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Introduction

Macromedia Flash Basic 8 and Macromedia Flash Professional 8 provide everything you need to create and deliver rich web content and powerful applications. Whether you're designing motion graphics or building data-driven applications, Flash has the tools necessary to produce great results and deliver the best user experience across multiple platforms and devices.

The samples in this book are designed to introduce you to Flash. As you explore the samples, you will see many of the basic techniques used in creating Flash applications.

For additional samples see www.macromedia.com/go/flash_samples.

NOTE

This book is not a comprehensive manual that details all of the features of Flash. For in-depth information about how to use Flash, see *Using Flash* and *Learning ActionScript 2.0 in Flash*.

Graphics samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

This chapter contains the following sections:

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Animation and gradients	8

Animated drop shadow

This sample shows how to create a realistic-looking animated drop shadow by layering two instances of the same movie clip and adding a drop shadow filter to the lower layer.

To re-create the process of constructing this sample, you first create the shadow effect for the dog by nesting the animation inside a movie clip. You then duplicate the movie clip instance and place it behind the original instance. (You can keep the duplicate on the same layer and arrange it behind the original instance, or paste it to a new layer below the original.)

You then select the duplicate instance and, in the Filters tab of the Property inspector, select Drop Shadow from the Plus (+) menu.

Next, adjust the strength level to around 45% and select Hide Object. This hides the movie clip object but reveals the drop shadow filter properties.

You can make further adjustments by setting Quality to Low, Medium, or High, or modifying the amount of blur, the color, the angle, or the distance of the blur effect from the original graphic.

To prevent this effect from looking too much like a drop shadow against a flat wall behind the original object, you can use the Free Transform tool to skew the filtered movie clip instance. This technique takes a bit of trial and error. Squash and skew the instance until it looks as if the shadow is being cast upon a floor. (You may need to reposition the instance.) Test the movie clip, and you see the effect come to life.

You can find the sample source files, `drop_shadow_dog fla` and `drop_shadow_monkey fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\Graphics\AnimatedDropShadow.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples\Graphics\AnimatedDropShadow.

These samples were developed by Chris Georgenes.

Animation and gradients

This sample shows how to create a realistic-looking animation with gradients and drop shadows.

To re-create the process of constructing this sample, you first design the eight-ball graphic. Start by mixing a radial gradient containing three colors: black, white, and a medium gray. Then create a circle with the Oval tool (hold down Shift to constrain the shape so it is perfectly round), and fill it with the new radial gradient. Using the Gradient Transform tool, edit the radial gradient fill by offsetting it from the center of the circle. This gives the illusion of depth as the off-center white highlight gradually changes to black and a subtle amount of gray appears in the lower-right corner of the sphere. This is crucial for making a convincing-looking sphere; it suggests light wrapping around from behind the ball.

Then convert the gradient fill to a graphic symbol and edit it further by adding a new layer and applying a shadow using a linear gradient. The linear gradient uses two colors with varying amounts of alpha mixed in.

The next step is to create a movie clip symbol and place this eight-ball graphic inside it. Inside this movie clip is where the “8” graphic is added along with a mask layer. Then add a mask that is the same size and shape as the eight ball, and use the Free Transform tool and motion tweening to create the illusion of the ball rolling in various directions by moving and squashing the “8” graphic across the surface of the circle. The mask constrains the visibility of the “8” graphic to the exact area of the circle below it. This makes for a convincing illusion of the ball rolling.

Then add animations of the ball rolling to a stop and starting from a stationary position. Use descriptive frame labels and simple frame actions so this movie clip can be targeted later with ActionScript from the main timeline. The movie clip has to be set up this way; it uses a drop shadow, which can be applied only to movie clip instances.

Applying the drop shadow is the easiest part, thanks to the graphics filters in Flash. You simply select the movie clip instance, and from the Filters tab of the Property inspector, click the Plus (+) pop-up menu and select Drop Shadow. From there you can adjust the amount of blur, strength, quality, color, angle distance, and so on.

The drop shadow filter is used to create blurs only when the eight ball is animated moving rapidly across the screen. This emphasizes the speed at which the ball is moving and creates a dynamic visual effect.

You can find the sample source file, `animation_and_gradients fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\F8\Samples and Tutorials\Samples\Graphics\AnimationAndGradients.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/Graphics/AnimationAndGradients.

This sample was developed by Chris Georgenes.

An accessibility sample is provided when you install Macromedia Flash 8. This chapter contains a brief overview of this sample.

This chapter contains the following section:

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Accessibility features

This sample shows how to use accessibility features such as tab ordering, components, and the Accessibility panel. In this sample, you can see how to use the new authoring tool features and user interface, which are geared toward building applications that contain the accessibility features. An arrow moves to indicate which element on the Stage has the focus. Explore the source code to learn more about how to take advantage of the Flash accessibility features.

You can find the sample source file, `AccessibleApplications.fla`, in the `Samples` folder on your hard disk.

- In Windows, browse to `boot drive\Program Files\Macromedia\F8\Samples and Tutorials\Samples\Accessibility\AccessibleApplications`.
- On the Macintosh, browse to `Macintosh HD/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/Accessibility/AccessibleApplications`.

Masking samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

This chapter contains the following sections:

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Device font masking

This sample explores Flash Player support for masking device fonts. The main features illustrated in the sample are device font masking, components, and scriptable masks. Newly added support in Flash Player for masking device fonts expands the possibilities for using scriptable masks on Flash content. Device font masking allows device fonts to be used inside components that mask their content, as well as custom masks that you create. This sample shows examples of both types of masking.

You can find the sample source file, `DeviceFontMasking.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\F8\Samples and Tutorials\Samples\Masking\DeviceFontMasking.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/Masking/DeviceFontMasking.

Scriptable masks

This sample shows how to dynamically mask Flash content at runtime using scriptable masks and components. Scriptable masking allows precise control over how masks behave at runtime, and allows the mask and the masked content to be dynamically changed at runtime. This sample shows different types of masks and masked content that are controlled by a user interface built with components. Explore this sample to learn more about masking and building interfaces with components.

You can find the sample source file, `ScriptableMasksPart2.fla`, in the `Samples` folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\Masking\ScriptableMasksPart2.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/Masking/ScriptableMasksPart2.

Text samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

This chapter contains the following sections:

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Text sample

This sample uses the many new text enhancements added to Macromedia Flash Basic 8 and Macromedia Flash Professional 8. The features highlighted in this sample are text styles, inline images, hyperlink improvements, and small text optimization. The text enhancements provide better and more precise control over text as it is entered in Flash Player. This sample loads an external HTML file named `sample.html` into a text field in the SWF file. However, you could use any text file that incorporates a tag-based format such as XML or HTML. New support for Cascading Style Sheets allows Flash to style the text in a given text field for each tag before displaying it. This sample uses a style sheet named `style.css`. Additionally, Flash Player supports the `img` tag, allowing inline images that your text wraps around.

You can find the sample source file, `TextEnhancements.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\F8\Samples and Tutorials\Samples\Text\TextEnhancements.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/Text/TextEnhancements.

Multilingual content

This sample, featuring the Strings panel, shows a streamlined approach to developing and managing content in several languages. The new Strings panel provides for easy and fast content development in different languages. Localized content for text fields inside the document is kept in language-specific XML files in directories alongside the document. This sample has content in several languages. The language displayed corresponds to the current language of the host operating system. Explore this sample to see how the Strings panel manages localized content.

You can find the sample source file, `MultiLingualContent.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\Text\MultilingualContent.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/Text/MultilingualContent.

A behaviors sample is provided when you install Macromedia Flash 8. This chapter contains a brief overview of this sample.

This chapter contains the following section:

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Photo scrapbook

This sample shows how to build an interactive photo scrapbook by using behaviors instead of scripting. Behaviors provide an easy way to add interactivity to your Flash content without having to write ActionScript. In this sample, multiple behaviors are combined to create an interactive scrapbook. Explore the source file to learn more, or customize it by adding your own pictures.

You can find the sample source file, BehaviorsScrapbook.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\F8\Samples and Tutorials\Samples\Behaviors\BehaviorsScrapbook.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples\Behaviors\BehaviorsScrapbook.

Several component samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

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Component application

This sample is the starter file you can use in the tutorial “Creating an Application with Components (Flash Professional Only)” in *Using Components*. The end result of the tutorial is a file identical to `first_app fla`.

You can find this starter Flash (FLA) file, `first_app_start fla`, and the finished file, `first_app fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\F8\Samples and Tutorials\Samples\Components\ComponentsApplication.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples\Components\ComponentsApplication.

Dial component sample

This sample provides an example of a dial component with a getter/setter property that gets or sets the position of the needle on the dial.

This sample is discussed in “Building your first component” in *Using Components*.

You can find the sample source file, Dial.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\Components\DialComponent.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/Components/DialComponent.

Login component sample

The sample LogIn component files are the completed files created in the LogIn tutorial in Chapter 6, “Creating Components” in *Using Components*.

This sample LogIn component demonstrates how to incorporate the power of Flash components into your own custom components using the version 2 Macromedia Component Architecture and ActionScript 2.0. This sample demonstrates how to create a form that captures and validates data, sends it to a server, and receives a response.

You can bring Flash components into your own components by importing their uncompiled movie clip symbols from the library in StandardComponents.fla.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\language\Configuration\ComponentFLA\StandardComponents.fla.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Configuration/ComponentFLA/StandardComponents.fla

The LogIn sample component uses Button, Label, and InputField component movie clip symbols to create a simple name and password login interface that dispatches a click event when the Login button is clicked. The sample includes a document file (.fla) containing the LogIn component movie clip symbol in its library and the LogIn component's class ActionScript file (.as), which defines its class properties and methods. Explore both files to learn about the basic version 2 component structure and how to incorporate the capabilities of Flash components into your own custom components.

You can find the sample source file, login.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\Components\Login.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples/Components/Login.

Tip calculator

This sample demonstrates how to perform event handling with forms and components.

You can find the sample source files (TipCalculator.fla, TipCalculator1.fla, and TipCalculator2.fla) in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\Components\TipCalculator.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples/Components/TipCalculator.

Components jukebox

This sample demonstrates how to create a jukebox by using data types, general coding principles, and several components.

You can find the sample source file, `jukebox.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\Components\Jukebox.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/Components/Jukebox.

Several ActionScript samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

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Custom Flash Player context menu

In this sample, you can see how to add custom options to the Flash Player context menu using ActionScript 2.0. This sample uses ActionScript to modify the context menu by adding cut, copy, and paste functionality that can be applied to the drawing objects on the Stage. The source includes the document file (.fla) and the ActionScript file (.as) that defines the Clipboard class. Explore both files to learn more about the context menu and writing classes with ActionScript 2.0.

You can find the sample source file, CustomizingContextMenu.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\ActionScript\CustomizingContextMenu.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/CustomizingContextMenu.

Filters with ActionScript

This sample shows how to apply filter effects to images with ActionScript. You can apply different filters to several images, and then manipulate their properties at runtime. The ActionScript code shows how to apply filters and manipulate the filter properties using components.

You can find the sample source file, Filters.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\ActionScript\Filters.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/Filters.

Animation with ActionScript

This sample provides an example of programmatic animation using ActionScript. It shows a simple game where instances are animated across the Stage at runtime. You create a custom mouse pointer, and you can tally scores by manipulating strings and using operators to write equations.

You can find the sample source file, `animation.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\Animation.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ActionScript/Animation.

The Tween class, the TransitionManager class, and progress bars

This sample shows how to script animation using the Tween and TransitionManager classes, which provide an easy way to animate instances using code. It also shows how to create a progress bar using code.

You can find the sample source file, `tweenProgress.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\Tween ProgressBar.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ActionScript/Tween ProgressBar.

ActionScript data types

This sample provides an example of converting data from one type to another.

You can find the sample source file, `datatypes.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\DataTypes.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/DataTypes.

Bitmap caching with ActionScript

This sample demonstrates the benefit of using bitmap caching when you animate complex vector shapes. Click the button on the Stage to see the vast improvement `cacheAsBitmap` has on the animating movie clips.

You can find the sample source file, `cacheBitmap.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\CacheBitmap.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/CacheBitmap.

Drawing with ActionScript

This sample demonstrates how to draw lines and create, fill, sort, and remove shapes with ActionScript.

You can find the sample source file, `drawingapi fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\DrawingAPI.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/DrawingAPI.

ActionScript arrays example

This sample illustrates array manipulation using ActionScript. The code in the sample creates an array and sorts, adds, and removes items of two List components.

You can find the sample source file, `array fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\Arrays.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/Arrays.

Interaction between the browser and Flash Player

This sample demonstrates how to use the External API (ExternalInterface class) to create interaction between the browser and your SWF file. In this sample, HTML form controls on a web page let you manipulate and display information about an FLV video that plays in a SWF file. Messages from the SWF file appear in an HTML text field.

You can find the sample source file, `external.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\ExternalAPI.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/ActionScript/ExternalAPI.

Stage size control with ActionScript

This sample demonstrates how the `Stage.scaleMode` property affects the values of `Stage.width` and `Stage.height` when the browser window is resized.

You can find the sample source file, `stagesize.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\StageSize.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/ActionScript/StageSize.

Text loading with ActionScript

This simple sample shows how to load text into a SWF file at runtime using the LoadVars class.

You can find the sample source file, loadText.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\LoadText.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ActionScript/LoadText.

Formatted text with ActionScript

This sample shows how to load formatted text into a SWF file at runtime.

You can find the sample source file, formattedText.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\LoadText.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ActionScript/LoadText.

FlashType sample

This sample shows how to apply and manipulate anti-aliased text in an application. You use the FlashType rendering technology to create small text that's highly legible. This sample also demonstrates how text fields can scroll quickly and smoothly when you use the `cacheAsBitmap` property.

You can find the sample source file, flashtype.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\FlashType.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ActionScript/FlashType.

Login sample

This sample shows how to add simple login functionality to your websites using ActionScript 2.0. The sample uses ActionScript and components to create a small form in which you enter a user name and password and then click a button to enter a site.

You can find the sample source file, `login.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript>Login.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples>ActionScript/Login.

String processing with ActionScript

This sample demonstrates how to build a simple word processor that compares and retrieves string and substring selections.

You can find the sample source file, `strings.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\Strings.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples>ActionScript/Strings.

Image manipulation with the BitmapData class

This sample demonstrates how to manipulate an image and create a transition using the BitmapData class.

You can find the sample source file, BitmapData.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\BitmapData.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples\ActionScript/BitmapData.

Text field manipulation with ActionScript

This sample demonstrates how to create and position a text field, manipulate its text, and control text selections.

You can find the sample source files, textfieldsA.fla and textfieldsB.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ActionScript\TextFields.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples\ActionScript/TextFields.

Photo gallery with tree navigation

This sample is a photo gallery application with tree navigation. It provides an example of using components to control movie clips dynamically.

You can find the sample source file, `gallery_tree fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flesh 8\Samples and Tutorials\Samples\ActionScript\Galleries.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/Galleries.

Photo gallery with thumbnails

This sample is a photo gallery application with thumbnails. It provides an example of using ActionScript to control movie clips dynamically.

You can find the sample source file, `gallery_tween fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flesh 8\Samples and Tutorials\Samples\ActionScript\Galleries.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/Galleries.

File upload with the FileReference API

This sample demonstrates how to let users select a file on their hard disk and upload it to a server. After the local image uploads, it appears in the SWF file.

You can find the sample source file, FileUpload.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\FileUpload.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/ActionScript/FileUpload.

XML blog tracker

This sample demonstrates how to create a web log tracker by loading, parsing, and manipulating XML data.

You can find the sample source file, xml_blogTracker.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript/XML_BlogTracker.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/ActionScript/XML_BlogTracker.

XML language picker

This sample demonstrates how to use XML and nested arrays to choose strings of different languages to populate text fields.

You can find the sample source file, `xml_languagePicker.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\XML_LanguagePicker.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/XML_LanguagePicker.

XML menu

This sample demonstrates how to create a dynamic menu with XML data. The sample calls the ActionScript `XmlMenu()` constructor and passes it two parameters: the path to the XML menu file and a reference to the current timeline. The rest of the functionality resides in a custom class file, `XmlMenu.as`.

You can find the sample source file, `xmlmenu.fla`, in the Samples folder on your hard disk.

- On Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\ActionScript\XML_Menu.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples\ActionScript/XML_Menu.

Several data integration samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

If you installed Flash Basic 8, you can view and explore these samples. However, you can reconstruct the samples only if you installed Flash Professional 8.

This chapter contains the following sections:

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WebServiceConnector component	36
Data integration XML sample	36
Flash and PHP integration	37

News reader

This sample provides an interface for reading the latest news on Macromedia DevNet at www.macromedia.com/devnet. The addition of the data-binding user interface in Macromedia Flash Professional 8 allows you to build interfaces that connect to, retrieve, and display remote data without writing any code. The new components have built-in data awareness, allowing several possible scenarios with web services, XML documents, and more. Explore this sample to see how these components are connected to a Rich Site Summary (RSS) feed on www.macromedia.com.

You can find the sample source file, *DevNetNews fla*, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\DataIntegration\NewsReader*.
- On the Macintosh, browse to *Macintosh HD/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/DataIntegration/NewsReader*.

WebServiceConnector component

This sample demonstrates how to use the *WebServiceConnector* component.

You can find the sample source file, *tips fla*, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\DataIntegration\MacromediaTips*.
- On the Macintosh, browse to *Macintosh HD/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/DataIntegration/MacromediaTips*.

Data integration XML sample

This sample is an XML file that you can use in the “Creating a simple application” procedure in *Using Flash*.

You can find the XML file (*dinner_menu.xml*) in the Samples folder on your hard disk.

- In Windows, browse to *boot drive\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\DataIntegration\DinnerMenu*.
- On the Macintosh, browse to *Macintosh HD/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/DataIntegration/DinnerMenu*.

Flash and PHP integration

This sample demonstrates how to use Flash and PHP (Hypertext Preprocessor) integration to create a guestbook.

You can find the sample source file, `guestbook fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flesh 8\Samples and Tutorials\Samples\DataIntegration\Guestbook.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/DataIntegration/Guestbook.

As a Macromedia Flash user, you may be familiar with ActionScript, which lets you create scripts that execute at runtime in Macromedia Flash Player. The Flash JavaScript application programming interface (JavaScript API) is a complementary programming tool that lets you create scripts that run in the authoring environment (that is, while a user has the Flash program open). These scripts can be used to help streamline the authoring process. For example, you can write scripts to automate repetitive tasks, add custom tools to the Tools panel, or add timeline effects.

Several JavaScript API samples are available when you install Flash 8. This chapter contains a brief overview of each sample.

This chapter contains the following sections:

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Shape command

This sample displays information about the contours of the selected shape in the Output panel.

You can find the source file for this script, Shape.jsfl, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\ExtendingFlash\Shape.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/ExtendingFlash/Shape.

For instructions on how to install and use this file, see “Sample Shape command” in *Extending Flash*.

Get and set filters command

This sample adds filters to a selected object and displays information about the filters in the Output panel.

You can find the source file for this script, filtersGetSet.jsfl, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\ExtendingFlash\filtersGetSet.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/ExtendingFlash/filtersGetSet.

For instructions on how to install and use this file, see “Sample get and set filters command” in *Extending Flash*.

PolyStar tool

This sample provides an example of adding a tool to the Tools panel using the JavaScript API.

You can find the source file for this script, `PolyStar.jsfl`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ExtendingFlash\PolyStar.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ExtendingFlash/PolyStar.

For instructions on how to install and use this file, see “Sample PolyStar tool” in *Extending Flash*.

Trace Bitmap panel

This advanced sample illustrates how to design and build a panel to control the functions of Flash.

You can find the sample source file, `TraceBitmap.fla`, in the Samples folder on your hard disk. This file shows the use of the `MMEExecute()` function to call JavaScript commands from an ActionScript script.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\ExtendingFlash\TraceBitmapPanel.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/ExtendingFlash/TraceBitmapPanel.

For information on installing and running the sample, see “Sample Trace Bitmap panel” in *Extending Flash*.

Sample DLL

Advanced users can use the C-level extensibility mechanism to implement Flash extensibility files using a combination of JavaScript and custom C code. You define functions using C, bundle them in a dynamic linked library (DLL) or a shared library, save the library in the appropriate directory, and then call the functions from JavaScript using the JavaScript API.

A sample DLL implementation is located in the following folder:

- In Windows, browse to *boot drive*\Program Files\Macromedia\FIash 8\Samples and Tutorials\Samples\ExtendingFlash\dllSampleComputeSum.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia FIash 8/Samples and Tutorials/Samples/ExtendingFlash/dllSampleComputeSum.

For information about installing and using this sample, see “Sample DLL implementation” in Chapter 3, “C-Level Extensibility,” in *Extending FIash*.

Several Macromedia Flash Lite samples are provided when you install Macromedia Flash 8. This chapter contains a brief overview of each sample.

This chapter contains the following sections:

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Four-way navigation sample	44
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Simple button menu sample	45
Soft keys example	45
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Two-way navigation sample

This sample demonstrates two-way navigation in Flash Lite. In two-way navigation, the device's Up and Down arrow keys switch focus among buttons and input text fields on the Stage, similar to how the Tab and Shift+Tab keys function on a desktop computer.

For more information about two-way navigation, see “Modes of tab navigation” in *Developing Flash Lite Applications*.

You can find the sample source file, *2-way.fla*, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples\FlashLite.

Four-way navigation sample

This sample demonstrates four-way navigation in Flash Lite. In four-way navigation, the device's Up, Down, Left, and Right arrow keys switch focus among buttons and input text fields on the Stage.

For more information about four-way navigation, see “Modes of tab navigation” in *Developing Flash Lite Applications*.

You can find the sample source file, *4-way.fla*, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples\FlashLite.

Input text field sample

This sample demonstrates how to use input text fields to get text input from users. For more information about how this sample was constructed, see “Text field example application” in *Developing Flash Lite Applications*.

You can find the sample source file, *input_text_example.fla*, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*\Applications\Macromedia Flash 8\Samples and Tutorials\Samples\FlashLite.

Movie clip menu sample

This sample demonstrates how to create a simple menu out of movie clips. For more information about how this sample was constructed, see “Creating a simple menu using movie clips” in *Developing Flash Lite Applications*.

You can find the sample source file, `movieclip_menu_complete fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/FlashLite.

Simple button menu sample

This sample demonstrates how to create a simple menu using buttons. For more information about how this sample was constructed, see “Handling key events” in *Developing Flash Lite Applications*.

You can find the sample source file, `simple_menu_complete fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/FlashLite.

Soft keys example

This sample demonstrates how to use the soft keys in a Flash Lite application. For more information about how this sample was constructed, see “Using the soft keys” in *Developing Flash Lite Applications*.

You can find the sample source file, `softkeys_sample fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/FlashLite.

Animated cartoon

This Flash Lite sample shows how to create an animated cartoon in Flash Lite. The design shows the optimized use of vector and bitmap graphics to create smooth animation on a mobile device.

Explore the source file to learn more, or customize it by creating your own animated cartoon.

You can find the sample source file, `FLAnimatedCartoon.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia/Flash 8/Samples and Tutorials/Samples/FlashLite.

Flash Lite news reader

This Flash Lite sample shows how to create a Flash Lite application to connect to a website that reports news stories. The design is a classic mobile design pattern: a user selects from a scrollable list of headlines and can then select details to see the full story text in a scrolling text field, after which the user can easily return to the main list.

Explore the source file to learn more, or customize it by creating your own news reader.

You can find the sample source file, `FLNewsReader.fla`, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flash 8\Samples and Tutorials\Samples\FlashLite.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flash 8/Samples and Tutorials/Samples/FlashLite.

Strategy game

This Flash Lite sample shows how to create a Flash Lite strategy game similar to the popular games Tetris and Breakout. The game uses the handset's joypad to navigate blocks dynamically drawn on the screen. The joypad is the main input device for the game.

Explore the source file to learn more, or customize it by creating your own strategy game.

You can find the sample source file, FLStrategyGame.fla, in the Samples folder on your hard disk.

- In Windows, browse to *boot drive*\Program Files\Macromedia\Flex 8\Samples and Tutorials\Samples\FlexLite.
- On the Macintosh, browse to *Macintosh HD*/Applications/Macromedia Flex 8/Samples and Tutorials/Samples/FlexLite.

