Fundamentals of IBM Process Mining

WB846 (Classroom)

ZB846 (Self-paced)

Course description

This course introduces you to IBM Process Mining and how to use it to perform process and data analysis. You learn the differences between process mining and task mining, the different types of process mining, use cases, and how process mining is performed. You learn how to use IBM Process Mining to import a data source, map data, and visualize a process. You learn how to plan a process mining project. You learn how to evaluate a process for potential candidates for Robotic Process Automation. You learn advanced data preparation and transformation concepts and how to evaluate a multi-level process for maverick buying patterns. You also leverage the simulation capabilities of the product to simulate a Blueworks Live BPMN process.

The lab environment for this course, is a Trial environment. There is a 30-day limit to the user. Only enroll if you know you can complete the labs in the 30-day window. There are no extensions available for the lab Trial environment.

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 1.12.0.3I

Audience

This course is intended for Business Process Analysts, Data Analysts, and Technical Analysts that use the IBM Process Mining product.

Learning objectives

After completing this course, you should be able to:

* Visualize a process and generate the event log
* Understand data quality and data quality issues
* Evaluate maverick buying patterns of a multi-level process
* View the frequency, duration, and cost models of a process
* Import a reference model and perform conformance checking
* Create custom filters and dashboards
* Perform a Diff comparison of two simulation scenarios
* Analyze a process for potential RPA candidates
* Import a BPMN model into IBM Process Mining
* Configure and run simulations on a Blueworks Live BPMN process

Prerequisites

* None

Duration

1 day

Skill level

Basic

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 the second in a series.

* WB845 \ ZB845 Overview of IBM Process Mining
* WB846 \ ZB846 Fundamentals of IBM Process Mining

Course agenda

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| Course introductionDuration: 15 minutes |

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| Unit 1. Project planning and process analysis with IBM Process MiningDuration: 1 hour |
| Overview | This unit introduces you to process mining, why it is performed, use cases for process mining, and the different types of process mining. It also discusses the differences between process mining and task mining and how each is performed in the IBM Process Mining tool. An overview of IBM Process Mining is provided along with instructions on how to create a new process, import data and perform data mapping. The project planning process is also introduced, including the standard phases of a project, scope, roles involved, and typical duration. |
| Learning objectives | After completing this unit, you should be able to:* Define process mining and task mining
* Describe use cases for process mining
* List the different types of process mining
* Explain how task mining and process mining is performed
* Describe the Digital Twin of an Organization and its purpose
* Describe the typical timeline of a process mining project
* List the different roles involved in a process mining project
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| Unit 2. Evaluating a process for RPA candidatesDuration: 1 hour and 30 minutes |
| Overview | Evaluating a process for robotic process automation candidates is a typical purpose behind process mining. In this unit, you are introduced to the analysis functions of IBM Process Mining that enable you to evaluate a process for potential candidates for robotic process automation. |
| Learning objectives | After completing this unit, you should be able to:* Define Robotic Process Automation (RPA)
* Explain the benefits and challenges of RPA
* Describe how RPA and process mining fit together
* Describe how to upload and map data
* List the required data fields to create the event log
* List the steps required to visualize a process
* Use IBM Process Mining to analyze a process for potential candidates for RPA
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| Exercise 1. Evaluating a process for RPA candidatesDuration: 1 hour and 30 minutes |
| Overview | In this exercise you generate an event log for a bank account closure process, import a reference model, and analyze the data to determine potential candidate activities for robotic process automation. You use the most common features of IBM Process Mining to evaluate activities for their duration, cost, and rework. You compare the process to the reference model for conformance and evaluate how key performance indicators are being met. |
| Learning objectives | After completing this exercise, you should be able to:* Create and visualize a process
* Analyze the process for bottlenecks
* Evaluate manual rework
* Perform a path analysis
* Import a reference model for conformance checking
* Compare performance values against KPI expectations
* View the frequency, duration, and cost models of a process
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| Unit 3. Advanced data analysisDuration: 1 hour |
| Overview | In this unit, a deeper dive into understanding and preparing data for a process mining project is undertaken. Activities involved in data preparation are highlighted along with a deeper analysis of data quality issues and data profiling. The multi-level approach to event log creation is compared to the standard approach. You learn how to identify maverick buying patterns and how to use IBM Process Mining dashboards to add insight. You also learn how to create custom dashboards. |
| Learning objectives | After completing this unit, you should be able to:* Identify the activities involved with data preparation
* Understand data quality and data quality issues
* Explain the difference between the classical and multi-level approach to event log creation
* Understand the data relationships in a multi-level process
* Explain how to identify maverick buying patterns
* Describe how to apply custom filters
* Explain how to create custom dashboards
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| Exercise 2. Evaluating maverick buying in a multi-level processDuration: 1 hour and 30 minutes |
| Overview | In this exercise, you evaluate a procure-to-pay, multi-level process for data discrepancies and to identify maverick buying patterns. For this lab exercise, the data has been extracted for you as an export from the company's enterprise resource planning system. After generating the event log, you review the process for model conformance and unexpected flows. You create and apply custom filters. You also create your own custom dashboard and apply filters to it to evaluate maverick buying patterns. . |
| Learning objectives | After completing this exercise, you should be able to:* Analyze the model of a multi-level process
* Evaluate maverick buying by using custom dashboards
* Create custom filters
* Create a custom dashboard
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| Unit 4. Using simulation and the BPA toolDuration: 1 hour |
| Overview | This unit introduces you to simulation and the BPA module. You are introduced to the Business Process Model and Notation standard and how it is used in Blueworks Live and IBM Process Mining. You use the BPA module to import a Blueworks Live process and perform simulations on the BPMN model. |
| Learning objectives | After completing this unit, you should be able to:* Explain how to navigate the BPA module
* Understand process, application, and organization landscapes
* Explain how to manually draw BPMN and DMN diagrams
* Define Business Process Model and Notation (BPMN)
* Describe how to use Blueworks Live (BWL) to export BPMN models
* Understand how the fields are mapped from BWL to IBM Process Mining
* Understand how simulations can be used to evaluate automation
* Explain how to import BPMN models into IBM Process Mining
* Describe how to run simulations on BPMN models
* Describe how to perform a diff comparison between two simulation scenarios
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| Exercise 3. Simulating a Blueworks Live BPMN processDuration: 1 hour |
| Overview | In this exercise, you take on the role of a Technical Analyst to import a Blueworks Live BPMN model into IBM Process Mining. You use the BPA module to import a Blueworks Live process and perform simulations on the BPMN model. |
| Learning objectives | After completing this exercise, you should be able to:* Import a Blueworks Live BPMN model into IBM Process Mining
* Configure and run a simulation
* Perform a Diff comparison of multiple simulations
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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