



Informatica Power Center 9.0.1

Building Financial Data Mode - Lab#14 Hands-on Guide on Joiner Transformation

Description:

BISP is committed to provide BEST learning material to the beginners and advance learners. In the same series, we have prepared a complete end-to end Hands-on Guide for building financial data model in Informatica. The document focuses on how the real world requirement should be interpreted. The mapping document template with very simplified steps and screen shots makes the complete learning so easy. The document focuses on Joiner Transformation. **Join our professional training program and learn from experts.**

History:

Version	Description Change	Author	Publish Date
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Introduction

Joiner Transformation in Informatica.

The joiner transformation is an active and connected transformation used to join two heterogeneous sources. The joiner transformation joins sources based on a condition that matches one or more pairs of columns between the two sources. The two input pipelines include a master and a detail pipeline or branch. To join more than two sources, you need to join the output of the joiner transformation with another source. To join n number of sources in a mapping, you need n-1 joiner transformations.

Description

A Source Qualifier Transformation.

- Flat File as a source database
- Used Oracle 11g as a target database.

Mapping Sheet

Definition Name	Joiner Transformation				
Source Name	SRC_CREDITCARD				
Target Name	TRG_CREDITCARD				
Source Details				Target Details	
Entity Name	Field/Expression Name	Data Type	Join Expression	Destination	Destination Field Name
SRC_ACCRUAL_BASIC_CD	ACCRUAL_BASIC_CD	NUMBER(5,0)			
SRC_ACCRUAL_BASIC_CD	ACCRUAL_BASIC_DISPLAY_CD	VARCHAR2(60 BYTE)			
SRC_IRCS	INTEREST_RATE_CD	NUMBER(5,0)		TRG_IRCS	INTEREST_RATE_CD
SRC_IRCS	IRC_NAME	VARCHAR2(60 BYTE)		TRG_IRCS	IRC_NAME
SRC_IRCS	IRC_FORMAT_CD	NUMBER(5,0)	SRC_IRCS.IRC_FORMAT_CD=SRC_IRCS_FORMAT_CD.IRCS_FORMAT_CD	TRG_IRCS	IRC_FORMAT_CD
SRC_IRCS	ISO_CURRENCY_CD	VARCHAR2(20 BYTE)	SRC_IRCS.ISO_CURRENCY_CD=SRC_Currencies.ISO_CURRENCY_CD	TRG_IRCS	ISO_CURRENCY_CD
SRC_IRCS	ACCRUAL_BASIS_CD	NUMBER(5,0)	SRC_IRCS.ACCRUAL_BASIC_CD=SRC_ACCRUAL_BASIC_CD.ACCRUAL_BASIC_CD	TRG_IRCS	ACCRUAL_BASIS_CD
SRC_IRCS	COMPOUND_BASIS_CD	NUMBER(5,0)	SRC_IRCS.COMPOUND_BASIS_CD=SRC_COMPOUND_BASIS_CD.COMPOUND_BASIS_CD	TRG_IRCS	COMPOUND_BASIS_CD
SRC_IRCS	IRC_DESC	VARCHAR2(300 BYTE)		TRG_IRCS	IRC_DESC
SRC_IRCS	IRC_STRUCTURE_TYPE	NUMBER(1,0)		TRG_IRCS	IRC_STRUCTURE_TYPE
SRC_IRCS	GENERATE_FREQUENCY_FLG	NUMBER(1,0)		TRG_IRCS	GENERATE_FREQUENCY_FLG
SRC_IRCS	INTERPOLATION_TYPE_FLG	NUMBER(1,0)		TRG_IRCS	INTERPOLATION_TYPE_FLG
SRC_IRCS	CREATED_BY	VARCHAR2(20 BYTE)		TRG_IRCS	CREATED_BY
SRC_IRCS	CREATED_DATE	TIMESTAMP(6)		TRG_IRCS	CREATED_DATE
SRC_IRCS	LAST_MODIFIED_BY	VARCHAR2(20 BYTE)		TRG_IRCS	LAST_MODIFIED_BY
SRC_IRCS	LAST_MODIFIED_DATE	TIMESTAMP(6)		TRG_IRCS	LAST_MODIFIED_DATE
SRC_IRCS	HYBRID_CURVE_TYPE_CD	NUMBER(5,0)		TRG_IRCS	HYBRID_CURVE_TYPE_CD
SRC_IRCS	MOVING_AVG_TERM	NUMBER(5,0)		TRG_IRCS	MOVING_AVG_TERM
SRC_IRCS	MOVING_AVG_TERM_MULT	CHAR(1 BYTE)		TRG_IRCS	MOVING_AVG_TERM_MULT

SRC_IRCS	VOLATILITY_CURVE_FLG	NUMBER(1,0)		TRG_IRCS	VOLATILITY_CURVE_FLG
SRC_IRCS	DISPLAY_FOR_ALL_CCY_FLG	NUMBER(1,0)		TRG_IRCS	DISPLAY_FOR_ALL_CCY_FLG
SRC_IRCS	RISK_FREE_RATE_FLG	NUMBER(1,0)		TRG_IRCS	RISK_FREE_RATE_FLG
SRC_IRCS	LAST_EXECUTION_DATE	TIMESTAMP(6)		TRG_IRCS	LAST_EXECUTION_DATE
SRC_IRCS	MOVING_AVG_ALL_FLG	NUMBER(1,0)		TRG_IRCS	MOVING_AVG_ALL_FLG
SRC_IRCS_FORMAT_CD	IRC_FORMAT_CD	NUMBER(14,0)			
SRC_IRCS_FORMAT_CD	IRC_FORMAT_NAME	VARCHAR2(20 BYTE)			
SRC_COMPOUND_BASIS_CD	COMPOUND_BASIS_CD	NUMBER(14,0)			
SRC_COMPOUND_BASIS_CD	COMPOUND_BASIS_NAME	VARCHAR2(20 BYTE)			
SRC_Currencies	ISO_CURRENCY_CD	VARCHAR2(20 BYTE)			
SRC_Currencies	ISO_CURRENCY_NAME	VARCHAR2(20 BYTE)			

Source Table

Source Analyzer

K	Name	Datatype
F	ACCRUAL_BAS...	numb
M	ACCRUAL_BAS...	string

K	Name	Datatype
F	COMPOUND_B...	numb
M	COMPOUND_B...	string

K	Name	Datatype
?	INTEREST...	number
	IRC_NAME	string
?	IRC_FOR...	number
?	ISO_CUR...	string
?	ACCRUAL...	number
?	COMPOU...	number
	IRC_DESC	string
	IRC_STRU...	number
	GENERAT...	string
	INTERPOL...	string
	CREATED...	string
	CREATED...	string
	LAST_MO...	string
	LAST_MO...	string
	HYBRID_C...	string
	MOVING...	string
	MOVING...	string
	VOLATILIT...	number
	DISPLAY...	number
	RISK_FRE...	number
	LAST_EXE...	string
	MOVING...	number

Ke...	Name	D
P...	IRC_FORMAT_...	ni
N...	IRC_FORMAT_...	st

Ke...	Name	D
P...	ISO_CURRENC...	st
N...	ISO_CURRENC...	st

Target Table

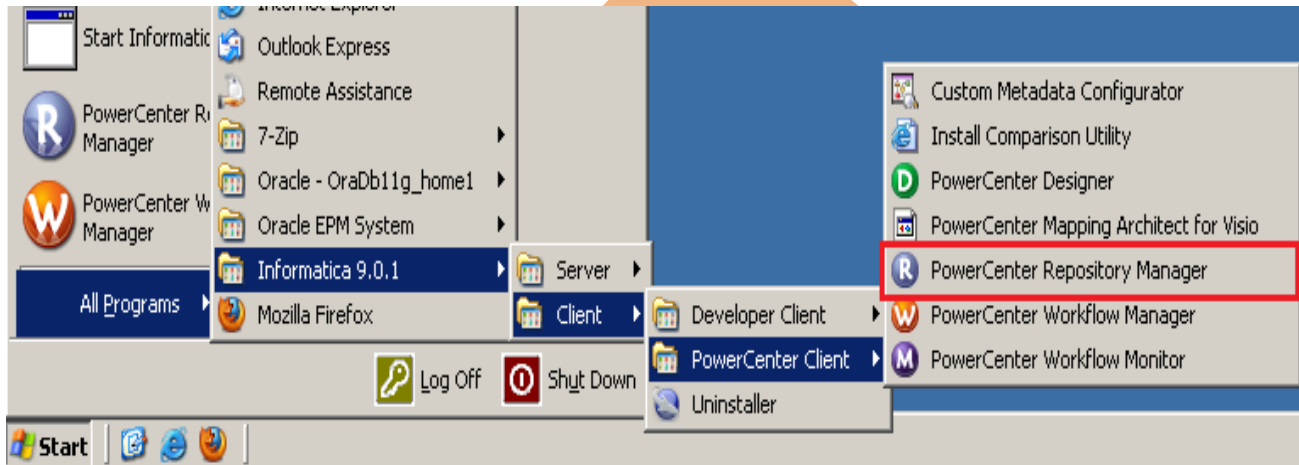
Target Designer

K	Name	Datatype
?	INTEREST_RA...	number(p,s
	IRC_NAME	varchar2
?	IRC_FORMAT_...	number(p,s
?	ISO_CURRENC...	varchar2
?	ACCRUAL_BAS...	number(p,s
?	COMPOUND_B...	number(p,s
	IRC_DESC	varchar2
	IRC_STRUCTU...	number(p,s
	GENERATE_FR...	number(p,s
	INTERPOLATIO...	number(p,s
	CREATED_BY	varchar2
	CREATED_DATE	timestamp
	LAST_MODIEF	varchar2

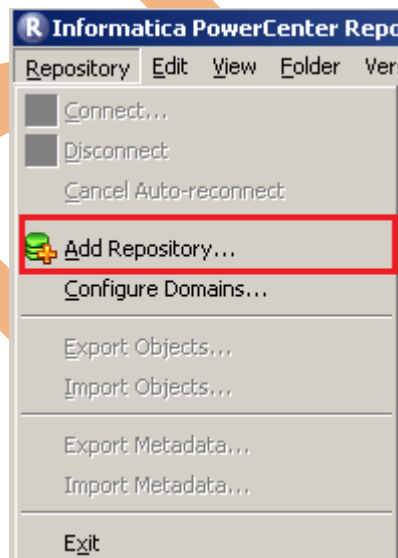
Creating Repository and Folder

Creating Repository & Connecting it.

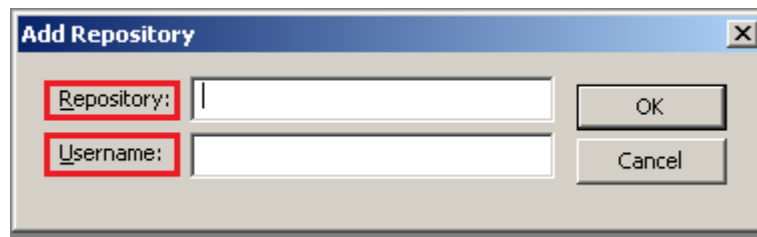
Step-1 First create repository, Click on Start -> All Programs -> Informatica 9.0.1 -> Client -> Power Center Client -> Power Center Repository Manager.



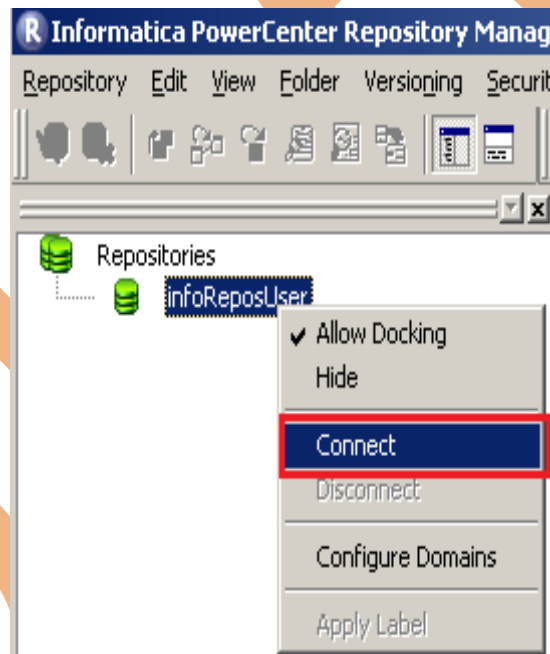
Step-2 Then click on Repository Menu and click on Add Repository.



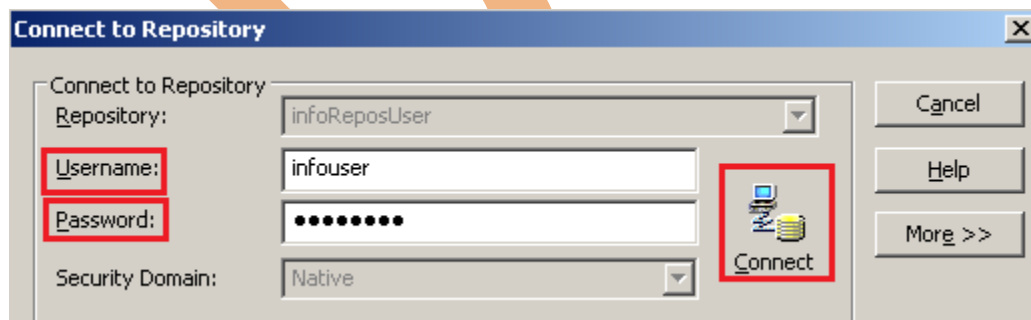
Step-3 Give information like Repository Name and Username. Then click on ok button and repository created successfully.



Step-4 Now connect repository. Right click on newly created repository and click on connect.



Step-5 Give Username & password and click on Connect.

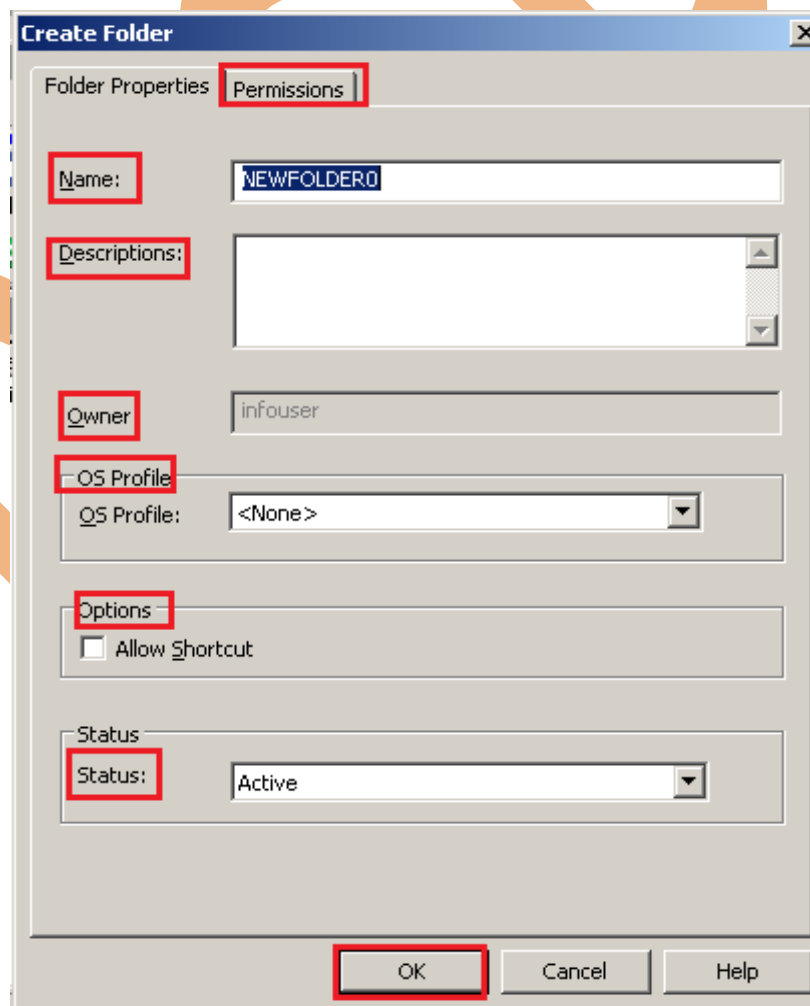


Creating Folder.

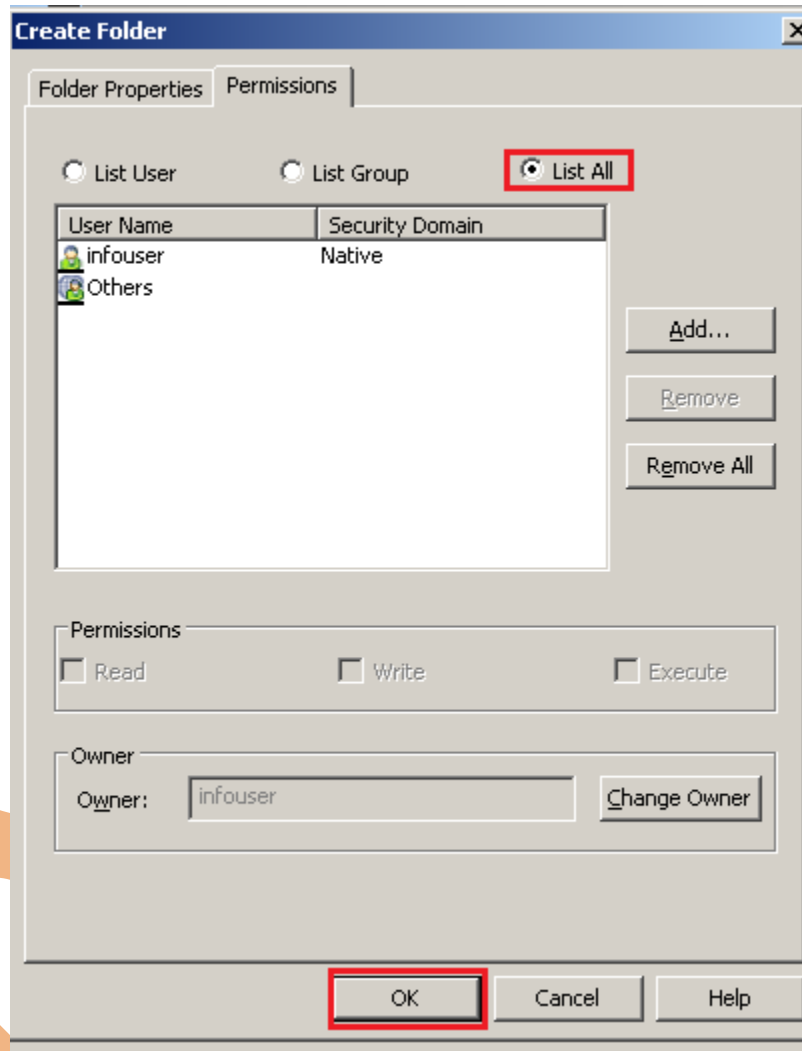
Step-1 Go to Informatica Power Center Repository Manager and click on Folder Menu and click on Create.



Step-2 Specify Name of Folder, Description, Owner, OS Profile, Options, Status and got to permissions tab.



Step-3 This is permission tab to give permission for this folder.



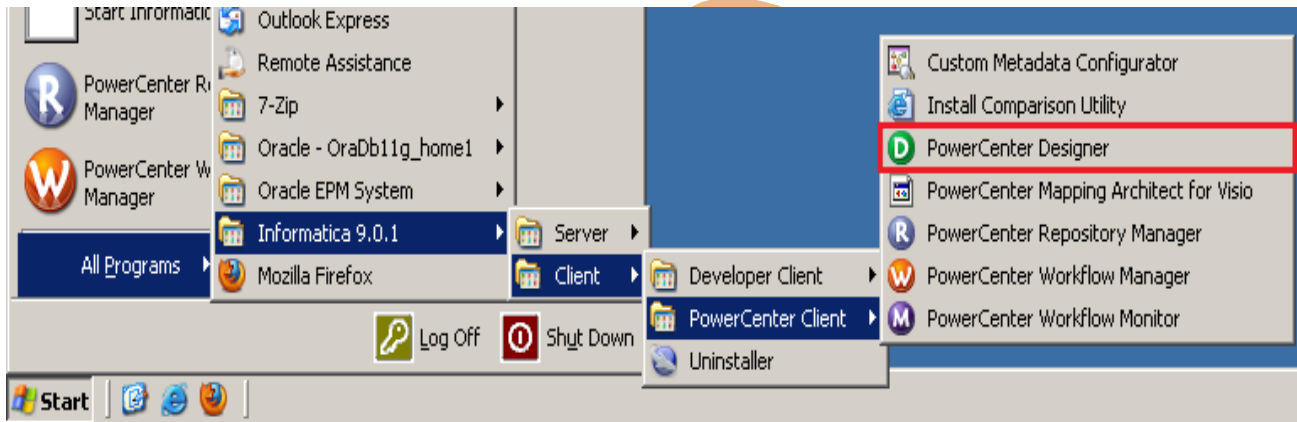
Step-4 This is newly created Folder

The screenshot shows a window titled 'infoReposUser' containing a table with the following data:

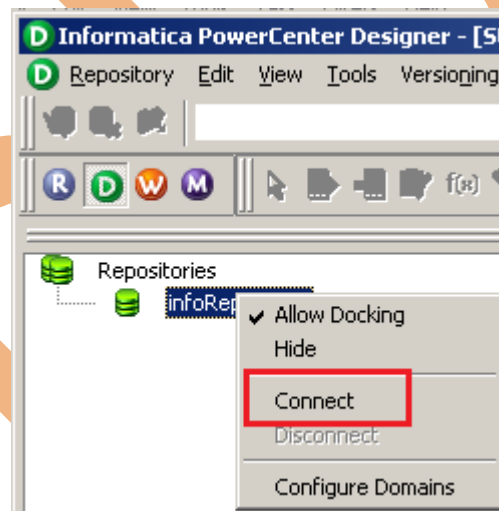
Name	Comments	Is Shared	Owner	OS Profile
bispInfo	-	no	infouser	-
Transformation	-	no	infouser	-

Importing Source and Target Table

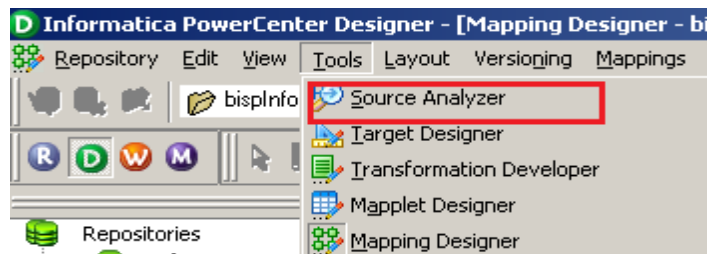
Step-1 Click on Start -> All Programs -> Informatica 9.0.1 -> Client -> Power Center Client -> Power Center Designer.



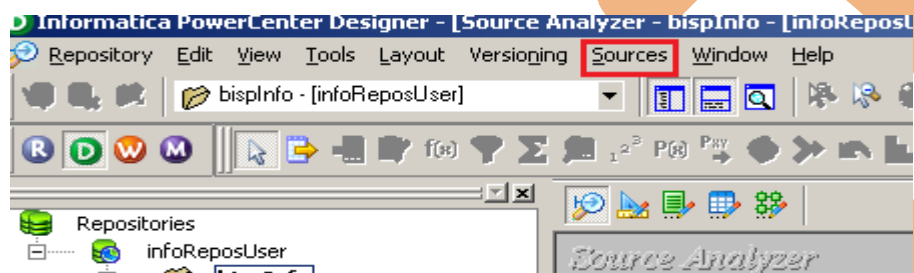
Step-2 Then Connect to Repository in Informatica Power Center Designer Right click on repository name and click on Connect.



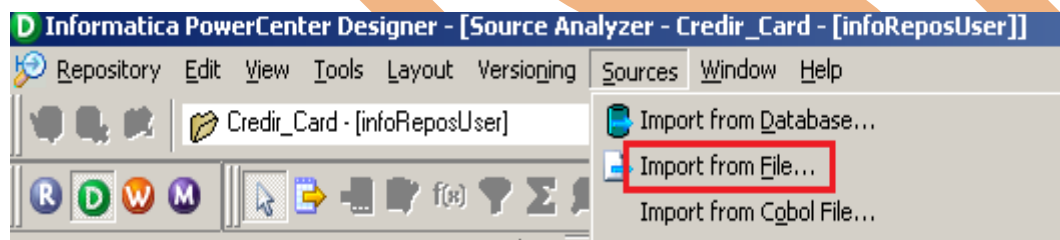
Step-3 Go to Tools Menu and click on Source Analyzer to import source table.



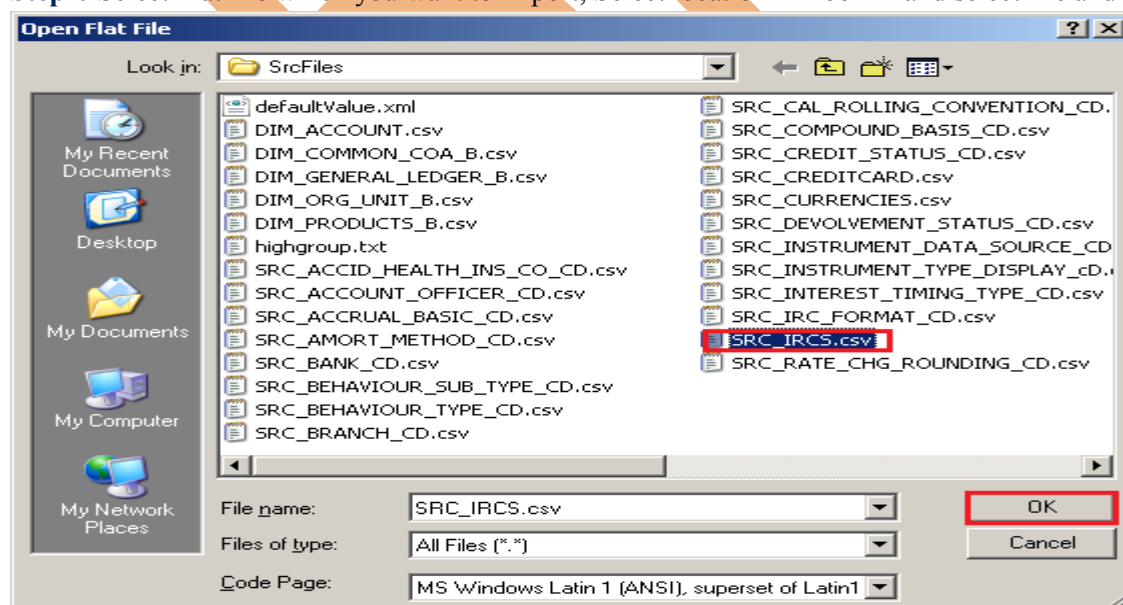
Step-4 And then go to Sources Menu in Informatica Power Center Designer.



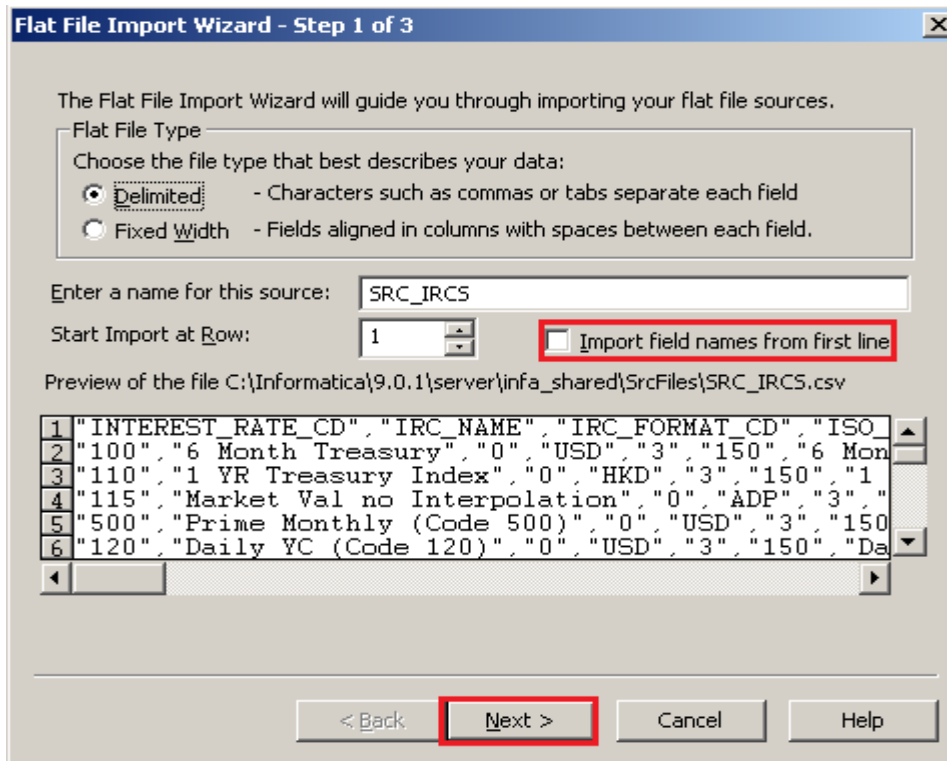
Step-5 And then click on Source menu and select Import from file.



Step-6 Select Flat file which you want to import, Select location in Look in and select file and click OK.



Step-7 Choose the file type - Delimited, click on Import field names from first line. And the click Next.



The Flat File Import Wizard will guide you through importing your flat file sources.

Flat File Type

Choose the file type that best describes your data:

☒ Delimited - Characters such as commas or tabs separate each field

☐ Fixed Width - Fields aligned in columns with spaces between each field.

Enter a name for this source: SRC_IRCS

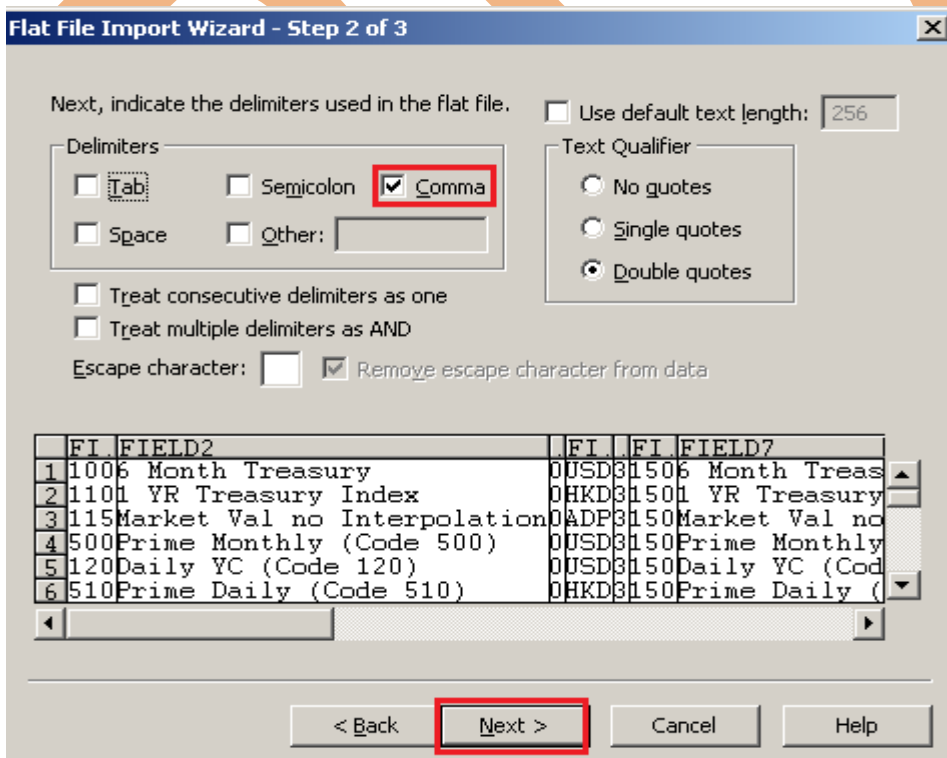
Start Import at Row: 1 ☐ Import field names from first line

Preview of the file C:\Informatica\9.0.1\server\infa_shared\SrcFiles\SRC_IRCS.csv

1	"INTEREST_RATE_CD"	"IRC_NAME"	"IRC_FORMAT_CD"	"ISO"
2	"100"	"6 Month Treasury"	"0"	"USD"
3	"110"	"1 YR Treasury Index"	"0"	"HKD"
4	"115"	"Market Val no Interpolation"	"0"	"ADP"
5	"500"	"Prime Monthly (Code 500)"	"0"	"USD"
6	"120"	"Daily YC (Code 120)"	"0"	"USD"

< Back Next > Cancel Help

Step-8 Specify Delimiters and click Next Button.



Next, indicate the delimiters used in the flat file.

☐ Use default text length: 256

Delimiters

☐ Tab ☐ Semicolon ☒ Comma

☐ Space ☐ Other:

☐ Treat consecutive delimiters as one

☐ Treat multiple delimiters as AND

Escape character: ☐ ☒ Remove escape character from data

Text Qualifier

☐ No quotes

☐ Single quotes

☒ Double quotes

FI	FIELD2	FI	FI	FIELD7
1	1006 Month Treasury	0	USD3150	6 Month Treas
2	1101 YR Treasury Index	0	HKD3150	1 YR Treasury
3	115Market Val no Interpolation	0	ADP3150	Market Val no
4	500Prime Monthly (Code 500)	0	USD3150	Prime Monthly
5	120Daily YC (Code 120)	0	USD3150	Daily YC (Cod
6	510Prime Daily (Code 510)	0	HKD3150	Prime Daily (

< Back Next > Cancel Help

Step-9 Specify Name of Column and Click Finish.

Next, select the name and datatype for each column.

Column Information

Name: **INTEREST RATE CD**

Datatype:

☐ Text Length/Prec. 3

☒ Numeric Scale 0

☐ Datetime Width 3

Source definition:

Name	Type	Le...	Scale
INTEREST...	Num...	3	0
IRC_NAME	Text	38	-
IRC_FOR...	Num...	1	0
ISO_CURR...	Text	3	-
ACCRUAL...	Num...	1	0
COMPOUN...	Num...	3	0
IRC_DESC	Text	38	-

IN	IRC NAME	IS	CO	IRC DESC
1	1005 Month Treasury	0USD81506	Month Treas	
2	1101 YR Treasury Index	0HKD81501	YR Treasury	
3	115 Market Val no Interpolation	0ADP8150	Market Val no	
4	500 Prime Monthly (Code 500)	0USD8150	Prime Monthly	
5	120 Daily YC (Code 120)	0USD8150	Daily YC (Cod	
6	510 Prime Daily (Code 510)	0HKD8150	Prime Daily (

< Back **Finish** Cancel Help

Step-10 Apply (Step-4 to Step -9) to import all Flatfile.

Step-11 This is Source table.

Source Analyzer

SRC_ACCRUAL_BASIC...

K	Name	Datatype
F	ACCRUAL_BAS...	number
N	ACCRUAL_BAS...	string

SRC_COMPOUND_BAS...

K	Name	Datatype
F	COMPOUND_B...	number
N	COMPOUND_B...	string

SRC_IRCS (Flat File)

K	Name	Datatype
I	INTEREST...	number
I	IRC_NAME	string
I	IRC_FOR...	number
I	ISO_CUR...	string
I	ACCRUAL...	number
I	COMPOU...	number
I	IRC_DESC	string
I	IRC_STRU...	number
I	GENERAT...	string
I	INTERPOL...	string
I	CREATED...	string
I	CREATED...	string
I	LAST_MO...	string
I	LAST_MO...	string
I	HYBRID_C...	string
I	MOVING...	string
I	MOVING...	string
I	VOLATILIT...	number
I	DISPLAY...	number
I	RISK_FRE...	number
I	LAST_EXE...	string
I	MOVING...	number

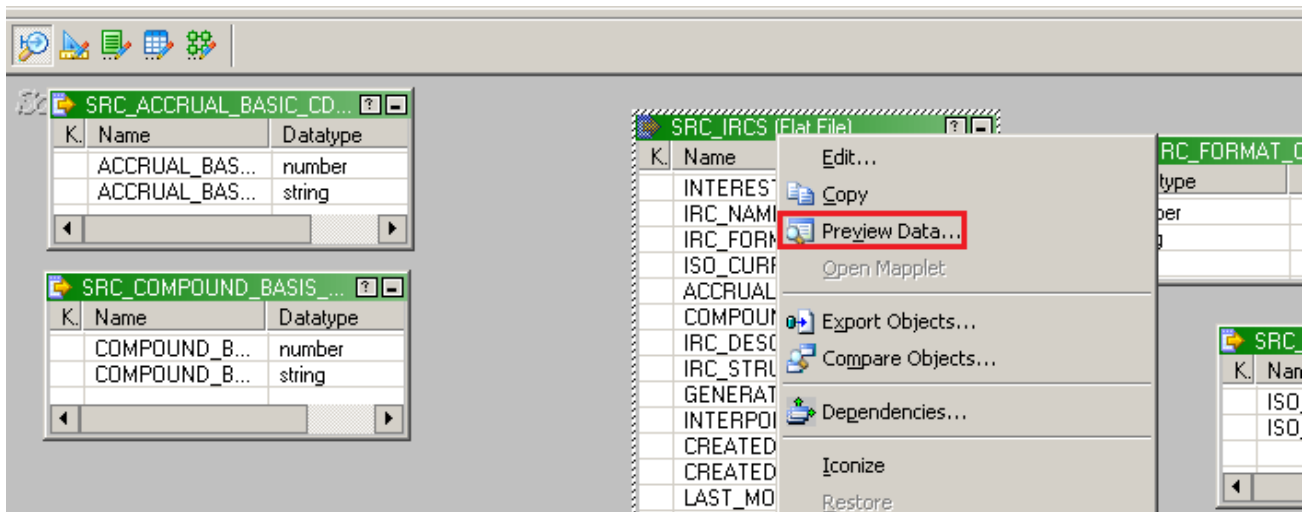
SRC_IRC_FORMAT_CD...

Ke...	Name	D
P...	IRC_FORMAT_...	ni
N...	IRC_FORMAT_...	st

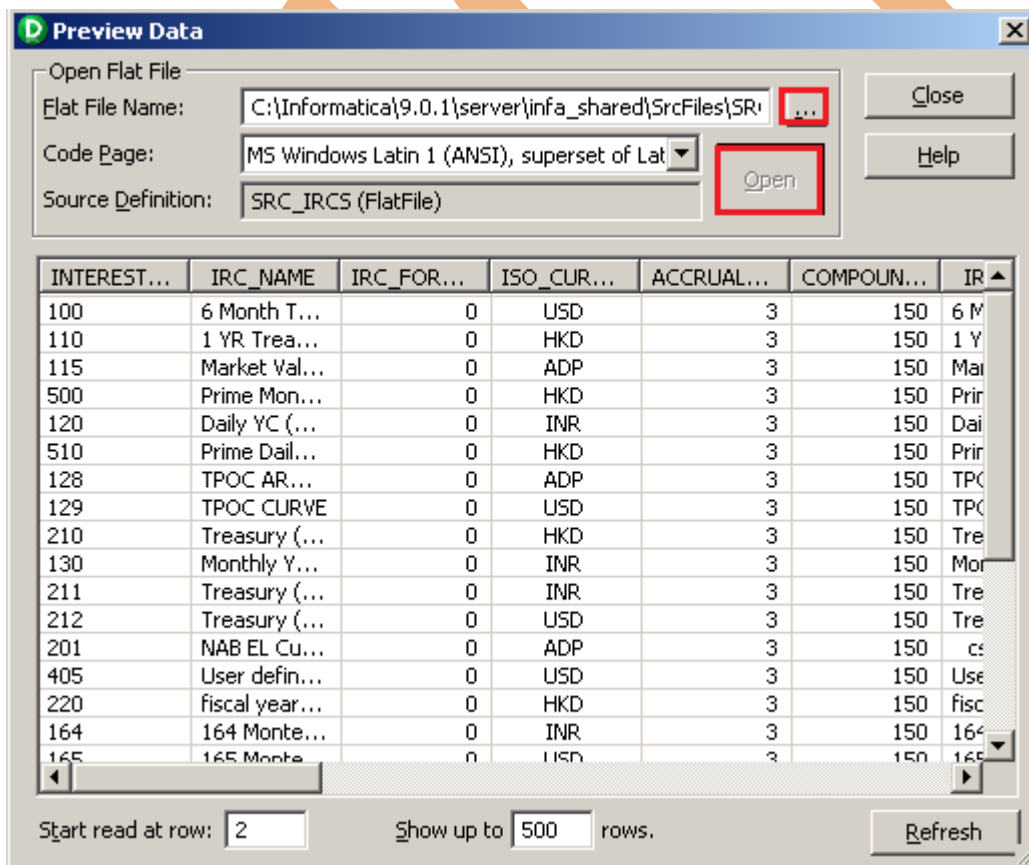
SRC_CURRENCIES (Fla...

Ke...	Name	D
P...	ISO_CURRENC...	st
N...	ISO_CURRENC...	st

Step-12 Right click on table to view Data, select Preview Data.

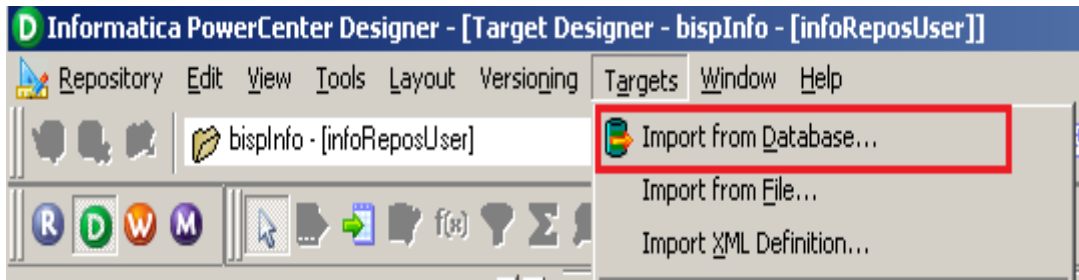


Step-13 Select file location and open it.

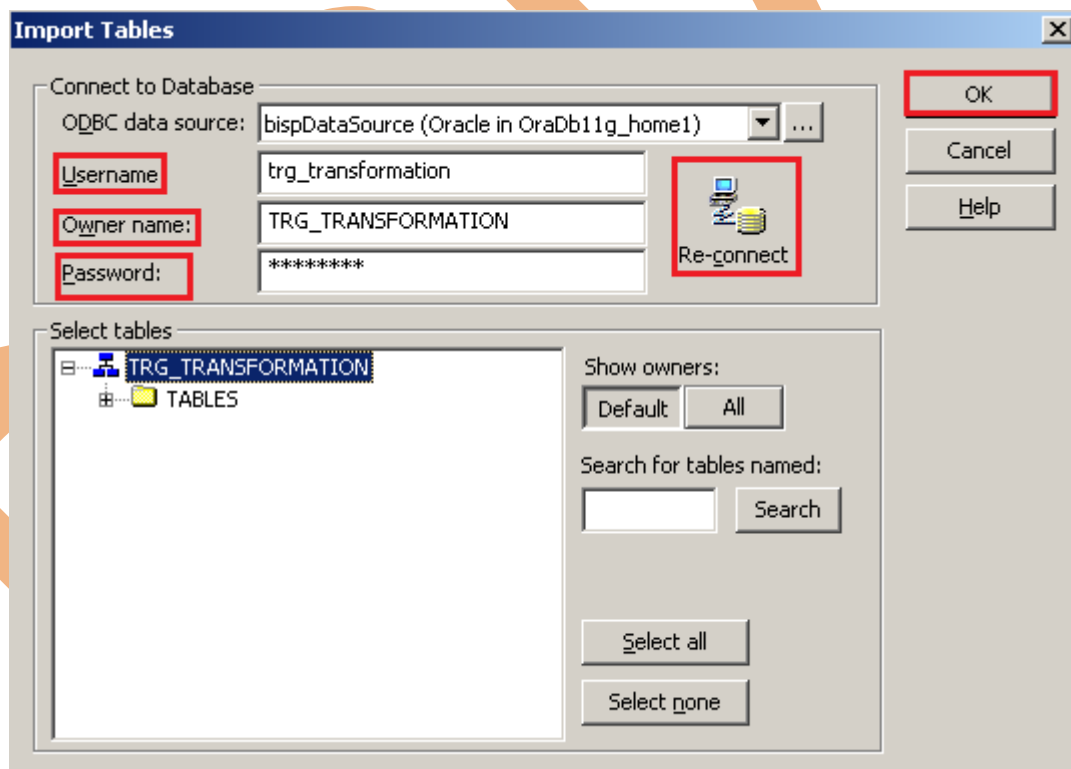


Step-14 Now click on Target Designer.

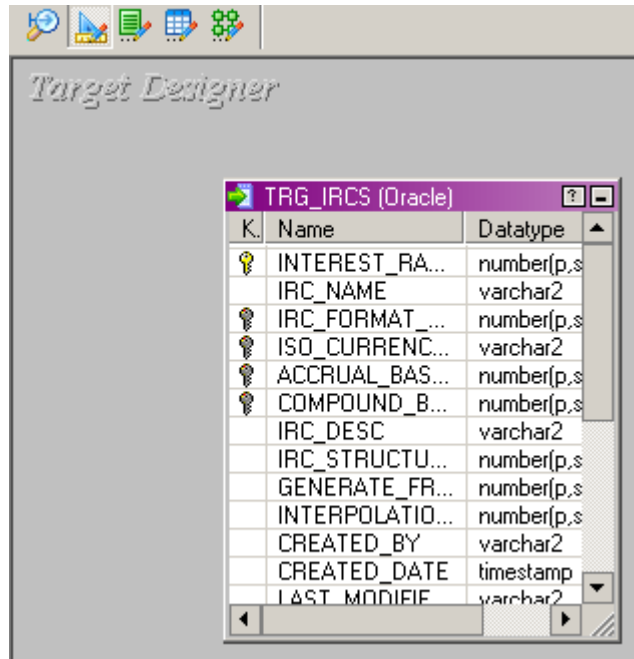
Step-15 And then select Target menu and click on Import from database to import target table.



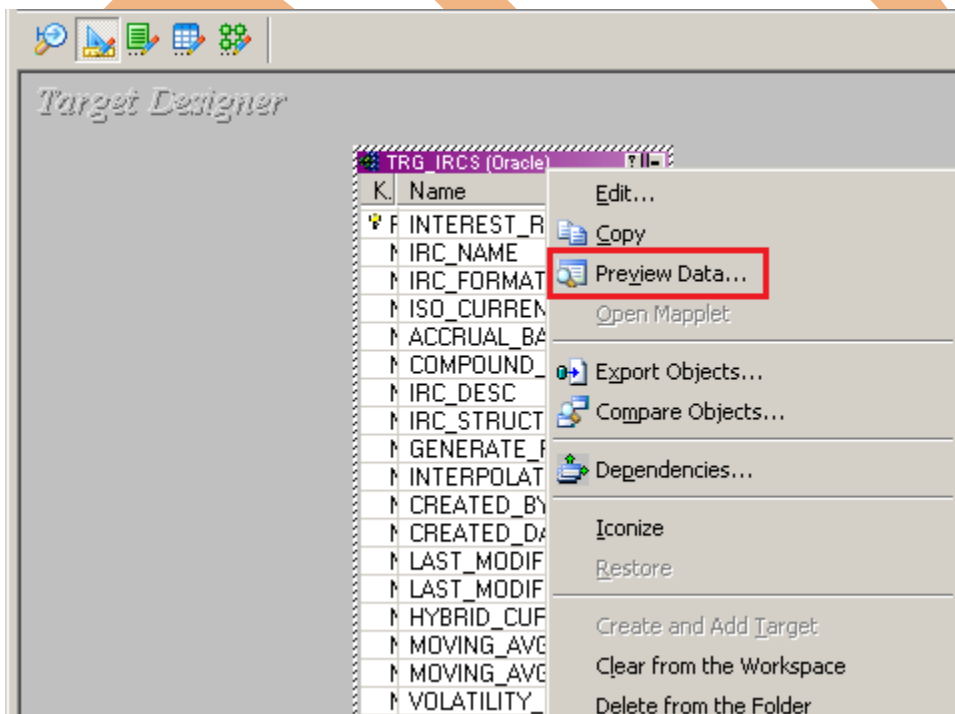
Step-16 Specify Username, Owner name, password and then click on connect and then select table and then OK.



Step-17 Target table in Target Designer.




Step-18 To view data select table and Right click on that table after that specify Username and Password and then connect it. Then Close it.



Step-19 Target data.

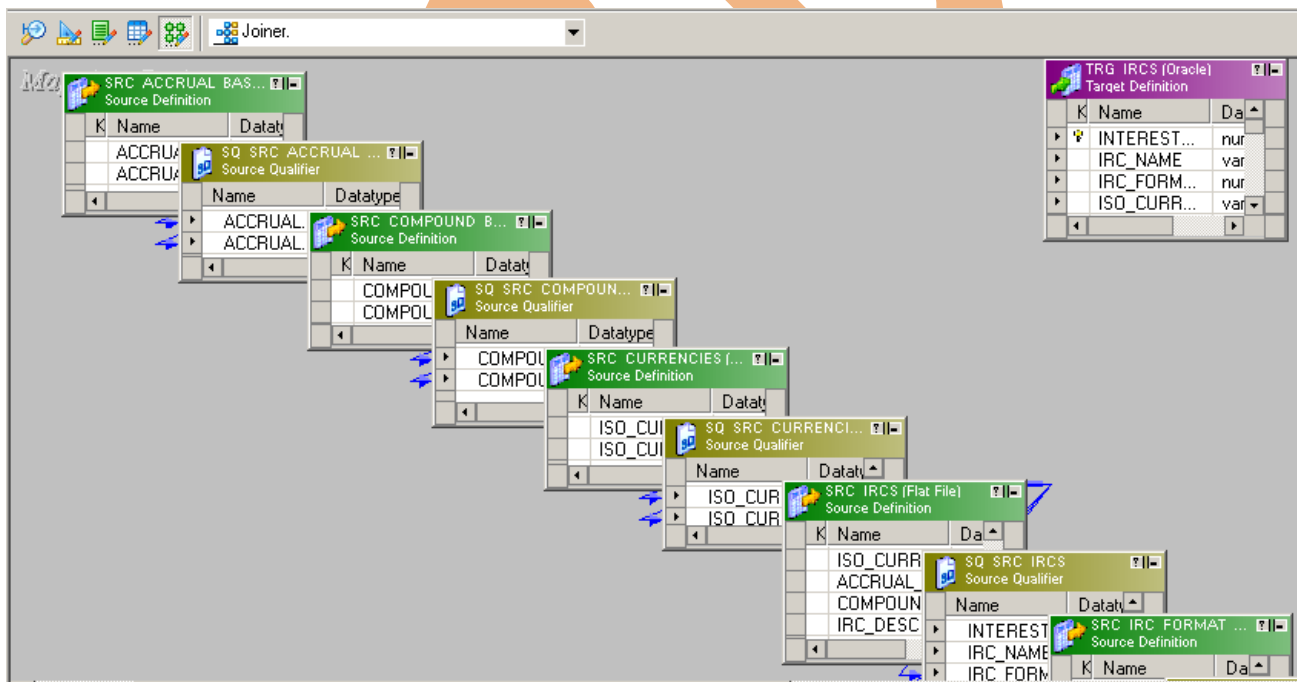
[illegible]

CREATE MAPPING AND DEFINING JOINER TRANSFORMATION

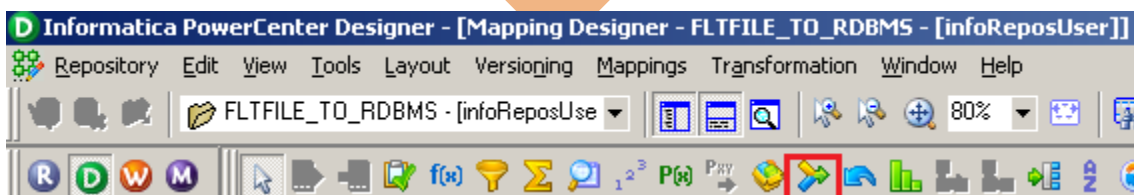
Step-1 Go to Mapping Designer  and Create New Mapping and then name of mapping and click OK.



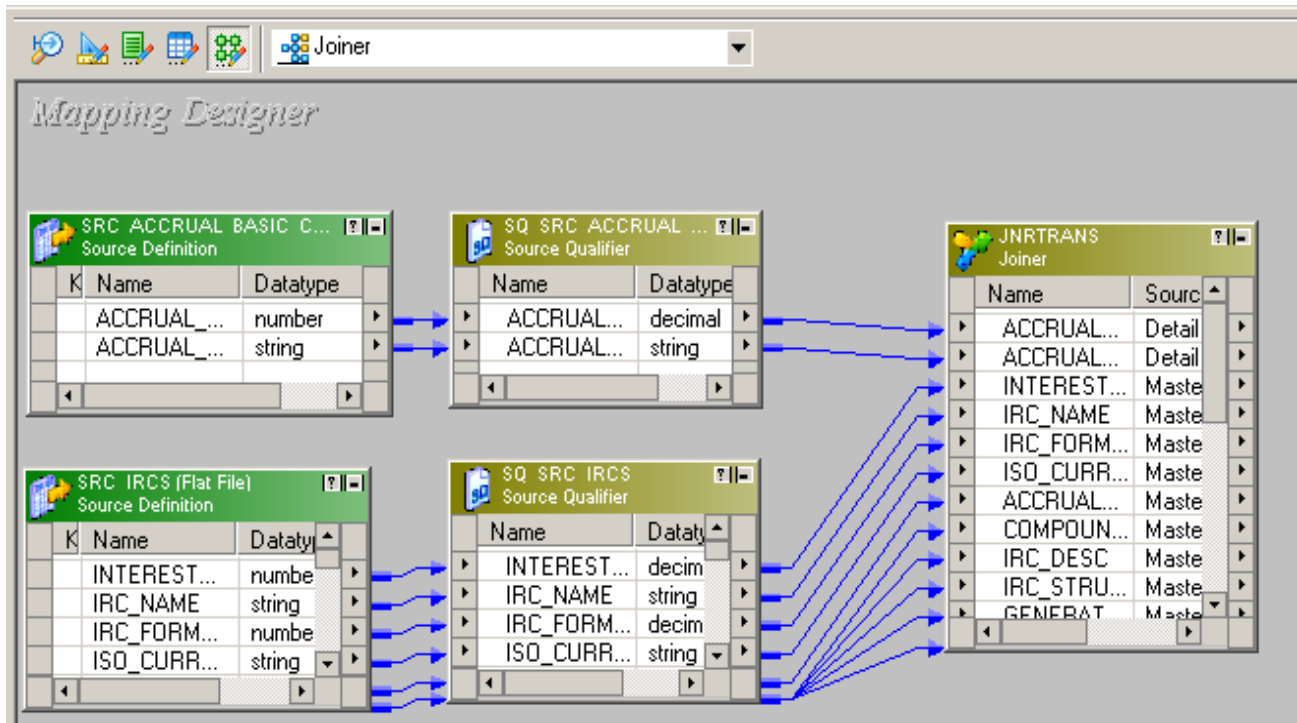
Step-2 Then drag and drop source and target data in Mapping Designer.



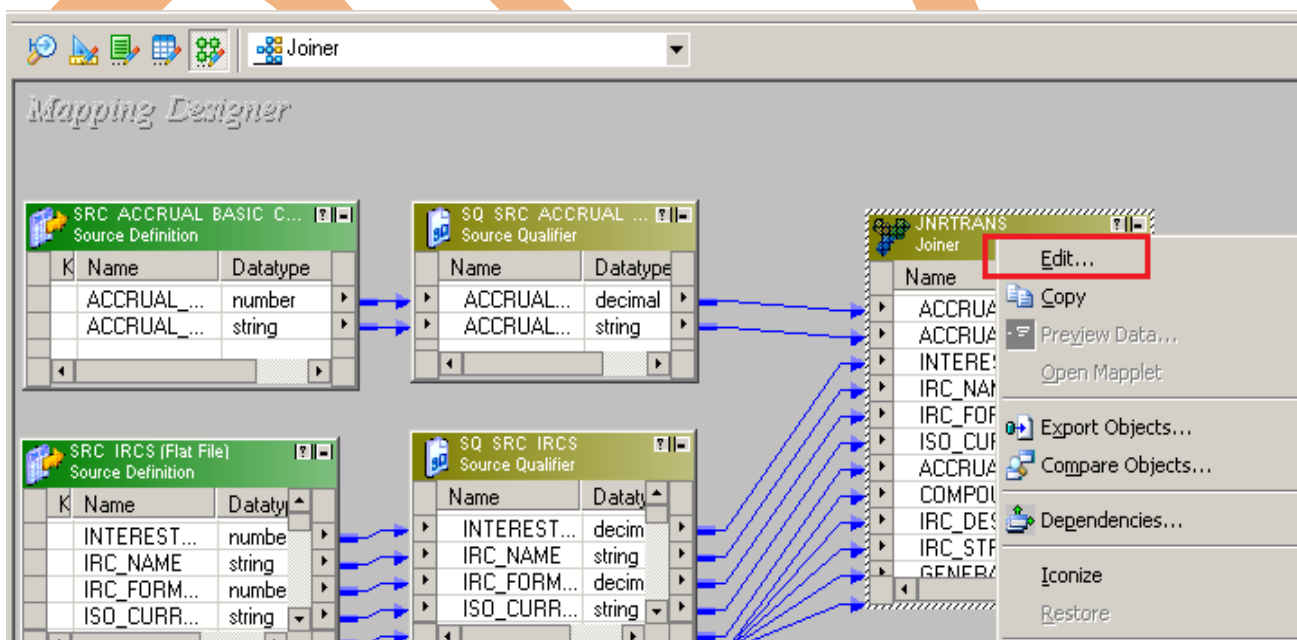
Step-3 Then create transformation, select Joiner Transformation and drop into Mapping Designer window



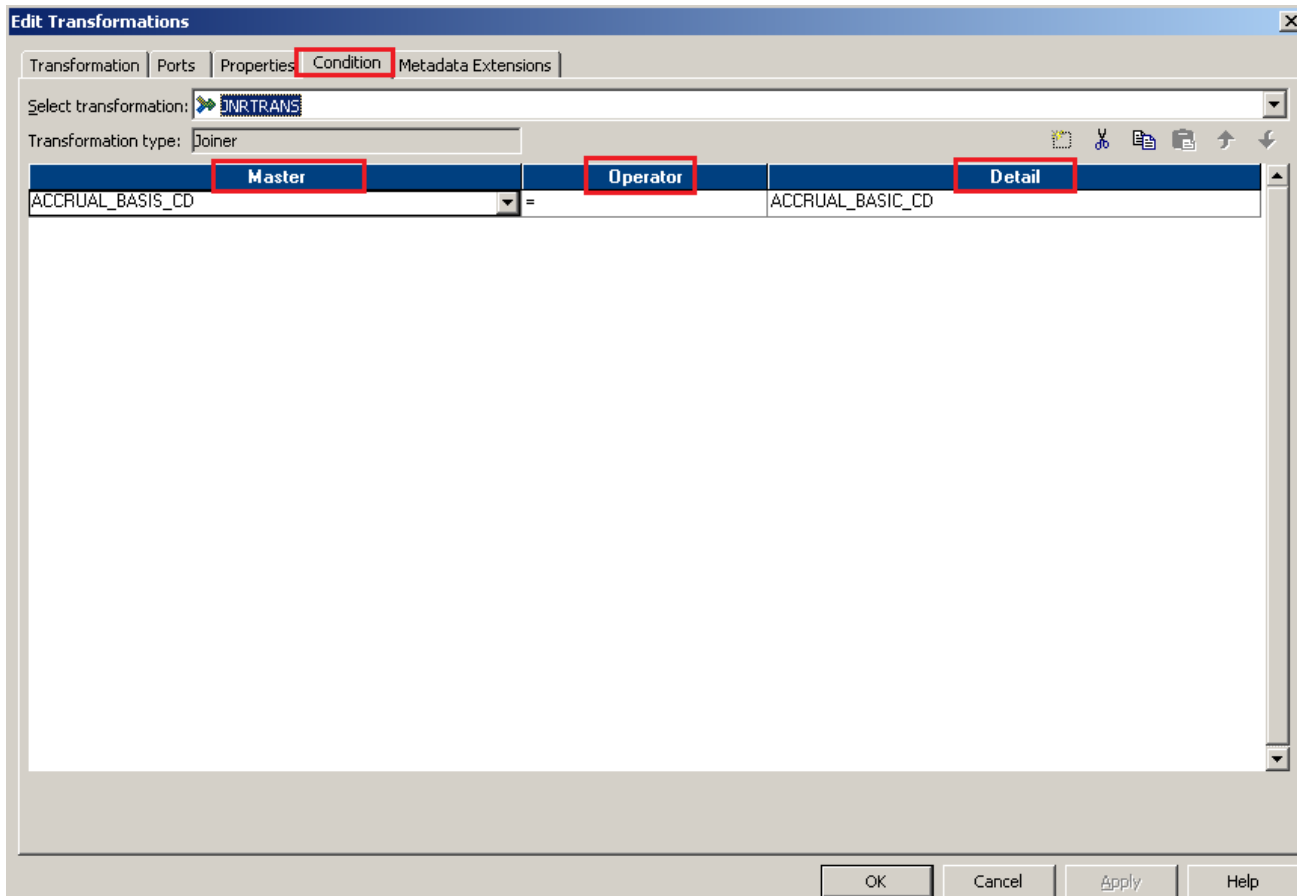
Step-4 Then drag and drop SRC_ACCRUAL_BASIS_CD Source Qualifier and SRC_IRCS Source Qualifier table column into Joiner Table.



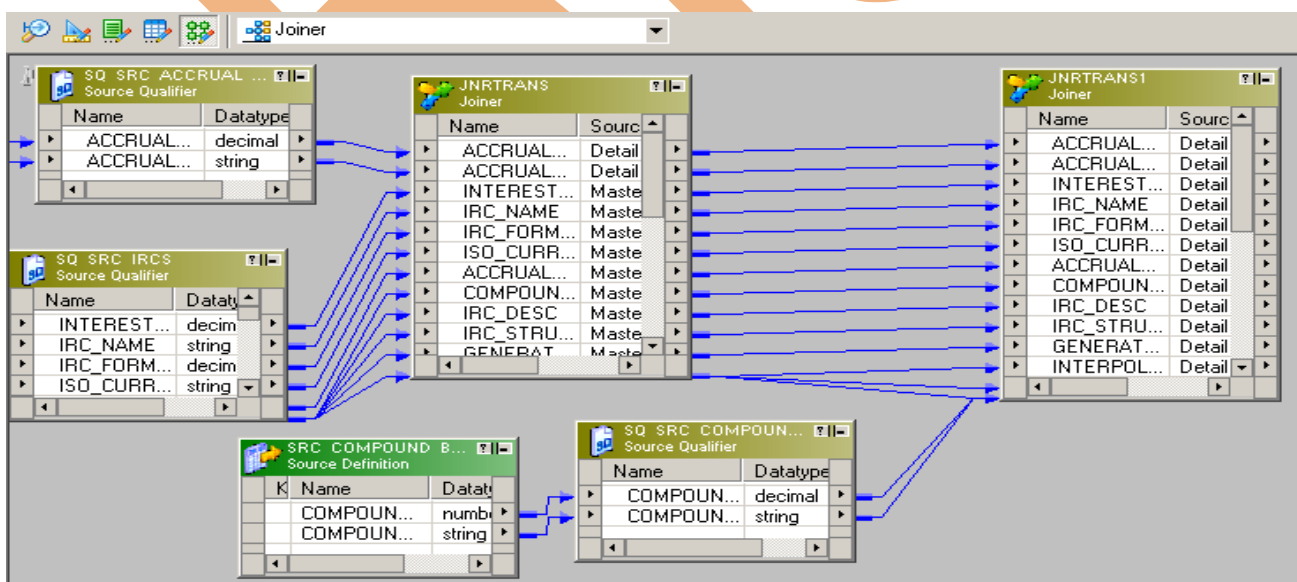
Step-5 Then right click on joiner table and select Edit.



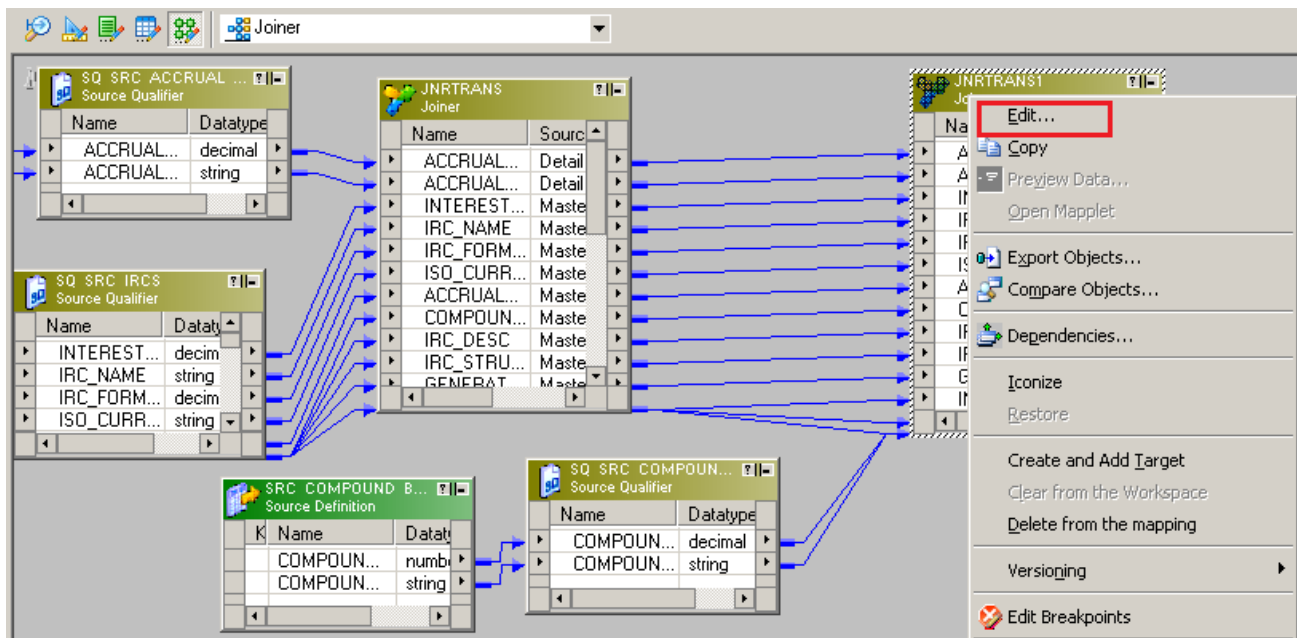
Step-6 Select join conditions in Condition tab, then click on apply button and OK.



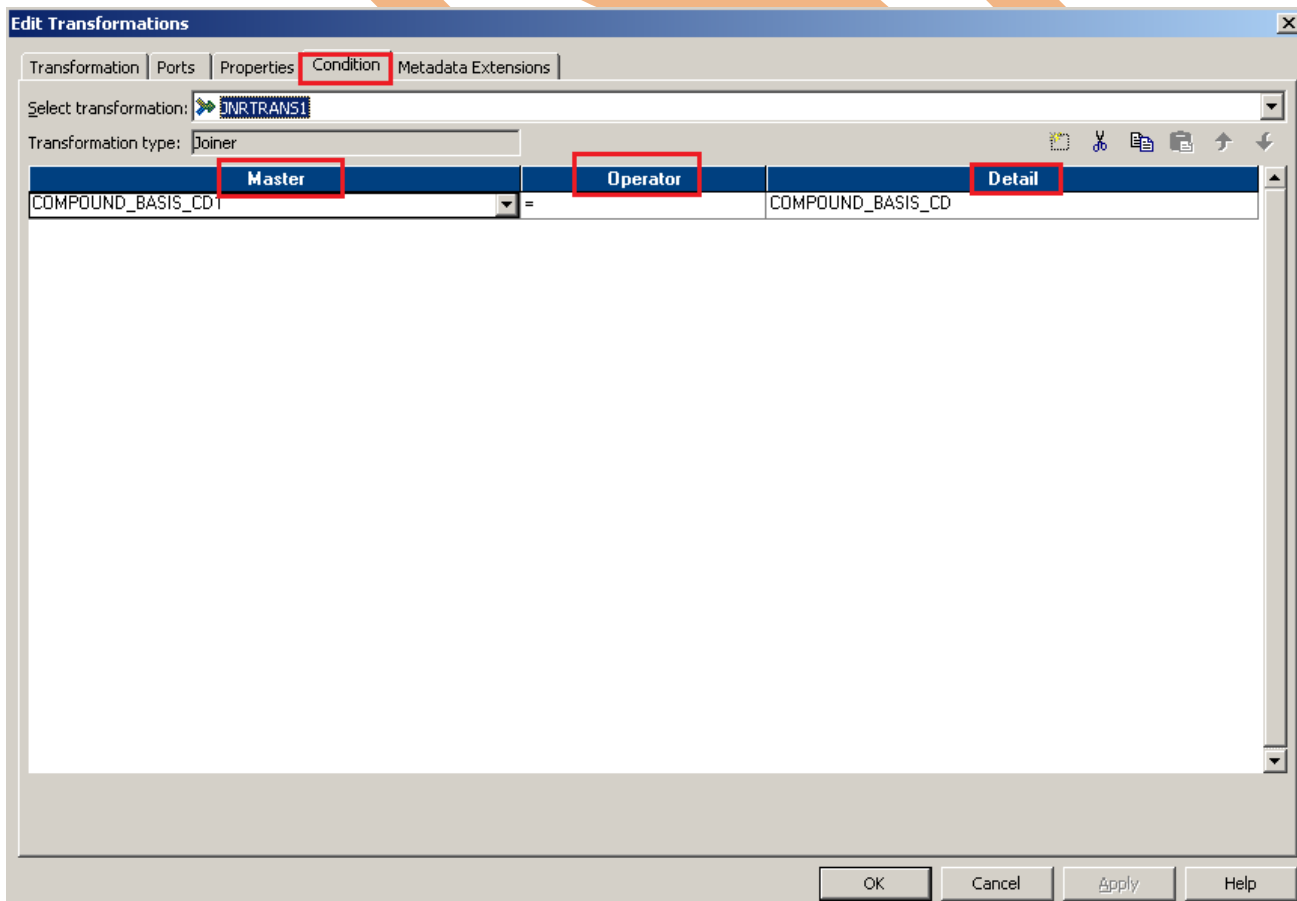
Step-7 Then create Joiner Transformation and Then drag and drop SRC_COMPOUND_BASIS_CD Source Qualifier and Joiner table column into newly created joiner transformation table.



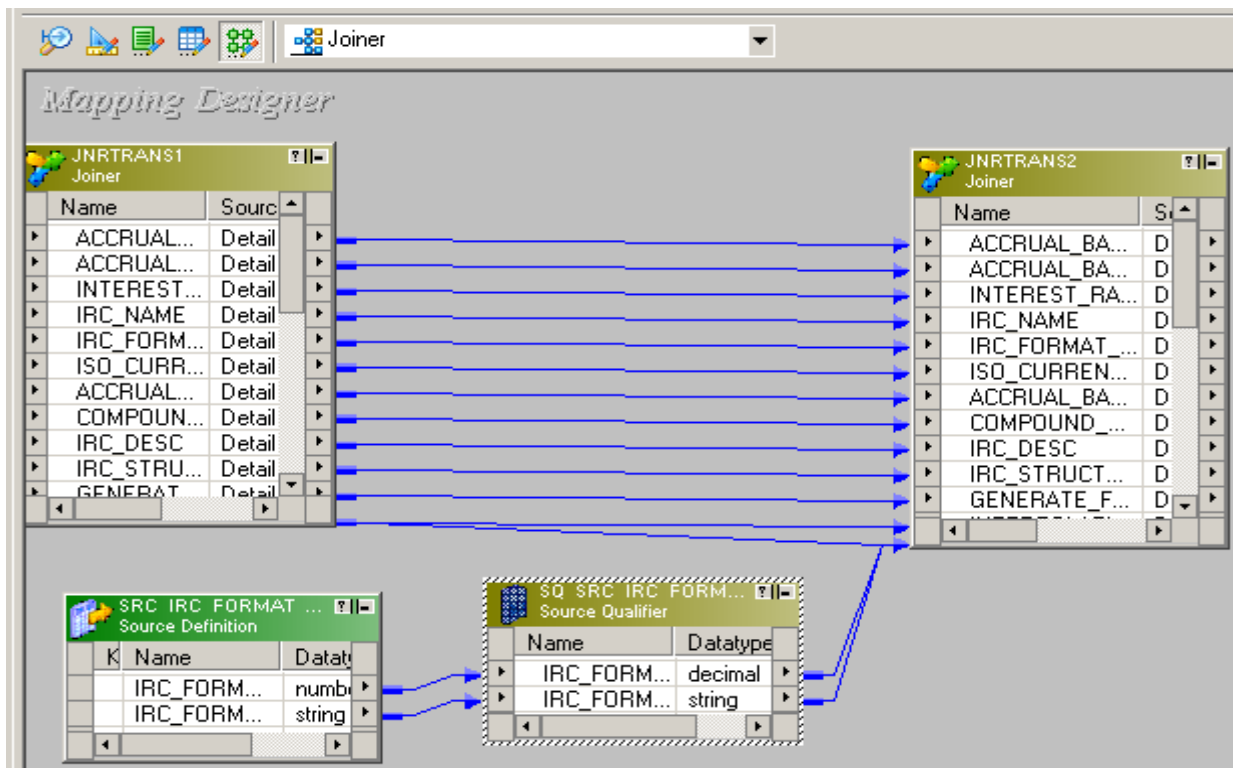
Step-8 Then right click on joiner table and select Edit.



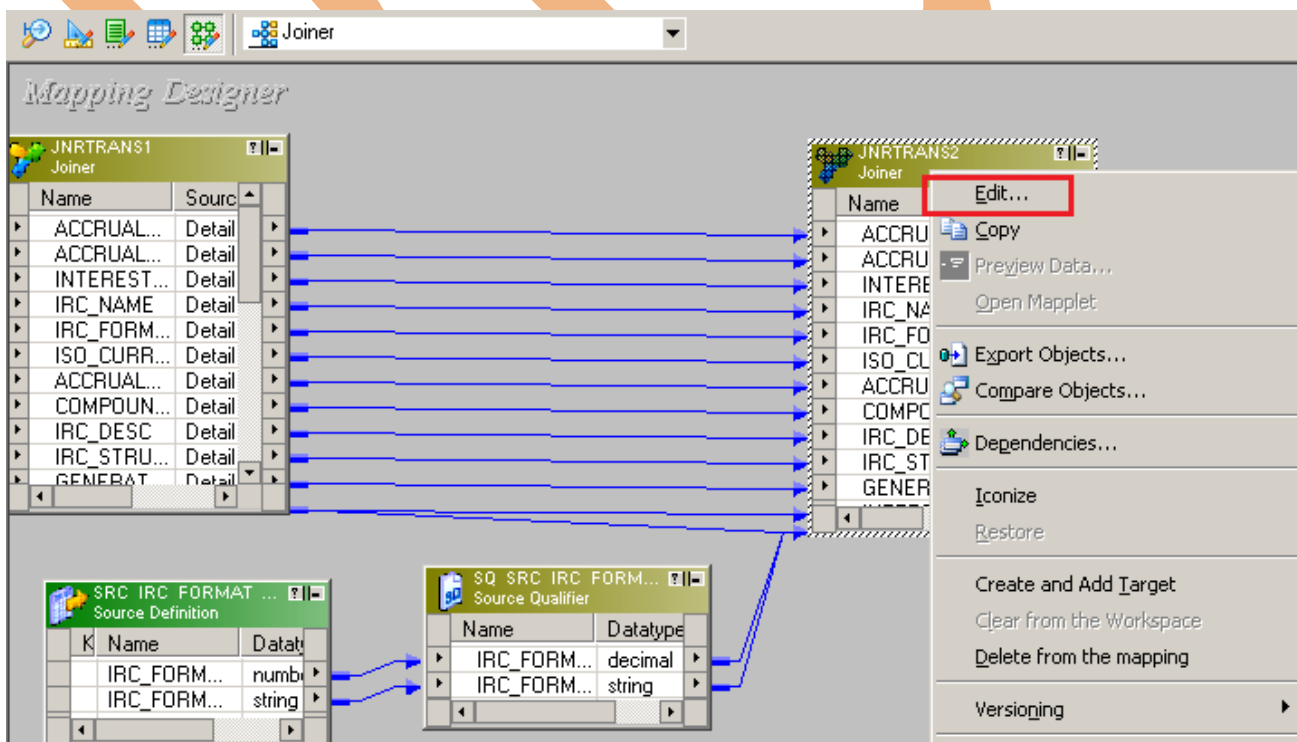
Step-9 Select join conditions in Condition tab, then click on apply button and OK.



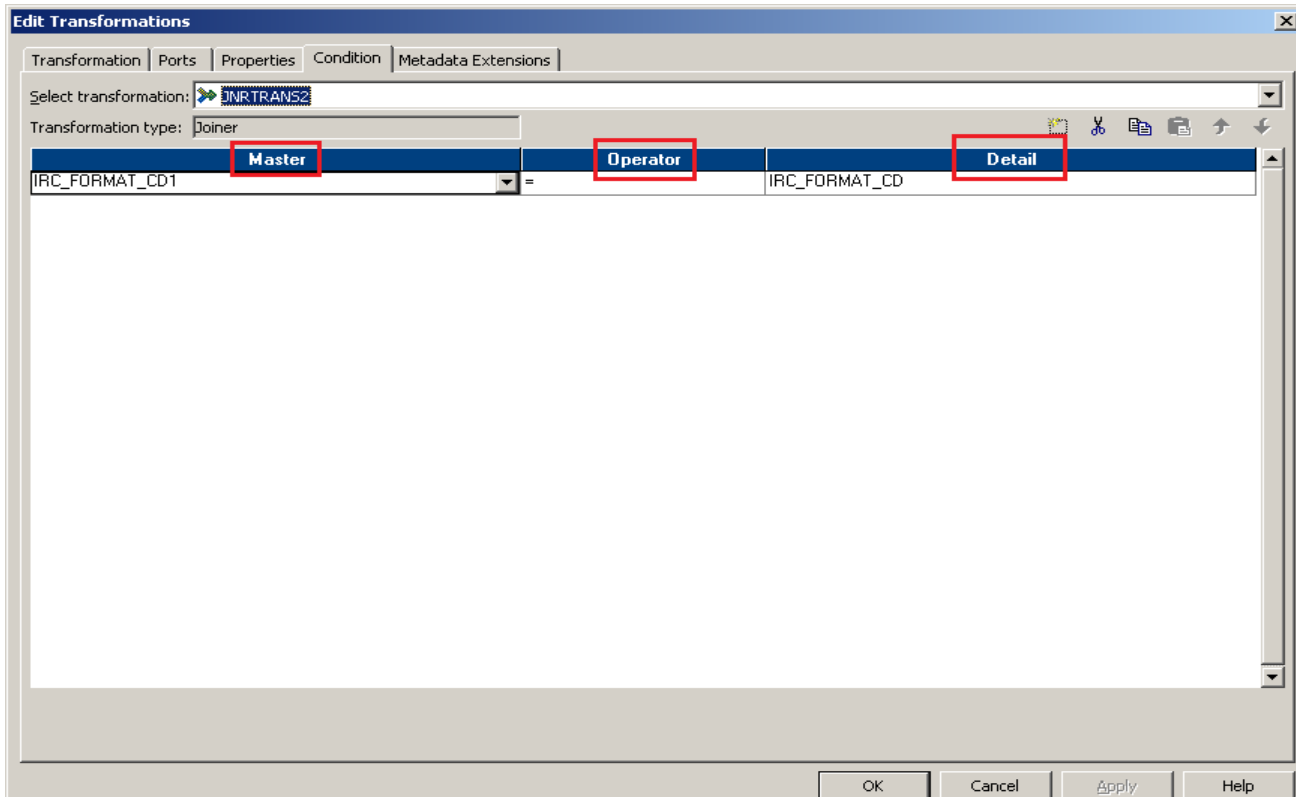
Step-10 Then create Joiner Transformation and then drag and drop SRC_IRC_FORMAT_CD Source Qualifier and Joiner table column into newly created joiner transformation table.



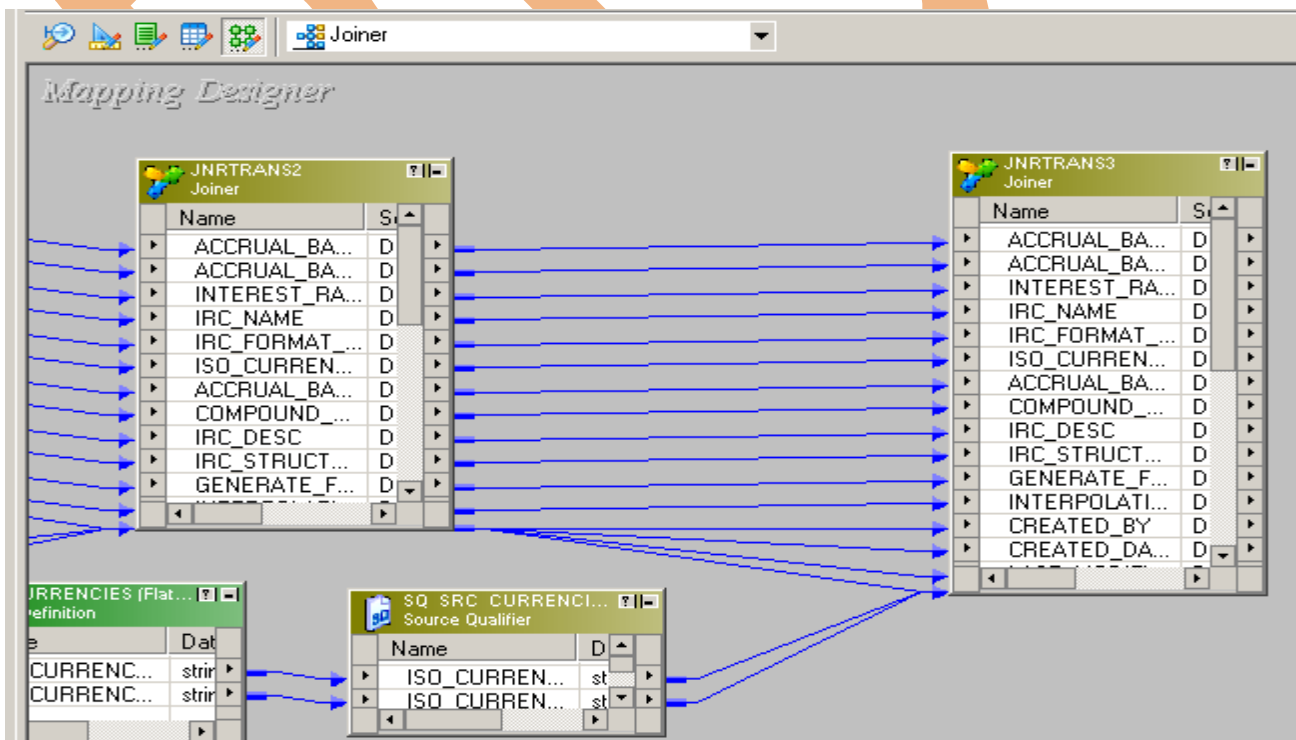
Step-11 Then right click on joiner table and select Edit.



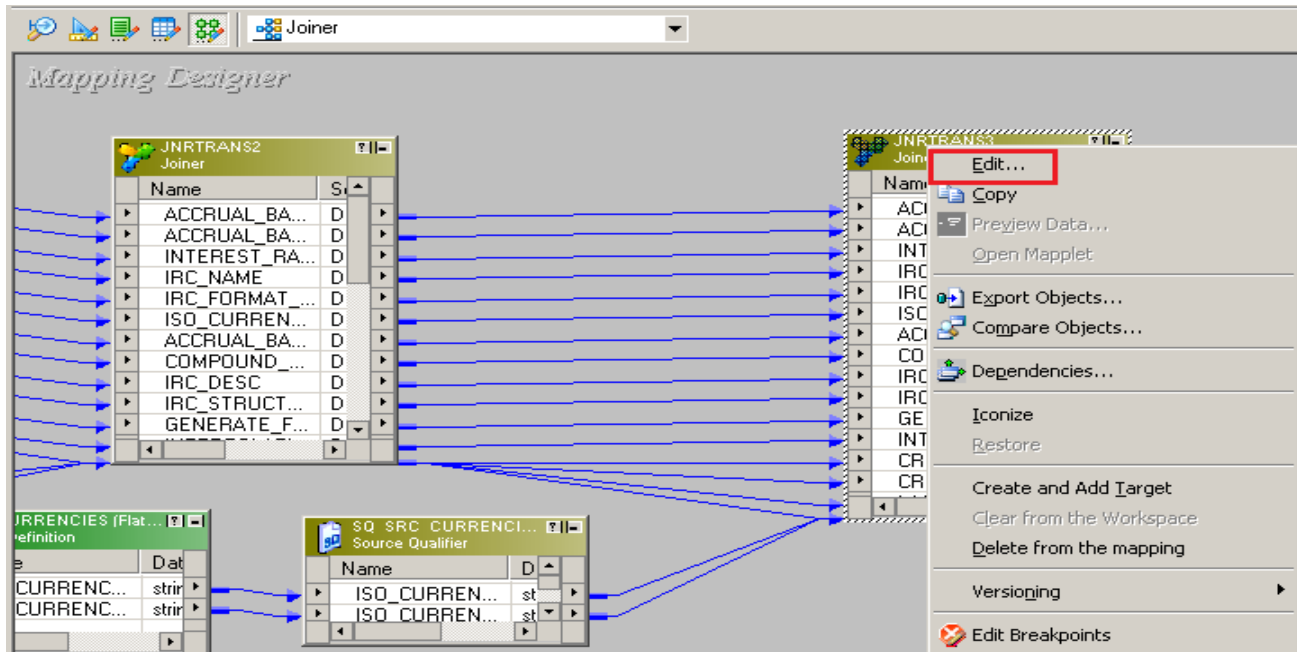
Step-12 Select join conditions in Condition tab, then click on apply button and OK.



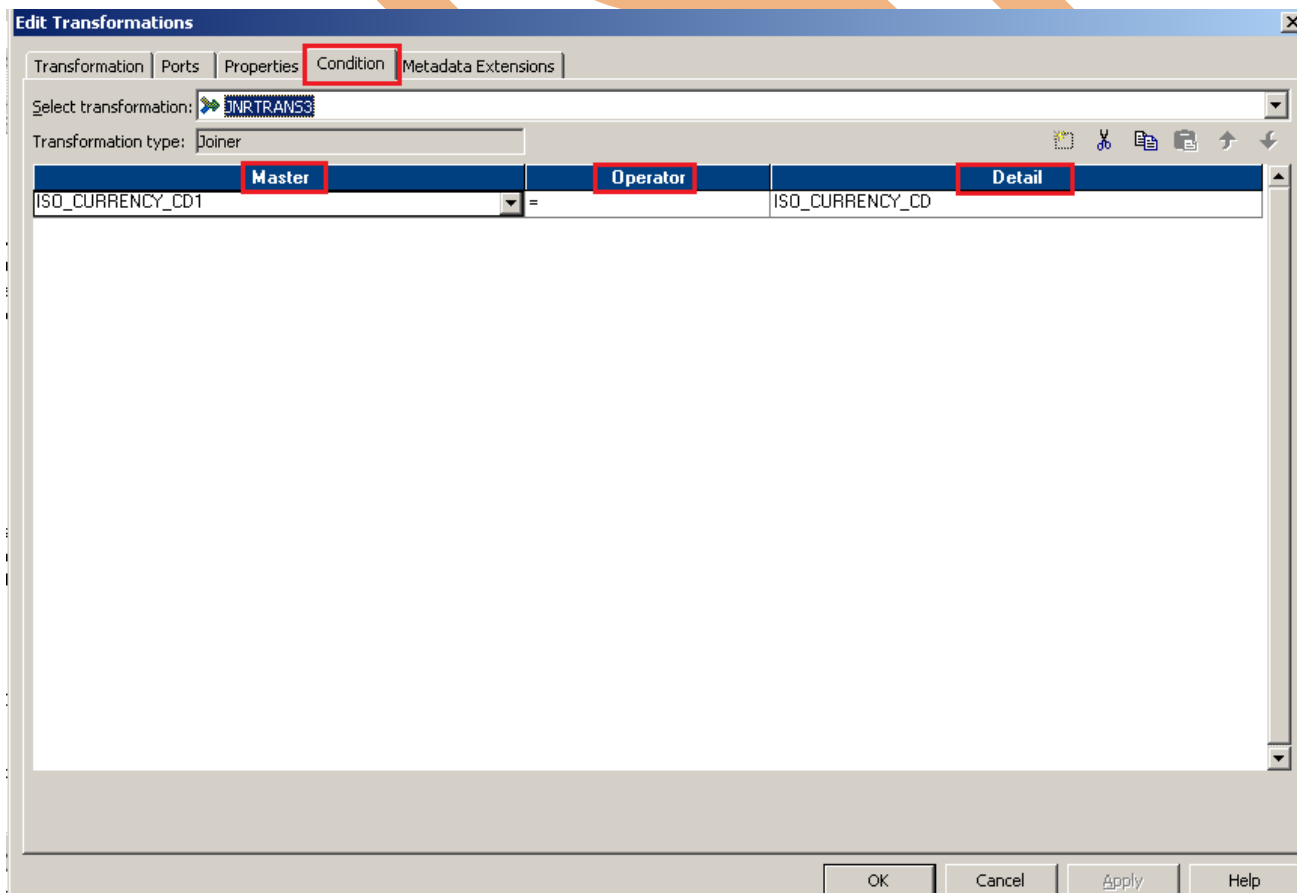
Step-13 Then create Joiner Transformation and Then drag and drop SRC_CURRENCIES Source Qualifier and Joiner table column into newly created joiner transformation table.



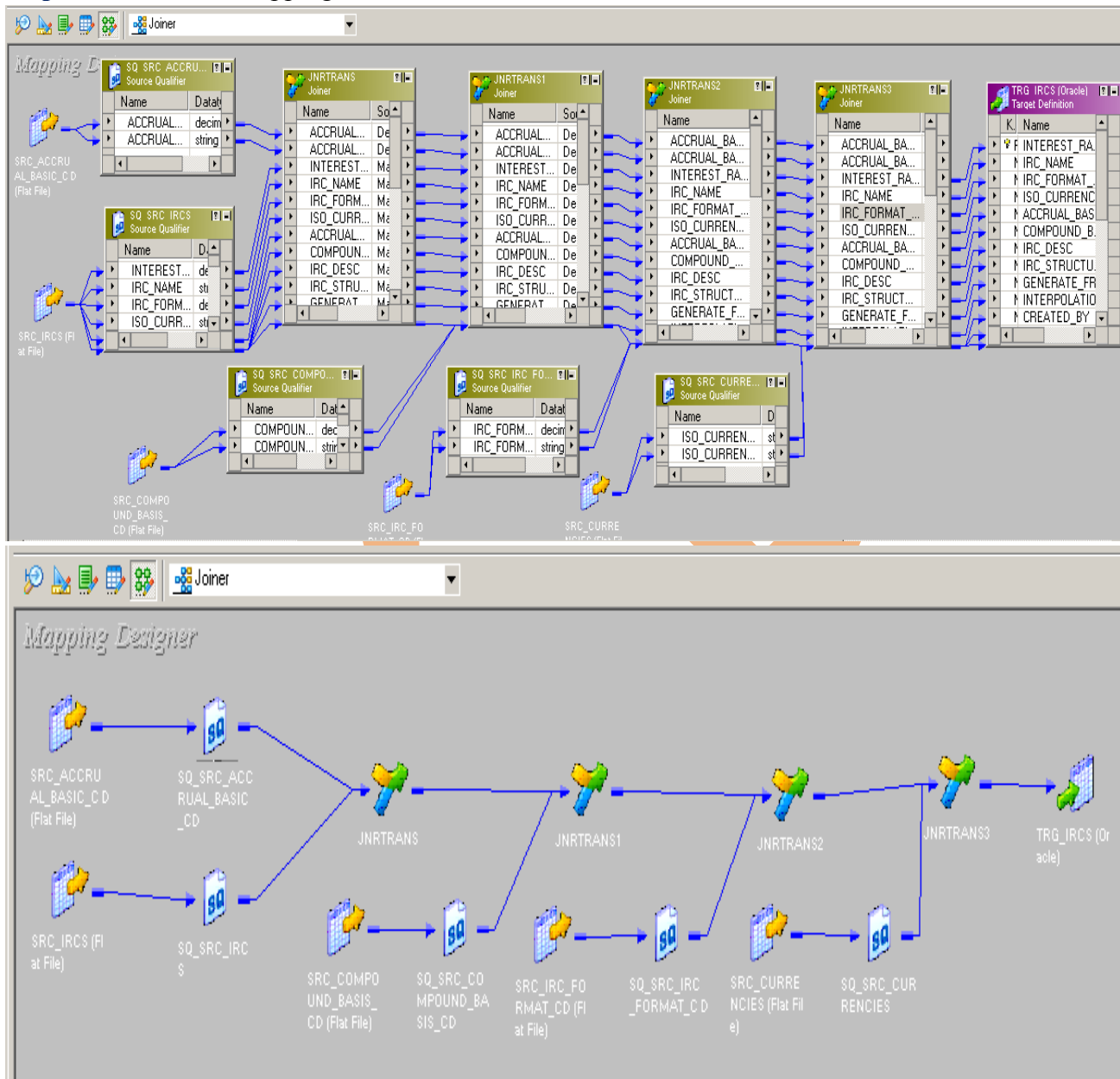
Step-14 Then right click on joiner table and select Edit.



Step-15 Select join conditions in Condition tab, then click on apply button and OK.



Step-16 Then create mapping.



Step-17 And then save it (ctrl+s) and check mapping is VALID.

11/26/2012 13:21:26 *** Saving... Repository infoReposUser, Folder FLTFILE_TO_RDBMS

Validating transformations of mapping Joiner...

...transformation validation completed with no errors.

Validating data flow of mapping Joiner...

...data flow validation completed with no errors.

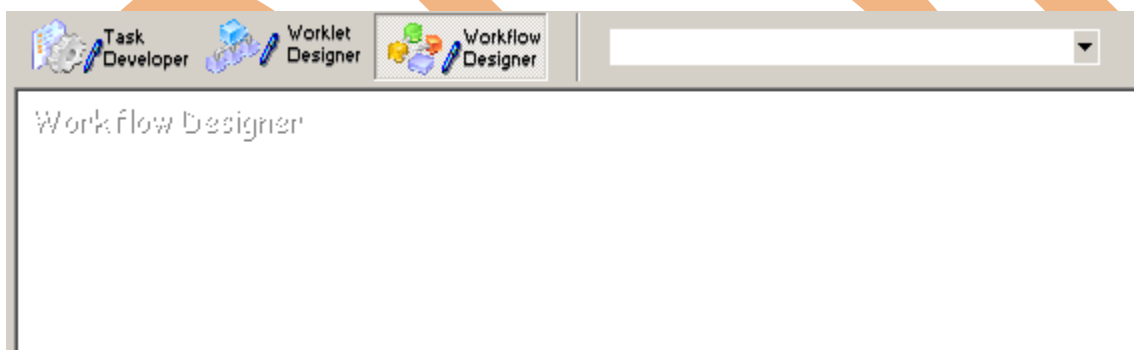
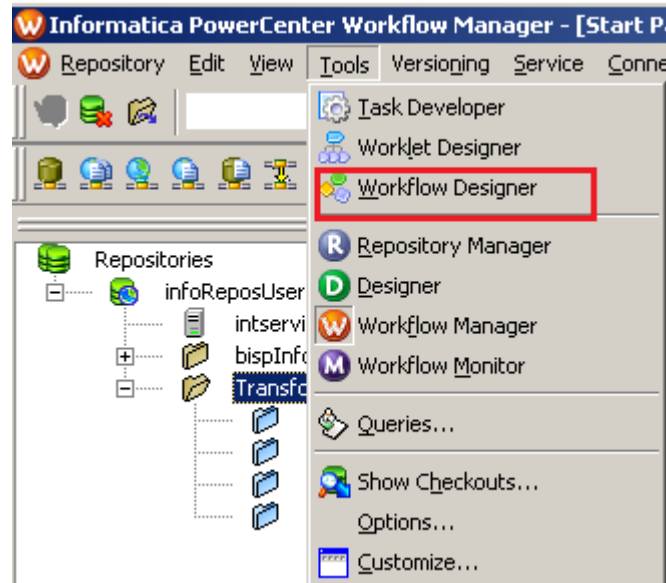
Parsing mapping Joiner...

...parsing completed with no errors.

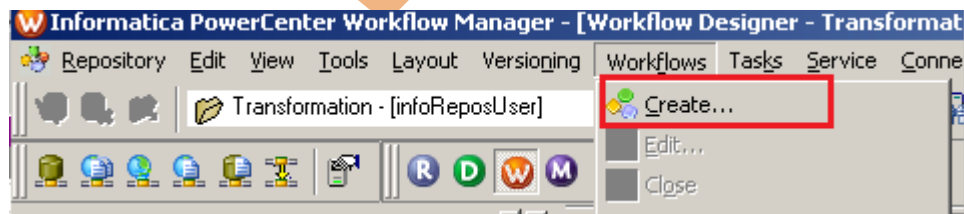
***** Mapping Joiner is VALID *****
mapping Joiner updated.

CREATE WORKFLOW

Step-1 Now go to Informatica Power Center Workflow Manager, and go to Tools menu and select Workflow Designer.



Step-2 Now to create workflows, go to Workflows menu and select Create. Then Name of workflow and click OK buttons.



Create Workflow - NEWWORKFLOW288

General | Properties | Scheduler | Variables | Events | Metadata Extensions

Name: Joiner

Comments:

Integration Service: intservice

Suspension email:

Runtime options: ☐ Disabled ☐ Suspend on error

Web Services: ☐ Enabled [Config Service...](#)

Configure Concurrent Execution: ☐ Enabled [Configure Concurrent Execution ...](#)

Load Balancing:

Service Level: Default

OK **Cancel** **Help**

Step-3 Work flow Designer windows

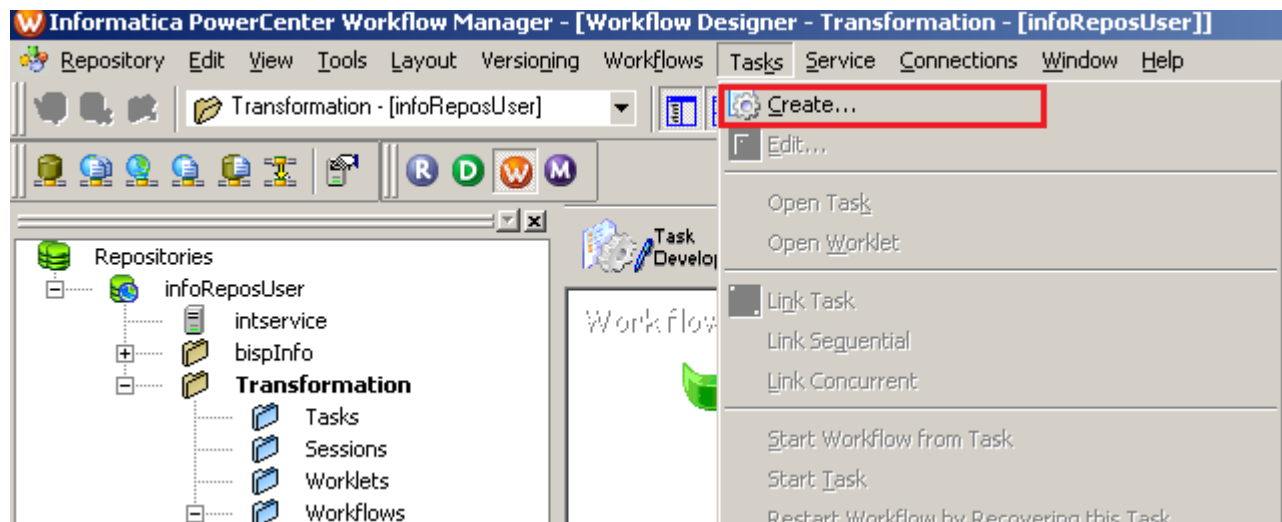


Workflow Designer

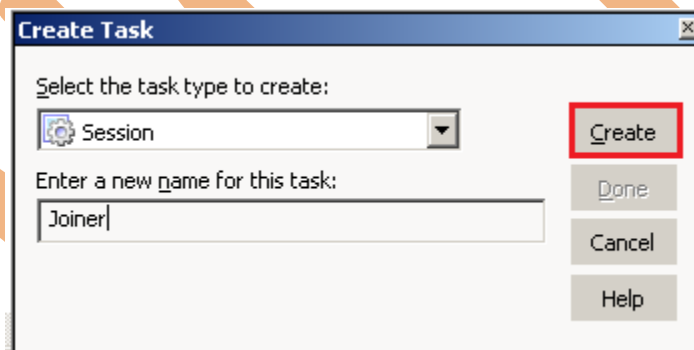


Start

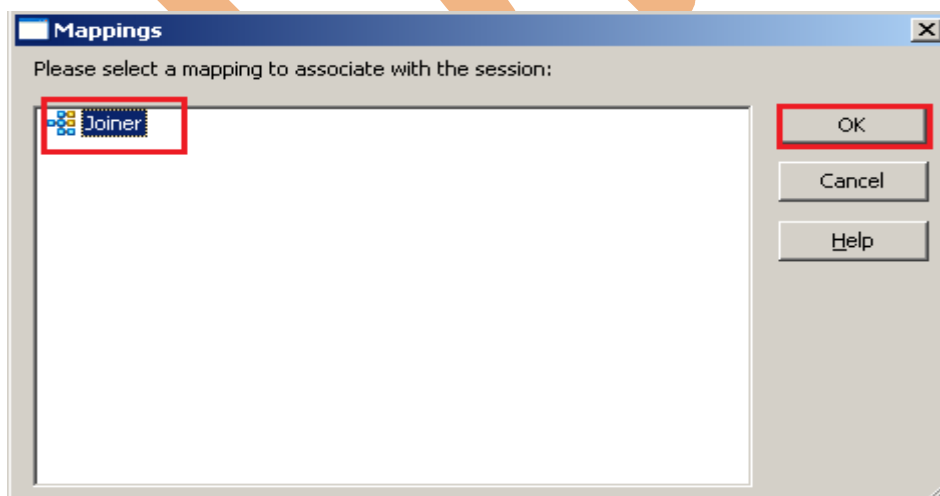
Step-4 Then create Task, Go to Tasks Menu and click Create.



Step-5 Now select session and insert Name of task.



Step-6 Select Mapping to associate with the session.



Step-7 Workflow Designer Window.



Workflow Designer



Step-8 Now create flow B/W Workflow to Task. Select Line Task and link to start to Filter.



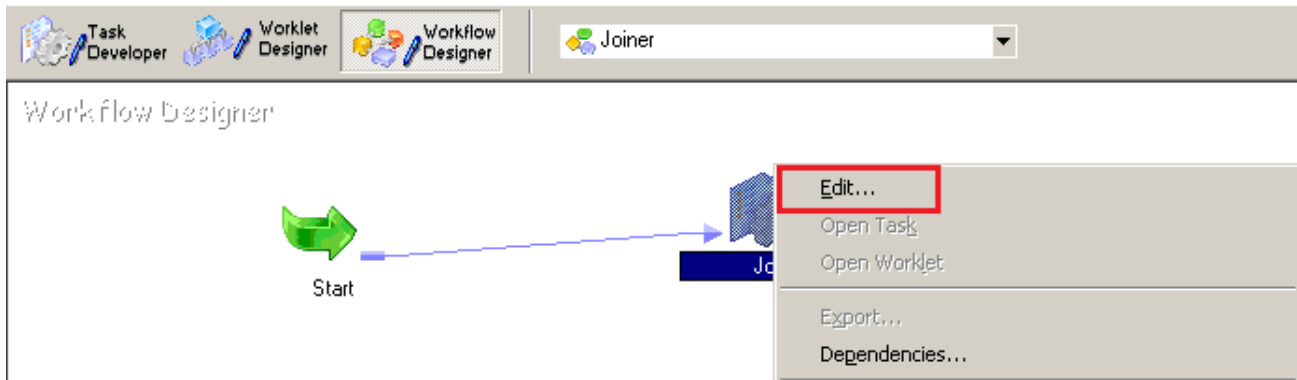
Step-9 Work Designer Windows



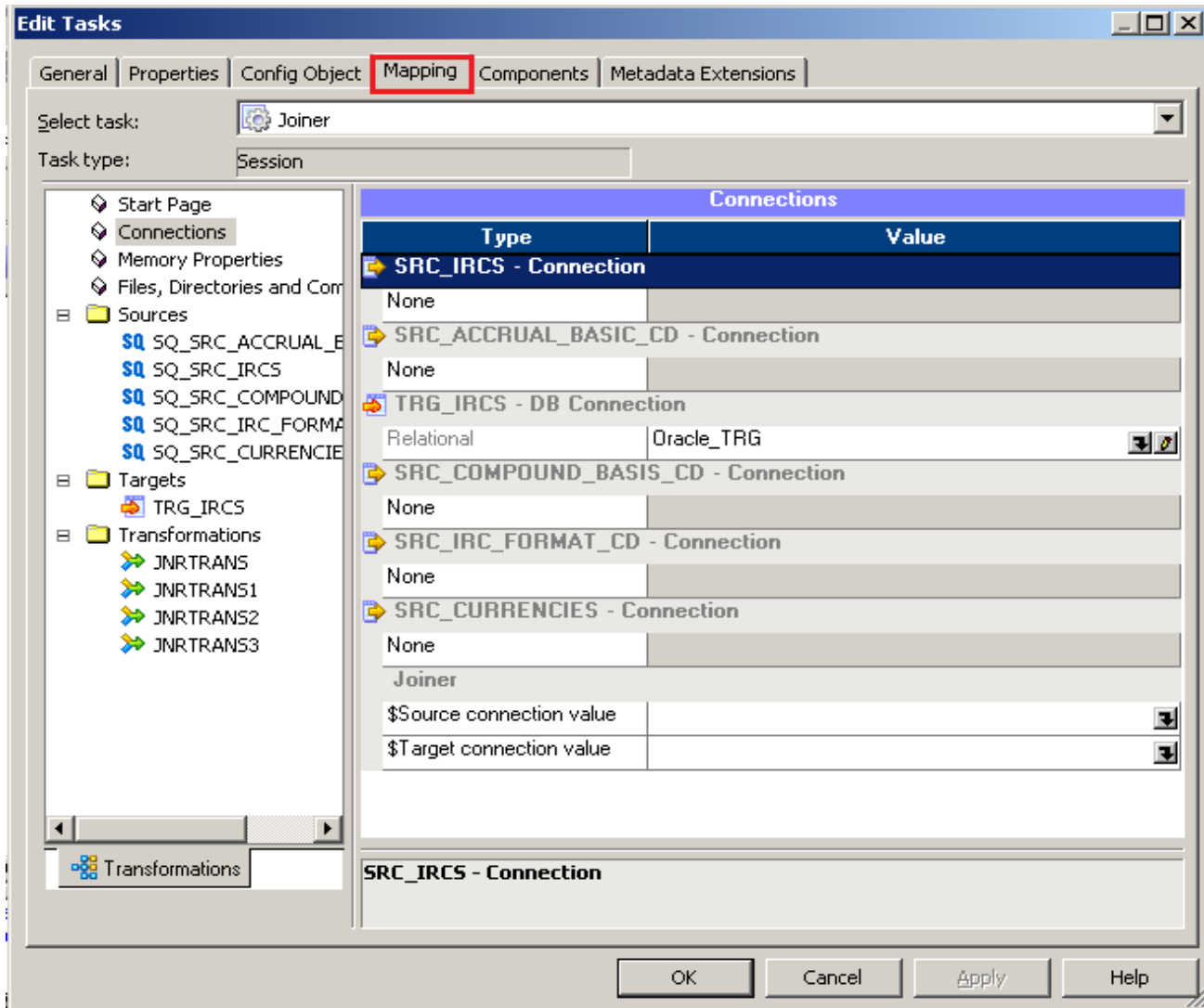
Workflow Designer



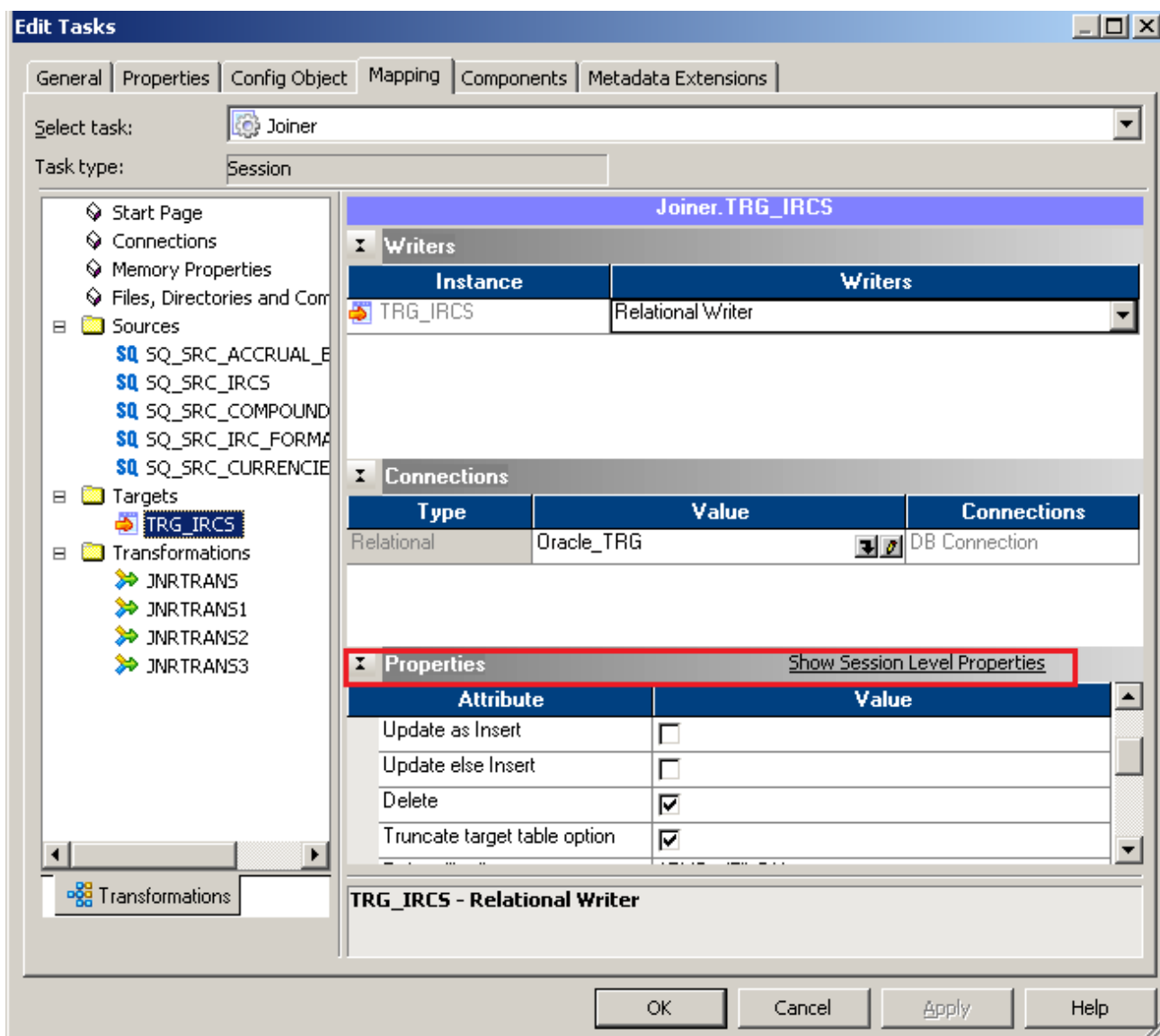
Step-10 Now Configure Connection to Source and Target, Then Right Click on Filter and Edit, Then Click Mapping tab and configure connection for your source and target table schema in oracle 11g RDBMS. And then click OK.



Step-11 Select DBConnection for Source and Target Relation Database.



Step-12 Set Property of Target Table.



Step-13 Now save (ctrl+s) this workflow and check it.

11/26/2012 16:39:35 *** Saving... Repository infoReposUser, Folder FLTFILE_TO_RDBMS

Validating the flow semantics of Workflow Joiner...

...flow semantics validation completed with no errors.

Validating tasks of Workflow Joiner...

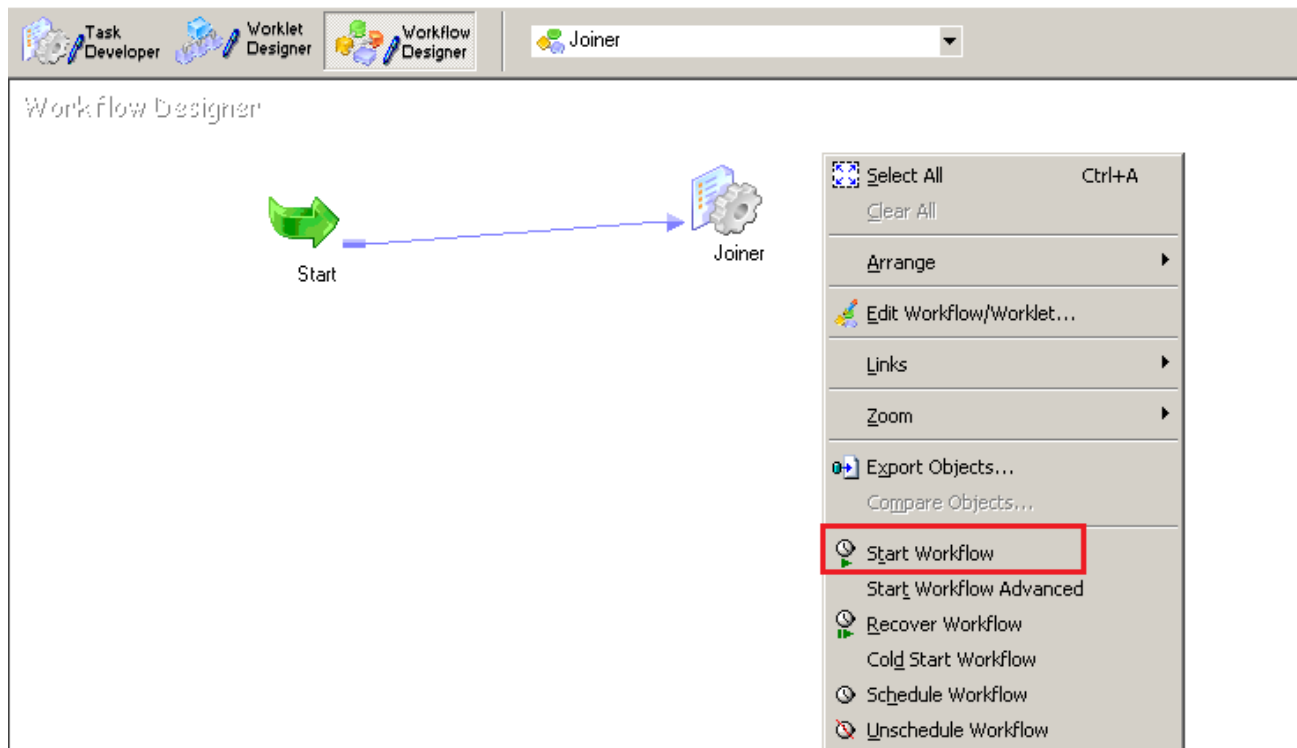
...Workflow Joiner tasks validation completed with no errors.

***** Workflow Joiner is VALID *****

Workflow Joiner updated.

WORKFLOW MONITOR AND VIEW TARGET DATA

Step-1 Now Start Workflow, Right click on Workflow Designer Window and Click on Start Workflow.



Step-2 Check session in Informatica PowerCenter Workflow Monitor.

FLFILE_IO_RDBMS			
Joiner			
Joiner	11/26/2012 4:40:35 PM	11/26/2012 4:40:40 PM	Succeeded
Start	11/26/2012 4:40:35 PM	11/26/2012 4:40:35 PM	Succeeded
Joiner	11/26/2012 4:40:35 PM	11/26/2012 4:40:38 PM	Succeeded

Step-3 Check log file of session.(Right click on session and select Get Session Log)

Log Events for Session: Joiner

Save As... Copy Find... Refresh

Severity	Timestamp	Node	Thread	Message Co...	Message
INFO	11/26/2012 4:40:37 PM	node01_mitest	TRANSF_1_1_1	CMN_1795	The index cache size that would hold [2] input rows from the master for [JNRTRANS2], in memory, is [2000] bytes
INFO	11/26/2012 4:40:37 PM	node01_mitest	TRANSF_1_1_1	CMN_1794	The data cache size that would hold [2] input rows from the master for [JNRTRANS2], in memory, is [528] bytes
INFO	11/26/2012 4:40:37 PM	node01_mitest	WRITER_1_*_1	WRT_8141	Commit on end-of-data Mon Nov 26 16:40:37 2012 =====
INFO	11/26/2012 4:40:37 PM	node01_mitest	WRITER_1_*_1	WRT_8035	WRT_8036 Target: TRG_IRCS (Instance Name: [TRG_IRCS]) WRT_8038 Inserted rows - Requested: 10 Load complete time: Mon Nov 26 16:40:37 2012 LOAD SUMMARY =====
INFO	11/26/2012 4:40:37 PM	node01_mitest	WRITER_1_*_1	WRT_8043	WRT_8036 Target: TRG_IRCS (Instance Name: [TRG_IRCS]) WRT_8038 Inserted rows - Requested: 10 Applied: 10 Rejected: 0 Affected: 10 *****END LOAD SESSION*****

Severity: INFO
Timestamp: 11/26/2012 4:40:37 PM
Node: node01_mitesha
Thread: MAPPING
Process ID: 2596
Message Code: TM_6151
Message: The session sort order is [Binary].

Step-4 Now view data in Target RDBMS (Oracle 11g)

admin TRG_IRCS

Columns Data Constraints Grants Statistics Column Statistics Triggers Dependencies Details Partitions Indexes SQL

Sort... Filter: Enter Where Clause Actions...

	INTEREST_RATE...	IRC_NAME	IRC_FORMAT_CD	ISO_CURRENCY_CD	ACCRUAL...	COMPOUND_B...	IRC_DESC	IRC_STRUC...	GENERATE_FREQUENCY_FLG	INTERPOLATION_TYPE_FLG	CREATE
1	200 TREASU...		1 USD		3	150 TREASU...		1	(null)	(null)	RTUSER
2	219 Hull and ...		0 USD		3	150 Hull and ...		1	(null)	(null)	RTUSER
3	165 165 Mon...		0 USD		3	150 165 Mon...		1	(null)	(null)	RTUSER
4	220 fiscal ye...		0 HKD		3	150 fiscal ye...		1	(null)	(null)	RTUSER
5	405 User defi...		0 USD		3	150 User def...		1	(null)	(null)	RTUSER
6	212 Treasury...		0 USD		3	150 Treasur...		1	(null)	(null)	RTUSER
7	128 TPOC AR...		0 ADP		3	150 TPOC A...		1	(null)	(null)	RTUSER
8	510 Prime Dai...		0 HKD		3	150 Prime Da...		1	(null)	(null)	RTUSER
9	500 Prime Mo...		0 HKD		3	150 Prime M...		1	(null)	(null)	RTUSER
10	100 6 Month ...		0 USD		3	150 6 Month ...		1	(null)	(null)	RTUSER