

# Analysis Process Designer (APD): Part - 3



## Applies to:

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

## Summary

This article gives clear picture about how to down load the data using Report into DSO (Direct Update type DSO).

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**Created on:** 26 February 2010

## Author Bio



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## Introduction

The Analysis Process Designer (APD) is a workbench with an intuitive graphical user interface for creating, executing, and monitoring analysis processes. The analysis process is primarily based on data that was consolidated in the Data Warehouse and that exists in InfoProviders.

Analysis processes (APD) can be created on a graphical user interface using drag and drop. Data from different data sources in the BI system can be combined, transformed, and prepared for analysis in several individual steps. This allows it to be resaved in data targets in the BI system (DataStore objects for direct update or InfoObjects with attributes) or in CRM system.

## Live Scenario

I have one report in BW/BI and want to execute and download the data into DSO.

I have the following Characteristics InfoObjects and Key figure InfoObjects in Report.

Material = 0MATERIAL

Batch = 0BATCH

Plant = 0PLANT

Calendar Day = 0CALDAY

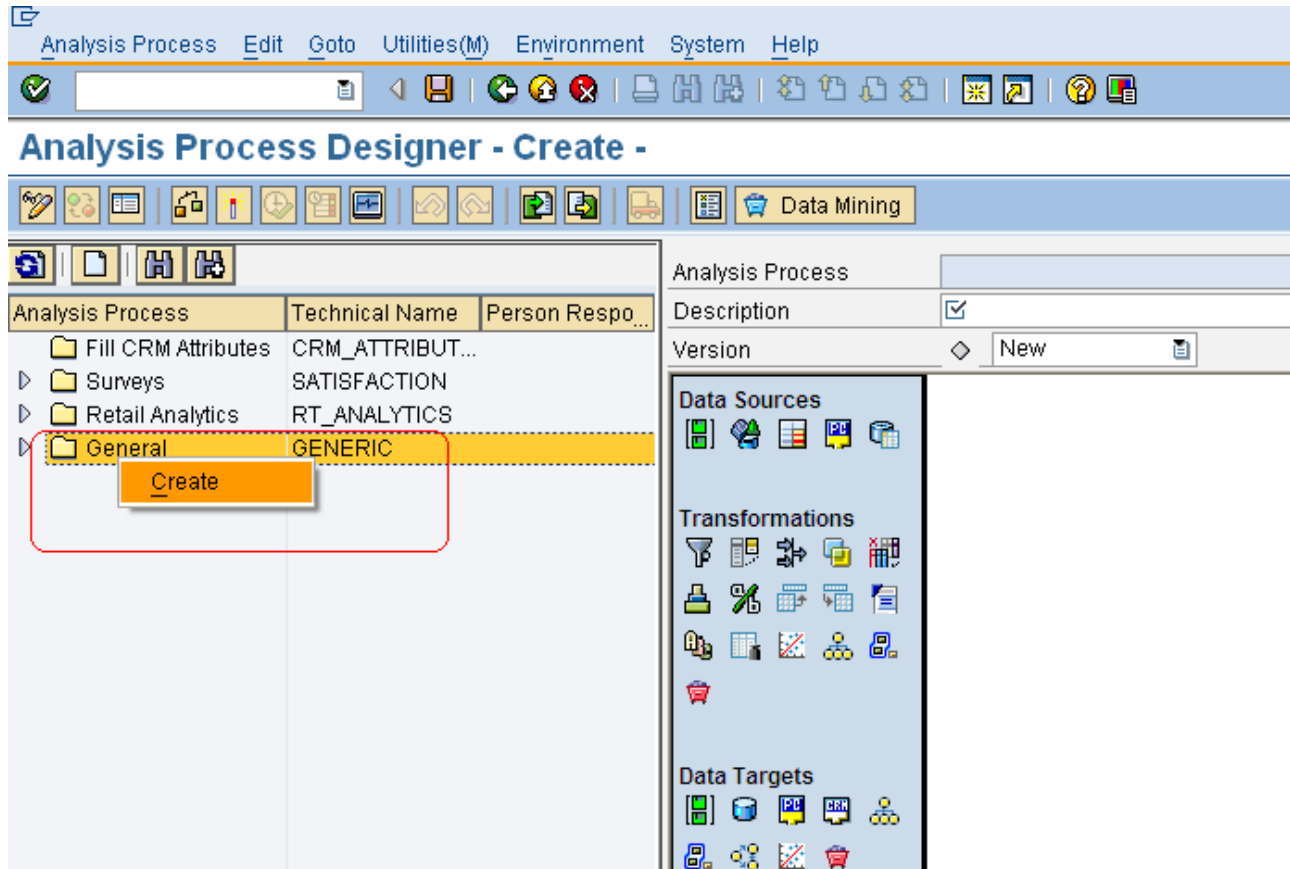
Amount = 0AMOUNT

## Steps

Follow the following simple steps.

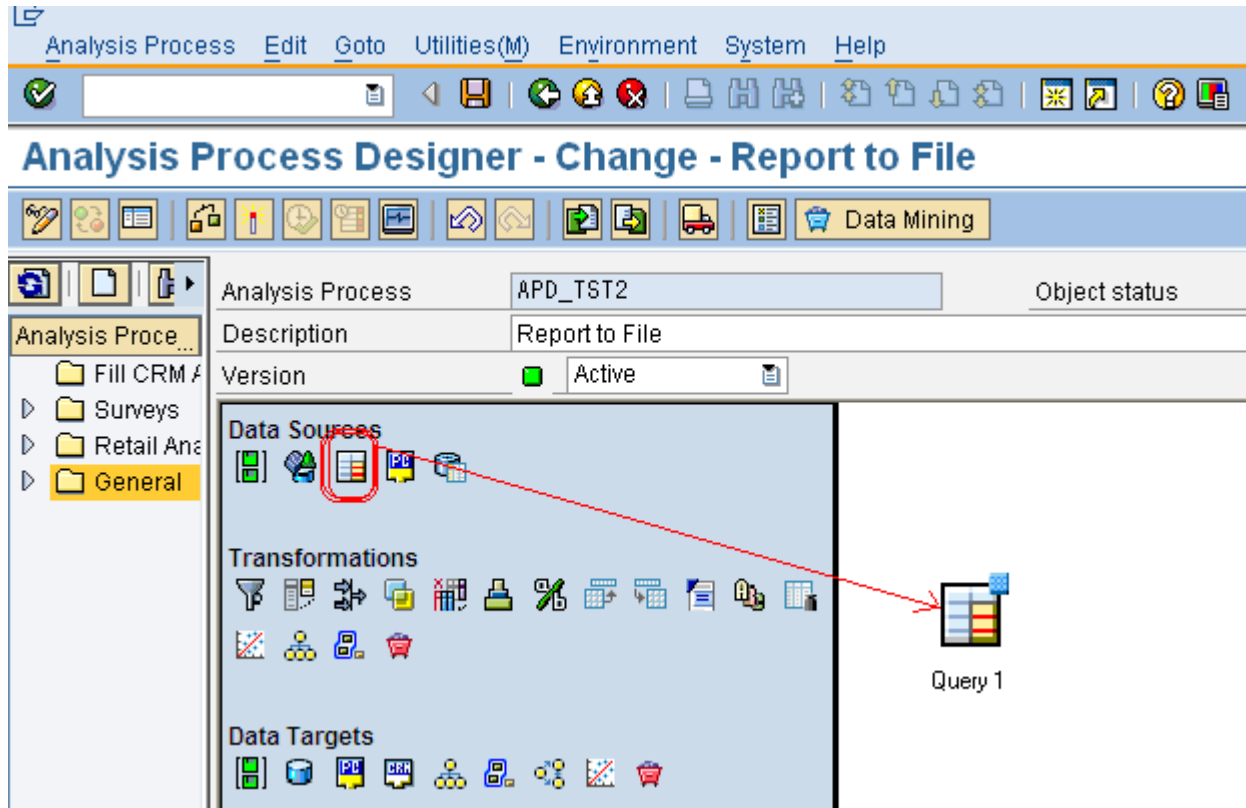
## Step 1

Go to RSANWB Transaction code and create new Analysis Process.



## Step 2

Drag and Drop DataSource i.e. Use Query to Read Data. See the below Screen.



Double Click on Query 1 and Query Technical Name (use F4 help).

Click on Choose Query and select the Report name in Source Tab.

There is no change in Extended Settings Tab. See the below Screens.

Data Source: Query

Source Extended Settings

Description Query 1

Select a query with which you wish to read the data.

Query

InfoCube ZIC\_FT1  
Cube for FF Test1

Query ZIC\_FT1\_RP1  
Tst Report on ZIC\_FT1

Variant

Choose query...

✓ ✗ ?

Data Source: Query

Source Extended Settings

Data Partitioning

Divide Data Collection into Packages

Partitioning Characteristic

Package Size 0

Process Data Collection Concurrently

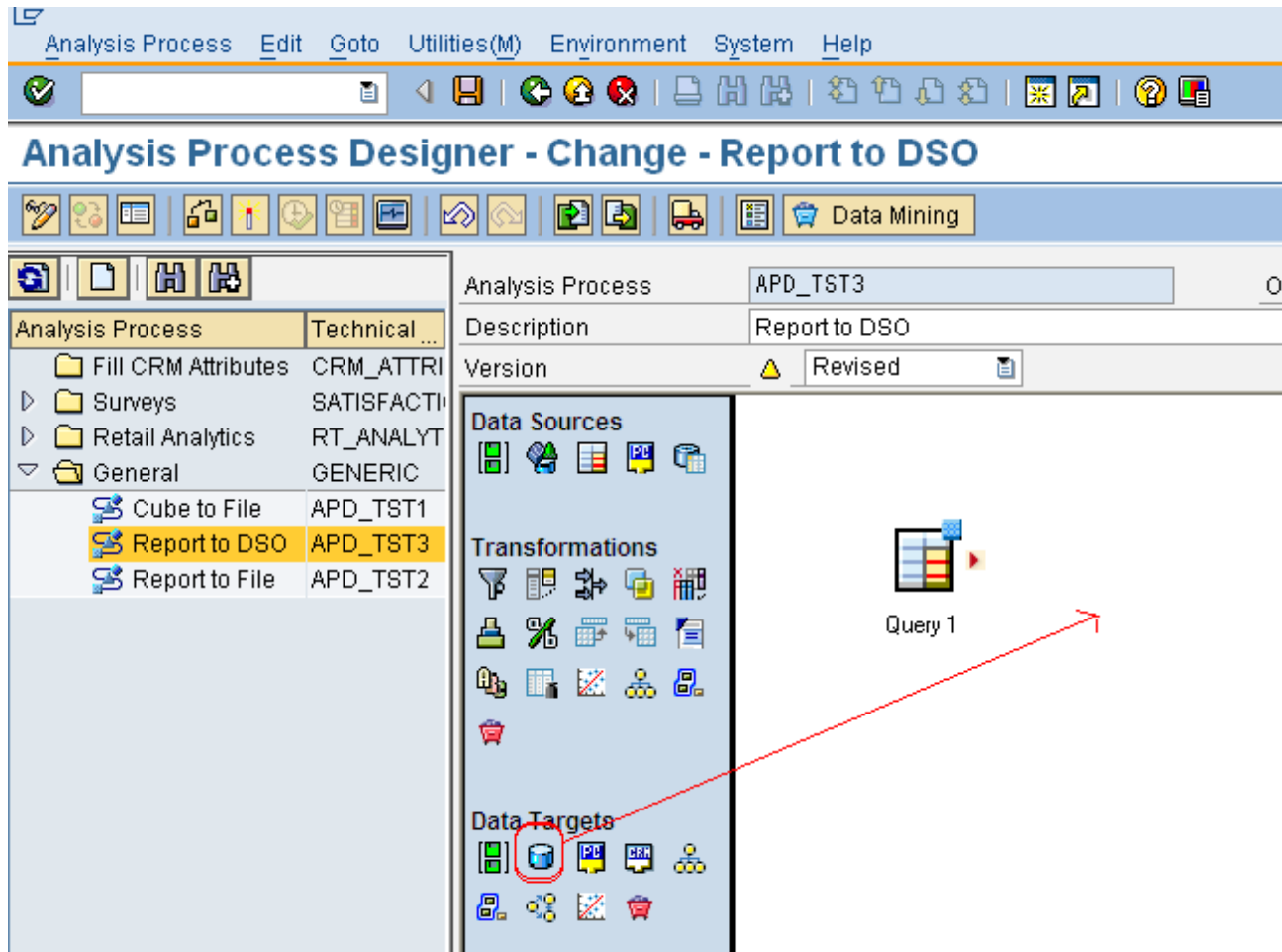
Server Group

✓ ✗ ?

## Step 3

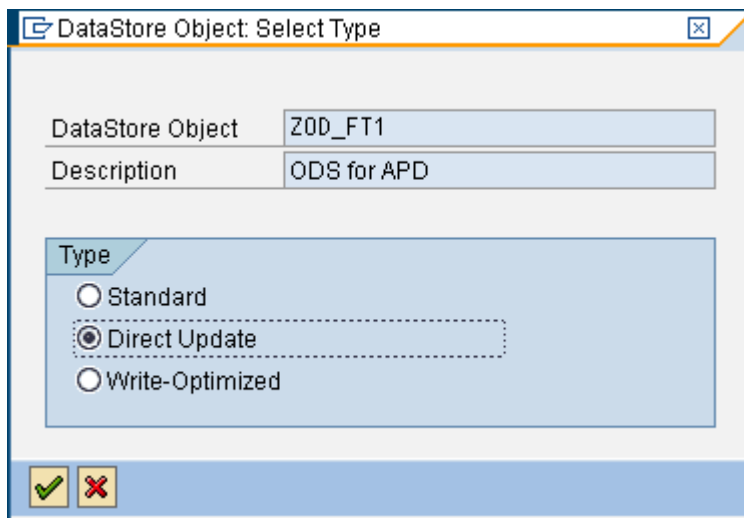
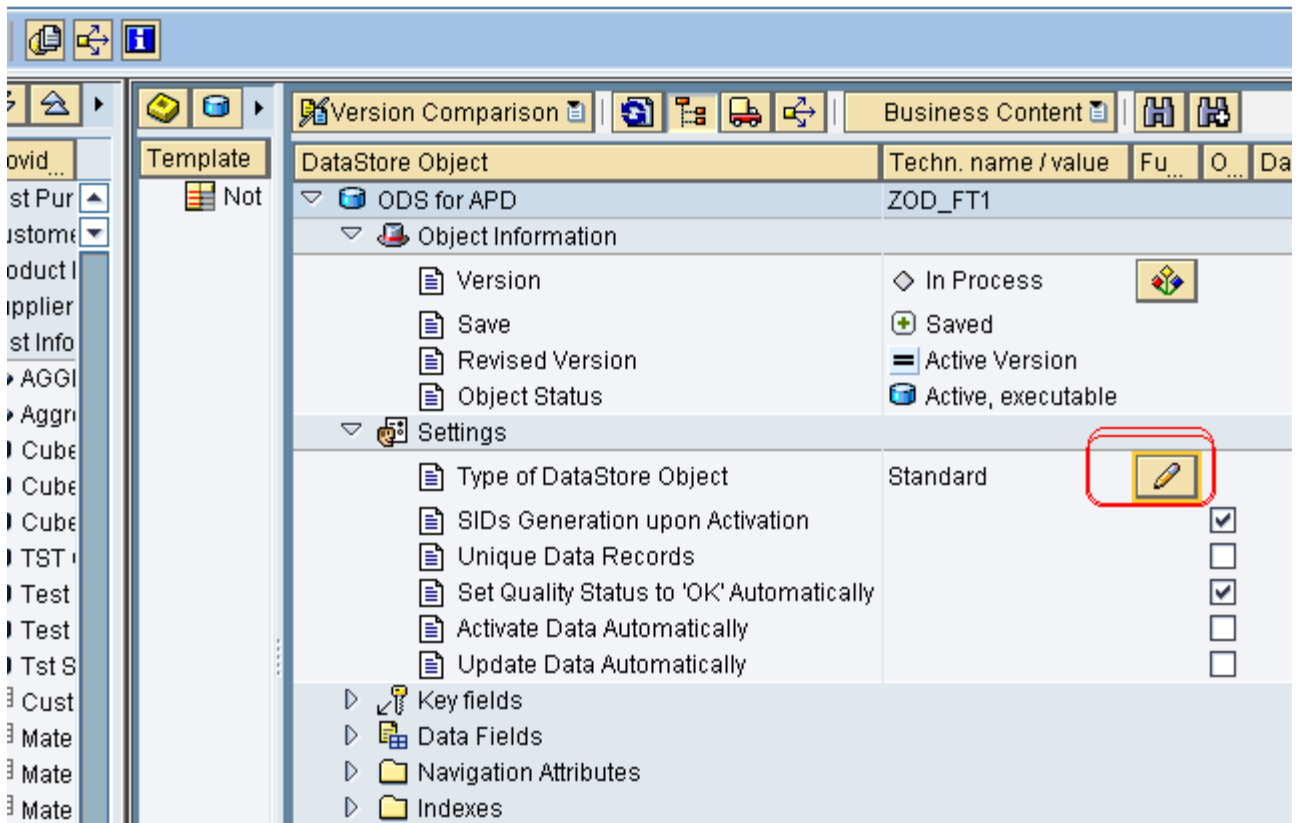
Click on Write Data to DataStore Object in Data Targets.

See the below Screen.



Before doing the above step, first you make sure that the DSO we are using is Direct Update Type DSO, see the below screen how to set Direct Update to the Standard DSO.

Go to Change mode of the DSO and then click on settings and change.



Here by default it will be Standard, but we need to select it Direct Update like above.



In Data Target Tab give our DSO Technical name.

Data Target: DataStore Object

Data Target Target Area

Description Data Target: DataStore Object 1

Select a DataStore object for direct write into which the data is to be written.

DataStore Object

:DataStore Object: ZOD\_FT1

Display Data

✓ ✗ ?

If you see in the above figure the Display Data Button is disabled.

You can see the Key Fields in the Target Area Tab. And by default it will Overwrite Complete Constant of the DataStore Object.

Data Target: DataStore Object

Data Target Target Area

Specify How the Result of the Calculation Should Be Saved:

Overwrite Complete Content of the DataStore Object

Overwrite Part of the DataStore Object

Choose the Key Fields for Restricting the Subarea

Name	FId Name	Restrict	Val.
Material	0MATERIAL	<input type="checkbox"/>	
Batch number	0BATCH	<input type="checkbox"/>	
Plant	0PLANT	<input type="checkbox"/>	
Calendar Day	0CALDAY	<input type="checkbox"/>	

Navigation icons: back, forward, search, help, close.

Data Target: DataStore Object

Data Target Target Area

Description ODS for APD

Select a DataStore object for direct write into which the data is to be written.

DataStore Object

DataStore Object Z0D\_FT1

ODS for APD

Display Data

Once you give the DSO name and then enter, after that you can see the Display Data Button is enabled, so just click on that and it will take you to DSO Table screen, i.e. you can see it in SE11 also by giving the Technical name of our DSO.

Program Edit Goto Settings System Help

Number of Entries

Material	<input type="text"/>	to	<input type="text"/>	
Batch	<input type="text"/>	to	<input type="text"/>	
Plant	<input type="text"/>	to	<input type="text"/>	
Calendar Year	<input type="text"/>	to	<input type="text"/>	
Calendar Year/Month	<input type="text"/>	to	<input type="text"/>	
Calendar Day	<input type="text"/>	to	<input type="text"/>	
Amount	<input type="text"/>	to	<input type="text"/>	
Activity quantity	<input type="text"/>	to	<input type="text"/>	
Currency	<input type="text"/>	to	<input type="text"/>	
Activity unit	<input type="text"/>	to	<input type="text"/>	
Record Mode	<input type="text"/>	to	<input type="text"/>	
Width of Output List	<input type="text" value="250"/>			
Maximum No. of Hits	<input type="text" value="200"/>			

You just click on Number of Entries button, it will display ZERO records, because this DSO is having no data, once we will execute the APD then it will get the data.

The screenshot shows the SAP Data Browser interface for Table /BIC/AZOD\_FT100. The main window has a menu bar (Program, Edit, Goto, Settings, System, Help) and a toolbar. Below the title bar, there are icons for navigation and a button labeled "Number of Entries" which is highlighted with a red rectangle. The main area contains selection criteria for Material, Batch, and Plant, each with a "to" field and a right-pointing arrow icon. A dialog box titled "Display Number of Entries" is open, showing the text "Number of entries which meet the selection criteria:" followed by the number "0" (circled in red). The dialog also has a "Close" button with a green checkmark icon. At the bottom of the main window, there are fields for "Width of Output List" (set to 250) and "Maximum No. of Hits" (set to 200).

See in the above screen, it is showing ZERO records.

You just come back to original screen and then join the Report and DSO, i.e. just drag and drop line between two objects.

## Step 4

Analysis Process Designer - Change - Report to DSO

Analysis Process: APD\_TST3      Object status

Description: Report to DSO

Version: Revised

Analysis Process: Technical N...

- Fill CRM At CRM\_ATTRIBL
- Surveys SATISFACTION
- Retail Anal: RT\_ANALYTIC
- General GENERIC
  - Cube to APD\_TST1
  - Report APD\_TST3
  - Report APD\_TST2

Data Sources

Transformations

Data Targets

Query 1 → [Transformation Symbol] → ODS for APD

Now click on Transformation Symbol and see the mappings, by default it won't map any InfoObjects, we need to map it.

See the below screen.

Change Field Assignment

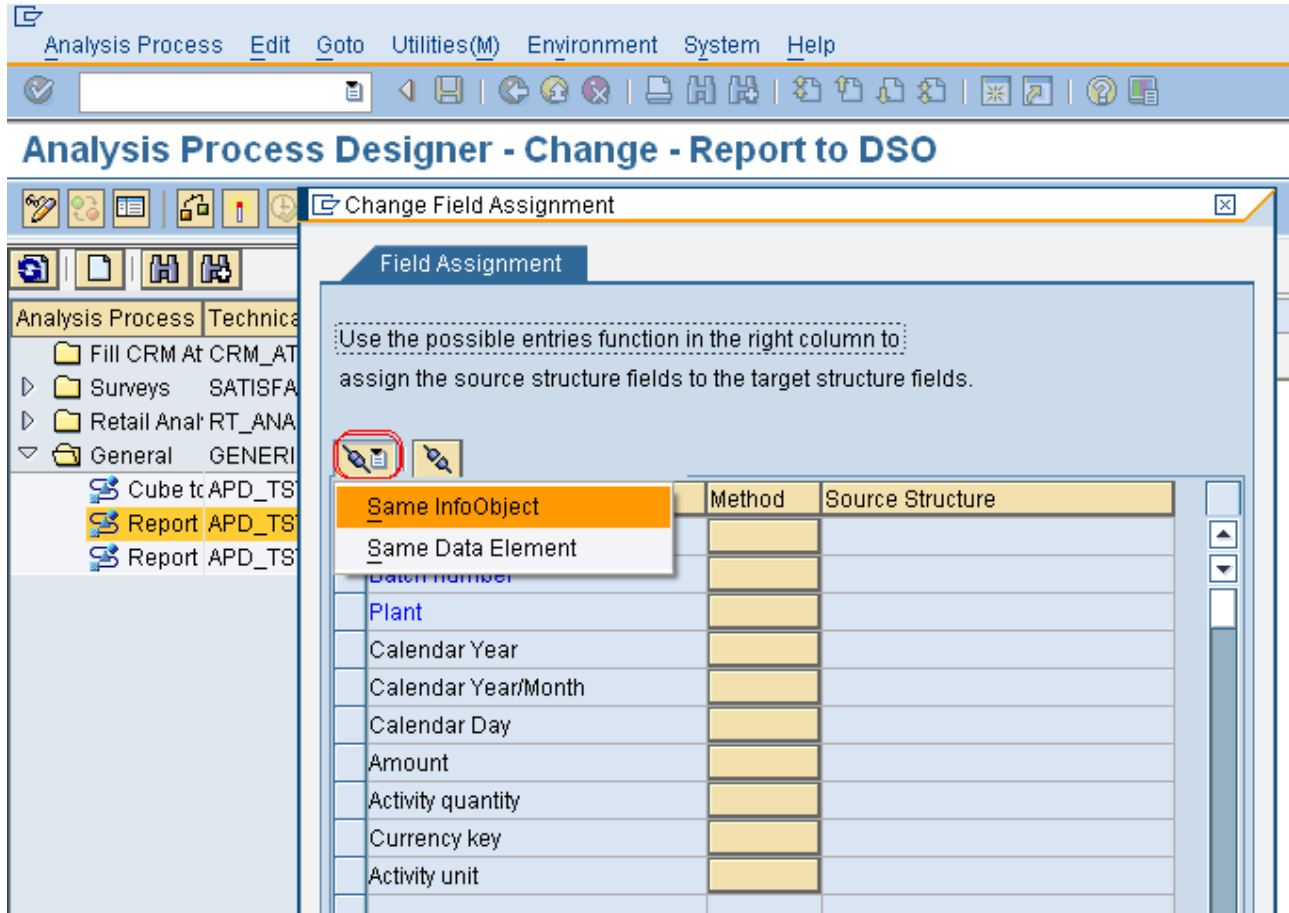
Field Assignment

Use the possible entries function in the right column to assign the source structure fields to the target structure fields.

Target Structure	Method	Source Structure
Material		
Batch number		
Plant		
Calendar Year		
Calendar Year/Month		
Calendar Day		
Amount		
Activity quantity		
Currency key		
Activity unit		

All are empty.

You just click on Join Icon and select the Same InfoObject option, it will propose the mappings.

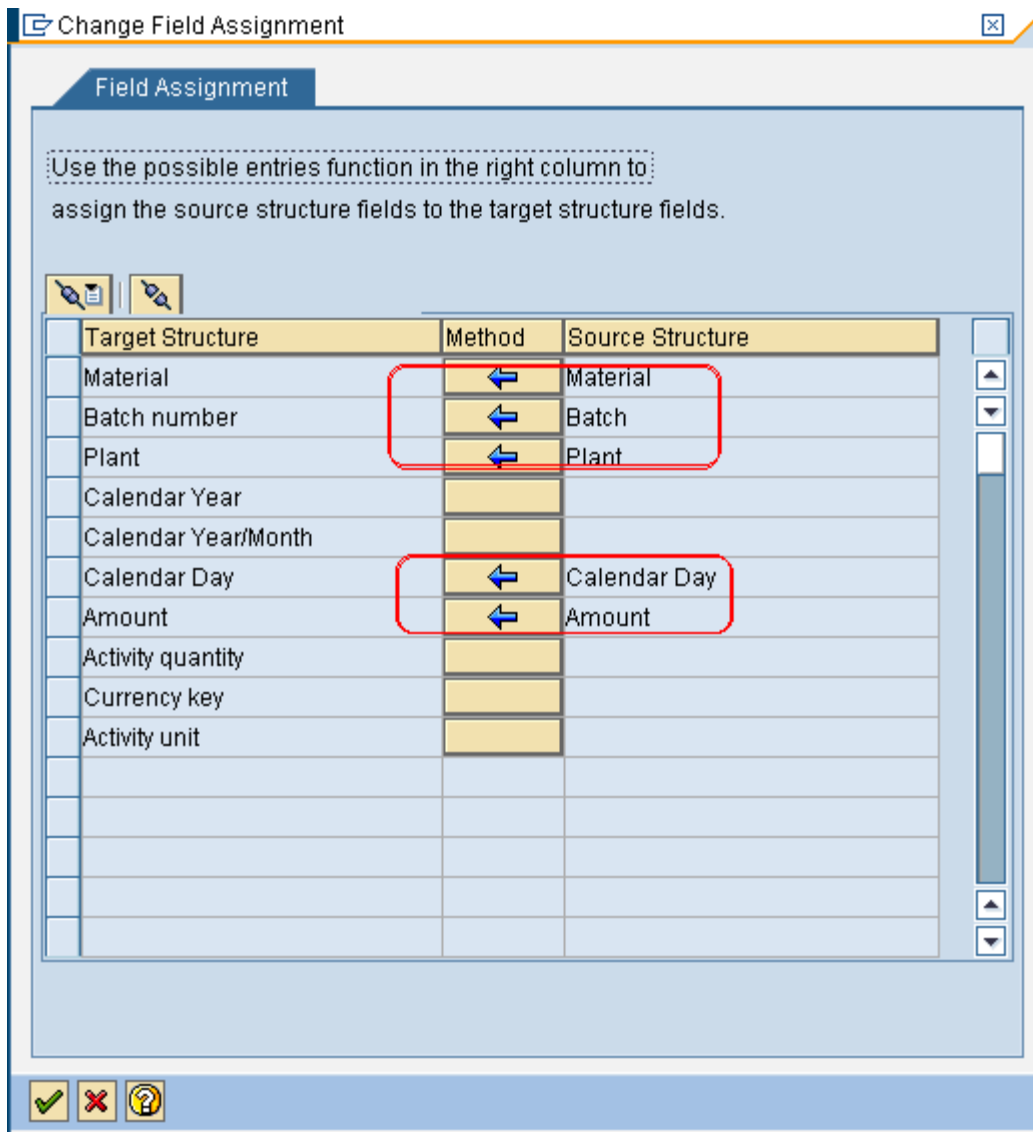


In Report we have only following InfoObjects.

- Material
- Batch
- Plant
- Calendar Day
- Amount

So by default it will propose the mappings for those InfoObjects.





We have the following extra InfoObjects in DSO.

- Calendar Year/Month
- Calendar Year

For the above InfoObjects we need to map it manually. It is like exactly normal Transformations mapping.

Click on Calendar Year and select the Calendar day

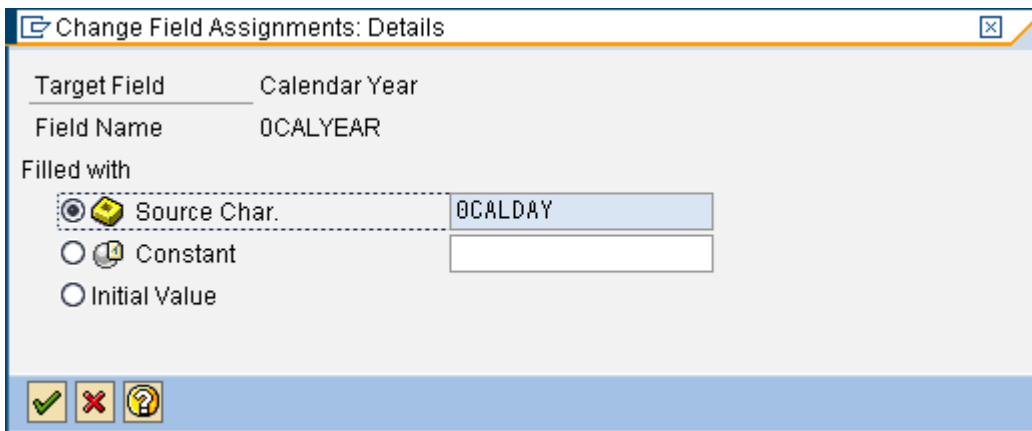
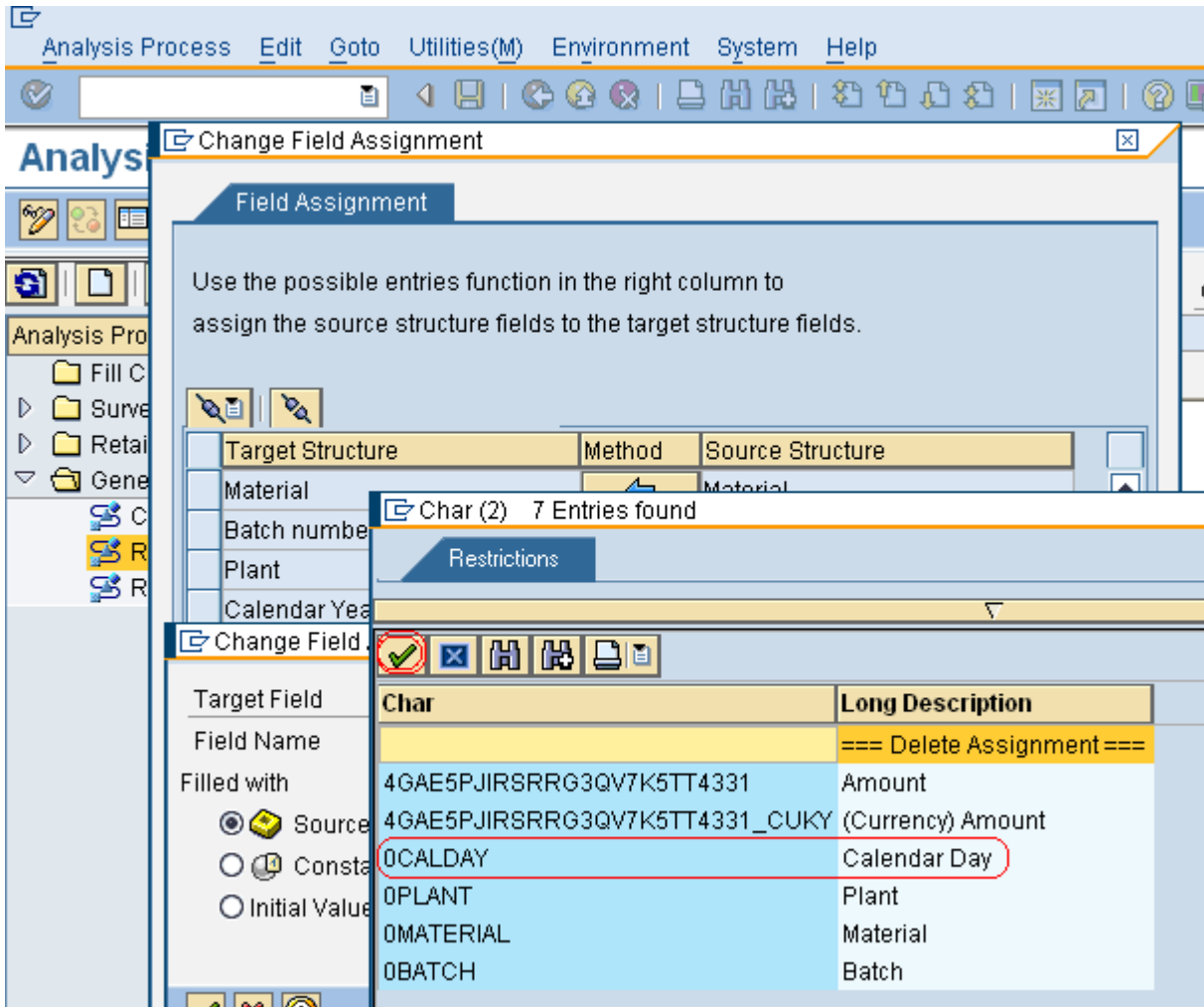
The screenshot shows the SAP Analysis Process Designer interface. The main window is titled "Analysis Process Designer - Change - Report to DSO". A sub-dialog titled "Change Field Assignment" is open, showing a table of field assignments. The "Calendar Year" row is highlighted with a red circle. Below the table, the "Change Field Assignments: Details" section is visible, showing the target field "Calendar Year" and the field name "OCALYEAR". Under "Filled with", the "Source Char." option is selected and highlighted with a red circle.

Target Structure	Method	Source Structure
Material	←	Material
Batch number	←	Batch
Plant	←	Plant
Calendar Year		

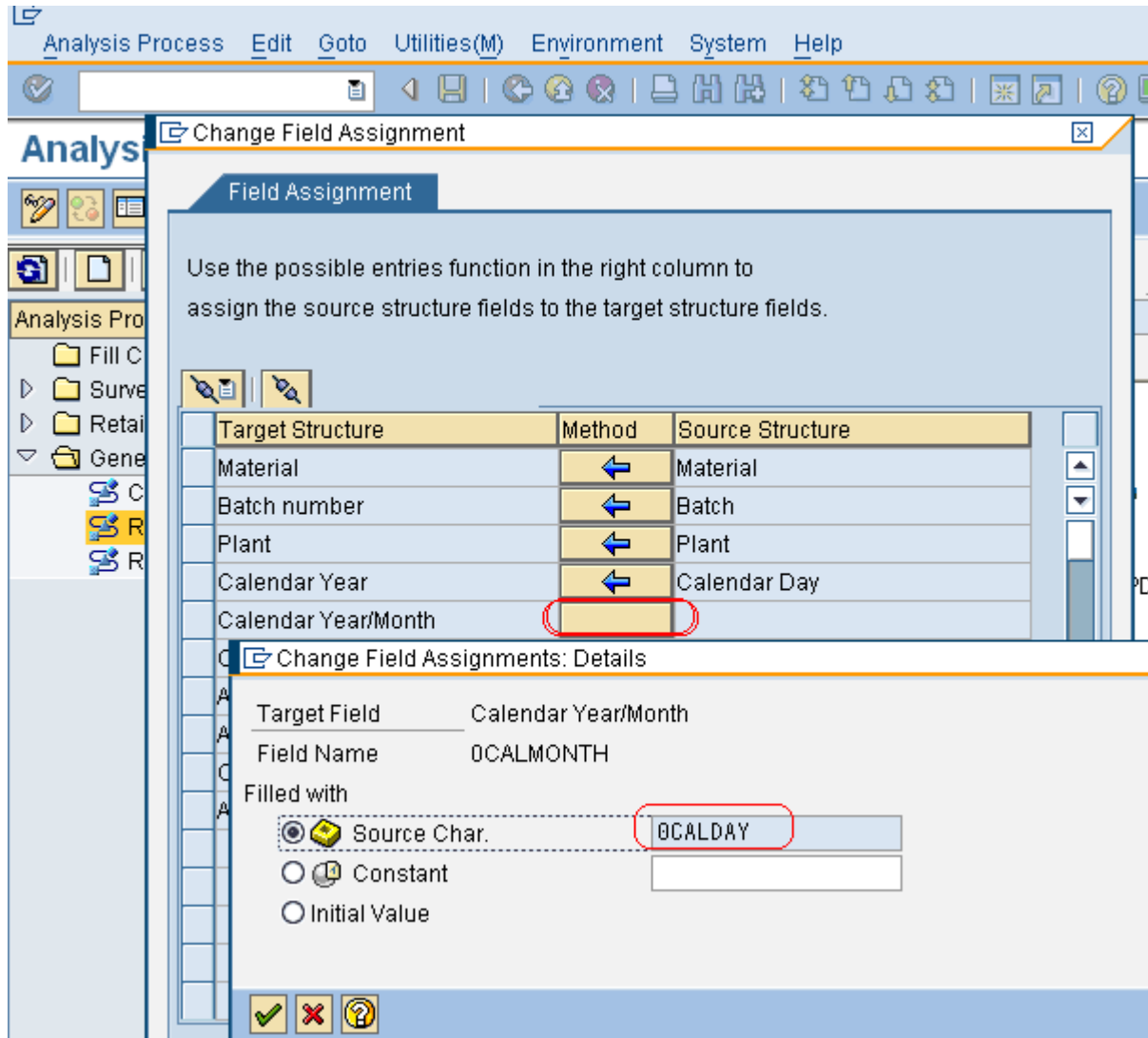
Change Field Assignments: Details

Target Field	Calendar Year
Field Name	OCALYEAR
Filled with	<input checked="" type="radio"/> Source Char. <input type="radio"/> Constant <input type="radio"/> Initial Value

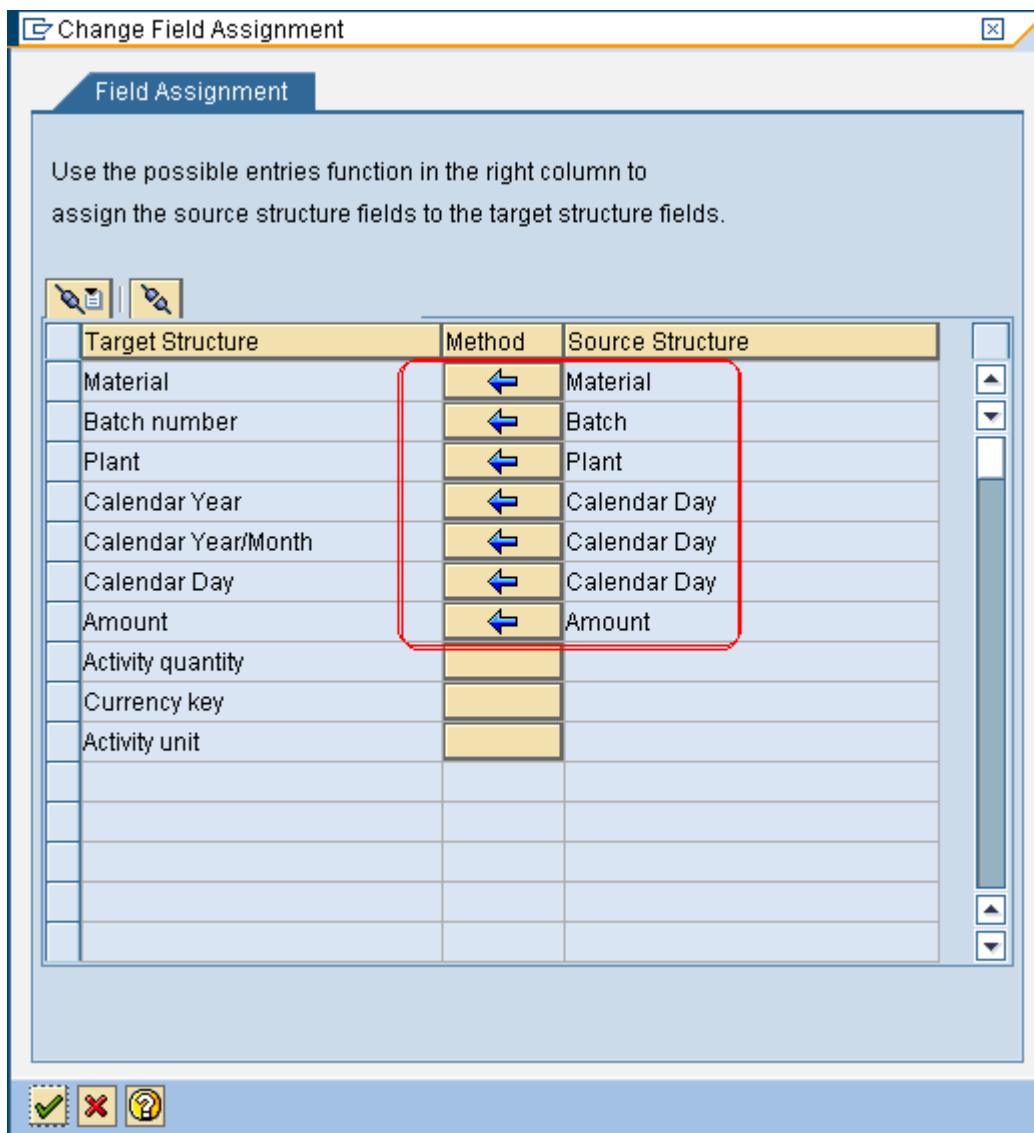
Press F4 and select the Calendar day. See the below Screen.



In the same way select Calendar day for Calendar Month also.



So the Calendar Month and Year will get the data from Calendar day only using some internal routines, system will take care that splitting the data.



Now in the above figure you can see the mappings for all InfoObjects.

## Step 5

Now Save and Activate the APD.

The screenshot displays the SAP Analysis Process Designer (APD) interface. The title bar reads "Analysis Process Designer - Display - Report to DSO". The main window shows the following details:

- Analysis Process:** APD\_TST3
- Description:** Report to DSO
- Version:** Active (indicated by a green light icon)

The left sidebar shows a tree view of analysis processes, with "Report APD\_TST3" selected. The central workspace contains a diagram illustrating the data flow:

```

graph LR
    Query1[Query 1] --> Transformation[Transformation]
    Transformation --> ODS[ODS for APD]
  
```

The diagram shows a data source icon labeled "Query 1" connected by an arrow to a transformation icon, which is then connected to a data target icon labeled "ODS for APD".

After Activation you can see the green light, and then execute the APD.

If it is success, it will show the following screen.

The screenshot displays the 'Display logs' window in SAP Analysis Process Designer. The window title is 'Display logs'. The menu bar includes 'Log', 'Edit', 'Goto', 'System', and 'Help'. The toolbar contains various icons for navigation and actions. The log table has two columns: 'Type' and 'Message Text'. The log entries are as follows:

Type	Message Text
	-----
	Execute analysis process APD_TST3, version A
	Execute Analysis Process
	-----
	Processing started for analysis process APD_TST3
	Source data is being read and the result is being calculated
	Old data in DataStore object ZOD_FT1 was deleted
	5 records written to DataStore object ZOD_FT1
	Data successfully written to the data target of the analysis process
	-----
	Processing completed successfully for analysis process APD_TST3
	-----

After that you can see the data in that DSO.

**Data Browser: Table /BIC/AZOD\_FT100: Selection Screen**

Number of Entries

Material [ ] to [ ]

Batch [ ] to [ ]

Plant [ ]

Calendar Day [ ]

Calendar Year [ ]

Calendar Year [ ]

Amount [ ]

Activity quantity [ ]

Currency [ ]

Activity unit [ ] to [ ]

Record Mode [ ] to [ ]

**Display Number of Entries**

Number of entries which meet the selection criteria: **5**

Close

See the actual data in DSO.

**Data Browser: Table /BIC/AZOD\_FT100 Select Entries 5**

Material	Batch	Plant	Calendar Day	Calendar Year	Calendar Year/Month	Amount	Activity quantity	Curr
0000000000000000000100	1	1	01.01.2010	2010	201001	200.00	0.000	
0000000000000000000200	2	3	01.01.2010	2010	201001	400.00	0.000	
M1	B1	P1	01.12.2009	2009	200912	100.00	0.000	
M1	B1	P1	02.12.2009	2009	200912	100.00	0.000	
M1	B1	P2	01.12.2009	2009	200912	400.00	0.000	



## Related Content

[Analysis Process Designer \(APD\): Part - 1](#)

[Analysis Process Designer \(APD\): Part - 2](#)

[Analysis Process Designer](#)

[Using Customer Exit Variables in BW Reports Part - 3](#)

[How to use Customer Exit Variables in BW Reports: Part - 2](#)

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

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

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

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