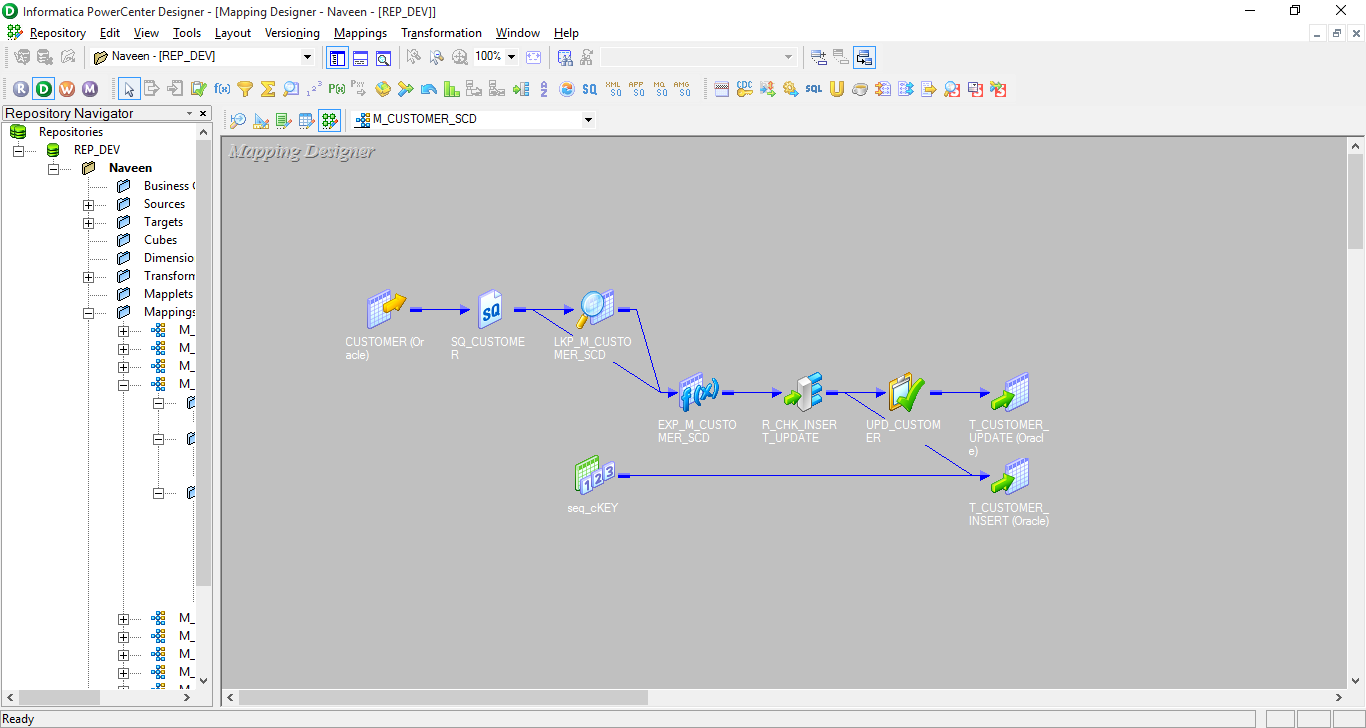
SCD 1 Implementation – will hold only current information, if the record does not exists then insert, if exists check for changes

As of now we are overwriting the fields with new time.



SCD1 TRANSFORMATION

-- SOURCE TABLE

CREATE TABLE CUSTOMER

( "CID" NUMBER,

"CNAME" VARCHAR2(33 ),

"ADDR\_1" VARCHAR2(33 ),

"ADDR\_2" VARCHAR2(33 ),

"STATE" VARCHAR2(33 ),

PRIMARY KEY ("CID"));

INSERT INTO CUSTOMER VALUES (1, 'SREEDHAR', 'AMERICAN DREAMWAY', '1ST STREET', 'RESTON');

INSERT INTO CUSTOMER VALUES (2, 'KUMAR', '8TH CORSS', 'BANGALORE', 'KARNATAKA');

INSERT INTO CUSTOMER VALUES (3, 'BECKY', 'DREAM CORNER', 'CLARA LANE', 'VIRGINIA');

INSERT INTO CUSTOMER VALUES (4, 'CHAITRA', 'MK COLONY', 'HRR', 'KARNATAKA');

COMMIT;

-- TARGET TABLE

CREATE TABLE T\_CUSTOMER

( "CKEY" NUMBER,

"CID" NUMBER,

"CNAME" VARCHAR2(33 BYTE),

"ADDR\_1" VARCHAR2(33 BYTE),

"ADDR\_2" VARCHAR2(33 BYTE),

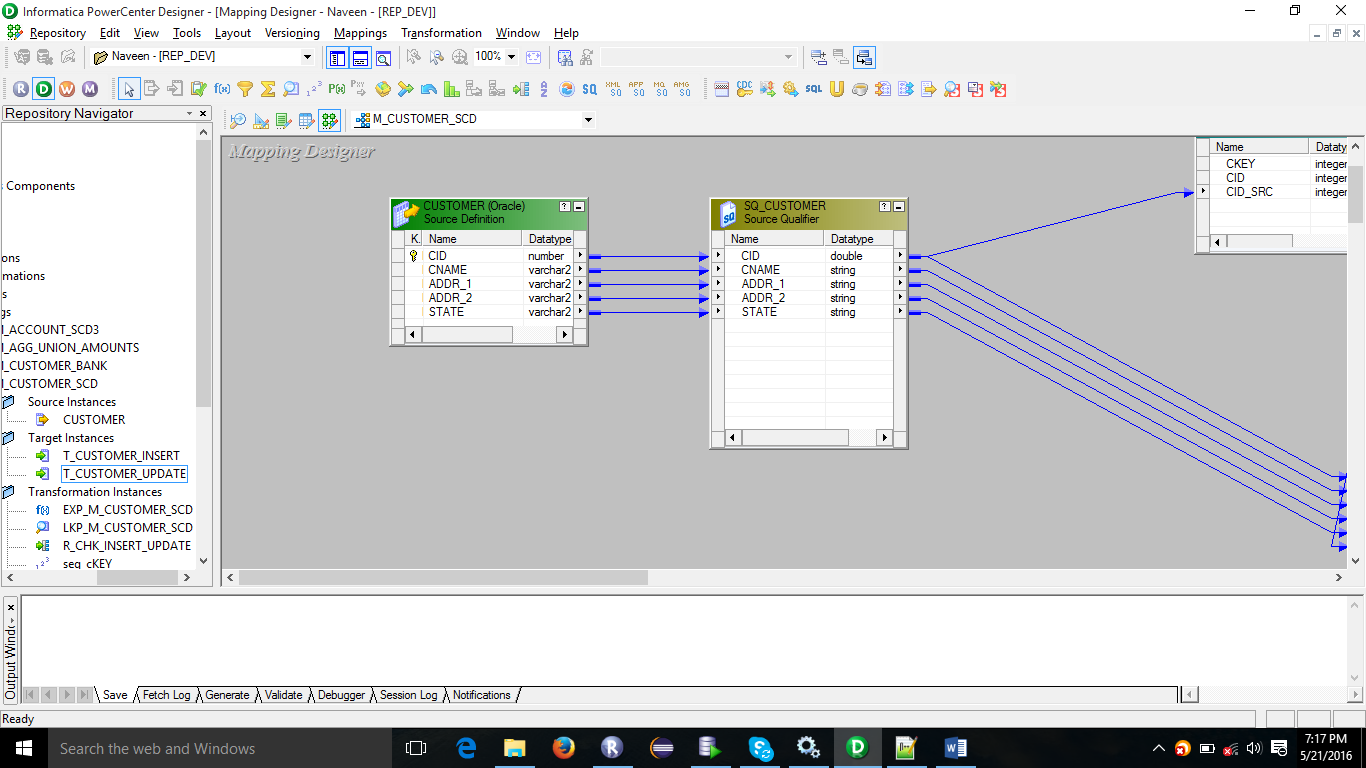
"STATE" VARCHAR2(33 BYTE),

"CREATE\_DATE" DATE,

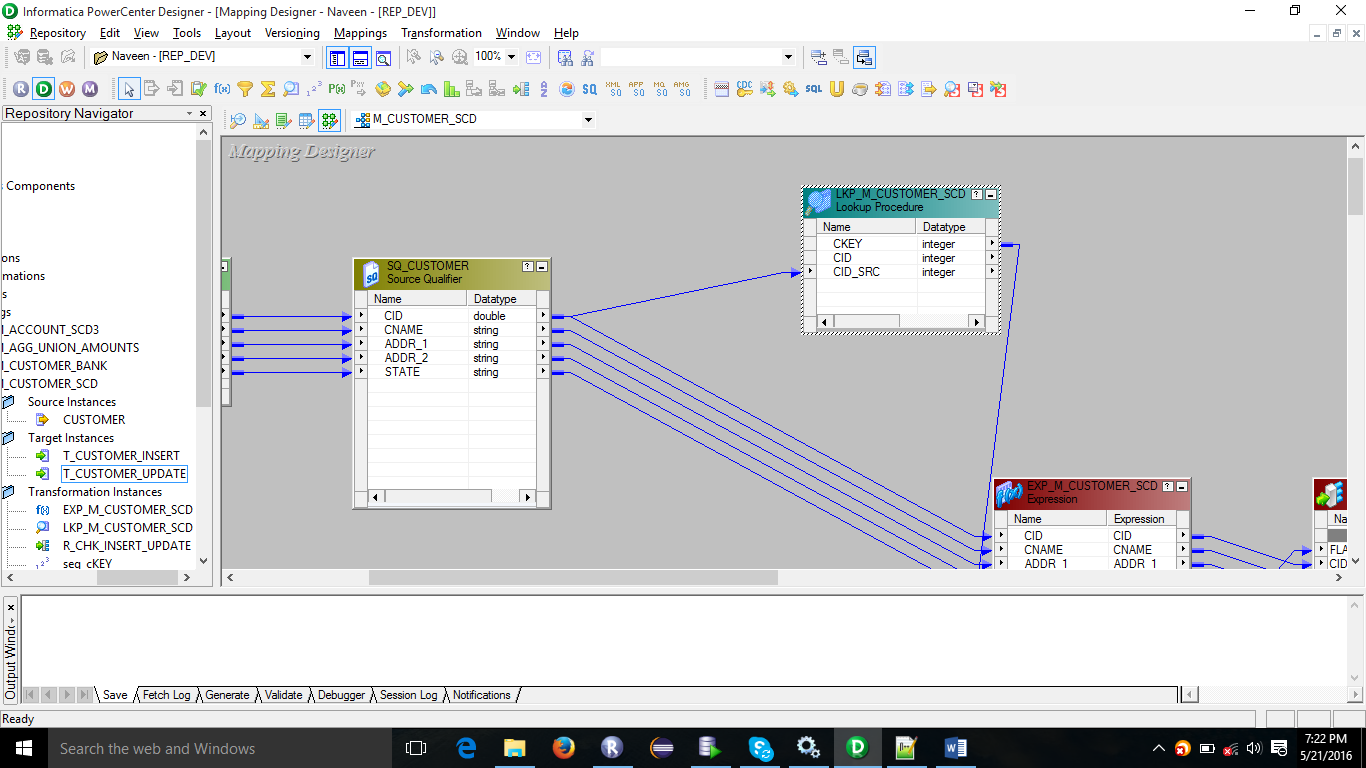
"UPDATE\_DATE" DATE,

PRIMARY KEY ("CKEY"));

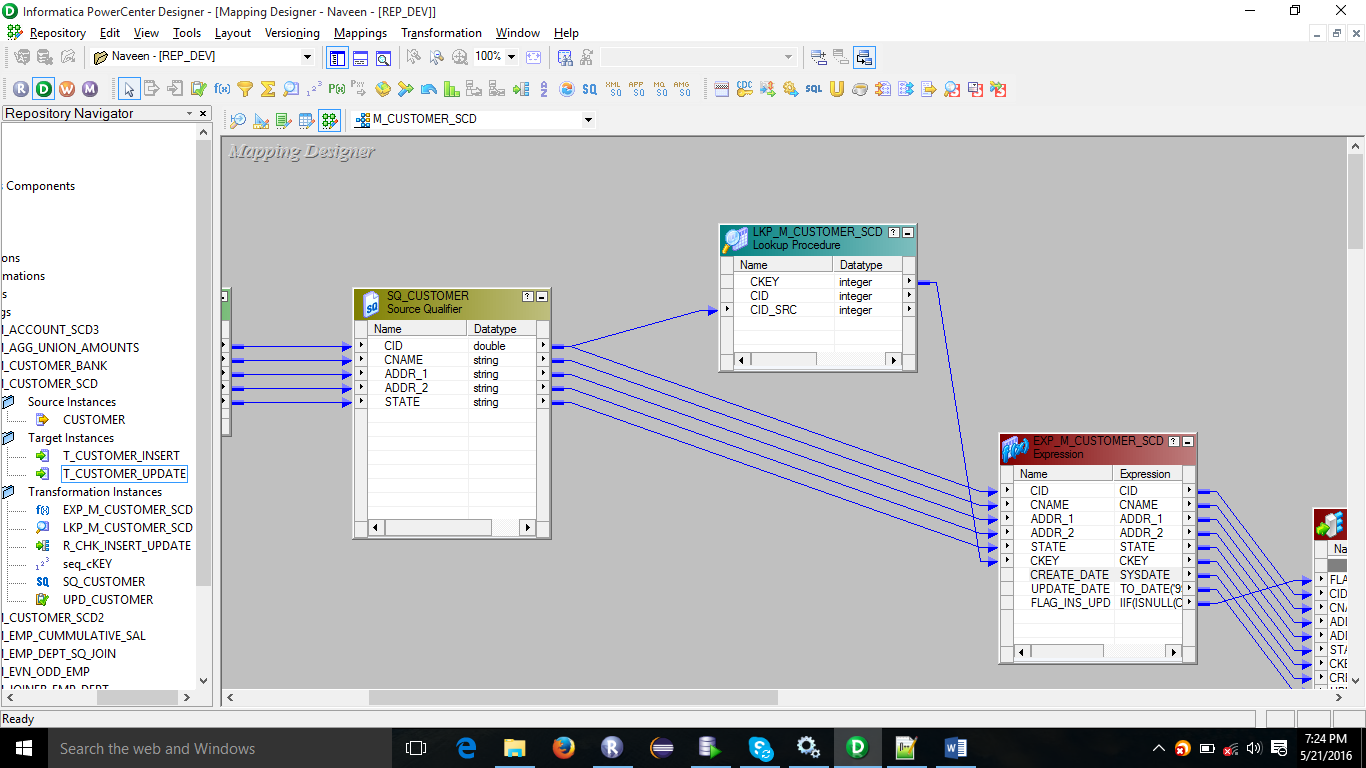
Take the source qualifier from customer table



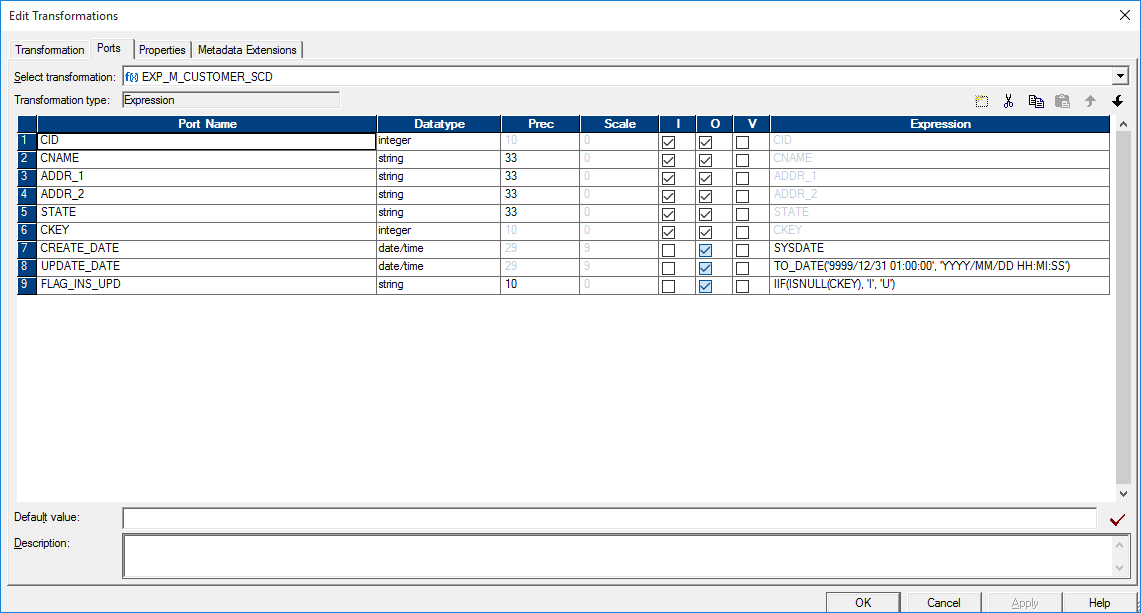
Create a lookup have only CKEY which is a surrogate key, and cid because we will compare only with that, whether the record exists or not. Create an port in lookup port called CID\_SRC and drag and drop CID to CID\_SRC, such that we can lookup.



Create an expression EXP\_M\_CUSTOMER\_SCD

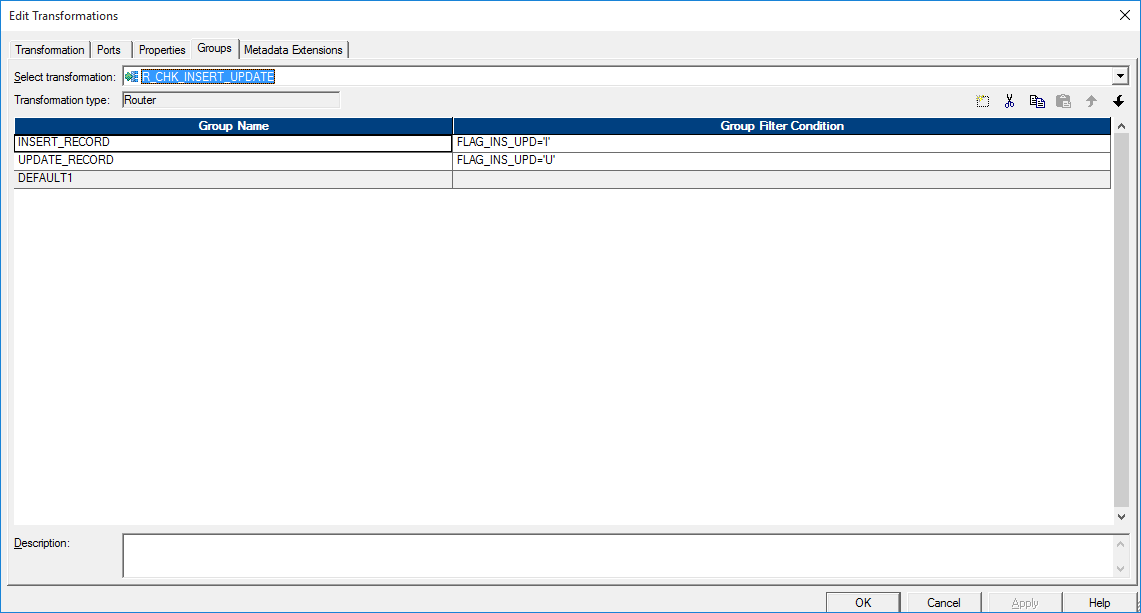


In expression



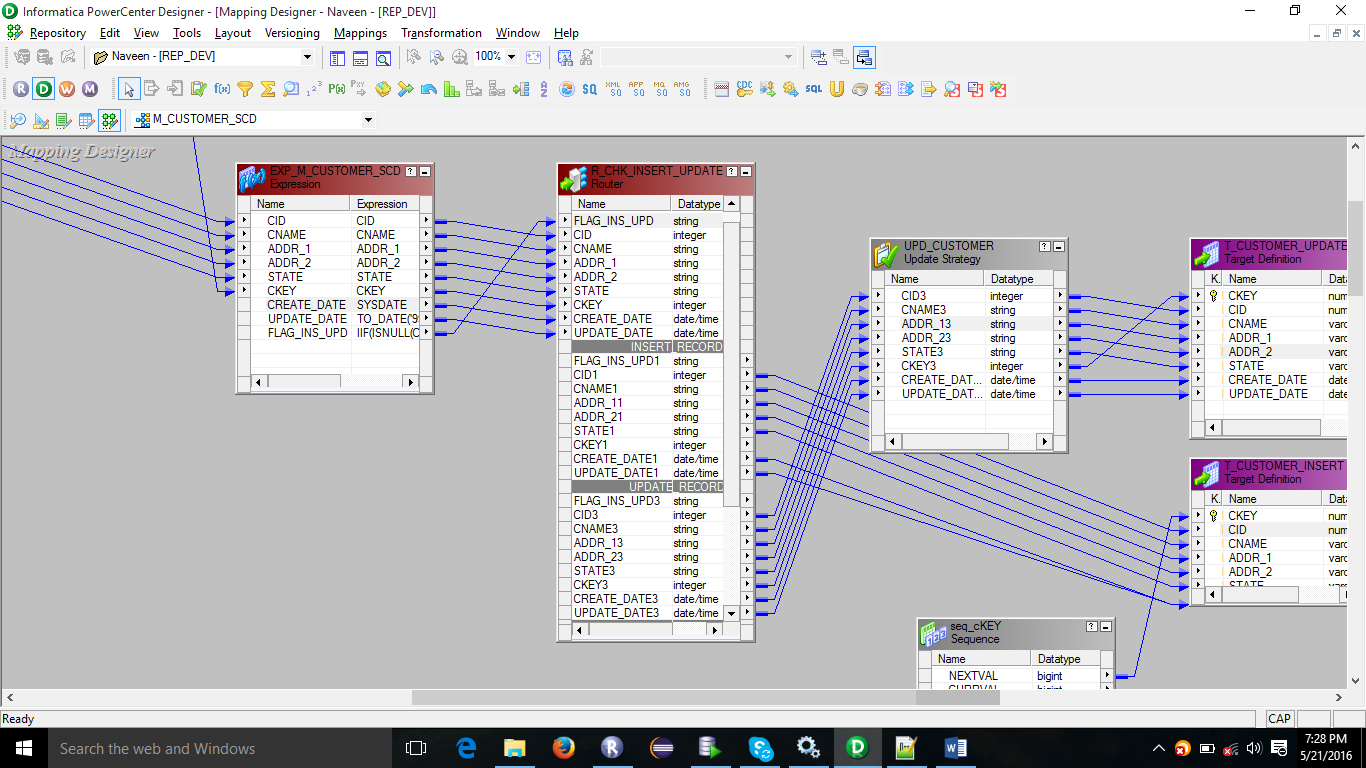
Create\_date is sysdate, update\_date is dummy date, flag for insert or update IIF(ISNULL(CKEY),’I’, ‘U’))

Create a router, with 2 groups with values I and U



Here we have to do two things If the record is existing we have to update and if not existing need to be inserted.

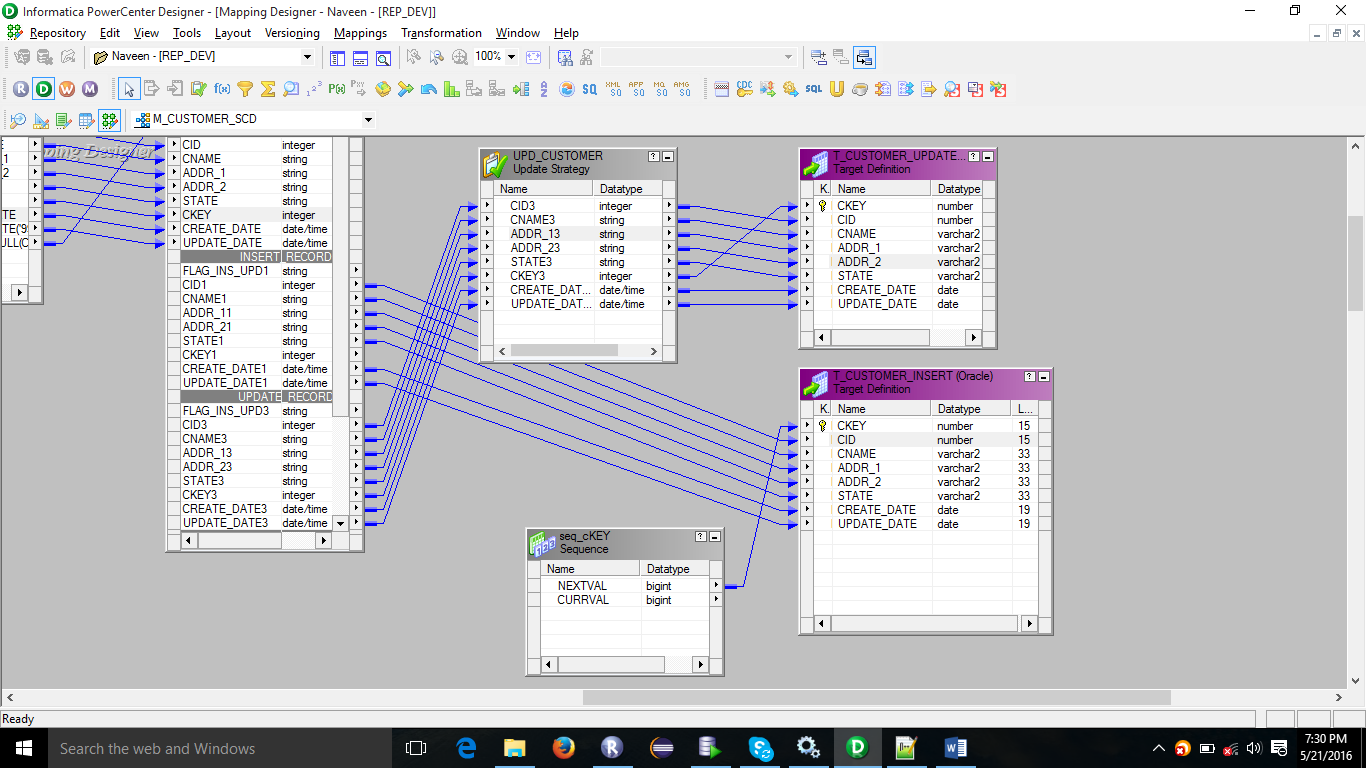
For updating existing record we will use Update Strategy



Case 1: Insert

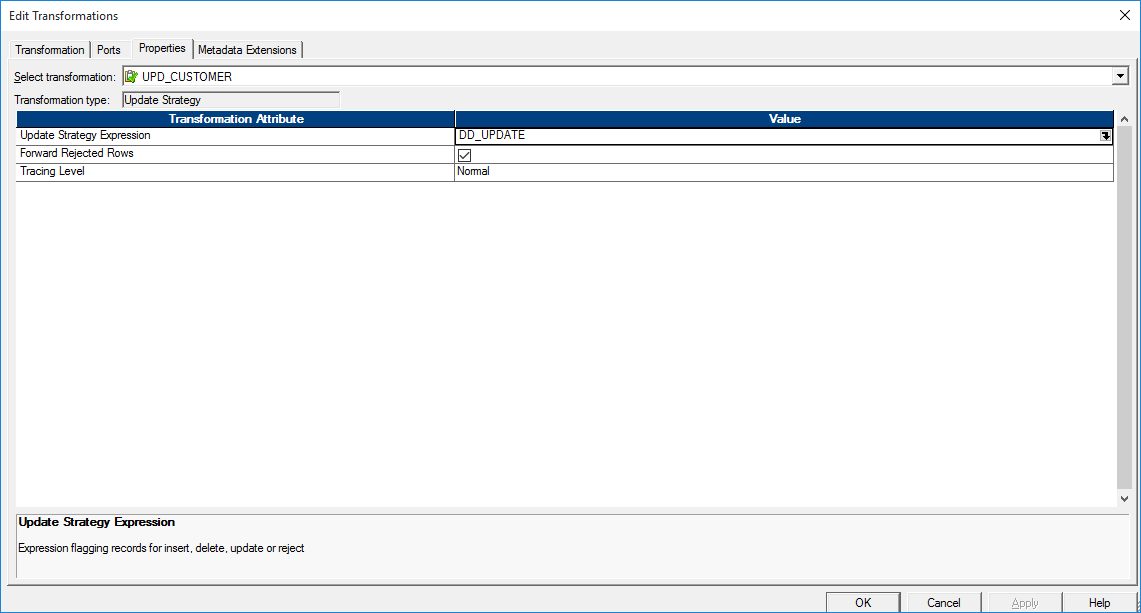
Create a sequence

Target Definition will take all attributes except ckey, give ckey value from sequence created

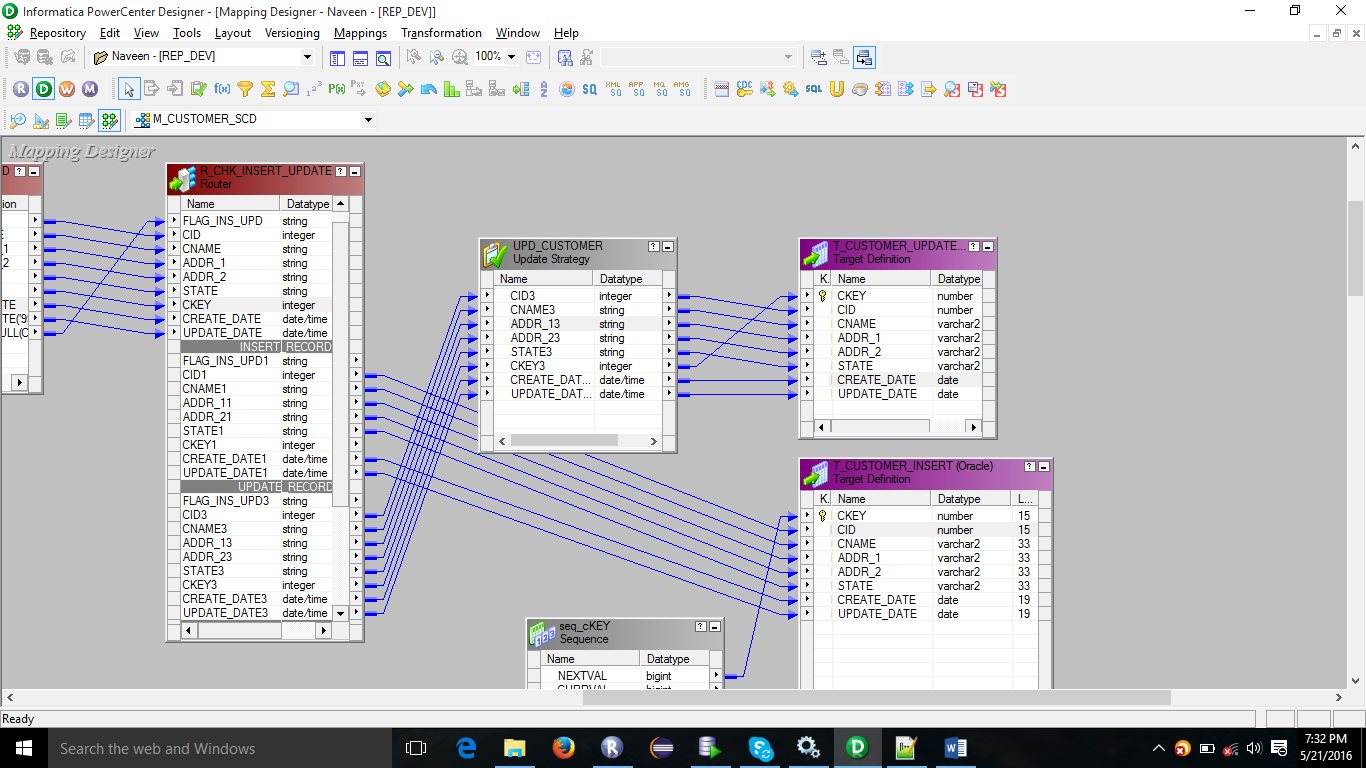


Case 2: Update

Create update strategy

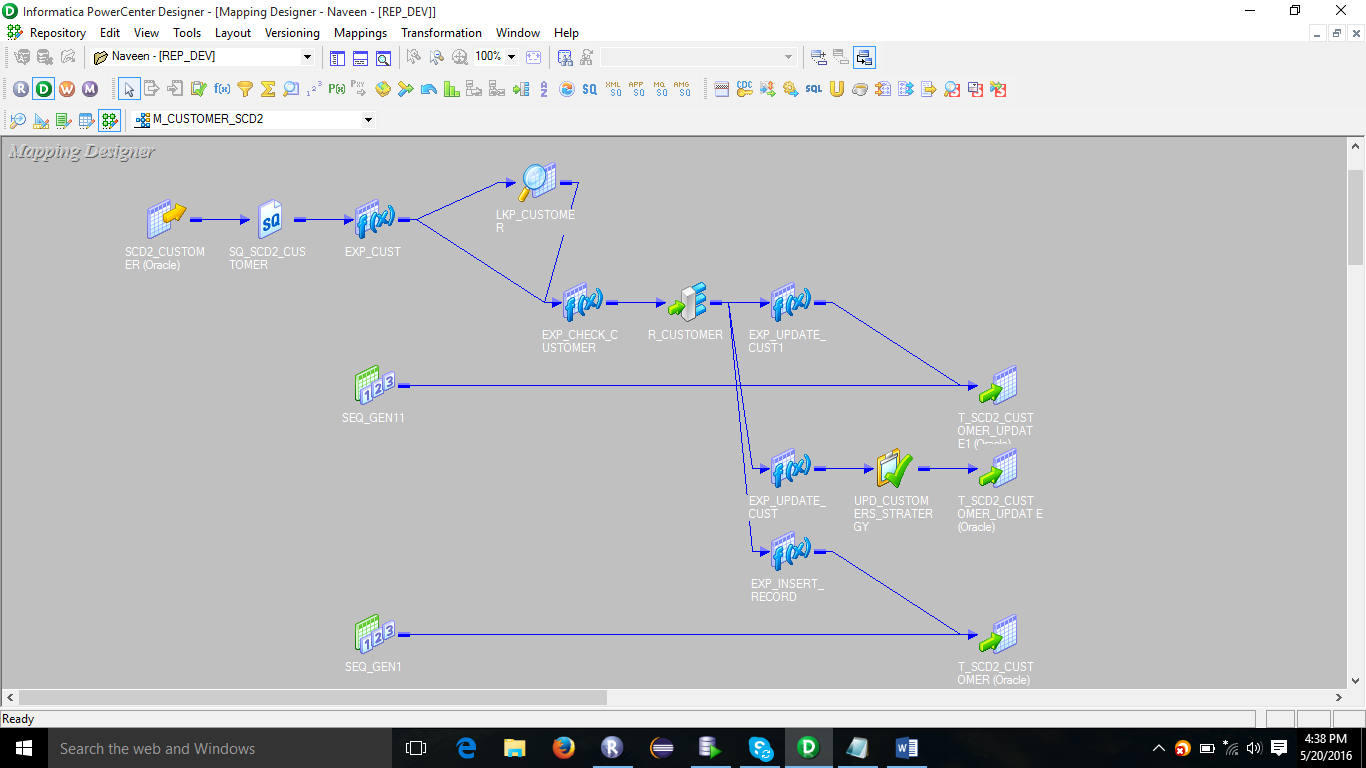


And drag all fields as shown below



**SCD TYPE 2 IMPLEMENTAION**

* If not
  + Create a new entry along with create date(current date) and update date(future date)
* If Yes
  + New Entry with current Date and update date
  + Look for matching record and update date with current date



CREATE TABLE SCD2\_CUSTOMER(

CUSTID VARCHAR2(5) PRIMARY KEY,

CUSTNAME VARCHAR2(33),

CUSTGRADE CHAR(1),

INCOME NUMBER(9,2));

INSERT INTO SCD2\_CUSTOMER VALUES('C1', 'KUMAR', 'B', 232323);

INSERT INTO SCD2\_CUSTOMER VALUES('C2', 'NAVEEN', 'B', 132323);

INSERT INTO SCD2\_CUSTOMER VALUES('C3', 'SAM', 'A', 432323);

INSERT INTO SCD2\_CUSTOMER VALUES('C4', 'DON', 'D', 31113);

-- TARGET TABLE

CREATE TABLE T\_SCD2\_CUSTOMER(

CUST\_SKEY NUMBER PRIMARY KEY, -- SORROGATE KEY

CUSTID VARCHAR2(5),

CUSTNAME VARCHAR2(33),

CUSTGRADE CHAR(1),

INCOME NUMBER(9,2),

CUST\_HASHCODE VARCHAR2(255),

START\_DATE DATE,

END\_DATE DATE,

CUST\_FLAG CHAR(1));

Expression exp\_cust is used as a best practice, from exp\_cust take in\_cust id other will be taken from lookup

In lookup sql override

SELECT T\_SCD2\_CUSTOMER.CUST\_SKEY as CUST\_SKEY, T\_SCD2\_CUSTOMER.CUST\_HASHCODE as CUST\_HASHCODE, T\_SCD2\_CUSTOMER.CUSTID as CUSTID FROM T\_SCD2\_CUSTOMER

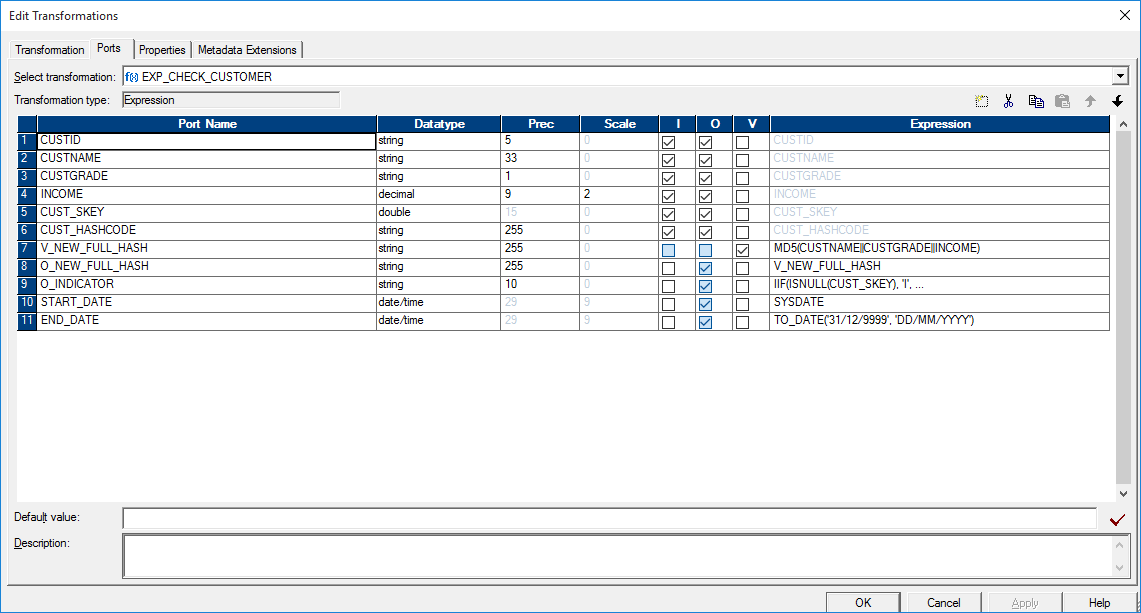
WHERE

T\_SCD2\_CUSTOMER.CUST\_FLAG='Y'

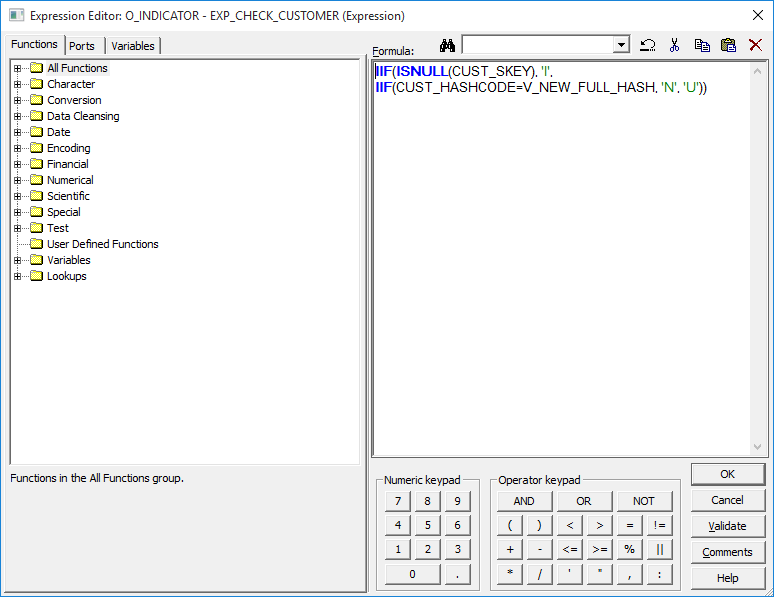
This is to make sure that only the valid customers are taken in to account

And in lookup have condition custid=in\_custid

EXP\_CHECK\_CUSTOMER

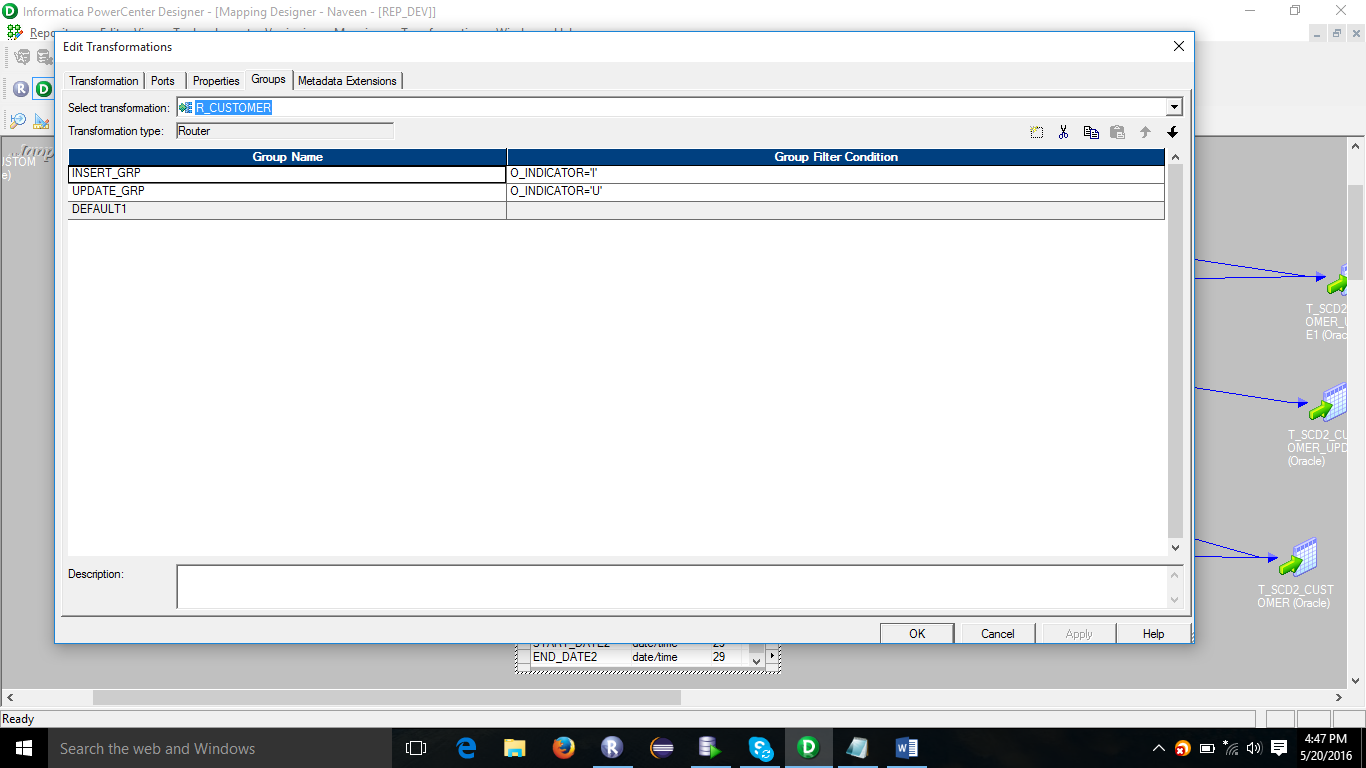


O\_INDICATOR

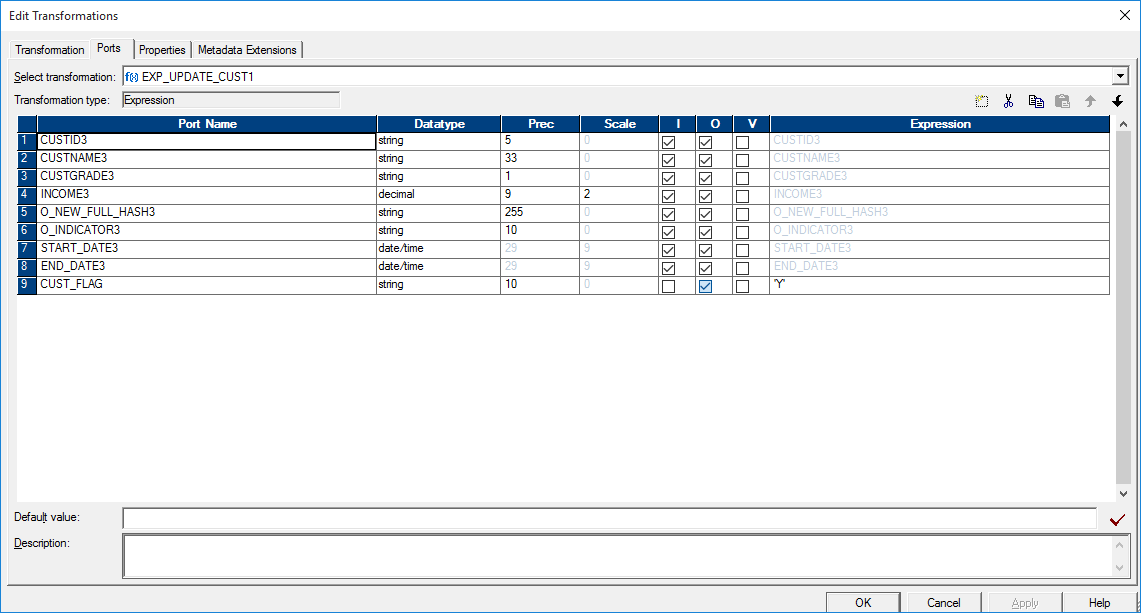


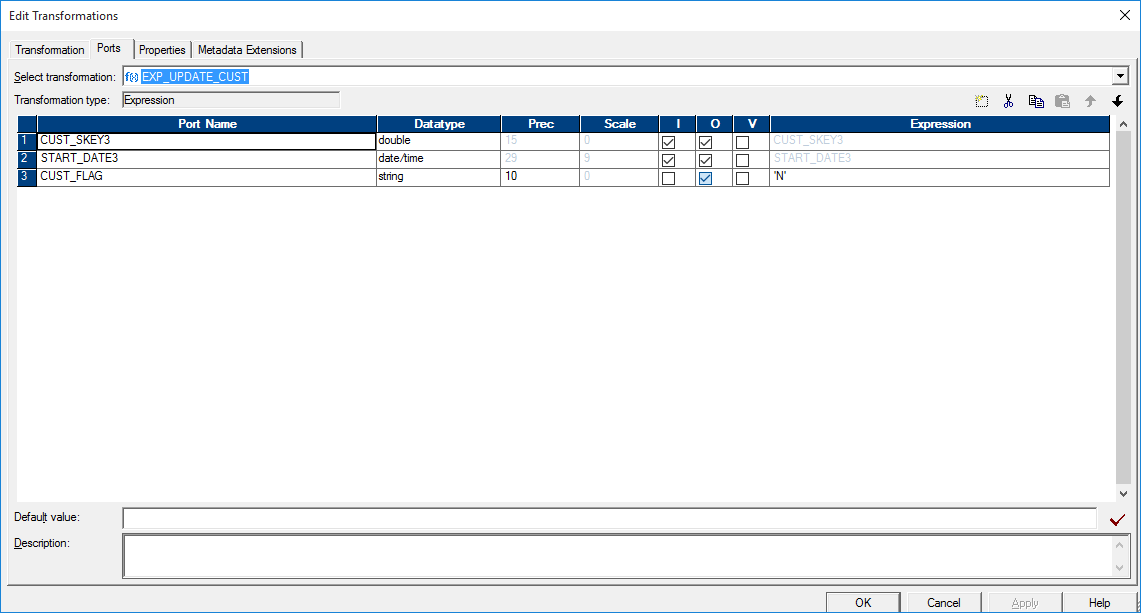
Others are visible in the screen only

In router create two groups

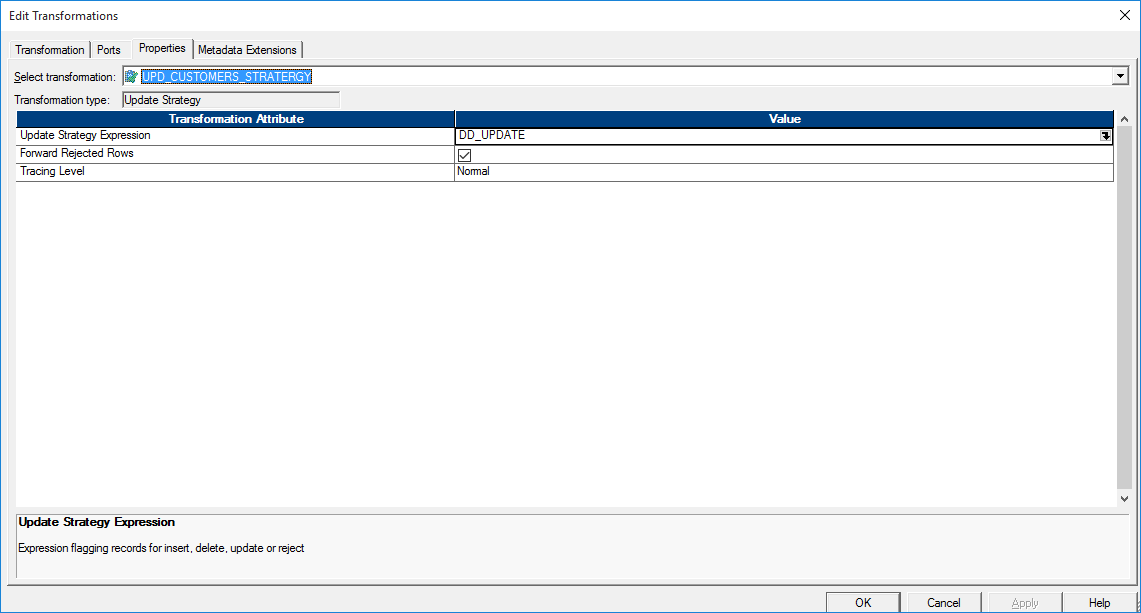


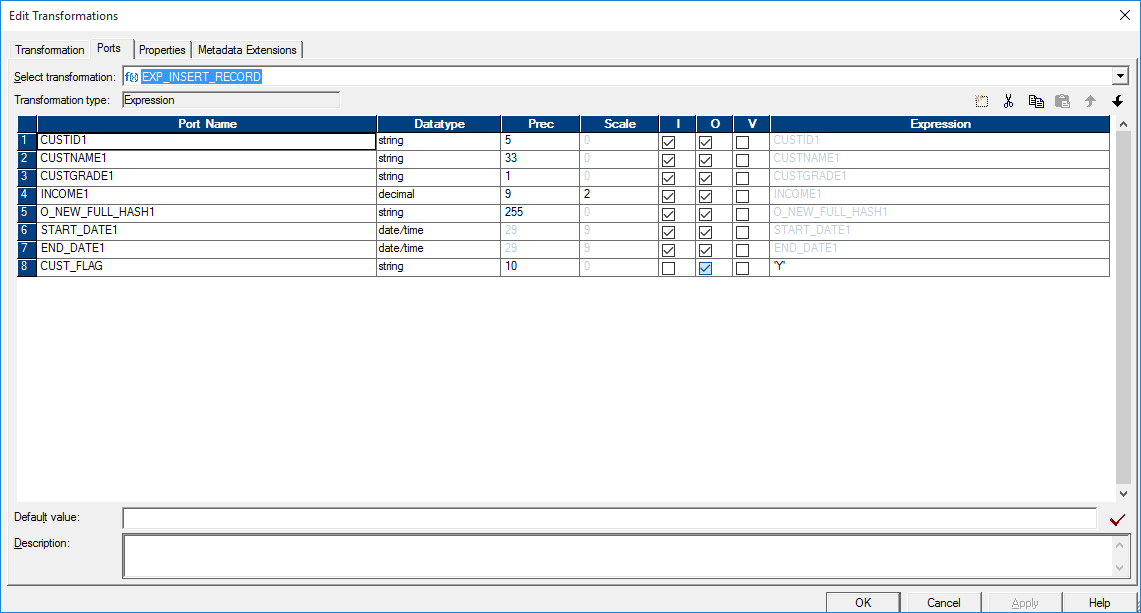
After router



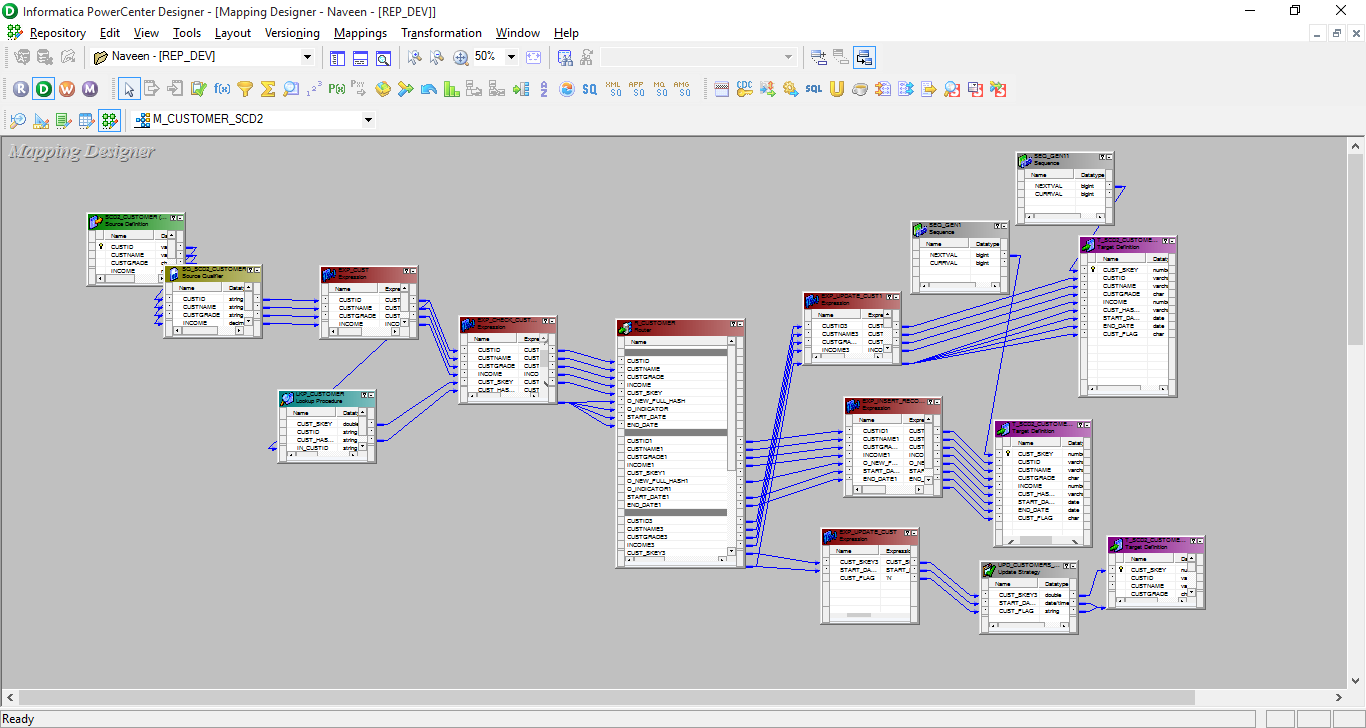


The above one give it only for existing record for update the flag to ‘N’ , give it to update strategy with DD\_UPDATE





Final View



**Implementation of SCD Type 3**

CREATE TABLE SCD3\_CUSTOMER(

CUST\_ID NUMBER(10) PRIMARY KEY,

CUST\_NAME VARCHAR2(30) NOT NULL,

CITY VARCHAR2(30),

STATE VARCHAR2(30));

INSERT INTO SCD3\_CUSTOMER VALUES (101, 'KARTHIKA', 'RESTON', 'VIRGINIA');

INSERT INTO SCD3\_CUSTOMER VALUES (102, 'SUNDAR', 'CUPERTINO', 'CALIFORNIA');

INSERT INTO SCD3\_CUSTOMER VALUES (103, 'SCOTT', 'DELHI', 'DELHI');

INSERT INTO SCD3\_CUSTOMER VALUES (104, 'VIJAY', 'DALLAS', 'TEXAS');

CREATE TABLE T\_SCD3\_CUSTOMER(

CUST\_KEY NUMBER(30) PRIMARY KEY,

CUST\_ID NUMBER(10),

CUST\_NAME VARCHAR2(30),

CITY VARCHAR2(30),

STATE VARCHAR2(30),

PREV\_CUST\_NAME VARCHAR2(30),

PREV\_CITY VARCHAR2(30),

PREV\_STATE VARCHAR2(30),

CREATE\_DT DATE,

UPDATE\_DT DATE);