Adaptive streaming:
See MBR.

Analog:
The principal feature of analog representations is that they are continuous. For example, clocks with hands are analog-the hands move continuously around the clock face. As the minute hand goes around, it not only touches the numbers 1 through 12, but also the infinite number of points in between. Similarly, our experience of the world, perceived in sight and sound, is analog.
We perceive infinitely smooth gradations of light and shadow; infinitely smooth modulations of sound. Traditional (non-digital) video is analog.

Animated GIF:
GIF is a bitmap file format often used on the Web. GIF (which may be correctly pronounced as either "gif " with a hard "g" or "jiff ") stands for Graphic Interchange Format. Because it applies data compression, GIF is often used for photographic images. An animated GIF combines several images into a single GIF file. Applications that support the animated GIF standard (GIF89A) cycle through the images, creating the impression of motion. The animated GIF format does not provide as much control and flexibility as other animation formats but, because it is supported by nearly every Web browser, has become very popular.

Architecture:
The structure of the software, or the system of software components, responsible for the creation, storage, and playback of multimedia content. An architecture may include such things such as encoders, compression/decompression support, file formats, server software, and browser plug-ins. Different multi-media architectures offer different features and options, and store data in different file formats. QuickTime, Real Video, and Windows Media are examples of streaming media architectures.

Artifact: Visible degradations of an image resulting from any of a variety of processes. In digital video, artifacts usually result from color compression, and are most noticeable around sharply contrasting color boundaries such as black next to white.

ASF:
Defined by Microsoft, "ASF" stands for Advanced Streaming Format. ASF is the file format in the Windows Media architecture.

ASP:
An application service provider (ASP) is a third party entity that manages and distributes software-based services and solutions to customersacross a wide area network from a central data center.

Aspect ratio:
The ratio of an image's width to its height. For example, a standard video display has an aspect ratio of 4:3.

Asynchronous:
Not coordinated in time; contrasted with synchronous. In a typical synchronous protocol, each successive transmission of data requires a response to the previous transmission before a new one can be initiated. An asynchronous protocol allows transmissions to occur independently of one another.
In computer communications using asynchronous protocols, each piece of data usually has a start bit at the beginning and a stop bit at the end, so that the valid data can be distinguished from random noise. Most communications between computers and devices are asynchronous; the public Internet is based on an asynchronous system.

AVI :
Defined by Microsoft, "AVI " stands for Audio Video Interleave. AVI is the standard file format for digital video on the Microsoft® Windows® platform. AVI is not a streaming format; ASF (Advanced Streaming Format) is the Windows Media streaming format.

Bandwidth:
The data-carrying capacity of a network. Bandwidth is the maximum amount of data that can travel a communications path in a given time,usually measured in kilobits per second (Kbps). If you think of the communications path as a pipe, then bandwidth represents the width of the pipe, which determines how much data can flow through it at once. Connections of 56 Kbps or lower (typical dial-up connection rates) are considered low-bandwidth, aka narrowband. High-bandwidth, aka broadband connections are higher than 56 Kbps (e.g., ISDN, DSL, cable modem, T-1).

Bit:
The smallest unit of data used by computer systems. A bit (short for binary digit) has a value of either 0 (nil) or 1. Bits are the "building blocks" of binary data.

Bit depth:
See bitmap.

Bitmap:
Also known as raster, bitmap data comprises a set of binary values specifying the color of individual pixels that make up an image. Bitmap data is characterized by resolution and bit depth. Resolution relates to the detail in an image, and is expressed in dots per inch (dpi) or pixels per inch (ppi). The higher the resolution (i.e., the more dots used to describe the image), the more detail possible. Bit depth defines the number of colors the image can display. A higcontrast (no grey tones) black and white image is 1-bit, meaning it can be off or on, black or white. As bit depth increases, more colors become available: For image detail and quality, bit depth is as important as
resolution, since the bit depth determines the colors available in the palette. When fewer colors are available, areas that may have shown a subtle shift of t ones and hues are rendered instead as single blocks of solid color, eliminating image detail. Bitmap data is indispensable for continuous tone images, such as scanned or digital photographs, and for anti-aliased images.
However, bitmap data is consistently larger than vector data. Each pixel in a bitmap image has to be defined. A relatively small 150-pixel x 150-pixel graphic requires 22,500 discrete bits of information plus the palette, or color lookup table (CLUT), that is usually included.

Bit rate:
In a digital network, the number of bits that pass a given point, in a given amount of time, usually a second. Bit rate is usually measured in kilobits (Kbps), or thousands of bits per second. While the term "bit rate" is a synonym for data transfer rate (aka data rate), bit rate seems to be used more often when referring to telecommunications transmission technology, and data transfer rate (or data rate) is used more often when referring to computing systems.

Blue screen:
Video editing technique used to combine a subject with a background shot separately. The subject is shot against a solid blue (or sometimes green) color screen. The blue color can be selected on a frame-by-frame basis, through the use of a video editing system. A matte can then be generated to isolate the subject, in order to composite it onto the desired still or motion background clip.

Broadband:
High-bandwidth network (Internet or intranet) connections higher than 56 Kbps (e.g., ISDN, DSL, cable modem, T-1).

Broadcast:
A single stream transmitted to all clients on a network, whereby all the clients experience the same portion of the media program, at the same time, whether the program is live or pre-recorded.

Broadcast quality:
Standard of quality associated with current expectations of clearly-received network or cable television.

Browser:
A client application, usually with a graphical user interface (GUI), that provides a way to experience and interact with files hosted on a network, such as the Internet or an intranet. Web browsers provide access via the Internet to files posted on the World Wide Web. Web browsers use the Hypertext Transfer Protocol (HTTP) to make requests of Web servers connected to the Internet, on behalf of the browser user. The two most popular browsers in use today are Netscape Navigator and Microsoft Internet Explorer.

Buffer:
A temporary storage area, or holding place, usually in the RAM (random access memory) of a computer or peripheral device (e.g., a printer), where data can be collected and/or held for ongoing or later processing.

Byte:
Eight (8) bits.

Camcorder:
A video camera, i.e., a device that records continuous pictures and generates a signal for display or recording. To avoid confusion, it is recommended that the term "camcorder" be used rather than "camera"- in contrast, a digital camera records still images, while a digital camcorder records continuous video images.

Capture:
If the source footage is analog, "capture" refers to the act of digitization (conversion to a digital format) to make the video usable on a computer and, usually, the simultaneous application of compression to reduce the video to a manageable data rate for processing and storage. If the source video is DV, "capture" typically refers to the simple transfer of video from an external device, such as a digital camcorder or tape deck, to a computer hard drive.

Capture card:
A printed circuit board that fits into an expansion slot on a computer and provides functionality for capturing video from an external source.

Chapterization:
The process of placing markers into the timeline of a video to demark the beginning points of sequences, or chapters, to which a viewer may "jump," at will, during playback, so long as chapterization is supported by the video architecture in use. True streaming of video supports chapterization; pseudo-streaming, a.k.a. progressive download, does not.

Client:
In a client/server architecture, the client is a software application that makes requests of the server on behalf of the end-user. A Web browser is a client application; a media player is also a client application. Sometimes the term "client" is also used to refer to a PC or workstation (hardware) on a network being used by an individual to access data and or applications hosted on a server.

Clip:
A digitized portion of media, typically video or audio.

Clipping:
Clipping occurs when audio volume reaches or exceeds 0 decibels (db) for 3 consecutive seconds. If you don't lower the volume so it is within the clipping threshold, data will be lost.

Codec:
Short for compressor/decompressor comprised of algorithms that handle the compression of video to make it easier to work with and store, as well as the decompression of video for playback.

Co-location:
An outsource, usually a dedicated facility or facilities, that provides physical space for and/or shared usage of essential computer equipment such as Web servers and, often, mission-critical managed services. Co-locations typically provide a high level of security and protection against fire, theft, vandalism, power outages or irregularities, and other risks which might, potentially, devastate a business that is reliant on 24/7/365 computer operations.

Compositing:
The process of combining two or more images to yield a resulting, or "composite" image.

Compression:
Algorithms used by a computer to reduce the total amount of data in a digitized frame or series of frames of video and/or audio.

Datagram:
See packet.
Data rate or data transfer rate: Amount of data moved over a period of time, such as 10MB per second. Often used to describe a hard drive's ability to retrieve and deliver information. Also see bit rate.

De-interlacing:
The process, usually performed by video editing software, of removing interlacing from video originally intended for display on television monitors, in order to make it suitable for display on computer monitors.

Delta frame:
In inter frame (a.k.a. temporal) compression, periodic key frames store all the information that comprises a frame, while delta frames store only the information that changes from frame-to-frame in between key frames.

Digital:
In contrast to analog, digital representations consist of values measured at discrete intervals. Digital clocks go from one value to the next without displaying all intermediate values. Computers are digital machines employing a binary system, i.e., at their most basic level they can distinguish between just two values, 0 and 1 (off and on); there is no simple way to represent all the values in between, such as 0.25. All data that a computer processes must be digital, encoded as a series of zeroes and ones. Digital representations are approximations of analog events. They are useful because they are relatively easy to store and manipulate electronically.

Digital rights management (DRM):
Server software that protects against the illegal distribution (a.k.a. pirating) of copyrighted content over the Internet.

Digitizing:
Act of converting an analog audio or video signal to digital information.

Download:
The act of one computer requesting and receiving data, via a network, from another computer.

Downloadable media:
Media (i.e., video and/or audio) that can be downloaded and written to disk (i.e., saved onto a computer hard drive); typically refers to media files hosted on a Web server (as opposed to a media server) which can, and often must, be entirely downloaded and written to disk in order to be played (as contrasted to streaming media).

DV:
Generally refers to a digital video format that incorporates DV compression, the type of compression used by DV systems or by a DV camcorder that employs the DVformat. A standard consumer DV camcorder uses mini-DV tape, compresses the video using the DV25 standard, and has an IEEE 1394 port for connecting to a desktop computer. The DV designation is also used to for a special type of tape cartridge used in DV camcorders and DV tape decks.

DV25:
The most common form of DV compression, using a fixed data rate of 25 megabits/sec.

Dynamic media:
Refers to design elements that incorporate motion and/or sound such as video, animation, and audio.

Effect:
Distortion of a frame or frames of video to change its appearance; distortion of audio to alter the quality of sound.

Encoder:
A software application or a device (hard-ware) used to encode-i.e., compress and format (see encoding) digital video or audio.

Encoding:
Encoding accomplishes two main objectives: 1) it reduces the size of your video and audio files, by means of compression, making Internet delivery feasible, and 2) it saves your files in a format that can be read and played back on the desktops of your targeted audience. Some encoding solutions may also be configured to provide additional processing functions, such as digital watermarking, for example.
Encoding may be handled by a software application, or by specialized hardware with encoding software built in. Note that the term compression is often used interchangeably with the term "encoding" when referring to the final step in preparing media files for Web distribution; but compression is only a part of the encoding process.

Fast-start streaming:
Term used in Apple's QuickTime architecture for progressive download.

Fields:
The sets of upper (odd) and lower (even) lines drawn by the electron gun when illuminating the phosphors on the inside of a standard television screen, thereby resulting in displaying an interlaced image. In the NTSC standard, one complete vertical scanof the picture or field contains 262.5 lines. Two fields make up a complete television frame the lines of field 1 are vertically interlaced with field 2 for 525 lines of resolution.

FireWire:
The Apple Computer trade name for IEEE 1394.

Flash:
Macromedia Flash is a popular architecture for vector-based Web animation. Often referred to as "streaming," Flash does not fit the definition of "true streaming" used in this Primer. While Flash shares some characteristics with streaming media, and cansimulate video by animating sequential frames, it does not deliver standard, full-motion video file formats over the Web and is constrained to files containing no more than 16,000 frames (approximately 17 minutes of material at 15 fps). The Flash file format, SWF, can be created using Adobe After Effects and Adobe GoLive software, as well as other applications.

FPS:
Number of "frames per second;" a method for describing frame rate.

Frame:
A single still image in a sequence of images which, when displayed in rapid succession, creates the illusion of motion the more frames per second (FPS), the smoother the motion appears.

Frame rate:
The number of images (video frames) shown within a specified time period; often represented as FPS (frames per second). A complete NTSC TV picture consisting of two fields, a total scanning of all 525 lines of the raster area, occurs every 1/30 of a second. In countries where PAL and SECAM are the video standard, a frame consists of 625 lines at 25 frames/sec.

FTP:
File Transfer Protocol is the simplest way to exchange files between computers on the Internet. Like the Hypertext Transfer Protocol (HTTP), which transfers displayable Web pages and related files, and the Simple Mail Transfer Protocol (SMTP), which transfers e-mail, FTP uses the Internet's TCP/IP protocols. FTP is commonly used to transfer Web page files from the on which they were created to a Web server.

Hinted movie:
Term used in Apple's QuickTime architecture for video files that are formatted for true streaming.

Hint track:
Term used in Apple's QuickTime architecture for the set of streaming instructions which, in the QuickTime streaming format, are embedded right into the movie. Other architectures provide streaming instructions as metafiles which are often downloaded separately from the actual movie file.

Host:
A computer system providing data to be accessed by a user working on a remote system, via a network such as the Internet; can be a synonym for server. The term "host" is also used to refer to businesses that provide such systems. A hosting services provider (HSP) is an application service provider (ASP) dedicated to providing hosting services. A hosting services provider typically operates a Web server farm, at a data center or co-location facility. The term "host" may also be used as a verb, as in "to host" files on a server.

HTML:
Hypertext Markup Language is a lexicon of formatting commands typically used to create Web pages. HTML is the language that describes all the basic elements of a page (such as text and graphics), but its current incarnation can't do much to make a page interactive; Java and ActiveX are often used to build interactivity into Web pages.

HTTP:
Hyper Text Transfer Protocol is comprises the underlying set of rules used by the World Wide Web to define how messages are formatted and transmitted, and to communicate what actions Web servers and browsers should take in response to various commands. For example, when a URL is specified in a browser, an HTTP command is sent to a Web server directing it to fetch and transmit the requested Web page.

HTTP streaming:
See progressive download.

Hypertext:
A database system wherein objects (text, images, video, audio, and applications) can be linked to each other.For example, while reading an article about jazz music, you might click on the name of a musician to see a photograph, biography, or discography; you might click on the name of a song to hear it played or to view score. A Web page is simply a graphical user interface (GUI) used to convey a hypertext document.

IEEE 1394:
The interface standard that enables the direct transfer of DV between devices such as a DV camcorder and acomputer; also used to describe the cables and connectors utilizing this standard.

i.LINK:
The Sony trade name for IEEE 1394.

Inter-frame compression:
Also known as temporal compression, inter-frame compression reduces the amount of video information by storing only the differences between frames.

Interlacing:
System developed for early television and still in use in standard television displays. To compensate for limited persistence, the electron gun used to illuminate the phosphors coating the inside of the screen alternately draws even, then odd horizontal lines. By the time the even lines are dimming, the odd lines are illuminated. We perceive these "interlaced" fields of lines as complete pictures.

Intra-frame compression:
Also known as spatial compression, intra-frame compression reduces the amount of video information within each frame individually.

IP:
Internet Protocol, the basis of most Internet protocols, breaks up large chunks of information into digestible packets. In addition to the data being conveyed, each packet (also known as a datagram) carries a header containing the source and destination IP addresses, as well as a sequence number that allows the destination computer to reconstruct the packets in the correct sequence, when they arrive.

IP address:
A numeric identifier for a computer or device on the Internet. An IP address consists of four numbers separated by periods, or dots (e.g., 192.168.0.1), representing a unique 32-bit address. An IP address consists of a network portion and a host portion; how many bits designate the network and how many designate the host varies.

KB:
Kilobytes.

Kbps:
Kilobits per second.

Keyframe:
A frame selected at the beginning or end of a sequence of frames, that is used as a reference for any of a variety of functions. In inter-frame video compression, keyframes typically store complete information about the image, while the frames in between may store only the differences between two keyframes.

Live feed:
Data which is fed to a server in real time (i.e., as it is recorded), rather than being pre-recorded.

Live-live:
Sometimes used to refer to the streaming of a live feed.

Lossy:
Generally refers to a compression scheme or other process, such as duplication, that causes degradation of signal fidelity.

Lossless:
A process that does not affect signal fidelity; e.g. the transfer of DV via an IEEE 1394 connection.

MB:
Megabytes

M-Bone:
The MBONE (Multicast Backbone) is a virtual network layered on top of the physical Internet to support the routing of multicast packets. For more information, see www.mbone.com.

Mbps:
Megabits per second.

MBR:
Short for multiple (or multi) bit rate, and also known as adaptive streaming, MBR is a technique by which several streams, compressed at different bitrates,are encoded together into a single file. When the client calls for the media file, a negotiation between client and server determines the available bandwidth, and the appropriate stream is transmitted.

Media:
A term with many different meanings, in the context of streaming media, it refers to video, animation, and audio. The term "media" may also refer to something used for storage or transmission, such as tapes, diskettes, CD-ROMs, DVDs, or networks suchas the Internet.

Media server:
Specialized server software that takes advantage of appropriate Web transfer protocols such as RTSP (real time streaming protocol), as well as special communication techniques between clients and servers, to facilitate the continuous playback of synchronized audio and video in real time, adjusting the streams transmitted to the actual bandwidth available. Media server software may be running on discrete hardware, or can be deployed in combination with Web server software running on the same device.

Metafile:
A file containing information that describes or specifies another file. Some streaming media formats use metafiles to invoke the client media player and/or to specify the location of a streaming file on a media server.

Mic:
Pronounced like "mike;" short for microphone.

MPEG:
Motion Pictures Expert Group of the Inter-national Organization for Standardization (ISO) has defined multiple standards for compressing audio and video sequences.Setting it apart from JPEG which compresses individual frames, MPEG compression uses a technique where the differences in what has changed between one frame and its predecessor are calculated and encoded. MPEG is both a type of compression and a video format. "MPEG-1" was initially designed to deliver near-broadcast quality video through a standard speed CD-ROM. Playback of MPEG-1 video requires either a software decoder coupled with a high-end machine,or a hardware decoder. "MPEG-2" is the broadcast quality video found on DVD's. It requires a hardware decoder (e.g.; a DVD-ROM player) for playback. "MPEG-4" is a relatively new standard, now being used in some architectures for streaming media.

Multiple (or multi) bit rate:
See MBR.

Multicast:
Multicast is an efficient way to transmit the same media stream to many recipients simultaneously, by replicating the stream at router hops where the path to different multicast group members diverges. Multicast end-users experience the same portion of the media, at the same time (in contrast to unicast, which can allow each end-user to control their own experience when accessing pre-recorded, or on-demand, files). The infrastructure to handle multicasting, known as the M-Bone (multicast backbone) is still emerging; the Internet is not yet ready for the popular proliferation of multicasting. The terms "multicast" and narrowcast are sometimes used interchangeably, although "multicast" more specifically refers to the actual technology inherent in the process.

Narrowband:
Low-bandwidth (typically dial-up) net-work connections usually 56 Kbps or lower.

Narrowcast:
Transmission of media to multiple end-users but, as differentiated from broadcast, not to everyone on a network.

NTSC:
National Television Standards Committee standard for color television transmission used in the United States,Japan and elsewhere. NTSC incorporates an interlaced display with 60 fields per second, 29.97 frames per second.

On-demand:
Media which is not transmitted live, as it is recorded, but is made available as an archive on a server,for end-users to access when they wish. A television broadcast is "live;" renting a video and watching it at home is "on-demand."

Optimize:
Another term for pre-process.

Packet:
Although computers and modems can send data one character at a time, it's more efficient to send information in larger blocks called data "packets," or datagrams. When using the standard Internet protocol, TCP/IP, packets are typically around 1,500 characters. Packets consist of the data being transmitted plus the IP address information of the sender and the recipient.

PAL:
Phase-alternating line television standard popular in most European and South American countries. PAL uses an interlaced display with 50 fields per second, 25 frames per second.

Pixel:
An abbreviation for picture element. The minimum computer display element, represented as a point with a specified color and intensity level. One way to measure image resolution is by the number of pixels used to create the image.

Player:
In a multimedia architecture, the client soft-ware application, typically a plug-in, that enables play-back of the media.

Plug-in:
A plug-in extends the capabilities of a Web browser, enabling the client to display or playback a file type which the browser itself cannot handle.

Pre-processing:
Sometimes called optimizing, pre-processing removes non-essential information from your video and audio information that is difficult to encode and or does not substantively add to the quality of the streamed media. So pre-processing prior to encoding reduces the burden on the compressor, potentially saving time and CPU capacity.

Post-production:
The phase of a film or video project that involves editing and assembling footage and adding effects, graphics, titles, and sound.

Pre-production:
The planning phase of a film or video project usually completed prior to commencing production.

Production:
The phase of a film or video project comprised of shooting or recording raw footage.

Progressive download:
Also known as pseudo-streaming, "progressive download" allows end-users to experience media accessed via a network such as the Internet, while the media file is still in the process of downloading; as opposed to downloadable media,which cannot be played back until the entire file is received. Unlike true streaming, progressive download leaves a copy of the media file on the client. Progressive download is also called HTTP streaming because Web server software using standard protocols (HTTP servers) can deliver progressive download files, unlike true streaming, which takes advantage of the special protocols used by media server software to adjust transmission to match the actual available bandwidth.

Protocol:
A formal description of, i.e., rules for, how specific types of computer systems interact.

Pseudo-streaming:
See progressive download.

QuickTime:
Apple's multi-platform, multimedia soft-ware architecture; used by software developers, hard-ware manufacturers, and content creators to author and publish synchronized graphics, sound, video, text, music, VR, and 3D media. "QuickTime 4" includes strong support for "real" (RTSP) streaming.

RealMedia:
Architecture developed by Real Networks to deliver audio and video content on the Web.Along with QuickTime and Windows Media, one of three dominant streaming architectures.

Real-time:
In computing, refers to an operating mode under which data is received, processed and the results returned so quickly as to seem instantaneous. In terms of streaming media, refers to content streamed live, or as-it-happens.

Reference movie:
A metafile in the QuickTime architecture, used to invoke the QuickTime player and/or to refer the browser to an adaptive bit rate (MBR) file.

Resolution:
The amount of information in each frame of video, normally represented by the number of horizontal pixels times the number of vertical pixels (e.g. 640x480). All other things being equal, a higher resolution will result in a better quality image.

Rich media:
Another term for multimedia.

RTP:
Realtime Transfer Protocol is used as the transfer protocol for RTSP streaming (true streaming), and can deliver a streaming media file to one or more end-users simultaneously (i.e., can unicast or multicast).

RTSP:
Realtime Streaming Protocol provides the functionality allowing end-users to randomly access and control the delivery of streaming media content.

Server cluster or server farm:
A group of networked servers that streamline internal processes by distributing the workload and expedite computing processes by harnessing the power of multiple servers. Load-balancing software tracks demand for processing power from different machines, prioritizing the tasks, and scheduling and rescheduling them depending on priority and demand users put on the network. Redundancy ensures that if one server in the farm fails, another can step in as backup.

SECAM:
Similar to PAL at 25 FPS, the SECAM format is employed primarily in France, the Middle East, and Africa. It is only used for broadcasting. In countries employing the SECAM standard, PAL format cameras and decks are used.

Skin:
A custom GUI (graphical user interface) designed for a specific media player.

SMIL:
Pronounced like "smile," SMIL stands for Synchronized Multimedia Integration Language. Like HTML, it is a markup language designed to be easy to learn and deploy on Web sites. SMIL was created specifically to solve the problems of coordinating the display of a variety of multimedia on Web sites. By using a single timeline for all of the media on a page, display can be time-coordinated and synchronized.

Spatial compression:
See intra-frame compression.

Static media:
Refers to design elements that do not incorporate motion or sound such as still photos or graphics.

Stream:
Data of a distinct type sent from server to client at a rate defined by the server. For a typical video broadcast, for example,one stream could consist of the video signal, one stream could consist of the audio data, and one stream could contain the closed caption information. In most cases, each stream is served at the rate that it should be rendered by the client.

Streaming:
Process of sending media over the Internet or other network, allowing playback on the desktop as the video is received, rather than requiring that the entire file be downloaded prior to playback.

SWF:
The SWF graphic file format is a version of the Macromedia Flash Player vector-based graphics format introduced in 1997. The SWF file format is ideal for presenting vector-based interactive and animated graphics with sound for the Web. Vector images are ideal for graphics with solid areas of color and distinct object definitions. Because a SWF file is vector-based, its graphics are scalable and play back smoothly on any screen size and across multiple platforms. A vector animation usually has a smaller file size than a bitmap animation.

TCP/IP:
These two protocols (Transmission Control Protocol/Internet Protocol) were developed by the U.S. military to allow computers to talk to each other over long distance networks. IP is responsible for moving packets of data between nodes. TCP is responsible for verifying delivery from client to server. TCP/IP forms the basis of the Internet, and is built into most every common operating system.

Temporal compression:
See inter-frame compression.

Timeline:
The graphical representation of program length onto which video, audio and graphics clips are arranged.

True streaming:
Affording real-time access to content via the Internet or an intranet, true streaming is enabled by a specialized server application,that relies on streaming protocols to adjust the rate of transmission to accommodate available bandwidth.

Tunneling:
The use of specially designed paths to carry multicast traffic over the Internet.

24-bit color:
Type of color representation used by current computers. For each of the Red, Green, and Blue components, 8 bits of information are stored and transmitted 24 bits in total. With these 24 bits of information, over a million different variations of color can be represented.

UDP:
User Datagram Protocol, like TCP, runs on top of IP networks. Unlike TCP/IP, UDP/IP provides very little error recovery, offering instead a direct way to send and receive datagrams over an IP network. It is primarily used for streaming over the Internet.

Unicast:
The technique whereby a single stream is transmitted to a single end-user; i.e., each end-user gets a unique stream. Bandwidth-hogging unicasting is not as efficient as multicasting.

Upload:
The act of one computer sending data, via a network, to another computer.

URL:
A Uniform Resource Locator is the "address" used to find a document or resource on the World Wide Web. The first part of the address specifies the protocol (typically HTTP for Web pages, FTP for files not residing on a Web server, or RTSP for streaming files); the second part specifies the IP address, or domain name; and the rest specifies the directory structure for finding the discrete file on the host computer.

URL flip:
A coded marker embedded in the timeline of video or audio that calls up a link to a Web page during playback.

Video capture card (or board):
Installed inside a computer, adds the functionality needed to digitize analog video for use by the computer. Using a hardware or software codec, the capture card also compresses video in and decompresses video out for display on a television monitor.

VOD:
Video On Demand refers to streaming files that are archived on a streaming server and may be accessed by an end-user at any time, as contrasted with live, or real-time, content.

Webcasting:
The technique of broadcasting media over an intranet, extranet, or the Internet.

Web server streaming:
Yet another term for HTTP streaming, pseudo-streaming, or progressive download; see progressive download.

Windows Media:
Offered by Microsoft, one of the three dominant architectures for distributing media on the Web, including streaming media.