ODI Hands-On Guide
For Rank 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 ODI Rank Transformation Guide. The document briefs you practical approach to define the rank transformation. The document assists ODI learners to explore the various features. The subsequent release of the case study will cover Aggregate Transformation, Expression Trans, Filter Transformation, Joiner Transformation, Lookup Transformation, Normalized Transformation, Router Transformation, Sequence Generator Transformation, Stored Proc Trans, Sorter Transformation, XML Transformation

Document History

Version	Description Change	Author	Publish Date
0.1	Initial Draft	Upendra Upadhyay	5th Jan 2012
0.1	Review 1st	Amit Sharma	15th Jan 2012

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1. Introduction

Rank Transformation:-

The Rank transformation allows us to select only the top or bottom rank of data. It allows us to select a group of top or bottom values, not just one value. As given in the below example, the business likes to see the Top 6 Profits based on Order date

Rank Transformation

Customer ID	Item No	Order date	Unit Sales	Profit
1	150	Jan-12	11	11.52
1	150	Feb-12	3	3.9
1	150	Mar-12	2	2.48
1	150	Apr-12	1	1.37
1	150	May-12	1	1.33
1	150	Jun-12	2	2.87

Rank Transformation

Rank	Customer ID	Item No	Order date	Unit Sales	Profit
1	1	150	May-12	1	11.52
2	1	150	Apr-12	1	3.9
3	1	150	Mar-12	2	2.87
4	1	150	Jun-12	2	2.48
5	1	150	Feb-12	3	1.37
6	1	150	Jan-12	11	1.33

2. Creating Data Server, Physical & Logical

Creating Source Data Server

1. Creating Data Server for Source
2. Click on Physical Technology & right click on your technology e.g. oracle and right click on oracle and create new data server then insert information like data server name, DB username and password
3. insert information in JDBC Driver

2.1) Creating Data Server for Source Database

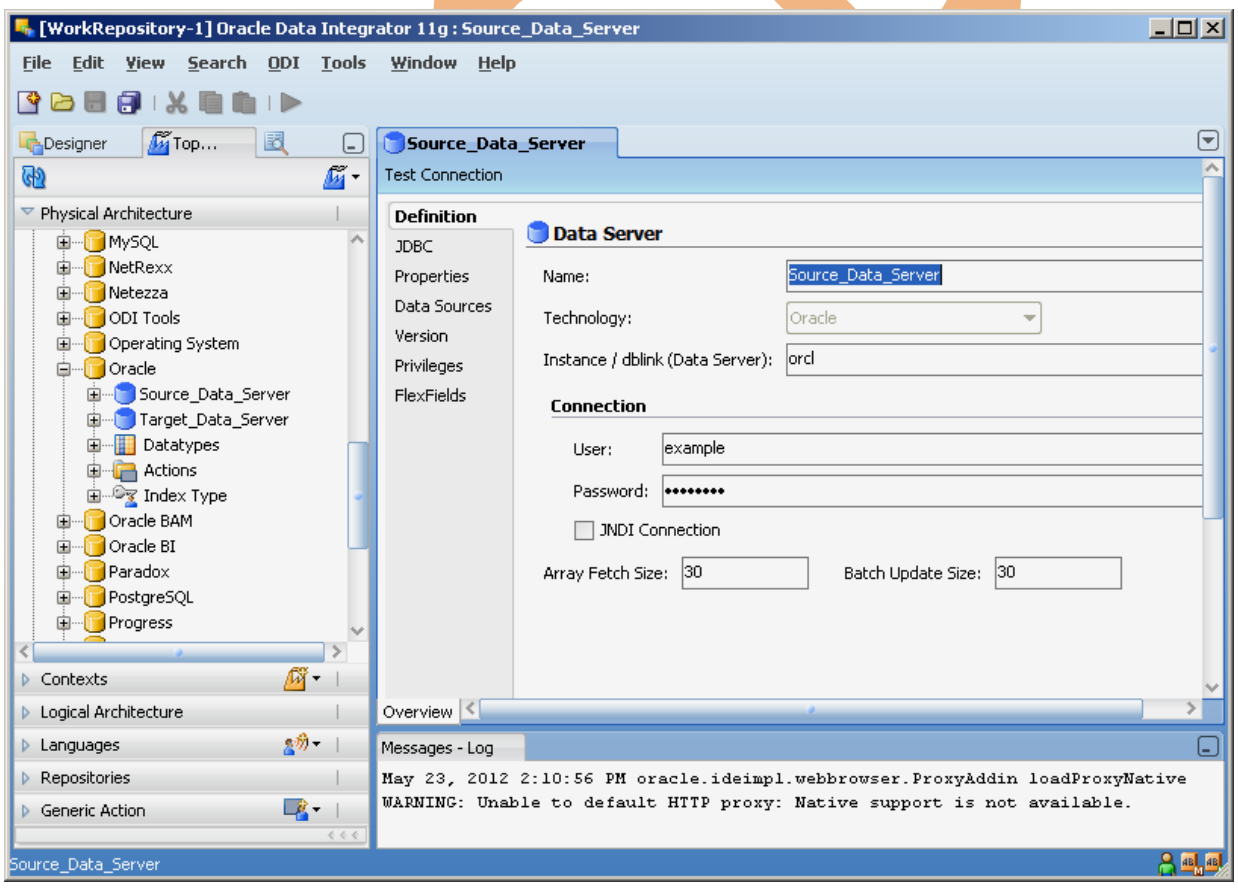

Fig. 01 – Creating Source Data Server

2.2) Specify JDBC Driver & URL

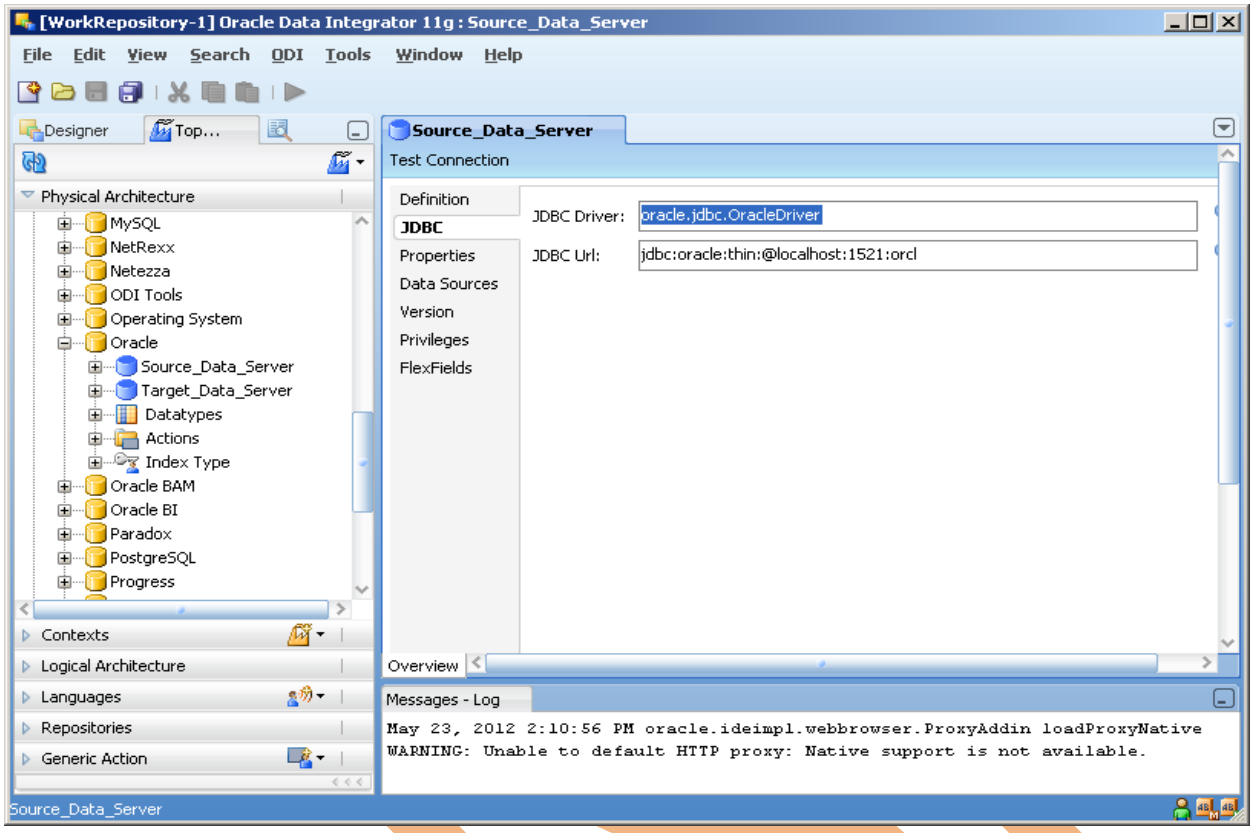

Fig. – 02 – Specify JDBC Driver & URL

Creating Physical Schema for Source Data Server

1. Creating Physical Schema

2. Right click on Data Server & Create New Physical Schema
3. Then scroll down schema and select correct user schema & work schema also where temporary table will store during Execution.

2.3) Creating Physical Schema for Source Data Server

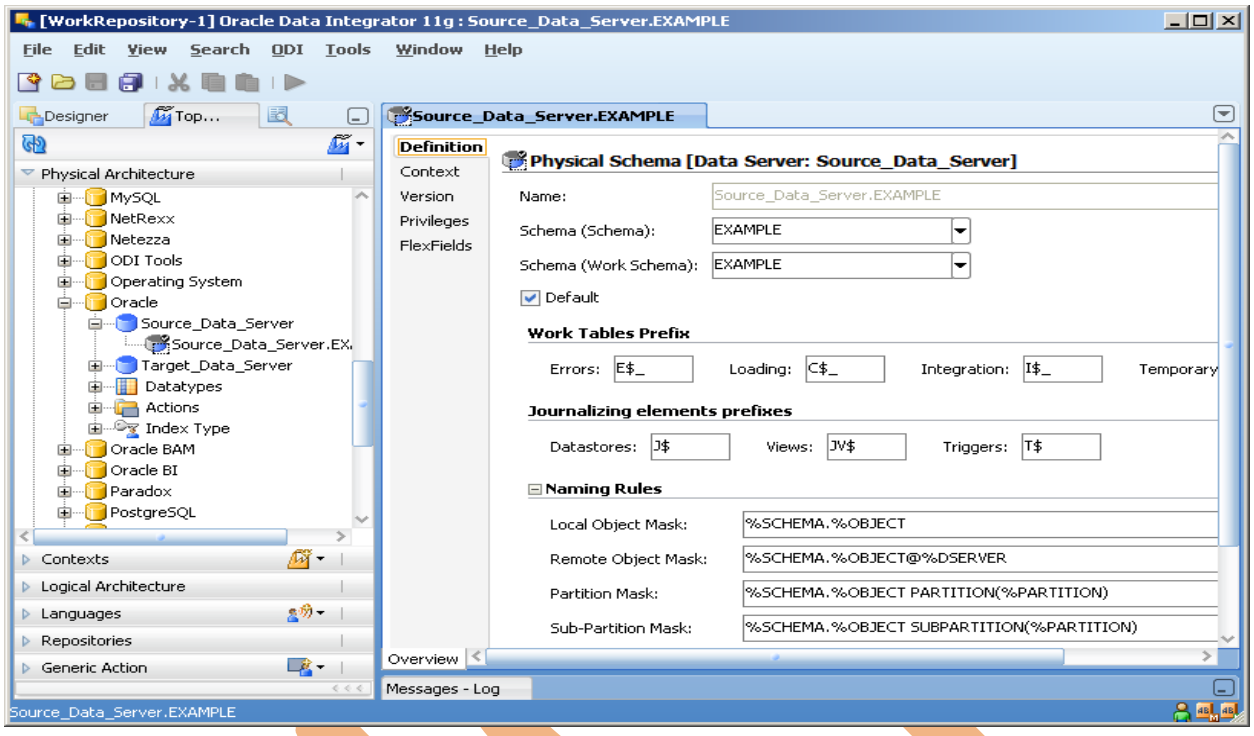

Fig. 03 Physical Schema for Source Data Server

Creating Target Data Server

1. Creating Data Server for Target

2. Click on Physical Technology & right click on your technology e.g. oracle & right click on oracle and click create new data server then insert information like data server name, DB username and password
3. insert information in JDBC Driver
4. Test connection

2.1) Creating Data Server for Target Database

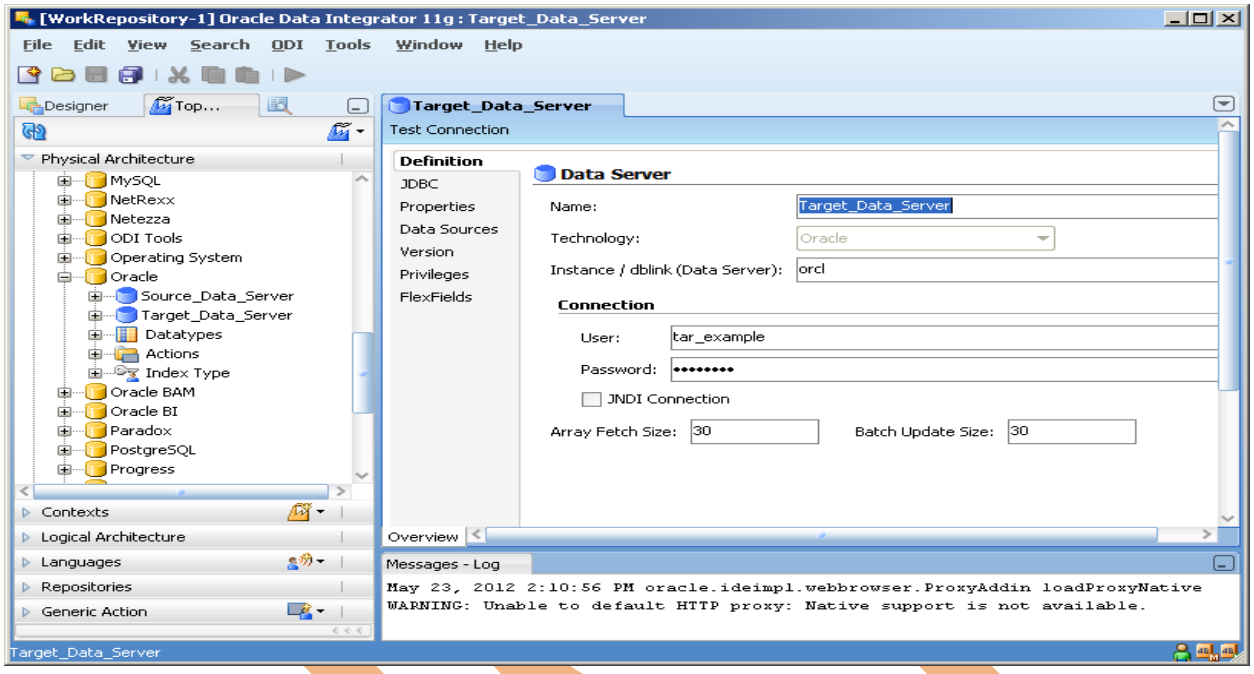

Fig. 04 – Creating Target Data Server

2.2) Specify JDBC Driver & URL

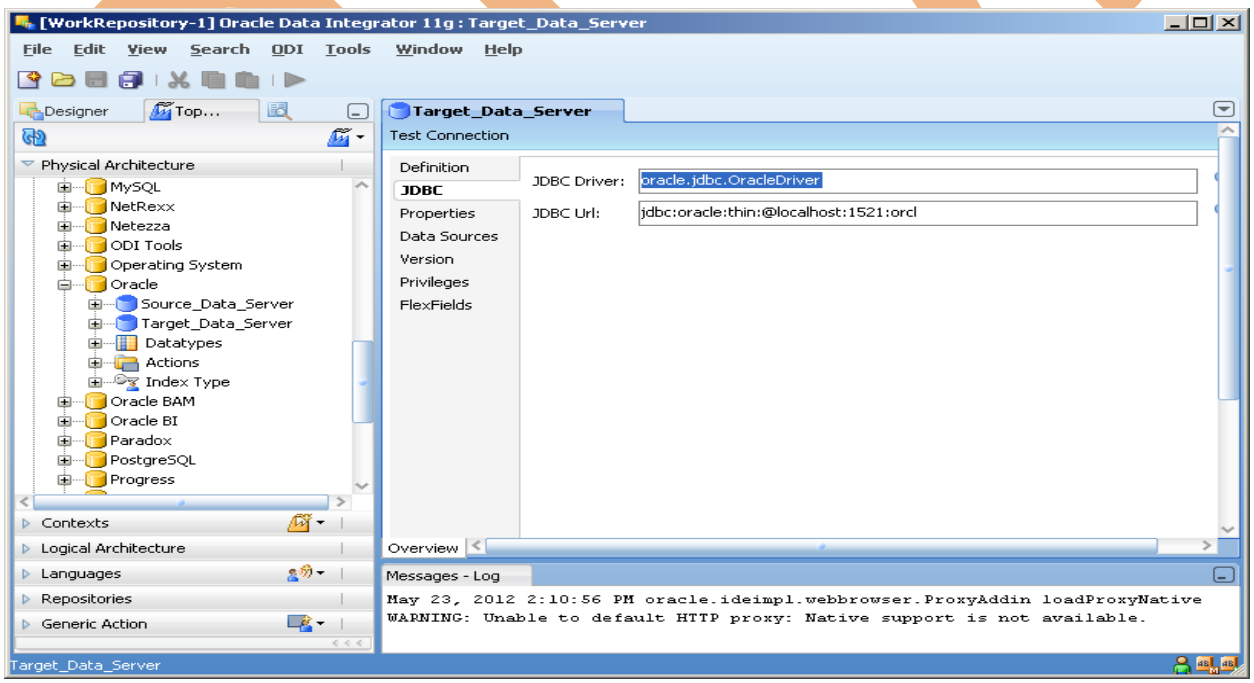

Fig. – 05 – Specify JDBC Driver & URL

Creating Physical Schema for Target Data Server

1. Creating Physical Schema

2. Right click on Data Server & Create New Physical Schema
3. Then scroll down schema and select correct user schema & work schema also where temporary table will store during Execution.

2.3) Creating Physical Schema for Target Data Server

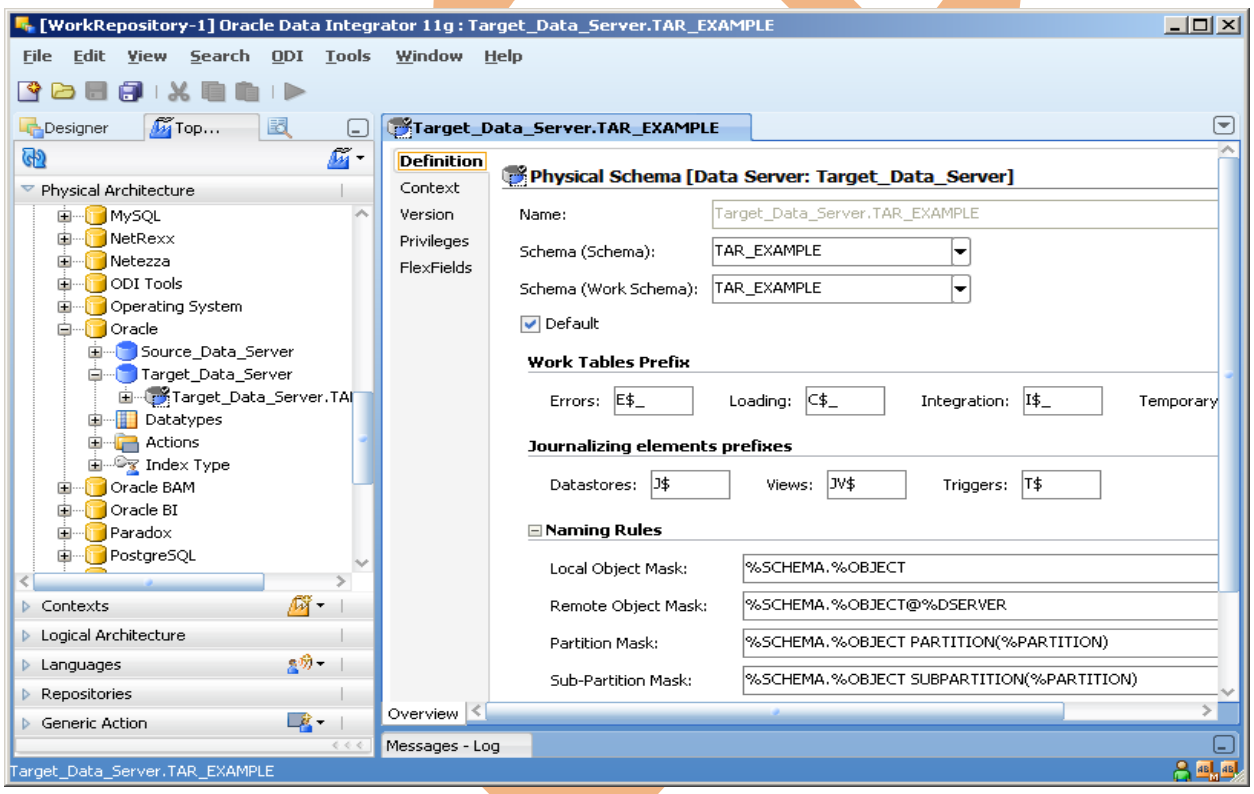

Fig. 06 Physical Schema for Target Data Server

Creating Logical Schema for Source & Target Physical Schema

1. Click on Logical Architecture and right click on your technology e.g. oracle & Create New Physical Schema

2.4) Creating Logical Schema for Source Physical Schema

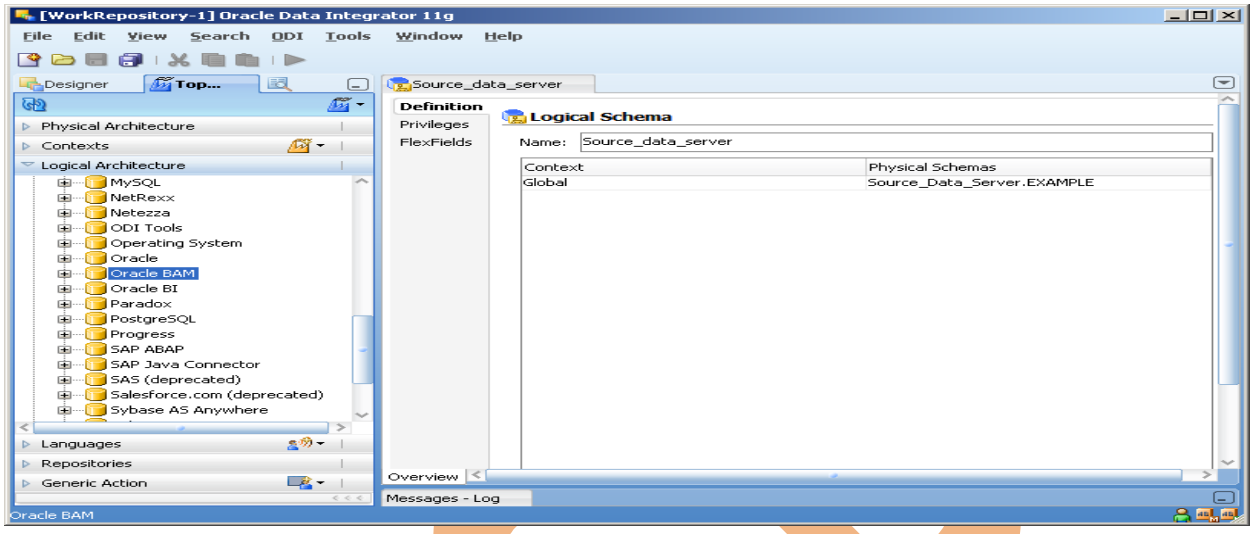

Fig. 06 Logical Schema for source physical schema

2.5) Creating Logical Schema for Target Physical Schema

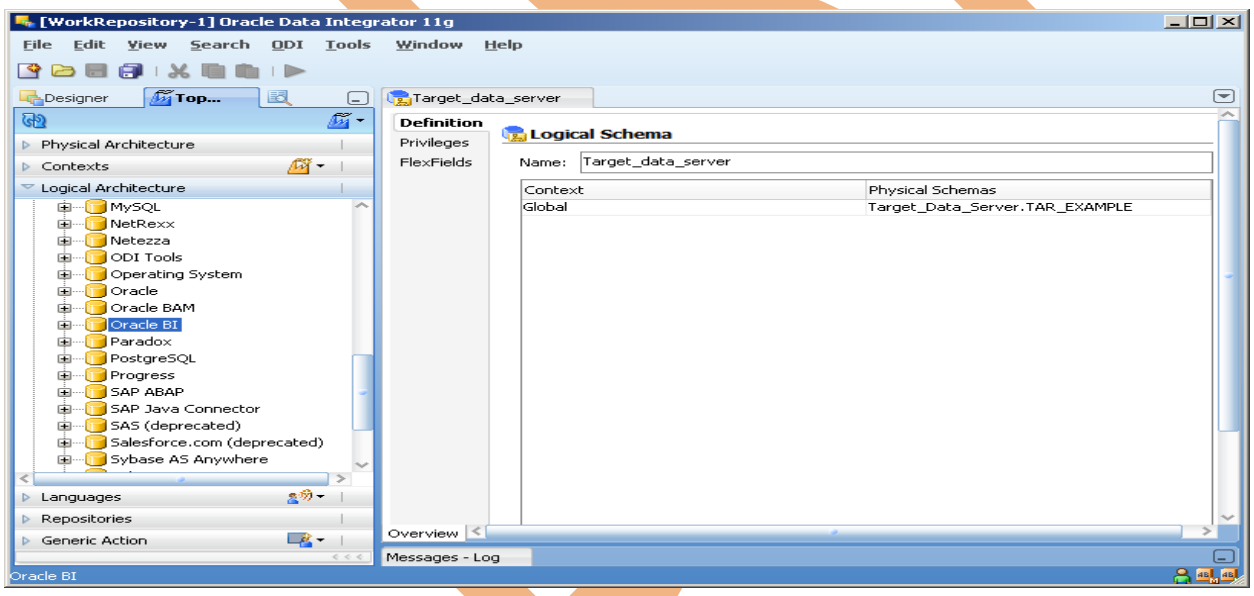

Fig. 07 Logical Schema for Target Physical Schema

Server :-

Creating Physical Schema for Target Data Server

1.) Create Data Model for Source & Target Data Model.

2.) Input Name of Data Model.

3.) Select Technology.

4.) Select Logical Schema.

3.1) Creating Source Data Model

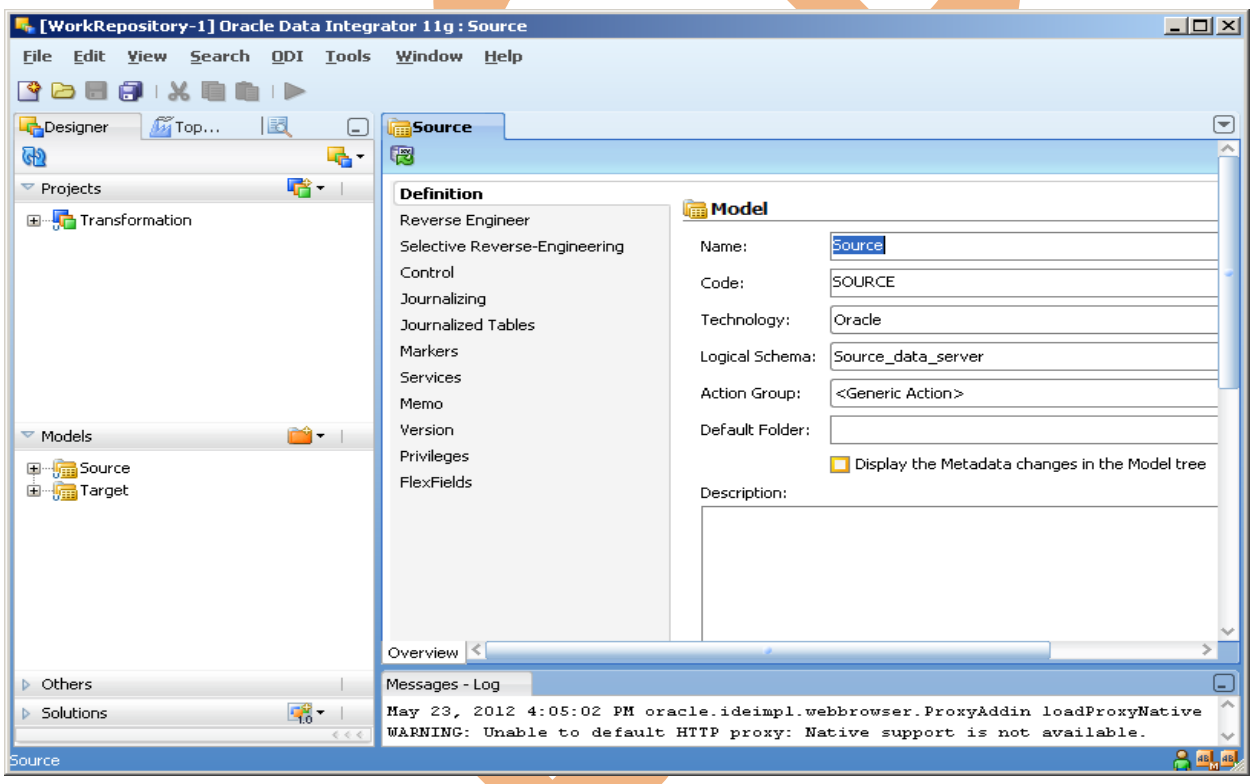

Fig. 08- Source Data Model.

3.2) Creating Target Data Model

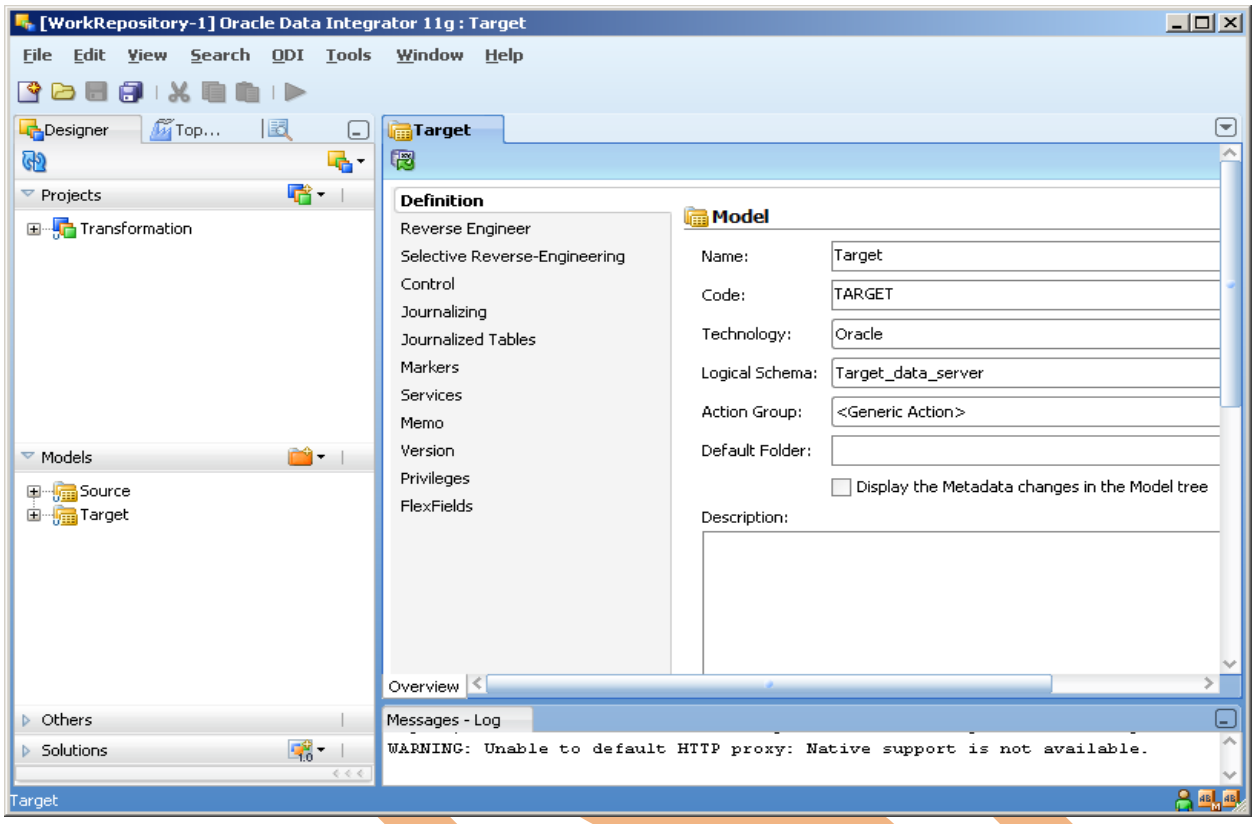

Fig. 09-Target Data Model

4. Creating Project & Importing Knowledge

1. Right click on project & input Project NAME

4.1) Crate Project Folder.

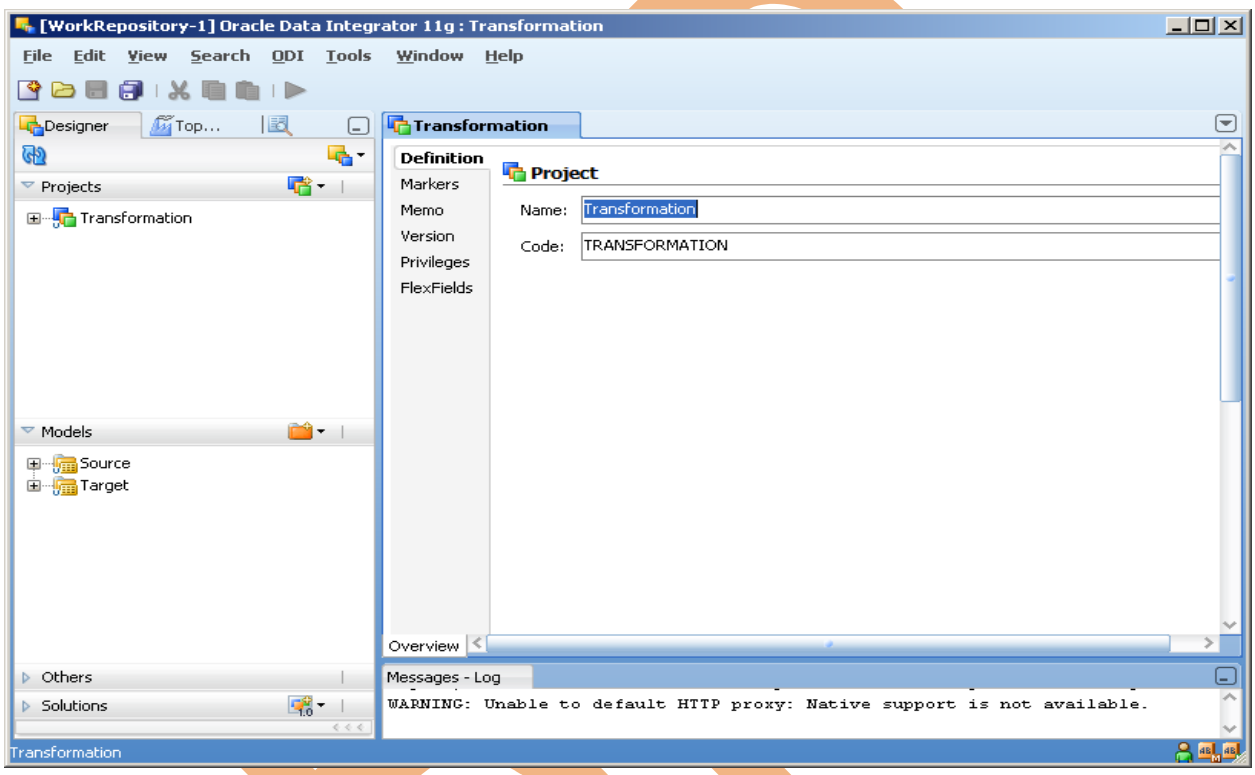

Fig. 10 Creating Project Folder for Operation.

1. Click on Transformation.
2. Right Click on Knowledge Module and import knowledge module used for this project.

4.2) Importing Knowledge Module:-

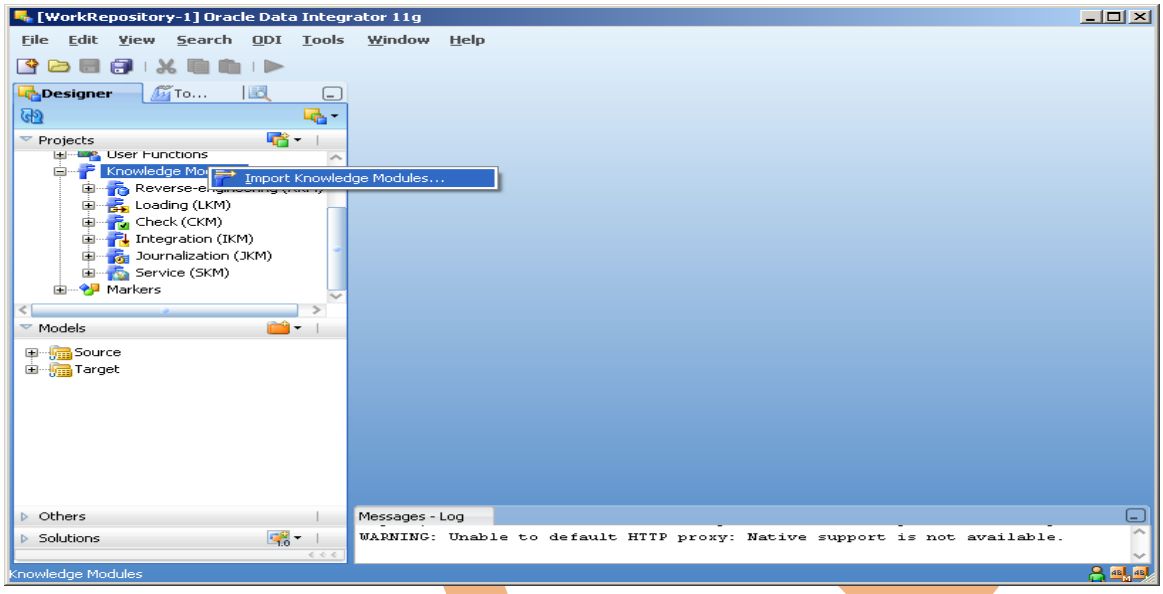

Fig. 11 Import Knowledge Module.

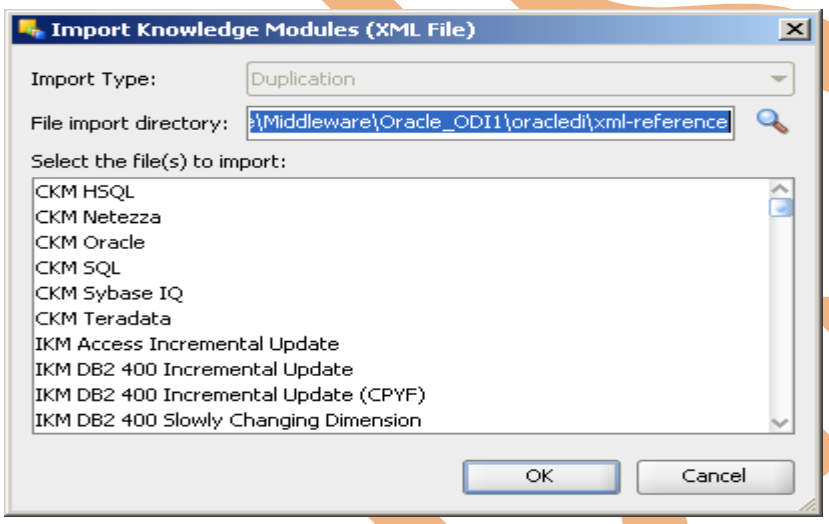

Fig. 12 List of Knowledge Module

5. Transformation Operation

5.1) Source Database:-

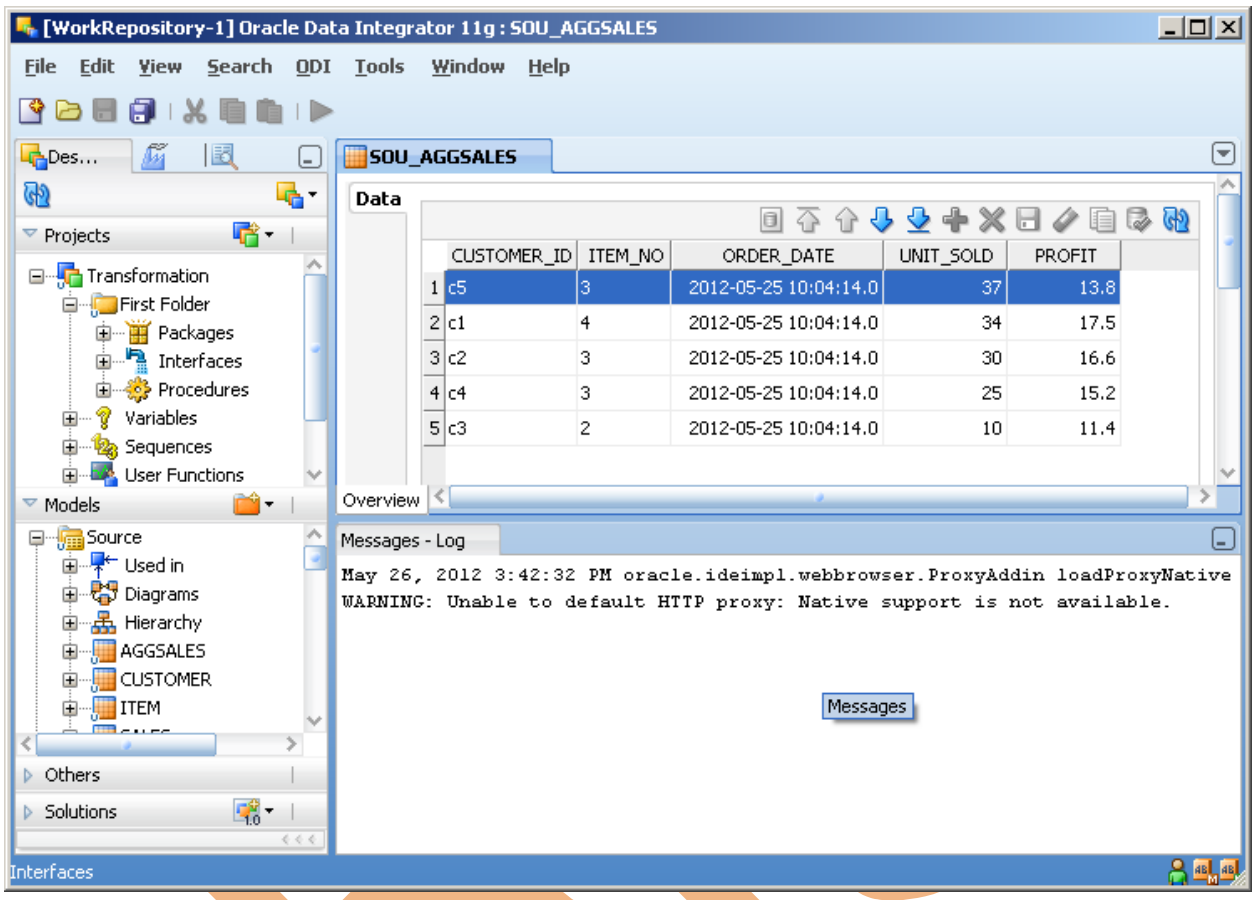

Fig. 13 Source Database for sou_aggsales table

5.1) Rank Transformation:-

1. Create New Interface.
2. Name of Interface.
3. Click Mapping tab.
4. Drag & Drop to Source Data base & Target Data store.

5.2) Creating Interface & Mapping.

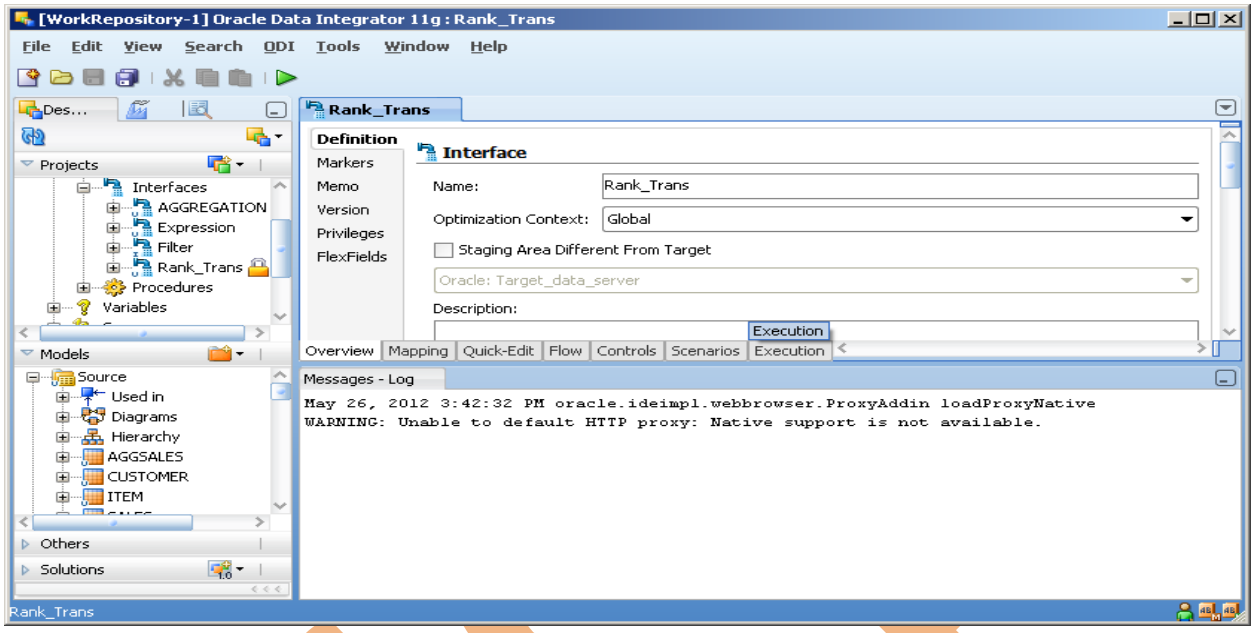

Fig.14 Creating Interface for Rank Transformation.

5.3) SQL Query for Mapping from Source to Target

S.No.	Column Name	Mapping Implementation
1.	Customer_id	SOU_AGGSALES.CUSTOMER_ID
2.	Item_no	SOU_AGGSALES.ITEM_NO
3.	Profit	SOU_AGGSALES.PROFIT
4.	Unit_Sold	SOU_AGGSALES.UNIT_SOLD
5.	Ordre_date	SOU_AGGSALES.ORDER_DATE
6.	Rank	RANK() OVER(ORDER BY SOU_AGGSALES.PROFIT)

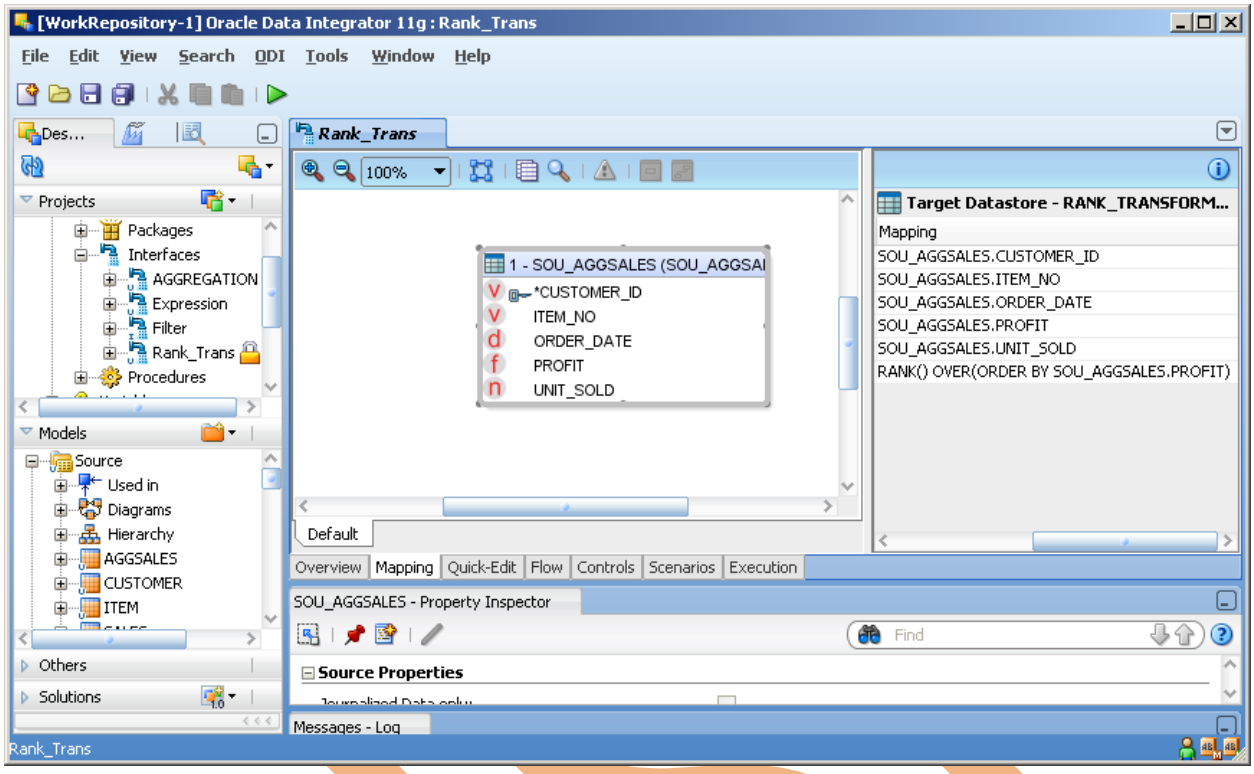

Fig. 15 Mapping from Source to Target Data.

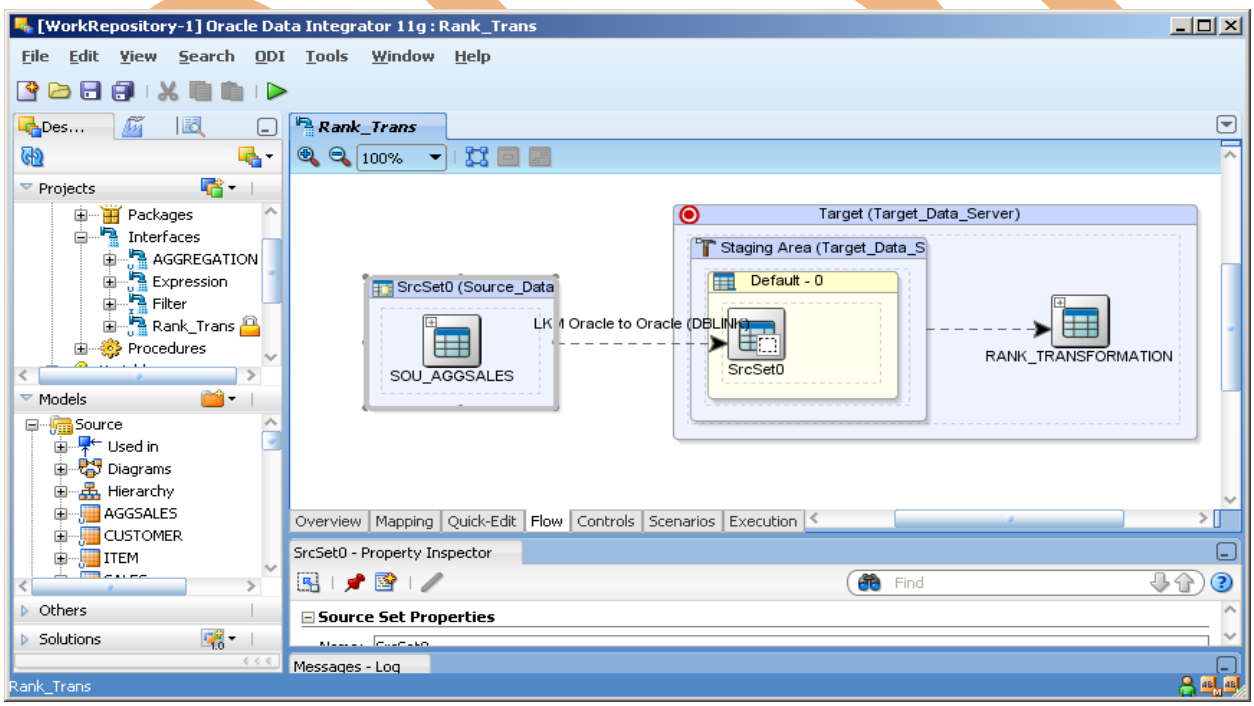

Fig. 16 Flow of data B/W Source to Target Area

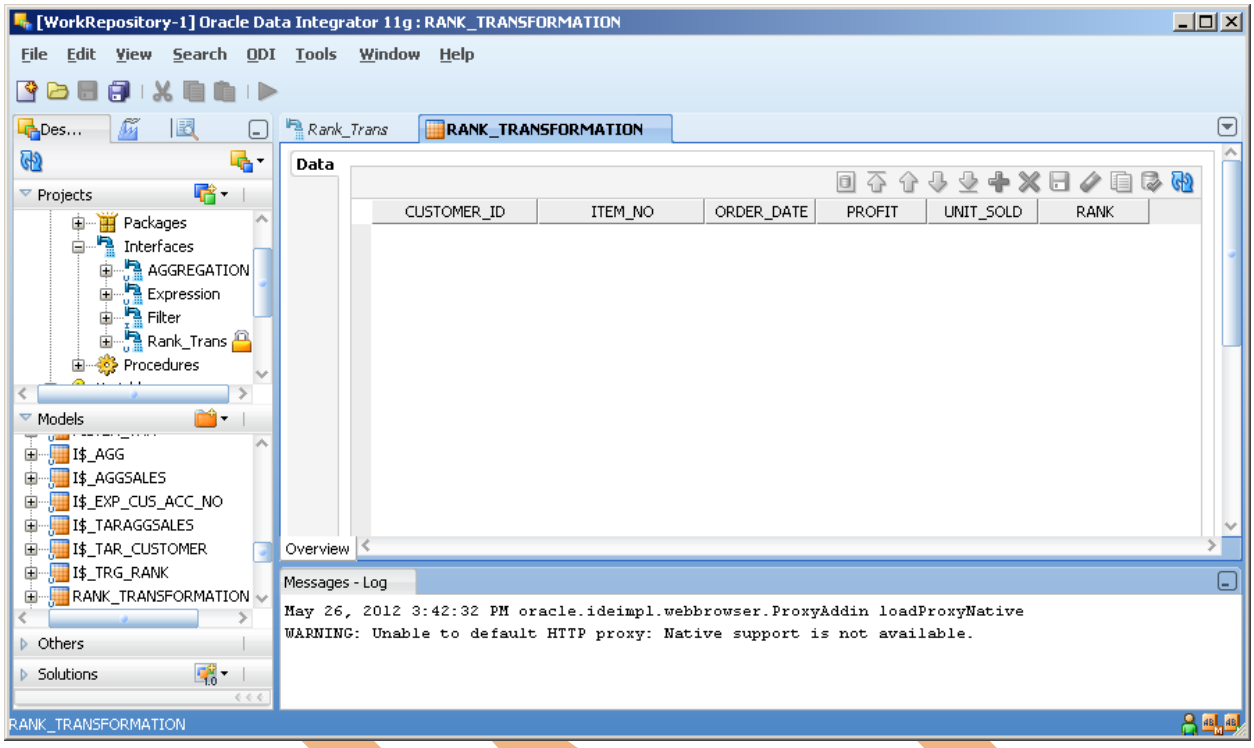

Fig. 17 Target Data Store before Session Started

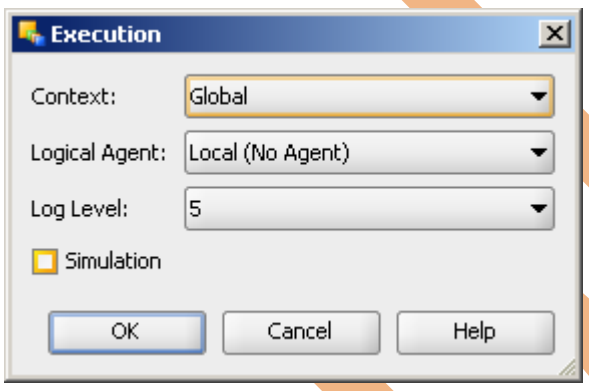

Fig. 18 Execution for Interface

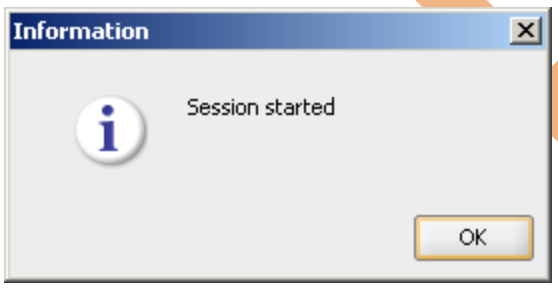

Fig. 19 Sessions Started

5.4) Open Operator & verify your interface was executed successfully.

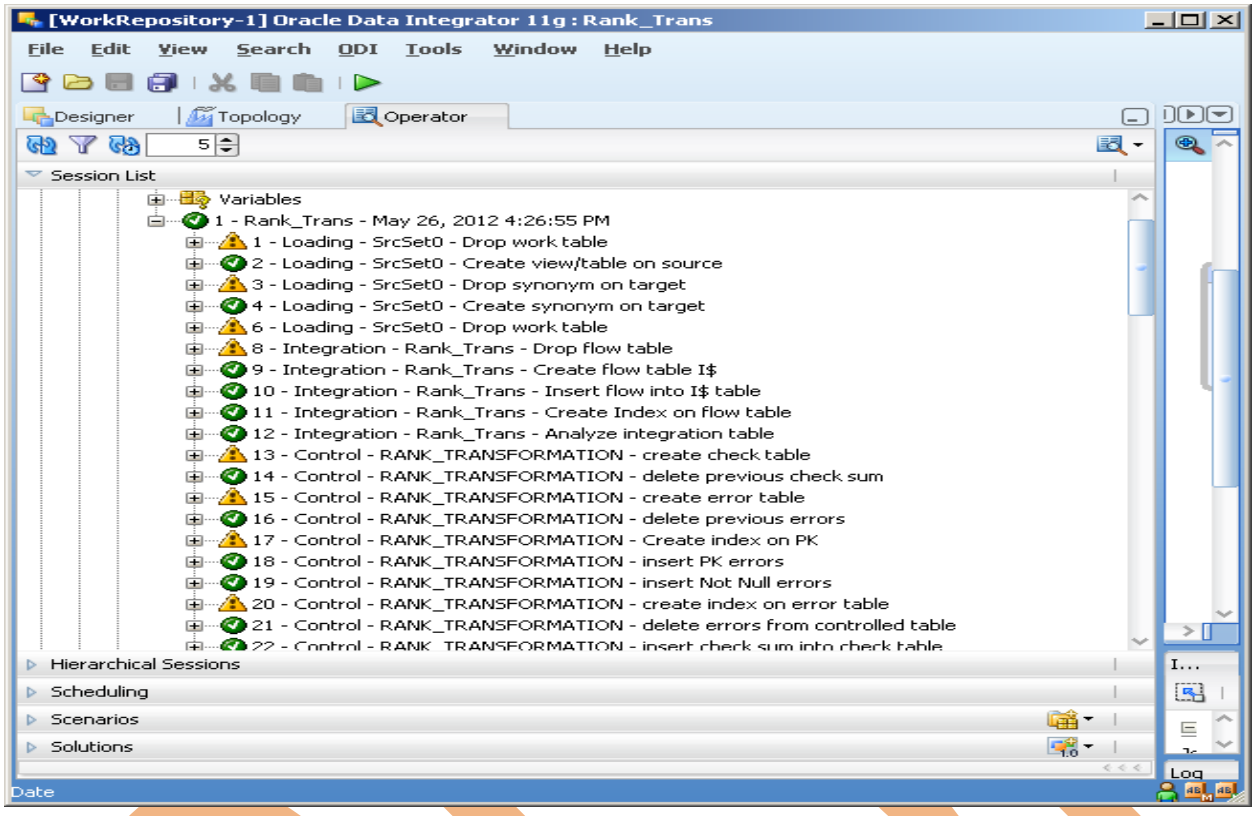

Fig. 20 Operator Navigator

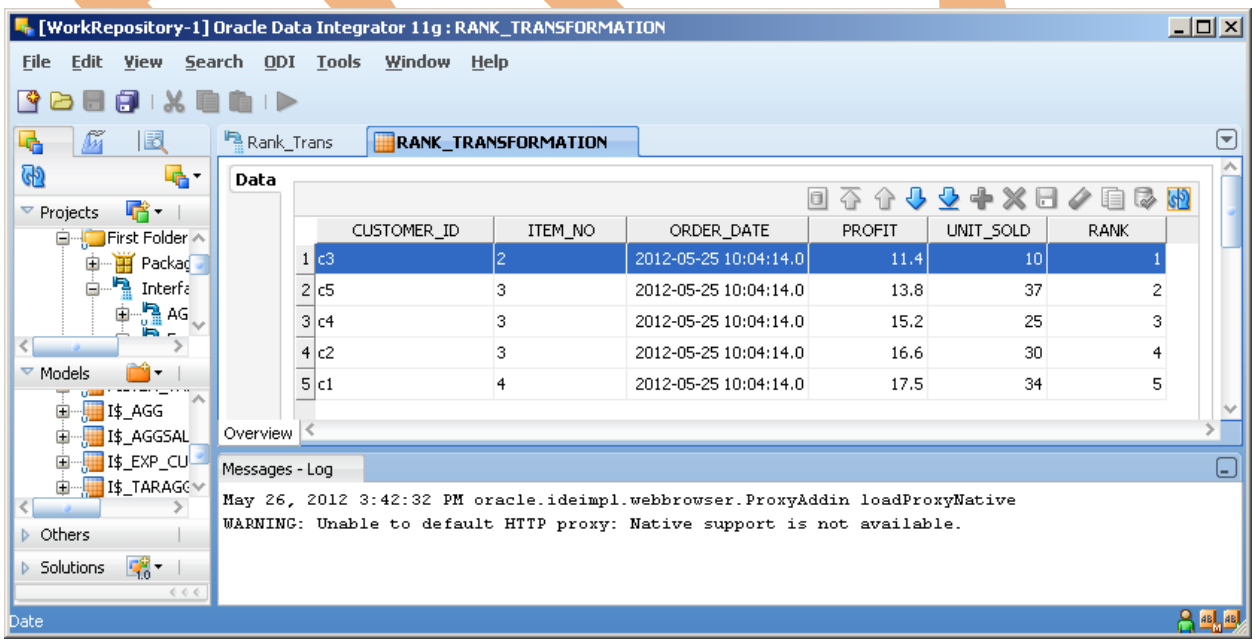

Fig. 21 Target Data Store after Session Started