

Managing Decisions in IBM Operational Decision Manager V8.9

WB401 (Classroom)

ZB401 (Self-paced)

Course description

This course introduces business analysts to IBM Operational Decision Manager V8.9. You learn the concepts and skills that are necessary to capture, author, validate, and manage business rules with Operational Decision Manager.

IBM Operational Decision Manager provides a complete platform for managing business rules by helping to automate and govern decisions across processes and applications. This course focuses on the iterative nature of working collaboratively with business policy experts and development teams on rule projects. Through instructor-led presentations and hands-on lab exercises, you learn about the core features of Operational Decision Manager. You also receive intensive training in modeling business rule vocabulary, rule discovery, rule authoring, and rule governance and management. The course uses realistic scenarios and a case study to illustrate the principles and good practices for discovering, analyzing, and authoring business rules.

The lab environment for this course uses Windows 2012 Server R2 Standard.

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

http:www.ibm.com/training

General information

Delivery method

Classroom or self-paced virtual classroom (SPVC)

Course level

ERC 1.1

Product and version

Operational Decision Manager V8.9 Standard

Audience

This course is designed for business analysts.

Learning objectives

After completing this course, you should be able to:

* Describe the benefits of implementing an Operational Decision Manager solution
* Identify the main user roles and tasks that are involved in designing and developing an Operational Decision Manager solution
* Explain modeling concepts and the UML notation that is relevant to modeling for business rules
* Define and implement object models for business rules
* Set up the rule authoring environment in Designer by working with decision services and synchronizing across development and business environments
* Transform business policy into rule statements and make sure that they form a complete and coherent set of rules
* Use the Operational Decision Manager rule editors to author business rules and decision tables
* Run tests and simulations in the Decision Center Business console to validate decision logic and rule changes
* Work with Decision Center decision service administration tools
* Manage user access and permissions in the Business console
* Use Operational Decision Manager tools to support decision governance

Prerequisites

* Experience with identifying and defining business policies and rules
* A basic understanding of business models

Duration

5 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 the following previous courses:

* WB396, *Managing Decisions in IBM Operational Decision Manager V8.7.1*

Course agenda

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| Course introduction  Duration: 30 minutes |

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| Unit 1. Introducing IBM Operational Decision Manager V8.9  Duration: 2 hours | |
| Overview | This unit introduces you to Operational Decision Manager and describes the advantages of implementing a decision management solution in your organization. |
| Learning objectives | After completing this unit, you should be able to:   * Explain the benefits of using Operational Decision Manager * Identify the need for governance * Map the various roles that are involved in a decision management solution to roles in your organization * Identify the tasks that are performed on various Operational Decision Manager modules, and which user roles perform them |

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| Exercise 1. Operational Decision Manager in action  Duration: 1 hour and 30 minutes | |
| Overview | This exercise provides an overview of the Operational Decision Manager modules. You learn how the Operational Decision Manager modules work together to provide a comprehensive Business Rule Management System (BRMS) across the business and development environments. Both IT and business tasks are included in this exercise to demonstrate the collaboration that occurs between the technical and business teams. |
| Learning objectives | After completing this exercise, you should be able to:   * Explain the general workflow in Operational Decision Manager for working with business rule projects * Identify the Operational Decision Manager tools that apply to your role in your organization |

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| Unit 2. Modeling for business rules  Duration: 1 hour and 30 minutes | |
| Overview | This unit and the next several units introduce you to business rule and decision service concepts and tasks, such as modeling, rule projects, and BOMs. In this unit, you learn how to get started with a business rule project. The unit walks you through the tasks that you participate in during the development of the business rule application, and shows you how to apply modeling concepts and UML when specifying rule vocabulary requirements. |
| Learning objectives | After completing this unit, you should be able to:   * Model a business process * Define use cases * Explain UML notation and the modeling concepts that are relevant to modeling business rule vocabulary * Describe the interaction between the business and development teams during the initial phases of business rule application development * Use business policy documents and use cases to create a class diagram that models the business domain * Identify the connection between the model and the vocabulary that is used to author rules * Implement the business model in Rule Designer * Write rules against the model to test for completeness |

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| Exercise 2. Building the model on paper  Duration: 1 hour | |
| Overview | This exercise and the next several exercises introduce you to business rule and decision service concepts and tasks, such as modeling business rules, working with rule projects, and BOMs. In this exercise, you learn how to create a UML class diagram that clearly expresses rule vocabulary requirements for implementation by developers. |
| Learning objectives | After completing this exercise, you should be able to:   * Use business policy documents and use cases to create a class diagram that models the business domain * Identify the connection between the model and the vocabulary that is used to author rules |

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| Exercise 3. Implementing the model  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on introducing you to business rule and decision service concepts and tasks. It introduces you to developer tasks by showing you how to implement developer models in Rule Designer. You learn what developers need from business users when requirements are handed over to them. |
| Learning objectives | After completing this exercise, you should be able to:   * Implement the business model in Rule Designer * Write rules against the model to test for completeness |

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| Unit 3. Understanding decision services  Duration: 1 hour | |
| Overview | This unit continues the focus on introducing you to business rule concepts and practices. You learn how to create a decision service. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the decision service rule project structure * Explain how ruleflows orchestrate rule execution * Describe synchronization mechanisms between the business and development environments |

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| Exercise 4. Setting up a decision service  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on introducing you to business rule and decision service concepts and tasks. You learn how to prepare the rule authoring environment in Rule Designer by creating a decision service. |
| Learning objectives | After completing this exercise, you should be able to:   * Set up a decision service for rule authoring * Create a ruleflow * Share and synchronize rule projects between the business and development environments |

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| Unit 4. Working with the BOM  Duration: 1 hour | |
| Overview | This unit continues the focus on introducing you to business rule and decision service concepts and tasks. You learn how to work with the BOM and the vocabulary to ensure that the BOM implementation matches requirements and supports your rules. |
| Learning objectives | After completing this unit, you should be able to:   * Explain the relationship between the BOM and the rule vocabulary * Verbalize the BOM * Create categories to simplify rule authoring * Define domains |

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| Exercise 5. Working with the BOM  Duration: 1 hour | |
| Overview | This exercise continues the focus on introducing you to business rule and decision service concepts and tasks. In this exercise, you review and customize the vocabulary that is attached to the BOM. |
| Learning objectives | After completing this exercise, you should be able to:   * Review and correct verbalization of the BOM * Refactor changes that you make to the vocabulary * Define domains for customized rule vocabulary |

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| Unit 5. Introducing Decision Center  Duration: 1 hour | |
| Overview | This unit introduces you to Decision Center and to the Decision Center Business console and Enterprise console. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the Business console and Enterprise console rule authoring environments * Use the Business console rule editors to create and change rules |

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| Exercise 6. Exploring the Decision Center Business console  Duration: 1 hour and 30 minutes | |
| Overview | This exercise focuses on the Decision Center Business console, which is the main rule authoring environment in Decision Center. You learn how to author and edit rules, manage changes, and collaborate with other users. |
| Learning objectives | After completing this exercise, you should be able to:   * Use the Business console rule editors to author rules * Collaborate with other users to modify rules * Manage changes by using timelines and snapshots * Compare versions of rules |

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| Unit 6. Introducing rule authoring  Duration: 1 hour | |
| Overview | This unit and the next several units focus on various aspects of rule authoring. This unit reviews how the rule language evolves during a business rule project, and introduces the structure of rules. |
| Learning objectives | After completing this unit, you should be able to:   * Describe when rule writing occurs in the implementation process * Define the typical roles of people who author rules * Describe how these roles might fit within their organizational environment * List the Operational Decision Manager tools that are used for rule authoring * Define the parts of a rule * Explain the difference between business policy and business rules, and provide an example of each |

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| Exercise 7. Understanding the case study  Duration: 30 minutes | |
| Overview | This exercise and the next several exercises focus on rule authoring. This exercise provides an overview of the business domain and object model that you work with during the rule authoring exercises. |
| Learning objectives | After completing this exercise, you should be able to:   * Describe the business domain * Describe the business policies and vocabulary requirements for this domain |

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| Unit 7. Discovering and analyzing rules  Duration: 1 hour | |
| Overview | This unit continues the focus on rule authoring. You learn how to perform rule discovery and analysis tasks by using a realistic case study. |
| Learning objectives | After completing this unit, you should be able to:   * Use good practices to discover rules * Analyze rules to eliminate problems before implementation |

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| Exercise 8. Discovering rules  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on rule authoring. You learn suggested practices for discovering rules. |
| Learning objectives | After completing this exercise, you should be able to:   * Elicit decisions from use cases * Transform business policy into formal rule statements |

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| Exercise 9. Analyzing rules  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on rule authoring. You learn suggested practices for analyzing rules that are based on the case study materials. |
| Learning objectives | After completing this exercise, you should be able to:   * Make rules atomic * Eliminate overlap, redundancy, and inconsistency * Identify dependencies between individual rules and rule families |

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| Unit 8. Working with conditions in rules  Duration: 1 hour | |
| Overview | This unit continues the focus on rule authoring. You learn about various types of condition statements and the Business Action Language (BAL) constructs that help build them. You also learn about the relationship between the BOM and the vocabulary available in the rule editors. |
| Learning objectives | After completing this unit, you should be able to:   * Identify basic types of conditions and give examples * Determine which BAL constructs to use for various types of condition statements * Describe how to use Boolean logic in condition statements * Describe the relationship between rule vocabulary in the rule editors and the BOM |

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| Exercise 10. Working with conditions in rules  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on rule authoring. You learn how to identify the appropriate BAL constructs to use in your condition statements when you write rules. |
| Learning objectives | After completing this exercise, you should be able to:   * Identify BAL constructs that apply to specific types of conditions * Use the BAL reference documentation to look up constructs and syntax * Use the correct BAL constructs to define condition statements in rules |

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| Unit 9. Working with definitions in rules  Duration: 1 hour | |
| Overview | This unit continues the focus on rule authoring. It teaches you how to define and use variables in rules. You learn which situations require certain types of variables, and which BAL constructs to use when you define those variables. |
| Learning objectives | After completing this unit, you should be able to:   * Describe why you might need to use rule definitions * Explain how to define various types of variables and which BAL constructs to use |

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| Exercise 11. Working with definitions in rules  Duration: 1 hour | |
| Overview | This exercise continues the focus on rule authoring. You learn how to define and use variables. |
| Learning objectives | After completing this exercise, you should be able to:   * Identify and use common BAL constructs to write definition statements, including *in*, *from*, and *where* * Use variables to make a rule easier to read * Write definition statements that use objects and collections of objects |

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| Unit 10. Writing complete rules  Duration: 1 hour | |
| Overview | This unit continues the focus on rule authoring. It covers common rule action patterns, the use of multiple actions in a single rule, and when to use the *else* statement. You learn how to resolve errors that appear in the rule editor, and how to avoid ambiguity in rule statements. |
| Learning objectives | After completing this unit, you should be able to:   * Explain the purpose of action statements in rules * Give examples of rule actions * Explain how to resolve error messages that are commonly encountered in the rule editors * Explain the use of an *else* statement |

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| Exercise 12. Writing complete rules  Duration: 1 hour and 45 minutes | |
| Overview | This exercise continues the focus on rule authoring. It provides practice with various types of action statements and writing complete rules. |
| Learning objectives | After completing this exercise, you should be able to:   * Write clear and unambiguous action statements in rules * Apply the concepts of building definition, condition, and action statements to write complete rules |

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| Unit 11. Authoring decision tables  Duration: 30 minutes | |
| Overview | This unit continues the focus on rule authoring. You learn how to work with decision tables. |
| Learning objectives | After completing this unit, you should be able to:   * Describe how to express policy as decision tables * Explain when to create decision tables versus individual action rules |

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| Exercise 13. Authoring decision tables  Duration: 1 hour | |
| Overview | This exercise continues the focus on rule authoring. You learn how to create decision tables. |
| Learning objectives | After completing this exercise, you should be able to:   * Use the decision table editor to create a decision table * Change rule conditions in a condition cell |

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| Exercise 14. Authoring rules: Putting it all together  Duration: 1 hour and 45 minutes | |
| Overview | This exercise continues the focus on rule authoring. You practice the rule authoring skills that you learned in the previous units and exercises. |
| Learning objectives | After completing this exercise, you should be able to:   * Use the rule editors to transform business policy into formal rule statements |

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| Unit 12. Running tests and simulations  Duration: 1 hour | |
| Overview | This unit and the following units focus on various Decision Center tools for managing rules and decision services. In this unit, you learn how to run tests and simulations to test the effects of rule changes and validate decision logic. |
| Learning objectives | After completing this unit, you should be able to:   * Describe the basic features of testing and simulation * Collaborate with developers to set up testing and simulation * Identify the required input from the BOM and define the expected results of rule execution in scenario files to generate scenario file templates |

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| Exercise 15. Running tests and simulations in the Business console  Duration: 45 minutes | |
| Overview | This exercise and the following exercises focus on various Decision Center tools for rule and decision service management. In this exercise, you learn how to run tests and simulations in the Business console. |
| Learning objectives | After completing this exercise, you should be able to:   * Test rules by using the Microsoft Excel format to store scenarios and their expected results * Run simulations based on scenario data |

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| Unit 13. Working with Decision Center administrative tools  Duration: 1 hour | |
| Overview | This unit continues the focus on managing rules and decision services. In this unit, you learn about some administrative tools in Decision Center that you can use to manage decision service projects. You also learn how to manage user access to Decision Center. |
| Learning objectives | After completing this unit, you should be able to:   * Work with decision service administrative tools in the Enterprise console and the Business console * Manage groups and users in the Business console |

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| Exercise 16. Working with management features in Decision Center  Duration: 30 minutes | |
| Overview | This exercise continues the focus on rule and decision service management. In this exercise, you explore some of the decision service management features of the Decision Center Enterprise console and Business console. |
| Learning objectives | After completing this exercise, you should be able to:   * Import, export, and delete decision services by using the Enterprise console * Work with ungoverned decision service branches in the Business console |

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| Exercise 17. Managing user access in Decision Center  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on rule and decision service management. In this exercise, you work with users in the Business console. |
| Learning objectives | After completing this exercise, you should be able to:   * Define custom groups and users on the application server * Manage groups and users from an LDAP repository |

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| Unit 14. Introducing decision governance  Duration: 1 hour and 45 minutes | |
| Overview | This unit continues the focus on rule and decision service management. In this unit, you learn how to identify governance issues and how to use Operational Decision Manager features to support decision governance. |
| Learning objectives | After completing this unit, you should be able to:   * Explain governance issues and good practices * Identify Operational Decision Manager features that support decision governance * Describe the decision governance framework |

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| Exercise 18. Working with the decision governance framework  Duration: 1 hour and 30 minutes | |
| Overview | This exercise continues the focus on rule and decision service management. In this exercise, you work with the decision governance framework in Decision Center by simulating a collaborative workflow that includes working with releases, change activities, and other tasks in a governed decision service. |
| Learning objectives | After completing this exercise, you should be able to:   * Work with releases * Work with change and validation activities * Deploy decision service releases |

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| Unit 15. 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, see **ibm.com**/training

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