

IBM Software Group I IBM SOA Technology Summit

IBM® WebSphere® Portal: Platform for delivering the frontend of SOA

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Portals are being deployed today to achieve business goals

Portal Principle

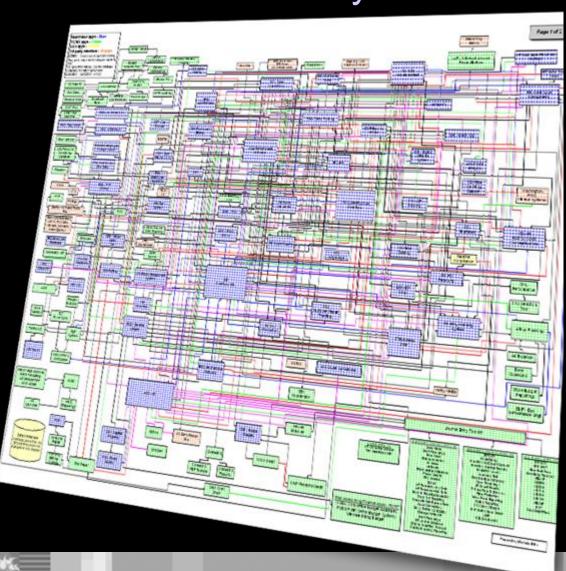
- Combines portlets (application user interfaces and/or content) together into one unified presentation
- Delivers a highly personalized experience, considering role, personal settings, and device settings
- Separates site design, site/page assembly/administration, from application design
- Provides application integration, collaboration, single sign-on services and much more





What are the barriers to business flexibility and reuse?

- Lack of business process standards
- Architectural policy limited
- Point application buys to support redundant LOB needs
- Infrastructure built with no roadmap





What is SOA?

... a service?

A repeatable business task – e.g., check customer credit; open new account

... service oriented architecture (SOA)?

An IT architectural style that supports integrating your business as linked services

... service orientation?

A way of integrating your business as linked services and the outcomes that they bring

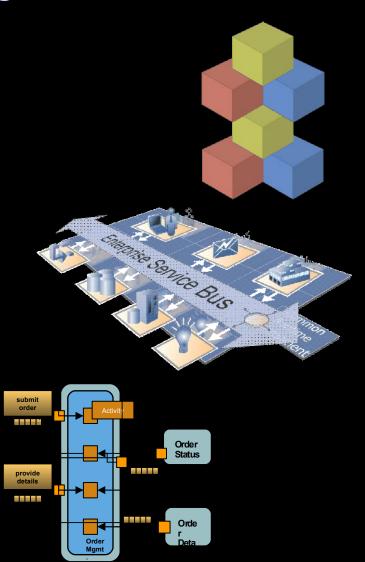
... a composite application?

A set of related & integrated services that support a business process built on an SOA



Service Oriented Architecture

- An architecture that leverages open standards to represent software assets as standards based services independent of the platform they run on: J2EE, .net, Domino, CICS...
- Individual software assets become building blocks that can be reused in developing other applications
- Shifts focus to application assembly rather than implementation details
- Enterprise Service Bus provides messaging, mediation, transformations, pub/sub and other standards based services for enabling communication between these standards based building blocks.
- Business Process Execution Language (BPEL) provides a standards based way to choreograph together a set of web services into a business process.





SOA is important ... this is what businesses are saying...

"Through 2007, an enterprise portal will be the first major application of SOA concepts for more than 50 percent of enterprises (0.6 probability)."

Source: Gene Phifer, Gartner Research, October 2005

60% of business executives say IT will be a competitive weapon in the future and **80% say IT is of central importance** to their organization's ability to **adapt to changes**.

Economist Intelligence Unit Survey

63% respondents agree SOAs are **driven by the business**, whereas previous IT architectures were driven by IT

Cutter Benchmark Survey

Xerox enhances productivity with IBM enterprise service bus solution and SOA

"With IBM's help we can move forward with a service oriented architecture that helps us respond to today's challenges and gives us a flexible architecture to respond to future challenges."

Ram Sunkara, Manager, Integration Competency Center, Xerox

New Holland grows higher customer satisfaction with IBM solution

"We plan to improve our speed to market in terms of developing seamless flows of information to integrate end to end with our business partners. IBM, WebSphere and the service oriented architecture will be the key components of our ability to do that."

Ted Post, System Integrator, CNH



The Top Benefits of Business Flexibility with SOA

Assemble

Manage

Nodel

Deploy

Productivity



Easier change management

Agility and compliance



Single source of information

Collaboration



Role-based access for all

Customer experience



Tasks provided by others

Responsiveness and service



Reduce transaction time

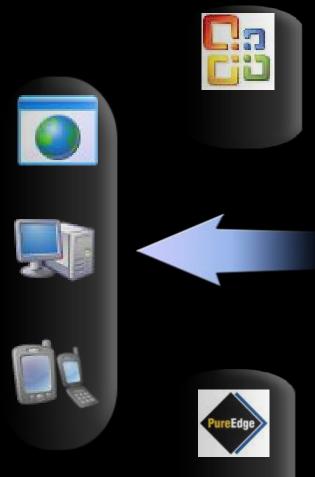
New opportunities



Expand access to apps and systems



Portal Evolution - User Experience for SOA



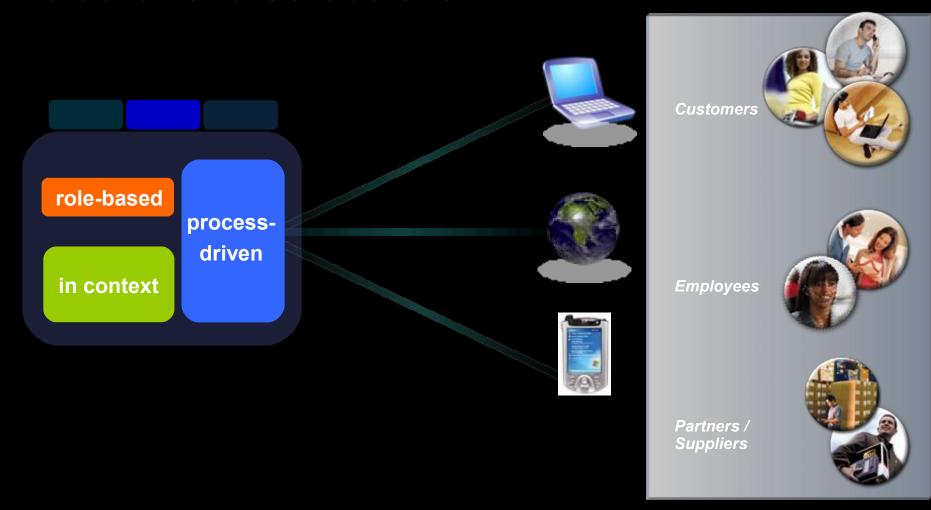


- 1 Integration / SSO
- **2** Collaboration
- 3 Composite Apps
- 4 Process Portal
- **5** Federation
- 6 Offline Portal

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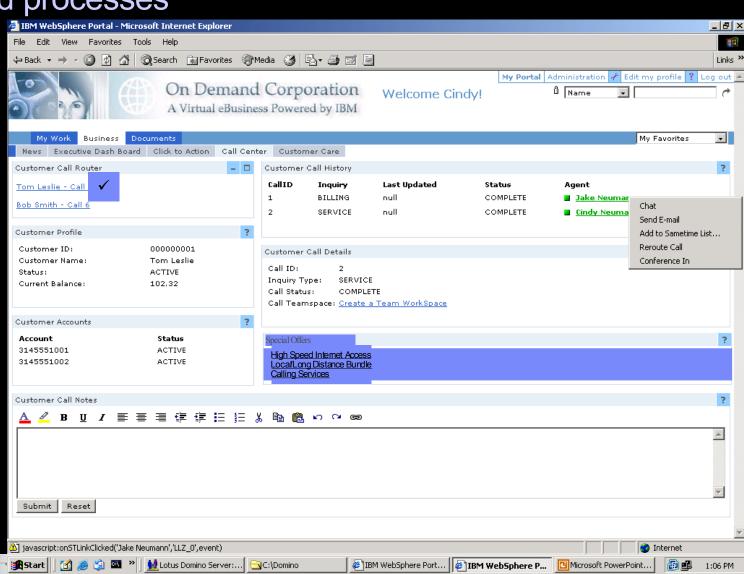
Enhancing Productivity through Optimized Interaction and Collaboration





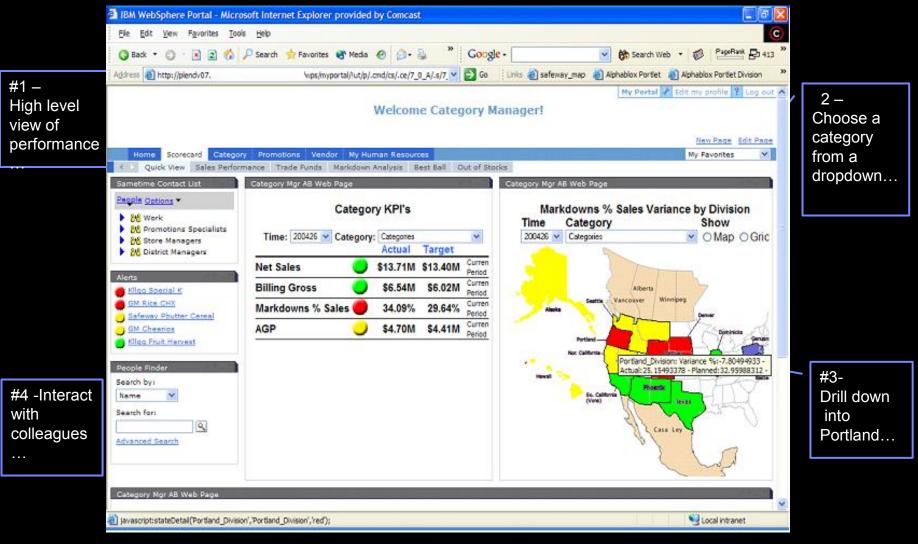
Composite Applications optimize connections to people, information and processes

- Info from call Router portlet can populate the call center employee's desktop.
- People awareness allows chatting with customer service reps that helped the customer in the past
- People tag can be extended with application specific capabilities such as re-routing the call.
- Productivity can be improved by integrated disparate applications and allowing focus to remain in the app vs. navigating to the buddy list portlet.



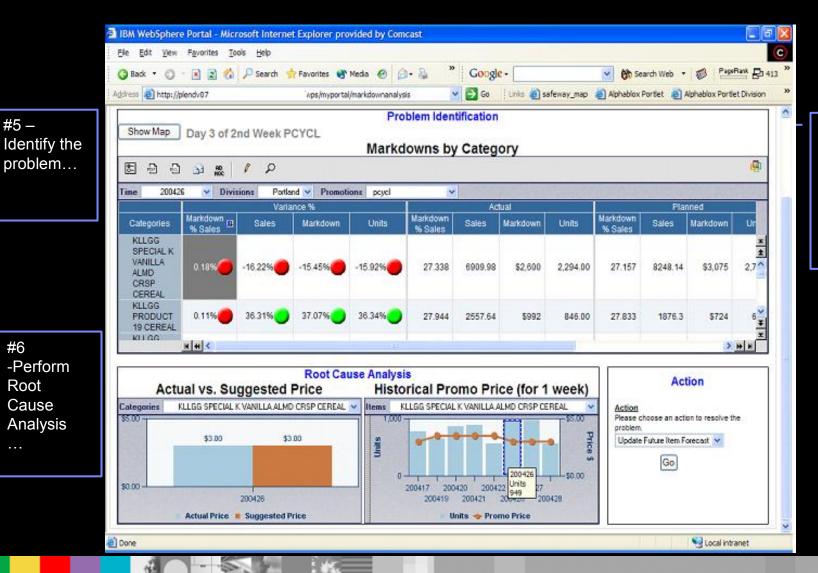


A Grocery Store Dashboard





Drill Down and Take Action



#7 – Record the recommendati on - now usable by others...

#5 –

#6

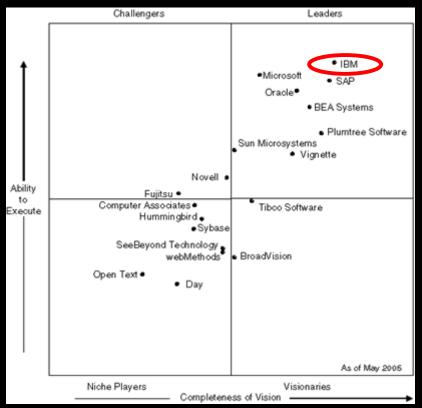
Root

Cause

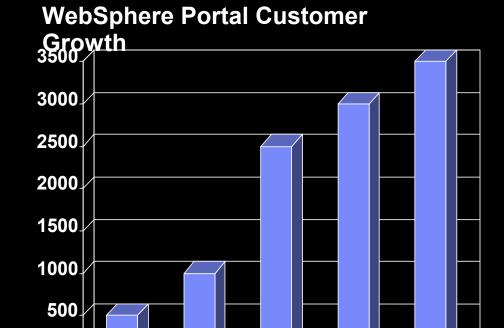


WebSphere Portal momentum

Magic Quadrant for Horizontal Portal Products, 2005 (4 Years in a Row)



May 18 2005 by Gene Phifer, Ray Valdes, David Gootzit, Kim Underwood, Laurie Wurster



Market Share Leadership

2002

2001

WebSphere Portal Market share = 21.6% (Gartner April 2005)

2003

2004

➤ WebSphere Portal Market share = 24.8% (IDC June 2005)

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1H 2005



IBM WebSphere Portal Version 6.0

1

Revolutionized user experience

Help increase productivity and revenue with dynamic, contextual experience

2

Accelerated SOA

Help provide quick ROI from composite applications

3

Optimized Administration & Management

Help lower total cost of ownership and rock-solid performance

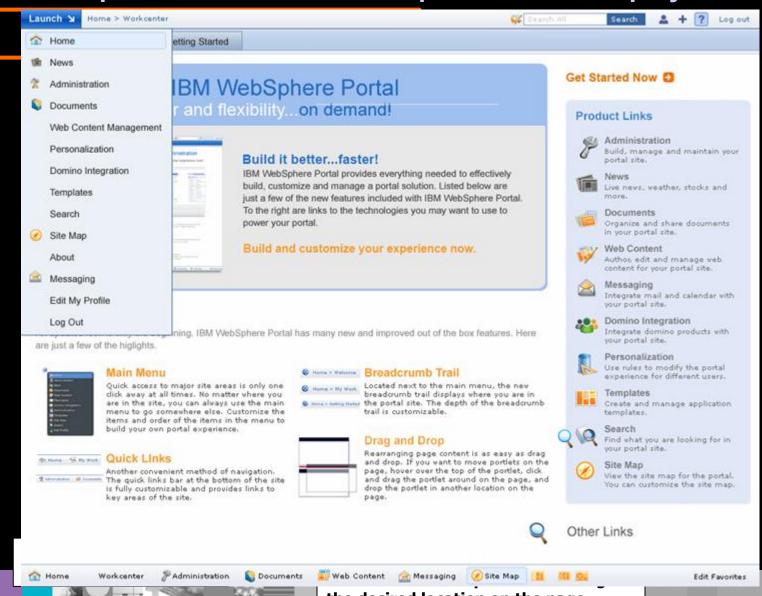
4

Orchestrated Workflow, Collaboration, & Forms

Powerful composite applications



Updated WebSphere Portal 6 interface speeds time to deployment

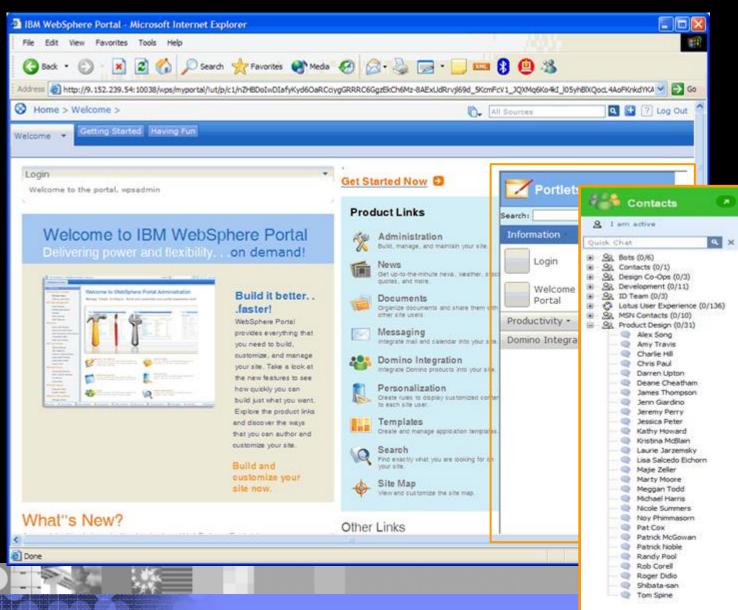




Flyouts for common tasks (Portlets, Contacts, Help,...)

IBM WebSphere
Portal provides
everything needed
to effectively build,
customize and
manage a portal
solution.

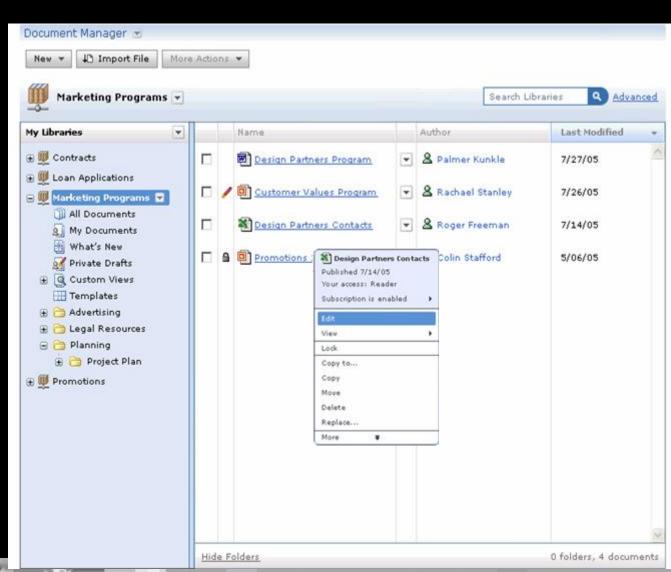
In the new release access to these capabilities becomes just easy.





Portal Document Manager new look and feel

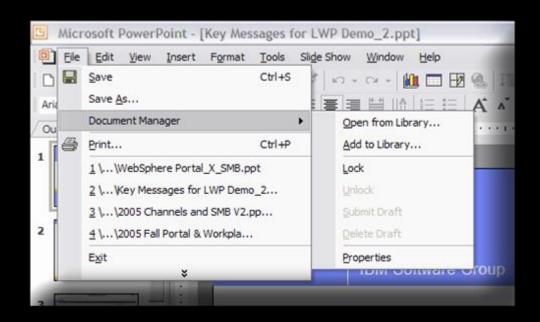
- Look & Feel
 - Native MS Office Icon
 - Icons show document state
- Ease of Use
 - Drag & Drop in the Browser
 - One Click Edit button
 - Search results and file lists paginated for easier navigation
- Admin
 - Multiple file import
 - Customize the "New" Menu
- Performance
 - Improvements via cached rendition rendering
 - Document 1st page preview

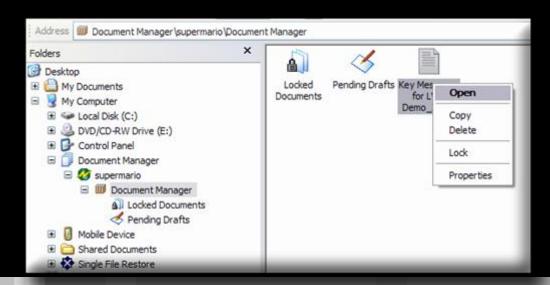




Microsoft Integration

- Microsoft Office Integration
 - Power Point, MS Word & Excel
 - Check in, check out
- Microsoft Windows
 - Drag & Drop
 - Right click support
- Business Value
 - Security-enhanced Storage & File level security
 - Leverage existing MS products
 (MS Office 97 & Higher)







Improved Search raises productivity

New Search Enhancements:

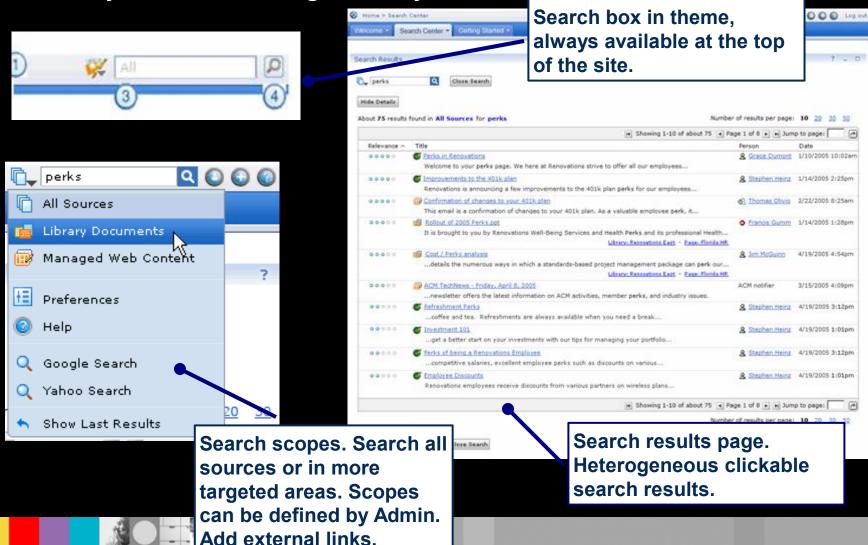
- Improved search of Workplace Web Content Management (WCM) author, published and site content
- Search Center improvements
 - UI enhancements, Scope definitions
- Search performance improvements on indexing throughput
- Search and Index API (SIAPI) published
- Search Domino and File system content via HTTP
- Improved External Search of Portal Content
 - Enhanced search results from Google and other search engines
 - Site map provides security-rich "outline" of Portal hierarchy for public URL portal content index control





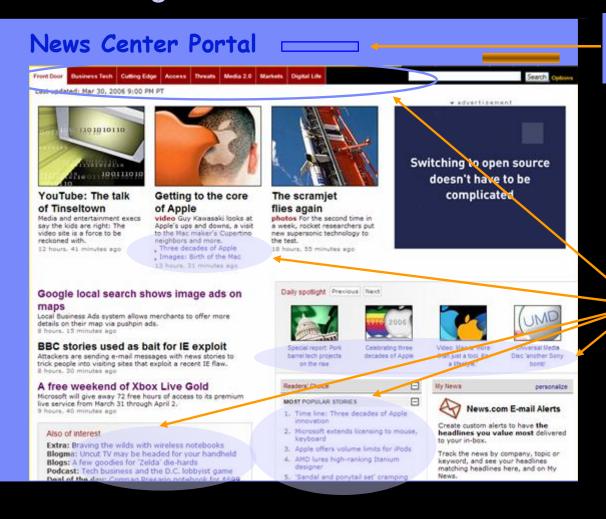
WebSphere Portal 6 Search Center updates

Find what you are looking for anytime and anywhere





Manage and Control Public Content indexed by External Search Engines



(Hidden) optional Sitemap for the crawler to efficiently crawl all pages

Optional robot directives to not require the crawler to follow links on the portal pages.

<META name="robots" value="noindex,
follow">

URLs normalized (for a crawler)

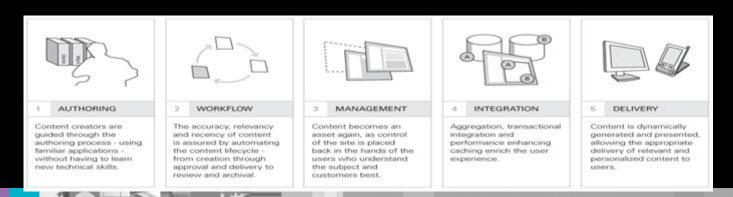


Workplace Web Content Management End to End Content Management

Enables non-technical, non-HTML savvy users to create content (news information, announcements) for the Portal (or standard web sites)

With Workplace Web Content Management version 6.0:

- IBM leads the industry with the most tightly integrated Portal and Web content management solution on the market today.
- Advanced, rules-based personalization capabilities allow targeted information to be dynamically delivered to your employees, customers, suppliers and partners via the WebSphere Portal environment
- Enhanced authoring and administration capabilities so that web content can be created and delivered more effectively via your WebSphere Portal environment





Web Content Management Usability Improvements

Improved authoring usability:

Welcome page to help new users get started

Inline Editing for infrequent users

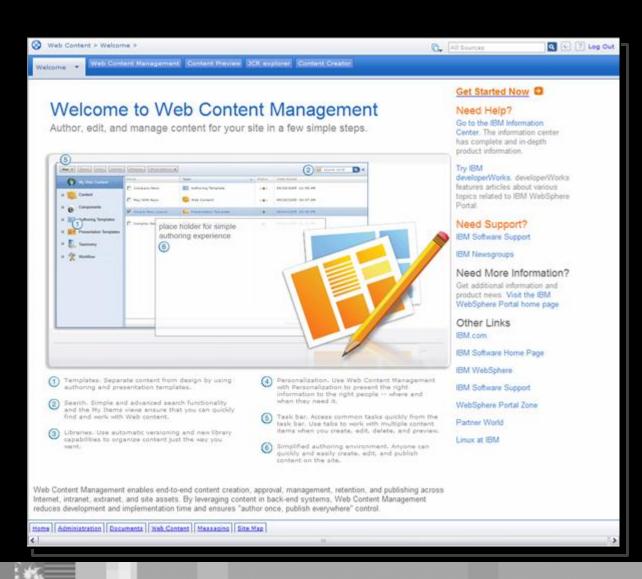
User-friendly, simpler templates for entering content

Full text, attribute and taxonomy **search** and searches within searches

Simplified process for including **personalization** rules in content and layout

New views allow users to find their content easily

User interface can be customized easily to provide tailored experience





Other Web Content Management Enhancements

Improved Site Scalability

- Library Sections can be created and updated separately to support specific site areas,
 making it easier to keep large, dispersed websites up-to-date
- WebSphere Clustering Support ensures demand on servers is distributed more effectively

Greater "Look and Feel" Flexibility for sophisticated websites

 Enhanced Cascading Style Sheets (CSS) support enables designers to not only define the overall look & feel of the site, but also create specific designs for different site areas, user profiles, or individual content items

Protection against broken links

 New Link Management ensures all internally referenced website links will be up to date (e.g. "live" and not "broken")

Simplified Administration

- Integrated administration within Portal no need to learn a different UI or administer from different location
- Uses Portal's built-in Java Content Repository
- Unified access control for users and content objects
- WebSphere clustering support: Administration of multiple WCM servers as one
- Simplified cache and logging



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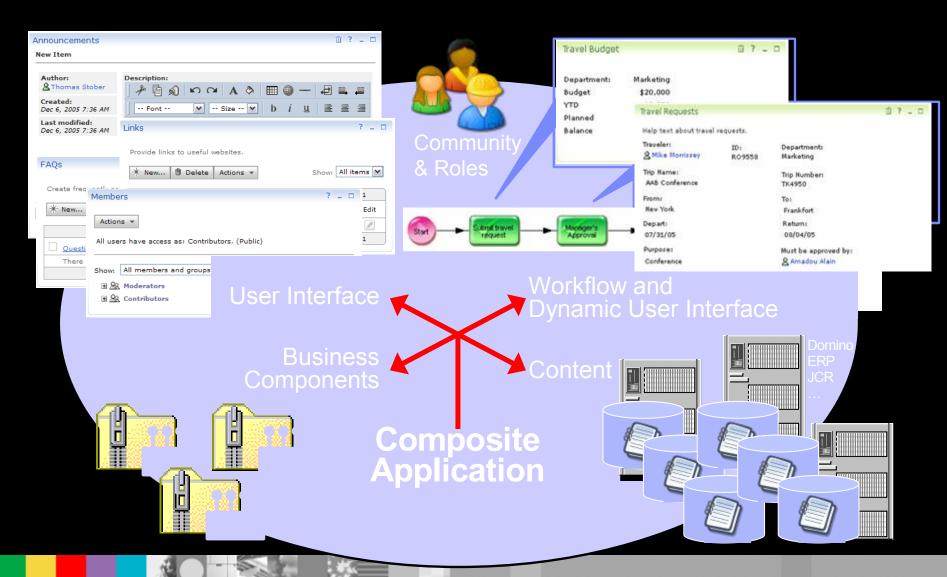
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Composite Applications in Portal





Build Composite Applications Faster with Portal Application Templates

Template based applications allow business users to define these applications once as a template

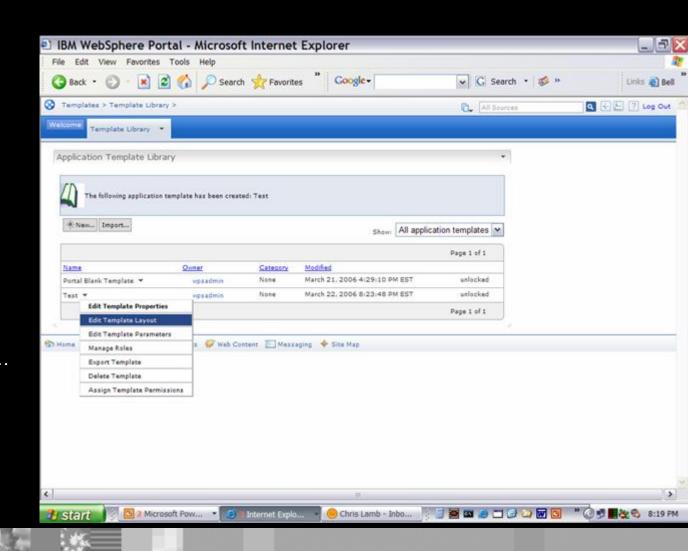
- Template defines
 - Pages
 - Portlets
 - Wires
 - Role mappings
 - Initial configuration values

Portal applications can then be instantiated on demand by any authorized user

Deploy them to different communities with different...

- Look and feel
- Members and Roles
- Other Parameters

Application owners can then change it to meet new requirements





Template Membership and Roles Definition

- Create unique "Roles" for members
 - Build upon template for SOA / Composite application
- Business Value
 - Simplified interface to apply "rights" for each of the members
 - Designed for Business person No IT required
 - Create new SOA
 Composite applications that inherit current membership

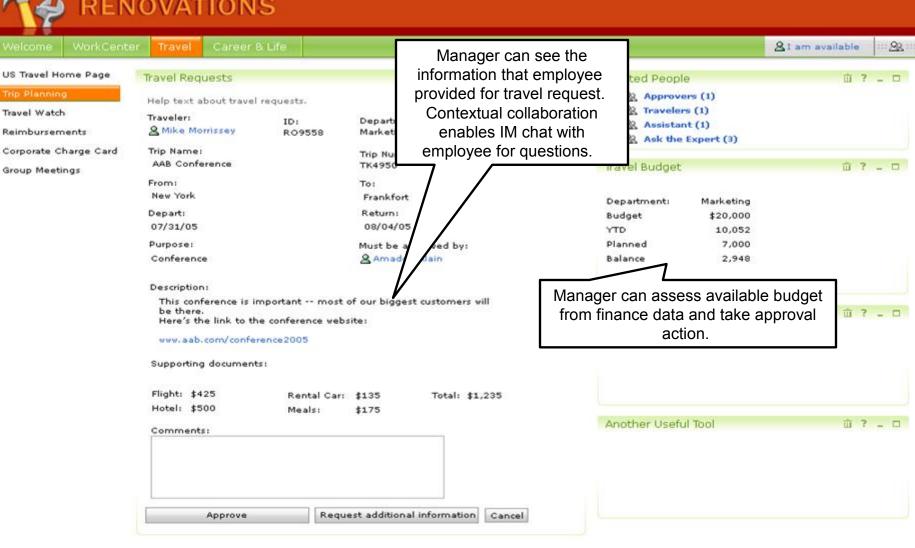


Type	Access	Description
Workplace	Manager V	People with this role ca
Page		
Application Component	Administrator 💌	Can read, create and
Application Component	Manager 💌	Can edit all list items;
Application Component	Manager 💌	Can edit all list items;
Page		
Application Component	Manager 💌	Can edit all list items;
Page		



My Work Templates Edit my profile Actions ▼

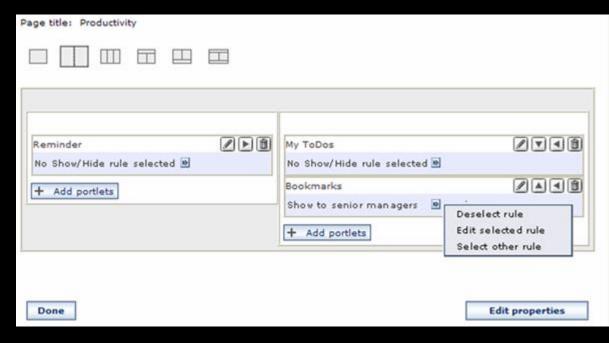


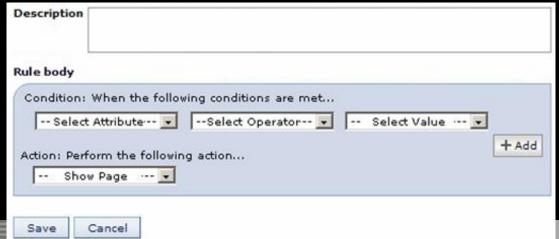


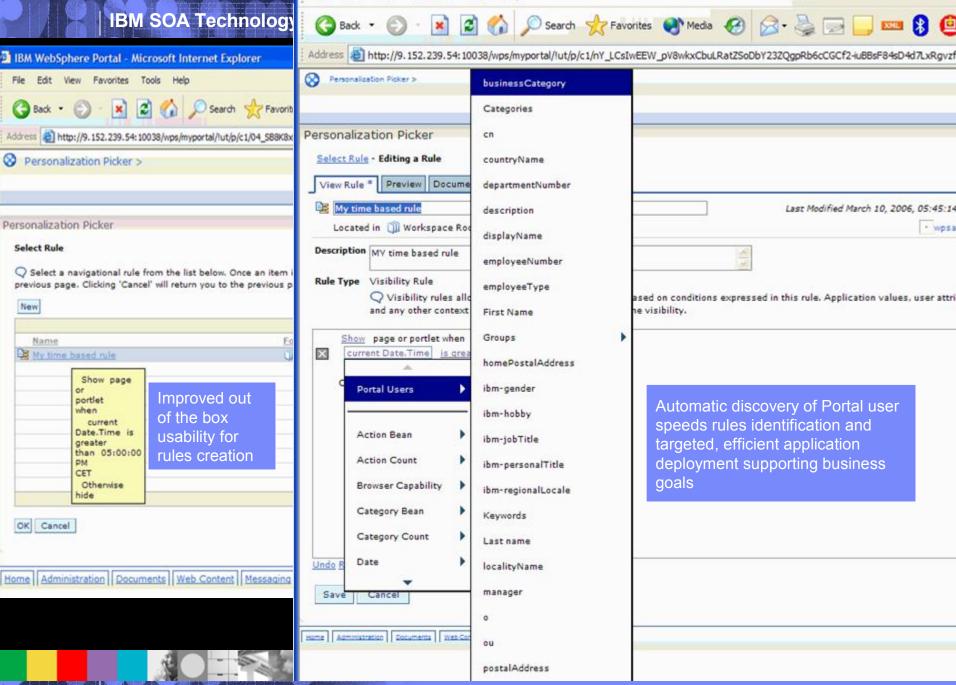


Advanced Personalization speeds application deployment

- Administrators can apply "Personalization rules" to both portlets and portal pages
 - –Use of Business logic to provide "dynamic" experience
 - Example: Show HR Benefits
 Page during enrollment period
- Enhanced personalization rules dialog accessed in context
- Business Value
 - Further map the business requirements to the Portal
 - Example: Marketing campaign



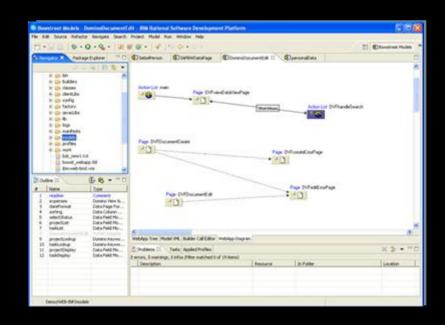






WebSphere Portlet Factory Helps Speed SOA Value & Deployment of WebSphere Portal

- Automation for multi-page, complex portlets to back end systems including Lotus Domino, SAP, Siebel, JDBC, web services and more, without coding – speeds development/deployment
- Change simplified for evolving business requirements – increases <u>efficiency</u> of IT, LOB and users
- Reuse for generation of new portlets from existing portlet models on demand – serve more business and user requirements for more <u>value</u>
- SOA for integration/delivery of existing applications and portlet interfaces as reusable services – <u>flexibility</u> for increased productivity and ROI



Using the tool [Portlet Factory] also saved Allmerica \$1 million in development costs, Clifton adds. The technology enabled Allmerica to build the portal in four months, whereas using API technology would have taken about 16 months, he estimates.

Mike Clifton, Vice President of IT, Allmerica Insurance

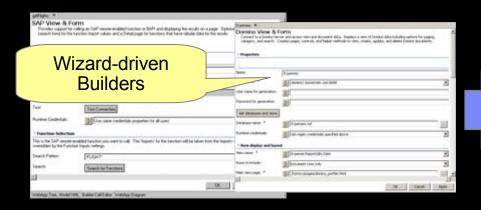
Source: Insurance & Technology, May 2005

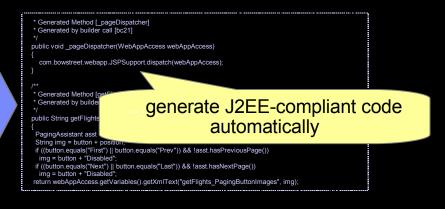
http://www.insurancetech.com/story/showArticle.jhtml?articleID=160906146



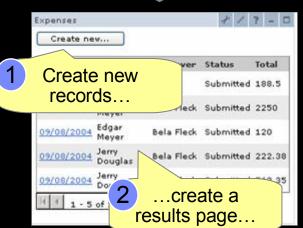
Multi-page, Complex Portlets without Coding

Developers of all skill levels can rapidly build multi-page, complex portlets (search, create, update, and delete) without writing any java code.



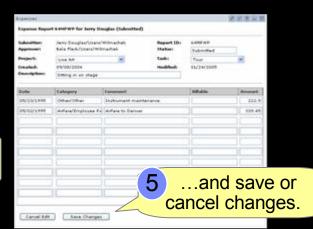


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Multi-page Portlet







Robust Integration Capabilities Deliver SOA

Pre-built Extensions enable companies to quickly create composite portlets and applications that leverage data and processes from multiple backend systems via SOA.



SAP and Siebel

Web

Service



Support for 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,

My Supplier's Portlet installed on my system.

Local Portlets Application and Content Providers

WebSphere Portal Generic Portlet / WSF Service Proxy Intranet

JSR 170 Repository

WSRI

UDDI Registry

Publish/Find Web Services (SOAF

My Supplier's Portlet used on my system.

Unification of content applications across porta



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Policy Based Application Administration

- Improves application deployment and change management
 - Policy is a globally scope set of values for a given group of users
 - For example: maximum document storage used
- Admin interface for setting system wide "policy sets"
 - Default Policy Se
- Easy to use component configurations for different communities.
 - Example: Mail quotas can be defined differently for employees, managers, and executives
- Helps increases reliability

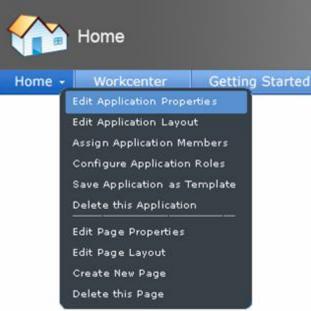
Workplace Policies
Edit Properties Set the conditions and actions for the workplace application policy.
* Name: Default Workplace Application Policy
Maximum workplace application size: ○ No limit ● Limit 60 MB Send warning message at 60 M
Send warning message when maximum workplace application size is exceeded to: Administrator Moderators Members Display warning message in Home page of application.
Length of time to keep after no activity: No limit Limit maximum days with no activity to Send warning message after days
Send warning message for maximum days with no activity to: Administrator Moderators Members



Contextual Menus

- Contextual Admin Menus
 - Right admin actions based on the portal object
 - Only shows the "actions" allowed by the "Role" & "Person" (Security)
 - Visual indicators
- Business Value
 - Helps simplify administration
 results in lower training costs and improved productivity
 - Helps speeds deployment & management

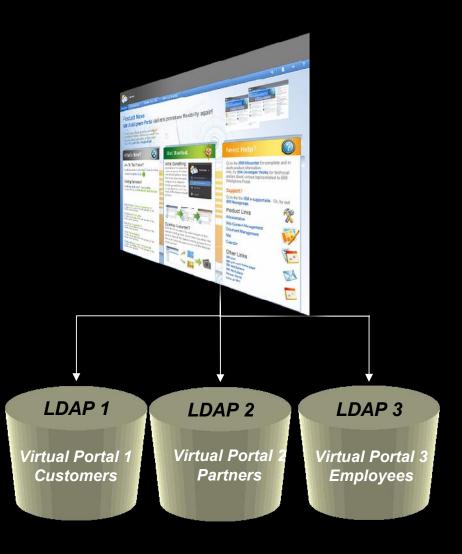






Multiple LDAP Binding

- Multiple LDAPs
 - Can bind to multiple LDAP directories
- Business Value
 - Flexibility for different customer environments
 - Reduces the need to customize the "Member Manager" or a Tivoli Directory Integrator
 - Reuse Portal deployments both inside & outside firewall Including Virtual Portals





Portal Data Separation: "Configuration Split"

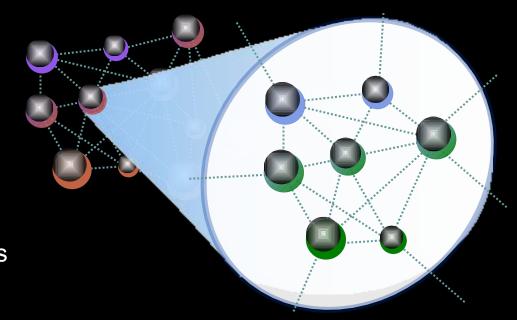
- Partition Portal configuration data into 4 logical buckets
 - <u>Configuration data</u>: Class files and property files, etc.
 - Release data: portal pages and the portlet instances + default modes & state
 - Customization data: portlet data (user data)
 - Community data: WCM, PDM, application instances
- Business Value
 - Allows for 24/7 maintenance & upgrades & easier back-up & restore
 - Eases management of portal in cluster configurations
 - Enables global deployment (with replicated user data)





Performance Focus Areas

- Improve computation during request processing
 - Supports Portal sites with over 30000 pages
 - Caching context in session
 - Reuse already computed results and objects
 - Reduce DB calls
- Better linear scaling by adding CPUs

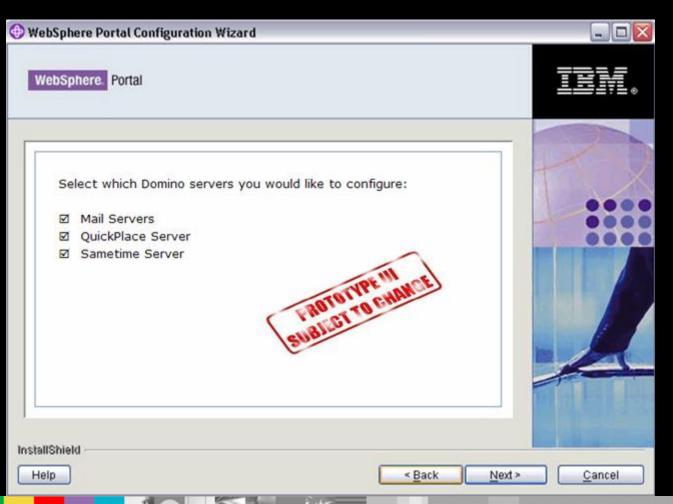


- Performance Best Practices
 - Provide guidance for design regarding tradeoffs so that customers know what they have to give up in order to scale



Domino Configuration Wizard

Domino and Portal Integration made easy!



Simplifies configuration of Portal with Domino

Validation after each screen

Delivered via Portal Catalog soon after WP v6.0!



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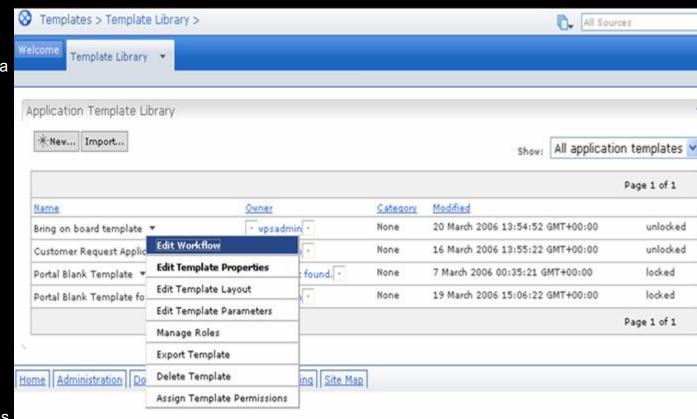
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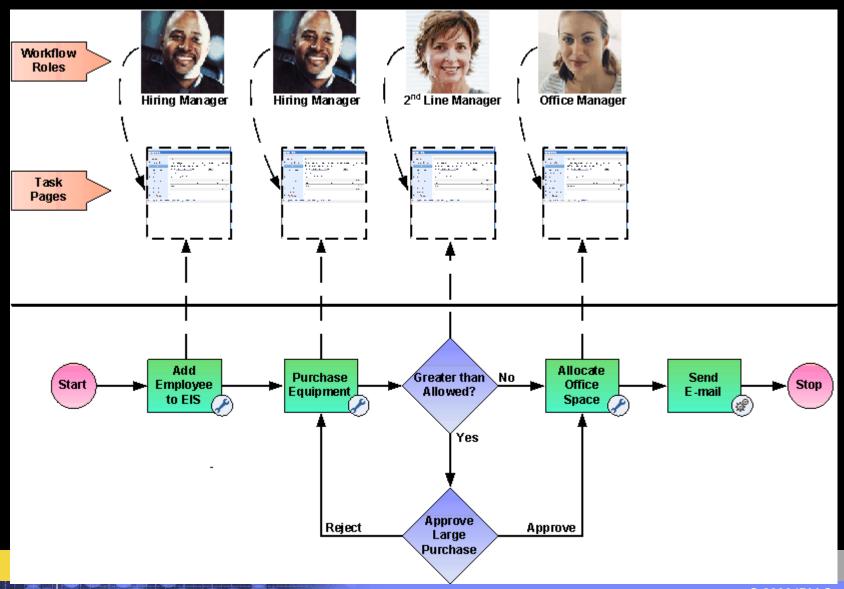
Automate departmental tasks with Workflow Builder

- Business User tool for simple workflows
 - Many processes handled via email today
 - Automate best practices or infrequent tasks
 - Example: Bringing new employee on board
- Workflow Binder includes all related documents for a given workflow
- Utilizes Process Choreographer BPEL engine
- Integrated into Portal Composite Application template model
- Business Value
 - Helps reduction of errors
 - Consistently better decisions





Example: Process Driven Collaborative Workflow



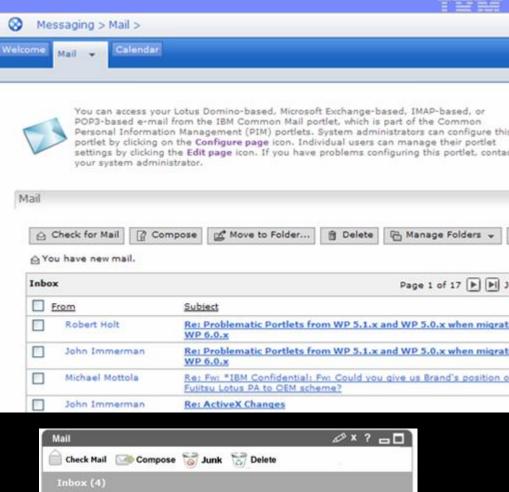
Common PIM Portlets

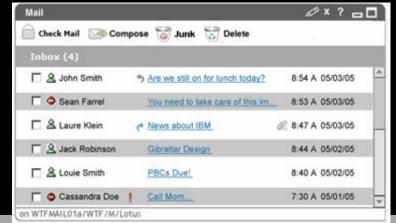
Provides basic messaging and calendar capabilities with a native Portal look and feel.

Supports Domino, Exchange, IMAP and POP back ends

New WebSphere Portal 6 features:

- Enhanced UI
 - -Mini View Portlets
 - Mail & Calendar
 - -Drag & Drop
 - -Usability Enhancements
- **Exchange Functionality**
 - -Exchange 2000/2003 calendar support
 - -Performance Enhancements
 - -Future: Outlook Web Access integration
- **Increased Deployability**



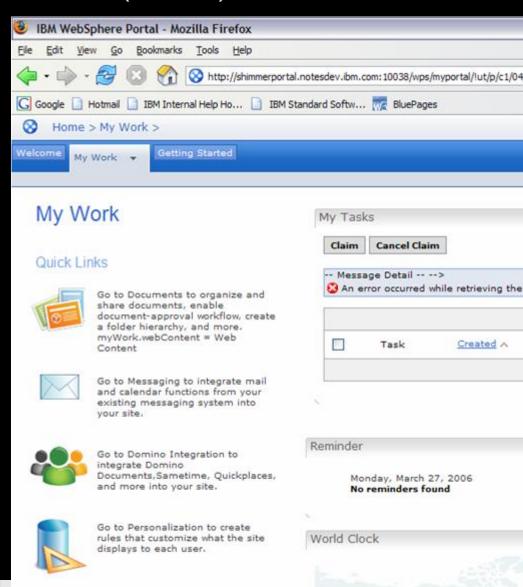


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Domino & Extended Products Portlets (DEPP) Enhancements

- Performance improvements
- Support for Domino 7.0
- Notes View
 - –Domino 7, WSRP support , improved UI, presence awareness
- Domino Web Access
 - Domino 7 support, support for
 Domino redirect db, more features
- Quickplace
 - Domino 7, improved UI, place creation, user tasks list across member places
- Sametime contact list
 - -Improved ease of use, sorting

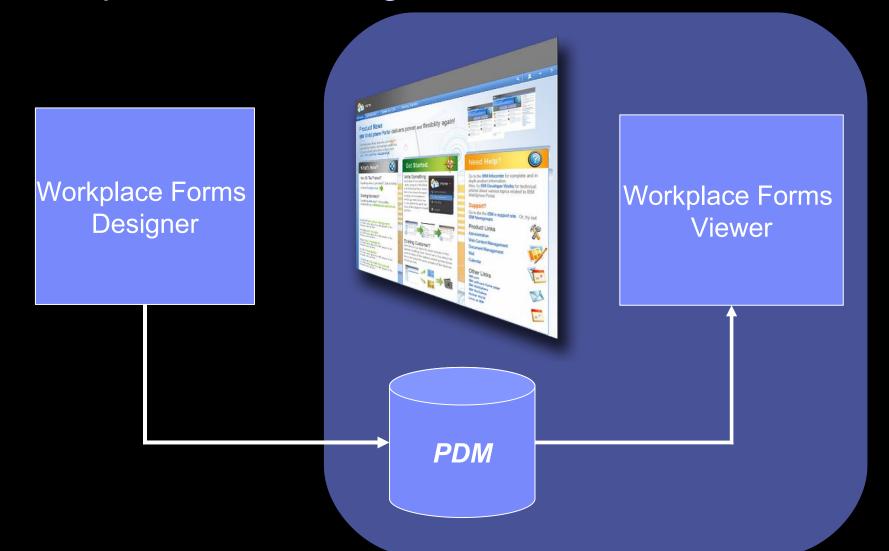


Transferring data from shimmerportal.notesdev.ibm.com...

Local Time:

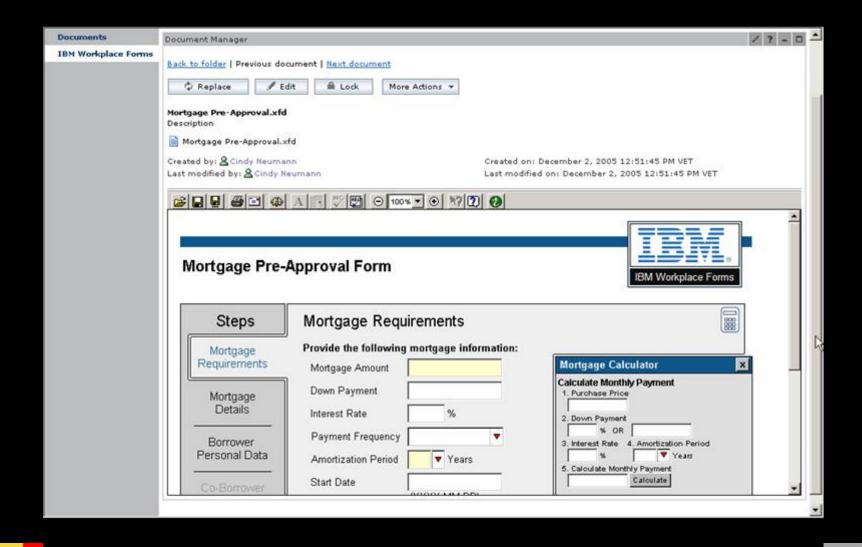


Workplace Forms Integration with Portal





Viewing a Form within Portal Document Manager





Extend Composite Applications to Portal-Managed Clients (2H2006)

- Portal applications available on managed clients, whether connected or disconnected
 - Access to critical applications
 - Where needed... safely and securely
 - Rich client UIs and browser-based UIs
 - Tools to take portlets offline with little effort
- Enhanced role-based portal administration
 - Portal admin can remotely deploy managed apps for users, based upon roles
- Business Value
 - Help increased user productivity through access to enterprise portals regardless of network availability
 - Help lower TCO through remote deployment and maintenance and reuse of assets and programming skills





WebSphere Portal is the foundation for building composite applications driving the front end of SOA

rvices

Management Dashboards

Sales Force Automation

Customer Relation <u>Management</u>

E-Forms

Content <u>Management</u>

Collaboration

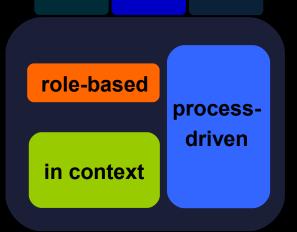
eHR

Composite products

Syndicated Rates

Claims

Natural, Intuitive, Adaptive User Experience





Composite application or view, that securely assembles and delivers <u>services</u> in the form of <u>portlets</u> in the context of a business process



Adding incremental value on top of WebSphere Portal



Focus

Solving a
Particular
Business
problem vs
a functional
component

Accelerate

A customer's "time to value"

Benefits "Out of the above

"Out of the box" end user product

Maintains
flexibility with
SOA platform
and tools to
Extend
capabilities

Business Oriented

Focused on emerging business needs





WebSphere Portal is the foundation for Workplace Composite Applications

IBM Workplace for Business Strategy Execution



IBM Workplace Forms



IBM Workplace Dashboards

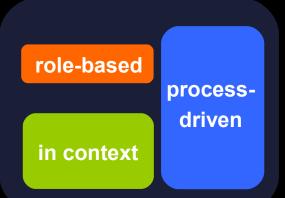


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IBM Workplace for SAP



IBM Workplace for Business Controls and Reporting Natural, Intuitive, Adaptive User Experience





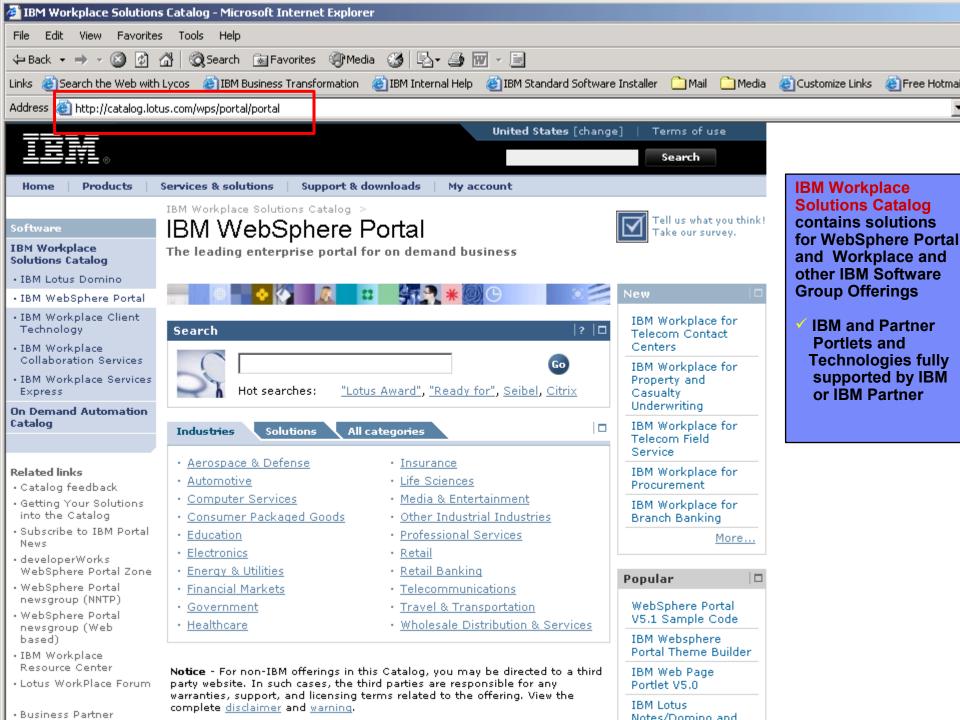
WebSphere Portal is the platform supporting composite applications that securely deliver information and interaction in the context of business processes



IBM WebSphere Portal Version 6.0

Platform for delivering the front end of SOA

- Helps improves efficiency and productivity
- Helps accelerates application and content deployment
- Delivers responsiveness and reliability at lower cost





Additional Information and Resources

- Websphere Portal and Workplace Catalog:
 - http://www-3.ibm.com/software/genservers/portal/portlet/catalog
- Webspere Portal Product Information:
 - http://www-306.ibm.com/software/genservers/portal/enable/
- WebSphere Portal Information Center documentation
 - http://www-106.ibm.com/developerworks/websphere/zones/portal/proddoc.html



Maximizing Your Portal Investment with Education & Training

- The IBM WebSphere Portal Version 6.0 Curriculum is targeted at a technical audience, which includes scripters, programmers, and system administrators. Courses, available in Q3, are available through select Education Centers for IBM Software (ECIS) business partners.
- Looking to become IBM WebSphere Portal Certified?
 - Check the Lotus Certification homepage at http://www.lotus.com/certification to learn more about IBM WebSphere Portal certification.
- To locate an ECIS partner or learn more about the IBM WebSphere Portal curriculum, visit the Lotus Education homepage at: http://www.lotus.com/training.

- IBM WebSphere Portal Version 6.0:
 - Fundamentals
 - Application Development
 - Administration
 - Installation and Deployment
- IBM WebSphere Portlet Factory 6.0:
 - Developer Fundamentals
 - Advanced Developer Topics
 - Dashboard Framework Version 2.6
- IBM Web Content Management
 - Developing Web Sites Using IBM Web Content Management Version 6.0
- IBM Workplace Forms Designer
 - Training for IBM Workplace Forms
 Version 2.6

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Dziękuję





Afrikaans

Siyabonga







Merci French



ありがとうございました

감사합니다

Japanese

Korean





IBM Software Group I IBM SOA Technology Summit

Thank You



