

How to Use Customer Exit Variables in BW/BI Reports: Part 2



Applies to:

SAP BW 3.5, Will also work on SAP BI 7.

For more information, visit the [Business Intelligence homepage](#).

Summary

This article gives clear picture about how to use Characteristic Customer Exit Variables and Text Variables in BW/BI Reports.

Author: Surendra Kumar Reddy Koduru

Company: ITC Infotech India Ltd. (Bangalore/INDIA)

Created on: 28 May 2009

Author Bio



Surendra Kumar Reddy Koduru is a SAP BI consultant currently working with ITC Infotech India Ltd (Bangalore/INDIA). He has got rich experience and worked on various BW/BI implementation/Support projects.

Table of Contents

Introduction:	3
Live Scenarios:.....	3
Steps.....	4
Code:	6
Related Content.....	15
Disclaimer and Liability Notice.....	16

Introduction:

This article addresses the requirement of Customer Exit variables in BW/BI Reports, in this article I'm explaining the following two types of variables.

1. How to use the Characteristic Customer Exit Variables in BW/BI Reports.
2. How to use the Text Variables in BW/BI Reports.

Live Scenarios:

In some cases the requirement is like below....

User will give some text/value as Input for Text variable and they need to get the report result as per their input.

E.g.: If user input for the Text Variable is "A" then he want to see the Sales data related to all PA01 to PA05 Plants (Actually in System, I have Plants from PA01 to PA20, but users want to see the Sales data from PA01 to PA05 Plants only and users don't want to enter Plants information in the Report Variables, he just wants to give some Text/Value in Text variable.), if user input for the Text Variable is "B" then he want to see the Sales data from PB01 to PB05 Plants (Actually in System, I have Plants from PB01 to PB20).

In the above example I taken for Plants, in other cases it may differ, i.e. we can use this logic for G/L Accounts, (If User will give IND as input for Text Variable, then he want to see all Transactions related to India G/L Account 0000001 to 0000009. If User will give USD as input for Text Variable, then he wants to see all Transactions related to India G/L Account 0000010 to 0000019....etc.).

Steps

1. Create a Text Variable like below.

Create ZV_TXT1 variable, the properties are..

Type of Variable = Text
Variable Name = ZV_TXT1
Processing by = User Entry/Default Value
Characteristic = CalendarDay
Variable Entry = Mandatory
Length of Input Field = 0004

Check ready for input.

The screenshot shows the 'SAP BW Variables Editor' dialog box. It is divided into three main sections: 'General Information', 'Details', and 'Default Values'.
- **General Information:** 'Type of Variable' is set to 'Text', 'Variable Name' is 'ZV_TXT1', 'Description' is 'Plant Code', and 'Processing by' is 'User Entry / Default Value'.
- **Details:** 'Variable entry is' is set to 'Mandatory', the 'Ready for Input' checkbox is checked, and 'Length of Input Field' is '0004'.
- **Default Values:** The 'Default Value' field is empty.
At the bottom, there are icons for help, search, and delete, along with 'OK' and 'Cancel' buttons.

2. Create Customer Exit Variable on Plant (OPLANT)

Create ZPLANT variable on OPLANT, the properties are..

Type of Variable = Characteristic value

Variable Name = ZPLANT

Processing by = Customer Exit

Characteristic = Plant

Variable Represents = Interval

Variable Entry = Mandatory

Don't Check ready for input.

SAP BW Variables Editor

General Information

Type of Variable: Characteristic Value

Variable Name: ZPLANT

Description: Plant

Processing by: Customer Exit

Characteristic

Characteristic: Plant

Details

Variable Represents: Interval

Variable entry is: Mandatory

Ready for Input

Can be changed in query navigation

Copy personalization data from the variable:

OK Cancel

Code:

Goto **CMOD** TCode in BW and then give your Project Name and click on Change button.

The screenshot shows the SAP Project Management of SAP Enhancements interface. At the top, there is a menu bar with 'Project', 'Edit', 'Goto', 'Utilities(M)', 'Environment', 'System', and 'Help'. Below the menu bar is a toolbar with various icons. The main title is 'Project Management of SAP Enhancements'. Below the title, there is a toolbar with icons for 'New', 'Open', 'Save', 'Print', 'Help', and 'Close'. The 'Project' field contains 'ZBW' and the 'Create' button is visible. Below the 'Project' field, there is a 'Subobjects' section with radio buttons for 'Attributes', 'Enhancement Assignment', 'Components', and 'Documentation'. The 'Attributes' radio button is selected. Below the 'Subobjects' section, there are 'Display' and 'Change' buttons.

Click on **Components**

The screenshot shows the SAP Attributes of Enhancement Project ZBW interface. At the top, there is a menu bar with 'Project', 'Edit', 'Goto', 'Environment', 'System', and 'Help'. Below the menu bar is a toolbar with various icons. The main title is 'Attributes of Enhancement Project ZBW'. Below the title, there is a toolbar with icons for 'New', 'Open', 'Save', 'Print', 'Help', and 'Close'. The 'Enhancement assignments' and 'Components' buttons are visible, with 'Components' highlighted by a red box. Below the buttons, the 'Project' field contains 'ZBW' and the 'Short text' field contains 'For BW Enhancements'. Below the 'Short text' field, there is an 'Administration data' section.

Double Click on **EXIT_SAPLRRS0_001**

The screenshot shows the SAP 'Display ZBW' window. At the top, there is a menu bar with 'Project', 'Edit', 'Goto', 'Environment', 'System', and 'Help'. Below the menu is a toolbar with various icons. The main area has a title 'Display ZBW' and two tabs: 'Enhancement assignments' (selected) and 'Enhancement'. Below the tabs is a table with the following data:

Project		<input checked="" type="checkbox"/>		ZBW For BW Enhancements
Enhancement	Impl	<input checked="" type="checkbox"/>	Exp	RSR00001 BW: Enhancements for global variables in report
Function exit	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		EXIT_SAPLRRS0_001

Double Click on **INCLUDE ZXRSRU01** .

Function Builder: Display EXIT_SAPLRRS0_001

Function module: EXIT_SAPLRRS0_001 Active

Attributes Import Export Changing Tables Exceptions Source code

```

FUNCTION EXIT_SAPLRRS0_001.
*-----
***"Lokale Schnittstelle:"
*  IMPORTING
*    VALUE(I_VNAM) LIKE  RSZGLOBV-VNAM
*    VALUE(I_VARTYP) LIKE RSZGLOBV-VARTYP
*    VALUE(I_IOBJNM) LIKE RSZGLOBV-IOBJNM
*    VALUE(I_S_COB_PRO) TYPE  RSD_S_COB_PRO
*    VALUE(I_S_RKB1D) TYPE  RSR_S_RKB1D
*    VALUE(I_PERIV) TYPE  RR001_S_RKB1F-PERIV
*    VALUE(I_T_VAR_RANGE) TYPE  RRS0_T_VAR_RANGE
*    VALUE(I_STEP) TYPE  I DEFAULT 0
*  EXPORTING
*    VALUE(E_T_RANGE) TYPE  RSR_T_RANGESID
*    VALUE(E_MEEHT) LIKE  RSZGLOBV-MEEHT
*    VALUE(E_MEFAC) LIKE  RSZGLOBV-MEFAC
*    VALUE(E_WAERS) LIKE  RSZGLOBV-WAERS
*    VALUE(E_WHFAC) LIKE  RSZGLOBV-WHFAC
*  CHANGING
*    VALUE(C_S_CUSTOMER) TYPE  RR004_S_CUSTOMER OPTIONAL
*-----
INCLUDE ZXRSRU01 .

ENDFUNCTION.

```


Write the Following Code in the ABAP Editor.

```

*-----*
*   INCLUDE ZXRSRU01                               *
*-----*

DATA: L_S_RANGE TYPE RSR_S_RANGESID,
      LOC_VAR_RANGE LIKE RRRANGEEXIT,
      ZPL TYPE CHAR4.

IF i_step = 2.

  CASE i_vnam.

    *****To get the Plant details (interval) as per the user input data*****
    *****Surendra Kumar Reddy Koduru***28-05-2009*****

    WHEN 'ZPLANT'.

      LOOP AT i_t_var_range INTO loc_var_range WHERE vnam = 'ZV_TXT1'.

        CLEAR: l_s_range.
        ZPL = loc_var_range-low.

        CASE ZPL.
          WHEN 'A'.
            l_s_range-low   = 'PA01'.
            l_s_range-high  = 'PA05'.
            l_s_range-sign  = 'I'.
            l_s_range-opt   = 'BT'.

          WHEN 'B'.
            l_s_range-low   = 'PB01'.
            l_s_range-high  = 'PB05'.
            l_s_range-sign  = 'I'.
            l_s_range-opt   = 'BT'.

          WHEN OTHERS.

            l_s_range-low   = 'PA01'.
            l_s_range-high  = 'PZ10'.
            l_s_range-sign  = 'I'.
            l_s_range-opt   = 'BT'.

        ENDCASE.

        APPEND l_s_range TO e_t_range.

      ENDLIST.

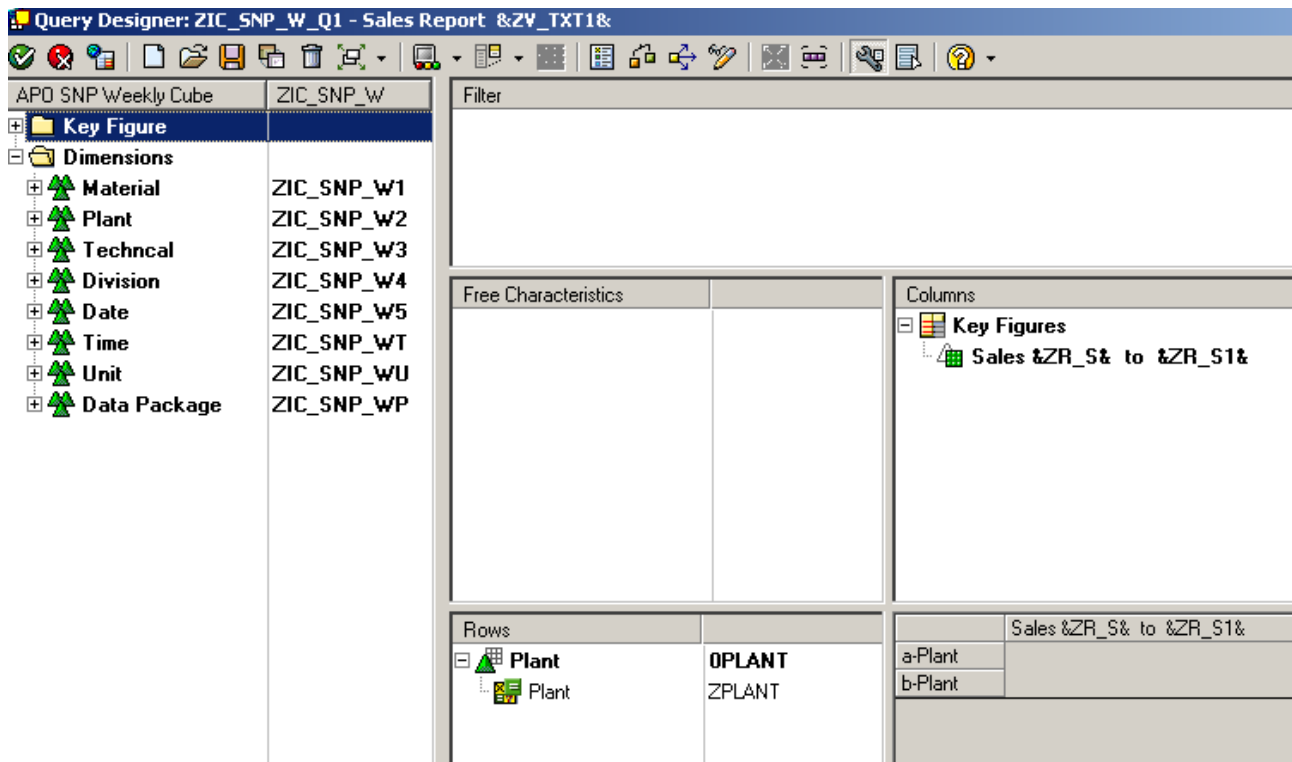
    ENDCASE.

  ENDIF.

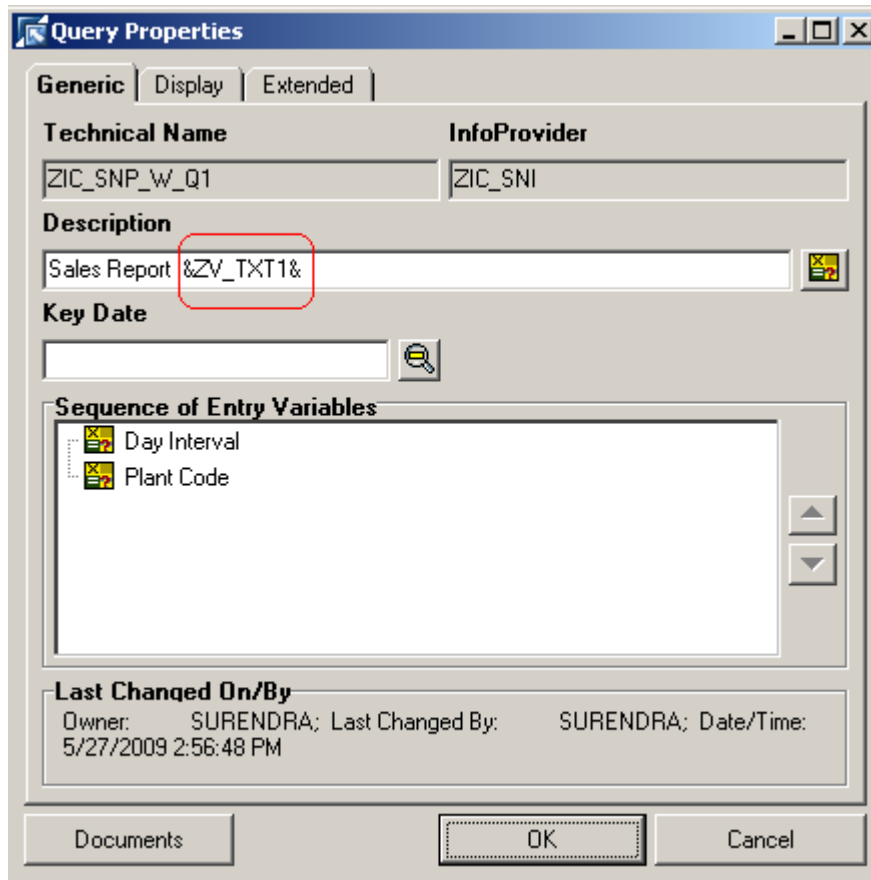
*****End*****

```

Report Designer:



Give Text Variable **ZV_TXT1** in Query Properties. (Refer Page No 4).



In Report Rows:

Drag and Drop **Plant** Characteristic and restrict with the Customer Exit variable **ZPLANT** (Refer Page No 5).

In Report Columns:

Create New Selection and Drag and Drop 0AMOUNT Key figure and 0CALDAY and restrict 0CALDAY with ZDAY_IN User Input variable .(About this variable Refer. Article: **Using Customer Exit Variables in BW/BI Reports Part - 1**)

URL for Part-1:

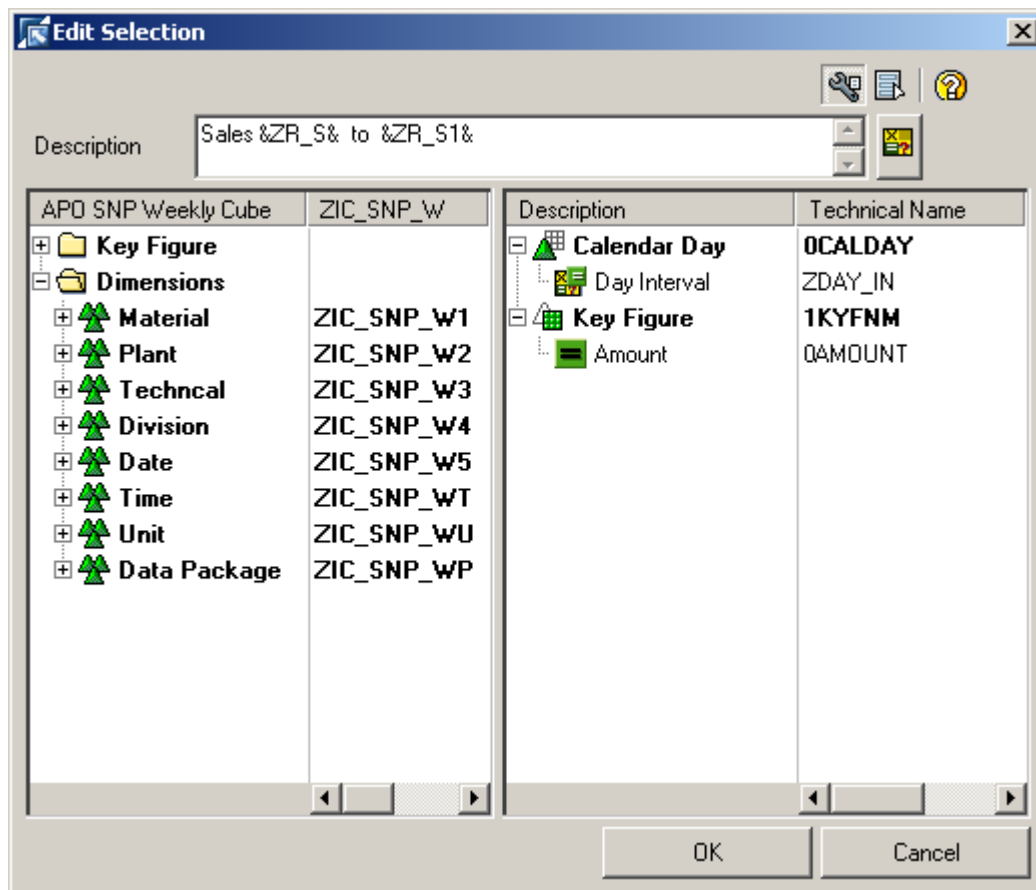
<https://www.sdn.sap.com/irj/scn/go/portal/prtroot/docs/library/uuid/20f119d9-922d-2c10-88af-8c016638bd90>

In Description give Text variables ZR_S and ZR_S1. .(About this variable Refer. Article: **Using Customer Exit Variables in BW/BI Reports Part - 1**).

ZR_S : For to display From Date.

ZR_S1 : For to display To Date.

This is for to display User given Date Range Sales Data and Date Column heading..



Execute the Report :

Give Date range (MM/DD/YYYY) and Plant Code = "A" like below:

ZIC_SNP_W_Q1: Sales Report &ZV_TXT1&

Day Interval: 5/1/2009 to 5/27/2009

Plant Code: A A

Check

See the Report Result: Plant Code = "A".

Sales Report A	
Key Figures	
Plant	
Plant	PA01..PA05
Plant	Sales 01.05.2009 to 27.05.2009
PA01	64 INR
PA02	55 INR
PA03	57 INR
PA04	62 INR
PA05	81 INR
Result	318 INR

ZIC_SNP_W_Q1: Sales Report &ZV_TXT1&

Day Interval: 5/1/2009 to 5/27/2009

Plant Code: B B

Check

See the Report Result: Plant Code = "B"

Sales Report B	
Key Figures	
Plant	
Plant	PB01..PB05
Plant	Sales 01.05.2009 to 27.05.2009
PB01	64 INR
PB02	65 INR
PB03	66 INR
PB05	67 INR
Result	262 INR

ZIC_SNP_W_Q1: Sales Report &ZV_TXT1&

Day Interval to

Plant Code C

See the Report Result: Plant Code = "C".

Sales Report C	
Key Figures	
Plant	
Plant	PA01..PZ10
Plant	Sales 01.05.2009 to 27.05.2009
PA01	64 INR
PA02	55 INR
PA03	57 INR
PA04	62 INR
PA05	81 INR
PA06	113 INR
PA07	106 INR
PA08	384 INR
PA09	62 INR
PA10	63 INR
PB01	64 INR
PB02	65 INR
PB03	66 INR
PB05	67 INR
PB06	68 INR
PC03	19 INR
PD01	20 INR
Result	1,415 INR

Related Content

[Using Customer Exit Variables in BW/BI Reports Part - 1](#)

[Using Text Variables with Customer Exits in Report Headings](#)

[Raise Event from ECC](#)

[Triggering Events from ABAP Programs](#)

For more information, visit the [Business Intelligence homepage](#).

Disclaimer and Liability Notice

This document may discuss sample coding or other information that does not include SAP official interfaces and therefore is not supported by SAP. Changes made based on this information are not supported and can be overwritten during an upgrade.

SAP will not be held liable for any damages caused by using or misusing the information, code or methods suggested in this document, and anyone using these methods does so at his/her own risk.

SAP offers no guarantees and assumes no responsibility or liability of any type with respect to the content of this technical article or code sample, including any liability resulting from incompatibility between the content within this document and the materials and services offered by SAP. You agree that you will not hold, or seek to hold, SAP responsible or liable with respect to the content of this document.