An Introduction to Real-Time Deliverables

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Real-Time Deliverables in Autodesk Visual Effects and Finishing Applications

Topics Inside:

Overview

This document describes high-level use cases and workflows for using the Real-Time Deliverables feature to output clips in real time with Autodesk® Inferno® 2010, Autodesk® Flame® 2010, Autodesk® Flint® 2010, Autodesk® Smoke® 2010, and Autodesk® Backdraft® Conform 2010 software.

The Real-Time Deliverables feature can be described as the capability to output deliverables from a master source format to many output formats directly to tape without rendering. It supports the following realtime operations:

Top Features of Real-Time Deliverables

- Resize with high quality filtering
- Application of 3D and 1D LUT
- Logo insertion with shadow
- Frame rate change with slow down or speed up with 2:3 insertion
- Audio timewarp
- Letterbox
- Support for source material up to 2K 10-bit

Concepts

The Deliverables Menu

Accessed from the Player, it allows users to configure real-time operations such as resolution (resize), timing (frame rate), add pulldown, letterbox, and LUT application. Many Deliverable settings can also be altered in the Output Clip menu.

Deliverable Setups

The real-time settings created in the Deliverables menu are saved as a Deliverable setup. Like the traditional idea of a clip setup, the Deliverable setup is associated with the clip from that point on, whether working with it in the Library or on the Desktop or the EditDesk. When users take clips into the Output Clip menu, they also bring the real-time settings contained in the Deliverable setup.

Deliverable setups can be saved as Deliverable Templates and loaded onto other clips. Deliverables setups can also be copied and pasted onto other clips in the library.

Scenario: Film Master 24p –HD or 2K Log– to Video

Real-Time Deliverables helps solve the problem of taking a 24p film master with an HD or 2K logarithmic timeline and creating real-time output to PAL and NTSC video format, as when creating a movie preview or trailer.

To output to PAL video, users create a Deliverable setup that does the following:

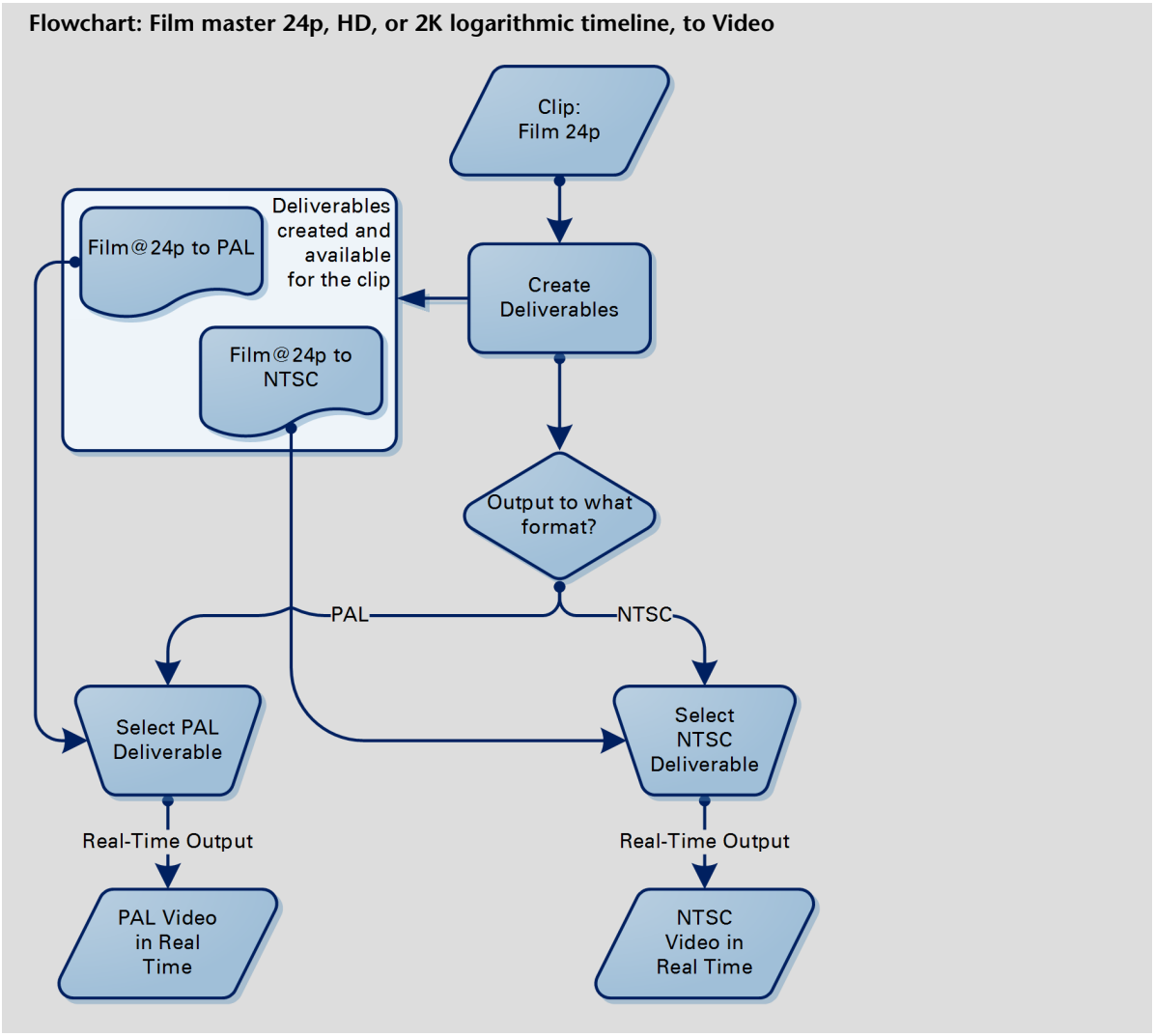
- Increases the frame rate from 24 to 25 or adds a PAL pulldown
- Resizes the clip
- Applies a print-look 3D LUT
- Accelerates the audio while preserving the pitch, if necessary.

To output to NTSC video, users create a Deliverable setup that does the following:

- Adds 2:3 pulldown
- Resizes the clip
- Applies a print-look 3D LUT

Then, from the Output Clip menu, the clip is output to tape with no need to render the preceding settings.

Flowchart: Film master 24p, HD, or 2K logarithmic timeline, to Video



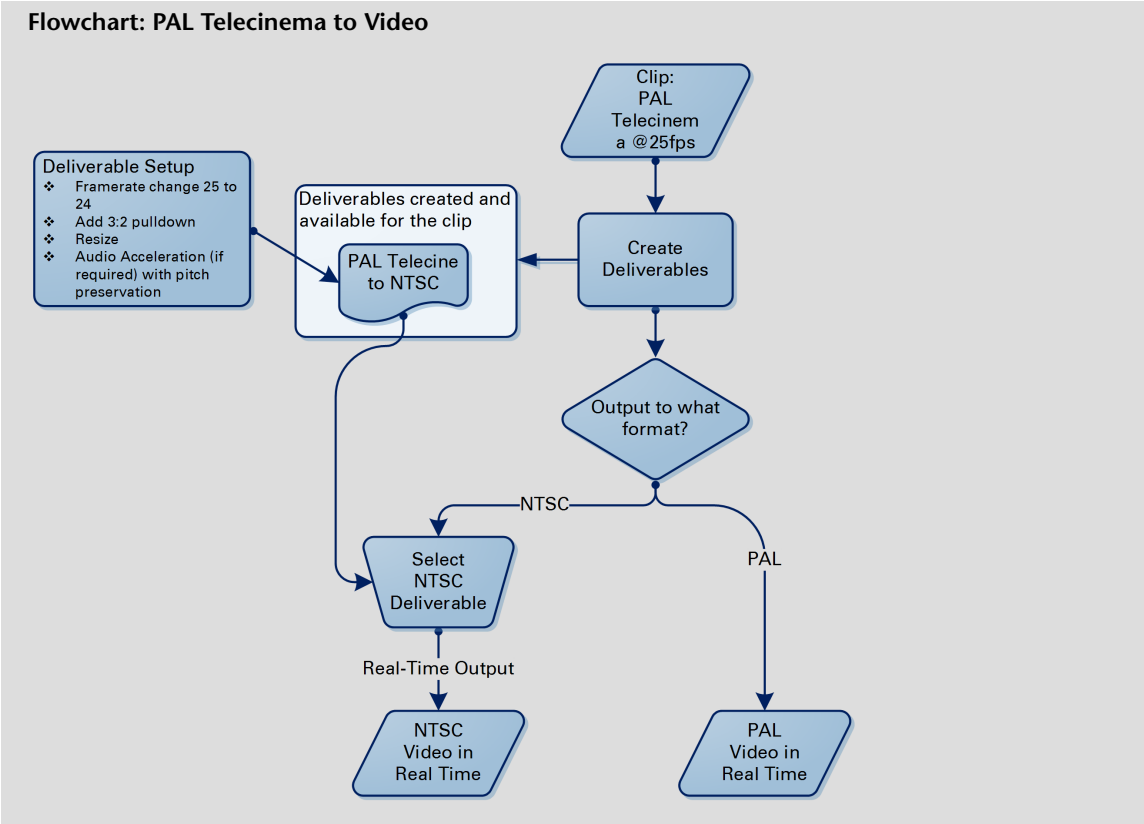
Scenario: PAL Telecinema to Video

The following workflow is like the previous scenario in that NTSC and PAL video are the outputs, with the difference being that the source material is a PAL Telecinema clip. Because the latter is not field-based, the resulting video can be treated as progressive: its video fields are spatially complementary.

To output to NTSC video, users create a Deliverable setup that does the following:

- Decreases the frame rate from 25 to 24.
- Resizes the clip
- Adds 2:3 pulldown
- Accelerates the audio while preserving the pitch, if necessary.

From the Clip Output menu, the clip is output to tape with no need to render the preceding settings.

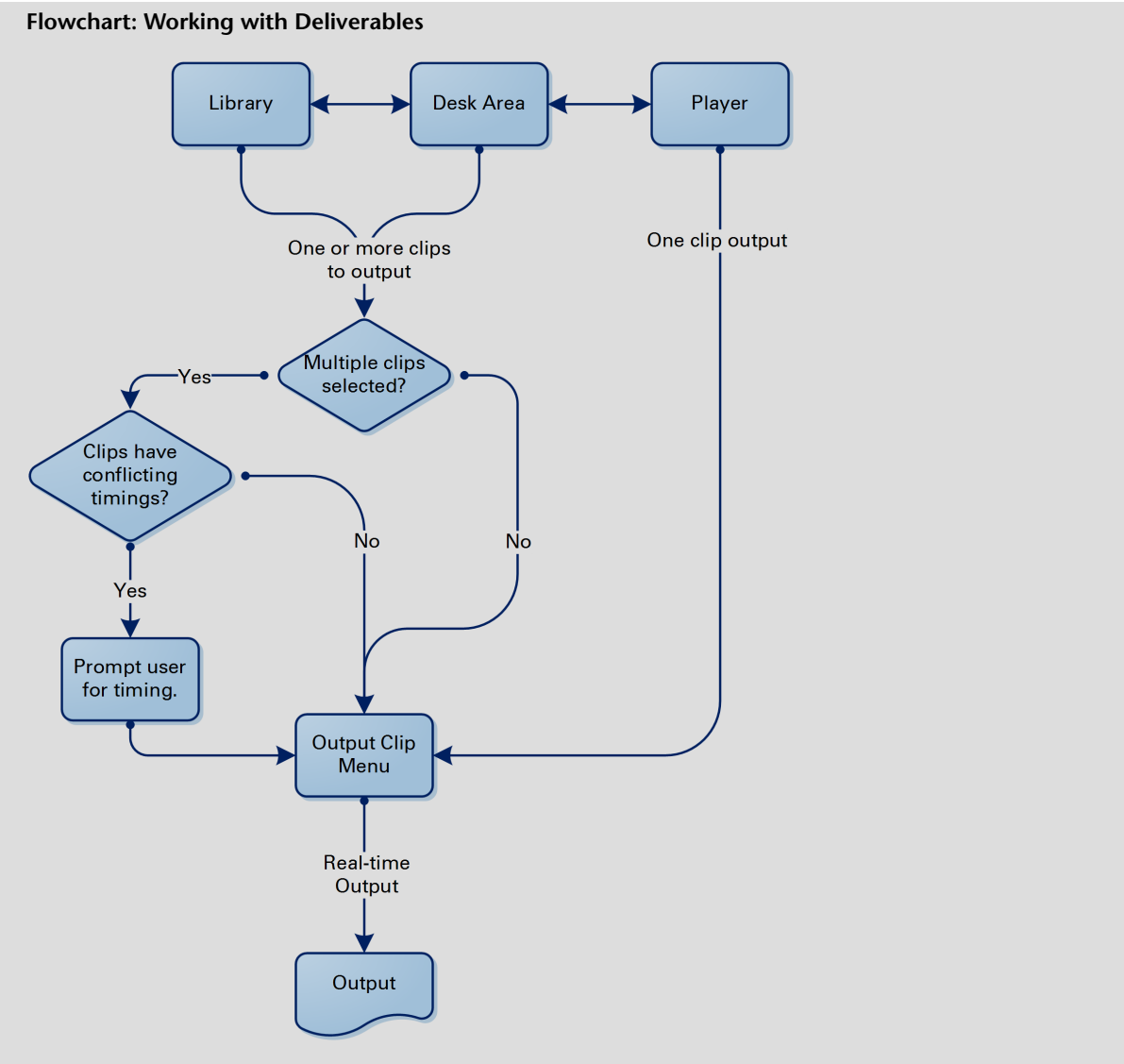


Working with Deliverables: A Workflow

The following Working with Deliverables sections describe Visual Effects and Finishing workflows for Real-Time Deliverables.

- Real-time settings are configured in the Deliverables menu, which is accessed from the Player.
- In the Deliverables menu, before you can create any real-time settings, create a new Deliverable setup.
- From the Deliverables menu, you can access the Output Clip menu directly. Only the clip being worked on is loaded to Output Clip. You cannot load more than one clip into the Deliverables menu, or from the Deliverables menu into Output Clip.
- The real-time settings configured for a clip are associated with that clip as its Deliverable setup.
- From the library or Desktop/EditDesk, you can access Output Clip with multiple clips, taking with you the real-time settings of the clip.
- If you enter Output Clip with multiple clips that have timings that conflict with each other, you are prompted to select the timing you want to use.
- In the Clip Output menu, you can alter most real-time settings, and the changes made are saved to the Deliverable setup.

■ In the Clip Output menu, you can choose and set up a logo overlay for real-time output.



To create real-time settings for a clip and output to tape in real time:

1 From the Player, create a Deliverable, and then configure real-time settings for a clip.

2 Do one of the following:

- From the Deliverables menu, access the Output Clip menu, or;
- From the library or desktop/EditDesk, select the clip or multiple clips, and access the Output Clip menu. If you selected multiple clips and they have conflicting timings, you are prompted to select which timing you want to use.

3 In Output Clip, adjust to real-time settings if necessary, and add a logo overlay if you want.

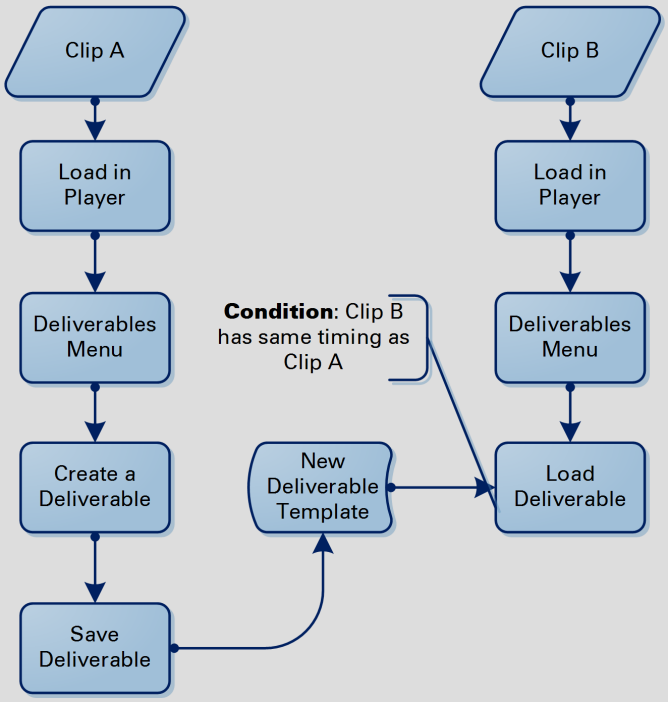
4 Output the clip or clips to tape in real time.

Working with Deliverables: the Deliverables Menu

The following sections describe global and specific workflows in the Autodesk Visual Effects and Finishing implementation of Real-Time Deliverables. This workflow describes what you can do with existing Deliverable setups in the Deliverables menu.

- From the Deliverables menu, you can delete a Deliverable setup. Deleting a Deliverable removes real-time settings for the clip with which it was associated.
- From the Deliverables menu, you can Save the Deliverable setup as a Deliverable template, for reuse with other clips. In the illustration, the Deliverable setup for Clip A is saved as a Deliverable template that can be reused with Clip B.
- In the Deliverables menu, you can load a Deliverable template for association with the current clip. In the illustration, the Deliverable template created from Clip A is loaded to Clip B, which shares the same frame rate. Consequently, Clip B has the same real-time settings as Clip A until you start changing the settings.
- Think of Deliverable setups like word processor templates – files containing premade settings for fast loading, which you modify to become a separate entity.

Flowchart: Moving a Deliverable from A to B



To create a Deliverable template and apply it to a clip:

1. Create a Deliverable setup and its corresponding real-time settings for a clip (for example, Clip A) in the Deliverables menu.
2. Save the Deliverable setup as a Deliverable template.
3. Select another clip in the Player (Clip B).
4. Load the template you created in step 2. Its real-time settings are applied to Clip B. A new Deliverable setup specific to Clip B is created.

Working with Deliverables: Deliverables and the Library

This workflow describes what you can do with Deliverable setups in the library.

- Library Views:
  Proxy View: Presence of Deliverable setup indicated by an icon.
- If you modify a clip in the library, Deliverable setup information is purged.
- If you Alt+click an item, the information displayed includes the number of templates.
- If you copy and paste Deliverable setups onto a clip or multiple clips, the clip (or clips) acquire the real-time characteristics of the pasted clip. This can only be done between clips with identical timings.
- You can enter Output Clip with multiple clips. If they have timings that conflict with each other, you are prompted to select the timing you want to use.