

**Module Title : AD465: Implementing with Red Hat JBoss BRMS**

**Duration : 4 days**

### **A combination of Authoring Rules (JB461) and Developing Rules Applications with Red Hat JBoss BRMS (JB463)**

Implementing with Red Hat® JBoss® BRMS combines content from both Authoring Rules with Red Hat JBoss BRMS (JB461) and Developing Rules Applications with Red Hat JBoss BRMS (JB463). It teaches business analysts, rule developers, and Java™ enterprise application developers how to create, test, debug, and control business rules.

### **Course Overview**

Students are given detailed, hands-on exercises using Red Hat JBoss Developer Studio and Red Hat JBoss BRMS that are designed to let students create and manage business rules in a production environment. This course can also help you prepare for the Red Hat Certificate of Expertise in Business Rules Management Exam (EX465).

### **Course Content Summary**

- Authoring basic business rules in JBoss Developer Studio and Business Central
- Integrating business rules with Java applications
- Authoring advanced rules
- Testing business rules
- Authoring and testing rules in decision tables
- Authoring rule templates and generating rules from decision tables
- Authoring domain-specific languages
- BRMS architecture and rule execution at run time
- Controlling rule execution and preventing conflicts
- Complex event processing (CEP)
- Integration with Business Central

### **Audience for this course**

- Business analysts and enterprise SOA architects who are responsible for creating and adapting business policies.
- Rule authors responsible for authoring and testing rules.
- Java EE application developers responsible for integrating business rules into SOA and Java EE enterprise applications.

## Prerequisites for this course

- Basic Java/Java EE programming experience.
- Knowledge of the Eclipse IDE, Maven, and GIT are useful, but not essential.

## Course Outline

### Overview of this course

- Learn about the architecture, basic deployment options, and the business need for a business rules management system such as Red Hat JBoss BRMS.

### Authoring basic business rules

- Develop business rule structure and components, including facts working memory.
- Identify rule components.
- Author rules with Business Central and Red Hat JBoss Developer Studio (JBDS).

### Integrating business rules with Java applications

- Use the knowledge API to integrate rules processing into an application.

### Authoring rules as technical rules, decision tables, templates, and domain-specific language files

- Author rules using the Business Central technical rule editor and create a spreadsheet decision tables.
- Create rule templates.

### Business rules decision tables and rule templates

- Create spreadsheets with rules and rule templates.

### Domain-specific languages in BRMS

- Learn the purpose of domain-specific languages (DSLs), how to author them, and how to use them in a rule in BRMS.
- Use domain-specific languages created by developers to create rules.

### Testing business rules

- Test business rules using both the Business Central web interface and Java coding.

### Authoring complex rules with BRMS

- Author complex business rules using advanced conditions and field constraints.

### Controlling rule execution

- Control rule execution.
- Learn how to avoid rule conflicts.

### Debugging basic business rules in Drools

- Debug Drools applications in JBDS.

### Complex event processing in BRMS

- Create and use complex event processing (CEP) with rules.

#### **Integration with Business Central**

- Gain an overview of BRMS administration with Business Central, a web application built into BRMS.
- Learn how to integrate Business Central with Java code.

### **Recommended next exam or course**

#### **Red Hat Certificate of Expertise in Business Rules Management Exam (EX465)**

### **Impact of this training**

#### **Impact on the organization**

This course is intended to develop the skills needed to create business logic as business rules, using a graphical interface. The rules are consumed by traditional applications, in a way that the rules can be changed without updating and redeploying applications. Expected results include faster time to market, increased visibility of the specific business rules implemented by an application, and a lower risk of interpretation errors that could lead to application errors.

Red Hat has created this course in a way intended to benefit our customers, but each company and infrastructure is unique, and actual results or benefits may vary.

#### **Impact on the individual**

As a result of attending this course, students should be able to use the Business Central web interface and the JBoss Developer Studio IDE to develop, test, and integrate business rules into Java applications. The business rules are written using languages that can be understood by business experts as well as software developers.

Students should be able to demonstrate the following skills:

- Create business rules using the Drools declarative language.
- Create business rules using decision tables and Domain Specific Languages (DSL).
- Test business rules outside of an application.
- Integrate business rules into a Java or Java EE application
- Debug business rules
- Implement conflict resolution strategies for business rules.
- Implement rules tailored for Complex Event Processing (CEP)