DATA WAREHOUSING AND BUSINESS INTELLIGENCE – MIDTERM PROJECT (SPRING 2018)

TEAM 4

Schema – adventureworks2016_us

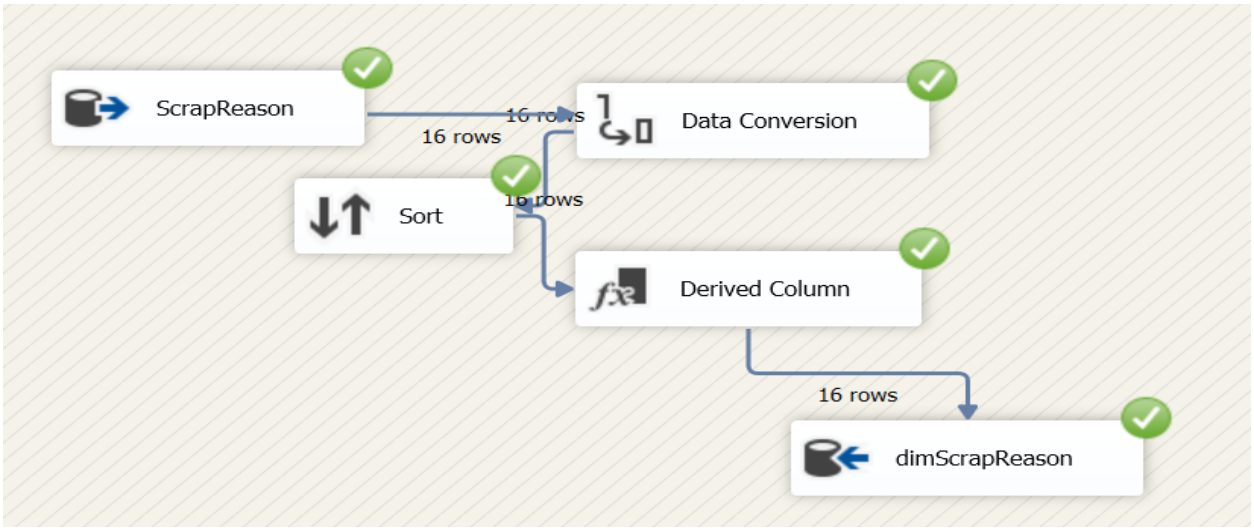
List of Tables and counts:

DimDate	3652 rows
DimEmployee	284 rows
DimGeography	402 rows
DimLocation	14 rows
DimProducts_Purchased	265 rows
DimProductsAll	504 rows
DimProductVendor	460 rows
DimSalesTerritory	5 rows
DimScrapReason	16 rows
DimShipMethod	5 rows
DimStore	427 rows
DimVendorContacts	156 rows
DimVendors	104 rows
Fact_WorkOrder	71856 rows
Fact_WorkOrder_Rejects	735 rows
Fact_WorkOrderRouting	66748 rows
Fact_WorkOrderRouting_Rejects	383 rows
FactPurchases	9578 rows
FactPurchases_Rejects	152 rows

SSIS Control Flow:

SSIS Jobs:

DimScrapReasons



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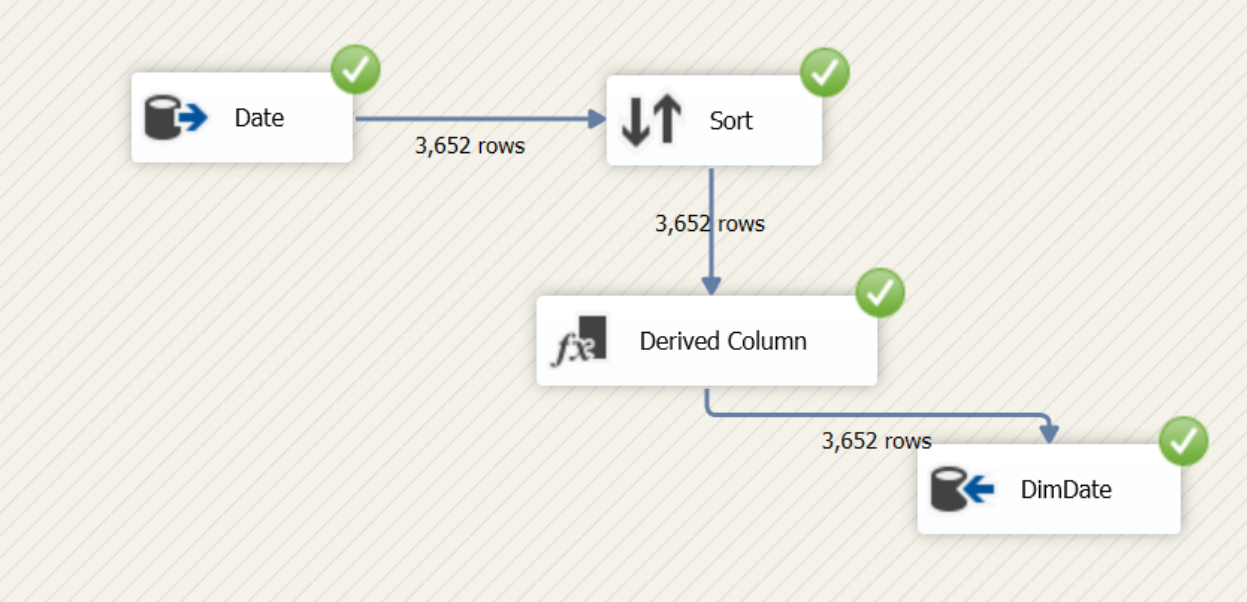
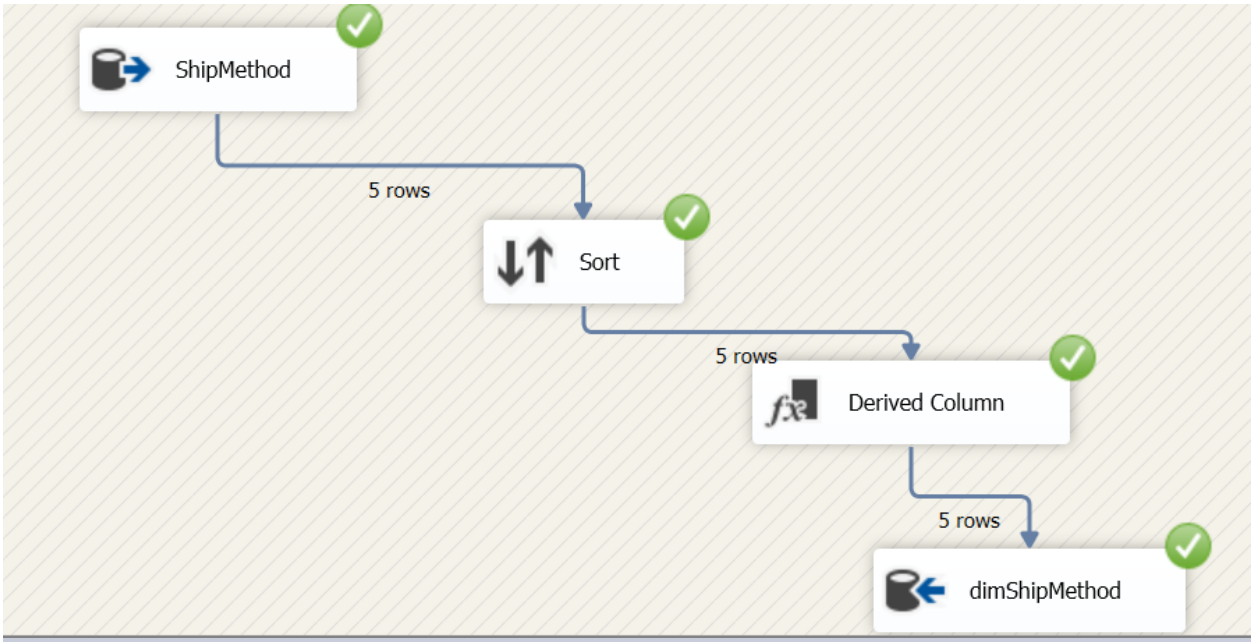
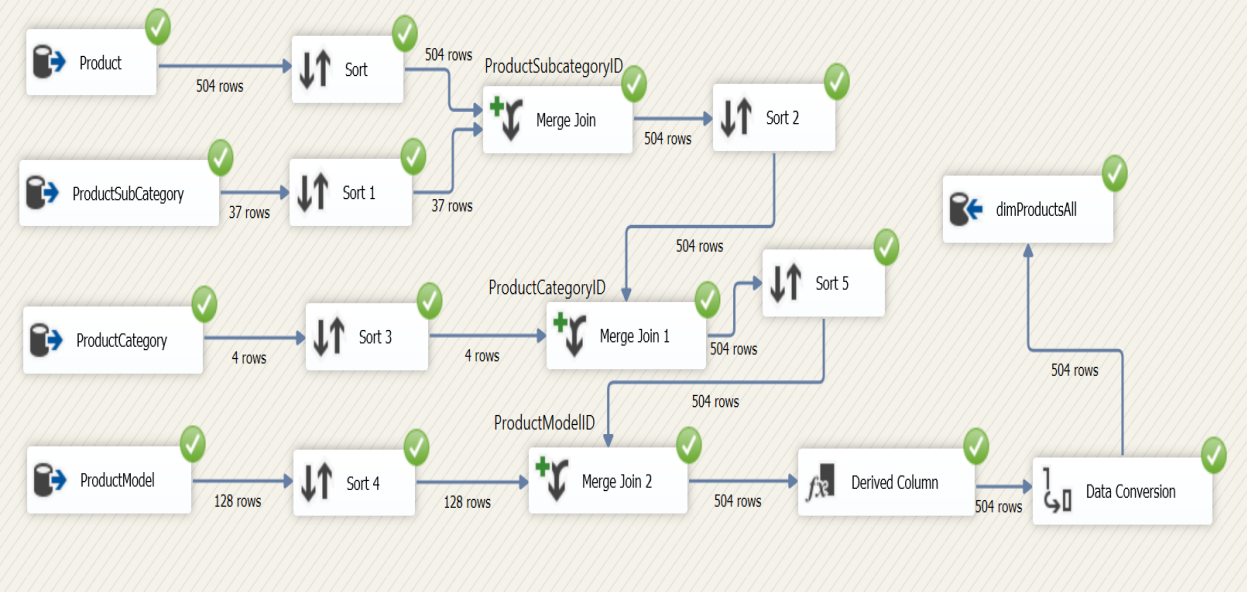


DimShipMethod:



DimProductsAll:



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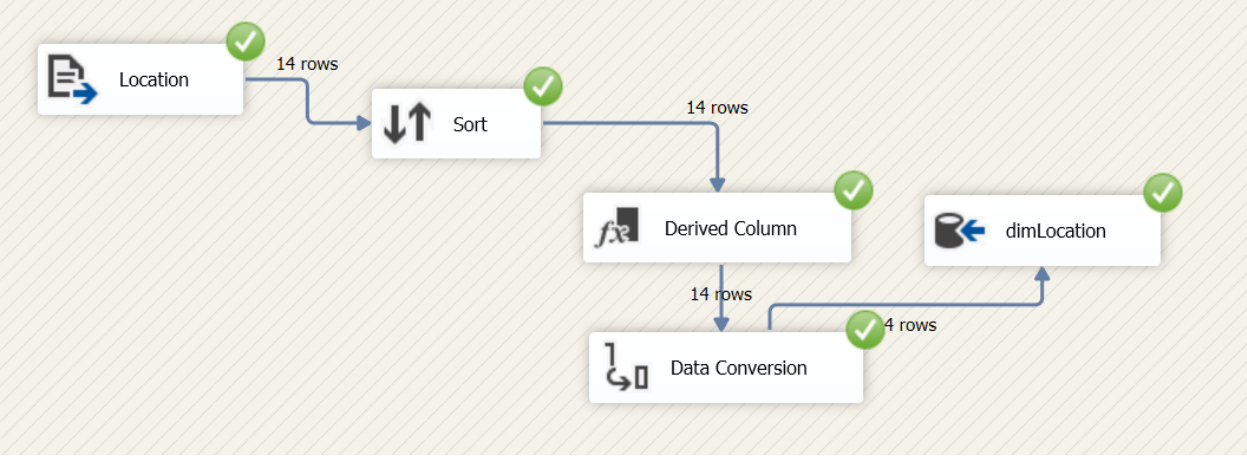

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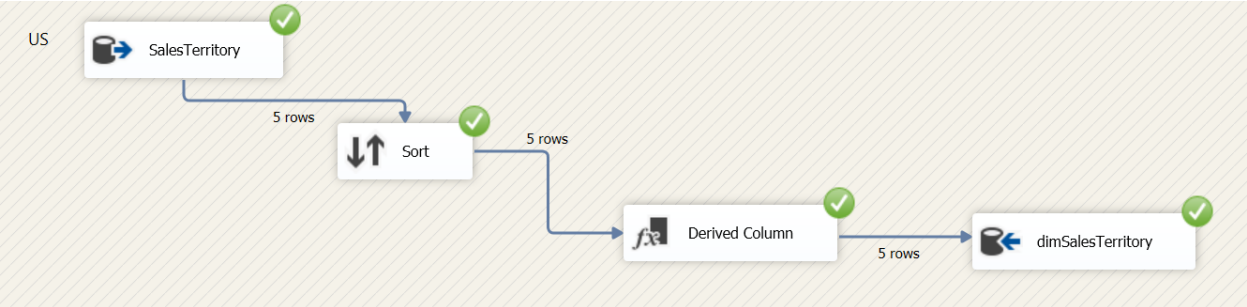

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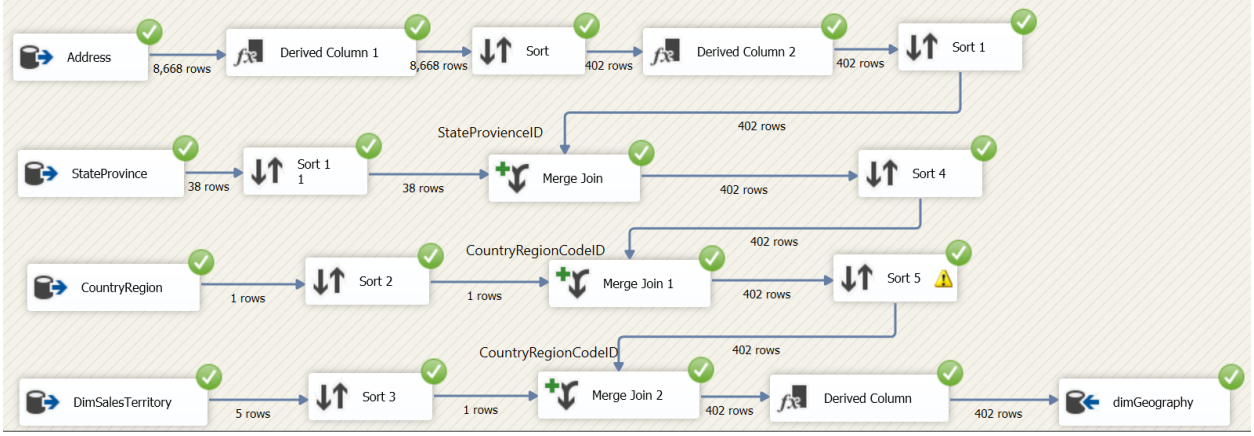

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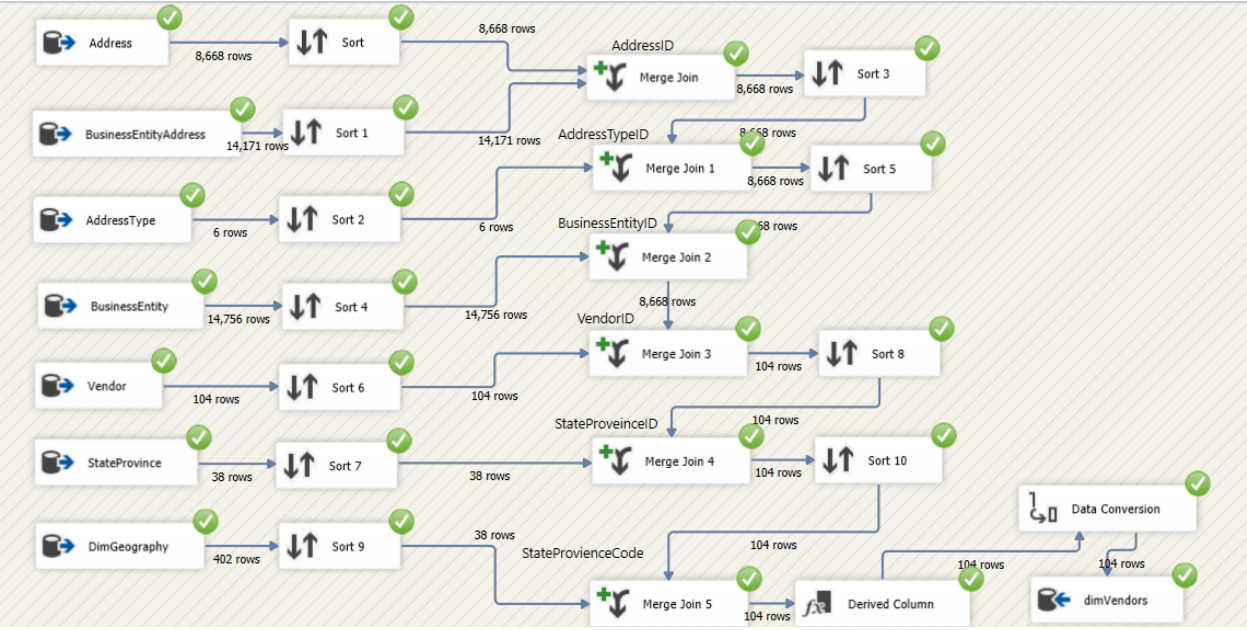

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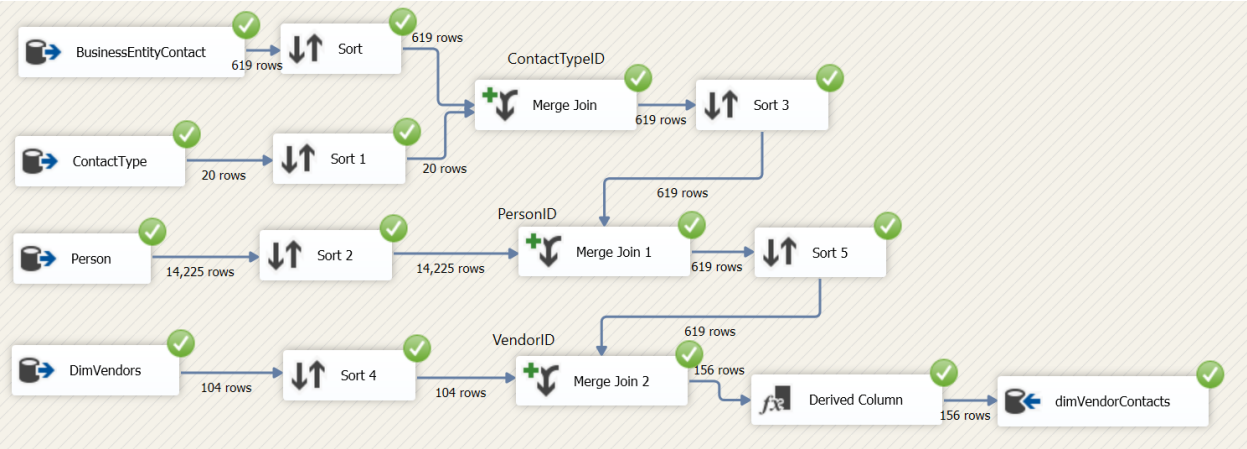

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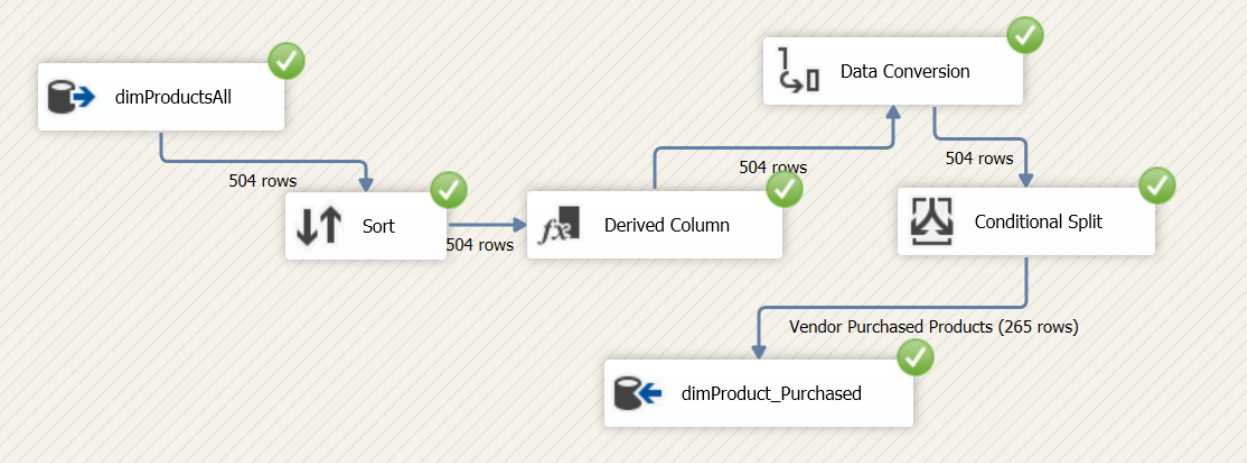
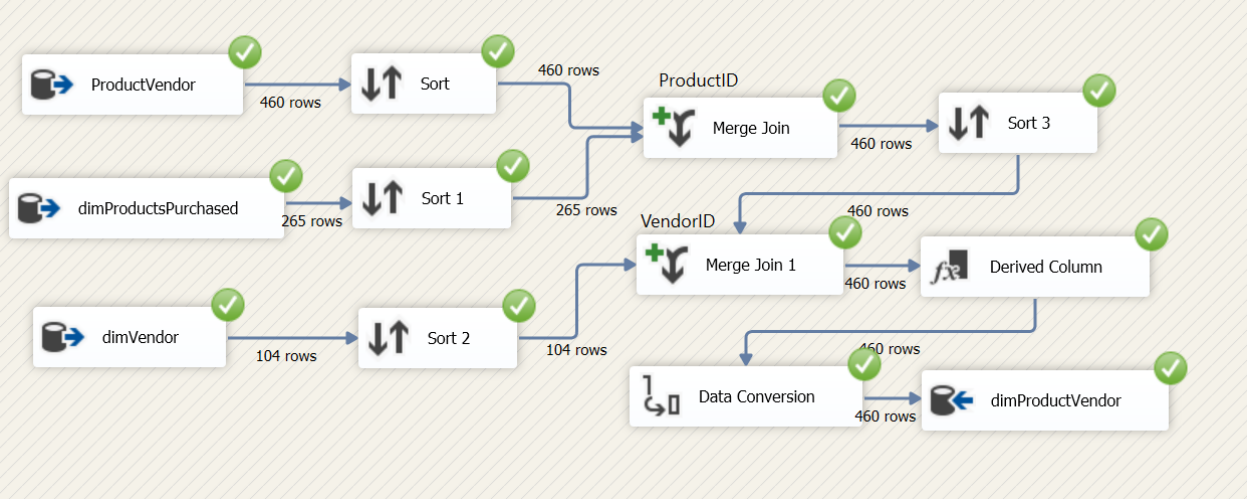


DimProductVendor



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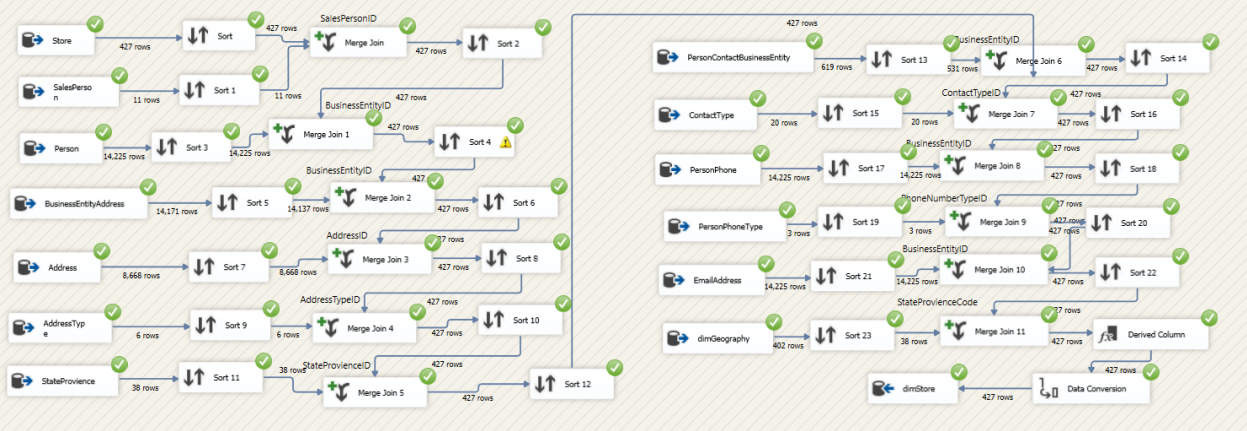

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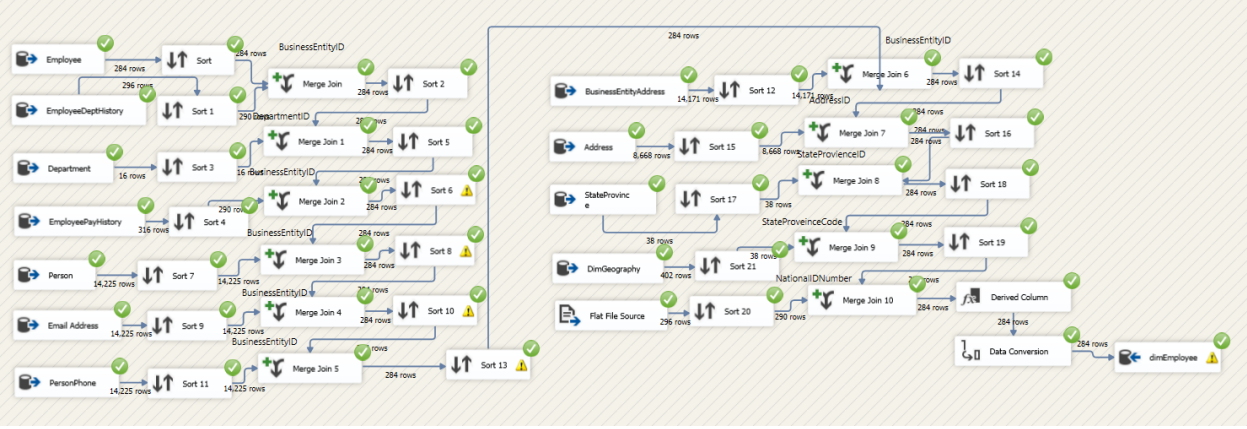
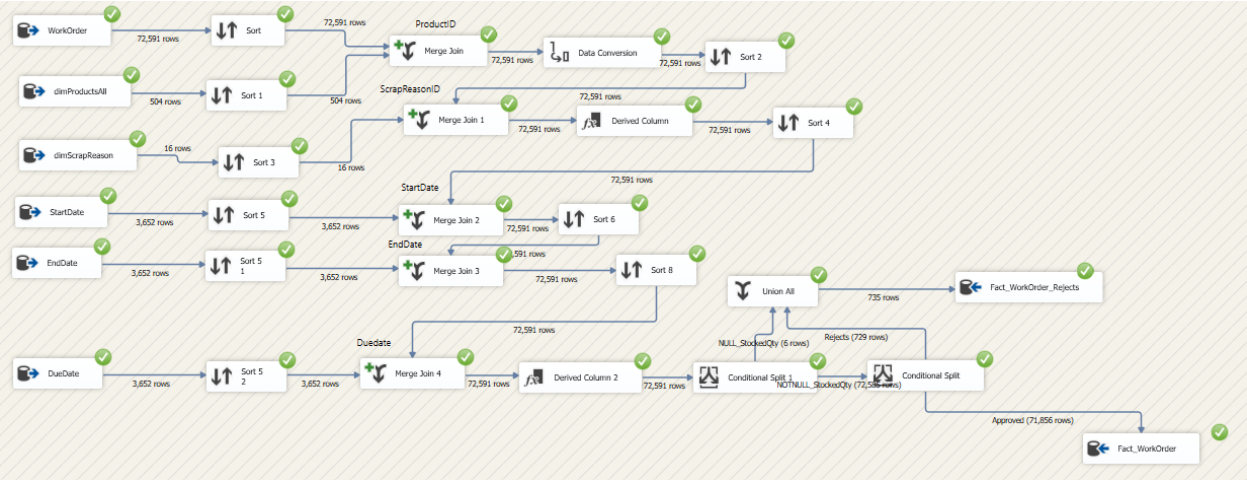


Fact_WorkOrder and Fact_WorkOrder_Rejects:



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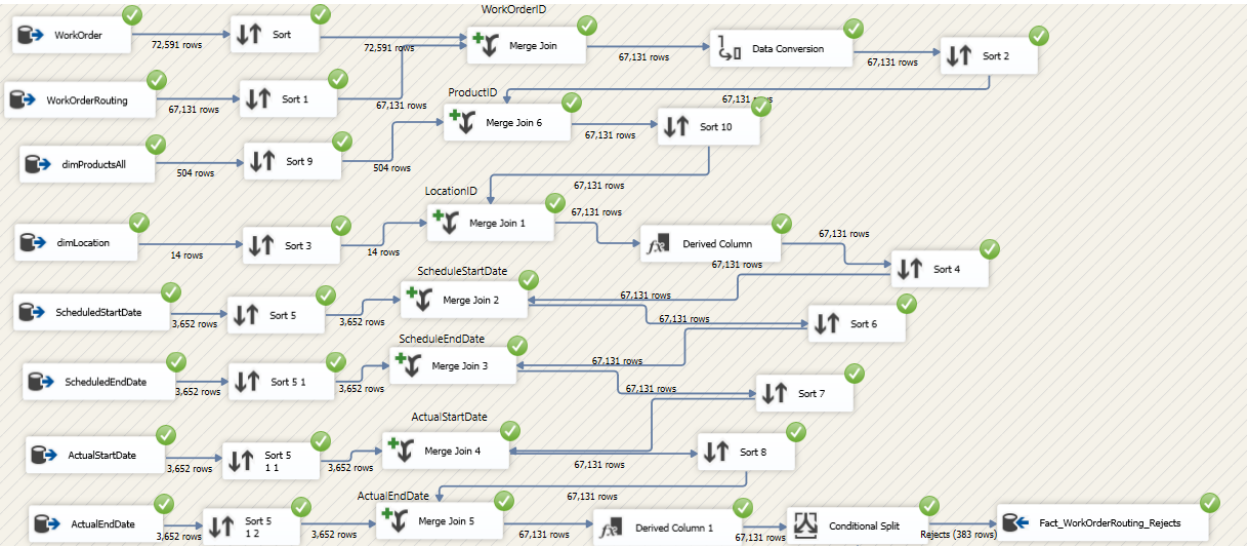
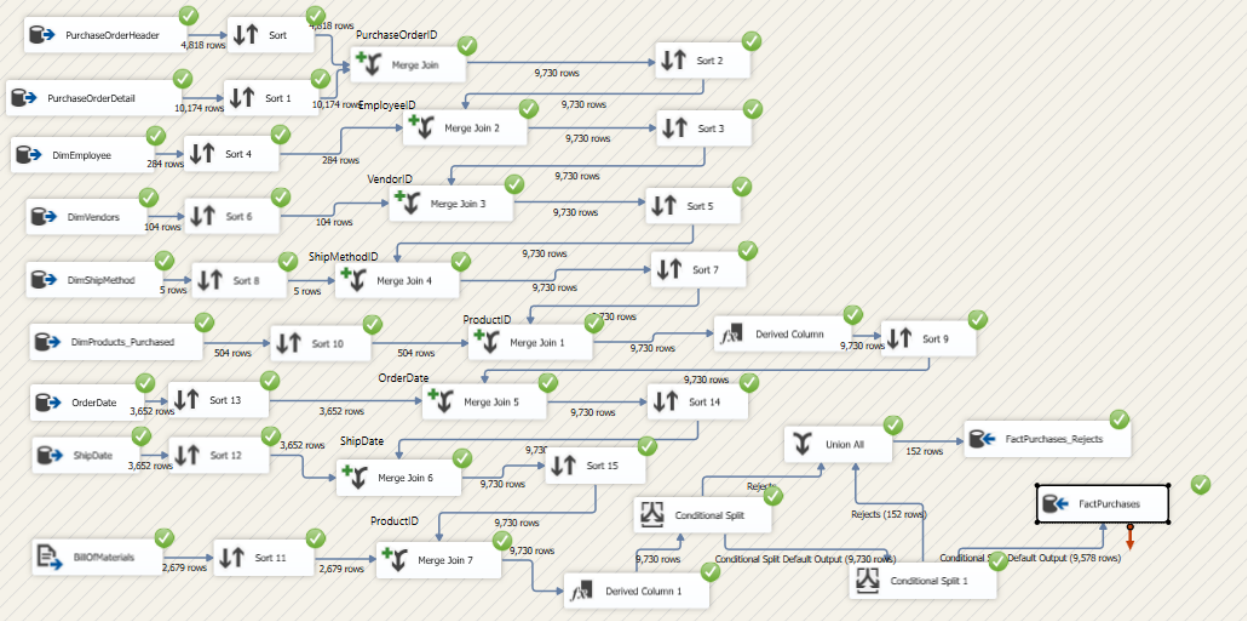
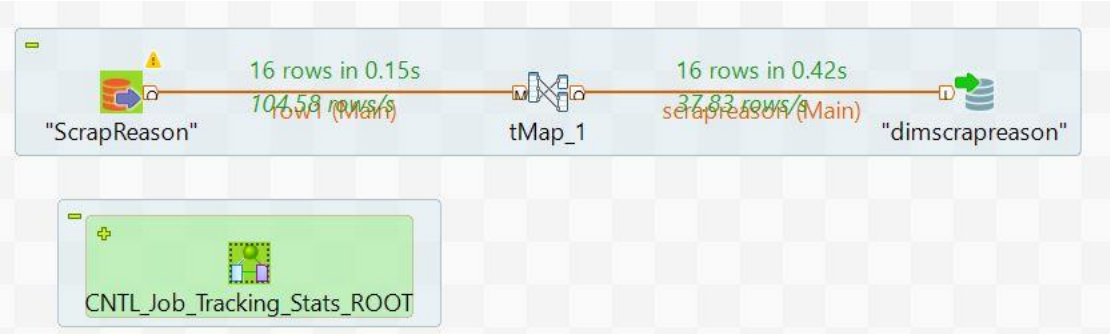


FactPurchases and FactPurchases_Rejects:



Talend Jobs:

DimScrapReason:



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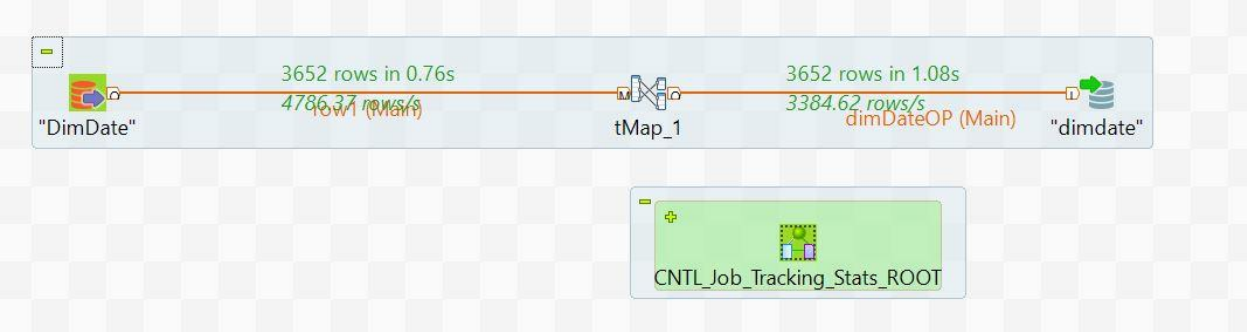

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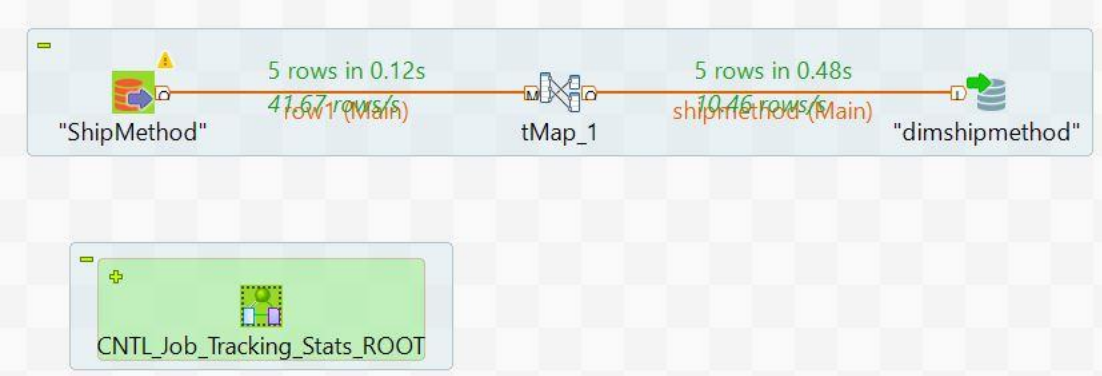

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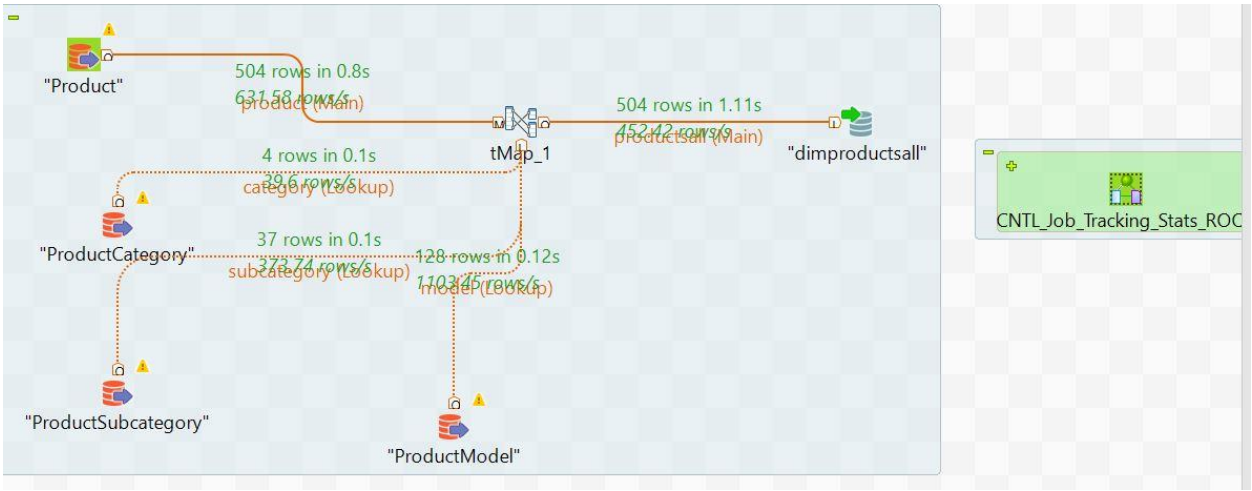
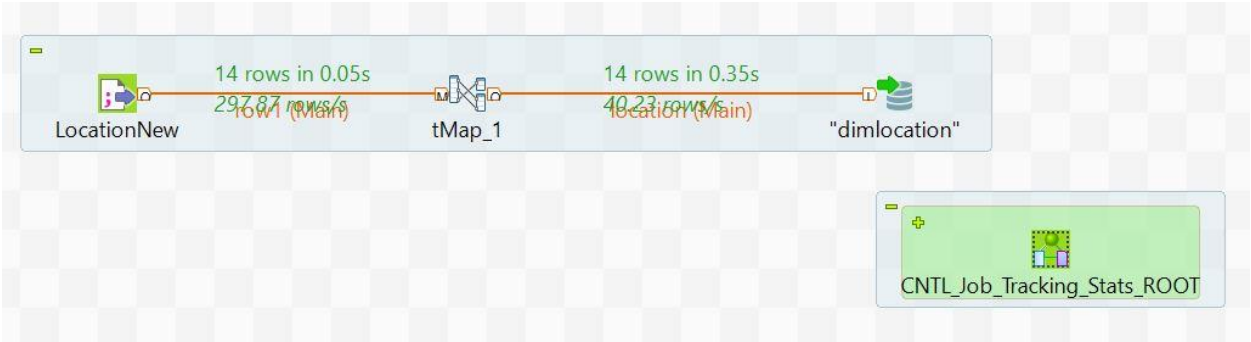
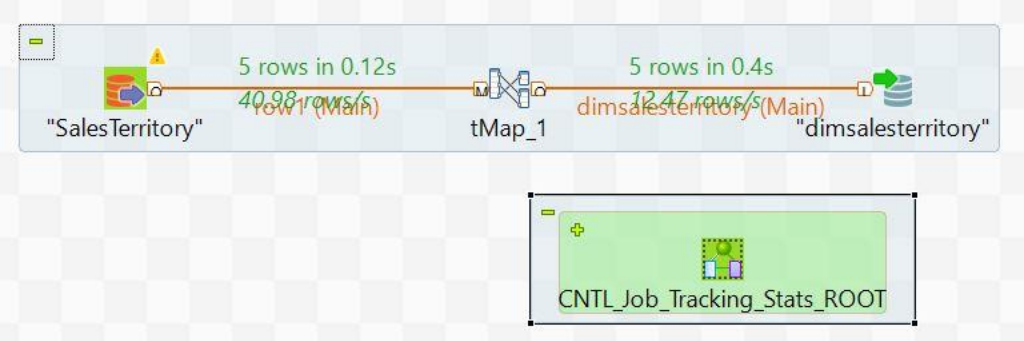


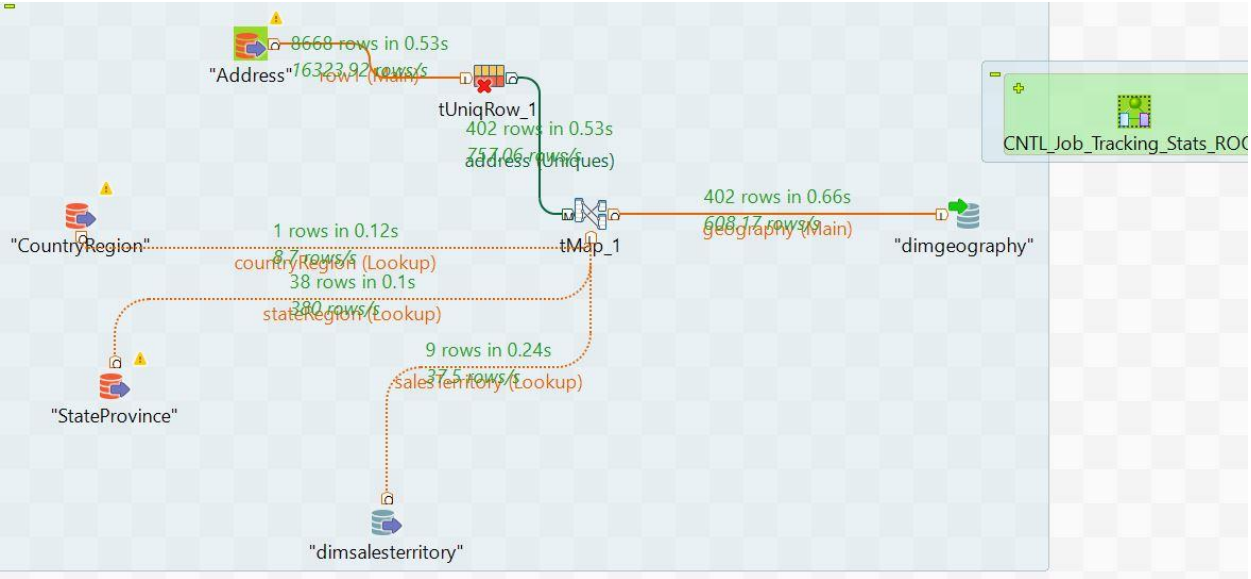
DimLocation:



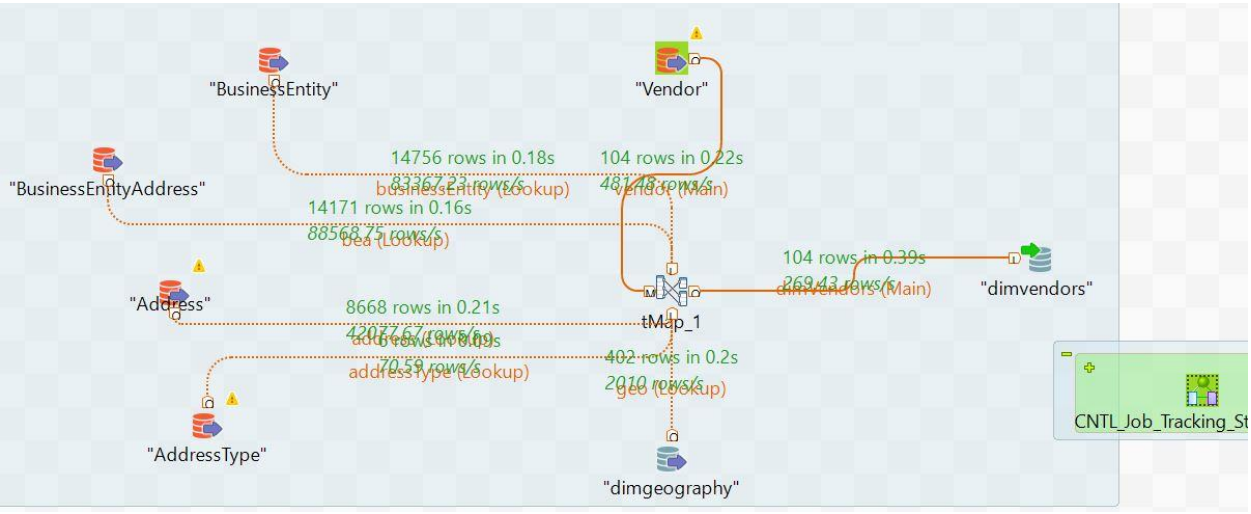
DimSalesTerritory:



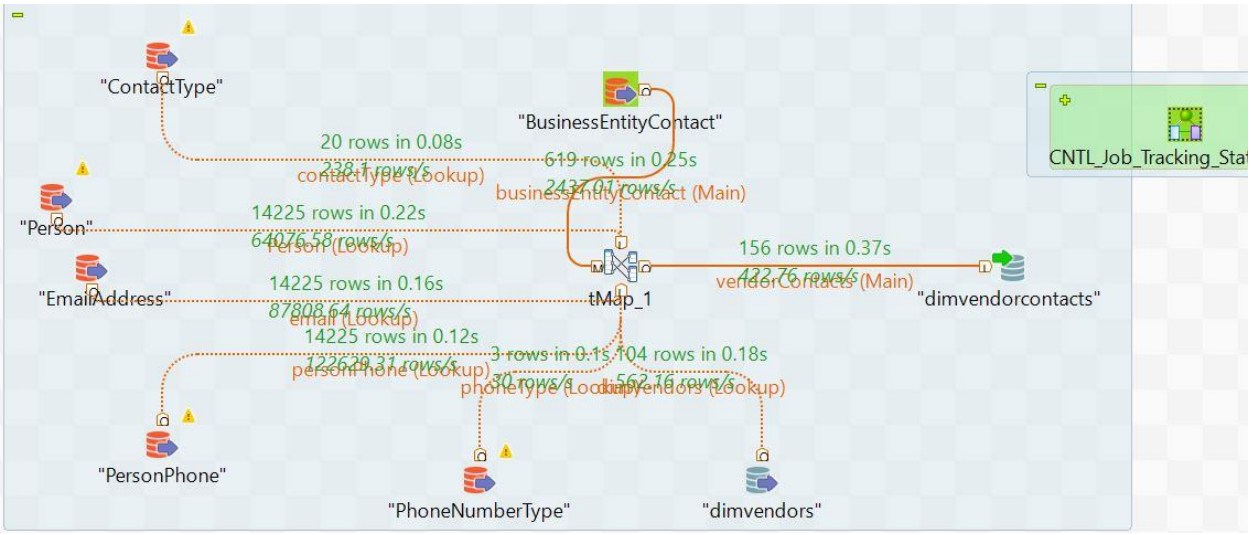
DimGeography:



DimVendor:



DimVendorContacts:



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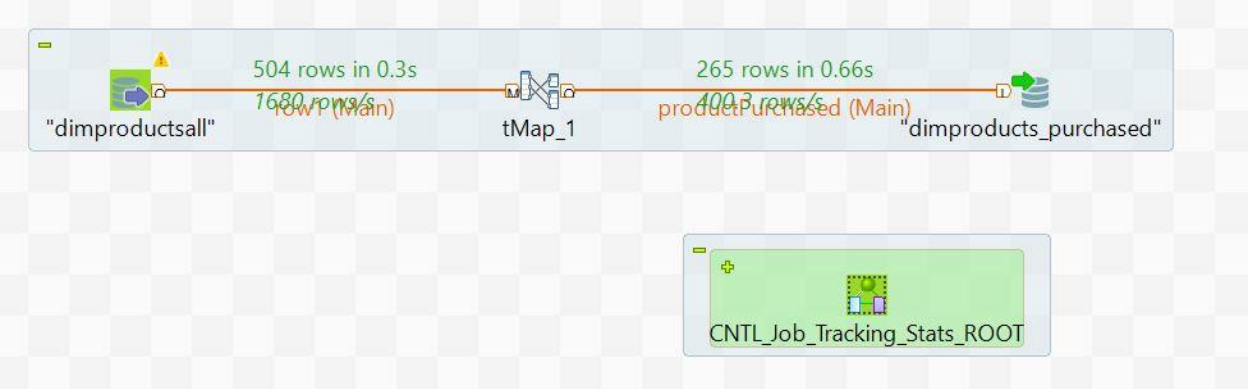

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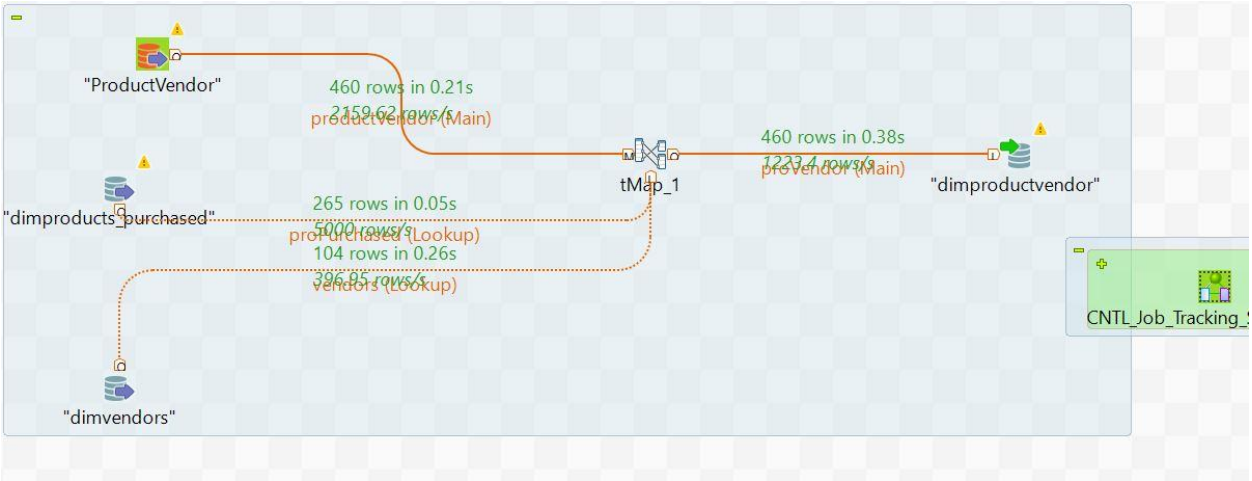

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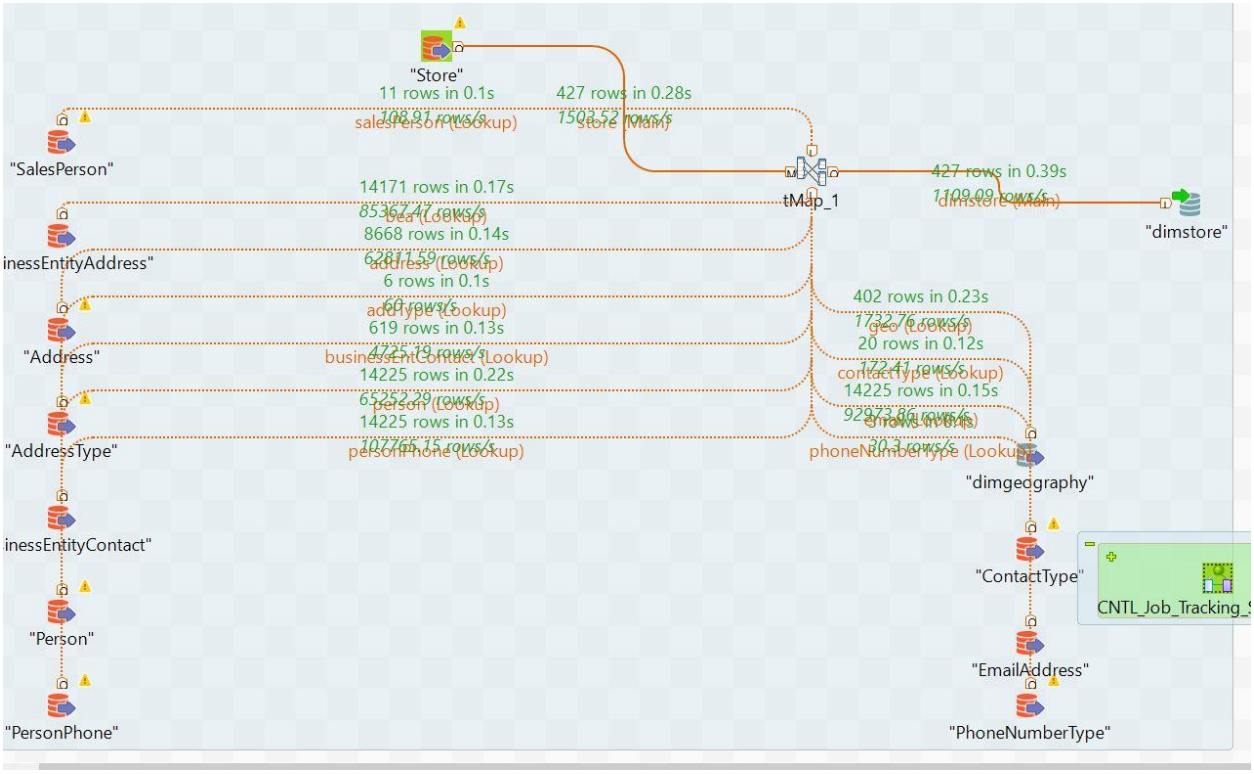
"Store"
11 rows in 0.1s
427 rows in 0.28s
"SalesPerson"
tMap_1
427 rows in 0.39s
"dimstore"
14171 rows in 0.17s
8668 rows in 0.14s
6 rows in 0.1s
619 rows in 0.13s
14225 rows in 0.22s
14225 rows in 0.13s
402 rows in 0.23s
20 rows in 0.12s
14225 rows in 0.15s
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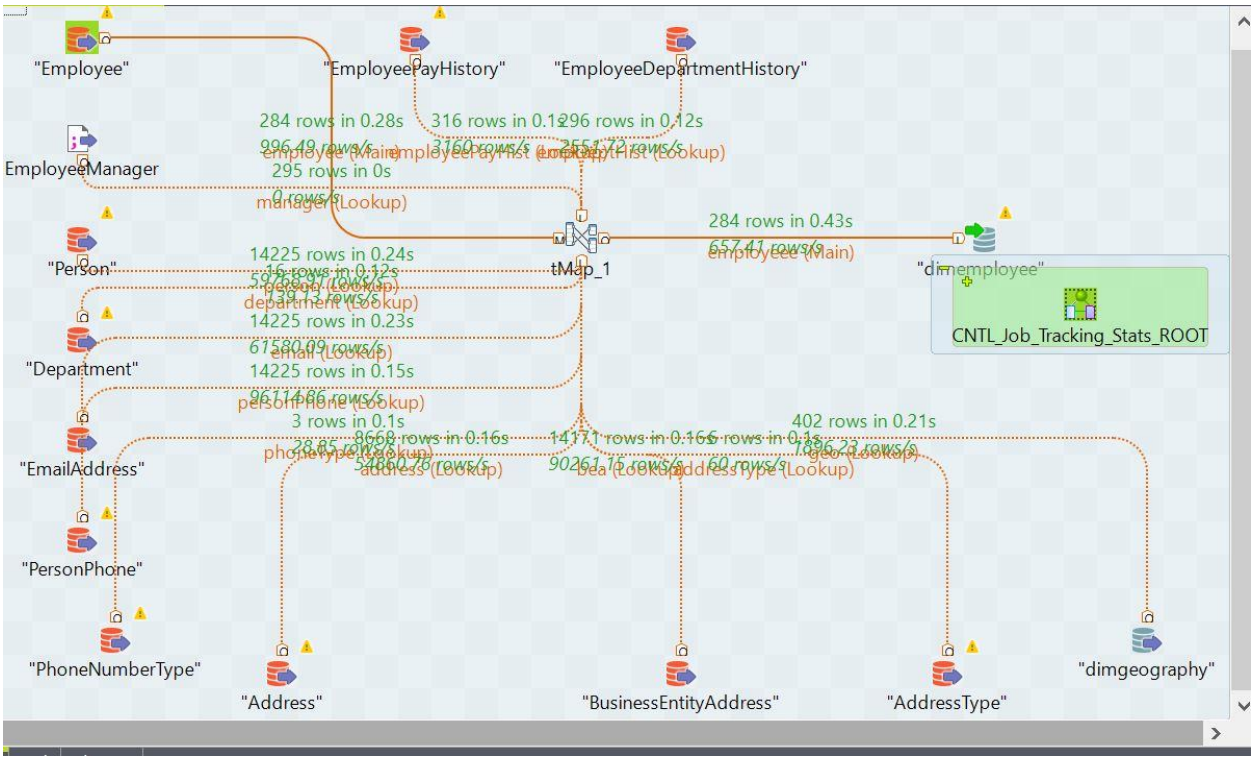
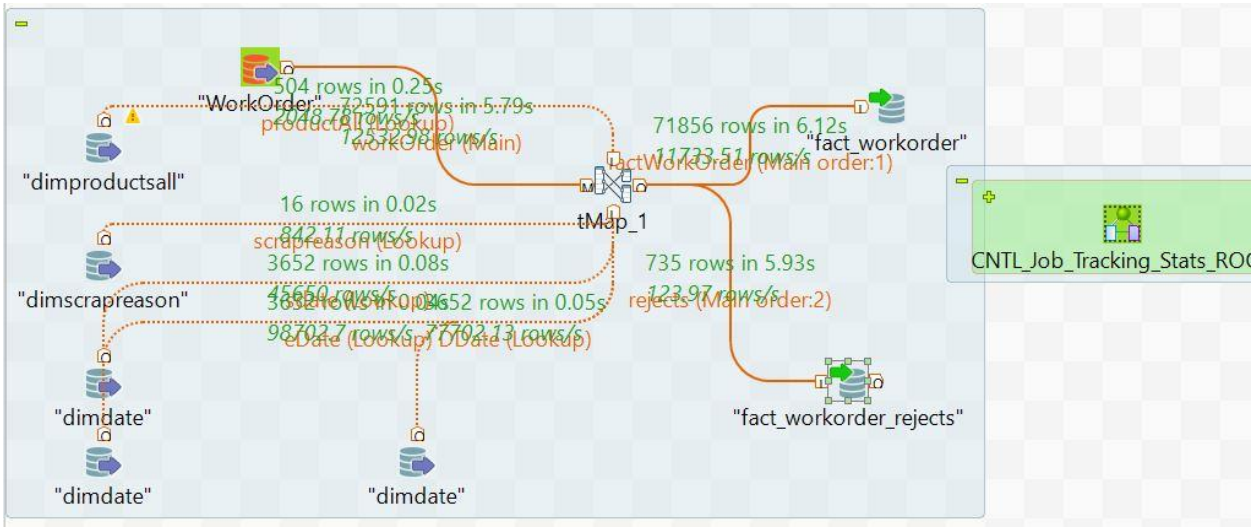
"AddressType"
"Person"
"PersonPhone"
"dimgeography"
"ContactType"
"EmailAddress"
"PhoneNumberType"

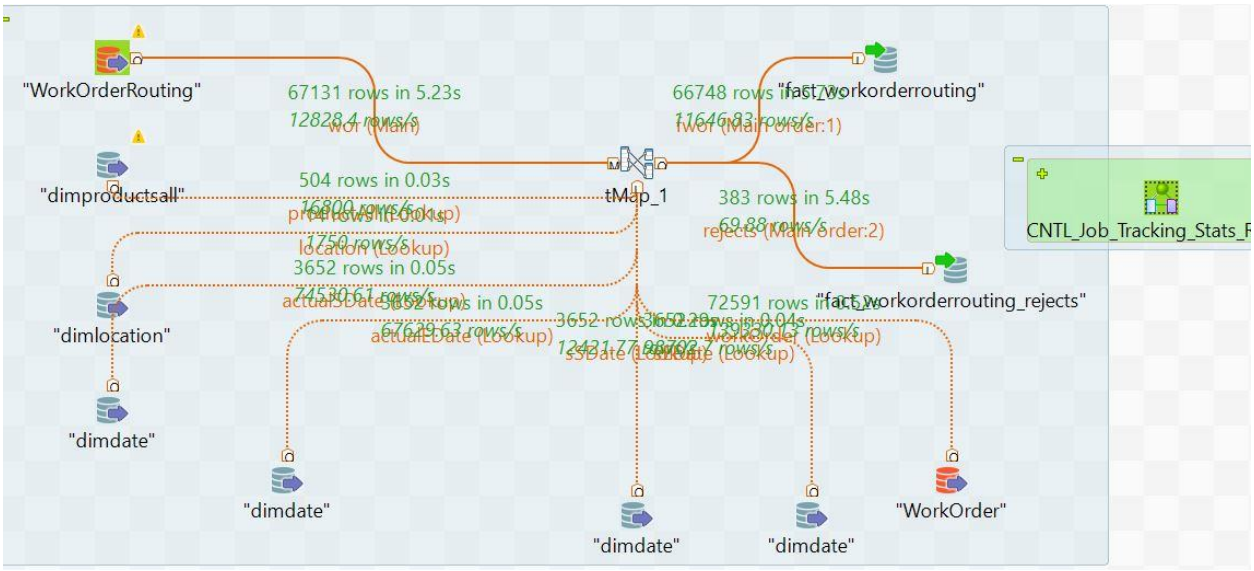
DImEmployee:



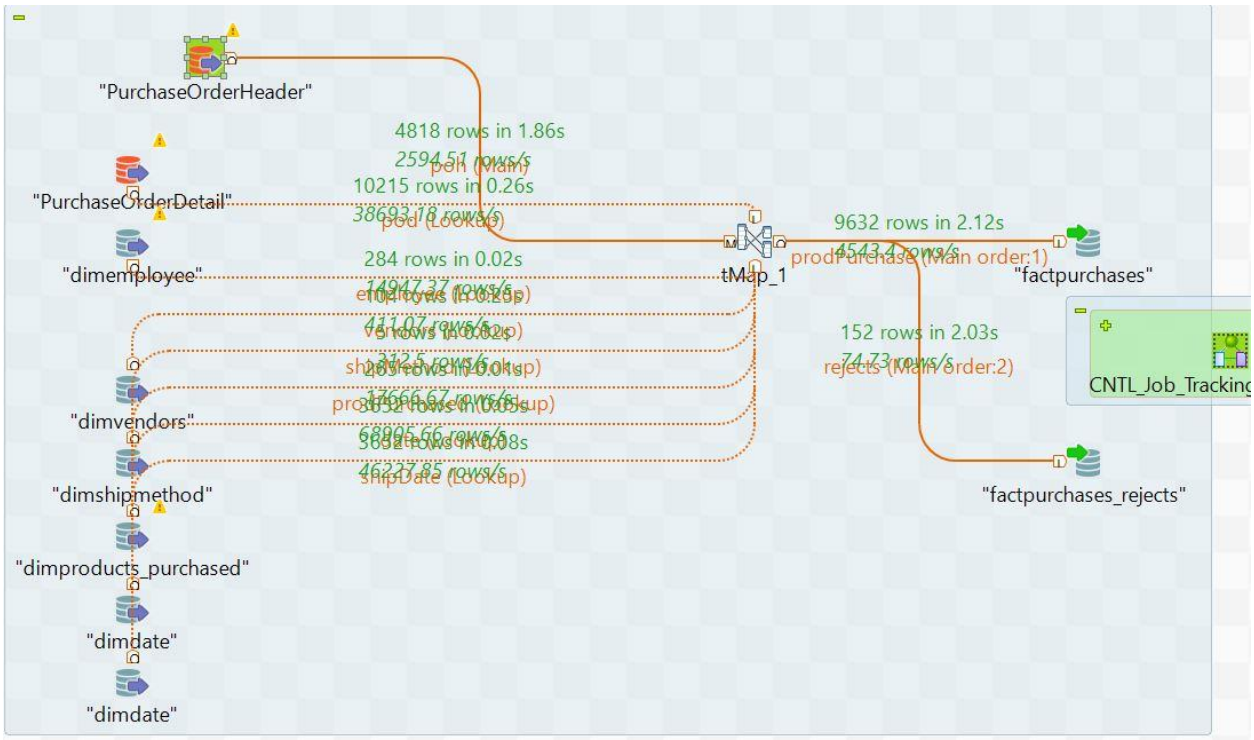
Fact_WorkOrder and Fact_WorkOrder_Rejects:



Fact_WorkOrderRouting and Fact_WorkOrderRouting_Rejects:



FactPurchases and FactPurchases_Rejects:



SQL Queries:

1. Ranked order of Vendors by purchase amount $ -

```
select rank() over (order by fp.subtotal desc) as Rank_Vendor,
v.vendorSK, fp.subtotal
from dbo.DimVendors as v inner join dbo.FactPurchases as fp
on v.VendorSK = fp.VendorSK
group by v.vendorSK, fp.subtotal;
```

Rows: 469

2.

--a) Ranked order of products by amount $ By category

```
select ProductCategoryName,ListPrice,
rank() over(partition by ProductCategoryName order by listprice desc) as Amount_Rank
from DimProductsAll
order by 3,1 desc;
```

Rows: 111

--b) Ranked order of products by amount $ By Subcategory

```
select ProductSubcategoryName,ListPrice,
rank() over(order by listprice desc) as Amount_Rank
from DimProductsAll
order by 3,1 desc;
```

Rows: 129

--c) Ranked order of products by amount $ By ProductModel - 20

```
select top 20 ModelName,ListPrice,
rank() over(order by listprice desc) as Amount_Rank
from DimProductsAll
order by 3,1 desc;
```

Rows: 20

--d) Ranked order of products by amount $ By ProductName - 20

```
select top 20 ProductName,ListPrice,

rank() over(order by listprice desc) as Amount_Rank
from DimProductsAll
order by 3,1 desc;
```

Rows: 20

3. Ranked list of employees purchasing products amount $

```
select distinct concat(e.FirstName,' ' ,e.LastName) as Name, sum(fp.subtotal) as
Sum_Amount, rank() over(order by sum(fp.subtotal) asc) as Amount_Rank
from DimEmployee as e
join FactPurchases as fp
```

```
on e.EmployeeSK = fp.EmployeeSK
group by FirstName, LastName
order by Sum_Amount;
```

Rows: 12

4. List of employees who purchased products with phone, email & address

```
select distinct concat(e.FirstName,' ',e.MiddleName,' ',e.LastName) as
EmployeeName,
e.phone, e.emailaddress,
e.addressline1, ISNULL(e.addressline2,'-')
from dbo.DimEmployee as e
join dbo.FactPurchases as fp
on e.EmployeeSK = fp.EmployeeSK
```

Rows: 12

5. List of purchasing contacts with vendor name, phone, email & address

```
select distinct concat(vc.vendorSK,' ',vc.firstname,' ',vc.lastname) as FullName,
v.vendorname, vc.phonenumber,
vc.emailaddress, v.addressline1, ISNULL(v.addressline2,'-') as addressline2
from DimVendorContacts as vc
inner join DimVendors as v
on v.VendorSK = vc.VendorSK
inner join FactPurchases fp
on fp.VendorID=v.BusinessEntityID;
```

Rows: 129