Adobe Flash CS4
Part 1: Introduction to Flash

Fall 2010, Version 1.0

Table of Contents

Introduction

Adobe Flash CS4 is the industry standard software for creating rich, interactive content ranging from simple animations to full-featured web applications. Flash includes many features that make it powerful but easy to use. In addition, Flash includes a scripting language that can be used to add interactivity and complex functionality to Flash projects. This handout covers the basics of Flash CS4, including getting familiar with the user interface, working with layers, and creating vector graphics using different drawing tools.

Downloading the Data Files

This handout includes sample data files that can be used for hands-on practice. The data files are stored in a self-extracting archive. The archive must be downloaded and executed in order to extract the data files.
- The data files used with this handout are available for download at http://www.calstatela.edu/its/training/datafiles/flashcs4p1.exe.
- Instructions on how to download and extract the data files are available at http://www.calstatela.edu/its/docs/download.php.

Launching the Program

When Flash CS4 is launched, the *Welcome Screen* displays. This screen provides quick access to the most recently opened files and shortcuts for creating new documents. In addition, this screen can be used to access useful support documentation and video tutorials.

To launch Flash CS4:
1. Click the **Start** button, point to **All Programs**, point to **Adobe Design Premium CS4**, and select **Adobe Flash CS4 Professional**. The program opens and the **Welcome Screen** displays (see Figure 1).
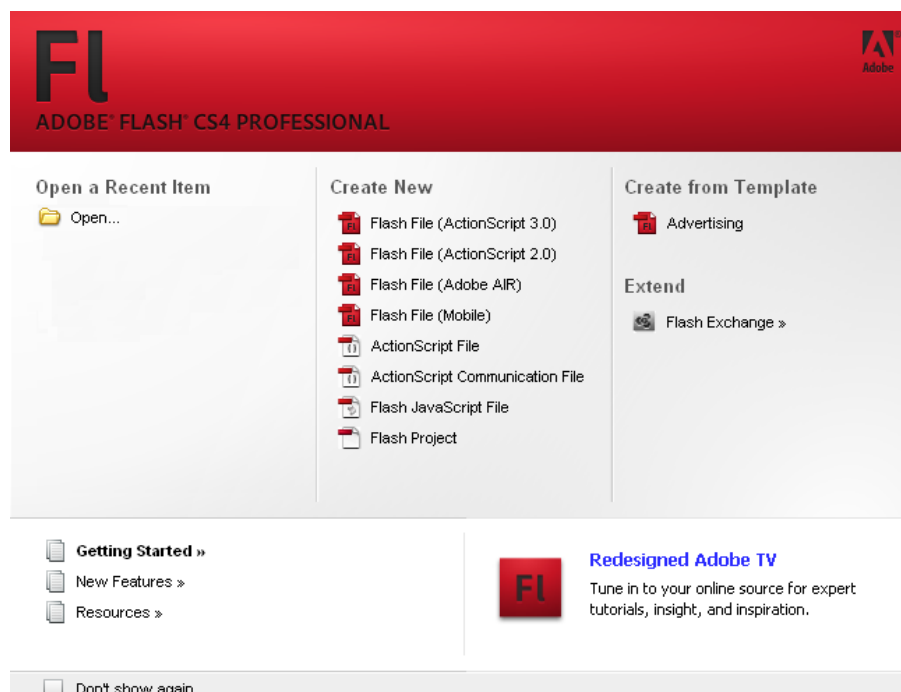

Figure 1 – Flash CS4 Welcome Screen

Creating a New Document

In Flash CS4, a new document can be created from the Welcome Screen or from the File menu. Use one of the methods below to create a new document.

To create a new document from the Welcome Screen:
1. Click **Flash File (ActionScript 3.0)** in the **Create New** section of the **Welcome Screen** (see Figure 1). A new blank document labeled **Untitled-1** opens.

   NOTE: Adobe Flash Player 9 or later is required in order to open an ActionScript 3.0 Flash file.

To create a new document from the File menu:
1. Click the **File** menu and select **New**. The **New Document** dialog box opens (see Figure 2).
2. On the **General** tab, select **Flash File (ActionScript 3.0)** from the **Type** list.
3. Click the **OK** button. A new blank document labeled **Untitled-1** opens.
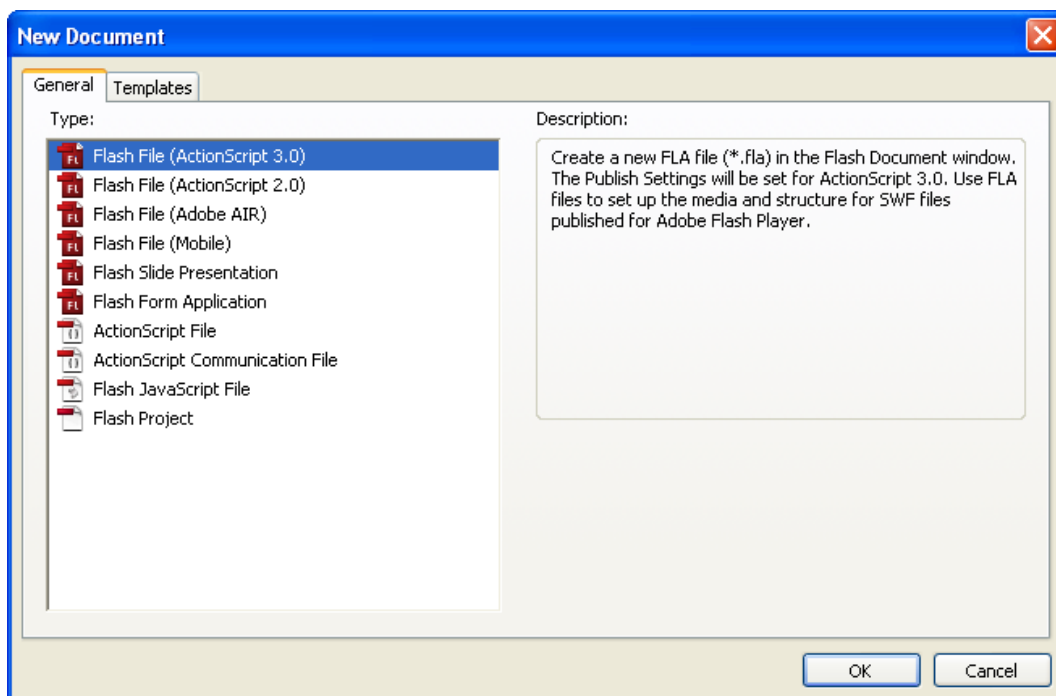

Figure 2 – New Document Dialog Box

Exploring the Interface

The Flash CS4 interface includes various elements such as tools and panels that help users create and manipulate Flash documents. Any arrangement of these elements is called a *workspace*. Users can adapt the program to the way they work by selecting from several preset workspaces or by creating their own workspace. The main elements of the Flash CS4 default workspace are the Stage, the Timeline, the Application bar, the Property inspector, the Library panel, and the Tools panel (see Figure 3).
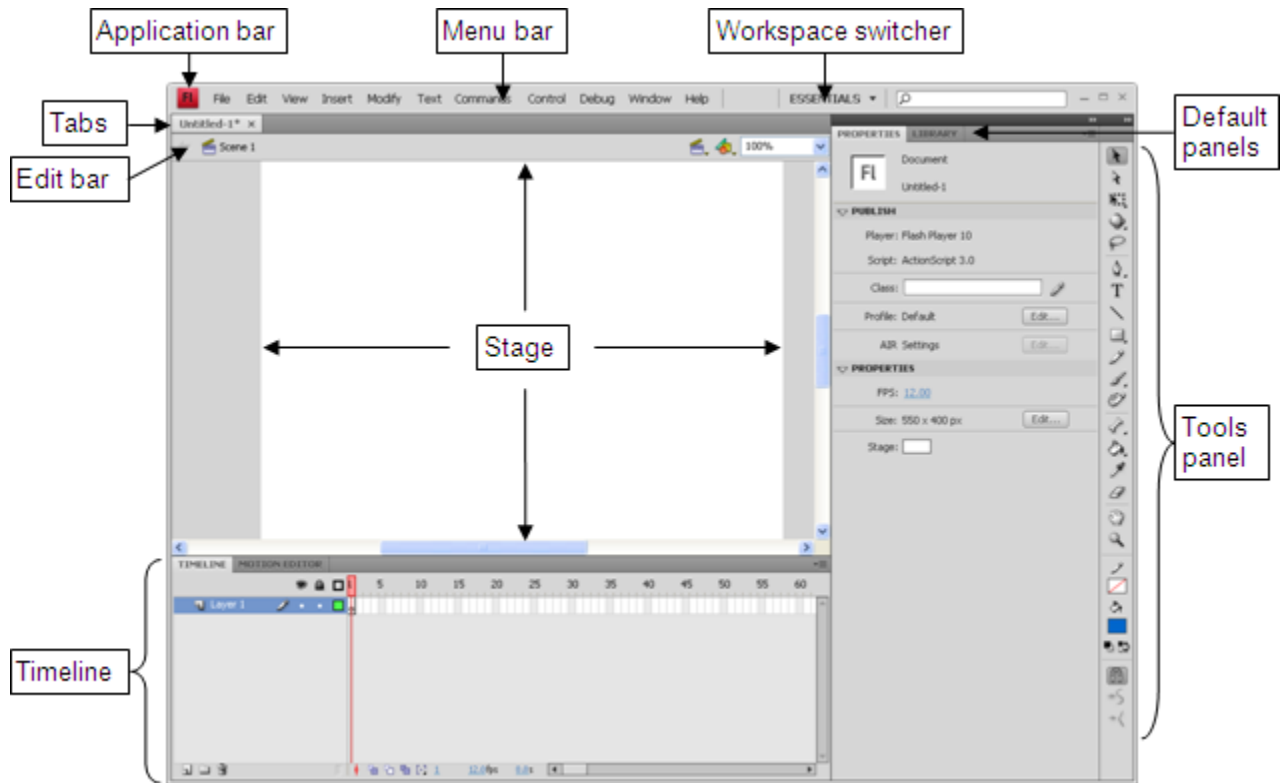
Figure 3 – Flash CS4 Interface

Panels

Panels help users streamline their workflow by giving them easy access to many of the most commonly used features in Flash. Many panels include a menu with additional options that can be accessed by clicking the menu icon ▾≣ in the upper-right corner of the panel.

Library Panel

The *Library* panel is used to store and organize symbols created in Flash as well as imported files, including bitmap graphics, sound files, and video clips.

To display the Library panel:
1. Click the **Window** menu and select **Library**. Or, press **Ctrl+L** (see Figure 4).
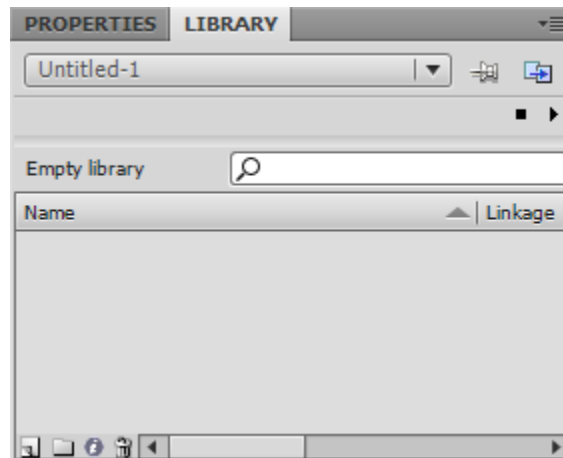

Figure 4 – Library Panel

Property Inspector

The *Property inspector* provides quick and easy access to the most commonly used attributes of the currently selected element or tool. The options available in the Property inspector depend on the current selection.

To display the Property inspector:
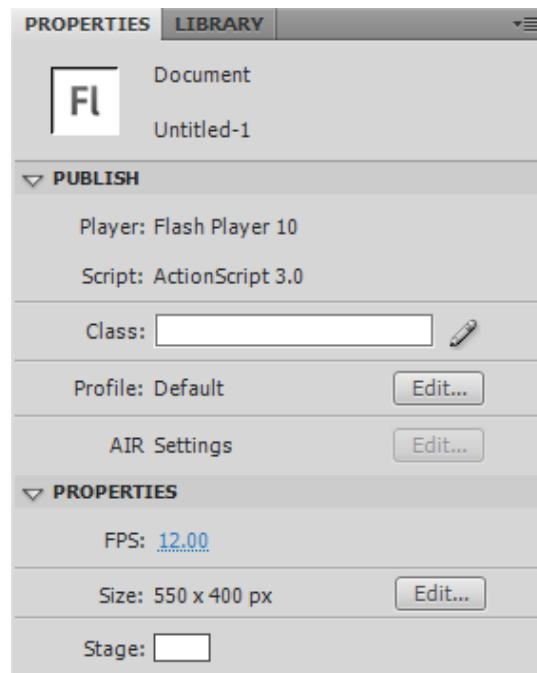1. Click the **Window** menu and select **Properties** (see Figure 5).

Figure 5 – Property Inspector

The Timeline

The *Timeline* is used to organize and control a document's content (see Figure 6). The major components of the Timeline are layers, frames, and the playhead. Layers are listed in a column on the left side of the Timeline. Controls in the layers section let users hide, show, lock, or unlock layers. Frames contained in each layer appear in a row to the right of the layer name. The Timeline header at the top of the Timeline indicates frame numbers. The playhead indicates the current frame displayed on the Stage. The Timeline status bar displayed at the bottom of the Timeline indicates the selected frame number, the current frame rate, and the elapsed time to the current frame. A document's content can be separated into multiple scenes. Each scene has its own Timeline.
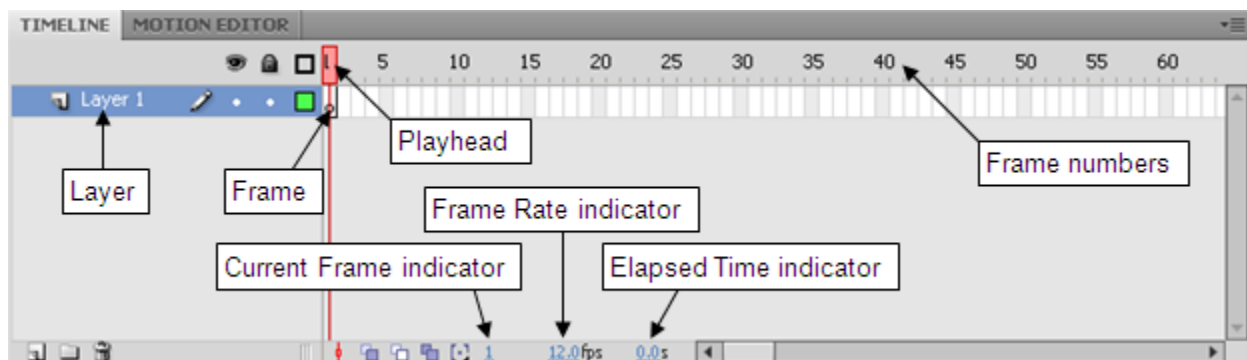

Figure 6 – The Timeline

Tools Panel

The *Tools* panel contains a group of selection tools, drawing and type tools, painting and editing tools, navigation tools, and tool options that are used to create and modify graphic objects (see Figure 7).
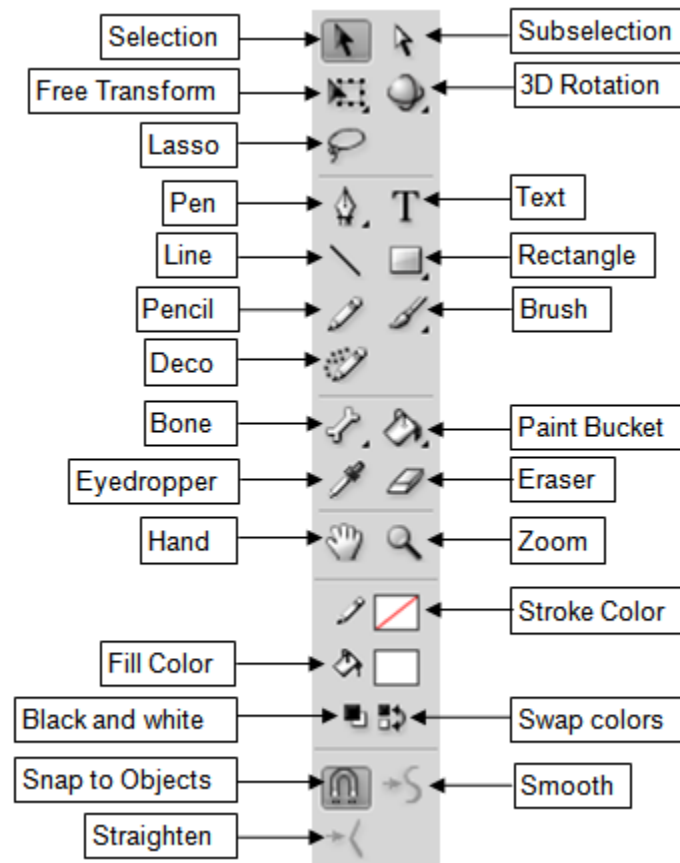

Figure 7 – Tools Panel

The Stage

The *Stage* is the rectangular area where users place graphic content when creating Flash documents. What displays on the Stage depends on the layer and frame that is selected in the Timeline.

Changing Document Properties

Users can change the properties of new or existing documents.

To change the document properties:
1. In the **Property inspector**, under **Properties**, click the **Edit** button next to **Size**. The **Document Properties** dialog box opens (see Figure 8).
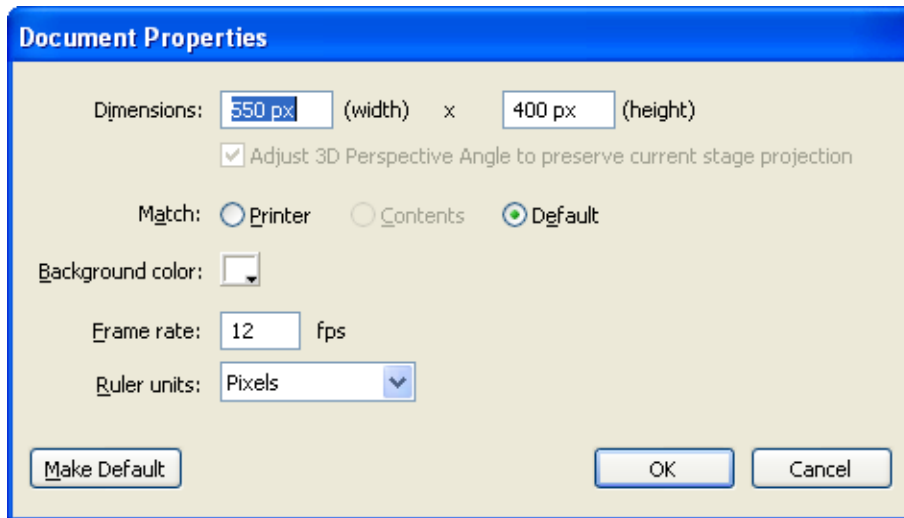2. Next to **Dimensions**, type **550 px** in the **width** box and **400 px** in the **height** box.

Figure 8 – Document Properties Dialog Box

3. Click the **Background color** control ⬛, and then select a color swatch from the palette or enter a color's hexadecimal value in the box (see Figure 9).
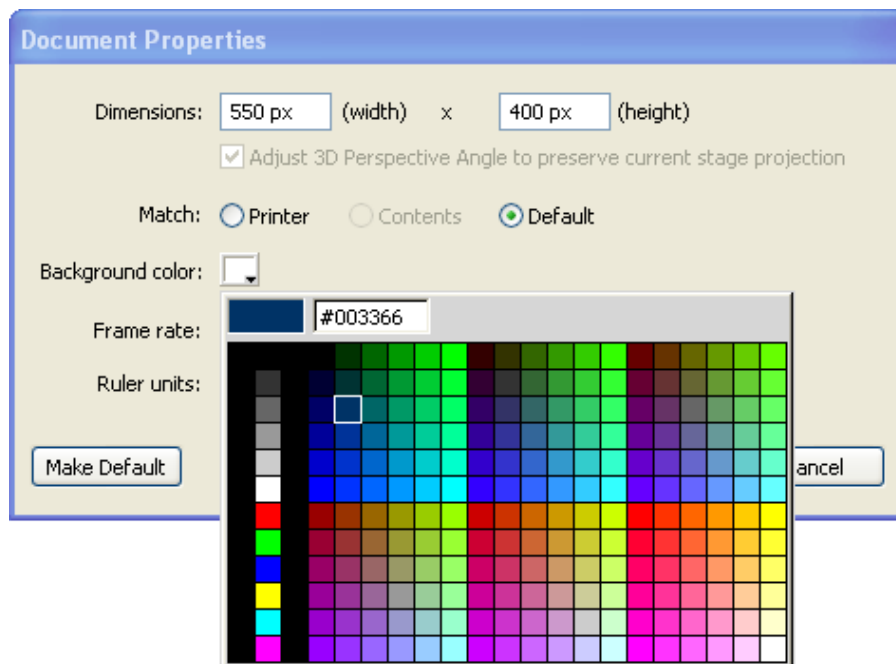

Figure 9 – Background Color Palette

4. Click the **OK** button to apply the changes.

Working with Layers

Layers help users organize the artwork, animation, and other elements in a Flash document. When a document has multiple layers, users can draw and edit objects on one layer without affecting objects on another layer. To work with a layer, it must first be selected in the Timeline to make it active. A pencil icon next to a layer in the Timeline indicates that the layer is active. When a new Flash document is created, it contains only one layer. Users can easily add, delete, rename, hide, lock, or rearrange layers.

Adding and Deleting Layers

When a new layer is created, it appears above the selected layer. The newly added layer becomes the active layer.

To add a layer:
1. Click the **File** menu and select **Open**. The **Open** dialog box opens.
2. Navigate to the data files folder, select the **Part1.fla** file, and then click the **Open** button.
3. In the **Timeline**, click one of the existing layers to select it.
4. Click the **New Layer** button ⬑ at the bottom of the **Timeline** (see Figure 10). A new layer is created above the selected layer and is given a default name.

   NOTE: Flash displays layers from the bottom up. It displays the contents of the bottom layer first; then, on top of that layer, it displays the contents of the next layer up; and so on. To change the order of layers, drag the layer name in the **Timeline** to a new position.

To delete a layer:
1. In the **Timeline**, click one of the existing layers to select it.
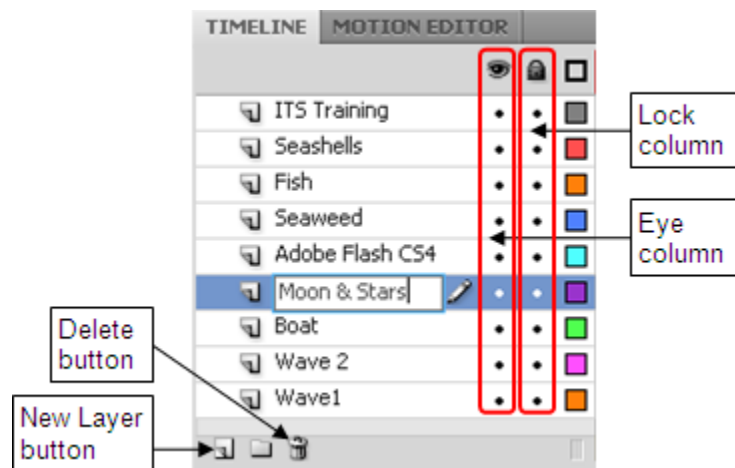2. Click the **Delete** button 🗑 at the bottom of the **Timeline** (see Figure 10).

Figure 10 – Layers Section of the Timeline

Renaming Layers

By default, new layers are named by the order in which they are created: *Layer 1*, *Layer 2*, *Layer 3*, and so on. Layers should be renamed to better reflect their contents.

To rename a layer:
1. In the **Timeline**, double-click the layer name, type the new name, and press the **Enter** key (see Figure 10).

Locking and Unlocking Layers

Locking a layer prevents its contents from being selected and accidentally changed.

To lock or unlock a layer:
1. In the **Timeline**, click in the **Lock** column to the right of the layer name (see Figure 10). A padlock icon 🔒 appears next to the layer name to indicate that it is locked.
2. To unlock the layer, click in the **Lock** column again. The padlock icon 🔒 disappears to indicate that the layer is unlocked.

NOTE: To lock all layers, click the padlock icon 🔒 at the top of the **Lock** column. To unlock all layers, click the padlock icon 🔒 again.

Showing and Hiding Layers

Users can choose to have all layers visible or show only the one they are working on.

To show or hide a layer:
1. In the **Timeline**, click in the **Eye** column to the right of the layer name (see Figure 10). A red x icon ✖ appears next to the layer name to indicate that it is hidden.
2. To show the layer, click in the **Eye** column again. The red x icon ✖ disappears to indicate that the layer is visible.

    NOTE: To hide all layers, click the eye icon 👁 at the top of the **Eye** column. To show all layers, click the eye icon 👁 again.

Working with Graphics

The drawing tools in Flash can be used to create and modify lines and shapes which are vector based. Vector graphics can be scaled to any size without losing quality because the points, curves, and lines that create vectors are resolution-independent. Using vector graphics in a file can help keep the file size small.

Creating Rectangles

The *Rectangle* tool can be used to create basic geometric shapes and apply strokes and fills.

To create a rectangle:
1. Create a new Flash document.
2. In the **Timeline**, rename **Layer 1** to **Boat**.
3. Select the **Rectangle** tool ⬜ in the **Tools** panel.
4. Click the **Stroke Color** and **Fill Color** controls in the **Tools** panel and select a color swatch from each palette.
5. On the **Stage**, drag the mouse pointer to draw a rectangle.

To modify the rectangle:
1. Select the **Selection** tool ➤ in the **Tools** panel.
2. Drag the mouse pointer around the entire rectangle to select the stroke and the fill (see Figure 11).
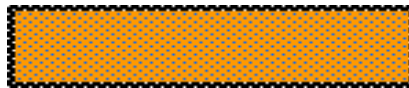

Figure 11 – Selected Rectangle

3. In the **Property inspector**, under **Position and Size**, change the **W** (width) value to **168** and the **H** (height) value to **35** by dragging the hot text or by clicking the hot text and entering the new value (see Figure 12).
4. Under **Fill and Stroke**, click the **Stroke Color** control and select the desired color from the palette.
5. Type **2** in the **Stroke Height** box and press the **Enter** key (see Figure 12). The rectangle now has a thick, colored stroke.
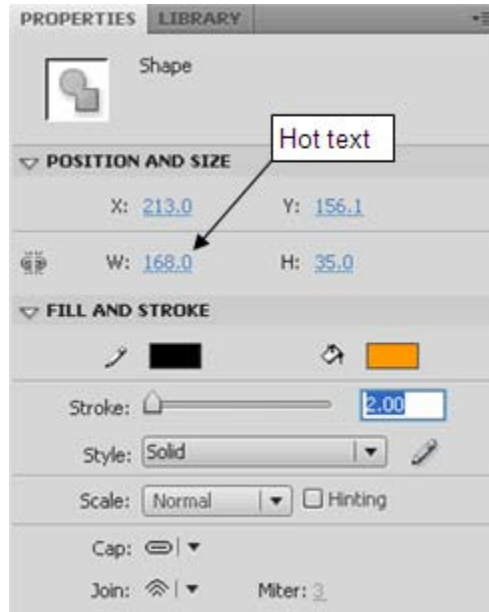
Figure 12 – Property Inspector Displaying the Rectangle Properties

Applying a Bitmap Fill

Users can apply a solid color, gradient, or bitmap (such as a TIFF, JPEG, or GIF file) to a shape's fill. Shapes can also have no fill. To apply a bitmap fill to a shape, the bitmap must be imported into the current file.

To apply a bitmap fill:
1. Make sure the entire rectangle is selected.
2. Click the **Window** menu and select **Color**. The **Color** panel displays (see Figure 13).
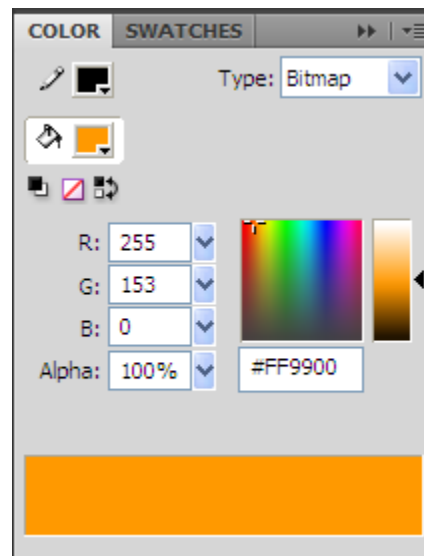3. In the **Color** panel, click the **Fill** icon to display the **Fill Color** attributes.

Figure 13 – Color Panel

4. Click the **Type** arrow and select **Bitmap** from the list (see Figure 13). The **Import to Library** dialog box opens.
5. Locate and select the **Wood.jpg** file, and then click the **Open** button. The rectangle fills with the wood image (see Figure 14).

Figure 14 – Rectangle Filled with Wood Image

Modifying Objects

To adjust the shape of the rectangle:

1. Make sure the entire rectangle is selected.
2. Select the **Free Transform** tool in the **Tools** panel. Transformation handles appear around the rectangle (see Figure 15).

Figure 15 – Modifying a Rectangle Using Transformation Handles

3. Press and hold **Ctrl**+**Shift** as you drag one of the bottom corner handles inward. This simultaneously moves the selected corner and the adjoining corner equal distances from their original location.
4. Click outside the shape to deselect it. It now looks more like a boat.

Drawing with the PolyStar Tool

To create a triangle using the PolyStar tool:

1. Select the **PolyStar** tool in the **Tools** panel.

   NOTE: If the **PolyStar** tool is not displayed, click and hold the mouse button on the **Rectangle** tool , and then select the **PolyStar** tool from the pop-up menu.

2. In the **Property inspector**, under **Tool Settings**, click the **Options** button. The **Tool Settings** dialog box opens (see Figure 16).
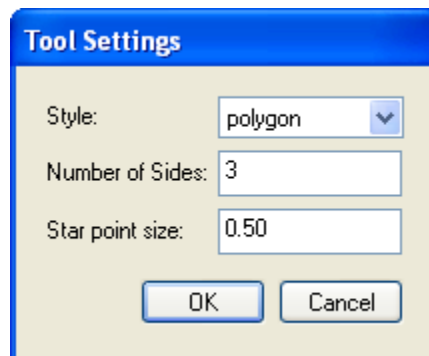

Figure 16 – Tool Settings Dialog Box

3. Type **3** in the **Number of Sides** box, and then click the **OK** button.
4. In the **Property inspector**, under **Fill and Stroke**, click the **Fill Color** control and select the desired color from the palette.
5. On the **Stage**, drag the mouse pointer to draw a triangle.
6. Select the **Free Transform** tool in the **Tools** panel.
7. On the **Stage**, drag the mouse pointer around the triangle to select it. Transformation handles appear around the triangle (see Figure 17).

8. Modify the triangle as necessary to transform it into a sail and move it above the boat.
   - To rotate the triangle, position the mouse pointer just outside a corner handle and drag.
   - To resize the triangle, drag a corner handle diagonally to scale in two dimensions, or drag a side handle horizontally or vertically to scale in the respective direction only.
   - To skew the triangle, position the mouse pointer on the outline between the transformation handles and drag.
   - To move the triangle, position the mouse pointer over the triangle (within the bounding box) and drag. Do not drag the transformation handles.
9. Click outside the shape to deselect it. It now looks more like a sail (see Figure 17).
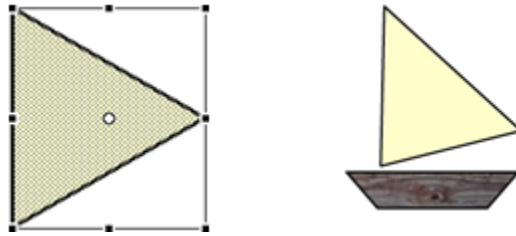

Figure 17 – A Triangle Transformed into a Sail

Drawing with the Line Tool
The *Line* tool is used to draw straight lines in any direction.

To create a pole using the Line tool:
1. Select the **Line** tool   in the **Tools** panel.
2. In the **Property inspector**, under **Fill and Stroke**, click the **Stroke Color** control and select the desired color from the palette (see Figure 18).
3. Type **5** in the **Stroke Height** box and press the **Enter** key.
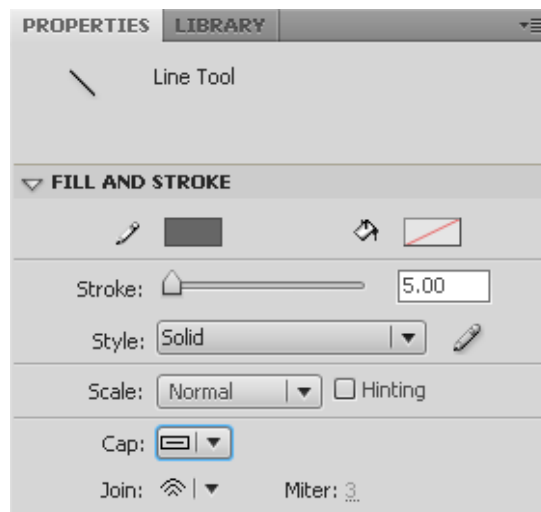4. Click the **Cap** arrow and select **Square** from the list.

Figure 18 – Line Tool Property Inspector

5. Hold down the **Shift** key and drag the mouse pointer vertically to draw a straight line on the **Stage.**
6. Move the line to the left of the triangle.
7. Draw a short horizontal line above the vertical line. The line looks more like a pole now (see Figure 19).
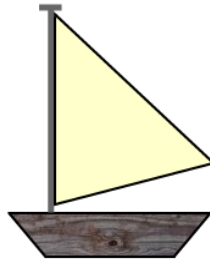
Figure 19 – Boat

Applying a Gradient Fill

A gradient is a multicolor fill in which one color gradually changes into another color. Flash can be used to create *linear* gradients, which change color along a linear path (horizontal or vertical), or *radial* gradients, which change color in an outward direction starting from a central focal point.

To apply a gradient fill:

1. Select the **Selection** tool in the **Tools** panel.
2. On the **Stage**, double-click the triangle to select both the stroke and the fill.
3. In the **Color** panel, click the **Fill** icon .
4. Click the **Type** arrow and select **Radial** from the list.
5. Click on or below the gradient definition bar to add a color pointer to the gradient.
6. Drag the new pointer to the middle of the gradient definition bar.
7. Select the new pointer, and then click in the color space that appears above the gradient bar to change the color.

   NOTE: The triangle at the top of a pointer turns black when selected.

8. Select the far-left and far-right pointers and select the desired colors from the color space. The gradient fill consisting of three colors is applied to the sail (see Figure 20).
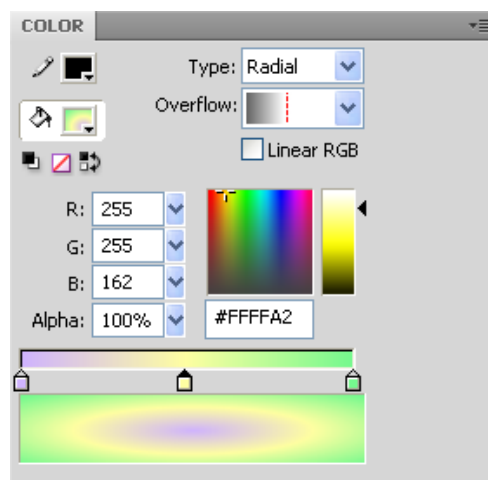

**Figure 20 – Radial Gradient Selected in the Color Panel**

Using the Gradient Transform Tool

The *Gradient Transform* tool can be used to adjust the size, direction, or center of a gradient fill.

To modify the gradient fill in the sail:

1. Select the **Gradient Transform** tool in the **Tools** panel.

NOTE: If the **Gradient Transform** tool is not displayed, click and hold the mouse button on the **Free Transform** tool [icon], and then select the **Gradient Transform** tool from the pop-up menu.

2. On the **Stage**, click within the sail. Transformation handles appear around the sail (see Figure 21).
3. Drag the square handle ⊟ on the edge of the bounding circle to stretch the gradient fill horizontally.
4. Drag the middle circular handle ⊘ on the edge of the bounding circle to stretch the overall gradient fill.
5. Drag the bottom circular handle ⟳ on the edge of the bounding circle to rotate the gradient fill.
6. Drag the inverted triangle ▽ in the center of the bounding circle to change the center of the gradient.
7. Drag the circular handle ○ in the middle of the bounding circle to move the gradient fill within the sail.
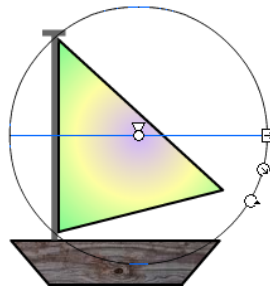

Figure 21 – Gradient Transformation Handles

Making Selections

In Flash, objects can be selected using the *Selection* tool, *Subselection* tool, or *Lasso* tool. The *Selection* tool is used to select an entire object or a section of an object. The *Subselection* tool is used to select a specific anchor point in a vector path. The *Lasso* tool is used to draw a freeform selection.

Selecting and Grouping Objects

Groups are collections of graphic objects that are treated as a single unit. Grouping lets users move or transform a number of objects without affecting their attributes or relative positions.

To select objects and group them:

1. Select the **Selection** tool [icon] in the **Tools** panel.
2. On the **Stage**, drag the mouse pointer around the boat to select it.
3. Click the **Modify** menu and select **Group** (see Figure 22).

Figure 22 – Modify Menu When Selecting Group

To edit the newly created group:

1. Double-click the boat on the **Stage**. The **Edit** bar above the **Stage** now displays **Scene 1** and **Group** (see Figure 23).

Figure 23 – Edit Bar

2. Select the pole of the boat using the **Selection** tool .
3. Click the **Stroke Color** control in the **Tools** panel and select the desired color from the palette.
4. Click **Scene 1** on the **Edit** bar to return to the main scene.

Using the Lasso Tool

The *Lasso* tool lets users select elements that are oddly shaped or too close to other elements to allow the use of the selection rectangle.

To create a wave beneath the boat:

1. Double-click the boat on the **Stage**.
2. Select the **Lasso** tool in the **Tools** panel.
3. On the **Stage**, drag to draw a wave-like shape beneath the boat, overlap the ends to close the selection outline, and then release the mouse button.
4. Click the **Fill Color** control in the **Tools** panel and select blue from the color palette. The selected area of the wood bitmap is replaced with a solid blue fill.
5. Click the **Stroke Color** control in the **Tools** panel and click the **No Color** button located in the upper-right corner of the color palette.
6. Click **Scene 1** on the **Edit** bar to return to the main scene (see Figure 24).
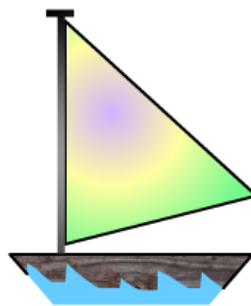

Figure 24 – Boat with Waves

Using Other Shape Tools

In addition to creating rectangles and triangles, Flash includes tools that can be used to draw circles, ovals, and stars. All these tools can be used to draw a shape as an outline (a stroke) or as a solid object (a fill).

To create a moon using the Oval tool:

1. In the **Timeline**, create a new layer and rename it to **Moon & Stars**.
2. Select the **Oval** tool in the **Tools** panel.

    NOTE: If the **Oval** tool is not displayed, click and hold the mouse button on the **PolyStar** tool , and then select the **Oval** tool from the pop-up menu.

3. In the **Property inspector**, under **Fill and Stroke**, click the **Stroke Color** control to display the color palette, and then click the **No Color** button ⊘.
4. Click the **Fill Color** control and select the desired color from the palette.
5. Hold down the **Shift** key to constrain the shape and drag the mouse pointer on the **Stage** to draw a circle (see Figure 25).

Figure 25 – Creating a Crescent-shaped Moon

6. Use the **Selection** tool ▶ to select the circle, click the **Edit** menu and select **Copy** (or, press **Ctrl+C**), and then click the **Edit** menu and select **Paste in Center** (or, press **Ctrl+V**). A copy of the circle appears on the **Stage**.
7. Select the **Free Transform** tool ⬚, hold down the **Shift** key to retain the circle's proportions, and drag a corner handle inward to make the second circle smaller.
8. Use the **Fill Color** control to select a different color for the second circle.
9. Move the second circle on top of the first circle to create a crescent-shaped moon.
10. Click outside the circle to deselect it.
11. Click the second circle again and press the **Delete** key to delete it.
12. Select the newly created moon and move it to the upper-right corner of the **Stage**.

To create stars using the PolyStar tool:
1. Select the **PolyStar** tool ⬠ in the **Tools** panel.

   NOTE: If the **PolyStar** tool is not displayed, click and hold the mouse button on the **Oval** tool ⬭, and then select the **PolyStar** tool from the pop-up menu.

2. In the **Property inspector**, under **Tool Settings**, click the **Options** button. The **Tool Settings** dialog box opens (see Figure 16).
3. Click the **Style** arrow and select **star** from the list.
4. Type **5** in the **Number of Sides** box, and then click the **OK** button (see Figure 26).
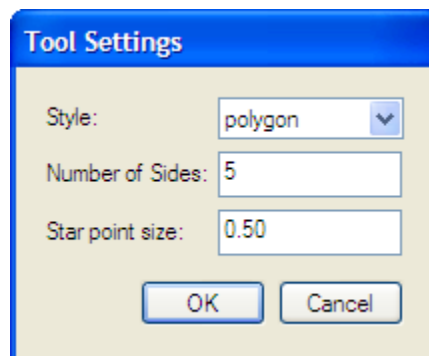

Figure 26 – Tool Settings Dialog Box

5. In the **Property inspector**, under **Fill and Stroke**, click the **Stroke Color** control to display the color palette, and then click the **No Color** button ⊘.
6. Click the **Fill Color** control and select the desired color from the palette.
7. On the **Stage**, drag the mouse pointer to draw a few stars (see Figure 27).

Figure 27 – Moon and Stars

Creating Curves

The *Pen* tool is used to draw precise paths as straight lines or smooth, flowing curves.

To create a wave-like background graphic using the Pen tool:
1. In the **Timeline**, create a new layer and rename it to **Wave1**.
2. Drag the **Wave1** layer to the bottom of the layer stack (see Figure 28).
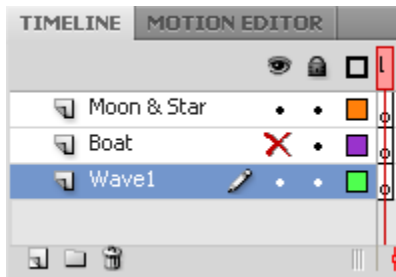3. Hide the **Boat** layer.

Figure 28 – Timeline after Rearranging Layers

4. Select the **Pen** tool in the **Tools** panel.
5. Click to the left of the **Stage** to create the first anchor point.
6. Position the mouse pointer on the **Stage** to the right of the first anchor point, and then drag to establish the second anchor point and to create a smooth curve (see Figure 29).

   NOTE: The direction lines that appear at an anchor point as you drag can be used to adjust the shape of the curve (see Figure 29).
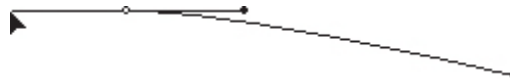

Figure 29 – Drawing a Curve Using the Pen Tool

7. Continue dragging on the **Stage** to create a series of smooth curves. Make the width of the wave wider than the **Stage** (see Figure 30).

Figure 30 – Smooth Wave Curves

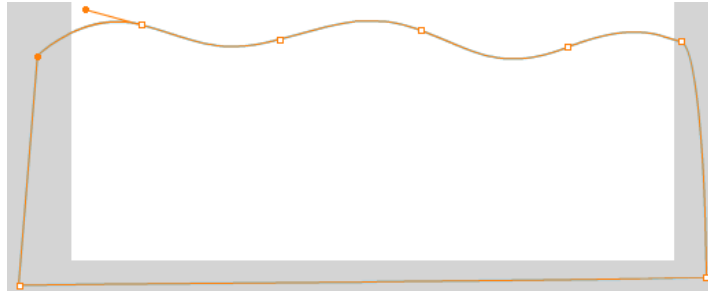8. Close the path by clicking on the first anchor point (see Figure 31).

Figure 31 – Wave Outline

9. Select the **Paint Bucket** tool in the **Tools** panel, and then click the **Fill Color** control and select blue from the color palette.
10. Click anywhere inside the wave outline to fill it with the selected color (see Figure 32).

Figure 32 – Colored Wave

11. Double-click the wave shape.
12. In the **Property inspector**, click the **Stroke Color** control, and then click the **No Color** button.

Transparencies

Transparency is measured as a percentage and is referred to as alpha. An alpha of 100% indicates that a color is totally opaque, whereas an alpha of 0% indicates that a color is totally transparent. Transparency can be applied to either the stroke or the fill.

Modifying the Alpha Value of a Fill

To modify the alpha value of a fill:

1. Select the wave shape.
2. Click the **Edit** menu and select **Copy**.
3. Create a new layer and rename it to **Wave2**.
4. Click the **Edit** menu and select **Paste in Place**. The copy of the wave is placed in the same location as the original wave.
5. Select the **Selection** tool and move the copy slightly to the left or to the right of the original so the crests of the waves are somewhat offset.
6. Make sure the copied wave is still selected.
7. In the **Color** panel, set the **Fill Color** to a slightly lighter blue, and then change the **Alpha** value to **50%**. The color swatch at the bottom of the **Color** panel displays a preview of the newly selected color (see Figure 33). The **Stage** now has two waves with different color tones (see Figure 34).
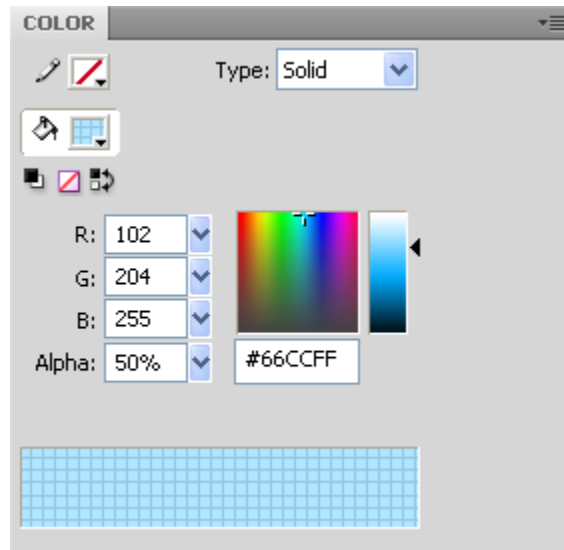
Figure 33 – Changing the Alpha Value in the Color Panel

8. Unhide the **Boat** layer and change the background color to a darker blue (see Figure 34).

Figure 34 – Waves with Different Color Tones

Text

In Flash CS4, users can create three types of text fields: static, dynamic, and input. Static text fields display text that does not change characters dynamically. Dynamic text fields display dynamically updating text. Input text fields allow users to enter text in forms or surveys.

To create static text:
1. Create a new layer and rename it to **Adobe Flash CS4**.
2. Select the **Text** tool T in the **Tools** panel.
3. In the **Property inspector**, click the **Text type** arrow and select **Static Text** from the list (see Figure 35).
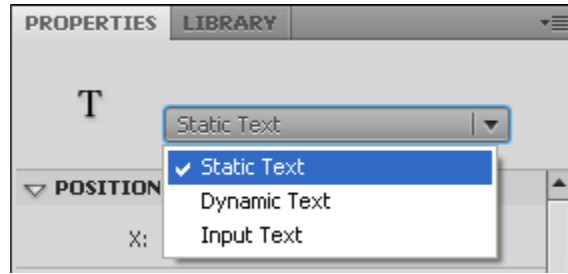
Figure 35 – Selecting Static Text in the Property Inspector

4. Under **Character**, click the **Family** arrow and select a font from the list.
5. Click the hot text next to **Size** and enter a new font size.
6. Click the **Color** box and select a color swatch from the palette.
7. Under **Paragraph**, click the **Align center** button ≣ to center the text in the text box (see Figure 36).
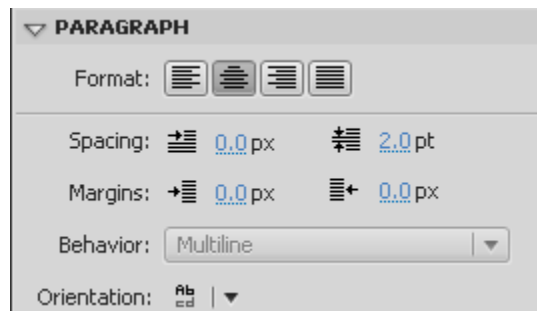

Figure 36 – Paragraph Options in the Property Inspector

8. Click on the **Stage** and type **Adobe Flash CS4**.
9. Click another part of the **Stage** to deselect the text box (see Figure 37).

Figure 37 – Stage after Adding Text

Breaking Apart Text Objects

The *Break Apart* command separates each character in the text box into individual static characters. It also provides a means to select all of the characters so that a gradient fill can be applied to the text object.

To apply a gradient fill to a text object:

1. Select the **Selection** tool ⤣ in the **Tools** panel.
2. Right-click the text on the **Stage** and select **Break Apart** (see Figure 38).

Figure 38 – Selecting Break Apart from the Shortcut Menu

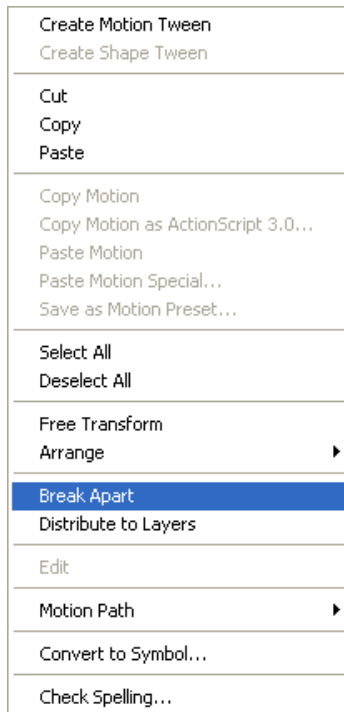3. Right-click the text and select **Break Apart** one more time. The text is automatically selected (see Figure 39).

Figure 39 – The Effect of Break Apart

4. In the **Property inspector**, click the **Fill Color** control and select a gradient fill from the palette.

   NOTE: The gradient fill can be modified as desired by following the steps in the Applying a Gradient Fill section of this handout.

Special Effects and Filters
Filters are special effects that can be applied to text and to certain symbols.

To add a drop shadow to the text:
1. Create a new layer and rename it to **ITS Training**.
2. Select the **Text** tool T , click on the **Stage**, and type **ITS Training**.
3. Select the **Selection** tool and click the text on the **Stage**.
4. In the **Property inspector**, expand the **Filters** section.
5. In the **Filters** section, click the **Add filter** button and select **Drop Shadow** from the menu (see Figure 40). The **Drop Shadow** filter appears in the **Filters** section, and a drop shadow is applied to the selected text (see Figure 41).
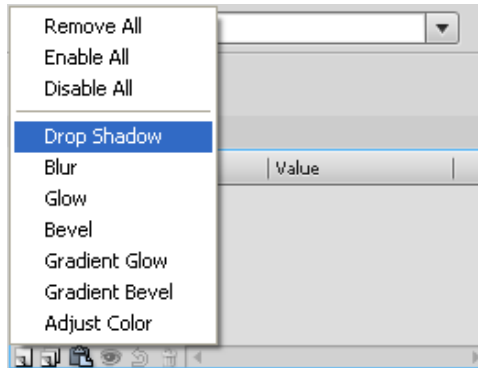
Figure 40 – Selecting Drop Shadow from the Add Filter Menu

Figure 41 – Text with Drop Shadow

Other Drawing Tools

Flash includes other useful drawing tools such as the Deco tool, the Brush tool, and the Pencil tool.

Using the Deco Tool

The *Deco* tool, which is a new feature in Flash CS4, can be used to create difficult patterns. The Deco tool options can help users easily create symmetrical designs, grids, and branching-type flourishes.

To draw vines:

1. Create a new layer and rename it to **Vines**.
2. Select the **Deco** tool in the **Tools** panel.
3. In the **Property inspector**, under **Drawing Effect**, click the down arrow and select **Vine Fill** from the list.
4. Click the color box next to **Leaf** and select a color for the leaf shapes.
5. Click the color box next to **Flower** and select a color for the flower shapes.
6. Under **Advanced Options**, click the color box next to **Branch angle** and select a color for the branches.
7. Click the hot text next to **Branch angle** and enter **0**.
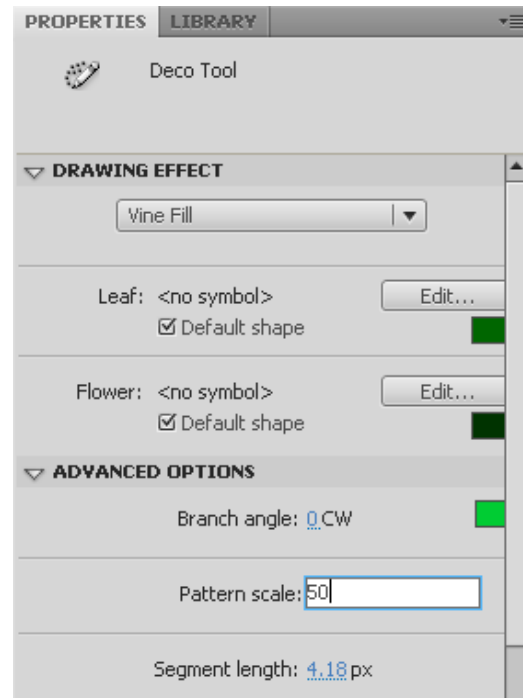8. Click the hot text next to **Pattern scale** and enter **50** (see Figure 42).

Figure 42 – Deco Tool Property Inspector

9. Click once on the **Stage** to create the fill pattern. Click again to stop the formation. The vines appear on the **Stage** (see Figure 43).

Figure 43 – Text with Vines

NOTE: The fill pattern cannot be changed after the Vine Fill effect is applied.

Using the Brush Tool

The *Brush* tool draws brush-like strokes and creates special effects, including calligraphic effects. The Brush tool modifiers can be used to select a brush size and shape.

To draw a fish:
1. Create a new layer and rename it to **Fish**.
2. Select the **Brush** tool ![brush icon] in the **Tools** panel.
3. In the **Property inspector**, click the **Fill Color** control and select the desired color from the palette.
4. Click the hot text next to **Smoothing** and enter **100**.
5. In the **Tools** panel, click the **Brush Size** modifier ![icon] and select the desired brush size.
6. In the **Tools** panel, click the **Brush Shape** modifier ![icon] and select the desired brush shape.
7. Draw a fish on the **Stage** (see Figure 44).

Figure 44 – Fish

Using the Pencil Tool

The *Pencil* tool is used to draw lines and shapes in much the same way as a real pencil. Users can apply smoothing or straightening to the lines and shapes as they draw by selecting a drawing mode for the Pencil tool.

To draw the details of the fish:
1. Select the **Pencil** tool ![pencil icon] in the **Tools** panel.
2. In the **Property inspector**, click the **Stroke Color** control and select the desired color.
3. Type **1** in the **Stroke Height** box and press the **Enter** key.
4. Click the hot text next to **Smoothing** and enter **100**.
5. In the **Tools** panel, click the **Straighten** pencil mode ![icon] and select **Smooth** ![icon].
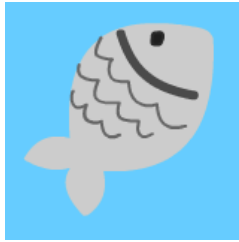6. On the **Stage**, draw details on the fish (see Figure 45).

Figure 45 – Fish with Details

Importing/Exporting Images and Graphics

A key advantage of Flash CS4 is that users can import images created in other applications and use those assets in their Flash documents. In addition, images created in Flash CS4 can be exported and used in other applications.

Importing Images into Flash

Flash lets users import vector graphics and bitmaps in various file formats (e.g., .ai, .psd, .bmp, .gif, .jpg, .png) either directly to the Stage or to the Library.

To import images to the Library:
1. Click the **File** menu, point to **Import**, and select **Import to Library**. The **Import to Library** dialog box opens (see Figure 46).

Figure 46 – Import to Library Dialog Box
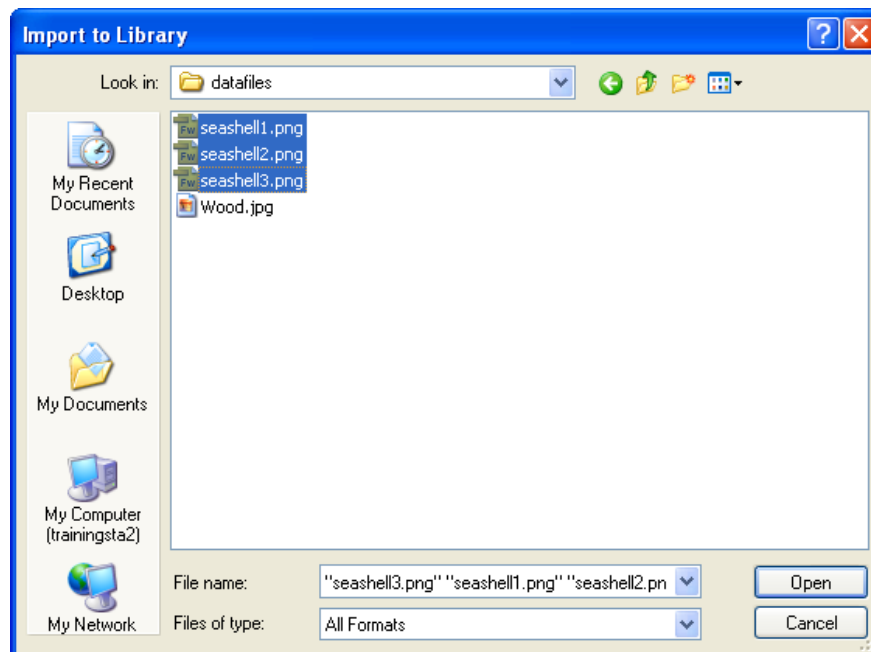
2. While holding down the **Shift** key, select the **seashell1.png**, **seashell2.png**, and **seashell3.png** files.
3. Click the **Open** button. The images are added to the **Library** panel.
4. Create a new layer and rename it to **Seashells**.
5. Drag the **seashell1.png**, **seashell2.png**, and **seashell3.png** files from the **Library** panel to the **Stage** (see Figure 47).

Figure 47 – Imported Seashells

Exporting as a Bitmap Image

Users can create bitmap images from Flash content and use them in other applications.

To export the Flash file as a bitmap image:
1. Click the **File** menu, point to **Export**, and select **Export Image**. The **Export Image** dialog box opens.
2. Click the **Save in** arrow and select a location to save the file.
3. Click the **Save as type** arrow and select **Bitmap (*.bmp)** from the list (see Figure 48).
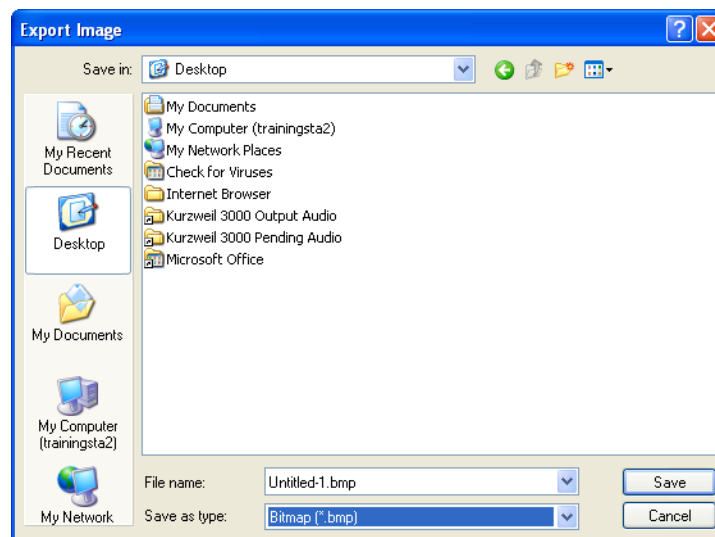

Figure 48 – Export Image Dialog Box

4. Type a name for the file in the **File name** box.
5. Click the **Save** button. The **Export Bitmap** dialog box opens (see Figure 49).
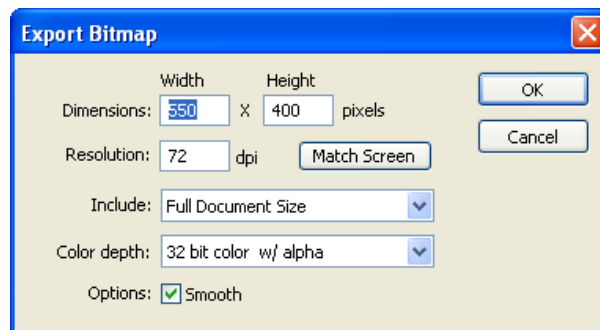

Figure 49 – Export Bitmap Dialog Box

6. Click the **Include** arrow and select **Full Document Size** from the list.
7. Click the **Color depth** arrow and select **32 bit color w/ alpha** from the list.
8. Click the **OK** button.

Saving Flash Documents

When a file is saved in Flash, the default format is FLA. FLA files have the *.fla* file extension and can only be edited using Flash. When an FLA file is published, Flash creates a SWF file which has the *.swf* file extension. Users can then use Adobe Flash Player to play the SWF file in a web browser or as a stand-alone application. The SWF format is well suited for delivery over the Internet because its files are very small.

NOTE: When a Flash document contains unsaved changes, an asterisk (*) appears after the document name on the document tab. When the document is saved, the asterisk is removed.

To save a Flash document in the FLA format:
1. Click the **File** menu and select **Save**. The **Save As** dialog box opens.
2. Click the **Save in** arrow and select a location to save the file.
3. Type a name for the file in the **File name** box.
4. Click the **OK** button.

Getting Help

The Adobe website provides a comprehensive user guide on Flash CS4 that users can search and browse. In addition, Community Help gives users access to community-generated content which includes the most useful, relevant, and up-to-date information about Adobe products.

To access Flash Help:
1. Type a search term in the search box on the **Application** bar, and then press the **Enter** key (see Figure 50). A web browser opens and displays the Flash Help website with a list of search results.
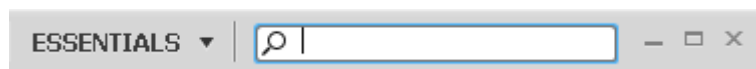

Figure 50 – Adobe Flash CS4 Search Box

NOTE: The search results are sorted according to their relevance.

2. Click on a topic to view the full details.