

□

Developing Applications in IBM Business Process Manager Advanced V8 - II  
Information

<b>Length:</b>	5.0 Days
<b>Ref:</b>	WB852G-X
<b>Delivery method:</b>	ClassroomInstructor Led Online
<b>Price:</b>	EUR

Overview

An updated version of this course is available. For more information, click[Developing Applications in IBM Business Process Manager Advanced V8.5.5 - II \(WB858G\)](#).

This course is also available as self-paced virtual (e-learning) course[Developing Applications in IBM Business Process Manager Advanced V8 - II \(ZB852G\)](#). This option does not require any travel.

This course continues building the skills and concepts that are learned in[Developing Applications in IBM Business Process Manager Advanced V8 - I \(WB851G\)](#). That course introduced the service-oriented architecture (SOA) approach to business process management (BPM), and covered how to build a basic process integration solution. In this course, you learn how to extend the functionality of that solution to accommodate more process integration scenarios.

Through presentations and hands-on lab exercises, you learn about the Service Component Architecture (SCA) programming model and runtime environment, XML (business object) support, Business Process Execution Language (BPEL) handlers, business state machines, and SCA transactions. You also learn about business process dynamicity and flexibility, relationships, and mediation primitives. Other topics include creating versions of SCA components, test environment capabilities, and approaches to securing SCA applications.

You use the IBM Process Center repository to add process model artifacts in a complete and integrated development solution. You also learn how to handle advanced integration services faults and how to apply governance to process applications.

In addition, you use IBM Integration Designer to design, develop, and test comprehensive process integration solutions. The solutions use the SCA programming model, the Service Data Object (SDO) data model, and the mediation flow programming model. You learn how to deploy these solutions to the IBM Process Server runtime environment, maintain them in the IBM Process Center repository, and test them in the IBM Integration Designer test environment.

The course also covers how to use the tools of IBM Business Process Manager for iterative (model-driven)

application development. For example, you learn how to develop a process diagram in IBM Process Designer, store it in the IBM Process Center repository, and associate it with modules and libraries in IBM Integration Designer.

For information about other related courses, visit the IBM Training website:

<http://www.ibm.com/training>

## Public

This intermediate course is designed for integration developers and other application development specialists.

## Prerequisites

Before taking this course, you should: successfully complete *Developing Applications in IBM Business Process Manager Advanced V8 – I* (WB851G). You should also have:

- Basic Java **and** Java 2 Platform, Enterprise Edition (Java EE) skills
- Experience with, **or** prior education on, WebSphere Application Server, **or** experience with Rational Application Developer
- Basic Extensible Markup Language (XML) skills

## Objective

- Describe the service-oriented architecture approach to business process management
- Create and modify an application by using iterative, model-driven development
- Develop a business process diagram in IBM Process Designer
- Work with a process application snapshot in IBM Integration Designer
- Associate IBM Integration Designer artifacts with a process application snapshot
- Use artifacts from an IBM Integration Designer library in a business process diagram
- Implement and deploy SCA modules and libraries that contain version information
- Use the serviceDeploy tool to install versioned modules in an IBM Process Server profile
- Enable cross-component trace to follow the invocation sequences between SCA applications to diagnose and repair an application failure
- Implement the event sequencing quality of service qualifier in an application
- Implement a WebSphere MQ import in an application
- Implement a fault handler and compensation handler in a business process
- Handle Advanced Integration Services (AIS) faults
- Examine and test a business state machine
- Examine the transaction propagation settings and transaction quality of service qualifier settings for an application
- Implement a selector component and dynamically navigate a business process instance at run time

- Implement a static (lookup) relationship
- Create a service aggregation mediation flow by using several prebuilt mediation primitives
- Create a reusable mediation subflow
- Build a mediation flow that contains error handling primitives
- Examine an Industry Content Pack and use the business object compare utility
- Configure security quality of service qualifiers and implement role-based security for human tasks and business processes
- Apply governance to process applications
- Configure IBM Business Process Manager Advanced tools for integration with other applications, such as IBM Case Manager and IBM Business Monitor

## Topics

- Course introduction
- Business process management and service-oriented architecture
- Exercise: Using iterative development to create applications
- Version control and testing of SCA applications
- Exercise: Version control for SCA applications
- SCA bindings, the SCA runtime environment, and SCA quality of service qualifiers
- Exercise: Working with SCA bindings and qualifiers
- Fault handlers
- Exercise: Applying fault handlers
- WS-BPEL compensation and event handlers
- Exercise: Applying a compensation handler to WS-BPEL
- Business state machines
- Exercise: Working with business state machines
- Transactional behavior of SCA applications
- Exercise: Defining transactional behavior in SCA applications
- Business process flexibility
- Exercise: Creating flexible business processes
- Relationships
- Exercise: Working with static relationships
- Mediation primitives
- Exercise: Implementing a mediation flow
- Mediation flow control
- Exercise: Writing a generic error handler for WebSphere Enterprise Service Bus
- Industry Packs
- Exercise: Working with industry schemas and business objects
- Security
- Exercise: Implementing security
- Governance of process applications

- Exercise: Applying governance to process applications
- Integrating with IBM Business Process Manager
- Exercise: Integrating other applications with IBM Integration Designer
- Course summary