



Implementing a Federated Portal Network

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SAP NetWeaver Product Management





Overview: Federated Portal Network

Use Cases

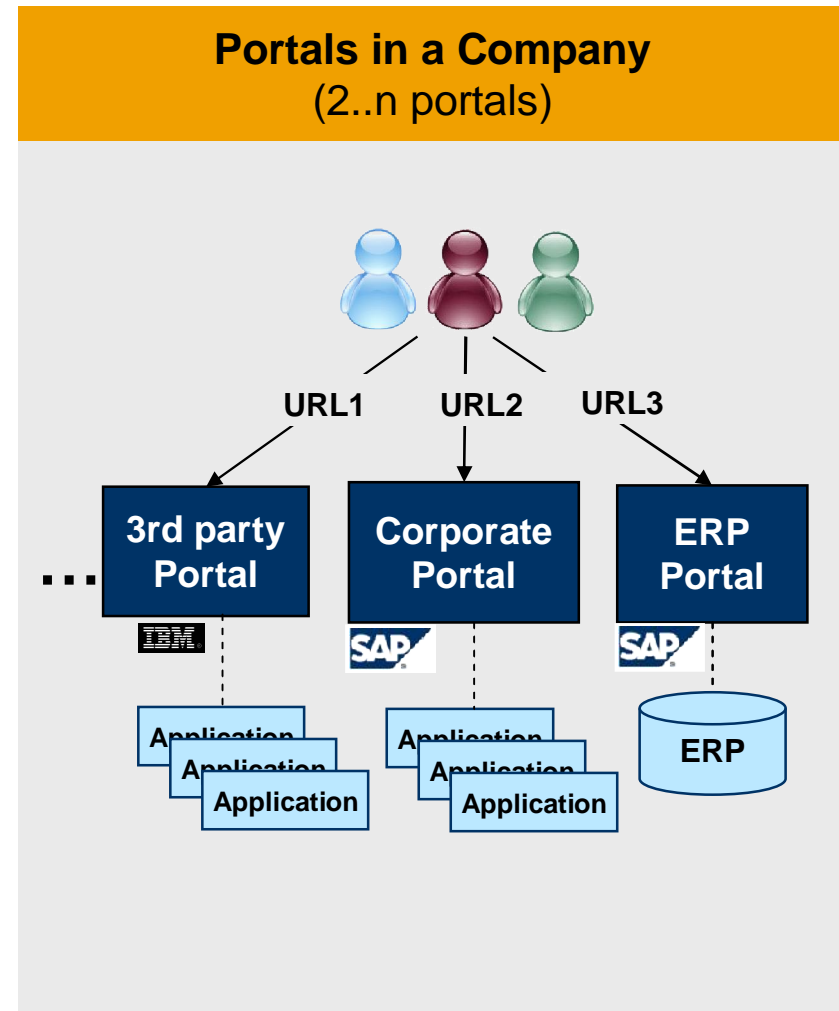
Integration Concepts & Tools

Landscape Considerations

Summary

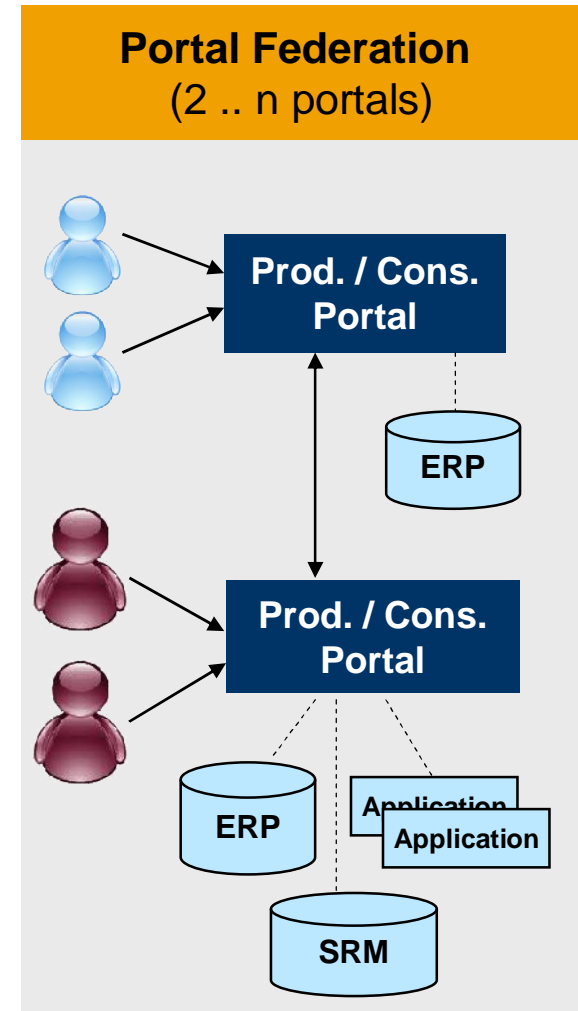
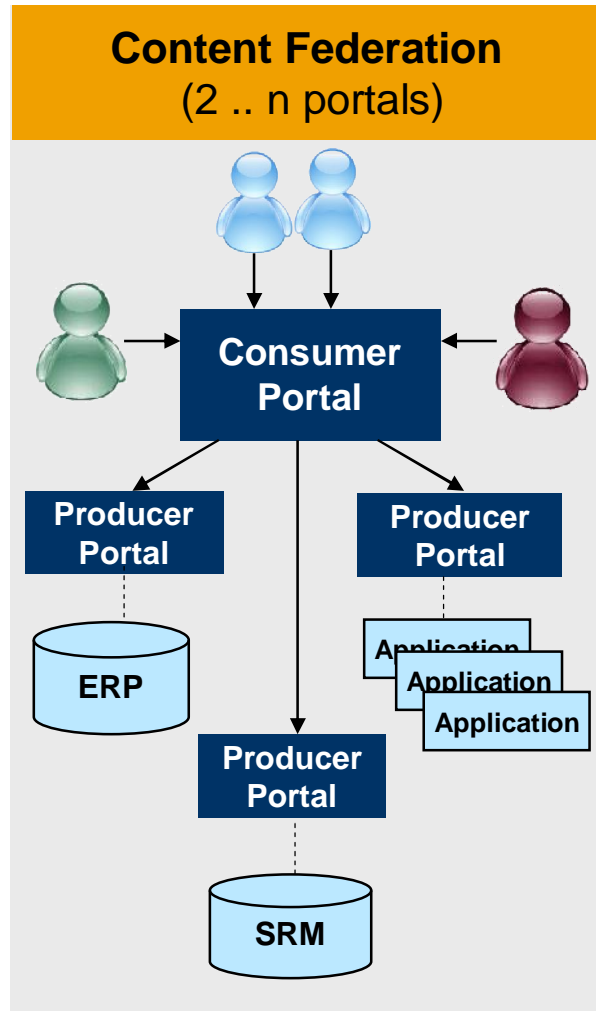
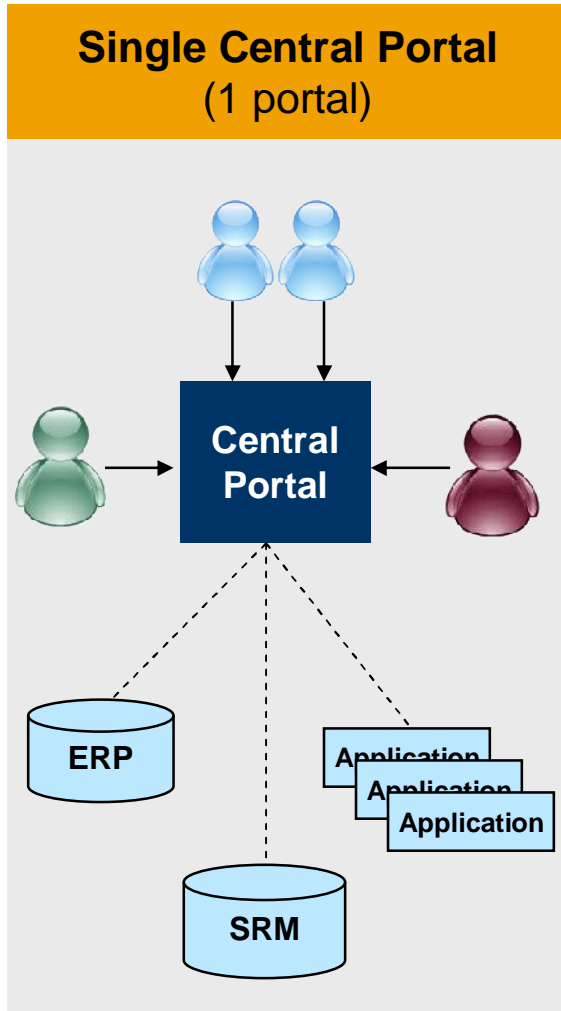
Motivation

- Number of portals in organizations is increasing
- Users have to access more than one portal
- Allow users to access information, services and applications located on various portals
- Increase user productivity by providing one login portal per user



Portal Landscapes

A federated portal network (FPN) allows organizations with multiple portals, SAP and non-SAP, to share content between the independent portals.



* The figures are for illustration purposes only – they show only the logical view on the end user experience.



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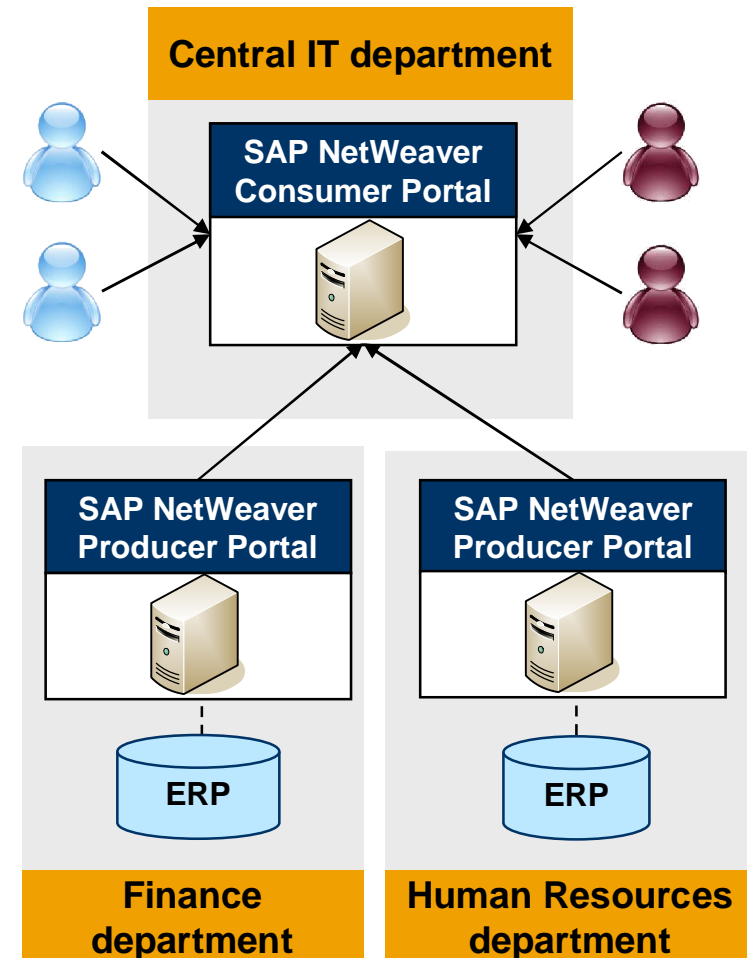
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Use Case 1: Central Portal With Autonomous Portals for Business Units

- **Business units use different portal servers to create and maintain their required functionalities**
- **One central portal for all company employees**

Benefit: Different units can upgrade their portal server to provide enhanced functionality without effecting the main portal server which all employees use.

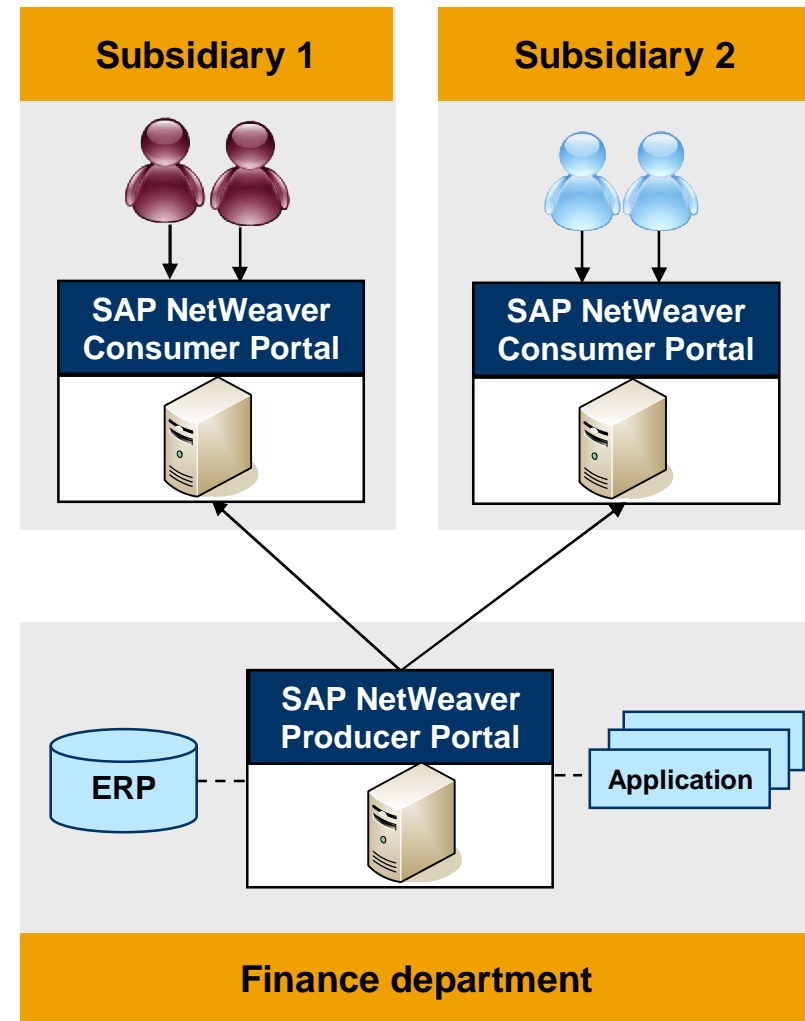


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Use Case 2: Autonomous Portal Servers for Different Departments

- Each unit maintains its own business content on a separate portal
- Employees use their dedicated business unit portal
- Some applications are global applications which need to be shared between the different portals

Benefit: **Units keep their business autonomy but at the same time utilize company resources and reduce total cost of ownership by sharing content and systems.**

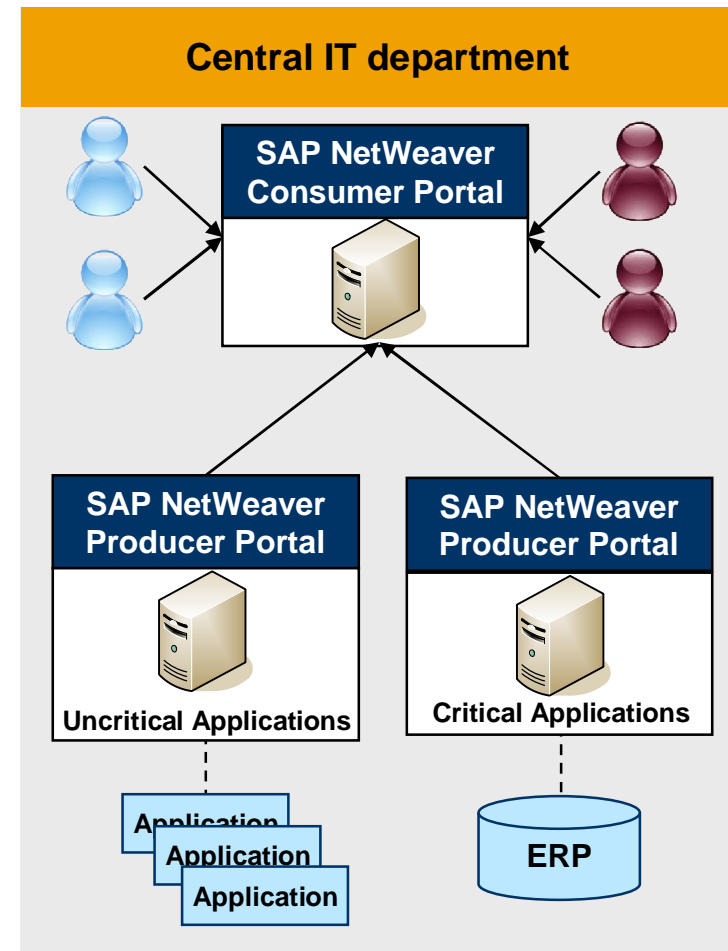


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Use Case 3: Content Separation

- Separated portals for different types of content or functionality
- Separate content servers for business-critical applications and non-business-critical content
- Implement different service-level agreements

Benefit: **Distribute risks to different servers. Set the appropriate service level agreement according to content type.**

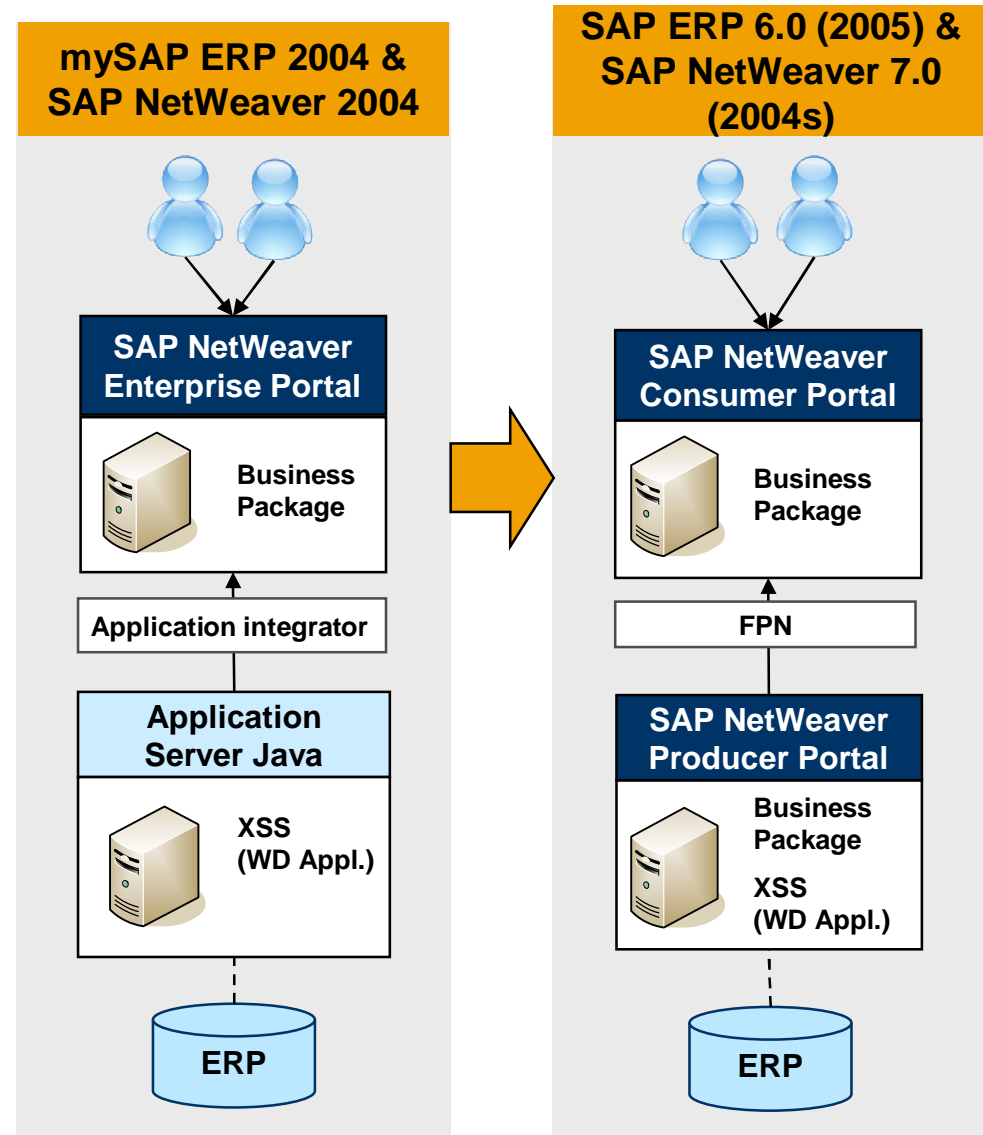


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Use Case 4: SAP ERP 6.0 Distributed Landscape

- **SAP ERP 6.0 (2005) Business Packages require a portal (PCD and portal eventing) to support the enhanced functionality**
- **Change in architecture compared to SAP NetWeaver 2004 / mySAP ERP 2004**

Remark: FPN is not a must for using ERP Business Packages. It is only needed when you want to separate the Self-Service applications from your central corporate portal.

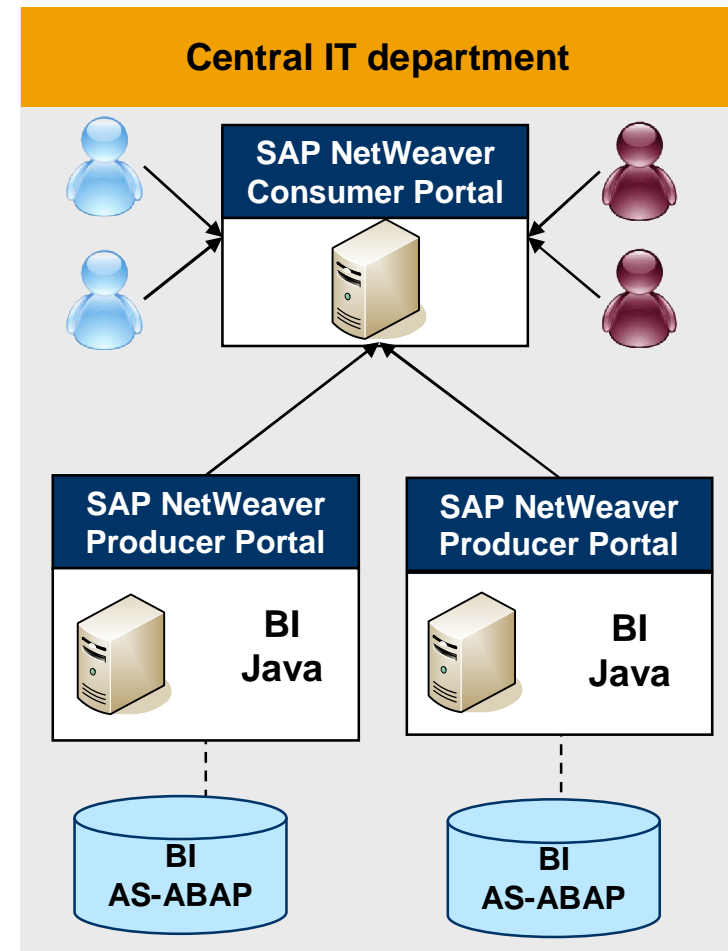


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Use Case 5: BI Java Distributed Landscape

- BI Java provides new functionality like BEx Web with Drag&Drop, Formatted Reporting, BI Integrated Planning using new Planning Modeler...
- BI Java installations require usage type EP (1:1 relation)

Benefit: Federated Portal Network allows connecting several BI systems to a central Enterprise Portal (different Support Package Stacks possible).

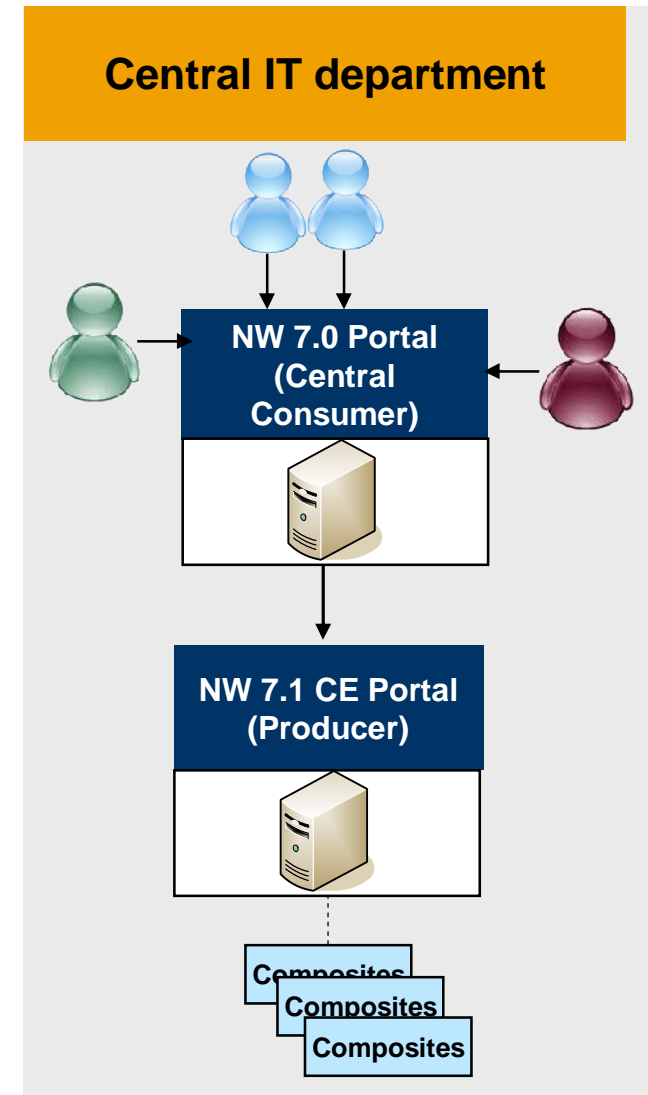


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Use Case 6: CE Portal as a Sidecar

- **SAP NetWeaver 7.0 (2004s) can run on a stable version - the portal includes central content, like KMC and Business Packages. It is the central access point for end users.**
- **SAP NetWeaver 7.1 CE portal serves as the runtime for new composite applications.**

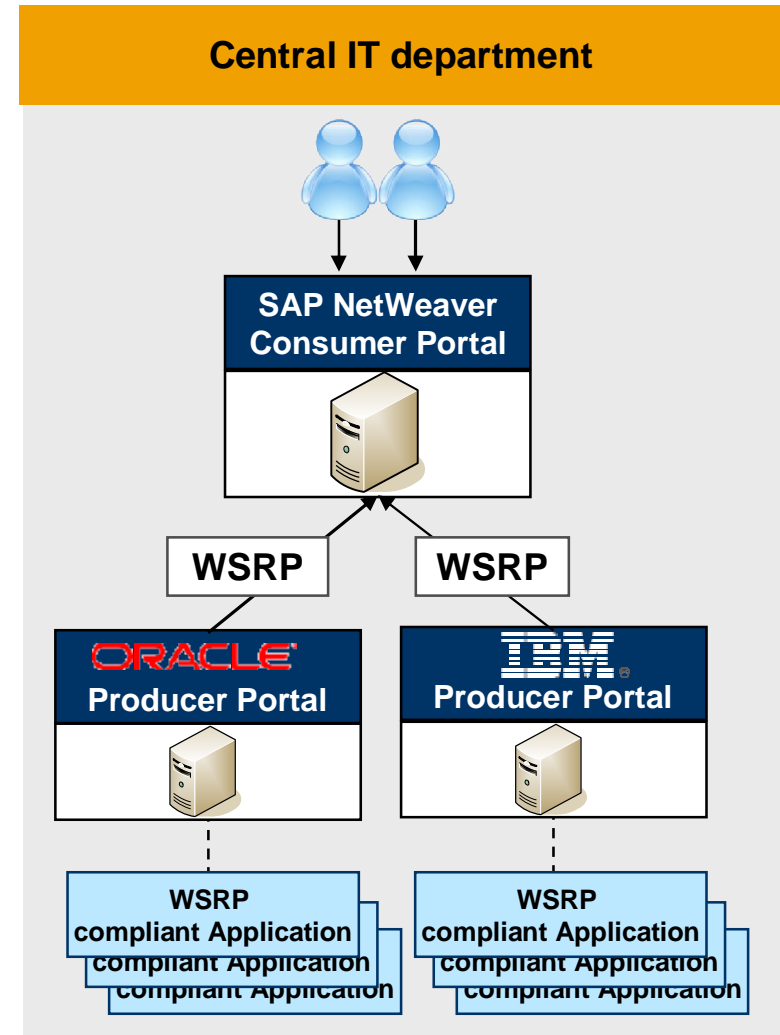
Benefit: SAP NetWeaver CE can be updated independently. Its advanced applications can be integrated seamlessly for end users into the stable central corporate portal.



Use Case 7: Interoperability With Non-SAP WSRP-Compliant Portals

- Share content between WSRP-compliant portal servers from different vendors
- SAP NetWeaver Portal could serve as a consumer or producer

Benefit:
Enable the integration of non-SAP content into SAP NetWeaver Portal.



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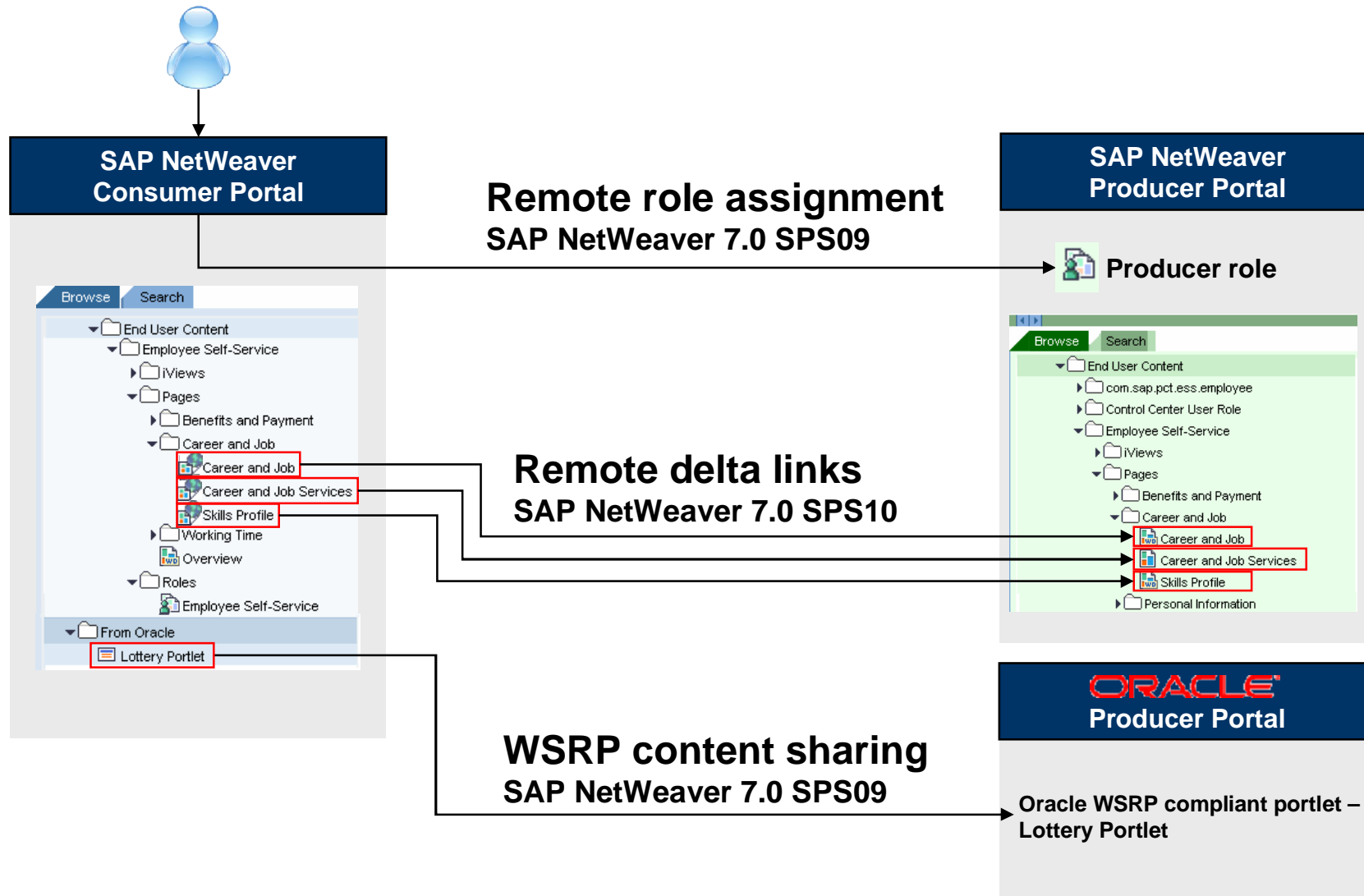
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Content Sharing Content Usage Modes (1/2)



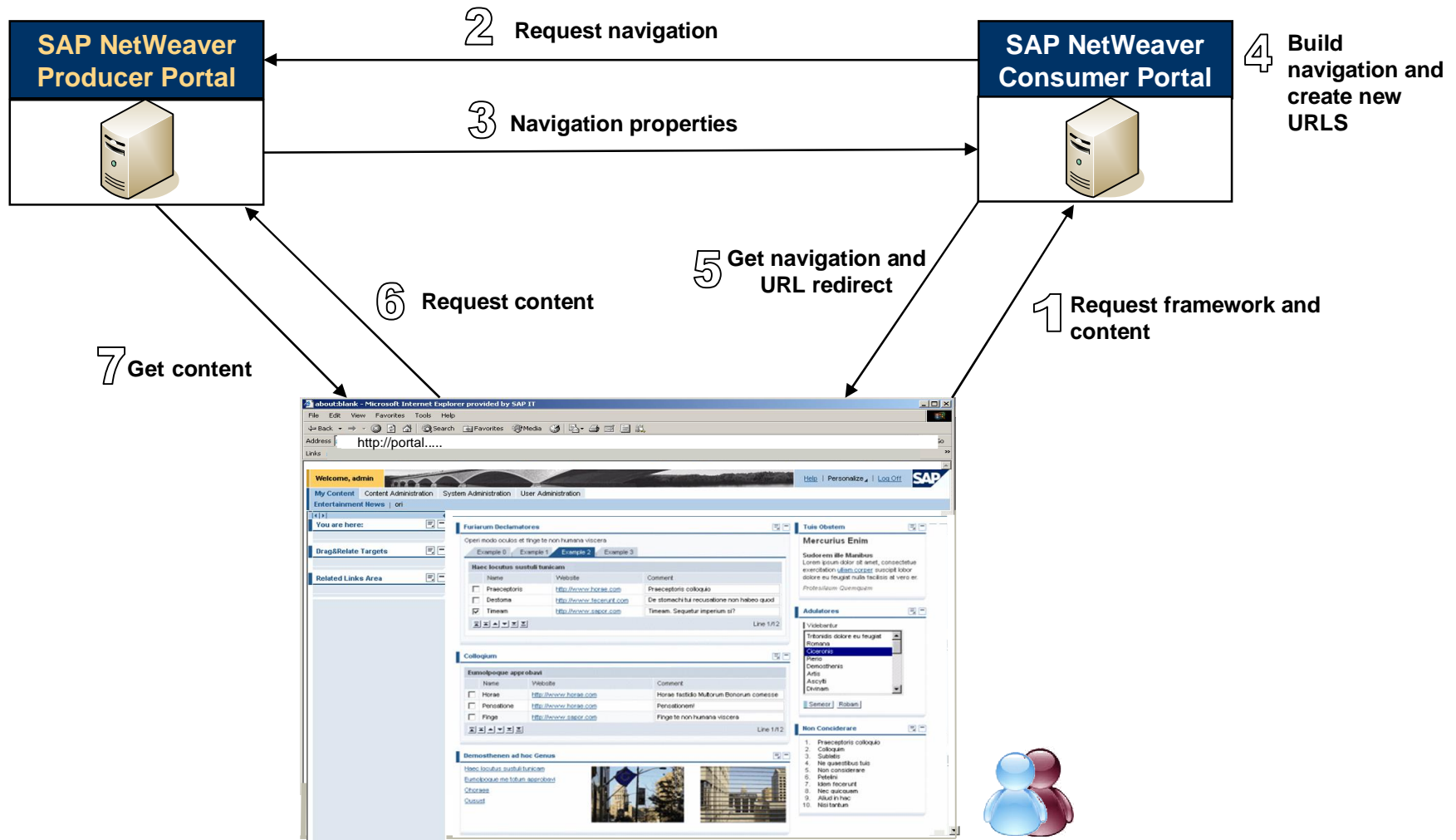
The content is shared throughout the network using three content usage modes:

- **Remote Role Assignment**
Enables the consumer administrator to assign complete roles offered by an SAP producer.
- **Remote Delta Links (SAP NetWeaver 7.0 SPS10)**
Enables the consumer to embed remote portal content (iViews / Pages etc.) offered by an SAP producer into local content.
- **WSRP Content Sharing**
Enables the consumer to provide its users with portlets offered by WSRP-compliant SAP or non-SAP producer.

Remote Role Assignment – Facts

- An SAP NetWeaver portal producer can offer **complete roles** to an SAP NetWeaver consumer.
- Role content is **maintained on the producer**.
- The **navigation structure** of the role is **built on the consumer** (top level navigation and detailed navigation) .
- Role content is **executed on the producer**.
- The remote roles are assigned to the consumer users using the **standard Role Assignment tools**.
- Remote Role Assignment is ideal in cases where no changes to the provided content are required.
- **Merging Remote Roles** is possible.

Remote Role Assignment - Runtime Technical Flow



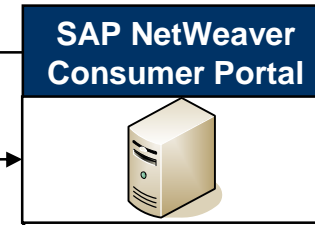
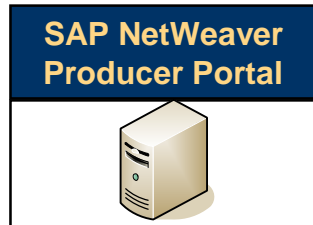
Remote Delta Links – Facts (As of SPS 10)

- An SAP NetWeaver portal producer can offer content from its location to be **copied to a remote consumer**.
- The consumer administrator can **easily browse the PCD of the producer** and copy required content to its local PCD.
- Copied content becomes local consumer content and can be **reused, configured, and customized**.
- It allows **delta link synchronization** of copied content. Any change on the producer object properties, which were not updated on the consumer, is synchronized and reflected during runtime.
- This is ideal for cases that require combination of local and remote content within one role.

Remote Delta Links - Runtime Technical Flow

7 Integrate consumer and producer properties – delta link behavior

2 Build navigation and local content



6 Get consumer object properties

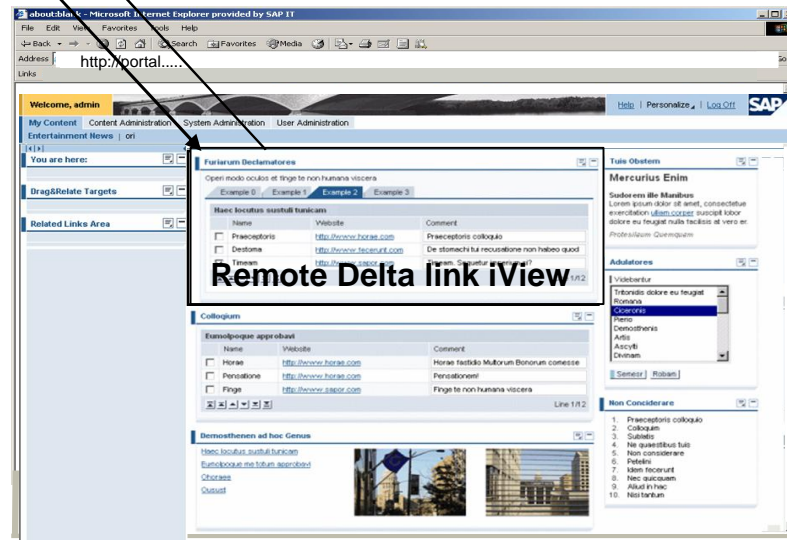
5 Request consumer properties *

3 Get navigation and URL redirect

1 Request framework and content









4 Request remote content

8 Get content



* This step happens only once.

Remote Role Assignment Vs. Remote Delta Links

	Remote Role Assignment	Remote Delta Links
Types of shared content	 Roles	 iViews, pages, worksets, roles
Administration effort / TCO	 Producer: create and maintain portal content + applications  Consumer: assign users to roles	 Producer: create and maintain portal content + applications (could be minimized)  Consumer: copy portal content, adjust + integrate portal content
Modification possibilities	 Merge roles	 Adjust content + integrate into local content (flexible, but requires synchronization)

** Traffic lights are used for illustration purposes only. It illustrates the required effort or possibilities compared between RRA and RDL.*

- **WSRP allows sharing of portlets (iViews) between SAP and non-SAP portals**
- **Runtime execution of portlets remains on the WSRP producer**

Consuming WSRP Content

- **Any WSRP producer can offer portlets to an SAP NetWeaver consumer**
- **The SAP consumer can integrate remote portlets into local content as standard iViews**

Producing WSRP Content

- **Customers and partners are able to develop Java-based iViews and make them available for WSRP consumption**
- **The WSRP standard provides support for integration on a generic portlet level only**



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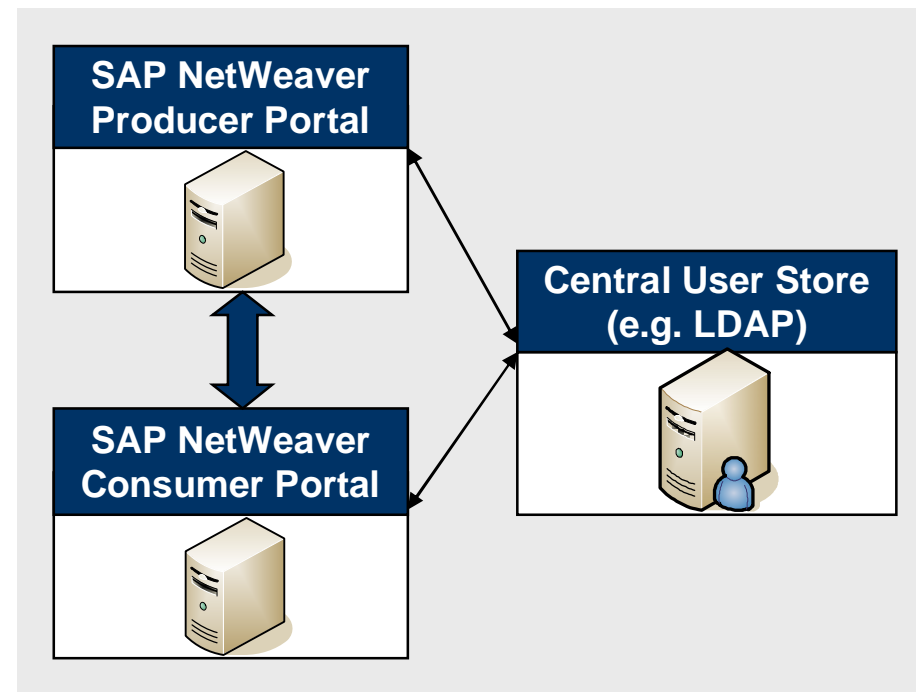
Summary

SAP NetWeaver Producer Portal	SAP NetWeaver Consumer Portal
<ul style="list-style-type: none">■ Configuring Proxy Settings (→ SMP: How To... Set up Federated Portal Network Scenarios with Reverse Proxies)■ Setting Up Trust Between You and Consumers (exchange portal server certificate file)■ Configuring Your Registration Password (for RRA and RDL)■ WSRP application sharing:<ul style="list-style-type: none">■ Set your root PCD folder for WSRP-based content requests■ Create a registration user and password for the consumer	<ul style="list-style-type: none">■ Configuring Proxy Settings■ Setting Up Trust Between You and Producers (exchange portal server certificate file)■ Configuring Caching for your Consumer Portal■ Optimizing Your Consumer Profile (only for RRA)

Users on the consumer portal must also exist in the user store utilized by the producer portal

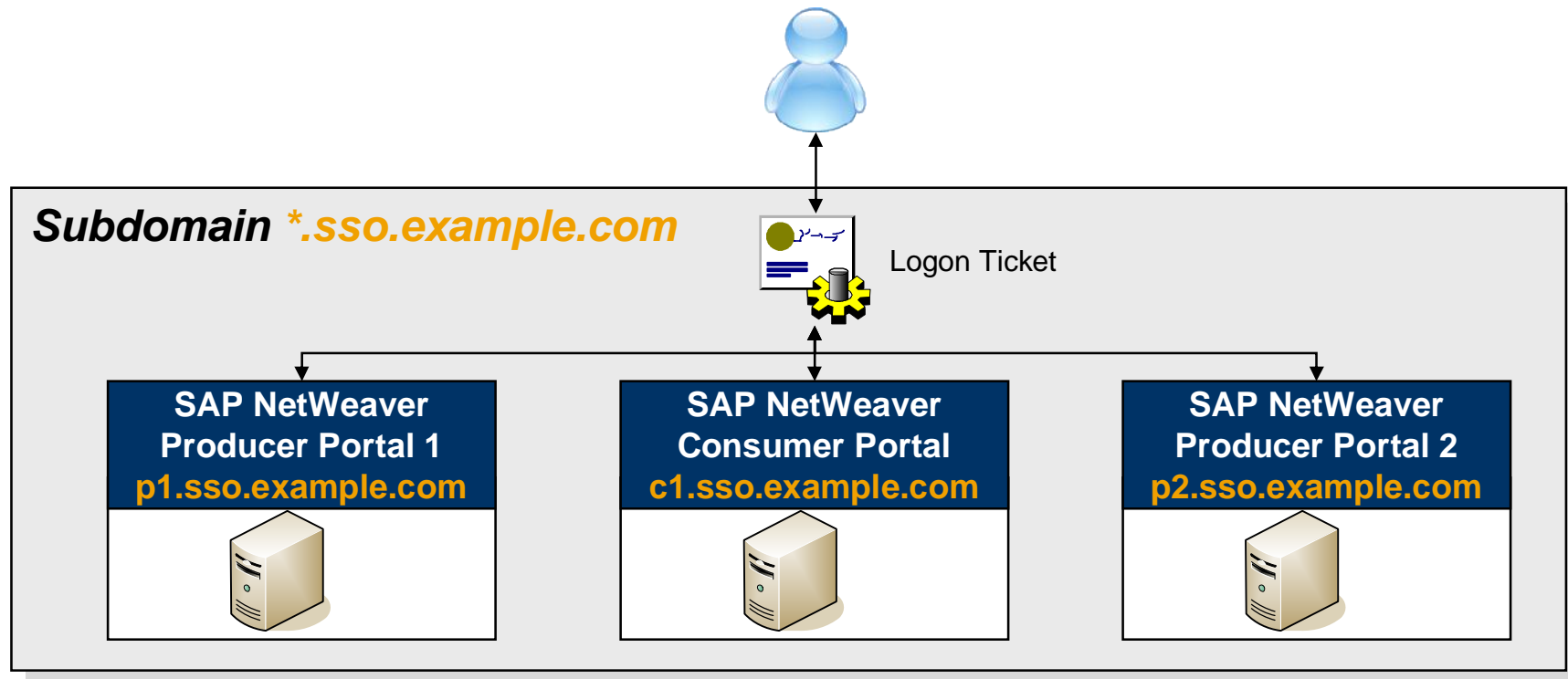
Logon tickets used for authentication → User IDs must be identical

- **Recommended: Single user store serving all portal installations**
- **Alternatively:**
 - Distributed user stores with exact duplication
 - Distributed user stores with partial duplication



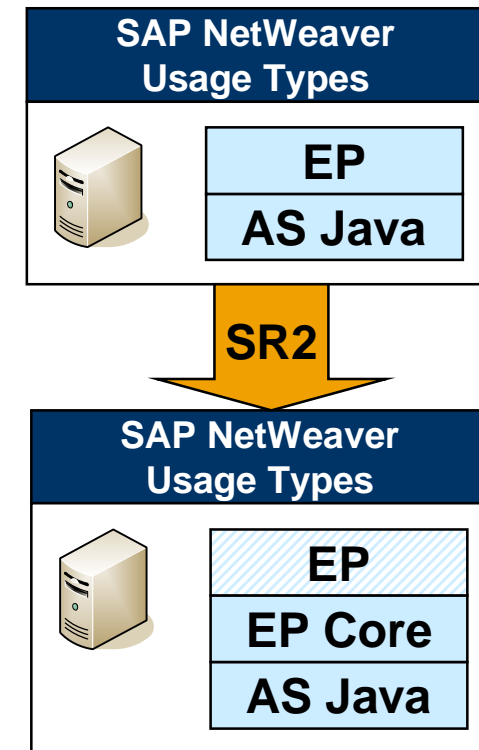
Single Sign-On / Logon Tickets

- **Recommended:** All federated portals into one DNS sub-domain



SAP NetWeaver 7.0, Service Release 2: usage type Enterprise Portal separated into two closely related usage types:

- **EP Core (EPC):** core portal capabilities (e.g. portal runtime, administration, FPN tools; *planned: Universal Worklist and Guided Procedures*)
- **Enterprise Portal (EP):** portal add-on capabilities (e.g. Knowledge Management, Collaboration, Visual Composer)



Benefit:

Decide for each producer and consumer portal whether usage type EPC or EP is required (depending on needed functionality). Improve overall performance, reduce memory consumption and lower TCO of the landscape.

UWL and the Federated Portal Network

- Only one Universal Worklist should be configured in a federation.

- Recommended: UWL content runs on the consumer portal

- Alternatively:

- UWL iView runs on a producer portal and is displayed in the consumer portal
- Multiple UWL iViews from producers are integrated (via RDL) into consumer portal

The screenshot displays the SAP Universal Worklist (UWL) interface. The top navigation bar includes 'Home', 'Content Administration', 'User Administration', and 'System Administration'. Below this, there are tabs for 'Tasks (55 / 71)', 'Alerts', 'Notifications', and 'Tracking'. The main area shows a table of tasks with columns for Subject, From, Sent, Priority, and Due. The first task is 'Create vacation request (UWL testing)' with a due date of Jul 8, 2004. Below the table, there is a detailed view for the selected task, showing its status as 'In Progress' and a description: 'Create a vacation request. This will be sent to your boss for review.'

Subject	From	Sent	Priority	Due
Create vacation request (UWL testing) ⌵	Workflow system	Jul 7, 2004	Normal	Jul 8, 2004
Create vacation request (UWL testing) ⌵	Administrator, Admin	Jul 14, 2004	Normal	Jul 15, 2004
test ⌵	Administrator, Admin	Jan 3, 2006	Normal	Yesterday
Edit maintenance notification 10001353 / M2 ⌵	Workflow system	Dec 9, 2005	Normal	1
Edit maintenance notification 10001352 / M2 ⌵	Workflow system	Dec 9, 2005	Normal	1
Edit maintenance notification 10001350 / M2 ⌵	Workflow system	Dec 9, 2005	Normal	1
Edit maintenance notification 10001349 / M2 ⌵	Workflow system	Dec 9, 2005	Normal	1
Edit maintenance notification 10001341 / M2 ⌵	Workflow system	Nov 24, 2005	Normal	1
Edit maintenance notification 10001339 / M2 ⌵	Workflow system	Nov 24, 2005	Normal	1
Test WebFlow Services ⌵	Workflow system	Nov 15, 2005	Normal	

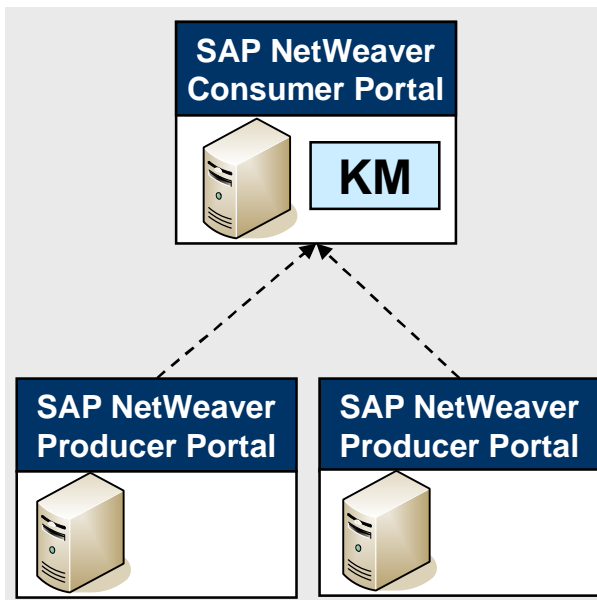
Create vacation request (UWL testing)

Escalated: Normal Sent: Jul 7, 2004 by Workflow system
Priority: Normal Due: Jul 8, 2004
Status: In Progress

Create a vacation request. This will be sent to your boss for review.

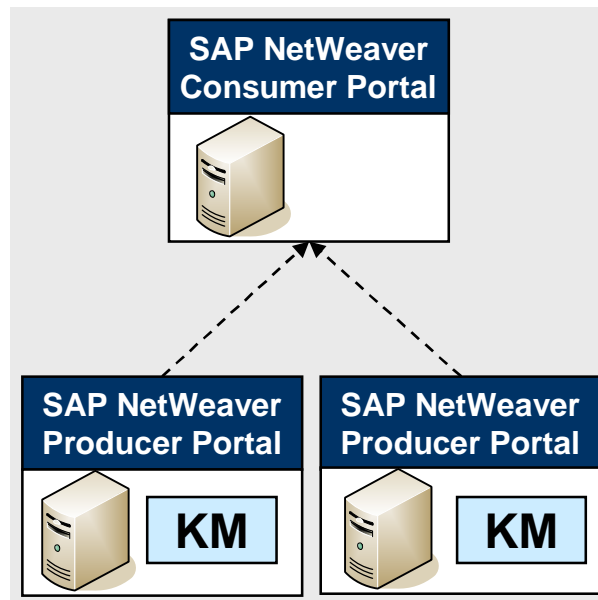
You can also
[View Memos](#)
[Display Details in SAP Gui](#)
[Create Ad-Hoc Request](#)

Recommended:
KM runs on the
consumer portal only



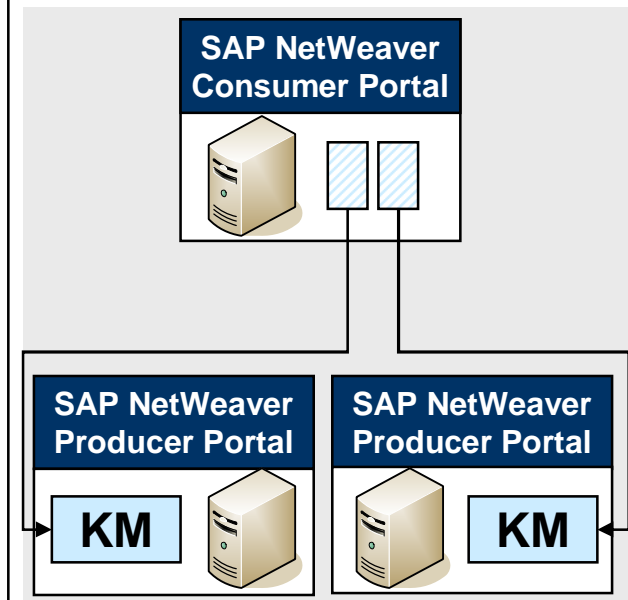
All KM features **available**
on the consumer

**Integrate KM iViews via
Remote Role
Assignment or Remote
Delta Links**



Some KM features **not**
available on consumer e.g.
■ taxonomies
■ subscriptions & workflows
■ search restricted to
„Federated Quick Search“

**Connect remote KM
repositories via
WebDAV to consumer
portal**



Some KM features have to be
maintained on consumer
e.g.
■ taxonomies
■ subscriptions & workflows

- **KM federated search searches for documents over all connected producers**
- **The search results are displayed in tabs:**

The screenshot displays a search results interface for the term "test". At the top, it shows "Search Results For test" with filters for "Items" (All) and "Sort By" (Relevance). Below this, there are navigation tabs for "Consumer", "CRM", "ESS", and "MDM". The results are listed as follows:

- BBC - Test The Nation** (92% relevance): Includes links for "See Also" and "Details". The snippet mentions "Test the Nation Take the Test Previous tests 20th Century Test... Look Up Table for 20th Century Test Big Entertainment Test 2004 Test IQ Test... for the graphical version of the test Get Flash Player Take the... version of The Know Your English Test...". A link for "HTML Version" is provided.
- BBC - One Life - Work - Interviews - Ability & Aptitude Tests** (91% relevance): Includes links for "See Also" and "Details". The snippet mentions "Of Assessment: Ability & Aptitude Tests... A psychometric test is a reliable measure of human ability and behaviour... Ability/aptitude tests... Ability/aptitude tests... to practice before you take the test...". A link for "HTML Version" is provided.
- BBC - Nature - Test Your Pet** (89% relevance): Includes links for "See Also" and "Details". The snippet mentions "Test Your Pet... Nature > Animals > Pets > Test your pet Test Your Pet - Test Results... collected as part of the 'Test Your Pet' programme,... Overall Test Results... an average of 4.0 for each test...". A link for "HTML Version" is provided.
- BBC - Science & Nature - Test Your Pet** (88% relevance): Includes links for "See Also" and "Details". The snippet mentions "Test Your Pet... Nature > Animals > Pets > Test your pet... What was the idea behind Test Your Pet?... Test Your Pet was all about you, the BBC audience,... behaviourists to devise a series of tests...".

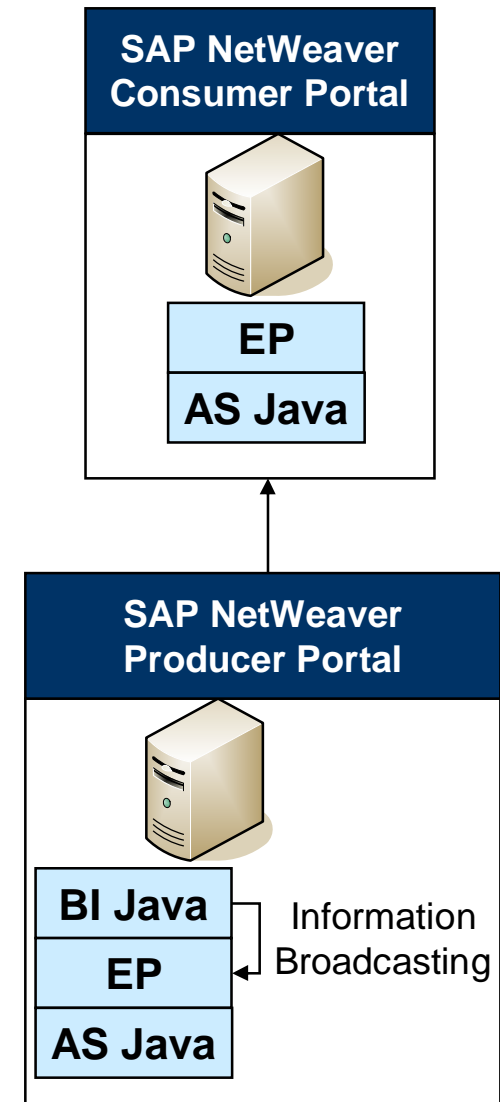
Information Broadcasting supports distribution of reports to the local portal. Documents and online links are stored in KM.

Available Options:

- Remote Delta Link KM Navigation iView
- URL iView: for SAP NetWeaver 2004 consumer
- WebDAV Repository Manager: Documents stored + accessed from consumer and producer portals
- CM Repository Manager: Document storage in same file system
- ICE: Documents copied regularly to consumer portal

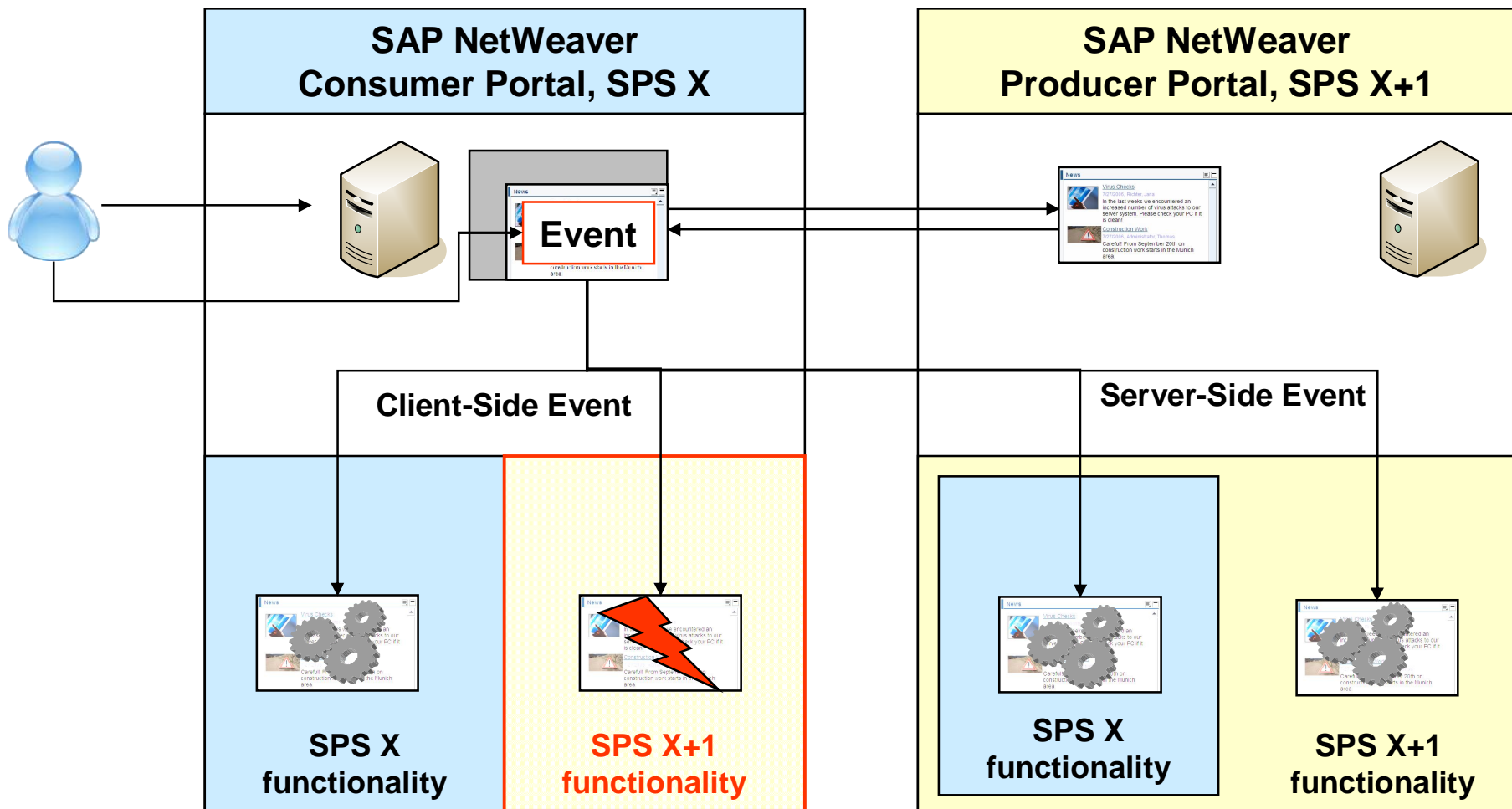
More information:

- Note 969040
- <http://service.sap.com/bifag>



Version Interoperability Considerations

- **Consumer \geq Producer: works** 
- **Consumer $<$ Producer:**





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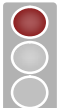





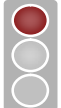

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Go for FPN? Exemplified Landscape Comparison ...

	Central Landscape (1 portal)	Federated Portal Network (2 .. n portals)
Administration effort	 1 portal to be administered	 Multiple portals with different scopes
Release dependency	 Each individual requirement influences portal upgrade strategy	 Upgrades take place on different portals independently
Test	 All functionality to be tested in one portal	 Integration and landscape tests required
Autonomy of business units	 Typically central IT department leading, delegated administration concept	 Autonomous content and application creation and maintenance
Availability	 Only one portal → determines availability + SLA	 Availability requirements can vary, but consumer remains crucial

** Traffic lights are used for illustration purposes only. It illustrates the required effort or possibilities compared between central and federated landscapes.*

Key Take-Aways

- **The Federated Portal Network might be a solution for certain use cases, e.g. providing business units with **autonomous portals** or **separating content**.**
- **Different **content sharing modes** are offered: Remote Role Assignment, Remote Delta Links and WSRP content sharing.**
- **The planned implementation should to be **evaluated thoroughly and certain landscape considerations**, e.g. regarding user stores, Knowledge Management and BI Java, should be taken into account.**

Further Information



Public Web:

- SAP.com: www.sap.com
- SAP Developer Network:
www.sdn.sap.com/irj/sdn/developerareas/ep Federated Portal Network
- SAP Service Marketplace: www.service.sap.com/nw-fpn
- SAP Help:
http://help.sap.com/saphelp_nw2004s/helpdata/en/5b/9f2d4293825333e10000000a155106/content.htm



Related SAP Education Training Opportunities

- www.sap.com/education/ : SAPEP, EP120, EP200 (general portal training)



Related Notes

- 880482: Central Note Federated Portal Network
- 853509: Release Restrictions Usage Type EP of SAP NetWeaver 2004s
- 969040: Federated Portal Network and Information Broadcasting

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