



IBM Software Group

IBM® Rational® Application Developer V7.5

Introduction



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This presentation will provide a brief introduction to Rational Application Developer V7.5.

Agenda

- Basics
- Tool overview
- Installation notes



This presentation will first discuss the fundamental software components in this release, followed by an overview of the functionality that has been upgraded to support Java™ EE 5, and some notes on installation.

Basics

- Based on:
 - ▶ Eclipse platform 3.4
 - ▶ Web tools project 3.0
- Uses Java runtime environment 1.6



Rational Application Developer V7.5 is built on an open-source core, including Eclipse Platform 3.4 and Web Tools Project 3.0, both projects of the Eclipse Foundation. This version runs on the Java Platform, Standard Edition 1.6 runtime environment.

EJB 3.0 tools

- Syntax validation and code completion for annotations
- Enhanced deployment descriptor editor
- EJB visualizer updated to support EJB 3.0 beans
 - ▶ Graphical representation of EJB beans
 - ▶ Works with both annotations and deployment descriptors
- Support for adding EJB 3.0 modules to existing applications that have J2EE 1.4 deployment descriptors

The Java development tools in V7.5 have been upgraded to provide first-class support for developing Java EE 5 enterprise applications. These upgrades include new tools for working with Enterprise Java Beans (EJB) 3.0. The code editor has been enhanced to provide syntax validation and code completion support for Java annotations, and provides an annotations panel that allows you to easily manage the values that can be set using annotations. The deployment descriptor editors and visualizers have also been enhanced to support the new specification. In addition to building EJB 3.0 modules as part of your Java EE 5 applications, Rational Application Developer also allows you to add EJB 3.0 modules to your Java EE 1.4 applications.

Java persistence API tools

- Bidirectional tools to map JPA entities to database tables
- JPA XML editors
- JPA “manager bean” wizards for easy integration with the Web tier
- Enhanced JSF client support for EJB 3.0 and JPA beans



The Java Persistence API is a subset of the EJB 3.0 specification, and provides a new standard for accessing relational data from enterprise Java applications. Rational Application Developer V7.5 can help you develop JPA applications more quickly, by providing tools for graphical creation of JPA Entities and database tables, in top-down, bottom-up, or meet-in-the-middle styles. Wizards are also provided for creating “JPA manager beans” that provide a façade for easy integration with Web components like Servlets, JavaServer Pages, and JavaServer Faces.

Web tools overview

- JPA consumption in Web applications
- Page designer
 - ▶ Split view option
 - Ability to split the page designer into a designer and source view
 - Horizontally or vertically
 - ▶ Absolute positioning
 - Ability to position the widget to an absolute position on the page
- Ability to add custom JSF library to Rational Application Developer
- Creation of composite JSF components
- RPC adapter to expose Java beans as REST-style services

The Web tools in Rational Application Developer V7.5 have been enhanced with wizards that make it easy to include JPA or EJB data in your Web pages. The page designer component offers a split-screen view, so that you can view your source code and the preview of your design at the same time, and provides the ability to position objects at an absolute position on the page you are designing. The JSF tools support adding custom libraries and creating composite components. Also included is an adapter to expose Java beans on the Web as Relational State Transfer (REST)-style services.

Test environments

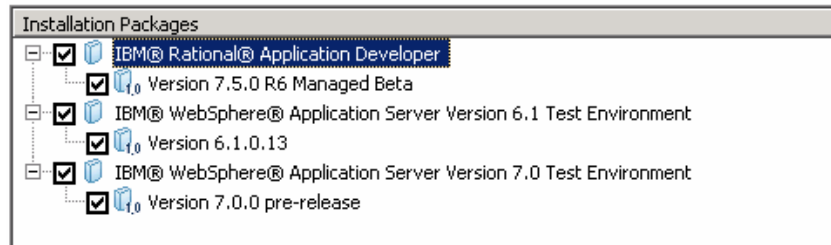
- Included test environments:
 - ▶ WebSphere® Application Server V6.0
 - ▶ WebSphere Application Server V6.1 including
 - Feature Pack for EJB 3.0
 - Feature Pack for Web Services
 - Feature Pack for Web 2.0
 - ▶ WebSphere Application Server V7.0
 - Feature Pack for Web 2.0



The included server tools allow you to create a WebSphere Application Server test environment directly within your Rational Application Server installation. This release provides test environments for WebSphere Application Server V6.0, V6.1 (including feature pack support), and V7.0.

Installation notes

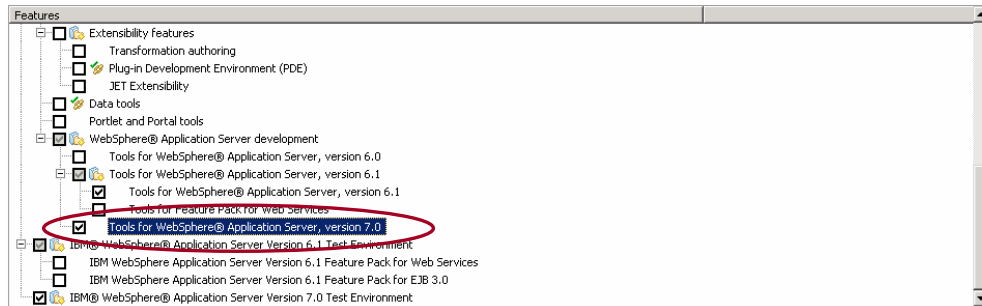
- Installation uses the IBM Installation Manager



The installation manager is a tool that allows you to choose the components of Rational Application Developer that you want to install. You can first choose from the available packages on your system, as shown here, to install Rational Application Developer itself, or any of the test environments that are available.

Feature selection

- Features can be selected based on which tools you want to use
- Be sure to select “Tools for WebSphere Application Server 7.0”



After selecting the packages to be installed, you can then choose the Rational Application Developer features that you want to install. This lets you install the product with a smaller footprint, if there are features that you do not plan to use. You can use the Installation Manager again later if you decide to install a feature that was previously not installed. If you plan to develop applications for WebSphere Application Server V7, be sure to select the “Tools for WebSphere Application Server, version 7.0” feature.

Summary

- Rational Application Developer V7.5
 - ▶ Rich tools for Java EE 5 development
 - ▶ Support for WebSphere Application Server V7



This presentation has provided a brief introduction to some of the major enhancements in Rational Application Developer V7.5, the preferred development environment for WebSphere Application Server V7. In addition to adding support for the latest version of WebSphere Application Server, Rational Application Developer now has tools for developing Java EE 5 applications, including EJB 3.0 support, JPA tools for data persistence, and improved tools for building Web applications.

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