

# APD to Update Marketing Attributes from SAP BI to SAP CRM



## Applies to:

SAP NetWeaver BI 7.0 and SAP CRM 5.0(and above). For more information, visit the [EDW homepage](#).

## Summary

This article gives a clear picture about how to update CRM marketing attributes from BW using an APD. Through this document I have tried to explain the steps involved in this process.

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## Author Bio

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## Introduction

Analysis Process Designer (APD) provides an intuitive graphical interface that enables you to visualize, transform, and deploy data. It simplifies the process of updating marketing attribute values for business partners into SAP CRM in a single data pass. This APD technique can be implemented to update any marketing attributes. The process of filling CRM marketing attributes via an APD can become a bit confusing, because several steps are involved. To clarify the steps involved in this process, I will walk through the steps to prepare your system to use APD for this purpose. Then I'll show you how to set up the data transfers in your system. When you complete the process, you'll have created an interface between SAP CRM and SAP NetWeaver BI to update the business partner marketing attributes.

## Live Scenario

In BW system, I want to classify customers into three classes A, B and C according to the sales revenue they generate. I would like to use the ABC class determined for a customer in SAP BW as a marketing attribute in SAP CRM and I want the data of ABC class attribute determined in SAP BW for the business partners to be written to the marketing attribute of CRM. To do this, I use Analysis Process Designer (APD) to help me update this attribute. I will now explain the steps involved in this process.

To achieve this, first we should create an ABC classification model to classify business partners and update Business Partner info object (OBPARTNER). Then, we should use the OBPARTNER info object and filter the Business Partners to update the CRM marketing attribute.

## Analysis Process to Classify Business Partners

The structure of sales infocube which will be used for explaining this scenario is given below:



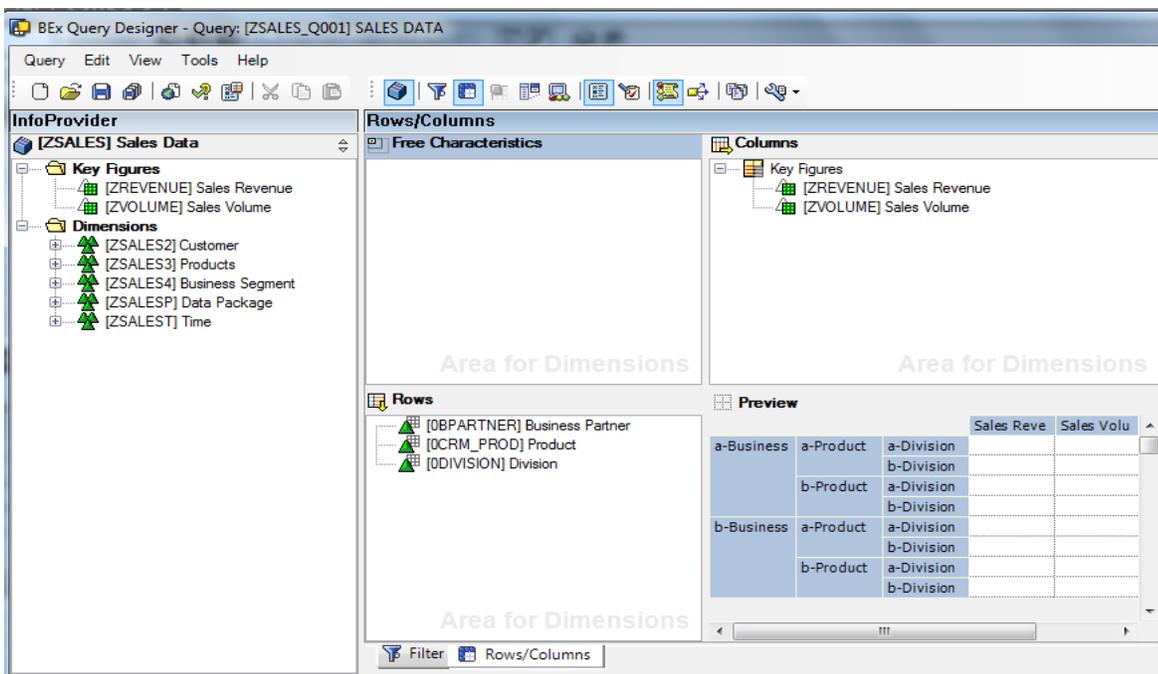
InfoCube	Techn. name / value	Fu...	O...	Data ...	L	Key Fi...	C...	N...	Ag...	Ex...	Reference...	Unit
Sales Data	ZSALES											
Object Information												
Version	In Process											
Save	Saved											
Revised Version	Active Version											
Object Status	Active, executable											
Settings												
Dimensions												
Data Package	ZSALESP											
Change Run ID	0CHNGID			NUMC	14						0CHNGID	
Record type	0RECORDTP			NUMC	01						0RECORD...	
Request ID	0REQUID			CHAR	30						0REQUID	
Time	ZSALEST											
Calendar year	0CALYEAR			NUMC	04						0CALYEAR	
Unit	ZSALESU											
Customer	ZSALES2											
Business Partner	0BPARTNER			CHAR	10						0BPARTN...	
Products	ZSALES3											
Product	0CRM_PROD			CHAR	32						0CRM_PR...	
Business Segment	ZSALES4											
Division	0DIVISION			CHAR	02						0DIVISION	
Navigation Attributes												
Key Figures												
Sales Revenue	ZREVENUE			CURR	09	Amount	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SUM	SUM		
Sales Volume	ZVOLUME			QUAN	09	Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	SUM	SUM		

The screenshot of the data of 'ZSALES' cube is given below. The fields selected for output are 0BPARTNER, ZREVENUE, ZVOLUME.

**"ZSALES", List output**

0BPARTNER	ZREVENUE	ZVOLUME
9000000310	8.900,00	10,000
9000000311	4.590,00	20,000
9000000312	12.000,00	30,000
9000000313	11.200,00	40,000
9000000314	11.500,00	50,000
9000000315	12.500,00	80,000
9000000316	15.200,00	70,000
9000000317	7.800,00	45,000
9000000318	9.500,00	25,000
9000000319	18.000,00	65,000

The screenshot of the query 'ZSALES\_Q001' which is created on top of the infocube 'ZSALES' is given below:



To create an ABC classification model, Goto 'Data Mining Workbench' using transaction **RSDMWB**. Now, follow the path DataMining-->Further Analyses-->ABC Classification. Right click on ABC Classification and create a model. Fill in all the fields as shown below. In Model Field Selection specify the BW Query name as the query name which was created above.

**Create Model**

Model Name: SALES\_MODEL

Description: Model to classify Business Partners

Method:

Options:

Manual

Use Model as Template

Name:

Model Field Selection

BW Query: I\_ZSALES/ZSALES\_Q001

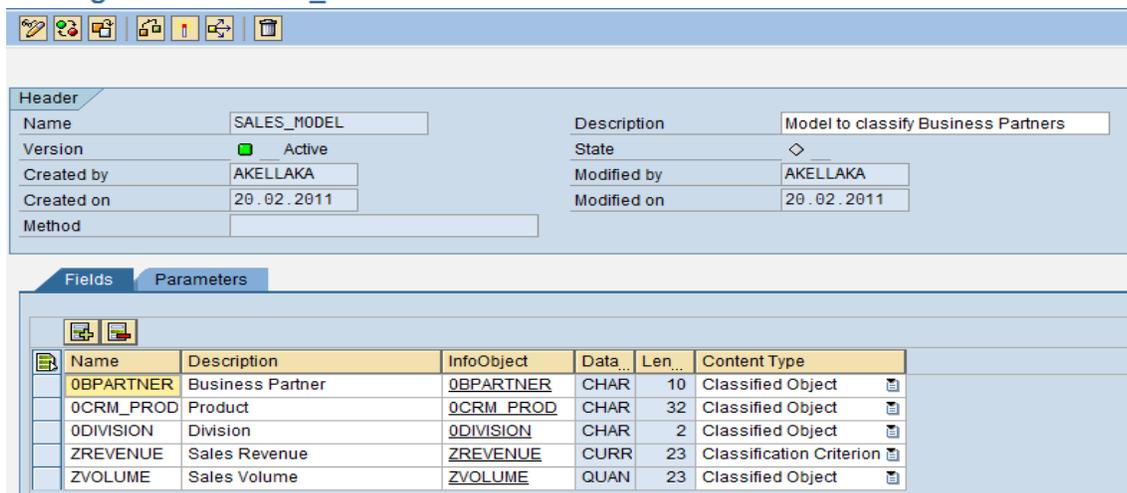
✓ ✗

Select all fields from list of excluded fields to list of selected fields.



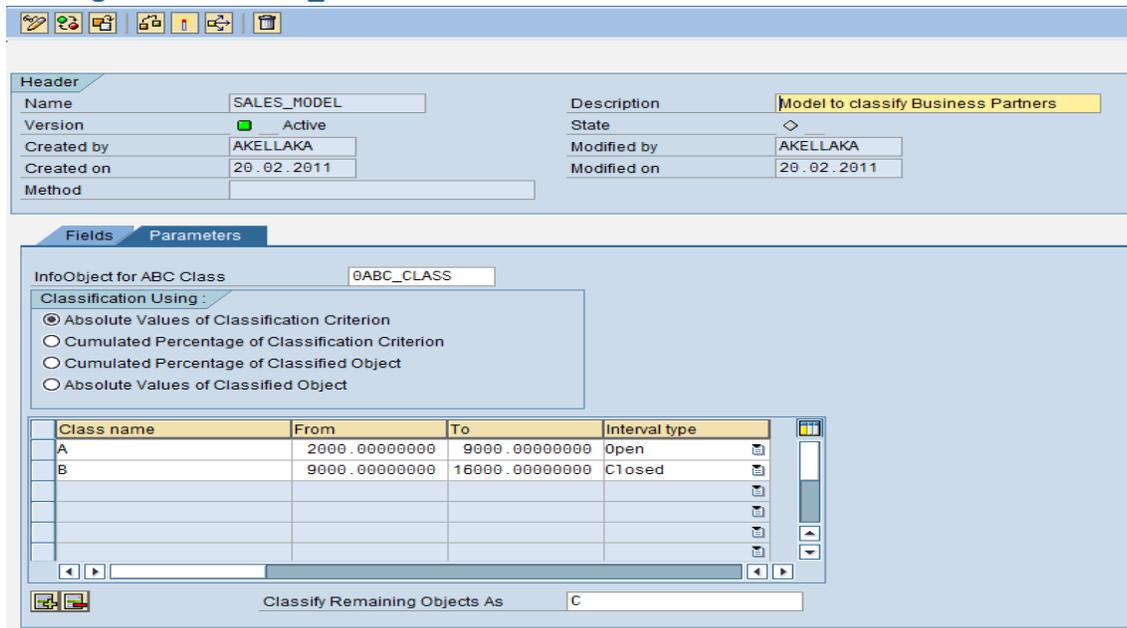
Select sales revenue as classification criterion in fields tab. Business Partners who generate a revenue between 2000 USD and 9000 USD should belong to class 'A'. Those Business Partners who generate a sales revenue between 9000 USD and 16000 USD should belong to class 'B'. All the other Business Partners should belong to class 'C'. These conditions must be specified in Parameters tab. Now, check and activate the model. The screenshot of the model's fields tab is given below:

**Change Model SALES\_MODEL**



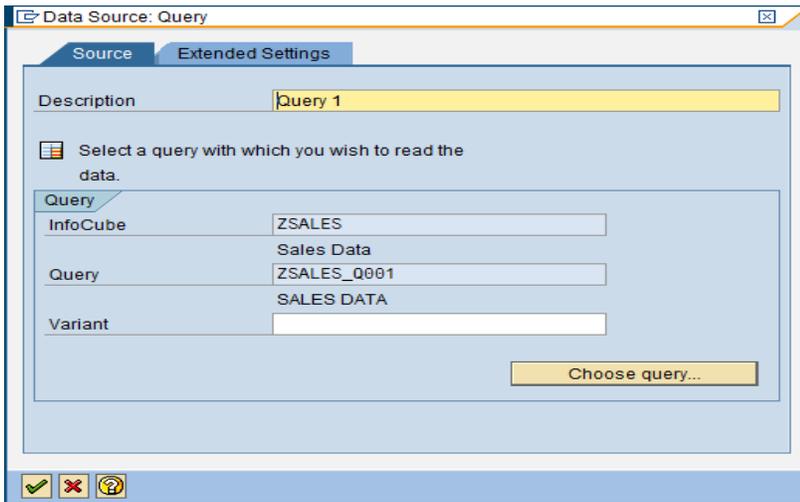
The screenshot of Model's Parameters tab is given below:

**Change Model SALES\_MODEL**

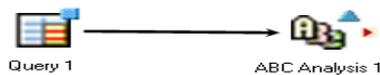


Now, create an analysis process using the transaction 'RSANWB'. The query that is built on the sales cube should be the source, the ABC classification model (created above) should be the transformation and target should be 0BPARTNER infoobject. The attribute that receives the result is 0ABC\_CLASS infoobject of BW.

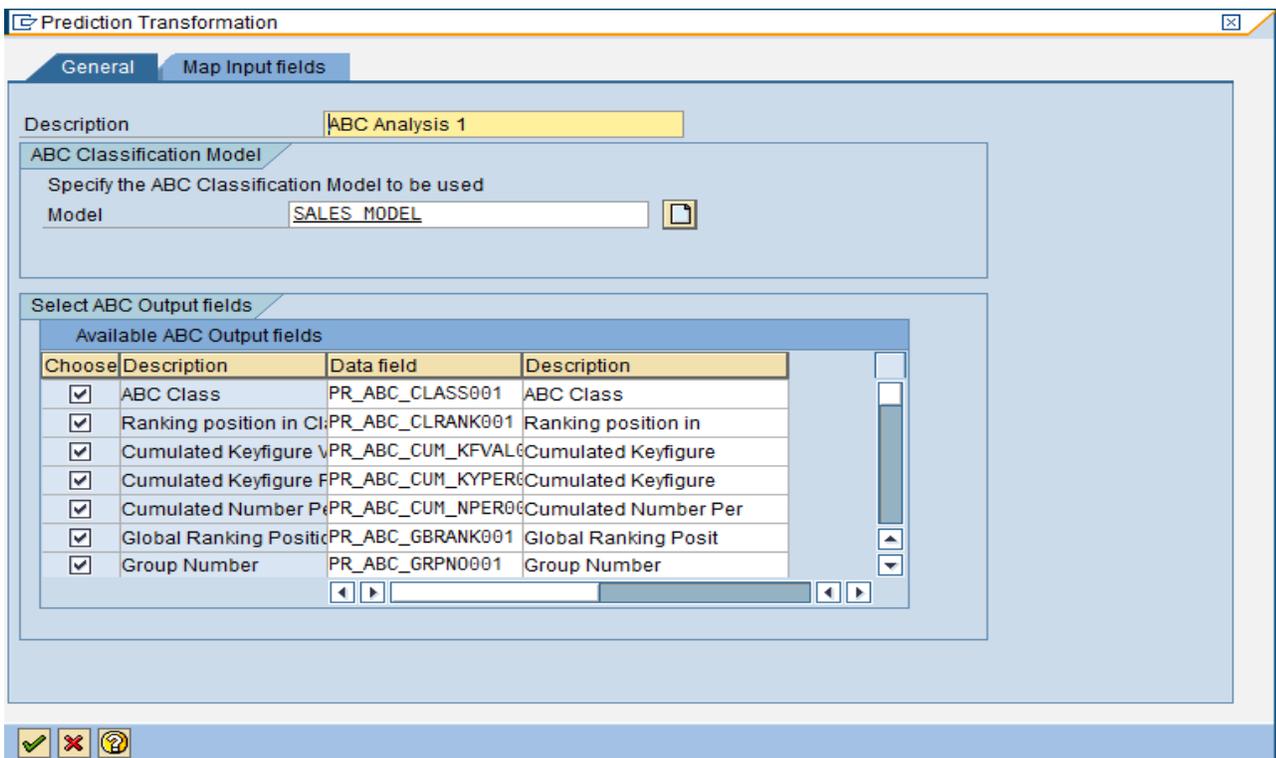
Choose the above created query as data source. The screen shot is given below:



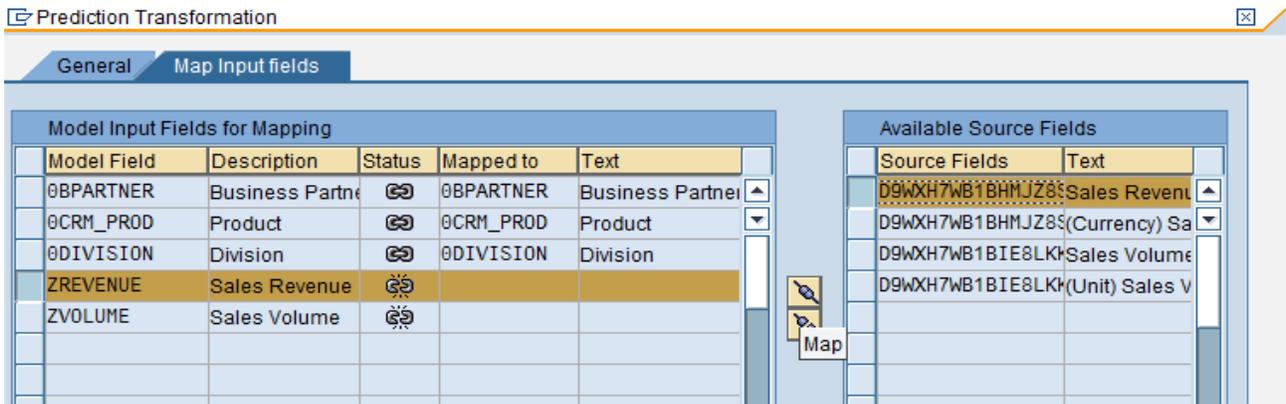
The source is the query, drag transformation as the ABC Classification. The screenshot looks as follows:



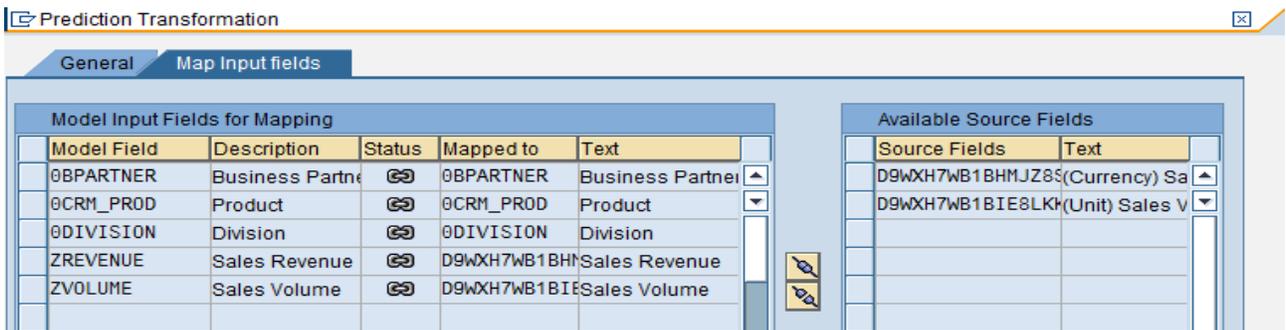
Double click on the ABC Classification model which was shown above and give the model name as 'SALES\_MODEL' which was created above. The screen shot is given below:



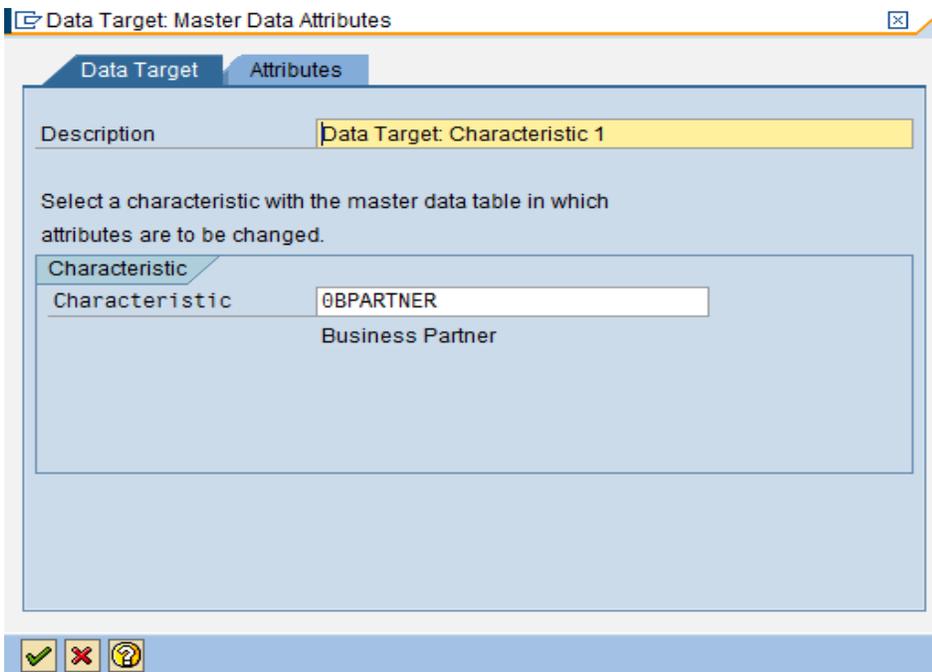
Now, map the input fields accordingly by clicking on map symbol. The screenshot for mapping Sales Revenue is given below:



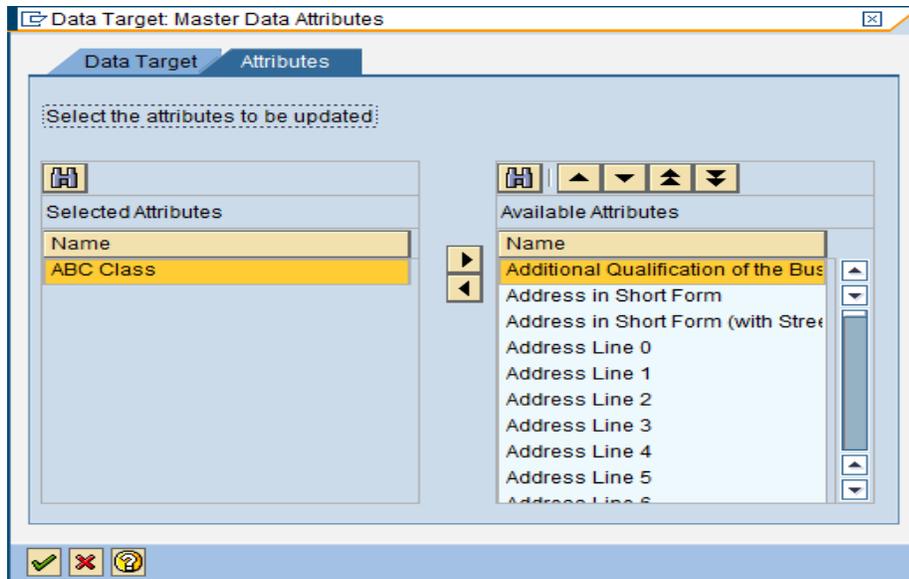
Similarly, map Sales Volume and the screenshot after all the mappings are done is given below:



The datatarget is the 0BPARTNER infoobject. The screenshot is given below:



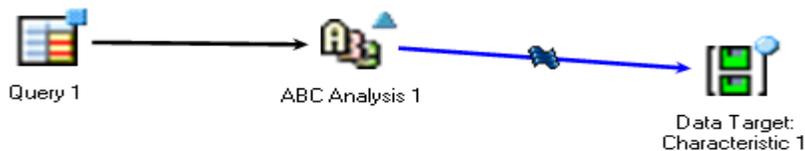
Select the attribute '0ABC\_CLASS' to the selected attributes from the list of available attributes.



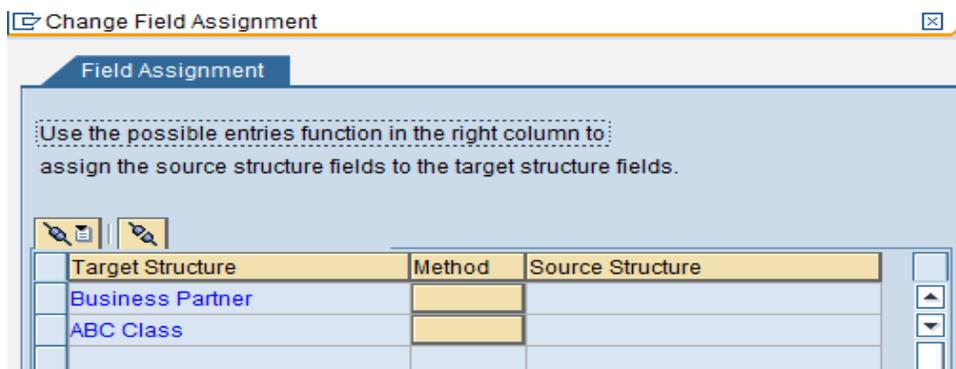
The intermediate screenshot of the analysis process is given below:



Now, set a data flow arrow between the ABC Classification model and the data target to assign the ABC Class 'PR\_ABC\_CLASS001' of the model to the BW attribute 0ABC\_CLASS of 0BPARTNER infoobject. The screenshot is given below:



Double click on the dataflow arrow between ABC Classification model and the datatarget. Initially, no assignments will be present between the source structure and target structure.



Now, assign 0BPARTNER of ABC Classification model to 0BPARTNER infoobject. The screenshot is given below:

**Change Field Assignments: Details**

Target Field: Business Partner  
Field Name: 0BPARTNER

Filled with:

Source Char.

Constant

Initial Value

Now, assign PR\_ABC\_CLASS001 of ABC Classification model to 0ABC\_CLASS attribute of 0BPARTNER infoobject. The screenshot is given below:

**Change Field Assignments: Details**

Target Field: ABC Class  
Field Name: 0ABC\_CLASS

Filled with:

Source Char.

Constant

Initial Value

The final screen looks as follows:

**Change Field Assignment**

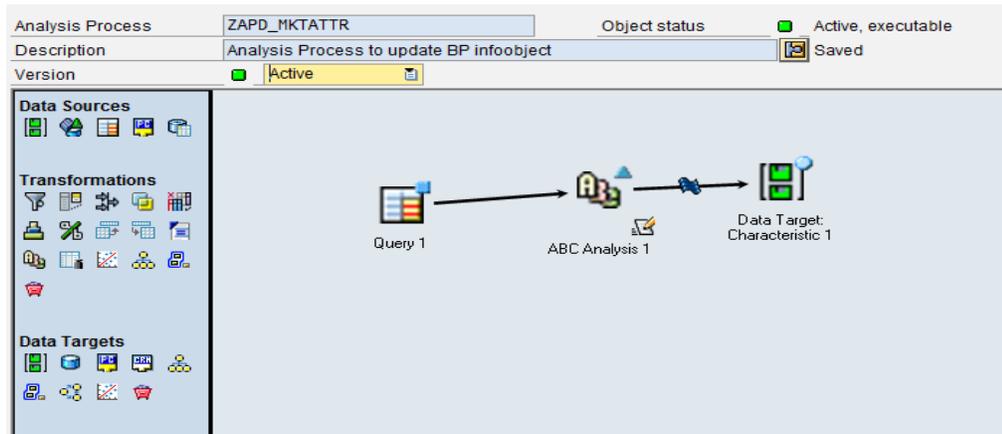
**Field Assignment**

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
Business Partner	←	Business Partner
ABC Class	←	ABC Class

Now, check and activate the analysis process.

Analysis process ZAPD\_MKTATTR has been activated



Execute the above analysis process. The logs are shown below:

Log | Edit | Goto | System | Help

Display logs

Type	Message Text	LTxt
Success	Execute analysis process ZAPD_MKTATTR, version A	
Success	Execute Analysis Process	
Success	Processing started for analysis process ZAPD_MKTATTR	
Success	Source data is being read and the result is being calculated	
Success	10 records were changed in the master data table	
Success	10 data records of characteristic 0BPARTNER were updated	
Warning	Attrib. values for char. 0BPARTNER have been changed. Do not forget to activate	?
Success	Data successfully written to the data target of the analysis process	
Success	Calculation summary for node 2PT_DM_ABC1 has been deleted	
Success	Calculation summary for node 2PT_DM_ABC1 has been saved	
Success	Processing completed successfully for analysis process ZAPD_MKTATTR	

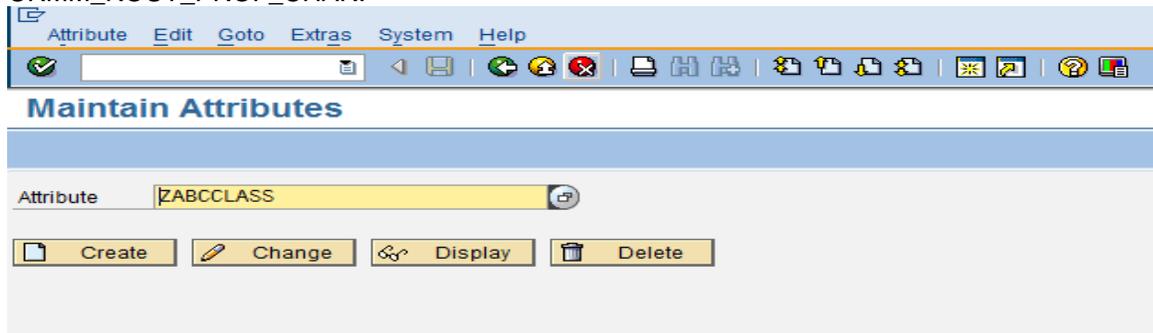
Now, activate the master data of 0BPARTNER infoobject because the attribute values have been changed.

I want to send data of this ABC Class attribute of 0BPARTNER infoobject to CRM. To perform this, first a datatarget should be defined in CRM i.e., a marketing attribute should be created for ABC Class which holds the data that flows from BW. To do this, perform the below mentioned tasks on CRM side.

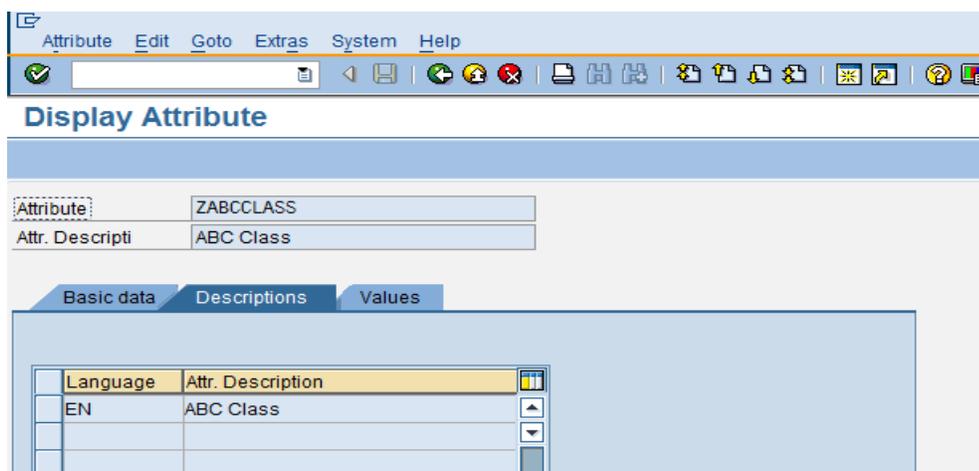
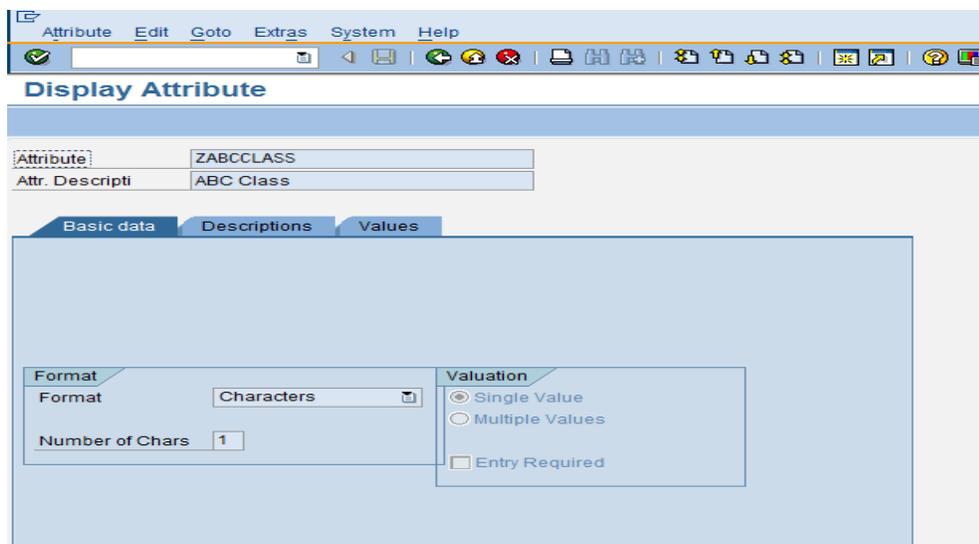
## Steps: CRM Side

### Step 1:

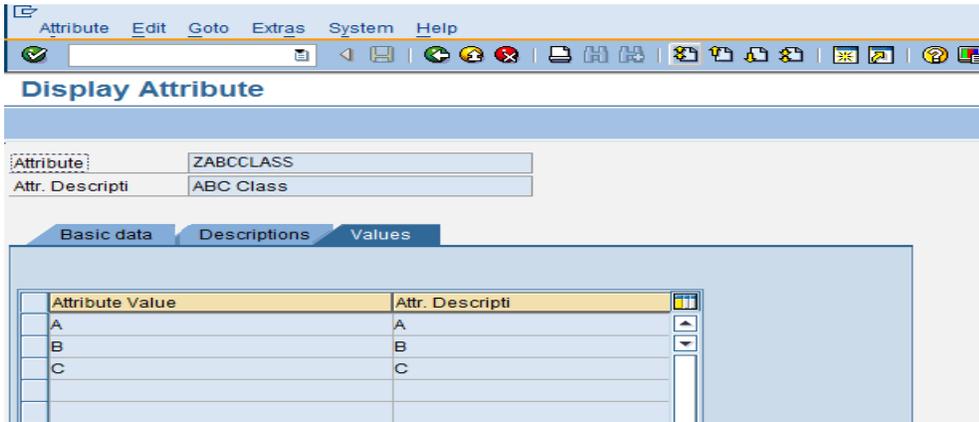
Create in SAP CRM a marketing attribute 'ZABCCCLASS'. Transaction Code to create an Attribute is: CRMM\_ROUT\_PROF\_CHAR.



Give description for the attribute and number of characters as '1'. The screenshots are given below:

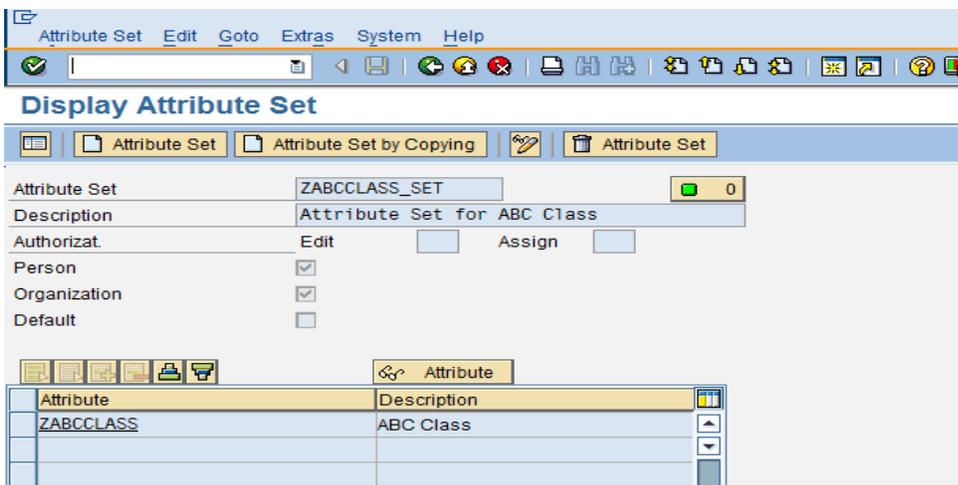


Specify the attribute values and attribute descriptions in 'Values' tab. The corresponding screenshot is given below:



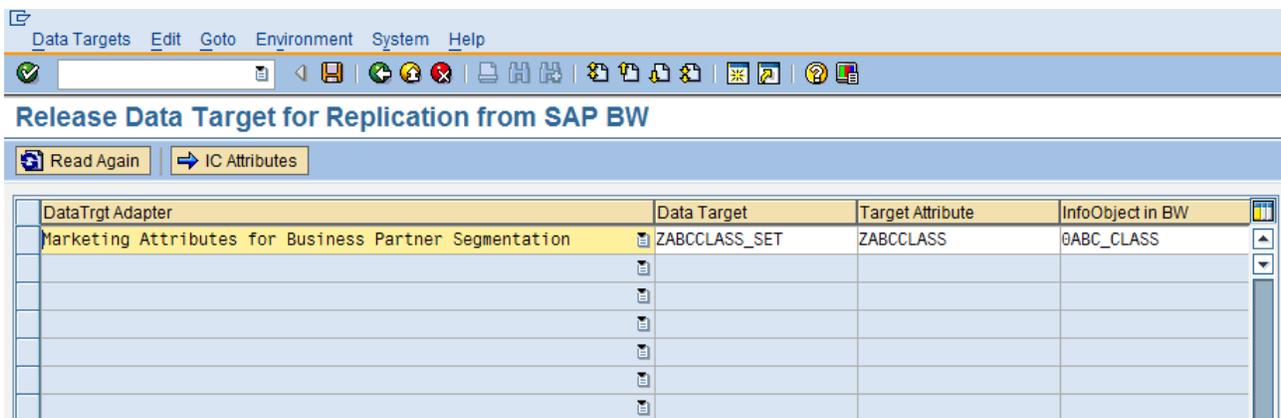
**Step 2:**

Assign the above created marketing attribute to an attribute set 'ZABCCLASS\_SET'. Transaction Code to create an Attribute set is: CRMD\_PROF\_TEMPL.



**Step 3:**

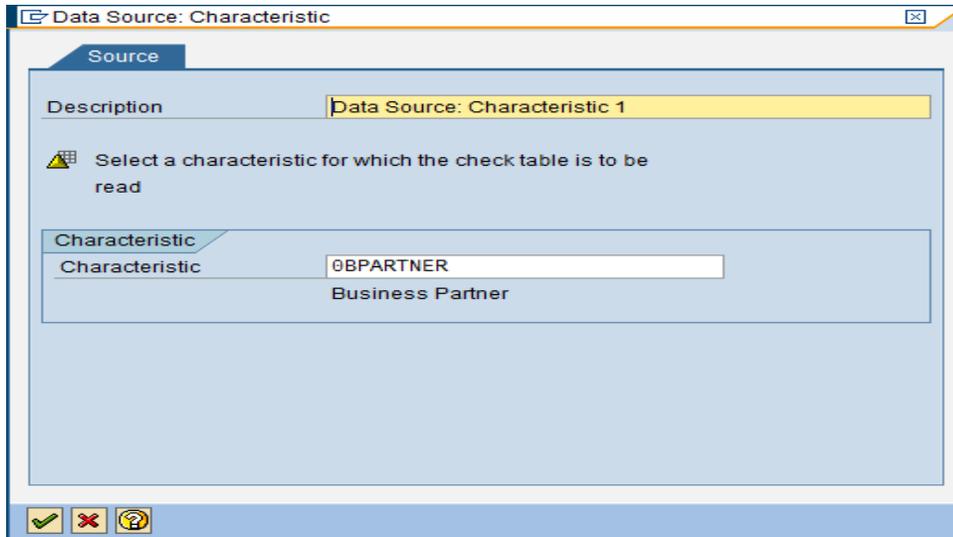
Define the marketing attribute 'ZABCCLASS' as a data target in Customizing for SAP CRM. To do this follow the path: SPRO -->Integration with Other mySAP Components -->Data Transfer from SAP Business Information Warehouse -->Release Data Targets for Replication from SAP BW or use CRMBWTARGETS transaction code.



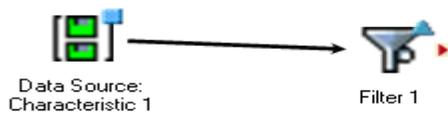
To perform this, we should have authorization for the authorization object C\_CRMBWTGT.

## Analysis Process to Update CRM Marketing Attribute

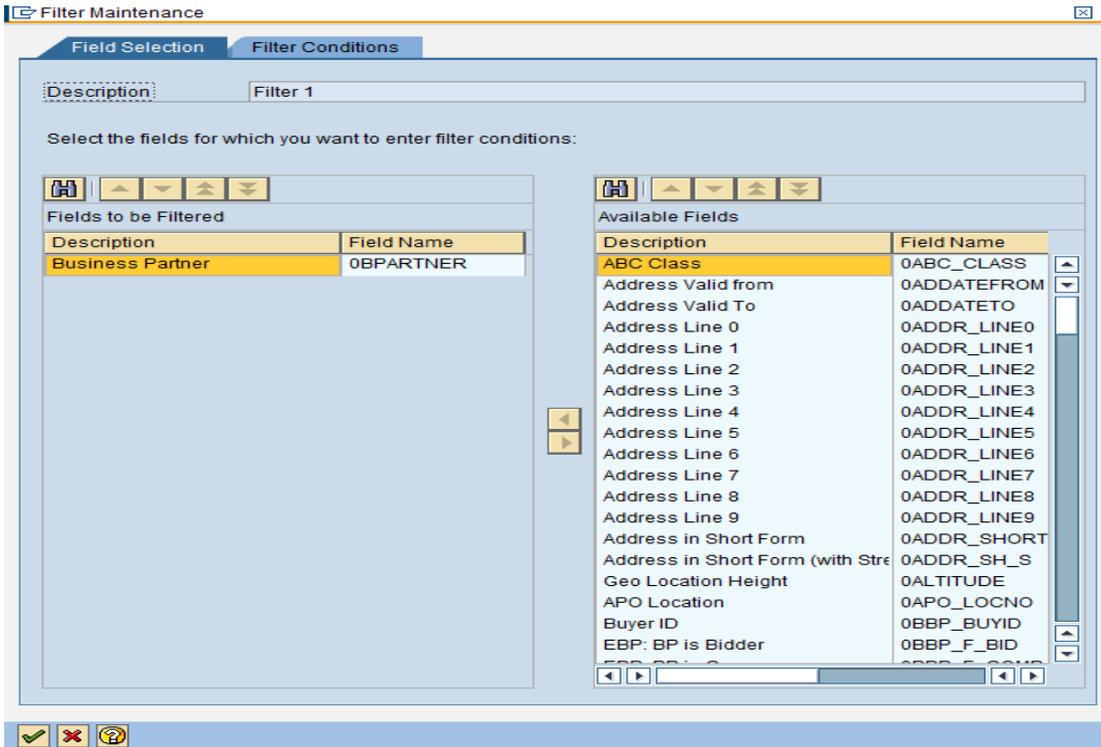
Now model an *analysis process* for transferring data from attribute (OABC\_CLASS) of 0BPARTNER to CRM attribute (ZABCCCLASS). To achieve this, create the analysis process with source as 0BPARTNER infoobject, transformation of the type *Filter* so that the business partners to be read are restricted, Data target of the type *CRM* with selection of the data target that is defined in step 3(above). You set a data flow arrow between the filter and the data target to assign the BW attribute OABC\_CLASS to the marketing attribute ZABCCCLASS that is created. The screenshot for the datasource is given below:



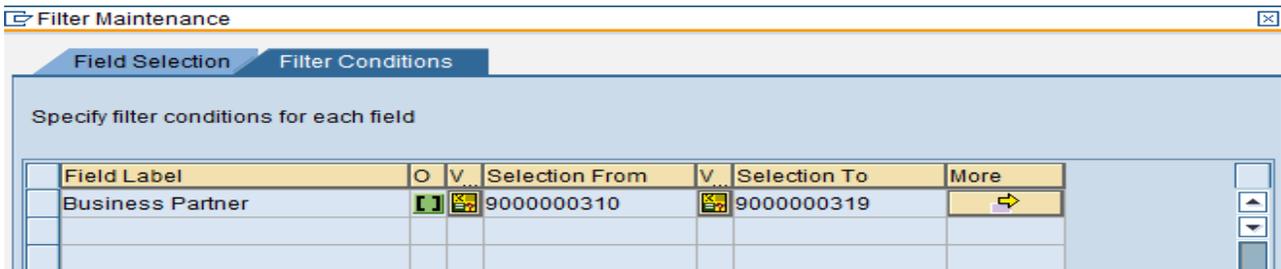
The transformation is of the type *Filter* to restrict the business partners to be read. The corresponding screenshot is given below:



Now, double click on the filter to restrict the business partners and select the field to be filtered as 0BPARTNER. The screenshot is given below:



Specify the filter condition as those business partners who range from 9000000310 to 9000000319. This is just an arbitrary condition, we can specify any condition like business partners of a specific country etc.

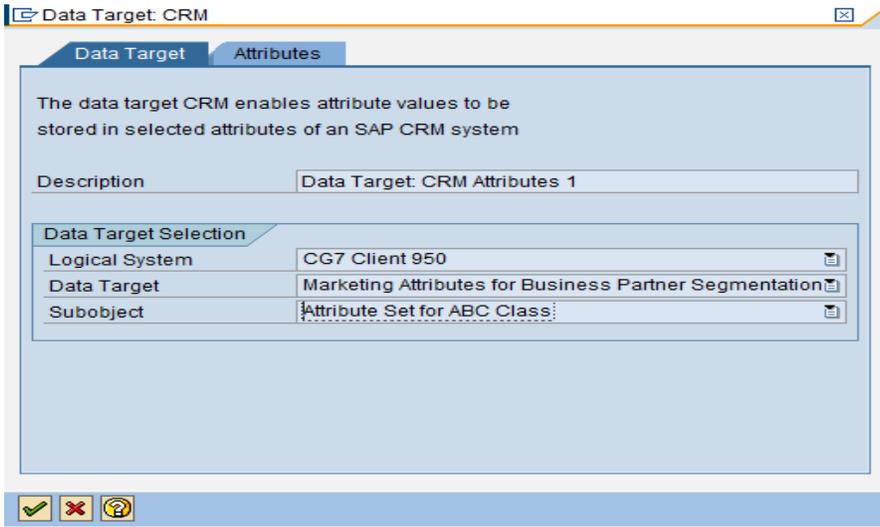


Data target should be of the type CRM with selection of the data target that was defined previously.

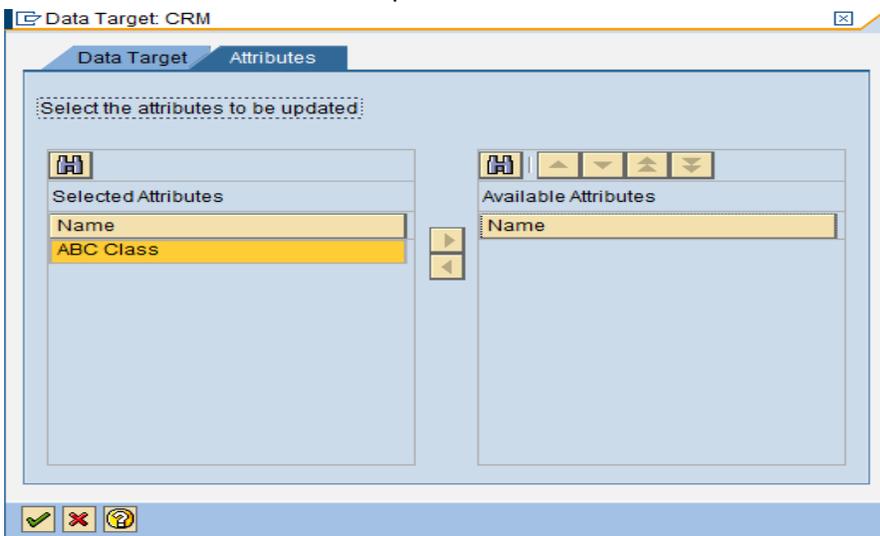
Select the datatarget as 'Marketing Attributes for Business Partner Segmentation' and the subobject should be the attribute set created in step2. The attribute defined above are available as data targets.

The screenshots are given below:

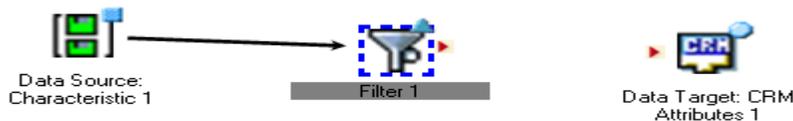




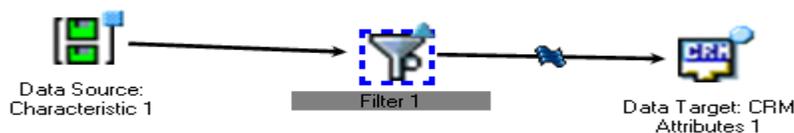
Select the attribute created in step1 from list of Available Attributes to the Selected Attributes.



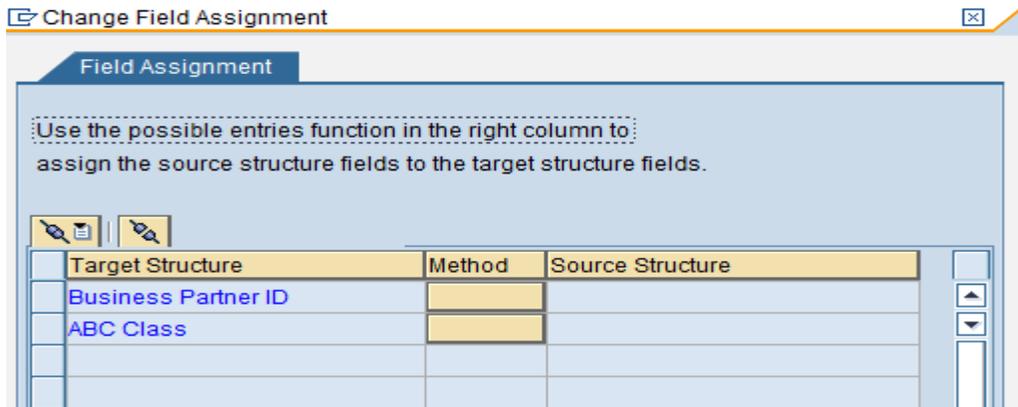
The intermediate screenshot of the analysis process is given below:



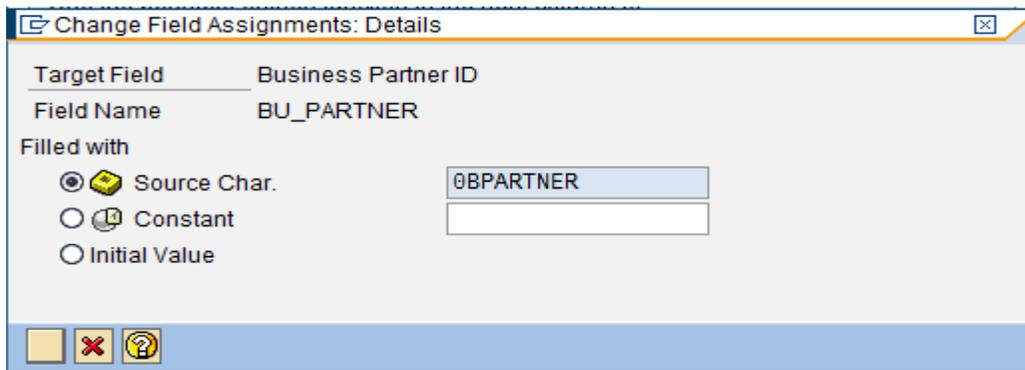
Now, set a data flow arrow between the filter and the data target to assign the BW attribute *ABC Class* for the attribute *0BPARTNER* to the marketing attribute *ABC Class* that you created. The screenshot looks as follows:



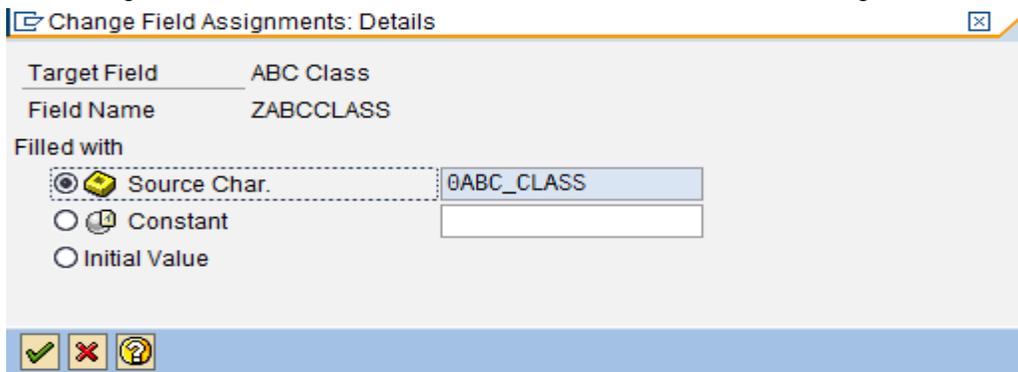
Double click on the dataflow arrow between the filter and the datatarget. Initially, no assignments will be present between the source structure and target structure.



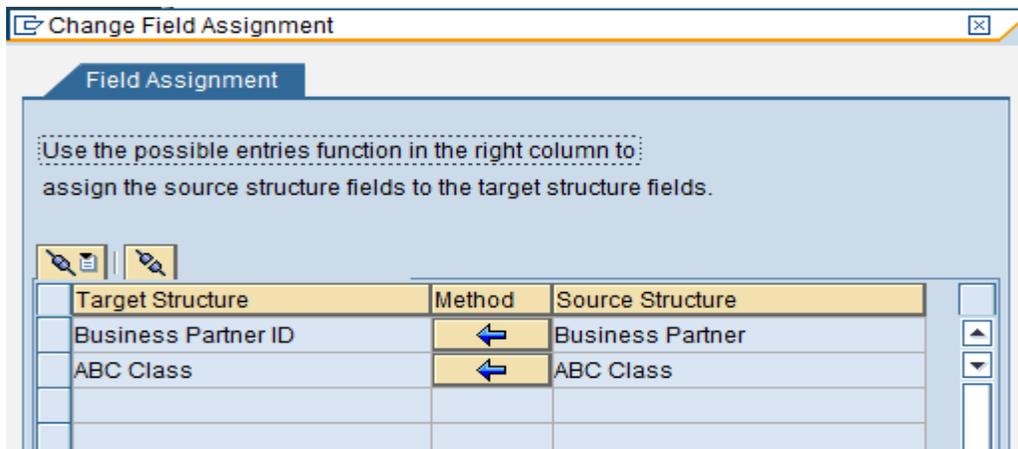
Now, assign 0BPARTNER of the source to the target field Business Partner ID. The screenshot is given below:



Now, assign 0ABC\_CLASS of the source to ZABCCCLASS attribute of target. The screenshot is given below:

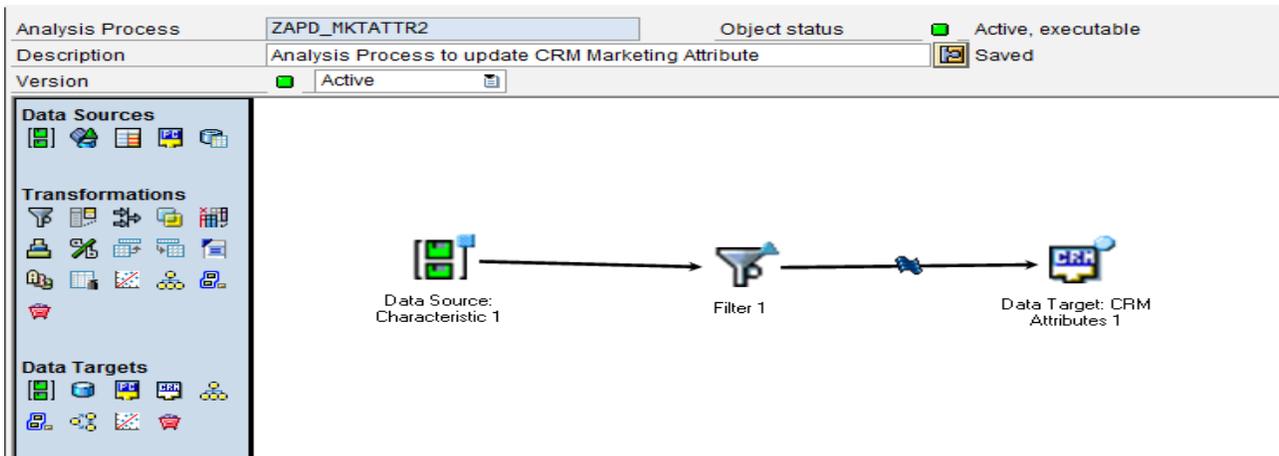


The final screen looks as follows:



Now check and activate the analysis process.

 Analysis process ZAPD\_MKTATTR2 has been activated



Analysis Process: ZAPD\_MKTATTR2      Object status: Active, executable  
 Description: Analysis Process to update CRM Marketing Attribute      Saved  
 Version: Active

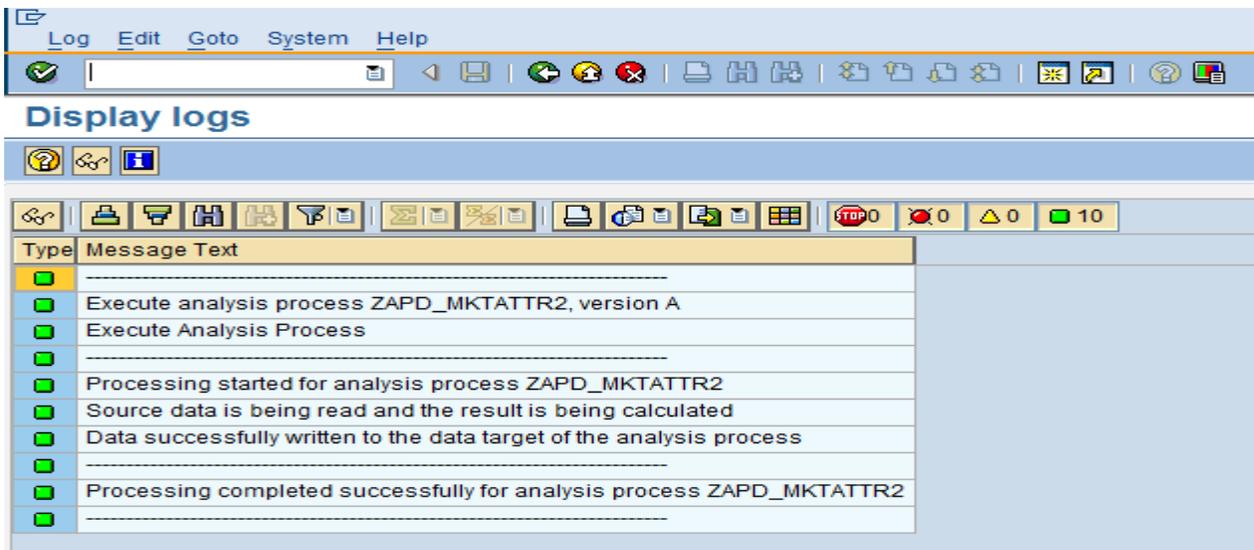
**Data Sources**

**Transformations**

**Data Targets**

Diagram: Data Source: Characteristic 1 → Filter 1 → Data Target: CRM Attributes 1

Execute the above analysis process. The logs are shown below:



Log   Edit   Goto   System   Help

### Display logs

Type	Message Text
	Execute analysis process ZAPD_MKTATTR2, version A
	Execute Analysis Process
	Processing started for analysis process ZAPD_MKTATTR2
	Source data is being read and the result is being calculated
	Data successfully written to the data target of the analysis process
	Processing completed successfully for analysis process ZAPD_MKTATTR2

The data is transferred from SAP BW into the CRM attribute ZABCCLASS which we have created. An assignment will be made automatically between the attribute ZABCCLASS and the business partners on CRM side.

## Result

For example in BW, the Business Partner 9000000318 is determined as class 'B'. The screen shot is given below:

Characteristic 0BPARTNER - maintain master data: List

Business P ABC Class Address Li Add. in Sh Add. in Sh

9000000318	B													
------------	---	--	--	--	--	--	--	--	--	--	--	--	--	--

Now, Goto CRM webclient by typing the transaction code 'CRM\_UI' in the entry bar. Logon to the SAP Web Application Server and select a business role. Search for Business Partner '9000000318' and the screen looks as follows:

Search: Contacts

Search Criteria

Last Name is  
 First Name is Akella  
 Employee Responsible ID is  
 Account Name is

Maximum Number of Results 100

Search Clear Save Search As Save

Result List: 1 Contact Found

ID	Name	Function	Standard Relationship	Account	E-Mail	Phone
9000000318	Akella Kameswari					

Open the Business Partner 9000000318, you can find that the business partner is assigned to the attribute 'ZABCCCLASS' and data of ABC class attribute 'ZABCCCLASS' is updated as 'B'. The corresponding screen shot is given below:

Contact: Akella Kameswari

Save | X Cancel | New | Show Duplicates

Opportunities No result found

Relationships No result found

Marketing Attributes Edit List

Actions	Attribute Set	Attribute	Value
	Attribute Set for ABC Class	ABC Class	B

Interaction History

Change History

Associated VARs to End User contact

We can also check this in Marketing Attributes tab of BP transaction. The data is transferred from SAP BW into the CRM attribute which we have created. This technique can be used to update any CRM marketing attributes.

## Related Content

[Analysis Process Designer](#)

[CRM Attributes](#)

[Transferring Attribute Data from SAP BW](#)

For more information, visit the [EDW homepage](#)

## Disclaimer and Liability Notice

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