

Basic Computer Terminology (CS102)

Analog communications: Communications such as those over a standard phone line, based on variations in loudness and pitch. Analog signals must be translated into [digital](#) format, or [demodulated](#), before a computer can understand them.

Anonymous FTP: Method by which a user can establish an [FTP](#) session with a [software archive](#) by [logging in](#) as **anonymous** and supplying an [e-mail](#) address as a password.

ARPAnet: [Distributed](#) network set up in the late 1960s by the Department of Defense to ensure that the nation's computer resources are not wiped out by a nuclear attack. Universities, and later businesses, saw the communication advantages such a network could offer and joined, and the network was renamed the [Internet](#).

Bandwidth: Measurement of the amount of data that can be moved through a network connection. A high-bandwidth link can transfer data faster than a low-bandwidth link. (Recently, the term has been used to describe people as well. A person with high bandwidth is someone who can process a lot of facts and figures quickly.)

Binary number system: A number system consisting of only two digits, 0 and 1. This is ideal for representing patterns of [bits](#), with 0 expressing a bit that is turned off and 1 expressing a bit that is turned on.

Bit: An on-off switch; the basic building block of digital computers.

Browser: A program which lets the user access the [World Wide Web](#). Examples: Netscape, Firefox, Internet Explorer, etc.

Byte: The amount of memory needed to store one character, usually eight [bits](#).

Central processing unit (CPU): The brain of a computer, with a [control unit](#) which oversees the computer's operation, and an [arithmetic/logic unit](#) for performing computations.

Client: Computer in a [client-server](#) connection which makes requests to be fulfilled by the computer on the other end, the [server](#).

Client-server technology: A connection between computers in which one computer, the [client](#), makes requests of the other computer, the [server](#), which performs the computations or looks up the information and then delivers the results to the client.

Compress: To make a file smaller so that it will take up less disk space and transmit faster over a modem. Most files in this form must be [decompressed](#) before they can be used. *See also* [PKZIP](#), [Stuffit](#), [Compact Pro](#).

Digital communications: Communications which use the computer's [binary number system](#). *Contrast with* [analog communications](#)

E-mail: Method in which two users who have accounts, either on the same system or connected by a network (often the [Internet](#)), can send messages to each other. If a user is not [logged on](#) when a message arrives, it is stored and he is informed he has mail next time he logs in.

Fiber optic cable: Data transmission medium which transmits via pulses of light. This has two advantages: (1) Data moves at the speed of light; (2) the on-off pulses are in the [digital](#) format computers understand.

FTP (File Transfer Protocol): Method used to exchange files with a [remote](#) computer on the [Internet](#).

Hypertext: Information system in which text is displayed with key words appearing in color. Clicking on a colored word displays a page related to that word. Commonly used in [Help](#) files and on the [World Wide Web](#).

Internet: World-wide network of computers originally created by the Department of Defense (U.S.) but made popular as a communication medium among universities; recently, business and non-profit organizations have joined. Provides many services, including communication through [e-mail](#), multimedia capability through the [World Wide Web](#), remote computer access via [telnet](#) and file transfer through [FTP](#), [Usenet News](#) discussion groups, and more.

Intranet: An information server which exists within a corporation to distribute information among its employees. Intranets are similar to the [Internet](#) in that they may offer [e-mail](#) and [hypertext browsing](#) like that of the [World Wide Web](#), but people outside the office do not have access.

LAN (Local Area Network): A network over a small area (usually a square mile or less) connecting computers for the purposes of sharing files and applications (often by requesting them from a [file server](#)), sharing a [network printer](#), and allowing communication between computers on the LAN.

Mosaic: [Browser](#) which made the [World Wide Web](#) popular because of its ability to display both text and pictures, producing the effect of reading an illustrated book. Mosaic remains a popular way to browse the Web, although [Netscape](#) has since surpassed it.

Packet: Unit of transmission in data communications. Files being transmitted over a network are broken up into these packets of some arbitrary size agreed upon in advance on both sides. Doing this allows less data to have to be re-transmitted if errors occur.

Peer-to-peer: Connection between two computers in which both perform computations, store data, and make requests from the other computer. *Contrast with* [client-server](#).

WAN (Wide Area Network): A network connecting distant computers, such as a business' network connecting its branch offices in different cities.

World Wide Web: [Hypertext](#)-based information system on the [Internet](#). You must use a [browser](#) such as [Netscape](#) to access the Web.