

## Bonus Chapter 3

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# Managing Your Media While Editing

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### *In This Chapter*

- ▶ Keeping tabs on your media by using Media Manager
  - ▶ Deleting media
  - ▶ Moving projects from one place to another
  - ▶ Copying media
  - ▶ Creating backup copies of your projects
  - ▶ Using OfflineRT and Media Manager to edit on the road
  - ▶ Relinking media
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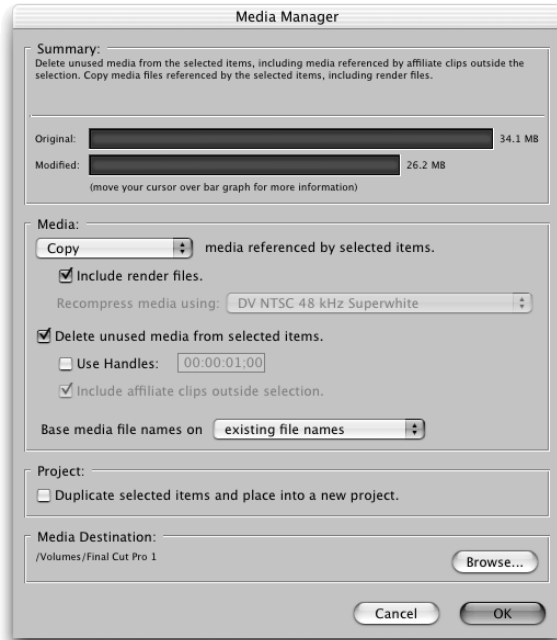
**I**n this chapter, I tell you how to manage your media files as you edit your project. Whether you're a novice or a pro, the single greatest challenge you face in moviemaking, apart from the creative process itself, is media management. Managing media files presents two challenges: maintaining adequate hard drive space for your project, and keeping your media files organized so that Final Cut Pro can keep the files connected, or *online*, to that project. And how do mere mortals deal with these challenges? They use Media Manager. It meets these challenges and more.

Video is data-intensive. A small amount of video can take up lots of disk space, and video projects can include many files that are stored in several different places. Having as many as 200 files (video clips, audio clips, stills, and titles from image-editing applications, for instance) for a 5-minute tutorial or promo isn't unusual. Often, a given clip contains only a sliver of data that you plan to use in your project. Thus, even with a large hard drive or disk array, space quickly becomes an issue. Media Manager helps you keep tabs on how much space your media requires.

To conserve space and stay organized, you may decide to move your video and audio clips to a new location or even delete unused media. For instance, to conserve hard drive space, you may decide to change your clips to a different file format or to cut from a clip some footage that you never plan to use. These kinds of actions, however, can have nasty consequences: Your project may lose connection with the files, which is called going offline. (*Offline* means that files may still exist and are on your drives somewhere, but Final Cut Pro doesn't know where to find them.) Sometimes, files just seem to disappear as a consequence of something you've done, like accidentally renaming a media folder on your hard drive. Media Manager can prevent these situations by gathering your media for you and placing it all in a common location. Media Manager also allows you to correctly delete media you no longer need without adversely affecting your project.

## *Editing Media with Media Manager*

Media Manager is a tool within Final Cut Pro that gives you control over numerous features of your media files (see Figure BC3-1).



**Figure BC3-1:**  
Media Manager provides options for moving, saving, trimming, and more.

With Media Manager, you can do the following:

- ✔ Delete any unwanted or unused media from a project quickly and globally.
- ✔ Move parts or all of a project from one location to another without breaking any links to the actual media files on your hard drive. (Breaking links takes files *offline*.)
- ✔ Single out items that are related to a sequence so that they can be saved separately.
- ✔ Compress part or all of a sequence.
- ✔ Trim your media.
- ✔ Back up your project in a simple and effective way so that the project files and media are placed in one convenient place.

I explain each of these options in detail in a moment. Take a quick glance at all of them before trying one so that you know which result you really want.



In fact, I recommend creating a test project with some unimportant media (media that you don't mind losing if you do something unintended) and using that dummy project to take Media Manager out for a test drive.

## Opening Media Manager

To open and use Media Manager, remember the following things:

- ✔ Before you can open Media Manager, a project containing media must be in the Browser window. That rule is easy to remember: No media to manage, no Media Manager.
- ✔ In the Browser, you must select the media you want to manage.

To open the Media Manager window, select a sequence or clip (or clips) in the Browser, choose File→Media Manager or Control+click one of the selected items in the Browser, and then choose Media Manager from the pop-up menu that appears.

## Using Media Manager: Important and Useful Tasks

In Media Manager, big tasks are reduced to small, manageable ones. But Media Manager is a powerful tool, and as with any tool, you must take proper precautions when handling it. The most important precaution is understanding what's happening to your data during a process you initiate. In this section, I help you to both understand and perform key tasks.

## Deleting unwanted media

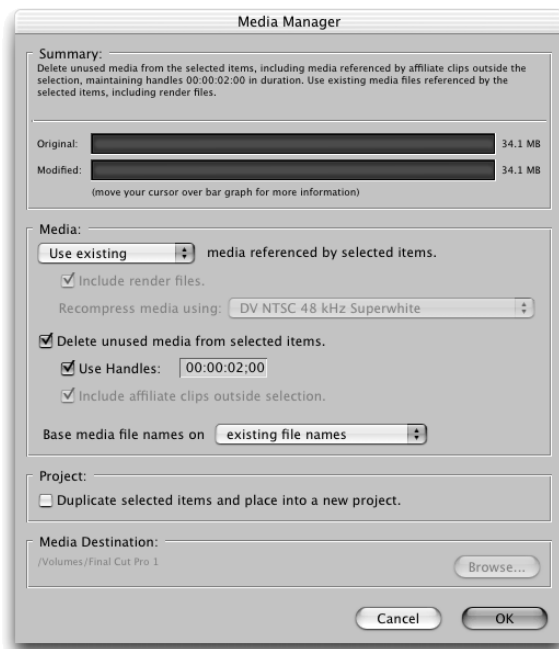
Imagine that, for all practical purposes, your latest project is done. Meanwhile, all the source footage you captured for it is taking up tons of valuable space on your hard drive, and you know that your project's final edit uses only a fraction of all that media. To give your hard drive some breathing room, you naturally want to keep the media files your project uses and dump all the excess media that never made it into the final cut ("final cut" — get it? Get it?). How can you quickly delete the media you imported into your project but never used? To do so, follow these steps:

1. **Select in the Browser a sequence you want to consolidate, and open Media Manager by choosing File⇨Media Manager.**

You can select multiple Sequences by clicking each one while pressing Command.

2. **Choose the Use Existing option from the Media drop-down menu. (The menu is in the upper-left corner of the Media area, as shown in Figure BC3-2.)**

Note that the Include Render Files option is selected automatically.



**Figure BC3-2:**  
Deleting  
media you no  
longer need.

**3. Check the Delete Unused Media from Selected Items box.**

This step tells Final Cut to delete from your hard drive any media that never made it into the final edit of your sequence.

**4. To leave some extra room around the In and Out points of each media clip in your final sequence, check the Use Handles option, and enter a value in the text box.**

Normally, Final Cut preserves only the exact length of a media clip as it appears in a Timeline sequence. For instance, if you've edited 5 seconds and 10 frames of a clip to the Timeline, only those 5 seconds and 10 frames, and nothing else, are saved. That may be fine with you, but sometimes it's nice to have Final Cut save a few extra seconds or frames on each side of the clip (its beginning and end), as a safety measure. This way, if you ever decide to go back and reedit your sequence to make a clip a little longer, you have the extra frames saved to the clip.

Anyway, *handles* are the extra frames you decide to save to a clip. To enter a length for your handles, select the Use Handles check box, and type the number of seconds you want your handles to last. For instance, in Figure BC3-2, I've entered 00:00:02:00 to create a 2-second handle for the media, which is more than enough for any future trimming operations.

**5. Uncheck the box labeled Duplicate Selected Items and Place into a New Project.**

To conserve space, you must uncheck this option. However, you may leave this option checked if you want to create a new project in which to place your truncated sequence and clips. For instance, you may want to start fresh with a new project and delete the older project later. However, using this option doesn't remove the media from your hard drive. Instead, it creates a new project and takes up even more space on your hard drive.

**6. Review the information in the Summary area to confirm that you made the correct selections and then click OK.**

The Summary area provides a visual representation of the amount of disk space occupied by your media before (Original) and after (Modified) the Media Manager operation you have selected. When you run the mouse over a bar, more information about the media, such as its size and duration, is listed in the Summary area.

**7. A Confirm Media Modifications box opens and warns you that you cannot undo this action.**

At this stage, you can choose to either abort or continue.

**8. Click Continue to finish the process.**

This function of Media Manager deletes material from your source files. Make sure that deletion is what you want to do before you click the Continue button.





Because you're clever enough to be using Final Cut Pro in the first place, you can do the following things to save your bacon in case of a problem or premature deletion using Media Manager:

- ✓ Remember to keep a copy of the original media on tape, CD, or DVD.
- ✓ Adequately label your media with a system that corresponds to the clips in your project.

The sweetest words to a project manager's ears are "Don't worry — I kept the originals as a backup, and I know right where they are."



If you chose to include handles, you may get a warning message that your specified handle size exceeds the length of available media for one or more items. Don't worry about this; it just means that some of your media clips don't have enough frames to fill the handle length you've specified. That's fine — Final Cut just includes as many frames' worth of handles as are available.

## *Safely moving projects to new locations*

Why is moving media safely such a big deal? The captured media exists as files on the hard drive you designated as your scratch disk. (Refer to Chapter 2 for more information on scratch disks.) The icons that represent clips in the Browser window are merely pointers (a kind of alias) to the actual media files. If you arbitrarily move a media file (listed in the Browser window) to a new location on your hard drive, you break the link between the clip's alias in the Browser and the actual media file on your hard drive. These clip icons (aliases) have no way of finding and maintaining that link without your help. With Media Manager, you can move part or all of a project to a new location or disk and not lose the links between the clips and their respective media files.

Suppose that you just bought a new FireWire hard drive, and you want to move your current project to a new folder on that drive. Follow these steps to do so:

- 1. In the Browser, select all the items in your project that you want to move, and open Media Manager by choosing File⇨Media Manager.**
- 2. In the Media Manager window, choose the Move option from the Media drop-down menu in the upper-left corner of the Media area, as shown in Figure BC3-3.**

Make sure that the Delete Unused Media from Selected Items option, the Use Handles option, and the Duplicate Selected Items and Place into a New Project options are unchecked.

- 3. Check the Include Render Files option to save render files that are linked to your sequence.**

Of course, if you don't want to save your render files, leave this box unchecked. Why would you not want to save your render files? For

one thing, you can always get them back by rendering. Also, avoiding moving the render files may save you space on your destination disk.

**4. Click the Browse button to select a new drive or location.**

You're presented with the Choose a Folder dialog box. Navigate to the drive where you want to save your media.

**5. Create a new folder to hold the sequence and its media.**

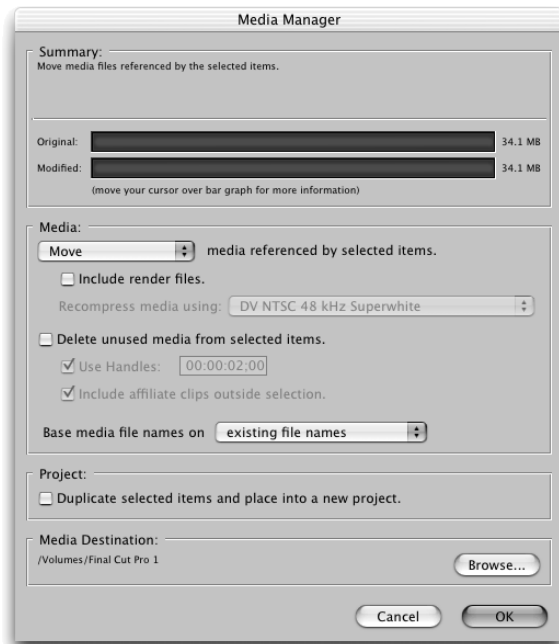
In the Choose a Folder window, click the New Folder button to create a new folder. This folder is the one that contains your final media and project.

**6. Check the Summary areas to confirm that you made the correct selections and that you have adequate disk space, and then click OK in Media Manager.**

The Summary area provides a visual representation of the amount of disk space occupied by your media before (Original) and after (Modified) the Media Manager operation you have selected. When you run the mouse over a bar, more information about the media, such as its size and duration, is listed in the Summary area.

**7. The Confirm Media Modifications box opens and warns you that you cannot undo this action.**

If you're sure that this is what you want to do, click Continue, and the operation is complete.



**Figure BC3-3:**  
Moving files  
to new  
locations.

## *Duplicating and saving sequences for future use*

Suppose that you've been working for some time on a sequence that is the generic opening background for a series of tutorials you're doing for a class. You have sweated over it for days. You know that you want to use that video again. The sequence you created looks perfect, and you don't want to run the risk of corrupting or deleting it. Instead, you decide to make a copy of the sequence and tuck it away for safekeeping, possibly on a backup disk or on a temporary partition that you plan to burn to a CD later. Follow these steps to back up the finished sequence:

- 1. Select in the Browser a sequence you want to duplicate, and open Media Manager by choosing File⇨Media Manager.**
- 2. In the Project area, check the Duplicate Selected Items and Place into a New Project box.**
- 3. If you want only the media from the sequence itself, check the Delete Unused Media from Duplicated Items option.**

Of course, deleting unused media reduces your final media size. Leaving this option unchecked moves even the unused media in the sequence and creates larger file sizes.

- 4. Choose Copy from the drop-down menu in the upper-left corner of the Media area to create new copies of your media (see Figure BC3-4).**

Alternatively, you can make other choices, such as Create Offline, which results in an offline sequence with no media linked to it. You can use this offline sequence to recapture your media at a later time.

- 5. Check the Include Render Files box to save render files that are linked to your sequence.**
- 6. If you want to include the media that occurs outside the In and Out points of existing clips in your sequence but between other clips from the same master clip, check the Include Affiliate Clips Outside Selection box.**

Affiliate clips can be a bit confusing to understand at first. Essentially, *affiliate clips* are media in a sequence that simply reference a master clip. These affiliate clips can reference different parts of a single master clip based on the In and Out points that were set for each clip when they were added to the Timeline. By checking the Include Affiliate Clips Outside Selection box, you're telling Media Manager that you want to include additional media for other related affiliate and master clips that are in your project. This operation may include lots of media from a master clip, such as the media that falls between two unconnected affiliate clips that are part of the same master clip. If you're satisfied with your sequence as it

is, and you don't plan to make any more changes to it, you don't need to keep this option checked. Keeping all the material outside the current clips (particularly when a project is duplicated) can create very large file sizes and take up more precious space on your hard drive.

**7. Click the Browse button to select a drive where you want to move your media.**

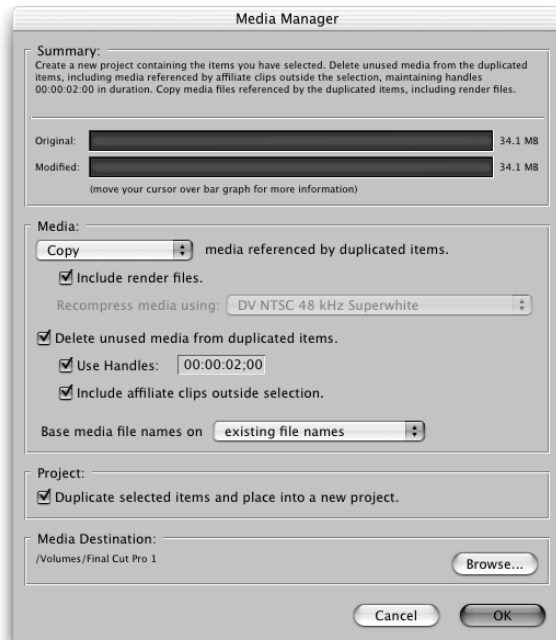
Create a folder on your hard drive to hold the new project you're about to create and your sequence's media.

**8. Check the Summary area to confirm that you made the correct selections and that you have adequate disk space, and then click OK in Media Manager.**

The Summary area provides a visual representation of the amount of disk space occupied by your media before (Original) and after (Modified) the Media Manager operation you have selected. When you run the mouse over a bar, more information about the media, such as its size and duration, is listed in the Summary area.

**9. In the Save dialog box that opens, name your project, confirm the location for the save operation, and click Save.**

A small horizontal progress bar appears, indicating that the data is being saved.



**Figure BC3-4:**  
Duplicating  
and saving  
sequences.

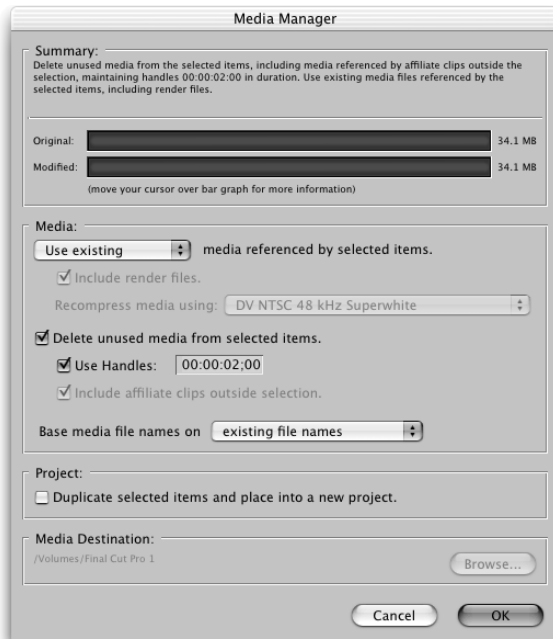
A new tab appears in the Browser window, confirming that your sequence is now a separate collection of media in a new location.

## Trimming media

Imagine that you're at the end of your project, and you now know what material you really need in order to complete it. Space on your hard drive is at a premium, and you want to get rid of the unused portions of the source files. You need to think carefully here: "Which source files am I using? What can I afford to trim? How many times do I use material from the same master clip, but in different pieces (affiliate clips)?" If you have sorted out all that and know that you have a long media file that could be trimmed significantly, this section is for you. Follow these steps to trim your media:

1. **In the Browser, select just the sequence you want to trim, and open Media Manager by choosing File→Media Manager.**
2. **Check the Delete Unused Media from Selected Items box.**
3. **In the Media area, choose the Use Existing option from the drop-down menu in the upper-left corner (see Figure BC3-5).**

Note that the Include Render Files box is checked automatically.



**Figure BC3-5:**  
Trimming  
sequences.

- 4. To leave some extra room around the In and Out points, check the Use Handles option, and enter the length of the handle.**

To enter this value, select the Use Handles field, and type the numbers. For instance, in the example shown in Figure BC3-5, I have entered 00:00:02;00 for a 2-second handle.

- 5. Review the Summary area to confirm that you made the correct selections and then click OK.**

A Confirm Media Modifications box appears, warning you that you cannot undo this action. You can choose either Abort or Continue in the Media Modifications dialog box.

- 6. Click Continue to finish the process.**



I offer this word of caution: This action deletes material from your source files. Make sure that this is what you want to do before you click the Continue button.

## *Performing simple backups*

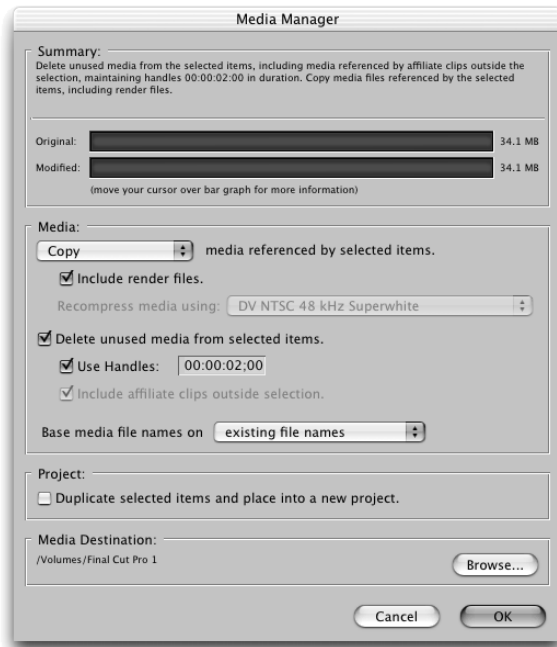
Want to put your whole project in the vault on your new FireWire external hard drive? Want to burn all the sequences and the corresponding media to a DVD? Or want to back them up to a third hard drive in your tower? Media Manager helps you quickly and easily copy your entire project to a backup drive or partition. If your computer is networked, you can even place the backup on the server. Follow these steps to back up your project:

- 1. In the Browser, select all the material you want to back up, and open Media Manager by choosing File⇨Media Manager.**
- 2. In the Media area, choose the Copy option from the drop-down menu in the upper-left corner to leave your original source media files alone and create new copies (see Figure BC3-6).**
- 3. Check the Include Render Files option to save render files that are linked to your sequence.**

Bear in mind that because all render files can be re-created by re-rendering, many users choose not to save their render files in a backup. Depending on how many renders you have in your Timeline, this action can result in a significant space savings.

- 4. Click the Browse button to select a new drive or location.**

The Choose a Folder dialog box appears. Navigate to the drive where you want to save your media.



**Figure BC3-6:**  
Backing up  
a project.

**5. Create a new folder to hold the sequence and its media.**

While still in the Choose a Folder window, you can click the New Folder button to create a new folder. This folder is the one that contains your final media.

**6. Check the Summary area to confirm that you made the correct selections and that you have adequate disk space on the target disk or media, and then click OK.**

The Summary area provides a visual representation of the amount of disk space occupied by your media before (Original) and after (Modified) the Media Manager operation you have selected. When you run the mouse over a bar, more information about the media, such as its size and duration, is listed in the Summary area.

**7. In the Save dialog box that opens, name your project, confirm the location, and click Save.**

A small horizontal progress bar appears, indicating that the data is being saved.



This is a backup, so none of the deletion or replace options is selected.

## Using Media Manager with OfflineRT Compression

In Final Cut Pro 3, Apple introduced *OfflineRT*, a compression scheme that creates compressed files of timecode-accurate video that play back at lightning speed. Designed with the mobile editor in mind, OfflineRT can be used on a PowerBook. (Check with Apple, at [www.apple.com/finalcutpro](http://www.apple.com/finalcutpro), to see whether your PowerBook is fast enough.) OfflineRT enables you to edit to your heart's content and to view many effects and transitions in real-time. (That's where the *RT* in OfflineRT comes from.)

Here's the best part: Media Manager lets you create OfflineRT files for a draft edit with the greatest of ease and then convert them back again to DV video (or whatever format you were working in). In the steps I provide in this section, you can use Media Manager to export a sequence to your PowerBook by using OfflineRT so that you can edit your sequence on the go. When you get back to your desktop computer, you can open the sequence again in Final Cut Pro and reconnect the sequence to your original DV media by using the Media Manager.

Although OfflineRT is basically designed for creating a rough draft of your sequence, the quality is good enough to do serious edits. This type of task is possible because your Mac is doing much less work: The file format is a Photo JPEG codec at 320 x 240 pixels and 35 percent compression. That works out to a compression rate of approximately 2 hours of video for every gigabyte of hard drive space, which means that you can pack most, if not all, of the video for an average-size feature film on a typical PowerBook 20GB internal hard drive. Follow these steps to recompress your full-quality media for use with the Offline RT feature:

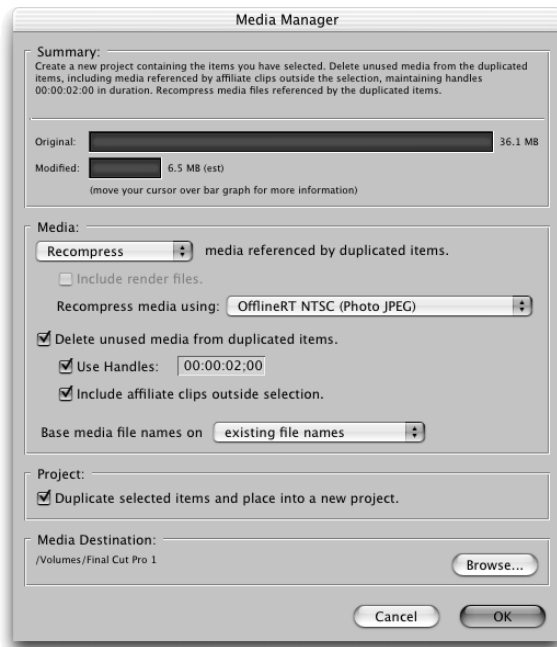
- 1. In the Browser window, select the sequence you want to save in the OfflineRT format.**
- 2. Control+click the selected sequence, and choose Media Manager from the contextual menu that appears.**

Alternatively, you can select the sequence in the Browser and then choose File⇨Media Manager.

- 3. In the Media area, choose the Recompress option from the drop-down menu in the upper-left corner, as shown in Figure BC3-7.**

The Recompress option allows you to export your selected media by recompressing it with a sequence preset other than the one you used for your media.

**Figure BC3-7:**  
Media  
Manager  
settings for  
creating an  
OfflineRT  
version of  
your  
sequence  
and media.



**4. From the Recompress Media Using drop-down menu, choose OfflineRT NTSC (Photo JPEG).**

**5. Click the Browse button to select a drive or location.**

The Choose a Folder dialog box appears. Navigate to the drive where you want to save your media.

**6. Create a new folder to hold the sequence and its OfflineRT media.**

In the Choose a Folder window, you can click the New Folder button to create a new folder. This folder is the one that contains your final media and project. Later, you may move this folder to a PowerBook or to another computer to edit in the OfflineRT format.

**7. Check the Summary areas to confirm that you made the correct selections and that you have adequate disk space, and then click OK.**

The Summary area provides a visual representation of the amount of disk space occupied by your media before (Original) and after (Modified) the Media Manager operation you have selected. When you run the mouse over a bar, more information about the media, such as its size and duration, is listed in the Summary area.

In the Summary area, Final Cut Pro indicates whether you have adequate disk space to move these files.

The Confirm Media Modifications box opens and warns you that you cannot undo this action.

8. **If you're sure that this is what you want to do, click Continue, and the operation is completed.**

Now that your media is saved in the OfflineRT format, you can move it to your PowerBook for mobile editing or to another computer. The OfflineRT format allows for real-time effects and speedy renderings.

Who says that you can't hang out at the beach and still make movies?



Want an easy way to move those Offline RT files over to your PowerBook? First, boot your PowerBook while holding down the T key, and it should start in FireWire mode. Your PowerBook then acts just like a FireWire drive! Now plug the PowerBook into your desktop computer with a FireWire cable, and it mounts on your desktop. Finally, choose the PowerBook as the destination in the Media Manager (see Step 5 in the preceding set of steps).

## Auto-Relinking Media Files

Your clips in the Final Cut Pro Browser window are linked to their respective media files (stored on your hard drives) by location. If you move the media files around on your drives, Final Cut Pro may be unable to link to them. Although Final Cut Pro 4 does a good job of following the changes you make to clips, in some instances, you encounter files that need to be relinked. These unlinked files are also known as *offline* files. (Offline clips have a red slash across them in the Browser.)

Final Cut Pro sports a handy auto-relink feature that you can use to relink to the media files you just moved. Note that Final Cut Pro automatically presents this relinking option when you have moved some media files around. In addition to the auto-relink feature that's presented here, I outline in the following section a method for manually relinking files.

To auto-relink files in Final Cut Pro, follow these steps:

1. **Open a Final Cut Pro project that has broken links between clips and their media files.**

The links may have been broken because you knowingly or unknowingly moved the media files on the drives to another folder.

If the project contains broken links, the Offline Files dialog box is automatically presented to you, as shown in Figure BC3-8. The main section of this dialog box lists the names of the unlinked files.

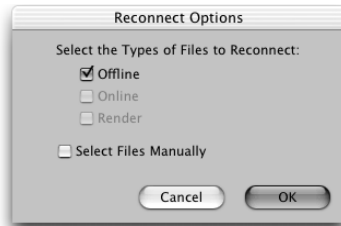
**Figure BC3-8:**  
The Offline Files dialog box warns you about unlinked files.



**2. Click the Reconnect button to relink the media files in the list.**

The Reconnect Options dialog box appears, as shown in Figure BC3-9. Choose the kind of files you want to reconnect, and click OK. In this dialog box, you may choose to relink just the files that are offline, relink online files to other media files, or relink render files.

**Figure BC3-9:**  
Select the type of files you want to reconnect.



**3. Click OK when you've made your choices in the Reconnect Options dialog box.**

Final Cut Pro searches for the offline files by name and displays the Reconnect dialog box (as shown in Figure BC3-10), in which you can identify the files. If Final Cut Pro finds a file you're looking for, it highlights it in the Reconnect dialog box. Of course, it's at times like these

that you can see why it's important to give your media clips different names when capturing or importing them. Otherwise, Final Cut will not be able to relink media properly, because it won't be able to determine the difference between two media files with the same name.

**4. Select the correct file, and click Choose.**

Final Cut Pro relinks the file and continues through the list of other unlinked files.



**Figure BC3-10:**  
The Reconnect dialog box allows you to select media files for relinking.



A handy option in the Reconnect dialog box is the Reconnect All Files in Relative Path check box. Checking this option relinks all other files if you find one media file in a folder where all your other media files are located.

## *Manually Relinking Files*

When you open a project, Final Cut Pro automatically checks links between the clips in your Browser and the media files on your drives. If any of the media files has been moved, deleted, or renamed, Final Cut Pro may warn you with the Offline Files dialog box.

When Final Cut Pro presents you with the Offline Files dialog box, you have the choice of auto-relinking (which I discuss in the preceding section) or bypassing the relinking phase by clicking OK. You may want to skip relinking for now, for any number of reasons. For instance, you may want to finish another task and then return to relinking later.

If you choose to manually relink your files, follow these steps:

- 1. In the Browser window, select an offline clip or clips (indicated by a red slash), and choose File⇨Reconnect Media.**

Alternatively, you can Control+click an offline clip and then choose Reconnect Media from the contextual menu that appears.

The Reconnect Options box appears.

- 2. Select the type of files you want to reconnect, and click OK.**

In the Reconnect Options dialog box, select Offline, because you're trying to relink files that are offline. You also have the choice of relinking online files, which means that you can relink online files to media files that didn't originally belong to the clips.

Final Cut Pro searches for the media files by name and presents them in a dialog box.

- 3. Highlight the appropriate file, and click Choose to reconnect the files.**



When you select an offline clip in the Browser and reconnect the media file by using the contextual menu's Reconnect Media option, only that clip is relinked to the media file. If that same offline clip is already being used in a Timeline sequence, the clip in the sequence isn't relinked. To reconnect an offline clip both in the Browser and in a Timeline sequence at the same time, you must select the clip in the Browser *and* select the sequence by clicking it (hold down Shift while clicking to select multiple clips or the entire Timeline) before you choose the Reconnect Media option.