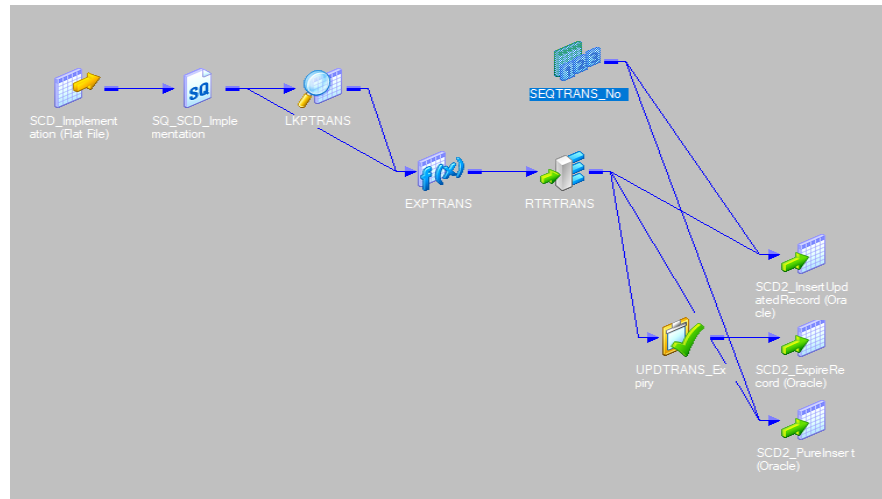


## Designer Window

### Design Mapping



### Create Transformation

SQL:

```

SELECT SCD2.EMPKEY as EMPKEY, SCD2.EMPNAME as EMPNAME, SCD2.DESIGNATION as DESIGNATION, SCD2.SALARY as SALARY, SCD2.ISACTIVE as ISACTIVE, SCD2.EID as EID FROM SCD2 where isactive = 1
    
```

if:

```

not isnull(Tgt_EMPKEY)
and (
EmpName <> Tgt_EMPNAME
or Designation <> Tgt_DESIGNATION
or Salary <> Tgt_SALARY
)
)
.1
.0
)
    
```

Transformation | Ports | Properties | Groups | Metadata Extensions

Select transformation: **RTRTRANS**

Transformation type: Router

Group Name	Group Filter Condition
Pure_insert	New_Record = 1
Update	Updated_record = 1
DEFAULT1	

Transformation | Ports | Properties | Metadata Extensions

Select transformation: **EXPTRANS**

Transformation type: Expression

Port Name	Datatype	Prec	Scale	I	O	V	Expression
1	Eid	decimal	2	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Eid
2	EmpName	string	15	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	EmpName
3	Designation	string	15	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Designation
4	Salary	decimal	5	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Salary
5	Tgt_EMPKEY	double	15	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tgt_EMPKEY
6	Tgt_EID	double	15	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tgt_EID
7	Tgt_EMPNAME	nstring	20	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tgt_EMPNAME
8	Tgt_DESIGNATION	nstring	20	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tgt_DESIGNATION
9	Tgt_SALARY	double	15	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Tgt_SALARY
10	New_Record	integer	10	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	if@null(Tgt_EMPKEY),1,0)
11	Updated_record	integer	10	0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	if(...
12	Current Time Stamp	date/time	29	9	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	SYSTIMESTAMP0

## Workflow Manager

### Design Workflow



### Configure connection

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

Select task: **s\_M\_SCD\_Type2**

Task type: Session (Reusable)

**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 Tvp2	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

A	B	C	D
Eid	EmpName	Designation	Salary
1	Ashok Ram	QA	25000
2	Samatha	Developer	40000

#### After

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

### Target

#### Before

select \* from scd2;

Script Output x Query Result x

All Rows Fetched: 2 in 0.003 seconds

EMPKEY	EID	EMPNAME	DESIGNATION	SALARY	START_EFFECTIVE_DATE	END_EFFECTIVE_...	ISACTIVE
1	7	1 Ashok Ram	QA	25000	10-03-24	(null)	1
2	8	2 Samatha	Developer	40000	10-03-24	(null)	1

#### After

select \* from scd2;

Script Output x Query Result x

All Rows Fetched: 6 in 0.003 seconds

EMPKEY	EID	EMPNAME	DESIGNATION	SALARY	START_EFFECTIVE_DATE	END_EFFECTIVE_...	ISACTIVE
1	7	1 Ashok Ram	QA	25000	10-03-24	11-03-24	0
2	8	2 Samatha	Developer	40000	10-03-24	11-03-24	0
3	9	1 Ram	QA	25000	11-03-24	(null)	1
4	10	2 Samantha	Developer	40000	11-03-24	(null)	1
5	11	3 Divya	Software Engineer	50000	11-03-24	(null)	1
6	12	4 Akhil	Test Enginner	45000	11-03-24	(null)	1

## Design & Development

Import source and target details to the Designer

Design Mapping from source to target with necessary transformation

Creating SCD type 2 Implementation: This preserves the changes made to the data. History maintenance is achieved with this type of Design.

Use Lookup Transformation to check record exist in the target. Then the source record can be Inserted/ Update and Expire. Surrogate key (Sequence generator) is used to update records.

## Data Validation

Check Run properties and session logs for the detailed report

Validate source and target with necessary SQL Queries

Use Active Flag to filter Active records and validate source and Target