IBM Software Group

IBM Rational Application Developer V7.5

Introduction

@business on demand.

© 2008 IBM Corporation
Updated April 21, 2015

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

Agenda

- Basics

- Tool overview

- Installation notes

Introduction

© 2008 IBM Corporation

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.

IBM

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.
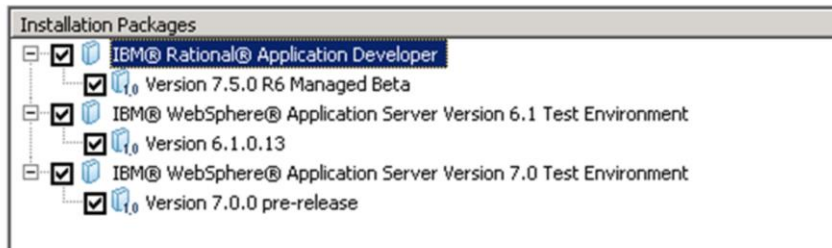
IBM

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

7

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

Installation Packages
- ☑ IBM® Rational® Application Developer
  - ☑ Version 7.5.0 R6 Managed Beta
- ☑ IBM® WebSphere® Application Server Version 6.1 Test Environment
  - ☑ Version 6.1.0.13
- ☑ IBM® WebSphere® Application Server Version 7.0 Test Environment
  - ☑ Version 7.0.0 pre-release

Introduction   8
© 2008 IBM Corporation

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.

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.

IBM

Summary

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

Introduction

© 2008 IBM Corporation

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.

Trademarks, copyrights, and disclaimers

IBM, the IBM logo, ibm.com, and the following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

Rational   WebSphere

If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of other IBM trademarks is available on the Web at "Copyright and trademark information" at http://www.ibm.com/legal/copytrade.shtml

EJB, J2EE, Java, Java runtime environment, JavaServer, and all Java-based trademarks and logos are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Other company, product, or service names may be trademarks or service marks of others.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements or changes in the products or programs described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted, if at all, according to the terms and conditions of the agreements (for example, IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

© Copyright International Business Machines Corporation 2008. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights-Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract and IBM Corp.