

Glossary

- 404 A person who has no idea about computers, the World Wide Web, and other essentials of life. Derived from the 'Server Not Found' message.
- acceptable use policy (AUP)* Many transit networks have policies which restrict the use to which the network may be put. A well known example is NSFNET's AUP which does not allow commercial use. Enforcement of AUPs varies with the network.
- access control list (ACL)* Most network security systems operate by allowing selective use of services. An Access Control List is the usual means by which access to, and denial of, services is controlled. It is simply a list of the services available, each with a list of the hosts permitted to use the service.
- address* There are three types of addresses in common use within the Internet. They are email address; IP, internet or Internet address; and hardware or MAC address.
- address resolution* Conversion of an internet address into the corresponding physical address. Software handles this conversion so the user can enter a more user friendly mnemonic.
- administrative domain (AD)* A collection of hosts and routers, and the interconnecting network(s), managed by a single administrative authority.
- Advanced Research Projects Agency Network (ARPANET)* A pioneering long-haul network funded by ARPA (now Defense Advanced Research Projects Agency, or DARPA). ARPA served as the basis for early networking research, as well as a central backbone during the development of the Internet. The ARPANET consisted of individual packet switching computers interconnected by leased lines.
- agents* Programs that perform tasks seemingly without user direction. The programs return data to their owner or perform an operation when specific conditions exist. Agents can operate on a file, a drive, a network or across multiple networks; for example, NetBuddy examines Web pages for changes and reports the changes to the owner of the program.
- alias* A name, usually short and easy to remember, that is translated into another name, usually long and difficult to remember.
- American National Standards Institute (ANSI)* This organisation is responsible for approving US standards in many areas, including computers and communications. Standards approved by this organisation are often called ANSI standards (e.g., ANSI C is the version of the 'C' language approved by ANSI). ANSI is a member of ISO.
- American Standard Code for Information Interchange (ASCII)* A standard character-to-number encoding widely used in the computer industry. See also ASCII, below.
- anonymous FTP* Anonymous FTP (File Transfer Protocol) allows a user to retrieve documents, files, programs and other archived data from anywhere in the Internet without having to establish a user-id and password. By using the special user-id of 'anonymous', the network user will by-pass local security checks and will have access to publicly accessible files on the remote system.
- ANSI* Computers use several different methods for deciding how to put information on your screen and how your keyboard interacts with the screen. ANSI is one of these terminal emulation methods. Although most popular on PC-based bulletin-board systems, it can also be found on some Net sites. To use it properly, you will first have to turn it on, or enable it, in your communications software.
- applet* Custom applications that run within operating environments or other programs. Java allows applets to be integrated into Web pages. They can enable virtually any function that a standalone program can deliver, including database lookup, animation and spreadsheet functions.
- application* A program that performs a function directly for a user. FTP, mail and Telnet clients are examples of network applications.
- application proxy* An application that forwards application traffic through a firewall. Proxies tend to be specific to the protocol they are designed to forward, and may provide increased access control or audit.

archie A system to automatically gather, index and serve information on the Internet. The initial implementation of archie provided an indexed directory of filenames from all anonymous FTP archives on the Internet. Later versions provide other collections of information.

archive site A machine that provides access to a collection of files across the Internet. An anonymous FTP archive site, for example, provides access to this material via the FTP protocol.

ASCII ASCII is a universal computer code for English letters and characters.

Asynchronous Transfer Mode (ATM) A method for the dynamic allocation of bandwidth using a fixed-size packet (called a cell). ATM is based on the concept of fast packet switching.

atomic data Data elements at the smallest granularity or level of detail.

authentication A security process that helps ensure the integrity of a message that has been received. The process verifies that nothing was changed during the transmission. The process does not encrypt the message.

authentication on a per-directory basis Users with write-access to part of the file system that is being served can control access to their files as they wish. They need not have root access on the system or write-access to the server's primary configuration files. Per-directory access control is maintained in a separate file in each directory. The server reads this file when attempting to access a document in that directory or in any subdirectories under that directory. The access control specification given on a per-directory basis may be overridden by the global access configuration file.

authorisation Process to give a user a specific level of access after identity has been established.

avatar The synthetic self adopted by a person in cyberspace.

backbone The top level in a hierarchical network. Stub and transit networks which connect to the same backbone are guaranteed to be interconnected.

bandwidth Technically, the difference, in Hertz (Hz), between the highest and lowest frequencies of a transmission channel. It regulates the speed that data that can be sent through a given communications circuit.

barfogenesis The nausea experienced by people exploring virtual reality.

bastion host A gateway host system that is a 'strong point' in the network's security perimeter. Bastion hosts should be configured to be particularly resistant to attack. In a host-based firewall, the bastion host is the platform on which the firewall software is run.

baud A unit used by telecom engineers to express modulation rate. One baud equals one change of condition per second. This corresponds to a data signalling rate of 1 bit per second if only two signalling states are in use (which is the case with simple systems). But modem modems employ more sophisticated techniques that provide faster data throughput for the same circuit conditions.

birds of a feather (BOF) A birds of a feather (flocking together) is an informal discussion group. It is formed, often *ad hoc*, to consider a specific issue and, therefore, has a narrow focus.

bitnet An academic computer network that provides interactive electronic mail and file transfer services, using a store-and-forward protocol, based on IBM Network Job Entry protocols. Bitnet-II encapsulates the Bitnet protocol within IP packets and depends on the Internet to route them. It is an academically oriented, international computer network, which uses a different set of computer instructions to move data. It is easily accessible to Internet users through e-mail, and provides a large number of conferences and databases. Its name comes from *Because It's Time*.

black data Term used to describe stolen or illegally obtained information via the Internet.

blind signature Employing mathematics and random numbers, the signature algorithm makes it impossible to falsify the 'signature' attached to a transaction.

bounce The return of a piece of mail because of an error in its delivery.

browser Software that interprets HTML and Internet-specific programming application code like Java, Frontier, or Telescript. The browser software includes a wide range of standard Internet functions like ftp and electronic mail.

BTW By the way

Bulletin Board System (BBS) An online system operated from a home or other organisation to provide online access to a electronic information. BBSs were the domain of hobbyists, an increasing number of BBSs are connected directly to the Internet, and many BBSs are currently operated by government, educational and research institutions.

- CGI* The Common Gateway Interface is a specification to facilitate World Wide Web servers to pass data to other programs and systems connected via the Internet.
- client* A computer that runs a program on another machine or receives data from another computer via a network connection.
- client-server* A system in which one machine acts as a host and others are connected to it. Typically used to describe networks in which the clients are personal computers.
- commercial online service* An online service that has a high commercial profile. Applied to Prodigy, CompuServe, America Online, and a handful of other timesharing services.
- confidentiality* Keeping the contents of a transmission secret.
- congestion* Congestion occurs when the offered load exceeds the capacity of a data communication path.
- cyberspace* A term coined by William Gibson in his fantasy novel *Neuromancer* to describe the world of computers, and the society that gathers around them.
- daemon* An otherwise harmless UNIX program that normally works out of sight of the user. On the Internet, you will most likely encounter it only when your e-mail is not delivered to your recipient — you will get back your original message plus an ugly message from a mailer daemon.
- data encryption key (DEK)* Used for the encryption of message text and for the computation of message integrity checks (signatures).
- data encryption standard (DES)* A popular, standard encryption scheme. This term originated as 'Defense Encryption Standard' from the US Dept. of Defense.
- datasphere* The organic information environment created by electronic information services.
- DES* Data Encryption Standard that uses public and private key encryption. A message is encrypted but can only be read when the recipient enters his private key and the sender's public key.
- dialup* A temporary, as opposed to dedicated, connection between machines established over a standard telephone line..
- digital signatures* A representative system involves a pair of numeric keys that work like the halves of a codebook: messages encoded with one key decode with the other key. One key is made public, while the other is kept private. By supplying all users with its public key, a company, bank or individual can allow them to decode any message encoded with its private key. If decoding by a user yields a meaningful message, the user can be sure that only the sender — for example, a brokerage firm, a credit card company or bank — could have encoded it.
- directory access protocol* X.500 protocol used for communication between a Directory User Agent and a Directory System Agent.
- distributed computing* A computing environment in which tasks are performed at different geographic locations via the Internet or some other network protocol.
- distributed database* A collection of several different data repositories that appears as a single database to the user. A prime example in the Internet is the Domain Name System.
- distributed internet operating systems* The phrase used to describe the Internet as an applications platform, not a communications medium.
- domain* A heavily over-used term in the Internet. It can be used in the Administrative Domain context, or the Domain Name context.
- domain name system (DNS)* The DNS is a general purpose distributed, replicated, data query service. The principal use is the lookup of host IP addresses based on host names. The style of host names now used in the Internet is called domain name, because it is the style of names used to look up anything in the DNS. Some important domains are: .COM (commercial), .EDU (educational), .NET (network operations), .GOV (US government), and .MIL (US military). Most countries also have a domain. For example, .US (United States), .NZ (New Zealand), .CA (Canada).
- download* Copying a file from a remote computer to a local machine, via a network. Contrasts with upload: to send a file from a local machine to a remote machine, via a network. See *also* file transfer.
- dual-homed gateway* A firewall consisting of a bastion host with two network interfaces, one of which is connected to the protected network, the other to the Internet. IP traffic forwarding is usually disabled, restricting all traffic between the two networks to whatever passes through some kind of application proxy.

electronic mail (email) A system whereby a computer user can exchange messages with other computer users (or groups of users) via a communications network. Electronic mail is one of the most popular uses of the Internet.

email address The domain-based or UUCP address that is used to send electronic mail to a specified destination. For example an address is *s_arnold@delphi.com*.

encryption A security technique that converts information from a readable format into an unreadable format. Reversing the process requires a 'key' to unlock the coding algorithm. An encrypted message helps ensure that no person without the decryption key can read the message. The process does not guarantee that the message remains unchanged during transmission (authenticated).

e-tailing Online shorthand for electronic retailing.

f2f Face to face. When you actually meet those people you been corresponding with/flaming.

FAQ (Frequently Asked Question) A compilation of answers to these. Many Usenet newsgroups have these files, which are posted once a month or so for beginners.

file transfer The copying of a file from one computer to another. When this is over a network, the term usually becomes download or upload (see under download).

file transfer protocol (FTP) A protocol which allows a user on one host to access, and transfer files to and from, another host over a network. FTP is usually the name of the program the user invokes to execute the protocol.

film at 11 One reaction to an overwrought argument: *Imminent death of the Net* predicted. *Film at 11*.

finger A program that displays information about a particular user, or all users, logged on the local system or on a remote system. It typically shows full name, last login time, idle time, terminal line and terminal location (where applicable). It may also display plan and project files left by the user.

firewall A firewall is any one of several ways of protecting one network from another untrusted network. The actual mechanism whereby this is accomplished varies widely, but in principle, the firewall can be thought of as a pair of mechanisms: one to block traffic, and the other to permit traffic. Some firewalls place a greater emphasis on blocking traffic, while others emphasise permitting traffic.

flame Verbal abuse of a person in cyberspace.

for your information (FYI) A sub-series of Requests for Comments (RFCs) that are not technical standards or descriptions of protocols. FYIs convey general information about topics related to TCP/IP or the Internet.

fragment A piece of a packet. When a router is forwarding an IP packet to a network that has a maximum packet size smaller than the packet size, it is forced to break up that packet into multiple fragments. These fragments will be reassembled by the IP layer at the destination host.

frame A frame is a data-link layer packet which contains the header and trailer information required by the physical medium. That is, network layer packets are encapsulated to become frames.

freenet Community-based bulletin board system with email, information services, interactive communications, and conferencing. Freenets are funded and operated by individuals and volunteers — in one sense, like public television. They are part of the National Public Telecomputing Network (NPTN), an organisation based in Cleveland, Ohio, devoted to making computer telecommunication and networking services as freely available as public libraries.

freeware Software author does not want payment for the programs.

fully qualified domain name (FQDN) The FQDN is the full name of a system, rather than just its host-name. For example, *delphi* is a hostname and *delphi.com* is an FQDN.

gatedaemon. A program which supports multiple routing protocols and protocol families. It may be used for routing, and makes an effective platform for routing protocol research. The software is available by anonymous FTP from *gated.cornell.edu*.

gateway The term router is now used in place of the original definition of gateway. Currently, a gateway is a communications device/program which passes data between networks having similar functions but dissimilar implementations. This should not be confused with a protocol converter. By this definition, a router is a layer 3 (network layer) gateway, and a mail gateway is a layer 7 (application layer) gateway.

gender surfing Switched sexual roles in one's avatar.

GIF Graphics Interchange Format is a proprietary technique for compressing large graphic files. The algorithms have been patented by Unisys and licensed to CompuServe Information Services. For certain uses of the GIF algorithms, royalties must be paid.

gopher A distributed information service that makes available hierarchical collections of information across the Internet. Gopher uses a simple protocol that allows a single Gopher client to access information from any accessible Gopher server, providing the user with a single *Gopher* space of information. Public domain versions of the client and server are available.

groupware A category of software that allows two or more people to work on a particular file and share information about the file.

GUI A Graphics User Interface replaces keyboard commands with menu selections and mouse activation of icons.

hacker A person who delights in having an intimate understanding of the internal workings of a system, computers and computer networks in particular. The term is often misused in a pejorative context. Some Internet enthusiasts prefer the term *cracker* to describe a person who makes an unauthorised entry into a system.

header The portion of a packet, preceding the actual data, containing source and destination addresses, and error checking and other fields. A header is also the part of an electronic mail message that precedes the body of a message and contains, among other things, the message originator, date and time.

home page A World Wide Web page that displays when a user connects with a specific Uniform Resource Locator (URL).

host A computer that allows users to communicate with other host computers on a network. Individual users communicate by using application programs, such as electronic mail, Telnet and FTP.

hostname The name given to a machine on a network.

host system A public-access site; provides Net access to people outside the research and government community.

host-based firewall A firewall where the security is implemented in software running on a general-purpose computer of some sort. Security in host-based firewalls is generally at the application level, rather than at a network level.

html Hypertext Markup Language. A subset of Standard Generalised Markup Language, currently in version 2.0 with version 3.0 expected in late 1995. A tagging scheme that instructs the Web browser about the graphic and typographical format of the information contained in the HTML-tagged file.

http HyperText Transfer Protocol states the rules for communication between Web servers, HTML files and browser software.

hypertext Text encoded with syntax to allow the user to jump from one web resource to a linked resource with a mouse click

huge pipes Jargon for high bandwidth Internet connections.

IMHO In My Humble Opinion

index spamming A server loaded with popular search words not related to the server's content.

Integrated Services Digital Network (ISDN) A technology allowing the combination of all digital network services in a single medium, making it possible to offer customers digital data services as well as voice connections through a single wire. The standards that define ISDN are specified by CCITT. An attempt to convert analogue telephone systems to digital systems to provide voice and data services on a single carrier wire. ISDN is based on a two 64-kilobits-per-second data channel plus one 16-bit signalling channel and can be multiplexed like T-1 lines. Unfortunately, many of the advanced services that ISDN can offer have been eclipsed by other, less expensive technology.

integrated security Refers to integrated processes and procedures that wrap the data or site in layers of security.

integrity Processes that guarantee that a transmission arrives in the precise form in which it was transmitted.

International Organisation for Standardisation (ISO) A voluntary, non-treaty organisation founded in 1946 which is responsible for creating international standards in many areas, including computers and communications. Its members are the national standards organisations.

Internet The term used to refer to the global collection of computer networks using the TCP/IP protocol for information transfer.

internet protocol (IP) The Internet Protocol, defined in STD 5, RFC 791, is the network layer for the TCP/IP Protocol Suite. It is a connectionless, best-effort packet switching protocol,

internet relay chat (IRC) A world-wide party line protocol that allows one to converse with others in real time. IRC is structured as a network of servers, each of which accepts connections from client programs, one per user.

leased line Also known as private circuit. A point-to-point facility for voice or data transmission provided by rental on a continuous basis.

listserv An automated mailing list distribution system originally designed for the Bitnet/EARN network.

local area network (LAN) A data network where the terminals can normally be linked via direct connections. Network signal protocols permit data rates up to 100Mb/s.

log analysis Tools that permit user traffic data to be extracted and presented in a report

lurking No active participation on the part of a subscriber to a mailing list or USENET newsgroup. A person who is lurking is listening to the discussion.

mail bridge A mail gateway that forwards electronic mail between two or more networks while ensuring that the messages it forwards meet certain administrative criteria. A mail bridge is simply a specialised form of mail gateway that enforces an administrative policy with regard to what mail it forwards.

mail exploder Part of an electronic mail delivery system which allows a message to be delivered to a list of addresses. Mail exploders are used to implement mailing lists. Users send messages to a single address. The mail exploder sends the message to the individual mailboxes in the list.

mail gateway A machine that connects two or more electronic mail systems (including dissimilar mail systems) and transfers messages between them. Sometimes the mapping and translation can be quite complex, and it generally requires a store-and-forward scheme whereby the message is received from one system completely before it is transmitted to the next system, after suitable translations.

mail path A series of machine names used to direct electronic mail from one user to another.

mail server A software program that distributes files or information in response to requests sent via email. Mail servers have also been used in Bitnet to provide FTP-like services.

mailing list A list of email addresses, used by a mail exploder, to forward messages to groups of people. Generally, a mailing list is used to discuss certain set of topics, and different mailing lists discuss different topics. A mailing list may be moderated. This means that messages sent to the list are actually sent to a moderator who determines whether or not to send the messages on to everyone else. Requests to subscribe to, or leave, a mailing list should ALWAYS *be* sent to the list's *-request* address.

message authenticity Nothing changed from the time the message left the sender's computer to the time it was received at the target server

midbund Term for telephone *or* communications speeds that are faster than telephone lines but slower than ISDN.

MIME Multipurpose Internet Mail Extensions comprise an Internet standard for incorporating sound, images and other binary data into Internet electronic mail.

mip-o-suction A process that uses a significant percentage of the CPU cycles.

mirrored site One or more servers that contain copies of specific information, files or interactive services that exist on a parent *server*. Mirrored sites are used to reduce the traffic for certain high volume sites and increase response time for users desiring access.

moderator A person, or small group of people, who manage moderated mailing lists and newsgroups. Moderators are responsible for determining which *email* submissions are passed on to list.

mosaic The generic term for browsing technology that allows GUI (menu and mouse) access to such Internet resources as World Wide Web sites.

multiple IP addresses Technique and software tool that allows a server to support multiple domain *names*; for example, *ibm.com* and *mcdonalds.com* on one server

netiquette A pun on etiquette referring to proper behaviour on a network.

netsploitation Used to describe actions of newcomers to the Internet and World Wide Web with predominately commercial intent.

network A computer network is a data communications system which interconnects computer systems at various different sites. A network may be composed of any combination of LANs, MANs or WANs.

network address The network portion of an IP address. For a class A network, the network address is the first byte of the IP address. For a class B network, the network address is the first two bytes of the IP address. For a class C network, the network address is the first three bytes of the IP address. In each case, the remainder is the host address.

- newbie* Somebody new to the Net. Often used derogatorily by net veterans who have forgotten that, they, too, were once newbies who did not innately know the answer to everything.
- newsgroups* Text-based electronic fora where information can be posted on a specific topic. There are thousands of newsgroups on virtually all subjects; often described as USENET or user news.
- NNTP* Network News Transport Protocol is the standard for transferring USENET postings.
- non-repudiation of origin* Process to ensure that when an authenticated electronic message is sent, the sender cannot deny that the message originated at that transmission point.
- open system* Computing environments that are built upon non-proprietary technology and standards. Associated with the UNIX environment and standards developed for the UNIX environment.
- open systems foundation (OSF)* A non-profit group formed for the purpose of encouraging and distributing software that runs on different vendors' UNIX systems and software.
- open systems interconnection (OSI)* A suite of protocols, designed by ISO committees, to be the international standard computer network architecture.
- open-collar workers* People who work at home. Telecommuters.
- OSI reference model* A seven-layer structure designed to describe computer network architectures and the way that data passes through them. This model was developed by the ISO in 1978 to define the interfaces in multi-vendor networks and provide users of those networks with conceptual guidelines for use in the construction of open networks.
- packet* The unit of data sent across a network. *Packet* a generic term used to describe unit of data at all levels of the protocol stack, but it is most correctly used to describe application data units.
- packet-switched network (PSN)* A network that does not create a sustained path between devices. Packet-switched networks gather information in packets and forward them to their destinations. (See also packet switching, below).
- packet switch node* A dedicated computer whose purpose is to accept, route and forward packets in a packet switched network.
- packet switching* A communications paradigm in which packets (messages) are individually routed between hosts, with no previously established communication path.
- PDF (Portable Document Format)* A binary document format developed by Adobe Systems, Inc. The PDF format must be compiled using a special distiller program. The resulting file can be viewed on any computing platform, including within the Netscape browser. The PDF format incorporates a text retrieval tool, hyperlinks and bookmarks.
- ping* A program used to test reachability of destinations by sending them an electronic request and waiting for a reply.
- plausible deniability* A situation in which events are structured so that someone can claim not to have known or done something and no proof exists to the contrary. Whenever this term comes up, the person is almost certainly guilty.
- PONA* Person of No Account, a person not online
- port* A port is a transport layer demultiplexing value. Each application has a unique port number associated with it.
- post* To compose a message for a Usenet newsgroup and then send it out for others to see.
- post office protocol (POP)* A protocol designed to allow single user hosts to read mail from a server.
- PPP* Point-to-Point protocol allows a personal computer with a modem to use TCP/IP to communicate via the Internet.
- protocol* A formal description of message formats and the rules two computers must follow to exchange those messages.
- proxy servers* Specialised HTTP servers that usually run on or alongside firewall machines. People inside the firewall gain access to the Internet through the proxy server. Outsiders are prevented from accessing local data inside the firewall.
- public data network (PDN)* A network that offers its data transmission services to the public.
- public key encryption* Conventional cryptographic systems use one and the same key for both encoding and decoding a message. The RSA system uses a pair of keys. A message that has been encoded with one key, can only be decoded with the other key of that pair, and vice versa; from one key, the related key cannot be computed.

public telecommunication operator (PTO) Common carriers.

pulling glass Laying optical fibre cable.

*read the f**king manual (RTFMJ)* This acronym is often used when someone asks a simple or common question.

report mining, data mining Moving information to a client-server platform so it can be processed by software agents that extract desired data

route The path that network traffic takes from its source to its destination. Also, a possible path from a given host to another host or destination.

route daemon. A program that automatically propagates routes among machines on a local area network.

router A device which forwards traffic between networks. The forwarding decision is based on network layer information and routing tables, often constructed by routing protocols.

router-based firewall A firewall where the security is implemented using screening routers as the primary means of protecting the network.

RSA encryption In the RSA public-key cryptosystem used for electronic cash, both encryption and decryption are done by raising the message – here, the note number – to a power that is the appropriate key. These exponentiations are done in a modular arithmetic system: one that saves only the result of division by a fixed number called a modulus. This modulus needs to be large, usually at least 150 digits. When the system is set up, the key-making bank generates two large primes p and q . Their product pq will be the modulus of the exponentiations. The basis of the RSA system is the fact that, after some mathematical manipulations, anything encrypted with a can be decrypted with h .

scalability The jargon used to describe a software or system that can be expanded with the addition of hardware, software or combination of hardware and software with minimal re-engineering.

screened subnet A firewall architecture in which a ‘sand box’ or ‘demilitarised zone’ network is set up between the protected network and the Internet, with traffic between the protected network and the Internet blocked. Conceptually, this is similar to a dual-homed gateway, except that an entire network, rather than a single host is reachable from the outside.

screening router A router that is used to implement part of the security of a firewall by configuring it to selectively permit or deny traffic at a network level.

serial line IP (SLIP) A protocol used to run IP over serial lines, such as telephone circuits or RS-232 cables, interconnecting two systems.

server A provider of resources (e.g., file servers and name servers).

shareware Software that is freely available on the Net, but which, if you like and use it, you should send in the fee requested by the author, whose name and address will be found in a file distributed with the software.

S-HTTP Secure HyperText Transfer Protocol, one of the emerging models to secure the transmission of sensitive data via the Internet and the World Wide Web.

SIG Special Interest Group

signature The three or four line message at the bottom of a piece of email or a Usenet article which identifies the sender.

SGML Standard Generalised Mark-up Language is a programmatic approach to the description of information. The structure of the document exists in an ASCII file. Defined tags mark each structural unit of the document. The appearance of the document is specified in a separate set of instructions. A simplified **but** conforming subset of SGML was used for the Hypertext Markup Language.

Silicon Alley The area north and south of Houston Street in New York City where Internet start-ups are congregating.

SMTP Simple Mail Transport Protocol describes how information can be transferred using TCP/IP.

snail mail An Internet user’s term for traditional, paper-based mail,

SNMP Simple Network Management Protocol states how information is sent from network servers and systems to the software that manages the devices and programs.

soft copy Reports or data that are created on screen from data residing within different applications. No hard copy of the data exist.

SSL Secure Sockets Layer is a standard developed by Netscape Communications, Inc. for encrypting data passing along the network between a client system and a server. The SSL standard has been extended by software vendors to provide additional layers of security; for example, a digital envelope or wrapper that itself must be decrypted before gaining access to the encrypted message it carries. SSL is an open security protocol that incorporates RSA Data Security technology for securing data communications across networks. Supported by more than fifteen companies, SSL provides a straightforward method for adding strong security to existing applications and network infrastructures. More than six million people already have SSL-enabled products, which have been available since December 1994. SSL is application protocol-independent and provides encryption, which creates a secured channel to prevent others from tapping into the network; authentication, which uses certificates and digital signatures to verify the identity of parties in information exchanges and transactions; and message integrity, which ensures that messages cannot be altered en route. SSL will continue to be used to provide privacy, authentication, and data integrity for all types of transaction data on the Internet.

state Refers to knowing what user has entered a server, what information objects the user has inspected at the file level, and how long the user remained in each segment of the server. Monitoring states is difficult because of the open nature of the typical Internet server, the lack of a need for these tools was a greater barrier than programming complexity. The need now exists and state monitoring tools are available. They are not on the shelf at the local computer store, but companies such as BBN Planet, Netscape and Open Market sell these products. A representative example is the OMI WebReporter. The software, created in Cambridge, Massachusetts, tracks the demographics of the users of a particular Web site. At one level, OMI's tools can work at the single server level. A broader deployment of the tools allows one to monitor traffic, pricing and information activities across a group of servers. The canny implementer can monitor servers that are operated by others. The report generator provides a wide range of tabular summaries of usage, traffic and time.

stress puppy A World Wide Web programmer who thrives on overwork and rapid change.

systems network architecture (SNA) A proprietary networking architecture used by IBM and IBM-compatible mainframe computers.

T1 A term for a digital carrier facility used to transmit a DS-1 formatted digital signal at 1.544 megabits per second. A high-speed digital signal carrier standard adopted by the Bell System in the US. The T-1 line consists of 24 channels, multiplexed together. Each channel is capable of carrying data at a speed of 56,000 bits per second / 64 Mb/s so the entire T-1 channel can support 1.344 megabits per second. Higher bandwidth carriers are also available: T-2 at 6.312 megabits per second, T-3 at 44.736 megabits per second, and T-4 at 274.176 megabits per second. Outside of North America and Japan, the available bandwidths are T-1 at 2.048 megabits per second, T-2 at 8.848 megabits per second, T-3 at 139.264 megabits per second, and T4 at 565.148 megabits per second. These higher rates are due to faster single-channel speeds of 64,000 bits per second and a 32-channel carrier rather than a 24-channel one. T-1 lines are frequently used to extend local-area network services across a wide area. In many instances, you can achieve performance similar to that of a locally attached station. T-1 lines are generally expensive when going from one city to another. However, full-bandwidth T-1 service within the same city can be almost as inexpensive as a single 56-kilobits-per-second leased line. A *Fractional T-1* line is one split into groups of channels, each used for a different purpose. In some cases, both voice and data traffic are passed across a single T-1 line using this method. The split is accomplished with a channel service unit or CSU.

T3 A term for a digital carrier used to transmit a DS-3 formatted digital signal at 44.736 Mb/s.

TCP/IP Transmission Control Protocol/Internet Protocol is the standard packet-based communications standard for the Internet. Each packet contains the intelligence required to reach its destination. TCP/IP networks are transmission channels.

teledildonics Sex in cyberspace

Telnet A protocol that permits a computer connected via the Internet to operate a remote computer as if it were on the user's desktop.

tunnelling Using encryption technology to route packages to servers with specialised decryption software.

URL (Uniform Resource Locator) A Uniform Resource Locator is the address that gives the location of a particular World Wide Web resource or 'page'.

USENET The term used to refer to the thousands of newsgroups available via the Internet.

- value-added network* A private network that runs on leased lines or publicly-accessible lines using techniques to secure the data packets, access to the server, and the levels of access to different files stored on the server.
- video-enhanced web* Phrase used to describe a World Wide Web site that offers digitised video objects.
- virtual reality* An online experience that attempts to recreate a reality.
- VRML* Virtual Reality Mark-up Language is one effort to bring three-dimensional representations to the Web. Objects in a VRML environment can link to other Web sites or other VRML objects.
- WAIS (Wide Area Information Servers)* An information-retrieval and indexing system. The program searches for servers that match the keyword or phrase you supply. America Online acquired the WAIS organisation in 1995.
- wide area network (WAN)* A network, usually constructed with serial lines, which normally extends beyond one geographic site.
- world wide web (WWW or W3)* A hypertext-based, distributed information system created by researchers at CERN in Switzerland. Users may create, edit or browse hypertext documents. The clients and servers are freely available.
- worm* A computer program which replicates itself and is self-propagating. Worms, as opposed to viruses, are meant to spawn in network environments. Network worms were first defined by Shoch & Hupp of Xerox in ACM *Communications* (March 1982). The Internet worm of November 1988 is perhaps the most famous; it successfully propagated itself on over 6,000 systems across the Internet.
- WRT* with respect to
- X The name for TCP/IP based network-oriented window systems. Network window systems allow a program to use a display on a different computer. The most widely-implemented window system is XI 1 — a component of MIT's Project Athena.
- X.25 A data communications interface specification developed to describe how data passes into and out of public data communications networks. The CCITT and ISO approved protocol suite defines protocol layers 1 through 3. A misnomer frequently used to refer to packet-switched networks. In reality, X.25 is an international standard that describes the physical interface between devices and a packet-switched network.
- X.400 The CCITT and ISO standard for electronic mail. It is widely used in Europe and Canada.
- X.500 The CCITT and ISO standard for electronic directory (white pages) services.
- yellow pages (YP)* A service used by UNIX administrators to manage databases distributed across a network.