**Process Implementing with IBM Business Process Manager Standard V8.5.5 – I**

Description: 5300_IBMpos

**WB814 (Classroom)**

**ZB814 (Self-paced)**



Course description

This course teaches core process modeling skills. You also learn a project development approach, process model implementation fundamentals, and exceptional delivery patterns. These skills improve the speed and quality of process definition and implementation efforts.

The course integrates training in business process management (BPM) methods and implementation with IBM Business Process Manager V8.5.5. IBM Business Process Manager V8.5.5 is a comprehensive BPM environment that provides the visibility and insight that is needed to effectively manage the business processes of an organization.

The course begins with an overview of business process management and process modeling, and it emphasizes the concepts of reuse, ease of maintenance, and high-quality development strategies. You use the IBM Business Process Manager Standard V8.5.5 Process Designer to create a business process definition (BPD) from business requirements that are identified during process analysis. You learn how to make team collaboration more efficient by enabling all team members to use standard Business Process Model and Notation (BPMN) elements. BPMN elements make expressing and interpreting business requirements consistent throughout the business process management lifecycle.

The course continues with an overview of IBM Business Process Manager V8.5.5 architecture, and describes the use of process applications and toolkits within the tool. You create business objects and variables, implement gateways, and enable team lanes to demonstrate process flow on their diagrams. You build customized user interfaces (coaches) to enable business and process data flows throughout the process model.

The course uses an interactive learning environment, with hands-on demonstrations and class activities to reinforce concepts and check understanding. Lab exercises throughout the course give you hands-on experience with BPM tasks and skills. This course is intended to be collaborative, and you can work in teams to complete class activities.

The lab environment for this course uses the Windows Server 2008 SP2 environment.

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

**ibm.com**/training

General information

Delivery method

Classroom or self-paced virtual classroom (SPVC)

Course level

ERC 1.0

Product and version

IBM Business Process Manager Express version 8.5.5

IBM Business Process Manager Standard version 8.5.5

Audience

This course is designed for project members who design and implement detailed logic, data models, and external system integrations for an executable business process definition. These roles include process owners, BPM analysts, BPM authors, BPM developers, BPM administrators, and BPM project managers.

Learning objectives

After completing this course, you should be able to:

* Describe why process modeling is an important phase in the BPM lifecycle
* Explain how to use Process Designer to create a process application
* List and identify the core elements that are used to create a BPD in Process Designer
* Translate workflow steps into business process activities and nested processes
* Use gateways to control the process flow
* Validate that the process model meets playback 0 goals and requirements
* Identify how intermediate events are used during the execution of a business process
* Describe the architecture of IBM Business Process Manager
* Organize process assets into toolkits
* Manage variables and data flow
* Implement timer events
* Implement gateways and routing to control process flow
* Build a business data model
* Build client-side human services and user input forms (coaches)
* Create a snapshot for deployment
* Create a decision service
* Model and implement message events
* Apply asset tags to organize artifacts
* Enhance coaches for a rich user experience
* Implement effective error handling in processes and services

Prerequisites

Before taking this course, you should have:

* Practical knowledge of data structures
* Understanding of SQL syntax and JavaScript
* Basic understanding of web services
* Experience with modern programming techniques

Duration

5 days

Skill level

Basic

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| Classroom (ILT) setup requirements | |
| Processor | Intel Core i7-3630QM processor |
| GB RAM | 12 GB |
| GB free disk space | 60 available (NOT total) disk space |
| Network requirements | None |
| Other requirements | None |

Notes

The following unit and exercise durations are estimates, and might not reflect every class experience.

This course is an update of the following previous course:

* WB808 or ZB808, *Process Implementing with IBM Business Process Manager Standard V8.5 - I*

Course agenda

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| Course introduction  Duration: 30 minutes |

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| Unit 1. Introduction to business process management  Duration: 1 hour and 30 minutes | |
| Overview | This unit explains the foundational concepts that establish the importance of process modeling. It includes a review of business process management, the business process management lifecycle, the basics of process modeling, and business process management project development. It introduces a case-study scenario that begins the in-class development of a business process definition that is based on the business requirements that are established within the process analysis - playback zero phase of the project. |
| Learning objectives | After completing this unit, you should be able to:   * Define business process management (BPM) * List and describe the phases in the BPM lifecycle procedure * Define process modeling * Describe playback 0 and the achievements that are reached during this stage of project development |

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| Unit 2. Introduction to IBM Business Process Manager and integration with other tools  Duration: 1 hour and 45 minutes | |
| Overview | This unit is an overview of IBM Business Process Manager and integration with other tools. It focuses on how to create a process application in the Process Center, provides a look at the Designer and Inspector views of IBM Process Designer, and introduces the Process Portal. |
| Learning objectives | After completing this unit, you should be able to:   * Describe how to use IBM Business Process Manager to accomplish process modeling goals * Explain how to create and modify process applications in the Process Center * Explain how to create and modify process models with the Designer view of the IBM Process Designer * Describe how to validate process models with the Inspector view of the IBM Process Designer * Describe the purpose of the Process Portal * Describe the purpose and function of Blueworks Live * Describe the integration with other tools and products |

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| Unit 3. Creating a process model  Duration: 2 hours and 30 minutes | |
| Overview | In this unit, you complete the initial work that is needed to interpret business requirements into a process model, which is known as a business process definition (BPD). Because process models are shared in all stages from design to development to deployment, they have a long life within the business process management lifecycle. The BPDs are important for effective collaboration and communication between all BPM project members. |
| Learning objectives | After completing this unit, you should be able to:   * List and describe the core notation elements that are used in IBM Process Designer * Examine a defined workflow from detailed process requirements and identify the interrelated process activities and the roles that are responsible for completing them * Decompose activities into processes and nested processes that contain process tasks * Create a BPD from the process and nested process tasks and responsible roles |

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| Exercise 1. Creating a process application  Duration: 1 hour and 30 minutes | |
| Overview | In this exercise, you learn how to create a process application and BPD in the Process Center, and model teams for the BPD. This exercise also covers how to model task-type activities, create a linked process, and decompose a process into nested processes. |
| Learning objectives | After completing this exercise, you should be able to:   * Create a process application in the Process Center * Create a BPD * Create the foundation for a BPD by adding the appropriate lanes to the default pool * Translate business process workflow steps that are documented in the process discovery and analysis into process model tasks * Model the expected process flow for the initial process model * Decompose business process workflow steps that are documented in the process discovery and analysis into process model tasks * Create a subprocess or a linked process |

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| Unit 4. Defining process flow  Duration: 2 hours and 45 minutes | |
| Overview | Comprehensive process models communicate process flow well. A process flow encompasses the normal, expected process path to completion, in addition to alternative process paths that might occur with different process conditions or business rules. To explain how to communicate both kinds of process flows in the process model, this unit focuses on gateways. It also covers intermediate events, which occur in a business process to interrupt or alter the process flow. |
| Learning objectives | After completing this unit, you should be able to:   * Describe process sequence flow and the runtime use of process tokens * List and describe gateways as they are used in IBM Process Designer * Explain how to evaluate conditions for a BPD gateway * Model gateways in a BPD * List and describe intermediate event types that are used in IBM Process Designer * Model a business process escalation path with an attached timer intermediate event |

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| Exercise 2. Modeling gateways and timer intermediate events in a BPD  Duration: 1 hour | |
| Overview | In this exercise, you add gateways to a business process definition, and define the timer intermediate events. |
| Learning objectives | After completing this exercise, you should be able to:   * Add gateways to a business process definition * Model the appropriate sequence flows for each gateway * Add a timer intermediate event to a BPD based on business requirements * Model an escalation path in a BPD with IBM Process Designer * Document details for the implementation team |

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| Unit 5. Validating the process model with playback 0  Duration: 1 hour | |
| Overview | This unit covers process model validation. At the end of the first phase in BPM project development, which is known as playback 0, the BPM team and business stakeholders review the process model that was modified and adjusted through process analysis. Specific goals and requirements from playback zero drive the validation effort. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the playback 0 validation goals and requirements * Validate that a process model meets playback 0 goals and requirements |

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| Exercise 3. Validating the process model  Duration: 1 hour | |
| Overview | In this exercise, you validate the process model. |
| Learning objectives | After completing this exercise, you should be able to:   * Validate that the business process reflects the wanted requirements * Implement the requirements with playback feedback and new process requirements as input |

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| Unit 6. IBM Business Process Manager architecture and toolkits  Duration: 2 hours | |
| Overview | This unit provides a technical overview of IBM Business Process Manager, starting with the architecture, IBM Process Center, and the runtime environments of a typical system deployment. The unit also describes toolkits, including how they are used in IBM Business Process Manager and development strategies for their use. |
| Learning objectives | After completing this unit, you should be able to:   * Describe IBM Business Process Manager product components * Describe the relationship between IBM Process Center and the runtime environments * Describe IBM Process Server and the Performance Data Warehouse * Create toolkits for easy reuse of assets |

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| Exercise 4. Creating a toolkit  Duration: 30 minutes | |
| Overview | In this exercise, you create a toolkit to store and share assets. |
| Learning objectives | After completing this exercise, you should be able to:   * Create a toolkit * Take a snapshot of a toolkit * Import a toolkit * Add a process application dependency to a toolkit |

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| Unit 7. Conducting playback 1  Duration: 4 hours | |
| Overview | This unit describes the steps and procedures that are required during playback 1 of the BPD lifecycle. It includes variables and business objects, data flow, implementing timer events and gateways, and routing tasks. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the differences between Process Flow Data and Business Flow Data * Add variables to a BPD * Implement gateways to control process flow * Describe teams and process lanes * Implement routing for tasks * Assign an expert group to an activity * Expose a process application to a team * Validate process flow |

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| Exercise 5. Creating playback 1 assets  Duration: 2 hours and 30 minutes | |
| Overview | In this exercise, you create assets that are required during playback 1 of the BPD lifecycle. You create variables, implement timer intermediate events, establish routing, and implement exclusive gateways. |
| Learning objectives | After completing this exercise, you should be able to:   * Create simple variables in a BPD * Implement timer intermediate events on a process * Implement gateways for a process * Implement routing for an activity |

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| Exercise 6. Conducting playback 1  Duration: 1 hour | |
| Overview | In this exercise, you conduct a playback of a process. |
| Learning objectives | After completing this exercise, you should be able to:   * Log on to the Process Portal * Create an instance of a process * Demonstrate that the process follows the various paths modeled |

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| Unit 8. Conducting playback 2  Duration: 2 hours and 15 minutes | |
| Overview | This unit describes the steps and procedures that are required during playback 2 of the BPD lifecycle. It covers building data models, services, and coaches. |
| Learning objectives | After completing this unit, you should be able to:   * Build a business object * Initialize a complex object and a list * Build a service * Use coaches to define and implement guided user interactions * Implement a service for an activity in a BPD * Map variables between a nested service and an activity in the overlying BPD * Use object methods * Create a snapshot of a process application for deployment |

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| Exercise 7. Implementing a human service for playback 2  Duration: 1 hour and 30 minutes | |
| Overview | This exercise covers creating a coach service and its supporting artifacts. |
| Learning objectives | After completing this exercise, you should be able to:   * Determine and organize data when provided with a written process * Add business objects and object types * Create a new client-side human service * Add variables and business objects to a process application * Create and configure a coach to obtain process participant input * Add coach controls to control process flow * Create a client-side human service and coach for the General Manager review activity * Implement an activity by attaching a service and mapping data |

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| Exercise 8. Creating a snapshot  Duration: 15 minutes | |
| Overview | In this exercise, you create a snapshot for deployment. |
| Learning objectives | After completing this exercise, you should be able to:   * Create a snapshot of a process application |

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| Unit 9. Conducting playback 3  Duration: 2 hours | |
| Overview | This unit describes the steps and procedures that are required during playback 3 of the BPD lifecycle. It covers implementing decision services, message start and intermediated events, undercover agents, and organizing assets. The unit also explains how to create a snapshot in preparation for installation to a Process Server. At the end of the unit, you conduct playback 3 to validate rules, message events, and integrations. |
| Learning objectives | After completing this unit, you should be able to:   * Create a decision service * Create a message start event * Create an enabling service * Create and configure an undercover agent (UCA) * Start a BPD with a message start event * Organize assets with favorites, tagging, and smart folders * Define the basic function of an integration service * Identify the components of the IBM Business Process Manager integration architecture * Describe how integration components interact with services * Configure and define integration services for outbound integration * Describe the differences between an environment variable and an exposed process variable |

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| Exercise 9. Creating playback 3 assets  Duration: 2 hours | |
| Overview | This exercise covers how to create implementation assets that support playback 3. |
| Learning objectives | After completing this exercise, you should be able to:   * Create a decision service * Create and configure a UCA * Start a BPD with a message start event * Use tagging to organize assets * Query a database to obtain information and populate a list variable * Create environment variables (ENVs) and exposed process variables (EPVs) |

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| Unit 10. Conducting playback 4  Duration: 2 hours | |
| Overview | This unit describes the steps and procedures that are required during playback 4 of the BPD lifecycle. It covers modifying the presentation layer, enhancing coaches, and working with classes and Cascading Style Sheets (CSS) on a coach. |
| Learning objectives | After completing this unit, you should be able to:   * Create tabs on a coach * Add a visibility rule to an input control * Apply a class to a control * Change the look of a control through CSS * Create a coach view |

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| Exercise 10. Enhancing a coach for playback 4  Duration: 2 hours | |
| Overview | This exercise covers enhancing the presentation and appearance of a coach service. |
| Learning objectives | After completing this exercise, you should be able to:   * Create tabs on a coach * Change a text control to a single select control * Add a visibility rule to an input control * Apply a class to a control * Change the look of a control through CSS * Create a coach view * Change the coach layout for a mobile format |

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| Unit 11. Conducting playback 5  Duration: 1 hour and 30 minutes | |
| Overview | This unit describes the steps and procedures that are required during playback 5 of the BPD lifecycle. It covers hardening a process and validating error handling. |
| Learning objectives | After completing this unit, you should be able to:   * Catch an error in a BPD and service |

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| Exercise 11. Creating error handling for a service for playback 5  Duration: 30 minutes | |
| Overview | This exercise covers adding error handling capabilities to harden a process. |
| Learning objectives | After completing this exercise, you should be able to:   * Harden a service with a catch exception component |

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| Unit 12. Course summary  Duration: 30 minutes | |
| Overview | This unit summarizes the course and provides information for future study. |
| Learning objectives | After completing this unit, you should be able to:   * 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 |

For more information

To learn more about this course and other related offerings, and to schedule training, visit **ibm.com/**training.

To learn more about validating your technical skills with IBM certification, visit **ibm.com**/certify.

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