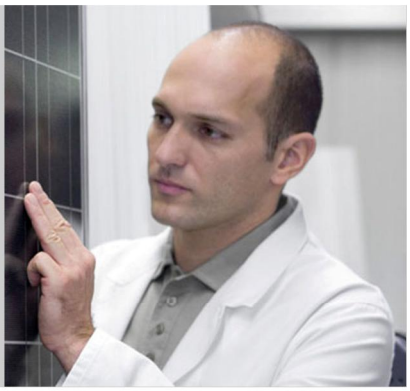
Remote Application Integration

New Content Sharing Mode for the Federated Portal Network (FPN)



SAP NetWeaver Product Management
25.October 2007

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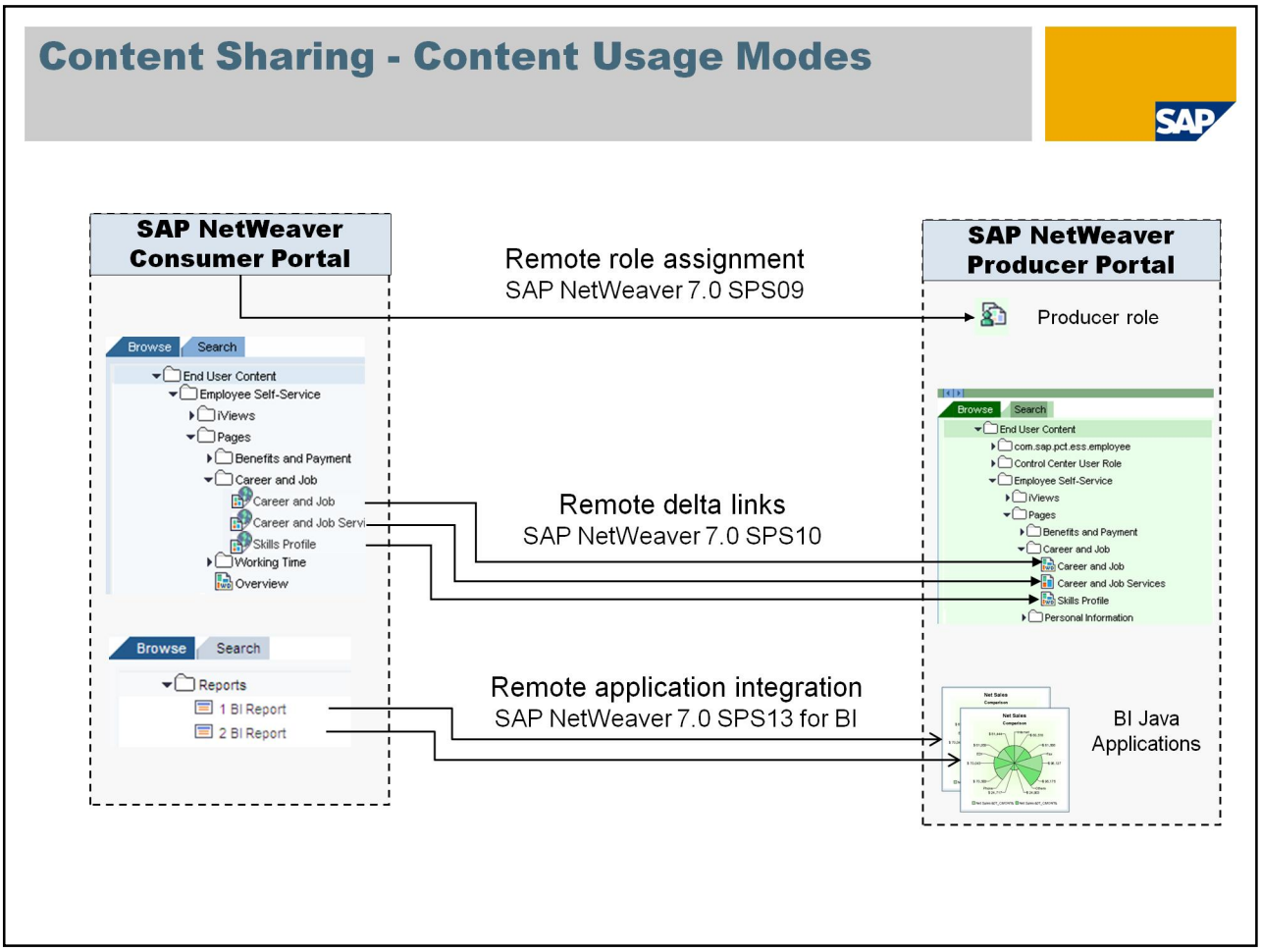


The Federated Portal Network supports 3 content sharing modes when discussing SAP NetWeaver – SAP NetWeaver Integration:

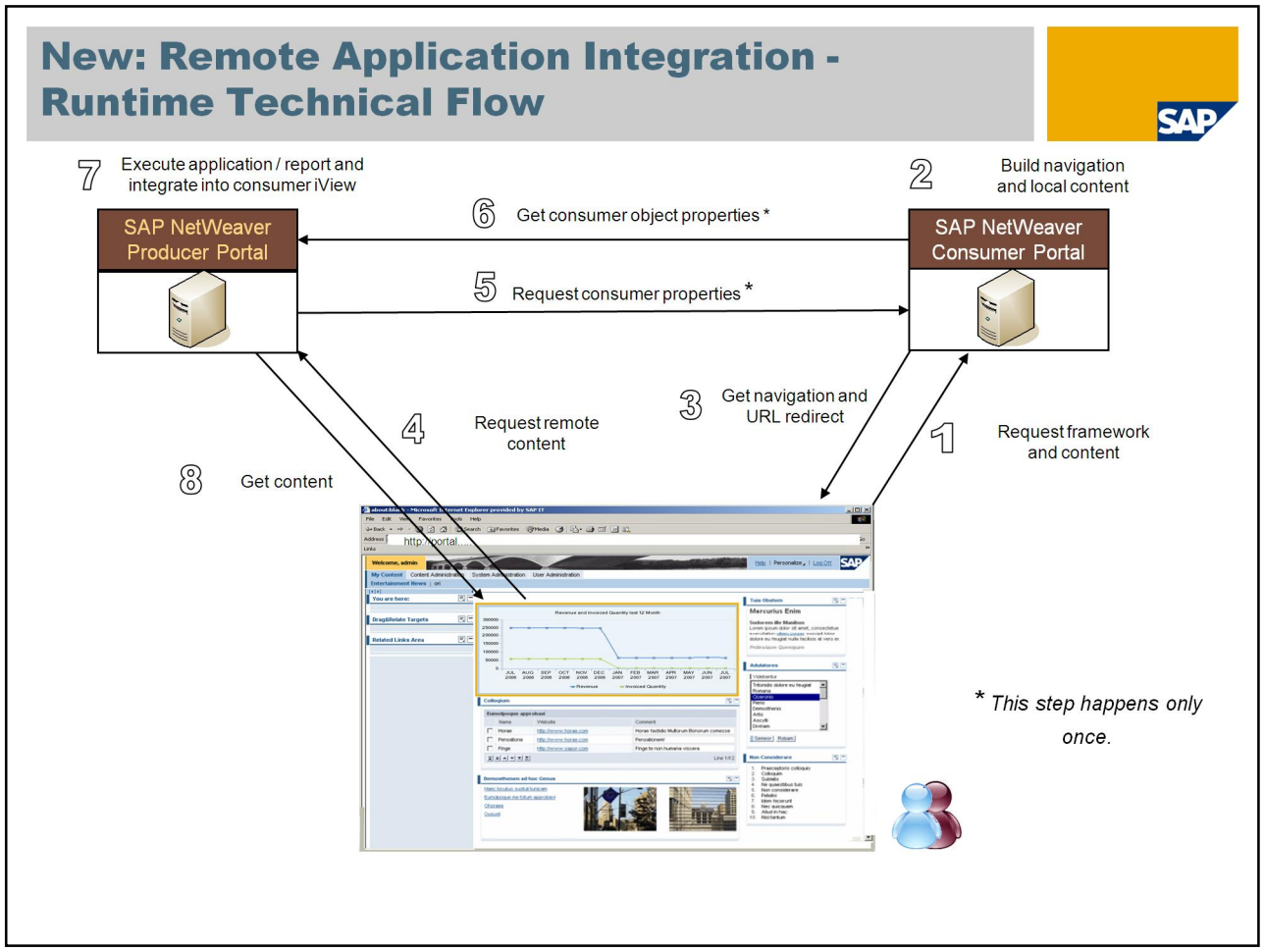
• **Remote Role Assignment (RRA):** Here you have the full content administration performed on the producer portal. You deploy applications, create iViews / pages / worksets / roles … on the producer and basically want to reuse the content as is on the central consumer portal. In the consumer, you then have no content administration effort at all, but you can assign the remote roles to users on this consumer portal directly. This is available since SAP NetWeaver 7.0 (2004s) SPS 09 and can be performed through standard UME role assignment tools.

• **Remote Delta Links (RDL):** With this content usage mode, portal content (like iViews, pages …) from a producer portal can be reused, adjusted and embedded into the local content offering of a consumer portal. You can browse the portal content directory (pcd) of the producer portal, copy the content and paste as delta link into the local PCD of the consumer portal. This mode is available since SAP NetWeaver 7.0 (2004s) SPS 10.

• **Remote Application Integration (RAI):** This new content sharing mode is available in SAP NetWeaver 7.0 (2004s) SPS 13 for BI reports only. It is basically a contrary content usage mode to Remote Role Assignment. In RAI you don't have any content administration on the producer portal, but do the full content administration flow only through the central consumer portal. Thus you can create iViews on the consumer portal that are integrating BI reports from a remote producer portal. For future Enhancement Packages in NetWeaver SAP plans to increase the scope of this content usage mode to other applications.

For SAP NetWeaver Portal & non-SAP Portal integration the content sharing mode WSRP is available:

• **WSRP content sharing:** In order to integrate standard-compliant content coming from Non-SAP portals, an iView template is available in the Portal Content Studio. Consuming and producing content is supported since SAP NetWeaver 7.0 (2004s) SPS 09.



This slide explains the **runtime flow for Remote Application Integration** (for the other content usage modes please have a look at the respective presentations):

1. The end user accesses his browser and logs on the central consumer portal. He requests his navigation and content.
2. In the consumer portal the navigation properties and portal content located on the consumer portal are fetched.
3. The properties are send back to browser of the end user, including URL redirects to the application on the remote producer portal for separate fetching there.
4. The remote content (BI report) is requested via the URL redirect from the producer portal.
5. The BI report itself is available on the producer portal, but the portal content (e.g. iView) is located on the consumer portal. Thus a roundtrip to the consumer portal is required to fetch the properties of the portal content. This step is cached and so is only required once or after changes of the object.
6. The properties of the portal objects are sent back to the producer portal.
7. The report is executed and calculated on the producer portal using the iView / portal content context (which came from the consumer portal).
8. This content is then sent to the end users browser directly.

Some things to remark here: End users always require access through the browser to all portals in the federation (as they do in all content sharing modes of FPN and even without FPN for accessing a portal and backend system – thus FPN does not tunnel any communication channel and does not serve as a proxy). Moreover, in case content is not yet cached in the browser, there is a roundtrip from the producer to the consumer portal in order to retrieve the portal content object properties (iView details) – this is required only once per iView using a shared persistence based cache. The properties are fetched from the consumer portal and used in the producer in order to embed the executed application in there and display it properly in the end users‘ browser.

New: Remote Application Integration – Facts (As of SPS 13)

- Only **applications / reports** running on the **producer** portal.
- All **portal content** is created and maintained on the **consumer** portal.
- **Wizard-based creation** of iViews linking to remote applications (Application Integrator-like behavior).
- Available with SAP NetWeaver 7.0 SPS 13 for **BI reports only**. Enhancements and more application types planned for later SPS.
- Supports **changing producer portal alias** during designtime (change property) or runtime (Dynamic System Resolution / user exit)

Within SAP NetWeaver 7.0 SPS 13 this new content sharing mode is provided only for integration of BI reports.

Basically, there's no need to create portal content objects on a producer portal. Instead only the applications / reports are executed on the producer portal (whereby the portal itself is required as a runtime environment). All content creation can happen in one central place in the federation – the consumer portal. The process is quite well known, since you create a usual iView with a slightly modified template for BI 7.x iViews. In there you can choose whether the report is running locally or on a connected producer portal.

Since the technology builds on top of the existing Application Integrator, some flexibility is supported. You can change the alias of the producer portal during designtime in the iView Editor or during runtime with the help of dynamic system resolution / the user exit in AppIntegrator. This might help in case you need some flexibility for users accessing different producer portals to see BI Java reports.

Decision Matrix Content Sharing Mode

	Remote Role Assignment	Remote Delta Links	Remote Application Integration
Shared content	Roles	iViews, pages, worksets, roles	Applications *(currently: BI only)*
Administration effort / TCO	**Producer:** create and maintain portal content + applications	**Producer:** create and maintain portal content + applications (could be minimized)	**Producer:** create + maintain applications
	Consumer: assign users to roles	**Consumer:** copy portal content, adjust + integrate portal content	**Consumer:** full portal content administration (create + maintain)
Modification possible on consumer	Merge roles	Adjust content + integrate into local content	Only local content, Change producer alias

** Traffic lights are used for illustration purposes only. It illustrates the required effort or possibilities compared between the different modes.*

The traffic lights **illustrate the effort and possibilities provided by the different content sharing modes and displays the differences**. All solutions are valuable for different use cases, but have certain administrative impacts you should be aware of.

The three content sharing modes Remote Role Assignment, Remote Delta Links and Remote Application Integrator might suit different business needs. Basically those approaches can exist:

- **"Bottom-Up-Approach":** Autonomous units create and maintain content on their own producer portals. They build fully configured roles, which should be integrated into a central consumer portal with only little central administration effort. This approach is supported by Remote Role Assignment.

- **"Top-Down-Approach":** Due to technical reasons the central department decides to separate content to individual producer portals (especially BI reports are executed on a separate producer portal). The admin effort on the producer portals should be minimized, because the content is only deployed to the producer, but in the consumer portal you would like to do all content creation and maintenance. For this approach Remote Application Integration would be the right choice (whereby you should notice that currently only BI reports are supported, other applications are planned for future Enhancement Packages of SAP NetWeaver).

- **Mixed scenarios**: Autonomous portal content is created in a producer portal, however, this will be reused and adjusted on other consumer portals. Here Remote Delta Links are most likely to be suitable for this use case.

Depending on the necessary modification possibilities and desired administration scenario, you should decide thoroughly which content sharing mode you would like to use. It should fit the overall administration concept of your federation, since the content sharing mode impacts on the administration effort required on consumer and producer portals.

Moreover, your choice might be influenced by some limitations that are existing for individual content sharing modes (more details see note 880482)

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