

Session ID: S01

Leveraging WebSphere Portal and the Self-Service Accelerator to access SAP ERP system data at Sigma-Aldrich

Eric Boson, Manager I/S Collaborative & Human Resources Solutions

Marty Lechleider, Program Director, Self-Service Accelerator, IBM Software Group

Agenda

- Sigma-Aldrich Solution
- Self-Service Accelerator
- Summary

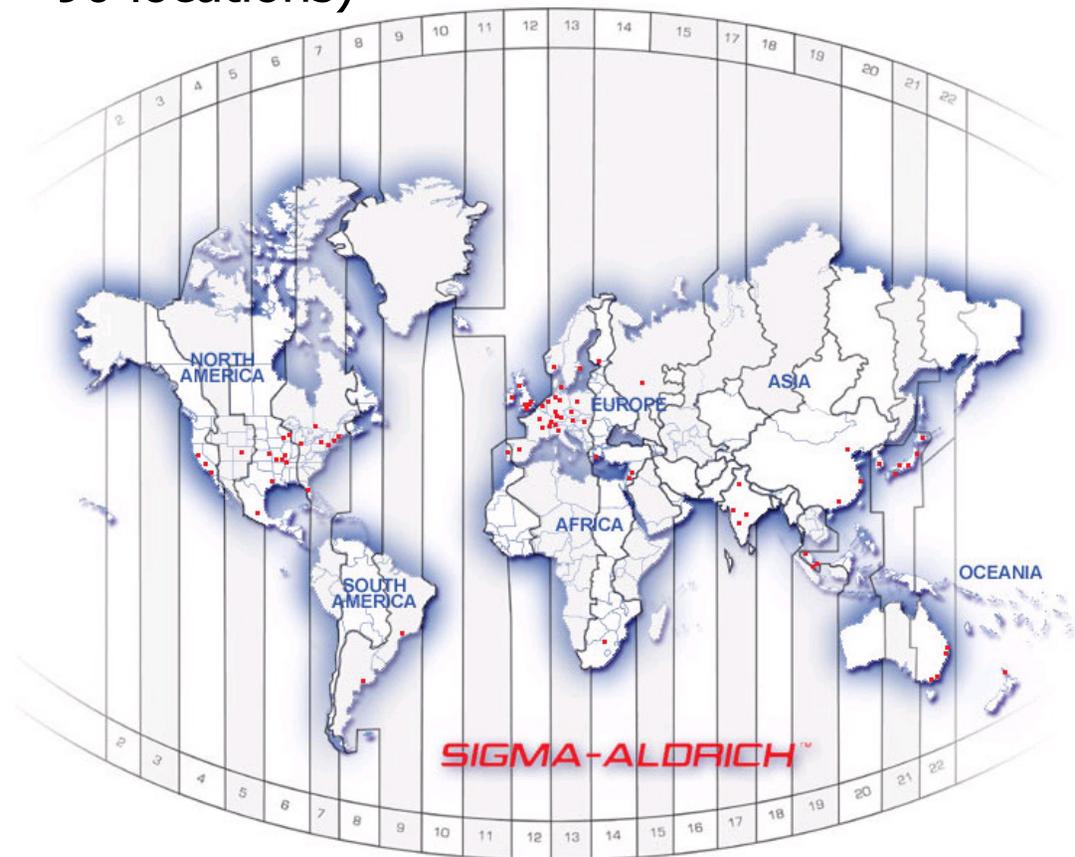


Sigma-Aldrich Solution

Eric Boson, Manager I/S Collaborative & Human Resources Solutions

Who is Sigma-Aldrich

- A leading Life Science and High Technology company
- Headquarters in St Louis, MO
- Operates in 36 countries (> 90 locations)
- 8,000 employees
- Sales were over \$2 Billion for 2007



www.sigmaaldrich.com

Global Human Resources Challenges

- Increase Quality
 - ▶ Improve accuracy of HR data
 - ▶ Maintain compliance with regulatory guidelines
- Decrease Costs
 - ▶ Hardware/Software
 - ▶ Third Party
- Create Synergies
 - ▶ Standardize HR processes
 - ▶ Use Common Systems
 - ▶ Improve Acquisitions Integration

US Benefits Team Expectations

- Simple to use, no user training
- Secure
- Ready within 3 months
- Usable by the US based employee population at 20 sites
- Reduce HR administrative tasks
- Reduce quantity of paper used
- Decrease overall enrollment process time

Streamline the Benefits Enrollment Process

Global I/S Requirements

- Global web-based system
- Accessible anywhere anytime
- Create the foundations to re-develop our current intranet
- Capable to integrate with SAP
- Capable to interface with Lotus Notes databases directly
- Prepare the ground for additional Employee Self Service (ESS) & Manager Self Service (MSS) features:
 - ▶ Personal Data Visualization & Maintenance
 - ▶ Life Events
 - ▶ Career Changes & Compensation Management

Choice of a Solution

- We evaluated 2 vendors
- We also evaluated Open Source tools (J2EE) for in-house development
- We decided to choose IBM because of its complete package (Websphere Portal + Self-Service Accelerator)
- We decided to also use IBM consulting team to help us implement this application in such a short time frame

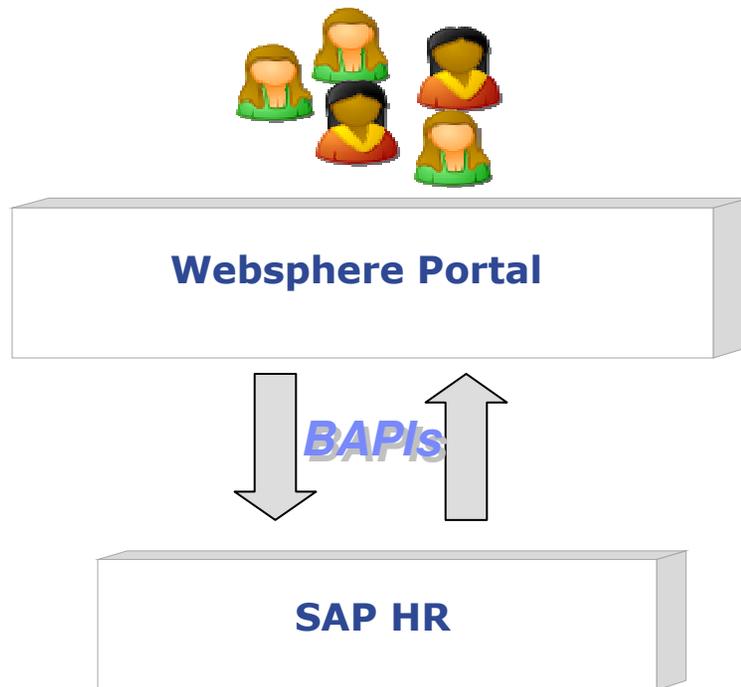
US Benefits Enrollment Project

- The project started during the last week of July 2007
- The project team included IBM & SIAL resources in the USA (2 locations) and France
- The project had a joint management team (SIAL-IBM)
- The communication between project team members was critical
- The Open Benefits Enrollment was scheduled between October 29th and November 9th 2007

Project – Partnership

- SIAL partnered with IBM to co-manage the project and produce the Websphere portlets.
- IBM created the portlets for Websphere, using Portlet Factory and the Self-Service Accelerator.
- By using Self-Service Accelerator as a foundation we were able to dramatically reduce the development cycle.
- We performed approximately 1,000 User Acceptance Tests on the software over a 2 week period. We then ran 2 pilot tests prior to moving the application into production.
- After each pilot test we met with the pilot users and, based on their feedback, made corrections to improve the usability of the application.

Project – Integration with SAP HR

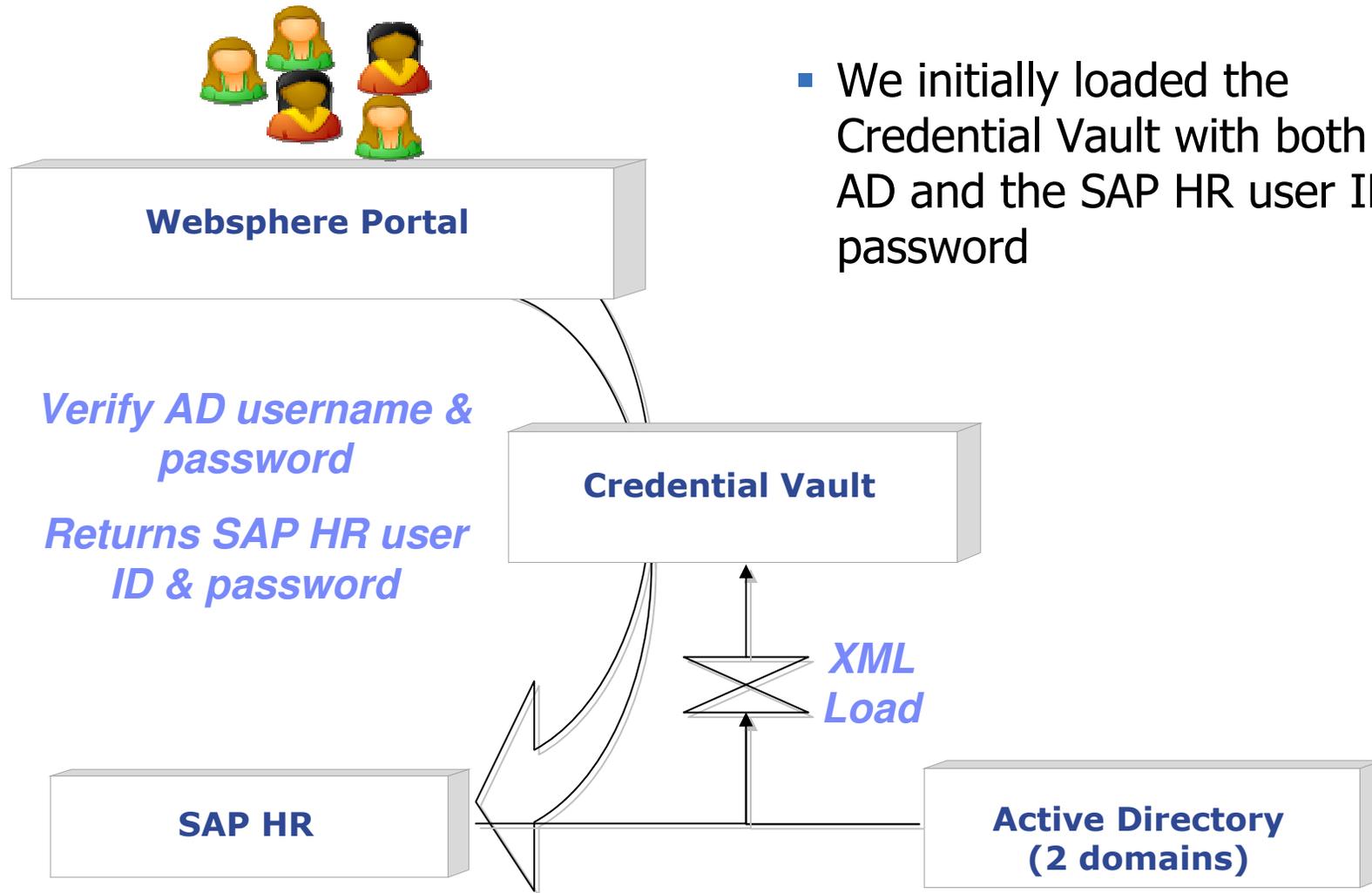


- We used a method based on BAPIs to integrate with SAP
- In some cases we had to modify the standard BAPIs to minimize the volume of data transferred between the 2 systems
- SIAL was responsible for the SAP HR configuration & the BAPIs

Project – Identity Management

- We reconciled our Active Directory accounts against our SAP accounts.
- We had to create an Active Directory account for every US employee who did not have one yet.
- We used the IBM Credential Vault to provide Single Sign On (SSO) between Websphere, Active Directory and SAP.
- This portion of our Single Sign On effort only addressed our benefit enrollment process.
- We are continuing to develop our Identity Management system for use throughout the entire organization.

Project – Credential Vault



- We initially loaded the Credential Vault with both the AD and the SAP HR user IDs & password

Project – Solution Components

Component	Vendor	Product/Solution - Brand
Portal For ESS/MSS	IBM	WebSphere Portal
ESS/MSS Solution	IBM	Self-Service Accelerator
HR Business Engine	SAP	SAP HR (ECC 5.0)
Content Management	IBM	WCM (Document Manager)
E-Mail & Collaboration	IBM	Lotus Notes

Project – Infrastructure

- We installed & configured 3 Websphere Portal servers (Development, QA and Production) to mirror our SAP environment.
- Websphere Portal Server 6.0.1.1.
- Websphere Application Server Version 6.0.2.17
- Servers are AIX. Dev/QA have 2 processors, 8 gig of RAM. Production has 4 processors, 16 gig RAM.
- Dev, QA & Prod have approx. 400 gig disk space.
- We provided private & secure kiosks for users who normally use shared PCs (or do not use PCs at all for their daily work).

Benefits Enrollment Wizard

- The Wizard format allowed the users to be directed through the benefits enrollment process.
- We designed very simple screens so that anyone could use them.
- No user training was done prior to the release of the enrollment system.
 - ▶ We provided online documentation about the system.
 - ▶ We provided online documentation library about the benefit programs and links to the benefit provider web sites.
- A confirmation page was provided at the end of the wizard for the users to check their benefit selections.
- Once confirmed, the portlet updated the SAP HR system with the user's selections.
- The information was then easily collected and electronically sent to our benefits providers.

Benefits Enrollment Wizard – continued

eHR

Open Enrollment My Benefits

Benefits Open Enrollment

Easy Self Service in 7 Steps

1. Welcome
2. Update Dependent Information
3. Medical
4. Dental
5. Flexible Spending
6. Supplemental Life
7. Confirmation

Menu is part of the Container and is built using the Tab Builder

Welcome

Welcome to the Sigma-Aldrich Benefits Open Enrollment for 2008. Open enrollment starts on October 29 and ends at midnight, CT, November 9. Human Resources is excited to introduce our new confidential, secure online benefits enrollment system. Online enrollment is the first step in the development of a comprehensive Employee Self Service (ESS) system. It provides an easy and efficient way to view your current individual benefit elections and covered dependents and to elect your 2008 benefits. Before beginning your online enrollment, we encourage you to review both your current benefit elections on the [My Benefits](#) tab and the enrollment materials provided.

The online enrollment system will take you through the open enrollment process. Most screens show you current benefit election including any covered dependents. Comments at the top of each screen help you navigate through the system. Some screens contain required fields (identified with an asterisk *) that must be completed before going to the next screen. Additional information regarding Open Enrollment can be found in the Reference Library located on each screen. If you are unable to complete your enrollment at this time, you will need to begin the re-enrollment process again when you log in.

If you complete the enrollment process and later decide that you want to change your benefit elections, you can do so by repeating the online enrollment process. You can continue to make election changes through November 9; after this date, your elections are locked-in. Each time you repeat the enrollment process, the system will display your last election.

Should you have any questions, please contact your Human Resources representative.

[Next >](#)

Benefits Enrollment Wizard – continued

The screenshot displays the 'My Benefits' page in the eHR system. The page is titled 'My Benefits' and includes a 'Logout' button. The main content area is divided into several sections:

- Benefits Overview:** Contains a 'Print This' link and a paragraph explaining the overview. Below it is a table for 'Health Plans' and 'Flexible Spending Accounts'.
- Benefits Details:** A section that is currently empty.
- Plan Administrators Contact Information:** Contains a 'Print This' link and a table with columns for Category, Provider Name, Contact Information, Web Site, Mail Claims To, and Additional Information. The table lists categories like Medical, Dental, Prescription Drugs, Flexible Spending Accounts, EAP, and 401(k).

Blue arrows point from a text box at the bottom to the 'Benefits Details' and 'Plan Administrators Contact Information' sections, indicating that multiple portlets were merged into these sections.

Benefits	Plan	Enrollment	Employee Contribution
Medical	Great West PPO High Plan	Employee + 1	██████ USD
Prescription	Express Scripts Prescription Plan	Employee + 1	██████ USD
Dental	Delta Dental Tier 2	Employee + 1	██████ USD

Benefits	Plan	Enrollment	Employee Contribution
FSA Medical	Medical FSA		██████ USD

Category	Provider Name	Contact Information	Web Site	Mail Claims To	Additional Information
▶ Medical					
▶ Dental					
▶ Prescription Drugs					
▶ Flexible Spending Accounts					
▶ EAP					
▶ 401(k)					

Benefits Enrollment Wizard – continued

Model Container - loads separate model for each step

Easy Self Service in 7 Steps

1. Welcome ✓
2. Update Dependent Information ✓
3. Medical ✓
4. Dental
5. Flexible Spending
6. Supplemental Life
7. Confirmation

Dental Benefits

Please review your current elections. If you do not want to make a change, click on Next and you will be re-enrolled in the elections as they appear on the screen. Use the drop-down menu to change your Option or Coverage level. When you have completed your changes, click on Next. To return to a prior screen, click on Previous.

Plan Name *	Delta Dental			
Plan Options				
Plan Option *	Tier 2 ▾			
Coverage-N-Cost				
Coverage *	Employee + 1 ▾			
Pre-Tax Per Pay Period Contribution	USD			
Post-Tax Per Pay Period Contribution	USD			
DEPENDENTS				
Selected	Name	Relationship	Gender	Date of Birth
<input checked="" type="checkbox"/>	ChildOf Woods	Stepchild living with you	F	07/21/1994

Each step is a separate "Contained Model"

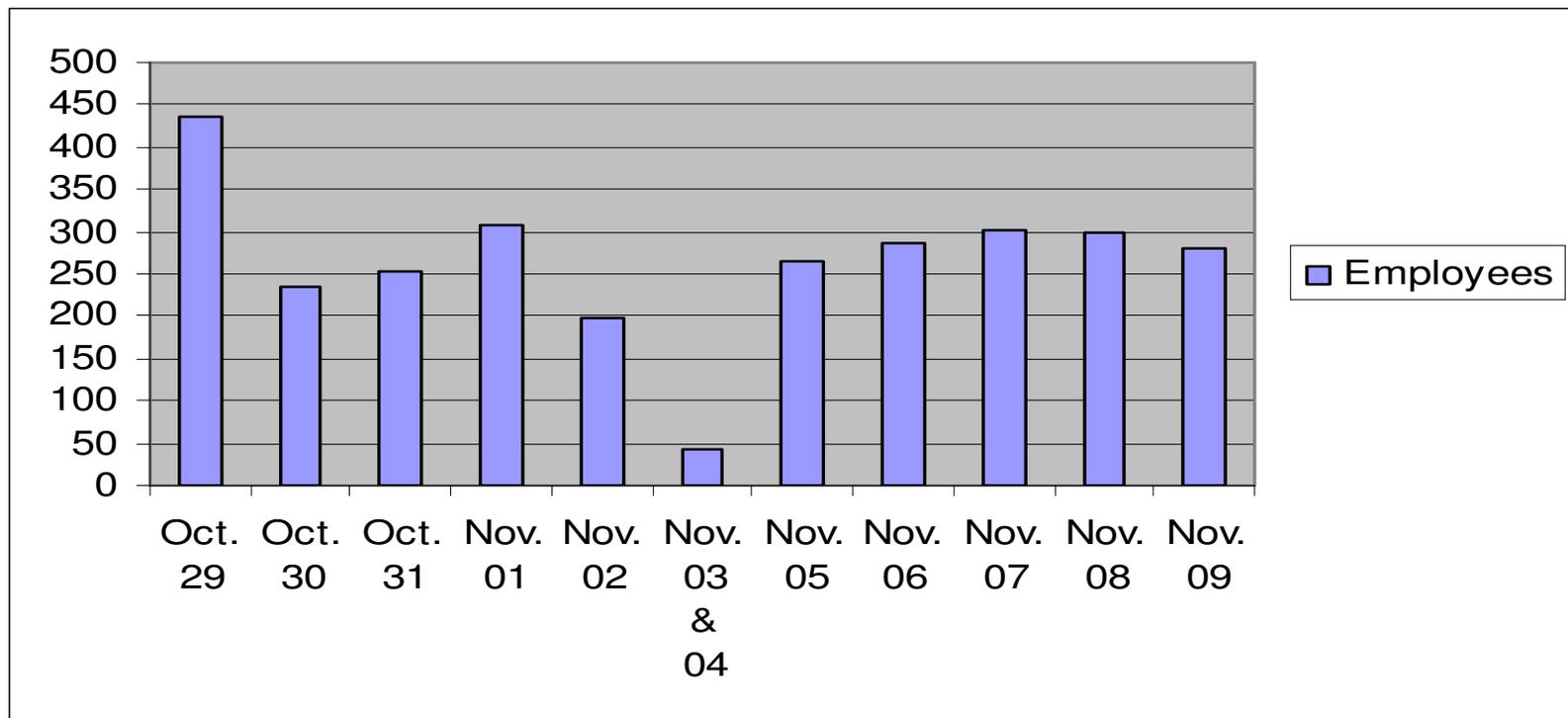
Upon Submit - process information and fire Portlet Factory Events to interact with Container

Project Steps – Go live period

- We set up a project room for the 2 weeks enrollment period with at least one member from each team staffing the room.
- We did not expect any major problem but we wanted to be prepared for anything as the enrollment period was short.
- Documentation/Training was provided to the Global Service Desk staff.
- All calls from users went to the Global Service Desk.
- Any call not able to be resolved by the Global Service Desk then went to the project room.

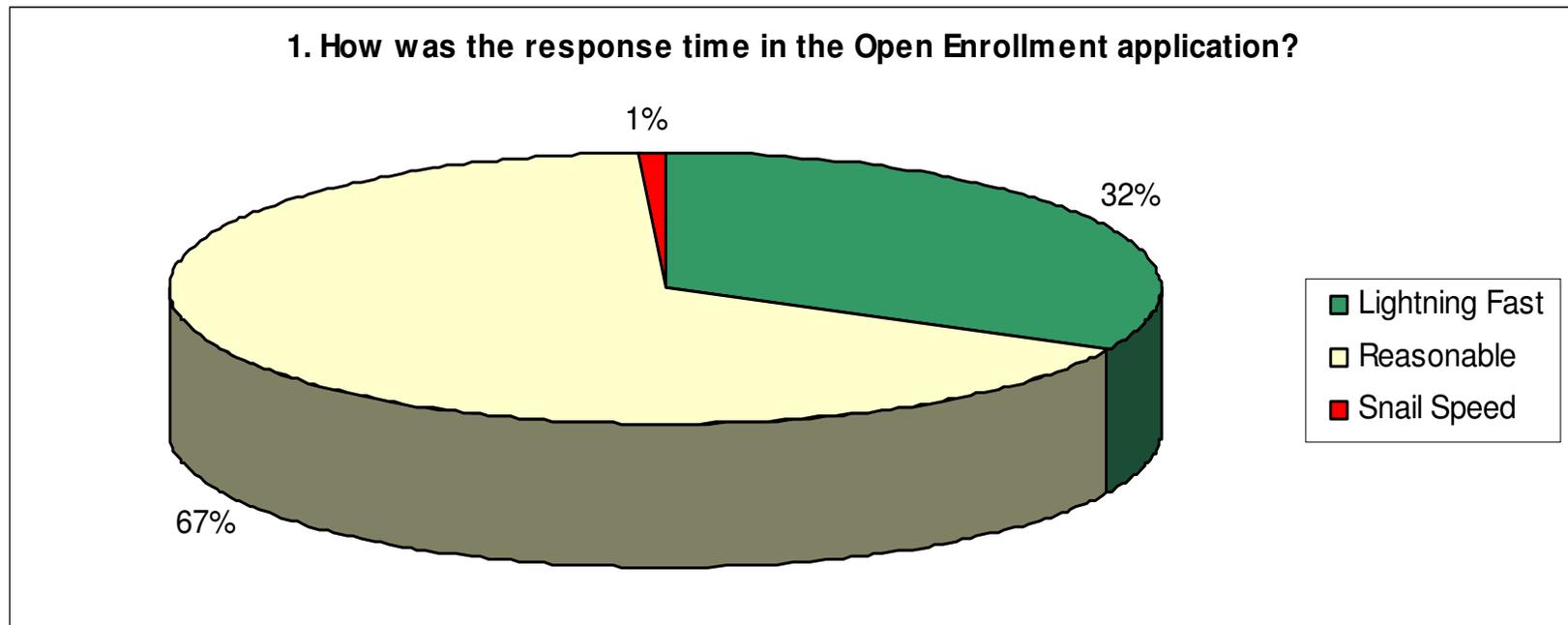
Results – Enrollment Pattern

- The application was used every day (including during the week end)
- We had to cope with a large number of enrollment on the first day
- Most of the connections were performed early morning



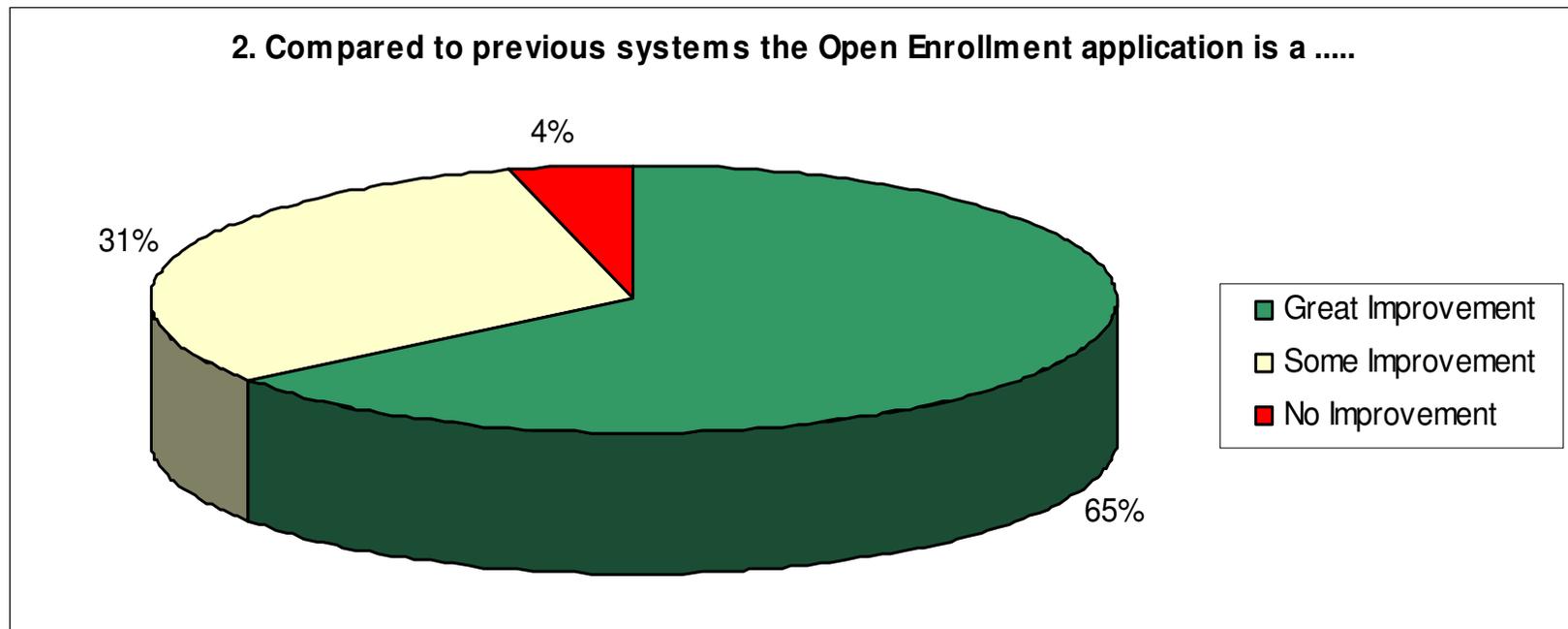
Results – Employees Feedback

- The application used very little bandwidth
- Most employees connected from our US locations during their working hours
- Some employees also connected from home using our secured VPN



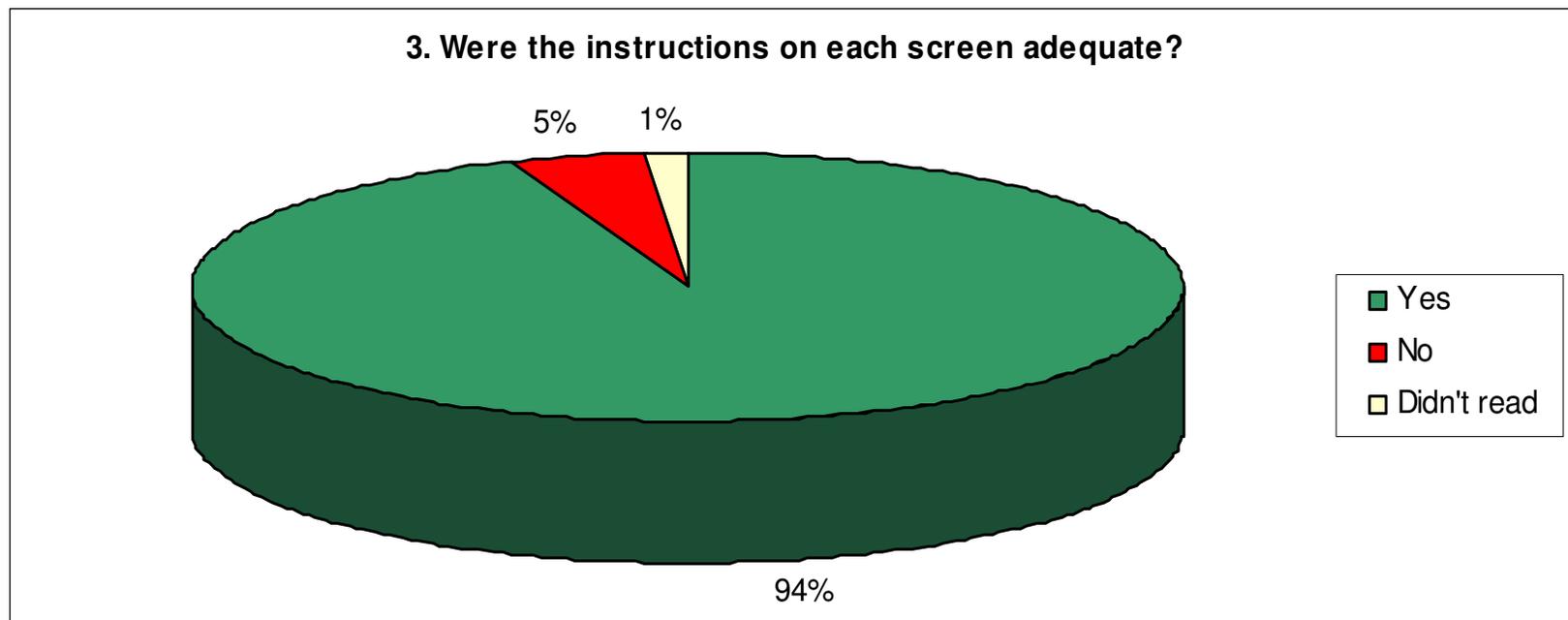
Results – Employees Feedback – continued

- We provided a unique system to register for all Benefits plans
- We displayed current Benefits selection to help making the choice
- We used fewer paper-based documents



Results – Employees Feedback – continued

- We focused lots of our energy in the User Interface design
- We provided on-line documentation for each Benefit plan
- The navigation was straight forward



Company Vision

- Increase ability to measure employees' contribution
 - ▶ Implement SAP HR in compliance with EU data privacy regulation in Europe in 2008 (on schedule)
 - ▶ Implement SAP HR in Asia-Pacific in future years
- Use the Benefits Enrollment module every year in the USA with minimal I/S & HR resources to support it
- Provide additional I/S tools to help operations to run the business

Project Conclusions

- SIAL would not have been able to do it in such a short time frame without IBM
- SIAL HR & I/S Teams collaborated extensively
- On Time / On Budget
- Data quality was improved in SAP HR by having employees maintaining it themselves

The project was a clear success



Self-Service Accelerator

Marty Lechleider, Program Director, Self-Service Accelerator, IBM Software Group

Building on a Solid Framework

WebSphere Portal and the Self-Service Accelerator



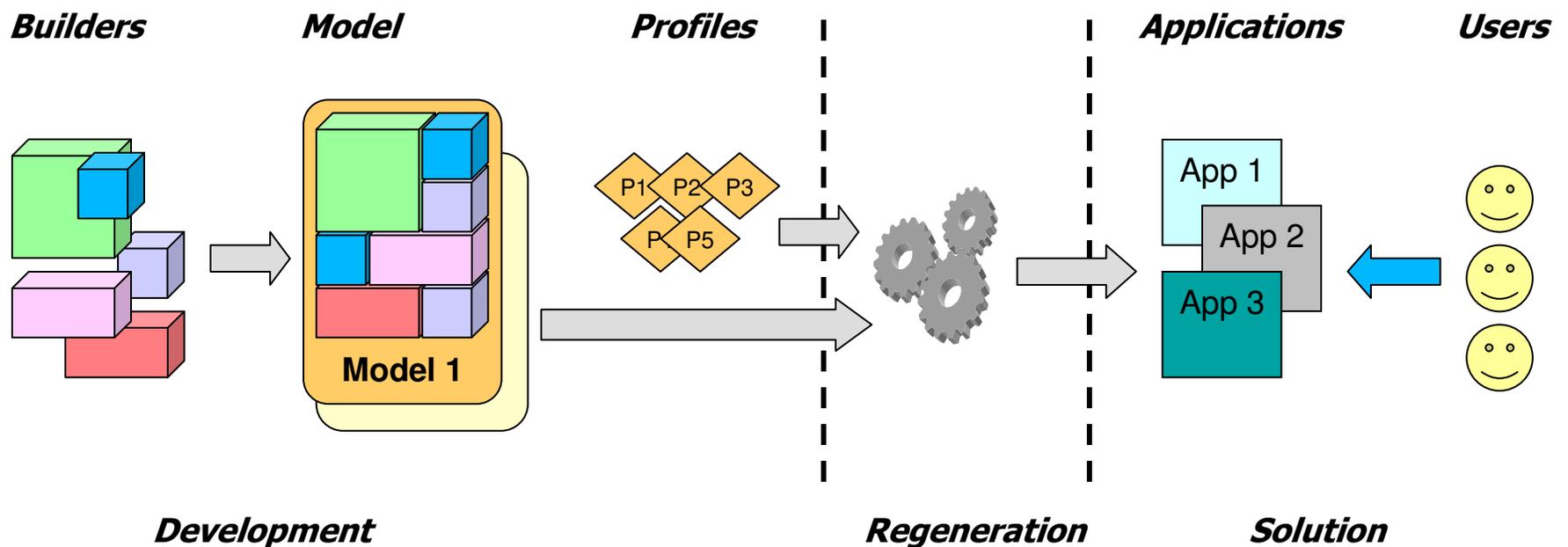
Challenges to Address:

- Rapid Application Development
- Coordinate Credentials between SAP and WebSphere Portal
- Access and Integration with SAP
- Ability to create an Intuitive Guided User Experience



Rapid Application Development

The Self-Service Accelerator extends WebSphere Portlet Factory ...



... to enable rapid development of self-service portal applications that need to integrate with SAP.

Authentication & Credential Management



Flexible Authentication & Credential Management

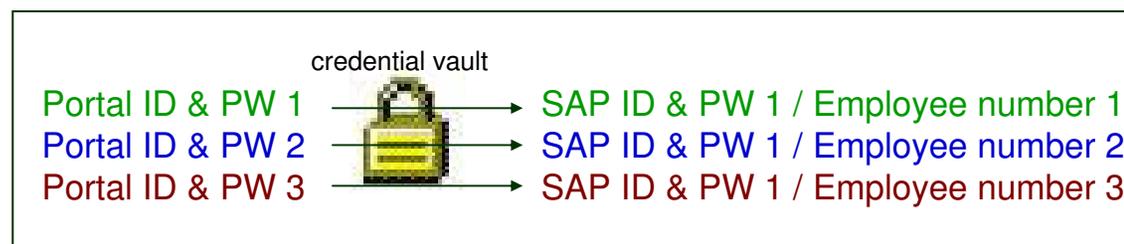
Self-Service Accelerator provides options for SSO and credential management

N to 1



1 to 1

or

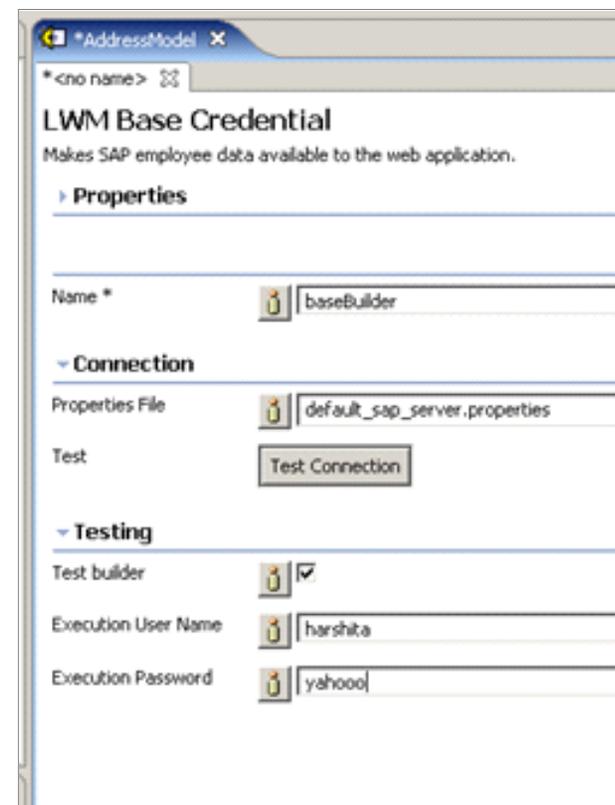


Base Credential Builder



Managing Credentials and Employee Details

- Provide access to users SAP credentials stored in Portal's Credential Vault to builders in a Portlet Factory model.
- Provide access to other relevant information from SAP to builders in a Portlet Factory model at runtime:
 - ▶ personnel number
 - ▶ personnel area
 - ▶ organizational unit
 - ▶ country code



Credential Builder



Managing Credentials and Employee Details

- Present the end user with a credential challenge.
- Accept the users input to the credential challenge and verify against SAP
- Persist valid credentials & make available for future access requests to SAP
- Store in Credential Vault

A screenshot of a web application portlet titled "Demo". The portlet has a header "Enter Credentials" and a sub-header "Enter SAP User-name and Password.". Below this, there are two input fields: "User Name" with the text "harshite" and "Password" with masked characters. A "Submit" button is located at the bottom of the form.

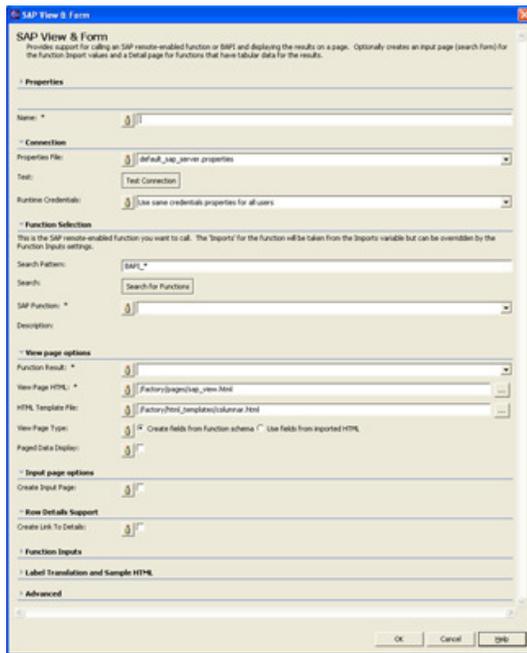
example credential challenge portlet generated by the builder

SAP Integration

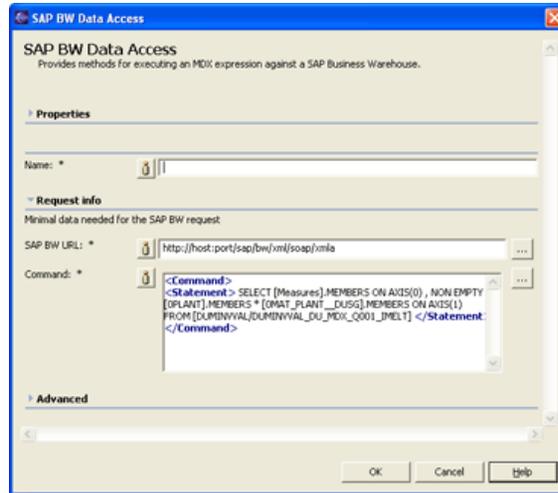


Standard Portlet Factory Builders

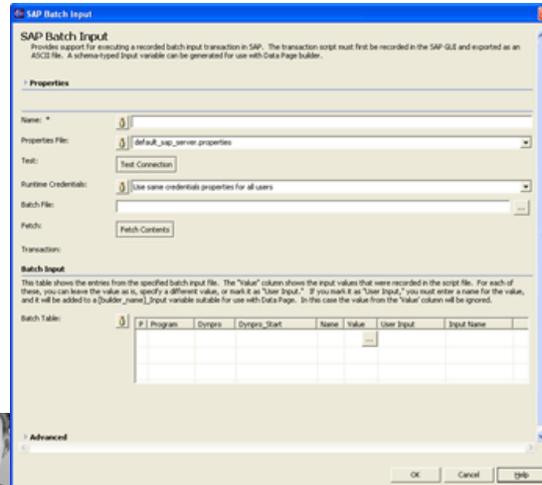
SAP View & Form - Rapidly create portlets that leverage any remote-enabled SAP function or BAPI



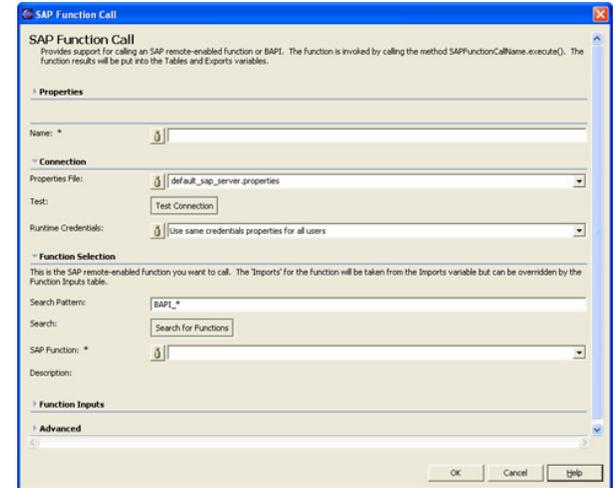
SAP BW Data Access – Access SAP BW via XMLA



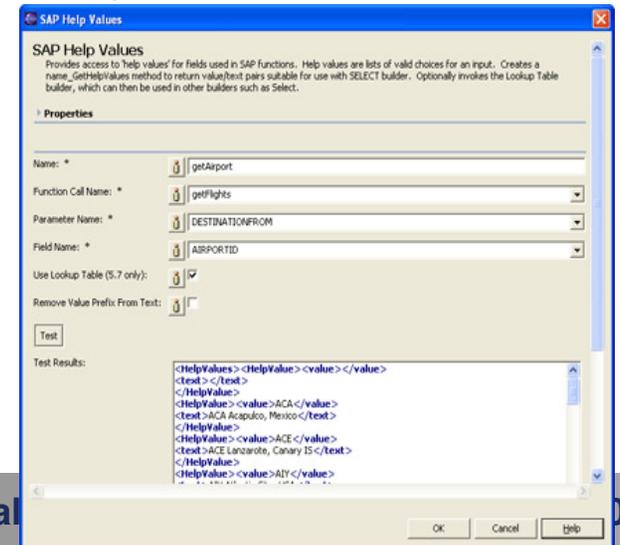
SAP Batch Input – Execute a batch input transaction



SAP Function Call – Call any remote-enabled SAP RFC or BAPI



SAP Help Values – Easily access help values used in SAP functions



SAP Infotype Builder



- Provides access to SAP data based on Infotypes.
- For a defined infotype / subtype combination provide support for CRUD (create, retrieve, update, delete) operations.
- Allow access to CRUD operations as Data Services to other builders in a Portlet Factory model.
- Data services will return XML typed variables containing the result of the operation.
- Provide for integration with existing Portlet Factory builders & future custom builders via this data service / variable interface.
- Integrate with Base Builder when accessing system of record credentials.



SAP InfoType View & Form Builder



- Call data services provided by the SAP Infotype Builder and display the results on a page.
- Allow for the creation of an Input page if one is required for the operation e.g. search parameters for a read operation.
- Provide row details support if more than one record is returned as a result of a read operation.
- Create an Update page for an update operation that allows the end user edit & submit data from the system of record.



SAP Read Table Builder



- Reads data from a defined SAP table.
- Refine the values returned from a table read based on defined criteria.
- Sort the values returned from a table read based on a defined field.
- Make the returned table data available as a lookup table to others builders in the Portlet Factory model.
- Provide access to this builder's functionality as a data service in a Portlet Factory model.
- Integrate with LWM Base Builders when accessing system of record credentials.

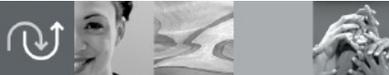
A screenshot of the SAP Read Table Builder configuration interface. The window title is "AddressModel" and the active tab is "*TableReadExample". The interface includes a description: "SAP Read Table Provides support for reading an SAP table or view. The function is variable." Below this are sections for "Properties", "Connection", and "Table Selection". The "Properties" section has a "Name" field with the value "readTable". The "Connection" section has a "Properties File" field with the value "default_sap_serv" and a "Test Connection" button. The "Table Selection" section has a "Search Pattern (% as wildcard)" field with the value "T%", a "Search" button labeled "Search for Tables", a "Table Name" field, a "Description" field, and an "Enable schema caching" checkbox which is checked.

SAP Table Merge Builder



- Read data from 2 defined tables in SAP.
- Refine search results from each table read based on defined criteria.
- Merge / join results from returned tables based on a defined predicate (field labels from each table).
- Populate an XML typed variable with the result of the merge. Expose this functionality as a Data Service in the Portlet Factory model.
- Optionally create a lookup table for consumption by other builders in the model from the merged results.

Building an Intuitive Guided User Experience



Checklist Builder



- Renders an instance of an XML checklist as HTML
- Checklist represent a set of activities that are required (or should be considered) to be completed in order to successfully complete a task
- Checklist builder provides support for various types of activity within a checklist:
 - ▶ Address a defined portal page in order to complete an activity
 - ▶ Address a defined portlet (model) in order to complete an activity
 - ▶ Make a call to a defined web service in order to complete an activity
- Checklist builder maintains state for given activities within a checklist.

The screenshot shows a web browser window titled "Checklist_Example_Main" with a tab for "checklist". The main content area is titled "Checklist" and contains the following configuration options:

- Checklist**
Displays a checklist in a page with a set of activities to be completed by the user. Allows the user to complete activities or navigate to activity pages.
- Properties**
 - Name: checklist
 - Checklist Variable *: checklistVar
- Page Options**
Select HTML page options.
 - Page URL *: /factory/pages/checklistView.html
 - HTML Template File: /factory/html_templates/gridtable.ht
- Column Headings**
Enter column heading names.
 - 'Learn More' Column Heading: Learn More
 - 'Proceed' Column Heading: Proceed
 - 'Check/Uncheck' Column Heading: Check/Uncheck
 - 'Complete' Column Heading: Complete

Checklist Example

Your Upcoming Marriage



Congratulations on your marriage!

Make sure that your personal information and benefits match up with your new marital status. Use this checklist to keep track of important items you may need to update:



▼ Important Changes		
Name and marital status	?	Proceed > Mark completed <input checked="" type="checkbox"/>
Address and phone number	?	Proceed > Mark completed <input checked="" type="checkbox"/>
Emergency contacts	?	Proceed > Mark completed <input checked="" type="checkbox"/>
Dependents and Beneficiaries	?	Proceed > Mark completed <input checked="" type="checkbox"/>
Healthcare Coverage	?	Proceed > Mark completed <input checked="" type="checkbox"/>
Federal Tax Withholdings	?	Proceed > Mark completed <input checked="" type="checkbox"/>
▼ Other things to consider		
Direct Deposit Information	?	Proceed > Mark completed <input checked="" type="checkbox"/>
Will and estate planning	?	Mark completed <input checked="" type="checkbox"/>
Post Office Address Notification	?	Mark completed <input checked="" type="checkbox"/>
Passport information	?	Mark completed <input checked="" type="checkbox"/>
Social Security Card	?	Mark completed <input checked="" type="checkbox"/>
Voluntary benefit offerings	?	Mark completed <input checked="" type="checkbox"/>

[Home](#)[Save Checklist](#)

Checklist Example

Your Upcoming Marriage

Name and Marital Status



Use this form to change your personal information. Required fields are marked with an asterisk (*) and must be filled in to complete the form.

* Name change effective on	07/05/2008	
Name Change		
Prefix	<input type="text"/>	
* First Name	Jennifer	
* Last Name	Stanton	
Middle Name	<input type="text"/>	
Marital Status		
* Marital Status	Married	
* Date of Marriage	07/05/2008	

[< Back](#) [Cancel](#) [Next >](#)

Checklist Example

Your Upcoming Marriage



Congratulations on your marriage!

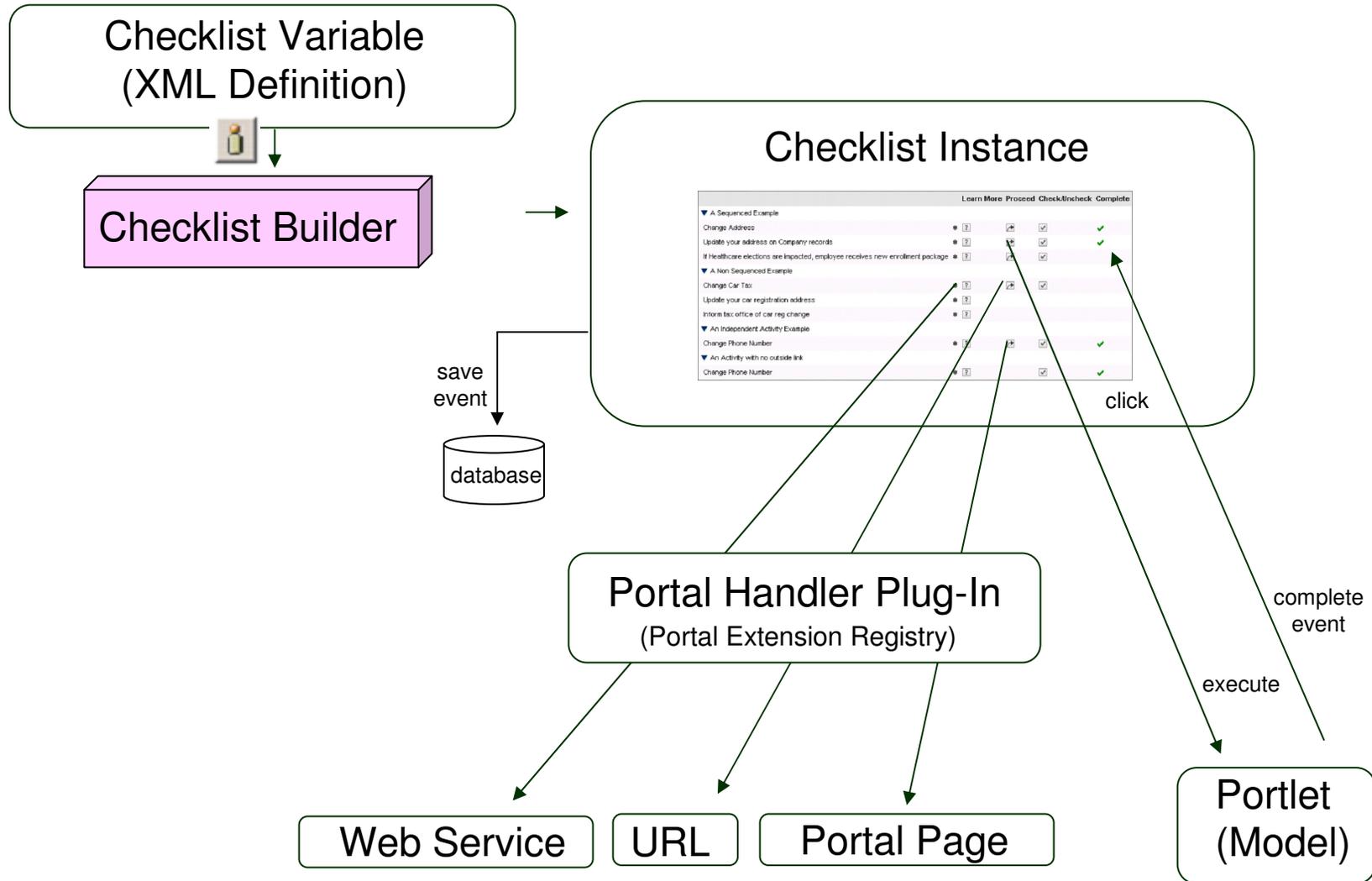
Make sure that your personal information and benefits match up with your new marital status. Use this checklist to keep track of important items you may need to update:



▼ Important Changes				
Name and marital status	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Address and phone number	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	
Emergency contacts	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	
Dependents and Beneficiaries	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	
Healthcare Coverage	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	
Federal Tax Withholdings	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	
▼ Other things to consider				
Direct Deposit Information	?	Proceed >	Mark completed <input checked="" type="checkbox"/>	
Will and estate planning	?		Mark completed <input checked="" type="checkbox"/>	
Post Office Address Notification	?		Mark completed <input checked="" type="checkbox"/>	
Passport information	?		Mark completed <input checked="" type="checkbox"/>	
Social Security Card	?		Mark completed <input checked="" type="checkbox"/>	
Voluntary benefit offerings	?		Mark completed <input checked="" type="checkbox"/>	

[Home](#)[Save Checklist](#)

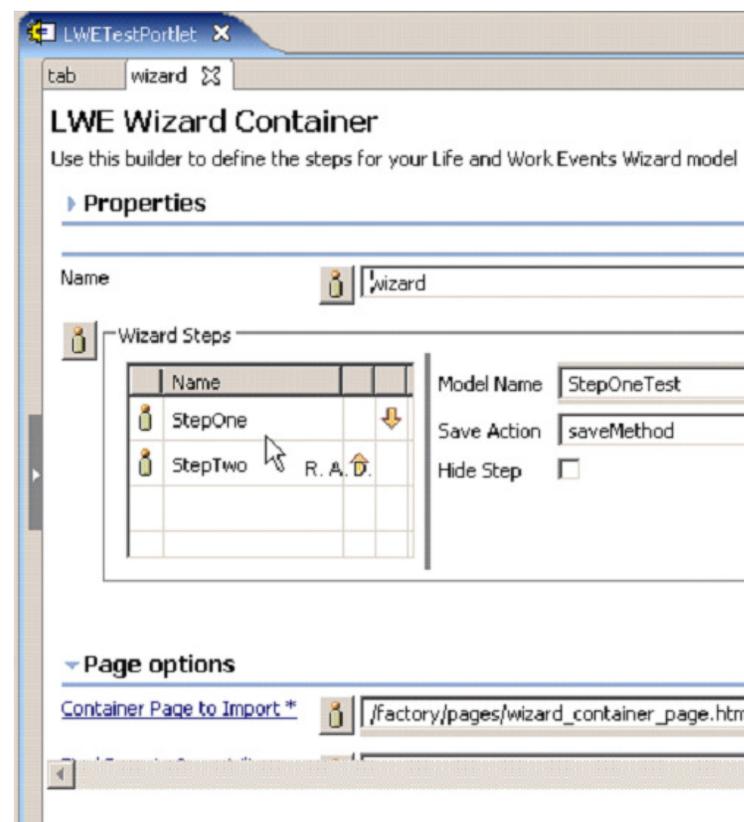
How Checklists Work



Life & Work Event Wizard Builder



- Container that guides end user through a linked a series models together in a wizard-style framework.
- Stand-alone Portlet Factory models that implement wizard steps.
- References to step models in the Wizard Container builder.
- At runtime, Wizard Container builder renders step models in a container (portlet).



Wizard Builder Example

Open Enrollment

Open Enrollment Tab is only available during the "Enrollment Period"

The screenshot shows a web application interface for Open Enrollment. At the top, there is a navigation bar with a 'Launch' dropdown menu and a breadcrumb trail: 'Home > Open Enrollment >'. To the right of the breadcrumb is a search bar with the text 'All Sources' and a search icon, followed by icons for user profile, help, and a 'Log Out' link. Below the navigation bar is a horizontal menu with tabs: 'Welcome', 'My Benefits', 'E-Learning', 'MSS', and 'Open Enrollment'. The 'Open Enrollment' tab is selected. The main content area is divided into two columns. The left column is titled '8 Easy Self Service Steps' and contains a numbered list: 1. Welcome, 2. Update Dependent Info, 3. Medical, 4. Dental, 5. HSA, 6. DCSA, 7. Supplemental Life, and 8. Confirmation. The right column is titled 'Welcome' and contains a message: 'This application will take you through a series of steps where you will enter information for open Enrollment. If you are unable to complete all the information at this time, click 'Save for Later' to save what you have entered and you may resume at a later time.' Below this is a personalized message: 'Dear John, Welcome to the Open Benefits Enrollment for 2008. The next few screens will walk you through each of your Benefit Elections. Enrollment ends on 15th Oct 2007. These elections will be valid from 01/01/2008 - 12/31/2008. We encourage you to review the Benefits Reference Guide and the Corporate Policies Manual (CPM) for more information on each of the Benefits. Should you have any questions please contact your HR personnel or your manager. Sincerely, Human Resources Team'. At the bottom of the main content area is a 'Next >' button. A 'Site Map' link is visible in the footer. Three callout boxes are present: one pointing to the 'Open Enrollment' tab, one pointing to the '8 Easy Self Service Steps' list, and one pointing to the personalized message.

Launch ▾ Home > Open Enrollment > Search: All Sources + ? Log Out

Welcome My Benefits E-Learning MSS Open Enrollment

8 Easy Self Service Steps

1. Welcome
2. Update Dependent Info
3. Medical
4. Dental
5. HSA
6. DCSA
7. Supplemental Life
8. Confirmation

Welcome

This application will take you through a series of steps where you will enter information for open Enrollment. If you are unable to complete all the information at this time, click 'Save for Later' to save what you have entered and you may resume at a later time.

Dear John,

Welcome to the Open Benefits Enrollment for 2008. The next few screens will walk you through each of your Benefit Elections. Enrollment ends on 15th Oct 2007. These elections will be valid from 01/01/2008 - 12/31/2008.

We encourage you to review the Benefits Reference Guide and the Corporate Policies Manual (CPM) for more information on each of the Benefits. Should you have any questions please contact your HR personnel or your manager.

Sincerely,
Human Resources Team

Next >

Site Map

Enrollment Wizard to walk the user through the enrollment exercise

Open Enrollment messages managed by the Benefits Admin

Wizard Builder Example

Open Enrollment

Launch Home > Open Enrollment > Search: All Sources Log Out

Welcome My Benefits E-Learning MSS Open Enrollment

8 Easy Self Service Steps

1. Welcome ✓
2. Update Dependent Info
3. Medical
4. Dental
5. HSA
6. DCSA
7. Supplemental Life
8. Confirmation

Update Dependent Info
Please add or edit Dependents if you plan to add them to any of your Benefits. If you need to **Edit** and then save the changes.

[Add Dependent](#)

Name	SSNumber	Relationship	BirthDate	Gender	Address	Edit
Jane Smith	297-453-19	Spouse	07-30-1980	F	Same As Employee	Edit
Maya Smith	301-79-1654	Child	10-04-2004	F	Same As Employee	Edit

Name: Jane Smith
SSNumber: 297-453-1980
Relationship: Spouse
BirthDate: 07-30-1980
Gender: F
Address: Same As Employee

[< Previous](#) [Next >](#) [Save for Later](#)

Home Administration Documents

Portlet allows update of Dependent information – uses Web 2.0 concepts for intuitive UI

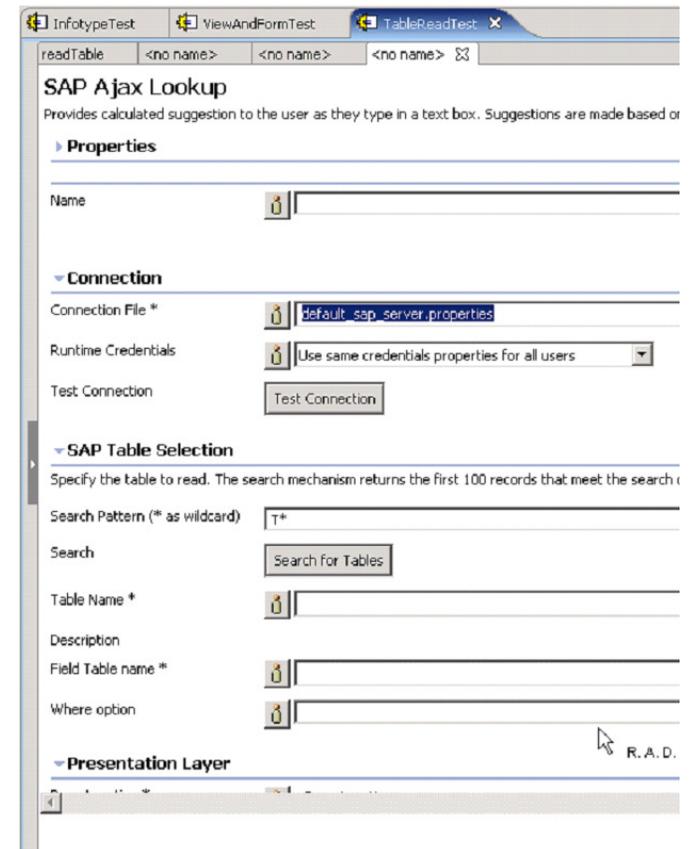
Buttons for easy navigation through the enrollment application

User can choose to “Save For Later” – they can sign-in at a later point and pick up where they left

SAP AJAX Lookup Builder



- Support for auto-complete, type-ahead input fields from data read from an SAP table.
- Read data from an SAP Table.
- Refine results returned from table read based on defined criteria.
- Define presentation layer criteria e.g. page & location on which the field is rendered



Summary

- Sigma-Aldrich
 - ▶ Rapid Deployment
 - ▶ Successful Project
- Self-Service Accelerator
 - ▶ Rapid Development
 - ▶ SAP Integration
 - ▶ Intuitive Guided User Experience

Additional Information and Resources

WebSphere Portal – IBM Site

<http://www-3.ibm.com/software/genservers/portal/>

WebSphere Portal Business Solutions Catalog:

<http://catalog.lotus.com/wps/portal/portal>

WebSphere Portal Developer's Zone

<http://www-106.ibm.com/developerworks/websphere/zones/portal/>

Product Documentation and WebSphere Portal Wiki

<http://www-3.ibm.com/software/genservers/portal/library/>

<http://www-10.lotus.com/ldd/portalwiki.nsf>

Education

<http://www-3.ibm.com/software/genservers/portal/education/>

WebSphere Portal 6.0 DemoNet

<http://docs.dfw.ibm.com/wp6/?DDSPageRequest=/>

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