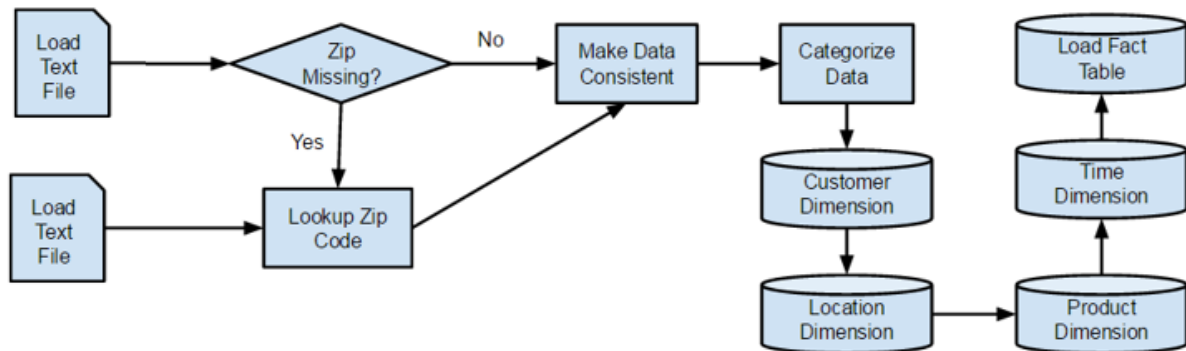


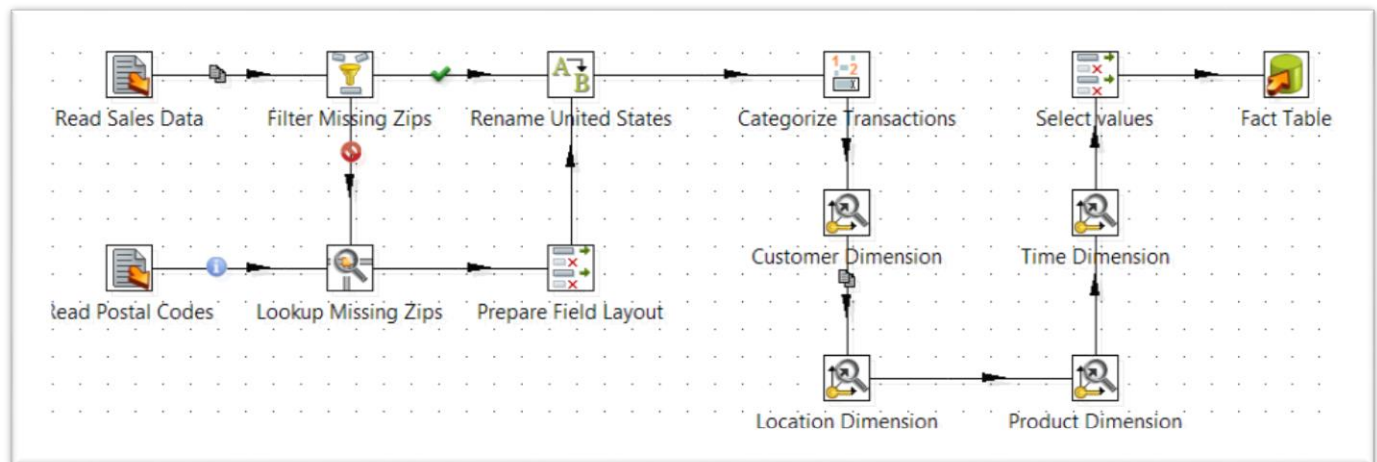
Data Warehousing (Use Case #6)

Demonstrate Exercise #3

During this exercise we will extend the example we built in Exercise #1 by creating a data warehouse. Exercise #1 loads all the data into a single table. For this exercise we will create 4 dimension tables and a fact table.

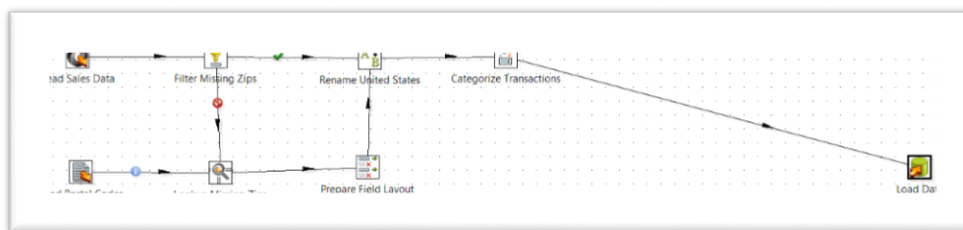


The result will look as follows:

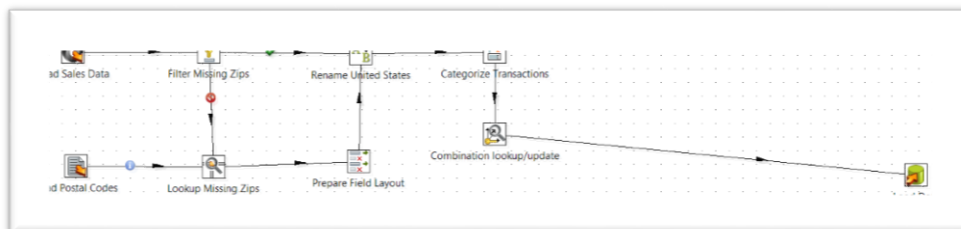


Build Exercise #3

1. Open the Exercise 3 FINAL located in the Exercise 3 folder for reference purposes.
2. Open the Exercise 3 START located in the Exercise 3 folder and we will modify this example to create our data warehouse
3. Save Exercise 3 START as YOUR_NAME_Exercise_3 by clicking File -> Save As.
4. Select and Drag the Load Data step toward the bottom right so that you have room on your line to add additional steps



5. Expand the Data Warehouse folder in the Design tab, drag the Combination lookup/update step onto the line between the Categorize Transactions step and the Load Data step. When the line between these steps are bold, release the mouse button and this step will now be part of the data flow. Now drag the Combination lookup/update step so that it is below the Categorize Transactions step.



Build Dimension Tables

1. Open the Combination lookup/update step. Rename it to Customer Dimension and fill in the values as show below:

Combination Lookup / Update

Step name: Customer Dimension

Connection: workshop_postgres [Edit... New... Wizard...]

Target schema: [Browse...]

Target table: dimCustomer [Browse...]

Commit size: 100 Cache size: 9999

Pre-load the cache? ☐

Key fields (to look up row in table):

#	Dimension field	Field in stream
1	CUSTOMERNAME	CUSTOMERNAME
2	CUSTOMERPHONE	PHONE

Technical key field: customerKey

Creation of technical key

☐ Use table maximum + 1

☐ Use sequence []

☒ Use auto increment field

Remove lookup fields? ☒

Use hashcode? ☐

Hashcode field in table: []

Date of last update field (optional): []

[Help] [OK] [Cancel] [Get Fields] [SQL]

2. Click on the SQL button, click on Execute, click Ok, Close and then Ok.
3. Drag another Combination lookup/update step onto the line between the Customer Dimension step and the Load Data step. When the line between these steps are bold, release the mouse button and this step will now be part of the data flow. Now drag the Combination lookup/update step so that it is below the Customer Dimension step.
4. Open the Combination lookup/update step. Rename it to Location Dimension and fill in the values as show below:

Combination Lookup / Update

Step name:

Connection:

Target schema:

Target table:

Commit size: Cache size:

Pre-load the cache? ☐

Key fields (to look up row in table):

#	Dimension field	Field in stream
1	TERRITORY	TERRITORY
2	COUNTRY	COUNTRY
3	STATE	STATE
4	CITY	CITY
5	POSTALCODE	POSTALCODE

Technical key field:

Creation of technical key

☐ Use table maximum + 1

☐ Use sequence

☒ Use auto increment field

Remove lookup fields? ☒

Use hashcode? ☐

Hashcode field in table:

Date of last update field (optional):

- Click on the SQL button, click on Execute, click Ok, Close and then Ok.
- Drag another Combination lookup/update step onto the line between the Location Dimension step and the Load Data step. When the line between these steps are bold, release the mouse button and this step will now be part of the data flow. Now drag the Combination lookup/update step so that it is to the right of the Location Dimension step.
- Open the Combination lookup/update step. Rename it to Product Dimension and fill in the values as show below:

Combination Lookup / Update

Step name:

Connection:

Target schema:

Target table:

Commit size: Cache size:

Pre-load the cache? ☐

Key fields (to look up row in table):

#	Dimension field	Field in stream
1	PRODUCTLINE	PRODUCTLINE
2	PRODUCTCODE	PRODUCTCODE

Technical key field:

Creation of technical key:

☐ Use table maximum + 1

☐ Use sequence

☒ Use auto increment field

Remove lookup fields? ☒

Use hashcode? ☐

Hashcode field in table:

Date of last update field (optional):

8. Click on the SQL button, click on Execute, click Ok, Close and then Ok.
9. Drag another Combination lookup/update step onto the line between the Product Dimension step and the Load Data step. When the line between these steps are bold, release the mouse button and this step will now be part of the data flow. Now drag the Combination lookup/update step so that it is above the Product Dimension step.
10. Open the Combination lookup/update step. Rename it to Time Dimension and fill in the values as show below:
11. Click on the SQL button, click on Execute, click Ok, Close and then Ok.

Build the Fact Table

12. Expand the Transform folder in the Design tab and drag the Select values step on the line between the Time Dimension and Load Data step then move it above the Time Dimension step.

Combination Lookup / Update

Step name:

Connection:

Target schema:

Target table:

Commit size: Cache size:

Pre-load the cache? ☐

Key fields (to look up row in table):

#	Dimension field	Field in stream
1	YEAR	YEAR_ID
2	QUARTER	QTR_ID
3	MONTH	MONTH_ID

Technical key field:

Creation of technical key

☐ Use table maximum + 1

☐ Use sequence

☒ Use auto increment field

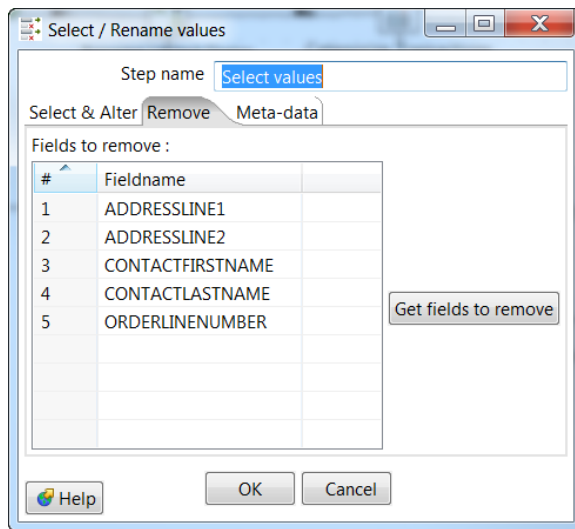
Remove lookup fields? ☒

Use hashcode? ☐

Hashcode field in table:

Date of last update field (optional):

13. Open the Select values step, click on the Remove tab and add the following fields to remove list:



14. Open the Load Data and change the Target table value to factSales_your_initials

15. Click on the SQL button, click on Execute, click Ok, Close and then Ok.

16. Save transformation and then click run.

Review Exercise #3

What We Covered...

- Created various dimension tables
 - Customer Dimension
 - Location Dimension
 - Product Dimension
 - Time Dimension
- Created a Fact Table