

Query Transform

by Sudheer Sharma - Monday, May 04, 2009

<http://dwhnotes.com/data-integrator/query-transform>

What do you think of this post?

[Awesome \(6\)](#) [Interesting \(4\)](#) [Useful \(0\)](#)

Notes on Query transform

Ohh! My god what a transformation it is?... mind blowing... astonishing... This is one of the best best best transformations in DI, I would compare this component with a beautiful women in this world.

The beauty of this transformation is, it will try to push the code to the database as much as it can. By pushing down the code to the database, obviously reduces the engine overhead, thus improves performance.

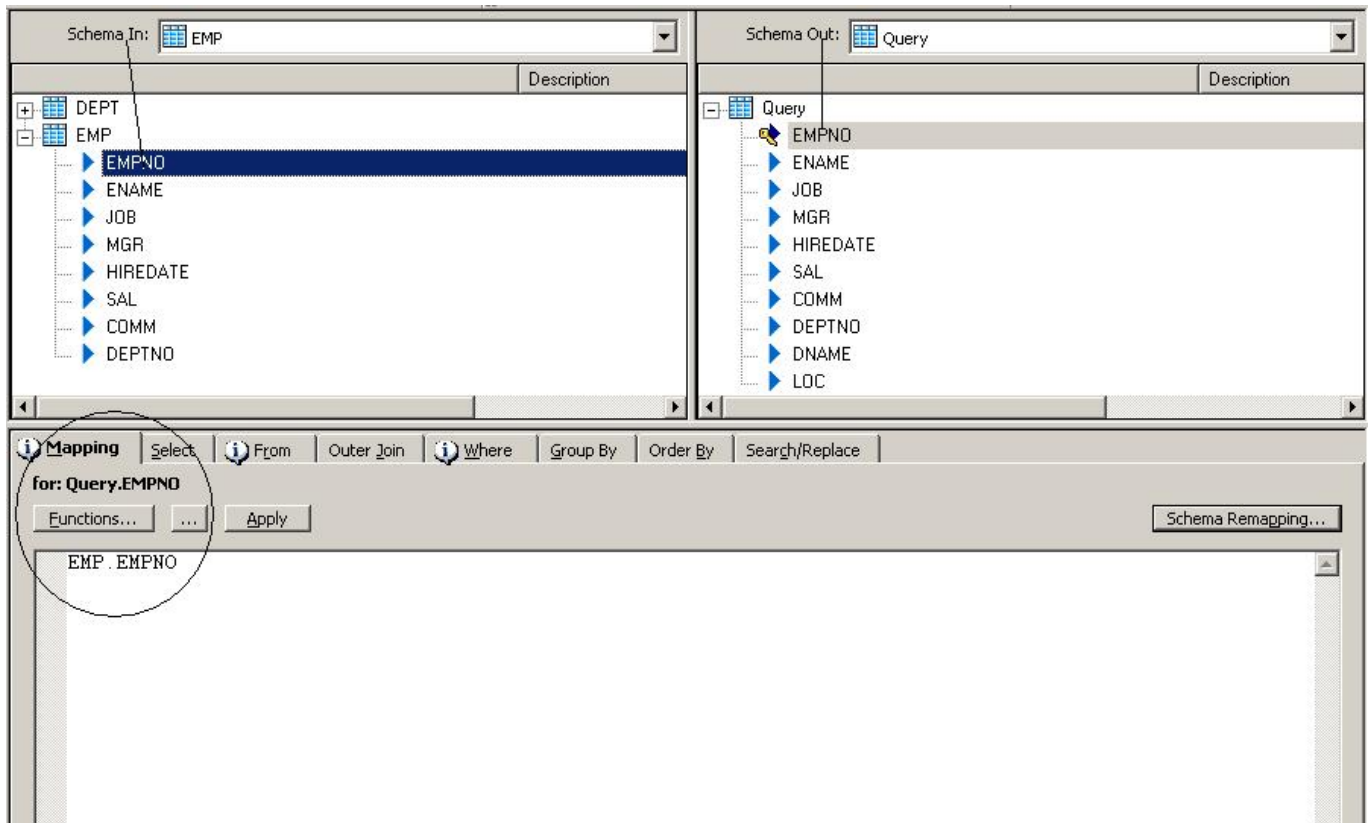
Ex: You applied an aggregation function, then It says “Ok, If these function(s) are available in database, then let me push this operation to the database”

Technical Manuals says: A Query transform is similar to a SQL Select statement that retrieves a data set that satisfies conditions that are specified.

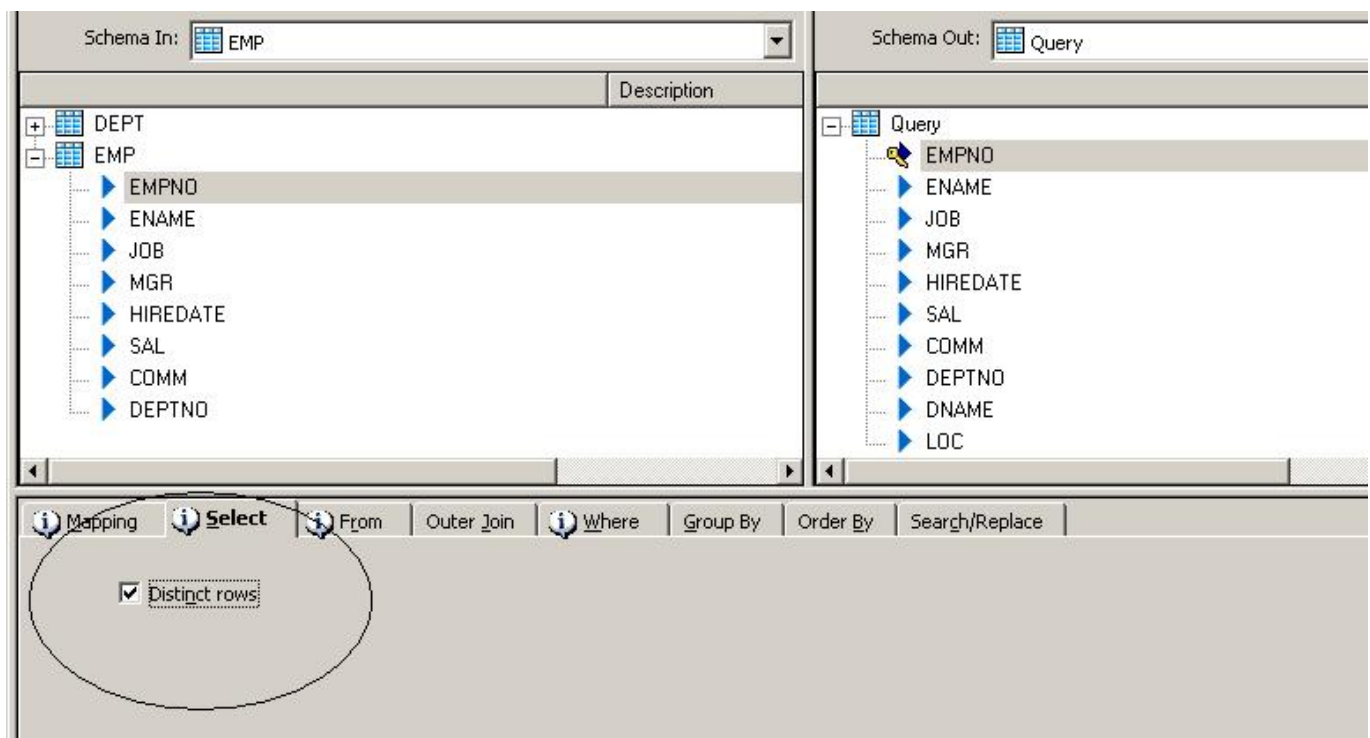
Here, I listed out Query transform functionalities, it has around 20 different functionalities.

Let's discuss about those functionalities one by one,

- can map columns from in schema to out schema (**Mapping tab**), Just drag the required columns from in-schema to out-schema.

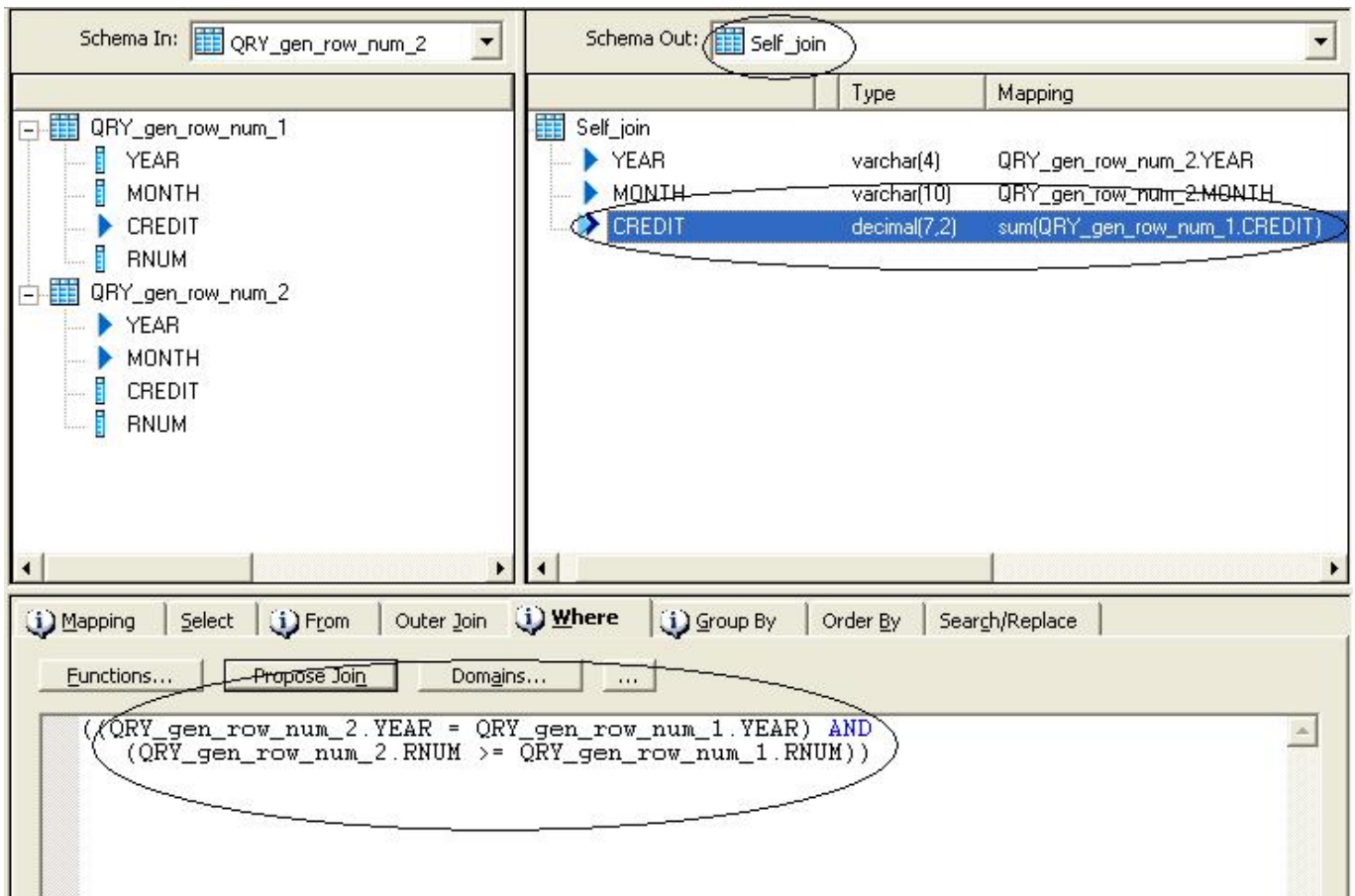


- can select the distinct records (to fetch only unique records) by checking **Distinct rows** option in **Select tab**.



- can filter out the data (using where clause conditions)

- can join tables (All kind of joins)



In Outer Join tab, mention inner source and outer source Where clause will treat as outer join. You can view Optimized SQL Go back to DF designer window, click on **Validation Menu**→**Display Optimized SQL**

The screenshot shows a query builder interface with two schema panes. The left pane, 'Schema In: EMP', shows a tree view with 'DEPT' (containing DEPTNO, DNAME, LOC) and 'EMP' (containing EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO). The right pane, 'Schema Out: Left_Outer_Join', shows a tree view with 'Left_Outer_Join' (containing EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO, DEPTNO_1, DNAME, LOC). Below the panes is a toolbar with tabs: Mapping, Select, From, Outer Join, Where, Group By, Order By, Search/Replace. The 'Outer Join' tab is selected and circled. Below the toolbar is a table:

Outer source	Inner source
EMP	DEPT

- can sort the records (using Order by tab)

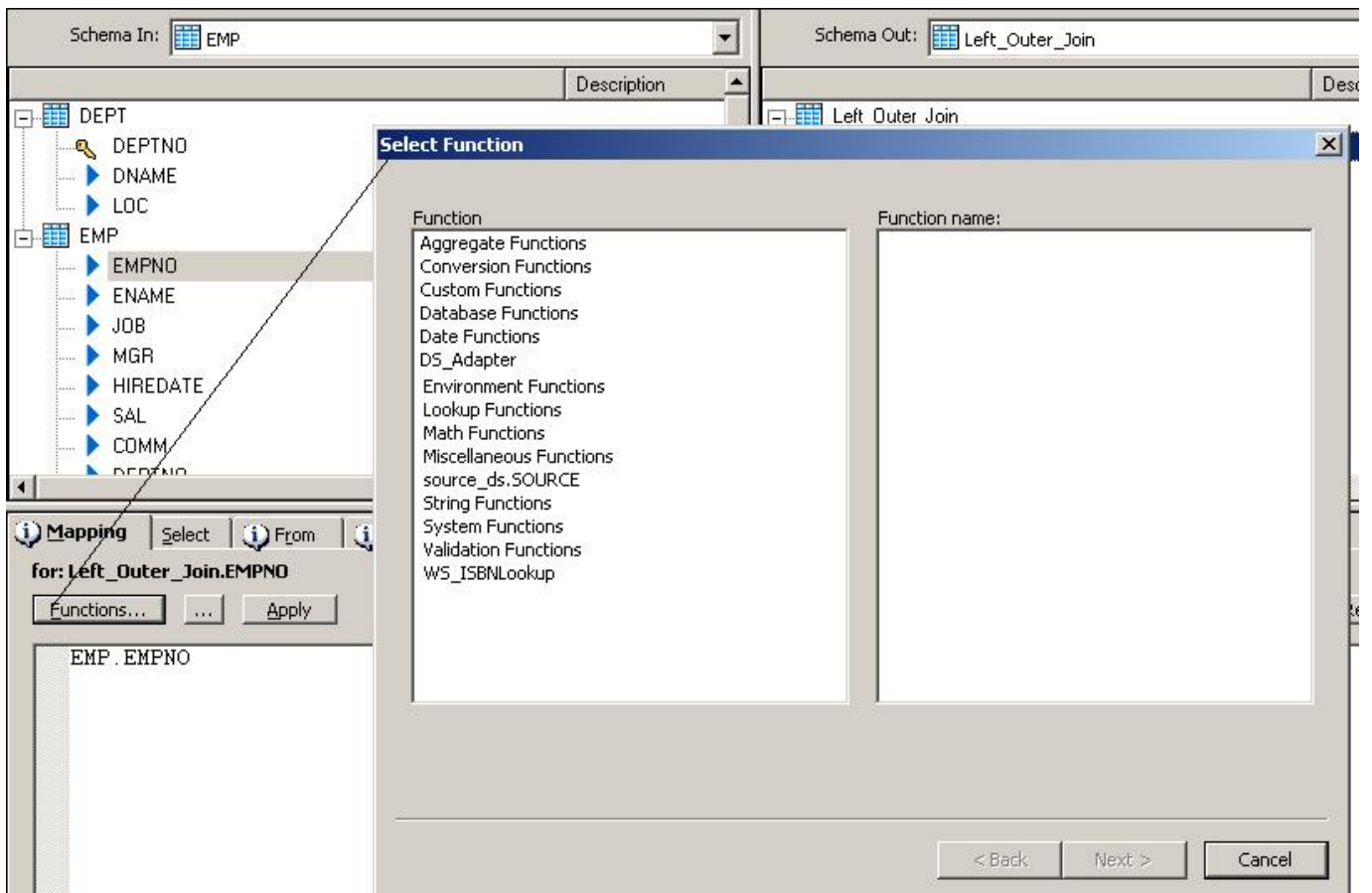
The screenshot shows a query builder interface with two schema panes. The left pane, 'Schema In: Self_join', shows a tree view with 'Self_join' (containing YEAR, MONTH, CREDIT). The right pane, 'Schema Out: Order_by', shows a tree view with 'Order_by' (containing YEAR, MONTH, CREDIT). Below the panes is a toolbar with tabs: Mapping, Select, From, Outer Join, Where, Group By, Order By, Search/R. The 'Order By' tab is selected. Below the toolbar is a table:

Column	Sort
Self_join.YEAR	Ascending
Self_join.CREDIT	Ascending

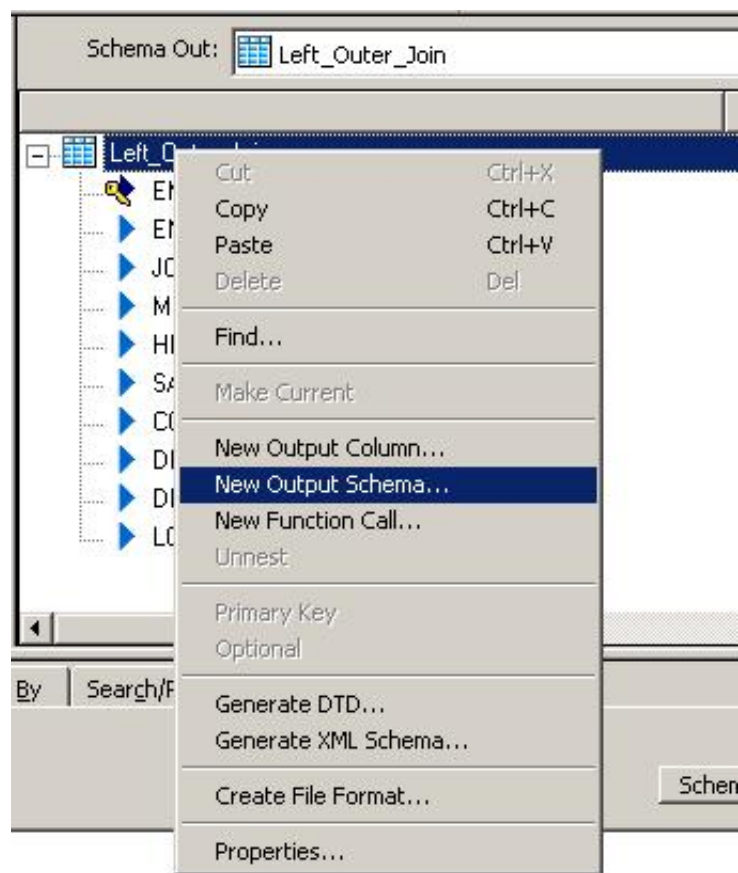
- can combine/group the result set when you use aggregation functions (**using Group by tab**)



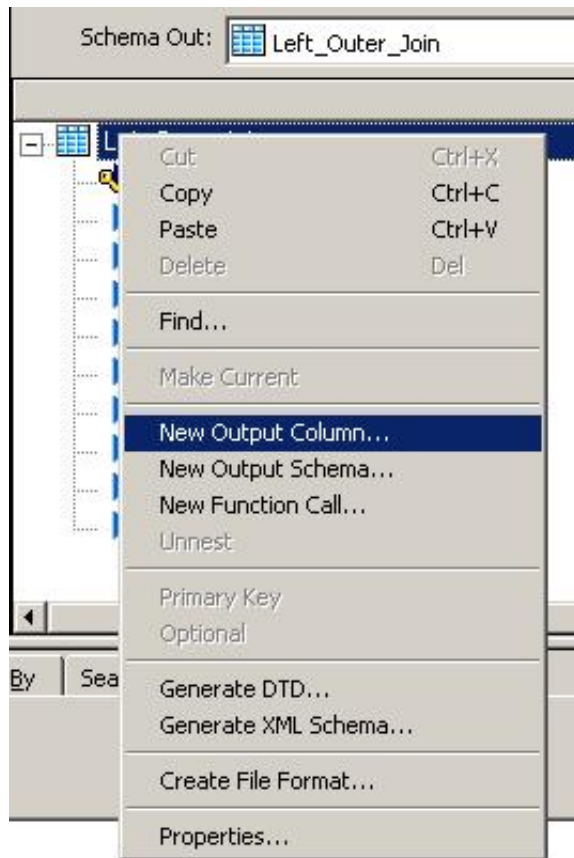
- can use available functions in DI (Aggregation, Conversion, Custom, Database, Date, Lookup, Math, Misc, String, Validation etc)



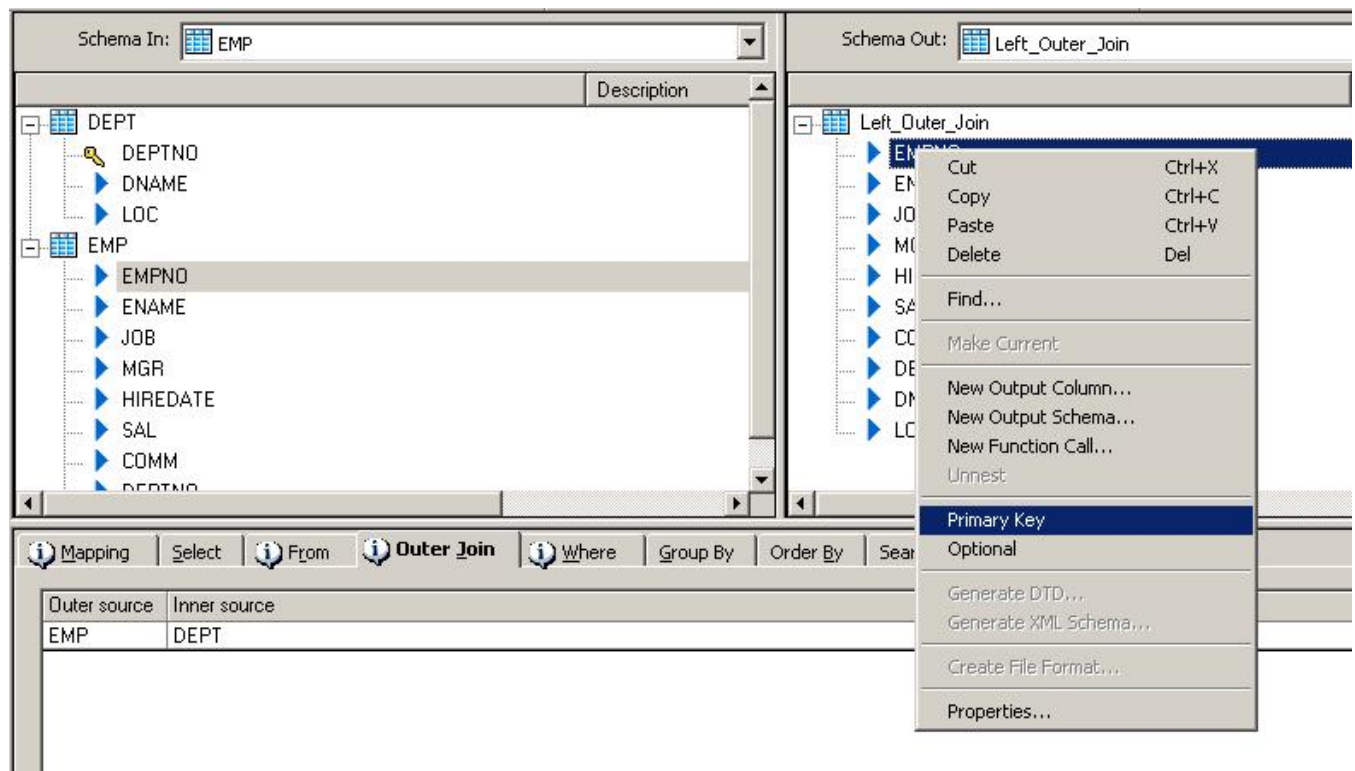
- can create **New Output Schema**



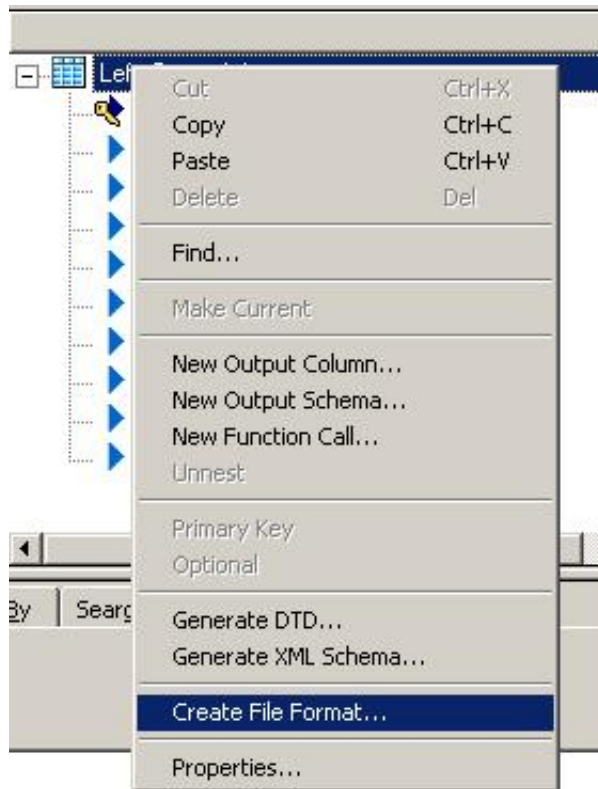
- can create a **New output column**



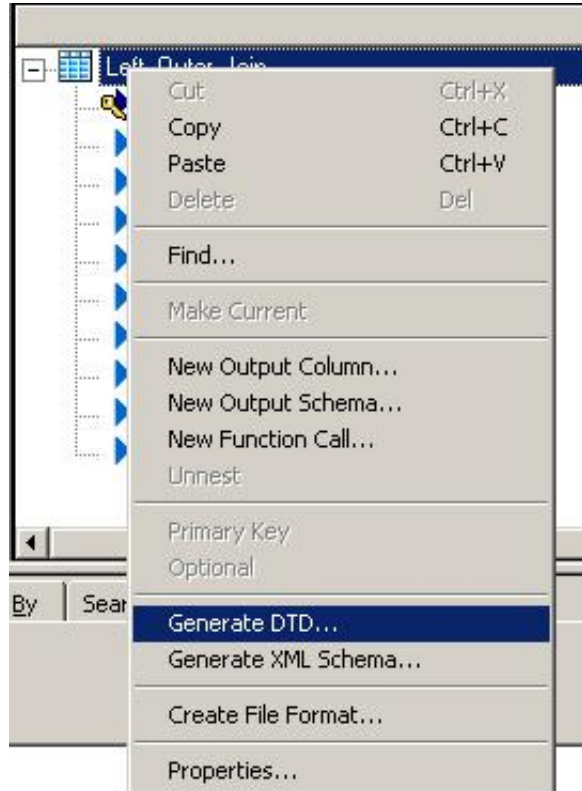
- can set a **Primary key** (it's a toggle option) to a column



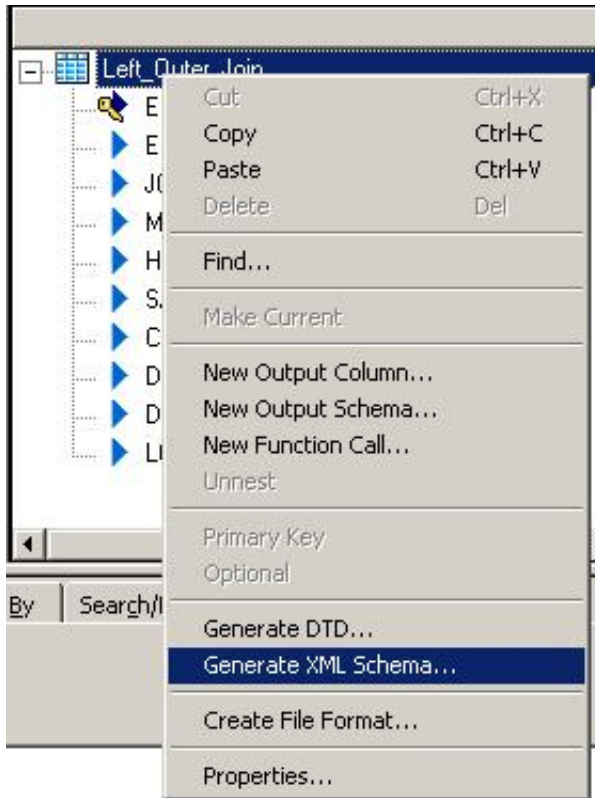
- can create a flat **file format** definition



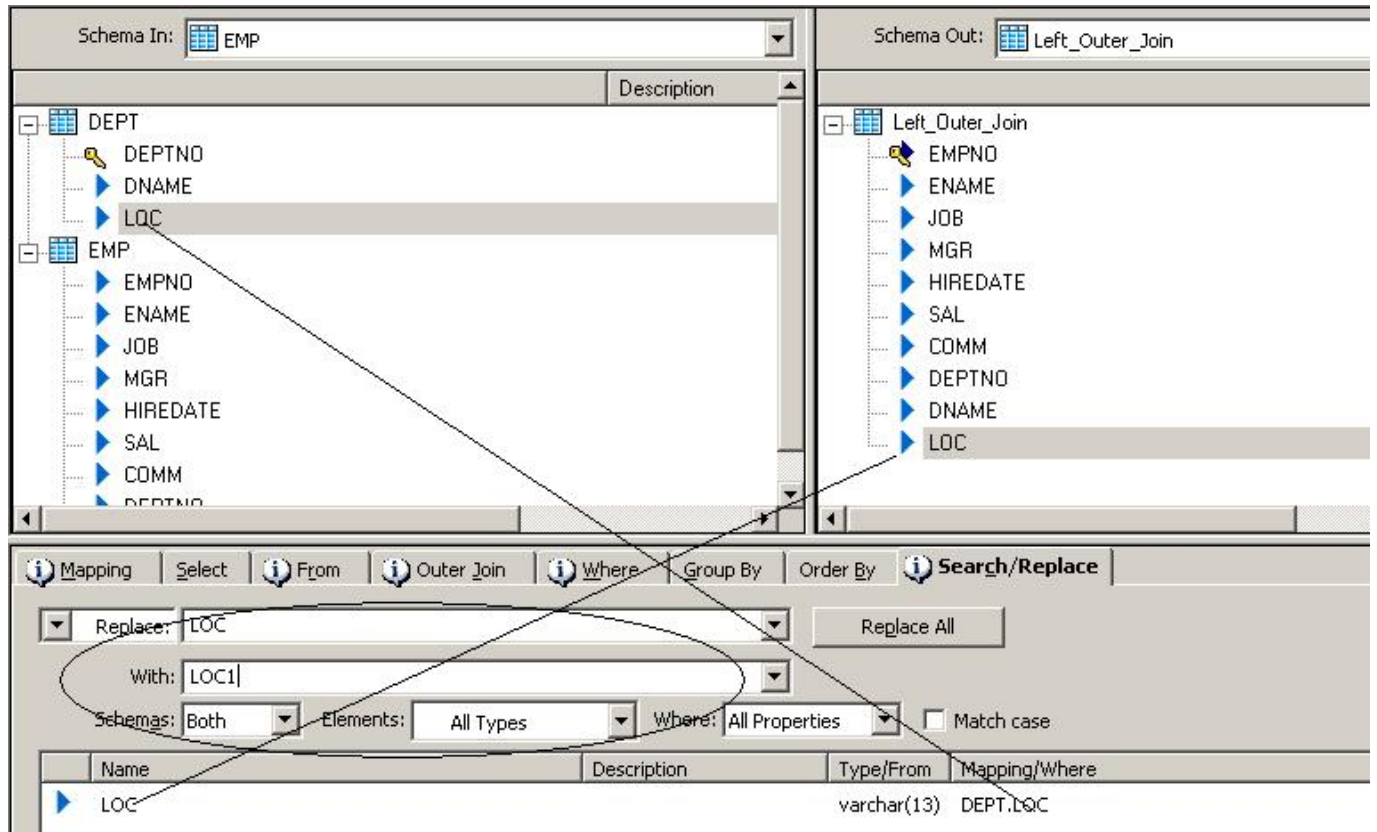
- can generate a **DTD format**



- can generate an **XSD schema** definition



- can select a nested schema using **“Make Current”**
- can call functions(conversion, lookup, custom, stored procedures, adapter functions) thru **“New function call”**
- **Unnest** a nested schema (it’s a toggle option)
- **Cut, copy, paste, delete** of schemas, columns etc
- **Search** and **Replace** of column mapping



- **Schema Remapping**

All in all, this transform works as a SQL “**SELECT statement**” with extra features.

Ohh...forgot to mention in the above list, from 11.7 onwards there is another tab called Advanced (to create a separate process of GROUP BY, ORDER BY clauses etc.)

Hope I listed out almost all common options available in QRY transform, If I missed out anything then please do let me know...

What do you think of this post?

[Awesome \(6\)](#) [Interesting \(4\)](#) [Useful \(0\)](#)