# **Developing with Integration Designer in IBM Business Process Manager V8.6 - I**



IBM Process Server supports a service-oriented architecture (SOA) by providing a platform for using diverse technologies to integrate business applications. In this course, you learn how IBM Process Server enables business integration applications to define business logic and processes based on Web Services Business Process Execution Language (WS-BPEL), and business rules. In the intensive hands-on lab exercises, you design, develop, and test a comprehensive business integration solution. You use the IBM Integration Designer tool to create business integration solutions by using the Service Component Architecture (SCA) programming model, the Service Data Objects (SDO) data model, and the mediation flow programming model

This course is also available as an SPVC (course code: ZB872) with instructional content, as well as a lab environment where students can work through demonstrations and exercises at their own pace.

Recommended Delivery Method: Instructor-led/SPVC

Recommended Duration: 5 days

### **Intended Audience**

This course is designed for system administrators, integration specialists, application developers, business process developers, support engineers, and technical sales and marketing professionals.

### **Prerequisites**

- Before taking this course, you should have:
- · Basic Java and Java Platform, Enterprise Edition (Java EE) skills
- Basic Extensible Markup Language (XML) skills

Successful completion of course WB827, Process Implementing with IBM Business Process Manager V8.6 - I, is highly recommended, but not required

# **Topics Covered**

Unit 1 Introduction to IBM Business Process Manager

 Describe the concepts of business processes and business process management (BPM)

Unit 2 Overview of IBM Business Process Manager

- Describe the differences between BPMN and BPEL
- Describe the capabilities of IBM Business Process Manager

Unit 3 Course business scenario: What you build

- Describe the key components that you build and assemble in this course
- Explain the benefits of each lab exercise in this course

Unit 4 IBM Integration Designer overview

- Describe the purpose and business value of IBM Integration Designer
- Define the types of projects that are developed in IBM Integration Designer: modules, mediation modules, and libraries
- Describe how to create and deploy applications in IBM Integration Designer

Unit 5 Service Component Architecture overview

- Identify the purpose and business value of using SCA
- Identify and explain the function of the individual parts of an SCA component
- Define the concept of a service module and explain each of the service module components
- Describe how to test SCA applications in IBM Integration Designer
- Describe the features that are available in the IBM Integration Designer test environment

# Unit 6 SCA bindings

- List the various types of SCA import and export bindings
- Describe how SCA bindings facilitate integration with different types of applications
- Describe how web services are used in the Service Component Architecture framework

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#### Unit 7 Business objects

- Identify the purpose and advantages of using the SDO framework
- Define the data object and data graph components of the SDO framework
- Identify the purpose and advantages of using the business object framework
- Define the business object and business graph components of the business object framework

# Unit 8 Business process choreography overview

- Describe the purpose and business value of using the WS-BPEL standard
- · Describe the function of the business process container
- Describe the difference between long-running and microflow (short-running) business processes
- · List and describe the seven parts of a business process

#### Unit 9 Business process basic and structured activities

- · List and describe the basic activities for business processes
- Define each of the available structured activities for business processes

# Unit 10 Business process handlers, runtime behavior, and clients

- List and describe the available handlers and error-processing activities
- Describe the runtime behavior of business processes
- Describe the administrative options and types of client access that are available for business processes

## Unit 11 Business rules

- Define the purpose and business value of using business rules
- Describe the function of a rule group and list the rule group components
- Define the concepts of rule sets and decision tables
- Describe the runtime behavior of a rule group component
- Identify the IBM Process Server administrative capabilities for importing, exporting, and auditing business rule changes in the runtime environment

# Unit 12 Adapters

- Describe the purpose and business value of using adapters in applications
- Describe the capabilities of WebSphere (JCA) adapters
- List the advantages of using the JCA architecture for WebSphere Adapters
- Describe how to use the External Service wizard for WebSphere Adapters

## Unit 13 Developing mediation services

- Describe the role of mediation services in IBM Process Server
- Define the concept of mediation modules
- Describe how to create mediation flows in IBM Integration Designer
- Describe the role of SMOs in mediations
- Explain the structure of SMOs

#### Unit 14 Mediation primitives

- Describe the role of mediation primitives in mediation flows
- Describe the prebuilt mediation primitives that are available for mediation flows

#### Unit 15 Business Space

- Describe the purpose and business value of Business Space
- Describe the types of widgets that are available in Business Space
- Describe the types of templates that are available in Business Space
- Explain how to create and configure a new space in Business Space

## Unit 16 Advanced testing

- Describe the advanced testing facilities that are available in IBM Integration Designer, including the Component Test Explorer and cross-component trace
- Define the purpose and function of the serviceDeploy tool
- Describe how to use serviceDeploy in single-developer and multiple-developer environments

#### Unit 17 Process Center

- Describe the purpose and business value of IBM Process Center
- Define the components of IBM Process Center
- Describe how to use the IBM Process Center Console to deploy, test, and manage IBM BPM applications

# Unit 18 Advanced Integration services

- Explain Advanced Integration services (AIS)
- Describe the business value of AIS
- · Describe the steps to create an AIS

# Unit 19 Course summary

- · Explain how the course met its learning objectives
- Access the IBM Training website
- Identify other IBM Training courses that are related to this topic
- · Locate appropriate resources for further study

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