

Course Code: WB404G

Course Title: Developing Rule Solutions in IBM Operational Decision Manager V8.10.5

## Description:

This course introduces developers to IBM Operational Decision Manager V8.10.5. It teaches you how to design, develop, and integrate a business rule solution with Operational Decision Manager.

The course begins with an overview of Operational Decision Manager, which is composed of two main environments: Decision Server for technical users and Decision Center for business users. The course outlines the collaboration between development and business teams during project development.

Through instructor-led presentations and hands-on lab exercises, you learn about the core features of Decision Server Rules, which is the primary working environment for developers. You learn how to support your business users by setting up the rule authoring environment and object models that are required to execute rule artifacts. You also work with rule authoring so that you can support business users to set up and customize the rule authoring and validation environments. You learn how to manage ruleset deployment and execution, and work extensively with Rule Execution Server. And, you learn how Operational Decision Manager features support decision governance so that it can be implemented in your organization.

## Objectives:

After completing this course, you should be able to:

- Describe the benefits of implementing a decision management solution with Operational Decision Manager
- Identify the key user roles that are involved in designing and developing a decision management solution, and the tasks that are associated with each role
- Describe the development process of building a business rule application and the collaboration between business and development teams
- Set up and customize the Business Object Model (BOM) and vocabulary for rule authoring
- Implement the Execution Object Model (XOM) that enables rule execution
- Orchestrate rule execution through ruleflows
- Author rule artifacts to implement business policies
- Debug business rule applications to ensure that the implemented business logic is error-free
- Set up and customize testing and simulation for business users
- Package and deploy decision services to test and production environments
- Integrate decision services for managed execution within an enterprise environment
- Monitor and audit execution of decision services
- Work with Operational Decision Manager features that support decision governance

## Exercises

- Exercise 1. Operational Decision Manager in action
- Exercise 2. Setting up decision services
- Exercise 3. Modeling decisions
- Exercise 4. Working with the BOM
- Exercise 5. Refactoring
- Exercise 6. Working with ruleflows
- Exercise 7. Exploring action rules

- Exercise 8. Authoring action rules
- Exercise 9. Authoring decision tables
- Exercise 10. Working with static domains
- Exercise 11. Working with dynamic domains
- Exercise 12. Working with searches and queries
- Exercise 13. Debugging a ruleset
- Exercise 14. Enabling rule validation
- Exercise 15. Managing deployment
- Exercise 16. Exploring the Rule Execution Server console
- Exercise 17. Executing rules using the REST service
- Exercise 18. Auditing ruleset execution through Decision Warehouse

## **Prerequisites:**

Before taking this course, you should have:

- Experience with the Java programming language and object-oriented concepts
- Knowledge of Java Platform, Enterprise Edition (Java EE)
- Basic knowledge of Extensible Markup Language (XML)
- Basic knowledge of the REST API and RESTful architecture

## **Duration:**

40 Hrs

## **Topics:**

- Introducing IBM Operational Decision Manager
- Exercise 1. Operational Decision Manager in action
- Developing decision services
- Exercise 2. Setting up decision services
- Modeling decisions
- Exercise 3. Modeling decisions
- Programming with business rules
- Developing object models
- Exercise 4. Working with the BOM
- Exercise 5. Refactoring
- Orchestrating ruleset execution
- Exercise 6. Working with ruleflows
- Authoring rules
- Exercise 7. Exploring action rules
- Exercise 8. Authoring action rules
- Exercise 9. Authoring decision tables
- Customizing rule vocabulary with categories and domains
- Exercise 10. Working with static domains
- Exercise 11. Working with dynamic domains
- Working with queries
- Exercise 12. Working with searches and queries
- Debugging rulesets
- Exercise 13. Debugging a ruleset
- Enabling tests and simulations
- Exercise 14. Enabling rule validation
- Managing deployment
- Exercise 15. Managing deployment

- Executing rules with Rule Execution Server
- Exercise 16. Exploring the Rule Execution Server console
- Working with transparent decision services
- Exercise 17. Executing rules using the REST service
- Auditing and monitoring ruleset execution
- Exercise 18. Auditing ruleset execution through Decision Warehouse
- Applying decision governance
- Course summary

**Audience:**

This course is designed for developers.