Chapter 1

Introducing Final Cut Pro

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- Introducing the concept of editing
- Final Cut makes editing easy
- What’s new in Final Cut Pro 4
- Understanding the Final Cut workflow
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Imagine for a moment: You’re a big-time director on the set of your latest movie. You’ve just called your last “Cut!,” the A-list actors have gone back to their mansions, and the crew is dismantling the million-dollar sets. You lean back in your director’s chair, close your eyes, and breathe a deep sigh of relief, knowing that the film is finally finished. You can, at last, relax.

Yeah, right! In fact, this show is far from over. Although you may have some amazing footage, the fat lady won’t be singing until you’ve edited it all into a polished film. Enter Final Cut Pro.

Understanding the Purpose of Editing

Editing video or film is a bit like writing. When you write (or when we write, at least) you start by putting all your ideas on paper — good or bad — so you can see what you’re working with. Then you take the best ideas and arrange them in a logical order so that they say what you mean, as clearly and efficiently as possible.
It works the same way when you’re editing digital video. First, you scrutinize all the footage you shot on set (usually a lot). Slowly, you figure out which shots to keep and which ones to send to the proverbial cutting room floor. You may remove a shot for any number of reasons: an actor’s performance, technical problems, or the fact that you can see a crewmember’s foot in frame. Next, you arrange your keeper shots, one by one, so that they begin to tell a story, and you bring in your dialogue, music, and sound effects to make the project complete.

In this book, we call your footage “video,” whether you originally shot it on film or videotape. This keeps things simpler, since digital footage is generally treated the same once it’s in Final Cut, regardless of its origins. (There are a few cases where footage originally shot on film will have some distinctions, but we’ll note them when appropriate.)

Exploring the Capabilities of Final Cut Pro

Final Cut lets you do all this editing work on your Mac. To be a little more specific, when you’re behind the wheel with Final Cut, you can do the following:

- **Capture**: Capture video or audio media from digital video cameras and video decks, CDs, microphones, and existing digital files onto your hard drive.
- **Organize**: Organize all your media files so that you can easily find them (a project might use hundreds of different files).
- **Edit**: Edit your footage together, which is almost as easy as cutting and pasting text in a word processor.
- **Add audio**: Add audio to your movie — be it dialogue, voice narration, music, or sound effects — and control the volume for each audio element.
- **Create transitions**: Create transitions, such as fades and wipes, between shots.
- **Add text titles**: Titles can range from the classic white-text-on-black title cards to animations with all sorts of pyrotechnics.
- **Add effects**: Enhance video and audio with tons of custom effects filters.
- **Composite**: Create impressive visual montages by compositing (combining) multiple shots into one. This process is similar to the one in the popular Adobe After Effects program.
- **Create a final product**: Record your polished masterpiece to videotape, or export it to digital files destined for DVD, CD-ROM, or the Web.
Appreciating nondestructive editing

One of the great things about Final Cut Pro is that it’s a nondestructive editor, which means that no matter what you do to your video and audio inside the program, the original media files on your hard drive are never changed or erased (okay, almost never; see the tip below). Say you have a bunch of video files on your hard drive and you bring them into Final Cut to edit them together. Although it may seem as if you’re cutting this media into different pieces, resizing it, and even deleting it, that’s not the case. When you’re editing, you’re really just creating and moving a bunch of digital pointers to the media on your hard drive. The pointers tell Final Cut what parts of the media you want to play in your final movie (in other words, play Clip A for three seconds, and then play part of Clip C for two seconds, and so on). Thanks to this approach, you can work and experiment knowing that you aren’t hurting your precious media.

With Final Cut Pro 4, there is actually one way you can alter or erase your original media files within the software, but you really have to go out of your way to do this, and there are safeguards to prevent accidental goofs. We explain this feature — just one of the many useful things Media Manager can do for you — in Bonus Chapter 3, found on this book’s CD.

Final Cut Pro versus the competition

Plenty of other editing programs are available these days: Adobe Premiere, Avid Media Composer, Avid Xpress Pro, and SpeedRazor all come to mind. So what makes Final Cut Pro so special? Four things:

✔️ **It’s brimming with features:** Final Cut Pro not only delivers the big power-features that sound great on the back of the box, but also gets tons of details right — the little, thoughtful things that help you work smoothly, in a way that suits your personal style.

✔️ **You don’t need a super-computer or expensive, proprietary hardware to run Final Cut Pro:** You can build your editing system around many fairly-modern Macs (as long as it has a G4 processor—see Chapter 2 for more info) and everyday peripherals, such as capture cards, FireWire hard drives, and so on.

✔️ **Final Cut Pro is affordable at $1,000:** Admittedly, many people wouldn’t put the words affordable and $1,000 together, but before Final Cut Pro came along, you had to pay several thousand dollars for software that did the same thing. So, relatively speaking, $1,000 is actually the equivalent of a Blue Light Special — with the added bonus that you don’t have to fight off angry hordes of shoppers, because Apple has plenty of copies to go around.
Final Cut Pro is hugely important to Apple Computer: Final Cut Pro has sold many new Macs in the last few years, and Apple thinks it can sell many more in the years ahead. (For instance, major movie studios and commercial production companies are beginning to switch to Final Cut Pro, instead of sticking with the former standard, Avid.) So Apple is very serious about constantly and aggressively improving this gem. Case in point: Final Cut has had 3 very major revisions in a little more than 2 years. Now that’s commitment!

New in Final Cut Pro 4

Speaking of improvements to Final Cut, there are lots of great ones in Version 4. Some are little tweaks that polish off the editing experience, but others are big-ticket additions that will make a big, big difference in the kind of work you can do. Here are some of the more exciting features:

- **Making Music with Soundtrack:** Soundtrack is a new, stand-alone program included with Final Cut 4 that lets you compose custom music for your movies using short, pre-corded musical “loops” (drum beats, and tons of other instrumental riffs). No musical experience required!

- **Hot Text Effects with LiveType:** Final Cut 4 ships with a new application called LiveType — see Figure 1-1 — which lets you animate text and apply all sorts of special effects — glows, particle effects, you name it, LiveType has it. LiveType ships with tons of pre-designed animations and styles, so if you’re in a hurry, you can whip up good-looking titles in minutes. But if you invest a little more time, you can also customize the animations and effects to an amazing degree, creating type that is truly unique to your project.

- **Compressing QuickTime Video:** Compressor is yet another stand-alone program that makes it easier to encode (that is, to compress) your Final Cut movies as QuickTime digital files. For starters, Compressor features a long list of pre-determined settings that you can apply to movies, depending on the delivery medium they’re destined for. (For instance, there are settings for encoding movies for DVDs, or for downloading by 56K modems on the Internet, or faster DSL modems, and so on.) These pre-determined settings take a lot of the guesswork out of encoding your video. Also, Compressor has a fantastic batch-processing mode; it can encode your Final Cut project into lots of different formats all at once, while you go down the street and get a latte.

- **RealTime Rendering:** Final Cut 3 introduced real-time previews of transitions (fades, and so on), color corrections, and some other special effects saving you from having to render those effects before seeing
how they looked. (*Rendering* is the process where your Mac has to calculate how an effect should look before the effect can be played.) But there were some limitations to this feature: 1) Final Cut 3 could only offer these real-time previews for a handful of effects, 2) you could only see those previews on your Mac’s screen, not on a TV monitor that many editors prefer to watch, and 3) when you were finally ready to record your movie to tape, you’d still have to render all the effects the old-fashioned way. But Final Cut 4 can change all that: it can give you real-time previews of *any* effect imaginable (and combinations of effects too). You can also view these effects on a TV, and output them to tape without rendering—it all hinges on whether your Mac is fast enough.

**Customizable interface**: Finally, Final Cut 4 now gives you full control over its interface. Have you ever wished that a certain function had a keyboard shortcut, or a different keyboard shortcut than the one currently assigned to it? Well, no problem — you can now assign any Final Cut function to a keyboard shortcut of your choosing. What’s more, Final Cut’s main interface windows (like the Canvas, Viewer, and Timeline) now let you install custom icons that call up just about any feature in the program, saving you time from hunting for them in menus.

![Figure 1-1: The new LiveType application can do amazing things with text titles.](image-url)
Going with the Final Cut (Work) Flow

Final Cut Pro starts to make sense when you understand how you’ll use it from start to finish. So let’s summarize its workflow in four easy steps:

1. Capture and import all the media — that is, video, audio, and still pictures — that you want to use in your project.

   This media can come from a camera, video deck, music CD, DVD-ROM disk, or other digital files already on your hard drive. The media shows up in Final Cut’s Browser window, where you have easy access to it. Each piece of media you bring into the Browser, by the way, is called a *clip*.

2. Move your media clips to Final Cut’s all-important Timeline window.

   You use the Timeline to place, move, and otherwise edit clips so they tell the story you want to tell.

3. Add pizzazz in the form of titles, transitions (such as fades, dissolves, and wipes), custom music, and more advanced special effects.

4. Record your project to videotape or export it to a QuickTime digital file.

   You’ll make QuickTime digital files if you’re aiming for digital distribution, such as the Internet, CD-ROM, or DVD.

It’s true, Final Cut Pro brims with many windows, dialog boxes, menus, and check boxes, but all this apparent complexity really boils down to these four easy preceding steps. Keep that in mind, and you’ll see that this isn’t rocket science.

Taking a Grand Tour of the Interface

After you’ve gotten a grasp of Final Cut Pro’s workflow, you can expand your expertise by taking a tour of its interface — namely its toolbar and the Browser, Viewer, Canvas, and Timeline windows, as shown in Figure 1-2. Keeping track of all these elements can seem daunting, but you’ll soon see that there’s actually not much to them and that they do in fact work together in an intuitive way. Trust us.

By the way, Final Cut Pro’s windows may be arranged differently on your screen than they are arranged in Figure 1-2. To get your screen to look like our screen shot, choose Window→Arrange→Standard from the menu bar at the top.
The Browser

The Browser is the central storage depot for all the media clips used by your Final Cut project. Just think of the Browser as a big file cabinet. When you want to work with a file (that is, a clip of media), you open the cabinet (or the Browser window) and grab whatever you need.

Although the Browser has a lot of features, you really need to know only these basics: When you import a piece of media into your project (either from your hard drive or by capturing it from videotape), the media automatically appears in the Browser as a *clip*, as shown in Figure 1-3. Within the Browser window, you can also create *bins*, which store groups of related media clips and help you keep your media well organized. (Bins work a lot like folders on your hard drive.)
Besides clips and bins, the Browser window is also the home of any sequences you create for your movie. A sequence is a collection of clips that you’ve edited together in the Final Cut Timeline window. (We’ll get to the Timeline in a moment.) You might edit your movie into a single sequence or, for longer-running projects such as a two-hour feature, you could create each major scene in its own sequence because shorter sequences are a bit easier to navigate and work with.

The Viewer

Once you have media clips in the Browser, you can use the Viewer window to watch and listen to them before you move them to Final Cut’s Timeline. To open a clip in the Viewer, just double-click its name or icon in the Browser window. Notice that the Viewer displays tabs at the top of its window, and that clicking a different tab shows you different things in the Viewer: for instance, the Video tab shows you a clip’s video, and the tab right next to it shows you a clip’s audio, as a sound waveform. The two other tabs let you control special effects and motion effects you can apply to any clip, but let’s stay focused on the basics for now.

Playing with play controls

The Viewer sports an assortment of buttons and other gizmos, but focus for now on its play controls, shown in Figure 1-4. You can click the Play button to play your clip forward (another click pauses your clip), or use the Viewer Jog and Shuttle controls — also shown in Figure 1-4 — to move forward and in
reverse at different speeds. As a clip plays, you see the Viewer playhead move across what’s called the **scrubber bar**, frame by frame. You can click anywhere in the scrubber bar to move the playhead to that point, or click and drag the playhead anywhere as well.

**The ins and outs of ins and outs**

Besides playing clips, you use the Viewer to edit clips in a very basic way by setting **In** and **Out points**. (In fact, you also use these points in other Final Cut windows, but they’re “regulars” in the Viewer.) As shown in Figure 1-5, In and Out points let you isolate only that part of a clip that you’re interested in, before bringing it to the Timeline. Say you have a great clip, except that the first four seconds suffer from a shaky camera and the last five seconds prominently feature the leg of a crewmember. Because you don’t want to bring the entire clip to the Timeline, you can use the Viewer to set an In point at the clip’s first good frame (right after the camera shake) and an Out point at the last good frame (before the leg shows up). Then Final Cut knows to use only the frames between those points. (We cover the basics of In and Out points in Chapters 3 and 6.)
The Timeline

Final Cut Pro’s Timeline window lets you arrange when your media clips play in time. To better understand the Timeline, think of it as a sheet of music. Rather than place musical notes one after another on the page, you place clips of video and audio, and you tell Final Cut how long to play each one — for example, show a black screen for two seconds, play video clip A for four seconds, then play clip B for three seconds, and so on.

So how does the Timeline work? We talk about its many nuances throughout the book, but check out Figure 1-6 for the basics. Stretching across the top of the Timeline is a bar with notches and numbers, which looks like a ruler. But those numbers aren’t measurements of distance, they’re measurements of time, increasing from left to right (for example, 5 seconds, 10 seconds, 15 seconds, and so on). As you edit, you move your media clips to the Timeline (solid-colored rectangles represent clips on the Timeline) and position them under a time value. That’s exactly where, in time, the clips play in your story.

One other feature to note about the Timeline is that it’s divided into rows, which are called tracks. Tracks make it possible to stack media clips on top of each other, so that they play at the same time. For instance, if you want dialogue clips, and music clips and sound effects clips to all play at the same time, you would place those clips at the same time value on the Timeline, but on different tracks (you can easily create new tracks yourself).

Anyway, the Timeline features tracks for video clips (the video track is labeled, V1 in Figure 1-6), and tracks for audio clips (labeled A1, and A2 in the same figure). Some of your media clips come with video and audio linked together...
in the same clip, in which case, Final Cut Pro shows the clip in the Timeline’s video and audio tracks. Other clips carry just video or audio; for example, you can see in the figure that the video clip labeled FX14 has no corresponding audio along with it.

The Tool palette

After you move media clips to the Timeline, you can edit them — that is, make them last longer or shorter in time, cut them into smaller pieces, and rearrange them until they tell your story. Enter the Final Cut Pro Tool palette, shown in Figure 1-7, which offers a host of tools that you can select (just click ‘em) and use to edit your clips in all sorts of ways. The tool you’ll find yourself using the most is the standard Selection tool (the plain arrow at the top of the palette), which you use to select and move media clips on the Timeline. To be honest, you can edit an entire movie with this tool alone, but the palette’s other tools make that work much easier. Some of the handy ones let you select huge groups of clips at once, cut clips in two, or quickly magnify your view of the Timeline so that you can better see what you’re doing. You’ll get to know all these tools soon enough.

The icon menu expands.

Selection tool

Click and hold over a button to see more tool icons.

When you see a little black triangle in the upper-right corner of a tool icon, more tool icons are hidden underneath it. These additional tools are all related but do slightly different things. Just click and hold down the mouse button on such an icon, and the hidden tools pop up for you to choose.
The Canvas

After you’ve edited your video and audio clips on the Timeline and want to see (and hear) how they all play together, turn your attention to Final Cut Pro’s Canvas window. The Canvas is where you watch your movie-in-progress as you’ve arranged it on the Timeline.

As you can see in Figure 1-8, the Canvas looks a lot like the Viewer. You do have the same play controls, but the Canvas has some differences. (For instance, you can perform some basic edits on the Canvas instead of on the Timeline.) For now, all you need to know is that the Canvas lets you play, move forward, pause, and rewind through your Final Cut Pro movie. Sit back and enjoy your show!

Figure 1-8: The Canvas window plays the clips you’ve arranged on the Timeline.