

Name of Solution:

Mapping : Columns to rows using Normalizer

Business Requirement:

PowerCenter example to pivot columns in a single row into multiple rows in the target using Normalizer Transformation.

Solution URL:

<https://community.informatica.com/solutions/1631>

Supported Versions:

Informatica PowerCenter 9.1 and above.

Description:

Overview

Developers sometimes need to transform one source row into multiple target rows. For example, attributes that are stored in columns in one table or file may need to be broken into multiple records - one record per column attribute - upon being loaded into a data warehouse.

Source

EMP_Name	EMP_Year	Transport	House_Rent	Food
Rachel Geller	2000	200	1500	500
Chandler Bing	2000	300	1200	300
Joey Frank	2000	300	1350	350

Target

EMP_Name	EMP_Year	Expenses_Type	Expenditure
Rachel Geller	2000	Transport	200
Rachel Geller	2000	House_Rent	1500
Rachel Geller	2000	Food	500
Chandler Bing	2000	Transport	300
Chandler Bing	2000	House_Rent	1200
Chandler Bing	2000	Food	300
Joey Frank	2000	Transport	300



informatica Marketplace

Joey Frank	2000	House_Rent	1350
Joey Frank	2000	Food	350

This mapping template demonstrates how to use a Normalizer transformation to split one source row into multiple target rows as shown above. Normalization is the process of organizing data. In database terms, this includes creating normalized tables and establishing relationships between those tables according to rules designed to both protect the data and make the database more flexible by eliminating redundancy and inconsistent dependencies.

The Normalizer transformation normalizes records from VSAM and relational sources, allowing you to organize the data according to your own needs. A Normalizer transformation can appear anywhere in a data flow when you normalize a relational source. Use a Normalizer transformation instead of the Source Qualifier transformation when you normalize a VSAM source.

The Normalizer transformation is primarily used with VSAM sources, which are often stored in a de-normalized format. The OCCURS statement in a COBOL file, for example, nests multiple records of information in a single row. Using the Normalizer transformation, you can break out repeated data within a record into separate records. For each new record it creates, the Normalizer transformation generates a unique identifier. You can use this key value to join the normalized records.

Once you have created a Normalizer transformation in your mapping, you need to customize its properties. On the Normalizer transformation's "Normalizer" tab, you can set the port names, data types, key fields, precision and an Occurs value for each port passing through the Normalizer.

Tips:

- You can use a single Normalizer transformation to handle multiple levels of de-normalization in the same record. For example, a single record might contain two different detail record sets. Rather than using two Normalizer transformations to handle the two different detail record sets, you handle both normalizations in the same transformation.
- If you have de-normalized data for which the Normalizer transformation has created key values, connect the ports representing the repeated data and the output port for the generated keys to a different portion of the data flow in the mapping. Ultimately, you may want to write these values to different targets.

Download file contents:

1. Script
2. Mapping

Steps to implement the solution:

1. Execute the given script to create source table and Target table.
2. Import workflow using the Repository Manager. Select the appropriate folder from the repository and resolve the conflicts by choosing suitable option.

informatica Marketplace

3. In the PowerCenter Designer, observe the logic of Normalizer Transformation as shown below,

Edit Transformations

Transformation | Ports | Properties | Normalizer | Metadata Extensions

Select transformation: **nm_Pivot_Records**

<< Level >>

	Column Name	Level	Occurs	Datatype	Prec	Scale
1	E_NAME	1	0	nstring	20	0
2	E_YEAR	1	0	number	10	0
3	Expenses	1	3			
4	EXPENSES_TYPE	2	0	string	20	0
5	EXPENDITURE	2	0	number	10	0

4. Open the workflow in Workflow Manager. Assign the integration service in Workflow - > Edit -> Integration Service
5. Edit session and assign valid connection object for the source and target.
6. Execute the workflow and observe the target files.

Other Useful links:

[Mapping Bundles](#)

[Workflow Bundles](#)

[Informatica Tools Bundles](#)

[Informatica for Social Media Bundles](#)

[Debugging Tools Bundles](#)

[Visio Templates Bundles](#)

[B2B Templates and Projects Bundles](#)

[Data Quality Packs and Plans Bundles](#)

[Script Bundles](#)