HOW TO USE LSMW

By Allen Dawkins & Amit Bhandari

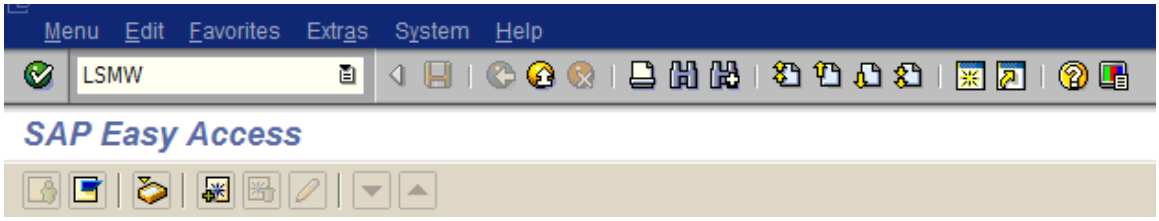
What is LSMW?

LSMW is one of SAP's best data conversion and master data creation tools. It is available for most R/3 master and transactional data. LSMW can be used for most conversion and migration tasks and can be accomplished with standard functionality. With a little ABAP coding, you can use LSMW for more complex data conversion activities.

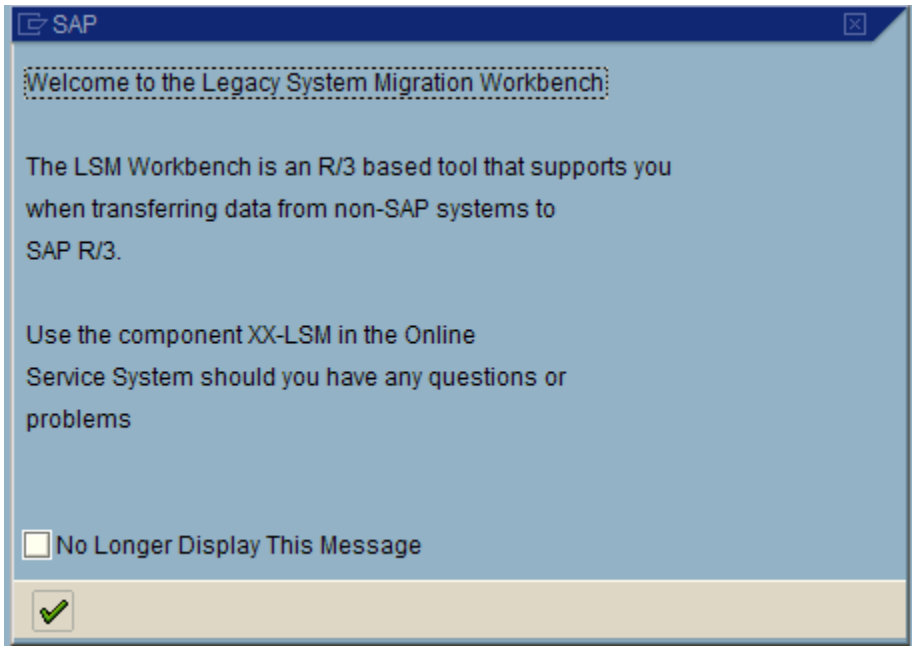
The information below will walk you through the process of creating a simple LSMW. Once you've done this you'll be able to see how useful the tool can be and how LSMW is the right choice for most conversion and migration!

STEPS FOR CREATING AN LSMW.

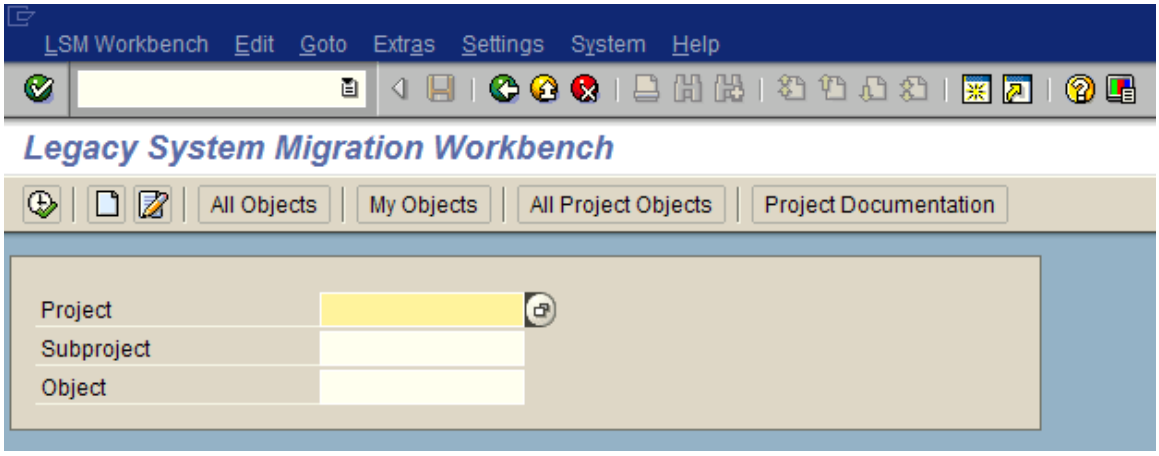
1) Log on to SAP
2) Enter transaction code “LSMW”



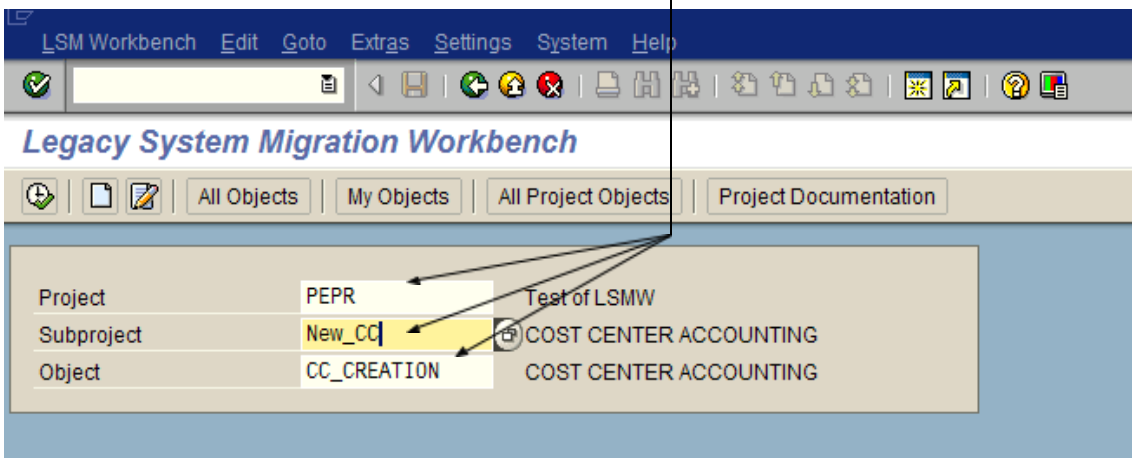
3) If you receive the following screen either check the white box ☐ to no longer display the message then click the green check ☐ or just click the green check to continue.



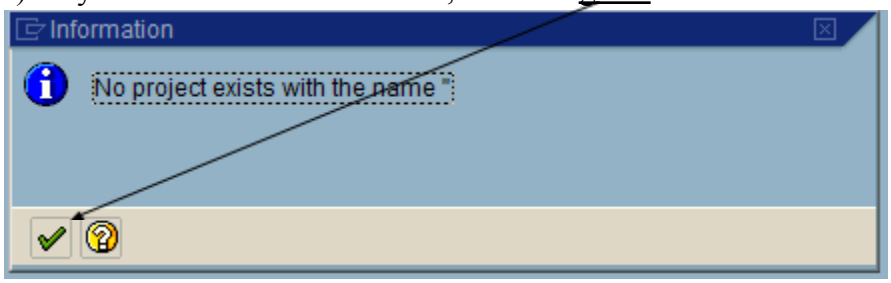
4) Once the screen below appears, you are now ready to begin your LSMW script creation.



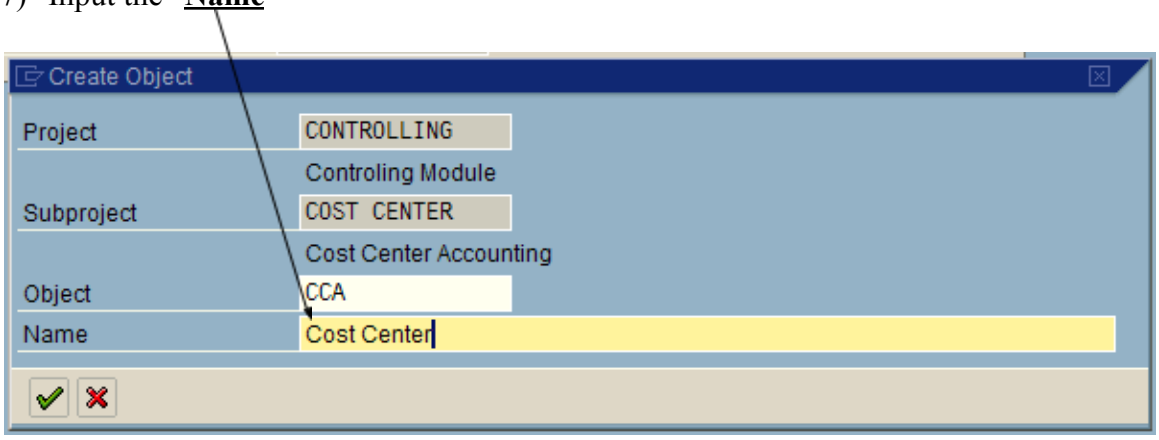
5) Create the file by inputting the Project, Subproject, and Object.



6) If you receive the screen below, click the green check and continue.

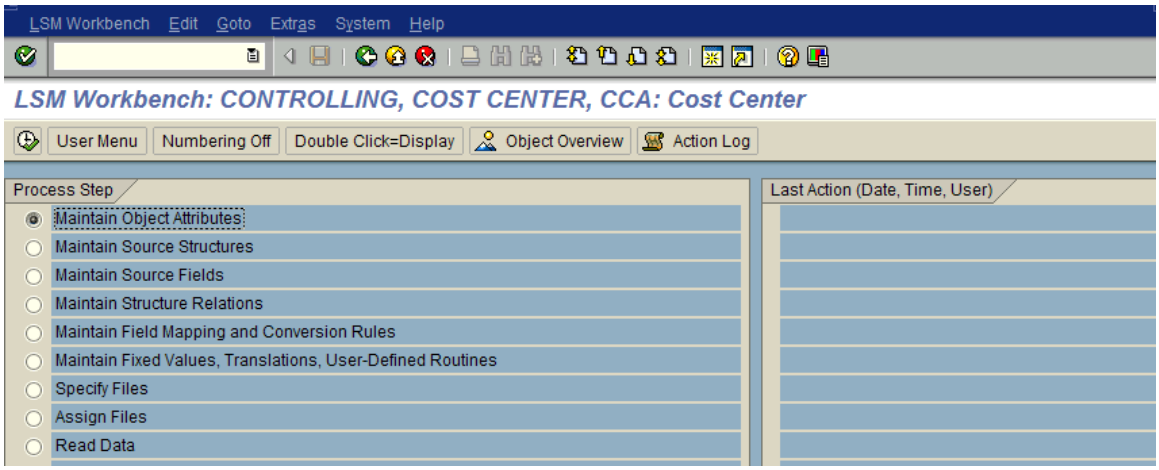


7) Input the "**Name**"

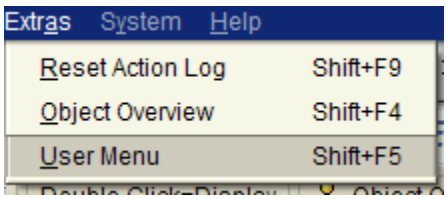


8) Next click

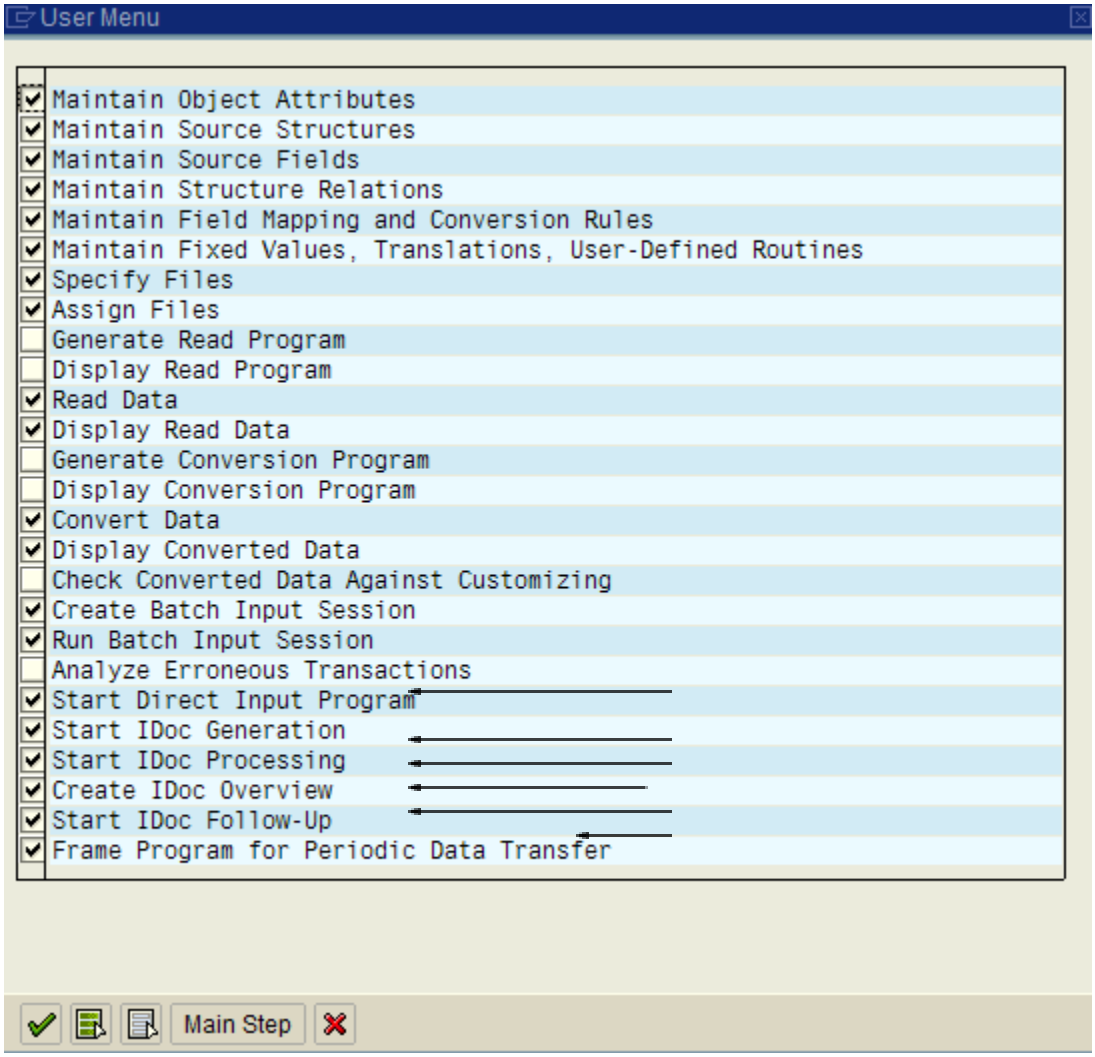
9) The screen below now appears.



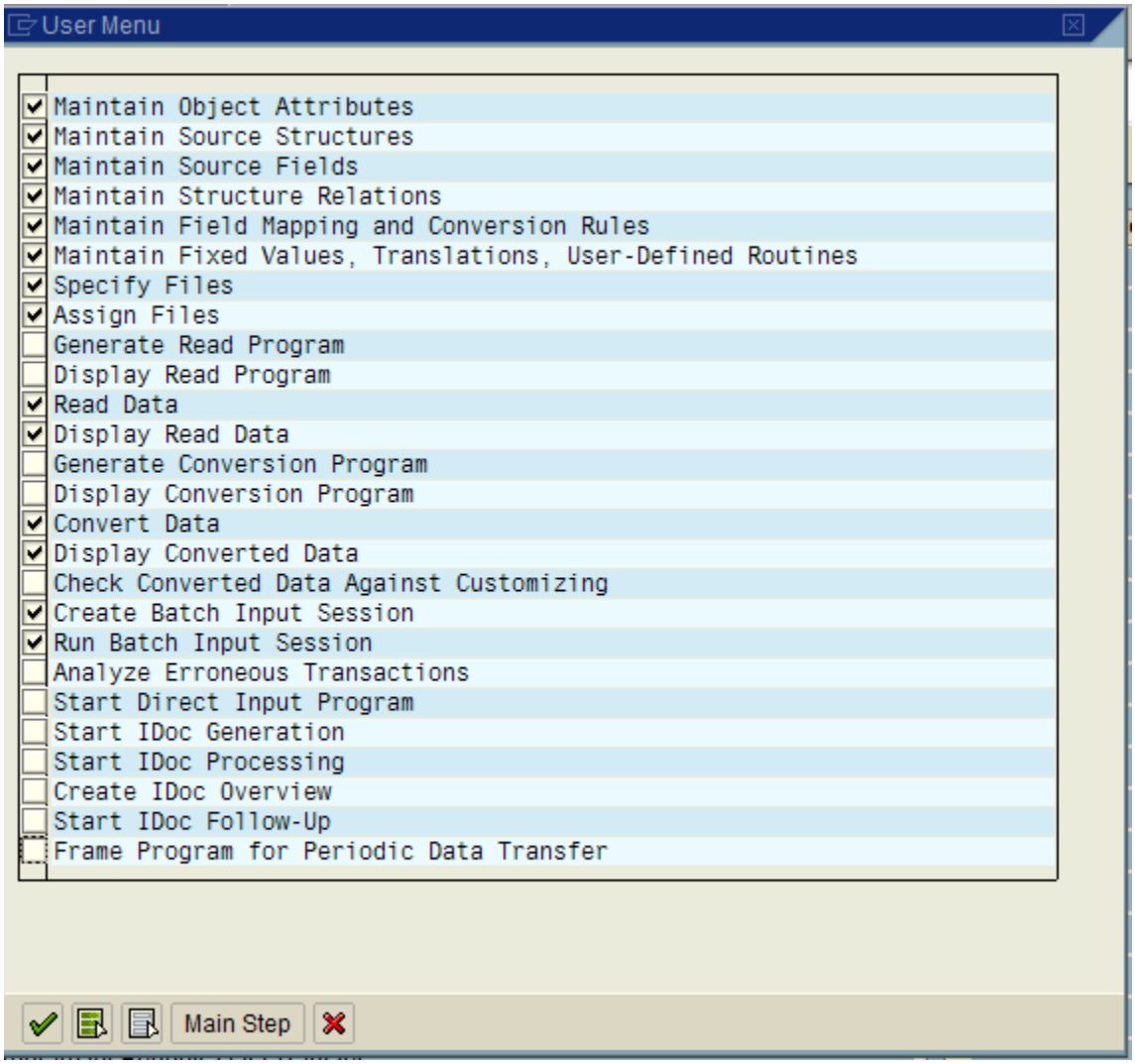
10) Follow the menu path >Extras>User Menu



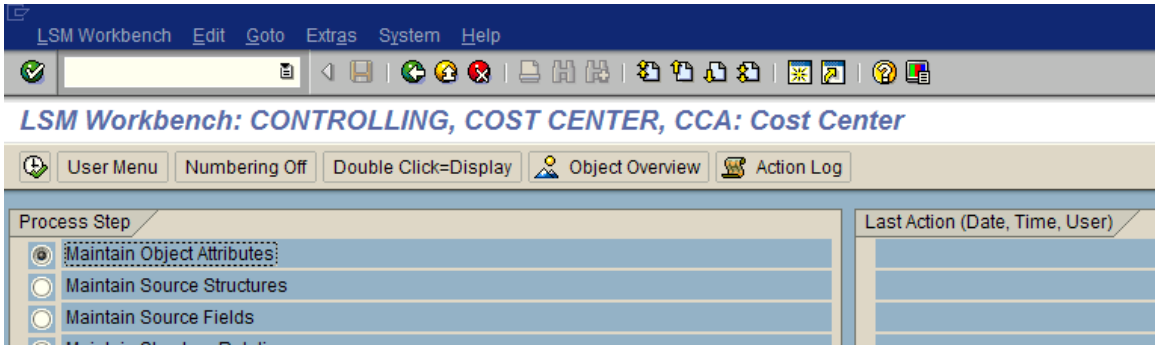
11) Next you get this screen. This allows you to set up the LSMW. Since we don't use IDOC's you can remove all the checks at the bottom of the screen.



12) Your screen will now appear as below. Click .



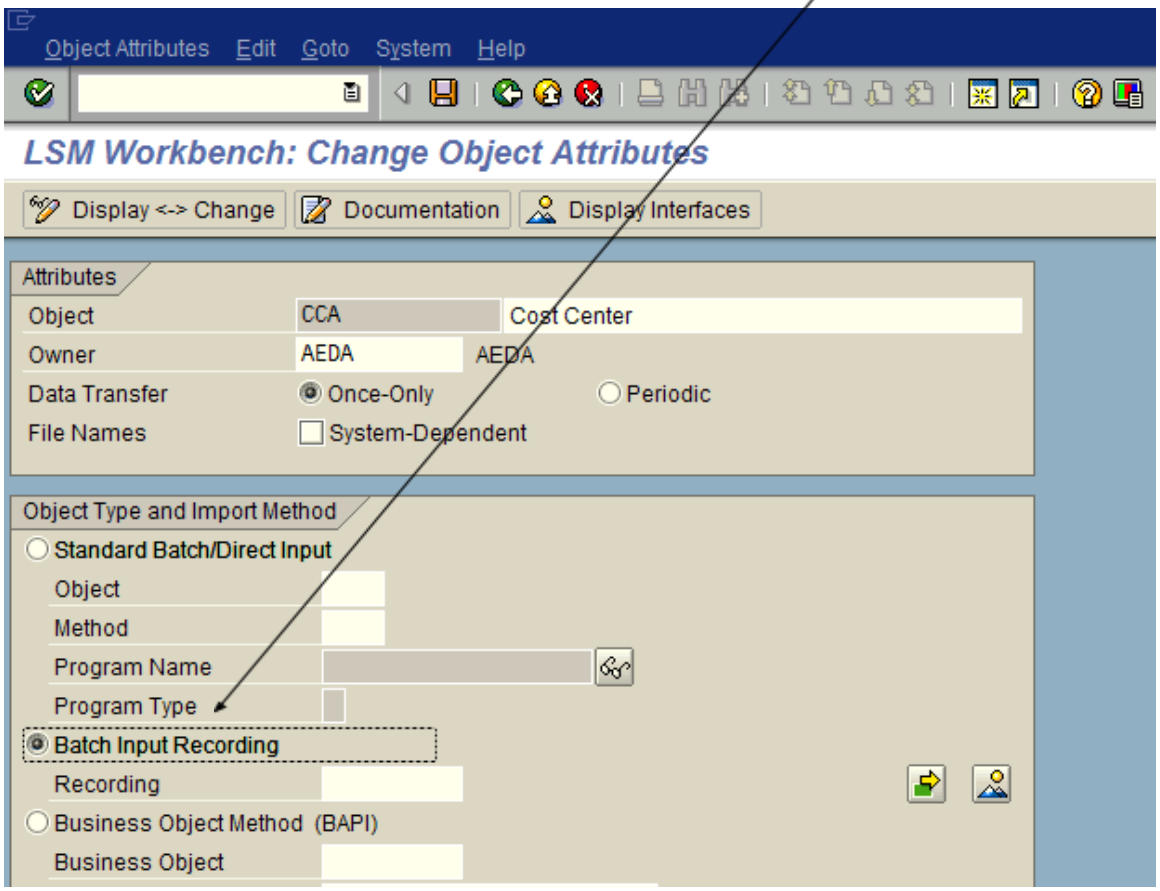
13) You will be returned to the main screen shown below. Click .



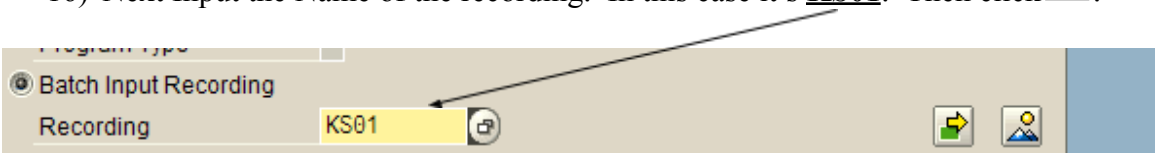
14) Now you will begin the creation of the LSMW.

STEP 1. – MAINTAIN OBJECT ATTRIBUTES

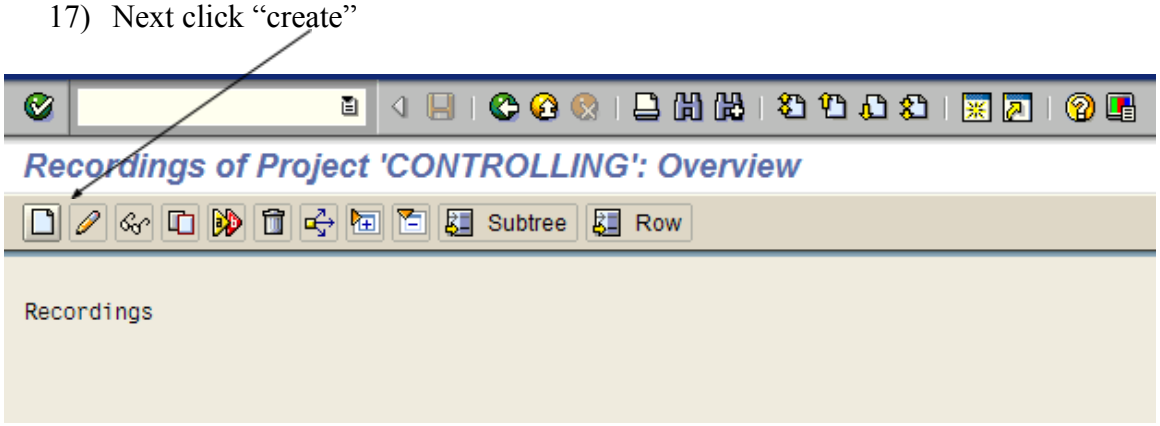
15) Next click on Display <-> Change then select "Batch Input Recording".



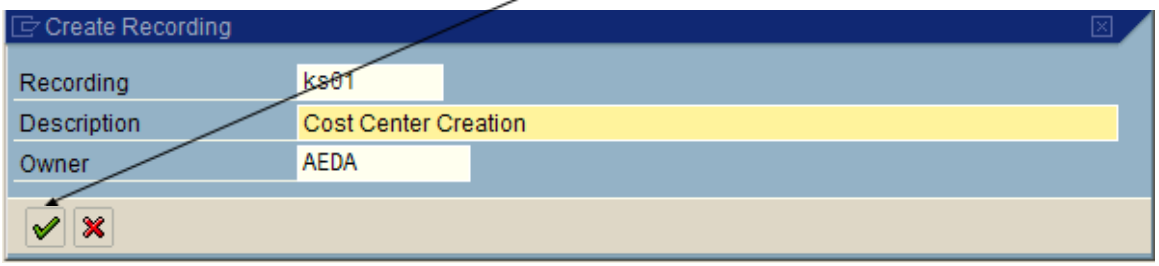
16) Next Input the Name of the recording. In this case it's **KS01**. Then click .



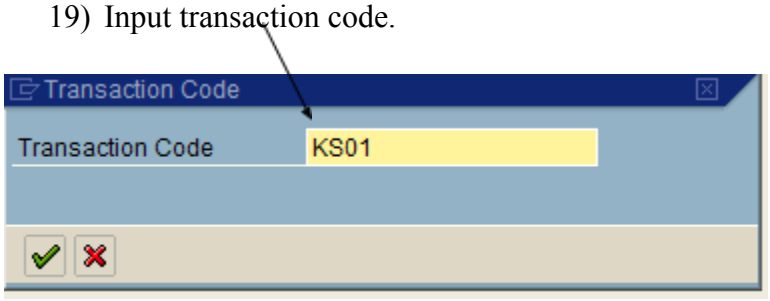
17) Next click “create”



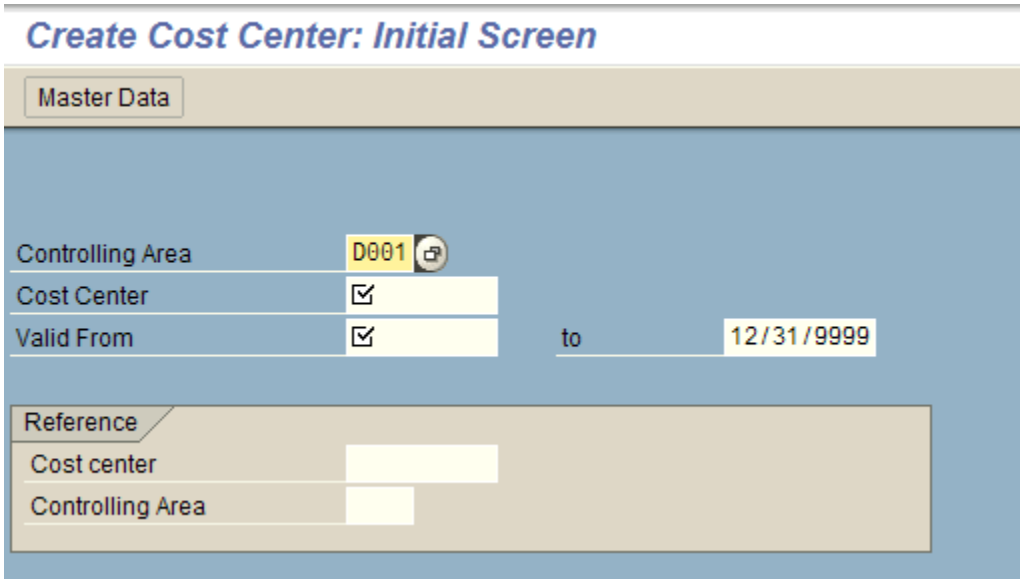
18) Input recording fields as below then click the “green check”.



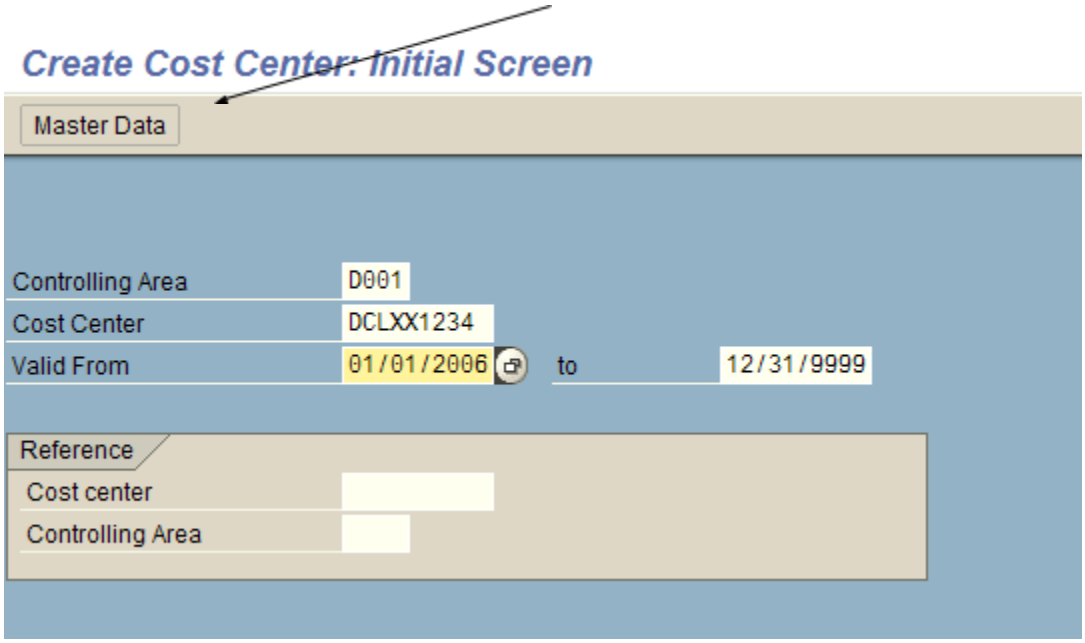
19) Input transaction code.



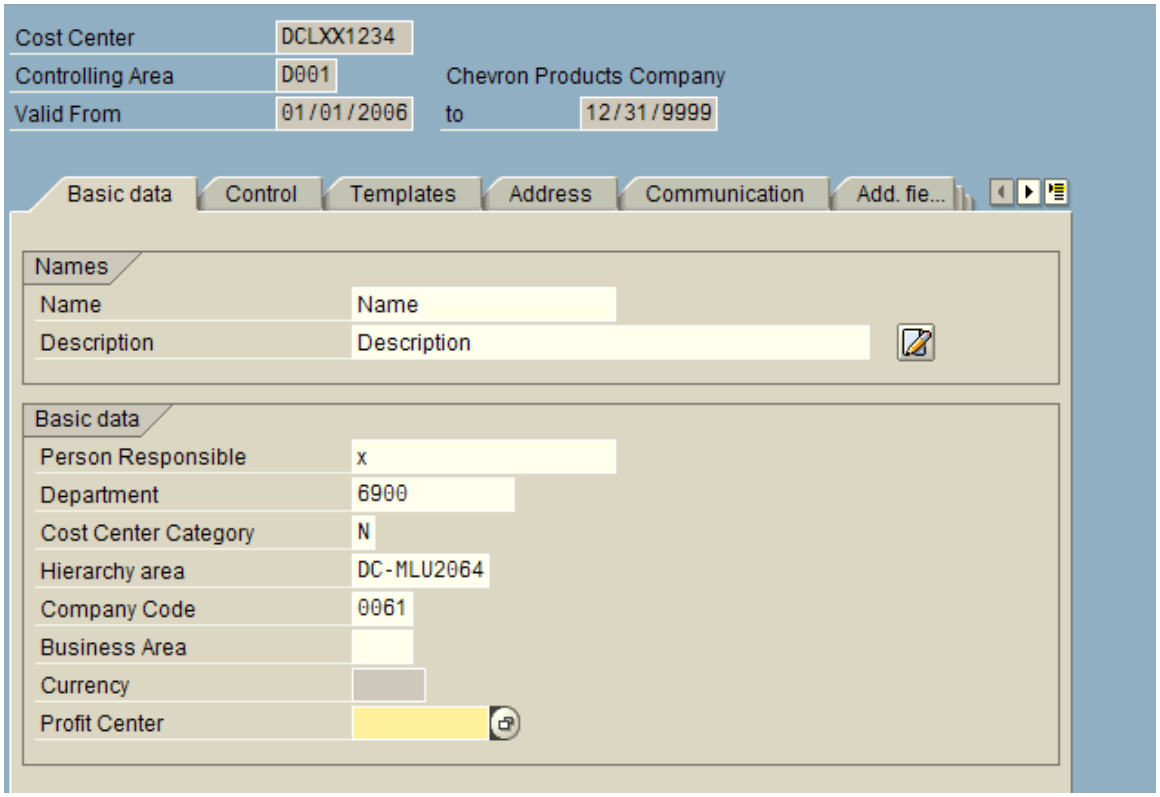
20) Next you're ready to being creation of the master data for your LSMW. In our example using KS01 you see the following screen.

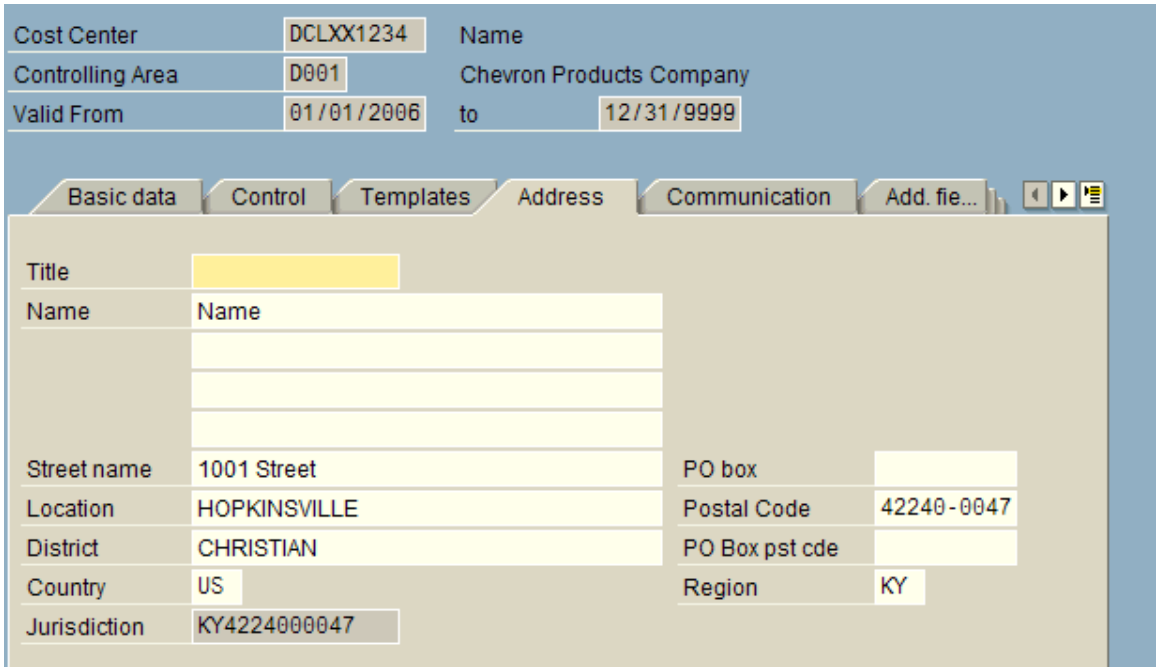


21) Input data as below, then click "Master Data"

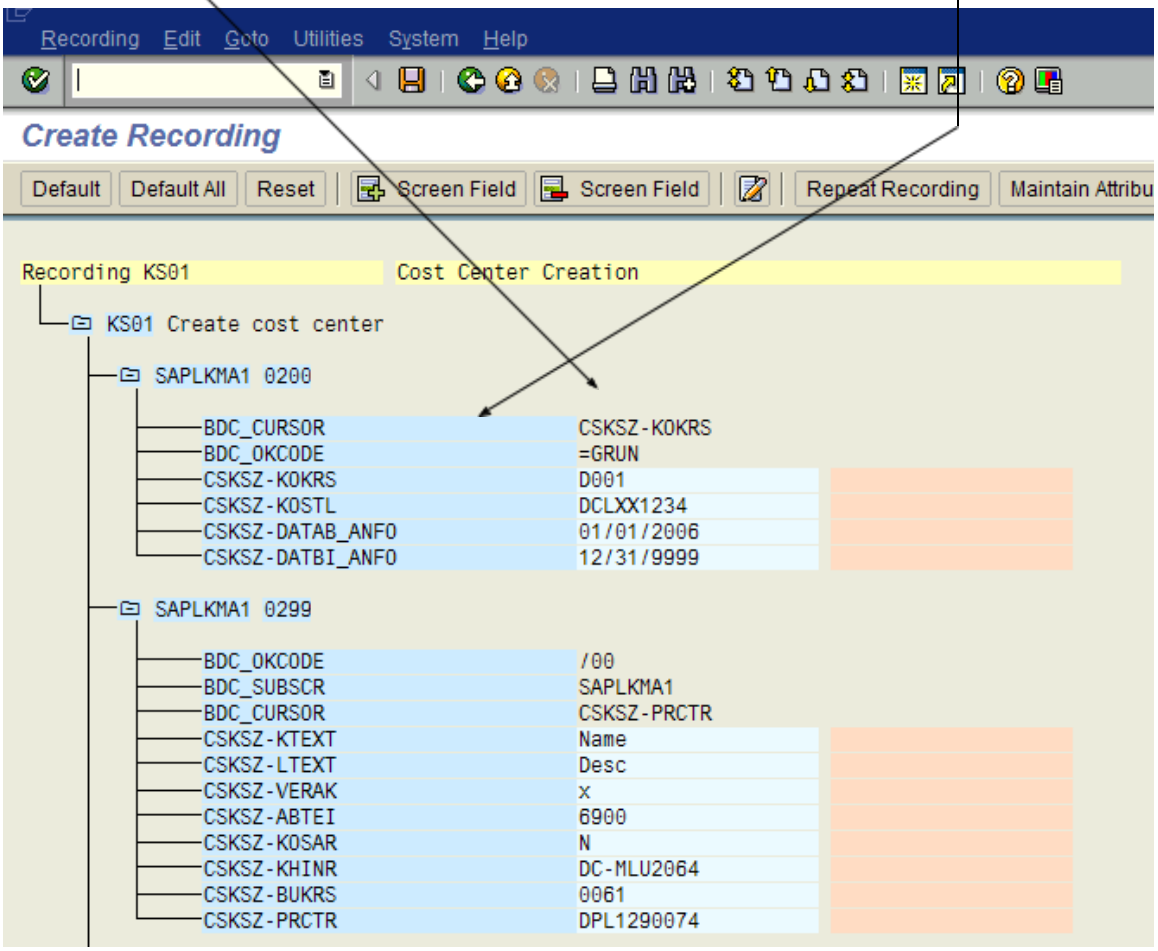


22) Next fill in all information needed for your script. In this case for cost center creation.

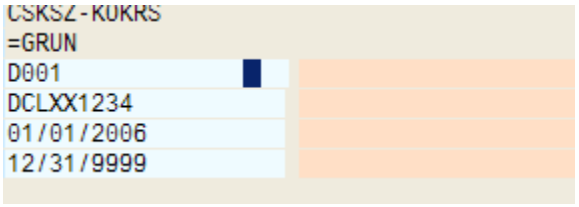




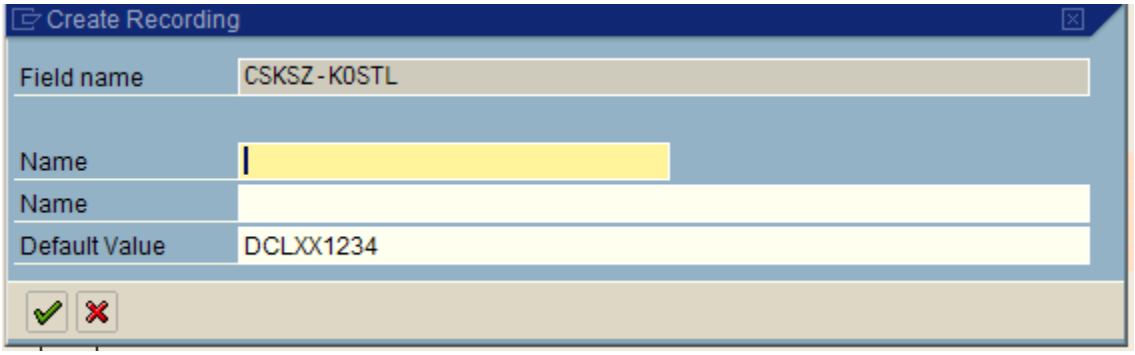
23) Save the Recording . On the following screen you see the field names and the default values for the field names that were created from the recording.



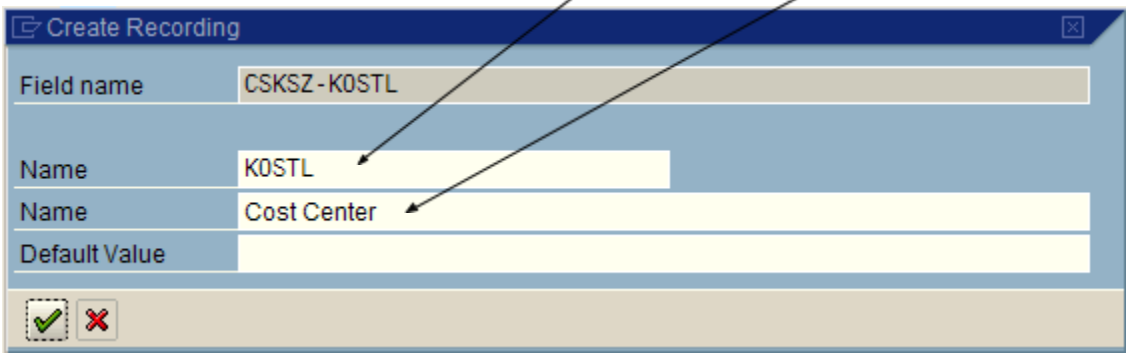
24) Next we need to remove the default values. The purpose is to create parameter import names. To do this you must double-click into each default value name.



25) After double clicking into a “field” you will see a screen similar to the one below.

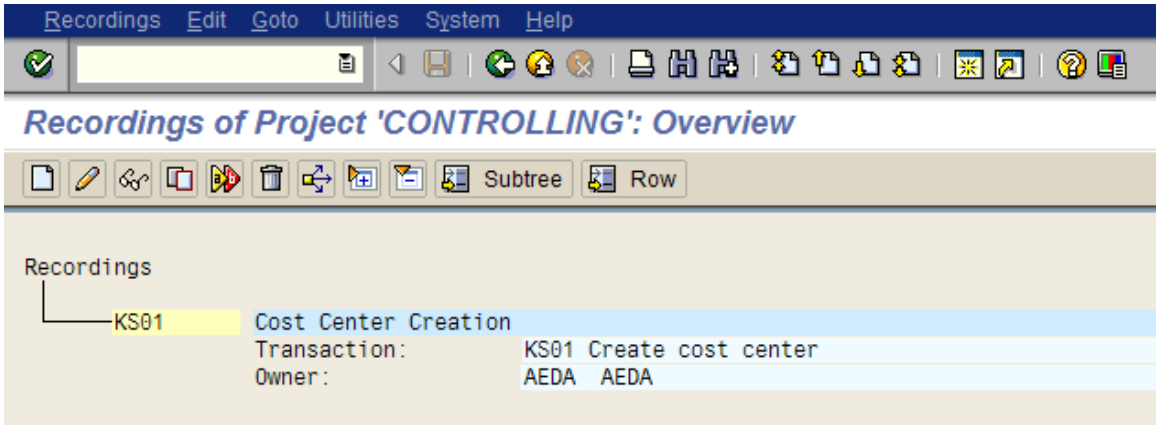


26) Remove the default value then input the field name and the description of the field name. Click

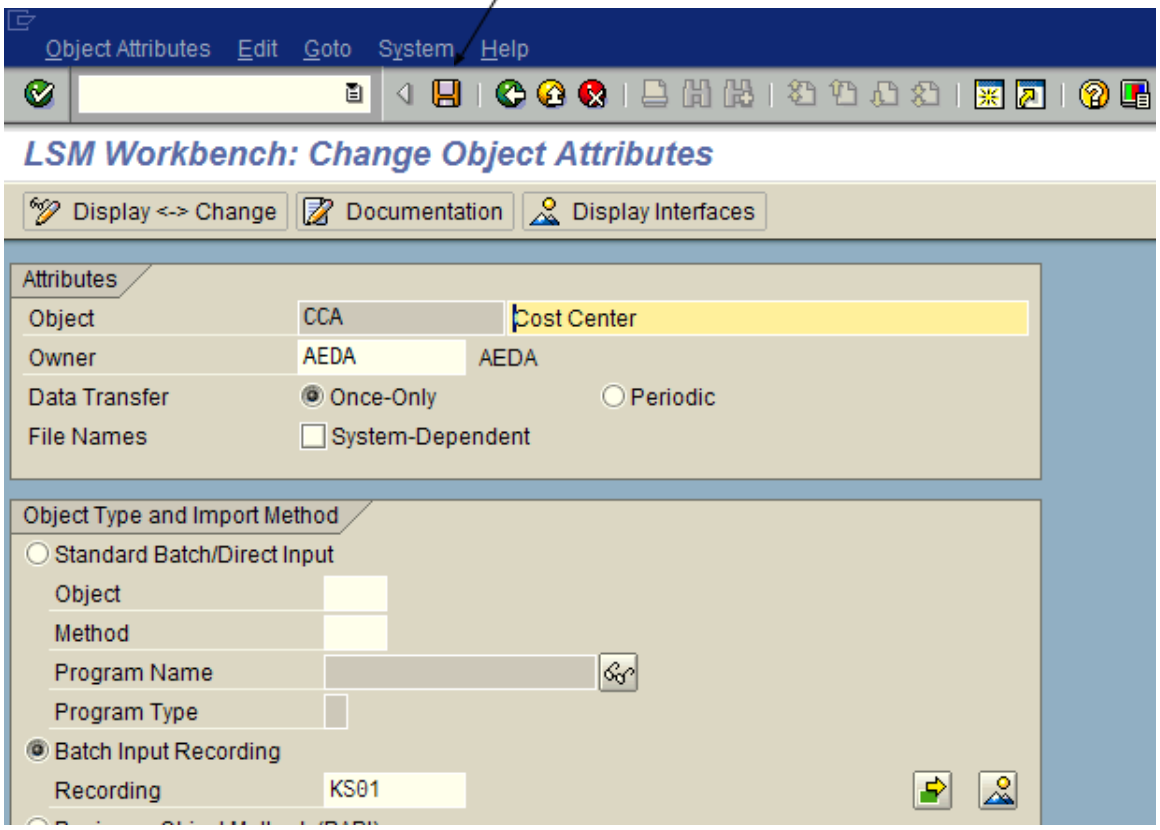


27) Then .

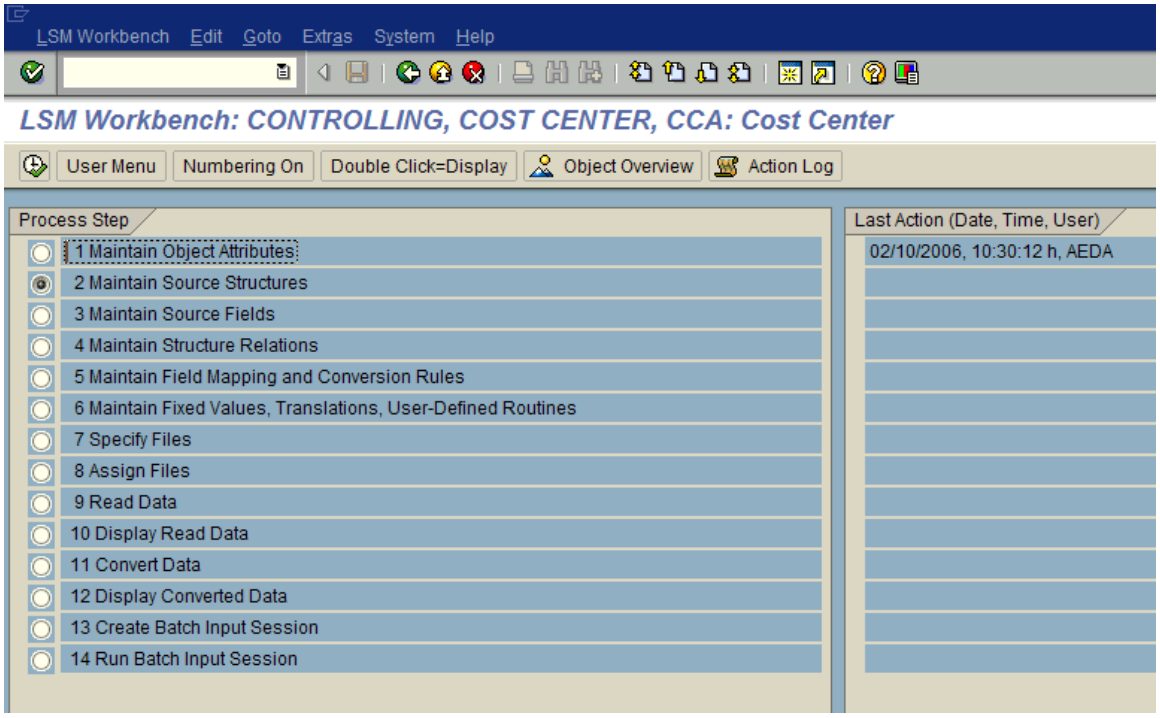
28) Click to return to initial screen.



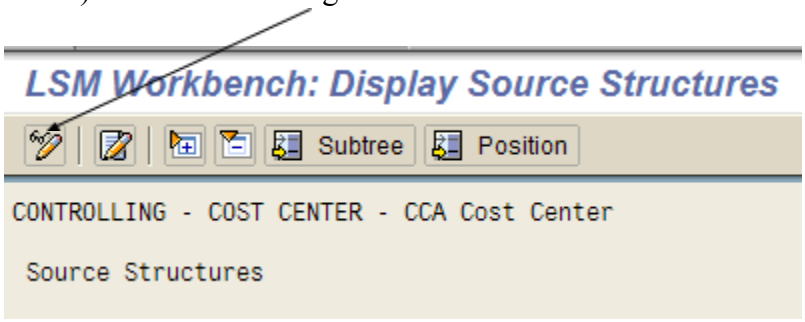
29) Click to return. . . . . Then “save”.



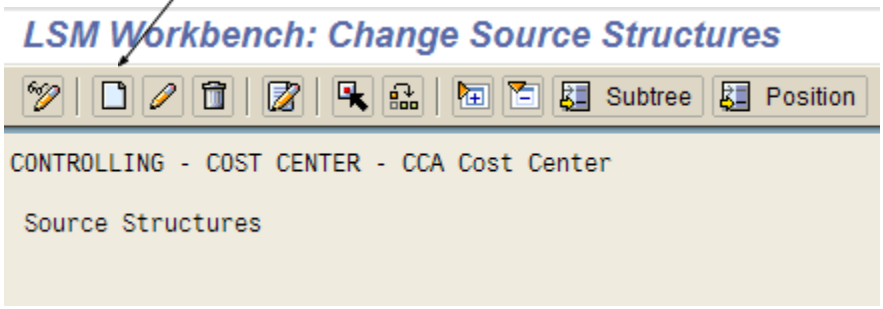
30) Next to return to Main Screen.



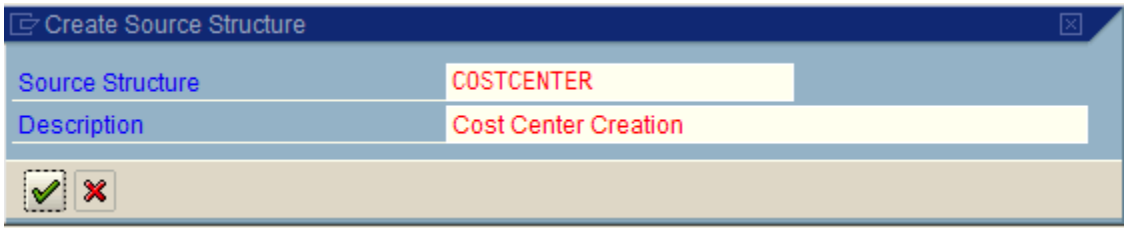
31) From this screen you will now move on to Step 2 of this process. Click .
32) Then click “change”



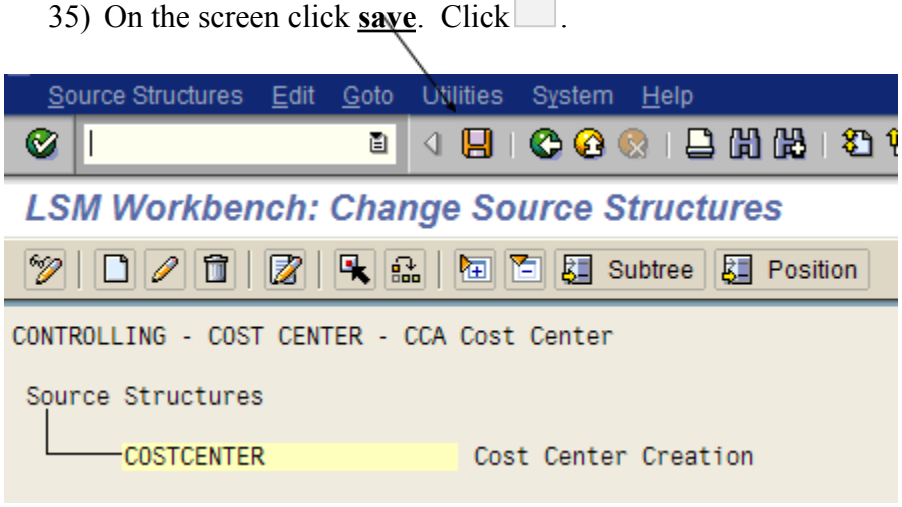
33) Click “create”



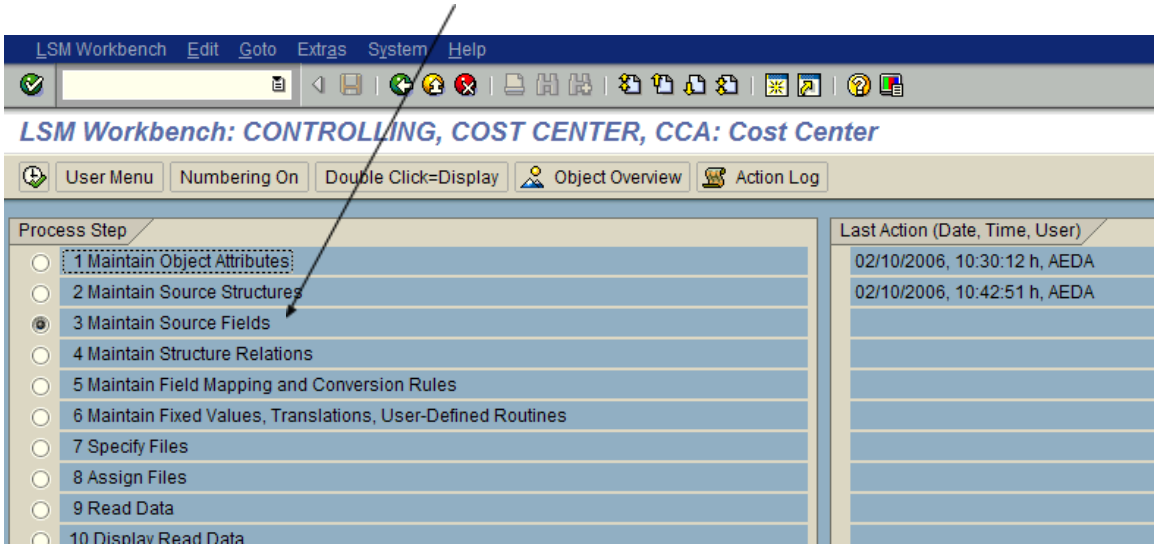
34) You will receive the screen below. Input your data then click .



35) On the screen click **save**. Click .



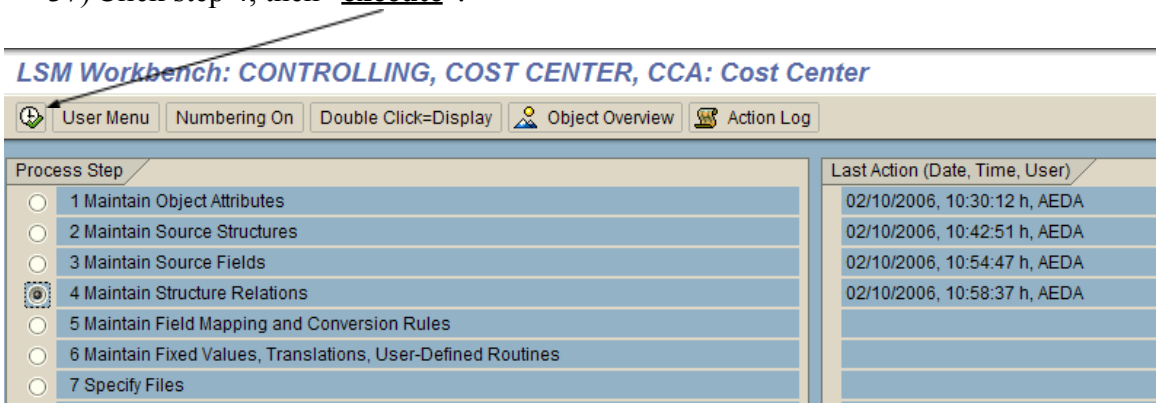
36) You will return to the Main Screen as below. Please note you're now ready for Step 3. Click **Maintain Source Fields**.



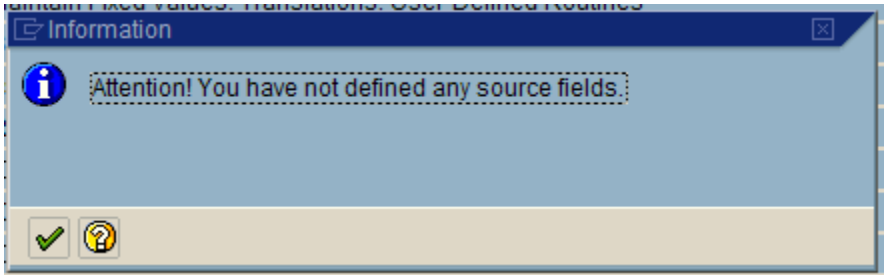
PLEAE NOTE THE FOLLWING:

To prepare for Step 3 you will require the field names. To get these you must first go to Step 4, then Step 5 to obtain the field names, you will return to complete step 3.

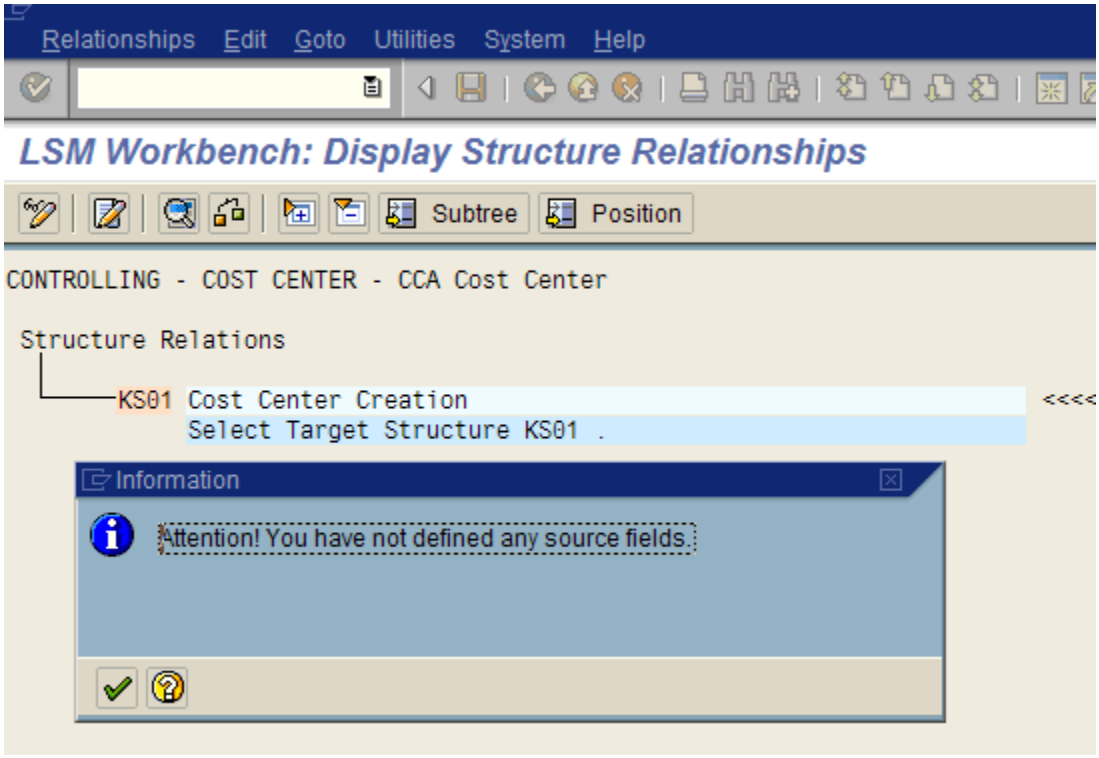
37) Click step 4, then "**execute**".



38) You will receive the screen below since we have not completed step 3. This is a warning. Click .

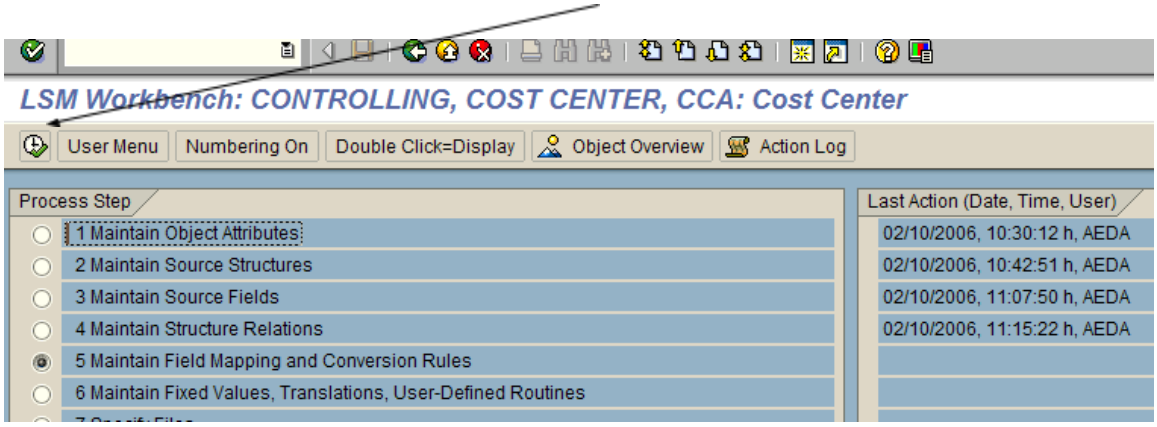


39) Click “Change” and you will receive the warning again. Click the green check and continue.

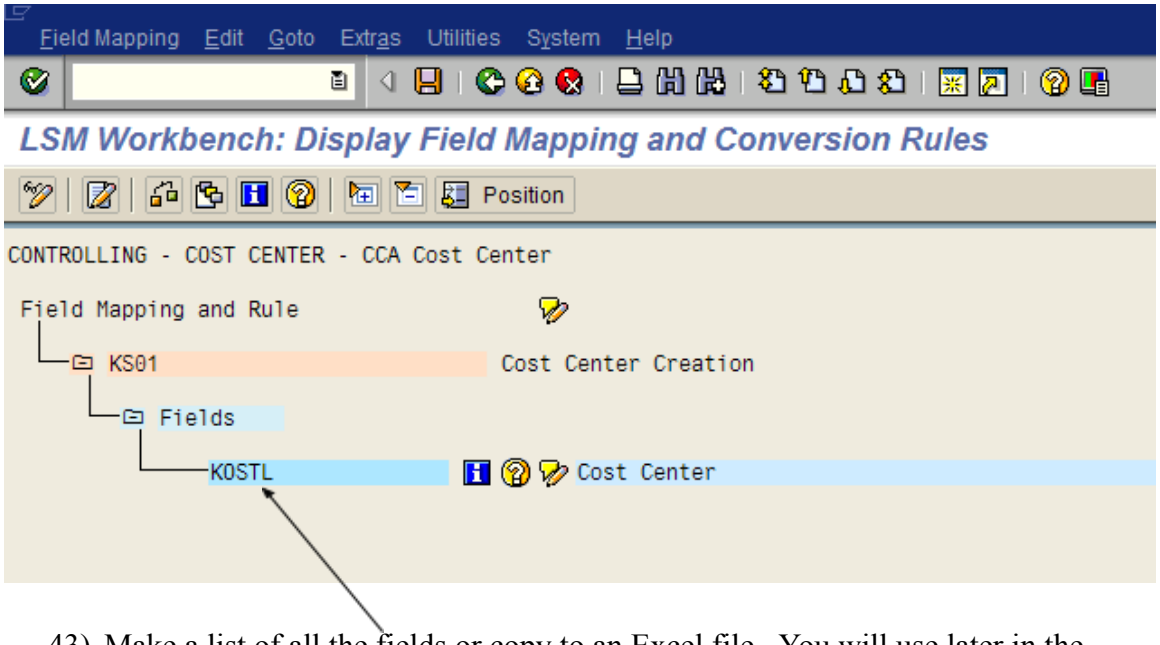


40) Click , then .

41) You’re now on the initial screen. Automatically step 5 is selected or you may manually make the selection. Click “**Execute**”.



42) On the screen below all fields that you created will be listed. In our example we only selected ***one*** field **(KOSTL)** as a parameter in the first step and all other fields were kept as defaults.

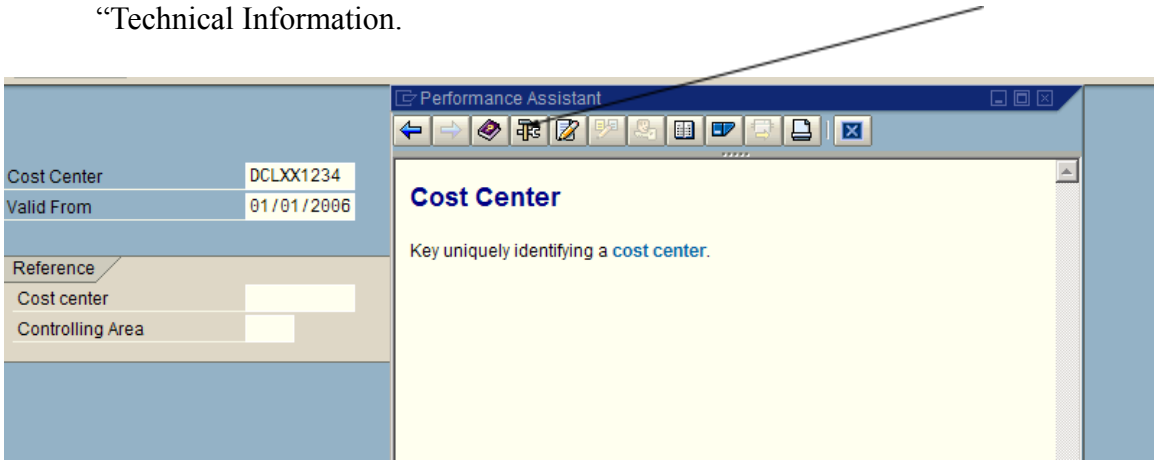


43) Make a list of all the fields or copy to an Excel file. You will use later in the exercise. The format of your Excel file should appear as below.

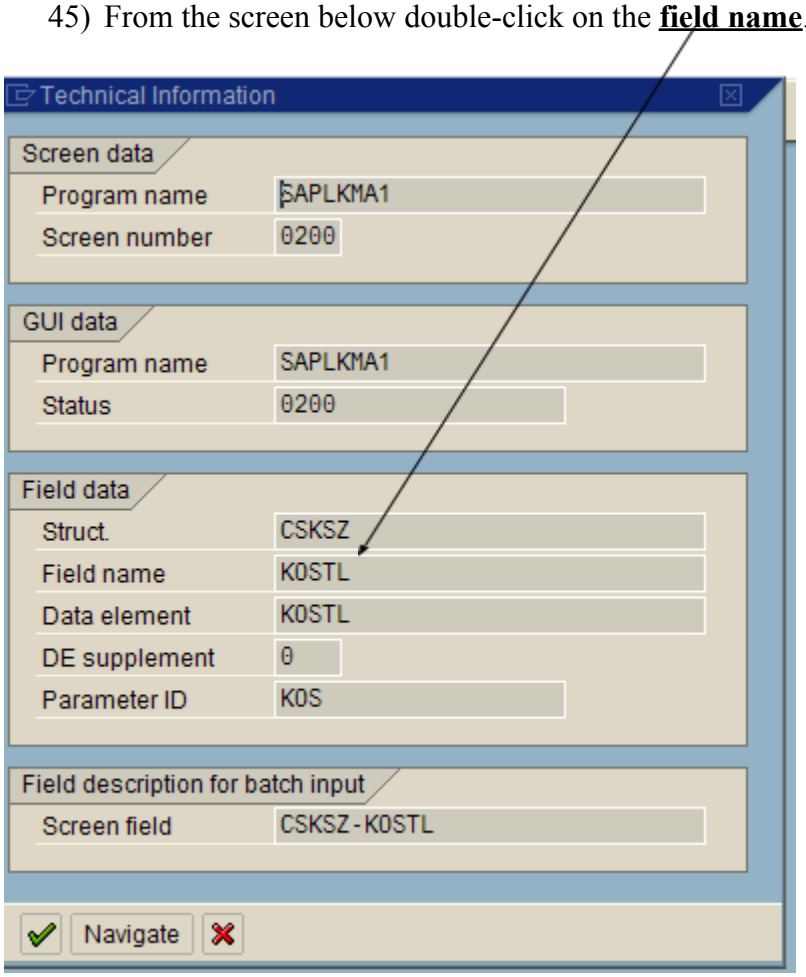
A	B	C	D
Field Name	**Character**	**Length**	
KOSTL			

The Character and Length fields will be obtained from Technical help. To do this:

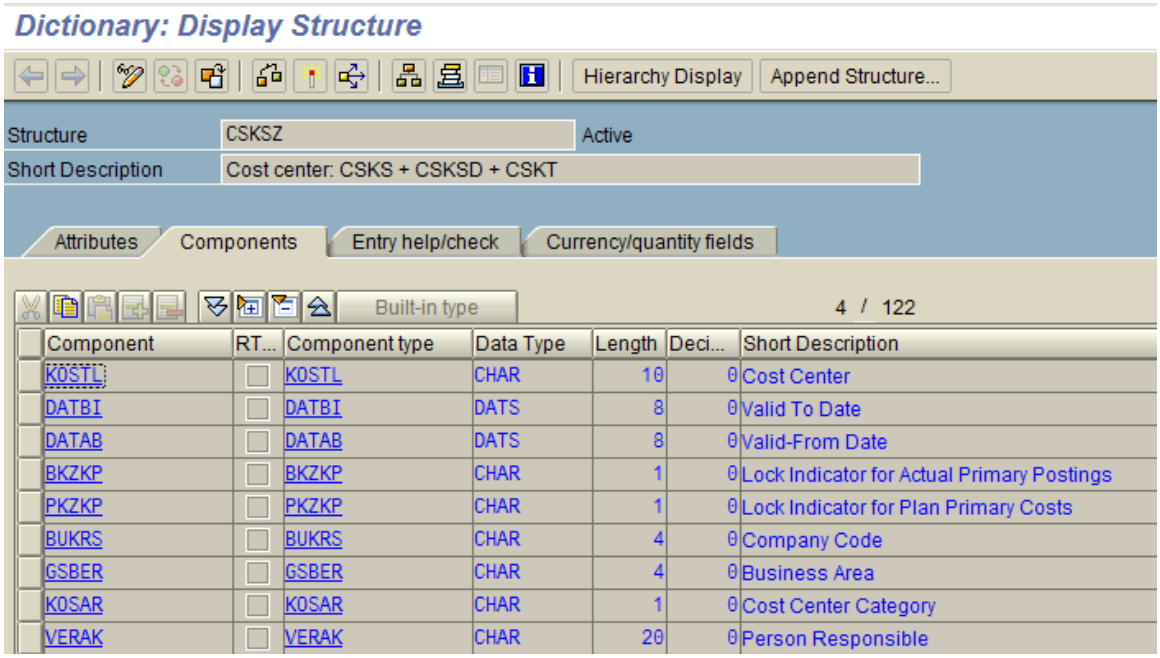
44) Open a new SAP Session, enter transaction code KS01. Click in the Cost Center field then click “F1 help”. The screen below appears. Click on “Technical Information.



45) From the screen below double-click on the **field name**.



46) Locate each of your field names and get the “Data Type” and “Length”. In our example “Data Type = Char however in LSMW selection could be different. For instance CHAR = “C”, etc.

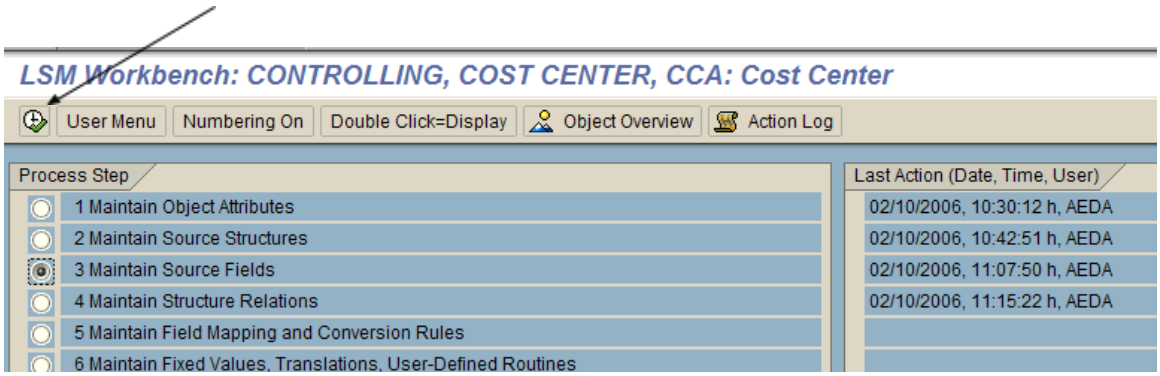


Component	RT...	Component type	Data Type	Length	Deci...	Short Description
KOSTL		KOSTL	CHAR	10	0	Cost Center
DATBI		DATBI	DATS	8	0	Valid To Date
DATAB		DATAB	DATS	8	0	Valid-From Date
BKZKP		BKZKP	CHAR	1	0	Lock Indicator for Actual Primary Postings
PKZKP		PKZKP	CHAR	1	0	Lock Indicator for Plan Primary Costs
BUKRS		BUKRS	CHAR	4	0	Company Code
GSBER		GSBER	CHAR	4	0	Business Area
KOSAR		KOSAR	CHAR	1	0	Cost Center Category
VERAK		VERAK	CHAR	20	0	Person Responsible

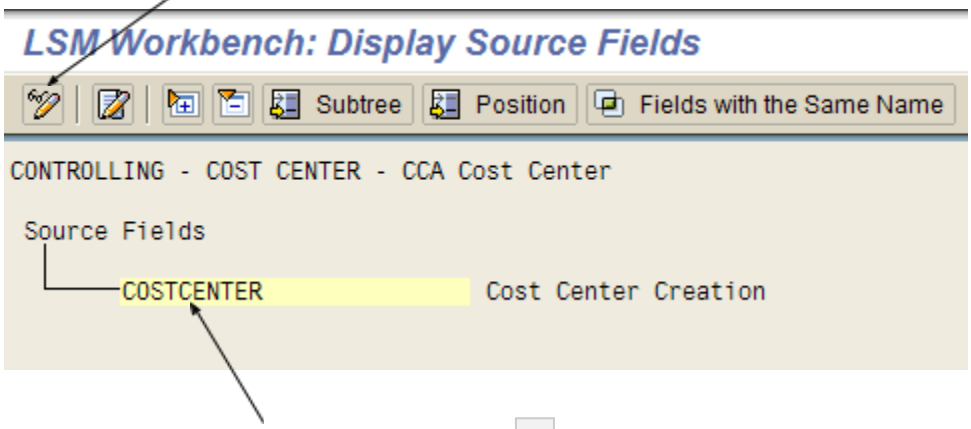
47) Input your data to your Excel file as below. Save the file as a “.txt” format. This is always required when importing data to LSMW.

A	B	C	D
Field Name	**Character**	**Length**	
KOSTL	C	10	

48) After the excel sheet is complete we can now go to the third step. Click step 3 then execute.

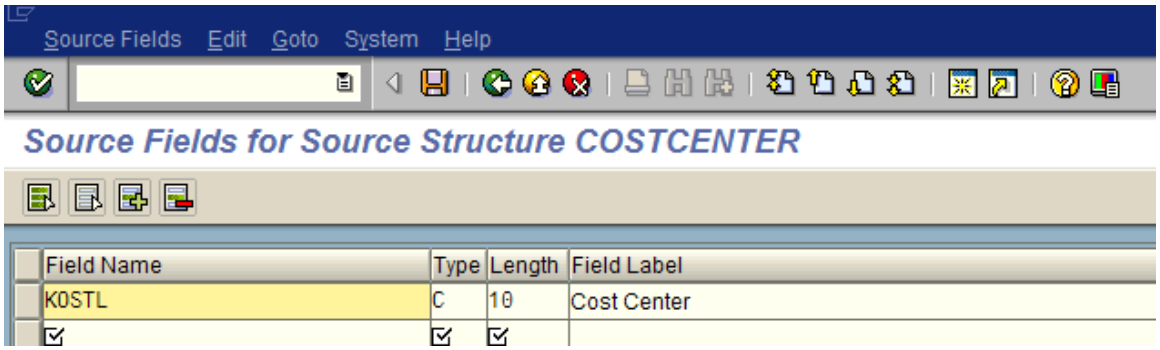


49) Click change on the screen below

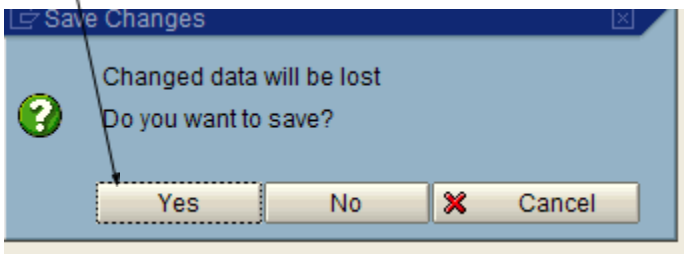


50) Select "Source Structure" click for "Table Maintenance.

51) You will see the screen below. You will need to input the "field name", "type", "length". The field label will default. This information is taken from the Excel Sheet that you created earlier.

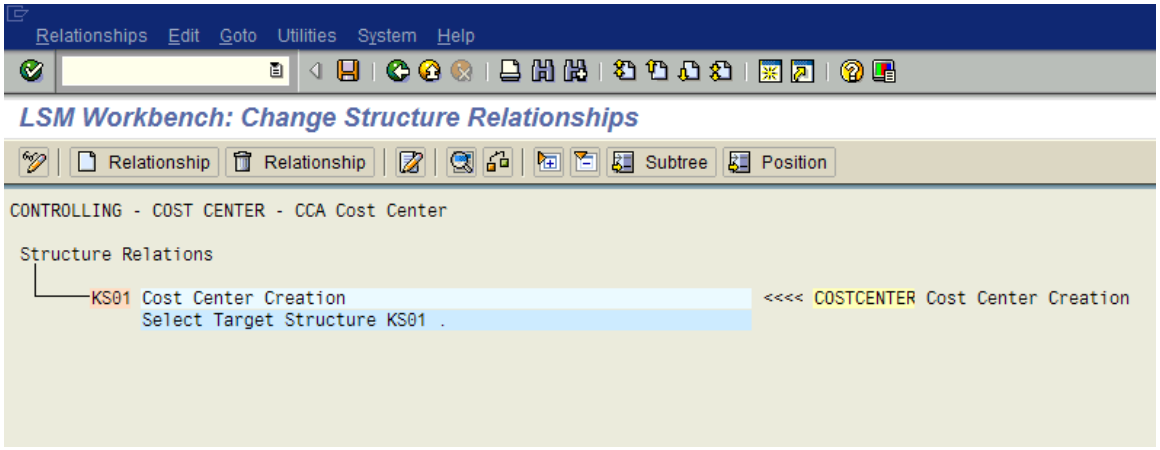


52) Press <enter> then , then twice. You will receive the screen below, click "yes".

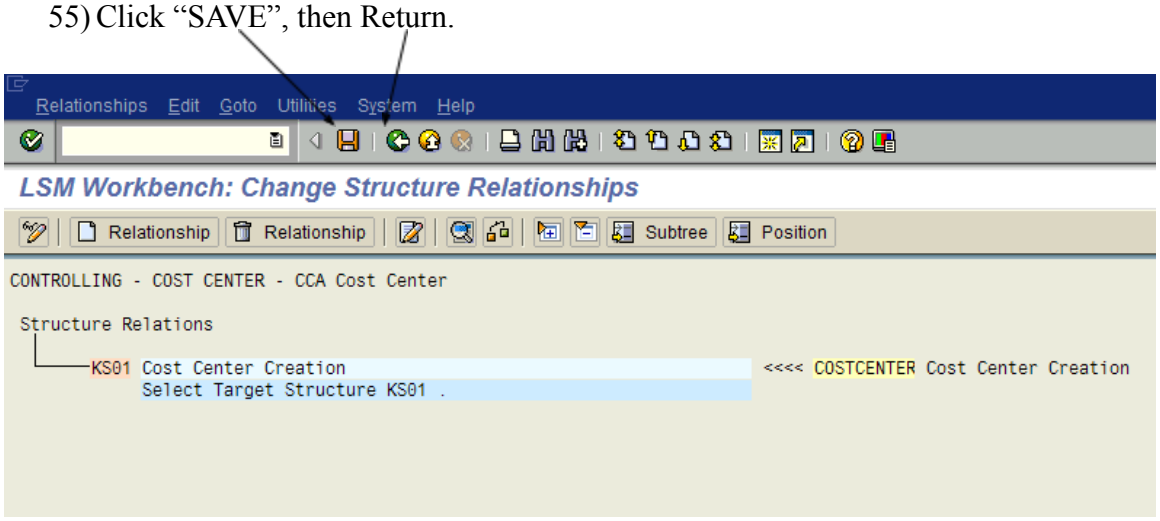


53) We are now ready to begin step 4. Click “Execute”.

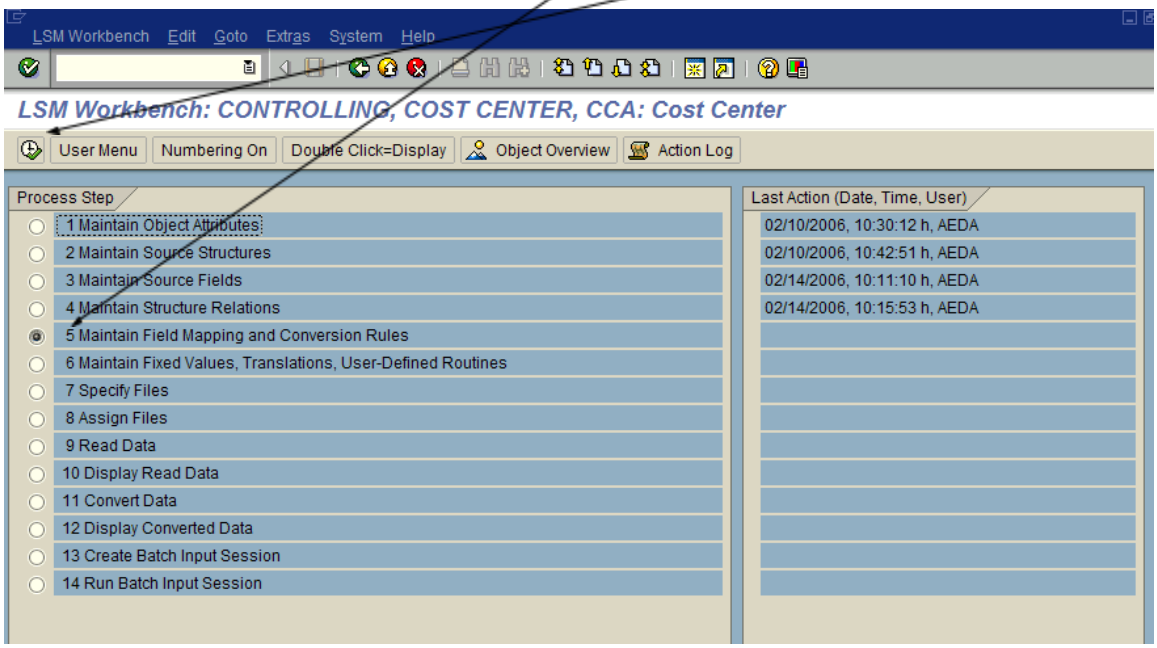
54) You will see the screen below. Click



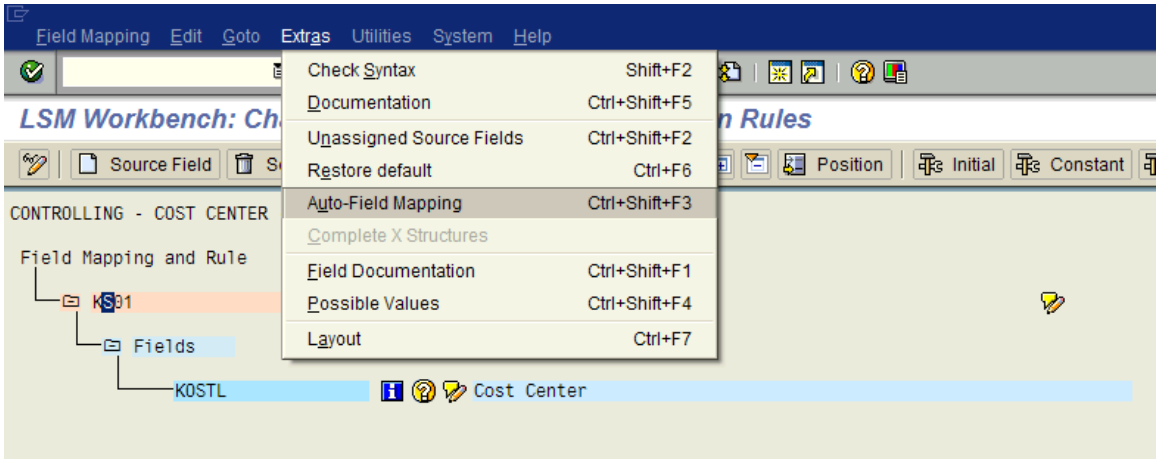
55) Click “SAVE”, then Return.



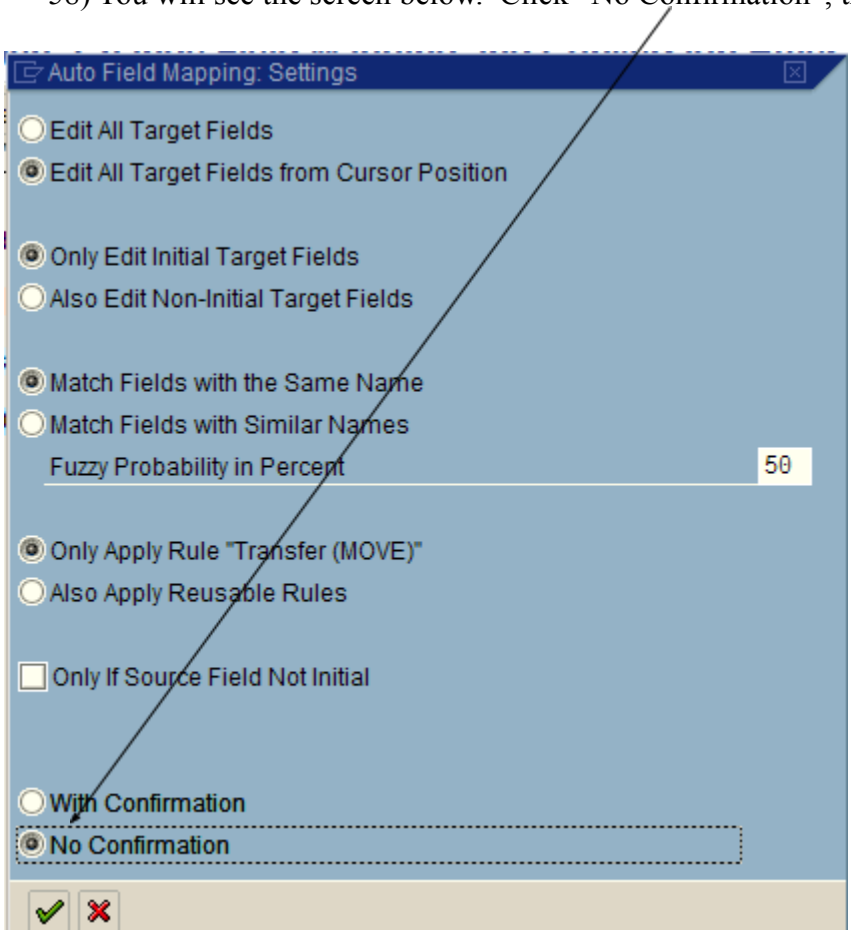
56) You are defaulted automatically to Step 5. Click “Execute”.



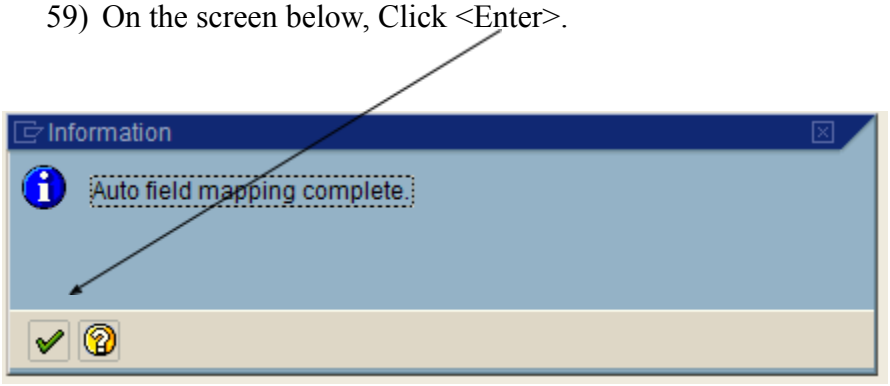
57) Click “Change”, then click once on the Structure Name, then Click “Extras”>Auto-Field Mapping>



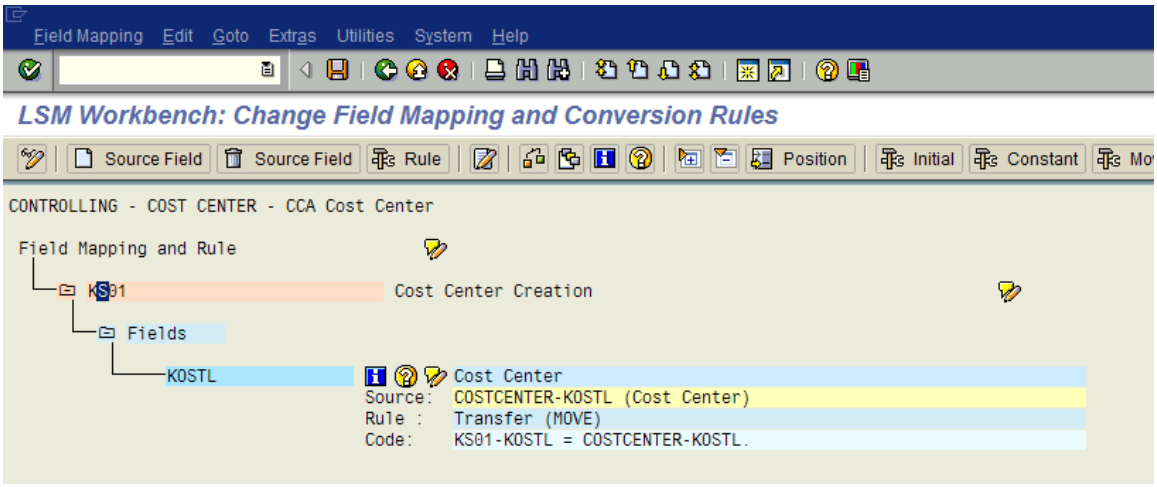
58) You will see the screen below. Click “No Confirmation”, then “return”.



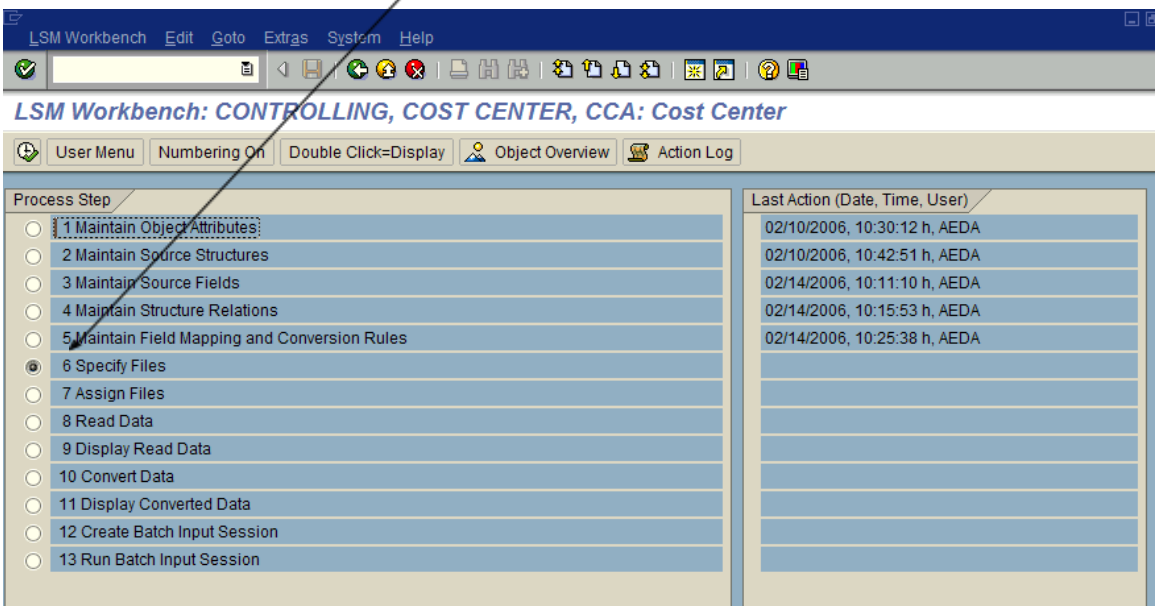
59) On the screen below, Click <Enter>.



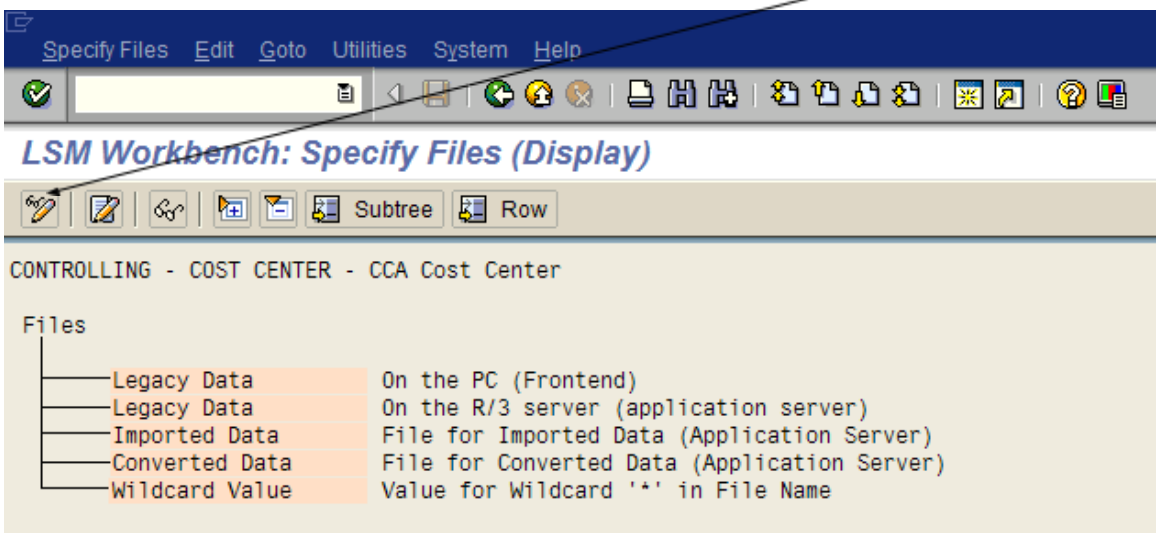
60) On the next screen click <save>, then <return>.



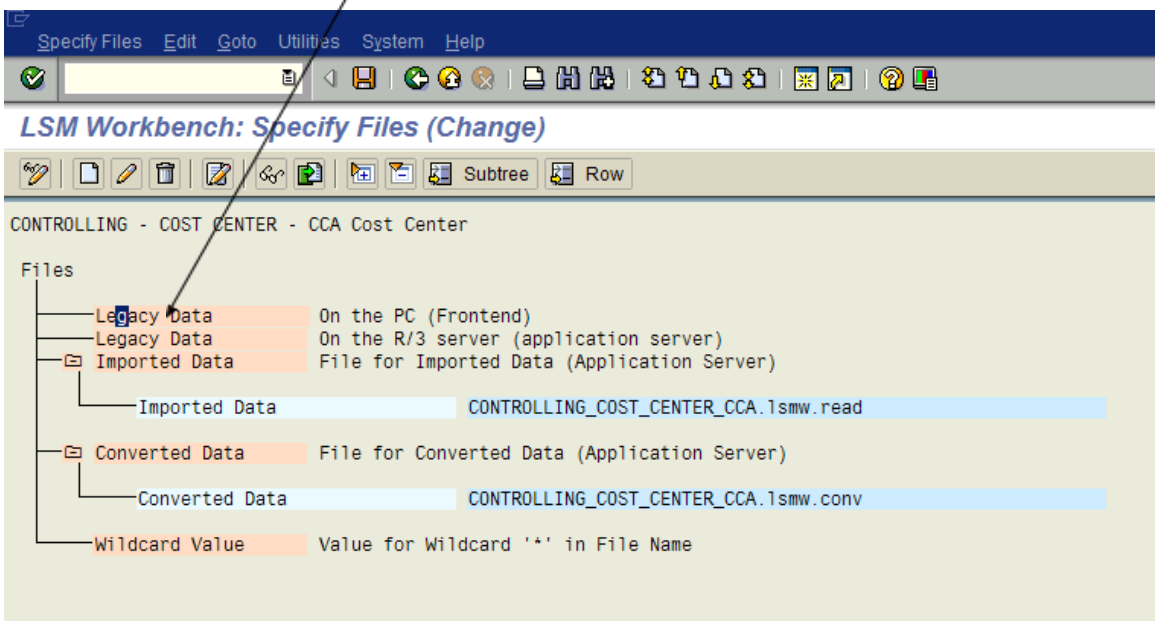
61) You're now ready for Step 6. Click <Execute>



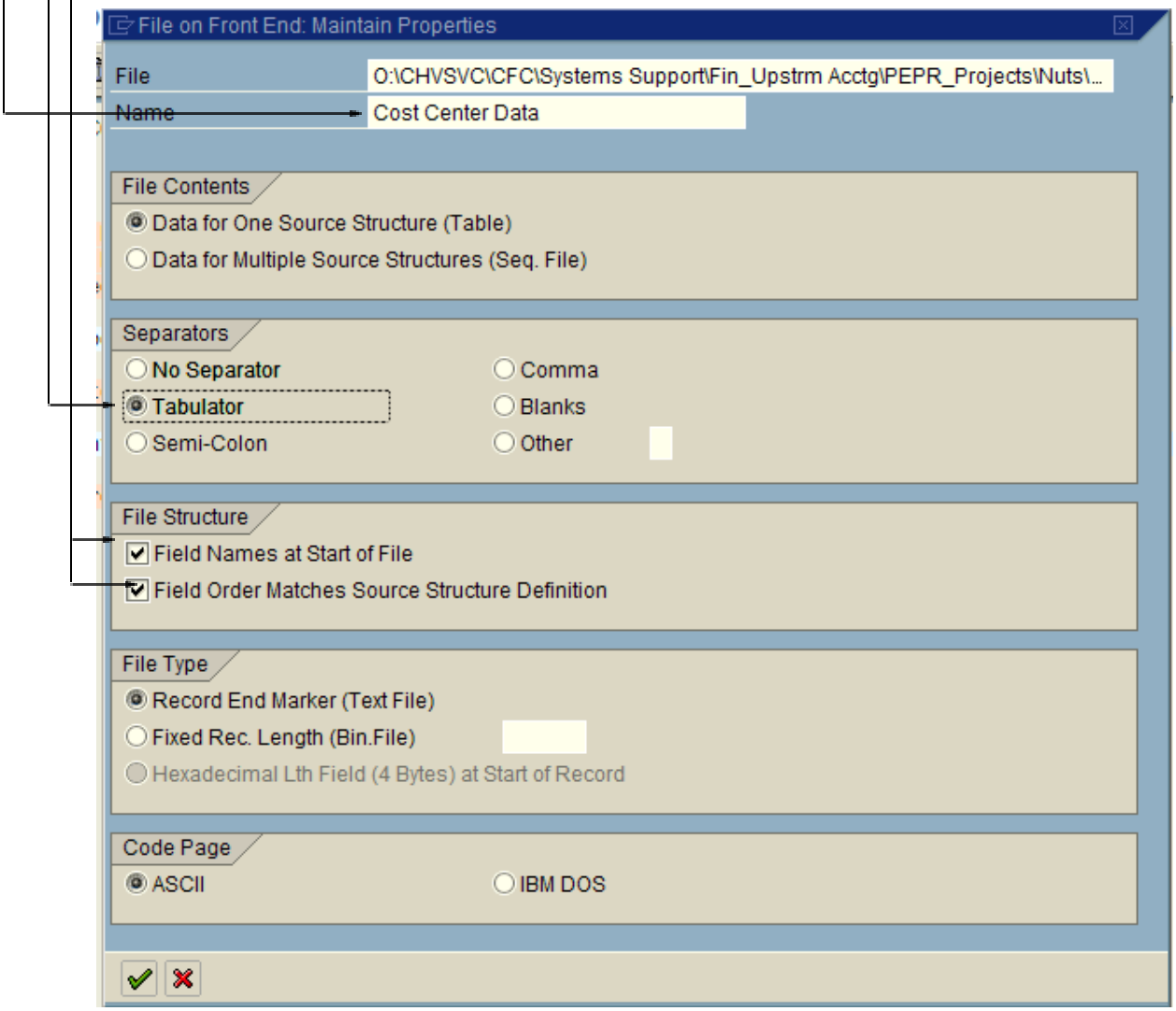
62) The screen below appears. It offers several options of importing data. In our example we want to import data saved on our PC. Therefore we need to select the first option “Legacy Data On the PC (Frontend) then click **<change>**



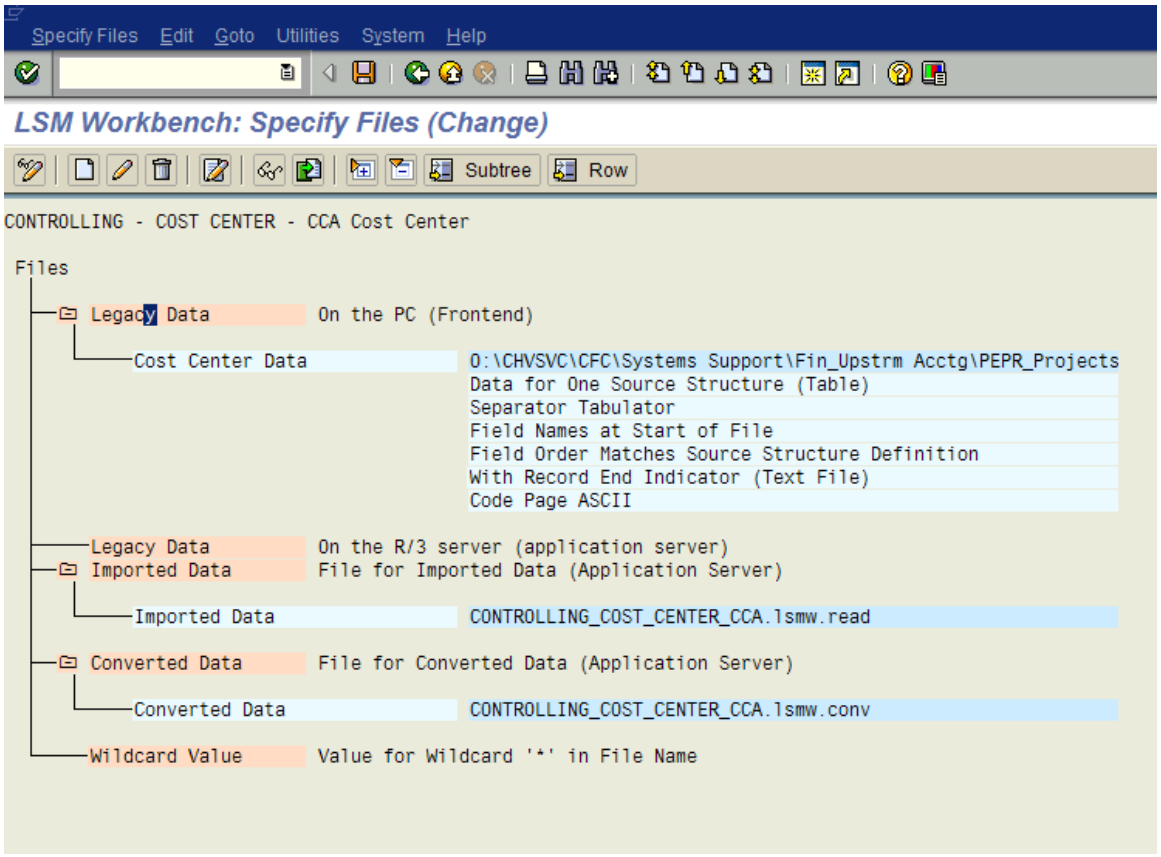
63) Double click on the first option.



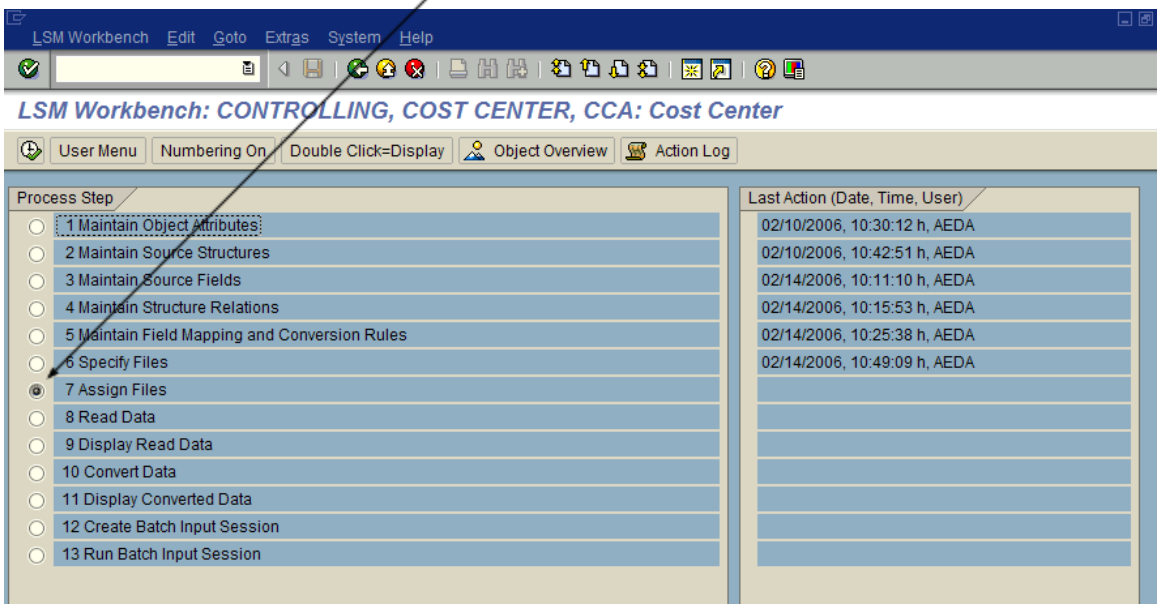
64) On the screen below you will select the file to import from you Desktop (Please remember the location of the file).
Next put in the file name (in the "Name" field)
Select "Tabulator".
Under File Structure ensure that both items are checked. Click <enter>.



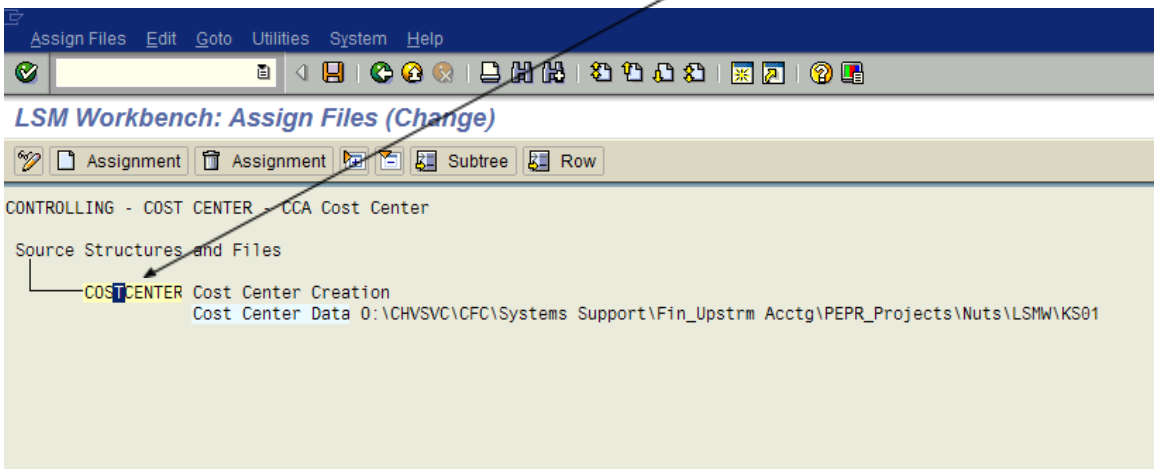
65) Click <save>, Click <return>.



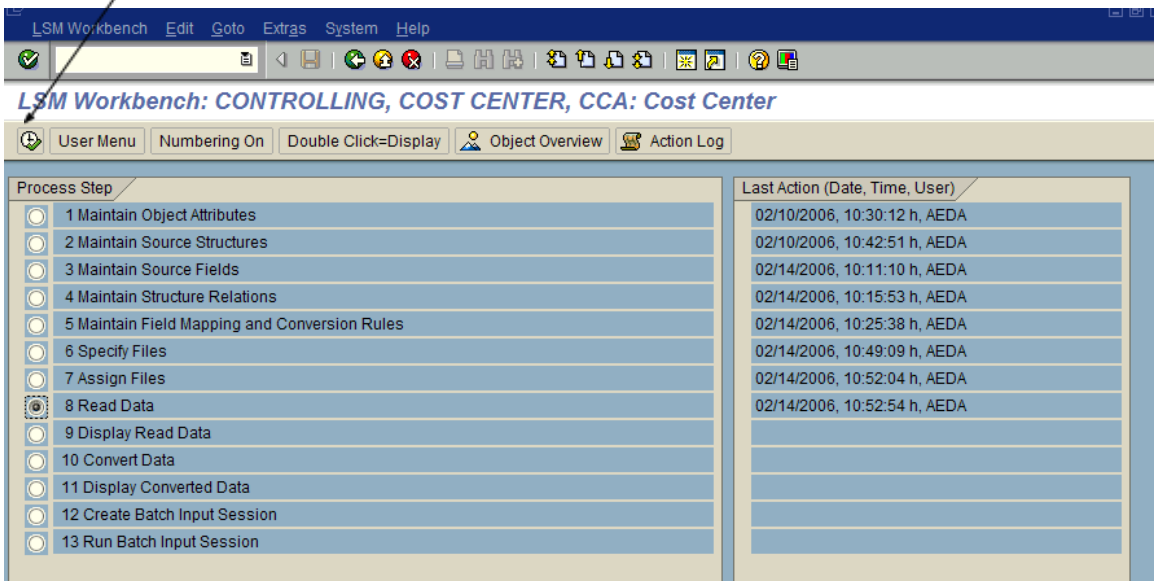
66) You are now ready for Step 7. Click <execute>.



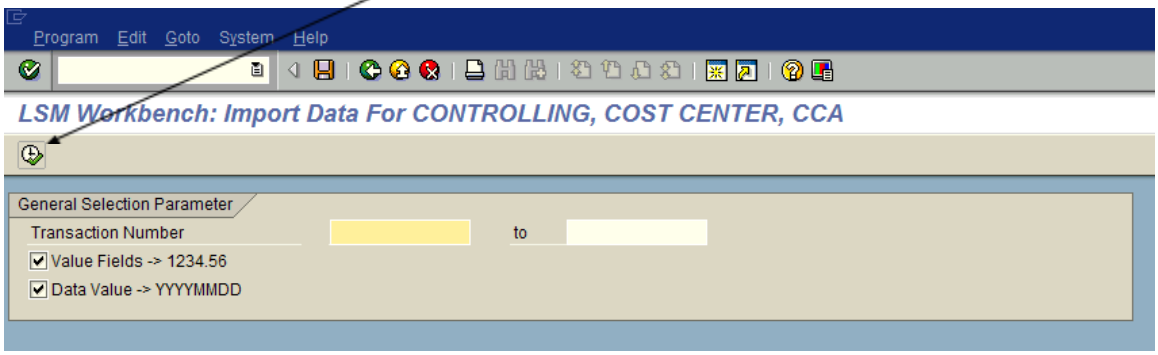
67) On the screen below click <change>, Select the **source structure**, then <save>, then <return>.



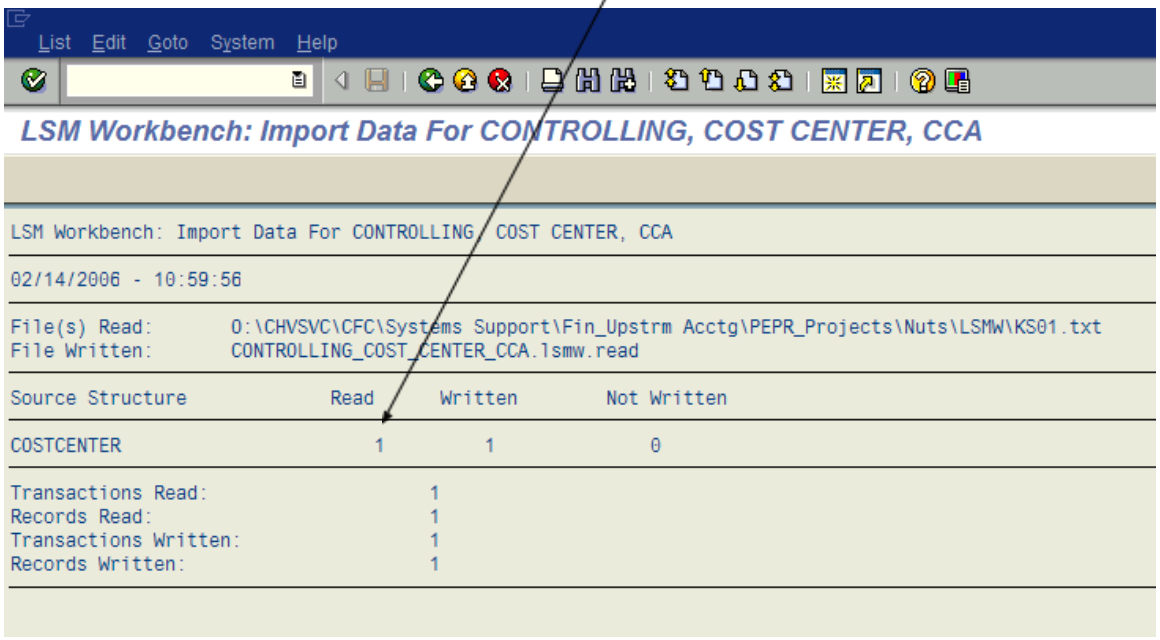
68) You can now test to see if LSMW will read your data on the "text" file. **Execute** Step 8.



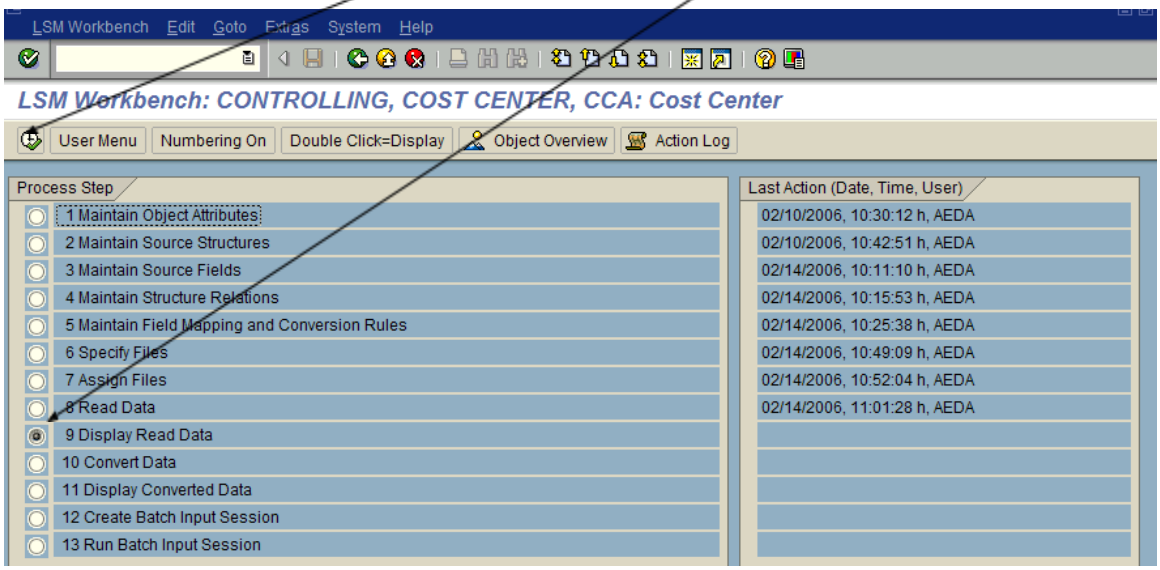
69) From the screen below, click **<execute>**. LSMW will read the data from your text file.



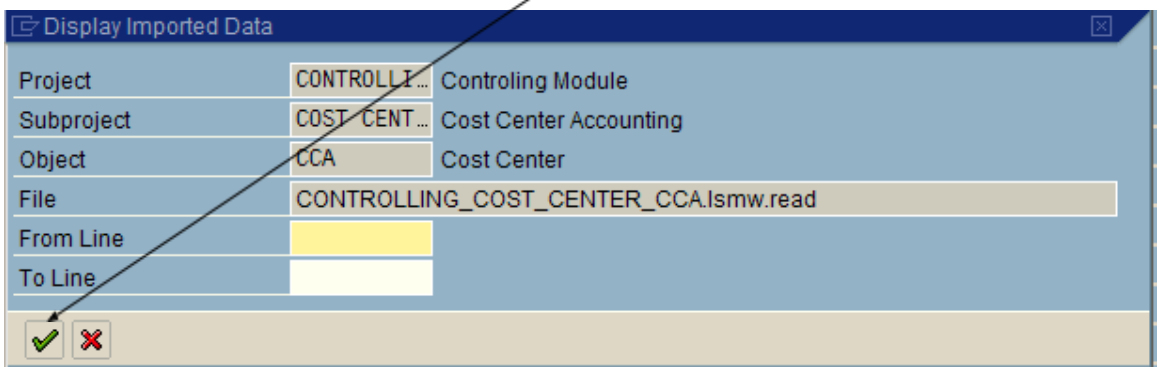
70) The screen below shows that we have **one record** being read from our ".txt" file. Click <return> twice to return to the Main Screen.



71) You are now ready to **execute** Step 9. This step displays the data.

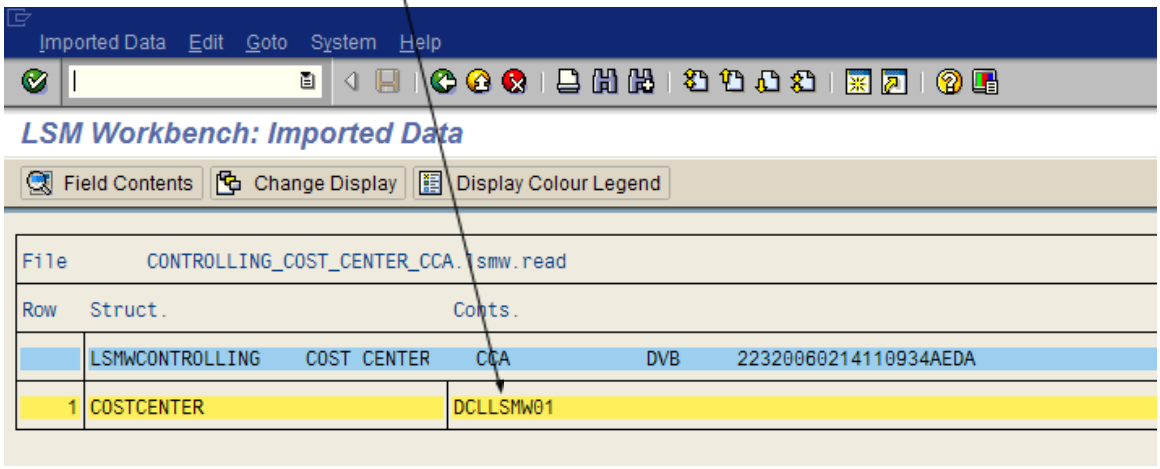


72) You will see the screen below. Click **<enter>**

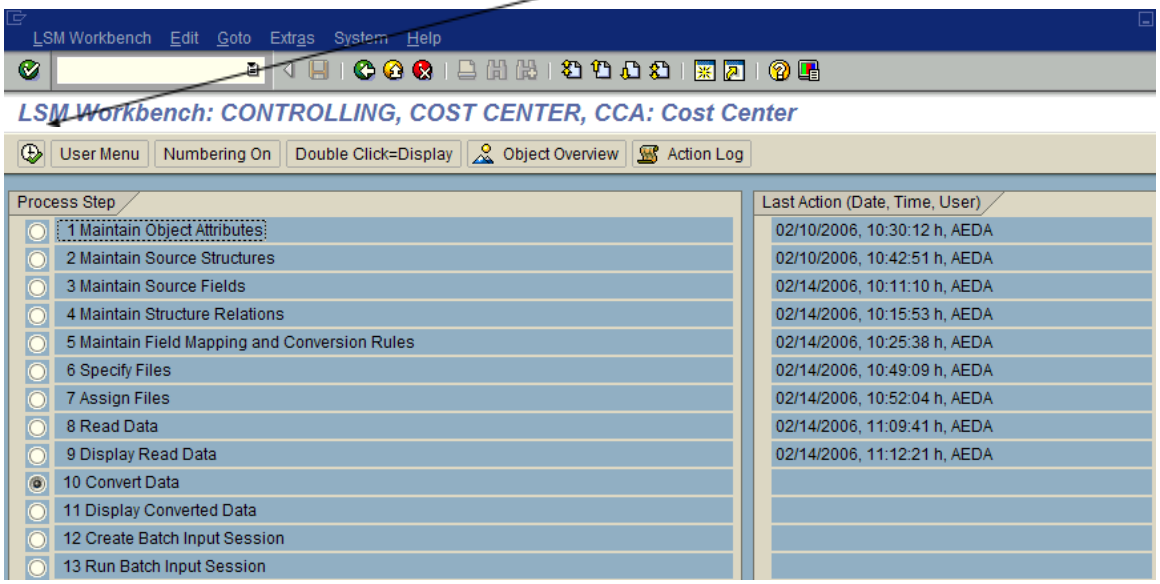


(Please Note: If you wish to just use particular lines in your LSMW can use the "From Line" and "To Line" to tell LSMW which lines from your file that you wish to process. LSMW will only select those lines.)

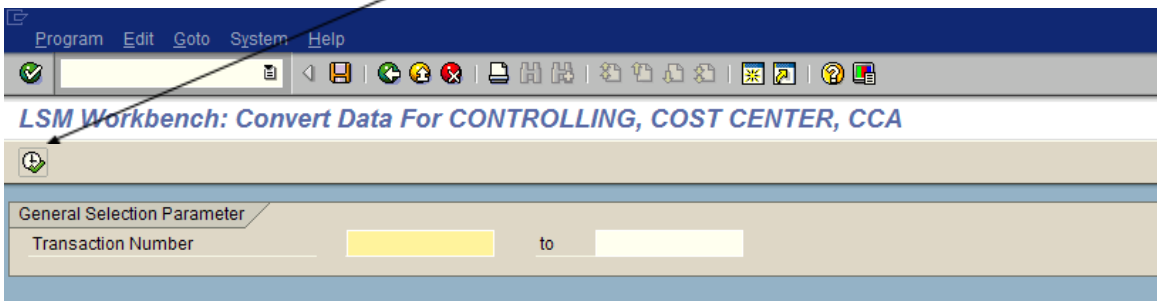
73) The screen below shows that we will load one cost center. In this example the cost center is **"DCLLSMW01"**. The purpose here is to verify that all the data that you wish to load is being captured. Click <return>.



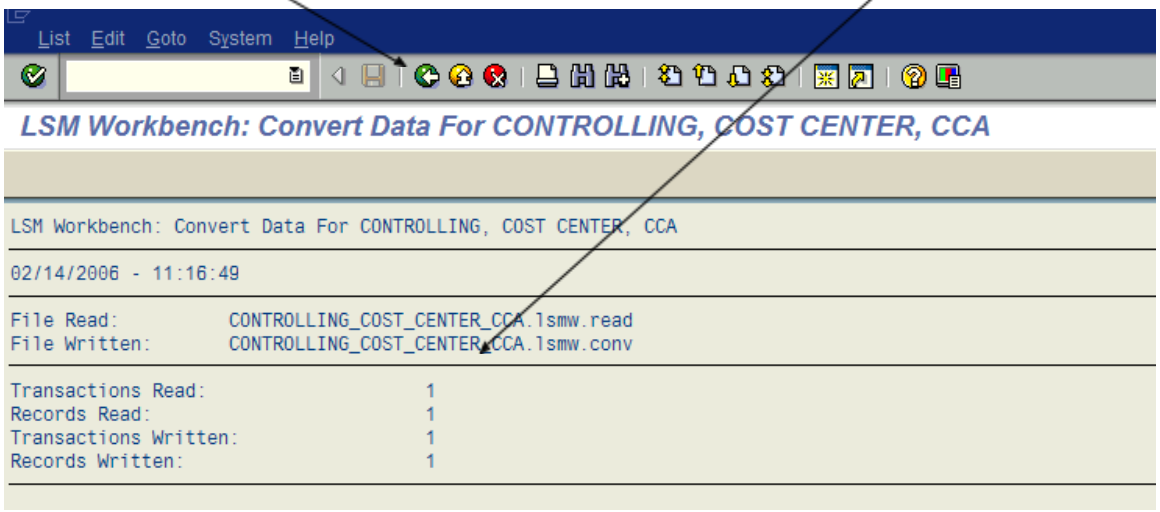
74) Next you're ready to convert the data. That is the data is being converted from your .txt file to the LSMW language. **Execute** Step 10.



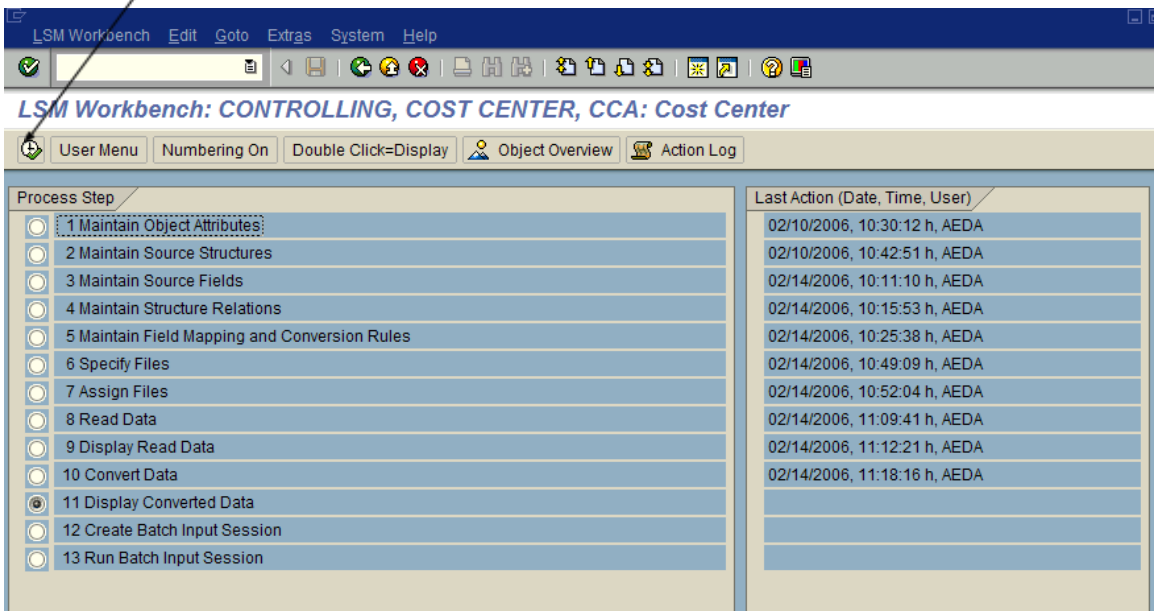
75) From the screen below. Click **<execute>**. NOTE TO FILE EXPLAIN THE NUMBER OF RECORDS CONVERTED.



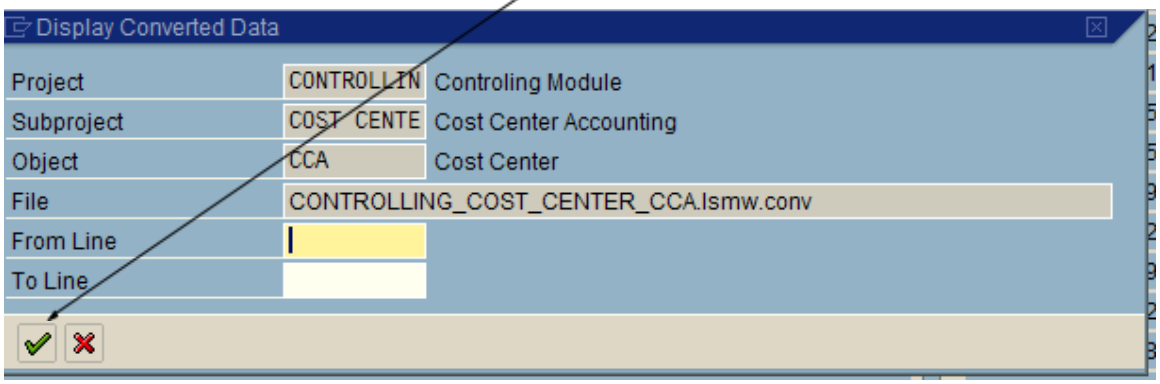
76) The screen below shows that in our example one record is being converted. Click **<return>** twice to return to the main screen.



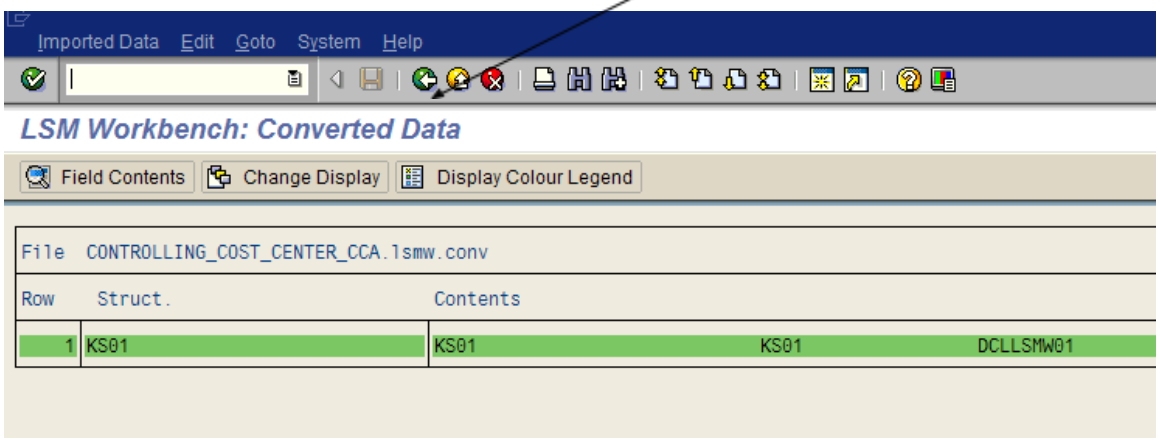
77) Now you're ready to display the data that you have converted. Click **<execute>**.



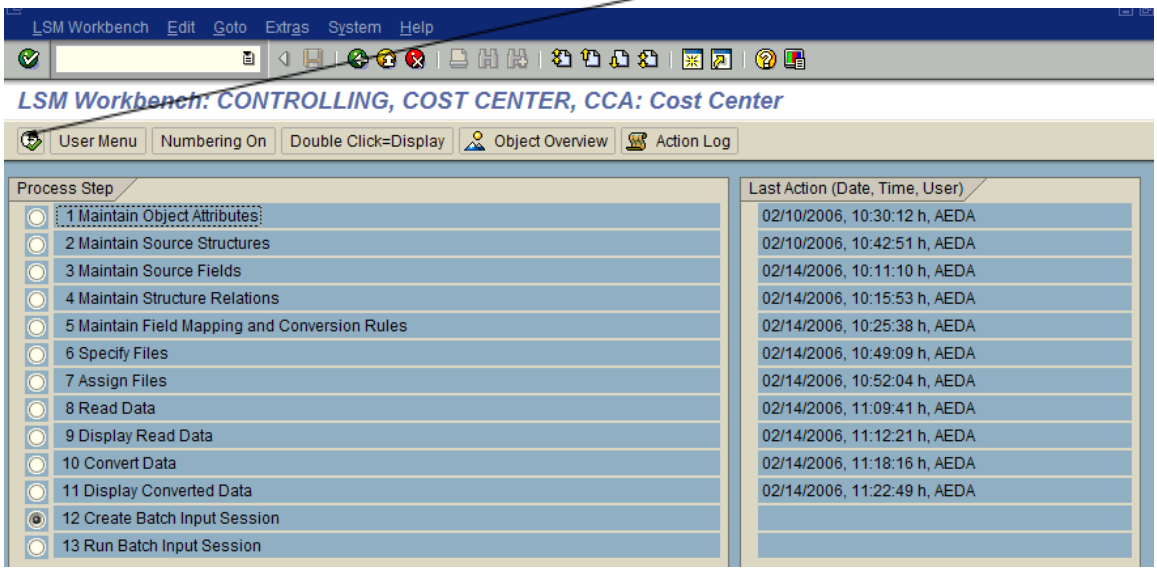
78) The screen below appears. Click **<enter>**.



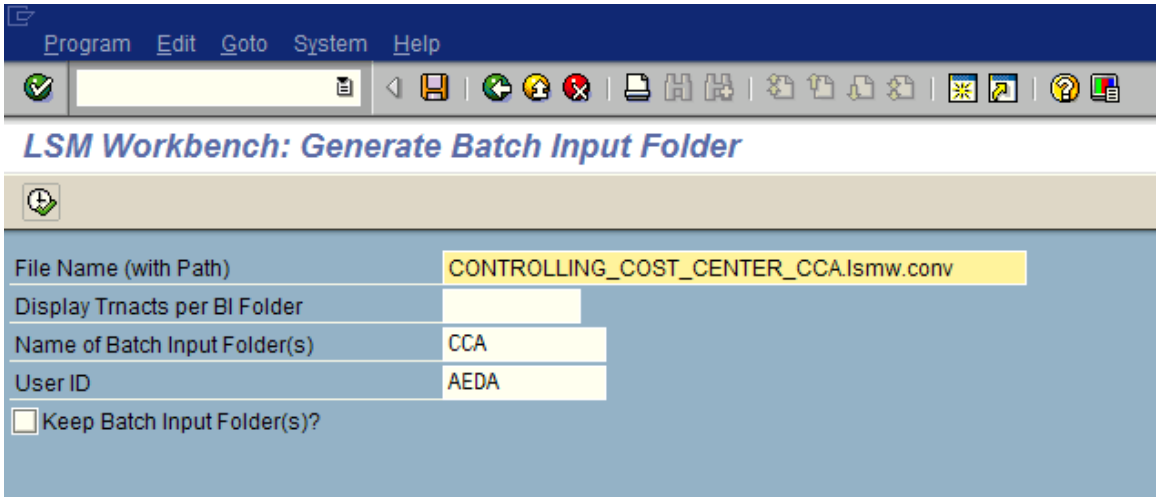
79) You will now see the data converted. In this example cost center "DCLLSMW01" is being displayed. Click **<return>** to the main screen.



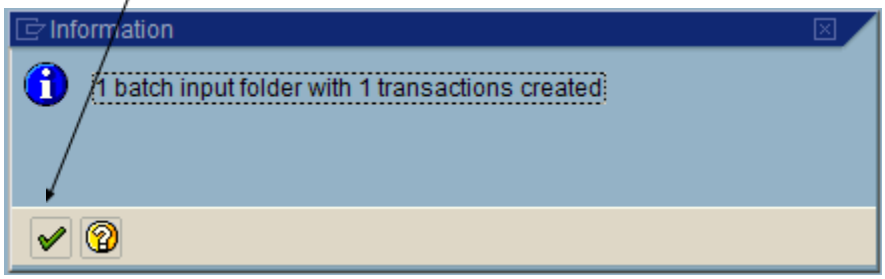
80) Next you want to "Create Batch Input Session". Execute Step 12.



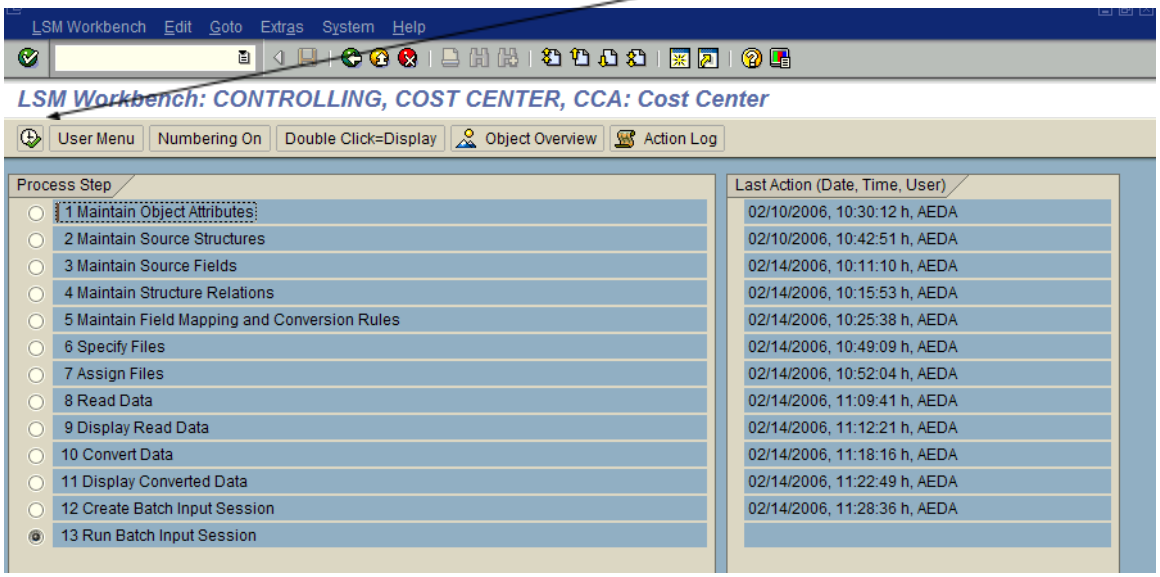
81) The screen below appears. Click <execute>. This will create an SAP BDC session (SM35).



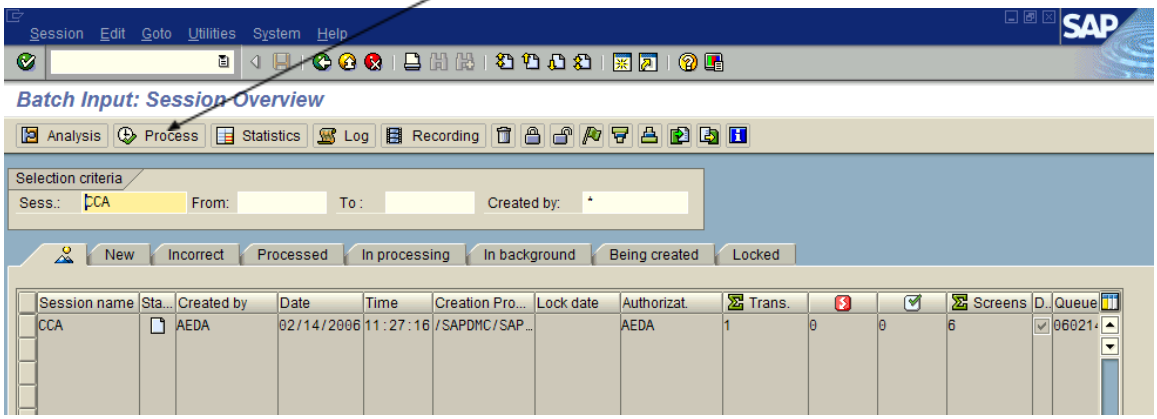
82) The message below appears that you have created a Batch Input session. Click <enter>.



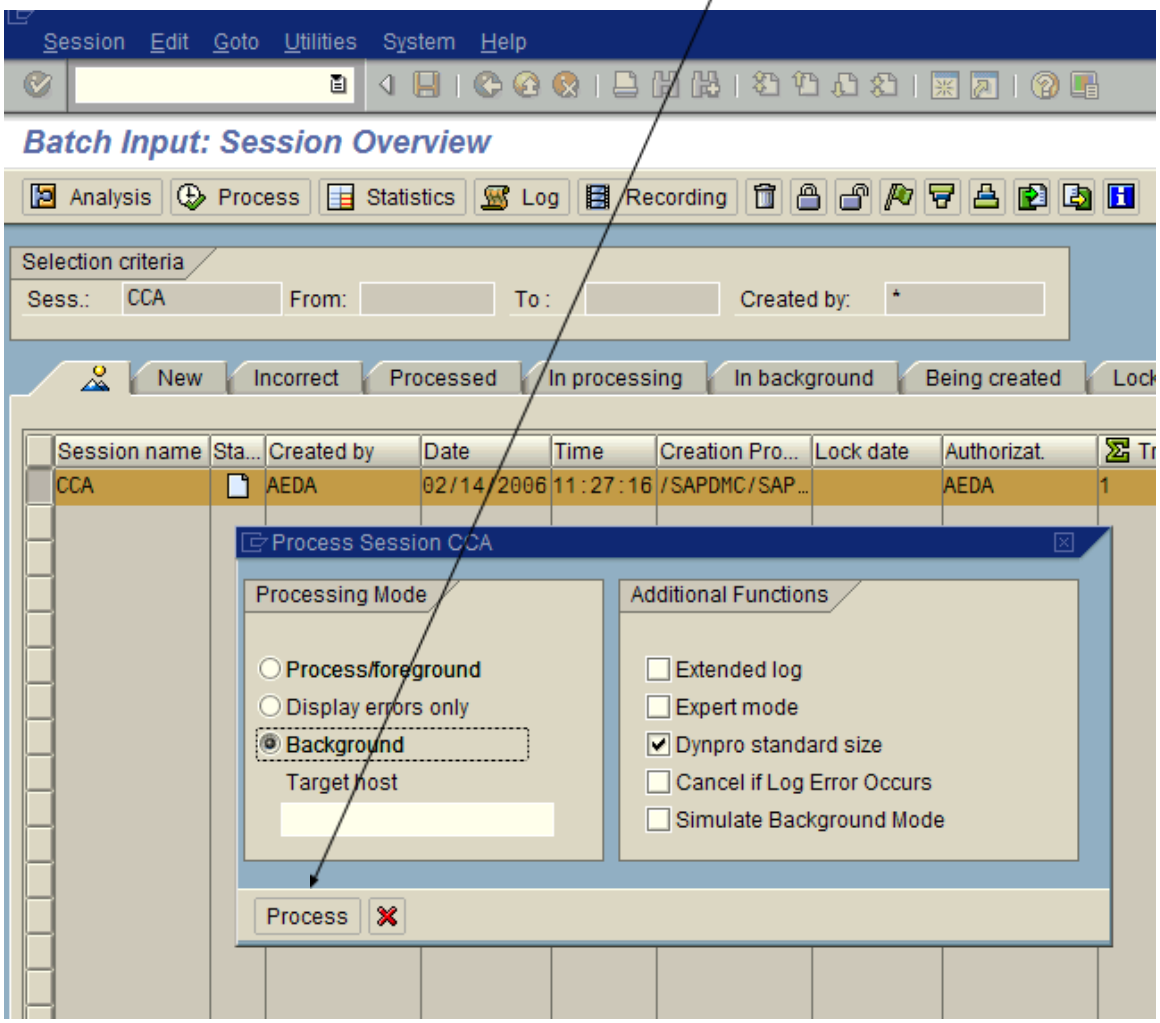
83) You are now ready to process the BDC session. You do this by **executing** step 13 “Run Batch Input Session”.



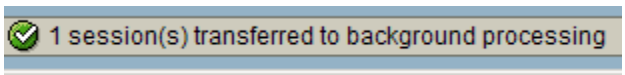
84) You are automatically taken to transaction SM35. You now need to process the BDC session by clicking on <Process>.



85) Select the session, Click Process, and a dialog box appears. You need to choose your preferred processing mode. In our example we're choosing to process the session in "Background". Click **<Process>**.



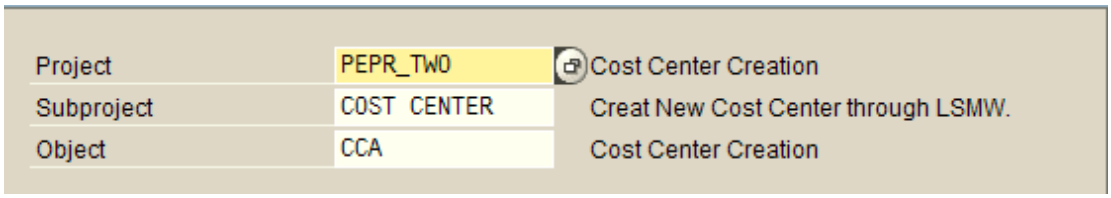
86) You will see the message below.



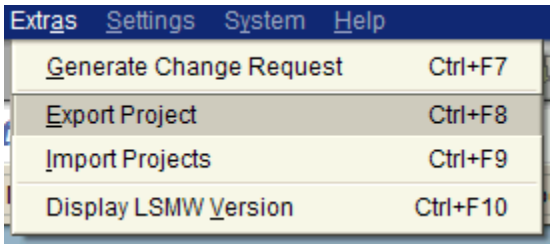
EXPORT/IMPORT LSMW TO OTHER CLIENTS

The LSMW can be exported and imported to other SAP Clients for execution. No transports are necessary as in the case of CATT/eCATT. Follow the instruction on the following pages to do this.

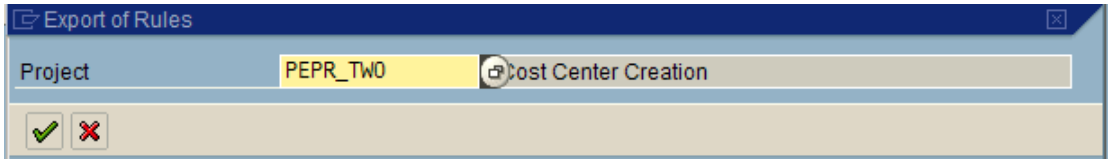
1) Go to transaction LSMW
2) Choose the Project you wish to Export.



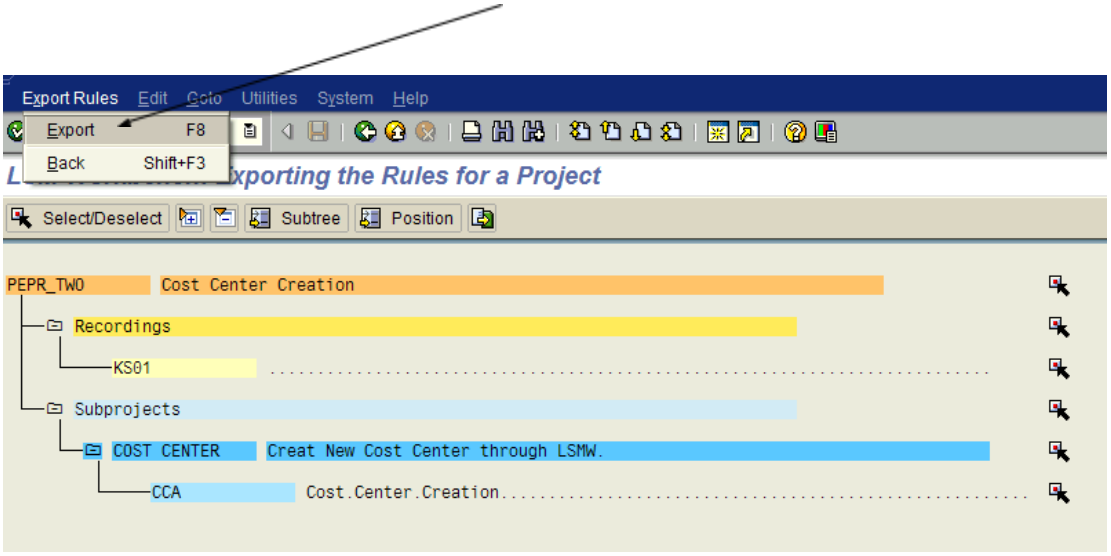
3) Click >Extras>Export Project



4) When the screen below appears, click

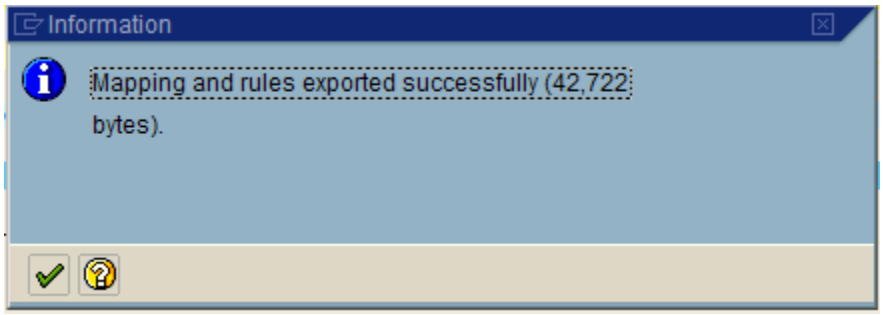


5) From the next screen **<u>click >Export Rules>Export</u>**



6) Select a location on your local drive to store the file and save it there.

7) You will receive a screen similar to below.



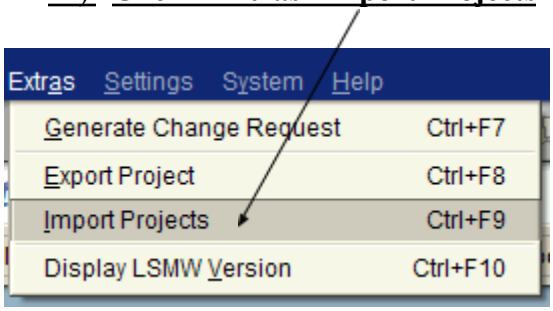
8) Click .

IMPORTING LSMW

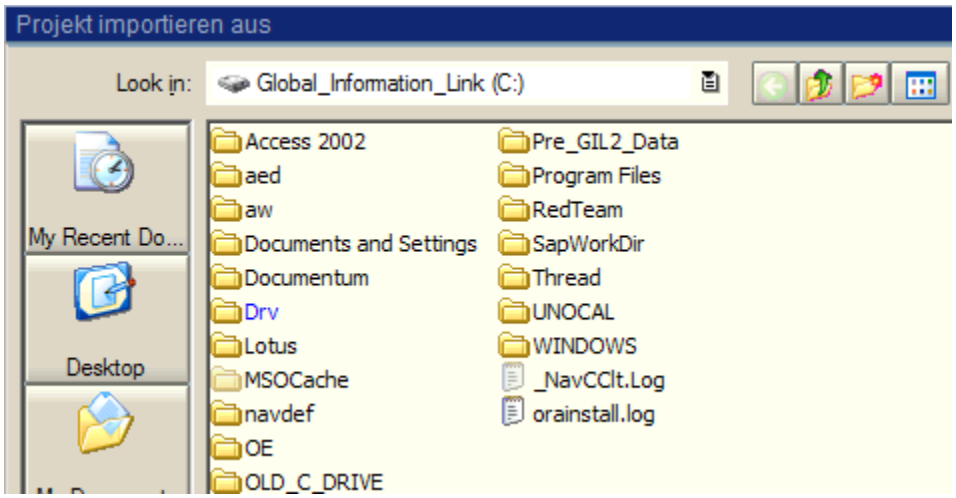
9) To Import LSMW log on to the client in which you wish to import to.

10) Go to Transaction code LSMW.

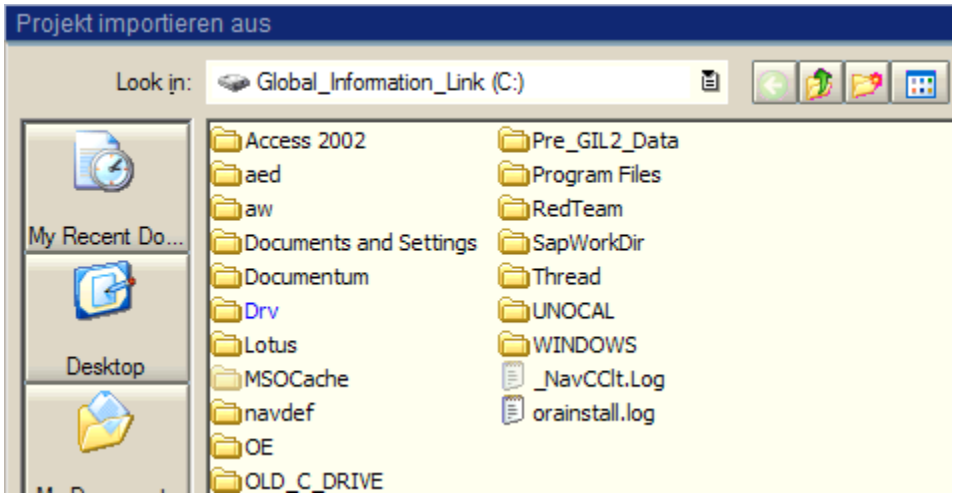
11) **Click >Extras>Import Projects**



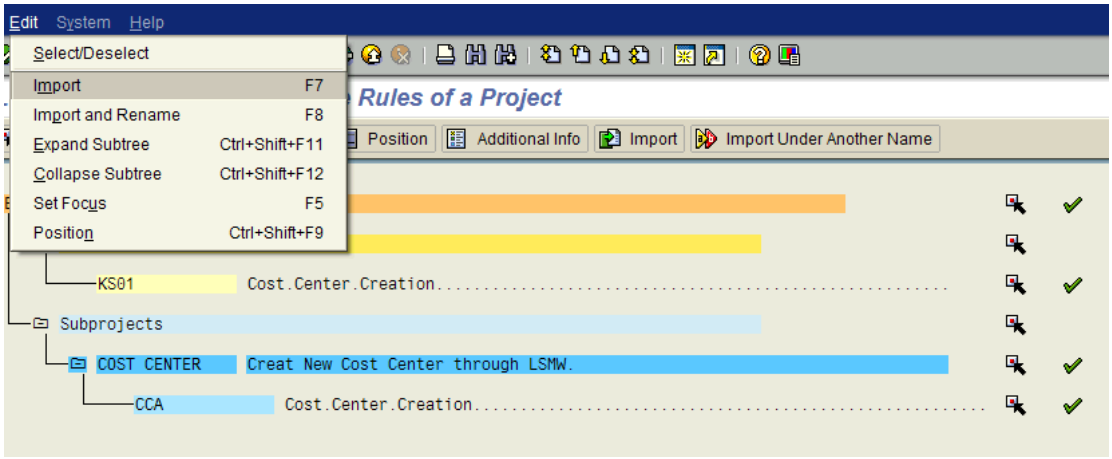
12) Choose the file from the location you exported it to.



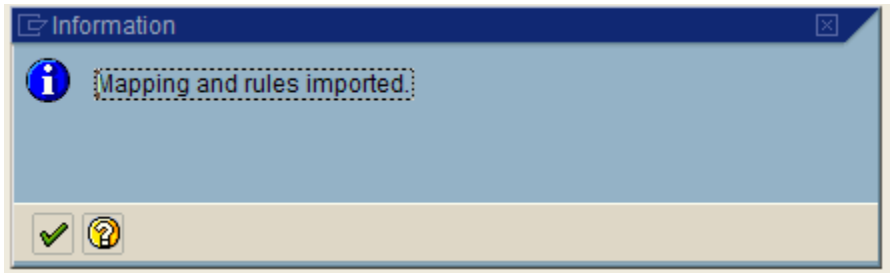
13) You will receive the screen below. Click the green check and continue.



14) From the following screen **<u>Click >Edit>Import</u>**



15) You will see the screen below. Click the green check.



16) You are now ready to execute the LSMW in the client.