PMC202

Interoperability Between SAP NetWeaver Portal and Microsoft SharePoint Technology



Carsten Boennen, Microsoft Strategic Alliance Management



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Agenda





1. Introduction

- 2. SAP Netweaver Portal
- 3. Integration "out-of-the-box"
 - Integrating SAP NetWeaver Portal into Microsoft Office Sharepoint Server
 - Integrating Microsoft Office Sharepoint Server into SAP NetWeaver Portal
- 4. Integration "manually"

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SAP and Microsoft Collaboration Aligning around Customer Needs





Customer Success

- Providing our joint customers added value through SAP business applications and Microsoft technology
- SAP applications run on the latest versions of Windows and SQL Server



Innovation

- Duet Software for Microsoft Office and SAP
- SAP BusinessObjects Live Office



Efficiency

- Interoperability based on Web Services standards
- SAP performs tests of new releases of SQL Server before General Availability for customers

SAP and Microsoft Collaboration SAP mySAP CRM Mobile Client on Tablet PC mvSAP.com Solutions on Pocket PC General Availability of Duet™ 1.5 · SAP Desktop Office Interoperability Joint Project Mendocing ships as Duet T Full Integroperation Integration with Microsoft Exchange Server Joint Commitment to Advanced Web Services SAP Enterprise Services Interopera- DCOM Connector Explorer for Microsoft .NET Portal Development Kit .NET SAP .NET Connector REC SDK SAP announces support SAP R/3 on SQL Server SAP supports Windows Server 2003 for Windows Server and SQL Server 2008 Support SAP is SQL Server 2005 Launch Partner SAP is Windows® 2000 SAP R/3 on Windows NT Launch Partner Microsoft uses mySAP SCM to manufacture the Xbox Microsoft uses mySAP of joint Project Mendocino Microsoft uses mySAP of joint Project Roadmap Manufacture Mendocino No. Microsoft selects SAP for its global Finance implementations the Xbox Enterprise SAP NetWeaver and Microsoft .NET Interoperability Announcement Alliance Partnership Agreement between Bill Gates and Hasso Plattner 1993 1994 1995 1996 1997 1993 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010

Resource Commitments



SAP and Microsoft Corporate Teams

- Executive Sponsorship
- WW Coordination, Marketing, Technical and Sales

Interoperability Lab

- Team of technical experts located in Walldorf
- Drives interoperability between SAP and Microsoft solution stacks

SAP and Microsoft Development Teams

SAP and Microsoft each have deep technical experts working in Redmond and Walldorf

Field Resources

Regional Alliance Managers in Americas, EMEA and APJ

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What does it do?

Overview SAP NetWeaver Portal



SAP NetWeaver Portal provides easy access to business processes and information, and serves many unique user roles

- Delivers multi-system-, rolebased access to business processes and information
- Provides a secure and single point of access
- Increases people productivity
- Provides managed content in the context of business applications
- Offers an intuitive web interface for internal and external users



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Showcases SAP runs SAP NetWeaver Portal





SAP Corporate Portal

- Serves 50,000 SAP employees
- One of the top 10 intranets 2008 worldwide!
- Awarded by NN/g Nielsen Norman Group



SAP Community Network:

- Serves more than1,000,000 SAP experts
- SDN Community
- BPX Community
- BusinessObjects Community
- SAP EcoHub

Future Directions – at a glance **Midterm**



SAP Portal for Me Empower Users. Enable Self Service. All Enterprise Digital Assets



Who?

 All Enterprise users: Employees, Partners, Customers, Consumers



What?

 All enterprise and external digital assets accessible to user, e.g. transactional, analytical, social applications, non structured

How?

 Via self service discovery, access, recomposition and UI flexibility of digital assets, while enabling "process of me" concept



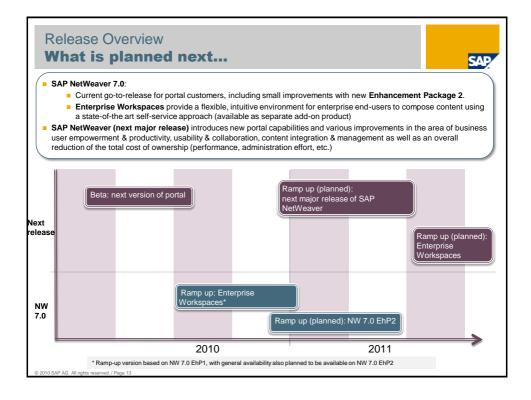
Where?

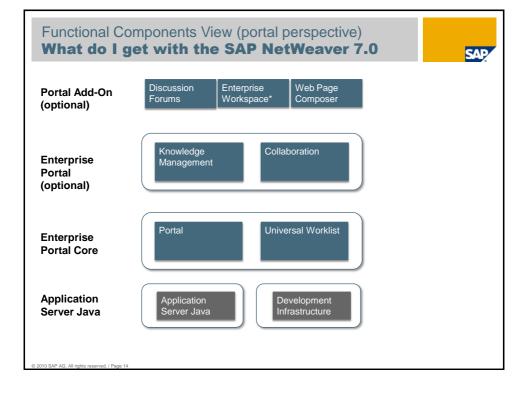
 In a channel of user's choice, e.g. corporate portal, workspace, mobile or external channel such as on demand services

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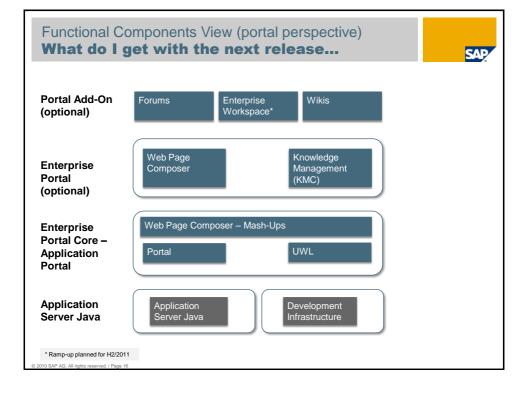
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Review What happened so far... SAP ■ Various beta shipments, partner testing & conferences to gather comprehensive feedback from customers & partners Improvements via enhancement packages or as part of SAP NetWeaver Composition Environment (CE), e.g. JSR 168, Java 5 ■ Great adoption in 2009: EPC + 69,1% and full EP + 25% of productive customers* Note: mainstream maintenance of SAP NetWeaver 2004 (EP 6.40) ended in March 2010! Pilot: Ajax Framework Page Partner Testing: Next Application Portal release Beta: Wikis Beta: Web Page Composer CF** 7.1/ 7.2 Ramp-Up: NW 7.0 EhP1 NW 7.0 2008 2010 *Productive Customers (SAP NW 2004, 7.0, 7.01, CE 7.1, CE 7.2); January 2010 **SAP NetWeaver Composition Environment is a separate product with main focus on composition / process modeling tools. It provides only basic portal capabilities. SAP plans to align the CE / NW stacks with the next major SAP NetWeaver release





Enhancement Package 2 for SAP NetWeaver 7.0 SAP Key Investment areas: Supportability, Performance & Standards New Portal Capabilities Knowledge Management & Collaboration Solution Enhancements **Key Benefits** State-of-the-art new Ajax Framework Enhanced Application Integration and Federated Portal Network capabilities for Page (AFP) consumption of remote applications ■ Navigation cache pre-loader capability Improved root cause analysis via: for improved end-user experience New functionality in the area of Customized Portal runtime error pages Knowledge Management & Clean redundant log messages Collaboration Traceability of administrator actions on Read-only mode for KM (via NZDM) PCD objects Transport of KM application properties Layout set transport via CTS+ Remote UWL connector for KM Personalized mail signatures in all KMC mails Customizable subject line ■ New browser support: Internet Explorer 8 FireFox 3.5



Planned Highlights





NetWe Enabling end user

End user Empowerment & Self–Services, with SAP NetWeaver Portal, Enterprise Workspaces first release

Enabling a flexible, intuitive environment to compose content, enabling enterprise end users to integrate and run structured and unstructured assets using a self-service approach.

Managing and Mashing up Portal Pages with Web Page Composer Supporting business key users in the easy creation and management

Supporting business key users in the easy creation and management of enriched portal pages, blending business applications and user-generated content, generating truly flexible UI

Unified Access to Applications and Processes with Lower TCO

Delivering the best of class integration layer for SAP, Business Objects and non-SAP applications & reports while maintaining low TCO with capabilities such as advanced caching, integration with SAP central Transport System and significant performance and scalability improvements.

Portal Landscape Interoperability and Openness

Providing industry standards integration capabilities for SAP and non-SAP content, both into the SAP Portal and for 3rd party Portals, such as JSR and Java 5 support, or open API's for navigation connectors.

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Feedback: Preview of new Portal next release



"We like to the new editing environment [of WPC], since it is much more intuitive and easy to use. We are looking forward to work with and see our feedback implemented in the final version."

HLP Informationsmanagement GmbH

"The Wikis are ease to use and intuitive and have an UI easy to work with. They implement all basic functions expected in a wiki software was stable, good performance, only smaller bugs."

General Feedback, Wiki Pilot Shipment "Thanks for the opportunity to evaluate the preview version of the new Web Page Composer. It's a major step forward, we specially like the new architecture"

btexx business technologies GmbH - The Portal Experts

"From an end-user perspective the functionality and performance are a major step forward. The Ajax Framework Page provides a state-of-the-art UI. The simplified mechanism to integrate backend content into the portal and the handling of Business Packages makes the life much more easier for us."

Feedback from Partner Testing for "Application

"We greatly welcome the wellimproved user interface, which allows the user to operate in a much more intuitive way. The deeper integration into the portal content is also a big plus of the new version. All in all, we had a very promising first impression!"

Competence Center Enterprise Portals, CubeServ Group

Complementary Partner Solutions



Next major release of SAP NetWeaver Portal extends support for various open frameworks for integration of third party content and services. In addition partners can leverage APIs to build complementary solutions on top of the portal's capabilities.

btexx business technologies

COREMEDIA

Integration Levels

Simple Integration

- Navigation / Role
- User Management
- Authentication / Session Management
- Portal Content

Key Capabilities for Integration

- Portal Content Model and Directory
- Navigation Connectors / Web Service
- KM Repository Manager
- JSP Tag Library and Ajax LShape-API
- Connectors for UWL, Collaboration Services
- JSR 168, 286, WSRP
- Java APIs

Complex Integration sweetlets @

- Search
- Theme
- Languages
- Application Integration

Examples

- Business Package for Confluence Wiki by HLP
- MOSS Integrator & easyWCM by btexx
- Conetweaversuite by CONET
- Open SAP Portal Server Integration by CoreMedia
- CMS for SAP Portal by imperia
- Click Stream by Sweetlets
- ... and lot more in SAP Eco Hub

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SAP EcoHub

Future Directions

Potential topics for future enhancements



SAP Portal for Me

Integration

With transactional, analytical & social applications

- Business Suite landscape awareness
- Improved BOE Portal Integration
- Integration with SAP StreamWork (SAP's ondemand decision making tool)
- Industry standards support (portlets. OpenSocial, ECM, JSR170, SAML 2, OAuth)

Extension

Extend on premise solutions with SaaS extensions

- Integration with SAP StreamWork for decision making on business context
- Integration with SAP BI On Demand through portal

Self Service

For discovery, access, UI composition and wiring

- Personal and Line of Business
- UI composition and syndication
- Framework for SAP pre-wired business content, end user wiring and expansion to non-SAP content

Channel of Choice

Enable content syndication to multiple channels

- Mobile
- Personal portals and social networks, wikis, forums
- Corporate Portals

Summary





- SAP NetWeaver Portal plays a key role in SAP's user interaction strategy.
- There are lot of improvements done in the various upcoming portal releases.
- Functional roadmap in essence
 - Self Service End Users and Line of Business by:
 - Simplifying content development
 - Enabling UI flexibility
 - Reducing the overall TCO and TCA
 - Further opening up portal framework for 3rd party vendors

SAP and Microsoft SharePoint Interoperability across multiple levels



Portal to Portal Interoperability

SAP NetWeaver Portal Interoperability Support

- BI-Directional access
- Multiple level of interoperability

SAP data and processes embedded in SharePoint sites and solutions

Duet Enterprise

for Microsoft® SharePoint® and SAP®

- Duet Composites based on Web Services foundation layer
- Simplified and Robust access layer to SAP

Navigation, data analysis and interaction with reports in SharePoint



Portal Integration Kit Integration Option for Microsoft SharePoint

- Part of the SAP BusinessObjects Suite
- Web Part Integration approach with enhanced functionality

Agenda



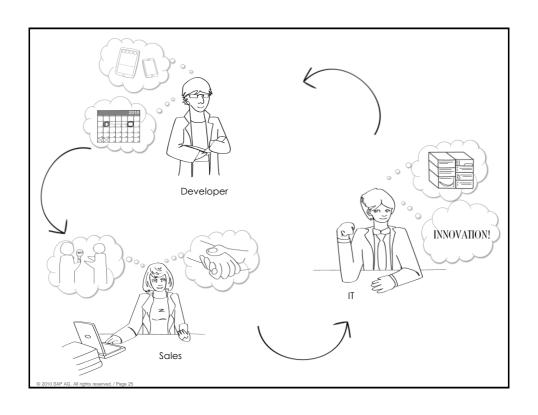


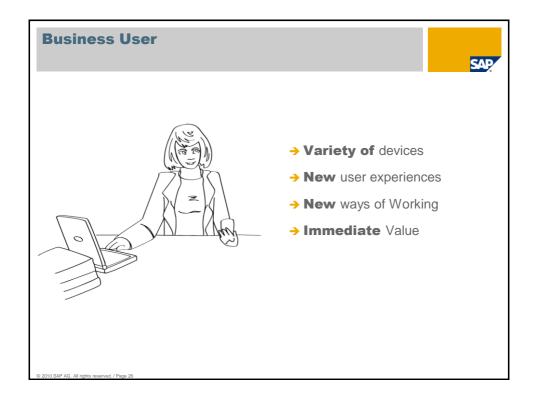
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Extend SAP to the environment of your choice





IT





- → IT Control and Governance
- → Security and Integrity
- → Cost of deployment and maintenance
- → Accelerate Innovation
- → Address Business needs

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Developer

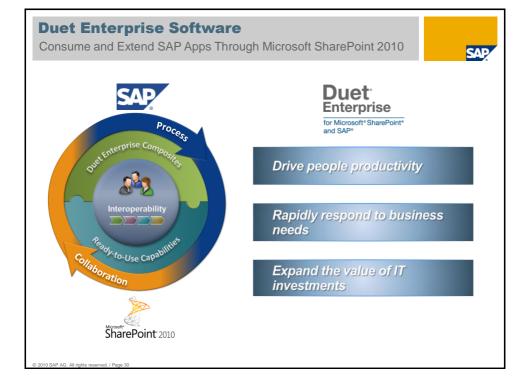




- → Variety of devices
- → Focus on **usage**
- → **Short** development cycle
- → All data sources
- → Knowledge focused on device or environment

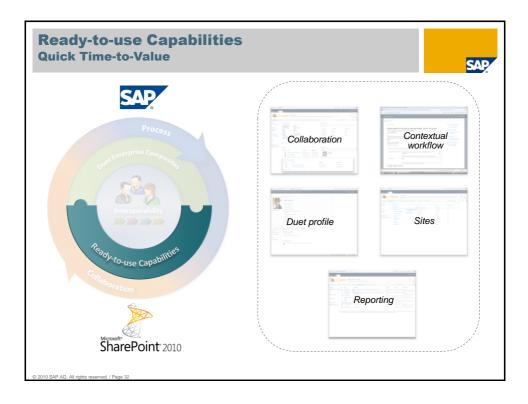


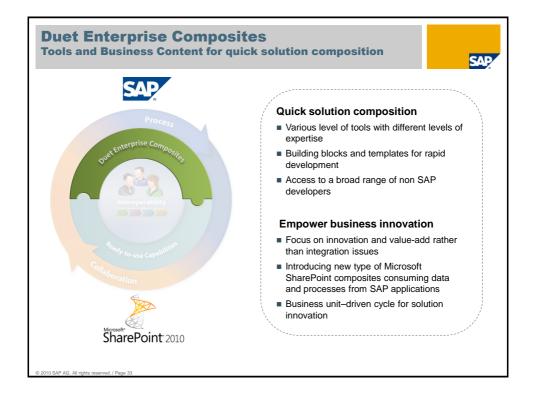
Microsoft and SAP Introduce Duet Enterprise

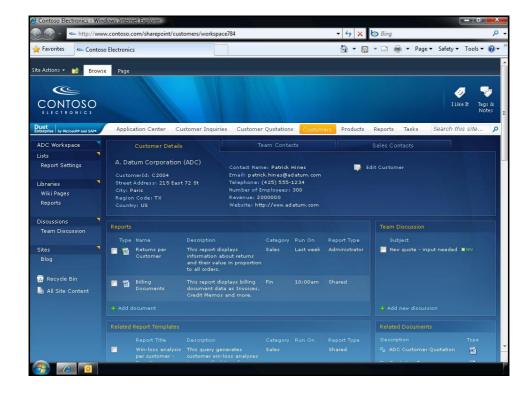


Built-In Interoperability Simple and reliable design approach Add-on to SAP NetWeaver technology platform and Microsoft SharePoint ■ Simple architectural approach ■ Joint design, development, and support Supports key integration areas ■ Security/SSO/authorization Administration/supportability Simplified access to processes and information from SAP Leverages existing platforms and skill sets ■ Optimized IT landscape Utilization of standard management tools ■ Builds on existing IT team knowledge

SharePoint 2010







On DEVICE Collaboration Analytics All user experiences All user experiences Easy to extend On DEMAND SAP Business Suite 7 Technology Foundation



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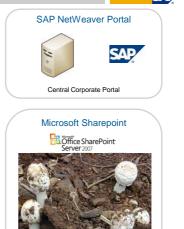
Typical customer situation



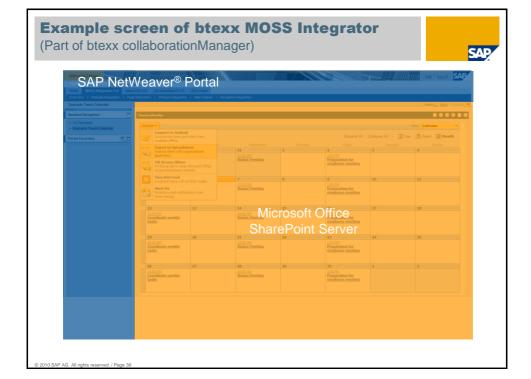
Typical: Single SAP NetWeaver Portal & several MOSS systems for collaboration

Challenges

- No longer a single point of access with the central SAP Portal
- Different Look & Feel
- No Integration of MOSS within SAP Portal or some bad integration via URL iView
- No single search engine
- Single sign-on challenges
- Portal Governance is a big issue through Sharepoints "Mushroom effect"



Decentrally organized

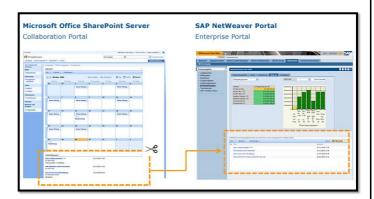


btexx MOSS Integrator:

Easy Use of SharePoint Features in the SAP NetWeaver Portal



- Integration of any SharePoint content into a leading SAP NetWeaver Portal
- Different integration levels for any use-case including Search
- Wizard-based, no programming necessary
- Low administration, low TCO



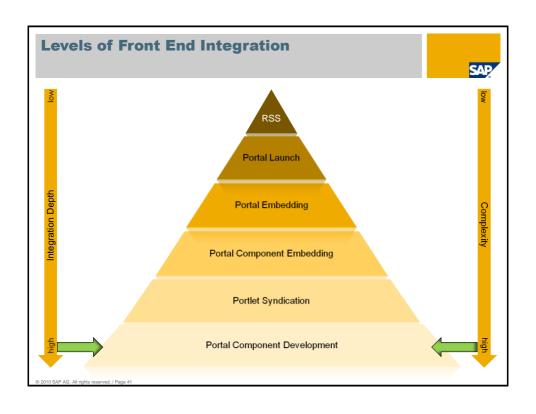
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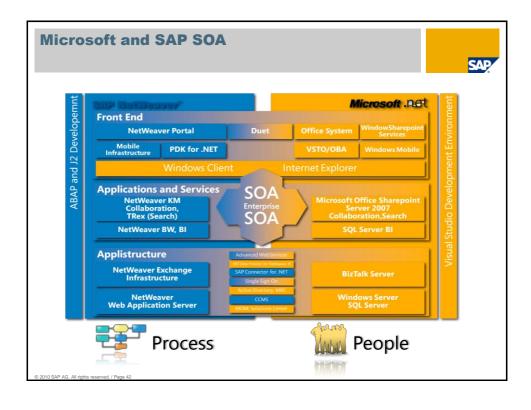
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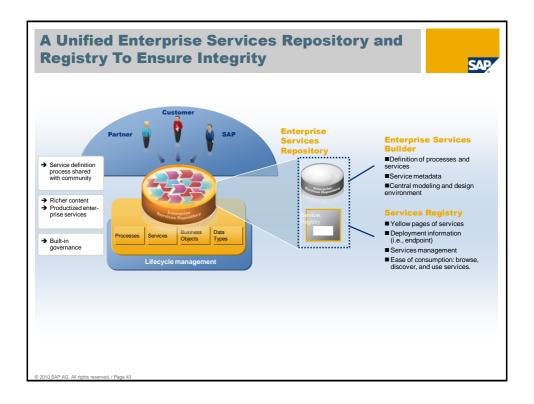


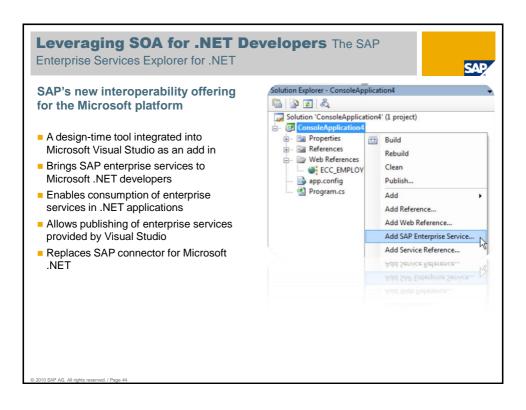
SAD

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Leveraging SOA for .NET Developers The SAP

Enterprise Services Explorer for .NET

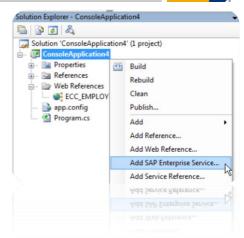


Enterprise Service Consumption

- Consuming Enterprise Services from:
 - Windows Smart Client applications
 - Microsoft Office applications
 - Web (ASP.NET) applications
 - SAP NetWeaver Portal (PDK for .NET) applications
 - Other .NET applications

Enterprise Service Deployment

 Deploy .NET based Web Services into the Enterprise Services Registry of SAP NetWeaver



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Installation Requirements



Microsoft

- .NET Framework 2.0 at minimum
- Visual Studio 2005 or 2008
- For WCF support:
 - .NET Framework 3.0 at minimum
 - Windows SDK 6.0
- SAP
- SAP Enterprise Services Explorer for Microsoft .NET
- Sneak preview is ready for you to download here.
- Services Registry on one of the following NetWeaver shipments:
 - SAP NW PI 7.1
 - SAP NW CE 7.1

Portal Development Kit for Microsoft .NET



Implementation Highlights

- Developers proficient with the PDK for Microsoft .NET within 2 hours
- New iViews (portlets) developed within 3 hours
- More than 40 portal pages delivered within 2 months
- Live Internet data feeds captured in portal

Key Benefits

- Ability to capitalize on existing .NET assets
- Ability to quickly and easily create portal content, which can then be easily integrated into portal pages
- No need for recruitment or retraining
- Single unified view of data and applications
- Personalized portal for each individual executive or user
- Improved decision making within the capital markets department and other units in the Ministry of Finance

"Our .NET developers were comfortable using the SAP portal development kit for .NET within just two hours."

Shmuel Oppenheimer, Head of .NET Development Israeli Ministry of Finance



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Portal Development Kit for Microsoft .NET



ISRAELI MINISTRY OF FINANCE

Key Challenges

- Leverage existing Microsoft .NET applications, skills, and expertise
- Deliver rapid business value to user departments

Project Objectives

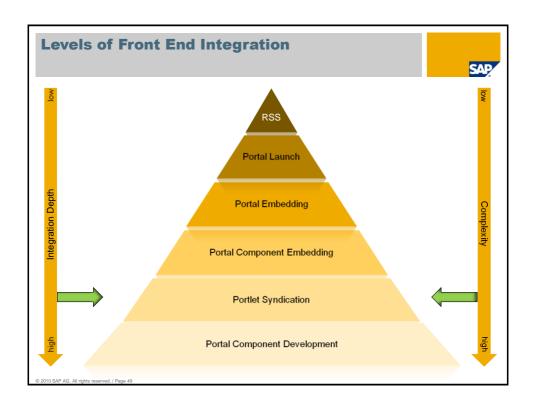
- Gain commitment of .NET developers to a non-Microsoft solution
- Integrate the .NET environment at the Ministry of Finance with the SAP[®] environment dominating government operations

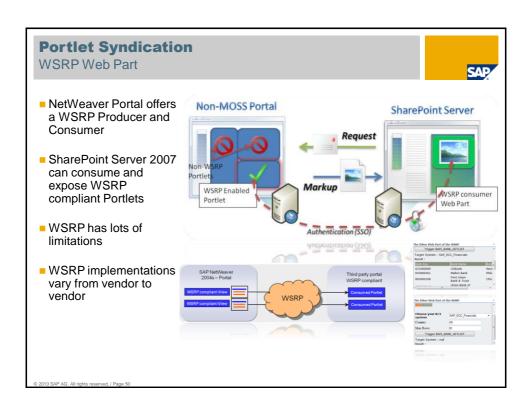
Why SAP Solutions

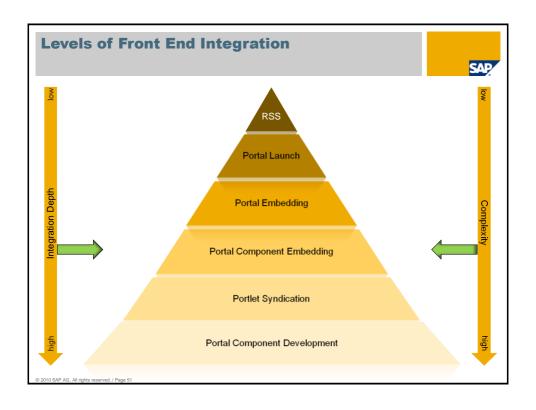
- Allows programmers to develop the SAP NetWeaver® Portal component within the .NET environment using .NET tools
- Provides highly productive development environment
- Enables organizations to use their existing .NET applications
- Precludes the need to recruit new skills or retrain staff

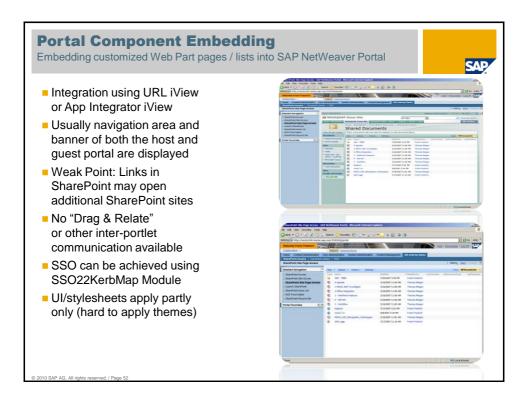
When the Government of Israel set out to implement a portal across all ministries using SAP NetWeaver Portal, the Ministry of Finance's .NET environment posed a particular challenge. However, by using the portal development kit (PDK) for Microsoft .NET from SAP, the government was able to meet this challenge head-on.

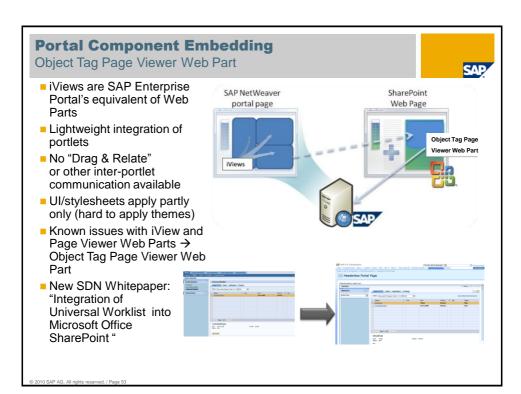


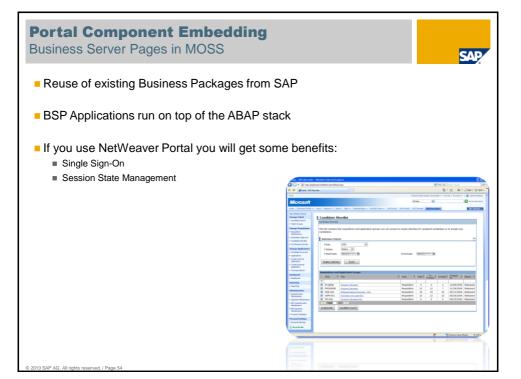












Portal Component Embedding

Web Dynpro in MOSS



- Reuse of existing Business Packages from SAP
- Web Dynpro Applications run on top of the ABAP stack or the JAVA stack
- No NetWeaver Portal required if Web Dynpro for ABAP is used
- Single Sign-On requires SAP NetWeaver JAVA stack or a X.509 certificate infrastructure (for example using Microsoft Active Directories autoenrollment capabilities)
- Desired look and feel by CSS

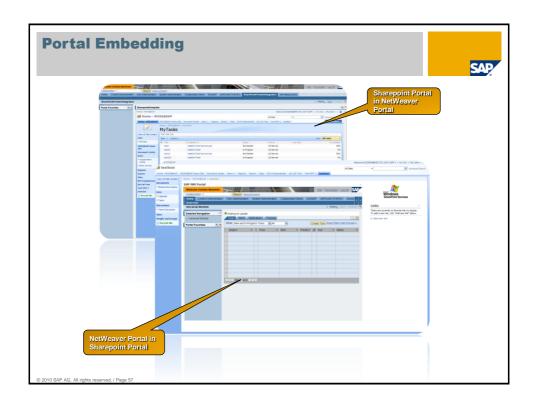


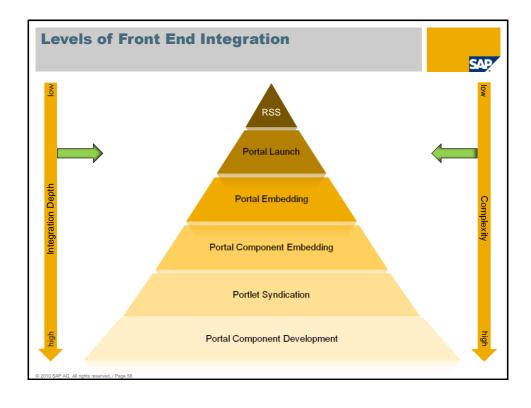
Portal Embedding

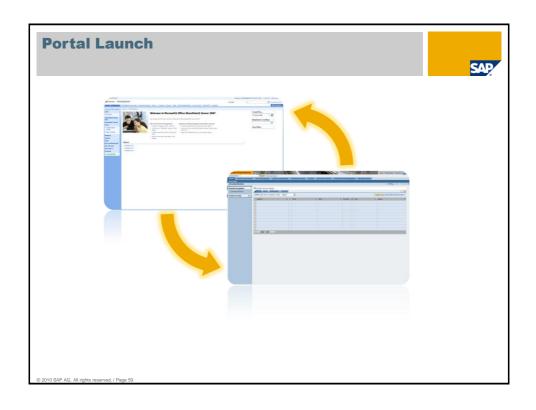
Portal Component Embedding

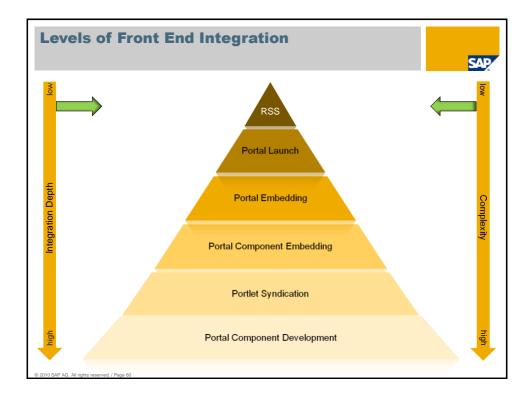
Portal Component Development

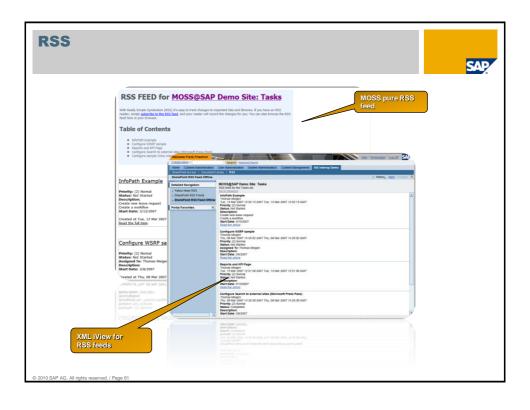
Portal Component Development

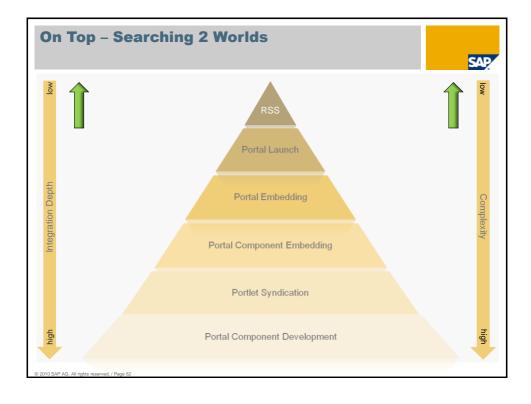


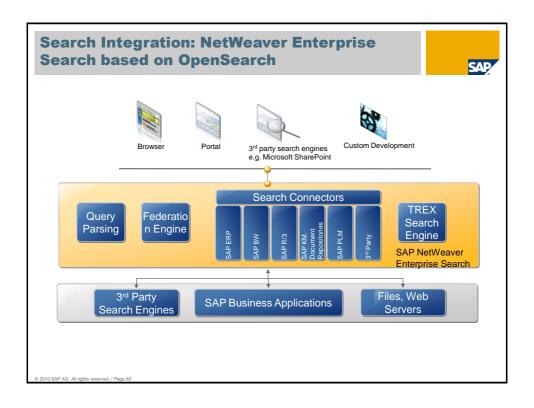


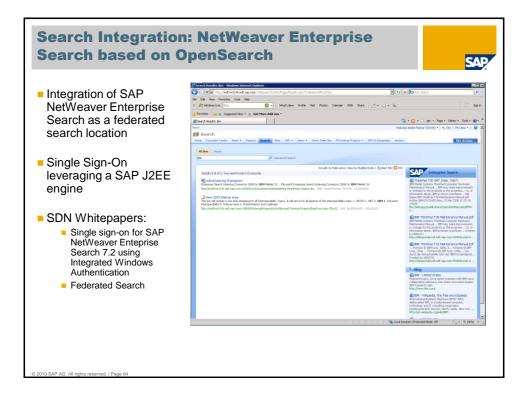












Further Information



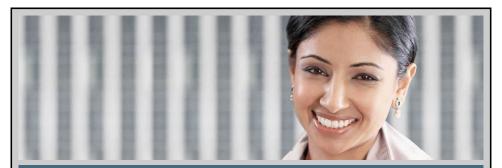
SAP Public Web:

SAP Developer Network (SDN): www.sdn.sap.com
Business Process Expert (BPX) Community: www.bpx.sap.com
SAP BusinessObjects Community (BOC): www.boc.sap.com

Related Workshops/Lectures at SAP TechEd 2010

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