



Amarillo College

An equal opportunity community college

Multimedia and Internet Dictionary

- **Acrobat**
An Adobe program needed for viewing Portable Document Files (PDF) files.
- **Algorithm**
A step by step set of instructions that accomplishes some common programming task.
- **Aliasing**
Jagged or stair-stepped appearance of diagonal lines in computer graphics.
- **Anti-aliasing**
A software technique designed to remove the jagged edge along curved and angled objects in computer graphics. Usually a blended of the color of the object into the background to give the illusion of smoothing the edges
- **Alpha test**
The initial testing of a new program, full of bugs, usually conducted by the programmers and their associates.
- **Analog**
Opposite of digital. Analog values are not absolute values; they are immeasurable or constantly changing, such as an analog clock that has a dial and hands that sweep around the clock face.
- **Anchor**
A place in an html document that you jump to when following an internal link, like going to a letter within a glossary or scrolling up or down on a web page.
- **ANSI**
American National Standards Institute, on-line usually means the extended character set approved by ANSI, a standard set of characters used by a computer that includes ordinary letters and numbers plus symbols. There are also ANSI versions of computer languages, etc.
- **Applet**
A small program, most commonly a java one downloaded via a browser. See java.
- **Appletalk**
The networking program found on most apple products, to link them into a common system.

- **ASCII**
Pronounced "Askie". Basic text ("plain text" or "vanilla text" or "DOS text") -- all e-mail messages over the internet must be in ASCII (although there are some different character sets) -- and you must learn how to change your word processor text into and out of ASCII. Programs, binary computer files, etc. must be encoded before being sent via e-mail. See UUencode. Fonts, bold, or underlining are not allowed with ASCII. Bold is usually shown as *bold* -- not as all caps -- ALL CAPS IS CONSIDERED "SHOUTING" -- Underlining is usually shown as "underlining" or as underlining. Accent marks can not be used, either. They are either forgotten, or added after the letter accented. Some of these (bold, underlining) are allowed in HTML.
- **Audio Compression or Codec**
Stands for **CO**mpressor-**de**compressor. Ways to compress audio data to make usable but smaller files.
 - **μLaw 2:1** Digital telephony in North America and Japan. Standard audio for UNIX.
 - **IMA 4:1** used for cross-platform audio for multimedia.
 - **MACE 3:1** General-purpose audio compression.
 - **Microsoft IMA** For cross-platform multimedia.
- **Audio sample rates**
When analog signal is converted to digital, the sample rate describes the number of times audio is sampled to approximate the original analog sound measure in samples per second, or hertz (Hz). 1000 hertz is called kilohertz (kHz). The higher the sample rate the larger the file.
 - **48 kHz** Equivalent to digital audio tape (DAT) or Digital Betacam.
 - **44 kHz** Appropriate for music and music CD.
 - **32 kHz** Same rate used in many digital cameras.
 - **22 kHz** Good compromise. Alright for voice but questionable for music with very high (treble) and very low pitches (heavy bass).
 - **11 kHz** Adequate for narration.
 - **8 kHz** Low data rate and quality, but suitable for the internet

- **Audio bit depth**
Describes the number of bits used to describe each audio sample and affects the range of sound that the audio file can reproduce, from silence to the loudest sound known as signal to noise ratio measured in decibels (dB)

8 bit Equivalent to 48 dB; similar to FM broadcast

16 bit Equivalent to 96 dB; used by CD studios.
- **Bandwidth**
The band or "pipeline" down which data must travel. Transmission speed or "width" in bits per second.
- **Beta and Beta Version**
"Beta testing" or "in beta" means that a program isn't ready for sale because there are still some bugs in it. Because of the fast development of the web, most of the browsers, applets, etc., ie the programs you use to access what you want, almost always seem to be "in beta." "Alpha testing" therefore means a v. rough program; "Gamma" would be when everything is finished, except perhaps for the technical writing (manuals etc). "Gold" version is the finished master by which copies for distribution are made.
- **bps**
Bits Per Second -- the rate a modem can send and accept information. Older speeds are 300, 600, and 1200 -- all so slow that many BBS's etc. no longer will work at them. 2400 was the standard for many older services and connection when I first came on-line. 9600 is the max. speed that older Apples & Macs or the pc AT, XT, or 286 will work with external modems. 28,800 is the current basic standard, although that is quickly changing to 33 or even 56k -- over standard phone connections. Computer nets using Ethernet connections operate either at 56k (56,000) or 1M (1,000,000). The "backbone" operates at 45M.
- **Browser**
Program and service that actually interfaces the computer to the internet and interprets HTML, XML, JavaScript and other internet languages. Also a search program for using the WWW's hypertext. Comes in graphical & text-based types. Microsoft Internet Explorer, Netscape, America On Line, etc.
- **Cable Modem**
Capable to transmitting 10 millions bps and a very fast internet connection. Turns one-way analog cables into high-speed two-way digital pipes. 1 million bytes take only 2.5 seconds to transmit on a cable modem.
- **Cache**
Ram memory that keeps track of the latest web page you've visited, last programs you have run, and the most used actions used in a program recently. Speeds up processing.

- **CGI**
Common Gateway Interface; a special type of UNIX program which allows a web server to access an application and transfer the information to your display. If you access a homepage and are told you are visitor # _____, that information is usually provided & updated by programs via CGI.
- **Color Depth**
Described in bits and represents how many colors can be displayed by an image or video. The larger the color depth number the larger the file may be.
 - 1 bit** White and Black. One color or light turned on (White). Black is not light on.
 - 2 bits** 4 colors (2 colors X 2 colors)
 - 4 bits** 16 colors (4 colors X 4 colors)
 - 8 bits** 256 colors (16 colors X 16 colors)
 - 16 bits** 32,768 colors, or thousands of colors
 - 32 bits** 16,777,216 colors, or millions of colors
- **Digital Watermark**
A way to safeguard unauthorized use of images by encoding ownership information into the pixels of photographs: the brightness of certain pixels are changed enough to be electronically detected, but not enough to be seen. If a person is receiving information, he is the client; the sender is the server.
- **DNS**
Domain Name Service; the automatic systems which allow you to input a name in an e-mail, www, telnet, etc. address, and have it transferred to the actual address (which is really a series of numbers).
- **Domain**
A system address. E-mail addresses are broken down and really read from right to left. For example, cost-s@actx.edu Non-US addresses end in a 2 letter country code (CA=Canada, for example) Then the type of usage (looks like a file extension) after a period:
 - .com** commercial
 - .edu** education
 - .net** network
 - .org** organization

.gov government

.mil military

.tv television

Nowadays, there are several other abbreviations for usage. Contact a company that provides Domain names for your choices, such as GoDaddy.com.

- **E-dress and E-mail**

An on-line address. Electronic mail, sent from computer to computer, through any type of LAN or Network.

- **Ethernet**

A common method of linking computers into a network via coaxial cable & various types actual connections.

- **FAQ**

Frequently Asked Questions. Most discussion groups of all kinds have FAQ's -- and if a person asks a basic question, he will often get many angry responses (flames) telling him to read the FAQ ("RTFM").

- **File Formats and Extensions**

Unix, DOS and Windows operating systems require file extensions added to the names of files, and particularly, files cannot be read or used on the internet without them.

.png Portable Network Graphic. Standard for Macromedia Fireworks program. Retains all aspects of Fireworks without flattening.

.psd PhotoShop document. Keeps all aspects of PhotoShop including layers without flattening the file

.cdr CorelDraw document

.gif Graphics Interchange File. static or animated. Used on the internet for simple and limited color images. Limited to 256 colors or less.

.jpg JPEG: Joint Photographic Experts Group

.ai Standard Adobe Illustrator file

.eps Encapsulated Postscript file. For cross-platform use or vector and bitmap images.

.tif Tag Image File Format -- an older but still common graphics file.

.tga Standard UNIX format

- .txt** Plain text in ASCII format
- .bmp** Microsoft bitmap image
- .pict** Default image format for Macintosh, combination vector and bitmap
- .aif** audio information file
- .mov** Apple QuickTime format for digital video and audio
- .avi** Microsoft Windows audio video standard file
- .wav** Microsoft Windows Audio waVeform
- .dir** Standard for a Macromedia Director interactive show
- .dcr** Macromedia Director Shockwave show
- .dxx** Macromedia Director show (protected format)
- .cst** macromedia Director cast file
- .exe** Standard for Microsoft Windows executable file or any self-running file such as a Director projector.
- .fla** Macromedia Flash project
- .swf** Standard for Macromedia Flash web file

- **Firewall**

A security system for intranets which prevents outsiders from gaining access to the intranet. A VPN is a Virtual Private Network arrangement between two or more companies to open their firewalls to each other.

- **Freeware**

Free software. Some are "crippled" versions of commercial programs, usually produced by small independents; others only work with commercial programs. Some are actually excellent programs.

- **FTP**

File Transfer Protocol -- older standard of finding and transferring files on the internet. Most FTP sites are being incorporated, or at least linked, into either gopher or WWW sites (or both). Most public sites allow a person to log-on on using "anonymous" as her identification and your "e-ddress" (e-mail address) as a password. In all other cases, you need to know what password is required.

- **GUI** (Gooney)
GUI=**G**raphic **U**sers **I**nterface, graphics, buttons, icons, etc. which make an interactive product or web site look the way it does and hopefully helps its communications, functionality and marketability. Basically what a user sees and interacts with.
- **Home page**
The main web page of a set of pages, which then lead a user to any other pages set up by that person, directly or indirectly.
- **Host**
A company that provides disk space on their computer hard drive servers to other companies and individuals so their web sites are available on the internet.
- **html**
Hyper**T**ext **M**arkup **L**anguage—the program used to create hypertext documents. The protocol/program used to move from one link to another on the World Wide Web.
- **http://**
Hyper**T**ext **T**ransport **P**rotocol
- **Hypertext**
A way of making a link that when clicked on goes to another page, image or website (URL) by using text. Hypertext links are highlighted and perhaps underscored.
- **Internet**
A network of connectivity originally designed to be used for the government and the U.S. military. Now an international communications network of electronic connections by cable, telephone lines, and satellite accessed usually by a computer. The internet is a collection of joined networks of computers. Presently there are 100,000 separate networks around the world, with 20 million hosts. The major part of the internet is often referred to as the World Wide Web.
- **Intranet**
A closed communications network within an organization. Its like having your own private internet inside your own company.
- **IP Address**
Internet **P**rotocol **A**ddress. Numerical addresses that relate to a specific domain name.
- **ISDN**
Integrated **S**ervices **D**igital **N**etwork, a special (and faster) phone connection.
- **ISP**
Internet **S**ervice **P**rovider.

- **Java**
Programming language developed by Sun Microsystems as a response to problems programming in the C++ language, Java is a general programming language suited for use on the WWW and is intended to be simple, cross-platform, high performance, multi-threaded, and dynamic.
- **Java Script**
Not Java, but a programming mini-application ("applets") for web-browsers and other programs. Doesn't have to be compiled and the source code resides within the HTML documents.
- **JPEG (.jpg)**
Joint **P**hotographers **E**xperts **G**roup file format. A major type of scanned-in image file. Most appropriately used for images such as photographs that have thousands or millions of colors (color depth).
- **LAN**
Local **A**ccess **N**etwork, set up within a limited area, like a business or campus.
- **Links**
Connection to other pages, files and websites (URL) by clicking on the hypertext or image assigned as a link. A button. Hypertext.
- **MIME**
Multipurpose **I**nternet **M**ail **E**xtensions -- encoding that allows most e-mail programs to show non-ASCII information.
- **Modem**
Originally **M**odulation and **D**EModulation. For digital messages to be sent from computer to computer over telephone lines, the computer's digital data must be converted to analog and back again to digital data. Modems are devices built-in or connected to computers. An ISBM is a fast dedicated server-style modem often used by large companies.
- **On-line Service**
Large companies that provide e-mail, discussion forums (or sigs), conferencing, and files.
- **OS**
Operating **S**ystem. The software that runs your computer (like UNIX, DOS, etc.)
- **PDF**
Portable **D**ocument **F**ile, a document which, with the proper acrobat reader, is displayed the same way on all systems. Many cd's of documents, and many documents and forms on government internet sites, are in pdf.

- **Pixel**
Pictorial (**Pix**) **Cel**. Any one of the individual "dots" which actually makes up an electronic image.
- **Plug-and-play**
Software which can (at least in theory) be plugged into the OS or other software and used immediately, without configuration fiddling on the part of the user.
- **Plug-in**
Basically, a general computer term for any application which can be added on to another program.
- **Protocol**
Digital language used on the Internet so different computer systems can communicate with each other.
- **Provider**
The entity you have your internet connection with. More commonly "**ISP**" for "Internet Service Provider."
- **Routers**
Make sure that digital information gets to its destination by the fastest route on the Internet.
- **Search Engine**
Any of the web sites or other computer programs which allow you to search for certain types of information.
- **Server**
If you are receiving information, you are the client; the sender is the server.
- **Shareware**
Software that you may download and use at no initial charge. If you like the software, and want to keep using it, some form of payment is usually required.
- **Spam**
Posting an inappropriate message, especially if commercial, over a number of groups or mass-e-mailings is "spamming; the message itself is the "Spam."
- **SMTP**
Server **M**odulated **T**ransfer **P**rotocol. The server address of the account through which you send e-mail.
- **SSL**
Secure **S**ockets **L**ayer. Protects transmissions over the WWW from spectators by encrypting the data while it is transmitted over the Internet.

- **Streaming**
Sends files, like the constant flow of a stream, to the user's computer in such a way that they can begin viewing or listening to the file after an initial buffer is set. Does not require downloading files to the user's hard drive.
- **T1**
Digital communications line, carrying 1.544 million bits per second. If you have a small ISP they should have one or more T1 connections.
- **T3**
A digital communications line that carries 45 million bites per second -- ideally your ISP will have a T3 connection, or whatever comes along that's faster.
- **TCP/IP**
Transmission Control Protocol/Internet Protocol. The software protocol that the internet runs under.
- **URL**
Universal (or Uniform) Resource Locator. An internet address, used in hypertext. Examples would be: <http://www.gnofn.org/~tlewis/home.htm>
<telnet://www.gnofn.org>. Urls may also be gopher or ftp addresses as well.
- **Video Compression or Codec**
Stands for **Compressor-decompressor**. Ways to compress audio and video data to make usable but smaller files.

Animation Designed for images that contain large areas of flat color such as cartoons.

Cinepak Compresses 24 bit video (thousands of colors) for data rates suitable for CD-ROM playback or internet download

Component Used for capture and interim storage format but not fo video delivery

DV-NTST Used to transfer video from a Digital Video deck or camera to Premiere or to transfer DV video across platforms and between comptuers with FireWire cards and cables.

Video Video content in only thousands of colors (not millions), good for previews but unsuitable for presentations or broadcasts.

H.263 Used for videoconferencing at low data rates.

MJPEG Motion Joint Photographic Experts Group. Used to transfer video captured with a hardware capture card.

Sorenson Although slow to compress, yields high compression with high quality for data rates ideal for Internet download or CD-ROM, but plays best with computers with fast processors.

AVI Microsoft Windows video codec. No longer supported.

- **VRML**
Virtual Reality Modeling Language -- an up and coming addition to the web, adding 3-d interactive models and up to 360 degree views of panoramic photos "stitched" together in order to give a panoramic view to web-sites. RAM intensive.
- **WWW**
The World Wide Web; hypertext links between the public files areas of computers who have set-up "homepages."
- **WYSIWYG**
What You See Is What You Get Software that's supposed to be so easy you don't need a manual. Any word processor or editor that claims that what you see on the screen is exactly how it'll look on the printed page.
- **Zip file**
Compressed file format generally for Windows operating systems.