



IBM Software Group

What's New in IBM Rational Application Developer

Davyd Norris
Senior IT Architect – IBM Rational

Rational. software



ON DEMAND BUSINESS™

Agenda

Rational Application Developer

- Using RAD in your agile development lifecycle

Rational Application Developer – V7.5.3

- Getting Started quickly
- Web Client Development
 - Web 2.0 & JSF
- Building Distributed Services
 - Java EE & Web Services
 - Service Component Architecture
 - WAS Deployment
- Verifying the quality of the code
 - Problem determination & Debugging
- Team Collaboration / Product Integration



Use RAD to build Enterprise Java IT applications

1st Tier


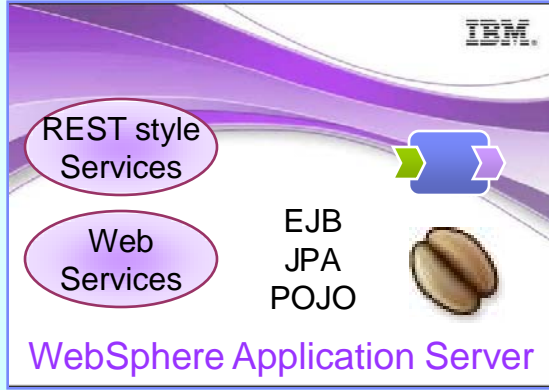



Web Client JavaScript JSF

Portal Client

Rich Java GUI Client

2nd Tier



REST style Services

Web Services





EJB JPA POJO

WebSphere Application Server

Tomcat JBoss

3rd Tier

- IBM CICS Transaction Server
- IBM InfoSphere DB2
- Oracle
- IBM InfoSphere IMS
- SAP
- PeopleSoft
- ...

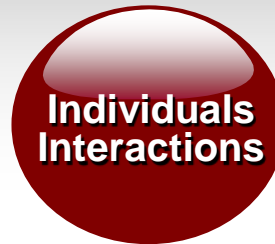


RAD helps with Agile Development

Facilitates the principles of high-performance teams



Simplification of complex implementations



- Wizards, visual design tools and assistive source level tools, get you to your first iteration, faster
- Integrated test and debug capabilities let you unit test every step of the way

- RTC integration
 - Collaborative Debug
- Automated static code analysis
- Process awareness

- Iterative development support
- Comprehensive refactoring,



RAD Accelerates SOA, Java EE, Web 2.0, Portal Development for IBM Middleware

Web 2.0

Extend SOA and Java EE assets to the glass via dynamic, rich JSF and AJAX applications



Quick Fix

Validate

Refactor

Annotate

Refine

Java EE 5

Develop and test Java EE 5 applications with annotation based programming



Team Collaboration

Rational Team Concert:
Collaborate, Automate, Report



RAD

Visualize

Analyze

Deploy

Test

Debug



WAS

WAS Integration

Hot deploy incremental changes to WAS



SOA

Assemble Web services and SCA components into heterogeneous business applications



Portal

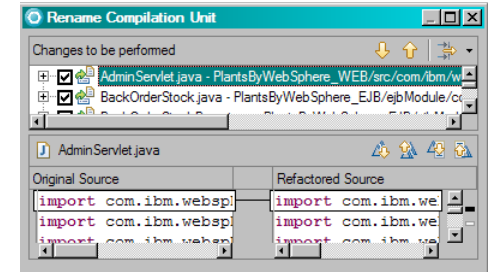
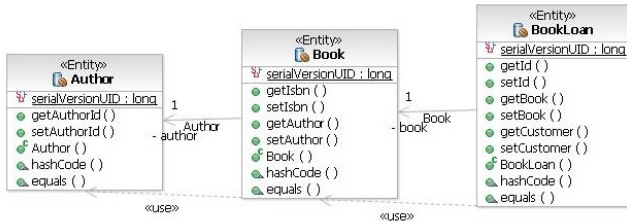
Visually design portal sites and portlets for WebSphere Portal Server



RAD Increases Efficiency and Shortens the Development and Test Cycle

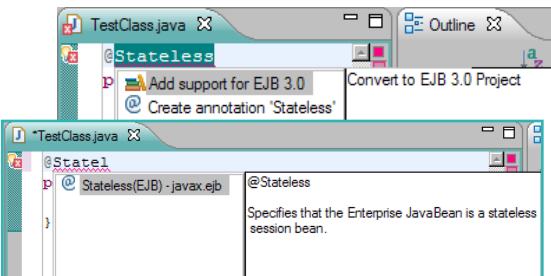
Visualize and enforce Java EE, SOA and Web 2.0 architectures

**Refactor...
Rename...
Enhance...**

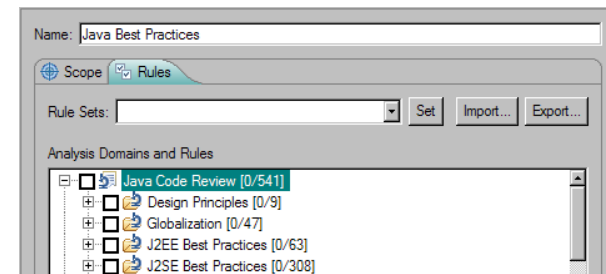


Analyze with static analysis rules and dynamic line level code coverage

Accelerate development with annotation based programming and quick fixes



Unit test with WebSphere Integrations



Server	State	Status
WebSphere Application Server v6.1 at localhost	Stopped	
WebSphere Application Server v7.0 at localhost	Starting...	Synchronized

RAD Value Statements

RAD features and function bring value to your organization by:

■ **Increased developer productivity**

- ▶ Iterative creation, validation, revision and deletion of artifacts.
- ▶ Simplified business logic programming models via Java annotations.
- ▶ Support for WAS V7 – Java EE 5, EJB 3, JPA, JSF 1.2, JAX-WS 2.1, JAXB 2.0, JSP 2.1, Servlet 2.5...
- ▶ Simplified development of RIA clients to extend and expose services and feeds

■ **Improved application quality**

- ▶ Line level code coverage, advanced code review and debug capabilities.

■ **Integration with other IBM products**

- ▶ WebSphere test environments for WAS 7.0, WAS 6.1, and WAS 6.0 included.
- ▶ WebSphere feature pack support – Web 2.0 FeP, Web Services FeP, EJB 3.0 FeP, SCA 1.0.0 FeP.
- ▶ WebSphere Portal 6.1 / 6.0 development – WP 6.1 Server included.
- ▶ WebSphere adapter Support – SAP, PeopleSoft, Siebel...
- ▶ Rational Team Concert integration – Software development is a team sport.

■ **Governance support**

- ▶ Install Manager – Flexible installation and maintenance.
- ▶ Process Advisor – Guides developers for best of breed practice.

■ **IBM support**



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Flexible Install Options – get set up quickly

- Built on Eclipse 3.4.
- Uses IBM JRE 1.6.
- Install RAD...
 - ▶ As a complete offering with its own Eclipse platform, or
 - ▶ Into an existing Eclipse, if both are on the same Eclipse levels.
- IBM Installation Manager simplifies and optimizes your install...
 - ▶ Minimize footprint – Install just what you need.
 - ▶ Shell share with other Rational products to help developers more easily manage their desktop.
 - ▶ Enterprise install capabilities for simple maintenance and provisioning of your own standardized install configurations.
 - Create response files for what install configuration you need.

Learning resources in RAD – get up to speed quickly

■ Detailed and comprehensive documentation

- ▶ Scenario based documentation to provide a seamless flow from topic to topic
- ▶ Install it on your machine, on an intranet server or browse online

■ Tutorials

- ▶ Watch as the tutorial is performed.
- ▶ Do the steps of the tutorial.

■ Samples

- ▶ Learn how to do application tasks in RAD.
- ▶ Get a better understanding of the underlying technology.

■ Online resources

- ▶ developerWorks: Rational zone
 - White papers, demos, web casts

IBM Rational Application Developer Version 7.5.2



What's new in the help

- ▶ **SCA Applications**
SCA Development Tools assist in the assembly of service oriented application components based on the open Service Component Architecture.
- ▶ **Java EE 5 Applications**
The Java EE 5 programming model simplifies the process of creating Java applications.
- ▶ **Developing EJB 3.0 Applications**
You can use the workbench to develop and test enterprise beans that conform to the distributed component architecture defined in the Sun Microsystems Enterprise JavaBeans (EJB) 3.0 specification.
- ▶ **Developing Data Web Services**
Data Web Services is a next generation solution to significantly ease the development, deployment, and management of Web services-based access to DB2 and IDS database servers.



Featured help topics

- ▶ **Developing JPA applications**
Using the Java Persistence API (JPA), you can define and edit object-relational (O/R) mappings between Enterprise JavaBeans™ (EJB) 3.0 and database tables.
- ▶ **Creating Web diagrams**
A Web diagram is a file that helps you create, visualize, and change the flow of a dynamic Web application. The Web diagram editor is a visual editor for creating and modifying Web diagrams.
- ▶ **Testing and publishing on your server**
The testing and publishing tools provides runtime environments where you can test JSP files, servlets, HTML files, enterprise beans and Java™ classes.



Help system overview

The help system is designed to give you quick access to the resources you need to use Rational software effectively. To find product information efficiently, try the new index or run a tailored search with the quick view button. Create PDFs or print out your favorite help topics. You can stay up-to-date with the latest information from the Rational RSS feeds in the Web resources section. You can download Rational information centers and customize them for the needs of your organization.



Web resources

Explore the resources below for more information about Rational® Application Developer, services, and support.

IBM Information Centers

Information Centers and Libraries for IBM software by brand

Resources from www.ibm.com

- ▶ Rational Top 10 FAQ
- ▶ Rational Application Developer Support
- ▶ developerWorks®
- ▶ Rational library
- ▶ IBM Redbooks: Rational Application Developer v7.5 Programming Guide
- ▶ Rational Application Developer version 7.5 Best Practices
- ▶ Software consumability survey

RSS feeds

- ▶ developerWorks: Rational Application Developer articles ▶
- ▶ developerWorks: Rational Application Developer tutorials ▶
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- ▶ developerWorks: Rational tutorials ▶

<http://publib.boulder.ibm.com/infocenter/radhelp/v7r5/index.jsp>



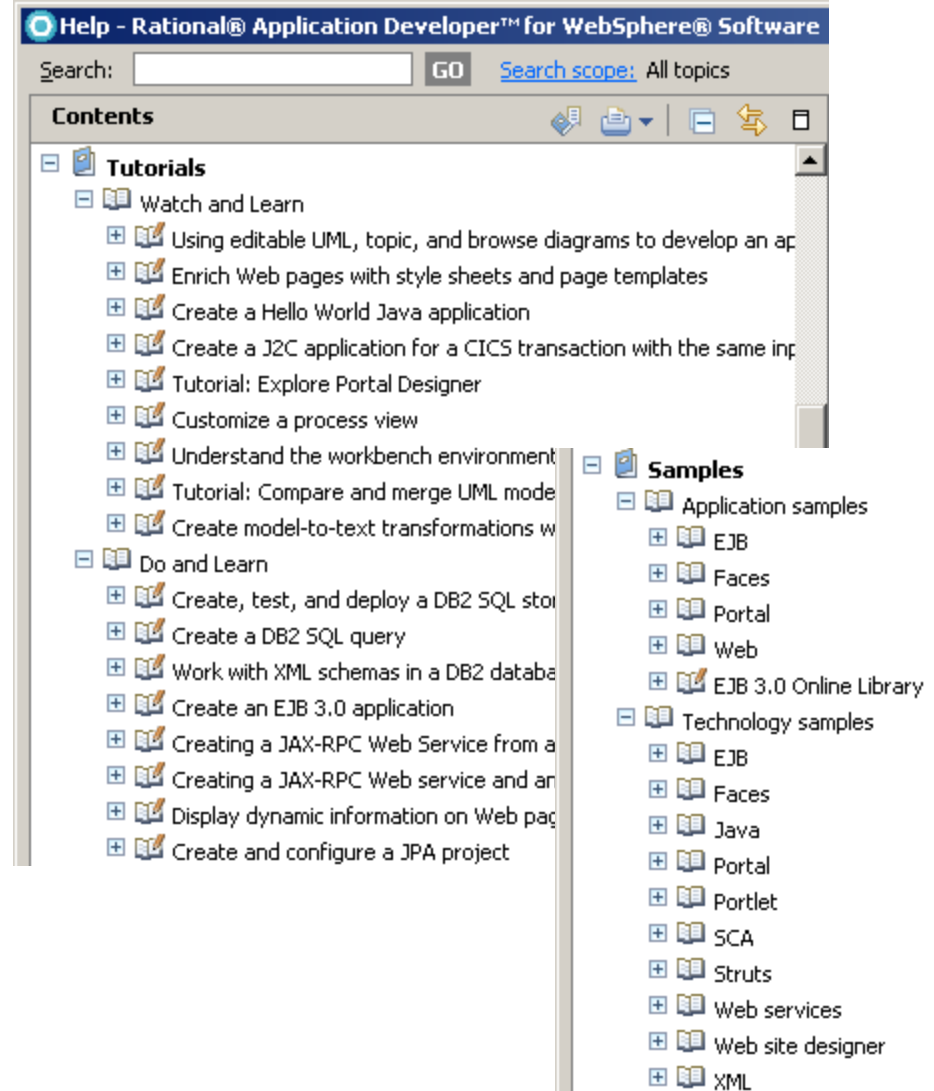
Building skills quickly: Wide Range of Help

Tutorials come in two flavors:

- **Watch and Learn**
Watch as the tutorial is performed.
- **Do and Learn**
Do the steps of the tutorial.

Samples come in two flavors:

- **Application Samples**
Learn how to do application tasks in RAD.
- **Technology Samples**
Get a better understanding of the underlying technology.



Migration

- **Ability to migrate from RAD 6.0.0.x or RAD 7.0.0.x via**
 - ▶ Import projects using Project Interchange.
 - ▶ Import projects shared in a source code management (SCM) system.
 - ▶ Open a version 6.0.x or version 7.0.x workspace with the current version of the product.

- **Workspace Migration wizard**
 - ▶ Select the projects that you want to migrate
 - ▶ Highlights which files in the workspace will be modified
 - ▶ Identifies projects which target a runtime environment that is not available in current RAD release.
 - ▶ Enables the user to optionally remove 'no longer needed' project files from the workspace
 - ▶ Upon migration completion, the Migration Validation window opens and the user can see the messages generated during the validation of the migration.



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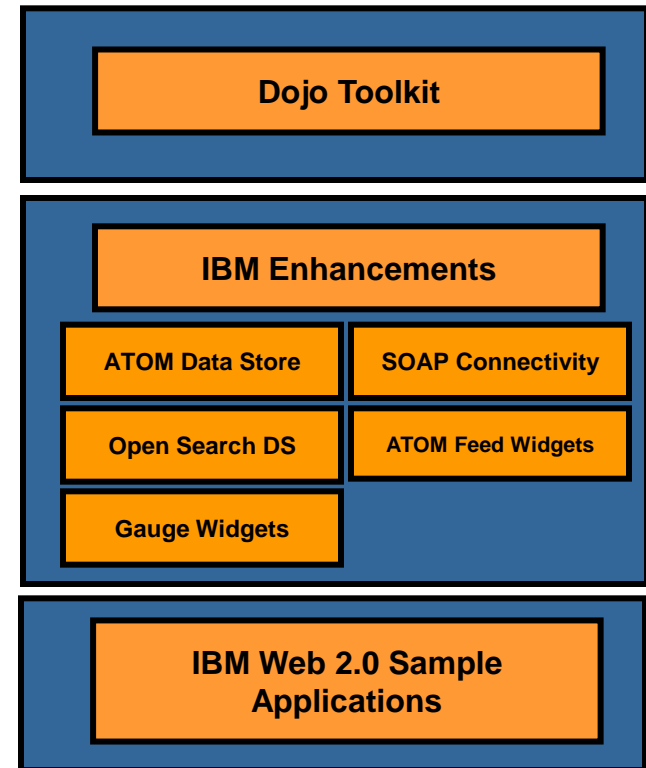
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Dojo Toolkit

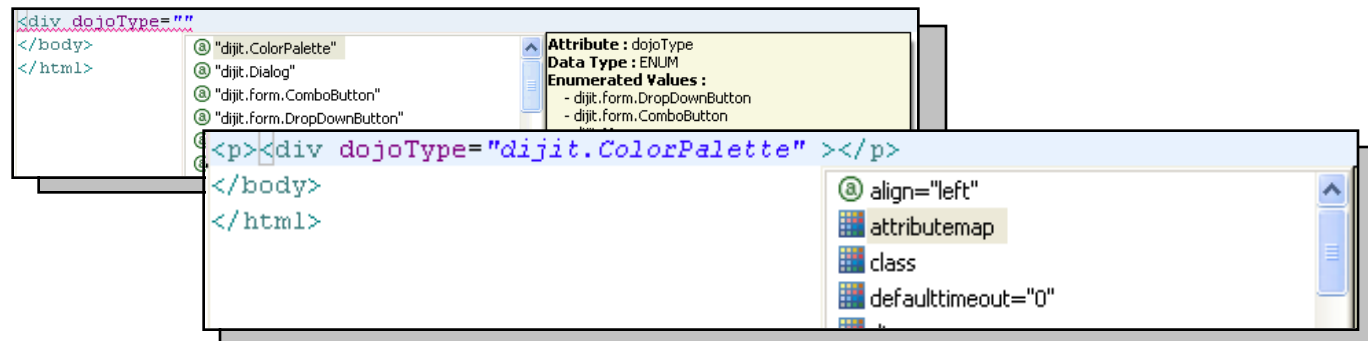
- JavaScript open source toolkit with IBM extensions.
- Rich set of interactive widgets
- Provides core functionality for event handling, localization, accessibility
- Eliminates many browser inconsistencies with JavaScript
- Reduces time to market and helps lower Ajax adoption costs.
- IBM is an active contributor to the Dojo Foundation.
- Dojo is part of the OpenAJAX Alliance



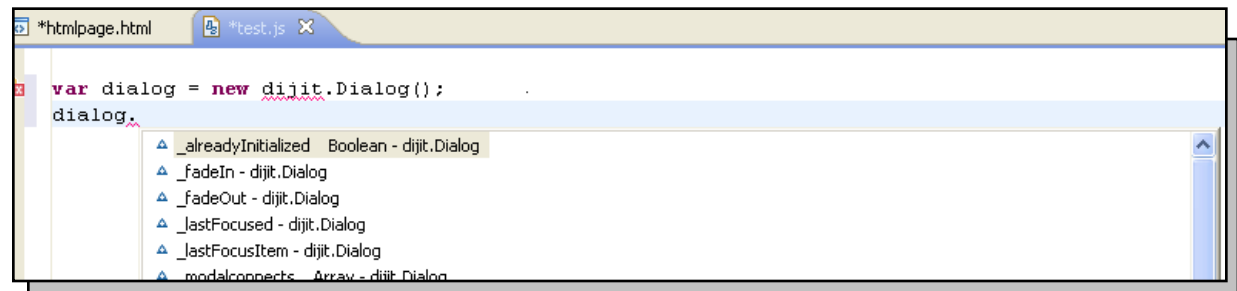
RAD helps with RIA Clients – JavaScript Editing

- Provides a world class JavaScript source level development environment
 - ▶ JavaScript editor with content assist, validation, refactoring, outline view
 - ▶ Integration & support for Dojo
 - Dojo specific content assist, validation, refactoring

– In HTML

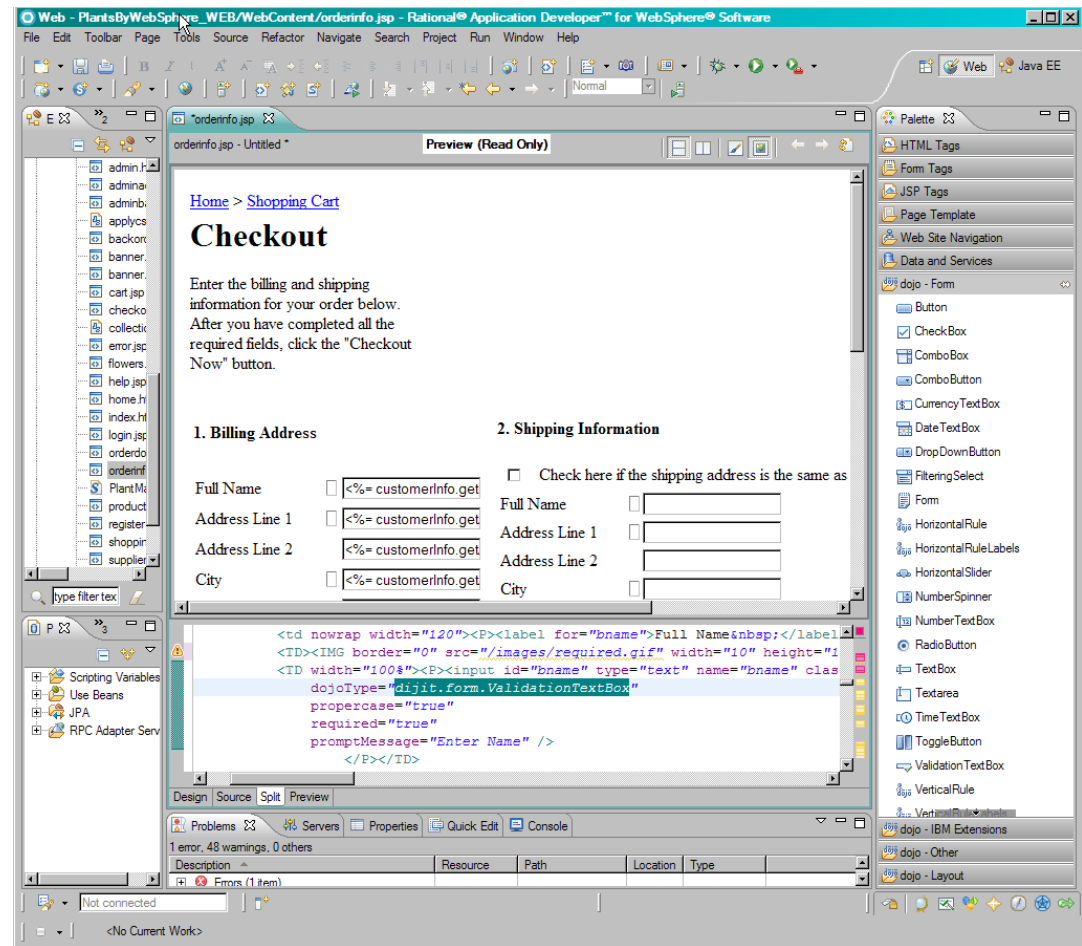


– In JavaScript



RAD helps with RIA Clients – Visual Editing

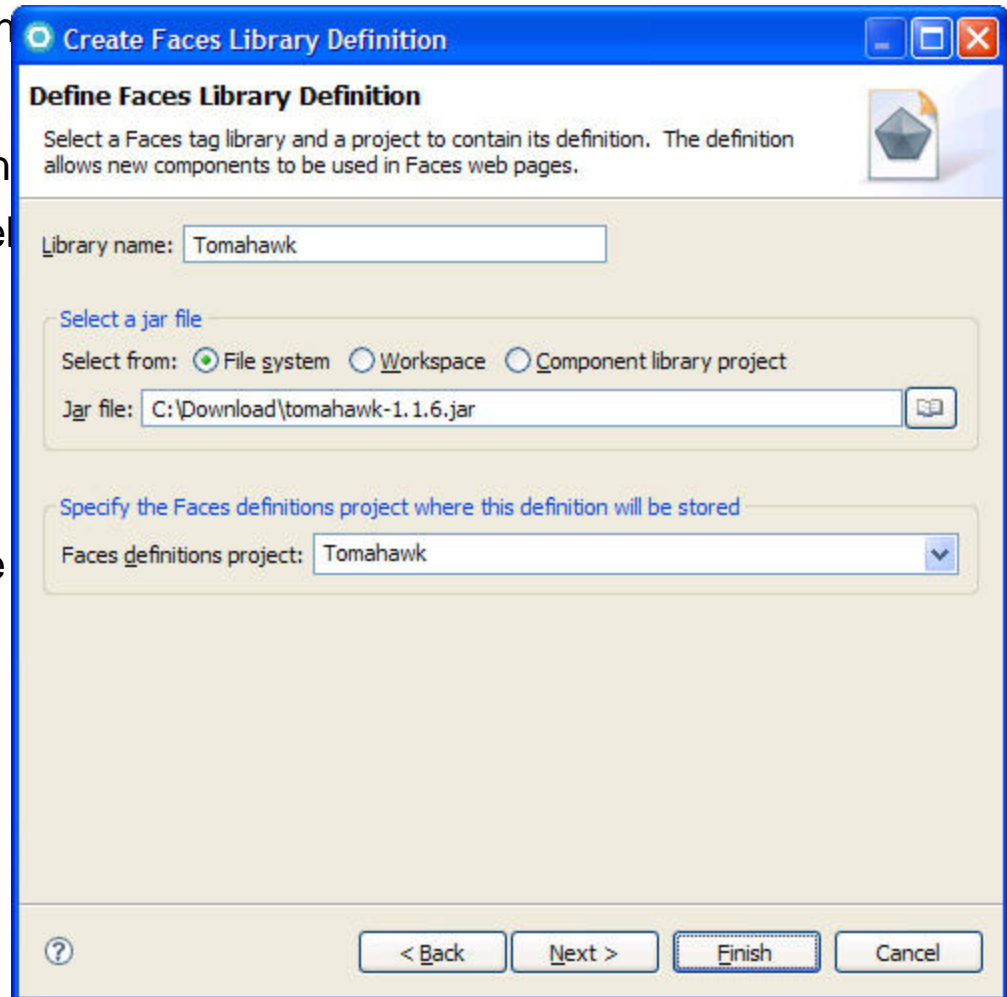
- Support for visual construction of RIA pages with Dojo Widgets on Palette for easy drag-and-drop to page
 - Page Designer split pane view
- DOJO property views for setting widget attributes
- Access to REST services, web remoting interfaces and feeds



Enhanced 3rd Party JSF Component Library support

Faces Library Definition Project - definition

- ▶ Initialize content from introspecting
- ▶ Holds artifacts to be copied to web
- ▶ Defines:
 - Palette
 - Visualization
 - Tag usage information
- ▶ Presence of project in workspace



Custom Component Building - Visual layout

Custom component used in a web application

- ▶ On palette
- ▶ Visualized
- ▶ Properties shown in Properties

The screenshot displays the IBM Rational software interface for building a custom component. The main window shows a visual layout of a form with three input fields: "First name: #{component.firstName}", "Last name: #{component.lastName}", and "Date of birth: #{component.dob}". Below the visual layout is the source code editor showing the following XML structure:

```
<body>
<hx:scriptCollector id="scriptCollector1">
  <h:form styleClass="form" id="form1">
    <fc:person id="person1"></fc:person>
  </h:form>
</hx:scriptCollector>
</body>
</f:view>
</html>
```

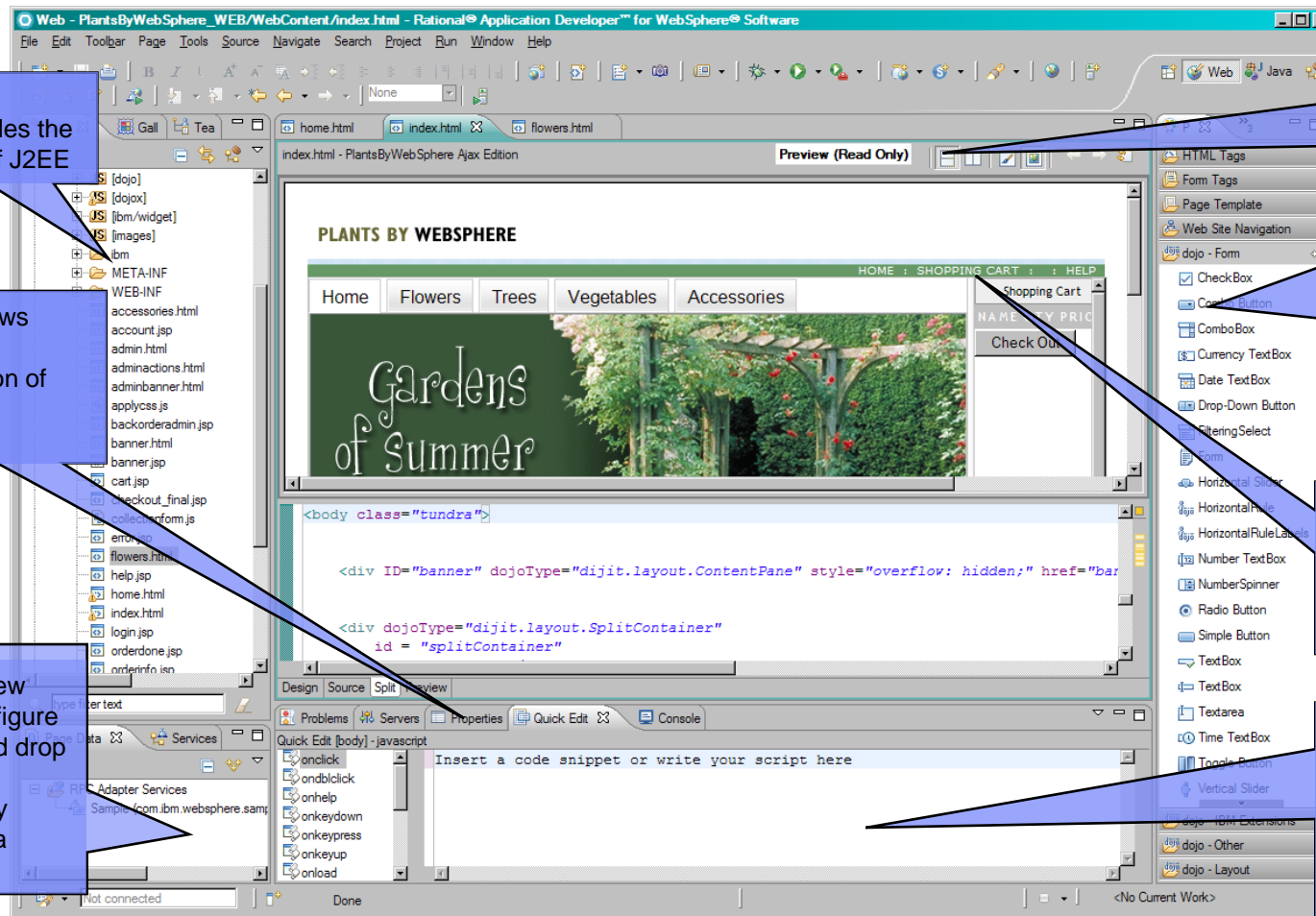
The Properties window at the bottom shows the component hierarchy: body, hx:scriptCollector, h:form, and fc:person. The Properties table for fc:person is as follows:

Attribute Name	Value
binding	
dob	
firstName	
id	person1
lastName	
rendered	

The JSP Tags palette on the right side of the interface shows various components, including "Person" under the "My Components" section.



Design Dynamic Pages with Rational page Designer



Simplified Navigator hides the complexity of J2EE

Property views allow easy customization of the selected component

The Data View lets you configure and drag and drop data to automatically create a data bound UI

Split pane view allows you to see a synchronized source and design (or preview) view.

Construct pages by dragging and dropping rich web components from a customizable Palette

Page templates separate out common page elements in a single template file

The Quick Edit View allows scripting of client or server side events in Java or Java Script.

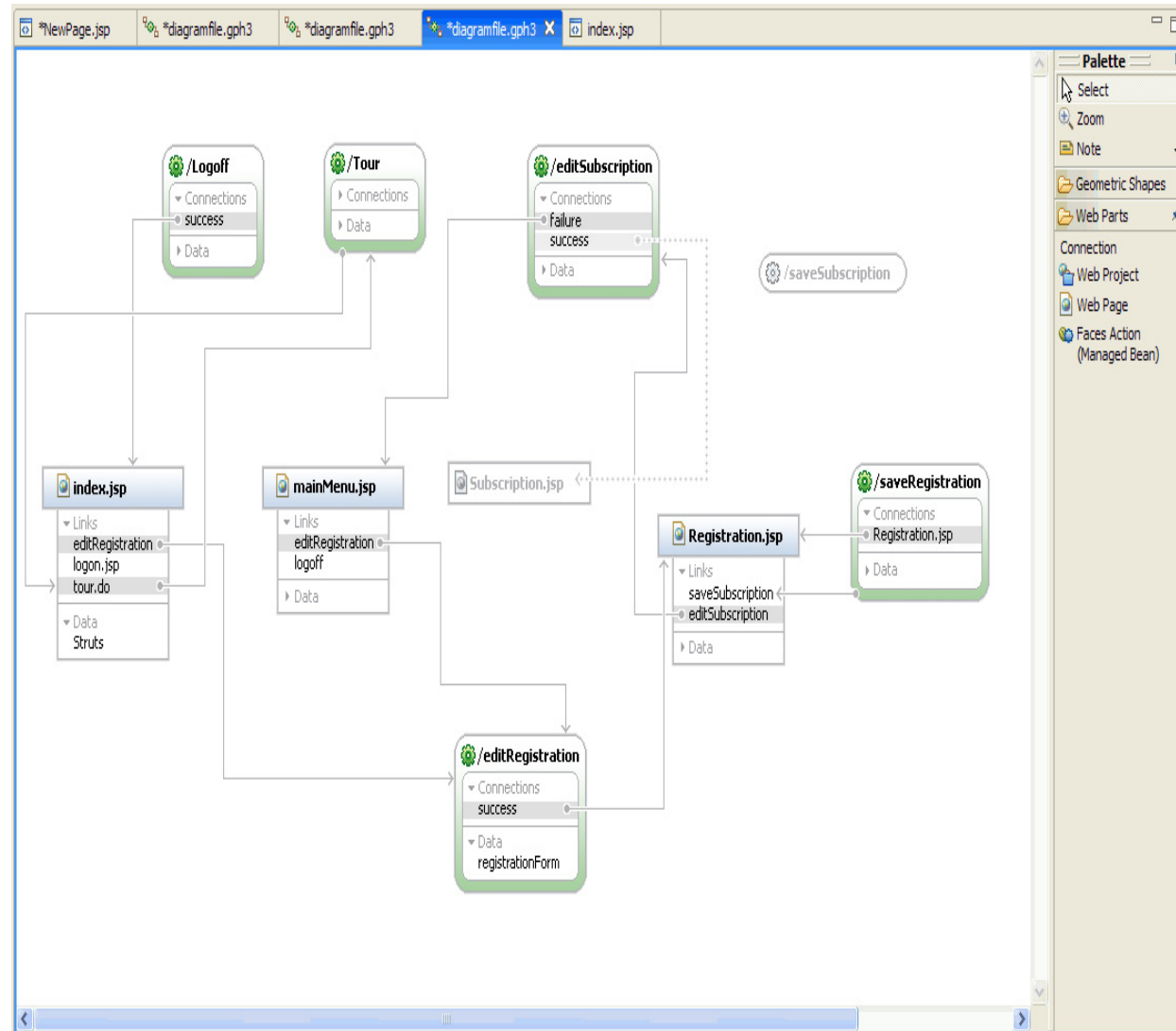
Code assist writes the code for you!

Web Application Development is Drag and Drop Simple!

- Rapid UI Creation
- Instant binding of UI to Data
- Simple Data Access via JPA
- Quick Server-side event scripting (with Java Server Faces)

Web Diagram Editor

- **Create a complete data/service driven application completely within the Web Diagram Editor**
 - ▶ Visualize complete or part of application page flows
 - ▶ Visualize Data and Service consumption
 - ▶ Improves application understanding and application maintenance overhead
 - ▶ Existing or new applications
- **Supports Struts and Faces applications**



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What's new with Java EE 5?

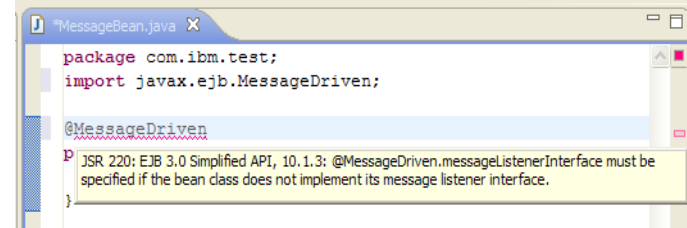
- Java EE 5 – A simplified programming model.
- Annotations
 - ▶ Part of the Java 5 programming language and the Java editing experience.
 - ▶ Inject information into plain old Java objects (POJOs).
 - ▶ Specify information in the source instead of in side files.
 - ▶ Separate concerns between business logic and infrastructure.
 - ▶ Java EE Deployment Descriptors become optional.
 - ▶ Tie business logic to programming models non-invasively.
 - ▶ More intuitive and convenient.
- Examples:
 - ▶ @Stateless – Enables a POJO to be a Stateless Session Bean.
 - ▶ @Stateful – Enables a POJO to be a Stateful Session Bean.
 - ▶ @WebService – Enables a POJO to be a Message Driven Bean.
 - ▶ @Entity – Enables a POJO to be a JPA Entity Bean.



RAD helps with – Java EE 5 development

RAD helps simplify and accelerate Java EE 5 development

- Content assist and as you type validation
- Quickfixes for code and project configuration
- Advanced refactoring options to allow you to modify and maintain code in an iterative manner.
- Annotation view to manage and modify annotation properties



```

package com.ibm.test;
import javax.ejb.MessageDriven;

@MessageDriven

```

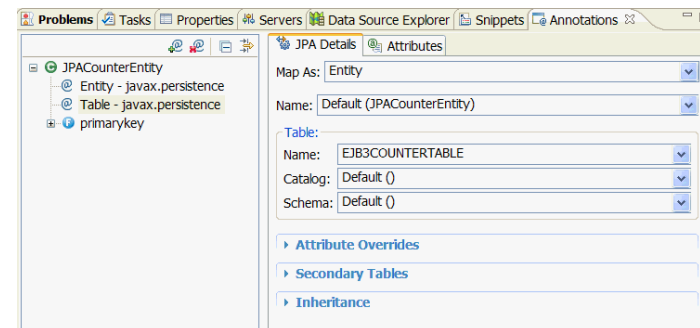
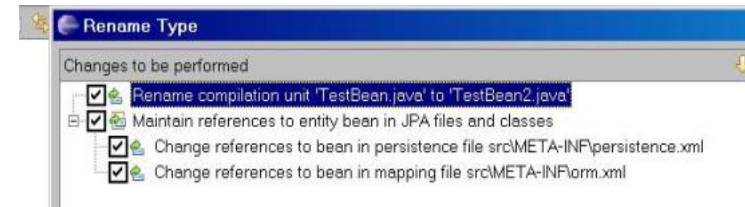
JSR 220: EJB 3.0 Simplified API, 10.1.3: @MessageDriven.messageListenerInterface must be specified if the bean class does not implement its message listener interface.

```

@Stateless
public class ...
public ...
re ...
}

```

- Add support for EJB 3.0
- Convert to EJB 3.0 Project
- Create annotation '@Stateless'
- Change to 'Stateful' (com.sun.xml.internal.ws.dev)
- Rename in file (Ctrl+2, R direct access)



RAD helps with – Java Persistence Architecture tools

Create and automatically initialize mappings:

- Top-down: Create new database tables from existing entity beans.
- Bottom-up: Create new entity beans from existing database tables.
- Meet-in-the-middle: Define mappings between existing database tables and entity beans.

Create Manager Beans

Generate entities

Generate Entities

Generate Entities from Tables

Source folder:

Package:

Synchronize Classes in persistence.xml

Tables:

Table	Entity Name
<input checked="" type="checkbox"/> DEPARTMENT	Department
<input type="checkbox"/> DEPT	Dept
<input type="checkbox"/> EMP	Emp
<input type="checkbox"/> EMPACT	Empact
<input checked="" type="checkbox"/> EMPLOYEE	Employee
<input type="checkbox"/> EMPMDC	Empmdc

JPA Manager Bean Wizard

Tasks

Select a JPA Entity from the top table and a task from the left column.

Entity	Task
Department	Primary Key
Employee	Query Methods
	Relationships
	Concurrency Control
	Other

Select a task from the left column to modify the associated properties.

This displays queries used to retrieve JPA data. You can add new queries or edit existing queries to return results tailored to your needs.

```

getDepartment
getDepartmentByAdmrdept
getDepartmentByDeptname
getDepartmentByLocation
getDepartmentByMgmo
getDepartmentOrdered
    
```

Filter results

Edit Query Method

Modify filters, order results, and select the attributes returned by the query.

Query Method Name:

Result Attributes | Filter Results | Order Results

Select which attributes should be returned by the query:

Attribute	Type
<input checked="" type="checkbox"/> admrdept	employees.list.Department...
<input type="checkbox"/> departmentCollection	java.util.Set<employees...
<input checked="" type="checkbox"/> deptname	String
<input checked="" type="checkbox"/> deptno	String
<input checked="" type="checkbox"/> employeeCollection	java.util.Set<employees...
<input checked="" type="checkbox"/> location	String
<input checked="" type="checkbox"/> mgmo	employees.list.Employee

Select All | Deselect All

Use an existing java bean to contain the results

Query Statement:

Named Query Name:

```

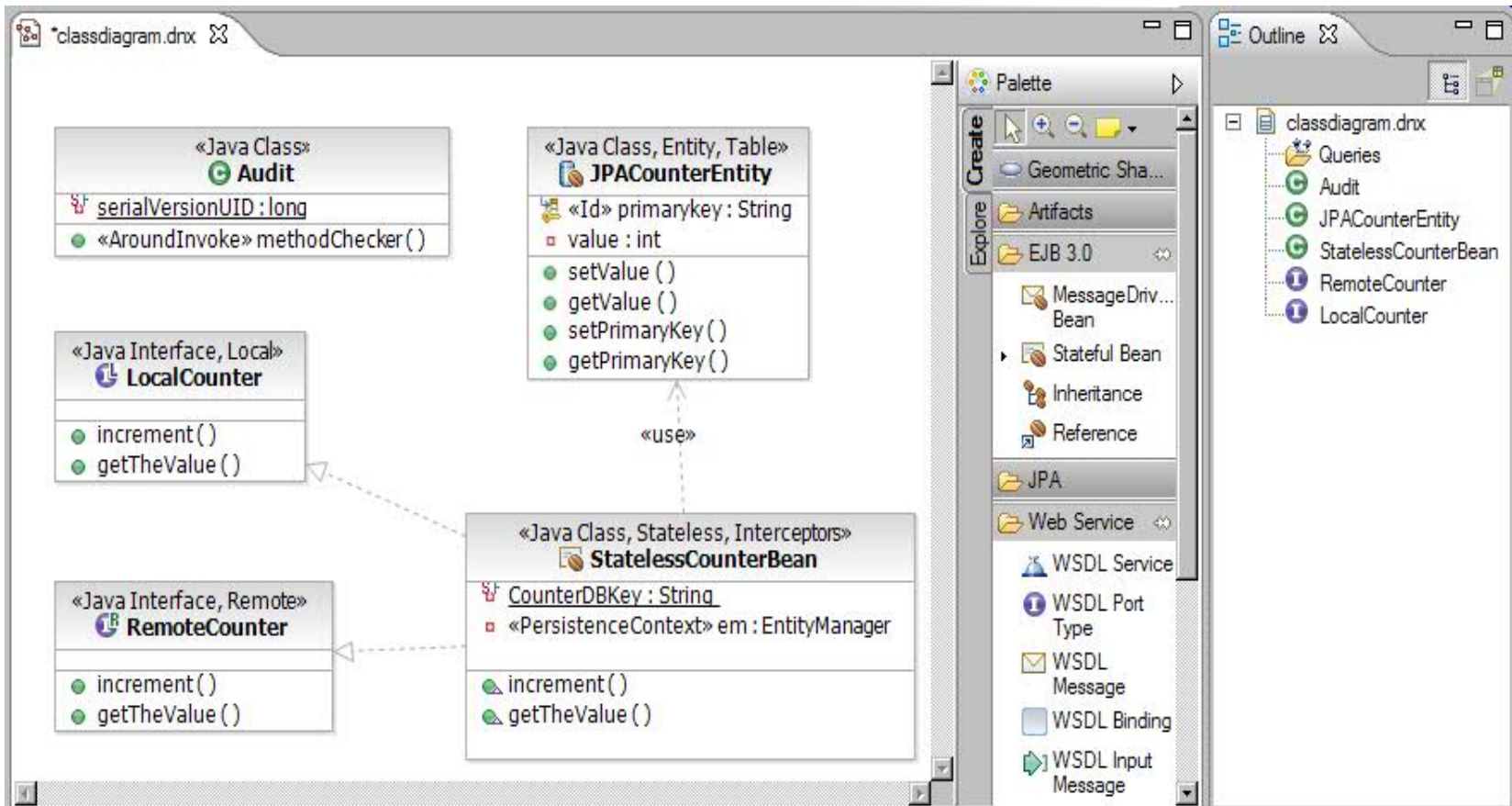
SELECT d.admrdept, d.deptname, d.deptno, d.employeeCollection, d.location,
d.mgmo FROM Department d
    
```



RAD helps with - Visualizing your EJB & JPA beans

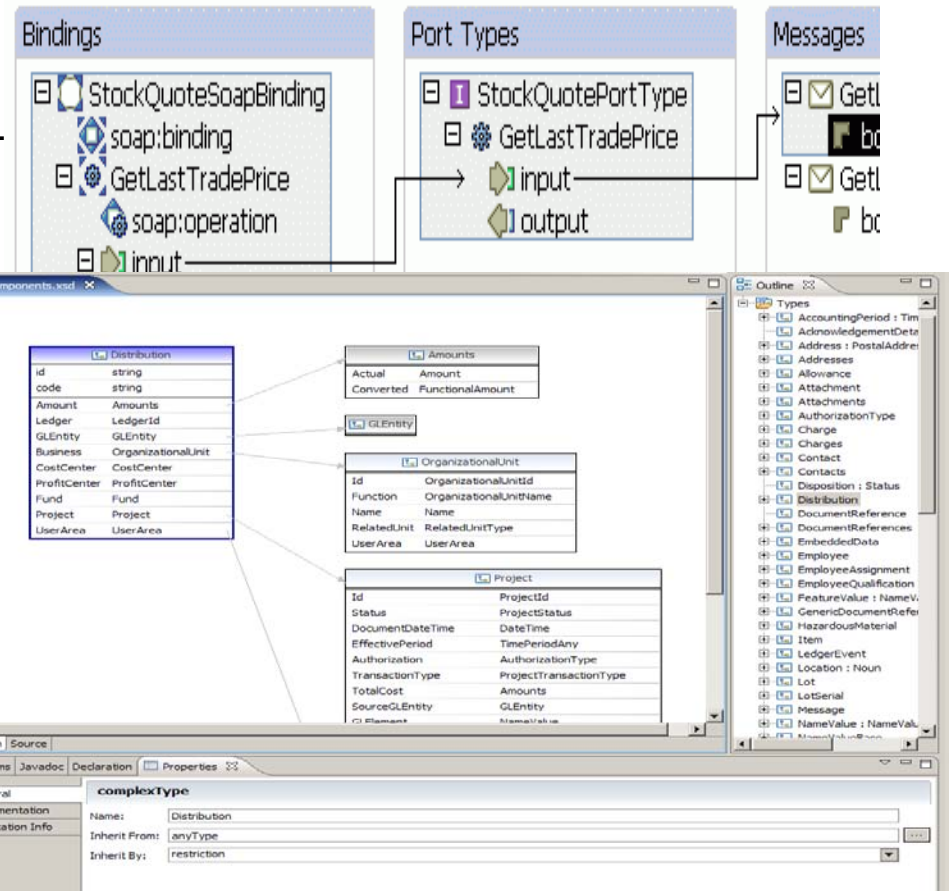
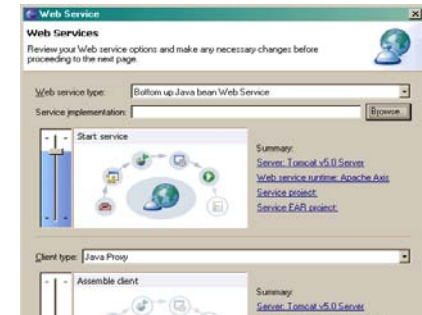
EJB Visualizer updated to view & edit EJB 3.0 & JPA beans

- Beans can be annotation or XML deployment descriptor based



RAD Helps with Web Services Development

- Discovery of Web services in Page Designer palette
- Simplified WSDL/Schema views in the editor
- Better (performing) validators in WSDL and XML schema validation
- Deployment and testing of Web Services into WebSphere Application server
- Test Web Service client with Universal Test client
- JAX-WS and JAXB annotation based programming models



RAD helps with – JSR 181 (Web Service Metadata Annotations)

- Sample JAX-WS Web Service:

- `import javax.jws.WebService;`
- `import javax.jws.WebMethod;`
- `@WebService`
- `public class Echo {`
- `@WebMethod`
- `public String echoString(String input) {`
- `return input;`
- `}`
- `public int echoInt(int input) {`
- `return input;`
- `}`
- `}`
- Only `echoString()` will appear as a WSDL operation.

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Service Component Architecture

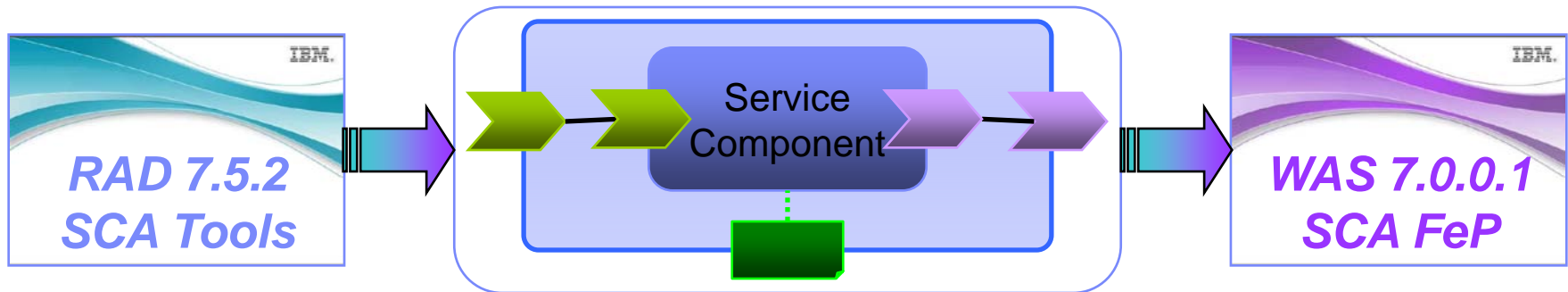
*SCA is an open programming model
for assembling SOA solutions
from flexible, reusable service components
based on diverse business IT assets.*

RAD 7.5.2 SCA Tools

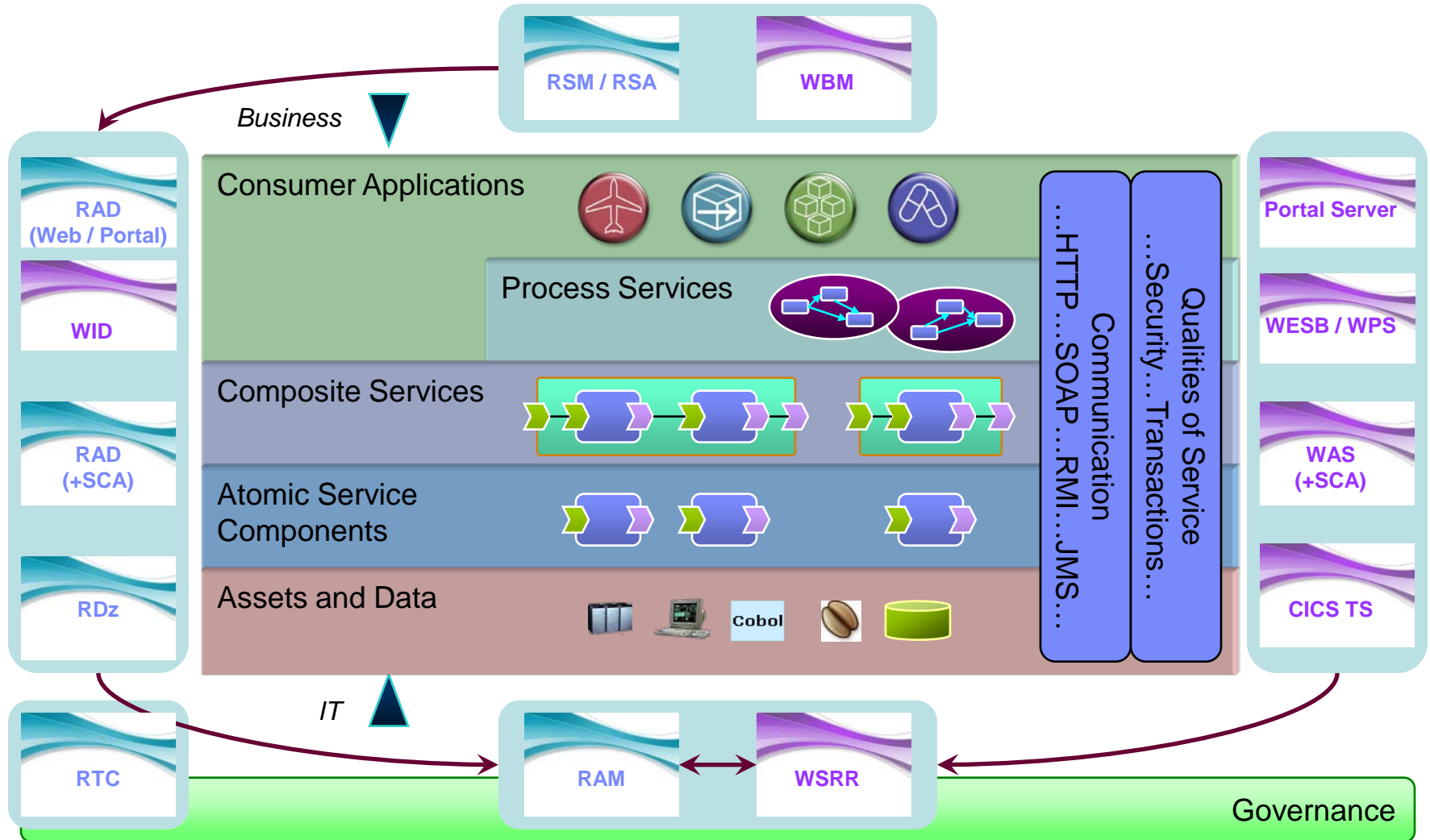
▶ GA available now

WAS 7.0 SCA Feature Pack

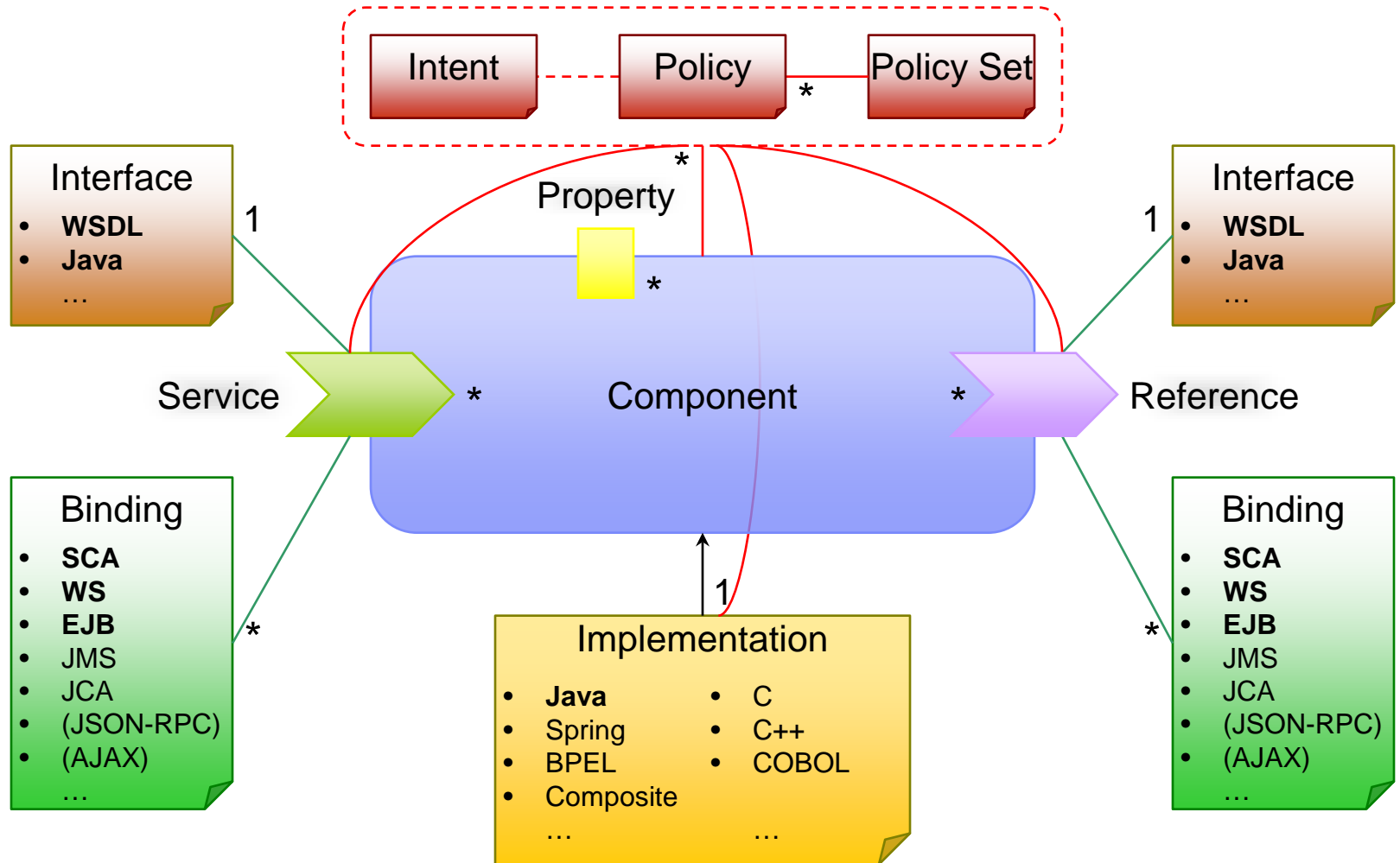
▶ GA available now



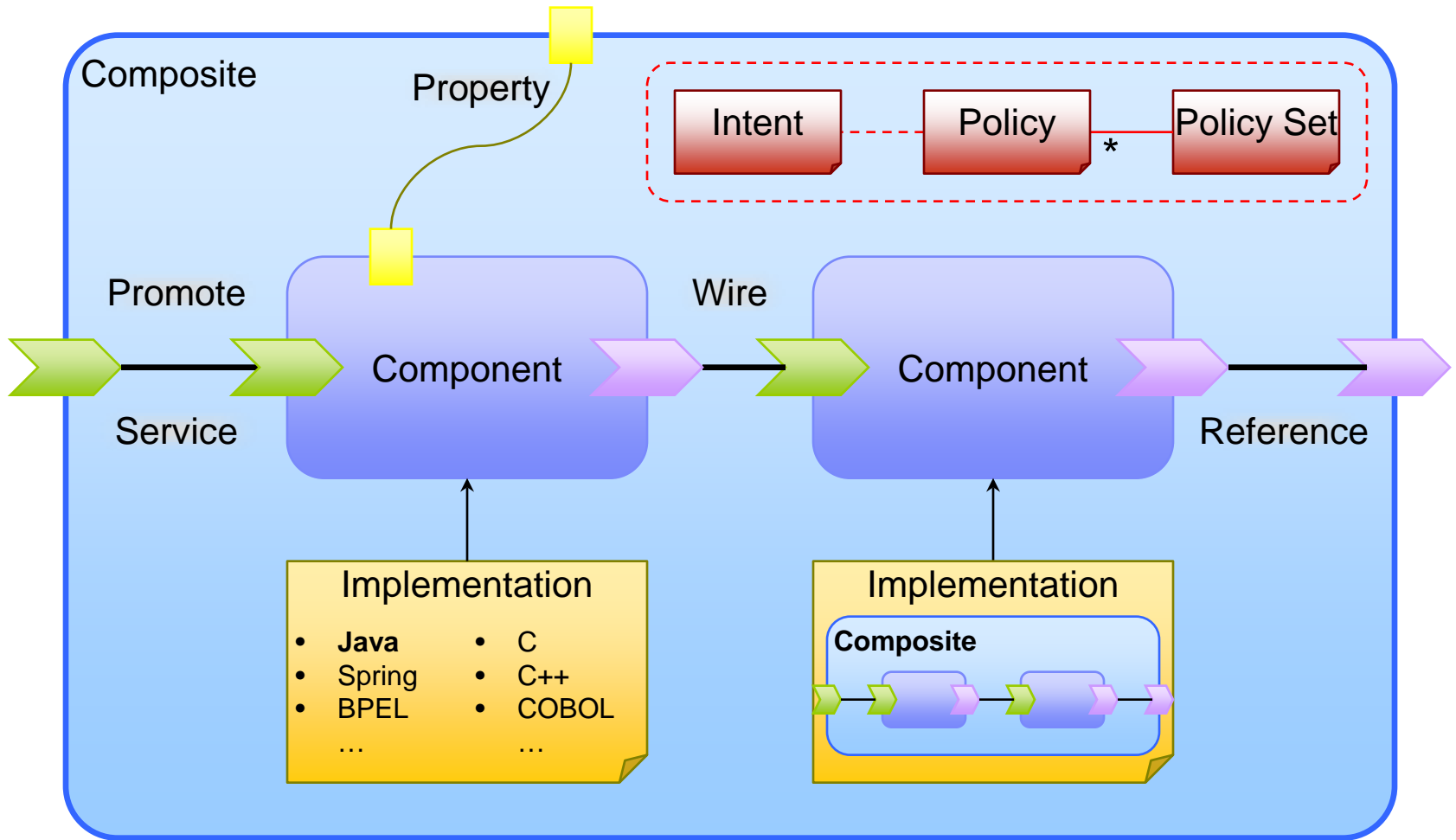
SOA Solution Layering



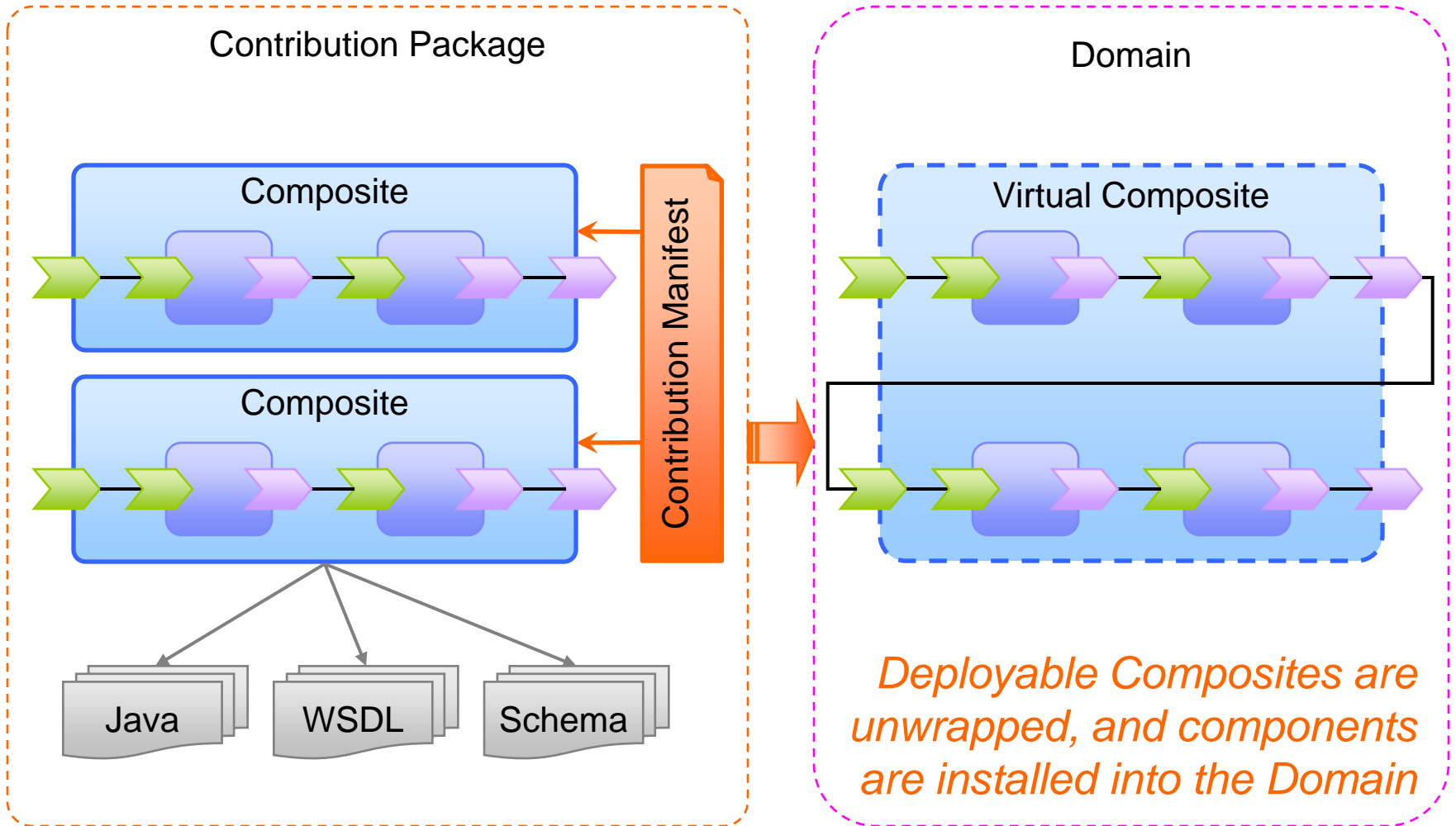
SCA Components



SCA Composites



SCA Contributions



Tools for SCA Assembly and Deployment

...and the WAS Admin Console for SCA Application Management

The image is a collage of screenshots from Rational IDEs and the WAS Admin Console, illustrating SCA development and management steps:

- Enterprise Explorer:** Shows a project structure for 'AccountServices' with files like 'Banking.java', 'BankingImpl.java', 'ChequingAccount.java', etc. A yellow oval labeled 'Explore' is over the project tree.
- Code Editor:** Shows a Java class 'BankingImpl' implementing 'Banking' with a reference to 'ChequingAccount'. A yellow oval labeled 'Implement' is over the code.
- UML Diagram:** Shows a 'Bank' component with references to 'Chequing' and 'Savings' components. A yellow oval labeled 'Assemble' is over the diagram.
- Deployable composites:** Shows a 'Bank' component in a 'http://temp' namespace. A yellow oval labeled 'Package' is over the component.
- Wizards:** Shows a wizard for creating SCA artifacts like 'SCA Component', 'SCA Composite', etc. A yellow oval labeled 'Create' is over the wizard.
- Service Component Architecture:** Shows configuration options like 'Default composite folder' and 'Validation Rules'. A yellow oval labeled 'Configure' is over the configuration area.
- Integrated Solutions Console:** Shows a 'Welcome' page with a 'Business-level application' section. A yellow oval labeled 'Manage' is over the application list.
- Add and Remove Projects:** Shows a dialog for adding and removing projects from the server. A yellow oval labeled 'Run' is over the dialog.
- WAS Admin Console:** Shows a table of applications with columns for 'Select' and 'Name'. A yellow oval labeled 'Debug' is over the table.

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WebSphere Test Environment support

- WebSphere Application Server 6.0
 - Includes support for Web 2.0 feature pack
- WebSphere Application Server 6.1
 - Includes support for EJB 3.0, Web Services and Web 2.0 feature pack
- WebSphere Application Server 7.0
 - Includes support for Web 2.0 feature pack **and** SCA feature pack
- WebSphere Portal Server 6.1
- WebSphere Portal Server 6.0 (stub support)
- Remote deployment to all WebSphere servers listed above
- Integrated debugging, menu items for admin console, ability launch WSADMIN, application client launcher
- Universal test client to dynamically test your applications



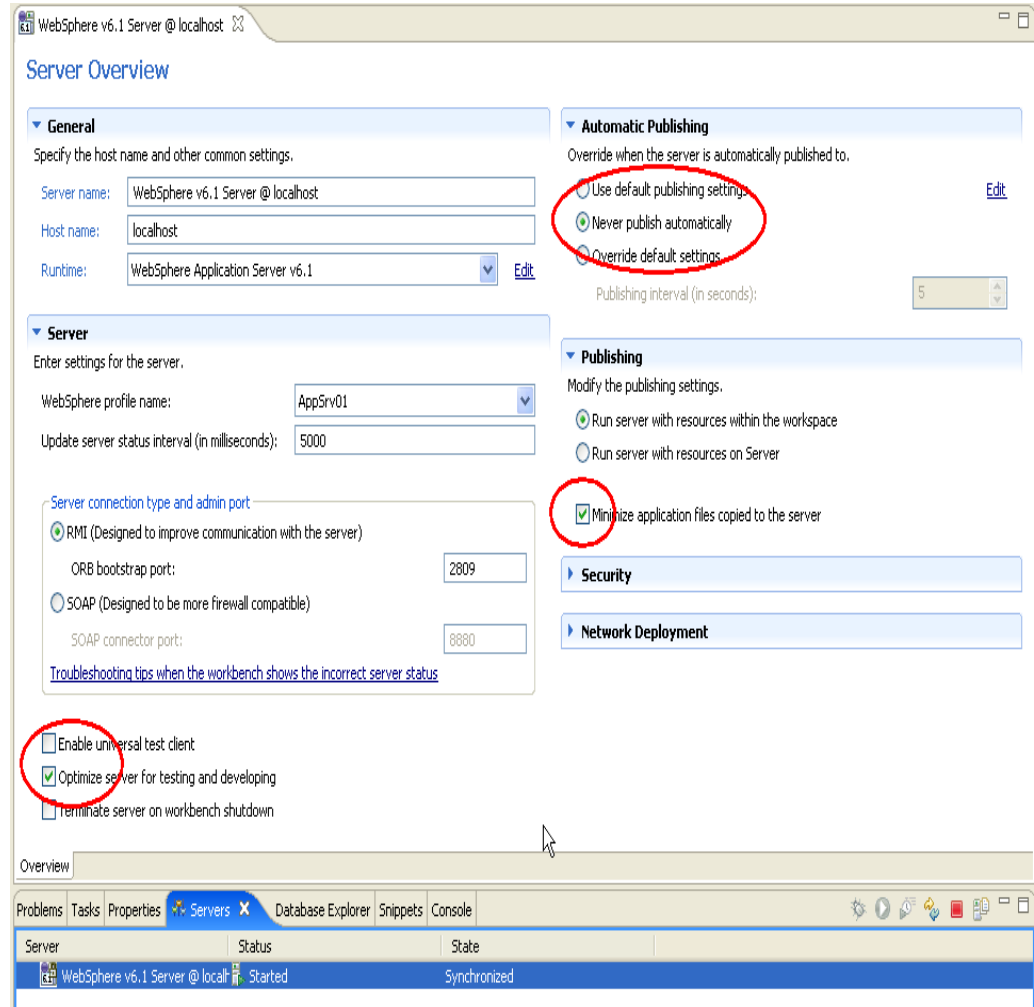
WebSphere Test Environment support

Publishing to WebSphere

- Support for exporting and publishing to WebSphere
- Support for hot deploy
 - ▶ Ability for WebSphere to recognize a change to the archive file and automatically update the server
- Support for automatic update
 - ▶ Changes in the workspace are automatically updated to the server

Server Tuning Options

- Be aware of the different server options
- Can also run the server on a different machine



Agenda

Rational Application Developer

- Using RAD in your agile development lifecycle

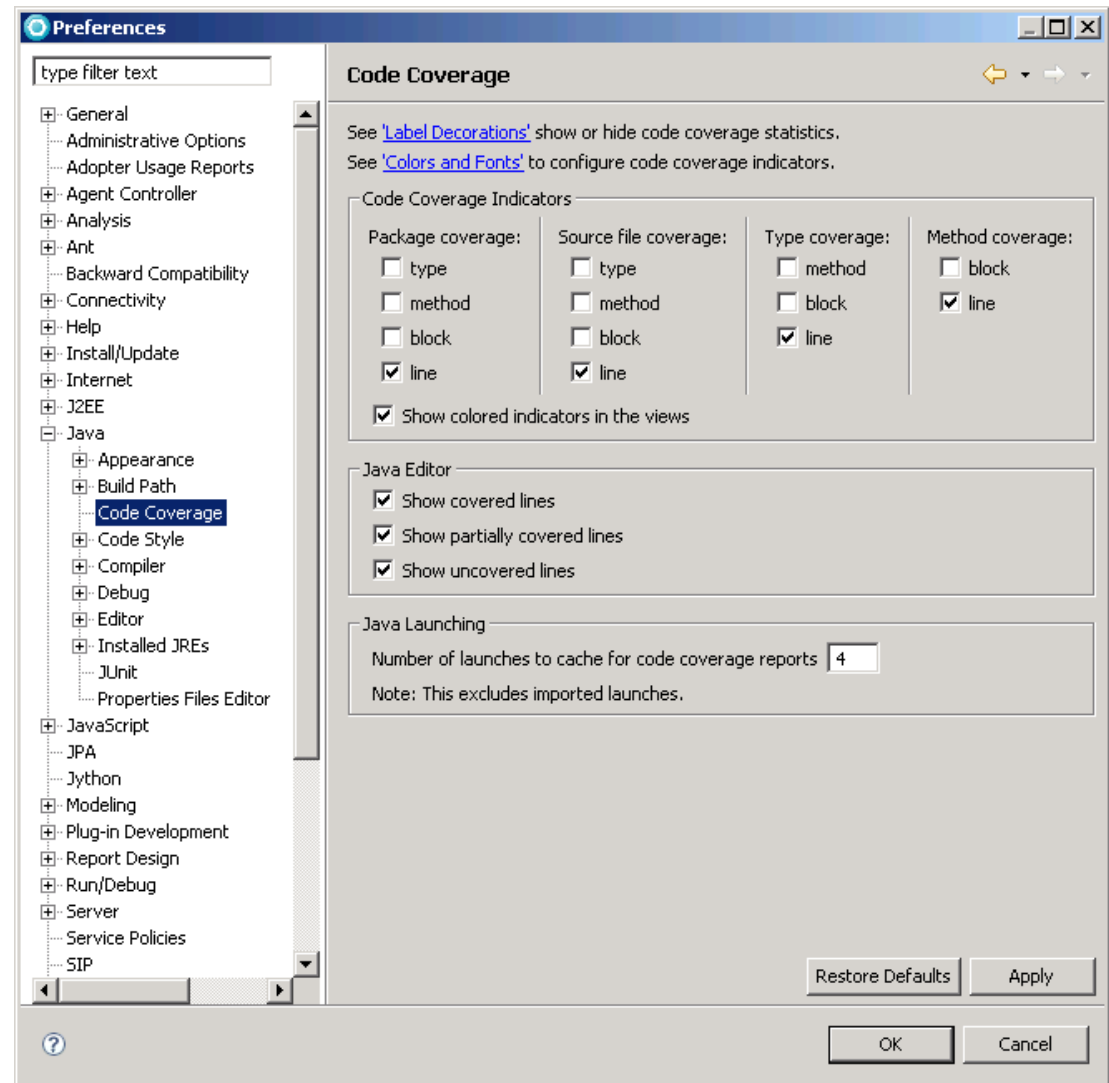
Rational Application Developer – V7.5.3

- Getting Started quickly
- Web Client Development
 - Web 2.0 & JSF
- Building Distributed Services
 - Java EE & Web Services
 - Service Component Architecture
 - WAS Deployment
- Verifying the quality of the code
 - Problem determination & Debugging
- Team Collaboration / Product Integration



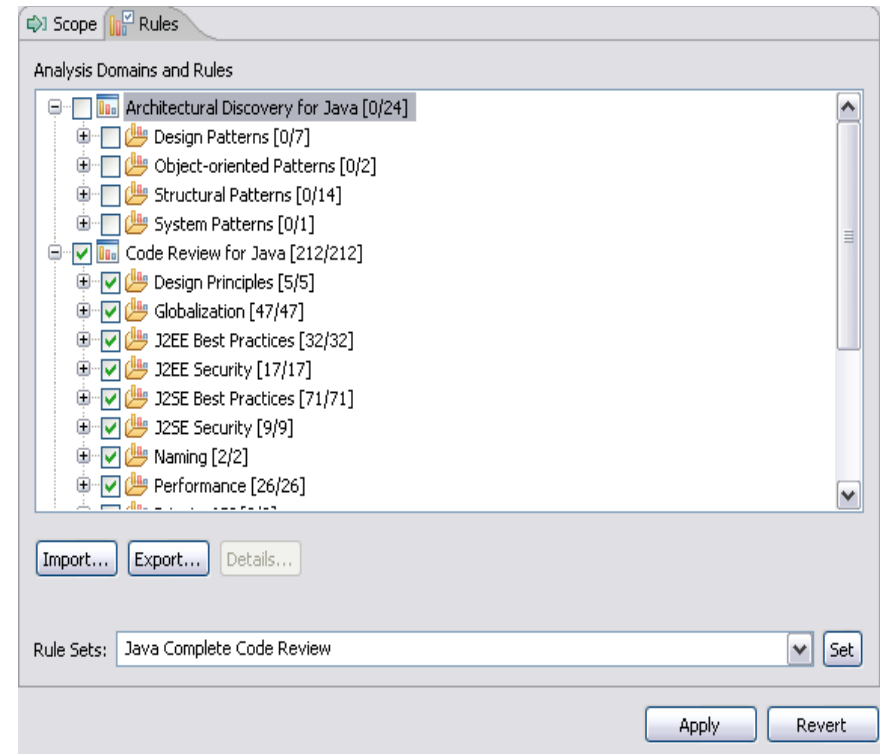
RAD helps with line level code coverage

- Code coverage of class/method/block/line for package/class/methods
 - ▶ Filtering to include/exclude packages, classes, methods
- Eclipse (Java editor integration) and HTML (portable/BIRT) reports.
- Enables code coverage from Ant
- Support for generating code coverage statistics for web applications



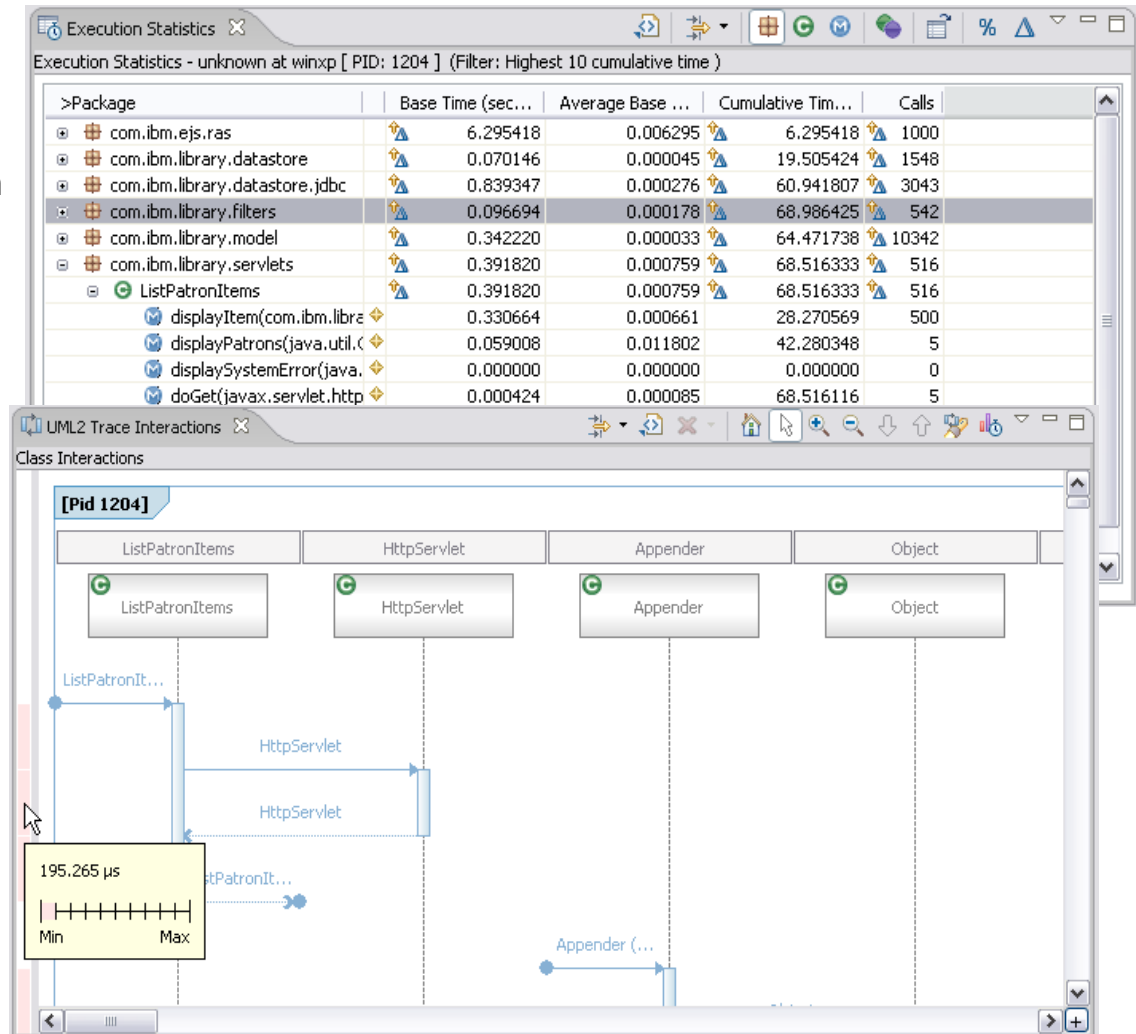
RAD Helps with Code Quality Assurance

- Analyze Project/Workspace to find problems of various types:
 - ▶ Globalization
 - ▶ J2EE & J2SE Best Practices
 - ▶ J2EE & J2SE Security
 - ▶ Naming
 - ▶ Performance
 - ▶ Private API
- Produce interactive reports with violations and metrics
- Provides explanations, examples, and quick fixes for problems
- Allow users to create, enable and disable validation rules
- Allow users to create their own rules based on rule templates
 - ▶ Complete Code Review (200+ rules)



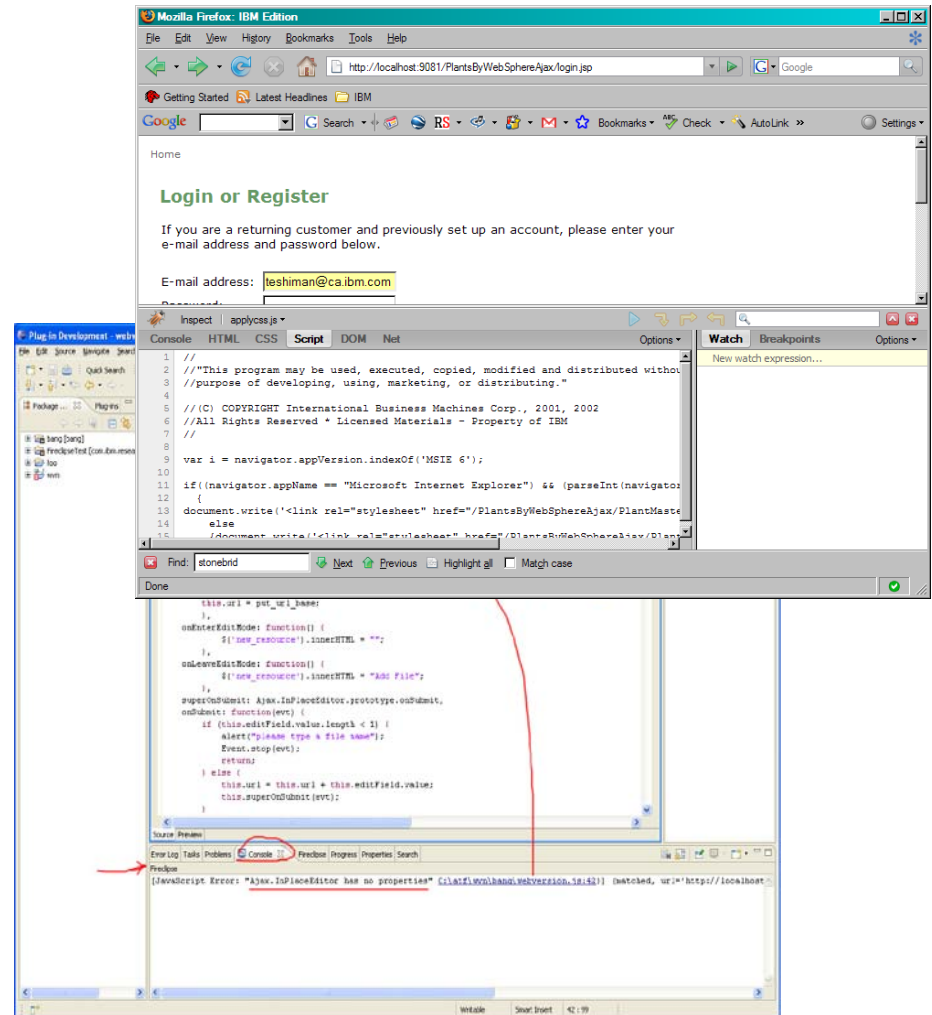
Performance and memory testing to detect problems sooner

- Start WAS in Profile Mode
 - ▶ Configure profiling set for analysis
- Begin Monitoring the application
 - ▶ Exercise scenarios for profile run
- Analyze
 - ▶ Tables and graph views to analyze profiling data
 - ▶ Tune Java code to address performance & memory issues
 - ▶ Timing
 - ▶ Memory statistics
- Probes - allows you to write your own probes



RAD helps with RIA debugging and testing

- Firebug JavaScript debugger
 - ▶ Shipping with RAD
- RAD Integration
 - ▶ Automatic installation of Firebug
 - ▶ Launch page into Firebug
 - ▶ Editor synchronization
 - ▶ Problems and Console views synchronization



Debug Tools

- **J2EE/Web application debugging**
 - Advanced debug support for Websphere Application Server, including EJBs, SCA components, JSP pages and servlets.
- **XSLT debugger**
 - The XSLT debugger enables you to detect and diagnose errors in XSLT Transformations
- **Step-by-Step Debugging**
 - Control debugging at a higher level. Provide user the ability to stop on entry to every object loaded by the JVM or server.
 - Supported object types: Web objects, XSLT
- **Logical display of complex variable types**
 - Display variables in a logical manner, allowing the user to examine variables more easily.
 - Supported complex variable types: JSP 2.0 Implicit object variables, EMF, DOM
- **Java and mixed language debugger**
 - Seamless debugging of Java calls to 'other language' programs (eg. SCA, C++) & vice versa
- **Support for DB2 V9 Stored Procedure Debug**
- **Debugger for WebSphere Jython Scripts**



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Introducing IBM Rational Team Concert

Software innovation through collaboration

- Enables “real-time, in-context” collaboration for distributed project teams – making software development more automated, transparent and predictive
- Integrates source control, work item, reporting and build capabilities which “think and work in unison”
- Provides real-time project health information and transparency of status through automated data gathering
- Supports out-of-the-box and custom defined processes which break down functional & organizational barriers
- Allows choice of client tools and extends the value of ClearQuest & ClearCase in enterprise deployments

IBM Rational Team Concert

transparent *integrated presence*
 wikis OPEN real-time reporting
 chat automated hand-offs Web 2.0
custom dashboards automated data gathering
EXTENSIBILITY Eclipse plug-ins services
 architecture **FREEDOM TO CREATE**

JAZZ TEAM SERVER

Open and extensible on

- ✓ Collaborate in context
- ✓ Right-size governance
- ✓ Day one productivity



RTC Views Integrated into RAD perspectives

Integrated RAD perspectives (Java EE, Web ...)

Manage your workload in the 'Team Central' and 'My Work' views

Work with your development artifacts in the 'Team Artifacts' view

- code
- diagrams
- metadata
- ...

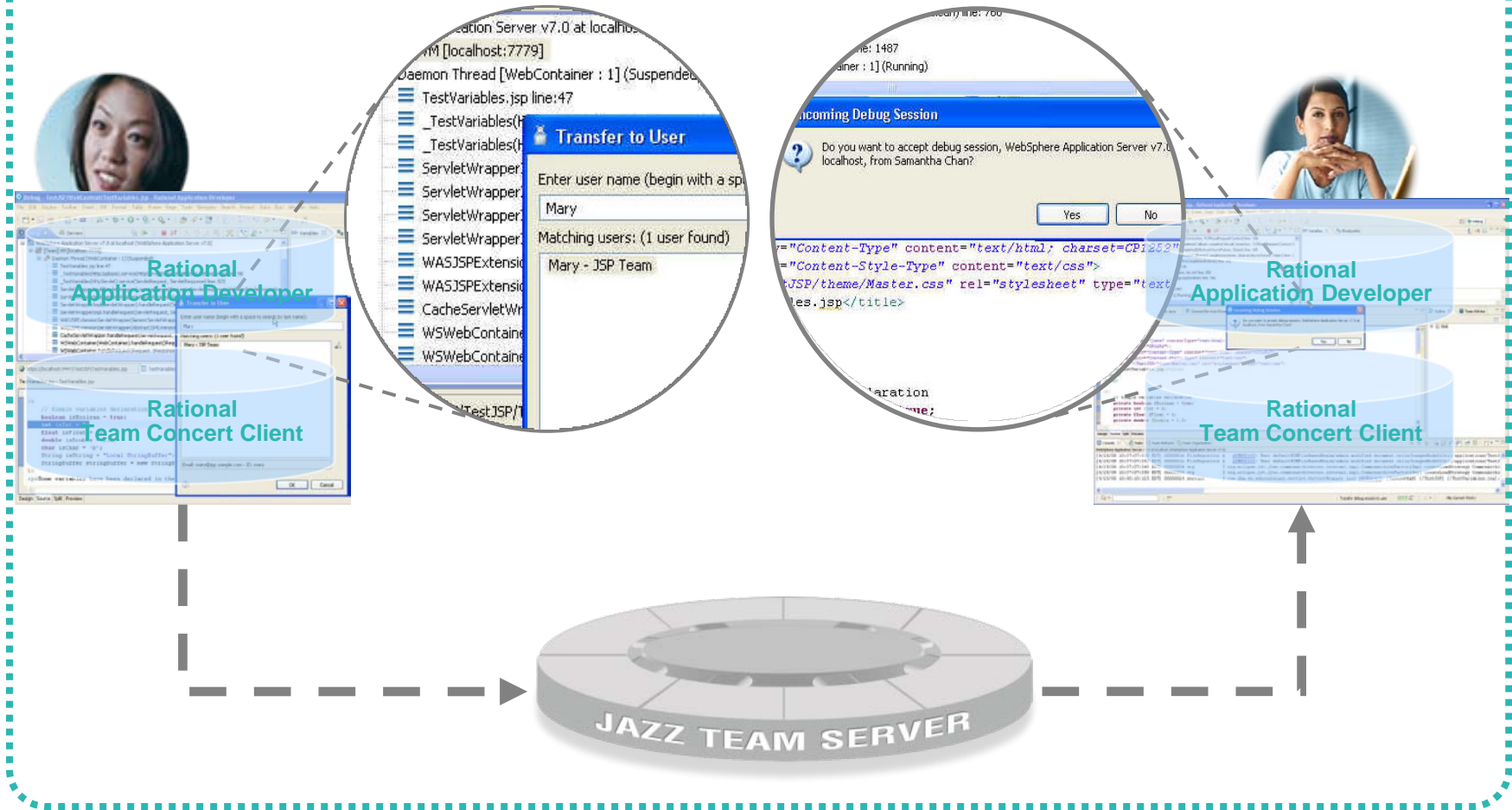
Use Jazz change management constructs and work flows

- change sets
- suspend/resume
- server workspaces, ...



Leveraging Rational Team Concert to deliver collaborative Debugging support

With RAD and RTC you can share live debug sessions between team members



IBM Rational AppScan

Assess and remediate security vulnerabilities

- Automates security testing and execution as part of the normal QA run
- Integration with IBM Rational ClearQuest for defect entry
- Provides QA teams a single console and environment for managing security and quality tests of web applications
- Delivers real-time training on secure testing and coding techniques

53 Security Issues (368 variants) for 'My Application'

- [-] Blind SQL Injection (4)
 - [+] http://demo.testfire.net/bank/account.aspx (1)
 - [+] http://demo.testfire.net/bank/login.aspx (2)
 - [+] http://demo.testfire.net/bank/transaction.aspx (1)
- [+] Cross-Site Scripting (5)
- [+] Format String Remote Command Execution (1)
- [+] HTTP Response Splitting (1)
- [+] SQL Injection (6)
- [+] XPath Injection (1)
- [+] Cookie Poisoning SQL Injection

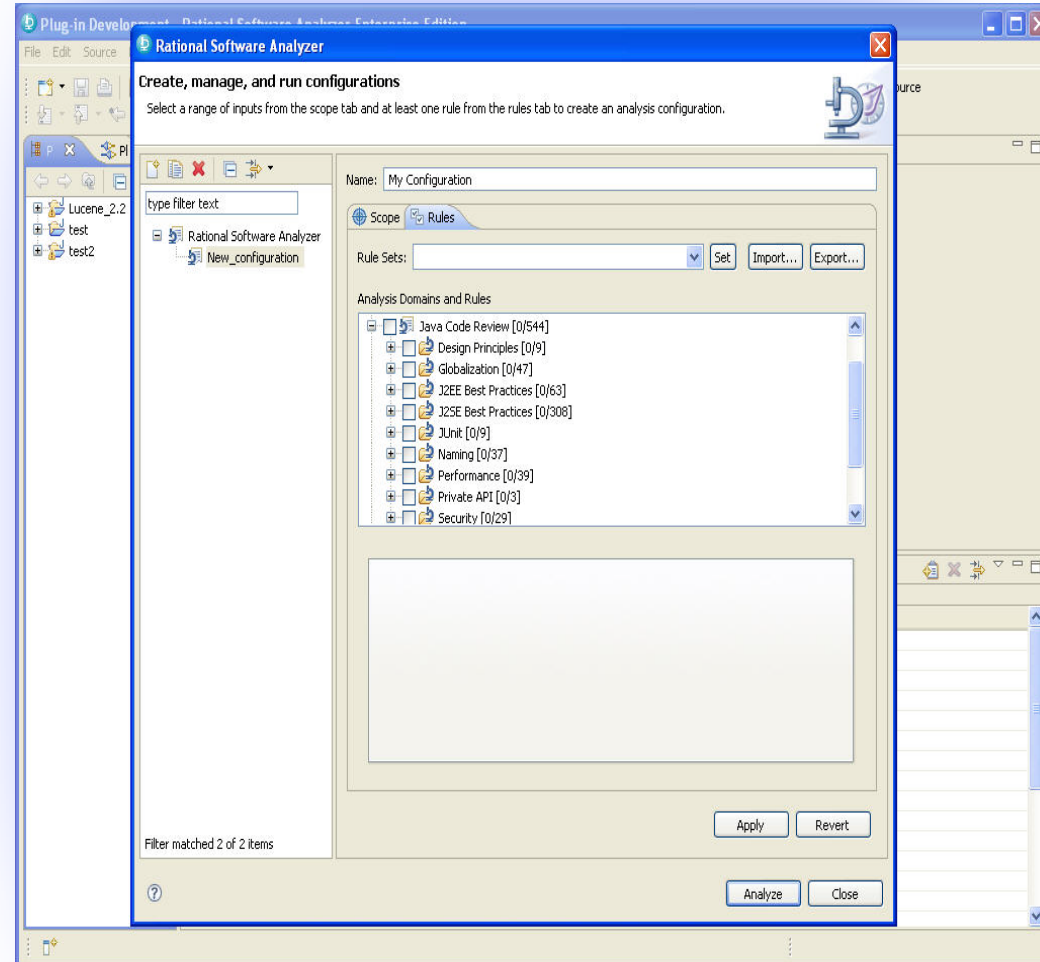
Context menu options:

- Severity
- Re-test
- Manual Test
- Delete
- Set as Non-vulnerable
- Report False Positive
- Log Defect to ClearQuest

IBM Rational Software Analyzer

Identifies, assess, and remediates source code issues

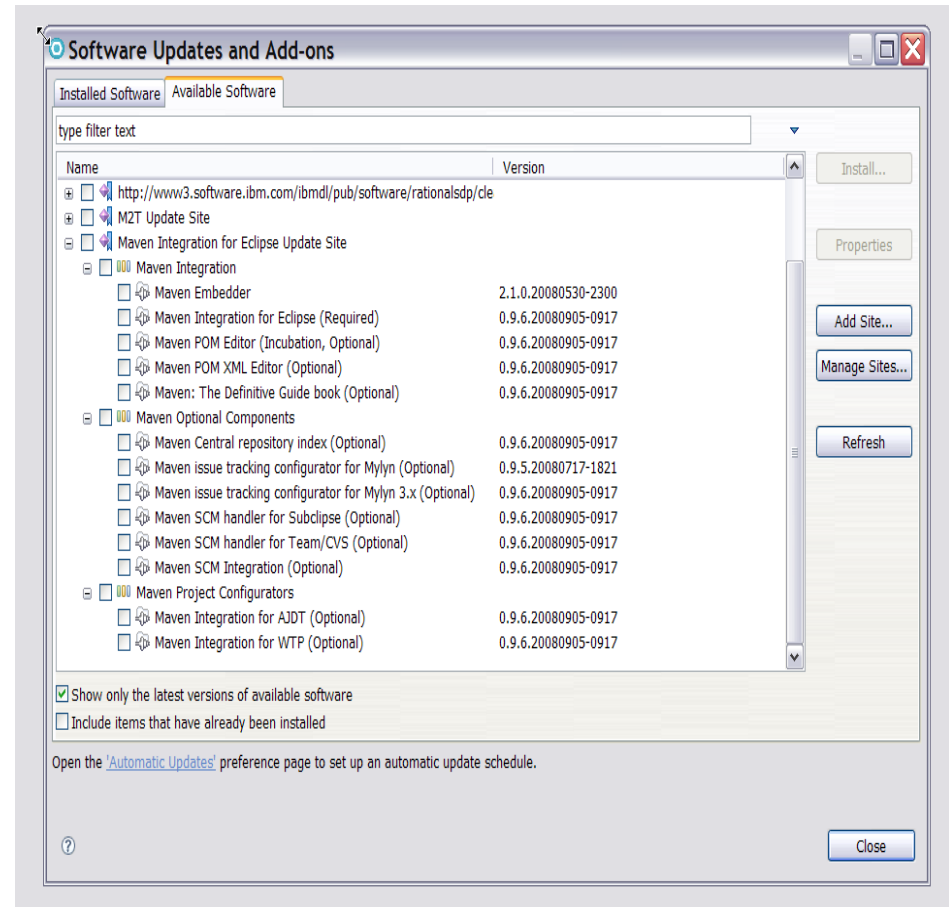
- Centralize and automate code defect identification as part of the development process
- Integrates into automated build systems through CLI tool
- Simplify user experience: Shell sharing with Rational Software Application Developer & Rational AppScan DE
- Tool unification through extensible framework: **One** scan, **One** view, **One** analysis, **One** decision
- Centralized reporting for high-level view of software quality and compliance related issues



Third party plug in integration into RAD

Third party plug-ins can be installed into RAD via the Eclipse Update manager if they meet the following criteria:

- Third party plug-ins must have version tolerances that are compatible with the version of Eclipse that RAD is based on:
- ie. RAD 7.5 or higher is based on Eclipse 3.4.1 – third party plug-in must be compatible with Eclipse 3.4.1





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