

IBM Business Automation Workflow 23.0.2: Controlling process flow using data, services, and coaches

WB876 (Classroom)

ZB876 (Self-paced)

Course description

This two-day intermediate-level course covers the modeling of process flow, sequence flow, tokens, gateways, and intermediate events. Using the core requirements for an HR recruitment process, you determine and create all the necessary assets to support a coach in the Hiring Request Process. You use complex business objects to organize your data, and pass data into and out of a linked process. You implement a service for an activity, and map variables between a nested service and an activity. You also create a toolkit to enable sharing of your assets. The course concludes with conducting a Playback session. You demonstrate the process, following various paths that flow from the exclusive gateways in the process and demonstrate tasks that are assigned.

For information about other related courses, see 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

Product name version 1.0

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. These roles include process owners, process analysts, workflow authors, workflow developers, process server administrators, and BPM project managers.

Learning objectives

After completing this course, you should be able to:

* Model conditional sequence flows in a process model by adding gateways
* Model a business process escalation path with an attached timer intermediate event
* Implement an activity by attaching a service and mapping data
* Add variables and business objects to a process application
* Perform a playback to demonstrate that the process follows the various paths modeled
* Use coaches to define and implement guided user interactions
* Create a client-side human service

Prerequisites

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

Duration

2 days

Skill level

Intermediate

Notes

The following unit and exercise durations are estimates and might not reflect every class experience. If the course is customized or abbreviated, the duration of unchanged units will probably increase.

This course is an update of course WB835 Developing workflow solutions with Business Automation Workflow v20.0.0.1 - ERC 1.1

Course agenda

|  |
| --- |
| Course introduction  Duration: 15 minutes |

|  |  |
| --- | --- |
| Unit 1. Controlling process flow  Duration: 1 hour and 30 minutes | |
| Overview | This unit covers the modeling of process flow, sequence flow, tokens, gateways, and intermediate events. |
| 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 process gateway * Model gateways in a process * 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 |

|  |  |
| --- | --- |
| Exercise 1. Controlling process flow  Duration: 2 hours | |
| Overview | This exercise covers how to add gateways to an existing process and model their sequence flows. You add a timer intermediate event and model an escalation path for a business process. After adding a new swimlane and activity for a legal review, you validate the process application and take a snapshot. |
| Learning objectives | After completing this exercise, you should be able to:   * Add gateways to a process * Model the appropriate sequence flows for each gateway * Add a timer intermediate event to a process based on business requirements * Model an escalation path in a process with IBM Process Designer * Add a new swimlane and activity for legal review to meet additional requirements. * Validate the process application and create a snapshot |

|  |  |
| --- | --- |
| Unit 2. Controlling process flow with business data  Duration: 1 hour and 30 minutes | |
| Overview | This unit describes how to manage the variables and data flow. It covers the implementation of the intermediate timer event, 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 process * 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 |

|  |  |
| --- | --- |
| Exercise 2. Controlling process flow with business data  Duration: 1 hour and 30 minutes | |
| Overview | In this exercise, 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 process * Implement timer intermediate events in a process * Implement gateways for a process * Implement routing for an activity |

|  |  |
| --- | --- |
| Unit 3. Business data, services, and coaches  Duration: 2 hours | |
| Overview | At this point in the development process, the purpose is to demonstrate that data flows from one coach to another and from one task to another inside the process. All data is bound on the coaches, and if the same data is shared across multiple tasks, Playback participants can track the data when it moves through the various activities. |
| 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 process * Map variables between a nested service and an activity in the overlying process * Describe the object methods |

|  |  |
| --- | --- |
| Exercise 3. Business data, services, and coaches  Duration: 1 hour and 30 minutes | |
| Overview | In this exercise, by using the core requirements, you determine and create all of the necessary assets to support a coach in the Hiring Request Process. You use complex business objects (variable types) to organize your data, and pass data into and out of a linked process. You build a service and define guided user interactions with a coach. You also implement a service for an activity, and map variables between a nested service and an activity. You model the coach by using the concept of grids. |
| Learning objectives | After completing this exercise, you should be able to:   * Add business objects and object types * Create a client-side human service * Add variables and business objects to a process application * Create and configure a coach to obtain process participant input * Model a coach by using the concept of grids * 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 |

|  |  |
| --- | --- |
| Unit 4. Enhancing coaches  Duration: 1 hour and 30 minutes | |
| Overview | This unit covers how to build coaches and then enhance them. You learn how to enhance coaches using tabs, themes, and other components from the UI Toolkit. You also learn how to share your assets by using a shared toolkit, take a snapshot, and export a process application. |
| Learning objectives | After completing this unit, you should be able to:   * Describe how to create tabs on a coach * Enhance coaches and apply a theme * Explain how to create a reusable View * Describe how to create a snapshot * Export your process application * Share your assets by using a toolkit * Conduct a Playback session |

|  |  |
| --- | --- |
| Exercise 4. User interface design and implementation  Duration: 1 hour and 30 minutes | |
| Overview | In this exercise, you group controls into tabs on a coach and change the appearance of the coach by applying a theme. |
| Learning objectives | After completing this exercise, you should be able to:   * Create tabs on a coach * Change the appearance of a coach by applying a custom theme * Change the coach layout for a mobile format * Configure controls to respond to different screen sizes * Debug the coach by using a responsive sensor |

|  |  |
| --- | --- |
| Exercise 5. Conducting the Playback session  Duration: 1 hour | |
| Overview | This exercise covers how to conduct a Playback of your process. The exercise demonstrates the process, following various paths that flow from the exclusive gateways in the process and demonstrate tasks that are assigned. It also describes the task that is created in the Process Portal inbox, depending on the swimlane and routing settings for an activity. You also create a toolkit to store and share these assets. |
| Learning objectives | After completing this exercise, you should be able to:   * Log on to the Process Portal and create an instance of a process * Demonstrate that the process follows the various paths modeled * Use Process Portal to view the state of activities in a process * Create a toolkit * Create a snapshot in the Workflow Center * Export the process application |

For more information

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

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

To stay informed about IBM training, see the following sites:

IBM Training News: https://www.ibm.com/blogs/ibm-training

YouTube: https://www.youtube.com/IBMSupportTV

Facebook: https://www.facebook.com/groups/IBMTrainingandSkills

Twitter: https://twitter.com/ibm