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Developing Applications for IBM Business Process Manager Advanced V7.5 - I
Information

Length:	5.0 Days
Ref:	WB751G-X
Delivery method:	ClassroomInstructor Led Online
Price:	NZD

Overview

An updated version of this course is available. For more information, click [Developing Applications in IBM Business Process Manager Advanced V8 – I \(WB851G\)](#).

This course is also available as self-paced virtual (e-learning) course [Developing Applications for IBM Business Process Manager Advanced V7.5 - I \(ZB751G\)](#). This option does not require any travel.

This course teaches students how to build and deploy process integration solutions by using the tools in IBM Business Process Management Advanced V7.5, including IBM Process Server, IBM Integration Designer, IBM Process Designer, IBM Process Center, and WebSphere Enterprise Service Bus.

IBM Process Server and WebSphere Enterprise Service Bus support a service-oriented architecture (SOA) by providing the ideal platform for integrating business applications using diverse technologies. IBM Process Center provides a scalable central repository and control center for organizing and managing all process artifacts, applications, and services that are created. IBM Process Server is a high-performance business process engine that orchestrates services within an SOA, and WebSphere Enterprise Service Bus enables interaction between applications and services by using standards-based connectivity.

Through instructor-led presentations and hands-on lab exercises, students learn the concepts, architecture, components, processes, and procedures required to develop and implement an integrated business solution using a diverse set of WebSphere and IBM products. The course teaches students how WebSphere adapters supply connectivity to back-end enterprise information systems (EIS), and how IBM Process Server enables business integration applications to define business logic and processes based on Web Services - Business Process Execution Language (WS-BPEL), human tasks, and business rules. Students also learn how IBM Process Server uses the Common Event Infrastructure (CEI) to centralize the runtime monitoring of various events that occur in business integration solutions and applications. In addition, this course covers how WebSphere Enterprise Service Bus provides mediation services for integration applications.

In the intensive hands-on lab exercises, students design, develop, and test a comprehensive business integration solution. Students use a standards-based process design tool - IBM Process Designer - as part

of the authoring environment to rapidly compose a process design. The IBM Integration Designer tool is then used to create business integration solutions using the Service Component Architecture (SCA) programming model, the Service Data Object (SDO) data model, and the mediation flow programming model. Students then manage their processes in IBM Process Center and deploy the integration application to IBM Process Server. Students also learn how to test and debug the application.

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

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

Public

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

Prerequisites

There are no required prerequisites for this course, but you should have:

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

While not required, you should have successfully completed *Process Modeling with IBM Business Process Manager (BPM)* (WB731G) **or** *Process Modeling with IBM Business Process Manager* (ZB731G).

Objective

- Describe the purpose and business value of a service-oriented architecture
- Describe the purpose and business value of the tools included in IBM Business Process Manager V7.5 Advanced: IBM Process Designer, IBM Integration Designer, IBM Process Server, IBM Process Center, and WebSphere Enterprise Service Bus
- Identify and describe the features available in IBM Process Designer, IBM Integration Designer, and the Service Component Architecture
- Describe the structure of modules and libraries
- Create business objects, shared interfaces, and business calendars
- Model a complex business process diagram in IBM Process Designer
- Create a complex business process that includes basic and structured WS-BPEL activities in IBM Integration Designer
- Use SCA bindings to communicate with web services
- Use WebSphere Java EE Connector Architecture (JCA) adapters in applications
- Implement data maps to transform business data

- Implement mediation modules to route and transform messages
- Implement business rules and use the Business Space and Business Rules Manager clients to interact with business rules at run time
- Implement human tasks in a business process and generate coaches, JavaServer Faces (JSF) interfaces, and Business Space human task user interfaces
- Create and run component test projects and use the IBM Integration Designer debugger to step through breakpoints in an application
- Collect Common Event Infrastructure events and view them using the Common Base Event browser

Topics

- Course introduction
- Business process management and service-oriented architecture
- Exercise: Exploring IBM Process Designer
- IBM Integration Designer overview
- Exercise: Exploring IBM Integration Designer, part I
- Service Component Architecture overview
- Exercise: Exploring IBM Integration Designer, part II
- SCA bindings
- Exercise: Working with web services
- Business objects
- Exercise: Creating business objects and shared interfaces
- Business process choreography overview
- Exercise: Creating a business process, part I
- Business process basic and structured activities
- Exercise: Creating a business process, part II
- Business process handlers, runtime behavior, and clients
- Exercise: Creating a business process, part III
- Business rules
- Exercise: Creating business rules
- Adapters
- Exercise: Implementing WebSphere (JCA) adapters
- Developing mediation services
- Exercise: Creating mediation services, part I
- Mediation primitives
- Exercise: Creating mediation services, part II
- Human tasks and human task clients
- Exercise: Implementing human tasks, part I
- Human task roles, people queries, and escalations
- Exercise: Implementing human tasks, part II
- Advanced testing and debugging

- Exercise: Using component tests and the debugger
- IBM Process Center
- Exercise: Exploring IBM Process Center
- Generating events
- Exercise: Monitoring using the Common Event Infrastructure
- Course summary