

Modifying iDVD Itself

As you've probably discovered, the iDVD program icon isn't really an application icon at all—it's a Mac OS X *package* (a folder disguised as a double-clickable icon). Because Mac OS X programs are often built as packages in this way, they give you a great opportunity to hack the program itself—to change its look, reassign its keystrokes, and so on.

This is a rush, an illicit-feeling power trip, but it doesn't actually hurt anything. As long as you've got your original iLife DVD on hand, so that you can install a fresh, unmodified copy of iDVD if necessary, you can do whatever you want to a copy and still sleep peacefully at night.

Download the Developer Tools

The following instructions assume that you have a copy of Apple's XCode *Developer Tools*.

The Developer Tools are essential for anyone who writes software for Mac OS X. The programs that come with them help you create, debug, and compile programs. But the Developer Tools can be useful even if you're not a programmer. They include some useful utilities, including PropertyList Editor (which makes it easy to edit a program's preference files).

These tools are on your Mac OS X DVD, in a folder called XCode Tools.

Dive into iDVD

Follow these steps to open your copy of iDVD and begin your joyful hacking.

1. **Open the iDVD application package.**

By now, you probably know the drill: Control-click (or right-click) the iDVD application icon; from the shortcut menu, choose Show Package Contents.

2. **Open the Contents→Resources folder. Open your language folder.**

iDVD contains separate folders for each language. For this example, open the English.lproj folder.

3. **Double-click the icon called DVDDocument.nib.**

This document opens in the program called Interface Builder, which is one of the developer tools programs.

Interface Builder lets you both create and modify the interfaces of your programs. You can change window titles, move buttons around the screen, add or remove menu commands, and more.

What you're now seeing is the behind-the-scenes layout of the iDVD program itself (see Figure 18-5).

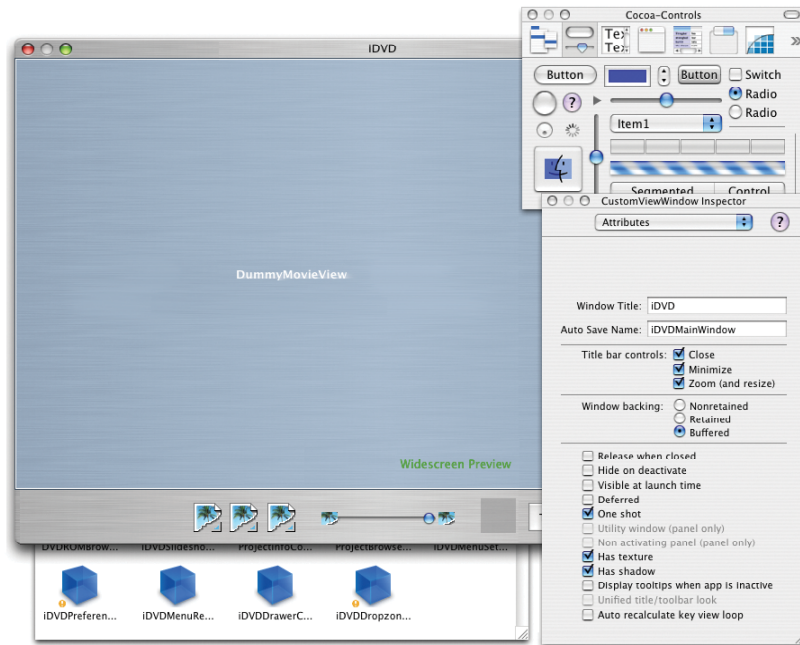


Figure 18-5: Interface Builder shows you a map of the various buttons, checkboxes, and other elements that compose its screen. It doesn't look exactly like iDVD, because this is just its skeleton, but it's enough for the little experiment you're about to try.

In this example, you'll create a custom button that turns off the sound in iDVD without stopping the videos that play on your buttons, drop zones, and backgrounds. (Ordinarily, clicking the Motion button in iDVD simultaneously silences the music and stops all video playback.)

Tip: Remember to turn both sound and motion back on again before you burn a DVD—if, that is, you want these features to appear in the finished product.

Of course, your first worry is where you're going to put this button. The only space for buttons is the row of icons at the bottom edge of the iDVD window, but there's plenty of space to the left of the Motion button.

In the next step, you're going to need the Cocoa palette (Figure 18-6, top right). If it isn't already open (usually at the upper-right corner of your screen), choose Tools→Palettes→Show Palettes (⌘-/).

1. In the Cocoa palette, click the Buttons button (shown at top in Figure 18-5).

The palette changes to show you a variety of button designs.

2. Drag the round, clear button on the Buttons palette (the second button in the top row of buttons) to the left of the Motion button.

Make sure to drag it far enough to the left. If you see a box around the three central buttons (they're grouped together), you're still too far to the right.

You've just installed a new button in iDVD. Unfortunately, when you click it, it won't do anything at all—yet.

3. Choose Tools→Show Info (Shift-⌘-I).

The Show Info dialog box appears. Make sure that the pop-up menu at the top says Attributes.

4. Click in the third line (Icon). Type *MiniAudio1N*.

Type the phrase exactly as you see here, including spelling and capitalization. (The second to last character is a 1, not an L.) You're directing Interface Builder's attention to a certain graphic that's already in the

Contents→Resources folder of your iDVD Application. In short, you're giving your new button a face—an icon of its own.

5. Center the new image.

Click the square to the right of the phrase Icon Pos at the bottom of the Inspector. It's the middle button on the top row, of the 6 possible icon locations. This tells Interface Builder to center the speaker image over the new button.

6. Change the button behavior.

From the button-behavior pop-up menu, choose Push on/Push off; you've just turned the button into switch that you can (surprise!) push on and push off. Then turn on Selected, which sets the initial on/off setting to On just as iDVD's initial setting is "sound on."

7. Close the Info panel.

A broken-picture icon now appears over your button. That's normal—and temporary.

In the next step, you're going to need the DVDDocument.nib window, which should also be somewhere on your screen (Figure 18-6). Move the window until you see both your new button *and* the iDVDMenuSettingsController cube at the same time. (You can probably see only part of the cube's name: *iDVDMenuSet*.)

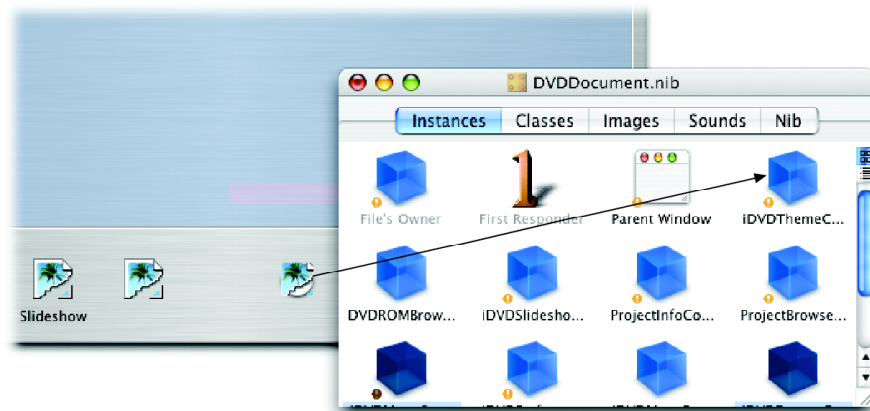


Figure 18-6:

The DVDDocument window has five tabs: Instances, Classes, Images, Sounds, and Nibs. Make sure that the Instances tab is selected. Set your windows so you can see both your new button and the iDVDMenuSet cube at the same time.

8. While pressing the Control key, drag from your button to the iDVDMenuSet cube. Wait until a box appears around the cube before releasing the mouse.

A strange little line connects your new button with the cube. When you let go, the Info panel reappears, with the Connections panel in view (Figure 18-7). You've just taught iDVD to make a connection between your newly placed button and some action, which you'll specify in the next step.

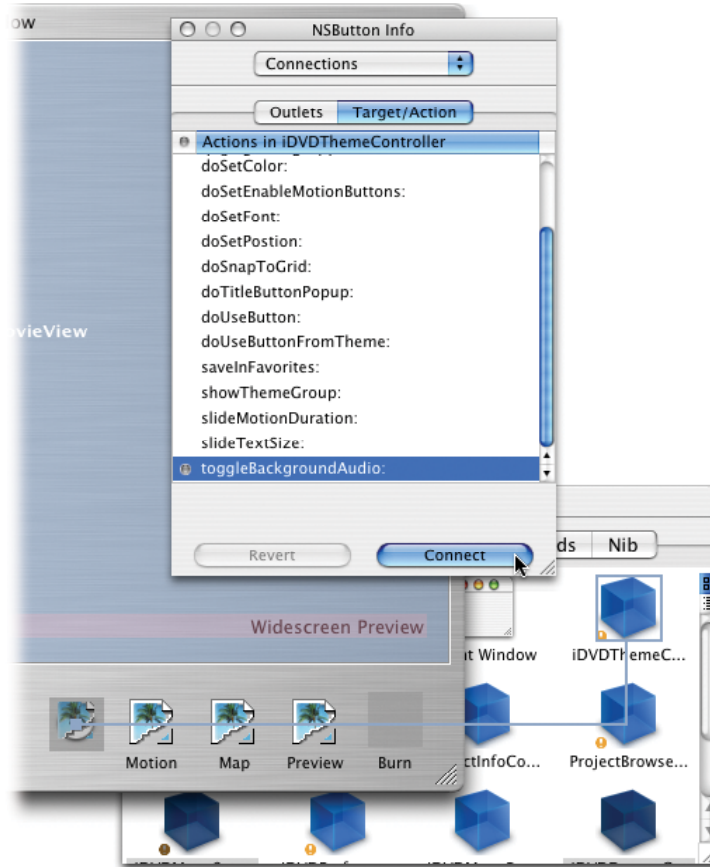


Figure 18-7:

The Connections panel lists all the different functions that your new button can perform. Many of them use cryptic names, but you can generally figure out what they do.

9. At the very bottom of the scrolling list on the right side, double-click `toggleBackgroundAudio:` (or whatever portion of this term you can see in the list).

An indented dot appears to the right of `toggleBackgroundAudio:`, as shown in Figure 18-7. You've just given your new button a purpose in life—something that will happen whenever somebody clicks it.

10. Choose **File**→**Save** (⌘-S). Quit Interface Builder.

If you open your modified copy of iDVD, you'll see that your new button appears at the bottom of the window (as shown in Figure 18-8). To test your new button, choose a theme that contains video and audio menu screens. Make sure that they're playing—and then click your new button. Marvel as the sound cuts out, but the video continues.

One small step for iDVD, perhaps, but a giant leap for your understanding of how Mac software is made.

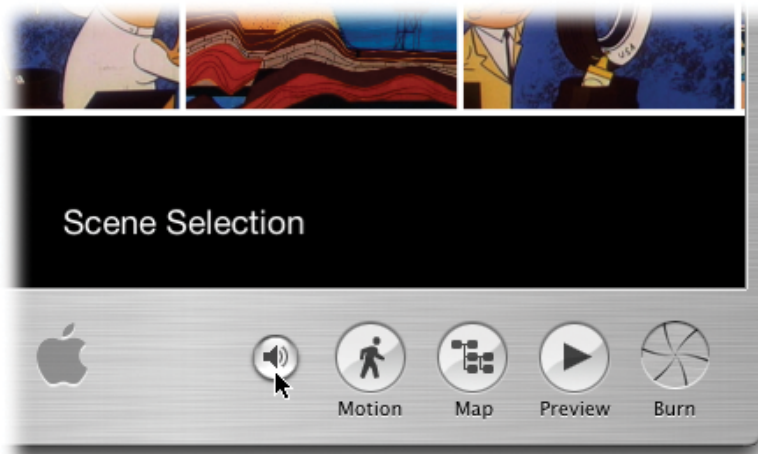


Figure 18-8:
Presto—a new Mute button that didn't exist before!