

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 Join our professional training program to learn from the experts.

Docume	ent History			
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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 1	Transformatio	on		_			Rank	Transform	ation	
Customer ID	Item No	Order date	Unit Sales	Profit		Rank	Customer ID	ltem No	<mark>Order</mark> date	Unit Sales	<mark>Profit</mark>
1	150	Jan-12	11	11.52		1	1	150	May-12	1	11.52
1	150	Feb-12	3	3.9		2	1	150	Apr-12	1	3.9
1	150	Mar-12	2	2.48		3	1	150	Mar-12	2	2.87
1	150	Apr-12	1	1.37		4	1	150	Jun-12	2	2.48
1	150	May-12	1	1.33		5	1	150	Feb-12	3	1.37
1	150	Jun-12	2	2.87		6	1	150	Jan-12	11	1.33

2. Creating Data Server, Physical & Logical

Creating Source Data Server

- 1. Creating Data Server for Source
- 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
 insert information in JDBC Driver

2.1) Creating Data Server for Source Database

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Fig. 01 – Creating Source Data Server

2.2) Specify JDBC Driver & URL

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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

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Languages
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Generic Action Overview
Source_Data_Server.EXAMPLE

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
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2.1) Creating Data Server for Target Database

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Fig. 04 – Creating Target Data Server

2.2) Specify JDBC Driver & URL

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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

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Fig. 06 Physical Schema for Target Data Server

Creating Logical Schema for Source & Target Physical Schema

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 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

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Fig. 07 Logical Schema for Target Physical Schema

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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

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Fig. 08- Source Data Model.

3.2) Creating Target Data Model

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4. Creating Project & Importing Knowledge

1. Right click on project & input Project NAME

4.1) Crate Project Folder.

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Transformation			

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.

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4.2) Importing Knowledge Module:-



Fig. 11 Import Knowledge Module.

🔩 Import Knowledg	je Modules (XML Fil	e)	×	
Import Type:	Duplication		-	
File import directory:	Middleware\Oracle_	ODI1\oracledi\xml-reference		
Select the file(s) to im	port:			
CKM HSQL CKM Netezza CKM Oracle CKM SQL CKM Sybase IQ CKM Teradata IKM Access Incremen IKM DB2 400 Increme IKM DB2 400 Increment	tal Update :ntal Update :ntal Update (CPYF) Thanging Dimension		~	
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ig. 12 List of	Knowledge M	Nodule		

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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.

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Rank_Trans				

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

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Fig. 17 Target Data Store before Session Started

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Context:	Global	-	
Logical Agent:	Local (No Agent)	-	
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Simulation			
ОК	Cancel Help		
Fig. 18 Exe	ecution for Interface		
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i	Session started		
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Fig. 19 Sessions Started

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

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→ → ▲ 1 - Loading - SrcSet0 - Drop work table		
🗈 🖓 3 - Loading - SrcSet0 - Drop synonym on target		
🗉 🗠 🕜 4 - Loading - SrcSet0 - Create synonym on target		
🕀 🕰 6 - Loading - SrcSet0 - Drop work table		
🗈 🖓 8 - Integration - Rank_Trans - Drop flow table		
🖃 🐨 🚳 9 - Integration - Rank_Trans - Create flow table I\$		
🗉 🗝 🧭 10 - Integration - Rank_Trans - Insert flow into I\$ table		
🖬 🐨 🚳 11 - Integration - Rank_Trans - Create Index on flow table		
🗊 🐨 🚳 12 - Integration - Rank_Trans - Analyze integration table		
🗉 🖓 13 - Control - RANK_TRANSFORMATION - create check table		
14 - Control - RANK_TRANSFORMATION - delete previous check sum		
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Fig. 20 Operator Navigator

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Fig. 21 Target Data Store after Session Started

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