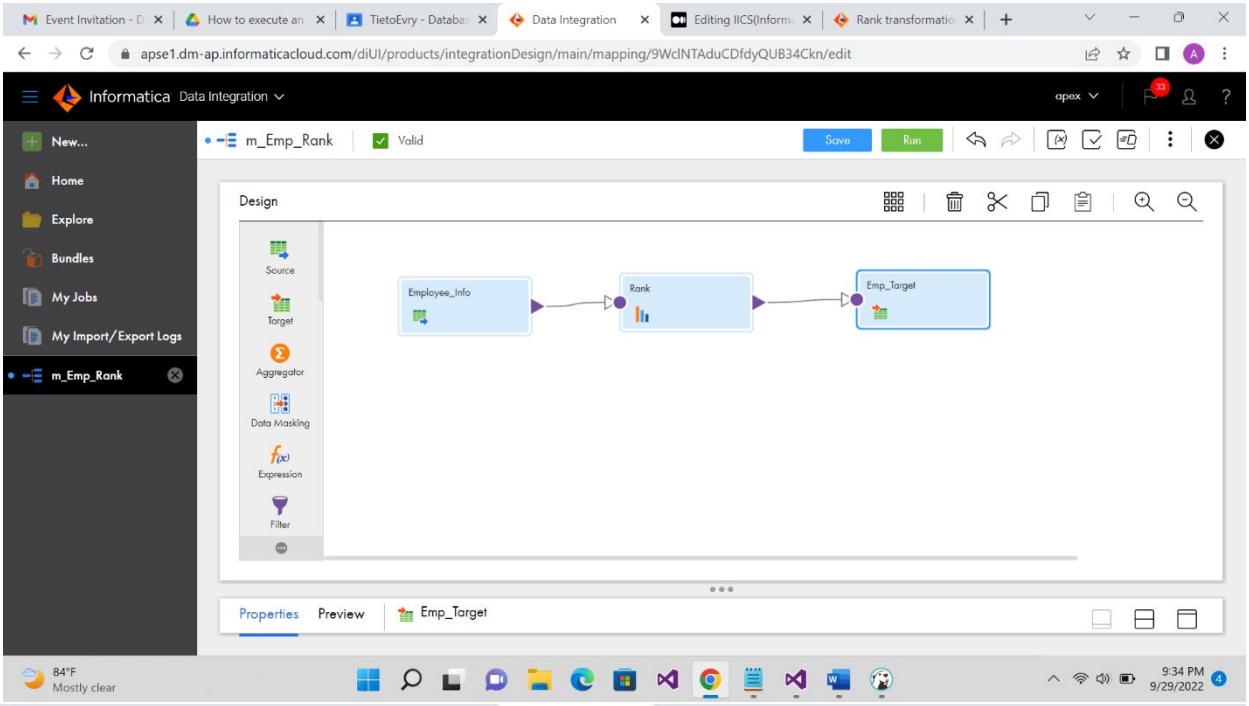
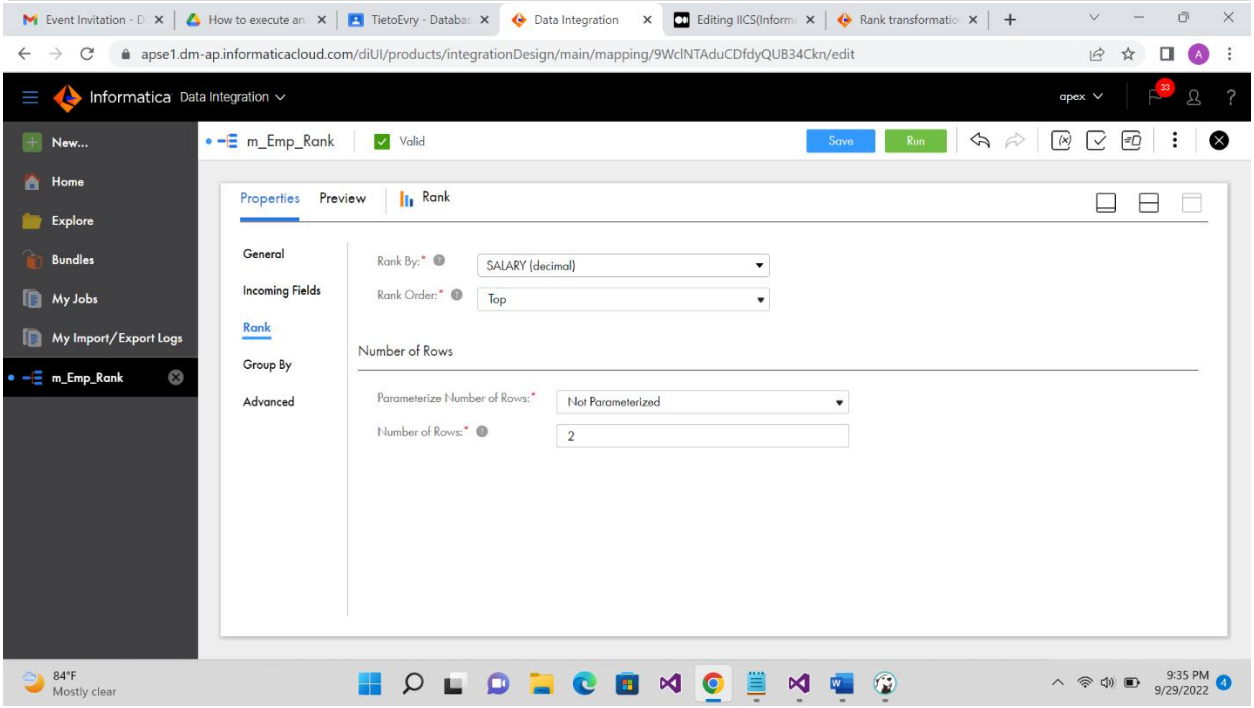
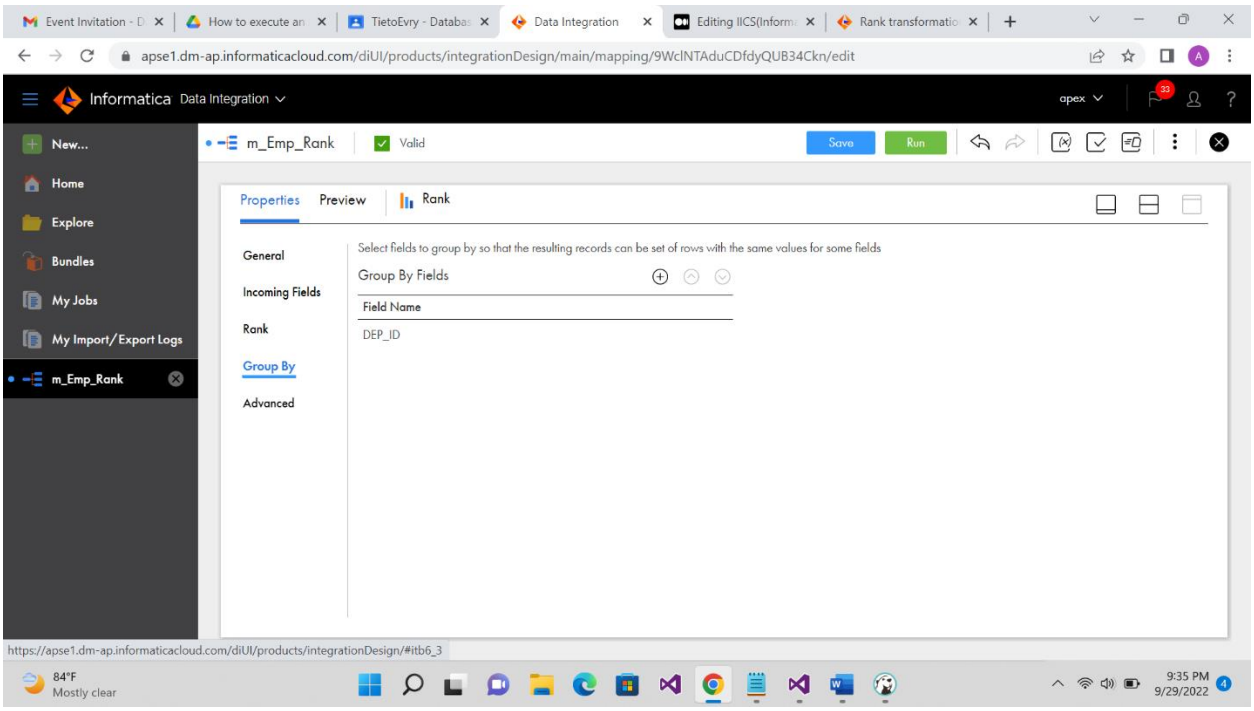
Rank Transformation







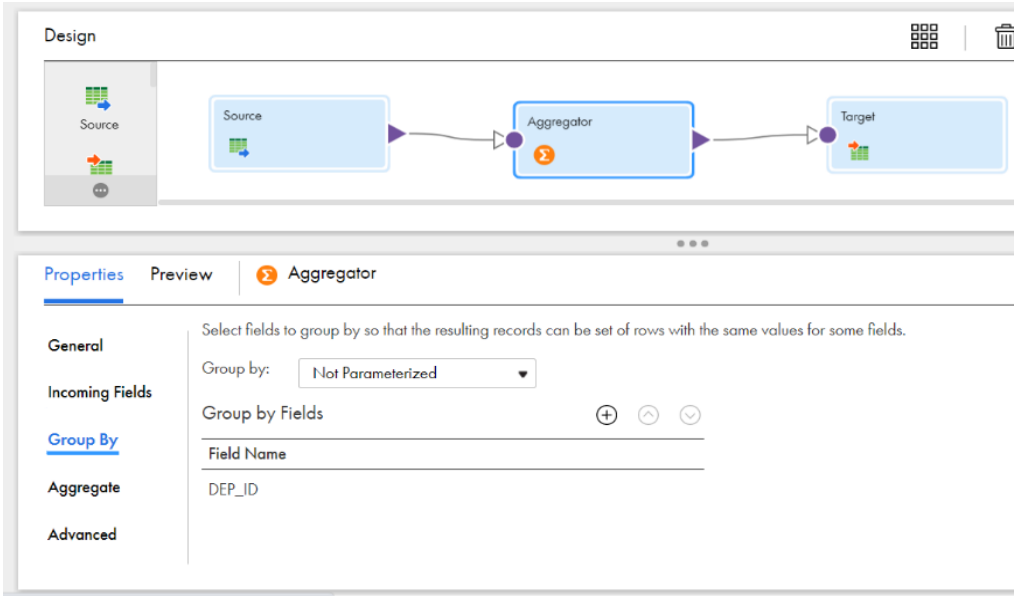

```
--Rank--
SELECT * from Emp_Rank
```

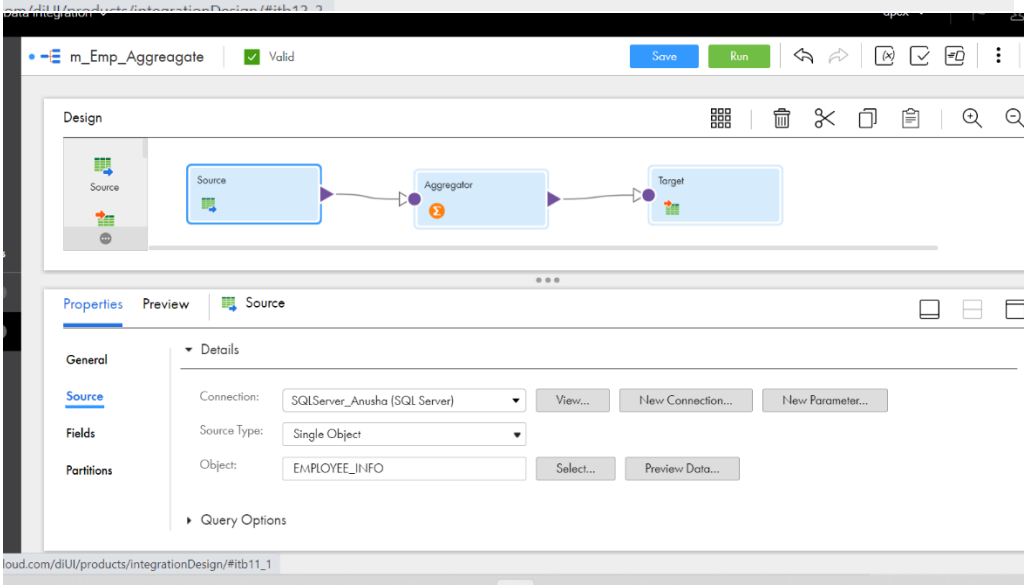
sults 1 | Results 2 | Results 4

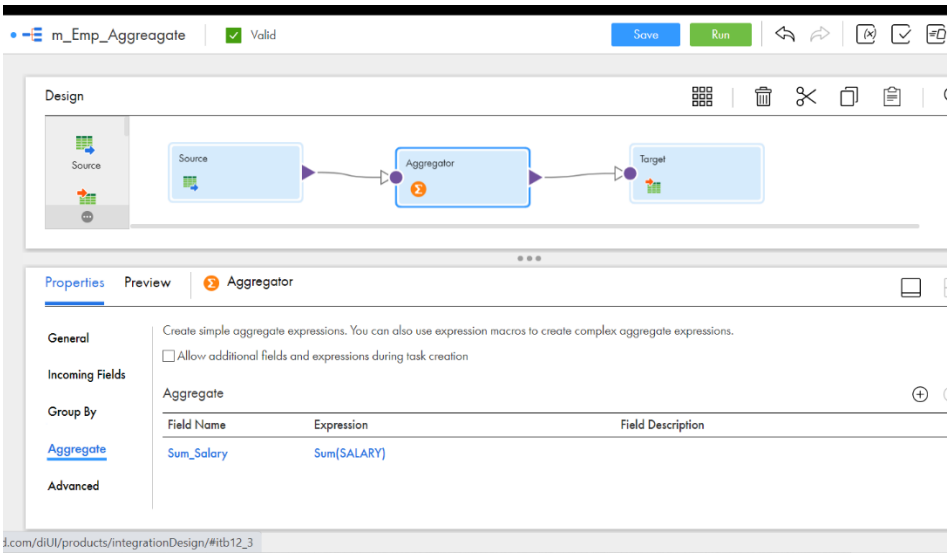
ELECT * from Emp_Rank | Enter a SQL expression to filter results (use Ctrl+Space)

	RANKINDEX	ID	NAME	SALARY	MANAGER_ID	DEP_ID
1	1	136	Hazel	2,200	122	50
2	2	132	TJ	2,100	121	50
3	1	100	Steven	24,000	[NULL]	90
4	2	101	Neena	17,000	100	90
5	1	108	Nancy	12,008	101	100
6	2	109	Daniel	9,000	108	100

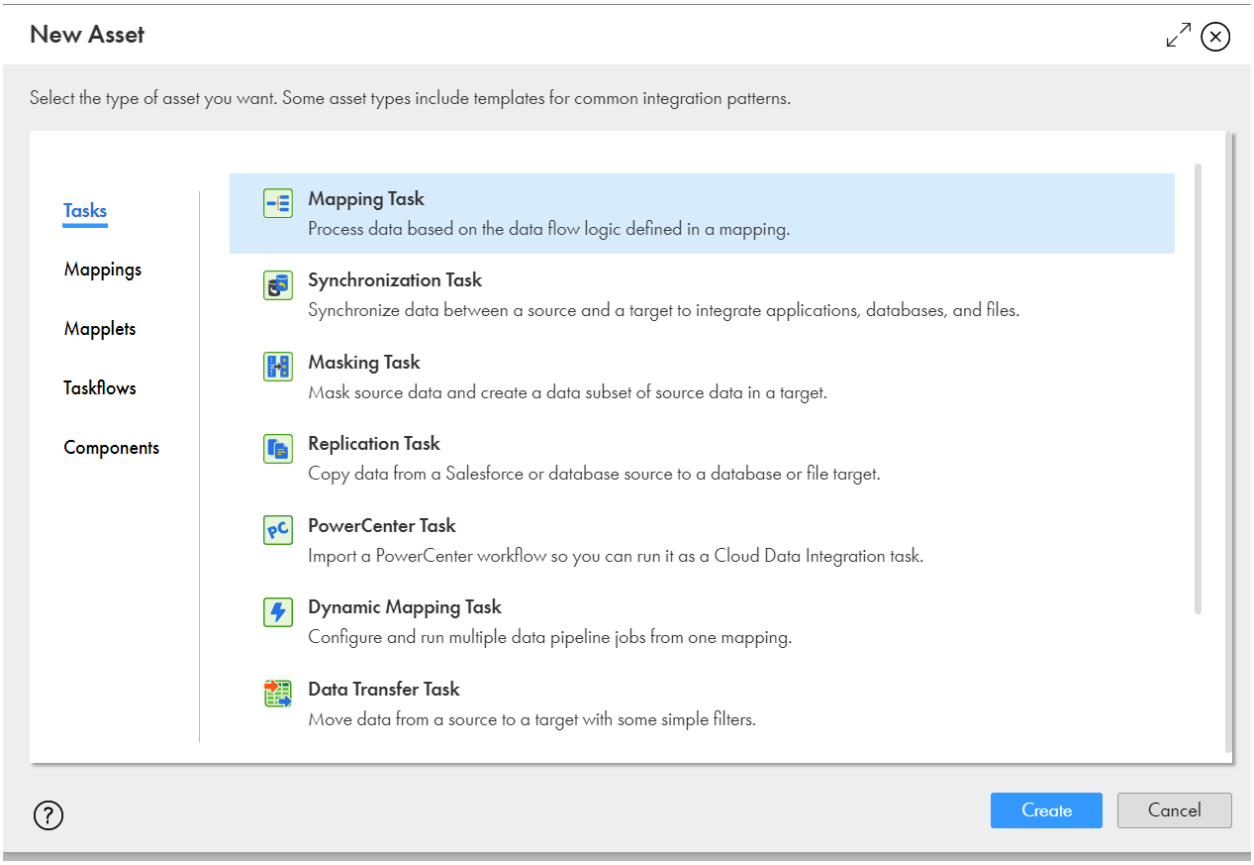
Aggregate Transformation



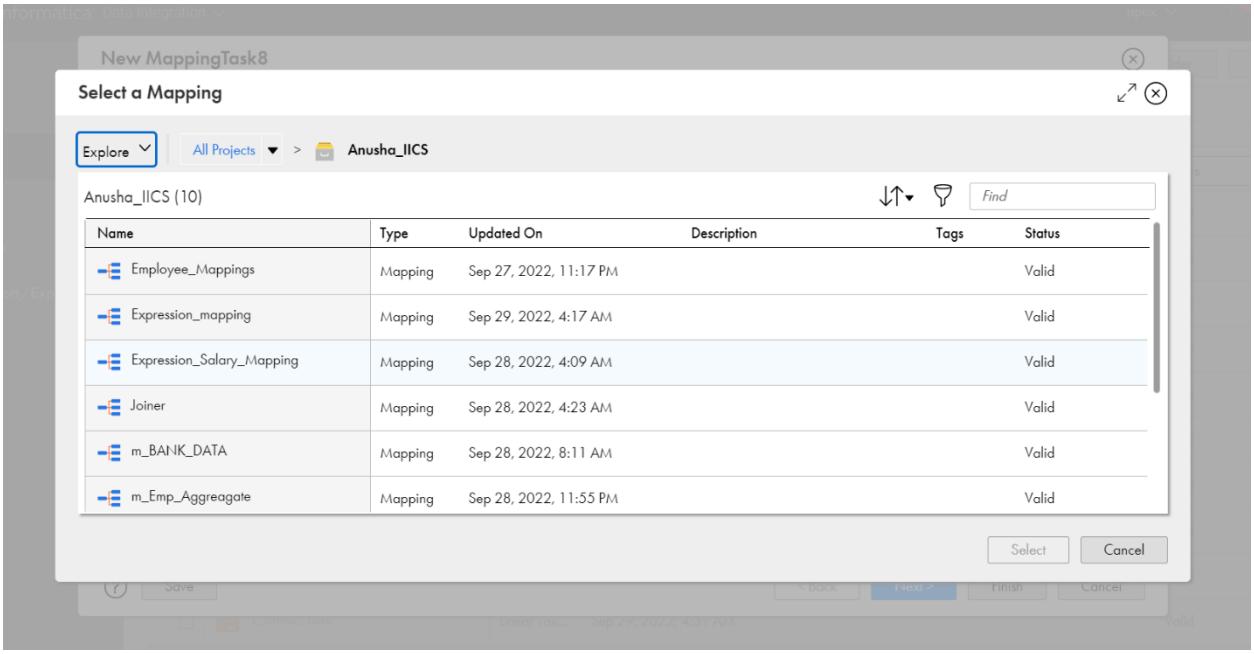




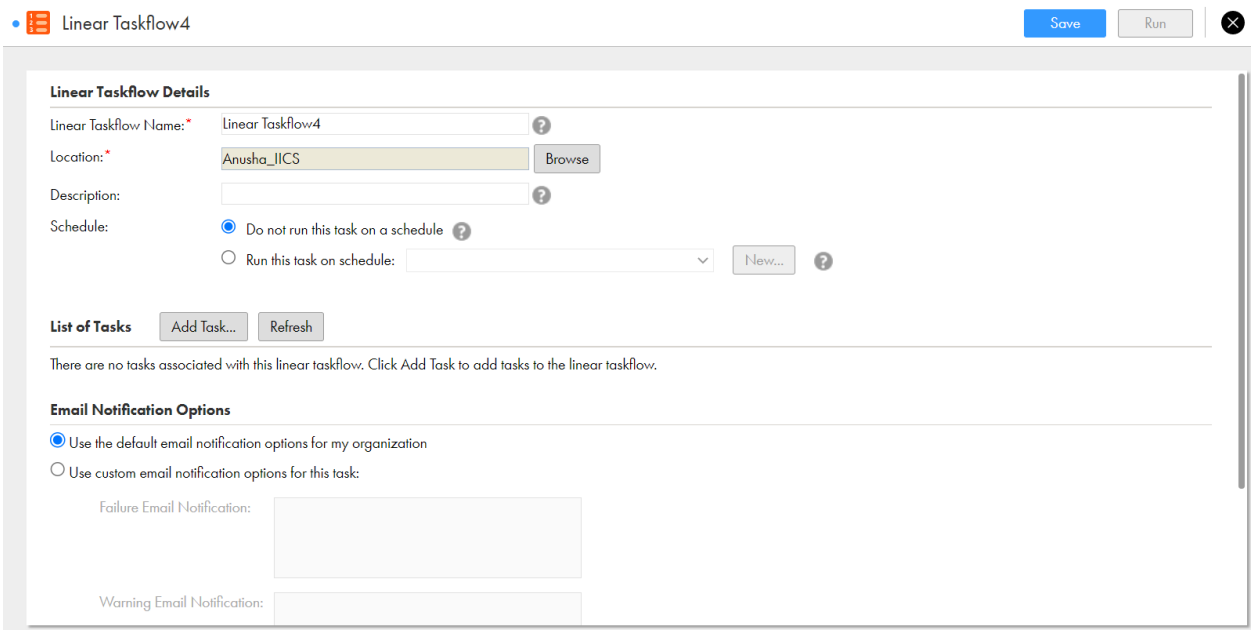
Tasks in IICS

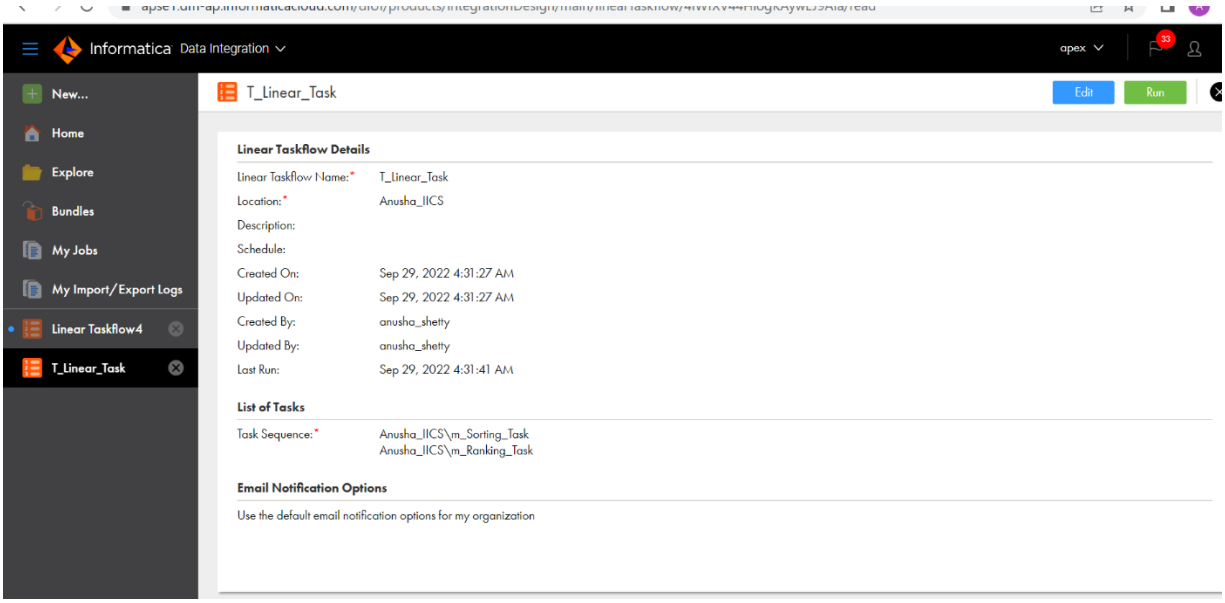


Mapping Task



Linear Taskflow





Started By: anusha_shetty through UI

Start Time: Sep 29, 2022 4:31:41 AM

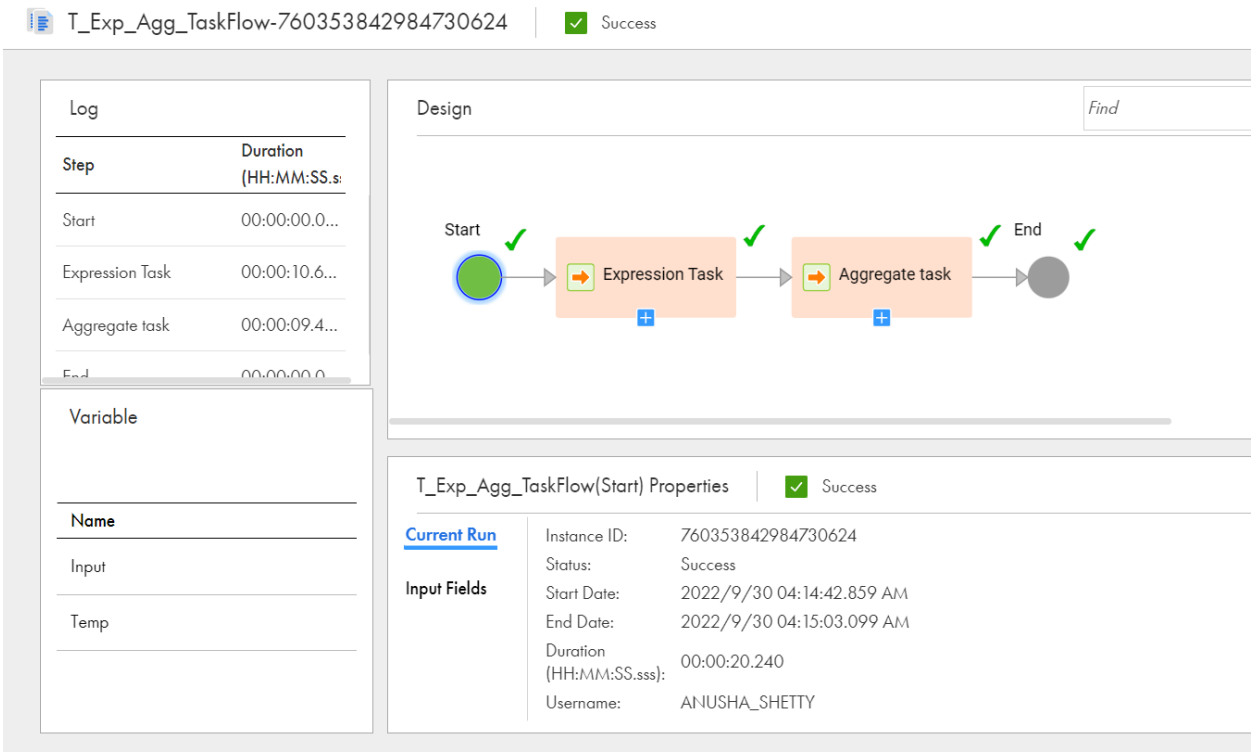
End Time: Sep 29, 2022 4:38:04 AM

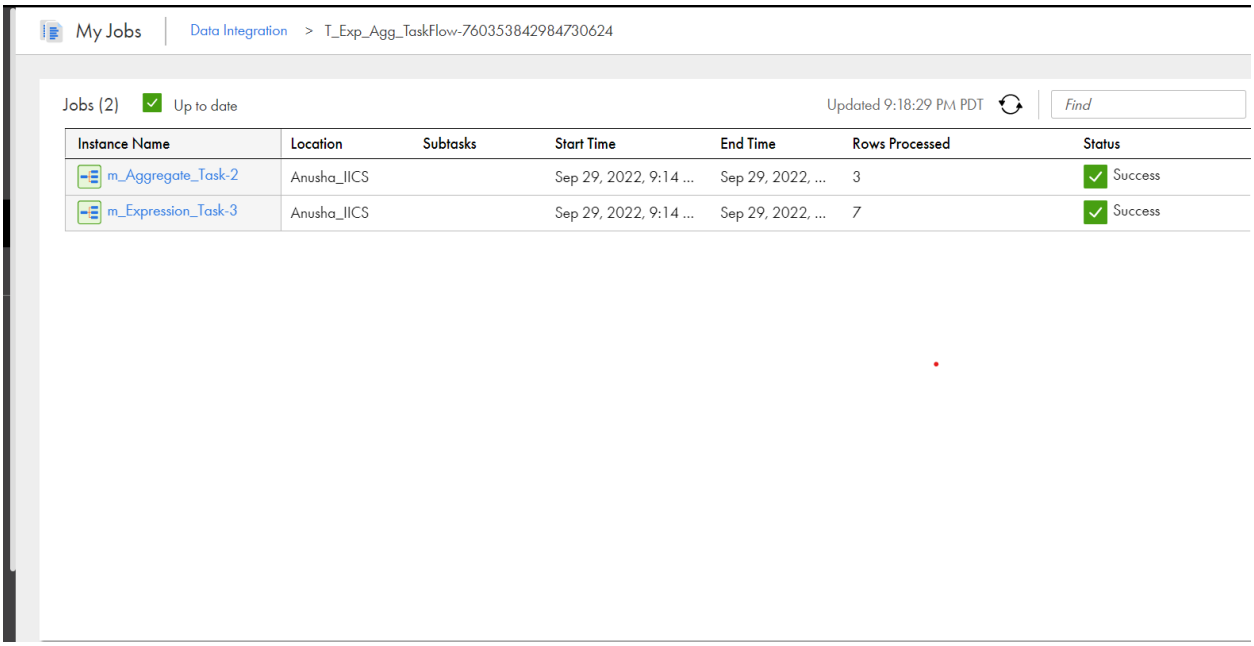
Duration: 6 minutes, 23 seconds

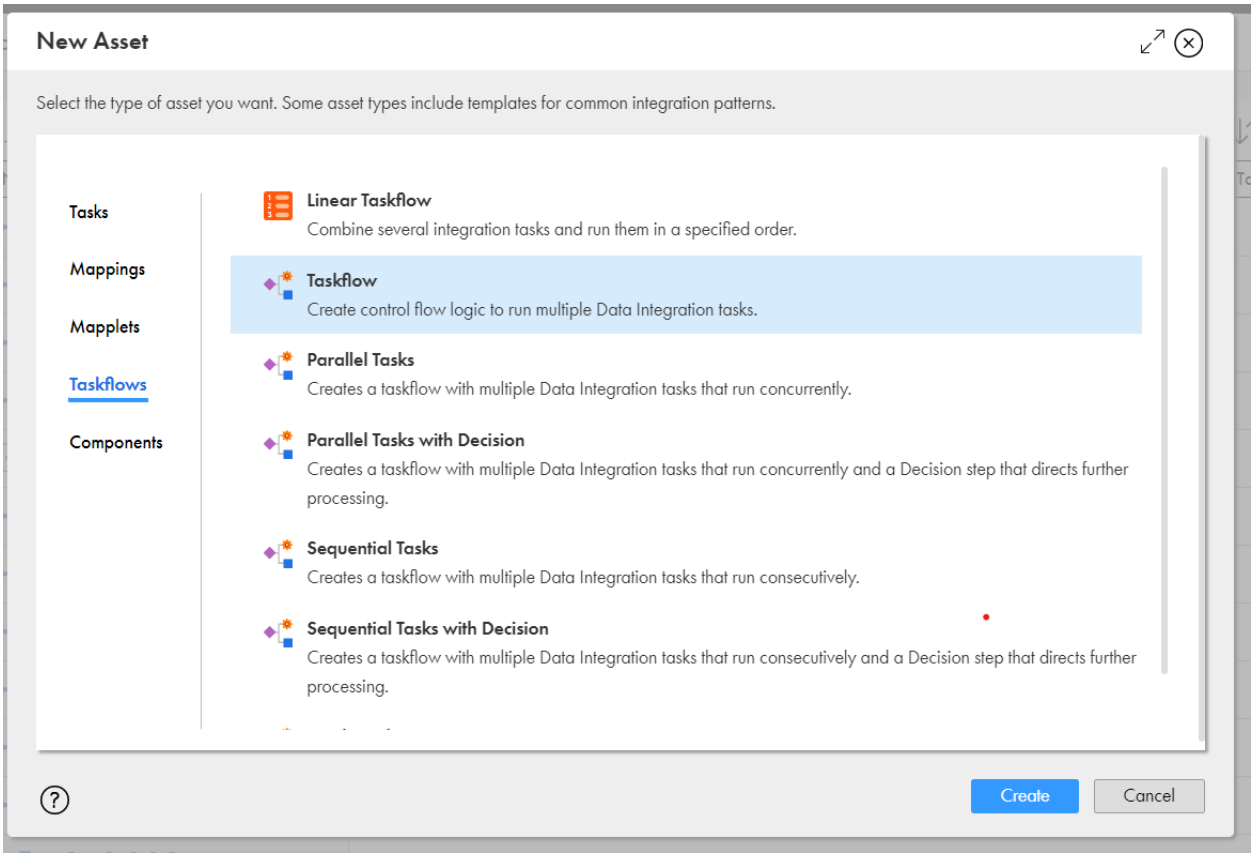
Individual Task Results

#	Task Name	End Time	Status	Success Rows	Errors	Error Message	Recommendation
1	m_Sorting_Task	Sep 29, 2022 4:33:32 AM	Success	107	0		
	Source			107	0		
	Sorting_Employee			107	0		
2	m_Ranking_Task	Sep 29, 2022 4:38:04 AM	Success	6	0		
	Employee_Info			14	0		
	Emp_Rank			6	0		

TaskFlow


T_Exp_Agg_TaskFlow-760353842984730624
Success
Log
Step
Duration (HH:MM:SS.s
Start
00:00:00.0...
Expression Task
00:00:10.6...
Aggregate task
00:00:09.4...
Design
Find
Start
Expression Task
Aggregate task
End
Variable
Name
Input
Temp
T_Exp_Agg_TaskFlow(Start) Properties
Success
Current Run
Input Fields
Instance ID: 760353842984730624
Status: Success
Start Date: 2022/9/30 04:14:42.859 AM
End Date: 2022/9/30 04:15:03.099 AM
Duration (HH:MM:SS.sss): 00:00:20.240
Username: ANUSHA_SHETTY


My Jobs
Data Integration > T_Exp_Agg_TaskFlow-760353842984730624
Jobs (2)
Up to date
Updated 9:18:29 PM PDT
Find
Instance Name
Location
Subtasks
Start Time
End Time
Rows Processed
Status
m_Aggregate_Task-2
Anusha_IICS
Sep 29, 2022, 9:14 ...
Sep 29, 2022, ...
3
Success
m_Expression_Task-3
Anusha_IICS
Sep 29, 2022, 9:14 ...
Sep 29, 2022, ...
7
Success


New Asset
Select the type of asset you want. Some asset types include templates for common integration patterns.
Tasks
Mappings
Mapplets
Taskflows
Components
Linear Taskflow
Combine several integration tasks and run them in a specified order.
Taskflow
Create control flow logic to run multiple Data Integration tasks.
Parallel Tasks
Creates a taskflow with multiple Data Integration tasks that run concurrently.
Parallel Tasks with Decision
Creates a taskflow with multiple Data Integration tasks that run concurrently and a Decision step that directs further processing.
Sequential Tasks
Creates a taskflow with multiple Data Integration tasks that run consecutively.
Sequential Tasks with Decision
Creates a taskflow with multiple Data Integration tasks that run consecutively and a Decision step that directs further processing.
Create
Cancel

SCD2

```sql
---Slowly changing dimension in IICS---
create table EMP_SCD
(
EMP_ID INT primary key,
EMP_NAME VARCHAR(50),
EMP_SALARY DECIMAL(8,2),
DEPT_ID INT
)

Insert into EMP_SCD values(100,'Jennifer',6000,10),
(101,'Micheal',8000,10)

CREATE TABLE Dim_Employees
(
Employee_Key int,
Employee_Id int,
Name varchar(50),
Salary decimal(8,2),
Department_id int,
Start_Date date,
End_Date date,
Checksum varchar(50)
)
```

Properties | Preview | exp_Checksum

General

Incoming Fields

Expression

Window

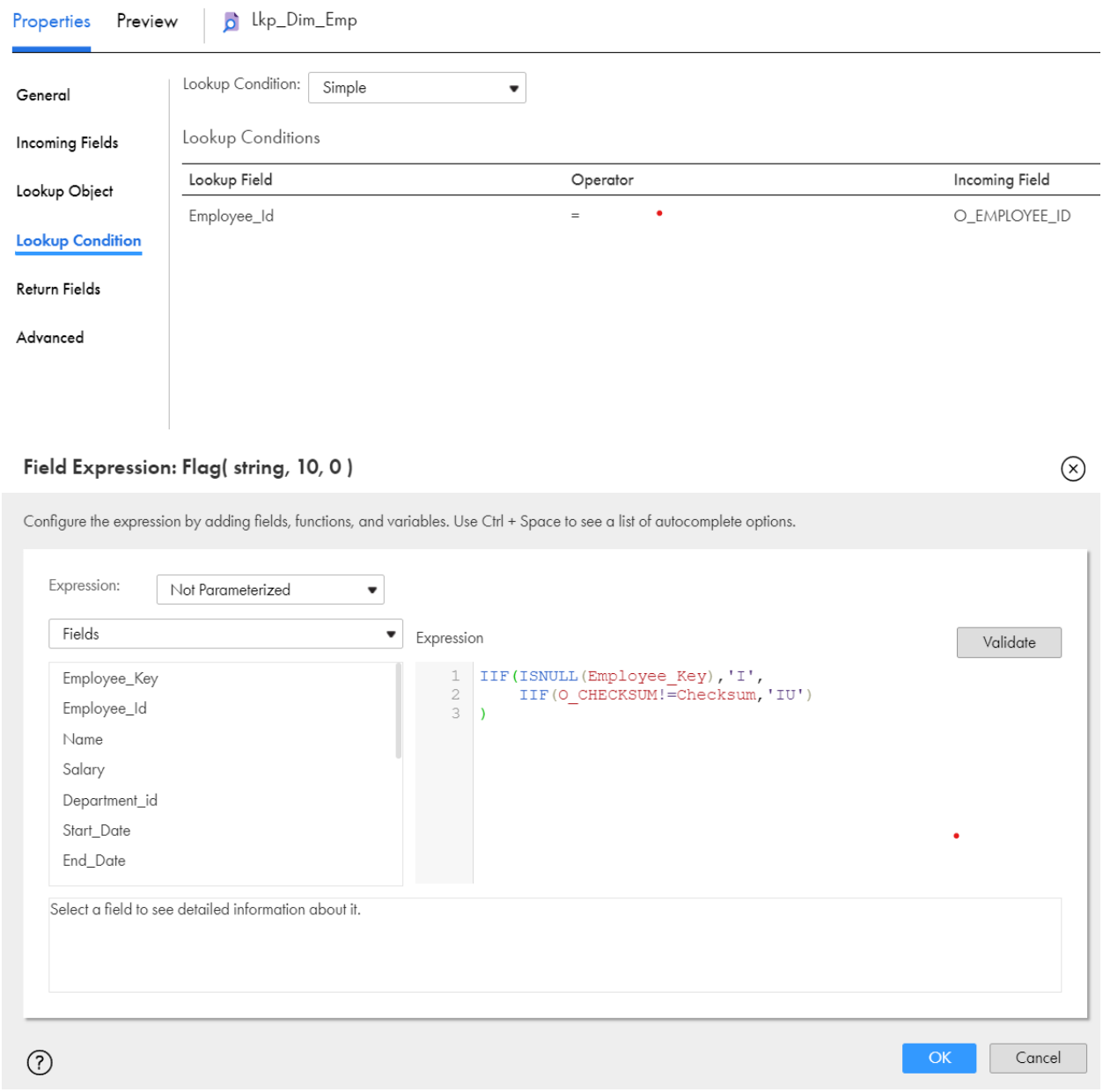
Advanced

Create simple expressions. You can also use expression macros to create complex expressions.

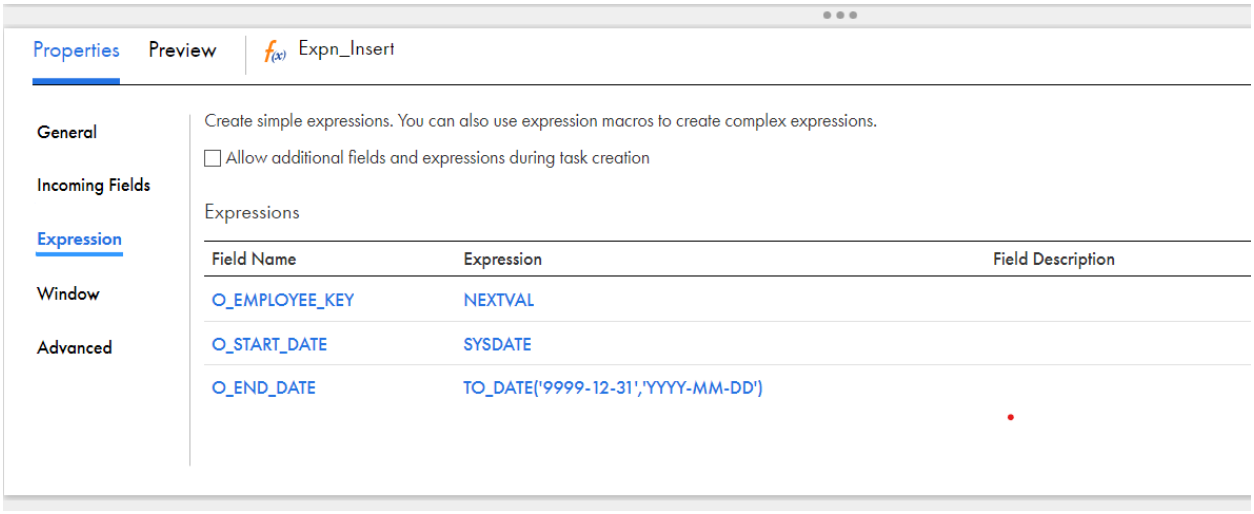
☐ Allow additional fields and expressions during task creation

Expressions

Field Name	Expression	Field Description
O_EMPLOYEE_ID	EMP_ID	
O_NAME	EMP_NAME	
O_SALARY	EMP_SALARY	
O_DEPARTMENT_ID	DEPT_ID	
O_CHECKSUM	MD5(EMP_ID||EMP_NAME||EMP_SALARY||DEPT_ID)	


Properties
Preview
Lkp_Dim_Emp
General
Incoming Fields
Lookup Object
Lookup Condition
Return Fields
Advanced
Lookup Condition: Simple
Lookup Conditions
Lookup Field
Operator
Incoming Field
Employee_Id
=
O_EMPLOYEE_ID

Field Expression: Flag(string, 10, 0)
Configure the expression by adding fields, functions, and variables. Use Ctrl + Space to see a list of autocomplete options.
Expression: Not Parameterized
Fields
Expression
Validate
Employee_Key
Employee_Id
Name
Salary
Department_id
Start_Date
End_Date
1 IIF(ISNULL(Employee_Key),'I',
2 IIF(O_CHECKSUM!=Checksum,'IU')
3)
Select a field to see detailed information about it.
OK
Cancel




```sql
CREATE TABLE Dim_Employees
(
Employee_Key int,
Employee_Id int,
Name varchar(50),
Salary decimal(8,2),
Department_id int,
Start_Date date,
End_Date date,
Checksum varchar(50)
)
```

Results 1

```
select * from Dim_Employees
```

Enter a SQL expression to filter results (use Ctrl+Space)

	Employee_Key	Employee_Id	Name	Salary	Department_id	Start_Date	End_Date	Checksum
1	1	100	Jennifer	6,000	10	2022-10-01	9999-12-31	C415847A64B48
2	2	101	Micheal	8,000	10	2022-10-01	9999-12-31	C26B6519FA4B0

Save Cancel Script 200 2 Rows: 0 2 row(s) fetched - 276ms. on 2022-10-01 at 08:56:12

```
update EMP_SCD set EMP_SALARY =10000 where emp_id=100
```

Results 1 | Statistics 2 | Results 3

```
select * from EMP_SCD es
```

Enter a SQL expression to filter results (use Ctrl+Space)

	EMP_ID	EMP_NAME	EMP_SALARY	DEPT_ID
1	100	Jennifer	10,000	10
2	101	Micheal	8,000	10

```
----After running mappping in IICS----
SELECT * from Dim_Employees de
```

Results 1 | Statistics 2 | Results 3 | Results 4

```
SELECT * from Dim_Employees de
```

Enter a SQL expression to filter results (use Ctrl+Space)

	Employee_Key	Employee_Id	Name	Salary	Department_id	Start_Date	End_Date	Checksum
1	1	100	Jennifer	6,000	10	2022-10-01	2022-10-01	C415847A64B48A35B0410DE6E848890D
2	2	101	Micheal	8,000	10	2022-10-01	9999-12-31	C26B6519FA4B0A3436478B70A8EC6200
3	1	100	Jennifer	10,000	10	2022-10-01	9999-12-31	F685A99813B1A98E809EC1487DF82563

Union Transformation

```
---Union---

select * from student
```

ults 12 ×

ct * from student | Enter a SQL expression to filter results (use Ctrl+Space)

STUD_ID	STUD_NAME	STUD_DOB	SUB_ID
2,001	JOHN	2001-01-15	1
2,002	RITHA	2000-05-13	2
2,003	RAMYA	2000-06-20	1
2,004	RICHARD	1999-06-22	3
2,005	MARY	1999-02-19	4
2,006	MILLY	2000-07-09	6

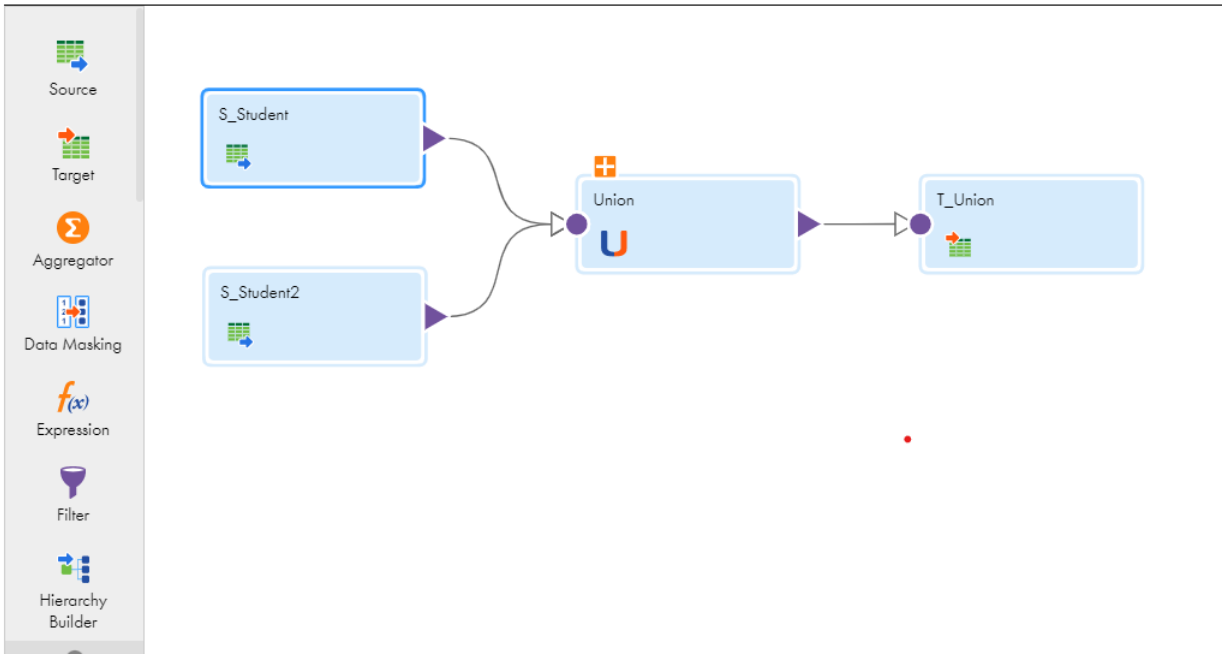
```
---Union---

select * from student2
```

esults 12 | Results 2 ×

elect * from student2 | Enter a SQL expression to filter results (use Ctrl+Space)

	STUD_ID	STUD_NAME	STUD_DOB	SUB_ID
1	2,001	JOHN	2001-01-15	1
2	2,002	RITHA	2000-05-13	2
3	2,003	RAMYA	2000-06-20	1
4	2,004	RICHARD	1999-06-22	3
5	2,005	MARY	1999-02-19	4
6	2,006	MILLY	2000-07-09	6

Design



Properties | Preview | Union

General
Incoming Fields
Output Fields
Field Mapping
Advanced

Stud1

Include	All Fields	All Fields | Rename...

Stud2

Include	All Fields	All Fields | Rename...

Included Fields | Excluded Fields

Field Name	Type	Precision	Scale	Origin
Stud1 (4)				
STUD_DOB	date/time	29	9	STUDENT2
STUD_ID	integer	10	0	STUDENT2
STUD_NAME	string	20	0	STUDENT2
SUB_ID	integer	10	0	STUDENT2
Stud2 (4)				
STUD_DOB	date/time	29	9	STUDENT
STUD_ID	integer	10	0	STUDENT
STUD_NAME	string	20	0	STUDENT
SUB_ID	integer	10	0	STUDENT