
Model Driven Development and Patterns in Rational Rose and Rational Software Architect v6.x/v7.x Using UML, Java and WebSphere

Course Code: WS402

Duration: 2 days

Objective

In this intensive workshop, you will learn the Model Driven Development (MDD) approach using Rational Software Architect (RSA) v6.x and v7.x and Rational Rose. Deploy your Java/Java EE applications to WebSphere Application Server v6.x , DB2 v8.x/v9.x, and WebSphere MQ Default Messaging Provider.

1. Generating Java source code from UML model.
2. Reversing Java source code to UML design model.
3. Disassembling Java byte code to Java source code.
4. Protecting Java code Asset from reversing engineering.
5. Synchronizing Java source code and Java UML model back and forth.
6. Learning Gang of Four design patterns support in Rational Rose, and Rational Software Architect 6.x and 7.x.
7. Applying IBM Enterprise and Messaging Patterns in RSA6 for EJBs, SDO, JSP, JSF, UML to Java, UML to EJB, EJB to DDL, UML to JACL for WebSphere Application Server v6.x.
8. How to Simplify JACL Script Generation for Configuring JMS resources in WebSphere Application Server v6.x
9. How to Simplify JACL Script Generation for System Integration Bus (SI Bus), Bus Member, and Queue/Topic Spaces in WebSphere Application Server v6.x.

Topics

Model Driven Development/Design

- What is Forward Engineering?
- Rational Rose, RSA, and IRAD Forward Engineering
- What is Reverse Engineering?
- Rational Rose, RSA, and IRAD Reverse Engineering
- What is Round-trip Engineering?
- Rational Rose Round-trip Engineering
- RSA v6 Round-trip Engineering
- RSA v7 Round-trip Engineering

- How does Rose Round-trip differ from RSA v6 Round-trip?
- How does RSA v6 differ from RSA v7 Round-trip?

Design Patterns Case Tools

- Design Patterns Case Tool Overview
- Steps to Use GoF Design Patterns In Rose
- Design Patterns Example in Rose
- Steps to Use GoF Design Patterns in Rational Software Architect 6 and 7
- Design Patterns Example in Rational Software Architect 6 and 7

IBM Enterprise Patterns in RSA6

- IBM Enterprise Patterns in Rational Software Architect 6
- Integration of IBM Enterprise Patterns with thin client JSP, JSF, SDO, and Entity EJB
- UML to EJB/Java Mapping and Code Generation
- EJB to DDL Generation

WebSphere Platform Messaging Patterns in RSA6

- Messaging Patterns in Rational Software Architect 6
- Integration of Messaging Patterns with Enterprise Patterns
- Integration of Messaging Patterns with rich client Swing, JMS, and MDB
- UML to EJB/Java Mapping and UML to JAACL Generation.

Prerequisite

Intermediate Java, J2EE or Java 5 EE knowledge is assumed. Be familiar with basic UML, Gang of Four Patterns, and Sun J2EE Design Patterns catalog. (or taken UML201 and WS401 or equivalent).