

INTRODUCTION

Getting Started with Components

Macromedia Flash MX 2004 and Macromedia Flash MX Professional 2004 are the professional standard authoring tools for producing high-impact web experiences. Components are the building blocks for the Rich Internet Applications that provide those experiences. A component is a movie clip with parameters that are set while authoring in Macromedia Flash, and ActionScript APIs that allow you to customize the component at runtime. Components are designed to allow developers to reuse and share code, and to encapsulate complex functionality that designers can use and customize without using ActionScript.

Components are built on version 2 (v2) of the Macromedia Component Architecture, which allows you to easily and quickly build robust applications with a consistent appearance and behavior. This book describes how to build applications with v2 components and describes each component's application programming interface (API). It includes usage scenarios and procedural samples for using the Flash MX 2004 or Flash MX Professional 2004 v2 components, as well as descriptions of the component APIs, in alphabetical order.

You can use components created by Macromedia, download components created by other developers, or create your own components.

Intended audience

This book is for developers who are building Flash MX 2004 or Flash MX Professional 2004 applications and want to use components to speed development. You should already be familiar with developing applications in Macromedia Flash, writing ActionScript, and Macromedia Flash Player.

This book assumes that you already have Flash MX 2004 or Flash MX Professional 2004 installed and know how to use it. Before using components, you should complete the lesson “Create a user interface with components” (select Help > How Do I > Quick Tasks > Create a user interface with components).

If you want to write as little ActionScript as possible, you can drag components into a document, set their parameters in the Property inspector or in the Components Inspector panel, and attach an `on()` handler directly to a component in the Actions panel to handle component events.

If you are a programmer who wants to create more robust applications, you can create components dynamically, use their APIs to set properties and call methods at runtime, and use the listener event model to handle events.

For more information, see [Chapter 2, “Working with Components,”](#) on page 15.

System requirements

Macromedia components do not have any system requirements in addition to Flash MX 2004 or Flash MX Professional 2004.

Installing components

A set of Macromedia components is already installed when you launch Flash MX 2004 or Flash MX Professional 2004 for the first time. You can view them in the Components panel.

Flash MX 2004 includes the following components:

- [Button component](#)
- [CheckBox component](#)
- [ComboBox component](#)
- [Label component](#)
- [List component](#)
- [Loader component](#)
- [NumericStepper component](#)
- [PopUpManager](#)
- [ProgressBar component](#)
- [RadioButton component](#)
- [ScrollPane component](#)
- [TextArea component](#)
- [TextInput component](#)
- [Window component](#)

Flash MX Professional 2004 includes the Flash MX 2004 components and the following additional components and classes:

- [Accordion component](#)
- [Alert component](#)
- [DataBinding package](#)
- [DateField component](#)
- [DataGrid component](#)
- [DataHolder component](#)
- [DataSet component](#)
- [DateChooser component](#)
- [Form class](#)
- [MediaController component](#)
- [MediaDisplay component](#)
- [MediaPlayback component](#)
- [Menu component](#)
- [RDBMSResolver component](#)
- [Screen class](#)

- [Tree component](#)
- [WebServiceConnector component](#)
- [XMLConnector component](#)
- [XUpdateResolver component](#)

To verify installation of the Flash MX 2004 or Flash MX Professional 2004 components:

- 1 Start Flash.
- 2 Select Window > Development Panels > Components to open the Components panel if it isn't already open.
- 3 Select UI Components to expand the tree and view the installed components.

You can also download components from the [Macromedia Exchange](#). To install components downloaded from the Exchange, download and install the [Macromedia Extension Manager](#).

Any component, whether it's a SWC file or a FLA file (see [“About compiled clips and SWC files” on page 14](#)), can appear in the Components panel in Flash. Follow these steps to install components on either a Windows or Macintosh computer.

To install components on a Windows-based or a Macintosh computer:

- 1 Quit Flash.
- 2 Place the SWC or FLA file containing the component in the following folder on your hard disk:
 - HD/Applications/Macromedia Flash MX 2004/First Run/Components (Macintosh)
 - \Program Files\Macromedia\Flex MX 2004\<language>\First Run\Components (Windows)
- 3 Open Flash.
- 4 Select Window > Development Panels > Components to view the component in the Components panel if it isn't already open.

About the documentation

This document explains the details of using components to develop Flash applications. It assumes the reader has general knowledge of Macromedia Flash and ActionScript. Specific documentation is available separately about Flash and related products.

- For information about Macromedia Flash, see *Using Flash*, the *ActionScript Reference Guide*, and ActionScript Dictionary Help.
- For information about accessing web services with Flash applications, see *Using Flash Remoting*.

Typographical conventions

The following typographical conventions are used in this book:

- *Italic font* indicates a value that should be replaced (for example, in a folder path).
- `Code font` indicates ActionScript code.
- *Code font italic* indicates an ActionScript parameter.
- **Bold font** indicates a verbatim entry.

Note: Bold font is not the same as the font used for run-in headings. Run-in heading font is used as an alternative to a bullet.

Terms used in this manual

The following terms are used in this book:

at runtime When the code is running in the Flash Player.

while authoring While working in the Flash authoring environment.

Additional resources

For the latest information on Flash, plus advice from expert users, advanced topics, examples, tips, and other updates, see the [Macromedia DevNet](#) website, which is updated regularly. Check the website often for the latest news on Flash and how to get the most out of the program.

For TechNotes, documentation updates, and links to additional resources in the Flash Community, see the [Macromedia Flash Support Center](#) at www.macromedia.com/support/flash.

For detailed information on ActionScript terms, syntax, and usage, see the *ActionScript Reference Guide* and ActionScript Dictionary Help.