



How To... Call BEx Web Applications from SAP BusinessObjects Dashboards (Xcelsius) and vice versa

Applicable Releases:

SAP NetWeaver BW 7.01 SP6 and higher, see SAP Note 1526291

Topic Area:

Business Information Management

Version 1.0

December 2010



HOW-TO GUIDE

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Document History

Document Version	Description
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1.00	First official release of this guide
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Typographic Conventions

Type Style	Description
<i>Example Text</i>	Words or characters quoted from the screen. These include field names, screen titles, pushbuttons labels, menu names, menu paths, and menu options. Cross-references to other documentation
Example text	Emphasized words or phrases in body text, graphic titles, and table titles
Example text	File and directory names and their paths, messages, names of variables and parameters, source text, and names of installation, upgrade and database tools.
Example text	User entry texts. These are words or characters that you enter in the system exactly as they appear in the documentation.
<Example text>	Variable user entry. Angle brackets indicate that you replace these words and characters with appropriate entries to make entries in the system.
EXAMPLE TEXT	Keys on the keyboard, for example, F2 or ENTER.

Icons

Icon	Description
	Caution
	Note or Important
	Example
	Recommendation or Tip

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1. Scenario

A dashboard is a visual display of the most important information needed to achieve one or more objectives, consolidated and arranged on a single screen so the information can be monitored at a glance. Dashboards provide an overview of a specific business topic, giving you a holistic picture visualized in an easy-to-consume format.

Thus once the user has analyzed the data in the overview presented by the dashboard it is often necessary to go further into detail and do a specific analysis of certain measures. As a dashboard usually does not provide the necessary analysis tools it is a good practice to offer a link from the dashboard into a specific application allowing more detailed analysis. If you are using a dashboard in InfoView you can call a WebI report via the openDocument interface. This interface is not available when you are using a dashboard with the SAP NetWeaver connection. So in this How to Paper we will show you how you can jump from a dashboard using the SAP NetWeaver BW connection into a BEx Web application transmitting selected values. The same technique can be used to jump from one dashboard (using the BW connection) to another dashboard (also using this connection type).

Sometimes also the reverse functionality is necessary. Therefore we will also show how to start a dashboard from a BEx query and/or a BEx Web application using the Report-Report Interface.

2. Background Information

When we call a BEx Web application (or another dashboard) from a dashboard we will use a button in the dashboard calling the correct URL of the target. Thus the main task is to build up the URL correctly. As we do not want to 'hard code' the link we have to use the correct protocol, server, and port which are system (and settings) dependent. The NetWeaver integration provides some flash variables (see Note 1451887) which you can use to retrieve the necessary information.

If you want to transmit already selected values to the BEx Web application you can use the command interface to set variable values. Please have a look at the examples in the documentation:

http://help.sap.com/saphelp_nw70ehp1/helpdata/en/e3/e60138fede083de10000009b38f8cf/frameset.htm

Important

If you are calling a dashboard from another dashboard (both using the NetWeaver integration) and want to set variable values in the target you cannot use the special 'stateless mode' (URL parameter XC_MODE=X). In this mode variable commands in the URL will be ignored.

3. Prerequisites and Restrictions

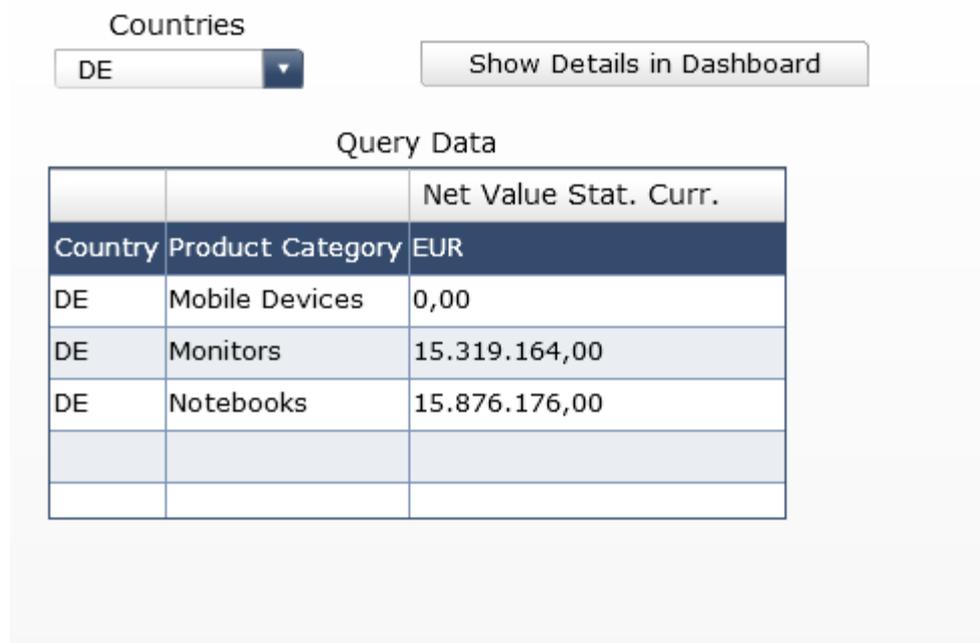
When calling a BEx Web application (or a dashboard) from a dashboard then it is sufficient to use a SAP NetWeaver 7.01, SP6 system. If you want to use the Report-Report-Interface to call a dashboard from a BEx query (or BEx Web application) you need either a SAP NetWeaver 7.02 or have to implement SAP Note 1526291.

4. Step-by-Step Procedure

4.1 Call a Web Template or Dashboard from a Dashboard

We assume that you have already created a dashboard using the BW connection. Now we have to use Excel means to build up the URL of the target dashboard. We assume that the target dashboard should be started from the same server. Thus no additional log on will be necessary. In the URL we have to use the correct protocol, server name, and port. As we do not want to hard code this in the URL we have to retrieve this information from the current system via a flash variable.

This is how the final dashboard will look like:



The screenshot shows a dashboard interface. At the top, there is a section titled 'Countries' with a dropdown menu currently showing 'DE' and a button labeled 'Show Details in Dashboard'. Below this is a section titled 'Query Data' containing a table with the following data:

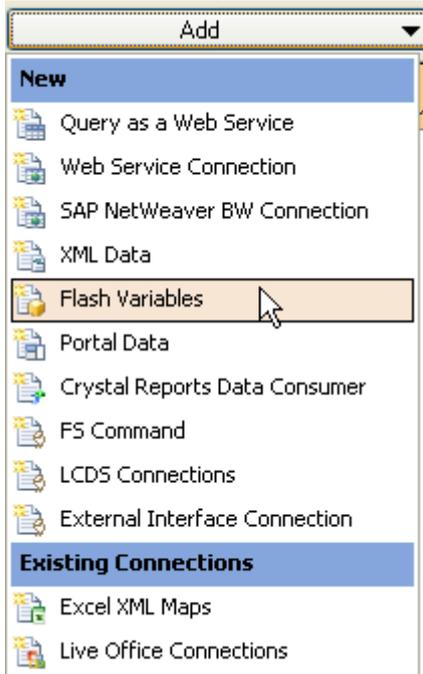
		Net Value Stat. Curr.
Country	Product Category	EUR
DE	Mobile Devices	0,00
DE	Monitors	15.319.164,00
DE	Notebooks	15.876.176,00

We have a table showing data for some product categories for a country selected in a drop down box. We will create a button that starts a second dashboard showing the data for the selected country in more detail. Instead of calling a dashboard we call also call a BEx Web template.

4.1.1 Get the correct Protocol, Server, and Port

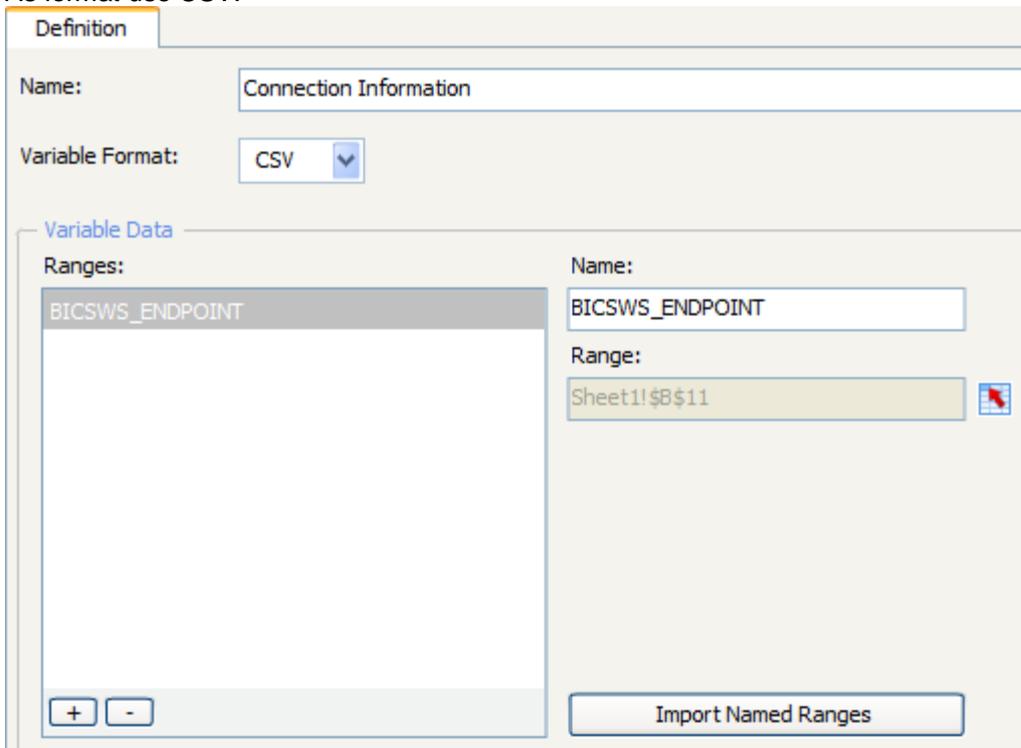
For simplicity reasons add a named range to the Excel. The range should contain one cell and is called BICSWs_ENDPOINT. In our case we place the named range in cell A11.

Now open the data manager and create a new connection of type 'Flash Variable'.



Add a flash variable called `BICSWS_ENDPOINT`. This variable contains the URL to the web service used in the BW connection. Link the result to some range in Excel – in our case we use a range called also `BICSWS_ENDPOINT` in the cell B11.

As format use CSV.



The flash variable contains the full URL – including the protocol, the server, and the port. We use an Excel formula to retrieve those values from the flash variable by using the following Excel cells:

A12: Derived: Prot+Server

B12: =LEFT(BICSWS_ENDPOINT;FIND(":";BICSWS_ENDPOINT;
FIND(":";BICSWS_ENDPOINT)+1)-1)

A13: Derived: Port+Server+Port

B13: =LEFT(BICSWS_ENDPOINT;LEN(B12)+6)

The cell B13 now contains the concatenation of the protocol, server, and port.

4.1.2 Add the Name of the Dashboard or Web Template to the URL

Now we have to add a fixed part of the URL that is identical for all Web templates and dashboards. Fill the Excel cells as described below:

A14: Path (fixed)

B14:
/irj/servlet/prt/portal/prtroot/pcd!3aportal_content!2fcom.sap.pct!2fplatform_add_ons!2fcom.sap.ip.bi!2fiViews!2fcom.sap.ip.bi.bex?

We now can add the name of the dashboard (in our case DASHBOARD_HOW_TO_PAPER):

A15: Dashboard Name

B15: DASHBOARD_HOW_TO_PAPER

Finally we build up the complete URL:

A16: URL (without variable cmd)

B16: =CONCATENATE(B13;B14;"DASHBOARD=";B15)

If you want to call a Web template instead of a dashboard then cell B15 should contain the name of the Web template and cell B16 should be replaced by:

B16: =CONCATENATE(B13;B14;"TEMPLATE=";B15)

4.1.3 Transmit the Variable Value

If you want to start your target (dashboard or Web template) with some selection defined in the source then you have to create a variable in the query used in the target object and set the variable value via the URL.

In our case we set a value for a country using the variable SEL_COUNTRY. The specific value for the country will be selected via a drop down box in the source dashboard.

As the command for setting the variable is quite lengthy we split it into several smaller pieces:

A17: Part 1

B17: &BI_COMMAND_1-BI_COMMAND_TYPE=SET_VARIABLES_STATE

A18: Part 2

B18: &BI_COMMAND_1-VARIABLE_VALUES-VARIABLE_VALUE_1-VARIABLE_TYPE=VARIABLE_INPUT_STRING

A19: Part 3

B19: &BI_COMMAND_1-VARIABLE_VALUES-VARIABLE_VALUE_1-VARIABLE_TYPE-VARIABLE_INPUT_STRING=

A20: Selected Value

B20: [Enter a link to the cell containing the selected country]

A21: Part 4

B21: &BI_COMMAND_1-VARIABLE_VALUES-VARIABLE_VALUE_1-VARIABLE=SEL_COUNTRY

A22: URL (with variable cmd)

B22: =CONCATENATE (B16;B17;B18;B19;B20;B21)

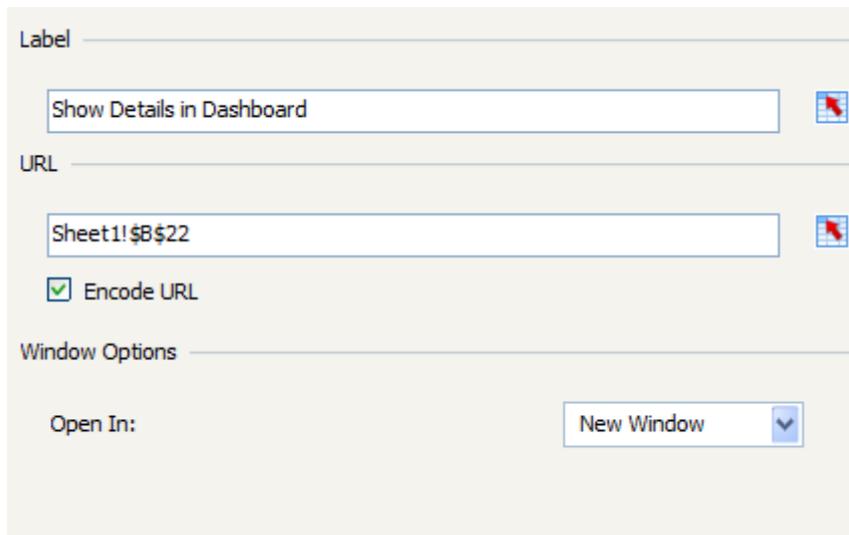
The cell B22 no contains the final URL including the command for setting the variable value.

4.1.4 Create a Button for Calling the Dashboard

We finally have to provide a mean to start the URL we have just built up. Go to the canvas and create an URL button.



In the properties pane enter some text for the button and pick the URL from the cell B22.

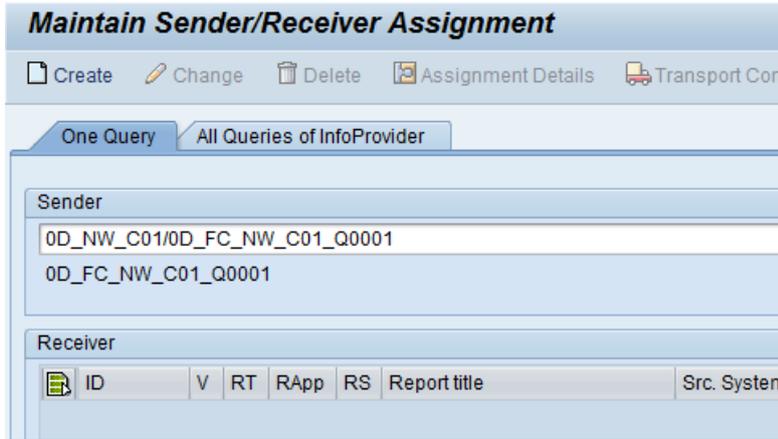


Your dashboard is ready now to be used.

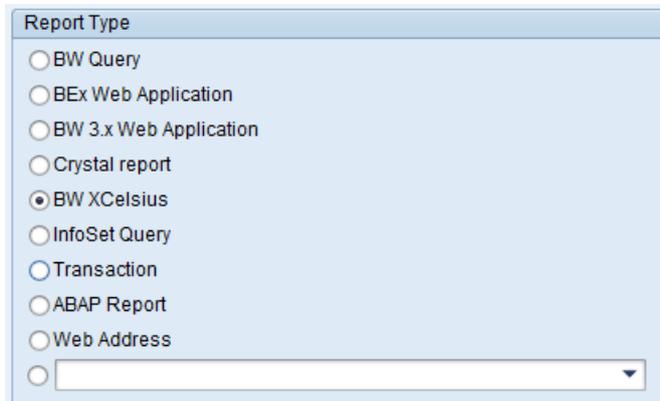
4.2 Call a Dashboard from a Web Template or Query

In this case we can use the well-known Report Report Interface. It now offers the possibility to start a dashboard directly.

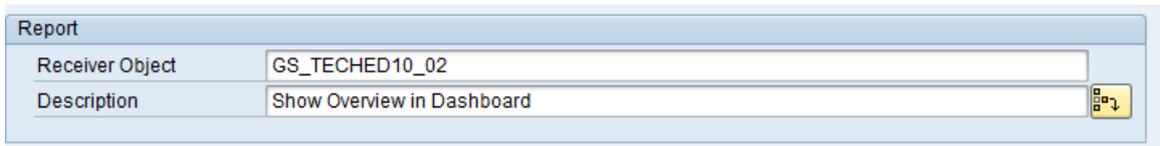
Start the transaction `r_sbbbs` and enter the name of the query which you want to use as a source for the RRI.



Press the 'Create' button. You will receive a popup.
 Select the report type 'BW Xcelsius'.



Now enter the name of the target dashboard and a description that will show up as jump target. Save your settings.



Now start a Web Template containing the used query or start the query directly in BEx Web. If you call the context menu, you will be able to jump to the dashboard directly:

Net Value Stat. Curr. ^{Δ=}	
	EUR
14.706.156,00	
15.210.161,00	
15.8	Goto ▶ Show Overview in Dashboard
45.9	Change Drilldown ▶
12.9	Printed Version
14.3	Distribute and Export ▶
17.1	
45.1	Properties ▶
6.1	Calculations and Translations ▶
5.9	Documents ▶
7.1	Exceptions ▶
20.096.195,00	
41.410.115,00	
26.960.052,00	
07.100.077,00	

Please note that it is not possible to transmit any variable values to the dashboard in this scenario.

www.sdn.sap.com/irj/sdn/howtoguides