

# Adobe® Flex™ 2

## Build next-generation web experiences

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#### The Adobe Flex 2 product line

**Adobe Flex Builder™ 2:** Eclipse based IDE

**Adobe Flex Charting 2:** Extensible library of rich charting components

**Adobe Flex Builder 2 with Charting:** IDE with charting library

**Adobe Flex Data Services 2:** Advanced data management services that enable integration with J2EE, publish/subscribe messaging, and data management services for rich Internet applications

**Adobe Flex SDK 2:** Free Flex Software Development Kit that includes the Flex framework (component class library) and Flex compiler

### Adobe Flex 2 overview

#### Q: What is Adobe Flex 2?

**A:** Adobe Flex 2 is a complete, powerful application development solution for creating and delivering cross-platform rich Internet applications (RIAs) within the enterprise and across the web. It provides a modern, standards-based language and programming model that supports common design patterns and includes an Eclipse™ based development environment; advanced data services; and a fast, enterprise-class client runtime based on the ubiquitous Adobe Flash® Player. Flex enables enterprises to create engaging, interactive, expressive applications that dramatically enhance user experience, increasing customer satisfaction and user productivity.

#### Q: What kinds of applications can be built with Flex 2?

**A:** You can use Flex 2 to create engaging, interactive, expressive applications that dramatically enhance user experience, revolutionizing the way people interact with the web. For example, a data visualization application built in Flex can pull data from multiple back-end sources and display it visually. Business users can drill down into the data for deeper insight and even change the data and have it automatically updated on the back end. A product configuration application can help customers navigate the process of selecting or customizing products online. And a self-service application can guide customers through an address change or help employees complete an otherwise complicated multistep benefits enrollment.

#### Q: What are the benefits of Adobe® Flex 2 compared with Macromedia® Flex 1.5?

**A:** Flex 2 provides a more productive Eclipse based development environment, dramatically improved application performance, support for new classes of applications such as those that require real-time data push, and more fine-grained control over application look and feel. ActionScript 3.0 significantly simplifies programming, while Flex Data Services 2 provides a robust, productive solution for data-intensive applications, including automatic paging for large data sets, data synchronization, and more. Finally, any developer can obtain the Flex framework to begin development at no charge with the free Flex 2 SDK and utilize Flex Data Services Express to deploy smaller production applications also free of charge. Flex 2 brings easy, affordable application development to developers in any kind of organization working on any kind of project.

#### Q: What is the difference between Flex Builder and Flex Builder with Charting?

**A:** Flex Builder with Charting also includes a library of charts that developers can include in their applications by easily dragging them into the design workspace and connecting them to a back-end data source. This ability to add charts increases the visual richness of Flex applications.



To see examples of rich applications that Adobe customers are developing with Flex, visit [www.adobe.com/go/flex\\_showcase](http://www.adobe.com/go/flex_showcase).

## Getting started

### **Q: What do I need to start building Flex applications today?**

**A:** The fastest, easiest way to get started is to use Flex Builder 2. Or, you can download the Flex SDK, which includes the Flex framework and compiler, enabling you to develop Flex applications using the IDE of your choice.

### **Q: Do I need to install the Flex SDK if I use Flex Builder?**

**A:** No. When you install Flex Builder, you automatically get the Flex framework and everything you need to start building Flex applications today.

### **Q: What kinds of Flex applications can I build using only Flex Builder?**

**A:** Using Flex Builder, you can create rich, easy-to-use applications using XML and web services. More data-intensive applications require Flex Data Services 2.

### **Q: Do I have to use Flex Builder to build Flex applications?**

**A:** No. However, most developers will find it more productive to use the Flex Builder IDE to design their applications. But it is not required, and you can code in ActionScript in your development tool of choice.

### **Q: How can Macromedia ColdFusion® developers get started with Flex?**

**A:** The ColdFusion/Flex Connectivity update lets you create RIAs using Flex Builder 2 with the advanced data retrieval features of ColdFusion such as CFQUERY. To make common coding tasks easier, the ColdFusion/Flex Connectivity update includes wizards that you can use in Flex Builder 2 to generate code. In addition, you can use ColdFusion/Flex Connectivity to create Flash applications that contain features such as server callbacks and customized user interfaces.

### **Q: Do I need any additional software to use Flex with ColdFusion?**

**A:** You must install the ColdFusion/Flex Connectivity update on all configurations of ColdFusion MX 7.0.1 Updater (server, multiserver, and J2EE) running on any of the supported ColdFusion MX 7.0.1 platforms.

## Licensing and pricing

### **Q: Can I get tryout versions of Flex Builder and Flex Data Services?**

**A:** You can download a free tryout version of Flex Builder 2 and start building applications today. You can also use a free limited production version of Flex Data Services Express 2. This version will allow you to deploy a single application on a single, nonclustered CPU.

### **Q: How are Flex Builder and Flex Data Services licensed?**

**A:** Developers can separately purchase Flex Builder 2, including the Flex framework, on a per-seat license model. As a result, for the affordable price of an IDE, a broad range of developers can start building rich Flex applications that connect to web services and XML, while enterprises with more complex integration requirements can take advantage of the data services and messaging capabilities available within Flex Data Services. Flex Data Services is licensed for use on the server in a CPU-based pricing model, although you can download a free, commercial limited-use version of Flex Data Services Express 2 for use on a single, nonclustered server.

### **Q: What languages and operating systems does Flex 2 support?**

**A:** Flex 2 is available in English and Japanese. Flex Builder runs on Microsoft® Windows® 2000, Windows XP Professional, Windows 2000 Server, or Windows Server™ 2003. Flex Data Services runs on Microsoft Windows 2000 Server, Windows XP Professional, Windows Server 2003, Red Hat® Enterprise Server 4, or SUSE™ Linux® Enterprise Server 9 from Novell.

## SYSTEM REQUIREMENTS

### Flex Builder 2

- Intel® Pentium® 4 processor
- Microsoft Windows XP with Service Pack 2, Windows XP Professional, Windows 2000 Server, Windows 2000 Pro, or Windows Server 2003
- 512MB of RAM (1GB recommended)
- 300MB of available hard-disk space to install
- Sun™ 1.4.2, Sun 1.5, or IBM® 1.4.2

### Flex Builder 2 with Charting

- Intel® Pentium® 4 processor
- Microsoft Windows XP with Service Pack 2, Windows XP Professional, Windows 2000 Server, Windows 2000 Pro, or Windows Server 2003
- 512MB of RAM (1GB recommended)
- 300MB of available hard-disk space to install
- Sun 1.4.2, Sun 1.5, or IBM 1.4.2

### Flex Charting 2

- Requires Flex SDK 2, Flex Builder 2, or Flex Data Services 2

## Flex and Flash

### Q: How is Flex different from Flash?

**A:** Flex and Flash have complementary strengths. Flash is the leading authoring tool for web developers, multimedia professionals, animators, and videographers who want to create rich interactive content. Flex 2 products enable more application developers to leverage the powerful Flash runtime to create data driven RIAs. In addition, developers can use Flash and Flex Builder together to add rich interactive elements to a structured, Flex-based application.

### Q: Can I run my Flex 1.5 applications on Flex 2?

**A:** Applications developed using previous versions of the Macromedia Flex Framework can continue to run without change using Flash Player 9. Flex 2 utilizes ActionScript 3.0 and therefore will require a recompile if modifications are needed. Applications will also need to be updated to take advantage of the new features of Flex 2.

### Q: Which version of Flash Player do Flex 2 applications require?

**A:** Applications developed with the Flex 2 product line require Flash Player 9. Developers can implement Flash Player Express Install to provide users who have Flash Player 6.0r 6.5 or later with a smooth, in-context upgrade to version 9.

### Q: Can I create content in Flash and use it in Flex?

**A:** Developers using Flex Builder 2 can import multimedia and video produced in Flash Professional 8.

### Q: Does Flex 2 still include Flash Remoting?

**A:** Yes. RPC Services in Flex Data Services 2 provide traditional Flash Remoting RPC-style service invocation and managed proxying for HTTP and web service requests.

## Flex and Ajax

### Q: Can I use Flex with Ajax?

**A:** Yes. Flex 2 and Ajax technology complement each other well, and the FABridge helps you integrate rich Flex components with Ajax applications. The FABridge is a small, unobtrusive library of code that you can insert into a Flex application, a Flex component, or an empty SWF file to expose it to scripting in the browser. It is being released to the community under an open-source license.

### Q: What capabilities can Flex add to Ajax?

**A:** Flash and Flex technology can augment Ajax to overcome chronic browser limitations in offline data access, audio/video, vector graphics, high-performance data exchange, and message-based publish/subscribe applications.

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