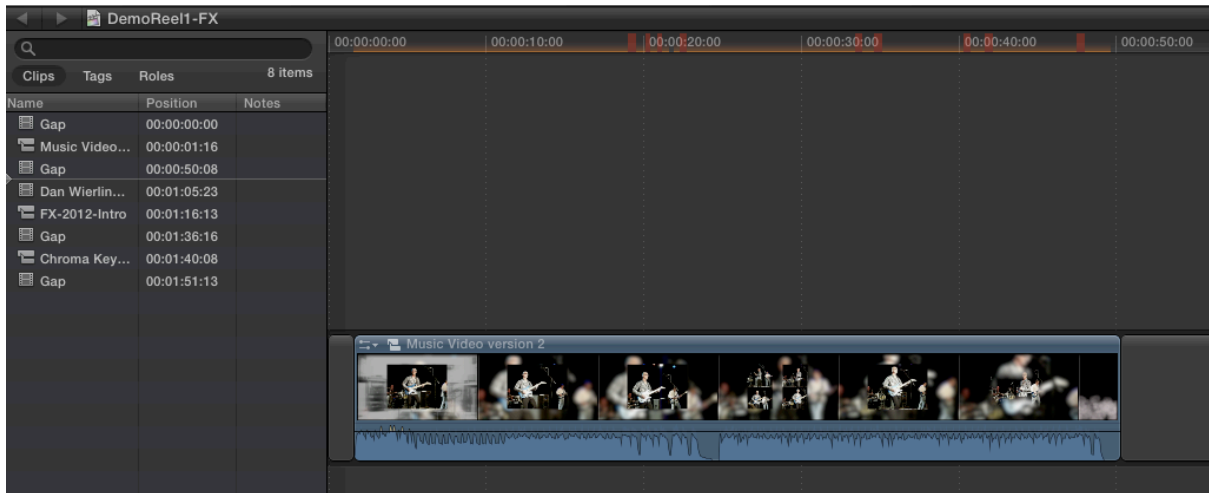


RED BAND in timecode bar of FCPX



I. System specs and Project/Event details

A. Research and Testing by Dan Wierling - Mar/Apr 2012

1. System Specifications

Mac Pro 12 Core, 48 GB Ram, ATI 5870HD GPU

System 512 GB Crucial M4 SSD - Bay 1

Media Scratch 512 GB Crucial M4 SSD - Bay 2

Media Scratch 3 TB Sata 6Gbps - Bay 3

Time Machine 1 TB Sata 3 Gbps - Bay 4

OSX Lion 10.7.3

FCPX 10.0.3, Motion 5.02, Compressor 4.02

B. Project Details

FCPX project is 1280 x 720, Stereo Audio 48 KHZ

Imported footage optimized to ProRes 422

Events copied to Final Cut Events folder on SSD

C. Compound clip details

1. Entire compound video consists of about 55 individual clips

2. About 25 clips are Motion J-Peg 640 x 480 Kodak camera

3. About 15 clips are DVCPRO HD 720p 24PN Panasonic P2

4. Some clips have associated audio within them.
5. There is an underlying soundtrack across the whole sequence (AIFF music)
6. Graphic templates from Motion 5.02 1280 x 720
7. All clips/graphics are set to “NONE” for spatial conform
8. Backgrounds underneath Motion-Jpeg clips have Gaussian blur applied
9. Some Motion-Jpeg clips have Optical Flow applied
10. Quick Flash effect is applied to some Motion J-Peg clips
11. A few Titles are stacked on top of some clips and span sections of two or more clips
12. Opacity reduction is applied on many clips
13. Compositing is set at “FLOOR” on Optical flow clips
14. Maximum of 5 stacks of video (layers) and soundtrack

II. Symptoms of problematic compound clip

A. Playback when broken apart in storyline

1. The complete video plays back correctly
2. Editing is sluggish

B. Playback when assembled into a compound clip

1. Playback is erratic...stops at certain intervals
2. Sequence of clips in two points is incorrect (a clip in the middle of the sequence plays at the very beginning)
3. RED BANDS appear in timecode window
4. Unable to delete render files within FCPX when the project is closed and contains this compound clip

III. Workarounds to the problem

Expanding the compound clip still retains the RED BANDS in the timecode window. Reviewing the underlying clip reveals that one of them contains audio.

Detaching the audio from the clip beneath the RED BAND makes the RED BAND disappear immediately.

Creating a compound clip to include the audio again makes the RED BANDS immediately appear.

Disabling another clip beneath the RED BAND in a different section of the story line removes the RED BAND at that location.

Deleting all render files manually through the finder allows the project to start again with NO RED BANDS, except for one small section (which I have still been unable to locate within the sequence).

Editing to correct the clip location affected in (II.)B.2 above works and the broken apart clip plays fine in the timeline, and when re-assembled into a compound clip now seems to work. Some RED BANDS still show up in the completed project associated with this specific compound clip.

IV. Conclusion

There appear to be certain corrupt clips causing this, however replacing them with clean versions of the same clip do not cause the problem to go away entirely.

Render files being deleted have the most beneficial impact on the playback of the specific compound clip.

Of the two possibly corrupt clips found, the one with attached audio still produces RED BANDS when assembled into a compound clip. This is within the entire compound clip. The audio plays fine regardless of whether it is self contained within the clip or detached from the clip.

The other defective clip also has “FLOOR” sampling compositing associated with the optical flow, so perhaps there is a correlation.

Both clips identified as a partial cause to the issue are Motion-Jpeg 640 x 480.

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