

Rationalisation Model

Date: 2024-12-17

# Summary of the analysis performed

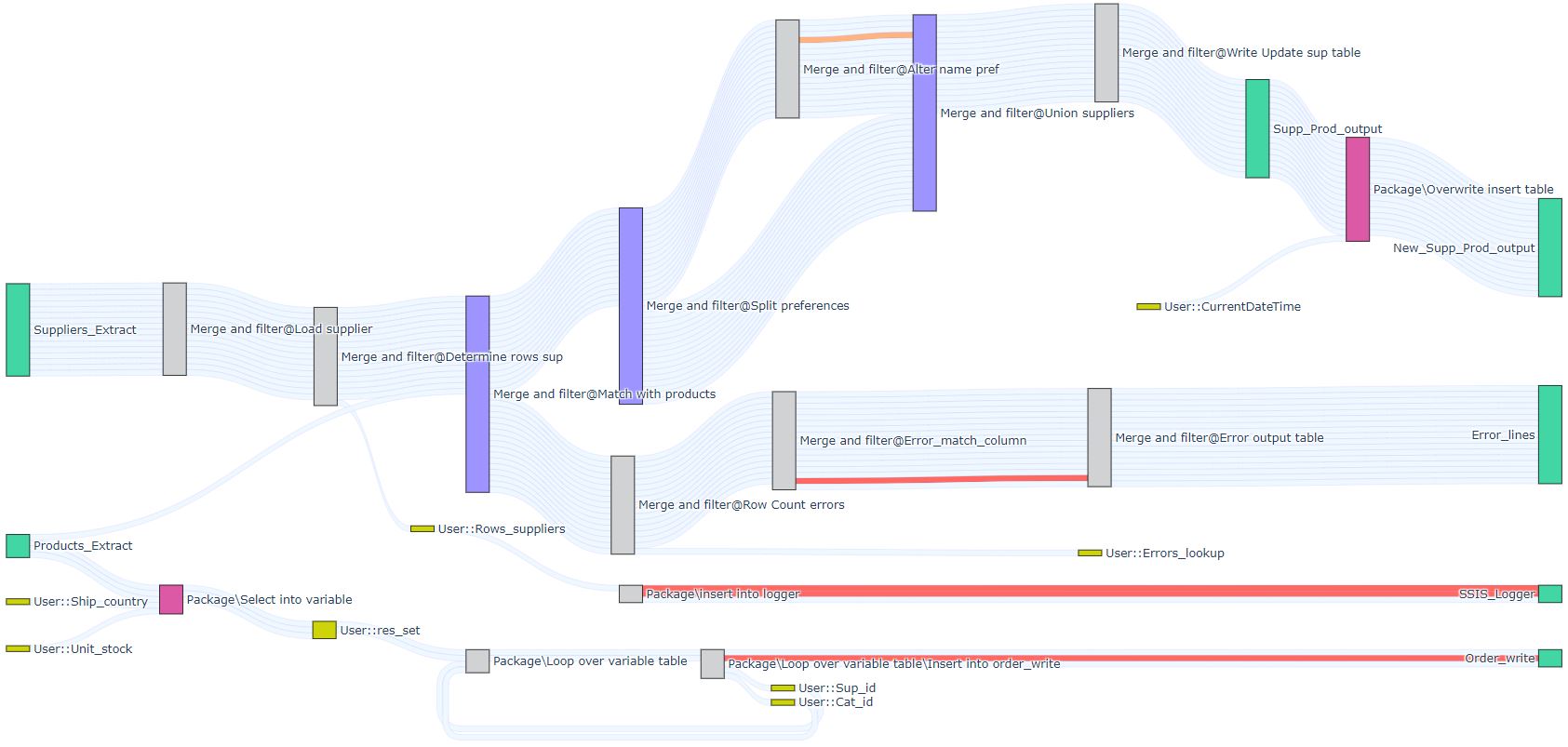
This document contains the results of the rationalisation model for the Rabobank with scope being SSIS. The goal of this analysis is to uncover the complexity within the system in-scope and provide useful insights of its functionalities.

## Overview of the nodes in the control flow

|  |  |
| --- | --- |
| Node task | Number of occurences |
| Execute SQL Task | 10 |

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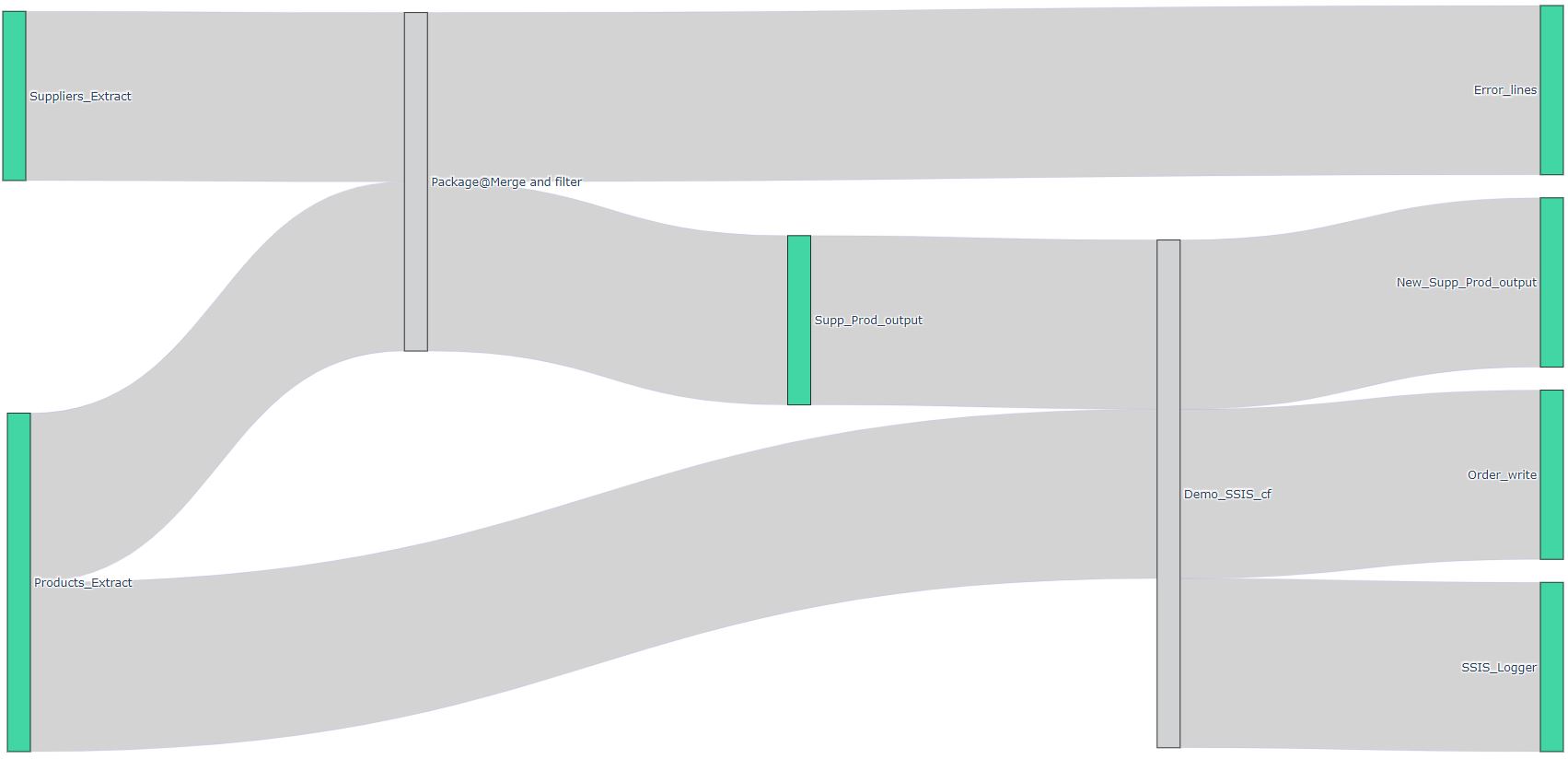
## Complete lineage of the analysed SSIS package



### Legend:

|  |  |
| --- | --- |
|  | - Node |
|  |  |
|  | - External table |
|  |  |
|  | - Join or split node |
|  |  |
|  | - Filter node |
|  |  |
|  | - Variable |
|  |  |
|  | - Data transmission |
|  |  |
|  | - Transformation (existing column) |
|  |  |
|  | - Transformation (new column) |
|  |  |

## External table connection to the control nodes



### Legend:

|  |  |
| --- | --- |
|  | - External table |
|  |  |
|  | - Control flow node |
|  |  |

# Details of the data flow Merge and filter

This section zooms in on the critical observations derived from the analysis, with a specific emphasis on the data flow.

## Overview of the nodes in the data flow

|  |  |
| --- | --- |
| Node task | Number of occurences |
| DataSources | 16 |
| variable | 12 |
| query | 9 |
| subquery | 9 |
| delete table where | 2 |

<Placeholder for manual input>

## Overview of utilised source tables in the data flow

|  |  |
| --- | --- |
| Source table | Occurrences |
| Run\_Time\_Description | 3 |
| tbl\_Product\_file | 2 |
| tbl\_File\_State | 2 |
| tbl\_Product\_parameter | 2 |
| REP\_Master\_GAP | 1 |
| REP\_Discount\_Factors | 1 |
| FTP\_Base | 1 |
| FTP\_Shocks | 1 |
| FTP\_Unpivot | 1 |
| GAP | 1 |
| Forecast\_Periods | 1 |
| Account\_Dimension | 1 |
| PlanningDimentsions | 1 |
| LKP\_Counterparty | 1 |

<Placeholder for manual input>

## Overview of utilised target tables in the data flow

|  |  |
| --- | --- |
| Target table | Occurrences |

<Placeholder for manual input>

## Overview of transformations in the data flow

|  |  |  |
| --- | --- | --- |
| Node | Column | Transformation |
| Package\select\_res@subquery\_1\_Package\select\_res | MAX(QRM.Run\_Time\_Description.DateTimeStamp) | MAX(QRM.Run\_Time\_Description.DateTimeStamp) |
| query\_User::Run\_time\_descip | CAST(QRM.Run\_Time\_Description.forecastid | CAST(QRM.Run\_Time\_Description.forecastid AS INTEGER) AS forcastid |
| Package\RecordCount@subquery\_3\_Package\RecordCount | COUNT(\*) | COUNT(\*) AS FUP\_CNT |
| Package\RecordCount@subquery\_2\_Package\RecordCount | COUNT(\*) | COUNT(\*) AS FSH\_CNT |
| Package\RecordCount@subquery\_1\_Package\RecordCount | COUNT(\*) | COUNT(\*) AS FBA\_CNT |
| query\_User::RecordCount | FBA\_CNT + FSH\_CNT + FUP\_CNT | FBA\_CNT + FSH\_CNT + FUP\_CNT AS RecordCount |
| query\_User::New\_table\_long | dbo.tbl\_Product\_parameter.Parameter\_Value | dbo.tbl\_Product\_parameter.Parameter\_Value AS Reporting\_Database |
| query\_User::New\_table\_long | dbo.tbl\_Product\_parameter.Parameter\_Value | dbo.tbl\_Product\_parameter.Parameter\_Value AS Reporting\_Server |
| Package\rec\_count@subquery\_5\_Package\rec\_count | COUNT(\*) | COUNT(\*) AS GAP\_CNT |
| Package\rec\_count@subquery\_4\_Package\rec\_count | COUNT(\*) | COUNT(\*) AS FOP\_CNT |
| Package\rec\_count@subquery\_3\_Package\rec\_count | COUNT(\*) | COUNT(\*) AS ACD\_CNT |
| Package\rec\_count@subquery\_2\_Package\rec\_count | COUNT(\*) | COUNT(\*) AS RTD\_CNT |
| Package\rec\_count@subquery\_1\_Package\rec\_count | COUNT(\*) | COUNT(\*) AS PLN\_CNT |
| query\_User::Rec\_cnt | PLN.PLN\_CNT + RTD.RTD\_CNT + ACD.ACD\_CNT + FOP.FOP\_CNT + GAP.GAP\_CNT | PLN.PLN\_CNT + RTD.RTD\_CNT + ACD.ACD\_CNT + FOP.FOP\_CNT + GAP.GAP\_CNT AS ANONYM |
| query\_Package\Update\_GAP\_1 | Intercompany\_segment | ISNULL(cfg.LKP\_Counterparty.Intercompany\_segment, 'LKP\_error') |
| query\_User::Table\_joins | ISNULL(dbo.tbl\_Product\_file.Mail\_Group, ) | ISNULL(dbo.tbl\_Product\_file.Mail\_Group, '') AS Mail\_Group |
| query\_User::Table\_joins | dbo.tbl\_Product\_parameter.Parameter\_Value | dbo.tbl\_Product\_parameter.Parameter\_Value AS Reporting\_Database |
| query\_User::Table\_joins | dbo.tbl\_Product\_parameter.Parameter\_Value | dbo.tbl\_Product\_parameter.Parameter\_Value AS Reporting\_Server |

<Placeholder for manual input>

## Overview of split arguments in the data flow

|  |  |  |
| --- | --- | --- |
| Node | Node task | Split argument |

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## Overview of join arguments in the data flow

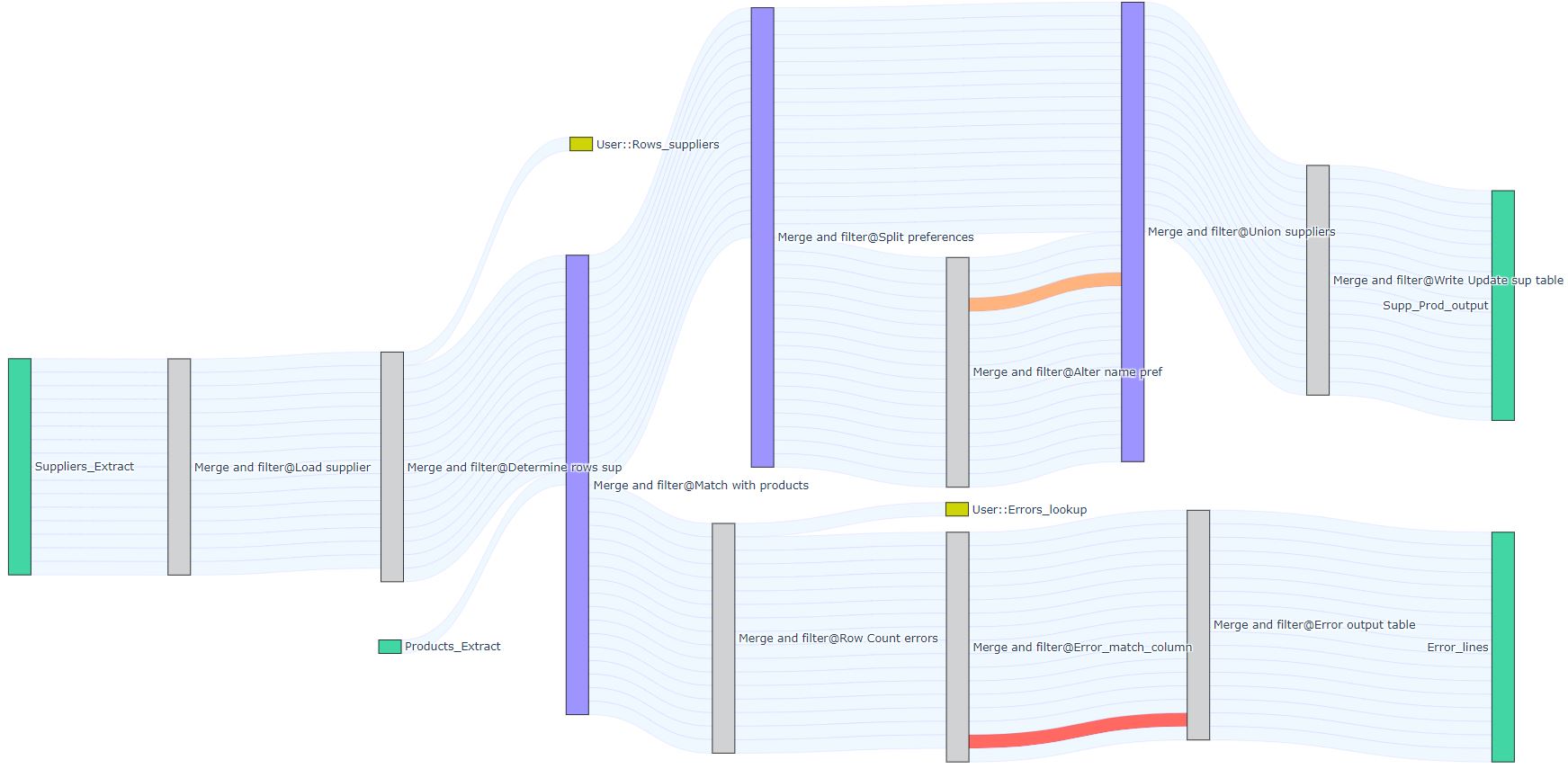
|  |  |  |
| --- | --- | --- |
| Node | Node task | Join argument |
| query\_User::RecordCount | query | JOIN (subquery\_2\_Package\RecordCount) AS FSH ON 1 = 1 JOIN (subquery\_3\_Package\RecordCount) AS FUP ON 1 = 1 |
| Package\RecordCount@(subquery\_1\_Package\RecordCount) | subquery | JOIN (subquery\_2\_Package\RecordCount) AS FSH ON 1 = 1 JOIN (subquery\_3\_Package\RecordCount) AS FUP ON 1 = 1 |
| Package\RecordCount@(subquery\_2\_Package\RecordCount) | subquery | JOIN (subquery\_2\_Package\RecordCount) AS FSH ON 1 = 1 JOIN (subquery\_3\_Package\RecordCount) AS FUP ON 1 = 1 |
| Package\RecordCount@(subquery\_3\_Package\RecordCount) | subquery | JOIN (subquery\_2\_Package\RecordCount) AS FSH ON 1 = 1 JOIN (subquery\_3\_Package\RecordCount) AS FUP ON 1 = 1 |
| query\_User::New\_table\_long | query | INNER JOIN dbo.tbl\_Product\_file AS PF ON dbo.tbl\_Product.Product\_id = dbo.tbl\_Product\_file.Product\_id AND dbo.tbl\_Product.Period = dbo.tbl\_Product\_file.Period LEFT JOIN dbo.tbl\_File\_State AS FS ON dbo.tbl\_Product\_file.Product\_id = dbo.tbl\_File\_State.Product\_id AND dbo.tbl\_Product\_file.Period = dbo.tbl\_File\_State.Period AND dbo.tbl\_Product\_file.File\_id = dbo.tbl\_File\_State.File\_id INNER JOIN dbo.tbl\_Product\_parameter AS PP1 ON dbo.tbl\_Product\_file.Product\_id = dbo.tbl\_Product\_parameter.Product\_id AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period INNER JOIN dbo.tbl\_Product\_parameter AS PP2 ON dbo.tbl\_Product\_parameter.Product\_id = 'GEN' AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period INNER JOIN dbo.tbl\_Product\_parameter AS PP3 ON dbo.tbl\_Product\_parameter.Product\_id = 'GEN' AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period |
| query\_User::Rec\_cnt | query | JOIN (subquery\_2\_Package\rec\_count) AS RTD ON 1 = 1 JOIN (subquery\_3\_Package\rec\_count) AS ACD ON 1 = 1 JOIN (subquery\_4\_Package\rec\_count) AS FOP ON 1 = 1 JOIN (subquery\_5\_Package\rec\_count) AS GAP ON 1 = 1 |
| Package\rec\_count@(subquery\_1\_Package\rec\_count) | subquery | JOIN (subquery\_2\_Package\rec\_count) AS RTD ON 1 = 1 JOIN (subquery\_3\_Package\rec\_count) AS ACD ON 1 = 1 JOIN (subquery\_4\_Package\rec\_count) AS FOP ON 1 = 1 JOIN (subquery\_5\_Package\rec\_count) AS GAP ON 1 = 1 |
| Package\rec\_count@(subquery\_2\_Package\rec\_count) | subquery | JOIN (subquery\_2\_Package\rec\_count) AS RTD ON 1 = 1 JOIN (subquery\_3\_Package\rec\_count) AS ACD ON 1 = 1 JOIN (subquery\_4\_Package\rec\_count) AS FOP ON 1 = 1 JOIN (subquery\_5\_Package\rec\_count) AS GAP ON 1 = 1 |
| Package\rec\_count@(subquery\_3\_Package\rec\_count) | subquery | JOIN (subquery\_2\_Package\rec\_count) AS RTD ON 1 = 1 JOIN (subquery\_3\_Package\rec\_count) AS ACD ON 1 = 1 JOIN (subquery\_4\_Package\rec\_count) AS FOP ON 1 = 1 JOIN (subquery\_5\_Package\rec\_count) AS GAP ON 1 = 1 |
| Package\rec\_count@(subquery\_4\_Package\rec\_count) | subquery | JOIN (subquery\_2\_Package\rec\_count) AS RTD ON 1 = 1 JOIN (subquery\_3\_Package\rec\_count) AS ACD ON 1 = 1 JOIN (subquery\_4\_Package\rec\_count) AS FOP ON 1 = 1 JOIN (subquery\_5\_Package\rec\_count) AS GAP ON 1 = 1 |
| Package\rec\_count@(subquery\_5\_Package\rec\_count) | subquery | JOIN (subquery\_2\_Package\rec\_count) AS RTD ON 1 = 1 JOIN (subquery\_3\_Package\rec\_count) AS ACD ON 1 = 1 JOIN (subquery\_4\_Package\rec\_count) AS FOP ON 1 = 1 JOIN (subquery\_5\_Package\rec\_count) AS GAP ON 1 = 1 |
| query\_Package\Update\_GAP\_1 | query | ['LEFT JOIN cfg.LKP\_Counterparty AS cp ON cp.Intercompany\_Legal\_Entity = staging.GAP.Intercompany\_Legal\_Entity', 'AND cp.Intercompany\_Counterparty = staging.GAP.Intercompany\_Counterparty'] |
| query\_User::Table\_joins | query | INNER JOIN dbo.tbl\_Product\_file AS PF ON dbo.tbl\_Product.Product\_id = dbo.tbl\_Product\_file.Product\_id AND dbo.tbl\_Product.Period = dbo.tbl\_Product\_file.Period LEFT JOIN dbo.tbl\_File\_State AS FS ON dbo.tbl\_Product\_file.Product\_id = dbo.tbl\_File\_State.Product\_id AND dbo.tbl\_Product\_file.Period = dbo.tbl\_File\_State.Period AND dbo.tbl\_Product\_file.File\_id = dbo.tbl\_File\_State.File\_id INNER JOIN dbo.tbl\_Product\_parameter AS PP1 ON dbo.tbl\_Product\_file.Product\_id = dbo.tbl\_Product\_parameter.Product\_id AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period INNER JOIN dbo.tbl\_Product\_parameter AS PP2 ON dbo.tbl\_Product\_parameter.Product\_id = 'GEN' AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period INNER JOIN dbo.tbl\_Product\_parameter AS PP3 ON dbo.tbl\_Product\_parameter.Product\_id = 'GEN' AND dbo.tbl\_Product\_file.Period = dbo.tbl\_Product\_parameter.Period |

<Placeholder for manual input>

# Sankey Diagrams

This section contains the Merge and filter data flow in a sankey Diagram, giving you insights into the overall lineage and the transformations as well as model-identified focus points of the view.

## Lineage within the Merge and filter data flow



### Legend:

|  |  |
| --- | --- |
|  | - Node |
|  |  |
|  | - External table |
|  |  |
|  | - Join or split node |
|  |  |
|  | - Variable |
|  |  |
|  | - Data transmission |
|  |  |
|  | - Transformation (existing column) |
|  |  |
|  | - Transformation (new column) |
|  |  |