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Pomfort Metadata Workflow for Avid Media Composer

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Overview

Metadata support for Avid Media Composer was released May 2011 as part of the on-set media management solution "Silverstack SET". The proposed metadata workflow enables users to maintain technical as well as non-technical metadata from the film set to the cutting room. This white paper provides in-depth information about how this workflow can be performed and what benefits can be drawn from this workflow and which new possibilities arise.

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Metadata Workflow with Silverstack SET – Overview

With "Silverstack SET" Pomfort provides a comprehensive solution for managing movie data as well as metadata on the film set and providing relevant information for subsequent steps in post-production.

Silverstack SET manages various types of information that are attached to a clip. The information is either gathered from source files (such as clip files or sidecar files) or is entered manually during organizing clip and quality check.

The information includes

- general clip information (such as clip name, scene/shot/take names, camera identification),
- timecode and reel name,
- exposure information (such as ASA, white point, gamma space and color space) from the source clips,
- format information (such as resolution, frames per second, codec and file type),
- user information (such as ratings, flags, comments, labels and cue points),
- file information with paths to source files as well as
- format specific header information (such as EXIF data of clips from Canon DSLRs or metadata from RED clips).



Figure 1: Metadata workflow with Silverstack SET

To benefit from this information in post-production, Silverstack SET includes transfer capabilities of metadata with various formats such as CSV, Final Cut Pro XML, Iridas IRCP files as well as Avid Log Exchange files (ALE) (see figure 1).

Note:

Not every transfer format can carry the same amount of information, that is why metadata workflows differ from format to format and thus from tool to tool.

Requirements for Comprehensive Metadata Management

Having as much information as possible available in the cutting room can save a lot of time for communication among the project participants. The following examples illustrate the potential benefits of comprehensive metadata availability.

I. Benefiting from set comments and quality check for clip selection

The selection of a take (and thus of a clip) for the cut of a movie can be influenced by not only the visual contents of a clip but also by

- the comments of the director and DOP,
- the results of the technical inspection of the clip, and
- the availability of other (better) clips.

This information is collected during shooting on the film set, during quality check of all source material as well as during building a library of clips during the entire shooting period.

Having this information available can help narrowing down the list of available clips for a scene but also for finding the right clips.

II. Avoiding expensive inconsistencies caused by naming errors

A consistent naming convention is a crucial part of any film project. For script and storyboard, clapper board on set as well as effect shots and cut lists problems in clip naming can lead to redundant work, misunderstandings in communication and even delayed delivery.

Usually some combination of scene, shot and take names are used to identify clips from the editorial point of view, filenames, reel names and timecodes from the acquisition point of few.

In an online/offline workflow this information is especially important, as the matching of the cut of the offline editing to the source files for the online process depends on a non-ambiguous and complete naming convention.

Mistakes and errors happen, so having tools that help to find inconsistencies and sometimes the availability of redundant information may help to correct such problems and prevent expensive consequences.

III. Providing technical metadata for effect shots to post-production facilities

Visual effects often combine movie clips from the shooting with artificial objects rendered by 3D software. In order to do exact match moving, color matching and overall compositing, technical information can help that process.

This information includes

- camera and lens information for geometrical matching as well as
- exposure information for matching grain or noise and white point.

Providing this information to post production and effects facilities together with the source material can save time either for communication or for trial and error by doing this work without the information being available.

Transferring Metadata to Avid Media Composer

For providing metadata from Silverstack SET to Avid Media Composer the following two steps have to be performed:

- The Avid Log Exchange (ALE) file is created in Silverstack SET and
- the information from the ALE file is merged with available master clips in Avid Mediacomposer.
- 1. Creating the ALE file in Silverstack SET

To create the ALE file in Silverstack SET you have to perform the following steps:

- 1. Select the Bin with the clips for which the information shall be transferred.
- 2. Creating an ALE file is part of the "transfer" activities in Silverstack SET. In the transfer menu choose "... via ALE for Avid Media Composer".
- 3. A wizard will open, that will let you select the clips for the transfer. Select or unselect the individual clips and continue.
- 4. The transfer options for ALE are shown. Select the sections of information you want the transfer and continue (see figure 2).
- 5. Choose matching criteria for importing in Avid Media Composer.
- 6. Choose a filename and destination for the ALE file and save the file.

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	Choose ALE Export Options
Project Form	nat
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Exposure Exposure	re Info (ASA, Whitepoint, F-Stop, Shutter)
 ✓ Format ✓ User/Q ✓ File Info 	C Info (Flagged, Rating, Comment, Label, Cue Point Summary) 5 Summary
Clip matchin	ng
Match clips	s based on
Source F	File name – Best if you directly imported your clips into Media Composer via AMA
🔘 Tape na	me - Best if you transcoded your clips before importing them into Media Composer
	Go Back Save ALE

Figure 2: ALE transfer options

2. Merging information from the ALE with available master clips

Usually media files already are available in Media Composer as master clips (e.g. via AMA or import). To merge information from the ALE with available master clips you have to perform the following steps:

- 1. In Avid Media Composer select the bin with the clips you have information for in the ALE file.
- 2. Select all clips and choose "Import..." from the context menu in the bin.
- 3. In Options in the Shot Log tab, select "Merge events with known master clips".
- 4. Navigate to the ALE file and select it.
- 5. Click Open.

Avid Media Composer now should be able to merge the information from the available master clips with the information from the ALE file.

00	0.0	ALE Test 1080p 24 Bin												
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	A045C012_110210_L1KL		No Label	-	800		HD	1 file resource (AE-35HD)	209		Log-C without Matrix	Rating O of 5		

Figure 3: Extended metadata after an ALE import

Avid Media Composer uses the timecode and the original filename or the tape name to match clips.

The information from the ALE file is attached as additional columns in the bin table (see figure 3). Some columns are already known by Avid Media Composer (such as "Scene" and "Take"), all unknown information fields are added as custom columns in the bin table.

Note:

If custom columns from the ALE file are not shown in the bin table, please perform the following steps:

- 1. Close bin and re-open bin
- 2. Right-click in free space in bin window and choose "Choose columns.." in context menu
- 3. Select/unselect columns. Custom columns from ALE file appear at the end of the list.

From the bin table, Avid Media Composer is able to carry this information throughout the entire editorial activities.

Workflow Examples

The requirements for ALE metadata transfer with Silverstack SET are simple: As long as the information can be matched to the master clips in Media Composer, ALE transfer can be used to enrich the editorial workflow with metadata from the film set.

Matching existing master clips with information from the ALE file uses always the time code and either tape name or the filename. So for example as master clips linked via AMA don't carry a tape name, matching has to happen by timecode and filename. Some dailies tools create MXF files for Media Composer with the tape name set to the clip name, so matching has to be done differently.

Silverstack SET offers options for this matching in the ALE Transfer Wizard, so even scenarios can benefit from these ALE files, where the essence files for Avid Media Composer have been created with third party tools.

1. ALE transfer for Alexa ProRes files

Transferring metadata from Silverstack SET to Avid Media Composer works for scenarios, where

- source material (ProRes QuickTime movies) is linked via AMA,
- material has been imported directly into Media Composer, and
- dailies have been created as MXF files.

For AMA and imported essence choose "Match by filename" in the ALE transfer options, for externally created MXF files choose the appropriate matching for your needs.

2. ALE transfer for H.264 material

Most H.264 cameras don't create a timecode track in the recorded QuickTime movies, so usually a timecode is created from the create date (Silverstack SET can do that, too). In order to match master clips during the ALE transfer, you have to have the same timecode in the ALE as in the master clips in Media Composer.

3. ALE transfer for RED material

Avid Media Composer doesn't open RED files directly, so there is usually a workflow in place where either MXF files or QuickTime files have been created elsewhere for use in Media Composer. Depending on the file naming convention and the existence of a tape name in the MXF files, you choose either "Match by filename" or "Match by tape name".

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