

How to...

Use Variables for Currency Conversion

BUSINESS INFORMATION WAREHOUSE



ASAP “How to...” Paper



**Applicable Releases: SAP BW 3.0B, SP 16/BW 3.1Content, SP 10
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1 Business Scenario

As of SAP BW 3.5, you will have additional options to create variables for the following components of a currency conversion type:

Exchange rate type: The exchange rate type distinguishes between exchange rates that are valid in the same time frame, for example, the bid rate, ask rate or middle rate. The exchange rate types are stored and can be maintained in a central table (TCURV). Create a variable for the technical InfoObject 0RTYPE.

Target currency: The target currency can either be fixed in the translation type or not selected until the time of translation. Create a variable for the technical InfoObject 0CURRENCY.

Fixed time reference: If the time reference is fixed for a currency translation type, then the point in time for the exchange rate determination is independent of the data. The fixed point in time can either be a fixed key date that is stored in the translation type or can be determined using the system date when executing the currency translation. Create a variable for the technical InfoObject 0DATE.

You can also to use these functions in BW 3.0 or 3.1 Content. As a prerequisite, you have to apply BW 3.0B Support Package 16 or BW 3.1 Content Support Package 10.

Please note, that there are additional enhancements to the system necessary before you can use the functions – please read note 656863 for details. In addition, please pay attention to note 678543.

2 The Step-By-Step Solution

2.1 In general, you have the option to create variables for the InfoObjects 0RTYPE (Exchange rate type), 0CURRENCY (Currency key), and 0DATE (Date). In the following example, you will learn how to implement a variable for the exchange rate type.

The creation of variables for 0CURRENCY and 0DATE is working very similar – you enter a variable for 0CURRENCY on the “Target Currency” tab strip, or a variable for 0DATE on the “Time Reference” tab strip during the creation of a currency conversion type.

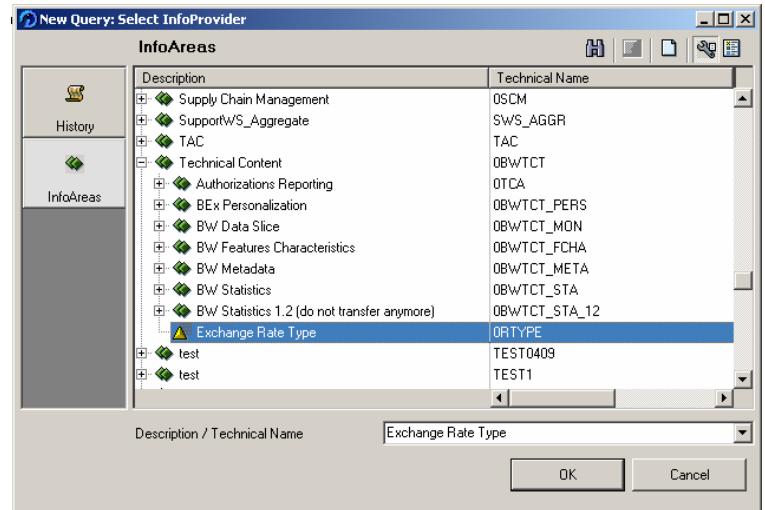
1. In the first step, you have to create a variable for the InfoObject ORTYPE.

Start the BEx Query Designer.

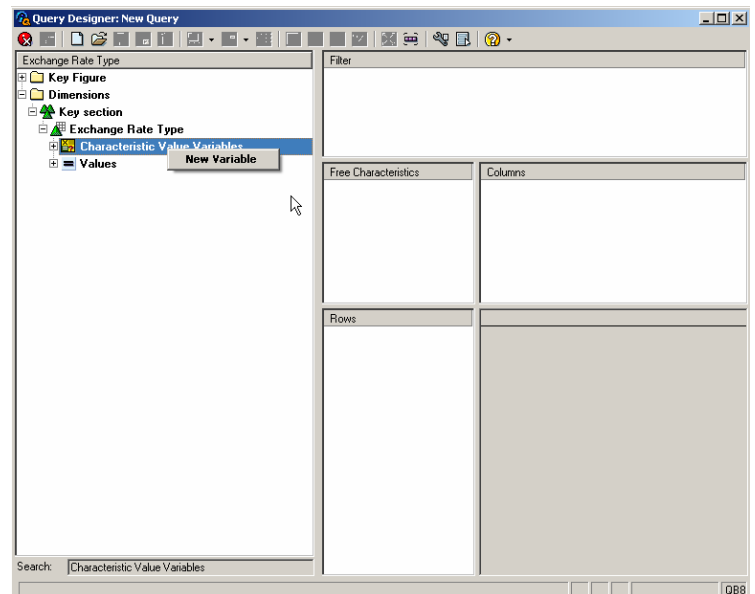
Choose the technical InfoObject

ORTYPE (Exchange rate type) as the InfoProvider for a new query.

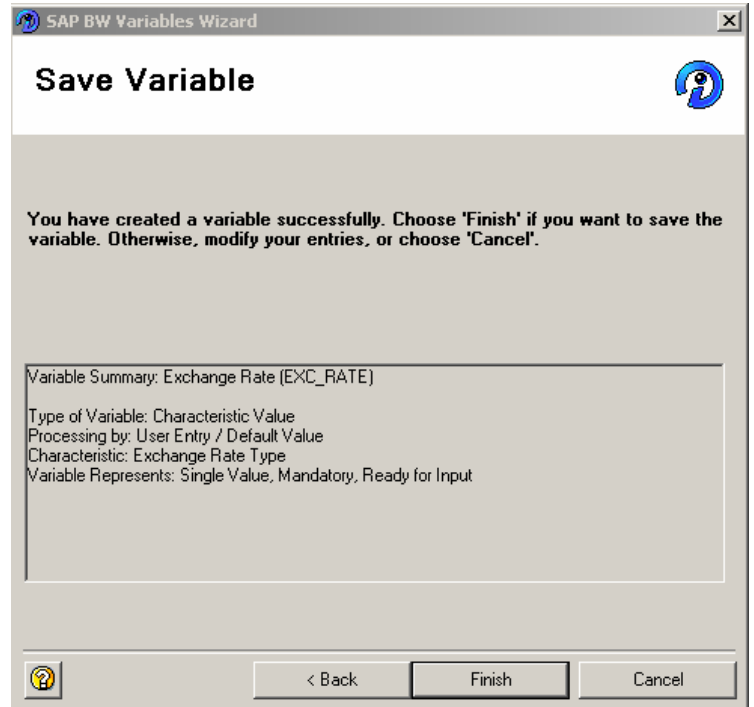
This InfoObject is available with BI Business Content and has to be activated after the implementation of SP16 for BW 3.0B or SP 10 for BW 3.1 Content.



2. Start the Variable Wizard in order to create a variable for ORTYPE.



3. Save the variable and quit the Query Designer.

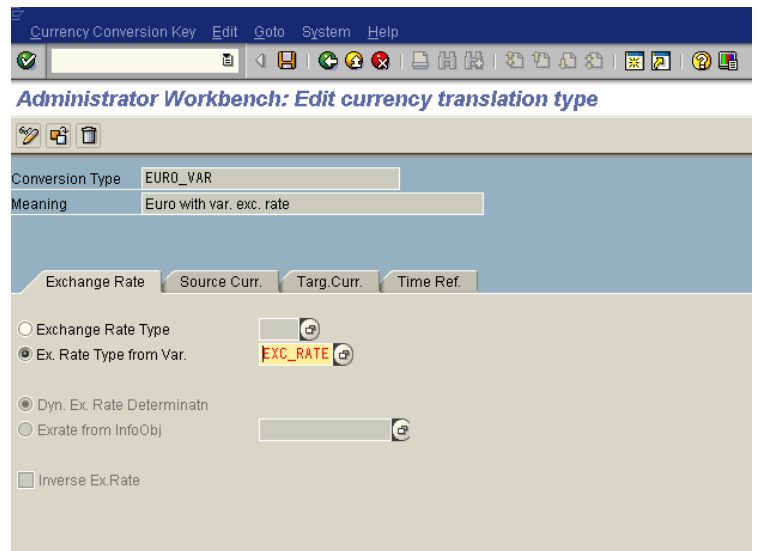


4. In the second step, create a currency conversion type that uses the newly created variable for the exchange rate.

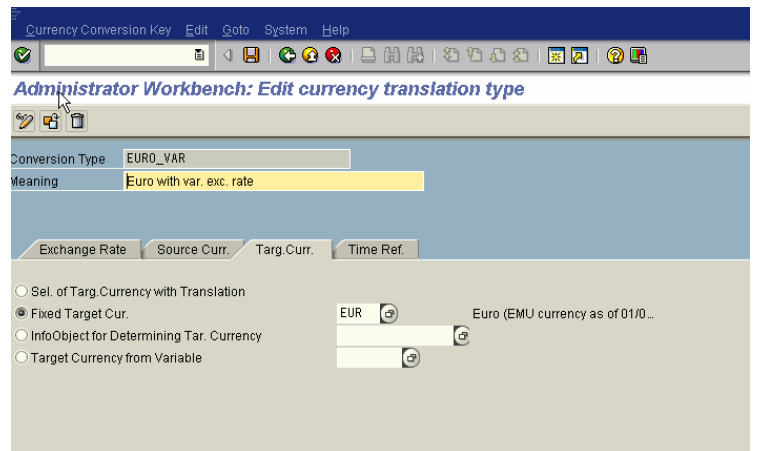
In order to do so, start the BW system and enter the transaction code RRC1. Enter a name for your new currency conversion type.



5. On the Exchange Rate tab strip, mark the radio button "Ex. Rate Type from Var.". Enter the technical name of the variable you created for the InfoObject 0RTYPE (you can also use the F4-Help).



6. Make the necessary entries on the other tab strips in order to complete the currency conversion type and then save it.



7. Start the Query Designer again.
Create a query with a key figure that uses the newly created currency translation type.

Execute the query. You will be asked for an exchange rate in a variable pop-up.

The screenshot shows the 'Properties of the Selection/Formula' dialog box. The 'Currency Translation' section at the bottom is highlighted with a blue border. This section contains the following fields and options:

- Currency Conversion Key:** A dropdown menu with 'Euro with var. exc. rate' selected.
- Target Currency:** A dropdown menu with 'Euro (EMU currency as of 01/01/19)' selected.
- Variables Entry:** An unchecked checkbox.

Other sections in the dialog include:

- Technical Name:** An empty text field.
- Description:** A text field containing 'Open orders'.
- Display:** Includes a 'Highlighting' dropdown set to 'No Highlighting', and checkboxes for 'Constant Selection' and 'Hide'.
- Number Format:** Includes 'Scaling Factor' (Nothing Defined), 'Number of Decimal Places' (From Key Figure: 0.00), and an unchecked 'Reverse +/- Signs' checkbox.
- Calculations (Includes Displayed Data Only):** Includes 'Calculate Result As...' (Nothing Defined), 'Calculate Single Values As...' (Nothing Defined), an unchecked 'Cumulated' checkbox, and an unchecked 'Also Apply to Results' checkbox.

At the bottom right are 'OK' and 'Cancel' buttons.