



IBM Software Group

# IBM Workplace and WebSphere Portal

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# Agenda

- Workplace and Portal
- WebSphere Portal
- Development Tools for IBM Workplace
- Summary



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## Workplace and Portal

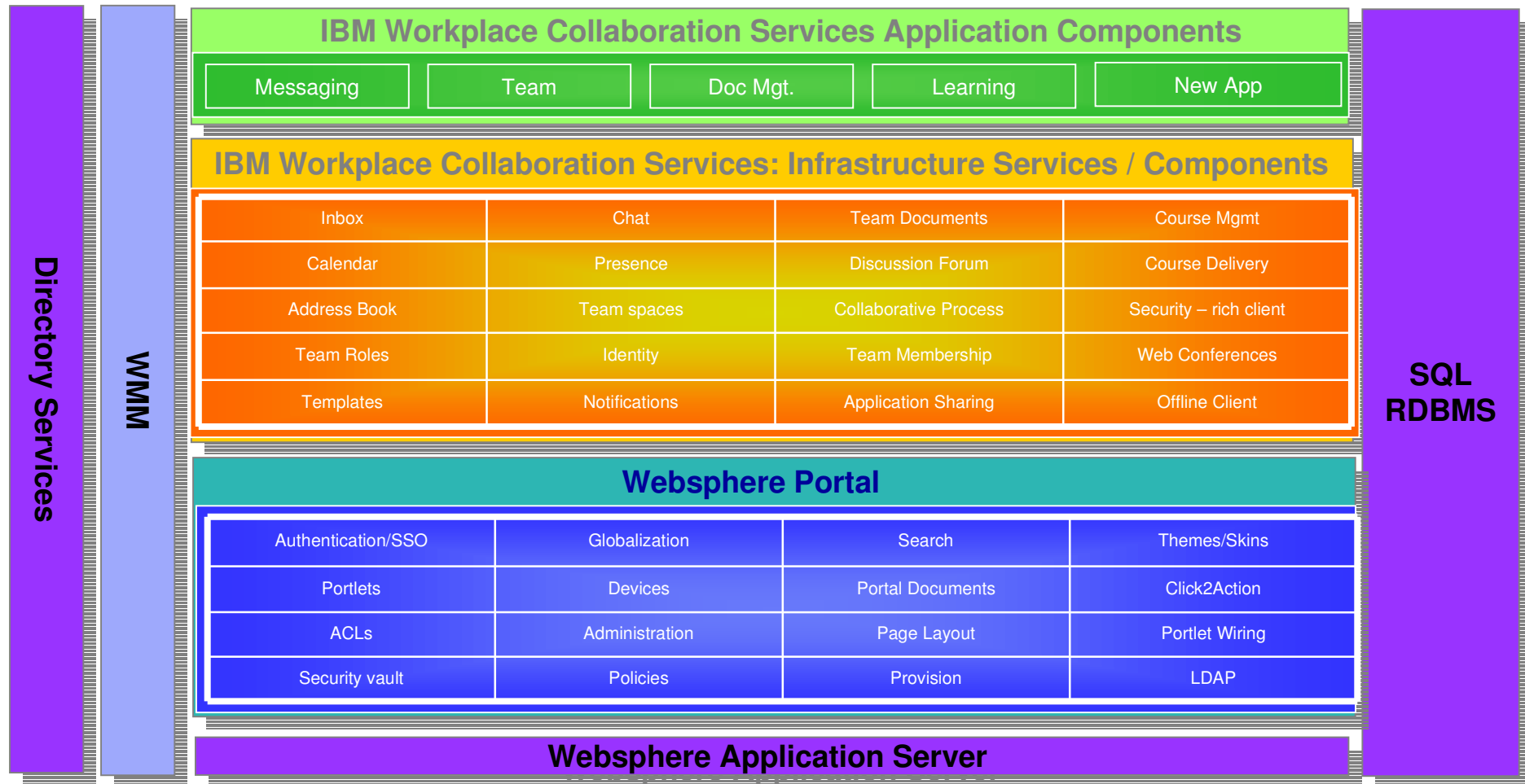


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# Workplace Software Stack

***Workplace builds on WebSphere Portal, which in turn is based on WebSphere Application Server***



# IBM Workplace is...

*A family of products, solutions and technologies for transforming the way people work*

## Only Workplace provides:

Unified, consistent access to people, resources and tools needed, in the context of a user's role -- in order to make more informed decisions, faster

## IBM Workplace family includes:

Portal technology

WebSphere Portal

Collaboration tools

**Workplace Collaboration Services**

Lotus Notes & Domino

Sametime

Tools & Technology

Workplace Templates, Workplace Designer

Lotus Domino Designer

Workplace Managed Client

WebSphere Everyplace Deployment (WED)

Solutions

IBM Workplace for....Business Controls & Reporting, Branch Bank, etc...



# Portal Technology Provides Key Integration Services

Access Based on “Who You Are”

Integration at the glass, common navigation

Portlet based user experience

User experience for service-oriented-architectures (SOA)

Integration of infrastructure for B2E, B2B, B2C

Content, information & application aggregation

Domino, Microsoft Office, Web content, Custom applications, Host/Legacy applications, SAP, Siebel, PeopleSoft, Oracle, JD Edwards, etc...

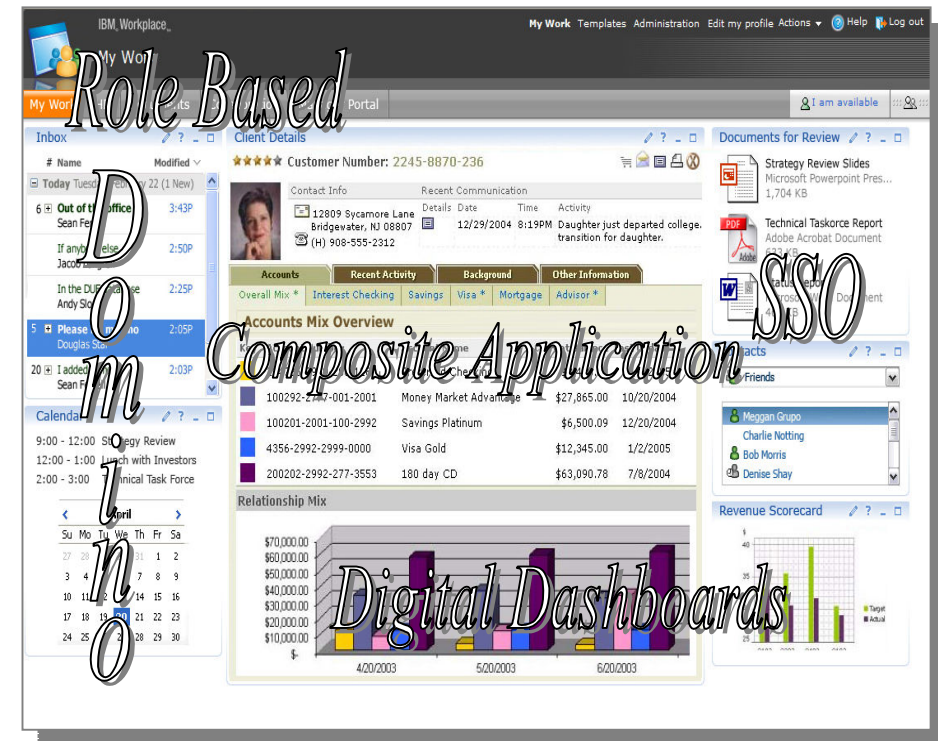
Self Service Model

Single Sign-on

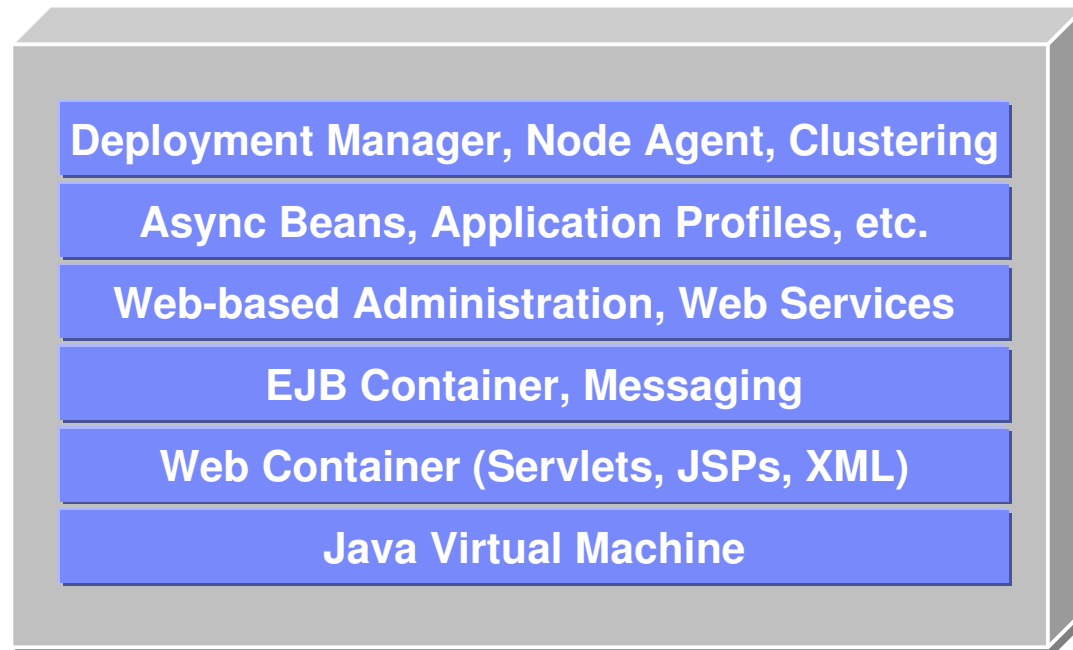
Enables Collaboration in Context

Basis for creating new composite applications

Incorporate existing assets and create new ones



# WebSphere Application Server



- Provides standards-based environment for WebSphere Portal
  - ▶ Runtime environment through Java Virtual Machine
  - ▶ Data access and logic through Enterprise Java Beans and Messaging
  - ▶ User Interface components through Servlets and Java Server Pages
  - ▶ Communication to other applications and portals through Web Services



## IBM Workplace Collaboration Services Extends Portal



**WCS = Out-of-the-box  
Collaboration**



**Portal =  
Infrastructure**

**WCS is composed of a set of portal-based collaboration services delivered as pre-built portlets**

- **Extensible:** can be customized and plugged-in into composite applications

**Tools for extending and integrating with WCS & Portal:**

- WCS Templates & Lists
- IBM Workplace Designer
- Rational Application Developer (RAD)

**Common programming model in next releases**





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# WebSphere Portal

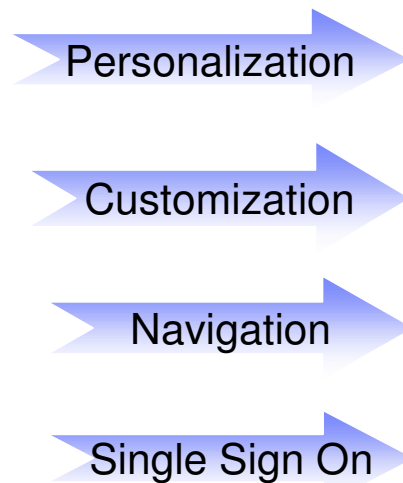


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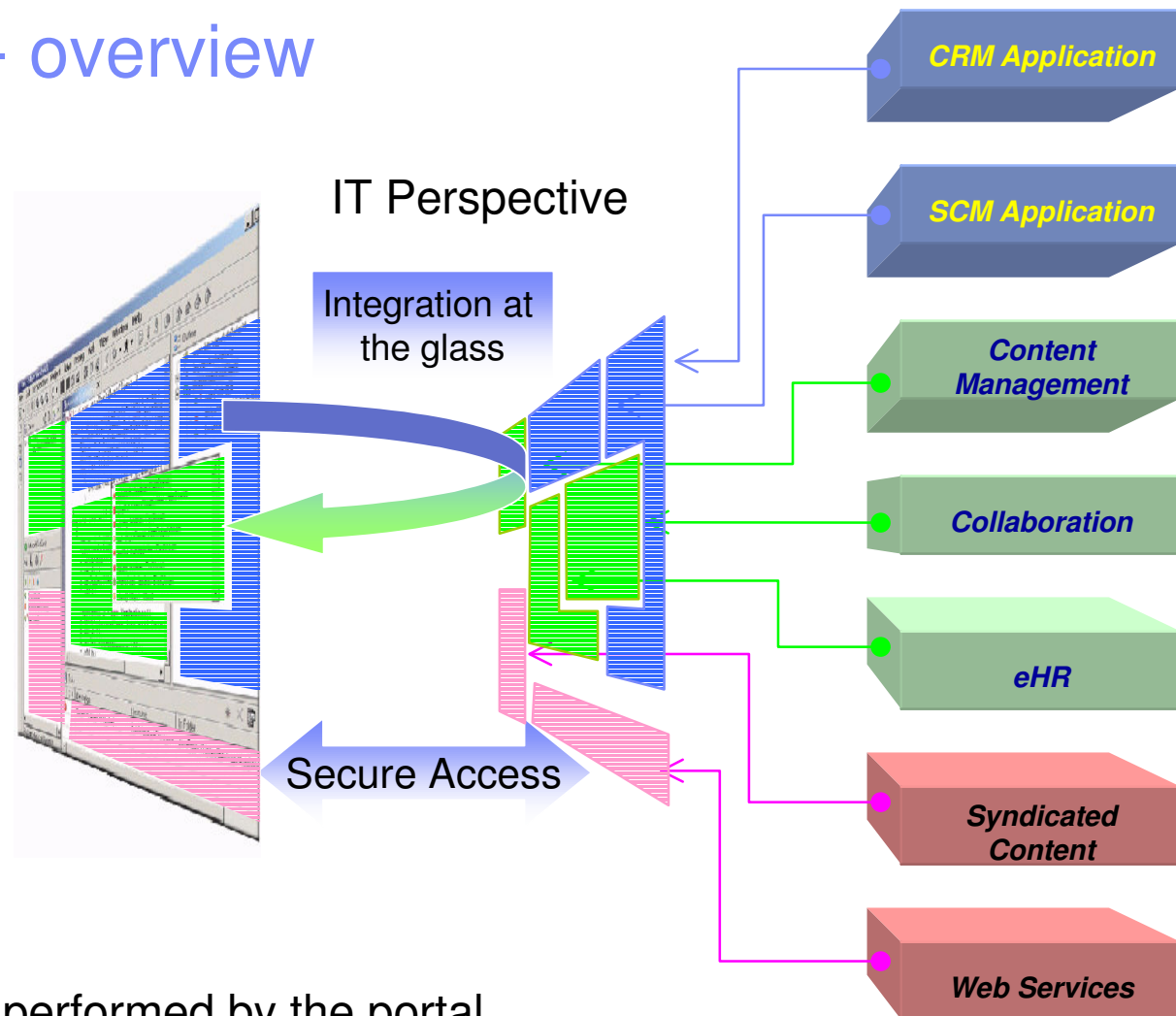
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# The Portal model - overview

## User Perspective



## IT Perspective



- Integration-at-the-glass – performed by the portal
- Components may or may not work on the same backends

# Portal model – portal page

The screenshot shows the IBM w3 On Demand Workplace portal. Red arrows point to various components: 'Navigation' points to the top navigation bar; 'Login/logout' points to the 'Sign out' link; 'Header' points to the 'IBM.' logo; 'Portlets' points to the main content area containing several news and link sections.

**Navigation**

**Login/logout**

**Header**

**Portlets**

**Essential links**

- About IBM
- About w3
- Automotive Industry
- Collaboration Central
- Customer Reference Materials
- Electronics Industry
- Energy & Utilities Industry
- Globalization Central
- IBM Corporate Strategy
- IBM Global Campus
- IBM Middleware Solutions for Automotive
- IBM Middleware Solutions for Banking
- IBM Middleware Solutions for Electronics
- IBM Middleware Solutions for Energy and Utilities
- IBM Middleware Solutions for Telecommunications
- IBM On Demand Community
- IBM SiteServ
- IBM Standard Software Installer
- IBM Travel
- IT Tools
- Learning Navigator
- Our Values at Work
- Presentation Central
- Retail Banking Industry
- Sam's w3 pages
- Software Group Intranet
- Speak Up Program
- STMT - Strategic Transformation Measurement Tool
- Telecommunications Industry

**News**

**Top stories** [Past 7 days >](#)

**Worldwide employee broadcast: 4 August, 2004**  
Share your comments or questions with Sam, and configure your system.

**The little penguin that could**  
Linux: a bold bet keeping IBM on the right side of history.

**IBM to acquire Cyanea**  
Software Group adds application management tools to enhance its portfolio.[Software Group]

**Talk with Steve**  
What's our position on open source?[Software Group]

**Brand of approval**  
The right attributes can drive the bottom line. [Read the story and join in the discussion.](#)

**Virus Alert:**  
MyDoom opens back door to Zindos

**In the news** [Past 7 days >](#)

**Introducing chips that fix themselves**  
IBM has revealed a breakthrough chip molding technology, enabling a new class of semiconductor products that can monitor and adjust their functions to improve quality, performance, and power consumption without human intervention. [Technology Group]

**Microsoft says new frontiers key to its future**  
CEO Steve Ballmer outlines growth plans. "People don't want to come here to work for some stodgy old company," he said. "They want to work for a dynamic company striving to change the world." [San Jose Mercury News]

**Intel will miss target on chip in latest mishap**  
Intel is telling customers it won't meet a high-profile milestone for improving chip performance this year, the latest in a series of misuses and schedule changes that recently prompted an angry message from the company's chief executive. [Wall Street Journal]

**Microsoft takes on IBM for title of patent leader**  
BM-Cates says Microsoft plans to step up patent filings as part of a plan to achieve growth through developing software innovations. [Computer Reseller News]

**IBM now plans fewer layoffs from offshoring**  
IBM's new internal-transfer policies are aimed at filling more open positions with employees who would otherwise get a pink slip. [Wall Street Journal]

**What's new** [Edit](#) [-](#) [?](#)

Currently, there are no new items

**Search** [Edit](#) [-](#) [?](#)

**BluePages**

☒ Name only (smith, jo\*)  
☐ Entire profile ("grid computing")

[GO](#) [Advanced search](#)

**Other searches**

☒ w3 intranet  
☐ IBM discussion forums  
☐ IBM news articles  
☐ ibm.com Internet

[GO](#) [Advanced search](#)

**Market report** [Edit](#) [-](#) [?](#)

Quoted at 4:04 PM, EDT on 30 Jul. [Refresh](#)

Symbol	Current	+/-
IBM	87.07	+0.30
BEAS	6.49	-0.04
CSCO	20.92	+0.12
INTC	24.38	+0.13
MSFT	28.49	+0.01
ORCL	10.51	+0.13
SAP	40.01	+0.11
SUNW	3.95	+0.16

**Indices**

Index	Last
DOWJONES	10,139.71
NASDAQ	1,887.36

[View full market report](#)  
[Go to the scorecard home page](#)

**On Demand** [Edit](#) [-](#) [?](#)

**On Demand the new agenda**

[Look out for 'ON'!](#)  
IBM's 'On Demand Business' campaign launches across Asia Pacific.

- Combines application user interfaces together into one unified presentation
- User registration
- Authentication and Authorization
- Pluggable portal components: Portlets
- Personalization based on profiles
- Customization of pages by users
- Search
- Content Management
- Administrators can either lock or open up areas of the page for end users to customize

# Themes and Skins

- Portal user interfaces are rebrandable by design: *Themes* and *Skins*
- Themes and skins control every element of how the page looks: colors, fonts, spacing, images, navigation, rows, columns, and portlets
- Themes and skins can be applied to any group of pages, any time
- Themes do most of the hard work for cross-browser support and accessibility e.g. through braille readers

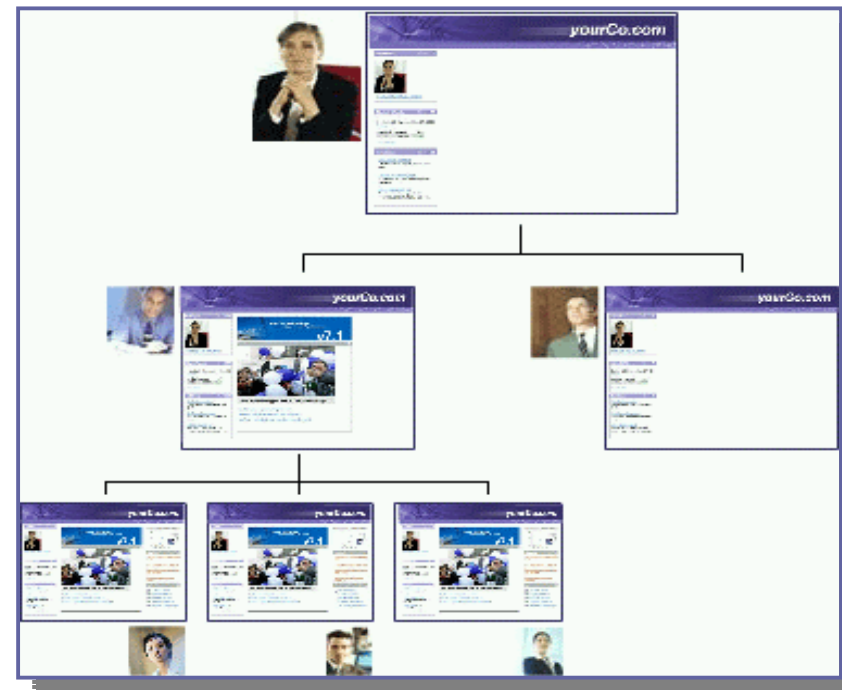


→ *You can fully customize the entire appearance and look and feel of the portal to your specific needs using custom themes and skins*

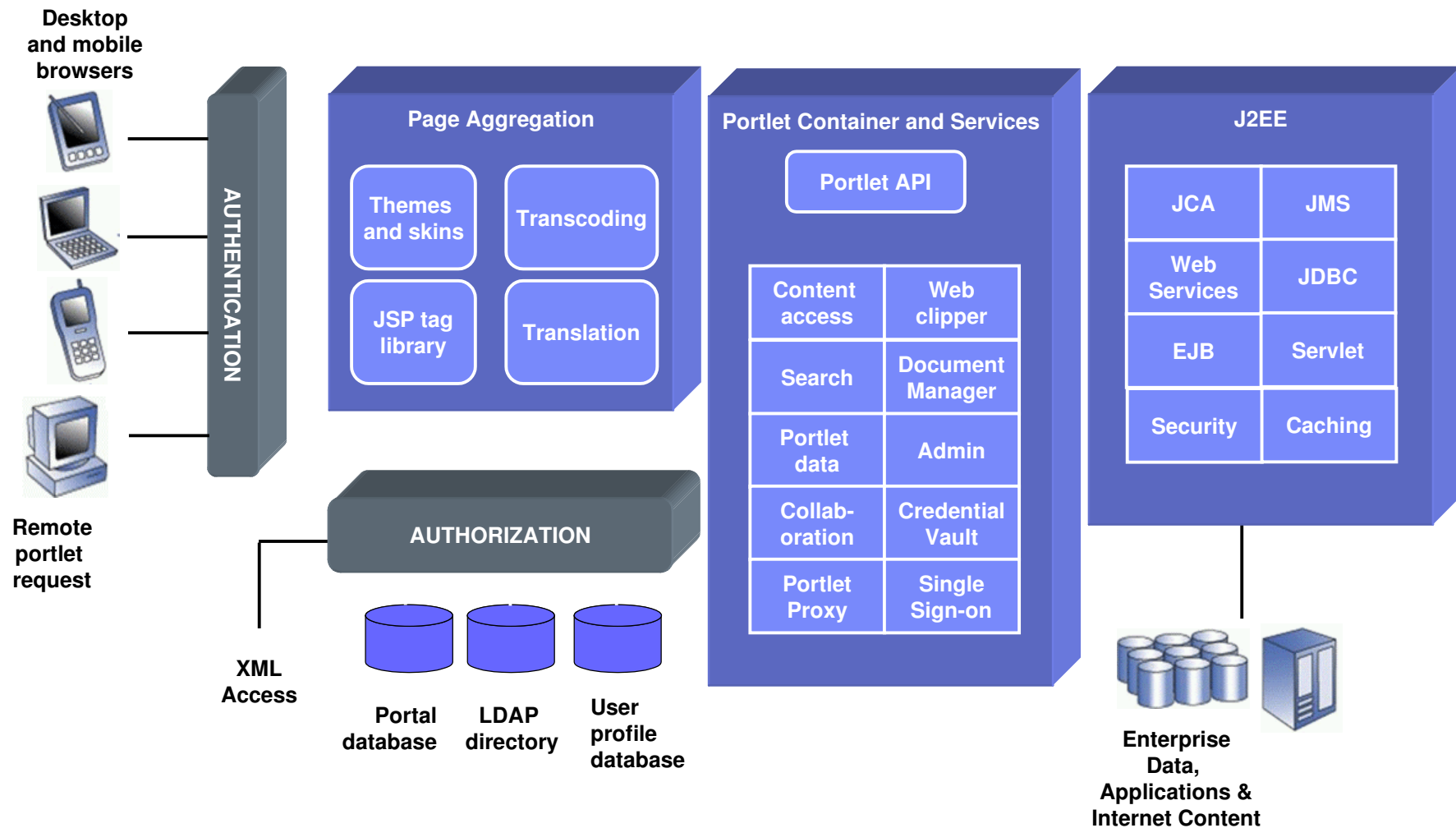


# Cascading Page Definitions

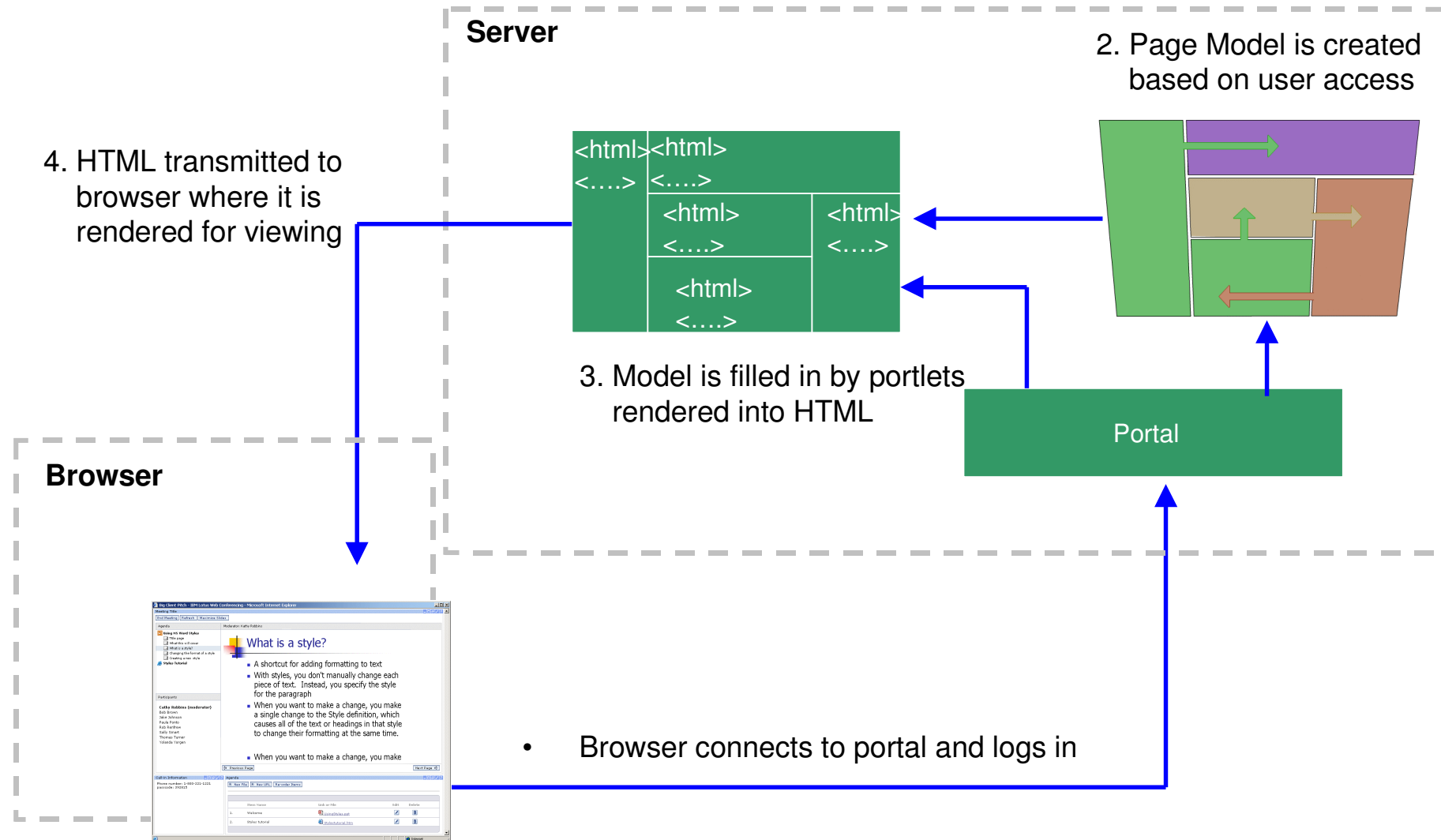
- Different administrators control different areas of the page
  - ▶ They can lock areas to prevent others from making changes
  - ▶ They can also delegate responsibility for certain areas to others
- The end user sees the aggregated result
- Future changes are propagated
- Helps organizations enforce policies and consistency, and create region specific portals with some centrally managed content



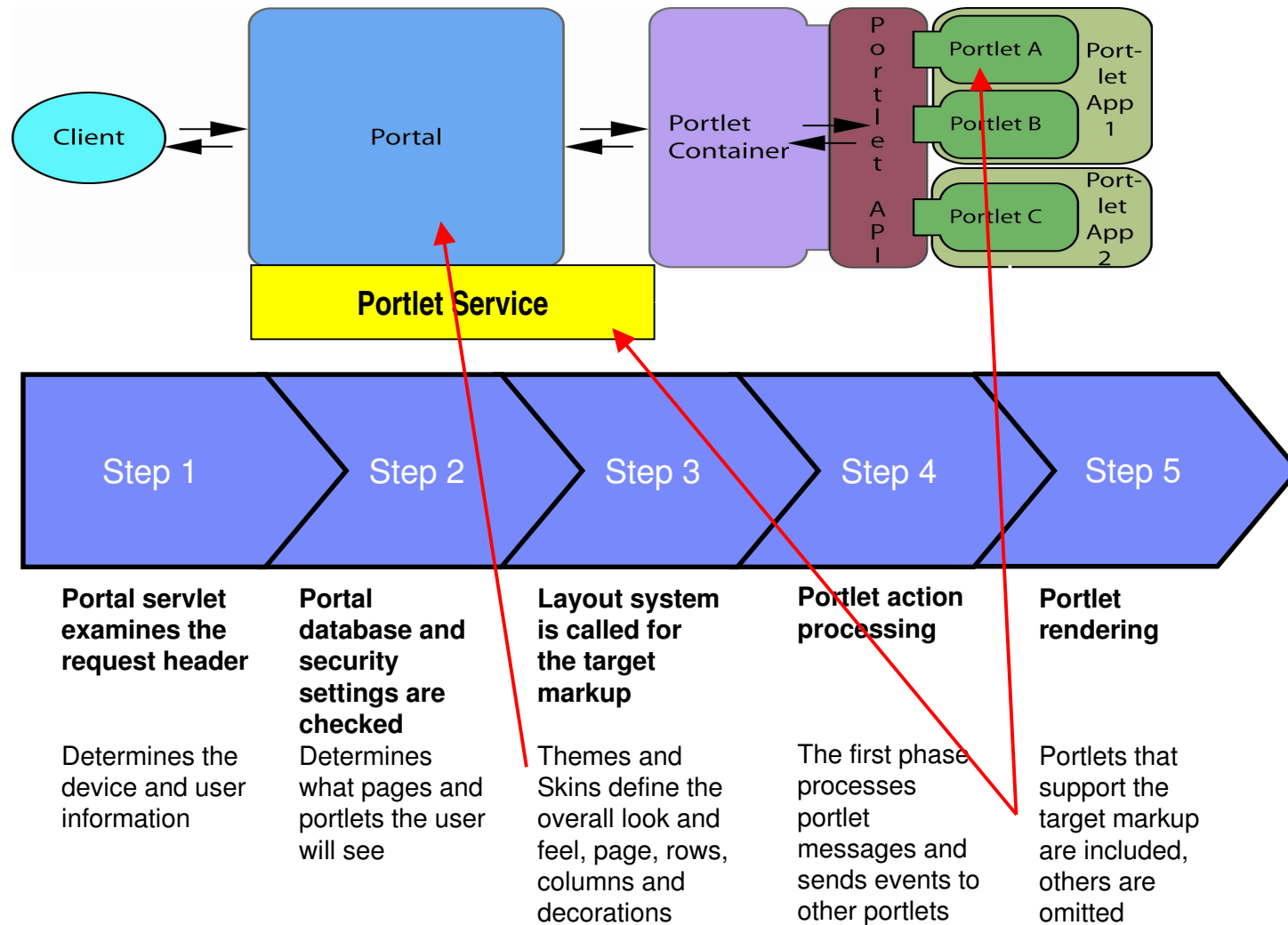
# WebSphere Portal Server – High-level Architecture



# Building a Page –HTML Browser



# Portal plug-points



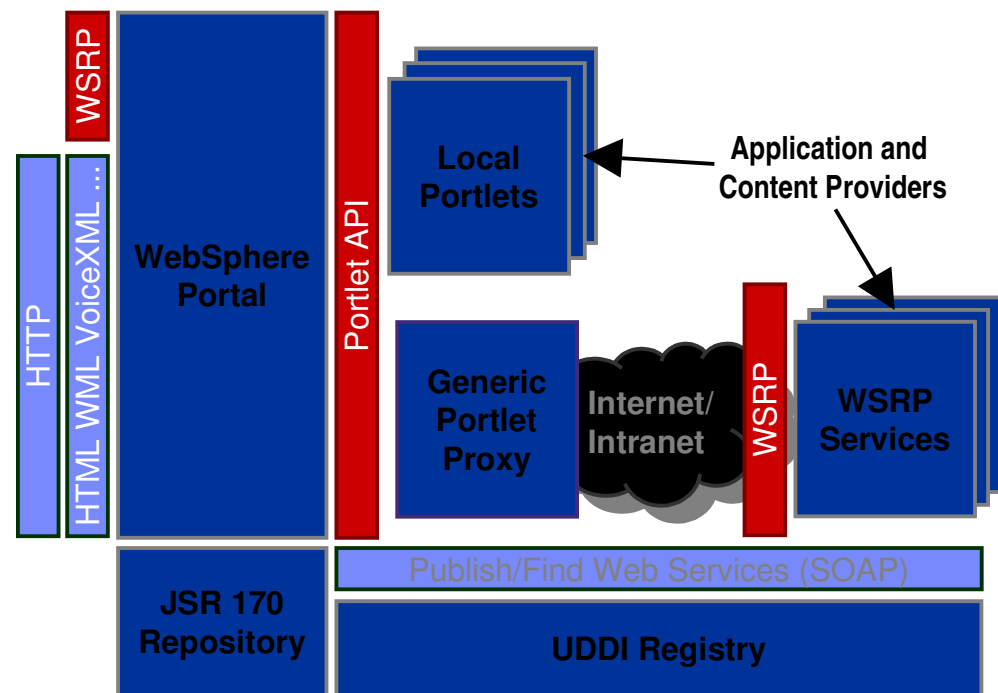


# Key Portal Standards

The Java Portlet API (JSR 168) defines the API for local portlets, Spec Leads: IBM and Sun see <http://jcp.org/jsr/detail/168.jsp>

WSRP (Web Services for Remote Portlets) deals with visual web services in portals, IBM provides Chairman and Spec Editor, for more information see <http://oasis-open.org/committees/wsrp/>

JSR 170 defines a common interface for access to content management systems.





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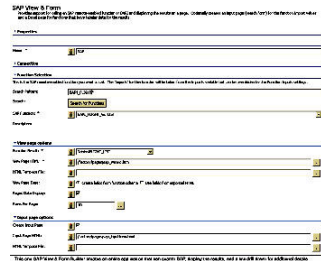
# Development Tools for IBM Workplace



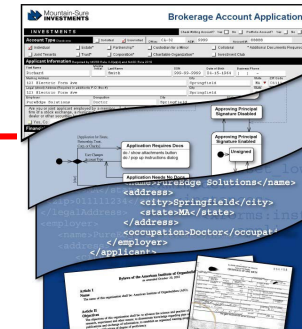
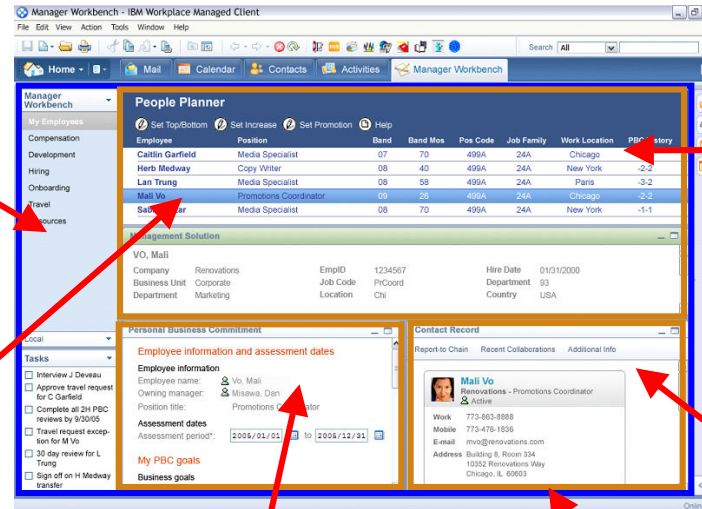
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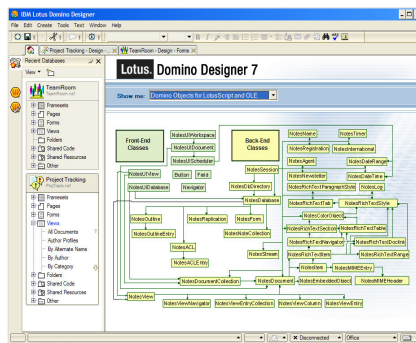
# Tools for Workplace Development



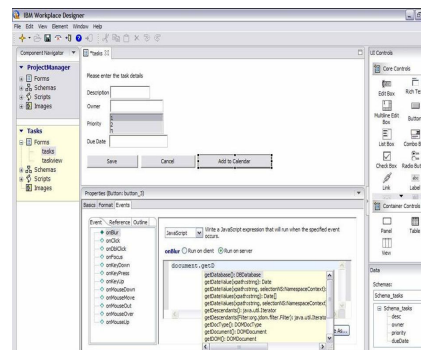
**Composite built with  
Bowstreet Factory**



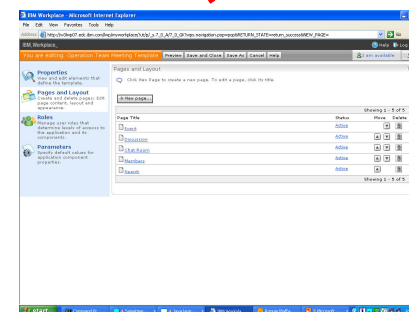
**E-form built with  
Workplace Forms  
Designer**



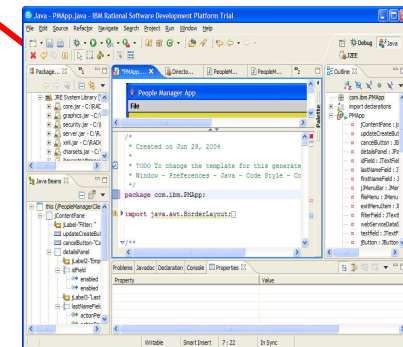
**Notes app built with  
Domino Designer**



**Collaborative app built with  
Workplace Designer**



**Template built with  
Workplace Builder**

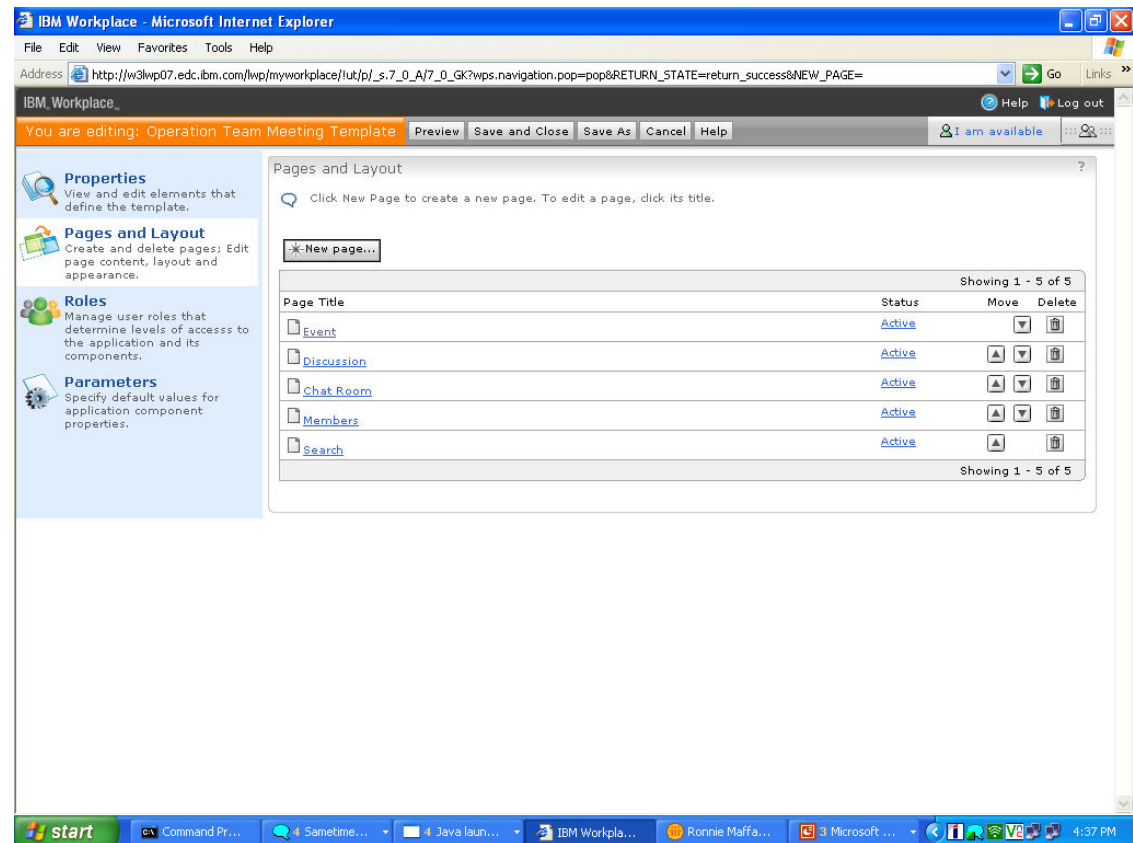


**Eclipse component  
built with  
Rational RAD**



# Workplace Builder

- Customize and create new Workplaces, templates or forms for specific business purposes
- Self-service tool designed for business users to:
  - ▶ easily work with the Workplace templates included with a specific product
  - ▶ assign access controls
  - ▶ create new forms
  - ▶ ...without having to rely on IT



# Bowstreet Portlet Factory for WebSphere

...ability to  
create new  
records...

...with a resu  
page, drill do  
to details...

...wizard-driven  
component  
creates a robust,  
multi-page  
portlet...

All without writing  
any Java code!

**Expense Report 64MPWP for Jerry Douglas (Submitted)**

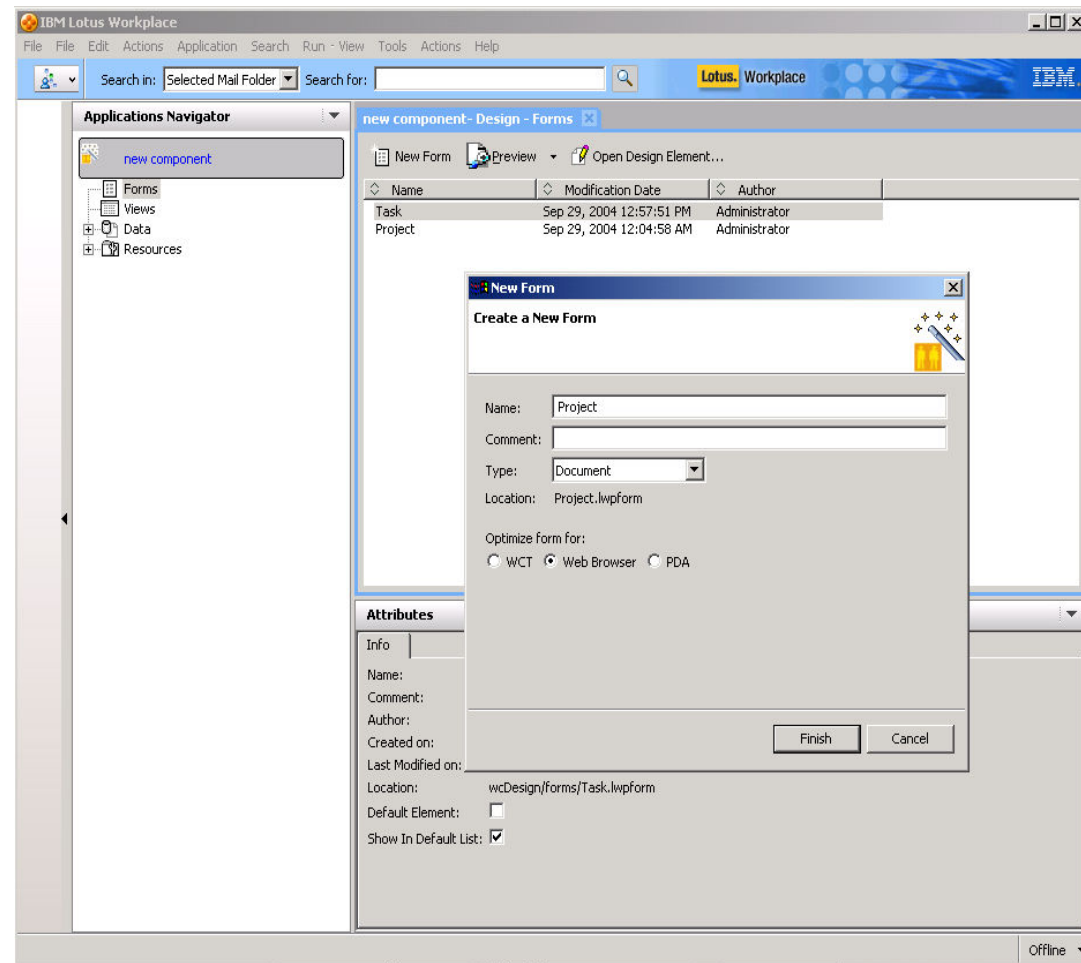
**Submitter:** Jerry Douglas/Users/Wilmachek **Report ID:** 64MPWP  
**Approver:** Bela Fleck/Users/Wilmachek **Status:** Submitted  
**Project:** Live Art **Task:** Tour  
**Created:** 09/08/2004 **Modified:** 02/28/2005  
**Description:** Project in Denver

Date	Category	Comment	Billable	Amount
05/23/1995	Other/Other	Instrument maintenance		250
05/02/1995	Airfare/Employee Paid	Airfare to Denver		339.45
<b>Total:</b>				<b>589.45</b>

**Buttons:** Back to View, Delete, Edit, Cancel Edit, Save Changes

# Workplace Designer

- Easy-to-use:
  - ▶ Visual development of applications and components
    - Forms, views, scripts, etc.
    - Components that Builder can assemble
- Provide path for Domino Designer and Visual Basic skilled developers
- Provide flexible path to Rational tools
  - ▶ Users can move easily to Rational tools from Designer, if desired
- Create components to render to multiple targets
  - ▶ Browser or Workplace Client

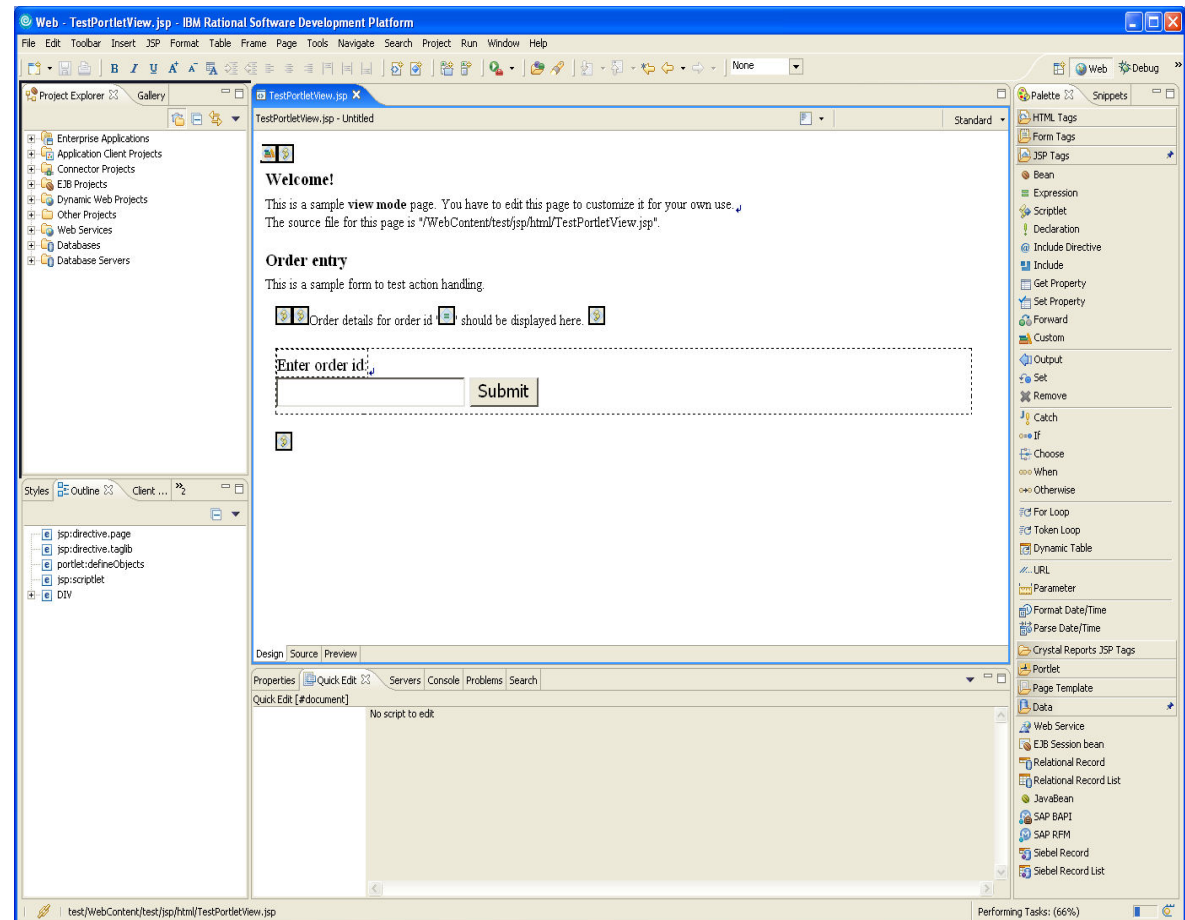




# Rational Application Developer

- Current version 6.0.1 with support for portal application development

- ▶ Struts and JSF Portlet creation
  - Support of the JWL JSF widget library with client side capabilities
- ▶ Support major portlet programming model - Click-to-Action, People Awareness, Portlet Messaging
- ▶ Standard Support for Portlet - JSR 168 Portlet APIs
- ▶ Portal page and site design
- ▶ Business portlet creation
- ▶ ...and more!



# Summary

- IBM Workplace Technology
  - ▶ IBM WebSphere Application Server provides a scalable J2EE environment for use by Portal
  - ▶ WebSphere Portal provides the runtime environment for IBM Workplace
  - ▶ IBM Workplace provides applications and rich collaborative APIs to end users and programmers
- WebSphere Portal
  - ▶ WebSphere Portal offers application aggregation and a customized user experience
  - ▶ The look and feel of portal page can be customized via Themes and Skins
  - ▶ The content of portal pages can be customized via portlets.
- Development Tools
  - ▶ There is a wide assortment of development tools for IBM Workplace products
  - ▶ Workplace Builder allows business users to create applications through visual programming
  - ▶ Workplace Designer supports scripting and visual programming to create components
  - ▶ Rational Application Designer provides support for portlet programming and more







- Please use this information to contact me:
- Scott Nicklous
- email [nick@de.ibm.com](mailto:nick@de.ibm.com)



## More Information

### Useful Links and Resources

**[www.software.ibm.com/websphere](http://www.software.ibm.com/websphere)**

- WebSphere Portal product information
- Latest Info Center
- White Papers

**[www.redbooks.ibm.com](http://www.redbooks.ibm.com)**

- In-depth, how-to books

**[www7b.software.ibm.com/wsdd](http://www7b.software.ibm.com/wsdd)**

- WebSphere Developer's Domain
- Best practices for WebSphere applications

**[www.ibm.com/developerworks](http://www.ibm.com/developerworks)**

- Technical information written by developers for developers
- Over 80 technical articles about portal alone

**[www.sys-con.com/websphere](http://www.sys-con.com/websphere)**

- Monthly technical journal about WebSphere

