15 Adding Interactive Slices and Rollovers



Slices are divisions of an image area that you can define using Adobe Photoshop or Adobe ImageReady. You can animate your slices, link them to URL addresses, and use them for rollover buttons.

Another practical use of slices is to optimize them individually in different Web image formats to maximize the effectiveness of your Web images while minimizing download times.

In this lesson, you'll learn how to do the following:

- Create image slices, using four different methods.
- Optimize individual image slices using various settings and file formats.
- Create "no image" slices to contain text and HTML.
- Create rollover buttons.
- Apply a warped text style to a text layer.
- Create Over, Down, and Selected rollover states for slices.
- Specify different combinations of hidden and visible layers as the designated conditions of various rollover states.
- Generate an HTML page that contains the sliced image in a table.

This lesson will take about 90 minutes to complete. The lesson is designed to be done in Adobe Photoshop and Adobe ImageReady. Some sections must be done in ImageReady.

If needed, remove the previous lesson folder from your hard drive, and copy the Lesson15 folder onto it. As you work on this lesson, you'll overwrite the start files. If you need to restore the start files, copy them from the *Adobe Photoshop 7.0 Classroom in a Book* CD.

Note: Windows users need to unlock the lesson files before using them. For more information, see "Copying the Classroom in a Book files" on page 4.

Getting started

Before beginning this lesson, restore the default application settings for Adobe Photoshop and Adobe ImageReady. See "Restoring default preferences" on page 5.

You'll start the lesson by viewing an example of the finished HTML banner that you'll create. The banner graphics react to your actions with the mouse. For example the image changes appearance when the pointer "rolls over" some areas or you click those areas.

1 Start a Web browser, and open the end file Banner.html from the Lessons/Lesson15/ 15End/Architech Pages folder.

The file contains an HTML table that links to several Web images all created from Photoshop and ImageReady slices.



2 Move the mouse pointer over the "designs," "structures," "art," and "contact" buttons in the banner.

Notice the small graphics that appear to the left of the buttons when you move the pointer over the first three buttons. Also notice the change in the word *Architech* when you move the pointer over the last button.

- **3** Hold down the mouse button and drag the pointer over the first three buttons, noticing how the word *Architech* changes this time. Release the mouse button.
- 4 Move the pointer over the large blue circle near the center of the image and let it hover until you see a pop-up text box with additional information. Then click the blue circle to go to the Team page.
- 5 On the Team page, try rolling the pointer over the three different buttons and notice the changes. Try clicking each button, and then click the Team button. Notice the changes.

6 When you're done viewing the end file, close it and quit the browser.

About slices

Slices are areas in an image that you define based on layers, guides, or precise selections in the image, or by using the slice tool. When you define slices in an image, Photoshop or ImageReady creates an HTML table or cascading style sheet to contain and align the slices. If you want, you can generate an HTML file that contains the sliced image along with the table or cascading style sheet.

You can optimize slices as individual Web images, add HTML and text to slices, and link slices to URL addresses. In ImageReady, you can animate slices and create rollovers with them.

In this lesson, you'll explore different ways to slice an image in Photoshop and ImageReady, optimize the slices, and create four rollover buttons for the banner.

To learn how to animate slices, see Lesson 16, "Creating Animated Images for the Web."

Slicing an image in Photoshop

Adobe Photoshop lets you define slices using the slice tool or by converting layers into slices. You'll begin the lesson by slicing parts of a banner image for buttons using the slice tool in Photoshop. You'll name the slices and link them to URL addresses, and then optimize the slices. Then you'll continue slicing the banner image in ImageReady and create rollovers for the button slices.

About designing Web pages with Photoshop and ImageReady

When designing Web pages using Adobe Photoshop and Adobe ImageReady, keep in mind the tools and features that are available in each application.

- Photoshop provides tools for creating and manipulating static images for use on the Web. You can divide an image into slices, add links and HTML text, optimize the slices, and save the image as a Web page.
- ImageReady provides many of the same image-editing tools as Photoshop. In addition, it includes tools and palettes for advanced Web processing and creating dynamic Web images such as animations and rollovers.

-From Adobe Photoshop 7.0 online Help

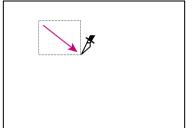
Experimenting with slices in Photoshop

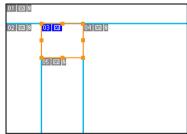
In this procedure, you'll learn not only some of the ways you can create slices, but also the difference between use slices and auto slices. User slices and auto slices also have different capabilities, which is the reason that it is important to understand the distinctions between them.

- User slices are areas that you actively designate as slices.
- Auto slices are the rectangular divisions of the remainder of the image—all the areas that are outside of a user slice. Photoshop and ImageReady create these slices for you.
- 1 Start Adobe Photoshop.

If a notice appears asking whether you want to customize your color settings, click No.

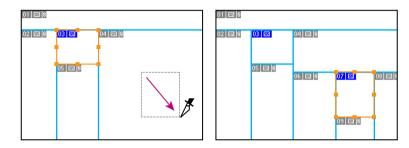
- **2** Choose File > New, and then click OK to accept the default settings.
- **3** Choose View > Show > Slices so that a checkmark appears on the Slices command.
- 4 In the toolbox, select the slice tool (**), and then drag a small rectangle anywhere inside the image window. You have just created a user slice.





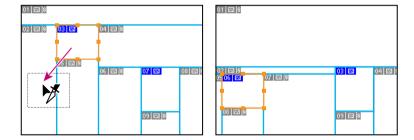
Notice that the rectangle is selected (borders are highlighted and handles are visible). Also, notice that there are other slices, which are identified by a differently colored label. These other slices are the auto slices. Each slice is numbered.

5 Create another user slice by dragging the slice tool in another area of the image window.



Slices are numbered sequentially, moving from top to bottom and left to right across the image. When you define a new user slice, all the slices in the image are renumbered.

- **6** In the toolbox, select the slice select tool (******) hidden under the slice tool, and try the following:
- Select one of the user slices you drew. Drag it to another position. Then drag one of the anchor points to resize the slice.

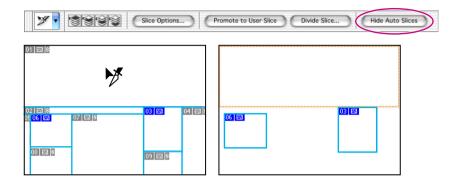


• Select one of the auto slices. Then try dragging or resizing it.

Although you can select both user slices and auto slices, you can drag and resize only user slices. Auto slices do not have selection handles.

7 Select one of the larger slices (either a user slice or an auto slice), and then go to the tool options bar and try the following actions:

• Click the Hide Auto Slices button. Then click it again (as the Show Auto Slices button).



- Click the Slice Options button and examine the options available in the Slice Options dialog box. Click Cancel to close the dialog box. You'll do more work with this shortly.
- Click the Divide Slice button, and then make sure that the Preview button is selected in the dialog box and that you can see the entire selected slice in the image window. Then, in the dialog box, select the Divide Horizontally Into check box and enter a number greater than one for the number of evenly spaced slices you want to create. Notice the results. Repeat for the Divide Vertically Into option. When you finish experimenting, close the dialog box.

Note: In ImageReady, choose Slices > Divide Slice to do this procedure.

8 Choose File > Close, and do not save your changes.

Types of slices

Slices you create using the slice tool are called user slices; slices you create from a layer are called layer-based slices. When you create a new user slice or layer-based slice, additional auto slices are generated to account for the remaining areas of the image. In other words, auto slices fill the space in the image that is not defined by user slices or layer-based slices. Auto slices are regenerated every time you add or edit user slices or layer-based slices.

User slices, layer-based slices, and auto slices look different—user slices and layer-based slices are defined by a solid line, while auto slices are defined by a dotted line. In addition, each type of slice displays a distinct icon. You can choose to show or hide auto slices, which makes your work with user and layer-based slices easier to view.

A subslice is a type of auto slice that is generated when you create overlapping slices. Subslices indicate how the image will be divided when you save the optimized file. Although subslices are numbered and display a slice symbol, you cannot select or edit them separately from the underlying slice. Subslices are regenerated every time you rearrange the stacking order of slices.

-From Adobe Photoshop 7.0 online Help

Using the slice tool to create slices

Now that you've had a taste of how slices work, you'll start making changes to the sample project for this lesson. Using the slice tool, you'll define four user slices for buttons in the banner.

1 Choose File > Open, and open the file 15Start.psd from the Lessons/Lesson15/15Start folder.

If a notice appears asking whether you want to update the text layers for vector-based output, click Update.

The lesson file includes blue horizontal and vertical guide lines. You'll use the guides and the snap-to commands when you draw marquees, so that they are tightly aligned.

- **2** Choose View > Show > and make sure that both Guides and Slices are selected (checked).
- **3** Choose View > Snap To > Guides, and then choose View > Snap To > Slices to select (place checkmarks on) both of these commands.

4 Select the slice tool (*), and draw a marquee around the rectangular area containing the word *designs*.





5 One at a time, draw slice marquees around each of the other words in the same row: around the words structures, art, and contact to create slices for three more buttons.

Make sure that there are no gaps between the slices, because gaps would become auto slices. (If necessary, use the zoom tool (Q) to get a closer view, and then double-click the zoom tool to return to 100%.)

 Ω You can change the way the pointer appears on-screen for the slice tool by changing *your Photoshop preferences. To change the slice tool's standard pointer (*) to the precise* pointer (-;-), choose Edit > Preferences > Display & Cursors (Windows, Mac OS 9) or Photoshop > Preferences > Display & Cursors (Mac OS 10), select Precise for Other Cursors, and click OK.

If you need to resize a slice, select the slice select tool (**) hidden behind the slice tool, select the slice, and drag the selection handles.

6 Choose File > Save to save your work.

Setting options for slices in Photoshop

Before optimizing slices as Web images, you can set options for them, such as naming the slices or assigning URL links to them. The names you assign to the slices determine the filenames of the optimized images.

For the four user slices that you defined earlier, you'll name them, link them to other Web pages, and specify target frames.

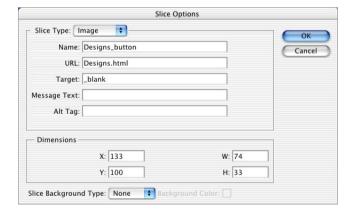
Note: Setting options for an auto slice automatically promotes it to a user slice.

- 1 Select the slice select tool (), and use it to select the Designs slice.
- **2** In the tool options bar, click the Slice Options button.



By default, Photoshop names each slice based on the filename and the slice number, so the current filename appears as "15Start_03," representing slice number three in the 15Start.psd file.

3 In the Slice Options dialog box, enter the following information: In Name, type **Designs_button**; in URL, type **Designs.html**; and in Target, type **_blank**. Then click OK.



Note: The Target option controls how a linked file opens when you click the link, such as whether the file opens in a new browser window or replaces the currently displayed file in the open browser. For more information, see Adobe Photoshop 7.0 online Help or an HTML reference (either printed or available on the Web).

- **4** Enter information for the other three user slices you created:
- Select the Structures slice and type **Structures_button** in Name, **Structures.html** in URL, and **_blank** in Target.
- Select the Art slice, and type **Art_button** in Name, **Art.html** in URL, and **_blank** in Target.
- Select the Contact slice and type **Contact_button** in Name, **Contact.html** in URL, and _blank in Target.
- **5** Choose File > Save.

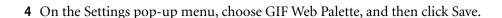
In the Slice Options dialog box, you can also enter message text to appear in the browser's status area, enter alternate text to appear in place of the images if they don't appear in the browser, specify dimensions to move or resize a slice, and change the slice to a No Image slice that contains HTML and text. Additional output settings for changing the background color of a slice are available when you open the Slice Options dialog box from the Save For Web dialog box or Save Optimized dialog box.

Optimizing slices in Photoshop

You can use Photoshop slices to optimize individual areas of the image, which is useful when some areas of the image require greater resolution or settings than the rest of the image. You optimize one or more slices by selecting them in the Save For Web dialog box, choosing optimization settings, and saving optimized files for either the selected slices or all slices. Photoshop creates an Images folder to contain the optimized files.

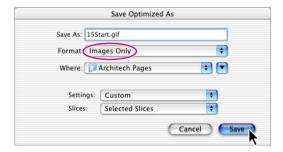
Next, you'll optimize the four user slices you defined.

- 1 Choose File > Save for Web.
- **2** On the left side of the Save For Web dialog box, select the slice select tool (**>**).
- 3 In the optimized version of the image, Shift-click to select the four slices you created.





- 5 In the Save Optimized As dialog box, do the following:
- On the Format pop-up menu, choose Images Only.
- On the Slices pop-up menu, choose Selected Slices.
- Select the Lessons/Lesson15/15Start/Architech Pages folder as the location for the saved file.
- Leave the name setting as it is (15Start.gif), and click Save.



Photoshop saves the optimized images in an Images folder within the Architech Pages folder and uses the names you specified in the Slice Options dialog box for the filenames. If there are any gaps in the table, Photoshop creates a Spacer.gif file.

6 Choose File > Save.

Slicing the image in ImageReady

You've already learned several ways to create and work with slices in Photoshop, all of which can also be done in ImageReady. Although the options sometimes appear in different locations in the two applications, you can also use either Photoshop or ImageReady to create slices from guides or layers and to optimize individual slices.

In this part of the lesson, you'll use ImageReady to convert a layer into a slice, create a No Image slice, and create a precisely shaped slice from a selection. Later in the lesson, you'll work with the Rollovers palette—a feature unique to ImageReady—to build interactivity into your images.

You'll start by jumping directly from Photoshop to ImageReady. When you use the Jump To feature to go back and forth between Photoshop and ImageReady, the currently active file also jumps with you, opening in the target application.

- 1 In the Photoshop toolbox, click the Jump to ImageReady button (). The 15Start.psd file opens in ImageReady.
- 2 Choose Window > Workspace > Reset Palette Locations to make sure that the palettes are in their default positions.

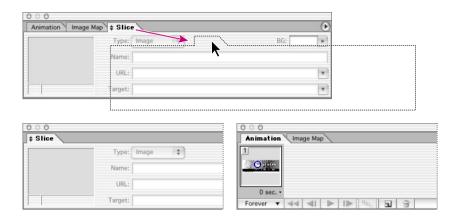
Notice that the ImageReady menu bar includes a Slices menu, and that a Slice palette tab appears in the Animations palette group in the lower left area of the workspace. This menu and palette group appear only in ImageReady, not in Photoshop.

Creating a custom workspace in ImageReady

To prepare for your ImageReady work with slices and rollovers, you'll streamline the work area by closing the palettes you won't need for these tasks and then resizing and arranging the ones you do need. By removing the clutter of unneeded palettes, you maximize your efficiency for these types of tasks. You'll save this arrangement as a custom workspace that you can reuse later.

To get a sense of the workspace arrangement you're aiming for, see the illustration with the final steps of this procedure.

- 1 Separate the palettes from their default palette groups as follows:
- Drag the Slice palette out of the Animation palette group.

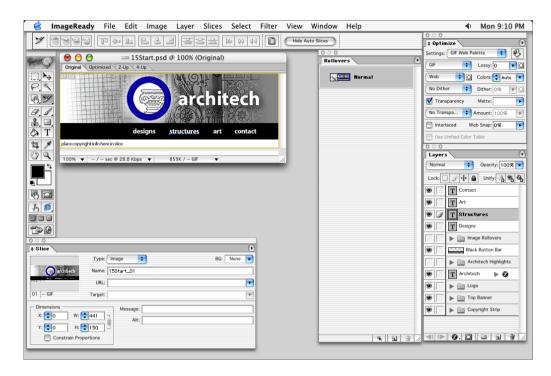


- Drag the Info palette out of the Optimize palette group.
- Drag the Rollovers palette out of its palette group (leaving the Color Table and Layer Options palettes together).
- Drag the Layers palette out its palette group (leaving the History and Actions palettes together).
- 2 You won't be using the following palettes in this lesson, so close them by clicking the close button on the palette title bar: the Animation palette group, the Info palette, the Color palette group, the Color Table palette group, and the History palette group.

Now just four palettes remain open: the Slice, Rollovers, Layers, and Optimize palettes.

- 3 Drag the Optimize palette to the upper right corner of your work area, and then open the Optimize palette menu and choose Show Options to expand the palette.
- 4 Drag the Layers palette just below the Optimize palette, and then drag the lower right corner of the Layers palette down to increase its height to take advantage of the available space.
- 5 Drag the Rollovers palette to the left of the Optimize palette. Drag its corner so that it is as tall as possible.
- **6** On the Slice palette menu, choose Show Options to expand the palette, and then drag it to the lower left corner of the work area.

Your workspace now includes all the palettes you'll need to see in this lesson, each expanded to the best size for the job.



7 Choose Window > Workspace > Save Workspace. Then, in the Save Workspace dialog box, type Rollovers_15, and click OK.

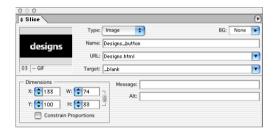
You can now select the Rollovers 15 workspace on the Window > Workspace menu whenever you need to use it, such as if your ImageReady session is interrupted before you finish this lesson.

Note: The custom workspaces you create and save for either ImageReady or Photoshop are not lost when you reset the default preferences for the application.

In Photoshop and ImageReady, you can convert all the areas between guides into user slices. When you convert guides into slices, the entire image is sliced and you lose any preexisting slices.

- 1 Choose File > Save, and then choose View > Show > and make sure that checkmarks appear by both Slices, Autoslices, and Guides commands. If not, select those commands now, as needed.
- 2 In the toolbox, select the slice select tool (♥), and then select the Designs_button slice in the image window.

In the Slice palette, notice that the slice name, URL, Target, and Alt text that you entered in Photoshop appear in this ImageReady palette.



3 Choose Slices > Create Slices From Guides.



This is a quick method for creating slices for every rectangular area between the guides.

4 Use the slice select tool to select the Designs_button slice again.

Notice that the options in the Slice palette for the Designs_button slice have changed to a default name based on the filename and slice number, and you've lost the options you set in Photoshop. Because that isn't what you want to happen, you'll undo this process.

- **5** Choose Edit > Undo Create Slices From Guides.
- **6** Choose View > Show > Guides to deselect the Guides command and hide the guides.

In Photoshop, you can perform this same task by selecting the slice tool () in the toolbox, and then clicking the Slices From Guides button on the tool options bar.

Creating a layer-based slice

Another method for defining slices in Photoshop and ImageReady is to convert layers into slices. A layer-based slice includes all the pixel data in the layer. When you edit the layer, move it, or apply a layer effect to it, the layer-based slice adjusts to encompass the new pixels. To unlink a layer-based slice from its layer, you can convert it to a user slice.

You'll create a slice based on the Copyright Strip layer, and then apply a layer effect to it so you can see how the slice adjusts to the new effect.

1 In the Layers palette, expand the Copyright Strip layer set and select the Strip Background layer.

The Strip Background layer contains the white strip that goes across the bottom of the banner.

2 Choose Layer > New Layer Based Slice.

ImageReady replaces the auto slices with one layer-based slice for the entire layer. Notice the icon () in the upper left corner of the slice that indicates that the slice is layer-based.



Note: You can still apply layer styles to the layer that you used to create the layer-based slice. The dimensions of the slice automatically increase to accommodate any extra space required to show the effect.

3 Choose File > Save to save your work in ImageReady.

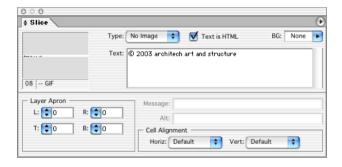
Creating No Image slices

In ImageReady and Photoshop, you can create *No Image* slices and add text or HTML source code to them. No Image slices can have a background color and are saved as part of the HTML file.

The primary advantage of using No Image slices for text is that the text can be edited in any HTML editor, saving you the trouble of having to go back to Photoshop or ImageReady to edit it. The disadvantage is that if the text grows too large for the slice, it will break the HTML table and introduce unwanted gaps.

Now you'll convert the Copyright Strip slice into a No Image slice and add text to it.

- 1 Make sure that the layer-based slice that you created for the copyright information is selected in the image window.
- **2** In the Slice palette, choose No Image from the Type pop-up menu.
- **3** Enter some copyright information for your banner in the Text box. (We used ©2003 architech art and structure.)



 \bigcirc You can add a copyright symbol by pressing Alt+0169 on the numeric keypad (Windows) or Option+G (Mac OS).

Because you chose No Image for the slice type, the layer of placeholder text ("place copyright info here in slice") that you do see in ImageReady will not appear in the Web page. The text that you typed will appear in the Web page; however, it does not appear in your sliced image in ImageReady or Photoshop.

- 4 In the Layers palette, click the arrow to collapse the Copyright Strip layer set.
- **5** Choose File > Save.

Previewing in a Web browser

To make sure that the text you type will fit in the table cell, you'll preview the image in a Web browser.

Note: (Mac OS 10 only) Make sure that you have a Mac OS 10 browser alias in place so that the browser doesn't open in classic mode.

1 In the toolbox, click the Preview In Default Browser button (or) or choose a browser from the button's pop-up menu.

The image appears in the browser window, and the HTML source for the preview appears in a table below the image. Without pressing the mouse button, move the pointer over the buttons.

Note: To add your browser to the Preview In Default Browser button, drag its shortcut (Windows) or alias (Mac OS) into the Preview In folder located inside the Helpers folder in the Photoshop 7.0 folder.

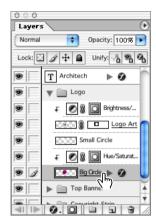
2 When you're done previewing the copyright text, quit the browser to return to ImageReady.

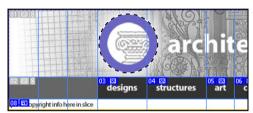
Creating slices from selections

In ImageReady, the easiest way to create a slice for a small or unusually shaped graphic element is to select the element and use the selection as the basis for the slice. This is also a useful technique for slicing objects that are crowded closely together. For graphic elements that are distinctly colored, the magic wand tool (*\) may be a good choice for making the initial selection. In this procedure, you'll use a keyboard shortcut to select a graphic element that is on its own layer.

1 In the Layers palette, expand the Logo layer set.

Hold down Ctrl (Windows) or Command (Mac OS) and select the Big Circle layer. The blue circle shape is now selected in the image window.





Choose Select > Create Slice from Selection.



Notice the additional auto slices that are created around the logo to complete the table.

In the Slice palette, enter the following: In Name, type **Logo**; in URL, type **Team.html**; and in Alt, type **Read about the team**. Enter **_blank** in the Target text box by choosing it from the Target pop-up menu.



- 5 In the toolbar, make sure that the slice tool or slice selection tool is not selected, or select any other tool.
- **6** Choose Select > Deselect to remove selection lines from the logo. The slice selection border and handles remain selected.

If the slice tool or slice select tool is currently active, the Deselect Slices command appears on the Select menu instead of the Deselect command.

7 Choose File > Save.

igcap You can choose URLs that you've already entered previously from the URL pop-up menu in the Slice palette.

Optimizing slices in ImageReady

ImageReady records separate optimization settings for every slice in the image. You specify optimization settings for a slice by selecting it and entering values in the Optimize palette. Then, you can save an optimized image file for the selected slice.

In this part of the lesson, you'll explore how to set the optimization for slices in ImageReady, and then you'll link the slices together to share the optimization settings.

Setting the optimization for selected slices

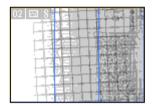
Slices use the optimization settings of the entire image until you select them and specify new settings.

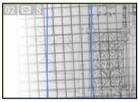
1 In the toolbox, select the slice select tool (\mathcal{Y}), and then select the number 02 auto slice in the image.



2 Click the 2-UP tab in the image window to display the original image next to the optimized image.

- 3 Choose 200% from the Zoom Level menu in the lower left corner of the image window. Notice that the quality of the optimized image at its default setting (GIF Web Palette) is poor compared to the original image.
- 4 In the Optimize palette, choose GIF 32 Dithered from the Settings menu. Now the quality of the selected slice is better than at the default GIF Web Palette setting.





GIF Web Palette setting

GIF 32 Dithered setting

- 5 Examine the optimized image at actual size by choosing 100% from the Zoom Level menu. You can click the Toggle Slices Visibility button () in the toolbox to hide the slice numbers while you're viewing the optimized image.
- **6** In the image, select another auto slice.

In the Optimize palette, notice that the selected slice has the same GIF 32 Dithered setting. This is because all auto slices are linked together, and any optimization setting that you choose for one auto slice is automatically applied to the others.

7 Choose File > Save.

You'll save the optimized slices later, after you create some rollovers. For information about the optimization settings and available Web formats for your image slices, see Lesson 14, "Optimizing Web Images and Image Maps."

igspace In ImageReady, you can link slices together to share the same optimization settings. Then, in ImageReady or Photoshop, you can change the settings for a linked slice and the new settings are instantly applied to the entire set of linked slices. Linked sets are color-coded to help identify slices in a set.

Creating rollovers

Rollovers are familiar Web effects. For example, many or even most Web pages feature some change in the appearance of a button or hotspot when you move the mouse over it, even though you don't click. This is a typical rollover state.

A rollover state is defined by the event that triggers the rollover behavior, such as a click, holding down the mouse (but not clicking), or just moving the pointer over that area of the image. For a description of the different rollover states available in ImageReady, see the sidebar "Rollover states in ImageReady," following below.

Secondary rollovers affect the appearance or behavior of other areas of the image when you perform the mouse action on the rollover button.

Only user slices can have rollover states. However, you can promote an auto slice to a user slice using the Slices > Promote to user slice command, and then assign rollover states to the slice.

Rollover states in ImageReady

When you create a rollover state, ImageReady assigns the type of state by default; however, you can easily change the state. You can also use the Rollovers palette to target the image content of a state for editing.

Over Activates the image when the user rolls over the slice or image-map area with the mouse while the mouse button is not pressed. (Over is automatically selected for the second rollover state.)

Down Activates the image when the user presses the mouse button on the slice or image-map area. The state appears as long as the viewer keeps the mouse button pressed down on the area.

Click Activates the image when the user clicks the mouse on the slice or image-map area. The state appears until the user moves the mouse out of the rollover area.

Note: Different Web browsers, or different versions of a browser, may process clicks and double-clicks differently. For example, some browsers leave the slice in the Click state after a click, and in the Up state after a double-click; other browsers use the Up state only as a transition into the Click state, regardless of single- or double-clicking. To ensure your Web page will function correctly, be sure to preview rollovers in various Web browsers.

Custom Activates the image of the specified name when the user performs the action defined in the corresponding JavaScript code. (You must create JavaScript code and add it to the HTML file for the Web page in order for the Custom rollover option to function. See a JavaScript manual for more information.)

None Preserves the current state of the image for later use, but does not output an image when the file is saved as a Web page.

Selected Activates the rollover state when the user clicks the mouse on the slice or image-map area. The state appears until the viewer activates another selected rollover state, and other rollover effects can occur while the selected state is active.

Out Activates the image when the user rolls the mouse out of the slice or image-map area. (The Normal state usually serves this purpose.)

Up Activates the image when the user releases the mouse button over the slice or image-map area.

-From Adobe Photoshop 7.0 online Help

Displaying warped text in the Over state

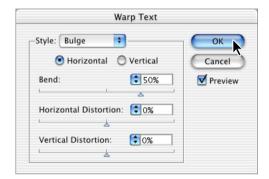
In the following topics in this lesson, you'll create several primary and secondary rollover effects for various rollover actions. You'll begin with a rollover for the Over state of the Contact button. Your goal is to make the text layer architech appear warped when the pointer moves over the Contact button. Because you'll create this rollover for the Contact button and the result will be a change in an area that is outside that slice, it fits the definition of a secondary rollover.

- 1 Click the Original tab in the image window.
- 2 Using the slice select tool (), select the Contact_button slice in the image window. Or, select it in the Rollovers palette. In either case, selecting it in one place also selects it in the other.
- 3 In the Rollover palette, click the Create Rollover State button (■). A new Over State rollover appears nested below the Contact_button slice in the palette.



- 4 In the Layers palette, select the Architech type layer.
- 5 Select the type tool (T) to display the text options in the tool options bar, and click the Create Warped Text button (1).

6 In the Style pop-up menu in the Warp Text dialog box, choose Bulge. Select Preview and wait a moment to see the effect applied to the type. (You may need to move the dialog box so you can see the type in the image.) You can try out various values for the different Bulge style settings or choose other styles to find a combination that appeals to you. When you're satisfied with a style and settings, make sure they are selected, and click OK.



The Warped Text effect is applied only to the Over state of the button.





Normal state of the Contact button

Over state of the Contact button

- 7 In the Rollover palette, click the Normal state. The word now appears in its undistorted condition.
- **8** Choose File > Save.

Previewing rollovers in ImageReady

ImageReady provides a quick way to preview rollovers in the image window without opening a Web browser. This rollover preview mode in ImageReady is consistent with Internet Explorer 5.0 (or later) for Windows.

- 1 In the toolbox, select the Toggle Slices Visibility button () to hide the slice boundaries.
- **2** Also in the toolbox, select the Preview Document button ().
- 3 Move the pointer over the Contact button in the image and notice how the Architech text changes. Also notice how the selection in the Rollovers palette switches from Normal to the Over State below the Contact_button as you move the pointer.
- 4 Click the Preview Document button again to deselect it.
- **5** Click the Toggles Slices Visibility button to show the slice boundaries.

Showing and hiding layers in an Over rollover state

When you previewed the sample finished file in your browser at the beginning of this lesson, you saw images that appeared at the left side of the button bar when you moved the mouse over those buttons. These are also examples of secondary rollovers for the Over state, but this time the change in appearance is caused by tying the visibility of different layers to the OverStates of the slices.

- 1 Using the slice select tool (******), select the Designs_button slice in the image window.
- 2 In the Rollover palette, click the Creates Rollover State button (■) to create an Over State for the Designs button slice.
- 3 In the Layers palette, select and expand the Image Rollovers layer set. If necessary, click to set an eye icon (*) for the layer set to make it visible.

4 In the Image Rollovers layer set, click to remove the eye icons (*) from the For Structures and For Art layers, as needed, so that the For Designs layer is the only visible layer in that layer set.



5 Using the slice select tool, select the Structures_button slice, and repeat steps 3 and 4, except this time make the For Structures layer visible and hide the For Designs and For Art layers.



6 Select the Art_button slice and repeat steps 3 and 4 again, but make the For Art layer the only visible layer in the Image Rollovers layer set.



- 7 In the toolbox, select the Toggle Slices Visibility button (a) and the Preview Document button (¾), and move the pointer back and forth across the buttons to see the results. Then click those two toolbox buttons again to deactivate them.
- **8** In the Layers palette, click the small arrow to collapse the Image Rollovers layer set. Then choose File > Save.

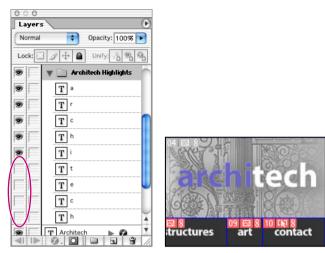
Showing and hiding layers in a Down rollover state

Next, you'll create a Down state for three of the buttons. A Down state is activated when the user holds down (but does not release) the mouse button over the slice.

- 1 Using the slice select tool (**), select the Designs_button slice in the image window.
- 2 In the Rollover palette, click the Creates Rollover State button (■). This time, ImageReady automatically creates a Down State for the Designs_button slice.
- 3 In the Layers palette, select the Architech Highlights layer set, and then click the small arrow to expand the layer set. If necessary, click the eye icon (**) for the layer set to make all the layers in it visible in the image window.

Notice the blue text that appears over the word *Architech* in the image. You'll hide parts of the blue text to draw attention to other parts of the word.

4 Click the eye icons (*) next to the bottom four layers to hide the blue highlighting for the letters "t-e-c-h."



Layers hidden in the Down state of the Designs button

The Down state of the Designs button now shows the letters "a-r-c-h-i" in blue and "t-e-c-h" in white.

- 5 In the Rollovers palette, select the Structures button slice and then click the New Rollover State button (1) at the bottom of the palette. Then, in the Layers palette, click the eye icons in the Architech Highlights layer set so that the letters "a-r-c-h" are hidden and the letters "i-t-e-c-h" are visible.
- 6 Repeat step 5 for the Art_button slice, but this time hide the letters "a-r" and "t" and leave all the other layers in the Architech Highlights layer set visible.
- 7 In the Rollovers palette, click the Normal rollover state.
- 8 In the toolbox, select the Toggle Slices Visibility button (a) and the Preview Document button (🐧). In the image window, hold down the mouse button as you drag the pointer over the three slices.
- **9** When you finish previewing, deselect the Toggle Slices visibility and Preview Document buttons, and choose File > Save.

Working with more rollover states

You can improve the usability of your Web pages by adding appropriate navigational hints for your readers. In this section, you'll work on one of the auxiliary pages for the Architech Web site and create three different kinds of visual clues to help readers find information

Creating a primary rollover state

So far, all the rollovers you've created have been secondary rollovers because the change appears outside the slice itself. This time, you'll create an Over rollover state that directly affects the appearance of the slice itself.

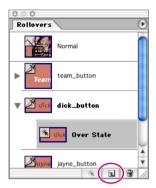
1 Choose File > Open, and select the team.psd file in the Lessons/Lesson15/15Start/Architech folder.



The new file is a page describing the Architech team. Some work has already been done for you, including the creation of some slices.

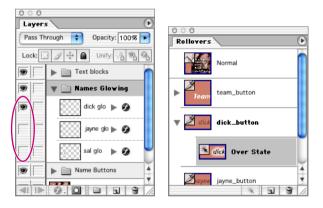
2 In the Layers palette, select the Names Glowing layer set, and click the arrow to expand it so that you can see the dick glo, jayne glo, and sal glo layers nested in the layer set.

3 In the Rollovers palette, select the dick_button slice and then click the Create Rollover State button () at the bottom of the palette.



ImageReady creates and selects an Over State rollover under the dick_button slice.

4 In the Layers palette, under the Names Glowing layer set, click to set an eye icon for the dick glo layer so that it is visible. (Leave the jayne glo and sal glo layers hidden.)



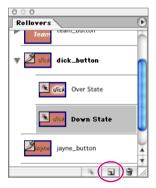
- **5** Repeat steps 3 and 4 for the jayne_button slice, but click an eye icon (*) in only the jayne glo layer, leaving dick glo and sal glo hidden.
- **6** Again repeat steps 3 and 4 for the sal_button slice, making only the sal glo layer visible in the Names Glowing layer set.
- 7 Verify your results by selecting the Toggle Slices Visibility button (a) and the Preview Document button ($\frac{1}{3}$) in the toolbar, and then moving the pointer over the three names. If you've done this procedure correctly, each name glows when the pointer is over it and returns to normal view when the pointer moves away from the slice.

- 8 In the toolbox, click the Toggle Slices Visibility button (☐) and the Preview Document button (1) again to deselect them.
- **9** Click the small arrow to collapse the Names Glowing layer set, and choose File > Save.

Creating a Selected rollover state

Ordinarily, users might expect that clicking a hotspot would jump the browser to a linked Web page. The Selected rollover state is especially useful when clicking the slice is not associated with a different URL.

1 In the Rollovers palette, select the dick_button slice, and click the Create Rollover State button (\mathbf{a}) at the bottom of the palette.



ImageReady creates a Down State rollover for the slice.

- 2 Double-click the new Down State rollover to open the Rollover State Options dialog box.
- 3 In the dialog box, select the Selected option, and click OK.

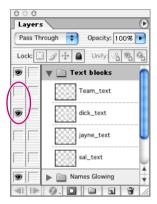


Now the new rollover shows that it is a Selected State rollover.

4 In the Layers palette, click the small arrow to expand the Text Blocks layer set. Notice the eye icons: The Text Blocks layer set and the Team layer are visible. The other three layers are currently hidden.

Note: Although the thumbnails of the layers in the Text Blocks layer set look like identical transparent layers, they're not. Each one contains white text, which is virtually impossible to see in these tiny images.

5 Click the eye icon (*) to hide the Team_text layer, and then click the visibility option for the dick_text layer so that an eye icon appears there.



Now the large text block on the right side of the image changes, showing placeholder text for a short biography about Dick.

- 6 Repeat steps 1 through 5 for the jayne_button slice, but make only the jayne_text layer visible in the Text Blocks layer set.
- 7 Again, repeat steps 1 through 5 for the sal_button slice, but make only the sal_text layer visible in the Text Blocks layer set.
- 8 Verify your results by selecting the Toggle Slices Visibility button () and the Preview Document button (5) in the toolbar, and then clicking each of the three name slices. Then deselect those two toolbox buttons.
- **9** Click the small arrow to collapse the Text Blocks layer set, and choose File > Save.

Adding alternate text

Alternate text appears under two different circumstances: when an image is not shown in the browser window, or when the user allows the pointer to hover over a hotspot. Either way, taking the trouble to add alternate text adds to the usability of your Web pages. You'll add some alternate text to four slices in the Team.psd image.

- 1 In the Rollovers palette, select the dick_button slice.
- 2 In the Alt option in the Slice palette, type **Read about Dick, our Chairman**.



- **3** In the Rollovers palette, select the jayne_button slice, and then go to the Alt option in the Slice palette and type **Read about Jayne**, **our President**.
- **4** In the Rollovers palette, select the sal_button slice, and then go to the Alt option in the Slice palette and type **Read about Sal, our Founder**.
- **5** In the Rollovers palette, select the Team_button slice, and then go to the Alt option in the Slice palette and type **Read about our expert team**.
- 6 Verify your results by selecting the Toggle Slices Visibility button (☐) and the Preview Document button (⅙) in the toolbar, and then letting the pointer hover for a few seconds over each of the four slices. Then deselect those two toolbox buttons.
- **7** Choose File > Save.

Previewing the completed pages in a browser

Before you save the optimized image slices, you'll preview the completed rollovers for the banner and team pages in a Web browser. However, the fictitious URL links that you assigned to the slices won't work in Preview In Browser mode, so you'll test them later when you generate the final HTML file and open the file from the browser.

- 1 Choose Window > Documents > 15Start.psd to switch back to the banner image.
- 2 In the toolbox, click the Preview In Default Browser button (♠) (肽) or choose a browser from the button's pop-up menu.
- 3 When the page opens in the browser window, move the pointer over each rollover button in the banner.

A different image appears for each of the first three buttons, and the warped text effect appears for the last button.

4 Hold the mouse button down when the pointer is over each button.

When you hold down the mouse button: On the Designs button, the white letters "tech" are visible; on the Structures button, the white letters "arch" are visible; and on the Art button, the white letters "art" are visible.

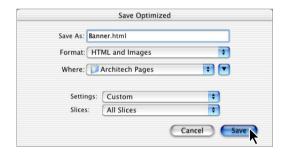
- 5 Click the blue circle in the middle of the image to open the Team.html page.
- **6** Move the pointer over the dick, jayne, and sal names to verify that the glowing Over State is functioning properly.
- 7 Click each of the four buttons (sal, jayne, dick, and Team) to verify that the Selected state is also functioning properly.
- **8** When you're finished previewing the rollovers, quit the browser and return to ImageReady.

Saving the sliced images in ImageReady

Now that the banner and team pages are complete, you'll save the optimized image slices and generate an HTML file that contains an HTML table of the sliced image.

ImageReady also lets you save slices in a cascading style sheet rather than a table. To set up the file for cascading style sheets, choose File > Output Settings > HTML. For Slice Output, select Generate CSS, and click OK. You can also change the output settings from the Save Optimized dialog box.

- 1 With the 15Start.psd file active, choose File > Save Optimized.
- **2** In the Save Optimized dialog box, enter **Banner.html** as the name. On the Format pop-up menu, choose HTML and Images, and choose All Slices from the Slices pop-up menu. Designate the Lesson/Lesson15/15Start/Architech Pages folder as the location, and click Save.



The Replace Files dialog box appears for the four button images you saved earlier in Photoshop.

3 Click Replace to save the new versions of the images.

ImageReady saves the HTML table of the entire sliced image in an HTML file and saves the optimized images for all of the auto slices, user slices, layer-based slices, and rollover states inside the Images folder. The filenames of the images are based on either the names you specified for the slices or the default names and numbers of the slices.

4 Choose Window > Documents > Team.psd to switch to the Team.psd file, and repeat steps 1 and 2, but this time enter **Team.html** as the filename for the saved optimized version.

- 5 To test the URL links that you assigned to the slices, start a Web browser and use it to open the Banner.html file. Again verify the behaviors of the rollover states of the various slices, including clicking the blue circle to open the linked Team page and testing the behaviors of those rollovers.
- **6** Close the browser, and then close the files and exit ImageReady and Photoshop. You have finished your work on Lesson 15. To learn more about using animations with your slices and rollovers, see Lesson 16, "Creating Animated Images for the Web."

Review questions

- 1 What are slices?
- **2** Describe the five ways that image slices are created.
- **3** What is the advantage of linking slices together?
- 4 Describe the method for creating a slice with boundaries that exactly encompass a small or unusually shaped object.
- 5 How do you create a slice that contains no image? What purpose would such a slice serve?
- **6** Name two common rollover states and the mouse actions that trigger them. How many states can a slice have?
- 7 Describe a simple way to create rollover states for an image.

Review answers

- 1 Slices are rectangular areas of an image that you can define in Photoshop or ImageReady for individual Web optimization. With slices, you can create animated GIFs, URL links, and rollovers.
- 2 Image slices are created when you define areas in the image using the slice tool, or when you convert guides, layers, or selections into slices. They are also created automatically for areas in the sliced image that you leave undefined.
- **3** The advantage of linking slices together is that they'll share optimization settings if you change the settings for one linked slice, the optimization settings automatically change for the other slices in the set.
- 4 Using the magic wand tool (or another appropriate selection tool) in ImageReady, select the object, and choose Slices > Create Slice from Selection.
- 5 Select the slice with the slice selection tool. In the Slice Options dialog box (Photoshop) or Slice palette (ImageReady), choose No Image from the Type menu. No Image slices can contain a background color, text, and HTML source code, or they can serve as a placeholder for graphics to be added later.

- 6 Normal and Over. Normal is active in the absence of any mouse action, and Over is triggered by moving the pointer over the slice. Selected is another state, which is triggered by clicking a slice. There are eight predefined states, counting Custom and None. But because you can create your own Custom states, there really is no limit to the number of states a slice can have.
- 7 Using a multilayer image, hide and reveal layers to create different versions of the image for each rollover state.