

Chapter 3

Working with Symbols and Instances

Learning Objectives

After completing this chapter, you will be able to:

- *Create new symbols*
- *Edit the symbols and instances*
- *Create and edit button symbols*
- *Import Adobe Photoshop files in Flash*

INTRODUCTION

In Flash, you can create movies of small file size. One way to keep the file size small is to create symbols. There are three categories of symbols in Flash namely graphics, buttons, and movie clips. Once a symbol is created in a Flash document, it is automatically saved in its library and can be used later in any of the Flash documents.

The graphic symbols are the basic category of symbols. These symbols are generally used for static images. They do not support ActionScript, filters, or blending modes.

The button symbols are used to create buttons for interactivity. A button symbol contains four keyframes. Each keyframe is used to define the behavior when the mouse pointer interacts with the button symbol. You can apply filters, blending modes, and color effects to the button symbols. These symbols require ActionScript to perform an action.

The movie clip symbols are the most powerful symbols in Flash and are generally used for animation. A movie clip symbol contains its own independent Timeline. You can add an animation to the movie clip Timeline as you do in the main Timeline and play both the animations simultaneously, making complex animations simpler. You can also apply filters, color effects, and blending modes to a movie clip and its instances. An instance is the copy of a symbol located in the Stage or inside a symbol. In addition, you can use ActionScripts to control movie clips and make them respond to the user.

Creating Symbols

In Flash, you can create symbols in two ways. They are discussed next.

1. Create a new Flash document. Next, choose **Insert > New Symbol** from the menubar; the **Create New Symbol** dialog box will be displayed. In this dialog box, specify a name for the symbol in the **Name** text box and select the required symbol type from the **Type** drop-down list. Next, choose the **OK** button; the symbol-editing mode will be displayed. In this mode, you can draw or import the graphics in the symbol.
2. Select an object or existing graphic in the Stage that you need to convert into a symbol. Next, choose **Modify > Convert to Symbol** from the menubar; the **Convert to Symbol** dialog box will be displayed. Next, specify a name for the symbol in the **Name** text box and select the required symbol type from the **Type** drop-down list. Then, choose the **OK** button; the selected object or graphic will be converted into a symbol and will be saved in the document library.

TUTORIALS

Before you start the tutorials, you need to download the *c03_flash_cs6_tut.zip* file from <http://www.cadcim.com>. The path of the file is as follows:

Textbooks > Animation and Visual Effects > Flash > The Adobe Flash Professional CS6: A Tutorial Approach

Next, extract the contents of the zipped file to `|Documents|Flash_Projects`.

Tutorial 1

In this tutorial, you will create and edit a graphic symbol and its instances.

(Expected time: 15 min)

The following steps are required to complete this tutorial:

- a. Open the Flash document.
- b. Convert the shape into a graphic symbol.
- c. Create and edit the instance of the symbol.
- d. Edit the symbol.
- e. Break the link of the instance from its symbol.

Opening the Flash Document

In this section, you will open the Flash document.

1. Choose **File > Open** from the menubar; the **Open** dialog box is displayed.
2. Choose **Documents > Flash_Projects > c03_tut > c03_tut_01 > c03_tut_01_start.fla**. Next, choose the **Open** button from the dialog box; the Flash document is displayed, as shown in Figure 3-1.

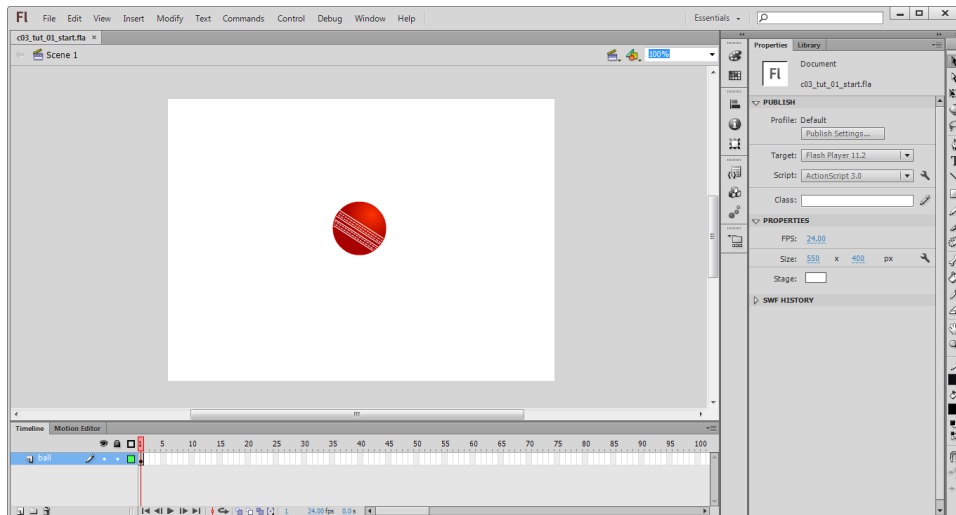


Figure 3-1 The c03_tut_01_start.fla document displayed

Converting the Shape into a Graphic Symbol

In this section, you will convert the object into a graphic symbol.

1. Choose **Selection Tool** from the **Tools** panel. Next, marquee select the circular shape in the Stage and choose **Modify > Convert to Symbol** from the menubar; the **Convert to Symbol** dialog box is displayed, as shown in Figure 3-2.

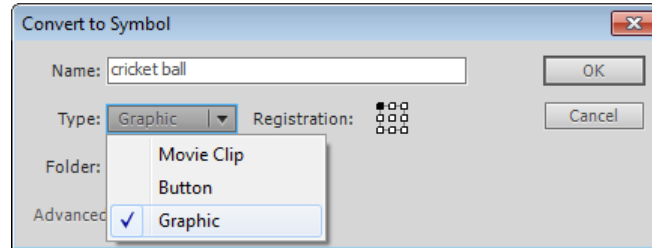


Figure 3-2 The *Convert to Symbol* dialog box

2. In the **Convert to Symbol** dialog box, type **cricket ball** as the name of the symbol in the **Name** text box and then select **Graphic** from the **Type** drop-down list, refer to Figure 3-2. Next, choose the **OK** button; the graphic symbol with the name *cricket ball* is created and saved in the **Library** and an instance of it is created in the Stage, as shown in Figure 3-3.

When you convert a shape or graphic into a symbol, its instance is created in the Stage and the symbol itself is placed inside the **Library** panel.

The graphic symbols are the basic category of symbols. These symbols are generally used to convert still images or objects into symbol.



Note

Select the *cricket ball* symbol in the **Library** panel to view it in the *Item preview window* if it is not selected, as shown in Figure 3-3. The *Item preview window* displays the selected symbol in the **Library** panel. The **Library** in Flash stores all the files such as bitmaps, graphics, sound files, and the video clips that you import. It also stores the symbols that are created in a Flash document.

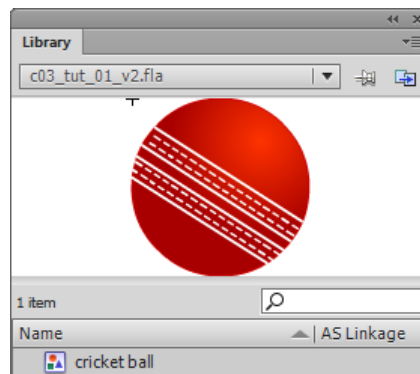


Figure 3-3 The *cricket ball* symbol displayed in the *Item preview window* of the **Library** panel

Creating and Editing the Instance of the Symbol

In this section, you will create and edit the instances of the **cricket ball** symbol.

1. Click on the *cricket ball* symbol icon (🏏) in the **Library** panel and drag it to the Stage; the second instance of the *cricket ball* symbol is created in the Stage. Alternatively, drag the *cricket ball* symbol from the Item preview window of the **Library** panel to the Stage to create its instance.
2. Place the second instance below the first instance in the Stage.
3. Choose **Selection Tool** from the **Tools** panel and select the first instance of the *cricket ball*; the properties of the instance are displayed in the **Properties** panel.
4. In the **COLOR EFFECT** area of the **Properties** panel, select **Alpha** from the **Style** drop-down list; the **Alpha** slider is displayed in the **COLOR EFFECT** area, as shown in Figure 3-4.
5. Set the value of the **Alpha** slider to **55**. Alternatively, enter **55** in the **Alpha** edit box and notice the change in the transparency of the first instance, as shown in Figure 3-5.
6. Choose **Selection Tool** from the **Tools** panel and select the second instance in the Stage; the properties of the instance are displayed in the **Properties** panel.
7. In the **COLOR EFFECT** area of the **Properties** panel, select **Brightness** from the **Style** drop-down list; the **Bright** slider is displayed in the **COLOR EFFECT** area. Next, set the value of **Bright** slider to **-60**; the second instance of the symbol turns dark, as shown in Figure 3-6.

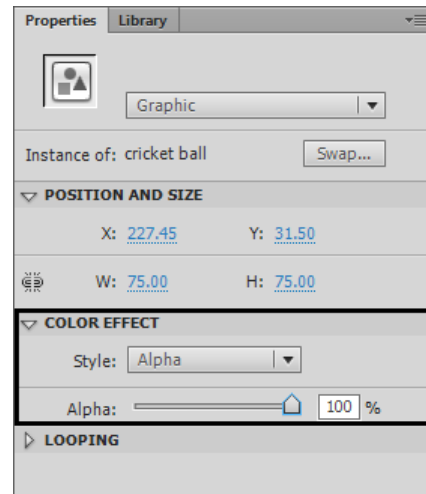


Figure 3-4 The **Alpha** slider in the **COLOR EFFECT** area



Figure 3-5 The first instance

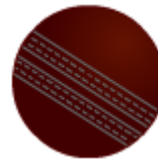


Figure 3-6 The second instance



Note

You can create any number of instances of a symbol and change their respective properties from the **Properties** panel without affecting the other instances. To edit a symbol's property and enter the symbol-editing mode, double-click on the symbol in the **Library** panel.

The **Advanced** option in the **Style** drop-down list is used to change the RGB values of an object. These options are discussed in the later chapters.

Editing the Symbol

In this section, you will edit the *cricket ball* symbol in the symbol-editing mode.

1. Double-click on the icon of the *cricket ball* graphic symbol (🏏) in the **Library** panel to enter into the symbol-editing mode. Alternatively, double-click on the *cricket ball* graphic symbol image in the Item Preview window of the **Library** panel; the *cricket ball* graphic symbol is displayed in the Stage with its Timeline in the symbol-editing mode, refer to Figure 3-7.



Tip: You can also edit a symbol by choosing **Edit > Edit Symbols** from the menubar or by pressing **CTRL+E**.

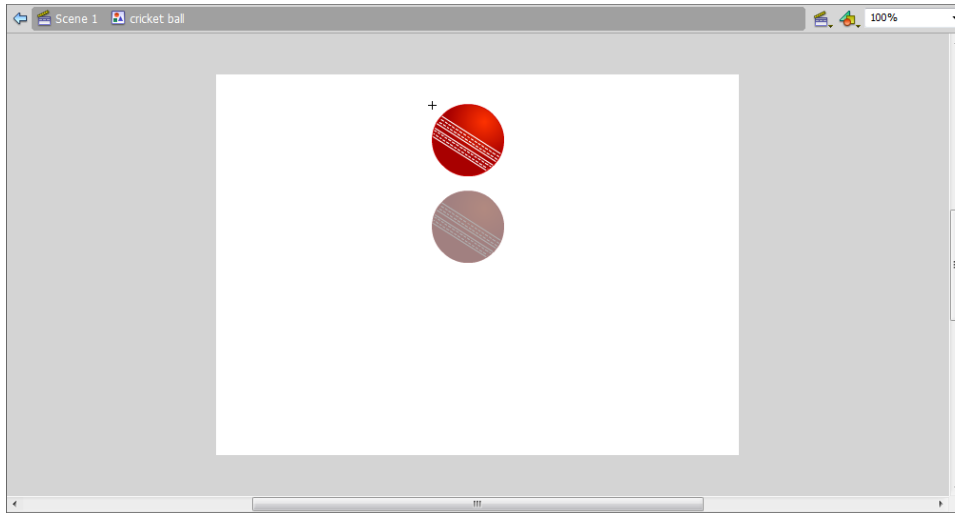



Figure 3-7 The *cricket ball* graphic symbol in the symbol-editing mode

2. Select the upper fill of the *cricket ball* graphic symbol and choose the **Color** button located at the upper left corner of the **Properties** panel; the **Color** panel is displayed. 
3. In this panel, double-click on the left pointer of the gradient definition bar; a flyout is displayed. In this flyout, enter **#FFFFFF** in the Hex edit box and press the ENTER key. Next, double-click on the right pointer; a flyout is displayed. In this flyout, enter **#000000** in the Hex edit box and press the ENTER key. Figure 3-8 displays the selected fill and its gradient definition bar.
4. Repeat Step 2 for the middle and lower fills of the *cricket ball*. Next, marquee select the entire stroke of the border of the *cricket ball* using the SHIFT key; the **Shape** properties are displayed in the **Properties** panel.

- In the **FILL AND STROKE** area of the **Properties** panel, choose the **Stroke color** swatch; a flyout is displayed. In this flyout, enter **#000000** in the Hex edit box and press the ENTER key. Notice that the changes that you make to the symbol also affect the instances of the symbol in the Stage. The ball will turn black in the **Library** panel and in the Stage, refer to Figure 3-9.



Figure 3-8 The gradient definition bar of the upper fill inside the cricket ball symbol

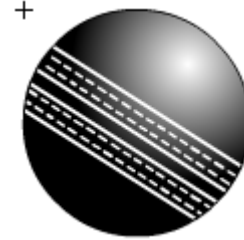
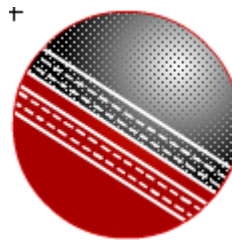



Figure 3-9 The cricket ball symbol after changing the color

- Click on **Scene 1** to return to the main Timeline.

Breaking the Link of the Instance from its Symbol

In this section, you will break the link of the *cricket ball* instance from its symbol.

- Choose **Selection Tool** from the **Tools** panel and select the first instance of *cricket ball* symbol in the Stage.
- Choose **Modify > Break Apart** from the menubar or press CTRL+B; the first instance of *cricket ball* is delinked from its symbol. The instance is now an independent object and is no longer linked to the symbol. Now, you can modify the symbol without affecting the instance or vice-versa.
- Double-click on the icon of the *cricket ball* graphic symbol (🎱) in the **Library** panel to enter into the symbol-editing mode.
- Choose **Selection Tool** from the **Tools** panel and select the upper fill of the ball. Next, choose the **Color** button located at the upper left corner of the **Properties** panel; the **Color** panel is displayed. 
- In this panel, double-click on the right pointer of the gradient definition bar; a flyout is displayed. In this flyout, enter **#0000CC** in the Hex edit box and press the ENTER key; the color of the *cricket ball* graphic symbol in the **Library** panel is changed, as shown in Figure 3-10.
- Click on **Scene 1** to return to the main Timeline; the color of the second instance is changed as it is still linked to the symbol. The first instance remains unchanged as it is no more linked to the symbol, refer to Figure 3-11.

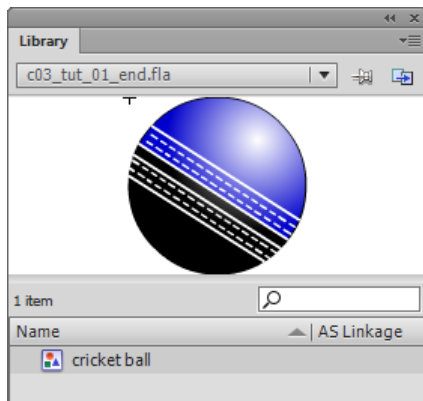


Figure 3-10 Displaying the change in color of the cricket ball graphic symbol

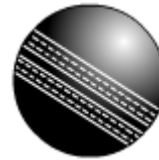


Figure 3-11 The first instance without any change

7. Save the flash file with the name *c03tut1* at the location `\Documents\FIash_Projects\c03_tut\c03_tut_01`.
8. Press CTRL+ENTER to view the final output of the instance and the symbol. You can also view the final rendered image of the instance by downloading the file *c03_flash_cs6_rndr.zip* from <http://www.cadcim.com>. The path of the zipped file is mentioned at the beginning of the chapter.

Tutorial 2

In this tutorial, you will create a button symbol, as shown in Figure 3-12 and then define its states. **(Expected time: 20 min)**



Figure 3-12 The button symbol

The following steps are required to complete this tutorial:

- a. Create a new Flash document.
- b. Create a shape.
- c. Convert the shape into a button symbol.


Creating a New Flash Document

In this section, you will create a new Flash document.

1. Choose **File > New** from the menubar; the **New Document** dialog box is displayed.
2. In the **New Document** dialog box, choose **ActionScript 3.0** from the **General** tab and then choose the **OK** button; a new Flash document is displayed.

Creating a Shape

In this section, you will create the shape of the button symbol.

1. Choose **Rectangle Primitive Tool** from the **Tools** panel.
2. Choose the **Color** button located at the upper left of the **Properties** panel; the **Color** panel is displayed. In this panel, select the fill style as **Linear gradient** from the **Color type** drop-down list. 
3. Draw a rectangle in the Stage; the tool properties are displayed in the **Properties** panel.
4. In the **RECTANGLE OPTIONS** area of the **Properties** panel, enter **7** in the **Rectangle corner radius** edit box and press the ENTER key; the shape of the corners is changed, as shown in Figure 3-13.

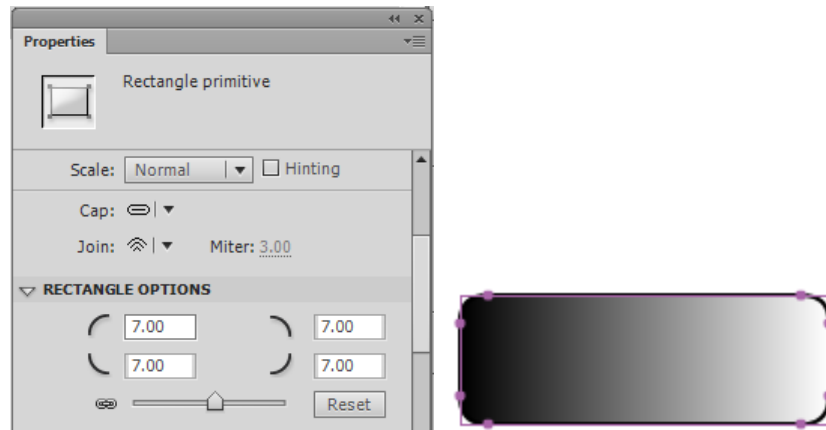


Figure 3-13 Changing the shape of the corners of the rectangle

5. Choose **Gradient Transform Tool** from the **Tools** panel and click on the fill of the rectangle in the Stage; the gradient transform bars are displayed around the fill.
6. Move the cursor over the rotation handle of the gradient transform bar located at the upper right corner of the bars and drag the cursor to the left to rotate the gradient transform bars to approximately 90 degrees, as shown in Figure 3-14.
7. Move the cursor over the arrow located on the gradient transform bar; the shape of the cursor changes to a double-headed arrow indicating that now you can scale the fill. Next, drag the cursor inward and scale the gradient fill approximately to 50%, as shown in Figure 3-15. The rectangular shape of the button symbol is created in the Stage.

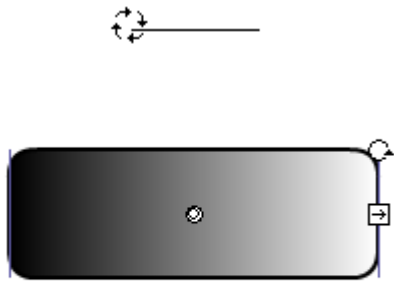


Figure 3-14 Rotating the gradient fill

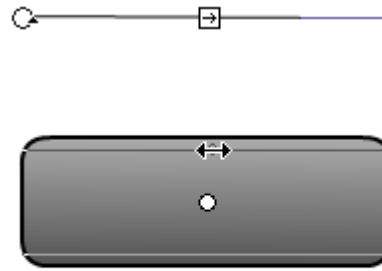


Figure 3-15 Scaling the gradient fill

Converting the Shape into a Button Symbol

In this section, you will convert the rectangle into a button symbol and edit it.

1. Double-click on **Layer 1** (default layer name) in the **Timeline** panel and rename it as **Buttons**.
2. Choose **Selection Tool** from the **Tools** panel and select the rectangle in the Stage. Next, choose **Modify > Convert to Symbol** from the menubar or press the F8 key; the **Convert to Symbol** dialog box is displayed.
3. In the **Convert to Symbol** dialog box, type **Home** in the **Name** text box and select **Button** from the **Type** drop-down list. Next, choose the **OK** button; a button symbol with the name *Home* is created and saved in the Library.



Note

In Flash, when you create a new button or convert a shape into a button symbol, a new Timeline is created for the corresponding button symbol, which is visible only in the button symbol's editing mode. To make the Timeline visible, double-click on that button symbol.

4. Double-click on the icon of the *Home* button symbol icon (📄) in the **Library** panel to enter the editing mode. Alternatively, choose **Edit > Edit Symbols** from the menubar. Figure 3-16 shows the editing mode of the *Home* button symbol.



Note

*Figure 3-17 shows the Timeline of the Home button symbol. This Timeline contains four frames that define the different states of the button symbol. The **Up** frame is used to define the appearance of the button when the cursor is not placed over it. Flash automatically places the original button symbol in the **Up** frame.*

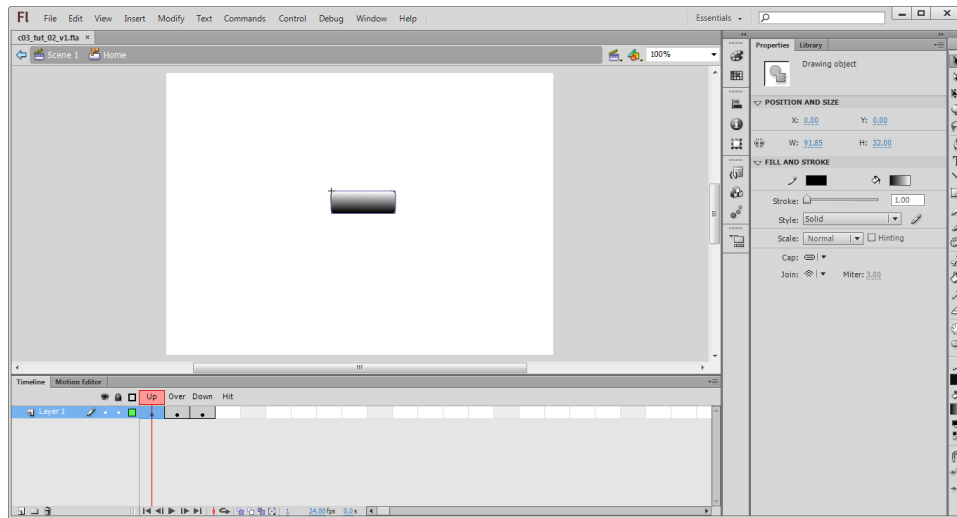


Figure 3-16 Symbol-editing mode of the Home button symbol

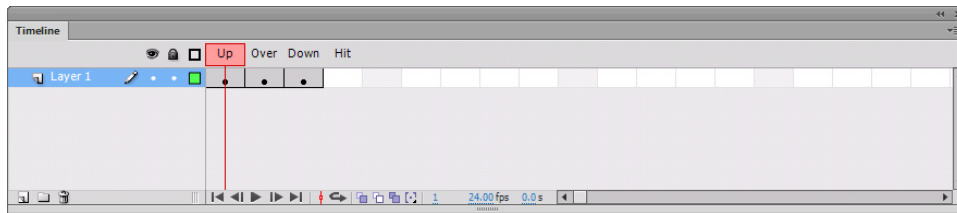


Figure 3-17 The Timeline of the Home button symbol

5. In the **Timeline** panel, select the **Over** frame. Next, press the F6 key or choose **Insert > Timeline > Keyframe** from the menubar; a keyframe is inserted in the blank frame.

The **Over** frame of the button symbol is used to define the appearance of the symbol when the mouse pointer is over it.



Note

The keyframe is a frame that represents a new symbol instance in the Timeline. You can also add the ActionScript code to the keyframe to control certain actions in a document.

6. Choose **Selection Tool** from the **Tools** panel and select the rectangle in the Stage.
7. Choose the **Color** button located at the upper left corner of the **Properties** panel; the **Color** panel is displayed. In the **Color** panel, double-click on the right pointer of the gradient definition bar; a flyout is displayed. In this flyout, enter **#999999** in the Hex edit box and press the ENTER key. Now, click in the blank area of the Stage to deselect the fill.



8. Select the **Down** frame and press the F6 key to insert a keyframe. Next, select the fill of the rectangle in the Stage.
9. Choose the **Color** button; the **Color** panel is displayed. In the **Color** panel, double-click on the right pointer of the gradient definition bar; a flyout is displayed. In this flyout, enter **#333333** in the Hex edit box and press the ENTER key.

The **Down** frame of the button symbol is used to define the appearance of the button when the user clicks on it.

10. Select the **Hit** frame and press the F7 key to insert a blank keyframe. Create a new layer above **Layer 1** using the **New Layer** button.
11. Choose **Rectangle Tool** from the **Tools** panel; the properties of this tool are displayed in the **Properties** panel. In the **FILL AND STROKE** area of the **Properties** panel, choose the **Stroke color** swatch; a flyout is displayed. In this flyout, enter **#000000** in the Hex edit box and press the ENTER key. Choose the **Fill color** swatch; a flyout is displayed. In this flyout, enter **#0000CC** in the Hex edit box.
12. In **Layer 2**, select **Hit** frame and press the F7 key to insert a blank keyframe. In the Stage (symbol-editing mode in the Scene area), create a rectangle covering the rectangle of the button symbol, as shown in Figure 3-18.

The **Hit** frame of the button symbol represents the area of the screen that will respond on clicking. The rectangle created in this frame defines the hit area of the button.



Note

The hit area is not visible in the Stage and in the preview window.

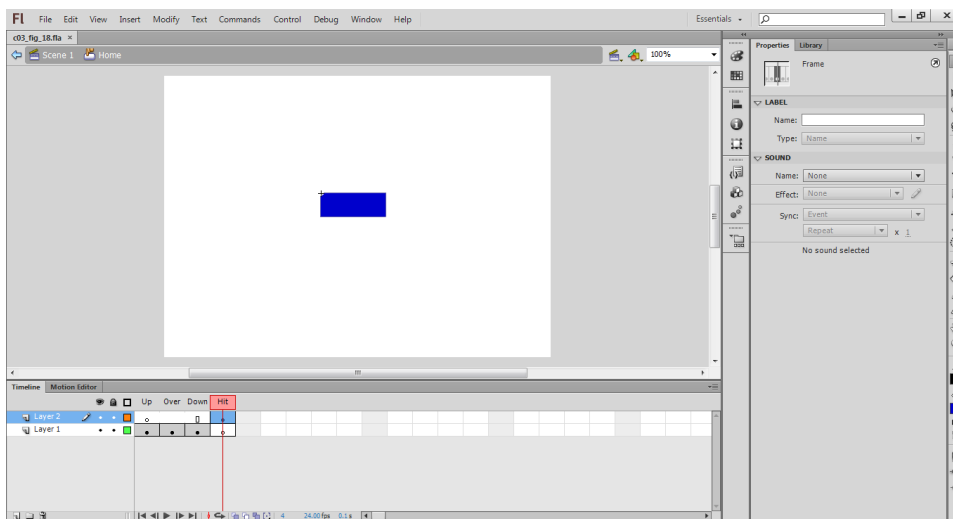


Figure 3-18 Rectangle in the Hit frame

13. Press CTRL+ENTER; the preview window is displayed showing the *Home* button instance. Move the mouse pointer over the *Home* button instance to see its **Over** state and click on it to see its **Down** state. Figures 3-19 and 3-20 show the **Over** and **Down** states of the *Home* button instance, respectively.



Figure 3-19 The **Over** state of the button symbol



Figure 3-20 The **Down** state of the button symbol

Notice that the rectangle you created in the **Hit** frame is not visible in the preview window. Click anywhere in the preview window, except on the hit area (rectangle) you created in the **Hit** frame; the button symbol shows no change.

14. Close the preview window to return to the Flash document.
15. In the **Layer 2** of the **Timeline** panel, select the **Hit** frame; the rectangle in the Stage is selected.
16. Choose **Selection Tool** from the **Tools** panel and click on the rectangle; the **Shape** properties are displayed in the **Properties** panel.
17. In the **POSITION AND SIZE** area of the **Properties** panel, set the value of **W** to **300** and the value of **H** to **200**. Next, set the value of **X** to **-105** and the value of **Y** to **-88**; the rectangle is positioned and resized, as shown in Figure 3-21.

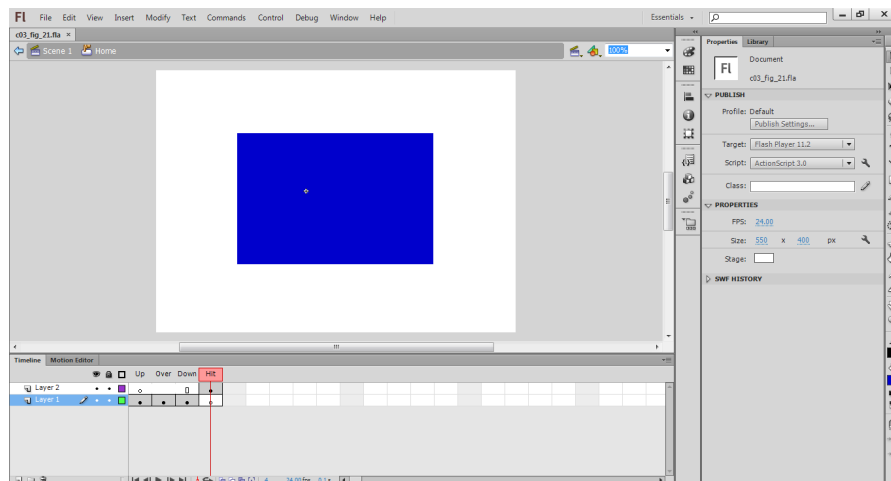


Figure 3-21 Increasing the dimensions of the rectangle in the Flash document

18. Press CTRL+ENTER; the preview window is displayed showing the *Home* button. In the preview window, move the cursor over the hit area of the button and notice the changes in it.

By increasing the dimensions of the rectangle in the **Hit** frame, you can define the hit area of the button symbol (instance). Now, the appearance of the button changes not merely by clicking on the symbol itself, but also on placing the cursor over the hit area and clicking in the hit area.

19. Save the flash file with the name *c03tut2* at the location `\Documents\FIash_Projects\c03_tut\c03_tut_02`.
20. Press CTRL+ENTER to view the final output of the button symbol. You can also view the final rendered file of the button symbol by downloading the file *c03_flash_cs6_rndr.zip* from <http://www.cadcim.com>. The path of the zipped file is mentioned at the beginning of the chapter.

Tutorial 3

In this tutorial, you will convert the objects into movie clip symbols and apply **Glow** filter to them, as shown in Figure 3-22. **(Expected time: 10 min)**



Figure 3-22 The Glow filter applied to movie clips symbols

The following steps are required to complete this tutorial:

- a. Open the Flash document.
- b. Convert the shapes into the movie clip symbols.

Opening the Flash Document

In this section, you will open the Flash document required for this tutorial.

1. Choose **File > Open** from the menubar; the **Open** dialog box is displayed. In this dialog box, choose **Documents > Flash_Projects > c03_tut > c03_tut_03 > c03_tut_03_start fla**. Next, choose the **Open** button; the Flash document is displayed, as shown in Figure 3-23.

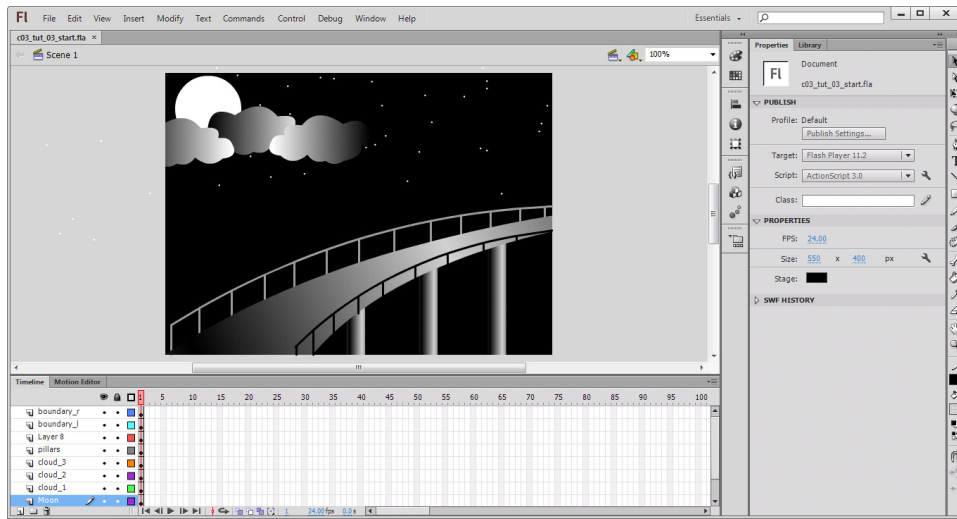


Figure 3-23 The *c03_tut_03_start.fla* document displayed

Converting the Shapes into Movie Clip Symbols

In this section, you will convert the shapes into movie clips symbols.

1. Select the **Moon** layer in the **Timeline** panel; the circle (moon) behind the clouds is selected in the Stage.
2. Press the F8 key; the **Convert to Symbol** dialog box is displayed. In this dialog box, type **moon_mc** as the symbol name in the **Name** text box and select **Movie Clip** as the symbol type from the **Type** drop-down list. Next, choose the **OK** button; the moon shape is converted into a movie clip symbol with the name *moon_mc*.
3. Expand the **FILTERS** area in the **Properties** panel. At the bottom of the **FILTERS** area, choose the **Add filter** button; a flyout is displayed, showing various filters, as shown in Figure 3-24.

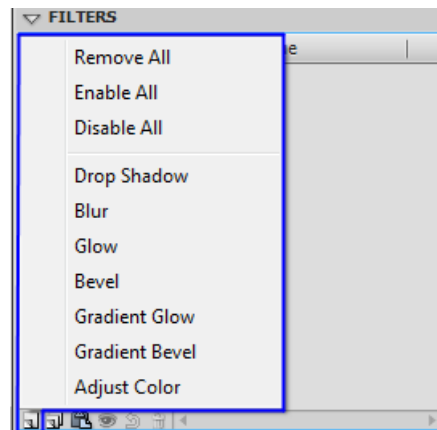


Figure 3-24 The flyout displayed on choosing the **Add filter** button

4. Choose **Glow** from this flyout; the **Glow** area with various properties is displayed in the **FILTERS** area displaying **Glow** properties, as shown in Figure 3-25.
5. In the **Glow** area, set the **Blur X** and **Blur Y** values to **50** each and **Strength** value to **150**.
6. Click on the swatch on the right to **Color**; a flyout is displayed. In this flyout, enter **#FFFFFF** in the Hex edit box and press the ENTER key.
7. Select **High** from the **Quality** drop-down list. After setting these values, you will notice the glow effect displayed around the circle (moon) in the Stage, as shown in Figure 3-26.

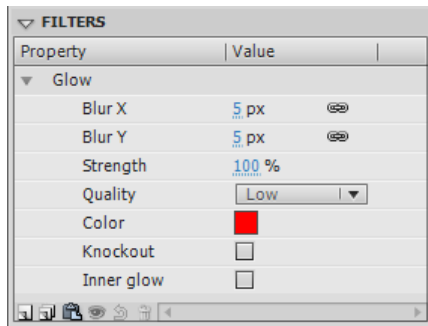


Figure 3-25 The Glow area

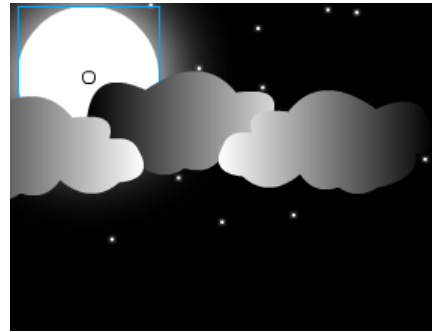


Figure 3-26 The effect of the Glow filter on the moon

8. In the **Timeline** panel, select the **Stars** layer; the dots (stars) are selected in the Stage.
9. Press the F8 key; the **Convert to Symbol** dialog box is displayed. In this dialog box, type the symbol name as **stars** in the **Name** text box and select **Movie Clip** as the symbol type from the **Type** drop-down list; the dots are converted into a movie clip symbol with the name *stars*.
10. At the bottom of the **FILTERS** area, choose the **Add filter** button; a flyout is displayed showing various filters. In this flyout, choose **Glow**; the **Glow** area is displayed in the **FILTERS** area.
11. In the **Glow** area, set the **Strength** value to **150**. Click on the swatch on the right of **Color**; a flyout is displayed. In this flyout, enter **#FFFFFF** in the Hex edit box and press the ENTER key.
12. Select **High** from the **Quality** drop-down list; the glow effect is displayed around the dots in the Stage, as shown in Figure 3-27.

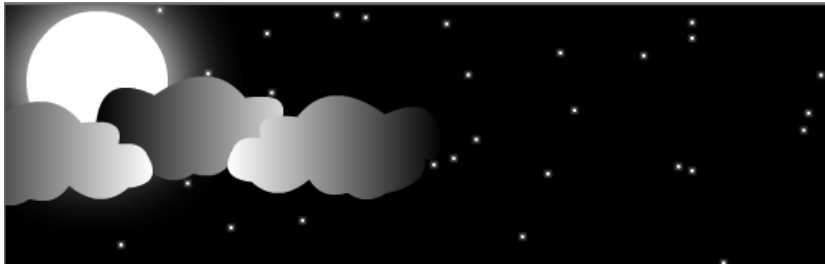


Figure 3-27 The glow effect on dots

13. Save the flash file with the name `c03tut3` at the location `\Documents\FIash_Projects\c03_tut\c03_tut_03`.
14. Press CTRL+ENTER to view the final output of the tutorial. You can also view the final rendered file of the tutorial by downloading the file `c03_flash_cs6_rndr.zip` from <http://www.cadcim.com>. The path of the zipped file is mentioned at the beginning of the chapter.

Tutorial 4

In this tutorial, you will import Adobe Photoshop artwork into Flash.

(Expected time: 10 min)

The following steps are required to complete this tutorial:

- a. Create a new Flash document.
- b. Import Photoshop file.

Creating a New Flash Document

In this section, you will create a new Flash document.

1. Choose **File > New** from the menubar; the **New Document** dialog box is displayed.
2. In the **New Document** dialog box, choose **ActionScript 3.0** from the **General** tab and then choose the **OK** button; a new Flash document is displayed.

Importing the Photoshop File

To create a complex artwork, you may prefer other applications such as Adobe Illustrator or Adobe Photoshop. In this section, you will learn to import artwork created in Adobe Photoshop to Flash.

1. Choose **File > Import > Import to Stage** from the menubar; the **Import** dialog box is displayed. In this dialog box, choose **Documents > Flash_Projects > c04_tut > Resources > shapes.psd**; the **Import “shapes.psd” to Stage** dialog box is displayed, as shown in Figure 3-28.

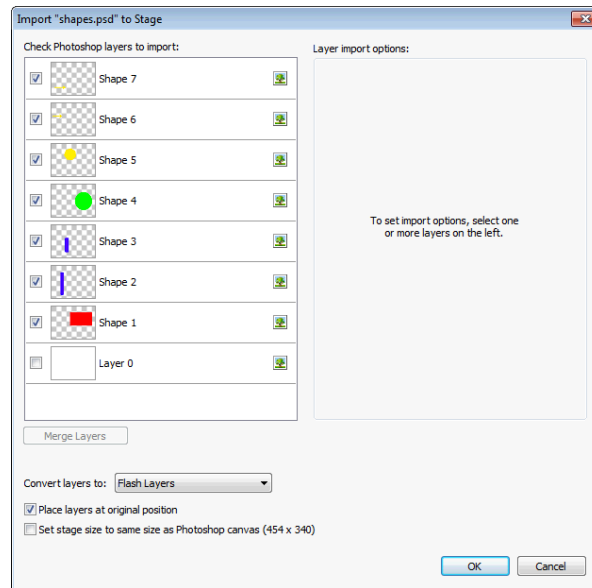


Figure 3-28 The Import “shapes.psd” to Stage dialog box

- From the **Check Photoshop layers to import** area of the **Import “shapes.psd” to Stage** dialog box, select the check boxes corresponding to the layers that you want to import; the selected layers will be imported to the Flash document, as shown in Figure 3-29.
- In the **Check Photoshop layers to import** area of the **Import “shapes.psd” to Stage** dialog box, select **Flash Layers** from the **Convert layers to** drop-down list and then select the **Place layers at original position** check box located below the drop-down list. Next, choose the **OK** button; every object created in separate layers in Photoshop is placed in the same manner in Flash with name of the layers as **Shape 1**, **Shape 2**, **Shape 3** and so on, as shown in Figure 3-29.

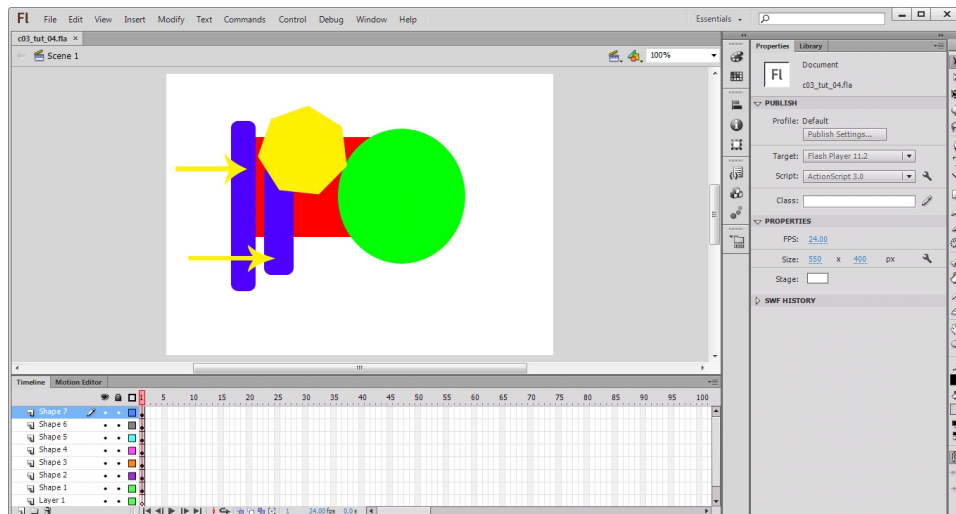


Figure 3-29 The selected layers imported in the Flash document

4. Save the flash file with the name *c03tut3* at the location `\Documents\Flash_Projects\c03_tut\c03_tut_04`.
5. Press CTRL+ENTER to view the final output. You can also view the final rendered file of the tutorial by downloading the file *c03_flash_cs6_rndr.zip* from <http://www.cadcim.com>. The path of the zipped file is mentioned at the beginning of the chapter.

Table 3-1 displays various file formats that can be imported in Flash 8 or later versions.

Table 3-1 The file formats that can be imported in Flash

File Type	Extension
Adobe Photoshop	.psd
Adobe Illustrator	.ai
AutoCAD	.dxf
Bitmap	.bmp
GIF and animated GIF	.gif
JPEG	.jpg
PNG	.png
Flash Player 6/7	.swf
Enhanced Windows Metafile	.emf
Windows Metafile	.wmf
FutureSplash Player	.spl
Video for Flash	.flv, f4v
WAV sound	.wav
MP3 sound	.mp3
3GPP/3GPP2 for mobile devices	.3gp, .3gpp, .3gp2

Self-Evaluation Test

Answer the following questions and then compare them to those given at the end of this chapter:

1. The _____, _____, and _____ are the three categories of symbols in Flash.
2. The _____ window displays the selected symbol in the **Library** panel.
3. An _____ is a copy of a symbol.
4. The _____ symbols are generally used for animating static images.
5. The _____ symbols are used to create buttons for interactivity.
6. A button symbol contains its own independent Timeline. (T/F)
7. The **Over** state of a button symbol is used to define the appearance of the button when the cursor is placed over it. (T/F)
8. You can apply blending modes and filters to a graphic symbol. (T/F)

Review Questions

Answer the following questions:

1. Which of the following combinations of the shortcut keys is used for applying the **Break Apart** command?
 - (a) CTRL+C
 - (b) CTRL+B
 - (c) CTRL+G
 - (d) CTRL+U
2. Which of the following shortcut keys is used to insert a keyframe?
 - (a) F2
 - (b) F4
 - (c) F8
 - (d) F6

3. The _____ area of a button symbol is not visible in the Stage and in the preview window.
4. _____, _____, _____, and _____ are the four states of a button symbol.
5. The _____ represents a new symbol instance in the Timeline.
6. The _____ state of a button symbol represents how the button will appear when the user clicks on it.
7. The _____ command is used to delink the instance from its symbol.

Exercises

Exercise 1

Create the buttons for a website, as shown in Figure 3-30, using various drawings and editing tools, functions, and button symbol frames. You can view the final rendered file of the buttons by downloading the file *c03_flash_cs6_exr.zip* from <http://www.cadcim.com>. The path of the file is as follows:

Textbooks > Animation and Visual Effects > Flash > The Adobe Flash Professional CS6: A Tutorial Approach

(Expected time: 20 min)



Figure 3-30 The buttons for website

Exercise 2

Create a night scene, as shown in Figure 3-31, using various tools, functions, and filters. You can view the final rendered file of the tutorial by downloading the file *c03_flash_cs6_exr.zip* from <http://www.cadcim.com>. The path of the file is mentioned in Exercise 1.

(Expected time: 40 min)

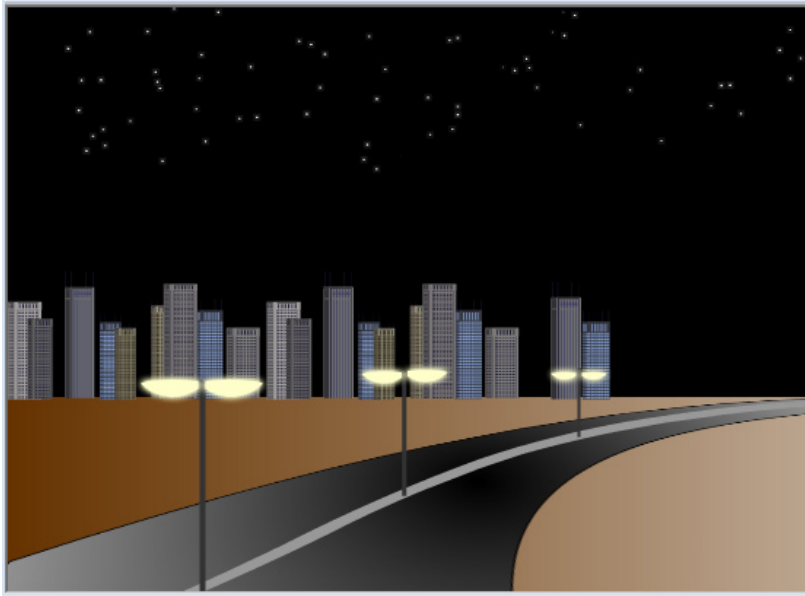


Figure 3-31 The night scene

Evaluation Copy. Do not reproduce. For information visit www.cadcim.com

Answers to Self-Evaluation Test

1. graphic, button, movie clip, 2. Item preview, 3. instance, 4. graphic, 5. button, 6. F, 7. T, 8. F