

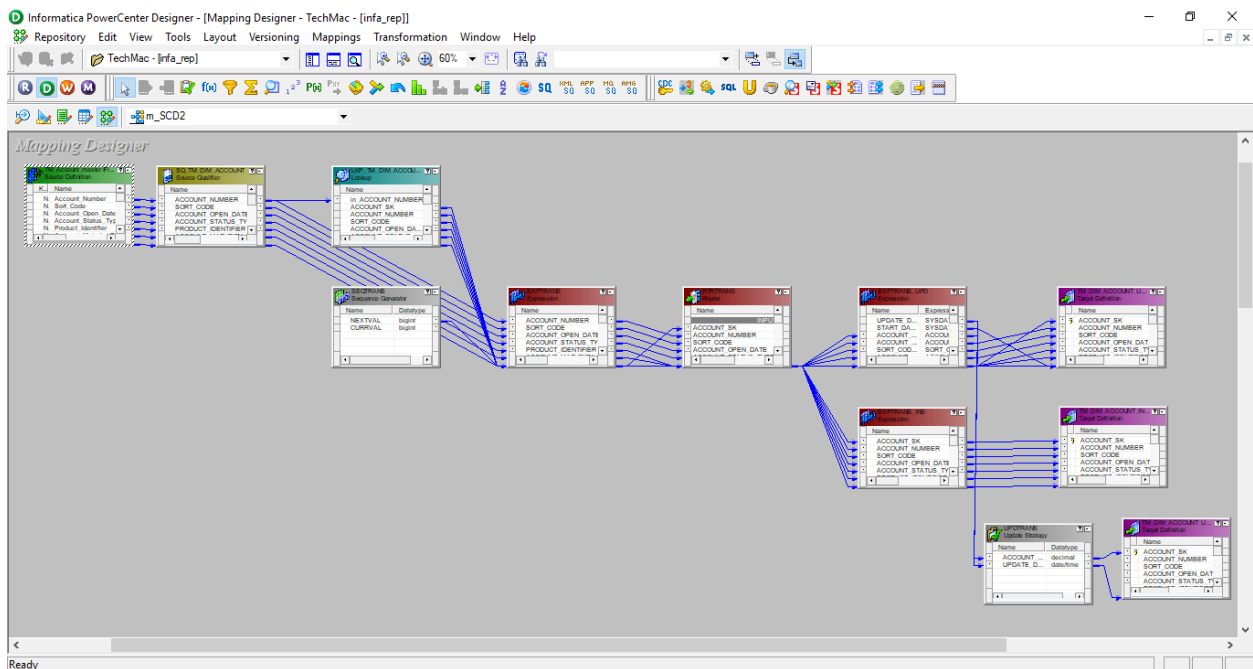
SCD2 Design approach:

This is one of most widely used design approach.

SRC->SQ->LKP->EXP->RTR->UPD->TGT1 & TGT2 & TGT3

Understanding Mapping: Type 2 Dimension/Effective Date Range mapping performs the following tasks:

1. Selects all rows.
2. Caches the existing target as a lookup table.
3. Compares logical key columns in the source against corresponding columns in the target lookup table.
4. Compares source columns against corresponding target columns if key columns match.
5. Flags new rows and changed rows.
6. Creates three data flows: one for new rows, one for changed rows, one for updating existing rows.
7. Generates a primary key and beginning of the effective date range for new rows.
8. Inserts new rows to the target.
9. Generates a primary key and beginning of the effective date range for changed rows.
10. Inserts changed rows in the target.
11. Updates existing versions of the changed rows in the target, generating the end of the effective date range to indicate the row is no longer current.



Lookup: Lookup on Target table for **ACTIVE** records only. Pass the natural key from source to Lookup which can be used for condition between Source and Lookup. Get all the TYPE2 attributes from Lookup table, which can be compared against Source attributes to verify if the source provides actual update.

Edit Transformations

Transformation

Ports

Properties

Condition

Metadata Extensions

Select transformation:

LKP_TM_DIM_ACCOUNT

Transformation type:

Lookup Procedure

Transformation Attribute	Value
Lookup Sql Override	
Lookup table name	TM_DIM_ACCOUNT
Lookup Source Filter	UPDATE_DATE IS NULL
Lookup caching enabled	<input checked="" type="checkbox"/>
Lookup policy on multiple match	Use Any Value
Lookup condition	ACCOUNT_NUMBER = in_ACCOUNT_NUMBER
Connection Information	\$Target
Source Type	Database
Tracing Level	Normal
Lookup cache directory name	\$PMCacheDir
Lookup cache persistent	<input type="checkbox"/>
Lookup Data Cache Size	Auto
Lookup Index Cache Size	Auto
Dynamic Lookup Cache	<input type="checkbox"/>
Synchronize Dynamic Cache	<input type="checkbox"/>
Output Old Value On Update	<input type="checkbox"/>
Update Dynamic Cache Condition	TRUE

Lookup Source Filter

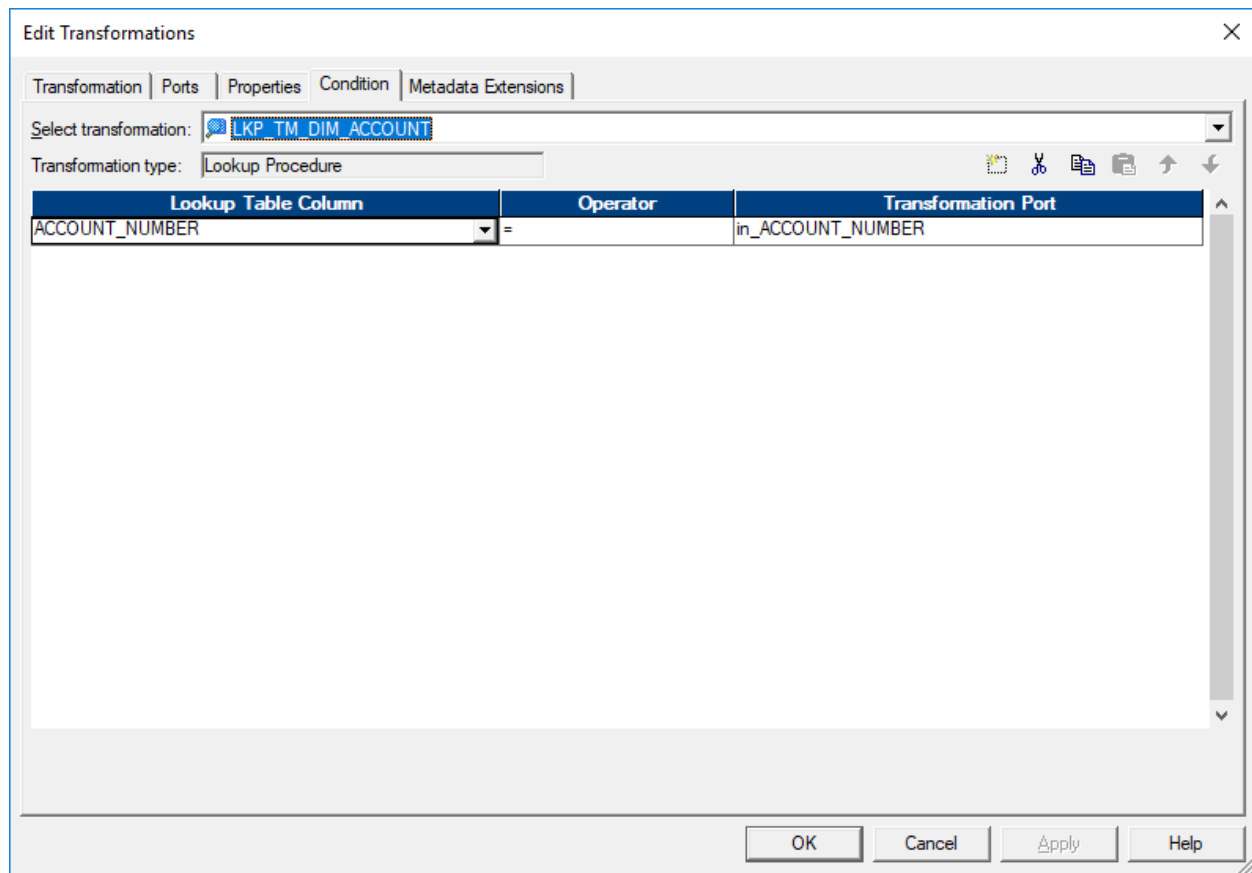
Filter applied to lookup records.

OK

Cancel

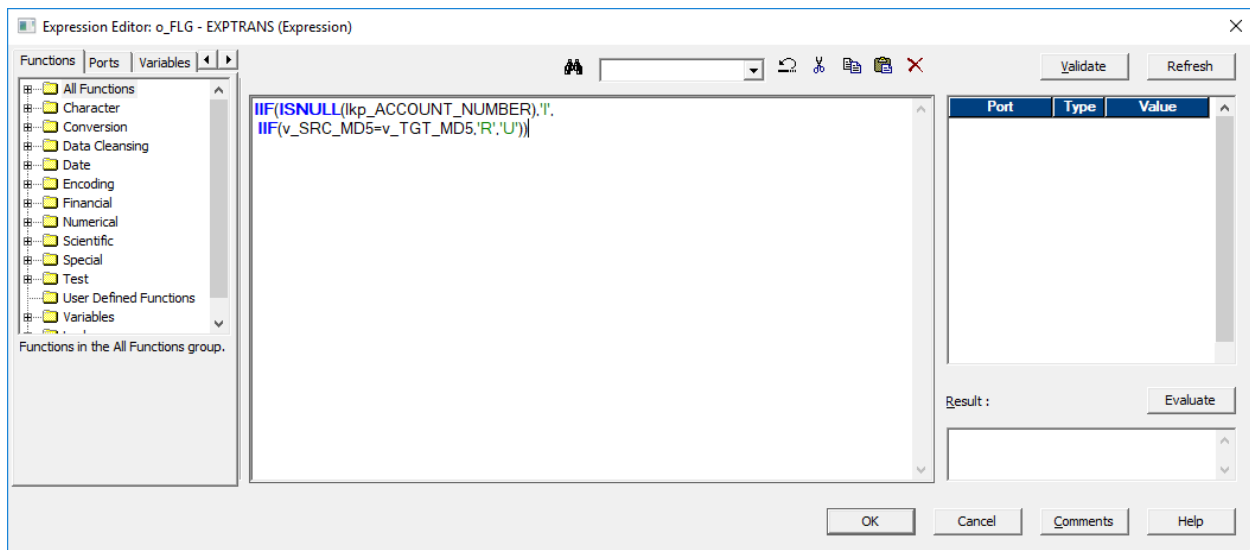
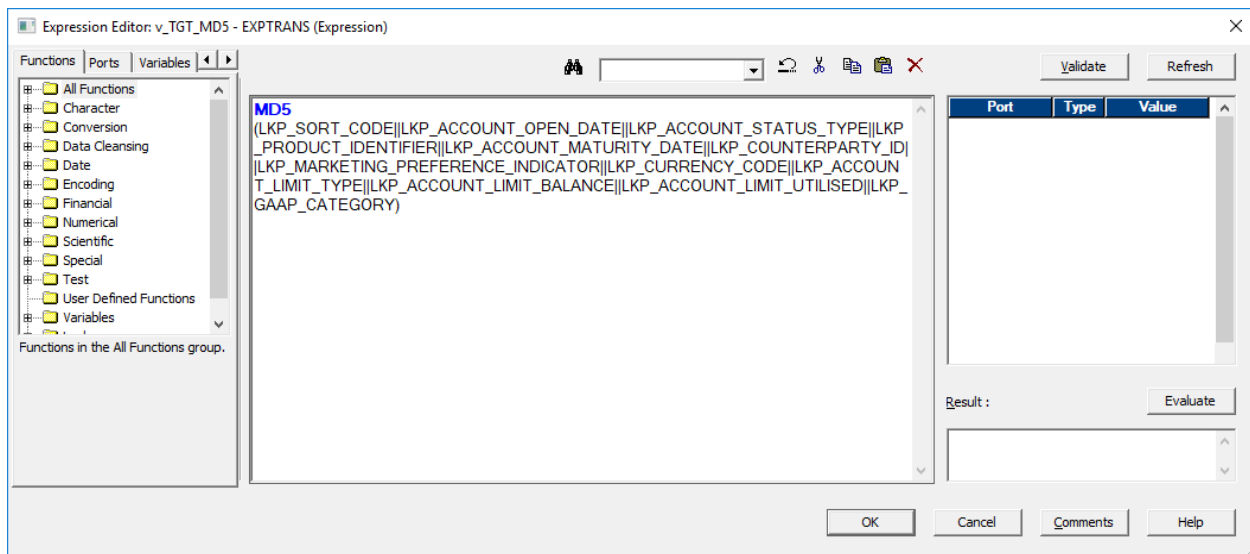
Apply

Help



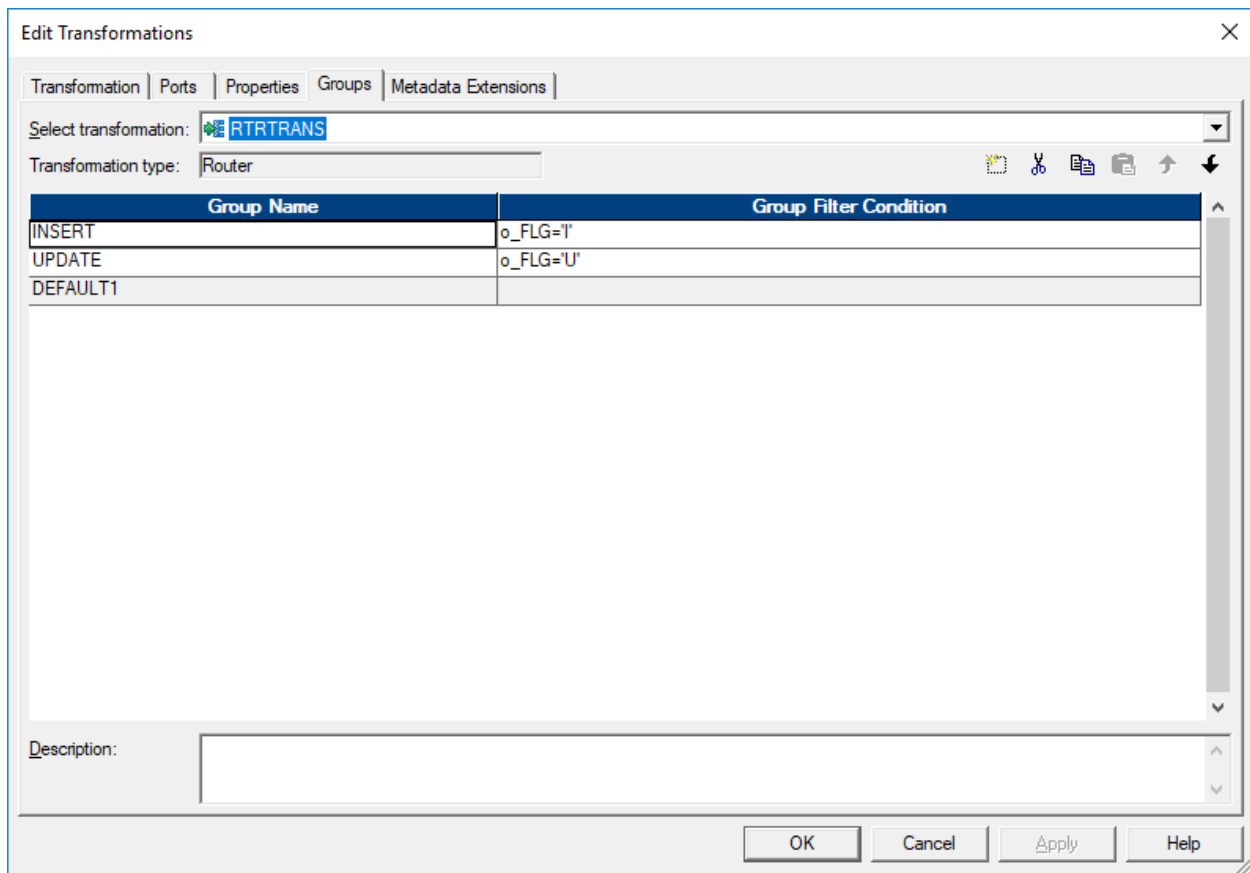
Expression: Derive Flag which can mark incoming records as either INSERT or UPDATE or REJECT.

To understand if there is any incoming data which there in the target are already and if these incoming data are actual updates which means they are different from target data. MD5 provides a hash number, hence is used for combination of source attributes and target attributes and then compare source attributes with target attributes to understand if there is any actual change.



Sequence Generator: Used to generate sequence for loading surrogate key

Router: Rout records for either INSERT or UPDATE pipeline.

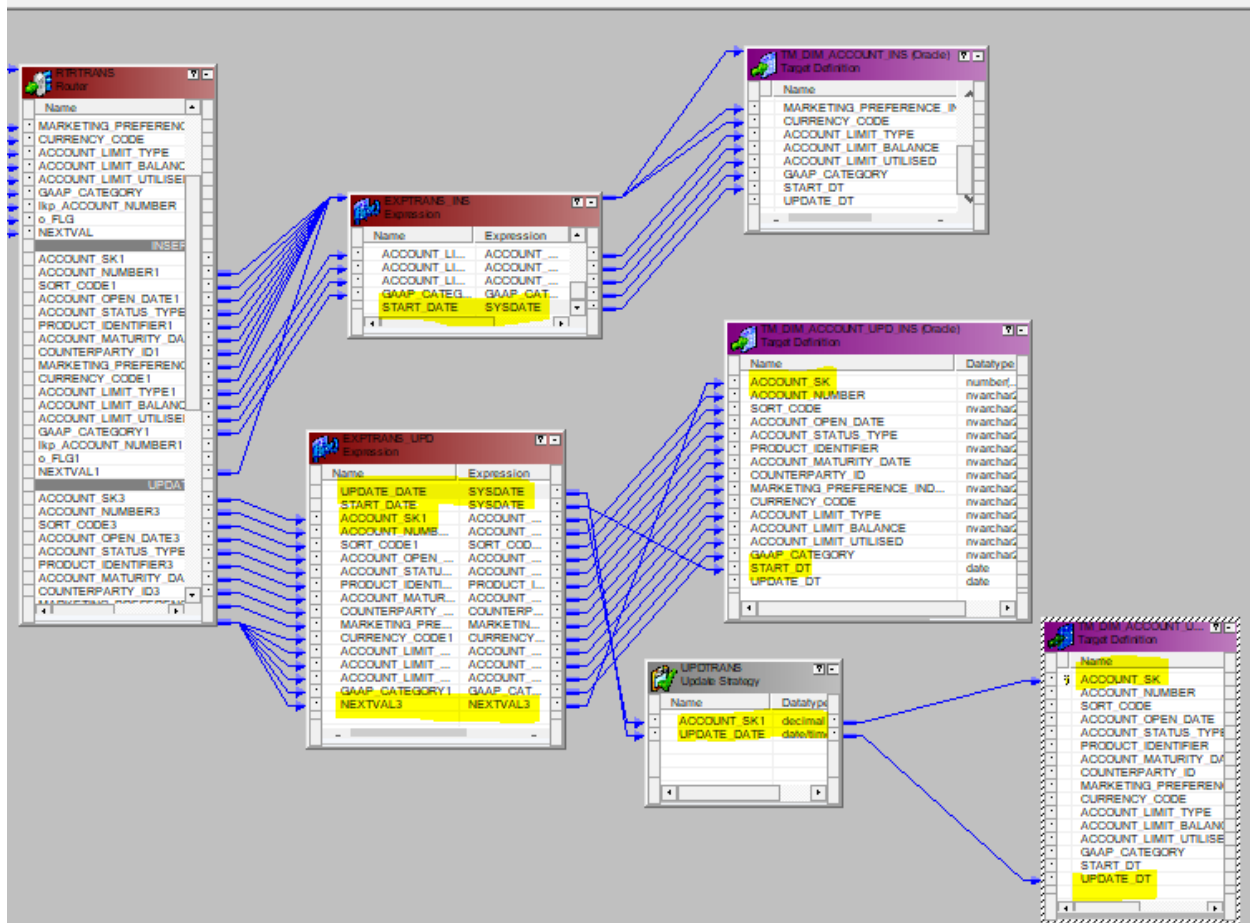


UPDATE: DD_UPDATE to update the record in target. Ensure that Target structure is having a key as primary key otherwise there update does not work as expected.

Target Designer: Please ensure that you have defined ACCOUNT_SK as primary key. This is required for firing UPDATE on the target database as based on primary key WHERE condition happens.

As per following screenshot, Router sends all NEW records to Target1 as INSERT,

all existing records has two different pipeline, one pipeline update the target record (Target3) with update_dt marking the closure of the record, one which directly insert the existing records from source as it is to the Target2.



SESSION: Ensure that session is marked as DATA DRIVEN as shown below.