

ALE Settings, for Communication between a BW System and an SAP System



Applies to:

SAP ECC 6.0. For more details, visit the [EDW homepage](#).

Summary

This document helps people to create ALE settings, which are needed for the communication between a BW System and an SAP System (ECC), are created in the background with the use of the created destinations.

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Created on: 04 April 2011

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Why ALE Setting needed?

The ALE settings, which are needed for the communication between a BW System and an SAP System (ECC), are created in the background with the use of the created destinations. These settings are made in BW as well as in the source system (ECC). The BW settings for the new connection are created in BW.

If the new SAP source system has been created, Metadata is requested automatically from the source system.

Procedure

There are two different ways of establishing the connection with source system.

- Creating an SAP Source System Manually
- Creating an SAP Source System Automatically

Step by Step Guide for Creating ALE Connection

List of transaction codes, needs to be used.

- SU01 → Maintain user
- SALE → Display ALE Customizing
- RSA1 → Modeling - DW Workbench

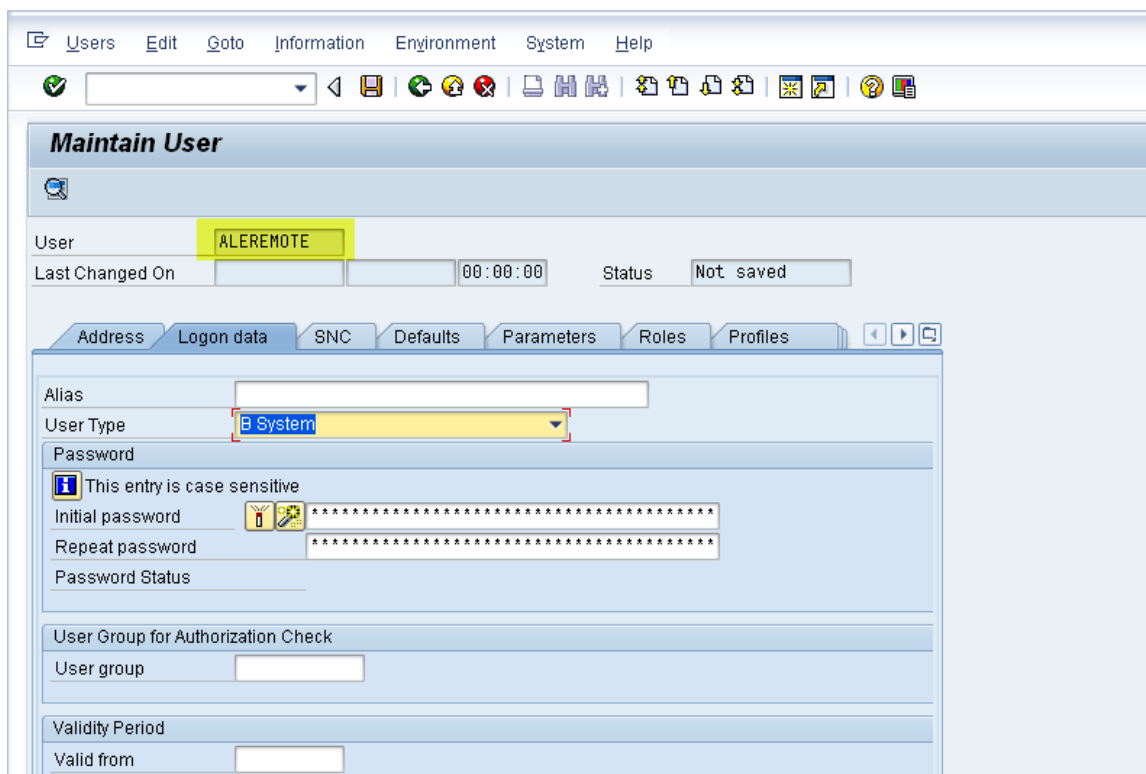
Step 1:

Below steps needs to be carried out in the SAP BW System.

Go to transaction code **SU01**, and create the following two users with the credentials that are shown in the below screen capture.

Below is the log in credentials for the users that needs to be created in BW system.

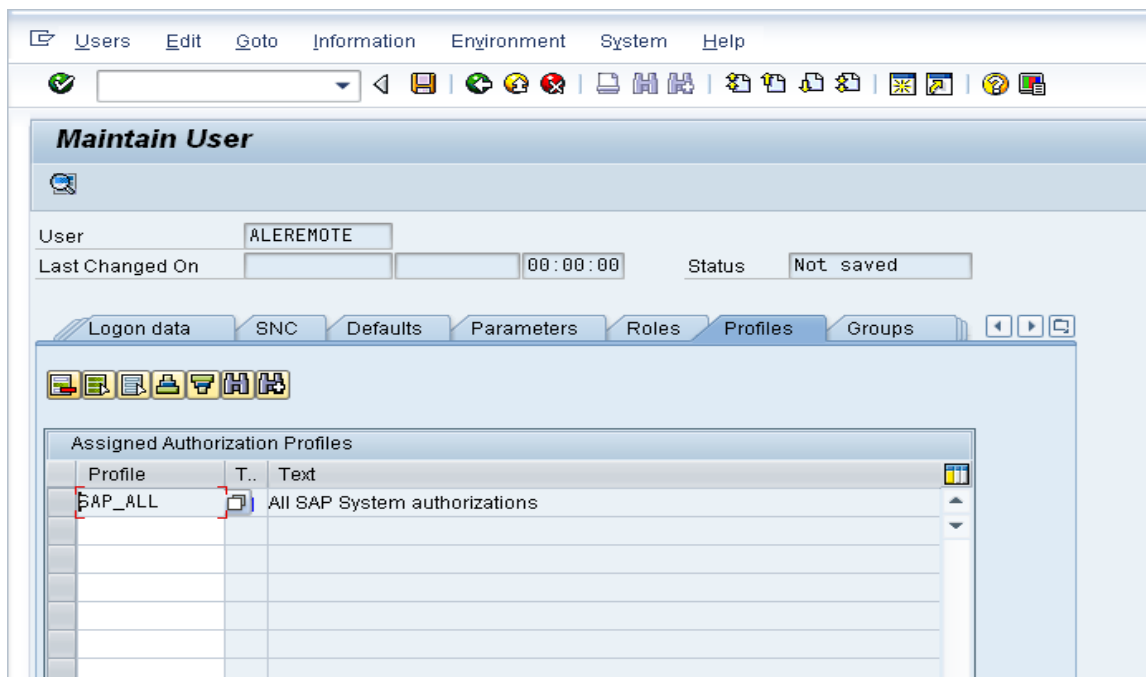
User Name	User Type	Profile
ALEREMOTE	B - System	SAP_ALL
BW_USER	B - System	SAP_ALL



Note: Password should be 8 characters for Unicode enabled system.

Make sure you have SAP all authorization to this back ground user. As shown in below screen capture.

Note: It is not mandatory to have profile SAP_ALL to ALEREMOTE user. You can restrict this user based on authorization.



As stated, create one more user BW_REMOTE, with the same credentials as user ALEREMOTE.

Note: Screen captures for creating BW_REMOTE are not shown. You can refer the above screen capture for creating this user.

Step 2:

Below steps needs to be carried out in the SAP ECC System.

Go to transaction code **SU01**, and create the following users with the credentials that are shown in the below screen capture.

Below is the log in credentials for the users that needs to be created in BW system.

User Name	User Type	Profile
ALEREMOTE	B - System	SAP_ALL

The screenshot shows the 'Maintain User' transaction in SAP. The user name is 'ALEREMOTE'. The 'User Type' dropdown is set to 'System'. The 'Password' section is visible, with a note 'This entry is case sensitive'. The 'User Group for Authorization Check' section is also visible, with the 'User group' field empty.

Note: Password should be 8 characters for Unicode enabled system.

Make sure you have SAP all authorization to this back ground user. As shown in below screen capture.

Note: It is not mandatory to have profile SAP_ALL to ALEREMOTE user. You can restrict this user based on authorization.

The screenshot shows the 'Maintain User' transaction in SAP, focusing on the 'Assigned Authorization Profiles' table. The user name is 'ALEREMOTE'. The table lists the following profile:


Profile	T..	Text
SAP_ALL	<input checked="" type="checkbox"/>	All SAP System authorizations

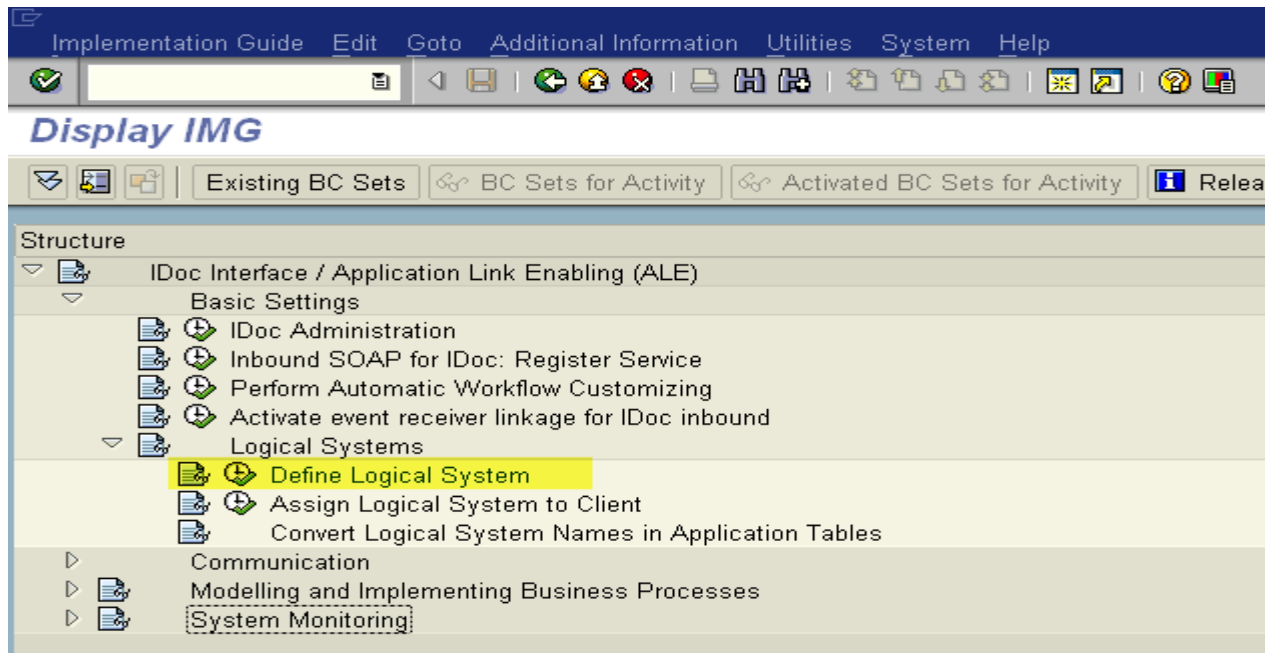
Step 3:

Below steps needs to be carried out in the SAP BW System.

Go to transaction code **SALE**, and define logical system and assign logical system.

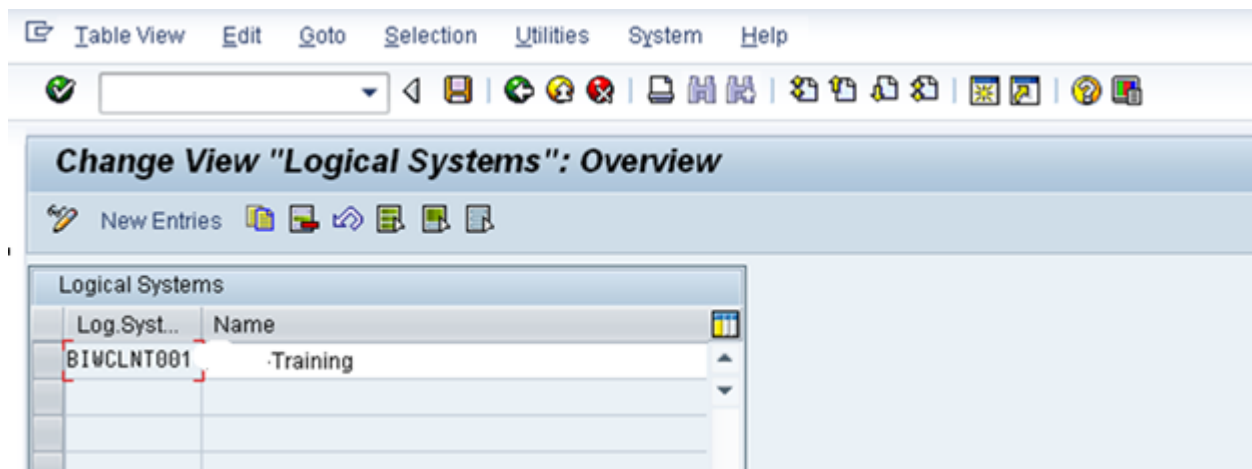
a) Define Logical system.

Path: SALE (transaction code) → IDoc Interface / Application Link Enabling(ALE) → Basic Settings → Logical Systems →  Define Logical systems




Define logical system as BIWCLNT001 and press **SAVE**

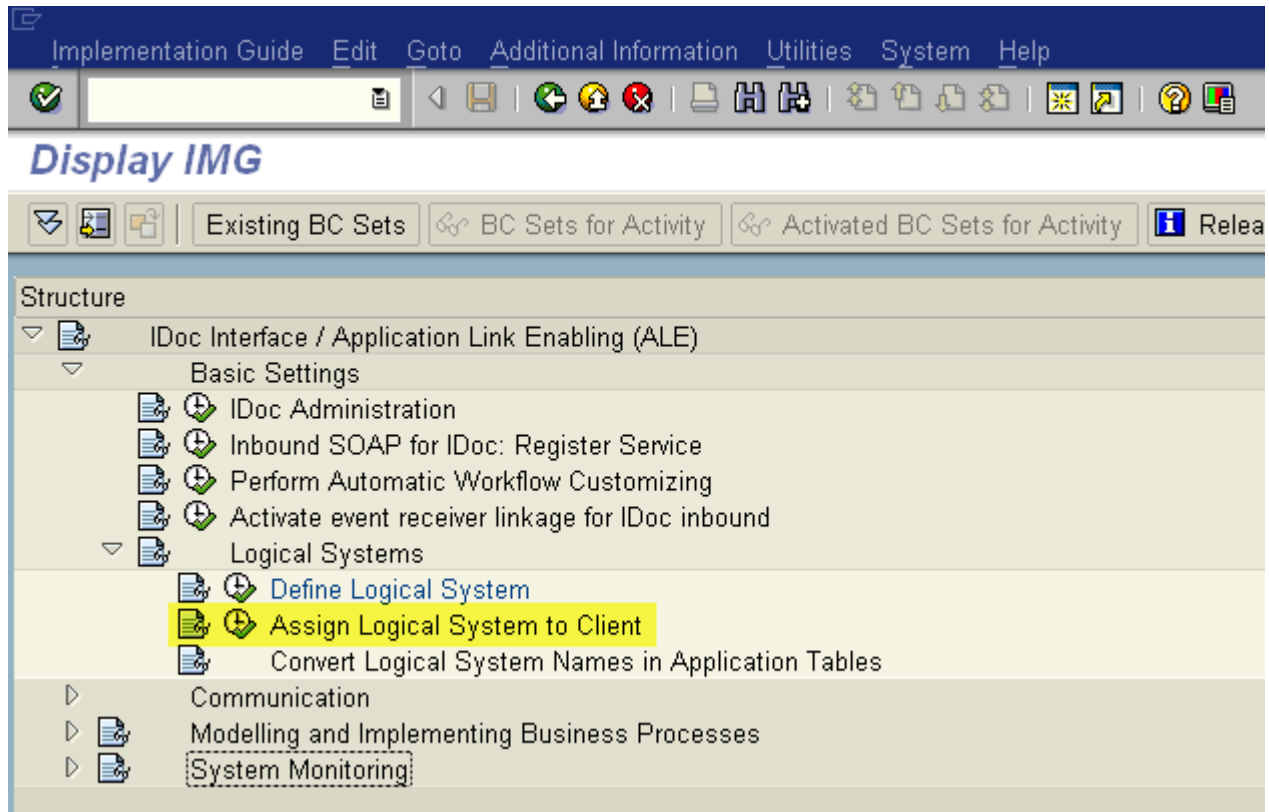
Note: As a best practice follow the naming convention for logical system name as <System ID>CLNT<Client Number>



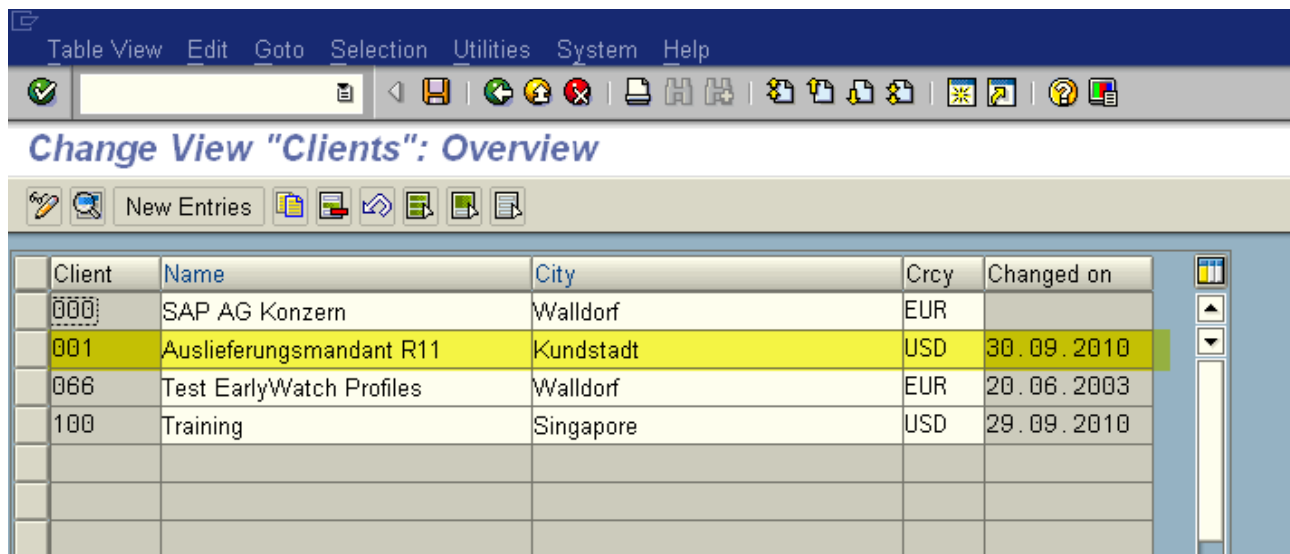
b) Assign Logical system to Client.

Our next step is to assign the logical system to client.

Path: SALE (transaction code) → IDoc Interface / Application Link Enabling(ALE) → Basic Settings → Logical Systems →  Assign Logical system to Client



Just double click on the client, where you want to maintain the logical system name.



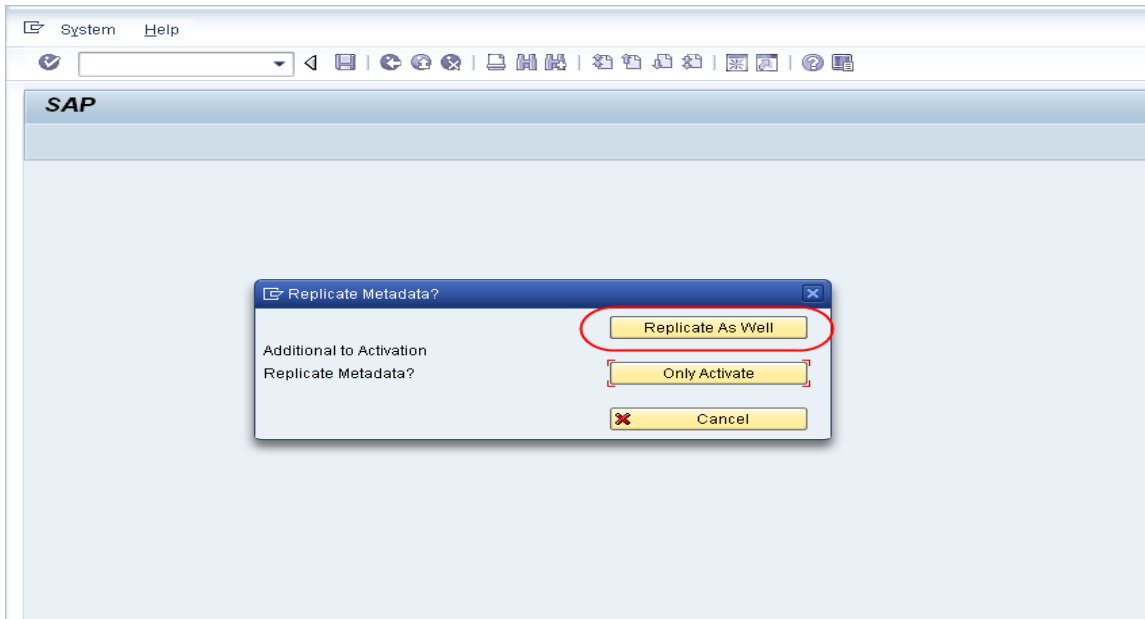
Assign the Logical system name as shown below. Press **SAVE**

Table View Edit Goto Selection Utilities System Help		
Change View "Clients": Details		
New Entries		
Client	001 Auslieferungsmandant R11	
City	Kundstadt	Last Changed By
Logical system	BIWCLNT001	Date
Std currency	USD	
Client role	C Customizing	
Changes and Transports for Client-Specific Objects <input type="radio"/> Changes without automatic recording <input checked="" type="radio"/> Automatic recording of changes <input type="radio"/> No changes allowed <input type="radio"/> Changes w/o automatic recording, no transports allowed		
Cross-Client Object Changes Changes to Repository and cross-client Customizing allowed		
Protection: Client Copier and Comparison Tool Protection level 0: No restriction		
CATT and eCATT Restrictions eCATT and CATT Not Allowed		
Restrictions <input type="checkbox"/> Locked due to client copy		

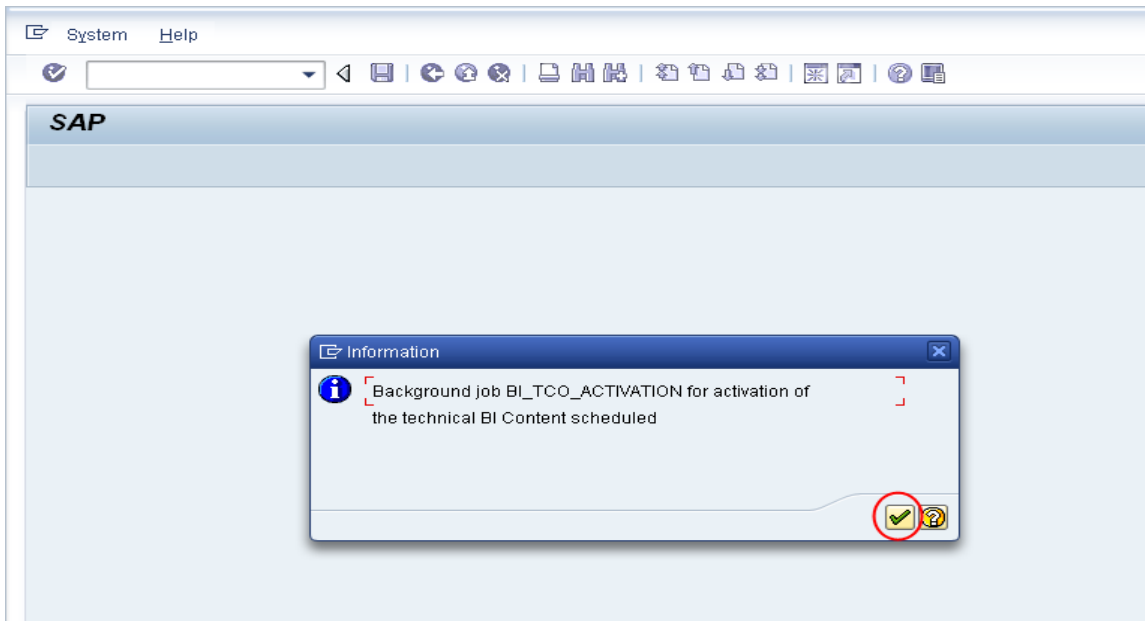
Step 4:

a) Run transaction code RSA1, on the prompt press “Replicate As Well”

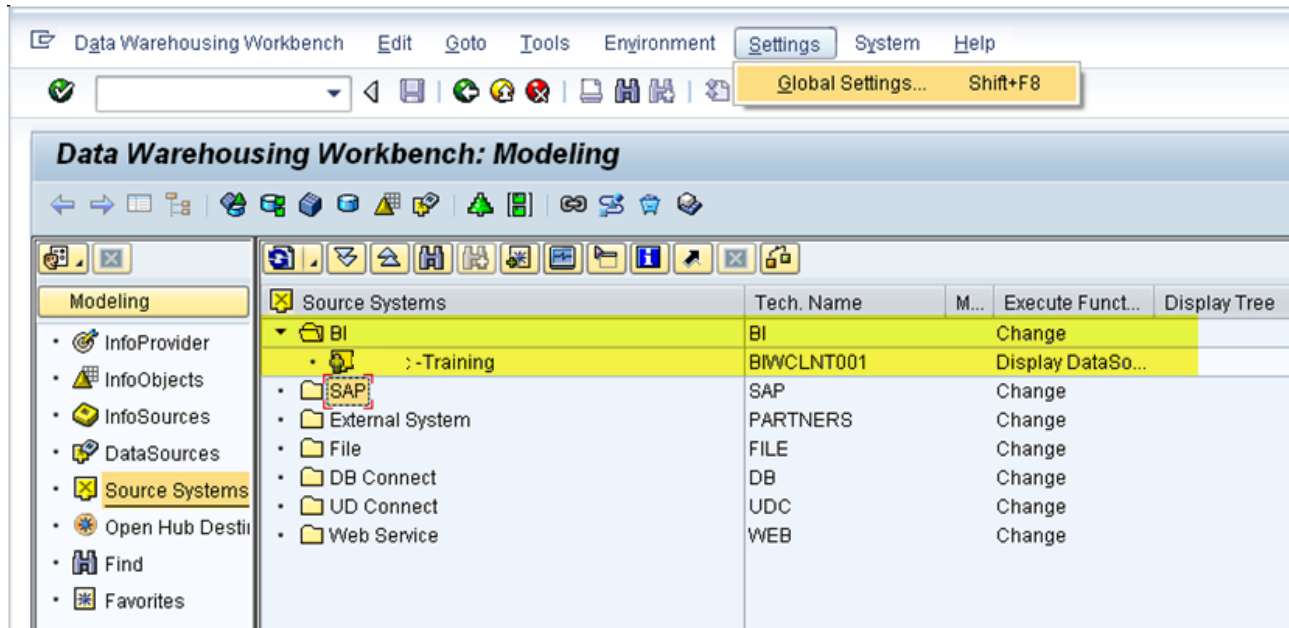
Note: It may take a while to do the replicate.



Press continue.

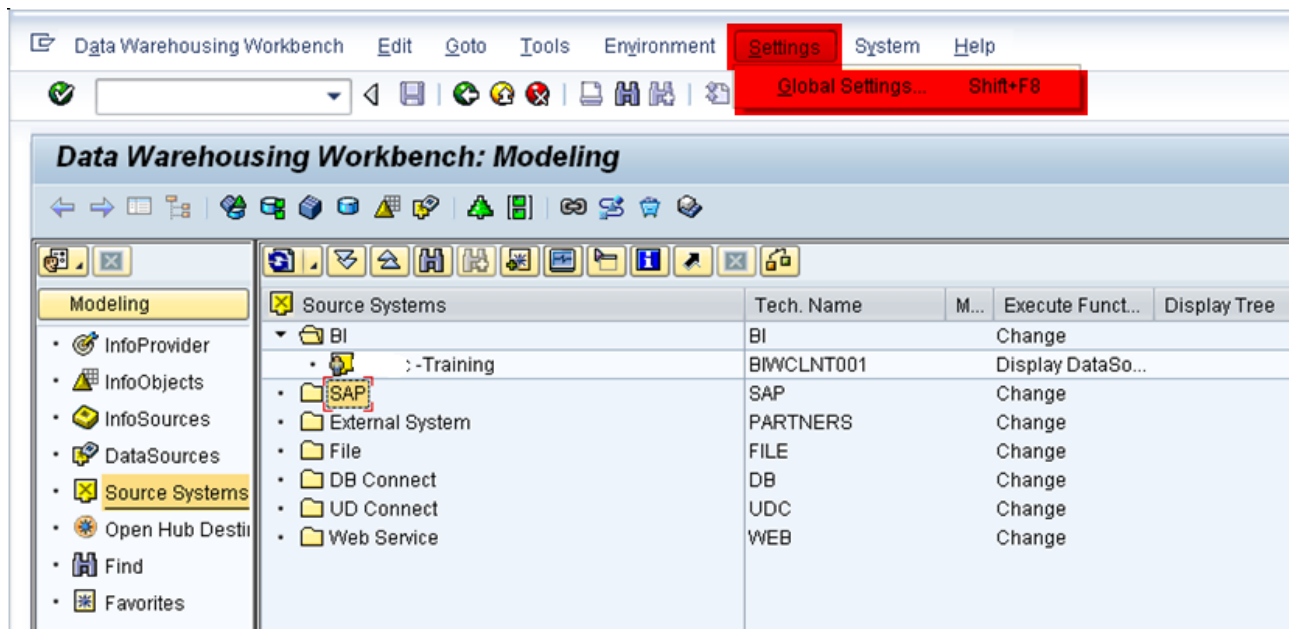


b) After activation you will see the BI source system in the list as shown below.

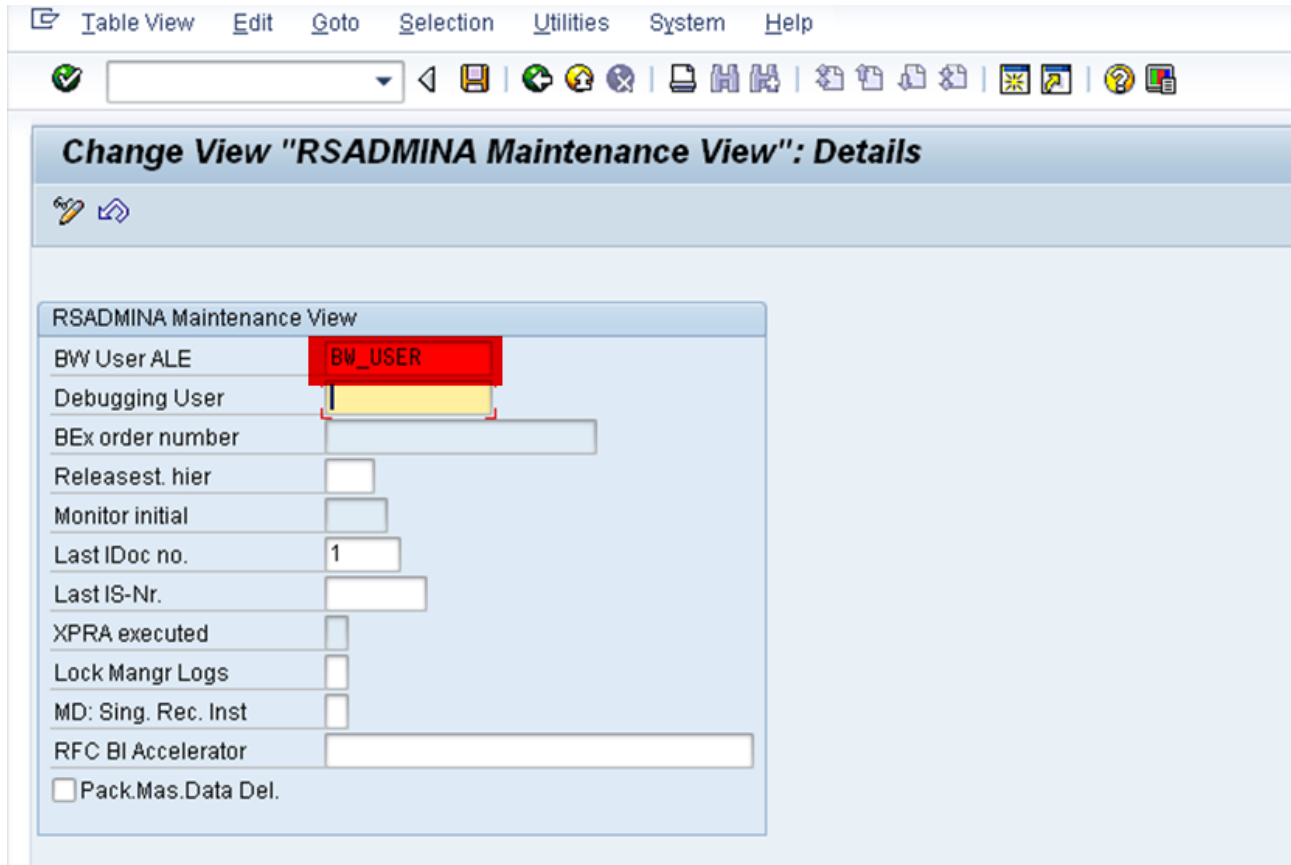


c) Next step is to do the global settings in RSA1.

From menu options, Settings → Global Settings



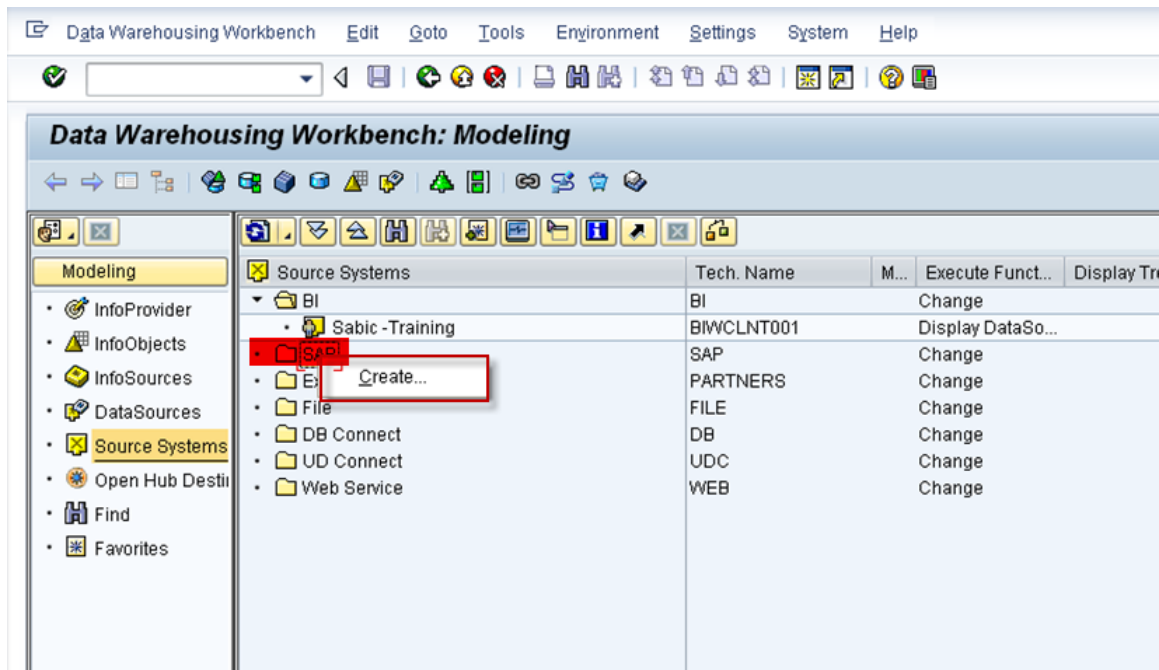
Maintain the BW User ALE as BW_USER which has been created in Step 1.



Step 5:

Re-run the transaction code RSA1.

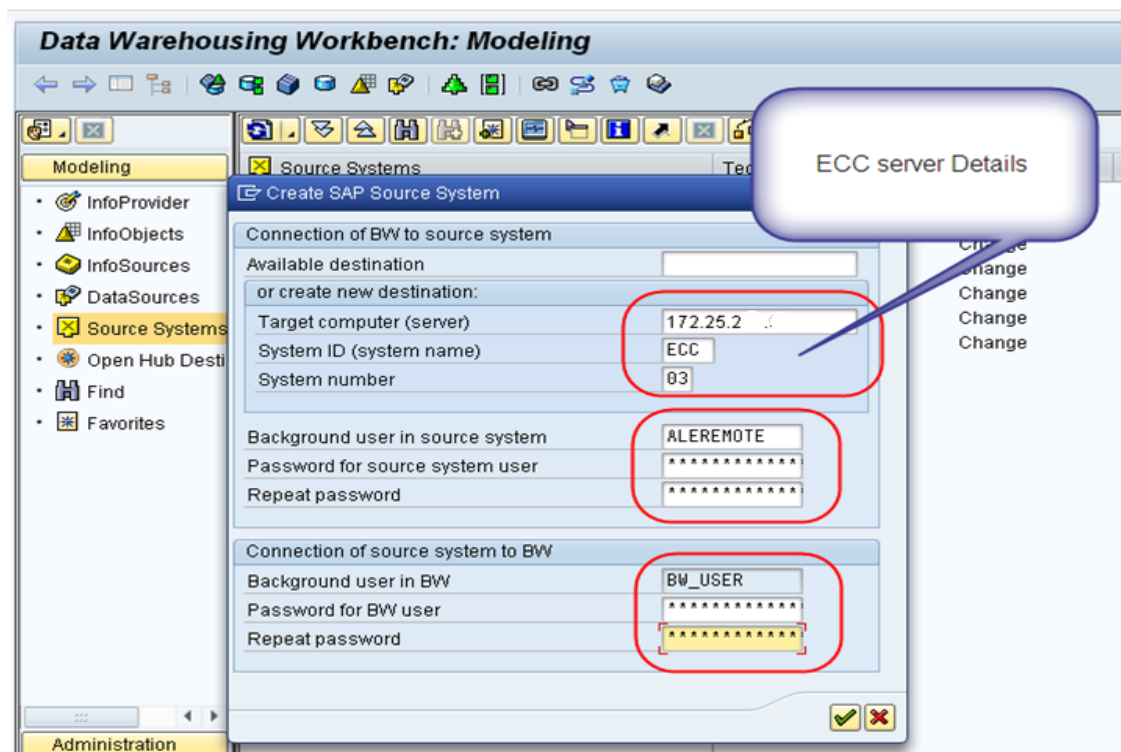
Right Click on source system i.e. SAP system and press Create.



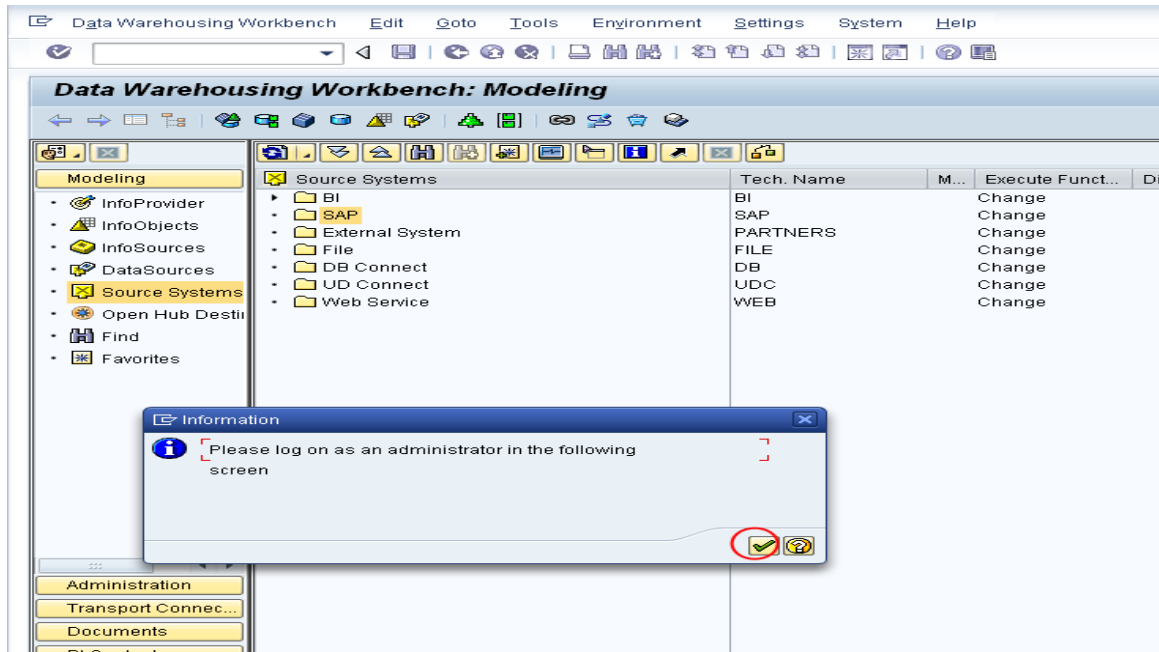
On pop-up screen enter the following details.

Target Computer (Server)	<IP address of your source system>
System ID (System Name)	<System ID of your source system>
System Number	<System Number of Source system>
Background user in source system	ALEREMOTE (User Created in above steps)
Background user in BW	BW_USER (User Created in above steps)

Note: Make sure you enter all logon credentials correctly.



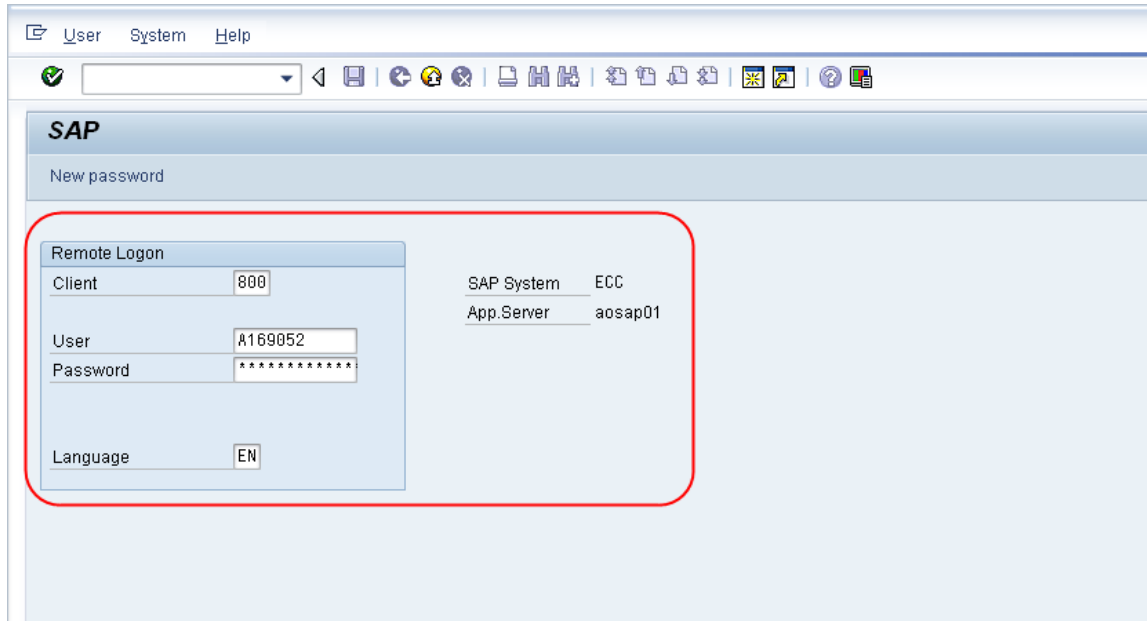
Press Enter to continue. On prompt as shown below press enter to continue.



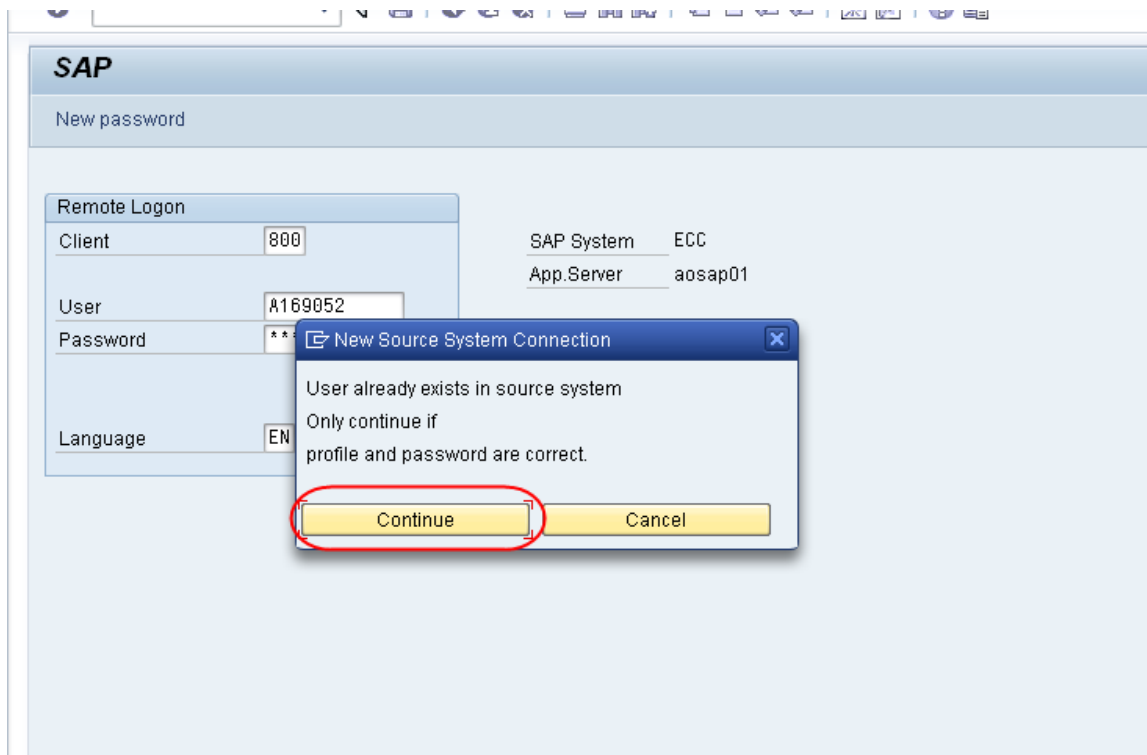
Step 6:

a) On pressing enter in above step, it will connect to the source system.

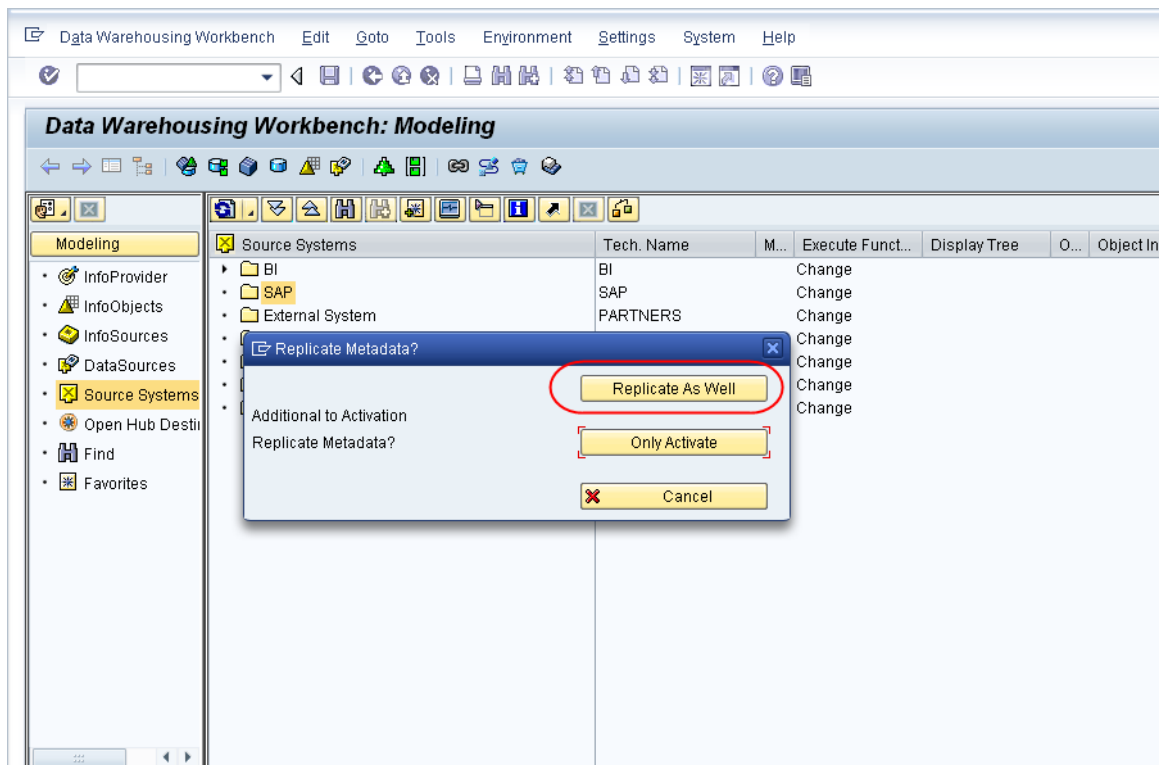
Enter the log in credentials, as shown below.



b) On pressing enter in the above screen it will give a pop-up as shown below. Press continue

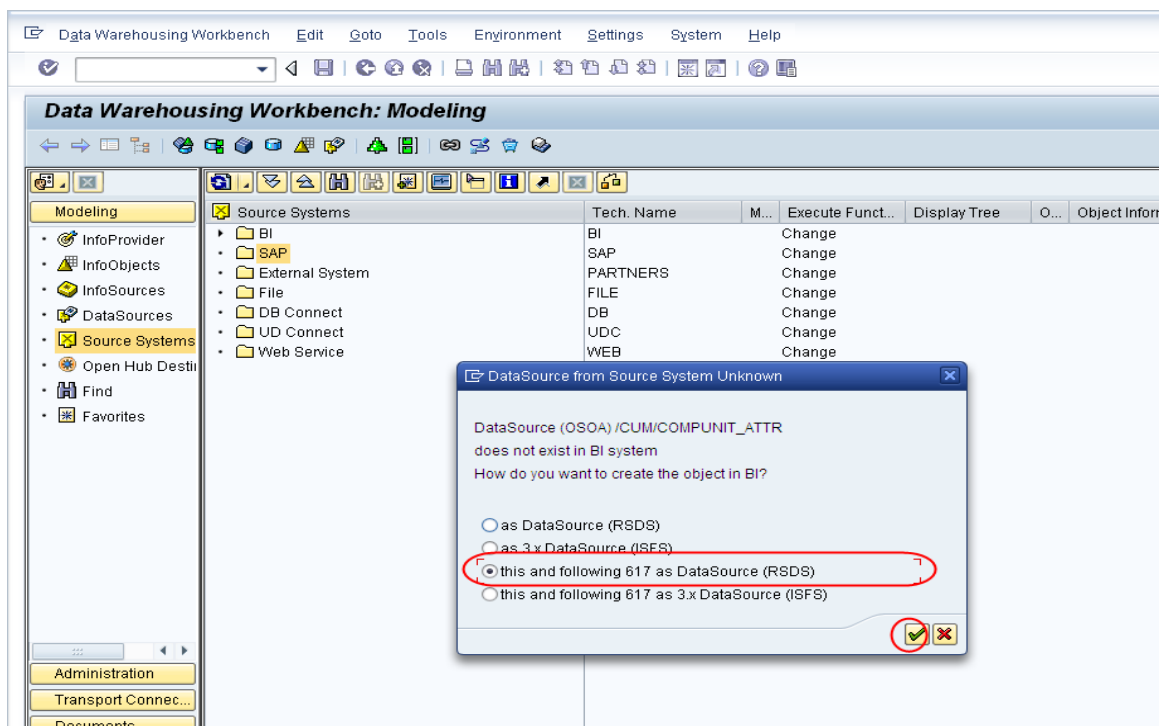


c) On the next pop-up press "Replicate as Well".



d) Select Radio button as shown below, make sure this selection is based on your BW system. In this example our BW is 7.0.

Press Continue.



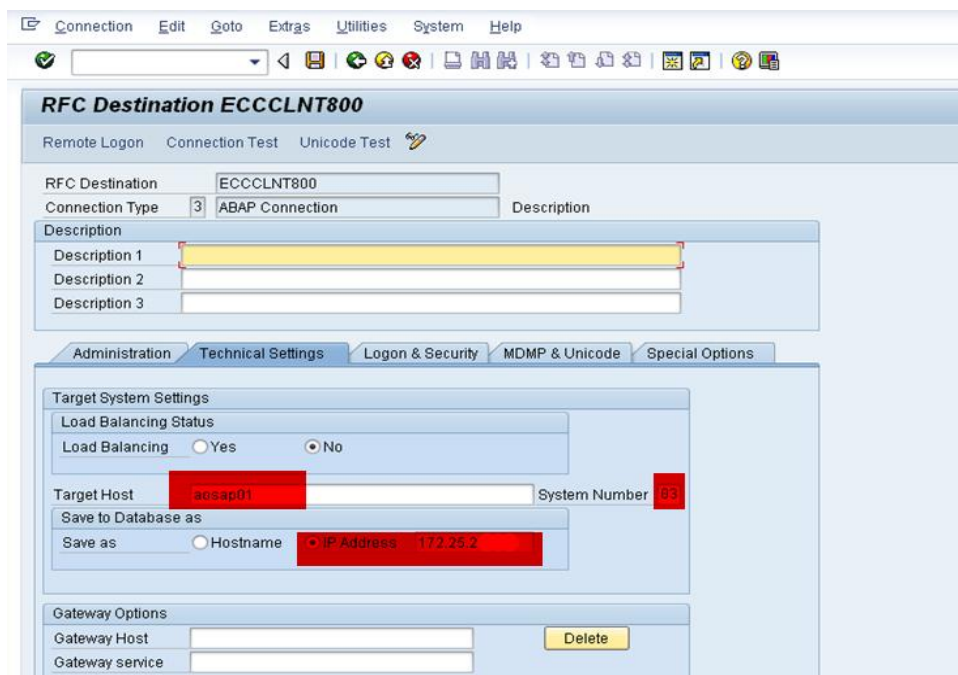
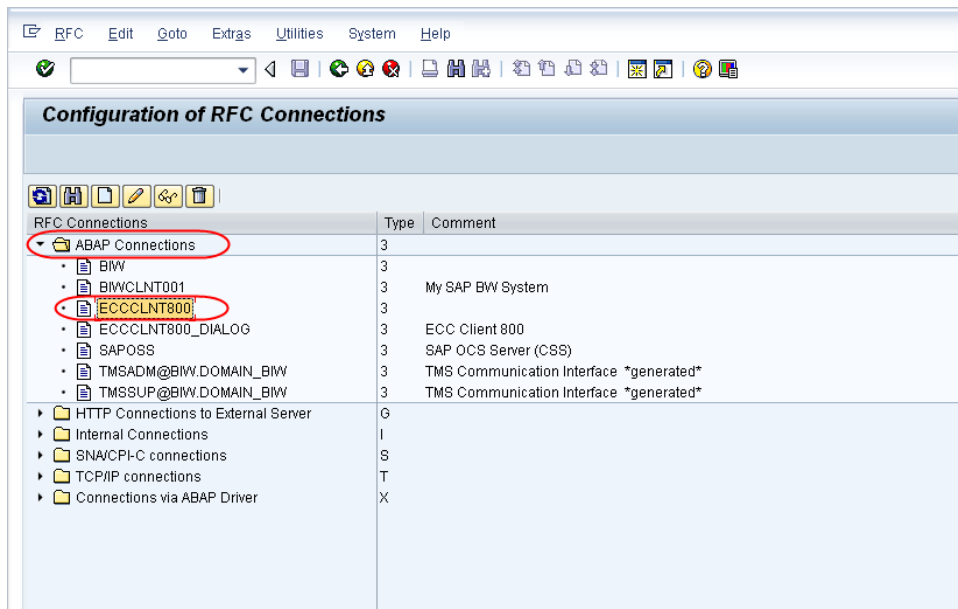
With this step, you will establish the connection between SAP Sources Systems with SAP BW.

Manual Steps: Useful for Trouble Shooting

Note: This manual steps are optional, these are mostly helpful as a trouble shooting guide, if at all something went wrong with your connections that I have stated in the above steps.

Log on to BW system

- 1) Go to Transaction code: SALE
- 2) Define logical system BIWCLNT001
- 3) Assign Logical system to client 001 as BIWCLNT001
- 4) Define Logical system ECCCLNT800
- 5) Now time to create RFC connection, Go to transaction code SM59



RFC Destination ECCCLNT800

Remote Logon Connection Test Unicode Test

RFC Destination

Connection Type ABAP Connection Description

Description

Description 1

Description 2

Description 3

Administration Technical Settings **Logon & Security** MDMP & Unicode Special Options

Security Options

Trusted System/Logon Screen Status

Trusted System No Yes Logon Screen

Status of Secure Protocol

SNC Inactive Active

Authorization for Destination

Logon

Language

Client

User Current User

PW Status

Password

Remote Logon Connection Test Unicode Test

RFC Destination

Connection Type ABAP Connection Description

Description

Description 1

Description 2

Description 3

Administration Technical Settings Logon & Security **MDMP & Unicode** Special Options

Communication Type with Target System

Non-Unicode

Unicode

MDMP Settings

Inactive Active

Character Conversion

Default Setting Ignore Error, Error Indicator: '#' = U+0023

Short Dump After Conversion Error

Ignore Conversion Errors

Display of Conversion Errors

Error Indicator

Log on to ECC system

- 1) SALE
 - 2) Define logical system ECCCLNT800
 - 3) Assign logical system to client 800 as ECCCLNT800
- Repeat as above.

Related Content

www.help.sap.com

[Creating an SAP Source System](#)

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

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