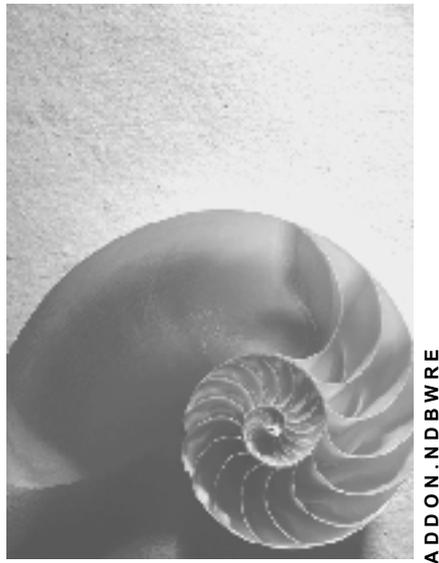


# Drag&Relate with the SAP Unifier for SAP BW



Release 30B



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## Icons

Icon	Meaning
	Caution
	Example
	Note
	Recommendation
	Syntax

## Typographic Conventions

Type Style	Description
<i>Example text</i>	Words or characters that appear on the screen. These include field names, screen titles, pushbuttons as well as menu names, paths and options.  Cross-references to other documentation.
<b>Example text</b>	Emphasized words or phrases in body text, titles of graphics and tables.
EXAMPLE TEXT	Names of elements in the system. These include report names, program names, transaction codes, table names, and individual key words of a programming language, when surrounded by body text, for example, SELECT and INCLUDE.
Example text	Screen output. This includes file and directory names and their paths, messages, source code, names of variables and parameters as well as names of installation, upgrade and database tools.
EXAMPLE TEXT	Keys on the keyboard, for example, function keys (such as F2) or the ENTER key.
<b>Example text</b>	Exact user entry. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Pointed brackets indicate that you replace these words and characters with appropriate entries.

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## Drag&Relate with the SAP Unifier for SAP BW

### Use

This function enhances basic browser-based navigation.

The function *Drag&Relate (D&R) with the SAP Unifier for SAP BW* enables you to execute BW applications or other transactions with BW contents (as filter values) across system boundaries, by connecting data from one application with data in another application. You select a business object (for example, order) by clicking on it and dragging it into another object (for example, a link to an external Web site) on the iPanel. The system executes the action (for example, displays the delivery status of the order).

For more information about Drag&Relate in the Enterprise Portal, see [The Unification Environment \[Extern\]](#) as well as the documentation [SAP Unifier for BW \[Extern\]](#) under [Drag&Relate \[Extern\]](#).

### Drag&Relate Selection – Report/Report Interface

Be careful that the *Drag&Relate* function does not replace the *Jumping using report/report interface* function. The two functions complement each other and are different in the following ways:

#### Drag&Relate (D&R)

- Only one object and one key can be assigned to the same time.
- Drag&Relate can work with transitive relations.



For example you are able to drag the characteristic *Material* (0MATERIAL) from a R/3 transaction that contains information on material. This navigation is possible because of the 1:1 key relationship between 0MATERIAL and the corresponding Business Object Repository (BOR) object BUS 2001.

If, for example, 0MATERIAL is a display or navigation attribute of 0CUSTOMER, you are also able to drag the characteristic *Customer* (0CUSTOMER) from a R/3 transaction that contains information on the characteristic.

To Drag&Relate between a BW characteristic and a BOR object either a 1:1 key relationship between a characteristic and a BOR object or between an attribute of the characteristic and the BOR object is necessary.

- If the target for Drag&Relate is SAP R/3 not all objects are assigned to BOR objects (time characteristics, for example). Look at the list of [Characteristics Compatible with Drag&Relate \[Seite 13\]](#). Assigning a BW characteristic to an object in any other situation outside of the SAP BW has to be assessed by consulting projects as it is not a standard function. Also see [Correlations Between R/3 Objects and BW InfoObjects \[Seite 12\]](#).
- Fields have to be assigned manually.
- Not suitable for drilldown to line item level (lacks context).

#### Jumping using Report/Report Interface (R/RI).

- The complete navigation status is transferred to the target (various InfoObjects and complex selection criteria).
- Automatic assignment of metadata using extract structures.
- Works with SAP systems, R/3 transactions, programs and URLs. Also see [Editing Sender/ Receiver Assignments for the R/RI in BW \[Extern\]](#).

Use the report/report interface in scenarios where the entire context has to be transferred. Implement Drag&Relate for 1:1 object assignments, making sure that the objects have identical keys.

## Integration

You require the following systems to use Drag&Relate with the SAP Unifier for SAP BW:

- Enterprise Portal 5.0 ≥ Support Package 04
- SAP BW ≥ 3.0B
- SAP Unifier for SAP BW (= component of the Enterprise Portal)



Look at the following SAP notes:

SAP Note	Topic	Support Package Required
626420	Drag&Relate with compounding of source system ID	SAP BW 3.0B SP 14
625593	Drag&Relate: Correlation <i>BW</i> → <i>R/3</i>	SAP R/3 Plug-In for Workplace Release 500_311
637271	BW Unifier project metadata	<ul style="list-style-type: none"> <li>• Unification Server SP 4 Patch 4</li> <li>• R/3 and/or BW Unifier SP 5 Patch 1</li> </ul>
637268	R/3 Unifier correlation	<ul style="list-style-type: none"> <li>• Unification Server SP 4 Patch 4</li> <li>• R/3 and/or BW Unifier SP 5 Patch 1</li> </ul>
637282	Hotfix 1 for “Unifier SP 4 Patch 4; R/3 / BW Unifiers SP5”	<ul style="list-style-type: none"> <li>• Unification Server SP 4 Patch 4</li> <li>• R/3 and/or BW Unifier SP 5 Patch 1</li> </ul>

## Prerequisites

You have made the following settings:

- You have connected BW to the Enterprise Portal.  
You can find additional information in the Enterprise Portal documentation in the SAP Help Portal (<http://help.sap.com>) → *SAP NetWeaver* → *SAP Enterprise Portal* → *EP 5.0 SP5* → *Administration Guide* → *Integration of Applications and Data Sources* → *Integration of SAP Systems* → **System Landscape**.
- You have set up single sign on with SAP logon tickets.  
You can find additional information in the Enterprise Portal documentation in the SAP Help Portal (<http://help.sap.com>) → *SAP NetWeaver* → *SAP Enterprise Portal* → *EP 5.0 SP5* → *Administration Guide* → *Security* → *Single Sign On* → **Single Sign-On with SAP Logon Tickets**.
- You have maintained the roles in BW. This is important because the Portal is role-based.
- You have installed the SAP Unifier for SAP BW.

While generating the project for the SAP Unifier for SAP BW, you have selected the required InfoProvider. The metadata for the characteristics of this InfoProvider is replicated in the SAP Unifier for SAP BW and a relational matrix is created.

For more information about installing the SAP Unifier for SAP BW, see the Enterprise Portal documentation in the SAP Help Portal (<http://help.sap.com>) under *Help for Unification* in the *SAP Unifier for BW Guide* or under [SAP Unifier for BW \[Extern\]](#).

- SAP Reference IMG:

In the BW customizing implementation guide under Business Information Warehouse → *Reporting Relevant Settings* → *Web-based Settings* → *Drag&Relate Settings*, you have selected the *SAP Unifier for SAP BW* checkbox. As a result, you have selected Drag&Relate with the SAP Unifier for BW.

For more information, see SAP note 454134.

## Features

When you use the SAP Unifier for SAP BW, every BW system appears automatically in the iPanel, as soon as a corresponding data source has been created for the BW system in the Portal under *System Configuration* → *Data Sources*. Your favorites and roles are displayed in the iPanel. The following objects are displayed within your roles (if available):

- Web applications
- Queries
- Workbooks
- Crystal Reports
- URLs

The queries are displayed using the [standard Web template \[Extern\]](#).

Role maintenance takes place in the BW system. Your current BW system roles are displayed in the Enterprise Portal but you cannot maintain them there. Any changes made to a role are displayed the next time you log on (at the latest).

If you launch a query or a Web application in the iPanel, the D&R links with the symbol  are now added automatically.



When you are importing a Web application into the Enterprise Portal as an iView, you have to ensure that the setting for displaying D&R links is active.

To display D&R links with the  symbol, you have to either:

- switch on the *Display Drag&Relate Links* display option in the *Query Properties*
- or parameterize the Web application URL with `&show_dr_links=X`.

The Drag&Relate with the SAP Unifier for SAP BW function enables a number of navigation scenarios. These are discussed further in [Drag&Relate Scenarios \[Seite 8\]](#).



## Drag&Relate Scenarios

### Use

The *Drag&Relate with the SAP Unifier for SAP BW* function enables the following scenarios:

Drag&Relate Sources	Drag&Relate Target
BEx Web Application	BEx Web Application
BEx Web Application	R/3 Transaction
R/3 Transaction	BEx Web Application
BEx Web Application	External (Web, ...)

### Features

#### **D&R from a BEx Web application to another BEx Web application (in the same BW system):**

Click on a characteristic in the iView and drag it (by holding down the left mouse button) from the iView to the other BW iView (BEx Web application) in the iPanel. The iViews are swapped and the iView to which you have dragged the characteristic using Drag&Relate is displayed, filtered by this characteristic.



The BEx Web application can either be a Web application created with the Web Application Designer or an ad-hoc query displayed on the Web (in the standard Web template).

#### **Drag&Relate from a BEx Web application to objects in other systems, and vice versa:**

If you have defined a correlation between the SAP Unifier for SAP BW and other unifiers (for example, database unifiers), you can Drag&Relate objects to and from these systems. You define whether you can Drag&Relate BW objects into other systems and whether you can Drag&Relate objects from other systems to BW objects in the correlation matrix.

See also the information in [Correlations between R/3 Objects and BW InfoObjects \[Seite 12\]](#).



D&R from a BEx Web application to an SAP R/3 transaction:

Click on a characteristic (for example, order) in the iView and drag it (by holding down the left mouse button) from the iView to an SAP R/3 transaction in the iPanel. The SAP R/3 system transaction is displayed and shows you the relevant information from this transaction for this characteristic (for example, a display of the delivery status for the order).

You can find further information under [Background Information on Drag&Relate Between BW and R/3 \[Seite 10\]](#).

D&R from a SAP R/3 transaction to a BEx Web application:

Choose the D&R object (for example, material) in the R/3 transaction and drag it (by holding down the left mouse button) from the transaction to a BW query or a BW Web application in the iPanel. The query or Web application is filtered by the object (for example, material) and is displayed on the Portal page.



Note that Drag&Relate is only useful for displaying master data as only the exact characteristic value, no more than one characteristics nor the overall context, can ever be transferred.

### Drag&Relate from a BEx Web application to a Web site:

If you have inserted the URL of a Web site into your iPanel under *My Portal*, you can drag the D&R link to this Web site.



D&R to [www.yahoo.de](http://www.yahoo.de)

The characteristic *Order* has a logical relationship to the characteristic *Customer* and the Yahoo! search site is connected to the customer information text.

Click in the Web application on the symbol of the characteristic *Order* and drag it (by holding down the left mouse button) from the iView to the URL [www.yahoo.de](http://www.yahoo.de) in the iPanel. The Yahoo! Web site appears with the text for the customer.

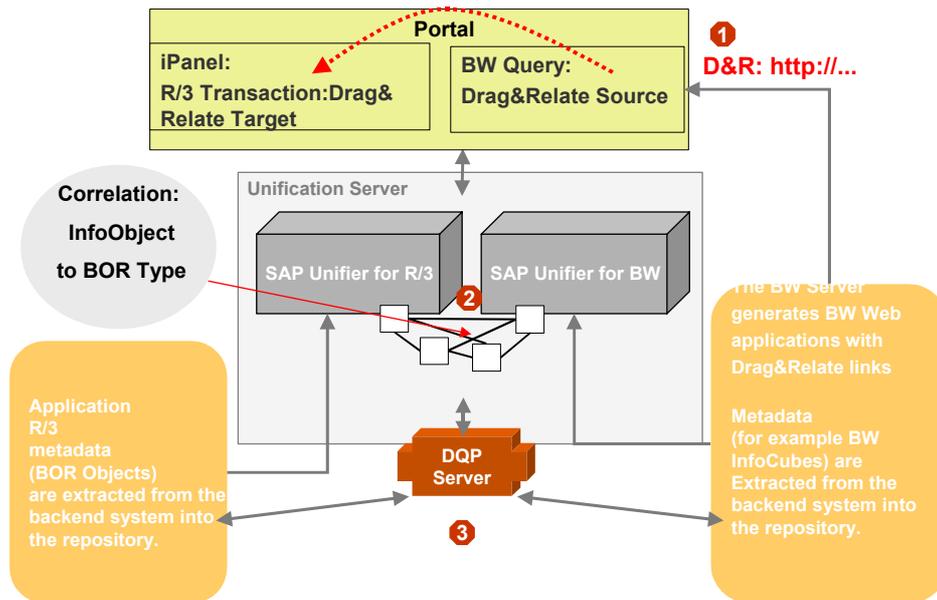
You can find additional information:

- in the SAP Service Marketplace, alias BW, under Services & Implementation → HOW TO ... Guides → **How to enable D&R between BW characteristics and EP Web Components.**
- in the Enterprise Portal documentation in the SAP Help Portal (<http://help.sap.com>) → *SAP NetWeaver* → *SAP Enterprise Portal* → *EP 5.0 SP5* → *Administration Guide* → **Internet Components (Web Components).**

## Background Information on Drag&Relate between BW and R/3

### Architecture

The following graphic offers an overview of the components that are necessary for Drag&Relate between SAP BW and SAP R/3 in the Enterprise Portal.



### Drag&Relate from a BEx Web application to a R/3 transaction:

1. Drag the characteristic *Customer*, for example, from a BW Web application into the R/3 transaction *Display Customer*.

The Drag&Relate-compatible link is made available by the BW system. This link is directed from the Portal to the Unification Server, which passes the link on to the corresponding Unifier (via the ISAPI filter). The Unifier triggers the link. The Unification Server identifies the right Unifier thanks to the logical system name in the URL for the link.



Example of a D&R link:

```
http://iwdf1622.wdf.sap-ag.de:1080/sap/bw/dr?~object_type=0SOLD_TO&~object_key=0000001175&~logical_system=B3TCLNT800
```

2. During mapping, the InfoObject name and the BW logical system name (LOGSYS) are exchanged for the BOR object names and the R/3 logical system names (LOGSYS).

The Unification Server translates the Drag&Relate query into the standard query language SQL (structured query language) that is used by the distributed query processor (DQP). The DQP server translates the standard SQL query into the specific query language of the application. R/3 executes a RFC query to the R/3 system Portal Plug-In.

3. The R/3 system executes the query and returns the result (in this case, a transaction with a specific filled value) via the ITS.

The DQP server receives the data from the R/3 system and directs it to the Unification Server. The Unification Server sends the user a formatted page containing the staged data.



## Correlation between R/3 Objects and BW InfoObjects

Any correlation that you want to establish between the SAP Unifier for SAP BW and the SAP Unifier for R/3 has to be defined manually. You can see the D&R-compatible links between SAP R/3 objects and BW InfoObjects in the list of [Characteristics Compatible with Drag&Relate \[Seite 13\]](#).

With all other InfoObjects and BOR objects the following has to be taken into account:

Correlations are only useful if a 1:1 key relationship exists between the BW characteristic and the R/3 BOR object. Furthermore the length and order of the key fields have to agree. In addition Drag&Relate can work with transitive relations.



For example you are able to drag the characteristic *Material* (OMATERIAL) from a R/3 transaction that contains information on material. This navigation is possible because of the 1:1 key relationship between OMATERIAL and the corresponding Business Object Repository (BOR) object BUS 2001.

If, for example, OMATERIAL is a display or navigation attribute of OCUSTOMER, you are also able to drag the characteristic *Customer* OCUSTOMER from a R/3 transaction that contains information on the characteristic.

If the characteristic does not have a 1:1 relationship to the BOR object and no characteristic attribute with a 1:1 key relationship to the BOR object is available, additional data modeling in the BW is necessary to make D&R possible. If the characteristic that you want to use for D&R does not have the necessary key it is, in straightforward cases, possible to attain the desired result by modeling and adding an attribute with the corresponding key.



If a 1:1 key relationship is maintained between OMATERIAL and BOR object BUS 1001, you can automatically execute D&R between a compound characteristic like OMAT\_PLANT and BUS 1001 (whose keys do not correspond 1:1), as long as OMATERIAL has been maintained as an attribute of OMAT\_PLANT.

These "generic" D&R mappings function for attributes, compounding, and navigation attributes.

InfoObjects and BOR objects are also often semantically different. In such cases it is possible that you will have to generate a new D&R characteristic in BW that corresponds to the BOR object.



Check whether it is possible to model your scenario using the report/report interface instead of Drag&Relate first.

You can find additional information in the SAP Service Marketplace, alias BW, under Services & Implementation → HOW TO ... *Guides* → **How to create custom D&R scenarios between BW characteristics and R/3 BOR objects for EP 5.0/6.0.**



## Characteristics Compatible with Drag&Relate

### Definition

Characteristics delivered with Business Content that have [Business Object Repository \[Extern\]](#) (BOR)object types assigned.

As standard, you can only use the Drag&Relate function with the SAP Unifier for SAP R/3 and the SAP Unifier for SAP BW with InfoObjects that have the BOR object type assigned. Amongst other things, the key for these object types matches exactly. Objects that are compatible with Drag&Relate are now listed.

InfoObjects and BOR objects that are not listed are not compatible with Drag&Relate.



However if you do want to use InfoObjects that are not listed for Drag&Relate scenarios first check whether you are build the scenarios using the report/report interface. If this is not possible then you can go into the metadata modeling in BW and make these InfoObjects compatible with Drag&Relate. See [Correlations between R/3 Objects and BW InfoObjects \[Seite 12\]](#).

### Structure

The following characteristics are compatible with Drag&Relate:

Basic Characteristic	Description	BOR Object Type	Characteristics that reference the basic characteristic
0ABCPROCESS	Business process number	BUS1036	0ABC, 0ABCPROCESS, 0PART_ABCPR, 0RECV_PROCS, 0SEND_PROC
0APPLICANT	Applicant	APPLICANT	0APPLICANT
0APPR_REQU	Appropriation request	BUS2204	0APPR_REQU
0ASSET	Asset subnumber	BUS1022	0ASSET
0BPARTNER	Business partner	BUS1006	0BBP_APPROV, 0BBP_BIDDER, 0BBP_RECIPIT, 0BBP_REQSTR, 0BBP_VENDOR, 0BE_BILLORG, 0BP_ACTIVIT, 0BP_CONS, 0BP_CONTPER, 0BP_EMPLO, 0BP_RESPPER, 0BPARTNER, 0BPARTNER1, 0BPARTNER2, 0CFM_BP_CON, 0CFM_BP_DBK, 0CFM_BP_GUA, 0CFM_BP_ISS, 0CRM_AGNT, 0CRM_AGNT2,

			0CRM_BILLTO, 0CRM_CAGNTB, 0CRM_COMPET, 0CRM_EXC_CC, 0CRM_PAYERP, 0CRM_PLANTP, 0CRM_PROSPE, 0CRM_SALESP, 0CRM_SALPAR, 0CRM_SHIPTO, 0CRM_SND_PT, 0CRM_SOLDTO, 0CRM_VENDOR, 0FS_BP_LO, 0FS_BP_RSK, 0IS_CLAIMNT, 0IS_PAYE, 0IS_POLHOL, 0IS_REPSHOP, 0MA_OPPINBP, 0MA_RSPBP, 0MSTRTENANT, 0PH_BPARTNE, 0PRCA_RESP, 0REQUESTER, 0STAKEHOLD
0COORDER	Order number	BUS2075 BOR super type: _ORDER	0COORDER, 0CRET_ORDER, 0DEBT_ORDER, 0INVORDER, 0PART_COORD, 0RECV_ORDER, 0SEND_ORDER
0COSTCENTER	Cost center	BUS0012	0CCT, 0COSTCENTER, 0CRET_CCTR, 0DEBT_CCTR, 0HC_COSTPER, 0HC_COSTREQ, 0HC_COSTREV, 0MAST_CCTR, 0PART_CCTR, 0RECV_CCTR, 0REQU_CCTR, 0RESP_CCTR, 0SEND_CCTR
0CS_ORDER	Service order	BUS2088 BOR super type: _ORDER	0CS_ORDER
0CUSTOMER	Customer number	KNA1	0AU_ENDCU, 0AU_VHORD, 0BILLTOPRTY, 0COMPETITOR, 0CUST_HIE01, 0CUST_HIE02, 0CUST_HIE03, 0CUSTOMER,

			0DEBITOR, 0HT_INRSPTN, 0HT_PARTNER, 0HT_PRTBRCH, 0HT_RESCUST, 0INT_CUST, 0PAYER, 0RT_CUSTPL, 0SHIP_TO, 0SOLD_TO
0DOC_NUMBER	Sales document	BUS2032 BOR super type: _SALESDOC	0DOC_NUMBER
0EMPLOYEE	Employee	BUS1065	0CNTCTEMPL, 0CP_EMPLOY, 0EMPL_ACCNT, 0EMPLOYEE, 0REFEMPL, 0TRAVELER, 0UC_WEMPL1, 0UC_WEMPL2, 0UC_WEMPL3
0EQUIPMENT	Equipment number	EQUI	0EQUIPMENT, 0UC_VEHICL1, 0UC_VEHICL2
0FUNCT_LOC	Functional location	BUS0010	0FUNCT_LOC
0INSP_LOT	Inspection lot number	BUS2045	0INSP_LOT
0MATERIAL	Material	BUS1001	0ASSEMBLY, 0CNSTR_MAT, 0COMPONENT, 0DM_MATDP, 0DM_MATLD, 0MAT, 0MATERIAL, 0MPN_MATNR, 0PLMPRODUCT, 0RT_GENMAT, 0UC_CONTCAT, 0UC_WCAT, 0UCDEV_CAT
0PLANT	Plant	BUS0008 BOR super type: _PLANT	0MAINTPLANT, 0MCHAR_PLNT, 0ME_PLANTIM, 0MOVE_PLANT, 0P_PLANT, 0PLANPLANT, 0PLANT, 0PLANT_COMP, 0PLANT_P, 0PLANTFROM, 0PLANTTO, 0QMWCPLANT, 0SUPP_PLANT, 0WDRW_PLANT
0WORKCENTER	Work center/ resources	BUS0011	0WORKCENTER

**BOR [Super Type \[Extern\]](#):**

Some data elements represent different objects according to the individual screen program. For example, a request number can be either an internal request or a customer request. These are two different BOR objects, but the same semantic (request number). So that the screen program (which only knows the data element) also knows which type of request this is, two different objects are assigned to the data element. To identify the object type the screen program writes the super type in the URL. The application has to deliver a dedicated function module that has to be recorded in the super type. The super type groups object types that have the same identifying data element.

You can determine whether a BOR object is assigned to a super type in transaction SPO0 in R/3.

To be sure that D&R from R/3 to BW works both for transactions with BOR type and for transactions with the super type, SAP recommends that you carry out mapping in the Relationship Editor both between InfoObject and BOR type, and between InfoObject and BOR super type.