

SAP NetWeaver™ Foundation RIG

SAP Labs, LLC

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OBJECT-BASED NAVIGATION

Object Based Navigation offers the user of SAP Enterprise Portal an additional method of navigation based on actual business objects from productive back-end systems.

OBN is based on a concept of business objects which have operations that can be performed on them, and iViews that can declare that they implement these operations.

Each operation has a priority, and when clicking on OBN link the operation with the highest priority, which has an implementing iView in the user's roles (the default), will be executed.

The usefulness and efficiency of OBN as a mode of navigation is in its ability to return, from a single business object iView, variable, role-specific back-end information that can be pre-planned to be relevant to any number of roles.

Benefits of Object-Based Navigation

Administrator

Administrator interface showing a table of publishers. The context menu is open over the 'GotoFavorite' button, showing options like 'GotoExport'.

OBENTest.dbo.publishers.city	OBENTest.dbo.publishers.country	OBENTest.dbo.publishers.pub_name	OBENTest.dbo.publishers.pub_id
Berkeley	USA	Algodata Infosystems	1389
Washington	USA	Binnet & Hardley	0877
Chicago	USA	Five Lakes Publishing	1622
MFnchen	Germany	GGG&G	9901
Paris	France	Lucerne Publishing	9999
Boston	USA	New Moon Books	0736
Dallas	USA	Ramona Publishers	1756

Administrator interface showing the 'Import' context menu. The menu includes options like 'Export', 'Import', 'Upload Content and Actions', 'Unification Synchronization', 'Role Upload', and 'Content Mirroring'. The 'Import' option is highlighted.

Different context menu + same operation with different actions dependent on user role assignment

Demo User

Demo User interface showing the same table of publishers. The 'GotoFavorite' button is highlighted, indicating the user's role-based access.

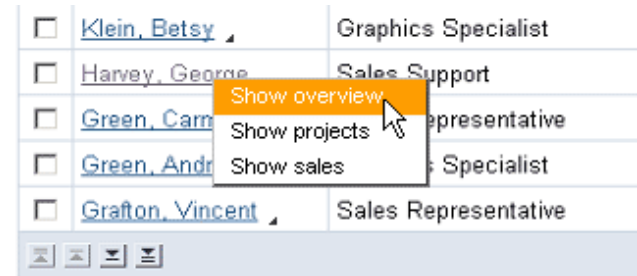
OBENTest.dbo.publishers.city	OBENTest.dbo.publishers.country	OBENTest.dbo.publishers.pub_name	OBENTest.dbo.publishers.pub_id
Berkeley	USA	Algodata Infosystems	1389
Washington	USA	Binnet & Hardley	0877
Chicago	USA	Five Lakes Publishing	1622
MFnchen	Germany	GGG&G	9901
Paris	France	Lucerne Publishing	9999
Boston	USA	New Moon Books	0736
Dallas	USA	Ramona Publishers	1756

Demo User interface showing the 'Pcd Inspector' context menu. The 'Browser' view displays a tree structure of objects, including 'Business_Objects', 'application_data', 'com.sap.portal.runtime.config', 'com.sap.portal.system', 'com.sapportals.portal.relationships', and 'portal_content'. Each object has a 'browse into PropEditor AllProps' link.



The operation is directly attached to the object:

- optically (visible for the user)
- logically (in the Portal Catalog)



The screenshot shows a table with two columns: employee names and their roles. A context menu is open over the entry 'Green, Carm', showing three options: 'Show overview', 'Show projects', and 'Show sales'. The 'Show overview' option is highlighted in orange.

<input type="checkbox"/>	Klein, Betsy	Graphics Specialist
<input type="checkbox"/>	Harvey, George	Sales Support
<input type="checkbox"/>	Green, Carm	representative
<input type="checkbox"/>	Green, Andr	Specialist
<input type="checkbox"/>	Grafton, Vincent	Sales Representative

The operation is role-sensitive

- The navigation options offered depend on the user's role

User experience is ergonomical

- Object-based navigation follows the style users are familiar with from the WWW and from other software
→ You choose an operation by clicking.

SAP delivers navigation scenarios out-of-the box

Customers can easily modify or create navigation scenarios

Object-Based Navigation means: Make Business Object entries navigatable

Create a new System with System Alias (here: JDBC)

Import Business Objects (only for Source)

Create a new Operation

Create a Source iView (e.g. Query iView) that has OBN links enabled.

Choose a Target iView and add the Operation via Object-based Navigation Editor.

OBN Benefit: Same Operation could have different actions dependend on the role assignments of the user.

Demo 

Scenario II: OBN – Create Operation

Unification&OBN | TestOBN | **Content Administration** | User Administration | System Administration | Home

Portal Content | Batch Property Replacement | Unification | Portal Content Translation | Web Dynpro

Portal Content | History | Back | Forward

Browse | Search

Overview | publishers

publishers

Save | Close | Preview | Refresh | Edit Mode

Business Object Editor

	Operation Name	Operation ID	Priority	Relation Resolving
<input type="radio"/>	GotoFavorite	test	4	No

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Add | Remove | Display iViews/Pages

Use the Portal Catalog to add iViews or pages that implement this operation at runtime

Property Editor - publishers

Property Category: Show All

Reset All Properties

Business Object Name: publishers
Text changes only affect the original language

Changed By: Administrator

com.sap.portal.pcd.gl.DeltaLinkState: -1

com.sap.portal.pcd.gl.OriginalCountry: US

com.sap.portal.pcd.gl.OriginalLanguage: en

Created By: Administrator

Created on: 7/12/2004

Distributed Query Engine (DQE) Name: OBNTTest.dbo.publishers

Last Modified on: 7/14/2004

Quick Info

ID: pcd:Business_Objects/PDKExample/O
com.sap.portal.pcm.Title
publishers
Permission:
Owner: Full Control. Read and Write. F

Implementing iViews / Pages

iView / Page	Location	In Navigation

Scenario II: OBN – Create Source iView

The screenshot displays the SAP NetWeaver Portal Administration interface. The top navigation bar includes tabs for 'Unification&OBN', 'TestOBN', 'Content Administration', 'User Administration', 'System Administration', and 'Home'. Below this, a breadcrumb trail shows 'Portal Content' > 'Batch Property Replacement' > 'Unification' > 'Portal Content Translation' > 'Web Dynpro'. The main content area is titled 'Portal Content' and features a 'History' section with 'Back' and 'Forward' links.

The interface is divided into several sections:

- Left Navigation Panel:** Contains a 'Browse' and 'Search' section with a tree view. The tree shows a hierarchy: 'Portal Users' > 'RKTWorkshopContent' > 'iViews' > 'JDBC'. Under 'JDBC', there are several sub-items: 'Authors', 'Employee Territories', 'Employees', 'Publisher', 'Publisher OBN Only', 'R/3 System', 'Marion', 'OBN-Scenario', and 'OBN_Implementing_iView'.
- Quick Info Panel:** Located below the navigation panel, it displays a table with the following data:

ID
pcd.portal_content/RKTWorkshopCont
com.sap.portal.pcm.Description
com.sap.portal.pcm.Title
JDBC
- Main Content Area:** Titled 'New iView', it contains the 'iView Wizard' with the following content:

Step 1: Template Selection

This wizard guides you through the steps required to create a portal iView based on an existing template. The template list reflects the contents of the cache, and may need refreshing.

Refresh

Choose Template *

 - Crystal Enterprise Report
 - JDBC Stored Procedure iView
 - Proxy-to-Remote iView
 - Query iView
 - SAP BSP iView
 - SAP BW Report iView
 - SAP IAC iView
 - SAP MiniApp iView
 - SAP RFC iView
 - SAP Transaction iView
 - SAP Web Dynpro iView
 - URL iView
 - Web Template iView

Scenario II: OBN – Create Source iView

The screenshot displays the SAP Content Administration interface. At the top, navigation tabs include 'Unification&OBN', 'TestOBN', 'Content Administration', 'User Administration', 'System Administration', and 'Home'. Below these, a breadcrumb trail shows 'Portal Content' > 'Batch Property Replacement' > 'Unification' > 'Portal Content Translation' > 'Web Dynpro'. The main window is titled 'Portal Content' and includes a 'History' section with 'Back' and 'Forward' buttons.

The left sidebar contains a 'Browse' pane with a tree view of the system structure. The tree shows 'Portal Users', 'RKTWorkshopContent', 'iViews', and 'JDBC'. Under 'JDBC', there are folders for 'Authors', 'Employee Territorie', 'Employees', 'Publisher', and 'Publisher OBN Only'. Below these are folders for 'R/3 System', 'Marion', 'OBN-Scenario', and 'OBN_Implementing_iView'. A 'Quick Info' section at the bottom left shows details for the selected 'JDBC' object, including 'ID', 'pcd:portal_content/RKTWorkshopCont', 'com.sap.portal.pcm.Description', 'com.sap.portal.pcm.Title', and 'JDBC'.

The main workspace is titled 'New iView' and contains the 'iView Wizard'. The current step is 'Step 3: Query Properties Selection'. The instruction reads: 'From the system tree, choose the object properties to include in your query.' The system tree on the left shows the path 'System' > 'OBNTTest' > 'dbo' > 'publishers'. Under 'publishers', the properties 'city', 'country', 'pub_id', 'pub_name', and 'state' are listed. The 'Add >>' button is highlighted with a mouse cursor, indicating that properties are being added to the 'Selected Object Properties' list. The 'Selected Object Properties' list on the right contains 'city', 'country', 'pub_id', and 'pub_name'. Below the list are 'Add >>' and '<< Remove' buttons. At the bottom right of the wizard, there are 'Cancel', 'Back', 'Next >', and 'Finish' buttons.

Scenario II: OBN – Create Source iView

The screenshot shows the SAP NetWeaver interface. On the left, a tree view under 'Business Objects' shows 'publishers' selected and circled in orange. The main window is the 'New iView' wizard, currently at 'Step 4: Properties and Sorting in Result iView'. The wizard prompts the user to 'Select the properties to display in the iView. Specify the property by which to sort and the sorting order.' Below this is a table with columns 'Visible', 'Property Name', 'Visible Name', and 'Link'. All properties are checked in the 'Visible' column. The 'Link' column has a dropdown menu open, with 'Object Based Navigation' selected. Below the table, the 'Sort Result iView by' dropdown is set to 'OBNTTest.dbo.publishers.pub_name' and the 'Sort Order' is set to 'Ascending'. At the bottom right of the wizard are buttons for 'Cancel', 'Back', 'Next >', and 'Finish'.

Visible	Property Name	Visible Name	Link
<input checked="" type="checkbox"/>	OBNTTest.dbo.publishers.city	OBNTTest.dbo.publishers.city	Object Based Navigation
<input checked="" type="checkbox"/>	OBNTTest.dbo.publishers.country	OBNTTest.dbo.publishers.country	None
<input checked="" type="checkbox"/>	OBNTTest.dbo.publishers.pub_id	OBNTTest.dbo.publishers.pub_id	Object Based Navigation
<input checked="" type="checkbox"/>	OBNTTest.dbo.publishers.pub_name	OBNTTest.dbo.publishers.pub_name	None
<input checked="" type="checkbox"/>	OBNTTest.dbo.publishers.state	OBNTTest.dbo.publishers.state	None

Sort Result iView by: OBNTTest.dbo.publishers.pub_name Sort Order: Ascending

The Source iView is aware of the operation which is assigned to the Business Object (publishers). This Business Object has been created based on the same object of the backend system (publisher table).

Scenario II: OBN – Create Source iView

The screenshot displays the SAP NetWeaver Portal Administration interface. At the top, there are navigation tabs for 'Unification&OBN', 'TestOBN', 'Content Administration', 'User Administration', 'System Administration', and 'Home'. Below these are sub-tabs for 'Portal Content', 'Batch Property Replacement', 'Unification', 'Portal Content Translation', and 'Web Dynpro'. The main header shows 'Portal Content' with 'History', 'Back', and 'Forward' options.

The left sidebar contains a 'Browse' and 'Search' section with a tree view showing the following structure:

- Portal Users
- RKTWorkshopContent
 - Andreas
 - iViews
 - JDBC
 - Authors
 - Employee Territories
 - Employees
 - Publisher
 - Publisher OBN Only
 - R/3 System
 - Marion
 - OBN-Scenario
 - OBN_Implementing_iView

Below the tree is a 'Quick Info' section with a list of fields:

- ID
- pcd:portal_content/RKTWorkshopCont
- com.sap.portal.pcm.Description
- com.sap.portal.pcm.Title
- JDBC

The main content area is titled 'New iView' and contains the 'iView Wizard' with 'Step 5: Query Condition'. The instruction reads: 'This screen enables you to define query conditions. Choose operators and parameter values as required.'

The wizard includes two rows of configuration:

Parameter	Operation
- Select -	- Select -

Parameter	Value	Personalize
- Select -		

Each row has an 'Add' button below it.

The SQL query is displayed in a text area:

```
SELECT OBNTTest.dbo.publishers.city, OBNTTest.dbo.publishers.country,
OBNTTest.dbo.publishers.pub_id, OBNTTest.dbo.publishers.pub_name,
OBNTTest.dbo.publishers.state FROM OBNTTest.dbo.publishers WHERE
```

Logical operators are available as buttons: (), OR, AND, NOT, { }, and }

At the bottom, there is a 'Preview the result iView' section with a 'Preview' button.

Scenario II: OBN – Assign Operation to Target iView

The screenshot shows the SAP NetWeaver Content Administration interface. The breadcrumb trail is: Portal Content > Super Administration > Import. The 'Object-Based Navigation' section contains the following text: "Add operations to 'pcd:portal_content/administrator/super_admin/super_admin_role/com.sap.portal.system_administration/com.sap.portal.transport/com.sap.portal.import' by choosing them from the Portal Catalog. This iView implements them at runtime."

A context menu is open over the 'GotoFavorite' operation, with the 'Add Operation to iView' option highlighted. The table below shows the operation details:

Operation Name	Display Name	Business Object	Priority
GotoFavorite	GotoFavorite	publishers	4

At the bottom of the table, there is a text area for the 'Object value manipulation JavaScript function for current selected operation:' with the following code snippet:

```
function OBNObjValueManipulation(objValue) {
```

**The target iView can be any iView which is assigned to a role of the user.
Multiple iViews – stored in different role - can implement the same operation.
(See next slide)**

If you have any feedback on this session, please
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Thank You

The SAP NetWeaver™ Foundation RIG Team

Q&A



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