



# **RAD v7.0 Technical Overview (New Features)**

## Course Description

This technical overview is intended for managers, project leaders and developers who are interested in using RAD to build their applications. IBM Rational Application Developer (RAD) is the new generation of Java application development environments built on the Eclipse open platform ([www.eclipse.org](http://www.eclipse.org)). RAD has many new features that the traditional IDEs do not provide and implementing this development can be overwhelming without the proper knowledge base.

## Topics

- Introduction to RAD
- J2EE Programming using RAD
- Building an application with Ant
- Using Ant
- Automated Component Testing
- Reviewing code using RAD
- Team Development in RAD

## Audience

This course is intended for managers, project leaders and developers who are interested in using RAD7 to build their applications.

## Duration

This overview course can be taught in two formats:

- 1 day overview with instructor demos
- 2 day hands-on course



# RAD v7.0 Technical Overview (New Features)

## Course Outline

### 1. Introduction to Rational Application Developer 7

- Eclipse Platform
- The WebSphere Studio Product Family
- Rational Web Developer
- Rational Application Developer
- Key Features in RAD v7.0
- WebSphere Studio Application Developer Integration Edition
- WebSphere Studio Enterprise Developer
- Views, Perspective and Editor Areas
- Basic Operations with RAD Views and Perspectives
- The Java Perspective
- The Debug Perspective
- Navigator View
- Package Explorer
- Outline View
- Task and Problems View
- Build and Validation
- Import and Export Project
- Project Interchange Feature
- Code Completion, Templates and Snippets
- Searching
- Setup Compiler Class Path
- JRE Switching
- Refactoring
- Changing Class Name
- Changing Method Name
- Changing Variable Name
- Generalizing a Variable
- Moving a Class to a Different Package
- Extracting Code to a Method
- Pull-up and Push-down Methods
- Migrating Workspace from WSAD v5.x
- Migrating J2EE Applications
- J2EE Migration Wizard
- Summary



# RAD v7.0 Technical Overview (New Features)

## 2. J2EE Programming Tools

- Objectives
- Project Explorer
- Servers View
- The J2EE Perspective
- The Web Perspective
- Create an Enterprise Application
- Setup Utility JAR
- Create an EJB Project
- Create a Web Project
- Setup Dependent JAR Files
- Create Server Instance and Server Configuration
- Configure Server Instance
- Add an Enterprise Application Project to the Test Server
- Start and Stop the Server
- Test a Servlet
- Debug a servlet
- Test a JSP
- Debug a JSP
- Summary

## 3. Introduction to ANT

- What is Ant?
- Ant Basics
- What Is build.xml?
- Simple build.xml
- Ant Targets
- Ant Tasks
- Ant Variables
- Ant and J2EE
- Using ant from RAD
- Running Ant
- Advanced Task

## 4. Automated Component Testing



## **RAD v7.0 Technical Overview (New Features)**

- Component Testing
- Component Test
- Testing Frameworks
- JUnit
- JUnit TestCase
- Assert Statements
- TestSuite
- TestRunners
- JUnit in RAD
- Add junit.jar Manually
- JUnit in RAD
- Component Testing
- Components to Test
- EJB Testing
- Web Service Testing
- Create a Component Test Project
- Creating Individual Component Test
- Select the Components to Test
- Customizing Component Tests
- Select a Test Pattern for EJB
- Select the EJB Interfaces
- Define Test Scenario
- Java Testing
- Component Under Test
- Test Pattern
- Define a Java Test Scenario
- Web Service Component Test
- Select the Web Service Under Test
- Test Scenario Page
- Test Data Table
- Define Set of Values
- Run the Test
- Examine Test Results
- Test Data Comparator
- Summary

### 5. Code Review

- Code Review



## **RAD v7.0 Technical Overview (New Features)**

- Types of Code Review
- Rule
- Rule Severity Level
- Information on a Rule
- Rule Categories
- Configuring Code Reviews
- Exclude Packages and Classes from the Review
- Configure the Review Rules
- Setting the Code Review Options
- Create User Defined Rule
- Select a Template Window
- Rule Properties
- User Defined Rule
- Perform Automated Code Review
- Run Code Review
- Code Review Details
- Run Code Review
- Quick Fixes
- Summary

### **6. Team Development**

- Objectives
- Goals of Team Development
- Team Development Architecture
- Workspace
- Repository
- Synchronize Workspace with Repository
- Creating a Milestone
- Branching
- Version Control Systems
- Major Tasks for Setting up Team Environment in RAD
- Install CVS NT
- Add Repository Connection
- Add a Project to CVS
- Import Project from Shared Repository
- Plain Commit / Update
- Synchronize Workspace with Repository
- Synchronize Workspace with Repository – Commit/Update



## **RAD v7.0 Technical Overview (New Features)**

- CVS Resource History
- Creating a Milestone
- Restoring a Milestone
- Creating a Branch
- Summary

wc7