Create An Exceptional Multi-Channel Web Experience Using IBM Rational Application Developer for WebSphere Portal

Lakshmi Priya
JSF Lead,RAD Portal Toolkit
lakpriya@in.ibm.com
MAC-1336

IBM Software

Innovate2011

The Premier Event for Software and Systems Innovation

Software. Everyware.

Agenda

Exceptional Web Experience Overview

Rational Application Developer Overview

Rational Application Developer Portal Tool Kit Overview

Demonstration of Rational Application Developer Portal Tool Kit

Question and Answer Session

2

Agenda

Exceptional Web Experience Overview

Rational Application Developer Overview

Rational Application Developer Portal Tool Kit Overview

Demonstration of Rational Application Developer Portal Tool Kit

Question and Answer Session

3

An Exceptional Web Experience...

Generates strong customer loyalty

Has a wow factor

Is adaptable to changing markets

First Impression of your business lends credibility

All built on a technology foundation you can trust

4

Our customers are telling us they need to...

Build brand, revenue, and customer satisfaction using online properties

Drive higher value customer interactions via lower cost channels

Increase business responsiveness by consolidating sites

IT business analyst

IT Director of web architecture

Director of online marketing

VP of online sales

VP of customer support

Creative agency

Public Information Officer (Government)

VP of Direct-to-consumer Marketing (Insurance)

Chief Medical Informatics Officer (Healthcare)

IBM Project Northstar
Leading the way in exceptional customer experiences

Vision about the "art of the possible" for engaging Customers on the web.

Multi-year IBM strategy to deliver the capabilities for our customer to excel at customer-facing experiences.
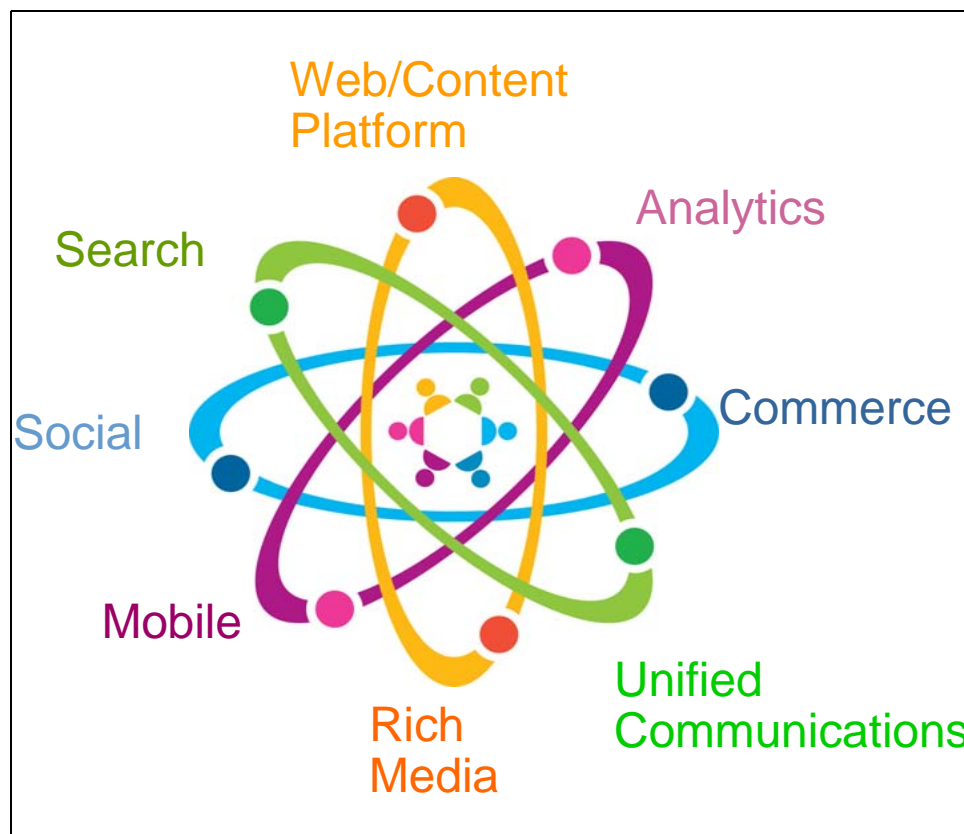
Context is key. The best Web experiences make all users feel like the experience was custom fit for them – based upon their preferences, device, location, social networks, and behaviors.

Social is everywhere and everywhere is social. Organizations hoping to meaningfully interact with, and listen to, customers must transform their online experience beyond one-way information sharing or "brochure sites". A more socially-infused experience is now expected, one that supports true dialogue with, and between, customers.

Web Experiences can be both visually pleasing and flexible. You don't need to sacrifice scalability, flexibility, and manageability to create a graphical, persuasive, and responsive web experience.

Integration must be easy. To create a truly interactive, context-aware Web experience, you must be able to easily leverage and extend existing data sources like CRM systems, social media sites, and back-end applications, as well as other product or cloud-based service you acquire in the future.

*Proper measurement can lead to co*mpetitive advantage. At a tactical level, analytics are key to determining if you are meeting your business objectives and properly engaging customers. At a more strategic level, analytics are also fundamental to gathering enough information about your customers to truly understand them, making it possible to deliver user-optimized Web experiences that deliver more to your bottom line.

Web/Content Platform — Analytics — Search — Social — Commerce — Mobile — Rich Media — Unified Communications

People are at the center of an exceptional experience; Capabilities are employed as necessary to help achieve experiences that meet/exceed the expectations of the intended user(s)

6

WebSphere Portal: Key value propositions and capabilities

User Expectation & Appeal

Integration of Web 2.0 features for a richer, more responsive, and modern user interface

Full **personalization of user experience**

Recommendation engine for **cross-selling and customer monitoring**

Multi language, disability access

Universal access (PCs, Mobile phones, TV) for new entry points to service and access

Speed to Market & Reduced Costs

Component based model for **faster development, re-use, and cost effective deployment**

Parallel development of service and application components

Shared 'plumbing' code so more time **spend creating business function not reinventing**

Powerful customization capabilities to change look & feel of website **without coding**

Flexibility & Agility

Flexible **integration of 3rd party content and applications**

Give **LOB and business users control over their website content and processes** while maintaining IT control over standards and best practices

Separation of content from presentation

Increased **content re-use and reconfiguration** vs hard coding

Easy integration of web content management and On-line Forms capabilities

Support for **leading portal standards** to maximize **reuse and investment protection**

Performance & Scalability

A set of **best practices on building web platforms**, developed and **refined over 6 years** by industry leading portal platform vendor

Proven to **scale for large numbers** of customers and users

Extendable to other enterprise portal environments

Agenda

Exceptional Web Experience Overview

Rational Application Developer Overview

Rational Application Developer Portal Tool Kit Overview

Demonstration of Rational Application Developer Portal Tool Kit

Question and Answer Session

8

Business challenges to the effective delivery of software
A history of cost overruns, schedule slips and quality issues

We need to deliver new and custom applications faster

Cost of development is rising but budgets are declining

Too many re-writes and failed launches

Overwhelming application complexity

Time wasted integrating piecemeal, multi-vendor solutions

Too many problems late in the cycle getting to production

Hard to stay current on new technologies.

9
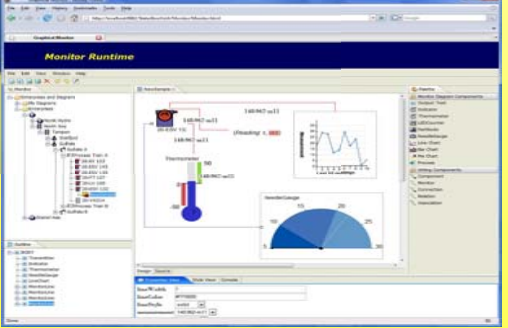
Rational Application Developer for WebSphere Software
Streamlined development for WebSphere Application Server and WebSphere Portal

Optimized for WebSphere → Complete Support

Leverage your investment with the award winning tools built for WebSphere runtime

Increase Productivity → Speed & Agility

Eliminate mundane tasks to allow developers to be innovative
Shorten the learning curve

Improve Quality → High Quality

Find and fix problems early in the development cycle

Built on Eclipse → Extensibility

Provide unique capability on top of a flexible and extensible platform

Mission Critical Ready → Reliability

Award winning! – 2009 Evans Data Users Choice: Software Development
24 X 7 / 5 + 3 years of support

10

Customers use RAD to build Enterprise Java IT applications

1st Tier
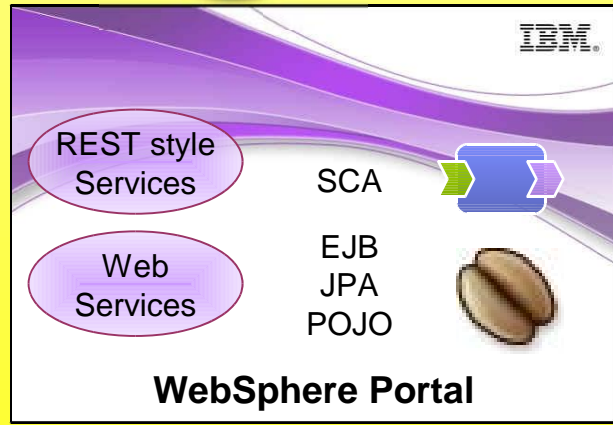
Web Clients

JavaScript

JSF

Portal Client

Rich Java GUI Client

2nd Tier

REST style Services

SCA

Web Services

EJB
JPA
POJO

WebSphere Portal

InfoSphere MashupHub

Tomcat

JBoss

3rd Tier

IBM CICS Transaction Server

IBM InfoSphere DB2

Oracle

IBM InfoSphere IMS

SAP PeopleSoft

...

DB2

IMS

11

RAD accelerates SOA, Java EE, Web 2.0 and Portal development

Evans Data IDE User Choice Award

Evans Data Corporation EDC

Web 2.0

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

Team Collaboration

Rational Team Concert: Collaborate, Problem Determination

SOA

Assemble Web services and SCA components into heterogeneous business applications

Quick Fix

Validate

Refactor

Annotate

Refine

RAD

Visualize

Analyze

Deploy

Test

Debug

Portal

Apache ARIES
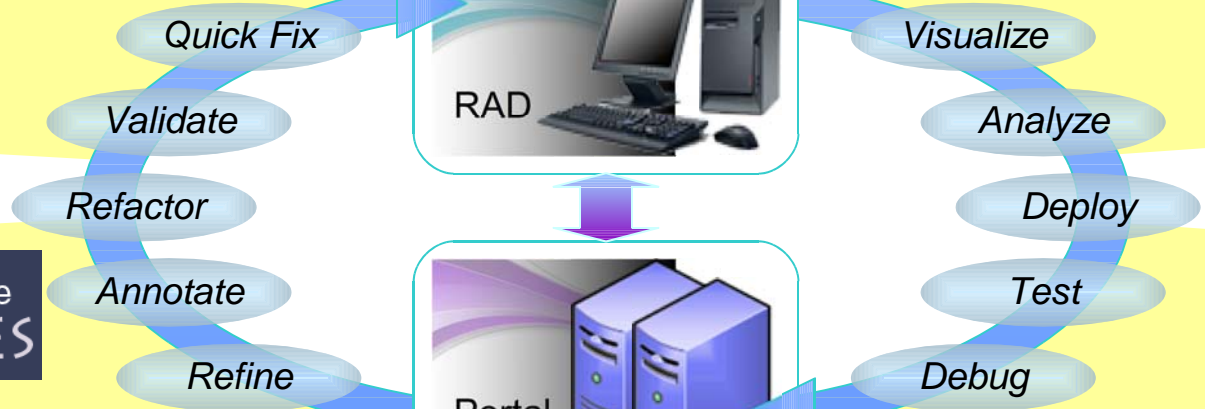
Java EE 6 and OSGi

Develop, test and componentize Java EE 6 applications with annotation based programming

Smart Phone Applications

Build and test smart phone applications

www.blackberry.com/developers/ibmrad

Portal

Visually design portal sites and portlets for WebSphere Portal Server

12

Agenda

Exceptional Web Experience Overview

Rational Application Developer Overview

Rational Application Developer Portal Tool Kit Overview

Demonstration of Rational Application Developer Portal Tool Kit

Question and Answer Session

13

Increase Productivity
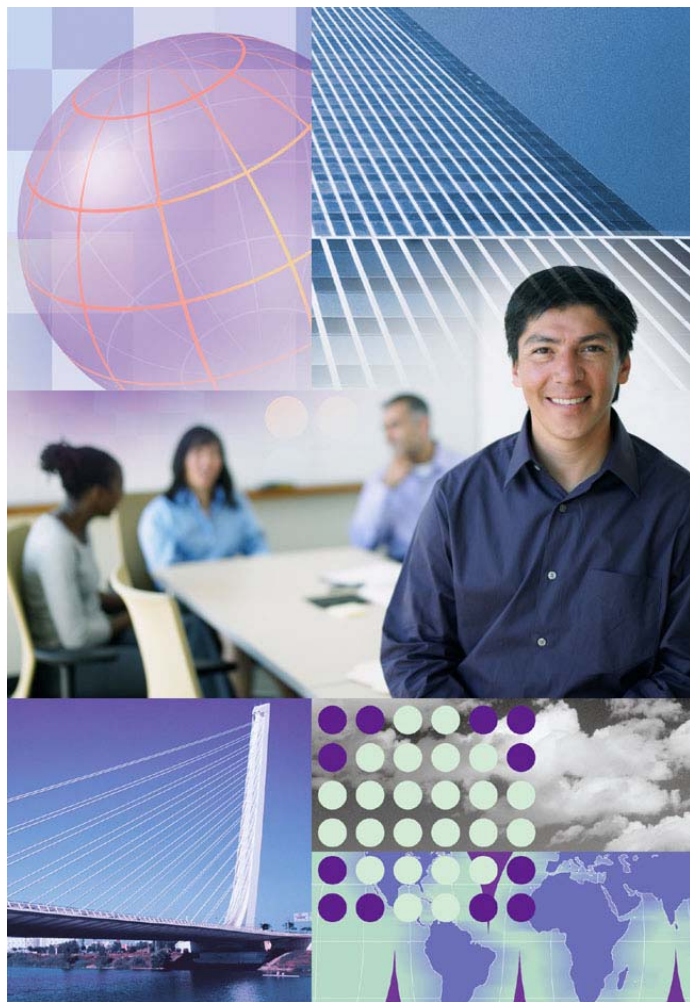
Eliminating mundane tasks through wizards, visual development, and editors that provide assistance as you develop
- Suggest ways to complete the code you're writing, look up APIs for what you've typed, validate your code as you type, suggest solutions to errors in the code

Improve application understanding through Code Visualization.
- Help resolve the: "I just inherited this code, and I have no idea what it does"

Support developers adopting agile and iterative development styles
- Design, code and test incremental parts of the application.
- Help manage changes you need to make.

Make new technologies easier to learn, and faster to implement, with less bugs.

RAD Portal Toolkit V8.0.x: At a glance

Support for WebSphere Portal V 7

> CSA2 or pagebuilder theme support

Developer Experience Enhancements

PTK Usability Improvements

> Portal run-time segregation for WAS/WID

JSF Best Practices & Performance study

JSF 1.2 support

JPA enabled portlets

JAX-WS for Portal V7

Eclipse 3.6
> Upgrade in place
> Clean Install

Additional Enhancements to PTK Web 2.0 Features

Cloud support

Multi-channel device development

PTK - Portal Dojo Library (dijit support)
> Easily build compelling, highly interactive portlets
> Create client-side charts and graphics

PTK - iWidget Support (v1.1, v2.0)
> Creation wizard
> Consume iWidgets and static pages in portal
> Publish iWidgets and Pages to Portal
> Test using Mashup enabler v2.0

PTK – Portal Site Designer Tool
> Manage layout and content of your Portal site from within RAD
> Faster than ever preview of Portlets and iWidgets

15

Optional and Flexible Installation of Portal Stubs

```
Features
  ☑ 📁 Portlet and Portal development tools
    ☑ 📁 WebSphere® Portal Server, version 6.1
        ☑ WebSphere® Portal Server, version 6.1 development tools
        ☐ Tools for developing applications without a local server installation
    ☑ 📁 WebSphere® Portal Server, version 6.1 on WebSphere Application Server, version 7.0
        ☑ WebSphere® Portal Server, version 6.1 on WebSphere Application Server, version 7.0 development tools
        ☐ Tools for developing applications without a local server installation
    ☑ 📁 WebSphere® Portal Server, version 7.0
        ☑ WebSphere® Portal Server, version 7.0 development tools
        ☐ Tools for developing applications without a local server installation
  ☐ IBM Workload Deployer development tools
  ☐ XML development tools
```

Install only the Portal version that's required;

No need to install Portal Stub if Portal server is installed on the local machine

Advantage: reduced hard disk footprint **(by ~20%)**

Ability to shell share with other Eclipse based products which helps developers manage the life cycle of their applications on their desktop

Download & footprint improvements for the WebSphere test environment

Enterprise install capabilities for simple maintenance and provisioning of your own standardized install configurations. Create response files for what install configuration you need.

Building Skills Quickly – Wide Range of Help

Various install options to manage your desktop configuration better

Can be installed on a Enterprise wide common infrastructure

Advantage:

  Available on internet – regular updates

  And even more reduced hard disk footprint

Tutorials

  Watch & Learn

  Do & Learn

Samples

  Application Samples

  Technology Samples

17

Portal Toolkit: an end-to-end Integrated Development Environment

Explore

Implement

Manage

Package

Create

Configure

Run

Debug

18

WebSphere Portal Server 7 Support

WP 7 Server Support

    Updated Wizard Steps

    Ability to test connection with credentials

    Updates to Server configuration editor to help manage deployment option local to Rational Application Developer

        Portlet Settings

        Publishing options

WP V7 Stubs Support

    contain all jars necessary for compilation of a JSR286, JAX-WS, and other portal features portal/portlet project
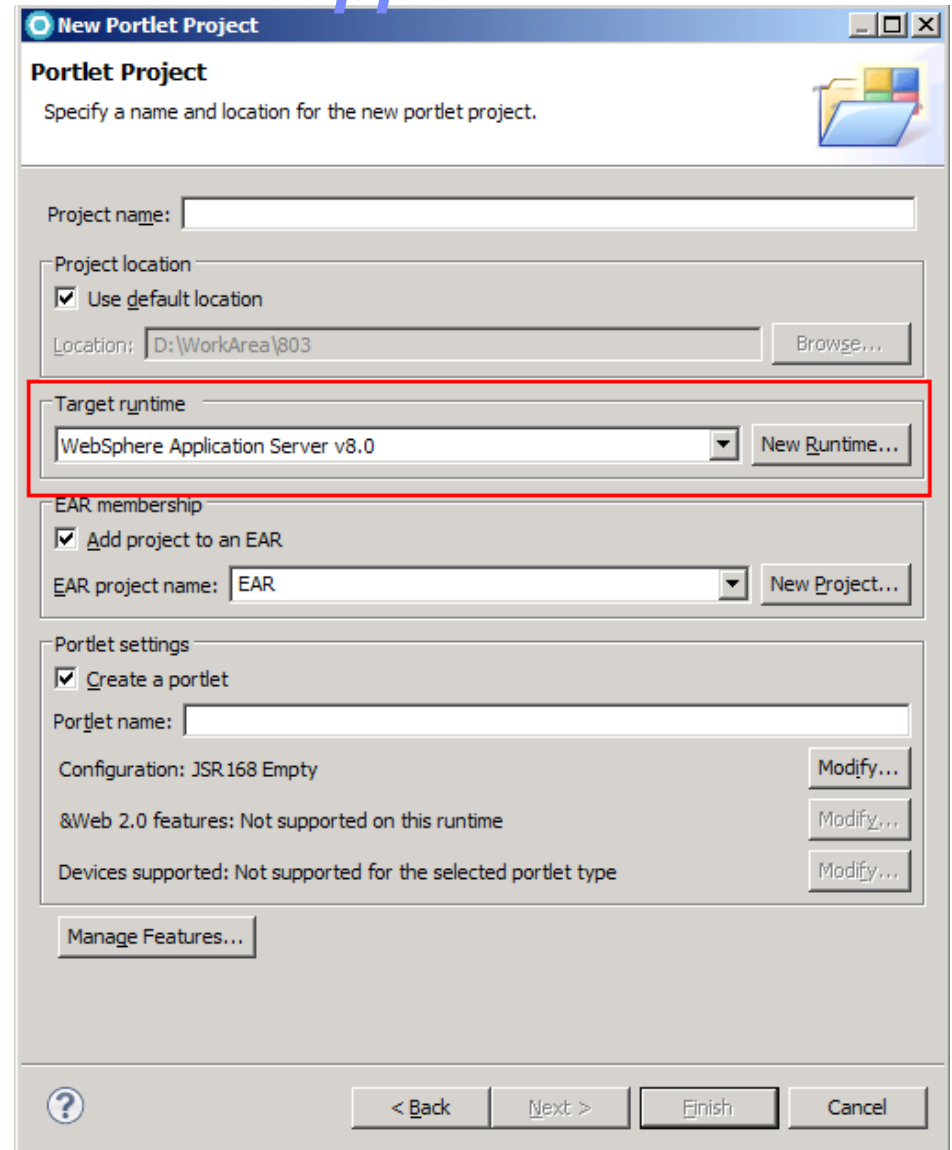
Workspace migration from Rational Application Developer v6.1, v7 and v7.5.x to v8

Incremental publish saves deployment time by an average of 80%

Integrated debugging, menu items for admin console, ability to launch WSADMIN, application client launcher
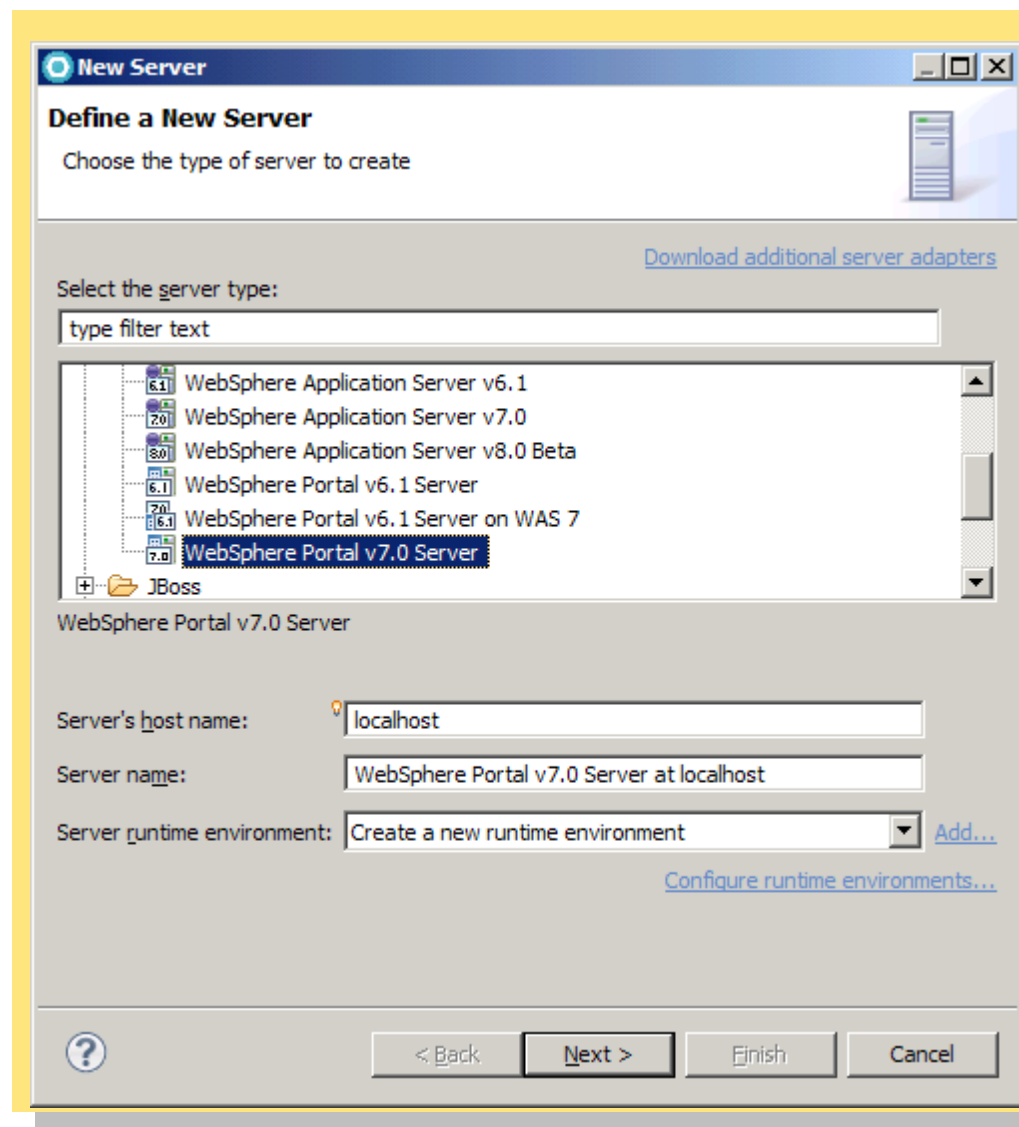
WebSphere Portal 7.0 and Client Side Aggregation 2.0 Support

RAD 8.0.1 supports WebSphere Portal 7.0*

as a new target runtime

Full feature support including CSA 2.0

Portlet and iWidgets can now be placed on same portal page
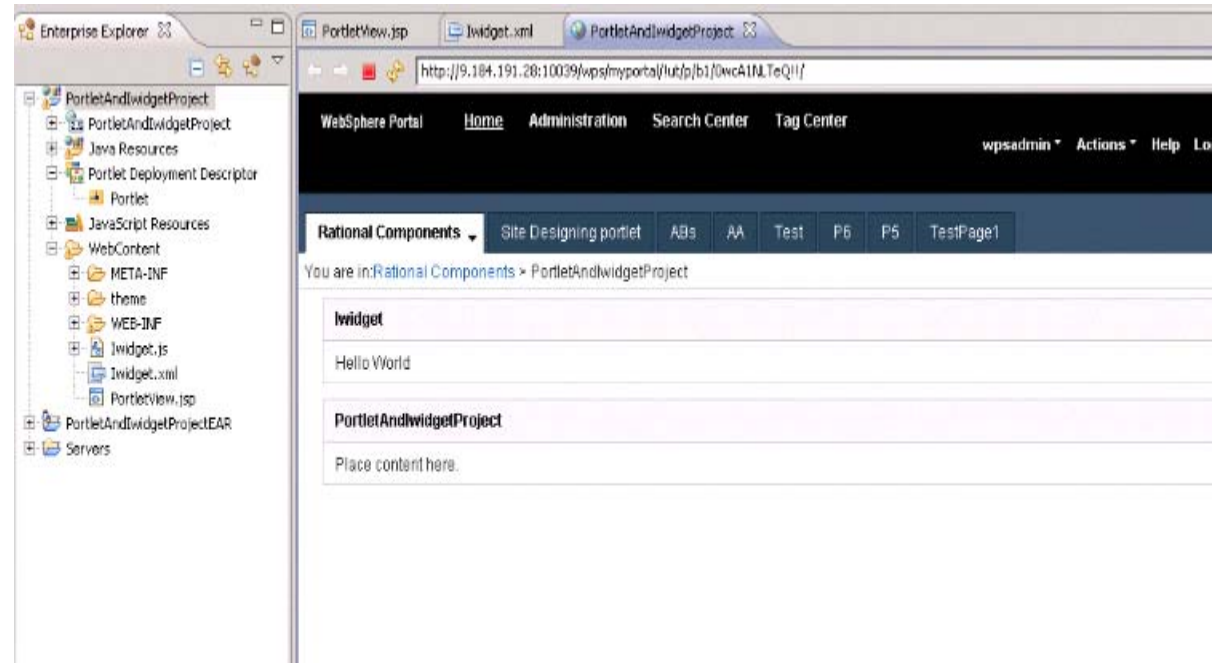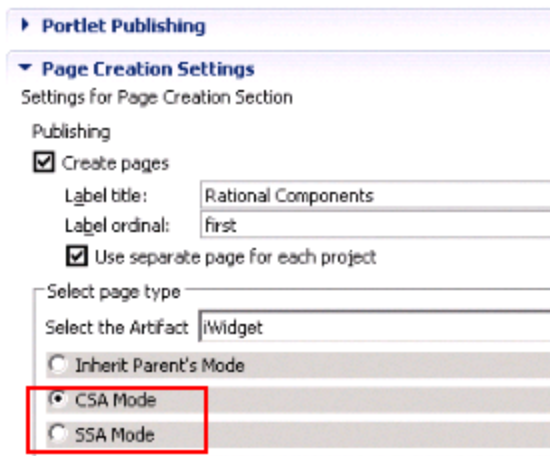
RAD 8.0 supports WebSphere Portal Beta which was publically available at RAD 8.0 eGA

20

WebSphere Test Environment support

Publishing to WebSphere Portal

Support for exporting and publishing to WebSphere Portal

Support for hot deploy

Ability for WebSphere Portal to recognize a change to the archive file and automatically update the server

Server Tuning Options

Be aware of the different server options

Can also run the server on a different machine

21

WebSphere Application Server vNext support

WAS vNext Server Support

    Updated Wizard Steps

    Ability to test connection with credentials

    Updates to Server configuration editor to help
        manage deployment option local to Rational
    Application Developer

        Portlet Settings

        Publishing options

Workspace migration from Rational Application
    Developer v6.1, v7 and v7.5.x to v8

Incremental publish saves deployment time by an
    average of 80%

Integrated debugging, menu items for admin console,
    ability launch WSADMIN, application client launcher

New Portlet Project

Portlet Project
Specify a name and location for the new portlet project.

Project name: _____

Project location
☑ Use default location
Location: D:\WorkArea\803   Browse...

Target runtime
WebSphere Application Server v8.0   ▼   New Runtime...

EAR membership
☑ Add project to an EAR
EAR project name: EAR   ▼   New Project...

Portlet settings
☑ Create a portlet
Portlet name: _____

Configuration: JSR168 Empty   Modify...

&Web 2.0 features: Not supported on this runtime   Modify...

Devices supported: Not supported for the selected portlet type   Modify...

Manage Features...

?   < Back   Next >   Finish   Cancel

22

Enhanced Performance Optimization for Development

```
ConfigEngine.bat enable-
  develop-mode-startup-
  performance
```

For development purpose

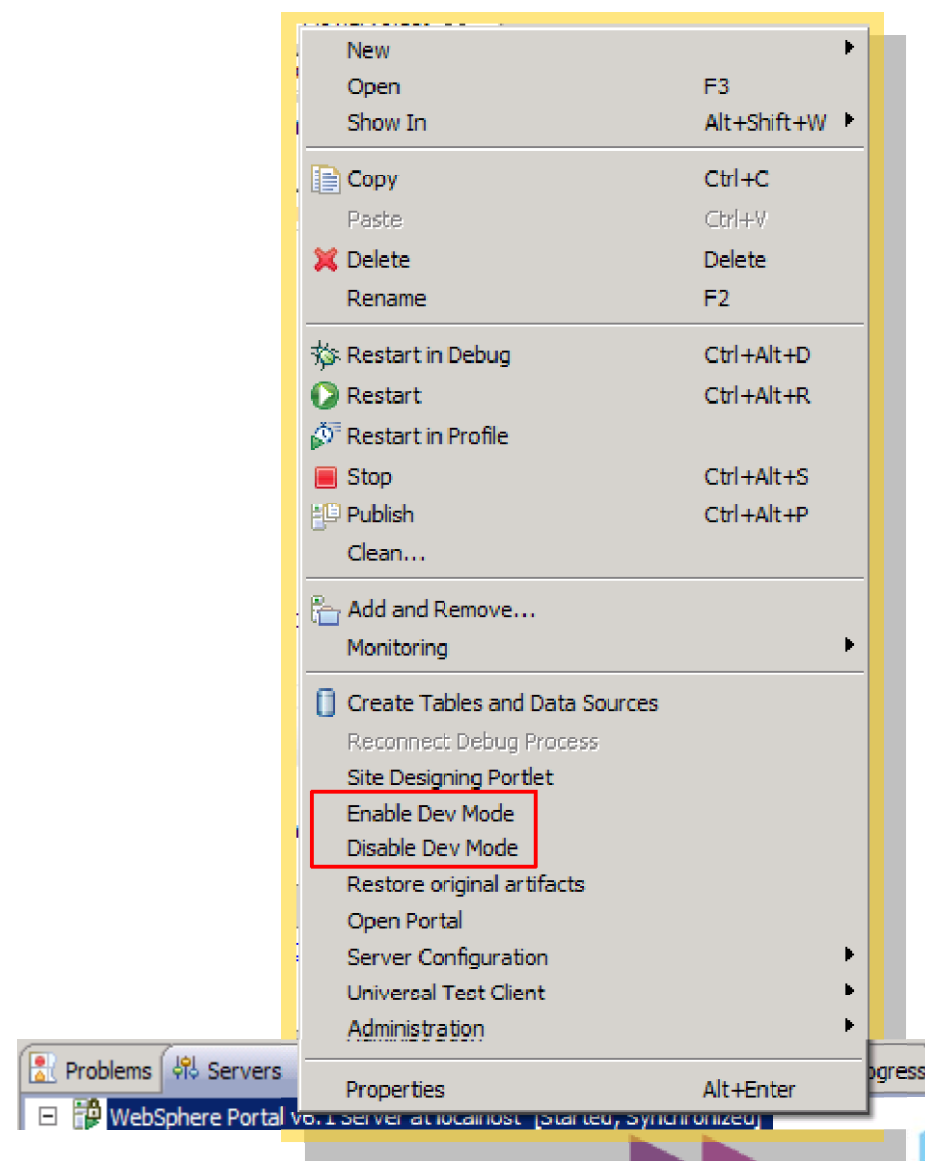Reduces portal start up time

JVM is optimized for development

One click

    Activation

    Deactivation

No need to remember various portal config params

Less chance of human error

New	▶
Open	F3
Show In	Alt+Shift+W ▶
Copy	Ctrl+C
Paste	Ctrl+V
Delete	Delete
Rename	F2
Restart in Debug	Ctrl+Alt+D
Restart	Ctrl+Alt+R
Restart in Profile	
Stop	Ctrl+Alt+S
Publish	Ctrl+Alt+P
Clean...	
Add and Remove...	
Monitoring	▶
Create Tables and Data Sources	
Reconnect Debug Process	
Site Designing Portlet	
Enable Dev Mode	
Disable Dev Mode	
Restore original artifacts	
Open Portal	
Server Configuration	▶
Universal Test Client	▶
Administration	▶
Properties	Alt+Enter

Problems | Servers | ogress

WebSphere Portal v6.1 Server at localhost [Started, Synchronized]

23

Cloud Computing Support

Reduced Cost; self service provisioning

On Demand Provisioning; accelerated development

Reduced Storage; on local infrastructure

Highly Automated; centrally managed

Ready to use; no need for installation

In built support of IBM Smart Cloud

Directly publish to a WebSphere Portal instance hosted on cloud

IBM Smart Business

Development & Test

IBM offers choices to deploy workloads that matter to you for greater efficiency, productivity and control.

24
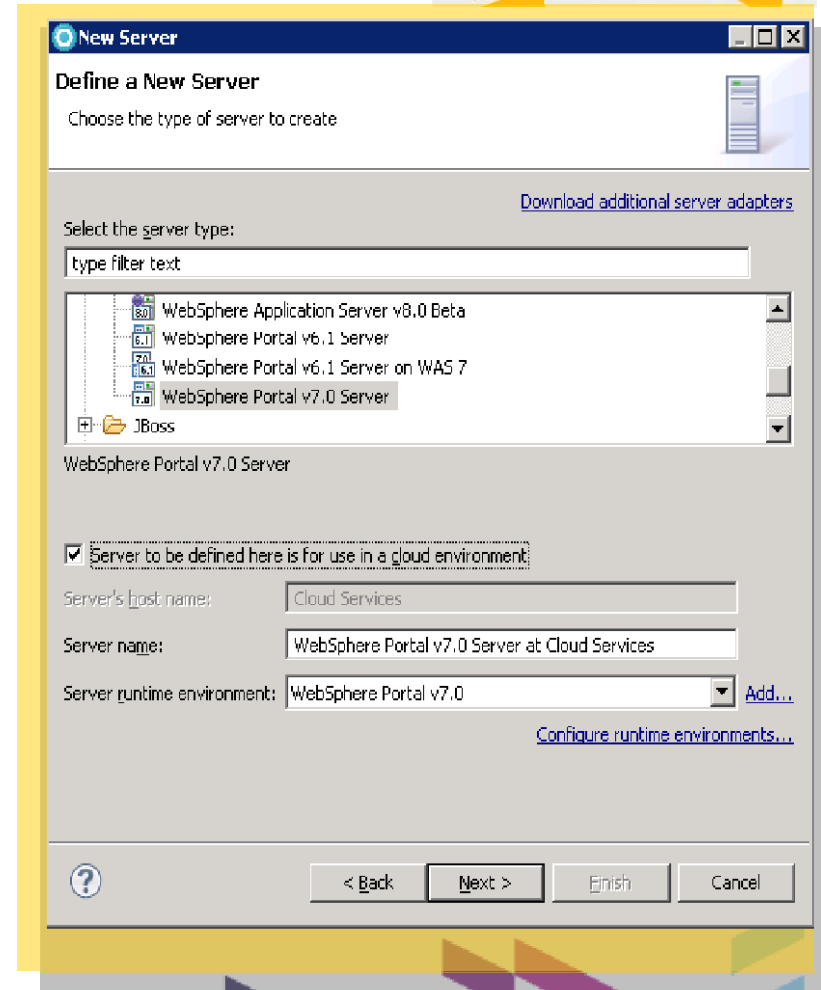
Multi-channel device development

Enhanced portlet project creation wizard, that allows device support

Direct publishing on portal, that can be tested on smart phone device simulator as well

Developers can leverage RAD tools to create JEE based web apps, and target them for different devices
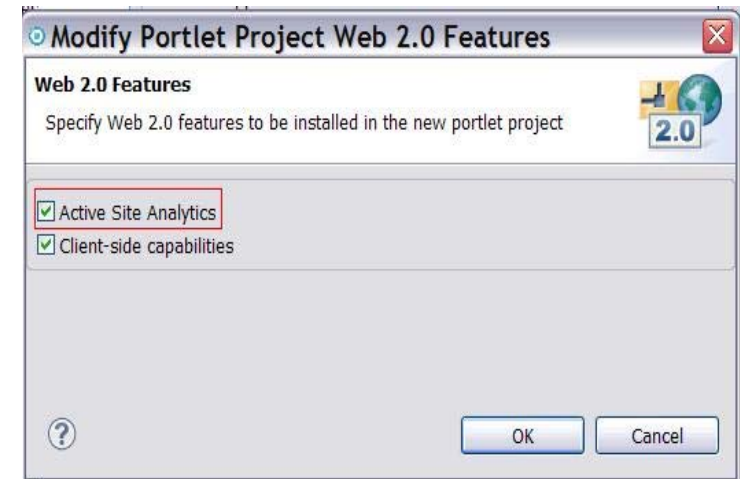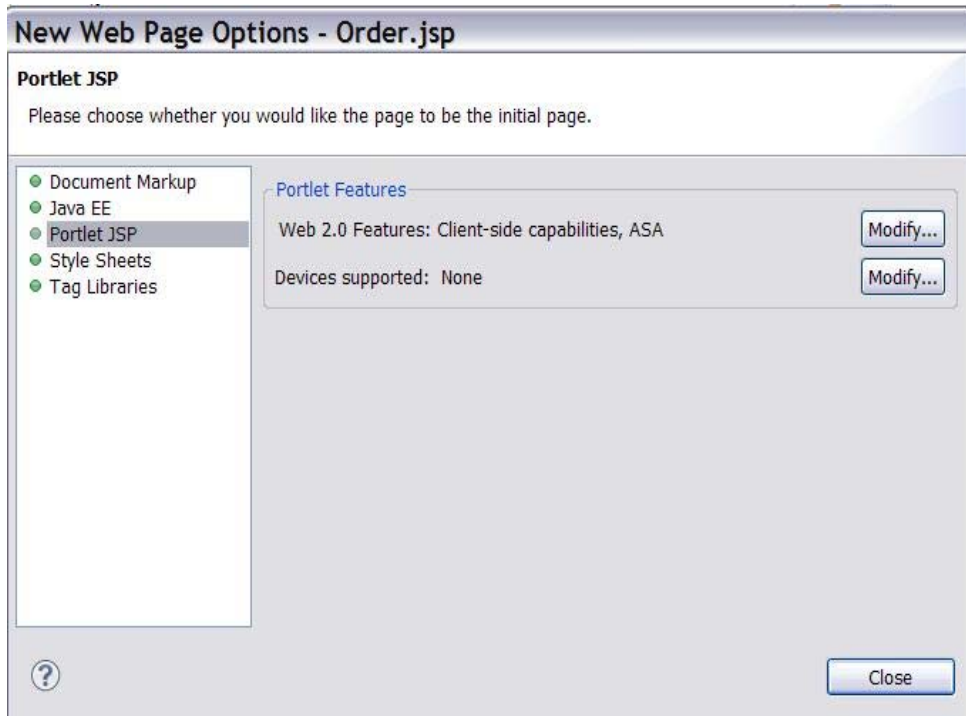
25
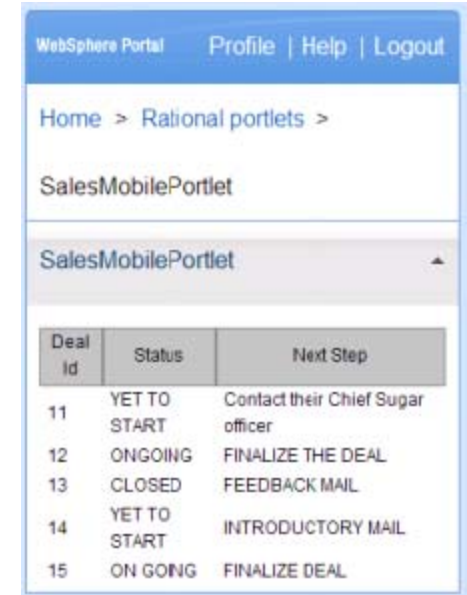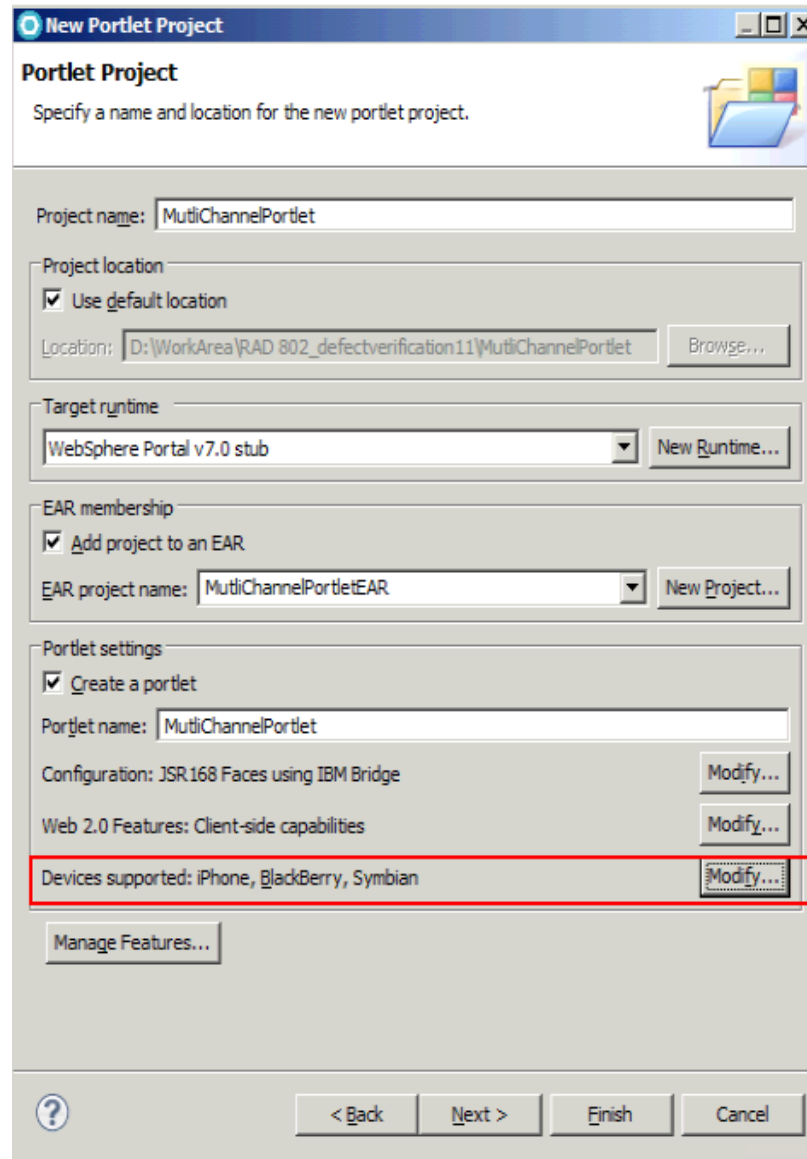
Active Site Analytics

Markup is generated for every asa enabled screen without explicitly specifying what the name of the tag and value of the tag is.

Select the Active site analytics checkbox to enable ASA support for this project
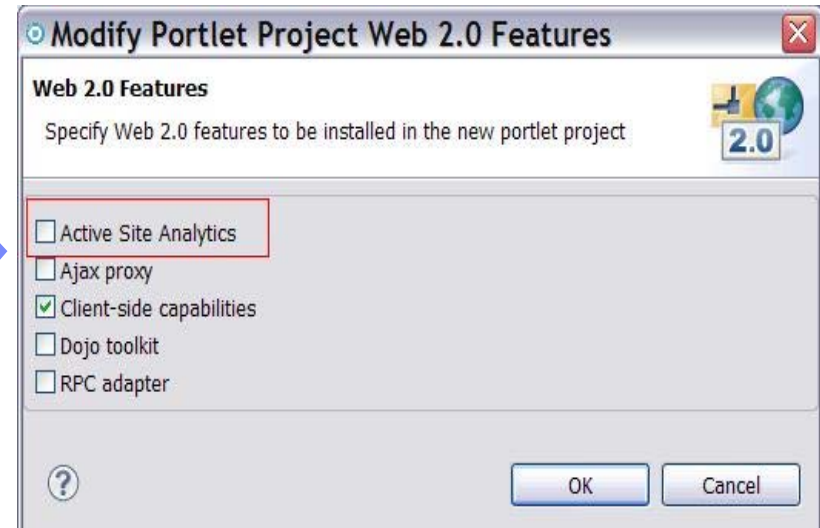
Active Site Analytics - modification to the resource bundle and portlet JSP

ASA Portlet Screen metadata is added to every auto generated portlet modes jsp
if ASA is enabled for the project.

Bundle lookup code is auto generated to read the JSP title from the resource
bundles depending on locale.

The jsp filenames are used as the default values for ASA Screen title tags.

Unique ASA Screen ID asa.portlet.screen.id is auto-generated by tooling for every
auto generated portlet modes jsp.

```
# Default Resource Bundle
#
# filename: ShoppingCartPortletResource.properties
# Portlet Info resource bundle example
javax.portlet.title=ShoppingCart
javax.portlet.short-title=ShoppingCart
javax.portlet.keywords=ShoppingCart

# ASA : Title for the JSP file to be rendered on the view mode
asa.portlet.screen.ShoppingCartPortletView.title=ShoppingCartPortletView
# ASA : Title for the JSP file to be rendered on the edit mode
asa.portlet.screen.ShoppingCartPortletEdit.title=ShoppingCartPortletEdit
# ASA:   Title for the JSP file to be rendered on the help mode
asa.portlet.screen.ShoppingCartPortletHelp.title=ShoppingCartPortletHelp
# ASA: Title for the JSP file to be rendered on the configure mode
asa.portlet.screen.ShoppingCartPortletConfig.title=ShoppingCartPortletConfig
# ASA: Title for the JSP file to be rendered on the edit_defaults mode
asa.portlet.screen.ShoppingCartPortletEditDefaults.title = ShoppingCartPortletEditDefaults
```

27

Active Site Analytics – Instrument ASA tags at portlet level

Markup is generated for every ASA enabled screen without explicitly specifying what the name of the tag and value of the tag is.

Select the Active site analytics checkbox to enable ASA support for this portlet.

Active Site Analytics – Instrument ASA tags at portlet screen level

Select the Active site analytics checkbox to enable ASA support for this portlet jsp.
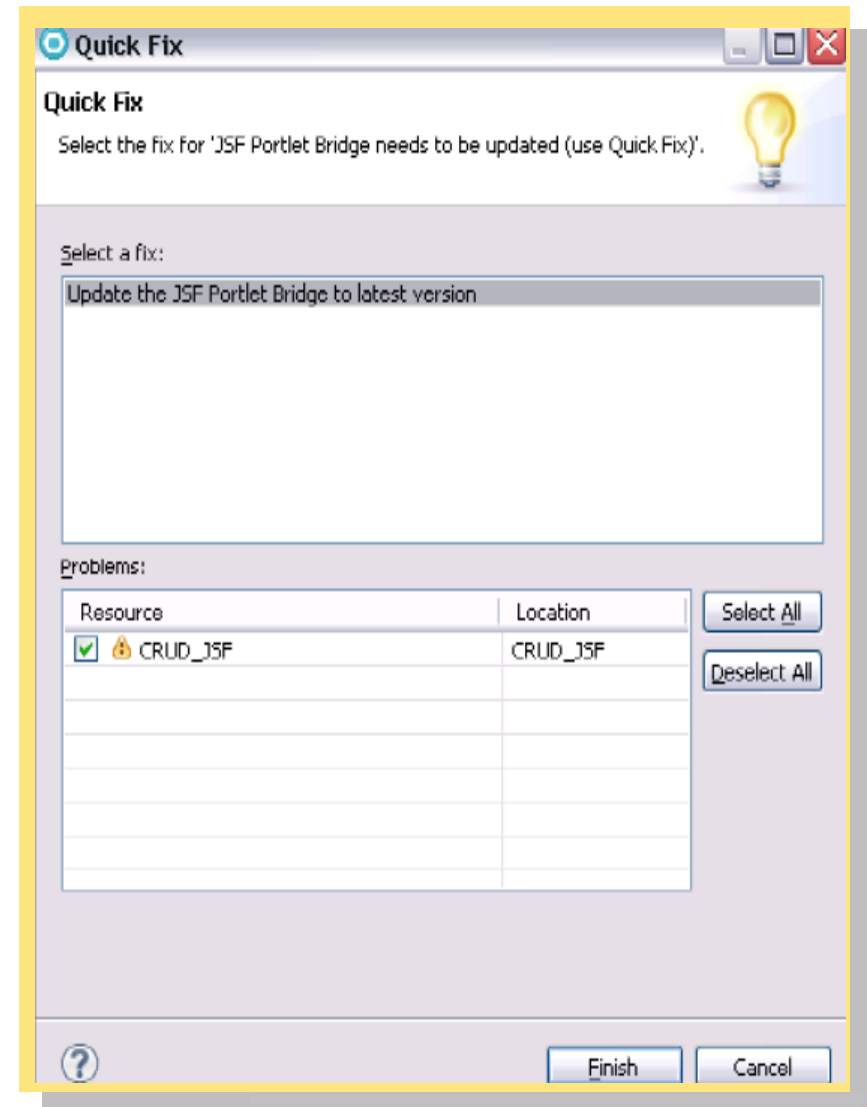
JSF Portlet Bridge improvements

The IBM JSF portlet bridge supports JSR 168 Faces Portlet applications based on JSF 1.2

Automatic update of the JSF portlet bridge when a JSF Portlet Project is migrated from IBM Rational Application Developer V7.0.0.x to RAD V8

In case of migration of JSF Portlet projects from IBM Rational Application Developer V7.5.x to RAD V8 quick fix option to update the JSF portlet bridge.

30

JSF 1.2 Support

IBM JSF Portlet Bridge is enhanced
    for JSF 1.2 specification

RAD Portal Tools allow integration
    of third party JSF bridges*

New Portlet Project

Portlet Project
Specify a name and location for the new portlet project.

Project name: TPJSFBridge

Project location
☑ Use default location
Location: D:\WorkArea\RAD 802_defectverification11\TPJSFBridge   Browse...

Target runtime
WebSphere Portal v7.0 stub   New Runtime...

EAR membership
☑ Add project to an EAR
EAR project name: TPJSFBridgeEAR   New Project...

Portlet settings
☑ Create a portlet
Portlet name: TPJSFBridge
Configuration: JSR168 Faces using IBM Bridge   Modify...
Web 2.0 Features: Client-side capabilities   Modify...
Devices supported: None   Modify...

Manage Features...

< Back   Next >   Finish   Cancel

* third party bridge is considered as application code

31

Improved Portlet project Creation Wizard

Hassle free feature selection

32
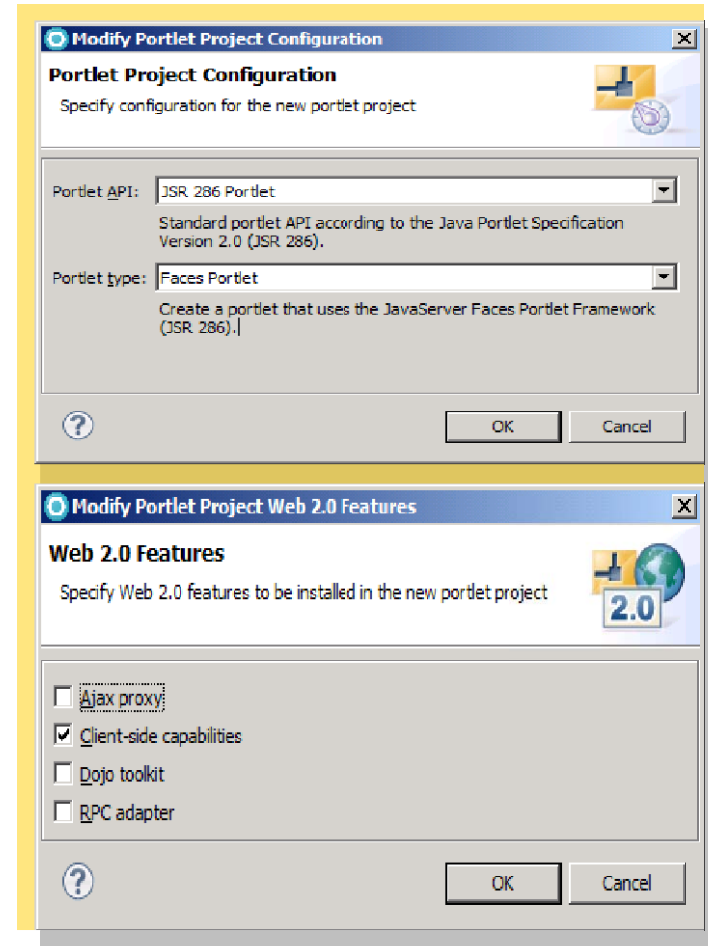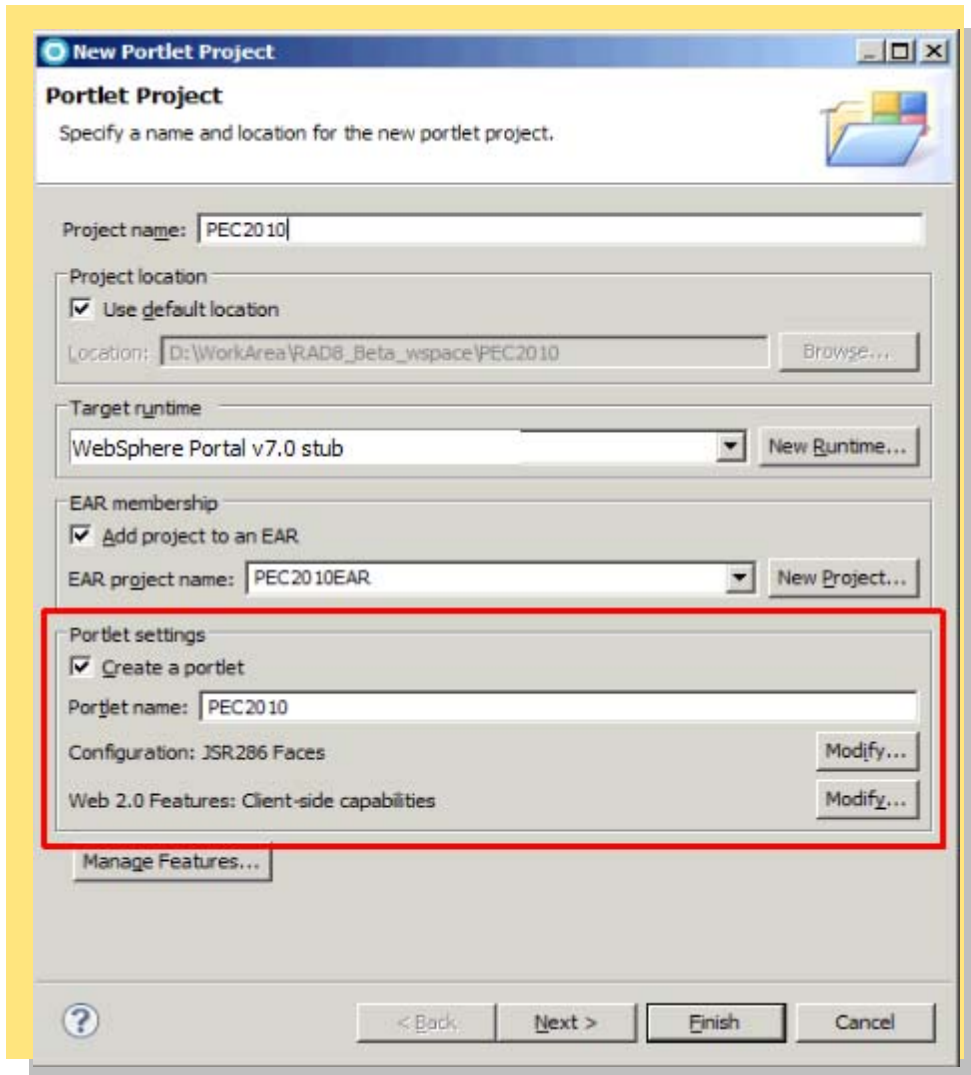
Site Designing Portlet Tool – Desktop application like experience

Light Weight

Desktop like compelling
  usage

Web2.0 Ajaxified interface

Universal Catalog

Portlet Design View

  Page Navigation

  Site Designing

33
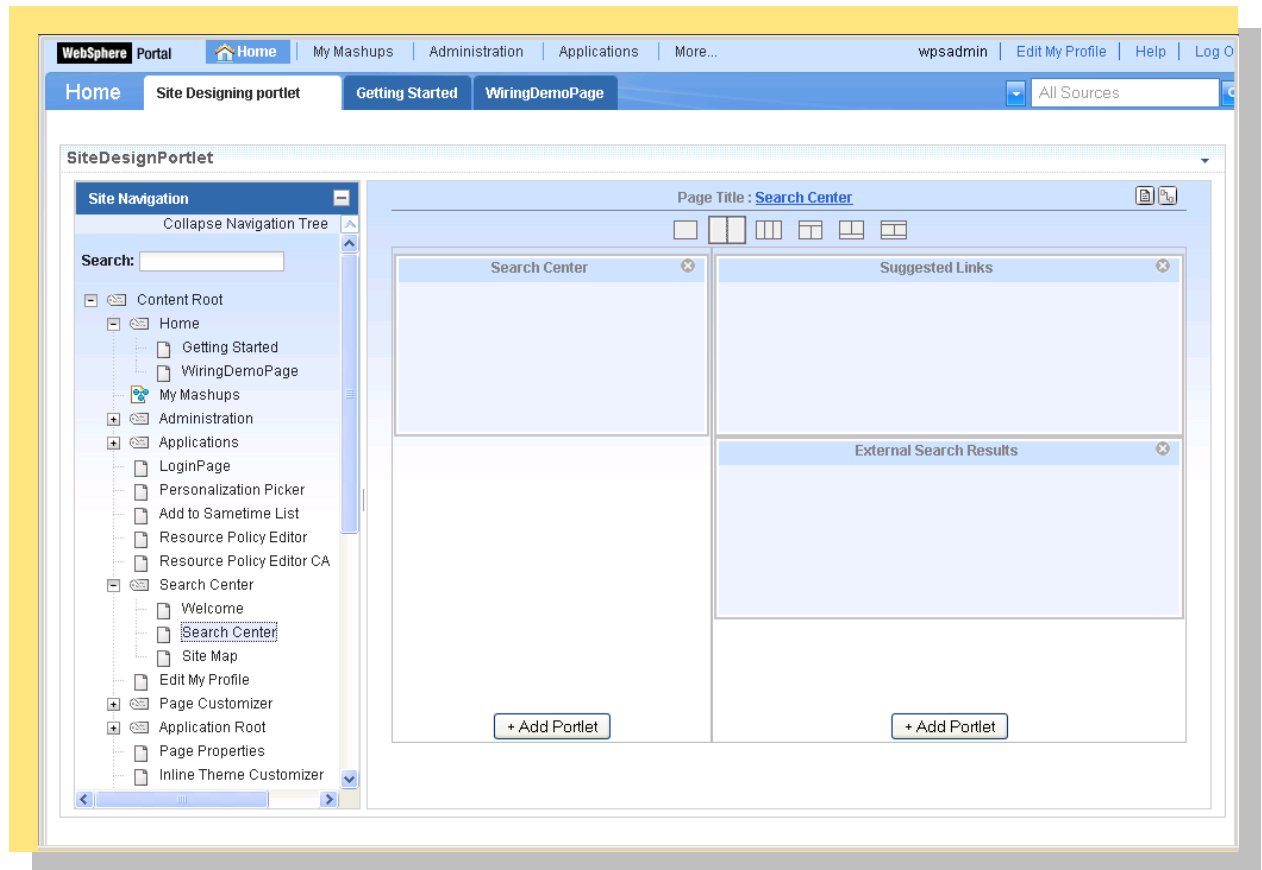
JPA Support for Portlet Projects

Wizards to create
>   Entities from DB
>   JPA Manager Bean
>   Query Method

Page Data View
>   Tree structure to represent the Entity
>   Auto generation of UI elements

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.

Generate Entities

Create Manager Beans

Filter Results

Browse Entity

Portal Toolkit is all about Web 2.0 features

Use RAD to build rich internet applications to improve online user experience and increase customer satisfaction

Lower the barriers of adoption of Web 2.0 technologies
- Visual development of Web 2.0 pages
- Source level tools to aid with Javascipt and dojo development
- Debug capabilities with Firebug integration
- Expose server side assets as Web 2.0 consumable services

Lightweight Ajax test server to rapidly preview web pages that include images, scripts, services, and data

35

End to End iWidget development

Create an iWidget with few clicks

Option to create

    Event emitting iWidget

    Event consuming iWidget

WYSIWYG editor for iWidget XML that includes validation

Deployment tools

Direct placement on server catalog

36
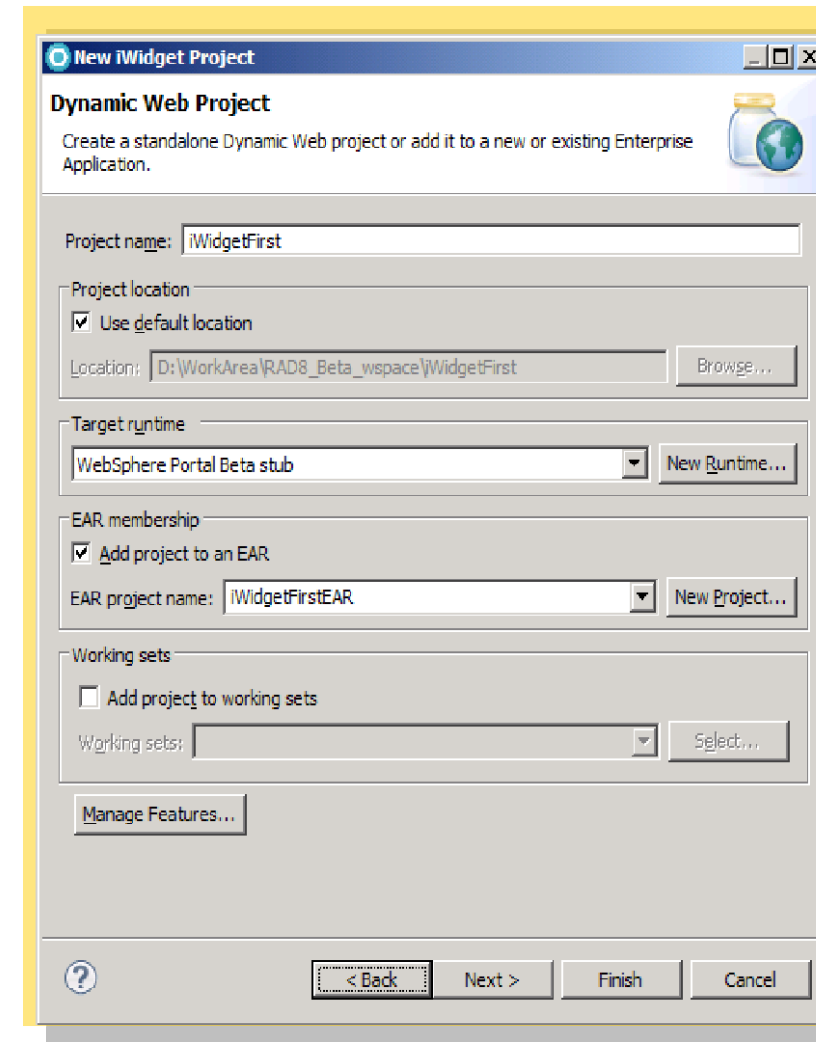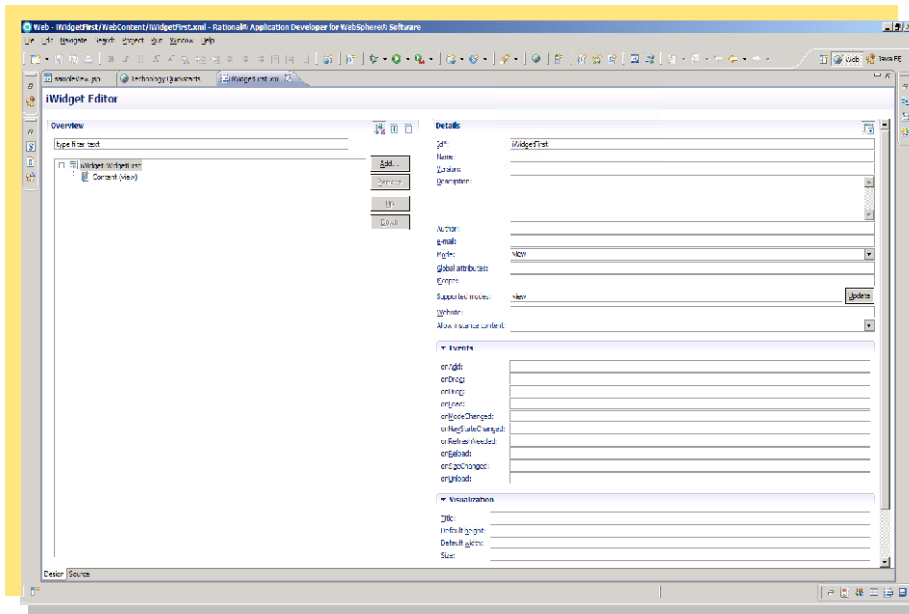
Easily create powerful ReST Services from server side code using RPC

A handy way of exposing any server side code as ReST service that enables Web20 portal application creation

Single click invocation of wizards that takes away all your coding worries - no coding required, no testing of generated code required

Exposes your POJOs, session beans methods to be directly callable from JavaScript or client side code

Very intuitive and simple access to direct URLs of methods exposed

URLs generated as per portlet specifications for applications targeting Portal

37
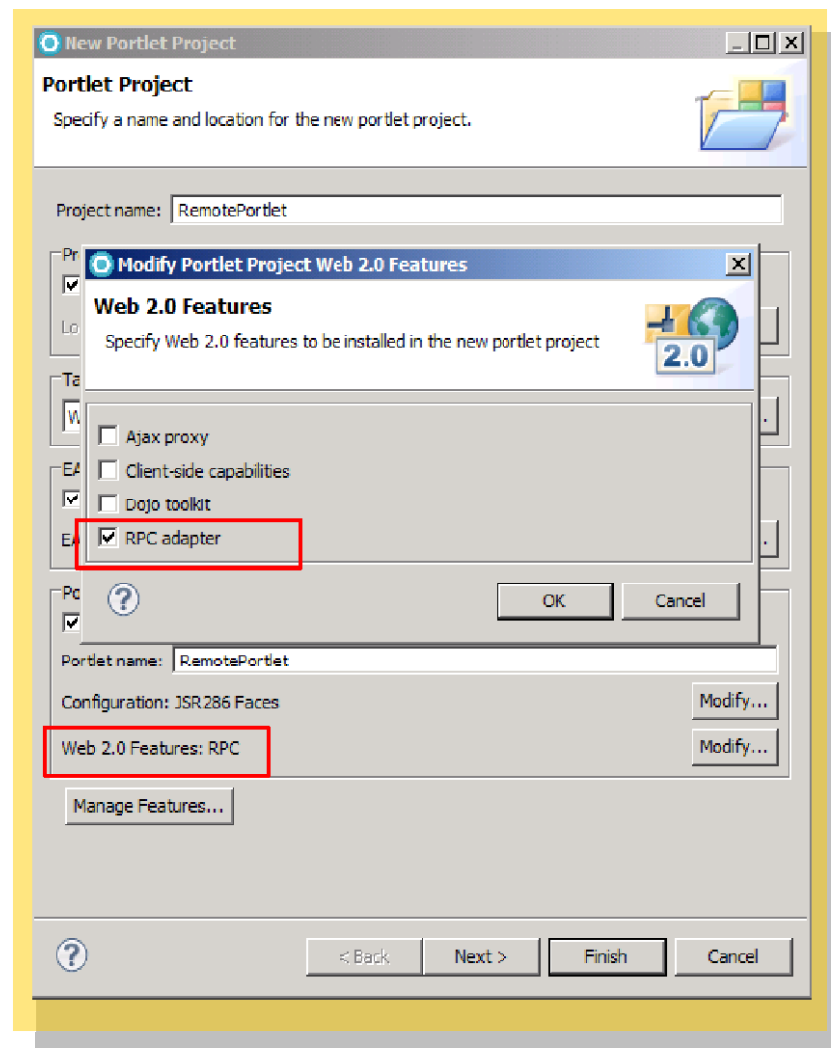
Create Exceptional Web Experience using Dojo tools

Rational Application Developer allows to configure and use various versions of Dojo library.

Solves challenges for Dojo development on Portal

Incorporates best practices for Dojo and JavaScript

38
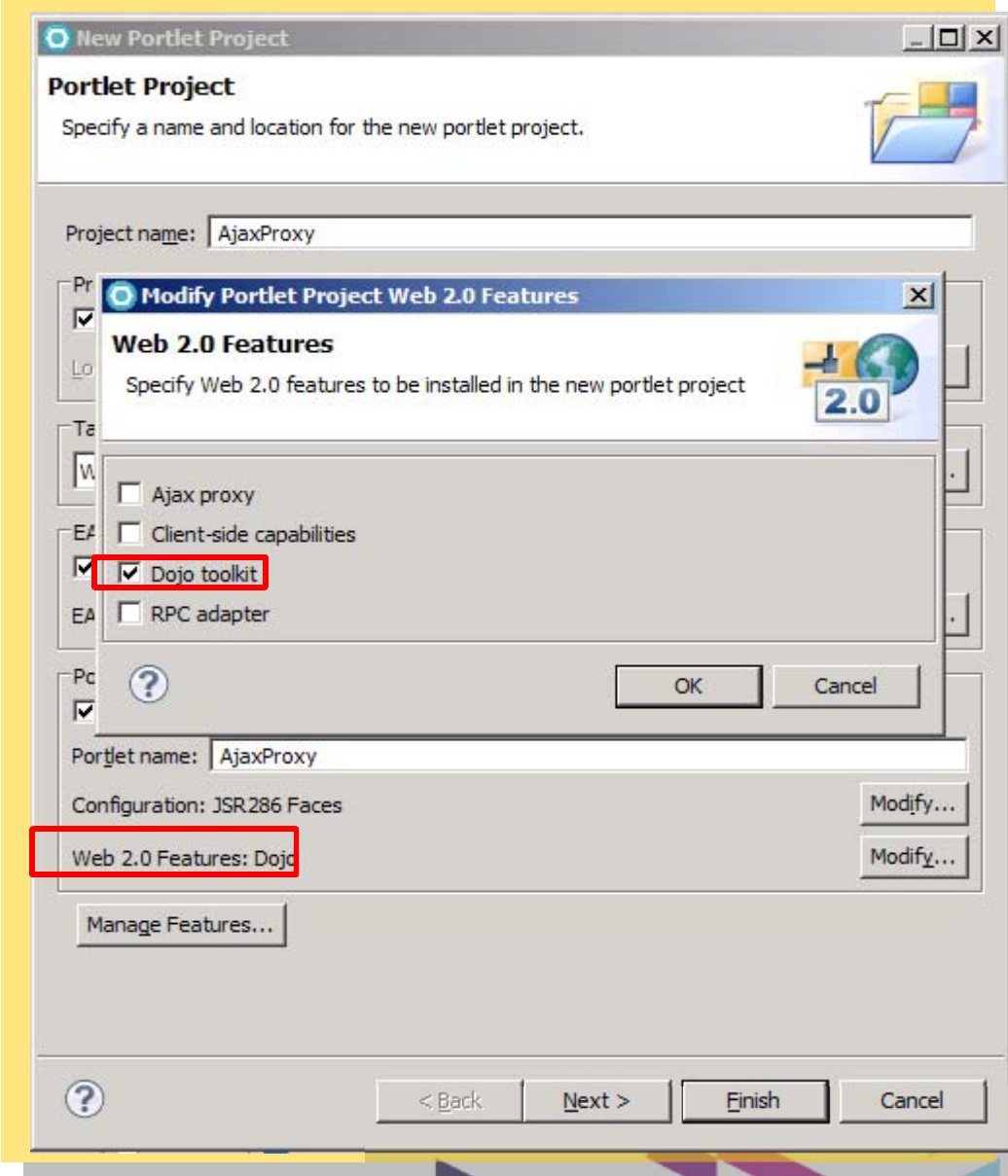
Dojo Widgets in RAD Palette: Easily create Exceptional Web Experience

39

Wizards to help create custom dojo widgets

40
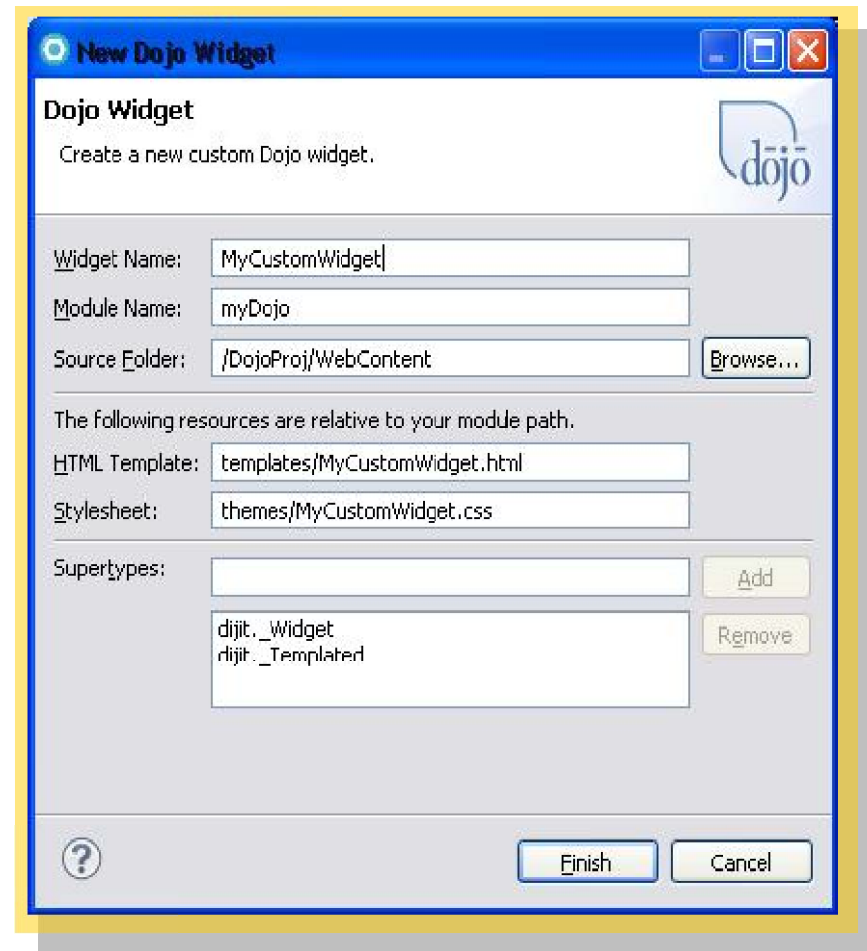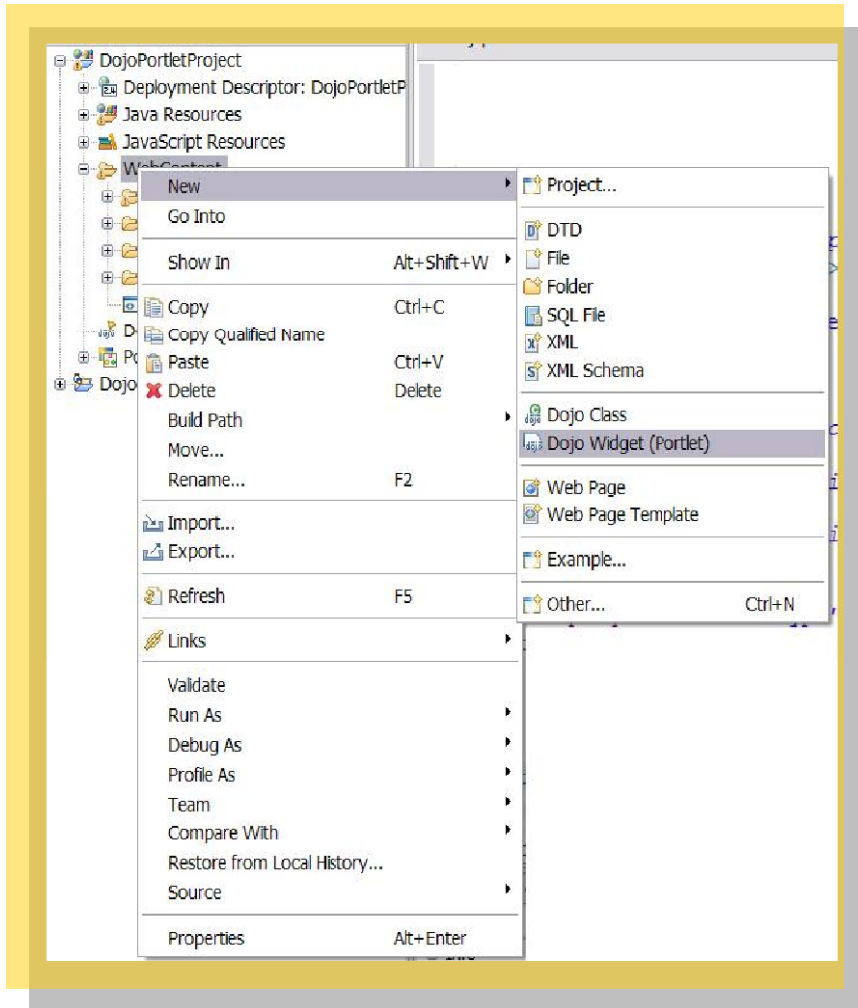
Exceptional User Interfaces with Dojo Widgets: Delivered!

Easily Drag and Drop from palette any Widget to create exceptional web experiences

41

Advance Dojo Features: Exclusively in RAD Portal Toolkit V8.0

Client-side Inter Portlet Communication (IPC)without page refresh to create exceptional web experiences

Client side IPC using Dojo

Wizard to create Event Subscriber

43
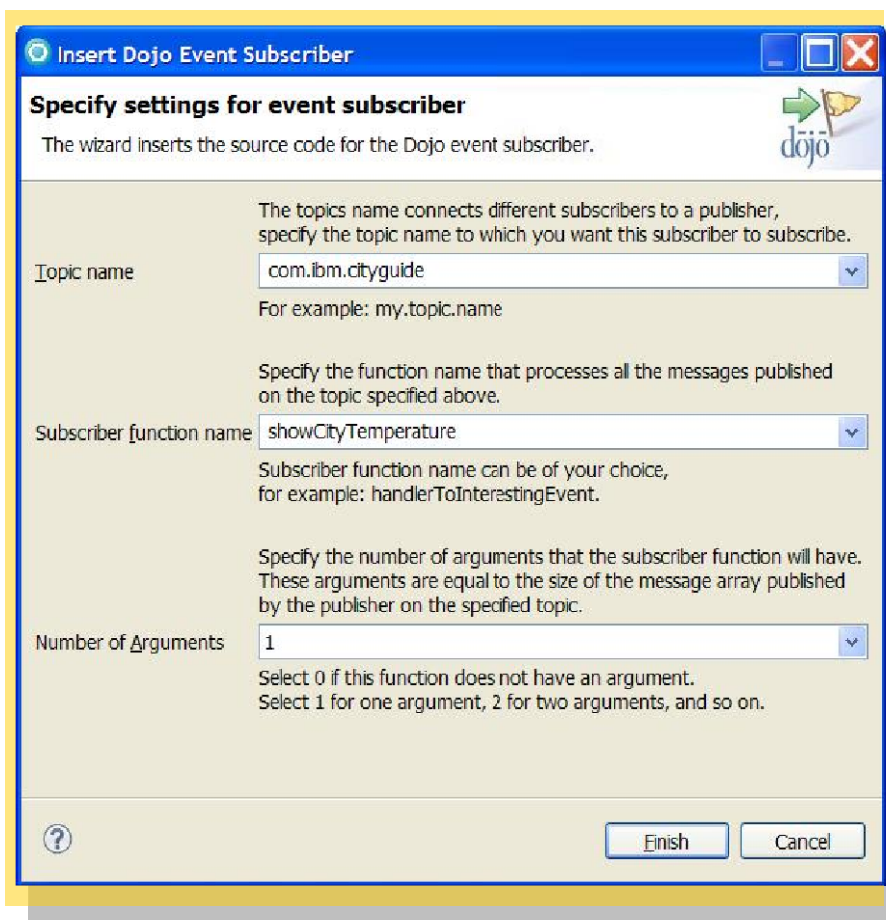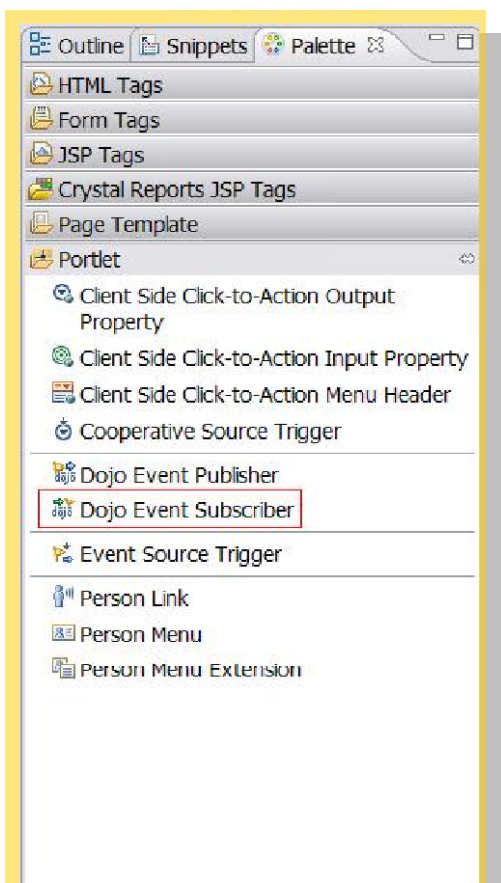
Client side IPC using Dojo

Node Decorators to demark

    Topic

    Event

Auto-code generation

    Connections are created for

        publishers

        subscribers

    Placeholder JS functions generated for

        publishers
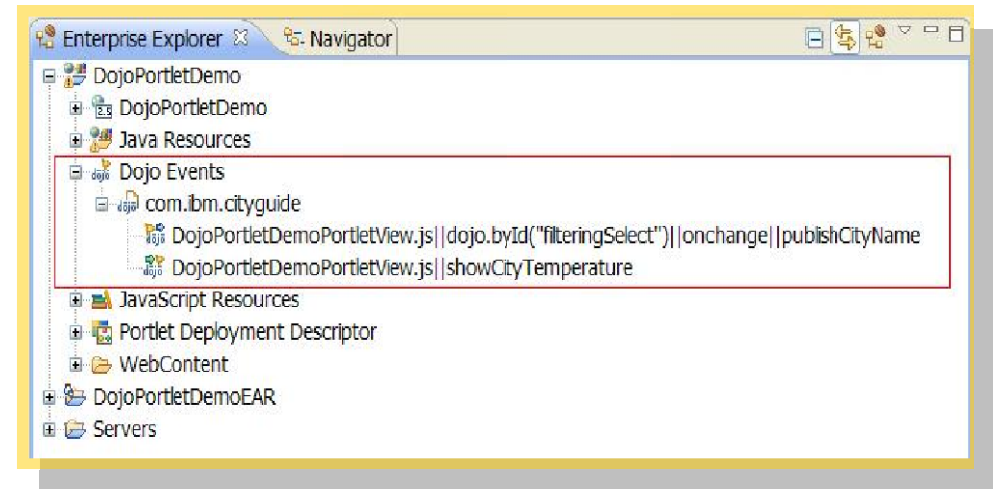
        subscribers

44

Agenda

Exceptional Web Experience Overview

Rational Application Developer Overview

Rational Application Developer Portal Tool Kit Overview

Demonstration of Rational Application Developer Portal Tool Kit

Question and Answer Session

45

www.ibm/software/rational

Client side IPC using Dojo – Application Demo

47

Easily create cohesive business applications
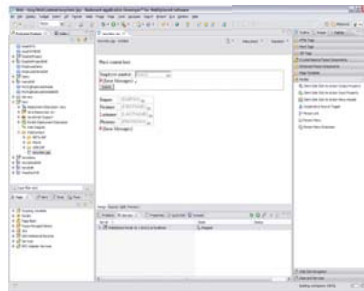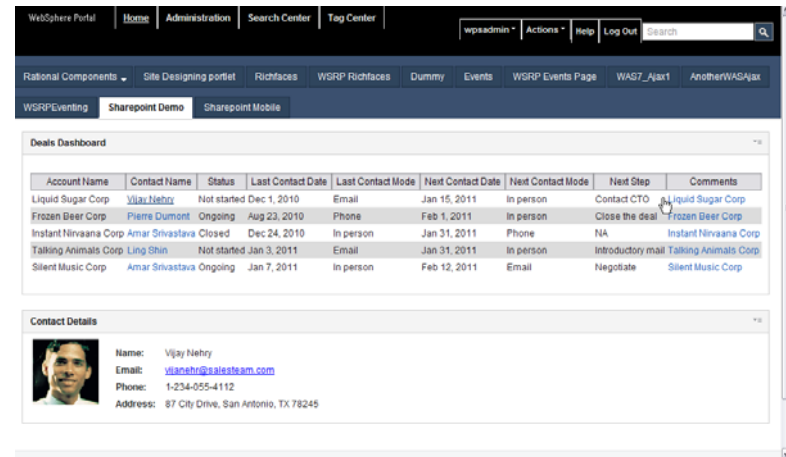
Additional IBM Rational Application Developer Information and Resources

Rational Application Developer Portal Toolkit Wiki Page:

http://www.ibm.com/developerworks/wikis/display/rad/Portal+tools

Rational Application Developer Portal Toolkit Developer's Forum:

http://www.ibm.com/developerworks/forums/forum.jspa?forumID=430&start=0

Rational Application Developer on developerWorks:

http://www-128.ibm.com/developerworks/rational/products/rad/

Rational Application Developer Release Notes Quick Links:

http://w3-103.ibm.com/software/xl/portal/viewcontent?type=doc&srcID=R9&docID=Q037376H41907N67

Rational Licensing Home Page:

http://w3-103.ibm.com/software/xl/portal/viewcontent?type=doc&srcID=R9&docID=R107288S44149G18

Rational Application Developer Beta Home Page:

https://www14.software.ibm.com/iwm/web/cc/earlyprograms/rational/radob/index.shtml
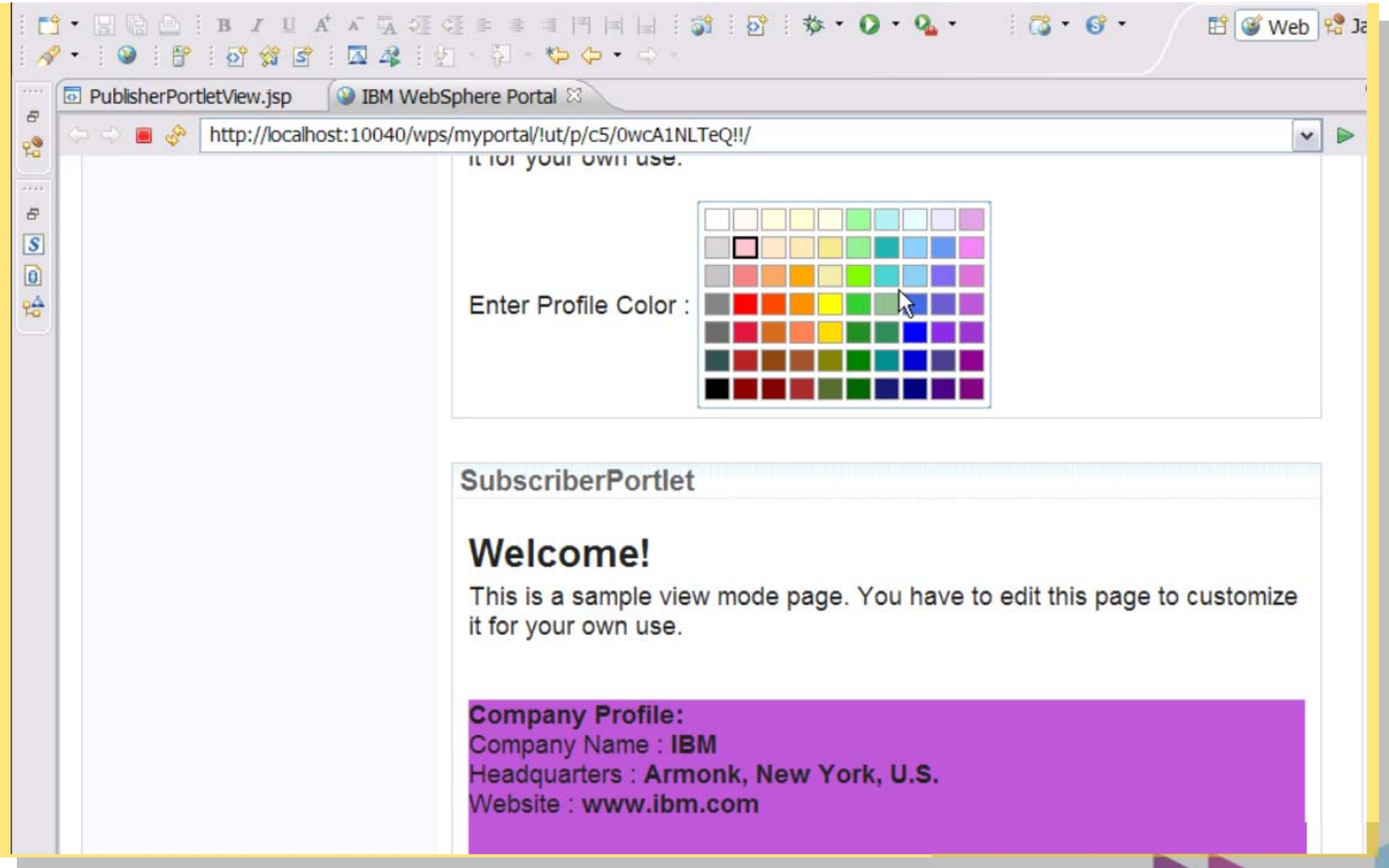
Rational Application Developer Beta Release Notes:

http://publib.boulder.ibm.com/infocenter/radhelp/v8/index.jsp?
topic=/com.ibm.rad.install.doc/topics/rad_releasenotes.html

Rational Application Developer Beta What's New:

http://www.ibm.com/developerworks/wikis/display/rad/Rational+Application+Developer+Version+8.0+Open+Beta

Rational Application Developer Beta Infocenter:

http://publib.boulder.ibm.com/infocenter/radhelp/v8/index.jsp

Additional IBM WebSphere Portal Information and Resources

WebSphere Portal – IBM Site

http://www-3.ibm.com/software/genservers/portal/

WebSphere Portal Business Solutions Catalog

http://catalog.lotus.com/wps/portal/portal

Websphere Portal Developer's Zone

http://www-106.ibm.com/developerworks/websphere/zones/portal/

Product Documentation and WebSphere Portal Wiki

http://www-3.ibm.com/software/genservers/portal/library/

http://www-10.lotus.com/ldd/portalwiki.nsf

Education

http://www-01.ibm.com/software/lotus/training/portalofferings.html

WebSphere Portal Blog

https://www.ibm.com/developerworks/mydeveloperworks/blogs/WebSpherePortal/

Websphere Portal Business Solutions Catalog:

http://catalog.lotus.com/wps/portal/portal

Webspere Portal Product Information:

http://www-306.ibm.com/software/genservers/portal

WebSphere Portal Information Center Documentation:

http://www.ibm.com/developerworks/websphere/zones/portal/proddoc.html

Additional Rational Application Developer Resources

Rational Application Developer on developerWorks:

http://www-128.ibm.com/developerworks/rational/products/rad/

Rational Application Developer Release Notes Quick Links:

http://w3-103.ibm.com/software/xl/portal/viewcontent?type=doc&srcID=R9&docID=Q037376H41907N67

Rational Licensing Home Page:

http://w3-103.ibm.com/software/xl/portal/viewcontent?type=doc&srcID=R9&docID=R107288S44149G18

Rational Application Developer Zone on DeveloperWorks:

http://www.ibm.com/developerworks/rational/products/rad/

Rational Application Developer Red Books

http://www.redbooks.ibm.com/abstracts/SG247501.html?Open?S_TACT=105AGY82&S_CMP=GENSITE

Platforms Supported by Rational Application Developer

Linux®:

Red Hat Enterprise Linux Version 4.0 AS / ES (x32 / x64)

Red Hat Enterprise Linux Version 5.0 AS / ES (x32 / x64)

Red Hat Enterprise Linux Desktop Version 4.0 (x32)

Red Hat Enterprise Linux Desktop Version 5.0 (x32)

SUSE Linux Enterprise Server (SLES) Version 9 (x32 / x64)

SUSE Linux Enterprise Server (SLES) Version 10 (x32 / x64)

SUSE Linux Enterprise Desktop (SLED) 9 (x32)

SUSE Linux Enterprise Desktop (SLED) 10(x32)

Microsoft® Windows®:

Windows Server 2003

Windows XP

Windows Vista Business/Enterprise

Windows Server 2008

Application Server Test Environment:

IBM WebSphere Application Server Unit Test Environment v6.0, v6.1, v7.0

WebSphere Portal Server V6.1 (also compatible with v6.0 but not included)

Supports WebSphere Feature Packs: Web 2.0, Web Services, EJB 3.0

Hardware:

Display, minimum requirements: 1024 x 768

1GB RAM minimum; 2 GB RAM works well

Disk space requirements: 3.5 GB minimum for installing Rational Application Developer and additional disk space for development resources (minimum disk space can be reduced if optional features and run times are not installed).

Linux only supported on x86 architecture

Intel® Pentium® III 800 MHz or higher recommended

52

Additional reasons why to use Rational Application Developer Portal Tools Kit?

IBM Rational Application Developer (RAD) is the most complete Java and Web IDE on the market.

Rational Application Developer's integrated set of Eclipse-based tools and best practices, as well as its local presence and expertise worldwide, minimizes development risks and maximizes return on investment.

By teaming directly with the WebSphere Application Server and WebSphere Portal Server teams Rational Application Developer provides industry leading capabilities for both runtimes.

Rational Application Developer can extended using both third party Eclipse plug-ins as well as Rational specific plug-ins provided by IBM and its partners.

Rational Application Developer provides a reliable, robust and customizable set of tools, the IBM Software Development Platform, which is built on top of Eclipse .

Rational Application Developer integrates with various Rational solutions including Rational Team Concert, which transforms Rational Application Developer into a collaborative JEE development environment which such capabilities as "Collaborative Debugging"

Rational Application Developer leverages the IBM Installation Manager which provides enterprise-wide deployment capability for your organization.

The standard ECLIPSE Vs RAD PTK customer objection

Most Common Customer Question: I already have Eclipse for my Java coding – what more do I need?

My Response: If you're doing JEE development, your developers are spending a lot of time dealing with low-level infrastructure tasks such as directly editing the deployment descriptors, manually creating the mapping descriptors, writing code to test EJBs and more.

Rational Application Developer adds a wealth of productivity features for the J2EE and Portal/Portlet developer over and above the base Eclipse platform.

For More Information (1)

WebSphere Portal – IBM Site

http://www-3.ibm.com/software/genservers/portal/

WebSphere Portal Information Center

http://www.ibm.com/developerworks/websphere/zones/portal/proddoc.html

WebSphere Portal Business Solutions Catalog (on Lotus Greenhouse)

https://greenhouse.lotus.com/catalog/home_full.xsp?fProduct=WebSphere%20Portal

WebSphere and Lotus Web Content Management Portal Open Beta

https://www14.software.ibm.com/iwm/web/cc/earlyprograms/lotus/portalopenbeta/

WebSphere Portal Blog

https://www.ibm.com/developerworks/mydeveloperworks/blogs/WebSpherePortal/

For More Information (2)

IBM Lotus Connections

http://www.ibm.com/software/lotus/products/connections

IBM Lotus Forms

http://www.ibm.com/software/lotus/forms

IBM Lotus Quickr

http://www.ibm.com/lotus/quickr

IBM Lotus Sametime

http://www.ibm.com/lotus/sametime

WebSphere Commerce

http://www.ibm.com/websphere/commerce

WebSphere Process Server and Business Process Automation

http://www.ibm.com/software/integration/wps

55

www.ibm/software/rational

www.ibm/software/rational