Step by Step on Changing ECC Source Systems without Affecting Data Modeling Objects in SAP BW

Applies to:
SAP ECC 6.00 and SAP BW 7.0 releases. For more information, visit the Business Intelligence homepage.

Summary
This paper gives a detail understanding of the steps to follow for changing ECC source systems on SAP BW environment without impacting the Data modeling objects built in the SAP BW system.

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Introduction

In SAP BW Implementation Projects we might encounter certain scenarios where SAP BW systems may need to connect to different ECC Source Systems during the Integration Testing phase of the project without affecting the data modeling objects in the BW environment. This document is a step by step procedure for switching source systems.

Scenario

The scenario discusses about switching ECC source systems in SAP BW Environment without affecting the data modeling objects in the BW environment. By data modeling objects, we mean transformations, update rules and transfer rules getting inactive or getting deleted. Once the source system is switched, data reload needs to happen to have the initializations and deltas to come from the new source system. Also we have to ensure that the data from old source system (both transactional and master) needs to be deleted in the BW system before reloading from the data from new source system to ensure consistency in the data from new system.
Step By Step Procedure

The environments discussed in the current context are BW system (BWQ Client 200) and ECC systems (ECQ Client 180 and ECQ Client 170). We will discuss the scenario of switching ECC source system ECQ Client 180 to ECQ Client 170 on BWQ Client 200 System.

Step 1:
In Transaction BDLS on BW system logical names of the source system need to be changed. In the ‘Old Logical System Name’ field, enter the existing source system ‘ECQCLNT180’ and in the ‘New Logical System Name’ field enter the new source system that we want to change to which is ‘ECQCLNT170’. Execute the run for this transaction in background to change the source systems.
The above step would change the source system name in the BW system. We now need to setup the connection for the new source system.

You can now see that the Technical Name of the source system got changed from ECQCLNT180 to ECQCLNT170.
Step 2:
In the next step, we need to open the BW system for change access by going to the transaction SCC4.

Select the option ‘Changes to Repository and cross-client Customizing allowed’ option for ‘Cross-Client Object Changes’ and click on save button to save the changes.

Step 3:
In the next step on the BW environment, go to Transaction SE37 and select the function module RSAP_BIW_DISCONNECT and execute.
Provide the following entries as inputs for the function module.

- RFC target sys -> Name of the RFC which the old source system used.
- I_BIW_LOGSYS -> Logical name of the BW Client. (BWQCLNT200)
- I_OLTP_LOGSYS -> Logical name of the old ECC Client. (ECQCLNT180)
- I_FORCE_DELETE -> X.

The following step would delete the entries needed for the source system change in the table RSBASIDOC.

### Test Function Module: Initial Screen

- **Test for function group**: RSAG
- **Function module**: RSAP_BIW_DISCONNECT
- **RFC target sys**: ECQCLNT180

<table>
<thead>
<tr>
<th>Import parameters</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>I_BIW_LOGSYS</td>
<td>BIOCLNT180</td>
</tr>
<tr>
<td>I_OLTP_LOGSYS</td>
<td>ECOCLNT180</td>
</tr>
<tr>
<td>I_FORCE_DELETE</td>
<td>X</td>
</tr>
</tbody>
</table>
Also we need to execute the same function module in old ECC source system with the same inputs to delete the entries needed for the source system change. In this context we are executing the function module in ECC source system Client 180. Ensure that the table entries for the BW system are deleted in Table RSBASIDOC.
Step 4:

In the next step, open the client for changes using transaction SCC4 in the new source system which is ECQ Client 170 using the same procedure described for BW environment above.

Change the RFC connections from Client 180 to 170. You can do so in transaction SM59.
Step 5:

In the next step, in the BW environment go to RSA1 to restore the connection for ECQCLNT170 system.

Enter ALEREMOTE username and password for this procedure.
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Data Warehousing Workbench: Modeling

RFC Destination BIQCLNT200

Target System Settings

Gateway Options
Step 6:

In the next step do the check and use connections. After that replicate the source system objects.

This job can be executed in the background if it has to replicate lot of data sources.
Check to see if the partner profiles are active in WE20 transaction if you face any error during the replication Process.
Step 7:

In the next step select ‘Yes’ for reactivating all transfer structures and data sources.

With this step the source system switch is finished. Close the BW system and new ECC source system for any changes by using the transaction SCC4 as described in the previous steps.

Do a final check of the source system by right click on source system and select option ‘Check’ to see if the source system is correctly mapped. After this you can start loading the data from the new source system. But remember to delete all the data from the BW system concerning the old ECC source system otherwise you might see inconsistent data in the new BW system.
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Datawarehouse Management
http://help.sap.com/saphelp_nw04s/helpdata/en/e3/e60138fede083de10000009b38f8cf/frameset.htm
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