





【IBM SOA講堂】 Lotus動員協作: Portal 與Microsoft 產品與技術的整合

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IBM Certified System Administrator WebSphere Portal

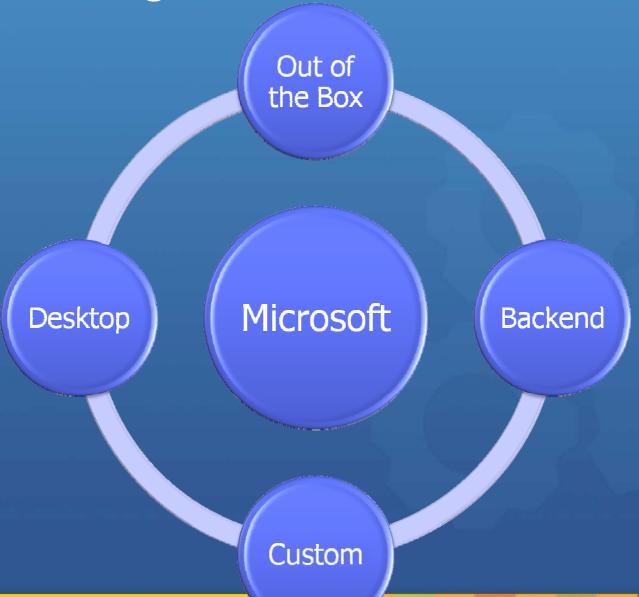
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Agenda

- Out of the Box Integration
 - Active Directory Support
 - Ms Office Document viewer Portlet
 - Microsoft Exchange Portlets
 - Filesystem Integration (New with Portal 6.0)
- Custom integration
 - Microsoft Office QuickLauncher
 - Microsoft Outlook Integration
 - Microsoft Office web components Integration
 - Using Live Communication Server for Presence
 - Backend integration via Web Services and XML
- Desktop Integration / Collaboration / Quickr
- MainSoft
- Summary & Questions



Microsoft Integration for Portal

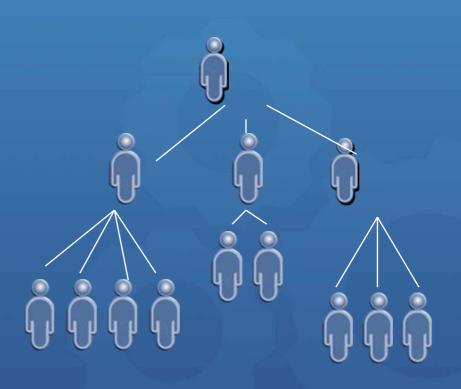




Active Directory Support

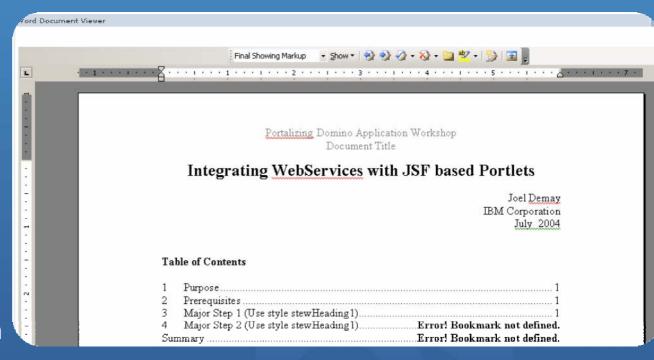
- OActive Directory can be used as the corporate LDAP Server for Portal Server.
 - Portal support AD 2003

 (Application and Infrastructure Modes)
 - Other IBM Products support AD (LDAP)
- Windows Desktop SSO
 - Possible with solutions from Tivoli or Netegrity
 - Custom TAI before v6.1
 - V6.1 support native Kerberos



Microsoft Office document viewer

- Standalone Portlets
 - Microsoft Word
 - Microsoft Excel
 - Microsoft Powerpoint
 - PDF also
- Portal DocumentManager / CommonPIM PortletCapabilities
 - Microsoft Office,
 + 160 other file
 types.



Microsoft Exchange support

- ©Exchange Portlet
 - Web Dav and Outlook Web Access support
 - Exchange5.5,2000,2003 support
 - Credential Vault
- IBM Portlet for Outlook Web Access
 - on Portal Catalog
- Internet Portlet
 - Exchange supports POP3

- Common Mail Portlet
 - Introduced with WP 5.1
 - Supports Domino,
 Exchange, Internet Mail
 - Mail, Calendars, To Dos
 - Exchange 2000, 2003
 - Leverages Credential Vault.
 - Contextual
 Collaboration/presence
 awareness





Exchange Portlet



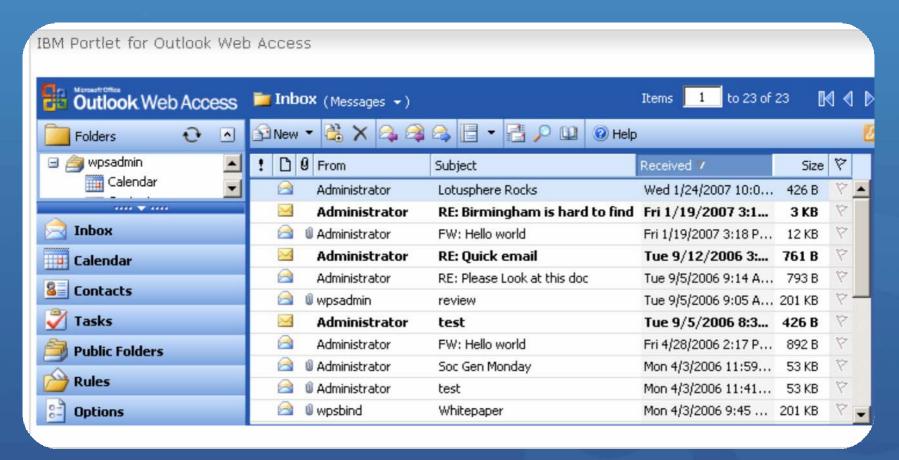
Exchange Portlet

- Web Dav and Outlook Web Access support
- Exchange 5.5,2000,2003 support
- Credential Vault





Exchange Portlets – Outlook Web Access



IBM Portlet for Outlook Web Access

• on Portal Catalog



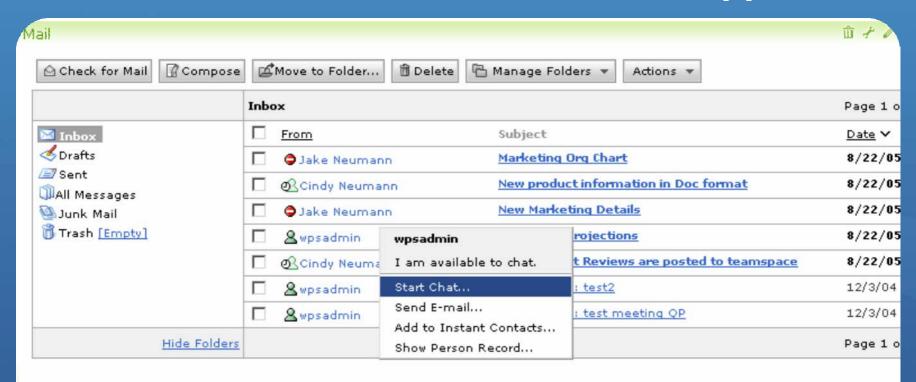








Common PIM Portlet – 2000 & 2003 Support



- Common Mail Portlet
 - Introduced with WP 5.1
 - Supports Domino, Exchange, Internet
 - Mail, Calendars, To Dos

- Common Mail Portlet
 - Exchange 2000, 2003
 - Leverages Credential Vault.
 - Contextual Collaboration/presence awareness

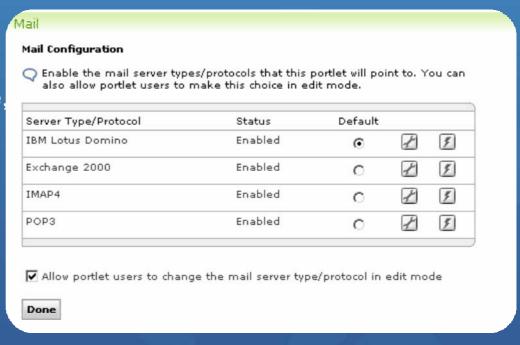




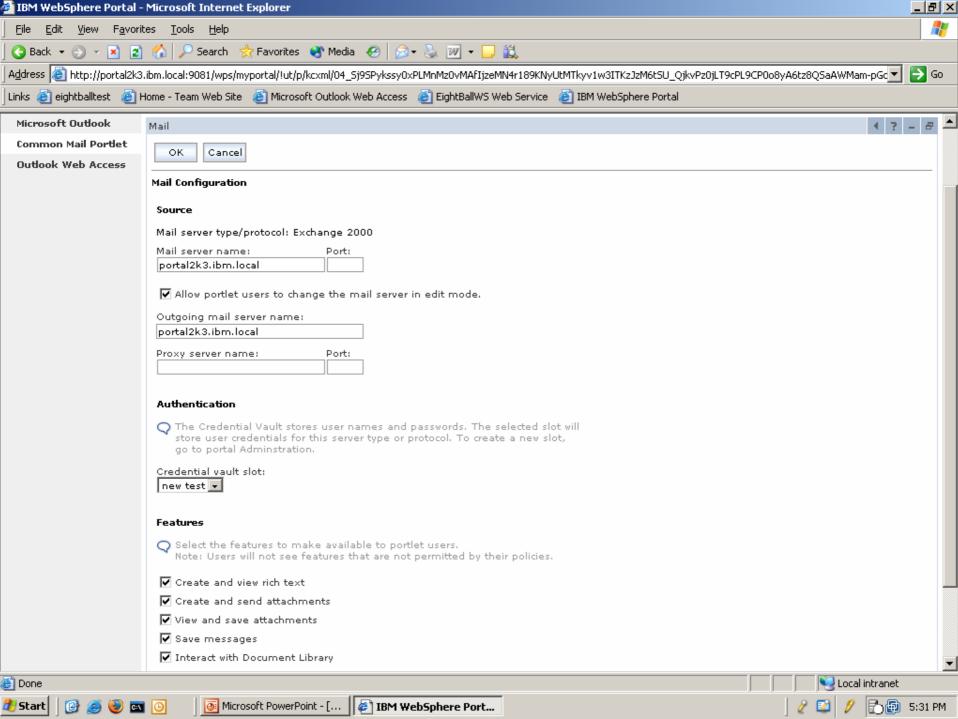
Common PIM Portlet – 2000 & 2003 Support

Common Mail Portlet

- Introduced with WP 5.1
- Supports Domino, Exchange Internet,
- Mail, Calendars, Todos
- Exchange 2000, 2003
- Leverages Credential Vault.
- Contextual Collaboration/presence awareness







How do we integrate with Microsoft SharePoint?

- 1. HTML, Javascript (Connections Business Cards, Snippt code, Sametime 8 Awareness)
- 2. Portlet Level
- 3. Web Services level
- 4. Site & Navigation level (Federation)
- 5. Mainsoft Integration

HTML

Portlets

Web Services

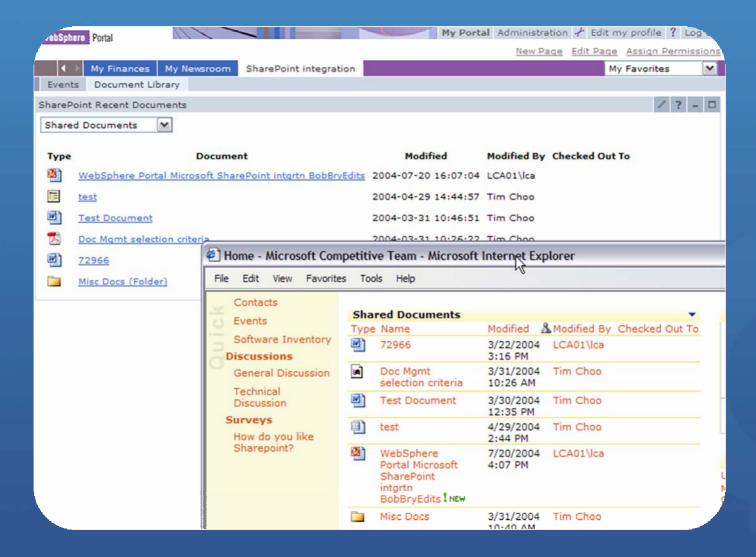
Federation

.NET / ASP





WebSphere Portal Integration with SharePoint











SharePoint Events Portlet

- The portlet calls the SharePoint List web service to retrieve all the items in an event list of a particular SharePoint site
- The user configures the portlet by specifying the userid/password credentials used to log in to SharePoint, as well as the URL to the SharePoint site
- The portlet displays the events in a calendar in normal mode. In Maximized mode, it also displays the events in a table with a clickable link to the SharePoint event form



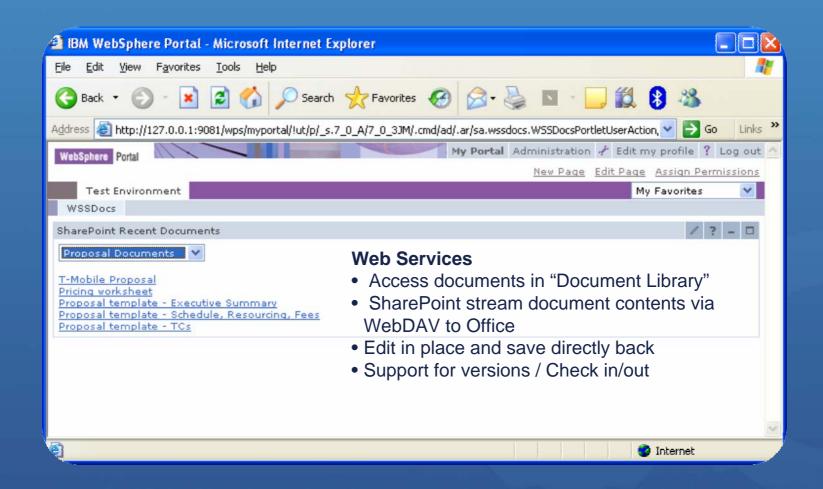








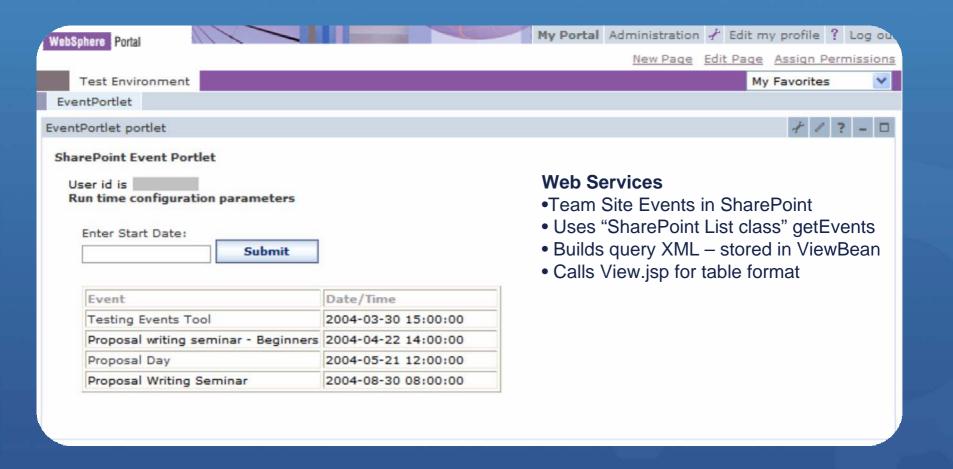
SharePoint Recent Document - Custom







SharePoint Events Calendar - Custom







IBM Portal as Federation Portal





JSR 168 + WSRP Other WebSphere Portals **EJBs**

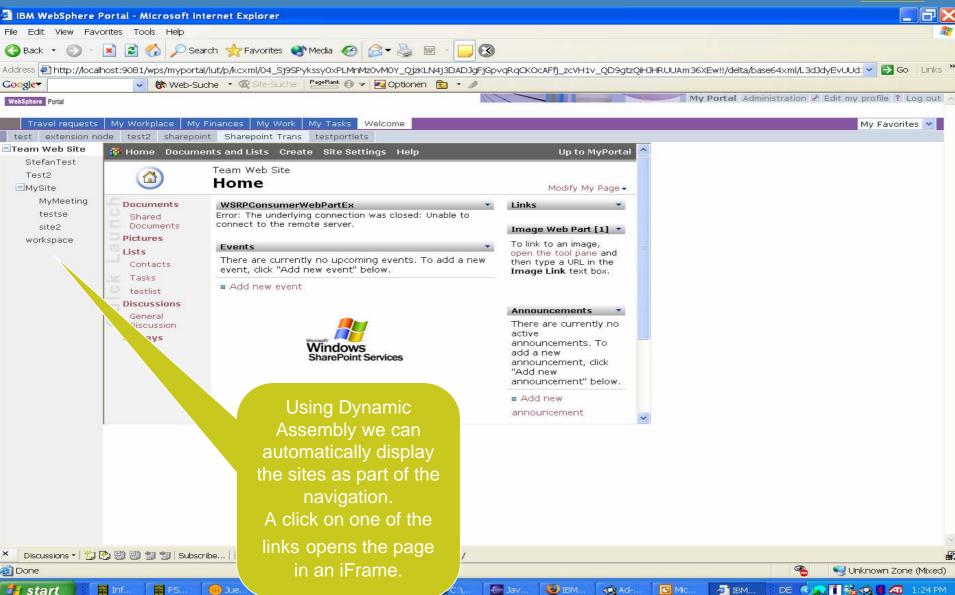
Web Services

SharePoint

- 1. Security
- 2. Portlets
- 3. Search
- 4. Personalization
- 5. Document Mgmt
- 6. Presence

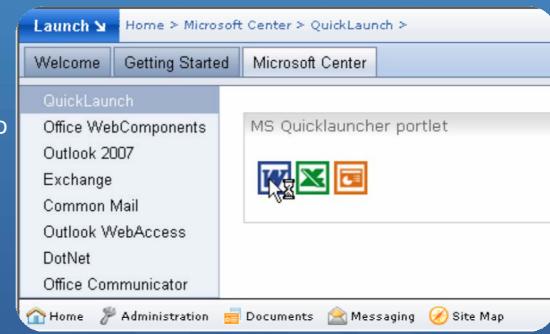


IBM Servicess Offering WebSphere Portal federated access across MS Sharepoint Services site(s)



Custom integration – Microsoft Office Quicklauncher

- Microsoft office applications only one click away
- Very simple Portlet
- Relies on ActiveX Scripting
- Portal host name to be added to Browser's trusted zone
- Most of the code is actually VBScript (IE4 or higher).
- Could be extended to <u>any</u> well behaved windows application
- Further automation is possible.
 - Launch Macro, Print, etc.













Custom integration – Microsoft Office web components

- What are the MS Office web component? (Active X Control)
 - Subset of MS Excel, Chart, etc
 - ✓ Ideal for portal real-estate.
 - Part of Microsoft Office 2000/XP/2003/2007
 - Fully programable via VBscript
 - Supports XML
 - Can be downloaded for free for non Office users.
 - Can Connect to easily to back end systems to load Data
 - ✓ Via XML over HTTP
 - Data needs to be coming from same Web Server
 - Could be dynamically generated by WebServer
 - Via ODBC/ADO Connection to MS SQL Server or any other RDMBS





Custom Integration with MS office Web Components

- Requirements
 - Microsoft Office has to be installed.
 - Read mode only if not installed
 - Relies on ActiveX Controls, no support for NS browsers. (Win + IE Only)

Potential Portal Applications:

- Dynamically Displaying office based data.
- Provide interactive calculators (Loan Calc, etc).
- Build Dashboards (Business intelligence)
 - ✓ Pivot Table, OLAP Cubes
- Front-End entry systems based on Excel Spreadsheet
 - ✓ Users already familiar with Office.
 - Components can be interfaced with any backend system for processing.
 - ▼ The Components do not provide an easy way to save data







Microsoft Office Web Components – DEMO (Custom)

MS Office web Component portlet G 8 9 13 Sheet1 Load Sample Data 2 Load Sample Data 1

ActiveX Component

Buttons are JSPs



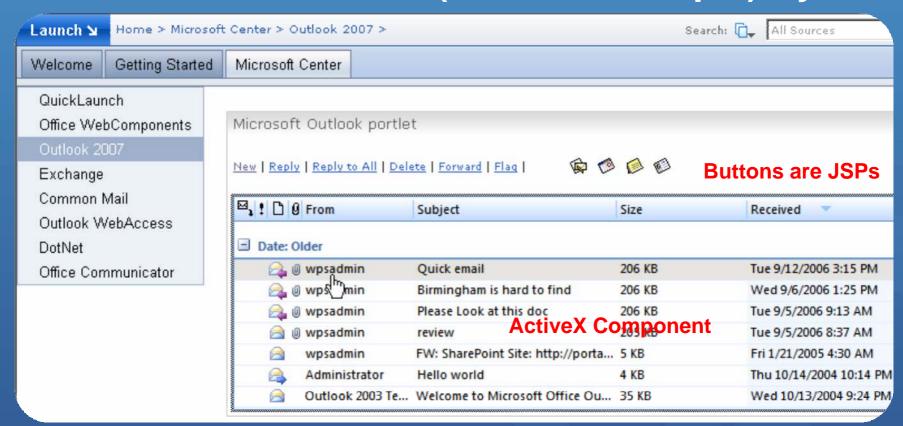
Microsoft Office

A Richer Client Integration for Exchange

- Outlook is the Application most Microsoft users live in.
- Exchange WebDav/OWA Portlets are functional but:
 - Server must be running version 2000
 - HTTP Protocol has be enabled on Server
 - Some basic features are missing:
 - Right Mouse Click Context menus
 - Drag and Drop
- The Solution is the Outlook Portlet (Custom Example)
 - Client based implementation
 - Supports any version of Exchange (from 4.0 to 2007)
 - Very rich feature set/UI (Matches Outlook win 32 client)
 - Not a pure thin client solution
 - Outlook 98/2000/XP/2003/2007 needs to be installed on Workstation



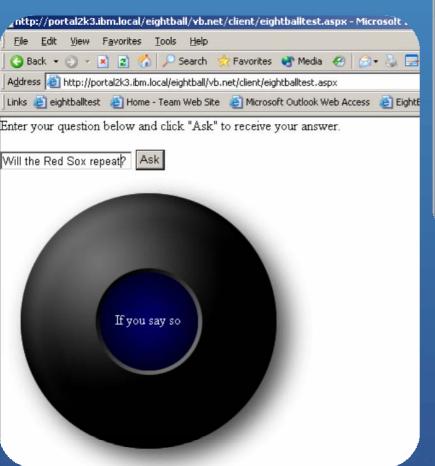
Outlook Portlet Demo (Custom example) Hybrid







Web Services with IBM Tooling



ivi roomiy
☑ Ad303View.jsp ×
Ad303View.jsp - Untitled
Place content here. PsQuestion: {psQuestion} Error Messages} Submit
EightBallWSSoapProxyAskResultBean: {eightballwssoapproxy1.
Dotnet portlet
TheMagic 8 Ball always has the answer:
Your Question goes here: will it rain tomorrow ?
Ask! The Answer is: Are you crazy?





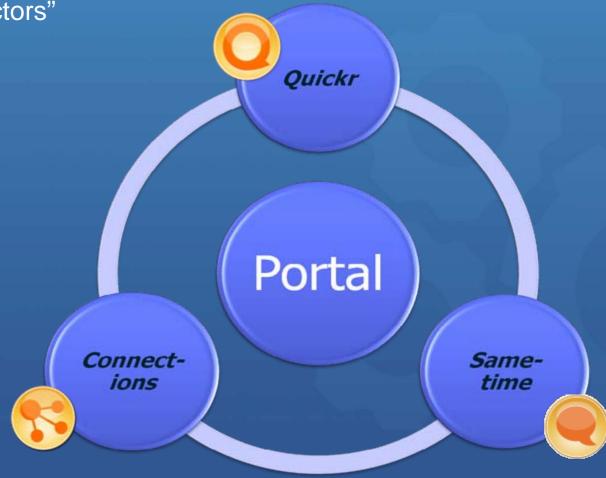




IBM Collaboration Accelerator

OLimited License to Portal Framework

ODesktop "Connectors"





Connectors for Quickr

- **0**6 Connectors
 - 1. MS File System
 - 2. MS Office
 - 3. Lotus Notes
 - 4. Sametime
 - 5. Portal / Browser
 - 6. Outlook
- Backend Libraries
 - 1. Domino
 - 2. J2EE (Portal)
 - 3. FileNet
 - 4. Sharepoint
 - 5. JCR / Java

- Recycle Bin
- 🗉 🥨 Lotus Quickr
 - American Express Go to Market for new "Clear" Card on quickr
 - 🕀 🚺 Avery Wizard 3.1 Software for Microsoft Office on quickr
 - 🕀 💽 Escalade Hybrid 2009 on quickr
 - Financial services Private Wealth Management 0423 on Domino
 - GSK Diabetes Looking to the future on quickr
 - EpoLand on quick
 - 🗄 🔋 Liberty Mutual Business Insurance Go to Market on quickr
 - Nationwide Catastrophe Center on quickr
 - Portal Customer Success Stories on quickr
 - Rennovations Product Place (ECM)
 - Sales_marketing on Domino
 - Standard Insurance Go to Market Retirement Plans on quickr



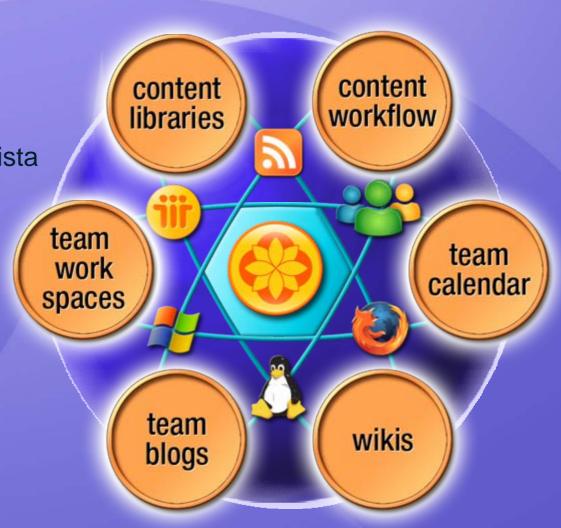
Learn More





Lotus Quickr

- Quickr Connectors
 - Lotus Notes 7.0.2 and 8
 - Sametime 7.5.1. above
 - Windows Explorer
 - Windows XP & Windows Vista
 - Microsoft Office
 - Office XP on Vista
 - Office 2003/2007 in Windows XP/Vista
 - IBM Productivity Tools
 - RSS / Atom
 - MS Outlook



Lotus. Quickr

connectors















services

Content Service Bus

content repositories



Lotus. Quickr

WebSphere. Portal Version 6.0



content repositories

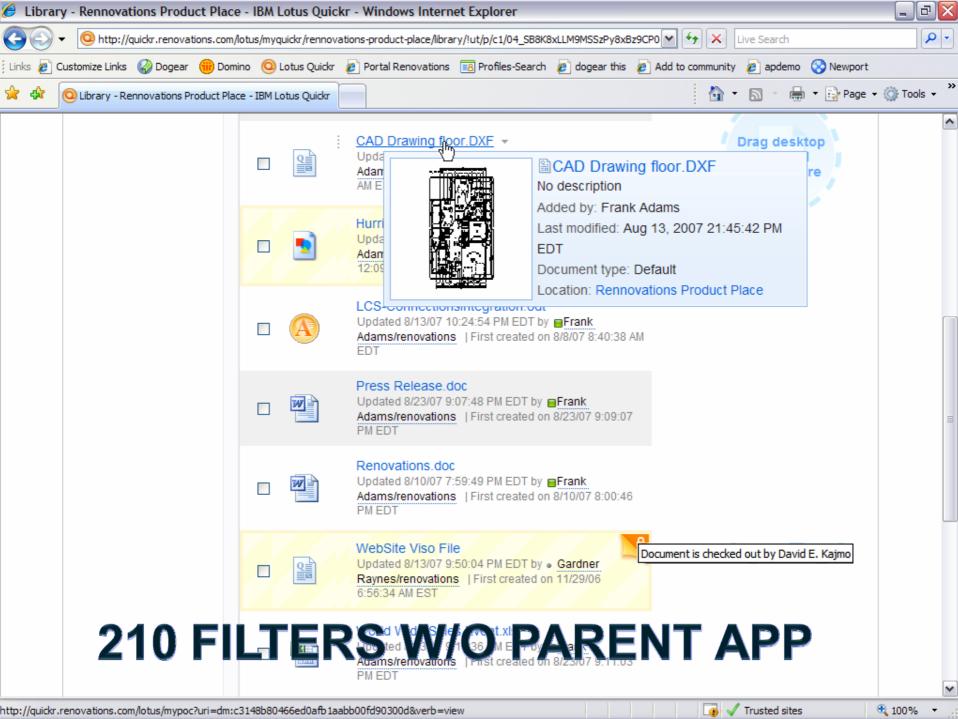
content repositories content repositories

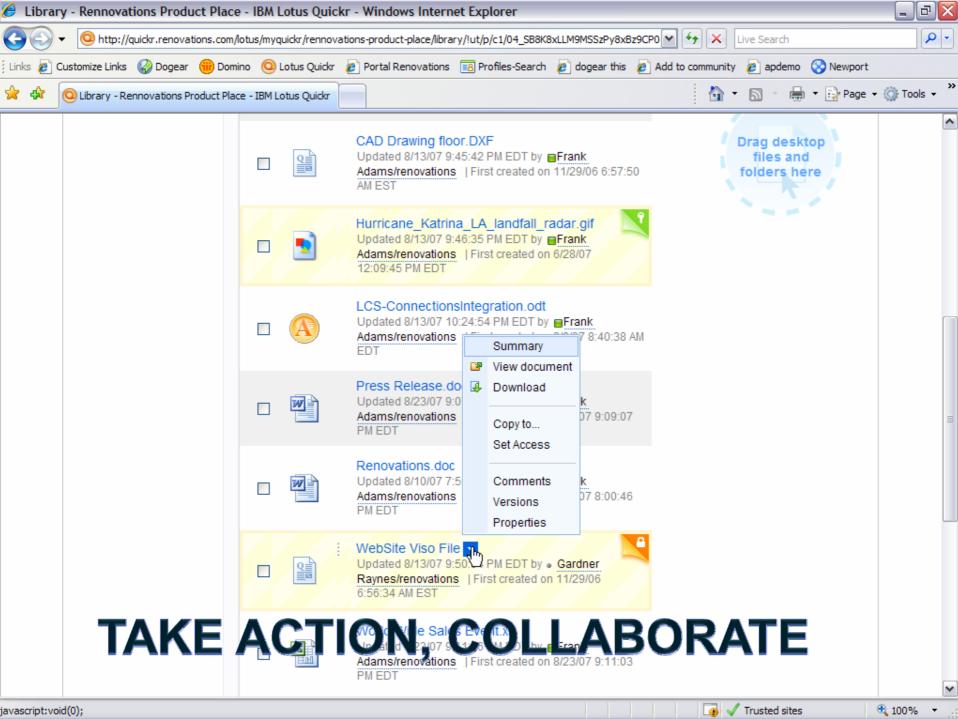


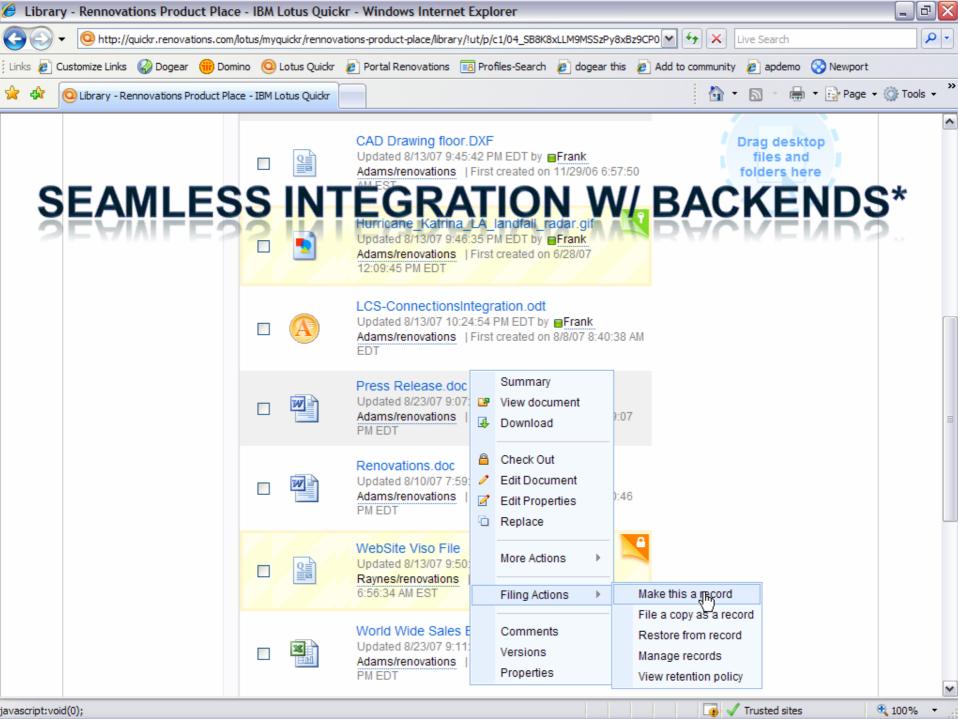


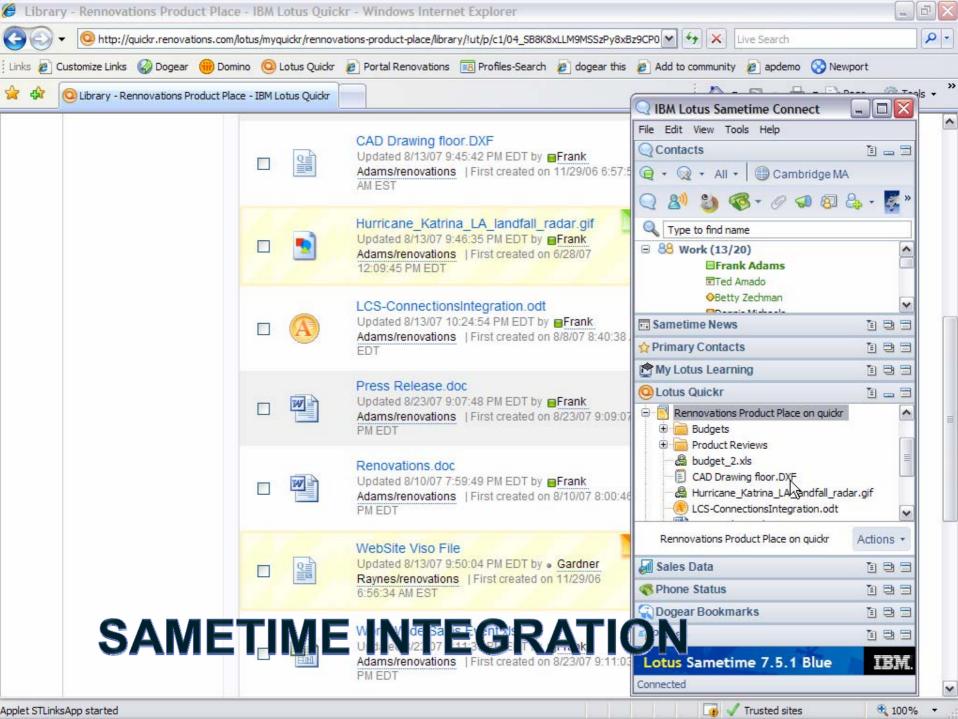


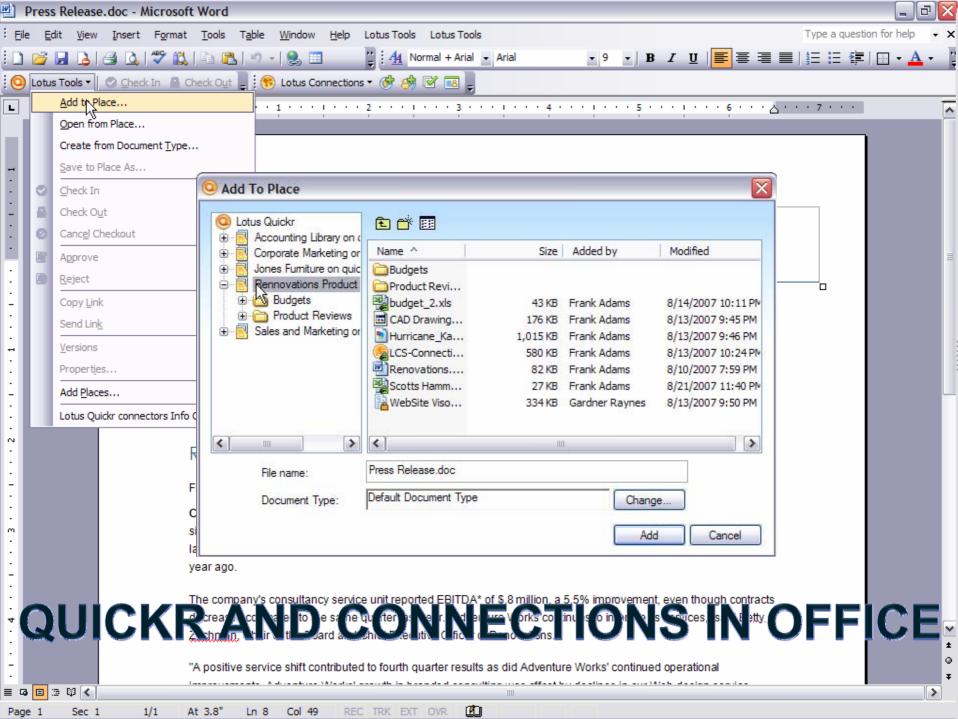


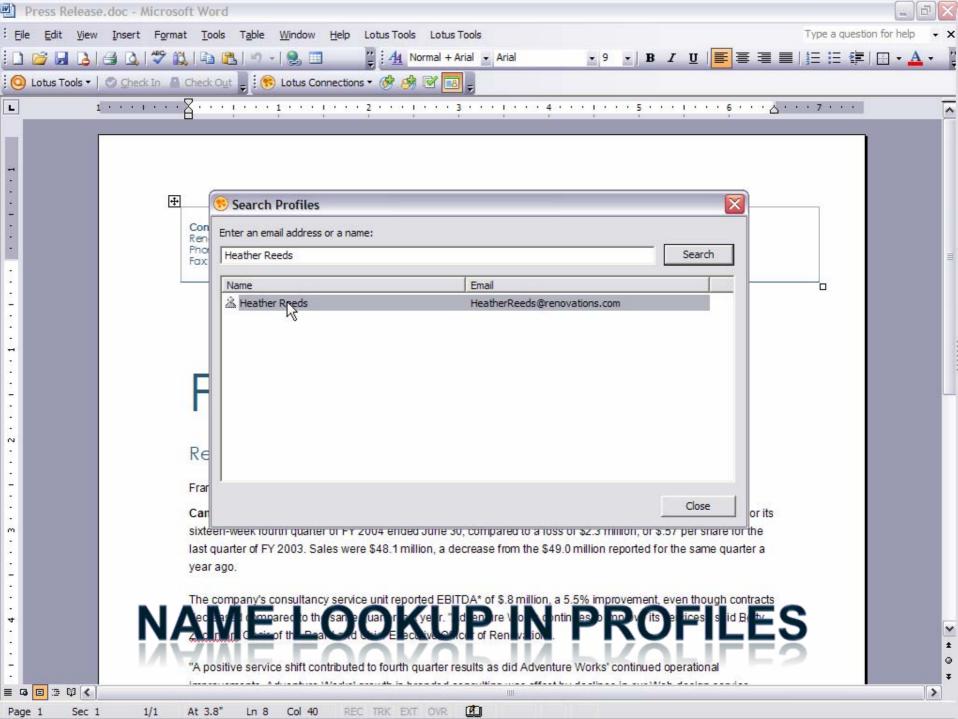


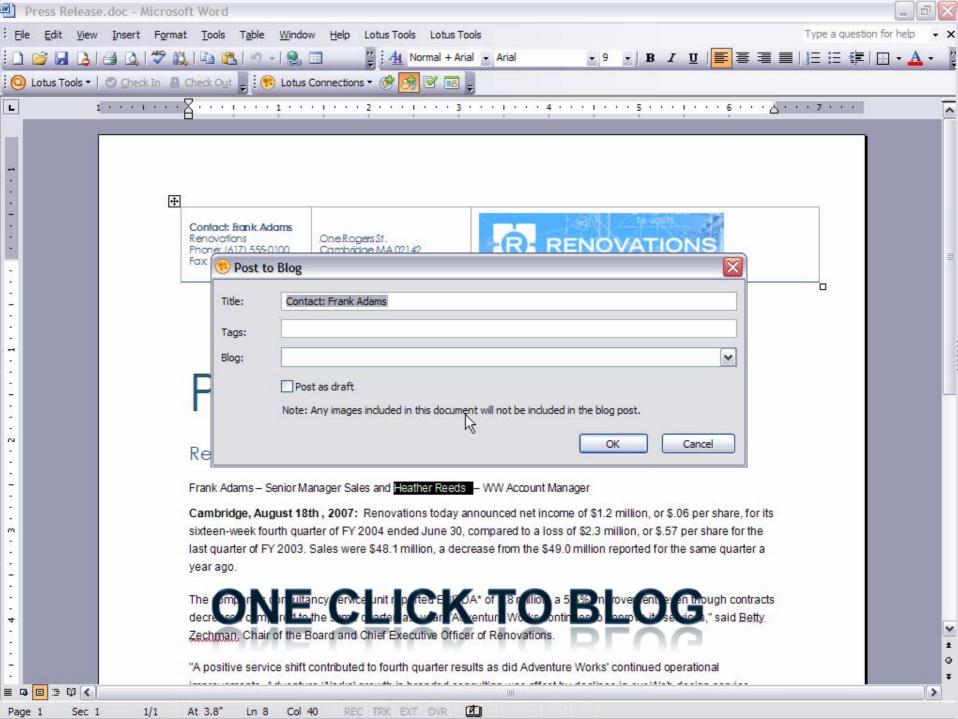


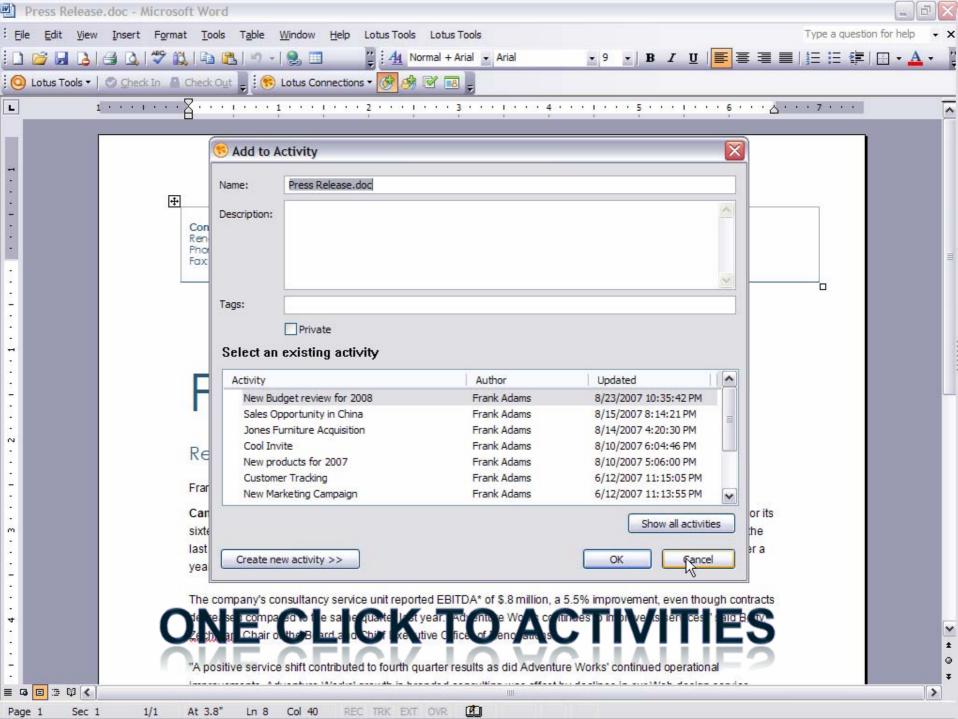


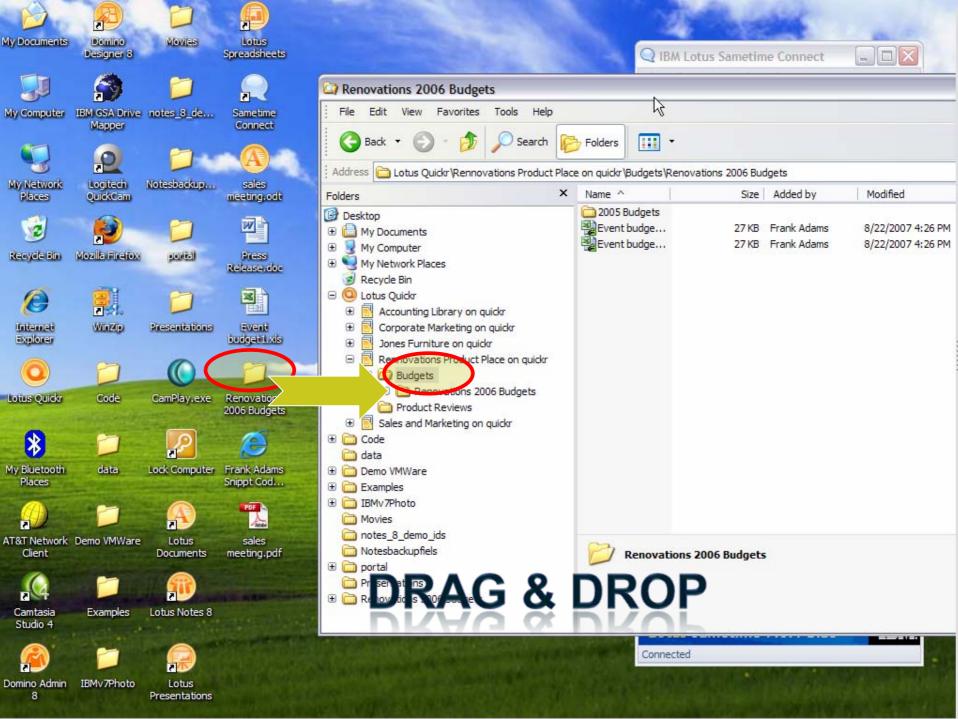


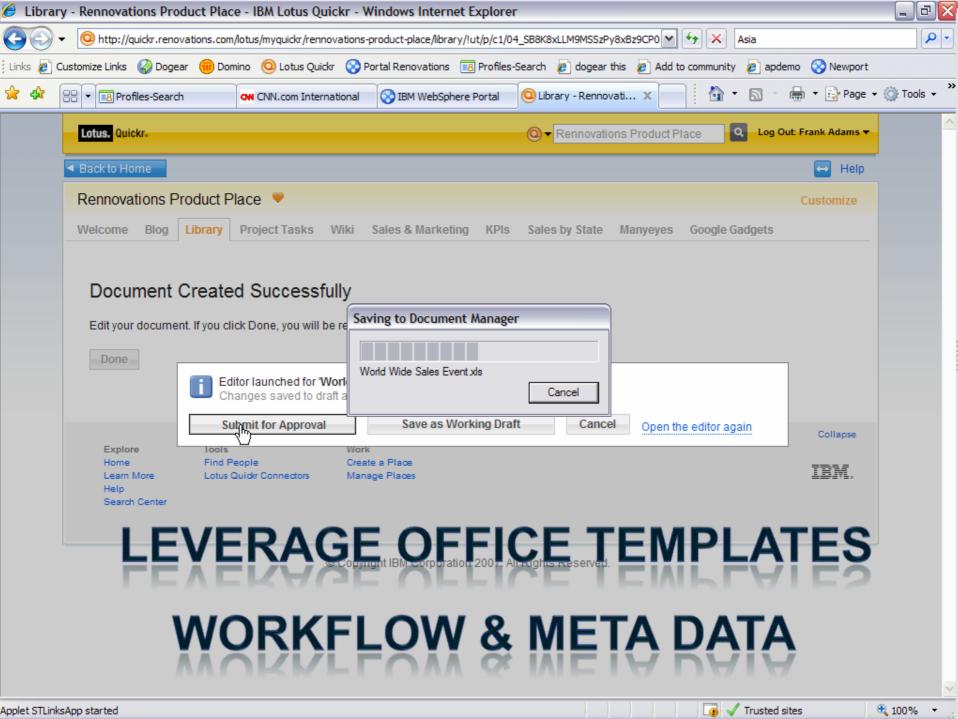


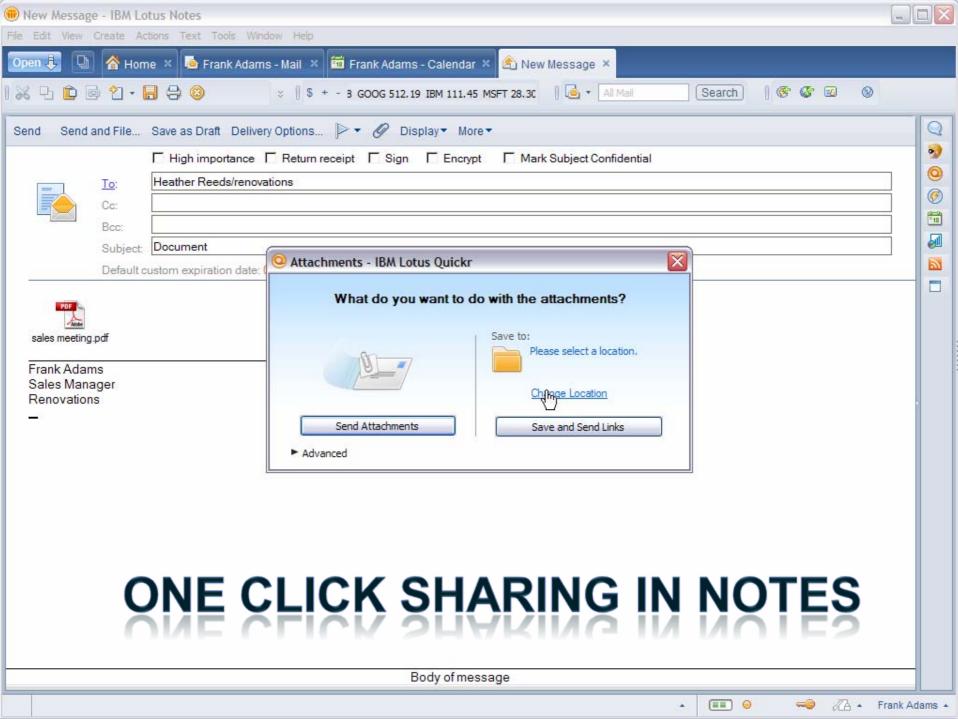


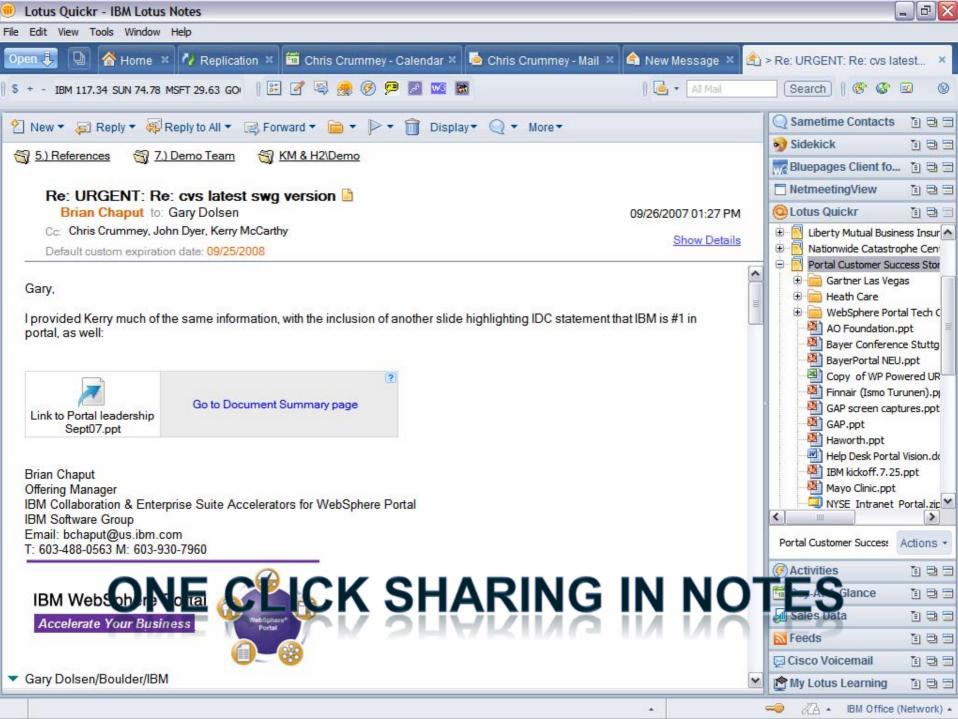


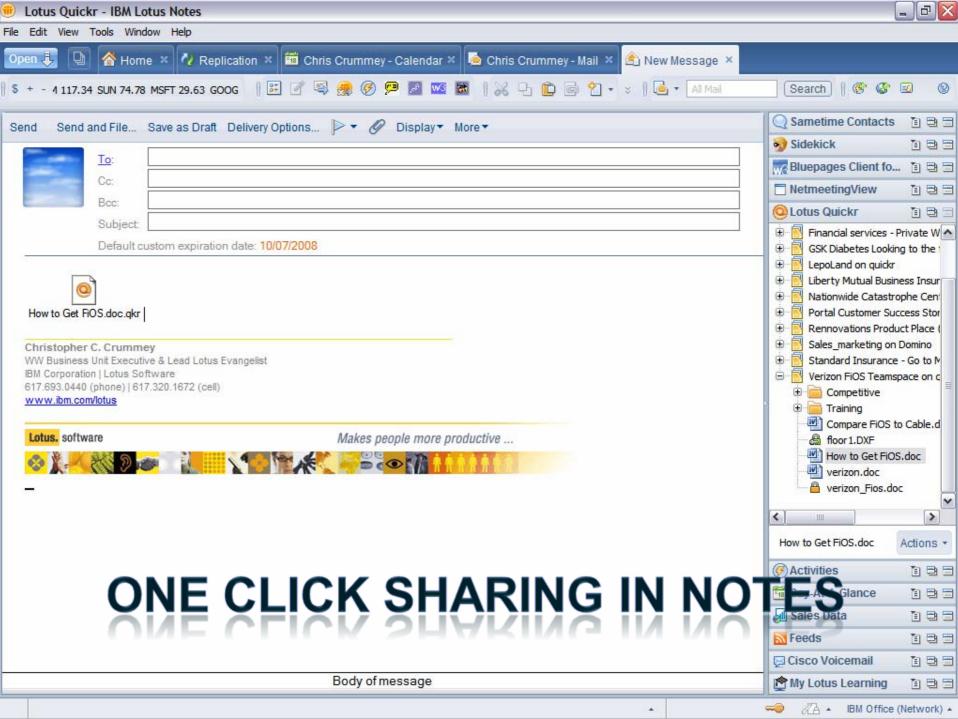














Introducing

Lotus. Quickr... Content Integrator



Microsoft Outlook public folders



Microsoft SharePoint sites



Lotus Domino Teamrooms



Lotus Domino Document Manager libraries















Lotus. Quickr..

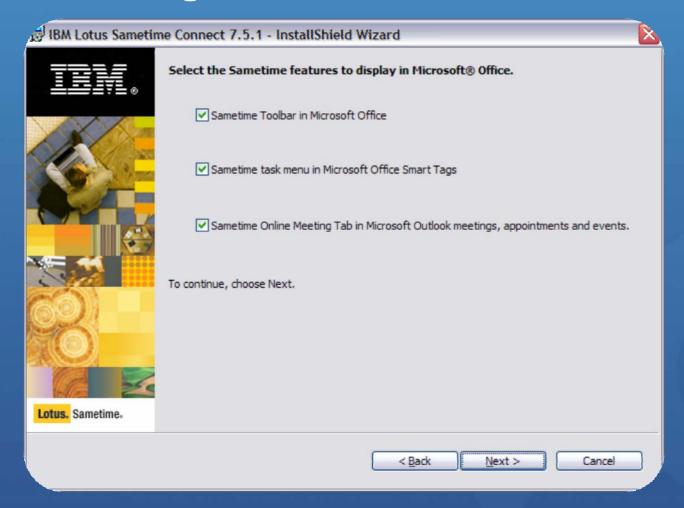
Content Integrator

Lotus. Quickr..

Enterprise Content Management



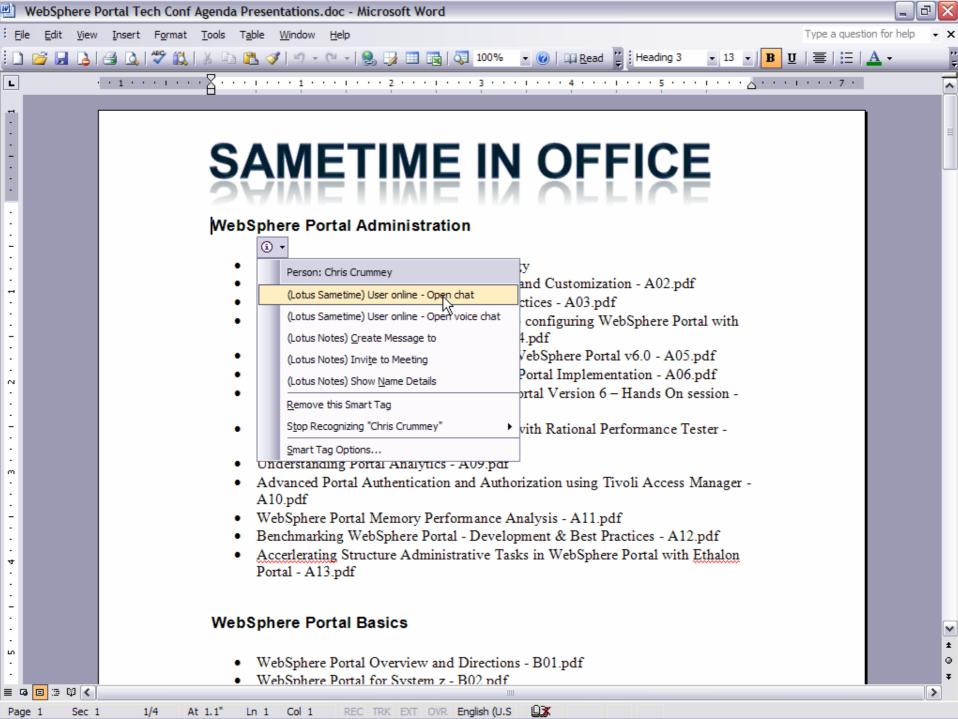
Sametime Integration with Microsoft

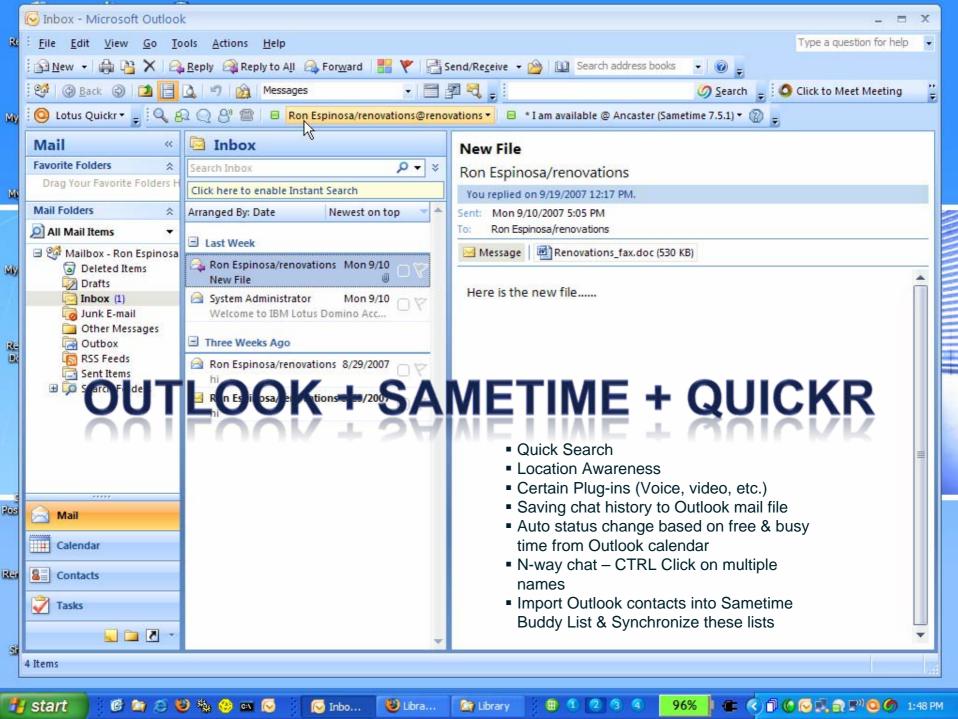


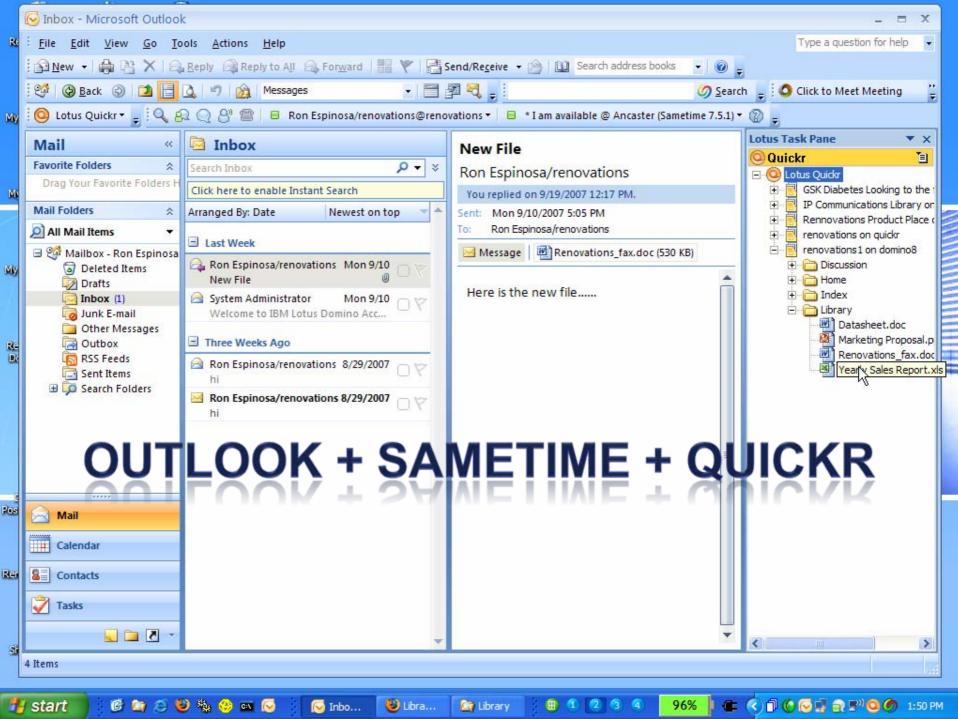


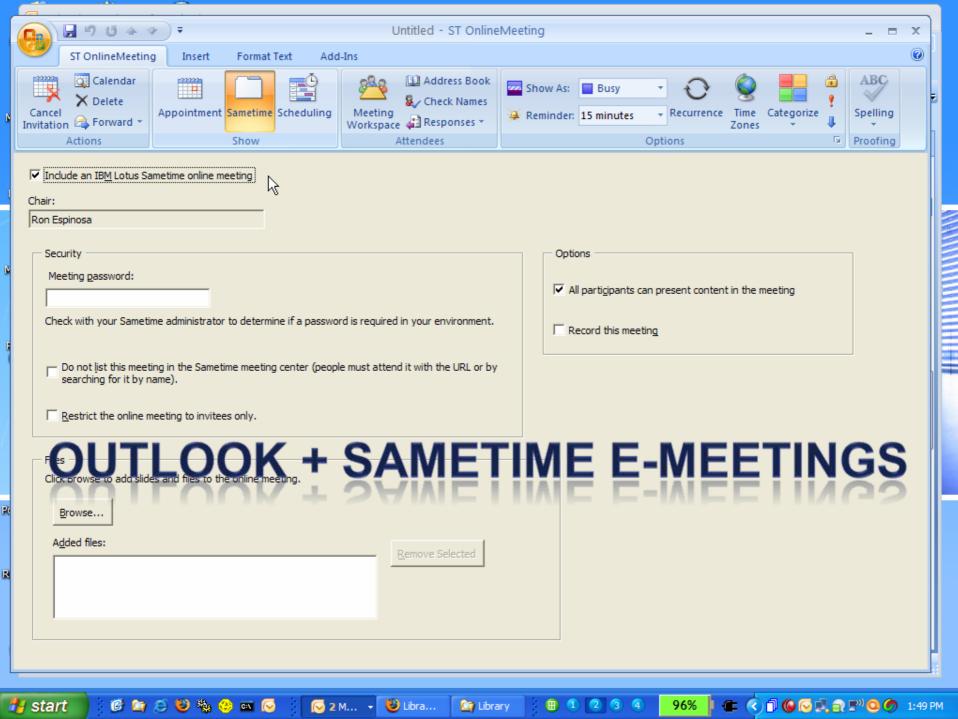




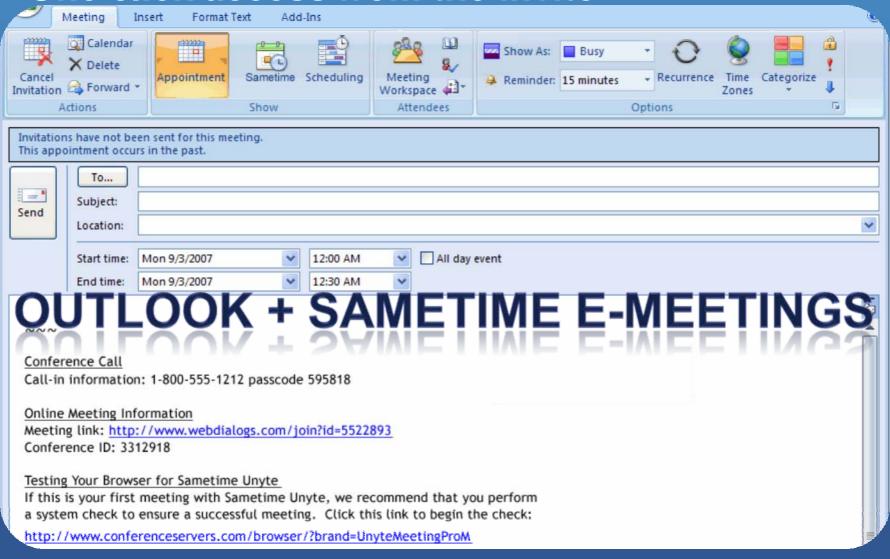


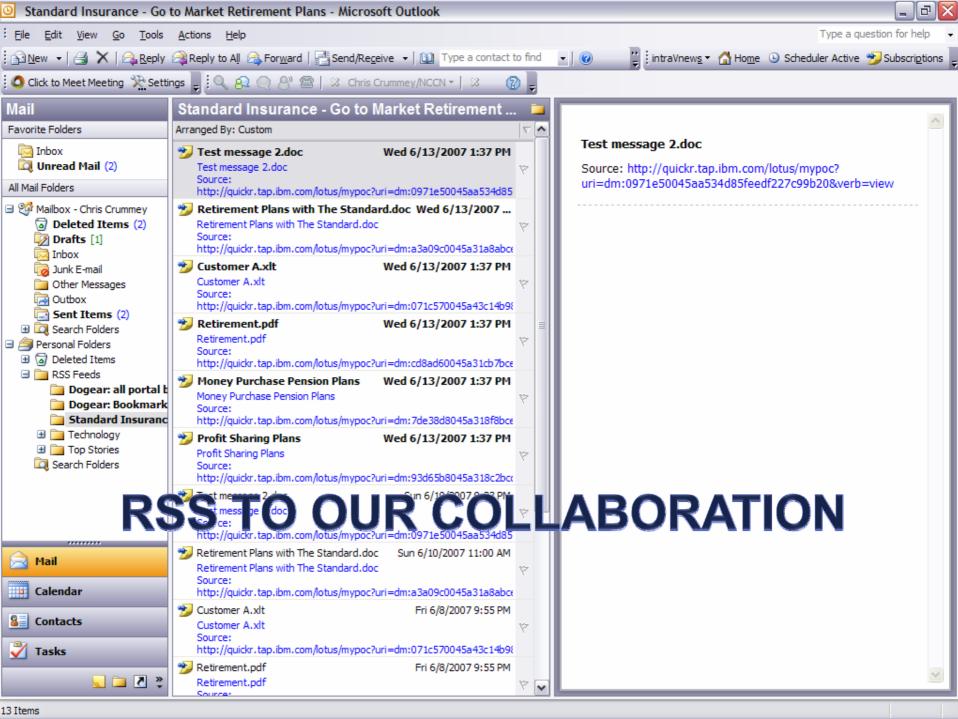






One click access from the invite







Lotus Connections Business Card within Sharepoint









Mainsoft 解決方案介紹



Who Is Mainsoft?

Founded: 1993

Leader in .NET-Java EE interoperability Advanced IBM Business Partner since 2005 **Business:**

Vision:

Move to Open Systems, Preserve Microsoft investments

150+ banking, healthcare, insurance, manufacturing, Clients:

retail, software development and public sector

customers

Product

Validations:







Awards:





Best option for rehosting .NET apps on Java EE servers



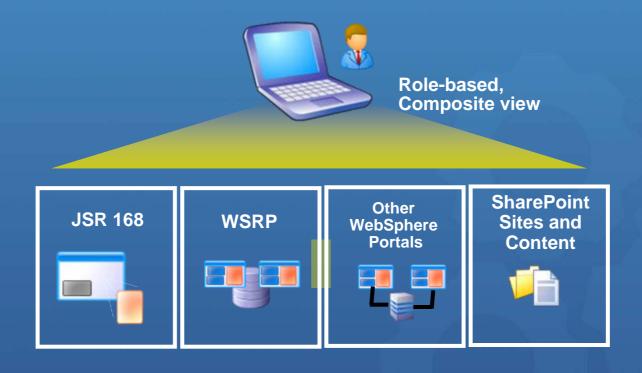


What value does Mainsoft bring to our Portal portfolio?

- Mainsoft enables companies to use existing .NET skills to integrate existing ASP.NET and SharePoint applications into WebSphere Portal.
- Mainsoft enables businesses to federate SharePoint sites from WebSphere Portal
- OApplications behave <u>exactly the same</u> as any Java portlet running on the portal
 - ability to participate in composite applications using portlet communications
 - the same look and feel
 - unified navigation
 - single sign on



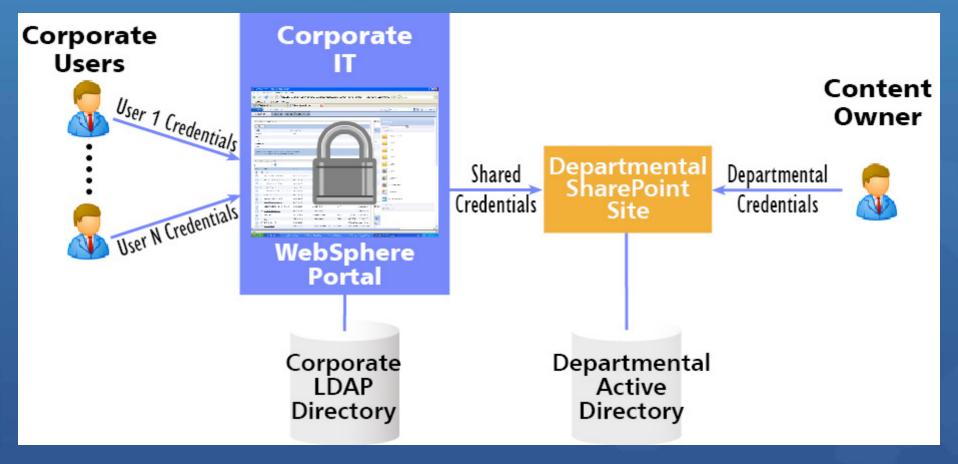
WebSphere Portal as the Federation Portal



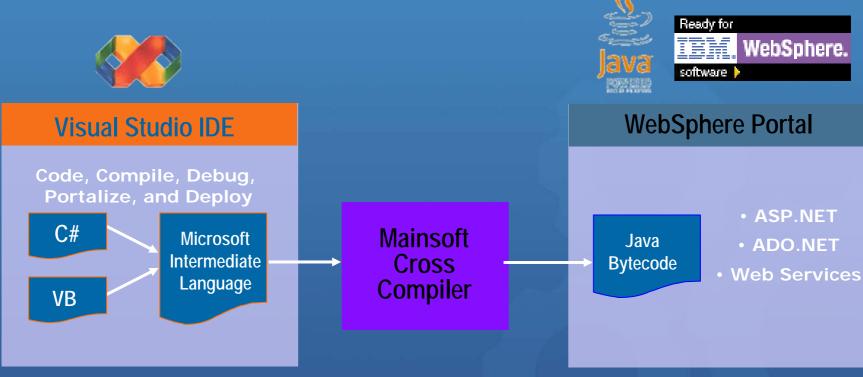
A single point of personalized interaction with enterprise applications, content, processes and people



Centralized Access to Departmental SharePoint Sites



Mainsoft for Java EE, Portal Edition Enabling Technology



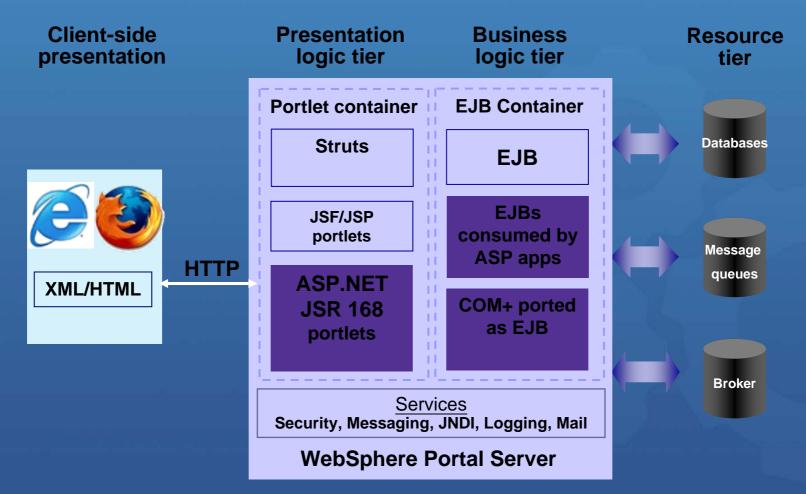
- Mainsoft software cross compiles C#/VB code into Java bytecode and packages it into WAR files.
- ✓ ASP .NET portlets run natively on WebSphere Portal.







ASP.NET:Just Another Framework on the JSR 168 Container



WebSphere Portal Can Support .NET & Java Equally

Capitalize on existing .NET assets

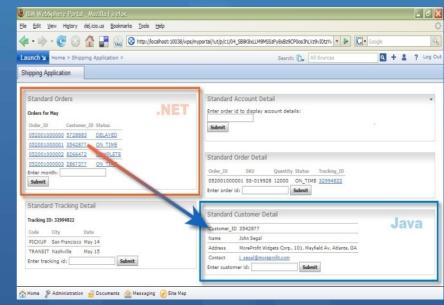
- Use existing .NET skills.
- Integrate <u>existing ASP.NET</u> <u>applications</u>.
- Federate contents stored on existing <u>SharePoint sites</u> and <u>SQL Reporting</u> Services.

Build composite apps across .NET and Java

- Create on-the-glass mash-ups across .NET and Java.
- Enhance employee productivity.
- Improve customer relationships.

Extend the value of portal to .NET

- Single point of access to all enterprise services - both .NET and Java - within a secure, role-based environment.
- High availability, scalability.

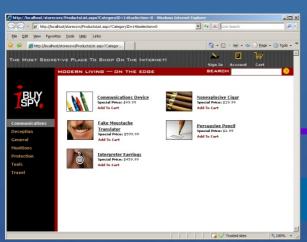


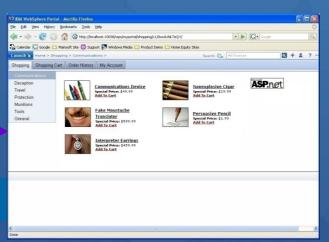
An example of on-the-glass integration between .NET and Java portlets.



.NET Extensions for WebSphere Portal: Mainsoft's Portal Edition

- C# and Visual Basic developers use Mainsoft's Visual Studio-based SDK to create and integrate ASP.NET applications into WebSphere Portal, without having to learn Java or become WebSphere Portal experts.
- .NET developers can also access <u>WebSphere Portal Services</u> to deliver a complete Portal implementation.
- End-user experience is <u>seamless</u> across .<u>NET and Java</u>.





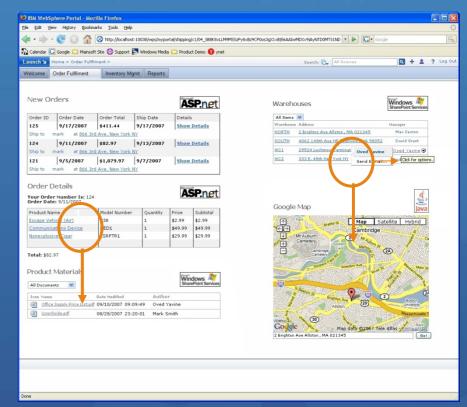
Use Mainsoft's Portal Édition to integrate an ASP.NET store front, with a product catalog, user authentication and personalization, shopping carts, and a Web service to submit orders into WebSphere Portal.



.NET Extensions for WebSphere Portal:

SharePoint Federator for WebSphere Portal New!

- Give end-users SSO, <u>role-</u> <u>based</u> access to SharePoint content:
 - ✓ SharePoint lists
 - ✓ Documents
 - Announcements
 - Events
 - Contacts
 - Meetings
- Portlets are highly customizable and can participate in mash-ups across .NET and Java.
- Build <u>composite apps</u> using SharePoint, .NET, & Java portlets.



- (1) The Product Materials portlet federates documents stored on a Windows SharePoint site.
- (2) The Warehouses portlet federates a SharePoint list that participates in mash-ups with Google Maps & Same Time Collaboration Services.







.NET Extensions for WebSphere Portal: SQL Reporting Services Federator for WebSphere Portal

- Federate <u>SQL Reports</u> within WebSphere Portal.
- Integrate with IBM Dashboard to deliver detailed reports using customer's reports stored on the SQL Server.



This Inventory Management Page integrates SQL Reporting Services and Dashboard framework KPIs.





Demo Screens





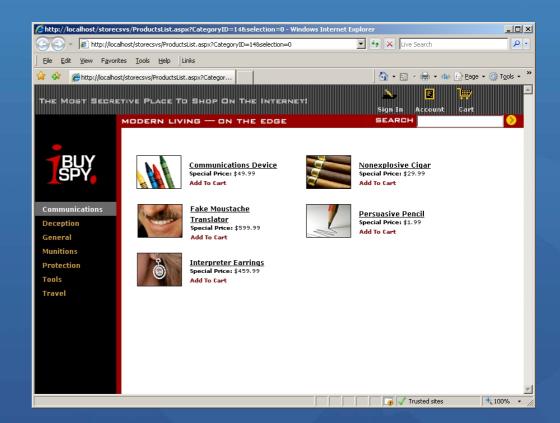






Integrate .NET Assets into WebSphere Portal

- Integrate into WebSphere Portal:
 - 1. ASP.NET eCommerce site.
 - Windows SharePoint Services.
 - 3. Microsoft SQL Reporting Services.
- Use composite applications across .NET & Java to stream line order processing, fulfillment and reports.
- Use C#, Visual Studio to integrate, maintain the .NET portlets.



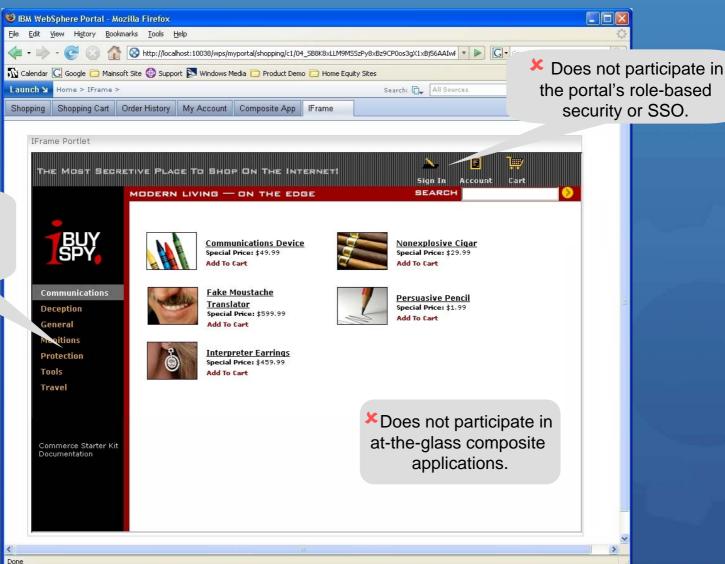




Using IFrames Integrate ASP.NET into WebSphere Portal

The ASP.NET application behaves like a picture-in-apicture.

Maintains original branding and navigation.

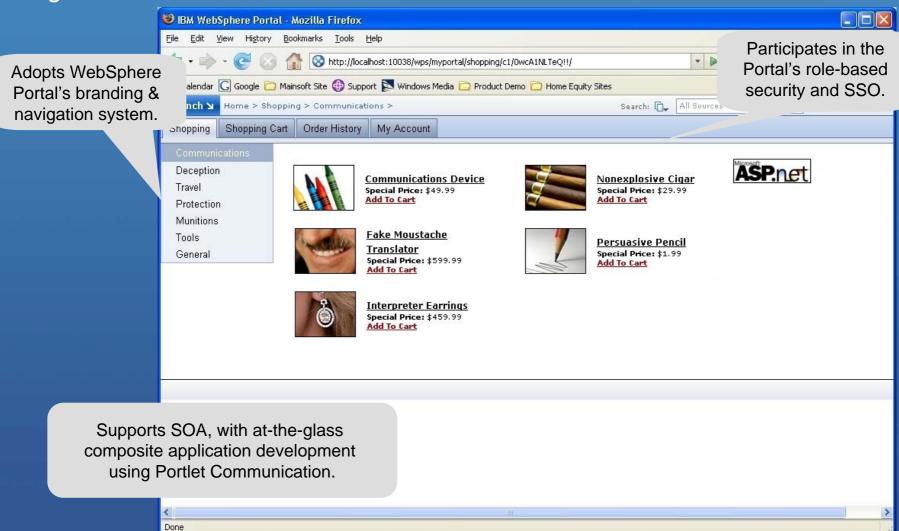








Using .NET Extensions Integrate ASP.NET into the Portal

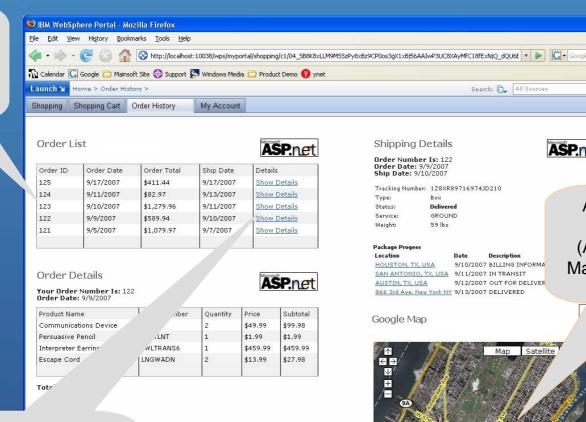




Q + A ? Log Out

Building Composite Applications Across .NET & Java

Order List **Portlet** (ASP.NET) displays new orders



Show Details Link (ASP.NET) uses Portlet Communication to update the Order Details and Shipping **Details** portlets

Done

Order Number Is: 122 Order Date: 9/9/2007 Ship Date: 9/10/2007 Tracking Number: 1Z8XR89716974JD210 A mash-up between the Delivered Status: GROUND Services Package Progress Weights (ASP.NET) and a Google Package Progess Location Map portlet (JAVA) displays 9/10/2007 BILLING INFORMA 9/11/2007 IN TRANSIT 9/12/2007 OUT FOR DELIVER the shipment route. 866 3rd Ave. New York NY 9/13/2007 DELIVERED

ASP.net



Search: 🕞 All Sources

Shipping Details

Google Map



Federate SharePoint Contents into Portal

site reuses

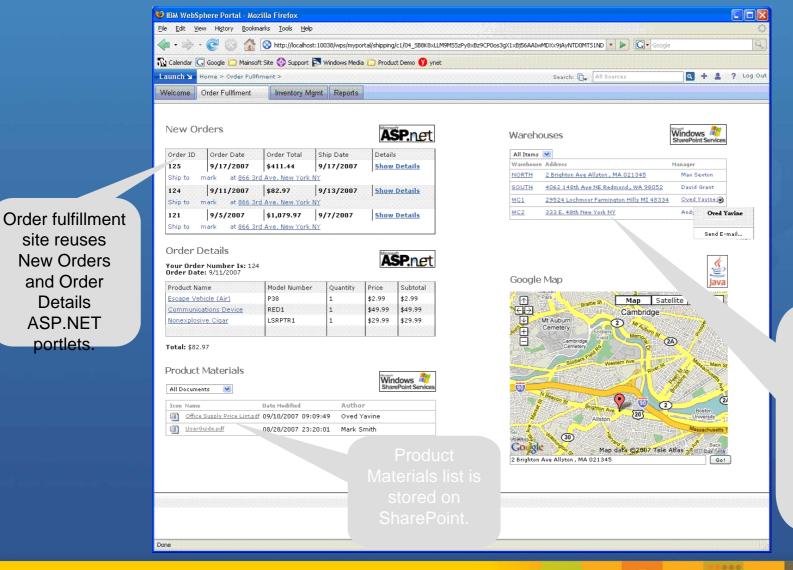
New Orders

and Order

Details

ASP.NET

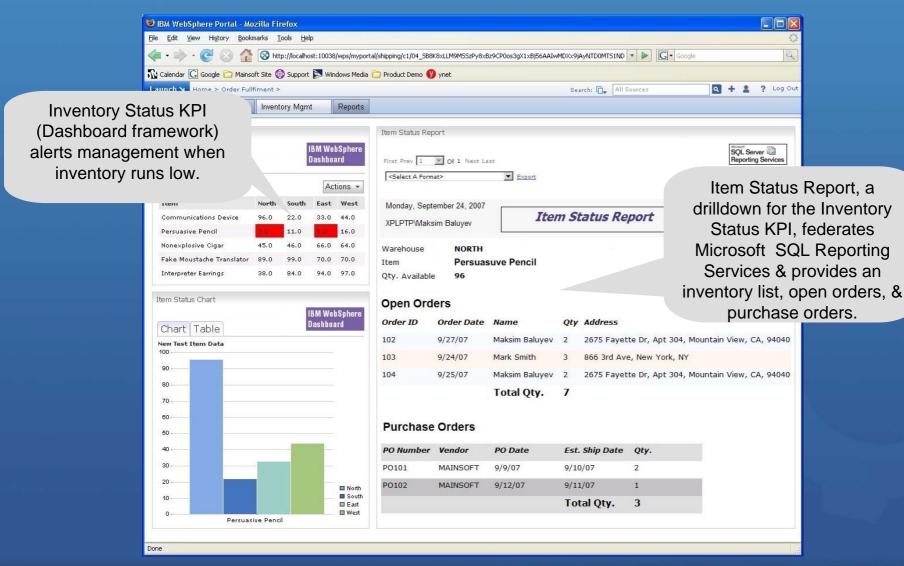
portlets.



SharePoint content participates in composite application with a Google Gadget & Sametime Collaborate Services



Integrate Dashboard Framework with SQL Reports



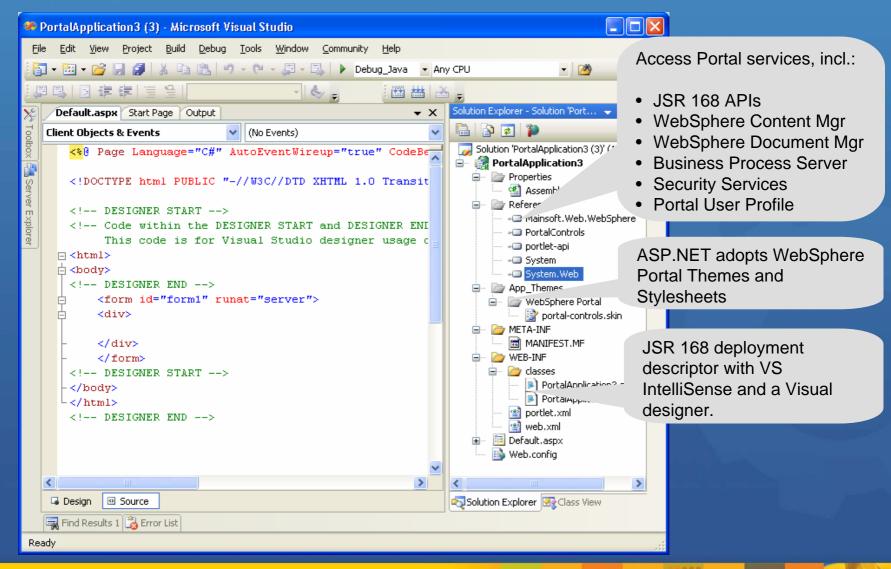








Visual Studio Development Experience

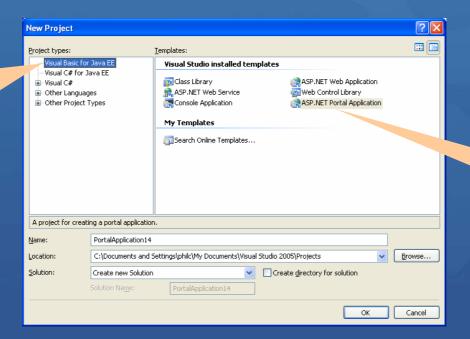




Developing ASP.NET Portlets From Visual Studio

- ✓ New Java EE Project Types for both C# and Visual Basic
- ✓ ASP.NET Portal Application Project Template
 - Preserve the ASP.NET development experience.
 - Deploy JSR 168 compliant deployment package.

Two new project types for creating Visual Basic and C# Java EE projects.



New ASP.NET Portal Application template.



Visual Studio JSR 168 Portlet Designer

The visual designer for portlet.xml shortens the JSR 168 learning curve.

- Multi-portlet applications.
- Support for localization
- ✓ View/Edit/Config portlet modes
- Portlet preferences

And more...

Setting portlet preferences.

Setting portlet modes.

Setting portlet Localization.

portlet.xml [Design]* Output

Customers

view

esource Bundle Porta pplication3

(Collection)

ASP.NET Portlet crea

Portal Application 3 Pc

PortalApplication3 Pc

Add Portlet.

Edit User Attributes Customers Appearance

(Name)

Description

Short Title

Display Name

ehaviour

ortlet Modes

eferences

dvanced

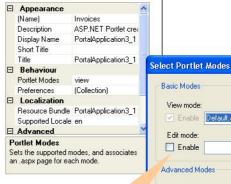
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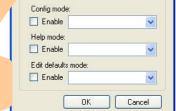
upported Locale en

the portlet's name.

Adding new portlets.

Setting portal user profile attributes.





Enable Default.aspx

Edit mode:

Enable



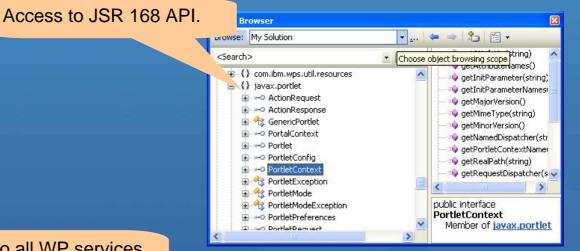
JSR 168, Portal API Access

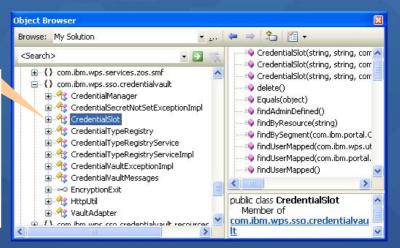
- ✓ Full access to JSR 168 API and Portal services.
- Support for Visual Studio IntelliSense.
- ✓ C#/VB invocation of WebSphere Portal APIs.

Direct access to Portlet API directly from the ASP.NET page.

Access to all WP services e.g. Credential Vault.

```
public partial class
                          ult : Mainsoft.VMW.Portal.Page
   protected void Page Lu
                            (object sender, Eventargs e)
        PortletContext pc = th s.PortletContext;
        PortletPreferences pr = this.PortletRequest.getPreferences();
```









ASP.NET API on top of WP Security Infrastructure

- ✓ Authentication: Leverages WP single sign-on support.
 - ASP.NET Authentication based on WP SSO

Fetch the logged-in user ID from the portal.

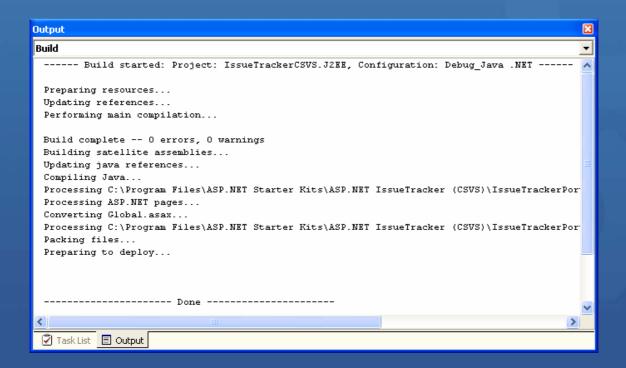
string usertId = this.User.Identity.Name;

 Authorization: ASP.NET Roles are mapped to WebSphere Portal groups. ASP.NET IsUserInRole() checks if the portal user belongs to the portal group.

Manage Users and Groups	
Search: User groups 💌	
Search by: All available V Search	
Users and Groups All Portal User Groups	
Members of All Portal User Groups - add, edit and delete user groups and u	sers
* New Group	
ID	
wcmadmins wcmadmins	
PWS.Admins	
PWS.Friends	

Compiling ASP.NET Apps to Java Bytecode

- Build, deploy, and debug portal application from Visual Studio:
 - Integrated Java build and deployment to the Portal.
 - Run portal application from Visual Studio.
 - Debug from Visual Studio and attach to the portal server.







Healthways, Inc.

Using .NET and Java technologies to build an eFulfillment site for 27 million members

Challenge

- Healthways was growing 36% a year and needed to streamline operations.
- In 2006, company spent \$28 million printing and mailing literature to its membership, and it needed to reduce costs.
- Chose WebSphere Portal as the preferred portal platform but inhouse development team was .NET

Solution

Use Mainsoft and WebSphere Portal to create a self-service fulfillment portal that gives members 24x7, online access to health and disease management documents

Benefits

- Site entered production five months after development work began.
- Estimate that full ROI will be achieved within one year.
- C# developers used Mainsoft's Visual Studio-based SDK to build Java portlets after a single day of training.
- Site delivers unified experience, with single sign on, role based access, common navigation and branding across both .NET and Java components.



"We achieved the best of both worlds: we used our enterprise .NET skills to develop our eFulfillment site, and we delivered a highly personalized experience to members in a highly scalable, proven production environment."

David Jarmoluk
Director of Enterprise Architecture
Healthways



Reference Information

- **OMSDN** Home
 - http://msdn.microsoft.com/
- OMSDN Home for XML/Webservices
 - http://msdn.microsoft.com/xml
- MSDN Home for MS Office
 - http://msdn.microsoft.com/office
- IBM WebSphere Portal Business Solutions Catalog
 - http://www.ibm.com/websphere/portal/portlet/catalog
- WebSphere Portal Zone
 - http://www7b.software.ibm.com/wsdd/zones/portal/





Additional Information and Resources

- 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







Thank You!