

# Appendices -Advanced exercises

# ADV03 **Not exists**In the filter of a mapping

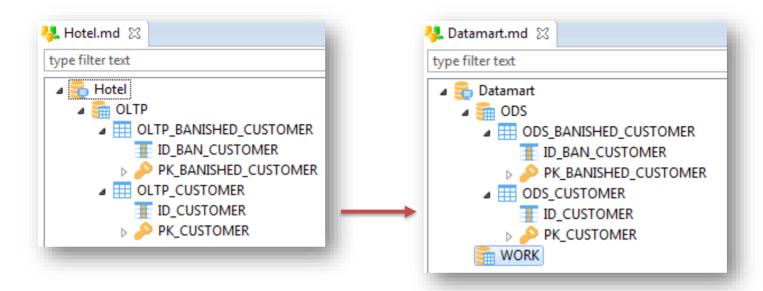
- A related article in Stambia.org
  - <a href="https://stambia.org/doc/220-development-hints-and-tips/exists-not-exist-in-mappings">https://stambia.org/doc/220-development-hints-and-tips/exists-not-exist-in-mappings</a>



#### Not exists - 1/5

#### Context

- The objective of this exercise is to integrate "customer\_id" from an OLTP database (source) to an ODS one (target)
- Some customers are banished and are listed in banished tables
- Those banished customers must not be integrated in ODS database
- We are going to study the case where the banished table is in the OLTP database and the case where the banished table is in the ODS database







#### Not exists - 2/5

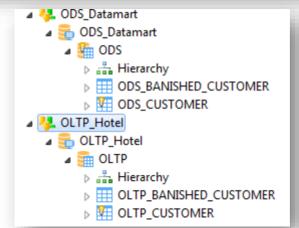
- 1 Execute the 2 SQL files
  - On the source (Hotel) & on the target (datamart)

```
Init environment on Hotel.sal
Fig Hotel(6).sql ⊠
                                                                                                                                         Not Exists.pdf
                                                                                                                                         step by step syntax help.txt
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✓ Limit Rows: 100

                                                                                 ■ ODS(8).sal 🖾
                                                                                                                                      20-Metadata
   WREATE SCHEMA OLTP:
   Execute current SQL, Current SQL is the selected text or the complete file content if nothing is selected.
                                                                                   🖈 🏂 🕏 🖟 🗁 🔙 🕖 ▽ 🔻 Datamart/sa
                                                                                                                                           → V Limit Rows: 100
   CREATE TABLE OLTP.OLTP BANISHED CUSTOMER
                                                                                     Execute current SQL, Current SQL is the selected text or the complete file content if nothing is selected.
       ID BAN CUSTOMER INTEGER NOT NULL
                                                                                    CREATE SCHEMA WORK:
       , CONSTRAINT PK BANISHED CUSTOMER PRIMARY KEY (ID BAN CUSTOMER)
                                                                                    CREATE TABLE ODS.ODS BANISHED CUSTOMER
  );
   CREATE TABLE OLTP.OLTP CUSTOMER
                                                                                         ID BAN CUSTOMER INTEGER NOT NULL
                                                                                         , CONSTRAINT PK BANISHED CUSTOMER PRIMARY KEY (ID BAN CUSTOMER)
       ID CUSTOMER INTEGER NOT NULL
       , CONSTRAINT PK CUSTOMER PRIMARY KEY (ID CUSTOMER)
                                                                                    CREATE TABLE ODS.ODS CUSTOMER
   INSERT INTO OLTP.OLTP CUSTOMER
                                                                                         ID CUSTOMER INTEGER NOT NULL
   SELECT GEN ID
          UNNEST (SEQUENCE ARRAY (1, 1000, 1)) AS GENERATE SERIES (GEN ID);
                                                                                         , CONSTRAINT PK CUSTOMER PRIMARY KEY (ID CUSTOMER)
   INSERT INTO OLTP.OLTP BANISHED CUSTOMER
   SELECT GEN ID
          UNNEST (SEQUENCE ARRAY (50, 199, 1)) AS GENERATE SERIES (GEN ID);
                                                                                    INSERT INTO ODS.ODS BANISHED CUSTOMER
                                                                                    SELECT GEN ID
                                                                                            UNNEST (SEQUENCE ARRAY (50, 99, 1)) AS GENERATE SERIES (GEN ID);
```

Reverse the schema and the tables



Training

Components
 Exos materials
 AddExo
 AdvExo

> > Adv01 Pivot

Adv02\_ExcelAdv03 NotExists

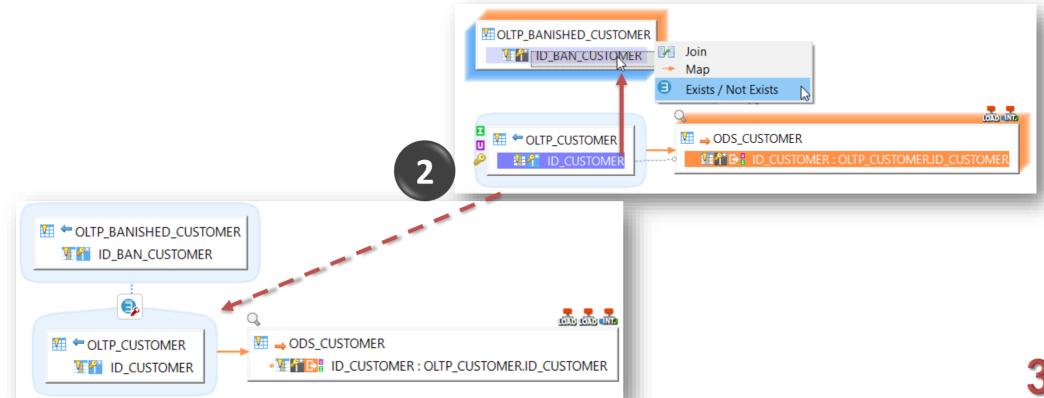
√ № 10-Materials

Init environment on Datamart.sql



#### Not exists - 3/5

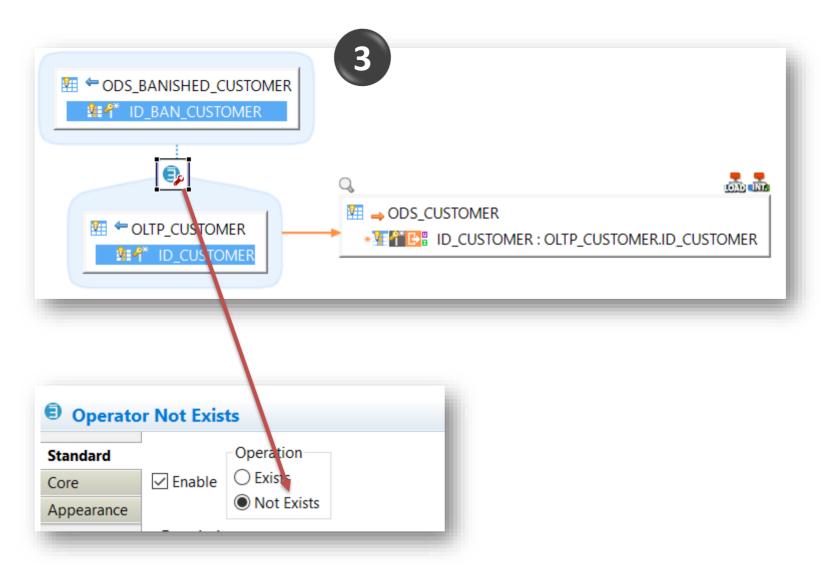
- 2 Create a mapping in which we will use the source banished table
- Drag & drop source and target customer tables
- Add banished source customer table
- Drag & drop ID CUSTOMER from OLTP CUSTOMER table on ID CUSTOMER of the banished table and choose Exists/Not exists





#### Not exists - 4/5

❖ 3 – Do the same on the target tables :





### Not exists - 5/5

#### Results

- First mapping
- On source

OLTP\_CUSTOMER

ID = [1:1000]

OLTP BANISHED CUSTOMER

ID = [50:199]

- On target
  - ODS\_CUSTOMER

ID = [1:49-200:1000]

## Second mapping

- On source
  - OLTP CUSTOMER

ID = [1:1000]

ID = [50:99]

- On target
  - ODS\_BANISHED\_CUSTOMER

ID = [1:49-100:1000]

ODS\_CUSTOMER

