Newsletter

LARRY JORDAN.BIZ

Larry's Final Cut Pro Newsletter

Issue 7: July, 2004
Editor: Larry Jordan

Welcome to the seventh edition of my Final Cut Pro newsletter!

The goal of this newsletter is to provide information helpful to the professional user of Final Cut Pro. This newsletter publishes around the middle of each month. Past issues are not archived, but last month's issue is included as a PDF at the end of this issue. Unless otherwise noted, all references are to Final Cut Pro version 4.x, and should not be assumed to work under any other version.

Also, please visit my web site: www.larryjordan.biz and invite your friends -- it's a great, FREE Final Cut resource!

Newsletter Contents

Survey #1 -- What Projects Are You Working On?

Thanks for your responses to last month's surveys. Based on your comments, we are already making changes to this website, it's articles and my training programs. (You can see the results of last month's surveys by clicking here.)

But, I learned so much from your answers that there are four more surveys in this month's newsletter.

Here's the first: what editing projects do you primarily work on? Again, all surveys are completely anonymous, and help a lot, so I really appreciate your taking a minute to answer them.

Client Report: Blurring a Face to Protect the Innocent.

I was doing some editing last week for a client that needed to cover a person's face for the camera…. Well, actually, since he was running around with a few too few clothes on, it wasn't his face we were covering, but you get the idea.

True, we could have just put a black box over the unmentionables. But, the producer didn't like black. Instead, he wanted to use a floating blurred image of what we were concealing.

This situation proved to be a perfect opportunity to use a key-framed, traveling matte, and I thought you'd be interested in how this technique works.

A traveling matte is the only effect that requires three layers of video -- all the rest can be done using only two layers. You set a traveling matte up this way:

 v1: the image that goes on the background

 v2: the image that cuts the hole into the background

 v3: the image that goes into the hole

To help us in this exercise, we have obtained the services of a particularly dangerous felon -- a two-month old Golden Retriever puppy named Ginger.

1) Let's say you want to mask her eyes, so that no one will recognize her. To do that, take the puppy's video and put on it v1.

2) Go to the Generator menu (the letter "A" in the lower right corner of the Viewer) and select Shapes > Oval.
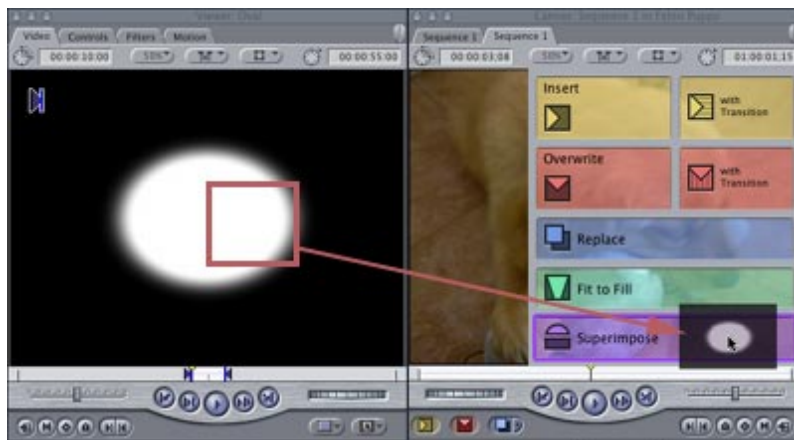
3) Put your Playhead in the middle of the clip you want to mask, in our case, it's called, "Puppy 3," then drag the oval mask from the Viewer to the Superimpose overlay in the Canvas.

4) The advantage of using the superimpose overlay is that the Oval will be automatically timed to match the length of the clip below it and dropped into the Timeline on v2. This is much faster than dragging it down from the Viewer to the Canvas. The location of the Playhead determines which clip the oval will be superimposed over.

5) Next, put the video that goes into the oval on v3. I'll give you two examples: 1) Black, 2) a blurred version of the dog's eyes. You can easily invent other ideas to use for your videos.
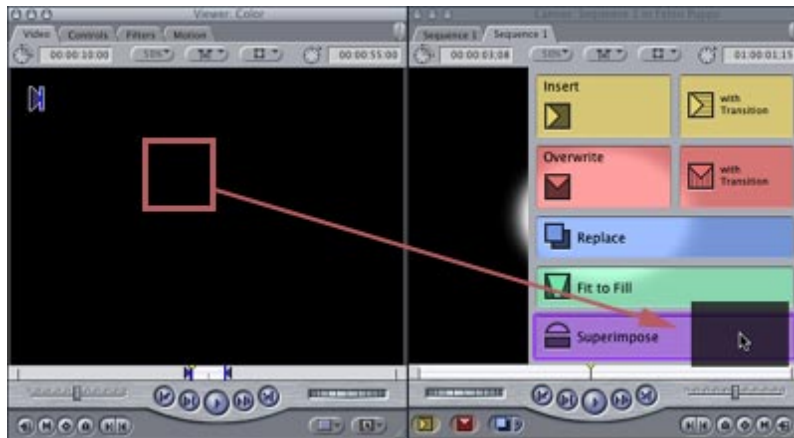
6) Go to the Generator menu, again, and select Matte > Color. By default it shows up as a 50% gray.
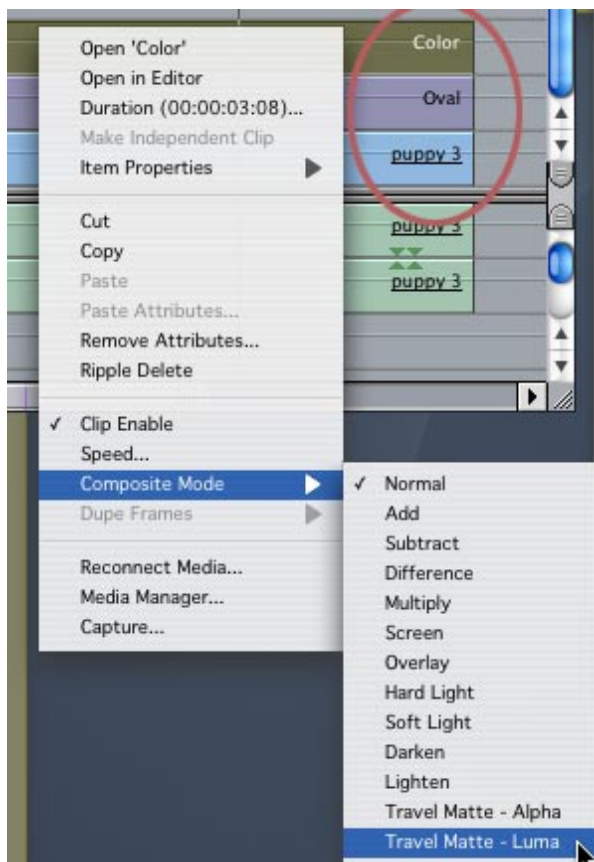
7) Click the Controls tab at the top of the Viewer, then click the gray color chip, and set the color to black.
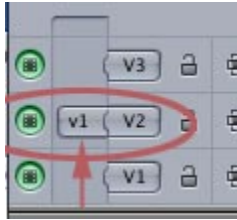
8) Change the patch panel so that V1 from the Viewer (the left patch) connects to V2 of the Timeline (the right patch) by dragging the left V1 up.

9) Click the Video tab at the top of the Viewer, and drag the color clip onto the Superimpose overlay in the Canvas. Again, as long has you haven't moved the Playhead, the color clip will be trimmed to match the other two clips and loaded into v3. The Patch Panel determines which track the clip is supered above. For instance, here the Patch was set to v2, so the clip is moved to v3.

| | Open 'Color' | Color |
	Open in Editor	
	Duration (00:00:03:08)...	Oval
	Make Independent Clip	
	Item Properties ▶	puppy 3
	Cut	puppy 3
	Copy	XX
	Paste	puppy 3
	Paste Attributes...	
	Remove Attributes...	
	Ripple Delete	
✓	Clip Enable	
	Speed...	
	Composite Mode ▶	✓ Normal
	Dupe Frames ▶	Add
		Subtract
	Reconnect Media...	Difference
	Media Manager...	Multiply
	Capture...	Screen
		Overlay
		Hard Light
		Soft Light
		Darken
		Lighten
		Travel Matte - Alpha
		Travel Matte - Luma

10) Control-click the color clip on v3 and set the composite mode to Travel Matte - Luma.

11) Poof! Instant black oval over our felon's face -- or, well, at least over the center of the screen. Why use Travel Matte - Luma? Because, while Final Cut text has alpha channels built into it, the generated shapes do not. So, in this case, we are telling Final Cut to drop out the black and replace

the white of the oval with whatever is on v3.

12) Also note that you can put anything on v3 -- not just black -- as you'll see next.
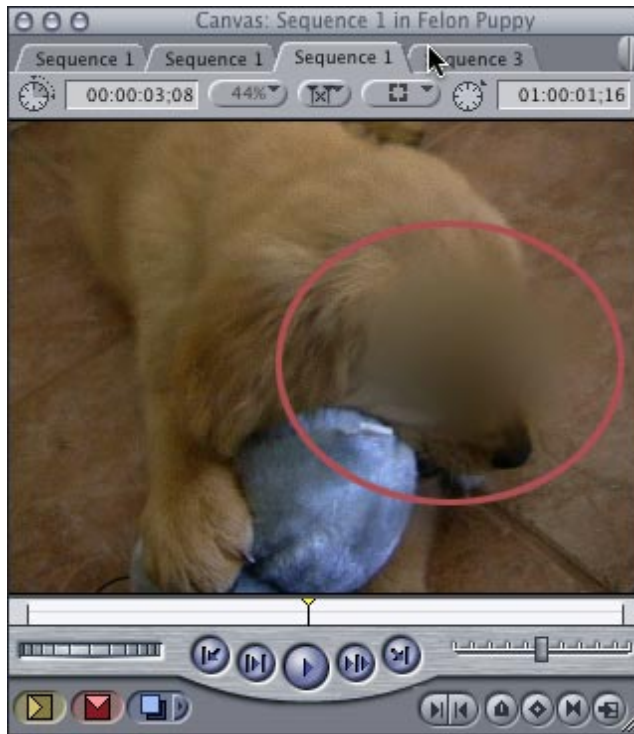
13) For instance, say you simply want to blur a portion of the image, her eyes, for example. In this case, **copy** the video on v1 to v3 and select it. (Notice, you are copying the clip, not moving it. The puppy video is now on tracks v1 and v3.)

14) Apply an Effects > Video effects > Blur > Gaussian blur to the clip on v3, then double-click it to load it into the Viewer.
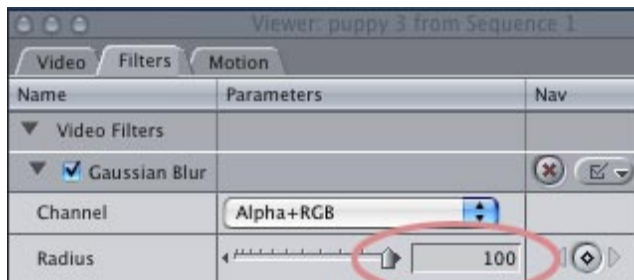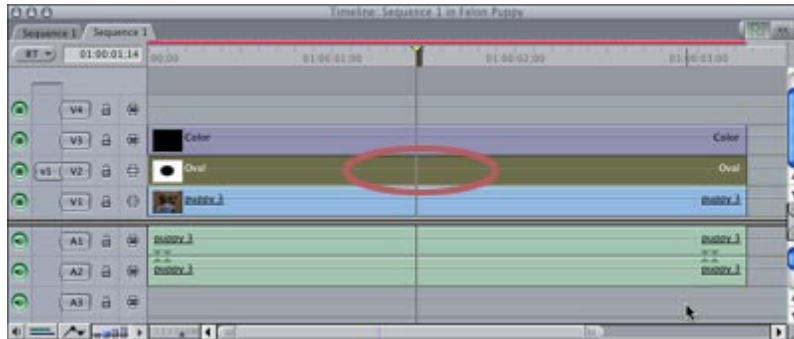

15) Click the Filters tab and change the blur setting from 2 to 100 (this is the maximum blur, you can use whatever setting you like).
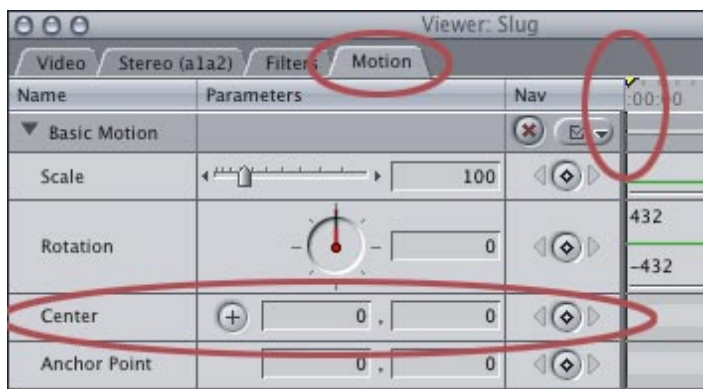
16) Now, the last step is to change the location of the video on v3 so that it follows the eyes. (To make this easier to see, I'm going to switch back to the black oval.)
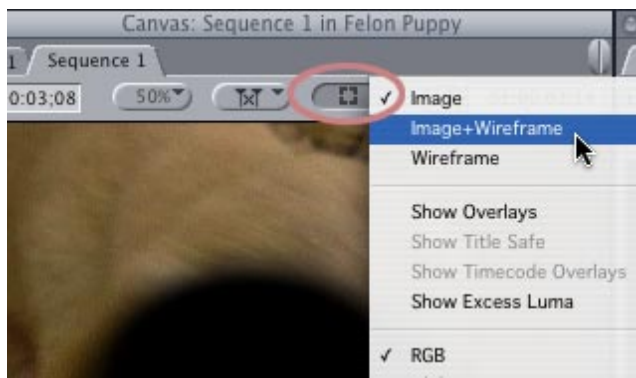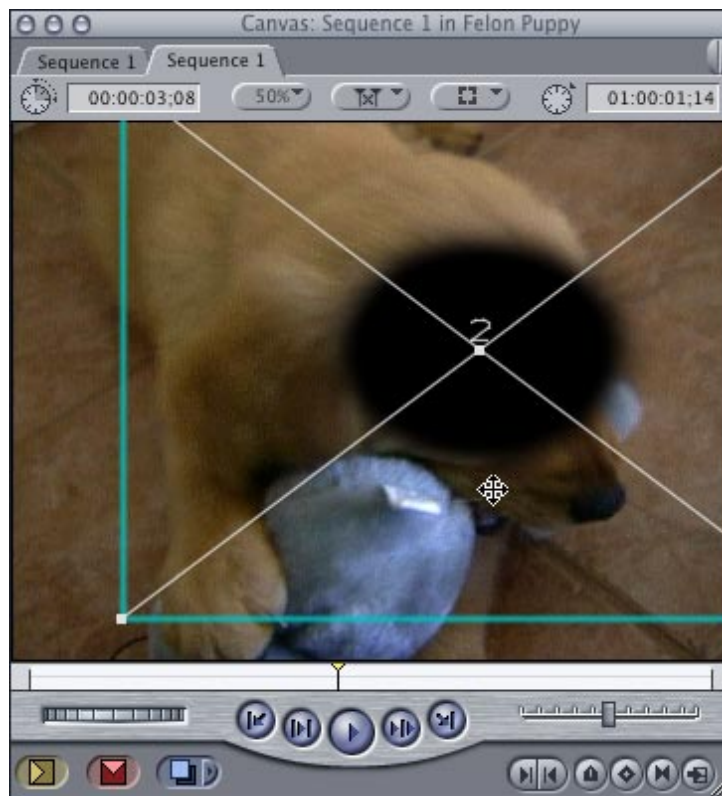
17) Go to the Canvas and set the third pop-up menu (the View menu) to Image/Wireframe.

17) Double click the clip on v2 (the oval) to load it into the Viewer and click the Motion tab. Be SURE to leave the oval on v2 selected.

18) Type, "Shift - i" to go to the In of the clip and set a keyframe for Center.

Canvas: Sequence 1 in Felon Puppy

Sequence 1 / Sequence 1

00:00:03;08   50%   01:00:01;14

2

19) Go to the Canvas and, drag the image so that the black oval covers the dog's eyes. You are moving the oval, rather than the clip on v3, because the position of the oval that determines where the black color appears -- the oval cuts the hole in the background on v1 which is then filled by the image on v3.

20) Go back to the Control tab for the oval if you need to adjust the size and drag the Size slider until the oval looks right for your video.

21) Now, slowly drag through the clip on v1 and whenever the puppy (or your subject) moves, drag the oval to the new position. This will automatically set a new Center keyframe. What you are doing is manually tracking the oval using keyframes to match the movement of the subject.

In my editing last week, we opted to go with a bright orange color and made it look like a bad (a REALLY bad) swimsuit. This travel matte technique has a variety of uses -- feel free to experiment with other shapes, even text, to cut the hole in the background.

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Technique: A Work-Around for Dropped-Frame Problems

Drop-frames on playback - especially on final output - drive us all nuts -- even me, particularly when I'm on a deadline.

I used to take this as a personal insult. I felt I should be smart enough to solve this problem and I'd sweat rivets over it.

However, recently, I've adopted a new procedure, which solves this angst -- I give up immediately and drop back to Plan B.

First, if you haven't read my article on [Trouble-Shooting Final Cut](#), that is an excellent place to start. Many, many, many problems can be fixed by following the guidance it contains.

Second, if that article doesn't solve your problem, here's Plan B:

1. First, turn off Range Check (View > Range Check) if it is on ([see bug report below](#)).
2. This procedure assumes you are ready for final output. If not, following this procedure won't help, because you are about to remove all the edit points from your video.
3. Position your Playhead at the start of your sequence. If you want to output everything, be sure there are no In's or Out's on the Timeline. If you only want to output a portion of the timeline, set an In and an Out to indicate the portion you want to output.
4. Go to File > Export > QuickTime movie.
5. Give the file a name and store it to your fastest drive that isn't your boot disk. (Important note: do not put this file on your boot disk.)
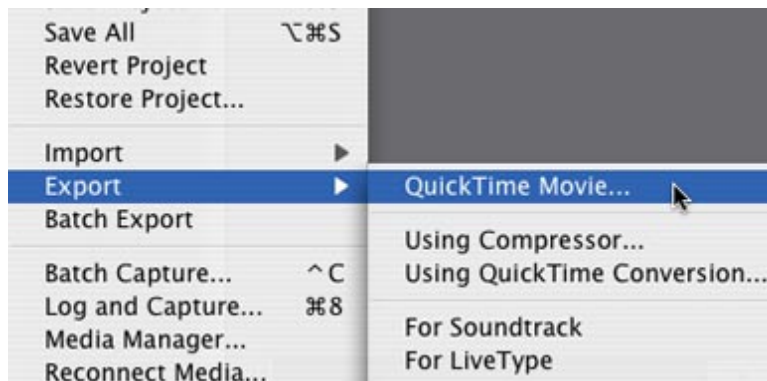
6. At the bottom of the Save dialog:
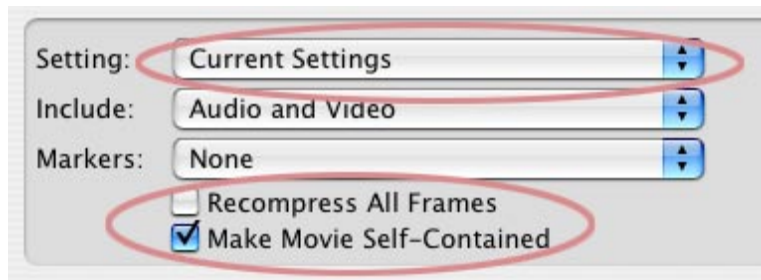
- Leave setting to Current Settings if you want to create a video using the same settings as your sequence
- DON'T check "Recompress All Frames"
- DO check "Make movie self-contained."

What you are doing is making a complete digital movie of your sequence, rendering everything that needs rendering, containing all video and all audio (fully mixed down). All at the highest possible quality settings for that codec.

7. When the export is done, import your movie back into Final Cut (File > Import > File).

8. Then, create a new sequence and edit your new movie into it. You should be able to output this with no problems.

9. However, if output problems still persist, AND you've done all the steps listed in the Trouble-Shooting article, you probably have a hardware or system-level driver problem that will need expert support to fix.

Survey #2: How Much Do You Edit?

Our second survey wants to know how much editing is a part of your job.

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Updated Technique: Color Correction

Early versions of last month's issue had an article on color correction that was pulled because I wanted to change my initial advice.

That article has now been updated with new images, and comments from Andrew Balis, the author of Apple's official color correction training guide.

You can read the revised color correction article here:

http://www.larryjordan.biz/articles/lj_color.html

Final Cut Pro Training

If you are looking for additional training on Final Cut Pro, please call me at **(818) 879-5105** or send an email to: larry@larryjordan.biz.

I provide a full range of training from a couple hours to polish individual skills all the way to full, hands-on intensive, multi-day courses for an entire staff.

Testimonials and references are readily available.

Here's my current client list.


Bug report: Range check

Range check is a function I find myself using more and more (View > Range Check > Excess Luma - or - Excess Chroma - or - Both).

| Range Check | ▶ | ✓ Off | |
Channels	▶	Excess Luma	^Z
Background	▶	Excess Chroma	
		Both	
Show Overlays	^⌥W		
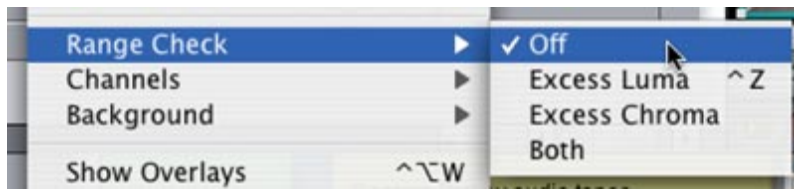
You saw a use for it in the Color Correction article. However, in a recent conversation with Ken Stone (www.kenstone.net), I learned that there is a bug with Range Check in Final Cut HD (v4.5) when you are exporting. So be sure to turn off Range Check prior to exporting.

Tips from the Classroom

A recent class got into a contest to see who could find the most arcane tips for Final Cut. Here are some of their results:
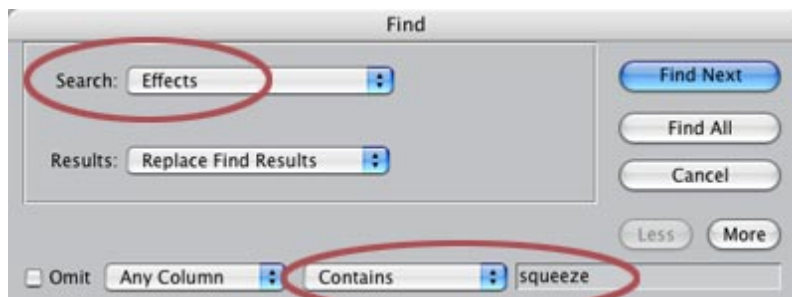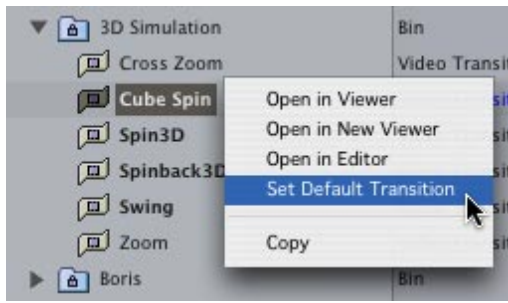

Dick: You can Find an effect, the same way you Find a clip, in the Browser. Click the Effects tab, go to Edit > Find, and type in the name of the effect you want to find.
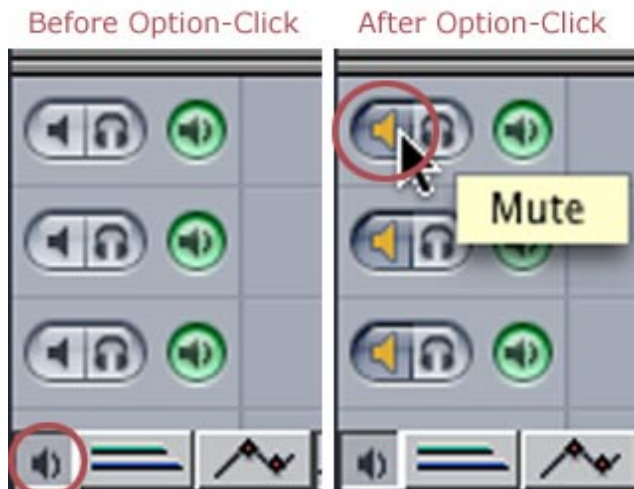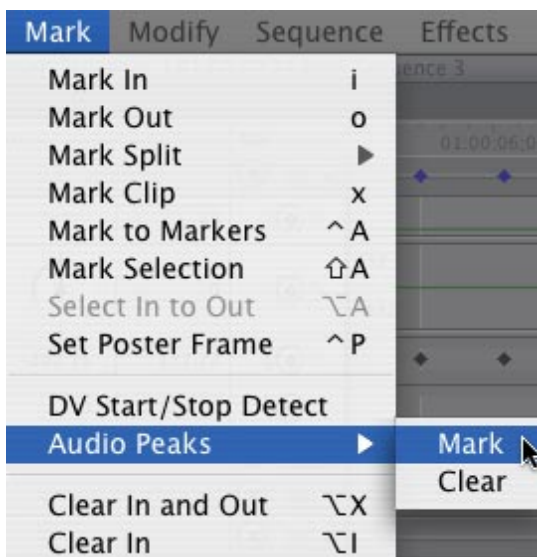

Paul: Option-clicking an Audio Mute or Solo button turns on or off all the buttons.

Dick: Click the small purple line at the **bottom** of the Timeline to jump the Timeline to the location of the Playhead.

Mernoosh: Control-click the name of a transition in the Effects tab of the Browser to quickly set it to the Default transition.

Larry: Load an audio clip into the Viewer OR select it on the Timeline, the go to Mark > Audio Peaks > Mark. Final Cut will put markers everywhere in the clip that audio levels are too high. To remove the markers, go to Mark > Audio Peaks > Clear.

Class: Typing, "Control - x" automatically creates a generated text clip and loads it into the Viewer.

Survey #3: How well do you know Final Cut Pro?

Our third survey wants to know how experienced you are with Final Cut. Knowing your experience level helps me in deciding what articles to write.

Technique: Using Garbage Mattes

Christian Fessel sent me some stills from a recent project ("Girl From Alaska," by the indie band SloMo, shot in DV PAL) where he was Lighting Cameraman (Director of Photography to us folks in the US) and editor. These stills were such a perfect example of how to use a garbage matte that I asked Chris for permission to share them with you.

The shoot took place in a bar in Sheffield, England. Chris wanted to set a moody, dark look, using wide shots while still seeing the singer. (I've lightened these images a little to make them easier to see on a computer monitor.)

First he took a wide shot of the scene using just set lighting.

Then, he added in all the lights and equipment for the singer, which totally trashed the wide shot; but did make the singer look great.

Then, he applied an eight-point garbage matte (Effects > Video filters > Matte > Eight-point Garbage Matte) to the video. The small numbers represent the eight control points where you can crop the picture.

| Name	Parameters
View Mode	Preview
	Corners
Point 1	⊕ -360 , -288
Point 2	⊕ 0 , -288

Then, he opened the matte filter and clicked the little cross-hair icon next to each point, placed his cursor into the Canvas window, clicked and HELD the mouse down while dragging each point to crop the frame until all the video gear was outside the edges of the matte.

This the what it looked like before the points moved….

Sequence 1   Sequence 1

00:01:01;07   50%   01:00:30;25
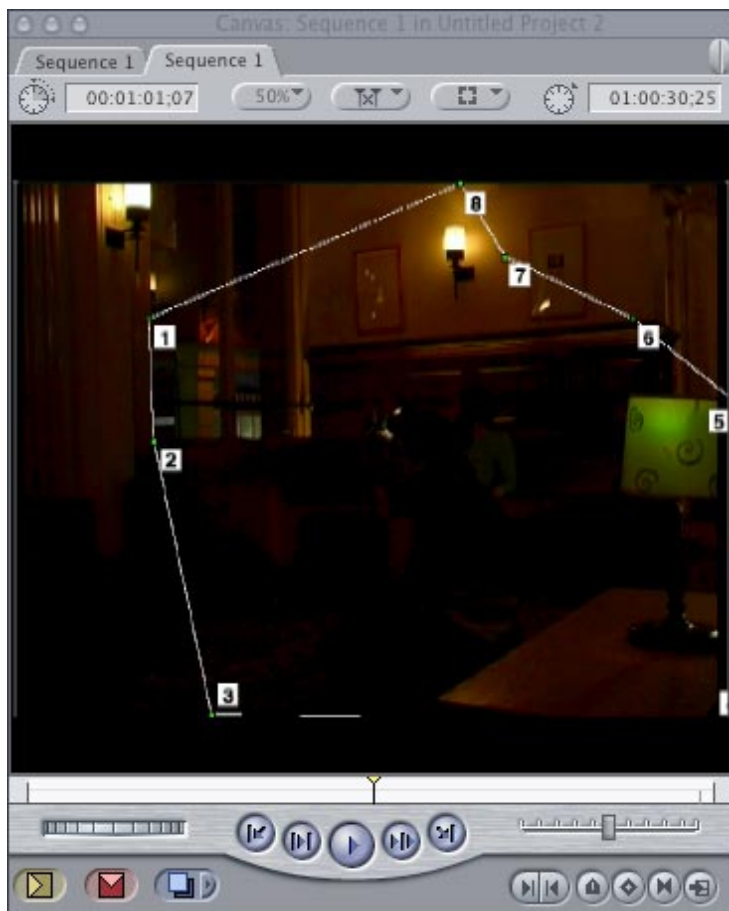
and this is what it looked like after all the points were moved to crop out the center of the background. If you were doing this, you'd see black on either the outside or inside of the matte, depending on how you were working.

Canvas: Sequence 1 in Untitled Project 2

Sequence 1 / Sequence 1

00:01:01;07   50%   01:00:44;26
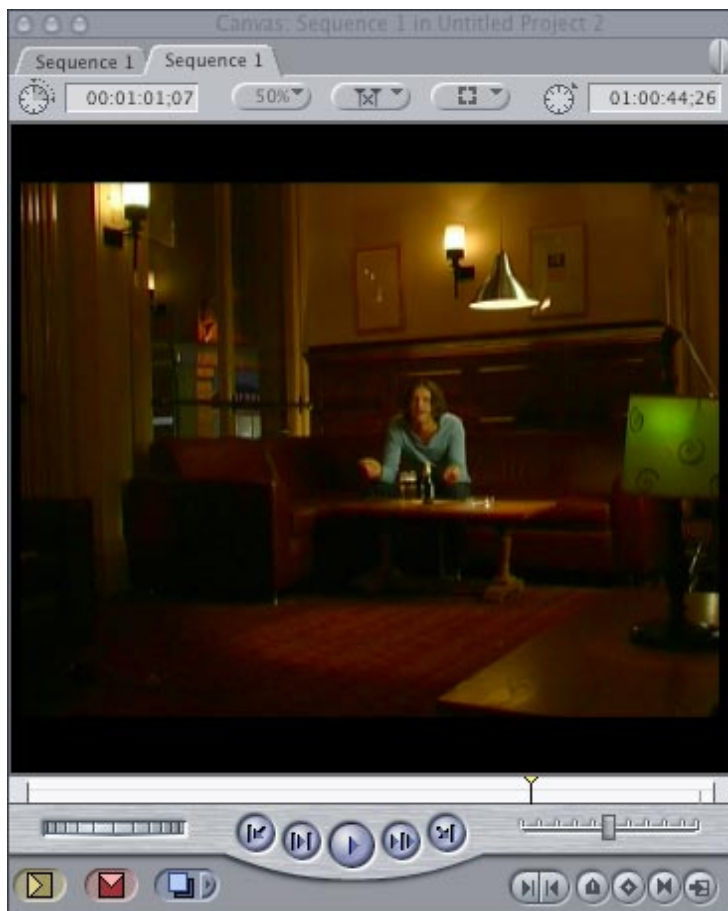
And this is the resulting picture, a beautiful composite between the initial wide shot and the shot of the singer, with all the TV gear digitally removed.

Very nice and absolutely invisible.

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Reader Comments

This month's Reader Comments cover using the Replace Edit in FCP 4.1, a request for a survey to see how many people use which DV format, on being a hobbyist using FCP, a search for Canadian FCP users, and the ever popular debate on striping tapes.

- - -

Nick Meyers provided the following comments on using Replace Edit.

> Love the Newsletter, as usual. Where do you find the time? You really have a knack for pin-pointing the "need to know" stuff....
>
> I'm not sure the Correction you added [to your article on] Replace Edit is actually correct.
>
> I should say first off that I'm still in 4.11, and so I don't know if Apple has changed this in 4.5. [While In/Out points are ignored in the Viewer,] In/Out points [in the Timeline] DO effect replace edits.

I use this all the time (well, a lot, anyway!) If I need to replace one audio line in a take, for instance:

* I define the line with In/Outs

* Find a sync point on the Original

* Line up the replacement clip

* Lock all Video tracks, if the clip is linked, and [press] F11.

I used replace edit almost exclusively in a recent big Multi-cam job, and really worked it with the in/outs…

I really hope this has not been changed in 4.5, as it's an extremely useful function.

Larry replies: Nick, I just tested this on FCP HD (4.5) and it doesn't work. Sigh… Still for everyone still on 4.11, this is a neat trick.

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Dylan King wrote:

Seeing as the [first] survey lists the DV combo group as having 79% of the votes, would it not be a good idea to break those elements into separate groups (i.e. miniDV, DVCam, DVCPro)? I know these all offer similar data paths, but, little intricacies about them are different. Furthermore, you want the best model of you audience--correct? I can see why you lumped them together, but, I think it would help to break them up.

Larry replies: Dylan, aside from the camera or tape deck that plays the clip, there really is no difference between the three DV formats, once they get into Final Cut. The codec, quality, data rate, and output methods are identical.

My curiosity is piqued about knowing the mix of the three formats among my readers, still, not piqued enough to design a new survey. Yet.

- - -

Richard Randolph wrote:

I have read [the June issue from] cover to cover. Find it very good. Your surveys are interesting to me. I am a person that could be called semi- professional. I do some video for work as part of my job. I do weddings for friends and neighbors but don't make much nor never intended to. I am a hobbyist at heart. HD is nice to read about but is not real for me. I have a pro Sony video camera, a dual 2.0 G5 and use FCPHD, DVDSP 3, Photoshop CS, LiveType, Garage Band and Soundtrack. I am bettering my skills and would like to know more about compositing and special effects. This love of video will never replace my day job. That is what continues to make it fun. Hope to make a little on the side but am not counting on it. The

people who have my work like what they see. Larry, I think there are a lot of people like me using FCPHD. Anything that helps me use the program better and makes me know about what else can be done would be great.

Your article on organization was a help. I have not done as good a job in this area as I could and it all starts at the beginning and sticking to it.

Larry replies: Richard, I am discovering that there are a whole lot of folks using Final Cut that are exactly as you describe yourself. That's one of the benefits to running surveys. I've already started putting more emphasis on effects and mid-level techniques, and less on the high-end esoteric stuff. Thanks for writing in.

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Jason Madore, from Canada, writes:

When I filled out your survey, 65% of your respondents were from Canada. In your next newsletter, you might want to find out where [they are] in Canada, like Vancouver, Calgary, Winnipeg, Toronto or Montreal. I myself am from Calgary.

We have a very active FCP user group which meets up in Calgary once a month. Check it out at www.emotiondv.com.

Larry replies: Jason, Calgary is a town I've always wanted to visit.

Sadly, though, the final tally from Canada was 6% of all viewers. (You were one of the first to vote on that survey.) However, that doesn't deny that Canada has some killer post-production chops. But, I don't think I'll run a survey asking Canadian folks for their province. In the first 24 hours after releasing last month's survey, I had letters from seriously miffed viewers in Britain who didn't want to be lumped in with Europe, viewers in Australia who had not heard the term, "Oceania," and a confused Singaporean who figured that Asia was too broad a geography to include Singapore.

To everyone affronted by last month's geographic survey, my apologies. I will do better next time.

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Kit Laughlin continues the somewhat raging debate over striping tapes:

I had reasonably extensive communication with the author of the LAFCPUG FCP tutorials on this matter a while ago (I could dig out if you want) but in essence, if the camera concerned cannot perform a frame accurate insert edit, then pre-striping will not do for you what you want.

The prosumer cameras (DP 150, the Canons, etc.) ALL write new TC (so do not 'pick up' the striped code), no matter what you select in the menu -- but starting with the TC you select. All pre-striping does is add a wear layer to the tape, and the mechanism used to stripe. As some-many FCP users for not have a deck, this will be the camera….backing up a miniDV tape

after recording a scene over existing pre-striped TC can be a recipe for more TC breaks, in my opinion. I got rid of my PD-150 for this reason (and the very average lens).

I use a JVC GY-500 that really does read existing TC (as Tom describes) -- but because it never generates TC breaks, we just set the start TC and let it "Record Run". The review feature on the playback control reviews the previous 10" of recorded video, finds the end of that and backs up two frames and waits. Never wrong.

[Jim Perry, of LAFCPUG] posted a long discussion of this on the LAFCPUG forum. For those interested, here are links to two discussion relevant to this issue. The first is regarding pre-striping tapes and the second is how to minimize getting timecode breaks during capture:

Striping:
http://www.lafcpug.org/phorum/read.php?f=1&i=50174&t=50174#reply_50174

Timecode breaks during capture:
http://www.lafcpug.org/fcp_faq/?category=3&question=16

Larry replies: Kit, you make good points. And I'm a fan of Jim Perry's work. From my personal point of view, I don't stripe tapes that I plan to shoot, but I do stripe all tapes that I use in post-production. Obviously, there are lots of other equally valid opinions. Given what I've read recently, the general opinion is leaning against striping.

Survey #4: Are PDFs of articles on my website helpful?

The last survey for this month is to see if you find PDF versions of web articles worth while. It takes effort to create these, and I find that not many people download them, so I wanted to find out if you find them useful.

Take the survey here:

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Technique: Using the Pen tool to Create Smoother Moves

I've been promising this Technique for months, but it kept getting pushed off the keyboard. However, last month's surveys convinced me I needed to write it -- which reminds me that I really do pay attention to your answers on these surveys!

Sometimes, when you are creating a motion effect, or other effect with keyframes, you may want to smooth out the corners, so that your object moves more smoothly across the frame. This technique shows you how to

do it.

1. Start with an image you want to move around the screen. We'll use our puppy to illustrate. To keep this simple, I'll use a still frame, but the process is the same whether you use a still frame or video clip.
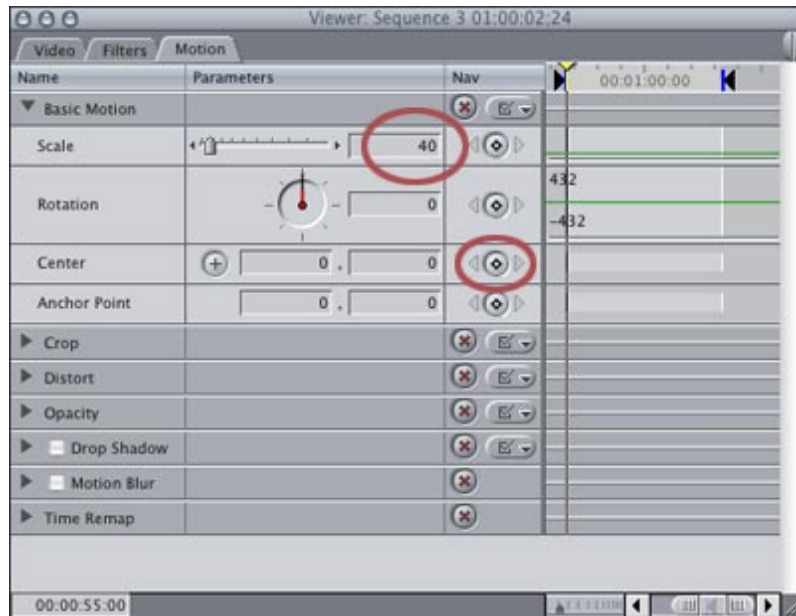
2. Load your clip into the Viewer, scale it back to, say 40%
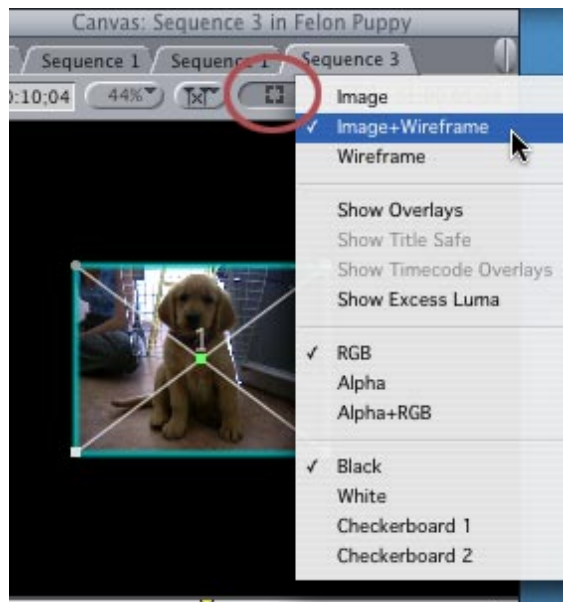
3. Switch the Canvas to Image/Wireframe by clicking in the third pop-up menu at the top of the Canvas
4. Drag the image to the top left corner of the Canvas and set a keyframe for it's starting position.
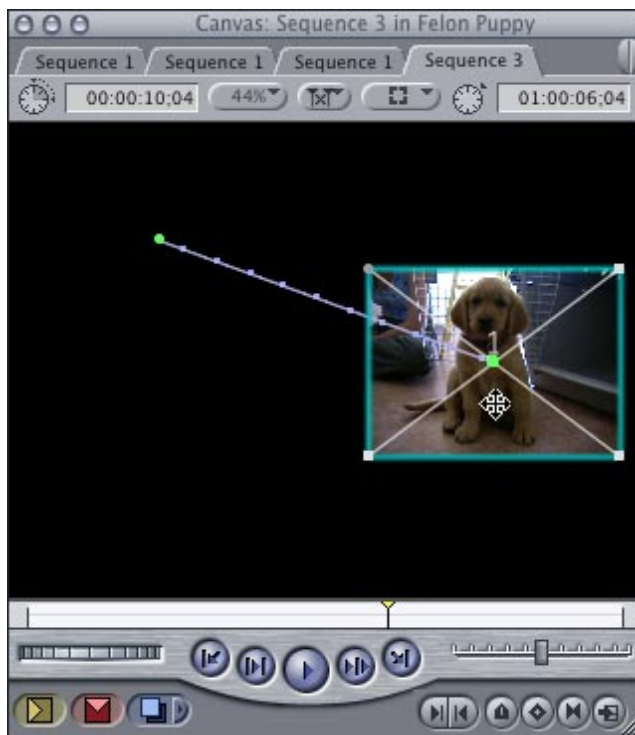
5. Move the Playhead 30 frames, or so, ahead and move the image to the middle of the right side. Moving the image's location automatically sets a new Center keyframe in the Motion tab.

6. Move the Playhead another second, or so, ahead and move the image to the bottom left corner. This, too, will set a new keyframe.
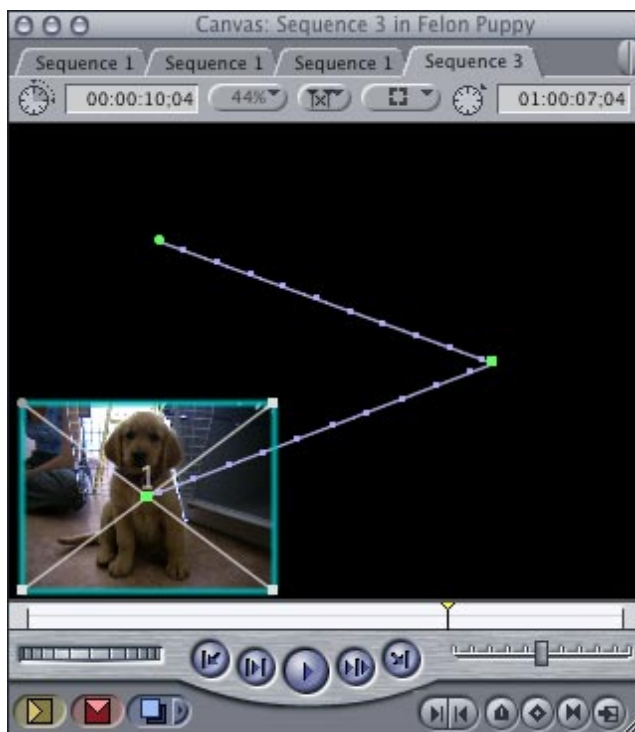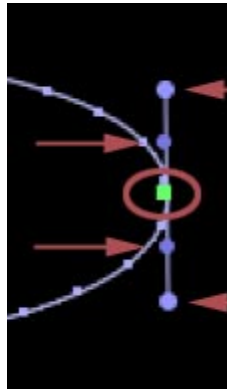

7. Play the animation you just created and you'll see a nice sharp corner where the image moves around the middle

keyframe.

8. But we don't WANT a nice sharp corner. We want a nice, SMOOTH corner.
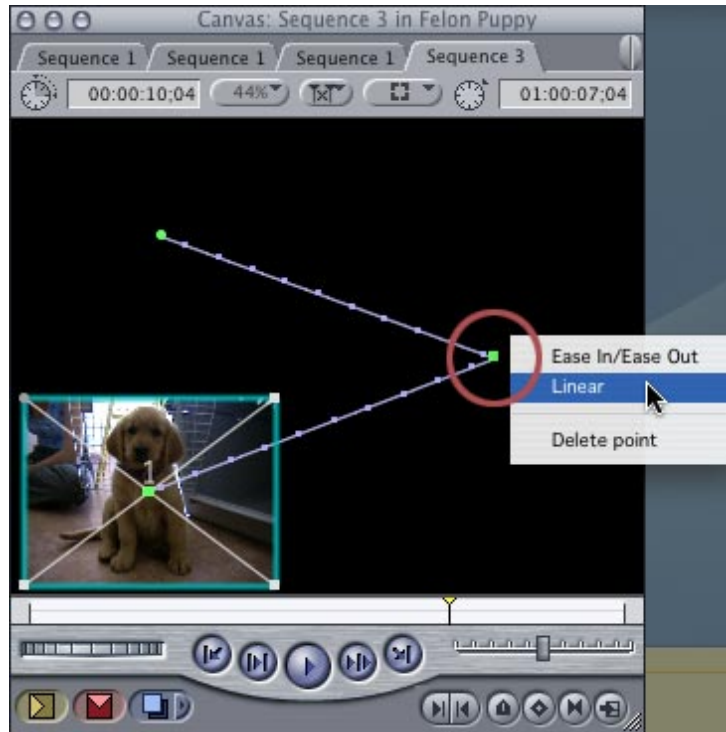
9. In this case, Control-click on the middle keyframe and set it to"linear."

10. The motion path turns into a nice, smooth curve with lines flying off from it. Those lines are called, "Bezier handles." Grab the dots at the end and watch how moving them adjusts the shape of the curve.

    Notice that these handles move together, move one handle and the other moves in a corresponding way.

11. If you look closely, there are two purple dots midway along each line. These control the speed into and out of the curve. Using "linear" means the speed of movement of your clip remains constant. Selecting, "Ease In Ease Out" slows your clip down as it approaches a keyframe and speeds up as it leaves.

    If you want to change the velocity of your object as it turns the corner, move the velocity dots in the middle of the line.

12. You can adjust the SHARPNESS of one side of the curve by holding the Shift key down and dragging a line.
13. You can adjust the ANGLE of one side of the curve by holding the Control key down and dragging a line.

There is a lot you can do with Bezier curves in Final Cut. This technique simply shows you where to look. Virtually every keyframe has Bezier control, though in many instances, changing the angle of the curve of a filter may not make much sense.

Still, knowledge is power. Enjoy.

Last Month's Survey Results

The surveys from last month are closed. If you want to see the final results, click here:

   http://www.larryjordan.biz/surveys.html

Here's the commercial that supports this newsletter.

I provide system design, consulting, editing, training and support for Final Cut Pro and DVD Studio Pro.

You can review my support and training services here.

If you need help or advice, I'd appreciate it if you would give me a call,
(818) 879-5105, or send me an email -- larry@larryjordan.biz -- worldwide.

My client list speaks for itself.

Your support keeps this newsletter free.

Thanks.

Go to Top.

Wrap-up

Well, that's it for this edition of the newsletter. Let me know what you think, and tell your friends to subscribe. I love reading your comments and sharing them with others. That way, we all learn!

Planned for next month (and, yes, this changes even AFTER the last minute - as long-time subscribers have noticed):

- Technique: Outputting OMF for audio sweetening
- Prepping your images to make them look great on TV
- Understanding and eliminating Track Gaps
- Compressor settings for better looking DVD video
- Another "Client Report"
- Reader feedback -- so send your comments in!
- More tips from the classroom
- And more.

Thanks -- and have fun editing!

Larry

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