

Streaming Technologies Glossary

A

ACELP.net	Industry standard audio compression technology developed by VoiceAge Corporation.
ADSL	Asymmetric Digital Subscriber Line – Consumer level broadband Internet connection technology. Download speeds up to 2Mbps and upload speeds up to 256kbps.
AIFF	De facto Macintosh music file format. Comparable to WAV on the Windows platform.
Artifact	A visual anomaly or error created when a compression system is not able to keep up with fast action or complex scenes in a video image.
Asf	Advanced Streaming Format - Microsoft streaming multimedia file format.
Asx	Files with the '.asx' extension are Advanced Stream Redirectors used to redirect users to streaming media content. These are simple text metafiles containing media and server information.
Avi	Audio Video Interleave - Microsoft video for windows standard.

B

Bitrate	Measured in Kilobits per second (kbps) determines the quality of a video or audio file. A higher bitrate means a better quality file, typically demonstrated as near TV quality video and near CD quality audio. Similarly, a low bitrate can produce poor quality files with poor image quality and 'telephone' like sounding audio.
---------	---

C

C	Used to denote chrominance (colour) portion of a video signal.
Capture card	The adaptor board (PCI/AGP) used to input audio/video onto the encoding computer's hard disk
Codec	Stands for C ompression D ecompression. Algorithm for reducing file size of multimedia source material for optimal streaming performance and picture quality.
CIF (QCIF)	Refers to size of streamed video picture after encoding. CIF - 352 pixels by 288 pixels, and Quarter CIF (QCIF) 176 pixels by 144 pixels. Also refers to image formats employed by the H.261 codec (used for videoconferencing over ISDN lines). Stands for Common Image Format.
Client	Device, typically a computer, used to play streams from server.

Composite	Video information is carried in a single signal combining colour and brightness information into the one signal. Composite video is transferred between video devices using a single interconnect cable with an RCA connector. (Also see Video Sources)
D	
De-interlace	De-interlacing provides a way around the production of unwanted artefacts (see above) that may result from, for example, changing the frame rate or resizing an image. Common methods of de-interlacing are <i>Duplication</i> and <i>Interpolation</i> (see below).
Duplication	A de-interlacing method (see above). By duplicating the lines from one field in an image to create the other, we end up with an image, which can appear a lot less "torn", but with a lower effective vertical resolution.
DV	See Video Sources
DVD	Digital Versatile Disk or Digital Video Disk.
E	
Encode	Process of converting audio/visual source material into format compatible with streaming technologies.
F	
FireWire	See IEEE 1394
Flash	Popular drawing and animation package from Macromedia. Also refers to the technology used to publish and play the 'movies' that Flash can export.
G	
GUI	Graphical User Interface. Program control system – composed of 'windows', check boxes, toolbars, drop down menus, etc. Typically employed in Microsoft Windows/Apple Macintosh operating systems as opposed to traditional command line interfaces employed in the Unix operating system.
H	
HDTV	High-Definition Television System. Generic term used to describe the next generation of broadcast television systems.
I	
IEEE 1394	Technical name for the high speed PC connectivity technology used to connect consumer electronics audio/video (A/V) appliances, storage peripherals, other PCs, and portable devices together. Known as 'FireWire' on the Macintosh.

Interpolation	Interpolation involves estimating the value of a second field in an image by working out mid-values from the lines above and below it from the first field. This leads to a smoother looking image.
Intranet	A local network, as opposed to the Internet which is a global network.
ISO	International Organisation for Standardization. Established 1947. Mission of ISO is to promote the development of standardization with a view to facilitating the international exchange of goods and services, and to developing cooperation in the spheres of intellectual, scientific, technological and economic activity.
M	
M1v	MPEG-1 Video
M3u	Metafile play list for use with windows media files using the mp3 file format. Similar to '. Asx' files (see above).
MIDI	Musical Instrument Digital Interface
Mp2	See mp2v.
Mp3	MPEG Audio Layer-3
Mpa	MPEG Audio (See mpg).
Mpe	See mpeg.
Mpg	Moving Picture Experts Group. Name given to a 'family' of international video/audio compression technologies.
Multicast	Network transmission technology. Multicasting sends a single copy of the data in a stream to those clients who request it. Multiple copies of data are not sent across the network, nor is data sent to clients who do not want it as is the case with Unicast (see below).
MVQ	M otion V ector Q uantization. Video compression method designed for low bitrate (see above) transmissions.
P	
Packet	A unit of data exchanged between end systems (host computers).
PCM	P ulse C ode M odulation. Method of digitising audio.
Protocol	An agreed-upon format for transmitting data between two devices.
Q	
QuickTime	Apple Computer's cross-platform, video conferencing, collaborative computing, and multimedia communications technology.

R

RTP	Real-time Transport Protocol. Protocol used for transmitting real-time data such as audio and video.
RTSP	Real Time Streaming Protocol. Technology for controlling streaming data over the World Wide Web. Makes use of RTP (see above).

S

Stream Bean	Proprietary codec developed A.D.I. Development, currently owned by HelloNetwork.com Inc.
-------------	--

T

TCP/IP	Transmission Control Protocol/Internet Protocol. A very popular data communications protocol, since it is available for most operating systems and hardware platforms--so these computers (UNIX workstations; PCs running MS-DOS, Windows, or OS/2; Apple Macintoshes, IBM Mainframes; DEC Minicomputers; etc.) can all communicate.
--------	---

U

UDP	User Datagram Protocol. A connectionless transport protocol that runs on top of TCP/IP's IP. Provides an unreliable datagram service. That is, packets may be duplicated, lost, or received in a different order than the one in which they were sent.
Unicast	The bulk of the traffic on today's networks is Unicast: A separate copy of the data is sent from the source to each client that requests it. (See Multicast above)

V

VCD	Video Compact Disk. Stores video in MPEG-1 format, up to 74 minutes at VHS quality.
VHS	Video Home System. Half-inch magnetic videotape cartridge format developed for home use with the ability to record and playback analog video and audio signals.
Video Sources	Depending on the capture card (see above) in use, material for streaming may be captured from different video sources using the following common formats: Composite (see above); DV – Digital Video, S-Video – Super Video.
VBR	Variable Bit Rate (See bitrate).

W

Wav	Wave Form Audio - Windows stores sounds as waveforms using the '. Wav' extension.
Wax	Windows Audio Media Redirector – Similar to the

‘.asx’ file format (see above) these files contain information about Windows media files and their presentation.

Wma

Windows Media Audio – Audio codec created by Microsoft.

Y

Y

Used to denote luminance (brightness) of video signal.