

Lotusphere2012

Business. Made Social.

Creating an Exceptional Web Experience - A Technical Journey

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Agenda

- Basics & Business Benefits of WebSphere Portal
- WebSphere Portal Architecture
- WebSphere Portal Administration and Security
- Web Content Management
- Integration and Portal Features
- Portlet Development
- Delivering to Mobile Audiences
- Additional Information and Resources
- Summary



WebSphere Portal: Proven Entry Point For Exceptional Web Experiences



Portals provide a single point of personalized interaction with people, content, processes & applications, in context of the user

Deliver Exceptional User Experiences

- Differentiate yourself to your customers
- Drive revenue and loyalty with your partners
- Enable productive and efficient employee web interactions

Significantly Reduce Costs

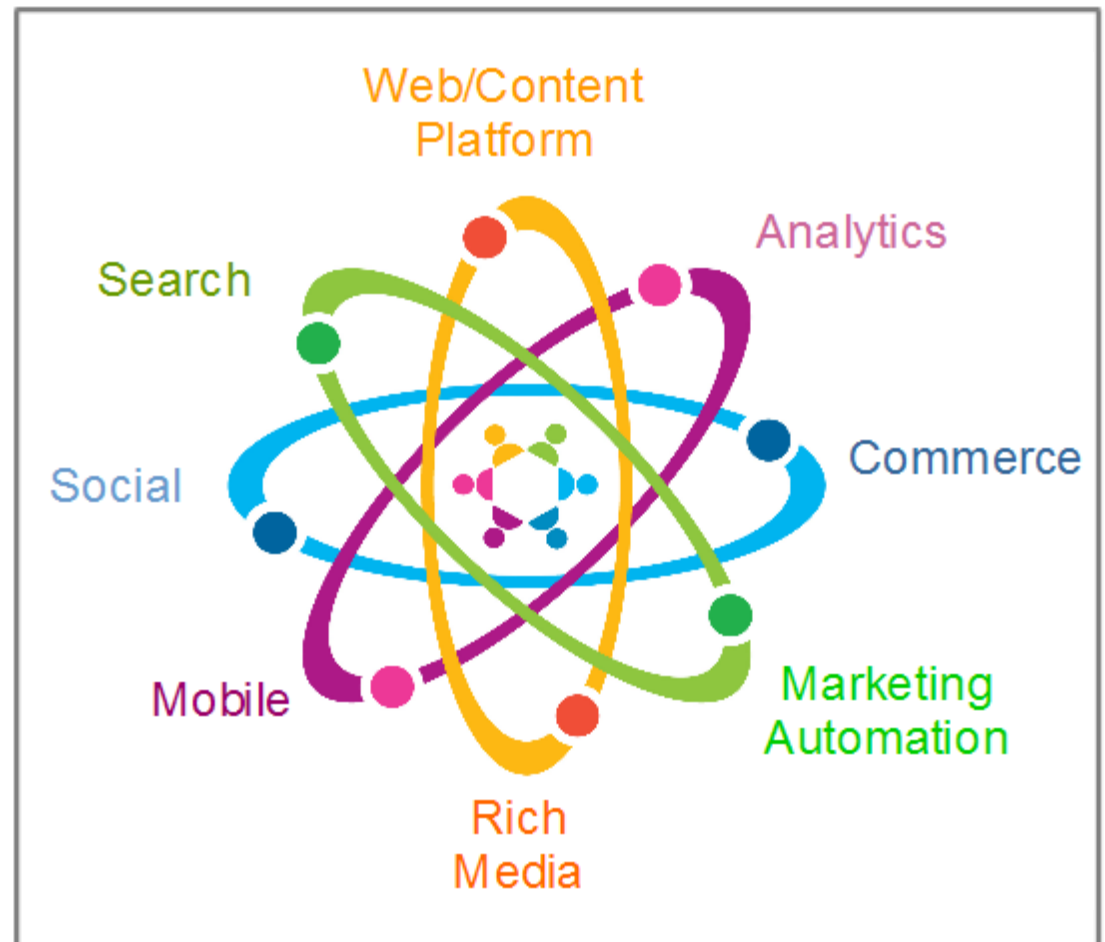
- Up to 50% in labor and other savings



IBM's Exceptional Web Experience Strategy

Helping You Create Differentiated, Engaging Online Experiences

- **Integrated** – Speed time to market with a core platform
- **Open** – Leverage & extend existing data sources through robust integration capabilities
- **Social** – Drive innovation & improve collaboration thru socially-infused experiences
- **Instrumented** – Support evidence-based decision making through analytics
- **Contextual** – Increase customer satisfaction by with experiences tailored to a user's location, attributes, preferences, device, behaviors.
- **Flexible** – adapt to handle the latest advancements + technology changes

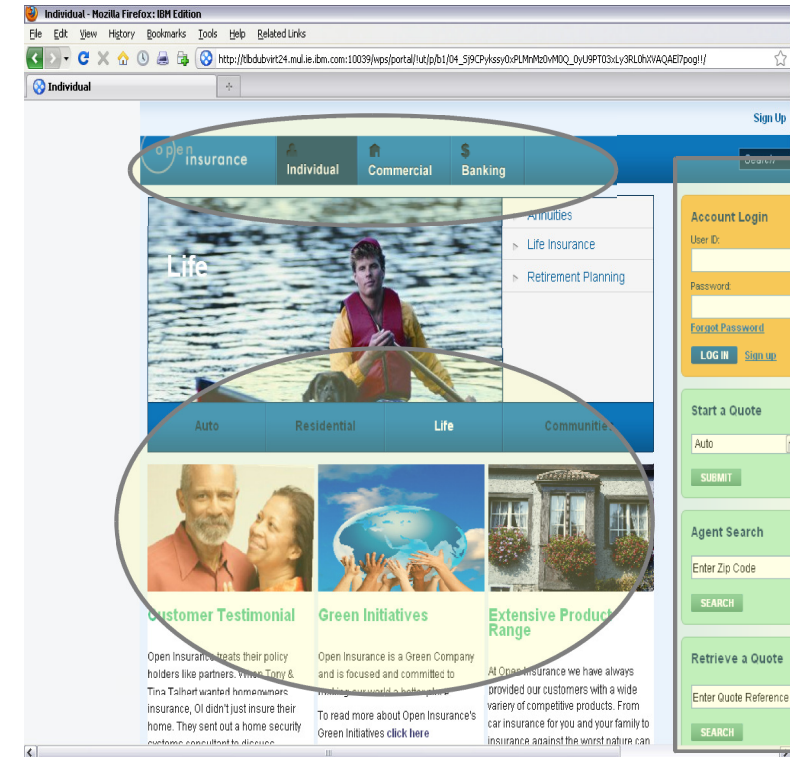


Our vision is to help you realize the “art of the possible” for engaging your customers on the web



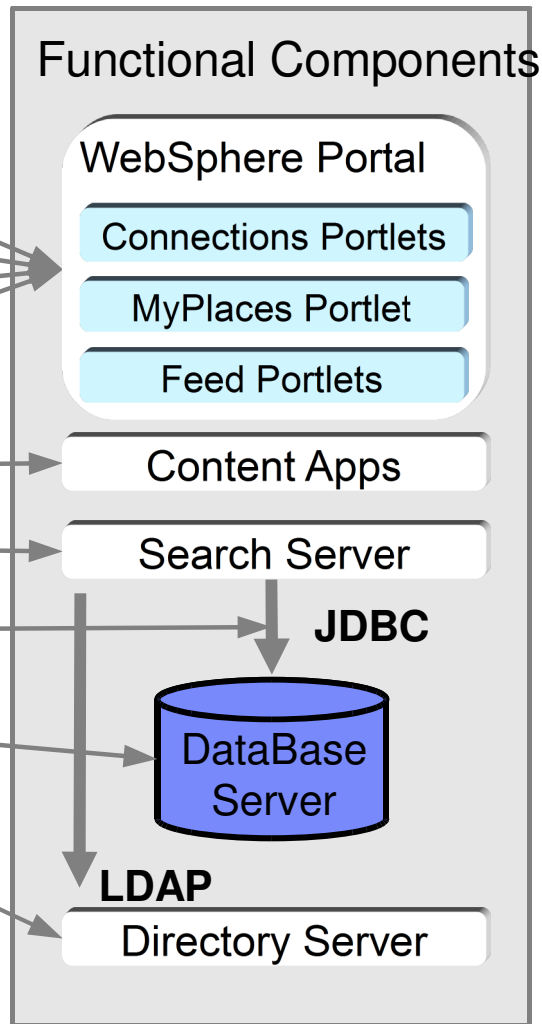
Business and Operational Advantages of WebSphere Portal

| Activity | Traditional Web Application | WebSphere Portal Application |
|--|---|--|
| Application Look and Feel | Developed by the developer for each application (often externalized into style sheets) | Portal Themes, Skins and Page Configuration capabilities free the developer from this task |
| Application Navigation | Developed by the developer for each page (often applied inconsistently across applications) | Page configuration frees the developer from this task |
| Personalization | Developed by the developer for each page (often applied inconsistently across applications) | Personalization services, and context aware social page optimizations provides this across applications and frees the developer from this task |
| Business Process Flows | Developed by the developer and often has limited capability | Business Process Universal Task list portlets provide role based delivery of human facing workflow driven processes |
| Reuse | Application code is generally not easily extractable and reusable | Portlets stored/reused out of the organization's or IBM's 'portlet catalog' repository on Lotus Greenhuose |
| Mobile | Different device displays may need to be coded | Portal provides mobile themes, Smart phone builders, and mobile accelerators supporting and simplifying interactions with a broad range of mobile and kiosk mobile devices |
| Content Management | Content Management integration is developed by the developer (often using vendor's API) | IBM Web Content Manager provides out of box content templates, portlets and web design assets |
| Incremental Functionality Development; Testing & Deployment | Typically there is no clean separation of the existing code and the new enhancements added and can cause complete end-to-end testing and deployment | Isolation at the Portlets/Applications is supported |

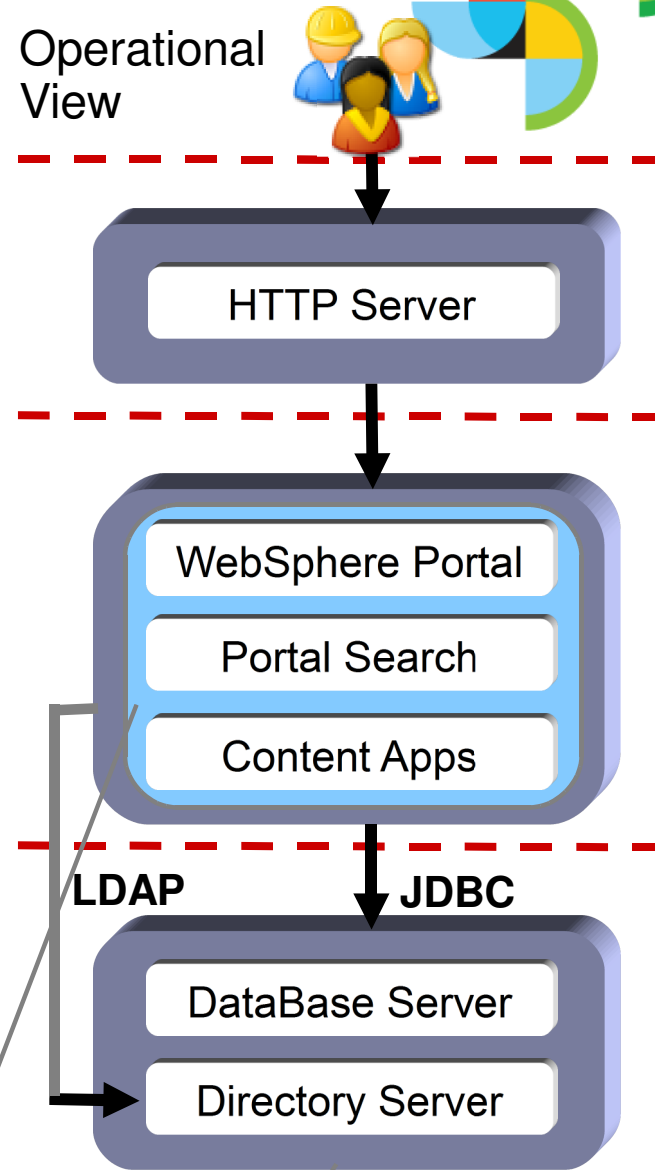


Core Functional Building Blocks

- Authentication
- Authorization
- Aggregation
- Runtime
- Web Content Management
- Search
- J2EE Services
- Storage
- User Repository
- Backends



Operational View

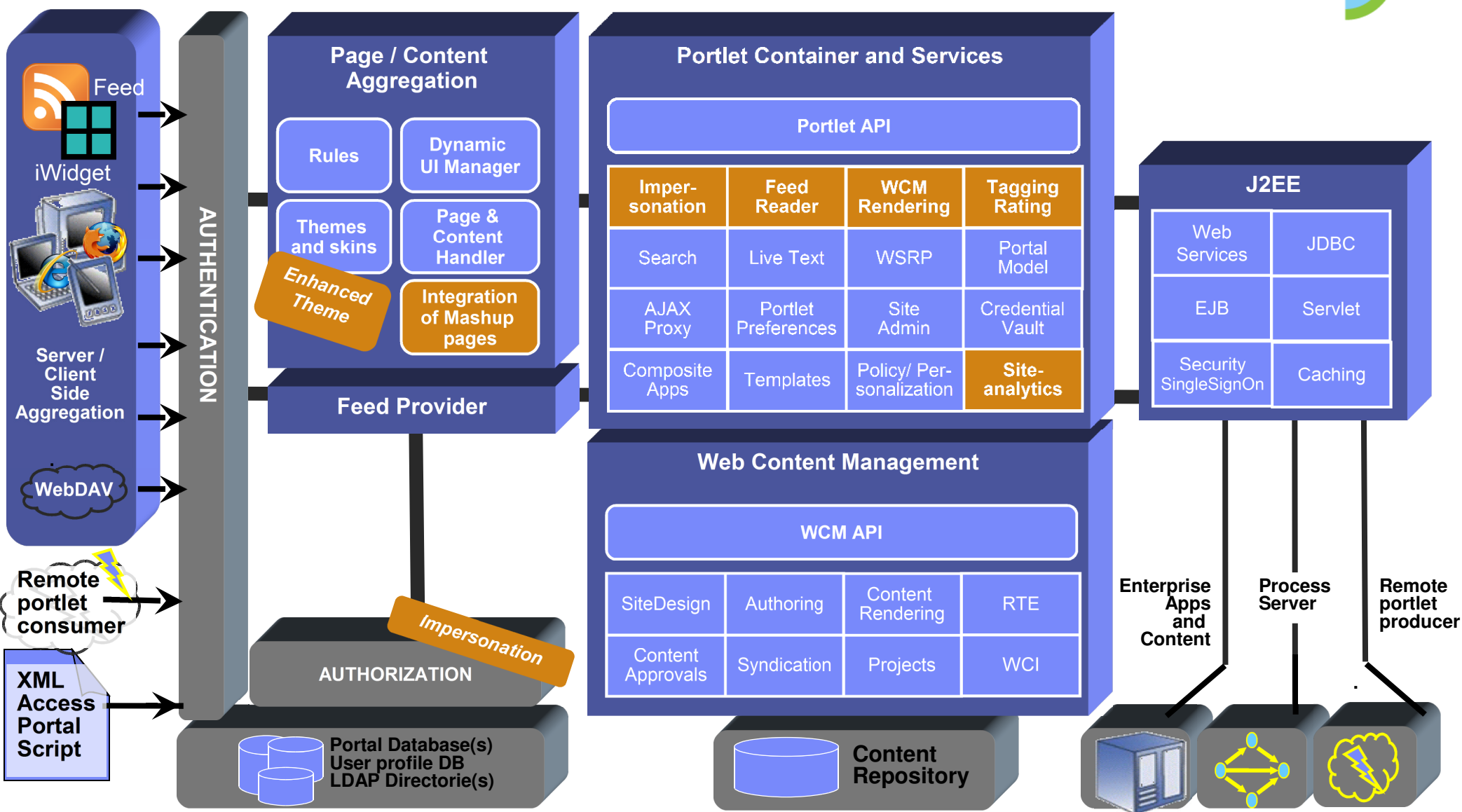


A JVM on a WebSphere Node

Hardware and OS Abstraction

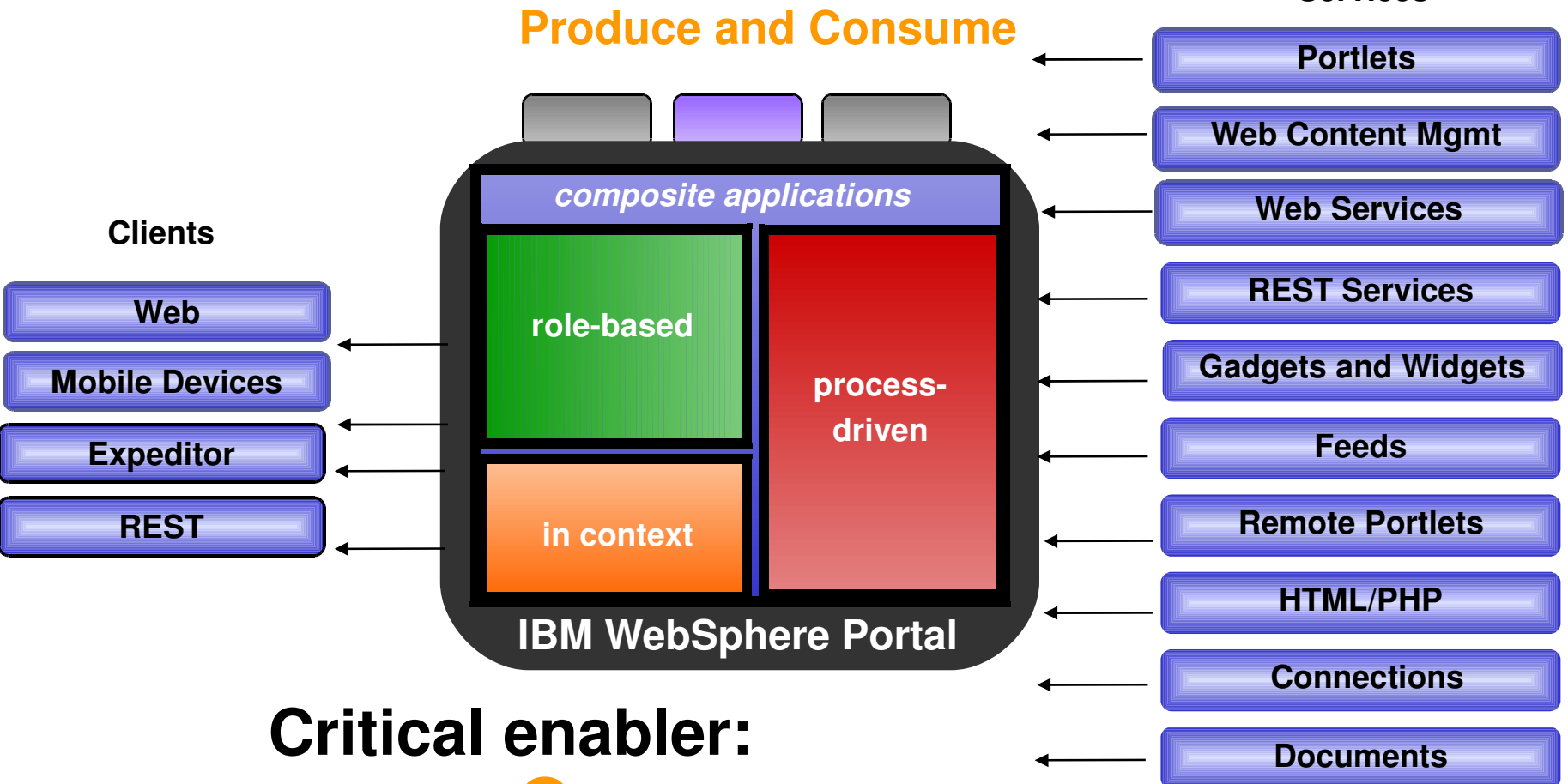


Architectural Updates for WebSphere Portal 7





WebSphere Portal is the 'front end' of Service Oriented Architectures



Critical enabler:
Openness

– Standards based access to integration and innovation



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Building the Site



1.

The screenshot shows the top navigation bar of the WebSphere Portal with the 'Actions' menu open. The menu items are: Edit, Edit Page, Edit Page Properties, Tagging and Rating, Rate, Tag, Browse Tags, Sharing, Assign Page Permissions, Add Shared Pages, Page, New Child Page, Move Page, Delete Page, and Refresh Page. The 'New Child Page' option is highlighted with a red box and labeled '2.'. The main content area shows a 'Welcome to IBM WebSphere Portal' message and a 'Quickly create, customize and share pages' section with numbered instructions 1 and 2.

- Use admin portlets to define pages and subpages
- And define who can see what
- And to define the layout of each page

1. Click Actions > Edit Page > New Page to add tabbed navigation. Enter a name for your page that reflects the content that you plan to place on this page. Drag and drop the new page into place. Build nested navigation this way.

2. Click Actions > Edit Page > Create Page to add content to the page. Click Add Content. Select a category and click Create to add content to the page. Click Change Style. Select a color that you want to use for the content. Click Change Layout. Select the layout of the content that you want to be arranged. For example, you can select a layout that displays content in a list. Save your changes.

3. Click Actions > Share Page to share the page. You can share your page with multiple people. Type the names of team members into the search field and click the search icon. Drag the names from the Search Results column into one of the Share icons.

When you have a page, you can use the Site wizard to quickly deploy a new page. You can easily customize the page content and click interface. Customization includes branding the site with your theme, adding color schemes, and customizing header content.

2 Create Page

3 Page name: Page Builder Page

Friendly URL Name: Page-Builder-Page

4 Make this my private page

5 Create Page Cancel

The screenshot shows the 'Add feed to page' dialog box. The 'Title' field contains 'My IBM Portal Feed' and the 'URL' field contains 'http://www-947.ibm.com/systems/support/myfeed/xmfeeder.wss?'. The 'Add' button is highlighted with a red box. The background shows the 'Page Builder Page' interface with various content portlets like 'Blog', 'Wiki', and 'Feed'.





Portal Security

- **User profiles** are managed through Virtual Member Manager; stores user data in LDAP + DB
- **Authentication** is forms-based, through WebSphere Security and 3rd party proxy servers and support for Java 2 Security.
- Built-in **Authorization** system protects portal resources including pages and portlets
- **Single Sign-on** services include a credential vault and persistent back-end connections

The screenshot displays the WebSphere Portal Administration interface. The top navigation bar includes 'WebSphere Portal', 'Home', 'Administration' (highlighted with a red box), 'Applications', 'Search Center', and 'More...'. The left sidebar shows a tree view with 'Administration' expanded, containing 'Welcome', 'Portal User Interface', 'Portlet Management', and 'Access'. The 'Access' section is further expanded to show 'Users and Groups' (highlighted with a red box). The main content area is titled 'Manage Users and Groups' and includes a search section with a dropdown menu set to 'User groups', a 'Search by' dropdown set to 'All available', and a 'Search' button. Below this, there are two buttons: '* New Group' and '* New User' (both highlighted with red boxes). A table below shows a list of user groups with columns for 'ID' and 'Name', containing entries for 'All Portal User Groups' and 'All Authenticated Portal Users'. On the right side, a 'Profile Management' dialog box is open, titled 'New user enrollment. Provide the information requested below and click OK. Click Cancel if...'. It contains several input fields: 'User ID' (with 'user1' entered), 'Password' (masked with dots), 'Confirm Password' (masked with dots), 'First Name' (with 'Our' entered), 'Last Name' (with 'User1' entered), and 'Email' (empty). A 'Preferred language' dropdown is set to '- Nothing Selected -'. At the bottom of the dialog are 'OK' and 'Cancel' buttons.



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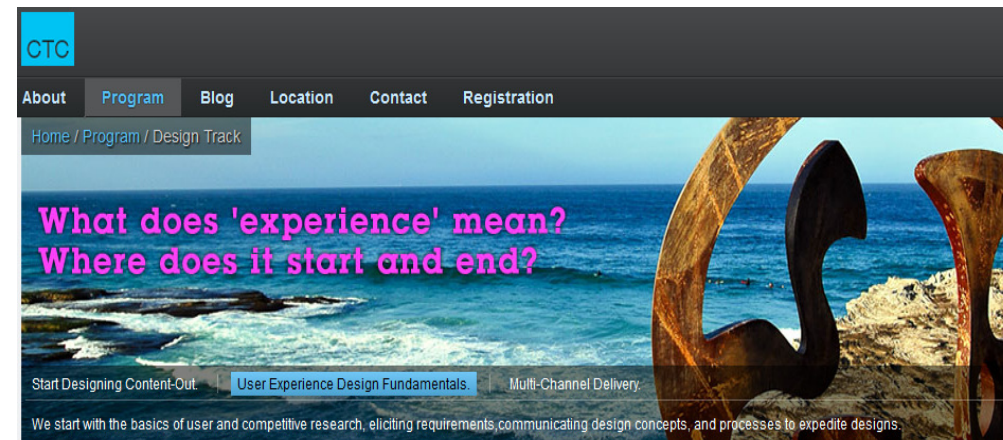
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IBM Web Content Manager (WCM)

IBM Web Content Manager™ is a powerful and sophisticated browser-based application designed to accelerate the creation, maintenance and delivery of critical business content across intranet, extranet, internet and portal sites.

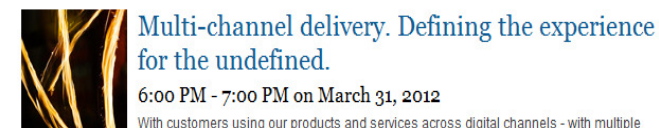
- Allows **business users** of all skill levels to author and submit content
- Enables **rapid** development of sites through **reusable**, out of the box components and templates
- **Separates content from presentation** allowing authors to create content and webmasters to maintain control
- Improves customer experiences through **dynamic content delivery** and a high level of **personalization** to the web user



Design Track

We've been able to bring some of the most influential interaction designers together in order to inspire you, lead you through the latest design strategies and answer the challenges that you're facing designing today's engaging web experiences.

| | | | |
|----------------------|------------|------------|---------------------------------------|
| Search for: | From: | To: | Search |
| <input type="text"/> | 10/18/2011 | 10/18/2012 | <input type="button" value="Search"/> |



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Web Content Manager Capabilities

Author



Text, Documents, Audio, Video
 Blogs, Wikis, Comments, Tags,
 Managed Links, Metadata.
 Multilingual Content, Inline editing,
 Preview, Versioning

Slash Time-To-Market and
 Reduce Cost

Generate



Dynamic Content Publishing and
 Expiration
 Mobile Delivery
 Reuse content & components
 Feeds

Design



Website Templates
 Micro-sites
 Blogs/Wikis Templates
 Industry Templates
 Theme customizer
 Content Templates



Content



Integration with document & ECM software
 Import from Microsoft Word ®
 Ingest directly from external repositories
 Content retention and archival

Collaboration



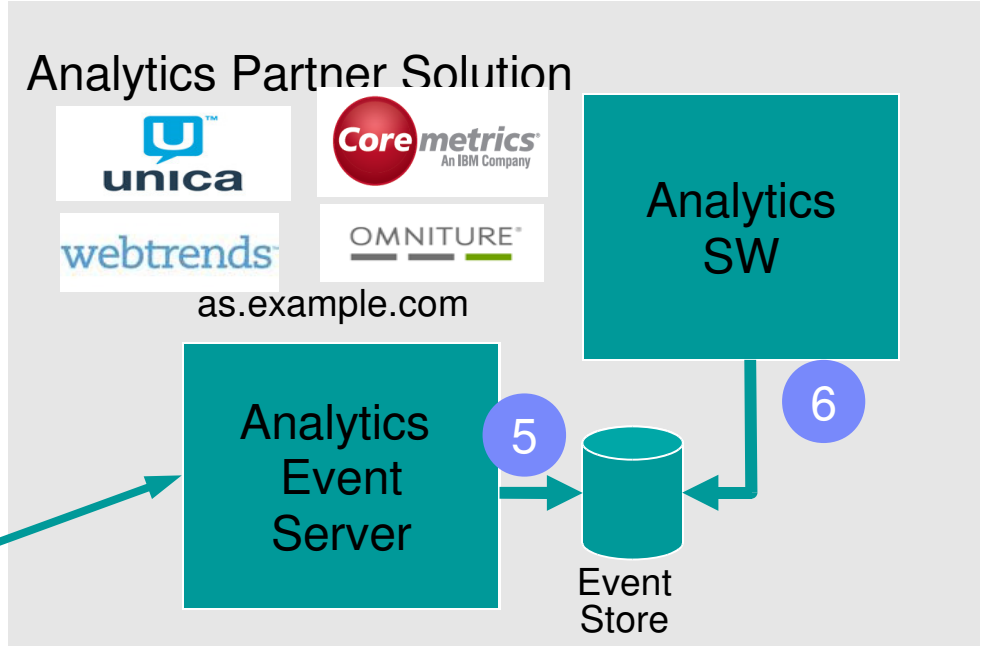
Parallel Workflows (approval,
 notification, tasks)
 Audit Trails
 Track changes & comments
 Integration with Lotus Sametime,
 IBM Connections



WebSphere Portal - Active Site Analytics

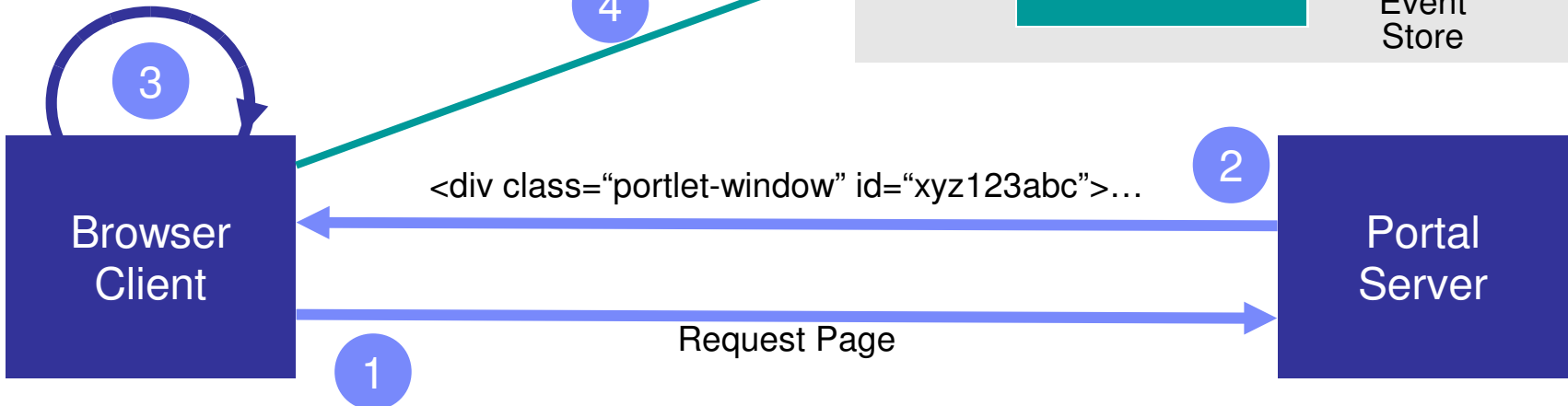
Captures web portal usage data to a comprehensive record of visitor interactions

- 1. Client requests portal page
- 2. Portal returns page markup including metadata markup (in a custom microformat)
- 3. Client aggregates metadata using JavaScript snippet
- 4. Client sends aggregate to analytics server (e.g. via HTTP GET)
- 5. Analytics server writes access log
- 6. **3rd party analytics package** analyses event data



GET /portlet?id=xyz123abc&...

Aggregation





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Integrating Systems and IT Landscape

How to exchange Information between IT Infrastructure and Portal's User Front End

- **Consume open standards**
 - Feeds/REST
 - Webservices
 - JSR 286 Portlets, WSRP 2.0
- **Apply Integration/“Bridging“ solutions**
 - Webclipping
 - iFrame
 - Web Application Integration
 - (Virtual) Web Application Bridge
 - Federated Navigation
 - Web Content Integrator
- **Understand and use proprietary/native interfaces**
 - Portlet development
 - EJBs
 - Web Experience Factory Builders
 - ...



A "Social Web Site" or "Social Portal" is...

a Web Site that seamlessly and contextually integrates people and social content

Social Web Sites speed integration & facilitate contextual collaboration... providing the foundation for a **Social Business**



Microsoft Sharepoint Integration

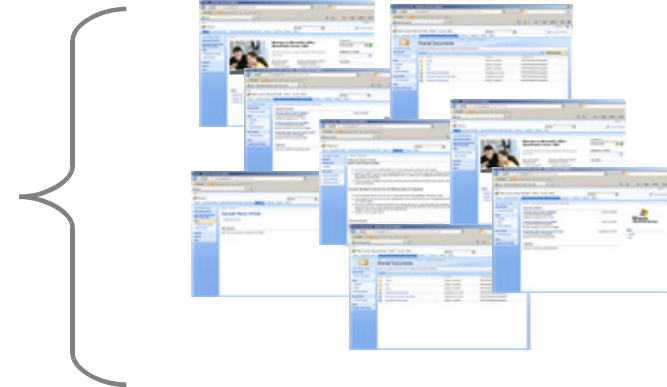
- Discover SharePoint servers using the new Omnifind crawler now entitled as a feature of Portal 7.0
- Access SharePoint sites and teamrooms through an IBM Portal interface using the new Web Application Bridge, with a simplified configuration process*
- Single Sign-On: IBM Portlet for Exchange supports Microsoft Exchange 2010 for Mail and Calendar functions leveraging new Exchange Web Services.
- Access SharePoint 2010 documents or services through
 - CMIS interface in IBM Web Content Manager 8.0 beta
 - New CMIS builders in Web Experience Factory 7.0.1
- New sample RAD application showcasing easy SharePoint integration

http://www.yourcompany.com/wps

The screenshot displays an IBM Portal interface with a sidebar on the left containing navigation links like 'Microsoft SharePoint 2007 Team Site: Announcements', 'Tasks', 'Links', 'Calendar', 'Home Expense', 'Discussions', 'Team Discussion', 'Wiki', and 'Recycle Bin'. The main content area shows a 'Microsoft SharePoint 2007 Team Site' with sections for 'Announcements', 'Tasks', 'Links', 'Discussions', and 'Wiki'. A 'Portlet Factory Wiki' portlet is visible on the right, displaying a table of sales orders. A server icon labeled 'Office SharePoint Server 2007' is positioned to the right of the main content area.

* Supports SharePoint 2007 today, with 2010 to follow

Custom Apps or Sharepoint Document Library





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Rational Application Developer & Web Experience Factory ***

For developers who create portlet applications using wizard driven tools



For developers who need complete access and control of all portlet, portal and other application code



Web Experience Factory*

- Model-driven portlet development and customization
- Wizard-driven tools that automate rapid portlet creation via reusable, automation components called Builders
- Dynamic profiling – Runtime instances of multiple portlet variations from a single code base

Rational Application Developer

- Rapid portlet creation
- Connectivity to SAP, Seibel, Peoplesoft, Domino, etc.
- Rapid development and deployment to WebSphere Portal
- All-inclusive environment for portlet, portal, and full Java and J2EE application development, debugging, testing and deployment
- Visual tools to hand-craft portlets and portal pages and Web apps using JavaServer Faces framework
- Portal site development with visual layout, theme/skin editing
- Create WPF Builders

The recommended scenario is to use RAD and Portlet Factory together to form comprehensive portal solutions. Portlets created in RAD can be combined with portlets created with Portlet Factory to form complete portal solutions that are integrated, tested and deployed using RAD.

*** *WebSphere Portlet Factory is renamed to **Web Experience Factory** June 2011 with Web Experience Factory 7.0.1 release*



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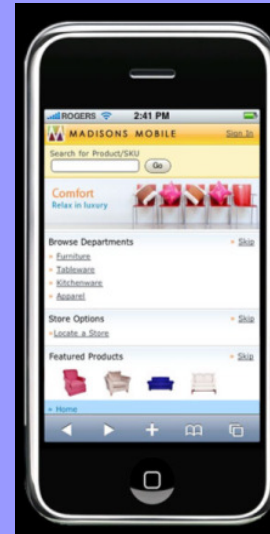
Delivering to Mobile Audiences

Reach Portal audiences Across Multiple Channels – Mobile, Web, Kiosk ...



- Utilize WebSphere Portal built-in support for **client detection** to return the appropriate pages and content depending upon the device
- **Leverage one common theme** to deliver content through the browser to desktop + mobile
- **Leverage out-of-the-box Web Experience Factory/Portlet Factory tooling** to create a single application that can support both smartphones and full-sized desktop browsers.

- Use the Mobile Portal Accelerator to **dynamically adapt content** to the unique display characteristics of over 8400 different mobile device types, including smartphones



Role based personalized delivery of key services, content and promotions to mobile devices and kiosks

Easily extend Portal and WCM content and services to mobile users





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In Review...

- WebSphere Portal provides a framework for helping organizations create [web sites/ web presence](#):
 - Role based navigation
 - UI composition, context sharing, state and preferences
 - Content creation, management, integration, and targeting
 - Web analytics, Personalization and Targeting of content
 - Mobile site support
 - Social integration, process and application integration, search integration...
- More [self service](#), huge [cost savings](#), huge [user satisfaction](#) improvement
- Organizations make significant investments in applications, content and services. WebSphere Portal can help make all of that available, in an understandable and approachable way, to [customer, employee, citizen and/or partner audiences](#) so that they can help themselves [7x24](#), from their [preferred device](#) and in their [preferred language](#).
- Frees IT professionals to focus on Infrastructure management tasks

Resources



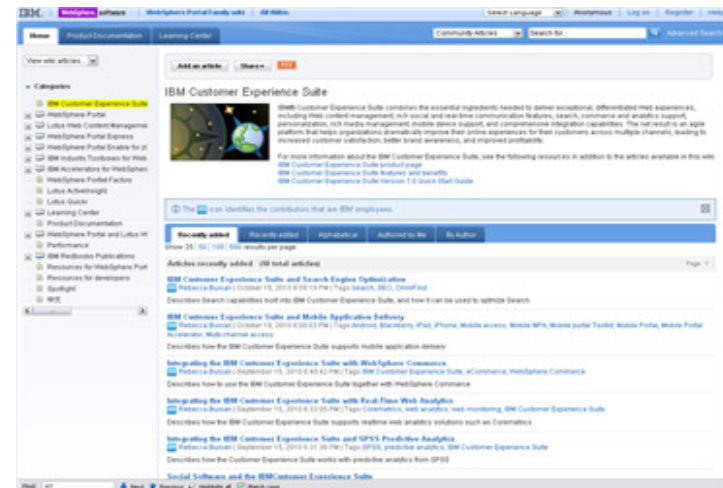
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Integration Whitepapers

