Avid Glossary

This glossary contains terms used in Avid documentation. Some terms may not apply to your particular system.

Numerics

10Base-T and 100Base-T

Low-cost point-to-point 10Mb/sec and 100Mb/sec Ethernet using four unshielded twisted pairs (UTP) of wire (only two pairs are actually used) with RJ-45 connectors.

1394

See *IEEE Standard 1394*.

24p

24-fps progressive media. Twenty-four full frames per second digital video progressively captured. In most cases, it refers to the HD picture format of 1920x1080, though it is also used with 1280x720 images.

25p

25-fps progressive media.

2:3 pulldown, 3:2 pulldown

See *pulldown*.

2D layer

A layer in which objects are stacked on top each other. Objects cannot intersect in this type of layer.

2D textures

Images that are mapped to the object surface. An algorithm is used for “wrapping” the texture around the object’s surface so that the pattern curves and distorts realistically. The advantage of using textures is that the complexity of appearance does not have to be modeled in the object geometry. A common use of textures is to apply a label as a texture image on a three-dimensional bottle. 2D textures can also be used as transparency, reflection, and displacement maps.

3/4-inch U-matic

One of the first composite videocassette formats, in which the composite signal is recorded onto 3/4-inch tape. Used for many years, particularly in field recording, the U-matic format is slowly being replaced by more advanced and lightweight systems.

3D layer

A layer in which objects are positioned based on their locations in three-dimensional space. Objects can intersect in this type of layer.

3D manipulators

A set of 3D controls that allow you to manipulate primitives, properties, and operators in a viewport. Manipulators provide “handles” that can be directly moved in 3D space to modify specific parameter values associated with the objects or operators being manipulated. They provide a direct and visual way of editing properties and doing relatively complex manipulations that cannot be done as easily by changing values in property editors. For example, you can use 3D manipulators to transform geometric objects, cameras, lights, and change the parameters of light cones and texture projections.

3D objects

Anything with a position and a representation in 3D space. Some objects have a special role, such as cameras and lights, while others serve as controls for other objects, such as waves and manipulators.

3D textures

Also called *solid* textures. A 3D texture is created by a computer procedure with a set of parameters instead of a picture file. A 3D texture, when applied to the surface of a three-dimensional object, gives the appearance of an object that has been carved from a block of a substance, such as wood or marble. In other words, the pattern follows logically inside the volume just as wood grain carries through inside a wooden object. 3D textures avoid many of the difficulties attributed to mapping a bitmap around the surface of an irregular object. These textures have no edges and provide a continuous-looking appearance.

4:2:2 digital video

A digital video system defined by the ITU-R 601 (CCIR-601) technical documentation. 4:2:2 refers to the comparative ratio of sampling of the three components of the video signal: luminance and two color channels.

A

AAF

Advanced Authoring Format. A cross-platform multimedia file format that allows interchange of media and composition information between AAF-compliant applications.

A-roll A method of conforming that requires the compositing of all multilayer effects into a single layer (including standard dissolves and fades) before assembly. Also called *single-strand editing*.

A/B-roll 1. A method of conforming that limits the amount of optical work by managing most standard dissolves and fades using two strands of film. Also called double-strand editing.

2. Alternating scenes, recorded on separate source tapes or film rolls, to perform dissolves, wipes, or other types of transitions.

A/D converter Analog-to-digital converter. A device that transforms a continuously variable (analog) signal to discrete binary bits that represent digital samples of the original signal.

absolute time The time assigned to a clip when it was encoded.

account A level of authorization assigned to individuals. This determines the types of information users can access and the actions they can perform. Account types include user, user manager, superuser, and system administrator.

activeness The sections of a clip that will be used in the final output.

academy Pertaining to specifications that meet the Academy of Motion Picture Arts and Sciences standards, such as academy leader, academy format (for film stock), academy countdown, and so forth.

add edit An edit added between consecutive frames in a sequence segment within the timeline. An add edit separates segment sections, so you can modify or add effects to a subsection of the segment.

ADAT Alesis Digital Audio Tape. A proprietary audio standard for a multichannel optical digital interface, which is used in the family of Alesis ADAT digital multitrack recorders. The standard ADAT data stream contains eight channels of digital audio data.

AES Audio Engineering Society. The primary international organization of users and producers of professional audio. The AES maintains a standards committee that supervises the work of several subcommittees and working groups covering various fields of sound reinforcements.

AES/EBU Audio Engineering Society/European Broadcasting Union. A standards-setting organization that defined a digital signal format for professional audio input to the Avid video-based editing systems using the SA 4 board. This signal format is typically used when you input sound directly to Avid video-based editing systems with a digital audiotape (DAT) machine, thereby bypassing the videotape recording or capturing process.

AFE Advanced File Exchange. A file format based on Advanced Authoring Format (AAF) technology. AFE files let you share project information among Avid applications by transferring one or more bins, their contents, and information about the contents, including master clips, subclips, titles, and sequences.

AIFF-C Audio Interchange File Format-Condensed. A sampled-sound file format that allows for the storage of audio data. This format is primarily used as data interchange format but can be used as a storage format as well. OMF Interchange® includes AIFF-C as a common interchange format for uncompressed audio data.

ALE Avid Log Exchange. A file format specifically designed to hold information about log files generated by the application. An ALE file contains information about the source material. You cannot use it to import sequences, effects, or other higher level information.

alias A code of up to 12 alphanumeric characters. It substitutes individual user names and automates the distribution of a mail story to a group of people.

alignment The position of text within a column of a text object. Alignment can be left-aligned, centered (horizontally), right-aligned, justified (flush on both the left and right sides, with equal space between words on the same line), or equally spaced (same as justified, but with equal space between characters on the same line).

alpha channel One of the four channels (or components) of information that is contained in each pixel of an image. This channel defines the transparency of each pixel, allowing portions of the foreground image to reveal or block the background image when two images are composited. You do not define the alpha channel on a pixel-by-pixel basis but, rather, per object. Different parts of the object would have different levels of transparency, depending on how much you wanted the background to show through. The grayscale image represented by the alpha channel is often referred to as the *matte*. See also *mask, matte, opacity*, and *transparency*.

ambience See *scene ambience*.

ambient A common material parameter that adds consistency to the color of an object's surface to simulate an ambient light that reaches all points in a scene. An ambient value is determined for individual surfaces. Scene ambience is multiplied with an object's ambient color. If the scene ambience is set to black, nothing alters the ambient color of an object except, of course, a light. The careful balance of ambient and direct light sources is the key to convincing lighting. See also *diffuse* and *specular color*.

A-mode A linear method of assembling edited footage. In A-mode, the editing system performs edits in the order in which they will appear on the master, stopping whenever the edit decision list (EDL) calls for a tape that is not presently in the deck. See also *B-mode, C-mode, D-mode, E-mode*, and *source mode.*

analog recording The common form of magnetic recording where the recorded waveform signal maintains the shape of the original waveform signal. All videotape source footage is analog. When recorded or captured (via telecine transfer), footage is converted from the analog format to a digital format.

ANAPA American Newspapers Publishers Association.

anchor 1. The person presenting a newscast on-air to a television audience. Also called a *presenter*.

2. The indicator that links a script to production information. Also called *grommet* or *marker*.

anchor point The location about which a rotation or scaling operation of an object occurs.

animation The movement of elements through time and space. Also, the process of creating and recording images that change over time. Everything in a scene is represented by numeric values and, as such, animation is also the process of changing these values—position, color, or any other property—over time. See also *keyframe.*

annotation A description of your material, including the author name, category, and other information you may want to save. Annotations let you quickly locate files and information about them.

answer print A print made of the final cut for review before the final release print is created. See also *work print.*

antialiasing A method of smoothing the jagged edges along the lines and curves of text or graphics. This is done by a mathematical process that supersamples pixels. Aliasing is caused by limited display resolution. Aliasing effects include staircasing along diagonal lines, moiré effects in checkerboards, and temporal aliasing (strobing) in animated scenes.

archive To back up project files or move closed projects to an external medium.

artifacts The undesired, visible effects in an image due to technical limitations. Some artifacts are caused by inherent limits in the video electronics process and some are the result of compression techniques.

ASCII American Standard Code for Information Interchange. The standard that governs the recording of characters by a sequence of binary digits. Most computers use ASCII code to represent text, which makes it possible to transfer data from one computer to another.

aspect ratio The ratio of screen width to screen height. In video and television, the standard aspect ratio is 4:3, which can be reduced to 1.33:1 or simply 1.33. HDTV video format has an aspect ratio of 16:9. In film, some aspect ratios include: 1.33:1, 1.85:1, and 2.35:1.

Digital video has rectangular pixels, and computers and HDTV have square pixels.

assemble edit An edit where all existing signals on a tape (if any) are replaced with new signals. Assemble editing sequentially adds new information to a tape and a control track might be created during the edit. The edit is made linearly and is added to the end of previously recorded material. See also *overwrite*.

ATR Audiotape recorder. A device for recording and reproducing sound on magnetic recording tape.

attenuation See *falloff*.

Attic folder See *Avid Attic folder*.

attribute clip A mechanism that applications can use to store supplemental information in a special track that is synchronized to the other tracks in a track group.

audio clip A sound file that can be added to a scene.

audio scrub See *scrubbing*.

audio sweetening The mixing of sound effects, music, and announcer audio tracks with the audio track of the edited master tape, usually during the mixing stages of a production. Also called *audio postproduction for video*.

audio timecode Longitudinal timecode (LTC) recorded on an audio track.

AudioVision A digital, nonlinear audio editing system (AudioVision®) that locks digital video in sync with audio for audio editing and sweetening.

auto backup A feature that saves a backup copy of an open story to your local disk at specified time intervals.

Autokey A mode in which keyframes are set whenever you change the selected object's properties.

auto-refresh A feature that automatically redisplays the queue screen whenever changes are made to the queue.

autosave A feature that automatically saves your work to a specific location at predetermined intervals.

autoscript A mode in which the production cue area of a story is automatically displayed if production cues are in the story. If there are no production cues added to a story, the story is displayed unscripted.

AUX Auxiliary track. In a video editing system, a channel reserved for connecting an external audio device, a video device, or both.

AVI Audio Video Interleaved. A file format used for synchronizing video and audio without the use of hardware.

Avid AirSPACE A multichannel broadcast video server (Avid AirSPACE™) that features digital video (DV) compression at 25 and 50 Mb/s or IMX compression at 50 Mb/s, and offers compatibility with all DV-based acquisition devices.

Avid iNEWS An integrated, digital news creation and production system (Avid iNEWS™) for broadcasting that provides up-to-date news data throughout a newsroom and seamlessly links news-gathering, production processes and device control tasks.

Avid Attic folder The folder containing backups of your files or bins. Every time you save or the system automatically saves your work, copies of your files or bins are placed in the Avid Attic folder until the folder reaches the specified maximum.

Avid MediaBrowse A nonlinear video editing and browsing system (Avid MediaBrowse™) for journalists, allowing them to create simple cuts-only packages or shot lists in low-resolution video, which can be conformed later to high-resolution for broadcast.

Avid Projects folder The folder containing your projects.

Avid Unity MediaManager A media database that lets you search a large number of media objects (master clips, sequences, effects and objects that reference digital media) in the Avid Unity MediaNetwork shared environment.

Avid Unity TransferManager A web-browser-based transfer utility that lets you move projects, compositions, or bins between Avid applications. You can use TransferManager by itself, peer-to-peer (Windows systems only) transfer or in an Avid Unity workgroup environment (Windows and Macintosh clients).

AVR Avid Video Resolution. The compression level at which visual media is stored by the Avid system. The system creates media in a particular AVR by using proprietary conversion algorithms to convert analog video to digital form.

axis, axes The reference for describing the origin and position of an object in space, displayed by intersecting straight lines. By using two axes, a plane is determined; for example, the XY plane is defined by placing the X and Y axes so that they intersect at the global center (point of origin). Three dimensions are determined by using three axes: X, Y, and Z.

B

background The material used for the background or fill area of objects or the back of a DVE object. Using a background material is a simple way of having a material appear behind text without using another object. See also *edge surface*, *extrude surface*, *main surface*, and *surface*.

background image In compositing, the background image is the one on top of which all other images are placed. In 3D environments, this is an image, color, or environment rendered behind all objects in a scene.

background track A type of track whose contents appear below the contents of the tracks above it. Background tracks can be used to create simple composites.

backtiming

1. A method of calculating the IN point by subtracting the duration from a known OUT point so that, for example, music and video or film end on the same note.

2. The exact time when a story in a newscast must start in order for the show to remain on schedule. Television newscasts typically use backtime to ensure that the newscast ends precisely as scheduled. See also *slip trimming*.

backup

A duplicate copy of a file or disk in another location if the original file or disk becomes corrupted. See also *Avid Attic folder*.

bandwidth

The difference between the upper and lower frequency limits of an audio sample component.

bar code

A pattern of vertical stripes of varying width and spacing that encodes information. Bar codes can be used to encode timecode on film.

batch capture

An automated process in which groups of clips, sequences, or both are captured (recorded digitally) in one pass. Also called *batch record*.

baud

The number of electrical oscillations that occur each second. Baud was the prevalent measure for bandwidth or data transmission capacity, but bps (bits per second) is used most often now and is more accurate.

best light

A telecine transfer performed with optimum settings of the color grade controls, but without precise scene-by-scene color correction.

Betacam, Betacam SP

Two component videotape and video recording standards by Sony Electronics, Inc. Sony Betacam was the first high-end cassette-based system, recording video onto 1/2-inch magnetic tape. The SP version arrived 3 years after the first Betacam, improving on signal-to-noise ratios, frequency responses, the number of audio channels, and the amount of tape available on cassettes. SP is now the only type sold.

Bézier

A type of curve that always passes through control points. A Bézier point on a curve lets you control the smoothness or sharpness of the curve at the point. See also *Linear* and *spline*.

bin

A database in which master clips, subclips, effects, and sequences are organized for a project. Bins provide database functions to simplify the organization and manipulation of material for recording, capturing, and editing.

bit depth

1. The number of bits used to represent the color of a pixel. Black and white images use a bit depth of 1, 16-color images use a bit depth of 4, 256-color images use 8, and so on.

2. The number of bits used to represent an audio sample. The more bits there are, the more accurately you can represent the amplitude at that point in time.

bit rate

The transfer speed of data within a computer or between a computer and a peripheral.

black and code

Video black, timecode, and control track that are prerecorded onto videotape stock. Tapes with black and code are referred to as striped or blacked tapes.

black burst

A video signal that has no luminance or chrominance components (except burst), but contains all the other elements of a video signal. Black burst is the reference signal commonly used for timing audio and video samples.

black burst generator

An electronic device that emits a signal that registers as pure black when recorded on videotape.

blacked tapes

See *black and code*.

black edits

1. A video source with no image.

2. A special source you can fade into, out of, or use for other effects.

black level

See *setup*.

black point

The luminance value in a video image that is set to be equal to reference black when making a color adjustment. See also *white point*.

blue screen

A special effects procedure in which a subject is photographed in front of a uniformly lit blue or green background. A new background image can be substituted for the blue or green during the shoot or in postproduction through the use of chroma key. See also *key*.

B-mode

A “checkerboard” or nonsequential method of assembly. In B-mode, the edit decision list (EDL) is arranged by source tape number. The edit system performs all edits from the tapes currently assigned to decks, leaving gaps that will be filled by material from subsequent reels. See also *A-mode, C-mode, D-mode, E-mode*, and *source mode*.

Boolean A system of logic that allows you to combine objects using logical operators, such as And, Or, Xor, Min, and Max.

border 1. The outer edge of an object. See also *construction lines*.

2. A type of DVE object that has a colored frame with an optional soft outer edge.

bounding box The extent or rectangular enclosure of an object.

bounding box handle One of eight small boxes on the corners and sides of an object's bounding box that you use to scale the object.

bps Bits per second. The standard measure of data transmission speeds.

B-roll An exact copy of the A-roll original material, or new original material on a separate reel, for use in A/B-roll editing.

branch A subordinate segment of a directory.

brightness See *luminance*.

browse clip A low-resolution, recorded or digitalized, video segment.

browse server For Media Browse, a low-resolution video server.

browser A tool used to search (browse) through scene databases, project directories, image libraries, and other repositories whose files are required to build a project. Using the browser, you can load scene and project files, as well as perform file management tasks such as moving, copying, renaming, and deleting files.

bulletin An incoming wire story coded as high-priority by a wire service.

bumping up The transfer of a program recorded on a lower quality videotape to a higher quality videotape (such as from 3/4-inch to 1-inch videotape, or from S-VHS to MII).

burn-in A visible timecode permanently superimposed (burned in) on footage, usually in the form of white numbers in a black rectangle. Burned-in timecode is normally used for tracking timecode during previews or offline editing. A videotape with burn-in is also called a burn-in dub or a window dub.

BVB

Black-Video-Black. A preview mode that displays black, newly inserted video, and then black again.

B–Y

One of the color difference signals in the component color system of the NTSC video standard. The signal formula is:

B–Y = 0.299R (red) – 0.587G (green) + 0.886B (blue)

See also *R–Y*, *Y*.

bypass

1. To mute an audio effect in order to listen to the original audio signal. Bypassing an effect lets you compare your audio signal with and without the effect. See also *mute*.

2. To mute a video effect in order to view the results without the effect(s) that you bypassed.

C

cache

A media file that stores information and is generated when you process an effect, transition, composite, or container clip created in your sequence. During playback, this cache file is used instead of the source media. Accessing cashed files is quick and reduces network traffic. Computers cache at several levels of operation, such as cache memory and a disk cache.

Caching may also be implemented for Internet content by distributing it to multiple servers that are periodically refreshed. (Use of the term in the latter context is similar to the concept of a distributed information base.) See also *interactive cache*.

calibrate

To fine-tune video levels for maximum clarity during capture and output (from videotape).

camera

The camera is analogous to a physical camera in the real world. It is an object that has a position from which a scene can be viewed and rendered. Like most objects, the camera has properties such as its rotation, depth of field, and field of view.

camera views

Let you display your scene in a viewport from the point of view of a “real” camera in your scene. All other views such as User, Top, Front, and Right are points of view that are not associated to an actual camera.

capture

1. To digitally transfer audio or video material from an external device, such as a videotape recorder, to a shared storage location or the local disk storage on your workstation.

2. To convert analog video and audio signals to digital signals.

Capture Mask effect

An effect that converts the format of source data during playback. For example, it could convert video frame data between PAL (25 fps) and NTSC (29.97 fps) formats.

Capture Manager

A software tool used to coordinate the recording of low and high-resolution video feeds to multiple devices.

capture resolution

The size and quality of the media file created when you capture source material. See also *resolution* and *working resolution*.

Cartesian coordinates

A mathematical representation of Euclidean space. Every point can be described by three coordinates (X, Y, Z) representing the position along the orthogonal X, Y, and Z axes. The point (0, 0, 0) is called the *origin*, which is the global center of the 3D world.

CCIR

Comité Consultatif International des Radio Communications. A mainly European organization similar to SMPTE (Society of Motion Picture and Television Engineers) in the United States that includes user and vendor representatives. Now called ITU (International Telecommunication Union). See also *ITU-R 601*.

CCIR-601

See *ITU-R 601*.

center

The reference point for defining an object's location, orientation, and size. When you create an object, its local center is located inside the object, at its geometric center. However, you can move this center to another location for performing different transformation tasks.

channel

1. A physical audio input or output.

2. One of several color components that combine to define a color image. An RGB image is made up of red, green, and blue color channels. In color correction, you can redefine color channels by blending color components in different proportions.

See also *track*.

character A letter, digit, or special symbol you type on a keyboard.

character generator An electronic device, or a computer device and software combination, that creates letters and numbers that can be superimposed on video footage as titles.

character spacing See *kerning*.

character style The visual enhancement, such as superscript or subscript, to the normal style of a character.

chassis The housing for removable disk modules. The chassis contains a power supply, drives, and connectors for each module.

chroma Video color. See *chrominance*.

chroma keying The process of creating a matte based on a foreground image's color. Using this matte, you can composite the image over another image.

ChromaCurve ChromaCurve™ graphs appear in the Color Correction tool and are used to adjust the color values in a sequence. The graphs plot input values on the horizontal axis and output values on the vertical axis. The background color in the graph represents the color adjustment in the corrected sequence, and the curve on the graph (created by the user) increases or decreases the amount of that color in the corrected sequence.

chroma key A method of combining images or parts of images from two different sources by replacing a solid color in one source with a picture from the second source.

ChromaWheel ChromaWheel™ controls appear in the Color Correction tool and are used to adjust hue and saturation in a sequence. ChromaWheel controls provide an adjustment method that is similar to the physical controllers on traditional color correction equipment, with the addition of a color background that graphically represents the hue and saturation values being adjusted.

chrominance The saturation and hue characteristics of a composite video signal; the portion of the video signal that contains color information. Adjust the chrominance and other video levels before recording or capturing.

chunking The transfer of media files in segments, so other workgroup users can access and use the media before complete files have been sent.

circle take A take from a film shoot that has been marked for use or printing by a circled number on the camera report.

client A workstation on which the application is installed.

clip 1. A segment of source material recorded or captured into your system at selected IN and OUT points and referenced in a project bin. The clip contains pointers to the media files in which the actual digital video and audio data is stored.

2. In a record in a log, which stands for one shot, the clip includes information about the start and end timecode for the shot, the source tape name, and the tracks selected for editing.

3. In OMFI, a general class of objects in the OMF Interchange class hierarchy representing shared properties of source clips, filler clips, attribute clips, track references, timecode clips, and edge code clips. A clip is a subclass of a component.

See also *master clip*, *media files,* and *subclip.*

Clipboard A portion of memory used to store temporary objects during copy and paste operations.

clip effect An effect that is attached to a clip and moves with it on the timeline. See also *track effect*.

clock timecode See *drop-frame timecode.*

cluster A named group of polygons defined for the purpose of being manipulated or having properties applied. The properties assigned to a cluster are shared by its members. A cluster has no geometry of its own; rather, it refers to other geometry. See also *components*.

C-mode A nonsequential method of assembly in which the edit decision list (EDL) is arranged by source tape number and ascending source timecode. See also *A-mode, B-mode, D-mode, E-mode,* and *source mode.*

codec *Co*mpressor/decompressor. Any technology for compressing and decompressing data. Codecs can be implemented in both software and hardware.

color balance The adjustment of the relative levels of color signals to produce the best quality image or effect.

color bars A standard color test signal, displayed as a video pattern of eight equal width columns (that is, “bars”) of colors. SMPTE color bars are a common standard. You adjust video levels against the color bars on your source videotape before recording or capturing.

color correction The process of adjusting the color characteristics of video material to achieve an accurate representation of color and consistency of color from one clip in a sequence to another. The term generally refers to adjustments made across all the video in a program rather than to individual color changes made as part of a single effect.

color frame A sequence of video fields required to produce a complete pattern of both field and frame synchronization and color subcarrier synchronization. The NTSC system requires four fields; PAL requires eight.

color model Any system used to specify colors. You can set color according to the following color models: RGB (red, green, blue), HLS (hue, lightness, saturation), or HSV (hue, saturation, value). See also *RGB*, *HLS*, and *HSV*.

color reference burst The color synchronizing signal included as part of the overall composite video signal. When compared with the color subcarrier signal, the color reference burst determines the hue of the video image.

color stop A key color location on a gradient between which colors are blended.

color timing The process of selecting color and density values for a film before film printing.

color weight A location on a gradient that marks the halfway point of a blend between the colors at adjoining color stops.

color wheel A circular graph that maps hue values around the circumference and saturation values along the radius. Used in the Color Correction tool as a control for making hue offset and secondary color correction adjustments.

column A vertical container within a text object. The text is positioned within a column based on the column’s text alignment. All text objects have at least one column. See also *alignment* and *gutter*.

command line A line typed in an MS-DOS Command Prompt window.

comparison buffer A portion of the system memory in Avid DS Nitris that is used to store a snapshot of a frame in the viewer.

component video The structuring of the video signal whereby color and luminance signals are kept separate from one another using the color-subtraction method Y (luminance), B–Y (blue minus luminance) and R–Y (red minus luminance), with green derived from a combination. Two other component formats are RGB and YUV.

components The parts of a geometric object that can be manipulated or selected, such as points or polygons. You can modify an object by selecting and moving, adding, or deleting components. You can group polygons to create clusters on one or more objects.

composite Two or more layered images that create a single new image. Using mattes and DVEs, you can define how the images are layered in the resulting composite image.

composite print A film print containing both picture and sound.

composite sound track A sound track containing all required sound elements—usually dialog, music, and effects mixed in correct proportions.

composite video A video signal in which the luminance and chrominance components have been combined (encoded) as in standard PAL, NTSC, or SECAM formats.

compositing The process of layering two or more images on top of one another. Examples include titles, keys, and picture-in-pictures.

composition The standard term used by OMF Interchange to refer to an edited sequence made up of a number of clips. The OMF® equivalent of a sequence in an Avid system.

compound shape A single shape consisting of separate curves.

compression 1. In audio, the process of reducing the dynamic range of the audio signal.

2. In video, a lack of detail in either the black or the white areas of the video picture due to improper separation of the signal level.

3. A reduction of audio signal detail, video signal detail, or both to reduce storage requirements during transformation from analog to Avid digital format. In JPEG compression, for example, algorithms for variable frame length analyze the information in each frame and perform reductions that maximize the information retained. Compression does not remove any frames from the original material.

See also *lossless compression* and *lossy compression*.

confidence value A measurement, expressed as a percentage, of the probability that the pattern the system finds during a motion tracking operation is identical to the pattern for which the system is searching. During a motion tracking operation, a confidence value is calculated for each tracking data point it creates.

conform To prepare a complete version of your project for viewing. The version produced might be an intermediate working version or the final cut.

conformance The creation of broadcast-quality (high-resolution) video from a sequence.

conforming a film negative The mathematical process that the editing system uses to ensure that the edits made on a videotape version of a film project (30 fps) are frame accurate when they are made to the final film version (24 fps).

connect To call a service that is either local (such as an archive system) or remote.

consolidate To make copies of media files or portions of media files, and then save them on a drive. The Consolidate feature operates differently for master clips, subclips, and sequences.

constraints A way of animating one object by using the animation of another to which it is constrained. There are predefined constraints to constrain objects by position, direction, and path.

construction lines The dashed lines that outline objects, such as the scene, text objects, and decks.

container clip A type of clip that combines multiple audio or video clips to create a mixdown, composite, or special effect. When you close a container clip, it appears as a single clip on the timeline. You can reopen a container clip at any time to add, modify, or delete its components.

container mapping A mapping that applies the texture image across the surface of an object. For container objects, the surfaces of all subobjects are treated as a single continuous surface. As the object moves, scales, or rotates, so does the texture applied to the object. See also *local map* and *region of interest*.

container object An object that contains other objects called subobjects. For example, a text object is the container of its subobjects (characters). See also *subobject*.

contrast The range of light-to-dark values present in a film or a video image.

control point A location on a Bézier curve that controls its direction. Each control point has two direction handles that can extend from it. See also *corner points*, *cusp point*, and *smooth point*.

control track The portion of the video recording used to control longitudinal motion of the tape during playback. Control track can be thought of as electronic sprocket holes on the videotape.

controller With remote processing, and media and project indexing services in Avid DS Nitris, one workstation is designated as the controller where all these services will run. If you have only one Avid DS Nitris workstation, then it is the controller.

control objects Objects that represent rigs, deformations, natural forces, and particles. The control objects themselves do not render; instead, they exist to define the properties of deformations and other effects.

control points 2D (UV) or 3D (XYZ) vertices that help define a curve or free-form surface.

corner pinning A technique used to pin the four corners of one static image (usually) onto another static image.

corner points A type of Bézier control point whose tangent handles do not point in opposite directions, producing an angle or corner at the control point. See also *cusp point* and *smooth point*.

CPU Central processing unit. The main computational section of a computer that interprets and executes instructions.

crash edit An edit that is electronically unstable, such as one made using the pause control on a deck, or using a noncapstan served deck.

crash recording See *hard recording*.

crawling text Text that moves horizontally over time. Examples include stock and sports score tickers that appear along the bottom of a television screen.

credit roll Another name for a rolling credit, a list of job titles and names that scrolls vertically at the end of television programs and feature films.

cropping The redefining of image boundaries, usually by electronically removing the top, bottom, left, or right sides of the image.

crossfade An audio transition between two clips over a specified number of frames. The sound of the outgoing clip gradually becomes less audible as the sound of the incoming clip increases to the desired volume. See also *dissolve* and *fade*.

crushing the blacks The reduction of detail in the black regions of a film or a video image by compressing the lower end of the contrast range.

CU Close-up. See also *ECU*.

cue To shuttle a videotape to a predetermined location. See *production cue*.

cume (cumulative) time The amount of airtime required from the beginning of the show up to a certain point in the show in order for it to remain on schedule. Used by producers when building, ordering, or airing a newscast. Cume time is displayed with each entry in a rundown queue.

cursor Another name for the vertical bar that represents the insertion point in an active text object.

curves Curves are one-dimensional objects that have points but no thickness. They are not renderable, but can be used to modify extruded and revolved objects, create paths for objects to move along, and so on.

Curves graph An X, Y graph that plots input color values on the horizontal axis and output color values on the vertical axis. Used in the Color Correction tool as a control for changing the relationship between input and output color values.

curve point See *keyframe marker*.

cusp point A type of Bézier control point whose tangent handles are of zero length, producing an angle at the control point. A cusp point is a variation of a corner point. See also *corner points* and *smooth point*.

cut 1. An instantaneous transition from one video source to another.

2. A section of source or record tape.

cut list A series of output lists containing specifications used to conform the film work print or negative. See also *dupe list*.

cycle 1. A series of frames which may be played over and over to create the illusion of continuing, repeated action.

2. To repeat a function curve for all or part of the duration of an animation. See also *function curve or fcurve*.

D

D1, D5

Two digital videotape recording formats that conform to the ITU-R 601 (CCIR-601) standard for uncompressed 4:2:2 digital component video. D5 is very similar to D1 in that it is a component digital recorder. However, D1 records with 8-bit accuracy and D5 records with 10-bit accuracy. See also *D2, D3*.

D2, D3

Two digital videotape recording formats for composite video. The main difference between D2 and D3 is that D2 uses 3/4-inch digital videotape, and D3 uses 1/2-inch digital videotape. See also *D1, D5*.

DAE, Digidesign Audio Engine

The application (DAE™, or Digidesign Audio Engine™) that manages the AudioSuite™ plug-ins.

dailies

Film prints or video transfers of recently shot film material, prepared quickly so that production personnel can view and evaluate the previous day's shooting before proceeding. Also called rushes, primarily in the United Kingdom.

DAT

Digital audiotape. A digital audio recording format that uses 3.8mm-wide magnetic tape.

data feed

Data received from a commercial news service, such as the Associated Press (AP), Reuters, United Press International (UPI), and others. Typically these wire services conform to one or more wire-service standards, such as ANPA and are delivered as serial data. Sometimes called a *wire feed*.

dead queue

A queue containing stories that have been either deleted by users or purged automatically by the system. These stories are recycled automatically as new space is required.

decibel (dB)

A unit of measurement for audio volume level.

deck

1. a videotape recorder (VTR)
2. A container or sequence of pages. A deck defines the location and size of the pages within it. See also *page*.

deck controller A tool that allows the user to control a deck using standard functions such as shuttle, play, fast forward, rewind, stop, and eject.

decompose To create new, shorter master clips based on only the material you have edited and included in your sequence.

deformation A way of changing the shape of objects by using another object (curve, surface, lattice) as a deforming tool, using a deforming operator such as Twist, Bend, or Push. The deformation depends on two factors: the shape of the deforming tool and the transformation (scaling, rotation, or translation) of the deformed object.

degauss To demagnetize (erase) all recorded material on a magnetic videotape, an audiotape, or the screen of a color monitor.

deinterlace The process of separating the odd and even fields in a clip. When you deinterlace a clip, each field becomes a frame and the clip's duration is doubled.

delay edit See *overlap edit*.

depth shadow A shadow that extends solidly from the edges of a title or shape to make it appear three-dimensional. See also *drop shadow*.

destructive mode See *Raster mode*.

Details A mode in the Avid Explorer where all the details pertaining to a clip are displayed, such as the date the clip was created.

device Any peripheral computer equipment, connected locally or via a network capable of receiving or sending data. Examples of devices are: printers, monitor, character generators, and video servers.

diffuse The essential color of an object. This is the color that the object reveals under pure white light. It is perceived as the color of the object itself rather than a reflection of the light. You can set the diffuse color separately from the ambient and specular colors. Diffuse color is distinguished from the color of specular reflection (highlights) off an object, which are generally the color of the light source itself. See also *ambient* and *specular color*.

digital cut The output of a sequence, which is usually recorded to tape.

digital intermediate The state between the original source and the final distribution form, where it can be digitally enhanced through the process of editing, adding visual effects, color correcting the captured film (digital master).

digital master The original source material scanned from film into digital format.

digital nonlinear accelerator Digital nonlinear accelerator (DNA) is a hardware subsystem designed to operate in conjunction with Avid software to multiply host processing performance.

digital recording A method of recording in which the recorded signal is encoded on the tape in pulses and then is decoded during playback.

digitally record To convert analog video and audio signals to digital signals.

digitize See *capture*.

dip An adjustment to an audio track in which the volume gain level decreases or "dips" to a lower level, rather than fading completely.

direct digital interface The interconnection of compatible pieces of digital audio or video equipment without conversion of the signal to an analog form.

direction handle A line extending from a control point that controls the direction of a Bézier curve. Each control point has two direction handles. These two handles together affect how the curve passes through the control point, with one handle controlling how the curve appears before the control point, and the other handle controlling how the curve appears after the control point.

directional light A light source that is very far away, so that the light rays are essentially parallel to each other, such as the sun. See also *infinite light*.

directory Like a file drawer in a file cabinet, a directory is a storage space. Directories, also known as *folders*, can contain other directories (known as *subdirectories*) or queues. Directories do not contain stories.

disk The medium used to store data in computer-readable form.

disk array Multiple SCSI drives combined to deliver fast data transfer rates, great storage capacity, and reliable data.

displacement map A representation of a nonsmooth surface described by the alpha channel of an image. Lighter shades produce bumps or convex regions, whereas darker shades produce valleys or concave regions.

display types Ways of displaying objects in a viewport. Display types are available only for geometry views. The available display types are Bounding Box, Wireframe, Depth Cue, Hidden Line Removal, Constant, Shaded, Textured, Textured Decal, and OpenGL. Display types do not affect what is shown in the render region.

dissolve A video or an audio transition in which an image from one source gradually becomes less distinct as an image from a second source replaces it. An audio dissolve is also called a *segue*. See also *crossfade* and *fade*.

Distributed Media Services (DMS) Services that may be distributed to lower cost, dedicated workstations in a networked environment, freeing computer resources to perform other tasks.

dithering The process of blending pixels of different colors to give the illusion of an intermediate color that is not usually displayable due to color depth limitations.

D-mode An A-mode edit decision list (EDL) in which all effects (dissolves, wipes, graphic overlays) are performed at the end. See also *A-mode, B-mode, C-mode, E-mode*, and *source mode*.

DMS See *Distributed Media Services (DMS)*.

DNA See *digital nonlinear accelerator*.

dolly To move the camera forward (dolly in) or backward (dolly out). A dolly physically moves the camera closer to the point of interest without changing the length of the lens; perspective distortions peculiar to the lens length may result at the edges of the scene.

dongle (Also known as the application key) A hardware device used as a key to control the use of licensed software. The software can be installed on any system, but will run only on the system that has a dongle installed.

double-perf film Film stock with perforations along both edges of the film.

double-strand editing See *A/B-roll*.

double system Any film system in which picture and sound are recorded on separate media. A double system requires the resyncing of picture and sound during postproduction.

DPX Digital Picture eXchange. A SMPTE 268M standard derived from Kodak's Cineon raster file format.

drop-frame timecode A type of SMPTE timecode designed to match clock time exactly. Two frames of code are dropped every minute on the minute except the tenth minute, to correct for the fact that color frames occur at a rate of 29.97 fps, rather than an exact 30 fps. Drop-frame timecode is recorded with semicolons between the digits; for example, 1;00;10;02. See also *non-drop-frame timecode*.

drop shadow A shadow that appears in the same form, at the same size, and on a surface parallel to the object creating it, but usually offset from the object. See also *depth shadow*, *projected shadow*, and *local shadow*.

DSU DS Unit. DSUs are the standard units used in Avid DS Nitris. They are independent of the working resolution and express absolute position or distance in a common way in all the effects.

DTV Digital television. The technology that enables the terrestrial transmission of television programs as data. See also *HDTV*.

dubbing 1. In videotape production, the process of copying video or audio from one tape to another.

2. In film production, the process of replacing dialog on a sound track. See also *foley*.

dubmaster A second-generation copy of a program master used for making additional preview or distribution copies, thereby protecting the master from overuse.

dupe Duplicate. A section of film or video source footage that has been repeated (duplicated) one or more times in an edited program.

dupe list A sublist of duplicated clips of film requiring additional prints or copies of negative for film finishing. See also *cut list*.

dupe reel A reel designated for the recording and playback of dupes (duplicate shots) during videotape editing.

duration 1. The length of time (in hours, minutes, and seconds or in feet and frames) that a particular effect, title, or section of audio or video material lasts.

2. The length of a show or story calculated by using the elapsed time in a broadcast when a story begins.

DV Digital video that is transferred through equipment conforming to IEEE Standard 1394. This equipment is sometimes called FireWire® or i.LINK®.

DVE Digital video effect. A type of effect used to transform the size, position, and shape of images in three-dimensional space.

dynamic range An audio term that refers to the range between the softest and loudest levels a source can produce without distortion.

E

easing (ease-in, ease-out) The reduction in the acceleration or deceleration of motion to present a smoother, more continuous movement. The shape of a function curve can reflect this when using a spline interpolation.

EBU European Broadcasting Union. A standards-setting organization in which only users (not vendors) have a voice. See also *AES/EBU*.

ECU Extreme close-up.

edgecode See *edge numbers* and *key numbers*.

edge filter A filter that applies anti-aliasing to graphics created in the Title tool. See also *antialiasing*.

edge numbers Sequential numbers mechanically printed or optically exposed along the edge of a strip of film to assist in matching negatives to work prints.

edge surface The surface that appears as a border or edge around an object. Edges can be shaped by a variety of Edge effects, such as Bevel and Tube. See also *background, extrude surface, main surface,* and *surface*.

edit 1. To assemble film or video, audio, effects, titles, and graphics to create a sequence.

2. A numbered event in an EDL. An edit consists of source entry/exit timecodes, a transition type (cut, wipe dissolve), the edit mode (video/audio), annotations, and record entry/exit timecodes.

3. A transition point (cut, wipe, or dissolve) between two video or audio sequences.

edit controller An electronic device, often computer-based, that lets you precisely control, play, and record to various videotape machines.

edit lock A feature that prevents two people from working in a story simultaneously.

edit rate In compositions, a measure of the number of editable units per second in a piece of media data (for example, 30 fps for NTSC, 25 fps for PAL, and 24 fps for film).

edit point 1. A moment in time at which a cut occurs or where a transition starts or ends.

2. An indicator of the in and out-points of clips and transitions that appear in the clip's activeness bar.

EDL Edit decision list. A list of edits made during offline editing and used to direct the online editing of the master. See also *cut list*.

effects The manipulation of an audio or a video signal. Types of film or video effects include special effects (F/X) such as morphing; simple effects such as dissolves, fades, superimpositions, and wipes; complex effects such as keys and DVEs; motion effects such as freeze frame and slow motion; and title and character generation. Effects usually have to be rendered because most systems cannot accommodate multiple video streams in real time. See also *rendering*, *clip effect*, and *track effect*.

Effects Tree A tool that lets you composite multiple clips and apply any number of effects. An Effects Tree is made of nodes which represent the inputs, effects, and the output, as well as node connectors.

EIA Electronic Industries Association. The largest trade organization that covers the television and audio fields. EIA publishes a catalog of standards; the most important standards to the television and audio industries are the ones developed by its Parts Division and its Consumer Electronics Group.

electronic editing The assembly of a finished video program in which scenes are joined without physically splicing the tape. Electronic editing requires at least two decks: one for playback and the other for recording.

elements Anything that can be visualized in 3D space or displayed. Elements can be renderable or non-renderable. They include models, lights, cameras, geometric objects, curves, nulls, and so on.

E-mode A C-mode edit decision list (EDL) in which all effects (dissolves, wipes, and graphic overlays) are performed at the end. See also *A-mode, B-mode, C-mode, D-mode,* and *source mode*.

emissive color The color of a surface when light is not shining on the surface. See also *shininess* and *specular color*.

encode 1. To add data such as timecode, cues, or closed-captioned information to a video recording.

2. The conversion of RGB S-Video to composite video.

3. The process of converting analog video to a digital form.

ending point The moment in time that an object no longer exists. See also *starting point*.

energy plot The display of audio waveforms as a graph of the relative loudness of an audio signal.

environment map A texture that is reflected from an existing surface material. The surface has its own material (solid color, gradient, or another texture) that reflects the texture. See also *local map* and *region of interest*.

equalization The balancing of various frequencies to create a pleasing sound by attenuating or boosting specific frequencies within the sound.

Ethernet A standard for connecting computers to a local area network (LAN).

event A number assigned by the editing system to each performed edit. In most computer editing systems, an event defines an action or a sequence of actions performed by the computer in a single pass of the record tape.

export 1. To create an EDL from a sequence.

2. To conform a sequence.

external matte A matte taken from another clip. See also *matte*.

extract To remove a selected area from an edited sequence and to close the resulting gap in the sequence.

extrude To make a three-dimensional surface by giving a two-dimensional object depth in space. For example, a circle becomes a cylinder, or a square becomes a cube or block.

extrude surface The surface that connects the front and back faces of an object that has been extruded into three dimensions by extending the edges of the object along its Z axis. See also *background*, *edge surface*, *main surface*, and *surface*.

eyedropper A tool for taking a color from a screen image and using that color for text or graphics.

F

face 1. For fonts, a variation in a font family. For example, Helvetica Bold is a face of the Helvetica font family.

2. For objects, an abbreviated name for surface. For example, the front or back face (surface) of an object.

fade A dissolve from full video to black video or from full audio to no audio, or vice versa.

falloff The diminishing of a light's intensity over distance, also called *attenuation*. Falloff options mimic the way light behaves naturally and are available for point and spotlights.

FAT File Allocation Table. A file system used on MS-DOS and Windows computers.

favorite A shortcut used for focusing the Avid Explorer tree on a specific set of files and folders.

FCC Federal Communications Commission. The United States governing body for radio and television broadcasting.

feedback A loud squeal or howl caused when the sound from a loudspeaker is picked up by a nearby microphone and reamplified. Also caused when the output of a tape recorder is fed back into the record circuit.

field One-half of the scan lines in an interlaced video frame. In most systems, the odd-numbered lines form one field, and the even-numbered lines form the second. NTSC video contains approximately 60 fields (30 frames) per second, and PAL video contains 50 fields (25 frames) per second. See also *frame*.

field dominance The order in which odd and even fields occur in time.

field of view (fov) The amount of the scene visible to the camera, which is defined as the camera's aperture divided by its focal length, or the total area (in degrees) to the left and right of the line of sight to an object in the scene. Wide-angle lenses have a large field of view, while telephoto has a small field of view.

file system A way of organizing directories and files on a disk drive, such as FAT or NTFS for Windows computers.

filler clip A segment of a sequence that contains no audio or video information. Filler can be added to the Source monitor (or pop-up monitor) and edited into a sequence. See also *filler proxy*.

filler proxy The result of a composition specifying media to be played for the filler clips in each track.

film timecode Timecode added to the film negative during the film shoot via a film timecode generator. Film timecode numbers are synced to the film key numbers on the dailies during the telecine transfer process. A special key link reader is required for viewing the film timecode.

filters Tools for defining the information displayed or manipulated in different types of views, thereby avoiding cluttering these views with unnecessary data.

flash frame After a long, complex piece is edited, small bits of video might be accidentally left in a sequence. When the Timeline is zoomed to 100 percent, these small, unwanted pieces might not be visible. An editor can use the Find Flash Frame command to find these bits.

flipbook A way of displaying animation in real time in a floating window. Flipbooks can be exported in a variety of standard formats, such as AVI, MPEG, and QuickTime. Also used for displaying and converting still images.

float To temporarily suspend a story. The story's time is removed from the show timing. Float time is also ignored by the teleprompter and machine control. Floating is used when you are not sure whether or where to put a story in a rundown.

flow A sequence of paragraphs that makes up the content of a text object.

focal length The distance from a camera lens to its focal point.

folder A directory in which you organize clips, sequences, and presets into smaller more manageable groups. A folder points to the location of your media files. It can be an area on a media disk, a network drive, or a hard drive on your workstation. When you select a folder, the Avid Explorer tree updates to show your project folders, sequences, clips, or media.

foley The background sounds added during audio sweetening to increase realism.

font A specific typeface.

form A preformatted layout (template) containing the fields and the field positions (such as presenter and writer) required for a story. The form serves as a copy master when creating a new story.

formatting The transfer and editing of material to form a complete program, including any of the following: countdown, test patterns, bars and tone, titles, credits, logos, space for commercial, and so forth.

fps Frames per second. A measure of the film or video display rates (NTSC = 30 fps; PAL = 25 fps; SECAM = 25 fps; film = 24 fps).

frame One complete video picture. A frame contains two video fields, scanned at the NTSC rate of approximately 30 fps or the PAL rate of 25 fps. A frame is a combination of interleaved even and odd fields. Different video formats display frames at different rates. See also *field*.

frame offset A way of indicating a particular frame within the group of frames identified by the edge number on a piece of film. For example, a frame offset of +12 indicates the twelfth frame from the frame marked by the *edgecode*.

frame pulse A pulse superimposed on the control track signal. Frame pulses are used to identify video track locations containing vertical sync pulses.

frame size The dimensions of a digital image in Avid DS Nitris. These measurements are based on DSUs (Avid DS Nitris units) so that they provide a common unit of measure between video images and computer-generated graphics.

frame synchronizer A device that allows a nonsynchronous video source, such as a satellite or microwave feed, to be used in a timed-video environment by capturing entire frames.

freeze frame A video effect that appears to stop the action. Freeze frames can be created during recording, capturing, or during an editing session. Compositions can create this effect by using a track repeat object that can specify the display of a single frame for a period of time.

front porch The portion of the composite video signal that starts at the trailing of the picture information and ends at the leading edge of the horizontal sync.

function curve or fcurve A graphic representation of the relationship between time and property values (animation). Function curves are represented as a curve with points in an XY grid, where time is on the X, or horizontal, axis and values are on the Y, or vertical, axis. You can edit the function curves that represent your animation in the animation editor.

G

gain 1. A measurement of the amount of luminance in a video image.

2. In audio, gain is a measurement of the change between two audio levels.

See also *waveform* and *white point*.

gamma A measurement of the midpoint in the luminance range of an image. Used in color adjustments to control the proportions of brighter and darker areas in an image. Also called the gray point.

gang Any combination of multiple tracks that are grouped. An edit that is performed on one track is also performed on tracks that are ganged together.

garbage matte A matte that you create in an image's alpha channel to remove unwanted objects.

generation The number of times material has been rerecorded. The original videotaped material is the first generation. A copy of the original is a second-generation tape, and so on. Each generation shows a gradual loss of image quality. With digital copies, there is little or no loss in quality.

genlock In Broadcast, a system whereby the internal sync generator in a device (such as a camera) locks onto and synchronizes itself with an incoming signal.

geometry The control points of an object. These control points are usually seen with objects that can be rendered. For example, a cube's geometry is composed of eight control points. By this definition, a curve has geometry since it is also composed of one or more control points, whereas nulls have no geometry.

gigabyte (GB) Approximately one billion bytes (1,073,741,824 bytes) of information.

global coordinates A coordinate system that is used to locate an object in relation to a world origin. See also *Cartesian coordinates*.

gradient A smooth ramp between multiple colors. See also *color stop*.

graphics object Any object that you create in the Graphics layout or floating Graphics combo view, such as strokes or titles.

graphics session The time span over which graphics objects appear. You can create a graphics session by applying the Graphics effect to a clip or track, or by applying graphics on a layer inside a composite container clip.

GPI General-purpose interface. In computerized editing systems, GPIs allow the computer to control various remote components.

gray point See *gamma*.

green screen See *blue screen*.

grid A visual representation of equally spaced horizontal and vertical intervals, along which objects can be aligned. A grid appears as dots at these intervals.

grommet The indicator that links a script to production information. Also called *anchor* or *marker*.

GUID Globally Unique Identifier. A unique value that is created by running a software utility.

gutter The space between columns of text.

H

handle 1. Material outside the IN and OUT points of a clip in a sequence. The handles are used for dissolves and trims with the new, shorter master clips.

2. A direction handle on a Bézier curve.

3. One of the eight handles on a selected object's bounding box. See also *bounding box handle*.

hard disk A magnetic data recording disk that is permanently mounted within a disk drive.

hard recording The immediate recording of all audio, video, timecode, and control tracks on a magnetic recorder. Because hard recording creates breaks in any existing timecode or control track on the tape, this procedure is often performed on blank tape when an edit is not required or in emergency circumstances. Also called crash recording.

hard out A story in a newscast that has a fixed start time, usually at the end of a segment or show.

HDTV High-definition television. A digital video image having at least two times the resolution of standard NTSC or PAL video. The HDTV aspect ratio is 16:9. (Analog TV has a ratio of 4:3.)

head frame 1. The first frame in a clip or in a segment of video.

2. The starting point or time of an object. See also *tail frame*.

headroom 1. In video, the room that should be left between the top of a person's head and the top of the frame when composing a clip.

2. In audio, the amount of available gain boost remaining before distortion is encountered.

heads out Film or tape wound on a reel with the tail on the inside next to the hub and the head end on the outside.

hertz (Hz) The SI unit of frequency equal to one cycle per second. See also *kilohertz (kHz)* and *megahertz (MHz)*.

Hi Con A high-contrast image used for creating matte keys.

hidden Any element that is not shown in the current rendering of the scene but still exists.

hierarchy A way of defining objects in relationship to each other (using a parent-child or tree analogy). This relationship means that transformations, deformations, and any other property of the parent object affect all child objects. This allows separately modeled objects to be used in a scene as a single functional unit. The movement of a parent affects the movement of the child, but you can move the child without affecting the parent.

high resolution Digital video of a resolution suitable for broadcast.

HIIP Host Image Independence Protocol. HIIP® allows the Avid system to import and export files in various standard formats. Also called Image Independence®.

HIIP folder The folder containing files that support the Host Image Independence Protocol. See also *HIIP*.

histogram In color correction, a graph that plots the distribution of pixels in an image based on their brightness. Provides a visual guide to the makeup of a video image in terms of relative luminance.

HLS Hue, Lightness, Saturation: the three components of the HLS color model. Hue refers to the position of the color in the spectrum, such as red, yellow, or green. Lightness is the amount of white mixed in a color, such as the difference between a pure red and pink. Saturation is the purity of the color, such as the difference between a pure red and a dusty rose—low saturation means that there is more gray in the color. See also *hue, luminance*, and *saturation*.

H phase Horizontal phase. The horizontal blanking interval used to synchronize the timing of two or more video signals.

HSB Hue, Saturation, Brightness. See *HSV*.

HSV Hue, Saturation, Value: the three components of the HSV color model. This color model defines the hue and saturation similar to the HLS model. Value is similar to lightness, as in HLS; however, a value of 1 represents a pure color when saturation is 1, while a lightness of 1 yields white no matter what the saturation. In both systems, 0 is black. See also *hue, saturation*, and *value*.

hue An attribute of color perception. Red, green, blue form the color model used, in varying proportions, to produce all the colors displayed in video and on computer screens. Also called a *color phase*.

Hue is expressed as a degree from 0 to 360 on a standard color wheel. For example, a value of 0 represents red, a value of 180 represents cyan, and a value of 300 represents magenta. See also *vectorscope, luminance,* and *saturation*.

I

IEEE Standard 1394

The international hardware and software standard for transporting data at 100, 200, or 300 megabits per second (Mb/s).

image clip

A copy or instance of a source image. Each time you use a source image, an image clip of it is created. You can have as many clips of the same source as you need. You can then manipulate the clip without affecting the original source image. See also *source or source clip*.

Image Independence

A registered trademark of Avid Technology, Inc. See *HIIP*.

in-betweening

See *keyframing*.

iNEWS ControlAir

A machine control system for on-air operations (iNEWS ControlAir™), which can be integrated into the iNEWS newsroom computer system or operate as a standalone environment. It is used to run a show's production devices, such as character generators, still store machines, and video servers.

infinite light

A light source that is very far away, so that the light rays are essentially parallel to each other, such as the sun. See also *directional light*, *local light, and spot light*.

initializing

The setting of the computer edit program to proper operating conditions at the start of the editing session.

ink numbers

The frame identification numbers used to conform a film work print. Film Composer cut lists and change lists reference ink numbers.

IN point

1. The place where an edit, clip, or effect starts. Also called mark IN.

2. A point in the timeline, represented by a locator, where material is inserted. See also *mark IN/OUT* and *OUT point*.

Input icon

A graphical representation of the input to a node. You can make a connection to this icon from the output icon of another node.

See also *Output icon*, *node*, and *Effects Tree*.

insert Placing new material in an existing video sequence by moving the existing material to accommodate the new or overwriting the existing material. See also *overwrite*.

insertion point The location in a body of text where new characters will be inserted. It is indicated by a blinking vertical cursor.

interactive cache A cache that is created each time you view an image with an effect applied to it. Avid DS Nitris automatically processes the effects on the frame on which the position indicator is currently positioned and saves it to disk, so that you can improve your interaction time when viewing the results of effects on a frame-by-frame basis.

interface 1. The computer software or hardware used to connect two functions or devices.

2. The program access level at which a user makes selections and navigates a given system.

interlace To combine the odd and even fields in a clip. When you interlace a clip, each frame becomes a field and the clip's duration is halved.interpolation

The process used to estimate an unknown value between two or more known values. In animation, interpolation is the process used to calculate values at frames between two keyframes in a sequence. See also *keyframing*.

I/O device See *device*.

IP address Internet Protocol address. A 32-bit numeric identifier usually expressed as four groups of 8-bit decimal numbers (0-256) separated by periods, such as: 192.168.0.1.

IPTC International Press Telecommunications Council. A group established to safeguard the telecommunications interests of the world press.

IRE A unit of measurement of the video waveform scale for the measurement of video levels, originally established by the Institute of Radio Engineers. The scale is divided into 140 IRE units, 100 above the blanking reference line and 40 below it.

ISO 1. International Organization for Standardization.

2. Isolation reel. In multicamera production, the source reel for the separate (isolated) recording of a single camera, alongside simultaneous recordings of the other cameras and a switched line feed.

ITU-R 601 The standard for standard-definition component digital video, published by the International Telecommunication Union as ITU-R BT.601-5 (formerly CCIR-601). This standard defines digital component video as it is derived from NTSC and PAL. It forms the basis for HDTV formats as well.

ITU-R 709 The standard for high-definition television formats, published by the International Telecommunication Union as ITU-R BT.709. ITU-R 601 and ITU-R 709 share some information: for example, for 8-bit components, black is mapped to 16 and white is mapped to 235. However, color values can change when converting from SD to HD, and vice versa. Avid HD systems automatically compensate for these differences.

J

jaggies The rough edges around computer-generated graphic objects and titles.

jam syncing The process of synchronizing a secondary timecode generator with a selected master timecode.

JBODS Just a bunch of disks.

JFIF JPEG File Interchange Format. A file format that contains JPEG-encoded image data, which can be shared among various applications. JFIF resolutions store data at a constant rate; for example, JFIF 300 uses 300 KB for each frame it stores. JFIF resolutions comply with the ISO-JPEG interchange format and the ITU-R 601 standard.

jogging To move through a clip or sequence, frame by frame, forward and backward. See *stepping* and *scrubbing*.

JPEG Joint Photographic Experts Group. Also, a form of compression developed by Avid Technology, Inc.

justified text Text that is both left- and right-aligned in a column.

K

KEM roll The roll of film used on a KEM flatbed editing system. A KEM roll combines multiple takes onto a single roll (a work print, not a negative). The maximum length of a KEM roll is 1000 feet (35mm).

kerning The amount of spacing between text characters, such as titles. See also *leading*.

key 1. To combine a selected image from one source with an image from another source. See also *chroma key*.

2. A special alphanumeric code that a user assigns to a queue or story to lock it. To open, or unlock, a queue or story, a user must have the key. See also *lock*.

keyboard shortcuts The keys or key combinations that, when pressed or held down, provide quick access to frequently performed commands or operations. A keyboard shortcut is the keyboard equivalent of a command, tool, or operation that is also available elsewhere in the application. In some cases, an object, such as a clip on the timeline, must be selected first.

key color The color used in the keying process. See also *keying*.

keyframe The value of an animated parameter that you set at a given point in time. Parameter values between keyframes are obtained by interpolating between keyframe values.

keyframing The process for animating values over time. Each keyframe is a frame that explicitly defines one or more parameter values. Values for frames between two keyframes are computed by interpolating (averaging) the values at the keyframes.

keyframe marker The visual representation of a keyframe.

keying The process of creating a matte from a foreground clip to composite it over a background clip. You can create a key based on HLS, YUV, or RGB color values. See also *matte*.

Keykode A trademark of Eastman Kodak Company. A film-marking system that applies optical information identifying the film stock and footage at the edge of the film during manufacture.

key numbers The original frame identification numbers applied by the film manufacturers to the film stock. Key numbers are used by the negative cutter to conform the film negative. Film Composer cut lists and change lists reference key numbers.

kill To delete a story.

kilobyte (KB) Approximately one thousand bytes (1024 bytes) of information.

kilohertz (kHz) One thousand cycles per second. See also *hertz (Hz)* and *megahertz (MHz)*.

kissing A method in which you can connect nodes in an Effects Tree. You can drag a node's input icon over the output icon of another node, so that it "kisses" the edge of the second node. A connector joins the two nodes. See also *ripping*, *sticky connections, and twanging*.

L

lattice A box made up of points that surrounds an object for the purpose of deforming it. Every point on a lattice is associated with a number of points on the object: when a point on the lattice is moved, the points on the object are also moved which changes the object's shape.

layback The process of transferring a finished audio track back to the master videotape. See also *audio sweetening*.

layer 1. An object in the Layers view that you can composite over another layer using a matte.

2. An object that defines how its contents are drawn. Layers are the size of and the same duration as the scene.

3. An object in the Effects Tree that you can composite over another input using a matte.

4. The clip that follows the motion path extracted from the reference clip in a Tracker effect. See also *2D layer* and *3D layer*.

layered tracks The elements of an effect created by combining two or more tracks in a specified way, such as nesting one track as a layer within another.

L-cut See *overlap edit*.

leader A length of film, tape, or a digital clip placed at the beginning of a roll, reel, or sequence to facilitate the cueing and syncing of material.

leading The vertical distance between lines of word-wrapped text in a single paragraph. See also *paragraph spacing*.

level A quantitative measure of a video or an audio signal. A low level indicates the darker portions in video and the soft or quieter portions in audio; conversely, a high level indicates a brighter video image or a louder audio signal. The level of audio signal correlates directly with the volume of reproduced sound.

library 1. A storage area that contains library elements.

2. A collection of pictures, materials, textures, tools, shaders, and so on from which you can select.

library element A piece of information stored in a library that you can use to simplify or automate the creation of titles. A library element might be a collection of property values used as a style or material, a graphics or animation file used as a texture, a collection of title objects and their behaviors used as a template, or a script.

lift To remove selected frames from a sequence and to leave black or silence in the place of the frames.

light source lluminates the objects in a scene. A light source can be an infinite light, point light, or spotlight. Lights affect the way all objects' surfaces appear, including their color. Lights can also be set to cast shadows. See also *infinite light*, *local light*, and *spot light*.

Linear A type of curve that consists of straight line segments between control points. See also *Bézier* and *spline*.

linear editing A type of tape editing in which you assemble the program from beginning to end. If you require changes, you must rerecord everything downstream of the change. The physical nature of the medium (for example, analog videotape) dictates how you place material on the medium. See also *nonlinear editing*.

line feed A recording or live feed of a program that switches between multiple cameras and image sources. Also known in sitcom production as the director's cut.

line of sight The path from the viewer to an object in the scene. See also *field of view (fov)*.

line spacing See *leading*.

lineup See *rundown*.

linked clip A representation of a media file located outside your disk array. As the media associated with a linked clip does not reside within the current project, you must process it before you can play it back in real time.

lit material A material whose appearance is affected by light sources. See also *emissive color*, *shininess*, *specular color*, and *tinted material*.

load 1. A roll of film stock ready to be placed in the camera for photography. A 1000-foot load is a common standard.

2. A group of multicamera reels shot at the same time, sharing the same timecode, and numbered accordingly.

3. To open a clip in preparation for viewing or editing.

local coordinates An object's coordinate system with its own center as the reference point (origin) as compared to global coordinates, which includes an origin for all objects in the world space. For example, if you animate a child object in a hierarchy using local coordinates, the animation is relative to its parent, not the global origin.

local light A light source whose light rays extend from a single point evenly in all directions, such as a candle. See also *infinite light and spot light*.

local map A texture image that is applied across the surface of an object. For container objects, the surface of each subobject is treated as a separate surface. As the object is moved, scaled, or rotated, so is the texture. See also *reflection map*.

local shadow A shadow that is attached to a side of an object, and moves in relation to the object. See also *drop shadow and projected shadow*.

locator A mark added to a selected frame to qualify a particular location within a sequence. User-defined comments can be added to locators.

A mark that is used to set reference points or areas of interest on the clips or the timeline.

lock To protect data, such as a queue or story, from access by unauthorized users.

log To enter information about source material into bins at the beginning of the editing process. Logging can be done automatically or manually, before capturing, or at the same time as capturing. See *shot log*.

loop 1. The recording of multiple takes of dialog or sound effects.

2. To repeatedly play back a section of the timeline or a clip or an animation sequence.

lossless compression A compression scheme in which no data is lost. In video compression, lossless data files are usually very large.

lossy compression A compression scheme in which data is thrown away, resulting in loss of image quality. The degree of loss depends on the specific compression algorithm used.

lower third A title that appears in the lower-third horizontal region of the video frame. An example of a lower-third title is the name of a person who is speaking on the background video. Lower-third titles are usually left-justified, centered, or right-justified within the region.

low resolution The digital video of a resolution suitable for edits or distribution over a network, but not for broadcast.

LS Long shot.

LTC Longitudinal timecode. A type of SMPTE timecode that is recorded on the audio track of a videotape. LTC can be easily read when the tape is moving forwards or backwards but not at freeze frame. See also *VITC* and *timecode*.

luminance The measure of the intensity of the combined color (white) portion of a video signal. The relative lightness or darkness of a color. The values range from 0 (darkest/black result) to 1 (lightest/white result). See also *hue* and *saturation*.

M

M & E track The common designation for a single sound track containing music and sound effects but not dialog.

main surface The front and back faces of an object, or the front face of a DVE or 3D DVE object. See also *background*, *edge surface, extrude surface,* and *surface*.

magnetic track A sound track recorded on magnetic sound recording film.

magnetism An object's ability to "snap" or align to other objects on the timeline when they are in close proximity of each other. As you drag an object on the timeline, it snaps to any of these elements: locators, clip in/out-points, cuts and transitions, and the position indicator.

manipulators See *3D manipulators*.

marker 1. A mark added to a selected frame to qualify a particular location within a video sequence. Also called *locator*.

2. An indicator that links a script to production information. Also called *grommet* or *anchor*.

mark IN/OUT 1. To enter the start and end timecodes for a clip to be edited into a sequence.

2. To mark or log timecode numbers to define clips during a logging, recording, or capturing session. See also *IN point* and *OUT point.*

mask 1. In film, a border placed over an image with a 3:4 aspect ratio to create the look of an another aspect ratio, such as wide-screen.

2. An image, portion, or component of an image that defines which pixels, paint strokes, and titling characters affect the image. See also *alpha channel* and *matte*.

master The tape resulting from editing. The finished program.

master clip 1. The media object that refers to the media files recorded or captured from tape or other sources.

2. The first clip selected in a sync group. Clips selected or added subsequently are slave clips. See also *clip, subclip,* and *sync lock.*

master shot The shot that serves as the basic scene, and into which all cutaways and close-ups will be inserted during editing. A master shot is often a wide shot showing all characters and action in the scene.

master/slave A video-editing process in which one or more decks (the slaves) are set to imitate the actions of another deck (the master).

A relationship between synchronized clips in which the position of the slave clips is calculated relative to the master clip.

material A collection of values that defines the appearance of a surface of an object. These values generally control how the surface interacts with light in the scene to create the object's color, specularity (highlights), reflective qualities, transparency, and, if the surface is at all transparent, refraction. Basically, they are those qualities that suggest the material that an object is made of, whether wood, plastic, or metal. See also *gradient* and *texture*.

matchback The process allowing you to generate a film cut list from a 30-fps video project that uses film as the source material.

matchback conversion The conversion from film to video frame rates.

match-frame edit An edit in which the last frame of the outgoing clip is in sync with the first frame of the incoming clip, such that the incoming clip is an extension of the outgoing clip.

material The appearance of a surface of an object. A material can be a solid color, a gradient, or a texture. In addition, gradients and textures can have an optional tint.

matte A grayscale image that defines the transparency of an image when it is composited over another. A matte can be part of the image itself (alpha channel) or derived from another image (external matte). See also *external matte*.

matte key A video effect comprised of three components: the background video, the foreground video, and the matte or alpha channel (black and white or grayscale silhouette) that allows one portion of the image to be superimposed on the other.

media 1. The video, audio, graphics, and rendered effects that can be combined to form a sequence or presentation.

2. The digitized form of source material after it has been captured and imported from tape or file into the application.

media data Data from a media source. Media data can be:

- Analog data — film frames, Nagra tape audio, or videotape video and audio

- Digital data — either data that was recorded or captured such as video frame data and audio samples, or data created in digital form such as title graphics, DAT recordings, or animation frames

media disk The physical device where you store media, such as a disk array.

media files Files containing the compressed digital audio and video data needed to play Avid clips and sequences. See also *clip* and *compression*.

media sample data See *safe color limiting*.

megahertz (MHz) One million cycles per second. See also *hertz (Hz)* and *kilohertz (kHz)*.

mental ray rendering software A high-quality, photorealistic raytracing renderer. The mental ray rendering software provides an extensive set of built-in functions and can create procedural textures (including bump and displacement maps), materials, atmosphere, and other volume rendering effects, environments, camera lenses, and light sources.

metadata "Data about data" that describes the content, quality, condition, and other characteristics of data.

MIDI Musical Instrument Digital Interface. A standard protocol that allows a user to control electronic music equipment from a PC.

MII A component videotape format created by Panasonic® in an effort to compete with Sony Betacam. MII is an extension of the VHS consumer format as Sony Betacam is an extension of the Betamax™ home video technology.

mirroring A fault tolerance method that keeps identical copies of data on disk partitions located on different physical hard disks and servers.

mix 1. A transition from one video source to another in a switcher.

2. The product of a recording session in which several separate sound tracks are combined through a mixing console in mono or stereo.

mixdown audio The process that allows the user to combine several tracks of audio onto a single track.

models A powerful way of organizing objects in your scenes and projects. Models contain not just the geometry of hierarchies, but also the function curves, shaders, and other properties that have been applied to it. They can also

contain internal constraints; that is, those constraints that refer only to elements within the model's hierarchy. Models can be easily reused in other scenes and projects.

This term also loosely refers to objects and characters.

monitor 1. In video, a picture tube and associated circuitry without tuner or audio sections. The monitor includes the display of source media, clips, and sequences. In Avid products, virtual monitors are displayed on the screen in which source media, clips, and sequences can be edited.

2. In audio, to monitor specific audio tracks and channels, or another name for the speakers through which sound is heard.

mono A single channel of audio data.

morph A technique that lets you transform one image or a sequence of images into another over a sequence of frames. See also *warp*.

MOS Media Object Server.

See also *MOS device*, *MOS protocol*.

MOS device A product that stores media objects and supports the MOS protocol.

See also *MOS protocol*.

MOS protocol An XML-based protocol for communication between a newsroom computer system and a MOS device.

See also *MOS device*.

motion blur The blurring of objects that move while the camera shutter is open, creating the illusion of movement. Motion blur also prevents strobing caused by too-rapid movement.

motion effect An effect that speeds up or slows down the presentation of media in a track.

motion path 1. The path that is drawn when a tracker tracks the movement of an object in a reference image. The path is comprised of a series of control points or keyframes, representing the position of a tracker on each frame. This path is then used to move the image of another layer.

2. The path that is drawn when a DVE is translated and animated. See also *DVE*.

motion tracking The process of generating position information that describes motion in a clip, for example, the changing position of a moving vehicle. You use motion tracking data to control the movement of effects. Motion tracking also lets you stabilize an image by compensating for unwanted camera movement. See also *stabilization*.

MU/FX or MUFX See *M & E track*.

multicamera A production or scene that is shot and recorded from more than one camera simultaneously.

muticamera editing Creating a video sequence of a single scene using material recorded with multiple cameras.

multiple B-roll A duplicate of the original source tape, created so that overlays can be merged onto one source tape.

multitrack A magnetic tape or film recorder capable of recording more than one track at a time. Placing clips on different tracks and creating cuts between them.

mute 1. To turn off the sound on an audio track or the visibility of a layer when compositing. See also *bypass*.

2. Temporarily turning off an operator which prevents it from affecting the objects on which it is applied. All operators can be muted. This can be useful for improving the speed of interaction in large scenes, or to make other selections and adjustments.

3. Mute also means to temporarily disable a viewport by middle-clicking its letter identifier in the upper-left corner. Middle-click it again to reactivate the viewport.

N

namespace A unique identifier for models; each model maintains its own namespace. Each 3D object in a model's hierarchy must have a unique name, but 3D objects in different models can have the same name. For example, two characters in the same scene can both have chains named "left_arm," "right_arm," and so on.

NAB National Association of Broadcasters.

Nagra A brand of audiotape recorder widely used in the film production and postproduction industries.

negative 1. A film element in which the light and dark areas are reversed compared to the original scene; the opposite of a positive.

2. A film stock designed to capture an image in the form of a negative.

neighborhood effect See *spatial filtering effect*.

network address A network number that uniquely identifies a network cable segment. It is also referred to as the IPX external network number.

NewsML NewsML is a compact, extensible and flexible structural framework for news, based on XML and other appropriate standards and specifications. It supports the representation of electronic news items, collections of such items, the relationships between them, and their associated metadata. It allows for the provision of multiple representations of the same information, and handles arbitrary mixtures of media types, formats, languages and encodings. It supports all stages of the news life cycle and allows the evolution of news items over time. Though media-independent, NewsML provides specific mechanisms for handling text. It allows the provenance of both metadata and news content to be asserted.

News Story Markup Language The XML-compliant data structure of stories in the iNEWS NRCS newsroom system.

node 1. Any type of data that is represented in an explorer or a tree view.

2. The graphical representation of the inputs, effects, and output in an Effects Tree. Each node in the tree is identified by an icon and a name. See also *Effects Tree*.

noise 1. In video, an aberration that appears as very fine white specks (snow) and that increases over multiple generations.

2. In audio, a sound that is usually heard as a hiss.

nondestructive editing A method of editing whereby the captured source material is always left unchanged.

noncomposite video — A video signal that does not contain horizontal and vertical sync pulses.

non-drop-frame timecode — An SMPTE timecode format that continuously tracks NTSC video at a rate of 30 fps without dropping frames to compensate for the actual 29.97-fps rate of NTSC video. As a result, non-drop-frame timecode does not coincide with real time. Non-drop-frame timecode is recorded with colons between the digits; for example, 1:00:10:02. See also *drop-frame timecode*.

nonlinear — Pertaining to instantaneous random access and manipulation of any frame of material on any track and on any layer of an edit sequence.

nonlinear editing — A type of editing in which you do not need to assemble the program from beginning to end. The nature of the medium and the technical process of manipulating that medium do not dictate how the material must be physically ordered. You can use nonlinear editing for traditional film cutting and splicing, and for recorded or captured video images. You can make changes at the beginning, middle, or end of the sequence. See also *linear editing*.

NRCS — Newsroom Computer System. Used to generically describe the newsroom database system.

NTFS — New Technology File System. A file system used on Windows computers.

NTSC — National Television Standards Committee. The organization that defined the color broadcasting standard used in North America, Japan, and parts of South America. It is now used in reference to a video signal that conforms to the NTSC guidelines. The NTSC signal uses 525 horizontal lines per frame with two fields per frame of 262.5 lines. Each field refreshes at 59.94 Hz. See also *PAL* and *SECAM*.

nulls — Points in space. Although simple, they have many uses, such as setting constraints, organizing objects in hierarchies, and so on. A null is displayed in the viewports as three intersecting lines, and is not visible in a rendered scene.

O

object — A distinct item within a title created by using the Text, Rectangle, Ellipse, or Shape tool. A container object can contain subobjects. See also *3D objects*.

offline — Pertaining to items that are unavailable to the computer, such as offline disks or media files.

offline edit The preliminary or rough-cut editing that produces an *EDL* (edit decision list). A rough cut or preliminary edit usually performed using low-cost equipment, which can then be conformed on a high quality online system.

offscreen rendering A method of rendering the scene in the background so that you can work on other tasks during rendering.

OMF Open Media Framework®.

OMFI Open Media Framework® Interchange. A standard format for the interchange of digital media data among heterogeneous platforms. The format is designed to encapsulate all the information required to interchange a variety of digital media, such as audio, video, graphics, and still images as well as the rules for combining and presenting the media. The format includes rules for identifying the original sources of the digital media, and it can encapsulate both compressed and uncompressed digital media data. An advanced form of an edit decision list. In addition to the instructions for transitions and timewarps, it also preserves layering information in a sequence.

omni-directional light See *local light*.

one light A telecine transfer or film print produced with a single setting of color correction values. One light is the simplest, fastest, and least costly type of transfer.

one-sided transition A transition or other effect applied to a clip's in point or out point. See also *transition*.

onion skinning Blending the current frame with preceding and/or successive frames at a specified percentage.

online edit The final edit using the master tapes and an edit decision list (EDL) to produce a finished program ready for distribution; usually associated with high-quality computer editing and digital effects.

opacity A property of an image or object that controls how much objects behind them are obscured. For images, it can be controlled by the alpha channel or by an external opacity control. See also *transparency*.

OpenGL Open Graphics Library. An interface to graphics hardware that allows for the creation of high-quality images, especially three-dimensional representations of objects.

operator A node that processes inputs to produce an output. An operator modifies an object, geometry, cluster, or property.

opticals The effects created in a film lab through a process called A-roll and B-roll printing. This process involves a specified manipulation of the film negative to create a new negative containing an effect. The most common opticals used in film editing are fades, dissolves, and superimpositions.

order lock A temporary lock placed on a queue when a user changes a sequence of stories in that queue. Order locking does not prevent other users from accessing the queue, but does prevent them from ordering the queues simultaneously.

orientation grid The visual representation of the frame size, location, and orientation in three-dimensional space. The orientation grid appears as equally spaced horizontal and vertical lines, with X, Y, and Z axis arrows extending from the center of the frame.

origin A reference point for measuring sections of recorded or captured sample data. A file mob value for the start position in the media is expressed in relation to the origin. Although the same sample data can be rerecorded or recaptured, and more sample data might be added, the origin remains the same, so that composition source clips referencing it remain valid.

original negative The actual film stock used in the camera to photograph a scene.

orphan file See *unreferenced media files*.

orthographic projection A type of projection whereby objects are not distorted to make depth more realistic. With orthographic projection, it is as if the object is very far away from the viewer, and distortion is not apparent. Although this type of projection is not realistic, it is sometimes useful to have an undistorted texture on an object rotating around the X or Y axis. See also *perspective*.

OUT point The end point of an edit, or a mark on a clip indicating a transition point. Also called *mark OUT*. See also *IN point*.

output 1. The result of inputs and effects in the Effects Tree.

2. The result of all layers and effects applied to each layer in a composite.

Output icon A graphical representation of the output of a node in an Effects Tree. You can make a connection to this icon from multiple input icons of other nodes. See also *Input icon*, *node*, and *Effects Tree*.

output pixel aspect The title's pixel aspect, which describes the aspect ratio of the final display, such as a video monitor. See also *square pixels*.

outtake A take that is not selected for inclusion in the finished product.

out time The total length of time for a show (shown in hours, minutes, and seconds) or the actual time by which the show must end (shown in 12-hour clock time). See also *backtiming*.

overlap edit An edit in which the audio and video signals are given separate IN points or OUT points, so the edit takes place with one signal preceding the other. This does not affect the audio and video synchronization. Also called L-cut, delay edit, or split edit.

overwrite An edit in which existing video, audio, or both is replaced by new material. See also *splice*.

oxide A metallic coating on videotape or magnetic film that is magnetized during the recording process.

P

page An object that exists within a deck object for a specific part of the deck object's duration. A page object is a container for other objects, even other decks. You create transitions between pages. See also *deck*.

page curl A type of DVE that bends the edge or corner of the surface and pulls it across the surface, similar to turning a page of a book.

PAL Phase Alternate Line. The video signal standard used in Western Europe, the United Kingdom, China, Australia, New Zealand, the Middle East, and parts of Africa. Video products destined for these areas must be compatible with this standard as opposed to NTSC standards.

PAL is based on the 50 Hz power system and displays 625 scan lines interlaced at 50 fields per second (25 frames per second), with two fields per frame of 312.5 lines each. Conversion between PAL and NTSC is possible but the standards are incompatible. See also *NTSC* and *SECAM*.

palette A central location for user-selectable buttons, which you can map to various functions for ease of use. The Command palette houses all the user-selectable buttons that allow you to perform a wide range of commands with a single click of the mouse.

pan A camera technique in which the focal point is adjusted by pivoting the camera direction, usually slowly across a scene.

paragraph spacing The vertical distance between paragraphs in a text object. See also *leading*.

parent timeline Any level of the timeline containing subordinate levels. For example, container clips are placed on the parent timelines of their contents. See also *top timeline*.

parallel projection See *orthographic projection*.

parameters Also known generally as properties, parameters are the "atomic" elements of a property set whose values determine the behavior of something. You can set parameters in property editors. See also *property*.

particles A point-based particle generation system that simulates types of natural phenomena that contain many particles. The particles system simulates particle dynamics by applying forces and recreating events, such as decay (disintegration) and obstacles, that affect natural particles. This allows you to animate particle streams, such as sparks rising from a campfire, fireworks, or the tail of a comet trailing off into space.

partition A method of assigning disk space that creates two or more virtual disks from a single physical disk (similar to creating a directory/folder).

patching The routing of audio or video from one channel or track in the sequence to another.

path 1. A user-defined curve along which you can fit text, scroll text, or animate objects. Paths can be linear or nonlinear.

2. The path to a certain file in the operating system's folder structure. Path names always start from the root folder. Each operating system has its own rules for specifying paths. On Windows systems, the root folder is named backslash (\) and each subfolder is separated by an additional backslash.

path name The hierarchical name of the directory and sub-directories in which a file is located.

path text Text that fits on or moves along a user-defined path.

pedestal See *setup*.

perspective A traditional art method of creating the illusion of three-dimensional form and distance on a two-dimensional surface. Perspective provides a three-dimensional view of the scene that indicates depth. In a perspective view, objects appear to converge toward a central vanishing point, and objects closer to the camera appear larger than those farther away. A perspective view is in contrast to an orthogonal view. See also *orthographic projection*.

picking A way of selecting an object when in a certain mode of action.

pinning To mark the function curves of different objects, so that they can all be viewed simultaneously in the animation editor.

player controls The electronic equivalent of tape deck controls. Also called *transport controls*.

pointer The onscreen pointer that is controlled by mouse movements.

point light See *local light*.

point(s) 1. The mark IN and mark OUT entered in the timeline.

2. A fundamental building element of an object in 3D space with an XYZ location. Point coordinates are the minimum information from which the geometry of an object can be calculated.

PortServer A high performance communications server that allows the connection of clusters of high-speed serial ports to any TCP/IP Ethernet network.

pop-up monitor An ancillary monitor used to view and mark clips and sequences.

position bar The horizontal rectangular area beneath the Source monitor, Record monitor, Playback monitor, Composer monitor, and Source pop-up monitor that contains the position indicator.

The horizontal rectangular area below the viewers/monitors that lets you view the location of the position indicator, locators, animation keys, and timecode as well as set an in point and an out point.

position indicator A vertical colored line that moves in the position bar and in the timeline to indicate the location of the frame displayed in the monitor.

postroll A preset period of time during a preview when a clip will continue to play past the OUT point before stopping or rewinding.

polygon A geometric primitive consisting of a closed non-intersecting set of contiguous line segments joining points.

polygon mesh A 3D object comprising a “quilt” of polygons joined at their edges and vertices.

precomputed media A computed effect stored in a file and referenced by a composition or sequence. Applications can precompute effects that they cannot create during playback.

preference set A file containing customized layouts, toolbars, command maps and script commands. You can create new preference sets, as well as importing and exporting existing ones.

prelay The phase of audio postproduction during which music, sound effects, dialog replacement, and announce tracks are added to the master multitrack before the final mix.

premultiplied image An image in which the RGB values of pixels have been multiplied by their corresponding alpha channel values. Only the color information is required to composite the image onto a different image; the alpha channel information is not required because it has already been incorporated into the color information. See also *straight alpha*.

preroll The process of rewinding videotapes to a predetermined cue point (for example, 6 seconds) so the tapes are stabilized and up to speed when they reach the selected edit point (during recording or capturing of source material from a video deck).

presenter The person presenting a newscast on-air to a television audience. Also called an *anchor*.

preset A customized set of properties for an effect, Effects Tree, transition, graphics tool, or attribute. Using the object’s property editor, you can modify any of these properties, and save them as a new preset.

preview To rehearse an edit or effect without actually performing (recording/exporting) it.

preview code

An additional reference numbering system, like key numbers, supported by Film Composer for comparing digital sequences with evolving work print versions using change lists.

primary color correction

Color correction that applies to every part of a video image, or to every part of a video image that falls within a defined luminance range. See also *secondary color correction*.

primitive

Primitives are basic predefined 2D and 3D shapes, such as circles, spheres, cubes, spirals, multi-sided figures, and so on. These primitives can be used "as is" or modified. Typically, you select a primitive form and then transform it or combine it with other modified pieces.

Primitives can be polygon mesh objects, surfaces, or curves.

print

A positive copy of the film negative produced in the laboratory. See also *answer print*, *release print,* and *work print*.

priority queue

1. An area where copies of wire stories are placed.

2. A queue designated to be read first by a server program for new stories.

process

To create a final image or sequence of images. Most of the effects, transitions, composites, or container clips in your sequence must be processed before they can be viewed during playback. Avid DS Nitris can play some effects in real time if you have the real-time, multi-stream workstation. The results are stored in a new media file (cache), so that your source media remains unaltered.

process shot

A shot photographed specifically to be part of a special effects composite.

production cue

A prompt to start a story element, such as a video playback. It is typically on the left of a scripted story, and provides information for other devices being controlled in the rundown. Production cues are usually prefaced by an asterisk (*). See also *marker*.

profile material

The material used for the profile surface of an object.

Program side

In color correction, the second of two available levels of color adjustment. Corrections made on the Program side typically apply a final look to a finished sequence, for example, by fine-tuning the color values to enhance the mood of a dramatic program. See also *Source side*.

progressive media Media composed of single frames, each of which is vertically scanned as one pass.

projected shadow A shadow that is produced by a light source shining on the object and projecting the obscured region onto a shadow plane. See also *drop shadow and local shadow*.

projection The method of representing three-dimensional objects on a two-dimensional surface, such as a computer display. See also *orthographic projection and perspective*.

property A collection of parameters whose values can determine the appearance, behavior, or simply provide information about an element in a scene or sequence. Properties define the visual aspect of objects; some provide motion information, such as time, and others are used internally to control the way specific operations are performed. The parameters of most properties can be edited and animated in property editors. Related parameters are usually displayed as a property page within a property editor.

property curve A curve that describes how a property's value changes over time.

property editor A tool similar to a dialog box that allows interactive editing of the properties that define the objects and models in a scene. As you make changes, the scene is updated to reflect these changes. A property editor contains tabs that indicate property pages and keyframing icons for animating parameters.

Protection master A copy (dub) of a master tape, usually made immediately after the master has been recorded. It is used as a backup if the master is damaged.

PsF Progressive segmented frames. A progressive format where the frames are displayed one after the other, but are transported as two separate fields.

pulldown A process in which extra fields are added or "pulled down" during the conversion of 24-fps material to 30-fps NTSC or 25-fps PAL videotape. This conversion can be a telecine film-to-tape transfer or a 24p high-definition (HD) downconversion. Special procedures are required when recording or capturing to eliminate the extra pulldown fields and to achieve true 24-fps editing. (PAL video with pulldown is not currently supported in Avid editing systems.)

pulldown phase In a project based on an NTSC 24-fps to 30-fps transfer, the video frame at which a master clip starts: A, B, X, C, or D. The pulldown phase represents the pulldown-to-timecode relationship. Also called pullin frame.

pullin An Avid term that combines two words — pulldown and IN point. The pullin is the column where the user logs the pulldown phase of the start timecode as either A, B, X, C, or D. The user can modify this field before or after output or capture.

pullout An Avid term that combines two words — pulldown and OUT point. The pullout is the column where the user logs the pulldown relationship at the sync point of the OUT point (end timecode) as either A, B, C, or D. This field cannot be modified by the user and is calculated by the system based on the pullin and the duration of the clip.

purge 1. To delete source or cached media. Source media is associated with master clips, while cached media is generated from processed effects, graphics and composites in a sequence.

2. To remove stories from queues (based on age or specified interval). Purged stories are recycled as needed as new space is required.

Python The programming language used when writing Marquee scripts.

Q

quadraphonic A surround sound configuration that uses four channels of audio data.

queue An area of the database that contains stories related to a general topic. Queues are storage places within a system's file structure that allow you to organize information in detailed categories. See also *directory*.

quickstretch An animated deformation that changes an object's shape automatically, based on its motion. It calculates deformations on the fly according to the object's speed and acceleration. Quickstretch uses four types of motion—linear velocity, linear acceleration, rotational velocity, and rotational acceleration—to calculate the deformation. For each type of motion, you can deform by flexing, stretching, or yielding.

R

radio frequency (RF) The high-frequency portion of the electromagnetic spectrum used for transmitting television and radio signals. See also *UHF* and *VHF*.

RAID Redundant Array of Independent Disks. The storage device standards that provide fault tolerance, which helps to recover a system if a drive malfunctions. RAID is also used to enhance throughput of stored data.

RAM Random-access memory. Computer memory that is volatile and unsaved; information in RAM clears when the computer is turned off.

Raster mode A mode that lets you perform tedious rotoscoping tasks quickly. Also called *destructive mode*.

raytracing A rendering method that plots a view of every pixel in a scene through a virtual camera's lens. The mental ray rendering software is a raytracing renderer. Rays are cast from the camera, taking into account the location, strength, and quality of all light sources, along with the surface characteristics of each object in the scene including transparency, reflectivity, refraction, and shadows. Shiny objects reflect other objects, and realistic shadows are cast. Raytracing bounces the light through the model rather than terminating light values when they first intersect an object. The color and direction of light is changed by the object's reflective and spectral properties.

read rate The number of words per minute at which a presenter can read a news story. The total running time of a newscast is based on the read rate of the presenter.

real time During play back, events occur at actual clock time.

real-time effect An effect that you can apply to your sequence and play without having to process it first.

record To convert analog video and audio signals to an Avid compressed digital signal format.

reel A spool with a center hub and flat sides on which magnetic tape is wound. Generally, a spool of tape is referred to as a reel, and a spool of film is referred to as a roll.

re-encode To find and automatically convert high-resolution editing media to low-resolution browse media. The browse media is used for multiple purposes, including content creation, re-purposing, archive browsing, and story review. Also known as *scavenge*.

reference The clip that is tracked to construct a motion path.

See also *search region*, *target area,* and *tracker*.

reference background An image or animation file used to help position objects in a scene. The reference background appears behind all objects.

reference clips A clip that points to another sequence within the current project. Because reference clips only *point* to a sequence, they consume less memory and load faster than container clips. This improves performance on complex timelines. Using a reference clip also allows you to work on that portion of your sequence separately. Once updated, the changes are automatically reflected in sequences that contain this reference clip.

reference object The object that all other selected objects will be aligned to when you perform an object alignment operation.

reflection A surface characteristic used to determine the extent at which a material reflects other objects in the scene like a mirror.

reflection mapping A method of mapping an image onto an object in which the image is a rendering of the object's environment. The resulting mirror effect adds realism and takes much less time to calculate than raytracing. See also *local map, container mapping, and environment map*.

refraction The bending of light as it passes through a transparent or translucent object. See also *refractive index*.

refractive index The degree to which light bends (refraction) when passing through a transparent or translucent object. For example, the refractive index of air is 1 and water is 1.33.

refresh To update information shown on the monitor.

region of interest The part of an image that the user identifies as the target for a motion tracking operation. Also called the search pattern.

rehearse To play a sequence in the Timeline from the preroll through the postroll.

rehearse postroll To play a sequence in the Timeline from the current position to the postroll.

rehearse preroll To play a sequence in the Timeline from the preroll to the current position.

relative-to-mark time Time is displayed as though the start of the clip is at the locator mark.

relative-to-start time — Time is displayed as though the start of the clip is at 00:00:00:00.

release print — A film print ready for presentation to an audience. Release prints generally include both picture and sound tracks. See also *answer print, work print,* and *YUV*.

remote processing station — A workstation that has only the Avid DS Nitris RP software installed on it. It handles processing requests from the client workstation.

remote service — An archival system, bulletin board, or any information service that allows you to establish a connection to another service.

rendering — The process of creating a final image or sequence of images from a scene description. The process of taking a geometric model, a lighting model, a camera view, and other image generation parameters, such as maps, and computing an image. Rendering techniques such as shading, light source, or depth cueing are sometimes used to make the image look realistic. See also *raytracing*.

repeat effect — A type of effect for repeating a frame so that it appears to "freeze" or stop the frame, or for repeating a series of frames, such as a series of animation frames.

replace edit — An edit in which a segment in the sequence is overwritten or replaced with source material of matching duration.

resolution — The amount and degree of detail in the video image, measured along both the horizontal and vertical axes. Usually, the number of available dots or lines contained in the horizontal and vertical dimensions of a video image. Also, the number of color or grayscale values that can be added, usually stated in bits, such as 8-bit or 24-bit. Sometimes dots per inch (dpi) is referred to as the resolution, although it is more properly called the screen density. See also *capture resolution* and *working resolution*.

resolution independence — The ability to capture, work with, and output the same material at various predetermined resolutions. The working resolution, capture resolution, and output resolution can be totally independent from one another in Avid DS Nitris. See also *working resolution* and *capture resolution*.

revolution — A modeling term defining a surface made by rotating a curve around the axis of another curve.

RF — See *radio frequency (RF)*.

RGB Red, Green, and Blue. In computer systems, the additive primary colors used to create all other colors on a computer monitor. See also *YUV*.

RIFF wave See *WAVE*.

right-hand rule A method of remembering the direction of positive rotation of objects around the X, Y, and Z axes. Take your right hand and wrap it around the positive end of one of the axes, with your thumb pointing away from the origin of the axis. Your other fingers will point in the direction of positive rotation around the axis.

ripple 1. The process in edit decision list management of adjusting the times of all edits following a length-altered edit.

2. A type of DVE that produces parallel ridges or waves across the surface.

ripping A method in which you can disconnect nodes in an Effects Tree. You can click on a node and "shake" or "rip" it away from the other nodes. See also *kissing*, *twanging*, and *sticky connections*.

ripple A mode that propagates the changes that you make to the edit points of clips to all successive clips. You can ripple clips on the entire timeline or just clips on specific tracks.

RMAG Removable magnetic disk. RMAGs are used in conjunction with chassis; each chassis can hold two of these removable disk modules.

roll To play a video. The digital equivalent of starting the tape deck.

rolling text Text that moves vertically across an area over time. The most common example of rolling text is credits at the end of feature films and television programs.

root 1. The parent node of any hierarchy. Transformations affecting the root affect the rest of the hierarchy. See also *hierarchy* and *models*.

2. A root is also the root directory in the operating system's directory structure. In Windows, the root directory is named backslash (\), and each subdirectory is separated by an additional backslash.

rotation sphere The control for a selected object that allows you to rotate an object around the X, Y, or Z axis, as well as set the anchor point around which the object rotates.

rotoscoping Creating imagery or mattes on a frame-by-frame basis.

rough cut A preliminary edit of a program, usually the result of an offline edit. See also *work print*.

RS-170A The Electronic Industries Association timing specification for NTSC broadcast video equipment. RS-170A specifies the timing of scans and blanking required to decode color signals.

RS-232C The Electronic Industries Association standard interface for connecting serial devices. Usually referred to by the original standard name of RS-232. The standard supports two types of connectors: a 25-pin D-type connector and a 9-pin D-type connector. The maximum permissible line length under the specification is approximately 15 meters.

RS-422 The Electronic Industries Association standard interface for connecting serial devices. The RS-422 is an enhancement of the RS-232C standard. It allows for higher data rates and an extended line length to approximately 1200 meters.

rundown A lineup or timed-out list of stories indicating the order in which they will be aired during a news program.

rushes See *dailies*.

R–Y One of the color difference signals in the component color system of the NTSC video standard. The signal formula is:

R–Y = 0.701R (red) – 0.587G (green) – 0.114B (blue)

See also *B–Y*, *Y*.

S

S/PDIF Sony/Phillips Digital Interface Format. A consumer variation of the AES/EBU digital audio interconnection standard. The standard S/PDIF data stream contains a stereo pair (two channels) of digital audio.

safe action area, safe title area The regions of the video image considered safe from cropping for either the action or on-screen titles, taking into account variations in adjustments for video monitors or television receivers. Safe action is 90 percent of the screen measured from the center, and safe title is 80 percent.

safe color limiting The process of adjusting color values in a finished program so that they meet broadcast standards for luminance, composite signal, or RGB gamut.

sample data The media data created by recording or capturing from a physical source. A sample is a unit of data that the recording or capturing device can measure. Applications can play digital sample data from files on disk.

sample plot The representation of audio as a sample waveform.

sample rate The frequency at which an analog signal is captured during recording. The higher the sampling rate, the more accurate the digital representation of the signal becomes.

sample unit A unit of measure used in recording or capturing media data from a physical source, such as a videotape. Media data contains its own sample rate and the size of each sample in bytes.

sampling The process of measuring the value of an analog signal at regular intervals during recording or capturing. These measurements ("samples") are used to construct a digital representation of the signal.

satellite mode Recording using LTC timecode of live events, multicamera shows, and video material coming in on routers. Allows you to record to the NewsCutter® system from multiple external sources at the same time they are recording to tape.

saturation The purity of a color (hue) in the video signal. The saturation of a color is diluted by gray (for example, pink is less saturated than red). A color that is 100 percent saturated contains no gray. See also *HLS*, *HSV*, *hue*, *luminance*, and *vectorscope*.

scale bar A control in the timeline window that allows you to expand and contract the timeline area centered around the position indicator.

scaling A transformation that changes the size of an object by moving all the points outward from the object's center (enlarging it), or shrinking it by drawing them all in toward that center.

scavenge See *re-encode*.

scavenge channel A channel that allows the Media Browse user to see a low-resolution copy of the media created in the high-resolution editor environment. Also known as *re-encode channel*.

scavenge path The path used to specify a source that provides editorial browse material for Media Browse. Also known as *re-encode path*.

scene 1. The area of a title that will be visible in the title's finished form.

2. A file containing all the information necessary to identify and position all of the models and their animation, lights, and cameras for rendering.

scene ambience The lighting or illumination in a scene which is assumed to come from any direction and is thus independent of the presence of objects, the viewer position, or the actual light sources in the scene. Without ambient light, objects in shadow would be completely black.

SC phase Subcarrier phase. The method used to calibrate the colorburst portion of a composite video signal.

SC/H phase Subcarrier to horizontal phase. The phase relationship between the burst and the horizontal blanking reference point for a video signal. Used to synchronize the timing of two or more video signals.

scratch pad A buffer in which text or notes are stored until the appropriate recovery procedures are performed. Deleted text and notes are stored in the scratch pad. It is separate from the Windows Clipboard and allows clippings to be accumulated.

screening A showing of a film program, a video program, or raw footage.

script 1. A block of code, written in the Python programming language. Scripts contain instructions for performing tasks, such as animation and title creation automatically.

2. A story that is read on the air. Typically, a script also contains production cues and references to the related media annotations.

scroll bar A rectangular bar located along the right side or the bottom of a window. Clicking or dragging in the scroll bar allows the user to move or pan through the file.

scrubbing 1. To shuttle through audio or video at various speeds. See also *jogging*.

2. To enter information by gestural input. Click and drag the mouse pointer in a circular motion over a text box that supports numeric values. To increase the value, “scrub” in a clockwise direction; to decrease the value, scrub in a counterclockwise direction.

SD See *standard definition (SD)*.

search pattern See *region of interest*.

search region The vicinity in which the tracker looks for its target. See also *tracker* and *target area*.

SECAM Séquential Couleur à Memoire. A color television standard developed in France and used throughout Eastern Europe. The SECAM standard uses 625 lines per frame. See also *NTSC* and *PAL*.

secondary color correction Color correction that applies to specific parts of an image defined by hue and saturation values. A secondary color correction can change the green parts of an image to yellow without altering other colors in the image. See also *primary color correction*.

SEG Special effects generator. A section of a switcher that provides the capability to perform wipes of various patterns.

segment 1. A section of a track or clip within a sequence in the Timeline that can be edited.

2. A portion of a curve. Also, a component with one dimension, such as an edge, knot curve, or boundary.

sequence 1. An arrangement of clips on the timeline that contains includes audio and video clips, and information about edit decisions, applied graphics and effects, animation settings, and working preferences.

2. A series of images or frames, usually in an animation.

serial timecode See *LTC*.

session The way in which an iNEWS Workspace is customized. Toolbars, workspace layout, and preferences can be customized and saved with a session.

setup A reference point in the video signal that is the blackest point in the visible picture. Also called black level or pedestal.

shadow The projection of an object onto a surface. A shadow is created by the object obscuring rays of light shining on it. See also *drop shadow*, *local shadow*, *projected shadow*, and *waveform*.

shape An object created by using a drawing tool.

shared volume segmentation See *chunking*.

shape tracking A technique that lets you create shapes in a garbage matte for areas that are difficult to key out, and then track them to match the moving image.

shelf The effect produced by a shelving equalizer in which the response curve for a certain range of the frequency spectrum (high or low frequency, for example) flattens out or "shelves" at the limits of the audio spectrum. In audio equalization, adjustments to the shelf affect all frequencies within the range of the response curve.

shininess The visual glossiness or dullness of a material. See also *emissive color* and *specular color*.

shot log A listing of information about a roll of film or a reel of videotape, usually in chronological order.

shuttle To view footage at speeds greater than real time.

SI Système International d'Unites. The French version of the International System of Units. SI is roughly equivalent to the metric system.

sifting The displaying of clips that meet specific criteria in a bin.

signal-to-noise ratio The ratio of a wanted signal to an unwanted signal.

silence Blank (black) space in the audio tracks in a Timeline that contains no audio material.

single-perf film Film stock that is perforated along one edge only.

single-strand editing See *A-roll*.

slate 1. An identification board held briefly in front of the camera at the beginning of a take that displays information about the take. A smart slate also includes a timecode display that is fed from the sound recorder for synchronization purposes.

2. A single page, usually containing no animated elements.

slewing The synchronizing of decks in computerized editing systems.

slide trimming The outgoing (A-side) and incoming (B-side) frames change because the clip remains fixed while the footage before and after it is trimmed. To change a clip's location on the timeline, while retaining its duration and active frames.

slip trimming The head and tail frames of the clip change because only the contents of the clip are adjusted. The frames that precede and follow the clip are not affected. To move the contents of a clip while its edit points remain fixed. Slipping a clip does not change the position or duration of the active area of a clip.

smart slate See *slate*.

smooth point A type of control point whose tangent handles point in opposite directions, producing a smooth curve through the control point. See also *control point, cusp point, and corner points*.

SMPTE Society of Motion Picture and Television Engineers. A frame numbering system used for electronic editing and timing of video productions. Each frame of video is assigned a number. Timecode denotes the hours: minutes: seconds: frames (00:00:00:00) elapsed on videotape. There are two types of timecode: drop frame and non-drop frame. See also *SMPTE timecode*, *timecode*, and *time-of-day timecode*.

SMPTE timecode A frame-numbering system developed by the Society of Motion Picture and Television Engineers that is used primarily for electronic editing and timing of video programs. It assigns a number to each frame of video, telling the elapsed number of hours, minutes, seconds, and frames; for example, 01:42:13:26. See also *time-of-day timecode*.

snapshot curves Temporary backup copies of function curves. Snapshot curves allow you to edit a function curve and then revert to the snapshot function curve if you're not satisfied with the change.

soft wipe A wipe effect from one image to another that has a soft, diffused edge.

solo

1. To single out the sound on an audio strip.

2. To single out the visibility of a layer when compositing.

3. To single out the image on a video track. 4. A way of speeding up the refresh rate of a single viewport by hiding (or *muting*) the contents of all other viewports. See also *mute*.

sorting

The arranging of clips in a bin column in numerical or alphabetical order, depending on the column the user selects.

sorted queue

A queue in which stories are sorted according to criteria specified by the system administrator.

Sound Designer II

An audio file format (Sound Designer II™) used for the import and export of digital audio tracks.

source or source clip

The original image, video, or audio file. See also *clip, master clip,* and *subclip.*

source mode

A method of assembly that determines the order in which the edit controller reads the edit decision list (EDL) and assembles the final tape. There are five different types of source mode: *A-mode*, *B-mode*, *C-mode*, *D-mode*, and *E-mode*.

source queue

A queue from which stories are copied or moved.

Source side

In color correction, the first of two available levels of color adjustment. Corrections made on the Source side typically seek to restore the original color characteristics of a clip or to achieve basic clip-to-clip color consistency among the clips in a sequence. See also *Program side*.

source generator

A type of effect that lets you create new clips based on the region or track you've selected. You can specify an effect for the new clip, such as a solid color or wood grain, and then use the clip as the background in your compositing session.

source material

The original unaltered material in the form of videotapes, film reels, digital recordings, etc. used for editing.

spatial filtering effect

A type of effect that modifies every pixel in an image based on a calculation that involves adjacent pixels.

specular color The color that appears at or near the area of a lit surface closest to a light source. By default, the specular color is white. See also *ambient*, *diffuse*, *emissive color*, and *shininess*.

speed The point at which videotape playback reaches a stable speed, all servos are locked, and there is enough preroll time for editing, recording, or capturing.

spill correction A method of correcting a keyed image's foreground color where the background color has not been fully removed through the keying process.

splice An edit in which the material already on the video or audio track is lengthened by the addition of new material spliced in at any point in the sequence. See also *overwrite*.

spline A curve that is defined by control points, but does not pass through them. With function curves, a spline indicates a fluctuating value between two points in time. See also *Linear* and *Bézier*.

split edit See *overlap edit*.

split-screen The video special effect that displays two images separated by a horizontal or vertical wipe line.

spot color correction A color adjustment made to a specific part of a video image that is identified using drawing tools. See also *secondary color correction*.

spot falloff The decrease in intensity for a spot light from the center of the light source to the edges of the area defined by the spot size. See also *spot light* and *spot size*.

spot light A light source whose light rays extend from a single point in a cone shape, casting light on a specific oval or circular area of a scene. See also *infinite light*, *local light*, *spot falloff*, and *spot size*.

spotlight view Sets the point of view in the active viewport relative to the chosen spotlight. The point of view is set according to the direction of the light cone defined for the chosen spotlight.

spot size The circular area, expressed as an angle, covered by a spot light. A small angle produces a small, focused spot size. A large angle produces a large, wide spot light, similar to a local light. See also *spot falloff*.

SRT An abbreviation for the three types of coordinate transformations: scaling, rotation, and translation.

square pixels A display using 1:1 pixel aspect. See also *output pixel aspect*.

stabilization A form of motion tracking used to eliminate unwanted motion, such as camera movement from a clip. Stabilization works by tracking an inherently unmoving object in the clip and by repositioning each frame or field of video to keep that object stationary. See also *motion tracking*.

stacking The action of positioning object tracks in front of or behind other tracks. Objects in higher tracks appear in front of objects in lower tracks.

standard definition (SD) An interlaced video format consisting of 480 active lines (NTSC) or 576 active lines (PAL).

starting point The moment in time when an object begins to exist. See also *ending point*.

startup disk The disk that contains the operating system files. The computer needs operating system information in order to run.

static text Text that does not move across its text box over time. The most common example of static text is a single line of text, such as a lower-third title.

stepping The movement forward or backward one frame at a time. Also called *jogging*.

sticky connections A method in which you can connect nodes in an Effects Tree. You can click on an node's output icon and release the mouse button. The connector becomes "stuck" to the pointer. You can then move the pointer over another node's input icon and click on it to make the connection. See also *kissing*, *twanging*, and *ripping*.

sticky mode A mode for using supra keys where you do not need to hold the key down to activate the tool. Tools can be activated by supra keys in one of two modes: "sticky" and "temporary." In temporary mode, you must hold down the key for the tool to remain active. See also *supra key* and *temporary mode*.

story 1. A uniquely identified file that contains text.

2. The Avid term for an edited piece. A story is created by editing clips and sequences together.

storyboard A series of pictures (traditionally sketches) designed to show how a production will look. Comic books are essentially storyboards. Storyboards and subsequent sequences can be created by manipulating images from the recorded or captured footage in a bin.

straight alpha Another name for nonpremultiplied alpha, it is the description of an image in which each pixel's color (RGB) values have not been multiplied by the pixel's alpha channel level. The color and alpha channel information are used to composite the image onto a different image. See also *premultiplied image*.

streaming A technology that allows users to watch a video clip or movie over the Internet while the video is being copied to their computers. See also *video stream*.

striped stock Film stock to which a narrow stripe of magnetic recording material has been applied for the recording of a sound track. See *black and code*.

stroke A single drawing gesture made in the viewer to create a graphics object, such as titles, freehand strokes, and geometric shapes.

style A collection of object properties that you can apply to any number of objects.

subcarrier (SC) The sine wave used as a color reference signal.

subclip 1. An edited part of a clip. In a sequence, a subclip can be bound by any variation of clip beginnings, endings, and mark points.

2. A subclip created by marking IN and OUT points in a clip and by saving the frames between the points. The subclip does not contain pointers to media files. The subclip references the master clip, which alone contains pointers to the media files.

subobject An object within a container object. For example, a character is a subobject of a text object, the character's container. See also *container object*.

surface 1. An area of an object onto which you can apply a material.

2. A 2D parametric shape that defines the boundary or "skin" of an object in three dimensions. See also *face*.

Super 16 The 16mm film stock produced for a special format with an enlarged picture area. Super 16 is designed to be printed to 35mm film for release.

supra key A shortcut key activated in supra mode. See also *keyboard shortcuts*, *sticky mode* and *temporary mode*.

swatch A small visual sample of a color or texture.

sweetening See *audio sweetening*.

sync (synchronization)

1. The pulses contained within a composite video signal to provide a synchronization reference for signal sampling. Also, a separate signal that can be fed to various pieces of equipment.

2. The sound recorded on a separate audiotape but synchronized with videotape or film shot simultaneously.

sync group

Two or more clips sync-locked together.

sync lock

To lock two or more clips together after they have been synchronized, so that when one clip is moved, all connected clips move with it.

sync master

The first clip selected when creating a sync group.

sync offset

The number of frames difference between the original position of a slave clip relative to the master clip, and its new position once you move it independently of its sync peers.

sync peer

Any clip in the same sync-group as another clip.

sync slave

Clips selected after the master clip when creating a sync group, or added to an existing sync group.

sync word

The portion of SMPTE timecode that indicates the end of each frame and the direction of tape travel. See also *timecode* and *time-of-day timecode*.

T

tail frame

The last frame in a clip of film or a segment of video.

tail slate

The slate information recorded at the end of the take instead of at the beginning; usually recorded upside down.

tails out

Film or videotape wound on a reel with the head next to the hub and the tail on the outside of the reel.

tangent

A line that extends from a control point that determines the slope of a curve or surface at a given point. Tangent handles also control key points on function curves when the curve point's type is set to Bézier.

target area

The pixel pattern that the tracker looks for in each frame. See also *tracker* and *search region*.

TBC Time-base corrector. An electronic device that improves video signal stability by correcting time-base errors inherent in mechanical videotape recorders.

TCP/IP Transmission Control Protocol/Internet Protocol. A platform-independent protocol for inter-computer communication.

text body A group of words, lines, and paragraphs that together constitute a single graphics object. You can select, edit, and add text within a text body.

telecine A device that transfers motion picture film images onto videotape.

telnet Telnet is a way access someone else's computer, assuming they have given you permission. (Such a computer is frequently called a host computer.) More technically, telnet is a user command and an underlying TCP/IP protocol for accessing remote computers. With telnet, you log on as a regular user with whatever privileges you may have been granted to the specific application and data on that computer.

template A collection of information that represents one or more title objects, together with their properties and behaviors. When you apply a template to an existing title, you add the title objects from the template to the title.

temporary mode A mode for using supra keys where you need to hold down the key to keep the tool active. Tools can be activated by supra keys in one of two modes: “sticky” and “temporary.” In sticky mode, you don’t need to hold down the key for the tool to remain active.

You can activate a tool in temporary mode by holding down its key for longer than half a second. The tool is deactivated after you release the key. See also *sticky mode* and *supra key*.

tessellation The way that the surface of an object is divided into triangles for the purpose of rendering. More complex regions require more triangles. The number of triangles is determined by the surface approximation properties of an object. See also *undertessellation*.

text body A group of words, lines, and paragraphs that together constitute a single graphics object. You can select, edit, and add text within a text body.

text file See *ASCII*.

texture An image that you can apply on an object to change its appearance. See also *2D textures* and *3D textures*.

texture mapping The way a picture file is mapped onto an object to be used as a 2D texture. When a picture is mapped onto an object, the correspondence between the picture's pixels and points on the object's surface is calculated. You can map a picture file to the object's XY, YX, or YZ coordinates. You can also map cylindrically, spherically, or by an object's UV coordinates.

three-button play To use the J-K-L keys on the keyboard to play, step, and shuttle through footage at varying speeds. This feature, also referred to as variable-speed play, lets you use three fingers to manipulate the speed of playback for greater control.

three-perf film Film stock generated via a modified camera gate that creates a frame size three perforations in height rather than the standard four perforations. Therefore, the same roll of film lasts 25 percent longer. Three-perf format is popular with multicamera film-based shows because the extra 25 percent of negative stock is similar to having a free camera.

three-point editing The basic principle that an edit event requires only three marks between the source and record sides to automatically calculate the fourth mark and complete the edit.

three-stripe Magnetic film stock containing three rows of magnetic oxide coating.

TIFF Tag Image File Format. A format used for storing and interchanging raster images.

time bar A graphical representation of the duration of a clip, including an indication of the current position and the In and Out marks.

time-base error A variation in the stable relation of picture information, color information, and video sync pulse during VTR playback. See also *sync (synchronization)*.

timecode An electronic indexing method used for editing and timing video programs. Timecode denotes hours, minutes, seconds, and frames (00:00:00:00) elapsed on a videotape. Address track timecode is recorded simultaneously with the video picture. Longitudinal timecode (LTC) is recorded on an audio track. Vertical interval timecode (VITC) is recorded in the vertical blanking interval of the video track. SMPTE timecode is the prevalent standard.

Other timecodes exist that include film timecode and audio timecode used during film projects. During editing, the Avid system can display and track several types of timecode. See also *SMPTE timecode* and *time-of-day timecode*.

timecode window See *burn-in*.

timeline The graphical representation of every macroscopic and microscopic edit made to a sequence or animation. This includes nested effects and layered tracks in sequences.

Displays the current frame of the animation and lets you manually move between different frames. The current frame is indicated by the position of the playback cursor in the timeline display box. The current position of the animation can also be controlled using the playback controls.

timeline effect track A type of track that is used to apply effects on top of all other effects on the video and background tracks.

time-of-day timecode The timecode that approximately matches the actual time of day (clock time). See also *SMPTE timecode*.

timewarp An effect that is used to change the duration of a clip. The action in the clip is speeded up or slowed down by decreasing or increasing the number of frames.

tinted material A material that is enhanced or tinged by color. See also *lit material*.

title bar The name given to a project or bin, located at the top of a window.

tone A constant audio frequency signal recorded at the start of a tape at 0 VU (volume units) to provide a reference for later use. Usually recorded in conjunction with color bars.

top timeline The topmost level of the timeline; this is where you can see all the clips that comprise your sequence. See also *parent timeline*.

track 1. The section of tape on which a signal is recorded. Also called a channel.

2. The sound portion of a video program.

3. A region of a clip or sequence on which audio or video is placed.

4. A playback channel represented in a sequence as either a video track or an audio track. Tracks are composed of one or more segments connected by transitions.

tracker In motion tracking, a structure associated with a specific region of interest and containing one set of data points. You can use multiple trackers on the same clip to define complex motion.

tracking 1. The positioning of video heads during playback of a tape so that the heads reproduce the strongest possible signal. Tracking is adjusted on the deck before recording or capturing.

2. To pan the camera to follow the movement of an object.

tracking edit A zero duration edit used as a reference during transition edits (dissolves, wipes, and so forth) on computerized editing systems.

track effect An effect that is attached to a track. See also *clip effect*.

track reference A way of making one track play another track's data. The referencing track points to the source clip in the referenced track. See also *layered tracks*.

track selector A method of selecting one of the tracks from a track group; only the selected track is to be played. For example, a track selector can indicate which of four alternate views of the same scene is to be played.

TransferManager An Avid application that allows you to transfer media from one workgroup to another. A Fibre Channel network connects the Avid systems and the TransferManager to the Avid Unity™ MediaNetwork environment.

transformation The movement of points by changing their coordinates. The transformation of coordinates permits you to perform translation (change the location), rotation (change the orientation), and scaling (change the size) of objects. Transformations can be applied on a single clip, or used to create an effect between two clips, such as a push-wipe or a picture-in-picture.

transition A change from one clip to the next. The simplest transition is a cut, which occurs in video when the first frame of the starting segment directly follows the last frame of the segment that is ending. A transition can also be a dissolve, wipe, fade, or DVE.

transition effect A wipe, dissolve, or digital video effect (DVE) applied to an edit transition. See also *effects*.

transition play loop The loop that plays in Trim mode.

translation A transformation in which the position of an object is changed (moved) without changing its shape, size, or orientation.

transparency A property of an image or object that controls how much objects behind them are displayed. For images, it can be controlled by the alpha channel or by an external opacity control.

The amount of light that travels through a surface. Complete transparency allows all light through; no transparency makes the surface completely opaque. See also *opacity*.

TraceLog A text-based file list of actions that have occurred.

tree A hierarchy of nodes starting from a root.

tree effect An effect that is applied in an Effects Tree.

trim The process of adjusting transitions in a sequence.

TrueType A typeface format designed by Microsoft Corporation and Apple Computer, Inc.

turnover point In audio equalization, the point at which the parametric curve for a particular shelf starts to return to zero.

twanging A method in which you can connect nodes in an Effects Tree. You can drag a node over an existing connector and the connector snaps or “twangs” to the input and output icons of the node. See also *kissing, ripping*, and *sticky connections*.

Type 1 A typeface format designed by Adobe Systems Incorporated, Type 1 is an international standard for digital type. Type 1 fonts are also commonly referred to as PostScript fonts.

typeface The style or design of a font within a type family of correlated designs. Examples include bold and italic versions of a font, such as Times Bold and Times Italic.

U

UHF Ultrahigh frequency. One of the television signals for broadcasting in the United States per FCC standards. UHF is the frequency between very high frequency (VHF) and super high frequency (SHF).

U-matic See *3/4-inch U-matic*.

uncompressed video A recorded or captured video stream that is not processed by a data compression scheme. The video signal remains uncompressed at all stages of the process: input, storage, and output. Uncompressed video conforms to the ITU-R 601 standard. A video stream whose data content has not been modified by a data compression scheme. The video signal remains uncompressed during input, storage, and output. Uncompressed video conforms to the ITU-R 601 standard.

undertessellation The appearance of triangular patterns on lit materials, which occurs when the polygons that form an object cannot be adequately subdivided to accurately sample the light source.

unreferenced media files Media files on the media disk that are not referenced by any clip or sequence.

Undo/Redo The process that allows a return to the state of the edit immediately preceding the last edit or a repeat of an “undo” edit.

up cut In editing, to cut the end of the previous scene, often by mistake. In general, to cut short.

user bits The portion of the timecode data available for encoding data chosen by the user; for example, footage count or Keykode™ numbers.

user ID Individual who has a valid user account in the computer system.

user manager A user account given the authority to add, modify, delete, and search for information about user accounts. User manager status can be assigned by a system administrator only.

user profile A file which contains your user preferences, such as screen layout, save, user, and backup preferences. Each user has a separate profile that is associated with their user name and recalled each time you log on to the system.

user name A word established to identify the individual user. Enter your user name and your password to log in. User names are alphanumeric and are up to 20-characters long.

user view A user-defined viewpoint that shows objects in a scene from a virtual camera's point of view. This view can be either perspective or orthographic. The User point of view can be placed at any position and at any angle within the global 3D coordinate system. You can orbit, dolly, zoom, and pan in this view.

U-type VTR A recorder format that uses 3/4-inch videotape.

UV coordinates Two-dimensional coordinates that describe the position of any point on surfaces in terms of direction (U and V). UV coordinates are useful for mapping two-dimensional textures onto objects.

V

value 1. Lightness or darkness of a color.

2. A component of the HSV (Hue, Saturation, Value) color model. See also *hue* and *saturation*.

variable-speed play A process, or an editing-system feature that enables the process, of shifting easily between the playing, stepping (jogging), and shuttling of footage.

VBV Video-Black-Video. A preview mode that shows a previously recorded scene, a black segment, and then the previously recorded scene again.

VCR Videocassette recorder. A video recorder that uses consumer-grade videotape formats such as VHS, Betamax, and Hi8™.

vector In color correction, a subdivision of the full color spectrum defined by hue and saturation values. Secondary color correction uses vectors to define specific areas of an image to receive color adjustments.

vectorscope A visual display that shows the electronic pattern of the color portion of the video signal. It is used to adjust the color saturation and hue by using a stable color reference such as color bars. The Avid Vectorscope monitor uses a single-line display. See also *waveform*.

vertex, vertices See *point(s)*.

vertical blanking interval The period during which the television picture goes blank as the electron beam returns (retraces) from scanning one field of video to begin scanning the next. The vertical blanking interval is sometimes used for inserting timecode, for automatic color tuning, or for captioning information into the video signal.

vertical sync Sync pulses that control the vertical field-by-field scanning of the video picture by the electron beam.

VHF Very high frequency. One of the television signals for broadcasting in the United States per FCC standards. VHF is the frequency between high frequency (HF) and ultrahigh frequency (UHF).

VHS Video Home System. The 1/2-inch videocassette format developed by JVC for consumer and industrial use.

video 1. A recording produced with a device that captures full motion.

2. Refers to recording, manipulating, and displaying moving images, especially in a format that can be presented on a television.

3. The visual portion of a program or sequence.

video clip See *clip*.

videocassette A plastic shell containing two reels and a length of videotape.

video-safe color Colors that are not too saturated for video broadcasts. A video-safe color does not exceed the maximum composite video signal allowed by the broadcast standard.

Video Slave Driver A hardware component (Video Slave Driver™) that synchronizes signal inputs, outputs, and conversions; selects audio frame rates; and selects pulldown of video frames.

video stream 1. In analog editing systems, also called a video playback source.

2. In digital editing systems, a stream of data making up a digital video image.

videotape Oxide-coated, plastic-based magnetic tape used for recording video and audio signals.

viewer Part of the Avid DS Nitris interface that displays the output of your sequence at the location of the position indicator.

viewpoints Allows you to see a scene in a viewport in a specific way, but is not a camera. You can choose from four default viewpoints in the viewport: User, Front, Top, and Right. In many ways, cameras and viewpoints are similar except that viewpoints, unlike cameras, are not actual objects: they are only tools for viewing your scene. You cannot animate a viewpoint, nor can you render from a viewpoint as you can from a camera. See also *views*.

viewport-navigation controls A set of basic "camera" controls that allow you to view a scene in different ways in a geometry view in the viewport. You can orbit, zoom, dolly, pan, tilt, roll, frame all, and frame selection with the camera.

views The means by which you view a scene in a viewport. Views can be geometry views, camera views, or spotlight views. Geometry views are Front, Top, Right (all orthographic) and User (perspective or orthographic).

visibility Properties that determine whether an object appears in the viewports and when rendering.

VITC Vertical interval timecode. The timecode inserted to the vertical blanking interval of a TV signal. See also *LTC* and *timecode*.

V-LAN An industry-standard software protocol for video device control. The V-LAN network allows a computer application to control and synchronize all connected VTRs, switchers, DATs, mixers, and DVEs.

VLX*i* A series of controllers that control and synchronize professional video equipment for animation, video editing, HDTV, and broadcast television production.

VTR Videotape recorder.

VU meter Volume unit meter. An instrument used to measure audio levels.

VVV Video-Video-Video. A preview mode that shows a previously recorded scene, the new insert video, and then the previously recorded scene again.

W

warp A technique that lets you transform an image or part of an image from one shape to another over time. See also *morph*.

WAVE RIFF Waveform Audio File Format. A widely used format for audio data. OMF Interchange includes it as a common interchange format for audio data.

waveform 1. In video, a visual display that shows the electronic pattern of the video signal. It is used to adjust the setup and gain by using a stable reference such as color bars. The Avid waveform uses a single-line display. See also *vectorscope*.

2. In audio, a visual representation of changing frequencies. See also *energy plot* and *sample plot*.

waves Animated deformations that travel in both time and space. You can create shock waves, water waves, and other types of natural disturbances with wave deformations.

whip A horizontal picture disturbance at an edit point, usually caused by timing misadjustments in the edit system.

white point The luminance value in a video image that you set to be equal to reference white when making a color adjustment. See also *black point*.

wild sound, wild track A recording of sound on either videotape or audiotape made without an accompanying picture.

window dub See *burn-in*.

Windows Explorer An application that lets you view and manage the files and folders on your workstation, and make network connections to shared resources.

wipe A shaped transition between video sources in which a margin or border moves across the screen, wiping out the image of one scene and replacing it with another.

wire bulletin See *bulletin*.

wire dump A binary file containing the raw data of a wire service.

wire feed See *data feed*.

wireframe A mode in which an object appears to be made of wire. This lets you easily see the outline of objects.

Wire Ingest The process by which a wire feed is received by a system and conformed to the data structure and requirements of the receiving system.

word wrap A property that allows a long line of text to continue on multiple lines of a text object, instead of being truncated at the end of the visible width of the text object.

working resolution The resolution that defines the quality at which media is displayed in the viewer and processed by Avid DS Nitris. See also *resolution* and *capture resolution*.

work print A film print made from the original negative that is used during the editing process to produce a cut list or an edit decision list for final program assembly. Work prints are typically low-cost, one-light prints that receive heavy wear through repeated handling. See also *answer print*, *print*, and *release print.*

workspace The area where users can create, view, add, edit, and delete information.

X

X axis The horizontal axis in a three-dimensional system. See also *Y axis* and *Z axis*.

XYZ axes The three axes in the Cartesian coordinate system that represent three-dimensional space: the X axis is horizontal space, the Y axis is vertical space, and the Z axis is depth. The point at which these three axes intersect is called the origin. All three axes have positive and negative values, depending on which side of the origin they are.

XYZ coordinates With the Cartesian coordinate system, you can locate any point in space using three coordinates called X, Y, and Z. For example, a point with X = +6, Y = –6, Z = +6 would be located at 6 units to the right of, 6 units below, and 6 units in front of the origin.

XZ, XY, YZ planes The perpendicular axes that extend as 2D planes. In the viewports, these planes correspond to three of the parallel projection views: Top, Front, and Right. Imagine that the XZ, XY, and YZ planes are folded together like the top, front, and right side of a box.

Y

Y The luminance signal of the component color system in the NTSC video standard. The signal is composed of the following proportions of red, green, and blue:

0.299R + 0.587G + 0.114B

See also *B–Y, R–Y*.

Y axis The vertical axis in a three-dimensional system. See also *X axis* and *Z axis*.

Y, B–Y, R–Y The luminance and color difference signals of the component color system in the NTSC video standard. Also called YCrCb.

YCrCb See *Y, B–Y, R–Y*, and *YUV*.

YUV The letter designations for luminance, luminance minus red, and luminance minus blue. YUV are the luminance and color difference signals of the component video standard for PAL. Also called YCrCb.

A color standard that describes color space in Y (luminance) and UV (chrominance) in which the luminance and chrominance are separate. The Y component specifies the brightness of each pixel, while the U and V, or chrominance, components specify the color of pixels. YUV is a commonly accepted term for YCrCb, where Y represents luminance and Cr and Cb represent chrominance. See also *RGB*.

Z

Z axis The axis that is perpendicular to the X and Y axes in a three-dimensional system.

zero duration dissolve The method of editing two scenes end-to-end simultaneously. Also called a *cut*.

zoom Increases the length of the camera lens, magnifying an aspect of a scene. The results of a zoom and a dolly are different. A dolly physically moves the camera closer to the point of interest without changing the length of the lens; perspective distortions peculiar to the lens length may result at the edges of the scene. Zoom increases the size of the point of interest by increasing the lens length; depth is not as well perceived as with a shorter lens.