

How to Use Text Variables in BW Reports Part - 1



Applies to:

SAP NetWeaver Business Warehouse (Formerly BI), Will also work on SAP BI 3.5. For more information, visit the [EDW homepage](#)

Summary

This article gives clear picture about how to use Text Variables in BW/BI reports headings.

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Author Bio



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Introduction:

This article addresses the requirement of Text Variables in BW/BI Reports, in this article I'm explaining the following scenario...

How to use the Text Variable in BW/BI Reports, and how to display the data for Fiscal Year Period based on User Input Date.

Live Scenario:

Users want to see the Sales revenue data for Financial Year Period based on Users Input date and they want to know for what Financial Year Period the report is displaying the result, i.e. they want to see the Financial Year Period in Report heading.

Steps:

Create User Entry Variable ZDATE_M on 0CALDAY.

For reference look into the following screens.

Change Variable

Advanced

General Replacement Path Details Default Values Currency/Unit

Description

Enter Date

Use Standard Text

Technical Name

ZDATE_M

Global Settings

Type of Variable
Characteristic Value

Processing By
Manual Input/Default Value

Reference Characteristic
[0CALDAY] Calendar day

Last Changed
Owner: DEV_CAT2
Last Changed By: DEV_CAT2
Date/Time: 5/31/2011 11:58:51 AM

OK Cancel

Change Variable

Advanced

General Replacement Path **Details** Default Values Currency/Unit

Basic Settings

Variable Represents
Single value

Variable Is
Optional

Variable is Ready for Input
 Variable Is Without Context

Personalization

Copy Personalization Data from This Variable

OK Cancel

Create Customer Exit Variable ZFYP_CE on 0FISCPER.

For reference look into the following screens.

Change Variable

Advanced

General Replacement Path **Details** Default Values Currency/Unit

Description

Fy Period

Use Standard Text

Technical Name

ZFYP_CE

Global Settings

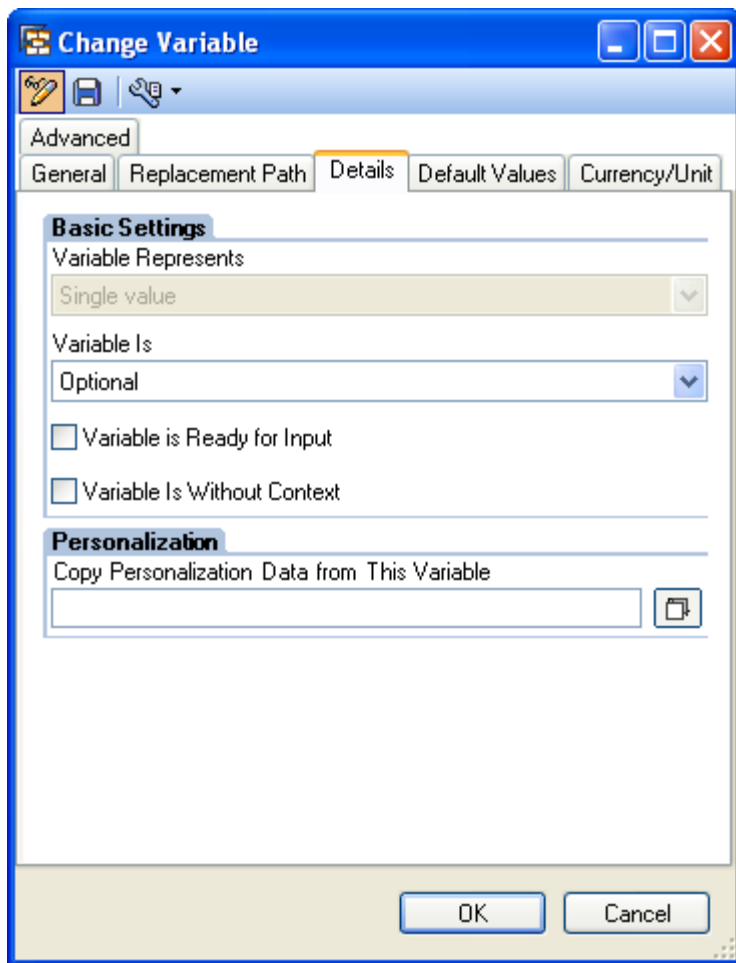
Type of Variable
Characteristic Value

Processing By
Customer exit

Reference Characteristic
[0FISCPER] Fiscal year/period

Last Changed
Owner: DEV_CAT2
Last Changed By: DEV_CAT2
Date/Time: 5/31/2011 8:42:14 PM

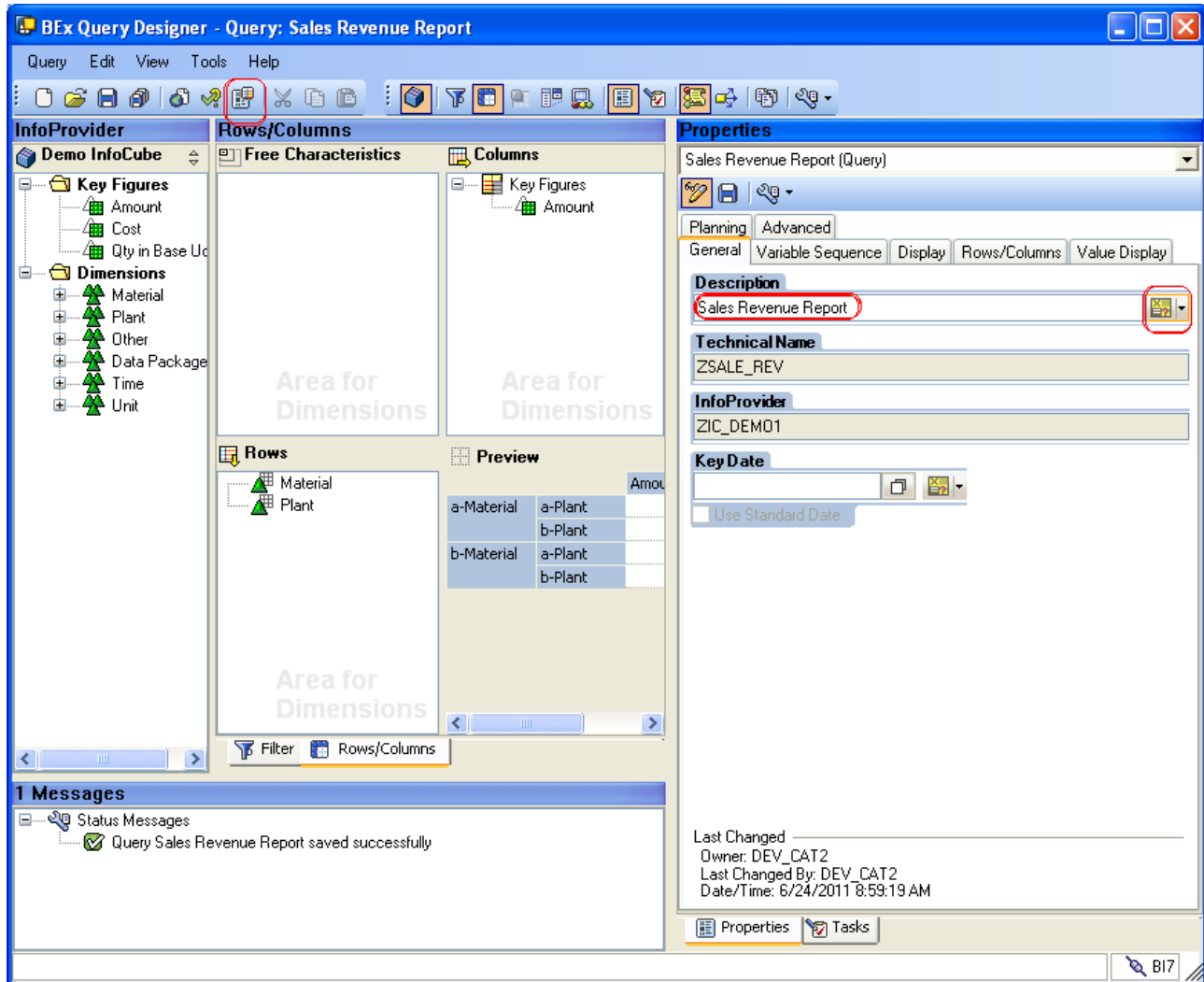
OK Cancel



Creating Text Variables:

Once you create above variables, you need to create Text Variable to display the Fiscal Year Period details in report heading, follow the below steps.

Open the report and go to the properties of the report and in General tab you can see the report Description, keep the cursor just aside and click on Create New Variable Icon, see below screen.



The screenshot shows the SAP BEx Query Designer interface for a query named 'Sales Revenue Report'. The 'Properties' tab is selected, and the 'Description' field is highlighted with a red circle. A red box highlights the 'Create New Variable' icon (a small square with a plus sign) next to the description field. The 'InfoProvider' is 'Demo InfoCube', and the 'Key Figures' include 'Amount', 'Cost', and 'Qty in Base Uo'. The 'Dimensions' include 'Material', 'Plant', 'Other', 'Data Package', 'Time', and 'Unit'. The 'Rows' section shows 'Material' and 'Plant' with a preview table.

Material	Plant	Amount
a-Material	a-Plant	
b-Material	b-Plant	
b-Material	a-Plant	
	b-Plant	

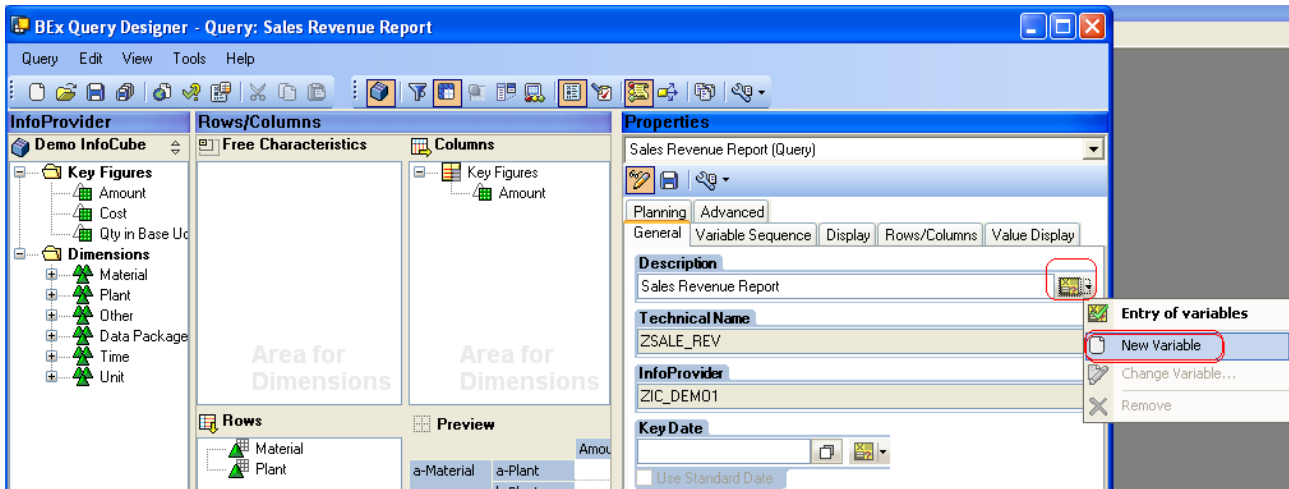
Messages:

- Query Sales Revenue Report saved successfully

Properties:

- Description: Sales Revenue Report
- Technical Name: ZSALE_REV
- InfoProvider: ZIC_DEMO1
- Key Date: []
- Use Standard Date:

Last Changed: []
 Owner: DEV_CAT2
 Last Changed By: DEV_CAT2
 Date/Time: 6/24/2011 8:59:19 AM

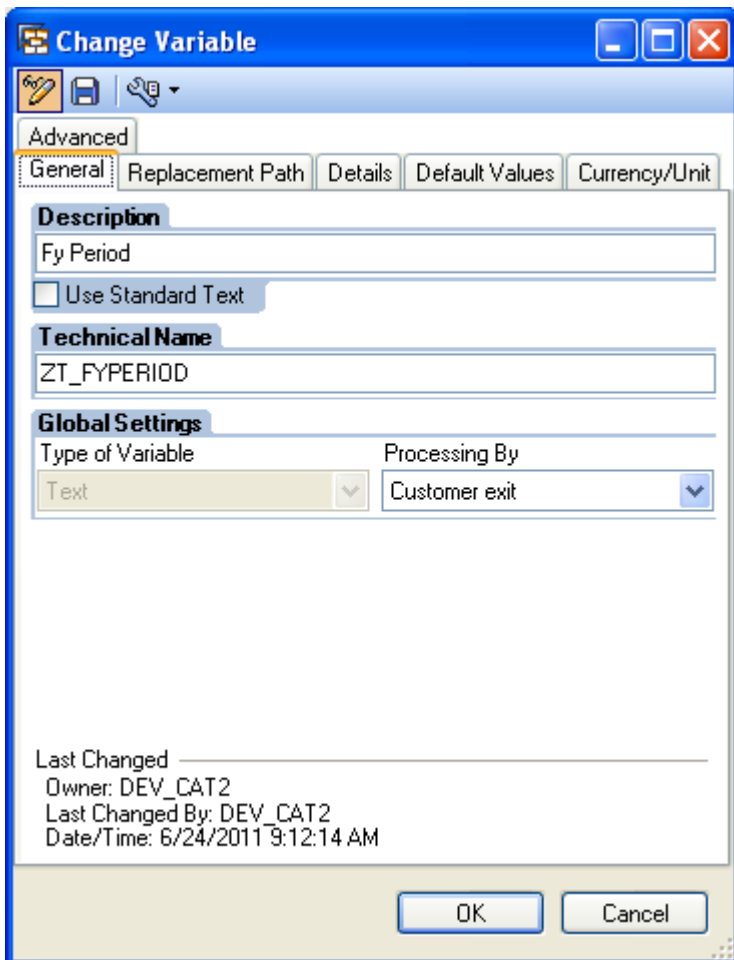


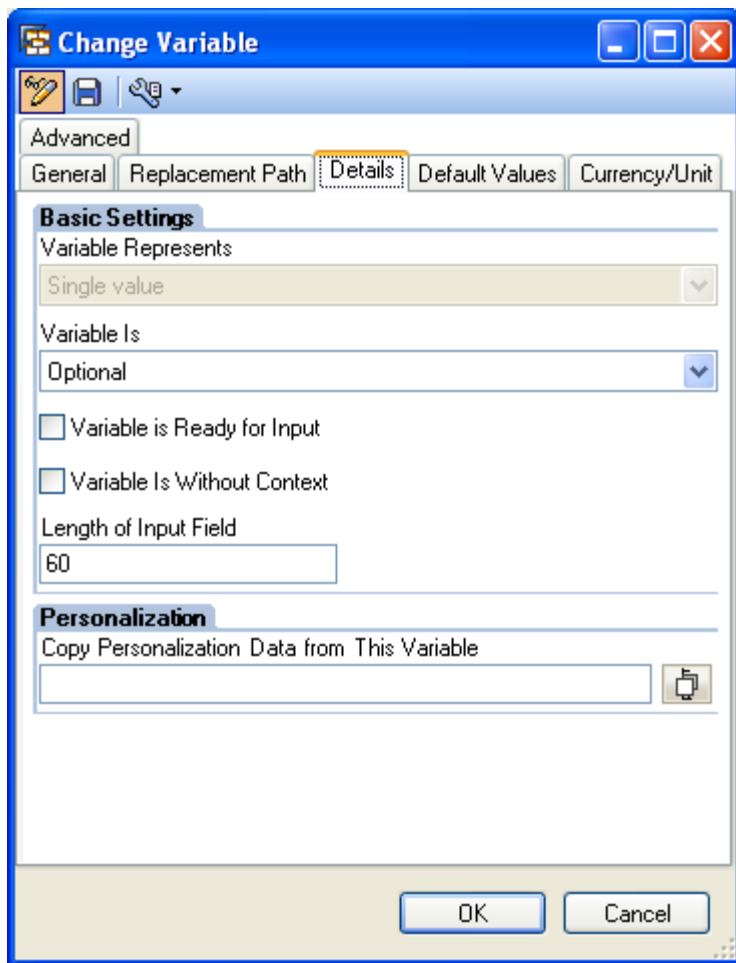
See the variable details:

Description : Fy Period.

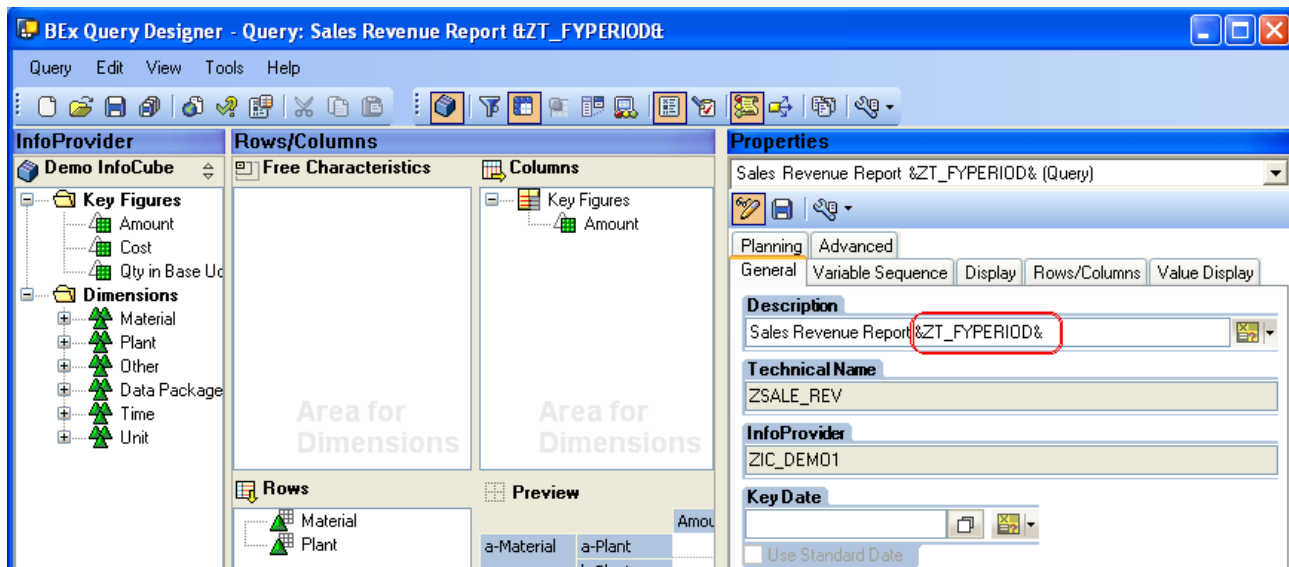
Name: ZT_FYPERIOD.

Processing by : Customer Exit.





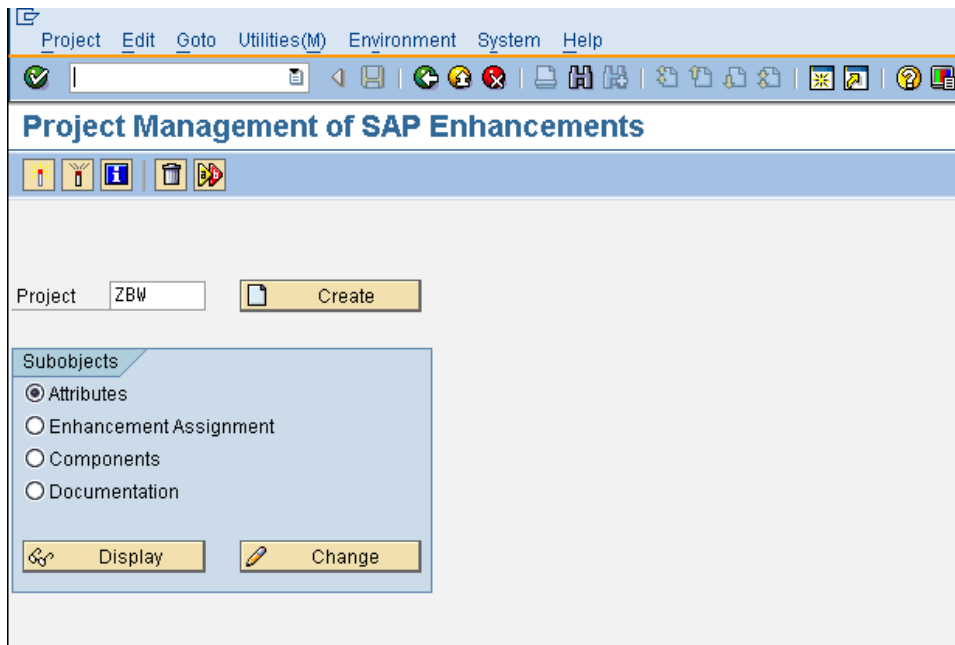
Once you create Text Variable and close the Variable creation window, after that you can see the Text Variable in below screen.



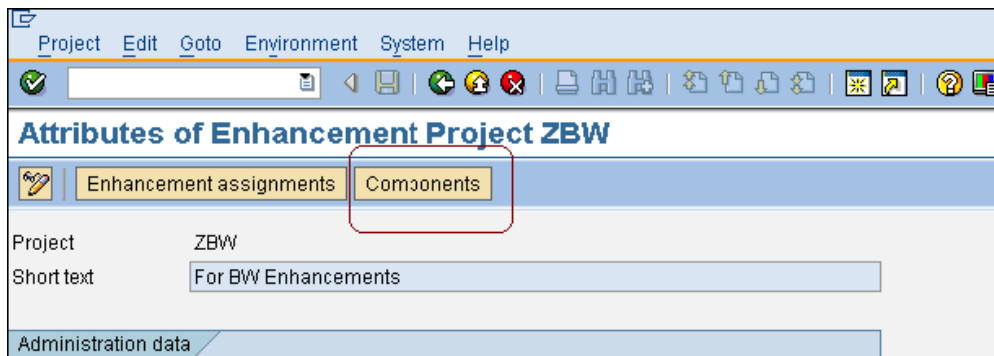
After that, we need to write the code for that Text Variable to populate the Fiscal Year Period based on user input.

Code:

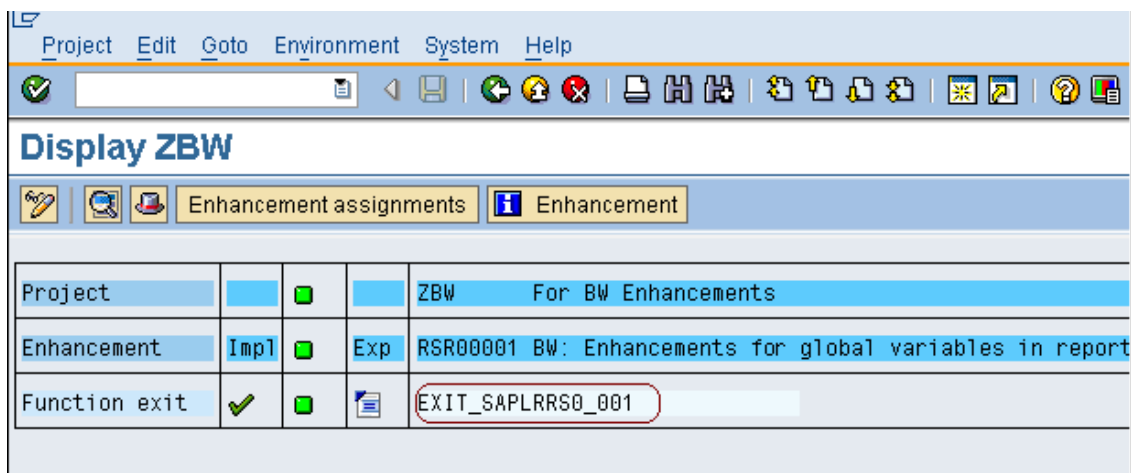
Goto **CMOD** TCode in SAP-BW/BI and then give your Project Name and click on Change button.



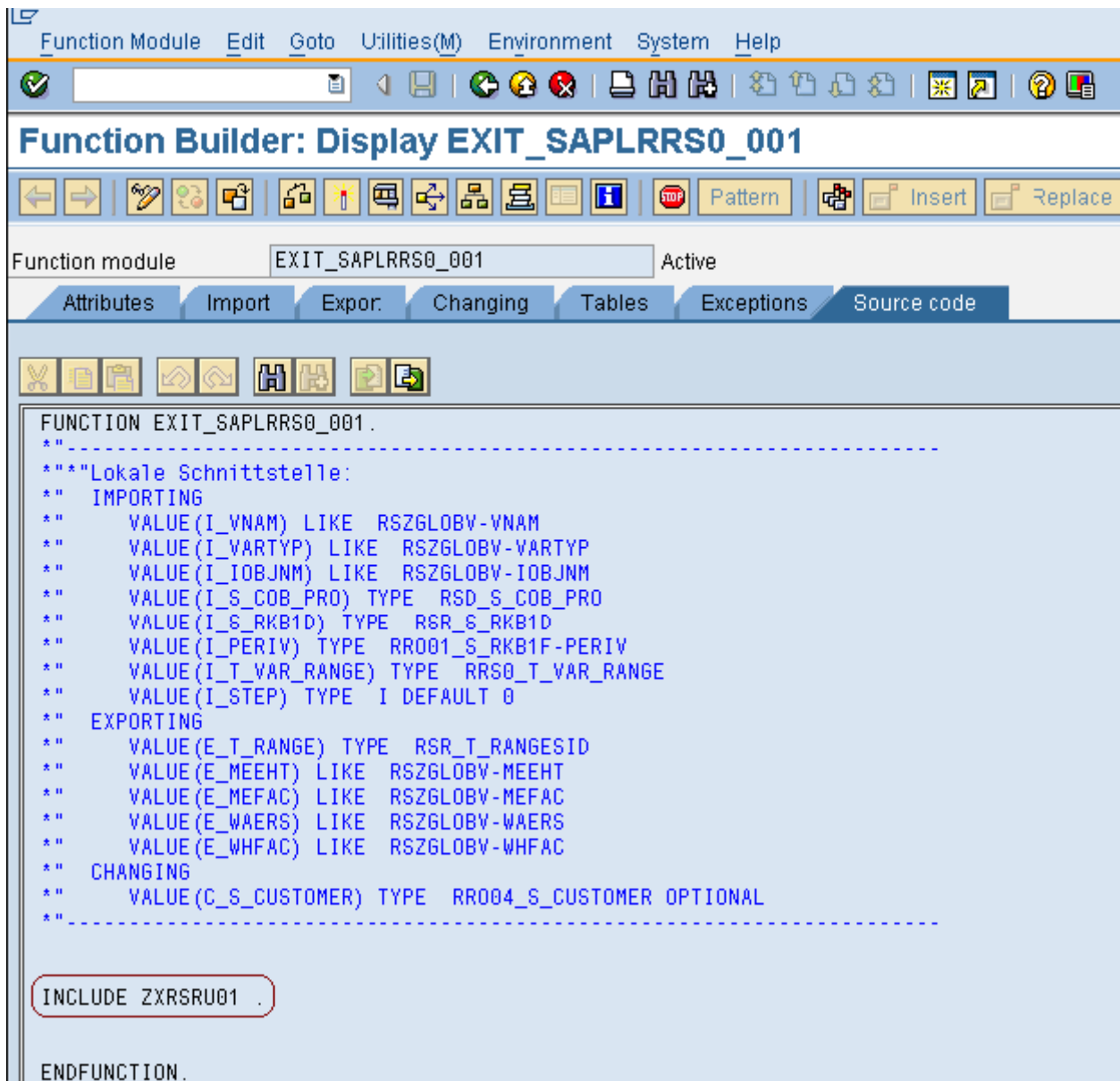
Click on **Components**



Double Click on **EXIT_SAPLRRS0_001**



Double Click on **INCLUDE ZXRSRU01**.



Write the following Code in the ABAP Editor in ECC:

```

*&-----*
*&  Include          ZXRSRU01
*&-----*

```

```

DATA : l_s_range TYPE rsr_s_rangesid,
       loc_var_range LIKE rrrangeexit,
       zbdattj LIKE t009b-bdattj,
       zbuper LIKE t009b-poper,
       zper LIKE t009b-poper,
       ZGJAHR LIKE T009B-BDATTJ.

```

```

DATA : ZDT TYPE SY-DATUM.

```

```

CASE i_vnam.

```

* The Below is to calculate the Fiscal Year Period based on User Input Date.

```

WHEN 'ZFYP_CE'.
  IF i_step = 2.
    LOOP AT i_t_var_range INTO loc_var_range WHERE vnam = 'ZDATE_M'.
      CLEAR: l_s_range.
      ZDT = loc_var_range-low.
      CALL FUNCTION 'DATE_TO_PERIOD_CONVERT'
        EXPORTING
          I_DATE          = ZDT
          I_MONMIT        = 00
          I_PERIV         = 'V3'
        IMPORTING
          E_BUPER        = ZBUPER
          E_GJAHR        = ZGJAHR
      *
      EXCEPTIONS
      *   INPUT_FALSE          = 1
      *   T009_NOTFOUND       = 2
      *   T009B_NOTFOUND     = 3
      *   OTHERS              = 4
      .
      IF SY-SUBRC <> 0.
      *   MESSAGE ID SY-MSGID TYPE SY-MSGTY NUMBER SY-MSGNO
      *   WITH SY-MSGV1 SY-MSGV2 SY-MSGV3 SY-MSGV4.
      ENDIF.

      CONCATENATE ZGJAHR ZBUPER into l_s_range-low.
      l_s_range-sign = 'I'.
      l_s_range-opt = 'EQ'.

      APPEND l_s_range TO e_t_range.
    ENDLOOP.
  ENDIF.
ENDCASE.

```

The Below is to calculate the Fiscal Year Period based on User Input Date and display the same value in Text Variable.

```

WHEN 'ZT_FYPERIOD'.
  IF i_step = 2.
    LOOP AT i_t_var_range INTO loc_var_range WHERE vnam = 'ZDATE_M'.
      CLEAR: l_s_range.
      ZDT = loc_var_range-low.
      CALL FUNCTION 'DATE_TO_PERIOD_CONVERT'
        EXPORTING
          I_DATE          = ZDT
          I_MONMIT        = 00
          I_PERIV         = 'V3'
        IMPORTING
          E_BUPER        = ZBUPER
          E_GJAHR        = ZGJAHR
      *
      EXCEPTIONS

```

```

*      INPUT_FALSE           = 1
*      T009_NOTFOUND        = 2
*      T009B_NOTFOUND       = 3
*      OTHERS                = 4
.
IF SY-SUBRC <> 0.
*      MESSAGE ID SY-MSGID TYPE SY-MSGTY NUMBER SY-MSGNO
*      WITH SY-MSGV1 SY-MSGV2 SY-MSGV3 SY-MSGV4.
ENDIF.

CONCATENATE ZBUPER '.' ZGJAHR into l_s_range-low.
l_s_range-sign = 'I'.
l_s_range-opt = 'EQ'.
APPEND l_s_range TO e_t_range.
ENDLOOP.
ENDIF.

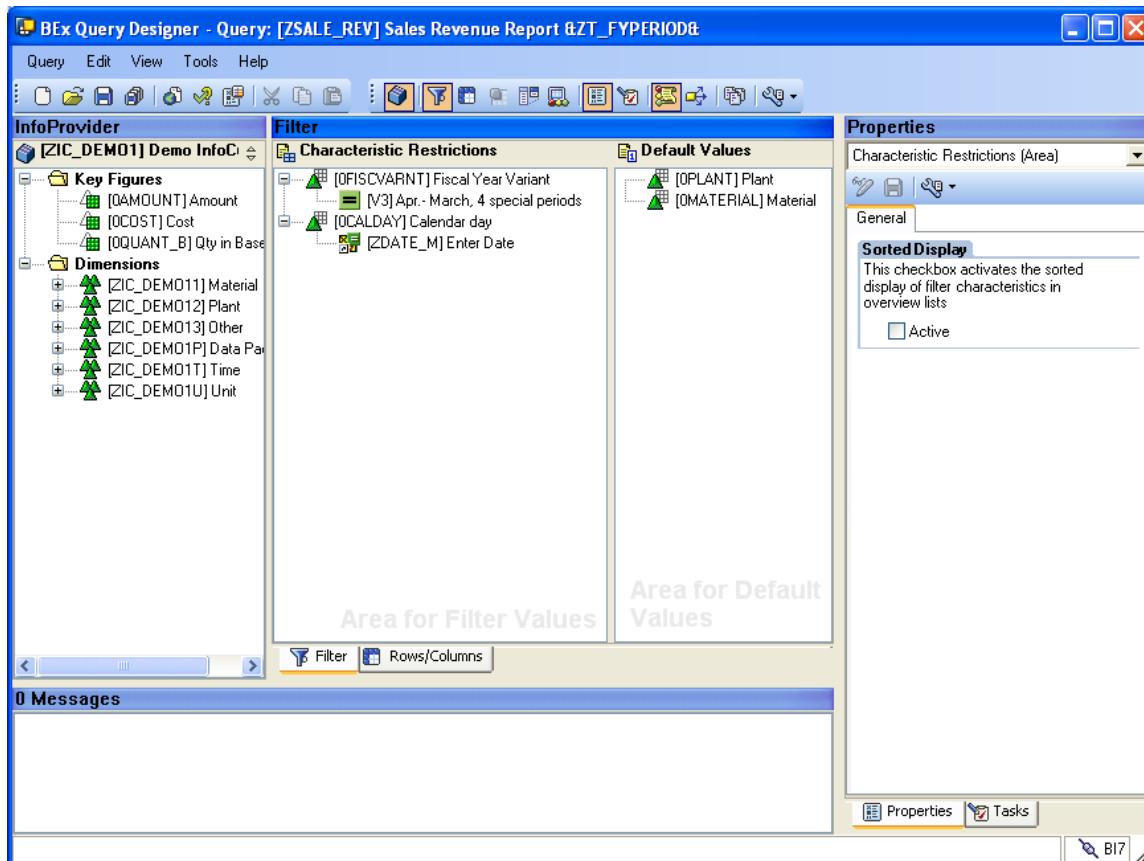
```

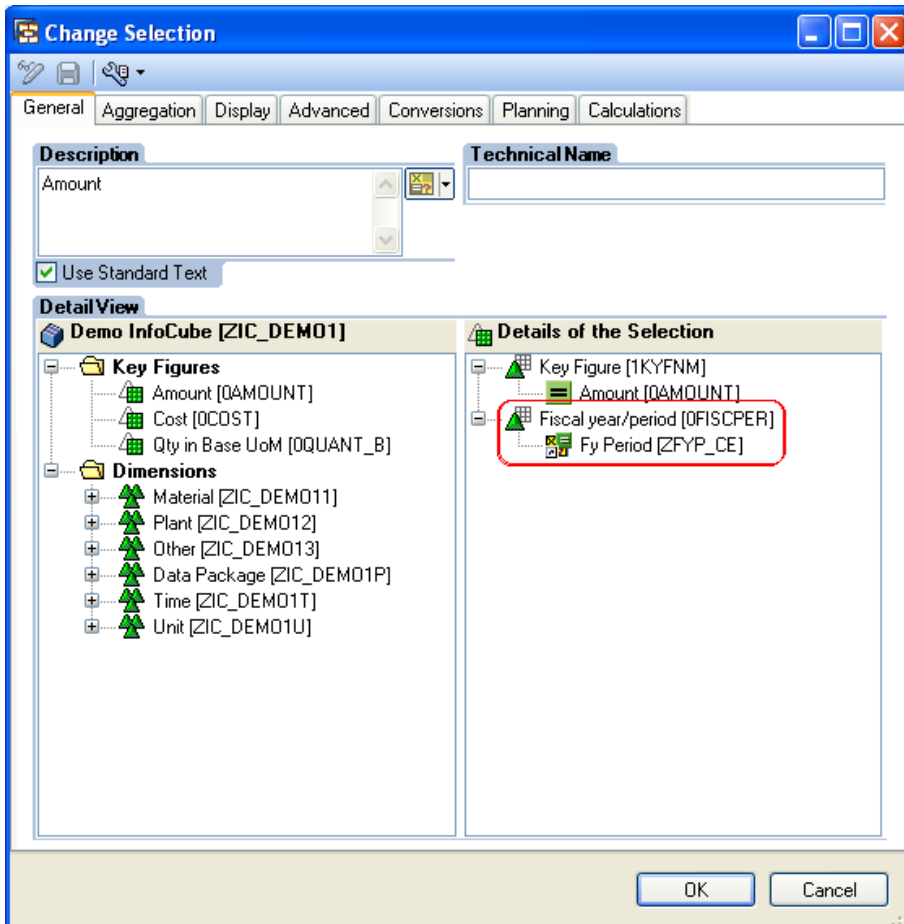
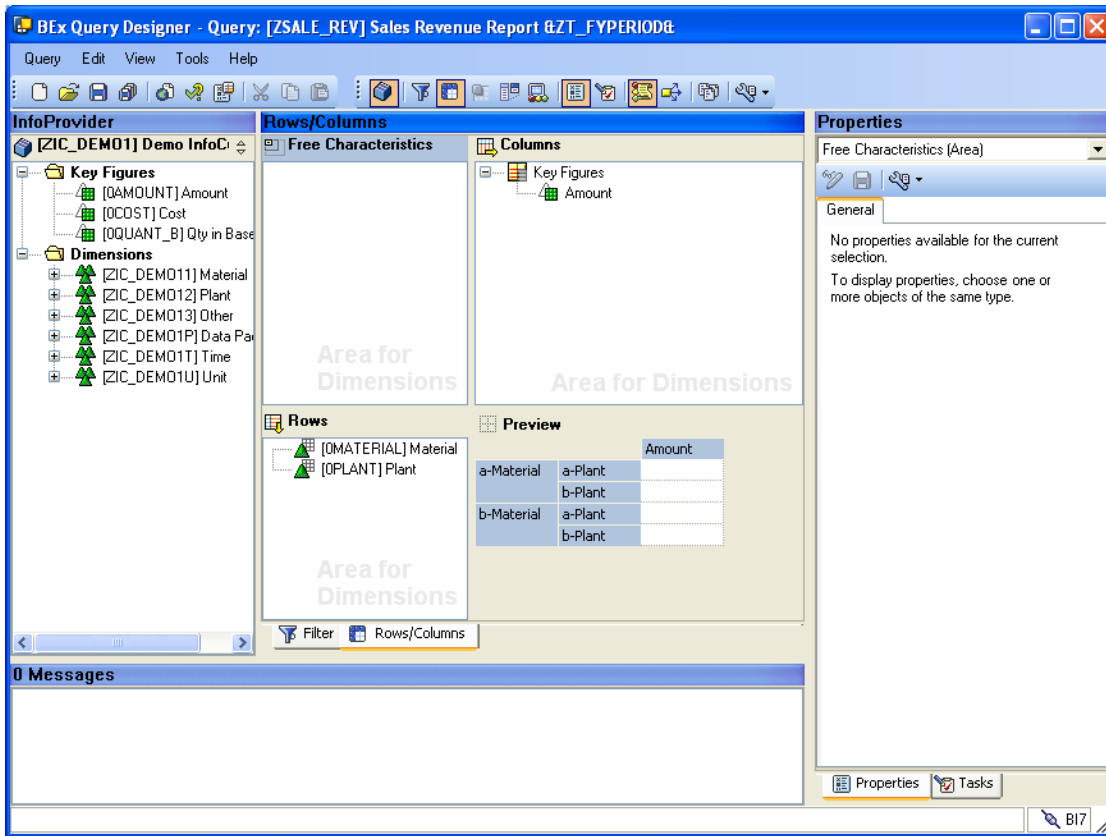
Save and **Activate** the above code and project.

Code Explanation:

The Function Module 'DATE_TO_PERIOD_CONVERT' will take Date and Fiscal Year Variant, as input, and it will give Fiscal year period.

Report Designer:





In Filters:

Drag & Drop 0FISCVARNT, 0CALDAY and restrict 0FISCVARNT with "V3" (as per India) and 0CALDAY with User Input Variable.

In Rows:

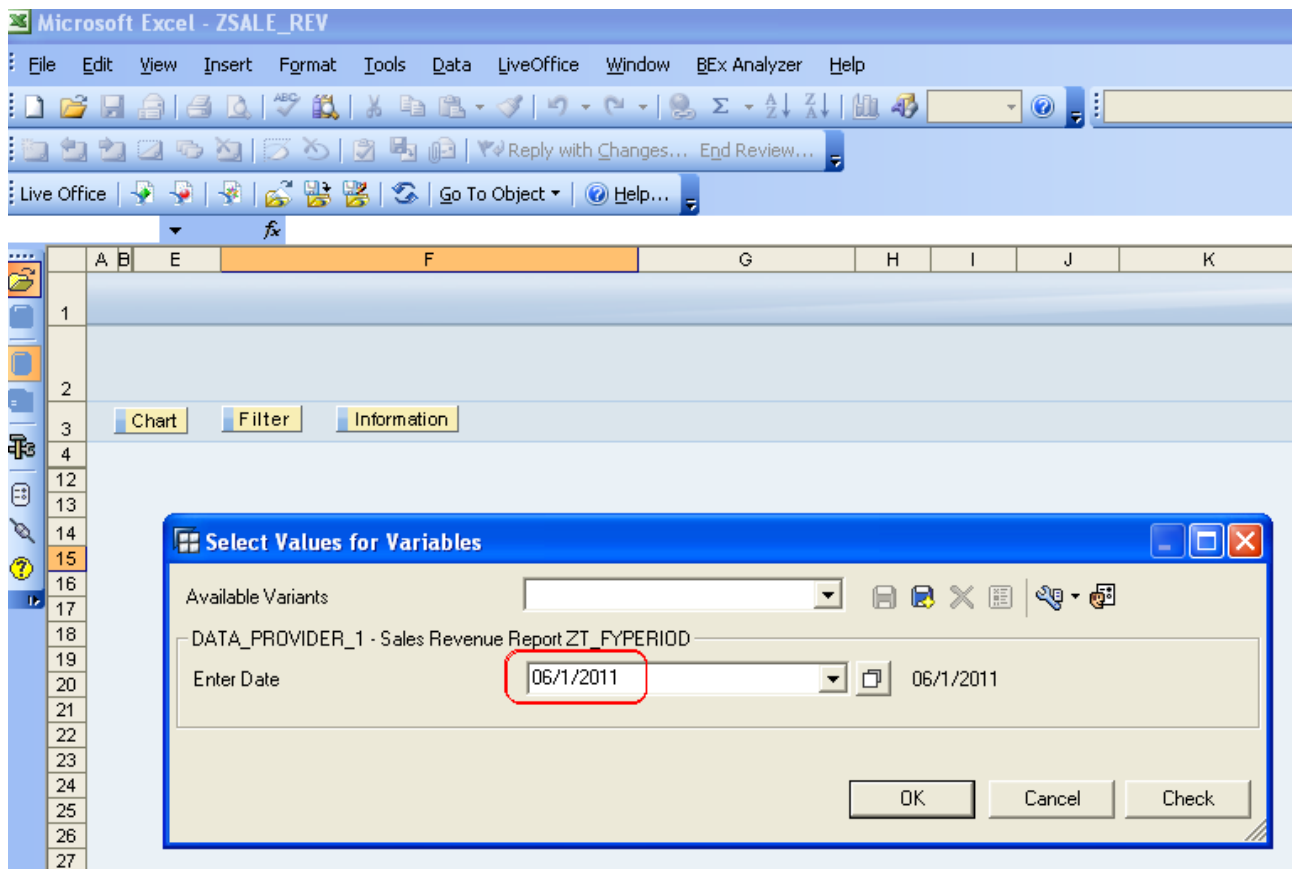
Drag and Drop Material and Plant.

In Columns:

Create New Selection and Drag and Drop Amount and 0FISCPER, restrict 0FISCPER with ZFYPERIOD Variable like above.

Save and Execute the Report :**Selection Screen:**

Once you execute the report you can see the following selection screen:



Once you execute the report, it will ask Date, in above screen I given 06/01/2011, i.e. MM/DD/YYYY format and executed.

Report Result:

See the following Report Result:

Here the result is displayed for 003.2011 period, because 01.06.2011 (DD.MM.YYYY) means 003.2011.

Microsoft Excel - Sales Revenue Report 003.2011

File Edit View Insert Format Tools Data LiveOffice Window BEx Analyzer Help

Reply with Changes... End Review...

Live Office Go To Object Help...

Sales Revenue Report 003.2011

Author DEV_CAT2 Status of Data 06/23/2011 10:46:49

Chart Filter Information

Information

Author DEV_CAT2 Last Refr: 06/24/2011 09:47:49
 Current Us: DEV_CAT2 Key Date 06/24/2011
 Last Chang: DEV_CAT2 Changed , 06/24/2011 09:28:39
 InfoProvide ZIC_DEMO1 Status of I: 06/23/2011 10:46:49
 Query Tech ZSALE_REV Relevance: 06/23/2011
 Query Des: Sales Revenue Rept Relevance: 10:46:49

Filter

Key Figures
 Material
 Plant

Table

Material	Plant	Amount
M100	P100	100.00 INR
M131	P131	131.00 INR
M162	P162	162.00 INR
M193	P193	193.00 INR
M224	P224	224.00 INR
M255	P255	255.00 INR
M286	P286	286.00 INR

See RSRT Result:

Text symbols:	
Description	Value
Enter Date	01.06.2011
Fy Period	6 2011
Fy Period	003.2011
Fy Period	003.2011
Author	DEV_CAT2
Last Changed By	DEV_CAT2
InfoProvider	ZIC_DEMO1
Query Technical Name	ZSALE_REV
Query Description	Sales Revenue Report 003.2011
Key Date	24.06.2011
Changed At	24.06.2011 09:28:39
Current User	DEV_CAT2
Last Refreshed	24.06.2011 09:34:51
Status of Data	23.06.2011 10:46:49
Relevance of Data (Da)	23.06.2011
Relevance of Data (Ti)	10:46:49
Calendar day	01.06.2011
Fiscal year/period	6 2011
Fiscal Year Variant	Apr. - March, 4 special periods

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