

Flex in a Week, Flex 4

Video 1.02: Incorporating Flex into the client/server world

Flex in a Week assumes that you are an experienced HTML web developer who has likely developed data-driven applications using a server-side technology like ColdFusion, PHP or Java.

In this video, I will first review the basic workflow of an HTML-based data-driven application to give us a point of reference.

Then I will orient you to how a SWF file changes this workflow.

Lastly, you will learn how SWF files can directly access data from server-side technologies.

Let's start by reviewing how a typical server-side technology generates HTML for an end user to view in a browser.

When the user requests the server page, the web server locates the file and passes it to the application server for processing.

The business logic in the code can access system resources like the database, mail server and file system.

The server page uses the requested data and services to generate the HTML dynamic display and return it to the browser for rendering.

Next, let's take a look at how adding a compiled SWF file enhances this server workflow.

The first two steps in this process are the same: The user requests a server page....

which in turn requests data and other services.

However, now when the server generates the HTML code, there is an embedded SWF file reference.

When the HTML code gets to the browser, the browser requests that the SWF file be downloaded and rendered in the Flash Player.

Note that the SWF file can be the entire application viewed in the browser, or it could be just a small widget that is part of a larger HTML page.

Remember that HTML, JavaScript, CSS and Flex are complementary technologies that can work seamlessly together.

In any case, consider this JavaScript code for embedding the SWF file into the HTML.

This is code from an HTML file that was automatically generated by Flash Builder when it compiled the SWF application.

Once the SWF file is in the browser, it can directly communicate with the server code.

This is extremely powerful because it allows for dynamic content to update the Flex application user interface without refreshing the HTML page.

It is also a great advantage to you because it decreases the number of requests to the server and the amount of content that is transferred over the network.

The first three days of this training focuses on data handling.

On Day 2, you will learn three ways to request data from the server.

On Day 3, you will learn how to send data to the server.

For your next step, watch the video titled “Exploring Flash Builder and Flash Player”.