

Mac users get high end video editing in OS X

Digital Video Software Apple Final Cut Pro 3

by Bob Connolly

This is *it*, folks—the one that Mac-centric video producers have all been waiting for: *Final Cut Pro 3* running on OS X.

After spending five years and a ton of money on my Avid system, I can now report that Apple has caught up with *Final Cut Pro 3*. And in some ways it surpasses Avid, especially when it comes to digital video editing. It's not just the real-time effects that everyone's been talking about, it's the little things that video editors crave—like good color correction, media management, and editing features that usually require other applications. *Final Cut 2* was great, but *Final Cut 3* is fantastic, especially considering the price tag. I would pay five times the price for this application—with no questions asked.

If you've been waiting for just the right time to jump into video production, or

you were thinking of switching from Wintel or another video editing application, I can't see why you would want to wait any longer—and here's why.

FINAL CUT GOES "OFF LINE"

Uncompressed or DV, it's all the same with QuickTime.

I've been using *Final Cut* with a Cinewave PCI card for the past year. From time to time, I still use Betacam stock footage in our productions, in which case I try to keep the analog footage clean and uncompressed. The Cinewave card works well since it runs QuickTime and is especially made for *Final Cut Pro*.

But—the files are huge! One hour of video swamps my hard drives' arrays—over one hundred gigs! How do you edit a one-hour documentary? You need to capture low resolution footage with accurate timecode, and then recapture only the footage that's used in the final production. This is the capability which made Avid Systems so special.

Well, *Final Cut Pro 3* now allows you to capture any footage, uncompressed or DV. It will compress the data as it is being captured and save it as a motion JPEG file. If you have captured the footage with

its corresponding timecode, you can transfer the *Final Cut Pro* sequence/log file to almost any Mac, edit the footage off-line, and then recapture the final high resolution clips that were used in the "final cut". Now you know why they chose that name.

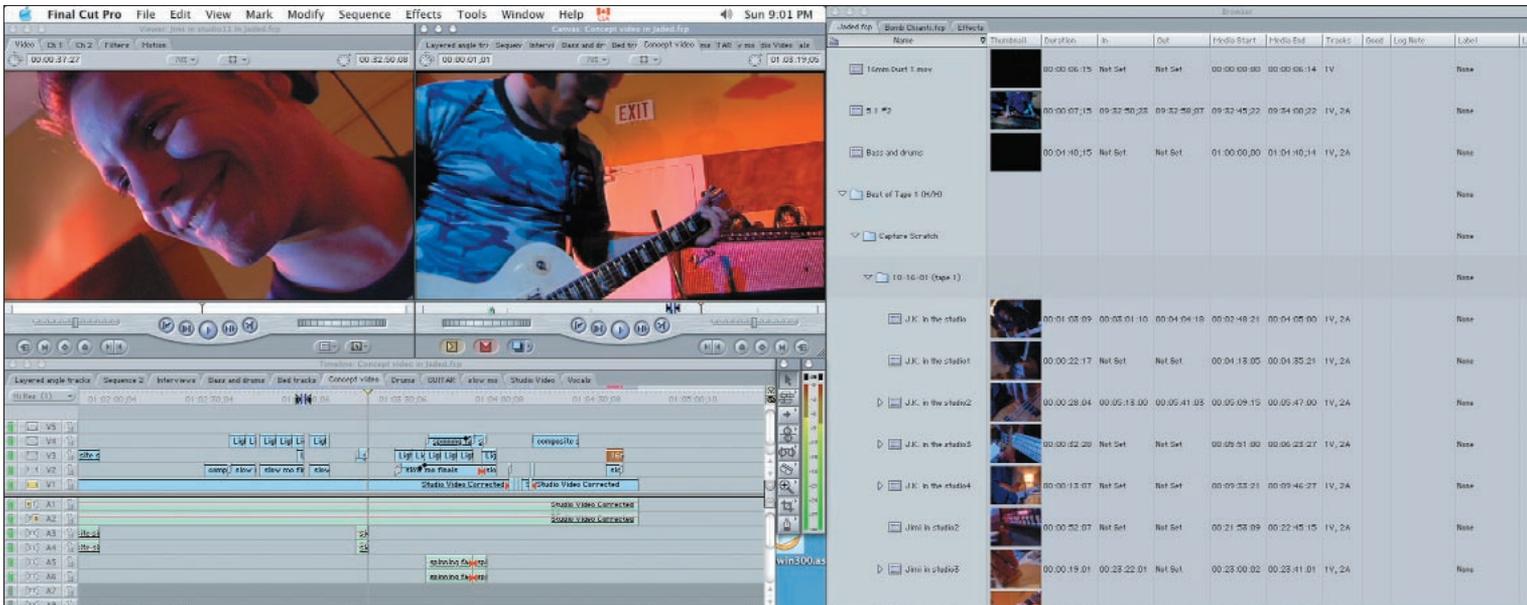
In the Avid world, you're locked out with dongles, proprietary PCI cards and incompatible file formats. But Apple wants everybody to get involved with the editing process, so in the *Final Cut Pro 3* environment, anyone can edit video, anywhere—with QuickTime Pro and any computer that they make, from iMacs, iBooks, or Titaniums to any G4.

"THE DRIVES ARE ALL FULL...WE CAN'T ADD ANY MORE FOOTAGE TO THIS SHOW."

You can never have enough hard drives. For editing DV, you need at least 70 GB to get decent video capture of source footage for a documentary. Film is expensive, but since DV is now acceptable for broadcast, camera operators shoot everything! Some let the camera roll on and on because they might miss something—"Cut!" is only heard when they run out of tape!

This has also let video editors get lazy about logging shots or best takes. They just digitize the whole tape, walk away, and log the footage later.

Final Cut Pro 3 is now OS X COMPATIBLE and offers REAL-TIME EFFECTS (although dependent on the speed of the Mac).





A terrific new feature in Final Cut Pro 3 is the ability to perform real-time three-way **COLOR CORRECTION** to DV source footage.

So, how do you dump the material that you don't want?

You "manage the media".

Final Cut Pro has now vastly improved its Media Manager function. You can select sequences or clips to remove unused footage from an existing project without duplicating it. You can create a trimmed duplicate of a sequence or a portion of the sequence. Or—best of all—you can recompress an entire project to a different codec for editing on a portable computer.

For example, you shoot six hours of footage, dump it to your G4, start to edit it online—and then you're suddenly required to travel to a far-off land and re-shoot additional footage. But how do you edit and shoot at the same time?

If you have a Titanium with a few free gigs—no problem. Using the Media Manager, you can recompress the footage that you used in your project into a format that requires less space. You continue editing on the portable computer, and when you're done, just copy the project file to your main drive—and the sequences re-link to your original master captured clips.

Or better still, take your project to the cottage, relax in the hammock, and edit movies the way people write movies! Your original data stays safe and sound, waiting for your return.

"IF YOU CAN SEE IT, YOU CAN SHOOT IT. DON'T WORRY, WE'LL FIX IT IN THE EDIT SUITE."

That's a favorite saying for many producers who shoot cutting edge documentaries. Camera operators were often in situations where unbalanced lighting conditions caused unwanted colors in the scene. We see white everywhere, but the camera sees green fluorescent lights, red incandescent light bulbs, and blue outdoors. For still images, *Photoshop* was the answer to color correction, but in DV it just wasn't possible. You had to

rent an expensive post-production editing facility, bump up the DV footage to an uncompressed format and use a million-dollar color corrector to "fix it in post".

But *Final Cut Pro 3* now has the same color correction features as the big boys, and it does it in real-time with DV compressed footage. Take it from me—this is simply astounding.

"THE NARRATION DOESN'T WORK. WE NEED TO DO A REWRITE—AND WE NEED IT FAST!"

The usual documentary or corporate video workflow happens something like this: The producer, director and writer sit down and compose a script—which almost no one follows, especially in documentary production. The camera crew attempts to capture the essence of the script, and the video editors try their best to match up the footage.

Quite often, the script is narrated in a sound recording facility after the final cut has been completed. While the video is being edited, the editors will "mouth" the written script in their heads, hoping that the director will understand why certain cuts have been chosen to match the written script.

The biggest problem is getting a feel for how the show is taking shape without



APPLE FINAL CUT PRO 3

System Requirements

MACINTOSH ONLY

- Minimum 300-MHz or faster PowerPC G3 or G4 processor and built-in FireWire
- 500-MHz or faster single or dual processor Power Mac G4 or PowerBook G4 required for G4 real-time effects
- 667-MHz PowerBook G4 required for mobile G4 real-time effects in DV format
- Mac OS 9.2.2 or Mac OS X v10.1.1
- QuickTime (included)
- 256MB of RAM (384MB recommended for G4 real-time effects)
- 40MB of available disk space required for installation

Pricing

Suggested list \$1599—upgrade from Final Cut Pro 2 \$479

Apple Canada

Web www.apple.com



The **MEDIA MANAGER TOOL**. By recompressing the footage to Photo JPEG you can squeeze 62 gigs down to only 1.3 GB and transfer that directly to a PowerBook or Firewire drive.



The **RECORD-TO-TIMELINE** feature allows you to overdub audio as the movie plays.

the benefit of a narration audio track to guide the editing process. *Final Cut Pro 3* is now capable of recording audio in sync directly into the time line. Editors can record their own narrations locked to the picture to see exactly how the clips match up. And if you have a soundproof room where you can isolate extraneous sounds, you can even use *Final Cut Pro* to record your final narration.

“SURE, OUR SOFTWARE IS REAL-TIME ALL THE TIME — WELL, OK, MOST OF THE TIME.”

In DV format, waiting for rendering is a real pain in the ass. Waiting for dissolves, well, that only takes a few seconds and is worth the wait in many cases. Waiting for title overlays to render is a bit much. Waiting for graphic alpha channel overlays can be deadly.

Final Cut Pro 3 can put those aggravations behind you (although it still depends on the processing speed of your machine). It’s so nice to see graphics and logos over video right away, even animating across the screen in real-time—all without the aid of an extra PCI card. This saves you bundles of money and a bundle of time.

Although you still need to render the final timeline when transferring to tape or exporting to DV, this can be done over lunch. The key point is that you can view the effects you’ve created on your screen right away and can then get on with other parts of the production.

“WE HAVE TO KILL THAT WIND RUMBLE IN THE NARRATION, IT’S SO DISTRACTING.”

Post-sound is an art unto itself. A video editor will often cut the show and tell the director to “fix the sound in the mix”. There are great Macintosh applications such as *Peak DV* that allow you to remove unwanted sound from the audio track, but this is usually done at the very end in the sound department.

Final Cut Pro 3 now allows you to launch an external editor like *Peak DV* to correct only the problem part of the audio track. The original data stays linked to the time line and is updated after it is saved. Exporting and importing the entire track is a thing of the past.

It’s the same idea when working with *Photoshop* files—if the size, color or image is wrong, just click on the file and *Photoshop* opens it for changes. When you return to *Final Cut Pro 3*, the revisions are updated in the sequence.

“DON’T COMPLAIN ABOUT ADOBE, APPLE STILL DOESN’T HAVE NATIVE OS X APPLICATIONS.”

Finally, Apple has released an application that runs natively in OS X. Sure, there’s *iMovie* and *iDVD*—but those are free applications that are only good enough for the average consumer. We all want the real thing!

If Apple can get an OS X version of *DVD Studio Pro* out soon, it will ease the pressure to live up to what it has been preaching to other software developers—to get their apps OS X native ASAP. The pressure is now on Adobe’s *Photoshop* development team.

I’ve upgraded our 733MHz G4 DVD Mac to OS X and started learning what works and what doesn’t. Quite a few classic applications crash (such as *Media Cleaner*). But the good news is that *Final Cut Pro 3* works fine! It works and looks just like the OS9 version.

The bad news is that I have to learn a new operating system all over again—OS X is definitely different. I’m trying to think

different like Apple asks, but it’s taking me some time.

For instance, I like to be messy with my desktop. I like to drag things to the trash on the bottom corner. And I have a workflow that my staff understands. It’s an organized mess, but at least they know where to find things on the system.

However this new operating system wants you to be orderly; it asks for permissions and passwords to install software. Who works like that?

I guess it’s time to clean up my act. I see where Apple is going. First time Mac users—the new kids—will never experience the “extension nightmares” we all had to live with, because this new system never crashes.

The toughest part about upgrading to *Final Cut Pro 3* and OS X at the same time is that you can’t find your raw data because the Finder has changed so drastically. This reminds me of trying to edit a video in an application called *Video Toaster* which only worked on an Amiga. It was a great editing application, but I hated using the Amiga because it just didn’t work like a Mac.

But this time around, I know the Mac won’t disappear like Amiga. It’s time to join the Unix crowd—and OS X is basically Linux for dummies!

So, if you’re a dummy, start off in OS X with *iMovie*. Get the feel of cut, copy, clear and paste with motion video first.

If you’re a *Final Cut Pro 2* user you’ll want the upgrade—it’s only \$479, and the new features are worth ten times that. *Final Cut Pro 3* works fine in OS X Classic, too, so if you were waiting for a good candidate to choose for testing out a move to OS X, this is an excellent choice.

For me, a new world of computing has arrived, and it’s time to boldly go where few (beta testers) have gone before. ☪

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