

## IBM Business Process Manager Advanced

### Application Developer skills for IBM Business Process Manager Advanced V8.5.7

#### Role

The application developer is responsible for assembling application components into a complete and integrated BPM solution, and preparing this solution for thorough testing and subsequent deployment. The application developer enables access to a range of data sources for other developers, which may include establishing relational views over federated sources (heterogeneous relational databases, data access layer developer queues, or Web services), writing entity beans to enable correlated access to federated sources, or developing Web services that provide access to federated sources.

#### Assumptions

It is assumed that the individual following this roadmap has basic skills in the following areas:

- Basic Java and Java 2 Platform, Enterprise Edition (Java EE) skills
- Basic Extensible Markup Language (XML) skills

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### Skills for developing application solutions with Business Process Manager Advanced

#### Objectives

For IBM Business Process Manager Advanced, after completing this training, students should be able to:

- Describe the purpose and business value of a service-oriented architecture (SOA)
- Describe the purpose and business value of the tools included in IBM Business Process Manager Advanced: IBM Process Designer, IBM Integration Designer, IBM Process Server, IBM Process Portal, IBM Process Center, and IBM Business Space
- 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 a web service
- 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 Rules Manager clients to interact with business rules at run time
- Create a business space by using widgets and templates that are available for IBM Business Process Manager Advanced
- Develop Advanced Integration Services (AIS) for IBM Business Process Manager Advanced
- Create and run component test projects in IBM Integration Designer
- Bring the UTE (Unit Test Environment) Process Server online and connect with Process Center
- Explore the IBM Process Center repository
- Create and modify an application by using iterative, model-driven development
- 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 in order 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 and use an Industry Accelerator as a service asset in IBM Business Process Manager Advanced
- 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

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**Note:**

The IBM BPM Advanced configuration contains all the features of IBM BPM Standard and Express configurations. Students in a developer role can either begin with the BPM Standard or BPM Advanced developer courses as listed below.

The full training path for BPM Standard for developers can be found .

