

Glossary of Digital Media Terminology

A

AAF (Advanced Authoring Format) – Refers to the standardized metadata definitions that are used to exchange metadata between creative content workstations. This “format” has been created primarily for postproduction use. The AAF includes a rich set of composition metadata that can be used to describe the components making up a program or production. It is worth noting that the definition does provide for “essence” exchange as well as metadata exchange.

Algorithm - The underlying instructions and computations that are the basis of programs. Can imply complex mathematical programs such as encryption or compression.

Analog - A storage or transmission of information by a variable physical means, such as shifts in voltage sent through the electromagnetic spectrum or the vibrations of against patterns inside the grooves of a vinyl disc, to create physical (analogous) patterns of pictures or sounds. Standard broadcasting or the way old "record players" worked before "CD's."

Archiving - The process of storing and retrieving data/media for extended periods of time without degradation.

ASF - Microsoft’s streaming media format that supports audio, video, slide shows and synchronized events.

Aspect Ratio - The ratio of a picture’s width to height for video display.

Asset – An original source or a high-quality digital content element that can be integrated into a larger work. Examples: an image file; a sound or video clip; or an animation.

Asynchronous Transfer Mode (ATM) - A fixed length 53 byte packet-based transmission technology that may be used to transmit data, voice and video traffic at speeds up to 2.4 Gbps.

Attributes – Sometimes called metadata, are used to describe and index “assets” within a content management system. See metadata.

Audio – Sound or the reproduction of sound. Audio frequency is a frequency capable of being perceived by the human ear.

AVI (Audio/Video Interleaved) - An uncompressed audio/video Microsoft –specified file format used for downloading audio and/or video files.

B

Bandwidth - The transmission capacity of a communications line, expressed in bits per second (bps) for digital transmission of Hertz (cycles per second) for analog signals. The greater the bandwidth, the greater the information-carrying capacity.

Bandwidth on Demand - A class of communications service whereby a user can request additional bandwidth, or speed capability, at any time, for a certain period of time and customers only pay for the actual time additional capacity is used.

BIT - A single binary digit, the smallest unit of information a computer can process with two possible states, 0 or 1.

Bit rate – a measure of bandwidth, expressed as the number of bits transmitted per second.

Bridge - An internetworking device used to connect together two or more network types or local area networks.

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Broadband - Generally used to refer to high-speed Internet connection technologies, the term has become synonymous with high bandwidth. The term originated in the telephone industry, where it refers to connections with wider bandwidths thus higher transmission speed than standard phone lines. Cable modems, DSL, and fiber optic systems are referred to as broadband technologies. (See minimum connection speed.)

Buffering - The temporary storage that occurs when a streaming media player is saving small portions of a streaming media file to local storage for playback. It is used when the available bandwidth does not match the presentation's required bandwidth and attempts to smooth video display.

Burn - The process of writing information, such as a music file, onto a CD.

Byte - A group of 8 bits.

C

Capture (a.k.a. ingest) - The process of digitizing audio and video content from an analog format.

Central Office (CO) - A carrier facility located in neighborhoods where the service provider physically connects its network to homes.

CDN (Content Distribution Network) – Companies that deliver Web data (including streaming media) via an intelligent distributed network. For companies providing streaming content delivery services, this means that audio or video streams will be delivered more reliably, with less buffering and time outs. Generally, this will provide a better overall experience for the end user.

Check-in/Checkout - The capability and practice of moving digital content from one system or process to another, for instance from a computer to a portable device (*checking-out*), and then returning it (*checking-in*).

Circuit switching - The process of establishing and maintaining a circuit through a public network between two or more users on demand and providing such users exclusive use of the circuit until the connection is released. Telephone companies and other common carriers typically perform circuit switching.

Chrominance - The color information of the video signal.

Clearinghouse (a.k.a. rights clearinghouse) - A company (or operation) that functions to ensure that the consumer receives the content purchased, and that "content owners" are provided accurate sales records for subsequent payments based on packaging and licensing agreements.

Clip – a media file within a presentation. Or a segment of video.

Codec – Coder/decoder. Any hardware or software that compresses and decompresses data as part of the conversion of sound, speech, or video to digital code and visa versa. (See compression.)

Container (a.k.a. package, wrapper) – A digital software device that provides online distributors with a way of transmitting digital products. The container is analogous to the CD jewel case. The container may contain the "essence" (music, video, etc.) as well as other materials such as art, liner notes, and company information.

Content integration – Software that integrates heterogeneous vendors repositories through federation or virtualization.

Convergence (a.k.a. TV- PC convergence) - The fusion of television and PC into a single home appliance.

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Component video - A video signal where the chrominance and luminance portions of the video are recorded separately to improve picture quality (over composite video).

Composite video - A video signal where the chrominance and luminance portions of the video are combined.

Compression - The process of reducing the size of a data file by removing redundant information so that the file requires less storage and bandwidth. Since compression requires discarding of data, some quality is lost. The compression ratio is the comparison of uncompressed and compressed files.

Customer premises equipment (CPE) - Equipment that interfaces with (connects to) the telephone network and physically resides at the user's location.

D

D1, D2, D3, D4 - Formats used for recording video data on tape. D1 has the highest quality recording with a component format at 720x486 resolution and 24-bit color that uses 1MB of storage for each frame in its raw, uncompressed digital format. D2 is broadcast quality and integrates well with analog equipment since it uses composite inputs and outputs. D3 and D4 are lower cost broadcast-quality alternatives to D1 recording that is a composite format recorded on half-inch tape.

Decoder - Software or hardware that converts a coded compressed file back to its original form.

Digital media – Digital stands for the “representation of a signal by a set of discrete numerical values...commonly represented on a computer in binary form.” Digital media refers to media – video, audio, images, etc. – that are stored in binary form. Digital media objects can be digital stored and distributed without changing their form. Digital media can be created, managed, and distributed using information technology (IT) systems.

Digital asset management – Software for managing the life cycle of large collections of digital assets such as photographic images, graphics, brand logos and compound documents. Key features include indexing, check-in/checkout, versioning, search, retrieval, workflow and life cycle management. Include support for thumbnails and complex metadata structures. Typically support a large number of output formats for delivery across multiple channels. DAM also encompassed media asset management (see below.)

Digital distribution master (a.k.a. electronic master, e-master, parent file) – The stored file that is copied (or mirrored) in fulfilling orders for digital content.

Digital rights management (DRM) – A set of technologies content owners can use to protect their copyrights and intellectual property rights, in order to enable the secure distribution, promotion, and sales of digital media content. . In most instances, DRM is a system that encrypts digital media content and limits access to only those people who have acquired a proper license to play the content.

Digital subscriber line (DSL) - DSL refers to a combination of technologies that allow the concurrent transmission of high-speed data along with voice over a standard copper telephone line. There is no single standard for DSL. There are a number of flavors including ADSL, SDSL, HDSL and VDSL. Symmetrical DSL options like HDSL and SDSL transmit data at the same speed in both the upstream and downstream direction and are thus best suited to commercial applications. Asymmetric flavors like ADSL are often used in residential deployments given that the disproportionately higher downstream speeds are thought to be better suited to Web access and file downloads.

Digital subscriber line access multiplexer (DSLAM) - Are devices that usually, but not always, reside in the central office and terminate and aggregate multiple DSL lines and provide the associated protocol translation.

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Digital service provider (DSP) - Companies that aggregate and manage services and technologies that enable retailers to sell digital content (here-to-fore primarily music) via the Internet, and also enable fulfillment of digital content orders.

Digital video - Video recorded in digital form, whether originated in a digital format or converted from an analog format.

Digital video effect - Visual effects generated by computer to enhance scene transitions such as fades, wipes, dissolving a frame, etc.

Digital wallet - Software that encrypts consumer's information, such as identification, credit card, and shipping information thus eliminating the need to re-enter this information every time the consumer makes a purchase. The encryption protects the consumer from theft and the retailer from fraud. Digital wallets may be proprietary to the retailer or may be proprietary to a stand-alone financial entity in which case the consumer can use the wallet at any site that accepts it.

Document management – Software that manages the complete life cycle of office documents from collaborative authoring to archival.

Download media - Is the method by which entire video/audio files are delivered to the local machine before playback is allowed. With streaming media, the data is processed in a continuous stream.

DS-0, DS-1, DS-3 - DS-0 stands for Digital Service, level 0. It is 64,000 bits per second and the most common method to sample a voice signal and cover it to an equivalent digital signal. DS-1 stands for Digital Service, level 1. DS-1 is 1.544 Mbps in North America and 2.048 Mbps elsewhere. There are 24 DS-0 channels in a DS-1. DS-3 stands for Digital Service, level 3. DS-3 is 44.736 Mbps, the equivalent of 28 T-1 channels.

DSP (digital signal processor) - Is a special purpose integrated circuit usually used for math-intensive applications, such as encoding and decoding. They are used in myriad devices from sound cards to cell phones to televisions.

DV, DVCAM, DVCPRO - DV (Digital Video) is a consumer digital video format endorsed by all major video equipment vendors. DV uses an algorithm similar to Motion JPEG that provides a 5:1 compression ratio. DVCAM and DVCPRO are Sony's and Panasonic's variants of the DV format which provides professional quality by increasing the tape speed and increasing track width for added reliability.

E

E-1 - Telecommunications line that operates at a speed of 2.048 Mbps, typically available in Europe and Latin America.

EDL (Edit Decision List) – The primary method of transferring information about an edit project between editing systems. This is especially important in transferring Off-line decisions to the On-line assembly. An EDL is a list of "events" that include the source to be recorded, and where to record it. In addition, it includes information about transitions (cuts, dissolves, wipes), transition durations, etc. An EDL is saved with a file name that must include the ".EDL" extension.

Encoder - Software or hardware that compresses video and audio from analog form to digital.

Encryption/decryption - The conversion of data into a secret code for transmission over a public network. The original material is converted into a coded equivalent called ciphertext via an encryption algorithm. The encryption algorithm uses a key, which is a binary number that is typically from 40 to 128 bits in length, though some keys contain as many as 1028 bits. The greater the number of bits in the key (cipher strength), the more possible key combinations and the longer it would take to break the code. The data is encrypted, or "locked," by mathematically combining the bits in the key with the data bits. At the receiving end, the key

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is used to "unlock" the code and restore the original data. Encryption of content can be done automatically with most DRM systems.

Enterprise content management – Software that encompasses document management, document imaging, web content management (WCM), COLD (Computer Output to Laser Disk)/ERM (Electronic Reports Management), digital asset management (DAM), media asset management (MAM), records management, and team collaboration.

Essence – see essence media.

Essence data – This is a new term that refers to the bits and bytes of new forms of content, such as interactive TV-specific content, Advanced Television Enhancement Forum (ATVEF) content, closed captions, etc. Essence

Essence media (a.k.a. essence data) – This is another means of saying "essence." The trend today is to use the term "essence" without the "data" or "media" appendage. The term refers to the actual bits and bytes that represent the sound and picture. It is frequently (and incorrectly) used by IT folks to describe a cassette, DVD, or streaming file.

Ethernet - A widely implemented nonproprietary standard set of specification (protocol) for a particular type of local area network that employs baseband signaling (single signal on a cable) and has a transmission rate of 10 Mbps.

F

Fair use – The copyright owner's exclusive rights are subject to a number of exceptions and limitations according to the "fair use doctrine" of copyright law

Firewire - A standard that allows external devices, such as digital video cameras, to transfer data to a computer at very high bit rates up to 500 Mbps.

Frame - One still image among the many that make up a video.

Frame grabber – A device that converts a screen's worth of analog video signal into a digital form.

Frame rate - The number of frames per second (fps) of a video, film or animation. Video and film are taken at 30 fps and 24 fps respectively.

Frame relay - A variable length packet-based transmission technology that organizes data into units called "frames" instead of providing dedicated channels and may be used to transmit data at speeds up to 2 Mbps.

Frequency - The number of identical cycles per second, measured in Hertz of period oscillation or waves.

Fulfillment - The process of delivering to a consumer the digital content files, digital licenses, and anything else that the consumer may require (such as a software player or player plug-in) to make complete use of the acquired rights to a specific piece of digital content.

G

Gateway - A device that connects incompatible networks such as the public telephone network, IP networks and ISDN networks.

Generational loss - Degradation in the quality of analog video/audio signals that occurs by tape copying. This does not create a problem for digital recordings.

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GIF (Graphics Interchange Format) - Is a widely used format for bitmapped graphics on the Web since its files compress well (and thus are speedy). It supports 8-bit color (256 colors).

GPRS (General Packet Radio Service) – Is a step in the evolution of a GSM network towards 3G. GPRS increases data throughput from 9.6kbps to 115kbps and allows the capability to charge per data bit sent.

GSM (Global System for Mobile Communications) - Is a digital wireless technology standardized to create a compatible wireless network across Europe. GSM is still most commonly used in Europe, but it is also deployed in other areas of the world. GSM operates in 3 frequency ranges - GSM 900, GSM 1800, and GSM 1900 (also called PCS 1900).

H

H.320 - An International Telecommunications Union (ITU) standard for videoconferencing over ISDN.

H.323 - An ITU standard for interactive voice, video and data over LANs and the Internet. It is widely used for videoconferencing and IP technology.

H.324 - An ITU standard for videoconferencing over standard analog phone lines, called POTS (Plain Old Telephone Service) using modems.

HDTV (High Definition Television) - The broadcast standard that offers greater resolution by increasing the number of scan lines.

Headend - Is the point of origin for content in a network. The head end in cable networks is the facility where the network to the home and information sources such as satellite feeds meet. For Internet services, it is the provider.

Hertz (Hz) - A unit for measuring the frequency with which an electromagnetic signal cycles from trough to trough or from peak to peak. One Hertz equals one cycle per second; one kilohertz (KHz) equals one thousand Hertz; one megahertz (MHz) equals one million Hertz.

HTML – HyperText Markup Language – A collection of platform-independent styles (indicated by markup tags) that define the various components of a World Wide Web document.

Hypermedia – An extension of hypertext that links text objects with other forms of data such as graphics, motion video or sound.

Hypertext – A system of linked text objects that allow a user to read through or study a topic via a custom path. This is a method used to navigate the World Wide Web.

I

Indexing - A process that creates references of pointers within an audio or video file that allows for searching within that file.

Ingest – (a.k.a. capture) - The process of digitizing audio and video content from an analog format.

Interframe Coding - A compression method that only notes the changes between frames. High compression rates can be achieved using this method or low motion recordings such as news commentators where little changes beyond facial and head movements.

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Interstitial (a.k.a. Interstitial ad) - Any web-based advertisement that occurs before, after, or during a narrative content presentation. For example, if streaming media terminology were applied to regular television, commercials would be called interstitials, since they interrupt programming.

ISRC (International Standard Recording Code) - The international identification system for sound recordings and music video recordings.

ITU (International Telecommunication Union) - An international standards organization located in Geneva, Switzerland. The ITU is comprised of over 150 member countries, of which the United States is one.

IETF (Internet Engineering Task Force) - An Internet activities board task force consisting of over 40 groups that is responsible for addressing short-term Internet engineering issues.

Interstitial Ad - A web-based advertisement that pops up and is displayed in a different window while the next web page is downloading.

IP - An abbreviation for Internet Protocol.

J

JPEG (Joint Photographic Experts Group) - An ISO/ITU standard for compression of still images. Compressions of 10-to-1 or 20-to-1 provide losses that are not very noticeable but can be as high as 100-to-1. M-JPEG and MPEG are variations of JPEG used for full-motion digital video.

Jukebox - Software programs, or actual physical entities, that organizes and plays digital music.

K

KLV (Key, Length, Value) – A data-encoding protocol (SMPTE 336M). This is the “header” information in a metadata stream that will identify the data and which metadata dictionary of definitions should be used for the metadata that follows. KLV and UMIDs (Unique Material Identifiers) are the basic engineering blocks designed to make metadata easier to exchange between different media (such as tapes or files) and metadata standards.

L

Latency - The transmission delays that occur across two points of a network. Latency is critical for voice and video applications since they are time-sensitive

Legacy systems - Mainframe and minicomputer systems that predate LANs and Bridge/Router-based WAN internetworking.

Linear editing - The editing of video data that is stored on magnetic tape which is a linear storage mechanism.

Local area network (LAN) - A communications arrangement connecting multiple computer and related products in an office, building or campus environment by means of a standard transmission medium (e.g., coaxial cable, twisted-pair wire or optical fiber). LANs are typically under the control of a network operator.

Local exchange networks - The part of the network that interconnects the carrier’s central offices in a metropolitan area.

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Lossy compression - During compression, certain data is discarded to shrink the size of the file. The discarded data is not recoverable and therefore, some precision of detail is lost.

Luminance - The black and white portion of a video signal.

M

Markup language – A set of labels (called “tags” embedded within text to distinguish individual elements.

Media – This is the blanket term used when referring to audio, video or images such as photos, as well as the ways they are used to reach the viewer (i.e. streaming media).

Media asset management – Software that is a subset of DAM and specific to rich media such as video and audio, which requires complex management tools.

Mediated distribution - The authorized distribution of content through a legitimate retailer or other online merchant, with the merchant or its affiliated partners managing the distribution via a central system.

Megabits per second (Mbps) - A rate of speed of data transfer corresponding to 1,024 kilobits per second or 1,048,576 bit per second.

Metadata - Information that describes another file. The data bits that complement the “essence” media and may include such data as timecode, sync, blanking, and color burst information. Metadata may also include all sorts of descriptive data, such as where the sources originated, how they are composited, talent information, digital rights management, etc.

Metafile - A file that minimally contains a URL that points a media player toward a streaming media source. Generally served using HTTP. May be a static file or generated dynamically. Commonly use the filename suffixes RAM (RealNetworks), ASX, WMX (Windows Media), and MOV (QuickTime).

MOV – A digital video format that requires QuickTime player.

MPEG - Stands for “Moving Pictures Experts Group” and is an ISO/ITU standard for compressing video. If the computer running the files is fast enough (e.g., 400MHz Pentium), the material can be decompressed in software; otherwise an MPEG board is useful. MPEG uses the same intraframe coding as JPEG for individual frames, but also uses interframe coding which further compresses the video data by encoding only the difference between periodic key frames.

MPEG-2 - A higher resolution format that provides the broadcast quality image of 720x480 resolution that is used in DVD movies. MPEG-2 supports a wide variety of audio/video formats including legacy TV, HDTV and surround sound. MPEG-2 requires from 4 to 16 Mbps bandwidth.

MPEG-3 or MP3 - MPEG Audio Layer 3, is an audio compression technology that is part of the MPEG-1 and MPEG-2 specifications. MPEG-3 compresses CD quality sound by a factor of 12 while providing almost the same fidelity (the average MP3 song is about 4MB). MP3 music files are played via software or a player that connects to a PC for transfer.

MPEG-4 - Is the next generation MPEG that deals with audio/video data as objects rather than streams of data. The advantage to this is that objects can be manipulated independently giving higher degrees of flexibility in editing. Moreover, MPEG-4 supports a wide range of transmission speeds and can deal with intellectual property and protection issues.

Multicast - A process that allows a server to send one stream to multiple recipients. This is different from traditional streaming media, where each user connects separately to a server.

Multicasting - The transmission of data to multiple parties from a single source.

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Multiplexer - Equipment that allows two or more signals to pass over one communications circuit.

Multiplexing - The combining of multiple data channels onto a single transmission medium. A process that enables a circuit normally dedicated to a single user to be shared by multiple users.

Music sample - A promotional excerpt of a song.

MXF (Material eXchange Format) – This is an open file format targeted at the interchange of audio-visual material with associated data and metadata. MFX is a subset of AAF (Advanced Authoring Format). MXF was designed for less complex (less vertically rich) metadata applications, such as news editing and video streaming from servers. Because of its flatter metadata structure, it is better suited to be used as a metadata wrapper within a video signal or a TCP/IP stream. It offers performance benefits over the more complex AAF file structure because of its streamable nature. Like AAF, this format is capable of carrying “essence” (Video, Audio, etc.) and compatible metadata (supporting information and data).

N

Narrowcast - The transmission of content that targets a specific community.

Network core - The core of the communications network is comprised of the transport and backbone segments that are responsible for long-haul transmission between central offices.

New media - Term used to describe relatively new forms of media distribution such as the Internet, CD-ROM, DVD, etc.

NTSC (National Television Standards Committee) - Is the standard for broadcast video in the U.S. and Japan. NTSC broadcasts 525 lines of resolution and is refreshed at 30 interlaced frames per second. PAL is the standard used in many other parts of the world and broadcasts at 625 lines of resolution at 25 interlaced frames per second.

Nonlinear editing - The editing of digital video/audio data on computers that is stored on disk drives which are non-linear or random access devices. Describes the process of editing audio or video where the entire video is available at any given moment for mixing and matching. Nonlinear video editing is to traditional video editing as word processing is to pen and paper.

O

OC-1, OC-3, OC-4, OC-192 - OC-1 stands for Optical Carrier, level 1. It is a SONET optical signal, transmitting at 51.840 Mbps. All higher levels are direct multiples of OC-1. For example, OC-48 is a SONET channel of 2.4 Gbps.

OMF, OMFI (Open Media Framework Interchange) – Is a media and metadata exchange solution developed by Avid Technology. It pre-dates AAF.

P

Packet switching - A data transmission technique whereby user information is segmented and routed in discrete data envelopes called packets, each with its own appended control information for routing, sequencing and error checking. Packet switching allows a communications channel to be shared by many users each using the circuit only for the time required to transmit a single packet.

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PAL (Phase Alternating Lines) – PAL is the standard for broadcast video used in many parts of the world, but in the U.S. and not in Japan. It broadcasts 625 lines of resolution at 25 interlaced frames per second. (See NTSC).

Peer-to-peer distribution - The distribution of content or information about a product from consumer to consumer. Except for certain fair use (see *fair use*.) situations, this type of distribution may violate copyright laws if the holder of the rights has not granted permission for the file to be transferred to a third party.

Pixel - The smallest addressable unit on a display screen.

Point of Presence (POP) - Is the location of an access point to the Internet. A POP may be physically located in space rented from a major telecommunications company and often includes equipment such as routers, servers and frame relay or ATM switches. The number of POPs an ISP has is often used as an indicator of its size.

Portable media (PM) - Media types that can be transferred to/among players.

Playlist – a list of time-based media in the order it should be played and in a format that playout or rendering functions can act on. The individual entries identify the media, the starting point (timecode) to begin play, and the duration or ending time to stop play. Playlists generally don't defined transitions between media. (See EDL. An EDL is the simplest form of a playlist.)

Q

Quicktime - Multimedia architecture used by software tool vendors and content creators to store, edit and play synchronized graphics, sound, video, and music.

R

RealAudio – The file format developed by RealNetworks that is used to stream audio over the Internet.

RealAudio – The file format developed by RealNetworks that is used to stream video over the Internet.

Real time – The actual time an event takes place. For example, real time can refer to a live broadcast or an active exchange between a host and a user.

Repurpose – The reformatting and re-use of a digital asset for an additional purpose. Since in this new instance production cost is reduced, this constitutes a major business value.

Repurposing - The reformatting of existing video/audio content to extend the original content's use.

Resolution – Described in dots per inch (dpi), resolution refers to the clarity and detail of an image.

Rights management (a.k.a. Digital rights management) - Technology and processes that monitors the ownership, distribution and usage of media.

Router - A device connecting two or more local area networks or network segments. Routers are used to improve overall network performance by segmenting networks and permitting only traffic destined for another segment of a network to be routed to that segment.

RTP (Real Time Protocol) – An Internet protocol that defines the transmission of real-time data, such as audio and video. RTP provides mechanisms for the sending (server) and receiving (client) applications to support streaming data.

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RTSP (Real-Time Streaming Protocol) - A standard method of transferring audio and video and other time-based media over Internet-technology based networks. RTSP is a descendent of UDP.

S

Secure Digital Music Initiative (SDMI) - SDMI is a forum of more than 200 companies whose goal is to develop a voluntary, open framework for playing, storing, and distributing digital music in a protected form. SDMI participants include music content, consumer electronics, information technology, and wireless telecommunication companies. IBM is a member.

Security schema – A security schema matches the different business objects and object classes to a particular type of user, with different authority levels. A content management (or digital asset management) system, a security schema defines what actions a user or group of users can perform on an object(s).

Serial Copy Management System (SCMS) - An original version of a digital work (primarily music CDs) includes a flag, or piece of information, identifying it as a master version. **SIP (Session Initiation Protocol)** - A protocol that provides interactive voice and video conferencing services similar to H.323, but is less complex and uses less resources making it suitable for very small portable devices.

SMIL (Synchronized Multimedia Integration Language) - Is an XML compliant mark-up (layout) language used to synchronize disparate media elements (such as text, animations, audio and video) within one streaming media presentation.

SMPTE – Society of Motion Picture and Television Engineers (USA) is an industry organization dedicated to....

Stream – To send a media clip over a network so that it begins playing back as quickly as possible.

Streaming media – An Internet data transfer technique that allows the users to see and hear audio and video files without lengthy download times. The host or source “streams” small packets of information over the Internet to the user, who can access the content as it is received. Buffers are used to account for delays in packet delivery.

Superdistribution – The consumer-to-consumer distribution of a product or content.

Syndication - A process whereby a content creator licenses a media to another party (e.g., a portal) for limited use.

T

T1 - Telecommunications line that operates at a speed of 1.544 Mbps, typically available in North America.

T3 - A high-speed digital facility that transmits data at a rate of 44.736 Mbps.

Taxonomy – The orderly classification of business objects according to their presumed natural relationships.

T-commerce – Interactive Television (TV) with commerce characteristics.

Terabit per second (Tbps) - A rate of speed of data transfer corresponding to 1,024 Gbps.

Thumbnail – a low quality, low resolution, small format image of a higher quality, higher resolution, larger format image (or video frame) that is representative of the high quality item.

Transcode – To translate one digital media format into another digital media format.

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Transcoding – The process of translating one digital media format into another digital media format. Typically done with software. An example would be transcoding an MPEG4 proxy from an MPEG2 editable quality source file.

Transmit/transmission – Used in context of both television-style broadcasting, as well as in reference to digital communication over phone or cable lines between computers.

Transponder - The device in a communications satellite that receives signals from an uplink on earth and transmits it back to earth (downlink), used by cable programmers to deliver signals to local cable systems.

U

UDP (User Datagram Protocol) - A protocol within the TCP/IP protocol that is used in place of TCP when a reliable delivery is not required. Real-time audio and video traffic ignores lost packets because there is not time to retransmit.

Unicast - A process that forces each individual user to make an individual connection to a server to receive a stream.

V

VBR (Variable Bit Rate) – Refers to the ability to maintain a quality broadcast without interruption from fluctuating bandwidth or other network load problems.

Vector graphics – Refers to graphics based on mathematical algorithms. As opposed to GIF or PNG pixel-based graphics, vector graphics can be resized infinitely without losing clarity.

Video conferencing - A Real-time, two-way video/audio communications technology that has expanded to include the sharing of whiteboard information, applications, presentations and other information.

Video compression - The process through which a complete video file is reduced in size. Video Compression algorithms take advantage of the fact that there is minimal difference from "one" frame to the next. The first frame is encoded and then the sequence of differences between frames. This is also known as "inter-frame" coding or "3D coding"

Video on Demand - A service that enables a user to order a movie or other video content from a library of content at any time.

UMID (Unique Material Identifier) – UMID is a SMPTE standard for metadata.

W

W3C – World Wide Web Consortium, an Internet standards body.

Walled garden - Refers to a browsing environment that is controlled by one specific entity. On the Internet, a walled garden refers to portals that give users limited access to a number of internal sites without the user having to leave their session with that portal.

Watermarking - A method of attaching invisible copyright information (author, rights, etc.) to data or content.

WAP (Wireless Application Protocol) - A protocol that defines delivery and access of information to WAP-enabled wireless devices.

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WAV - An uncompressed audio file that is in a native format used by Windows.

Web content management – Software that enables the collection, assembly, staging, maintenance and delivery of textual and graphic content for the primary purpose of disseminating information via the web.

Webcast – The broadcasting of streaming content over the Internet. Typically refers to a live broadcast.

Windows Media Audio and Video 9 – Microsoft format for compressed video. Windows Media Video 9 provides compression efficiency approximately three times that of MPEG-2. With the goal of enabling other companies to easily and independently develop their own interoperable products, Microsoft is submitting the compression technology used in the Windows Media Video (WMV) 9 codec to the Society of Motion Picture and Television Engineers (SMPTE) C24 Technical Committee for consideration as an openly available international standard.

WIPO – World Intellectual Property Organization is an intergovernmental organization with 175 member states, which promotes the protection of intellectual property throughout the world.

Workflow – The process for identifying, making, reviewing, approving and publishing new or changed content.

X

XML – This is an open-standard markup language for creating and reading documents that must contain structured information. XML can identify such varied data items as product, producer and MSRP, allowing Web pages to function like database records. By providing a common method for identifying data, XML supports business-to-business transactions and many expect it to become a dominant format for electronic data interchange