

# Flex 3 and LiveCycle Data Services: Integrating with Data and Messaging

## Description

*Flex 3 and LiveCycle Data Services: Integrating with Data and Messaging* provides experienced application developers with hands-on, practical experience connecting their Flex client applications to remote, dynamic data using LiveCycle Data Services. This two day course instructs developers how to connect with remote data using webservices and LiveCycle Data Services' features allowing communication with a Javabased server environment. In addition, skills will be learned how to manipulate and format the returned data.

## Course length

Two days

## Audience

This course is designed for application developers who want to connect their Flex client applications to dynamic data using Java-based server environments and web services. To gain the most from this class, you should:

- Have attended the Flex 3: Developing Rich Client Applications course.
- Have equivalent knowledge of the topics covered in F3RCA.

## Course Outline

### Unit 1 : Accessing Web Services

- Using web services
- Invoking web service methods and using the results
- Handling results using an event handler
- Walkthrough 2: Using a result event
- Handling faults
- Calling multiple methods from the same WebService object
- Passing Parameters to Web Services
- Importing Web Services in Flex Builder

### Unit 2 : Introducing LiveCycle Data Services ES

- Installing LiveCycle Data Services
- Creating a Flex application for use with LiveCycle Data Services
- Understanding the Server Compilation Process
- LiveCycle Data Services Features
- The Proxy Service
- The Proxy Service Default Destination
- Named Proxy Service Destinations
- Using BlazeDS

## Unit 3 : Using Java Classes with the Remoting Service

- Understanding the Remoting Service
- Handling RPC Events
- Complex Remote Method Calls
- Exchanging Data between ActionScript and Java
- Handling Server-Side Exceptions
- Remoting Service Runtime Configuration

## Unit 4 : Managing Data on the Client

- Understanding collection classes
- Filtering data on the client
- Sorting data on the client
- Using the IViewCursor interface

## Unit 5 : Using the Message Service

- Introducing the Message Service
- Sending Messages
- Receiving and Processing Messages
- Sending and Receiving Complex Data

## Unit 6 : Using the Data Management Service

- What is the Flex Data Management Service?
- Data Management Service Architecture
- Changing Data
- Managing Pending Changes
- Using Data Management Service Events
- Advanced Data Management Service Features

## Unit 7 : Providing XML to Controls with E4X

- Understanding XML structure
- Working with XML data in ActionScript 3
- Using E4X Expressions
- Using the Tree control
- Using Tree Control Events and Properties
- Using E4X Expressions for Search
- Removing Items from XML

## Unit 8 : Uploading Files to a Server

- Implementing file transfer basics
- Uploading a file

## Unit 5 : Styling Charts

- Styling Charts
- Applying CSS to Chart Components
- Styling Chart Series
- Styling Chart Grid Lines
- Applying the concepts