Leading the **Integration** Revolution

Your business problems have changed.
Why hasn't your integration solution?

ADEPTIA

Use Case: Pivot Mapping

ADEPTIA

Pivot rules to convert source records into multiple target records

Source file

B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
Lastnam	Company	Street 1	Street 2	City	State	Zip	UniqueId	Rep Email	Product	Product 1 Comments	Product 1 Ratin	Product	Product 2 Comments	Product 2 Rati	Product 3	Product 3 Comme	Product 3 Rati	Product 4	Product 4 Comme	Product	Product 5 Rating
Shmoe	1st Bank of Utah	123	Unit 3	Saltlake City	UT	84101	etlTest1	name@organization.cor	Visited	P1 Test comments 1...	High	Visited	P2 Test comments 1...	Low		P3 Test comments 1...			P4 Test comments	Visited	None
Adams	75th4th Bank	543	Unit 27	New York	NY	10001	etlTest2	name@organization.com		P1 Test comments 2...			P2 Test comments 2...		Visited	P3 Test comments	High	Visited	P4 Test comments 2...		
Schmidt	Southeast CU	678	Bld 4	Atlanta	GA	30032	etlTest3	name@organization.cor	Visited	P1 Test comments 3...	None	Visited	P2 Test comments 3...			P3 Test comments 3...			P4 Test comments	Visited	High
Arc	First Trust of CA	543		Sacramento	CA	90210	etlTest4	name@organization.com		P1 Test comments 4...			P2 Test comments 4...		Visited	P3 Test comments	Low		P4 Test comments 4...		
Lane	Bank of Solitude	4566		Metropolis	NY	10001	etlTest5	name@organization.com		P1 Test comments 5...			P2 Test comments 5...		Visited	P3 Test comments	Low		P4 Test comments 5...		
Griffin	Quohog Credit Unio	43	Unit 73	Quohog	RI	00093	etlTest6	name@organization.cor	Visited	P1 Test comments 6...	Low	Visited	P2 Test comments 6...	High		P3 Test comments 6...		Visited			
Jackson	Pulp Trust	5677		Culver City	CA	90230	etlTest7	name@organization.com		P1 Test comments 7...			P2 Test comments 7...			P3 Test comments 7...				Visited	Low

Rules:

1. Columns marked in yellow would each create a new record in output
2. Apply additional filter whereby only the records that have a source value of High or Low for these columns produce the corresponding records. For example, Joe Shmoe has two output records below since its single source record has two columns with High and Low circled in red.

Desired Output file

A	B	C	D	E	F	G	H	I	J	K	L	M
Firstname	Lastname	Company	Street 1	Street 2	City	State	Zip	UniqueId	Rep Email	Product	Comments	Rating
Joe	Shmoe	1st Bank of Utah	123	Unit 3	Saltlake City	UT	84101	etlTest1	name@organization.com	Product 1	P1 Test comments 1...	High
Joe	Shmoe	1st Bank of Utah	123	Unit 3	Saltlake City	UT	84101	etlTest1	name@organization.com	Product 2	P2 Test comments 1...	Low
Sam	Adams	75th4th Bank	543	Unit 27	New York	NY	10001	etlTest2	name@organization.com	Product 3	P3 Test comments 2...	High
John	Schmidt	Southeast CU	678	Bld 4	Atlanta	GA	30032	etlTest3	name@organization.com	Product 5		High
Joan	Arc	First Trust of CA	543		Sacramento	CA	90210	etlTest4	name@organization.com	Product 3	P3 Test comments 4...	Low
Lois	Lane	Bank of Solitude	4566		Metropolis	NY	10001	etlTest5	name@organization.com	Product 3	P3 Test comments 5...	Low
Peter	Griffin	Quohog Credit Ui	43	Unit 73	Quohog	RI	00093	etlTest6	name@organization.com	Product 1	P1 Test comments 6...	Low
Peter	Griffin	Quohog Credit Ui	43	Unit 73	Quohog	RI	00093	etlTest6	name@organization.com	Product 2	P2 Test comments 6...	High
Samuel	Jackson	Pulp Trust	5677		Culver City	CA	90230	etlTest7	name@organization.com	Product 5		Low

ADEPTIA

Things to remember

When you go through the steps think of 3 things

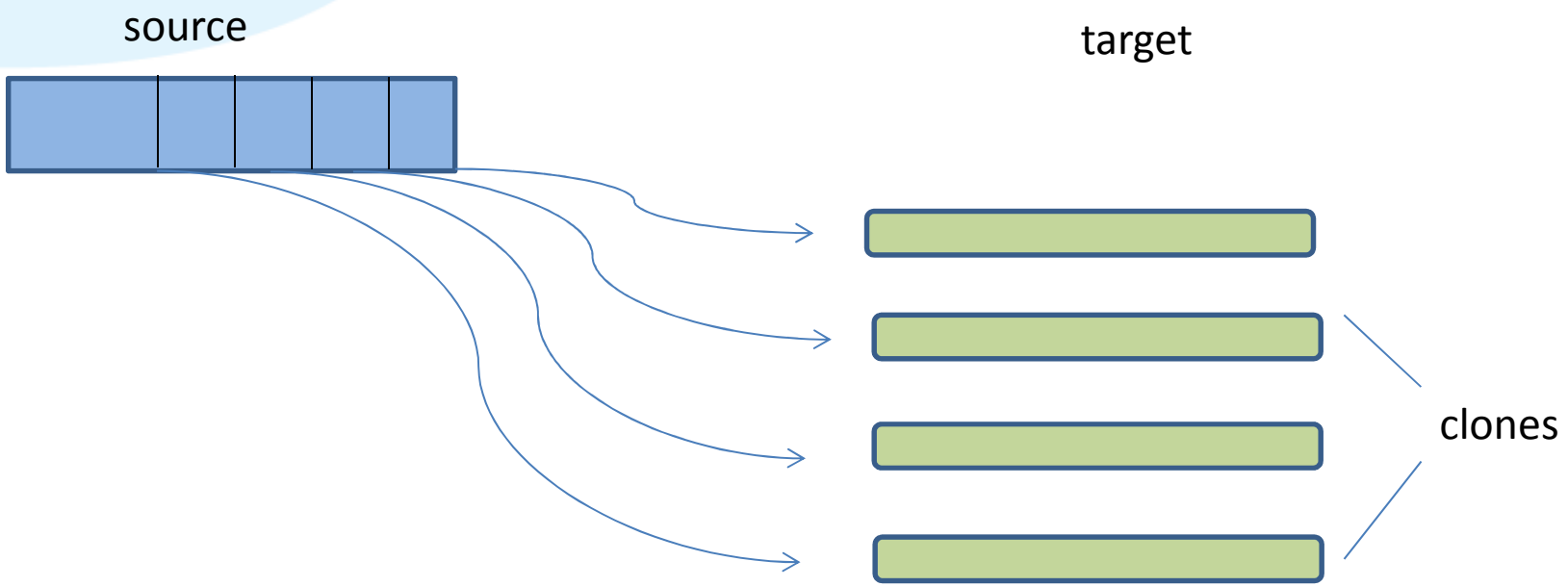
A. What is my source and target formats (for this we define the schemas)
B. What is the mapping needed to convert to the output (this is mapping)
C. How do I test and run this real-time (Mapping preview and Process Flow)

For help on setting up this example you can email to:
support@adeptia.com

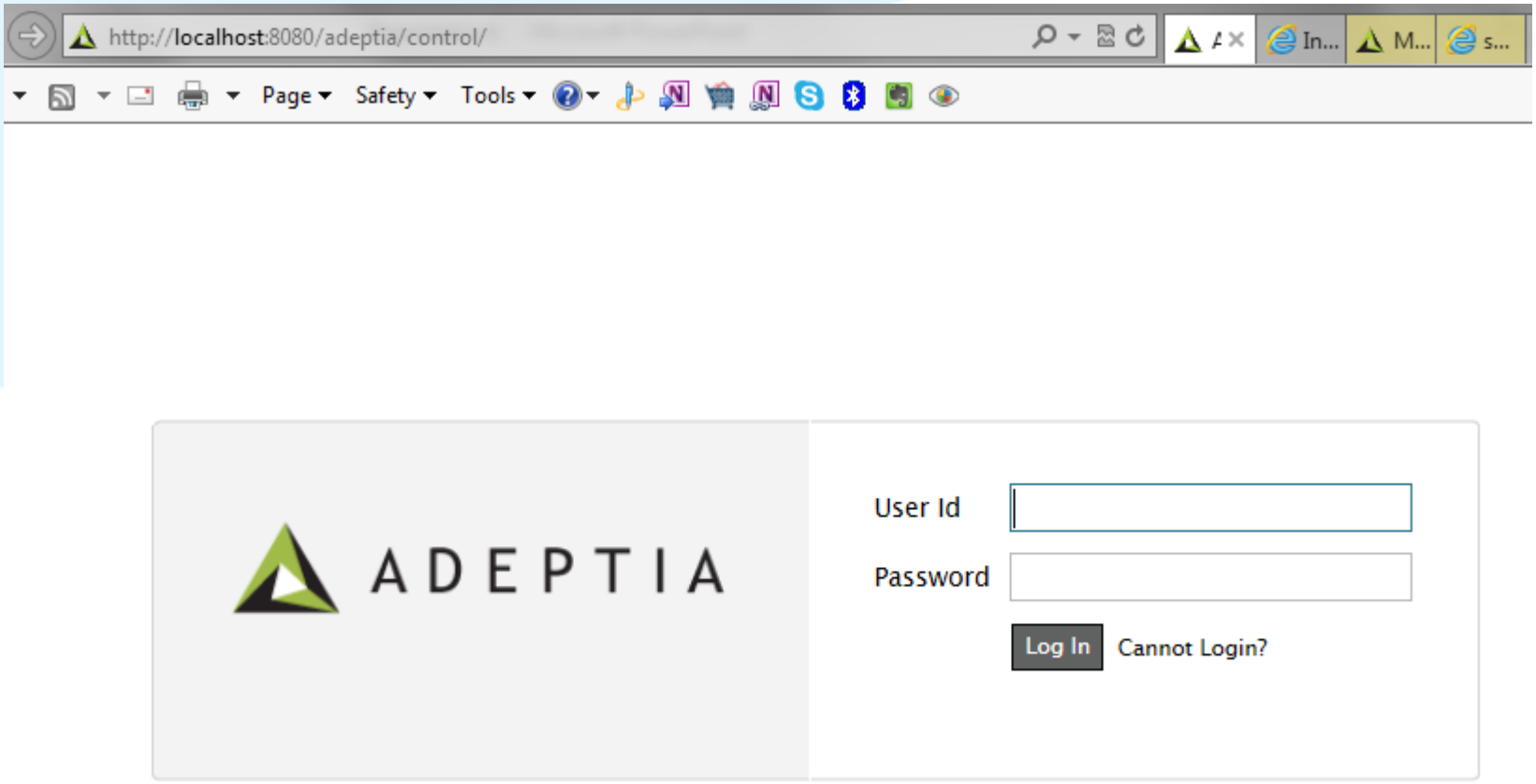
Mapping approach

In the Target schema we will clone that many record nodes corresponding to the pivot columns in source. Thus if there are 4 pivot columns we will have 4 separate target record nodes. The occurrence of these records would be based on each Record we are pulling from the source. Thus each source record can create 4 output records. Now we can apply additional filters to control the generation of an output record based on for-each conditions described later.

Create multiple Output records for each Source record



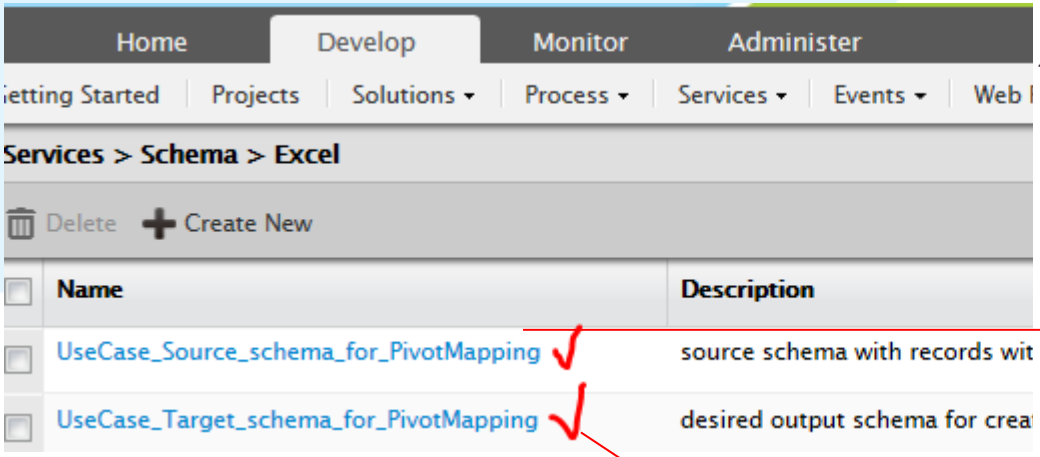
Let’s create the Mapping

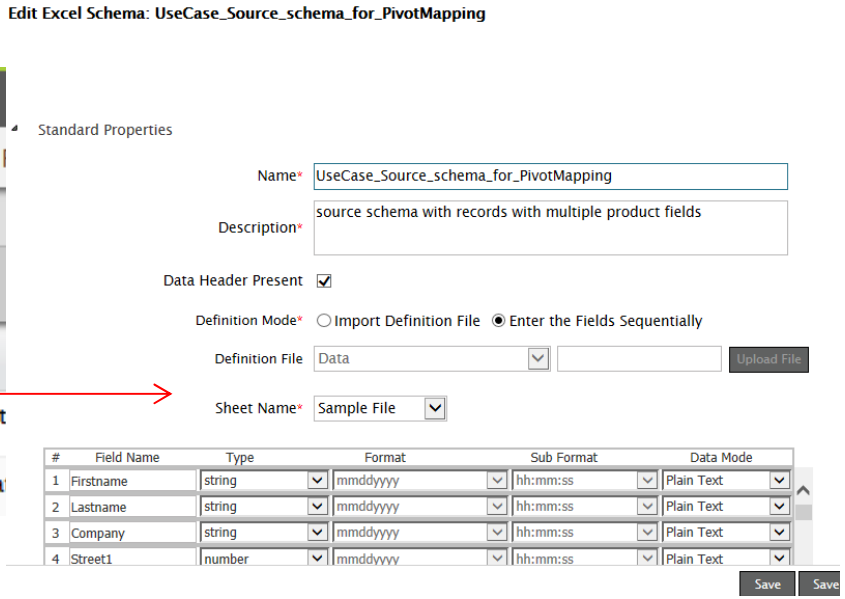


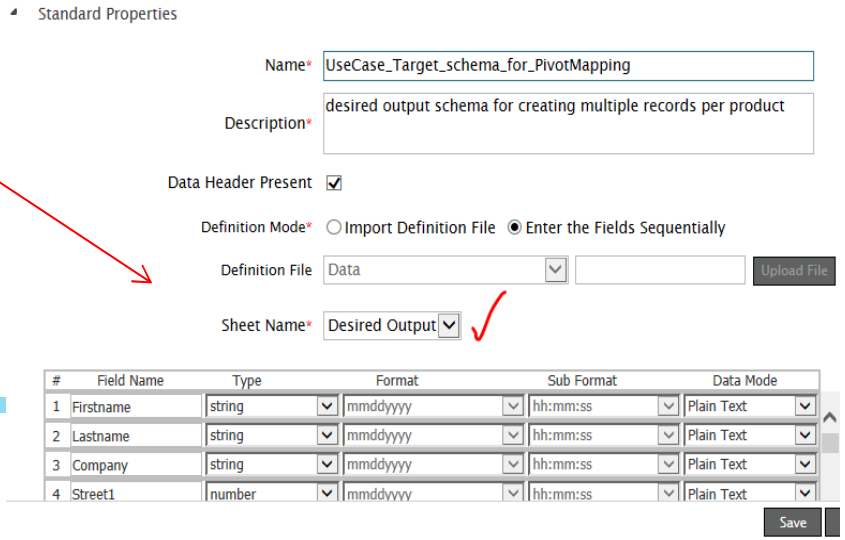
Login as admin/indigo1

Step 1: Define your Source and Target schema/meta-data

Go to Develop > Services > Schema > Excel and click on ‘Create New’





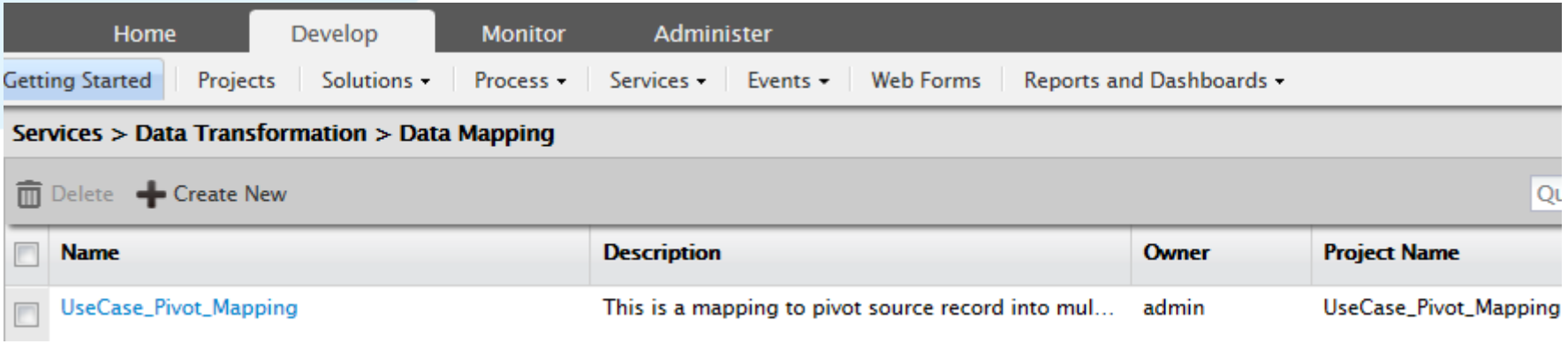


Give a Name and Description. Name cannot have spaces, use underscore if needed.
Check the Data Header Present box and select Import Definition File and click on
“Upload File”
In the Smaller pop-up browse the file and click on the Upload File button.
This will show the file with sheet names. Click on “Process Sheets” and then click on Finish and close the popup-window. Select the sheet name in the main page and click on Save.

ADEPTIA

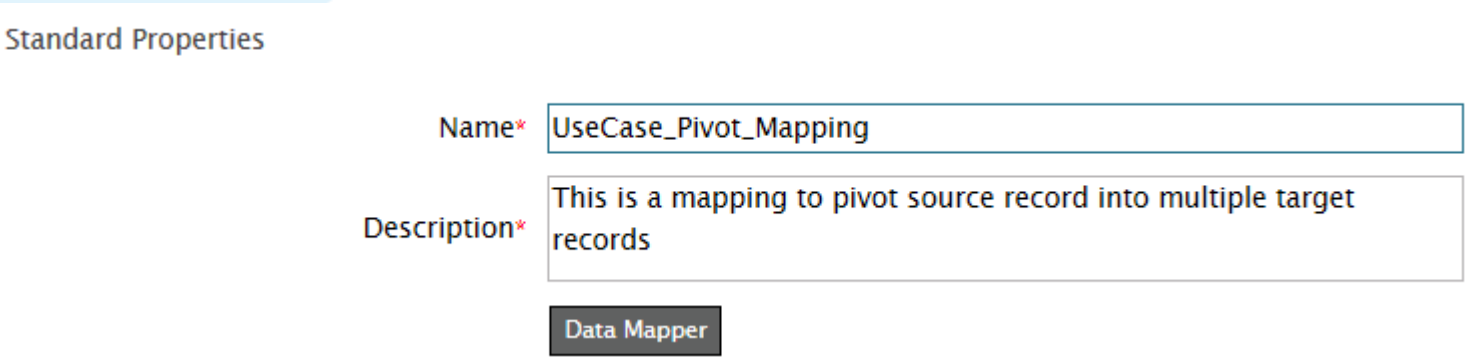
Step 2. Now let's do the mapping

Go to Develop > Services > Data Transformation > Data Mapping
And then click on "Create New"



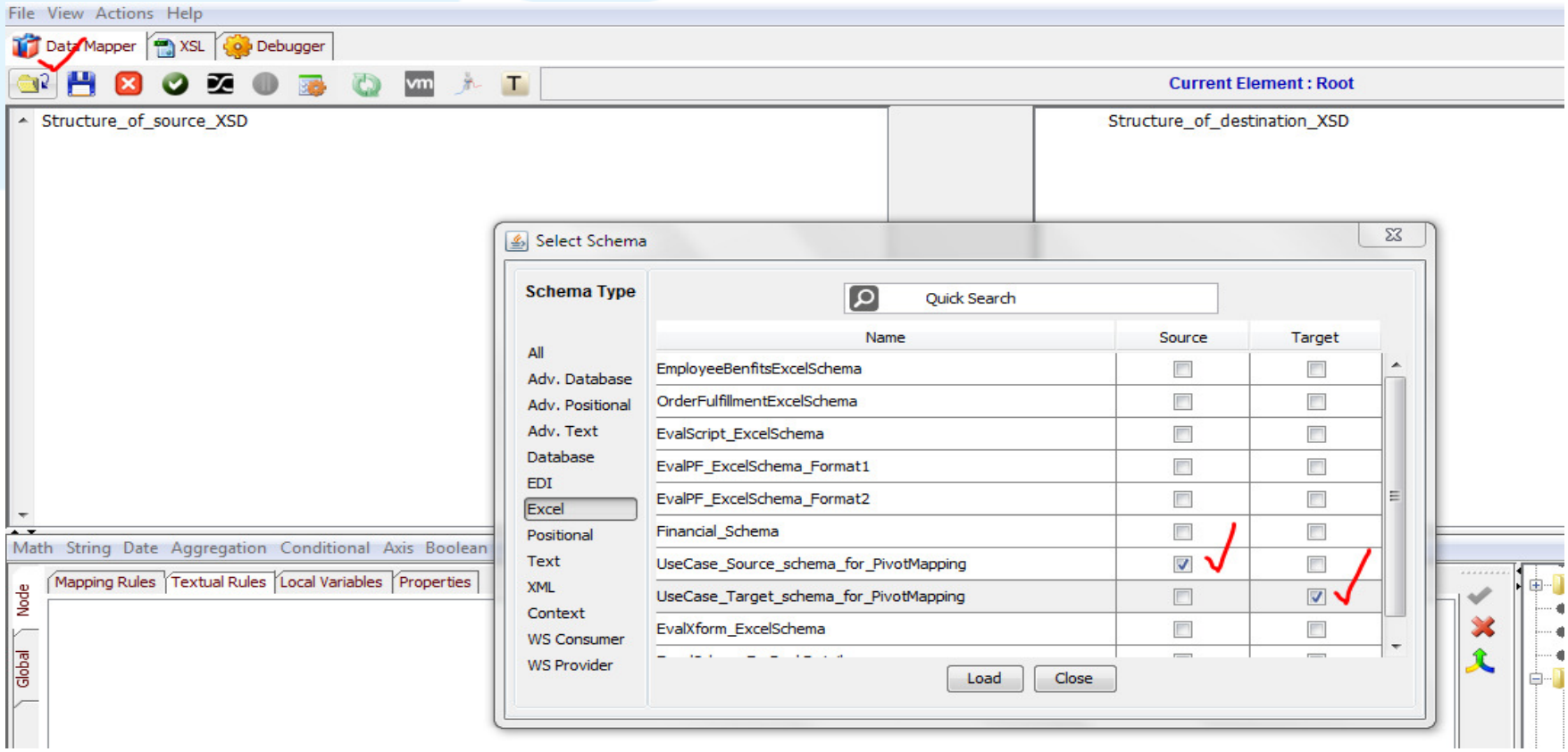
Step 2. Now let's do the mapping (contd.)

After clicking on "Create New", in the new screen enter the name of your mapping and the description and click on Data Mapper. Example shown below.



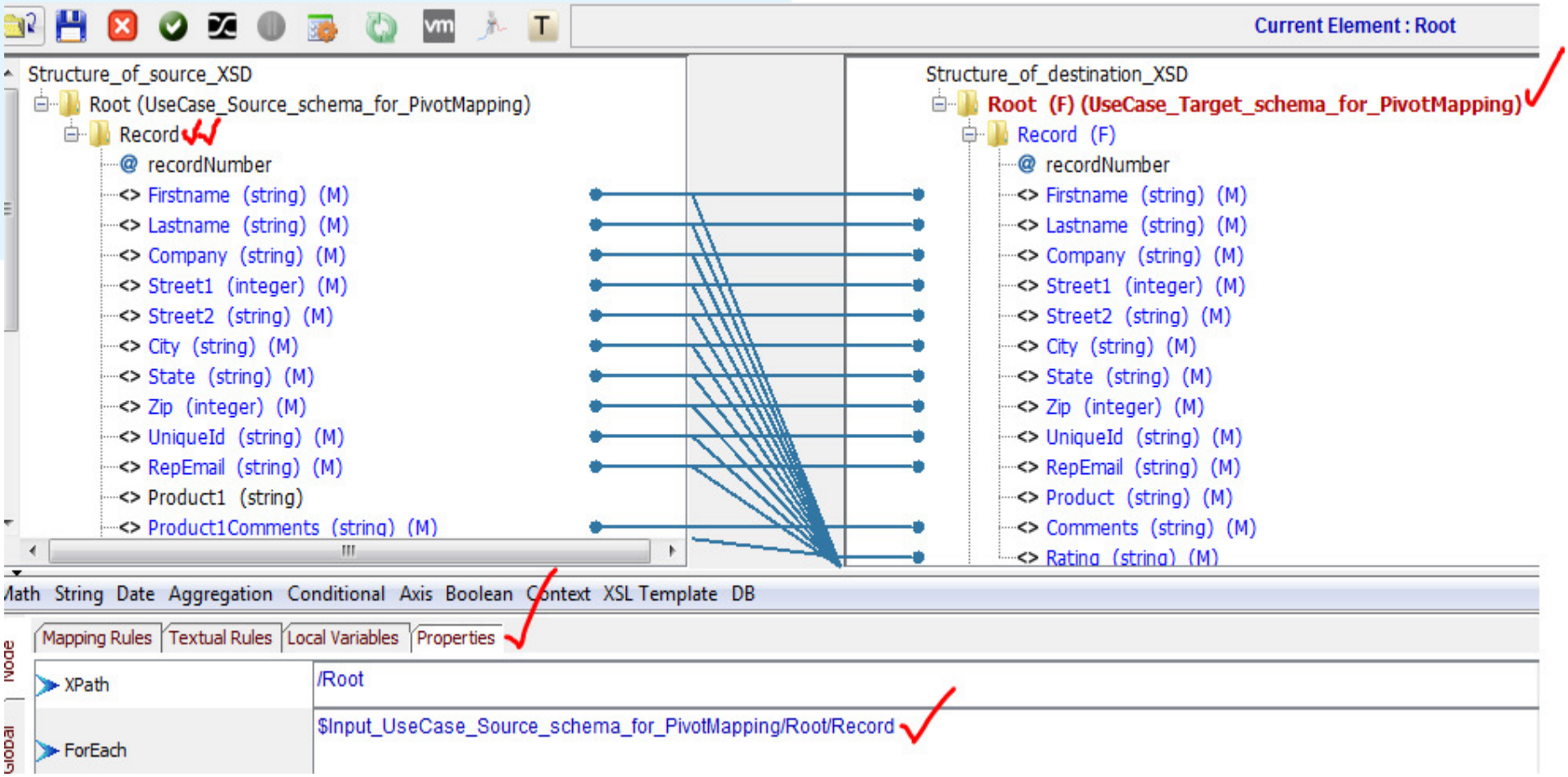
Step 2. Now let's do the mapping (contd.)

Click on the Load Schema icon on top left and from the schema browser
Select the Excel option from the list in the left and then select the source and target Schemas by checking their boxes and click on Load.



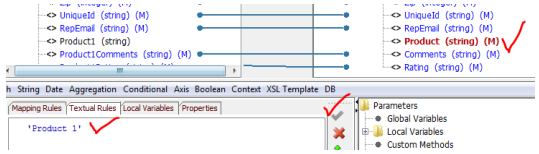
Step 2. Now let's do the mapping (contd.)

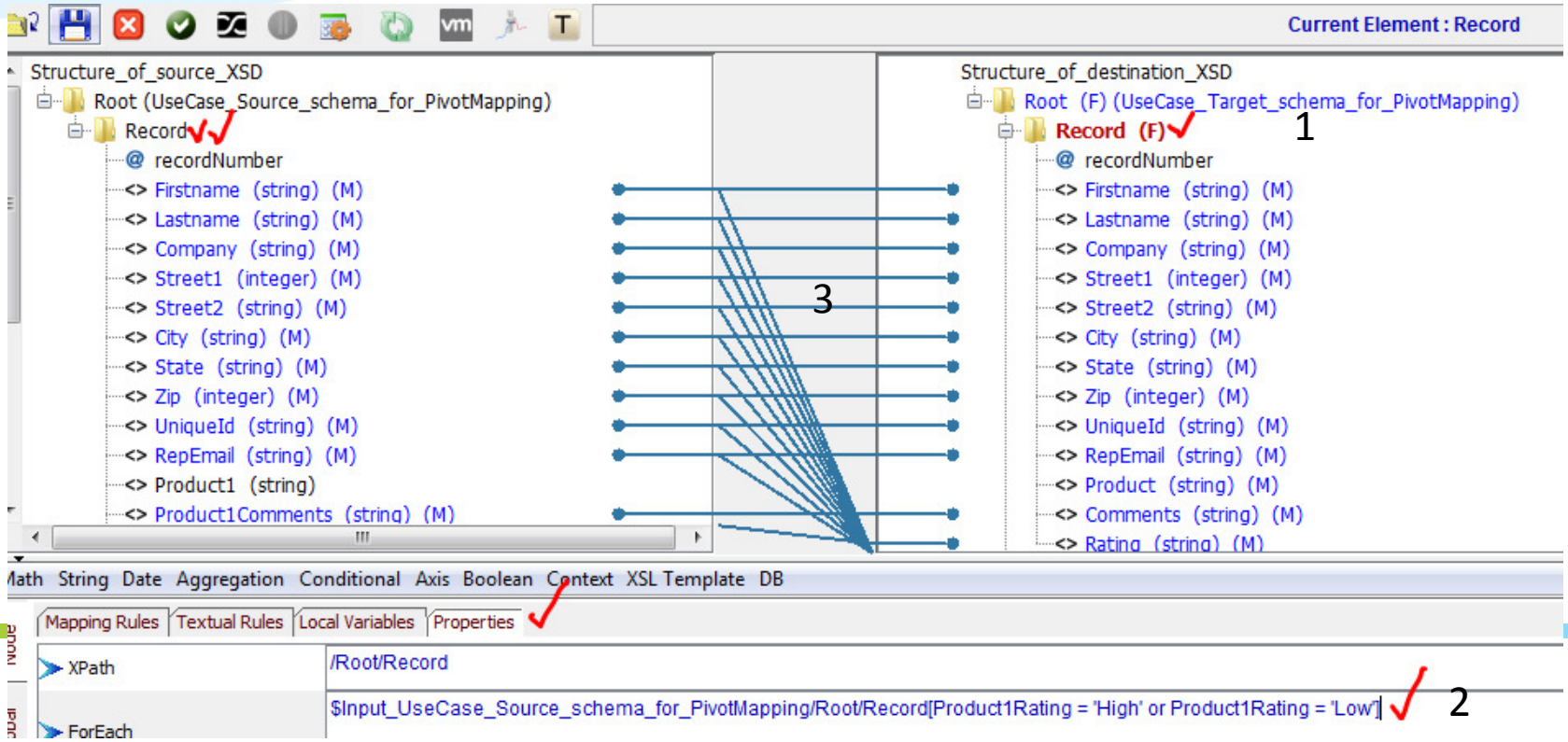
1. Select the Root node and go to Properties below and put the cursor in the ForEach section
2. Now double click on the Record node of the source and it will show the xpath. Click on Save Properties.



Step 2. Now let's do the mapping (contd.)

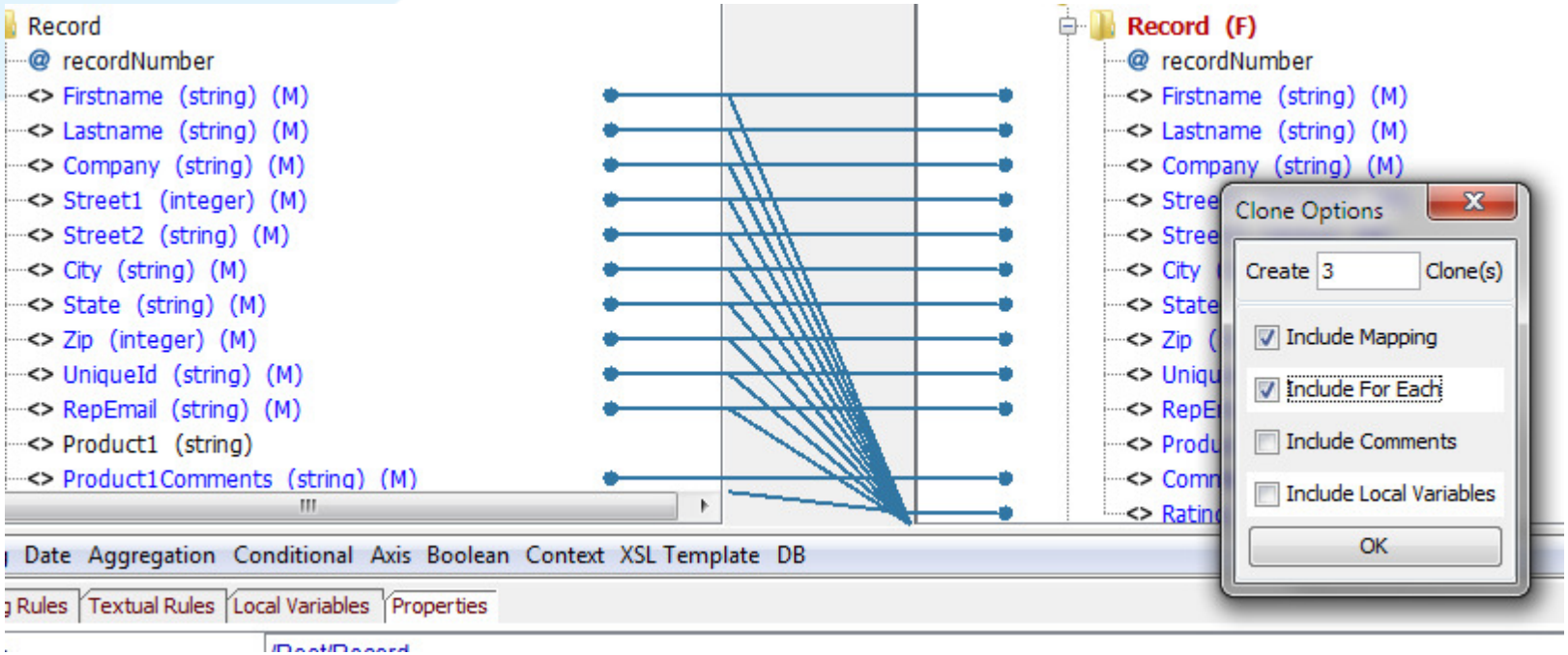
1. Select the Record node in the Target schema, go to Properties below.
2. In the ForEach section put your cursor in the box and now double-click on the Record node of the Source and it will display an xpath
   Edit the xpath by adding predicate [Product1Rating = 'High' or Product1Rating = 'Low']
   Click on Save Properties button.
3. Now do one-to-one map as shown below from source fields to target fields.
4. In the Product field go the Textual Rules and type 'Product 1' and click on the Textual Rule enter "Product 1" as shown below and apply the map.





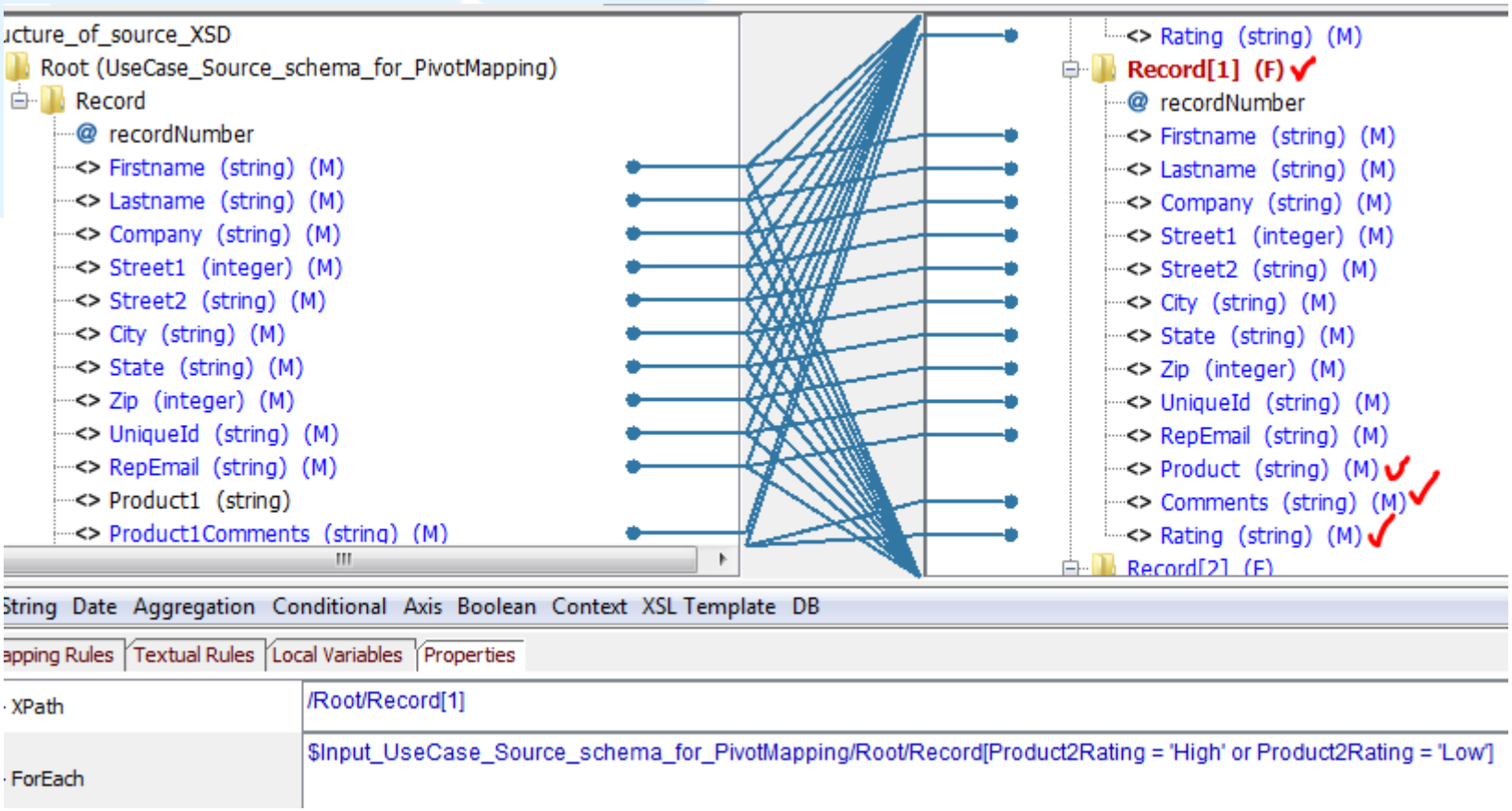
Step 2. Now let's do the mapping (contd.)

Right click on the Target Record node and click on Clone Node.
Enter 3 and Check the Include Mapping and Include For Each.
Click OK. Idea of using clones is that based on the number of Products we can create that many record in the output side.



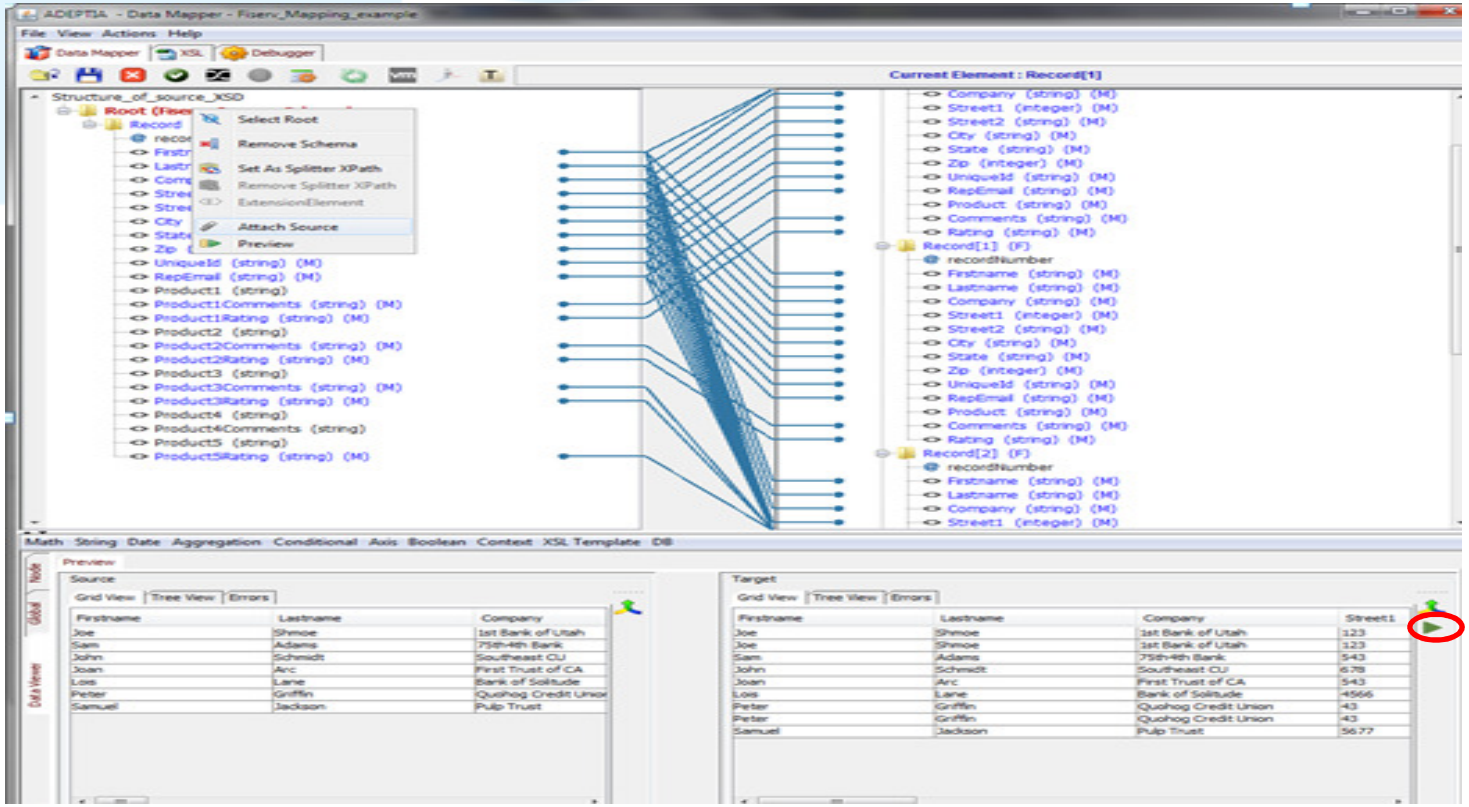
Step 2. Now let's do the mapping (contd.)

For each of the cloned nodes modify the predicate rule in the Properties and also override the mappings by doing one-to-one on the Product, Comments and Rating. (We will skip Product 4 as this does not have relevance in the sample output)



Step 3. Now let's TEST the mapping output.

Right click on the Root and Attach Source and then click on Preview.
In the bottom Data Viewer you can see the data. Click on the > button on the right to See the results.



To create a run-time orchestration

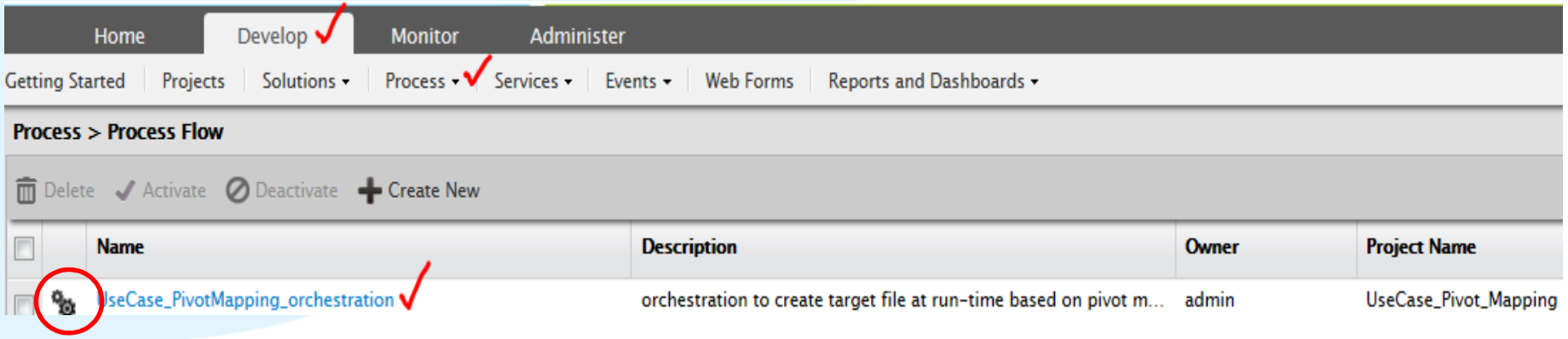
Step 4: Go to Develop > Services > Source and click on File and create a new Source
Go to Develop > Services > Target and click on File and create a new Target

Standard Properties

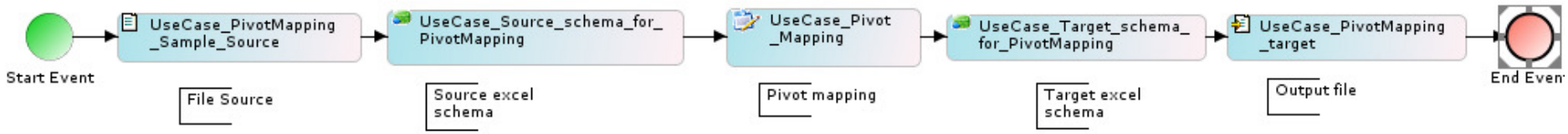
Name*	UseCase_PivotMapping_Sample_Source
Description*	get source file
File Path*	C:\1data\
File Name*	sample.xlsx

Name*	UseCase_PivotMapping_target
Description*	target location to produce desired output
File Path*	c:\1data\
File Name*	Output_
Time Stamp	yyyymmdd / HH-mm-ss.SSS
Create Unique File	☐
File Extension*	xlsx

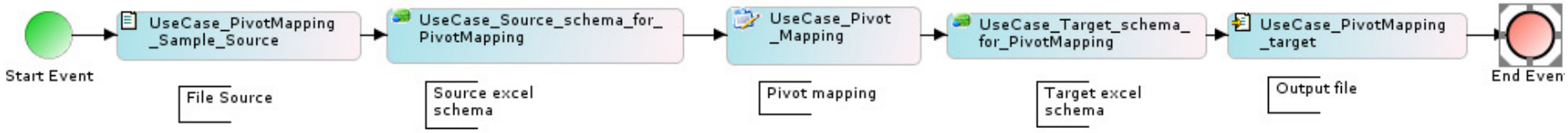
Step 5: Go to Develop > Process > Process Flow and click on “Create New”
To execute go to Develop > Process > Process flow and click on Execute icon next to the Process name.



Refer to the video available for this use case in Support forum to see how to build and run this process



More description on the process flow



File source

Double click on the activity and change File Type Property to xlsx.

Mapping activity

Double click on the activity and change File Type Property to xlsx.

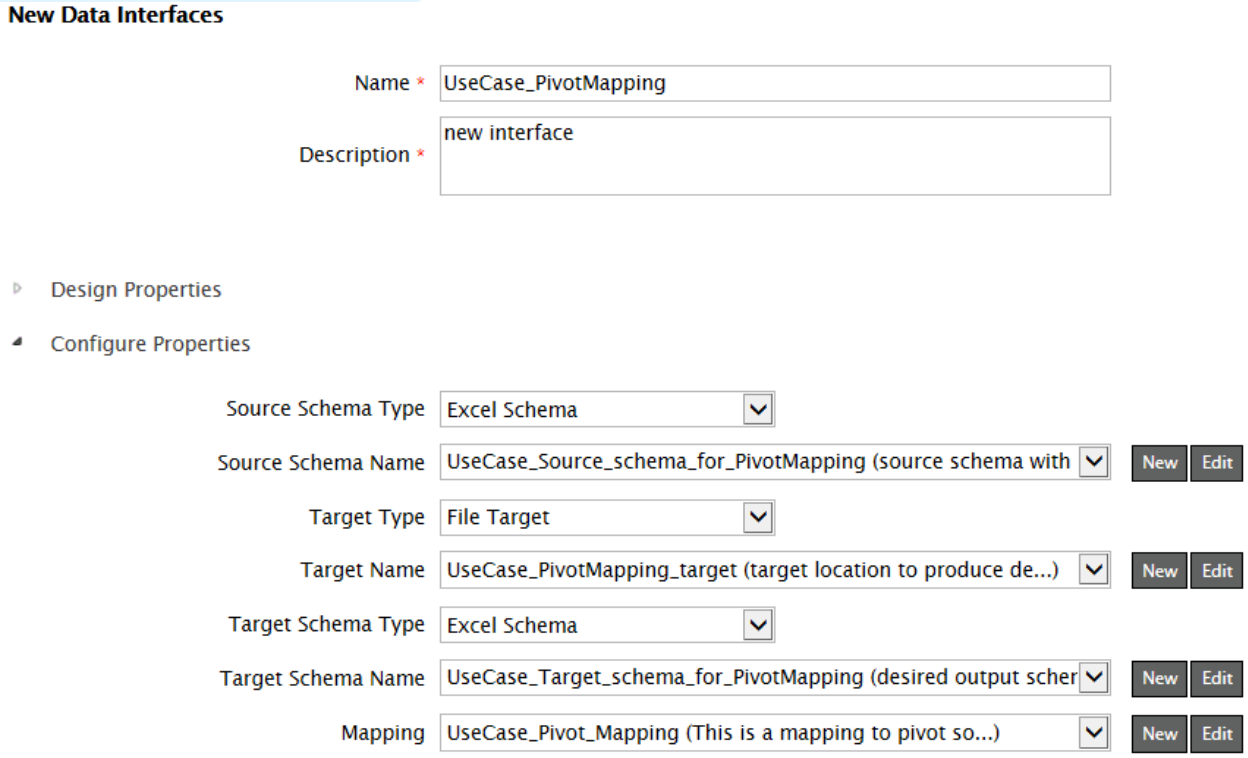
Also change the Transformer Property to XMLtoStream

File Target

Idea of using orchestration is that it provides greater extensibility by adding more activities and creating a more holistic process flow. You can add gateways, exception handling, call sub processes, send data to multiple targets such as Web Services etc. Attaching the process to an event or a batch is also possible.

For business users

For Business Users a simple screen to create the same orchestration is also available by Going to Develop > Solutions > Data Interface. Here you can create or select pre-existing Activities for each of the categories as defined below. You can also create an Event to Deploy the interface by creating and activating an Event.



Leading the **Integration** Revolution

Your business problems have changed.
Why hasn't your integration solution?

Thank You!

ADEPTIA