

Presentation: Using Flash Forms With ColdFusion

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Description:

An introduction to creating visually dynamic forms using Macromedia Flash MX 2004 Professional with Macromedia ColdFusion MX. Craig Boyles, Lead Flash Developer at MetaSurge Inc., takes us through a step-by-step tour of some of the new features of Flash MX 2004 Professional such as the new data binding components, Flash screens and ActionScript 2.0.

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Introduction

About Us...

MetaSurge Inc. is an interactive media and consulting company consisting of an award-winning team of creative, strategic and technical professionals. Your Internet presence, whether it is a corporate website, targeted ad campaign, intranet, or web-based application can be an invaluable business tool. MetaSurge integrates strategy, creativity and technology to develop a unique user experience for your customers on the Internet. If you're already online, our expert consultants can optimize and redesign your existing Internet presence to fully enhance your company's competitiveness. Our tested methodologies have been proven to work time and time again no matter what type of team you're used to, what type of business you're in, or what type of budget you're working with. Our process is simple, direct, and flexible; but most importantly it gets results.

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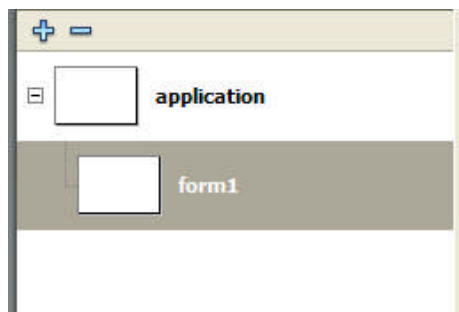
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Flash MX 2004 Overview : The Form Application

Benefits of the Form Application

Many developers not accustomed to Flash are often thrown by the application of the Timeline, but with the introduction of the Form Application it is now possible to create a non-linear Flash form without ever touching the Timeline.

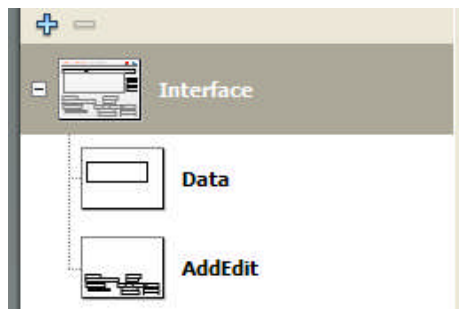
The format in creating a Flash Form is much like using multiple forms in an HTML based program. Creating a new Flash Form the default set up consists of the **application** and one child form, **form1**. These are known as *Screens*.



Img1

To learn more about “Screens” visit www.macromedia.com (using Screens)

For the example one additional form was created and the screens renamed as follows.



Img2

Since the Add and Edit portion would not be visible at all times placing them on a separate screen is a fast and easy way to hide and show all objects pertaining to those functions.

Problems with the Flash Form

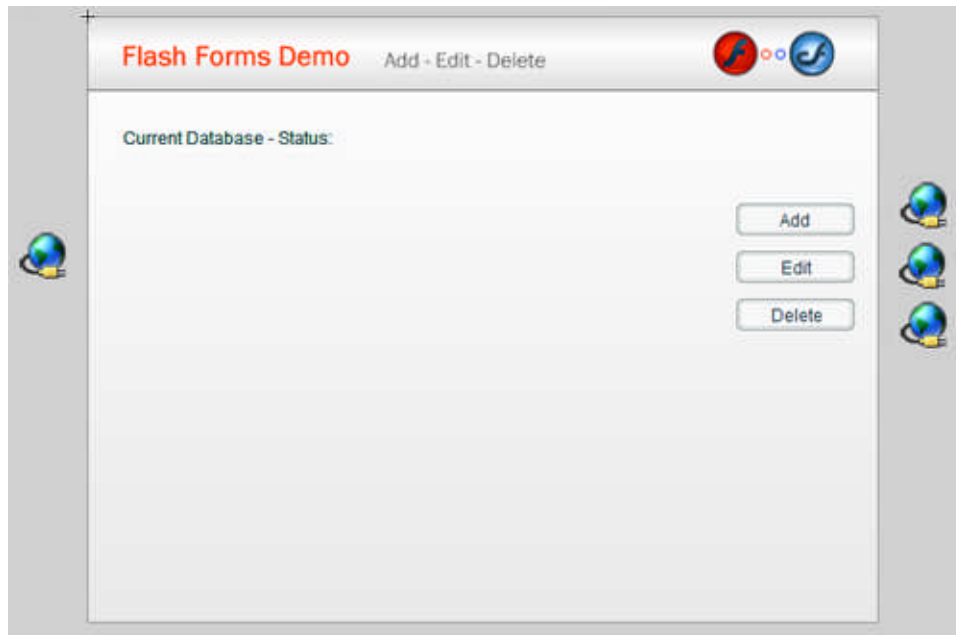
Using the Flash Form Application adds file size and is not always necessary. There are many ways to create the same application using the timeline and movieclips instead of Screens.

Flash MX 2004 Overview : The Interface

Building the Simple Interface

This example will use only components and event-driven actions and behaviors.

The base movie or Screen: "Interface" will contain the buttons and labels (these components will be explained later) that are on displayed at all times.



Img3

The DataGrid was added to the Data Screen and the AddEdit Screen has the fields and buttons to Add or Edit information from the DataGrid.

A screenshot of a form for adding or editing data. It contains several input fields and buttons. At the top, there are two fields: "Name" (a text input) and "Age" (a spinner box showing the value "1"). Below these, there is a "Favorite Program:" label followed by a dropdown menu showing "ColdFusion". To the right of this is a "Skill with ColdFusion" section with three radio buttons: "Novice", "Intermediate", and "Expert". Further right is a field labeled "<hidden>". At the bottom right, there are two buttons: "Accept" and "Cancel".

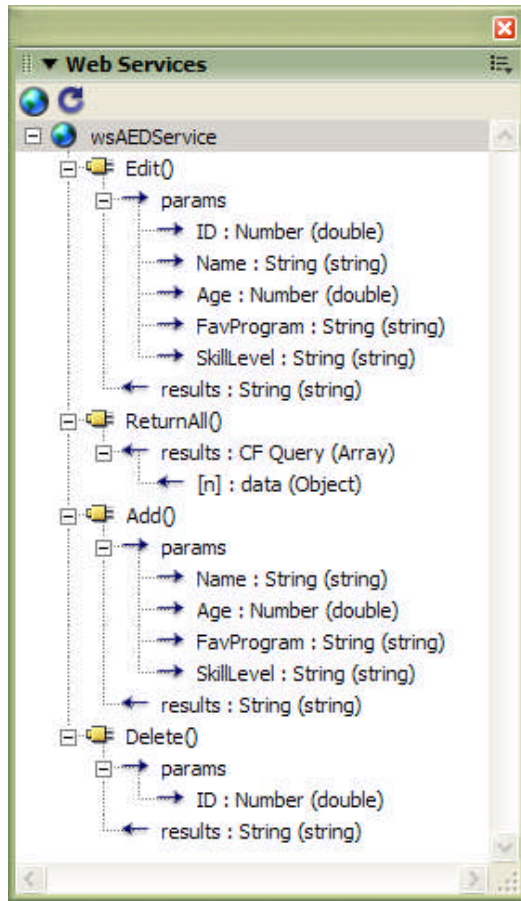
Img4

The next sections will explain how to connect to our ColdFusion Web Service and add bindings between components.

Flash MX 2004 Overview : Connect to ColdFusion

Using Web Services with Flash

With the Web Services panel open, define the Web Service.



Img5



This icon will open the Web Services Dialog.

In the example, the dialog box should display just as in *Img5*, when using the following as our Web Service:

<http://localhost:8500/FlashWebService/wsAED.cfc?WSDL>

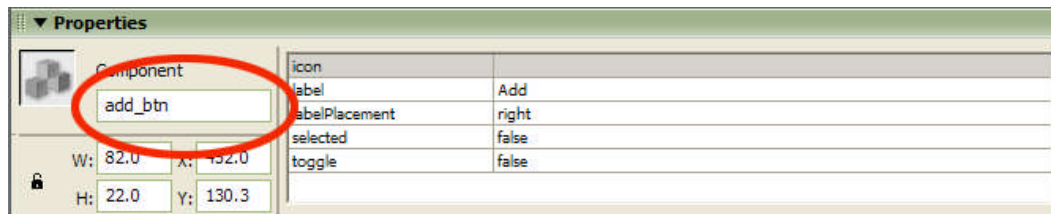


As seen in *Img3*, dragging this component (the “WebServiceConnector”) to the stage, allows for a function call of *wsAED.cfc*. Once this Connectors is “triggered”, it executes the ColdFusion Function providing the parameters with data we will set in the next section.

Flash MX 2004 Overview : Binding Data

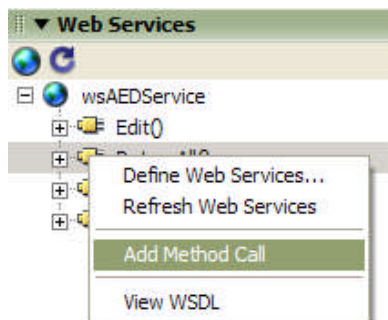
For every object, an Instance Name

If an object is to be referred to, an Instance Name must be given.



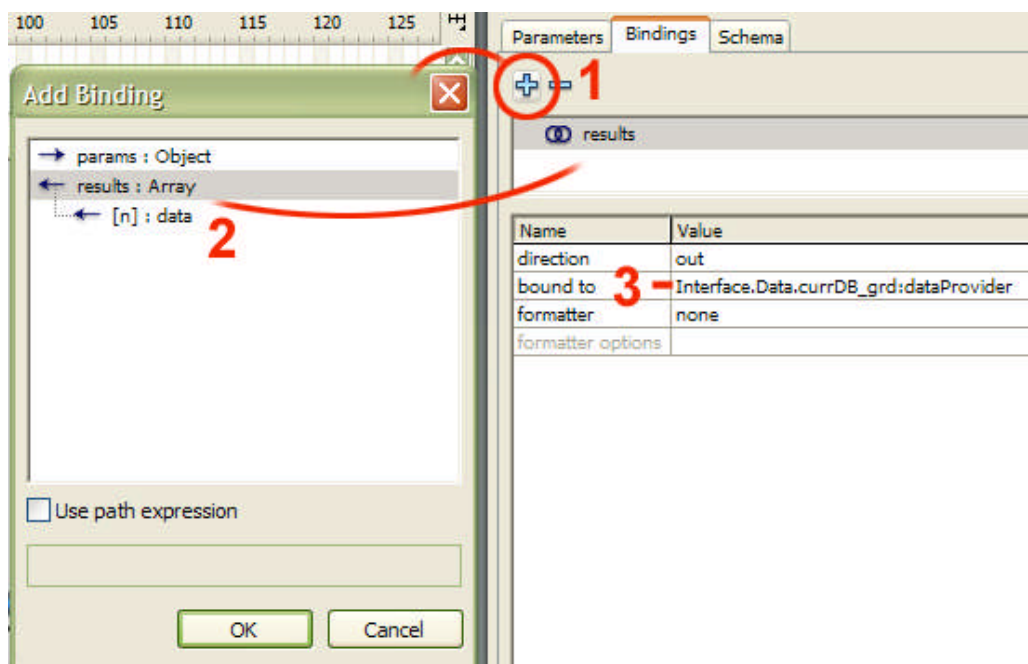
Img6

Once everything has a logical Instance Name we can then begin to bind the data that is provided. For the example, the first thing to bind is the returned Query of our "returnAll" function from the ColdFusion-Web Service. First, we add the function call.



Img7

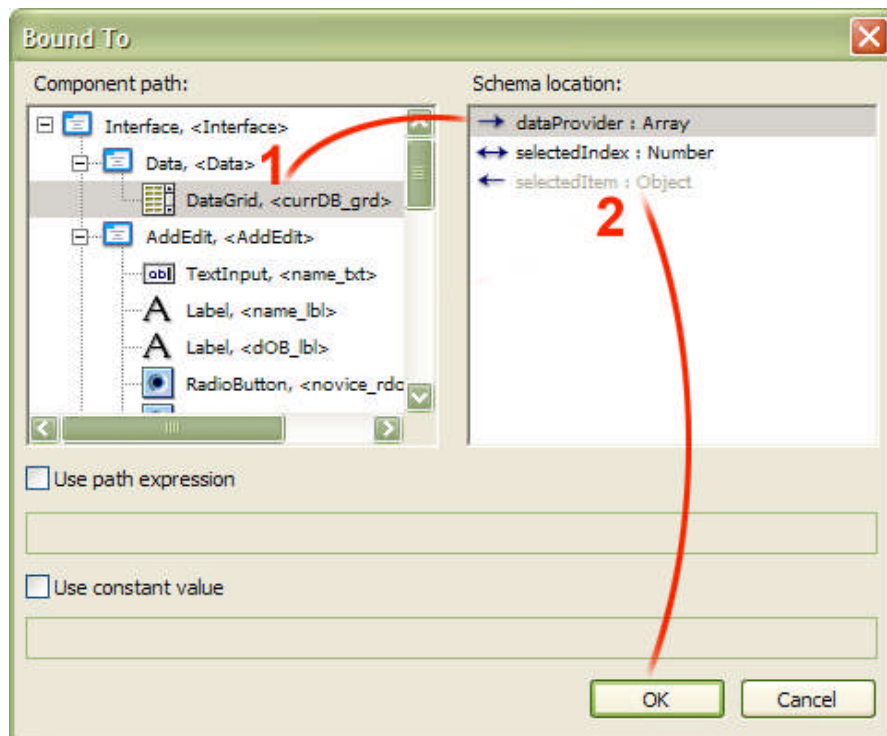
Then using the Component Inspector, point it to our DataGrid.



Img8

Flash MX 2004 Overview : Binding Data

Clicking on the “bound to” area displays a dialog that contains all objects contained in the application*.



Img9

The above procedure has bound the results of the WebServiceConnector to the dataProvider of the DataGrid on the Screen labeled “Data”.

Trigger the Component

To call the function that we just modified all that is needed is the following line of code:

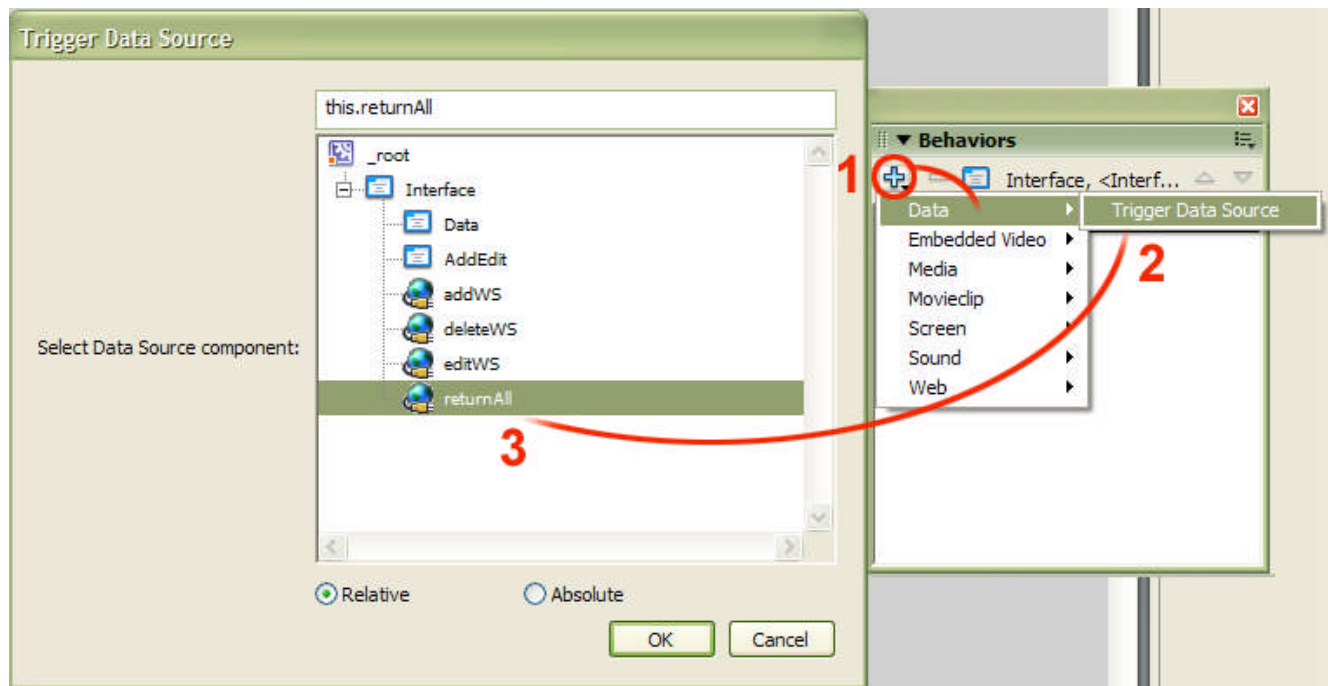
```
myWebService.trigger();
```

This can be done using the Behaviors Panel.

*only those created on the first frame

Flash MX 2004 Overview : Quick Behavior

With the “Interface” Screen Selected, do the following to fire off the function call.



After Testing the project (ctrl+Enter) the Data Grid will populate with whatever query results from that call.

Flash Forms Demo Add - Edit - Delete				
Current Database - Status: Returned 3 Result(s)				
ID	NAME	AGE	FAVPROGRAM	SKILLLEVEL
11	Tim	41	TheCalculator	Novice
14	Chris	24	Flash	Intermediate
15	Willis	92	Minesweeper	Expert

Case Study: Common Ground Festival Website



Customer: Common Ground Festival
www.commongroundfest.com

Mission: Provide a fan-focused experience to market the festival online.

Background...

This annual celebration features an outstanding line-up of musical acts, focusing on top-level, national, contemporary music performers. With an attractive, intimate venue, state-of-art production and a comprehensive array of patron amenities, the festival is the premier special event of the summer in the greater Lansing region.

The Challenge...

The organizers of the Common Ground Festival wanted a website that reflected the fun high-energy atmosphere of the event while including much needed features such as improved database and content management functionality, an email newsletter to update fans and an e-commerce store to purchase festival merchandise. In order to meet the business and marketing needs of the festival organizers, the website needed to accomplish 8 main goals:

1. The site must maintain the brand identity of the Common Ground Festival.
2. The site's content must be re-structured in order to maximize usability.
3. The site must be easy to update on short notice.
4. The administrator must be able to send email newsletters to opt-in subscribers.
5. The site must gather marketing data through an online survey.
6. The site must be able to process online applications for festival volunteers.
7. The site must be accessible in order to accommodate people with disabilities.
8. The site must contain an online store for purchasing Common Ground branded materials.

The Solution...

The team at MetaSurge delivered a high-energy brand-focused website that delivers on the excitement and fun of the Common Ground Festival by leveraging their experience with the following technologies:

- Macromedia DreamWeaver MX
- Macromedia Flash MX
- Microsoft ASP.NET with VB.NET
- Microsoft SQL Server 2000

The Results...

- Total Visitors up 66% from 2003
- Total Unique Visitors up 46% from 2003
- Total Hits up 46% from 2003

The new Common Ground Festival website has received rave reviews from the community and has been nominated for several industry awards. The solution was delivered ahead of schedule and the performance, stability and security has met or exceeded customer expectations.

Case Study: Global Compliance Network



GLOBAL COMPLIANCE NETWORK

Customer: Global Compliance Network Inc.
www.gcn1.net

Mission: To provide online training for federal compliance standards.

User Base: 8,000 Users in 3 States.
(as of 01/01/2004)

Volume: 18,000 Hits/Day, 700 MB/Day
(as of 03/31/2004)

Background...

Global Compliance Network Inc. (GCN) began delivering online training for federal compliance standards in 2001. Back then, their learning management system (LMS) consisted of 3 training modules that were text-based and a Microsoft Access database for tracking learners. As demand for online training soon began to grow, GCN realized that their current system could not support the projected growth of the company. Additionally, feedback from end-users was that the training content was stale and uninteresting.

GCN began contacting several vendors to determine the best company to, not only help improve stability, security and scalability of their LMS, but also develop engaging training content that is user-centered and provides an engaging and rich end-user experience. GCN realized that MetaSurge was the obvious choice because of their proven experience in developing rich Internet applications, award-winning content, and their strong commitment to excellence.

The Challenge...

In order to support the rapid growth of the company and meet the demanding requirements of federal compliance as well as the end-user, the new LMS needed to accomplish 7 main goals:

1. The LMS must support secure transactions of sensitive personal information.
2. The LMS user interface must be intuitive and easy to navigate.
3. The LMS must be reliable to support the data integrity of thousands of users.
4. The LMS must support administrative capabilities for database and user management.
5. The LMS must be able to track users for accountability and renewals.
6. Training content must be engaging and informative.
7. The training content must be accessible to people with older computers and low bandwidth Internet connections.

The Solution...

The experienced team at MetaSurge provided an LMS solution that met and surpassed all the technical requirements for GCN including the need for security, reliability, scalability, and accountability. Additionally, response from end-users regarding their experiences using GCN has been extremely positive.

The MetaSurge team leveraged its experience with the following technologies to produce a solution:

- Macromedia Flash MX
- Macromedia Dreamweaver MX
- Macromedia ColdFusion MX
- Microsoft SQL Server 2000

Results and Benefits...

The new GCN LMS continues to satisfy over 8,000 users in 3 states and support over 18,000 hits per day. Business for GCN has more than doubled since implementing the system and customers couldn't be happier with the service. Just read what real customers are saying about GCN:

"Our staff members appreciate the flexibility of the program – they can complete the training on their schedule. As an administrator I have immediate access to who has or has not completed the training. The system makes it easy for us to keep accurate records about training... This really has been an effective and efficient way to provide the training. We appreciate the wonderful service and quality product."

*Sue Belish
Superintendent
Sheridan School District #1*

"We are very happy with the GCN employee training modules. Employees can easily access the Internet and review the training modules at their convenience yet the documentation tools provided to administration allows us to track when employees have completed their training and document the training in their personnel files. The GCN training modules have saved us time and money – both scarce resources in today's school environment."

*Mary Ellen Currie
Director, Finance and Human Resources
Calhoun Intermediate School District (Educational Resource Center)*

Case Study: Daimler-Chrysler TRAX



Customer: Daimler-Chrysler
www.metasurge.com/metaclients/trax
(Live Demo)

Mission: To provide online training for Daimler-Chrysler employees.

User Base: 5,000 Users in three languages:
English, French, Spanish

Background...

In 2003, Daimler-Chrysler developed an internal asset tracking system called "TRAX" to be used by over 5,000 service employees. The new system included an intranet-based application that would track the disbursement of company assets such as autos, laptop computers, cell phones, security badges and more. To launch TRAX, Daimler-Chrysler created an internal promotional campaign. Part of this campaign needed to consist of a computer-based training module that introduced Daimler-Chrysler employees to the TRAX system. MetaSurge Inc. was called upon to produce the interactive training module that could be accessed through the company's intranet.

The Challenge...

In order to meet the needs of Daimler-Chrysler's management team and educate its over 5,000 service employees, the training module needed to accomplish 7 main goals:

1. The user interface must be intuitive and easy to navigate.
2. The module must be localized to support English, French and Spanish speaking employees in the U.S., Canada and Mexico.
3. The module must be reliable to support the data integrity of thousands of users.
4. The module must support administrative capabilities for database and user management.
5. Training content must be engaging and informative, with simulated data and screen captures.
6. The module must work over a secure intranet with password protection for employees only.
7. The module must accommodate existing employees and new employees that will be hired in the future.

The Solution...

The experienced team at MetaSurge produced an engaging interactive module that met all the requirements of the Daimler-Chrysler management team. The MetaSurge team leveraged its experience with the following technologies to produce a solution:

- Macromedia Flash MX
- Macromedia Dreamweaver MX
- Microsoft ASP.NET
- XML

Results and Benefits...

The TRAX system was successfully launched along with the interactive training module produced by MetaSurge Inc. Daimler-Chrysler employees from three countries of differing languages used the training module to become familiarized with TRAX. The module provided a rich user experience that was accessible through the company intranet so that employees could perform the training at their convenience. The training module has maintained its reliability and security and is still in use today to train new employees.

Additional Resources

Macromedia Flash Development Center:

<http://www.macromedia.com/devnet/mx/flash/>

Screens Overview:

<http://www.macromedia.com/devnet/mx/flash/screens/presentation/>

http://www.macromedia.com/devnet/mx/flash/articles/migrate_flashmx2004_07.html

Components:

<http://www.macromedia.com/devnet/mx/flash/components/presentation/>

Customize Components:

http://www.macromedia.com/devnet/mx/flash/articles/skinning_2004.html