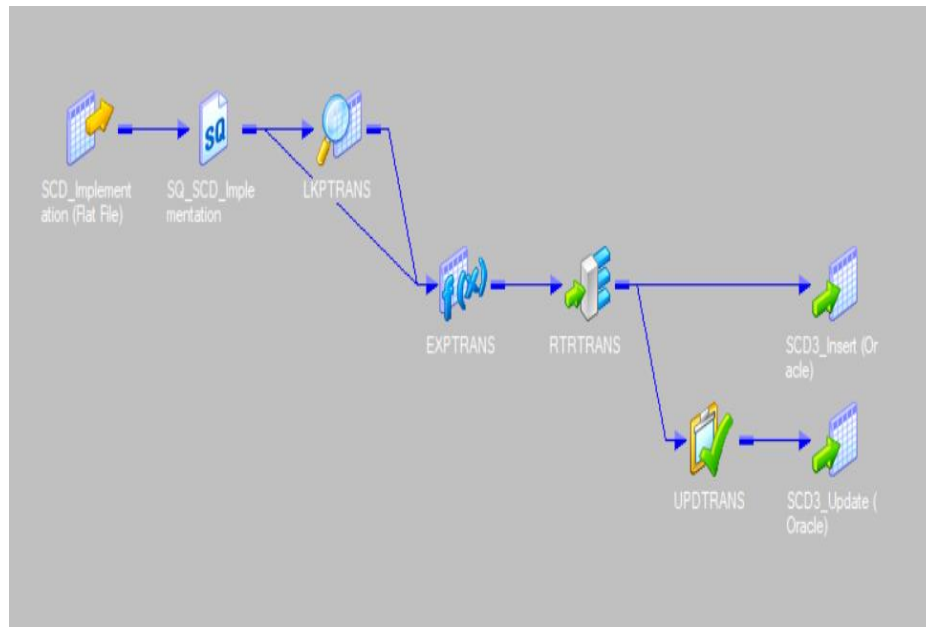


Designer Window

Design Mapping



Create Transformation

Edit Transformations

Transformation | Ports | Properties | Condition | Metadata Extensions

Select transformation: LKPTRANS

Transformation type: Lookup Procedure

| Lookup Table Column | Operator | Transformation Port |
|---------------------|----------|---------------------|
| EMPID | = | Emp_in |

Transformation | Ports | Properties | Metadata Extensions

Select transformation: EXPTRANS

Transformation type: Expression

| | Port Name | Datatype | Prec | Scale | I | O | V | Expression |
|----|----------------------|---------------|------|-------|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------|
| 3 | Designation | string | 15 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Designation |
| 4 | Salary | decimal | 5 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Salary |
| 5 | Tgt_EMPID | decimal | 38 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Tgt_EMPID |
| 6 | Tgt_EMPNAME | nstring | 30 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Tgt_EMPNAME |
| 7 | Tgt_DESIGNATION | nstring | 30 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Tgt_DESIGNATION |
| 8 | Tgt_Prev_Designation | nstring | 30 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Tgt_Prev_Designation |
| 9 | Tgt_SALARY | decimal | 38 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Tgt_SALARY |
| 10 | Prev_Designation | string | 30 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | if(Designation <> Tgt_DESIGN... |
| 11 | Current_date | date/time | 29 | 9 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | SYSTEMSTAMP() |
| 12 | Insert_Flag | small integer | 5 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | if(isnull(Tgt_EMPID),1,0) |
| 13 | Update_Flag | small integer | 5 | 0 | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | if(not isnull(Tgt_EMPID)... |

Transformation | Ports | Properties | Groups | Metadata Extensions

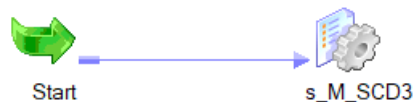
Select transformation: RTRTRANS

Transformation type: Router

| Group Name | Group Filter Condition |
|------------|------------------------|
| Insert | Insert_Flag = 1 |
| Update | Update_Flag = 1 |
| DEFAULT1 | |

Workflow Manager

Design Workflow



Configure connection

General | Properties | Config Object | Mapping | Components | Metadata Extensions

Select task: s_M_SCD3

Task type: Session

Start Page

Configure Mapping

To configure connections, select the [Connections](#) node in the tree in the Transformations view.

To edit the reader/writer properties of a source/target, select the [Sources](#) or the [Targets](#) node in the tree.

To edit the partitions, go to the [Partitions](#) tab and select a transformation from the tree.

Workflow Monitor

Run Properties

| Repositories | Workflow Run | Start Time | Completion Time | Status |
|--------------|----------------|---------------------|---------------------|-----------|
| rep | wf_M_SCD_Type2 | 11-03-2024 23:15:49 | 11-03-2024 23:15:55 | Succeeded |
| is | wf_M_SCD_Type2 | 11-03-2024 23:15:49 | 11-03-2024 23:15:51 | Succeeded |
| Connec | wf_M_SCD_Type2 | 11-03-2024 23:09:38 | 11-03-2024 23:09:41 | Succeeded |
| | s M SCD Type2 | 11-03-2024 23:09:38 | 11-03-2024 23:09:40 | Succeeded |

Gantt Chart Task View

s_M_SCD_Type2 [11-03-2024 23:15:49]

Task Details

Source/Target Statistics

| Transformation Name | Node | Applied Rows | Affected Rows | Rejected Rows | Throughput |
|----------------------|--------|--------------|---------------|---------------|------------|
| SCD2_ExpireRecord | node01 | 2 | 2 | 0 | 2 |
| SCD2_InsertUpdat... | node01 | 2 | 2 | 0 | 2 |
| SCD2_PureInsert | node01 | 2 | 2 | 0 | 2 |
| sq SQ_SCD_Impleme... | node01 | 4 | 4 | 0 | 4 |

Session Logs

| SESSION LOAD SUMMARY | | | | | | |
|----------------------|---------------------|--------|----------|----------|--|--|
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | TM_6252 | Source Load Summary. | |
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | CMN_1740 | Table: [SQ_SCD_Implementation] (Instance Name: [SQ_SCD_Implementation]) Output Rows [4], Affected Rows [4], Applied Rows [4], Rejected Rows [0] | |
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | TM_6253 | Target Load Summary. | |
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | CMN_1740 | Table: [SCD2] (Instance Name: [SCD2_InsertUpdatedRecord]) Output Rows [2], Affected Rows [2], Applied Rows [2], Rejected Rows [0] | |
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | CMN_1740 | Table: [SCD2] (Instance Name: [SCD2_PureInsert]) Output Rows [2], Affected Rows [2], Applied Rows [2], Rejected Rows [0] | |
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | CMN_1740 | Table: [SCD2] (Instance Name: [SCD2_ExpireRecord]) Output Rows [2], Affected Rows [2], Applied Rows [2], Rejected Rows [0] | |
| INFO | 11-03-2024 23:15:51 | node01 | DIRECTOR | TM_6023 | | |

Source Vs Target

Source

Before

| Eid | EmpName | Designation | Salary |
|-----|----------|-------------------|--------|
| 1 | Ram | QA | 25000 |
| 2 | Samantha | Developer | 40000 |
| 3 | Divya | Software Engineer | 50000 |
| 4 | Akhil | Test Engineer | 45000 |

After

| Eid | EmpName | Designation | Salary |
|-----|----------|-------------|--------|
| 1 | Ram | QA | 25000 |
| 2 | Samantha | Developer | 40000 |
| 3 | Divya | Developer | 50000 |
| 4 | Akhil | Engineer | 45000 |
| 5 | Ramya | Developer | 50000 |

Target

Before

select * from scd3;

Script Output x Query Result x

SQL | All Rows Fetched: 4 in 0.003 seconds

| EMPID | EMPNAME | DESIGNATION | SALARY | PREV_DESIGNATION | CREATE_DATE | UPDATE_DATE |
|-------|------------|-------------------|--------------|------------------|-------------|-------------|
| 1 | 1 Ram | QA | 25000 (null) | | 11-03-24 | (null) |
| 2 | 2 Samantha | Developer | 40000 (null) | | 11-03-24 | (null) |
| 3 | 3 Divya | Software Engineer | 50000 (null) | | 11-03-24 | (null) |
| 4 | 4 Akhil | Test Engineer | 45000 (null) | | 11-03-24 | (null) |

After

select * from scd3;

Script Output x Query Result x

SQL | All Rows Fetched: 5 in 0.003 seconds

| EMPID | EMPNAME | DESIGNATION | SALARY | PREV_DESIGNATION | CREATE_DATE | UPDATE_DATE |
|-------|------------|-------------|-------------------------|------------------|-------------|-------------|
| 1 | 1 Ram | QA | 25000 (null) | | 11-03-24 | (null) |
| 2 | 2 Samantha | Developer | 40000 (null) | | 11-03-24 | (null) |
| 3 | 3 Divya | Developer | 50000 Software Engineer | | 11-03-24 | 12-03-24 |
| 4 | 4 Akhil | Engineer | 45000 Test Engineer | | 11-03-24 | 12-03-24 |
| 5 | 5 Ramya | Developer | 50000 (null) | | 12-03-24 | (null) |

Design & Development

Import source and target details to the Designer

Design Mapping from source to target with necessary transformation

Creating SCD type 3 Implementation: This provides partial history maintenance

Use Lookup Transformation to check record exist in the target. Then the source record can be Inserted/ Update. Surrogate key (Sequence generator) is not necessary, as only unique record of the employees is present.

Data Validation

Check Run properties and session logs for the detailed report

Validate source and target with necessary SQL Queries

Use Previous / current columns and Update_date columns to filter records and validate data