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Content Package User Guide

THE BEST RUN SAP

Content

1 Introduction

This documentation assumes that the reader is familiar with SAP Analytics Cloud, and does not substitute SAP Analytics Cloud documentation, which can be found here: Help Portal: SAP Analytics Cloud.

Many of the content models are based on replicated data, not on live data connections. The usage of models based on replicated data facilitates the consumption of the content, because it enables the delivery of sample data. Thus, the content based on these models is ready to run without any additional effort and no additional systems are required yet.

However, this is not to be mistaken as a recommendation for the productive use.

Please analyze if the live connection is available and suitable for your business scenario and use the same instead. The content does not include any predefined roles or permissions. However, it might include data sources that are part of possible future developments, which can be subject to change by SAP at any time for any reason without notice. In that case, please find the detailed information in this document in the respective chapters.

For information on getting the content and installing it in your system, see Getting Started.

For up-to-date information on the available content, see Release Information.

2 Line of Business

2.1 Advanced Compliance Reporting

2.1.1 Architecture and Abstract

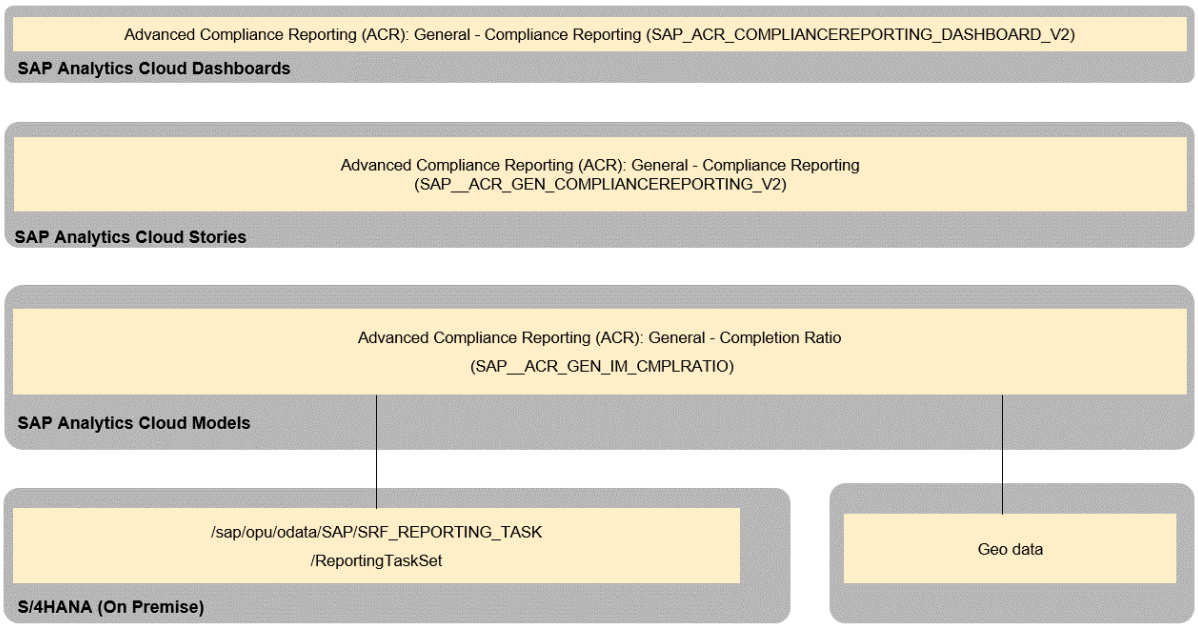
Advanced Compliance Reporting SAP Analytics Cloud content provides an out-of-box view about global legal indirect tax reporting for CFOs of a multinational company.

A complete detailed picture of pending and completed reports across the world is assigned to multiple accountants providing drill-down from a region level to each country specific reporting task. Set monthly filters to investigate for a specific reporting period of your reporting entity.

Overdue criticality indication enables to focus on curtail reporting tasks, enabling global compliance, avoiding penalties and meeting of submission deadlines to government authorities.

Advanced Compliance Reporting SAP Analytics Cloud content has one dashboard, one story, and one data model. The data model receives its transactional data from an OData Service from a S/4HANA system, while the geo master data can be loaded from a flat file.

Architecture:



The colored objects are documented in this chapter.

2.1.1.1 Dashboard

The Dashboard Advanced Compliance Reporting **(SAP_ACR_COMPLIANCEREPORTING_DASHBOARD_V2)** contains the Overdue Criticality and Completion Ratio from the story Advanced Compliance Reporting (ACR): General - Compliance Reporting **(SAP__ACR_GEN_COMPLIANCEREPORTING_V2)**.

2.1.2 Stories

Advanced Compliance Reporting (ACR): General - Compliance Reporting (SAP__ACR_GEN_COMPLIANCEREPORTING_V2)

The Compliance Reporting story consist of four pages:

- Overdue Criticality
- Completion Ratio
- Completion Ratio Details
- Help

The first three pages are documented below. The Help page describes possible use interactions and does not require a documentation.

The completion ratio details page is accessible only by using the Jump to Completion Ratio and Filter functionality from the charts Overdue Task by Country and Completion Ratio by Geography.

Measure Name	Type	Formula/Properties
TIME type Calculated Input Control [@Time Selection] is used in page Completion Ratio. The following Measures are created based on Model SAP__ACR_GEN_IM_CMPLRATIO and used in page Completion Ratio.		
Is_Before_PeriodEnd	Calculated Measure	See Calculation in subchapter Formula for Calculated Measure Is_Before_PeriodEnd [page 20].
Is_After_PeriodStart	Calculated Measure	See Calculation in its subchapter.
# of<1 space>Overdue Tasks	Restricted Measure	Measure: Dummy_INT Dimension: Category Dimension Filter: = Actual Dimension: Is_After_PeriodStart Dimension Filter: = YES Dimension: Overdue Status Dimension Filter: = OV

Measure Name	Type	Formula/Properties
Completed	Restricted Measure	Measure: Dummy_INT Dimension: Category Dimension Filter: = Actual Dimension: Is_Before_PeriodEnd Dimension Filter: = YES Dimension: Is_After_PeriodStart Dimension Filter: = YES Dimension: Overdue Status Dimension Filter: = CM
Pending	Restricted Measure	Measure: Dummy_INT Dimension: Category Dimension Filter: = Actual Dimension: Is_After_PeriodStart Dimension Filter: = YES Dimension: Overdue Status Dimension Filter: <> CM
# of<1 space>Completed Tasks	Calculated Measure	If(ISNULL ([#Completed]) ,0 ,[#Completed])
# of<1 space>Pending Tasks	Calculated Measure	If(ISNULL([#Pending]),0,[#Pending])
Completion<1 space>Ratio	Calculated Measure	If([## of Pending Tasks]=0,1, [## of Completed Tasks] / ([## of Completed Tasks] + [## of Pending Tasks]))
TIME type Calculated Input Control [@Time Selection 2] is used in page Overdue Criticality. The following Measures are created based on Model SAP__ACR_GEN_IM_CMPLRATIO and used in page Overdue Criticality.		
Is_Before_PeriodEnd2	Calculated Measure	Replace [@Time Selection] with [@Time Selection 2] in Is_Before_PeriodEnd
Is_After_PeriodStart2	Calculated Measure	Replace [@Time Selection] with [@Time Selection 2] in Is_After_PeriodStart
# of<1 space>Overdue Tasks_	Restricted Measure	Dimension Filter Is_Before_PeriodEnd is replaced with Is_Before_PeriodEnd2 (others are the same as Measure # of<1 space> Overdue Tasks

Measure Name	Type	Formula/Properties
Completed2	Restricted Measure	Dimension Filter Is_Before_PeriodEnd is replaced with Is_Before_PeriodEnd2 Dimension Filter Is_After_PeriodStart is replaced with Is_After_PeriodStart2 (others are the same as Measure Completed)
Pending2	Restricted Measure	Dimension Filter Is_Before_PeriodEnd is replaced with Is_Before_PeriodEnd2 (others are the same as Measure Pending
# of<1 space>Completed Tasks_	Calculated Measure	IF(ISNULL ([#Completed2]) ,0 ,[#Completed2])
# of<1 space>Pending Tasks_	Calculated Measure	If(ISNULL([#Pending2]),0,[#Pending2])
Completion<1 space>Ratio_	Calculated Measure	If([## of Pending Tasks]=0, 1, [## of Completed Tasks_] / ([## of Completed Tasks_] + [## of Pending Tasks_]))
TIME type Calculated Input Control [@Time Selection 3] is used in page Completion Ratio Detail. The following Measures are created based on Model SAP__ACR_GEN_IM_CMPLRATIO and used in page Completion Ratio Detail.		
Is_Before_PeriodEnd3	Calculated Measure	Replace [@Time Selection] with [@Time Selection 3] in Is_Before_PeriodEnd
Is_After_PeriodStart3	Calculated Measure	Replace [@Time Selection] with [@Time Selection 3] in Is_After_PeriodStart
# of<2 spaces>Overdue Tasks	Restricted Measure	Dimension Filter Is_Before_PeriodEnd is replaced with Is_Before_PeriodEnd3 (others are the same as Measure # of<1 space> Overdue Tasks
Completed3	Restricted Measure	Dimension Filter Is_Before_PeriodEnd is replaced with Is_Before_PeriodEnd3 Dimension Filter Is_After_PeriodStart is replaced with Is_After_PeriodStart3 (others are the same as Measure Completed)
Pending3	Restricted Measure	Dimension Filter Is_Before_PeriodEnd is replaced with Is_Before_PeriodEnd3 (others are the same as Measure Pending

Measure Name	Type	Formula/Properties
# of<2 spaces>Completed Tasks	Calculated Measure	IF(ISNULL ([#Completed3]) ,0 ,[#Completed3])
# of<2 spaces>Pending Tasks_	Calculated Measure	If(ISNULL([#Pending3]),0,[#Pending3])
Completion<2 spaces>Ratio	Calculated Measure	If([## of<2 spaces>Pending Tasks]=0, 1, [## of<2 spaces>Completed Tasks] / ([## of<2 spaces>Completed Tasks] + [## of<2 spaces>Pending Tasks]))

Dimension Name	Type	Formula/Properties
The following Calculated Dimensions are created based on Model SAP__ACR_GEN_IM_CMPLRATIO.		
Is_Before_PeriodEnd	Measure-Based Dimension	Measure: Is_Before_PeriodEnd Member Name: YES Measure Value: (0, INF) Member Name: NO Measure Value: (- INF, 0] Dimension Context: Period End, Category
Is_After_PeriodStart	Measure-Based Dimension	Measure: Is_After_PeriodStart Member Name: YES Measure Value: (0, INF) Member Name: NO Measure Value: (- INF, 0] Dimension Context: Period Start, Category
Is_Before_PeriodEnd2	Measure-Based Dimension	Measure: Is_Before_PeriodEnd2 (others are the same as Dimension Is_Before_PeriodEnd)
Is_After_PeriodStart2	Measure-Based Dimension	Measure: Is_After_PeriodStart2 (others are the same as Dimension Is_After_PeriodStart)
Is_Before_PeriodEnd3	Measure-Based Dimension	Measure: Is_Before_PeriodEnd3 (others are the same as Dimension Is_Before_PeriodEnd)
Is_After_PeriodStart3	Measure-Based Dimension	Measure: Is_After_PeriodStart3 (others are the same as Dimension Is_After_PeriodStart)

2.1.2.1 Formula for Calculated Measure Is_Before_PeriodEnd

Source Code

```
IF(LENGTH([@Time Selection])=4,
                IF(SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0, 4 )>=SUBSTRING
([@Time Selection], 0, 4),
                1,
                0
                ),
                IF(LENGTH([@Time Selection])=5,
                IF(SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)>=""01""
                AND
                SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)<=""03"",
                IF(SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0,
4)+""1""">=SUBSTRING([@Time Selection],0,5),
                1,
                0
                ),
                IF( SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)>=""04""
                AND
                SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID],4,2)<=""06"",
                IF( SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0,
4)+""2""">=SUBSTRING([@Time Selection],0,5),
                1,
                0
                ),
                IF( SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)>=""07""
                AND
                SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID],4,2)<=""09"",
                IF( SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0,
4)+""3""">=SUBSTRING([@Time Selection],0,5),
                1,
                0
                ),
                IF( SUBSTRING([d/
SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0,
4)+""4""">=SUBSTRING([@Time Selection],0,5),
                1,
                0
                )
                )
                )
                ),
                IF( [d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/
ID]>=SUBSTRING([@Time Selection], 0, 6),
                1,
                0
                )
                )
                )
```

```
IF( LENGTH([@Time Selection])=4,                    If input control is in the granularity of "YEAR"
  IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0, 4 )>=SUBSTRING([@Time Selection], 0, 4),
    1,
    0
  ),
  IF( LENGTH([@Time Selection])=5,                  If input control is in the granularity of "QUARTER"
    IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)>="01"
      AND
      SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)<="03",
      IF(SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0, 4)+"1">=SUBSTRING([@Time Selection],0,5),
        1,
        0                                           Convert "Period End" Month of Jan to Mar to Quarter of 1
      ),
      IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)>="04"
        AND
        SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID],4,2)<="06",
        IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0, 4)+"2">=SUBSTRING([@Time Selection],0,5),
          1,
          0                                         Convert "Period End" Month of Apr to Jun to Quarter of 2
        ),
        IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 4, 2)>="07"
          AND
          SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID],4,2)<="09",
          IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0, 4)+"3">=SUBSTRING([@Time Selection],0,5),
            1,
            0                                       Convert "Period End" Month of Jul to Sep to Quarter of 3
          ),
          IF( SUBSTRING([d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID], 0, 4)+"4">=SUBSTRING([@Time Selection],0,5),
            1,
            0                                       "Period End" Month of Oct to Dec has a Quarter value of 4
          )
        )
      )
    ),                                              If input control is in the granularity of "MONTH"
    IF( [d/SAP__ACR_GEN_IM_CMPLRATIO_qs:SAP_ACR_GEN_PERIODEND].[p/ID]>=SUBSTRING([@Time Selection], 0, 6),
      1,
      0
    )
  )
)
```

2.1.3 Models

This section provides detailed information about Advanced Compliance Reporting (ACR) Models and loading the data from S/4HANA OData Service.

2.1.3.1 General - Completion Ratio (SAP__ACR_GEN_IM_CMPLRATIO)

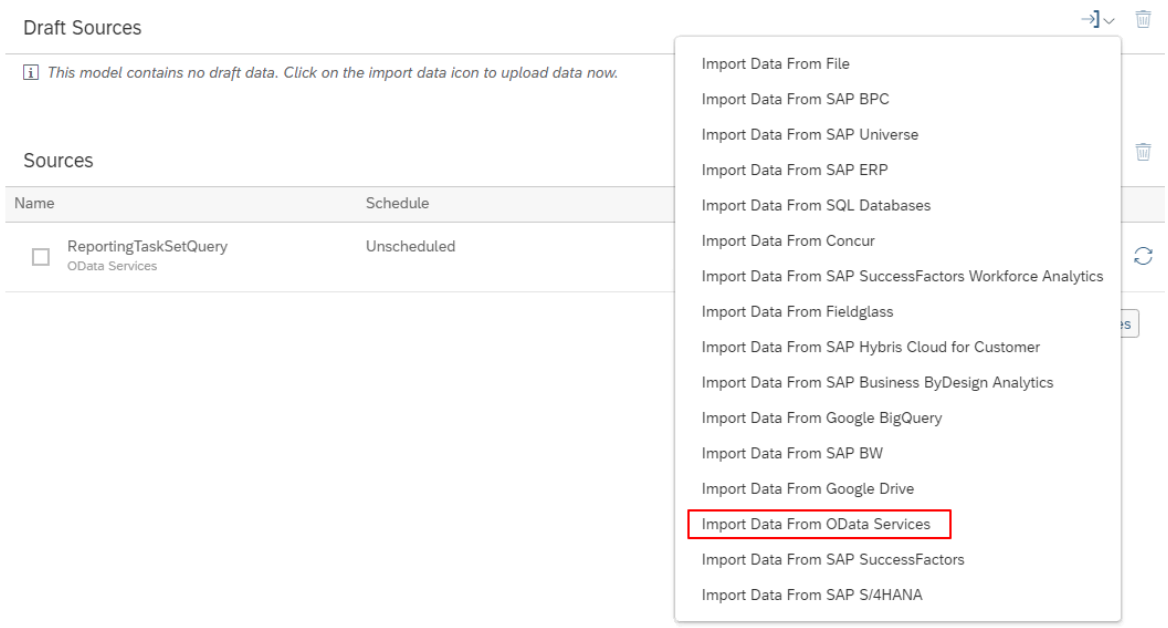
Model Name: SAP__ACR_GEN_IM_CMPLRATIO	Connection

• Model Description: Data source contains information regarding each report tasks, including report name, reporting entity, reporting start/end period, and overdue status. • Planning Enabled: No		• OData Service • /sap/opu/odata/SAP/SRF_REPORTING_TASK/ReportingTaskSet
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• OData Service • /sap/opu/odata/SAP/SRF_REPORTING_TASK/ReportingTaskSet
DUMMY_INT	# Of Tasks	Dummy Value 1 for each record
Dimensions		
Name	**Description**	**Mapping**
Transaction data is loaded from S/4HANA OData Service		• OData Service • /sap/opu/odata/SAP/SRF_REPORTING_TASK/ReportingTaskSet
Time	Time	[Begin of Period]
Account	Account	
PERIOD_START	Begin of Reporting Period	[Begin of Period]
PERIOD_END	End of Reporting Period	[End of Period]
Country	Country	[Country]
Overdue Status	Due Date Status	[Due Date Status]
Reporting Entity	Reporting Entity	[Reporting Entity] [Reporting Entity Name]
Report	Report	[Report ID] [Report Name]
Geo information is loaded from Excel file		
Country-Description	Country Name	[Geo Description]
Country-Latitude	Latitude	Latitude
Country-Longitude	Longitude	Longitude
Country-Region	Region Hierarchy	Region

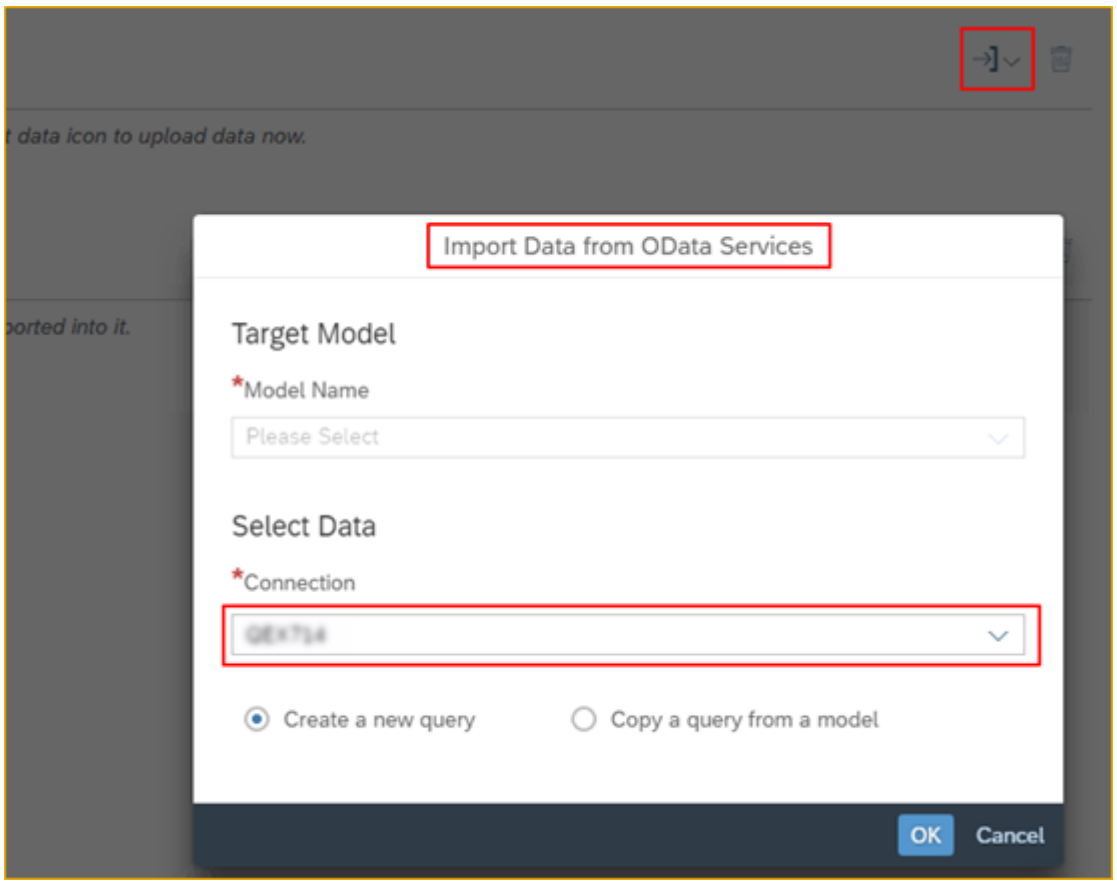
2.1.3.2 Loading data from S/4HANA Odata Service

Procedure

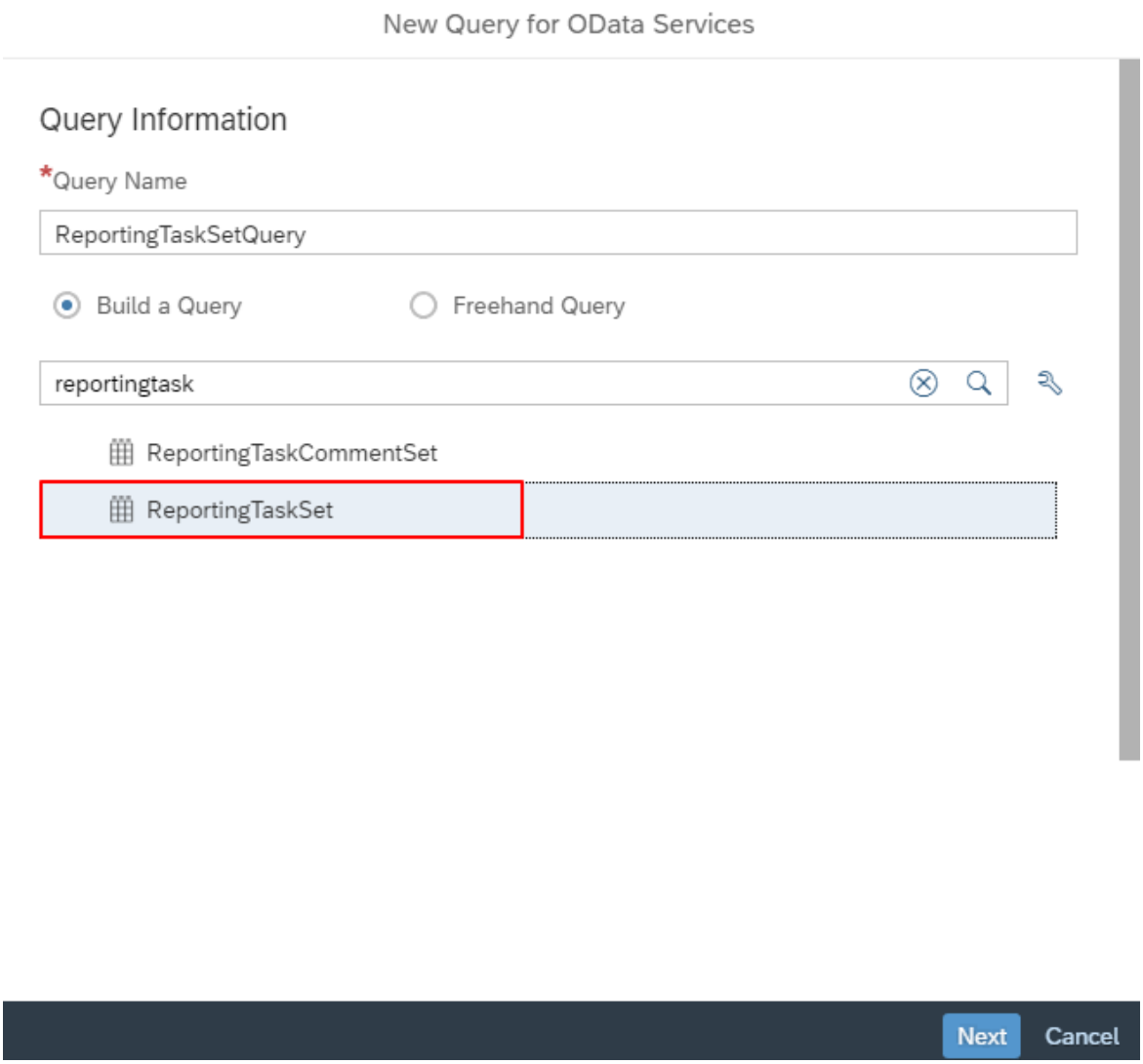
1. Choose to Import Data from OData Services.



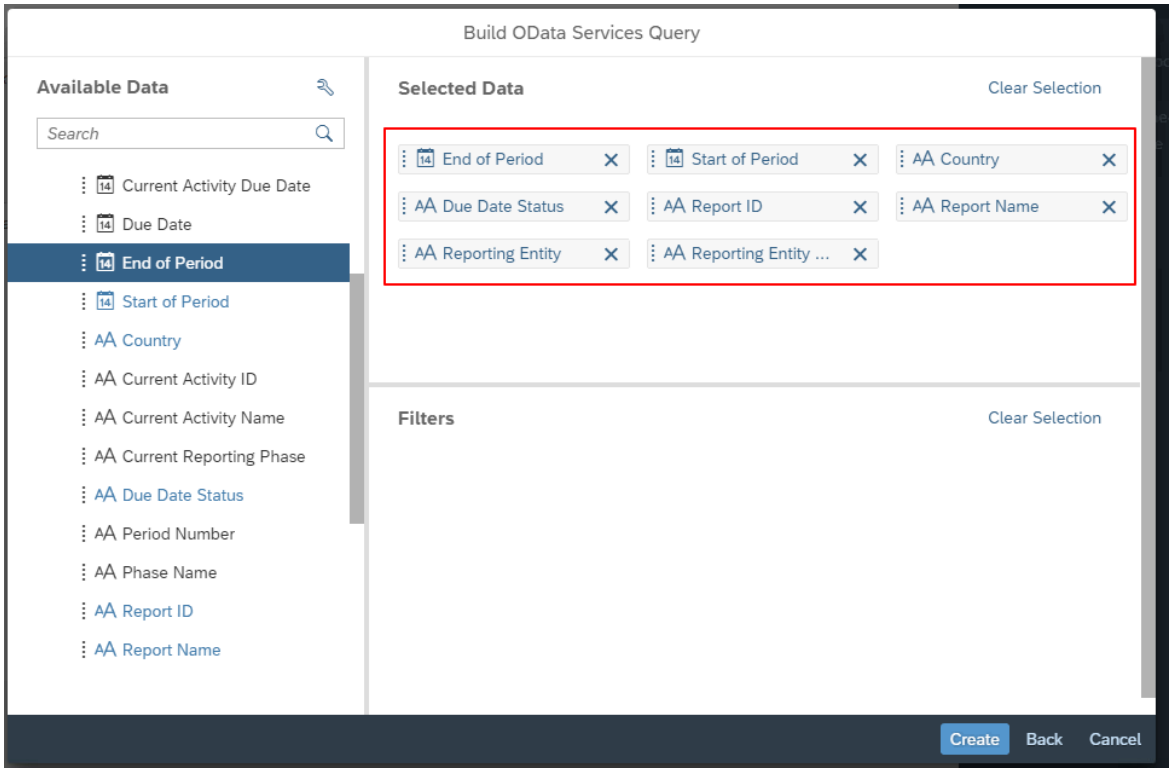
2. Select the correct OData connection and create a new Query by pressing OK.



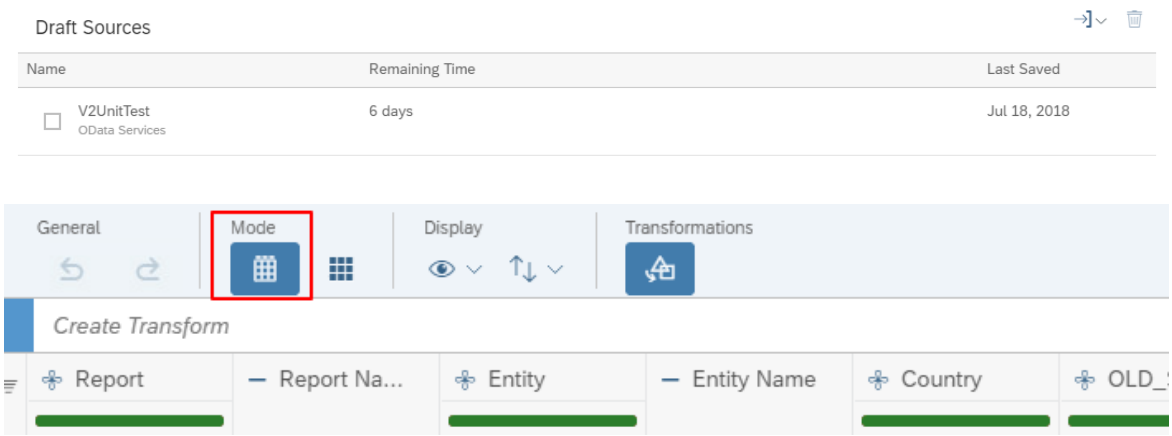
3. Choose the Odata entity ReportingTaskSet and press NEXT.



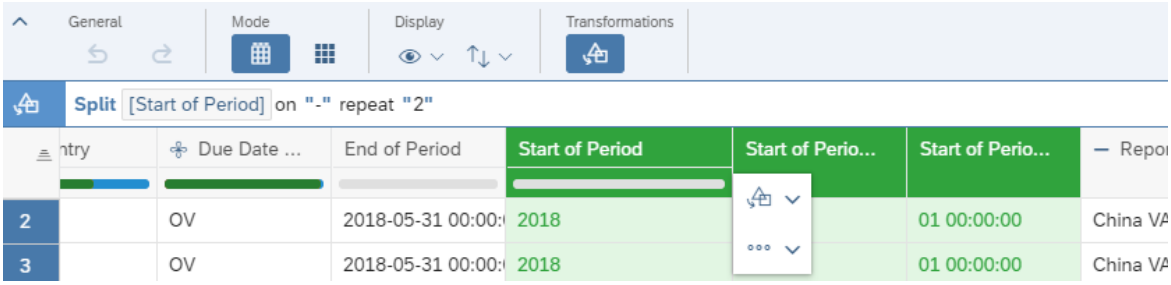
4. Select the following fields from the OData service: End of Period, Start of Period, Country, Due Date Status, Report ID, Report Name, Report Entity and Report Entity Name.



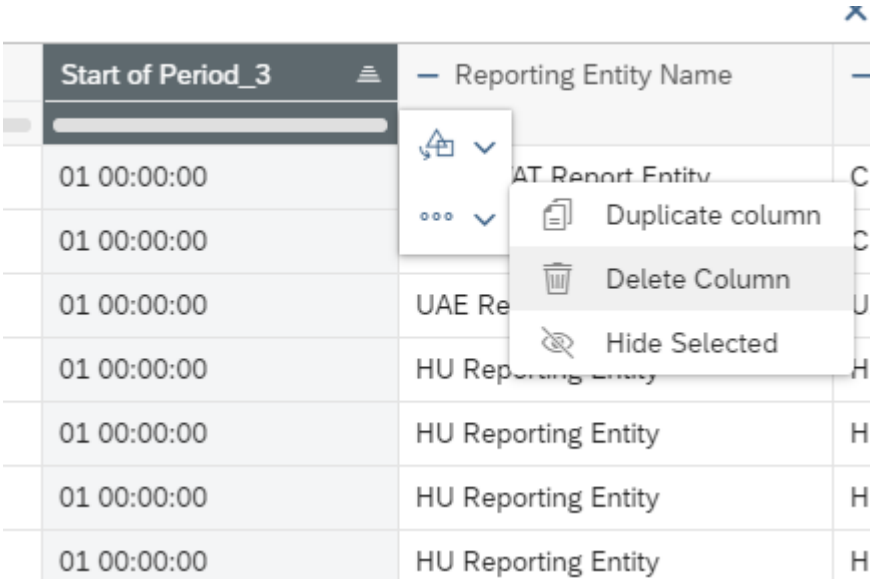
5. Press *Create* to continue.
6. Wait till the data is retrieved from the backend in the draft sources area and click it.



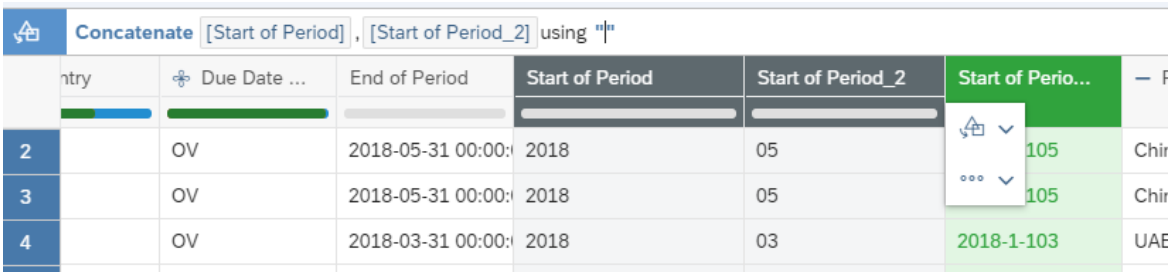
7. In the data mapping screen, switch to Table View Mode.
8. Create a transformation to split Start of Period on "-" repeat "2" to create three columns Start of Period, Start of Period_2 and Start_of_Period_3.



9. Delete column Start of Period_3.

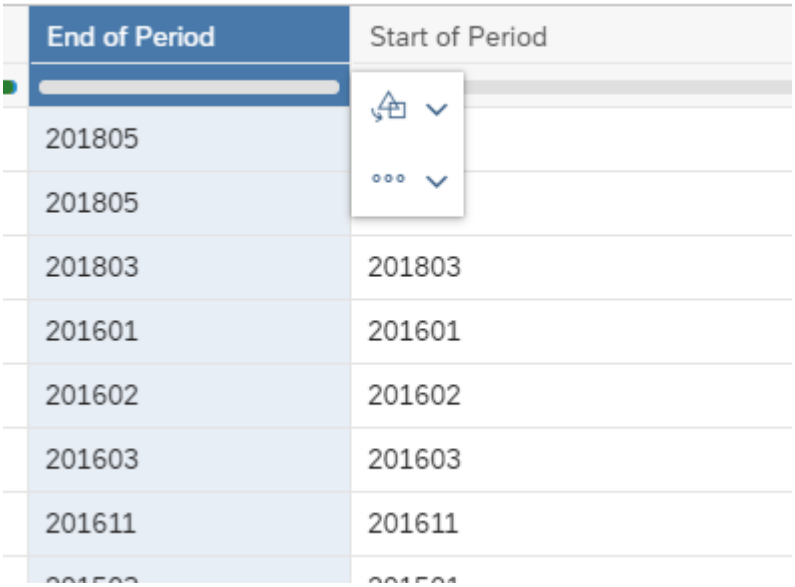


10. Select Start of Period and Start of Period_2 and create a transformation to concatenate Start of Period, Start of Period_2 using "".

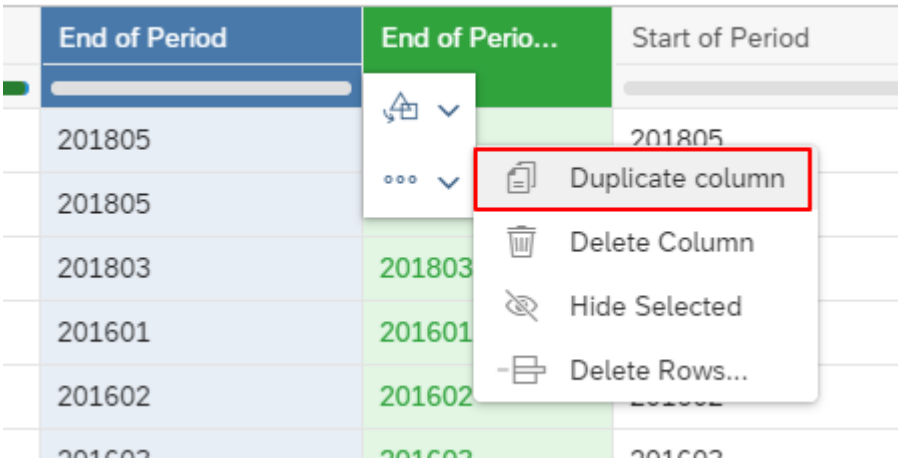


11. Rename the newly created column as Start of Period.

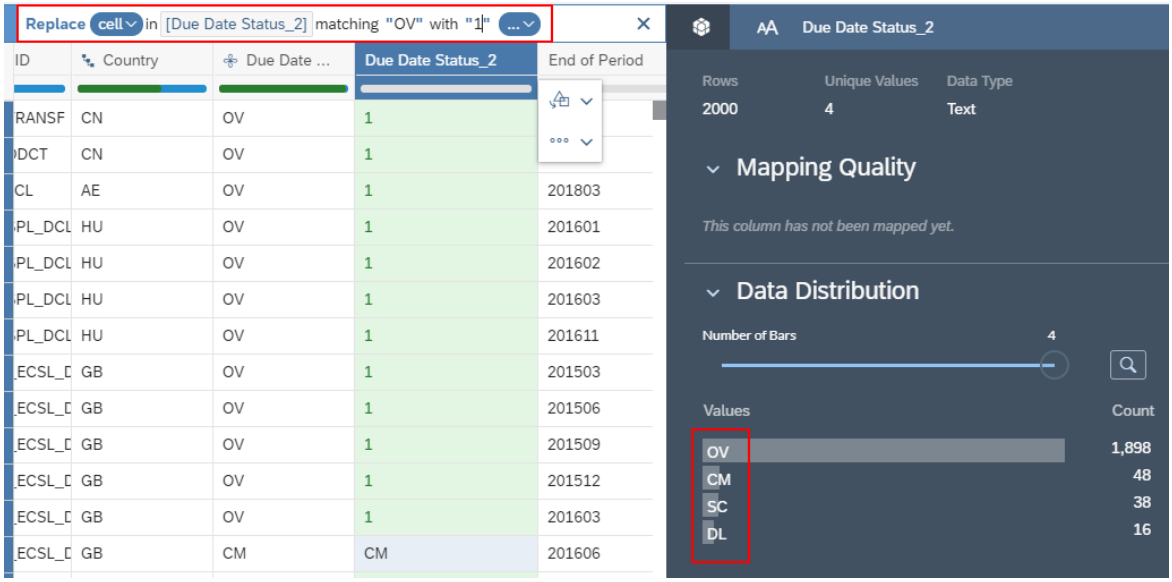
12. Repeat Step 8 to Step 11 for End of Period column to generate a new field with YYYYMM format and name it End of Period.



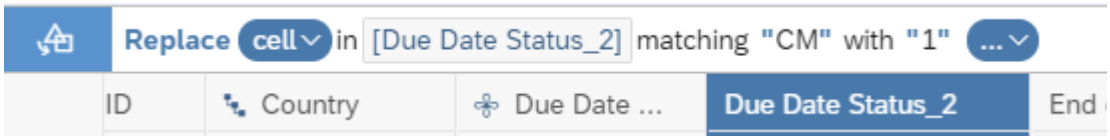
13. Duplicate the End of Period and rename it to Time.



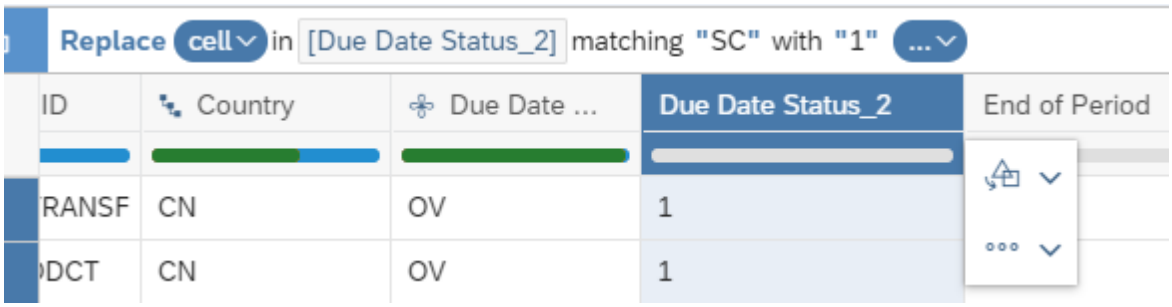
14. Duplicate column Due Date Status yields a new column called Due Date Status_2.
15. Create a transformation on Due Date Status_2 to replace cell in Due Date Status_2 match "OV" with "1".



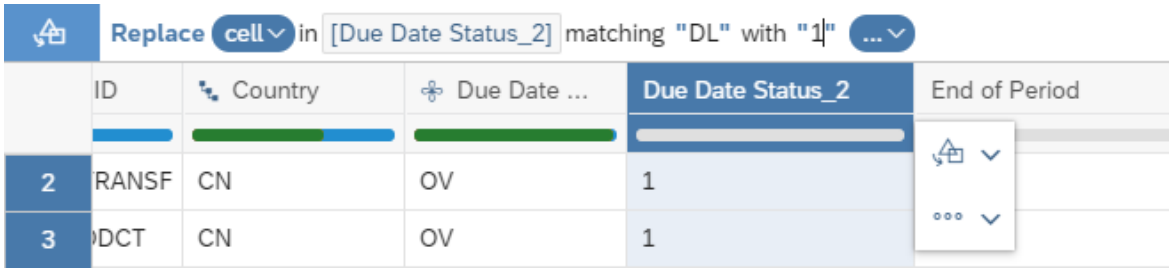
16. Create a transformation on Due Date Status_2 to replace cell in Due Date Status_2 match "CM" with "1".



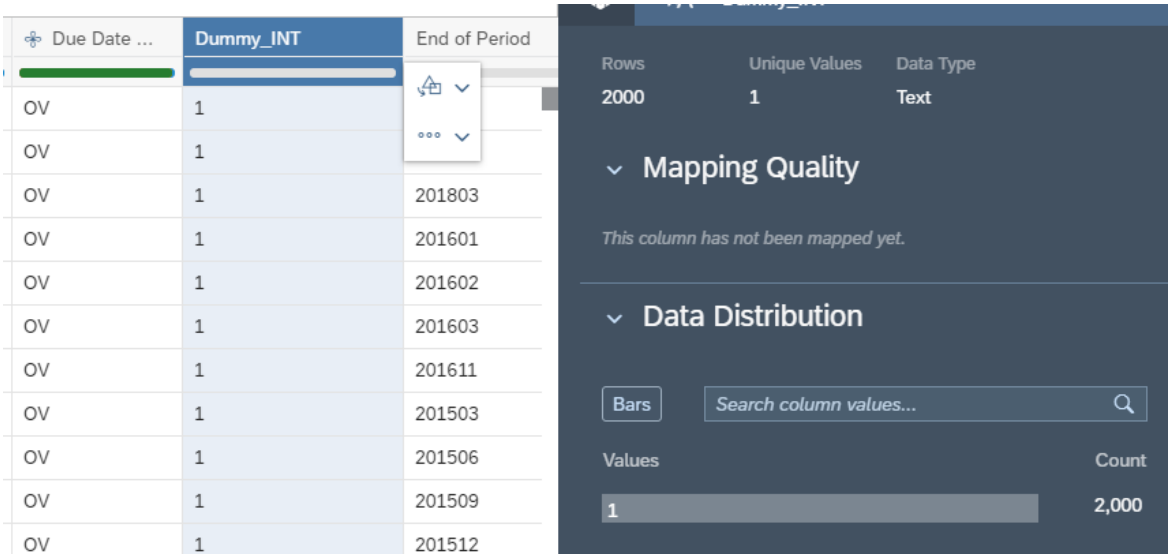
17. Create a transformation on Due Date Status_2 to replace cell in Due Date Status_2 match "SC" with "1".

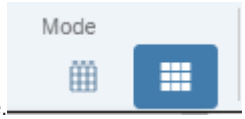


18. Create a transformation on Due Date Status_2 to replace cell in Due Date Status_2 match "DL" with "1".



19. Create a transformation on Due Date Status_2 to replace cell in Due Date Status_2 match "DS" with "1".
20. Rename Column Due Date Status_2 to Dummy_INT.

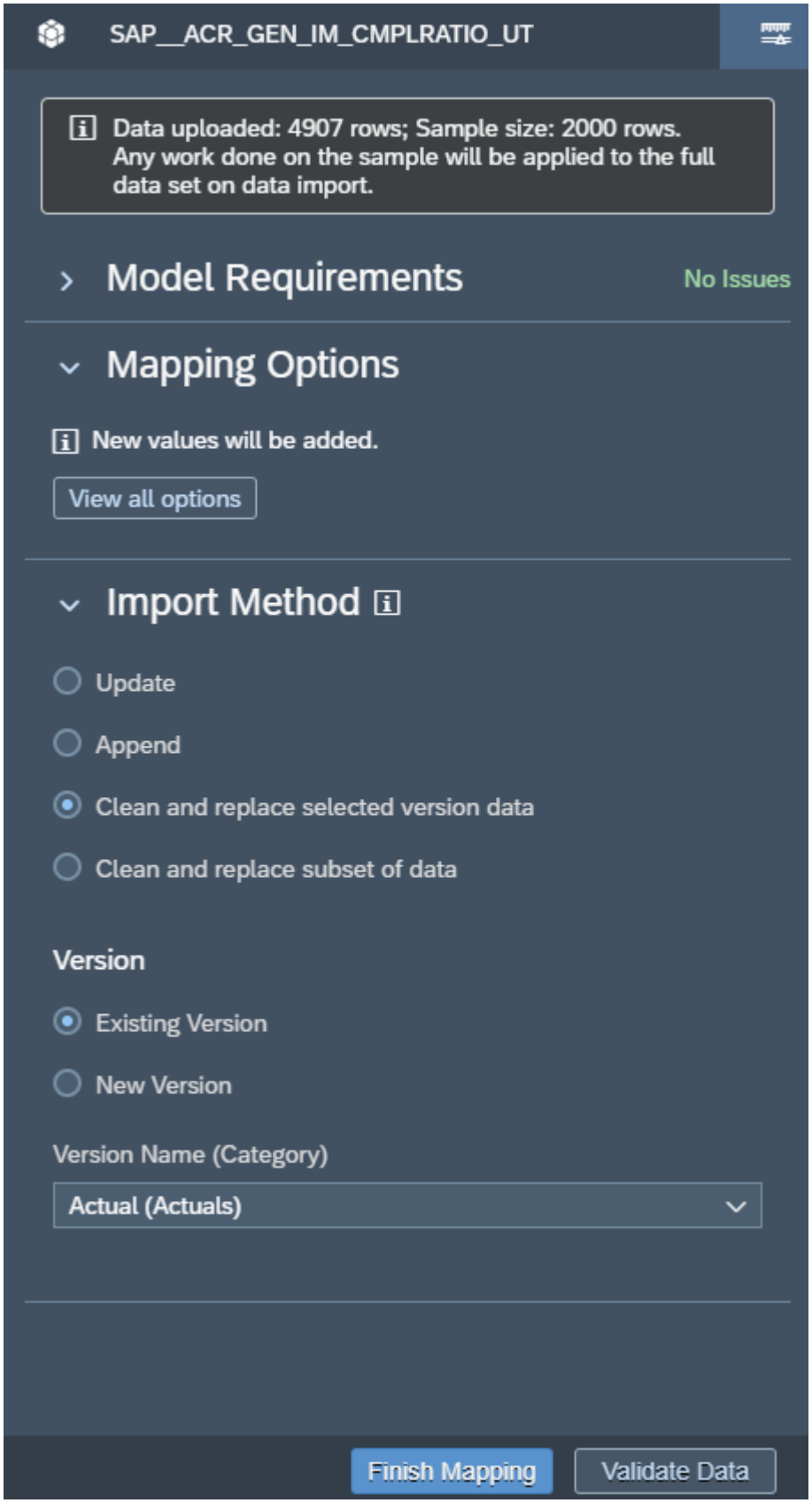




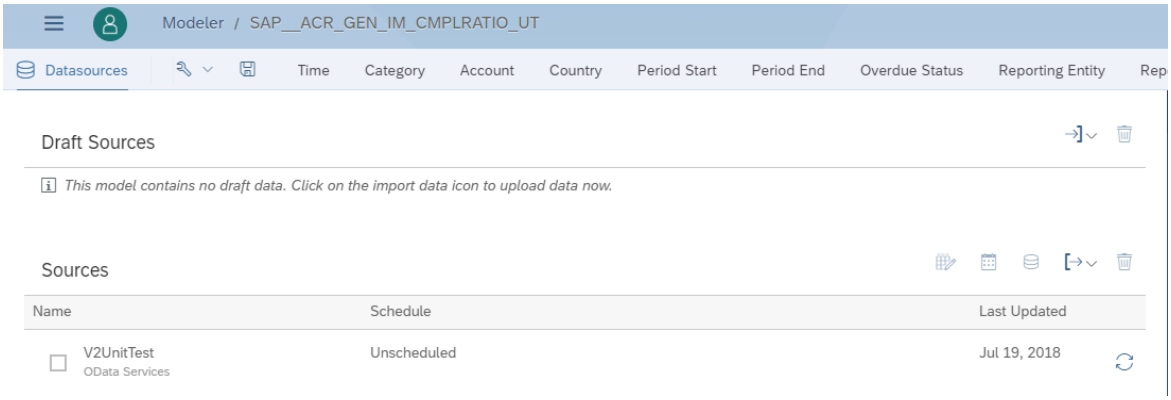
21. Switch back to the Card Mode.
22. Create the following mapping.

Source Field	Target Field
Report ID	Report (Dimension ID)
Report Name	Report (Description)
Report Entity	Reporting Entity (Dimension ID)
Report Entity Name	Reporting Entity (Description)
Due Date Status	Overdue Status (Dimension ID)
Country	Country (Dimension ID)
State of Period	Period Start (Dimension ID)
End of Period	Period End (Dimension ID)
TIME	TIME
DUMMY_INT	DUMMY_INT(Measure)

23. There should be no issues in the Model Requirements section. Fix any data quality issue (if any).
24. Set the Import Method to be Clean and replace selected version data and choose Actual (Actuals) as the version. Press Finish Mapping to load the data from OData service to the model.


SAP__ACR_GEN_IM_CMPLRATIO_UT
Data uploaded: 4907 rows; Sample size: 2000 rows.
Any work done on the sample will be applied to the full data set on data import.
Model Requirements
No Issues
Mapping Options
New values will be added.
View all options
Import Method
Update
Append
Clean and replace selected version data
Clean and replace subset of data
Version
Existing Version
New Version
Version Name (Category)
Actual (Actuals)
Finish Mapping
Validate Data

25. If the data loading is successful, you will be able to see the entry in the Sources section, where future data loading can be scheduled.



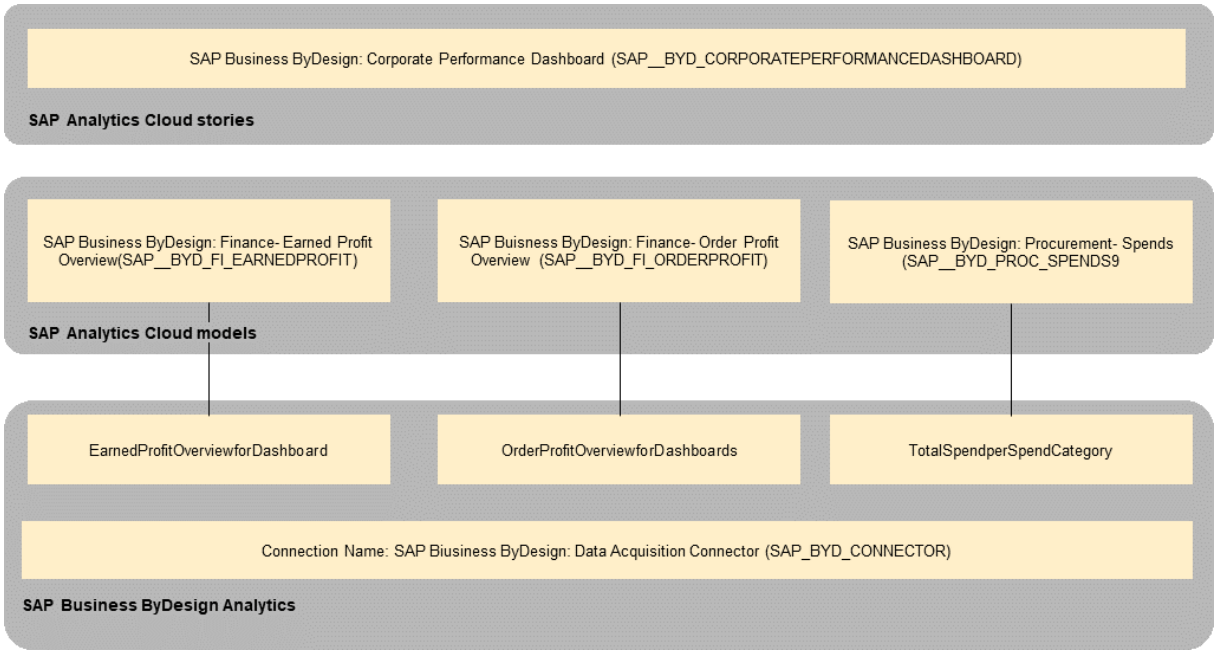
2.2 Business ByDesign

2.2.1 Architecture and Abstract

SAP Business ByDesign has several dashboards provided in the Corporate Performance section. The queries used to build the Financial and Procurement dashboards are reused to build the content for SAP Analytics Cloud.

Architecture:

The building blocks are as shown:



The colored objects are documented in this chapter.

2.2.2 Stories

SAP Business ByDesign: Corporate Performance Dashboard (SAP__BYD_CORPORATEPERFORMANCEDASHBOARD)

Name: SAP__BYD_CORPORATEPERFORMANCEDASHBOARD
Description: SAP Business ByDesign: Corporate Performance Dashboard
Page – Finance
This page provides the Financial Profit Overview of the current year with deviations w.r.t. previous year. This page can be filtered based on Company and Country.
Charts
Net Revenue
Model: SAP__BYD_FI_EARNEDPROFIT This chart shows Net Revenue for the current year and its variance with the previous year.
Operating Profit
Model: SAP__BYD_FI_EARNEDPROFIT This chart shows Operating Profit for the current year and its variance with the previous year.
Cost of Goods Sold
Model: SAP__BYD_FI_EARNEDPROFIT This chart shows COGS for the current year and its variance with the previous year.
Net Incoming Orders
Model: SAP__BYD_FI_ORDERPROFIT This chart shows Net Incoming Orders for the current year and its variance with the previous year.
Profitability Trend
Model: SAP__BYD_FI_EARNEDPROFIT This chart shows the Operating Profit and Gross Profit as bars and their corresponding margins as trend lines over the previous and current year on a quarterly timeline.
Net Incoming Orders Trend
Model: SAP__BYD_FI_ORDERPROFIT This chart shows the trend of incoming orders for the current year in a monthly basis along with variance w.r.t previous year.
Net Revenue by Country
Model: SAP__BYD_FI_EARNEDPROFIT This chart shows Net Revenue breakdown by country, for the current year and its variance with the previous year.

Name: SAP__BYD_CORPORATEPERFORMANCEDASHBOARD

Profitability Margin by Product Group

Model: SAP__BYD_FI_EARNEDPROFIT

This chart shows Profitability Margin per Product Group, for the current year and its variance with the previous year.

Incoming Order Distribution by Country

Model: SAP__BYD_FI_ORDERPROFIT

This chart shows the percentage of Incoming Orders in each country for the current year. Hovering over the chart also shows the absolute values of the Incoming Orders.

Page - Procurement

This page provides the Financial Overview for the Profit Overview of the current year with deviations w.r.t. previous year.

This page can be filtered based on Company. The model SAP__BYD_PROC_SPENDS is used for all charts in this page. There is a measure input control Spend Type-, this is used to select the spend you such as want to display in the middle row of charts along with Total Spend.

Charts

Total Spend

This chart shows Total Spend for the current year and its variance with the previous year. Total spend is the sum of all other spends shown in the header.

Purchase Order Spend

This chart shows Purchase Order Spend for the current year and its variance with the previous year.

Maverick Spend

This chart shows Maverick Spend for the current year and its variance with the previous year. Maverick Spend should be kept at a minimum.

Contract Spend

This chart shows Contract Spend for the current year and its variance with the previous year.

Spend Trend

This chart shows the trend of total spend and a spend selected from the Spend Type control spends for the previous and current year. Additionally, forecast is provided for the spends for the next months.

Spend per Supplier

This chart shows the total spend and a spend selected from the Spend Type control spends for each supplier for the current year for each quarter. It also shows YOY variance for the total cost.

Total Spend per Site

This chart shows the total spend per site per year with a YOY variance to previous year.

Total Spend per Product Category

This chart shows the total spend per site for the current year with a YOY variance to previous year.

Total Spend Trend per Supplier

This chart shows the total spend per supplier for the previous and current year. Additionally, forecast is provided for the spend for the next months.

Name: SAP__BYD_CORPORATEPERFORMANCEDASHBOARD
Page – Reports
This page provides the model information in grids. Users can in design mode, drill-down by all dimensions available in these models.
Charts
Financial Report
Model: SAP__BYD_FI_EARNEDPROFIT This grid provides all the earned profit KPIs
Procurement Report
Model: SAP__BYD_PROC_SPENDS This grid provides all the spends KPIs

2.2.3 Models

There are 3 models used in this content.

Each of these models can be filled by a specified predefined SAP Business ByDesign Query based on the connection SAP_BYD_CONNECTOR.

2.2.3.1 Finance - Earned Profit Overview (SAP__BYD_FI_EARNEDPROFIT)

Model Name: SAP__BYD_FI_EARNEDPROFIT	Connection
• Model Description: SAP Business ByDesign: Finance - Earned Profit Overview • Planning Enabled: Yes	• Connection type: Get Data from an App > SAP Business ByDesign Analytics • Connection Name: SAP_BYD_CONNECTOR • (SAP Business ByDesign: Data Acquisition Connector) • Connection Query: EarnedProfitOverviewforDashboard • (RPFINPRFU30_Q0004QueryResults)

Account*		
ID	**Description**	**Formula/Mapping**

Model Name: SAP__BYD_FI_EARNEDPROFIT		Connection
Gross_Profit	Gross Profit	Gross_Profit
Operating_Profit	Operating Profit	Operating_Profit
Cost_of_Goods_Sold	Cost of Goods Sold	Cost_of_Goods_Sold
Net_Sales_Revenue	Net Sales Revenue	Net_Sales_Revenue
Gross_Profit_Margin	Gross Profit Margin	[Gross_Profit]/[Net_Sales_Revenue]
Operating_Profit_Margin	Operating Profit Margin	[Operating_Profit]/[Net_Sales_Revenue]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Calendar Year/Month ID
Company_ID*	Company ID	Company ID
Country _ID*	Country ID	Country ID
Customer_ID*	Customer ID	Customer ID
Distribution_Channel_ID*	Distribution Channel ID	Distribution Channel ID
Product_Category_ID*	Product Category ID	Product Category ID
Product_ID*	Product ID	Product ID
Profit_Center_ID*	Profit Center ID	Profit Center ID
Profitability_Line_ID*	Profitability Line ID	Profitability Line ID
Sales_Unit_ID*	Sales Unit ID	Sales Unit ID
Additional Notes about the model		
It is best to upload data into this model using the connection SAP_BYD_CONNECTOR provided. This would mean that you don't have to do any manual mapping but only schedule or do an immediate data upload. Further information about this is available in SAP Analytics Cloud Help for Updating and Scheduling Models.		

> **i Note**
>
> *Private dimension, other dimensions are public

2.2.3.2 Finance - Order Profit Overview (SAP__BYD_FI_ORDERPROFIT)

Model Name: SAP__BYD_FI_ORDERPROFIT	Connection
• Model Description: SAP Business ByDesign: Finance - Order Profit Overview • Planning Enabled: Yes	• Connection type: Get Data from an App > SAP Business ByDesign Analytics • Connection Name: SAP_BYD_CONNECTOR (SAP Business ByDesign: Data Acquisition Connector) • Connection Query: OrderProfitOverviewforDashboards (RPFINPRFU30_Q0006QueryResults)

Account*		
ID	**Description**	**Formula/Mapping**
Net_Incoming_Orders	Net Incoming Orders	Net Incoming Orders
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Calendar Year/Month ID
Company_ID	Company ID	Company ID
Country_ID	Country ID	Country ID
Customer_ID	Customer ID	Customer ID
Distribution_Channel_ID	Distribution Channel ID	Distribution Channel ID
Product_Category_ID	Product Category ID	Product Category ID
Product_ID	Product ID	Product ID
Sales_Unit_ID	Sales Unit ID	Sales Unit ID
Additional Notes about the model		
It is best to upload data into this model using the connection SAP_BYD_CONNECTOR provided. This would mean that you don't have to do any manual mapping but only schedule, or do an immediate data upload. Further information about this is available in SAP Analytics Cloud Help for Updating and Scheduling Models.		

*Private dimension, other dimensions are public

2.2.3.3 Procurement-Spends (SAP__BYD_PROC_SPENDS)

Model Name: SAP__BYD_PROC_SPENDS	Connection
• Model Description: SAP Business ByDesign: Procurement-Spends • Planning Enabled: Yes	• Connection type: Get Data from an App > SAP Business ByDesign Analytics • Connection Name: SAP_BYD_CONNECTOR (SAP Business ByDesign: Data Acquisition Connector) • Connection Query: TotalSpendperSpendCategory (RPSRMIV_B03_Q0011QueryResults)

Account*		
ID	**Description**	**Formula/Mapping**
Maverick_Spend	Maverick Spend	Maverick Spend
Contract_Spend	Contract Spend	Contract Spend
Purchase_Order_Spend	Purchase Order Spend	Purchase Order Spend
Total_Spend	Total Spend	Total Spend
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Calendar Year/Month ID
Company_ID	Company ID	Company ID
Country_ID	Country ID	Country ID
Buyer_Responsible_ID	Buyer Responsible ID	Buyer Responsible ID
Process_Type_ID	Process Type ID	Process Type ID
Product_Category_ID	Product Category ID	Product Category ID
Product_ID	Product ID	Product ID
Site_ID_ID	Site ID	Site ID
Supplier_ID	Supplier ID	Supplier ID
Supplier_Country_ID	Supplier Country ID	Supplier Country ID
Additional Notes about the model		
It is best to upload data into this model using the connection SAP_BYD_CONNECTOR provided. This would mean that you don't have to do any manual mapping but only schedule or do an immediate data upload. Further information about this is available in SAP Analytics Cloud Help for Updating and Scheduling Models.		

> **i Note**
>
> *Private dimension and other dimensions are public.

2.3 Cloud Platform Integration - Reporting Dashboard

2.3.1 Architecture & Abstract

Overview

SAP Cloud Platform Integration (CPI) is SAP's strategic enterprise-wide integration middleware hosted on SAP Cloud Platform (SCP). The CPI reporting dashboard is built upon SAP Analytics Cloud (SAC), which is a powerful data acquisition application.

This document helps you start the analytics journey in SAC that is specific to CPI line of business (LoB). We assume that the reader is familiar with SAP Analytics Cloud and this document does not substitute SAP Analytics Cloud documentation, which can be found here: Help Portal: SAP Analytics Cloud.

What is the purpose of the Dashboard?

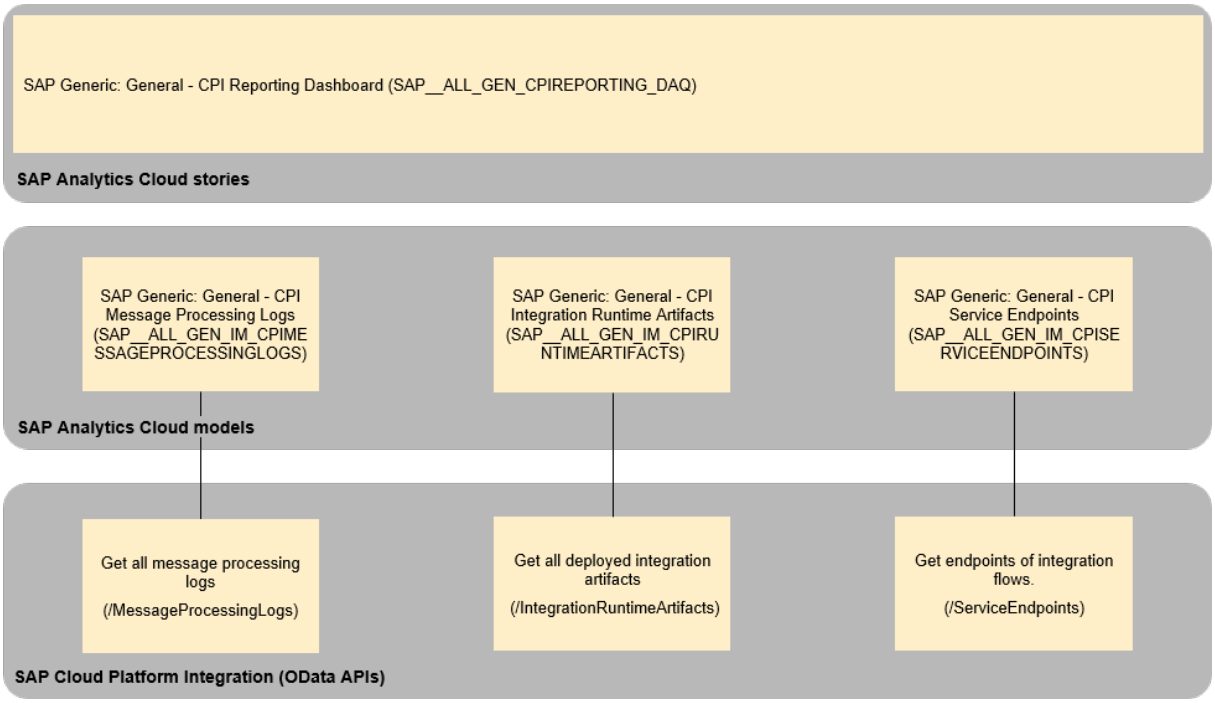
The CPI reporting dashboard offers the tenant administrators with an unbiased view on the performance of messages and integration content artifacts deployed on a CPI tenant. Following are the key views of the dashboard:

- Message Processing View
  - Visualize, sort, and track message processing happening on your CPI tenant. Here you can monitor the messages that are being processed by each integration flows and get to know the processed messages over a period. Besides monitoring, you can also get to know the deployment statuses of integration flows.
- Deployed Artifact View
  - Reports the number of integration artifacts deployed based on the type of integration content.
- Service Endpoints View
  - In this view, you can find the service endpoints distributed as per the API protocols.

Architecture

Cloud Platform Integration SAP Analytics Cloud content helps the tenant administrators to make better decisions based on the insights from the CPI tenant using the intuitive and interactive widgets.

Cloud Platform Integration SAP Analytics Cloud architecture has one story and three data models, which is based on the relevant CPI OData APIs.



The colored objects are documented in this chapter.

The documentation for the greyed out stories and models can be found in the respective Lines of Business (LoB) chapters:

2.3.2 Stories

SAP Generic: General - CPI Reporting Dashboard (SAP__ALL_GEN_CPIREPORTING_DAQ)

Measure Name	Type	Formula/Properties
Messages	Calculated Measure	Set formula of [Messages] to "'1'"
Deployed Artifacts	Calculated Measure	Set formula of [Deployed Artifacts] to "'1'"
Service Endpoints	Calculated Measure	Set formula of [Service Endpoints] to "'1'"

2.3.3 Models

2.3.3.1 SAP Generic: General - CPI Message Processing Logs (SAP__ALL_GEN_IM_CPIMESSAGEPROCESSINGLOGS)

Model Name: SAP__ALL_GEN_IM_CPIMESSAGEPROCESSINGLOGS

Model Description: SAP Generic: General - CPI Message Processing Logs

Planning Enabled: no

Connection

- Import Data Connection to OData Services
- SAPCPI

Account

ID	Description	Mapping/Formula
Messages		Messages

Dimensions

Name	Description	Mapping
Account*	Account	-
MessageGuid		MessageGuid
CorrelationId		CorrelationId
Sender		Sender
Receiver		Receiver
Status		Status
AlternateWebLink		AlternateWebLink
IntegrationArtifactId		IntegrationArtifactId
Integration_3o5q220684		IntegrationArtifact/Name
Integration_104j6605w2		IntegrationArtifact/Type
PackageId		IntegrationArtifact/PackageId
PackageName		IntegrationArtifact/PackageName
LogLevel		LogLevel
LogStart		LogStart
LogEnd		LogEnd
TransactionId		TransactionId
Additional Notes about the model		

Data Transformation Applied:

Replace "INTEGRATION_FLOW" with "Integration Flow" in [IntegrationArtifact/Type]

Replace "ODATA_SERVICE" with "OData API" in [IntegrationArtifact/Type]

Replace "SOAP_API_PROVIDER" with "SOAP API" in [IntegrationArtifact/Type]

Replace "REST_API_PROVIDER" with "REST API" in [IntegrationArtifact/Type]

Import Method Used:

Update - Updates the existing data and adds new entries to the target model.

Configure Data Scheduling:

By default, the scheduling frequency is set to None. We recommend you to schedule a data import every one hour, see Updating and Scheduling Models

> **i Note**
>
> *Private dimension, other dimensions are public

2.3.3.2 SAP Generic: General - CPI Integration Runtime Artifacts (SAP__ALL_GEN_IM_CPIRUNTIMEARTIFACTS)

Model Name: SAP__ALL_GEN_IM_CPIRUNTIMEARTIFACTS

Model Description: SAP Generic: General - CPI Integration Runtime Artifacts

Planning Enabled: no

Connection

- Import Data Connection to OData Services
- SAPCPI

Account		
ID	**Description**	**Mapping/Formula**
Deployed_Artifacts	Deployed_Artifacts	Deployed_Artifacts
Dimensions		
Name	**Description**	**Mapping**
Account*	Account	-
Id_4b605a0b1t		MessageGuid
Version		Version
Name		Name

Type	Type
DeployedBy	DeployedBy
DeployedOn	DeployedOn
Status	Status
Additional Notes about the model	

Data Transformation Applied:

Set formula of [Deployed Artifacts] to "'1'"

Replace "INTEGRATION_FLOW" with "Integration Flow" in [Type]

Replace "ODATA_SERVICE" with "OData API" in [Type]

Replace "SOAP_API_PROVIDER" with "SOAP API" in [Type]

Replace "REST_API_PROVIDER" with "REST API" in [Type]

Replace "VALUE_MAPPING" with "Value Mapping" in [Type]

Import Method Used:

Clean and replace selected version data - Deletes the existing data and adds new entries to the target model.

Configure Data Scheduling:

By default, the scheduling frequency is set to None. We recommend you to schedule a data import every one hour, see Updating and Scheduling Models

> **i Note**
>
> *Private dimension, other dimensions are public

2.3.3.3 SAP Generic: General - CPI Service Endpoints (SAP__ALL_GEN_IM_CPISERVICEENDPOINTS)

Model Name: SAP__ALL_GEN_IM_CPISERVICEENDPOINTS

Model Description: SAP Generic: General - CPI Service Endpoints

Planning Enabled: no

Connection

- Import Data Connection to OData Services
- SAPCPI

Account

ID	Description	Mapping/Formula
Service_Endpoints	Service_Endpoints	Service_Endpoints

Dimensions

Name	Description	Mapping
Account*	Account	-
Name		Name
Id_p2f4g0672h		Id_p2f4g0672h
Version		Version
Description_3r6l4204l3		Description
Protocol		Protocol
LastUpdated		LastUpdated
Additional Notes about the model		

Data Transformation Applied:

Set formula of [Service Endpoints] to "'1'"

Import Method Used:

Clean and replace selected version data - Deletes the existing data and adds new entries to the target model.

Configure Data Scheduling:

By default, the scheduling frequency is set to None. We recommend you to schedule a data import every one hour, see Updating and Scheduling Models

> **i Note**
>
> *Private dimension, other dimensions are public

2.3.4 OData Connectivity

By default, the data acquired and displayed initially in the dashboard is from a sample data.

To connect your SAP CPI tenant to this SAC story, use the existing connection with the name SAPCPI and configure it as described here. You can connect to an OData Service in SAP Analytics Cloud application, based on the following connectivity types.

2.3.4.1 Connectivity: OAuth 2.0 Client Credentials (Recommended)

Configure OAuth

First, you must configure OAuth with Client Credentials Grant in your SAP Cloud Platform cockpit. For more information on how to register as the OAuth client in the consumer account, subscribed to CPI service, using the SAP Cloud Platform cockpit, see OAuth 2.0 Configuration. This gives the client application access to the associated runtime node through OAuth authentication.

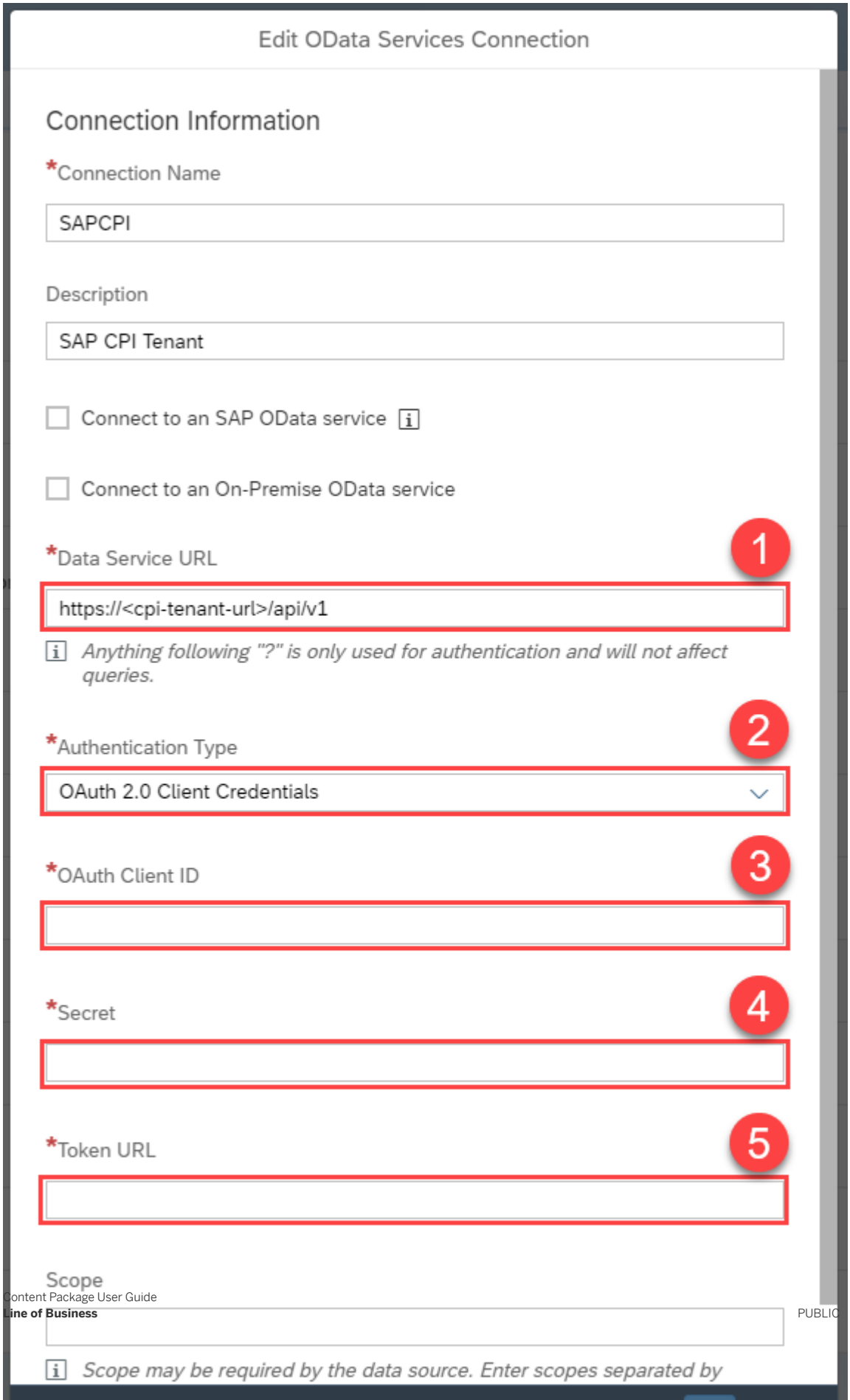
Remember, while registering the OAuth make sure you:

- Select the VM name of the runtime node type that ends with "*.tmn" in the Subscription field.
- Select Authorization Grant as Client Credentials.
- Keep a note of the Token Endpoint URL that you need to enter in the client application. Navigate to *Security* > *OAuth* and click the Branding tab to find the Token Endpoint URL displayed in section OAuth URLs.
- Before you continue, obtain and make a note of the OAuth 2.0 credentials (OAuth Client ID, Secret), and the Token Endpoint URL.

Authorize Users

Secondly, you must authorize the client to access the OData APIs. For more information, see Defining Authorizations. Before you assign the role to the user, the name of the user should be of the format "oauth_client_<client ID>". To know more on pre-defined roles that you can assign to users of the account, see Persona.

Connecting to OData Service



1. Provide your CPI tenant URL that has the format https://<cpi-tenant-url>/api/v1

2. Select OAuth 2.0 Client Credentials.

3. Provide the OAuth Client ID registered in the cockpit.

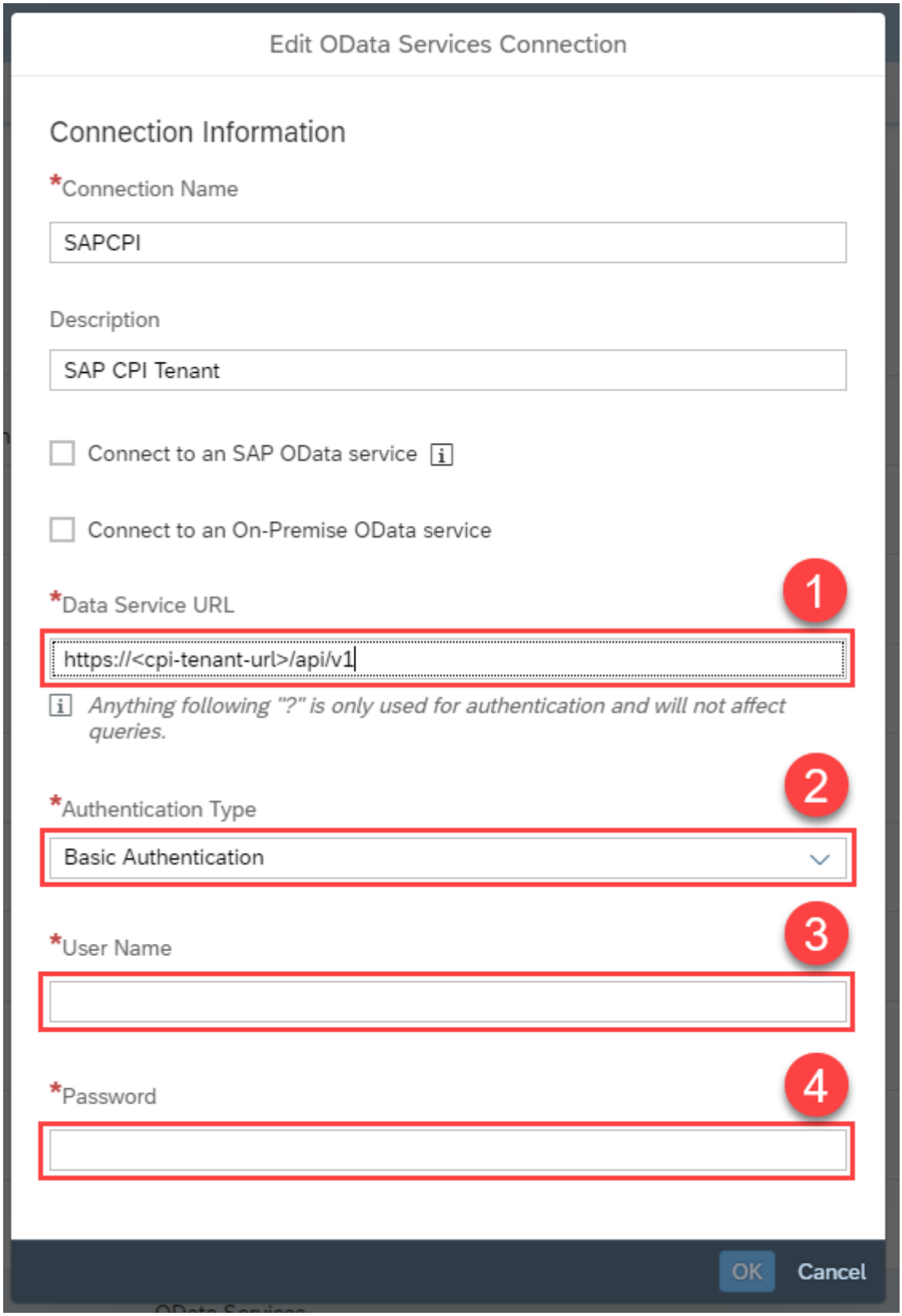
4. Provide the Secret password defined in cockpit.

5. Use the Token Endpoint URL obtained from the cockpit.

For more information, see Adding an OData Service.

2.3.4.2 Connectivity: Basic Authentication

When basic authentication is configured, you must authorize the user to access the OData APIs. For more information, see Defining Authorizations. To know more on pre-defined roles that you can assign to users of the account, see Persona.



1. Provide your CPI tenant URL that has the format https://<cpi-tenant-url>/api/v1.
2. Select Basic Authentication Type.

3. Provide the username of the user who has access to the CPI tenant.
4. Provide the password of the user who has access to the CPI tenant.

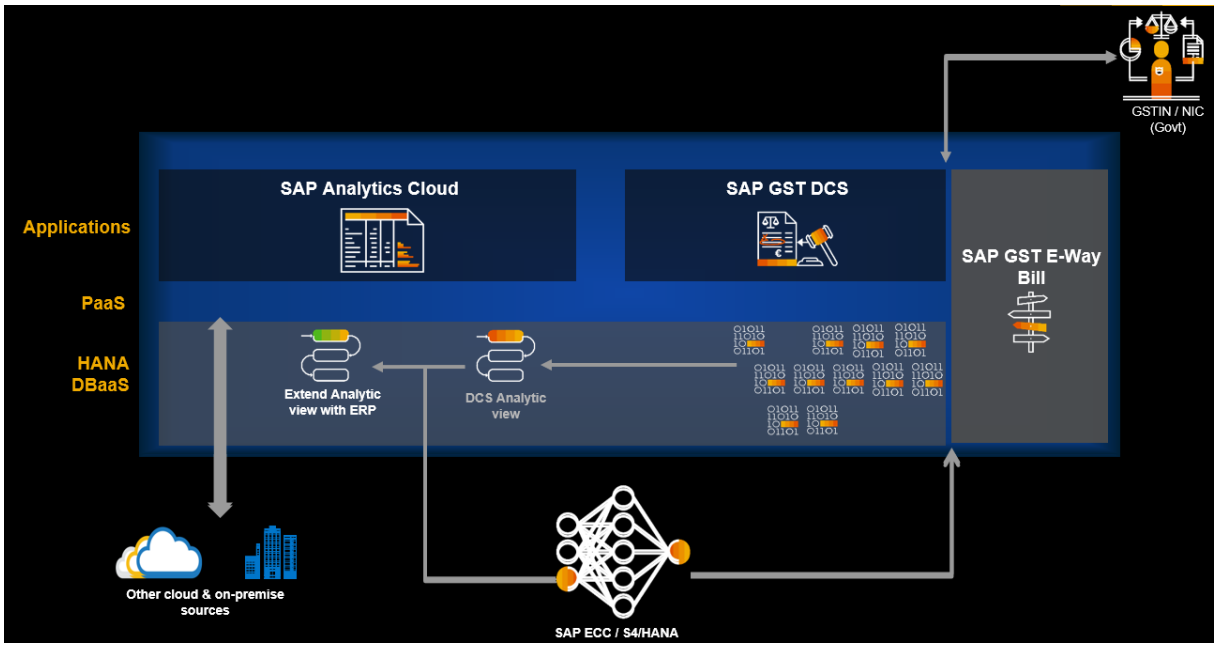
2.4 Digital Compliance Service - GST

2.4.1 Architecture and Abstract

The introduction of Goods and Services Tax (GST) in India, brings in a new regime of tax compliance, moving from filing of tax reports to a model-based on data communication between you as the taxpayer and the GST Network (GSTN) organization. GSTN has introduced two new entities, GST Suvidha Provider (GSP) and the Application Service Provider (ASP), whose roles are to facilitate the data communication to the GST system at GSTN in the required format.

SAP brings you ASP services in the taxpayer enterprise landscape through the GST Digital Compliance Service from SAP. This solution shall offer consolidation capabilities at a GST registration level of organization of data from disparate systems and is designed around a framework driven approach for reporting.

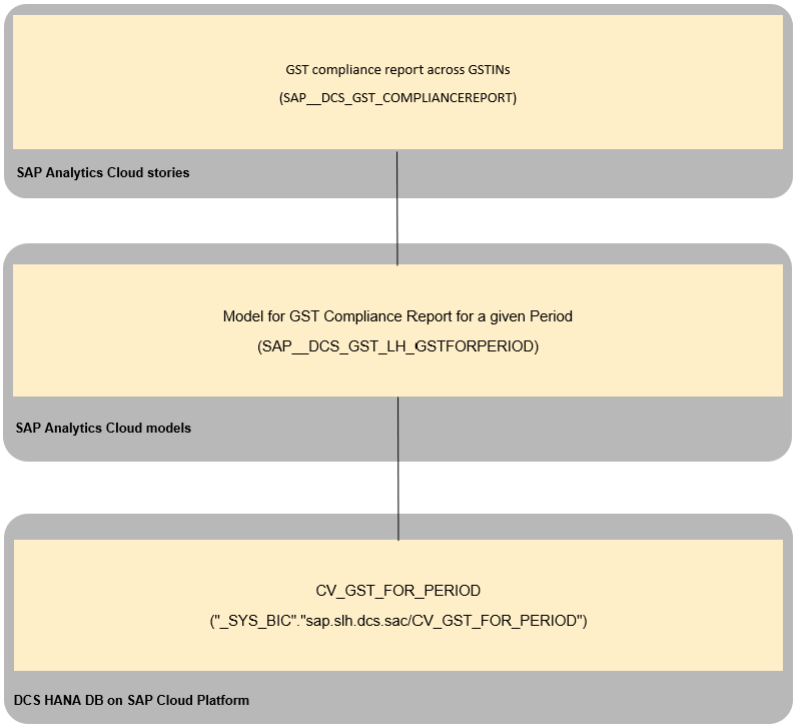
Scenario Overview



The SAP Analytics Cloud standard content for SAP Digital Compliance Service (GST) provides an out of the box overall tax payable, dues per GST component, status wise inward credit and outward liability for each GST component, analysis by Vendor/Customer/HSN Code and capability to drill-down up-to invoice level information.

This allows end user to monitor the overall GST compliance on monthly/Quarterly basis for one or more GSTINs. This report fetches the relevant information via live HANA connectivity from the DCS views, hosted in HANA DB on SAP Cloud Platform.

Architecture



Please check the following topics before using the content:

- The SAP Digital Compliance Service solution must be in place.
- The software must be at the level 1.2.18.
- The user that you intend to use while updating the connection to your DCS tenant need to have relevant permissions, please also consult the SAP Analytics Cloud documentation HANA Live connections.
- After importing the content, you need to configure the connection with following parameters:

Field	Value
Connection	HANA Live
Connection Type	SAP Cloud Platform
SAP Cloud Platform Account	<your account>
Database Name	<your SCP database>
Landscape Host	<your datacenter>
Default Language	EN
Authentication Method	Username and Password
Username	<your SCP DB/HANA user>
Password	<your SCP DB/HANA Password>

2.4.2 Compliance Report (SAP__DCS_GST_ComplianceReport)

- When launching the story, a start period and end period must be entered in the prompt. The values need to be entered in format MMYYYY. e.g., 092017.
- Once, prompts are set the story page is loaded. The GSTINs that needs to be analysed should be chosen. By default, all are selected.

The page is then re-loaded for the provided period and selected GSTINs. The page has following information:

- Tax payable information at the top left corner.
- The first two lanes in the story provides with the summary of the tax payable components. This is basically CGST, SGST, IGST and Cess information. Each component has net value displayed, its split across inward credit and outward liability. Outward liability is further split by status New in yellow, SENT in Blue, and FILED in green. Inward liability is further split by status RECONCILED in green and TO BE RECONCILED in yellow.
- The below part of the page allows to choose the measure that a user wants to analyse. The available measures that can be analysed are Inward CGST, Inward SGST, Inward IGST, Inward Cess, Outward CGST, Outward SGST, Outward IGST, Outward Cesss.
- Once the measure is selected, all the visualizations at the same level provide split of that measure by dimensions Vendor, LoB Type, and HSN Code.

> **i Note**
>
> - It's a stacked chart and the bars are split by the status codes.
> - The elements in the stacked bar chart can be selected to filter on the list of invoices that are contributing to the value of that element.

Measure Name	Type	Formula/Properties
Tax Payable	Calculated Measure	Net CGST + Net SGST + Net IGST + Net Cess

2.4.3 DCS: GST Models

The next chapters provides the detailed information about Digital Compliance Service (DCS: GST) Models.

2.4.3.1 GST data for a given period (SAP__DCS_GST_LH_GSTFORPERIOD)

Model Name: SAP__DCS_GST_LH_GSTFORPERIOD	**Connection**
• Model Description: GST data for a given period • Planning Enabled: No	• HANA Live • ComplianceReport

Dimensions		
Name	**Description**	**Mapping**
GSTIN	GSTIN Code	GSTIN
GSTIN Name	GSTIN Name	GSTIN_NAME
Customer GSTIN	Customer GSTIN	CGSTIN
HSN Code	HSN Code	HSN_SAC
Customer/Vendor	Customer or Vendor Name	CUST_NAME
Invoice Date	Invoice Date	INV_DATE
Period	Financial Period	FIN_PERIOD
Status	Status covers status for both Outward liability and inward credit	STATUS
Invoice Type	The business or LOB type	INV_TYP
Invoice Number	Unique Identified for Invoices	INV_NUM
Measures		
Inward CGST	CGST Inward Credit	IN_CGST
Inward SGST	SGST Inward Credit	IN_SGST
Inward IGST	IGST Inward Credit	IN_IGST
Inward Cess	Cess Inward Credit	IN_CESS
Invoice Count	Number of Invoices	INV_COUNT
Outward CGST	CGST Outward liability	OUT_CGST
Outward SGST	SGST Outward liability	OUT_SGST
Outward IGST	IGST Outward liability	OUT_IGST
Outward Cess	Cess Outward liability	OUT_CESS
Net CGST	CGST Outward liability - CGST Inward Credit	NET_CGST

Model Name: SAP__DCS_GST_LH_GSTFORPERIOD		Connection
Net SGST	SGST Outward liability - SGST Inward Credit	NET_SGST
Net IGST	IGST Outward liability - IGST Inward Credit	NET_IGST
Net Cess	Cess Outward liability - Cess Inward Credit	NET_CESS

> **Note**
>
> *Private dimension and other dimensions are public.

Extensibility

Dimensions		Key
Field1	Custom Field	DCS_INVHDR_EXT_FIELD1
Field2	Custom Field	DCS_INVHDR_EXT_FIELD2
Field3	Custom Field	DCS_INVHDR_EXT_FIELD3
Field4	Custom Field	DCS_INVHDR_EXT_FIELD4
Field5	Custom Field	DCS_INVHDR_EXT_FIELD5
Field6	Custom Field	DCS_INVHDR_EXT_FIELD6

> **Note**
>
> - Now, while pushing invoices from SAP S4HANA or SAP ECC system to DCS Applications. If invoice fields are mapped to any of these fields in the DCS application, the calculation view would provide information of that field to SAP Analytics Cloud model.
> - This approach can be used to extend the analysis to more dimensions such as Business Area, Plant Code etc.,

2.5 Environment, Health and Safety Management (EHS)

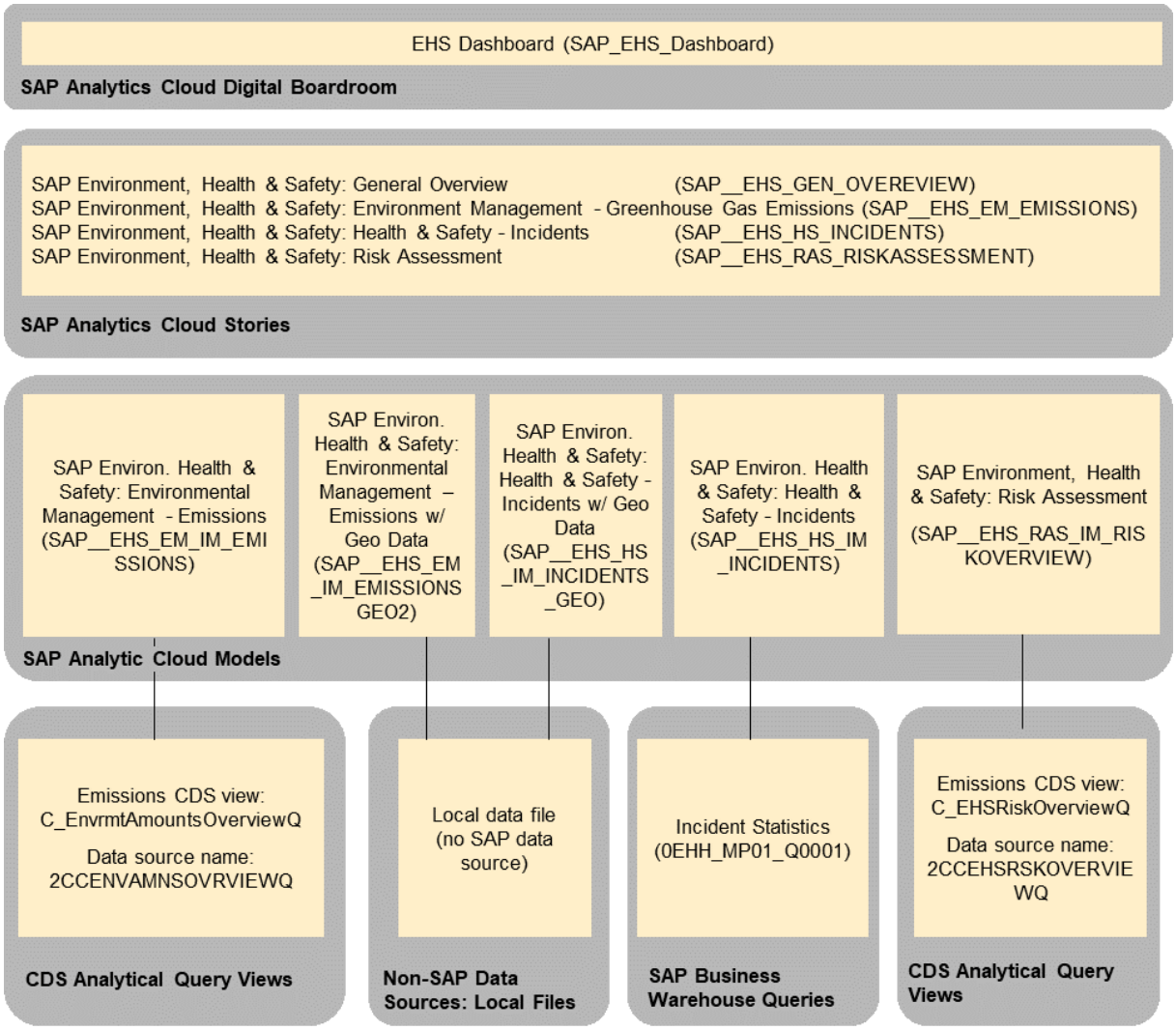
2.5.1 Architecture and Abstract

The Environment, Health, and Safety (EHS) Boardroom shows the greenhouse gas emissions of a company, the safety of its workers, and the level of potential risks including their mitigation. Due to the generic nature of EHS, this content can be reused across multiple industries.

The incident-related story is based on BW queries for the component extension for SAP EHS Management, which is an add-on to SAP ERP.

The stories for greenhouse gas emissions and risk assessment are based on CDS Analytical Query Views of the environment management and the health and safety management components of Environment, Health, and Safety as part of SAP S/4HANA (a solution capability of S/4HANA OP).

Architecture



2.5.2 Dashboard

The dashboard which is used for obtaining insights is: *SAP_EHS_Dashboard*.

2.5.3 Stories

The next chapters provide the detailed information about the stories related to *Environment, Health and Safety Management (EHS)*

2.5.3.1 General Overview (SAP__EHS_GEN_OVERVIEW)

Title: SAP__EHS_GEN_OVERVIEW	
Description: SAP Environment, Health & Safety: General Overview	
Purpose: To give a combined overview on the incident status, the greenhouse gas emissions and the risk level.	
Page: Overview	
Title	**Models Used**
Yearly Greenhouse Gas Emissions in CO2e by Business Unit	SAP__EHS_EM_IM_EMISSIONS
CO2e Reduction Rate	SAP__EHS_EM_IM_EMISSIONS
Number of Injuries	SAP__EHS_HS_IM_INCIDENTS
Injuries	SAP__EHS_HS_IM_INCIDENTS
Risk Level Index and Number of Risks per Location	SAP__EHS_RAS_IM_RISKOVERVIEW
Risk Level Index	SAP__EHS_RAS_IM_RISKOVERVIEW

2.5.3.2 Health & Safety - Incidents (SAP__EHS_HS_INCIDENTS)

In this story, the increase of incidents per incident type is monitored, the most critical injuries come in focus, and the root causes for injuries are analyzed. In addition, the plants where the most severe injuries happened are visualized. This is done by showing the number of injuries in combination with the lost workdays and fatal accidents.

Usage in Industry-specific Boardrooms

Industry	**Story**
SAP Chemicals	SAP__CHEM_EHS_HS_INCIDENTS
SAP Eng. Cons. & Ops.	SAP__EHS_HS_INCIDENTS

Industry	Story
SAP Oil & Gas	SAP__OAG_EHS_HS_INCIDENTS
SAP Utilities	SAP__UTL_EHS_HS_INCIDENTS
SAP Mill Products	SAP__MIL_EHS_HS_INCIDENTS
SAP Mining	SAP__EHS_HS_INCIDENTS

2.5.3.3 Environment Management - Greenhouse Gas Emissions (SAP__EHS_EM_EMISSIONS)

The environment management component as part of Environment, Health, and Safety management (a solution capability of S/4HANA OP) helps companies to reduce their environmental impact with comprehensive environment management and to comply with regulations, internal policies, and environmental operating permits. It covers the processes through data collection, sampling, calculation, and aggregation of emissions into the daily operations within companies. For example, it calculates the emission of CO2 and CO2 equivalents based on the consumption of certain materials (for example, crude oil, natural gas, or diesel).

In this use case, we focus on the emission of CO2 equivalents. To support long-term climate goals of the Paris Agreement, or as a response to national or sub national regulations, most companies have set up on company level emission reduction targets for CO2 equivalents. One factor on influencing carbon emissions, is reducing the GHG footprint of the company's own operations.

Usage in Industry Specific Boardrooms:

To use this story, industries should make a copy of the story SAP__EHS_EM_EMISSIONS to their own namespace. The current usage in Industries is listed below:

Usage in Industry Specific Boardrooms

Industry	Story
Oil & Gas	SAP__OAG_EHS_EM_EMISSIONS
Utilities	SAP__UTL_EHS_EM_EMISSIONS
Chemicals	SAP__EHS_EM_EMISSIONS
Mill Products	SAP__MIL_EHS_EM_EMISSIONS

Name: SAP__EHS_EM_EMISSIONS		
Description: SAP Environment, Health and Safety: Environment Management - Greenhouse Gas Emissions		
Purpose: It enables customers to monitor and analyze emissions of greenhouse gases of its plants, calculated as CO2 equivalents. It shows how well the operational units in our example the oil platforms, fields, terminals and refineries - reach the companies greenhouse gas emission reduction target.		
Page: Detail		
Charts		
Title	**Models Used**	**Navigate to**

Name: SAP__EHS_EM_EMISSIONS		
Yearly Greenhouse Gas Emissions in CO2e by Business Unit	SAP__EHS_EM_IM_EMISSIONS	Open in Explorer
Shows all the greenhouse gas emissions of the last 10 years of all business unit to monitor if the 10-years company reduction target will be reached.		
Monthly Emissions in CO2e	SAP__EHS_EM_IM_EMISSIONS	Open in Explorer
Shows the greenhouse gas emissions per months of the current year		
Top 5 Locations by Total Emissions in CO2e	SAP__EHS_EM_IM_EMISSIONS	Open in Explorer
Shows the top 5 locations with the highest absolute CO2e emissions. Reductions in these locations would have the highest impact on the company's emissions.		
Top 5 Locations by Reduction Rate	SAP__EHS_EM_IM_EMISSIONS	Open in Explorer
Shows the top 5 locations with highest reduction rate of CO2e emissions in the current year.		
10 Year Reduction Rates by Country	SAP__EHS_EM_IM_EMISSIONS	Open in Explorer
Shows the reduction rate of CO2e emissions over the last 10 years per location.		
Emissions by EHS Location Type in CO2e	SAP__EHS_EM_IM_EMISSIONS	Open in Explorer
Shows the emissions by EHS Location Type in CO2e of the last 12 Months		
Page: Content		
Emissions by Location	SAP__EHS_EM_IM_EMISSIONSGEO2	

2.5.3.4 Risk Assessment (SAP__EHS_RAS_RISKASSESSMENT)

The risk assessment component of Environment, Health, and Safety as part of SAP S/4HANA (a solution capability of S/4HANA OP) is a comprehensive and integrated application that helps companies meet health and safety requirements on a local and global level. It allows companies to identify and manage health and safety risks in the workplace. It supports tasks and processes to address regulatory compliance. As a component of SAP's solutions for environment, health, and safety, it supports EHS performance and reduction of operational risks.

In this use case, we focus on the two main aspects of a company's health and safety risk situation:

a) What are the operational risks for the employees?

b) What is done to mitigate these risks?

These two questions are answered by visualizing and contrasting the risks and their mitigating controls in various aspects, one of which an artificial risk level index is calculated from all existing risks.

Usage in Industry Specific Boardrooms

Industry	Story
Oil & Gas	SAP__EHS_RAS_RISKASSESSMENT
Chemicals	SAP__EHS_RAS_RISKASSESSMENT
Mining	SAP__EHS_RAS_RISKASSESSMENT

Story Name: SAP__EHS_RAS_RISKASSESSMENT
Description: SAP Environment, Health, and Safety: Risk Assessment
Purpose: This story enables customers to analyze and compare the risk situation of their operational units (in this example plants). It shows how well this risk situation is managed by the implementation of mitigating risk controls.
Models Used: for all charts, the model used is: SAP__EHS_RAS_IM_RISKOVERVIEW
Page – Risk Overview
This page provides an overview on the Risk Assessment of the operational units, in our example the EHS locations are plants.
Charts
Open Controls and Risk Level Index per Location.
This page shows the correlation between the Risk Level and the open controls per location in a Scatterplot chart, the more critical locations are shown in the upper right quadrant.
Risk Level Index and Number of Risks per Location.
This page shows the distribution of absolute number of risk and the risk level of the locations in a tree map.
Number of Risks per Risk Level
This page shows how many risks per risk level are identified in the company or for the filtered location or hazard category in a bar chart.
Number of Risks per Hazard Category
This page shows how many risks per hazard category are identified in the company or for the filtered location or hazard category in a bar chart.
Number of Risks per Agent
This page shows how many risks per agent are identified in the company or for the filtered location or hazard category in a bar chart.
Page – Details Risk Assessment
This page shows details on the Risk Assessment.
Charts
Risk Level per EHS Location
This page shows the risk level of the locations in a tree map. Selecting locations here is filtering the other charts as a linked analysis.
Number of Risks per Hazard Category
This page shows the number of risk per hazard category in a stacked bar chart.
Number of Risks per Agent
This page shows the number of risk per agent in a stacked bar chart.

Story Name: SAP__EHS_RAS_RISKASSESSMENT
Number of Risks per Hazard Category and Agent
This page shows the number of risk per hazard category and agent in a stacked bar chart.
Page – Details Control Assessment
This page shows details on the implementation of controls to mitigate the identified risks.
Charts
Number of Controls and % of Implemented Controls per Location
This page shows the absolute number of controls in the heights and the implementation rate in a Marimekko chart as the width. So many controls with low implementation rates can be critical.
Number of Controls
This page shows the top 5 locations by number of engineering controls in a stacked bar chart that also shows the person related and organizational controls.
% of Implemented Engineering Controls
This page shows the % of implemented Engineering Controls in a bar chart. Five thresholds are defined indicating the criticality. The lower the implementation rate is, the more critical this is.
% Impl. Organizational Controls
This page shows the % of implemented Organizational Controls in a bar chart. Five thresholds are defined indicating the criticality. The lower the implementation rate is, the more critical this is.
% Impl. Personal Controls
This page shows the % of implemented Personal Controls in a bar chart. Five thresholds are defined indicating the criticality. The lower the implementation rate is, the more critical this is.

2.5.4 Models

The next chapters provide the detailed information about the Models used for creating insightful visualisations.

2.5.4.1 Health & Safety - Incidents (SAP__EHS_HS_IM_INCIDENTS)

Model Name: SAP__EHS_HS_IM_INCIDENTS	Connection
• Model Description: SAP Environment. Health & Safety: Health & Safety - Incidents • Planning Enabled: No	• Connection Types: SAP BW Connection • Connection Query: 0EHH_MP01_Q0001[1]

Incidents Account		
ID	**Description**	**Formula/Mapping**

Model Name: SAP__EHS_HS_IM_INCIDENTS		Connection
INC	Incidents	0EHH_MP01_CK002
INJ	Injuries	0EHH_MP01_CK047
REL	Release	0EHH_MP01_CK045
NOV	Notices of Violation	0EHH_MP01_RK013
NMS	Near misses	0EHH_MP01_CK010
SOB	Safety Observations	0EHH_MP01_CK011
NLW	Number of Lost Workdays	0EH_NUMLWD
FAT		0EHH_MP01_CK005
Dimensions		
ID	**Description**	**Mapping**
Time (granularity date) *	Time	Incident: Start Date
SAP_EHS_HS_IncidentsAccount	Incidents Account	Incident: ID
SAP_EHS_HS_IncidentID	Incident ID	Incident: Category
SAP_EHS_HS_IncidentCategory	Incident Category	Incident: Location
SAP_EHS_HS_Incidentlocation	Incident Location	Incident: Location Classification
SAP_EHS_HS_IncidentLocClass	Incident Location Class	Incident: Status
SAP_EHS_HS_IncidentStatus	Incident Status	Incident: Country
SAP_ALL_COUNTRY	Country	Incident: Plant
SAP_ALL_PLANT	Plant	Incident: Region
SAP_ALL_REGION	Region	Incident: Organizational Unit
SAP_EHS_HS_OrgUnit	Organizational Unit	Investigation: Major Root Cause
SAP_EHS_HS_MajorRootCause	Major Root Cause	
Additional Notes about the model		
[1]Remark: Query 0EHH_MP01_Q0001 is using by default a display hierarchy. Since SAP Analytics Cloud currently doesn't support SAP BW queries with display hierarchy for BW Data Import, a copy of query 0EHH_MP01_Q0001 might be used with the display hierarchy setting switched off.		

*Private dimension and other dimensions are public.

2.5.4.2 Health & Safety - Incidents w/ Geo Data (SAP__EHS_HS_IM_INCIDENTSGEO)

Model Name: SAP__EHS_HS_IM_INCIDENTSGEO	Connection
• Model Description: SAP Environ. Health & Safety: Health & Safety - Incidents w/ Geo Data • Planning Enabled: No	• Connection Types: local file • Connection Query: --

Account		
ID	**Description**	**Formula/Mapping**
INC	Incidents	Suitable column in local file
INJ	Injuries	Suitable column in local file
REL	Releases	Suitable column in local file
NOV	Notices of Violation	Suitable column in local file
NMS	Near misses	Suitable column in local file
SOB	Safety Observations	Suitable column in local file
NLW	Number of Lost Workdays	Suitable column in local file
FAT	Fatalities	Suitable column in local file
Dimensions		
ID	**Description**	**Mapping**
Time (granularity: Days) *	Time	Suitable column in local file
Account_SAP_EHS_1wb30045s6*	Account	Suitable column in local file
Plant_45jg01e6l2*	Plant	Suitable column in local file
Additional Notes about the model		

Remark: For models that contain a geo dimension such as model SAP__EHS_HS_IM_INCIDENTSGEO (here: dimension Plant), it is currently not possible to edit the data of this geo dimension.

Example: For dimension Plant it is not possible to edit or create/delete plant data, such as adding new plants or editing Longitude or Latitude data. The data of this model represents an example only.

To visualize your own geo-enabled data (used in a geo map within a story), you need to create your own geo-enabled model. A possible way to create your own geo-enabled model is as follows:

- Download data from an SAP data source (such as SAP BW query 0EHH_MP01_Q0001) into a local spreadsheet file.
- Add two additional columns to the spreadsheet: Latitude and Longitude.
- For the column that needs to be geo-enabled such as dimension Plant, manually add latitude and longitude data to the file.
- Create your model from this local file. During the Data Integration step create a location out of the dimension that is to be geo-enabled (for example, dimension Plant) by choosing the Create Location function from the column menu.

> **i Note**
>
> *Private dimension and other dimensions are public.

2.5.4.3 Environment Management – Greenhouse Gas Emissions (SAP__EHS_EM_IM_EMISSIONS)

Model Name: SAP__EHS_EM_IM_EMISSIONS	Connection
• Model Description: SAP Environ. Health & Safety: Environmental Management - Greenhouse Gas Emissions • Planning Enabled: No	• Connection type: Import Data Connection to SAP BW • Connection Analytical Query: Data source name: 2CCENVAMNSOVRVIEWQ • CDS view name: C_EnvrmtAmountsOverviewQ

Account		Formula/Mapping		
ID	**Description**	**Description**	**ID**	
EHS_Subject_Amount	EHS Subject Amount	EHS Amount Value	EHSAMOUNTVALUE	
EHS_Subject_Amount_Mte	EHS Subject Amount in Mte	[EHS_Subject_Amount]/1000000000		
Dimensions				
ID	**Description**	**Mapping**		
Time*	Time	Amount UTC Date		EHSAMOUNTUTCDATE
EHS Account Emissions*	SAP_EHS_ACCOUNT_EMISSIONS	Map account as described above		
EHS Subject	SAP_EHS_SUBJECT	Subject Key		EHSSUBJECT
EHS Subject Type	SAP_EHS_SUBJECTTYPE	Subject Type		EHSSUBJECTTYPE
EHS Location	SAP_EHS_LOCATION	Location Key		EHSLOCATION
EHS Location Type	SAP_EHS_LOCATIONTYPE	Location Type		EHSLOCATIONTYPE
EHS EM Data Period	SAP_EHS_EM_DATAPERIOD	Data Period		DATAUSAGEPERIODICITY
Country	SAP_ALL_COUNTRY	Country		COUNTRY
Plant	SAP_ALL_PLANT	Plant ID		PLANT
Business Area	SAP_ALL_BUSINESSAREA	Business Area		BUSINESSAREA
EHS Data Source Type	SAP_EHS_EM_DATASOURCETYPE	Data Source Type		EHSAMOUNTSOURCETYPE
Unit Of Measure	SAP_ALL_UOM	Unit of Measurement		UNITOFMEASURE
Region	SAP_ALL_REGION	Region		REGION
Additional Notes about the model				
Unit of Measure: All the Subjects from EHS should be exposed to SAP Analytics Cloud in one Unit of Measure. Here, we use the Subject CO2e in tons.				

> **i Note**
>
> *Private dimension and other dimensions are public.

2.5.4.4 Environment Management – Greenhouse Gas Emissions w/ Geodata (SAP__EHS_EM_IM_EMISSIONSGEO2)

Model Name: SAP__EHS_EM_IM_EMISSIONSGEO2	**Connection**
• Model Description: SAP Environ. Health & Safety: Environment Management – Greenhouse Gas Emissions w/ Geodata • Planning Enabled: No	Connection Type: Local file

EHS Account Emissions Geo		
ID	**Description**	**Formula/Mapping**
Longitude	Longitude	Suitable column in local file
Latitude	Latitude	Suitable column in local file
Value	Value	Suitable column in local file
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Suitable column in local file
EHS Account Emissions Geo*	Account	Map account as above
EHS Location*	SAP_EHS_LOCATIONGEO	Suitable column in local file

> **i Note**
>
> *Private dimension and other dimensions are public.

2.5.4.5 Risk Assessment (SAP__EHS_RAS_IM_RISKOVERVIEW)

Model Name: SAP__EHS_RAS_IM_RISKOVERVIEW	Connection
• Model Description: SAP Environment, Health & Safety: Risk Assessment • Planning Enabled: No	• Connection type: Data Acquisition or Live Data Connection to S/4 • Connection Analytical Query: Data source name: 2CCEHSRSKMTG-SUMQ • CDS query view name: C_EHSRsk-MitigationSummaryQ

Account		Formula/Mapping
ID	**Description**	**ID**
EHS_Number_of_Risks	Number of Risks	NumberOfEHSRisks
EHS_High_Risk_Level	High Risk Level	NumberOfEHSRisksPrio1
EHS_Medium_Risk_Level	Medium Risk Level	NumberOfEHSRisksPrio2
EHS_Low_Risk_Level	Low Risk Level	NumberOfEHSRisksPrio3
EHS_Unassigned_Risk_Level	Unassigned Risk Level	NumberOfUnassignedEHSRisks
EHS_Num_Controls	Number of Controls	Not mapped
EHS_Num_Implemented_Controls	Number of Implemented Controls	Not mapped
EHS_Num_Engineering_Controls	Number of Engineering Controls	Not mapped
EHS_Num_Impl_EngControls	Number of Impl Eng Controls	Not mapped
EHS_Num_OrganizationalControls	Number of Organizational Controls	Not mapped
EHS_Num_Impl_OrgControls	Number of Impl Org Controls	Not mapped
EHS_Num_PersRelControls	Number of Pers Rel Controls	Not mapped
EHS_Num_Impl_PersRelControls	Number of Impl Pers Rel Controls	Not mapped
EHS_Risk_Level_Index	EHS_Risk_Level_Index	([SAP__EHS_RAS_IM_RISKOVER-VIEW:EHS_High_Risk_Level]*3+ [SAP__EHS_RAS_IM_RISKOVER-VIEW:EHS_Medium_Risk_Level]*2+ [SAP__EHS_RAS_IM_RISKOVER-VIEW:EHS_Low_Risk_Level] *1+ [SAP__EHS_RAS_IM_RISKOVER-VIEW:EHS_Unas-signed_Risk_Level]*3)/ [SAP__EHS_RAS_IM_RISKOVER-VIEW:EHS_Number_of_Risks] /3

Dimensions		
ID	**Description**	**Mapping**
EHS Agent	SAP_EHS_AGENT	EHSAgentUUID

Model Name: SAP__EHS_RAS_IM_RISKOVERVIEW		Connection
EHS Hazard	SAP_EHS_HAZARD	Hazard
EHS Hazard Category	SAP_EHS_HAZARDCATEGORY	HazardCategory
EHS Risk Level	SAP_EHS_RISKLEVEL	EHSRiskLevel
EHS Location[1]	SAP_EHS_LOCATION	Assign to #
Additional Notes about the model		
[1]The CDS view is planned to be shipped with release S/4HANA 1809 On Premise. This is the current state of planning and can be changed by SAP at any time without notice.		

> **i** Note
>
> *Private dimension and other dimensions are public.

2.6 Supply Chain Management – Extended Service Parts Planning

2.6.1 Architecture and Abstract

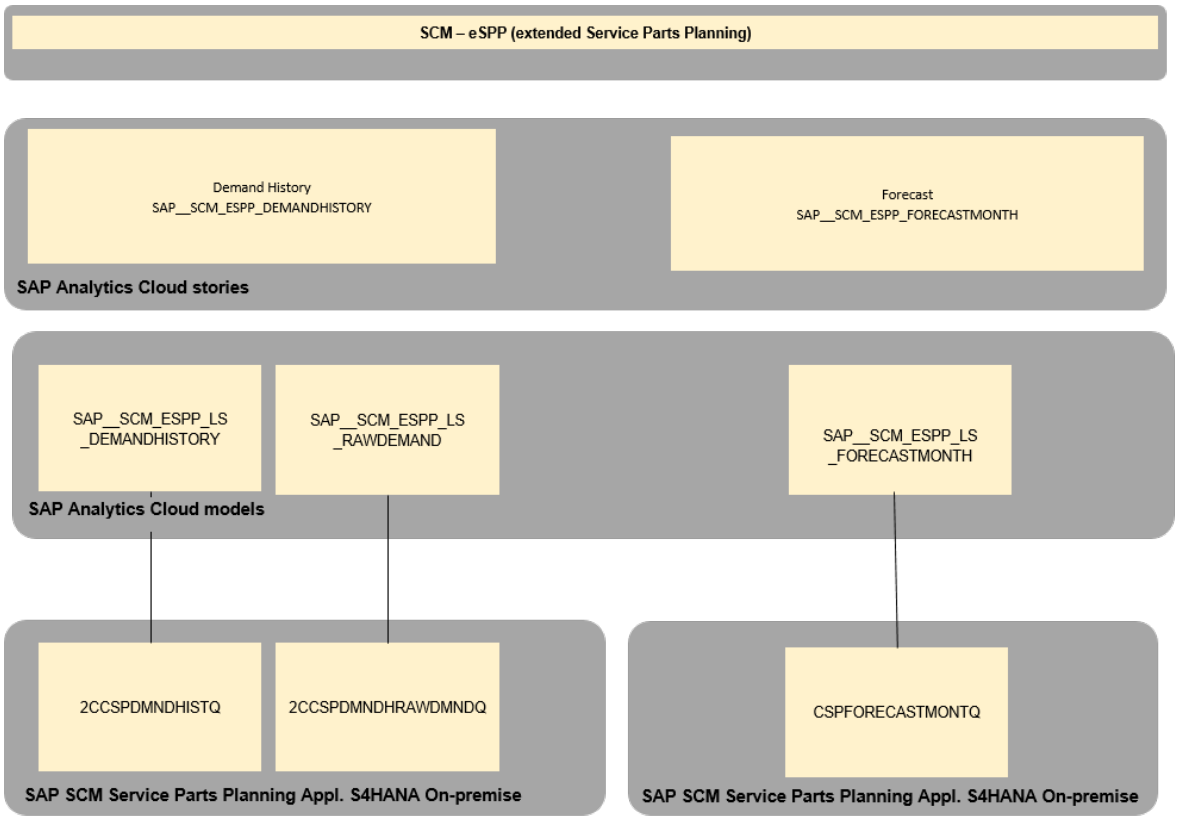
Extended Service Parts Planning (eSPP) is an S/4HANA OnPremise application which provides functionality for the requirements planning of service parts, the distribution of service parts within the Supply Chain network and the monitoring of the related processes. The primary industry focus within eSPP is engineering and automotive.

Analytics with SAP Analytics Cloud (SAC) can provide deep inside in eSPP requirements planning. The stories and models delivered with eSPP SAC content provide both overview and detailed data of eSPP raw demand and demand history, all eSPP forecasting key figures with its quantities and a comparison of raw demand with forecast quantities.

The displayed key figures are easily comparable and support eSPP planners in choosing effective planning parameters and meeting target service levels.

The provided models work based on a live connection between SAC and a S/4HANA backend system.

The provided stories serve as templates for custom specific stories.



> **i** Note
>
> The colored objects are documented in this chapter.

2.6.2 Stories

2.6.2.1 SAP Supply Chain Management: extended Service Parts Planning – Demand History (SAP__SCM_SPP_DemandHistory)

- Provides real-time insights into the eSPP demand history dependend on period, stocking location and facing location.
- Provides real-time insights into the eSPP raw demand dependend on stocking location, facing location, customer and product group.

Measure Name	Formula	Type
Demand	Sum of demand quantity in period of demand history.	Quantity

Measure Name	Formula	Type
Demand Entry	Sum of order positions in a period of demand history.	Value
Final Quantity	Scaling quantity adjusts the demand quantity to the period code.	Quantity
Final No. Dmnd. Entry	Scaling demand entry amount adjusts the demand entry to the period code.	Value
Scaling Quantity	Final demand quantity in Time Series Data Management.	Quantity
Scal. No. Dmnd. Entry	Final demand entry amount in Time Series Data Management.	Value

2.6.2.2 SAP Supply Chain Management: extended Service Parts Planning – Monthly Forecast (SAP__SCM_SPP_FORECASTMONTH)

- Provides real-time insights into the time series data of all eSPP forecast key figures dependend on period, product, location product, product group and both warehouse location and virtual child location.
- It only provides the time series data which has been created in the eSPP forecast transactions in the backend system beforehand.
- Ranges and thresholds can be defined for the numeric point charts "Item: Disaggregated Forecast" so that the displayed quantity changes its color accordingly.

Measure Name	Measure Type	Formula/Properties
Forecast Quantity		
Forecast Month Current Year	Restricted key figure	Looks at the forecast of the current year only
Forecast Month Previous Year	Restricted key figure	Looks at the forecast of the previous year only

2.6.3 Models

2.6.3.1 SAP Supply Chain Management: extended Service Parts Planning – Raw Demand (SAP__SCM_SPP_LS_RAWDEMAND)

Model Name: SAP__SCM_SPP_LS_RAWDEMAND

Model Description: SAP Supply Chain Management: extended Service Parts Planning – Raw Demand

Planning Enabled: no

Connection

- Live Connection
- SQL View: 2CCSPDMNDHRAWDMNDQ

Dimensions

Name	Description	Mapping
SrvcPartsDmndOrder	Order Number	
SrvcPartsDmndItemNumber	Item Number	
SrvcPartsDmndScheduleLineNmbr	Schedule Line	
SrvcPartsDmndOrderDate	Order Date	
SrvcPartsDmndType	Demand Type	
Product	Product	
SrvcPartsFacingLocation	Facing Location	
SrvcPartsStockingLocation	Stocking Location	
Customer	Customer	
ProductGroupValue	Product Group	
ShippingDate	Shipping Date	
SrvcPartsDmndCategory	Demand Category	
CalendarDay	Calendar Day	
CalendarMonth	Calendar Month	Model: SAP__SCM_SPP_LS_FORE-CASTMONTH Dimension: CalendarMonth
CalendarYear	Calendar Year	Model: SAP__SCM_SPP_LS_FORE-CASTMONTH Dimension: CalendarYear

2.6.3.2 SAP Supply Chain Management: extended Service Parts Planning – Demand History (SAP__SCM_SPP_LS_DEMANDHISTORY)

Model Name: SAP__SCM_SPP_LS_DEMANDHISTORY

Model Description: SAP Supply Chain Management: extended Service Parts Planning – Demand History

Planning Enabled: no

Connection

- Live Connection
- SQL View: 2CCSPDMNDHISTQ

Dimensions

Name	Description	Mapping
SrvcPartsDmndHistPeriod	Period	
Product	Product	
SrvcPartsOriginalProduct	Original Product	
SrvcPartsFacingLocation	Facing Location	
SrvcPartsStockingLocation	Stocking Location	
OrderIsEmergency	Emergency Order	

2.6.3.3 SAP Supply Chain Management: extended Service Parts Planning – Monthly Forecast (SAP__SCM_SPP_LS_FORECASTMONTH)

Model Name: SAP__SCM_SPP_LS_FORECASTMONTH

Model Description: SAP Supply Chain Management: extended Service Parts Planning – Monthly Forecast

Planning Enabled: no

Connection

- Live Connection
- SQL View: CSPFORECASTMONTQ

Dimensions

Name	Description	Mapping
LOCATION	Location	
PRODUCT	Product	
ESPPPeriodFromDateTime	Period begin time	

Name	Description	Mapping
ESPPPeriodToDateTime	Period end time	
BASEUNIT	Unit	
ProductGroupType	Prod. Group Type	
ProductGroupValue	Product Group	
CalendarDay	Calendar Day	
CalendarMonth	Calendar Month	Model: SAP__SCM_SPP_LS_RAWDE-MAND Dimension: CalendarMonth
CalendarYear	Calendar Year	Model: SAP__SCM_SPP_LS_RAWDE-MAND Dimension: CalendarYear

2.7 Finance

2.7.1 FI (DA based on COA): Architecture and Abstract

Introduction to Financial Performance Digital Boardroom

The Financial Performance Boardroom shows the Company's financial situation for the current year. Due to the generic nature of Finance, this content can be reused across multiple industries.

Both planning and actuals data can be retrieved from the designed models. However, for simplicity, the Boardroom is built only for scenarios pertaining to Actuals (with an exception to detailed Profit & Loss Statement- where planned data is also shown).

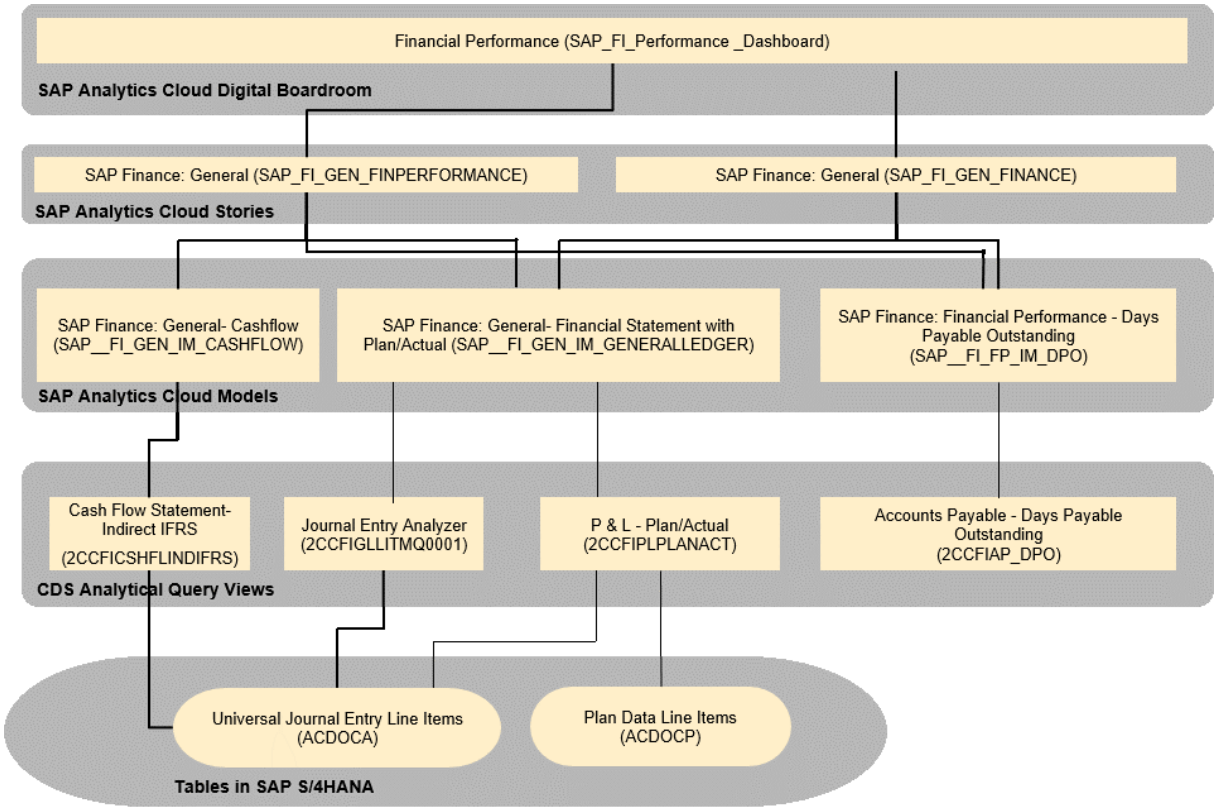
Architecture

Financial Performance is built based on SAP S/4HANA Finance. SAP S/4HANA Finance delivers CDS Analytical Queries that can be consumed by SAP Analytics Cloud.

The Financial Model in SAP Analytics Cloud is built based on the sample Chart of Accounts (INT).

The connectivity is Data acquisition based.

The building blocks are as shown:



*The CDS query 2CCFIAP_DPO is currently not in released state. The current timeline for the release of this CDS query is 201811 CE

Usage in Industry-specific Boardrooms

To use the Financial Boardroom, industries made a copy of the story SAP__FI_GEN_FINANCE or SAP__FI_GEN_FIPERFORMANCE to their own namespace.

The current usage in Industries is listed below:

Industry	Story
SAP Chemicals	SAP__GEN_FI_FINANCE, SAP__GEN_FI_FINPERFORMANCE
SAP Consumer Products	SAP__CP_FI_FINANCE
SAP Mill Products	SAP__MIL_FI_FINANCE
SAP Public Sector	The DSO and DPO related charts are copied into story SAP__PS_GEN_FINANCE and SAP__PS_HER_FINANCE
SAP Oil and Gas	SAP_OAG_GEN_FINANCE
SAP Utilities	SAP_UTL_GEN_FINANCE

2.7.2 FI (DA based on COA): Dashboard

There are two dashboards in LoB Finance:

- *SAP_FI_AGENDA*
- *SAP_FI_FINPERFORMANCE*

This dashboard provides FI KPIs in different agenda items based on the classification of Growth, Profitability, Liquidity, and Value Based Management.

2.7.3 FI (DA based on COA): Stories

The next chapters provide details about the SAP Finance Stories.

2.7.3.1 Financial Boardroom (SAP__FI_GEN_FINANCE)

This story is used in most industry boardrooms.

Please note that unless explicitly mentioned for a chart, the model used is SAP__FI_GEN_IM_GENERALLEDGER.

SAP Finance: Financial Boardroom (SAP__FI_GEN_FINANCE)

Name: SAP__FI_GEN_FINANCE
Description: SAP Finance: Financial Boardroom
Page: Overview
This page contains some overview KPIs that can be copied into overview page provided by industries.
Charts
Financial Overview for the Current Year
Containing bar chart for EBIT (Earnings before interest and tax), Contribution Margin and ROCE (Return on Capital Employed). EBIT and Contribution Margin could appear as being the same due to the scale in numbers.
Net Revenue
Net Revenue of the current year based on order entry (YTD) – Gross Revenue – sales deductions.
Contribution Margin
Calculated for the current year (as day-to-date) based on order entry info and cost position postings.
Page: Detail
This page forms the content screen for the Financial Performance Boardroom. Aim of the content screen is to provide detailed information on the P&L (Profit & Loss) situation of the company, its Net and Gross Profit Margin and Earnings and Expense situation for the current year. Business Unit and Profit Center are provided as page level filters (please note that in the Boardroom the page filters behave as story filters).
Charts
Profit and Loss (P&L) Statement
P&L statement shows an overview of the breakup of income and expenses for the current and previous year. More detailed P&L statement with drill-in capabilities can be navigated through.

Name: SAP__FI_GEN_FINANCE

Navigation: Page Context, Profit and Loss

Earnings and Expenses

This bar chart represents the sums of all earnings (sales revenue, other operational income, financial results, and others), expense positions (material, personnel, other operational expenses, and others), and as a residual the gross profit for all quarters of the last year and the corresponding quarters of the current year.

Net Profit Margin

This section consists of a KPI tile and a Bar, Line chart.

The KPI tile displays Net Profit Margin of the current year and its difference with the previous.

The bar line shows the Net Profit over past and current year by quarter and the line chart shows the Net Profit margin for the same time interval.

Gross Profit Margin

Similar visualization to Net Profit Margin just replaced with Gross Profit related figures.

Page: Context

This page forms the context screen for the Financial Performance Boardroom.

Aim of the context screen is to provide an overview about the most important KPIs:

- The capital and cash related performance of a company presented because of the P&L performance.
- From a shareholder perspective (Working Capital, Debt to Equity Ratio, and Return on Equity)
- Internal view on capital spend (Cash Flow from Operating Activities, Fixed Asset Turnover Ratio, Inventory Turnover) internal view on cash management (DPO, DSO, DIO)

Charts

Working Capital

Working Capital is a measure of both a company's efficiency and its short-term financial health. The working capital ratio (Current Assets/Current Liabilities) indicates whether a company has enough short-term assets to cover its short-term debt.

Debt to Equity (D/E) Ratio

The D/E ratio indicates how much debt a company is using to finance its assets relative to the amount of value represented in shareholders' equity.

Return on Equity

Return on equity (ROE) is the amount of net income returned as a percentage of shareholders' equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Cash Flow from Operating Activities

Cash flow from operating activities (CFO) is an accounting item indicating the money a company brings in from ongoing, regular business activities, such as manufacturing and selling goods or providing a service. Cash flow from operating activities does not include long-term capital or investment costs. It includes earnings before interest and taxes plus depreciation minus taxes.

Fixed Asset Turnover Ratio

The fixed-asset turnover ratio is, in general, used by analysts to measure operating performance. It is a ratio of net sales to fixed assets.

Name: SAP__FI_GEN_FINANCE
Inventory Turnover
Inventory turnover is a ratio showing how many times a company's inventory is sold and replaced over a period.
Days Payables Outstanding
Days Payable Outstanding (DPO) is a company's average payable period. Days payable outstanding tells how long it takes a company to pay its invoices for example, from suppliers. Further navigation is available to provide a more detailed view on individual suppliers. Model used: **SAP__FI_FP_IM_DPO**
Navigation: Page Context - DSO DPO
Days Sales Outstanding
Days Sales Outstanding (DSO) is a measure of the average number of days that a company takes to collect revenue after a sale is made. A DSO being higher as the DPO of the period indicates that a company gets its invoices paid before it is paying the received supplier invoices and by that generates a positive cash flow in that period.
Navigation: Page - Context- DSO DPO
Days Inventory Outstanding
The Days Inventory Outstanding (DIO) is a financial measure of how long it takes a company to turn its inventory (including goods that are a work in progress, if applicable) into sales. A high DIO indicates that a company holds bigger stocks and ties more cash than needed for its business, a low DIO indicates a low stock and use of cash but might indicate a certain vulnerability in terms of out-of-stock supply chain disruptions.
Page: Context - Profit and Loss
This page provides the detailed P&L statement along with page filters Business Area and Profit Center.
Charts
Profit and Loss Statement
This page provides detailed P&L statement with Actuals data for current and previous year and Planned data for the current year.
Navigation: Page: Detail
Page: Context - DSO DPO
This page provides drill-in capabilities for DPO and DSO. Filters are available separately for DPO and DSO related charts.
Charts
Days Sales Outstanding for Customer Groups.
Shows DSO for the selected customer groups in the selected regions.
Amount Outstanding.
Shows the total amounts outstanding for each selected Customer Group.
Navigation: Page – Context
Days Payables Outstanding to Suppliers
Shows DPO for the selected suppliers in the selected regions.
Amount Payables
Shows the total amounts payable to the selected suppliers.

Name: SAP__FI_GEN_FINANCE
Page: Overview – Boardroom
This page provides the Overview screen for the Financial Performance Boardroom. All the content provided here is available in either the Overview or Details page mentioned above. Here we will only list the charts.
Charts
KPI Tiles for the following
Net Revenue, Total Expenses, Contribution Margin, Net Profit Margin, and Return on Equity
Financial Overview for the current year
Containing bar chart for EBIT (Earnings before interest and tax), Contribution Margin and ROCE (Return on Capital Employed). EBIT and Contribution Margin could appear as being the same due to the scale in numbers.

2.7.3.2 General – Financial Performance

This story forms part of the SAP_FI_FINPERFORMANCE. Please note that unless explicitly mentioned, the model used in the charts is SAP_FI_GEN_IM_GENERALLEDGER.

Name: SAP__FI_GEN_FINPERFORMANCE
Description: SAP Finance: Financial Performance
Page: Overview
This page shows the overview of KPIs for each of the classifications Growth, Profitability, Liquidity, and Value Based Management.
Tiles
Growth
The KPI for growth is Net Revenue. According to the story, we are in the beginning of Q4. The Net Revenue for Q3 is shown as a numeric point with variance in percentage points w.r.t. to Q3 last year and Q3 Plan. Adjacent to this is the deviation of Net Revenue this year w.r.t. Plan for the complete year, as well as how much was the deviation of Net Revenue from plan at this time in the previous year. Below this is a bar chart showing YOY and Plan vs Actual comparison of Net Revenue per quarter.
Navigation: Agenda item Growth
Profitability
This tile provides information about two profitability KPIs – EBIT and Gross Profit. The numeric point charts of EBIT Margin and Gross Profit Margin show the values aggregated from Q1 to Q3 and deviation from Previous year. Using radio buttons, one can select to see the trailing quarters information of EBIT or Gross Profit. The trend by quarter of previous and current year are shown. For the current year, the forecast is also shown. Beside that a bar chart is shown with the KPI aggregate for the current year and forecast for the entire year.
Navigation: Agenda Item Profitability
Liquidity

Name: SAP__FI_GEN_FINPERFORMANCE

The model used is SAP__FI_GEN_IM_CASHFLOW

This tile provides information about two liquidity KPIs: operating cashflow and free cashflow for the previous quarter with variance from previous year. The trend of these KPIs are shown quarterly for previous and current year.

Navigation: Agenda Item Liquidity

Value Based Management

This tile shows the KPI ROCE as an aggregate numeric point for the current year with its deviation to the previous year. The quarterly trend of ROCE for current and previous year are shown too.

Page: Detail Growth - YOY Previous Quarter

This page shows the breakdown of Net Revenue by Business Area, Segment, and Country. The first row of charts shows a year on year comparison of the Net Revenue for the previous quarter. The second row of charts shows the trend of Net Revenue quarterly for previous and current year. Filters for business are, segment and country are provided in the left side. It is also possible to switch to other views of Net Revenue Comparison such as Detail Growth YOY, YTM, and Detail Growth, Actual vs Plan by clicking on the required tabs placed above the filters.

Page: Detail Growth - YOY YTD

This page shows the breakdown of Net Revenue by Business Area, Segment, and Country. The first row of charts shows a year on year comparison of the Net Revenue YTD (YTM for previous year). The chart in the second row shows the trend of Net Revenue for the current year with variance of previous year. Filters for business are, segment and country are provided in the left side. It is also possible to switch to other views of Net Revenue Comparison such as YOY Previous Quarter and Actual vs Plan - Prev. Quarter.

Page: Detail Growth - Actual vs Plan

This page shows the breakdown of Net Revenue by Business Area, Segment, and Country. The first row of charts shows a comparison the Net Revenue Actuals w.r.t Plan for the previous quarter. The second row of charts shows the variance for each quarter for the current year per Business Area, Segment, and Country.Net Revenue quarterly for previous and current year. Filters for business area, segment, and country are provided in the left side.

It is also possible to switch to other views of Net Revenue Comparison such as Detail Growth YOY, YTM, and YOY, Previous Quarter by clicking on the required tabs placed above the filters.

Page: Detail Growth - YTG

This page shows the breakdown of Net Revenue by Business Area, Segment and Country. The first row of charts shows the YTD Net Revenue Actuals and its percentage deviation from annual plan – i.e. Year to Go.

In the second row, the first chart shows how far was each month's revenue from YTG and the second chart shows the trend of monthly revenue and deviation from plan.

Page: Growth Effects

Name: SAP__FI_GEN_FINPERFORMANCE

This page shows the price, volume and mix effects breakup for variance of sales revenue YOY w.r.t. to previous year. The effects are calculated based on ceteris paribus theory.

- Price effect:$\Delta p = \sum_i [\![(p_{ci}-p_{bi})\times v_{ci}]\!]$
- Mix effect:$\Delta mx = \sum_i [\![p_{bi} (mx_{ci}-[\![mx]\!]_{bi})\times v_c]\!]$
- Volume effect:$\Delta v = \sum_i [\![p_{bi}\times mx_{bi}\times(v_c-v_b)]\!]$

For calculating effects, a prerequisite is to load volume account with data. The model SAP__FI_GEN_IM_GENERALLEDGER is an account-based model and all the members of the account are mapped to the amount measure while doing the mapping to CDS views.

For retrieving data into the volume measure, please follow the following steps:

1. Create a new query based on the connection query 2CCFIGLLITMQ0001.
2. While creating this query, do the following:
   In the selection screen, select the dimensions as mentioned in section 5.5.4.1 in the data source connection and integration section for connection query 2CCFIGLLITMQ0001 with the addition that the GL Account should be filtered for account "Sales Revenue".
   Select the measure quantity.
3. Use this query for loading volume related data into the model.
4. The first chart on the left shows the different splits that add up to the sales revenue variance.
5. The lanes for each of the effects: price, volume, and mix, show the total effect and its contribution by Business Area and Material Group.
6. It is possible to filter the effects for a single business area.
7. Smart Discovery Findings on Revenue Influencers navigates to Context-Growth.

Page: Context -Growth

SAP Analytics Cloud provides a functionality to run Machine led Discovery of insights on any model. In a story, it is possible to run machine discovery on a model in the data view section. This functionality is used to analyze the model SAP__FI_GEN_IM_GENERALLEDGER for the measure Net Revenue. The machine discovery provides a result, showing the dimensions that are main influencers for Net Revenue along with charts showing the distribution of the influencing members of a dimension. The charts of the discovery are copied over to this page.

These charts are frozen on the point during the analysis and they are not influenced by any filters.

Navigation: Agenda Item Growth

Page: Detail Profitability

This page provides details on profitability KPIs. It is possible to filter the Legal Entity.

There is navigation possibility to see other Profitability KPIs such as Net Profit and Gross Profit using Navigation: Addition, Net and Gross Profit.

Charts

Profit Margins, Breakdown of Gross Revenue

This chart shows the components of gross revenue on a quarterly series for past and current year and shows the trend of Profit Margins such as EBITDA, EBIT, and Profit.

Breakdown of Gross Revenue

Name: SAP__FI_GEN_FINPERFORMANCE
This waterfall chart shows the component breakup up of Gross Revenue for past 3 quarters aggregated. In this chart, we can clearly see the deductions involved in deriving Net Income – stating from Gross Revenue.
Profitability Breakdown by Legal Entity
These 2 sets of stacked bars show the YOY comparison of EBIT and EBITDA for the previous quarter for each selected Legal entity.
EBIT vs Gross Profit
Shows the comparison of EBIT vs Gross Profit (also known as Contribution Margin).
Page: Context – Profitability
This shows the entire General Ledger and calculated measures with Actuals for the previous year and Plan and Actuals figures for the current year.
Page: Addition - Net and Gross Profit
The first row shows aggregated KPIs of Net Profit, net profit margin, gross profit and gross profit margin for the current year and deviation from the previous year. For Net Profit, the charts in the second line show YOY Comparison by Business Area and by Country for the previous quarter below which are shown the trend of Net Profit quarterly over the 2 years. The last column shows Plan Actual comparison charts for Net Profit and Gross Profit quarterly for the current year.
Navigation: Agenda Item Growth
Page: Detail Liquidity
This page provides details on liquidity KPIs. It is possible to filter based on Legal Entity. The top row shows some aggregated KPIs for the previous quarter and their variance with the same quarter in the previous year. The KPIs are Quick Ratio, Cash Asset Ratio, Working Capital Ratio, and Cash Conversion Cycle. There is navigation possibility to see more information on DSO and DPO using Navigation Addition-DSO and Addition-DPO respectively.
Charts
Cash Flow Bridge
Base on model SAP__FI_GEN_IM_CASHFLOW. This chart shows the cash at hand at the start of the year, the cash flow from operating, investing and Financial activities and the cash at hand at the end of the current period.
Working Capital
The working capital for the current year, quarterly and deviation from previous year is shown.
Days Sales Outstanding
Shows the DSO trend monthly for the past and present year and provides a forecast for the coming months based of predictive forecasting functionality.
Days Payable Outstanding
Based on model SAP__FI_FP_IM_DPO. Shows the DPO trend monthly for the past and present year and also provides a forecast for the coming months based of predictive forecasting functionality.
Page: Context - Cash Flow
Based on model SAP__FI_GEN_IM_CASHFLOW. Provides the cash flow breakdown in Indirect mode based on the IFRS Standard.

Name: SAP__FI_GEN_FINPERFORMANCE
Page: Addition - DSO
This page provides drill-in capabilities for DSO. It shows the DSO for customer groups and the amount understanding per customer.
Navigation - Agenda Item Liquidity
Page: Addition - DPO
Based on model SAP__FI_FP_IM_DPO: This page provides drill-in capabilities for DPO, it shows the DPO to suppliers and the amount pending per supplier.
Navigation - Agenda Item Liquidity

2.7.4 FI (DA based on COA): Models

The next chapters provide the details for the Models: Financial Statement, Financial Performance, Cashflow.

2.7.4.1 General- Financial Statement with Plan/Actual (SAP__FI_GEN_IM_GENERALLEDGER)

Structure of the Model:

Model Name: SAP__FI_GEN_IM_GENERALLEDGER		
Model Description: SAP Finance: General- Financial Statement with Plan/Actual.		
Model Purpose: The purpose of model SAP__FI_GEN_IM_GENERALLEDGER is to provide the Balance sheet and P&L line entries. Several dimensions are provided for drill-down capabilities. This model uses the chart of accounts and there are also additional calculated accounts. The account dimension SAP_FI_GEN_GLACCOUNT explains this in detail.		
Planning Enabled: Yes		
Calculated Measures in GL Account		
ID	**Description**	**Formula**
F1	Net Revenue	Gross Revenue - Sales Deductions
F2	COGS	Material Expenses + Personnel Expenses + Interest & Similar Expenses
F3	Gross Profit	Net Revenue - COGS
F4	Gross Profit Margin	Gross Profit / Net Revenue
F5	Operating Expenses	COGS + Other Operating Expenses
F6	Operating Profit	Net Revenue - Operating Expenses
F7	Operating Margin	Operating Profit / Sales Revenue

Model Name: SAP__FI_GEN_IM_GENERALLEDGER

F8	Net Profit	Net Revenue - (Operating Expenses + Depreciation+ Amortization + Interests + Taxes)	
F9	Net Profit Margin	Net Profit / Net Revenue	
F10	Contribution Margin	Net Revenue – COGS	
F0	Gross Revenue	Sales Revenue	
F11	EBIT	Net Revenue - (Operating Expenses +Amortization + Depreciation)	
F12	Working Capital	Current Assets - Payables	
F13	Working Capital Ratio	Current Assets / Payables	
F14	Capital Employed	Total Assets – Payables	
F15	ROCE	EBIT / Capital Employed	
F16	Share Holders Equity	Assets - Total Liabilities	
F17	Debt to Equity Ratio	Total Liabilities / Share Holders Equity	
F18	Cash Flow from Operations	EBIT + Depreciation -Taxes	
F19	Property, Plant and Equipment (PPE)	Tangible Assets	
F20	Fixed Asset Turnover Ratio	COGS / PPE	
F21	Inventory Turnover	Net Revenue / Change In Inventory	
F22	DIO	(Change In Inventory /COGS) / 30	
F23	Return on Equity	Net Revenue / Share Holder's Equity	
F24	DSO_base	(Accounts Receivable / Gross Revenue)	
F25	DPO	((AP Domestic + AP Foreign) / COGS) / 30 (Advisable To Use DPO Model)	
F26	NetNetSales	Gross Revenue - Sales Deduction	
F27	Sales Contribution	NetNetSales - COGS - Trade Spends	
F28	Sales Margin	Sales Contribution / NetNetSales	
F29	Trade Spend	Sales Deductions + Sales & Advertising Expenses	
F30	EBITDA	Net Revenue – Operating Expenses	
F31	EBIT Margin	EBIT / Gross Revenue	
F32	EBITDA Margin	EBITDA/ Gross Revenue	
F33	Quick Ratio	(Assets – Inventories) / Liabilities	
F34	Marketable Securities	Stock in Affiliates	
F35	Cash Asset Ratio	Marketable Securities / Liabilities	
F36	Cash Conversion Cycle	DSO_base + DIO -DPO	
Dimensions			
Dimension Name	**Dimension Description**	**Dimension Type**	Public/Private Dimension

Model Name: SAP__FI_GEN_IM_GENERALLEDGER			
Time	Time	Time	Private
SAP_FI_GEN_GLACCOUNT	GL Account*	Account Dimension	Private
SAP_ALL_BUSINESSAREA	Business Area	Generic Dimension	Private
SAP_ALL_COSTCENTER	Cost Center	Generic Dimension	Private
SAP_ALL_COUNTRY	Country	Generic Dimension	Private
SAP_ALL_CUSTOMER	Customer	Generic Dimension	Private
SAP_ALL_CUSTOMER-GROUP	Customer Group	Generic Dimension	Private
SAP_ALL_MATERIAL	Material	Generic Dimension	Private
SAP_ALL_MATERIALGROUP	Material Group	Generic Dimension	Private
SAP_ALL_PLANT	Plant	Generic Dimension	Private
SAP_ALL_PROFITCENTER	Profit Center	Generic Dimension	Private
SAP_ALL_REGION	Region	Generic Dimension	Private
SAP_ALL_SEGMENT	Segment	Generic Dimension	Private
SAP_ALL_SUPPLIER	Supplier	Generic Dimension	Private

The account dimension SAP_FI_GEN_GLACCOUNT is a very special dimension and is handled as follows:

This dimension should be filled based on the Chart of Accounts. The master data for Chart of Accounts is retrieved from the OData service API_GLACCOUNTINCHARTOFACCOUNTS_SRV (see step Data Source Connection and Integration). Currently INT is used for Chart of Accounts and Hierarchy.

The data and hierarchy must be manually maintained in the Account Dimension.

Data Source Connection and Integration

The model should be filled in 2 steps. To get the actuals values, data import should be connected to CDS Query, Journal Entry Analyzer. This will fill the model with Actuals Journal Entry Line Items.

To get any plan version entries for the P&L, for the selected plan, data import should be connected to CDS Query, P& L, and Plan Actual.

The mappings for these 2 queries are mentioned below:

Model Name: SAP__FI_GEN_IM_GENERALLEDGER
Model Description: SAP Finance: General - Financial Statement with Plan/Actual
Connection Type: Data import from SAP BW (this is the interface used to access CDS Queries) System: SAP S/4HANA
Connection Query: Journal Entry Analyzer (2CCFIGLLITMQ0001)

Model Name: SAP__FI_GEN_IM_GENERALLEDGER	
Connection Variables: Ledger: 0L (or any other specific ledger) Company Code: Relevant company codes Fiscal Year: Relevant Fiscal Year Measures: Amount in Global Currency	
Connection Purpose: To get the actuals values	
Dimension Mapping	
Dimension	**Mapping Field**
GL Account	G/L Account 2CIFIGLACCINCOA-DISPLAY_KEY_MIXED_COMPOUNDMENT
Business Area	Business Area 2CIFIBUSAREA-DISPLAY_KEY
Legal Entity	Company Code 2CIFICOMPANYCODE-DISPLAY_KEY
Cost Center	Cost Center 2CIFICOSTCENTER-DISPLAY_KEY
Country	Assign to #
Customer	Customer 2CI_CUSTOMER_CDS-DISPLAY_KEY
Customer Group	Customer Group 2CISDCUSTGRP-DISPLAY_KEY
Functional Area	Functional Area 2CIFIFUNCAREA-DISPLAY_KEY
Material	Material 2CIMATERIAL-DISPLAY_KEY
Material Group	Material Group 2CIMATGROUP-DISPLAY_KEY
Plant	Assign to #
Profit Center	Profit Center 2CIFIPROFITCENTER-DISPLAY_KEY
Project Definition	Project Definition 2CIFIGLLITMCUBE-PROJECT-DISPLAY_KEY
Region	Assign to #
Segment	Segment 2CIFISEGMENT-DISPLAY_KEY
Supplier	Supplier 2CI_SUPPLIER_CDS-DISPLAY_KEY
Time	Posting Date 2CIFIGLLITMCUBE-POSTINGDATE-DISPLAY_KEY
Category	Actuals

Please note that the fields marked in **bold** have to be mapped as a minimum for the Financial Performance Boardroom to work as designed.

Model Name: SAP__FI_GEN_IM_GENERALLEDGER
Model Description: SAP Finance: General - Financial Statement with Plan/Actual

Model Name: SAP__FI_GEN_IM_GENERALLEDGER	
Connection Type: Data import from SAP BW (this is the interface used to access CDS Queries) System: SAP S/4HANA	
Connection Query: P & L – Plan/Actual (2CCFIPLPLANACT)	
Connection Variables: Ledger: 0L (or any other specific ledger) Company Code: Relevant company codes Fiscal Year: Relevant Fiscal Year Measures: Amount in Global Currency	
Connection Purpose: To get the plan values	
Dimension Mapping	
Dimension	**Mapping Field**
GL Account*	G/L Account 2CIFIGLACCINCOA-DISPLAY_KEY_MIXED_COMPOUNDMENT
Business Area	Business Area 2CIFIBUSAREA-DISPLAY_KEY
Legal Entity	Company Code 2CIFICOMPANYCODE-DISPLAY_KEY
Cost Center	Cost Center 2CIFICOSTCENTER-DISPLAY_KEY
Country	Assign to #
Customer	Customer 2CI_CUSTOMER_CDS-DISPLAY_KEY
Customer Group	Customer Group 2CISDCUSTGRP-DISPLAY_KEY
Functional Area	Functional Area 2CIFIFUNCAREA-DISPLAY_KEY
Material	Material 2CIMATERIAL-DISPLAY_KEY
Material Group	Material Group 2CIMATGROUP-DISPLAY_KEY
Plant	Plant 2CIPLANT-DISPLAY_KEY
Profit Center	Profit Center 2CIFIPROFITCENTER-DISPLAY_KEY
Project Definition	Project Definition 2CIFIGLLITMCUBE-PROJECT-DISPLAY_KEY
Region	Assign to #
Segment	Segment 2CIFISEGMENT-DISPLAY_KEY
Supplier	Supplier 2CI_SUPPLIER_CDS-DISPLAY_KEY
Trading Partner	Trading Partner 2CIPARTNERCOMPANY-DISPLAY_KEY
Time	YYYY/MM date based on Fiscal Year 2CIFIFYEARCC-DISPLAY_KEY and Fiscal Period 2CIFIFYEARPERIODCC-DISPLAY_KEY
Category	Based on the plan type selected, it can be mapped to Plan, Budget, Forecast, Rolling Forecast

To map the GL Account, a transformation is needed. The accounts are delivered in the X/Y form, but the model requires X/0000Y. This can be done by following the steps below using the context menu provided for columns:

1. Split the GL column using custom separator /
2. 2. Combine the split columns using custom separator /0000

For time dimension mapping, splitting, and combining should be done of Fiscal Year and Fiscal Period based on the company's Fiscal Variant.

2.7.4.2 Financial Performance- Days Payable Outstanding (SAP__FI_FP_IM_DPO)

Model Name: SAP__FI_FP_IM_DPO	Connection
• Model Description: SAP Finance: Financial Performance- Days Payable Outstanding • Model Purpose: - SAP__FI_FP_IM_DPO is used to provide the days payable outstanding to suppliers. The source is CDS Query 2CCFIAP_DPO which connects to SAP S/4HANA Finance Ops. • Planning Enabled: No	• Connection Type: Data import from SAP BW (this is the interface used to access CDS Queries) System: SAP S/4HANA • Connection Query: Accounts Payable. Days Payables Outstanding (2CCFIAP_DPO) • Connection Variables: Currency key for the display currency: Relevant currency Exchange Rate Type: M (or any other relevant exchange type) • Connection Purpose: To get the DPO to suppliers

DSO/DPO Account		
ID	**Description**	**Mapping**
DebitAmt	Debit Amount	
RevAmt	Receivables Amount	
WgtAmt	Wgt Amount	Wgt Amt in Dspl Crcy ELTUIDCMP1
Amount	Amount	Amount in Dspl Crcy ELTUIDCMP2
DSO	Days Sales Outstanding	
DPO	Days Payables Outstanding	Days Payables Outstanding ELTUIDCMP3
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	2CIFIAP_DPO-YEARMONTH-DISPLAY_KEY
SAP_FI_FP_Outstanding	DSO/DPO Account	Map measures individually above

Model Name: SAP__FI_FP_IM_DPO		Connection
SAP_ALL_REGION	Region	2SUPPLIERREGION-DISPLAY_KEY
SAP_ALL_SUPPLIER	Supplier	2CI_SUPPLIER_CDS-DISPLAY_KEY
SAP_ALL_COMPANYCODE	Company Code	2CIFICOMPANYCODE-DISPLAY_KEY
SAP_ALL_MONTH	Month	Assign to #
SAP_ALL_YEAR	Year	Assign to #
SAP_ALL_COUNTRY	Country	2CIFICOUNTRY-DISPLAY_KEY

*Private dimension and other dimensions are public.

2.7.4.3 General- Cashflow (SAP__FI_GEN_IM_CASHFLOW)

Model Name: SAP__FI_GEN_IM_CASHFLOW		Connection
• Model Description: SAP Finance: General- Cashflow • Model Purpose: This model provides the cashflow indirect method based on IFRS standard • Planning Enabled: Yes		• Connection Type: Data import from SAP BW (this is the interface used to access CDS Queries) System: SAP S/4HANA • Connection Query: Cashflow Statement – Indirect IFRS (2CCFICSHFLINDIFRS) • Connection Variables: All variables are mandatory From Period, To Period, Fin Stmnt Version, Company Code, Fiscal Year, and Ledger
DSO/DPO Account		
ID	**Description**	**Formula**
F1	CAPEX	Purchase(sale) of tangible assets + Purchase(sale) of intangible assets
F2	Operating Cashflow	Net cash generated from continuing operating activities
F3	Free Cashflow	Operating Cashflow – Free Cashflow
ID		**Mapping**
HEADER11		Profit for the period ELTUIDCMP4
HEADER13		Depreciation of property, plant and equipment ELTUIDCMP6
HEADER14		Amortization of intangible assets ELTUIDCMP7

Model Name: SAP__FI_GEN_IM_CASHFLOW		Connection
HEADER15		Gain/Loss from fixed asset retirement ELTUIDCMP8
HEADER17		Increase (Decrease) of provisions ELTUIDCMP10
HEADER18		Increase (Decrease) of inventories ELTUIDCMP11
HEADER19		Increase (Decrease) in accounts receivables (net) ELTUIDCMP12
HEADER20		Increase (Decrease) in other receivables (net) ELTUIDCMP13
HEADER21		Increase (Decrease) in accounts payables ELTUIDCMP14
HEADER22		Increase (Decrease) in other payables ELTUIDCMP15
HEADER23		Net cash generated from continuing operating activities ELTUIDCMP16
HEADER27		Purchase (Sale) of tangible assets ELTUIDCMP20
HEADER30		Purchase (Sale) of intangible assets ELTUIDCMP23
HEADER31		Amortization of intangible assets ELTUIDCMP24
HEADER15		Gain/Loss from retirement of fixed assets ELTUIDCMP25
HEADER33		Increase (Decrease) in long-term investments ELTUIDCMP26
HEADER34		Net cash used in continuing investing activities ELTUIDCMP27
HEADER36		Increase (Decrease) in common stocks ELTUIDCMP29
HEADER37		Increase (Decrease) in notes receivable ELTUIDCMP30
HEADER38		Net cash generated from financing activities ELTUIDCMP31
HEADER39		Net Cash Flow ELTUIDCMP32
HEADER40		Cash Flow Validation ELTUIDCMP33
HEADER41		Validation Balance ELTUIDCMP34
Dimension Mapping		**Connection**
ID	**Description**	**Mapping**
Time*	Time	Posting Date
SAP_FI_GEN_CASHFLOW*	Cashflow Account	Map measures individually above

Model Name: SAP__FI_GEN_IM_CASHFLOW		Connection
SAP_ALL_BUSINESSAREA	Business Area	2CIFIBUSAREA-DISPLAY_KEY
SAP_ALL_COUNTRY	Country	Assign to #
SAP_ALL_COMPANY_CODE	Legal Entity	2CIFIVOMPANYCODE-DISPLAY_KEY
SAP_ALL_COSTCENTER	Cost Center	2CIFICOSTCENTER-DISPLAY_KEY
SAP_ALL_PROFITCENTER	Profit Center	2CIFIPROFITCENTER-DISPLAY_KEY
SAP_ALL_SEGMENT	Segment	2CIFISEGMENT-DISPLAY_KEY

*Private Dimension and other Dimensions are public.

Further information on the CDS view for Cashflow Statement and Indirect IFRS can be found here.

2.7.5 FI (Live based on Semantic Tags): Architecture and Abstract

Introduction to Financial Performance Digital Boardroom

The Financial Performance Boardroom shows the Company's financial situation for the current and previous year.

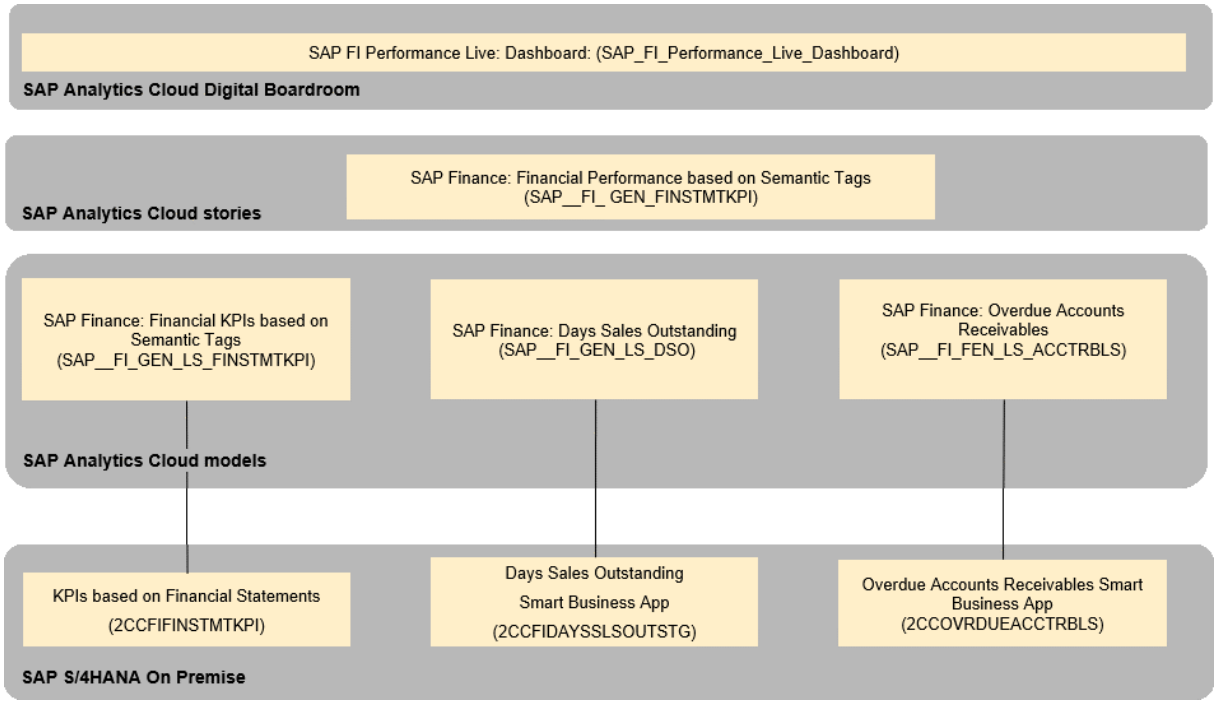
Architecture

Financial Performance is built based SAP S/4HANA On Premise live connectivity. The CDS view which exposes the financial KPIs uses semantic tags for defining the KPIs. With this approach, it is not needed to create the KPIs in SAP Analytics Cloud based on dedicated Chart of Accounts.

This content can be plugged on to a S/4HANA system to display content out of the box. The CDS view is available from S/4HANA On-premise 1809 or S/4HANA Cloud 1808.

The building blocks are as shown:

Architecture



This video gives a preview of the content.

2.7.6 FI (Live based on Semantic Tags): Dashboard

There is a single digital boardroom.

SAP_FI_Performance_Live_Dashboard

This dashboard provides FI KPIs in different topics based on the classification of Growth, Profitability, and Liquidity.

2.7.7 FI (Live Based on Semantic Tags): Stories

SAP Finance: Financial Performance based on Semantic Tags (SAP__FI_GEN_FINSTMTKPI)

This story is used to provide complete Financial Performance Overview. Here's a brief explanation of the pages.

Overview

The aggregated KPIs for Growth, Profitability, and Liquidity are shown here in three lanes.

> **i Note**
>
> Apart from the model input parameters, it is important in this page to select the Current and Previous year in the input fields available at the top right.

Growth

This page provides further information on the Growth KPI, Net Revenue.

Here also please select current and previous year in top right. You can select the breakdown dimension for the page to reflect accordingly.

This page has 3 lanes:

1. The first lane shows quarter wise comparison of Net Revenue for current year w.r.t previous year and plan. You need to select the quarters for which comparison should be done.
2. The second lane shows YTG comparison of Net Revenue for current year w.r.t previous year and plan. You need to select the fiscal periods YTD.
3. The third lane shows YTG comparison of Net Revenue w.r.t. Plan.

Profitability - EBIT & EBITDA

This page shows external facing profitability KPIs. Please select current year in top right.

Profitability - Net & Gross Profit

This page shows operational profitability KPIs. Please select current year in top right.

P&L Analysis

A scatter plot in this page does smart grouping of the selected measures and dimension. It is possible to filter on a smart group and analyze financial performance of this group.

Liquidity

Various liquidity KPI trends are shown. Please select current year in top right.

Liquidity- DSO

This page shows DSO and Accounts Receivables related information. Here, smart grouping-based filtering can be used for analysis.

As we are using different modes in this page than the others, please remember to filter on the company codes to be same as that of the company code available as a story filter.

2.7.8 FI (Live based on Semantic Tags): Models

The next chapters provide the detailed information on the Models used for creating the Stories.

2.7.8.1 Financial KPIs based on Semantic Tags (SAP__FI_GEN_LS_FINSTMTKPI)

This model provides Financial KPIs delivered by Semantic tags. Documentation regarding these KPIs is found here.

Model Name: SAP__FI_GEN_LS_FINSTMTKPI	Connection
Model Description: SAP Finance: Financial KPIs based on Semantic Tags • Planning Enabled: No	• Connection Type: Live connectivity Which system: S/4HANA On Prem 1808+ • Connection name: S/4HANA Finance On Premise(SAPFIN) • Connection Query: KPIs based on Financial Statements (2CCFIFINSTMTKPI)

Connection Parameter	Value
Financial Statement Version	{mandatory}
Ledger	{mandatory}
Ledger Fiscal Year	{mandatory} Please use 2 entries current and previous year
To Period	{mandatory} 12
Plan Category	{mandatory} If you have planning configured, please use the plan category else use ACT01

> **i Note**
>
> The dimensions and measures are not listed, since this is a live model, they are identical to the measures and dimensions in the CDS view.

2.7.8.2 Days Sales Outstanding (SAP__FI_GEN_LS_DSO)

This model provides current DSO related information.

Model Name: SAP__FI_GEN_LS_DSO	Connection
Model Description: SAP Finance: Days Sales Outstanding Planning Enabled: No	Connection Type: Live Connectivity System: S/4HANA On Prem Connection Name: S/4HANA Finance On Premise (SAPFIN) Connection Query: Days Sales Outstanding Smart Business App (2CCFIDAYSSLSOUTSTG)

Connection Parameter	Value
Rolling Avg. for Rec	{mandatory} 1

Model Name: SAP__FI_GEN_LS_DSO	Connection
Rolling Avg. for Rev	{mandatory} 1
Display Currency	{mandatory} US Dollar
Exchange Rate Type	{mandatory} M

> **i Note**
>
> The dimensions and measures are not listed since this is a live model, they are identical to the measures and dimensions in the CDS view.

2.7.8.3 Overdue Accounts Receivables (SAP__FI_GEN_LS_ACCTRBLS)

This model provides Accounts Receivables Overdue related information.

Model Name: SAP__FI_GEN_LS_ACCTRBLS	Connection
Model Description: SAP Finance: Overdue Accounts Receivables Planning Enabled: No	Connection Type: Live Connectivity System: S/4HANA On Prem Connection Name: S/4HANA Finance On Premise (SAPFIN) Connection Query: Overdue Accounts Receivables Smart Business App (2CCOVRDUEACCTRBLS)
Connection Parameter	**Value**
Open on Key Date	{mandatory} TODAY
Display Currency	{mandatory} US Dollar
Exchange Rate Type	{mandatory} M
Net Due Interval 1	{mandatory} 30

Model Name: SAP__FI_GEN_LS_ACCTRBLS	Connection
Net Due Interval 2	{mandatory} 60
Net Due Interval 3	{mandatory} 90

> **i Note**
>
> The dimensions and measures are not listed- since this is a live model, they are identical to the measures and dimensions in the CDS view.

2.8 Finance - Accounts Receivable: Payment Forecasting (FI-AR-PF)

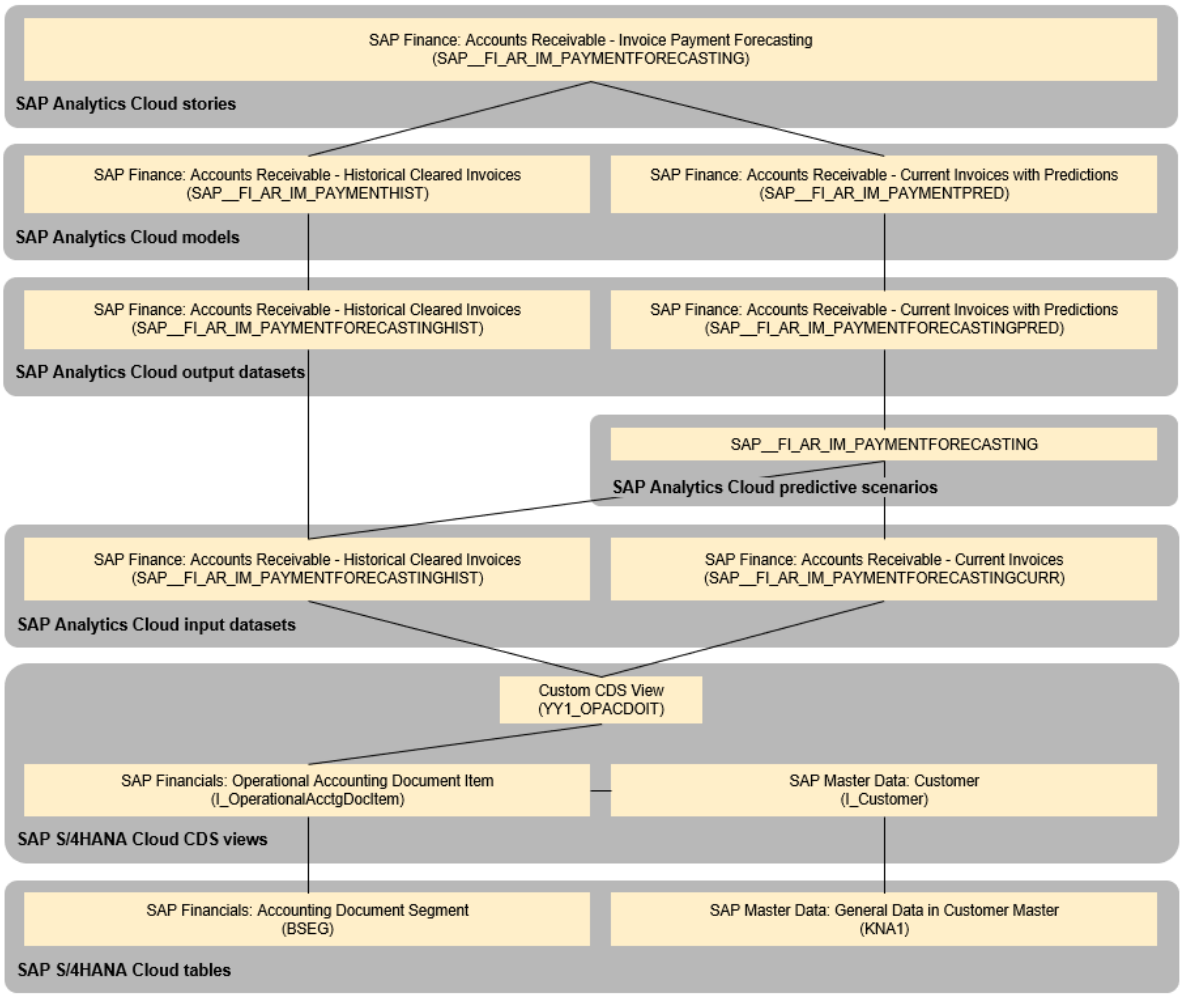
2.8.1 Architecture and Abstract

Abstract

This content extends the existing Accounts Receivable Cash Collection functionality within S/4HANA Cloud. It can be considered as an extension of the Process Collections Worklist, Process Receivables, and Manage Customer Line Items apps.

Accounts Receivable is typically the largest asset on any organization's financial statements. With B2B transactions increasing in volume and complexity, poor management of AR can lead to unnecessary expenses and cash flow problems. Using the results from a regression model, payment predictions are presented to enable collections managers to prioritize their time on high value invoices and customers with poor predicted payment behavior.

Architecture



2.8.2 Stories

The story SAP__FI_AR_PAYMENTFORECASTING (SAP Finance: Accounts Receivable - Invoice Payment Forecasting) is included as part of this package.

The story includes the following calculated measures and dimensions:

Measure Name	Type	Formula/Properties
Model: SAP__FI_AR_IM_PAYMENTHIST		
HIST_COUNT_INVOICES	Aggregation	• Operation: [COUNT DIMENSION] • Aggregation Dimension: [ID] • Conditional Aggregation: [No]

Measure Name	Type	Formula/Properties
AVG_DAYS_TO_PAY	Calculated Measure	[SAP__FI_AR_IM_PAYMENTHIST:OVERDUEDAYS] / [#HIST_COUNT_INVOICES]
Model: SAP__FI_AR_IM_PAYMENTPRED		
COUNT_INVOICES	Aggregation	• Operation: [COUNT DIMENSION] • Aggregation Dimension: [ID] • Conditional Aggregation: [No]
OVERDUEAMOUNTS	Restricted Measure	Measure [AMOUNTINCOCURR] restricted by [OVERDUEDAYS] on [1 - 15, 16 - 30, 31 - 60, 61 - 90, >= 91]
%_OVERDUEAMOUNTS	Calculated Measure	[#OVERDUEAMOUNTS] / [SAP__FI_AR_IM_PAYMENTPRED:AMOUNTINCOMPANYCODECURR]

Dimension Name	Type	Formula/Properties
Model: SAP__FI_AR_IM_PAYMENTHIST		
HIST_OVERDUEDAYS	Measure-Based Dimension	Measure [OVERDUEDAYS]: • Member Name: 0. Measure Values: ≤ 0. • Member Name: 1 - 15. Measure Values: ≥ 1 and < 16. • Member Name: 16 - 30. Measure Values: ≥ 16 and < 31. • Member Name: 31 - 60. Measure Values: ≥ 31 and < 61. • Member Name: 61 - 90. Measure Values: ≥ 61 and < 91. • Member Name: >=91. Measure Values: ≥ 91. Dimension Context: Select All
Model: SAP__FI_AR_IM_PAYMENTPRED		

Dimension Name	Type	Formula/Properties
OVERDUEDAYS	Measure-Based Dimension	Measure [OVERDUEDAYS]: • Member Name: 0. Measure Values: ≤ 0. • Member Name: 1 - 15. Measure Values: ≥ 1 and < 16. • Member Name: 16 - 30. Measure Values: ≥ 16 and < 31. • Member Name: 31 - 60. Measure Values: ≥ 31 and < 61. • Member Name: 61 - 90. Measure Values: ≥ 61 and < 91. • Member Name: >=91. Measure Values: ≥ 91. Dimension Context: Select All
DUEINDAYS	Measure-Based Dimension	Measure [OVERDUEDAYS]: • Member Name: 0 - 15. Measure Values: ≥ -15 and ≤ 0. • Member Name: 16 - 30. Measure Values: ≥ -30 and < -15. • Member Name: 31 - 60. Measure Values: ≥ -60 and < -30. • Member Name: 61 - 90. Measure Values: ≥ -90 and < -60. • Member Name: >= 91. Measure Values: ≤ -91. Dimension Context: Select All Filter Context: [OVERDUEDAYS] restricted by [0]
PRED_OVERDUEDAYS	Measure-Based Dimension	Measure [PRED_OVERDUEDAYS]: • Member Name: 0. Measure Values: ≤ 0. • Member Name: 1 - 15. Measure Values: ≥ 1 and < 16. • Member Name: 16 - 30. Measure Values: ≥ 16 and < 31. • Member Name: 31 - 60. Measure Values: ≥ 31 and < 61. • Member Name: 61 - 90. Measure Values: ≥ 61 and < 91. • Member Name: >=91. Measure Values: ≥ 91. - Dimension Context: Select All

2.8.3 Models

2.8.3.1 SAP__FI_AR_IM_PAYMENTHIST

All the dimensions listed below are private dimensions.

Model Name: SAP__FI_AR_IM_PAYMENTHIST		Connection
• Model Description: SAP Finance: Accounts Receivable - Historical Cleared Invoices • Planning Enabled: No		Dataset SAP__FI_AR_PAYMENTFORECASTINGHIST
Account		
ID	**Description**	**Mapping/Formula**
AMOUNTINCOMPANYCODECURRENCY	AMOUNTINCOCURR	AMOUNTINCOMPANYCODECURRENCY
CASHDISCOUNTBASEAMOUNT	CASHDISCOUNTBASEAMOUNT	CASHDISCOUNTBASEAMOUNT
NETPAYMENTAMOUNT	NETPAYMENTAMOUNT	NETPAYMENTAMOUNT
NETDUEDAYS	NETDUEDAYS	NETDUEDAYS
DUEDAYS	DUEDAYS	DUEDAYS
POSTINGDAYS	POSTINGDAYS	POSTINGDAYS
CLEARINGDAYS	CLEARINGDAYS	CLEARINGDAYS
OVERDUEDAYS	OVERDUEDAYS	OVERDUEDAYS
LASTDUNNINGDAYS	LASTDUNNINGDAYS	LASTDUNNINGDAYS
CASHDISCOUNT1DAYS	CASHDISCOUNT1DAYS	CASHDISCOUNT1DAYS
Dimensions		
Name	**Description**	**Mapping**
ID		ID
COMPANYCODE		COMPANYCODE
ACCOUNTINGDOCUMENT		ACCOUNTINGDOCUMENT
ACCOUNTINGDOCUMENTITEM		ACCOUNTINGDOCUMENTITEM
DOCUMENTDATE		DOCUMENTDATE
NETDUEDATE		NETDUEDATE
DUECALCULATIONBASEDATE		DUECALCULATIONBASEDATE
POSTINGDATE		POSTINGDATE
CLEARINGDATE		CLEARINGDATE
LASTDUNNINGDATE		LASTDUNNINGDATE
CASHDISCOUNT1DUEDATE		CASHDISCOUNT1DUEDATE
PAYMENTTERMS		PAYMENTTERMS

Model Name: SAP__FI_AR_IM_PAYMENTHIST	Connection
GLACCOUNT	GLACCOUNT
POSTINGKEY	POSTINGKEY
DEBITCREDITCODE	DEBITCREDITCODE
CUSTOMER	CUSTOMER
PLANNINGLEVEL	PLANNINGLEVEL
COUNTRY	COUNTRY
FINANCIALACCOUNTTYPE	FINANCIALACCOUNTTYPE
BILLINGDOCUMENT	BILLINGDOCUMENT
CLEARINGISREVERSED	CLEARINGISREVERSED
ACCOUNTINGDOCUMENTTYPE	ACCOUNTINGDOCUMENTTYPE
COMPANYCODECURRENCY	COMPANYCODECURRENCY
TRANSACTIONCURRENCY	TRANSACTIONCURRENCY
KEYDATE	KEYDATE

2.8.3.2 SAP__FI_AR_IM_PAYMENTPRED

All the dimensions listed below are private dimensions.

Model Name: SAP__FI_AR_IM_PAYMENTPRED		Connection
• Model Description: SAP Finance: Accounts Receivable - Current Invoices with Predictions • Planning Enabled: No		Dataset SAP__FI_AR_PAYMENTFORECASTINGPRED
Account		
ID	**Description**	**Mapping/Formula**
AMOUNTINCOMPANYCODECURRENCY	AMOUNTINCOCURR	AMOUNTINCOMPANYCODECURRENCY
CASHDISCOUNTBASEAMOUNT	CASHDISCOUNTBASEAMOUNT	CASHDISCOUNTBASEAMOUNT
NETPAYMENTAMOUNT	NETPAYMENTAMOUNT	NETPAYMENTAMOUNT
NETDUEDAYS	NETDUEDAYS	NETDUEDAYS
DUEDAYS	DUEDAYS	DUEDAYS
POSTINGDAYS	POSTINGDAYS	POSTINGDAYS
CLEARINGDAYS	CLEARINGDAYS	CLEARINGDAYS
OVERDUEDAYS	OVERDUEDAYS	OVERDUEDAYS
LASTDUNNINGDAYS	LASTDUNNINGDAYS	LASTDUNNINGDAYS
CASHDISCOUNT1DAYS	CASHDISCOUNT1DAYS	CASHDISCOUNT1DAYS

Model Name: SAP__FI_AR_IM_PAYMENTPRED		Connection
rr_CLEARINGDAYS	PRED_CLEARINGDAYS	rr_CLEARINGDAYS
Calculated_column_1	PRED_OVERDUEDAYS	Not mapped to the dataset. Create a calculated column based on this formula: IF([PRED_CLEARINGDAYS]-[NETDUEDAYS]>=0, [PRED_CLEARINGDAYS]-[NETDUEDAYS], 0)

Dimensions

Name	Description	Mapping
ID		ID
COMPANYCODE		COMPANYCODE
ACCOUNTINGDOCUMENT		ACCOUNTINGDOCUMENT
ACCOUNTINGDOCUMENTITEM		ACCOUNTINGDOCUMENTITEM
DOCUMENTDATE		DOCUMENTDATE
NETDUEDATE		NETDUEDATE
DUECALCULATIONBASEDATE		DUECALCULATIONBASEDATE
POSTINGDATE		POSTINGDATE
LASTDUNNINGDATE		LASTDUNNINGDATE
CASHDISCOUNT1DUEDATE		CASHDISCOUNT1DUEDATE
PAYMENTTERMS		PAYMENTTERMS
GLACCOUNT		GLACCOUNT
POSTINGKEY		POSTINGKEY
DEBITCREDITCODE		DEBITCREDITCODE
CUSTOMER		CUSTOMER
PLANNINGLEVEL		PLANNINGLEVEL
COUNTRY		COUNTRY
FINANCIALACCOUNTTYPE		FINANCIALACCOUNTTYPE
BILLINGDOCUMENT		BILLINGDOCUMENT
CLEARINGISREVERSED		CLEARINGISREVERSED
ACCOUNTINGDOCUMENTTYPE		ACCOUNTINGDOCUMENTTYPE
COMPANYCODECURRENCY		COMPANYCODECURRENCY
TRANSACTIONCURRENCY		TRANSACTIONCURRENCY
KEYDATE		KEYDATE

2.8.4 Datasets

2.8.4.1 SAP__FI_AR_PAYMENTFORECASTINGHIST

The dataset SAP__FI_AR_PAYMENTFORECASTINGHIST contains invoices that is cleared as of November 28, 2018. The filter *CLEARINGDATEFISCALYEAR ≠ 0000* is applied to ensure that the clearing date is not missing and has a value.

Dataset Name: SAP__FI_AR_PAYMENTFORECASTINGHIST

- Dataset Description: SAP Finance: Accounts Receivable, Historical Cleared Invoices
- Connection: Import Data Connection to an SAP S/4HANA Cloud System. SAP S/4HANA Cloud custom CDS view: YY1_OPACDOIT

Variables	
Column Header	**Mapping in YY1_OPACDOIT**
ID	<Unique key generated by S/4HANA>
COMPANYCODE	Company Code
ACCOUNTINGDOCUMENT	Journal Entry
FISCALYEAR	Fiscal Year
ACCOUNTINGDOCUMENTITEM	Posting View Item
KEYDATE	Key Date
DOCUMENTDATE	Journal Entry Date
NETDUEDATE	Net Due Date
DUECALCULATIONBASEDATE	Due Calculation Base Date
POSTINGDATE	Posting Date
CLEARINGDATE	Clearing Date
LASTDUNNINGDATE	Last Dunned
CASHDISCOUNT1DUEDATE	Cash Disc 1 Due Date
PAYMENTTERMS	Payment Terms
GLACCOUNT	G/L Account
POSTINGKEY	Posting Key
DEBITCREDITCODE	Debit/Credit Code
FISCALPERIOD	Fiscal Period
CUSTOMER	Customer
PLANNINGLEVEL	Planning Level
COUNTRY	Country
FINANCIALACCOUNTTYPE	Account Type
BILLINGDOCUMENT	Billing Document

Dataset Name: SAP__FI_AR_PAYMENTFORECASTINGHIST	
CLEARINGISREVERSED	Clearing Is Reversed
CLEARINGDOCFISCALYEAR	Clearing Fisc. Year
ACCOUNTINGDOCUMENTTYPE	Journal Entry Type
COMPANYCODECURRENCY	Company Code Crcy
AMOUNTINCOMPANYCODECURR	Amount in CC Crcy
TRANSACTIONCURRENCY	Transaction Currency
CASHDISCOUNTBASEAMOUNT	Cash Dscnt Base Amt
NETPAYMENTAMOUNT	Net Payment Amount
NETDUEDAYS	Net Due Days
DUEDAYS	Due Days
POSTINGDAYS	Posting Days
CLEARINGDAYS	Clearing Days
OVERDUEDAYS	Overdue Days
LASTDUNNINGDAYS	Last Dunning Days
CASHDISCOUNT1DAYS	Cash Discount Days 1

2.8.4.2 SAP__FI_AR_PAYMENTFORECASTINGCURR

The dataset SAP__FI_AR_PAYMENTFORECASTINGCURR contains the same columns as the dataset SAP__FI_AR_PAYMENTFORECASTINGHIST. The only difference is that the filter CLEARINGDATEFISCALYEAR = 0000 is applied to ensure that the clearing date is missing, indicating that the invoice is not cleared.

2.8.4.3 SAP__FI_AR_PAYMENTFORECASTINGPRED

The dataset *SAP__FI_AR_PAYMENTFORECASTINGPRED* contains the columns that *SAP__FI_AR_PAYMENTFORECASTINGCURR* has with additional columns created by the predictive scenario. These additional columns supplement the predictive modelling process but have not been included in the analytics models or the story. Lastly, this dataset includes the predictive output column *rr_CLEARINGDAYS*.

Dataset Name: SAP__FI_AR_PAYMENTFORECASTINGPRED	
• Dataset Description: SAP Finance: Accounts Receivable - Current Invoices with Predictions • Connection: Output dataset from predictive scenario: SAP__FI_AR_PAYMENTFORECASTING	
Variables	
Column Header	**Mapping in YY1_OPACDOIT**

Dataset Name: SAP__FI_AR_PAYMENTFORECASTINGPRED

KxIndex	<Unique key generated by the predictive scenario>
ID	<Unique key generated by S/4HANA>
COMPANYCODE	Company Code
ACCOUNTINGDOCUMENT	Journal Entry
FISCALYEAR	Fiscal Year
ACCOUNTINGDOCUMENTITEM	Posting View Item
KEYDATE	Key Date
DOCUMENTDATE	Journal Entry Date
NETDUEDATE	Net Due Date
DUECALCULATIONBASEDATE	Due Calculation Base Date
POSTINGDATE	Posting Date
CLEARINGDATE	Clearing Date
LASTDUNNINGDATE	Last Dunned
CASHDISCOUNT1DUEDATE	Cash Disc 1 Due Date
PAYMENTTERMS	Payment Terms
GLACCOUNT	G/L Account
POSTINGKEY	Posting Key
DEBITCREDITCODE	Debit/Credit Code
FISCALPERIOD	Fiscal Period
CUSTOMER	Customer
PLANNINGLEVEL	Planning Level
COUNTRY	Country
FINANCIALACCOUNTTYPE	Account Type
BILLINGDOCUMENT	Billing Document
CLEARINGISREVERSED	Clearing Is Reversed
CLEARINGDOCFISCALYEAR	Clearing Fisc. Year
ACCOUNTINGDOCUMENTTYPE	Journal Entry Type
COMPANYCODECURRENCY	Company Code Crcy
AMOUNTINCOMPANYCODECURR	Amount in CC Crcy
TRANSACTIONCURRENCY	Transaction Currency
CASHDISCOUNTBASEAMOUNT	Cash Dscnt Base Amt
NETPAYMENTAMOUNT	Net Payment Amount
NETDUEDAYS	Net Due Days
DUEDAYS	Due Days

Dataset Name: SAP__FI_AR_PAYMENTFORECASTINGPRED

POSTINGDAYS	Posting Days
CLEARINGDAYS	Clearing Days
OVERDUEDAYS	Overdue Days
LASTDUNNINGDAYS	Last Dunning Days
CASHDISCOUNT1DAYS	Cash Discount Days 1
KEYDATE_Y	These are additional features created by the predictive scenario for date variables. They are omitted from the analytics models.
KEYDATE_M	
KEYDATE_DoM	
KEYDATE_DoW	
KEYDATE_DoY	
KEYDATE_QoY	
KEYDATE_MoQ	
DOCUMENTDATE_Y	
DOCUMENTDATE _M	
DOCUMENTDATE _DoM	
DOCUMENTDATE _DoW	
DOCUMENTDATE _DoY	
DOCUMENTDATE _QoY	
DOCUMENTDATE _MoQ	
NETDUEDATE_Y	
NETDUEDATE _M	
NETDUEDATE _DoM	
NETDUEDATE _DoW	
NETDUEDATE _DoY	
NETDUEDATE _QoY	
NETDUEDATE _MoQ	
DUECALCULATIONBASEDATE_Y	
DUECALCULATIONBASEDATE _M	
DUECALCULATIONBASEDATE _DoM	
DUECALCULATIONBASEDATE _DoW	
DUECALCULATIONBASEDATE _DoY	
DUECALCULATIONBASEDATE _QoY	
DUECALCULATIONBASEDATE _MoQ	
POSTINGDATE_Y	

Dataset Name: SAP__FI_AR_PAYMENTFORECASTINGPRED	
POSTINGDATE _M	
POSTINGDATE _DoM	
POSTINGDATE _DoW	
POSTINGDATE _DoY	
POSTINGDATE _QoY	
POSTINGDATE _MoQ	
LASTDUNNINGDATE_Y	
LASTDUNNINGDATE _M	
LASTDUNNINGDATE _DoM	
LASTDUNNINGDATE _DoW	
LASTDUNNINGDATE _DoY	
LASTDUNNINGDATE _QoY	
LASTDUNNINGDATE _MoQ	
CASHDISCOUNT1DUEDATE_Y	
CASHDISCOUNT1DUEDATE _M	
CASHDISCOUNT1DUEDATE _DoM	
CASHDISCOUNT1DUEDATE _DoW	
CASHDISCOUNT1DUEDATE _DoY	
CASHDISCOUNT1DUEDATE _QoY	
CASHDISCOUNT1DUEDATE _MoQ	
rr_CLEARINGDAYS	This additional column is created by the predictive scenario. It represents the predicted value for the target.

2.8.5 Navigating the Content

Please visit this blog which explains how to navigate this content and understand the various KPIs.

2.8.6 Recreating the Content

2.8.6.1 Creating your custom CDS view in S/4HANA Cloud

Prerequisites

<S4User>/<S4Password> with the following roles on S/4HANA Cloud <S4Tenant>:

- SAP_BR_ADMINISTRATOR
- SAP_BR_BPC_EXPERT
- SAP_BR_ANALYTICS_SPECIALIST

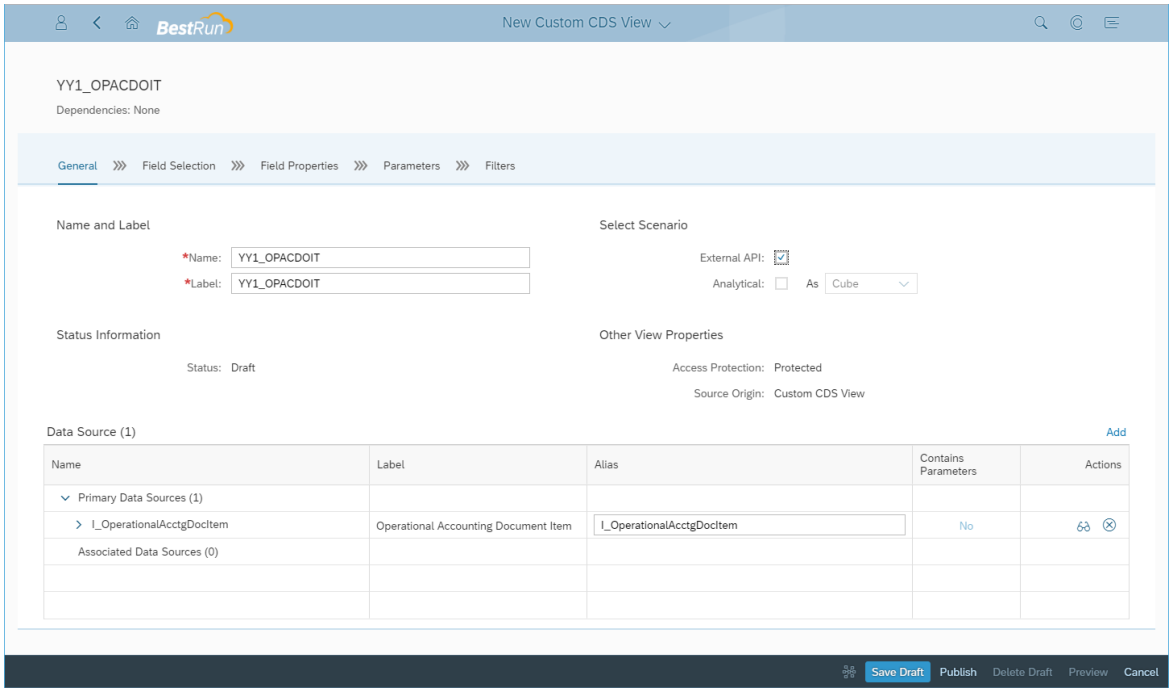
The user will create a custom CDS view and expose it via S/4HANA Cloud extensibility apps.

Context

Procedure

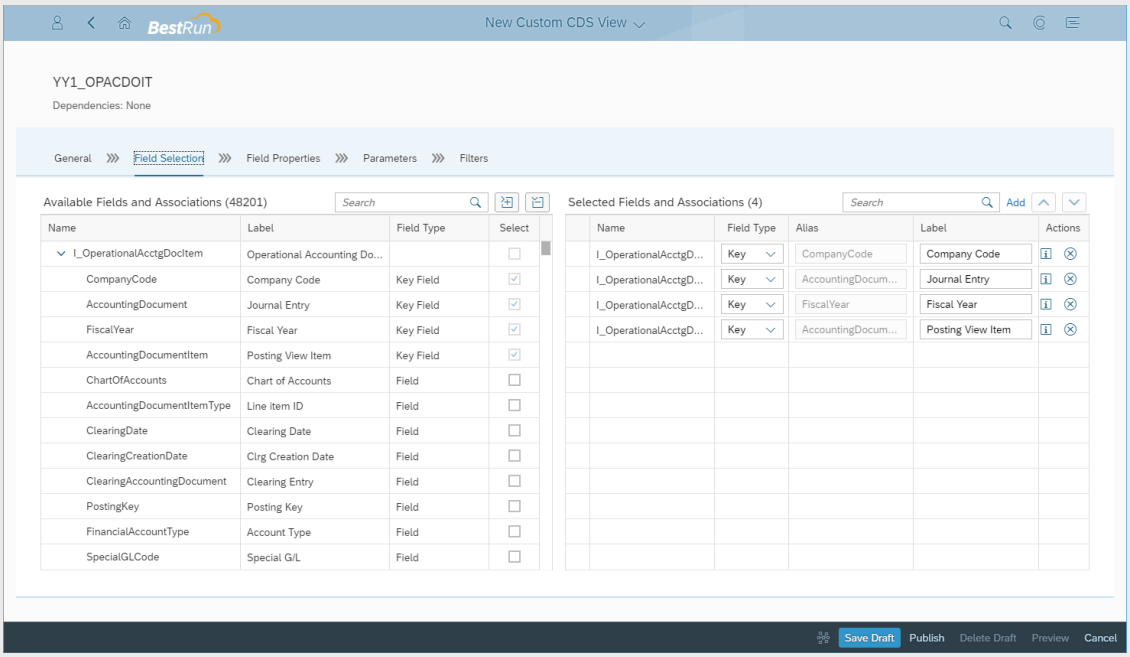
1. Connect to <S4Tenant> and launch Custom CDS Views extensibility app.
2. Search for CDS View I_OperationalAcctgDocItem (Operational Accounting Document Item).
3. Select it and click *Create*.

   The New Custom CDS View form appears.
4. Enter the Name: *YY1_OPACDOIT*, Label: *YY1_OPACDOIT*, and click check box *External API*:



5. Click on Field Selection tab.

> **i Note**
>
> The source CDS view key fields are already selected for your custom CDS view.



6. The list of fields that should be added to/created in the custom CDS view can be found here:

Custom CDS View Name: YY1_OPACDOIT

- Custom CDS View Description: YY1_OPACDOIT
- External API: Yes
- Source CDS View(s): I_OperationalAcctgDocItem

Fields

Name	Label	Data Type
I_OperationalAcctgDocItem.CompanyCode *	Company Code	CHAR (4)
I_OperationalAcctgDocItem.AccountingDocument *	Journal Entry	CHAR (10)
I_OperationalAcctgDocItem.FiscalYear *	Fiscal Year	NUMC (4)
I_OperationalAcctgDocItem.AccountingDocumentItem *	Posting View Item	NUMC (3)
KeyDate **	Key Date	DATS (16)
I_OperationalAcctgDocItem.DocumentDate	Journal Entry Date	DATS (16)
I_OperationalAcctgDocItem.NetDueDate	Net Due Date	DATS (16)

Custom CDS View Name: YY1_OPACDOIT

I_OperationalAcctgDocItem.DueCalculationBaseDate	Due Calculation Base Date	DATS (16)
I_OperationalAcctgDocItem.PostingDate	Posting Date	DATS (16)
I_OperationalAcctgDocItem.ClearingDate	Clearing Date	DATS (16)
I_OperationalAcctgDocItem.LastDunningDate	Last Dunned	DATS (16)
I_OperationalAcctgDocItem.CashDiscount1DueDate	Cash Disc 1 Due Date	DATS (16)
I_OperationalAcctgDocItem.PaymentTerms	Payment Terms	CHAR (4)
I_OperationalAcctgDocItem.GLAccount	G/L Account	CHAR (10)
I_OperationalAcctgDocItem.PostingKey	Posting Key	CHAR (2)
I_OperationalAcctgDocItem.DebitCreditCode	Debit/Credit Code	CHAR (1)
I_OperationalAcctgDocItem.FiscalPeriod	Fiscal Period	NUMC (3)
I_OperationalAcctgDocItem.Customer	Customer	CHAR (10)
I_OperationalAcctgDocItem.PlanningLevel	Planning Level	CHAR (2)
I_OperationalAcctgDocItem.Customer.Country	Country	CHAR (3)
I_OperationalAcctgDocItem.FinancialAccountType	Account Type	CHAR (1)
I_OperationalAcctgDocItem.BillingDocument	Billing Document	CHAR (10)
I_OperationalAcctgDocItem.ClearingIsReversed	Clearing Is Reversed	CHAR (1)
I_OperationalAcctgDocItem.ClearingDocFiscalYear	Clearing Fisc. Year	NUMC (4)
I_OperationalAcctgDocItem.AccountingDocumentType	Journal Entry Type	CHAR (2)
I_OperationalAcctgDocItem.IsSalesRelated	Is Sales Related	CHAR (1)
I_OperationalAcctgDocItem.CompanyCodeCurrency	Company Code Crcy	CUKY (5)
I_OperationalAcctgDocItem.AmountInCompanyCodeCurrency	Amount in CC Crcy	CURR (12)

Custom CDS View Name: YY1_OPACDOIT

I_OperationalAcctgDocItem.TransactionCurrency	Transaction Currency	CUKY (5)
I_OperationalAcctgDocItem.CashDiscountBaseAmount	Cash Dscnt Base Amt	CURR (12)
I_OperationalAcctgDocItem.NetPaymentAmount	Net Payment Amount	CURR (12)
NetDueDays **	Net Due Days	INT4 (4)
DueDays **	Due Days	INT4 (4)
PostingDays **	Posting Days	INT4 (4)
ClearingDays **	Clearing Days	INT4 (4)
OverdueDays **	Overdue Days	INT4 (4)
LastDunningDays **	Last Dunning Days	INT4 (4)
I_OperationalAcctgDocItem.CashDiscount1Days	Cash Discount Days 1	DEC (2)

> **Note**
>
> - * *Key Field
> - * ** Calculated Field

7. The formulas for the calculated fields above can be found here:

Calculated Fields of Custom CDS View YY1_OPACDOIT

Name	Formula
KeyDate	Source Code `cast( $session.system_date as ABAP.DATS )`
NetDueDays	Source Code `case when I_OperationalAcctgDocItem.NetDueDate = '00000000' then 0 else DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.DocumentDate,I_OperationalAcctgDocItem.NetDueDate) end`

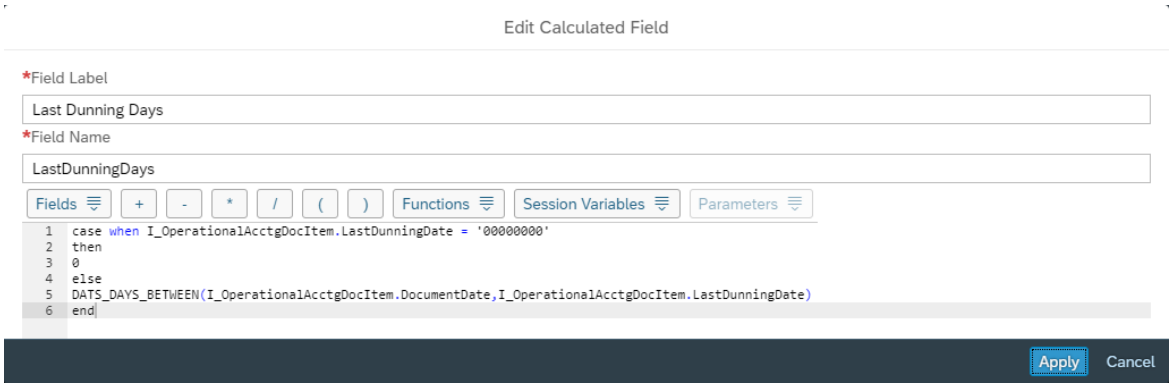
Calculated Fields of Custom CDS View YY1_OPACDOIT

DueDays	Source Code `case when I_OperationalAcctgDocItem.DueCalculationBaseDate = '00000000' then 0 else DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.DocumentDate,I_OperationalAcctgDocItem.DueCalculationBaseDate) end`
PostingDays	Source Code `case when I_OperationalAcctgDocItem.PostingDate = '00000000' then 0 else DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.DocumentDate,I_OperationalAcctgDocItem.PostingDate) end`
ClearingDays	Source Code `case when I_OperationalAcctgDocItem.ClearingDate = '00000000' then 0 else DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.DocumentDate,I_OperationalAcctgDocItem.ClearingDate) end`

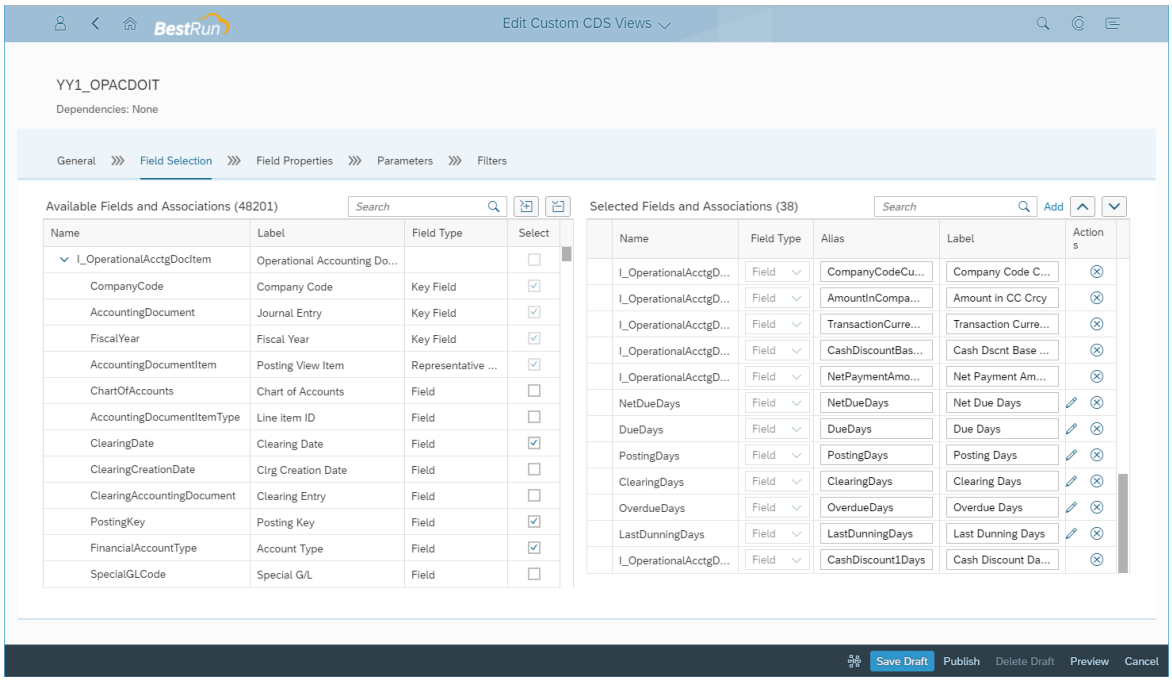
Calculated Fields of Custom CDS View YY1_OPACDOIT

OverdueDays	Source Code `case when I_OperationalAcctgDocItem.ClearingDate = '00000000' then DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.NetDueDate,cast($session.system_date as ABAP.DATS)) else DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.NetDueDate,I_OperationalAcctgDocItem.ClearingDate) end`
LastDunningDays	case when I_OperationalAcctgDocItem.LastDunningDate = '00000000' then 0 else DATS_DAYS_BETWEEN(I_OperationalAcctgDocItem.DocumentDate,I_OperationalAcctgDocItem.LastDunningDate) End

8. For example, you create the calculated field LastDunningDays by clicking Add, entering the formula, and click Apply in the dialog box below:



Once all fields are created, the form should look like this:



9. Click on Publish to publish your custom CDS view.

   You have now created the custom CDS view YY1_OPACDOIT on top of CDS View I_OperationalAcctgDocItem and generated the external API service YY1_OPACDOIT_CDS. Now, you can securely expose this service for consumption via SAP Analytics Cloud.

2.8.6.2 Acquiring your S/4HANA Cloud custom CDS view data into SAP Analytics Cloud datasets

To connect to SAP S/4HANA Cloud OData services, the necessary configuration is documented in scope item 1YB: https://rapid.sap.com/bp/#/scopeitems/1YB

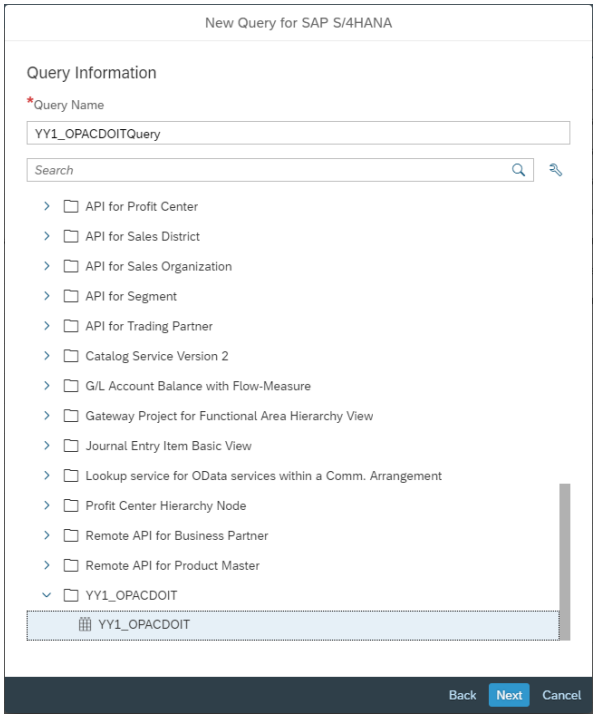
The corresponding steps can be summarized as follows:

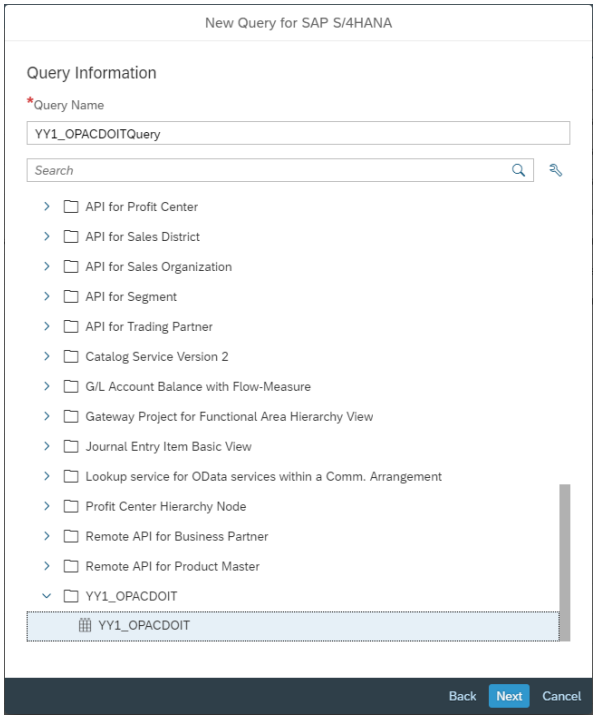
Configure acquisition of S/4HANA Cloud custom CDS view data into SAP Analytics Cloud

In S/4HANA Cloud Tenant <S4Tenant>	
Step / App	**Action(s)**
1 / Maintain Communication Users	Create communication user <SAC_USER> (Name/Pass).
2 / Communication Systems	Create communication system <SAC_SYSTEM> and assign user <SAC_USER> for inbound communication.
3 / Communication Arrangements	Create communication arrangement SAP_COM_0087_CA on top of communication scenario SAP_COM_0087, with system <SAC_SYSTEM> and user <SAC_USER>.

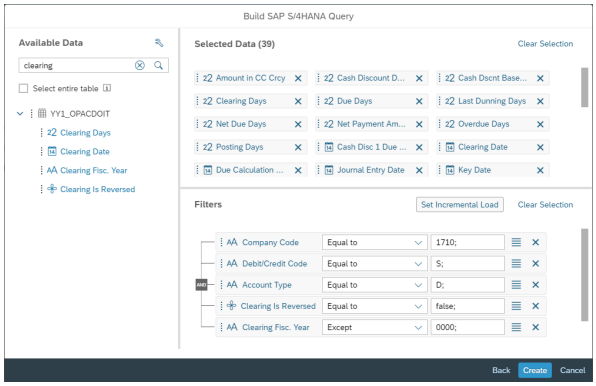
Configure acquisition of S/4HANA Cloud custom CDS view data into SAP Analytics Cloud	
4 / Custom Communication Scenarios	Create custom communication scenario YY1_OPACDOIT_CS and add service YY1_OPACDOIT_CDS to it. Trigger creation of attached communication arrangement (this takes you to the next step).
5 / Communication Arrangements	Create communication arrangement YY1_OPACDOIT_CA and add system <SAC_SYSTEM> (then <SAC_USER> is automatically added). Take note of the root URL of the OData service: *https://<myxxxxxx-api.s4hana.ondemand.com>:<port>*
In SAP Analytics Cloud Tenant <SACTenant>	
Step / App	**Action(s)**
1 / Main Menu/Connection	Create a S/4HANA OData import connection <S4Tenant-Connection>. Enter the Data Service URL noted in step 5 above. Select Basic Authentication. Enter <SAC_USER> Name/Pass. Share the connection if needed. Click on OK.

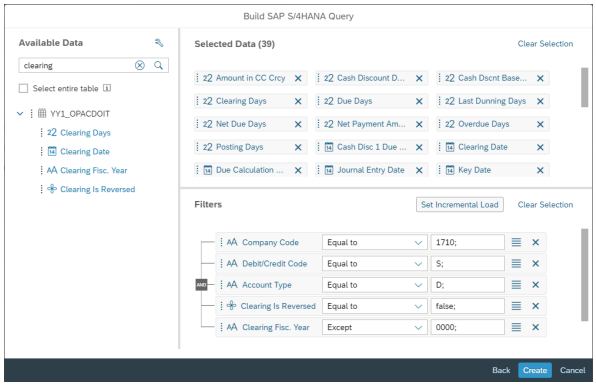
Configure acquisition of S/4HANA Cloud custom CDS view data into SAP Analytics Cloud	
2 / Browse/Files	Create a dataset XXX__FI_AR_IM_PAYMENTFORECAS-TINGHIST (replace prefix XXX by your namespace to replace SAP prefix). Select Data acquired from S/4HANA. Select connection created in step 1 (<S4TenantConnection>). The following dialog box pops up:



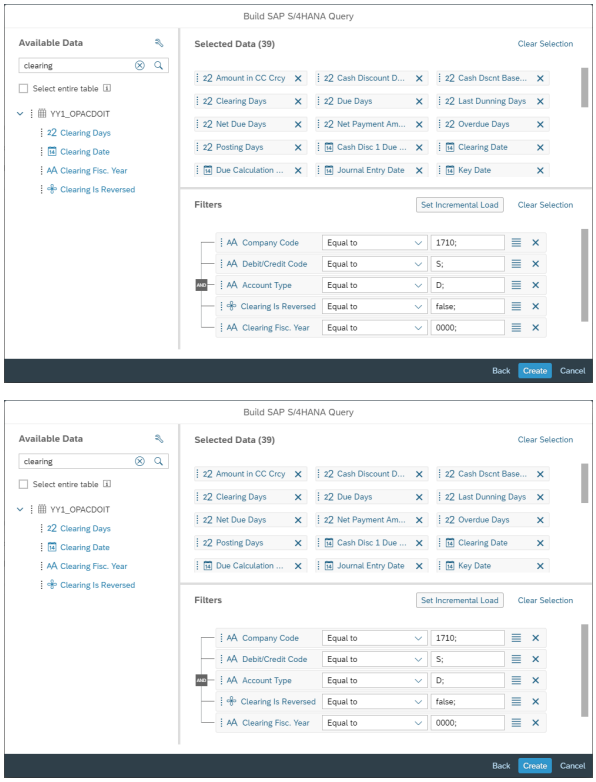


Select service YY1_OPACDOIT, and click Next. Drag/Drop all fields in Selected Data and set the filters as shown below (replace Company Code 1710 by your company code):





Click Create, and save the resulting dataset as XXX__FI_AR_IM_PAYMENTFORECASTINGHIST.

3 / Browse/Files	Create dataset XXX__FI_AR_IM_PAYMENTFORECASTING-CURR (replace prefix XXX by your namespace to replace SAP prefix). Perform the Step 2 as shown above again, only this time the last filter is different: Replace Clearing Fisc. Year Except 0000 by Clearing Fisc. Year Equal to 0000:  Click Create, and save the resulting dataset as XXX__FI_AR_IM_PAYMENTFORECASTINGCURR.

2.8.6.3 Creating the Predictive Scenario and Predictive Output

Prerequisites

Now that the datasets for both historical invoices and current invoices are acquired into SAP Analytics Cloud as datasets, the first step is to create a predictive scenario.

Procedure

1. Navigate to the main *Menu* > *Create* > *Predictive Scenario* > . Click *Regression*.
2. Give your Predictive Scenario the name XXX__FI_AR_PAYMENTFORECASTING. You can add a description such as SAP Finance: Accounts Receivable, Invoice Payment Forecasting.
3. Click *Create Predictive Model* to start and add a description for your model if you'd like. Then, click *OK*.
4. A predictive model needs historical data to learn from as part of the model training process. You need to select an input dataset, which in this case would be the historical dataset you created in the section Acquiring your S/4HANA Cloud custom CDS view into SAP Analytics Cloud datasets. If you want to use the sample data we have provided instead, please use the dataset SAP__FI_AR_PAYMENTFORECASTINGHIST.
5. The next step would be to verify the metadata for your dataset. Given this data is acquired by SAP S/4HANA system, the metadata is preserved from the source. You can learn more about editing variable metadata in the SAP Analytics Cloud Help.
6. The target variable represents the column in the dataset which answers what you are trying to predict, or your business question. In this use case, we want to predict the number of days it will take an invoice to clear in the system. Select *CLEARINGDAYS* as the target variable.
7. Excluding variables from the model training allows you to remove variables that are unique IDs, variables can be directly related to the target variable, or variables that contain information might not be available at the time of applying the model. Exclude the following 6 variables:
    - ID
    - ACCOUNTINGDOCUMENT
    - OVERDUEDAYS
    - CLEARINGDATE
    - CLEARINGISREVERSED
    - CLEARINGDOCFISCALYEAR
8. Click *Train to train your predictive model*. If you are prompted to save your changes, click *Yes.*

    Depending on the size of your dataset, the model training can take a few minutes. Once the process is complete, you will be presented with the model debrief screen. From the debrief, you can determine whether you want to move forward and apply this model, or if you want to retrain the model with some changes. Find out more about analyzing your regression model in the SAP Analytics Cloud Help.
9. To apply the model, click the icon that resembles a factory. The input dataset for this step is the data you want to create predictions for, which in this case would be the dataset containing current invoices that you created in the section Acquiring your customer CDS view into an SAP Analytics Cloud dataset. If you want to use the sample data we have provided instead, please use the dataset SAP__FI_AR_PAYMENTFORECASTINGCURR. The predictive scenario will create a new dataset which contains the outputs from applying the model. Under Output Dataset, choose where to save this dataset and give it a name. Lastly, you can select they type of output columns you would like to have in your output dataset. We suggest selecting All Variables under Input Dataset Variables and Predicted Value under Predictions. To learn more about predictive outputs, see the SAP Analytics Cloud Help.

    Depending on the size of your dataset, the model application might take a few minutes. You can check the status of the application by clicking on the arrow on bottom bar, beside Predictive Models. This will open

the model version review panel, where you will see the status change to Applied once the application is complete.

After the model is applied, you will notice that the predictive output dataset exists in the file structure. You can now use this dataset as a source for models or stories.

2.8.6.4 Recreating the Story

Content based off predictive scenarios is different than other content as it utilizes the dataset. At this time, datasets cannot be mapped to existing models. If you have created a new predictive output dataset via the steps above, you need to recreate the models and reproduce the story.

2.8.6.4.1 Creating the Models

You need to create 2 models for the historical data and the current invoices with predictions.

Context

To create the historical data model:

Procedure

1. Navigate to the main *Menu* > *Create* > *Model*. Select *Get data from a data source* followed by *Dataset* and select your historical dataset which was created in the previous steps.
2. Change the model name and add a description in the right-side panel:
   - Name: FI_AR_IM_PAYMENTHIST
   - Description: SAP Finance: Accounts Receivable – Historical Cleared Invoices
3. Navigate to *Card View* under Mode and delete the columns *FISCALPERIOD* and *CLEARINGDOCFISCALYEAR*.
4. Change *KEYDATE* to *Dimension* under *Type*.
5. Ensure the following columns are set to Measure under Type:
   - AMOUNTINCOMPANYCODECURR
   - CASHDISCOUNTBASEAMOUNT
   - NETPAYMENTAMOUNT

- NETDUEDAYS
- DUEDAYS
- POSTINGDAYS
- CLEARINGDAYS
- OVERDUEDAYS
- LASTDUNNINGDAYS
- CASHDICSOUNT1DAYS

6. Rename *AMOUNTINCOMPANYCODECURR* to *AMOUNTINCOCURR* by double-clicking on the card's title.
7. Click *Create Model* > *Create*
8. Identify *AMOUNTINCOCURR CASHDISCOUNTBASEAMOUNT* and *NETPAYMENTAMOUNT* as Currency under Units & Currencies.
9. Change the default decimal places to 0 for:
   - NETDUEDAYS
   - DUEDAYS
   - POSTINGDAYS
   - CLEARINGDAYS
   - OVERDUEDAYS
   - LASTDUNNINGDAYS
   - CASHDICSOUNT1DAYS
10. Once complete, save the model.
11. For the predictive output model: Navigate to the *Menu* > *Create* > *Model*. Select *Get data from a datasource* followed by *Dataset* and select your predictive output dataset which was created in the previous steps.
12. Next, change the model name and add a description in the right-side panel:
    - Name: FI_AR_IM_PAYMENTPRED
    - Description: SAP Finance: Accounts Receivable, Current Invoices with Predictions
13. Navigate to Card View under Mode and delete the following columns:
    - KxIndex
    - CLEARINGDATE
    - FISCALPERIOD
    - CLEARINGDOCFISCALYEAR
14. Remove all columns from KEYDATE_Y to CASHDISCOUNT1DUEDATE_MoQ (inclusive).

> → Tip
>
> The easiest way to do this is to select KEYDATE_Y, hold shift and select CASHDISCOUNT1DUEDATE_MoQ.

15. Change KEYDATE to Dimension under Type.
16. Ensure the following columns are set to Measure under Type:
    - AMOUNTINCOMPANYCODECURR
    - CASHDISCOUNTBASEAMOUNT
    - NETPAYMENTAMOUNT
    - NETDUEDAYS
    - DUEDAYS

- POSTINGDAYS
- CLEARINGDAYS
- OVERDUEDAYS
- LASTDUNNINGDAYS
- CASHDICSOUNT1DAYS
- rr_CLEARINGDAYS

17. Rename AMOUNTINCOMPANYCODECURR to AMOUNTINCOCURR by double-clicking on the card's title. Rename rr_CLEARINGDAYS to PRED_CLEARINGDAYS.
18. Create a calculated column by selecting the "fx" button in the top toolbar, under Transformations. Name the calculated column PRED_OVERDUEDAYS. For the formula, use the following:

    Source Code

    ```
    IF([PRED_CLEARINGDAYS]-[NETDUEDAYS]>=0, [PRED_CLEARINGDAYS]-[NETDUEDAYS],
    0)
    ```

19. Click *Preview* to ensure the calculation is correct, and then click *OK*.
20. Click *Create Model* > *Create*.
21. Identify AMOUNTINCOCURR CASHDISCOUNTBASEAMOUNT and NETPAYMENTAMOUNT as Currency under Units & Currencies.
22. Change the default decimal places to 0 for:
    - NETDUEDAYS
    - DUEDAYS
    - POSTINGDAYS
    - CLEARINGDAYS
    - OVERDUEDAYS
    - LASTDUNNINGDAYS
    - CASHDICSOUNT1DAYS
    - PRED_CLEARINGDAYS
23. Once complete, save the model.

2.8.6.4.2 Duplicate the Story and Remove the Existing Models

The easiest way to recreate the sample story and preserve the formatting is to Save As... a copy of the story with a different name.

In the new story, you will want to upload the new models. To do this, enter edit mode and navigate to the data tab. Where the existing models are listed, click to Add New Data and add both models you created in the previous steps.

Once you have completed this, navigate back to the story and enter designer mode. For all charts and tables, you will want to switch the existing model for your relevant model. You cannot easily switch input controls, so they need to be recreated. Once you have replaced all the models, save the story. SAP Analytics Cloud will ask you if you would like to remove models SAP__FI_AR_IM_PAYMENTHIST and SAP__FI_AR_IM_PAYMENTPRED because they are not being used. Click Remove. For good measure, navigate out to the file structure and

navigate back into the story to ensure that the calculated measures and dimensions from the sample models are fully removed.

2.8.6.4.3 Recreate the Calculations

The next step is to create the calculated measures and dimensions to ensure the visualizations can be rebuilt. **Please see the section FI-AR-PF: Stories above for the formulas required to rebuild the calculations.**

2.8.6.4.4 Rebuild the Story

If you would like to rebuild the sample visualizations, open a new browser window and navigate to the sample story: SAP__FI_AR_PAYMENTFORECASTING. Recreate the visualizations by using the sample story as a reference and select the same measures and dimensions for your story. You can also add the same tooltips.

Next, you can move forward with replicating the conditional formatting and linked analysis settings.

If by chance, the formatting for the story is lost, follow this guide:

- Chart Titles:
  - Font: 72-Web
  - Size: 24
  - Color: Hex 213f57
- Chart subtitles:
  - Font: 72-Web
  - Size: 16
  - Color: Hex 58595b
- Table headers:
  - Font: 72-Web
  - Size: 14
  - Color: Hex 213f57
  - Style: Bold
- Table Cells:
  - Font: 72-Web
  - Size: 13
- Input Control titles:
  - Font: 72-Web
  - Size: 20
  - Color: Hex 213f57

2.9 Financial Analytics Dashboard for SAP Analytics Cloud

2.9.1 Financial Analytics Dashboard for SAP Analytics Cloud

The Financial Analytics Dashboard for SAP Analytics Cloud content consists of two packages. An SAP Data Warehouse Cloud package and an SAP Analytics Cloud package for the visualizations. Find the SAP Datawarehouse Cloud package in the Content Network in your SAP Data Warehouse Cloud instance. Install both packages to use the content entirely.

Financial Analytics Dashboard for SAP Analytics Cloud content monitors and acts on the most critical business metrics and improve the company's overall Financial and Human Resource health. This package has a dependency on the SAP Data Warehouse Cloud Package: Financial analytics dashboard for SAP Analytics Cloud. Before importing the content, please read the documentation carefully and set up the required connections.

Find all details (architecture, configuration) and documentation about this package in 3013006 - Financial Analytics Dashboard for SAP Analytics Cloud - Implementation Help.

2.10 Financial Consolidation for SAP S/4HANA Cloud (SAP BEST PRACTICES)

2.10.1 Financial Consolidation for SAP S/4HANA Cloud (SAP BEST PRACTICES)

SAP Financial Consolidation for S/4HANA Cloud content (2K6) is using live connections. Before importing the content, please read the documentation carefully and set up the required connections.

Find all details and documentation about this scope item in SAP Best Practices Explorer: SAP S/4HANA Cloud Consolidation content.

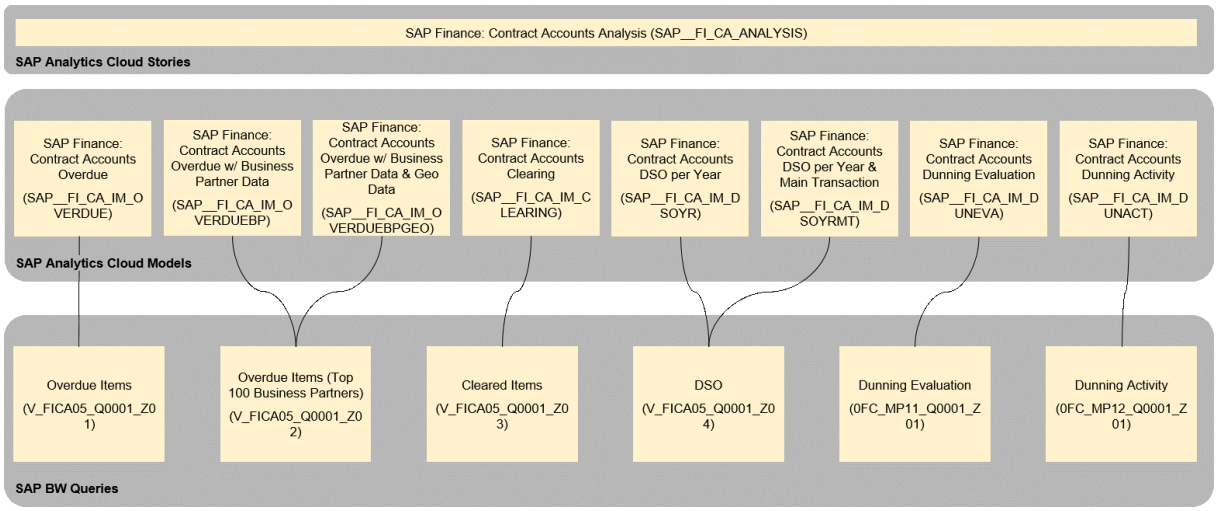
2.11 Finance Contract Accounts (FI-CA)

2.11.1 Architecture and Abstract

The contract accounts payable and receivable (FI-CA) sub ledger is an extended version of the Accounts Payable and Accounts Receivable components with additional functions for certain industries such as public utilities, insurance, and telecommunications (increased volume of customers).

Architecture

The Finance Contract Accounts content described herein is built on the SAP BW BI Content Add-On. It provides information on overdue and cleared customer bills, sub ledger Days Sales Outstanding as well as Dunning evaluation and activity.



Usage in Industry-specific Boardrooms

To use the Finance Contract Accounts boardroom as is, industries can make a copy of the story SAP__FI_CA_ANALYSIS to their own namespace.

Alternatively, industries can create their own stories, pointing to the FI-CA SAP Analytics Cloud models described as above. You will find below a list of industry stories pointing to one or more of these models:

Industry	Story
SAP Utilities	SAP__UTL_RA_ANALYSIS
SAP Utilities	SAP__UTL_CE_ANALYSIS

2.11.2 Stories

There is a single story for Finance Contract Analysis as described below:

2.11.2.1 Contract Accounts Analysis (SAP__FI_CA_ANALYSIS)

Name: SAP__FI_CA_ANALYSIS	
Description: SAP Finance: Contract Accounts Analysis	
Page: Detail	
Charts	
Title	**Models Used**

Name: SAP__FI_CA_ANALYSIS	
DSO Trend	SAP_FI_CA_IM_DSOYR
Sub ledger Days Sales Outstanding by Year	
DSO by Main Transaction	SAP_FI_CA_IM_DSOYRMT
Sub ledger Days Sales Outstanding by Main Transaction for Current year	
Current Overdue Amounts	SAP_FI_CA_IM_OVERDUE
Overdue amount by Time bucket (<1 day, 1 – 30 days, 31 – 60 days, 61 – 90 days, > 90 days) at Current date	
Overdue Amount by Main Transaction	SAP_FI_CA_IM_OVERDUE
Total overdue amount by Main transaction at Current date	
Top 100 Customers Overdue	SAP_FI_CA_IM_OVERDUEBP
Top 100 customers overdue amount by Division (Electricity or Gas) at Current date	
Clearing Analysis Last 12 Months	SAP_FI_CA_IM_CLEARING
Total clearing amount and Total number of cleared items by Clearing Reason Last 12 months	
# of Dunning Activities Last 12 Months	SAP_FI_CA_IM_DUNACT
Number of activities by Dunning procedure and Dunning Level Last 12 Months	
All Divisions	SAP_FI_CA_IM_DUNEVA
Number of dunning notices, Dunning balance (USD), and Average dunning success (%) for All divisions	
Electricity Division	SAP_FI_CA_IM_DUNEVA
Number of dunning notices, Dunning balance (USD), and Average dunning success (%) for Electricity division	
Gas Division	SAP_FI_CA_IM_DUNEVA
Number of dunning notices, Dunning balance (USD), and Average dunning success (%) for Gas division	
Overdue Amount Last 2 Quarters	SAP_FI_CA_IM_OVERDUE
Overdue amount by Time bucket (<1 day, 1 – 30 days, 31 – 60 days, 61 – 90 days, > 90 days) by Month for Last 2 quarters	
Dunning Balance Last 2 Quarters	SAP_FI_CA_IM_OVERDUE
Dunning balance by Dunning level by Month for Last 2 quarters	
Page: Context	
Charts	
Title	**Models Used**
Top 100 Customers Overdue	SAP__FI_CA_IM_OVERDUEBPGEO
Combination of Geomap and Grid visualizations allowing interactive analysis of Top 100 customers overdue by Geo location.	

2.11.3 Models

2.11.3.1 Contract Accounts Overdue (SAP__FI_CA_IM_OVERDUE)

Model Name: SAP__FI_CA_IM_OVERDUE	Connection
• Model Description: SAP Finance: Contract Accounts Overdue • Planning Enabled: No	• Connection type: Data import from SAP BW • Connection Query: Custom Query V_FICA05_Q0001_Z01 (see description in next step) • Connection Variables: Key Date for Comparison (Manual Entry to set Key Date for Net Due Date) (0P_CSDT2) For example: 20.10.2017 • Key Date for Clearing Date (SAP Exit to set Key Date for Clearing Date) (0P_AUGDT)

Account		
ID	**Description**	**Mapping/Formula**
<_1_day_overdue_amount	< 1 day overdue	< 1 day overdue amount
1_-_30_days_overdue_amount	1 - 30 days overdue	1 - 30 days overdue amount
31_-_60_days_overdue_amount	31 - 60 days overdue	31 - 60 days overdue amount
61_-_90_days_overdue_amount	61 - 90 days overdue	61 - 90 days overdue amount
>_90_days_overdue_amount	> 90 days overdue	> 90 days overdue amount
Total_open_amount	Total open amount	Total open amount
Total_clearing_amount	Total clearing amount	Total clearing amount
Total_overdue_amount	Total overdue amount	[<_1_day_overdue_amount] +[1_-_30_days_overdue_amount] +[31_-_60_days_overdue_amount] +[61_-_90_days_overdue_amount] +[>_90_days_overdue_amount]

Dimensions

Name	Descr.	Mapping Description	Technical Name
Time*	Time	Document Date	0DOC_DATE
SAP_ALL_COMPANYCODE	Company Code	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	Business Area	0BUS_AREA
SAP_FI_CA_MAINTRANSACTION	Main Transaction	Main Transaction	0CAMNTRANS

> **i** Note
>
> * Private dimension and other dimensions are public.

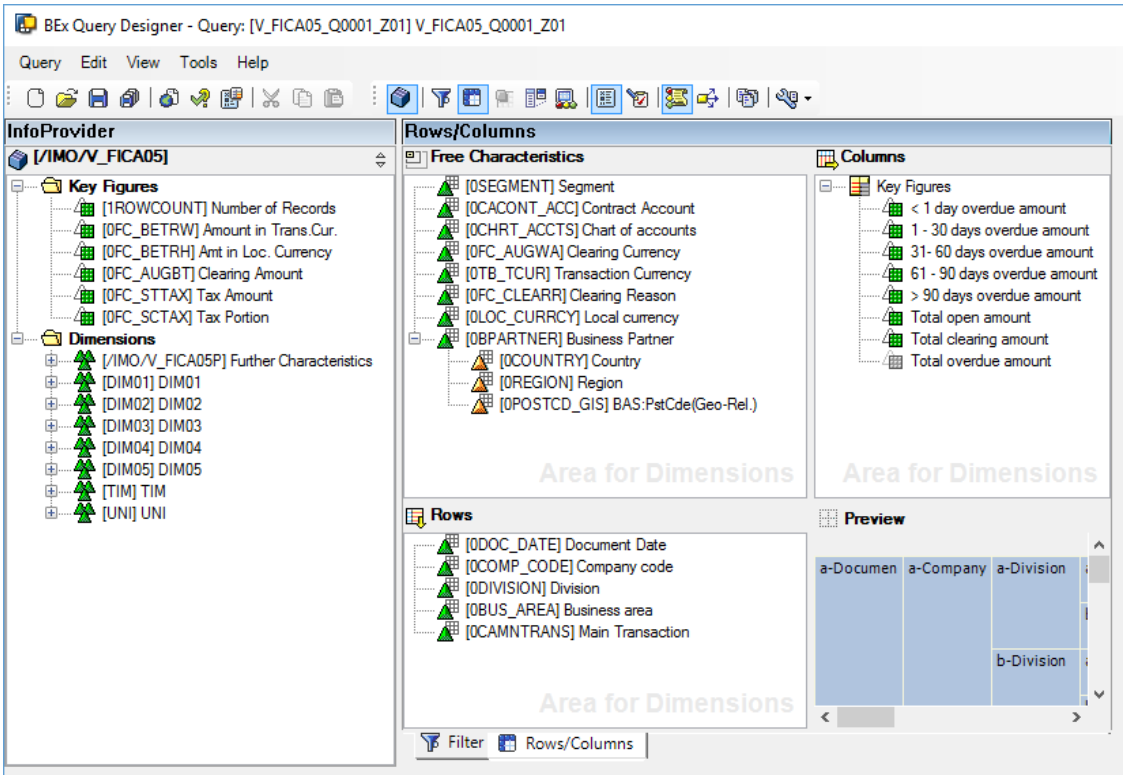
2.11.3.2 How to create Custom Query V_FICA05_Q0001_Z01

Procedure

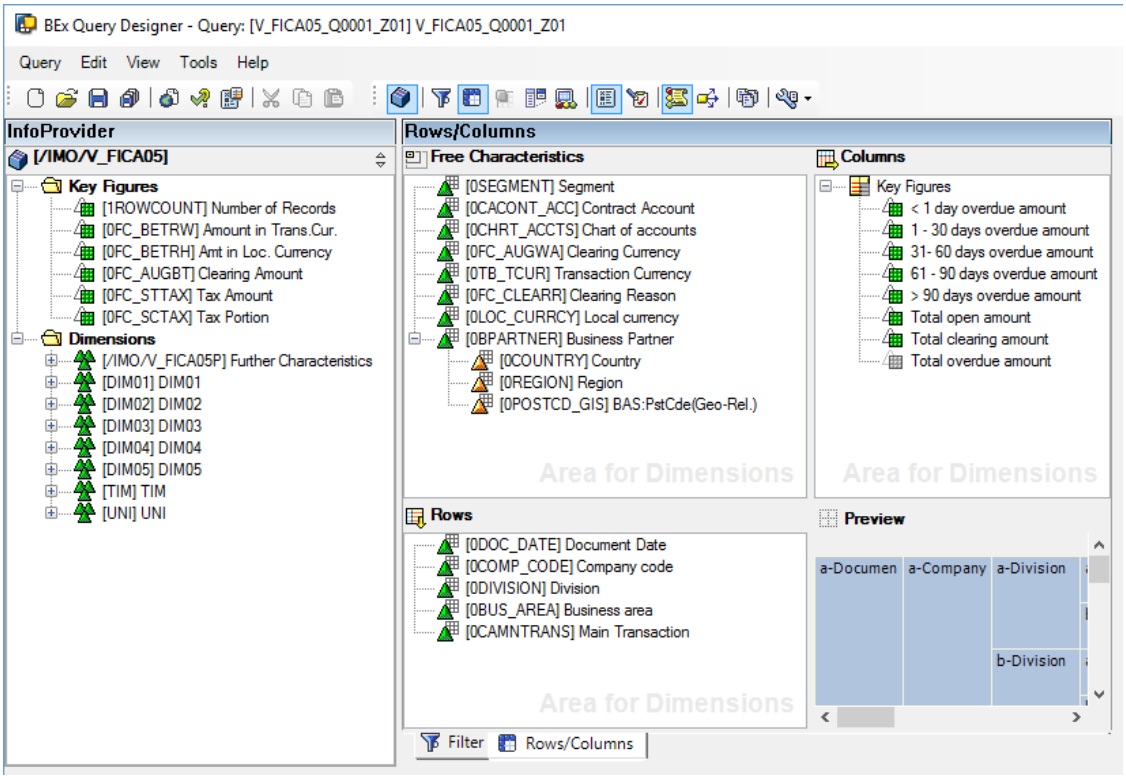
1. Open query /IMO/V_FICA05_Q0001 with SAP BEx Query Designer.
2. Save it as V_FICA05_Q0001_Z01.
3. Navigate to the Rows/Column Tab.
4. Free Characteristics:

   Drag/Drop dimensions from/to InfoProvider /IMO/V_FICA05 for a result as displayed in the screenshot below.
5. Rows:

   Drag/Drop dimensions from/to InfoProvider /IMO/V_FICA05 for a result as displayed in the screenshot below.
6. Columns:
   - Rename structure Grid to Key Figures for a result as displayed in the screenshot below.
   - Delete structure Open items for a result as displayed in the screenshot below.
   - Append overdue amount to the description of key figures “< 1”, “1 – 30”, “31 – 60”, “61 – 90” and “> 90” for a result as displayed in screenshot below.
   - Append open amount to the description of key figure Total for a result as displayed in the screenshot below

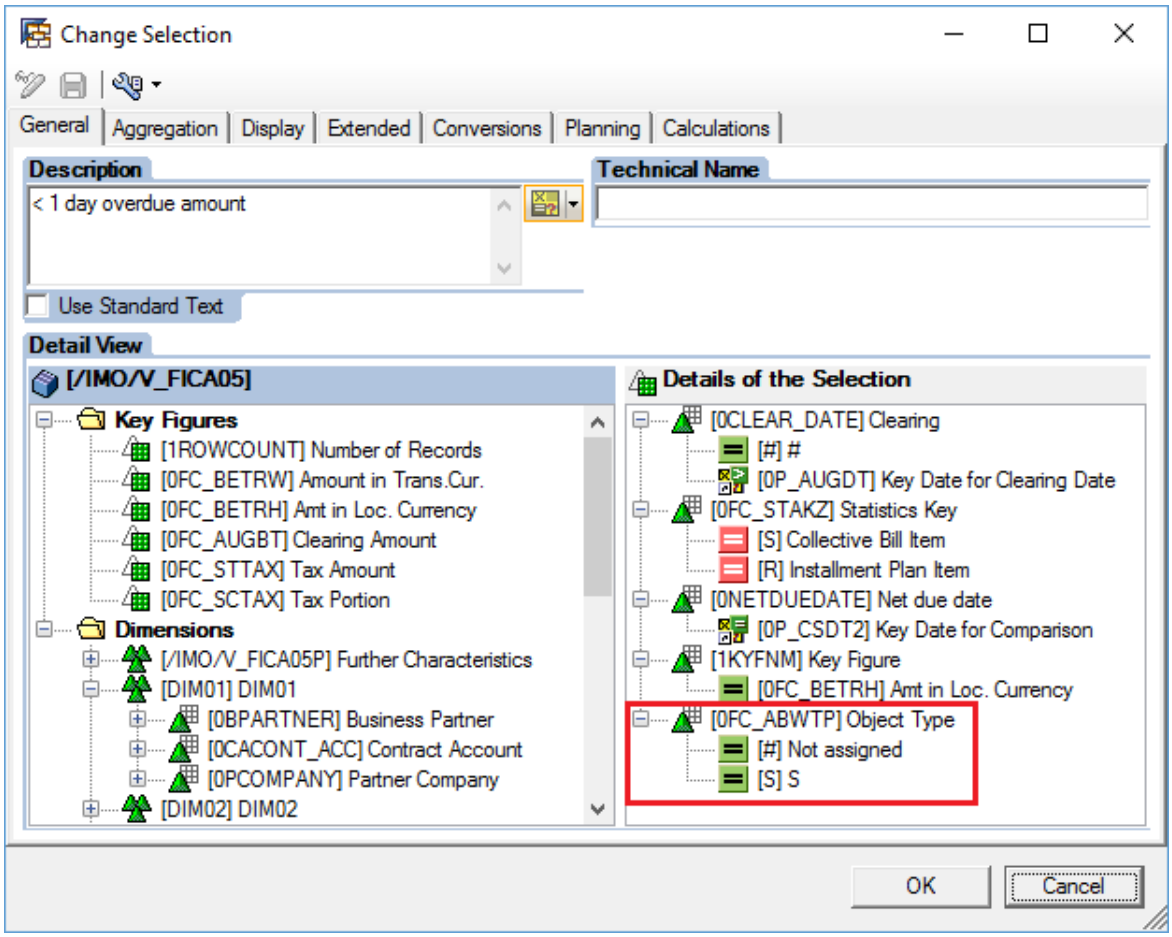


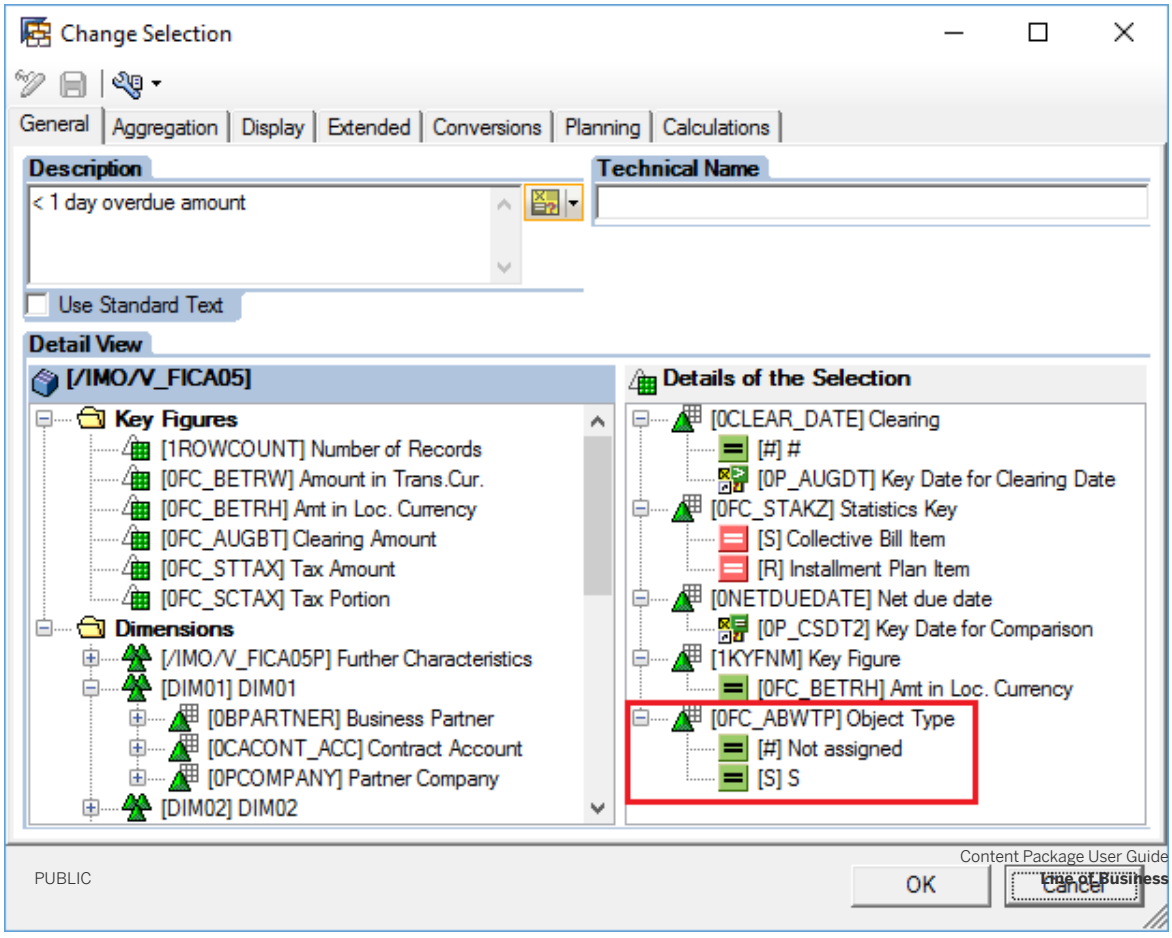
.



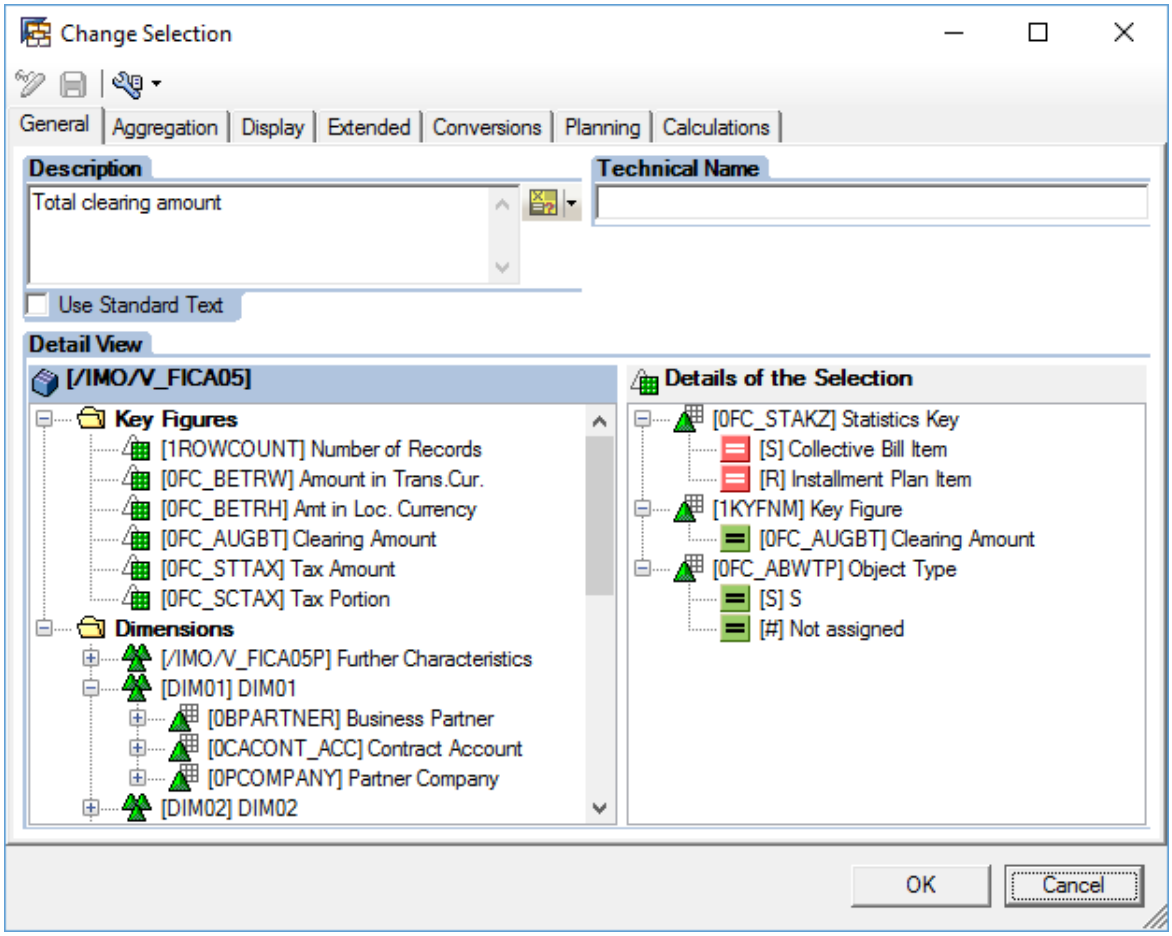
7. Edit key figure selections < 1 day overdue amount, 1 – 30 days overdue amount, 31 – 60 days overdue amount, 61 – 90 days overdue amount, > 90 days overdue amount, and Total open amount by adding dimension [0FC_ABWTP] Object Type with values = [#] Not Assigned and = [S] S in the Details of the

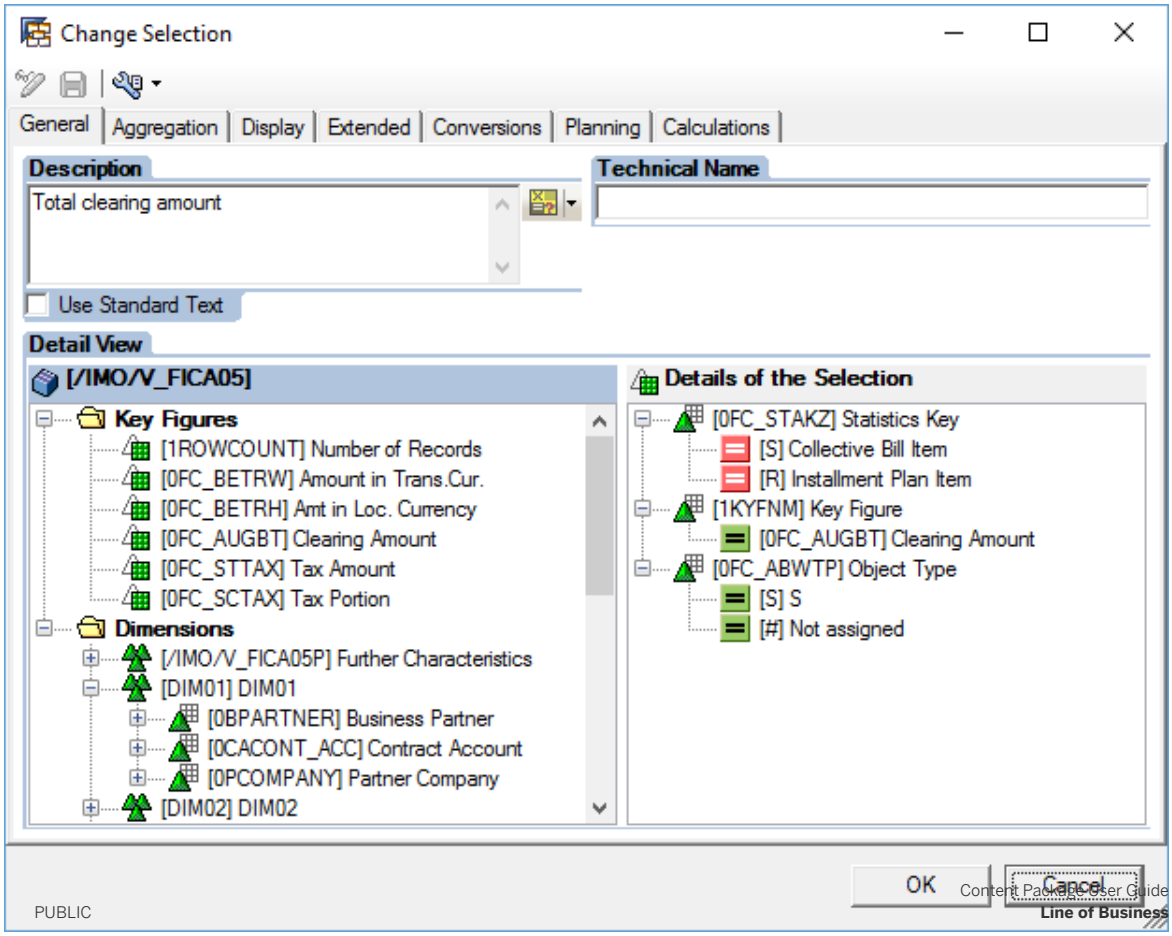
Selection. The result for key figure < 1 day overdue amount is displayed in the screenshot below.



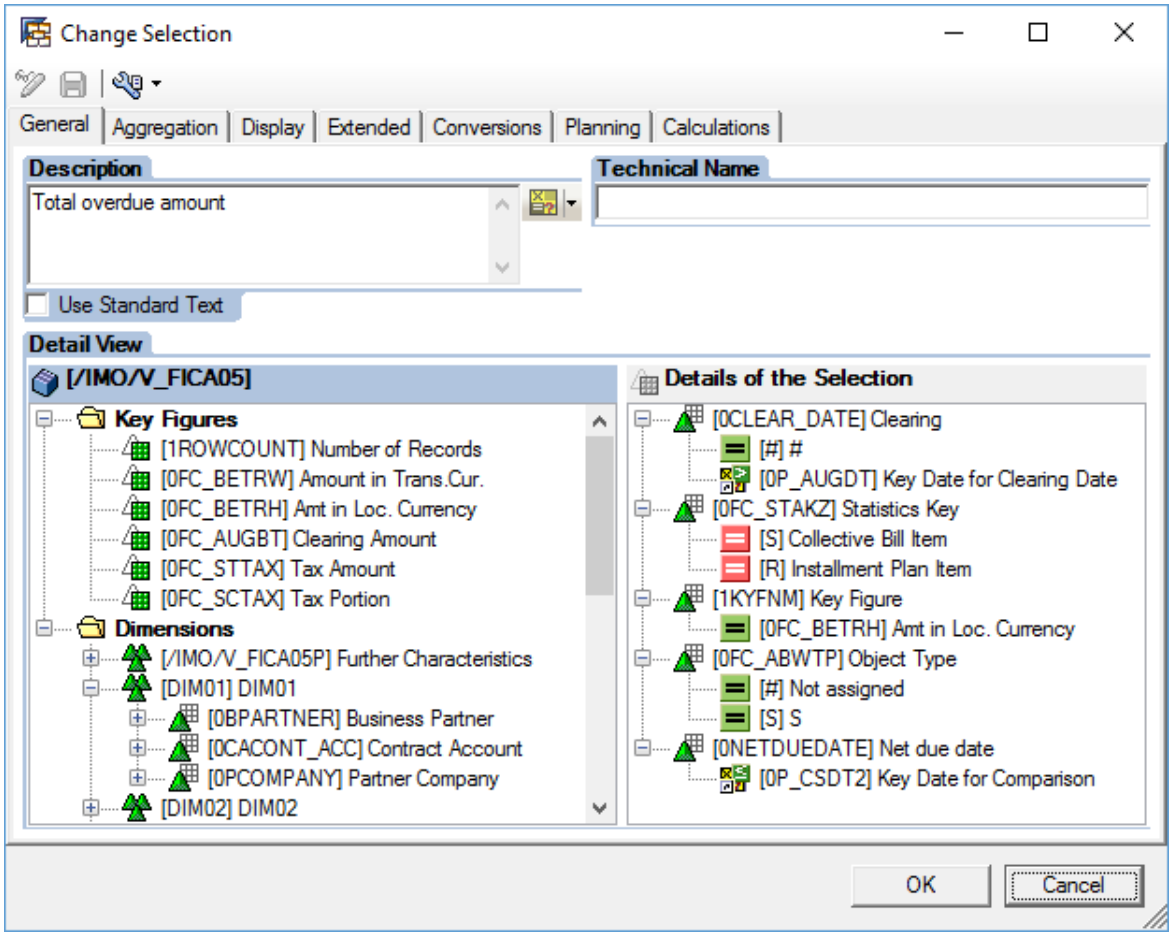


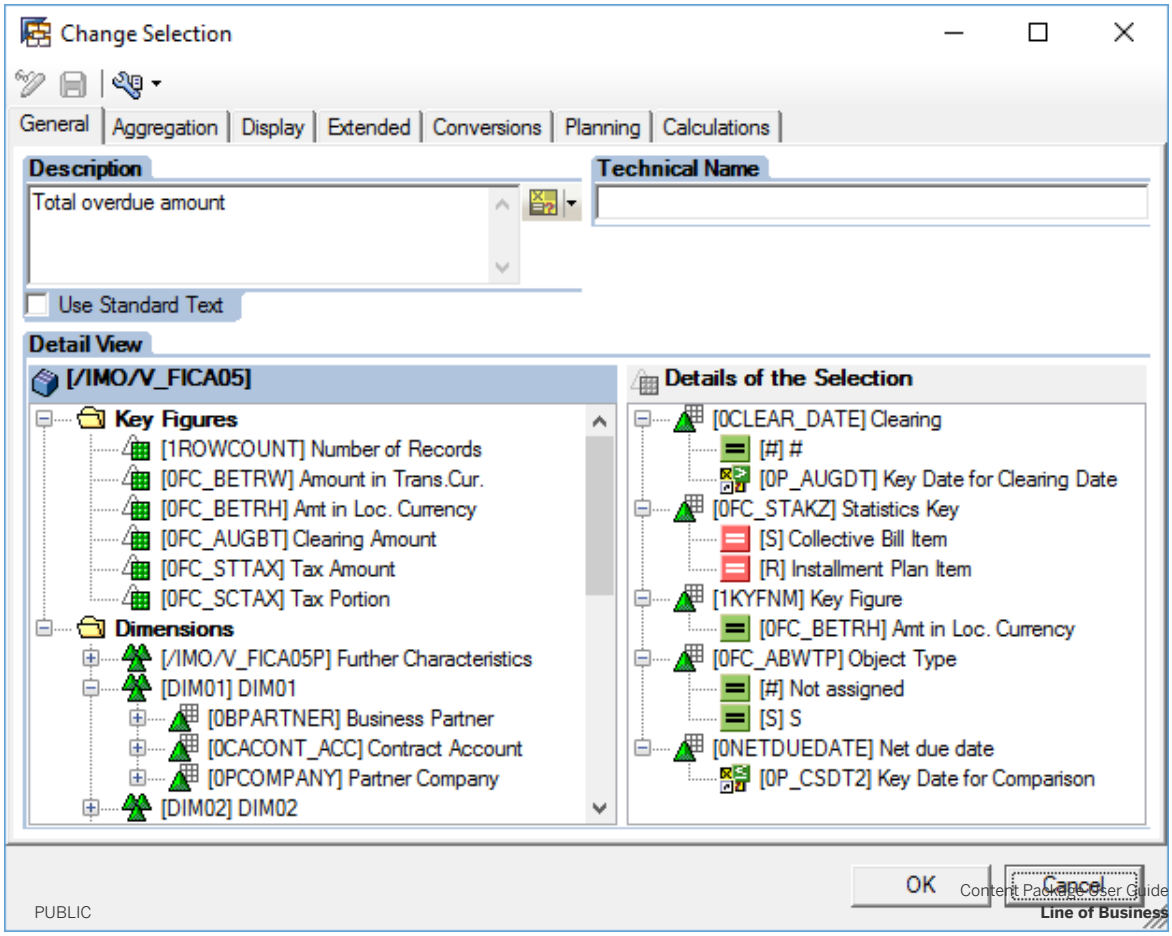
8. Create key figure selection, Total clearing amount, following the definitions displayed in the screenshot below.


Change Selection
General
Aggregation
Display
Extended
Conversions
Planning
Calculations
Description
Total clearing amount
Technical Name
Use Standard Text
Detail View
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[0BPARTNER] Business Partner
[0CACONT_ACC] Contract Account
[0PCOMPANY] Partner Company
[DIM02] DIM02
Details of the Selection
[0FC_STAKZ] Statistics Key
[S] Collective Bill Item
[R] Installment Plan Item
[1KYFNM] Key Figure
[0FC_AUGBT] Clearing Amount
[0FC_ABWTP] Object Type
[S] S
[#] Not assigned
OK
Cancel

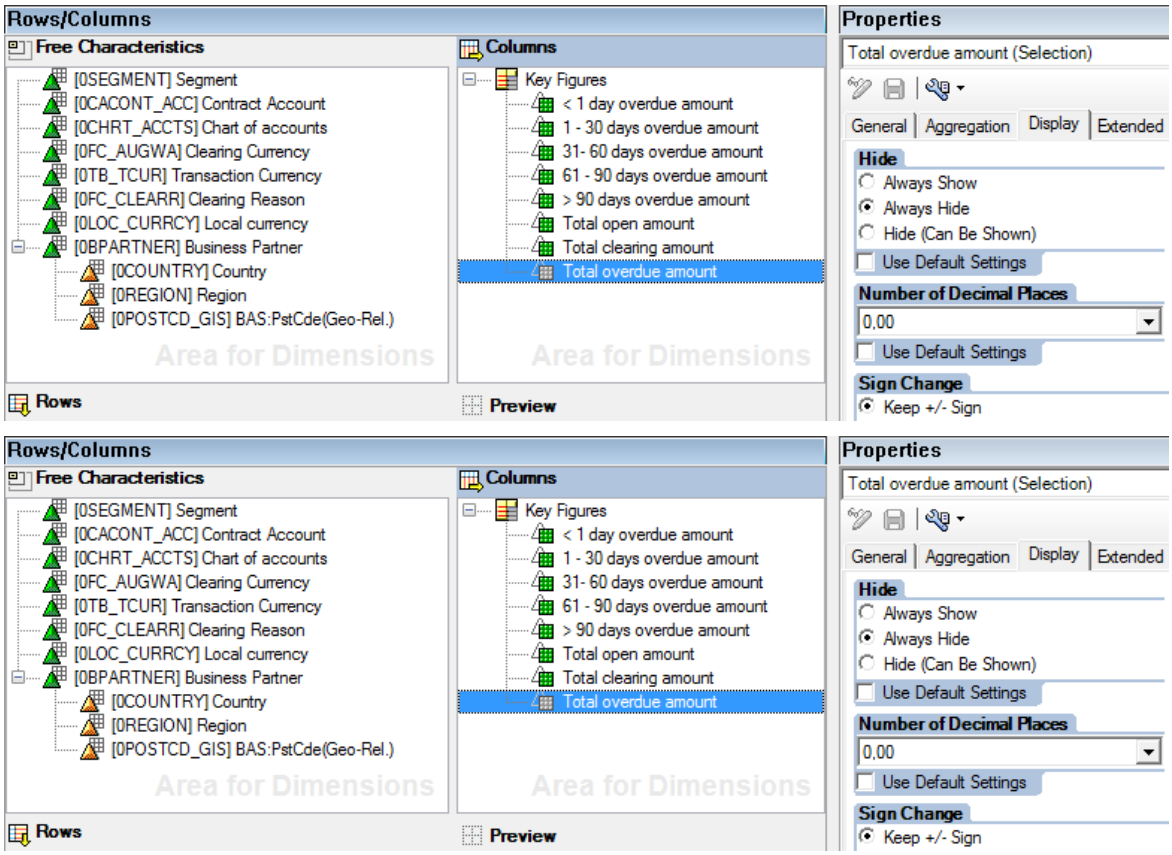

Change Selection
General
Aggregation
Display
Extended
Conversions
Planning
Calculations
Description
Total clearing amount
Technical Name
Use Standard Text
Detail View
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[0BPARTNER] Business Partner
[0CACONT_ACC] Contract Account
[0PCOMPANY] Partner Company
[DIM02] DIM02
Details of the Selection
[0FC_STAKZ] Statistics Key
[S] Collective Bill Item
[R] Installment Plan Item
[1KYFNM] Key Figure
[0FC_AUGBT] Clearing Amount
[0FC_ABWTP] Object Type
[S] S
[#] Not assigned
OK
Cancel

9. Create key figure selection Total overdue amount, following the definitions displayed in the screenshot below.


Change Selection
General
Aggregation
Display
Extended
Conversions
Planning
Calculations
Description
Total overdue amount
Technical Name
Use Standard Text
Detail View
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[0BPARTNER] Business Partner
[0CACONT_ACC] Contract Account
[0PCOMPANY] Partner Company
[DIM02] DIM02
Details of the Selection
[0CLEAR_DATE] Clearing
[#] #
[0P_AUGDT] Key Date for Clearing Date
[0FC_STAKZ] Statistics Key
[S] Collective Bill Item
[R] Installment Plan Item
[1KYFNM] Key Figure
[0FC_BETRH] Amt in Loc. Currency
[0FC_ABWTP] Object Type
[#] Not assigned
[S] S
[0NETDUEDATE] Net due date
[0P_CSDT2] Key Date for Comparison
OK
Cancel


Change Selection
General
Aggregation
Display
Extended
Conversions
Planning
Calculations
Description
Total overdue amount
Technical Name
Use Standard Text
Detail View
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[0BPARTNER] Business Partner
[0CACONT_ACC] Contract Account
[0PCOMPANY] Partner Company
[DIM02] DIM02
Details of the Selection
[0CLEAR_DATE] Clearing
[#] #
[0P_AUGDT] Key Date for Clearing Date
[0FC_STAKZ] Statistics Key
[S] Collective Bill Item
[R] Installment Plan Item
[1KYFNM] Key Figure
[0FC_BETRH] Amt in Loc. Currency
[0FC_ABWTP] Object Type
[#] Not assigned
[S] S
[0NETDUEDATE] Net due date
[0P_CSDT2] Key Date for Comparison
OK
Cancel

10. Set this key figure to Always Hide as displayed in the screenshot below.



11. Save the query.

2.11.3.3 Contract Accounts Overdue w/ Business Partner Data (SAP__FI_CA_IM_OVERDUEBP)

Model Name: SAP__FI_CA_IM_OVERDUEBP	Connection
• Model Description: SAP Finance: Contract Accounts Overdue w/ Business Partner Data • Planning Enabled: No	• Connection type: Data import from SAP BW • Connection Query: Custom Query V_FICA05_Q0001_Z02 (see description in next step) • Connection Variables: Key Date for Comparison (Manual Entry to set Key Date for Net Due Date) (0P_CSDT2) For example: 20.10.2017 • Key Date for Clearing Date (SAP Exit to set Key Date for Clearing Date) (0P_AUGDT) Set to 0P_CSDT2 via SAP Exit (Default is System Date)

DSO/DPO Account		
ID	**Description**	**Mapping/Formula**
<_1_day_overdue_amount	< 1 day overdue	< 1 day overdue amount

Model Name: SAP__FI_CA_IM_OVERDUEBP		Connection
1_-_30_days_overdue_amount	1 - 30 days overdue	1 - 30 days overdue amount
31_-_60_days_overdue_amount	31 - 60 days overdue	31 - 60 days overdue amount
61_-_90_days_overdue_amount	61 - 90 days overdue	61 - 90 days overdue amount
>_90_days_overdue_amount	> 90 days overdue	> 90 days overdue amount
Total_open_amount	Total open amount	Total open amount
Total_clearing_amount	Total clearing amount	Total clearing amount
Total_overdue_amount	Total overdue amount	[<_1_day_overdue_amount] +[1_-_30_days_overdue_amount] +[31_-_60_days_overdue_amount] +[61_-_90_days_overdue_amount] +[>_90_days_overdue_amount]

Dimensions

Name	Description	Mapping Description	Technical Name
Time*	Time	Document Date	0DOC_DATE
SAP_ALL_COMPANYCODE	Company Code	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	Business Area	0BUS_AREA
SAP_FI_CA_MAINTRANSACTION	Main Transaction	Main Transaction	0CAMNTRANS
SAP_ALL_CUSTOMER	Customer	Customer	0BPARTNER
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Customer Country	0BPARTNER/0COUNTRY
SAP_ALL_CUSTOMERREGION	Customer Region	Customer Region	0BPARTNER/0REGION
SAP_ALL_CUSTOMERPCODE	Customer Postal Code	Customer Postal Code	0BPARTNER/0POSTCD_GIS

Additional Notes about the model

This model extends the SAP__FI_CA_OVERDUE model by exposing Customer, Customer Country, Customer Region and Customer Postal Code dimensions. For volumetric reasons, it is mapped to a Top 100 Business Partners extension of the SAP__FI_CA_OVERDUE model data source as you will see described in detail below.

> **i** Note
>
> * Private dimension and other dimensions are public.

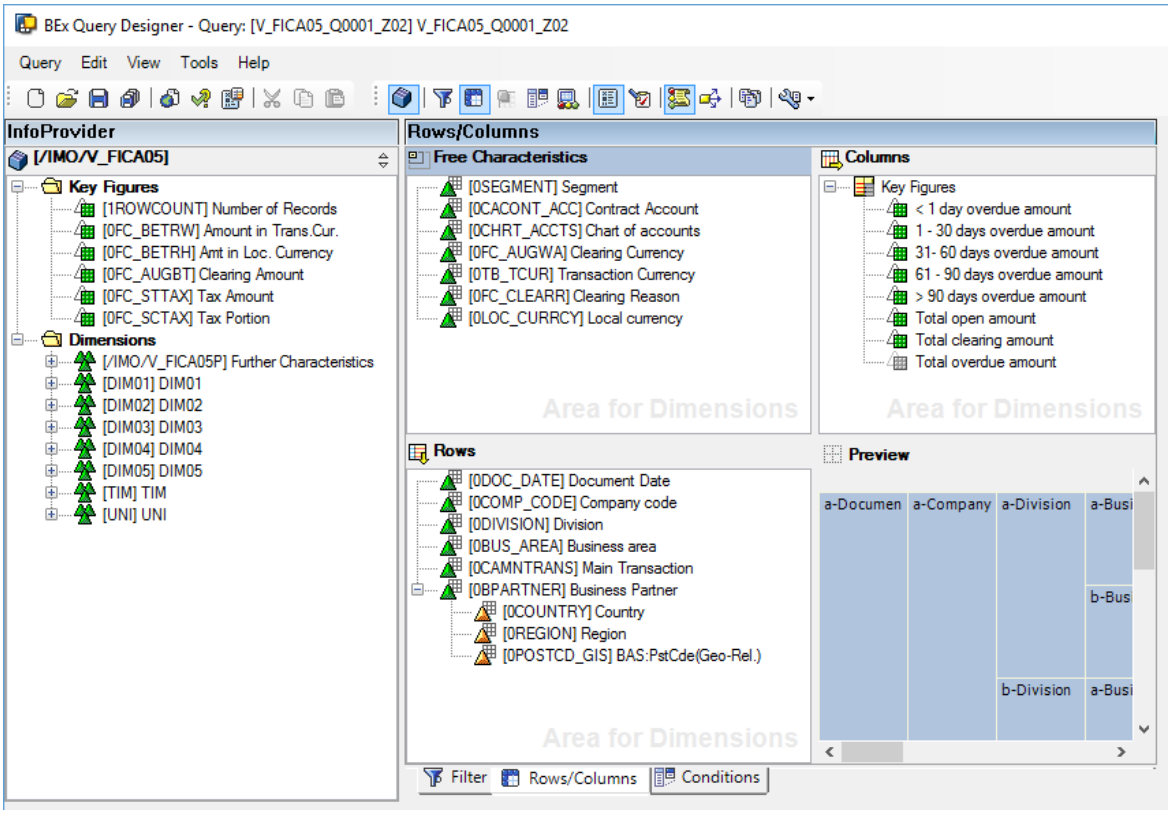
2.11.3.4 How to create Custom Query V_FICA05_Q0001_Z02

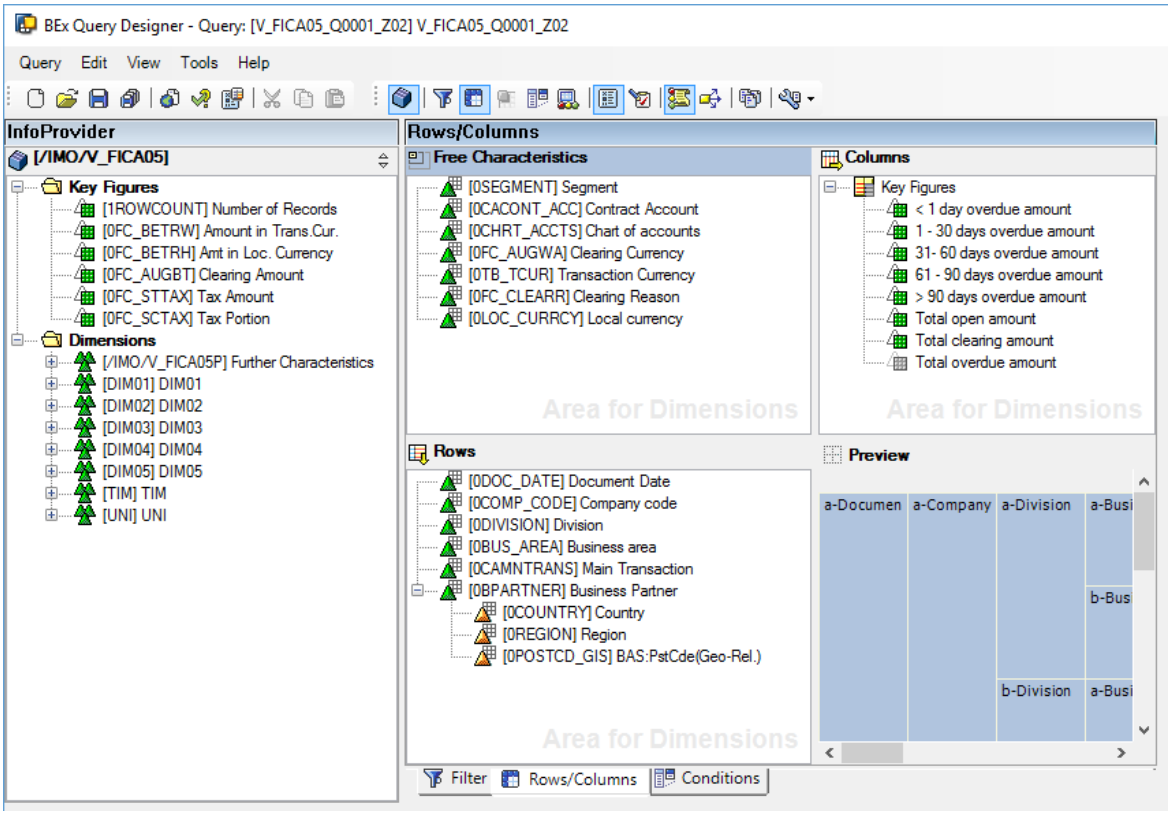
Procedure

1. Open query /IMO/V_FICA05_Q0001 with SAP BEx Query Designer.
2. Save it as V_FICA05_Q0001_Z02.
3. Navigate to the Rows/Column Tab.
4. Free Characteristics:

   Drag/Drop dimensions from/to InfoProvider /IMO/V_FICA05 for a result as displayed in the screenshot below.
5. Rows:

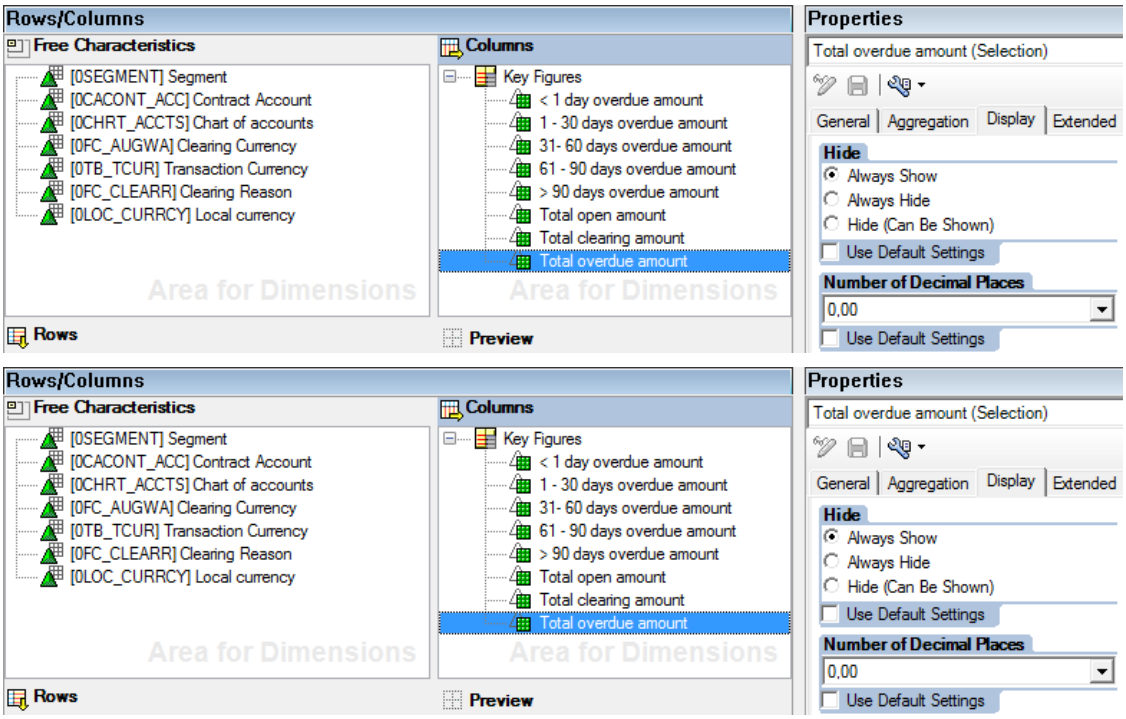
   Drag/Drop dimensions from/to InfoProvider /IMO/V_FICA05 for a result as displayed in the screenshot below.


BEx Query Designer - Query: [V_FICA05_Q0001_Z02] V_FICA05_Q0001_Z02
Query Edit View Tools Help
InfoProvider
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[DIM02] DIM02
[DIM03] DIM03
[DIM04] DIM04
[DIM05] DIM05
[TIM] TIM
[UNI] UNI
Rows/Columns
Free Characteristics
[0SEGMENT] Segment
[0CACONT_ACC] Contract Account
[0CHRT_ACCTS] Chart of accounts
[0FC_AUGWA] Clearing Currency
[0TB_TCUR] Transaction Currency
[0FC_CLEARR] Clearing Reason
[0LOC_CURRCY] Local currency
Area for Dimensions
Columns
Key Figures
< 1 day overdue amount
1 - 30 days overdue amount
31- 60 days overdue amount
61 - 90 days overdue amount
> 90 days overdue amount
Total open amount
Total clearing amount
Total overdue amount
Area for Dimensions
Rows
[0DOC_DATE] Document Date
[0COMP_CODE] Company code
[0DIVISION] Division
[0BUS_AREA] Business area
[0CAMNTRANS] Main Transaction
[0BPARTNER] Business Partner
[0COUNTRY] Country
[0REGION] Region
[0POSTCD_GIS] BAS:PstCde(Geo-Rel.)
Area for Dimensions
Preview
a-Documen
a-Company
a-Division
a-Busi
b-Bus
b-Division
a-Busi
Filter
Rows/Columns
Conditions


BEx Query Designer - Query: [V_FICA05_Q0001_Z02] V_FICA05_Q0001_Z02
Query Edit View Tools Help
InfoProvider
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[DIM02] DIM02
[DIM03] DIM03
[DIM04] DIM04
[DIM05] DIM05
[TIM] TIM
[UNI] UNI
Rows/Columns
Free Characteristics
[0SEGMENT] Segment
[0CACONT_ACC] Contract Account
[0CHRT_ACCTS] Chart of accounts
[0FC_AUGWA] Clearing Currency
[0TB_TCUR] Transaction Currency
[0FC_CLEARR] Clearing Reason
[0LOC_CURRCY] Local currency
Area for Dimensions
Columns
Key Figures
< 1 day overdue amount
1 - 30 days overdue amount
31- 60 days overdue amount
61 - 90 days overdue amount
> 90 days overdue amount
Total open amount
Total clearing amount
Total overdue amount
Area for Dimensions
Rows
[0DOC_DATE] Document Date
[0COMP_CODE] Company code
[0DIVISION] Division
[0BUS_AREA] Business area
[0CAMNTRANS] Main Transaction
[0BPARTNER] Business Partner
[0COUNTRY] Country
[0REGION] Region
[0POSTCD_GIS] BAS:PstCde(Geo-Rel.)
Area for Dimensions
Preview
a-Documen
a-Company
a-Division
a-Busi
b-Bus
b-Division
a-Busi
Filter
Rows/Columns
Conditions

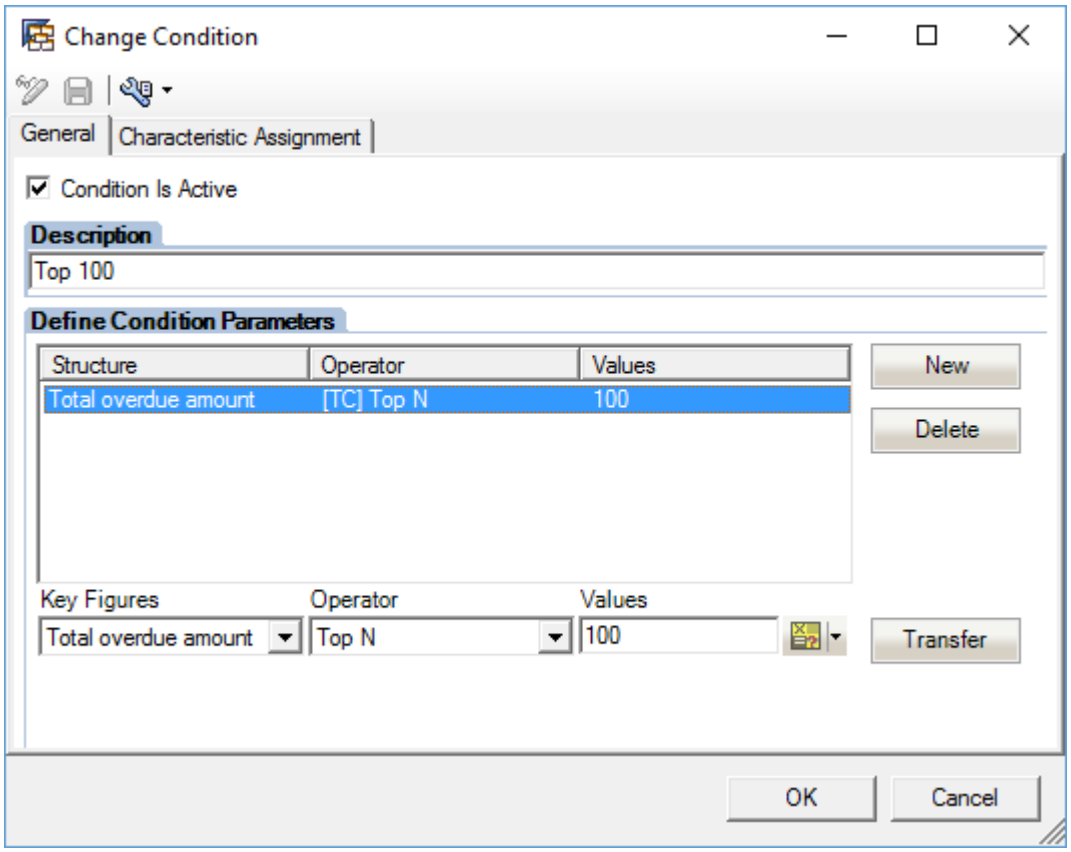
6. Columns:

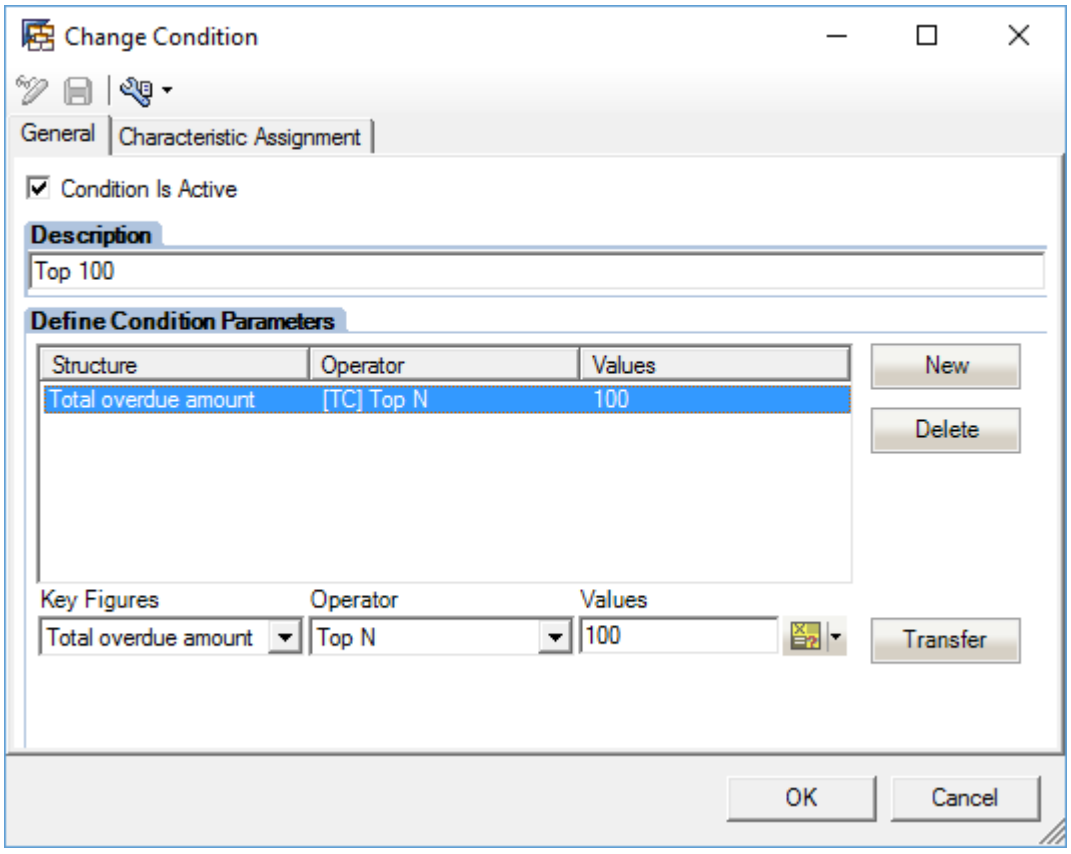
- Set key figure Total overdue amount to Always Show as displayed in the screenshot below. This is mandatory as the Top 100 condition set below uses this key figure. However, this key figure doesn't need to be mapped when acquiring from this BW Data Source as it is recomputed in SAP Analytics Cloud.



7. Select View/Conditions from the toolbar menu. This opens the Conditions tab.
8. Right-Click on the empty Conditions list to bring up the pop-up menu. Select New Condition.
9. Right-Click on the newly created condition to edit it.
10. Name this new condition Top 100.
11. Select the following condition parameters:
    - Key figures: Total overdue amount
    - Operator: Top N
    - Values: 100
12. Click *Transfer*.

The result is displayed in the screenshot below.





13. Click *OK*

    You now have a Top 100 condition set for the query V_FICA05_Q0001_Z02.

14. Savethe Query.

2.11.3.5 Contract Accounts Overdue w/ Business Partner and Geo Data (SAP__FI_CA_IM_OVERDUEBPGEO)

Model Name: SAP__FI_CA_IM_OVERDUEBP	Connection
• Model Description: SAP Finance: Contract Accounts Overdue w/ Business Partner Data • Planning Enabled: No	• Connection type: Data import from SAP BW • Connection Query: Custom Query V_FICA05_Q0001_Z02 (see description in next step) • Connection Variables: Key Date for Comparison (Manual Entry to set Key Date for Net Due Date) (0P_CSDT2) for example 20.10.2017 • Key Date for Clearing Date (SAP Exit to set Key Date for Clearing Date) (0P_AUGDT) • Set to 0P_CSDT2 via SAP Exit (Default is System Date)

DSO/DPO Account		
ID	**Description**	**Mapping/Formula**
<_1_day_overdue_amount	< 1 day overdue	< 1 day overdue amount
1_-_30_days_overdue_amount	1 - 30 days overdue	1 - 30 days overdue amount
31_-_60_days_overdue_amount	31 - 60 days overdue	31 - 60 days overdue amount
61_-_90_days_overdue_amount	61 - 90 days overdue	61 - 90 days overdue amount
>_90_days_overdue_amount	> 90 days overdue	> 90 days overdue amount
Total_open_amount	Total open amount	Total open amount
Total_clearing_amount	Total clearing amount	Total clearing amount
Total_overdue_amount	Total overdue amount	[<_1_day_overdue_amount] +[1_-_30_days_overdue_amount] +[31_-_60_days_overdue_amount] +[61_-_90_days_overdue_amount] +[>_90_days_overdue_amount]

Dimensions			
Name	**Description**	**Mapping Description**	**Technical Name**
Time*	Time	Document Date	0DOC_DATE

Model Name: SAP__FI_CA_IM_OVERDUEBP		Connection	
SAP_ALL_COMPANYCODE	Company Code	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	Business Area	0BUS_AREA
SAP_FI_CA_MAINTRANSAC-TION	Main Transaction	Main Transaction	0CAMNTRANS
SAP_ALL_CUSTOMER	Customer	Customer	0BPARTNER
SAP_ALL_CUSTOMERCOUN-TRY	Customer Country	Customer Country	0BPARTNER/0COUNTRY
SAP_ALL_CUSTOMERRE-GION	Customer Region	Customer Region	0BPARTNER/0REGION
SAP_ALL_CUSTOMER-PCODE	Customer Postal Code	Customer Postal Code	0BPARTNER/0POSTCD_GIS
Additional Notes about the model			
This model extends the SAP__FI_CA_OVERDUE model by exposing Customer, Customer Country, Customer Region and Customer Postal Code dimensions. For volumetric reasons, it is mapped to a Top 100 Business Partners extension of the SAP__FI_CA_OVERDUE model data source as you will see described in detail below.			

> **i** Note
>
> * Private dimension and other dimensions are public.

2.11.3.6 How to Geo Enrich the Model

Context

The model SAP__FI_CA_IM_OVERDUEBPGEO is delivered as an example with geocoded data pertinent to the delivered sample data set. You need to manually create your own SAP__FI_CA_IM_OVERDUEBPGEO model, as a derivative of model SAP__FI_CA_IM_OVERDUEBP, by injecting your own geo coding information. Perform the below steps:

Procedure

In Excel:

1. Create a table with headers CustomerPCodeGeo, Description, Latitude, Longitude, Time, and Measure.
2. Manually enter the values for each column.
   - Description: The City name corresponding to these postal codes.
   - Latitude: The latitude corresponding to these postal codes.
   - Longitude: The longitude corresponding to these postal codes.

- Time: The Start Date and the End Date for the analysis in model SAP__FI_CA_IM_OVERDUEBPGEO. You only need to enter these 2 distinct values across all rows.
- Measure: A value to set a measure for the model. For example, enter “1” for all rows.

The result looks like the screenshot below.

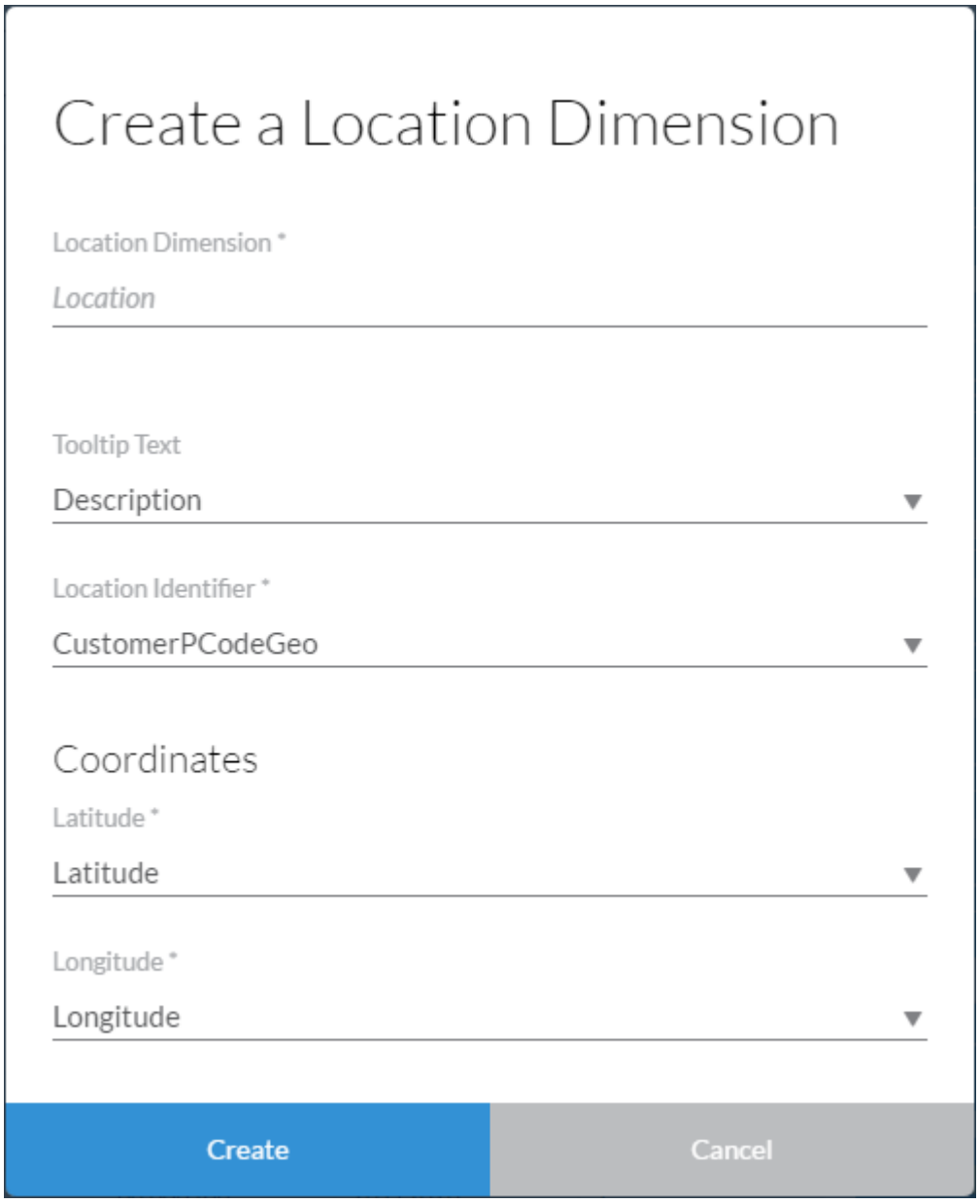
	A	B	C	D	E	F
1	CustomerPCodeGeo	Description	Latitude	Longitude	Time	Measure
2	48740	Harrisville	44.656464	-83.295031	20140103	1
3	49862	Munising	46.411369	-86.648114	20171020	1
4	49010	Allegan	42.529177	-85.855418	20171020	1
5	49707	Alpena	45.061219	-83.433422	20171020	1
6	49615	Bellaire	44.976201	-85.207302	20171020	1
7	48658	Standish	43.983156	-83.959719	20171020	1

	A	B	C	D	E	F
1	CustomerPCodeGeo	Description	Latitude	Longitude	Time	Measure
2	48740	Harrisville	44.656464	-83.295031	20140103	1
3	49862	Munising	46.411369	-86.648114	20171020	1
4	49010	Allegan	42.529177	-85.855418	20171020	1
5	49707	Alpena	45.061219	-83.433422	20171020	1
6	49615	Bellaire	44.976201	-85.207302	20171020	1
7	48658	Standish	43.983156	-83.959719	20171020	1

In SAP Analytics Cloud:

3. Create a new model.
4. Select Import a file from your computer.
5. Upload the newly created Excel table as a CSV file.
6. This brings up the Data Integration screen.
7. Set the metadata for the imported CustomerPCodeGeo, Description, Latitude and Longitude headers.
8. Set CustomerPCodeGeo as Dimension.
9. Add Description header as Description attribute.
10. Add Latitude header as Property Attribute.
11. Add Longitude header as Property attribute.
12. Select Geo by Coordinate.

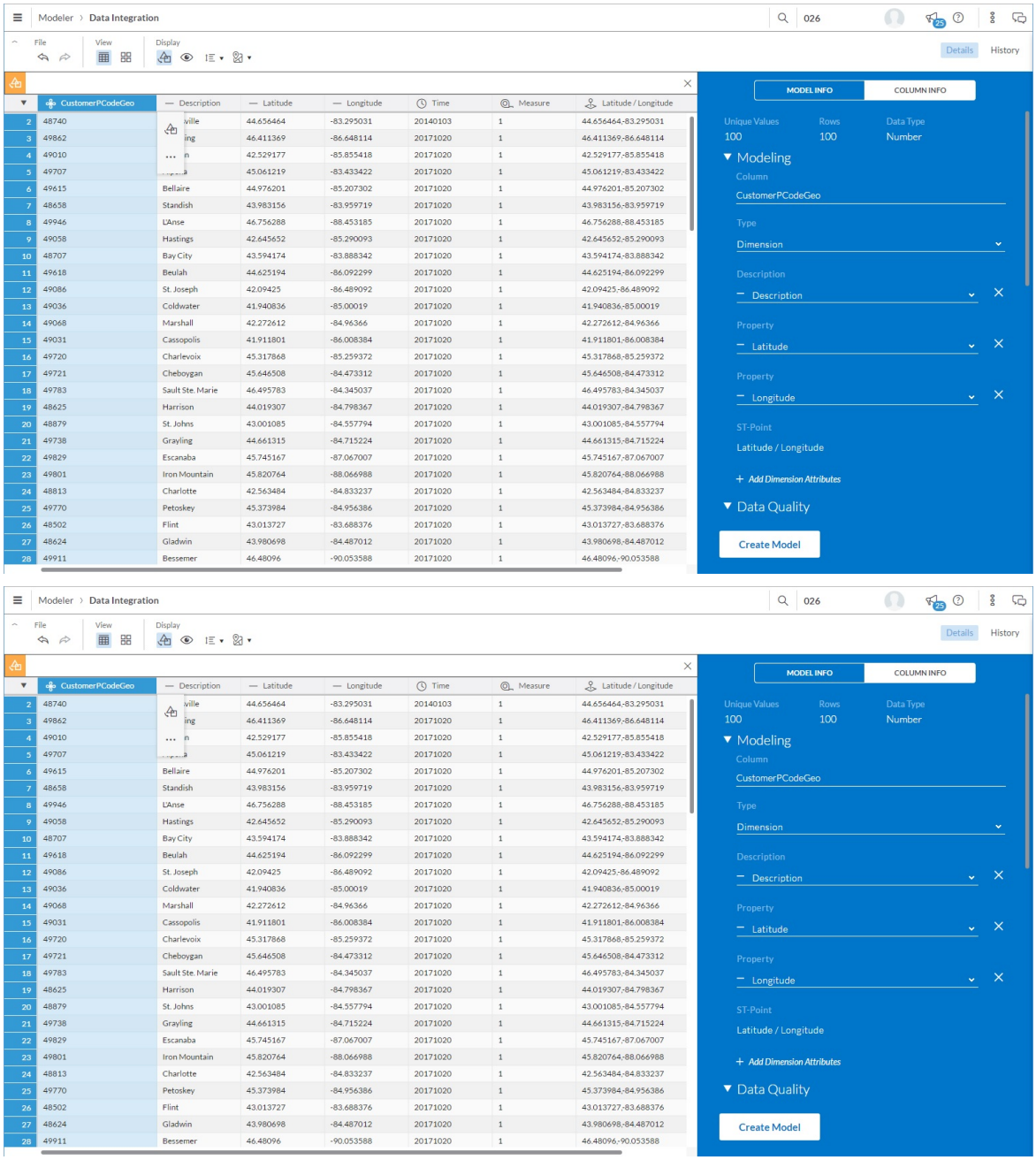
13. Fill out the Create a Location Dimension dialog box as displayed in the screenshot below.



Create a Location Dimension
Location Dimension *
Location
Tooltip Text
Description
Location Identifier *
CustomerPCodeGeo

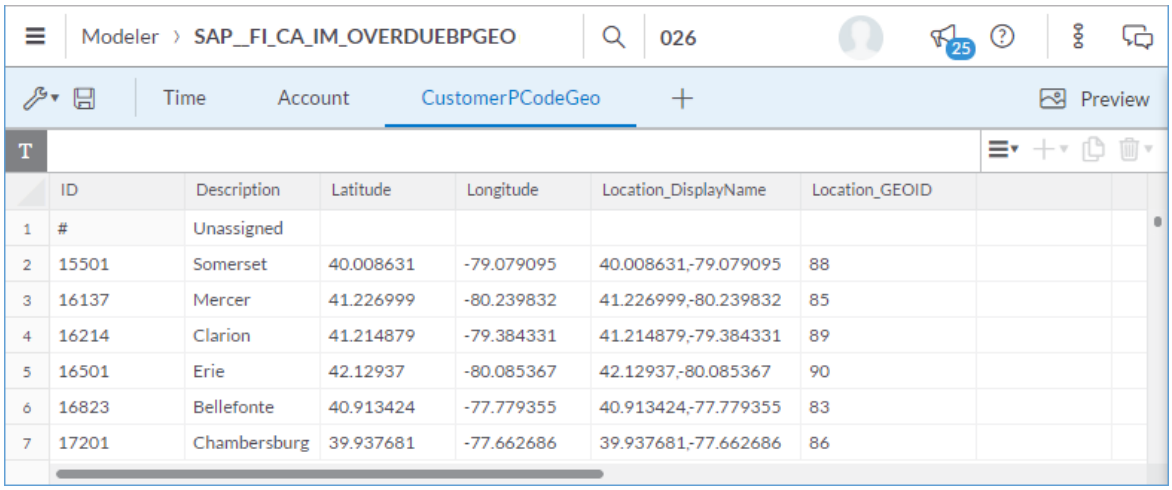
14. Click on Create.
15. Set the metadata for the other imported headers.
    - Time: Set as Time Dimension.
    - Measure: Set as Measure.

    The result is displayed in the screenshot below.



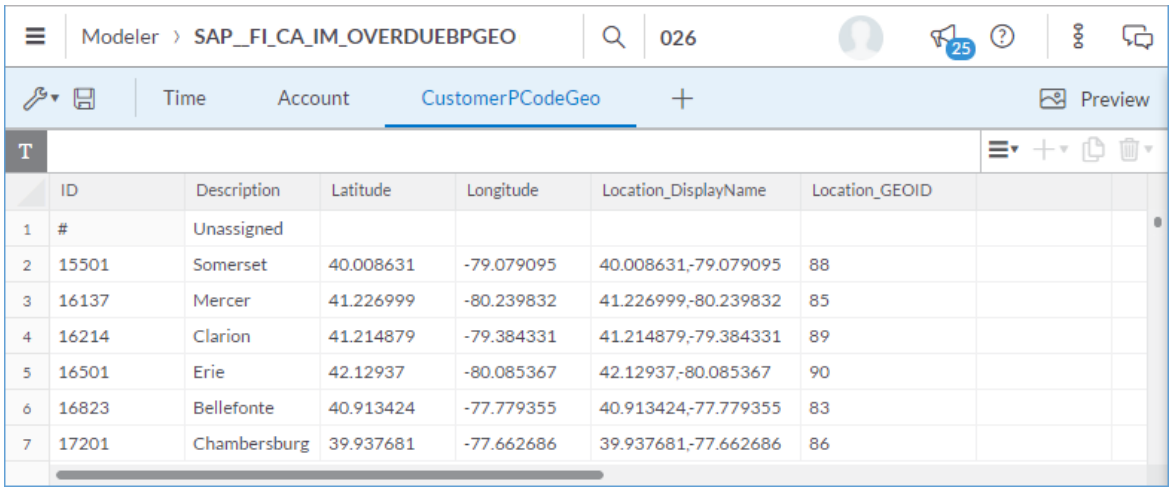
16. Click on MODEL INFO.
17. Name the model SAP__FI_CA_IM_OVERDUEBPGEO.
18. Set the Description to SAP Finance: Contract Accounts Overdue w/ Business Partner and Geo Data.
19. Click on the Create Model button.

A screenshot of the newly created initial SAP__FI_CA_IM_OVERDUEBPGEO model is displayed below



	ID	Description	Latitude	Longitude	Location_DisplayName	Location_GEOID
1	#	Unassigned				
2	15501	Somerset	40.008631	-79.079095	40.008631,-79.079095	88
3	16137	Mercer	41.226999	-80.239832	41.226999,-80.239832	85
4	16214	Clarion	41.214879	-79.384331	41.214879,-79.384331	89
5	16501	Erie	42.12937	-80.085367	42.12937,-80.085367	90
6	16823	Bellefonte	40.913424	-77.779355	40.913424,-77.779355	83
7	17201	Chambersburg	39.937681	-77.662686	39.937681,-77.662686	86

.



	ID	Description	Latitude	Longitude	Location_DisplayName	Location_GEOID
1	#	Unassigned				
2	15501	Somerset	40.008631	-79.079095	40.008631,-79.079095	88
3	16137	Mercer	41.226999	-80.239832	41.226999,-80.239832	85
4	16214	Clarion	41.214879	-79.384331	41.214879,-79.384331	89
5	16501	Erie	42.12937	-80.085367	42.12937,-80.085367	90
6	16823	Bellefonte	40.913424	-77.779355	40.913424,-77.779355	83
7	17201	Chambersburg	39.937681	-77.662686	39.937681,-77.662686	86

20. Clear this newly created model.
21. Delete Measure.

Your own model SAP__FI_CA_IM_OVERDUEBPGEO is now ready for mapping with its BW data source (see below).

2.11.3.7 Contract Accounts Clearing (SAP__FI_CA_IM_CLEARING)

Model Name: SAP__FI_CA_IM_CLEARING	Connection
• Model Description: SAP Finance: Contract Accounts Clearing • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query V_FICA05_Q0001_Z03 (see next step) • Connection Variables: Date Range Selection (Manual Entry to set a range for Clearing Date) (0P_DATER). For example you can input [18.01.2014 - 20.10.2017].

Account			
ID	**Description**	**Mapping/Formula**	
Total_clearing_amount	Total clearing amount	Total clearing amount	
Total_number_of_cleared_items	Total number of cleared items	Total number of cleared items	
Dimensions			
Name	**Description**	**Mapping**	**Technical Name**
Time*	Time	Clearing Date	0CLEAR_DATE
SAP_ALL_COMPANYCODE	Company Code	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	Business Area	0BUS_AREA
SAP_FI_CA_MAINTRANSACTION	Main Transaction	Main Transaction	0CAMNTRANS
SAP_FI_CA_CLEARINGREASON	Clearing Reason	Clearing Reason	0FC_CLEARR
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Country	0BPARTNER/0BCOUNTRY
SAP_ALL_CUSTOMERREGION	Customer Region	Region	0BPARTNER/0REGION

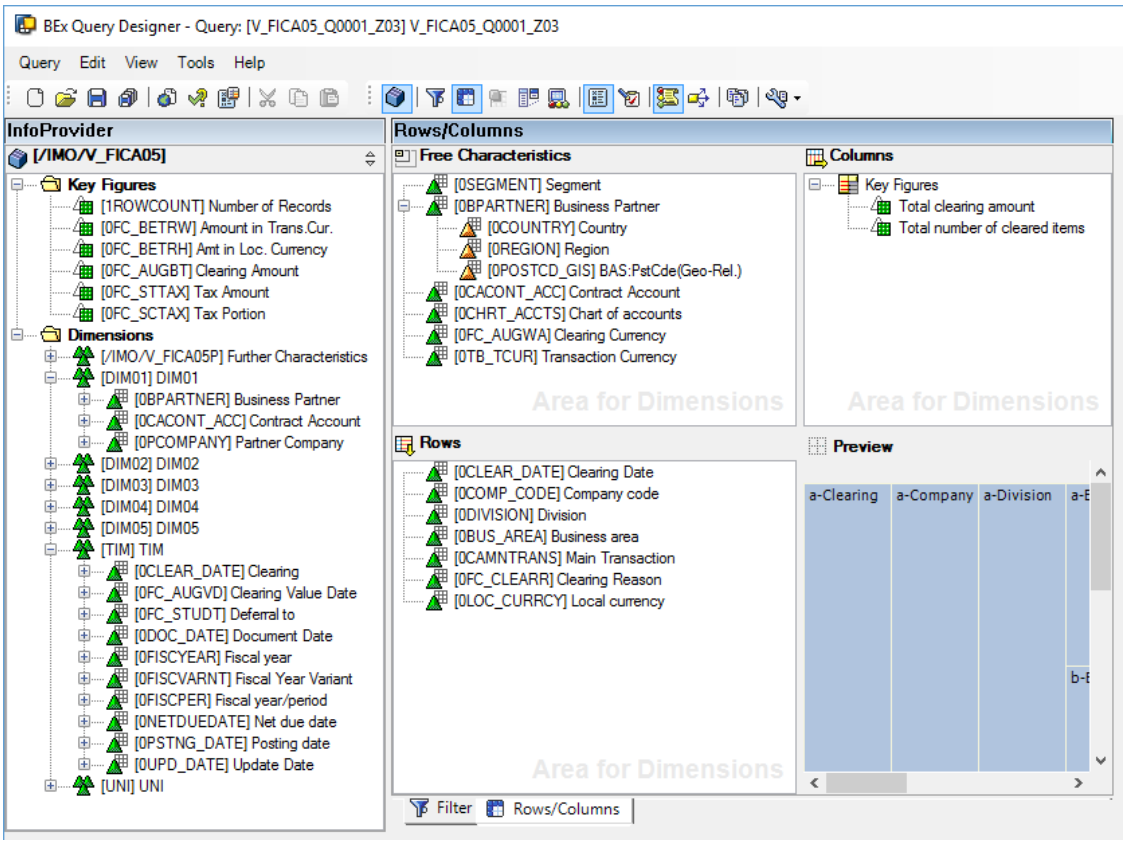
> **i Note**
>
> * Private dimensionand other dimensions are public.

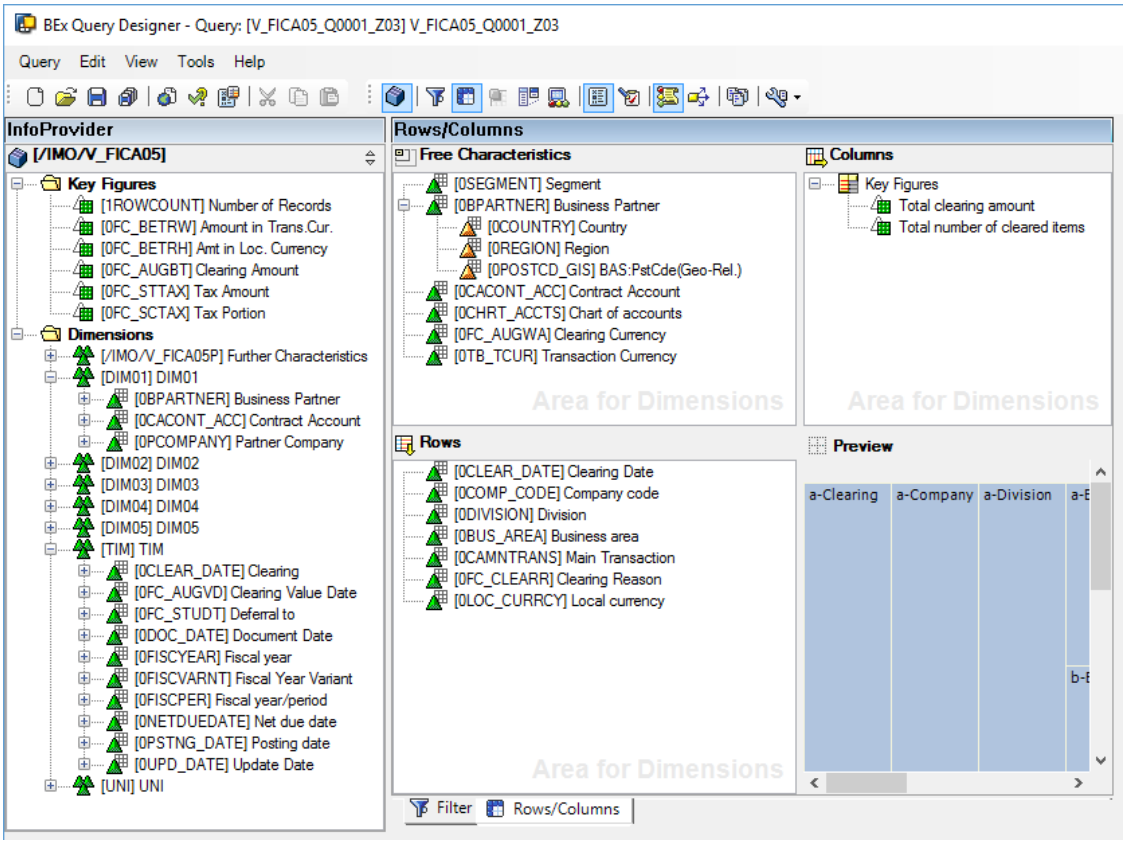
2.11.3.8 How to create Connection Query: Custom Query V_FICA05_Q0001_Z03

Procedure

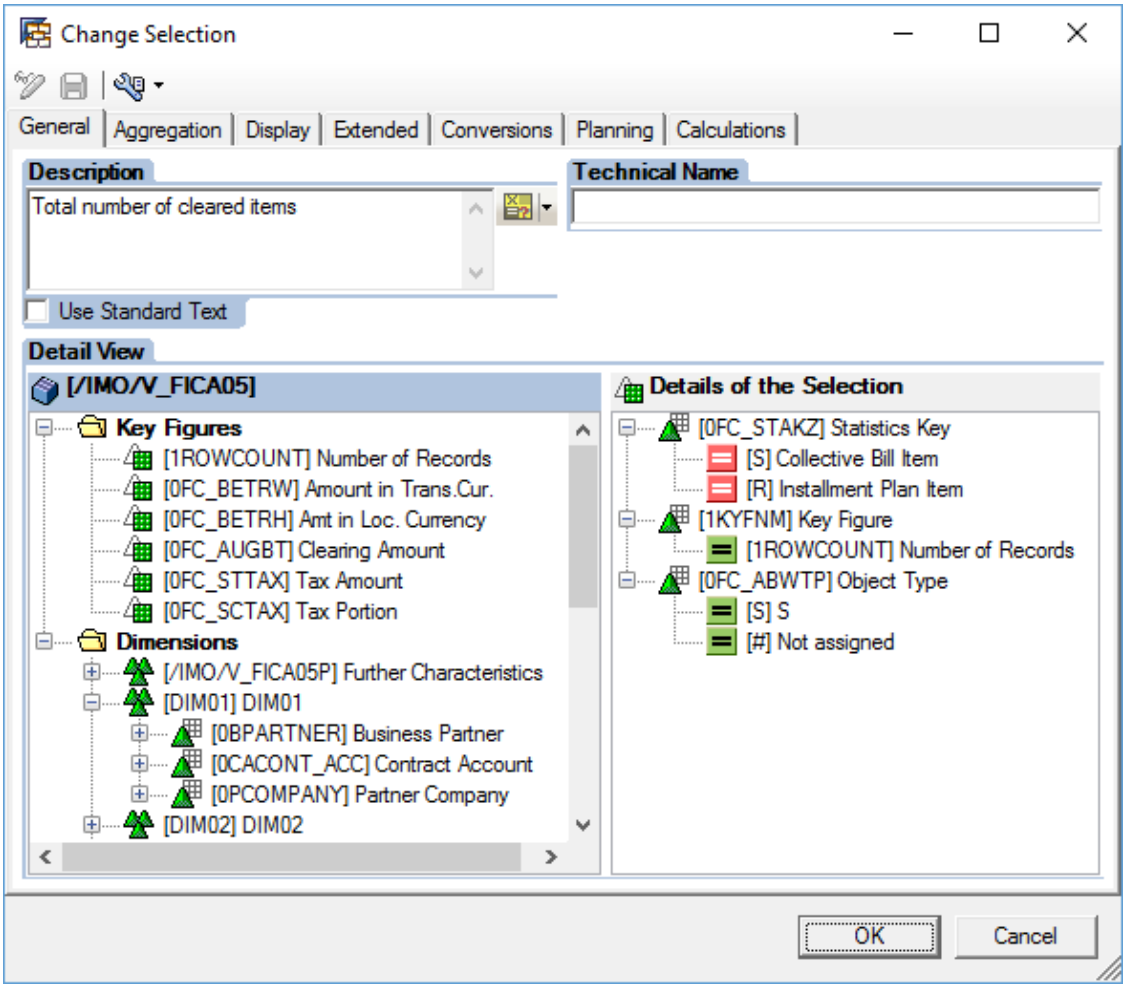
1. Open query V_FICA05_Q0001_Z01 with SAP BEx Query Designer.
2. Save it as V_FICA05_Q0001_Z03.
3. Navigate to the Rows/Column Tab.
4. Free Characteristics:
    - Drag/Drop dimensions from/to InfoProvider /IMO/V_FICA05 for a result as displayed in the screenshot below.
5. Rows:
    - Drag/Drop dimensions from/to InfoProvider /IMO/V_FICA05 for a result as displayed in the screenshot below.
6. Columns:
    - Delete key figure selections < 1 day overdue amount, 1 – 30 days overdue amount, 31 – 60 days overdue amount, 61 – 90 days overdue amount, > 90 days overdue amount, Total open amount, and Total overdue amount for a result as displayed in the screenshot below.

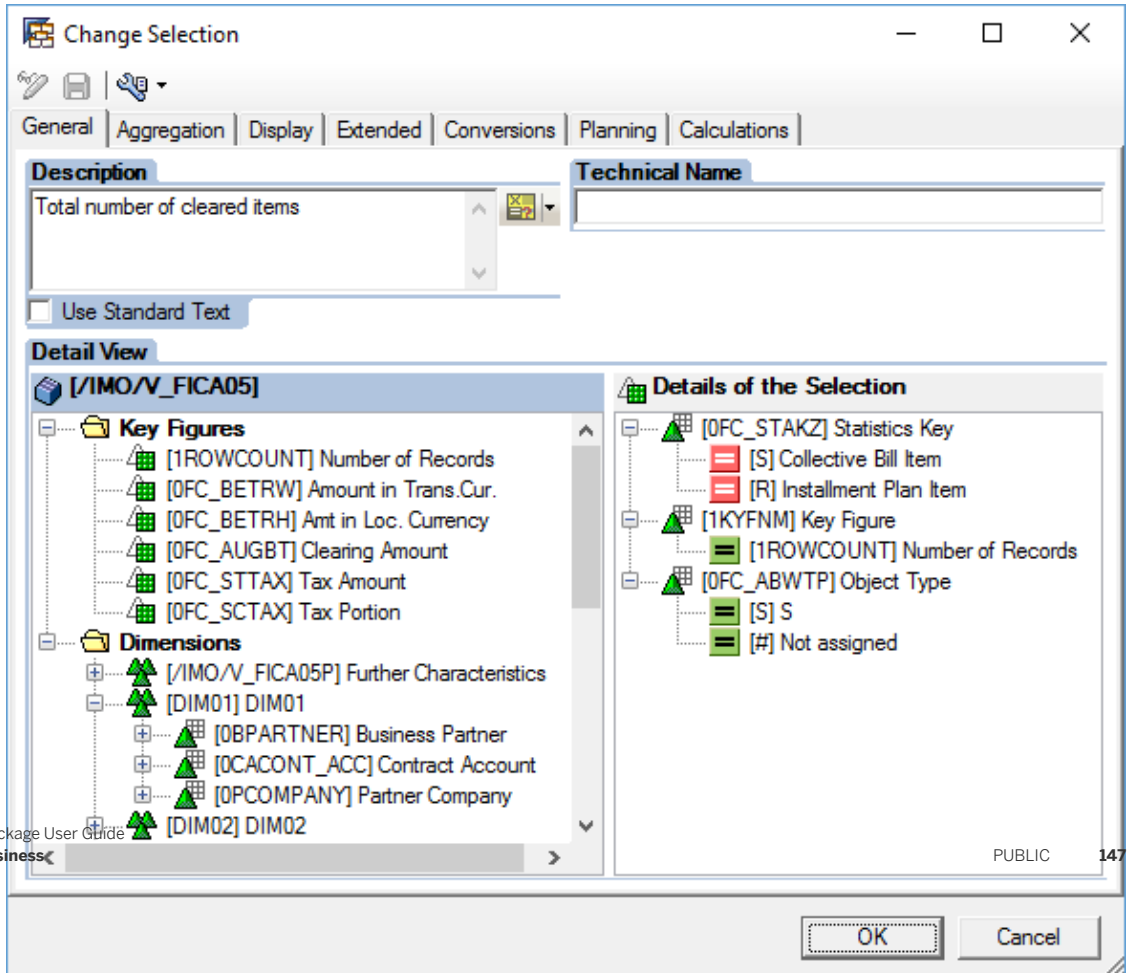
- Create key figure selection Total number of cleared items.





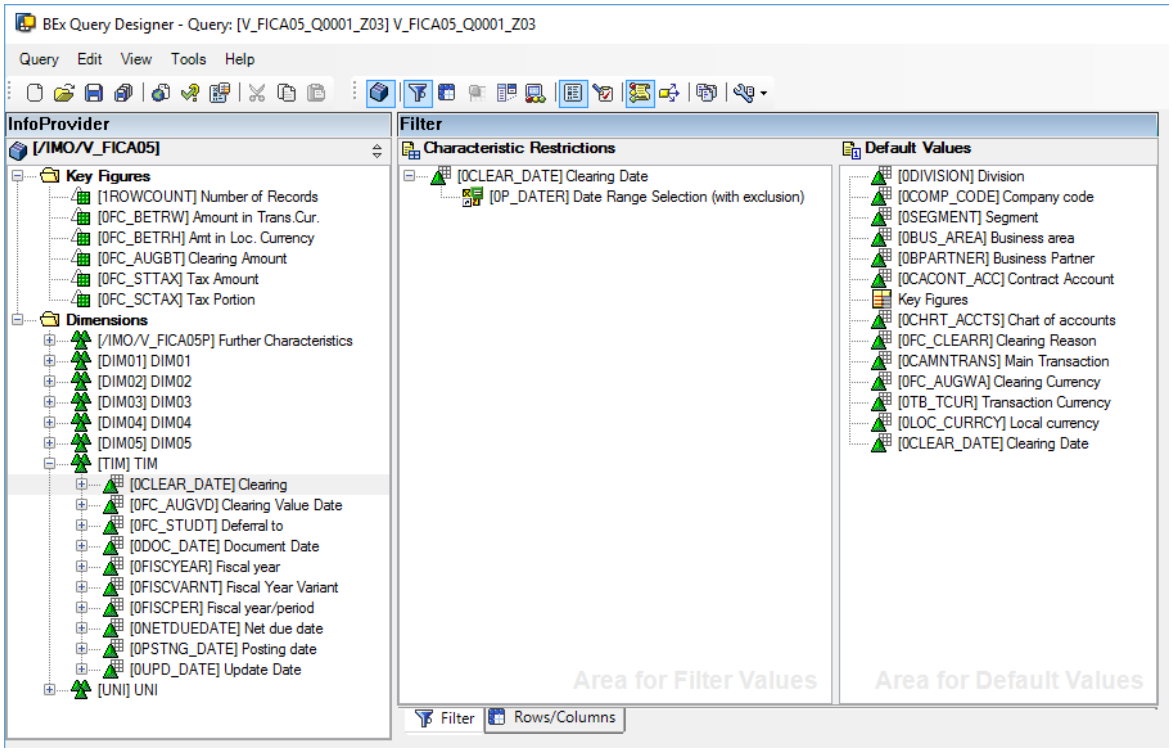
- Edit key figure selection Total number of cleared items, following the definitions displayed in the screenshot below.

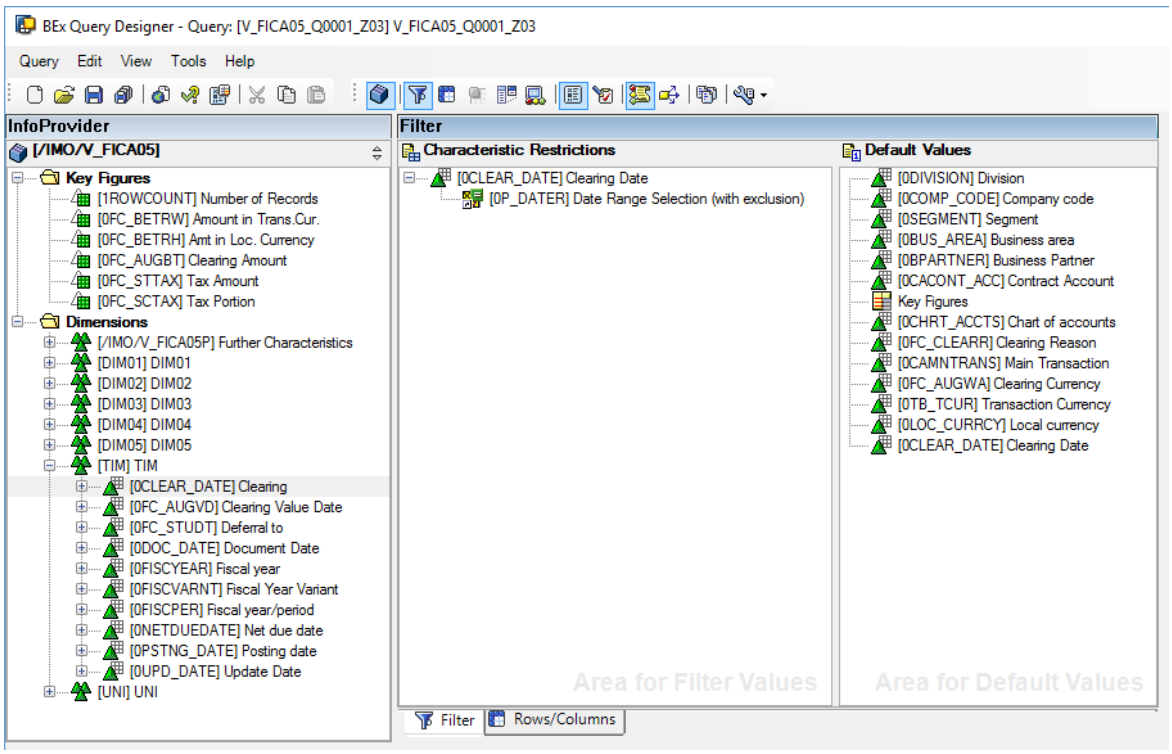

Change Selection
General
Aggregation
Display
Extended
Conversions
Planning
Calculations
Description
Total number of cleared items
Technical Name
Use Standard Text
Detail View
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[0BPARTNER] Business Partner
[0CACONT_ACC] Contract Account
[0PCOMPANY] Partner Company
[DIM02] DIM02
Details of the Selection
[0FC_STAKZ] Statistics Key
[S] Collective Bill Item
[R] Installment Plan Item
[1KYFNM] Key Figure
[1ROWCOUNT] Number of Records
[0FC_ABWTP] Object Type
[S] S
[#] Not assigned
OK
Cancel


Change Selection
General
Aggregation
Display
Extended
Conversions
Planning
Calculations
Description
Total number of cleared items
Technical Name
Use Standard Text
Detail View
[/IMO/V_FICA05]
Key Figures
[1ROWCOUNT] Number of Records
[0FC_BETRW] Amount in Trans.Cur.
[0FC_BETRH] Amt in Loc. Currency
[0FC_AUGBT] Clearing Amount
[0FC_STTAX] Tax Amount
[0FC_SCTAX] Tax Portion
Dimensions
[/IMO/V_FICA05P] Further Characteristics
[DIM01] DIM01
[0BPARTNER] Business Partner
[0CACONT_ACC] Contract Account
[0PCOMPANY] Partner Company
[DIM02] DIM02
Details of the Selection
[0FC_STAKZ] Statistics Key
[S] Collective Bill Item
[R] Installment Plan Item
[1KYFNM] Key Figure
[1ROWCOUNT] Number of Records
[0FC_ABWTP] Object Type
[S] S
[#] Not assigned
OK
Cancel

- Click OK to validate your changes.

7. When acquiring from this BW data source into Analytics Cloud, we now need to make sure that we can select the correct volumetric for the number of records imported. This can be achieved by setting a variable as Characteristic Restriction filter for Clearing Date as follows:
8. Click on the Filter tab.
9. Drag/Drop [0CLEARDATE] Clearing Date into the Characteristic Restrictions area.
10. Restrict Characteristic [0CLEARDATE] Clearing Date by associating variable [0P_DATER] Date Range Selection to it. The result is shown in the screenshot below.





11. Save the query.

2.11.3.9 Contract Accounts DSO w/ Year (SAP__FI_CA_IM_DSOYR)

Model Name: SAP__FI_CA_IM_DSOYR	Connection
• Model Description: SAP Finance: Contract Accounts DSO w/ Year • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query V_FICA05_Q0001_Z04 • Connection Variables: Because DSO is a non-additive key figure, Customer Country needs to be filtered to a single value (in our sample it is set to US) when acquiring into SAP Analytics Cloud to retrieve the proper non-aggregable results.

Account			
ID	**Description**	**Mapping/Formula**	
2014_DSO	2014 DSO	2014 DSO	
2015_DSO	2015 DSO	2015 DSO	
2016_DSO	2016 DSO	2016 DSO	
2017_DSO	2017 DSO	2017 DSO	
Dimensions			
Name	Description	Mapping	Technical Name
SAP_ALL_COMPANYCODE	Company Code	Company Code	0COMP_CODE
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Customer Country	0BPARTNER/0COUNTRY

> **i** Note
>
> * Private dimension and other dimensions are public.

2.11.3.10 How to create Connection Query: Custom Query V_FICA05_Q0001_Z04

Procedure

1. Open query V_FICA05_Q0001_Z03 with SAP BEx Query Designer.
2. Save it as V_FICA05_Q0001_Z04.
3. Navigate to the Filter tab.

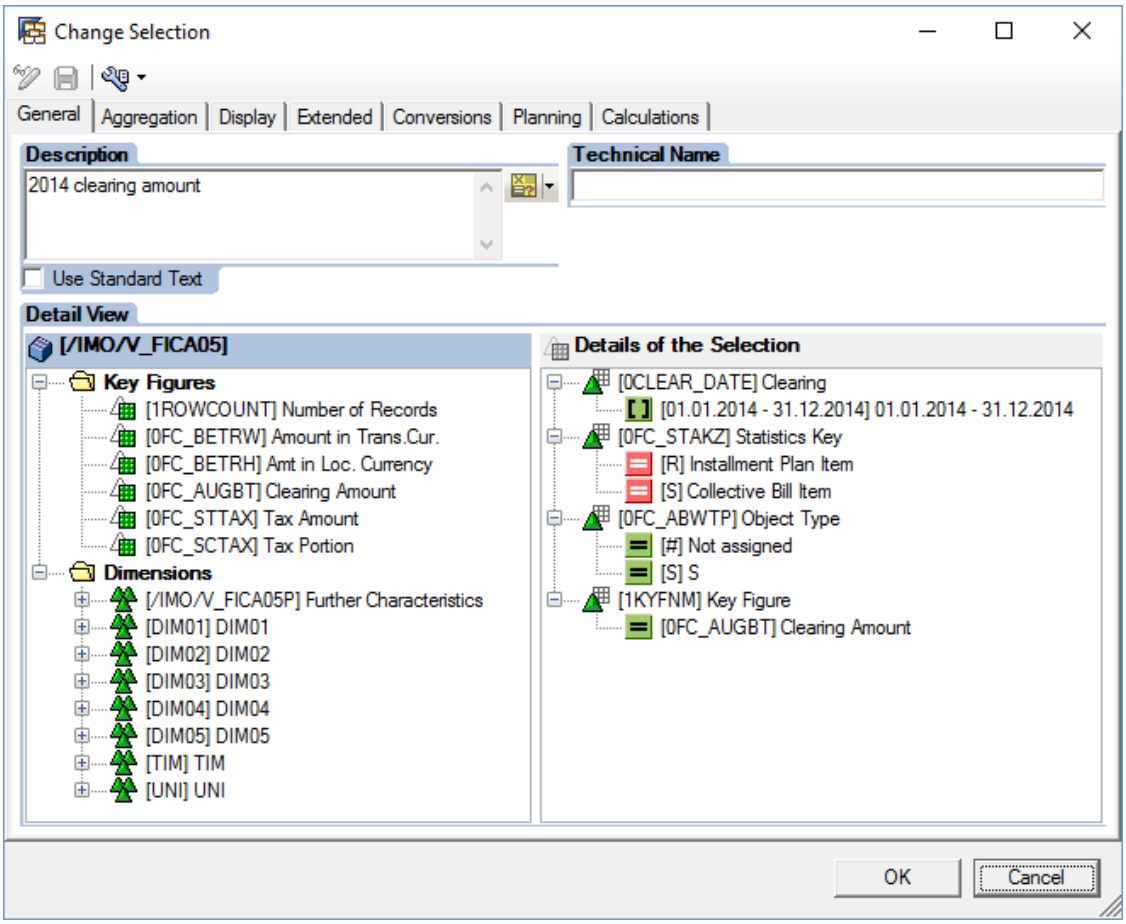
   Remove the characteristic restriction selection [0CLEAR_DATE] Clearing Date.

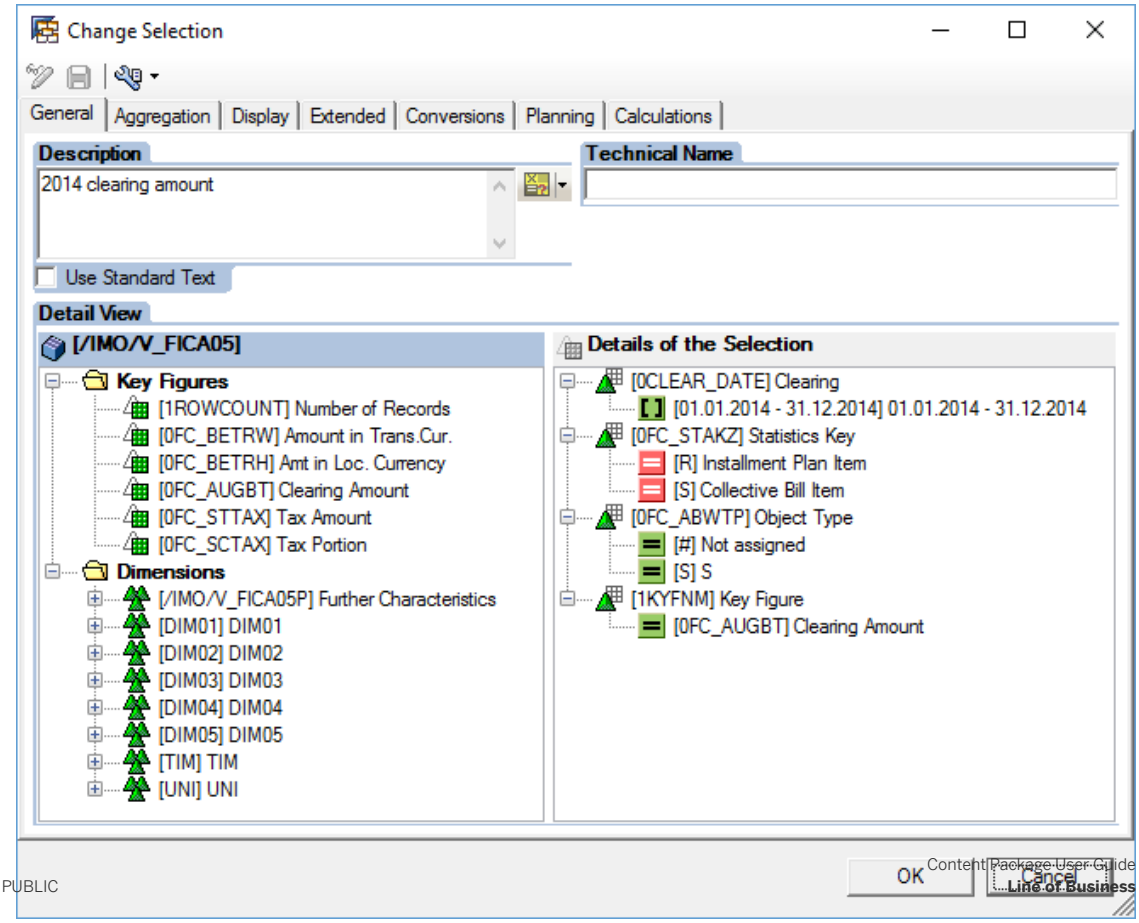
4. Navigate to the Rows/Column tab.
5. Free Characteristics:

   Leave as is.
6. Rows:

   Remove the characteristic [0CLEAR_DATE] Clearing Date.
7. Columns:
   - Remove selection Total clearing amount.
   - Remove selection Total number of cleared items.
   - Create selection 2014 clearing amount and set its display to Always Hide.

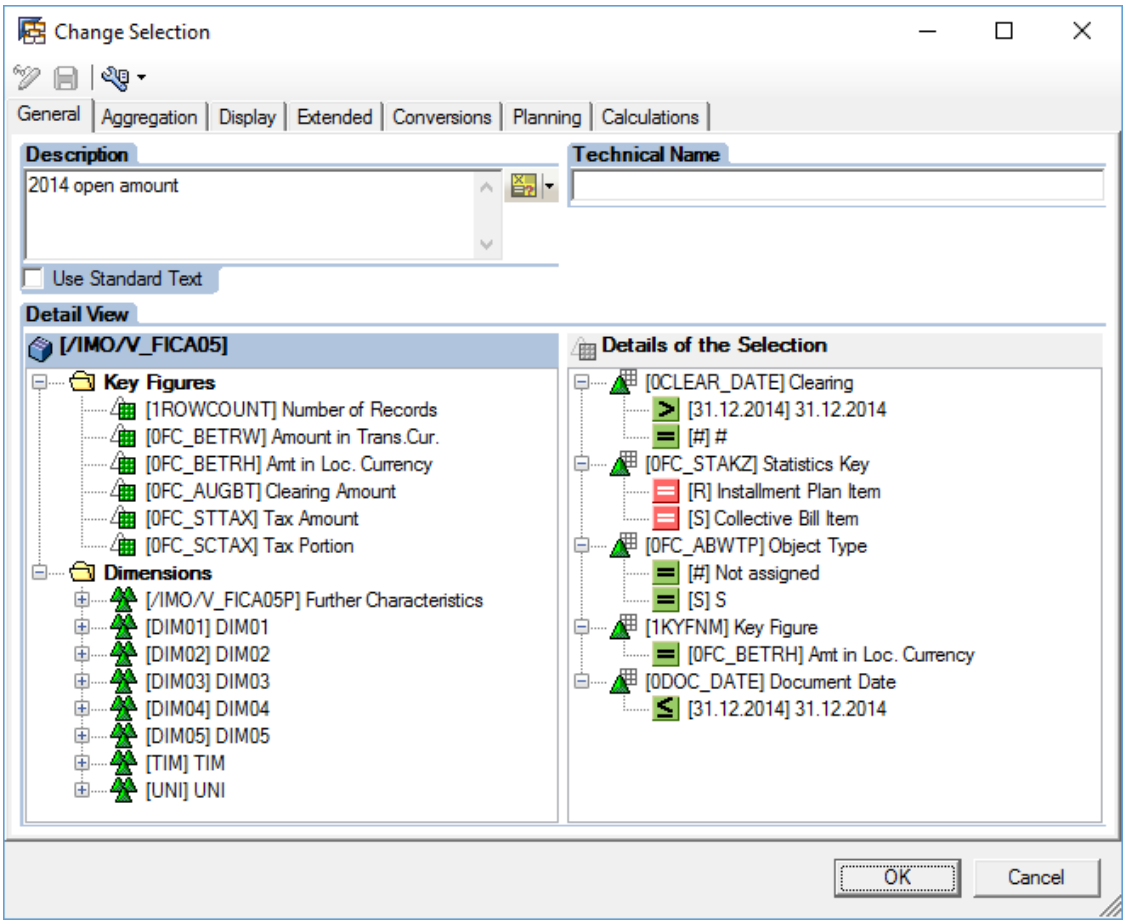
- Add the definitions for selection “2014 clearing amount” as displayed in the screenshot below.

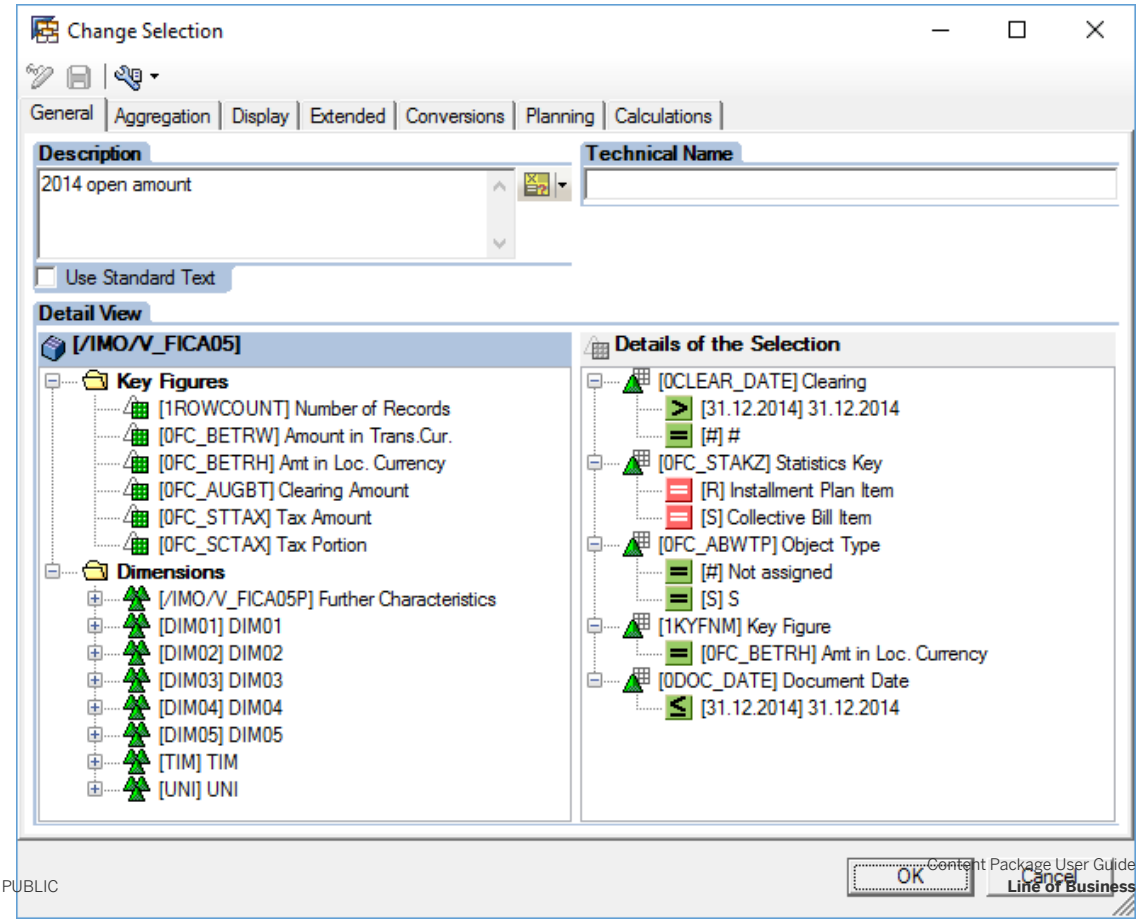




- Create selections 2015 clearing amount, 2016 clearing amount, and 2017 clearing amount by replacing 2014 by respectively 2015, 2016, then 2017 in the definitions above.
- Create selection 2014 open amount and set its display to *Always Hide*.

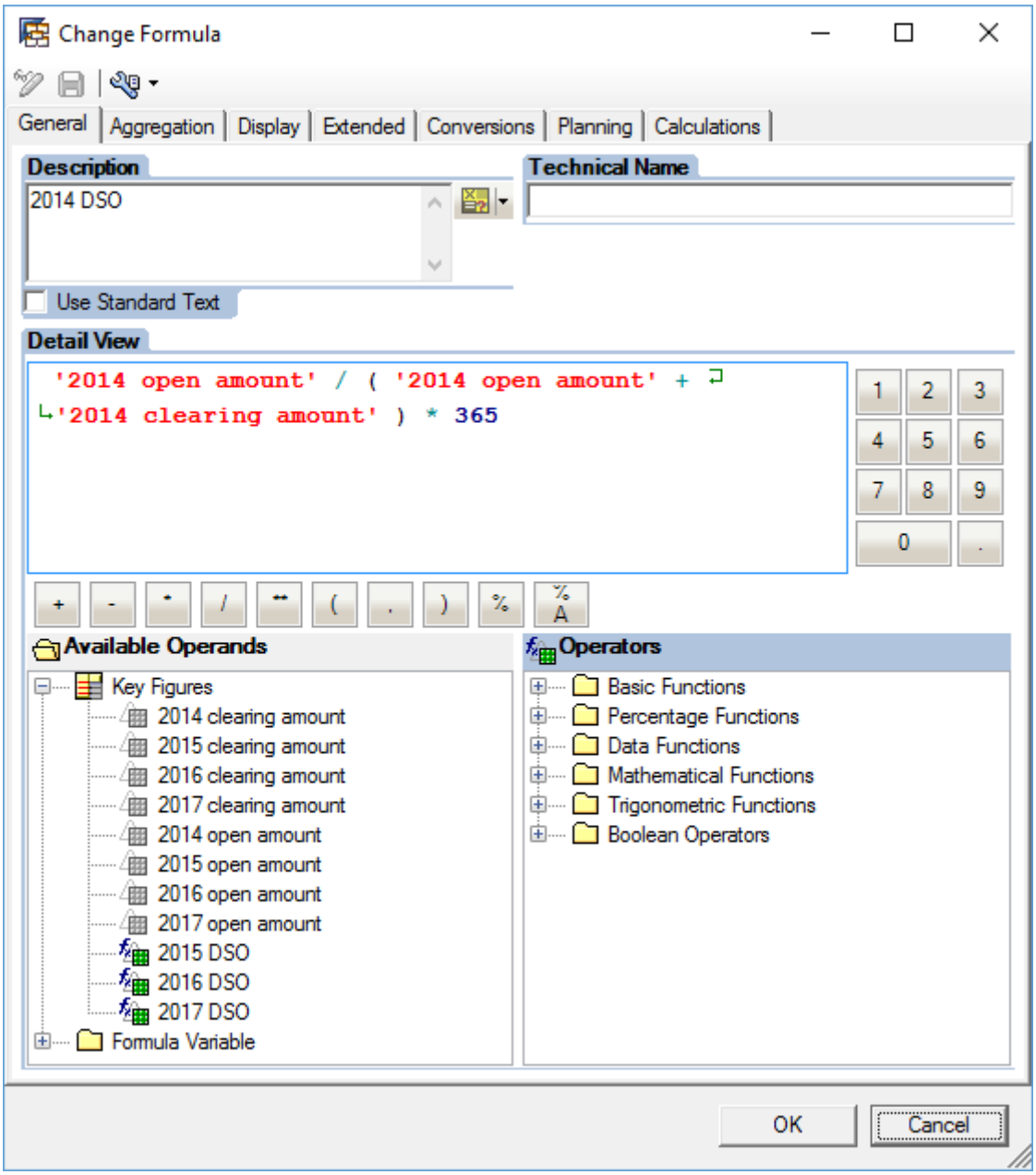
- Add the definitions for selection 2014 open amount as displayed in the screenshot below.

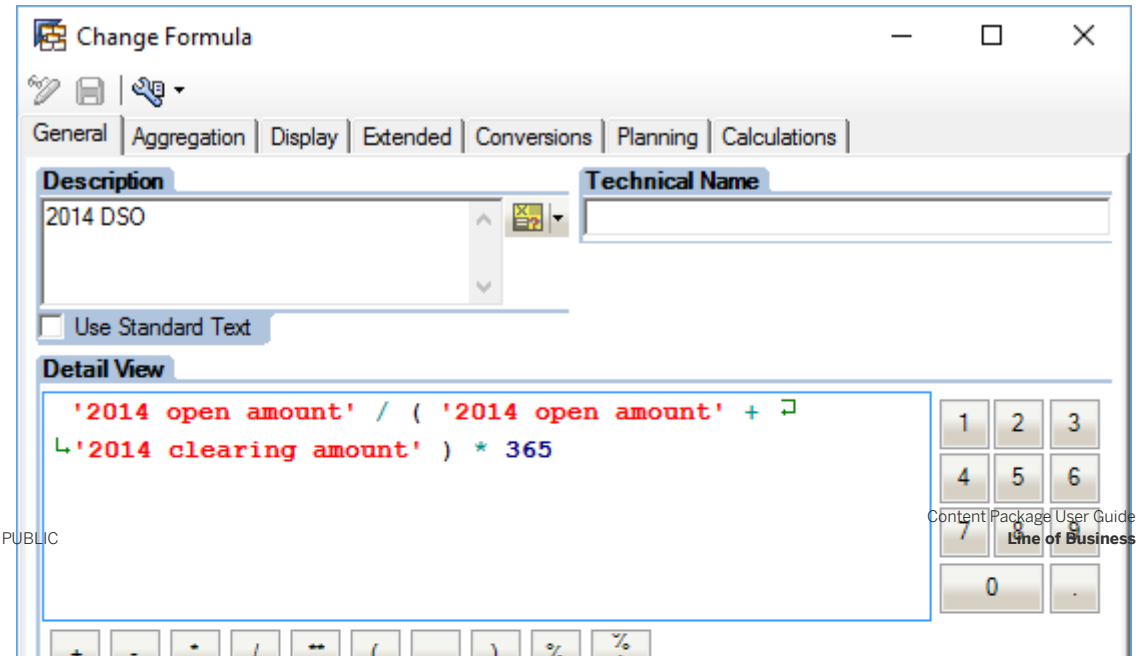




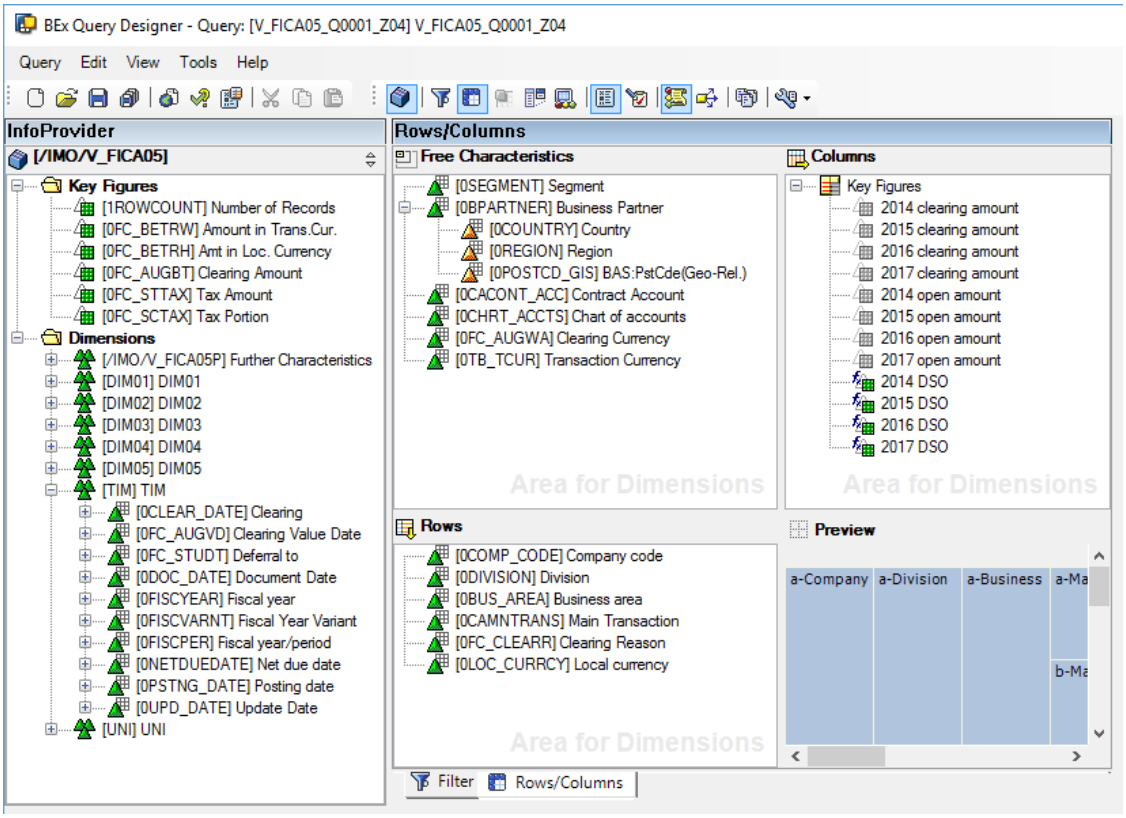
- Create selections 2015 open amount, 2016 open amount, and 2017 open amount by replacing 2014 by respectively 2015, 2016, then 2017 in the definitions above.

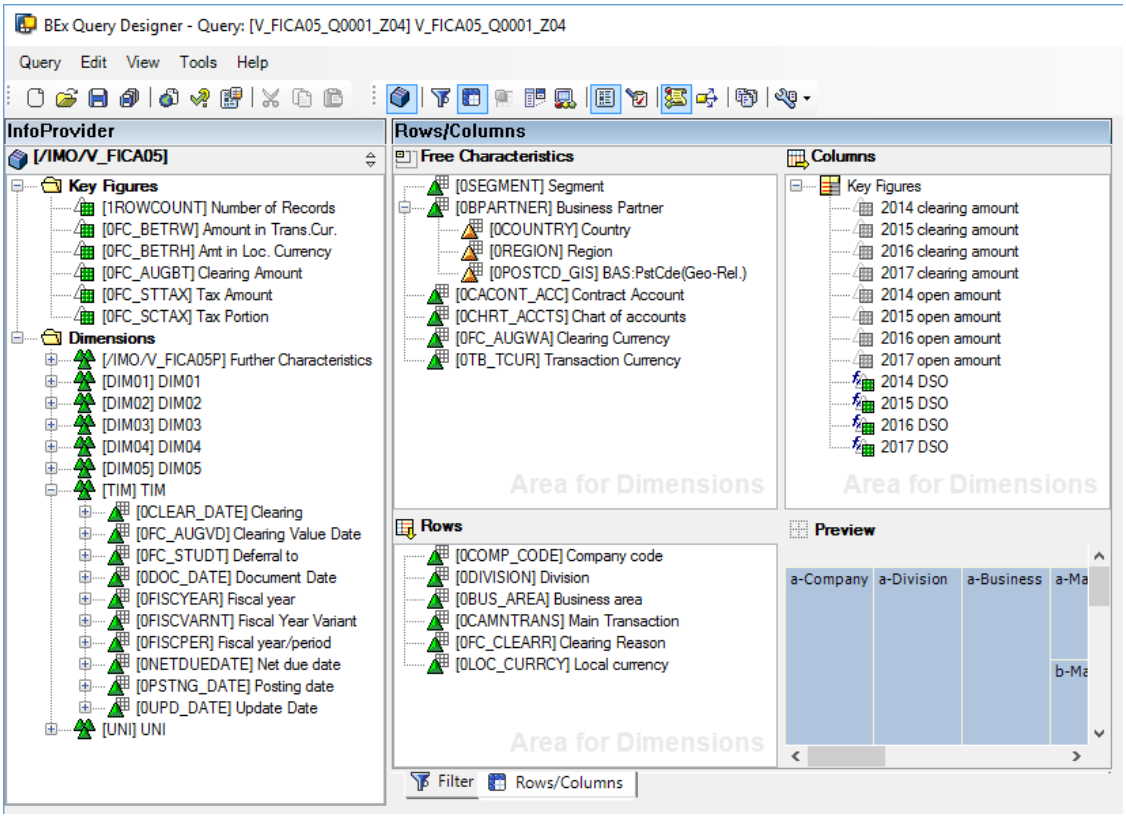
- Create formula 2014 DSO following the definitions displayed in the screenshot below.





- Create formulas 2015 DSO, 2016 DSO, and 2017 DSO by replacing 2014 by respectively 2015, 2016, then 2017 in the definitions above. At this point, the custom query V_FICA05_Q0001_Z04 should look like this.





8. Save the Query.

2.11.3.11 Contract Accounts DSO w/ Year and Main Transaction Data (SAP__FI_CA_IM_DSOYRMT)

Model Name: SAP__FI_CA_IM_DSOYRMT	Connection
• Model Description: SAP Finance: Contract Accounts DSO w/ Year and Main Transaction Data • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query V_FICA05_Q0001_Z04 • The custom BW query we acquire data from for this model is unchanged as compared to model SAP__FI_CA_IM_DSOYR, since the computation of the non-additive key figure DSO is fully performed in BW • Because DSO is a non-additive key figure, Customer Country needs to be filtered to a single value (in our sample it is set to US) when acquiring into SAP Analytics Cloud to retrieve the proper non-aggregable results.

Account			
ID	**Description**	**Mapping/Formula**	
2014_DSO	2014 DSO	2014 DSO	
2015_DSO	2015 DSO	2015 DSO	
2016_DSO	2016 DSO	2016 DSO	
2017_DSO	2017 DSO	2017 DSO	
Dimensions			
Name	Description	Mapping	Technical Name
SAP_ALL_COMPANYCODE	Company Code	Company Code	0COMP_CODE
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Customer Country	0BPARTNER/0COUNTRY
SAP_FI_CA_MAINTRANSACTION	Main Transaction	Main Transaction	0CAMNTRANS

Additional Notes about the model
This model is a derivative of model SAP__FI_CA_IM_DSOYR, in which we also retrieve dimension SAP_FI_CA_MAINTRANSACTION to adequately gather proper non-aggregable values for reporting.

> **i** Note
>
> * Private dimension and other dimensions are public.

2.11.3.12 Contract Accounts Dunning Evaluation (SAP__FI_CA_IM_DUNEVA)

Model Name: SAP__FI_CA_IM_DUNEVA	Connection
• Model Description: SAP Finance: Contract Accounts Dunning Evaluation • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query 0FC_MP11_Q0001_Z01 (see next step)

Account		Mapping/Formula	
ID	**Description**	**Description**	**ID**
Number_of_Dunning_Notices	Number of Dunning Notices	Number of Dunning Notices	0FC_DUNNO
Success_Percentage	Success Percentage	Success Percentage	0FC_SUCPC
Dunning_Balance	Dunning Balance	Dunning Balance	0FC_MSALM
Dunning_Balance_Successful	Dunning Balance Successful	Dunning Balance Successful	0FC_MSALMS
Dimensions		**Mapping**	
ID	**Description**	**Description**	**ID**
SAP_ALL_COMPANYCODE	Company Code	Company Code	0FC_OPBUK
SAP_ALL_DIVISION	Division	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	Business Area	0BUS_AREA
SAP_FI_CA_DUNNINGPROCEDURE	Dunning Procedure	Dunning Procedure	0CADUNN_PRC
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Country	0COUNTRY

> **i** Note
>
> * Private dimension and other dimensions are public.

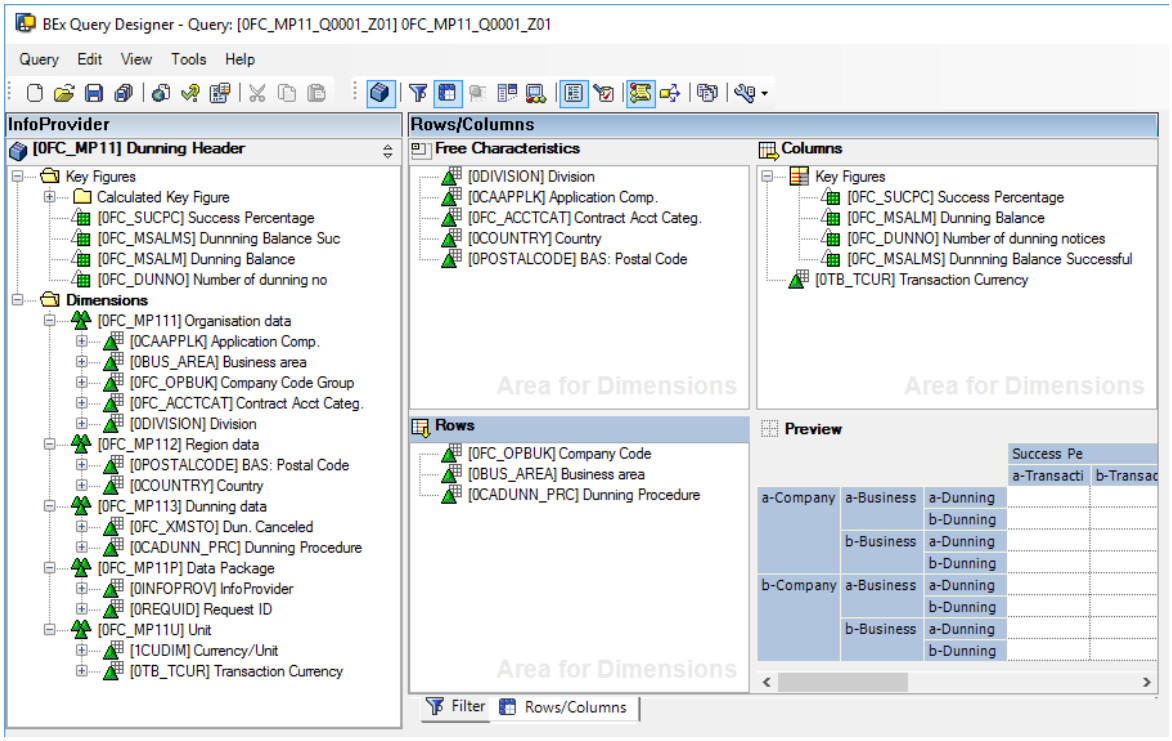
2.11.3.13 How to create Custom Query: 0FC_MP11_Q0001_Z01

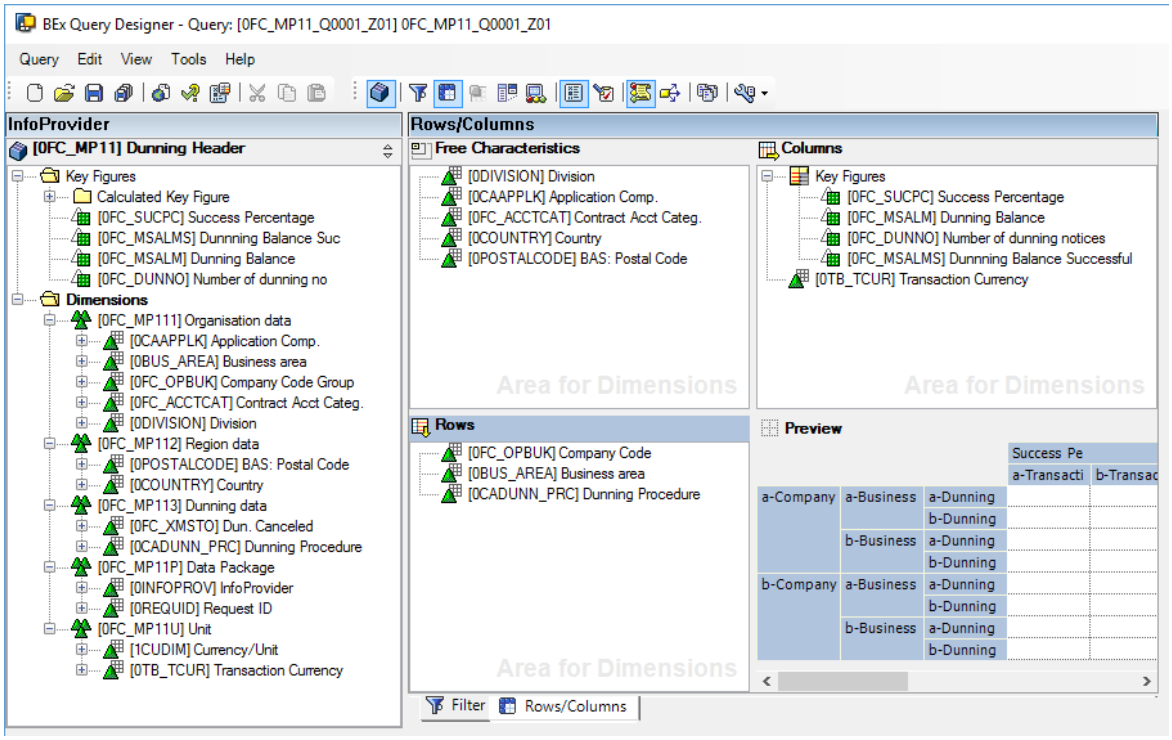
Procedure

1. Open query 0FC_MP11_Q0001 with SAP BEx Query Designer.
2. Save it as 0FC_MP11_Q0001_Z01.
3. Navigate to the Rows/Columns tab.

4. Columns:
    - Remove key figure [0FC_SUCCPERAMT] Success Percentage (Amount)
    - Remove key figure [0FC_SUCCPERNUM] Success Percentage (Number)
    - Drag/Drop key figure [0FC_SUCPC] Success Percentage in the Area

    The resulting query definition is displayed in the screenshot below.





5. Save the Query.

2.11.3.14 Contract Accounts Dunning Activity (SAP__FI_CA_IM_DUNACT)

Model Name: SAP__FI_CA_IM_DUNACT	Connection
• Model Description: SAP Finance: Contract Accounts Dunning Activity • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query 0FC_MP12_Q0001_Z01 (see next step) • Connection Variables: Last 12 Months Including Current Month (Manual Entry to set a time range for analysis) (0CALMTH) For example, inputting 10.2017 will select the time range [11.2016 – 10-2017] for analysis.

Account		**Mapping/Formula**	
ID	Description	Description	ID
Dunning_Balance	Dunning Balance	Dunning Balance	0FC_MSALM
Number_of_Activities	Number of Activities	Number of Activities	0FC_ACTNO
Dimensions		**Mapping**	
ID	**Description**	**Description**	**ID**
Time*	Time	Calendar Year/Month	0CALMONTH
SAP_ALL_COMPANYCODE	Company Code	Company Code	0FC_OPBUK
SAP_ALL_DIVISION	Division	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	Business Area	0BUS_AREA
SAP_FI_CA_DUNNINGPROCEDURE	Dunning Procedure	Dunning Procedure	0CADUNN_PRC
SAP_FI_CA_DUNNINGLEVEL	Dunning Level	Dunning Level	0FCDUNN_LEV
SAP_FI_CA_DUNNINGACTIVITY	Dunning Activity	Dunning Activity	0FC_ACKEY
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Country	0COUNTRY

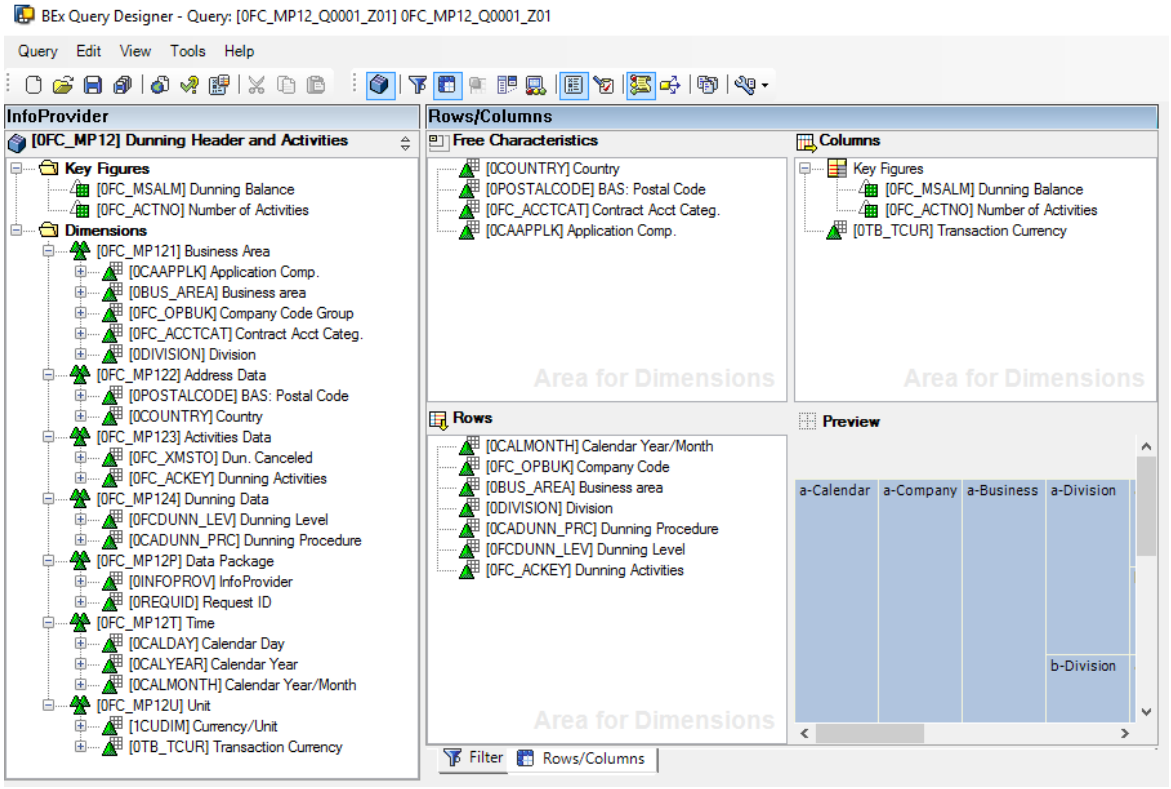
> **i Note**
>
> * Private dimension and other dimensions are public.

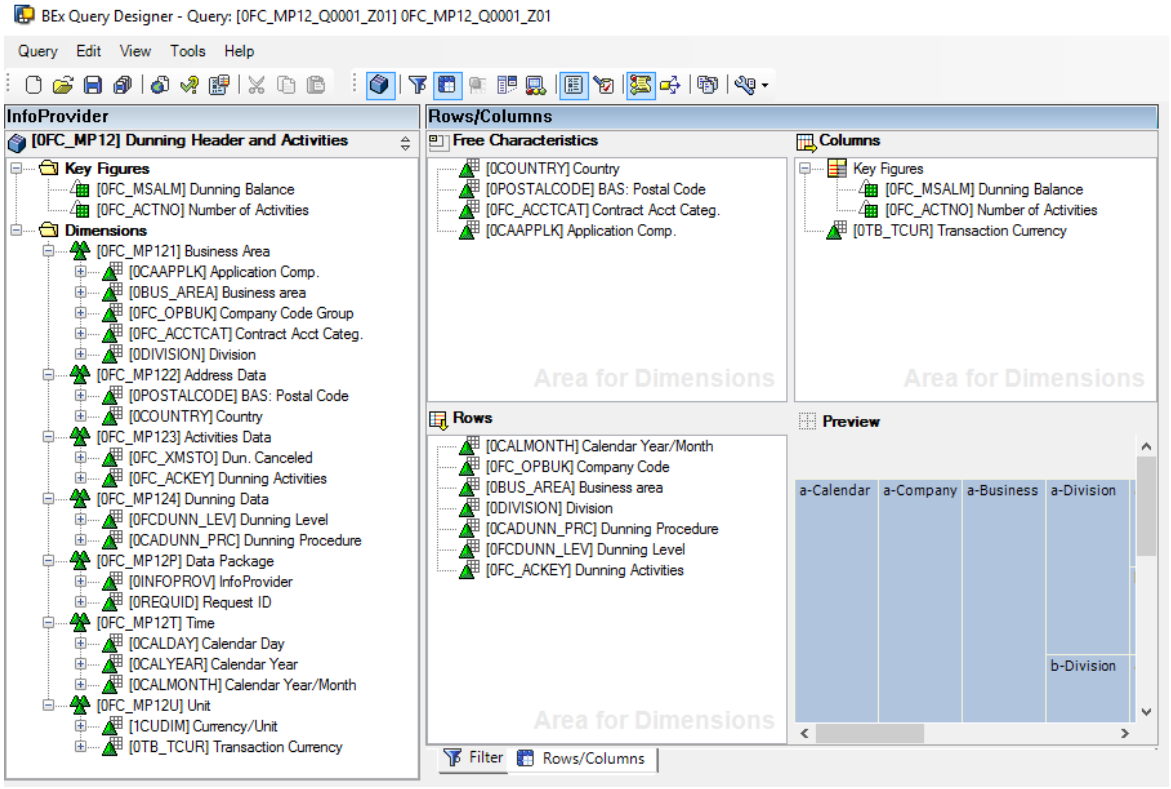
2.11.3.15 How to create Connection Query: Custom Query 0FC_MP12_Q0001_Z01

Procedure

1. Open query 0FC_MP12_Q0001 with SAP BEx Query Designer.
2. Save it as 0FC_MP12_Q0001_Z01.
3. Navigate to the Rows/Column Tab.
4. Rows:

   Drag/Drop dimensions [0CADUNN_PRC] Dunning Procedure and [0FCDUNN_LEV] Dunning Level from InfoProvider 0FC_MP12 for a result as displayed in the screenshot below.
5. Rearrange the dimensions between Free Characteristics, Rows, and Columns areas for a result as displayed in the screenshot below.





6. Save the query.

2.12 Finance –Financial Product Subledger For SAP S/4HANA- IFRS17

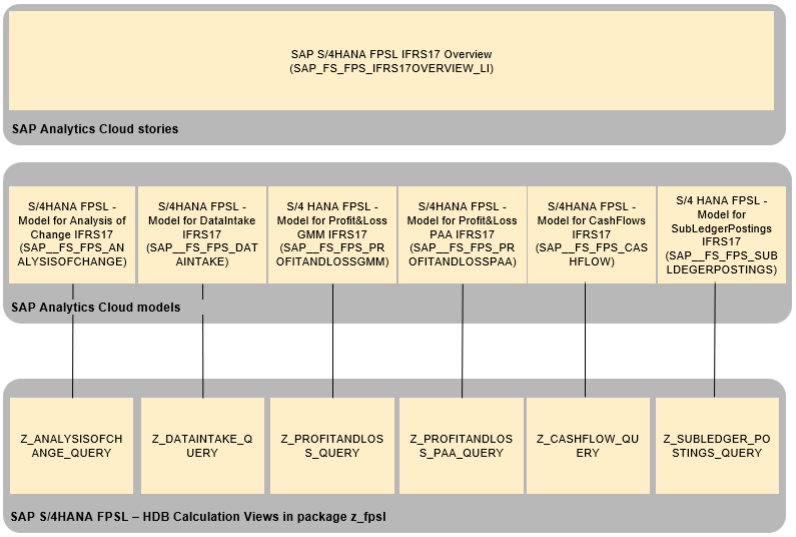
2.12.1 Architecture and Abstract

The S/4HANA for FPSL IFRS17 comprises a SAP Analytics Cloud Story for subledger reporting based on the specifications of IFRS17. In detail, the following pages are provided in the SAP Analytics Cloud story:

- Overview Page with KPI Tiles, enabled for exploration and Charts
- Date Intake Analysis with the possibility to further explore data in the Cashflows table widget
- Analysis of Change
- Profit and Loss for GMM (General Measurement Model)
- Profit and Loss for PAA (Premium Allocation Approach)
- Subledger Postings with a detailed Overview of the posting documents

The above-mentioned SAP Analytics Cloud Story requires the availability of S/4HANA for financial products subledger FP01 (or higher) based on S/4HANA 1809. The SAP Analytics Cloud Story requires a live data connection to the S/4HANA FPSL HDB system.

> **i** Note
>
> The HANA calculation view package **z_fpsl** which is required for this business content package is not part of the standard delivery of SAP Financial Products Subledger package. The package is only available as part of a deployment of the pre-configured SAP Financial Products Subledger system available in the SAP Cloud Appliance Library (CAL). The CAL image is mainly targeted for PoCs and demonstration purposes. As the HANA Calculation Views depend on both configuration and data in the preconfigured SAP Financial Products Subledger system it will only work when the CAL image is deployed.



Architecture

*The colored objects are documented in this chapter

2.12.2 Overview

Overview

Here, the most important IFRS17 key figures are given at a glance.

Data Intake

Supports the user to verify the data imported from the upstream systems. The sample report focuses on the actuarial input, summarizing upload information on Group of Contract, Best Estimate Cashflows and the earning patterns. BECF data is aggregated, providing checksums on number of items and total amount. Further BECF details up to the line items can be accessed in the Explore Mode.

Analysis of Change

Shows the roll-forward of IFRS17 balance sheet positions throughout a year for selected group of contract and time period. The AoC is split up in three blocks, separating the present value of future cash flows, the risk adjustment and the CSM.

Profit and Loss (GMM)

Shows the P&L impact for groups of contracts measured under GMM and VFA. P&L positions are aggregated in line with the effects shown in the AoC.

Profit and Loss (PAA)

Represents a combined view on balance positions and P&L for business measured under PAA: Balance positions and their roll-forward in the selected period is shown on the left. On the right, the corresponding P&L effects are presented.

Subledger Postings

Details on all subledger postings on a line item view, allowing free data analysis on the raw data.

2.12.3 Models

2.12.3.1 Model for Analysis of Change IFRS17 (SAP__FS_FPS_ANALYSISOFCHANGE)

Model Name: SAP__FS_FPS_ANALYSISOFCHANGE	Connection
• Model Description: S/4HANA FPSL - Model for Analysis of Change IFRS17 • Planning Enabled: No • Model Purpose: This model measures the dimensions to analyse changes in Insurance Liabilities	• Connection type: Direct Live connection to HDB: SAPFPSLHDB • Connection Query: Z_ANALYSISOFCHANGE_QUERY • Mandatory Variables: Legal Entity, Period Start Date, Period End Date

Dimensions

Name	Description	Mapping
[ACT_CONTRACT]	Actuarial Contract	
[ACT_PF]	Actuarial Portfolio	
[CHANGE_REASON_GROUP]	Change Reason Group	
[CHANGE_REASON_TXT]	Change Reason Description	
[CHILDTEXT_UOA]	Text for Child Unit of Account	
[CLIENT]	SAPClient	
[CONTCT_TEXT]	Contract Category Text	
[CalculationLevel]	Calculationlevel	
[GL_ACC_TXT]	GL Account Text	
[Measures]	Measures	
[ONRST_TEXT]	Onerousness Status IR Text	
[ONSTIR_TEXT]	Onerous Status Text	
[PAY_CAT_TXT]	Cost or Revenue Element Text	
[PF_CONTRACT]	Portfolio Contract	
[PROC_STEPID_TXT]	Process Step ID Text	
[ProcessStepGroup]	Process Step Group	
[SLALC_TEXT]	SubLedger LifeCycleStatus Text	
[SubLedgerAccountText]	SubLedgerAccountText	
[SubledgerAccountGroupText]	SubledgerAccountGroupText	
[SubledgerAccountGroup]	SubledgerAccountGroup	
[UNIT_ACC]	Calculation Level	
[YEAR]	Year	
[Z_GLACCOUNT]	GL Account	

Dimensions

[Z_Month]	Month
[Z_PostingDate]	Posting Date
[Z_Quarter]	Quarter
[_BA1_BIL_CURR]	Functional currency
[_BA1_C41FINST]	Financial Instrument
[_BA1_C55ACCSY]	AccountingSystem
[_BA1_C55CHGRSN]	Change Reason
[_BA1_C55CMETHY]	Methodology
[_BA1_C55CMETH]	Calculation Method
[_BA1_C55CONTCT]	Contract Category
[_BA1_C55DBCDF]	Debit/Credit Flag
[_BA1_C55DOCITM]	Document Item
[_BA1_C55DOCNUM]	Document Number
[_BA1_C55HOLDCT]	Classification
[_BA1_C55LGENT]	Legal Entity
[_BA1_C55ONRST]	Onerous Status
[_BA1_C55PFID]	CSM Group
[_BA1_C55PROCID]	Process Step ID
[_BA1_C55SLACC]	SubLedgerAccount
[_BA1_C55SLALC]	SubLedger LifeCycleStatus
[_BA1_C55_ONSTIR]	Onerousness Status on Initial Recognition
[_BA1_CIDPSEID]	Coverage ID
[_BA1_CRCBECFVN]	Version Number
[_BA1_CRCPAYCAT]	Cost or Revenue Element
[_BA1_OBJ_CURR]	Transaction Currency

Measures

Z_CSM_AMORT	Amortization (CSM)
Z_CSM_AMORT_TCUR	Amortization (CSM,TCur)
Z_CSM_CONTR_IN_REC	Contract Initially Recognized (CSM)
Z_CSM_CONTR_IN_REC_TCUR	Contract Initially Recognized (CSM,TCur)
Z_CSM_IMP_CHG_BE_NON_FIN	Impact Due to Changes in BE Non-Financial Assumptions (CSM)

Measures	
Z_CSM_IMP_CHG_BE_NON_FIN_TCUR	Impact Due to Changes in BE Non-Financial Assumptions (CSM,TCur)
Z_CSM_IMP_VAR	Impact Due To Experience Variance (CSM)
Z_CSM_IMP_VAR_TCUR	Impact Due To Experience Variance (CSM,TCur)
Z_CSM_NET_CLOSE_BAL	Net Closing Balance (CSM)
Z_CSM_NET_CLOSE_BAL_TCUR	Net Closing Balance (CSM,TCur)
Z_CSM_NET_OPEN_BAL	Net Opening Balance (CSM)
Z_CSM_NET_OPEN_BAL_TCUR	Net Opening Balance (CSM, TCur)
Z_CSM_UNWIND_VAR_FEE_LOCKED	Unwind/Variable Fee (locked-in) (CSM)
Z_CSM_UNWIND_VAR_FEE_LOCKED_TCUR	Unwind/Variable Fee (locked-in) (CSM,TCur)
Z_CSM_VAR_FEE_CURRENT	Variable Fee (current) (CSM)
Z_CSM_VAR_FEE_CURRENT_TCUR	Variable Fee (current) (CSM,Tcur)
Z_LIC_CLAIMS_SERV_EXP_PAID	Claims Paid (LIC)
Z_LIC_CLAIMS_SERV_EXP_PAID_TCUR	Claims Paid (LIC,TCur)
Z_LIC_IMP_CHG_BE_NON_FIN	Impact Due to Changes in BE Non-Financial Assumptions (LIC)
Z_LIC_IMP_CHG_BE_NON_FIN_TCUR	Impact Due to Changes in BE Non-Financial Assumptions (LIC,TCur)
Z_LIC_IMP_CHG_DM_RATE	Impact Due to Changes in Discount/ Market Rate (LIC)
Z_LIC_IMP_CHG_DM_RATE_TCUR	Impact Due to Changes in Discount/ Market Rate (LIC,TCur)
Z_LIC_IMP_VAR	Impact Due To Experience Variance (LIC)
Z_LIC_IMP_VAR_TCUR	Impact Due To Experience Variance (LIC,TCur)
Z_LIC_NET_CLOSE_BAL	Net Closing Balance (LIC)
Z_LIC_NET_CLOSE_BAL_TCUR	Net Closing Balance (LIC,TCur)
Z_LIC_NET_OPEN_BAL	Net Opening Balance (LIC)
Z_LIC_NET_OPEN_BAL_TCUR	Net Opening Balance (LIC,TCur)
Z_LIC_REL_LRC	Release from LRC (LIC)
Z_LIC_REL_LRC_TCUR	Release from LRC (LIC,TCur)
Z_LIC_UNWIND	Unwind (LIC)
Z_LIC_UNWIND_TCUR	Unwind (LIC,TCur)

Measures	
Z_PVFCF_CLAIMS_SERV_EXP_PAID	Claims and Other Insurance Service Expenses Paid (PVFCF)
Z_PVFCF_CLAIMS_SERV_EXP_PAID_TCUR	Claims and Other Insurance Service Expenses Paid (PVFCF,TCur)
Z_PVFCF_CONTR_IN_REC	Contract Initially Recognized (PVFCF)
Z_PVFCF_CONTR_IN_REC_TCUR	Contract Initially Recognized (PVFCF,TCur)
Z_PVFCF_EXP_PREM_REC	Expected Premiums Received (PVFCF)
Z_PVFCF_EXP_PREM_REC_TCUR	Expected Premiums Received (PVFCF,TCur)
Z_PVFCF_IMP_CHG_BE_NON_FIN	Impact Due to Changes in BE Non-Financial Assumptions (PVFCF)
Z_PVFCF_IMP_CHG_BE_NON_FIN_TCUR	Impact Due to Changes in BE Non-Financial Assumptions (PVFCF,TCur)
Z_PVFCF_IMP_CHG_DM_RATE	Impact Due to Changes in Discount/ Market Rate (PVFCF)
Z_PVFCF_IMP_CHG_DM_RATE_TCUR	Impact Due to Changes in Discount/ Market Rate (PVFCF,TCur)
Z_PVFCF_IMP_VAR	Impact Due To Experience Variance (PVFCF)
Z_PVFCF_IMP_VAR_TCUR	Impact Due To Experience Variance (PVFCF,TCur)
Z_PVFCF_NET_CLOSE_BAL	Net Closing Balance (PVFCF)
Z_PVFCF_NET_CLOSE_BAL_TCUR	Net Closing Balance (PVFCF,TCur)
Z_PVFCF_NET_OPEN_BAL	Net Opening Balance (PVFCF)
Z_PVFCF_NET_OPEN_BAL_TCUR	Net Opening Balance (PVFCF, TCur)
Z_PVFCF_UNWIND	Unwind (PVFCF)
Z_PVFCF_UNWIND_TCUR	Unwind (PVFCF,TCur)
Z_RA_CHG_RISK_EXP	Changes in RA for Risk Expired (RA)
Z_RA_CHG_RISK_EXP_TCUR	Changes in RA for Risk Expired (RA,TCur)
Z_RA_CONTR_IN_REC	Contract Initially Recognized (RA)
Z_RA_CONTR_IN_REC_TCUR	Contract Initially Recognized (RA,TCur)
Z_RA_IMP_CHG_BE_NON_FIN	Impact Due to Changes in BE Non-Financial Assumptions (RA)
Z_RA_IMP_CHG_BE_NON_FIN_TCUR	Impact Due to Changes in BE Non-Financial Assumptions (RA,TCur)
Z_RA_IMP_CHG_DM_RATE	Impact Due to Changes in Discount/ Market Rate (RA)

Measures

Z_RA_IMP_CHG_DM_RATE_TCUR	Impact Due to Changes in Discount/ Market Rate (RA,TCUR)
Z_RA_IMP_VAR	Impact Due To Experience Variance (RA)
Z_RA_IMP_VAR_TCUR	Impact Due To Experience Variance (RA,TCur)
Z_RA_NET_CLOSE_BAL	Net Closing Balance (RA)
Z_RA_NET_CLOSE_BAL_TCUR	Net Closing Balance (RA,TCur)
Z_RA_NET_OPEN_BAL	Net Opening Balance (RA)
Z_RA_NET_OPEN_BAL_TCUR	Net Opening Balance (RA,TCur)
Z_RA_UNWIND	Unwind (RA)
Z_RA_UNWIND_TCUR	Unwind (RA.TCur)

2.12.3.2 Model for CashFlows IFRS17 (SAP__FS_FPS_CASHFLOW)

Model Name: SAP__FS_FPS_CASHFLOW	Connection
• Model Description: S/4HANA FPSL - Model for Cash-Flows IFRS17 • Planning Enabled: No • Model Purpose: This model measures and dimension to analyse changes in Insurance Liabilities	• Connection type: Direct Live connection to HDB: SAPFPSLHDB • Connection Query: Z_CASHFLOW_QUERY • Mandatory Variables: sLegal Entity, Period Start Date, and Period End Date

Dimensions

Name	Description	Mapping
[CF_VERSION]	Version Number	
[CHILDTEXT_UOA]	Text for Child Unit of Account	
[CLIENT]	SAPClient	
[DDTEXT]	Contract category Text	
[DESCRIPTION]	Cost or Revenue Element Text	
[Measures]	Measures	
[TXTMI]	Change Driver CF Description	
[Time]	Time	
[UoA]	Uoa	
[VALID_TO_TS]	VALID_TO_TS	

Dimensions	
[Z_KeyDate_CF]	Key Date (CF)
[Z_LAST_UPDATE]	Last Update
[_BA1_C55ACCSY]	Accounting System
[_BA1_C55CONTCT]	ContractCategory
[_BA1_C55CONTCT_1]	Contract Category1
[_BA1_C55CONTID]	Calculation Level
[_BA1_C55LGENT]	LegalEntity
[_BA1_C55PFID]	CSM Group
[_BA1_CIDPSEID]	Coverage
[_BA1_CR0KEYDAT]	Key Date
[_BA1_CR0SRCSYS]	Source System
[_BA1_CR0TCGUID]	Guid
[_BA1_CRCCFCATG]	Contract Category
[_BA1_CRCCHDCF]	Change Driver
[_BA1_CRCDUEDAT]	Due Date
[_BA1_CRCINCDAT]	Incurred Date
[_BA1_CRCISDAT]	Issue Date
[_BA1_CRCPAYCAT]	Cost or Reveneue Element
[_BA1_CRCREPDAT]	Reported Date
[_BA1_CRCSETDAT]	Settled Date
[_BA1_KRCCFAMDC]	Coverage Amount Currency
[_BA1_KRCCFAMEC]	Expected Amount Currency

Measures	Coverage Amount
_BA1_KRCCFAMD	Coverage Amount
_BA1_KRCCFAME	Expected Amount

2.12.3.3 Model for DataIntake IFRS17 (SAP__FS_FPS_DATAINTAKE)

Model Name: SAP__FS_FPS_CASHFLOW	Connection
• Model Description: S/4HANA FPSL - Model for Cash-Flows IFRS17 • Planning Enabled: No • Model Purpose: This model measures and dimension to analyse changes in Insurance Liabilities	• Connection type: Direct Live connection to HDB: SAPFPSLHDB • Connection Query: Z_CASHFLOW_QUERY • Mandatory Variables: Legal Entity, Period Start Date, and Period End Date

Dimensions

Name	Description	Mapping
[CF_VERSION]	Version Number	
[CHILDTEXT_UOA]	Text for Child Unit of Account	
[CLIENT]	SAPClient	
[DDTEXT]	Contract category Text	
[DESCRIPTION]	Cost or Revenue Element Text	
[Measures]	Measures	
[TXTMI]	Change Driver CF Description	
[Time]	Time	
[UoA]	Uoa	
[VALID_TO_TS]	VALID_TO_TS	
[Z_KeyDate_CF]	Key Date (CF)	
[Z_LAST_UPDATE]	Last Update	
[_BA1_C55ACCSY]	Accounting System	
[_BA1_C55CONTCT]	ContractCategory	
[_BA1_C55CONTCT_1]	Contract Category1	
[_BA1_C55CONTID]	Calculation Level	
[_BA1_C55LGENT]	LegalEntity	
[_BA1_C55PFID]	CSM Group	
[_BA1_CIDPSEID]	Coverage	
[_BA1_CR0KEYDAT]	Key Date	
[_BA1_CR0SRCSYS]	Source System	
[_BA1_CR0TCGUID]	Guid	
[_BA1_CRCCFCATG]	Contract Category	
[_BA1_CRCCHDCF]	Change Driver	
[_BA1_CRCDUEDAT]	Due Date	

Dimensions

[_BA1_CRCINCDAT]	Incurred Date
[_BA1_CRCISDAT]	Issue Date
[_BA1_CRCPAYCAT]	Cost or Reveneue Element
[_BA1_CRCREPDAT]	Reported Date
[_BA1_CRCSETDAT]	Settled Date
[_BA1_KRCCFAMDC]	Coverage Amount Currency
[_BA1_KRCCFAMEC]	Expected Amount Currency

Measures

_BA1_KRCCFAMD	Coverage Amount
_BA1_KRCCFAME	Expected Amount

2.12.3.4 Model for Profit & Loss GMM IFRS17 (SAP__FS_FPS_PROFITANDLOSSGMM)

Model Name: SAP__FS_FPS_PROFITANDLOSSGMM	Connection
• Model Description: S/4 HANA FPSL - Model for Profit&Loss GMM IFRS17 • Planning Enabled: No • Model Purpose: This model measures and dimension to analyse changes in Insurance Liabilities	• Connection type: Direct Live connection to HDB: SAPFPSLHDB • Connection Query: Z_PROFITANDLOSS_QUERY • Mandatory Variables: Legal Entity, Period Start Date, and Period End Date

Dimensions

Name	Description	Mapping
[CF_VERSION]	Version Number (CF)	
[CONCTTEXT_CF]	Contract Category Text (CF)	
[CONCTTEXT_EPS]	Contract Category Text (EPS)	
[CONTCT_CF]	Contract Category (CF)	
[CONTCT_EPS]	Contract Category (EPS)	
[CSMGROUP_CF]	CSM Group (CF)	
[CSMGROUP_CSM]	CSM Group (CSM)	
[CSMGROUP_EPS]	CSM Group (EPS)	
[HOLDCAT_ID]	Holding Category	
[HOLDCT_TEXT]	Holding Category Text	
[MAX_KEYDATE_AC]	Last Update Actuarial Contract	

Dimensions

[MAX_KEYDATE_AP]	Last Update Actuarial Portfolio
[Measures]	Measures
[ONSTIR_TEXT]	Onerousness Status IR Text
[PAYCAT_CF]	Cost or Revenue Element
[PAYCAT_EPS]	Cost or Revenue Element (EPS)
[PAYCAT_TEXT_CF]	Cost or Revenue Element Text
[PAYCAT_TEXT_EPS]	Cost or Revenue Element Text (EPS)
[TXTMI]	Change Driver Text (CF)
[UNITACCOUNT_EPS]	Calculation Level (EPS)
[Z_DUEDATE_CF]	Due Date (CF)
[Z_INCDATE_CF]	Incurred Date (CF)
[Z_KeyDate_CF]	Key Date (CF)
[Z_KeyDate_CSM]	Keydate CSM Group
[Z_KeyDate_EPS]	Key Date (EPS)
[Z_LAST_UPDATE]	Last Update
[Z_REPDATE_CF]	Reported Date (CF)
[Z_SETDATE_CF]	Settled Date (CF)
[_BA1_C55CONTID]	Calculation Level (CF)
[_BA1_C55LGENT]	Legal Entity
[_BA1_C55ONSTIR]	Onerousness Status on Initial Recognition
[_BA1_CIDPSEID]	Coverage
[_BA1_CRCBECFVN]	Version Number (EPS)
[_BA1_CRCCHDCF]	Change Driver (CF)
[_BA1_CRCDUEDAT]	Due Date
[_BA1_CRCINCDAT]	Incurred Date
[_BA1_CRCREPDAT]	Reported Date
[_BA1_CRCSETDAT]	Settled Date
[_BA1_KRCCFAMDC]	CF Currency

Measures

Z_AMBAL_BEF_END	Amount To End Date (FCur)
Z_AMBAL_BEF_START	Amount Previous Period (FCur)
Z_AMBAL_PER_SEL	Amount Period (FCur)
Z_AMOBJ_BEF_END	Amount To End Date (TCur)

Z_AMOBJ_BEF_START	Amount Previous Period (TCur)
Z_AMOBJ_PER_SEL	Amount Period (Tcur)
Z_AMORT_CSM	Amortization of CSM
Z_AQUISITION_COST_AMORT	Amortization of acquisition costs
Z_EXP_ADJ_SERVICES	Experience Adjustment for Current/ Past Services
Z_EXP_BEN_EXP	Expected Benefits and Expenses
Z_INC_CLAIMS_SERV-ICE_EXP_CLAIMS	Incurred claims and other service expenses
Z_INS_CONTR_REVENUE	Insurance Contract revenue
Z_INS_FIN_EXP	Insurance Finance Expenses
Z_INS_INVEST_INC	Insurance Investment Income
Z_INS_SERV_EXP_TOTAL	Insurance Service Expenses
Z_INS_SERV_RESULT	Insurance Services Result
Z_NET_FIN_RESULT	Net Financial Result
Z_OTHER_COMPR_INC	Other Comprehensive Income
Z_PROFIT_LOSS	Profit and Loss
Z_REL_AQUIS_COST	Release of Aquisition Costs
Z_REL_OF_RISK_ADJ	Release of Risk Adjustment
Z_TOTAL_COMPR_INCOME	Total Comprehensive Income
_BA1_K5SAMBAL	Amount (FCur)
_BA1_K5SAMOBJ	Amount (TCur)

2.12.3.5 Model for Profit & Loss PAA IFRS17 (SAP__FS_FPS_PROFITANDLOSSPAA)

Model Name: SAP__FS_FPS_PROFITANDLOSSPAA	Connection
• Model Description: S/4 HANA FPSL - Model for Profit&Loss PAA IFRS17 • Planning Enabled: No • Model Purpose: This model measures dimensions to analyse changes in Insurance Liabilities	• Connection type: Direct Live connection to HDB: SAPFPSLHDB • Connection Query: Z_PROFITANDLOSS_PAA_QUERY • Mandatory Variables: Legal Entity, Period Start Date, and Period End Date

Dimensions

Name	Description	Mapping
[ACCRST_TEXT]	Accrual Status Text	

Dimensions	
[ACT_CONTRACT]	Actuarial Contract
[ACT_PF]	Actuarial Portfolio
[ALST_TEXT]	Asset/Liability Status Text
[CALWEEK]	Calendar Week
[CHANGE_REASON_GROUP]	Change Reason Group
[CHANGE_REASON_TXT]	Change Reason Description
[CHILDTEXT_UOA]	Text for Child Unit of Account
[CLIENT]	SAPClient
[CONTCT_TEXT]	Contract Category Text
[CalculationLevel]	Calculationlevel
[DATE]	Date
[GL_ACC_TXT]	GL Account Text
[LTEXT]	Profit Center Text
[MONTH]	Month
[Measures]	Measures
[ONRST_TEXT]	Onerousness Status IR Text
[ONSTIR_TEXT]	Onerous Status Text
[PAY_CAT_TXT]	Cost or Revenue Element Text
[PF_CONTRACT]	Portfolio Contract
[PROC_STEPID_TXT]	Process Step ID Text
[ProcessStepGroup]	Process Step Group
[QUARTERDESC]	Quarter
[SLALC_TEXT]	SubLedger LifeCycleStatus Text
[STEXT]	Organizational Unit Text
[SubLedgerAccountText]	SubLedgerAccountText
[SubledgerAccountGroupText]	SubledgerAccountGroupText
[SubledgerAccountGroup]	SubledgerAccountGroup
[UNIT_ACC]	Calculation Level
[YEAR_1]	Year
[Z_GLACCOUNT]	GL Account
[Z_PostingDate]	Posting Date
[_BA1_BIL_CURR]	Functional Currency
[_BA1_C41FINST]	Financial Instrument
[_BA1_C55ACCSY]	AccountingSystem

Dimensions

[_BA1_C55ALST]	Asset/Liability Status
[_BA1_C55CHGRSN]	Change Reason
[_BA1_C55CMETHY]	Methodology
[_BA1_C55CMETH]	Calculation Method
[_BA1_C55CONTCT]	Contract Category
[_BA1_C55DBCDF]	Debit/Credit Flag
[_BA1_C55DOCITM]	Document Item
[_BA1_C55DOCNUM]	Document Number
[_BA1_C55HOLDCT]	Classification
[_BA1_C55LGENT]	Legal Entity
[_BA1_C55ONRST]	Onerous Status
[_BA1_C55PFID]	CSM Group
[_BA1_C55PROCID]	Process Step ID
[_BA1_C55PRODSG]	Product Segment
[_BA1_C55SLACC]	SubLedgerAccount
[_BA1_C55SLALC]	SubLedger LifeCycleStatus
[_BA1_C55YPER]	Financial Period
[_BA1_C55_ONSTIR]	Onerousness Status on Initial Recognition
[_BA1_C58ACCRST]	Accrual Status
[_BA1_C58IMPSTA]	Impairment Status
[_BA1_C58WDST]	Write-down Status
[_BA1_C80ORGUNI]	Organizational Unit
[_BA1_CIDPSEID]	Coverage ID
[_BA1_CP0PRFCTR]	Profit Center
[_BA1_CRCBECFVN]	Version Number
[_BA1_CRCPAYCAT]	Cost or Revenue Element
[_BA1_OBJ_CURR]	Transaction Currency

Measures

Z_AQUI_COSTS_NOT_YET	Aquisition Costs not yet Paid
Z_EQUITY	Cumulated P&L Effect to Equity
Z_LIC_CLAIMS_PAID	Claims Paid (LIC)
Z_LIC_CLOSE_BAL	Closing Balance (LIC)
Z_LIC_IMP_CHG_BE_NON_FIN	Impact Due to Changes in BE Non-Financial Assumptions (LIC)

Measures	
Z_LIC_IMP_CHG_DM_RATE	Impact Due to Changes in Discount/ Market Rate (LIC)
Z_LIC_IMP_EXP_VAR	Impact due to Experience Variance (LIC)
Z_LIC_OPEN_BAL	Opening Balance (LIC)
Z_LIC_REL_LRC	Release from LRC (LIC)
Z_LIC_UNWIND	Unwind (LIC)
Z_LRC	Liability for Remaining Coverage
Z_PL_AMORT_AQUI_COSTS_neg	Amortization of Aquisition Costs
Z_PL_CHG_RISK_ADJ_INC_CLAIMS	Change in Risk Adjustment for incurred Claims
Z_PL_FIN_EXP_INC	Insurance Finance Expense or Income
Z_PL_INCUR_CLAIMS	Incurred Claims
Z_PL_INS_CONTR_REV	Insurance Contract Revenue
Z_PL_INS_SERVICES_EXP	Insurance Services Expenses
Z_PL_INVEST_INCOME	Investment Income
Z_PL_NET_FIN_RESULT	Net Financial Result
Z_PL_OTHER_COMPR_INCOME	Other Comprehensive Income
Z_PL_SERVICES_RESULT	Insurance Services Result
Z_PL_TOTAL_INCOME	Total Comprehensive Income
Z_PREMIUMS_NOT_YET	Premiums not yet Paid
Z_RA_CHG_RISK_ADJ_LIC	Change in Risk Adjustment (LIC)
Z_RA_CLOSE_BAL_LIC	Risk Adjustment Closing Balance (LIC)
Z_RA_OPEN_BAL_LIC	Risk Adjustment Opening Balance (LIC)
Z_RA_UNWIND_LIC	Risk Adjustment Unwind (LIC)
Z_ULTIMATE_CLAIMS_EXPEC	Ultimate claims expectation (EoP)
Z_UPR	Unearned Premium Reserve

2.12.3.6 Model for SubLedger Postings IFRS17 (SAP__FS_FPS_SUBLEGERPOSTINGS)

Model Name: SAP__FS_FPS_SUBLEDGERPOSTINGS	Connection
• Model Description: S/4 HANA FPSL - Model for Sub-LedgerPostings IFRS17 • Planning Enabled: no • Model Purpose: This model measures and dimension to analyse changes in Insurance Liabilities	• Connection type: Direct Live connection to HDB: SAPFPSLHDB • Connection Query: Z_SUBLEDGER_POSTINGS_QUERY • mandatory Variables: Legal Entity, Period Start Date, Period End Date

Dimensions

Name	Description	Mapping
[ACCRST_TEXT]	Accrual Status Text	
[ACT_CONTRACT]	Actuarial Contract	
[ACT_PF]	Actuarial Portfolio	
[ALST_TEXT]	Asset/Liability Status Text	
[CHANGE_REASON_TXT]	Change Reason Description	
[CHILDTEXT_UOA]	Text for Child Unit of Account	
[CHNGR_GROUP]	Chngr Group	
[CLIENT]	SAPClient	
[CONTCT_TEXT]	Contract Category Text	
[GL_ACCOUNT]	GL Account	
[GL_ACC_TXT]	GL Account Text	
[LTEXT]	Profit Center Text	
[Measures]	Measures	
[ONRST_TEXT]	Onerousness Status IR Text	
[ONSTIR_TEXT]	Onerous Status Text	
[PAY_CAT_TXT]	Cost or Revenue Element Text	
[PAY_CAT_TXT]	Payment Category Text	
[PF_CONTRACT]	Portfolio Contract	
[PROC_STEPID_TXT]	Process Step ID Text	
[ProcessStepGroup]	Process Step Group	
[SLACC_GROUP]	Slacc Group	
[SLALC_TEXT]	SubLedger LifeCycleStatus Text	
[STEXT]	Organizational Unit Text	
[SubLedgerAccountText]	SubLedgerAccountText	
[SubledgerAccountGroupText]	SubledgerAccountGroupText	

Dimensions	
[Time]	Time
[UNIT_ACC]	Calculation Level
[UNIT_ACC]	Unit of Account
[UoA]	Uoa
[XBILK]	XBILK
[Z_GLACCOUNT]	GL Account
[Z_PostingDate]	Posting Date
[_BA1_BIL_CURR]	Functional Currency
[_BA1_C41FINST]	Financial Instrument
[_BA1_C55ACCSY]	Accounting System
[_BA1_C55ACCSY]	AccountingSystem
[_BA1_C55ALST]	Asset/Liability Status
[_BA1_C55CMETHY]	Methodology
[_BA1_C55CMETH]	Calculation Method
[_BA1_C55CONTCT]	Contract Category
[_BA1_C55DBCDF]	Debit/Credit Flag
[_BA1_C55DOCITM]	Document Item
[_BA1_C55DOCNUM]	Document Number
[_BA1_C55HOLDCT]	Classification
[_BA1_C55LGENT]	Legal Entity
[_BA1_C55ONRST]	Onerous Status
[_BA1_C55PFID]	CSM Group
[_BA1_C55POSTD]	DateSAP
[_BA1_C55PROCID]	Process Step ID
[_BA1_C55PRODSG]	Product Segment
[_BA1_C55SLALC]	SubLedger LifeCycleStatus
[_BA1_C55YEAR]	Fiscal Year
[_BA1_C55YPER]	Financial Period
[_BA1_C55YPER]	Fiscal Year Period
[_BA1_C55_ONSTIR]	Onerousness Status on Initial Recognition
[_BA1_C58ACCRST]	Accrual Status
[_BA1_C58IMPSTA]	Impairment Status
[_BA1_C58WDST]	Write-down Status
[_BA1_C80ORGUNI]	Organizational Unit

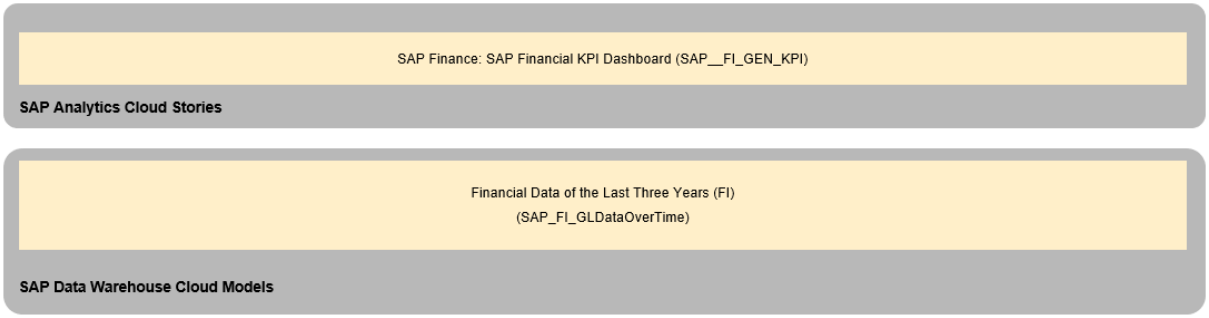
Dimensions	
[_BA1_C80ORGUNI]	_BA1_C80ORGUNI
[_BA1_CIDPSEID]	Coverage ID
[_BA1_CP0PARTPC]	Profit Center
[_BA1_CP0PRFCTR]	Profit Center
[_BA1_CP0PRFCTR]	_BA1_CP0PRFCTR
[_BA1_CRCBECFVN]	Version Number
[_BA1_CRCPAYCAT]	Cost or Revenue Element
[_BA1_CRCPAYCAT]	Payment Category
[_BA1_OBJ_CURR]	Transaction Currency

Measures	
Z_AMBAL_BEF_END	Amount To End Date (FCur)
Z_AMBAL_BEF_START	Amount Previous Period (FCur)
Z_AMBAL_PER_SEL	Amount Period (FCur)
Z_AMOBJ_BEF_END	Amount To End Date (TCur)
Z_AMOBJ_BEF_START	Amount Previous Period (TCur)
Z_AMOBJ_PER_SEL	Amount Period (Tcur)
_BA1_K5SAMBAL	Amount (FCur)
_BA1_K5SAMOBJ	Amount (TCur)

2.13 Finance for SAP S/4HANA Cloud

2.13.1 Architecture and Abstract

The purpose of the Financial KPI Dashboard, is to focus only on the financial views and KPIs. The dashboard offers basic finance reports, such as a general Corporate Overview, Profit& Loss and a Balance Sheet. In addition, the dashboard offers further financial KPIs. The data source is a Data Warehouse Cloud Model based on SAP S/4 HANA Cloud.



2.13.2 Stories

2.13.2.1 Corporate Overview

The Corporate Overview page provides business users a financial overview with an analysis view of the most important financial metrics, such as Operating Profit, Total Revenue with filters on Company Code and on Profit Center including delta comparison year over year and actual to plan.

The Corporate Overview page is composed of following KPIs:

- Total Revenue
- Operating Profit
- Gross Profit
- Operating Margin %
- Earnings Before Interest, Taxes, Depreciation, Amortization (EBITDA)
- Return on Equity in % (ROE)
- Debt to Equity in %
- Working Capital
- Shareholder's Equity
- Operating Cash Flow

The following table show the relevant basic measure calculation used in the story. Further calculations exist, which typically filter on version (ActualPlanCode) and time (YearType).

Measure Name	Type	Formula / Properties
Cost of Goods Sold (COGS)		- Measure COGS and Time Dimension Year Type - Compare COGS Current Year Actuals to COGS Last Year Actuals - Compare COGS Current Year Actuals to COGS Current Year Plan - Set No Data as Zero [Yes] - Calculate as Percentage [No]
Debt To Asset %		Current Liabilities / Current Assets
Debt to Equity %		Current Liabilities / Shareholders Equity
Net Revenue		Gross Revenue - COGS
Operating Income		Operating Profit - Amortization of Intangible Asset
Operating Margin %		Operating Profit – Recognized Revenue

Measure Name	Type	Formula / Properties
ROA in %		Net Income – Assets
ROE in %		Net Income – Shareholders Equity
ROE in %		Current Assets – Current Liabilities

2.13.2.2 Profit and Loss

The Profit & Loss page provides an overview of additional key performance indicators (KPI) related to the income statement and balance sheet.

Find information on most relevant KPIs and their performance over time.

The page is divided into two areas. The upper part shows KPIs related to the financial statement with input controls of Company Code, Cost Center and Profit Center. The part below shows basic Profit & Loss KPIs over time.

The Profit & Loss page is composed of following KPIs:

- COGS
- Operating Margin %
- Employee Expense
- Gross Margin
- Income Tax
- Interest
- Net Income
- Total Operating Expense
- Operating Income
- Net Revenue
- Gross Margin %

2.13.2.3 Balance Sheet

The Balance Sheet focus on Assets and Liabilities as well as Shareholders' Equity. The KPIs show the current financial state.

- Balance Sheet KPIs:
- Return on Asset %
- Asset Turnover %
- Debt to Asset %
- Accounts Payables Changes
- Accounts Receivables Changes

- Current Asset
- Current Liability
- Shareholders' Equity

2.13.3 Models

The story is using the following Data Warehouse Cloud model. It's based on a live connection to the SAP Data Warehouse Cloud system. Setup the connection with the name **SAPDWC**.

Model Name: Financial Data of the Last Three Years (FI)

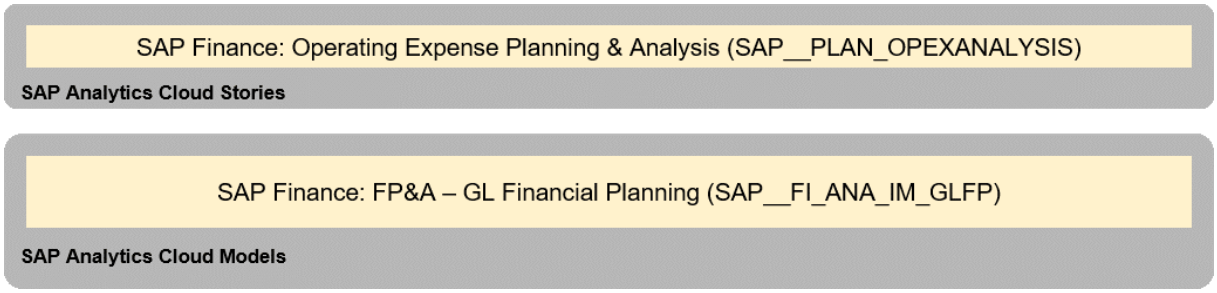
Technical Name: SAP_FI_GLDataOverTime

Please navigate to the SAP Data Warehouse Cloud documentation for more details.

2.14 Finance: Operational Expense (OPEX) Planning and Analysis

2.14.1 Architecture and Abstract

Integration between S4HC and SAC is set up for integrated scenario where SAP Analytics cloud leverage the model and data from S4HC.



Usage in SAP Analytics Cloud

To best leverage the model and data from S4HC in SAP Analytics Cloud, any modification or addition to the model master data should be change in S4HC (source system) to avoid master data override when the model is refreshed from S4HC.

2.14.2 FP&A - GL Financial Planning

2.14.2.1 SAP__FI_ANA_IM_GLFP

Model Name: SAP__FI_ANA_IM_GLFP			
Model Description: Financial Planning & Analysis - General Ledger Financial Planning			
Planning Enabled: Yes			
SAP_FI_S4HC_GLACCOUNT – G/L Account			
ID	**Description**	**Formula**	
KPI0010	Revenue	[FPA1/022]	
KPI0015	Net Revenue	[FPA1/021]	
KPI0020	COGS	[FPA1/020]	
KPI0022	Personnel	[FPA1/033]	
KPI0024	Depreciation	[FPA1/025]	
KPI0026	Other Operating Expense	[FPA1/018]	
KPI0030	Operating Income	[FPA1/016]	
KPI0040	Net Income	[FPA1/08]	
KPI0070	Interest Expense	[FPA1/013]	
KPI0090	Shares Outstanding	[SHARES]	
KPI0100	Gross Margin	[FPA1/017]	
KPI0110	Gross Margin %	[KPI0100]/[KPI0015]	
KPI0120	Return on Sales %	[KPI0040]/[KPI0010]	
KPI0140	Earnings per Share	[KPI0040]/[KPI0090]	
KPI0170	Operating Margin %	[KPI0030]/[KPI0010]	
KPI0180	EBIT	[FPA1/09]	
KPI0181	EBITDA	[KPI0180]+[FPA1/025]	
KPI0183	EBIT %	[KPI0180]/[KPI0010]	
KPI0185	EBITDA %	[KPI0181]/[KPI0010]	
KPI0190	Operating Expense	[KPI0020]+[KPI0022]+[KPI0024]+[KPI0026]	
KPI0210	Market Share %	[COMPANY_MARKET]/[TOTAL_MARKET]	
Dimensions			
Dimension Name	**Dimension Description**	**Dimension type**	**Public/Private Dimension**
Time & Categories	Time & Categories	Time (lowest granularity = month)	Private
Version	Version	Version (Actual, Plan)	Private
G/L Account	G/L Account		Public

Model Name: SAP__FI_ANA_IM_GLFP		
Company Code	Company Code	Public
Cost Center	Cost Center	Public
Functional Area	Functional Area	Public
Profit Center	Profit Center	Public
Audit Trail	Audit trail for data source	Private
Additional Notes about the model		
Model is provided as part of the standard prebuilt content delivered in the S4HC Best Practice Solution Package Real Time Finance & Planning Best practice methodologies to integrate real-time S/4HANA Cloud with SAP Analytics for Cloud. The content leverages P&L CDS-Views based on S/4HANA Cloud Finance data (Actual from ACDOCA and Plan from ACDOCP). In the planning scenario, Actuals are acquired (ACDOCA) from S/4HANA Cloud and Plan data retracted from SAP Analytics Cloud back into S/4HANA Cloud (ACDOCP).		
Data Source Connection and Integration		
Connection type: Import Data Connection to OData Services Link to data source documentation in S/4HANA Cloud Best Practice Solution Package Real Time Finance & Planning: https://rapid.sap.com/bp/scopeitems/2EB		

2.15 Financial Planning & Analysis for SAP S/4HANA Cloud (SAP BEST PRACTICES)

2.15.1 Financial Planning & Analysis for SAP S/4HANA Cloud (SAP BEST PRACTICES)

SAP Best Practices: Suite for Financial Planning & Analysis for SAP S/4HANA Cloud is made up of the following components. Follow the links for further information.

- Financial Planning for S/4HANA Cloud
  - P&L (Cost Center, Profit Center) planning based on S/4HANA Cloud
  - Share a financial model with analytics users
- Financial Analysis for S/4HANA Cloud
  - Merge data from multiple financial sources into SAP Analytics Cloud
  - Leverage SAP Analytics Cloud-based Plan data into analytics
  - Share a financial model with planning users
- Workforce Planning for SAP S/4HANA Cloud (SAP Best Practices)
  - Combine data from SuccessFactors and SAP S/4HANA Cloud for workforce planning and analysis
- Sales Planning For SAP S/4HANA Cloud (SAP Best Practice)
  - Offers gross margin planning and analysis in SAP Analytics Cloud based on SAP S/4HANA Cloud financial structures

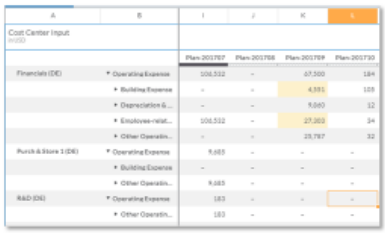
SAP Best Practices for Analytics > Finance

SAP Financial Planning & Analysis for SAP S/4HANA Cloud

SAP Analytics Cloud

Finance: 1U8/2EB/2IJ

Planning

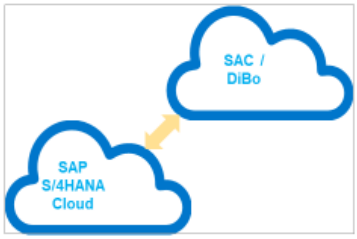


- Prebuilt financial planning model tied to SAP S/4HANA Cloud
- Accelerators include: planning input templates, Actual v Plan reports, best practice allocations, and planning process flow
- Profit & Loss, Balance Sheet & Cash Flow planning & analysis

Analysis

- Prebuilt set of analytical dashboards, key performance indicators, and reports
- Accelerators include: Digital Boardroom scenario, Trend reports, Year-over-Year reports, option to leverage real-time data and KPIs

Integration



- Best Practices to integrate financial results from SAP S/4HANA Cloud into SAP Analytics Cloud, plus retract Plan data back into SAP S/4HANA Cloud
- Accelerators include pre-built integration jobs & best practice integration methodologies

6

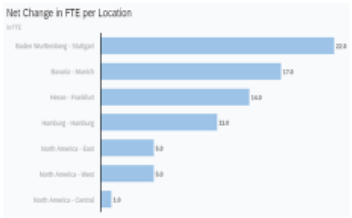
SAP Best Practices for Analytics > Finance / HR

SAP Workforce Planning for SAP S/4HANA Cloud

SAP Analytics Cloud

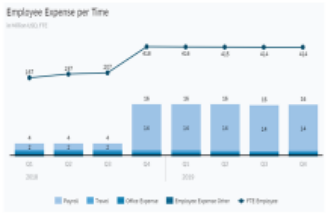
Finance / HR – 3DJ

Headcount Planning



- Prebuilt workforce planning model based on SAP SuccessFactors & SAP S/4HANA Cloud
- Accelerators include: planning input templates, variance reports, dashboard, & a planning process flow
- Plan hires, transfers, terminations

Employee Expense Planning

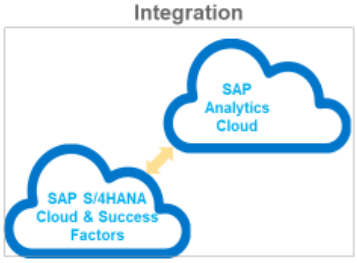


Planners plan employee-related expense: salary, bonus, benefits, travel, & office expense

"Assumption generator" leverages historical trends into the workforce planning process

Enables the initial layer of cost center planning in a financial planning & analysis scenario

Integration



- Best Practices to integrate historical headcount & latest salary from SAP SuccessFactors Employee Central into SAP Analytics Cloud
- Best Practices to integrate employee expenses from SAP S/4HANA Cloud into SAP Analytics Cloud
- Accelerators include integration jobs & best practice integration methodologies

8

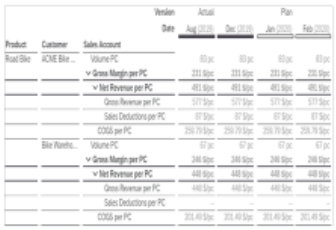
SAP Best Practices for Analytics > Finance / Sales

SAP Sales Planning for SAP S/4HANA Cloud

SAP Analytics Cloud

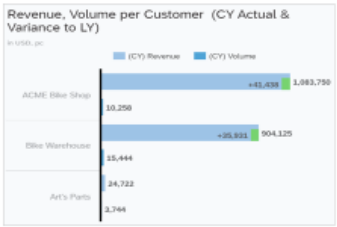
Finance: 4DP

Planning



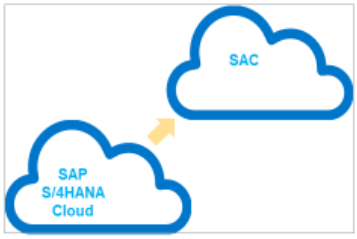
- Prebuilt sales planning model tied to SAP S/4HANA Cloud
- Accelerators include: planning input templates, Actual v Plan reports, best practice disaggregation, and planning process flow

Analysis



- Prebuilt set of analytical dashboards, key performance indicators, and reports
- Accelerators include: Trend reports, Year-over-Year reports, Quantity, price, revenue, & cogs mix analysis

Integration



- Best Practices to integrate sales finance results from SAP S/4HANA Cloud into SAP Analytics Cloud
- Accelerators include pre-built integration jobs & best practice integration methodologies

You can import all this content from the SAP Analytics Cloud: Business Content library, under:

- Financial Planning & Analysis for S/4HANA Cloud (SAP Best Practices)
- Workforce Planning for SAP S/4HANA Cloud (SAP Best Practices)
- SAP Sales Planning for SAP S/4HANA Cloud (SAP Best Practices)

For questions or comments, please contact S/4HANA Cloud product managers below:

- Mark P. Burke – **mark.p.burke@sap.com** – Financial Planning & Analysis
- Hardeep Tulsi – **h.tulsi@sap.com** – Finance Analytics

2.16 Financial Products Subledger for SAP S/4HANA

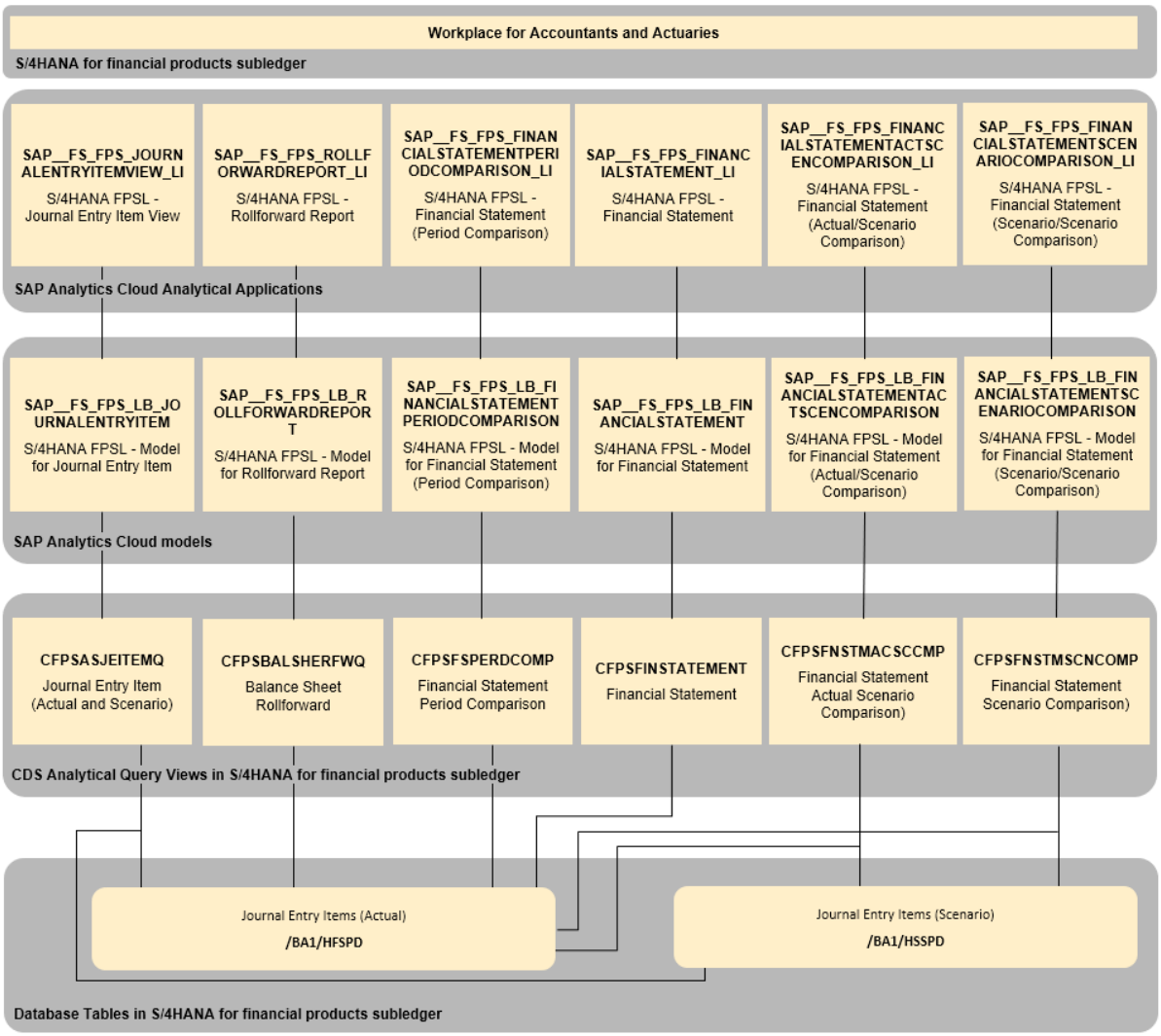
2.16.1 Architecture and Abstract

The financial products subledger for S/4HANA Workplace for Accountants and Actuaries comprises several SAP Analytics Cloud analytical applications for subledger reporting. In detail, the following analytical applications are provided as SAP Analytics Cloud content:

- Journal entry item view
- Financial statement reports for the following:
  - Actual key date
  - Comparison of two key dates
  - Comparison of actual and scenario data for a key date
  - Comparison of two scenarios for a key date
  - Rollforward Report

All of the above-mentioned SAP Analytics Cloud analytical applications require the availability of financial products subledger for S/4HANA FP02 (or higher) based on S/4HANA 1809. The SAP Analytics Cloud content applications require a live data connection to the S/4HANA FPSL system.

Architecture



2.16.2 Analytical Applications

2.16.2.1 Journal Entry Item View (SAP__FS_FPS_JOURNALENTRYITEMVIEW_LI)

The analytical application *Journal Entry Item View* allows you to display journal entry items for a legal entity, accounting system and a posting date period.

On the canvas page of the application, a standardized view shows journal entry items with the following dimensions and measures:

Dimensions:

- Journal Entry Item Number

- Posting Date
- Line Item Number
- Debit/Credit Indicator
- G/L Account
- Subledger Account
- Process Step ID
- Calculation Method
- Contract Category
- Contract ID
- Financial Instrument ID
- Measures:
- Local Currency Amount
- Functional Currency Amount
- Group Currency Amount
- Transaction Currency Amount

At the top of the canvas page, a filter line allows you to filter based on specific dimensions. By clicking on the Settings icon in the top right-hand corner, a popup appears, which allows you to add additional dimensions and measures. In this popup window, dimensions and measures can be selected in a checkbox group. The checkbox group contains all subledger coding block dimensions included in the S/4HANA FPSL virtual data model. These can be enhanced by custom fields using extension views. In addition, the display mode of all dimensions can be changed. The setting *Default* keeps the individual setting specified on the table level.

The Explorer icon allows you to switch to the explorer mode.

For a detailed view of one journal entry item, you can click on a line item. A popup window appears that gives you insights into all coding block dimensions. While the first tab in the popup window gives an overview, the header tab shows all coding block dimensions belonging to the journal entry item header. The item tab shows all the coding block dimensions of each item. The last tab (the status dimension tab) shows analytical statuses and the G/L account.

2.16.2.2 Financial Statement

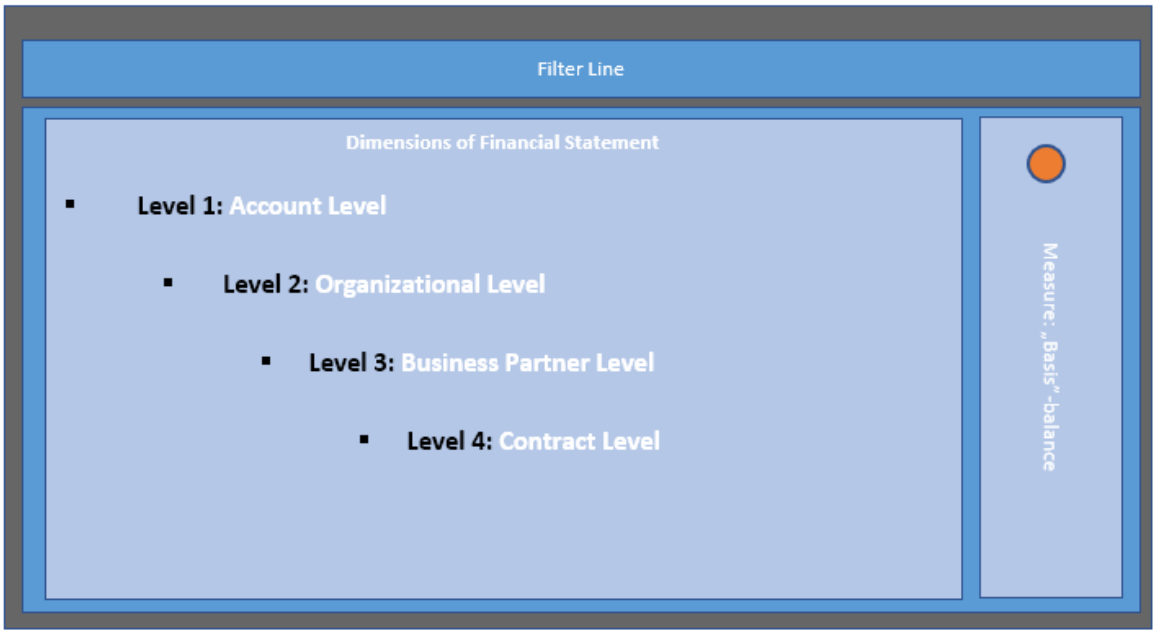
The analytical application "Financial Statement" allows you to display a balance sheet and profit and loss statement for a legal entity, accounting system and a key date.

On the canvas page of the application, a standardized view shows the financial statement with the G/L account hierarchy in functional currency. At the top of the canvas page, a filter line allows you to filter based on specific dimensions. By clicking on the *Settings* icon in the top right-hand corner, additional dimensions can be added, the currency type can be switched from functional currency to another currency using a dropdown menu. Additionally, the financial statement can be reduced to display only accounts for the balance sheet or only the accounts for profit & loss.

By choosing additional dimensions, you can drill down in the balance sheet at the following 4 levels:

1. Account Level
   Default dimension: General Ledger Account (Hierarchy)
2. Account Level
   Dimensions: Segment, Profit Center (Hierarchy)

3. Business Partner Level
   Dimensions: Industry (Hierarchy), Industry Segment, Industry System
4. Contract Level
   Dimensions: Contract, Financial Instrument



Selectable Currency Measures:

- Transaction Currency Amount
- Amount in Functional Currency
- Local Currency Amount
- Group Currency Amount
- Hard Currency Amount
- Index Currency Amount
- Add. Currency 1 Amt
- Add. Currency 2 Amt
- Add. Currency 3 Amt
- Add. Currency 4 Amt

2.16.2.3 Financial Statement (Period Comparison)

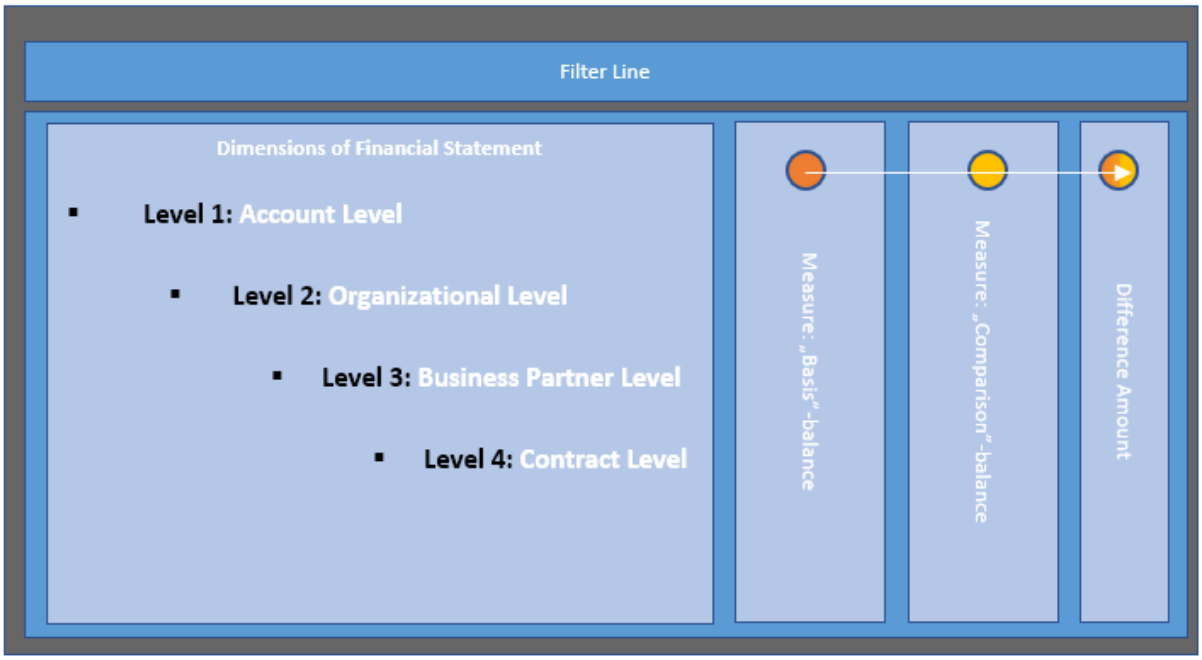
The analytical application "Financial Statement (Period Comparison)" allows you to compare two balance sheets and profit and loss statements for a legal entity and accounting system on two different key dates.

For more details about filtering, adding dimensions and changing currencies later on, please see the *Financial Statement* section.

The canvas page of the application has the following structure and shows three different currency amounts:

- Basis balance
- Comparison balance

- Difference amount (= basis balance ./. comparison balance)



2.16.2.4 Financial Statement (Actual/Scenario Comparison)

The analytical application "Financial Statement (Actual/Scenario Comparison)" allows you to compare two financial statements for a legal entity and accounting system on a key date. The comparison amount corresponds to a scenario (identified by the Scenario Run ID). The prerequisite for using this application is that you are using the Forecasting, Planning, and Simulation function of financial products subledger for S/4HANA.

For details about filtering, adding dimensions, and changing currency types later on, and about the structure of the canvas page, please see the *Financial Statement (Period Comparison)* section.

2.16.2.5 Financial Statement (Scenario/Scenario Comparison)

The analytical application *Financial Statement (Scenario/Scenario Comparison)* allows you to compare two financial statements of a legal entity, accounting system, key date and two different scenario run IDs. The prerequisite for using this application is that you are using the Forecasting, Planning, and Simulation function of financial products subledger for S/4HANA.

For details about filtering, adding dimensions, and changing currency types later on, and about the structure of the canvas page, please see the *Financial Statement (Period Comparison)* section.

2.16.2.6 Rollforward Report

The analytical application *Rollforward Report* allows you to display the development of balance sheet positions of a legal entity and accounting system for a freely defined posting date period.

The canvas page is split into two panels. The upper panel shows a waterfall chart for the dimension *Accounting Change*, which is represented as a hierarchy and has the following level-1 items: previous recognition, initial recognition, time recognition, experience recognition, update recognition and derecognition. The measure for currency amounts can be selected in the *Settings* popup, while amounts in functional currency are shown in the default setting.

The lower panel shows the information on which the waterfall chart is based. The columns show the chosen currency measures divided into the accounting changes. This hierarchy can be used to drill down to all detailed accounting changes. By default, the table rows show the G/L account hierarchy. At the top of the canvas page, a filter line allows you to filter table entries based on specific dimensions.

The following dimensions can be added using the *Settings* popup:

- Segment
- Profit Center (Hierarchy)
- Industry (Hierarchy)
- Industry Segment
- Industry System
- Contract
- Financial Instrument

The following currency measures can be selected:

- Amount in Functional Currency
- Local Currency Amount
- Group Currency Amount
- Hard Currency Amount
- Index Currency Amount
- Add. Currency 1 Amt
- Add. Currency 2 Amt
- Add. Currency 3 Amt
- Add. Currency 4 Amt

2.16.3 Models

2.16.3.1 Journal Entry Line Items (SAP__FS_FPS_LB_JOURNALENTRYITEM)

Model Name: SAP__FS_FPS_LB_JOURNALENTRYITEM	Connection
• Model Description: Journal Entry Items • Planning Enabled: No • Model Purpose: This model provides journal entry items comprising all subledger coding block dimensions	• Connection Type: Data import from SAP BW (this is the interface used to access CDS Queries) Which system: Financial products subledger for SAP S/4HANA • Connection Query: Journal Entry Items (2CCFPSASJEITEMQ) ○ Mandatory Variables: Legal Entity, Accounting System, Posting Date ○ Optional Variables: Accounting Scenario, Accounting Scenario Run, Scenario Reference Date, Contract, Contract Source System, Financial Instrument ID

Dimensions

Name	Description	Mapping
FPSDATABASEPARTITIONINGNMBR	Partitioning Key	2CHD4UX78XGTMLJEVX3LTRK2UU0
POSTINGDATE	Posting Date	2CICALENDARDATE
FPSACCOUNTINGSYSTEM	Accounting System	2CIFPSACCSYST
FPSLEGALENTITY	Legal Entity	2CIFPSLEGENT
FPSSUBLDGRJOURNALENTRY	Journal Entry Number	2CNKUSL141AYOJI2FDRAEBA3NT2
FPSRESULTTYPE	Result Type	2CQ7D2RN7U2O2NKPL8MBUMAHVM1
FPSRESULTDATAAREA	Results Data Area	2CQTSPD9TK6EL6SKNOD8ZPDVD1W
FPSACCTGSCENPROCESSCATEGORY	Process Category	2CTXWWNYA4I3PNR3PIEZCFGRUIC
FPSSUBLDGRJOURNALENTRYITEM	Journal Entry Line Item Number	2CU8GLTI4SIJWYLZ4ELGD1RVOU8
FPSSUBLDGRACCTBALLFCYCSTAGE	Lifecycle Stage (Subledger Account)	2CF8T8F1LNHCLGTIHFIVIAQAY82
FPSFINPRODTRANSITIONAPPROACH	Transition Approach	2CFH6OA3JJVGCAPSQPUAKU131BU
FPSSECURITYPOSITIONLOT	Lot ID	2CFO9S4G0CH57YD7SFB19RI0OSQ
FPSFINANCIALPRODUCTSTATUS	Contract Status	2CFOSEQDDHJTPQP6E5KDEZJPT5U
FPSBUSTRANSACTRANSACTIONTYPE	Transaction Type	2CFQSYH07RX88JQ809MSGEDPHZL
FPSINSURCONTRCVRGSBPERDSTRTDTE	Coverage Subperiod Start Date	2CFRSN6PO68PNCZ10ORCP58QY5A

Model Name: SAP__FS_FPS_LB_JOURNALENTRYITEM		Connection
FPSSUBLDGRJRNLENTRRSET-POSTGDTE	Posting Date of Reset	2CG1U0HTM7Z45VYXVTOBOYR9B6S
FPSBUSTRANSACTIONVATCOUNTRY	Tax Country	2CG44SJLD83TDUZR7EN7M8DMW0U
FPSFINPRODASSETLIABILITYSTATUS	Asset/Liability Status	2CGHANERC0ITHJTWA962493VMHT
FPSFINPRODMKTCONFORMITYSTA-TUS	Market Conformity Status of Contract	2CGQ9749XC9BK306SMI20MIQR1K
FPSFINPRODWRITEDOWNSTATUS	Write-Down Status	2CGZ54V3X54DNVYR4VMDCOI2VAY
FPSBESTESTCASHFLOWISCANCELED	Cancellation Indicator	2CH02M6NFZ28BUHCJCHF1O6PO7X
FPSSUBLDGRJOURNALENTRYRSE-TREF	Reference to Reset Journal Entry	2CH5M7MANMN6EJ5CE0NAYM5HELI
FPSPORTFOLIOCATEGORY	Portfolio Category	2CHFX745FK0R6IYS4HXMD7VHOQU
FPSREINSURCONTRACTBUSINES-STYPE	Insurance Business Type	2CI88ZSDZAHG7SRPHZZHDSSZTQC
ACCOUNTINGPRINCIPLE	Accounting Principle	2CIACCPRINCIPLE
ACCOUNTINGDOCUMENTTYPE	Document type	2CIFIACCDOCTYPE
CHARTOFACCOUNTS	Chart of Accounts	2CIFICHOFACC
COMPANYCODE	Company Code	2CIFICOMPANYCODE
CONTROLLINGAREA	Controlling Area	2CIFICONTAREA
FISCALYEAR	Fiscal Year	2CIFIFYEARCC
FPSGENERALLEDGERACCOUNT	G/L Account Number	2CIFIGLACCINCOA
PROFITCENTER	Profit Center	2CIFIPROFITCENTER
PARTNERSEGMENT	Partner Segment for Segmental Re-porting	2CIFISEGMENT
FINANCIALTRANSACTIONTYPE	Consolidation Transaction Type	2CIFITRANSTYPE
FPSACCOUNTINGSCENARIORUN	ID of Accounting Scenario Run	2CIFPSACCSCENID
SEGMENT	Segment for Segmental Reporting	2CIFPSASJEITEMC-SEGMENT
FPSTGTBALANCECALCULATIONME-THOD	Calculation Method	2CIFPSCMETH
FPSTGTBALCALCMETHODOLOGY	Calculation Methodology	2CIFPSCMETHY
DEBITCREDITCODE	Debit/Credit Indicator	2CIFPSDEBITCREDITC
FPSFINANCIALPRODUCTCATEGORY	Contract Category	2CIFPSFINPRODCAT
FPSFINANCIALPRODUCT	Contract	2CIFPSFINPRODE
FPSFINANCIALSTATEMENTSEGMENT	Financial Statement Segment	2CIFPSFINSTMNTSGMT
FPSFINANCIALPRODUCTTYPE	Production Control	2CIFPSFPRODTYPE
FPSBUSPARTDISCLINDSTRYSGMT	Industry Segment (Balance Sheet)	2CIFPSINDSEG
FPSBUSPARTDISCLINDUSTRY	Industry	2CIFPSINDUSTRY
FPSBUSPARTDISCLINDSTRYSYST	Industry System	2CIFPSINDUSTRYH

Model Name: SAP__FS_FPS_LB_JOURNALENTRYITEM		Connection
FPSFINPRODUCTSOURCESYSTEM	Contract Source System	2CIFPSOURCESYSTEM
FPSACCOUNTINGPROCESSSTEP	Process Step ID for Process Controller	2CIFPSPROCID
FPSSECURITY	Financial Instrument ID	2CIFPSSECURITY
FPSSUBLEDGERACCOUNT	Subledger Account	2CIFPSSLACC
FPSTARGETBALANCECHANGE	Accounting Change	2CIFPSTARBALCH
FPSREPORTINGPRODUCTSEGMENT	Product Segment (Balance Sheet)	2CIR0BEAECXC4E4D457V23QWQOB
FPSFINPRODINITIALRECGNONRSSTS	Onerousness Status on Initial Recognition	2CIV36SKOEDBLT87Q2EP349IM6B
FPSBUSINESSTRANSACTION	Business Transaction ID	2CJ08HX8Z249H1MES6XH7JE6TER
FPSTIMESTAMPCOLLECTION	ID of Timestamp Collection	2CJ0W58EVGBV52GKVASPNWSEE4U
FPSRESULTCREATEDBY	Created By	2CJEHL8A0YUBM77R77CTPE3D4WN
FPSFINPRODONEROUSNESSSTATUS	Onerousness Status	2CK2O9AKVJI015YN0ROHVVUW7HQ
FPSBUSTRANSACTIONVATREFERENCE	ID of Reference Business Transaction	2CKL8FDUZUAQQI2N1F7IAY8D956
FPSPARKEDSUBLDGRJOURNALENTRY	Reference to Parked Subledger Journal En	2CKOOPY0PDS15OFTHMSPRLMHCPR
FPSLOSSEVENT	Loss Event ID	2CL2X8GPRXS7GRWA9LJMIAQJ5P9
FPSBECFCANCLDVERSIONREFERENCE	Cancellation Reference	2CLAT6ISL6CURNZ01AMSXQWXJMM
FPSFINPRODTERMSEGMENTSTATUS	Term Segment (Balance Sheet)	2CLDILY0286G6CE5H5T2ASGDE8K
FPSPRKDSUBLDGRJRNLENTRRELDBY	Preliminary Subledger Journal Entry Rele	2CLNHDXUM85RKEABQPICID700FO
FPSCONTRACTLIFECYCLESTAGE	Lifecycle Segment (Balance Sheet)	2CM35I04ABLBSFNE8PNY5Y8QNXL
FISCALYEARPERIOD	FIN Master Data: Fiscal Year and Period	2CM91PAZUAR0PMPEGBQN83CDLTQ
FPSBUSTRANSACTIONVALUEDATE	Value Date	2CMGB0RS9MY6R4M6SUSTDVZ6TAE
FPSFINPRODACCRUINGSTATUS	Accrual Status	2CMN9CIQ103SVV3CABECHX492IV
FPSSECURITYNODE	Node Number (Financial Instrument)	2CMNC5V2N2OC4GJ3MC4Y80RNBE6
ACCOUNTINGDOCUMENTHEADERTEXT	Journal Entry Header Text	2CN09A9K693J49BX0QCTNXKRKQS
FPSACCOUNTINGSCENARIO	Accounting Scenario	2CN0G51XO4NQZPQIOJU4P9DP7YG
FPSBUSTRANSACTIONISREVERSING	Reversal Business Transaction By Value	2CN7UW272BQXERMYW4IS4JTE921
FPSCASHFLOWCATEGORY	Cash Flow Category	2CNQA0JBXISBECC97ZP424S8L6U
FPSCOSTREVENUEELEMENT	Cost or Revenue Element	2CNQGUCD4C2QJBZUIJFYHLSJ5M1
FPSRESULTCREATIONDATETIME	Point in Time	2CO374NC4HVNDZOVCWQUMVX8IZV
FPSBUSTRANSACTIONREVERSEDREF	Business Transaction ID of Reversed BT	2CO4C3A355NID4AWTHNJ4D4SVM8
FPSJOURNALENTRYINVERTEDREF	Reference to Inverted Journal Entry	2CO6B5HBOY7WI8BEJIBA1Q85A9R
FPSSCENARIOREFERENCEDATE	Scenario Reference Date	2COA4N7ZJ6OS8KBA3ZDSTZLENDK

Model Name: SAP__FS_FPS_LB_JOURNALENTRYITEM		Connection
PARTNERPROFITCENTER	Partner Profit Center	2COENXOUE8BAD00INFJY0UMU0FI
FPSFINPRODCLASSIFICATIONSTATUS	Classification for Financial Products	2COII3X5YDAAPOHYBOU326F2I6A
FPSFINPRODIMPAIRMENTSTATUS	Impairment Status	2COPNX8NSSJN2L7VCXSIA08XGC2
FPSINSURCONTRCOVERAGESTART-DATE	Start Date of Coverage	2COR2UKYY80ZODJGHKHR7NN1VP4
ISBUSINESSPURPOSECOMPLETED	ISBUSINESSPURPOSECOMPLETED	2CP7B8ZIBLJZ480A2FI1XLUZX1F
FPSTGTBALINFLOWOUTFLOWIND	Inflow/Outflow	2CP88NO6LEWP4NQO22MX3UA5Z4M
FPSBUSTRANSACVALUEADDEDTAX-CODE	Tax Code	2CPJTXWG05QYE78MTPJNZYYOD2P
FPSSECURITYTYPE	Instrument Type	2CPZD9DAIS068A4VD067D1VVYL0
FPSBUSTRANSACVALUEADDEDTAX-TYPE	Transaction Key	2CQ779W85E3DMZK91145SKNJX4Y
FPSPOSTINGRECORD	Posting Record	2CQB2QKYGZNLTJV6ES6SJ2XK784
FPSBUSTRANSACTIONPOSTINGDATE	Document Date	2CQDVAIED38O9K2Q5QBZPILZ18D
FPSFINPRODFAIRVALUELEVELSTATUS	Level in Fair Value Hierarchy	2CQKB59ALGKF6O36T72SCA7K0K8
FPSSUBLDGRJOURNALENTRYISRSET	Reset Document	2CQPHQXPF6SQ9POC7N49SNPA7EU
FPSREINSURCONTRINVENTOR-YGROUP	Insurance Inventory Group	2CR20IRDXLZ7JZ3QFP5CZKO826D
FPSSECURITYSOURCESYSTEM	Securities Source System	2CRBNOG1D2L26J2E1BMKMCNDQCY
FPSPRKDSUBLDGRJRNLENTRCR-TEDBY	Preliminary Subledger Journal Entry	2CRKBX0K9NLMOHPDIPZT4HPIMYM
FPSSECURITIESACCOUNTCATEGORY	Securities Account Category	2CRQ02JZV4S1JOLS6MZU0PVGZOD
FPSBUSINESSTRANSACTIONITEM	Item Number	2CRXHG7Y3RHJOGSVS9HH14E0B5E
FPSBUSTRANSACTIONVATREFITEM	Reference Number of Business Transaction	2CS5N6Y9USO80WSV9SBVF5I9VMD
FPSSECURITYSTATUS	Securities Status	2CS74CMAFSIGE7KOB3Q5Q9LZZNN
FPSJOURNALENTRYISINVERTING	Inverting Journal Entry (X = Inverter)	2CSEE6KKB6AXOBILDKB9ATKBEA2
FPSBUSTRANSACTIONSOURCESYS-TEM	Source System of Business Transaction	2CSVXQ1ZKDQWLQ0DGP202JY8NK6
FPSINSURANCECONTRACTCOVER-AGE	Coverage Identifier	2CSZ914IZFZ3UFNGR6EEJIC15IN
FPSBUSTRANSACSOURCE-SYSTCRTNDTE	System Date in Source System	2CTRQUENFR2HMALU5QAANAOGIZF
FPSBESTESTIMATECASHFLOWVER-SION	Version Number	2CTZW89HPPUUTXN49YIFIV1U45V
FPSBUSTRANSACVATREFERENCETAX	Reference Tax Code	2CU02PUOSWJ9I6GJR6DT0WMAC60
FPSBUSTRANSACSOURCE-SYSTCRTNTME	System Time in Source System	2CU6459S6KMZ0MVER1BHLARG2TP

Model Name: SAP__FS_FPS_LB_JOURNALENTRYITEM		Connection
FPSFINANCIALPRODUCTNODE	Node Number	2CU97J6WSOPE8LLDGV52VLEO08O
INDEXBASEDCURRENCY	Index-Based Currency	2CGTIMU9XOT0H3460BXUYNLPBXM
FPSBUSTRANSACNOMINALCUR-RENCY	Key Figure Currency	2CHYE2220B56U80VY4LOC3F8VOK
FPSADDITIONALCURRENCY2	Additional Currency 2	2CI18HHZWISUB15TG2EE0Y6VIZR
FPSADDITIONALCURRENCY3	Additional Currency 3	2CIWTJ192XYXQS7OE0ZPTPWNZ3T
HARDCURRENCY	Hard Currency	2CJXO275TFM56NRVJFSA7RZIWY1
FPSFUNCTIONALCURRENCY	Functional Currency	2CLRV91R1PNQUBO8RA43HBASJLX
LOCALCURRENCY	Local Currency	2CMONVA6UGB1PXBCQEWDSGX2LM6
FPSBUSTRANSACTIONQUANTITYUNIT	Unit of Measure of a Key Figure	2CMWUFWSLFF25TAYTE0J2YWZYV9
GROUPCURRENCY	Group Currency	2CR16IPHNPEL6J7UL16S0CWQ3JQ
TRANSACTIONCURRENCY	Object Currency/Transaction Currency	2CR4335Y5XDV1O1E4JEWOMVW70V
FPSADDITIONALCURRENCY1	Additional Currency 1	2CR6ZPW25YU13VCQFNC25S5R233
FPSADDITIONALCURRENCY4	Additional Currency 4	2CSJ1JVD1OS0454J1807TM1E8BR
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		
Measures		
ELTUIDCMP1	Add. Currency 1 Amt	
ELTUIDCMP10	Trans. Crcy Amount	
ELTUIDCMP11	Quantity	
ELTUIDCMP12	Nominal Amount	
ELTUIDCMP13	Tax Base Amount (TC)	
ELTUIDCMP14	Tax Base Amount (FC)	
ELTUIDCMP2	Add. Currency 2 Amt	
ELTUIDCMP3	Add. Currency 3 Amt	
ELTUIDCMP4	Add. Currency 4 Amt	
ELTUIDCMP5	Local Currency Amnt	
ELTUIDCMP6	Amount in Func. Crcy	
ELTUIDCMP7	Group Crcy Amnt	
ELTUIDCMP8	Hard Crcy Amnt	
ELTUIDCMP9	Index Crcy Amnt	

2.16.3.2 Financial Statement

Model Name: SAP__FS_FPS_LB_FINANCIALSTATEMENT	Connection
• Model Description: Model for Financial Statement • Planning Enabled: No • Model Purpose: This model provides a financial statement, including balance sheet and profit and loss, for a certain key date	• Connection type: Data import from SAP BW (this is the interface used to access CDS Queries) Which system: Financial products subledger for SAP S/4HANA • Connection Query: Financial Statement (2CCFPSFINSTATEMENT) • Connection Variables: mandatory Variables: Legal Entity, Accounting System, Key Date

Dimensions		
Name	**Description**	**Mapping**
FPSRESULTTYPE	Result Type	2CG8WU3APHYUHTPZVKH51QETGZF
FPSACCTGSCENPROCESSCATEGORY	Process Category	2CHH05S64ON0GBGUYQLSOHGA1JE
FPSSUBLDGRJOURNALENTRYITEM	Journal Entry Line Item Number	2CI7VRQL4G8SH4VJ01DAQ4WT29Y
POSTINGDATE	Posting Date	2CICALENDARDATE
FPSACCOUNTINGSYSTEM	Accounting System	2CIFPSACCSYST
FPSLEGALENTITY	Legal Entity	2CIFPSLEGENT
FPSDATABASEPARTITIONINGNMBR	Partitioning Key	2CL52PDPVKL0XRGEQ52UNWKZ5RX
FPSRESULTDATAAREA	Results Data Area	2CMRC5OUB5FAGTFHE3X8857P820
FPSSUBLDGRJOURNALENTRY	Journal Entry Number	2CS7R8WPITG0QVT1YV7YY9XX3LJ
GLACCOUNTHIERARCHY	G/L Account Hierarchy	2CHSS1J78GXKS7PNJPN1917SYSY
CHARTOFACCOUNTS	Chart of Accounts	2CIFICHOFACC
COMPANYCODE	Company Code	2CIFICOMPANYCODE
CONTROLLINGAREA	Controlling Area	2CIFICONTAREA
FISCALYEAR	Fiscal Year	2CIFIFYEARCC
FPSGENERALLEDGERACCOUNT	G/L Account Number	2CIFIGLACCINCOA
PROFITCENTER	Profit Center	2CIFIPROFITCENTER
FPSFINANCIALPRODUCT	Contract	2CIFPSFINPRODE
SEGMENT	Segment for Segmental Reporting	2CIFPSFINSTATEMENT-SEGMENT
FPSFINANCIALSTATEMENTSEGMENT	Financial Statement Segment	2CIFPSFINSTMNTSGMT
FPSBUSPARTDISCLINDSTRYSGMT	Industry Segment (Balance Sheet)	2CIFPSINDSEG
FPSBUSPARTDISCLINDUSTRY	Industry	2CIFPSINDUSTRY
FPSBUSPARTDISCLINDSTRYSYST	Industry System	2CIFPSINDUSTRYH

Model Name: SAP__FS_FPS_LB_FINANCIALSTATEMENT		Connection
FPSFINPRODUCTSOURCESYSTEM	Contract Source System	2CIFPSOURCESYSTEM
FPSSECURITY	Financial Instrument ID	2CIFPSSECURITY
FPSREPORTINGPRODUCTSEGMENT	Product Segment (Balance Sheet)	2CLOAT6LGSI8GU44FJ7PTE44RVM
FPSADDITIONALCURRENCY1	Additional Currency 1	2CG19VA65QB8NHSZ92WF49TB07M
FPSADDITIONALCURRENCY4	Additional Currency 4	2CH75DHKTV10PDUY8S73O6DNRXH
INDEXBASEDCURRENCY	Index-Based Currency	2CL7LINZPZYB23B6NDRGPO1RDHL
FPSADDITIONALCURRENCY2	Additional Currency 2	2CLHUQAJ0JCOZVGVKSROTX3BDLM
FPSBUSTRANSACTIONQUANTITYUNIT	Unit of Measure of a Key Figure	2CLQF5HKUKCSA89HM7Z3EKXALGO
FPSBUSTRANSACNOMINALCUR-RENCY	Key Figure Currency	2CMHXP3VTIWJRE0MU32SK9L8GCS
HARDCURRENCY	Hard Currency	2CMS14LT8VVUCKMUHI6J8F5CCJ5
GROUPCURRENCY	Group Currency	2CMXG9CZO9J3K0PY60BXTH8N5HL
TRANSACTIONCURRENCY	Object Currency/Transaction Currency	2CNY9VUSENH2M74XRTEXT213YLJ
FPSFUNCTIONALCURRENCY	Functional Currency	2CPH45IZHOP2M6QB2S2BAT9WSQ3
FPSADDITIONALCURRENCY3	Additional Currency 3	2CTM5EYEQ1BXVXGZT3UATNSPGQP
LOCALCURRENCY	Local Currency	2CTO8NHNH2LYXLB0I4M3VOX7MQJ
		Connection Type Name of the Report
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		
Measures		
ELTUIDCMP1		Nominal Amount
ELTUIDCMP10		Add. Currency 2 Amt
ELTUIDCMP11		Add. Currency 3 Amt
ELTUIDCMP12		Add. Currency 4 Amt
ELTUIDCMP13		Tax Base Amount (TC)
ELTUIDCMP14		Tax Base Amount (FC)
ELTUIDCMP2		Quantity
ELTUIDCMP3		Trans. Crcy Amount
ELTUIDCMP4		Amount in Func. Crcy
ELTUIDCMP5		Local Currency Amnt
ELTUIDCMP6		Group Crcy Amnt
ELTUIDCMP7		Hard Crcy Amnt

Model Name: SAP__FS_FPS_LB_FINANCIALSTATEMENT	Connection
ELTUIDCMP8	Index Crcy Amnt
ELTUIDCMP9	Add. Currency 1 Amt

2.16.3.3 Financial Statement (Period Comparison)

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTPERIODCOMPARISON	Connection
• Model Description: Model for Financial Statement (Period Comparison) • Planning Enabled: no • Model Purpose: This model provides a financial statement, including balance sheet and profit and loss, of a legal entity and accounting system for two different key dates	• Connection type: Data import from SAP BW (this is the interface used to access CDS Queries) Which system: Financial products subledger for SAP S/4HANA • Connection Query: Financial Statement Period Comparison (2CCFPSFSPERDCOMP) • Connection Variables: Key Date, Key Date Benchmark, Legal Entity, Accounting System

Dimensions

Name	Description	Mapping
FPSRESULTDATAAREA	Results Data Area	2CFGNH2XZ60O5G5T15NYQO5W34A
FPSSUBLDGRJOURNALENTRY	Journal Entry Number	2CHJ1BX5H6UBBKTGBRCPWSGGG2Z
POSTINGDATE	Posting Date	2CICALENDARDATE
FPSACCOUNTINGSYSTEM	Accounting System	2CIFPSACCSYST
FPSLEGALENTITY	Legal Entity	2CIFPSLEGENT
FPSACCTGSCENPROCESSCATEGORY	Process Category	2CNLXM3A7HWYOHG240N24SSVMJT
FPSDATABASEPARTITIONINGNMBR	Partitioning Key	2CO8K8KYC20C1J13EYODH8WBAQB
FPSRESULTTYPE	Result Type	2COGET3HVJQZ3TVPRSYNRBRO932
FPSSUBLDGRJOURNALENTRYITEM	Journal Entry Line Item Number	2CQJF4RBFMLNECB8F7KXWX49X7R
CHARTOFACCOUNTS	Chart of Accounts	2CIFICHOFACC
COMPANYCODE	Company Code	2CIFICOMPANYCODE
CONTROLLINGAREA	Controlling Area	2CIFICONTAREA
FISCALYEAR	Fiscal Year	2CIFIFYEARCC
FPSGENERALLEDGERACCOUNT	G/L Account Number	2CIFIGLACCINCOA
PROFITCENTER	Profit Center	2CIFIPROFITCENTER
FPSFINANCIALPRODUCT	Contract	2CIFPSFINPRODE

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTPERIODCOMPARISON		Connection
FPSFINANCIALSTATEMENTSEGMENT	Financial Statement Segment	2CIFPSFINSTMNTSGMT
SEGMENT	Segment for Segmental Reporting	2CIFPSFSPERDCOMP-SEGMENT
FPSBUSPARTDISCLINDSTRYSGMT	Industry Segment (Balance Sheet)	2CIFPSINDSEG
FPSBUSPARTDISCLINDUSTRY	Industry	2CIFPSINDUSTRY
FPSBUSPARTDISCLINDSTRYSYST	Industry System	2CIFPSINDUSTRYH
FPSSECURITY	Financial Instrument ID	2CIFPSSECURITY
FISCALYEARPERIOD	Fiscal Year and Period	2CM13J5FK452TWVDGSBZ0IT77OF
FPSCOMPARISONPART	Analytic Comparison Part	2CNOVBP1RGXOSCDHNLAAAO-DOQWK
GLACCOUNTHIERARCHY	G/L Account Hierarchy	2CONCBOE2EVO92W5KI1QJMO7QQE
FPSREPORTINGPRODUCTSEGMENT	Product Segment (Balance Sheet)	2CTCZGPBGGJSVD8682PAJKH5W2N
FPSADDITIONALCURRENCY1	Additional Currency 1	2CFWP0LCQQP2FR4ZUM6D8ZZVYB2
FPSADDITIONALCURRENCY3	Additional Currency 3	2CGDV2Q3L4PIHF0MQCKHCY4QS2Q
FPSBUSTRANSACNOMINALCURRENCY	Key Figure Currency	2CKFLBS2DF4HKR8YJGAGVXAWEA2
HARDCURRENCY	Hard Currency	2CKOG8X3LXQ521BP8HWMYP50TYE
FPSADDITIONALCURRENCY4	Additional Currency 4	2CMOBZ1FESYX8D3CFDHU6DVVF84
LOCALCURRENCY	Local Currency	2CPLCO0STFLUCHI23AAC4XNMYZP
FPSADDITIONALCURRENCY2	Additional Currency 2	2CQZILVEFUN4EH95TPXU9M6L4BS
FPSBUSTRANSACTIONQUANTITYUNIT	Unit of Measure of a Key Figure	2CRVDOKZ6TXHCGID5B5TGBG3LTC
FPSFUNCTIONALCURRENCY	Functional Currency	2CSPHDD0BGOZ3E7WO6VDNBRWP6Q
INDEXBASEDCURRENCY	Index-Based Currency	2CSR5XSG0ZJXB3RC1ELXGHC0R81
TRANSACTIONCURRENCY	Object Currency/Transaction Currency	2CT9YTTTYU1TFJPGMSFNX3C53I7
GROUPCURRENCY	Group Currency	2CTU9E0WK2DMQW0M1URCX9SGMVN
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		
Measures		
ELTUIDCMP1		Nominal Amount
ELTUIDCMP10		Add. Currency 2 Amt
ELTUIDCMP11		Add. Currency 3 Amt
ELTUIDCMP12		Add. Currency 4 Amt
ELTUIDCMP13		Tax Base Amount (TC)

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTPERIODCOMPARISON	Connection
ELTUIDCMP14	Tax Base Amount (FC)
ELTUIDCMP15	Nominal Cmprn Amount
ELTUIDCMP16	Comparison Quantity
ELTUIDCMP17	TrCrcy ComprnAmt
ELTUIDCMP18	CmpAmount Func. Crcy
ELTUIDCMP19	Local Curr. CmprnAmt
ELTUIDCMP2	Quantity
ELTUIDCMP20	Group Curr. CmprnAmt
ELTUIDCMP21	Hard Curr. CmprnAmt
ELTUIDCMP22	Index Curr. CmprnAmt
ELTUIDCMP23	AdCrcy 1 Comprn Amt
ELTUIDCMP24	AdCrcy 2 Comprn Amt
ELTUIDCMP25	AdCrcy 3 Comprn Amt
ELTUIDCMP26	AdCrcy 4 Comprn Amt
ELTUIDCMP27	Tax Base CmpAmt (TC)
ELTUIDCMP28	Tax Base CmpAmt (FC)
ELTUIDCMP29	Nominal Diff. Amount
ELTUIDCMP3	Trans. Crcy Amount
ELTUIDCMP30	Difference Quantity
ELTUIDCMP31	TrCrcy Diiff.Amt
ELTUIDCMP32	DifAmount Func. Crcy
ELTUIDCMP33	Local Curr. Diff.Amt
ELTUIDCMP34	Group Curr. Diff.Amt
ELTUIDCMP35	Hard Curr. Diff.Amt
ELTUIDCMP36	Index Curr. Diff.Amt
ELTUIDCMP37	AdCrcy 1 Diff. Amt
ELTUIDCMP38	AdCrcy 2 Diff. Amt
ELTUIDCMP39	AdCrcy 3 Diff. Amt
ELTUIDCMP4	Amount in Func. Crcy
ELTUIDCMP40	AdCrcy 4 Diff. Amt
ELTUIDCMP41	Tax Base DifAmt (TC)
ELTUIDCMP42	Tax Base DifAmt (FC)
ELTUIDCMP5	Local Currency Amnt
ELTUIDCMP6	Group Crcy Amnt

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTPERIODCOMPARISON	Connection
ELTUIDCMP7	Hard Crcy Amnt
ELTUIDCMP8	Index Crcy Amnt
ELTUIDCMP9	Add. Currency 1 Amt

2.16.3.4 Financial Statement (Actual/Scenario Comparison)

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTACTSCENCOMPARISON	Connection
• Model Description: Model for Financial Statement (Actual/Scenario Comparison) • Planning Enabled: no • Model Purpose: Model Purpose: This model provides a financial statement, including balance sheet and profit and loss, of a legal entity and accounting system for the actual and a forecast, planning or simulation scenario	• Connection type: Data import from SAP BW (this is the interface used to access CDS Queries) Which system: Financial products subledger for SAP S/4HANA • Connection Query: Financial Statement Actual Scenario Comparison (2CCFPSFNSTMACSCCMP) • Connection Variables: Key Date, Accounting Scenario Run, Legal Entity, Accounting System

Dimensions		
Name	**Description**	**Mapping**
POSTINGDATE	Posting Date	2CICALENDARDATE
FPSACCOUNTINGSYSTEM	Accounting System	2CIFPSACCSYST
FPSLEGALENTITY	Legal Entity	2CIFPSLEGENT
FPSDATABASEPARTITIONINGNMBR	Partitioning Key	2CK60QG1T98LARI1752H7B8Q29R
FPSSUBLDGRJOURNALENTRYITEM	Journal Entry Line Item Number	2CKN5G1KOVTTC9TATM3SZH6KECD
FPSACCTGSCENPROCESSCATEGORY	Process Category	2CNJWYJS1LFXR48ZKBW0I1IOKVK
FPSSUBLDGRJOURNALENTRY	Journal Entry Number	2CTN4SYYGMZ1012R3DH9V52109V

Model Name:

SAP__FS_FPS_LB_ FINANCIALSTATEMENTACTSCENCOMPARISON		Connection
FPSREPORTINGPRODUCT-SEGMENT	Product Segment (Balance Sheet)	2CFBK4JRWY01P5GSBLDD7ZLI73M
CHARTOFACCOUNTS	Chart of Accounts	2CIFICHOFACC
COMPANYCODE	Company Code	2CIFICOMPANYCODE
CONTROLLINGAREA	Controlling Area	2CIFICONTAREA
FISCALYEAR	Fiscal Year	2CIFIFYEARCC
FPSGENERALLEDGERAC-COUNT	G/L Account Number	2CIFIGLACCINCOA
PROFITCENTER	Profit Center	2CIFIPROFITCENTER
FPSFINANCIALPRODUCT	Contract	2CIFPSFINPRODE
FPSFINANCIALSTATEMENT-SEGMENT	Financial Statement Segment	2CIFPSFINSTMNTSGMT
SEGMENT	Segment for Segmental Reporting	2CIFPSFNSTMACSCCMP-SEGMENT
FPSBUSPARTDISCLIND-STRYSGMT	Industry Segment (Balance Sheet)	2CIFPSINDSEG
FPSBUSPARTDISCLINDUS-TRY	Industry	2CIFPSINDUSTRY
FPSBUSPARTDISCLIND-STRYSYST	Industry System	2CIFPSINDUSTRYH
FPSSECURITY	Financial Instrument ID	2CIFPSSECURITY
FISCALYEARPERIOD	FIN Master Data: Fiscal Year and Period	2CIK7LLR2J83AU7015XD1EFM1CO
FPSANALYTICCOMPARI-SONPART	Analytic Comparison Part	2CKXMGZBSBDZO64J7YF36RKM5BQ
GLACCOUNTHIERARCHY	G/L Account Hierarchy	2CRNZN56LFK4BI8WBZPHATCBZYV
HARDCURRENCY	Hard Currency	2CFDSMLFL9VEYKKRJ9ZEGF7XR9Q
TRANSACTIONCURRENCY	Object Currency/Transaction Currency	2CGMA7GRGPU6NMXYBY27S66PGIB
FPSADDITIONALCUR-RENCY2	Additional Currency 2	2CI0OAJ9GGZL3ANEHM1L9U0Y5DX
FPSBUSTRANSACTION-QUANTITYUNIT	Unit of Measure of a Key Figure	2CKSVOWBDU4HA2UZ1D5X96CGVM2
FPSADDITIONALCUR-RENCY3	Additional Currency 3	2CLQCULSKBC9PMMNYPX7G1J4HJS
GROUPCURRENCY	Group Currency	2CLUXFMJWZTJ4S5NGND2FX371T0

Model Name:

SAP__FS_FPS_LB_ FINANCIALSTATEMENTACTSCENCOMPARISON		Connection
FPSADDITIONALCUR-RENCY4	Additional Currency 4	2CNKE92RWAC9F2C6QVNB4DTYRCI
LOCALCURRENCY	Local Currency	2CNS0C9R10SGP3Z0FANX7XB5L5Q
INDEXBASEDCURRENCY	Index-Based Currency	2CNZ3ZGYQTQLI0WQ6YA7AQX746R
FPSADDITIONALCUR-RENCY1	Additional Currency 1	2CO1BR31VHU8UFLOCBBV62J459O
FPSFUNCTIONALCUR-RENCY	Functional Currency	2CO86XGM1ZTNB94F7ETG9OL6WJ8
FPSBUSTRANSACNOMINAL-CURRENCY	Key Figure Currency	2COTWH2LV9OME458J27PG7D3XOX
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		
Measures		
ELTUIDCMP1	Nominal Amount	
ELTUIDCMP10	Add. Currency 2 Amt	
ELTUIDCMP11	Add. Currency 3 Amt	
ELTUIDCMP12	Add. Currency 4 Amt	
ELTUIDCMP13	Tax Base Amount (TC)	
ELTUIDCMP14	Tax Base Amount (FC)	
ELTUIDCMP15	Nominal Cmprn Amount	
ELTUIDCMP16	Comparison Quantity	
ELTUIDCMP17	TrCrcy ComprnAmt	
ELTUIDCMP18	CmpAmount Func. Crcy	
ELTUIDCMP19	Local Curr. CmprnAmt	
ELTUIDCMP2	Quantity	
ELTUIDCMP20	Group Curr. CmprnAmt	
ELTUIDCMP21	Hard Curr. CmprnAmt	
ELTUIDCMP22	Index Curr. CmprnAmt	
ELTUIDCMP23	AdCrcy 1 Comprn Amt	
ELTUIDCMP24	AdCrcy 2 Comprn Amt	
ELTUIDCMP25	AdCrcy 3 Comprn Amt	
ELTUIDCMP26	AdCrcy 4 Comprn Amt	

Model Name:

SAP__FS_FPS_LB_ FINANCIALSTATEMENTACTSCENCOMPARISON	Connection
ELTUIDCMP27	Tax Base CmpAmt (TC)
ELTUIDCMP28	Tax Base CmpAmt (FC)
ELTUIDCMP29	Nominal Diff. Amount
ELTUIDCMP3	Trans. Crcy Amount
ELTUIDCMP30	Difference Quantity
ELTUIDCMP31	TrCrcy Diiff.Amt
ELTUIDCMP32	DifAmount Func. Crcy
ELTUIDCMP33	Local Curr. Diff.Amt
ELTUIDCMP34	Group Curr. Diff.Amt
ELTUIDCMP35	Hard Curr. Diff.Amt
ELTUIDCMP36	Index Curr. Diff.Amt
ELTUIDCMP37	AdCrcy 1 Diff. Amt
ELTUIDCMP38	AdCrcy 2 Diff. Amt
ELTUIDCMP39	AdCrcy 3 Diff. Amt
ELTUIDCMP4	Amount in Func. Crcy
ELTUIDCMP40	AdCrcy 4 Diff. Amt
ELTUIDCMP41	Tax Base DifAmt (TC)
ELTUIDCMP42	Tax Base DifAmt (FC)
ELTUIDCMP5	Local Currency Amnt
ELTUIDCMP6	Group Crcy Amnt
ELTUIDCMP7	Hard Crcy Amnt
ELTUIDCMP8	Index Crcy Amnt
ELTUIDCMP9	Add. Currency 1 Amt

2.16.3.5 Financial Statement (Scenario/Scenario Comparison)

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTSCENARIOCOMPARISON	Connection
• Model Description: Model for Financial Statement (Scenario/Scenario Comparison) • Planning Enabled: no • Model Purpose: This model provides a financial statement, including balance sheet and profit and loss, of a legal entity and accounting system for two different scenario runs	• Connection type: Data import from SAP BW (this is the interface used to access CDS Queries) Which system: Financial products sub-ledger for SAP S/4HANA • Connection Query: Financial Statement Scenario Comparison (2CCFPSFNSTMSCNCOMP) • Connection Variables: Key Date, Accounting Scenario Run, Comparison Accounting Scenario Run, Legal Entity, Accounting System

Dimensions

Name	Description	Mapping
FPSSUBLDGRJOURNALENTRY	Journal Entry Number	2CHV31J8WNKLUWU3OIP1NNGR1QN
POSTINGDATE	Posting Date	2CICALENDARDATE
FPSACCOUNTINGSYSTEM	Accounting System	2CIFPSACCSYST
FPSLEGALENTITY	Legal Entity	2CIFPSLEGENT
FPSACCTGSCENPROCESSCATEGORY	Process Category	2CL0SJID7HH8H2T51CMR804N7GF
FPSSUBLDGRJOURNALENTRYITEM	Journal Entry Line Item Number	2CLVOTP0WQ1GNB7IN4POAT0YZHL
FPSDATABASEPARTITIONINGNMBR	Partitioning Key	2CU7GRLURRELXICSNS308ACU02I
FPSANALYTICCOMPARISONPART	Analytic Comparison Part	2CGTZA53XO3PDKAG9WYA8Q4IQP8
CHARTOFACCOUNTS	Chart of Accounts	2CIFICHOFACC
COMPANYCODE	Company Code	2CIFICOMPANYCODE
CONTROLLINGAREA	Controlling Area	2CIFICONTAREA
FISCALYEAR	Fiscal Year	2CIFIFYEARCC

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTSCENARIOCOMPARISON		Connection
FPSGENERALLEDGERACCOUNT	G/L Account Number	2CIFIGLACCINCOA
PROFITCENTER	Profit Center	2CIFIPROFITCENTER
FPSFINANCIALPRODUCT	Contract	2CIFPSFINPRODE
FPSFINANCIALSTATEMENTSEGMENT	Financial Statement Segment	2CIFPSFINSTMNTSGMT
SEGMENT	Segment for Segmental Reporting	2CIFPSFNSTMSCNCOMPSEGMENT
FPSBUSPARTDISCLINDUSTRY	Industry	2CIFPSINDUSTRY
FPSBUSPARTDISCLINDSTRYSYST	Industry System	2CIFPSINDUSTRYH
FPSSECURITY	Financial Instrument ID	2CIFPSSECURITY
GLACCOUNTHIERARCHY	G/L Account Hierarchy	2CKMD9YPEC56IBL7ANKKWUV0YP8
FPSREPORTINGPRODUCTSEGMENT	Product Segment (Balance Sheet)	2CLRQ7U2L5DNTSKFGZVARGRX94Y
FISCALYEARPERIOD	Fiscal Year and Period	2CNZW8TD5E172I30BCQ7G5AQTFM
GROUPCURRENCY	Group Currency	2CFHS8VPYP02VA0ZJS0GAH5SMXJ
FPSBUSTRANSACTIONQUANTITYUNIT	Unit of Measure of a Key Figure	2CFL2XXGEMWUE9U24LFE06CTFHA
TRANSACTIONCURRENCY	Object Currency/Transaction Currency	2CI6Y2V62KUBNA7E8QK22PBLYQM
FPSADDITIONALCURRENCY3	Additional Currency 3	2CIR1B0VHSL8U7H962GJRYNJ0K7
HARDCURRENCY	Hard Currency	2CJN2ZJ3YRCQS0HE5U7ED5G14TH
FPSBUSTRANSACNOMINALCURRENCY	Key Figure Currency	2CL5MU7SI7UJ3R5Q4762CGMGZB5
INDEXBASEDCURRENCY	Index-Based Currency	2CLFXIX0423I37OFSFZU3KS72CU
FPSADDITIONALCURRENCY1	Additional Currency 1	2CO3C0XEV576R35INFVA4IB3H2Z
FPSADDITIONALCURRENCY4	Additional Currency 4	2CO6H0LXA5PWW5D9W2BP7O07ZG9
FPSFUNCTIONALCURRENCY	Functional Currency	2COJUV9WY3KB1LXXXRZ8F7ZQH37
LOCALCURRENCY	Local Currency	2CRLVM9GCB487O9JT85VHFD3YXR

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTSCENARIOCOMPARISON		Connection
FPSADDITIONALCUR-RENCY2	Additional Currency 2	2CSML6ZLN24HJNDLGIV598RBX5L
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		
Measures		
ELTUIDCMP1	Nominal Amount	
ELTUIDCMP10	Add. Currency 2 Amt	
ELTUIDCMP11	Add. Currency 3 Amt	
ELTUIDCMP12	Add. Currency 4 Amt	
ELTUIDCMP13	Tax Base Amount (TC)	
ELTUIDCMP14	Tax Base Amount (FC)	
ELTUIDCMP15	Nominal Cmprn Amount	
ELTUIDCMP16	Comparison Quantity	
ELTUIDCMP17	TrCrcy ComprnAmt	
ELTUIDCMP18	CmpAmount Func. Crcy	
ELTUIDCMP19	Local Curr. CmprnAmt	
ELTUIDCMP2	Quantity	
ELTUIDCMP20	Group Curr. CmprnAmt	
ELTUIDCMP21	Hard Curr. CmprnAmt	
ELTUIDCMP22	Index Curr. CmprnAmt	
ELTUIDCMP23	AdCrcy 1 Comprn Amt	
ELTUIDCMP24	AdCrcy 2 Comprn Amt	
ELTUIDCMP25	AdCrcy 3 Comprn Amt	
ELTUIDCMP26	AdCrcy 4 Comprn Amt	
ELTUIDCMP27	Tax Base CmpAmt (TC)	
ELTUIDCMP28	Tax Base CmpAmt (FC)	
ELTUIDCMP29	Nominal Diff. Amount	
ELTUIDCMP3	Trans. Crcy Amount	
ELTUIDCMP30	Difference Quantity	
ELTUIDCMP31	TrCrcy Diiff.Amt	
ELTUIDCMP32	DifAmount Func. Crcy	
ELTUIDCMP33	Local Curr. Diff.Amt	
ELTUIDCMP34	Group Curr. Diff.Amt	
ELTUIDCMP35	Hard Curr. Diff.Amt	

Model Name: SAP__FS_FPS_LB_ FINANCIALSTATEMENTSCENARIOCOMPARISON	Connection
ELTUIDCMP36	Index Curr. Diff.Amt
ELTUIDCMP37	AdCrcy 1 Diff. Amt
ELTUIDCMP38	AdCrcy 2 Diff. Amt
ELTUIDCMP39	AdCrcy 3 Diff. Amt
ELTUIDCMP4	Amount in Func. Crcy
ELTUIDCMP40	AdCrcy 4 Diff. Amt
ELTUIDCMP41	Tax Base DifAmt (TC)
ELTUIDCMP42	Tax Base DifAmt (FC)
ELTUIDCMP5	Local Currency Amnt
ELTUIDCMP6	Group Crcy Amnt
ELTUIDCMP7	Hard Crcy Amnt
ELTUIDCMP8	Index Crcy Amnt
ELTUIDCMP9	Add. Currency 1 Amt

2.16.3.6 Model for Rollforward Report

Model Name: SAP__FS_FPS_LB_ROLLFORWARDREPORT	Connection
• Model Description: Rollforward Report • Planning Enabled: no • Model Purpose: This model provides data for balance sheet positions of a legal entity and accounting system to create a rollforward report for a certain (posting date) period	Connection type: Data import from SAP BW (this is the interface used to access CDS Queries) Which system: Financial products subledger for SAP S/4HANA Connection Query: Rollforward Report (2CCFPSBALSHERFWQ) Connection Variables: • Mandatory Variables: Legal Entity, Accounting System, Posting Date From, Posting Date To • Optional Variables: Contract, Contract Source System, Financial Instrument ID, Accounting Change
Dimensions	

Model Name: SAP__FS_FPS_LB_ROLLFORWARDREPORT		Connection
Name	**Description**	**Mapping**
POSTINGDATE	Posting Date	2CICALENDARDATE
FPSACCOUNTINGSYSTEM	Accounting System	2CIFPSACCSYST
FPSLEGALENTITY	Legal Entity	2CIFPSLEGENT
FPSRESULTDATAAREA	Results Data Area	2CJXIITV0KFJ8ZRJOXGD-CIZG0I7
FPSDATABASEPARTITIO-NINGNMBR	Partitioning Key	2CLDF1CVKE78P1BUO-CYJZE6Q8C6
FPSACCTGSCENPROCESS-CATEGORY	Process Category	2CM6S6R7QXU2IB-GIZWJW0V74LQF
FPSSUBLDGRJOURNALEN-TRYITEM	Journal Entry Line Item Number	2COVN8JF0I2KBIS-GEZ2LE429SMH
FPSSUBLDGRJOURNALEN-TRY	Journal Entry Number	2CPZ5SI1MZPOBA6PZ3AD1LENI1N
FPSRESULTTYPE	Result Type	2CTDQL4FG5J20WD6OI6B2GXSYKS
FPSFINPRODUCTSOURCE-SYSTEM	Contract Source System	2CGBC096CTL7Q37E4H1PUIEH71I
FISCALYEARPERIOD	Fiscal Year and Period	2CIDCQFVP-JAYSMK2OJI4F2LEPD8
CHARTOFACCOUNTS	Chart of Accounts	2CIFICHOFACC
COMPANYCODE	Company Code	2CIFICOMPANYCODE
CONTROLLINGAREA	Controlling Area	2CIFICONTAREA
FISCALYEAR	Fiscal Year	2CIFIFYEARCC
FPSGENERALLEDGERAC-COUNT	G/L Account Number	2CIFIGLACCINCOA
PROFITCENTER	Profit Center	2CIFIPROFITCENTER
SEGMENT	Segment for Segmental Reporting	2CIFPSBALSHERFWC-SEG-MENT
FPSBUSPARTDISCLIND-STRYSGMT	Industry Segment (Balance Sheet)	2CIFPSINDSEG
FPSBUSPARTDISCLINDUS-TRY	Industry	2CIFPSINDUSTRY
FPSBUSPARTDISCLIND-STRYSYST	Industry System	2CIFPSINDUSTRYH
FPSSECURITY	Financial Instrument ID	2CIFPSSECURITY
FPSFINANCIALPRODUCT	Contract	2CLBYUKN7VCO32ZPAJ-MYUIL91AP
FPSREPORTINGPRODUCT-SEGMENT	Product Segment (Balance Sheet)	2COAR9GDVRULVFNZNFW1O2LOFZ8

Model Name: SAP__FS_FPS_LB_ROLLFORWARDREPORT		Connection
FPSADDITIONALCUR-RENCY1	Additional Currency 1	2CF7B3KQF638NGP7EJNY604TL3W
INDEXBASEDCURRENCY	Index-Based Currency	2CGRDELWE89O59J54VH8T0V7DI8
FPSADDITIONALCUR-RENCY2	Additional Currency 2	2CIB079GH6ZAH-WRIYI8EFV2XNIP
GROUPCURRENCY	Group Currency	2CLGEOZ-ZOIUE9S08JJ80NH0GSAZ
TRANSACTIONCURRENCY	Object Currency/Transaction Currency	2COPVSMVTWD906KR48C1T4A1GN7
FPSADDITIONALCUR-RENCY3	Additional Currency 3	2COWIL6UYXZCH6FMJLASWN89FCZ
LOCALCURRENCY	Local Currency	2CQDUJA-KAQSI8PZ4ZHOEJ0NDQ9T
FPSBUSTRANSACNOMINAL-CURRENCY	Key Figure Currency	2CR3FEECS9OA5E80UD9ZNP9BWEM
FPSBUSTRANSACTION-QUANTITYUNIT	Unit of Measure of a Key Figure	2CRS1MHI-HEUVL675KXLVJCZEL6X
FPSADDITIONALCUR-RENCY4	Additional Currency 4	2CSBP6F9N7QGLQMJILY4DWK523F
FPSFUNCTIONALCUR-RENCY	Functional Currency	2CTGUZ8GESU8R3SQKO5ACVJZVV5
HARDCURRENCY	Hard Currency	2CU0JEIM84EU-ZQUXDK0UT6BBE7Y
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		
Measures		
ELTUIDCMP1	Nominal Amount	
ELTUIDCMP10	Add. Currency 2 Amt	
ELTUIDCMP11	Add. Currency 3 Amt	
ELTUIDCMP12	Add. Currency 4 Amt	
ELTUIDCMP13	Tax Base Amount (TC)	
ELTUIDCMP14	Tax Base Amount (FC)	
ELTUIDCMP2	Quantity	
ELTUIDCMP3	Trans. Crcy Amount	
ELTUIDCMP4	Amount in Func. Crcy	
ELTUIDCMP5	Local Currency Amnt	
ELTUIDCMP6	Group Crcy Amnt	

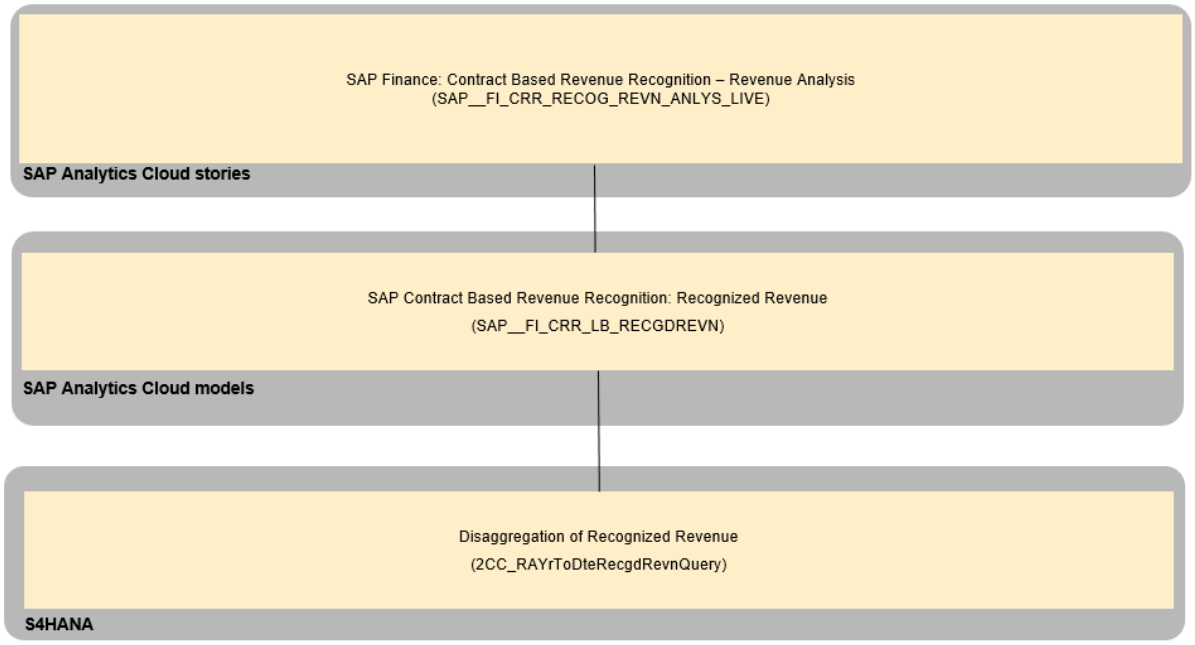
Model Name: SAP__FS_FPS_LB_ROLLFORWARDREPORT	Connection
ELTUIDCMP7	Hard Crcy Amnt
ELTUIDCMP8	Index Crcy Amnt
ELTUIDCMP9	Add. Currency 1 Amt

2.17 Finance - Revenue Accounting and Reporting Contract-Based Revenue Recognition

2.17.1 Architecture and Abstract

The Revenue Accounting and Reporting (Contract-Based Revenue Recognition) model and story provides recognized revenue of different dimensions based on the variables, such as company code, accounting principle, display currency, and fiscal year.

Architecture



2.17.2 Stories

2.17.2.1 SAP Finance: Contract Based Revenue Recognition – Revenue Analysis (SAP__FI_CRR_RECOG_REVN_ANLYS_LIVE)

The story contains two pages: **Recognized Revenue** and **Recognized Revenue Reporting**

A prompt is pop-up when the story page is loaded to inform user to fill in mandatory search criterial including Company Code (single value), Accounting Principle (single value), Display Currency (single value), Fiscal Year (multiple value). Other optional search criterial include Fiscal Period, Customer, Fulfilment Type and Performance Obligation name and they support multiple value.

For example,

- Company Code = 'FARR'
- Accounting Principle = 'IFRS'
- Display Currency = 'EUR'
- Fiscal Year = 2018, 2019

The story page **Recognized Revenue** consists of the following two lanes:

- Top lane (Header) supplies the selected value of single Company Code and single Accounting Principle and SAP Analytics Cloud logo.
- Lower lane supplies the detail Recognized Revenue KPI referring to the page filter:
  - Recognized Revenue KPI of selected search criterial in prompt.
  - A waterfall chart shows how Recognized Revenue is affected by the Revenue from Fulfillment and Revenue Catch-up.
  - A donut chart shows the proportion of Recognized Revenue per Profit Center.
  - A line trend shows the Recognized Revenue per Fiscal Year and Posting Period.
  - A Bar/Column chart shows the Recognized Revenue per Fiscal Year and Business Partner.
  - A Bar/Column chart shows the Recognized Revenue per Fiscal Year and Performance Obligation Name.
  - A Bar/Column chart shows the Recognized Revenue per Fiscal Year and Fulfillment Type.

The story page 'Recognized Revenue Reporting' display aggregated recognized revenue by fiscal year, posting period, business partner and performance obligation name using a table chart.

> **i Note**
>
> Recognized revenue within the story is year-to-date revenue. If the current fiscal year is selected, the revenue from beginning the period and current period is supplied. If past fiscal year is selected, the revenue of whole past fiscal year is supplied.

Measure Name	Type	Formula/Properties
Revenue from Fulfillment	Calculated Measure	Measure [Recognized Revenue] - Measure [Revenue Catch-up]
Recognized Revenue		SAP__FI_CRR_LB_RECGDREVN:Recognized Revenue

Measure Name	Type	Formula/Properties
Revenue Catch-up		SAP__FI_CRR_LB_RECGDREVN:Revenue Catch-up

2.17.3 Models

The next chapter provides the detailed information about the Model which can be used for creating the Stories.

2.17.3.1 Recognized Revenue (SAP__FI_CRR_LB_RECGDREVN)

Model Name: Technical Name of Model	Connection
• Model Description: SAP Contract Based Revenue Recognition: Recognized Revenue • Planning Enabled: No	• Connection Type: Direct - SAP HANA Live • Connection with Authentication Method: SAML Single Sign On • Connection Name: SAPEMC **i Note** The connection is already configured between SAP S/4HANA Cloud system and SAP Analytics Cloud. For detailed steps, please refer to the Integrating SAP Analytics Cloud (Choose the version according to SAP S/4HANA version) **→ Tip**  Please use 'SAPEMC' as the connection name (it is important that it is entered exactly as shown). • Calculation View: C_RAYrToDteRecgdRevnQuery

Measure		
ID	**Description**	**Mapping/Formula**
RARecognizedRevnInDspCrcy	Recognized Revenue	RARecognizedRevnInDspCrcy

Model Name: Technical Name of Model		Connection
RecgdCatchUpAmtInDspCrcy	Revenue Catch-up	RecgdCatchUpAmtInDspCrcy
Dimensions		
Name	**Description**	**Mapping**
Profit Center	Profit Center	ProfitCenter
Fiscal Year	Fiscal Year	FiscalYear
Posting Period	Posting Period	FiscalPeriod
Business Partner	Business Partner	BusinessPartnerName
Performance Obligation Name	Performance Obligation Name	PerformanceObligationClass
Fulfillment Type	Fulfillment Type	PerfOblgnFulfillmentType
Name Dimension that only exists in SAC model and not in data source		Assign to #
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> *Private dimension, other dimensions are public.

2.18 Finance: Sales - Revenue Planning

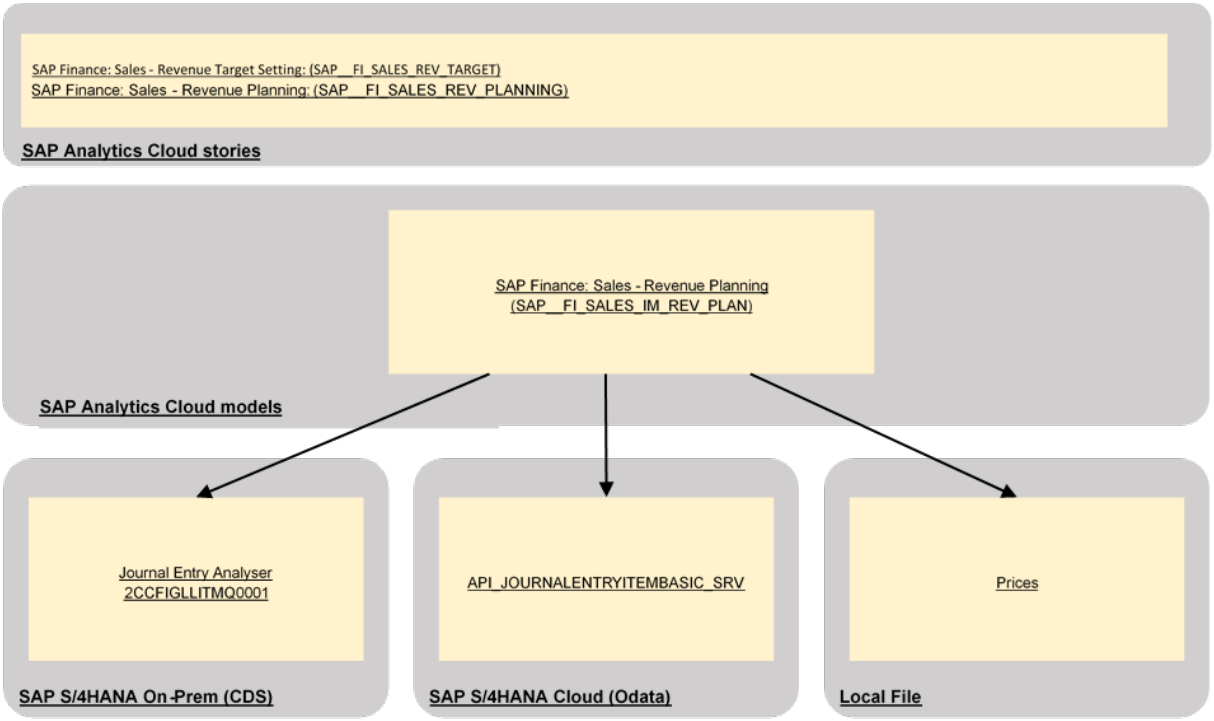
2.18.1 Architecture and Abstract

The package consists of two stories. Both stories are dealing with the planning of measure net revenue for a certain planning period, typically for one calendar year. With story Revenue Target Setting roles from top management first define targets for net revenue.

The roles from the sales organization do the planning against the targets. Goal for the planner is to achieve a reasonable plan that meets the target. This process can be iterative, i.e. sales planner might realize that targets can't be meet. In this case target planner might adapt targets and sales planning starts again.

Both stories share the same model (SAP__FI_SALES_REV_PLAN). Data is imported in this model from system S/4HANA On-Premise or from S/4HANA Cloud. In case of S/4HANA On-Premise query Journal Entry Analyser (2CCFIGLLITMQ0001) is used. If data is imported from a S/4HANA Cloud system, the OData service API_JOURNALENTRYITEMBASIC_SRV should be taken. Prices are imported from a local file.

Architecture



2.18.2 Stories

The next chapters provide an overview of the stories used for Finance: Sales - Revenue Planning.

2.18.2.1 Sales – Revenue Target Setting (SAP__FI_SALES_REV_TARGET)

With this story, targets for the planning period are planned. The planner has the option to copy the actual net revenue of the previous year as a baseline to the target column by clicking the button Copy Actual* PY to Target. In the background data action SAP__FI_SALES_COPY_ACT_TO_TGT is processed. The planner can compare the target numbers also against the planned numbers of the current planning period, for example, in case the target planner needs to adapt the targets (iteration).

A second chart in the story shows the history of targets and actual net revenue together with the difference between these measures.

2.18.2.2 Sales – Revenue Planning (SAP__FI_SALES_REV_PLANNING)

With this story, the sales planner does the planning against the targets. Starting point is to copy either the actual net revenue of the year before the current planning period or the net revenue targets of the current planning period to create a baseline for the planning process. This copy process is triggered by the buttons Copy Actual* 2018 or Copy Targets 2019. In the background, the data actions SAP__FI_SALES_COPY_ACT or SAP__FI_SALES_COPY_TGT are triggered.

After the creation of a baseline, the planning of current period starts.

2.18.3 Models

There are three models.

2.18.3.1 C4C Service Cloud - Tickets (SAP__CRM_SRV_IM_TICKETS)

This is the main model of this content and provides most of the relevant drill-in dimensions and performance measures.

Model Name: SAP__CRM_SRV_IM_TICKETS	**Connection**
• Model Description: SAP CRM: C4C Service Cloud - Tickets • Planning Enabled: Yes	• Connection type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • Connection Query: Custom Query based on Data source CRMSRQHB

Account		
ID	**Description**	**Formula/Mapping**
Lead_Time_s	Lead Time (s)	Lead_Time_s
Number_of_Interaction_Steps	Number of Interaction Steps	Number_of_Interaction_Steps
Age_s	Age (s)	Age_s
Total_Time_at_Processor_s	Total Time at Processor (s)	Total_Time_at_Processor_s
Total_Time_at_Processor_s	Total Time at Requestor (s)	Total_Time_at_Requestor_s
Number_of_Response_Cycles	Number of Response Cycles	Number_of_Response_Cycles
Total_Response_Duration_s	Total Response Duration (s)	Total_Response_Duration_s
Number_of_Missed_Responses	Number of Missed Responses	Number_of_Missed_Responses

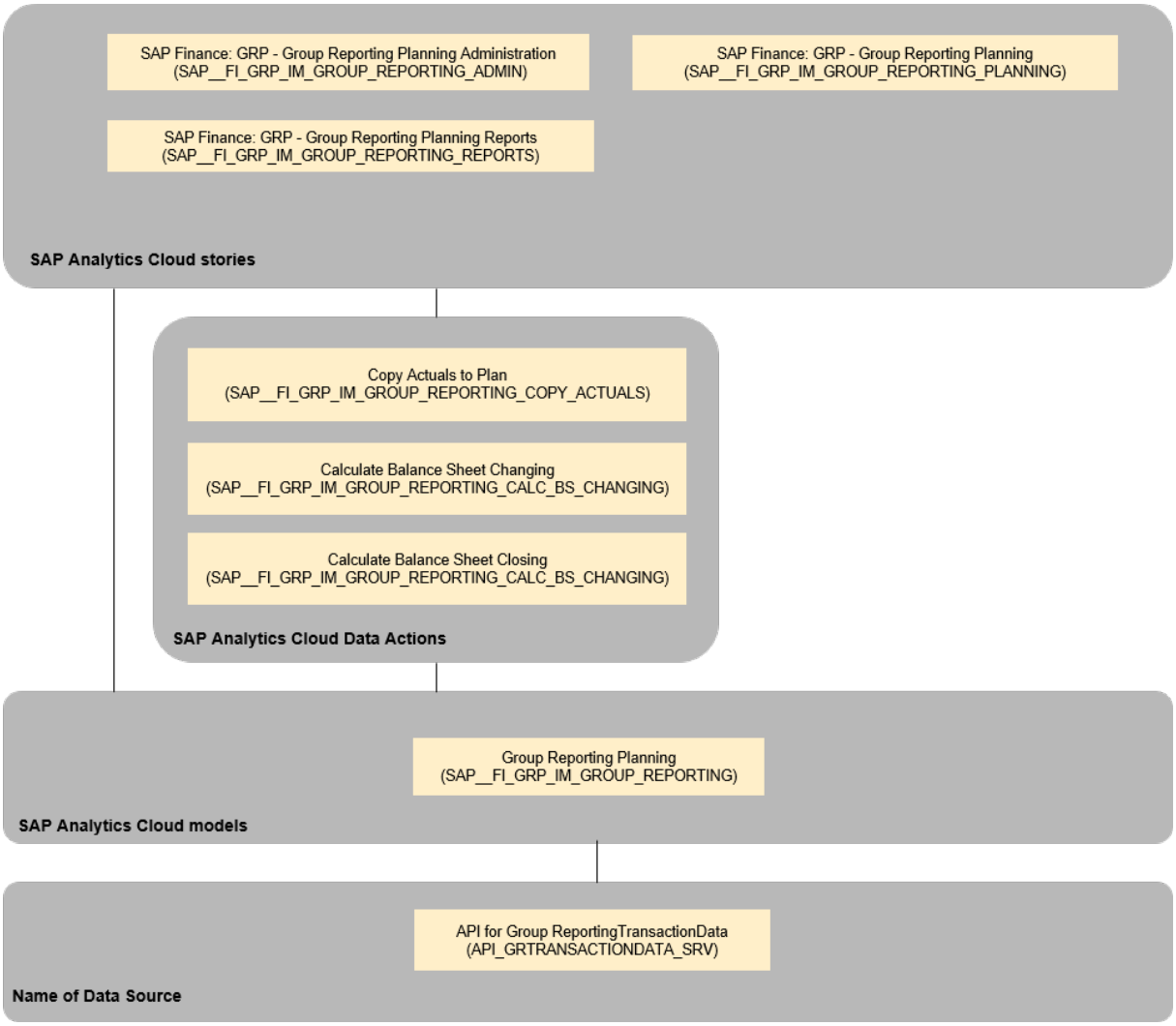
Model Name: SAP__CRM_SRV_IM_TICKETS		Connection
Number_of_Tickets	Number of Tickets	Number_of_Tickets
Number_of_Tickets_Completed_on_Schedule	Number of Tickets Completed on Schedule	Number_of_Tickets_Completed_on_Schedule
Average_Lead_Time	Average Lead Time (days)	([Lead_Time_s]/[Number_of_Tickets])/(3600*24)
Average_Age	Average Age (days)	([Age_s]/[Number_of_Tickets])/(3600*24)
Tickets_Open	Tickets Open	LOOKUP([Number_of_Tickets] ,[d/Lifecycle_Status_ID]="1")
Tickets_InProcess	Tickets In Process	LOOKUP([Number_of_Tickets] ,[d/Lifecycle_Status_ID]="2")
Tickets_InEscalation	Tickets In Escalation	LOOKUP([Number_of_Tickets] , [d/Lifecycle_Status_ID]=("1","2")and [d/Escalation_Status_ID]="2")
Avg_Time_at_Processor_s	Average Time at Processor (days)	([Total_Time_at_Processor_s]/[Number_of_Tickets])/(3600*24)
Avg__Time_at_Requestor_s	Average Time at Requestor (days)	([Total_Time_at_Requestor_s]/[Number_of_Tickets])/(24*3600)
Avg_response_duration	Average Response Duration (days)	([Total_Response_Duration_s]/[Number_of_Tickets])/(24*3600)
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Created on – filter on current and previous year
Service_Organization_ID_ID	Service Organization	Service_Organization_ID_ID
Source_ID	Source	Source_ID
Escalation_Status_ID	Escalation Status	Escalation_Status_ID
Lifecycle_Status_ID	Lifecycle Status	Lifecycle_Status_ID
Ticket_Solution_Status_ID	Ticket Solution Status	Ticket_Solution_Status_ID
Status_ID	Status	Status_ID
Account_ID	Account	Account_ID
Ticket_ID	Ticket	Ticket_ID
Agent_ID	Agent	Agent_ID
Reported_By_ID	Reported By	Reported_By_ID
Sales_Unit_ID	Sales Unit	Sales_Unit_ID
Service_and_Support_Team_ID	Service and Support Team	Service_and_Support_Team_ID
Affected_Product_Category_ID	Affected Product Category ID	Affected_Product_Category_ID
Product_ID	Product	Product_ID

Model Name: SAP__CRM_SRV_IM_TICKETS		Connection
Contract_ID_ID	Contract	Contract_ID_ID
Service_Category_ID_ID	Service Category	Service_Category_ID_ID
Contract_Status_ID	Contract Status	Contract_Status_ID
Priority_ID	Priority	Priority_ID
Completion_Date_ID	Completion Date	Completion_Date_ID
Additional Notes about the model		
This model uses only local dimensions. Master data is uploaded during transactional data upload.		

2.19 Group Reporting Planning for S/4HANA

2.19.1 Architecture and Abstract

The Group Reporting Planning model, stories and data actions support profit and loss (P&L) planning and balance sheet planning with option to plan by partner consolidation unit.


SAP Finance: GRP - Group Reporting Planning Administration
(SAP__FI_GRP_IM_GROUP_REPORTING_ADMIN)
SAP Finance: GRP - Group Reporting Planning
(SAP__FI_GRP_IM_GROUP_REPORTING_PLANNING)
SAP Finance: GRP - Group Reporting Planning Reports
(SAP__FI_GRP_IM_GROUP_REPORTING_REPORTS)
SAP Analytics Cloud stories
Copy Actuals to Plan
(SAP__FI_GRP_IM_GROUP_REPORTING_COPY_ACTUALS)
Calculate Balance Sheet Changing
(SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CHANGING)
Calculate Balance Sheet Closing
(SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CHANGING)
SAP Analytics Cloud Data Actions
Group Reporting Planning
(SAP__FI_GRP_IM_GROUP_REPORTING)
SAP Analytics Cloud models
API for Group ReportingTransactionData
(API_GRTRANSACTIONDATA_SRV)
Name of Data Source

2.19.2 Models

Group Reporting Planning (SAP__FI_GRP_IM_GROUP_REPORTING)

Model Name: SAP__FI_GRP_IM_GROUP_REPORTING	**Connection**
- Model Description: Group Reporting Planning - Planning Enabled: yes	- SAP S/4HANA Import Connection "FP&A" - OData Services Import Connection SAP - GRTRANSACTIONDATA **i Note** Communications Scenario 0370 (Finance - Group Reporting Planning Integration) configured on SAP S/4HANA instance.

Account Dimension		
ID	Description	Mapping/Formula
MEASURE*	Measure	n.a.
Dimensions		
Name	Description	Mapping/Formula
Date	Time	n.a.
SAP_FI_GRP_FSITEM	Financial Statement Item	FSITEMATTRIBBYTIMEVERSION
SAP_FI_GRP_PRTNRCONSUNIT	Partner Consolidation Unit	PARNTERCNSLDTNUNIT
SAP_FI_GRP_FUNCTIONALAREA	Functional Area	FUNCTIONALAREA
SAP_FI_GRP_CONSUNIT	Consolidation Unit	CONSOLIDATIONUNIT

Key Custom Properties of SAP_FI_GRP_FSITEM	
Name	Description
Calc Method	Cash balancing FS Item is manually labelled as "CHANGING_CASH". Other FS Items that are calculated, rather than inputted, are manually labelled as "CHANGING_CALC".
Counter Account	Used for Depreciation/Amortization FS Items whose results are transferred to accumulated Depreciation/Amortization FS Items
Partner Input	FS Items which can be planned by Partner within the planning input story are manually labelled as "PARTNER_INPUT"

Model Name: SAP__FI_GRP_IM_GROUP_REPORTING	Connection
FS Item Role	Populated by the master data import. "S-ANI-PL" represents the negation of Net Income in Actuals (ACDOCU). "S-ANA-BS" represents Net Income in the Balance Sheet (Actuals, ACDOCU). These two labels are used by the Data Actions related to Actuals only.
Transaction Data Mapping	
Name	Description
GRTRANSACTIONDATA	Group Reporting Transaction Data
Freehand Query	GRTransactionData(P_ConsolidationUnitHierId='$',P_ConsolidationPrftCtrHierId='$',P_ConsolidationSegmentHierId='$',P_KeyDate=datetime'2021-01-01T00:00:00')/Results?$select=FiscalYearPeriod,ConsolidationUnit,FinancialStatementItem,FinancialTransactionType,FunctionalArea,PartnerConsolidationUnit,AmountInLocalCurrency&$filter=ConsolidationVersion eq 'Y10' and PeriodMode eq 'PER' and ConsolidationGroup eq '' and FiscalYear eq '2021' and (startswith(PostingLevel , '0') or startswith(PostingLevel , '1'))

2.19.3 Stories

Stories for Group Reporting Planning

- - SAP Finance: GRP - Group Reporting Planning Administration (SAP__FI_GRP_IM_GROUP_REPORTING_ADMIN)
- - SAP Finance: GRP - Group Reporting Planning (SAP__FI_GRP_IM_GROUP_REPORTING_PLANNING)
- - SAP Finance: GRP - Group Reporting Planning Reports (SAP__FI_GRP_IM_GROUP_REPORTING_REPORTS)

Group Reporting Planning Administration (SAP__FI_GRP_IM_GROUP_REPORTING_ADMIN)

This story allows the planner to create sample data and perform data actions for the planning scenarios.

This story uses the following data actions

- Calculate Balance Sheet Changing

SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CHANGING

- Calculate Balance Sheet Closing

SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CLOSING

- Clear Version

(SAP__FI_GRP_IM_GROUP_REPORTING_CLEAR_VERSION)

- Copy P&L and Balance Sheet from Actuals

(SAP__FI_GRP_IM_GROUP_REPORTING_COPY_ACTUALS)

- Create Sample Data for Actuals

(SAP__FI_GRP_IM_GROUP_REPORTING_CREATE_SAMPLE_DATA)

- Prepare Actuals

(SAP__FI_GRP_IM_GROUP_REPORTING_PREPARE_ACTUALS)

Group Reporting Planning (SAP__FI_GRP_IM_GROUP_REPORTING_PLANNING)

This story has tabs for profit & loss planning with hierarchy, profit & loss planning with partner, balance sheet planning, balance sheet planning with partner and balance sheet reporting. It allows the planner to perform planning functions to copy last year's actuals and carry forward the balance sheet.

This story uses the following data actions

- Calculate Balance Sheet Changing

SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CHANGING

- Calculate Balance Sheet Closing

SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CLOSING

- Copy P&L and Balance Sheet from Actuals

(SAP__FI_GRP_IM_GROUP_REPORTING_COPY_ACTUALS)

Group Reporting Planning Reports (SAP__FI_GRP_IM_GROUP_REPORTING_REPORTS)

This story has tabs for profit & loss and balance sheet. The reports allow the planner to analyze several views of profit & loss and balance sheet including filtering by consolidation unit, partner consolidation unit, and functional area.

2.19.4 Data Actions

Data Actions for Financial Statement Planning

- Calculate Balance Sheet ChangingSAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CHANGING
- Calculate Balance Sheet Closing SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CLOSING
- Clear Version (SAP__FI_GRP_IM_GROUP_REPORTING_CLEAR_VERSION)
- Copy P&L and Balance Sheet from Actuals (SAP__FI_GRP_IM_GROUP_REPORTING_COPY_ACTUALS)

- Create Sample Data for Actuals (SAP__FI_GRP_IM_GROUP_REPORTING_CREATE_SAMPLE_DATA)
- Prepare Actuals (SAP__FI_GRP_IM_GROUP_REPORTING_PREPARE_ACTUALS)

Calculate balance sheet changing (SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CHANGING)

Carry forward balance amounts to the next periods after manual changes to the closing balance amounts and performs calculations for Cash Balance and Accumulated Depreciation/Amortization.

Calculate balance sheet closing (SAP__FI_GRP_IM_GROUP_REPORTING_CALC_BS_CLOSING)

Carry forward balance amounts to the next periods after manual changes to the changing balance amounts and performs calculations for Cash Balance and Accumulated Depreciation/Amortization.

Clear Version (SAP__FI_GRP_IM_GROUP_REPORTING_CLEAR_VERSION)

Delete a complete version. Can be applied to actual and plan versions.

Copy actual amounts to plan (SAP__FI_GRP_IM_GROUP_REPORTING_COPY_ACTUALS)

Copy the last year actual net income and balance sheet amounts to plan version as a starting point for planning. Before that, delete all P&L and balance sheet plan amounts.

Create sample data (SAP__FI_GRP_IM_GROUP_REPORTING_CREATE_SAMPLE_DATA)

Create sample data for the actual version.

Prepare actuals (SAP__FI_GRP_IM_GROUP_REPORTING_PREPARE_ACTUALS)

Fill out the balance sheet by populating closing and opening values for the balance sheet accounts based upon the opening and changing transaction values loaded. Populate the opening values for P&L with zero and set the closing values equal to changing.

2.20 HR Analytics for S/4HANA Cloud and SAP SuccessFactors (SAP BEST PRACTICES)

2.20.1 HR Analytics for S/4HANA Cloud and SAP SuccessFactors (SAP BEST PRACTICES)

SAP Best Practices: HR Analytics for S/4HANA Cloud and SAP SuccessFactors for SAP S/4HANA Cloud is made up of three components. For further information, follow the dashboards mentioned below.

- **Workforce Overview and Workforce Diversity**
  This dashboard visualizes key measures based on data from SAP SuccessFactors. Prebuilt charts provide insights into Headcount and FTE trends, staff in management, turnover rates, and the diversity of workforce in terms of gender, tenure and generations, as well as contract types and span of control.
- **Workforce Performance**
  This dashboard visualizes key measures based on data from SAP S/4HANA Cloud and SAP SuccessFactors. KPIs for Total Workforce Ratio, Financial Expenses per FTE, Financial Actual, and Plan data by Cost Center are brought together with HR-related measures such as Headcount and Positions by Cost Center.
- **Finance Overview**
  This dashboard visualizes key measures based on data from SAP S/4HANA Cloud. Prebuilt charts show Balance Sheet, Net Income, and Cash Flow data as well as a Financial Statement table.

Find all the details and documentation about this content in the SAP Best Practices Explorer -HR Analytics S4/HANA and SAP Success Factors

2.21 Human Resources (HR)

2.21.1 Architecture and Abstract

The Human Resources Boardroom shows the Company's Headcount and Staff related information for the current year. Due to the generic nature of HR, this content can be reused across multiple industries.

The Human Resources Boardroom is built based on SAP Success Factors ODATA APIs. SAP Analytics Cloud provides a connector to SAP Success Factors.

The SuccessFactors API Documentation can be found here: SAP SuccessFactors HCM Suite OData API: Reference Guide.

A simple Chinese version of the content exists for the following stories:

- SAP__HR_GEN_HR
- SAP__HR_GEN_RECRUITMENT

All objects are copied added the postfix _ZH.

SAP__HR_GEN_HR copied to SAP__HR_GEN_HR_ZH

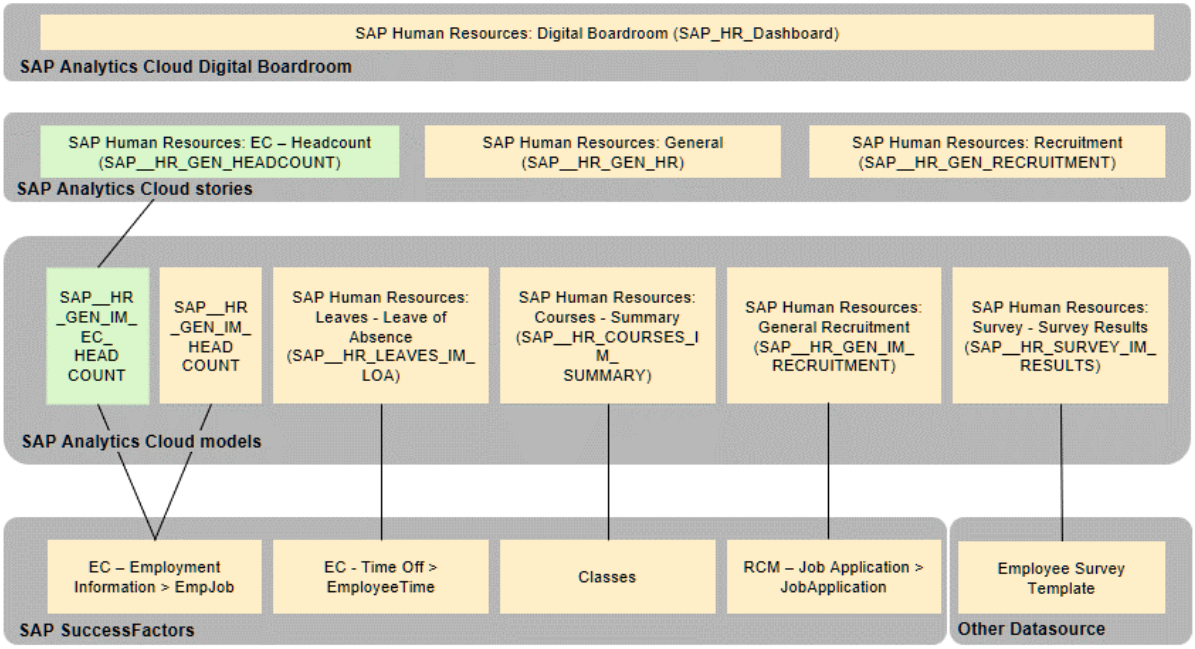
SAP__HR_GEN_RECRUITMENT copied to SAP__HR_GEN_RECRUITMENT_ZH and translated into simple Chinese.

The underlying models have also been copied and the postfix _ZH is added.

The following text describes how to deal with the English version. The simple Chinese version can be mapped to and filled analogously.

Architecture

The building blocks are as shown.



The objects highlighted in green are added with CI10.

For CI11, objects in yellow are copied to <original name>_ZH. The _ZH objects including screen elements and data is translated into Chinese

The building blocks are as shown.

The current usage in Industries is listed below:

Industry	Story
SAP Chemicals	SAP__HR_GEN_HR

Industry	Story
SAP Consumer Products	SAP__HR_GEN_HR
SAP Public Sector	SAP__PS_HR_BOARDROOM*
SAP Engineering, Construction and Operations	SAP__HR_GEN_HR
SAP Public Services: Higher Education and Research	SAP__PS_HER_HR*
SAP Oil & Gas	SAP__HR_GEN_HR, SAP__HR_GEN_RECRUITMENT
SAP Utilities	SAP__HR_GEN_HR, SAP__HR_GEN_RECRUITMENT
SAP Mill Products	SAP__HR_GEN_HR, SAP__HR_GEN_RECRUITMENT
SAP Mining	SAP__HR_GEN_HR, SAP__HR_GEN_RECRUITMENT

> **i** Note
>
> *Please note that in SAP__PS_HR_BOARDROOM and SAP__PS_HER_HR, country related content is replaced by Division.

2.21.2 Dashboard

SAP_HR_AGENDA

2.21.3 Stories

2.21.3.1 SAP__HR_GEN_HEADCOUNT

Name: SAP__HR_GEN_HEADCOUNT
Description: SAP Human Resources: EC – Headcount The model that is used is SAP__HR_GEN_IM_EC_HEADCOUNT
Page – Overview
This page provides an overview of the HR figures in the organization for the current year.
Page – Current Headcount
The page is divided into a top and a bottom portion. Select a measure and a dimension to drive the heatmap. Linked analysis is enabled. If one data point is selected in the heatmap, the rest of the charts will update accordingly. Also, there is a hyperlink enabled, which will hand over the filters to a detailed list of employees on the last page. Below, a measure can be selected and the average and median can be compared in both charts. The scatterplot below compared the average seniority and average potential where each bubble stands for a dimension member. The bubble size indicates the current headcount.

Page – Hires and Terminations
At the top of the page, a hire year, termination year, and measure have to be selected. Every employee has a hire year and every employee that has left the company has a termination year. In order to see Hires and Terminations for the current year, 2018 has to be selected in both selections. The left pane gives an overview of the selection that was made. Linked analysis is enabled again. Selecting one country on the world map or one cell in the treemap will filter the remaining charts. In the treemap, the manager hierarchy allows for a drilldown in to different teams.

SAP__HR_GEN_HR

Name: SAP__HR_GEN_HR
Description: SAP Human Resources: General
Please note that unless explicitly mentioned for a chart, the model used is SAP__HR_GEN_IM_HEADCOUNT
Page – Overview
This page provides an overview of the HR figures in the organization for the current year.
Charts
Workforce
Contains the following KPIs related to FTE: Current FTE, Average Age at Joining, Average Age at Leaving, Turnover Ratio, and Part-time FTE.
Headcount Movement
Shows the FTE count at the beginning of the year, hires and exits count YTD, and Current FTE count.
Succession Management
This tile shows Employee succession path through the following KPIs in FTE Count, Managers, Future Managers, New to Position, and High Impact of Loss.
Gender Diversity
Shows the split between Male and Female FTE.
Age Diversity
Shows the age distribution across the organization and the average employee age.
Average Tenure vs Performance of Exits
This graph shows the performance of the employees that exit and how was their tenure with the organization. This chart gives an understanding of whether the better performing employees find the organization attractive and stay beyond the years defined as Loyal to the company.
Employee Engagement Index
Shows the Employee engagement index across countries for the current year. This chart is based on model SAP__HR_SURVEY_IM_RESULTS. Model linked to SAP__HR_GEN_HR through country.

Page – Detail
This page forms the content screen for the Human Resources Boardroom. Aim of the content screen is to provide detail information on granularity of Country and Business Area. Page level filters are provided for Country and Business Area.
Charts
Distribution by Country
A tree map showing the distribution of FTE across Countries.
Distribution by Area
A tree map showing distribution of FTE across Business Areas.
Diversity - Women in Management
This tile shows the total number of women in management and their distribution across countries.
Navigation: Page – Context-Diversity
Hire and Attrition Trend
This chart shows the hires and terminations over the years.
Navigation: Page, Context, and Movement and Performance
Average Salary
This chart shows average salaries in the different countries.
Navigation: Page, Context-Salary
Time-offs
This tile shows the total number of days off and the breakdown of the days off by time-off type. Model used SAP__HR_LEAVES_IM_LOA: Model linked to SAP__HR_GEN_HR through user.
Training Spends
This tile shows the total amount spent in training and the breakdown by courses. Model used SAP__HR_COURSES_IM_SUMMARY: Model linked to SAP__HR_GEN_HR through user.
Page - Context
This page forms the context screen for the Human Resources Boardroom by default. However, navigations are provided by various charts in the Detail page to other context screens as well. The purpose of this screen is to show the Employee Survey Results.
Charts
Employee Survey Results
This heat map shows the survey results of the different survey indicators across different countries.
Employee Engagement Index
This chart shows the Employee Engagement Index for the current year across countries and the deviation from the previous year.

Page – Context-Salary
This page shows further details about salary distribution. There are page level filters for Country and Job Classification.
Charts
Average Salary per Country
This chart shows average salaries in the different countries.
Headcount per Job Classification
This chart shows the distribution of headcount by Job Classification.
Average Salary for Job Titles
This chart shows the average salary for each Job Title grouped by country and Job Classification.
Page – Context-Salary
This page shows further details about salary distribution. There are page level filters for Country and Job Classification.
Charts
Average Salary per Country
This chart shows average salaries in the different countries.
Headcount per Job Classification
This chart shows the distribution of headcount by Job Classification.
Average Salary for Job Titles
This chart shows the average salary for each Job Title grouped by country and Job Classification.
Page - Context-Diversity
This page provides further details about different diversity parameters in the company. The page filters are Country and Gender.
Charts
Gender Diversity
This chart shows the male and female employees.
Ethnic Diversity
Ethnic distribution of FTE
Age Diversity
This chart shows the age distribution across the organization and the average employee age.
Navigation: Page – Context
Marital Status
This chart shows married and single employees.
Succession Management
This chart shows the current managers and future managers.
Page – Context - Movement & Performance
This page provides additional information regarding Headcount movement and Employee performance. Page filters are Country and Job Classification.

Page – Context-Salary
Charts
Workforce
This chart shows KPI tiles for Current FTE, FTE having high impact of loss and turnover ratio for the current year.
Headcount Movement
This chart shows the FTE count at the beginning of the year, hires, and exits count YTD and Current FTE count.
Employee Exits vs Performance
The Performance of Employees that left the organization this year.
Reason for Leaving
This chart shows the reasons for leaving for exited employees.
Average Tenure vs Performance of Exits
This graph shows the performance of the employees that exit and how was their tenure with the organization. This chart gives an understanding of whether the better performing employees find the organization attractive and stay beyond the years defined as Loyal to the company.
Performance Distribution
This chart shows the distribution of Performance of employees for the current year.
Navigation: Page – Context

2.21.3.2 SAP__HR_GEN_RECRUITMENT

Name: SAP__HR_GEN_RECRUITMENT
Description: SAP Human Resources: Recruitment
Please note that the model used is SAP__HR_GEN_IM_RECRUITMENT
Page – Overview
This page provides an overview of Recruitments in the selected job posting period.
Charts
Recruitment Overview
This chart contains the following KPIs related to Recruitment: Positions Posted, Job Requisitions, Number of Applications, Hires, Position fulfilment ratio, Application Conversion Ratio, Days to Fill (Average), and Days to Start (Average).
Job Requisitions
This chart shows the trend of Job postings on granularity of month for the selected job posting period
Requisitions per Country
This treemap shows the distribution of requisitions by country.
Requisitions per Department
This treemap shows the distribution of requisitions by department.

Name: SAP__HR_GEN_RECRUITMENT
Positions per Country
This chart shows the number of jobs posted, number of hires, and the Position fulfilment ratio per country.
Recruitment Sources
This chart shows the different recruitment sources and the applications, hires, and application conversion ratio for each source.
Gender Distribution
This chart shows the gender distribution of applicants and hires.
Page – Detail
This page forms the content screen for the Recruitment Agenda Item. Aim of the content screen is to provide detail information on granularity of country and department based on a selected job posting period. Page level filters are provided for country, department and job posting period. This page shows how the different modes of Recruitment are performing, Internal Candidates, External Candidates, and Referrals and Agencies in 4 swim lanes.
Charts
Internal Candidates
This chart shows KPIS for Internal Applications, Internal hires, and Conversion rate. The internal hire distribution is shown by department and by paygrade.
External Candidates
This chart shows KPIS for External Applications, External hires, and Conversion rate. The external hire distribution is shown by department and by paygrade.
Employee Referrals
This chart shows KPIs for number of referrals, successful referral, and conversion ratio. For each department, the number of job requisitions and number of referrals are shown.
Agency Placements
This chart shows KPIs for number of agencies, candidates proposed through agencies, successful hires, and conversion ratio. For each agency, the no. of proposed candidates and hires are shown.
Page – Context
This page forms the context screen for Recruitment Agenda item. The purpose of this screen is to provide more information on the Job requisitions posted.
Charts
Talent Pipeline
This tile shows the number of applicants in different phases of the recruitment process. The phases are customizable in SuccessFactors.
Hires
This chart shows the number of hires each year for the job posting period selected.
Job Requisitions

Name: SAP__HR_GEN_RECRUITMENT
This chart shows the number of job requisitions posted each year for the job posting period selected. It is possible to navigate to the explorer from this chart to do free style analysis.
Lead Times per Department
This chart shows the average Days to Fill and Days to Start per department.
Positions per Pay Grade
This chart shows for each Paygrade, the number of postings, applications and hires.
Full Time vs Part-time Positions
For each department, this chart shows the number of postings for full time and part time employees.
Lead Times per Job Classification
This chart shows the average Days to Fill and Days to Start per job classification.
Positions per Job Classification
This chart shows the postings, applications, and hires for each job classification.
Regular vs Temporary Positions
This chart shows the postings for regular and temporary positions for each department.

2.21.4 Models

For all the models mentioned for HR, all the public dimensions mentioned should be manually filled with master data based on SuccessFactors before models can be loaded.

2.21.4.1 (SAP__HR_GEN_IM_EC_HEADCOUNT)

Model Name: SAP__HR_GEN_IM_EC_HEADCOUNT	Connection
• Model Description: SAP Human Resources: EC - Headcount • Planning Enabled: No	• Connection type: Get data from an App • Which system: SuccessFactors • Connection Query: Job Information (SFSF EC - EmploymentInformation > EmpJob)
How to import data into the model	

Model Name:
SAP__HR_GEN_IM_

EC_HEADCOUNT	**Connection**

The model and the Public Dimensions come with some predefined data import jobs.

1. Update the credentials in the connection SAPSFSF.
2. Import the master data into the Public Dimensions by running the predefined import jobs.
3. Import the transactional data into the model by running the predefined import job.
4. If both ran successfully, the import jobs into the public dimensions can be concatenated. This dependency would make sure that the master data is consistent first before the transactional data is being imported.

Account			
Measure ID	**ID Mapping**		
FTE	Fte		
BIRTHYEAR	userNav/dateOfBirth		
HIREYEAR	employmentNav/startDate		
TERMINATIONYEAR	employmentNav/endDate		
SENIORITYSTART	employmentNav/seniorityDate		
PERFORMANCE	userNav/performance		
POTENTIAL	userNav/potential		
Transactional data import		**Public Dimensions import**	
Dimension ID	**ID Mapping**	**Description Mapping**	**Additional Property Mapping**
HIREDATE	employmentNav/startDate		
Location: LOCATION	locationNav/externalcode		
Country of Company: COUNTYOFCOMPANY	countryofcompany		
User: SAP_HR_GEN_USER	userNav/userId	userNav/firstName userNav/lastName	userNav/username: jobTitle Parent: userNav/manager/userId
Business Area: SAP_ALL_BUSINESSAREA	businessUnitNav/externalcode	businessUnitNav/name	
Company Code: SAP_ALL_COMPANY_CODE	companyNav/externalcode	companyNav/name	
Cost Center: SAP_ALL_COSTCENTER	costCenterNav/externalCode	costCenterNav/name	

Model Name: SAP__HR_GEN_IM_ EC_HEADCOUNT	Connection		
Department: SAP_HR_USER_DEPARTMENT	departmentNav/externalcode	departmentNav/name	
Division: SAP_HR_USER_DIVISION	divisionNav/externalcode	divisionNav/name	
Employment Status: SAP_HR_EMPLSTATUS	emplStatusNav/externalCode		
Ethnicity: SAP_HR_USER_ETHNICITY	userNav/ethnicity		
Future Leader: SAP_HR_USER_FUTURELEADER	userNav/futureLeader		
Gender: SAP_HR_USER_GENDER	userNav/gender		
Impact of Loss: SAP_HR_USER_LOSSIMPACT	userNav/impactOfLoss		
Is Contingent Worker: SAP_HR_ISCONTINGENT	employmentNav/isContingentWorker		
Fulltime: SAP_HR_USER_ISFULLTIME	isFulltimeEmployee		
Job Classification: SAP_HR_USER_JOBCLASSIFICATION	jobCodeNav/externalCode	jobCodeNav/name	
Location: SAP_HR_LOCATION_COUNTRY	locationNav/externalcode	locationNav/name	• locationNav/geozoneFlxNav/name • locationNav/addressNavDEFLT/country • locationNav/locationGroupNav/name
New to Position: SAP_HR_USER_ISNEWTOPOSITION	userNav/newToPosition		

Model Name: SAP__HR_GEN_IM_ EC_HEADCOUNT	Connection		
Pay Grade: SAP_HR_USER_PAYGRADE	payGradeNav/externalCode	payGradeNav/name	
Performance: SAP_HR_USER_PERFORM-ANCE	userNav/performance		
Potential: SAP_HR_USER_POTENTIAL	userNav/potential		
Reason For Leaving: SAP_HR_USER_REASON-FORLEAVING	userNav/reasonForLeaving		
Seniority Start Date: SAP_HR_SENIORITYSTART-DATE	employmentNav/seniority-Date	Day	Month Year
Termination Date: SAP_HR_TERMINATION-DATE	employmentNav/endDate	Day	Month Year
Note 1: Time handling			

Model Name: SAP__HR_GEN_IM_ EC_HEADCOUNT	Connection

Seniority Start Date

First, import data into the public dimension:

- Map Seniority Start Date to ID
- Duplicate Seniority Start Date
- Split on "-" repeat "2"
- Assign day to description, month to month and year to year

When importing transactional data:

- Assign Seniority Start Date to dimension ID SAP_HR_SENIORITYSTARTDATE
- Duplicate Seniority Start Date
- Split on "-"
- Assign Year to measure SENIORITYSTART
- Delete residual

Termination Date

First, import data into the public dimension:

- Map Termination Date to ID
- Duplicate Termination Date
- Split on "-" repeat "2"
- Assign day to description, month to month and year to year

When importing transactional data:

- Assign Termination Date to dimension SAP_HR_TERMINATIONDATE
- Duplicate Termination Date
- Split on "-"
- Assign Year to measure TERMINATIONYEAR
- Delete residual

Hire Date

- Assign Hire Date to Time
- Duplicate Hire Date
- Split on "-"
- Assign Year to measure HIREYEAR
- Delete residual

Note 2: Geo handling
The SuccessFactors OData API does not deliver Geo coordinates. In order to update the latitude and longitude values, an excel file with those values needs to be updated and they need to be mapped.

2.21.4.2 General - Headcount (SAP__HR_GEN_IM_HEADCOUNT)

Model Name: SAP__HR_GEN_IM_HEADCOUNT	Connection
• Model Description: SAP Human Resources: General - Headcount • Planning Enabled: No	• Connection type: Get data from an App • System: SuccessFactors • Connection Query: Template Query Headcount, with the additional dimensions Hire Date, Gender and IsShift: IsShift can be found in the Job Information • Hire date and Gender can be found on the left hand side to find userNav and expand User, then drag Hire Date and Gender into the query.

Headcount Account		
ID	**Description**	**Formula/Mapping**
FTE	Entire FTE	FTE
Salary		userNav>User>Salary
Starting Salary		userNav>User>Starting Salary
WeeklyHours	Standard Weekly Hours	Standard Weekly Hours
DaysWeekly	Working days per week	Working Days per Week
BirthYear	Year of Birth	Please see Note1
HireYear	Hire Year	Please see Note1
LeaveYear	Leaving Year	Please see Note1
Joining Age	Joining Age	[HireYear] -[BirthYear]
Leaving Age	Leaving Age	[LeavingYear] - [BirthYear]
Tenure	Tenure	[LeavingYear] -[HireYear]
AverageTenure	Average Tenure	[Tenure] / [LeftEmployees]
CurrentFTE	Current FTE	LOOKUP([FTE]) where terminationyear =2099
NewHires	New Hires	LOOKUP([FTE]) where hireyear = 2017
CurrentExits	Current Exits	LOOKUP([FTE]) where terminationyear = 2017
LeftEmployees	Left Employees	LOOKUP([FTE]) where terminationyear < 2099

Model Name: SAP__HR_GEN_IM_HEADCOUNT		Connection
Managers		LOOKUP([CurrentFTE]) where jobclassification =("EXEC","IT-DIR","MKT-DIR","President","VP-IT")
FTEStartCurrentYear	FTE Year Beginning	LOOKUP([FTE]) where hireyear < 2017 AND terminationyear = ("2017","2099")
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	userNav>User> Hire Date, also see Note 1
User	SAP_HR_GEN_USER	User ID
BirthDate	SAP_HR_USER_BIRTHDATE	userNav>User>Date of Birth
Birthyear	SAP_HR_USER_BIRTHYEAR	Please see Note1
Department	SAP_HR_USER_DEPARTMENT	Department
Division	SAP_HR_USER_DIVISION	Division
Ethnicity	SAP_HR_USER_ETHNICITY	Ethnicity
FutureLeader	SAP_HR_USER_FUTURELEADER	userNav>User>FutureLeader
Gender	SAP_HR_USER_GENDER	Scroll down and add user-Nav>User>Gender
HireYear	SAP_HR_USER_HIREYEAR	Please see Note1
Fulltime	SAP_HR_USER_ISFULLTIME	Is Fulltime Employee
NewToPosition	SAP_HR_USER_ISNEWTOPOSITION	userNav>User>New To Position
IsShift	SAP_HR_USER_ISSHIFT	Open Job Information and add Is Shift Employee
Job Classification	SAP_HR_USER_JOBCLASSIFICATION	Job Classification
Job Title	SAP_HR_USER_JOBTITLE	Job Title
Impact Of Loss	SAP_HR_USER_LOSSIMPACT	userNav>User>Impact of Loss
Manager	SAP_HR_USER_MANAGER	ManagerUserNav>User>User ID
Married	SAP_HR_USER_MARRIED	userNav>User>Married
PayGrade	SAP_HR_USER_PAYGRADE	PayGradeID
Performance	SAP_HR_USER_PERFORMANCE	userNav>User>Performance
Potential	SAP_HR_USER_POTENTIAL	userNav>User>Potential
ReasonForLeaving	SAP_HR_USER_REASONFORLEAVING	userNav>User>ReasonForLeaving
Termination Date	SAP_HR_USER_TERMINATIONDATE	userNav>User>Termination Date
Termination Year	SAP_HR_USER_TERMINATIONYEAR	Please see Note1
Legal Entity	SAP_ALL_COMPANY_CODE	Business Unit
Country	SAP_ALL_COUNTRY	Country
Headcount Account*	SAP_HR_HEADCOUNTACCOUNT	Company

Model Name: SAP__HR_GEN_IM_HEADCOUNT	Connection
Note 1	

> **Note**
>
> - Date handling needs some workarounds in SAP Analytics Cloud.
> - userNav>User> Hire Date in SuccessFactors – Let's say column [userNav/User/Hire Date]

Action	Result
Click on Hire Date and go from the Card View to the Column View	
Split [userNav/User/Hire Date] on " " repeat "1"	Column [userNav/User/Hire Date] only has the Hire Date Column [userNav/User/Hire Date_2] has the Hire Time
Duplicate [userNav/User/Hire Date]	Column [userNav/User/Hire Date_3] is created with Hire Date
Split [userNav/User/Hire Date_3] on "-" repeat "1"	Column [userNav/User/Hire Date_3] has the Year Column [userNav/User/Hire Date_3_2] has the month and days
Duplicate [userNav/User/Hire Date_3]	Column [userNav/User/Hire_Date_3_3] is created
Optional: delete unnecessary columns: Delete [userNav/User/Hire Date_2] Delete [userNav/User/Hire Date_3_2]	
Go back into the card view.	
Map Time in the model to column [userNav/User/Hire Date] Map Account HireYear in the model to column [userNav/User/Hire Date_3] Map Dimension HireYear in the model to column [userNav/User/Hire Date_3_3]	

In a similar way:

- userNav>User>TerminationDate columns should be mapped to account LeaveDate and dimension Termination Date
- userNav>User>Date of Birth columns should be mapped to account BirthDate and Dimension BirthDate

> **Note**
>
> * Private dimension and other dimensions are public.

2.21.4.3 SAP Human Resources: Courses - Summary (SAP__HR_COURSES_IM_SUMMARY)

Model Name: SAP__HR_COURSES_IM_SUMMARY	Connection
• Model Description: SAP Human Resources: Courses - Summary • Planning Enabled: No	• Connection type: Get data from an App • System: SuccessFactors • Connection Query: Table Query Classes

SAP_HR_COURSEACCOUNT (HR Course Account)		
ID	**Description**	**Formula/Mapping**
Tuition	Tuition	Tuition
Reimbursement	Reimbursement	Reimbursement
Dimensions		
ID	Description	Mapping
Time*	Time	Tuition Reimbursement_Employee
User	SAP_HR_GEN_USER	Course
Course Name	SAP_HR_COURSE_COURSENAME	Grade
Grade	SAP_HR_COURSE_GRADE	Tuition Reimbursement Effective Date

> **i Note**
>
> * Private dimension and other dimensions are public.

2.21.4.4 Leaves - Leave of Absence (SAP__HR_LEAVES_IM_LOA)

Model Name: SAP__HR_LEAVES_IM_LOA	Connection
• Model Description: SAP Human Resources: Leaves - Leave of Absence • Planning Enabled: No	• Connection type: Get data from an App • System: SuccessFactors • Connection Query: Table Query Employee Time

SAP_HR_LEAVESACCOUNT (HR Leaves Account)		
ID	**Description**	**Formula/Mapping**
DeductionQuantity	Deduction Quantity	Deduction Quantity

Model Name: SAP__HR_LEAVES_IM_LOA		Connection
FractionQuantity	Fraction Quantity	Fraction Quantity
NumberDays	Number of Days	Number of Days
NumberHours	Number of Hours	Number of Hours
WorkflowRequest	Workflow Request	Workflow Request
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Start Date
User	SAP_HR_GEN_USER	User
LOA Actual Return Date	SAP_HR_LEAVES_ACTUALEND	Leave of Absence Actual Return Date
LOA Expected Return Date	SAP_HR_LEAVES_EXPECTEDEND	Leave of Absence Expected Return Date
Approval Status	SAP_HR_LEAVES_APPROVALSTATUS	Approval Status
Time Record Origin	SAP_HR_LEAVES_TIMERECORD	Time Record Origin
Time Type	SAP_HR_LEAVES_TIMETYPE	Time Type
Name Dimension that only exists in SAP Analytics Cloud model and not in data source		Assign to #

> **i** Note
>
> * Private dimension and other dimensions are public.

2.21.4.5 Survey - Survey Results (SAP__HR_SURVEY_IM_RESULTS)

Model Name: SAP__HR_SURVEY_IM_RESULTS

- Model Description: SAP Human Resources: Survey - Survey Results
- Planning Enabled: No

SAP_HR_SURVEYACCOUNT (HR Survey Account)	
ID	**Description**
Indicator	Indicator
Dimensions	
ID	**Description**
Time*	Time
Legal Entity	SAP_ALL_COMPANY_CODE
Country	SAP_ALL_COUNTRY

Model Name: SAP__HR_SURVEY_IM_RESULTS	
Department	SAP_HR_USER_DEPARTMENT
Survey Indicator	SAP_HR_SURVEY_INDICATOR
Data Source Connection and Integration	
This model should be filled from an external source, for example, from a suitable spread sheet, so mapping description is not provided.	

> **i** Note
>
> * Private dimension and other dimensions are public.

2.21.4.6 General - Recruitment (SAP__HR_GEN_IM_RECRUITMENT)

Model Name: SAP__HR_GEN_IM_RECRUITMENT	Connection
• Model Description: SAP Human Resources: General - Recruitment • Planning Enabled: No	• Connection type: Get data from an App • System: SuccessFactors • Connection Query: Template EmployeeCentralRecruitmentMovementSource

SAP_HR_RECRUITMENTACCOUNT (Recruitment Account)		
ID	Description	Formula/Mapping
openings_system	Number of openings coming from system	JobRequisition>Number of Opening
hirecost	Cost of hire	JobRequisition>Cost of Hire
daystohire	Days to hire	JobApplication>Time to Hire
counter	Applicant counter	Map to a column with value 1
daystostart	Days to start	JobRequistion>Time to Fill
calculation_opening	Level 1 exception aggregation for openings	Internal calculation (not visible in story)
openings	Positions Posted	Calculation based on calculation opening
posf	Hires	RESTRICT([counter],[d/SAP_HR_RECRUIT_APPSTATUS]="27")

Dimensions		
ID	**Description**	**Mapping**

Model Name: SAP__HR_GEN_IM_RECRUITMENT		Connection
Time*	Time	JobRequisition>Date Created
Application ID	SAP_HR_RECRUIT_APPLICATIONID	JobApplication>Application Id
Job Requisition ID	SAP_HR_RECRUIT_JOBREQUISITION	JobApplication>Job Requisition ID
Candidate ID	SAP_HR_RECRUIT_CANDIDATEID	JobApplication>Candidate Id
Application Status	SAP_HR_RECRUIT_APPSTATUS	JobApplicationStatus>Application Status Id
External Employee	SAP_HR_RECRUIT_ISEXTERNAL	Candidate>External Candidate
Recruitment Source	SAP_HR_RECRUIT_SOURCE	JobApplication>Source
Former Employee	SAP_HR_RECRUIT_ISFORMEREMP	JobApplication>Former Employee
Employee Referral	SAP_HR_RECRUIT_EMPLOYEEREF	JobApplication>Referred By
Job Start Date	SAP_HR_RECRUIT_JOBSTARTDATE	JobRequisition>Job Start Date Time
Job Hire Date	SAP_HR_RECRUIT_HIREDATE	JobApplication>Hired On
Agency Name	SAP_HR_RECRUIT_AGENCYNAME	JobApplication>Agency Info
User	SAP_HR_GEN_USER	JobApplication>User id
PayGrade	SAP_HR_USER_PAYGRADE	JobRequisition>Pay Grade
Gender	SAP_HR_USER_GENDER	JobApplication>Gender
Division	SAP_HR_USER_DIVISION	JobRequisition>Job Division
Department	SAP_HR_USER_DEPARTMENT	JobRequisition>Job Department
Fulltime	SAP_HR_USER_ISFULLTIME	JobRequisition>Is Full Time Employee
Country	SAP_ALL_COUNTRY	JobRequisition>Country
Job Start Year	SAP_HR_RECRUIT_STARTYEAR	Please see Note A
Job Hire Year	SAP_HR_RECRUIT_HIREYEAR	Please see Note A
Job Requisition Status	SAP_HR_RECRUIT_REQSTATUS	JobApplication>System Status
Job Posting Close Date	SAP_HR_RECRUIT_POSTINGCLOSE	JobRequisition>Date Closed
Regular/Temporary	SAP_HR_RECRUIT_REGTEMP	JobRequisition>Reg/Temp
Job Requisition Stage	SAP_HR_RECRUIT_REQSTAGE	JobRequisition>Application Status Set ID
Job Classification	SAP_HR_USER_JOBCLASSIFICATION	#
Job Title	SAP_HR_USER_JOBTITLE	JobRequisition>Job Level
Recruitment Account	SAP_HR_RECRUITMENTACCOUNT	Map measures individually (see above)
Additional Notes about the model		

Model Name: SAP__HR_GEN_IM_RECRUITMENT	Connection

> **Note**
>
> Date handling needs some workarounds in SAP Analytics Cloud.

Hence, the following should be done while date mapping to the model:

JobRequisition > Job Start Date Time in SuccessFactors, Let's say column A

- Make duplicate column of column B (column C)
- Use column split on column C to get only the year (column D)
- Map Dimension Job Start Year in the model to column D

> **Note**
>
> * Private dimension and other dimensions are public.

2.22 Human Experience Management (HXM) Workforce Planning

2.22.1 Overview: Use Case and Area of Application

This content package aims to enable HR planners in the area of FTE and salary cost planning, both on the aggregated (top-down) and detailed (bottom-up) level. Capabilities include planning for cost center and employment level changes, promotions, absences, terminations and the creation of new positions. Based on one central model, this content package offers a single source of truth for the planned FTE and related costs, enabling reports with insights to current workforce compositions, such as shrinkage or growth in a particular job role, gender distribution, or internal/external workforce ratio.

An extension of this package is possible with the add-on package ("SAP_HXM_Workforce_Planning_Addon") to publish the planned results into the Integrated Financial Planning for SAP S/4HANA content package.

This content package is best viewed when SAP Analytics Cloud is displayed in a screen with resolution of 1920 x 1200 px.

2.22.2 Architecture

This content package consists of five analytic applications and one reporting story, all based on one central data model of type: "New Model".

WFP - Overview Page (SAP__HR_BPL_IM_WFP_OVERVIEW_PAGE)

(Analytic app) Central entry point for all users to navigate to the setup, the three headcount and FTE planning applications, and the reports (story).

WFP - Central Assumptions (SAP__HR_BPL_IM_WFP_CENTRAL_ASSUMPTIONS)

(Analytic app) Sets up the foundation of the workforce planning process. Maintain central assumptions for internal headcounts (e.g. midpoint salaries, contributing cost factors like social security, pensions etc.) and monthly rates for the external workforce. Define the planning granularity by choosing from a list of pre-configured planning levels. Existing data, such as actuals, can be copied to seed the initial plan data.

WFP - Aggregated External Plan (SAP__HR_BPL_IM_WFP_AGGREGATED_EXTERNAL)

(Analytic app) Top-down headcount plan for external (contingent) workers. Plan headcount and see the resulting costs. Choose from a list of pre-configured planning levels to define the planning granularity to optimally reflect your organizational structure. For comparisons see chart visualization of the delta to budget or any other chosen version.

WFP - Aggregated Internal Plan (SAP__HR_BPL_IM_WFP_AGGREGATED_INTERNAL)

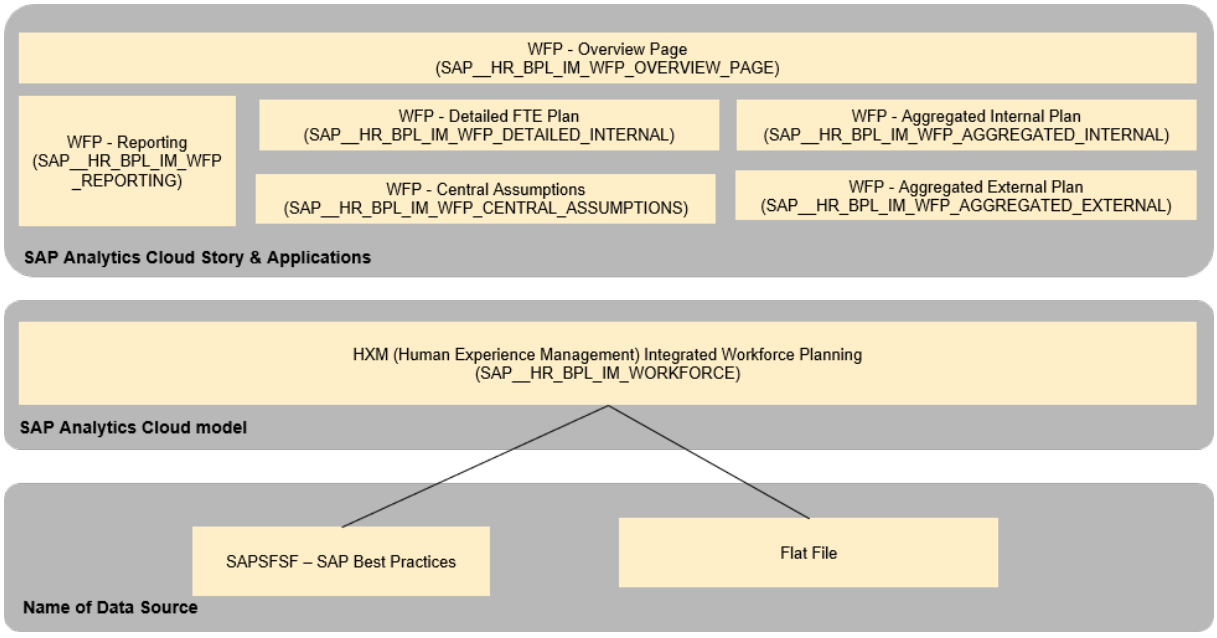
(Analytic app) Top-down headcount planning for internal workforce. Plan headcount and see the resulting costs. Choose from a list of pre-configured planning levels to define the planning granularity to optimally reflect your organizational structure. For comparisons see chart visualizations of the delta to budget or any other chosen version.

WFP - Detailed Internal (SAP__HR_BPL_IM_WFP_DETAILED_INTERNAL)

(Analytic app) Bottom-up FTE planning of individual employees. Carry out actions for existing employees such as cost center or employment level change, promotion, absence, or termination. Create new positions together with the corresponding attributes such as cost center, company code, location, job family etc. See resulting costs from the FTE planning of both existing and new positions. For comparisons see chart visualizations of the delta to budget or any other chosen version.

WFP - Reporting (SAP__HR_BPL_IM_WFP_REPORTING)

(Story) Reports showing current planning progress and the actuals performance. See gender analysis or workforce composition breakdown in different locations and roles. Get insights to internal/external headcount ratio. Assess current planning in comparison to budget.



2.22.3 Analytic Applications and Stories

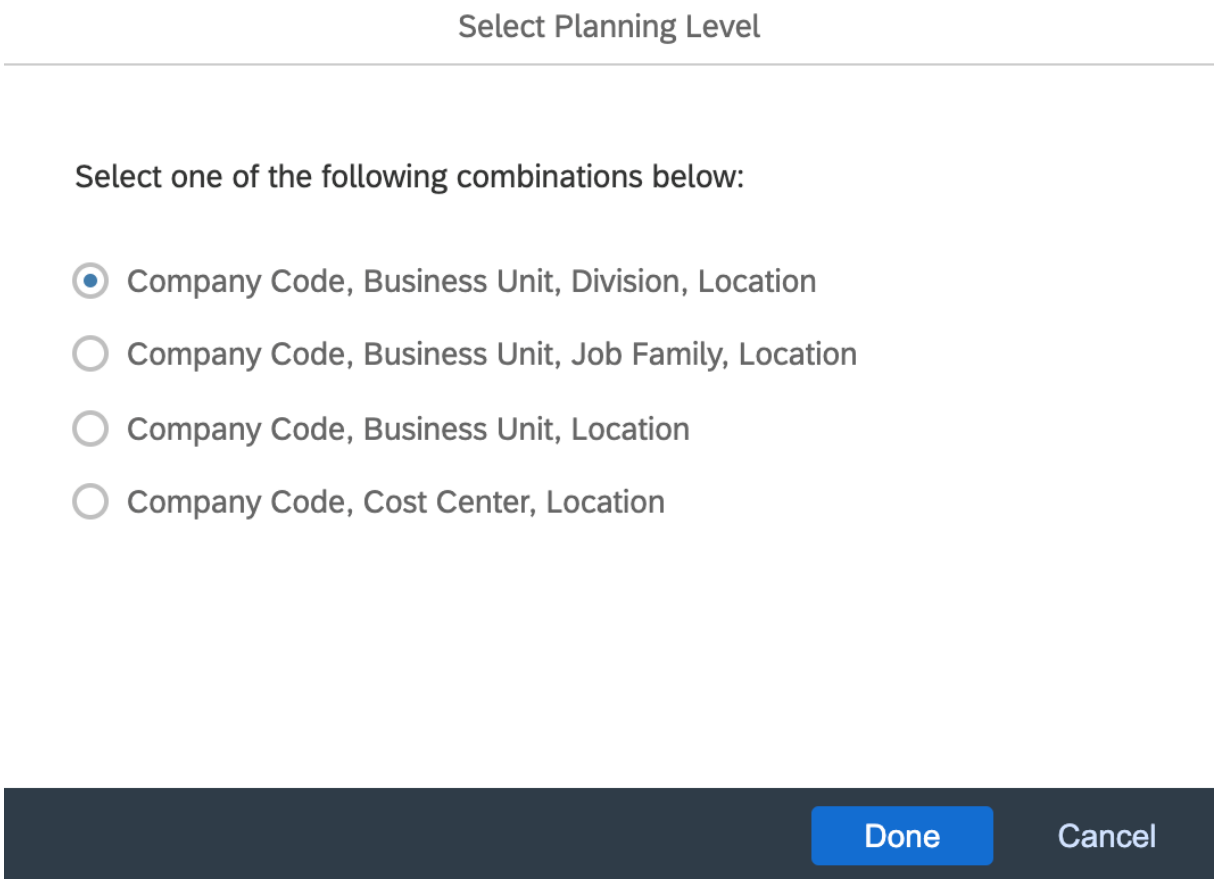
General Features

Plan level Selection

For some applications it is necessary to select the intended plan level at the beginning of your workflow. For those cases you will find the settings under the button "General Settings". This ensures that the data is entered and/or seeded at the correct granularity. For some workflows it is also possible to change the level during planning. See the details to each application in the following sections for more information.

Button

Options



Version Selection

The content comes with 4 versions:

- Actual

- Aggregated Plan

- Detailed Plan

- TopDown Budget

If additional versions are desired, simply create one via the Version Management. See SAP Help Portal for more details.

For all chart visualizations, it is possible to switch between available versions in the model for desired comparison.

View Switch / Sub-Workflows

For some applications an alternative plan method is provided, or the workflow is divided into two areas for better overview and comprehensibility. Access to those is possible via the toggle under the headline.

Filter

In all applications besides the landing page there is a filter icon above the headline. This allows for the setting of filter during the workflow to further refine your table layout. This filter, however, works purely as a visual filter and has no impact on the seeding granularity.

Collapse / Expand

Where applicable, collapse/expand capabilities are built in to allow for adjustments of the table height. It is possible to collapse each table, or to collapse the header altogether when it is not necessary for the workflow. To hide all other UI elements besides the current table in use, trigger the full screen mode of the desired table via the quick-action menu.

2.22.3.1 Overview Page

Use Case

Central entry point for all users. Contains links to all parts of the content.

Version(s) Used

Aggregated_Plan

2.22.3.2 Central Assumptions

Use Case

This application is for the setting up of the foundation for workforce planning solution. Parameters for salary cost calculations (central assumptions) are loaded here. These are then in turn used for the seeding of the plan data, albeit only at the chosen planning level. The rates maintained in the central assumptions are also taken for calculations made in the scope of planning new hires.

Parameters can be maintained for internal and external workforce. Depending on the cost type, the mode of entry could be in amount, percentage rate or headcount.

The workflow could be executed via a guided UI (click on button "Guide Me!") or - for the more experienced - by triggering the copy and seeding steps according to individual needs.

Workflow:

- Click on "General Settings" to set up the version and plan level
- If desired, click on "Copy Data" to seed the chosen version with data from another
- Adjust the data manually, if needed, and click on "Confirm" when done

Version(s) Used

Two versions should be seeded to setup the whole solution: Detailed_Plan and Aggregated_Plan.

Data Action(s)

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_COPY_CENTRAL_ASSUMPTIONS_FROM_OTHER_VERSION	da_copy_ca	I
SAP__HR_BPL_IM_INITIALIZE_PLAN_WITHOUT_AGGREGATION	da_Seed_Scenario_0	II
SAP__HR_BPL_IM_INITIALIZE_PLAN_LEVEL_01	da_Seed_Scenario_1	III
SAP__HR_BPL_IM_INITIALIZE_PLAN_LEVEL_02	da_Seed_Scenario_2	IV

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_INITIAL-IZE_PLAN_LEVEL_03	da_Seed_Scenario_3	V
SAP__HR_BPL_IM_INITIAL-IZE_PLAN_LEVEL_05	da_Seed_Scenario_5	VI

Usage

- (I) Copies the central assumptions, written on Plan Level = Central Assumptions, from one version to another

- (II) Calculates the costs based on the cost parameters set on the plan level "CompanyCode/CostCenter(Detailed Plan)" and prepopulates the chosen plan version with headcount values and costs. A pre-population for headcount values and costs of the chosen plan version can only take place if there is at least one reference month in the dataset available to copy the data from.

- (III) Aggregates all data on a CompanyCode/BusinessUnit/Division level (plan level), calculates the costs based on the cost parameters set on the corresponding plan level and prepopulates the chosen plan version with headcount values and costs. For external workforce, the aggregation occurs on CompanyCode/BusinessUnit/Division/Location level. A pre-population can only take place when the conditions described in (II) are met.

- (IV) Aggregates all data on a CompanyCode/BusinessUnit level (plan level), calculates the costs based on the cost parameters set on the corresponding plan level and prepopulates the chosen plan version with headcount values and costs. For external workforce, the aggregation occurs on CompanyCode/BusinessUnit/Location level. A pre-population can only take place when the conditions described in (II) are met.

- (V) Aggregates all data on a CompanyCode/CostCenter level (plan level), calculates the costs based on the cost parameters set on the corresponding plan level and prepopulates the chosen plan version with headcount values and costs. For external workforce, the aggregation occurs on CompanyCode/CostCenter/Location level. A pre-population can only take place when the conditions described in (II) are met.

- (VI) Aggregates all data on a CompanyCode/BusinessUnit/JobFamily level (plan level), calculates the costs based on the cost parameters set on the corresponding plan level and prepopulates the chosen plan version with headcount values and costs. For external workforce, the aggregation occurs on CompanyCode/BusinessUnit/JobFamily/Location level. A pre-population can only take place when the conditions described in (II) are met.

2.22.3.3 Aggregated External

Use Case

This application is for top-down planning of external headcounts.

Workflow:

1. Enter the total HC demand in the first table.

2. Click on the Calculate Costs in the second table to see the results

3. Click Confirm when done.

> **i** Note
>
> After being triggered, the calculated costs can be manually adjusted afterwards if desired. Toggle on "Show Adjustment" above the table. A column for manual adjustment entries will appear in the table.

Version(s) Used

Aggregated Plan

Data Action(s)

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_01	da_AGGRPLAN_PL1_calculate_costs	I
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_02	da_AGGRPLAN_PL2_calculate_costs	II
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_03	da_AGGRPLAN_PL3_calculate_costs	III
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_05	da_AGGRPLAN_PL4_calculate_costs	IV
SAP__HR_BPL_IM_CALCU-LATE_DELTA_VALUES	da_calculate_delta_FTE	V

Usage

- Calculates the costs for all cost types on plan level = CompanyCode/BusinessUnit/Division(+Location) based on the headcount values planned and parameters maintained in the central assumptions.
- Calculates the costs for all cost types on plan level = CompanyCode/BusinessUnit(+Location) based on the headcount values planned and parameters maintained in the central assumptions.
- Calculates the costs for all cost types on plan level = CompanyCode/CostCenter(+Location) based on the headcount values planned and parameters maintained in the central assumptions.
- Calculates the costs for all cost types on plan level = CompanyCode/BusinessUnit/JobFamily(+Location) based on the headcount values planned and parameters maintained in the central assumptions.

- Calculates the amount of resulting hires and terminations based on the user input for overall headcount demand.

2.22.3.4 Aggregated Internal

Use Case

This application is for top-down planning of internal headcounts. There are two ways to do the planning here:

1. Start by planning the desired total headcount demand and let the system calculate the resulting necessary new hires.

2. Start by planning the necessary new hires and let the system calculate the resulting total demand.

Toggling between these two modes are possible via the button:

Workflow:

Plan Total Headcount:

1) Enter total headcount demand in the first table.

2) Click Calculate Costs and check the results in the second table.

3) Click Confirm when done.

Plan New Hires Demand:

1) Enter new hires headcount demand in the first table.

2) Click Calculate Costs and check the results in the second table

3) Click Confirm when done

Note: After being triggered, the calculated costs can be manually adjusted afterwards if desired. Toggle on Show Adjustment above the table to display a column for manual adjustments.

Version(s) Used

Aggregated Plan

Data Action(s)

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_01	da_AGGRPLAN_PL1_calculate_costs	I
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_02	da_AGGRPLAN_PL2_calculate_costs	II
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_03	da_AGGRPLAN_PL3_calculate_costs	III
SAP__HR_BPL_IM_CALCU-LATE_COSTS_PLAN_LEVEL_05	da_AGGRPLAN_PL4_calculate_costs	IV
SAP__HR_BPL_IM_CALCU-LATE_DELTA_VALUES	da_calculate_delta_FTE	V
SAP__HR_BPL_IM_CALCU-LATE_END_OF_PERIOD_VALUES	da_calculate_EOP_FTE	VI

Usage

For first five entries, refer to the data actions listed in the topic Aggregated External.

(VI) Calculates the total headcount for each month based on the user input for the amount of hires and terminations.

2.22.3.5 Detailed Internal

Use Case

This application is for bottom-up planning of internal headcounts. There are 2 separate workflows, each dedicated to a different part of FTE planning:

1) Adjustments (absence & movement) for existing employees:

- Cost center change

- Promotion

- Absence

- Employment Level

- Termination

2) New hires creation

Toggling between these two workflows are possible via the button:

Workflow:

Absence & Movement:

1) Select your desired employee on the table, then select the action to perform

2) The resulting FTE and cost will be displayed in the tables

3) When done with planning, click Confirm.

New Hires

1) Click on Create New Position.

2) Enter all necessary details

3) The resulting FTE will be displayed. [The resulting costs will be displayed in the Overview FTE Costs table]

4) When done with planning, click Confirm.

> **i** Note
>
> After being triggered, the calculated costs can be manually adjusted afterwards if desired. Toggle on Show Adjustment above the table. A column for manual adjustment entries will appear in the table.

Version(s) Used

Detailed_Plan

Data Action(s)

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_CREATE_NEW_POSITION	da_createNewPosition	I
SAP__HR_BPL_IM_TERMINATE_EMPLOYEE	da_terminateEmployee	II
SAP__HR_BPL_IM_CHANGE_COST_CENTER_OF_EMPLOYEE	da_changeCostCenter	III
SAP__HR_BPL_IM_PLAN_ABSENCE_FOR_EMPLOYEE	da_maintainAbsence	IV

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_PLAN_PART_TIME_FOR_EMPLOYEE	da_adjustEmploymentLevel	V
SAP__HR_BPL_IM_REVERT_MANUAL_CHANGES_FOR_EMPLOYEE	da_revertEmployee	VI
SAP__HR_BPL_IM_PROMOTE_EMPLOYEE	da_promoteEmployee	VII
SAP__HR_BPL_IM_DELETE_POSITION	da_deletePosition	VIII
SAP__HR_BPL_IM_CALCULATE_COSTS_PLAN_LEVEL_04	(Is not included in application, but a nested data action)	IX
SAP__HR_BPL_IM_CALCULATE_COSTS_FOR_NEW_POSITION_PLAN_LEVEL_04	(Is not included in application, but a nested data action)	X

Usage

- (I) Books FTE values on a company code, cost center, position, pay grade, job family, business unit, division and department level and calculates the costs for the position based on the parameters set in the central assumption on the level "CompanyCode/CostCenter(Detailed Plan)".

- (II) Deletes all headcount values, FTE values and costs for a certain employee beginning from a certain month.

- (III) Change the cost center of an existing employee.

- (IV) Book an absence for specific period of time for an existing employee. The FTE values and costs are set on 0 for the specified period of time.

- (V) Adjust the FTE value for specific period of time for an existing employee. The FTE value is set on the user input and costs are reduced on a percentage basis compared to the initial state.

- (VI) Revert all changes planned for an existing employee to the initial state.

- (VII) Change the pay grade of a specific employee starting from a specified date.

- (VIII) Delete all data for a specific position.

- (IX) Calculates the costs for all cost types on plan level "CompanyCode/CostCenter(Detailed Plan) based on the FTE values planned and parameters set on the corresponding plan level in central assumption for a specific employee. This data action is not included in the application but embedded in other data actions (da_maintainAbsence, da_adjustEmploymentLevel, da_revertEmployee).

- (X) Calculates the costs for all cost types on plan level = CompanyCode/CostCenter(Detailed Plan) based on the FTE values planned and the parameters set on the corresponding plan level in the central assumption. This data action is not included in the application but embedded in another data action (da_createNewPosition).

2.22.3.6 Reporting

Use Case

This story contains reports with insights to how the actual performance is in comparison to the planned data, with location and role breakdowns to offer an overview of the regional shrinkage/growth and also role development.

Pages:

1) Progress Overview (Actuals Δ Plan)

2) Gender Analysis (Actuals Δ Plan)

3) External Workforce (Actuals Δ Plan)

4) Budget Comparison (Plan Δ Budget)

Version(s) Used

Aggregated_Plan, Detailed_Plan, TopDown Budget

Calculations

Measure Name	Type	Formula/Properties
% External HC (Actuals)	Calculated Measure	[#External HC Actuals]/[#HC (Actuals)]
% External HC (Plan)	Calculated Measure	[#External HC Plan]/[#HC (Aggregated Plan)]
% Female HC (Actuals)	Calculated Measure	[#Female HC (Actuals)]/[#HC (Actuals)]
% Female HC (Detailed Plan)	Calculated Measure	[#Female HC (Detailed Plan)]/[#HC (Detailed Plan)]
% HC Δ (Actuals - Plan)	Calculated Measure	[#HC ACT Δ PLAN]/[#HC (Detailed Plan)]
% HC Δ (Plan - Budget)	Calculated Measure	[#HC (Plan Δ Budget)]/[#HC (Budget)]

Measure Name	Type	Formula/Properties
Average Salary	Aggregation	- Measure: - TotalAmountGC - Operation: - AVERAGE excl. NULL - Aggregation Dimensions: - Employee
External HC Actuals	Restricted Measure	- Measure: - HC - Dimensions // Value: - Is Contingent Worker // External - Version // Actual - Audit // Initial Data Load
External HC Plan	Restricted Measure	- Measure: - HC - Dimensions // Value: - Is Contingent Worker // External - Version // Aggregated_Plan - Audit // Manual Change
Female HC (Actuals)	Restricted Measure	- Measure: - HC - Dimensions // Value: - Gender // F - Version // Actual - Audit // Initial Data Load
Female HC (Detailed Plan)	Restricted Measure	- Measure: - HC - Dimensions // Value: - Gender // F - Version // Detailed_Plan - Audit // Manual Change

Measure Name	Type	Formula/Properties
HC (Actuals)	Restricted Measure	- Measure: - HC - Dimensions // Value: - Version // Actual - Audit // Initial Data Load
HC (Aggregated Plan)	Restricted Measure	- Measure: - HC - Dimensions // Value: - Version // Aggregated_Plan - Audit // Manual Change
HC (Budget)	Restricted Measure	- Measure: - HC - Dimensions // Value: - Version // TopDown Budget - Audit // Manual Change
HC (Detailed Plan)	Restricted Measure	- Measure: - HC - Dimensions // Value: - Version // Detailed_Plan - Audit // Manual Change
HC (Plan Δ Budget)	Calculated Measure	[#HC (Detailed Plan)]-[#HC (Budget)]
HC ACT Δ PLAN	Calculated Measure	[#HC (Actuals)]-[#HC (Detailed Plan)]
MaxBaseSalary	Aggregation	- Measure: - BaseSalary - Operation: - Max - Aggregation Dimensions: - Employee

Measure Name	Type	Formula/Properties
MinBaseSalary	Aggregation	- Measure: - BaseSalary - Operation: - MIN - Aggregation Dimensions: - Employee

2.22.4 Model

Model Name: SAP__HR_BPL_IM_WORKFORCE	Connection	
HXM (Human Experience Management) Integrated Workforce Planning	Connection Type: - SAP SuccessFactors	
Modeltype: New Model	Planning: Yes	
Measures		
ID	Description	Mapping/Formula
AMOUNT	Amount	XXX
FTE_Change	FTE Change	
HC_Change	HC Change	
HC_EoP	HC	HC
HC_BoP	HC Begin of Period	
FTE_BoP	FTE Begin of Period	
FTE_EoP	FTE	FTE
Rate_Percentage	New percentage rate based on amount value	
Change_Percentage	Delta percentage for an amount value	
Rate_Absolute	Additional Rate as a absolut number	
Manual_Adjustment	Adjustment	
Calculated Measures:		

Model Name: SAP__HR_BPL_IM_WORKFORCE	Connection	
ID	Description	Mapping/Formula
CM_BaseSalary	BaseSalary	RESTRICT([AMOUNT] ,[d/SAP_HR_COSTTYPE]="SALARY")
CM_HC_Termination	Terminations (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT]= "26")
CM_HC_Hires	Hires (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT] = "H")
CM_Bonus	Bonus (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE] = "BONUS")
CM_FTE_Abscence	Absence (FTE)	RESTRICT([FTE_Change] ,[d/SAP_HR_USER_EVENT] = "10")
CM_MidpointSalary	Midpoint Salary	RESTRICT([AMOUNT] ,[d/SAP_HR_COSTTYPE] = "MIDPOINTSALARY")
CM_ITCosts	IT Costs Absolute Rate	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE] = "IT_COSTS")
CM_HealthInsurance_Rate	Health Insurance (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE] = "HEALTH_INSURANCE")
CM_TravelCosts	Travel Costs Absolute Rate	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE] = "TRAVEL_COSTS")
CM_CarCosts	Car Costs Absolute Rate	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE]="CAR_COSTS")
CM_Comission_Rate	Comission (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE] = "COMMISSION")
CM_LifeInsurance	Life Insurance (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "LIFE_INSURANCE")
CM_Pension	Pension (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "PENSION")
CM_RetirementFund	Retirement Fund (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "RETIREMENT_FUND")

Model Name: SAP__HR_BPL_IM_WORKFORCE	Connection	
CM_SocialInsurance	Social Insurance (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "SOC_INSUR-ANCE")
CM_FTE_Termination	Terminations (FTE)	RESTRICT([FTE_Change],[d/SAP_HR_USER_EVENT]= "26")
CM_FTE Hires	Hires (FTE)	RESTRICT([FTE_Change],[d/SAP_HR_USER_EVENT] = "H")
CM_HC_Promotion	Promotions (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT] = "8")
CM_FTE_Promotion	Promotions (FTE)	RESTRICT([FTE_Change],[d/SAP_HR_USER_EVENT] = "8")
CM_FTE_CostCenterChange	Cost Center Changes (FTE)	RESTRICT([FTE_Change],[d/SAP_HR_USER_EVENT] = "5")
CM_HC_CostCenterChange	Cost Center Changes (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT] = "5")
CM_Month_Rate	Cost Rate For External Workers	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE]= "MONTH_RATE")
CM_MeritIncrease	Merit Increase (Abs.)	RESTRICT([AMOUNT] ,[d/SAP_HR_COSTTYPE]= "MERIT")
CM_MeritIncrease_Rate	Merit Increase (%)	RESTRICT([Change_Percentage] ,[d/SAP_HR_COSTTYPE]= "MERIT")
CM_TotalAmount	Total Amount	[AMOUNT] + [Manual_Adjustment]
CM_HC_EoP	HC (no input)	[HC_EoP]
CM_TotalAmountGC	TotalAmountGC	[CM_AdjustmentGC]+[CM_AmountGC]
CM_AmountGC	Amount (GC)	AMOUNT
CM_AdjustmentGC	CM_AdjustmentGC	Manual_Adjustment

Dimensions

Name	Description	Mapping
Date	Date	EFFECTIVE_DATE
SAP_HR_COSTTYPE	Plan Cost Type	
SAP_HR_DIVISION	Division	DIVISION

Dimensions		
SAP_HR_DEPARTMENT	Department	DEPARTMENT
SAP_HR_GEOZONE	Geo Zone	
SAP_HR_BUSINESSUNIT	Business Unit	BUSINESSUNIT
SAP_HR_JOBFUNCTION	Job Family	
SAP_HR_USER_PAYRANGE	Pay Range	
SAP_HR_USER_EMPLOYEE	Employee	USERID
SAP_HR_USER_EMPLOYMENTTYPE	Employment Type	EMPLOYMENTTYPE
SAP_HR_POSITION	Position	
SAP_HR_USER_CONTRACTTYPE	Contract Type	
SAP_HR_USER_JOBLEVEL	Job Level	
SAP_HR_USER_EVENT	Event	EVENT
SAP_HR_USER_LOCATION	Location	LOCATION
SAP_HR_USER_JOBCLASSIFICATION	Job Classification	JOBCODE
SAP_FI_BPL_GLACCOUNT	G/L Account	PAYGRADE
SAP_HR_USER_PAYGRADE	Pay Grade	COSTCENTER
SAP_ALL_COSTCENTER	Cost Center	
SAP_HR_ISCONTINGENT	Is Contingent Worker	
Audit	Audit	
Plan_Level	Aggregation Level for Planning	
SAP_ALL_COMPANY_CODE	Company Code	COMPANY

2.22.5 Add-on

2.22.5.1 Overview

Use Case

This add-on aims to enable HR planners to publish their results from workforce planning (content package: "SAP_HXM_Workforce_Planning") to a Cost Center Planning and Budgeting model as part of the Integrated Financial Planning for SAP S/4HANA content package.

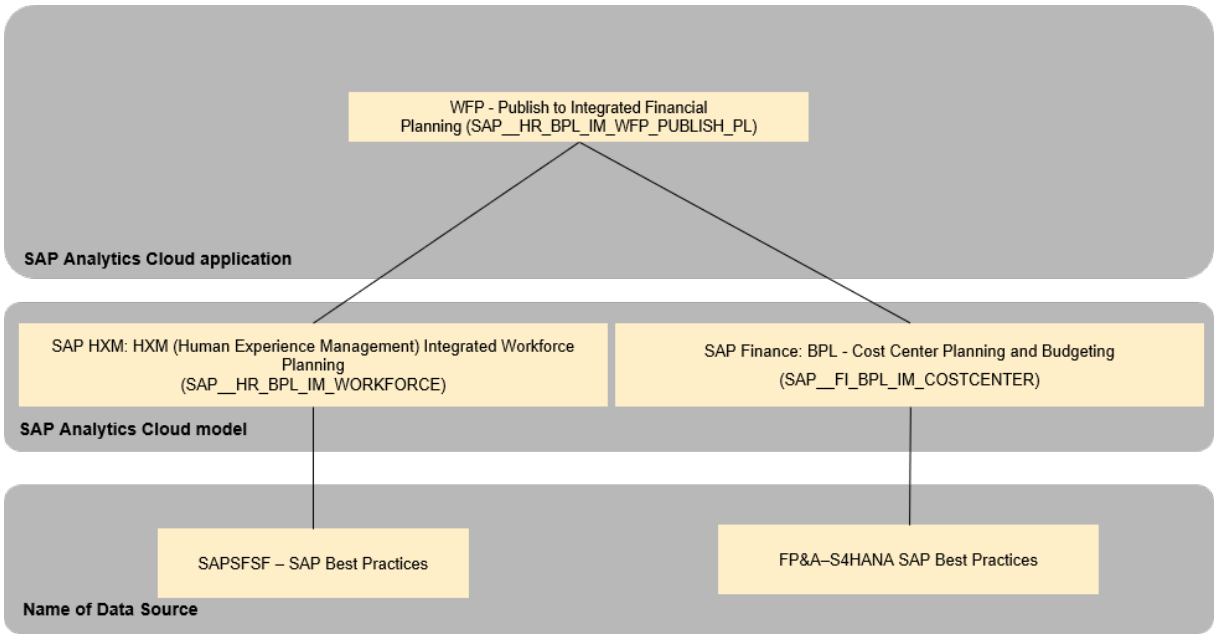
This content is best viewed with a screen resolution of 1920 x 1200 px.

2.22.5.2 Architecture

This add-on consists of one analytic application.

SAP__HR_BPL_IM_WFP_PUBLISH_PL (Analytic Application)

Maps cost types from the workforce planning model (type: new model) to GL accounts and transfers costs to the Cost Center Planning and Budgeting model.



2.22.5.3 Analytic Application

Use Case

Maps cost types from the workforce planning model (type: new model) to GL accounts and transfers costs to the Cost Center Planning and Budgeting model.

Workflow:

1) Click "General Settings" to choose the version and the plan level to copy the data from

2) Click "G/L Mapping to map the costs from the cost types to the corresponding G/L accounts

3) Click "Publish to P&L" to transfer the results to the Cost Center Planning and Budgeting model (SAP_FI_BPL_COSTCENTER).

Version(s) Used

Actual, Aggregated_Plan, Detailed_Plan, Budget (To be selected)

Data Action(s)

Data Action Technical Name	Data Action Name in Application	Usage
SAP__HR_BPL_IM_DERIVE_GL_ACCOUNTS	da_derive_gl_accounts	I
SAP__HR_BPL_IM_TRANSFER_COSTS_TO_FINANCIAL_PLAN	da_copy_to_cc_model	II

Usage

- (I) Derives the G/L Accounts for the cost types based on the attribute "G/L Account" of the dimension "Cost Type".

- (II) Copies over the costs from the Workforce Planning Model to the Financial Plan based on the global Dimension "G/L Accounts"

2.22.5.4 Model

Model Name: **SAP__HR_BPL_IM_WORKFORCE**	**Connection**	
HXM (Human Experience Management) Integrated Workforce Planning	Connection Type: - SAP SuccessFactors	
Modeltype: New Model	Planning: Yes	
Measures		
ID	Description	Mapping/Formula
AMOUNT	Amount	XXX
FTE_Change	FTE Change	
HC_Change	HC Change	
HC_EoP	HC	HC
HC_BoP	HC Begin of Period	
FTE_BoP	FTE Begin of Period	
FTE_EoP	FTE	FTE
Rate_Percentage	New percentage rate based on amount value	
Change_Percentage	Delta percentage for an amount value	
Rate_Absolute	Additional Rate as a absolut number	
Manual_Adjustment	Adjustment	
Calculated Measures:		
ID	Description	Mapping/Formula
CM_BaseSalary	BaseSalary	RESTRICT([AMOUNT] ,[d/SAP_HR_COSTTYPE]="SALARY")
CM_HC_Termination	Terminations (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT]= "26")
CM_HC_Hires	Hires (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT] = "H")
CM_Bonus	Bonus (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE] = "BONUS")

Model Name: SAP__HR_BPL_IM_WORKFORCE	Connection	
CM_FTE_Abscence	Absence (FTE)	RESTRICT([FTE_Change] ,[d/SAP_HR_USER_EVENT] = "10")
CM_MidpointSalary	Midpoint Salary	RESTRICT([AMOUNT] ,[d/SAP_HR_COSTTYPE] = "MIDPOINTSALARY")
CM_ITCosts	IT Costs Absolute Rate	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE] = "IT_COSTS")
CM_HealthInsurance_Rate	Health Insurance (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE] = "HEALTH_INSURANCE")
CM_TravelCosts	Travel Costs Absolute Rate	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE] = "TRAVEL_COSTS")
CM_CarCosts	Car Costs Absolute Rate	RESTRICT([Rate_Absolute] ,[d/SAP_HR_COSTTYPE]="CAR_COSTS")
CM_Comission_Rate	Comission (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE] = "COMMISSION")
CM_LifeInsurance	Life Insurance (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "LIFE_INSURANCE")
CM_Pension	Pension (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "PENSION")
CM_RetirementFund	Retirement Fund (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "RETIREMENT_FUND")
CM_SocialInsurance	Social Insurance (%)	RESTRICT([Rate_Percentage] ,[d/SAP_HR_COSTTYPE]= "SOC_INSURANCE")
CM_FTE_Termination	Terminations (FTE)	RESTRICT([FTE_Change],[d/SAP_HR_USER_EVENT]= "26")
CM_FTE Hires	Hires (FTE)	RESTRICT([FTE_Change],[d/SAP_HR_USER_EVENT] = "H")
CM_HC_Promotion	Promotions (HC)	RESTRICT([HC_Change],[d/SAP_HR_USER_EVENT] = "8")

Model Name: SAP__HR_BPL_IM_WORKFORCE	Connection	
CM_FTE_Promotion	Promotions (FTE)	RESTRICT([FTE_Change],[d/ SAP_HR_USER_EVENT] = "8")
CM_FTE_CostCenterChange	Cost Center Changes (FTE)	RESTRICT([FTE_Change],[d/ SAP_HR_USER_EVENT] = "5")
CM_HC_CostCenterChange	Cost Center Changes (HC)	RESTRICT([HC_Change],[d/ SAP_HR_USER_EVENT] = "5")
CM_Month_Rate	Cost Rate For External Workers	RESTRICT([Rate_Absolute] ,[d/ SAP_HR_COSTTYPE]= "MONTH_RATE")
CM_MeritIncrease	Merit Increase (Abs.)	RESTRICT([AMOUNT] ,[d/ SAP_HR_COSTTYPE]= "MERIT")
CM_MeritIncrease_Rate	Merit Increase (%)	RESTRICT([Change_Percentage] ,[d/ SAP_HR_COSTTYPE]= "MERIT")
CM_TotalAmount	Total Amount	[AMOUNT] + [Manual_Adjustment]
CM_HC_EoP	HC (no input)	[HC_EoP]
CM_TotalAmountGC	TotalAmountGC	[CM_AdjustmentGC]+[CM_AmountGC]
CM_AmountGC	Amount (GC)	AMOUNT
CM_AdjustmentGC	CM_AdjustmentGC	Manual_Adjustment

Dimensions

Name	Description	Mapping
Date	Date	EFFECTIVE_DATE
SAP_HR_COSTTYPE	Plan Cost Type	
SAP_HR_DIVISION	Division	DIVISION
SAP_HR_DEPARTMENT	Department	DEPARTMENT
SAP_HR_GEOZONE	Geo Zone	
SAP_HR_BUSINESSUNIT	Business Unit	BUSINESSUNIT
SAP_HR_JOBFUNCTION	Job Family	
SAP_HR_USER_PAYRANGE	Pay Range	
SAP_HR_USER_EMPLOYEE	Employee	USERID
SAP_HR_USER_EMPLOYMENTTYPE	Employment Type	EMPLOYMENTTYPE

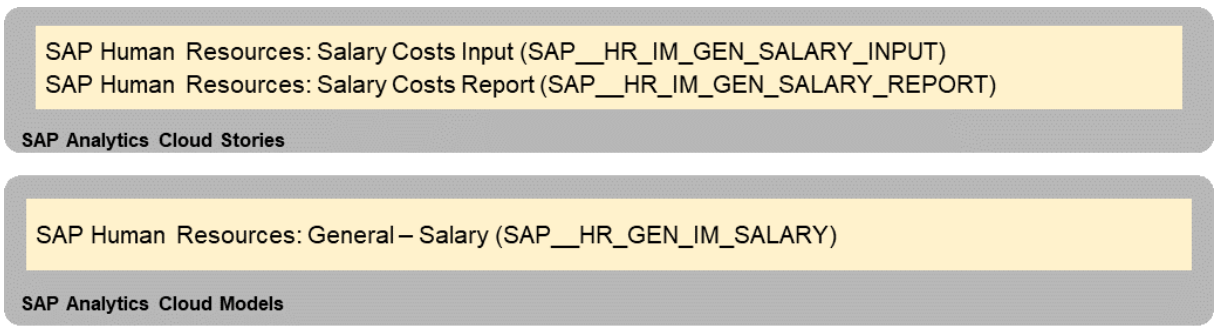
Dimensions		
SAP_HR_POSITION	Position	
SAP_HR_USER_CONTRACTTYPE	Contract Type	
SAP_HR_USER_JOBLEVEL	Job Level	
SAP_HR_USER_EVENT	Event	EVENT
SAP_HR_USER_LOCATION	Location	LOCATION
SAP_HR_USER_JOBCLASSIFICATION	Job Classification	JOBCODE
SAP_FI_BPL_GLACCOUNT	G/L Account	PAYGRADE
SAP_HR_USER_PAYGRADE	Pay Grade	COSTCENTER
SAP_ALL_COSTCENTER	Cost Center	
SAP_HR_ISCONTINGENT	Is Contingent Worker	
Audit	Audit	
Plan_Level	Aggregation Level for Planning	
SAP_ALL_COMPANY_CODE	Company Code	COMPANY

2.23 Human Resources - Salary and Employee Cost Planning

2.23.1 Architecture and Abstract

Integration between SuccessFactors and SAP Analytics Cloud is set up for integrated scenario where SAP Analytics Cloud leverages the model and data from SuccessFactors.

Architecture



2.23.2 Stories

The following stories are included:

- SAP Human Resources: Salary Costs Input (SAP__HR_IM_GEN_SALARY_INPUT)
- SAP Human Resources: Salary Costs Report (SAP__HR_IM_GEN_SALARY_REPORT)

2.23.3 Models

The next chapter provides the detailed information about the model used to create insightful Stories.

2.23.3.1 SAP Human Resources: General -Salary (SAP__HR_GEN_IM_SALARY)

SAP__HR_GEN_IM_SALARY		Connection
• SAP Procurement: Network- Invoice • Planning Enabled: Yes		Upload from File
Salary Account (SAP_HR_SAL_ACCOUNT *)		
ID	**Description**	**Mapping/Formula**
10	SALARY	
101	Base Salary	
100	ALLOWANCE	
1001	Parking	
1002	Meal	
1003	Fuel	
1004	Company Car	
200	PENSION	
2001	Fund Pension Contribution (in %)	
300	BENEFITS	
3001	Fitness	
3002	Company Mobile	
3003	Home Office connection	
400	RATES	
4001	Bonus Rate (in %)	
4002	Tax Rate (in %)	

SAP__HR_GEN_IM_SALARY		Connection
MISC	Miscellaneous	
Assignments	Assignments	
Salary_Adj	Salary Adjustment Input	
101_LOOKUP	Base Salary Temp	Lookup([101] ,[d/ t.S:SAP_HR_GEN_USER]= "#")
100_LOOKUP	Allowances Temp	Lookup([100] ,[d/ t.S:SAP_HR_GEN_USER]= "#")
300_LOOKUP	Benefits Temp	Lookup([300] ,[d/ t.S:SAP_HR_GEN_USER]= "#")
4001_LOOKUP	Bonus Temp	Lookup([4001] ,[d/ t.S:SAP_HR_GEN_USER]= "#")
4002_LOOKUP	Taxes Temp	Lookup([4002] ,[d/ t.S:SAP_HR_GEN_USER]= "#")
2001_LOOKUP	Pension Temp	Lookup([2001] ,[d/ t.S:SAP_HR_GEN_USER]= "#")
Salary_If	Base Salary	IF([Assignments]!=0, [101_LOOKUP]*[Assignments],0)
Salary_Adj_Rep	Salary Adjustment	[Salary_Adj]
Salary_Allow	Allowances	IF([Assignments]!=0, [100_LOOKUP]*[Assignments],0)
Salary_Benef	Benefits	IF([Assignments]!=0, [300_LOOKUP]*[Assignments],0)
Salary_Bonus	Bonus	IF([Assignments]!=0, ([4001_LOOKUP]*[Salary_If]))
Salary_Tax	Taxes	IF([Assignments]!=0, ([4002_LOOKUP]*[Salary_If]))
Salary_Pension	Pension	IF([Assignments]!=0, ([2001_LOOKUP]*[Salary_If]))
Salary_Overall	Overall Salary	
Assignments_Check	Already Assigned	LOOKUP([Assignments] ,[d/ SAP_HR_SAL_COUNTRY]=("AU", "CN", "HK", "IN", "JP", "KR", "NZ", "SG", "CH", "DE", "ES", "FR", "IE", "IT", "NL", "PT", "RU", "UK", "AR", "BR", "CL", "MX", "VE", "CA", "US")and[d/ t.S:SAP_HR_USER_PAYGRADE]= ("GR-10", "GR-11", "GR-12", "GR-13", "GR-14", "GR-15") ,[d/ SAP_HR_SAL_COUNTRY])
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	

SAP__HR_GEN_IM_SALARY	Connection
SAP_HR_SAL_COUNTRY	Country
SAP_HR_USER_PAYGRADE	Paygrade
SAP_HR_GEN_USER	User

Additional Notes about the model

This model could be optionally linked to a SuccessFactors query and benefit from data imports from SuccessFactors. Imputable fields of this model are accounts 101, 1001, 1002, 1003, 1004, 2001, 3001, 3002 3003, 4001, and 4002. Those are the benefits and allowances linked to paygrades and location *(regardless of the employee > #Unassigned)*. For now, the best approach is to use this planning application as a standalone one.

> **i** Note
>
> *Please refer to the Known issues selection when using this content.

2.24 Integrated Financial Planning for SAP S/4HANA

2.24.1 Architecture and Abstract

Financial planning consists of seven integrated areas: Cost center planning, product cost planning, sales and profitability planning, project planning, internal order planning, investment planning and financial statement planning.

The Cost Center Planning and Budgeting model, stories, allocations and data actions support an elaborated planning and budgeting process with expense planning, allocations, activity quantity planning, activity cost rate planning and activity cost rate calculation

The Product Cost Planning model, stories and data action support the calculation and of product costs based on raw material prices and activity cost rates. The activity cost rates are the output of the cost center planning.

The Sales and Profitability model, stories and data actions support a detailed planning process with sales and quantity planning, revenue, deductions and cost of goods sold calculation. The cost of goods sold calculation is based on the product cost rates that are the output of the product cost planning.

The Project model, stories and data actions support planners to capture project expense budgets and plans based on work breakdown structure (WBS) elements of projects. It is integrated with availability control functions and budget consistency checks in SAP S/4HANA Cloud.

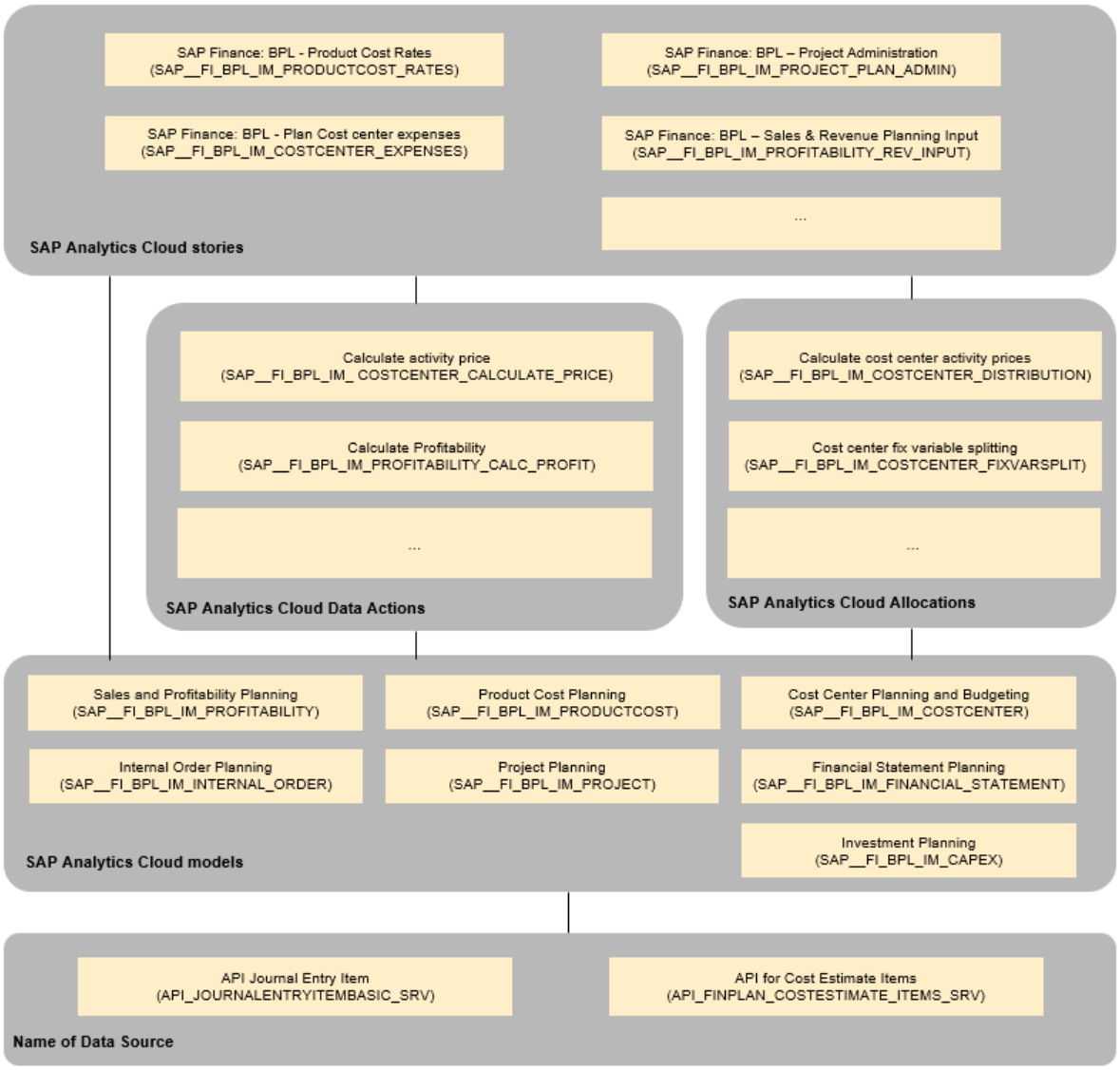
The Internal Order model, stories and data actions support planners to enter costs that are expected to incur during the life cycle of an order. Using internal order planning, you can plan and compare your costs on G/L account basis

The Investment model, stories and data actions makes it easy to plan profit center expenses for acquiring, maintaining, or improving fixed assets, such as buildings, vehicles, equipment, or land. It allows to calculate the resulting depreciation plan amounts via straight-line or accelerated depreciation method. The amounts of the planned investments and their calculated depreciation are the results of the investment planning.

The Financial Statement model, stories and data actions support a profit and loss (P&L) planning with allocation to trading partner and a closing balance sheet planning. The P&L gross margin could be transferred from the Sales and Profitability Planning, the P&L operating expense from the Cost Center Planning and the investments and depreciation from the Investment Planning.

The Cross Model Simulation Cockpit allows stakeholders in management or a central controlling department to perform what-if simulations for sample processes based on changes to drivers, such as sales quantities, personnel expenses or raw material prices.

Architecture



2.24.2 Models

2.24.2.1 Cost Center Planning and Budgeting (SAP__FI_BPL_IM_COSTCENTER)

Model Name: SAP__FI_BPL_IM_COSTCENTER		Connection
• Model Description: Cost Center Planning and Budgeting • Planning Enabled: yes		SAP S/4HANA Import Connection "FP&A"
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	**Description**	**Mapping**
Date	Time	n.a.
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV
SAP_ALL_COSTCENTER	Cost Center	API_COSTCENTER_SRV
SAP_FI_BPL_PRTNRCOSTCENTER	Partner Cost Center	API_COSTCENTER_SRV
SAP_FI_BPL_CCACTIVITYTYPE	Cost Center Activity Type	API_COSTCENTERACTIVITYTYPE_SRV
SAP_FI_BPL_PRTNRCCACTIVITYTYPE	Partner Cost Center Activity Type	API_COSTCENTERACTIVITYTYPE_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFACCOUNTS_SRV
SAP_FI_BPL_FIXVARIABLE	Fix/Variable Code	Assign to #
SAP_FI_BPL_CODEBITCREDITCODE	Controlling Debit Credit Code	API_CONTROLLINGDEBITCREDITCODE_SRV
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV
SAP_ALL_FUNCTIOANLAREA	Functional Area	API_FUNCTIONALAREA_SRV
Transaction Data Mapping		
Name	**Description**	
API_JOURNALENTRYITEMBASIC_SRV	API Journal Entry Item (ACDOCA)	
API_FINPLANNINGENTRYITEM_SRV	API Financial Planning Entry Item (ACDOCP)	

> **i Note**
>
> * Private dimension, other dimensions are public

2.24.2.2 Product Cost Planning (SAP__FI_BPL_IM_PRODUCTCOST)

Model Name: SAP__FI_BPL_IM_PRODUCTCOST		Connection
• Model Description: Product Cost Planning • Planning Enabled: Yes		SAP S/4HANA Import Connection "FP&A"
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	**Description**	**Mapping**
Date	Time	n.a.
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV
SAP_ALL_PRODUCT	Sold Product	API_PRODUCT_SRV
SAP_ALL_PLANT	Plant	API_PLANT_SRV
SAP_ALL_MATERIAL		API_PRODUCT_SRV
SAP_FI_BPL_COMPONENTPLANT	Component Plant	API_PLANT_SRV
SAP_ALL_COSTCENTER	Cost Center	API_COSTCENTER_SRV
SAP_FI_BPL_CCACTIVITYTYPE	Cost Center Activity Type	API_COSTCENTERACTIVITYTYPE_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFACCOUNTS_SRV
SAP_FI_BPL_FIXVARIABLE	Fix/Variable Code	n.a.
SAP_FI_BPL_QUANTITY_UNIT	Quantity Unit	C_FINUNITOFMEASURE_SRV
SAP_FI_BPL_LOTSIZE_UNIT	Lot Size Unit	C_FINUNITOFMEASURE_SRV
SAP_FI_BPL_SALESQUANTITY_UNIT	Sales Quantity Unit	C_FINUNITOFMEASURE_SRV
SAP_FI_BPL_COMPQUANTITY_UNIT	Component Quantity Unit	C_FINUNITOFMEASURE_SRV
Transaction Data Mapping		
Name	**Description**	
API_FINPLAN_COSTESTIMATE_ITEMS	API for Cost Estimate Items	

> **Note**
>
> * Private dimension, other dimensions are public

2.24.2.3 Sales and Profitability Planning (SAP__FI_BPL_IM_PROFITABILITY)

Model Name: SAP__FI_BPL_IM_PROFITABILITY		Connection
• Model Description: Sales and Profitability Planning • Planning Enabled: Yes		SAP S/4HANA Import Connection "FP&A"
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	**Description**	**Mapping**
Date	Time	n.a.
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV
SAP_ALL_PRODUCT	SoldProduct	API_PRODUCT_SRV
SAP_ALL_PLANT	Plant	API_PLANT_SRV
SAP_ALL_CUSTOMER	Customer	API_BUSINESS_PARTNER
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFACCOUNTS_SRV
SAP_FI_BPL_QUANTITY_UNIT	Quantity Unit	C_FINUNITOFMEASURE_SRV
SAP_FI_BPL_FIXVARIABLE	Fix/Variable Code	n.a.
SAP_ALL_FUNCTIONALAREA	Functional Area	API_FUNCTIONALAREA_SRV
Transaction Data Mapping		
Name	**Description**	
API_JOURNALENTRYITEMBASIC_SRV	API Journal Entry Item (ACDOCA)	
API_FINPLANNINGENTRYITEM_SRV	API Financial Planning Entry Item (ACDOCP)	

> **i Note**
>
> * Private dimension, other dimensions are public

2.24.2.4 Project Planning (SAP__FI_BPL_IM_PROJECT)

Model Name: SAP__FI_BPL_IM_PROJECT	Connection
• Model Description: Project Planning • Planning Enabled: Yes	SAP S/4HANA Import Connection "FP&A"

Model Name: SAP__FI_BPL_IM_PROJECT		Connection
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	Description	Mapping
Date	Time	n.a.
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFAC-COUNTS_SRV
SAP_ALL_PROJECT_WBSELEMENT	WBS Element	API_FINWBSELEMENT_SRV

> **i** Note
>
> * Private dimension, other dimensions are public.

2.24.2.5 Internal Order Planning (SAP__FI_BPL_IM_INTERNAL_ORDER)

Model Name: SAP__FI_BPL_IM_INTERNAL_ORDER		Connection
• Model Description: Internal Order Planning • Planning Enabled: Yes		• SAP S/4HANA Import Connection "FP&A"
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	**Description**	**Mapping**
Date	Time	n.a.
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFAC-COUNTS_SRV
SAP_FI_BPL_INTERNAL_ORDER	Internal Order	API_INTERNALORDER_SRV

> **i** Note
>
> - Private dimension, other dimensions are public

2.24.2.6 Investment Planning (SAP__FI_BPL_IM_CAPEX)

Model Name: SAP__FI_BPL_IM_CAPEX		Connection
• Model Description:Investment Planning • Planning Enabled: Yes		• SAP S/4HANA Import Connection "FP&A"
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	**Description**	**Mapping**
Date	Time	n.a.
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFAC-COUNTS_SRV
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV

> **i** Note
>
> - Private dimension, other dimensions are public

2.24.2.7 Financial Statement Planning (SAP__FI_BPL_IM_FINANCIAL_STATEMENT)

Model Name: SAP__FI_BPL_IM_FINANCIAL_STATEMENT		Connection
• Model Description: Financial Statement Planning • Planning Enabled: Yes		SAP S/4HANA Import Connection "FP&A"
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		
Name	Description	Mapping
Date	Time	n.a.
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV
SAP_FI_BPL_GLACCOUNT	GL Account	API_GLACCOUNTINCHARTOFAC-COUNTS_SRV
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV

Model Name: SAP__FI_BPL_IM_FINANCIAL_STATEMENT		Connection
SAP_ALL_FUNCTIOANLAREA	Functional Area	API_FUNCTIONALAREA_SRV
SAP_ALL_TRADINGPARTNER	Trading Partner	API_PARTNERCOMPANY_SRV
Transaction Data Mapping		
Name	**Description**	
UI_FINS_GLACCOUNTFLOW	GL Account Balance Flow	

> **i** Note
>
> * Private dimension, other dimensions are public

2.24.3 Stories

2.24.3.1 Stories for Cost Center Planning and Budgeting

- SAP Finance: BPL - Cost Center Planning Administration (SAP__FI_BPL_IM_COSTCENTER_PLAN_ADMIN)
- SAP Finance: BPL - Plan Cost Center Expenses (SAP__FI_BPL_IM_COSTCENTER_EXPENSES)
- SAP Finance: BPL - Plan Cost Center Cost Rates and Output Quantities (SAP__FI_BPL_IM_COSTCENTER_ACTIVITYPRICE_INPUT)
- SAP Finance: BPL - Calculate Cost Center Cost Rates (SAP__FI_BPL_IM_COSTCENTER_ACTIVITYPRICE_CALCULATION)
- SAP Finance: BPL - Cost Center Budgeting (SAP__FI_BPL_IM_COSTCENTER_BUDGET)
- SAP Finance: BPL - Cost Center Reporting (SAP__FI_BPL_IM_COSTCENTER_REPORTS)
- SAP Finance: BPL - Cost Center Analytics (SAP__FI_BPL_IM_COSTCENTER_ANALYTICS)

2.24.3.1.1 BPL - Cost Center Planning Administration (SAP__FI_BPL_IM_COSTCENTER_PLAN_ADMIN)

This story allows the planning administrator to maintain planning drivers (cost center distribution factors, activity type splitting factors, fix/variable splitting factors, activity allocation factors, activity relations) and execute planning functions across cost centers.

This story uses the following data actions:

- Indirect activity allocation (SAP__FI_BPL_IM_COSTCENTER_ACTIVITY_ALLOCATION)

- Cost center activity type splitting
  (SAP__FI_BPL_IM_COSTCENTER_ACTIVITYTYPESPLIT)
- Assessment
  (SAP__FI_BPL_IM_COSTCENTER_ASSESSMENT)
- Create cost enter budget proposal on control parameters
  (SAP__FI_BPL_IM_COSTCENTER_BUDGET_CTL_PARAMS)
- Create Budget Sample Data
  (SAP__FI_BPL_IM_COSTCENTER_BUDGET_SAMPLE_DATA)
- Calculate activity quantities inversely
  (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_ACTIVITY_QUANTITY)
- Calculate activity costs
  (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_COSTS)
- Calculate activity cost rates
  (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_PRICE)
- Clear version
  (SAP__FI_BPL_IM_COSTCENTER_CLEAR_VERSION)
- Copy actual credit quantities
  (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTCREDITQUAN)
- Derive activity cost rates from actuals
  (SAP__FI_BPL_IM_COSTCENTER_DERIVE_ACTIVITY_PRICES)
- Copy actual debit amounts
  (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTDEBITS)
- Copy activity quantities from product cost planning
  (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTIVITYQUANTITY_FROM_PRODUCTCOST)
- Copy overhead costs from product cost planning
  (SAP__FI_BPL_IM_COSTCENTER_COPY_OVEREHADS_FROM_PRODUCTCOST)
- Copy cost center plan to budget
  (SAP__FI_BPL_IM_COSTCENTER_COPY_PLAN)
- Create actual sample data
  (SAP__FI_BPL_IM_ COSTCENTER_CREATE_ACTUAL_SAMPLE_DATA)
- Create plan sample data
  (SAP__FI_BPL_IM_COSTCENTER_CREATE_PLAN_SAMPLE_DATA)
- Cost center distribution
  (SAP__FI_BPL_IM_COSTCENTER_DISTRIBUTION)
- Cost center fix variable splitting
  (SAP__FI_BPL_IM_COSTCENTER_FIXVARSPLIT)
- Derive Profit Center and Functional Area based on Cost Center or Account Attribute
  (SAP__FI_BPL_IM_COSTCENTER_PCTR_FA_DERIVATION)
- Create cost center plan proposal based on control parameters
  (SAP__FI_BPL_IM_COSTCENTER_PLAN_CTL_PARAMS)

and allows the following allocations (all allocations are also available as data action)

- Indirect activity allocation
  (SAP__FI_BPL_IM_ COSTCENTER _ACTIVITY_ALLOCATION)
- Cost center activity type splitting
  (SAP__FI_BPL_IM_ COSTCENTER _ACTIVITYTYPESPLIT)
- Cost center fix variable splitting
  (SAP__FI_BPL_IM_ COSTCENTER _FIXVARSPLIT)

- Cost center distribution
  (SAP__FI_BPL_IM_COSTCENTER_DISTRIBUTION)

2.24.3.1.2 BPL - Plan Cost Center Expenses (SAP__FI_BPL_IM_COSTCENTER_EXPENSES)

This story allows to copy actual expenses from last year as a planning proposal and then manually adjust the plan figures. After the manual planning process, expenses can be allocated to other cost centers based on the drivers that have been maintained in the plan admin story.

This story uses the following data actions

- Assessment: (SAP__FI_BPL_IM_COSTCENTER_ASSESSMENT)
- Copy actual debit amounts: (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTDEBITS)
- Cost center distribution: (SAP__FI_BPL_IM_COSTCENTER_DISTRIBUTION)
- Create cost center plan proposal based on control parameters:
  (SAP__FI_BPL_IM_COSTCENTER_PLAN_CTL_PARAMS)

and allows the following allocations (all allocations are also available as data action)

Cost center distribution: (SAP__FI_BPL_IM_COSTCENTER_DISTRIBUTION)

2.24.3.1.3 BPL - Plan Cost Center Cost Rates and Output Quantities (SAP__FI_BPL_IM_COSTCENTER_ACTIVITYPRICE_INPUT)

The actual data from last year serve as a planning proposal for the activity output quantities and activity cost rates. Output quantities and prices can be adjusted manually - both on an aggregated level or in a detailed way on partner cost centers - and then the costs are calculated by simple multiplication of quantity and prices.

Output quantities also can be determined automatically from the receiving cost centers via the "Inverse calculation of activity quantities" and the total activity output can be distributed to receiving cost centers via an allocation rule ("indirect activity allocation").

The capacity of a cost center can be planned manually and compared with the planned activity output.

This story uses the following data actions:

- Indirect activity allocation: (SAP__FI_BPL_IM_COSTCENTER_ACTIVITY_ALLOCATION)
- Calculate activity quantities inversely:
  (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_ACTIVITY_QUANTITY)
- Calculate activity costs: (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_COSTS)
- Derive activity cost rates from actuals: (SAP__FI_BPL_IM_COSTCENTER_DERIVE_ACTIVITY_PRICES)

and allows the following allocations (all allocations are also available as data action)

- Indirect activity allocation: (SAP__FI_BPL_IM_ COSTCENTER _ACTIVITY_ALLOCATION)

2.24.3.1.4 BPL - Calculate Cost Center Cost Rates

The cost center expense planning is the basis for this process.

The activity independent expenses are allocated to activity types based on the splitting factors that have been maintained in the plan admin story. Activity dependent expenses can also be planned manually.

There are two ways how to generate a proposal for the total activity quantities:

Either copy from last year's actuals same as in the story SAP Finance: BPL - Plan Cost Center Cost Rates and Output Quantities

Or copy from resource calculation (see story SAP Finance: BPL - Resources)

After that, the activity cost rate is calculated by dividing the activity dependent costs by the planned activity quantity. Note that the activity cost rate calculation is not iterative, i.e. it is suited for final cost centers (e.g. production cost centers) or in a step-down approach.

Optionally, the activity dependent expenses can be splitted to fix and variable portions based on the driver maintained in the plan admin story. The activity cost rate calculation then splits the activity cost rates also by fix and variable portions.

This story uses the following data actions

- Cost center activity type splitting: (SAP__FI_BPL_IM_COSTCENTER_ACTIVITYTYPESPLIT)
- Calculate activity cost rates: (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_PRICE)
- Copy actual credit quantities: (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTCREDITQUAN)
- Copy actual debit amounts: (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTDEBITS)
- Copy activity quantities from product cost planning: (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTIVITYQUANTITY_FROM_PRODUCTCOST)
- Copy overhead costs from product cost planning: (SAP__FI_BPL_IM_COSTCENTER_COPY_OVEREHADS_FROM_PRODUCTCOST)
- Cost center fix variable splitting: (SAP__FI_BPL_IM_COSTCENTER_FIXVARSPLIT)

and allows the following allocations (all allocations are also available as data action)

- Cost center activity type splitting: (SAP__FI_BPL_IM_ COSTCENTER _ACTIVITYTYPESPLIT)
- Cost center fix variable splitting: (SAP__FI_BPL_IM_ COSTCENTER _FIXVARSPLIT)

2.24.3.1.5 BPL - Cost Center Budgeting (SAP__FI_BPL_IM_COSTCENTER_BUDGET)

This content facilities the Cost Center Budgeting process by applying control parameters to expense accounts using historical or driver factors.

This story uses the following data actions:

- Populate calculations for closed actual periods (SAP__FI_BPL_IM_COSTCENTER_ANALYSE_DATA)
- Create cost enter budget proposal on control parameters (SAP__FI_BPL_IM_ COSTCENTER_BUDGET_CTL_PARAMS)

- Copy Costcenter Plan to Budget
  (SAP__FI_BPL_IM_COSTCENTER_COPY_PLAN)
- Populate control drivers for closed budget periods
  (SAP__FI_BPL_IM_COSTCENTER_CTL_DRIVERS)

2.24.3.1.6 Cost Center Reporting (SAP__FI_BPL_IM_COSTCENTER_REPORTS)

This story has tabs for viewing expenses, expenses by cost center and activity quantities. The reports allow the planner to analyze several views of expenses and activity quantities including filtering by company code, cost center, profit center and version.

2.24.3.1.7 Cost Center Analytics (SAP__FI_BPL_IM_COSTCENTER_ANALYTICS)

This story has tabs for cost center metrics and visualizations. The reports allow the planner to view high-level metrics and utilize visualizations to drill-down for detailed analysis.

2.24.3.2 Stories for Product Cost Planning

- SAP Finance: BPL - Product Cost Planning Administration
  (SAP__FI_BPL_IM_PRODUCTCOST_PLAN_ADMIN)
- SAP Finance: BPL - Product Cost Rates
  (SAP__FI_BPL_IM_PRODUCTCOST_RATES)
- SAP Finance: BPL - Resources
  (SAP__FI_BPL_IM_PRODUCTCOST_RESOURCES)
- BPL - Product Cost Reports
  (SAP__FI_BPL_IM_PRODUCTCOST_REPORTS)
- BPL - Product Cost Analytics
  (SAP__FI_BPL_IM_PRODUCTCOST_ANALYTICS)

2.24.3.2.1 BPL - Product Planning Administration (SAP__FI_BPL_IM_PRODUCTCOST_PLAN_ADMIN)

This story allows the planning administrator to prepare a product cost plan from a cost estimate in S/4. As a prerequisite the cost estimate needs to be imported into the plan version "CostEstimate". From the cost estimate in this plan version the quantity structure (raw material and activity type quantities per lot size of the

finished product), raw material prices, activity cost rates and overhead costs are derived and stored into plan version "Plan".

Further on the planning administrator can copy the sales quantities from the sales planning and calculate the resource consumption (total raw material quantity and activity quantity) from the quantity structure.

This story uses the following data actions

- Calculate overhead costs: (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_OVERHEADS)
- Calculate product cost rates: (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RATES)
- Calculate resources: (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RESOURCES)
- Clear version: (SAP__FI_BPL_IM_PRODUCTCOST_CLEAR_VERSION)
- Copy activity cost rates from cost center planning: (SAP__FI_BPL_IM_PRODUCTCOST_COPY_ACTIVITY_PRICES)
- Copy sales quantities: (SAP__FI_BPL_IM_PRODUCTCOST_COPY_SALES_QUANTITIES)
- Create sample data: (SAP__FI_BPL_IM_PRODUCTCOST_CREATE_SAMPLE_DATA)
- Derive activity cost rates from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_ACTIVIY_PRICES)
- Derive overhead costs from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_OVERHEAD_COSTS)
- Derive quantity structure from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_QUANTITY_STRUCTURE)
- Derive raw material prices from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_RAW_MATERIAL_PRICES)

2.24.3.2.2 BPL - Product Cost Rates (SAP__FI_BPL_IM_PRODUCTCOST_RATES)

This story shows the proposals for the quantity structure, raw material prices, activity cost rates, overhead costs that were created by the administrator.

It even allows to create these proposals again via the respective data actions on the first five tabs. These proposals can be overwritten manually, and the new product costs are calculated on the last two tabs.

This story uses the following data actions

- Calculate product cost rates: (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RATES)
- Copy activity cost rates from cost center planning: (SAP__FI_BPL_IM_PRODUCTCOST_COPY_ACTIVITY_PRICES)
- Derive activity cost rates from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_ACTIVIY_PRICES)
- Derive overhead costs from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_OVERHEAD_COSTS)
- Derive quantity structure from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_QUANTITY_STRUCTURE)
- Derive raw material prices from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_RAW_MATERIAL_PRICES)

2.24.3.2.3 BPL - Resources (SAP__FI_BPL_IM_PRODUCTCOST_RESOURCES)

This story allows to calculate the resource consumption (total raw material quantity and activity quantity) based on the sales quantities and the quantity structure. The corresponding data actions can be executed either within this story or within the Administrator story. In the latter case, this story here only is used to control the results.

This story uses the following data actions:

- Calculate Overhead Costs: (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_OVERHEADS)
- Calculate Resources: (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RESOURCES)
- Copy sales quantities: (SAP__FI_BPL_IM_PRODUCTCOST_COPY_SALES_QUANTITIES)
- Derive quantity structure from cost estimate: (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_QUANTITY_STRUCTURE)

2.24.3.2.4 BPL - Product Cost Reports (SAP__FI_BPL_IM_PRODUCTCOST_REPORTS)

This story has a report for analyzing and drilling into product cost details with detailed analysis of cost and quantity for the following dimensions: Plant, Resource, G/L Account, Lot Size Unit, and Fix/Variable Code.

2.24.3.2.5 BPL - Product Cost Analytics (SAP__FI_BPL_IM_PRODUCTCOST_ANALYTICS)

This story has tabs for product cost metrics and visualizations. The reports allows the planner to view high-level metrics and utilize visualizations to drill-down for detailed analysis.

2.24.3.3 Stories for Sales and Profitability Planning

- SAP Finance: BPL - Sales & Profitability Planning Administration (SAP__FI_BPL_IM_PROFITABILITY_PLAN_ADMIN)
- SAP Finance: BPL - Sales & Profitability Planning (SAP__FI_BPL_IM_PROFITABILITY_PROF_INPUT)
- SAP Finance: BPL - Sales Planning (SAP__FI_BPL_IM_PROFITABILITY_REV_INPUT)
- SAP Finance: BPL - Sales & Profitability Reporting (SAP__FI_BPL_IM_PROFITABILITY_REPORTS)
- SAP Finance: BPL - Sales & Profitability Analytics (SAP__FI_BPL_IM_PROFITABILITY_ANALYTICS)

2.24.3.3.1 BPL - Sales & Profitability Planning Administration (SAP__FI_BPL_IM_PROFITABILITY_PLAN_ADMIN)

This story allows the planner to create sample data and execute data actions grouped by planning scenario.

This story uses the following data actions:

- Calculate Profitability: (SAP__FI_BPL_IM_PROFITABILITY_CALC_PROFIT)
- Clear Version: (SAP__FI_BPL_IM_PROFITABILITY_CLEAR_VERSION)
- Copy Quantities from Actuals: (SAP__FI_BPL_IM_PROFITABILITY_COPY_ACT)
- Copy product cost rates: (SAP__FI_BPL_IM_PROFITABILITY_COPY_PRODUCTCOSTRATES)
- Derive product cost rates from actuals: (SAP__FI_BPL_IM_PROFITABILITY_DERIVE_PRODUCTCOSTRATES)
- Create Sample Data: (SAP__FI_BPL_IM_PROFITABILITY_SAMPLE_DATA)
- Apply Control Parameters: (SAP__FI_BPL_IM_PROFITABILITY_CREATE_CTL_PARAMS)
- Derive Functional Area: (SAP__FI_BPL_IM_PROFITABILITY_FA_DERIVATION)

2.24.3.3.2 BPL - Sales & Profitability Planning (SAP__FI_BPL_IM_PROFITABILITY_PROF_INPUT)

This story has multiple tabs allowing the planner to maintain planning drivers (price, quantity, sales deduction %, product cost rates) and execute planning functions across customers and products.

This story uses the following data actions:

- Calculate Profitability (SAP__FI_BPL_IM_PROFITABILITY_CALC_PROFIT)
- Copy Quantities from Actuals (SAP_FI_BPL_IM_PROFITABILITY_COPY_ACT)
- Copy product cost rates (SAP__FI_BPL_IM_PROFITABILITY_COPY_PRODUCTCOSTRATES)
- Derive product cost rates from actuals (SAP__FI_BPL_IM_PROFITABILITY_DERIVE_PRODUCTCOSTRATES)
- Apply Control Parameters (SAP__FI_BPL_IM_PROFITABILITY_CREATE_CTL_PARAMS)

2.24.3.3.3 BPL - Sales Planning (SAP__FI_BPL_IM_PROFITABILITY_REV_INPUT)

This story has multiple tabs allowing the planner to maintain planning drivers (price, quantity, sales deduction %) and execute planning functions across customers and products.

This story uses the following data actions:

- Calculate Profitability:
  (SAP__FI_BPL_IM_PROFITABILITY_CALC_PROFIT)
- Copy Actual to Plan:
  (SAP__FI_BPL_IM_PROFITABILITY_COPY_ACT)
- Sales Quantity:
  (SAP__FI_BPL_IM_PROFITABILITY_CREATE_CTL_PARAMS)

2.24.3.3.4 BPL - Sales & Profitability Reporting (SAP__FI_BPL_IM_PROFITABILITY_REPORTS)

This story has tabs for gross margin and quantity reporting. The reports allow the planner to analyze several views of gross margin including filtering by company code, profit center, customer, product and plant.

2.24.3.3.5 BPL - Sales & Profitability Analytics (SAP__FI_BPL_IM_PROFITABILITY_ANALYTICS)

This story has tabs for profitability, customer, product and plant metrics and visualizations. The reports allow the planner to view high-level metrics and utilize visualizations to view detailed analysis.

2.24.3.4 Stories for Project Planning

- SAP Finance: BPL - Project Administration
  (SAP__FI_BPL_IM_PROJECT_PLAN_ADMIN)
- SAP Finance: BPL - Project Planning and Budgeting
  (SAP__FI_BPL_IM_PROJECT_PLANNING_AND_BUDGETING)

2.24.3.4.1 BPL - Project Administration (SAP__FI_BPL_IM_PROJECT_PLAN_ADMIN)

This story allows the planning administrator to prepare plan and budget data and execute planning functions to perform the profit center derivation based on the master data.

This story uses the following data actions:

- Create budget sample data: (SAP__FI_BPL_IM_PROJECT_BUDGET_SAMPLE_DATA)
- Clear Version: (SAP__FI_BPL_IM_PROJECT_CLEAR_VERSION)
- Copy cost center plan to budget: (SAP__FI_BPL_IM_PROJECT_COPY_PLAN)
- Create plan sample data: (SAP__FI_BPL_IM_PROJECT_CREATE_PLAN_SAMPLE_DATA)

- Derive Profit Center based on WBS Element Attribute: (SAP__FI_BPL_IM_PROJECT_PCTR_DERIVATION)

2.24.3.4.2 BPL - Project Planning & Budgeting (SAP__FI_BPL_IM_PROJECT_PLANNING_AND_BUDGETING)

This story allows the planner to plan data based on WBS elements and copy plan data into budget version.

This story uses the following data actions:

- Copy project plan to budget: (SAP__FI_BPL_IM_PROJECT_COPY_PLAN)

2.24.3.5 Stories for Internal Order Planning

- SAP Finance: BPL - Internal Order Administration: (SAP__FI_BPL_IM_INTERNAL_ORDER_PLAN_ADMIN)
- SAP Finance: BPL - Internal Order Planning (SAP__FI_BPL_IM_INTERNAL_ORDER_PLANNING)

2.24.3.5.1 BPL - Internal Order Administration (SAP__FI_BPL_IM_INTERNAL_ORDER_PLAN_ADMIN)

This story allows the planning administrator to prepare plan data and execute planning functions to perform the profit center derivation based on the master data.

This story uses the following data actions:

- Clear Version: (SAP__FI_BPL_IM_INTERNAL_ORDER_CLEAR_VERSION)
- Create plan sample data: (SAP__FI_BPL_IM_INTERNAL_ORDER_CREATE_PLAN_SAMPLE_DATA)
- Derive Profit Center based on Internal Order Attribute: (SAP__FI_BPL_IM_INTERNAL_ORDER_PCTR_DERIVATION)

2.24.3.5.2 BPL - Internal Order Planning (SAP__FI_BPL_IM_INTERNAL_ORDER_PLANNING)

This story allows the planner to plan data based on Internal Orders.

2.24.3.6 Stories for Investment Planning

- SAP Finance: BPL - Investment Planning Administration (SAP__FI_BPL_IM_CAPEX_PLAN_ADMIN)
- SAP Finance: BPL - Investment Planning (SAP__FI_BPL_IM_CAPEX_PLANNING)

2.24.3.6.1 SAP Finance: BPL - Investment Planning Administration (SAP__FI_BPL_IM_CAPEX_PLAN_ADMIN)

This story allows the planning administrator to create or clear sample data, to maintain new investments and depreciation parameter settings for several profit centers, and to execute planning function to calculate the depreciation.

This story uses the following data actions.

- Clear Version (SAP__FI_BPL_IM_CAPEX_CLEAR_VERSION)
- Create actual sample data (SAP__FI_BPL_IM_CAPEX_CREATE_ACT_SAMPLE_DATA)
- Create plan sample data (SAP__FI_BPL_IM_CAPEX_CREATE_PLAN_SAMPLE_DATA)
- Copy actual investment amounts to plan (SAP__FI_BPL_IM_CAPEX_COPY_ACT_INVESTMENTS)
- Calculate Depreciation (SAP__FI_BPL_IM_CAPEX_CALCULATE_DEPRECIATION)

2.24.3.6.2 SAP Finance: BPL - Investment Planning (SAP__FI_BPL_IM_CAPEX_PLANNING)

This story allows the planner to plan investments / capital expenditure such as buildings, vehicles, equipment, or land for a profit center. It also allows to maintain the depreciation parameters and to calculate the resulting depreciation plan amounts via straight-line or accelerated depreciation method.

This story uses the following data actions.

- Copy actual investment amounts to plan (SAP__FI_BPL_IM_CAPEX_COPY_ACT_INVESTMENTS)
- Calculate Depreciation (SAP__FI_BPL_IM_CAPEX_CALCULATE_DEPRECIATION)

2.24.3.7 Stories for Financial Statement Planning

- SAP Finance: BPL - Financial Statement Planning Administration (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_PLAN_ADMIN)
- SAP Finance: BPL - Financial Statement Planning (SAP__FI_BPL_IM_ FINANCIAL_STATEMENT_PLANNING)
- SAP Finance: BPL - Financial Statement Reporting (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_REPORTS)
- SAP Finance: BPL - Financial Statement Planning Analytics (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_ANALYTICS)

2.24.3.7.1 BPL - Financial Statement Planning Administration (SAP__FI_BPL_IM_ FINANCIAL_STATEMENT _PLAN_ADMIN)

This story allows the planner to create sample data, maintain trading partner allocation factors and execute data actions for the planning scenario.

This story uses the following data actions:

- Financial Statement Balance Sheet Carry Forward (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BS_CRYFWD)
- Financial Statement Cash Flow (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CASHFLOW)
- Clear Version (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CLEAR_VERSION)
- Create sample data (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_SAMPLE_DATA)
- Copy plan sample data (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CREATE_PLAN_SAMPLE_DATA)
- Copy gross margin amounts from profitability plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_PROFITABILITY)
- Copy operational expense amounts from cost center plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_COSTCENTER)
- Create company code plan proposal based on control parameters (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_PLAN_CTL_PARAMS)
- Financial Statement Balance Sheet Carry Forward (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BS_CRYFWD)
- Get trading partner allocation factors from actual data (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TP_ALLOC_FACTOR_FROM_ACTUAI)
- Allocate amounts on trading partner (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TP_ALLOCATION)
- Copy actual amounts to plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_ACTUALS)
- Copy investments and depreciation amounts from investment plan

(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_CAPEX)

2.24.3.7.2 BPL - Financial Statement Planning (SAP__FI_BPL_IM_ FINANCIAL_STATEMENT _PLANNING)

This story has tabs for profit & loss planning, balance sheet planning, balance sheet reporting and cash flow planning. It allows the planner to execute planning functions to copy last year's actuals or data from other planning models, perform trading partner allocation, carry forward the balance sheet and generate the cash flow statement.

This story uses the following data actions

- Copy actual amounts to plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_ACTUALS)
- Copy gross margin amounts from profitability plan: (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_PROFITABILITY)
- Copy operational expense amounts from cost center plan: (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_COSTCENTER)
- Allocate amounts on trading partner: (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TP_ALLOCATION)
- Copy investments and depreciation amounts from investment plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_CAPEX)
- Financial Statement Cash Flow (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CASHFLOW)
- Create company code plan proposal based on control parameters (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_PLAN_CTL_PARAMS)
- Financial Statement Balance Sheet Carry Forward: (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BS_CRYFWD)

2.24.3.7.3 BPL - Financial Statement Reports (SAP__FI_BPL_IM_FINANCIAL_STATEMENT _REPORTS)

This story has tabs for profit & loss, balance sheet, and cash flow plan reporting. The reports allow the planner to analyze several views of profit & loss, balance sheet and cash flow including filtering by company code, profit center, functional area and trading partner.

2.24.3.7.4 BPL - Financial Statement Analytics (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_ANALYTICS)

This story has tabs for profit & loss and balance sheet metrics and visualizations. The reports allow the planner to view high-level metrics and utilize visualizations to drill-down for detailed analysis.

2.24.4 Analytic Applications

2.24.4.1 Analytic Application for Cross Model Simulation

Cross Model Simulation Cockpit (SAP__FI_BPL_IM_CROSS_SIMULATION_COCKPIT)

This application allows stakeholders in management or a central controlling department to perform what-if simulations for sample processes based on changes to drivers, such as sales quantity or personnel expenses.

As a controller, you may want to know the effect of changing the quantity of a sales product or the price of a raw material. After you have identified the driver you want to change and the corresponding simulation scenario, you can start the corresponding simulation. You are then guided step-by-step through the planning process. You can change the drivers, perform the corresponding data actions, and check the intermediate result in the reports. At the end of each simulation scenario, you can see the impact on the most important KPIs, for example, product profitability and your P&L statement.

This application uses the following data actions

- Split expenses and calculate prices with profit center and functional area derivation (SAP__FI_BPL_IM_COSTCENTER_BUNDLE_EXPENSES_CALC_ACT_PRICE)

- Calculate activity quantities, costs and prices with functional area derivation (SAP__FI_BPL_IM_COSTCENTER_BUNDLE_SALES_CALC_ACT_PRICE)

- Copy manufacturing overhead costs from product cost planning (SAP__FI_BPL_IM_COSTCENTER_COPY_OVERHEADS_FROM_PRODUCTCOST)

- Copy data from a source into a target version (SAP__FI_BPL_IM_COSTCENTER_COPY_SOURCE_TO_TARGET_VERSION)

- Allocate Expenses (SAP__FI_BPL_IM_COSTCENTER_EXPENSE_ALLOCATION)

- Calculate Profit and Loss (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BUNDLE_CALCULATE_P&L)

- Calculate Balance Sheet and Cash Flow (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BUNDLE_CALCULATE_BS_CF)

- Copy data from a source into a target version
(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_SOURCE_TO_TARGET_VERSION)

- Copy prices and calculate product costs and overheads
(SAP__FI_BPL_IM_PRODUCTCOST_BUNDLE_COPY_PRICE_CALC_PRODCOST_AND_OVERHEADS)

- Copy sales quantities and calculate resources
(SAP__FI_BPL_IM_PRODUCTCOST_BUNDLE_SALES_COPY_SALESQUANT_CALC_RESOURCES)

- Copy data from a source into a target version
(SAP__FI_BPL_IM_PRODUCTCOST_COPY_SOURCE_TO_TARGET_VERSION)

- Copy product cost rates, calculate profitability and functional area derivation
(SAP__FI_BPL_IM_PROFITABILITY_BUNDLE_COPY_PRODUCTCOSTRATES_CALC_PROFIT)

- Copy data from a source into a target version
(SAP__FI_BPL_IM_PROFITABILITY_COPY_SOURCE_TO_TARGET_VERSION)

2.24.5 Allocation Processes

2.24.5.1 Allocation Processes for Cost Center Planning and Budgeting

Cost center distribution (SAP_FI_BPL_IM_COSTCENTER_DISTRIBUTION)

Distribute cost center costs between cost centers based on a driver that is maintained on cost center level.

Cost center activity type splitting (SAP_FI_BPL_IM_COSTCENTER_ACTIVITYTYPESPLIT)

Distribute cost center costs down to activity types based on a driver that is maintained on cost center / activity type level.

Cost center fix variable splitting (SAP__FI_BPL_IM_COSTCENTER_FIXVARSPLIT)

Split cost center /activity type costs by fix and variable parts based on a driver that is maintained on GL account level.

Indirect activity allocation (SAP__FI_BPL_IM_COSTCENTER_ACTIVITY_ALLOCATION)

Allocate the total activity output of a sender cost center to the receiving cost centers.

2.24.5.2 Allocation Processes for Financial Statement Planning

Allocate Trading Partner (SAP_FI_BPL_IM_FINSTA_ALLOCATE_TRADING_PARTNER)

Allocate P&L amounts on trading partners based on a driver 'Trading Partner Allocation Factor'. The driver is maintained in the admin story per company code on GL account level.

2.24.6 Data Actions

2.24.6.1 Data Actions for Cost Center Planning and Budgeting

- Indirect activity allocation (SAP__FI_BPL_IM_COSTCENTER_ACTIVITY_ALLOCATION)
- Cost center activity type splitting (SAP__FI_BPL_IM_COSTCENTER_ACTIVITYTYPESPLIT)
- Populate calculations for closed actual periods (SAP__FI_BPL_IM_COSTCENTER_ANALYSE_DATA)
- Create cost center budget proposal on control parameters (SAP__FI_BPL_IM_COSTCENTER_BUDGET_CTL_PARAMS)
- Create budget sample data (SAP__FI_BPL_IM_COSTCENTER_BUDGET_SAMPLE_DATA)
- Split expenses and calculate prices with profit center and functional area derivation (SAP__FI_BPL_IM_COSTCENTER_BUNDLE_EXPENSES_CALC_ACT_PRICE)
- Calculate activity quantities, costs and prices with functional area derivation (SAP__FI_BPL_IM_COSTCENTER_BUNDLE_SALES_CALC_ACT_PRICE)
- Calculate activity quantities inversely (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_ACTIVITY_QUANTITY)
- Calculate activity costs (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_COSTS)

- Calculate activity cost rates
  (SAP__FI_BPL_IM_COSTCENTER_CALCULATE_PRICE)
- Clear version
  (SAP__FI_BPL_IM_COSTCENTER_CLEAR_VERSION)
- Copy actual credit quantities
  (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTCREDITQUAN)
- Derive activity cost rates from actuals
  (SAP__FI_BPL_IM_COSTCENTER_DERIVE_ACTIVITY_PRICES)
- Copy actual debit amount
  (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTDEBITS)
- Copy activity quantities from product cost planning
  (SAP__FI_BPL_IM_COSTCENTER_COPY_ACTIVITYQUANTITY_FROM_PRODUCTCOST)
- Copy Budget from Cost Center Plan
  (SAP__FI_BPL_IM_COSTCENTER_COPY_BUDGET_FROM_PLAN)
- Copy manufacturing overhead costs from product cost planning
  (SAP__FI_BPL_IM_COSTCENTER_COPY_OVEREHADS_FROM_PRODUCTCOST)
- Copy data from a source into a target version
  (SAP__FI_BPL_IM_COSTCENTER_COPY_SOURCE_TO_TARGET_VERSION)
- Create actual sample data
  (SAP__FI_BPL_IM_COSTCENTER_CREATE_ACTUAL_SAMPLE_DATA)
- Create plan sample data
  (SAP__FI_BPL_IM_COSTCENTER_CREATE_PLAN_SAMPLE_DATA)
- Populate control drivers for closed budget periods
  (SAP__FI_BPL_IM_ COSTCENTER_CTL_DRIVERS)
- Cost center distribution
  (SAP__FI_BPL_IM_COSTCENTER_DISTRIBUTION)
- Allocate Expenses
  (SAP__FI_BPL_IM_COSTCENTER_EXPENSE_ALLOCATION)
- Cost center fix variable splitting
  (SAP__FI_BPL_IM_COSTCENTER_FIXVARSPLIT)
- Derive Profit Center and Functional Area based on Cost Center or Account Attribute
  (SAP__FI_BPL_IM_COSTCENTER_PCTR_FA_DERIVATION)
- Create cost center plan proposal based on control parameters
  (SAP__FI_BPL_IM_COSTCENTER_PLAN_CTL_PARAMS)

Indirect activity allocation(SAP__FI_BPL_IM_COSTCENTER_ACTIVITY_ALLOCATION)

Allocate the total activity output of a sender cost center to the receiving cost centers.

Cost center activity type splitting(SAP__FI_BPL_IM_COSTCENTER_ACTIVITYTYPESPLIT)

Distribute cost center costs down to activity types based on a driver that is maintained on cost center / activity type level.

Populate calculations for closed actual periods(SAP__FI_BPL_IM_COSTCENTER_ANALYSE_DATA)

Calculate historical parameters for Actual periods.

Create cost center budget proposal on control parameters(SAP__FI_BPL_IM_COSTCENTER_BUDGET_CTL_PARAMS)

Perform cost center expense budgeting based upon control parameter entered by user.

Create budget sample data(SAP__FI_BPL_IM_COSTCENTER_BUDGET_SAMPLE_DATA)

Create sample data for the Budget version. Contains expenses for a pre-defined account.

Split expenses and calculate prices with profit center and functional area derivation

This data action combines 4 other data actions:

- SAP__FI_BPL_IM_COSTCENTER_ACTIVITYTYPESPLIT
- SAP__FI_BPL_IM_COSTCENTER_FIXVARSPLIT
- SAP__FI_BPL_IM_COSTCENTER_CALCULATE_PRICE
- SAP__FI_BPL_IM_COSTCENTER_PCTR_FA_DERIVATION

Calculate activity quantities, costs and prices with functional area derivation (SAP__FI_BPL_IM_COSTCENTER_BUNDLE_SALES_CALC_ACT_PRICE)

This data action combines 5 other data actions:

- SAP__FI_BPL_IM_COSTCENTER_COPY_ACTIVITYQUANTITY_FROM_PRODUCTCOST
- SAP__FI_BPL_IM_COSTCENTER_CALCULATE_ACTIVITY_QUANTITY
- SAP__FI_BPL_IM_COSTCENTER_CALCULATE_COSTS
- SAP__FI_BPL_IM_COSTCENTER_CALCULATE_PRICE
- SAP__FI_BPL_IM_COSTCENTER_PCTR_FA_DERIVATION

Calculate activity quantities inversely(SAP__FI_BPL_IM_COSTCENTER_CALCULATE_ACTIVITY_QUANTITY)

Calculate activity quantities of a sender cost center based on the activity quantities of the receiving

Calculate activity costs(SAP__FI_BPL_IM_COSTCENTER_CALCULATE_COSTS)

Each activity quantity record is multiplied with this price to calculate the costs. Technically, this runs on credit values. The debits are calculated afterwards by switching cost center / activity type with partner cost center / partner activity type and multiplying by -1.

Calculate activity cost rates(SAP__FI_BPL_IM_COSTCENTER_CALCULATE_PRICE)

Calculate activity cost rates by dividing aggregated expenses by the activity quantity. The price is calculated as an average year price and stored with the same value into each period. After that, each activity quantity record is multiplied with this price to calculate the costs. Technically, this runs on credit values. The debits are calculated afterwards by switching cost center / activity type with partner cost center / partner activity type and multiplying by -1.

Clear version(SAP__FI_BPL_IM_COSTCENTER_CLEAR_VERSION)

Delete a complete version. Can be applied to actual and plan versions.

Copy actual credit quantities(SAP__FI_BPL_IM_COSTCENTER_COPY_ACTCREDITQUAN)

Copy activity quantities from last year's actuals into a plan version. Technically, credit quantities are copied. The quantities are assigned to the GL account that is assigned to the activity type.

The prerequisite for this data action is that the unit of the activity quantity in the actual data corresponds to the quantity unit in the master data of the activity type but this conditions typically is fulfilled.

Derive activity cost rates from actuals (SAP__FI_BPL_IM_COSTCENTER_DERIVE_ACTIVITY_PRICES)

Copy activity quantities from last year's actuals into a plan version. Technically, credit quantities are copied. The quantities are assigned to the GL account that is assigned to the activity type.

Activity cost rates are calculated on the fly by dividing the corresponding costs by the quantities. The price is calculated as an average year price and stored with the same value into each period.

The prerequisite for this data action is that the unit of the activity quantity in the actual data corresponds to the quantity unit in the master data of the activity type but this conditions typically is fulfilled.

Copy actual debit amount(SAP__FI_BPL_IM_COSTCENTER_COPY_ACTDEBITS)

Copy actuals expenses from last year into a plan version. Technically, debit amounts are copied. Existing expenses in the plan version are deleted before the copy.

Copy activity quantities from product cost planning(SAP__FI_BPL_IM_COSTCENTER_COPY_ACTIVITYQUANTITY_FROM_PRODUCTCOST)

Copy activity quantities from product cost planning.

Copy budget from cost center plan (SAP__FI_BPL_IM_COSTCENTER_COPY_BUDGET_FROM_PLAN)

Copy plan data into a budget version. Technically, amounts planned on G/L Account.

Copy manufacturing overhead costs from product cost planning(SAP__FI_BPL_IM_COSTCENTER_COPY_OVEREHADS_FROM_PRODUCTCOST)

Copy total manufacturing overhead cost from product cost planning in order to credit the cost centers correctly.

Copy data from a source into a target version (SAP__FI_BPL_IM_COSTCENTER_COPY_SOURCE_TO_TARGET_VERSION)

Delete the data of the selected target version and copy the data of the selected source version into the target version

Create actual sample data(SAP__FI_BPL_IM_COSTCENTER_CREATE_ACTUAL_SAMPLE_DATA)

Create sample data for the actual version. They contain expenses and activity quantities.

Create plan sample data(SAP__FI_BPL_IM_COSTCENTER_CREATE_PLAN_SAMPLE_DATA)

Create sample data for drivers for cost center distribution, activity type splitting and fix/variable splitting.

Populate control drivers for closed budget periods (SAP__FI_BPL_IM_COSTCENTER_CTL_DRIVERS)

Populate control drivers (Headcount Rolling Average) for use in control parameter setting entered by user.

Cost center distribution(SAP__FI_BPL_IM_COSTCENTER_DISTRIBUTION)

Distribute cost center costs between cost centers based on a driver that is maintained on cost center level.

Allocate expenses (SAP__FI_BPL_IM_COSTCENTER_EXPENSE_ALLOCATION)

Perform a cost allocation from sender to receiver cost centers based on a driver that is maintained on sender cost center / receiver cost center level. The sender cost center is credited, and the receiver cost center is debited under a secondary account.

Cost center fix variable splitting(SAP__FI_BPL_IM_COSTCENTER_FIXVARSPLIT)

Split cost center/activity type costs by fix and variable parts based on a driver that is maintained on GL account level.

Derive Profit Center and Functional Area based on Cost Center or Account Attribute (SAP__FI_BPL_IM_COSTCENTER_PCTR_FA_DERIVATION)

Derive functional area from account or cost center based on master data attribute, derive profit center from cost center based on master data attribute.

Create cost center plan proposal based on control parameters(SAP__FI_BPL_IM_COSTCENTER_PLAN_CTL_PARAMS)

Perform cost center expense planning based upon control parameter entered by user.

2.24.6.2 Data Actions for Product Cost Planning

- Copy prices and calculate product costs and overheads (SAP__FI_BPL_IM_PRODUCTCOST_BUNDLE_COPY_PRICE_CALC_PRODCOST_AND_OVERHEADS)
- Copy sales quantities and calculate resources (SAP__FI_BPL_IM_PRODUCTCOST_BUNDLE_SALES_COPY_SALESQUANT_CALC_RESOURCES)
- Calculate manufacturing overhead costs (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_OVERHEADS)
- Calculate product cost rates (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RATES)
- Calculate resources (SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RESOURCES)
- Clear version (SAP__FI_BPL_IM_PRODUCTCOST_CLEAR_VERSION)

- Copy activity cost rates from cost center planning (SAP__FI_BPL_IM_PRODUCTCOST_COPY_ACTIVITY_PRICES)
- Copy sales quantities (SAP__FI_BPL_IM_PRODUCTCOST_COPY_SALES_QUANTITIES)
- Copy data from a source into a target version (SAP__FI_BPL_IM_PRODUCTCOST_COPY_SOURCE_TO_TARGET_VERSION)
- Create sample data (SAP__FI_BPL_IM_PRODUCTCOST_CREATE_SAMPLE_DATA)
- Derive activity cost rates from cost estimate (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_ACTIVIY_PRICES)
- Derive overhead costs from cost estimate (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_OVERHEAD_COSTS)
- Derive quantity structure from cost estimate (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_QUANTITY_STRUCTURE)
- Derive raw material prices from cost estimate (SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_RAW_MATERIAL_PRICES)

Copy prices and calculate product costs and overheads (SAP__FI_BPL_IM_PRODUCTCOST_BUNDLE_COPY_PRICE_CALC_PRODCOST_AND_OVERHEADS)

This data action combines 3 other data actions:

- SAP__FI_BPL_IM_PRODUCTCOST_COPY_ACTIVITY_PRICES

- SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RATES

- SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_OVERHEADS

Copy sales quantities and calculate resources (SAP__FI_BPL_IM_PRODUCTCOST_BUNDLE_SALES_COPY_SALESQUANT_CALC_RESOURCES)

This data action combines 2 other data actions:

- SAP__FI_BPL_IM_PRODUCTCOST_COPY_SALES_QUANTITIES

- SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RESOURCES

Calculate manufacturing overhead costs(SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_OVERHEADS)

Calculate total overhead costs by multiplying the overhead costs per unit with the sales quantities

Calculate product cost rates(SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RATES)

Calculate product cost rates by valuating the quantity structure with the new raw material and activity cost rates.

Calculate resources(SAP__FI_BPL_IM_PRODUCTCOST_CALCULATE_RESOURCES)

Calculate resource consumption (total raw material quantity and activity quantity) by multiplying the quantity structure with the sales quantities

Clear Version(SAP__FI_BPL_IM_PRODUCTCOST_CLEAR_VERSION)

Delete a complete plan version.

Copy activity cost rates from cost center planning(SAP__FI_BPL_IM_PRODUCTCOST_COPY_ACTIVITY_PRICES)

Copy activity cost rates from cost center planning.

Copy sales quantities(SAP__FI_BPL_IM_PRODUCTCOST_COPY_SALES_QUANTITIES)

Copy sales quantities from sales planning

Copy data from a source into a target version (SAP__FI_BPL_IM_PRODUCTCOST_COPY_SOURCE_TO_TARGET_VERSION)

Delete the data of the selected target version and copy the data of the selected source version into the target version

Create sample data(SAP__FI_BPL_IM_PRODUCTCOST_CREATE_SAMPLE_DATA)

Create sample data for a cost estimate.

Derive activity cost rates from cost estimate(SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_ACTIVIY_PRICES)

Extract the activity cost rates from other plan version that contains the cost estimate loaded from S/4HANA.

Derive overhead costs from cost estimate(SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_OVERHEAD_COSTS)

Extract the overhead costs from other plan version that contains the cost estimate loaded from S/4HANA.

Derive quantity structure from cost estimate(SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_QUANTITY_STRUCTURE)

Extract the quantity structure (raw material and activity type quantities per lot size of the finished product) from other plan version that contains the cost estimate loaded from S/4HANA.

Derive raw material prices from cost estimate(SAP__FI_BPL_IM_PRODUCTCOST_DERIVE_RAW_MATERIAL_PRICES)

Extract the raw material prices from other plan version that contains the cost estimate loaded from S/4HANA.

2.24.6.3 Data Actions for Sales and Profitability Planning

- Copy product cost rates, calculate profitability and functional area derivation (SAP__FI_BPL_IM_PROFITABILITY_BUNDLE_COPY_PRODUCTCOSTRATES_CALC_PROFIT)
- Calculate profitability (SAP__FI_BPL_IM_PROFITABILITY_CALC_PROFIT)

- Clear version
  (SAP__FI_BPL_IM_PROFITABILITY_CLEAR_VERSION)
- Copy actual to plan
  (SAP__FI_BPL_IM_PROFITABILITY_COPY_ACT)
- Copy product cost rates
  (SAP__FI_BPL_IM_PROFITABILITY_COPY_PRODUCTCOSTRATES)
- Derive product cost rates from actuals
  (SAP__FI_BPL_IM_PROFITABILITY_DERIVE_PRODUCTCOSTRATES
- Derive functional area from account attribute
  (SAP__FI_BPL_IM_PROFITABILITY_FA_DERIVATION)
- Create sample data
  (SAP__FI_BPL_IM_PROFITABILITY_SAMPLE_DATA)

Copy product cost rates, calculate profitability and functional area derivation (SAP__FI_BPL_IM_PROFITABILITY_BUNDLE_COPY_PRODUCTCOSTRATES_CALC_PROFIT)

This data action combines 3 other data actions:

- SAP__FI_BPL_IM_PROFITABILITY_COPY_PRODUCTCOSTRATES

- SAP__FI_BPL_IM_PROFITABILITY_CALC_PROFIT

- SAP__FI_BPL_IM_PROFITABILITY_FA_DERIVATION

Calculate profitability(SAP__FI_BPL_IM_PROFITABILITY_CALC_PROFIT)

Revenue in the Plan version is calculated by multiplying price by quantity. Deductions in the Plan version is calculated by applying the deduction percent against the revenue. COGS in the Plan version is calculated by multiplying product cost by quantity.

Clear version(SAP__FI_BPL_IM_PROFITABILITY_CLEAR_VERSION)

Used to clear all data from the selected version.

Copy actual to plan(SAP__FI_BPL_IM_PROFITABILITY_COPY_ACT)

Copies quantities calculates average prices and deductions percentages using Actuals and applies them as the basis for Plan. This data action is executed by the administrator at the start of the planning cycle.

Copy Product Cost Rates(SAP__FI_BPL_IM_PROFITABILITY_COPY_PRODUCTCOSTRATES)

Used to transfer the product cost rates from model SAP__FI_BPL_IM_PRODUCTCOST

Copy data from a source into a target version (SAP__FI_BPL_IM_PROFITABILITY_COPY_SOURCE_TO_TARGET_VERSION)

Delete the data of the selected target version and copy the data of the selected source version into the target version.

Create quantity plan proposal based on control parameters (SAP__FI_BPL_IM_PROFITABILITY_CREATE_CTL_PARAMS)

Using several user-selectable control parameters, plan version values for quantity are calculated and populated.

Derive product cost rates from actuals (SAP__FI_BPL_IM_PROFITABILITY_DERIVE_PRODUCTCOSTRATES)

Used to calculate the product cost rates from Actuals in model SAP__FI_BPL_IM_PROFITABILITY.

Derive functional area from account attribute (SAP__FI_BPL_IM_PROFITABILITY_FA_DERIVATION)

Used to derive the functional area based on the attribute of GL Account

Create sample data (SAP__FI_BPL_IM_PROFITABILITY_SAMPLE_DATA)

Creates sample data for the Actual version. They contain revenue, quantity and deductions.

2.24.6.4 Data Actions for Project Planning

- Create budget sample data
  (SAP__FI_BPL_IM_PROJECT_BUDGET_SAMPLE_DATA)
- Clear Version
  (SAP__FI_BPL_IM_PROJECT_CLEAR_VERSION)
- Copy cost center plan to budget
  (SAP__FI_BPL_IM_PROJECT_COPY_PLAN)
- Create plan sample data
  (SAP__FI_BPL_IM_PROJECT_CREATE_PLAN_SAMPLE_DATA)
- Derive profit center based on WBS
  (SAP__FI_BPL_IM_PROJECT_PCTR_DERIVATION)

Create budget sample data(SAP__FI_BPL_IM_PROJECT_BUDGET_SAMPLE_DATA)

Create sample data for the budget version.

Clear Version(SAP__FI_BPL_IM_PROJECT_CLEAR_VERSION)

Delete a complete version. Can be applied to budget and plan versions.

Copy cost center plan to budget(SAP__FI_BPL_IM_PROJECT_COPY_PLAN)

Copy plan data into a budget version. Technically, amounts planned on GL accounts will be aggregated to the GL account which is used for budgeting.

Create plan sample data(SAP__FI_BPL_IM_PROJECT_CREATE_PLAN_SAMPLE_DATA)

Create sample data for the plan version.

Derive profit center based on WBS(SAP__FI_BPL_IM_PROJECT_PCTR_DERIVATION)

Derive profit center from WBS element based on master data attribute.

2.24.6.5 Data Actions for Internal Order Planning

Data Actions for Internal Order Planning

- Clear Version
  (SAP__FI_BPL_IM_INTERNAL_ORDER_CLEAR_VERSION)
- Create plan sample data
  (SAP__FI_BPL_IM_INTERNAL_ORDER_CREATE_PLAN_SAMPLE_DATA)
- Derive Profit Center based on Internal Order Attribute
  (SAP__FI_BPL_IM_INTERNAL_ORDER_PCTR_DERIVATION)

Clear Version(SAP__FI_BPL_IM_INTERNAL_ORDER_CLEAR_VERSION)

Used to clear all data from the selected version.

Create plan sample data(SAP__FI_BPL_IM_INTERNAL_ORDER_CREATE_PLAN_SAMPLE_DATA)

Create sample data for the plan version.

Derive Profit Center based on Internal Order Attribute(SAP__FI_BPL_IM_INTERNAL_ORDER_PCTR_DERIVATION)

Derive profit center from internal order based on master data attribute.

2.24.6.6 Data Actions for Investment Planning

- Clear Version (SAP__FI_BPL_IM_CAPEX_CLEAR_VERSION)
- Create actual sample data (SAP__FI_BPL_IM_CAPEX_CREATE_ACT_SAMPLE_DATA)
- Create plan sample data (SAP__FI_BPL_IM_CAPEX_CREATE_PLAN_SAMPLE_DATA)
- Copy actual investment amounts to plan (SAP__FI_BPL_IM_CAPEX_COPY_ACT_INVESTMENTS)
- Calculate Depreciation (SAP__FI_BPL_IM_CAPEX_CALCULATE_DEPRECIATION)

Clear Version(SAP__FI_BPL_IM_INTERNAL_ORDER_CLEAR_VERSION)

Used to clear all data from the selected version.

Create actual sample data(SAP__FI_BPL_IM_CAPEX_CREATE_ACT_SAMPLE_DATA)

Create sample data for the actual version.

Create plan sample data (SAP__FI_BPL_IM_CAPEX_CREATE_PLAN_SAMPLE_DATA)

Create sample data for the plan version.

Copy actual investment amounts to plan (SAP__FI_BPL_IM_CAPEX_COPY_ACT_INVESTMENTS)

Copy previous year actual data to the plan version.

Calculate Depreciation (SAP__FI_BPL_IM_CAPEX_CALCULATE_DEPRECIATION)

Calculate the depreciation for the planning period according to the depreciation parameter settings for depreciation method (straight-line or accelerated depreciation method) and depreciation percentage. The depreciation starts in the period after the new investment is entered.

2.24.6.7 Data Actions for Financial Statement Planning

- Clear Version (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CLEAR_VERSION)
- Create sample data (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_SAMPLE_DATA)
- Copy actual amounts to plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_ACTUALS)
- Copy gross margin amounts from profitability plan

(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_PROFITABILITY)

- Copy data from a source into a target version
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_SOURCE_TO_TARGET_VERSION)
- Create plan sample data
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CREATE_PLAN_SAMPLE_DATA)
- Copy operational expense amounts from cost center plan
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_COSTCENTER)
- Copy plan sample data
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CREATE_PLAN_SAMPLE_DATA)
- Copy investment and depreciation amounts from capex plan
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_CAPEX)
- Create company code plan proposal based on control parameters
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_PLAN_CTL_PARAMS)
- Derive trading partner splitting factors from actuals
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_DERIVE_TP_SPLIT_FACTORS)
- Allocate amounts on trading partner
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TP_ALLOCATION)
- Financial Statement Cash Flow
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CASHFLOW)
- Financial Statement Balance Sheet Carry Forward
  (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BS_CRYFWD)

Calculate balance sheet and cash flow (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BUNDLE_CALCULATE_BS_CF)

This data action combines 2 other data actions:

- SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CALCULATE_BS

- SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CASHFLOW

Calculate profit and loss (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BUNDLE_CALCULATE_P&L)

This data action combines 3 other data actions:

- SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_PROFITABILITY

- SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_COSTCENTER

- SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TPSPLIT

Calculate financial statement balance sheet (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CALCULATE_BS)

Carry forward the balance amounts to the next periods after manual changes to the closing balance amount and performs calculations for Cash Balance and Accumulated Depreciation/Amortization.

Create company code plan proposal based on control parameters (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_PLAN_CTL_PARAMS)

Perform profit and loss planning based upon control parameter entered by user.

Split profit and loss amount by trading partner (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TPSPLIT)

Performs a split of profit and loss amount by trading partner splitting factors defined in the administration story.

Copy data from a source into a target version (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_SOURCE_TO_TARGET_VERSION)

Delete the data of the selected target version and copy the data of the selected source version into the target version.

Create plan sample data (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CREATE_PLAN_SAMPLE_DATA)

Create control parameter sample data for the plan version.

Clear Version(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CLEAR_VERSION)

Delete a complete version. Can be applied to budget and plan versions.

Create sample data(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_SAMPLE_DATA)

Create sample data for the actual version.

Copy actual amounts to plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_ACTUALS)

Copy the last year actual net income and balance sheet amounts to plan version as a starting point for planning. Before that, delete all P&L and balance sheet plan amounts.

Copy gross margin amounts from profitability plan(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_PROFITABILTY)

Copy gross margin from the profitability planning to the financial statement plan version.

Before that, delete all gross margin plan amounts.

Copy operating expense from cost center plan(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_COST_CENTER)

Copy operating expense from the cost center planning to the financial statement plan version.

Before that, delete all operating expense plan amounts.

Create plan sample data (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CREATE_PLAN_SAMPLE_DATA)

Create control parameter sample data for the plan version.

Copy investment and deprecation amounts from investment plan (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_COPY_CAPEX)

Copy investment and depreciation amounts from the investment planning to the financial statement plan version. Before that, delete investment and depreciation plan amounts.

Create company code plan proposal based on control parameters (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_PLAN_CTL_PARAMS)

Perform profit and loss planning based upon control parameter entered by user.

Derive trading partner splitting factors from actuals (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_DERIVE_TP_SPLIT_FACTORS)

The administrator performs this data action on the last years actuals, which contain GL account postings on different trading partners.

The data action performs the following:

1. It deletes all trading partner allocation factors.

2. For each company code and G/L account, it calculates the average trading partner share amount from last year's actuals.

3. It takes this share amount as Trading Partner Allocation Factor to each period of the plan version. Later, this Trading Partner Allocation Factor is used as driver to allocate the planned amounts to trading partners.

Allocate amounts on trading partner(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_TP_ALLOCATION)

Performs the trading partner allocation based on driver 'Trading Partner Allocation Factor' defined in the administration story.

Financial Statement Balance Sheet Carry Forward(SAP__FI_BPL_IM_FINANCIAL_STATEMENT_BS_CRYFWD)

Carry forward the balance amounts to the next periods after manual changes to the closing balance amount and performs calculations for Cash Balance and Accumulated Depreciation/Amortization..

Financial Statement Cash Flow (SAP__FI_BPL_IM_FINANCIAL_STATEMENT_CASHFLOW)

Calculate the cash flow statement using the changing amounts from the profit & loss and balance sheet.

2.24.7 Add-on for Integrated Financial Planning for SAP S/4HANA

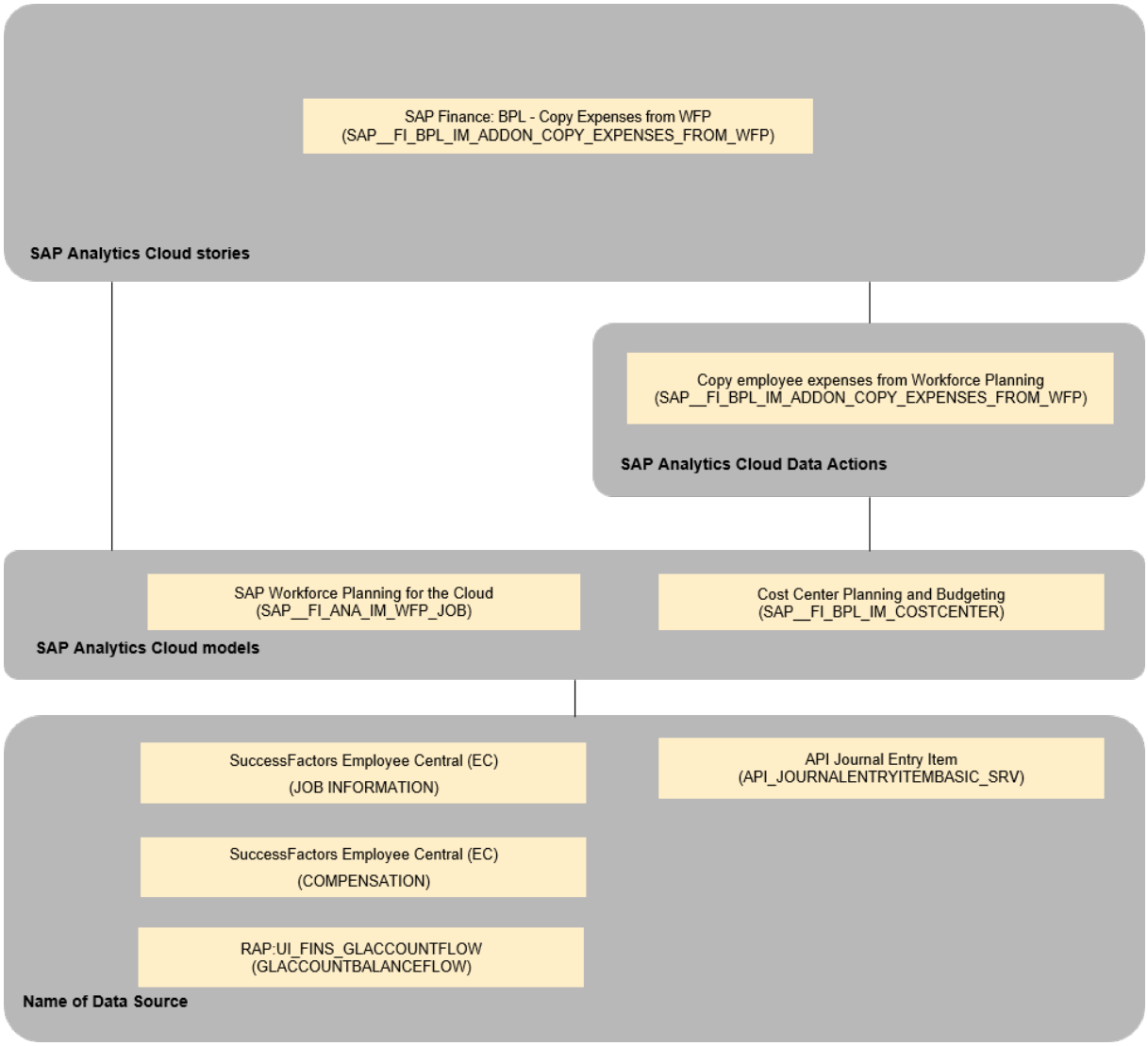
2.24.7.1 Architecture and Abstract

This package contains stories and data actions to support transfer of data between SAP Analytics Cloud Planning models and models contained in Integrated Financial Planning package.

Currently, this package contains a story and data action to support transfer of Employee Expense between Workforce Planning model and the Cost Center Planning model.

- The Cost Center Planning and Budgeting model, stories, allocations and data actions support an elaborated planning and budgeting process with expense planning, allocations, activity quantity planning, activity cost rate planning and activity cost rate calculation

- The Workforce Planning model is the source of the Employee Expense Plan data that is transferred to the Cost Center Planning model. The Workforce model is separate content from Integrated Financial Planning and is a prerequisite for this scenario.



2.24.7.2 Stories

SAP Finance: BPL - Copy Expenses from WFP (SAP__FI_BPL_IM_ADDON_COPY_EXPENSES_FROM_WFP)

The story facilities the cross-model copy of Employee Expenses Plan data to the Cost Center Planning model.

This story uses the data action **Copy Employee Expenses (SAP__FI_BPL_IM_ADDON_COPY_EXPENSES_FROM_WFP)**.

2.24.7.3 Data Actions

Copy Employee Expenses (SAP__FI_BPL_IM_ADDON_COPY_EXPENSES_FROM_WFP)

Plan data from SAP__FI_ANA_IM_WFP_JOB source model is transferred to the target model SAP__FI_BPL_IM_COSTCENTER.

2.25 Liquidity Planning for SAP S/4HANA Cloud (SAP BEST PRACTICES)

2.25.1 Liquidity Planning for SAP S/4HANA Cloud (SAP BEST PRACTICES)

SAP Liquidity Planning for SAP S/4HANA Cloud enables planners to complete a Liquidity plan, including calculated closing balances, in SAP Analytics Cloud based on information sources from SAP S/4HANA Cloud.

Find all details and documentation about this scope item in SAP Liquidity Planning for SAP S/4HANA Cloud (3Y0).

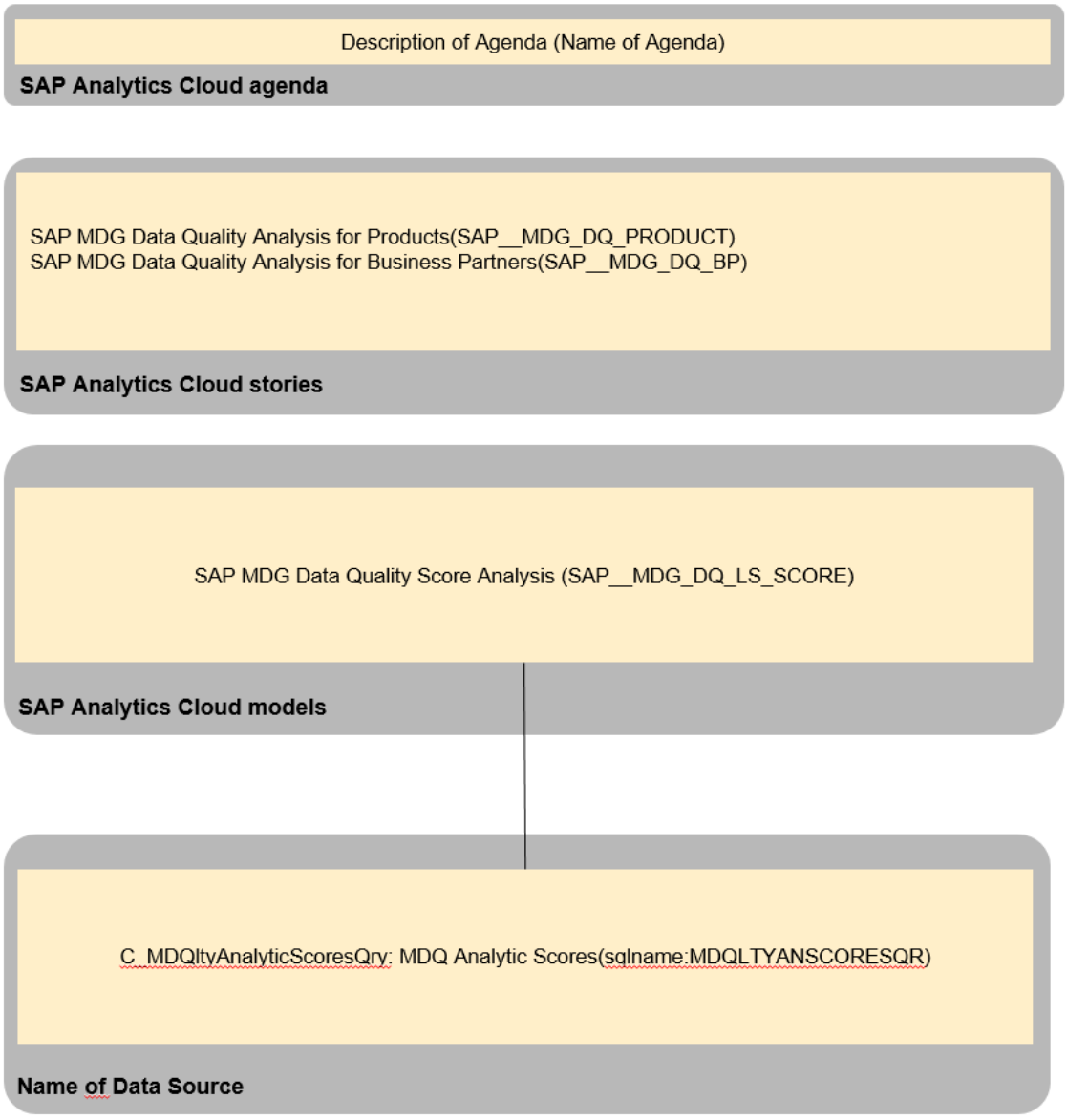
2.25.2 Liquidity Planning for SAP S/4HANA Cloud (SAP BEST PRACTICES)

SAP Liquidity Planning for SAP S/4HANA Cloud enables planners to complete a Liquidity plan, including calculated closing balances, in SAP Analytics Cloud based on information sources from SAP S/4HANA Cloud.

Find all details and documentation about this scope item in SAP Liquidity Planning for SAP S/4HANA Cloud (3Y0).

2.26 Master Data Governance Data Quality Analysis

2.26.1 Architecture and Abstract



2.26.2 Stories

- SAP MDG Data Quality Analysis for Products (SAP__MDG_DQ_PRODUCT)

- SAP MDG Data Quality Analysis for Business Partners (SAP__MDG_DQ_BP)

2.26.2.1 SAP MDG Data Quality Analysis for Products (SAP__MDG_DQ_PRODUCT) / SAP MDG Data Quality Analysis for Business Partners (SAP__MDG_DQ_BP)

Measure Name	Type	Formula/Properties
Dimension Score	Aggregation	- Operation [AVG] - Measure [MDQltyDimensionScore] by Aggregation Dimension [MDQltyDimension] Conditional Aggregation [No]
Dimension Target Score	Aggregation	- Operation [AVG] - Measure [MDQltyDimnTargetScoreValue] by Aggregation Dimension [MDQltyDimension] Conditional Aggregation [No]
Category Score	Aggregation	- Operation [AVG] - Measure [MDQltyDimnCategoryScore] by Aggregation Dimension [MDQltyDimensionCategory] - Conditional Aggregation [No]
Category Target Score	Aggregation	- Operation [AVG] - Measure [MDQltyDimnCatTargetScoreValue] by Aggregation Dimension [MDQltyDimensionCategory] - Conditional Aggregation [No]
Rule Score	Aggregation	- Operation [AVG] - Measure [MDQltyDimensionScore] by Aggregation Dimension [MDQltyDimension] - Conditional Aggregation [No]

2.26.3 Models

Model Name: SAP__MDG_DQ_LS_SCORE

Model Description: SAP MDG Data Quality Score Analysis

Planning Enabled: no

Connection: Live Connection

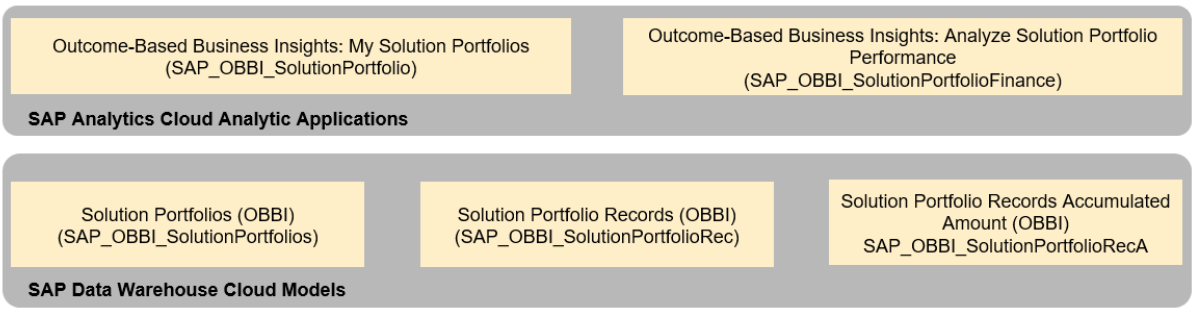
Dimensions

Name	Description	Mapping
		Connection Type Name of the Report
MasterDataChangeProcess	Evaluation Process	
MDQItyDimensionCategory	Dimension Category	
DQItyDimension	Data Quality Dimension	
MDQualityBusinessRule	Business Rule	
MDQItyBusinessObjectTypeCode	Business Object Type	
MDQualityBusinessRuleName	Business Rule Name	
MDQItyBusinessRuleBaseTable	Base Table	
MDQItyBusinessRuleOwner	Rule Owner	
MDQItyBusRuleCheckedField	Checked Fields	
MDQItyBusinessRuleExpert	Rule Expert	
MDChgProcessFinishDate	Evaluation Finishing Date	

2.27 Outcome-based Business Insights

2.27.1 Architecture and Abstract

SAP Outcome-Based Business Insights enables you to track, plan and analyze your outcome-based contracts and solution portfolios. The analytic applications provided in the content serve as a template to be customized and tailored to your specific needs.



2.27.2 Analytic Applications

- Outcome-Based Business Insights: My Solution Portfolios (SAP_OBBI_SolutionPortfolio)

- Outcome-Based Business Insights: Analyze Solution Portfolio Performance (SAP_OBBI_SolutionPortfolioFinance)

My Solution Portfolios (SAP_OBBI_SolutionPortfolio)

Measure Name	Type	Properties
Original Planned Costs	Aggregation	Costs from Excel Sheet

Analyze Solution Portfolio Performance (SAP_OBBI_SolutionPortfolioFinance)

Measure Name	Type	Properties
quantity	Aggregation	Accumulated usages per month from S/4 data source
amountInGlobalCurrency	Aggregation	Accumulated costs or revenues per month from S/4 data source
cumulatedAmountInGC	Aggregation	Accumulated total costs and revenues until the specified month

2.27.3 Models

Solution Portfolios (OBBI): SAP_OBBI_SolutionPortfolios

Solution Portfolios (OBBI): SAP_OBBI_SolutionPortfolios	Connection
Solution Portfolios (OBBI): This view in the reporting layer provides a list of the available Solution Portfolios with planned costs. - Planning Enabled: no	- Live Data Connection to DWC
Dimensions	
Technical Name Description	Live Data Connection to DWC

Solution Portfolios (OBBI): SAP_OBBI_SolutionPortfolios		Connection
solutionPortfolioExternalID	Solution Portfolio	Live Data Connection to DWC
description	Description	Live Data Connection to DWC
startDate	Start Date	Live Data Connection to DWC
endDate	End Date	Live Data Connection to DWC
dashboard	Dashboard	Live Data Connection to DWC
customers	Customers	Live Data Connection to DWC
globalCurrency	Global Currency	Live Data Connection to DWC
linkToPlanningData	linkToPlanningData	Live Data Connection to DWC
solutionPortfolioID	solutionPortfolioID	Live Data Connection to DWC

Solution Portfolio Records (OBBI): SAP_OBBI_SolutionPortfolioRec

Solution Portfolio Records (OBBI): SAP_OBBI_SolutionPortfolioRec	Connection
Solution Portfolio Records (OBBI): This view in the reporting layer accumulates data from "SAP_OBBI_SolutionPortfolioRecS", using the corresponding Solution Portfolios' amounts and quantities. - Planning Enabled: no	- Live Data Connection to DWC

Dimensions		
Technical Name	**Description**	**Mapping**
subMetricType	sub Metric Type	Live Data Connection to DWC
solutionPortfolioDescription	Solution Portfolio Description	Live Data Connection to DWC
solutionPortfolioExternalID	Solution Portfolio	Live Data Connection to DWC
solutionPortfolioCustomers	customers	Live Data Connection to DWC
recordType	Record Type	Live Data Connection to DWC
metricID	Metric ID	Live Data Connection to DWC
metricDescription	metricDescription	Live Data Connection to DWC
metricType	Metric Type	Live Data Connection to DWC
postingDate	Posting Date	Live Data Connection to DWC
quantityUnit	quantityUnit	Live Data Connection to DWC
globalCurrency	Global Currency	Live Data Connection to DWC

Solution Portfolio Records Accumulated Amount (OBBI): SAP_OBBI_SolutionPortfolioRecA

Solution Portfolio Records Accumulated Amount (OBBI): SAP_OBBI_Solution-PortfolioRecA	Connection
Solution Portfolio Records Accumulated Amount (OBBI): This view in the RL provides data for the chart “Accumulated Costs and Revenues” in the analytic application “Outcome-Based Business Insights: Analyze Solution Portfolio Performance”. - Planning Enabled: no	- Live Data Connection to DWC

Dimensions		
Technical Name	**Description**	**Mapping**
solutionPortfolioExternalID	Solution Portfolio	Live Data Connection to DWC
recordType	Record Type	Live Data Connection to DWC
metricType	Metric Type	Live Data Connection to DWC
postingDate	Posting Date	Live Data Connection to DWC

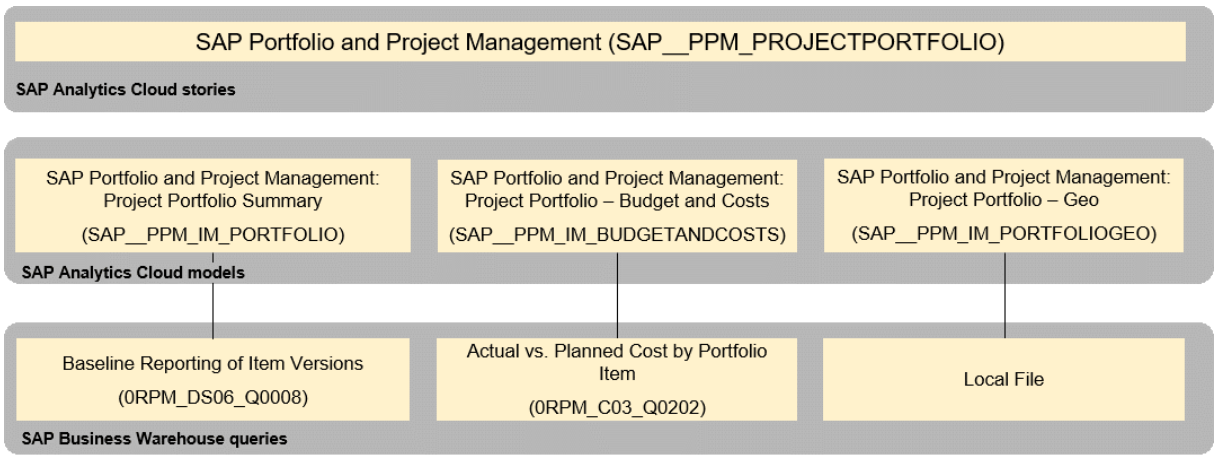
2.28 Portfolio and Project Management (PPM)

2.28.1 Architecture and Abstract

The Portfolio and Project Management (as part of the Enterprise Portfolio and Project Management offering in S/4HANA Enterprise Management) supports companies in planning, analyzing and executing the numerous projects. Companies can classify and aggregate their portfolio of projects to buckets to assess them per type, region, and risk or any other characteristic.

In this scenario, we focus on projects that are related to investments or maintenance (turnovers), both types represent significant budgets. The projects are scattered around the globe with different risk profile, expected commercial success, and criticality.

Architecture



Usage in Industry-Specific Boardrooms

To use the Financial Boardroom, industries should make a copy of the story SAP__PPM_PROJECTPORTFOLIO to their own namespace. The current usage in Industries is listed below:

Industry	Story
Oil & Gas	SAP__OAG_PPM_PROJECTPORTFOLIO
Utilities	SAP__UTL_ PPM_PROJECTPORTFOLIO

2.28.2 Dashboard

The PPM story is used in SAP_OAG_AGENDA and SAP_UTL_AGENDA.

2.28.3 Stories

2.28.3.1 SAP__PPM_PROJECTPORTFOLIO (SAP Portfolio and Project Management: Project Portfolio - Summary)

It enables customers to assess, monitor, and analyse the project portfolio on a global scale according to costs and budget, risk, commercial value and strategic fit. Project types encompass internal, STO and capital projects which are all typically subject to mid- and long-term planning. KPI´s such as Net Present Value and expected Commercial Value are displayed to provide crisp information on the outcomes.

Page: Details		
Charts		
Title	**Models Used**	**Navigate to**
Project Budget by Type	SAP__PPM_IM_BUDGETANDCOSTS	Open in Explorer
This chart shows total project budget per project type		
NPV and Risk by Project	SAP__PPM_IM_BUDGETANDCOSTS	Open in Explorer
This chart shows the NPV and risk in a bar chart		
Budget and Costs by – Top 5	SAP__PPM_IM_PORTFOLIO	Open in Explorer
This chart shows the top 5 projects displaying total budget, actual costs, planned costs, and the deviation in total and %		
Expected Commercial Value by Project-Top 5	SAP__PPM_IM_PORTFOLIO	Open in Explorer
This chart shows the top 5 projects by expected commercial value		
Page: Context1		
Charts		

Page: Details		
Title	**Models Used**	**Navigate to**
Costs Deviation by Cost Element	SAP__PPM_IM_BUDGETANDCOSTS	Open in Explorer
This chart shows waterfall of costs and total costs		
Annual Deviation of Budget and Costs	SAP__PPM_IM_BUDGETANDCOSTS	Open in Explorer
This chart Shows time-series of budget, planned- and annual costs		
Total Costs and Expenses	SAP__PPM_IM_BUDGETANDCOSTS	Open in Explorer
This chart shows list of cost types and total costs		
Page: Context2		
Charts		
Title	**Models Used**	**Navigate to**
Expected Commercial Value by Projects	SAP__PPM_IM_PORTFOLIOGEO	
This chart shows geo map with a bubble layer presenting aggregated Expected Commercial Value by Project Location		
Project	SAP__PPM_IM_ PORTFOLIOGEO	
This chart shows Risk, Probability of Commercial Success, NVP of the Projects within selected geo location in a tabular view		

2.28.4 Models

2.28.4.1 SAP Portfolio and Project Management (SAP__PPM_IM_PORTFOLIO)

Model Name: SAP__PPM_IM_PORTFOLIO		**Connection**
- Model Description: SAP Portfolio and Project Management: Project Portfolio - Summary - Planning Enabled: No		- Connection type: Import Data Connection to SAP BW - Connection Analytical Query: BW-Data Query name: 0RPM_DS06_Q0008
Account		
ID	**Description**	**Formula/Mapping**
Assessed Risk	Assessed Risk	0RPM_ARISK
Expected Commercial Value	Expected Commercial Value	0RPM_ECV
Probability Commercial Success	Probability Commercial Success	0RPM_PCSI
Probability Technical Success	Probability Technical Success	0RPM_PTSI
Net Present Value	Net Present Value	0RPM_NPV
Dimensions		**Mapping**

Model Name: SAP__PPM_IM_PORTFOLIO		Connection	
ID	**Description**	**ID**	**Description**
Time*	Time	0CRM_PLTO	Time
SAP_PPM_PROJECTNAME	Project Name	0RPM_IDID	Project Name[1]
SAP_PPM_TYPE	Type	0RPM_ITMT	Type
SAP_PPM_PROJECTLOCATION	Project Location	0RPM_LOC	Project Location
SAP_PPM_GEOAREA	Geo Area	0RPM_GEO	Geo Area
Additional Notes about the model			

- Unit of Measure: Expected Commercial Value and Net Present Value should be exposed to SAP Analytics ClouOnd in one Unit of Measurement only, where we used the Subject USD. Assessed Risk and Probabilities should be in the range from 0 to 1.
- The text for the project name that can be filled up in the master data can be taken from the field Item Detail: 0RPM_IDGU.

> **i** Note
>
> * Private dimension and other dimensions are public.

2.28.4.2 SAP Project Costs (SAP__PPM_IM_BUDGETANDCOSTS)

Model Name: SAP__PPM_IM_BUDGETANDCOSTS	Connection
• Model Description: SAP Portfolio and Project Management: Project Portfolio - Budget and Costs • Planning Enabled: No	• Connection Type: Import Data Connection to SAP BW • Connection Analytical Query: BW-Data Query name: 0RPM_C03_Q0202

Account		
ID	**Description**	**Formula/Mapping**
Actual Costs	Actual Costs	0RPM_C03_RK_ACT_COST
Budget	Budget	0RPM_C03_RK_BUDGET
Actual/Budget Variance	Actual/Budget Variance	[Actual Costs] – [Budget]
Actual/Planned Variance	Actual/Planned Variance	[Actual Costs] – [Planned Costs]
Planned Costs	Planned Costs	0RPM_C03_RK_PLAN_COST

Dimensions		Mapping	
ID	**Description**	**ID**	**Description**
Time (monthly)*	Time	0FISCPER	Fiscal year/period

Model Name: SAP__PPM_IM_BUDGETANDCOSTS		Connection	
SAP_PPM_PROJECTNAME	Project Name	0RPM_IGDU__0RPM_IDID	Item Detail ID
SAP_PPM_COSTELEMENT	Cost Element	0COSTELMNT	Cost Element
SAP_PPM_TYPE	Type	0RPM_IDGU__0RPM_ITMT	Item Type (Attribute of Portfolio Item)
SAP_PPM_GEOAREA	Geo Area	0RPM_PRO-GUI__0RPM_GEO	Geo Area as an Attribute of Project Name
Additional Notes about the model			
Unit of Measure: All Subjects from PPM should be exposed to SAP Analytics Cloud in one Unit of Measurement only, here we used the Subject USD.			

> **i** Note
>
> * Private dimension and other dimensions are public.

2.28.4.3 SAP Portfolio Geo (SAP__PPM_IM_PORTFOLIOGEO)

Model Name: SAP__PPM_IM_PORTFOLIOGEO		Connection
• Model Description: SAP Portfolio and Project Management: Project Portfolio - Geo • Planning Enabled: No		Connection Type: local file
Account		
ID	**Description**	**Formula/Mapping**
Assessed Risk	Assessed Risk	Suitable column in local file
Expected Commercial Value	Expected Commercial Value	Suitable column in local file
Probability Commercial Success	Probability Commercial Success	Suitable column in local file
Probability Technical Success	Probability Technical Success	Suitable column in local file
Net Present Value	Net Present Value	Suitable column in local file
Latitude	Latitude	Suitable column in local file
Longitude	Longitude	Suitable column in local file
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Suitable column in local file
SAP_PPM_PROJECTNAME	Project Name	Suitable column in local file
SAP_PPM_TYPE	Type	Suitable column in local file
SAP_PPM_PROJECTLOCATION	Location	Suitable column in local file

Model Name: SAP__PPM_IM_PORTFOLIOGEO		Connection
SAP_PPM_GEOAREA	Geo Area	Suitable column in local file
Project_Location	Project_Location	Suitable column in local file
Additional Notes about the model		
Unit of Measure: Expected Commercial Value and Net Present Value should be exposed to SAP Analytics Cloud in one Unit of Measurement only, here we used the Subject USD. Assessed Risk and Probabilities should be in the range from 0 to 1. Project_Location dimension is generated during the data model creation time. It is based on the Location dimension and geo coordinates in the corresponding Latitude and Longitude columns.		

> **i** Note
>
> * Private dimension and other dimensions are public.

2.29 Predictive Asset Insights

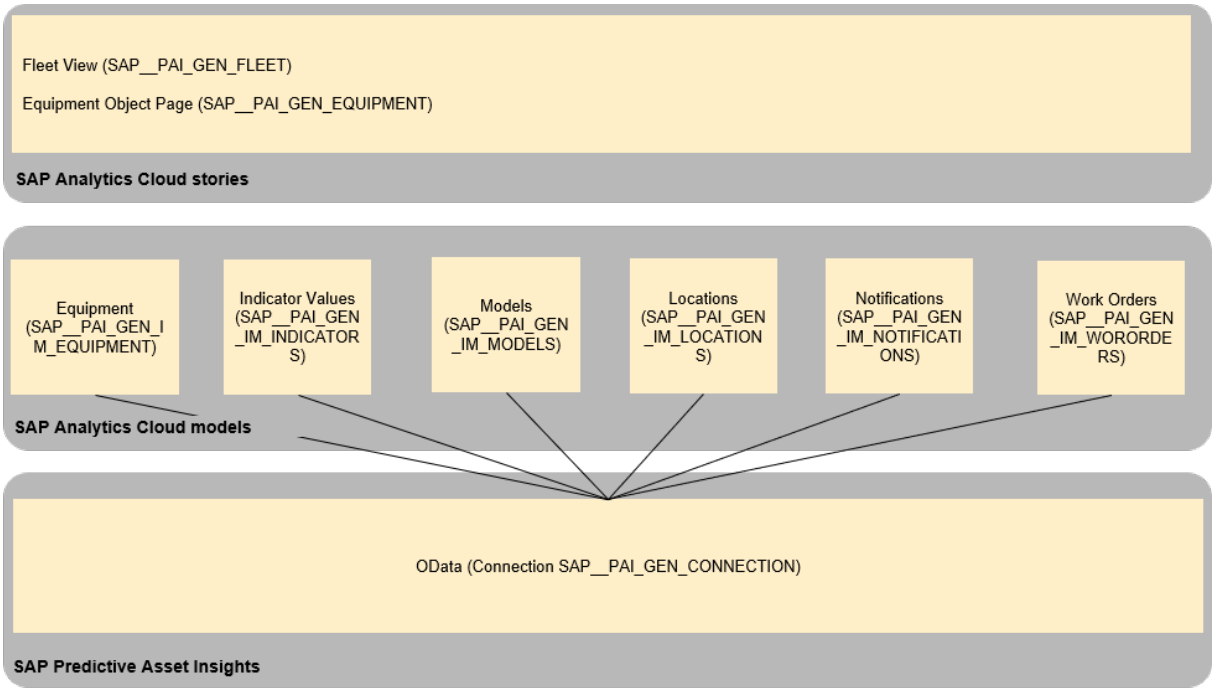
2.29.1 Architecture and Abstract

SAP Predictive Asset Insights (PAI) SAP Analytics Cloud (SAC) content provides:

- Six models, one for each of the OData APIs which you can use in PAI to extract data to SAC. These are:
  - Equipment
  - Indicator Values (the last one)
  - Models
  - Notifications
  - Work Orders
  - Locations
- Two sample stories.
- A sample connection.
- Sample data for each model.

One of the stories (...Fleet) is intended to be shown in the PAI Analytics Dashboards application. The other story (...Equipment) is intended to be shown on the PAI equipment object page. There are no sample stories for the other three PAI applications where SAC can be displayed, Models, Locations, Spare Parts.

Due to the limited nature of the data being exposed in the OData APIs these SAC stories are supposed to just illustrate what the data could look like in SAC stories in PAI. They are supposed to highlight some SAC functions like story tabs, page filters, and dimension selectors. They are not supposed to be stories delivering fully-fledged business insights based on common work practices.



2.29.2 PAI configuration for SAC (and SAC Connection)

2.29.2.1 SAC Connection

The configuration for the SAC connection is documented in the PAI help pages here (select the latest release).

The included sample connection has the Data Service URL provided, but each customer must add their specific other credentials.

2.29.2.2 PAI Configuration

The configuration of SAC in PAI is described in the PAI help pages here (select the latest release).

2.29.3 Stories

These stories are included:

- Fleet View (SAP__PAI_GEN_FLEET)
- Equipment Object Page (SAP__PAI_GEN_EQUIPMENT)

2.29.3.1 Fleet View (SAP__PAI_GEN_FLEET)

This story is intended to show in the PAI Analytics Dashboards application. It has two pages:

- Count and Breakdowns
- Indicators

Counts and Breakdowns shows five key indicators on the left, which are all counts of the corresponding business object types, from the five models. To the right of key figures are bar charts, one for each business object type. They show the count of business objects by a dimension. The dimension can be selected in the control above each chart.

Indicators show the last indicator values for equipment.

2.29.3.2 Equipment Object Page (SAP__PAI_GEN_EQUIPMENT)

This story is intended to show in the PAI Equipment application on its object page. It has one pages:

- Notification / Work Order Breakdown

Notification / Work Order Breakdown shows a count of notifications and work orders, shown as a key figure, in a chart by type and status, and in another bar chart where the user can select the dimension by which to break down the count.

All charts are just for illustrative purposes, to show what data could look like in the equipment object page.

2.29.4 Models

Context

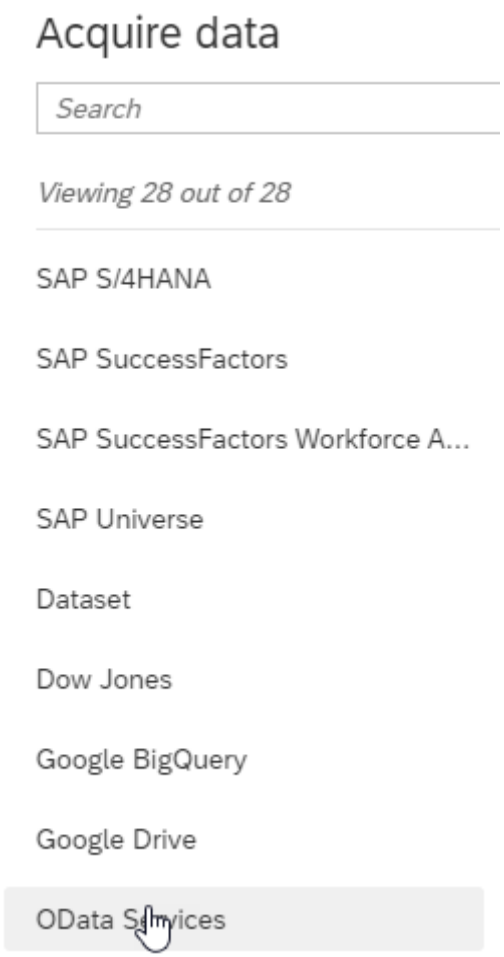
There are six models provided, one for each of the available OData APIs in PAI.

Model Name	Technical Name of Model
Equipment	SAP__PAI_GEN_IM_EQUIPMENT
Indicator Values	SAP__PAI_GEN_IM_INDICATOR
Models	SAP__PAI_GEN_IM_MODELS
Locations	SAP__PAI_GEN_IM_LOCATIONS

Model Name	Technical Name of Model
Spare Parts	SAP__PAI_GEN_IM_SPAREPARTS
Notifications	SAP__PAI_GEN_IM_NOTIFICATIONS
Work Orders	SAP__PAI_GEN_IM_WORORDERS

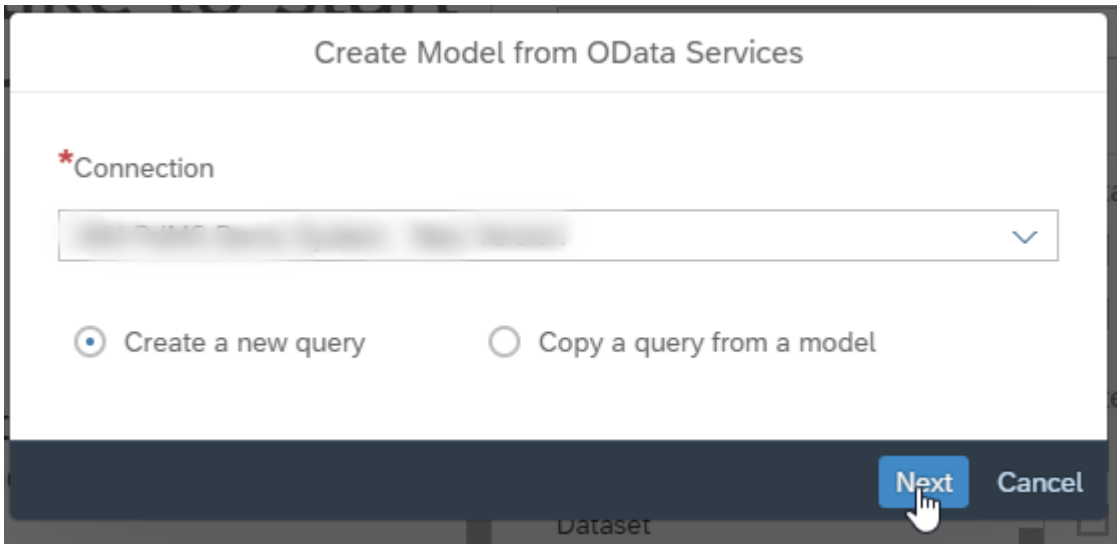
For each of the models some of the attributes available in the OData API were included. Apart from the indicator values the attributes are all dimensions, there are no measures. Note that SAC adds a measure on its own for models without measures. The available attributes are pretty self-explanatory when you call the PAI OData API in SAC. They are not separately listed here. How to see the available attributes:

Procedure

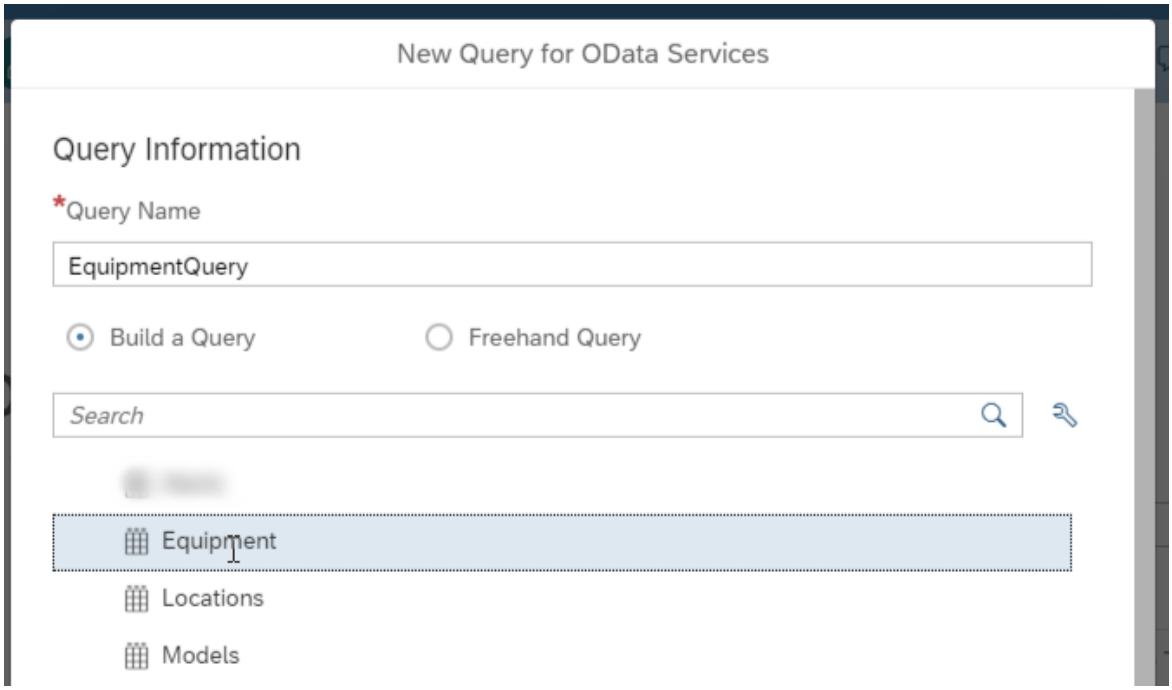


1. Launch function to import data via OData.

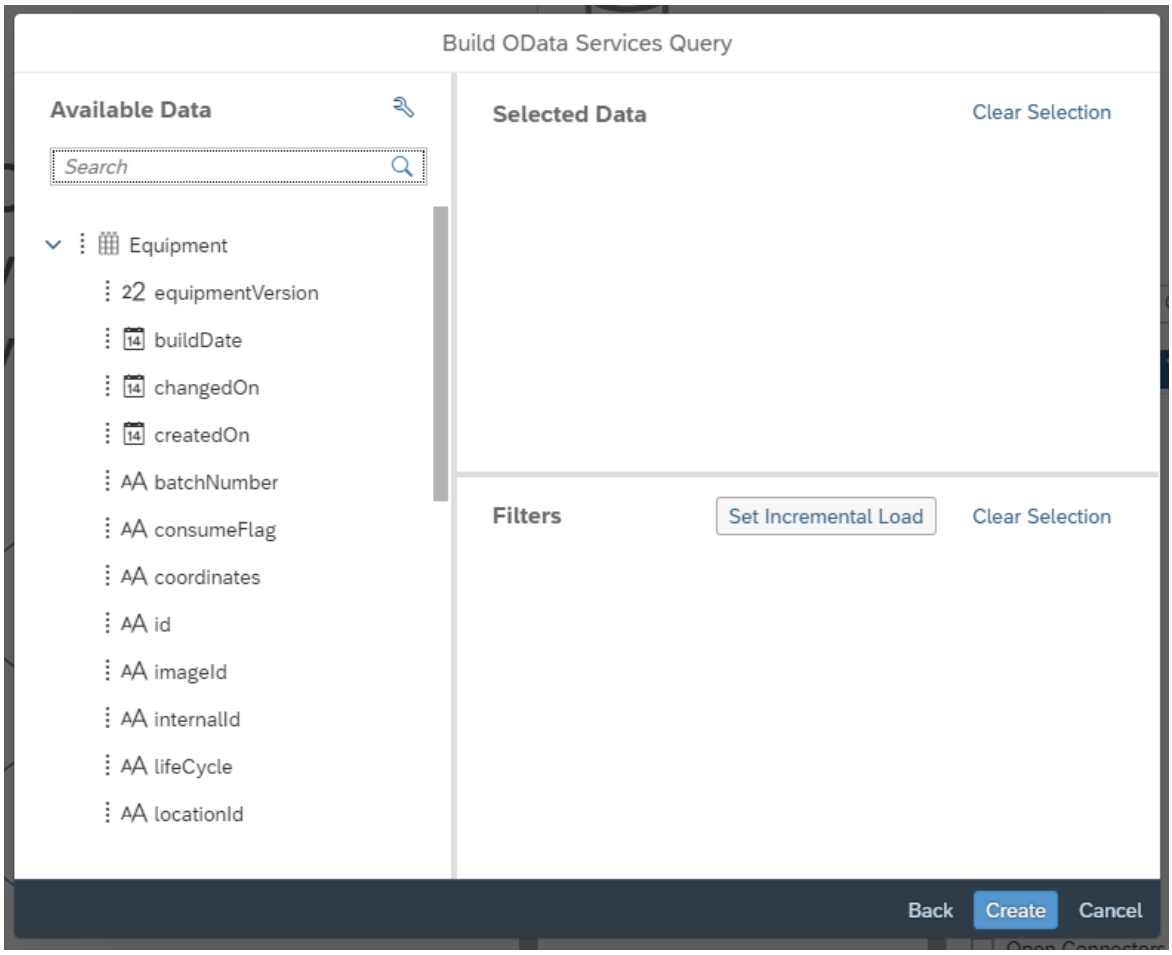
2. Select the appropriate connection to your source system.



3. Select the OData service for the desired business object type.



4. You can see a list of all attributes.



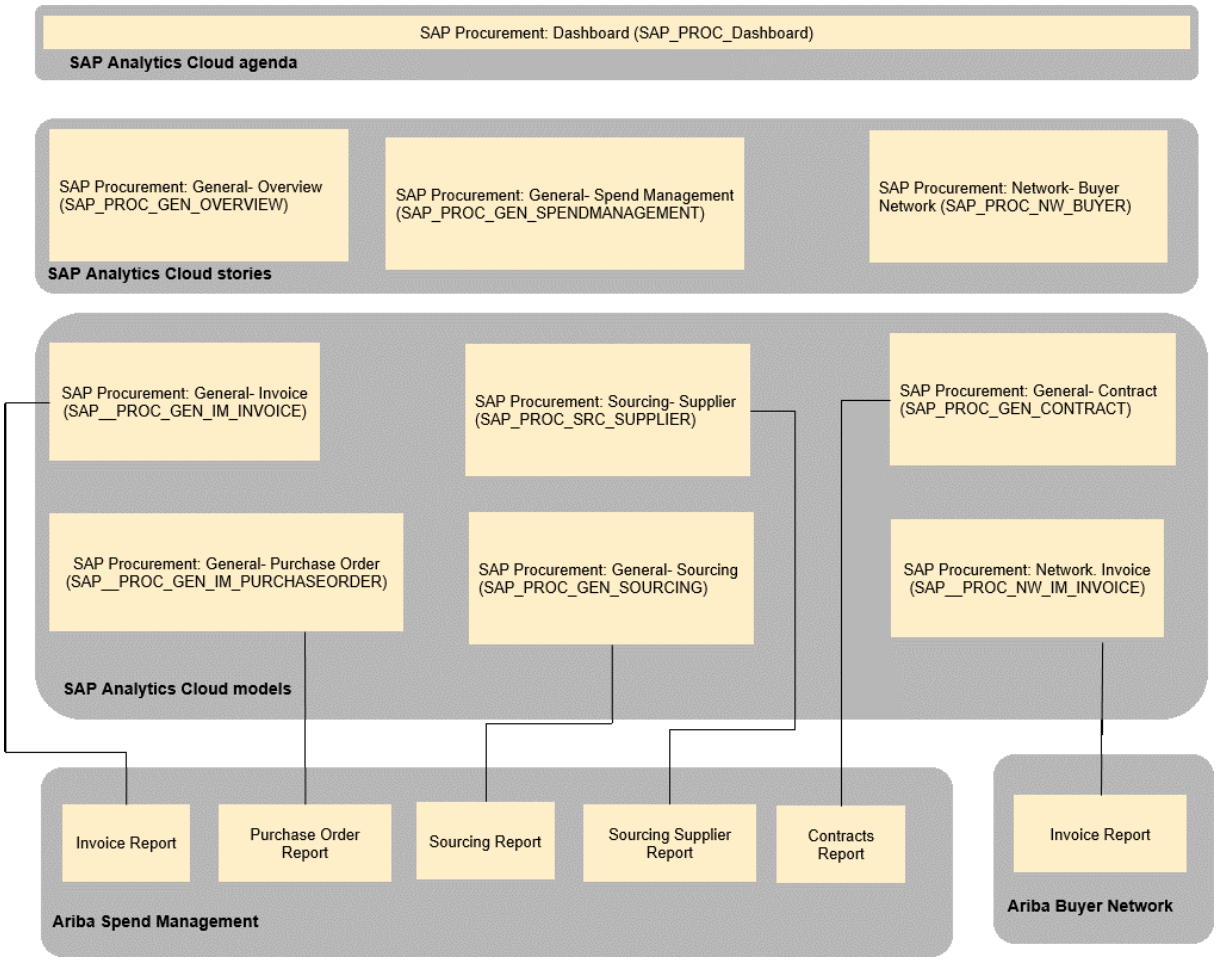
> **Note**
>
> - In the provided models also better human-readable versions of the technical attribute names were provided.

2.30 Procurement (PROC)

2.30.1 Architecture and Abstract

The Procurement content described here is based on SAP Ariba. The models are based on the applications Procurement, Sourcing, Contracts, and Buyer Network.

Architecture



2.30.2 Dashboard

The Dashboard SAP Procurement: Dashboard (SAP_PROC_Dashboard) brings together the stories from Spend Management and Buyer Network to provide seamless analytics through the components Spend, Sourcing, Contracts, and Network.

2.30.3 Stories

SAP Procurement: General- Overview (SAP_PROC_GEN_OVERVIEW)

This story is used to provide an overview on the overall Procurement content.

SAP Procurement: General- Spend Management (SAP_PROC_GEN_SPENDMANAGEMENT)

This story provides content based on Ariba Spend Management for Spend (Spend Visibility, Purchase Orders, and Invoices), Sourcing and Contracts.

SAP Procurement: Network- Buyer Network (SAP_PROC_NW_BUYER)

This story provides, based on Ariba Network, the statistics of Buyer Network, and comparison to Spend Management.

2.30.3.1 General- Overview (SAP_PROC_GEN_OVERVIEW)

Measure Name	Type	Formula/Properties
Active Suppliers	Aggregation	• Model: SAP__PROC_NW_IM_INVOICE • COUNT Amount • Dimension: Supplier • Condition: Time = 2018
Active Suppliers	Aggregation	• Model: SAP__PROC_GEN_IM_PURCHASEORDER • COUNT PO Spend • Dimension: Supplier • Condition: Time = 2018
PO Spend Current Year	Restricted Measure	• Model: SAP__PROC_GEN_IM_PURCHASEORDER • Measure: PO Spend • Dimension: Time :2018
PO Spend YoY Previous Year	Restricted Measure	• Model: SAP__PROC_GEN_IM_PURCHASEORDER • Measure: PO Spend • Dimension: Time: Q1, Q2, Q3 2017
Δ PO Spend YoY	Calculated Measure	• Model: SAP__PROC_GEN_IM_PURCHASEORDER • Calculation: PO Spend Current Year - PO Spend YoY Previous Year

> **Note**
>
> This story consists of a single page. The page brings together information from Invoices, Purchase Orders, and sourcing and Buyer Network.

2.30.3.2 General- Spend Management (SAP_PROC_GEN_SPENDMANAGEMENT)

Measure Name	Type	Formula/Properties
Active Suppliers	Aggregation	Model: SAP__PROC_NW_IM_INVOICE COUNT Amount Dimension: Supplier Condition: Time = 2018
Active Suppliers	Aggregation	• Model: SAP_PROC_GEN_IM_PURCHASEORDER • COUNT PO Spend • Dimension: Supplier • Condition: Time = 2018
PO Spend Current Year	Restricted Measure	• Model: SAP_PROC_GEN_IM_PURCHASEORDER • Measure: PO Spend • Dimension: Time: 2018
PO Spend YoY Previous Year	Restricted Measure	• Model: SAP_PROC_GEN_IM_PURCHASEORDER • Measure: PO Spend • Dimension: Time: Q1, Q2, Q3 2017
Δ PO Spend YoY	Calculated Measure	• Calculation: Invited Suppliers/ Event Count • Model: SAP_PROC_GEN_IM_PURCHASEORDER • Calculation: PO Spend Current Year - PO Spend YoY Previous Year
Invited Suppliers Avg	Calculated Measure	• Model: SAP_PROC_GEN_SOURCING • Calculation: Invited Suppliers/ Event Count
Participated Suppliers Avg	Calculated Measure	• Model: SAP_PROC_GEN_SOURCING • Calculation: Participated Suppliers/ Event Count
Declined Suppliers Avg	Calculated Measure	• Model: SAP_PROC_GEN_SOURCING • Calculation: Declined Suppliers/ Event Count

This story consists of 4 pages:

- Spend Visibility - this page provides overall information on the different kind of invoice spends namely Contract based, Off-contract, and Non-managed spends
- Purchase Order - Detail analysis of Purchase Orders is provided to the level of line items
- Invoice - Invoice analysis is provided based on status
- Sourcing - overview of different types of sourcing events and related suppliers is provided
- Contracts - Contract header information with available spends and comparison to non-contact spends is shown
- PO Ad-hoc Analysis - This page shows the relation between POs and related entities- invoices, contracts, commodities, and parts.

2.30.3.3 Network- Buyer Network (SAP_PROC_NW_BUYER)

Measure Name	Type	Formula/Properties
Active Suppliers	Aggregation	• Model: SAP__PROC_NW_IM_IN-VOICE • COUNT: Amount • Dimension: Supplier • Condition: Time = 2018
Active Suppliers	Aggregation	• Model: SAP_PROC_GEN_IM_PUR-CHASEORDER • COUNT PO Spend • Dimension: Supplier • Condition: Time = 2018
PO Spend Current Year	Restricted Measure	• Model: SAP_PROC_GEN_IM_PUR-CHASEORDER • Measure: PO Spend • Dimension: Time :2018
PO Spend YoY Previous Year	Restricted Measure	• Model: SAP__PROC_GEN_IM_PURCHA-SEORDER • Measure: PO Spend • Dimension: Time: Q1, Q2, Q3 2017
Δ PO Spend YoY	Calculated Measure	• Model: SAP__PROC_GEN_IM_PURCHA-SEORDER • Calculation: PO Spend Current Year - PO Spend YoY Previous Year

This story consists of 2 pages:

- Buyer Network - It provides you with network related statistics for invoices in the network.
- Ariba Network vs Spend Management - Provides comparison of spend for selected supplier through Ariba Network and Spend Management.

2.30.4 Models

Currently, there is direct connector in SAP Analytics Cloud for SAP Ariba, but this is in realization phase.

The workaround used for connectivity is by extracting SAP Ariba reports into Excel and importing this data into prebuilt models. For each model described below, we provide the definition of the SAP Ariba report.

2.30.4.1 General- Purchase Order (SAP__PROC_GEN_IM_PURCHASEORDER)

The purpose of this model is to provide all information regarding purchase orders.

SAP__PROC_GEN_IM_PURCHASEORDER		Connection
• SAP Procurement: General- Purchase Order • Planning Enabled: Yes		• Upload from File (Current option for Ariba connection) • Purchase Order Report
Purchase Order Account (SAP_PROC_POACCOUNT *)		
ID	**Description**	**Mapping/Formula**
po_spend	PO Spend	PO Spend
amount_invoiced	Amount Invoiced	Amount Invoiced
po_count	PO Count	Exception Aggregation COUNT(SAP_PROC_SPEND_PURCHA-SEORDER) [po_spend]
item_count	Item Count	Exception Aggregation COUNT(SAP_PROC_GEN_PART) [po_spend]
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Ordered Date
SAP_HR_GEN_USER	User (Requester)	Requester
SAP_ALL_SUPPLIER	Supplier	ERP Supplier
SAP_PROC_SPEND_PURCHASEOR-DER	Purchase Order	PO Id

SAP__PROC_GEN_IM_PURCHASEORDER		Connection
SAP_PROC_CONTRACT_ID	Contract	Contract
SAP_ALL_COSTCENTER	Cost Center	Cost Center
SAP_PROC_SPEND_PURCHA-SEGROUP	Purchasing Group	Purchase Organization Id
SAP_PROC_GEN_PART	Part	Part Name
SAP_PROC_GEN_COMMODITY	Commodity	Commodity
SAP_PROC_SPEND_LINETYPE	Line Type	Line Type

> **i** Note
>
> * Private dimension and other dimensions are public.

This report should be extracted from Ariba Spend Management. Create the report with the following definition.

Report Name: Purchase Order Report
Main Fact: Purchase Order (Procurement & Invoicing)
• Data • PO Spend • Amount Invoiced
Rows • Ordered Date • Line Type • Commodity • Part Name • Requester • ERP Supplier • PO ID • Contract • Cost Center • Purchase Organization Id
Filters • Ordered Date (Relative) Time Period 2 years Most recent 2

2.30.4.2 General- Invoice (SAP__PROC_GEN_IM_INVOICE)

SAP__PROC_GEN_IM_INVOICE	Connection
• SAP Procurement: General- Invoice • Planning Enabled: Yes	• Upload from File (Current option for Ariba connection) • Invoice Report

SAP__PROC_GEN_IM_INVOICE		Connection
Invoice Account (SAP_PROC_INVOICEACCOUNT*)		
ID	**Description**	**Mapping/Formula**
total_invoiced	Total Invoiced	Invoice Spend
total_cost	Total Cost	Not mapped (this field is provided for future use)
non_managed_spend	Non Managed Spends	LOOKUP([total_invoiced] ,[d/SAP_PROC_INVOICE_TYPE]="others")
off_contract_pospend	Off Contract PO Spends	LOOKUP([total_invoiced] ,[d/SAP_PROC_INVOICE_TYPE]="purchase_order")
contract_spend	Contract Spends	LOOKUP([total_invoiced] ,[d/SAP_PROC_INVOICE_TYPE]="contract")
non_managedspendratio	Non Managed Spend %	[non_managed_spend]/[total_invoiced]
contract_spendratio	Contract Spend %	[contract_spend]/[total_invoiced]
po_spends	Total PO Spends	[total_invoiced] -[non_managed_spend]
invoice_count	Invoice Count	Exception Aggregation COUNTNULL (SAP_PROC_INVOICE_NUMBER) [total_invoiced]
rejected_amount	Rejected Amount	LOOKUP([total_invoiced] ,[d/SAP_PROC_INVOICE_STATUS] ="rejected")
cancelled_amount	Cancelled Amount	LOOKUP([total_invoiced] ,[d/SAP_PROC_INVOICE_STATUS]="cancelled")
reconciled_amount	Reconciled Amount	LOOKUP([total_invoiced] ,[d/SAP_PROC_INVOICE_STATUS]="reconciled")
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Invoice Date
SAP_PROC_INVOICE_NUMBER	Invoice Number	Invoice ID
SAP_PROC_INVOICE_TYPE	Invoice Type	Invoice Type
SAP_PROC_INVOICE_STATUS	Invoice Status	Invoice Status
SAP_HR_GEN_USER	User (Requester)	Requester
SAP_ALL_SUPPLIER	Supplier	ERP Supplier
SAP_PROC_SPEND_PURCHASEORDER	Purchase Order	PO Id

SAP__PROC_GEN_IM_INVOICE		Connection
SAP_PROC_CONTRACT_ID	Contract	Contract
SAP_ALL_COSTCENTER	Cost Center	Cost Center
SAP_PROC_SPEND_PURCHA-SEGROUP	Purchasing Group	Purchase Organization Id
SAP_PROC_GEN_SYSTEM	Source System	Assign to 1

> **i** Note
>
> *Private dimension and other dimensions are public.

This report should be extracted from Ariba Spend Management. Create the report with the following definition.

Report Name: Invoice Report
Main Fact: Invoice (Procurement & Invoicing)
Data • Invoice Spend
Rows • Invoice Date • Invoice ID • Invoice Type • Invoice Status • Requester • ERP Supplier • PO ID • Contract • Cost Center • Purchase Organization ID
Filters • Invoice Date (Relative) Time Period 2 years Most recent 2

2.30.4.3 General- Sourcing (SAP_PROC_GEN_SOURCING)

SAP__PROC_GEN_IM_SOURCING		Connection
• SAP Procurement: General- Sourcing • Planning Enabled: Yes		• Upload from File (Current option for Ariba connection) • Sourcing Report
Sourcing Account (SAP_PROC_SOURCINGACCOUNT *)		
ID	**Description**	**Mapping/Formula**

SAP__PROC_GEN_IM_SOURCING		Connection
baseline_spend	Baseline Spend	Baseline Spend
participated_suppliers	Participated Suppliers	Participated Suppliers
declined_suppliers	Declined Suppliers	Declined Suppliers
invited_suppliers	Invited Suppliers	Invited Suppliers
bids_submitted	Bids Submitted	Bids Submitted
bids_removed	Bids Removed	Bids Removed
target_savings	Target Savings %	Target Savings % Add Exception Aggregation AVERAGE(SAP_PROC_EVENT_ID)
event_count	Event Count	Exception Aggregation COUNT(SAP_PROC_EVENT_ID) [baseline_spend]
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Event Publish Date
SAP_PROC_EVENT_ID	Event	Event Title
SAP_PROC_EVENT_PROJECT	Project Name	Project Name
SAP_PROC_EVENT_STATUS	Event Status	Event Status
SAP_HR_GEN_USER	User (Owner)	Owner
SAP_PROC_GEN_COMMODITY	Commodity	Commodity
SAP_PROC_EVENT_TYPE	Event Type	Event Type
SAP_PROC_EVENT_FORMAT	Event Format	Event Format
SAP_PROC_SPEND_PURCHASEGROUP	Purchasing Group	Purchasing Group
SAP_PROC_EVENT_TEMPLATE	Template Name	Template Name

> **i Note**
>
> * Private dimension and other dimensions are public.

Report Name: Sourcing Report
Main Fact: Event Level Summary

Report Name: Sourcing Report
Data • baseline_spend • participated_suppliers • declined_suppliers • invited_suppliers • bids_submitted • bids_removed • target_savings
Rows • Event Publish Date • Event Title • Project Name • Event Status • Owner • Commodity • Event Type • Event Format • Purchasing Group • Template Name
Filters • Event Publish Date (Relative) Time Period 2 years Most recent 2

2.30.4.4 Sourcing- Supplier (SAP_PROC_SRC_SUPPLIER)

SAP_PROC_SRC_SUPPLIER		Connection
• SAP Procurement: Sourcing- Supplier • Planning Enabled: Yes		• Upload from File (Current option for Ariba connection) • Sourcing Supplier Report
Sourcing Supplier Account (SAP_PROC_SRCSUPPLIERACCOUNT*)		
ID	**Description**	**Mapping/Formula**
baseline_spend	Baseline Spend	baseline spend
awarded_spend	Awarded Spend	awarded spend
Supplier_count	Active Supplier	Exception Aggregation COUNT(t.S:SAP_ALL_SUPPLIER) [awarded_spend]
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Event Publish Date

SAP_PROC_SRC_SUPPLIER		Connection
SAP_PROC_EVENT_ID	Event	Event Title
SAP_ALL_SUPPLIER	Supplier	ERP Supplier

> **i** Note
>
> * Private dimension and other dimensions are public.

Report Name: Sourcing Supplier Report
Main Fact: Supplier Participation
Data • baseline_spend • awarded spend
Rows • Event Title • ERP Supplier
Filters • Event Publish Date (Relative) Time Period 2 years Most recent 2

2.30.4.5 General- Contract (SAP_PROC_GEN_CONTRACT)

SAP_PROC_GEN_CONTRACT	Connection
• SAP Procurement: General- Contract • Planning Enabled: Yes	• Upload from File (Current option for Ariba connection) • Contract Report

Contract Account (SAP_PROC_CONTRACTACCOUNT*)		
ID	**Description**	**Mapping/Formula**
maximum_commitment	Maximum Commitment	Maximum Commitment
minimum_commitment	Minimum commitment	Minimum Commitment
amount_invoiced	Amount Invoiced	Amount Invoiced
remaining_ratio	Remaining %	([maximum_commitment]-[amount_invoiced]) / [maximum_commitment]
available_amount	Available Amount	[maximum_commitment] - [amount_invoiced]
contract_count	Contract Count	Exception Aggregation COUNT(SAP_PROC_CONTRACT_ID) [maximum_commitment]

SAP_PROC_GEN_CONTRACT		Connection
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Expiration Date
SAP_PROC_CONTRACT_ID	Contract	Contract
SAP_PROC_CONTRACT_STATUS	Contract Status	Status
SAP_PROC_CONTRACT_FROMDATE	Effective Date - Year	Effective Date
SAP_ALL_SUPPLIER	Supplier	Common Supplier
SAP_ALL_COMPANY_CODE	Company Code	#
SAP_PROC_SPEND_PURCHA-SEGROUP	Purchasing Group	Purchase Unit
SAP_PROC_CONTRACT_TYPE	Contract Type	Type
SAP_HR_GEN_USER	User	Contact
SAP_PROC_CONTRACT_SCOPE	Scope	Scope

> **i** Note
>
> * Private dimension and other dimensions are public.

This report should be extracted from Ariba Spend Management. Create the report with the following definition.

Report Name: Contract Report
Main Fact: Contract(Release)
Data • Maximum Commitment • Minimum Commitment • Amount Invoiced
Rows • Expiration Date • Contract • Status • Effective Date (only year) • Common Supplier • Purchase Unit • Type • Contact • Scope
Filters • Expiration Date (Relative) Time Period 2 years Most recent 2 Future 1

2.30.4.6 Network- Invoice (SAP__PROC_NW_IM_INVOICE)

SAP__PROC_NW_IM_INVOICE	Connection
• SAP Procurement: Network- Invoice Planning Enabled: Yes	• Upload from File (Current option for Ariba connection) • Network Invoice Report

Invoice Account (SAP_PROC_INVOICEACCOUNT*)

ID	Description	Mapping/Formula
Amount	Amount	Invoice Spend
disputed_amount	Disputed Amount	Not mapped (this field is provided for future use)
invoice_count	Invoice Count	Exception Aggregation COUNT(SAP_PROC_INVOICE_NUMBER) [amount]

Dimensions

Name	Description	Mapping
Time*	Time	Created Date
SAP_ALL_SUPPLIER	Supplier	Supplier
SAP_PROC_INVOICE_NUMBER	Invoice Number	Invoice Number
SAP_PROC_NETWORK_REFERENCE	Reference	Reference
SAP_PROC_NETWORK_ROUTINGSTATUS	Routing Status	Routing Status
SAP_PROC_NETWORK_INVOICESTATUS	Invoice Status	Invoice Status
SAP_PROC_NETWORK_RECEIVING	Receiving Method	Receiving Method
SAP_PROC_NETWORK_ORGIN	Origin	Origin
SAP_PROC_NETWORK_SOURCEDOC	Source Document	Source Document
SAP_PROC_NETWORK_SUBMISSION	Submission Method	Submission Method

> **i Note**
>
> * Private dimension and other dimensions are public.

Report Name: Network Invoice Report

Report Type: Invoice

Report Name: Network Invoice Report
Fields used for model • Supplier • Invoice Number • Reference • Routing Status • Invoice Status • Receiving Method • Origin • Source Document • Submission Method • Created Date
• Use time filter over 2 years. For all other filter criteria use defaults

2.31 Procurement for SAP S/4HANA Cloud (SAP BEST PRACTICES)

2.31.1 Procurement for SAP S/4HANA Cloud (SAP BEST PRACTICES)

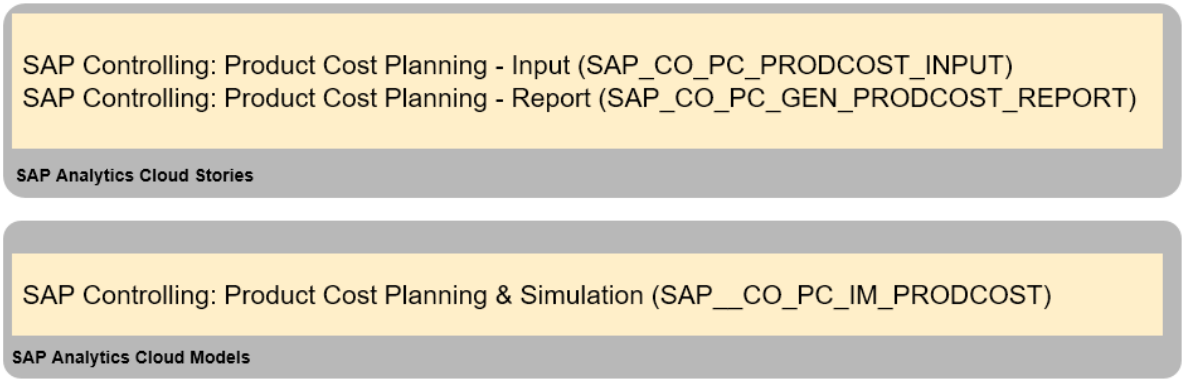
SAP Procurement for S/4HANA Cloud content (29D) is using live connections. Before importing the content, please read the documentation carefully and set up the required connections.

Find all details and documentation about this scope item in SAP Best Practices Explorer: SAP S/4HANA Cloud Procurement content.

2.32 Product Cost Planning (CO_PC)

2.32.1 Architecture and Abstract

Architecture



2.32.2 Stories

Title: SAP_CO_PC_PRODCOST_INPUT	
Description: SAP Controlling: Product Cost Planning - Input	
Story used as input sheet for planners to enter plan data	
Page: Parameter Setup	
Charts	
Title	Models Used
Correlation by Segment/Cost Component/Cost Driver	SAP__CO_PC_IM_PRODCOST
Page: Sales Volume	
Charts	
Title	Models Used
Sales Quantity and Sales Price by Material and Plant	SAP__CO_PC_IM_PRODCOST
Page: Itemization	
Charts	
Title	Models Used
Quantity of Raw Material and Plant for Finished Good and Plant	SAP__CO_PC_IM_PRODCOST
Page: Cost Driver	
Charts	
Title	Models Used
Cost Driver Changes	SAP__CO_PC_IM_PRODCOST
Page: Raw Material Cost	
Charts	
Title	Models Used
Purchase Price split by Raw Material and Plant	SAP__CO_PC_IM_PRODCOST
Page: Product Cost	
Charts	
Title	Models Used
Product Cost	SAP__CO_PC_IM_PRODCOST

Title: SAP_CO_PC_GEN_PRODCOST_REPORT
Description: SAP Controlling: Product Cost Planning - Report
Story for plant managers, category managers or product managers to monitor product relevant KPI's
Page: Product Cost Plan - Summary
Charts

Title: SAP_CO_PC_GEN_PRODCOST_REPORT	
Title	**Models Used**
Product Cost	SAP__CO_PC_IM_PRODCOST
Sales Revenue	SAP__CO_PC_IM_PRODCOST
Contribution Margin	SAP__CO_PC_IM_PRODCOST
Production Costs as % of Revenue by Plant	SAP__CO_PC_IM_PRODCOST
Product Cost by Cost Component (plan)	SAP__CO_PC_IM_PRODCOST
Planned Revenue/Cost of Goods Sold by Product Category	SAP__CO_PC_IM_PRODCOST
Spend per Segment (plan)	SAP__CO_PC_IM_PRODCOST
Product Cost by Cost Component (actual/plan)	SAP__CO_PC_IM_PRODCOST

2.32.3 Models

2.32.3.1 Structure of the Model

Model Name: SAP__CO_PC_IM_PRODCOST			
Model Description: SAP Controlling: Product Cost Planning			
Planning Enabled: Yes			
SAP_CO_PC_ACCOUNT			
ID	**Description**	**Formula**	
QUANTITY	Quantity		
SALES_QUANTITY	Sales Quantity		
LOTSIZE	Lotsize		
PURCHASE_PRICE	Purchase Price		
SALES_PRICE	Sales Price		
CORRELATION	Correlation		
PRICE_DIFFERENCE	Driver Price Change %		
Dimensions			
Dimension Name	Dimension Description	Dimension type	Public/Private Dimension
Time	Time	Time (Quarter)	Private
SAP_CO_PC_ACCOUNT	Account	Account	Private
Version	Version	Version	Private
SAP_CO_PC_SEGMENT	Material Driver Segment	Generic	Private

SAP_CO_PC_COSTCOMP	Cost Component	Generic	Private
SAP_CO_PC_MATERIAL	Material (Finished)	Generic	Private
SAP_CO_PC_PLANT	Plant (Finished)	Generic	Private
SAP_CO_PC_PMATNR	Material (Source)	Generic	Private
SAP_CO_PC_PWERKS	Plant (Source)	Organization	Private
SAP_CO_PC_DRIVER	Cost Driver	Generic	Private
Additional Notes about the model			

2.32.3.2 Data Source Connection and Integration

Model Name: SAP__CO_PC_IM_PRODCOST			
Model Description: SAP Controlling: Product Cost Planning			
Planning Enabled: Yes			
SAP_CO_PC_ACCOUNT			
ID	**Description**	**Formula**	
QUANTITY	Quantity		
SALES_QUANTITY	Sales Quantity		
LOTSIZE	Lotsize		
PURCHASE_PRICE	Purchase Price		
SALES_PRICE	Sales Price		
CORRELATION	Correlation		
PRICE_DIFFERENCE	Driver Price Change %		
Dimensions			
Dimension Name	**Dimension Description**	**Dimension type**	**Public/Private Dimension**
Time	Time	Time (Quarter)	Private
SAP_CO_PC_ACCOUNT	Account	Account	Private
Version	Version	Version	Private
SAP_CO_PC_SEGMENT	Material Driver Segment	Generic	Private
SAP_CO_PC_COSTCOMP	Cost Component	Generic	Private
SAP_CO_PC_MATERIAL	Material (Finished)	Generic	Private
SAP_CO_PC_PLANT	Plant (Finished)	Generic	Private
SAP_CO_PC_PMATNR	Material (Source)	Generic	Private
SAP_CO_PC_PWERKS	Plant (Source)	Organization	Private

Model Name: SAP__CO_PC_IM_PRODCOST			
SAP_CO_PC_DRIVER	Cost Driver	Generic	Private
Additional Notes about the model			

2.33 Project Budgeting & Planning for S/4HANA Cloud (SAP BEST PRACTICES)

2.33.1 Project Budgeting & Planning for S/4HANA Cloud (SAP BEST PRACTICES)

Project Budgeting & Planning for S/4HANA Cloud content (2YG) is using live connections. Before importing the content, please read the documentation carefully and set up the required connections.

Find all details and documentation about this scope item in SAP Best Practices Explorer: Project Budgeting & Planning for S/4HANA Cloud content.

2.33.2 Project Budgeting & Planning for S/4HANA Cloud (SAP BEST PRACTICES)

Project Budgeting & Planning for S/4HANA Cloud content (2YG) is using live connections. Before importing the content, please read the documentation carefully and set up the required connections.

Find all details and documentation about this scope item in SAP Best Practices Explorer: Project Budgeting & Planning for S/4HANA Cloud content.

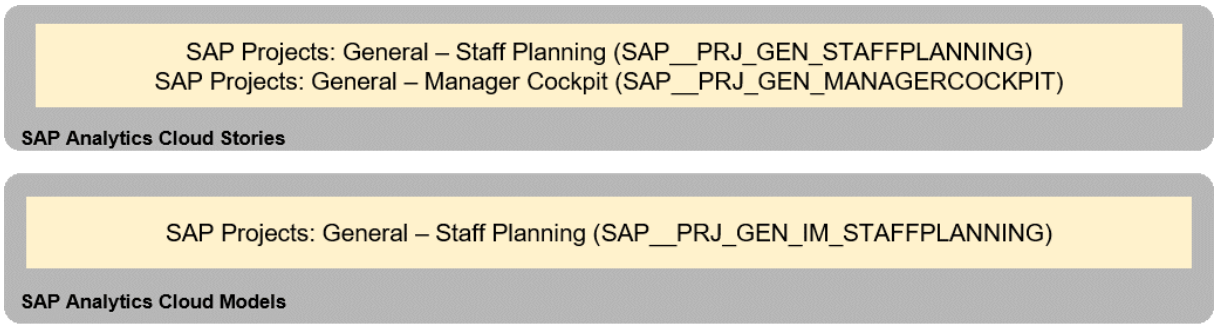
2.34 Project Staff Planning

2.34.1 Architecture and Abstract

The project staff planning content package allows project managers to plan, manage, and collaborate on critical projects.

Manage resource allocation for critical tasks and monitor planned expenses. Improve communication between project team members and other stakeholders. Increase the quality of your forecasts for the quantities, costs, and revenues involved throughout the project lifecycle to deliver projects on budget. Plan for project related staff, expenses and third-party resources. Improve your planning and forecasting accuracy by leveraging SAP Analytics Cloud predictive capabilities. Develop detailed cost and revenue plans for your projects and monitor those by the SAP Analytics Cloud's unique reporting capabilities.

Architecture



Usage in Industry - specific Stories

Industry	Story
Cross Industry	SAP Projects: Project Staff Planning
Cross Industry	SAP Projects: General - Manager Cockpit

2.34.2 Stories

- SAP Projects: General - Staff Planning (SAP__PRJ_GEN_STAFFPLANNING)
- SAP Projects: General - Manager Cockpit (SAP__PRJ_GEN_MANAGERCOCKPIT)

2.34.3 Models

The next chapter provides the detailed information of the Model used for Project Staff Planning to create Stories.

2.34.3.1 SAP__PRJ_GEN_STAFFPLANNING

Model Name: SAP__PRJ_GEN_IM_STAFFPLANNING		Connection
• Model Description: SAP Projects: General- Staff Planning • Planning Enabled: Yes		Connection Type: Import Data from File
SAP_PROJECT_SP_ACCNT		
ID	**Description**	**Formula/Mapping**
WORK_DAYS	Working Days	
HOUR_RATE	Hourly Rate	
LABOUR	Labour Cost	

Model Name: SAP__PRJ_GEN_IM_STAFFPLANNING		Connection
TOTAL_COST	Total Cost	
INTERNAL_COST	Internal Cost	
EXTERNAL_COST	External Cost	
HOUR_RATE_LU	Hourly Rate (Lookup)	
EXTERNAL_CHARGE	External Charges	
TOTAL_CHARGE	Total Charges	
INTERNAL_CHARGE	Internal Charges	
HOUR_RATE_AVG	Average Hourly Rate	
TOTAL_RESULT	Booking Total	
PROJECT_KPI	Project KPI's	
NON_PROJECT_OVERHEAD	Non-project related overhead	
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Time
SAP_PROJECT_SP_ACCNT*	Account	Map measures above
Version*	Version	
SAP_ALL_PROJECT_WBSELEMENT	WBS Element	WBS Element
SAP_HR_GEN_USER	User	User
SAP_ALL_CUSTOMER	Customer	Customer
SAP_ALL_COSTCENTER	Cost Center	Cost Center
Additional Notes about the model		

2.35 Receivable Management for SAP S/4 HANA Cloud (SAP BEST PRACTICES)

2.35.1 Receivable Management for SAP S/4 HANA Cloud (SAP BEST PRACTICES)

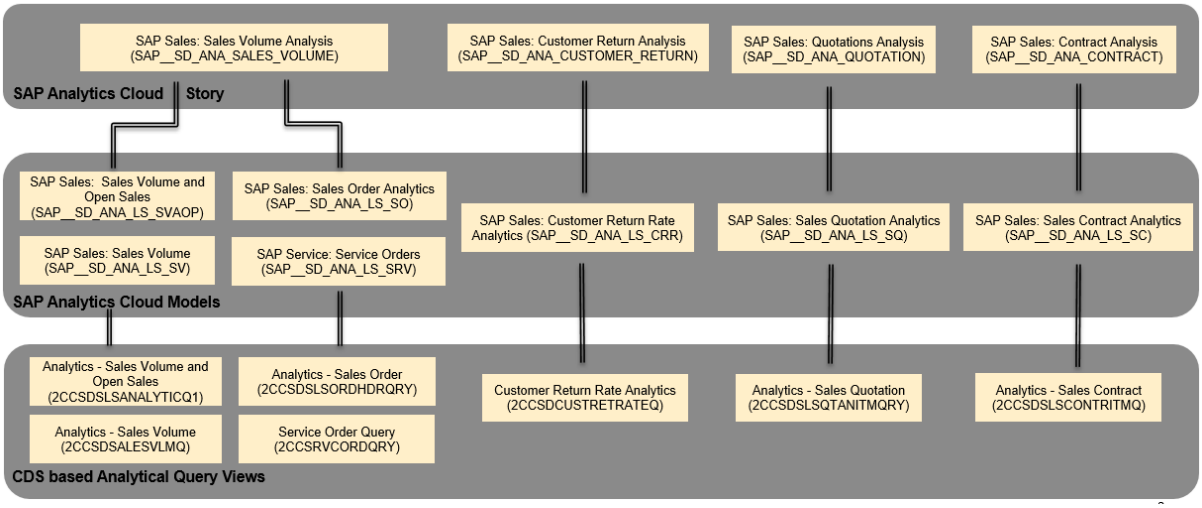
Receivable Management for SAP S/4 HANA Cloud (4A6) is an analytical application that displays the receivable management related results from SAP S/4 HANA Cloud in real-time. Before importing the content, please read the documentation carefully.

Find all details and documentation about this scope item in SAP Best Practices Explorer: Receivable Management Content Configuration with SAP Analytics Cloud.

2.36 Sales Analytics for SAP S/4HANA Cloud (SAP BEST PRACTICES)

2.36.1 Architecture and Abstract

Architecture



2.36.2 Stories

The next chapter provides the purpose and KPI's of the Story used in Sales Analytics for SAP S/4HANA Cloud

2.36.2.1 SAP Sales & Distribution: General - Backorders (SAP__SD_GEN_BACKORDERS and SAP__SD_GEN_BACKORDERS_LIVE)

Main purpose of story SAP__CP_SD_BACKORDERS and SAP__SD_GEN_BACKORDERS_LIVE is to provide insights into current status of sales by analysing the product availability.

Backorders are orders that cannot be confirmed due to a lack of product availability. For example, if order items are not confirmed, or partially confirmed, for the requested delivery date.

KPIs:

- **Confirmed:** Sales order items that are confirmed as requested for the full quantity on the requested date, without any restrictions or delays.
- **Delayed:** Sales order items that are fully confirmed as requested, but at least one part is later than the requested date.

- **Partially Confirmed:** Sales order items that are partially confirmed as requested, regardless of whether they are delayed or not.
- **Not Confirmed:** Sales order items for which no availability is confirmed as requested at all.

2.36.3 Models

The next chapters provide the detailed information about the Models used to create insightful Stories.

2.36.3.1 SAP Sales & Distribution: Backorders (SAP__SD_GEN_IM_BACKORDERS)

Model Name: SAP__SD_GEN_IM_BACKORDERS	Connection
Model Description: SAP Sales & Distribution: Backorders Planning Enabled: No	• Connection Type: SAP BW Live Data Connection • Source of Import: CDS View Analytics - Confirmation of Sales Orders(2CCSDSLSORDCONFAQ)

Connection Variables:

- *Exchange Rate Type:* Please choose a valid exchange rate type (for example, "M").
- *Currency:* The displayed currency has to map the currency in the target model. Model SAP Sales & Distribution, Sales Volume uses currency the USD (US Dollar).

Backorders Account		
ID	**Description**	**Formula/Mapping**
CONF	Confirmed	Confirmed (No. Of) ELTUIDCMP13
DELAY	Delayed	Delayed (No. Of) ELTUIDCMP14
PART_CONF	Partially Confirmed	Partially Confirmed (No. Of) ELTUIDCMP15
NOT_CONF	Not Confirmed	Unconfirmed (No. Of) ELTUIDCMP16
TOTAL	Total	[CONF]+[DELAY]+[PART_CONF] + [NOT_CONF]
CONF_RATIO	Confirmed Ratio	[CONF]/[TOTAL]
DELAY_RATIO	Delayed Ratio	[DELAY]/[TOTAL]
PART_CONF_RATIO	Partially Confirmed Ratio	[PART_CONF]/[TOTAL]
NOT_CONF_RATIO	Not Confirmed Ratio	[NOT_CONF]/[TOTAL]
Backlog	Backlog	([DELAY] + [NOT_CONF]) *[netamount]

Model Name: SAP__SD_GEN_IM_BACKORDERS		Connection
Workdone	Work done	([PART_CONF] +[CONF]) *[neta-mount]
Backlogratio	Sales Backlog Ratio	([DELAY] +[NOT_CONF]) / [TOTAL]
Netamount	Net Amount	
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Yr/Mo. Of Creation
SAP_ALL_COUNTRY	Country	Navigation attribute Country of dimension Sold-to-Party
SAP_ALL_CUSTOMER	Customer	Sold-to-Party
SAP_ALL_CUSTOMERGROUP	Customer Group	Customer Group
SAP_ALL_MATERIAL	Material	Material
SAP_ALL_MATERIALGROUP	Material Group	Material Group
SAP_ALL_PLANT	Plant	Plant
SAP_ALL_BUSINESSAREA	Business Area	Business Area
SAP_ALL_CUSTOMER_CLASSIFICAT	Customer Classification	Customer Classification
SAP_ALL_SALESORGANISATION	Sales Organisation	Sales Organisation

> **i** Note
>
> *Private dimension and other dimensions are public.

2.36.3.2 SAP Sales & Distribution: Backorders (SAP__SD_GEN_LS_BACKORDERS)

Model Name: SAP__SD_GEN_LS_BACKORDERS	Connection
- Model Description: SAP Sales & Distribution: Backorders	• Connection Type: SAP BW Live Data Connection • Source of Import: CDS View Analytics - Confirmation of Sales Orders(2CCSDSLSORDCONFAQ)

Connection Variables:

- - Exchange Rate Type: Please choose a valid exchange rate type (for example, “M”).
- - Currency: The displayed currency has to map the currency in the target model. Model SAP Sales & Distribution, Sales Volume uses currency the USD (US Dollar).

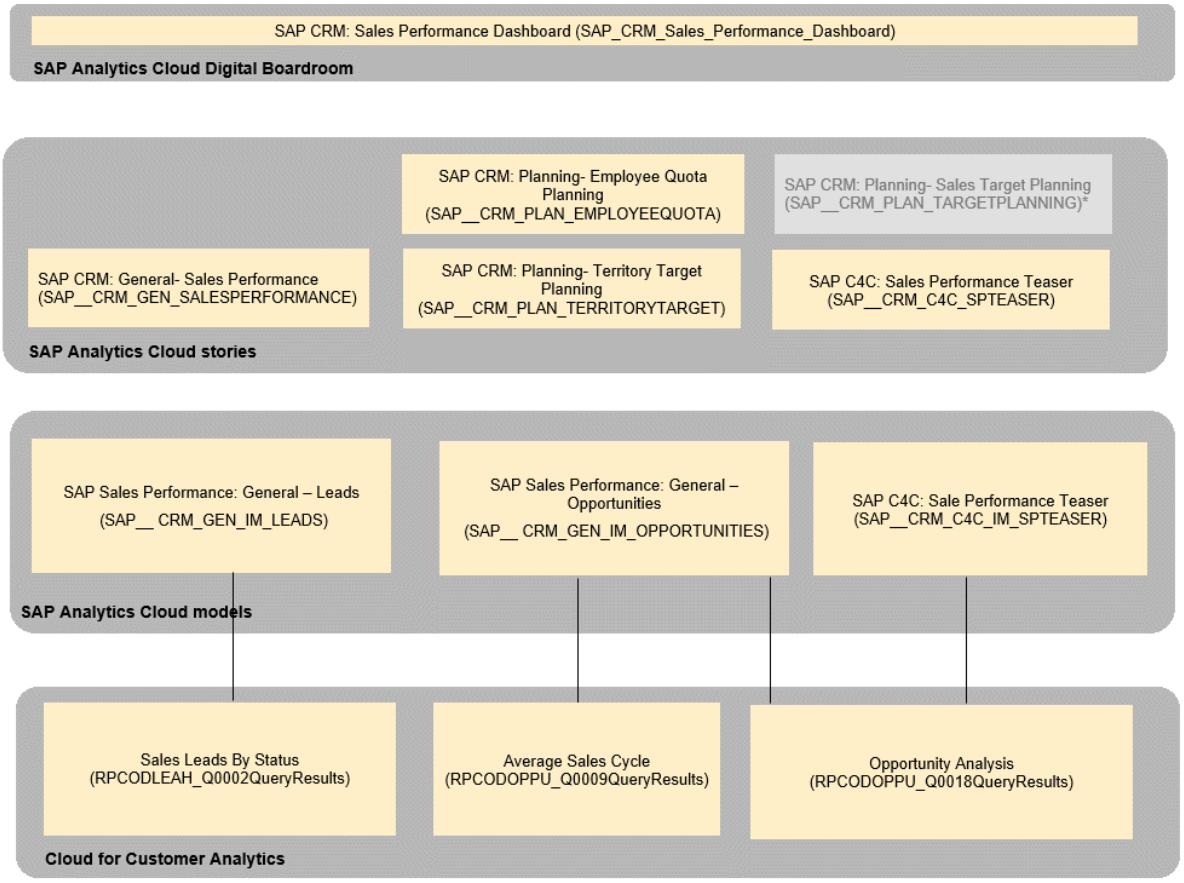
2.37 Sales Performance (CRM)

2.37.1 Architecture and Abstract

SAP Sales Performance content is developed based on SAP Hybris Cloud for Customer. However, this content is built in a generic way and can be connected to another CRM source for sales performance. The components addressed are Sales Performance and Sales Target Planning.

Architecture

The building blocks are as shown:



*SAP__CRM_PLAN_TARGETPLANNING is deprecated.

We recommend using SAP__CRM_PLAN_TERRITORYTARGET & SAP_CRM_PLAN_EMPLOYEEQUOTA instead.

2.37.2 Digital Boardrooms

There is a single Digital Boardroom for SAP CRM Sales Performance:
SAP_CRM_Sales_Performance_Dashboard

2.37.3 Stories

2.37.3.1 General- Sales Performance (SAP__CRM_GEN_SALESPERFORMANCE)

Name: SAP__CRM_GEN_SALESPERFORMANCE
Description: SAP CRM: General - Sales Performance
Page - Sales Performance Overview
This page provides an overview of the overall Sales Performance of an organization. Please note that unless mentioned, all the charts in this story use the model. SAP__CRM_GEN_IM_OPPORTUNITIES
Header
In this lane the current date, current quarter, and days left for quarter to end are indicated.
Growth
This lane shows the growth related KPIs.
Revenue Won
The revenue won and its variance with target and weighted revenue are shown for the current quarter.
Revenue Trend
This chart shows the trend of revenue won, weighted revenue pipeline, and target and variance of revenue won w.r.t. previous year.
Pipeline
This lane shows information on leads and opportunities.
Leads Generated
Model: SAP__CRM_GEN_IM_LEADS A numeric point chart shows the YTD Leads and YoY comparison. A trendline of the leads generated YTD on a monthly granularity is displayed.
Opportunities by Close Date
A numeric point chart shows the Current year's Opportunity Count and YoY comparison. A trendline of the opportunities on a monthly granularity is displayed.
Average Sales Cycle
A numeric point chart shows the YTD Average Cycle Time and YoY comparison. A trendline of average cycle time on a monthly granularity is displayed.
Pipeline Funnel
The funnel shows the weighted revenue pipeline in different stages for the current and next year.
Sales Team
This lane shows information on the performance of the Sales team.
Revenue Won YTD
The revenue won YTD and target is displayed per employee. It is possible to filter on top n employees.

Name: SAP__CRM_GEN_SALESPERFORMANCE
Revenue Pipeline YTG
The weighted revenue pipeline, unweighted revenue, and target are shown by employee for time from current date to end of current year.
Page - Growth: Sales Revenue
This page provides details on Revenue Won YTD.
Overview Pane
Filters are provided for Territory and Sales Unit. The revenue won and its variance with target and weighted revenue are shown for the current quarter, YTD, and Year to previous quarter.
Detail Pane
This area shows detailed analysis of the current year's revenue won.
Revenue Won
This chart provides a monthly view of the revenue won and its deviation with previous year. In the variance line, the deviation from target is shown.
Breakdown of Revenue Won
Based on selected dimension as breakdown dimension, the treemap shows by size the revenue won for the current year and the color denotes the growth in revenue won since previous year. The trendline shows the revenue won over quarters.
Page - Product Portfolio
Filters are provided for Territory and Sales Unit. This page provides details on Product based Revenue, this might not necessarily add up to Opportunity Revenue Won as this is calculated based on item value.
Overview Pane
The Product Revenue won and distribution across new and existing products is shown in the numeric point chart. With treemaps, one sees the distribution of revenue across all products and new products.
Detail Pane
This area shows detailed analysis of the Product Portfolio.
Revenue Growth Per Product Group
This chart shows the revenue won per product group for the current year and its variance with previous year. The revenue pipeline for the current year is also shown.
Revenue Distribution of New vs Existing Products by Product Group
The distribution of revenue YTD is shown between existing and new products for each Product Group. The calculation of finding new products is based on the logic of looking at products which generated revenue for the current year but not in the previous years. The difference from calculation is used here with the option of replacing null values by zero for calculating between years.
Product Performance by Product Group
This chart shows the performance of each product's revenue along x axis and deviation from previous year's revenue in the y axis. The products are colored by product groups and using the legends, one can filter on specific product groups.
Revenue by Product Group and Selection Dimension
This heat map shows a matrix of revenue for each product group with a breakdown per country, territory, sales unit, industry, and competitor or country

Name: SAP__CRM_GEN_SALESPERFORMANCE
Page – Customers
This page shows Customer analysis of Revenue Won and in pipeline.
Overview Pane
The page can be filtered on Territory and Sales unit. The customer statistics shows customers for current and previous year.
Detail Pane
This area shows details on Customer analysis.
Top Customers by Revenue Won
Customers providing highest revenue won for the current year are shown along with growth w.r.t previous year. For these customers, the revenue pipeline is also shown.
Revenue Pipeline by Customer and Additional Dimension
Based on selected dimension as breakdown dimension, the treemap shows distribution of revenue pipeline by customer.
Top Open Deals by Customer
This chart shows value of open opportunities for customers at different sales phases. Tooltips give further information like the employee responsible and close date for the opportunity.
Competitors for Lost Deals
This treemap shows the revenue lost associated with each competitor and the color shows the number of deals lost.
Page – Pipeline: Leads & Opportunities
This page provides information about leads and opportunities. Filters are available for territories and sales units.
Overview Pane
Filters are available for territories and sales units. Numeric point charts are available for Leads generated and lead conversion ratio for current year with YoY comparison (Model: SAP__CRM_GEN_IM_LEADS), Opportunities and Opportunity win rate by Close date for current year with YoY comparison.
Leads Pane
This lane provides all lead related details.
Lead Generation Trend
Model: SAP__CRM_GEN_IM_LEADS The trend of leads generated for the current year with YoY deviation is shown.
Lead Breakdown by Selected Dimension
Model: SAP__CRM_GEN_IM_LEADS Based on the selected dimension qualification, territory or source, the breakdown of leads generated for current year with deviation YoY is shown.
Lead Contribution to Opportunities
Based on the dimension selected, breakdown is provided for the current year to show the percentage of opportunities created with a lead source.
Opportunities Pane

Name: SAP__CRM_GEN_SALESPERFORMANCE
This lane provides all opportunity related information.
Opportunity Weighted Revenue Trend by Close Date
The trend of opportunity weighted revenue for current year with deviation YoY.
Weighted Value of Open Opportunities
The list of open opportunities for the current quarter sorted for the current quarter.
Campaign Influence on Revenue Won
This chart shows the breakup of revenue earned by opportunities with campaigns associated verses those without. YoY variance is shown, and breakdown is done by selected dimension.
Page – Pipeline
This page provides sales pipeline related information.
Overview Pane
Filters are available for territories, sales units, customer & employee responsible. Numeric point charts are available for opportunity win rate, deals won, deals lost, average deal size, and average sales cycle with YoY comparisons.
Detail Pane
This lane provides all pipeline details.
Pipeline Funnel
For each sales phase, shows the number of opportunities and weighted revenue for current and next year for opportunities that are not closed.
Pipeline Health Scorecard
The score card shows for each month of the current year the revenue won, revenue in pipeline, deals won, and deals in pipeline. It is possible for each month to see information in the detail level of dates.
Average Cycle Time for Closed Opportunities
This chart shows the trend of average cycle time per month with YoY comparison. This chart answers questions like have I been more efficient with closing sales this March vs last March.
Pipeline Opportunity Count Distribution by Sales Phase
For the next 6 months, the percentage of opportunities by close date per sales phase is shown. This chart answers questions like for the next month, are too many of my opportunities in the early sales phases.
Page – Sales Team
This page provides information on performance of the sales team.
Overview Pane
Filters are available for territories, sales units. Numeric point charts are available for revenue won for the current quarter and its deviation from target and Weighted revenue.
Detail Pane
This lane provides details on performance of the sales team.
Employee Performance
For each employee, all performance KPIs are shown for the current quarter in a tabular form.
Average Deal Size by Employee Responsible

Name: SAP__CRM_GEN_SALESPERFORMANCE
In this treemap, the size of each box shows the average deal size for an employee and the color indicates the weighted revenue pipeline in total for the deals the employee is responsible for. This chart gives an indication of with which employees the big deals lie and the workload on this employee as the tooltip also informs us of how many deals is this employee involved in.
Weighted Revenue vs Target Per Employee
This chart shows how far is each employee from targets for the current quarter.
Weighted Revenue Distribution by Employee and Selected Dimension
Dimension selection is possible for industry, competitor, sales phase and customer. Based on one of these selected dimensions, the breakdown of weighted revenue is shown per employee. This chart answers questions such as – which of my customers will give me the most revenue or which competitors pose the greatest threat.
Page – Win Loss Analysis
This page provides analysis of wins and losses for opportunities.
Overview Pane
Filters are available for territories, sales units & employee responsible. Numeric point charts are available for opportunity win rate, deals won, and deals lost.
Win Pane
This lane provides all win related details.
Opportunity Win Trend
Shows the trend of Opportunities won and revenue won per month for the current year.
Wins
The performance of wins per employee for the current quarter filtered on top 5 revenue won is shown. The filter of top 5 can be changed in presentation mode.
Deals Won by Select Dimension
Based on the dimension selected, breakdown is provided for the current quarter to show the number of opportunities won colored by revenue won. This chart answers questions such as what were the reasons for my wins, or which customers did I have most wins with.
Loss Pane
This lane provides all loss related details.
Opportunity Loss Trend
Shows the trend of Opportunities lost and revenue lost per month for the current year.
Losses
The performance of losses per employee for the current quarter filtered on top 5 revenue lost is shown. The filter of top 5 can be changed in presentation mode.
Deals Lost by Select Dimension
Based on the dimension selected, breakdown is provided for the current quarter to show the number of opportunities lost colored by revenue lost. This chart answers questions such as what were the reasons for my losses, or which competitors I lost to.
Page – Revenue Pipeline Simulation

Name: SAP__CRM_GEN_SALESPERFORMANCE
Revenue Pipeline is shown based on Weighted Revenue. Weighted revenue is provided as a calculation of unweighted revenue * chance of success. Chance of success is dependent on sales phase. In revenue pipeline simulation, additional influencers are added to the chance of success. A business scenario that can be addressed here is: There is a sudden slowdown in the construction industry across Brazil and this has a negative effect by 10% on the revenue pipeline for this tuple (Construction in Brazil), how would this influence the overall revenue pipeline for my company?
Simulation Selections Pane
The time range for the simulation is displayed. Using the slider, the influence on chance of success can be set between -50 to +50 %. The selection can be done on industry, country, and customer. Any selection influences all other filters. The calculation is weighted revenue * influence/100.
Simulation Results Pane
The results of simulated weighted pipeline based on influencers selected in the selections pane are shown.
Weighted & Simulated Weighted Revenue Pipeline based on the following selections:
Here we see the summary of influencers been selected.
KPIs
Total Actual Weighted Pipeline
This chart shows the total weighted pipeline without simulation effects.
Total Simulated Weighted Pipeline
This chart shows the total weighted pipeline with simulation effects. Adjacent to this the variance of actuals vs Simulation is shown.
Actual Weighted Pipeline for selection
This chart shows the weighted pipeline without simulation effects for the opportunities that belong to simulation criteria.
Simulated Weighted Pipeline for selection
This chart shows the weighted pipeline with simulation effects for the opportunities that belong to simulation criteria. Adjacent to this, the variance of actuals vs Simulation is shown.
Pipeline Breakup for Selected Industry, Country and Customer
For the simulation selection, a breakup per month of actual and simulated revenue pipeline are shown.

2.37.3.2 Planning- Sales Target Planning (SAP__CRM_PLAN_TARGETPLANNING) (deprecated)

Name: SAP__CRM_PLAN_TARGETPLANNING
Description: SAP CRM: Planning- Sales Target Planning
Page – Overview

Name: SAP__CRM_PLAN_TARGETPLANNING

Please note that all charts in this story use the model SAP__CRM_GEN_IM_OPPORTUNITIES.

Sales Target Planning is first done on territory level and then finetuned on the level of sales persons. The Overview Tab gives an overview of the current year's sales targets and performance of my Employees.

Revenue by Territory

In the overview page, a sales manager sees data based on his authorizations in SAP Analytics Cloud. Depending on the territories he/she is authorized to view, he/she can see the current year, the revenue won, revenue pipeline, and target revenue by territory.

Revenue Trend for my Sales Unit

This chart shows the trend of revenue won, weighted pipeline revenue, and target revenue for the sales units that belong to me, authorization can be maintained for sales units based on which only sales units belonging to me are shown. Else, a filter can also be used in the chart to filter to sales units the Sales Manager is interested in.

Revenue Won vs Target for My Employees

The revenue won YTD and its variance with target for each employee belonging to the selected sales units is shown.

Weighted Revenue Pipeline vs Target for My Employees

The weighted revenue Year To Go and its variance with target for each employee belonging to the selected sales units is shown.

Page – Target Setting - Territories

In this page, the monthly target setting is possible on the level of individual territory or territory hierarchy. Target planning for territories can be done only if one has authorization to the specific territories. This can be filtered on Sales units.

Revenue Overview

This chart provided an aggregated overview of revenue won, in pipeline, and target for the year based on territories authorized.

Revenue Trend

This chart shows the trend of revenue won, weighted pipeline revenue, and target revenue for the territories I am authorized to.

Target Settings for a specific year

In this grid, target values can be entered as absolute value or as percentage increase or decrease in any cell which is a data point for target revenue for a territory for a month. If the target is on a higher level than a leaf, then the values are distributed to the leaves.

Page – Target Setting – Employees

In this page, the monthly target setting is possible on the level of individual employee. Target planning for territories can be done only if one has authorization to the specific sales units or a filter can be used for this. Employee selection is also available.

If you would like to do planning for new employees, then use unbooked data for the employee.

Revenue Overview

This chart provides an aggregated overview of revenue won, in pipeline, and target for the year based on employees selected.

Revenue Trend

Name: SAP__CRM_PLAN_TARGETPLANNING
This chart shows the trend of revenue won, weighted pipeline revenue, and target revenue for the employees I am responsible for.
Target Settings for a specific year
In this grid, target values can be entered as absolute value or as percentage increase or decrease in any cell which is a data point for target revenue for an employee for a month.

This story is deprecated. We recommend you to use SAP__CRM_PLAN_TERRITORYTARGET and SAP__CRM_PLAN_EMPLOYEEQUOTA .

These stories cover the sales planning scenario in greater depth.

2.37.3.3 Planning- Sales Territory Target Planning (SAP__CRM_PLAN_TERRITORYTARGET)

This story enables you to do Territory Target planning.

In the Overview page, there are charts showing the revenue by territory and revenue trend and on the right-hand side the different steps of Territory Target Planning process are shown. From here, you can navigate to the pages where each of these process steps are available.

It is also possible to navigate from Territory Target Planning to Employee Quota Planning from this Overview page.

The steps are:

- Setup Target Revenue Baseline - You can define the base for your target planning either based on previous year's actuals or entering manually per territory.
- Setup Seasonality - You can distribute the target values based on seasonality using SAP Analytics Cloud's spreading functionality for the time dimension.
- Allocate Revenue to Product Group - You can distribute target across product groups using allocation step.
- Plan Revenue for Territories - You can do a detailed planning on a monthly granularity for territories. Filter on selected territory and do further planning on the level of Product Group. This page is also available for access directly from the story so it can be used for task creation.
- Help page provides help for all quota planning steps.

2.37.3.4 Planning- Employee Quota Planning (SAP__CRM_PLAN_EMPLOYEEQUOTA)

This story enables you to do Employee Quota planning which is derived based on Top- level Territory Target planning.

In the Overview page, there are charts showing the performance of the team YTD and YTG. The revenue trend for the team and distribution of quota across Sales Units assigned to you are also shown. On the right-hand side, the different steps of Employee Quota Planning process are shown. From here, you can navigate to the pages where each of these process steps are available.

It is also possible to navigate from Employee Quota Planning to Territory Target Planning from this Overview page.

The steps are:

- Set Quota Baseline - You can define the quota version based on copy from target version.
- Assign Employee to Sales Unit - Current employees are assigned quota based on previous year's assignment. For new employees, assignment of quota, and sales unit can be done in this step.
- Transfer Quota - Quota for selected employees can be transferred across sales units for selected quarters using allocation.
- Plan Quota for Employees - You can do a detailed planning for your employees on monthly level for sales units and territory. For selected employees, it is possible to do planning on Product Group level. This page is also available for access directly from the story so it can be used for task creation.

The Quota Coverage simulation page shows the actuals for assigned quota and provides the possibility to simulate quota coverage by changing quota and number of employees.

Help page provides help for all quota planning steps.

2.37.3.5 Sales Performance Teaser (SAP__CRM_C4C_SPTEASER)

This story is meant to be a teaser for demonstrating how content can run out of the box by switching connectivity to another system. A subset of the content provided in the story *SAP CRM: General - Sales Performance* is shown in this story in a single page.

2.37.4 Models

There are 2 models used in this content.

2.37.4.1 General - Opportunities (SAP__CRM_GEN_IM_OPPORTUNITIES)

Model Name: SAP__ CRM_GEN_IM_OPPORTUNITIES	Connection
• Model Description: SAP Sales Performance: General - Opportunities • Planning Enabled: Yes	• Connection type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • - Connection Query: Opportunity Analysis (RPCO-DOPPU_Q0018QueryResults). Please note that you might need to add some additional fields which are not selected by default (for example, Campaign) • Connection Query: Average Sales Cycle (RPCODOPPU_Q0009QueryResults). Please note that you might need to add some additional fields which are not selected by default (for example, Campaign)** (this query is only used for mapping saleslength)

Opportunity Account*		
ID	**Description**	**Formula/Mapping**
Expected_Value	Unweighted Revenue	Expected_Value
Chance_of_Success	Chance of Success	Chance_of_Success
Weighted_Value	Weighted Revenue	Weighted_Value
Item_Value	Item Value	Item_Value
Item_Total_Value	Item Total Value	Item_Total_Value
Number_of_Opportunities	Number of Opportunities	Number_of_Opportunities
Saleslength	Saleslength	**Should be mapped to Avg. Sales Cycle Length from RPCO-DOPPU_Q0009QueryResults
Average_salescycle	Average Sales Cycle	[Saleslength]/[Deals_won]
Revenue_won	Revenue Won	RESTRICT([Expected_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTA-TUS]="4")

Model Name: SAP__ CRM_GEN_IM_OPPORTUNITIES		Connection
Average_deal_size	Average Deal Size	[Expected_Value]/[Number_of_Opportunities]
Sales_employees	Sales Employees	[Number_of_Opportunities]
Revenue_item_won	Product Revenue Won	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")
Revenue_item_lost	Product Revenue Won	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")
Revenue_Pipeline	Product Revenue Lost	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="5")
Deals_won	Weighted Revenue Pipeline	RESTRICT([Weighted_Value],[d/SAP_CRM_OPP_LIFECYCLESTATUS]=("1","2"))
Deals_lost	Deals Won	RESTRICT([Number_of_Opportunities] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")
Opportunity_win_ratio	Deals Lost	RESTRICT([Number_of_Opportunities] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="5")
Deals_in_pipleline	Opp Win Rate	[Deals_won]/ [Number_of_Opportunities]
Revenue_lost	Revenue Lost	RESTRICT([Expected_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="5")
Target_revenue	Target Revenue	LOOKUP([Expected_Value] ,[d/Version]="public.Target")
Deals_closed	Deals Closed	RESTRICT([Number_of_Opportunities] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]=("4","5"))
Revenue_item_pipeline	Product Revenue Pipeline	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]=("1","2"))
Quota_revenue	Quota	LOOKUP([Expected_Value] ,[d/Version]="public.Quota")
Product_weightage	Share - CY	
Revenue_item_pipeline	Product Revenue Pipeline	LOOKUP([Revenue_item_won] ,[d/Version]="public.Actual")
Product_factoring	Product Factoring	[Item_Value] * [Product_weightage]
Seasonality_trend	Seasonality Trend	%GRANDTOTAL([Expected_Value])
Dimensions		
ID	Description	Mapping

Model Name: SAP__ CRM_GEN_IM_OPPORTUNITIES		Connection
Time*	Time	Month/ Calendar Year ID: filter on previous, current and next year
SAP_ALL_COUNTRY	Country	Country ID
SAP_CRM_GEN_LEAD	Lead	Sales Lead ID
SAP_ALL_MATERIAL	Material	Product ID
SAP_ALL_MATERIALGROUP	Material Group	Product Group ID
SAP_CRM_OPP_WINLOSSREASON	Win Loss Reason	Reason for Status ID
SAP_CRM_OPP_SALESCYCLE	Sales Cycle	Sales Cycle ID
SAP_ALL_SALESORGANISATION	Sales Organisation	Sales Organization ID
SAP_CRM_OPP_SALESPHASE	Sales Phase	Sales Phase ID
SAP_ALL_SALESUNIT	Sales Unit	Sales Unit ID
SAP_ALL_CITY	City	City ID
SAP_CRM_GEN_OPPORTUNITY	Opportunity	Opportunity ID
SAP_ALL_CUSTOMER	Customer	Account ID
SAP_ALL_TERRITORY	Territory	Territory ID
SAP_CRM_OPP_ABCCLASSIFY	ABC Classification	ABC Classification ID
SAP_CRM_OPP_STARTDATE	Start Date	Start Date ID
SAP_CRM_OPP_CAMPAIGN	Campaign	Campaign ID
SAP_CRM_OPP_COMPETITOR	Competitor	Competitor ID
SAP_ALL_DISTRIBUTIONCHANNEL	Distribution Channel	Distribution Channel ID
SAP_HR_GEN_USER	User	Employee Responsible ID
SAP_ALL_INDUSTRY	Industry	Industry ID
SAP_CRM_OPP_LIFECYCLESTATUS	Lifecycle Status	Lifecycle Status ID
SAP_CRM_GEN_MAINCONTACT	Main Contact	Main Contact ID
Additional Notes about the Model		
To load master data into this model please the generic oData connector where the connector URL syntax is **https://<system>/sap/c4c/odata/v1/c4codata** and use the appropriate query to load the master data.		

> **i** Note
>
> * Private dimension and other dimensions are public.

2.37.4.2 General – Leads (SAP__CRM_GEN_IM_LEADS)

Model Name: SAP__CRM_GEN_IM_LEADS	Connection
• Model Description: SAP Sales Performance: General - Leads • Planning Enabled: Yes	• Connection Type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • Connection Query: Sales Leads By Status (RPCODLEAH_Q0002QueryResults).

Lead Account*		
ID	**Description**	**Formula/Mapping**
lead_count	lead count	Number of leads
hot	hot leads	RESTRICT([lead_count] ,[d/SAP_CRM_LEAD_QUALIFICATION]="3")
warm	warm leads	RESTRICT([lead_count] ,[d/SAP_CRM_LEAD_QUALIFICATION]="2")
cold	cold leads	RESTRICT([lead_count] ,[d/SAP_CRM_LEAD_QUALIFICATION]="1")
lead_conversion	Lead Conversion Ratio	[converted_leads]/ [lead_count]
converted_leads	Converted Leads	RESTRICT([lead_count] ,[d/SAP_CRM_LEAD_LIFECYCLESTATUS]="6")

Dimensions		
ID	**Description**	**Mapping**
SAP_ALL_CUSTOMER	Customer	Account ID
SAP_ALL_TERRITORY	Territory	Territory ID
SAP_CRM_GEN_MAINCONTACT	Main Contact	Main Contact ID
SAP_CRM_LEAD_LIFECYCLESTATUS	Life Cycle Status	Lifecycle Status ID
SAP_CRM_LEAD_QUALSTATUS	Qualification Status	Qualification Status ID
SAP_CRM_LEAD_QUALIFICATION	Qualification Level	Qualification Level ID
SAP_CRM_LEAD_SOURCE	Source	Source ID
SAP_CRM_GEN_LEAD	Lead	Lead ID
Time*	Time	Month / Calendar Year ID

Additional Notes about the model

To load master data into this model please the generic oData connector where the connector URL syntax is **https://<system>/sap/c4c/odata/v1/c4codata** and use the appropriate query to load the master data.

2.37.4.3 Sales Performance Teaser (SAP__CRM_C4C_IM_SPTEASER)

Model Name: SAP__CRM_C4C_IM_SPTEASER	Connection
• Model Description: SAP C4C: Sales Performance Teaser • Planning Enabled: Yes	• Connection type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • Connection Query: Opportunity Analysis (RPCO-DOPPU_Q0018QueryResults). • Connector: SAP Sales Cloud (SAP_C4C)

Opportunity Account*

ID	Description	Formula/Mapping
Expected_Value	Unweighted Revenue	Expected_Value
Chance_of_Success	Chance of Success	Chance_of_Success
Weighted_Value	Weighted Revenue	Weighted_Value
Item_Value	Item Value	Item_Value
Item_Total_Value	Item Total Value	Item_Total_Value
Number_of_Opportunities	Number of Opportunities	Number_of_Opportunities
Revenue_won	Revenue Won	RESTRICT([Expected_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")
Average_deal_size	Average Deal Size	[Expected_Value]/[Number_of_Opportunities]
Sales_employees	Sales Employees	[Number_of_Opportunities]
Revenue_item_won	Product Revenue Won	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")
Revenue_item_lost	Product Revenue Won	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")
Revenue_Pipeline	Product Revenue Lost	RESTRICT([Item_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="5")
Deals_won	Weighted Revenue Pipeline	RESTRICT([Weighted_Value],[d/SAP_CRM_OPP_LIFECYCLESTATUS]=("1","2"))
Deals_lost	Deals Won	RESTRICT([Number_of_Opportunities] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="4")

Model Name: SAP__CRM_C4C_IM_SPTEASER		Connection
Opportunity_win_ratio	Deals Lost	RESTRICT([Number_of_Opportunities] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="5")
Deals_in_pipleline	Opp Win Rate	[Deals_won]/ [Number_of_Opportunities]
Revenue_lost	Revenue Lost	RESTRICT([Expected_Value] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]="5")
Deals_closed	Deals Closed	RESTRICT([Number_of_Opportunities] ,[d/SAP_CRM_OPP_LIFECYCLESTATUS]=("4","5"))
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Month/ Calendar Year ID: filter on previous, current and next year using Closing Date ID
Country ID	Country	Country ID
Product ID	Product	Product ID
Product Category ID	Product Category	Product Category ID
Reason for Status ID	Reason for Status	Reason for Status ID
Sales Phase ID	Sales Phase	Sales Phase ID
Sales Unit ID	Sales Unit	Sales Unit ID
Opportunity ID	Opportunity	Opportunity ID
Account ID	Customer	Account ID
Territory ID	Territory	Territory ID
Competitor ID	Competitor	Competitor ID
Employee Responsible ID	Employee Responsible	Employee Responsible ID
Industry ID	Industry	Industry ID
Lifecycle Status ID	Lifecycle Status	Lifecycle Status ID
Additional Notes about the model		

This model uses only local dimensions. Master data is uploaded during transactional data upload. This model can be used to easily show customer data after switching connection.

Please note that for productive use, it is better to separately load the master and Tx data as is the case in the first 2 models. This model assumes that the date format for time dimension is MM/YYYY. If it is not, then you need to create your own query based on the selections mentioned above and perform the right data transformation to map your MonthYear to time dimension.

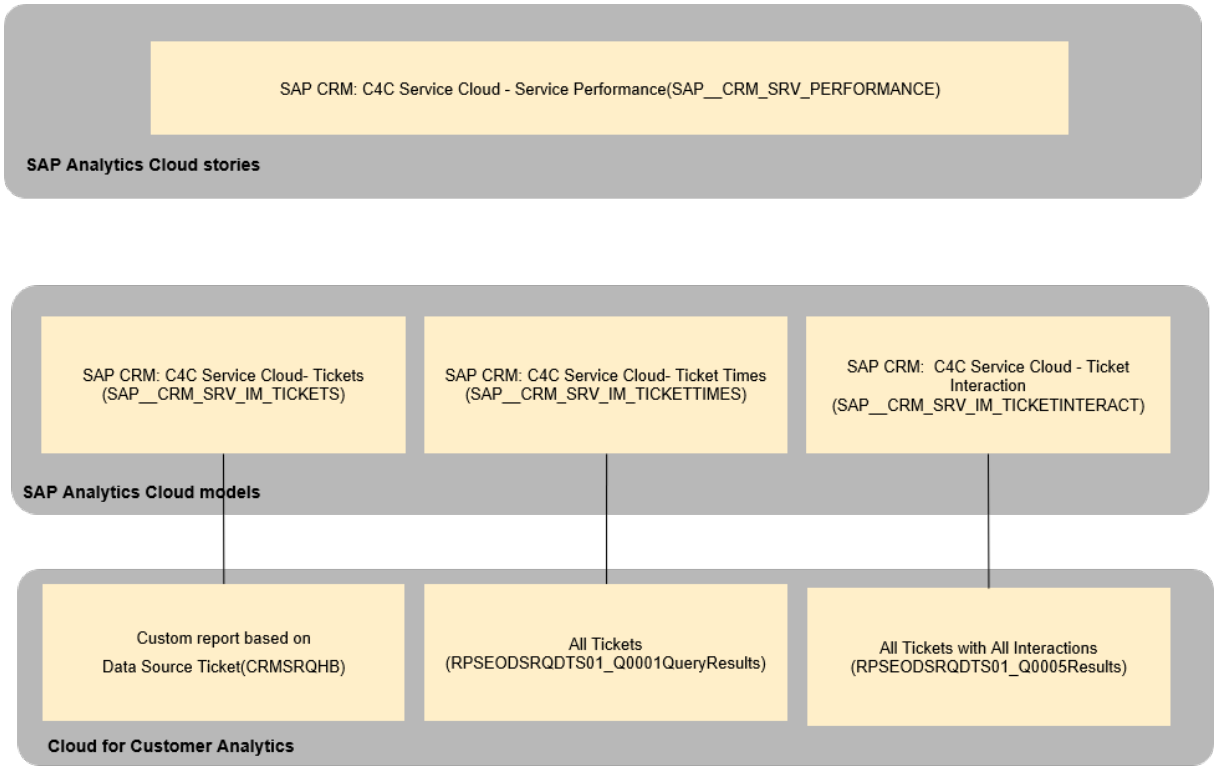
2.38 Service Performance (SRV)

2.38.1 Architecture and Abstract

SAP CRM Service Performance content is developed based on SAP Hybris Cloud for Customer. The area addressed is in performance of Service Ticketing

Architecture

The building blocks are as shown:



2.38.2 Stories

SAP CRM: C4C Service Cloud - Service Performance (SAP__CRM_SRV_PERFORMANCE)

This is the single story which consists of 3 pages. The story provides analysis of Service Tickets Performance.

The Overview page helps analyse service ticket creation trend, priority and status, various performance times such as lead time, and social media involvement.

The Agent Performance helps understand agent performance for agent groups and that of individual agents.

In the Adhoc Analysis page, one can perform freestyle analysis of various KPIs, and dimensions driven by smart grouping.

2.38.3 Models

There are 3 Models:

2.38.3.1 SAP CRM: C4C Service Cloud - Tickets (SAP__CRM_SRV_IM_TICKETS)

Model Name:

SAP__CRM_SRV_IM_TICKETS	Connection
• Model Description: SAP CRM: C4C Service Cloud - Tickets • Planning Enabled: Yes	• Connection type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • Connection Query: Custom Query based on Data source CRMSRQHB

Account

ID	Description	Formula/Mapping
Lead_Time_s	Lead Time (s)	Lead_Time_s
Number_of_Interaction_Steps	Number of Interaction Steps	Number_of_Interaction_Steps
Age_s	Age (s)	Age_s
Total_Time_at_Processor_s	Total Time at Processor (s)	Total_Time_at_Processor_s
Total_Time_at_Requestor_s	Total Time at Requestor (s)	Total_Time_at_Requestor_s
Number_of_Response_Cycles	Number of Response Cycles	Number_of_Response_Cycles
Total_Response_Duration_s	Total Response Duration (s)	Total_Response_Duration_s
Number_of_Missed_Responses	Number of Missed Responses	Number_of_Missed_Responses
Number_of_Tickets	Number of Tickets	Number_of_Tickets
Number_of_Tickets_Completed_on_Schedule	Number of Tickets Completed on Schedule	Number_of_Tickets_Completed_on_Schedule
Average_Lead_Time	Average Lead Time (days)	([Lead_Time_s]/[Number_of_Tickets])/(3600*24)
Average_Age	Average Age (days)	([Age_s]/[Number_of_Tickets])/(3600*24)
Tickets_Open	Tickets Open	LOOKUP([Number_of_Tickets] ,[d/Lifecycle_Status_ID]="1")
Tickets_InProcess	Tickets In Process	LOOKUP([Number_of_Tickets] ,[d/Lifecycle_Status_ID]="2")
Tickets_InEscalation	Tickets In Escalation	LOOKUP([Number_of_Tickets] , [d/Lifecycle_Status_ID]=("1","2")and [d/Escalation_Status_ID]="2")

Model Name:

SAP__CRM_SRV_IM_TICKETS		Connection
Avg_Time_at_Processor_s	Average Time at Processor (days)	([Total_Time_at_Processor_s]/[Number_of_Tickets])/(3600*24)
Avg__Time_at_Requestor_s	Average Time at Requestor (days)	([Total_Time_at_Requestor_s]/[Number_of_Tickets])/(24*3600)
Avg_response_duration	Average Response Duration (days)	([Total_Response_Duration_s]/[Number_of_Tickets])/(24*3600)

Dimensions

ID	Description	Mapping
Time	Time	Created on – filter on current and previous year
Service_Organization_ID_ID	Service Organization	Service_Organization_ID_ID
Source_ID	Source	Source_ID
Escalation_Status_ID	Escalation Status	Escalation_Status_ID
Lifecycle_Status_ID	Lifecycle Status	Lifecycle_Status_ID
Ticket_Solution_Status_ID	Ticket Solution Status	Ticket_Solution_Status_ID
Status_ID	Status	Status_ID
Account_ID	Account	Account_ID
Ticket_ID	Ticket	Ticket_ID
Agent_ID	Agent	Agent_ID
Reported_By_ID	Reported By	Reported_By_ID
Sales_Unit_ID	Sales Unit	Sales_Unit_ID
Service_and_Support_Team_ID	Service and Support Team	Service_and_Support_Team_ID
Affected_Product_Category_ID	Affected Product Category ID	Affected_Product_Category_ID
Product_ID	Product	Product_ID
Contract_ID_ID	Contract	Contract_ID_ID
Service_Category_ID_ID	Service Category	Service_Category_ID_ID
Contract_Status_ID	Contract Status	Contract_Status_ID
Priority_ID	Priority	Priority_ID
Completion_Date_ID	Completion Date	Completion_Date_ID

Additional Notes about the model

This model uses only local dimensions. Master data is uploaded during transactional data upload.

2.38.3.2 SAP CRM: C4C Service Cloud - Ticket Times (SAP__CRM_SRV_IM_TICKETTIMES)

This model provides additional ticket times which is not available in the main model.

Model Name:

SAP__CRM_SRV_IM_TICKETTIMES	Connection
• Model Description: SAP CRM: C4C Service Cloud- Ticket Times • Planning Enabled: No	• Connection type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • Connection Query: RPSEODSRQDTS01_Q0001QueryResults (All Tickets)

Account		
ID	**Description**	**Formula/Mapping**
Ticket_Handling_Time_Secs	Ticket Handling Time (Secs)	Ticket_Handling_Time_Secs
Initial_Review_Time_Secs	Initial Review Time (Secs)	Initial_Review_Time_Secs
Avg_Ticket_Handling_Time_Secs	Avg. Ticket Handling Time (days)	[Ticket_Handling_Time_Secs]/(3600*24)
Avg_Initial_Review_Time_Secs	Avg. Initial Review Time (days)	[Initial_Review_Time_Secs]/(3600*24)
Dimensions		
ID	Description	Mapping
Ticket_ID	Ticket	Ticket_ID
Additional Notes about the model		
This model uses only local dimensions. Master data is uploaded during transactional data upload.		

2.38.3.3 SAP CRM: Services - Ticket Interaction (SAP__CRM_SRV_IM_TICKETINTERACT)

This model tracks the entire set of interactions taking place on a ticket with additional focus on social media.

Model Name: SAP__CRM_SRV_IM_TICKETINTERACT	Connection
• Model Description: SAP CRM: Services - Ticket Interaction • Planning Enabled: No	• Connection type: SAP Hybris Cloud for Customer > SAP Hybris Cloud for Customer Analytics • Connection Query: RPSEODSRQDTS01_Q0005Results (All Tickets with All Interactions)

Interaction Account		
ID	**Description**	**Formula/Mapping**
Number_of_Interaction_Steps	Number of Interaction Steps	Number_of_Interaction_Steps
Number_of_Response_Cycles	Number of Response Cycles	Number_of_Response_Cycles
Number_of_Missed_Responses	Number of Missed Responses	Number_of_Missed_Responses
Number_of_EMail_Interactions	Number of E-Mail Interactions	Number_of_EMail_Interactions
Number_of_Chat_Conversations	Number of Chat Conversations	Number_of_Chat_Conversations
Number_of_Interactions	Number of Interactions	Number_of_Interactions
Number_of_Manually_Created_Tickets	Number of Manually Created Tickets	Number_of_Manually_Created_Tickets
Number_of_Portal_Replies_from_Customer	Number of Portal Replies from Customer	Number_of_Portal_Replies_from_Customer
Number_of_Portal_Interactions	Number_of_Portal_Interactions	Number_of_Portal_Interactions
Number_of_Portal_Replies_to_Customer	Number_of_Portal_Replies_to_Customer	Number_of_Portal_Replies_to_Customer
Number_of_SMS_interaction	Number_of_SMS_interaction	Number_of_SMS_interaction
Number_of_Phone_Calls	Number_of_Phone_Calls	Number_of_Phone_Calls
Number_of_Social_Interactions	Number_of_Social_Interactions	Number_of_Social_Interactions
Number_of_Internal_Notes	Number_of_Internal_Notes	Number_of_Internal_Notes
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Interaction data – filter on current and previous year
Direction_ID	Direction	Direction_ID
Social_Media_Channel_Type_ID	Channel Type	Social_Media_Channel_Type_ID
Channel_ID_ID	Channel	Channel_ID_ID
Interaction_Direction_ID	Interaction Direction	Interaction_Direction_ID
Social_Media_Message_Category	Message Category	Social_Media_Message_Category
Ticket_ID	Ticket	Ticket_ID
Interaction_Sentiment_ID	Interaction Sentiment	Interaction_Sentiment_ID
Additional Notes about the model		

Model Name: SAP__CRM_SRV_IM_TICKETINTERACT	Connection
This model uses only local dimensions. Master data is uploaded during transactional data upload.	

2.39 Solution Manager (SOLMAN)

2.39.1 Architecture and Abstract

SAP Solution Manager delivers content for two important areas:

- SAP Solution Manager IT Service Management – Incidents Analytics

- SAP Solution Manager Test Suite Analytics

The two areas are independent of each other and are consequently treated separately in this documentation:

SAP Solution Manager IT Service Management – Incident Analytics delivers a pre-defined analytic solution for SAP customers who make use of IT Service Management in SAP Solution Manager for their incident handling process.

It helps roles such as IT service desk, manager/IT, and the support lead/project manager monitor and analyse their focused incidents, such as how many incidents are created/closed/still open, what're these incidents about, and its current status, how they're distributed among support teams. It also provides more detailed insights such as historical trends and SLA (Service Level Agreement) adherence.

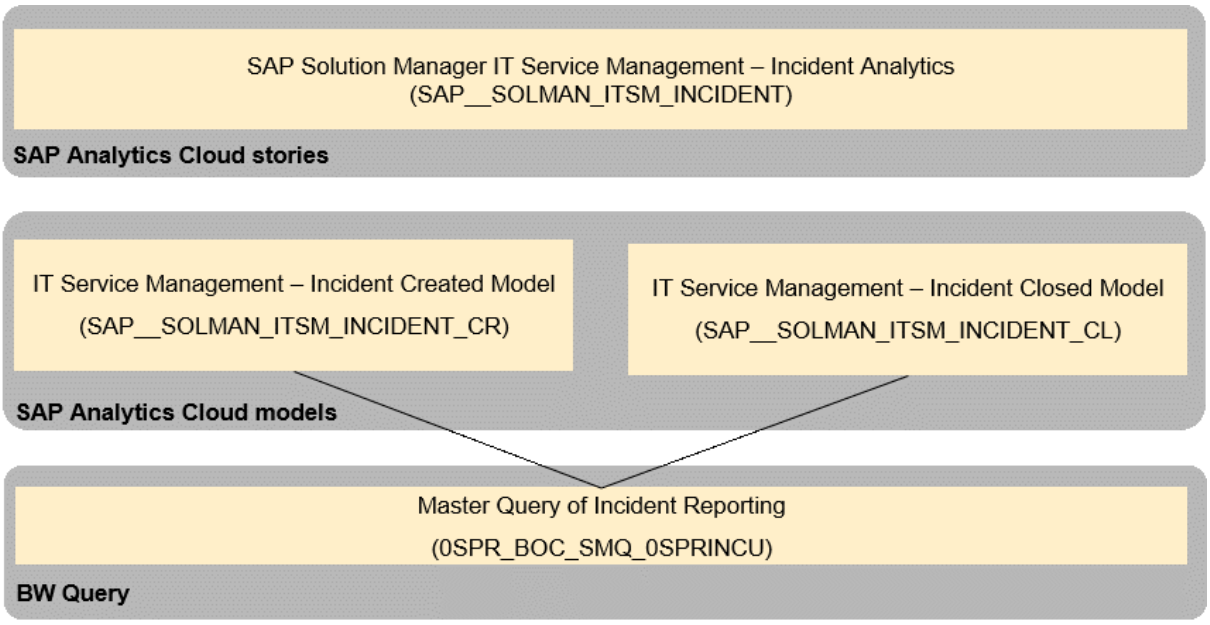
It provides an overview of KPIs such as:

- Number of open/closed/created incidents
- Trend of created/closed incidents
- MPT/IRT compliance
- Incident duration and processing time

Thus, IT service manager can ensure that all the incidents are solved in time and take actions to improve their incident handling process.

SAP Solution Manager IT Service Management – Incident Analytics is built based on BW query Master Query of Incident Reporting (technical name: 0SPR_BOC_SMQ_0SPRINCU) in SAP Solution Manager 720 SP06 (or newer). You should activate BW content during setting up IT Service Management scenario in SAP Solution Manager configuration to make BW query available.

The building blocks are as shown:

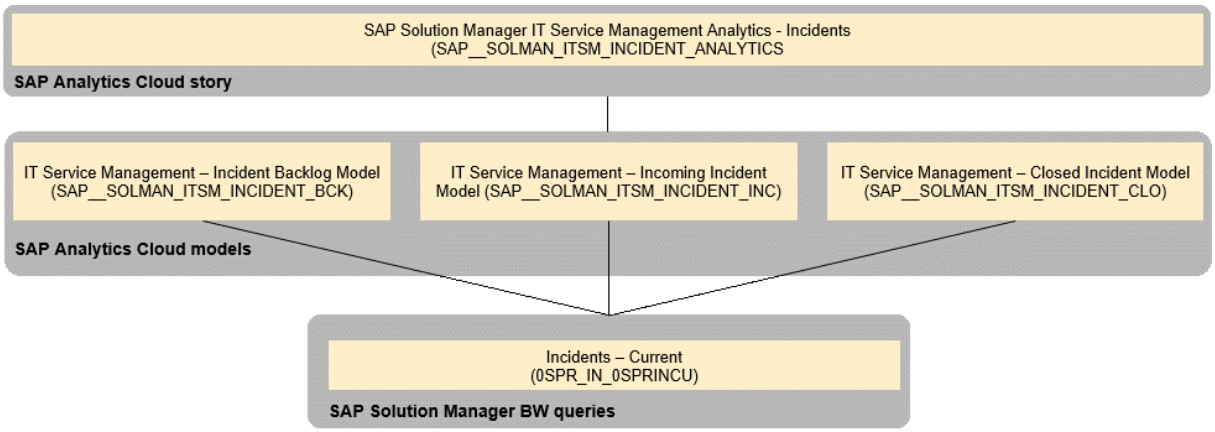


SAP Solution Manager Test Suite Analytics delivers a pre-defined analytic solution for SAP customers who make use of Test Suite in SAP Solution Manager for managing their testing process.

It helps roles such as test manager/test coordinator report their testing status, automatically compile important statistics and reports for current test cycle/scope, instead of manual calculations. It delivers an overview of current testing status such as how many test plans and test cases are there, what are the test execution status, how about the test coverage rate and OK rate. It also provides more detailed insights such as historical progress of test execution status as well as coverage/OK rate.

SAP Solution Manager Test Suite Analytics is built based on the SAP BW query Progress Analytics (technical name: 0SMTMP01/0SMT_TP_STATUS_PROG) in Solution Manager 7.2 SP03 (or newer). You should activate BW content during setting up Test Suite scenario in SAP Solution Manager configuration, to make BW query available.

The building blocks are as shown:



2.39.2 Stories

SAP Solution Manager ITSM Analytics - Incidents (SAP__SOLMAN_ITSM_INCIDENT)

IT Service Management – Incident Created Model (SAP__SOLMAN_ITSM_INCIDENT_CR)

SAP Solution Manager Test Suite Analytics (SAP_SOLMAN_TEST_SUITE_ANALYTICS)

2.39.3 SOLMAN IT Service Management: Models

2.39.3.1 IT Service Management – Incident Created Model (SAP__SOLMAN_ITSM_INCIDENT_CR)

Model Name: SAP__SOLMAN_ITSM_INCIDENT_CR	Connection
• Model Description: IT Service Management – Incident Created Model • Planning Enabled: No	• Connection Type: Import Data Connection to an SAP BW System • Connection Query: 0SPR_BOC_SMQ_0SPRINCU

Incident Measures*

ID	Description	Formula/Mapping
DOC_NO	No. of Incidents	0SPR_CKF_CNT
PROCESS	Mean Time to Repair (Hours)	0SPR_CKF_MTTRH
AVERAGE_PROC_TIME	Average Processing Time in Hours	[PROCESS]/[DOC_NO]
DURATION	Processing time (Hours)	0SPR_CKF_PROCTH
DUR_TIME	Average Duration in Hours	[DURATION]/[DOC_NO]
IRT_MEET	No. of IRT Meet	No. of IRT Meet

Model Name: SAP__SOLMAN_ITSM_INCIDENT_CR	Connection	
IRT_EXCEEDED	No. of IRT Exceeded	[DOC_NO]-[IRT_MEET]
IRT_SPENT	IRT Spent(Minutes)	0SPRIRTACT
IRT_TIME	Average Time of IRT	([IRT_SPENT]/ [DOC_NO])/60
IRT_COM	Average IRT Compliance	[IRT_MEET]/[DOC_NO]
MPT_MEET	No. of MPT Meet	No. of MPT Meet
MPT_EXCEEDED	No. of MPT Exceeded	[DOC_NO]-[MPT_MEET]
MPT_SPENT	MPT Spent(Minutes)	0SPRMPTACT
MPT_TIME	Average Time of MPT	([MPT_SPENT]/ [DOC_NO])/60
MPT_COM	Average MPT Compliance	[MPT_MEET]/[DOC_NO]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0SPRCREATED
SAP_SOL-MAN_ITSM_LB_INAC	Incident Measures	
SAP_SOL-MAN_ITSM_LB_SID	System ID	0SPR_SID
SAP_SOL-MAN_ITSM_LB_STATUS	Aggregated Status	0SPRSMTST
SAP_SOL-MAN_ITSM_LB_TYPE	Transaction Type	0SPRTTYPE
SAP_SOL-MAN_ITSM_LB_GUID	Message Number	0SPRMGNO
SAP_SOLMAN_ITSM_LB_PRI	Priority	0SPRMGPRITD
SAP_SOL-MAN_ITSM_LB_STEAM	Support Team	0SPRBPSUT
SAP_SOL-MAN_ITSM_LB_CAT	Category	0SPRCATLV1
SAP_SOL-MAN_ITSM_LB_COMPF	Completed Flag	0SPRCOMPL
SAP_SOL-MAN_ITSM_LB_CRET	Creation Date	0SPRCREATED
SAP_SOL-MAN_ITSM_LB_IRTM	IRT Meet	0SPRIRTMT
SAP_SOL-MAN_ITSM_LB_MPTM	MPT Meet	0SPRMPTMT
SAP_SOL-MAN_ITSM_LB_PROJ	Project	0SPRPPMPRO

Model Name: SAP__SOLMAN_ITSM_INCIDENT_CR		Connection
SAP_SOL-MAN_ITSM_LB_PROJPH	Project Phase	0SPRPPMPHS

> **Note**
>
> * Private dimension and other dimensions are public.

2.39.3.2 IT Service Management – Incident Closed Model (SAP__SOLMAN_ITSM_INCIDENT_CL)

Model Name: SAP__SOLMAN_ITSM_INCIDENT_CL	Connection
• Model Description: IT Service Management – Incident Closed Model • Planning Enabled: No	• Connection Type: Import Data Connection to an SAP BW System • Connection Query: 0SPR_BOC_SMQ_0SPRINCU

Incident Measures		
ID	**Description**	**Formula/Mapping**
DOC_NO	No. of Incidents	0SPR_CKF_CNT
PROCESS	Mean Time to Repair (Hours)	0SPR_CKF_MTTRH
AVERAGE_PROC_TIME	Average Processing Time in Hours	[PROCESS]/[DOC_NO]
DURATION	Processing time (Hours)	0SPR_CKF_PROCTH
DUR_TIME	Average Duration in Hours	[DURATION]/[DOC_NO]
IRT_MEET	No. of IRT Meet	No. of IRT Meet
IRT_EXCEEDED	No. of IRT Exceeded	[DOC_NO]-[IRT_MEET]
IRT_SPENT	IRT Spent(Minutes)	0SPRIRTACT
IRT_TIME	Average Time of IRT	([IRT_SPENT]/[DOC_NO])/60
IRT_COM	Average IRT Compliance	[IRT_MEET]/[DOC_NO]
MPT_MEET	No. of MPT Meet	No. of MPT Meet
MPT_EXCEEDED	No. of MPT Exceeded	[DOC_NO]-[MPT_MEET]
MPT_SPENT	MPT Spent(Minutes)	0SPRMPTACT
MPT_TIME	Average Time of MPT	([MPT_SPENT]/[DOC_NO])/60
MPT_COM	Average MPT Compliance	[MPT_MEET]/[DOC_NO]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0SPRCDAY

Model Name: SAP__SOLMAN_ITSM_INCIDENT_CL		Connection
SAP_SOLMAN_ITSM_LB_INAC	Incident Measures	
SAP_SOLMAN_ITSM_LB_SID	System ID	0SPR_SID
SAP_SOLMAN_ITSM_LB_STATUS	Aggregated Status	0SPRSMTST
SAP_SOLMAN_ITSM_LB_TYPE	Transaction Type	0SPRTTYPE
SAP_SOLMAN_ITSM_LB_GUID	Message Number	0SPRMGNO
SAP_SOLMAN_ITSM_LB_PRI	Priority	0SPRMGPRITD
SAP_SOLMAN_ITSM_LB_STEAM	Support Team	0SPRBPSUT
SAP_SOLMAN_ITSM_LB_CAT	Category	0SPRCATLV1
SAP_SOLMAN_ITSM_LB_COMPF	Completed Flag	0SPRCOMPL
SAP_SOLMAN_ITSM_LB_CRET	Creation Date	0SPRCREATED
SAP_SOLMAN_ITSM_LB_IRTM	IRT Meet	0SPRIRTMT
SAP_SOLMAN_ITSM_LB_MPTM	MPT Meet	0SPRMPTMT
SAP_SOLMAN_ITSM_LB_PROJ	Project	0SPRPPMPRO
SAP_SOLMAN_ITSM_LB_PROJPH	Project Phase	0SPRPPMPHS

> **i** Note
>
> * Private dimension and other dimensions are public.

2.39.3.3 Test Suite – Analysis Model for Current (SAP__SOLMAN_TS_CURRENT)

Model Name: SAP__SOLMAN_TS_CURRENT	Connection
• Model Description: SAP Solution Manager Test Suite - Analysis Model for Current • Planning Enabled: No	• Connection Type: BW Query • Connection Query: BEx query in BW (BEx query in SOLMAN 7.2 SP03 system: 0SMTMP01/0SMT_TP_STATUS_PROG) • Connection Variables: Remove all the default variables

Accounts		
ID	**Description**	**Formula/Mapping**
OK_Count	Number of Test Cases (OK)	OK

Model Name: SAP__SOLMAN_TS_CURRENT		Connection
No_Result_Count	Number of Test Cases (No Result)	No Result
In_Progress_Count	Number of Test Cases (In Progress)	In Progress
Errors_Count	Number of Test Cases (Errors)	Errors
No_of_Test_Cases	Number of Test Cases	[No_Result_Count] + [In_Progress_Count] + [OK_Count] + [Errors_Count]
Coverage_Rate	Coverage (%)	([OK_Count] + [In_Progress_Count] + [Errors_Count])/[No_of_Test_Cases]
OK_Rate	OK Rate (%)	[OK_Count]/[No_of_Test_Cases]
Dimensions		
ID	**Description**	**Mapping**
Time	Time	
SAP_SOLMAN_TS_LB_Solution	Solution	Solution (text)
SAP_SOLMAN_TS_LB_Branch	Branch	Branch (text)
SAP_SOLMAN_TS_LB_TestPlanID	Test Plan ID	Test Plan ID (text)
SAP_SOLMAN_TS_LB_TestCase	Test Case	Test Case (long text)
SAP_SOLMAN_TS_LB_TCStatusTP	Test Case Status (TestPlan)	Test Case Status (Test Plan) (text)
SAP_SOLMAN_TS_LB_CALDAY	Calendar Day	Snapshot Day (key)
Additional Notes about the model		
During the selection fields from the BEx query in data importing, make sure field presentation as below: Solution (text), Branch(text), Test Plan ID (key and text), Test Case (key and long text), Test case Status (test plan) (text), and snapshot Day (key).		

> **i Note**
>
> * Private dimension and other dimensions are public.

2.39.3.4 Test Suite – Analysis Model for Historical (SAP__SOLMAN_TS_HISTORICAL)

Model Name: SAP__SOLMAN_TS_HISTORICAL	Connection
• Model Description: SAP Solution Manager Test Suite - Analysis Model for Historical • Planning Enabled: No	• Connection Types: Connection type: BW Query • Connection Query: 0SMTMP01/0SMT_TP_STATUS_PROG from SAP Solution Manager 7.2 SP03 • Connection Variables: Remove all the default variables

Account*		
ID	**Description**	**Formula/Mapping**
OK_Count	Number of Test Cases (OK)	Snapshot Day (key)
No_Result_Count	Number of Test Cases (No Result)	No Result
In_Progress_Count	Number of Test Cases (In Progress)	In Progress
Errors_Count	Number of Test Cases (Errors)	Errors
No_of_Test_Cases	Number of Test Cases	[No_Result_Count] + [In_Progress_Count] + [OK_Count] + [Errors_Count]
Coverage_Rate	Coverage (%)	([OK_Count] + [In_Progress_Count] + [Errors_Count])/[No_of_Test_Cases]
OK_Rate	OK Rate (%)	[OK_Count]/[No_of_Test_Cases]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Snapshot Day (key)
SAP_SOLMAN_TS_LB_Solution	Solution	Solution (text)
SAP_SOLMAN_TS_LB_Branch	Branch	Branch (text)
SAP_SOLMAN_TS_LB_TestPlanID	Test Plan ID	Test Plan ID (text)
SAP_SOLMAN_TS_LB_TestCase	Test Case	Test Case (long text)
SAP_SOLMAN_TS_LB_TCStatusTP	Test Case Status (TestPlan)	Test Case Status (Test Plan) (text)

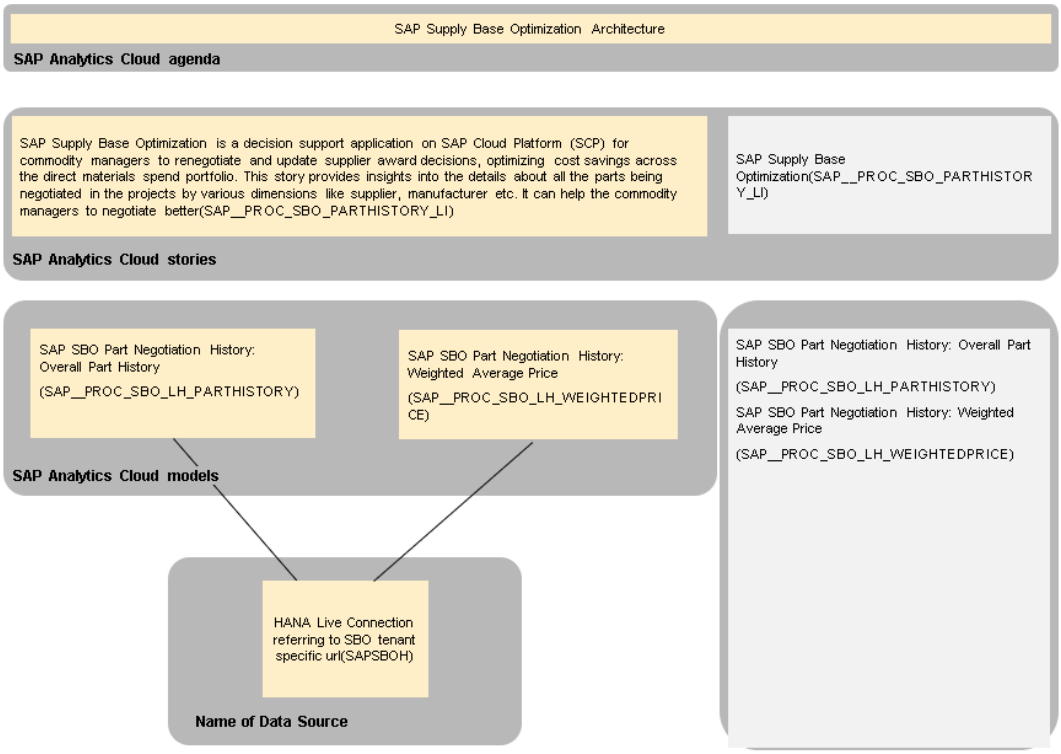
Additional Notes about the model
During the selection fields from the BEx query in data importing, make sure field presentation as below: Solution (text), Branch(text), Test Plan ID (key and text), Test case (key and Long text), Test case Status (test Plan) (text), and Snapshot Day (key).

> **i Note**
>
> * Private dimension and other dimensions are public.

2.40 Supply Base Optimization: Part Negotiation History

2.40.1 Architecture and Abstract

Architecture



The colored objects are documented in this chapter.

The documentation for the greyed-out stories and models can be found in the respective Lines of Business (LoB) chapters.

Usage in Industry specific Boardrooms

The current usage in Industries is listed below:

Industry	Story
High Tech	SAP__PROC_SBO_PARTHISTORY_LI

2.40.2 Dashboard

Root Topic Name	Topic Level 1
Part Negotiation History	Overall Part History
	Supplier Quote/Wtd.Avg.Price
	Demand

2.40.3 Models

Model Name: Technical Name of Model	Connection
Model Description: Part History Detail Cube Planning Enabled: No	Live Connection
Model Description: Weighted Price Detail Cube Planning Enabled: No	Live Connection
Additional Notes about the model	
Provide additional information about the model if needed.	

> **i** Note
>
> *Private dimension, other dimensions are public.

2.40.4 Stories

Part Negotiation History (SAP__PROC_SBO_PARTHISTORY_LI)

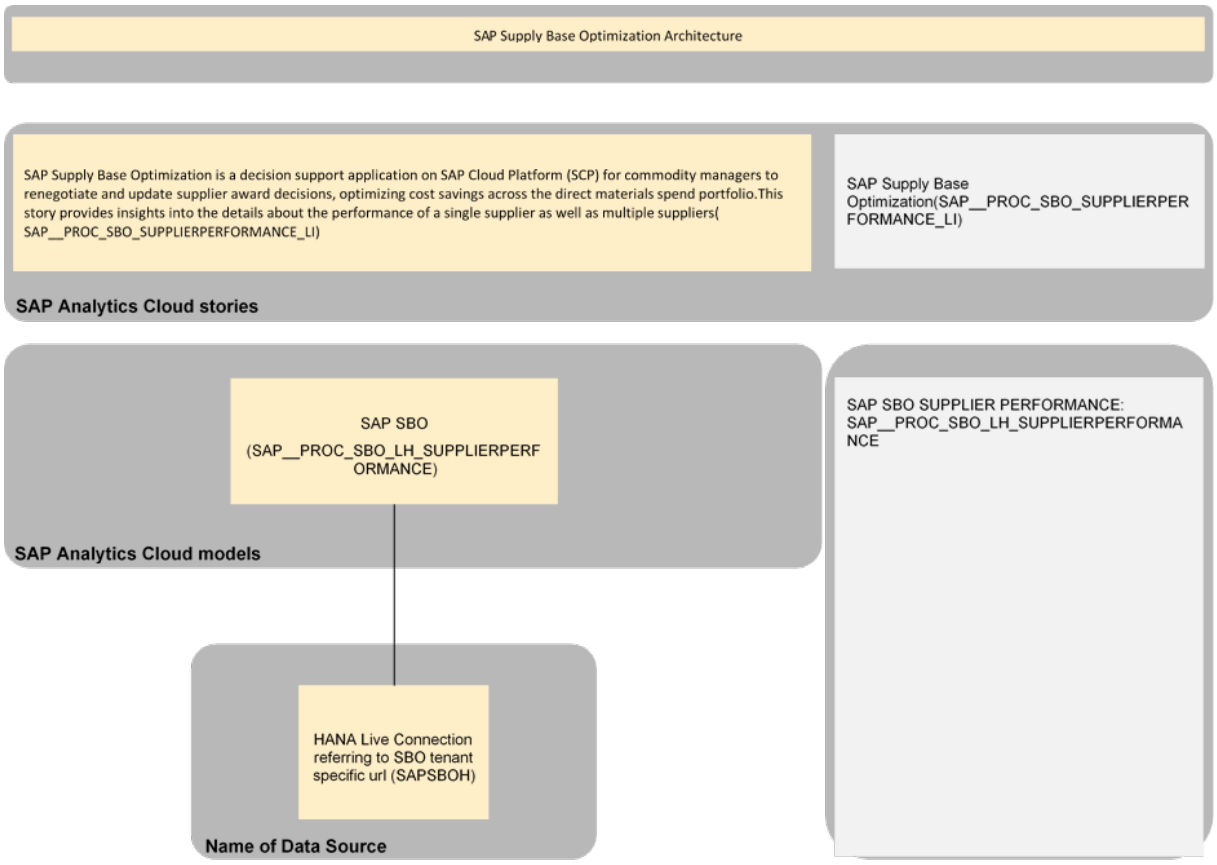
Measure Name	Type	Formula
Supplier Quote	SUM	
Award Split %	SUM	
Demand	SUM	

Measure Name	Type	Formula
Lead Time	SUM	
MOQ	SUM	
Target Price	SUM	
Baseline Price	SUM	
Wtd.Avg.Price	SUM	
MPQ	SUM	

2.41 Supply Base Optimization: Supplier Performance

2.41.1 Architecture and Abstract

Supplier Performance: Architecture and Abstract



The colored objects are documented in this chapter.

The documentation for the greyed out stories and models can be found in the respective Lines of Business (LoB) chapters:

Usage in Industry specific Boardrooms

The current usage in Industries is listed below:

Industry	Story
High Tech	SAP__PROC_SBO_SUPPLIERPERFORMANCE_LI

2.41.2 Dashboard

Root Topic Name	Topic Level 1
Supplier Performance	Performance(Single Supplier)
	Charts(Single Supplier)
	Performance(Comparison)
	Charts(Comparison)

2.41.3 Models

Model Name: Technical Name of Model	Connection
• Model Description: Supplier Performance Cube • Planning Enabled: No	Live Connection
Additional Notes about the model	
Provide additional information about the model if needed	

> **i** Note
>
> *Private dimension, other dimensions are public.

2.41.4 Stories

Supplier Performance (SAP__PROC_SBO_SUPPLIERPERFORMANCE_LI)

Measure Name	Type	Formula
Baseline Price	SUM	
Baseline Spend	SUM	
Current Spend	SUM	
Current Split	SUM	

Measure Name	Type	Formula
Demand	SUM	
Quoted Price	SUM	
Target Price	SUM	
Target Spend	SUM	

Title: SAP__PROC_SBO_SUPPLIERPERFORMANCE_LI

Description: Supplier Performance

The table provides a detailed description of the suppliers.

Page: Performance(Single Supplier)

Type: Responsive

Charts

Title	Model Used
Performance(Single Supplier)	SAP__PROC_SBO_LH_SUPPLIERPERFORMANCE

Provides the following KPIs for different projects:

- Demand
- Split %
- Baseline Price
- Quoted Price
- Spend
- Realized Savings

Supplier and Time Period are dynamic filters.

Title: SAP__PROC_SBO_SUPPLIERPERFORMANCE_LI

What is the demand for a specific commodity group for a supplier over the years?

Performance(Single Supplier)

Compare Demand, Split%, Baseline Price, Quoted Price, Spend, Realized Savings of a single supplier.

Performance(Single Supplier)

Page Filters/Input Control

Supplier

Time Period

Page: Charts(Single Supplier)

Type: Responsive

Charts

Title	Models Used
Charts(Single Supplier)	SAP__PROC_SBO_LH_SUPPLIERPERFORMANCE

Title: SAP__PROC_SBO_SUPPLIERPERFORMANCE_LI

Provides the following KPIs for a single supplier:

- Requests with Responses
- Requests without Responses
- Awarded Requests
- Disqualified Requests
- Withdrawn Requests

Supplier and Time Period are dynamic filters.

How many requests were awarded, withdrawn and disqualified which belongs to a particular supplier?

Single Supplier Request Chart

What is the Total Spend, Realized Savings and Realized Savings% for a single supplier?

Single Supplier Request Chart

Page Filters/Input Control

Supplier

Time Period

Page: Performance(Comparison)

Type: Responsive

Charts

Title	**Model Used**
Performance(Comparison)	SAP__PROC_SBO_LH_SUPPLIERPERFORMANCE

Provides the following KPIs for different Supply Base Managers:

- Demand
- Split %
- Baseline Price
- Quoted Price
- Spend
- Realized Savings

Supplier and Time Period are dynamic filters.

Compare Demand, Split%, Baseline Price, Quoted Price, Spend, Realized Savings of multiple supplier.

Performance(Comparison)

Page Filters/Input Control

Supplier

Time Period

Page: Charts(Comparison)	
Type: Responsive	
Charts	
Title	**Model Used**
Charts(Comparison)	SAP__PROC_SBO_LH_SUPPLIERPERFORMANCE
Provides the following KPIs for different Supply Base Managers: • Number of Parts Awarded per Supplier • Realized Savings per Supplier(in USD) • Awarded Spend per Supplier(in USD)	
Supplier and Time Period are dynamic filters.	
Compare Parts Awarded per Supplier, Realized Savings per Supplier and Awarded Spend per Supplier for multiple supplier.	
Charts(Comparison)	
Page Filters/Input Control	
Supplier Time Period	

2.42 SAP Ariba: Enterprise Analytics for Procurement

2.42.1 Architecture and Abstract

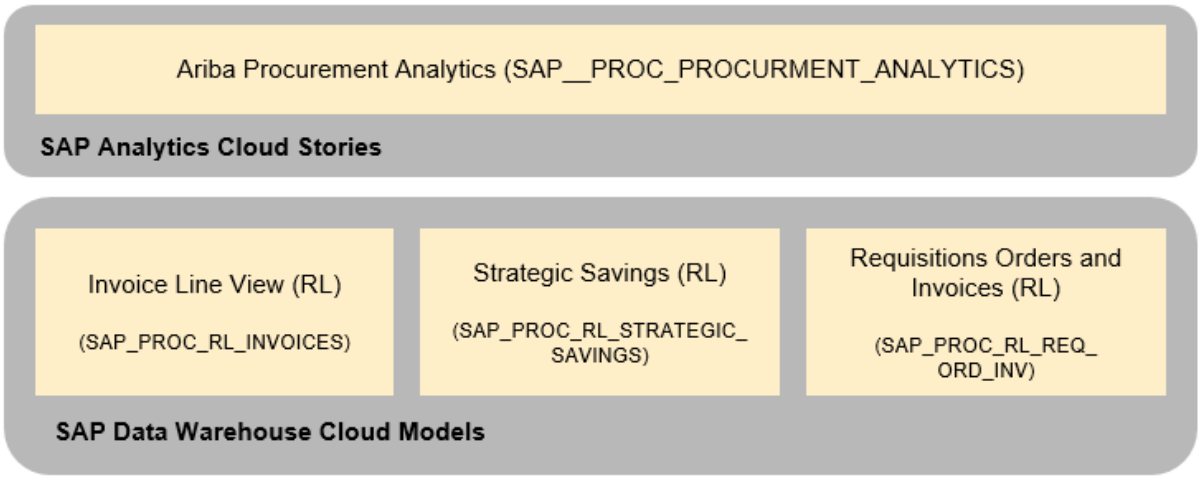
The Procurement Analytics Story for SAP Analytics Cloud is one integrated solution that provides analytics based on Ariba Data. It measures Compliance, Process Efficiency, Sourcing Savings and Working Capital to reduce spend by following established procurement processes, payment terms and the most efficient processing methods within an organization.

1. Compliance – Measures contract and purchase order compliance by showing the resulting compliance benefits of using Ariba or cost of not using Ariba effectively. Users can investigate by dimensions such as suppliers, purchasing groups and cost centers to determine if best practices are being used as expected.

2. Process Efficiency – Measures an organization's invoice processing efficiency, either through automation or the use of procurement FTEs to determine invoice exceptions encountered when reconciling invoices. Exceptions monitoring for invoices ensure proper compliance on agreements with suppliers for items such as order quantity, quantity received and pricing terms.

3. Sourcing Savings – Measures the savings captured from Ariba savings forms for materials procured via established contracts. This allows for deeper analysis on when savings do not match negotiated savings by dimensions such as commodity, cost center and supplier.

4. Working Capital –Measures KPIs to maximize working capital by showing when established supplier terms are followed and maximized. Also shows when early payment discounts negotiated with suppliers are achieved through efficient invoice processing.



2.42.2 Stories

This package contains a story: SAP Ariba: Procurement Analytics (SAP__PROC_PROCUREMENT_ANALYTICS)

> **i** Note
>
> The currency used in the story is the same as the chosen reporting currency in the source Ariba system.

2.42.2.1 Compliance Page Calculated Measures

These calculations are based on measures and dimensions from the **Invoice Line View** model.

Measure Name	Type	Formula/Properties
Compliance Benefit	Calculated Measure	[% Compliance Change] * ([Avg Savings Rate] / 100) * [Total Invoiced]
Non Compliance Cost	Calculated Measure	[Total Invoiced] * ([Avg Savings Rate] / 100) * (1 [Compliant Spend %])
% Compliance Change	Calculated Measure	[Compliant Spend %] ([Prior Year Compliant % / 100)
Compliant Spend %	Calculated Measure	[Compliant Spend] / [Total Invoiced]
Non Compliant Spend %	Calculated Measure	[Non-Compliant Spend] / [Total Invoiced]

Measure Name	Type	Formula/Properties
PO Used	Aggregation	COUNT DIMENSIONS [Order Number Inv)]
Invoice Count	Aggregation	COUNT DIMENSIONS [Realm_Invoice]
% On Contract Spend	Aggregation	[Compliant Spend] / [Total Invoiced]
Invoice Line Count	Calculated Measure	COUNT DIMENSIONS [Invoice Number-Line]
Commodity Count	Aggregation	COUNT DIMENSIONS [CommodityId]
Cost Center Count	Aggregation	COUNT DIMENSIONS [Cost Center ID]
Supplier Count	Aggregation	COUNT DIMENSIONS [Supplier Full Name]

2.42.2.2 Process Efficiency Page Calculated Measures

These calculations are based on measures and dimensions from the **Requisitions, Orders and Invoices** model.

Measure Name	Type	Formula/Properties
Invoices	Aggregation	COUNT DIMENSIONS - [Realm_Invoice]
Order Count	Aggregation	COUNT DIMENSIONS - [Order Number]
Invoices with Exceptions	Aggregation	COUNT DIMENSIONS - [Exception Short Invoice ID]
Exceptions %	Calculated Measure	[Invoices with Exceptions] / [Invoices]
FTE Count	Aggregation	COUNT DIMENSIONS - [Preparer Name]
Invoice Count per FTE	Calculated Measure	[Invoices] / [FTE Count]

Measure Name	Type	Formula/Properties
Exception Invoices per FTE	Calculated Measure	[Invoices with Exceptions] / [FTE Count]

2.42.2.3 Sourcing Savings Calculated Measures

These calculations are based on measures and dimensions from the **Strategic Savings** model.

Measure Name	Type	Formula/Properties
Actual Savings %	Calculated Measure	[Actual Savings] / [ActualSpend]
Negotiated Savings %	Calculated Measure	[NegotiatedSavings] / [Negotiated-SpendB]
Min Savings Duration	Date Difference	- Result Granularity: Day - Time A [Savings End Date] - Time B [Savings Start Date] - Result Aggregation Operation: MIN
Max Savings Duration	Date Difference	- Result Granularity: Day - Time A [Savings End Date] - Time B [Savings Start Date] - Result Aggregation Operation: MAX
Avg Savings Duration	Date Difference	- Result Granularity: Day - Time A [Savings End Date] - Time B [Savings Start Date] - Result Aggregation Operation: AVERAGE
Project count	Aggregation	COUNT DIMENSIONS - [Project Information]

2.42.2.4 Working Capital Calculated Measures

These calculations are based on measures and dimensions from the **Requisitions, Orders and Invoices** model.

Measure Name	Type	Formula/Properties
Avg NET Terms	Calculated Measure	[Terms Calc] / [Total Invoiced]
Discount Savings %	Calculated Measure	[Potential Discount Amout] / [PO Spend]
Avg PO Amount	Aggregation	- AVERAGE - [PO Spend] by [Order Number (Inv)] - Conditional Aggregation [No]
Avg Savings	Aggregation	- AVERAGE exl. 0, NULL - [Potential Discount Amount] by [Order Number (Inv)] - Conditional Aggregation [No]

2.42.3 Models

The Story is using the following Data Warehouse Cloud models. They are all based on a live connection to the SAP Data Warehouse Cloud system. Setup the connection with the name **SAPDWC**.

Business Name	Technical Name	Connection
Invoice Line View	SAP_PROC_RL_INVOICES	SAPDWC
Strategic Savings	SAP_PROC_RL_STRATEGIC_SAVINGS	SAPDWC
Requisitions Orders and Invoices	SAP_PROC_RL_REQ_ORD_INV	SAPDWC

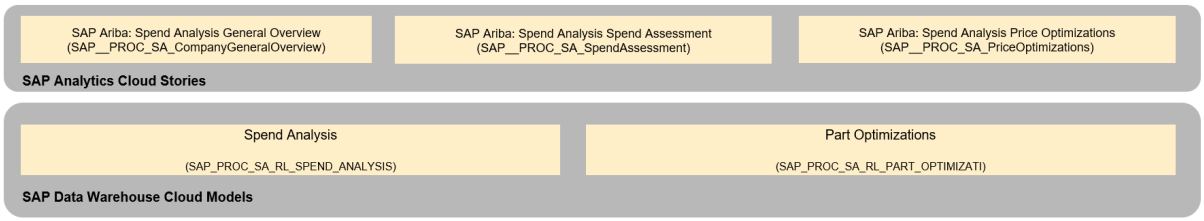
Please navigate to the SAP Data Warehouse Cloud content documentation for details.

2.43 SAP Ariba Spend Analysis

2.43.1 Architecture and Abstract

The SAP Ariba Spend Analysis package for SAP Data Warehouse Cloud and SAP Analytics Cloud provides a visualization extension of SAP Ariba Spend Analysis data. This package is aimed towards sourcing managers,

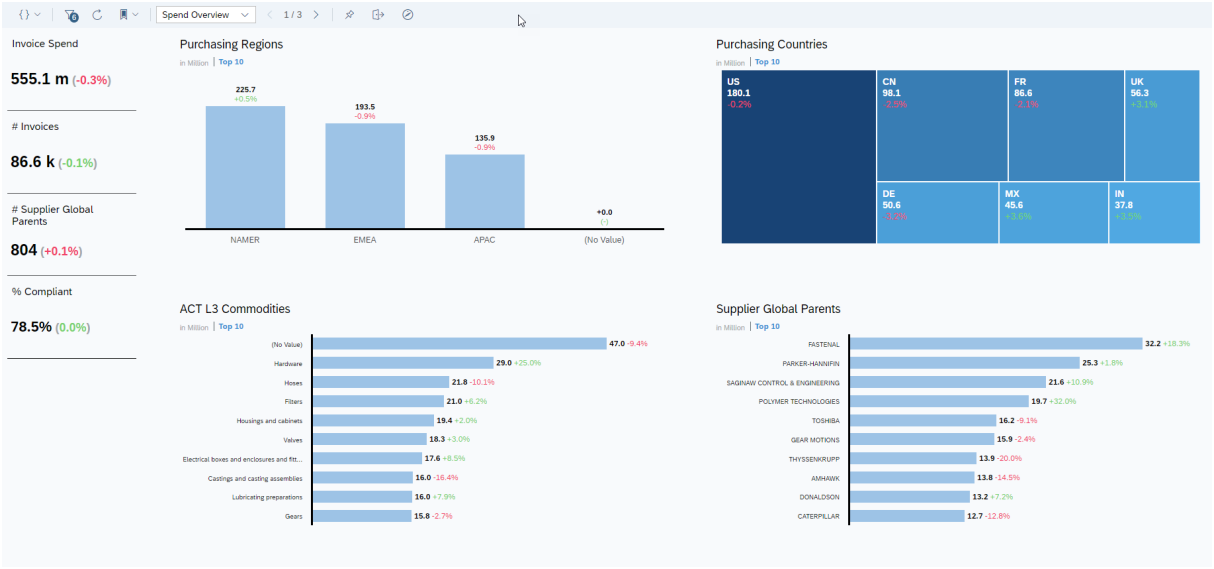
category managers, and procurement business analysts to inform decision making within procurement spending.



2.43.2 Stories

2.43.2.1 Spend Analysis General Overview (SAP__PROC_SA_GeneralOverview

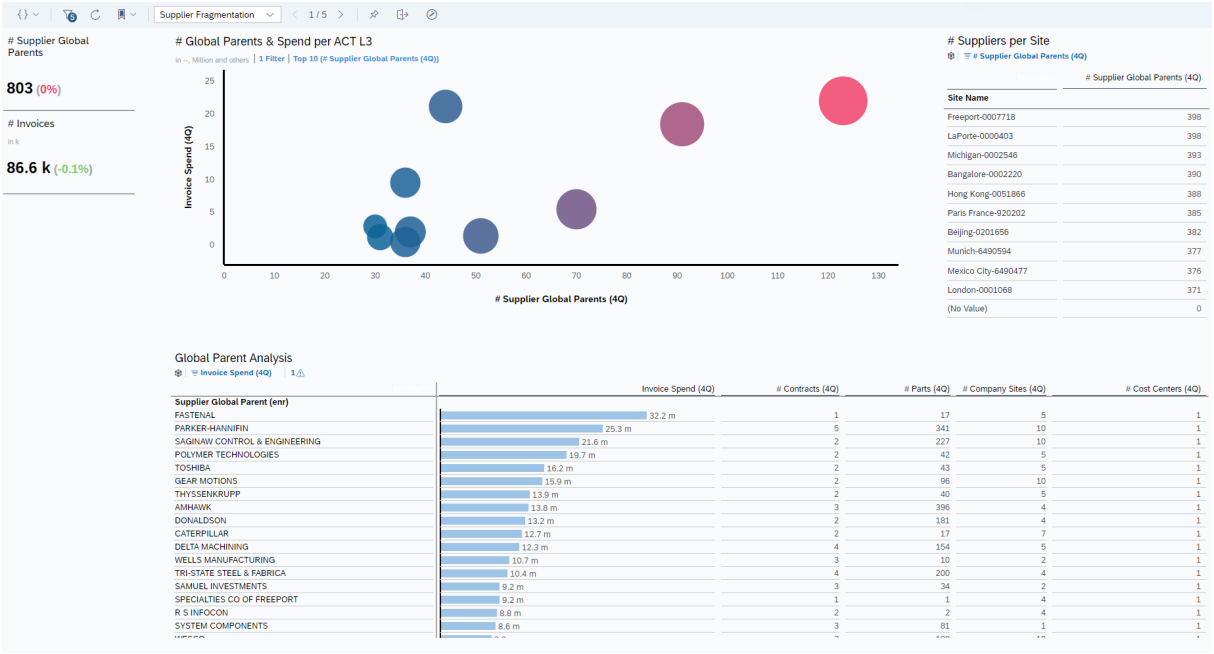
Provides a general overview of the company's current spend. It displays how the spend is distributed among different factors and trends for a period of 8 quarters. The assessment also highlights compliance areas that need to be managed differently.



SAP__PROC_SA_GeneralOverview	
Story Filters	- Choose Date: Select the last quarter of data that should be included in the analysis. - Site Region: Select specific company site region user wants included or excluded in the story. - Source System: Select specific company site region user wants included or excluded in the story. - Accounting Date: Displays the 8 quarters of data included in the story. The range automatically updates based on the "Choose Date" and cannot be modified. - ACT L3: Select specific Ariba Custom Taxonomy level 3 categories user wants included or excluded in the story. - Supplier Global Parent: Select specific Supplier Global parent user wants included or excluded in the story.
Filters Applied	- Choose Date: Users can select the time range to analyze by selecting the last quarter of data that must be included in the story. All values displayed are calculated on the last 4 calendar quarters, based on the Choose Date. All variances displayed are comparing the most recent 4 quarters compared to the previous 4 quarters.
Limitations/ Considerations	- The user must select the "Choose Date" based on the last data loaded in SAC, and not based on the current calendar date.

2.43.2.2 Spend Analysis Spend Assessment (SAP__PROC_SA_SpendAssessment)

Highlights important spend categories having the highest number of suppliers or having unique source supplier. This story should also help identify compliance issues and where there are opportunities to consolidate low spend suppliers.



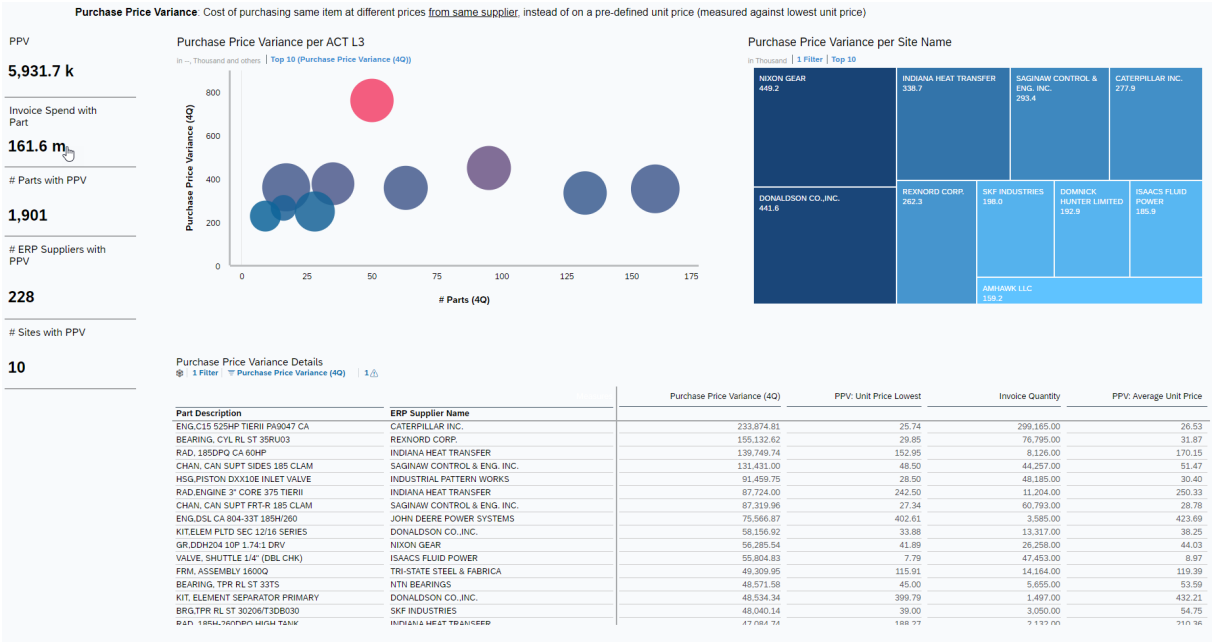
SAP__PROC_SA_SpendAssessment

Story Filters	Choose Date: Select the last quarter of data that should be included in the analysis. - Site Region: Select specific company site region user wants included or excluded in the story. - Source System: Select specific company site region user wants included or excluded in the story. - Accounting Date: Displays the 8 quarters of data included in the story. The range automatically updates based on the "Choose Date" and cannot be modified. - ACT L3: Select specific Ariba Custom Taxonomy level 3 categories user wants included or excluded in the story.
Filters Applied	- Choose Date: Users can select the time range to analyze by selecting the last quarter of data that must be included in the story. All measures displayed are calculated on the last 4 quarters. All variances displayed are comparing the most recent 4 quarters compared to the previous 4 quarters. Values update base on the filtered data. - ACT L3: The following categories are excluded as most organizations consider them "non-sourceable": Charity Organizations, Funds transfer and clearance and exchange services (including Inter/Intra company transfers), Utilities (Electric, Water and Sewer, Oil and Gas, Steam) Utilities" and Taxation (including Sales and Income Tax).

SAP__PROC_SA_SpendAssessment	
Limitations/ Considerations	- The user must select the "Choose Date" based on the last data loaded in SAC, and not based on the current calendar date.

2.43.2.3 Spend Analysis Price Optimizations (SAP__PROC_SA_PriceOptimizations)

Highlights saving opportunities where the organization is purchasing the same parts from different suppliers, from the same supplier at different prices or different company site purchased at different prices.



Part Description	ERP Supplier Name	Purchase Price Variance (4Q)	PPV: Unit Price Lowest	Invoice Quantity	PPV: Average Unit Price
ENG,C15 525HP TIERII PA9047 CA	CATERPILLAR INC.	233,874.81	25.74	299,165.00	26.53
BEARING, CYL RL ST 35RU03	REXNORD CORP.	155,132.62	29.85	76,795.00	31.87
RAD, 185DPQ CA 60HP	INDIANA HEAT TRANSFER	139,749.74	152.95	8,126.00	170.15
CHAN, CAN SUPT SIDES 185 CLAM	SAGINAW CONTROL & ENG. INC.	131,431.00	48.50	44,257.00	51.47
HSG,PISTON DXX10E INLET VALVE	INDUSTRIAL PATTERN WORKS	91,459.75	28.50	48,185.00	30.40
RAD,ENGINE 3" CORE 375 TIERII	INDIANA HEAT TRANSFER	87,724.00	242.50	11,204.00	250.33
CHAN, CAN SUPT FRT-R 185 CLAM	SAGINAW CONTROL & ENG. INC.	87,319.96	27.34	60,793.00	28.78
ENG,DSL CA 804-33T 185H/260	JOHN DEERE POWER SYSTEMS	75,566.87	402.61	3,585.00	423.69
KIT,ELEM PLTD SEC 12/16 SERIES	DONALDSON CO.,INC.	58,156.92	33.88	13,317.00	38.25
GR,DDH204 10P 1.74:1 DRV	NIXON GEAR	56,285.54	41.89	26,258.00	44.03
VALVE, SHUTTLE 1/4" (DBL CHK)	ISAACS FLUID POWER	55,804.83	7.79	47,453.00	8.97
FRM, ASSEMBLY 1600Q	TRI-STATE STEEL & FABRICA	49,309.95	115.91	14,164.00	119.39
BEARING, TPR RL ST 33TS	NTN BEARINGS	48,571.58	45.00	5,655.00	53.59
KIT, ELEMENT SEPARATOR PRIMARY	DONALDSON CO.,INC.	48,534.34	399.79	1,497.00	432.21
BRG,TPR RL ST 30206/T3DB030	SKF INDUSTRIES	48,040.14	39.00	3,050.00	54.75
RAD, 185H-260DPQ HIGH TANK	INDIANA HEAT TRANSFER	47,084.74	188.27	2,132.00	210.36

SAP__PROC_SA_PriceOptimizations	
Story Filters	- Site Region: Select specific company site region user wants included or excluded in the story. - Source System: Select specific company site region user wants included or excluded in the story. - ACT L3: Select specific Ariba Custom Taxonomy level 3 categories user wants included or excluded in the story.

SAP__PROC_SA_PriceOptimizations	
Filters Applied	- Accounting Date: The story is pre-filtered on the four most recent calendar quarters (regardless if the data is available or not in the system). All part analyses are done at the model level (for improved performance and accuracy) and cannot be modified at the story level. - ACT L3: The following categories are excluded to focus on net spend linked to parts: Charity Organizations, Funds transfer and clearance and exchange services and Taxation (including Sales Tax).
Limitations/ Considerations	- Only the last four complete quarter of data are included in the analyses. It is not possible to display variance values between the two most recent 2 years of data. - Only invoice transactions with a part description and invoice quantity value are included in the model and in the story. - The unit price averages and lowest values are calculated at the Part description level and only the invoices with a positive amount and positive quantity.

2.43.2.4 Measures included in Spend Analysis stories

Measure	Type	Formula/Properties
# Company Sites	Aggregation	Sum of unique company site names, excluding blank/null values
# ERP Suppliers	Aggregation	Sum of unique ERP Supplier names, excluding blank/null values
# Invoices	Aggregation	Sum of unique Invoice Ids, excluding blank/null values
# Parts	Aggregation	Sum of unique Part Descriptions, excluding blank/null values
Invoice Unit Price	Calculated Measure	Invoice Spend divided by Invoice Quantity, including negative spend and negative quantity values
Measures ending with "(4Q)"	Restricted Measure	Calculating specific measure for the last 4 calendar quarters, based on the "Choose Date" story filter.

Measure	Type	Formula/Properties
Measures ending with "(P4Q)"	Restricted Measure	Calculating specific measure for the 4 quarters prior to the current 4 calendar quarters, based on the "Choose Date" story filter.

2.43.2.5 Measures available in the General Overview and Spend Assessment stories

Measure	Type	Formula/Properties
# Payment Terms	Aggregation	Sum of unique value in the Invoice "AP-PaymentTerms" field
# POs	Aggregation	Sum of unique PO Id
% Maverick Spend	Aggregation	Sum of Maverick Spend divided by the sum of Invoice Spend
% Non-Managed Spend	Aggregation	Sum of Non-Managed Spend divided by the sum of Invoice Spend
% Managed Spend	Aggregation	Sum of Managed Spend divided by the sum of Invoice Spend
% Compliant Spend	Aggregation	Sum of Compliant Spend divided by the sum of Invoice Spend
Non-Managed Spend	Aggregation	Sum of Invoice Spend without a PO Id
Managed Spend	Aggregation	Sum of Invoice Spend WITH a PO Id
Compliant Spend	Aggregation	Sum of Invoice Spend with a Contract Name and/or a PO Id
Maverick Spend	Aggregation	Sum of Invoice Spend without a PO Id AND with contract type "Non-Contract"
Spend with Contract & No PO	Aggregation	Sum of Invoice Spend with a contract type "Contract" and no PO Id
Spend with Contract & PO	Aggregation	Sum of Invoice Spend with contract type "Contract" AND a PO Id
Spend with PO & No Contract	Aggregation	Sum of Invoice Spend with a PO Id and contract type "Non-Contract"
Actual Paid Days	Calculated Measure	Number of days difference between the Invoice Date and Paid Date, if both dates are provided
Invoice Created Before PO Count	Aggregation	Count number of Invoices with Invoice Date earlier than PO Ordered Date

2.43.2.6 Measure in Spend Analysis Price Optimizations (SAP_PROC_SA_PriceOptimizations)

Measure	Type	Formula/Properties
Purchase Price Variance (4Q)	Aggregation	Represents the potential saving opportunities over the last 4 quarters. It is calculated as the sum of the spend (for a specific Part Description and ERP Supplier Name), minus the lowest unit price paid (for the same part and supplier) multiplied by the quantity purchased.
PPV: Unit Price Lowest	Aggregation	Lowest unit price paid for a part (for a specific ERP Supplier), over the last 4 calendar quarters.
PPV: Average Unit Price	Aggregation	Average unit price paid for a part (for a specific ERP Supplier), over the last 4 calendar quarters.
Purchase Price Alignment (4Q)	Aggregation	Represents the potential saving opportunities over the last 4 quarters and the best average unit price. It is calculated as the sum of the spend (for a specific Part Description, ERP Supplier Name, and Company Site Name), minus the best average unit price paid (for the same Part and ERP Supplier) multiplied by quantity purchased.
PPA: Average Unit Price	Aggregation	Average unit price paid (over the last 4 quarters) by a Company Site for a specific part and a specific ERP Supplier.
Spend Optimization Cost (4Q)	Aggregation	Represents the potential saving opportunities over the last 4 quarters and the best average unit price. It is calculated as the sum of the spend (for a specific Part Description and ERP Supplier Name), minus the best average unit price paid multiplied by quantity purchased.
SOC: Average Unit Price	Aggregation	Average unit price paid (over the last 4 quarters) by a supplier for a specific part.

The following limitations and considerations apply to all Spend Analysis stories:

- Diversity and Green information are not available at this time.
- The flex dimension tables are not currently reportable.
- Multi-fact reporting with PO currently only show limited number of PO fields.

• If a user would prefer to analyze the spend data with a custom taxonomy or the UNSPSC, the page filter and reports need to be updated.

• Only the last complete quarter of data can be shown, and partial months/quarters cannot be displayed.

• All measures and reports within a tab are linked together. If a user selects a specific value/range, all measures and reports on the tab will update.

• Only a calendar dates can be selected at this time. It is not possible to display/select a different fiscal calendar.

• All reporting is done in the customer's base currency in the SAP Ariba Analysis system. There is no possibility to report in different currencies or in the original currency.

• The Account, Supplier Parentage, Company Site and Taxonomy hierarchies are not available.

2.43.3 Models

The three stories are using the following Data Warehouse Cloud models. They are all based on a live connection to the SAP Data Warehouse Cloud system. Setup the connection with the name "SAPDWC" if not already available.

Please navigate to the SAP Data Warehouse Cloud content documentation for details.

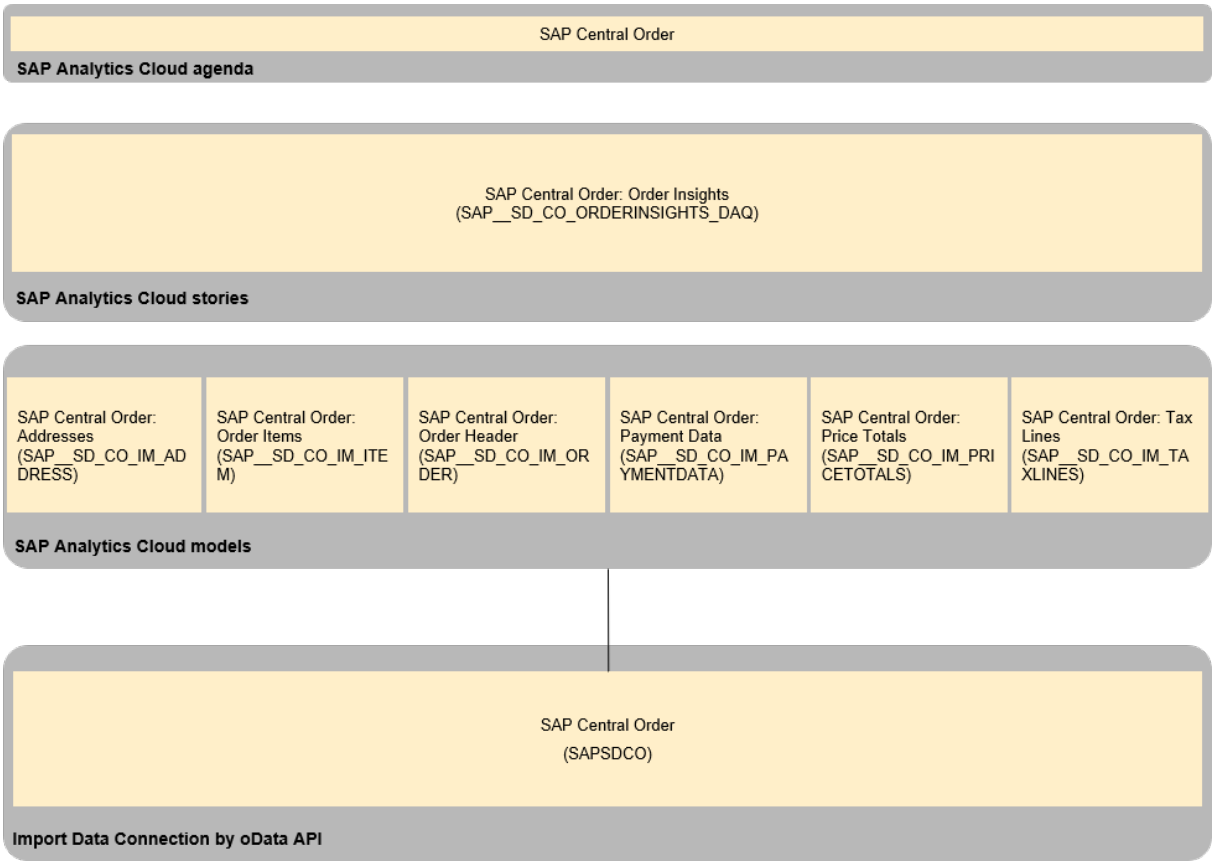
Business Name	Technical Model Name	Connection
SAP Ariba: Spend Analysis	SAP_PROC_SA_RL_SPEND_ANALYSIS	SAPDWC
SAP Ariba: Spend Analysis Part Optimizations	SAP_PROC_SA_RL_PART_OPTIMIZATI	SAPDWC

2.43.4 Known Issues

Issue	Solution	
Number Formatting lost for Chart Type Numeric Point for imported stories	Re-assign the correct Number Formatting in Styling	2016.24.x -
Broken Page Filters in Story "SAP Chemicals: Pipeline Health": Segment, Customer Region and Material Group in combination with table	Use a different chart	2016.24.x fix planned for 2016.25.x

2.44 SAP Central Order

2.44.1 Architecture and Abstract



2.44.2 Order Insights (SAP__SD_CO_ORDERINSIGHTS_DAQ)

Measure Name	Type	Formula/Properties
Number of Orders	Aggregation	- Operation [COUNT] - Measure [Measure 1] by Aggregation Dimension [Dimension 1] - Conditional Aggregation [Yes/No]

2.44.3 Models

2.44.3.1 Addresses (SAP__SD_CO_IM_ADDRESS)

SAP__SD_CO_IM_ADDRESS	Connection
- Model Description: The model contains address related information from the Order, with separate rows per address type, and excluding attributes, that would lead to revealing a connection to a person - Planning Enabled: no	- Connection Type: Import Data Connection to OData Services - Name of the Report : SAPSDCO

Dimensions

Name	Description	Mapping
ID	Generated Identifier	Import Data Connection to Data Services SAPSDCO
addressType	Type of Address (SHIP_TO, BILL_TO)	Import Data Connection to Data Services SAPSDCO
postalCode	Postal Code	Import Data Connection to Data Services SAPSDCO
city	City	Import Data Connection to Data Services SAPSDCO
country	Country	Import Data Connection to Data Services SAPSDCO
state	State	Import Data Connection to Data Services SAPSDCO
orderID	ID of the related Order	Import Data Connection to Data Services SAPSDCO

2.44.3.2 Order Items (SAP__SD_CO_IM_ITEM)

Order Items: SAP__SD_CO_IM_ITEM	Connection
- Model Description: The model represents the line items of an order. - Planning Enabled: no	- Connection Type: Import Data Connection to OData Services - Name of the Report : SAPSDCO

Dimensions

Name	Description	Mapping
ID	Generated Identifier	Import Data Connection to Data Services SAPSDCO
productId	Identifier of the purchased product	Import Data Connection to Data Services SAPSDCO
priceType	Price Type	Import Data Connection to Data Services SAPSDCO
quantityUnit	Unit for the quantity, e.g. EA	Import Data Connection to Data Services SAPSDCO
lineNumber	Line number within the order	Import Data Connection to Data Services SAPSDCO
orderID	ID of the related Order	Import Data Connection to Data Services SAPSDCO

2.44.3.3 Sales Order (SAP__SD_CO_IM_ORDER)

Order Items: SAP__SD_CO_IM_ORDER	Connection
- Model Description: The model represents the sales order information on header level. - Planning Enabled: no	- Connection Type: Import Data Connection to OData Services - Name of the Report : SAPSDCO

Dimensions

Name	Description	Mapping
ID	Generated Identifier	Import Data Connection to Data Services SAPSDCO
marketId	Identifier of the market where the order was created	Import Data Connection to Data Services SAPSDCO
orderStatus	Fulfillment status of the order	Import Data Connection to Data Services SAPSDCO
orderNumber	Consecutive number of the order	Import Data Connection to Data Services SAPSDCO
orderID	ID of the related Order	Import Data Connection to Data Services SAPSDCO
createdAt	Creation date of the order	Import Data Connection to Data Services SAPSDCO
modifiedAt	Last modification date of the order	Import Data Connection to Data Services SAPSDCO
pricingDate	Date when the prices were calculated	Import Data Connection to Data Services SAPSDCO

2.44.3.4 Payment Data (SAP__SD_CO_IM_PAYMENTDATA)

Order Items: SAP__SD_CO_IM_PAYMENTDATA	Connection
- Model Description: The model represents the sales order information on header level. - Planning Enabled: no	- Connection Type: Import Data Connection to OData Services - Name of the Report : SAPSDCO

Dimensions

Name	Description	Mapping
ID	Generated Identifier	Import Data Connection to Data Services SAPSDCO
paymentMethod	Payment Method that was chosen by the ordering party	Import Data Connection to Data Services SAPSDCO
orderID	ID of the related Order	Import Data Connection to Data Services SAPSDCO

2.44.3.5 Price Totals (SAP__SD_CO_IM_PRICETOTALS)

Order Items: SAP__SD_CO_IM_PRICETOTALS	Connection
- Model Description: The model contains information about the prices - Planning Enabled: no	- Connection Type: Import Data Connection to OData Services - Name of the Report : SAPSDCO

Dimensions

Name	Description	Mapping
ID	Generated Identifier	Import Data Connection to Data Services SAPSDCO

Order Items: SAP__SD_CO_IM_PRICETOTALS	Connection	
category	The category of the price totals	Import Data Connection to Data Services SAPSDCO
orderID	ID of the related Order	Import Data Connection to Data Services SAPSDCO
Period	The duration for which the charge is applied when the category is recurring, such as monthly.	Import Data Connection to Data Services SAPSDCO

2.44.3.6 Tax Lines (SAP__SD_CO_IM_TAXLINES)

Order Items: SAP__SD_CO_IM_TAXLINES	Connection	
- Model Description: The model contains information about the taxes. - Planning Enabled: no	- Connection Type: Import Data Connection to OData Services - Name of the Report : SAPSDCO	
Dimensions		
Name	**Description**	**Mapping**
ID	Generated Identifier	Import Data Connection to Data Services SAPSDCO
code	The tax code	Import Data Connection to Data Services SAPSDCO
name	The name of the tax	Import Data Connection to Data Services SAPSDCO
priceTotalId	ID of the related Price Total entry	Import Data Connection to Data Services SAPSDCO

2.45 SAP Entitlement Management

2.45.1 Overview

SAP Entitlement Management (EMS) provides a central entitlement repository with which you can manage and track the entire lifecycle of the entitlements including entitlement generation, operation, and consumption. EMS application is running on SAP Cloud Platform (SCP). The content package is built upon SAP Analytics Cloud (SAC), which is a powerful data acquisition application. EMS Customers can integrate EMS and SAC based on the content and build their own stories or reports because SAC provide powerful function for visible analytics reports.

This document helps you start the analytics journey in SAC that is specific to EMS line of business (LoB). We assume that the reader is familiar with SAP Analytics Cloud and this document does not substitute SAP Analytics Cloud documentation, which can be found here: Help Portal: SAP Analytics Cloud.

What is the purpose of EMS content package?

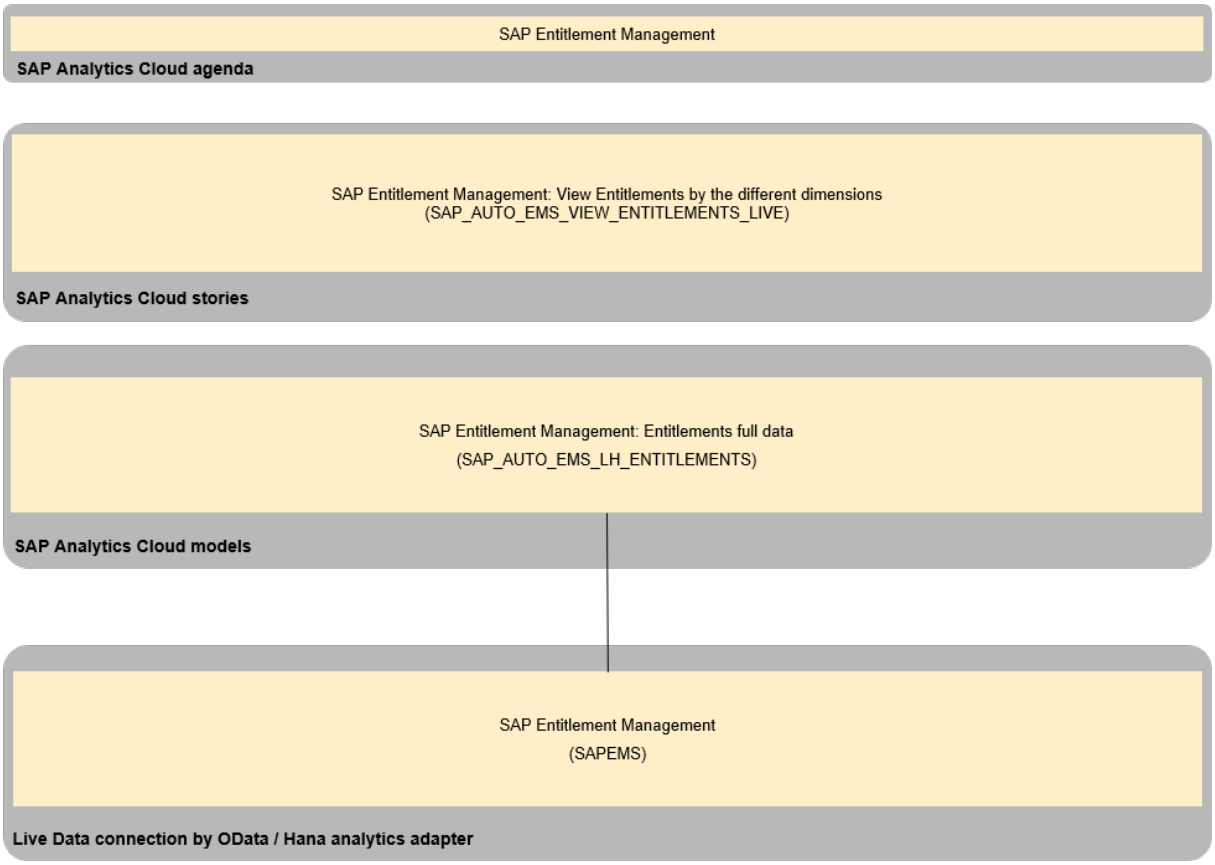
EMS provides 9 different templates in SAC content package story:

- View entitlements per customer
- View entitlements per customer per entitlement model
- View entitlements expiring in a given period
- View entitlements
- View entitlements with different statuses
- View entitlements per offering
- View entitlements by business category
- View entitlements by reference document
- View audit trail for entitlements records

They are the reference to customers. You can use them as your analytics report or you can develop your own reports based on these templates. EMS provide extensionality for SAC to read data from EMS application, you can create your tenant connection by specific tenant url without contact us.

2.45.2 Architecture and Abstract

EMS SAC content helps customers to build their own reports based on the templates of content story. EMS SAC content has only one story with 9 different view templates and one data model, which is based on HANA live data connection to EMS tenant.



2.45.3 Stories

2.45.3.1 View Entitlements by the different dimensions (SAP_AUTO_EMS_VIEW_ENTITLEMENTS_LIVE)

Measure Name	Type	Formula/Properties
Number of Entitlements	Aggregation	• Operation COUNT • Conditional Aggregation No
Number of Valid Entitlements	Aggregation	• Operation COUNT • Conditional Aggregation Yes (within validation period)
Quantity	Aggregation	• Operation SUM • Measure Quantity by Aggregation • Conditional Aggregation No

Measure Name	Type	Formula/Properties
Valid Entitlement Quantity	Aggregation	• Operation SUM • Measure Quantity by Aggregation • Conditional Aggregation Yes (within validation period)
Consumed Quantity	Aggregation	• Operation SUM • Measure Quantity by Aggregation • Conditional Aggregation Yes (consumption records)
Remaining Quantity	Aggregation	• Operation SUM • Measure Quantity by Aggregation • Conditional Aggregation Yes • [Valid Period Quantity] - [Consumed Quantity]

2.45.4 Models

2.45.4.1 Entitlements full data (SAP_AUTO_EMS_LH_ENTITLEMENTS)

Model Name: SAP_AUTO_EMS_LH_ENTITLEMENTS

Model Description: SAP Entitlement Management: Entitlements full data

Planning Enabled: yes

Connection:

- Live Data - SAP HANA
- SAPEMS

Dimensions

Name	Description	Mapping
ParentEntitlementNo	Parent Entitlement No	
EntitlementNo	Entitlement No	
EntitlementModelCode	Entitlement Model Code	
EntitlementModelName	Entitlement Model Name	
EntitlementTypeCode	Entitlement Type Code	

Name	Description	Mapping
EntitlementTypeName	Entitlement Type Name	
UoM	UoM	
ValidFrom	Valid From	
ValidTo	Valid To	
StatusCode	Status Code	
StatusName	Status Name	
CustomerID	Customer ID	
CustomerGroupCode	Customer Group	
CustomerName	Customer Name	
DistributorID	Distributor ID	
DistributorName	Distributor Name	
ThirdPartyID	Third Party ID	
ThirdPartyName	Third Party Name	
SourceSystem	Source System	
CustomerSystem	Customer System	
OfferingSystem	Offering System	
LatestRefDocType	Latest Ref Doc Type	
LatestRefDocNo	Latest Ref Doc No	
LatestRefItemNo	Latest Ref Item No	
OriginationDocType	Origination Doc Type	
OriginationDocNo	Origination Doc No	
OriginationItemNo	Origination Item No	
FolderCode	Folder Code	
FolderName	Folder Name	
TheRight	The Right	
BusinessCategory	Business Category	

Name	Description	Mapping
DistributionChannel	Distribution Channel	
GeoLocation	Geo Location	
OfferingID	Offering ID	
OfferingName	Offering Name	
OfferingCategory	Offering Category	
GenerationMethod	Generation Method	
CreatedBy	Created By	
CreatedByID	Created ByID	
CreatedAt	Created At	
LastChangedBy	Last Changed By	
LastChangedByID	Last Changed ByID	
LastChangedAt	Last Changed At	
RefDocType	Ref Doc Type	Entitlement History Ref Doc Type
RefDocNo	Ref Doc No	Entitlement History Ref Doc No
RefItemNo	Ref Item No	Entitlement History Ref Item No
S_EX_1	S_EX_1	Entitlement Extension Attribute: String
S_EX_200	S_EX_200	
T_EX_1	T_EX_1	Entitlement Extension Attribute: Date
T_EX_30	T_EX_30	
B_EX_1	B_EX_1	Entitlement Extension Attribute: Boolean
B_EX_30	B_EX_30	
N_EX_1	N_EX_1	Entitlement Extension Attribute: Decimal/Boolean
N_EX_100	N_EX_100	

The Extension attributes with the technical names are hidden by default, if you want to use them to show in stories, you can enable specific ones by modifying description with the actual attribute name. The attribute name and technical name mapping can be queried by EMS attribute query API.

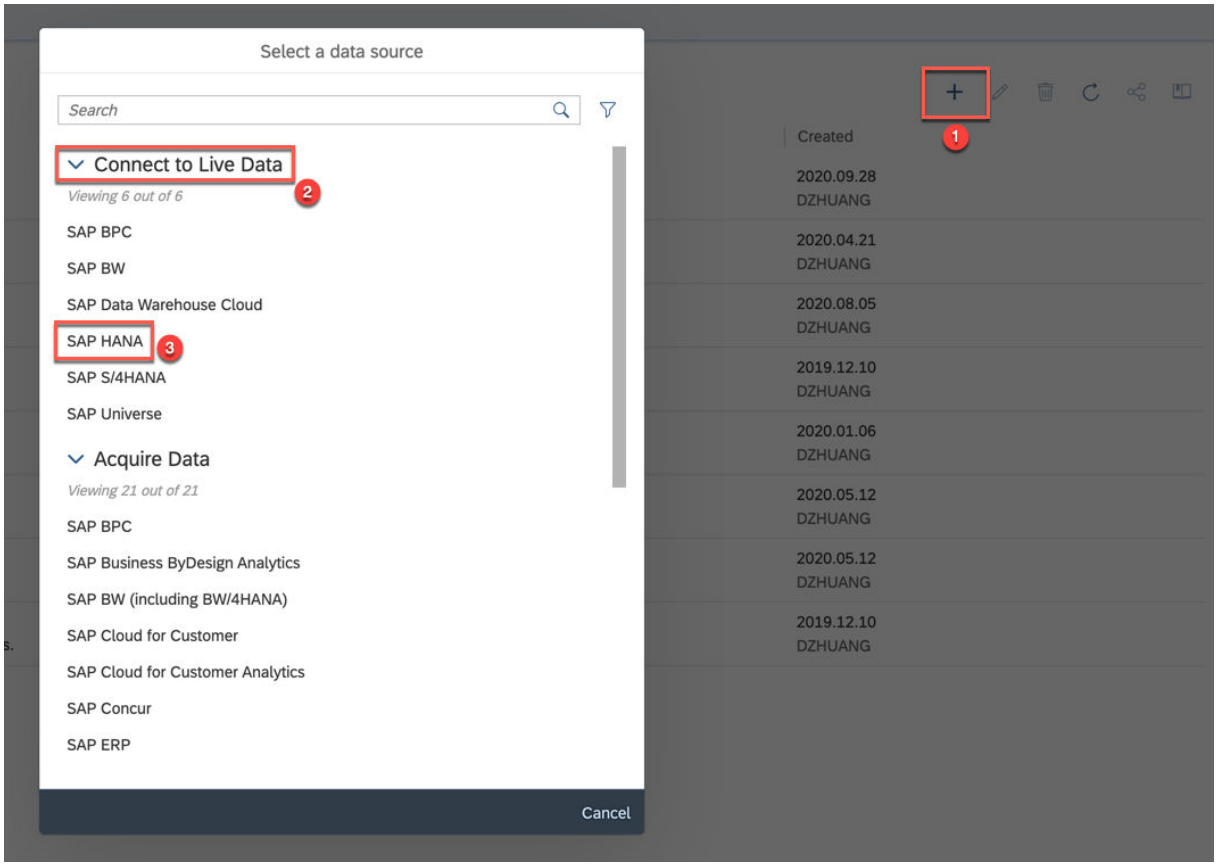
2.45.5 Live Data Connectivity

2.45.5.1 SAP HANA

To connect your EMS tenant to this SAC story, use the existing connection with the name SAPEMS and configure it as described here. You can connect to EMS HANA Service in SAP Analytics Cloud application, based on the following connectivity types.

Configure Data Source

First, you need to go to *Connection* page and add new connection by + at the upper right corner.



Connecting to EMS HANA Service

- Use the connection name **SAPEMS**.
- Select Connection Type **Direct**.
- Provide your EMS tenant URL with this format (with **/sac** suffix). For example, **https://{tenant_id}.ems.cfapps.{region}.hana.ondemand.com/sac/**.

> **Note**
>
> The HTTPS port is 443.

- Select Authentication Method **SAML Single Sign On** and then it will use the IDP on SCP configurated to authenticate.

For more information, see Live Data Connection to SAP HANA Using a Direct Connection and SSO.

2.46 SAP Field Service Management (FSM)

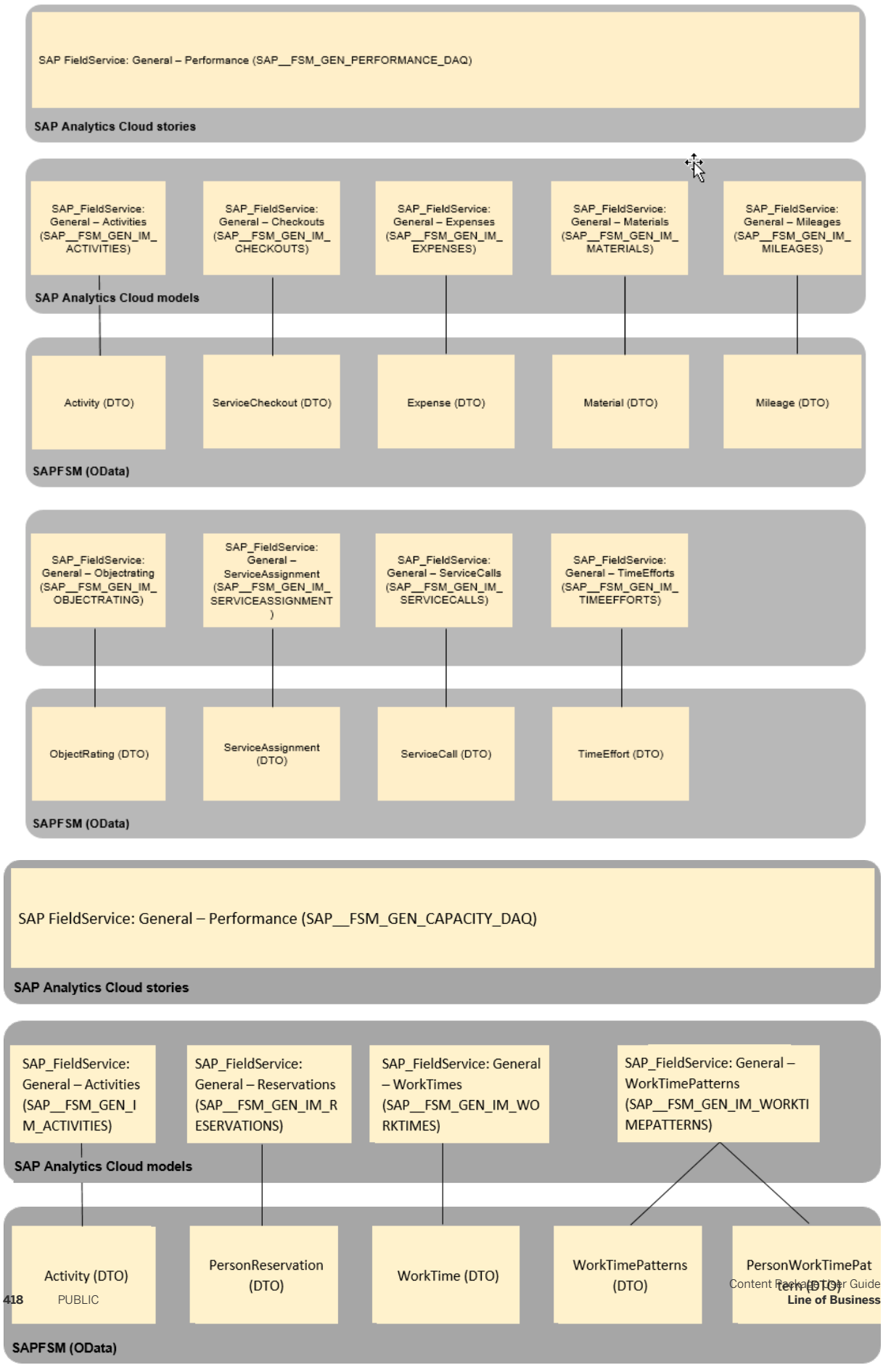
2.46.1 Architecture and Abstract

The Field Service Performance Dashboard SAC content gives an overview of your most important Fields Service KPI's.

It gives information on Service Calls and Activities as well as all the Time and Material Journals.

The Field Service Capacity Overview SAC content gives an overview of available capacity compare to already planned Jobs.

Architecture



The colored objects are documented in this chapter.

The documentation for the greyed-out stories and models can be found in the respective Lines of Business (LoB) chapters.

2.46.2 Stories

2.46.2.1 General – Performance (SAP__FSM_GEN_PERFORMANCE_DAQ)

Measure Name	Type	Formula/Properties
Average Activity duration	Aggregation	Operation [AVERAGE] Measure [Activity Duration] by Aggregation Dimension [Activity Id] Conditional Aggregation [No]
Average Distance traveled	Aggregation	Operation [AVERAGE] Measure [Distance traveled] by Aggregation Dimension [Mileage Id]
Average Number of Activities per Technician	Calculated Measure	[Number of Activities] / [Number of Activity-Technicians]
Average Number of Service Calls per Technician	Calculated Measure	[Number of Service Calls] / [Number of Technicians]
Average Service Call Duration	Aggregation	Operation [AVERAGE excl. 0, NULL] Measure [Service Call duration] by Aggregation Dimension [Service Call Code]
Average TimeEffortDuration	Aggregation	Operation [AVERAGE] Measure [Time Effort Duration] by Aggregation Dimension [Time Effort Id]
Average Travel Duration	Aggregation	Operation [AVERAGE] Measure [Travele Duration] by Aggregation Dimension [Mileage Id]
Business Partners	Aggregation	Operation [COUNT DIMENSION] Aggregation Dimension [Business Partner Code]
Customer Satisfaction	Calculated Measure	[Thumbs Up] / [Number of Ratings]

Measure Name	Type	Formula/Properties
Equipments	Aggregations	- Operation [COUNT DIMENSION] - Aggregation Dimension [Equipment Code]
FirstTimeFixRate	Calculated Measure	1- ([Followup] / [Closed])
Number of Business Partners	Aggregation	Operation [COUNT DIMENSION] Aggregation Dimension [SAP FieldService: General - BusinessPartners]
Number of Equipments	Aggregation	Operation [COUNT DIMENSION] Aggregation Dimension [SAP FieldService: General - Equipments]
Number of Technicians	Aggregation	Operation [COUNT DIMENSION] Aggregation Dimension [User Name]

2.46.2.2 General – Capacity Overview (SAP__FSM_GEN_CAPACITY_DAQ)

Measure Name	Type	Formula/Properties
Backlog Assignments	Restricted Measure	Measure [Activity Duration] Dimensions [External Resource] Values [no Value]
Internal Assignments	Restricted Measure	Measure [Activity Duration] Dimensions [External Resource] Values [false]
External Assignments	Restricted Measure	Measure [Activity Duration] Dimensions [External Resource] Values [true]
Total Assignments	Calculated Measure	["SAP__FSM_GEN_IM_ACTIVITIES":Duration]
Number of assigned Technicians	Aggregation	Operation [COUNT DIMENSIONS] Aggregation Dimension [Persons ID]

Measure Name	Type	Formula/Properties
Number of Available Technicians	Aggregation	Operation [COUNT DIMENSIONS] Aggregation Dimension [User Name]
Number of Backlog Service Calls	Calculated Measure	[Number of Service Call] Filter on External Resource [no Value]
External Capacity	Calculated Measure	["SAP__FSM_GEN_IN_WORKTIMEPATTERNS":ExternalCapacity] ["SAP__FSM_GEN_IM_WORKTIMES":ExternalWorktime] ["SAP__FSM_GEN_IM_RESERVATIONS":externalReservation]
Internal Capacity	Calculated Measure	Operation [COUNT DIMENSION] Aggregation Dimension [Business Partner Code]
Total Capacity		["SAP__FSM_GEN_IN_WORKTIMEPATTERNS":Capacity] ["SAP__FSM_GEN_IM_WORKTIMES":Duration] ["SAP__FSM_GEN_IM_RESERVATIONS":Reservations]
External Workload	Calculated Measure	[#External Assignments] / [#External Capacity]
Internal Workload	Calculated Measure	[#Internal Assignments] / [#Internal Capacity]
Total Workload	Calculated Measure	[#Total Assignments] / [#Total Capacity]
Number of External Activities	Restricted Measure	Measure [Number of Activities] Dimensions [External Resource] Values [true]
Number of Internal Activities	Restricted Measure	Measure [Number of Activities] Dimensions [External Resource] Values [false]
Number of Backlog Activities	Restricted Measure	Measure [Number of Activities] Dimensions [External Resource] Values [no Value]
Technician with Absences	Aggregation	Operation [COUNT DIMENSIONS] Aggregation Dimension [User Name]

Measure Name	Type	Formula/Properties
Total Absences	Calculate Measure	["SAP__FSM_GEN_IM_WORK-TIMES":Duration] + ["SAP__FSM_GEN_IM_RESERVA-TIONS":Reservations]
Technician with Reservations		Operation [COUNT DIMENSIONS] Aggregation Dimension [User Name]
Average Exclusive Resererv ations per Technician	Calculated Measure	["SAP__FSM_GEN_IM_RESERVA-TIONS":Reservations] / [#Technician with Reservations]
Average Absences per Technician	Calculate Measure	[SAP__FSM_GEN_IM_WORKTIMES:Ab-sence] / [#Technicians with Absences]

2.46.3 Models

2.46.3.1 General – Activities (SAP__FSM_GEN_IM_ACTIVITIES)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General - Activities • Planning Enabled: No		Import Data Connection to OData Serv-ices: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Activities	Number of Activities	F: 1
Activity_InDispatching	Activities in Dispatching	F: IF ([executionStage] = " DISPATCH-ING", 1, 0)
Activity_InExecution	Activities in Execution	F: IF (([executionStage]= " EXECU-TION", 1, 0)
Activity_InPlanning	Activities in Planning	F: IF (([executionStage]= " PLANNING", 1, 0)
Closed	Closed Activities	IF([status] = "CLOSED" and [previou-sActivity]="#",1,0)
CreateDateTime_TS	Activity CreateDateTime TimeStamp	M: [createDateTime/ts]
Duration	Activity Duration	F: ([endDateTime/ts] - [startDateTime/ts]) / 3600
Duration_SC	Service Call Duration	F: IF([object]="SERVICECALL", [Dura-tion], 0)
EndDateTime_TS	Activity EndDateTime TimeStamp	M: [endDateTime/ts]

Model Name: Technical Name of Model		Connection
Followup	Followup Activities	F: IF([previousActivity]="#" ,0 ,1)
StartDateTime_TS	Activity StartDateTime TimeStamp	M: [startDateTime/ts]
Dimensions		
Name	Description	Mapping
Time*	Time	CreateDateTime/date
Account*	Account	
Id	Activity Id	id
Status	Activity Status	status
Object	Object	object
PreviousActivity	Previous Activity	previousActivity
SAP_FSM_GEN_ADDRESS	SAP FieldService: General Addresses	address
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partners	businessPartners
SAP_FSM_GEN_EQUIPMENT	SAP FieldService: General – Equip-ments	equipments
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	responsibles
Additional Notes about the model		
Provide additional information about the model if needed		

* Private dimension, other dimensions are public

2.46.3.2 General – Checkouts (SAP__FSM_GEN_IM_CHECKOUTS)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – Checkouts • Planning Enabled: No		Import Data Connection to OData Serv-ices: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Checkouts	Number of Checkouts	F: 1
CreateDateTime_TS	Checkout CreateDateTime TimeStamp	M: createDateTime/ts
Dimensions		
Name	Description	Mapping
Time*	Time	CreateDateTime/date
Account*	Account	

Model Name: Technical Name of Model		Connection
Activity	Activity	activities
Id	Id	id
Additional Notes about the model Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public

2.46.3.3 General – Expenses (SAP__FSM_GEN_IM_EXPENSES)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General - Expenses • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
ChargeableExpenses	Chargeable Expenses	F: IF ([chargeOption]="CHARGEABLE", 1, 0)
Expenses	Number of Expenses	F: 1
ExternalAmount		M: [externalAmount/amount]
InternalAmount		M: [internalAmount/amount]
NoChargeOption	Undefined Charge Option	F: [Expenses] - [ChargeableExpenses] - [NonChargeableExpenses]
NonChargeableExpenses	Non Chargeable Expenses	F: IF ([chargeOption]="NONCHARGEABLE", 1, 0)
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	
Activity	Linked Activity	Activity/id
ChargeOption	Expense Charge Option	chargeOption
ExternalCurrency	Expense External Currency	externalAmount/currency
Id	Id	id
InternalCurrency	Expense Internal Currency	internalAmount/currency
ServiceCall	Service Call linked via Acitivity	Activity/object/objectId

Model Name: Technical Name of Model		Connection
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partners	Activity/businessPartners
SAP_FSM_GEN_EQUIPMENT	SAP FieldService: General – Equip-ments	Activity/equipment
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
SAP_FSM_GEN_EXPENSETYPE	SAP FieldService: General – Expense-types	type
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.4 General – Materials (SAP__FSM_GEN_IM_MATERIALS)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General - Materials • Planning Enabled: No		Import Data Connection to OData Serv-ices: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
ChargeableMaterial	Chargeable Material	F: IF ([chargeOption]="CHARGEABLE", 1, 0)
Material	Number of Material	F: 1
NoChargeOption	Undefined Charge Option	F: [Expenses] - [ChargeableMaterial] - [NonChargeableMaterial]
NonChargeableMaterial	Non Chargeable Material	F: IF ([chargeOption]="NONCHARGEA-BLE", 1, 0)
Price	Material Price	M: [unitPrice/amount]
Quantity	Material Quantity	M: [quantity]
TotalPrice	Total Material Price	F: [Price] * [quantity]
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	

Model Name: Technical Name of Model		Connection
Activity	Linked Activity	Activity/id
ChargeOption	Expense Charge Option	chargeOption
ExternalCurrency	Expense External Currency	externalAmount/currency
Id	Id	id
InternalCurrency	Expense Internal Currency	internalAmount/currency
ServiceCall	Service Call linked via Acitivity	Activity/object/objectId
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partners	Activity/businessPartners
SAP_FSM_GEN_EQUIPMENT	SAP FieldService: General – Equip-ments	Activity/equipment
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.5 General – Mileages (SAP__FSM_GEN_IM_MILEAGES)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – Mileages • Planning Enabled: No		Import Data Connection to OData Serv-ices: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
ChargeableMileages	Chargeable Mileages	F: IF ([chargeOption]="CHARGEABLE", 1, 0)
Distance	Distance traveled	M: distance
Duration	Travel Duration	F: ([travelEndDateTime/ts] - [travel-StartDateTime/ts]) / 3600
Mileages	Number of Mileages	F: 1
NoChargeOption	Undefined Charge Option	F: [Expenses] - [ChargeableMileage] - [NonChargeableMileage]
NonChargeableMileages	Non Chargeable Mileages	F: IF ([chargeOption]="NONCHARGEA-BLE", 1, 0)

Model Name: Technical Name of Model		Connection
PrivateCarDistance	Distance traveled with a Private Car	F: IF ([privateCar] = TRUE,[Distance], 0)
PrivateCarMileages	Mileages with Private Car	F: IF ([privateCar] = TRUE, 1, 0)
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	
Activity	Linked Activity	Activity/id
ChargeOption	Expense Charge Option	chargeOption
Id	Id	id
PrivateCar	Was a private car used	privateCar
ServiceCall	Service Call linked via Acitivity	Activity/object/objectId
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partners	Activity/businessPartners
SAP_FSM_GEN_EQUIPMENT	SAP FieldService: General – Equip-ments	Activity/equipment
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
Additional Notes about the Model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.6 General – Reservations (SAP__FSM_GEN_IM_RESERVATIONS)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – Reservation • Planning Enabled: No		Import Data Connection to OData Serv-ices: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Duration	Duration	([endDateTime/ts] - [startDateTime/ts]) / 3600
ExternalReservation	External Reservation	F: IF([Person/externalResource] = "true", [Reservations], 0)

Model Name: Technical Name of Model		Connection
InernalReservation	Inernal Reservation	F: IF([Person/externalResource] = "false", [Reservations] ,0)
Reservations	Reservation	IF([Duration] > 8, 8, [Duration])
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	StartDateTime/date
Account*	Work Time Pattern	name
Id	Id	Id
Eclusive	Exclusive	exclusive
External	External	external
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partner	businessPartner
Additional Notes about the model		
Provide additional information about the model if needed.		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.7 SAP FieldService: General – Requirement (SAP__FSM_GEN_IM_REQUIREMENT)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – Requirement • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Count	Number of Skills	F:1
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Default Date 202001
Account*	Account	
Activity*	Linked Activity	Activity/id

Model Name: Technical Name of Model		Connection
Id	Id	id
SAP_FSM_GEN_SKILL	SAP FieldService: General – Skills	tag
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.8 General – ObjectRating (SAP__FSM_GEN_IM_OBJECTRATING)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General - ObjectRating • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Bad	Thumbs Down	F: IF ([Rating]>=2, 1, 0)
Good	Thumbs Up	F: IF ([Rating]<=1, 1, 0)
Rating	Rating value	M: [rating]
Ratings	Number of Ratings	F: 1
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	
Checklout	Link to Checkout	Object/objectId
Id	Id	id
Additional Notes about the model		
Provide additional information about the model if needed		

2.46.3.9 General – ServiceAssignment (SAP__FSM_GEN_IM_SERVICEASSIGNMENT)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – ServiceAssignment • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
CreateDateTime_TS	Assignment Create DateTime TimeStamp	M: [createDateTime/ts]
ReleasedDateTime_TS	AssignmentReleased DateTime TimeStamp	M: [releaseDateTime/ts]
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	
Activity*	Linked Activity	Activity/id
Id	Id	id
ReleasedDateTime*	Assignment Released DateTime	releasedDateTime/date
ServiceCall*	Service Call linked via Activity	Activity/object/objectId
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public public.

2.46.3.10 General – ServiceCalls (SAP__FSM_GEN_IM_SERVICECALLS)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – ServiceCalls • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**

Model Name: Technical Name of Model		Connection
CreateDateTime_TS	Service Call CreateDateTime Time-Stamp	M: [createDateTime/ts]
Duration	Service Call Duration	F: IF((([endDateTime/ts]-[startDate-Time/ts]) / 3600) < 0, 0, ([endDate-Time/ts] - [startDateTime/ts]) / 3600)
EndDateTime_TS	Service Call EndDateTime TimeStamp	M: [endDateTime/ts]
ServiceCalls	Number of Service Calls	F: 1
StartDateTime_TS	Service Call StartDateTime TimeStamp	M: [startDateTime/ts]
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	
Code	Service Call code	Code
Id	Id	id
Priority	Service Call Priority	priority
ProblemType	Service Call Problem Type	problemTypeCode
SCType	Service Call Type	type
Status	Service Call status	statusCode
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partners	businessPartners
SAP_FSM_GEN_EQUIPMENT	SAP FieldService: General – Equip-ments	equipments
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	responsibles
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.11 SAP FieldService: General – Skills (SAP__FSM_GEN_IM_Skills)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – Skills • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Count	Number of Skills	F:1
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	Default Date 202001
Account*	Account	
Code	Service Call code	Code
Id	Id	id
SAP_FSM_GEN_SKILL	SAP FieldService: General – Skills	tag
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	person
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.12 General – TimeEfforts (SAP__FSM_GEN_IM_TIMEEFFORTS)

Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General – TimeEfforts • Planning Enabled: No		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
ChargeableEfforts	Chargeable Efforts	F: IF ([chargeOption]="CHARGEABLE", 1, 0)

Model Name: Technical Name of Model		Connection
Duration	Travel Duration	F: ([travelEndDateTime/ts] - [travel-StartDateTime/ts]) / 3600
NoChargeOption	Undefined Charge Option	F: [Expenses] - [ChargeableExpenses] - [NonChargeableExpenses]
NonChargeableEfforts	Non Chargeable Time Efforts	F: IF ([chargeOption]="NONCHARGEA-BLE", 1, 0)
TimeEfforts	Number of Time Efforts	F: 1
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	CreateDateTime/date
Account*	Account	
Activity	Linked Activity	Activity/id
ChargeOption	Expense Charge Option	chargeOption
Id	Id	id
ServiceCall	Service Call linked via Acitivity	Activity/object/objectId
SAP_FSM_GEN_BUSINESSPARTNER	SAP FieldService: General – Business-Partners	Activity/businessPartners
SAP_FSM_GEN_EQUIPMENT	SAP FieldService: General – Equip-ments	Activity/equipment
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
SAP_FSM_GEN_TIMETASK	SAP FieldService: General – TimeTasks	task
Additional Notes about the Model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.13 General – WorkTimePatterns (SAP__FSM_GEN_IM_WORKTIMEPATTERNS)

Model Name: Technical Name of Model		Connection
Model Description: SAP FieldService: General – WorkTimePatterns Planning Enabled: No		Import Data Connection to OData Serv-ices: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**

Model Name: Technical Name of Model		Connection
Capacity	Overall Capacity	([endDateTime/ts] - [startDateTime/ts]) / 3600
ExternalCapacity	ExternalCapacity	F: IF([Person/externalResource]= "true" , [Capacity] ,0)
InernalCapacity	InernalCapacity	F: IF([Person/externalResource]= "false" , [Capacity] ,0)
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	StartDateTime/date
Account*	Work Time Pattern	name
WorkTimePattern	Linked Activity	Activity/id
From	Work Time Pattern Start Time	startDateTime/date
To	Work Time Pattern End Time	endDateTime/date
external	external	Person/externalResource
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
Additional Notes about the model		
Provide additional information about the model if needed.		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.3.14 General – WorkTime (SAP__FSM_GEN_IM_WORKTIME)

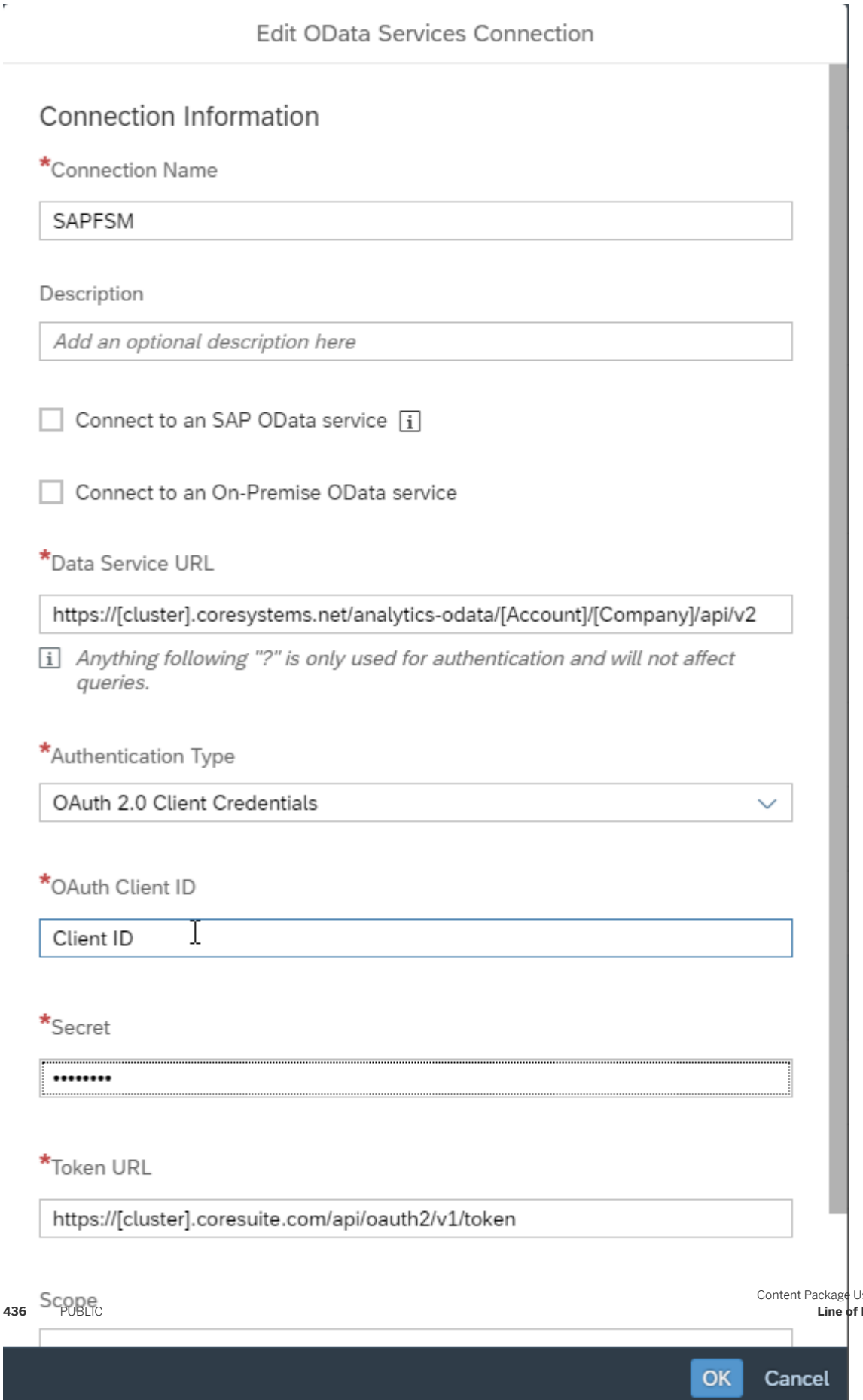
Model Name: Technical Name of Model		Connection
• Model Description: SAP FieldService: General - Worktimes • Planning Enabled: no		Import Data Connection to OData Services: SAPFSM
Account		
ID	**Description**	**Mapping(M)/Formula(F)**
Duration	Duration	([endDateTime/ts] - [startDateTime/ts]) / 3600
Reservation Duration	Duration	F: IF([Duration] > 8, 8, [Duration])
ExternalWorktime	External Worktime	F: IF([Person/externalResource] = "true", [ReservationDuration], 0)

Model Name: Technical Name of Model		Connection
InernalWorktime	Inernal Worktime	F: IF([Person/externalResource] = "false",ReservationDuration] ,0)
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	StartDateTime/date
Account*	Work Time Pattern	name
Id	Id	Id
Task	Task	Task
SAP_FSM_GEN_PERSON	SAP FieldService: General – Persons	createPerson
Additional Notes about the model		
Provide additional information about the model if needed		

> **i** Note
>
> * Private dimension, other dimensions are public.

2.46.4 OData Service

To connect your FSM solution to this SAC story the SAPFSM connection must be set up correctly:

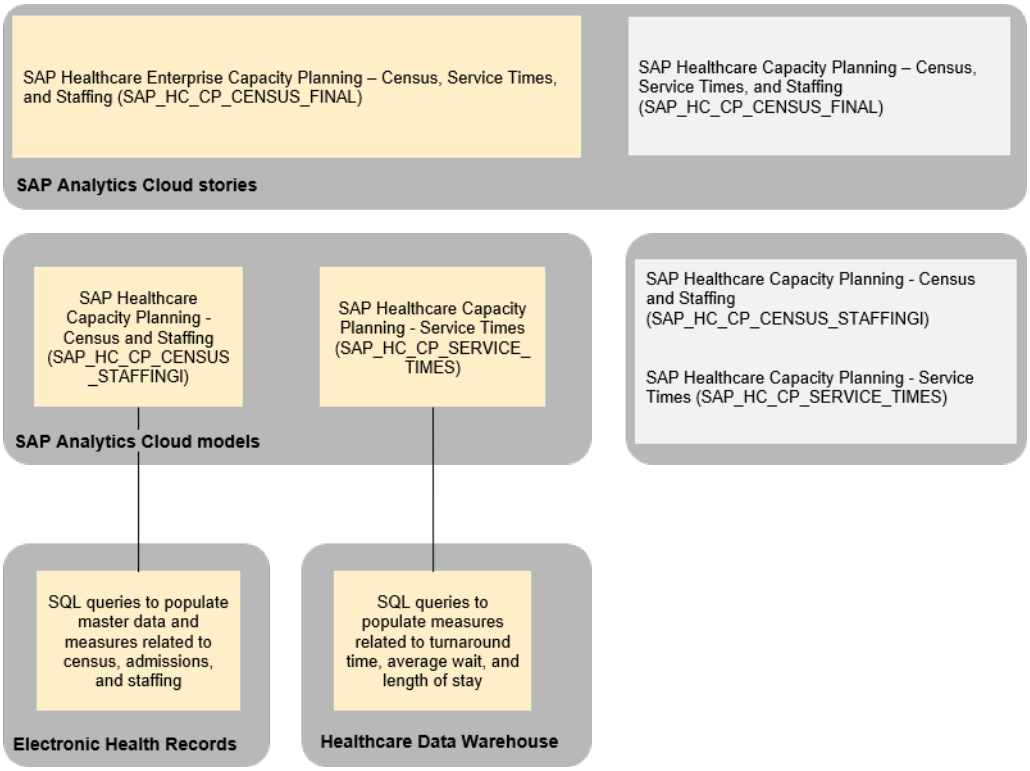


- Data Service URL: https://[cluster].coresystems.net/analytics-odata/[account]/[company]/api/v2
- OAuth Client ID: your Client ID
- Secret: your secret
- Token URL: https://[cluster].coresuite.com/api/oauth2/v1/token
  [cluster]: eu, de, us or cn (depending on your setup)
  [account]: your account
  [company]: your company

2.47 SAP Healthcare Enterprise Capacity Planning

2.47.1 Architecture and Abstract

Healthcare providers are faced with a growing need to better understand and manage critical care capacity for their entire enterprise. Understanding patient volumes from a historical perspective is valuable, but knowing what's happening today, and ultimately planning for tomorrow, is mission critical when managing an uncertain healthcare demand, especially during a pandemic. This pre-built content enables decision-makers at hospitals and health systems of all sizes to predict and manage surges, in the emergency department and throughout their facilities. These decision-makers need the ability to accurately estimate critical care staffing requirements and predict equipment and supply needs based on operational data currently buried in multiple disparate systems.



2.47.2 Stories

SAP Healthcare - Capacity Planning and Staffing (SAP_HC_CP_CAPACITY_AND_STAFFING)

In this story, we provide a view into important hospital metrics, broken down by department and service line. The Overview tab gives insights into census, admissions, transfers, and discharges, both for the current day, and over a monthly time series. The ED Arrivals tab is a deep dive on the Emergency Department, highlighting key metrics such as average wait time, turnaround discharge time, and average length of stay. The ED tab breaks down metrics for the Emergency Department by service line and by diagnosis, enabling detailed breakdowns by hour of the day and by shift. Hospital Inpatient compares ICU and Non-ICU metrics and a view of occupancy over time. The Staffing tab is focused on nurses, and compares the actual nurses staffed to the anticipated needs based on historical data.

2.47.2.1 SAP Healthcare - Capacity Planning and Staffing (SAP_HC_CP_CAPACITY_AND_STAFFING)

Measure Name	Type	Formula/Properties
ICU	Restricted Measure	Measure [Occupancy] restricted by [Department] on [Cardiology]
Non-ICU	Restricted Measure	Measure [Occupancy] restricted by [Department] on [Anesthesiology, Endocrinology, Family medicine, Internal Medicine, Neonatology, Neurology, Obstetrics and Gynecology, Surgery] Measure [Occupancy] restricted by [Department] on [Anesthesiology, Endocrinology, Family medicine, Internal Medicine, Neonatology, Neurology, Obstetrics and Gynecology, Surgery]

2.47.3 Models

2.47.3.1 SAP Healthcare Enterprise Capacity Planning - Census and Staffing (SAP_HC_CP_CENSUS_STAFFING)

Model Name: SAP_HC_CP_CENSUS_STAFFING		**Connection**
- Model Description: SAP Healthcare Enterprise Capacity Planning - Census and Staffing - Planning Enabled: no		- Import Data Connection to an SQL Database
Account Census		
ID	Description	Mapping/Formula
ADM1	Admissions	From data load
BED1	Beds Available	[BED1_INT]
BED1_INT	Beds Available (Interim)	[MAX1]-[OCC1]
DIS1	Discharges	From data load
MAX1	Max Occupancy	[MAX_INT]
MAX_INT	Max Occupancy (Interim)	[d/Department].[p/DeptMaxOcc]
NUR1	Nurses Staffed	From data load
OCC_PCT	Occupancy %	IF([MAX1]=0 ,0 ,[OCC1]/[MAX1])
OCC1	Occupancy	From data load
TRAN1	Transfers	From data load

Dimensions

Name	**Description**	**Mapping**
CensusDate	Census Date	
AccountCensus	AccountCensus	
Department	Department	
Service	Service	
CensusDayOfWeek	Census (Day of Week)	
CensusHour	Census (Hour)	
Additional Notes about the model		

Name	Description	Mapping
This model provides day and hour level granularity for the hospital census and staffed nurses, with planned and actual values Model uses Max Occupancy property of Department dimension in calculations. This value must be populated when loading master data from source. A hidden, interim account is utilized to apply exception aggregation to the **Beds Available** measure, in order to accurately represent values by day and by hour. Sample data is provided to illustrate required granularity and structure of dimension master data. Models are to be populated from customer-specific data sources.		

2.47.3.2 SAP Healthcare Enterprise Capacity Planning - Service Times (SAP_HC_CP_SERVICE_TIMES)

Model Name: SAP_HC_CP_SERVICE_TIMES		Connection
Model Description: SAP Healthcare Enterprise Capacity Planning - Service Times - Planning Enabled: no		- Import Data Connection to an SQL Database
Account Census		
ID	**Description**	**Mapping/Formula**
AST1	Arrival to Service Time	From data load
DIAG1	Diagnoses	From data load
LOS1	Length of Stay	From data load
PAT1	Patients	From data load
TDT1	Turnaround Time	From data load
WT1	Wait Time	From data load

Dimensions

Name	Description	Mapping
AdmissionDate	Census Date	
AccountServiceTimes	AccountCensus	
Department	Department	
Service	Service	
DRG	DRG	
PrimaryDiagnosis	Primary Diagnosis	

Name	Description	Mapping
BoarderFlag	Boarder Flag	

Additional Notes about the model

This model provides day level granularity for hospital service times such as wait time, length of stay, and turnaround discharge time. It also provides aggregated patient and diagnoses counts.

Model uses Average exception aggregation for all times across Department, Service, AdmissionDate, DRG, and Primary-Diagnosis.

Sample data is provided to illustrate required granularity and structure of dimension master data. Models are to be populated from customer-specific data sources.

2.48 SAP Intelligent Asset Management

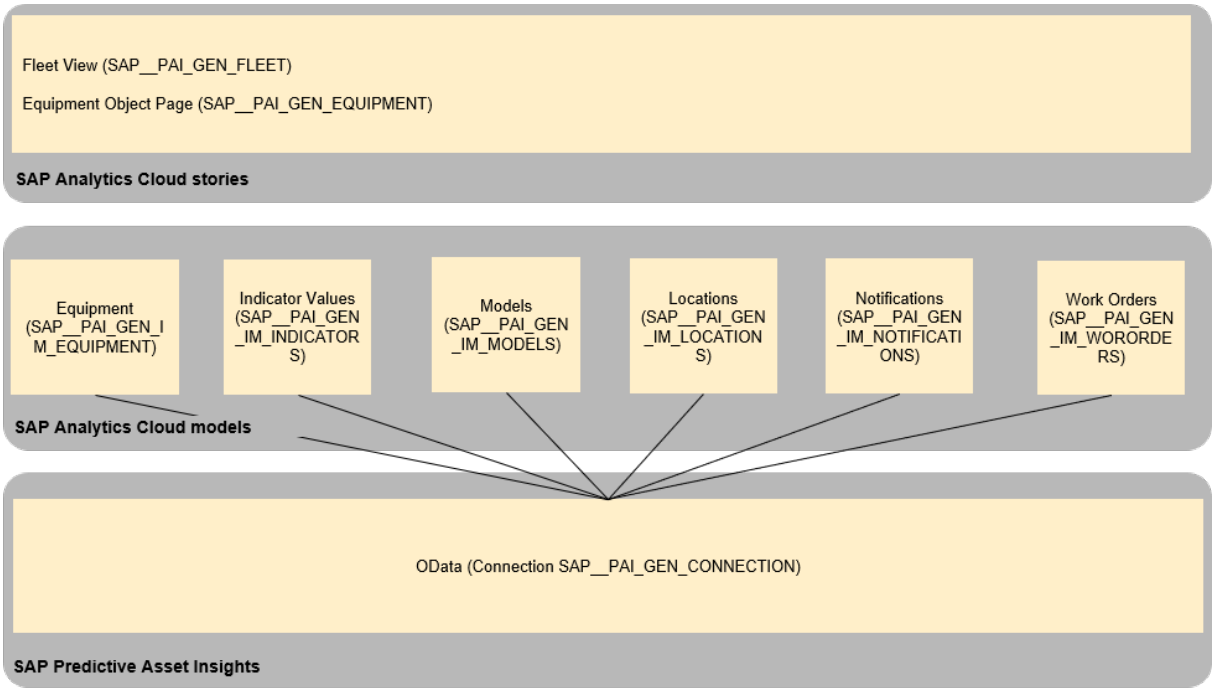
2.48.1 Architecture and Abstract

SAP Intelligent Asset Management (IAM) SAP Analytics Cloud (SAC) content provides:

- Seven models, one for each of the OData APIs which you can use in IAM to extract data to SAC. These are:
  - Equipment
  - Indicator Values (the last one)
  - Models
  - Notifications
  - Work Orders
  - Locations
  - Spare parts
- Two sample stories, mostly based on the first five of the seven models above.
- A sample connection.
- Sample data for each model.

One of the stories (...Fleet) is intended to be shown in the IAM Analytics Dashboards application. The other story (...Equipment) is intended to be shown on the IAM equipment object page. There are no sample stories for the other three IAM applications where SAC can be displayed, Models, Locations, Spare Parts.

Due to the limited nature of the data being exposed in the OData APIs these SAC stories are supposed to just illustrate what the data could look like in SAC stories in IAM. They are supposed to highlight some SAC functions like story tabs, page filters, and dimension selectors. They are not supposed to be stories delivering fully-fledged business insights based on common work practices.



2.48.2 IAM Configuration for SAC (and SAC Connection)

2.48.2.1 SAC Connection

The configuration for the SAC connection is documented in the IAM help pages, e.g. for PdMS here (select the latest release).

The included sample connection has the Data Service URL provided, but each customer must add their specific other credentials.

2.48.2.2 IAM Configuration

The configuration of SAC in IAM is described in the IAM help pages, e.g. for PdMS here (select the latest release).

2.48.3 Stories

These stories are included:

- Fleet View (SAP__IAM_GEN_FLEET)
- Equipment Object Page (SAP__IAM_GEN_EQUIPMENT)

2.48.3.1 Fleet View (SAP_IAM_GEN_FLEET)

This story is intended to show in the IAM Analytics Dashboards application. It has six pages:

- Count and Breakdowns
- Map
- Indicators
- Health Scores
- Tables
- Notification History

Counts and Breakdowns shows six key indicators on the left, which are all counts of the corresponding six business object types, from the six models. Above the key indicators is a page filter for equipment IDs. To the right of key figures are bar charts, one for each business object type. They show the count of business objects by a dimension. The dimension can be selected in the control above each chart.

Map shows the geospatial location of the equipment on a map.

Indicators and Health Scores show the last indicator values for equipment. The first tab shows all indicators, and they can be filtered by equipment and indicator IDs. The second tab show just an indicator called Health Score, and adds a threshold to show good and bad values.

The other two pages are merely for illustrative purposes, to show that SAC offers the ability to show tables and charts for timelines.

2.48.3.2 Equipment Object Page (SAP_IAM_GEN_EQUIPMENT)

This story is intended to show in the PAI Equipment application on its object page. It has one pages:

- Notification / Work Order Breakdown

Notification / Work Order Breakdown shows a count of notifications and work orders, shown as a key figure, in a chart by type and status, and in another bar chart where the user can select the dimension by which to break down the count.

All charts are just for illustrative purposes, to show what data could look like in the equipment object page.

2.48.4 Models

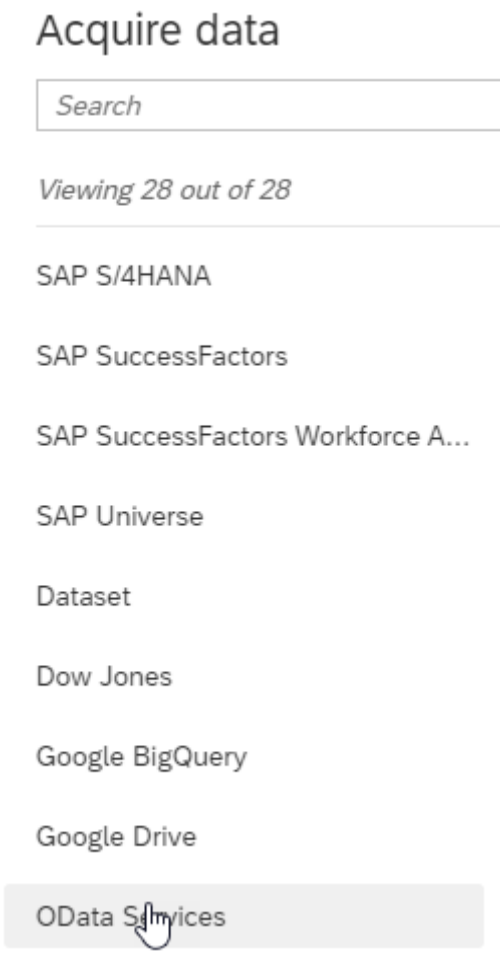
Context

There are seven models provided, one for each of the available OData APIs in IAM.

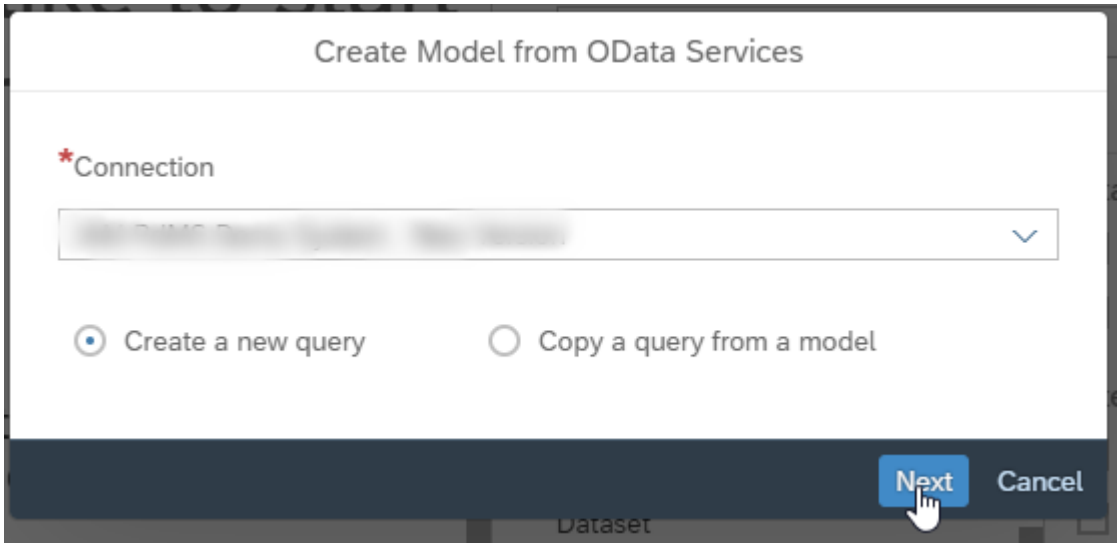
Model Name	Technical Name of Model
Equipment	SAP__IAM_GEN_IM_EQUIPMENT
Indicator Values	SAP__IAM_GEN_IM_INDICATOR
Models	SAP__IAM_GEN_IM_MODELS
Locations	SAP__IAM_GEN_IM_LOCATIONS
Spare Parts	SAP__IAM_GEN_IM_SPAREPARTS
Notifications	SAP__IAM_GEN_IM_NOTIFICATIONS
Work Orders	SAP__IAM_GEN_IM_WORORDERS

For each of the models all attributes available in the OData API were included. Apart from the indicator values the attributes are all dimensions, there are no measures. Note that SAC adds a measure on its own for models without measures. The available attributes are pretty self-explanatory when you call the IAM OData API in SAC. They are not separately listed here. How to see the available attributes:

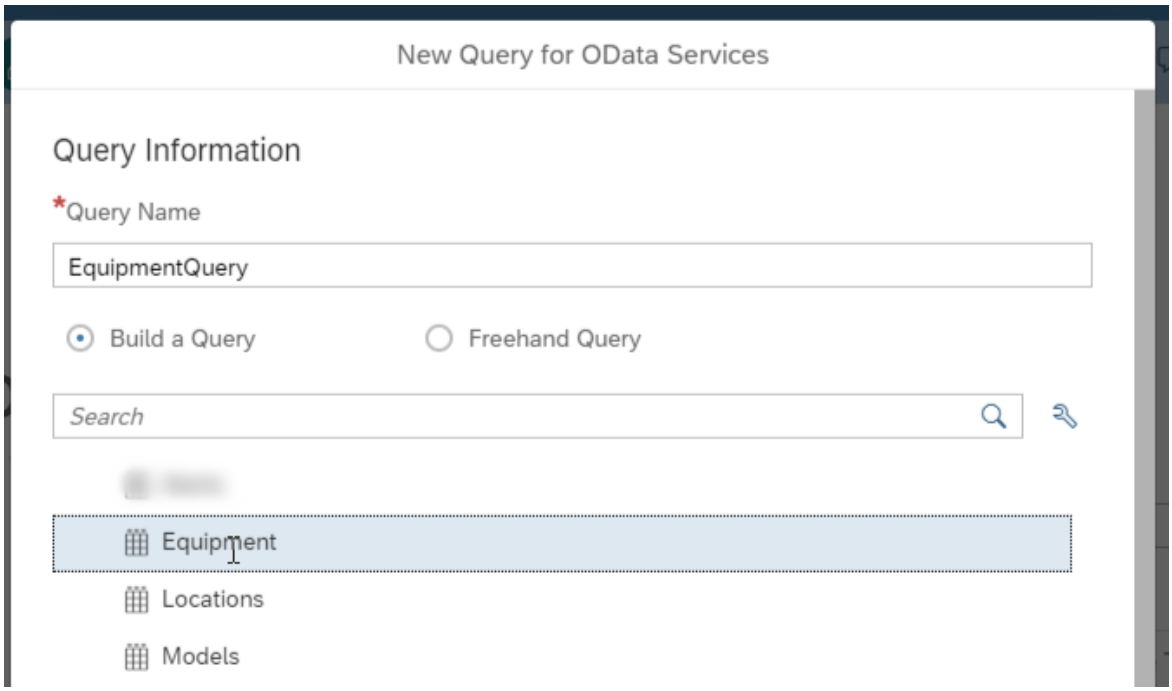
Procedure



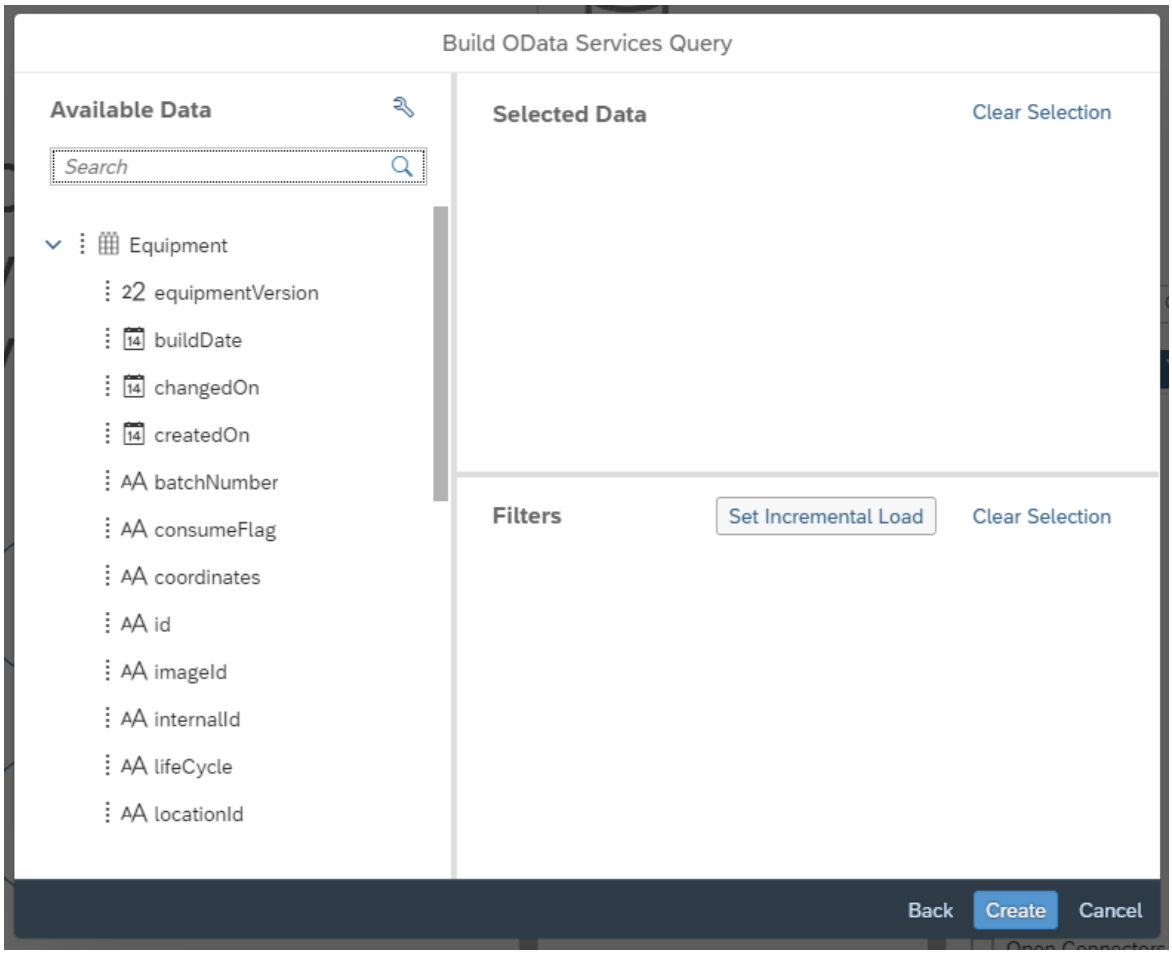
1. Launch function to import data via OData.
2. Select the appropriate connection to your source system.



3. Select the OData service for the desired business object type.



4. You can see a list of all attributes.



> **i** Note
>
> - In the provided models also better human-readable versions of the technical attribute names were provided.
> - In the equipment model the source attribute for "Coordinates" has been split into a latitude and a longitude attribute, and the model has been geo-enabled.
> - In the indicator value model, the source attribute for "Value" has been split into a value attribute for numeric values (which is then made the measure), and another for non-numeric values (boolean, text, date).

2.49 SAP Integrated Business Planning (IBP)

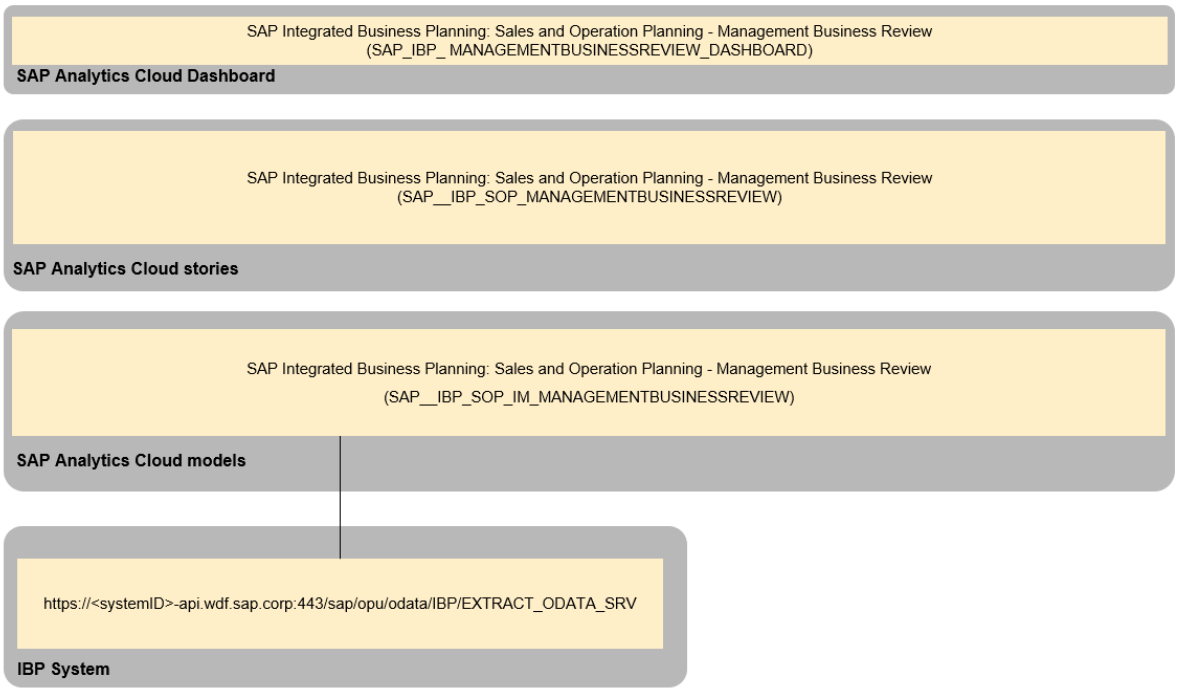
2.49.1 Architecture and Abstract

Integrated Business Planning SAC content provides information relevant to the management business review process which is part of the Sales and Operations Planning process.

During management business review, the executive management of the business units involved determine if the proposal presented aligns with the company's financial targets and key performance indicators. This results in an approved final consensus demand and supply plan ultimately designed to drive the revenue growth and increase market share, optimize product, customer profitability, minimize inventory costs, and overcome capacity constraints.

SAP Integrated Business Planning SAP Analytics Cloud content comprises of one dashboard, one story, and one data model. The data model receives its data from an OData service from an SAP IBP system. Alternatively, you can upload the master data from flat files.

Architecture



2.49.2 Dashboard

The SAP Integrated Business Planning: Sales and Operation Planning - Management Business Review (SAP_IBP_ MANAGEMENTBUSINESSREVIEW_DASHBOARD) dashboard contains the Executive Summary, the Overview of Revenues, and the Overview of Quantities from the SAP Integrated Business Planning: Sales and Operation Planning - Management Business Review (SAP__IBP_SOP_MANAGEMENTBUSINESSREVIEW) story.

2.49.3 Stories

SAP Integrated Business Planning: Sales and Operation Planning - Management Business Review (SAP__IBP_SOP_MANAGEMENTBUSINESSREVIEW).

The story consists of three pages:

- Executive Summary
- Overview of Revenues
- Overview of Quantities

Executive Summary

This story page consists of two charts and two numeric points. It focuses on providing a high-level overview of the financial targets. This data can be filtered by product families.

Actual Revenues:

A numeric point used to compare the revenues of the current year with the revenues of the previous year.

Gross Profit:

A numeric point used to compare the gross profit of the current year with the gross profit of the previous year.

Actual Revenues per Year:

This time-series chart shows how actual revenues have trended over time. It covers a period of four years (current year, + 2 years in the past, and 1 year in the future). The forecast is automatically calculated based on linear regression.

Identify the association between Actuals Rev. and Consensus Demand Rev. by Quarter

This time-series chart shows the trend of actual revenues and consensus demand revenues by quarters for a period of two years.

Overview of Revenues

This story page consists of three charts, five numeric points, and a table. It provides a detailed overview of the revenues. This data can be filtered by product families.

Compare Actual Revenues (Current year) and Actual Revenues (Previous year) per Customer Groups:

For each customer group, this bar chart compares the revenues of the current year with the revenues of the previous year. Additionally, five numeric points are used to show this comparison (in percent).

Compare the Actuals Rev. by Product Family and Location:

This tree map analyses the actual revenues by product families and locations. A smart insight shows the top contributor and the related percentage above or below the average.

Actual Revenues - Current Year:

A detailed table shows the revenues of the current year by quarter/month and product ID.

Analyse Actual Revenues / Gross Profit (Current year) per Product ID (Top 5):

This bar chart shows the contribution of the top 5 product IDs to the revenues and gross profit of the current year. A smart insight shows the top contributor and the related percentage above or below the average.

Overview of Quantities

This story page consists of three charts and a table. It provides a detailed overview of the quantities. This data can be filtered by product families.

Analyse how Actuals Qty is trending over time:

This time-series chart shows how actual quantities have trended over time. It covers a period of five years (current year, + 3 years in the past, and 1 year in the future). The forecast is automatically calculated based on linear regression.

Analyse the Monthly Average Actuals Qty. per Product Family:

This pie chart shows the monthly average actual quantity per product family. It covers a period of four years (current period and + 3 years in the past).

Actual Qty - Current Year:

A detailed table shows the quantities of the current year by quarter/month and product ID.

Analyse Constrained Demand and Consensus Demand per Product Family:

This chart compares the constrained demand and the consensus demand. Values are analysed by product families for a period of two years (current year and + 1 year in the future). A smart insight shows the top contributor and the related percentage above or below the average.

2.49.4 Models

2.49.4.1 Sales and Operation Planning - Management Business Review (SAP__IBP_SOP_IM_MANAGEMENTBUSINESSREVIEW)

Model Name: SAP__IBP_SOP_IM_MANAGEMENTBUSINESSREVIEW	Connection
• Model Description: SAP Integrated Business Planning: Sales and Operation Planning - Management Business Review • Planning Enabled: Yes	• Connection Type: Import Data Connection to SAP Integrated Business Planning • You can find the OData service URL from the IBP system as follows: • Communication Arrangement App à Inbound services • The service is specified as:https://%3CsystemID%3E-api.wdf.sap.corp/sap/opu/odata/IBP/EXTRACT_ODATA_SRV

Account Dimension: SAP_IBP_GEN_ACCOUNT		
ID	**Description**	**Properties**
Actuals Qty	Actuals Qty	Account type: NFIN
Actuals Rev.	Actuals Rev.	Account type: INC
AOP Qty	AOP Qty	Account type: NFIN
AOP Rev.	AOP Rev.	Account type: INC
Capacity Supply	Capacity Supply	Account type: NFIN
Capacity Usage of Production Resource	Capacity Usage of Production Resource	Account type: NFIN
Consensus Demand Plan Qty	Consensus Demand Plan Qty	Account type: NFIN
Consensus Demand Plan Rev	Consensus Demand Plan Rev	Account type: INC
Constrained Demand Rev.	Constrained Demand Rev.	Account type: INC
Gross Profit	Gross Profit	Account type: INC
Marketing Fcst Qty	Marketing Fcst Qty	Account type: NFIN
Marketing Fcst Rev.	Marketing Fcst Rev.	Account type: INC
Open Orders Rev.	Open Orders Rev.	Account type: INC
Planned Price	Planned Price	Account type: INC Aggregation type: None
Production Receipt	Production Receipt	Account type: NFIN

Model Name: SAP__IBP_SOP_IM_MANAGEMENTBUSINESSREVIEW		Connection
Projected Stock	Projected Stock	Account type: NFIN
Projected Stock Value	Projected Stock Value	Account type: INC
Recommended Safety Stock	Recommended Safety Stock	Account type: NFIN
Recommended Safety Stock Value	Recommended Safety Stock Value	Account type: INC
Sales Fcst Qty	Sales Fcst Qty	Account type: NFIN
Sales Fcst Rev.	Sales Fcst Rev.	Account type: INC
Total Customer Receipt	Total Customer Receipt	Account type: NFIN
Total Open Order Qty	Total Open Order Qty	Account type: NFIN
Total Production Value	Total Production Value	Account type: INC
Generic Dimensions		
Name	**Description**	**Properties**
Date	Month	
SAP_IBP_GEN_PRODUCT	Product	
SAP_IBP_GEN_PRODFAM	Product Family	
SAP_IBP_GEN_LOCATION	Location	
SAP_IBP_GEN_CUSTOMER	Customer	
SAP_IBP_GEN_UOM	Unit of Measure	
SAP_IBP_GEN_CURRENCY	Currency	Enable Currency: YES
SAP_IBP_GEN_CUSTGROUP	Customer Group	
Additional Notes on the Model		

Transactional data and master data are loaded using the IBP OData service:

https://<systemID>-api.wdf.sap.corp/sap/opu/odata/IBP/EXTRACT_ODATA_SRV

Master data (SAP_IBP_GEN_xxx generic dimensions) can also be loaded from a flat file. You can use the master data files for the SAPIBP1 sample planning area that are part of the SAP Best Practices for SAP Integrated Business Planning content as a template:

https://rapid.sap.com/bp/#/rds_ibp → Accelerators → Technical assets for SAPIBP1 (sample data, master data, and planning view templates)

2.49.4.2 Setting up the connection between SAP Analytics Cloud and SAP Integrated Business Planning

When you import the SAP Integrated Business Planning package into your system, the technical objects described in the previous chapters are imported. You also have predefined sample data that you can use for demo purposes.

If you want to update the predefined sample data with your own data, you must follow the steps described in this chapter.

Prerequisite

Before you start, ensure that the SAP Best Practices for SAP Integrated Business Planning content is available in the SAP IBP system. You must copy the SAPIBP1 sample planning area and upload the sample master data and key figure data available for the SAP IBP Best Practices.

The pre-built content refers to the IBP sales and operations planning process and is based on a planning area in which SOP is up and running.

2.49.4.2.1 SAP Integrated Business Planning Configuration

To enable the integration with SAP Analytics Cloud, you must define the following in your SAP Integrated Business Planning system:

- A communication user with a productive password,
- A communication system where your communication user is defined as an Inbound user,
- A communication arrangement based on communication scenario SAP_COM_0143.

In the Inbound Services section, you will find the URL to access the OData services, for example:

https://<systemID>-api.wdf.sap.corp/sap/opu/odata/IBP/EXTRACT_ODATA_SRV

The planning area to be used in the SAC Queries is configured in the Global Configuration app → Parameter Group FLEXIQUERY → Parameter Name PLANNINGAREA.

2.49.4.2.2 SAP Analytics Cloud Configuration

Context

You must create an SAP Integrated Business Planning import connection in SAP Analytics Cloud:

Procedure

1. From the main menu, choose *Connection* → *Add Connection (+)*.
2. In the Select a Datasource dialog box, choose *SAP Integrated Business Planning*.
3. In the New SAP Integrated Business Planning Connection dialog box, enter the connection information. Make sure to use the data service URL specified in your communication arrangement. Enter your IBP communication user as the Username along with the corresponding productive password.

> **i Note**
>
> If you want to use the imported SAPIBP connection instead of creating a new one, make sure to update the SAPIBP connection with your own URL, IBP communication user and productive password.

2.49.4.2.3 Loading Transactional Data from IBP OData Service

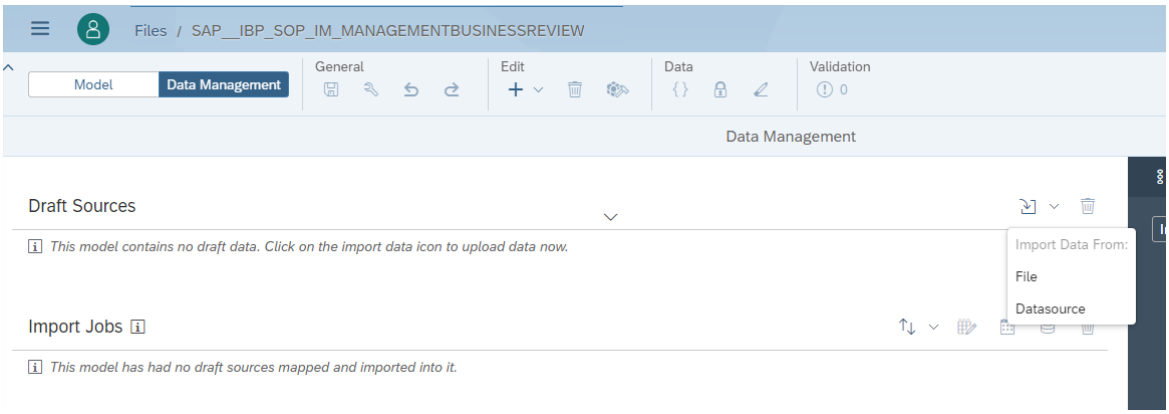
Context

Transactional data (SAP_IBP_GEN_ACCOUNT account dimension) is loaded using the IBP OData service. To use the model with your own data, you must create a new query related to your planning area.

> **i Note**
>
> The sample query we deliver refers to a planning area called UNIPA. If you have a non-productive SAP IBP system (test tenant), you will find the planning area UNIPA preconfigured in your system. For more information on the preconfigured planning area, refer to the WIKI page.

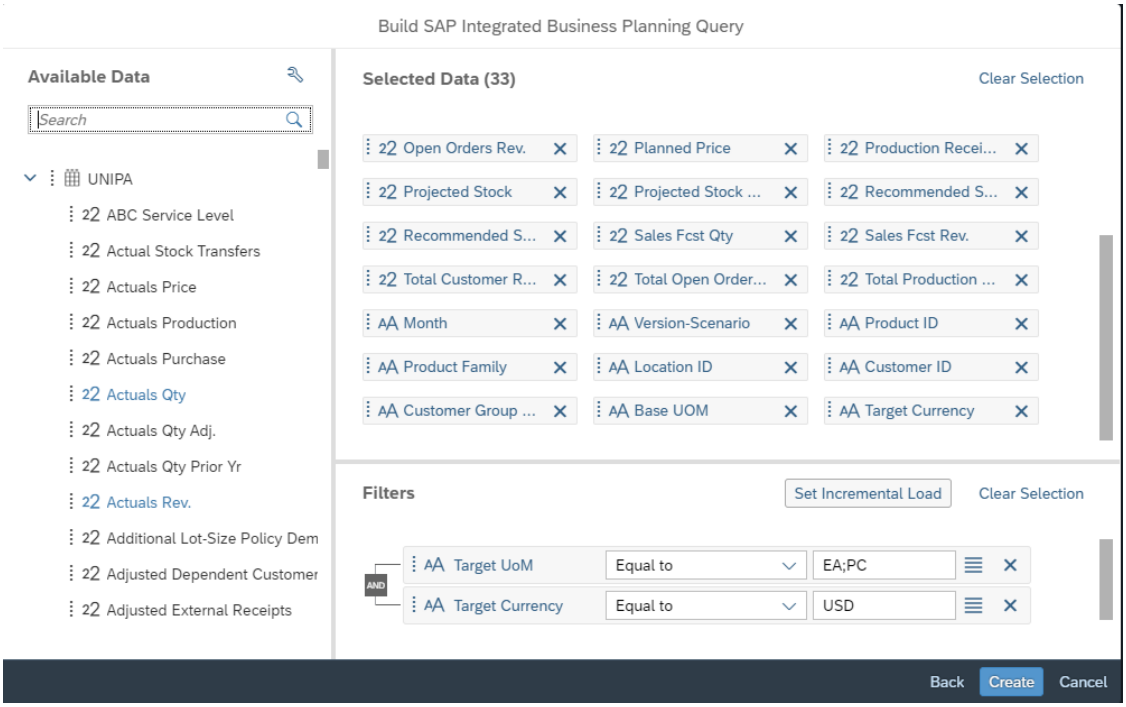
Procedure

1. Open the SAP__IBP_SOP_IM_MANAGEMENTBUSINESSREVIEW model.
2. On the Model detail screen, select the Data Management tab and choose *Import data* → *Datasource*.

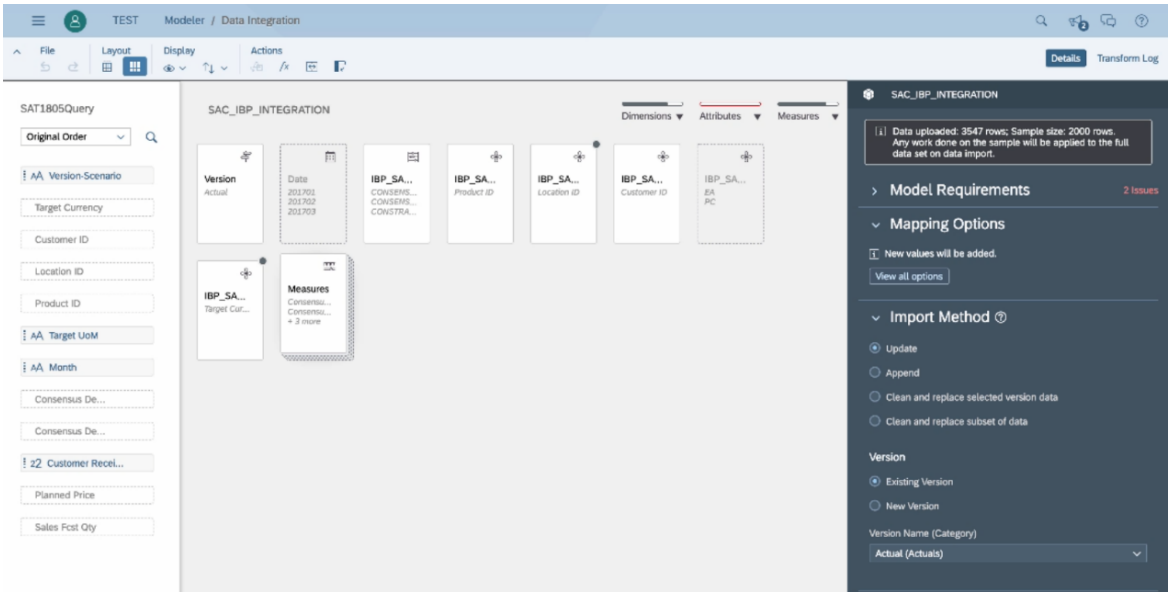


3. Select the *SAP Integrated Business Planning* datasource.
4. In the *Import Data from SAP Integrated Business Planning* dialog box, choose your connection to the IBP System.
5. Select *Create a new query* and choose *Next*.
6. Select your planning area and choose *Next*.
7. In the *Build SAP Integrated Business Planning Query* dialog box, select the items listed below, and move them to the *Selected Data* section:
   - The 24 key figures listed in the table above,
   - Time dimension as Month,
   - Version/Scenario,
   - Generic dimensions Product ID, Product Family, Location ID, Customer ID, and Customer Group/ Segment,
   - Base UoM and Target Currency.

- Do not forget to include Target UoM and Target Currency in filters. Otherwise, you will get an error when the model is built. Define the filters as Target Currency = USD and Target UoM = EA; PC.

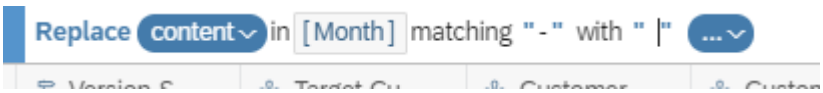


8. Once you have moved the 33 items in the *Selected Data* section and entered the two filters, choose *Create*.
9. After the content is uploaded, map the dimension set that is extracted from the OData service to the SAC dimensions.

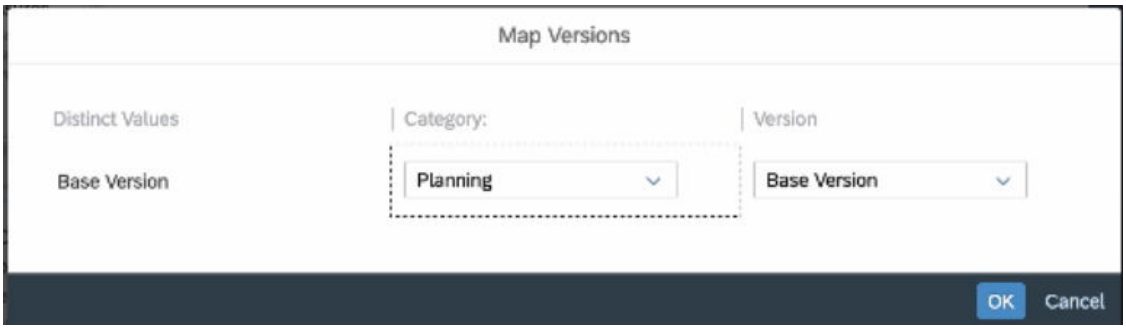


10. You might be required to make some manual adjustments, for example:
    - Month: Define the date format as YY MM.

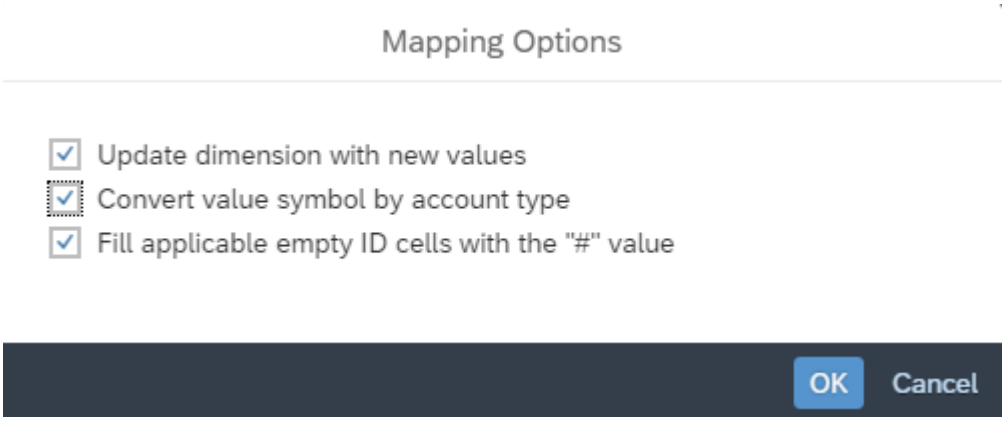
Since there is no template for YY-MM in SAC, a workaround is required: select the Month column, choose Create a transform, and replace "-" with " " in the formula.



- Version/Scenario: Map Base Version to the Planning category.



11. Once the issues are solved, select Convert value symbol by account type in the Mapping Options.



12. Choose Finish Mapping.

Results

The new query is created and the predefined content is updated with your own data.

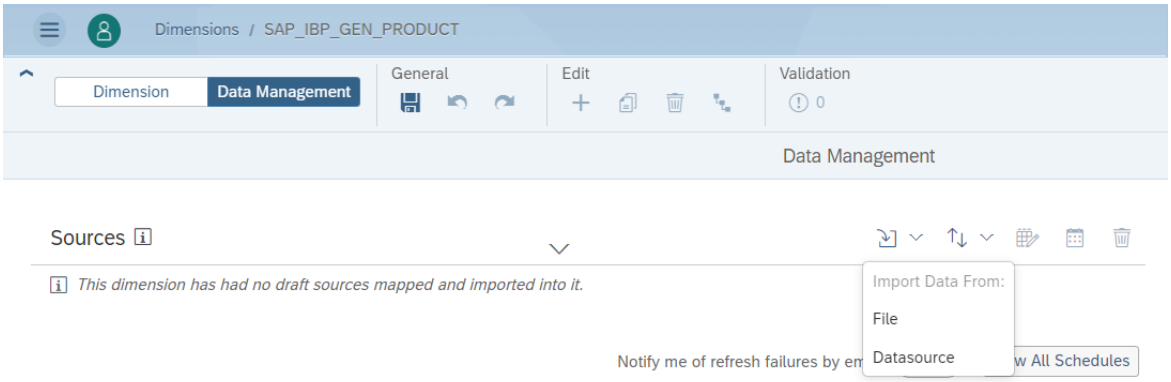
2.49.4.2.4 Loading Master Data from IBP OData Service

Context

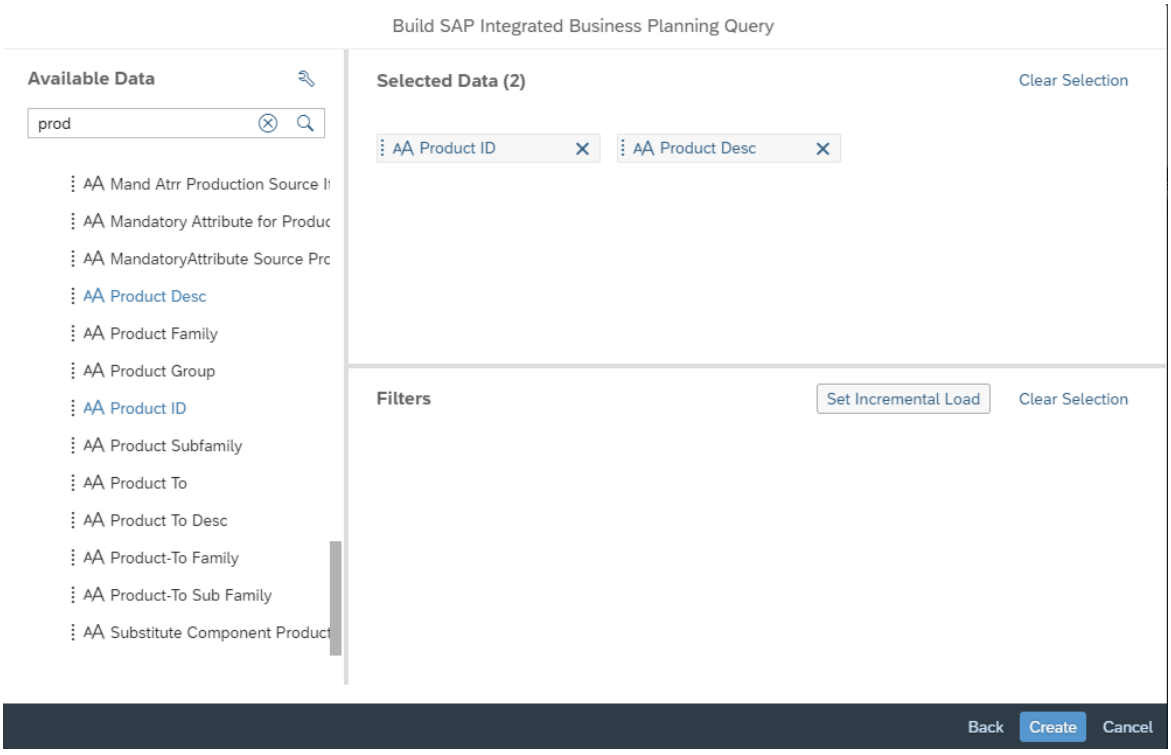
Master data (SAP_IBP_GEN_xxx generic dimensions) is loaded using the IBP OData service.

Procedure

1. On the Dimension detail screen, select the Data Management tab and choose *Import data* → *Datasource.*

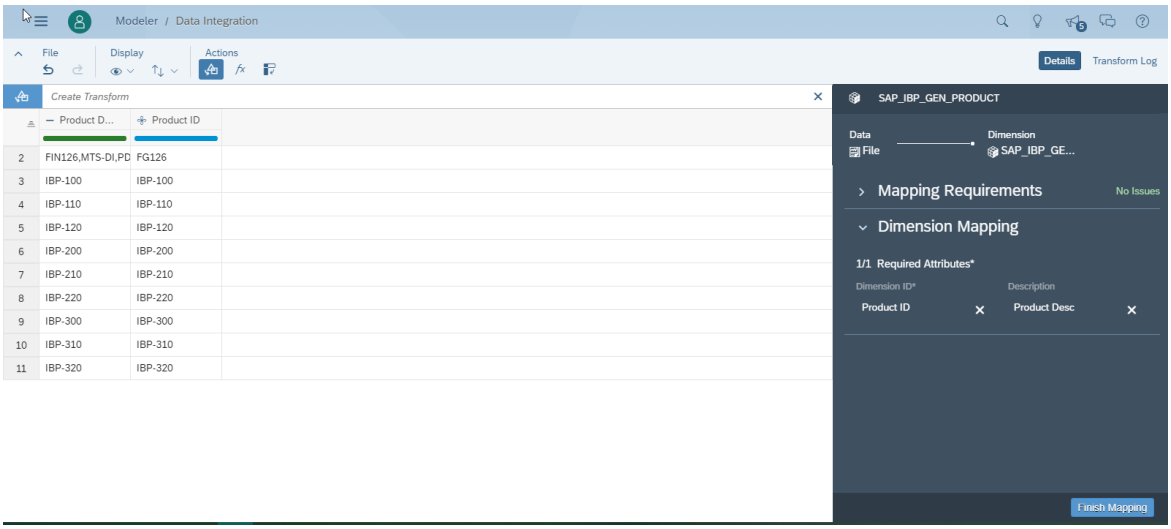


2. Select the SAP Integrated Business Planning datasource.
3. In the Import Data from SAP Integrated Business Planning dialog box, choose your connection to the IBP system.
4. Select your planning area.
5. In the Build SAP Integrated Business Planning Query dialog box, select the relevant dimensions and move them to the Selected Data section (for example: Product ID and Product Desc).



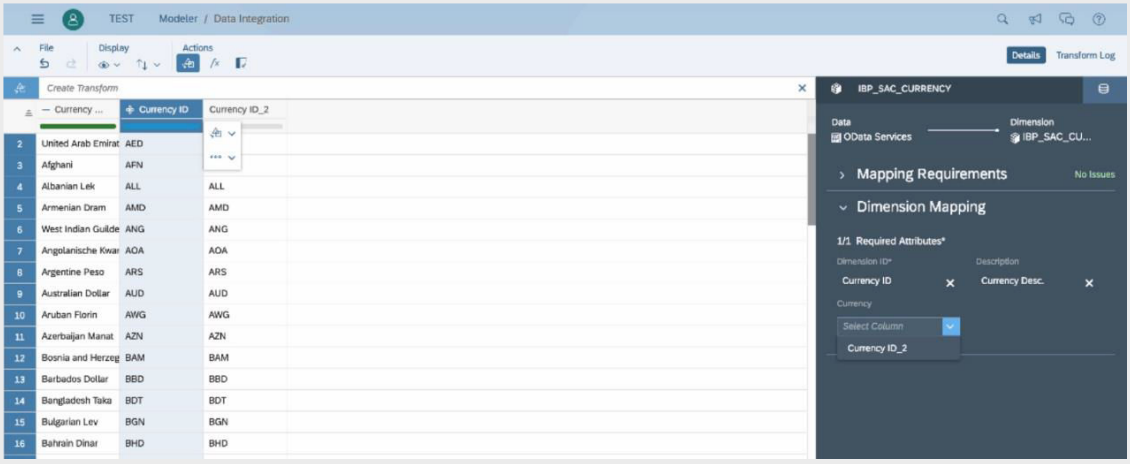
6. After the content is uploaded, map the dimension set that is extracted from the OData service to the SAC dimensions (for example: Dimension ID = Product ID and Description = Product Desc.). Then choose Finish

Mapping.



7. Repeat the steps for all SAP_IBP_GEN_xxx generic dimensions.

> **i Note**
>
> A currency in SAC is always expected to have three structural fields: Dimension ID, Description, and Currency ID. Therefore, duplicate the column Currency ID with the drop-down function and assign the newly duplicated column to the Currency ID.



2.49.4.2.5 Loading Master Data from a flat file

Context

You can also load master data (SAP_IBP_GEN_xxx generic dimensions) from flat files.

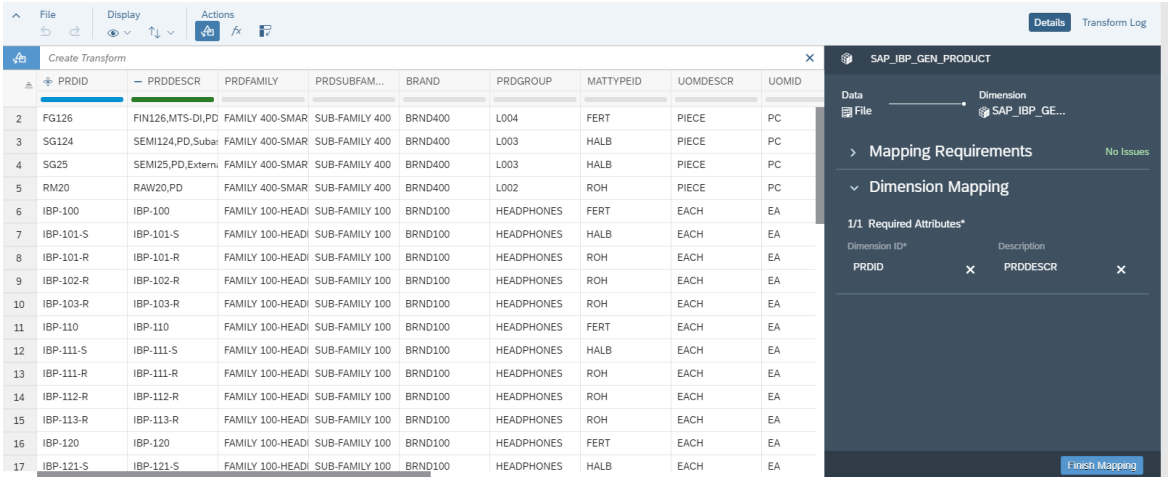
You can use the master data files for the SAPIBP1 sample planning area that are part of the SAP Best Practices for SAP Integrated Business Planning content as a template:

https://rapid.sap.com/bp/#/rds_ibp → Accelerators → Technical assets for SAPIBP1 (sample data, master data, and planning view templates).

Generic Dimension	Description	Flat File	Mapping to SAC dimension IDs
SAP_IBP_GEN_LOCATION	Location	020_Location_<release>.csv	LOCID
SAP_IBP_GEN_CUSTOMER	Customer	010_Customer_<release>.csv	CUSTID
SAP_IBP_GEN_UOM	Unit of Measure	090_UOMTo_<release>.csv	UOMTOID
SAP_IBP_GEN_CURRENCY	Currency	080_Currency_<release>.csv	CURRID
SAP_IBP_GEN_PRODUCT	Product	030_Product_<release>.csv	PRDID
SAP_IBP_GEN_PRODFAM	Product Family	030_Product_<release>.csv	PRDFAMILY
SAP_IBP_GEN_CUSTGROUP	Customer Group	010_Customer_<release>.csv	CUSTGROUP

Procedure

1. On the Dimension detail screen, select the Data Management tab and choose *Import data* → *File*.
2. Select your local file (for example: 030_Product_<release>.csv) and choose Import.
3. After the content is uploaded, map it to the SAC dimensions (for example, Dimension ID = PRDID and Description = PRDDESCR). Then choose Finish Mapping.



4. Repeat the steps for all SAP_IBP_GEN_xxx generic dimensions.

   For further information on how to set up the connection between SAP Analytics Cloud and SAP Integrated Business Planning, you can refer to SAP Note 2814555

2.49.4.2.6 Updating the Story

You can now update the predelivered story with your own data.

1. Open the SAP__IBP_SOP_MANAGEMENTBUSINESSREVIEW story.
2. On the Story screen, choose Refresh.
3. Story widgets are updated with your own data.

2.49.4.2.7 SAP Note

For further information on how to set up the connection between SAP Analytics Cloud and SAP Integrated Business Planning, you can refer to SAP Note 2814555

2.50 SAP Integration Suite

2.50.1 Overview

SAP Integration Suite is an enterprise integration platform as a service(iPaaS) that allows you to seamlessly integrate on-premise and cloud-based applications and processes with tools and prebuilt content managed by SAP. The computing infrastructure and embedded intelligence in Integration Suite offer a great opportunity for organizations to become intelligent enterprises. An intelligent enterprise enables you to achieve results faster and gain business agility with a versatile, dynamic, and enterprise-grade cloud integration platform.

SAP Integration Suite comes with following key capabilities:

1. Cloud Integration

Cloud Integration supports end-to-end process integration across cloud-based and on-premise applications based on the exchange of messages

2. API Management

Get access to simple, scalable, and secure digital assets through application programming interfaces (APIs) and consume these.

3. Open Connectors

Open Connectors simplifies and allows you to build seamless integrations with over 160 non-SAP applications using pre-built connectors.

4. Integration Advisor

Integration Advisor is an intelligent integration content management system that helps you accelerate the development of business-oriented interfaces and mappings.

Currently, in SAP Analytics Cloud you can explore the dashboards for Cloud Integration and API Management capabilities.

Cloud Integration Reporting Dashboard

The Cloud Integration reporting dashboard offers the tenant administrators with an unbiased view on the performance of messages and integration content artifacts deployed on a tenant. For more information, see Architecture & Abstract - SAP Help Portal.

API Management Reporting Dashboard

API Management, as SAP Integration Suite capability creates a digital experience to design, develop, and manage APIs in a secure and scalable environment. The API Management Reporting Dashboard is built upon SAP Analytics Cloud (SAC), describing various patterns of API consumption and performance.

What is the purpose of the Dashboard?

The API Management Reporting Dashboard displays runtime data of APIs gathered and analyzed as charts and key performance indicators. The data can be viewed across various report pages namely Overview, Health, and Usage, with each page providing information about key API metrics.

- Overview:

The Overview page provides a summarized report on API usage and performance. On the Overview page, you can analyze reports and view API trends for the last seven days about the most popular APIs, the total number of API calls, response time, and latency.

- Health:

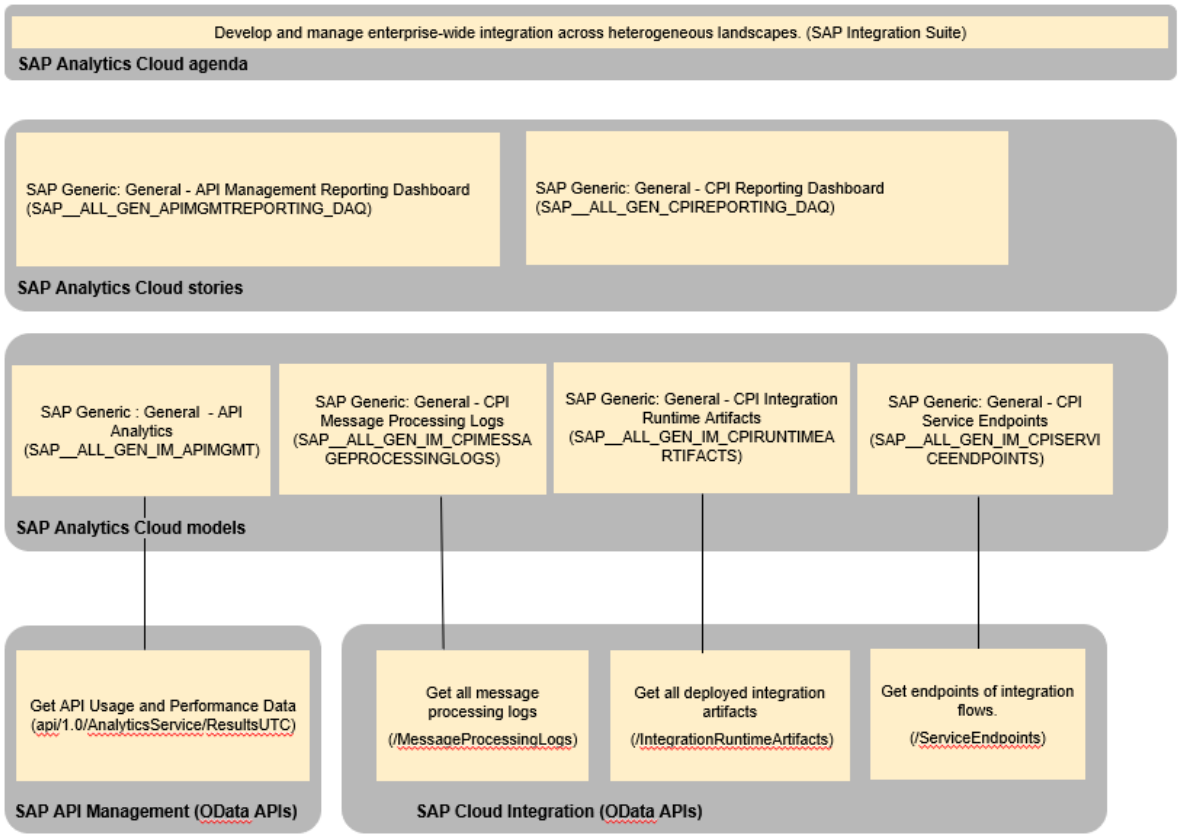
The Health page provides reports about key metrics related to the performance of your APIs. The Health page allows to quickly monitor API metrics that affect the performance of APIs and view API error trends for the selected interval.

- Usage:

The Usage page provides reports about key metrics related to user engagement. On the Usage page, you can analyze API metrics that indicate the overall traction or acceptance of the API program and view API trends for the selected interval.

2.50.2 Architecture & Abstract

SAP Integration Suite connects and contextualizes processes and data while enabling new content-rich applications to be assembled faster with less dependence on IT.



2.50.3 Stories

- Cloud Integration - Stories
- API Management -API Management Reporting Dashboard (SAP__ALL_GEN_APIMGMTREPORTING_DAQ) [page 462] Stories

2.50.3.1 API Management Reporting Dashboard (SAP__ALL_GEN_APIMGMTREPORTING_DAQ)

Measure Name	Type	Formula/Properties
Success	Calculated Measure	Measure [CallCount] - Measure [SumErrors]
CM_AVG_RESPONSETIME	Calculated Measure	Measure [SumResponseTime] / Measure [CallCount]

Measure Name	Type	Formula/Properties
CM_KPI_SUMAPICALLS_PREVWEEK	Restricted Measure	Measure [Total Calls] restricted by [CreatedTime] on [Previous Week]
CM_KPI_SUMAPICALLS_CURRWEEK	Restricted Measure	Measure [Total Calls] restricted by [CreatedTime] on [Current Week]
CM_KPI_DIFF_TOTAL_API_CALLS_PREV_WEEK	Calculated Measure	Measure [CM_KPI_SUMAPICALLS_CURRWEEK]- Measure [CM_KPI_SUMAPICALLS_PREVWEEK]
CM_KPI_SUMRESPONSETIME_CURRWEEK	Restricted Measure	Measure [SumResponseTime] restricted by [CreatedTime] on [Current Week]
CM_KPI_SUMRESPONSETIME_PREVWEEK	Restricted Measure	Measure [SumResponseTime] restricted by [CreatedTime] on [Previous Week]
CM_KPI_AVGRESPONSETIME_CURRWEEK	Calculated Measure	Measure [CM_KPI_SUMRESPONSETIME_CURRWEEK] / Measure [CM_KPI_SUMAPICALLS_CURRWEEK]
CM_KPI_AVGRESPONSETIME_PREVWEEK	Calculated Measure	Measure [CM_KPI_SUMRESPONSETIME_PREVWEEK] / Measure [CM_KPI_SUMAPICALLS_PREVWEEK]
CM_KPI_AVGDIFF_RESONSETIME_PREV_WEEK	Calculated Measure	Measure [CM_KPI_AVGRESPONSETIME_CURRWEEK]- Measure [CM_KPI_AVGRESPONSETIME_PREVWEEK]
CM_KPI_SUMREQUESTPROCESSINGLATENCY_CURRWEEK	Restricted Measure	Measure [SumRequestProcessingLatency] restricted by [CreatedTime] on [Current Week]
CM_KPI_SUMREQUESTPROCESSINGLATENCY_PREVWEEK	Restricted Measure	Measure [SumRequestProcessingLatency] restricted by [CreatedTime] on [Previous Week]
CM_KPI_DIFF_REQUESTPROCESSINGLATENCY_PREV_WEEK	Calculated Measure	Measure [CM_KPI_SUMREQUESTPROCESSINGLATENCY_CURRWEEK] - Measure [CM_KPI_SUMREQUESTPROCESSINGLATENCY_PREVWEEK]
CM_KPI_SUMAPIERRORS_CURRWEEK	Restricted Measure	Measure [Failure] restricted by [CreatedTime] on [Current Week]
CM_KPI_SUMAPIERRORS_PREVWEEK	Restricted Measure	Measure [Failure] restricted by [CreatedTime] on [Previous Week]

Measure Name	Type	Formula/Properties
CM_KPI_DIFF_APIER-RORS_PREV_WEEK	Calculated Measure	Measure [CM_KPI_SUMAPIER-RORS_CURRWEEK]-Measure [CM_KPI_SUMAPIERRORS_PRE-VWEEK]
CM_KPI_SUMTARGETERRORS_CURR-WEEK	Restricted Measure	Measure [SumTargetError] restricted by [CreatedTime] on [Current Week]
CM_KPI_SUMTARGETERRORS_PRE-VWEEK	Restricted Measure	Measure [SumTargetError] restricted by [CreatedTime] on [Previous Week]
CM_KPI_DIFF_TARGETER-RORS_PREV_WEEK	Calculated Measure	Measure [CM_KPI_SUMTARGETER-RORS_CURRWEEK] - Measure [CM_KPI_SUMTARGETERRORS_PRE-VWEEK]
CM_KPI_SUMTARGETRESPONSE-TIME_CURRWEEK	Restricted Measure	Measure [SumTargetResponseTime] restricted by [CreatedTime] on [Cur-rent Week]
CM_KPI_SUMTARGETRESPONSE-TIME_PREVWEEK	Restricted Measure	Measure [SumTargetResponseTime] restricted by [CreatedTime] on [Previ-ous Week]
CM_KPI_AVGTARGETRESPONSE-TIME_CURRWEEK	Calculated Measure	Measure [CM_KPI_SUMTARGETRES-PONSETIME_CURRWEEK] / Measure [CM_KPI_SUMAPICALLS_CURRWEEK]
CM_KPI_AVGTARGETRESPONSE-TIME_PREVWEEK	Calculated Measure	Measure [CM_KPI_SUMTARGETRES-PONSETIME_PREVWEEK] / Measure [CM_KPI_SUMAPICALLS_PREVWEEK]
CM_KPI_AVGDIFF_TARGETRESPON-SETIME_PREV_WEEK	Calculated Measure	Measure [CM_KPI_AVGTARGETRES-PONSETIME_CURRWEEK] - Measure [CM_KPI_AVGTARGETRESPONSE-TIME_PREVWEEK]
Average Target Response Time	Calculated Measure	Measure [SumTargetResponseTime] / Measure [CallCount]
CM_AVG_POLICYRESPONSETIME	Calculated Measure	Measure [PolicyResponseTime] / Measure [CallCount]

2.50.4 Models

Cloud Integration Models:

- SAP Generic: General - CPI Message Processing Logs (SAP__ALL_GEN_IM_CPIMESSAGEPROCESSINGLOGS) [page 40]
- SAP Generic: General - CPI Integration Runtime Artifacts (SAP__ALL_GEN_IM_CPIRUNTIMEARTIFACTS) [page 41]
- SAP Generic: General - CPI Service Endpoints (SAP__ALL_GEN_IM_CPISERVICEENDPOINTS) [page 42]

API Management Models

Model Name: **SAP__ALL_GEN_IM_APIMGMT**	**Connection**	
- Model Description: SAP Generic: General - SAP Analytics - Planning Enabled: no	- Import Data Connection to OData Services - SAPAPIM	
Account		
ID	Description	Mapping/Formula
AvgErrors	AvgErrors	
AvgPolicyError	AvgPolicyError	
AvgRequestP_r486o04v70	AvgRequestProcessingLatency	
AvgRequestSize	AvgRequestSize	
AvgResponse_16m7204x5k	AvgResponseProcessingLatency	
AvgResponseTime	AvgResponseTime	
AvgTargetError	AvgTargetError	
AvgTargetResponseTime	AvgTargetResponseTime	
CallCount	CallCount	
MaxRequestP_6f72f3k3h3	MaxRequestProcessingLatency	
MaxRequestSize	MaxRequestSize	
MaxResponse_713s560632	MaxResponseProcessingLatency	
MaxResponseTime	MaxResponseTime	
MaxTargetResponseTime	MaxTargetResponseTime	

Model Name: SAP__ALL_GEN_IM_APIMGMT	Connection
MinRequestP_3g232804kg	MinRequestProcessingLatency
MinRequestSize	MinRequestSize
MinResponse_2f1a2b01y3	MinResponseProcessingLatency
MinResponseTime	MinResponseTime
MinTargetResponseTime	MinTargetResponseTime
PolicyResponseTime	PolicyResponseTime
SumErrors	SumErrors
SumPolicyError	SumPolicyError
SumRequestP_6q4p6801l5	SumRequestProcessingLatency
SumRequestSize	SumRequestSize
SumResponse_5e6s6a3k1e	SumResponseProcessingLatency
SumResponseTime	SumResponseTime
SumTargetError	SumTargetError
SumTargetResponseTime	SumTargetResponseTime

Dimensions

Name	Description	Mapping
Account*	Account	
ID_k3850253g4	ID_k3850253g4	
ApiProxy	ApiProxy	
ProxyBasepath	ProxyBasepath	
RequestUrl	RequestUrl	
RequestMethod	RequestMethod	
ResponseCode	ResponseCode	
DeveloperName	DeveloperName	
ApplicationName	ApplicationName	
ProductName	ProductName	

Dimensions	
CacheHit	CacheHit
TargetHost	TargetHost
TargetUrl	TargetUrl
PlatformName	PlatformName
AgentsName	AgentsName
DeviceType	DeviceType
OsFamilyName	OsFamilyName
Additional Notes about the model	

Import Method Used:

Clean and replace selected version data - Deletes the existing data and adds new entries to the target model.

Configure Data Scheduling:

By default, the scheduling frequency is set to None. We recommend you to schedule a data import every one hour, see Updating and Scheduling Models.

2.50.5 Data Connectivity

Cloud Integration: OData Connectivity [page 43]

API Management

To connect your API Management tenant to this SAC story, use the existing connection with the name SAPAPIMGMT and configure it as described here. You can connect to an OData Service in SAP Analytics Cloud application, based on the connectivity types.

By default, the data acquired and displayed initially in the dashboard is from a sample data.

Configure OAuth

First, you must obtain the OAuth 2.0 credentials (OAuth Client ID, Secret), and the Token Endpoint URL in order to access the API Management ODATA APIs.

Refer to the help documentation to retrieve the OAuth 2.0 credentials and make a note of it.

1. Provide your API Management tenant URL that has the format https://<apimanagement-tenant-url>/api/v1

2. Select OAuth 2.0 Client Credentials.

3. Provide the OAuth Client ID registered in the cockpit.

4. Provide the Secret password defined in cockpit.

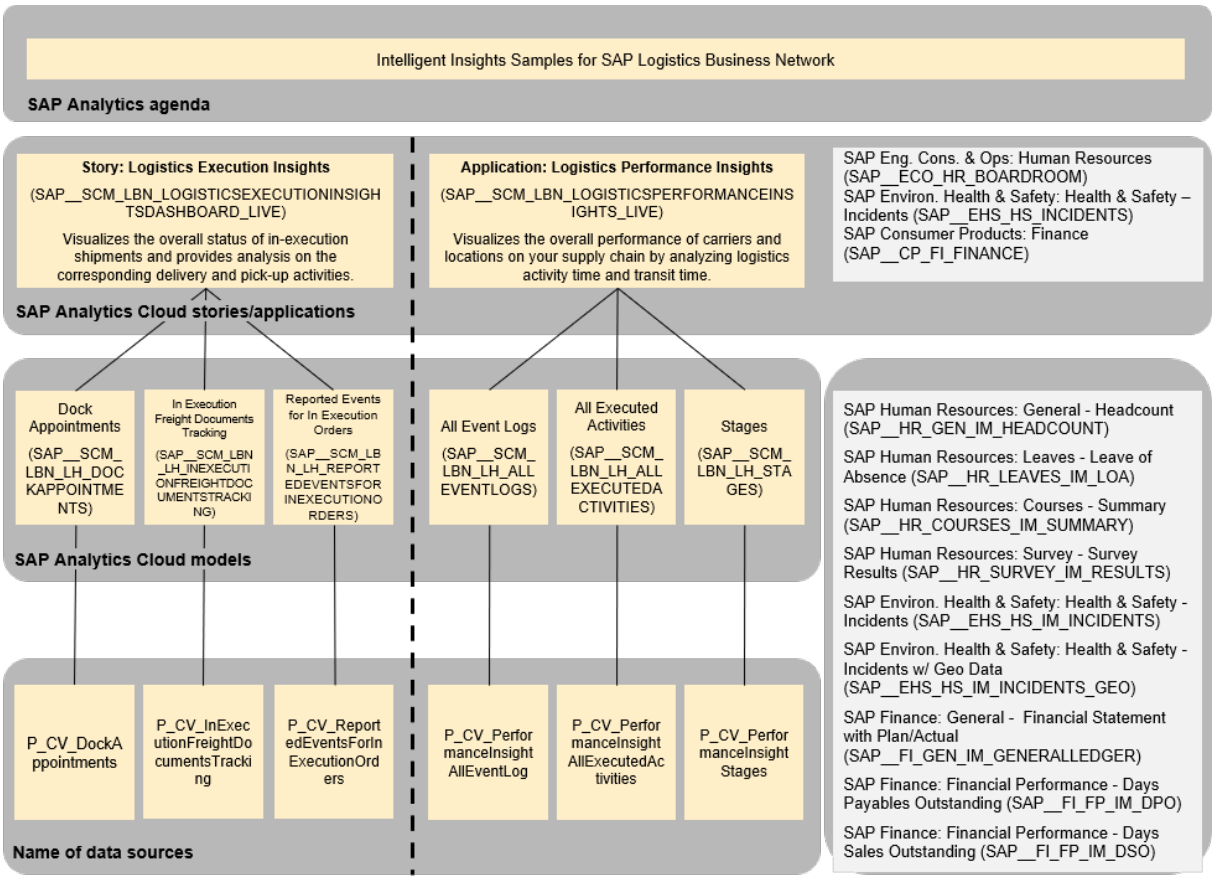
5. Use the Token Endpoint URL obtained from the cockpit.

2.51 SAP Logistics Business Network - Supply Chain Network Analytics

2.51.1 Architecture and Abstract

SAP Logistics Business Network is an open and secure network that connects multiple business partners for inter-company logistics collaboration and insights.

These are predefined analytics samples that can be consumed by the intelligent insights option for SAP Logistics Business Network.



2.51.2 Stories

2.51.2.1 Logistics Execution Insights Dashboard

Logistics Execution Insights Dashboard (SAP__SCM_LBN_LOGISTICSEXECUTIONINSIGHTSDASHBOARD_LIVE)

Measure Name	Type	Formula/Properties
Total Cargo Volume	Calculated Measure	Float of cargo volume
Total Cargo Weight	Calculated Measure	Float of cargo weight
Total Pick-up Running Late	Calculated Measure	Total number of loading shipments whose ETA time difference > 10 min
Total Deliveries Running Late	Calculated Measure	Total number of unloading shipments whose ETA time difference > 10 min

2.51.2.2 Logistics Performance Insights Dashboard

Logistics Performance Insights Dashboard (SAP__SCM_LBN_LOGISTICSPERFORMANCEINSIGHTS_LIVE)

Measure Name	Type	Formula/Properties
Activity Time	Calculated Measure	Activity duration time
Transition Time Between Locations	Calculated Measure	Transit Time between two transportation locations

2.51.3 Models

2.51.3.1 Dock Appointments

Model Name: SAP__SCM_LBN_LH_DOCKAPPOINTMENTS	Connection
- Model Description: Dock Appointments	- HANA live connection -Direct
- Planning Enabled: No	- P_CV_DockAppointments

Additional Notes about the model

This model is used for chart: **Open Appointments in Coming 7 Days** in Logistics Execution Insights Dashboard.

2.51.3.2 Reported Events for In Execution Orders

Model Name: SAP__SCM_LBN_LH_REPORTEDEVENTS-FORINEXECUTIONORDERS	Connection
- Model Description: Reported Events for In Execution Orders	- HANA live connection -Direct
- Planning Enabled: No	- P_CV_ReportedEventsForInExecutionOrders

Additional Notes about the model

This model is used for chart: **Delay/Late Reasons for In Execution Shipments** in Logistics Execution Insights Dashboard.

2.51.3.3 In Execution Freight Documents Tracking

Model Name: SAP__SCM_LBN_LH_INEXECUTION-FREIGHTDOCUMENTSTRACKING	Connection
- Model Description: In Execution Freight Documents	- HANA live connection -Direct
- Planning Enabled: No	- P_CV_InExecutionFreightDocumentsTracking

Additional Notes about the model

This model is the main data source for in execution shipments that is used for all the other charts in Logistics Execution Insights Dashboard.

2.51.3.4 Executed Activities (SAP__SCM_LBN_LH_ALLEXECUTEDACTIVITIES)

Model Name: SAP__SCM_LBN_LH_ALLEXECUTEDACTIVITIES	Connection
Model Description: Executed Activities	HANA live connection - Direct
Planning Enabled: No	P_CV_PerformanceInsightAllExecutedActivities

Additional Notes about the model

This model is used in Logistics Performance Insights dashboard.

2.51.3.5 Event Logs (SAP__SCM_LBN_LH_ALLEVENTLOGS)

Model Name: SAP__SCM_LBN_LH_ALLEVENTLOGS	Connection
Model Description: Event Logs	HANA live connection - Direct
Planning Enabled: No	P_CV_PerformanceInsightAllEventLog

Additional Notes about the model

This model is used in Logistics Performance Insights dashboard.

2.51.3.6 Transportation Stages (SAP__SCM_LBN_LH_STAGES)

Model Name: SAP__SCM_LBN_LH_STAGES	Connection
Model Description: Transportation Stages	HANA live connection - Direct
Planning Enabled: No	P_CV_PerformanceInsightStages

Additional Notes about the model

This model is used in Logistics Performance Insights dashboard.

2.52 SAP Marketing

2.52.1 SAP Marketing

Two sets of content are delivered for SAP Marketing:

- SAP Marketing Cloud and On Premise based on live connection
- Data acquisition: Sentiment Media Mix based on SAP Marketing on-premise (one story only including sample data)

2.52.1.1 SAP Marketing (Live Connections)

SAP Marketing content uses a live connection. Before activating the SAP Marketing content. Please read the documentation carefully and set up the required connections.

2.52.1.2 SAP Marketing Cloud

This content package covers the following topics:

Campaign Analytics

- **Success of Email and SMS Campaigns**
  Overview of Email and SMS campaign success for the last three months. Information includes numbers for Sent Messages, Delivered Messages, Unique Clicks, Hard Bounces, Soft Bounces, Missing Opt-in, Missing Communication Data, Relevant Overall Rates, and a comparison of Open Rate versus Opened Messages and more.
- **Campaign Statistics**
  Key campaign statistics and KPIs applicable for all campaigns during the last three months.
- **Paid Social Campaigns Success**
  Overview of the performance over time of paid social campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Paid Search Campaigns Success**
  Overview of the performance over time of paid search campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Display Ad Campaigns Success**
  Overview of the performance over time of display ad campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Campaign Success for Mobile Push Notifications**
  Operational report based on campaign success for mobile push notifications for the last three months.
- **Bounce Statistics**
  Overview of the hard and soft bounces in your campaign, including the recipient id, name of the contact and bounce reason and description.
- **Hard Bounce**
  Displays a list of contacts behind hard bounces.
- **Soft Bounce**
  Displays a list of contacts behind soft bounces.

Contacts and Profiles

- **Profile Analytics**
  Overview of the channels used by the contacts to interact (in) during the last 3 months.
- **Channel Interest Mix**
  Overview of the distribution of interests across channels or communication media. It also visualizes the number of interactions raised for a given interest during the last 3 months.
- **New and Converted Contacts**
  Overview of how many new contacts have been created and how many contacts have been converted from a lower to a higher validation status during the last 3 months.

Leads and Accounts

- **Lead Dashboard**
  Detailed Analysis on progress and success of marketing driven lead management providing KPIs for leads, opportunities, lead stages, associated interests, and products.
- **Spotlighting Accounts**
  Overview of the KPIs for accounts and for accounts that are ABM-relevant. It allows you an insight into data related to accounts with respect to master data completeness and interaction effectiveness.
- **Lead Nurture Performance**
  Helps you understand the performance of a lead nurture stream.

Marketing Planning and Performance

- **Spend for Marketing Plans**
  Overview of the top planned spend per media type and spend type, planned spend compared to actual spend, and the programs and campaigns with the highest deviation from the planned spend.
- **Marketing Conversions**
  Overview of the counts and amounts of the key conversions defined as important in your business in the Conversions application. By default, the story analyses leads, opportunities and sales orders.

Offer Management

- **Offer Preview**
  Overview of offers that are planned during the next 3 months.
- **Offer Success**
  Detailed analysis and comparison of the success of offers that were valid during the last 3 months.

Marketing Data Analysis

- **Performance of Mobile Push Notifications Last Six Months**
  Operational report for the performance of the mobile push notification campaign for the last six months.

NPS Feedback Analysis, by Accounts

Make the experience dimension measurable. Gauge the success of ABM programs based on experience data from Qualtrics using NPS.

> ℹ Note
>
> - **Last Update:** Release 2020.08
> - You need to setup a live connection to see data. Please find more information on the *SAP Help Portal for SAP Marketing Cloud* > *Getting Started* > *Implement* > *Onboarding Guide* > *Setup of SAP Analytics Cloud*
> - Please find more information on the stories on the *SAP Help Portal for SAP Marketing Cloud* > *Use* > *Application Help* > *English/German* > *Business Features* > *Analytics* > *Analytics and Report Gallery*

Related Information

https://help.sap.com/viewer/product/SAP_MARKETING_CLOUD/2005.500/en-US?task=discover_task
https://help.sap.com/viewer/product/SAP_MARKETING_CLOUD/2005.500/en-US?task=discover_task

2.52.1.3 SAP Marketing On Premise (1909)

This content package covers the following topics:

Campaign Analytics

- **Success of Email and SMS Campaigns**
  Overview of Email and SMS campaign success for the last three months. Information includes numbers for Sent Messages, Delivered Messages, Unique Clicks, Hard Bounces, Soft Bounces, Missing Opt-in, Missing Communication Data, Relevant Overall Rates, and a comparison of Open Rate versus Opened Messages and more.
- **Campaign Statistics**
  Key campaign statistics and KPIs applicable for all campaigns during the last three months.

- **Paid Social Campaigns Success**
  Overview of the performance over time of paid social campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Paid Search Campaigns Success**
  Overview of the performance over time of paid search campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Display Ad Campaigns Success**
  Overview of the performance over time of display ad campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Campaign Success for Mobile Push Notifications**
  Operational report based on campaign success for mobile push notifications for the last three months.
- **Bounce Statistics**
  Overview of the hard and soft bounces in your campaign, including the recipient id, name of the contact and bounce reason and description.
- **Hard Bounce**
  Displays a list of contacts behind hard bounces.
- **Soft Bounce**
  Displays a list of contacts behind soft bounces.

Contacts and Profiles

- **Profile Analytics**
  Overview of the channels used by the contacts to interact (in) during the last 3 months.
- **Channel Interest Mix**
  Overview of the distribution of interests across channels or communication media. It also visualizes the number of interactions raised for a given interest during the last 3 months.
- **New and Converted Contacts**
  Overview of how many new contacts have been created and how many contacts have been converted from a lower to a higher validation status during the last 3 months.
- **Leads and Accounts**
  Detailed Analysis on progress and success of marketing driven lead management providing KPIs for leads, opportunities, lead stages, associated interests, and products.
- **Spotlighting Accounts**
  Overview of the KPIs for accounts and for accounts that are ABM-relevant. It allows you an insight into data related to accounts with respect to master data completeness and interaction effectiveness.
- **Lead Nurture Performance**
  Helps you understand the performance of a lead nurture stream.

Marketing Planning and Performance

- **Spend for Marketing Plans**
  Overview of the top planned spend per media type and spend type, planned spend compared to actual spend, and the programs and campaigns with the highest deviation from the planned spend.

Offer Management

- **Offer Preview**
  Overview of offers that are planned during the next 3 months.
- **Offer Success**
  Detailed analysis and comparison of the success of offers that were valid during the last 3 months.

Marketing Data Analysis

- **Performance of Mobile Push Notifications Last Six Months**
  Operational report for the performance of the mobile push notification campaign for the last six months. The content above is relevant for SAP Marketing On Premise (Release 1909).
  Last Update: Release 2020.08

> **i** Note
>
> - You need to setup a live connection to see data. Please find more information on the SAP Help Portal for SAP Marketing On Premise > Integration > Integration Guide > Integration Scenarios > Application-Enabling Integrations > Integration with SAP Analytics Cloud (1SO).
> - Please find more information on the stories on the SAP Help Portal for SAP Marketing On Premise > Analytics and Reporting > Analytics Stories

2.52.1.4 SAP Marketing On Premise (2009)

Campaign Analytics

- **Success of Email and SMS Campaigns**
  Overview of Email and SMS campaign success for the last three months. Information includes numbers for Sent Messages, Delivered Messages, Unique Clicks, Hard Bounces, Soft Bounces, Missing Opt-in, Missing Communication Data, Relevant Overall Rates, and a comparison of Open Rate versus Opened Messages and more.
- **Campaign Statistics**

Key campaign statistics and KPIs applicable for all campaigns during the last three months.

- **Paid Social Campaigns Success**
  Overview of the performance over time of paid social campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Paid Search Campaigns Success**
  Overview of the performance over time of paid search campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Display Ad Campaigns Success**
  Overview of the performance over time of display ad campaigns with a breakdown by key dimensions, such as marketing area or agency, and key measures, such as the number of impressions, for the top campaigns. It includes ad serving spend and related cost measures such as CPM (cost per 1000 impressions).
- **Campaign Success for Mobile Push Notifications**
  Operational report based on campaign success for mobile push notifications for the last three months.
- **Bounce Statistics**
  Overview of the hard and soft bounces in your campaign, including the recipient id, name of the contact and bounce reason and description.
- **Hard Bounce**
  Displays a list of contacts behind hard bounces.
- **Soft Bounce**
  Displays a list of contacts behind soft bounces.

Contacts and Profiles

- **Profile Analytics**
  Overview of the channels used by the contacts to interact (in) during the last 3 months.
- **Channel Interest Mix**
  Overview of the distribution of interests across channels or communication media. It also visualizes the number of interactions raised for a given interest during the last 3 months.
- **New and Converted Contacts**
  Overview of how many new contacts have been created and how many contacts have been converted from a lower to a higher validation status during the last 3 months.
- **Leads and Accounts**
  Detailed Analysis on progress and success of marketing driven lead management providing KPIs for leads, opportunities, lead stages, associated interests, and products.
- **Spotlighting Accounts**
  Overview of the KPIs for accounts and for accounts that are ABM-relevant. It allows you an insight into data related to accounts with respect to master data completeness and interaction effectiveness.
- **Lead Nurture Performance**
  Helps you understand the performance of a lead nurture stream.

Marketing Planning and Performance

- **Spend for Marketing Plans**
  Overview of the top planned spend per media type and spend type, planned spend compared to actual spend, and the programs and campaigns with the highest deviation from the planned spend.

Offer Management

- **Offer Preview**
  Overview of offers that are planned during the next 3 months.
- **Offer Success**
  Detailed analysis and comparison of the success of offers that were valid during the last 3 months.

Marketing Data Analysis

- **Performance of Mobile Push Notifications Last Six Months**
  Operational report for the performance of the mobile push notification campaign for the last six months.
  The content above is relevant for SAP Marketing On Premise (Release 1909).
  Last Update: Release 2020.08

> **i** Note
>
> - You need to setup a live connection to see data. Please find more information on the SAP Help Portal for SAP Marketing On Premise > Integration > Integration Guide > Integration Scenarios > Application-Enabling Integrations > Integration with SAP Analytics Cloud (1SO).
> - Please find more information on the stories on the SAP Help Portal for SAP Marketing On Premise > Analytics and Reporting > Analytics Stories

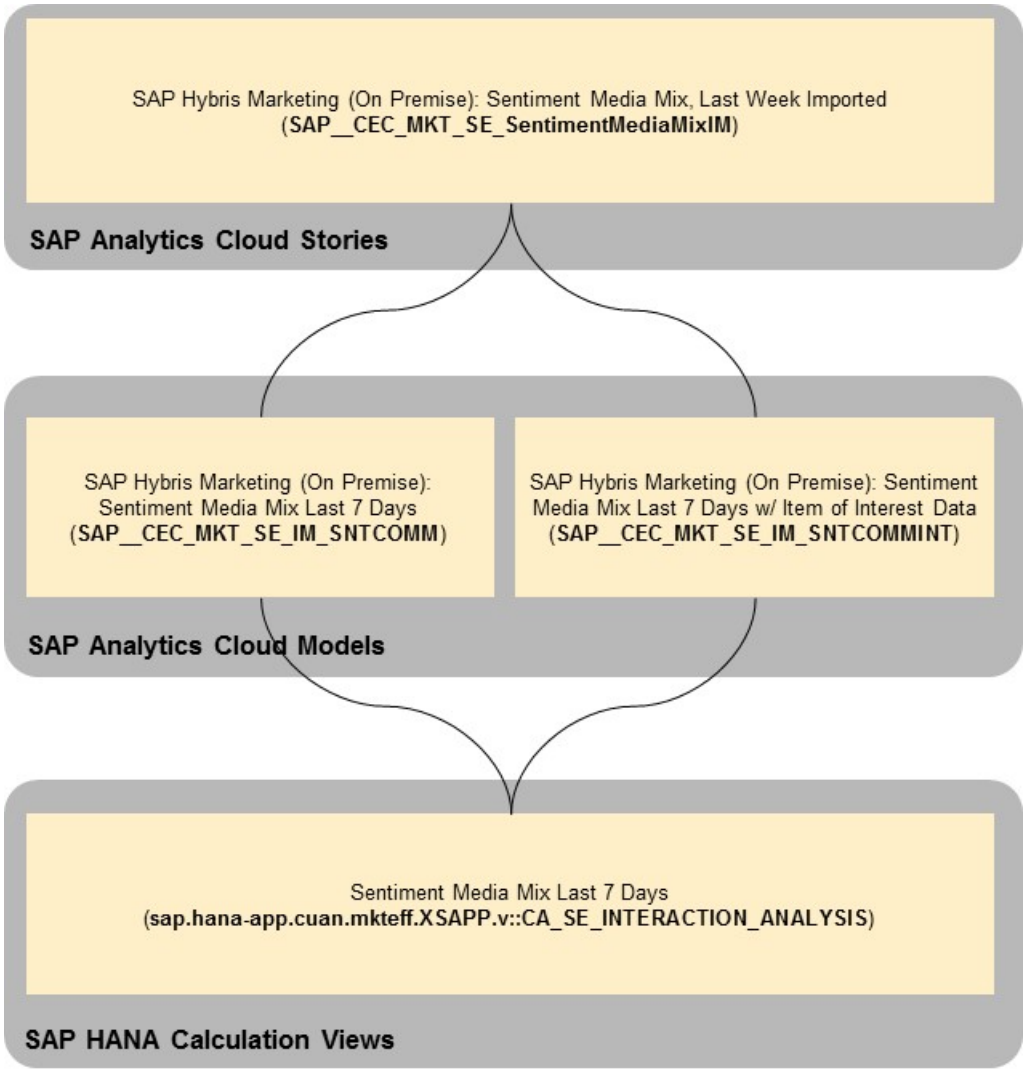
2.52.1.5 SAP Marketing – Data Acquisition (CEC_MKT_SE)

The next chapters provide the detailed information about Architecture, Stories, Models of SAP Marketing-Data Acquisition.

2.52.1.5.1 Architecture and Abstract

As described in the diagram below, we acquire data from SAP Marketing (On Premise), connecting via OData to the corresponding HANA On Premise instance.

Architecture



Usage in Industry-specific Boardrooms

To use the SAP Marketing Sentiment Media Mix boardroom as is, industries can make a copy of the story SAP__CEC_MKT_SE_SentimentMediaMixIM to their own namespace.

Alternatively, industries can create their own stories, pointing to the CEC_MKT_SE SAP Analytics Cloud models described above. You will find a list of industry stories pointing to one or more of these models below:

Industry	Story
SAP Utilities	SAP__UTL_CE_ANALYSIS

2.52.1.5.2 Stories

SAP Marketing (On Premise): Sentiment Media Mix, Last Week Imported
(SAP__CEC_MKT_SE_SentimentMediaMixIM)

There is a single story for SAP Marketing Sentiment Media Mix as described below

Name: SAP__CEC_MKT_SE_SentimentMediaMixIM	
Description: SAP Marketing (On Premise): Sentiment Media Mix, Last Week Imported	
Page: Sentiment Media Mix	
Charts	
Title	Models Used
Social Media Posts Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMM
Number of positive, neutral, and negative posts on social media by day over the last 7 days.	
Social Media Posts Last 7 Days by Communication Medium	SAP__CEC_MKT_SE_IM_SNTCOMM
Number of positive, neutral, and negative posts on social media by communication medium over the last 7 days.	
Top 5 Interests with Pos. Sentiments Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMMINT
Top 5 items of interest with regards to number of positive posts over the last 7 days.	
Top 5 Interests with Neg. Sentiments Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMMINT
Top 5 items of interest with regards to number of negative posts over the last 7 days.	
# of Posts for Top 5 Interests with Pos. Sent. Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMMINT
# of positive, neutral, & negative posts for each of the Top 5 items of interest with regards to # of pos. posts over the last 7 days.	

2.52.1.5.3 Models

The next chapters provide the detailed information about the Model: (SAP_CEC_MKT_SE_IM_SNTCOMM)

2.52.1.5.3.1 Sentiment Media Mix Last 7 Days (SAP__CEC_MKT_SE_IM_SNTCOMM)

Model Name: SAP__CEC_MKT_SE_IM_SNTCOMM		**Connection**
Model Description: SAP Marketing (On Premise): Sentiment Media Mix Last 7 Days Planning Enabled: No		Connection Type: Import Data Connection to OData Services (see description below)
Account*		
ID	**Description**	**Formula/Mapping**
Positive_Sentiment	Positive	POSTS_POSITIV
Neutral_Sentiment	Neutral	POSTS_NEUTRAL
Negative_Sentiment	Negative	POSTS_NEGATIV

Model Name: SAP__CEC_MKT_SE_IM_SNTCOMM		Connection
Number_of_Posts	Number of Posts	[Positive_Sentiment] • +[Neutral_Sentiment] • +[Negative_Sentiment]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	DATE_SQL
SAP_CEC_MKT_COMM	Communication Medium	COMM_MEDIUM
Additional Notes about the model		

Model Name: SAP__CEC_MKT_SE_IM_SNTCOMM	Connection

Connection HANA Calculation View: sap.hana-app.cuan.mkteff.XSAPP.v::CA_SE_INTERACTION_ANALYSIS

Open HANA Studio

Create an XS Project “SentimentOData”

Create file “MediaMix.xsodata” and edit it with the following code:

Source Code

```
service {
                                    "sap.hana-
app.cuan.mkteff.XSAPP.v::CA_SE_INTERACTION_ANALYSIS" as "MediaMix"
                                    keys generate local "ID"
                                    aggregates always;
                                    }
```

Leave file .xsapp blank

Make sure you set authentication to Basic in the .xsaccess file:

Source Code

```
{
                                    "exposed" : true,

"authentication" :
                                    {
                                    "method": "Basic"
                                    },
                                    "cache_control" : "must-revalidate",
                                    "cors" :
                                    {
                                    "enabled" : false
                                    },

                                    "enable_etags" : false,
                                    "force_ssl" : false,
                                    "prevent_xsrf" : true
                                    }
```

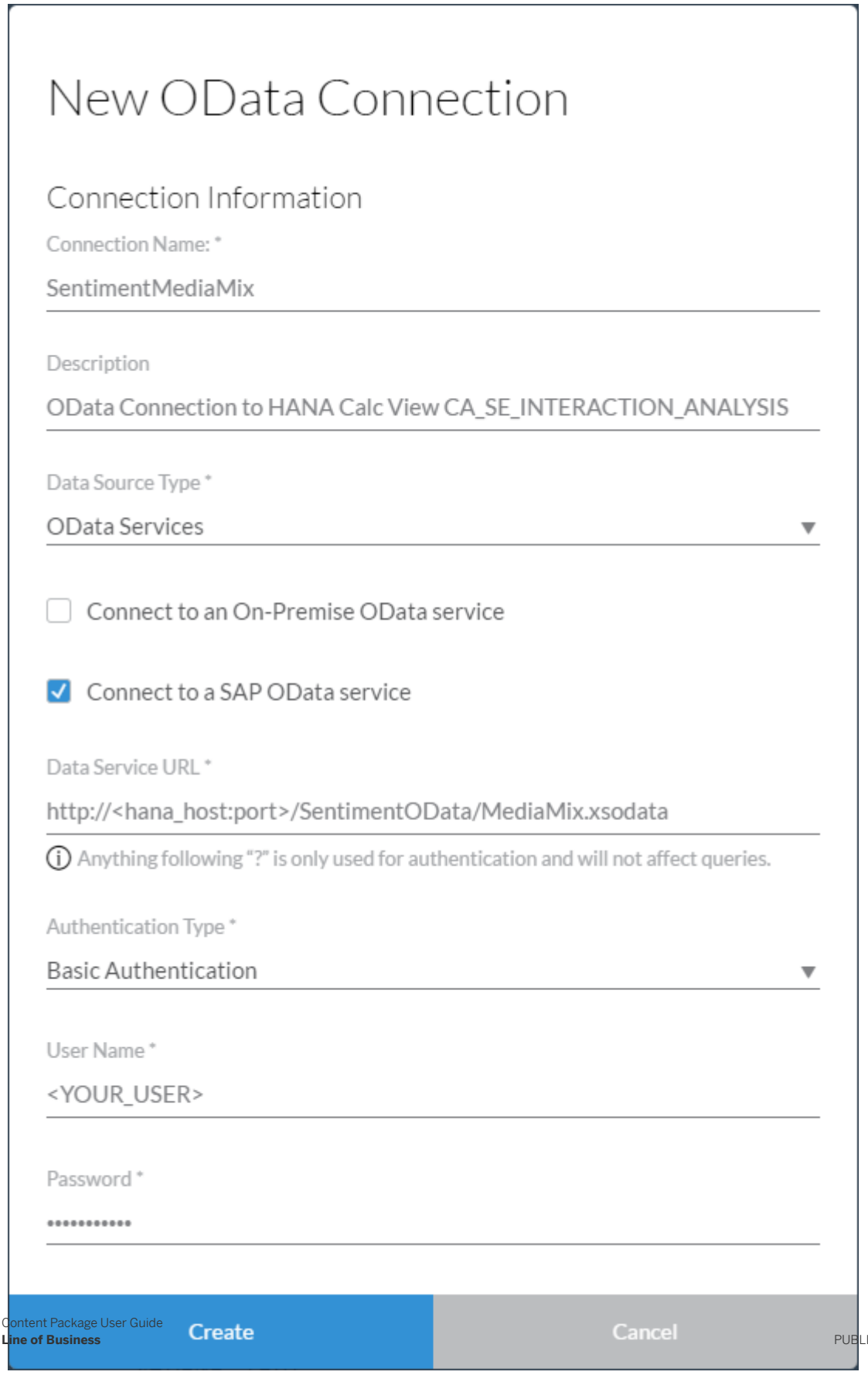
Activate your XS project via its Team/Activate context menu

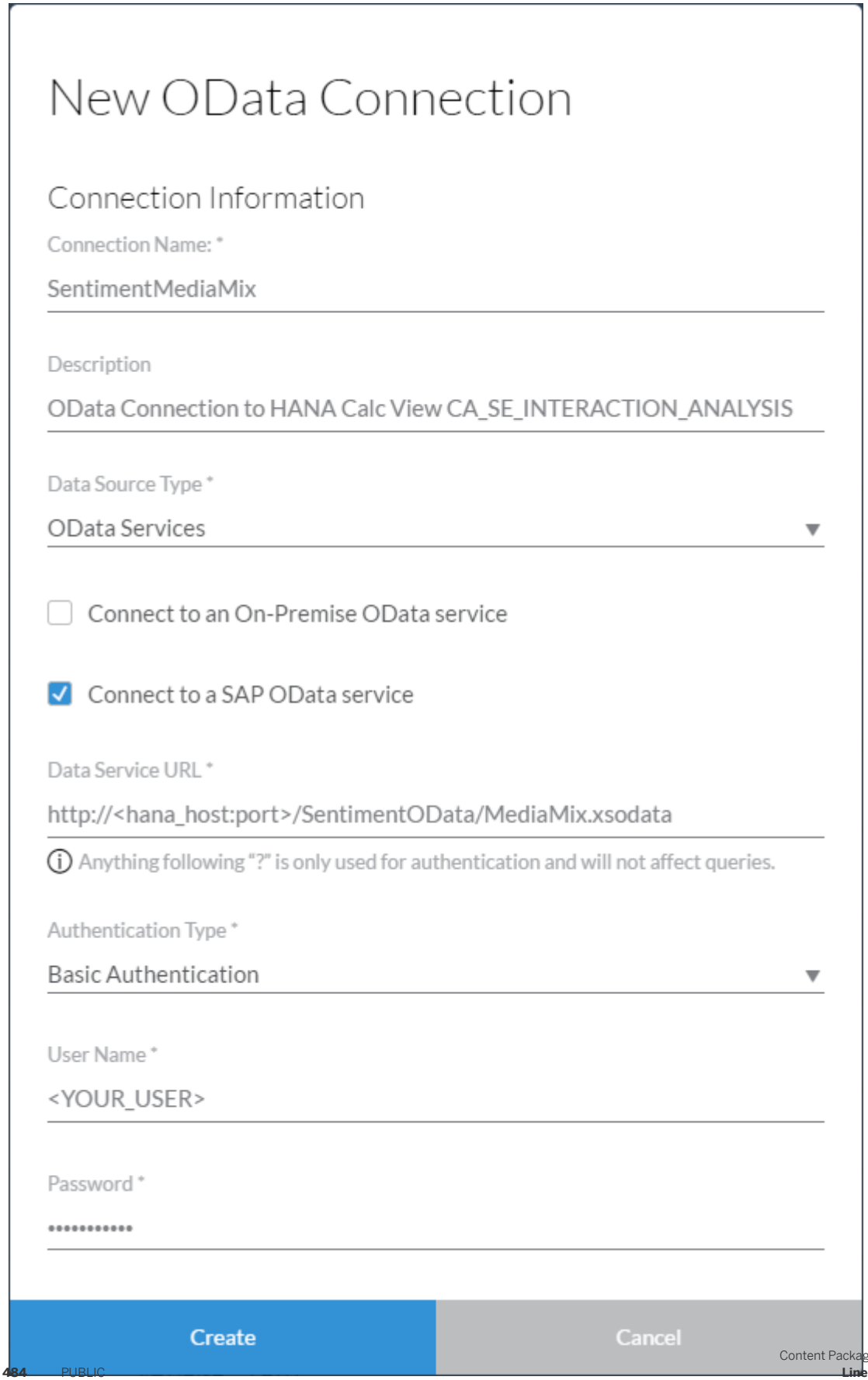
For more details on the steps above, refer to the following blogs:

https://blogs.sap.com/2012/12/21/hana-development-xs-odata-services/

https://blogs.sap.com/2013/01/22/rest-your-models-on-sap-hana-xs/

On your SAP Analytics Cloud System, create an OData connection as displayed in the screenshot below.




New OData Connection
Connection Information
Connection Name: *
SentimentMediaMix
Description
OData Connection to HANA Calc View CA_SE_INTERACTION_ANALYSIS
Data Source Type *
OData Services
Connect to an On-Premise OData service
Connect to a SAP OData service
Data Service URL *
http://<hana_host:port>/SentimentOData/MediaMix.xsodata
Anything following "?" is only used for authentication and will not affect queries.
Authentication Type *
Basic Authentication
User Name *
<YOUR_USER>
Password *
Create
Cancel

Model Name: SAP__CEC_MKT_SE_IM_SNTCOMM	Connection
You can now use this SentimentMediaMix oData connection to map the “Data Acquisition” model SAP__CEC_MKT_SE_IM_SNTCOMM to its HANA data source.	

> **i** Note
>
> *Private dimension and other dimensions are public.

2.52.1.5.3.2 Sentiment Media Mix Last 7 Days w/ Item of Interest Data (SAP__CEC_MKT_SE_IM_SNTCOMMINT)

Model Name: SAP__CEC_MKT_SE_IM_SNTCOMMINT		Connection
• Model Description: SAP Marketing (On Premise): Sentiment Media Mix Last 7 Days w/ Item of Interest Data • Planning Enabled: No		Connection type: Import Data Connection to OData Services (see details below)
Account*		
ID	**Description**	**Formula/Mapping**
Positive	Positive	POSTS_POSITIV
Neutral	Neutral	POSTS_NEUTRAL
Negative	Negative	POSTS_NEGATIV
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	DATE_SQL
SAP_CEC_MKT_COMM	Communication Medium	COMM_MEDIUM
Item of Interest	Interest	INTEREST_ITEM
Additional Notes about the model		
Connection HANA Calculation View: sap.hana-app.cuan.mkteff.XSAPP.v::CA_SE_INTERACTION_ANALYSIS Use the SentimentMediaMix oData connection created earlier to map the “Data Acquisition” model SAP__CEC_MKT_SE_IM_SNTCOMMINT to its HANA data source.		

2.53 SAP Procurement: Contract Management

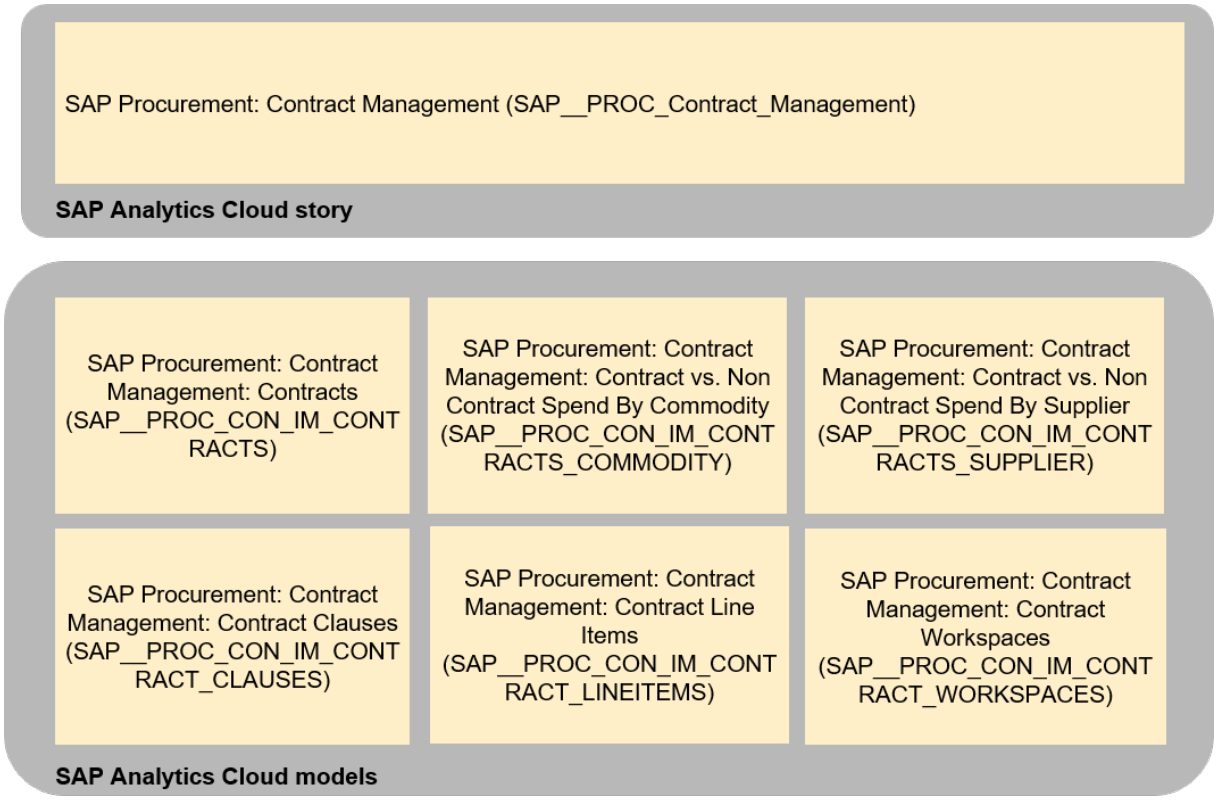
2.53.1 Architecture and Abstract

The SAP Procurement: Contract Management content package is an integrated set of analytics based on SAP Ariba Contracts data. The package covers three areas to provide insight into procurement contracts:

1. Overview – Provides an overview status and insight into an organization's active procurement contracts.

2. Contract Compliance – Measures an organization's compliance on making purchases against active contracts.

3. Contract Workspace and Clauses – Provides insights into contract execution efficiency and insights into contract clause usage.



2.53.2 Stories

This package contains the following story:

- SAP Procurement Contract Management (SAP__PROC_Contract_Management)

Remark: The currency used in the story is the same as the chosen reporting currency in the source Ariba system.

Overview Page Measures

Measure Name	Type	Formula/Properties
Total Contract Amount	Restricted Measure	Measure [Total Contract Amount] restricted by Category [Actual] and Expiration Date [Include before 2021]
Number of Open Contracts	Restricted Measure	COUNT DIMENSION [Contract ID] restricted by Category [Actual] and Status [Open]
Number of Commodities	Restricted Measure	COUNT DIMENSION [Commodity] restricted by Category [Actual]
Number of Suppliers	Restricted Measure	COUNT DIMENSION [Supplier ID] restricted by Category [Actual]
Number of Contracts	Aggregation	COUNT DIMENSION - Contract ID
Number of Open Contracts	Aggregation	COUNT DIMENSION - Contract ID

Contract Compliance Page Measures

Measure Name	Type	Formula/Properties
Amount Invoiced	Restricted Measure	Measure [Amount Invoiced] restricted by Category [Actual] and Expiration Date [Exclude before 2021]
Amount Used	Restricted Measure	Measure [Amount Used] restricted by Category [Actual] and Expiration Date [Exclude before 2021]
Amount Left	Restricted Measure	Measure [Amount Left] restricted by Category [Actual] and Expiration Date [Exclude before 2021]
Number of Open Contracts	Aggregation	COUNT DIMENSION - Contract ID

Measure Name	Type	Formula/Properties
Account Max Commitment	Restricted Measure	Measure [Account Max Commitment] restricted by Category [Actual] and Expiration Date [Exclude before 2021] and Status [Open]
Account Amount Left Percentage	Calculated Measure	["SAP__PROC_CON_IM_CONTRACTS":AmountPercentLeft]/100
Contract Spend	Restricted Measure	Version [Actual]
Non-Contract Spend	Restricted Measure	Version [Actual]

Measure Name	Type	Formula/Properties
Number of Executed Contracts	Calculated Measure	Measure [Number of Projects] restricted by Category [Actual] and Expiration Date [Exclude before 2021] and State [Active]
Number of Completed Contracts	Calculated Measure	Measure [Number of Projects] restricted by Category [Actual] and Expiration Date [Exclude before 2021] and State [Completed]
Average Duration	Calculated Measure	AVERAGE [Duration] aggregated by [ProjectId] restricted by Category [Actual] and State [Completed]
Clause Count	Restricted Measure	Measure [Clause Count] restricted by Category [Actual]
Account Max Commitment	Restricted Measure	Measure [Account Max Commitment] restricted by Category [Actual] and Expiration Date [Exclude before 2021] and Status [Open]
Number of Projects	Aggregation	COUNT DIMENSIONS [ProjectId] restricted by Account [Duration, Total Contract Amount, Number of Projects] and Begin Date [2020, 2021] and Category [Actual]
Duration	Restricted Measure	Restricted by Account [Duration, Total Contract Amount, Number of Projects] and Begin Date [2020, 2021] and Category [Actual]

Measure Name	Type	Formula/Properties
Total Contract Amount	Restricted Measure	Restricted by Account [Duration, Total Contract Amount, Number of Projects] and Begin Date [2020, 2021] and Category [Actual]

2.53.3 Models

Data Connectivity for the models is based on SAP Ariba Contracts and SAP Ariba Contract Compliance. SAP Ariba provides a reporting API that allows scheduled data extraction into SAP Analytics Cloud via a consumer-specific OData Service that requires additional services. Please contact your designated SAP Ariba support representative for implementation details.

Model Name	Technical Model Name	Connection
- SAP Procurement: Contract Management: Contracts	- SAP__PROC_CON_IM_CONTRACTS	- SAP Ariba created OData connection
- SAP Procurement: Contract Management: Contract vs. Non Contract Spend By Commodity	- SAP__PROC_CON_IM_CONTRACTS_COMMODITY	- SAP Ariba created OData connection
- SAP Procurement: Contract Management: Contract vs. Non Contract Spend By Supplier	- SAP__PROC_CON_IM_CONTRACTS_SUPPLIER	- SAP Ariba created OData connection
- SAP Procurement: Contract Management: Contract Clauses	- SAP__PROC_CON_IM_CONTRACT_CLAUSES	- SAP Ariba created OData connection
- SAP Procurement: Contract Management: Contract Line Items	- SAP__PROC_CON_IM_CONTRACT_LINEITEMS	- SAP Ariba created OData connection
- SAP Procurement: Contract Management: Contract Workspaces	- SAP__PROC_CON_IM_CONTRACT_WORKSPACES	- SAP Ariba created OData connection

2.53.4 Data Source

Data Connectivity for the models is based on SAP Ariba Contracts and SAP Ariba Contract Compliance. SAP Ariba provides a reporting API that allows scheduled data extraction into SAP Analytics Cloud via a consumer-specific OData Service that requires additional services. Please contact your designated SAP Ariba support representative for implementation details.

The OData connection name that the SAC models connect to will be defined by the customer once the data extractor is deployed in the customer environment. The OData service will have a dedicated URL per customer and must be connected to an OData connection in SAC.

2.54 SAP Product Carbon Footprint Analytics

2.54.1 Overview

Fighting climate change is rapidly moving up on the business agenda. The motivation of industry leaders goes beyond a heartfelt obligation to leave a livable planet to their children and grandchildren.

To safeguard their "license to operate" and to be a viable investment on the capital market, leading enterprises make their business model, product portfolio, operations, and supply chains compatible with customer and investor preferences – and resilient to more climate-related regulation.

Fighting climate change begins with understanding the CO2 footprint of a business. Greenhouse gas emissions don't just happen, they rather are the result of many distributed business decisions on all levels of the enterprise.

To enable businesses to minimize their CO2 footprint, they need the tools to analyze the impact of production, transportation, logistics, and the embedded contribution of procured materials, components, and energy to the overall greenhouse gas balance of services and finished goods. Dynamic and transparent insight is the foundation to minimize greenhouse gas emissions in day-to-day operations, to analyze business performance, to negotiate with suppliers, and to communicate with customers and ultimately consumers.

To optimize the carbon footprint of any operations, the best place to start is the end-product, which accumulates all the greenhouse gas emissions generated by all suppliers and all emissions by the enterprise itself, much in the same way that an end product accumulates all costs to calculate profitability.

If you find in a portfolio analysis that a product, a plant, a raw material, a piece of equipment, or a business unit consistently underperforms, then you can focus on these specific aspects to improve the overall performance. There is no fundamental difference between cost, revenue, and greenhouse gas performance.

With SAP Product Carbon Footprint Analytics, we believe that we can give you the tools to analyze your business portfolio and identify the things that need attention. The focus of this solution is on carbon footprint and the different factors playing into the carbon footprint for each product or plant.

2.54.2 Getting Started

For installation, see the general part of the documentation for an overview to select packages from the Business Content and install the packages.

The first time when an SAP Analytics Cloud package is imported, it is recommended to import all data (leave all data checkboxes checked) to import example data. However, once productive data is available in the system, it is recommended to uncheck the data checkbox for Models\SAP__C21_ANA_IM_CO2EPRODUCT to leave the existing data intact.

2.54.3 Configuration

In a first step, the data connection to S/4HANA, "FP&A - SAP Best Practices" must be configured (see menu "Connection") if not done yet. Please supply the relevant credentials of a technical user for the S/4HANA system which can be used to access the APIs. Note that only this connection needs to be maintained. Maintenance of further connections that are shipped with this package is optional. These would only be needed to supply dimensions with master data from further connected systems.

Within the data model, SAP__C21_ANA_IM_CO2EPRODUCT, first the master data must be configured. In many SAC tenants, most of the dimensions would already have data replicated. If not, for each dimension, the data must be replicated from the S/4HANA system after the relevant parameters have been configured to match business customization. It is important that all dimensions are imported first.

> **i** Note
>
> The demo data that is shipped with the package comes with its own data entries also in the relevant dimensions.

The dimension SAP__C21_ANA_IM_CO2ECATAGORY has no service for import attached, it is automatically filled during the import step.

Afterwards, the transaction data has to be configured and imported via the "Data Management" button. The SAP Product Carbon Footprint Analytics package uses three queries:

- Quantity Structure: Used with an inner join to sales quantities to load only those structures that have sales available and hence are relevant for CO2e footprint. The quantity structures determine which raw materials and processing activities flow into each product.
- Unit of Measures: Used also with an inner join to sales quantities, to download for all quantity structures the different conversions for unit of measures that are available for each product. These are sets of conversions are between a base and an alternative unit which are then used to make suggestions for conversions between Lot Size Units and Sales Quantity Units.
- Sales Quantities: This API is used to retrieve the quantities of each product sold. (Note that the current version does not support the use of production quantities for the purpose of CO2e footprint calculation.)

It may be required to edit each query (via "Edit Query") to match the configuration and customization in the S/4HANA system. For example, Costing Variant could be different within the business process, which would require an update of data imports in the model to the correct variant. In other cases, configurations may require applying specific filters to the Costing Status to restrict replication to relevant products. One can also consider creating a separate quantity structure, as a new variant, specifically for CO2e calculations. Furthermore, G/L Accounts should be reviewed, to make sure all G/L Accounts used for sales revenues are listed.

Note that queries are pre-configured to run in update mode. In order to support a **delta load** of S/4HANA data while keeping previously maintained CO2e values, it is recommended to keep queries in update configuration.

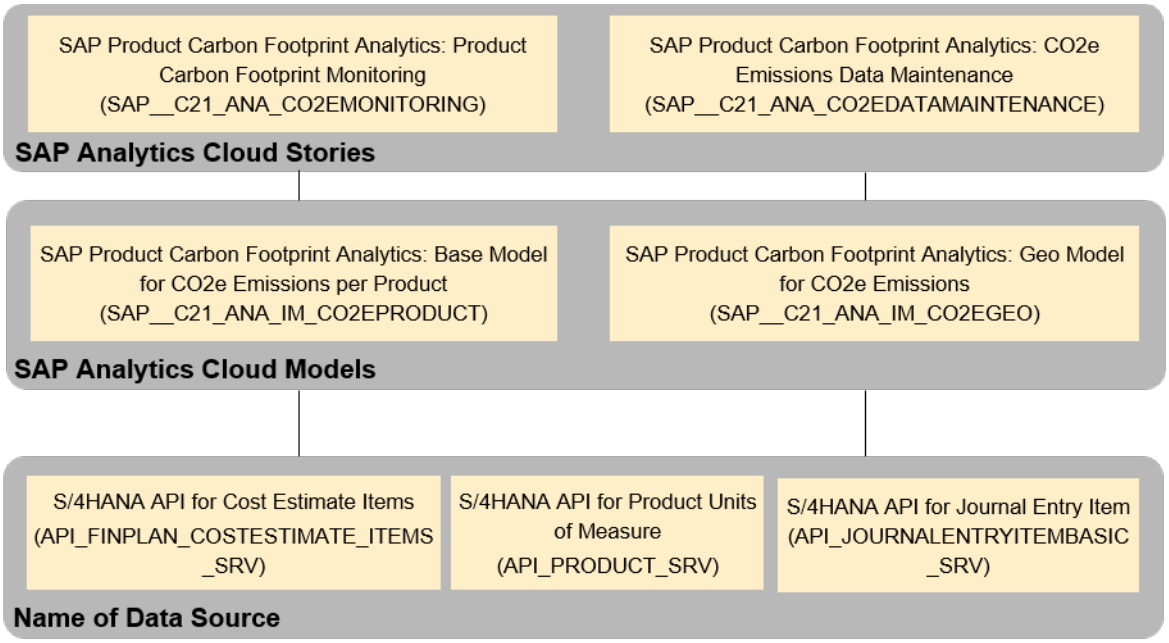
It is possible to plan a regular automatic import for these three APIs or to manually trigger an import. After each import, in the Data Maintenance story (SAP__C21_ANA_CO2EDATAMAINTENANCE) the **Initialize Data Model** data action must be triggered.

2.54.4 Architecture and Abstract

The SAP Product Carbon Footprint Analytics content on SAP Analytics Cloud consists of the following two stories:

- Data Maintenance for CO2e Emissions: In the first step, relevant CO2 equivalent (CO2e) emission values need to be maintained for production steps, e.g. the CO2e values for raw materials purchased, energy (specifically electricity consumed) and CO2e produced in processing steps.
- Product Carbon Footprint Monitoring: When emissions data has been maintained, the monitoring story can be used to look at the overall emissions for a company or to analyse the emissions by products and/or plants.

Architecture



2.54.5 Models

2.54.5.1 Base Model for CO2e Emissions per Product

Model Name: SAP_C21_ANA_IM_CO2EPRODUCT		Connection
• Model Description: Base Model for CO2e Emissions per Product • Planning Enabled: yes		SAP S/4HANA Import Connection "FP&A - SAP Best Practices"
Account		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		

Model Name: SAP_C21_ANA_IM_CO2EPRODUCT		Connection
Name	**Description**	**API Mapping**
Date	Date	n.a.
SAP_ALL_PLANT	Plant	API_PLANT_SRV
SAP_ALL_PRODUCT	Sold Product	API_PRODUCT_SRV
SAP_FI_BPL_COMPONENTPLANT	Component Plant	API_PLANT_SRV
SAP_ALL_MATERIAL	Material	API_PRODUCT_SRV
SAP_ALL_COSTCENTER	Cost Center	API_COSTCENTER_SRV
SAP_FI_BPL_CCACTIVITYTYPE	Cost Center Activity Type	API_COSTCENTERACTIVITYTYPE_SRV
SAP_FI_BPL_COMPQUANTITY_UNIT	Component Quantity Unit	C_FINUNITOFMEASURE_SRV
SAP_FI_BPL_SALESQUANTITY_UNIT	Sales Quantity Unit	C_FINUNITOFMEASURE_SRV
SAP_C21_ANA_CO2ECATEGORY	CO2e Category	n.a.
SAP_ALL_PROFITCENTER	Profit Center	API_PROFITCENTER_SRV
SAP_FI_BPL_LOTSIZE_UNIT	Lot Size Unit	C_FINUNITOFMEASURE_SRV
SAP_ALL_COMPANY_CODE	Company Code	API_COMPANYCODE_SRV
Transaction Data Mapping		
API Name		**Description**
API_JOURNALENTRYITEMBASIC_SRV		API Journal Entry Item (ACDOCA)
API_FINPLAN_COSTESTIMATE_ITEMS_SRV		API for Cost Estimate Items
API_PRODUCT_SRV		API for Product Units of Measure

*Private dimension, other dimensions are public.

All APIs from the table above refer to APIs that are exposed by S/4HANA systems (both On Premise and Cloud) via the reused S/4HANA - SAC import connection "FP&A - SAP Best practices". Custom queries on top of this import connection are used to import the transactional data. (bottom three lines in the table above)

2.54.5.2 Geo Model for CO2e Emissions

Model Name: SAP__C21_ANA_IM_CO2EGEO		Connection
• Model Description: Geo Model for CO2e Emissions		Copy Data from Model SAP_C21_ANA_IM_CO2EPRODUCT
Account Dimension		
ID	**Description**	**Mapping/Formula**
MEASURE*	Measure	n.a.
Dimensions		

Model Name: SAP__C21_ANA_IM_CO2EGEO		Connection
Name	**Description**	**Basis Model Member ID**
Date	Date	n.a.
Area	Area	SAP_C21_ANA_IM_CO2EPRODUCT.SAP_ALL_COMPANY_CODE.Country
SAP_ALL_COMPANY_CODE	Company Code	SAP_C21_ANA_IM_CO2EPRODUCT.SAP_ALL_COMPANY_CODE

The data model SAP__C21_ANA_IM_CO2EGEO uses the data model SAP_C21_ANA_IM_CO2EPRODUCT as reference data set. The data replication is handled by the Data Action SAP__C21_ANA_UPDATE_GEO_CO2E.

2.54.6 Stories

2.54.6.1 CO2e Emissions Data Maintenance (SAP__C21_ANA_CO2EDATAMAINTENANCE)

This story is used for entering all relevant CO2 equivalent (CO2e) emissions for a company along the different steps of the value chain. It focuses on four main sources of emissions: purchased goods and energy, direct emissions from the production steps and output transport emissions. With this story all relevant CO2e information is captured; the analytical presentation is done in the monitoring story (see below).

This story requires a few steps to prepare the data for computing the final emissions by product, plant and profit center for reporting purposes. We assume that the relevant structural data has already been imported from S/4HANA (Quantity Structures and Sales Quantities).

- Data is replicated from S/4HANA, using standard SAP Analytics Cloud (SAC) features. Of importance is to first parameterize the APIs to fetch the correct data according to your customization, for example controlling area, fiscal year, etc.
- After new products have been imported from S/4HANA, on the Overview tab, the “Initialize Data Model” button has to be clicked once to prepare the data model for CO2e data maintenance. Note that this does not overwrite or reset previously maintained CO2e data. This step should be completed each time after new data has been imported from a S/4HANA system.
- By default, only one quantity structure is specified in the model and this single quantity structure is applied to all relevant periods. This quantity structure is imported directly into the "Actual" version of the data model and is then replicated into all periods. However, if different quantity structures are relevant for different periods, then the import of the quantity structure from S/4HANA must be changed to import the "Imported Quantity Structure" version. As a next step, use then the data action "Copy Time Dependent Data", on the Overview page, to copy the imported quantity structure into the relevant periods in the "Actual" version. This process can be repeated any number of times, each time after the quantity structure is updated. The updated quantity structure is synced again into the "Imported Quantity Structure" version and from there copied into new relevant periods again with the "Copy Time Dependent Data" data action.
- For all data values to be entered, time series support has been activated. It is possible to either enter an average value to be used as value over all periods, or it is possible to enter individual values for specific periods. In this case, you the default SAC drag-and-extend feature to replicate the value to adjacent periods.

- In addition, an optional benchmark value can be added for each CO2e value specified. These benchmark numbers, if available, are then used in the monitoring, to show total CO2e values against the benchmark numbers. Note that total benchmark values are also computed similar to actual CO2e total values (based of sales quantities), so that after all computations, the actual total CO2e values can be compared to the planned benchmark numbers.
- Purchased Goods tab is used to enter CO2e emissions for all purchased materials, which are directly used by the company to produce own products. This tab reflects all materials that are part of the Bill of Materials (BOM) of products that have been sold in the time period of the data available from S/4HANA interface. What is required are the individual CO2e values for each material in the displayed base quantity. Recommended is to use Life Cycle Assessment (LCA) databases that are freely/commercially available for looking up CO2e values for materials, to obtain these values from suppliers or to use other sources of assessment.
- The Inbound Transport tab is used to capture CO2e emissions associated with the transportation of raw materials to the plant. Note that here CO2e emissions are specified relative to the respective raw materials for each product. In cases where complex transportation routes are used for inbound transportation to the plant, one could consider using average shipment values per raw material for the calculations.
- Purchased Energy tab is used to enter CO2e emissions associated with energy consumption of the individual processing steps directly required for producing the company's own products. All activities according to Routing or Recipe information of products that have been sold in the replicated time period are reflected in this tab.
- Direct Emissions tab is used to enter emissions that are caused directly in the production process itself, for example emissions measured at exhaust outlets of a production plant. This value has to be broken down over the specific products produced in the plant. The default option for allocation a total measured directed emission value for the complete plant to all products produced at the plant is to manually estimate the actual allocation per product. To support in this process, several heuristics are supported via data actions. Each of these heuristics will take the total CO2e direct emissions for a specific target plant and then allocate the emissions based on the programmed heuristics. For example: it is possible to allocate based on the sales quantities for each produced product.
- Outbound Transport Emissions tab is used to enter (averaged) emissions caused from transporting sold goods to their destination (e.g., the customer). For example: if your product is transported a specific number of kilometers per ship and a second leg with road transport, one takes the individual kilometer distances and for each type of transport multiplies that with the relevant CO2e emission values per kilometer. In the last step, one computes the number of products transported in such a shipment and then it is possible to compute the CO2e emissions per product for outbound transportation. In cases where complex transportation routes are used for shipment to different destinations, one could consider using average shipment values per product for the calculations.
- Overhead Emissions tab can optionally be used to capture any additional CO2e emissions that are associated with a specific product produced in a specific plant, that is not entered under any one of the other defined categories. This is effectively a place for miscellaneous CO2e entries.
- The Carbon Costs tab is used to maintain shadow costs associated with CO2e emissions. Such shadow costs could reflect company-internal fees, taxation, changes in buying propensities of customers, or virtual costs from non-material origins for example. A user is required to enter individual carbon costs for each sold product in the displayed currency per kg CO2e.
- The carbon footprint is computed based on sales quantities, which may be measured in other units of measurement than the production units. Generally, unit of measurement conversion factors are replicated from SAP S/4HANA, as far as they are available. In certain cases, however, the user may need to manual review and maintain these conversion factors in the Unit Conversion tab. All sales quantity units of products that have been sold in the replicated time period are reflected in this tab. A user is required to enter suitable Sales Quantity Unit and Lot Size Unit Factors for each non-identical unit conversion.

- For review purposes, the Quantity Structures and Sales Quantities tabs allow the user to review the product quantity structures and sales quantities as replicated from SAP S/4HANA. The tabs Product-Level Emissions and Total Emissions allow the user to review the calculated CO2e footprint on a product unit level and on a total level, respectively. The Detailed Information tab provides an overview of all values currently captured in the model and is targeted at advanced users. All these tabs are not relevant for data input or analytical purposes.

After completing CO2e data maintenance, on the Overview tab, use both the **Recalculate Carbon Footprint** and **Update Geospatial Data** buttons to trigger a calculation of aggregated CO2e emissions on a product, plant and profit center level for reporting purposes. This option can be triggered any number of times, at a minimum once after all data has been entered. Afterwards, this version of the data needs to be published using the **Publish Data** button in the toolbar, so that the monitoring story can work against the updated data model.

2.54.6.2 Product Carbon Footprint Monitoring (SAP__C21_ANA_CO2EMONITORING)

The data maintenance story focused on the gathering off all CO2 equivalent (CO2e) emissions for a company over products and plants. The monitoring story focusses on distilling the information and presenting it in actionable form.

Several different views onto the data are available below.

- The Total View shows an overview of the total CO2e values over all products as produced in all plants. The total values are also broken down into the six main categories: purchased goods, purchased energy, inbound transport, overhead emissions, direct emissions, and outbound transport.
- The views Plant, Country, Profit Center and Product shows first at a high-level the total company CO2e emissions as well as the emissions per period. In a second step, the different emissions are broken down relative to the main view selected.
- The Product Unit view displays in high detail the CO2e values based on the raw materials used per product, as well as the production steps to produce the product.
- Carbon Costs view attaches a monetary **shadow** cost to the CO2e produced, based on the configured costs associated per CO2e unit for each plant location.
- Ranked View gives a **Top 5** overview of each product causing the most CO2e values per category.

2.54.7 Data Actions

2.54.7.1 Data Actions for Base Model for CO2e Emissions per Product

- Initialization of SAP Product Carbon Footprint Analytics data model for newly replicated product quantity structures (SAP__C21_ANA_INIT_PRODUCT_CO2E). The focus of this data action is to create all the relevant data lines required to enter the different CO2e category values per product, as well as the relevant CO2e values for raw materials. In addition, it triggers a prefilling of unit of measurement conversion factors: Products can be produced and sold in different units of measure. Therefore, a unit of measure conversion factor is required during calculation. Via S4/HANA, relevant conversion factors are

downloaded. If conversion rules can be identified that match the conversion factors required, these are automatically prefilled into the data. However, the user is still required to verify correctness of these conversion factors, see Unit Conversion tab of the Maintenance Story (refer to CO2e Emissions Data Maintenance (SAP__C21_ANA_CO2EDATAMAINTENANCE) [page 494]). Note that also values that have been filled in automatically can be overwritten by a user; if values are maintained for a data row, these will in particular not get updated anymore, even if a user re-executes the initialization of the data model (SAP__C21_ANA_INIT_PRODUCT_CO2E).

- Usually a single quantity structure is supported for the complete model. This quantity structure is replicated into all relevant periods. However, if different quantity structures are required, then these must be synced into the "Imported Quantity Structure" version and then replicated to the Actual version for the relevant periods using the copy data action (SAP__C21_ANA_VERSION_COPY).
- After data has been entered, the calculate product carbon footprint (SAP__C21_ANA_CALCULATE_PRODUCT_CO2E) data action will compute and update all relevant total CO2e emissions as used for the monitoring story in the next steps. Because geospatial data is computed via a second model, also a second data action is required to update the total product carbon footprint for each country (SAP__C21_ANA_UPDATE_GEO_CO2E). These two data actions must be triggered at least once after all data has been entered. They can be triggered any number of times as intermediate steps.
- A number of data actions implement special heuristics to allocate total CO2e emission values to different products (SAP__C21_ANA_ALLOCATE_PLANT_CO2E, SAP__C21_ANA_ASSIGN_COMPANY_CO2E and SAP__C21_ANA_ASSIGN_PLANT_CO2E). These data actions all use an allocation process (SAP__C21_ANA_ALLOCATE_PLANT_CO2E) to do the actual allocation after all relevant heuristics has been computed.

2.54.8 Data Exporting and Importing

SAP Product Carbon Footprint Analytics is designed such that required data can be imported from S4/HANA systems (see Known Issues and Restrictions) and maintained within the Maintenance Story (refer to CO2e Emissions Data Maintenance (SAP__C21_ANA_CO2EDATAMAINTENANCE) [page 494]). However, in some cases it might be helpful to perform maintenance of CO2e base data and other related attributes in an offline spreadsheet application instead. For such cases, SAP Product Carbon Footprint Analytics supports download and upload of data using a dedicated template.

2.54.8.1 Data Maintenance Template

The XLSX template has an exact format that reflects the data model used one to one. This is to ensure a consistent import of data without data wrangling being required. It enables the user, in cases where complex CO2e computations are required, to do these offline and upload the final numbers into SAP Analytics Cloud.

As the XLSX follows the data model in SAP Analytics Cloud, there are a fixed number of columns that must be available. These columns are both the dimensions used, as well as additional measures. Depending on the type of data entered in any row, a specific subset of the columns needs to be filled.

> **i Note**
>
> The row types are qualified exactly by columns filled or not filled. It is critical that for each row type, exactly the required columns are completed correctly. It is recommended to start off with an exported data set,

just to get the correct columns filled per row, and from there to transform the XLSX into the format required for input. Do not include any extra rows into the XLS, as this data will also be imported, and will cause severe errors in the model.

The first block of rows (in the example XLSX shipped), describes completely the product structures. Three different row types are defined to describe a product.

> **i Note**
>
> For the three row types, the Date is hard-coded to be 001.2020.

- Any number of rows for Raw Materials: These rows describe the raw materials used in the specific product.
  - Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_FI_BPL_COMPONENTPLANT, SAP_ALL_MATERIAL, SAP_FI_BPL_COMPQUANTITY_UNIT
  - Measures: QuantityPerProductLotSize
- Any number of rows for Activities: These rows describe the activities in the production steps used to produce the product. Typical would be specify for example, time used on a specific production machine.
  - Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_ALL_COSTCENTER, SAP_FI_BPL_CCACTIVITYTYPE, SAP_FI_BPL_COMPQUANTITY_UNIT
  - Measures: QuantityPerProductLotSize
- One row for Production Lot Size Description: this row describes the lot size of the product that is produced in one batch, for which the raw materials and activities above are the input. In addition, the "shadow" carbons costs for CO2e are defined per product per plant. This is the cost factor used to compute monetary value for total CO2e.
  - Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_FI_BPL_LOTSIZE_UNIT
  - Measures: ProductLotSize, CarbonCostPerBaseQuantity

The second block of rows are the sales quantities per product per time unit. Here the Date field reflects the exact time unit for the sales quantities.

- Dimensions: Date, SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_ALL_PROFITCENTER, SAP_FI_BPL_SALESQUANTITY_UNIT
- Measures: SalesQuantity

The next block of rows describes the different inputs required in each CO2e category. Depending on the CO2e category, the "key" of each row may be a finished product, a raw material, or an activity. In total, there are four groups of values gathered. In all cases the Date column is hard coded to 001.2020.

- One row per Purchased Goods for the CO2e base value: These rows describe the CO2e values for each raw material used over all products.
  - Dimensions: Date (=001.2020), SAP_FI_BPL_COMPONENTPLANT, SAP_ALL_MATERIAL, SAP_FI_BPL_COMPQUANTITY_UNIT, SAP_C21_ANA_CO2ECATEGORY (=PURCHASED_GOODS)
  - Measures: CO2eBaseQuantity (=1), CO2ePerBaseQuantity
- One row per Inbound Transportation for the CO2e base value: These rows describe the CO2e values for each raw material used over all products.
  - Dimensions: Date (=001.2020), SAP_FI_BPL_COMPONENTPLANT, SAP_ALL_MATERIAL, SAP_FI_BPL_COMPQUANTITY_UNIT, SAP_C21_ANA_CO2ECATEGORY (=INBOUND_TRANSPORTATION)
  - Measures: CO2eBaseQuantity (=1), CO2ePerBaseQuantity

- One row per Activity for the CO2e base values of Purchased Energy: These rows describe the CO2e values for each activity step used over all products.
  - Dimensions: Date (=001.2020), SAP_ALL_COSTCENTER, SAP_FI_BPL_CCACTIVITYTYPE, SAP_FI_BPL_COMPQUANTITY_UNIT, SAP_C21_ANA_CO2ECATEGORY (=PURCHASED_ENERGY)
  - Measures: CO2eBaseQuantity (=1), CO2ePerBaseQuantity
- One row per product per plant for Direct Emissions: These rows describe the additional direct emission CO2e values from the production per product per plant.
  - Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_FI_BPL_LOTSIZE_UNIT, SAP_C21_ANA_CO2ECATEGORY (=DIRECT_EMISSIONS)
  - Measures: CO2eBaseQuantity (=1), CO2ePerBaseQuantity
- One row per product per plant for Outbound Transportation: These rows describe the CO2e values from the production per product per plant caused by outbound transportation.
  - Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_FI_BPL_LOTSIZE_UNIT, SAP_C21_ANA_CO2ECATEGORY (=OUTBOUND_TRANSPORTATION)
  - Measures: CO2eBaseQuantity (=1), CO2ePerBaseQuantity
- One row per product per plant for Overhead: These rows describe the CO2e values that cannot be allocated to one of the other CO2e categories.
  - Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_FI_BPL_LOTSIZE_UNIT, SAP_C21_ANA_CO2ECATEGORY (=OVERHEAD)
  - Measures: CO2eBaseQuantity (=1), CO2ePerBaseQuantity

The final block of rows describes possible unit of measure conversions for each product.

- Dimensions: Date (=001.2020), SAP_ALL_COMPANY_CODE, SAP_ALL_PLANT, SAP_ALL_PRODUCT, SAP_FI_BPL_LOTSIZE_UNIT, SAP_FI_BPL_SALESQUANTITY_UNIT
  - Measures: CO2eBaseQuantity (=1), SalesQuantityUnitFactor, LotSizeUnitFactor

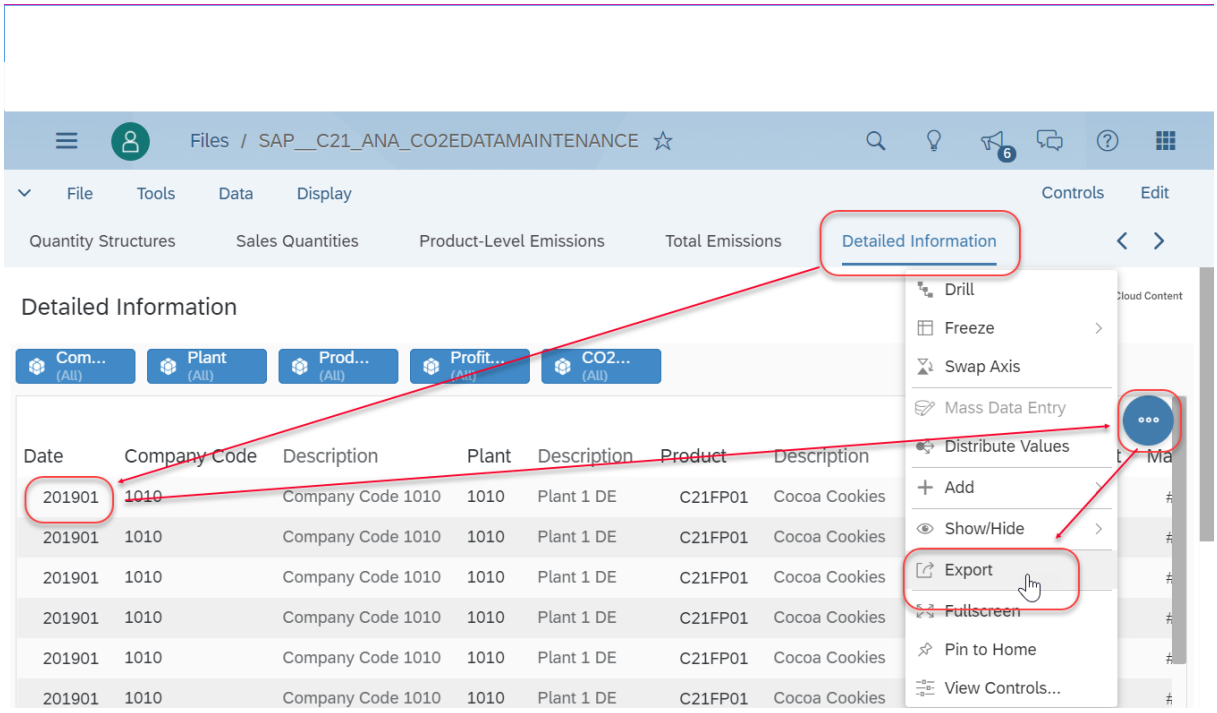
> **i Note**
>
> The Date is hard-coded to be 001.2020 and the value "1" for CO2eBaseQuantity must not be changed.

2.54.8.2 Data Exporting

To download data, go to the Maintenance Story (refer to Known Issues and Restrictions) and select the *Detailed Information* tab. This tab shows the complete data model with all relevant data gathered into one display table.

Select any cell in the table, to activate the *More Actions* menu for the table. Select *Export*. For the export itself, it is recommended to set filetype to XLSX. Depending on use case, decide to include formatting or not.

> **i Note**
>
> If the data will be (partially) imported back into SAP Product Carbon Footprint Analytics, it is recommended to not set the checkbox to include formatting and indent hierarchy.



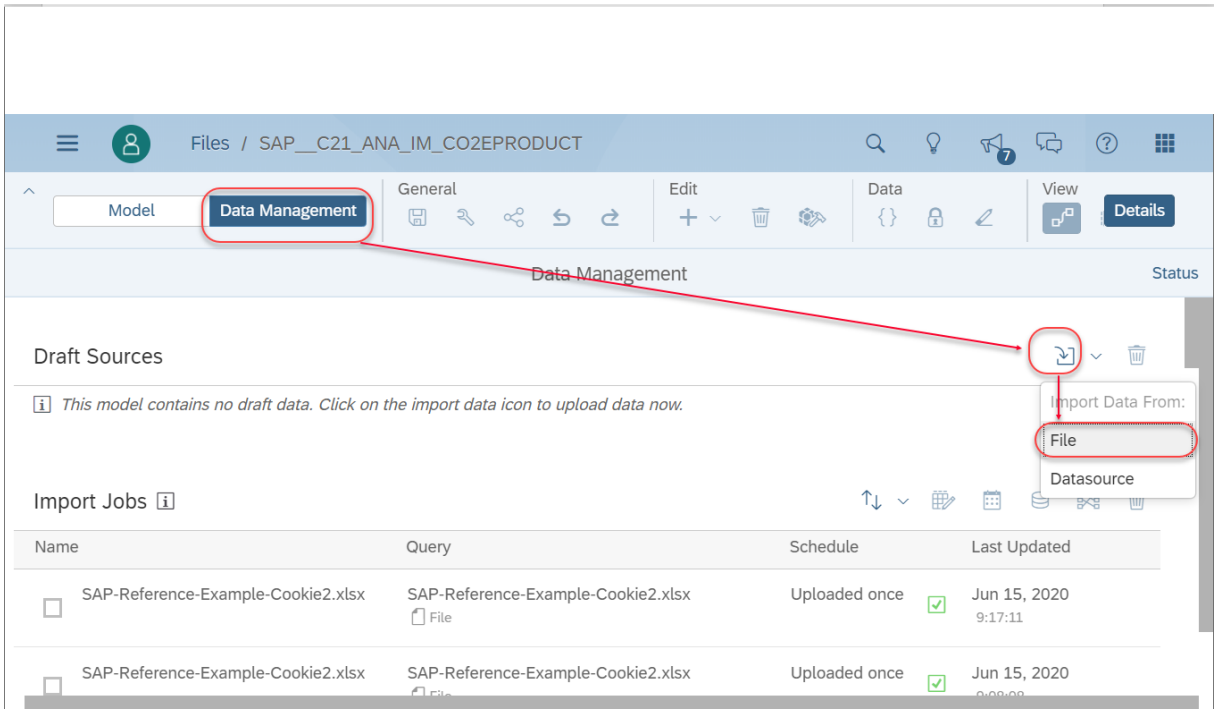
2.54.8.3 Data Importing

For data importing, the XLSX format must be so defined that it matches the model used for SAP Product Carbon Footprint Analytics exactly. For this, a reference XLSX is available within the product folder on SAP Analytics Cloud. The path is `My Files/Public/SAP_Content/SAP_C21_Product_Carbon_Footprint_Analytics`. The data in the XLSX must be prepared for importing in exactly the format as described above (refer to Data Maintenance Template [page 497]).

> **i Note**
>
> The data exported from SAP Analytics Cloud will not match this format by default. The exported data contains some additional columns, e.g. for descriptions to make the data easier to interpret and process. These columns must not be in the XLSX to be uploaded and needs to be deleted. In addition, the headers read differently and may therefore not be automatically matched during the upload process. For uploading data, it is therefore strongly recommended to copy any downloaded data row-wise or block-wise into the reference XLSX provided, while ensuring that the structure of the reference is kept.

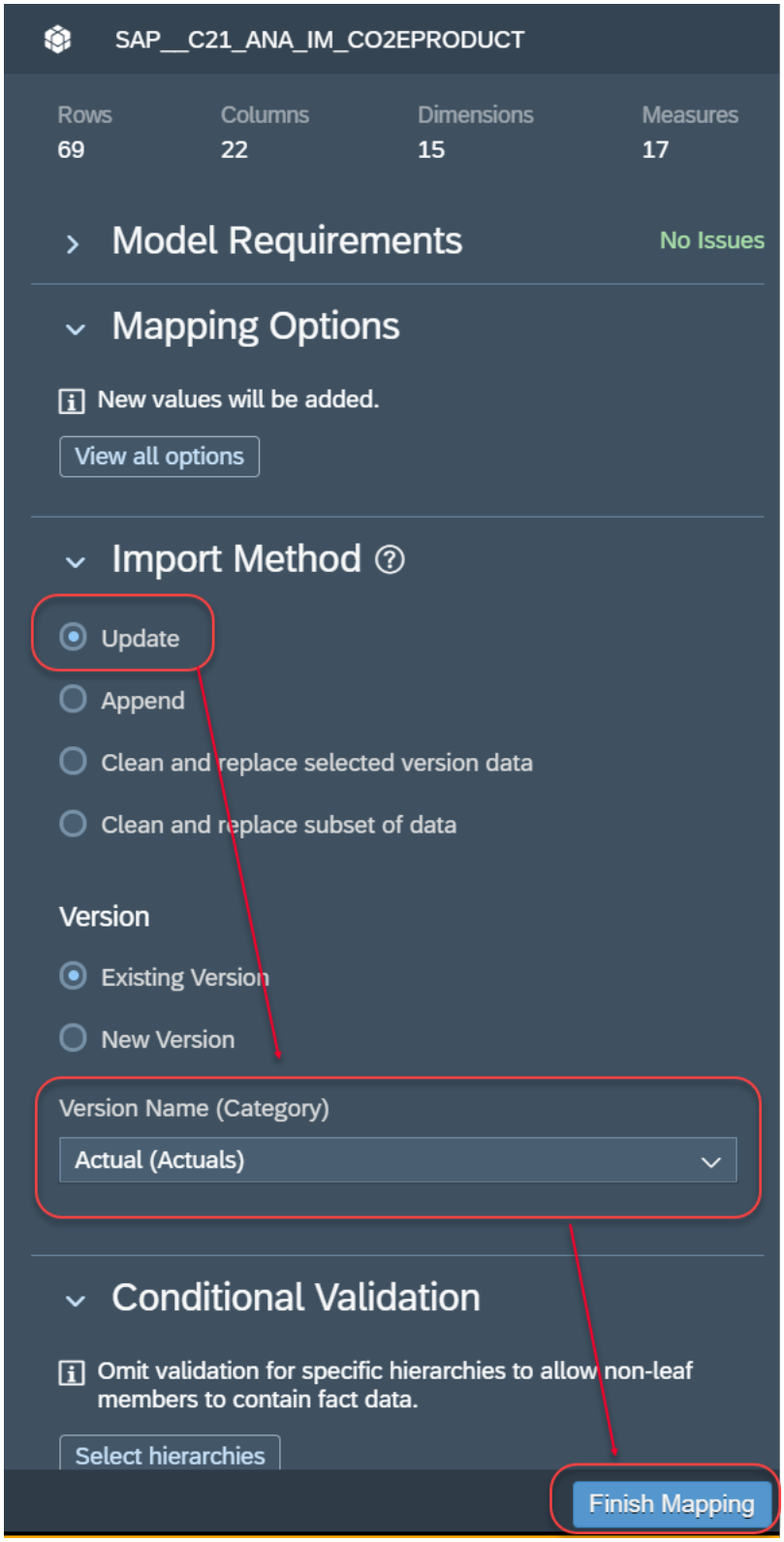
Please also note that rows will need to be filled completely in order to avoid problems during upload or even risk data corruption. This means, all fields of a specific row type that are filled in the template will also need to be filled in any uploaded row of data of the same row type.

The Data importing itself is done via the model (SAP__C21_ANA_IM_CO2EPRODUCT). Within the model, select Data Management and then the option "Import Data".



After the XLSX has been uploaded, select it and look at the data wrangling. If the imported XLSX format matches template, columns are typically automatically matched, and no data wrangling is required. Still, in certain cases the matching heuristics may fail, so it is recommended to verify correctness of the matching before importing and update the mapping manually if needed (refer also to the appropriate sections regarding data uploading of the general SAP Analytics Cloud documentation).

In most cases, the import will be completed in **Update** mode, where the existing model and version is updated. It is important to note, however, that this may overwrite previously maintained data row, and in case data in the XLSX file to be uploaded is not specified correctly, this may even lead to corrupt data in extreme cases. It is therefore recommended to do a test import into a separate data version first, by using "Clean and replace selected data" option and selecting a different or even a new version. Only after a successful to review the import should be repeated in "Update" mode into the "Actuals" version. For productive use, the upload should be imported into the "Actual" version. This is also the data version to which all stories of SAP Product Carbon Footprint Analytics point by default.



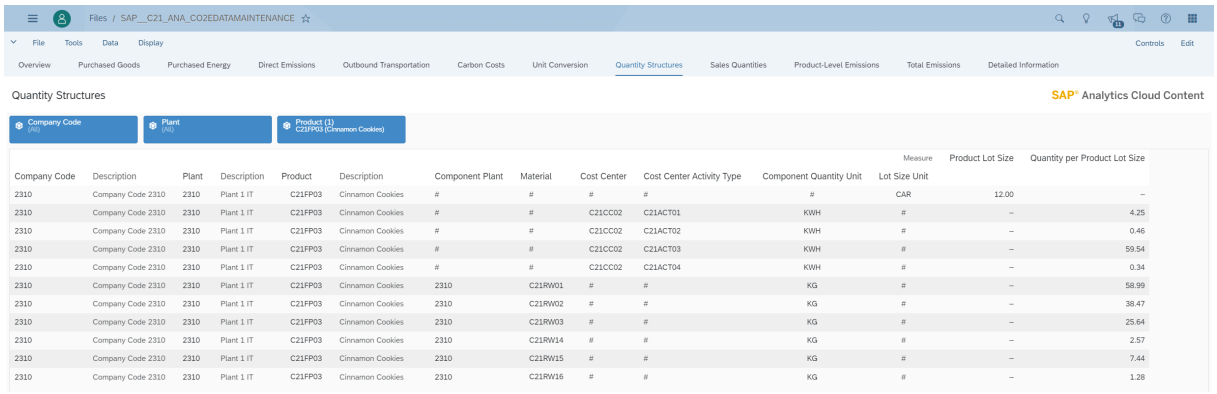
After ensuring that all settings are correct, press the button "Finish Mapping" as a final step to trigger the data import.

2.54.9 Overview of CO2e Computational Steps

This section will describe how, conceptually, CO2e footprint calculation is performed in SAP Product Carbon Footprint Analytics.

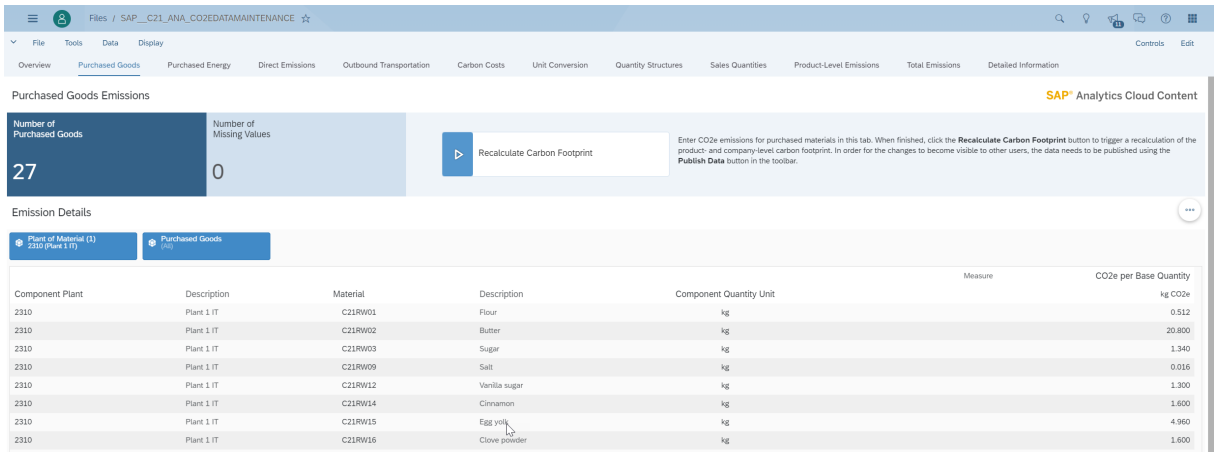
The starting point for computing the CO2e emissions is the actual raw materials used in the product (based on the S/4HANA Bill of Materials) and the production steps (based on the S/4HANA Routings/Recipes). These values are retrieved from S/4HANA for all products. Of importance here is that production is specified scaled to a product lot size. The amount and unit of a product lot size is replicated from S/4HANA together with the rest of the quantity structure of that product, which contains the exact list of raw materials that are used as well as the different activities in the production process.

After a successful replication from S/4HANA, the retrieved quantity structures can be inspected in the Quantity Structures tab of the Maintenance Story (refer to CO2e Emissions Data Maintenance (SAP__C21_ANA_CO2EDATAMAINTENANCE) [page 494]).

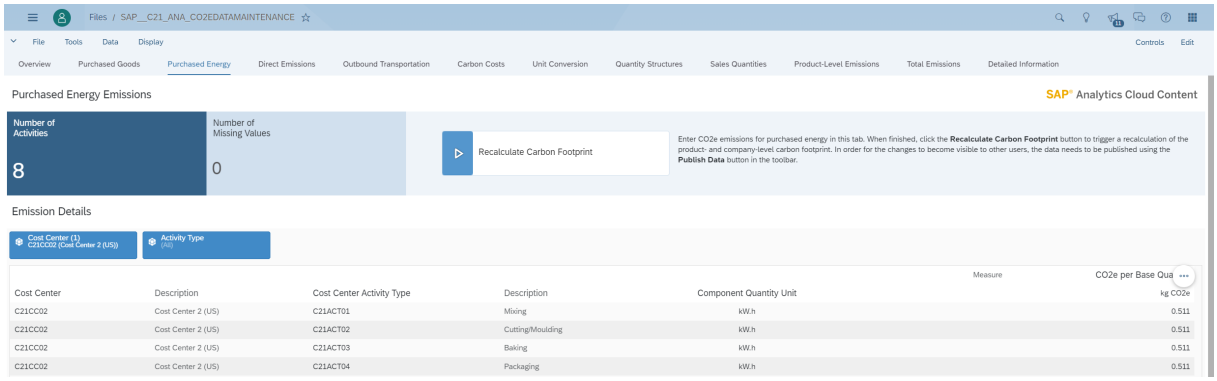


In this example, to produce a lot size of 12 cartons of cinnamon cookies, the required raw materials and processing steps are listed. Note that the product production is tied to a specific plant.

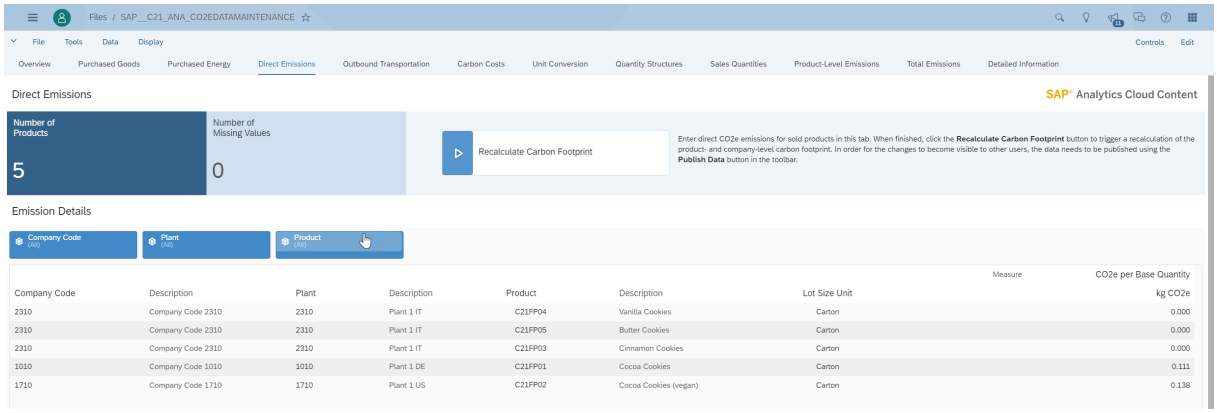
For all raw materials used in all products, for a specific production plant, the CO2e base values must be specified. This enables at a later stage the computation of CO2e values per product for the relevant raw materials used in the product.



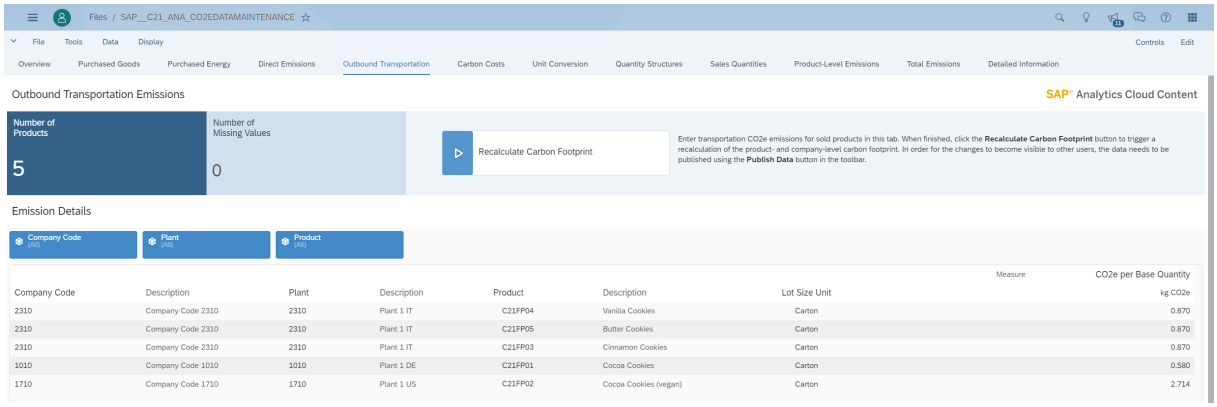
Similarly, for the energy used in the different activities of the production process, the CO2e values needs to be specified per activity.



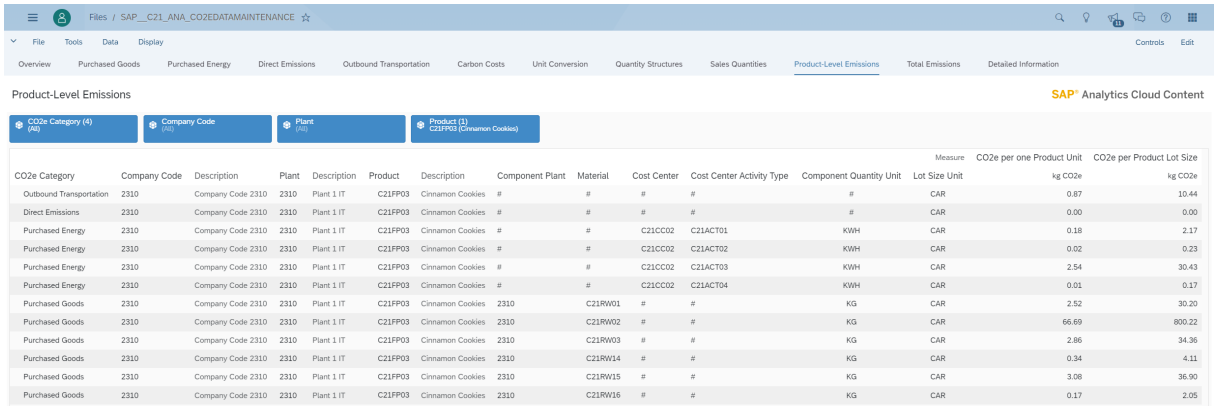
For the production process, it is also possible that CO2e is produced in the production process itself. This CO2e can be measured, for example, at the chimney of the factory, and then would apply to all products been produced at the specific plant. If a measurement for direct emissions is available, this measurement needs to be broken down over a specific time period into the quantities of each product produced within that period at the plant, and from this, a CO2e value for direct emissions for the production of a product in the displayed unit of measure can be computed and entered. Alternatively, direct emissions may be derived/calculated from process knowledge in other cases.



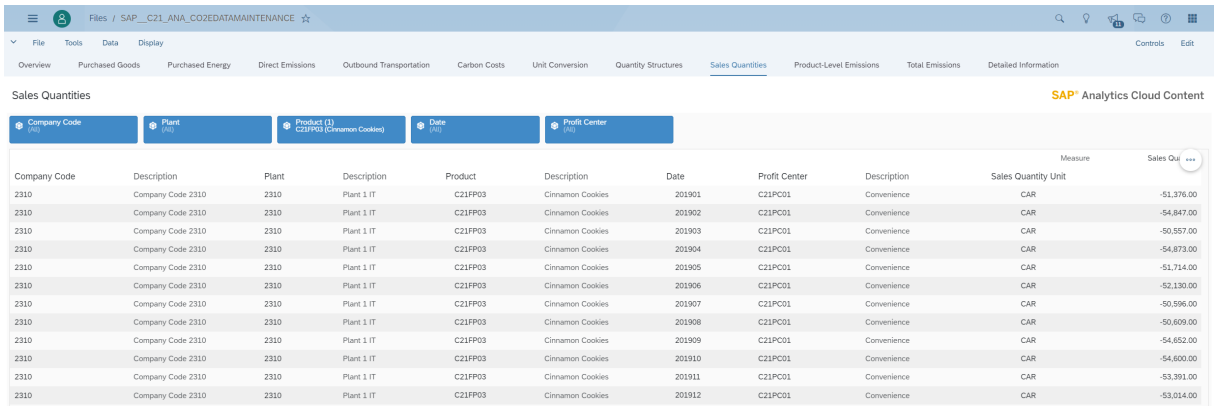
Similarly, the CO2e caused by outbound transportation must be computed, or estimated, separately for each product. In this calculation, the transportation methods should be considered, distances travelled, number of product units per transport, distances travelled and then the CO2e used for overall transportation. From this, an average CO2e value can be computed per product.



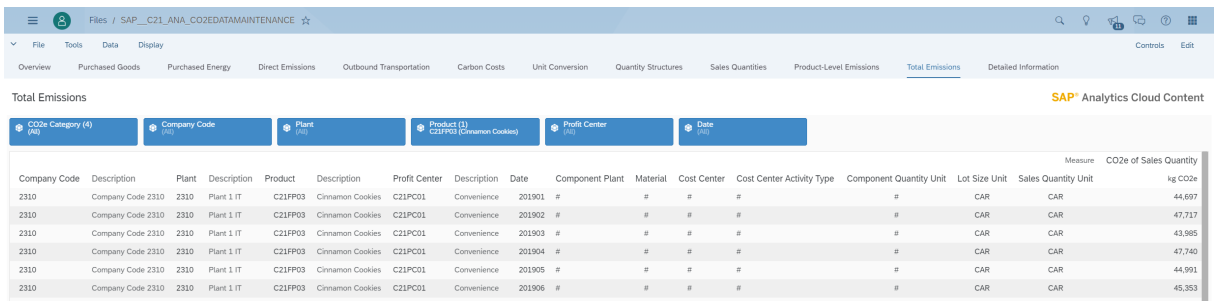
Based on the quantity structure and the CO2e specification for raw materials and activity steps, plus the CO2e values for direct emissions and outbound transport, the overall product level CO2e emissions are calculated by simple multiplication and summation. This is effectively the CO2e values for the production per one lot size and, appropriately scaled, one product unit.



Once this CO2e values are computed per product produced, the next step is to look at the actual sales quantities for a specific product. These are sales quantities per month. However, important is that the sales quantity units of measure are not always equivalent to the product lot size unit of measure. In this case, the values entered for Unit Conversions are used to match the numbers in the same base unit (the product lot size unit).



Based on the values for CO2e per product multiplied with the sales quantities in a month, the total CO2e produced for a product is computed.



These computed numbers are then visualized in the monitoring story, allowing detailed analysis per product and/or per plant.

2.55 SAP SuccessFactors Workforce Planning (SAP Best Practices)

2.55.1 SAP Best Practices for SAP SuccessFactors Workforce Planning (SAP Best Practice)

Strategic Workforce Planning is a scenario-based approach to predict workforce demand, supply, gap and cost and develop a five year workforce strategy. Operational Headcount Planning is a job classification- or position-based yearly planning of headcount for hires, terminations, transfers and cost.

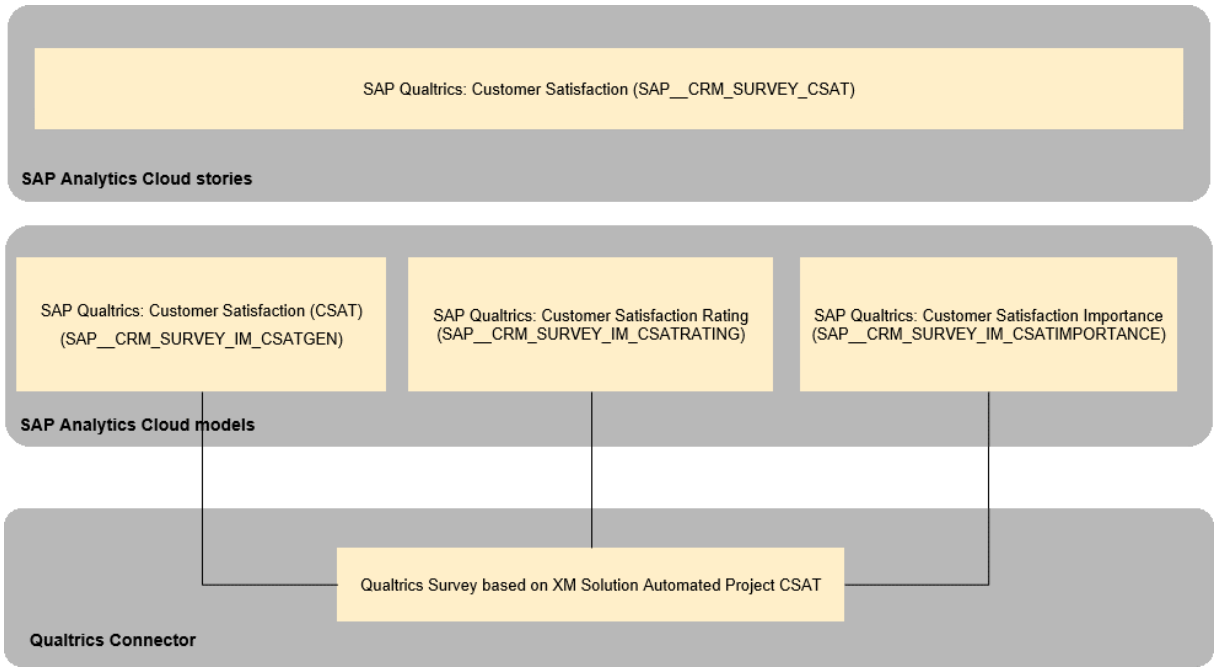
Find the details and documentation about this scope item in SAP Best Practices Explorer - SAP SuccessFactors Workforce Planning.

2.56 SAP Qualtrics Customer Satisfaction Score (CSAT)

2.56.1 Architecture and Abstract

Customer satisfaction (CSAT) helps you understand the relationship your customers have with your brand or product. The Qualtrics survey for CSAT focuses on understanding customers' experiences at key moments in the customer journey. This content is built based on excel export of results for a Qualtrics survey based on XM Solution Automated Project CSAT.

Architecture



2.56.2 Stories

SAP Qualtrics: Customer Satisfaction (SAP__CRM_SURVEY_CSAT)

The story does an in-depth analysis of a Qualtrics standard CSAT survey. There are 4 pages which are explained in further chapters.

Overview:

Get a total overview of your CSAT survey for selected products, be it trend of your survey responses and CSAT, geographical and demographical results, likelihood of purchase, willingness to recommend and understanding of negative comments.

Attributes:

Get into the details of all attributes addressed in your survey to analyse the satisfaction level and importance given to them by your survey respondents.

Details:

Get further insights into your survey results by analyzing customer service engagement and all details on demographical responses.

Adhoc Analysis:

Freely analyse the responses based on measures and dimensions of your choice.

2.56.2.1 Customer Satisfaction (SAP__CRM_SURVEY_CSAT)

Measure Name	Type	Formula/Properties
Customer Service Contacted	Restricted Measure	Responses where Contacted Customer Service? = yes
Customer Service Contacted?	Calculated Measure	[#Customer Service Contacted]/ ["SAP__CRM_SURVEY_IM_CSAT-GEN":recipientCount]

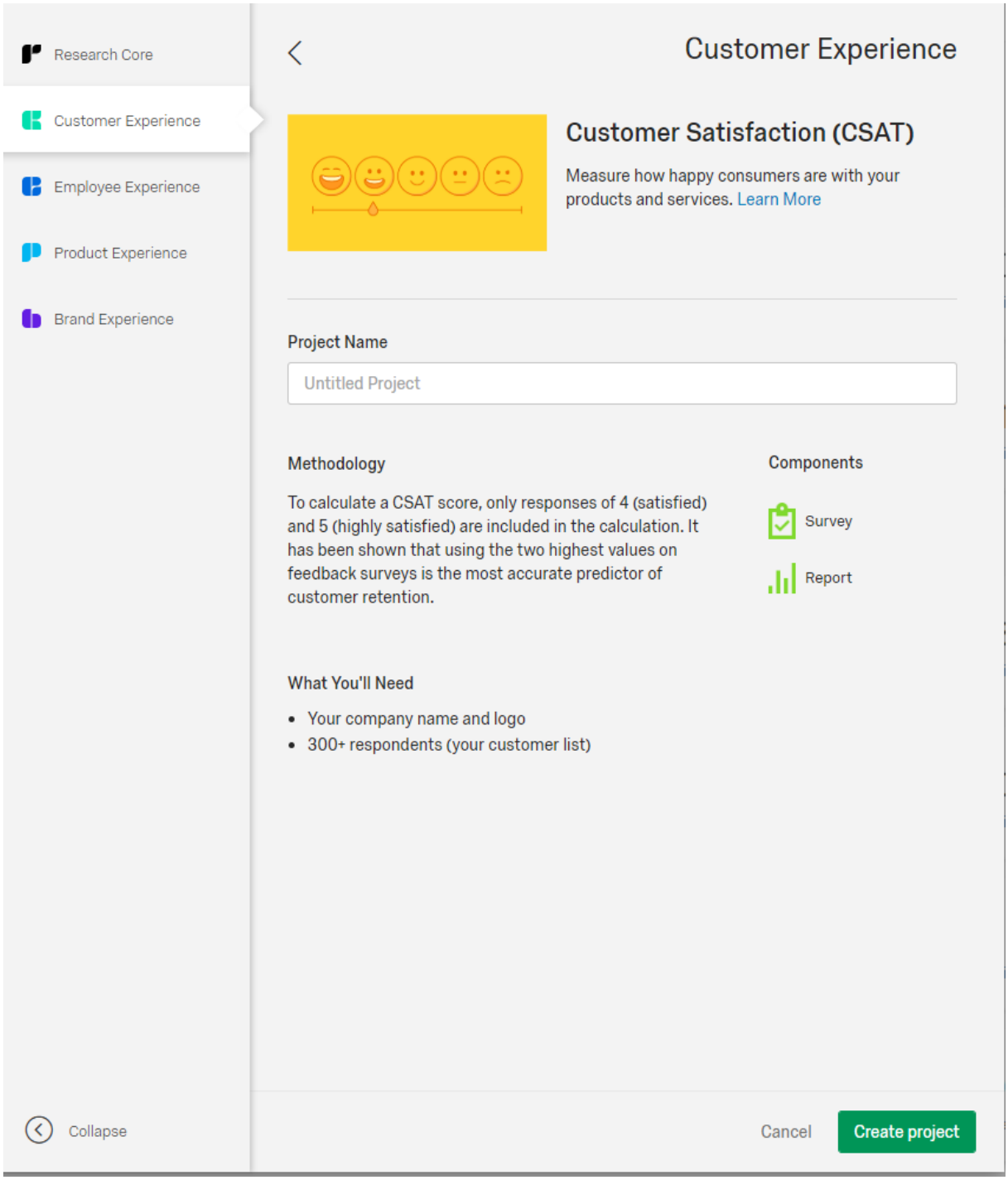
Measure Name	Type	Formula/Properties
Follow-up OK	Restricted Measure	Responses where Followup OK? = yes
Follow-up OK?	Calculated Measure	[#Follow-up OK] /["SAP__CRM_SURVEY_IM_CSATGEN":recipientCount]
Resolved to Satisfaction	Restricted Measure	Responses where Resolved to satisfaction?= yes
Issue Resolved to Satisfaction?	Calculated Measure	[#Resolved to Satisfaction]/[#Customer Service Contacted]

2.56.3 Models

The data source for the models is the project created based on standard CSAT template which is part of XM Solution Automated Projects.

Step-by-Step guide for uploading Qualtrics data into this content

Create your project based on Qualtrics standard template for CSAT e.g SAP Analytics Cloud Business Content CSAT



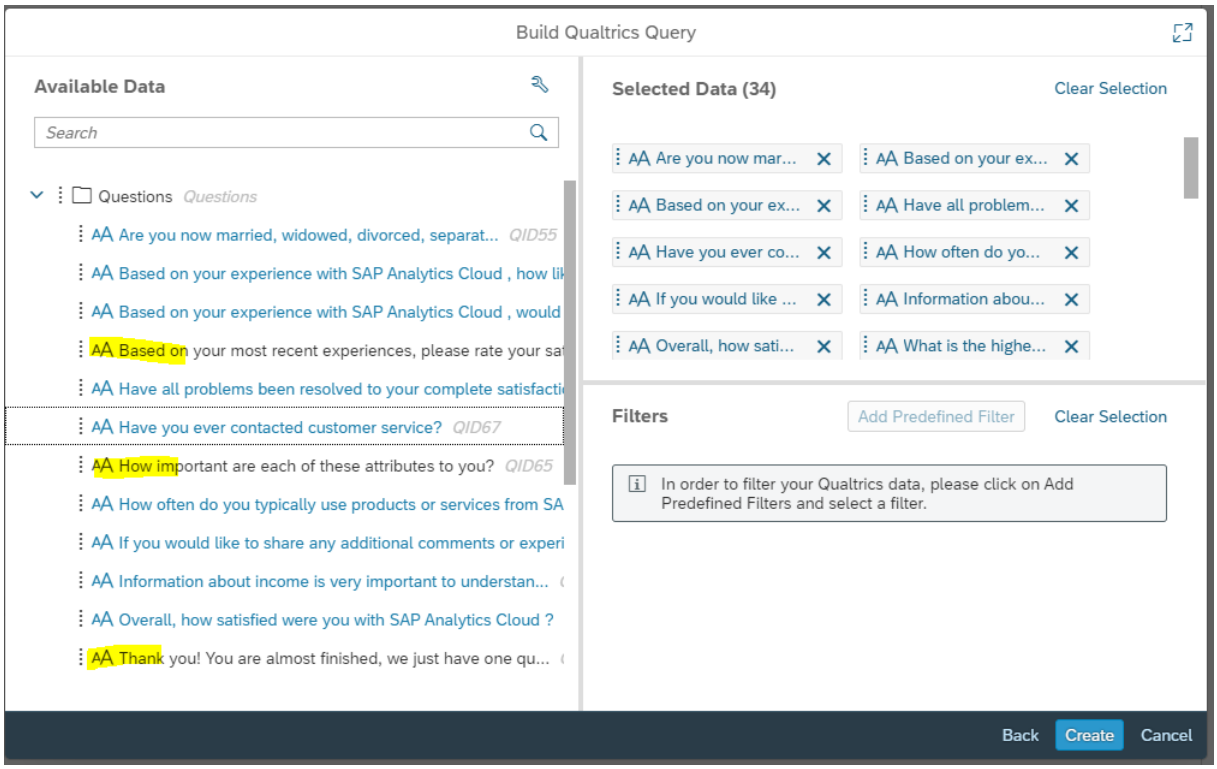
- If you want to use an embedded field in the survey so that it can be associated with other scenarios like product, then add the embedded field embeddedfield1 to your survey
- Create a connection to Qualtrics as mentioned in SAC documentiation.
- Use the importing data into an Exisiting model for Qualtrics basic steps provided in the Procedure section.

2.56.3.1 Customer Satisfaction (CSAT) (SAP__CRM_SURVEY_IM_CSATGEN)

This is the primary model for CSAT. All information apart from attribute specific questions are stored here. The other models are linked to this model in the story using ResponseId as linked dimension.

Query Builder has the following selections:

Drag both the folders from Available Data into Selected Data section and then remove the highlighted questions from the Selected Data section.



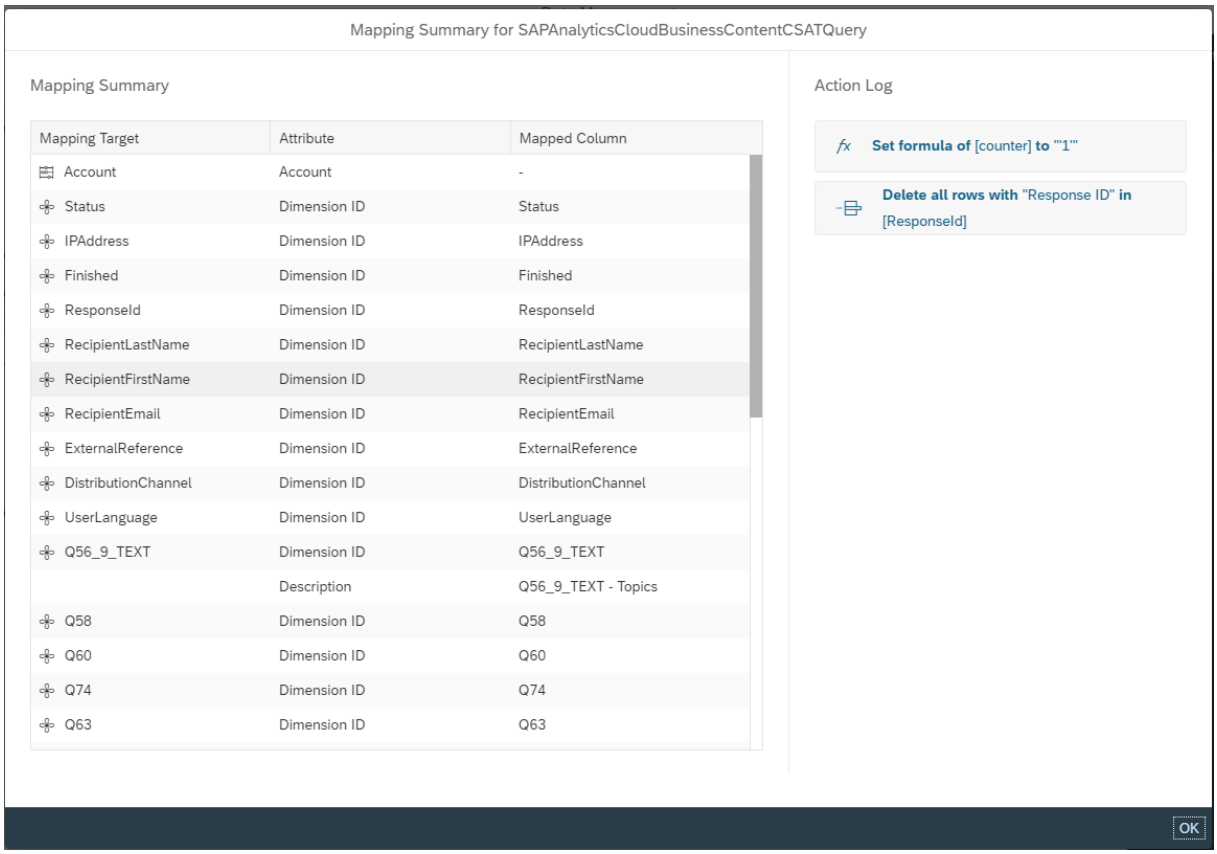
Delete the first row in the data wrangling page.

Model Name: SAP__CRM_SURVEY_IM_CSATGEN		**Connection**
• Model Description: SAP Qualtrics: Customer Satisfaction (CSAT) • Planning Enabled: No		Qualtrics Connector
Account Dimension		
ID	**Description**	**Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)**
Duration_in_seconds	Duration (in sec)	M: Duration_in_seconds
Progress	Progress	M: Progress
Q52	Age	M:Q52
recipientCount	Responses	C: 1 (step1.b in Further Information section)

Model Name: SAP__CRM_SURVEY_IM_CSATGEN		Connection
avgAge	Average Age	F: [Q52]/[recipientCount]
avgResponseDuration	Average Response Duration	F:[Duration_in_seconds]/[recipient-Count]
CSAT	CSAT	F:([satisfiedCount] /[recipientCount]) *100
satisfiedCount	Satisfied Count	F:LOOKUP([recipientCount],[d/Q16]=("12","11"))
surveyCompletionRatio	Survey Completion Ratio	F:[surveysCompleted]/[recipient-Count]
surveysCompleted	Surveys Completed Count	F:LOOKUP([recipientCount] ,[d/Finished]="1")
willingToPurchase	Willing To Purchase	F:LOOKUP([recipientCount] ,[d/Q20]=("4","5"))
willingToPurchaseRatio	Willing To Purchase	F:[willingToPurchase]/[recipientCount]
willingToRecommend	Willing to Recommend	F:LOOKUP([recipientCount] ,[d/Q21] =("5","6"))
willingToRecommendRatio	Willing to Recommend	F:[willingToRecommend]/[recipient-Count]
Dimensions		
Name	**Description**	**Mapping(M)/Formula(F)/Wran-gling(W)/Calculated Column(C)**
Status	Status	M:Status
IPAddress	IPAddress	M:IPAddress
Finished	Finished	M: Finished
ResponseId	ResponseId	M: ResponseId
RecipientLastName	RecipientLastName	M:RecipientLastName
RecipientFirstName	RecipientFirstName	M:RecipientFirstName
RecipientEmail	RecipientEmail	M: RecipientEmail
ExternalReference	ExternalReference	M: ExternalReference
DistributionChannel	DistributionChannel	M: DistributionChannel
UserLanguage	UserLanguage	M: UserLanguage
Q56_9_TEXT	Employment Status- other text	M: Q56_9_TEXT
Q58	Gender	M:Q58
Q60	Marital Status	M:Q60
Q74	Zip Code	M:Q74
Q63	Frequency of use	M:Q63
Q17	Contacted customer service?	M:Q17
Q19	Why customer support not contacted?	M:Q19

Model Name: SAP__CRM_SURVEY_IM_CSATGEN		Connection
Q20	Purchase again?	M:Q20
Q21	Recommend product?	M:Q21
Q22	Comments	M:Q22
Q23	Followup OK?	M:Q23
Q25	Followup email	M:Q25
embeddedfield1	embeddedfield1	M: embeddedfield1
StartDate	StartDate	M:StartDate
EndDate	EndDate	M:EndDate
RecordedDate	RecordedDate	M:RecordedDate
Q54	Education	M:Q54
Q56	Employment Status	M:Q56
Q16	Overall satisfaction	M:Q16
Q18	Resolved to satisfaction?	M:Q18
Q30	Income	M:Q30
GEO_DIM_Location	Location	W:LocationLatitude , LocationLongitude (map LocationLatitude to Geo Latitude and LocationLongitute to Geo Longitude)
* Please note that you don't need to have all the fields in your survey. If a field is not available in your survey, then map the dimension in the model to #.		

The mapping summary as seen in the data management tab for the selected import job.

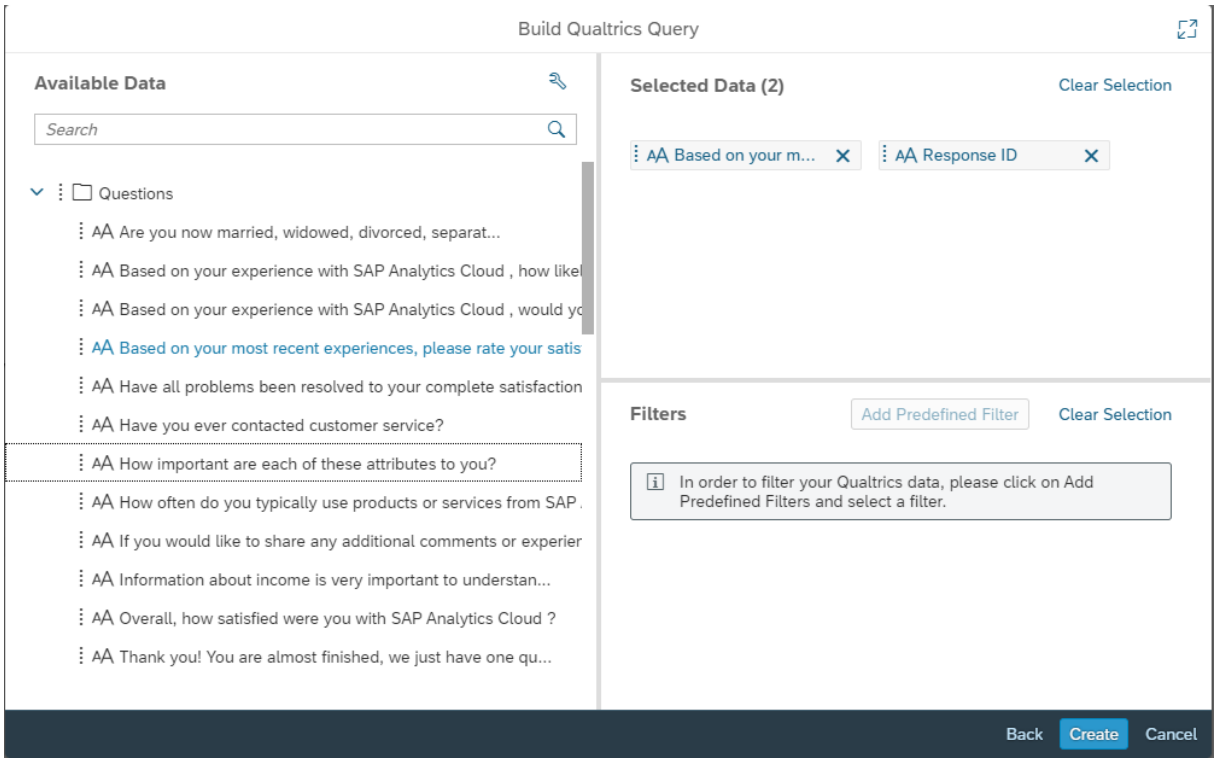


Mapping Target	Attribute	Mapped Column
Account	Account	-
Status	Dimension ID	Status
IPAddress	Dimension ID	IPAddress
Finished	Dimension ID	Finished
ResponseId	Dimension ID	ResponseId
RecipientLastName	Dimension ID	RecipientLastName
RecipientFirstName	Dimension ID	RecipientFirstName
RecipientEmail	Dimension ID	RecipientEmail
ExternalReference	Dimension ID	ExternalReference
DistributionChannel	Dimension ID	DistributionChannel
UserLanguage	Dimension ID	UserLanguage
Q56_9_TEXT	Dimension ID	Q56_9_TEXT
	Description	Q56_9_TEXT - Topics
Q58	Dimension ID	Q58
Q60	Dimension ID	Q60
Q74	Dimension ID	Q74
Q63	Dimension ID	Q63

2.56.3.2 Customer Satisfaction Rating (SAP__CRM_SURVEY_IM_CSATRATING)

This model stores the satisfaction scores for attributes.

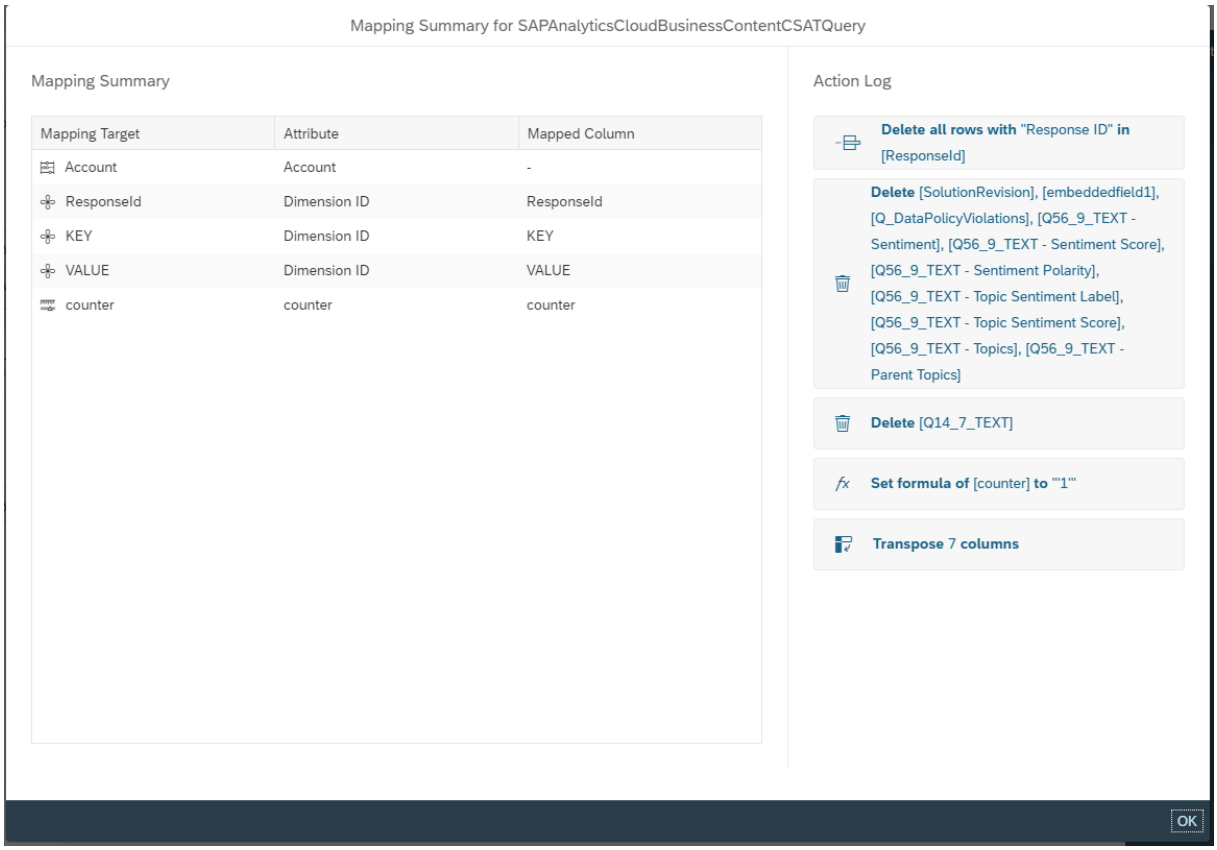
Query Builder has the following selections



Delete the first row in the data wrangling page.

Model Name: SAP__CRM_SURVEY_IM_CSATRATING		**Connection**
• Model Description: SAP Qualtrics: Customer Satisfaction Rating • Planning Enabled: No		Excel import based on Qualtrics CSAT Standard Template
Account Dimension		
ID	**Description**	**Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)**
counter	counter	C: 1 (step1.b in Further Information section)
CSAT	CSAT	F: ([satisfiedcount]/[counter]) *100
Satisfied count	Satisfied count	F:LOOKUP([counter] ,[d/VALUE]=("4","5"))
Dimensions		
Name	**Description**	**Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)**
ResponseId	ResponseId	M:ResponseId
KEY	Attribute	Follow step 1.a-c of the Further information section. Then map KEY to Attribute
Value	Rating	Subsequently map value to Rating

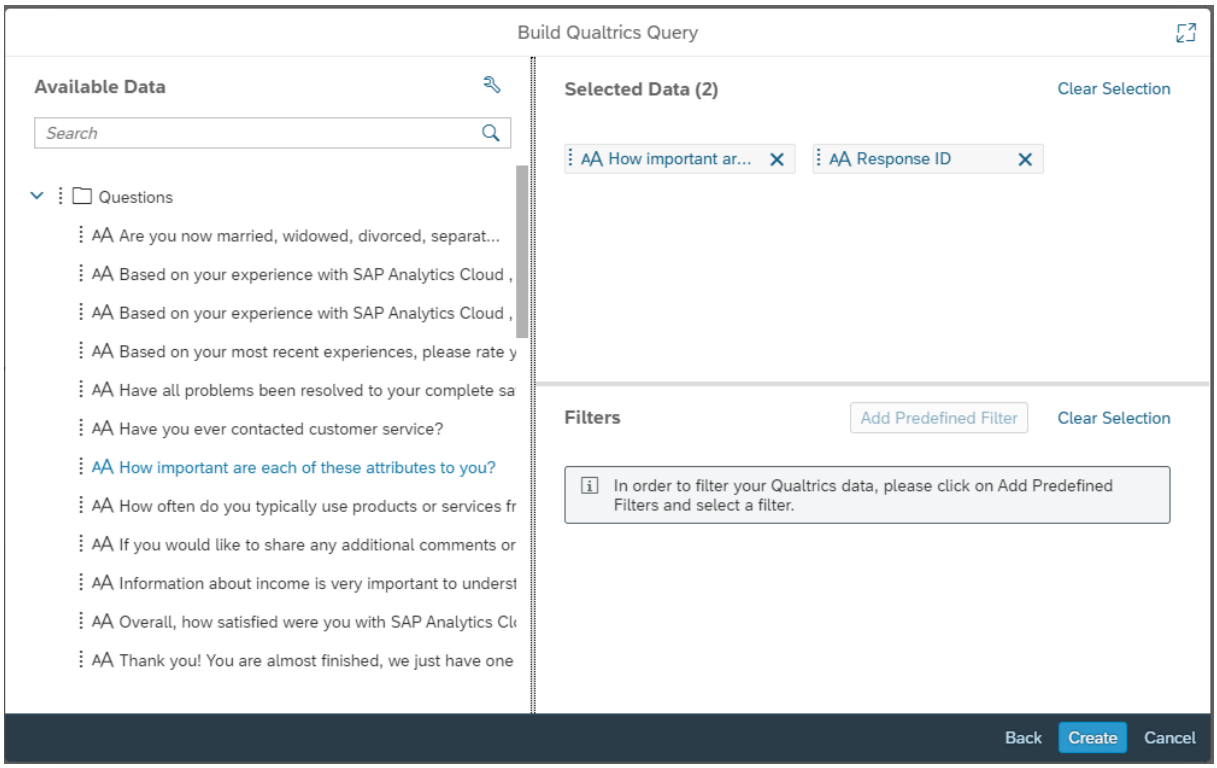
The mapping summary as seen in the data management tab for the selected import job.



2.56.3.3 Customer Satisfaction Importance (SAP__CRM_SURVEY_IM_CSATIMPORTANCE)

This model stores the importance for attributes.

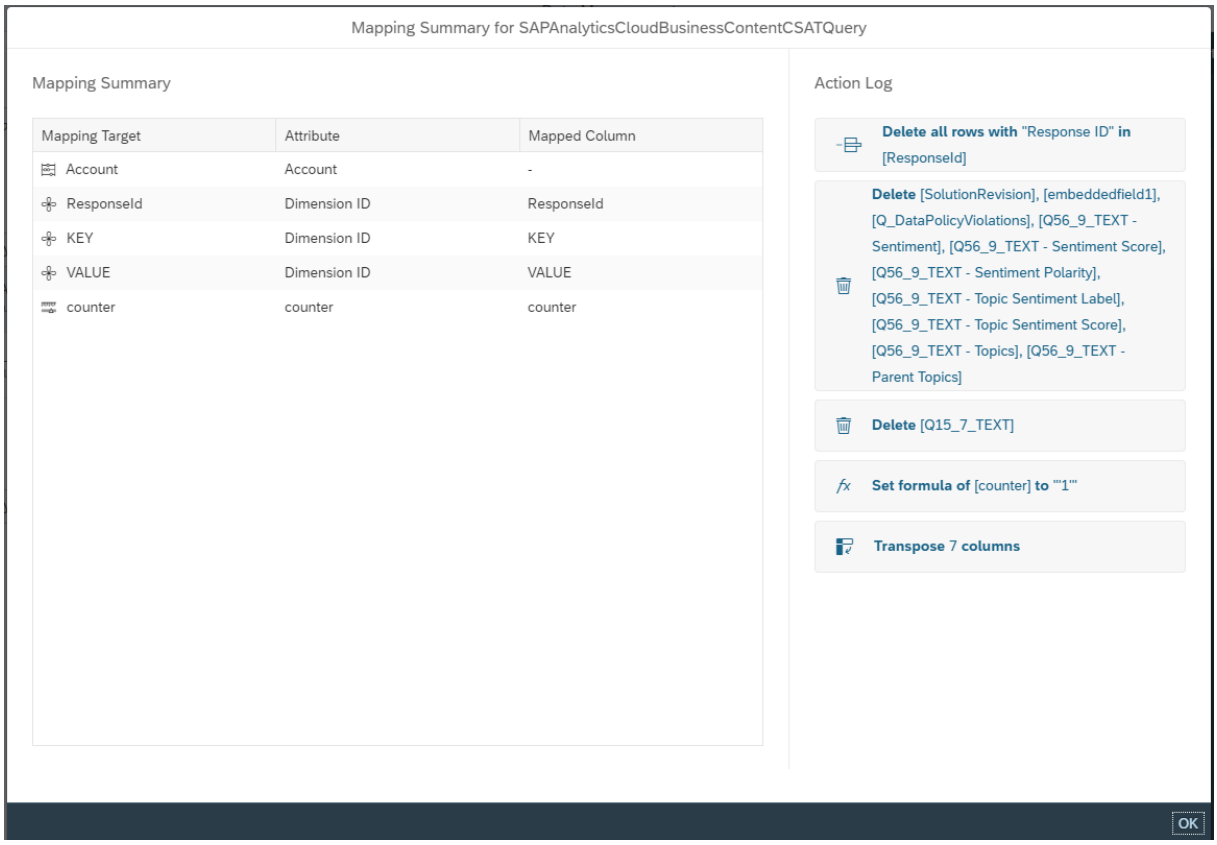
The mapping summary as seen in the data management tab for the selected import job.



Delete the first row in the data wrangling page.

Model Name: SAP__CRM_SURVEY_IM_CSATIMPORTANCE		**Connection**
• Model Description: SAP Qualtrics: Customer Satisfaction Importance • Planning Enabled: No		Excel import based on Qualtrics CSAT Standard Template
Account Dimension		
ID	**Description**	**Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)**
counter	counter	C: 1 (step1.b in Further Information section)
Dimensions		
Name	**Description**	**Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)**
ResponseId	ResponseId	M:ResponseId
KEY	Attribute	Follow step 1.a-c of the Further information section. Then map KEY to Attribute
Value	Rating	Subsequently map value to Rating

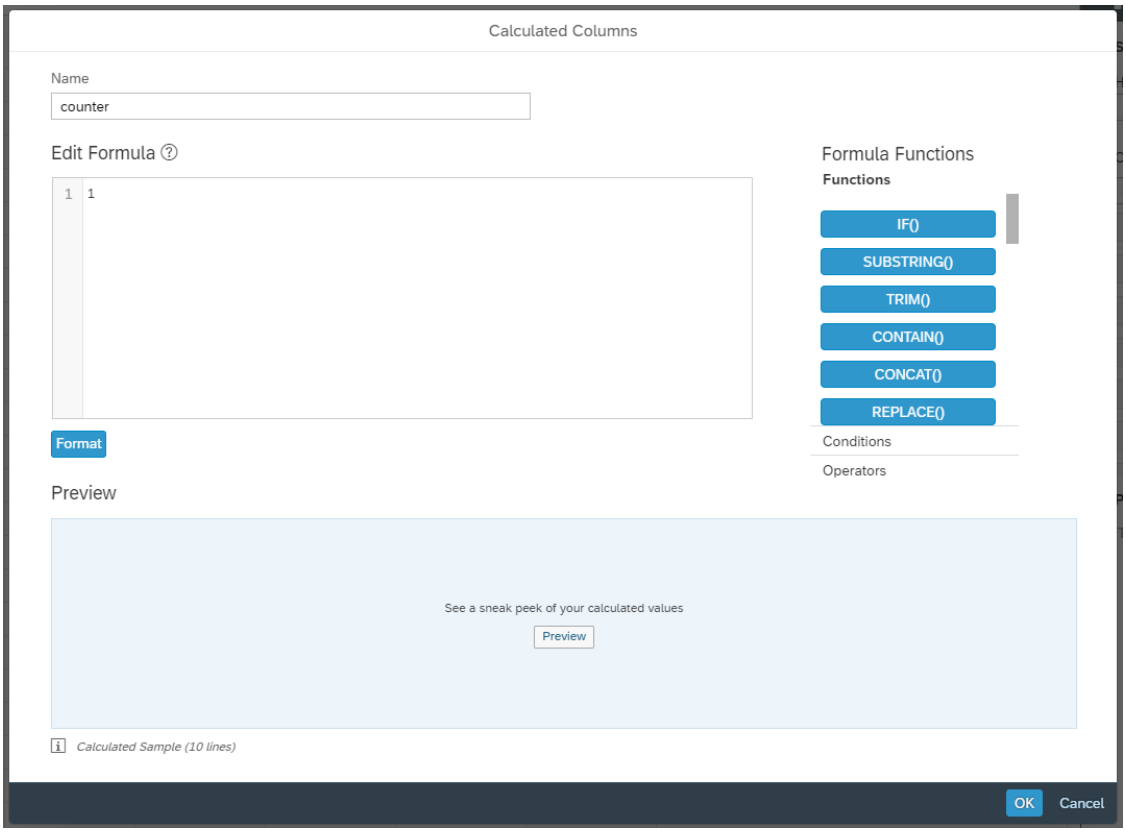
The mapping summary as seen in the data management tab for the selected import job.



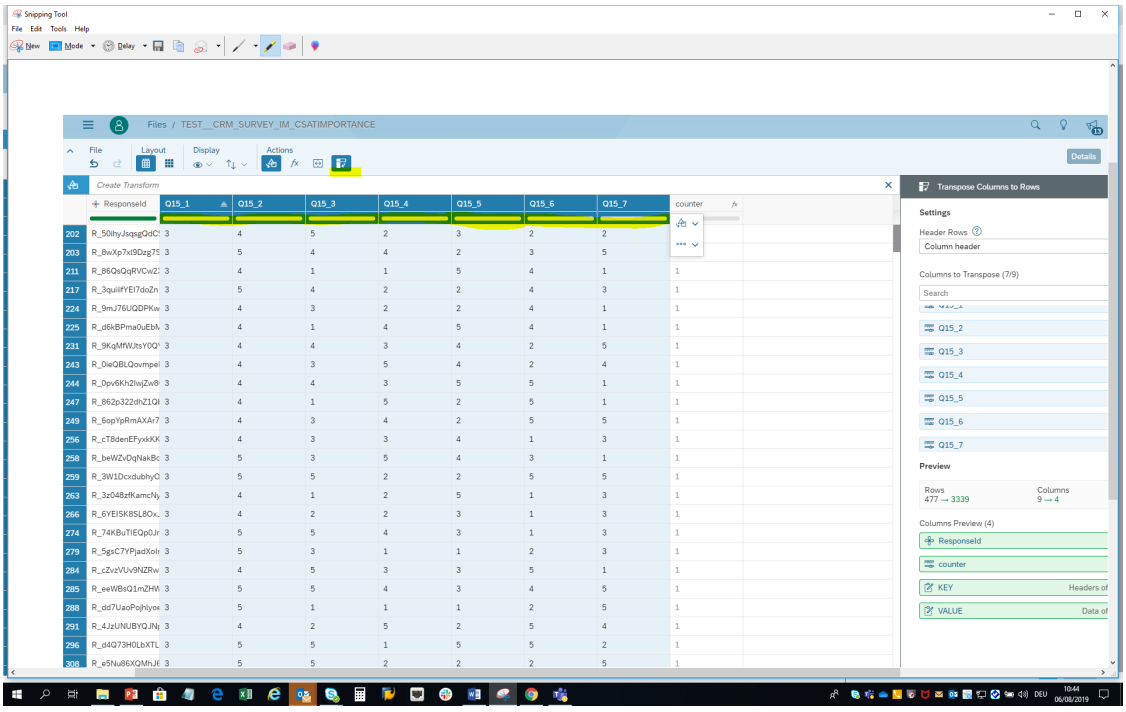
Further information:

1. For filling models SAP__CRM_SURVEY_IM_CSATRATING and SAP__CRM_SURVEY_IM_CSATIMPORTANCE you need to unpivot the data. The following steps explain how.
    1. In the wrangling screen for importing data, retain the columns:
        1. ResponseId
        2. Q14_1 to Q14_7 for SAP__CRM_SURVEY_IM_CSATRATING
        3. Q15_1 to Q15_7 for SAP__CRM_SURVEY_IM_CSATIMPORTANCE

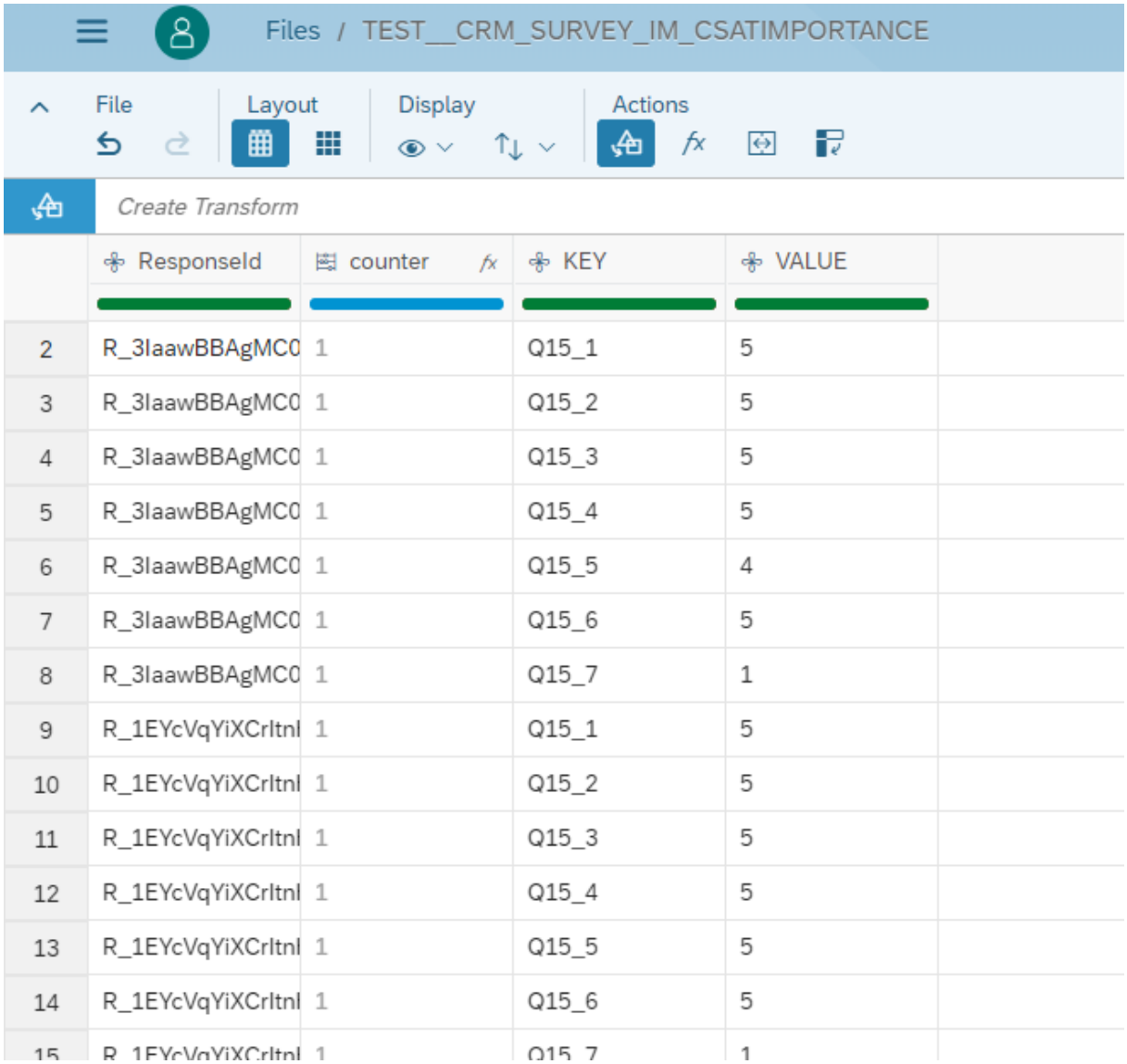
2. Create a calculated column named counter with value 1



3. Unpivot the Q.. columns



You should now have your fact table look like this.



	ResponseId	counter	KEY	VALUE
2	R_3IaawBBAgMC0	1	Q15_1	5
3	R_3IaawBBAgMC0	1	Q15_2	5
4	R_3IaawBBAgMC0	1	Q15_3	5
5	R_3IaawBBAgMC0	1	Q15_4	5
6	R_3IaawBBAgMC0	1	Q15_5	4
7	R_3IaawBBAgMC0	1	Q15_6	5
8	R_3IaawBBAgMC0	1	Q15_7	1
9	R_1EYcVqYiXCrItnl	1	Q15_1	5
10	R_1EYcVqYiXCrItnl	1	Q15_2	5
11	R_1EYcVqYiXCrItnl	1	Q15_3	5
12	R_1EYcVqYiXCrItnl	1	Q15_4	5
13	R_1EYcVqYiXCrItnl	1	Q15_5	5
14	R_1EYcVqYiXCrItnl	1	Q15_6	5
15	R_1EYcVqYiXCrItnl	1	Q15_7	1

Here's a blog on Best Practices for using the Qualtrics Connector.

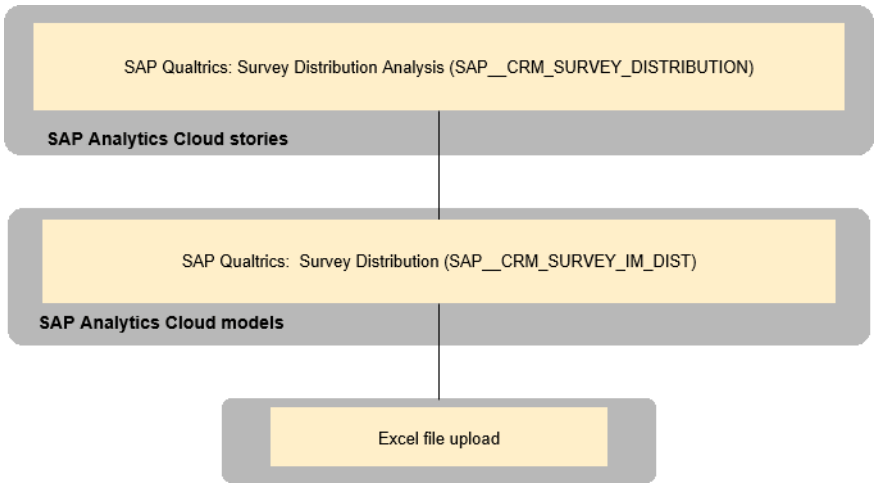
2.57 SAP Qualtrics Surveys (QUALTRICS)

2.57.1 Architecture and Abstract

Qualtrics provides various survey capabilities. This content is built based on data extracted from Qualtrics. It analyses the distribution and completion of surveys.

Architecture

The building blocks are as shown.



The survey distribution excel should be downloaded from Qualtrics and the columns should be mapped to the model mentioned in the coming model section.

2.57.2 Stories

SAP Qualtrics: Survey Distribution Analysis (SAP__CRM_SURVEY_DISTRIBUTION)

For a selected set of surveys, this story provides the KPIs for delivery of the surveys, audience information, and completion of received surveys.

2.57.2.1 Survey Distribution Analysis (SAP__CRM_SURVEY_DISTRIBUTION)

Measure Name	Type	Formula/Properties
Completion Rate	Calculated Measure	Survey Competed/ Survey Started
Audience Size	Restricted Measure	Count Dimension (Response ID)
Responses	Calculated Measure	Survey Completed
Surveys Sent	Calculated Measure	Audience Size

2.57.3 Models

2.57.3.1 Survey Distribution (SAP__CRM_SURVEY_IM_DIST)

Model Name: SAP__CRM_SURVEY_IM_DIST		Connection
- Model Description: SAP Qualtrics: Survey Distribution - Planning Enabled: No		- Import from excel
Account		
ID	Description	Mapping(M)/Formula(F)/Wrangling(W)/Calculated Coulmn(C)
Bounced	Bounced	M: Excel
Completed_D_41193d3kr4	Completed Hour	W: Duplicate [Completed Date (+00:00 GMT)]-> Split into 2 columns on"." -> Split [Completed Hour] into 2 columns on ":" -> Replace empty with "0" in [Completed Hour]
Completed_D_7302c05z62	Completed Minute	W: Duplicate [Completed Date (+00:00 GMT)]-> Split into 2 columns on" " ->Replace empty with "0" in [Completed Minute] ->Split [Completed Minute] into 2 columns on ":"

Completion_Time	Completion Time (min)	F:
		IF(DateDiff([Completed Date (+00:00 GMT)],
		[Started Date (+00:00 GMT)],
		"Day"
		)>0,IF([Started Hour]>[Completed Hour] or [Started Hour]=[Completed Hour] and [Started Minute]>[Completed Minute],
		DateDiff([Completed Date (+00:00 GMT)],
		[Started Date (+00:00 GMT)],
		"Day"
		)-1,DateDiff([Completed Date (+00:00 GMT)],[Started Date (+00:00 GMT)],"Day")),0)*1440+IF([Started Hour]>[Completed Hour],
		24+[Completed Hour]-[Started Hour]-1,
		IF([Started Minute]>[Completed Minute],
		[Completed Hour]-[Started Hour]-1,
		[Completed Hour]-[Started Hour]
		)
		)*60+IF([Completed Minute]-[Started Minute]<0,
		60+[Completed Minute]-[Started Minute],
		[Completed Minute]-[Started Minute]
		)

Opened	Opened	M: Excel
Started_Dat_295p1j0k12	Started Minute	W: Duplicate [Started Date (+00:00 GMT)]-> Split into 2 columns on" " ->Replace empty with "0" in [Started Minute] ->Split [Started Minute] into 2 columns on ":"

Started_Dat_3n2h3x1s6t	Started Hour	W: Duplicate [Started Date (+00:00 GMT)]-> Split into 2 columns on"." -> Split [Started Hour] into 2 columns on ":" -> Replace empty with "0" in [Started Hour]
Survey_Completed	Survey Completed	M: Excel
Survey_Started	Survey_Started	M: Excel
Date		
Name	Description	Mapping
Send_Date_0000_GMT	Send Date (+00:00 GMT)	M: Excel
Started_Date_0000_GMT	Started Date (+00:00 GMT)	M: Excel
Completed_D_6kv4d0223s	Completed Date (+00:00 GMT)	M: Excel
Opened_Date_0000_GMT	Opened Date (+00:00 GMT)	M: Excel
Dimensions		
Name	Description	Mapping(M)/Wrangling(W)/Calculated Column(C)
Survey_ID	Survey ID	M: Excel
Distribution_ID	Distribution ID	M: Excel
Distribution_Type	Distribution Type	M: Excel
Recipient_ID	Recipient ID	M: Excel
Address	Address	M: Excel
First_Name	First Name	M: Excel
Last_Name	Last Name	M: Excel
External_Da_664s5605t7	External Data Reference	M: Excel
Distribution_Channel	Distribution Channel	M: Excel
Address_2_2	Address Domain	W: Duplicate [Address]-> Split into 2 columns on"@" -> Split into 2 columns on "."
BouncedYN	Bounced YN	F: IF([Bounced]=0, 'No', 'Yes')

Survey_StartedYN	Survey Started YN	F: IF([Survey Started]=0, 'No', 'Yes')
Survey_CompletedYN	Survey Completed YN	F: IF([Survey Completed]=0, 'No', 'Yes')
Day_of_Week__Send_Date	Day of Week - Send Date	F: DAYOFWEEK([Send Date (+00:00 GMT)])
Day_of_Week_Started_Date	Day of Week- Started Date	F: DAYOFWEEK([Started Date (+00:00 GMT)])

> **i** Note
>
> * All the dimensions are local.

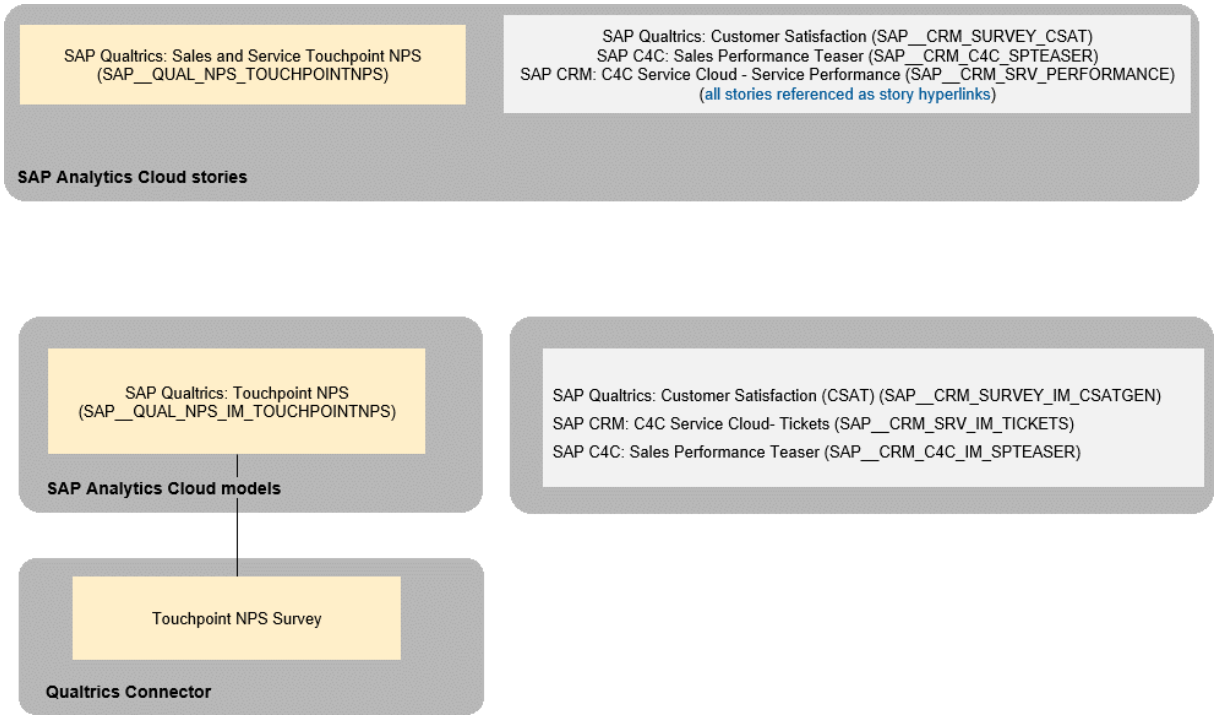
2.58 SAP Qualtrics Touchpoint NPS (T-NPS)

2.58.1 Architecture and Abstract

In this package, one can analyse the touch point NPS surveys provided through different touchpoints via different surveys in conjunction with operational data from C4C Sales and Service and additional experience data from CSAT Surveys. This content is a showcase of how SAP Analytics Cloud can be used to derive helpful insights by analysis Experience and Operational data together.

You can find a video and blog for this content.

Architecture



In this package several other packages are referenced to bring together C4C and Qualtrics models and stories together.

2.58.2 Stories

SAP Qualtrics: Sales and Service Touchpoint NPS (SAP__QUAL_NPS_TOUCHPOINTNPS)

In this story we are looking at several operational KPIs from Sales and Services like Opportunity win ratio, tickets by status and priority etc. All KPIs are filtered by customers. Through NPS surveys at various touchpoint channels, we can track the sentiment at various points of the customer journey. Additionally, a CSAT survey tracks the overall customer satisfaction score.

Overview

Using linked analysis, it is possible to understand the relation between all involved aspects like CSAT influence on Revenue or relation between NPS and all other KPIs for a customer.

KPI	Navigation
Revenue Won	SAP C4C: Sales Performance Teaser

KPI	Navigation
Tickets Created	SAP CRM: C4C Service Cloud - Service Performance
CSAT	SAP Qualtrics: Customer Satisfaction
Touchpoint NPS across channels	Touchpoint NPS page of current story

Here's a list of charts with hyperlink navigation.

Here we see the operational and experience KPIs together. For several KPIs there is a possibility through story hyperlink to navigate to stories that elaborate on the them.

Touchpoint NPS

Get into the details of Touchpoint NPS by Touchpoint channel with predictive trends. The sentiments, topics, parent topics associated with responses can be analysed here and one to drill into the level of individual responses. All this can be grouped by associated customer.

Sentiment Score Influencers and Sentiment Score Simulations

These 2 pages are generated out of the Smart Discovery feature with the use of machine learning, smart discovery analyses the key influencers for the measure Sentiment Score and provides a debriefing. In the Simulations section, it is possible to simulate different scenarios by varying the values of different influencers.

2.58.3 Models

The next chapter provides the detailed information about the Model used in the package.

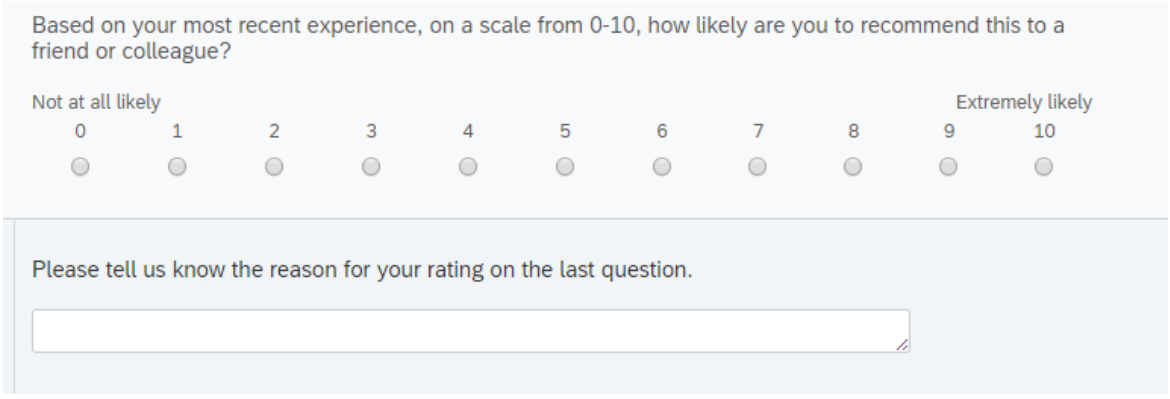
2.58.3.1 Touchpoint NPS (SAP__QUAL_NPS_IM_TOUCHPOINTNPS)

Model Name: SAP__QUAL_NPS_IM_TOUCHPOINTNPS		Connection
Model Description: SAP Qualtrics: Touchpoint NPS Planning Enabled: no		Qualtrics Connector
Account Dimension		
ID	**Description**	**Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)**
count	responses	C: 1 (step1.b in Further Information section)

Model Name: SAP__QUAL_NPS_IM_TOUCHPOINTNPS		Connection
DetractorCount	Detractor Count	F: LOOKUP([count] , [d/NPSGroup]="1")
NPS	NPS	F: ([PromoterCount] -[Detractor-Count])/[count] *100
PromoterCount	Promoter Count	F:LOOKUP([count],[d/NPSGroup]="3")
SentimentScore	SentimentScore	M: SentimentScore
Dimensions		
Name	Description	Mapping(M)/Formula(F)/Wrangling(W)/Calculated Column(C)
ResponseId	ResponseId	M: ResponseId
NPSGroup	NPSGroup	Explanation below
NPSFreetext	Freetext	
Touchpoint	Touchpoint	
Topics	Topics	
Parent_Topics	Parent Topics	
ExternalID	embeddedfield1	
Sentiment	Sentiment	
RecordedDate	RecordedDate	M:RecordedDate
GEO_DIM_Location	Location	W:LocationLatitude , LocationLongitude (map LocationLatitude to Geo Latitude and LocationLongitute to Geo Longitude)
* Please note that you don't need to have all the fields in your survey. If a field is not available in your survey, then map the dimension in the model to #.		

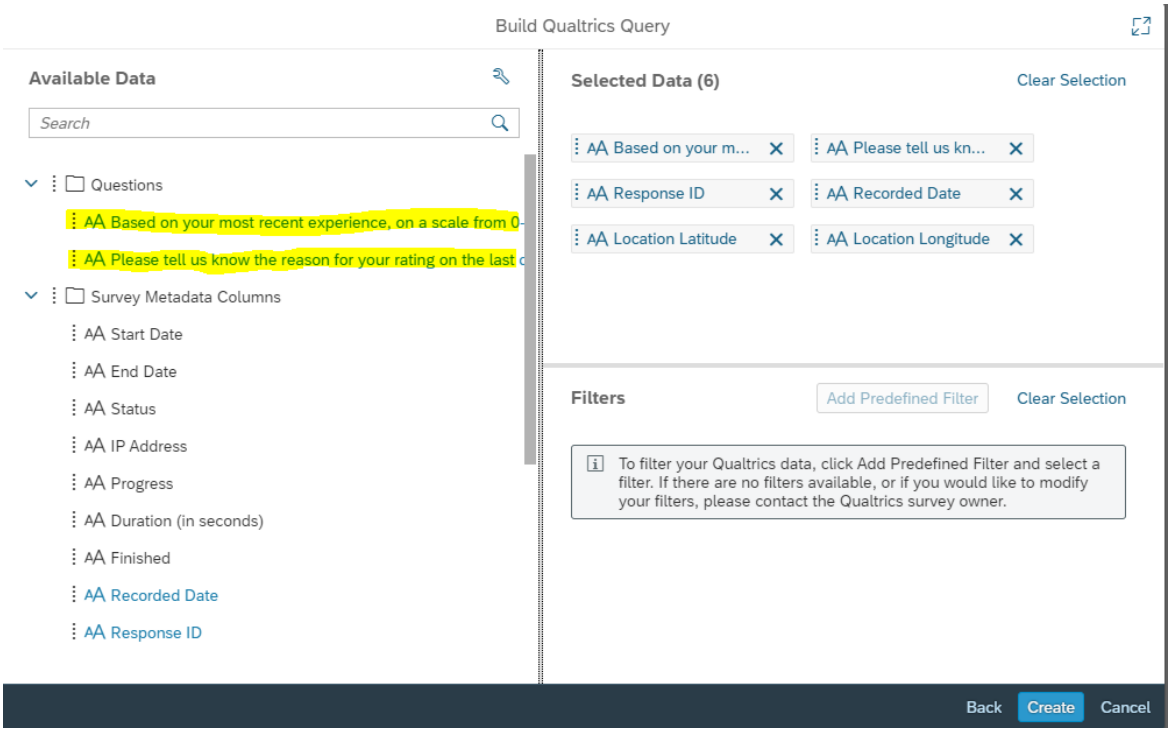
Here are some guidelines on how to fill this model:

- This model can be fed by responses from different survey about touchpoint NPS. The surveys may have any information but only fields relevant that the survey must have
- An NPS field and a text field to comment on the NPS as shown below.



- You may either use the XM Solution Touchpoint NPS or make your own survey with these 2 fields included.

- When this survey is consumed with the Qualtrics connector, then in the Query Builder select the 2 fields along with metadata fields as mentioned in the table below.



- Once the query is created, in the wrangling screen some additional fields are generated.

Here is the explanation for mapping these fields:

NPSGroup

Q42_NPS_GROUP	Q42
1	0
2	7
1	1
1	5
1	1
1	4

- For NPS type fields, an NPS Group is generated.
- Map this NPS group to the model's NPSGroup dimension.

- If TextIQ is run for the survey, then for the text field, several additional fields are generated. Some of these fields should be mapped to the model's dimensions.

Q57	Q57 - Parent Topics	Q57 - Sentiment Score	Q57 - Sentiment	Q57 - Topics
Pede, facilisi fringilla tempor molestie in sollicitudi	Answers	-1	Negative	Accuracy
Lacus morbi rutrum etiam imperdiet vel nunc elit v	Answers	-1	Negative	Answer qualtiy
Aliquam purus lacus nec massa primis? Quis prim	Answers	-1	Negative	Accuracy
Auctor cursus, scelerisque! Eu maecenas phasellu	Answers	-1	Negative	Accuracy
Posuere consectetuer ligula! Bibendum? Etiam. El	Usability	-1	Negative	User Friendly
Nullam. Accumsan fringilla? Dapibus molestie diar	Usability	-1	Negative	User Friendly
Good answers	Answers	6	Negative	Answer qualtiy
Correct answer	Answers	-1	Negative	Answer qualtiy,Accuracy
Right answer	Answers	-1	Negative	Answer qualtiy,Accuracy

Freetext

Map to the text field of the survey (Q57 for example here)

Topics

Map the Topics dimension in the model to the topics column. If there are more than 1 values in a column, only the first one should be taken for analysis. To do this, use the Split functionality.

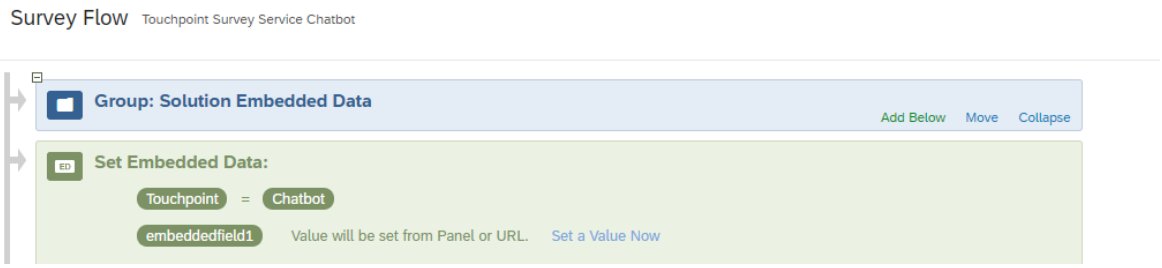
```
Split [Q57 - Topics] on "," repeat "1"
```

Parent Topics

- Handle in a similar way to Topics.
- Sentiment - Map to the sentiment column
- Sentiment score (measure) - Map to sentiment score

Touchpoint

- If you have different surveys for different touchpoints, then this model can be loaded with data from those surveys. To identify the type of touchpoint, in the survey, provide an embedded field with this information.
- Name the embedded field Touchpoint and provide information on the type of touchpoint (E.g., Chatbot, Email...)



embeddedfield1

Use another field of embedded data in your survey to pass customer name to a survey. This information can be leveraged in SAC where this dimension is used to link with other models on customer as common dimension.

2.59 SAP - Travel & Expense (TE) - Concur

2.59.1 Architecture and Abstract

Abstract

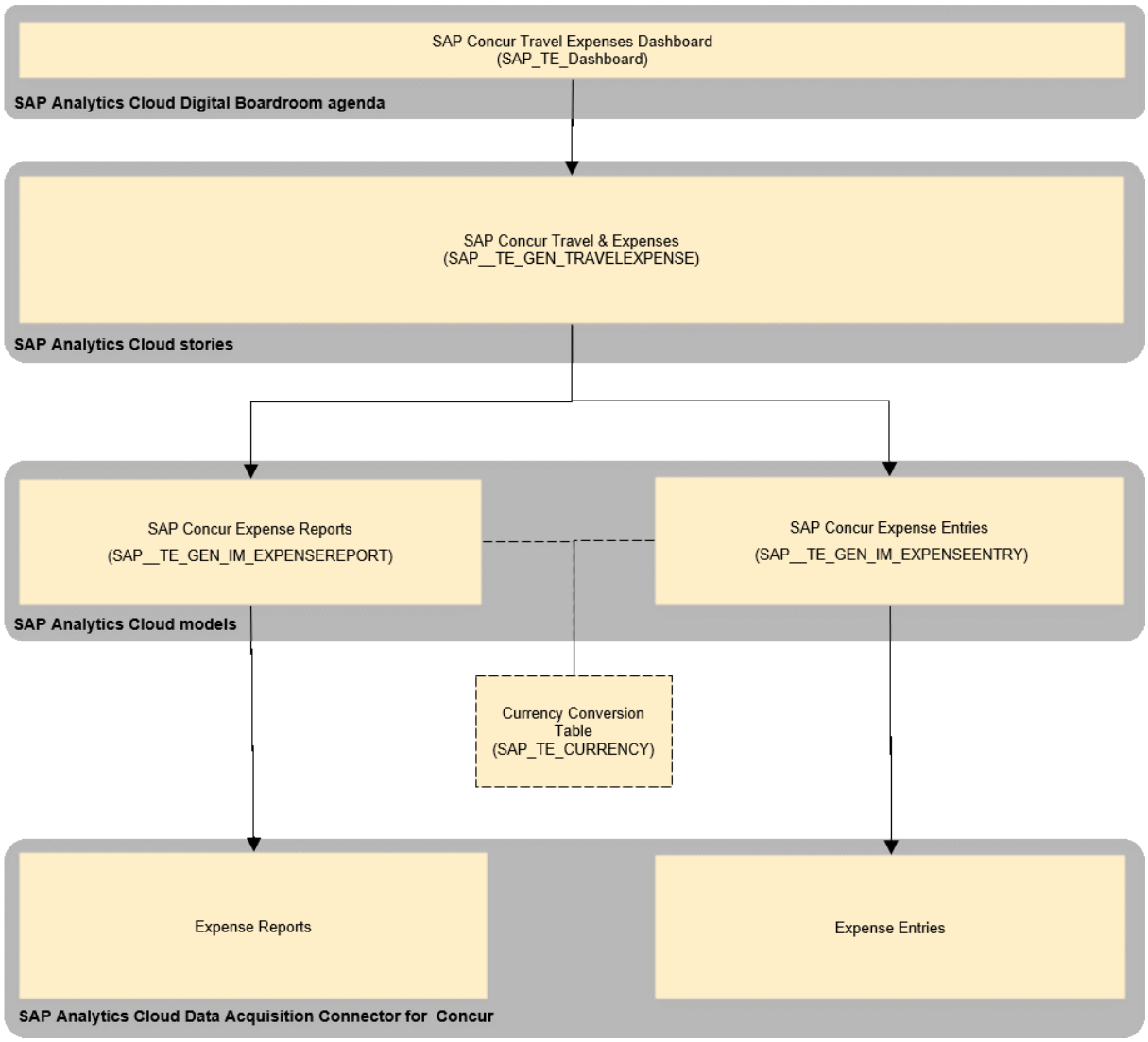
The SAP Concur Travel Expense dashboard provides comprehensive insights on travel expense, i.e.

- Expense KPIs:
  Travel expense actuals year-to-date and delta compared to budget and previous years. Drill-down by business area and country. KPIs such as due payments, credit card adoption rate and average report expenses. Visualization of budget consumption thresholds. Detailed analysis of average days between Report Process Steps such as trip start to report creation, to submission to payment, Flexible visualization of top reports with max days between different process steps
- Expense Analysis:
  Detailed break-down and filtering of expenses by multiple dimensions such as program/project, business area, spend categories, payment type, vendor or time of transaction. Ability to set KPI thresholds. Predictive forecast in time series chart for expenses. Insights based on approval status and exceptions, average & total amounts claimed vs. approved. Top spenders and reports including all related expense report entries.
- Dynamic Visualizations:
  Responsive dashboard pages with flexible dynamic time range filter and enhanced data slicing using Period range slider. Built-in currency conversion and flexible visualization of multiple currencies in all charts. Multiple device support for iPhone and iPad that can be used with the SAP Analytics Cloud iOS app.Detailed break-down and filtering of expenses by multiple dimensions such as program/project, business area, spend categories, payment type, vendor or time of transaction. Ability to set KPI thresholds. Predictive forecast in time series chart for expenses. Insights based on approval status and exceptions, average & total amounts claimed vs. approved. Top spenders and reports including all related expense report entries.
- Expense Planning:
  Expense Budget Planning on program/project hierarchies with budget distribution capabilities and tracking of actual-budget deviations. Additional threshold visualization.

Architecture

The story leverages travel expense data acquired from SAP Concur via the standard SAP Concur connector in SAP Analytics Cloud. The data source provides two object types, i.e. Expense Report and Expense Report Entries. These object types correspond with two models in SAP Analytics Cloud which are consumed in the

story.



The Concur models SAP__TE_GEN_IM_EXPENSEREPORT and SAP__TE_GEN_IM_EXPENSEENTRY are linked with a pre-configured connection that can be re-pointed to your own Concur tenant by entering the missing credentials. With this you can replace the demo data with your own data:

- Go to |Menu|Connection, select the connection “Concur Tenant (Data acquisition via Concur API connector)” and edit the connection parameters Key and Secret as provided by your Concur web service administrator (See help center topic “Import Data Connection to Concur”).
- To import data into the models, go to |Menu|Browse|Files|Public|Models, open the respective model, click on 'Data Management', select the predefined Import Job 'Concur Tenant' and click on 'Refresh Now' to start the import via the “Concur Tenant' connection. You can edit the import options and the schedule settings by clicking on the respective icon in the toolbar. It is recommended to use the import method Clean and Replace.
- After importing data into all relevant models, your data will be visible in the story. As your Concur tenant might have different org unit and custom fields or different payment types etc., some charts might not show something meaningful at first hand. In this case, you can re-design the charts accordingly by selecting dimensions or filters fitting to your data.
  The expense models are using the currency conversion table SAP_TE_CURRENCY.

2.59.2 Dashboard

SAP__TE_Dashboard			
Root Topic Name	Topic Level 1 name	Topic Level 2 name	Topic Level 3 name
Travel Expenses	Overview		
	Planning		
	Spending		
	Reports		
	Entries Per Report		
	Process Runtime		

2.59.3 Stories

The story used for obtaining insights is*: SAP Concur Travel Expenses (SAP__TE_GEN_TRAVELEXPENSE)*

2.59.3.1 SAP Concur Travel Expenses (SAP__TE_GEN_TRAVELEXPENSE)

Title: SAP__TE_GEN_TRAVELEXPENSE		
Description: SAP Concur Travel Expenses		
Provides KPIs, overview and insights on travel expenses and allows to do budget planning		
Story Filter: Allows dynamic selection of year to give users flexibility in visualization. • Dynamic Filter • Look Back: 0 • Look Ahead: 0 • Granularity: Year • Current Date Input Control: Year • Current Date Type: Custom Current Date/Period • Granularity: Year		
Page: Overview		
Type: Responsive		
Charts		
Title	**Models Used**	**Navigate to**

Title: SAP__TE_GEN_TRAVELEXPENSE

Key Indicators	• SAP__TE_GEN_IM_EXPENSEREPORT • SAP__TE_GEN_IM_EXPENSEENTRY

Provides the following KPIs for dynamic time period:

- Expenses
- ΔBudget
- Δ Previous Period
- Due Expenses
- Due to Employee
- Due to Employee
- Due Company Credit Card
- Average Report Expense
- Corporate Credit Card Adoption

Expenses per Period - Actuals vs Budget	SAP__TE_GEN_IM_ EXPENSEREPORT
How are expenses vs budget compared to previous years?	
Expenses by Country	SAP__TE_GEN_IM_ EXPENSEREPORT
What is the share of expenses per country over time?	
Expenses per Business Unit - YTD vs. Previous Year	SAP__TE_GEN_IM_ EXPENSEREPORT
Which business units spend how much compared to last year?	
Expenses, Number and Average Report per Business Unit	SAP__TE_GEN_IM_ EXPENSEREPORT
On average, which business units spend more / have more expense reports?	

Page Filters/Input Control

- Type of Filter: Dynamic
- Type of Filter: Dynamic
- Type of Filter: Dynamic
- Current Date: Year (as created in story filter)
- Granularity: Year
- Look Back: 0
- Look Ahead: 0

Page: Planning

Type: Responsive

Charts

Title	Models Used	Navigate to
Expense Budget Planning	SAP__TE_GEN_IM_EXPENSEREPORT	

Title: SAP__TE_GEN_TRAVELEXPENSE

Allows to assign budget per program / project / period		
Actual vs Budget per Program / Project	SAP__TE_GEN_IM_EXPENSEREPORT	
How are expenses vs budget in selected year per program?		
Page Filters/Input Control		

- Type of Filter: Dynamic
- Current Date: Year (as created in story filter)
- Granularity: Year
- Look Back: 0
- Look Ahead: 0

Page: Spending

Type: Responsive

Charts

Title	**Models Used**	**Navigate to**
Expenses per Spend Category	SAP__TE_GEN_IM_ EXPENSEENTRY	
What are the major categories of spending?		
Top Vendors	SAP__TE_GEN_IM_ EXPENSEENTRY	
Which vendors is most spent with?		
Expense Transactions over Time	SAP__TE_GEN_IM_ EXPENSEENTRY	
When do expenses occur? What amount was spent? This chart also provides a predictive forecast.		
Share of Expenses per Payment Type	SAP__TE_GEN_IM_ EXPENSEENTRY	
Which payment types are mainly used?		
Page Filters/Input Control		

- Type of Filter: Dynamic
- Current Date: Year (as created in story filter)
- Granularity: Year
- Look Back: 0
- Look Ahead: 0

Page: Reports

Type: Responsive

Charts

Title	**Models Used**	**Navigate to**
Key Indicators	SAP__TE_GEN_IM_EXPENSEREPORT- SAP__TE_GEN_IM_ EXPENSEENTRY	

Title: SAP__TE_GEN_TRAVELEXPENSE

Provides the following KPIs:

- Total Reports
- Spenders
- Reports Extracted for Payment
- Unpaid Reports
- Approvers
- Delta Approved vs. Claimed

Expense Reports per Approval Status	SAP__TE_GEN_IM_EXPENSEREPORT
How many reports are in which lifecycle stage?	
Average Claimed and Approved Amount per Approver	SAP__TE_GEN_IM_EXPENSEREPORT
Who approves how much on average / compared to claimed on average?	
Top Spenders by Claimed Amount	SAP__TE_GEN_IM_EXPENSEREPORT
Which employee spends the most amount of money for business trips?	
Top Reports by Claimed Amount	SAP__TE_GEN_IM_EXPENSEREPORT
Which are the most expensive reports, ranked by claimed amount?	
Page Filters/Input Control	

- Type of Filter: Dynamic
- Current Date: Year (as created in story filter)
- Granularity: Year
- Look Back: 0
- Look Ahead: 0

Page: Entries Per Report

Type: Responsive

Charts

Title	Models Used	Navigate to
Top Average Spenders	SAP__TE_GEN_IM_EXPENSEREPORT	
Which employees spend most on Business Trips on average?		
Ever Sent Back	SAP__TE_GEN_IM_EXPENSEREPORT	
How many reports were sent back?		
Required Images Available	SAP_TE_GEN_IM_EXPENSEENTRY	
How many entries are without an image attached?		
Have Exceptions	SAP_TE_GEN_IM_EXPENSEENTRY	
How many entries have an exception?		
Top Reports by Claimed Amount	SAP__TE_GEN_IM_EXPENSEREPORT	
Which are the highest reports?		
Entries	SAP_TE_GEN_IM_EXPENSEENTRY	

Title: SAP__TE_GEN_TRAVELEXPENSE

What does the report look like in detail? What did the employee spend money on?

Page Filters/Input Control

- Type of Filter: Dynamic
- Current Date: Year (as created in story filter)
- Granularity: Year
- Look Back: 0
- Look Ahead: 0

Page: Process Runtime

Type: Responsive

Charts

Title	Models Used	Navigate to
Key Indicators	SAP__TE_GEN_IM_EXPENSEREPORT	

Provides the following KPIs:

Average Days Between Report Process Steps

- Report Date to Submission
- Submission to Approval
- Approval to Payment
- Report Date to Payment

Days Between (Measure Input Control) Per Period	SAP__TE_GEN_IM_EXPENSEREPORT	

How many days are taken between different process steps per period?

Top Reports with Max Days Between(Measure Input Control)	SAP__TE_GEN_IM_EXPENSEREPORT	

Which reports take the most days between different process steps of an expense cycle?

Page Filters

- Type of Filter: Dynamic
- Current Date: Year (as created in story filter)
- Granularity: Year
- Look Back: 1
- Look Ahead: 0

Input Control

Business Unit (Org Unit 4)

Measure Input Control

Title: SAP__TE_GEN_TRAVELEXPENSE

Select Measures:

- Submission to Payment
- Report Date to Creation
- Report Date to Submission
- Creation to Submission
- Report Date to Paid Date
- Submission to Approval
- Approval to Payment

2.59.3.1.1 SAP Concur Travel Expenses (SAP__TE_GEN_TRAVELEXPENSE)

Calculated Measures in Story	Type	Formula/Properties
Average Claimed Amount	Aggregation	• Operation [AVERAGE excl.NULL] • Measure [Claimed Amount] by Aggregation Dimension [ID] • Conditional Aggregation [No]
Average Report Expenses	Aggregation	• Operation [AVERAGE excl.NULL] • Measure [Total] by Aggregation Dimension [ID] • Conditional Aggregation [No]
Average Approved Amount	Aggregation	• Operation [AVERAGE excl.NULL] • Measure [Approved Amount] by Aggregation Dimension [ID] • Conditional Aggregation [No]
Due Expenses	Calculated Measure	AmountDueCompanyCard + AmountDueToEmployee
Number of Approvers	Aggregation	• Operation [COUNT DIMENSIONS] • Aggregation Dimension [ApproverLoginID]
Number of Reports	Aggregation	• Operation [COUNT DIMENSIONS] • Aggregation Dimension [ID]
Number of Spenders	Aggregation	• Operation [COUNT DIMENSIONS] • Aggregation Dimension [OwnerLoginID]
Corporate Credit Card Amount	Restricted Measure	Measure [PostedAmount] restricted by [PaymentTypeCode] on [Corporate Credit Card]

Calculated Measures in Story	Type	Formula/Properties
Corporate Credit Card Adoption	Calculated Measure	Corporate CreditCard Amount/TransactionAmount
Number of Entries	Aggregation	• Operation [COUNT DIMENSIONS] • Aggregation Dimension [Entry]
Number of Missing Images	Restricted Measure	Measure [Count] restricted by [Has Image], [Is Image Required] on [false], [true]
Number of Not Missing Images	Calculated Measure	Number of Entries - Number of Missing Image
Share Approved vs. Claimed	Calculated Measure	Approved Amount / Claimed Amount
Claimed Amount Not Approved	Calculated Measure	Claimed Amount - Approved Amount

2.59.4 Models

2.59.4.1 SAP Concur Expense Reports (SAP__TE_GEN_IM_EXPENSEREPORT)

Model Name: SAP__TE_GEN_IM_EXPENSEREPORT		Connection
• Model Description: SAP Concur Expense Reports • Planning Enabled: Yes on UserDefinedDate • Purpose of Data Import : Acquire actuals data		Import Data Connection to Concur
Account Dimension		
ID	**Description**	**Mapping/Formula**
AmountDueCompanyCard	Due Company Card	AmountDueCompanyCard
AmountDueEmployee	Amount Due Employee	AmountDueEmployee
PersonalAmount	Personal Amount	PersonalAmount
Total	Total	Total
TotalApprovedAmount	Approved Amount	TotalApprovedAmount
TotalClaimedAmount	Claimed Amount	TotalClaimedAmount
PlanActualsDelta	Remaining Budget	RESULTLOOKUP([Total],[d/Version]="public.Budget Planning")-RESULTLOOKUP([Total],[d/Version]="public.Actual")
PlanActualsPercent	Consumed Budget %	RESULTLOOKUP([Total],[d/Category]="public.Actual")/RESULTLOOKUP([Total],[d/Category]="public.Budget Planning")

Model Name: SAP__TE_GEN_IM_EXPENSEREPORT		Connection
Trip Start to Paid date	Report Date to Paid date	DATEDIFF([d/PaidDate],[d/Trip-Date],"Day") +DECFLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions- Paid Date, TripDate
Report Creation to Submission	Creation to Submission	DATEDIFF([d/SubmitDate],[d/Create-Date],"Day") +DECFLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions- SubmitDate, CreateDate
Trip Start to Report Creation	Trip Start to Report Creation	DATEDIFF([d/TripDate] ,[d/Create-Date] ,"Day") +DECFLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions-CreateDate, TripDate
Trip Start to Report Submission	Report Date to Report Submission	DATEDIFF([d/SubmitDate],[d/Trip-Date],"Day") +DECFLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions-SubmitDate, TripDate
Report Submission to Payment	Submission to Payment	DATEDIFF([d/PaidDate] ,[d/Submit-Date] ,"Day") +DECFLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions-SubmitDate, PaidDate
Approval to Payment	Approval to Payment	DATEDIFF([d/PaidDate],[d/Processing-PaymentDate],"Day") +DEC-FLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions-PaidDate, ProcessingPaymentDate

Model Name: SAP__TE_GEN_IM_EXPENSEREPORT		Connection
Submission to Approval	Submission to Approval	DATEDIFF([d/ProcessingPayment-Date] ,[d/SubmitDate] ,"Day") +DEC-FLOAT("0.001") Exception Agg.Type- AVG excl.NULL Excep. Agg. Dimensions-SubmitDate, ProcessingPaymentDate
Dimensions		
SAP Analytics Cloud Dimension	**ID / Description / Property / Currency**	**Technical Name of Dimension in Data Source**
Approval Status	ID	ApprovalStatusCode
	Description	ApprovalStatusName
Approver	ID	ApproverLoginID
	Description	ApproverName
Approver (EmployeeID)	ID	ApproverLoginID/EmployeeID
Country	ID	Country
Country Subdivision	ID	CountrySubdivision
Create Date		CreateDate
Currency	ID	CurrencyCode
	Currency	CurrencyCode (copy)
Custom 1	ID	Custom1/Value
Custom 3	ID	Custom3/Value
Has Exception	ID	HasException
Ledger Name	ID	LedgerName
OrgUnit 1	ID	OrgUnit1/Value
OrgUnit 2	ID	OrgUnit2/Value
OrgUnit 3	ID	OrgUnit3/Value
OrgUnit 3 Code	ID	OrgUnit3/Code
OrgUnit 4 Code	ID	OrgUnit4/Code
Business Unit (OrgUnit 4)	ID	OrgUnit4/Value
Owner	ID	OwnerLoginID
	Description	OwnerName
Owner (EmployeeID)	ID	OwnerLoginID/EmployeeID

Model Name: SAP__TE_GEN_IM_EXPENSEREPORT		Connection
Paid Date		PaidDate
Payment Status	ID	PaymentStatusCode
	Description	PaymentStatusName
Processing Payment Date		ProcessingPaymentDate
Project (Custom 2)	ID	Custom2/Value
Receipts Ever Sent Back	ID	EverSentBack
Receipts Received	ID	ReceiptsReceived
Report	ID	ID
	Description	Name
Submit Date		SubmitDate
Time		UserDefinedDate
Additional Notes about the model		
All Concur Expense Report fields are documented in detail here: https://developer.concur.com/api-reference/expense/expense-report/reports.html#schema The model is using the currency conversion table *SAP_TE_CURRENCY.*		

2.59.4.2 SAP Concur Expense Entries (SAP__TE_GEN_IM_EXPENSEENTRY)

Model Name: SAP__TE_GEN_IM_EXPENSEENTRY		Connection
• Model Description: SAP Concur Expense Entries • Planning Enabled: Yes on Transaction Date • Purpose of Data Import: Acquire actuals data		Import Data Connection to Concur
Account Dimension		
ID	**Description**	**Mapping/Formula**
ApprovedAmount	Approved Amount (Not re-converted)	(This measure is set as hidden, as it is used for internal calculations only)
ApprovedAmount_C	Approved Amount	Exception Aggregation SUM(ID) ([ApprovedAmount]/[ExchangeRate])
PostedAmount	Posted Amount (Not re-converted)	(This measure is set as hidden, as it is used for internal calculations only)
PostedAmount_C	Posted Amount	Exception Aggregation SUM(ID) ([PostedAmount]/[ExchangeRate])
ExchangeRate	Exchange Rate	

Model Name: SAP__TE_GEN_IM_EXPENSEENTRY		Connection
TransactionAmount	Transaction Amount	
Dimensions		
SAP Analytics Cloud Dimension	**ID / Description / Property / Currency**	**Technical Name of Dimension in Data Source**
Allocation Type	ID	AllocationType
Custom 1	ID	Custom1/Value
Project (Custom 2)	ID	Custom2/Value
Custom3	ID	Custom3/Value
Entry	ID	ID
	Description	Description
Expense Type	ID	ExpenseTypeCode
	Description	ExpenseTypeName
Has Applied Cash Advance	ID	HasAppliedCashAdvance
Has Attendees	ID	HasAttendees
Has Comments	ID	HasComments
Has Exceptions	ID	HasExceptions
Has Image	ID	HasImage
Has Itemizations	ID	HasItemizations
Has VAT	ID	HasVAT
Is Billable	ID	IsBillable
Is Image Required	ID	IsImageRequired
Is Paid By Expense Pay	ID	IsPaidByExpensePay
Is Personal	ID	IsPersonal
Is Personal Card Charge	ID	IsPersonalCardCharge
Location Country	ID	LocationCountry
Location	ID	LocationID
	Description	LocationName
Location Subdivision	ID	LocationSubdivision
Org Unit 1	ID	OrgUnit1Value
Org Unit 2	ID	OrgUnit2Value
Org Unit 3	ID	OrgUnit3Value
Payment Type	ID	PaymentTypeID
	Description	PaymentTypeName

Model Name: SAP__TE_GEN_IM_EXPENSEENTRY		Connection
Receipt Received	ID	ReceiptReceived
Report ID (This dimension links to the related expense report, i.e. dimension ExpenseReport.ID)	ID	ReportID
Report Owner	ID	ReportOwnerID
	Description	ReportOwnerID/FirstName+LastName
Report Owner (EmployeeID)	ID	ReportOwnerID/EmployeeID
Spend Category	ID	SpendCategoryCode
	Description	SpendCategoryName
Tax Receipt Type	ID	TaxReceiptType
Time		TransactionDate
Transaction Currency	ID	TransactionCurrencyCode
	Currency	TransactionCurrencyCode (copy)
Vendor	ID	VendorDescription
Additional Notes about the model		
All Concur fields are documented in detail here: https://developer.concur.com/api-reference/expense/expense-report/expense-entry.html#schema The model is using the currency conversion table *SAP_TE_CURRENCY*.		

2.60 SAP UI Logging

2.60.1 Architecture and Abstract

UI logging is an add-on product provided by IBSO for on-premise.

In the hospital, the access of medical records of patients is strictly limited to medical staff. This is being achieved by implementing an authorization concept in the SAP systems. Nevertheless, the medical personnel are only allowed to access and process medical records of the patients in their responsibility. For example, Mr. Markus Mueller is a patient in the department Cardiology. The medical personnel such as doctors or nurses must have access to the medical records of this patient. The medical personnel of the department Cancer can access the medical record of Mr. Markus Mueller as well because they have the authorization, but they are not allowed to do so according to EU-GDPR guidelines. With the support of UI Logging, the Data Protection Officer (DPO) is able to identify the medical personnel that are responsible for non-allowed accesses to medical records. He can prevent data leakage and data fraud.

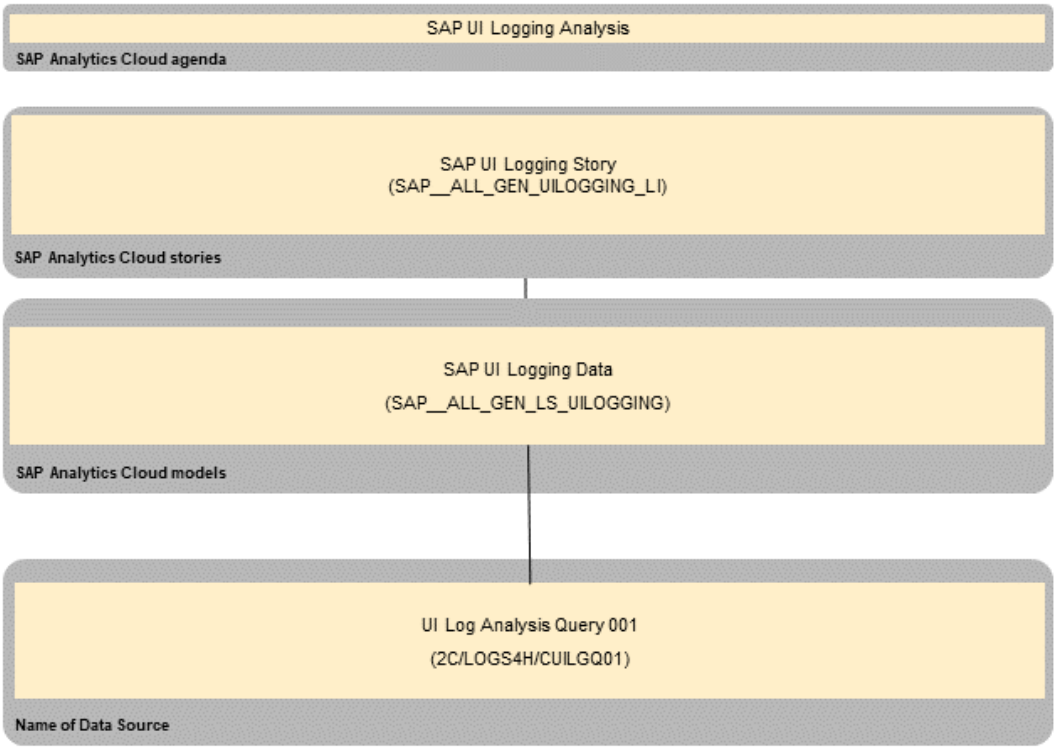
The legal ground for logging is to detect any data leakage by employees of a company: it reports the data being displayed to and entered by users in an SAP application and provides tools for analyzing logs to find any data

abuse. SAP Analytics Cloud (SAC) includes a tool for the DPO that allows him to analyze log data from an on-premise system. The analysis is subdivided into **UI Log Statistics**, **User Statistics**, and **Analysis on UI Logs**. In **UI Log Statistics** the most important log parameters such as Critical Users or Critical Applications are displayed.

User Statistics shows the users together with the number of accessed critical fields, the number of called applications, the number of logs created.

In **Analysis on UI Logs**, a list of users is displayed with its parameters such as number of logs or applications. By selecting the user, the system navigates you to the user behavior (time distribution of logs and called applications). The SAP Analytics Cloud content for SAP UI Logging Analysis is based on a live connection to the SAP S/4 HANA with dedicated CDS view.

SAC Content UI Logging Architecture



2.60.2 SAP UI Logging Story (SAP__ALL_GEN_UILOGGING_LI)

This story provides overall analysis of UI logging data from S/4 HANA on-premise system. The story contains the following pages:

- UI Log Statistics
- User Statistics
- User Behavior

Measure Name	Type	Formula/Properties
Number of Users	CDS Measure	Number of Users
Number of Critical Fields	CDS Measure	Number of Critical Fields
Number of Applications	CDS Measure	Number of Applications
Number of Logs	CDS Measure	Number of Logs
Number of Calls	CDS Measure	Number of Calls

2.60.3 SAP UI Logging Data (SAP__ALL_GEN_LS_UILOGGING)

Model Name: SAP__ALL_GEN_LS_UILOGGING	Connection
• Model Description: SAP UI Logging Data • Planning Enabled: no	- Connection Type: Live connection to S/4 HANA (SAPUILNW) - Analytical Query: 2C/LOGS4H/CUILGQ01 - CDS View Query name: /LOGS4H/C_UILOGQ001

Dimensions		
Name	**Description**	**Mapping**
2C/LOGS4H/IUILGCUB	Log GUID	
2CJHEXCNJZP09DMLYH7CCFYA41K	Logging Date	
2CN513ECZLROER6T31KMLQ593EY	Logging Time	
2C/LOGS4H/IUSERDIM	User ID	
2C/LOGS4H/IAPPLDIM	Application	
2C/LOGS4H/ITAGDIM	Critical Field (TAG ID)	
2C/LOGS4H/ITECHDIM	Technology ID	

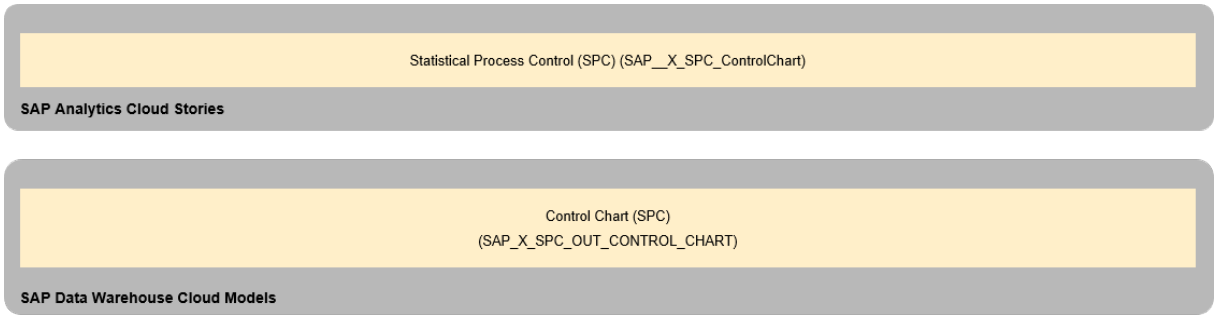
Model Name: SAP__ALL_GEN_LS_UILOGGING		Connection
2C/LOGS4H/ICRACTD	User Action ID	

2.61 Statistical Process Control (SPC) Toolkit

2.61.1 Architecture and Abstract

Statistical Process Control (SPC) is a methodology used in manufacturing (stability, quality, reliability) to prevent defects, and is typically either implemented in specialized software or used on top of a low-level software layer such as excel. However, the SPC tools can be easily applied to a much wider range of business processes and even beyond, to things like the sequence of items in a batch or a collection of purchase orders.

The content package described here provides a generic toolkit to simplify, accelerate and standardize implementations of SPC (control charts, nelson rules) on Data Warehouse Cloud. At a high level, this is achieved by combining all relevant data sources – measurements and master data describing them and enabling self-service SPC analyses on the combined data set.

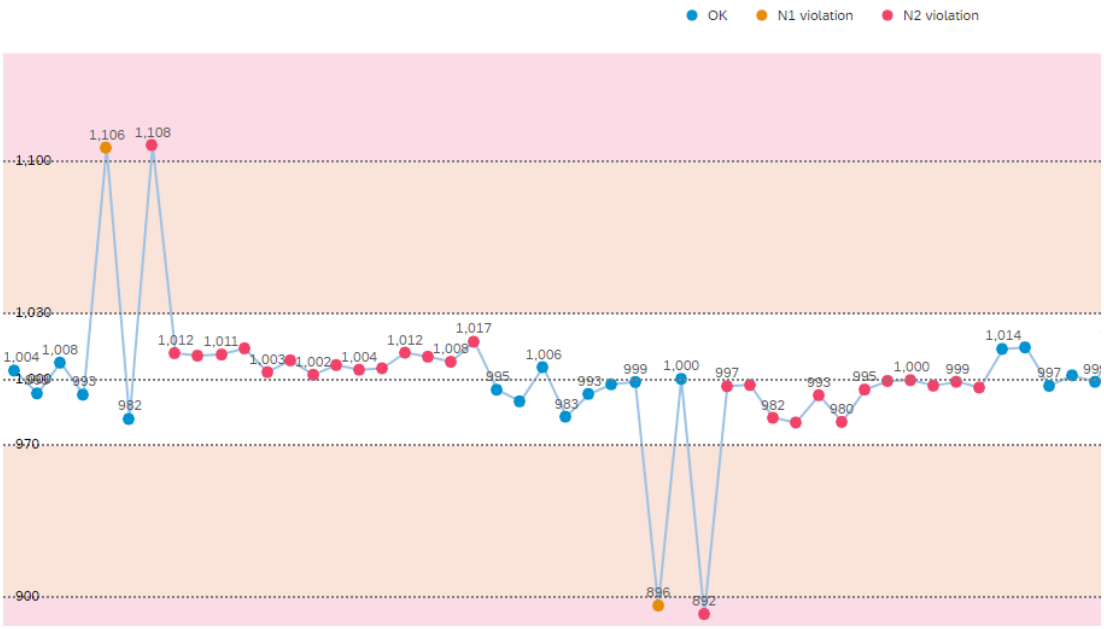


2.61.2 Stories

This package contains a story: Statistical Process Control (SPC) (SAP__X_SPC_ControlChart). The story allows the user to review a control chart for the selected measurement. The following details are displayed:

- Expected mean, tolerance limits and specification limits. The area between the tolerance limits is white. The area between tolerance and specification limits is orange. The area outside the specification limits is red.
- Point color according to Nelson rule violations: orange points represent a violation of rule 1 (but not of rule 2). Red points represent a violation of rule 2.

Measurement: throughput (ore crusher 1 location A)
Process: ore crusher 1 location A
Unit of measure: kg/h



2.61.3 Models

The Story is using the following Data Warehouse Cloud model. It's based on a live connection to the SAP Data Warehouse Cloud system. Setup the connection with the name **SAPDWC**.

Model Name: Model Control Chart (SPC)

Technical Name: SAP_X_SPC_OUT_CONTROL_CHART

Please navigate to the SAP Data Warehouse Cloud content documentation for details.

2.62 Transportation Management Business Performance Dashboard

2.62.1 Architecture and Abstract

Supply chains have become more complex in the last few years, and this has led to an increase in the risk of instability and fragility. In addition to that, logistic time buffers which are fitting to such a high transportation density along various global networks, are still diminishing worldwide.

Results of such an evolution is a rising demand of transparency, traceability and steerability. This requires a mixture of real time and non-real time KPIs covering and supporting a range from short to long term business

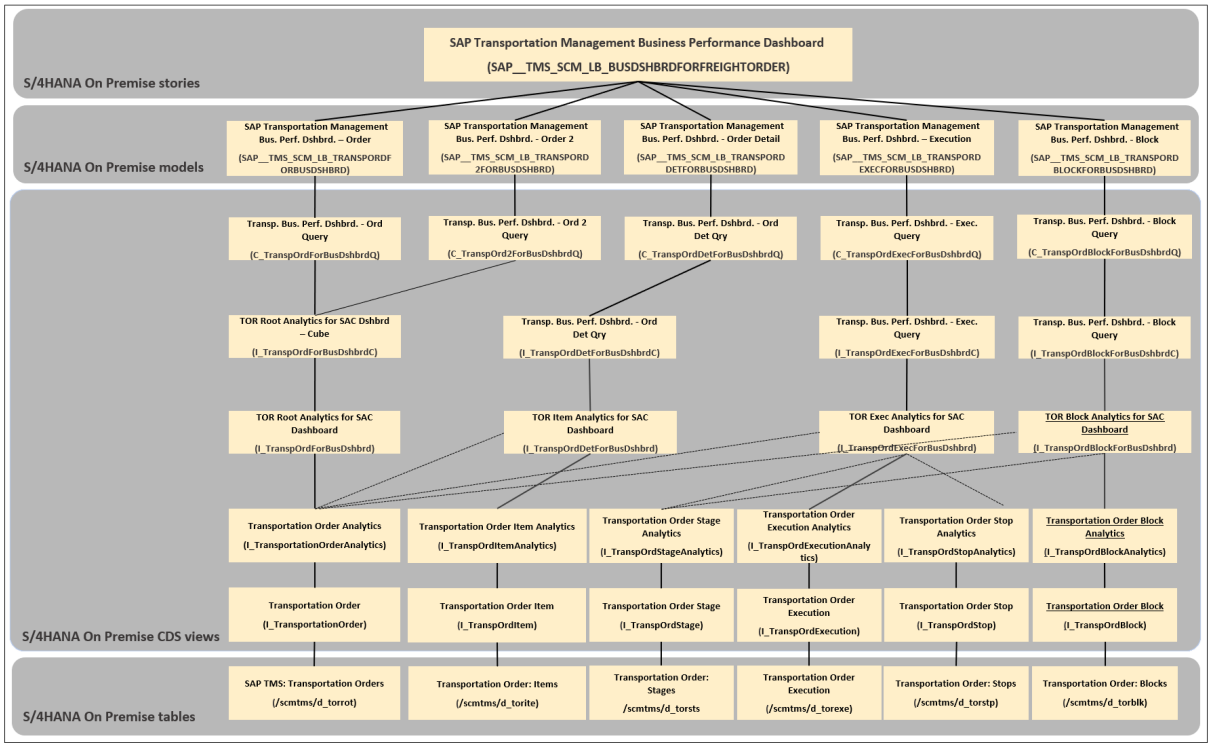
decisions. This holds true for any kind of market or business segment. Shipper of all industries like Retail, Wholesale, High-tech, Chemicals, Automotive and many more, as well as Logistic Service Providers like 2PL, 3PL and even 4PL facing similar analytical challenges.

Within this context, various KPI requirements for several major analytical target areas could have been identified. In this first shipment, the focus is on the following three sections:

- Overview: Providing a general overview of the current transportation status
- Execution and Block: Giving a more detailed insight into the execution section of the business
- Transported Quantities: Section three is covering quantity related information, down to a single transport and its individual items

  Prerequisites

  Prerequisite for SAP Transportation Management Business Performance Dashboard - Version CI20 Release 2021.07 - is S/4HANA on-premise 2020 FPS 2.



2.62.2 SAP Transportation Management: Story

Technical Name: SAP__TMS_SCM_LB_BUSDSHBRDFORFREIGHTORDER_LIVE

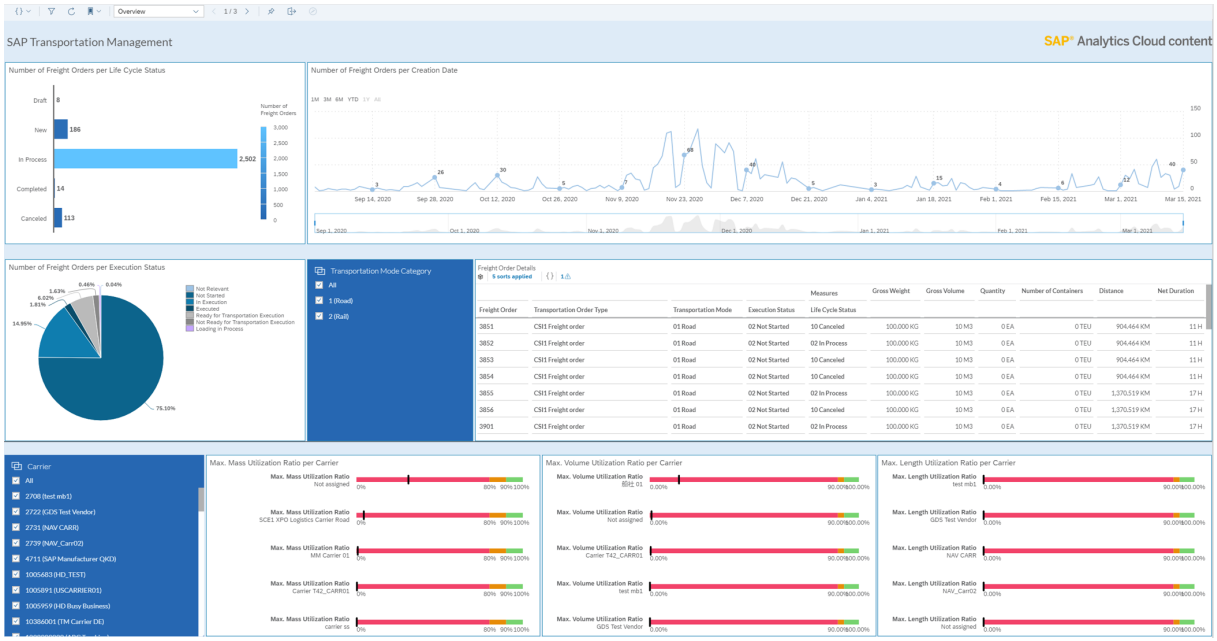
Description: SAP Transportation Management Business Performance Dashboard

The story consists of 3 pages, each one describing a separate transportation-related business area.

2.62.3 SAP Transportation Management: Pages

2.62.3.1 Overview

In the first page of the story, a general overview of the current transportation status is provided.



The following KPIs are used on the page:

- Number of Freight Orders

- Gross Weight

- Gross Volume

- Number of Containers

- Distances

- Net Durations

- Mass / Weight Utilization

- Volume Utilization

- Length Utilization

The following details are displayed, and interactions can be used on this page:

- Based on the different lifecycle status, such as "new", "in process" or "cancelled", the number of freight orders are shown. This bar chart also acts as a filter for all visual elements on this screen.

- To identify possible peaks or trends a time-resolved line chart is used to visualize this with the additional function of a time slider bar at the bottom.

- To monitor the operational area of the transport execution, a pie chart is showing the number of freight orders by individual execution status, such as "loading in progress", "in execution" or "executed". In parallel it can also be used as a filter for all the remaining elements of this page.

- For more detailed information on transportation mode, for example "Road", and freight order level an according table view provides additional insights, such as "Execution Status", "Life Cycle Status" in combination with several quantity KPIs and times.

- Three different carrier-related utilization categories are shown at the bottom of this page. They are covering the utilization by Mass, Volume and Length. It can be filtered by single or multiple carriers by the filter panel at the right, which is also affecting all other page elements.

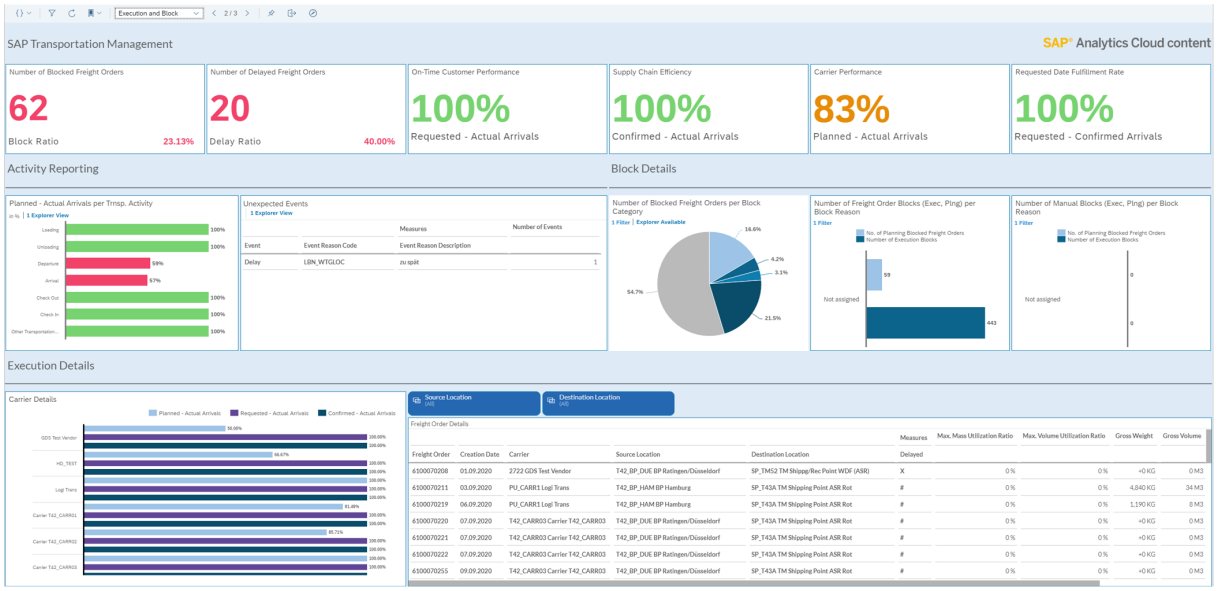
SAP Transportation Management Business Perfomance. Dashboard - Order: SAP__TMS_SCM_LB_TRANSPORD-FORBUSDSHBRD	**Connection**
CDS View: C_TranspOrdForBusDshbrdQ	Connection Type: S/4Hana Live BEx Query: 2CCTORROOTSACANAQ
Dimensions	**Measures**
Carrier	Number of Freight OrdersNumber of Freight Orders
Created By	Max. Mass Utilization Ratio
Creation Date	Max. Volume Utilization Ratio
Creation Date Time	Max. Length Utilization Ratio
Creation Year	Gross Weight
Creation Year Month	Gross Volume
Creation Year Quarter	Quantity
Creation Year Week	Number of Containers
Destination Location	Distance
Execution Status	Net Duration
Freight Order	
Length Display Unit	
Life Cycle Status	
Number of Containers Display Unit	
Planning Status	
Quantity Display Unit	
Source Location	
Time Display Unit	
Transportation Mode	
Transportation Mode Category	

SAP Transportation Management Business Perfomance. Dashboard - Order: SAP__TMS_SCM_LB_TRANSPORD-FORBUSDSHBRD	Connection
Transportation Order Category	
Transportation Order Type	
Volume Display Unit	
Weight Display Unit	

Mandatory Parameters	Default Value
Time Display Unit	H
Weight Display Unit	KG
Volume Display Unit	M3
Quantity Display Unit	EA
Number of Containers Display Unit	TEU
Distance Display Unit	KM
Creation Date	Interval from today date to 6 Month back to the start of month. For example, if today's date is 30.04. then the selected date for the start of the interval is 01.10.

2.62.3.2 Execution and Block

This page gives a more detailed insight into the execution section of the business.



The following KPIs are used on the page:

- Number of blocked Freight Orders
- Block ratio
- Number of delayed Freight Orders
- Delay ratio
- On-time customer performance
- Supply Chain efficiency
- Carrier performance
- Requested date fulfillment rate
- On-time activities
- Number of unexpected events
- Number of Freight Orders per block category
- Number of Freight Order blocks per block reason
- Number of manual blocks per block reason
- Carrier details display the following KPI's per carrier:
  - Carrier performance
  - On-time customer performance
  - Supply chain efficiency
- Freight Order details display the following KPI's per Freight Order:
  - Maximum mass utilization ratio
  - Maximum volume utilization ratio
  - Gross weight
  - Gross volume
  - Quantity
  - Distance
  - Net duration

The following details are displayed, and interactions can be used on this page:

- To get a first quick overview of the current transport execution situation, the six KPI tiles at the very top of this page provide a first insight.
    - **Number of blocked Freight Orders** as an absolute number as well as a **Block Ratio**
    - **Number of delayed Freight Orders** as an absolute number as well as a **Delay Ratio**
    - **On Time Customer Performance** is calculated as a difference between the **Requested Arrival Date** and the **Actual Arrival Date**
    - **Supply Chain Efficiency** is calculated as a difference between the **Confirmed Arrival Date** and the **Actual Arrival Date**
    - **Carrier Performance** is calculated as a difference between the **Planned Arrival Date** and the **Actual Arrival Date**
    - **Requested Date Fulfillment Rate** is calculated as a difference between the **Requested Arrival Date** and the **Confirmed Arrival Date**
- Detailed information around activities, such as loading/unloading and unexpected events, such as delay are visualized in a bar chart and a table view.
    - To analyze individual activities ding/uand get a better understanding of how well they have been conducted, this by-thresholds colored bar chart is providing a first overview. For more detailed analysis an **Explorer View** has been integrated. It can be launched by using the incorporated link. This will lead the user to an additional screen, with many more measures to choose from for further analytical purposes.
    - Unexpected events, which normally pop up by accident, are ones that cause unplanned additional efforts. A table structure in a first compressed view, shows a better and more detailed understanding of events and reasons they are appearing and how often. For more detailed analysis another **Explorer View** has been integrated. It can be launched by using the incorporated link. This will lead the user to an additional screen with many more measures to choose from for further analytical purposes.
- Transport-related blockings of any kind and type normally cause friction along the different supply chains. So, it's key to constantly monitor them and keep them to a minimum. This kind of information can be found in the **Block Details** section of this page. It consists of three separate charts:
    - **Number of Freight Orders per Block Category**. For more detailed analysis, another **Explorer View** has been integrated. It can be launched by using the incorporated link. This will lead the user to an additional screen with many more measures to choose from for further analytical purposes.
    - **Number of Freight Order Blocks per Block Reason**
    - **Number of Manual Blocks per Block Reason**
- Within the **Execution Details** section two additional aspects have been covered. Focus here is on carriers and pairs of locations – based on source and destination location of Freight Orders:
    - A first high-level overview, related to how good a carrier itself performed as well as regarding customer on-time or supply chain efficiency, is given in this bar chart. It also works as a filter for the table to the right which then shows only those Freight Orders belonging to the selected carrier.
    - The table is providing more detailed information on an individual Freight Order level in combination with the two geographical attributes of source- and destination location. These attributes can also be used as independent filters, which are placed directly above the table.

SAP Transportation Management Bus. Perf. Dshbrd. Order 2:

SAP__TMS_SCM_LB_TRANSPORD2FORBUSDSHBRD	Connection
CDS View: C_TranspOrd2ForBusDshbrdQ	Connection Type: S/4Hana Live BEx Query: 2CCTORROOT2SACQANA

Dimensions	Measures
Carrier	Number of Freight Orders
Created By	Max. Mass Utilization Ratio
Creation Date	Max. Volume Utilization Ratio
Creation Date Time	Max. Length Utilization Ratio
Delayed	Gross Weight
Destination Location	Gross Volume
Execution Status	Quantity
Freight Order	Number of Containers
Length Display Unit	Distance
Number of Containers Display Unit	Net Duration
Quantity Display Unit	
Source Location	
Time Display Unit	

Mandatory Parameters	Default Value
Time Display Unit	H
Weight Display Unit	KG
Volume Display Unit	M3
Quantity Display Unit	EA
Number of Containers Display Unit	TEU
Distance Display Unit	KM

Mandatory Parameters	Default Value
Creation Date	Interval from today date to 6 Month back to the start of month. For example, if today's date is 30.04, then the selected date for the start of the interval is 01.10.

SAP Transportation Management Bus. Perf. Dshbrd. – Execution:

SAP__TMS_SCM_LB_TRANSPORDEXECFORBUSDSHBRD	Connection
CDS View: C_TranspOrdExecForBusDshbrdQ	Connection Type: S/4Hana Live BEx Query: 2CCTOREXESACQANA

Dimensions	Measures
Carrier	Event Delay
Carrier Conf. End Date Time of Stop	Event Delay (reqd. vs. actl.)
Carrier Conf. Start Date Time of Stop	Event Delay (confd. vs. actl.)
Creation Date	Number of Events
Creation Year	No. of On Time Events
Creation Year Month	No. of On Time Events (reqd. vs. actl.)
Creation Year Quarter	No. of On Time Events (confd. vs. actl.)
Creation Year Week	No. of On Time Events (reqd. vs. confd.)
Event	Event On Time Ratio
Event Actual Date Time	Event On Time Ratio (reqd. vs. actl.)
Event Delay Display Unit	Event On Time Ratio (confd. vs. actl.)
Event Expected End Date Time	Event On Time Ratio (reqd. vs. confd.)
Event Reason Code	Number of Freight Orders
Event Reason Description	No. of Delayed Freight Orders
Event Recalled	Event Delay
Event Status	Event Delay (reqd. vs. actl.)
Execution	

SAP Transportation Management Bus. Perf. Dshbrd. – Execution:

SAP__TMS_SCM_LB_TRANSPORDEXECFORBUSDSHBRD	Connection
Execution Status	
Freight Order	
Ratio Unit	
Ship-to Party	
Shipper	
Stage Destination Location	
Stage Source Location	
Stop	
Stop Plan Transp. Date Time	
Stop Requested End Date Time	
Stop Requested Start Date Time	
Transp. Activity	
Transportation Order Category	
Transportation Order Type	

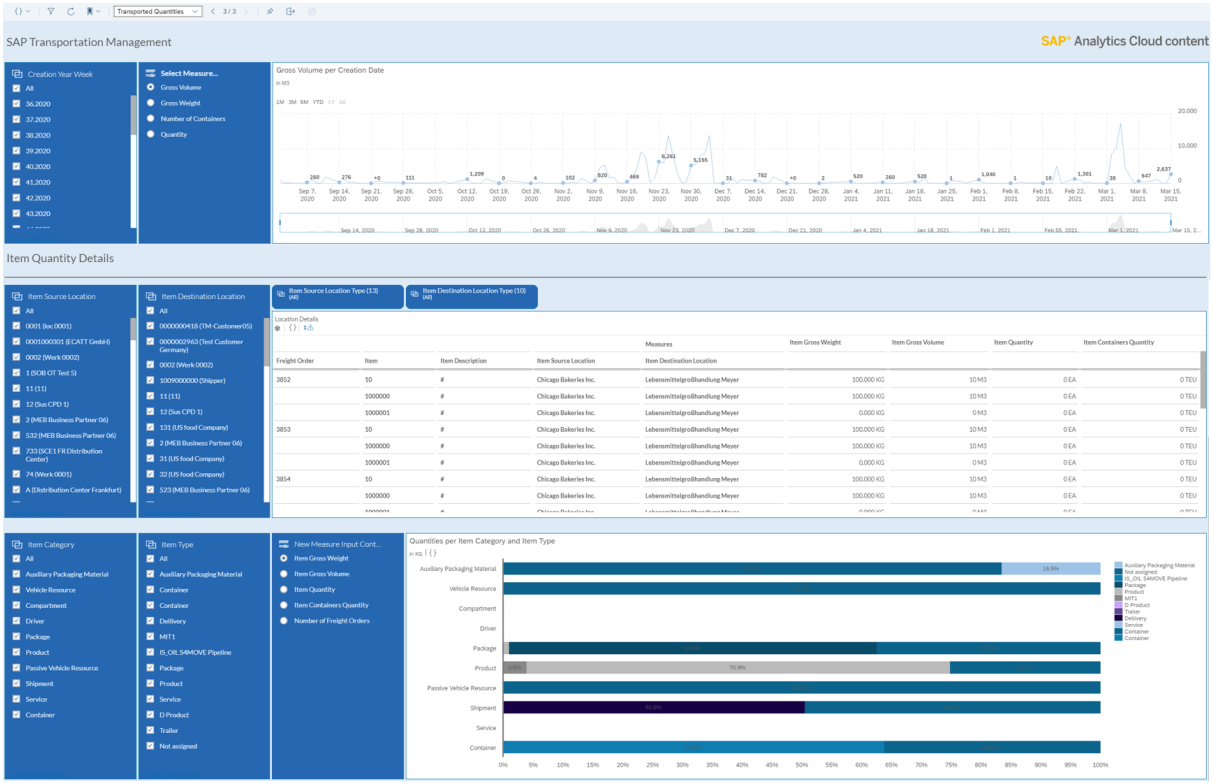
Mandatory Parameters	Default Value
Event Delay Display Unit	H
Creation Date	Interval from today date to 6 Month back to the start of month. For example, today date is 30.04. then the selected date for the start of the interval is 01.10.

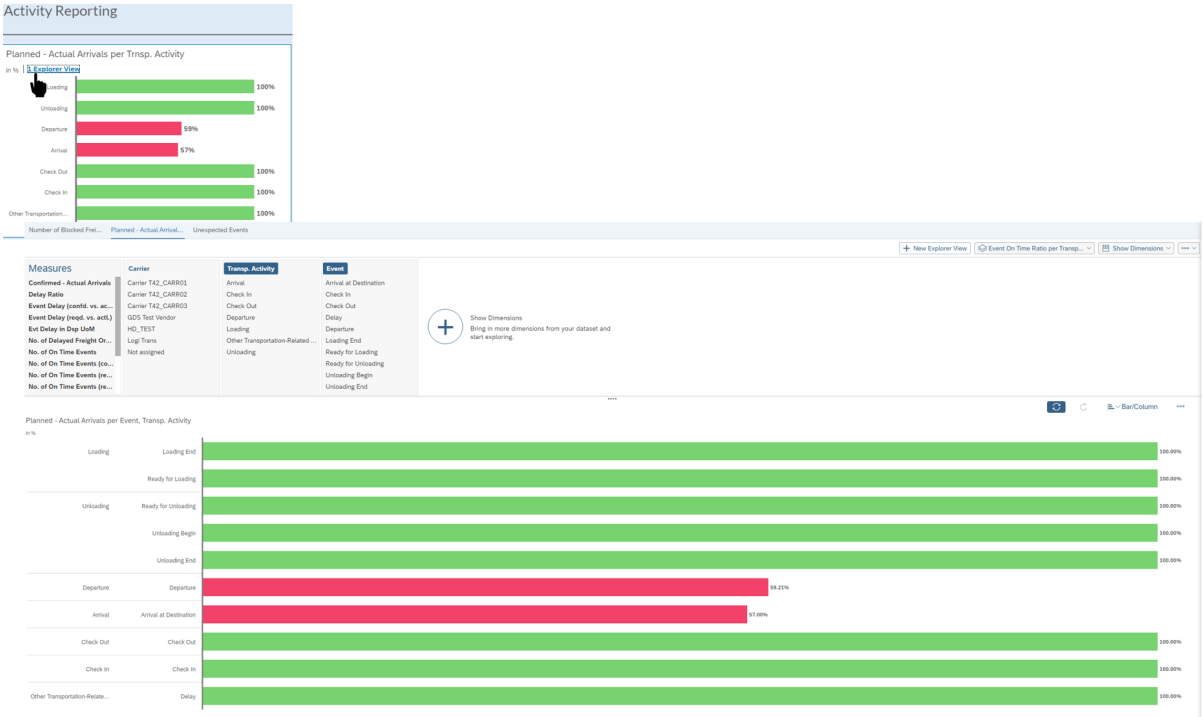
SAP Transportation Management Bus. Perf. Dshbrd. – Execution: SAP__TMS_SCM_LB_TRANSPORDBLOCKFOR-BUSDSHBRD	Connection
CDS View: C_TranspOrdBlockForBusDshbrdQ	Connection Type: S/4Hana Live BEx Query: 2CCTORBLKSACQANA
Dimensions	**Measures**
Block Category	Number of Freight Orders
Block Is Overruled	Number of Blocked Freight Orders
Block Reason	Number of Planning Blocks
Creation Date	Number of Execution Blocks
Creation Year	No. of Planning Blocked Freight Orders
Creation Year Month	No. of Exec. Blocked Freight Orders
Creation Year Quarter	Number of Freight Orders
Creation Year Week	
Source Location	
Planning Block	
Execution Block	
Freight Order	
Stage Type	
Stage	
Stage Category	
Destination Location	
Stage Source Location	
Stage Destination Location	
Transportation Order Category	
Transportation Order Type	

Mandatory Parameters	Default Value
Creation Date	Interval from today date to 6 Month back to the start of month. For example, today date is 30.04. then the selected date for the start of the interval is 01.10.

2.62.3.3 Transported Quantities

Here the information related to transported quantities is given down to a single transport and its individual items.





The following KPIs are used on the page:

- Number of Freight Orders
- Total transported weight
- Total transported volume
- Total transported container
- Total transported quantities
- Item gross weight
- Item gross volume
- Item container quantity
- Item quantity

The following details are displayed, and interactions can be used on this page:

- In the first of the three sections, a general overview of the transported quantities, in a certain timeframe, is given . To quickly change the chosen timeframe, an additional time slider function is available underneath the line chart. To switch between different unit of measures like e.g. weight, volume or others, the left-hand sided filter section can be used.
- The **Item Quantity Details** section consists of two major building blocks dealing firstly with individual transported items and with item categories, such as vehicle resources, compartments, products, and item types, for example service or trailer.
    - Sometimes it's not sufficient only analyzing freight orders on an aggregated level. More detailed information on an individual item level is needed and all this in combination with locations and location types, such as hub, and plant. All these different aspects can be flexibly combined in this set up, because all filters are concatenated and are in addition also influencing the bottom part of this page. So, with all this it's now possible to analyze transported weights, volumes and other quantities on a freight order item level.

- In case it's required to further narrow down the freight order item analysis, the bottom section of this page offers these features. A kind of additional drill down due to **item category** and **item type** has been implemented there, as two filter sections to the left of the stacked filter chart bar, which is showing the according quantities. If a switch between different unit of measures in this stacked bar chart is needed, the selection box directly attached to it can be used for this purpose.

SAP Transportation Management Business Performance Dashboard - Order Detail: SAP__TMS_SCM_LB_TRANS-PORDDETFORBUSDSHBRD	**Connection**
CDS View: C_TranspOrdExecForBusDshbrdQ	Connection Type: S/4Hana Live BEx Query: 2CCTORROOTDSACANAQ
Dimensions	Measures
Created By	Number of Freight Orders
Creation Year	Item Gross Volume
Creation Year Month	Item Quantity
Creation Year Quarter	Item Containers Quantity
Creation Date	Item Gross Weight
Creation Year Week	
Freight Order	
Item	
Item Category	
Item Description	
Item Destination Location	
Item Destination Location Type	
Item Source Location	
Item Source Location Type	
Item Type	
Number of Containers Display Unit	
Quantity Display Unit	
Transportation Mode	
Transportation Mode Category	
Volume Display Unit	
Weight Display Unit	

Mandatory Parameters	Default Value
Weight Display Unit	KG
Volume Display Unit	M3
Quantity Display Unit	EA
Number of Containers Display Unit	TEU
Creation Date	Interval from today date to 6 Month back to the start of month. For example, if today's date is 30.04, then the selected date for the end of the interval is 01.10.

2.63 Treasury Management for SAP S/4HANA Cloud (BEST PRACTICE)

2.63.1 Treasury Management for SAP S/4HANA Cloud (BEST PRACTICE)

Treasury Management for SAP S/4HANA Cloud (49P) provides preconfigured story samples. Please read the documentation carefully before importing the content.

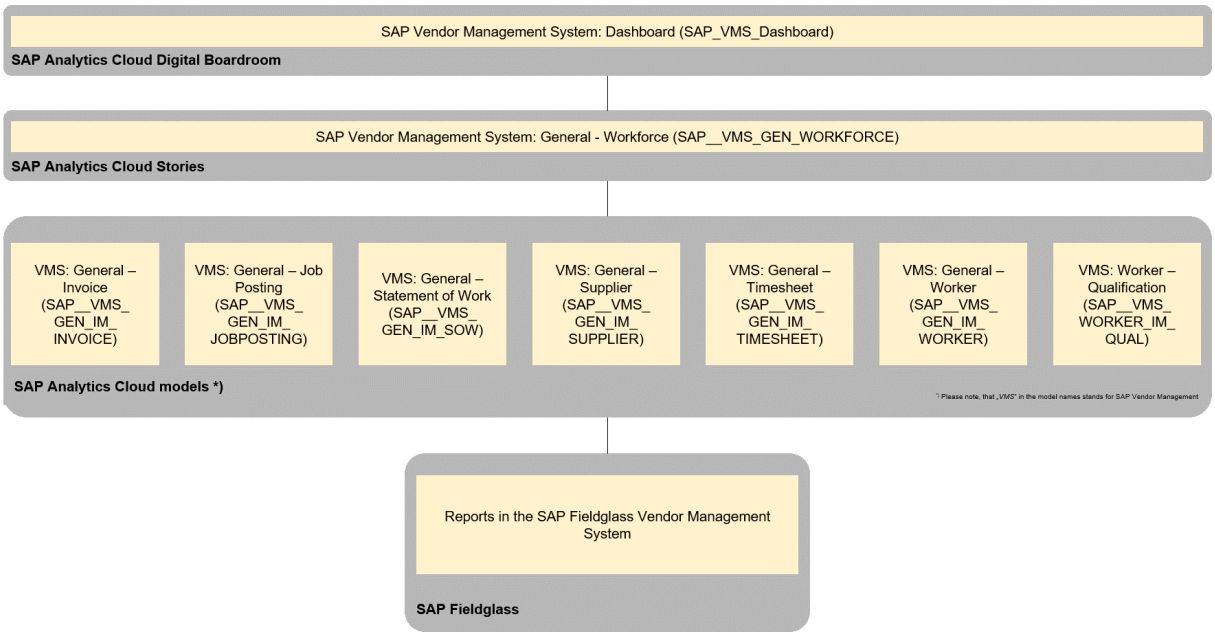
Find all details and documentation about this scope item in SAP Best Practices Explorer: SAP S/4HANA Cloud Treasury content with SAP Analytics Cloud (49P).

2.64 Vendor Management System (VMS)

2.64.1 Architecture and Abstract

The story leverages Contingent Workforce and Statement of Work data from SAP Fieldglass via the standard SAP Fieldglass connector in SAP Analytics Cloud. User defined reports in SAP Fieldglass are exposed through the connector in SAP Analytics Cloud based on which models are created. Since user defined reports cannot be shipped, in the document below, you will find the definition of these reports.

Architecture



2.64.2 Stories

SAP Vendor Management System: General - Workforce (SAP__VMS_GEN_WORKFORCE)

Page: Additional - Billing Rates

This page is divide into 2 parts:

The upper part compares daily rated for employees in payroll, job posting workers and SOW Workers.

SAP Analytics Cloud provides a functionality to run Smart Discovery (Machine led Discovery of insights) on any model. In a story, it is possible to run Smart Discovery on a model in the data view section. In the lower part of this page, this functionality is used to analyse the model SAP__VMS_GEN_IM_WORKER for the measure Current Work Order Committed Spend. The machine discovery provides a result, showing the dimensions that are main influencers for Committed spends along with charts showing the distribution of the influencing members of a dimension. The charts of the discovery are copied over to this page. These charts are frozen on the point in time the analysis took place and they are not influenced by any filters.

2.64.3 Models

As mentioned at the beginning of this chapter, the SAP Analytics Cloud models for Vendor Management System content can be filled using the SAP Fieldglass connector.

The SAP Fieldglass connector retrieves data exposed by SAP Fieldglass reports. These reports have to be set up manually in the SAP Fieldglass system. Once the reports are set up, the corresponding data models can be filled, usually by mapping the fields exposed by the reports 1:1 to the dimensions and key figures in the SAP Analytics Cloud models.

Once the SAP Fieldglass report is created, fill the corresponding SAP Analytics Cloud model as follows:

- Choose Import Data from Fieldglass (from Browse → Model menu)
- Choose your connection, create a new query, and provide name and description
- Select the SAP Fieldglass report and map the fields as described below
- Several models have Counter, for example, Job Postings Count details in the model field lists below. These Counter fields have to be filled in SAP Analytics Cloud as follows:
  - Duplicate a column, ideally one with only a few different values.
  - Map this new column to the Counter Measure, for example, Job Postings Count.
  - Replace all values with “1”.
  - If necessary, replace “” (blanks) in dimensions with suitable value (for example, “#” or “no”).

The following sub-chapters assume that the reader is familiar with the creation of reports in the SAP Fieldglass system in general.

Please note that some models are plan-enabled models to allow for Smart Discovery. A suitable license has to be in place.

2.64.3.1 General – Job Posting (SAP__VMS_GEN_IM_JOBPOSTING)

This report displays the Job Postings of SAP Fieldglass for the last 3 years.

Create the report as follows:

Filters

Job Posting Create Date	In Last	3 Years
Rate Category (Column Filter)	In	All (ST/Day, OT/Day)

Field list

Module	Data Field Name
Job Posting	Site
Job Posting	Job Posting Title
Job Posting	Job Posting ID
Job Posting	Business Unit
Job Posting	Cost Center
Job Posting	Job Posting Status
Job Posting	Estimated Spend
Job Posting	# Hired
Job Posting	Buyer Cycle Time
Job Posting	Work Order Time to Fill
Job Posting	Supplier Cycle Time

Field list	
Job Posting	Total Cycle Time
Job Posting	# Confirmed Interviews
Job Posting	# Positions Requested
Job Posting	# Withdrawn
Job Posting	# Unfilled Positions
Job Posting	# Responses
Job Posting	# Shortlisted
Job Posting	# Registered
Job Posting	# Suppliers Responded
Job Posting	# Accepted Interviews
Job Posting	# Suppliers Distributed
Job Posting	Job Posting Owner
Job Posting	Job Posting Owner's Username
Job Posting	Country
Job Posting	Project
Job Posting	Withdraw Reason
Job Posting	First Job Seeker Submission Time
Job Posting	Complete Supplier Cycle Time?
Job Posting	First Job Seeker shortlist time
Job Posting	Complete Buyer Cycle Time?
Job Posting	Supplier must enter Pay Rate?
Job Posting	Supplier must submit Resume/CV
Job Posting	Exclude Pay Rate from Tax Adjustment
Job Posting	Average Requested Bill Rate
Job Posting	Average Presented Bill Rate
Job Posting	Job Posting Create Date

Model Name: SAP__VMS_GEN_IM_JOBPOSTING	Connection
• Model Description: SAP Vendor Management System: General – Job Posting • Planning Enabled: Yes	• Connection Type: Import Data Connection to Fieldglass • Connection Report: See above

SAP_VMS_JOBPOSTING_ACCOUNT *		
ID	**Description**	**Formula/Mapping**
EstimatedSpend	Estimated Spend	Estimated Spend
BuyerCycleTime	Buyer Cycle Time	Buyer Cycle Time

Model Name: SAP__VMS_GEN_IM_JOBPOSTING		Connection
WOTimeToFill	Work Order Time to Fill	Work Order Time to Fill
SupplierCycleTime	Supplier Cycle Time	Supplier Cycle Time
TotalCycleTime	Total Cycle Time	Total Cycle Time
FirstSeekerSubmissionTime	First Job Seeker Submission Time	First Job Seeker Submission Time
FirstSeekerShortlistTime	First Job Seeker shortlist time	First Job Seeker shortlist time
AVRequestedBillRate	Average Requested Bill Rate	Average Requested Bill Rate
AVPresentedBillRateSTDAY	Average Presented Bill Rate [ST/Day]	Average Presented Bill Rate STDAY
AVPresentedBillRateOTDAY	Average Presented Bill Rate [OT/Day]	Average Presented Bill Rate OTDAY
PositionFullfillmentRatio	Position Fullfillment Ratio	[Hired] / [PositionsRequested]
ConfirmedInterviews	# Confirmed Interviews	# Confirmed Interviews
PositionsRequested	# Positions Requested	# Positions Requested
Withdrawn	# Withdrawn	# Withdrawn
UnfilledPositions	# Unfilled Positions	[PositionsRequested] -[Hired]
Responses	# Responses	# Responses
Shortlisted	# Shortlisted	# Shortlisted
Registered	# Registered	# Registered
SuppliersResponded	# Suppliers Responded	# Suppliers Responded
AcceptedInterviews	# Accepted Interviews	# Accepted Interviews
SuppliersDistributed	# Suppliers Distributed	# Suppliers Distributed
Hired	# Hired	# Hired
JobPostCount	Number of Job Postings	Fill with 1
Dimensions		
ID	**Description**	**Mapping**
SAP_VMS_GEN_IM_JOBPOST-ING:Time*	Time	Job Posting Create Date
SAP_VMS_GEN_IM_JOBPOSTING:Ver-sion*	Version	Use SAP Analytics Cloud Version map-ping and set to „Actuals“
SAP_ALL_COUNTRY	Country	See above how to map accounts
SAP_ALL_BUSINESSAREA	Business Area	Country
SAP_ALL_COSTCENTER	Cost Center	Business Unit
SAP_VMS_JP_ID	Job Posting	Cost Center
SAP_VMS_JP_STATUS	Job Posting Status	Job Posting ID
SAP_VMS_GEN_OWNER	Owner	Job Posting Status
SAP_VMS_GEN_PROJECT	Project	Job Posting Owner
SAP_VMS_GEN_SITE	Site	Project

Model Name: SAP__VMS_GEN_IM_JOBPOSTING		Connection
SAP_VMS_JP_WITHDRAWREASON	Withdrawal Reason	Site
SAP_VMS_JP_CSCT	Complete Supplier Cycle Time?	Withdraw Reason
SAP_VMS_JP_CBCT	Complete Buyer Cycle Time?	Complete Supplier Cycle Time?
SAP_VMS_JP_SUENTERPAY	Supplier must enter PayRate?	Complete Buyer Cycle Time?
SAP_VMS_JP_SUSUBMITCV	Supplier must submit CV?	Supplier must enter Pay Rate?
SAP_VMS_JP_EXCLUDEPAYTAX	Exclude PayRate from Tax Adjustment?	Supplier must submit Resume/CV?

> **i** Note
>
> * Private dimension and other dimensions are public.

2.64.3.2 General – Statement of Work (SAP__VMS_GEN_IM_SOW)

SAP Fieldglass report for Statements of Work

This report displays the Statements of Work of SAP Fieldglass for the last 3 years.

Create the report as follows:

Filters

Job Posting Create Date	In Last	3 Years
Rate Category (Column Filter)	In	All (ST/Day, OT/Day)
Cost Center	Display	Current
Statement of Work	Display	Last Approved

Field list

Module	Data Field Name
Statement of Work	Business Unit
Statement of Work	Cost Center
Statement of Work	Statement of Work
Statement of Work	Statement of Work ID
Statement of Work	SOW End Date
Statement of Work	SOW Start Date
Statement of Work	Statement of Work Create Date
Statement of Work	Committed Spend
Statement of Work	Edited On

Field list	
Statement of Work	Site
Statement of Work	# Suppliers Distributed
Statement of Work	Supplier
Statement of Work	Project
Statement of Work	Type
Statement of Work	# Suppliers Responded
Statement of Work	Active SOW Worker Count
Statement of Work	Estimated Expense %
Statement of Work	Estimated Additional Spend %
Statement of Work	Maximum Budget Amount
Statement of Work	Spend to Date
Statement of Work	Spend to Date for all Workers
Statement of Work	Remaining Spend
Statement of Work	Remaining Spend for all Workers
Statement of Work	Other Pending Spend
Statement of Work	Other Pending Spend for all Workers
Statement of Work	Statement of Work Status
Statement of Work	SOW Bid?
Statement of Work	Cap on Worker Spend
Statement of Work	Allow use of Fees with SOW Workers
Statement of Work	Enforce Max Budget on Characteristics and SOW Worker
Statement of Work	Taxable?
Statement of Work	Presented Rates
Statement of Work	Country

Model Name: SAP__VMS_GEN_IM_SOW	Connection
• Model Description: SAP Vendor Management: General - Statement of Work • Planning Enabled: Yes	Connection Type: Import Data Connection to Fieldglass Connection Report: See above

SOW Account*

ID	Description	Formula/Mapping
CommittedSpend	Committed Spend	Committed Spend
SuppliersDistributed	# Suppliers Distributed	# Suppliers Distributed
SuppliersResponded	# Suppliers Responded	# Suppliers Responded
ActiveSOWWorkerCount	Worker Count	Active SOW Worker Count

Model Name: SAP__VMS_GEN_IM_SOW		Connection
EstimatedExpense	Estimated Expense %	Estimated Expense %
EstimatedAdditionalSpend	Estimated Additional Spend %	Estimated Additional Spend %
MaximumBudgetAmount	Maximum Budget Amount	Maximum Budget Amount
SpendtoDateforallWorkers	Spend to Date for all Workers	Spend to Date for all Workers
RemainingSpendforallWorkers	Remaining Spend for all Workers	Remaining Spend for all Workers
OtherPendingSpendforallWorkers	Other Pending Spend for all Workers	Other Pending Spend for all Workers
SOWCounter	Number of SOWs	Counter Field, fill in SAP Analytics Cloud with "1"
TotalApprovalCycleTime	Total Approval Cycle Time	Total Approval Cycle Time
STRates	Standard Rate per day	Presented Rates (ST/Day)
OTRates	Overtime Rates per day	Presented Rates (OT/Day)
Dimensions		
ID	**Description**	**Mapping**
SAP_VMS_GEN_IM_SOW:Time*	Time	Statement of Work Create Date (split columns to separate date and time-of-day and map date only)
SAP_VMS_GEN_IM_SOW:Version*	Version	Use SAP Analytics Cloud Version mapping and set to „Actuals"
SAP_VMS_SOW_ACCOUNT*	SOW Account	See above how to map accounts
SAP_VMS_SOW_ID	Statement of Work	Statement of Work ID
SAP_VMS_SOW_STATUS	SOW Status	Statement of Work Status
SAP_VMS_SOW_TYPE	SOW Type	Type
SAP_VMS_SOW_BID	SOW Bid?	SOW Bid?
SAP_VMS_SOW_ALLOWFEE	Allow use of fees with SOW Workers?	Allow use of Fees with SOW Workers?
SAP_VMS_SOW_MAXBUDGET	Enforce Max Budget?	Enforce Max Budget on Characteristics and SOW Worker
SAP_VMS_SOW_TAXABLE	Taxable?	Taxable?
SAP_ALL_COUNTRY	Country	Country
SAP_ALL_COSTCENTER	Cost Center	Cost Center
SAP_ALL_BUSINESSAREA	Business Area	Business Unit
SAP_VMS_GEN_SITE	Site	Site
SAP_VMS_GEN_PROJECT	Project	Project
SAP_VMS_GEN_OWNER	Owner	Statement of Work Owner

> **i Note**
>
> * Private dimension and other dimensions are public.

2.64.3.3 General – Supplier (SAP__VMS_GEN_IM_SUPPLIER)

SAP Fieldglass report for Supplier

This report displays the Supplier information of SAP Fieldglass.

Create the report as follows:

Filters		
Supplier Status	In	Active

Field list	
Module	**Data Field Name**
Supplier	Total Staff
Supplier	Supplier
Supplier	# Workers
Supplier	Annual Revenue
Supplier	Supplier Status
Supplier	Supplier Code
Supplier	Country
Supplier	Average Evaluation Rating

Model Name: SAP__VMS_GEN_IM_SUPPLIER	Connection
• Model Description: SAP Vendor Management: General - Supplier • Planning Enabled: No	• Connection Type: Import Data Connection to Fieldglass • Connection Report: See above

Supplier Account*		
ID	**Description**	**Formula/Mapping**
WorkerCount	# Workers	# Workers
SupplierCount	Supplier Count	Counter Field, fill in SAP Analytics Cloud with “1”
Dimensions		
ID	Description	Mapping
SAP_VMS_GEN_IM_SUPPLIER:Time*	Time	Set to current year
SAP_VMS_SUPPLIER_REVENUE	Annual Revenue	Annual Revenue
SAP_VMS_SUPPLIER_RATING	Supplier Rating	Average Evaluation
SAP__ALL_COUNTRY	Country	Country
SAP_VMS_SUPPLIER_ID	Supplier	Supplier Code
SAP_VMS_SUPPLIER_STAFF	Staff	Total

Model Name: SAP__VMS_GEN_IM_SUPPLIER		Connection
SAP_VMS_SUPPLIER_STATUS	Supplier Status	Supplier Status

> **i** Note
>
> * Private dimension, other dimensions are public

2.64.3.4 General – Worker (SAP__VMS_GEN_IM_WORKER)

SAP Fieldglass report for Worker

This report displays the Worker information of SAP Fieldglass.

Create the report as follows:

Filters		
Worker Status	In	Created, Open, Pending Review, Closed
Worker Start Date	In Last	3 Years

Field list	
Module	Data Field Name
Worker	Worker Status
Worker	Supplier
Worker	Site
Worker	Worker Start Date
Worker	Worker End Date
Worker	Worker ID
Worker	Business Unit
Worker	Current Work Order Committed Spend
Worker	Average Evaluation Rating
Worker	Buyer Reference
Worker	Job Code
Worker	Spend to Date
Worker	Worker Tenure

Field list	
Worker	Worker Type
Worker	Worker
Worker	Can Rehire?
Worker	Country

Model Name: SAP__VMS_GEN_IM_WORKER	Connection
• Model Description: SAP Vendor Management: General - Worker • Planning Enabled: No	• Connection Type: Import Data Connection to Fieldglass • Connection Report: See above

Worker Account*		
ID	**Description**	**Formula/Mapping**
CurrentWorkOrderCommittedSpend	Current Work Order Committed Spend	Current Work Order Committed Spend
SpendtoDate	Spend to Date	Spend to Date
WorkerTenure	Worker Tenure	Worker Tenure
WorkerCount	Number of Workers	Counter Field, fill in SAP Analytics Cloud with “1”

Dimensions		
ID	**Description**	**Mapping**
SAP_VMS_WORKER_ACCOUNT:Time	Time	Worker Start Date
SAP_VMS_WORKER_ID	Worker	Worker ID
SAP_VMS_WORKER_JOBCODE	Job Code	Job Code
SAP_VMS_WORKER_TYPE	Worker Type	Worker Type
SAP_VMS_WORKER_REHIRE	Can Rehire?	Can Rehire?
SAP_VMS_WORKER_RATING	Worker Rating	Average Evaluation
SAP_VMS_WORKER_STATUS	Worker Status	Worker Status
SAP_ALL_COUNTRY	Country	Country
SAP_ALL_BUSINESSAREA	Business Area	Business Unit
SAP_VMS_GEN_SITE	Site	Site
SAP_VMS_SUPPLIER_ID	Supplier	Supplier

> **i Note**
>
> * Private dimension and other dimensions are public.

2.64.3.5 Worker - Qualification (SAP__VMS_WORKER_IM_QUAL)

SAP Fieldglass report for Worker Qualification

This report displays the Worker Qualification information of SAP Fieldglass.

Create the report as follows:

Filters		
Worker Status	In	Created, Open, Pending Review, Closed
Worker Start Date	In Last	3 Years

Field list	
Module	Data Field Name
Worker	Worker ID
Worker	Qualification
Worker	Qualification Category
Worker	Qualification Description
Worker	Worker Start Date
Worker	Worker Status
Worker	Years
Worker	Average Evaluation Rating

Model Name: SAP__VMS_WORKER_IM_QUAL	Connection
• Model Description: SAP Vendor Management: Worker - Qualification • Planning Enabled: No	• Connection Type: Import Data Connection to Fieldglass • Connection Report: See above

Qualification Account*		
ID	**Description**	**Formula/Mapping**
QualificationCount	QualificationCount	Counter Field, fill in SAP Analytics Cloud with “1”

Dimensions		
ID	**Description**	**Mapping**
SAP__VMS_WORKER_IM_QUAL:Time*	Time	Worker Start Date
SAP_VMS_WORKER_QUALID	Qualification ID	Qualification

Model Name: SAP__VMS_WORKER_IM_QUAL		Connection
SAP_VMS_WORKER_QUALCAT	Qualification Category	Qualification Category
SAP_VMS_WORKER_QUALYEAR	Years of Qualification	Years
SAP_VMS_WORKER_ID	Worker	Worker ID
SAP_VMS_WORKER_STATUS	Worker Status	Worker Status

> **i** Note
>
> * Private dimension and other dimensions are public.

2.64.3.6 General – Timesheet (SAP__VMS_GEN_IM_TIMESHEET)

SAP Fieldglass report for Timesheet

This report displays the Timesheet information of SAP Fieldglass.

Create the report as follows:

Filters

Time Sheet Start Date	In Last	3 Years
Time Sheet Status	In	• Approval Paused • Pending Review by Supplier • Approved • Payment Pending • Rejected • Pending Approval • Paid • Pending Review

Field list

Module	Data Field Name
Time Sheet	Time Sheet Amount
Time Sheet	Cost Center
Time Sheet	Site
Time Sheet	Time Sheet Status
Time Sheet	Supplier
Time Sheet	Time Sheet ID
Time Sheet	Time Sheet Submit Date
Time Sheet	Business Unit

Field list	
Time Sheet	Worker
Time Sheet	Working Hours
Time Sheet	Time Sheet Approval Time

Model Name: SAP__VMS_GEN_IM_TIMESHEET	Connection
• Model Description: SAP Vendor Management: General – Timesheet • Planning Enabled: No	• Connection Type: Import Data Connection to Fieldglass • Connection Report: See above

Timesheet Account*		
ID	**Description**	**Formula/Mapping**
TimeSheetApprovalTime	Time Sheet Approval Time	Time Sheet Approval Time
TimeSheetAmount	Time Sheet Amount	Time Sheet Amount
WorkingHours	Working Hours	Working Hours
TimesheetCount	Number of Timesheets	Counter Field, fill in SAP Analytics Cloud with “1”

Dimensions		
ID	**Description**	**Mapping**
SAP__VMS_GEN_IM_TIMESHEET:Time	Time	Time Sheet Submit Date
SAP_VMS_TS_STATUS	Timesheet Status	Time Sheet Status
SAP_VMS_TS_ID	Timesheet ID	Time Sheet ID
SAP_ALL_BUSINESSAREA	Business Area	Business Unit
SAP_ALL_COSTCENTER	Cost Center	Cost Center
SAP_VMS_GEN_SITE	Site	Site
SAP_VMS_SUPPLIER ID	Supplier	Supplier
SAP_VMS_WORKER_ID	Worker	Worker

> **i** Note
>
> * Private dimension and other dimensions are public.

2.64.3.7 General – Invoice (SAP__VMS_GEN_IM_INVOICE)

SAP Fieldglass report for Invoice

This report displays the Invoice information of SAP Fieldglass.

Create the report as follows:

Filters		
Invoice Status	In	• Paid • Consolidated • Payment Review • Approved • Pending Consolidation
Invoice Submit Date	In Last	3 Years
Rate Category Column Filter	In	OT/Day (ANTE) ST/Day (ANTE)

Field list	
Module	Data Field Name
Invoice	Invoice ID
Invoice	Invoice Amount
Invoice	Cost Center
Invoice	Invoice Status
Invoice	Supplier
Invoice	Invoice Submit Date
Invoice	Billable Hours (by Rate Category)
Invoice	Worker ID
Invoice	Site
Invoice	Business Unit
Invoice	Invoice Paid Amount
Invoice	Country

Model Name: SAP__VMS_GEN_IM_INVOICE	Connection
• Model Description: SAP Vendor Management: General - Invoice • Planning Enabled: No	• Connection Type: Import Data Connection to Fieldglass • Connection Report: See above

Account*		
ID	**Description**	**Formula/Mapping**
InvoiceAmount	Invoice Amount	Invoice Amount
BillableHoursSTDay	Billable Hours [ST/Day]	Billable Hours [ST/Day]
BillableHoursOTDay	Billable Hours [OT/Day]	Billable Hours [OT/Day]
InvoicePaidAmount	Invoice Paid Amount	Invoice Paid Amount

Model Name: SAP__VMS_GEN_IM_INVOICE		Connection
invoicecount	Number of Invoices	Counter Field, fill in SAP Analytics Cloud with “1”
Dimensions		
ID	**Description**	**Mapping**
SAP__VMS_GEN_IM_INVOICE: Time	Time	Invoice Submit Date
SAP_VMS_INVOICE_ID	Invoice	Invoice ID
SAP_VMS_INVOICE_STATUS	Invoice Status	Invoice Status
SAP_VMS_SUPPLIER_ID	Supplier	Supplier
SAP_VMS_WORKER_ID	Worker	Worker ID
SAP_ALL_COUNTRY	Country	Country
SAP_ALL_COSTCENTER	Cost Center	Cost Center
SAP_ALL_BUSINESSAREA	Business Area	Business Unit
SAP_VMS_GEN_SITE	Site	Site

> ℹ Note
>
> - Private dimension and other dimensions are public.

2.65 Visa & Permit Management for Human Experience Management

2.65.1 Architecture and Abstract

Prerequisites

To enable and use this content package, some implementation steps must be followed. For details, see the Implementation Steps listed in the Integration Guide for SAP SuccessFactors and SAP Analytics Cloud.

In this package, end-users can analyze their data from SAP SuccessFactors Visa and Permits Management combined with other SAP SuccessFactors modules and oversee specific compliance and performance aspects of visas and permits, as well as related business process (workflow) requests.

The architecture overview for this content package is available in Architecture Overview.

2.65.2 Stories

You can follow the links below for details about the stories in this package.

- Document Compliance (SAP__HR_VPM_DOCCOMPLIANCE)
- Company Matching (SAP__HR_VPM_COMPMISMATCH)
- Document Monitoring (SAP__HR_VPM_DOCMONITOR)
- Request Monitoring and Request Processor Performance (SAP__HR_VPM_REQMONITOR)

2.65.3 Models

You can follow the links below for details about the models in this package.

- Document Compliance (SAP__HR_VPM_DOCCOMPLIANCE)
- Company Matching (SAP__HR_VPM_IM_COMPMISMATCH)
- Document Monitoring (SAP__HR_VPM_IM_DOCMONITOR)
- Request Monitoring (SAP__HR_VPM_IM_REQMONITOR)
- Request Processor Performance (SAP__HR_VPM_IM_AGENTPERF)

3 Industries

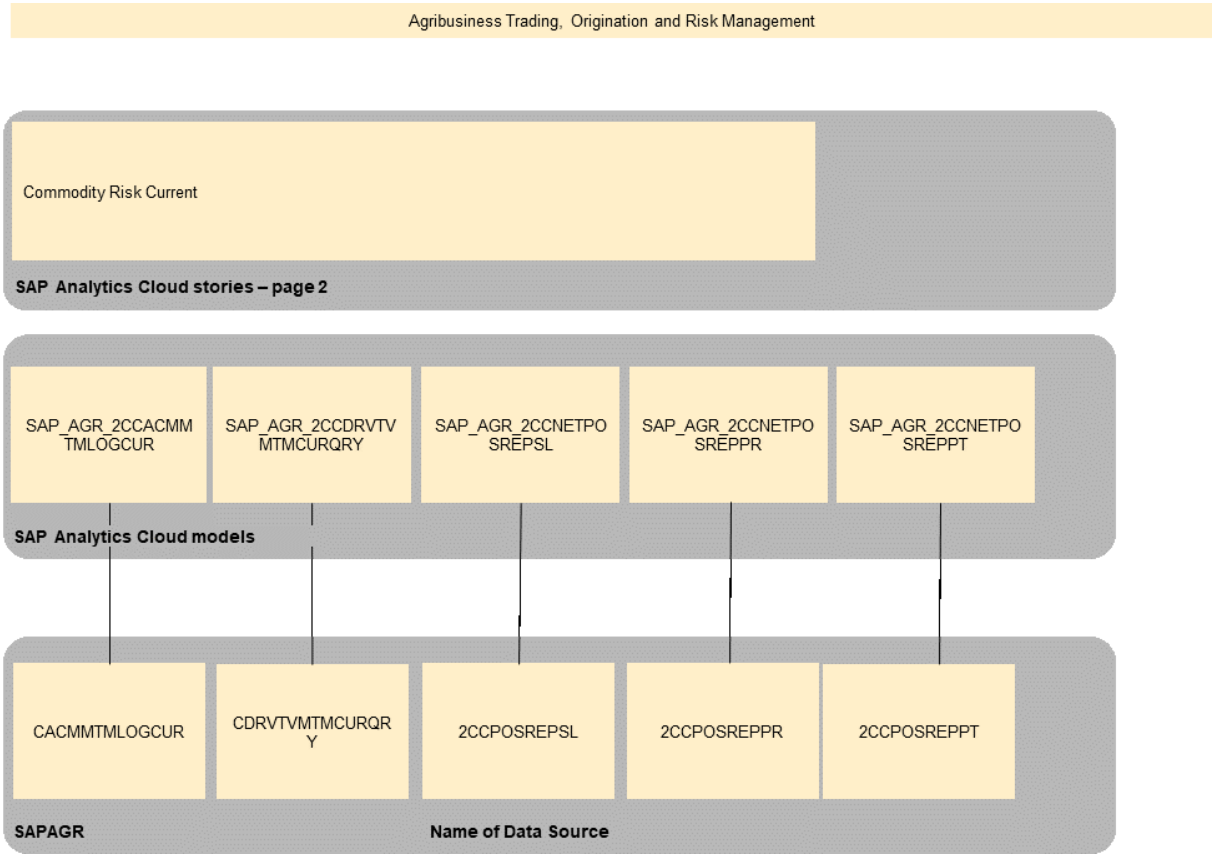
3.1 Agriculture

3.1.1 Architecture and Abstract

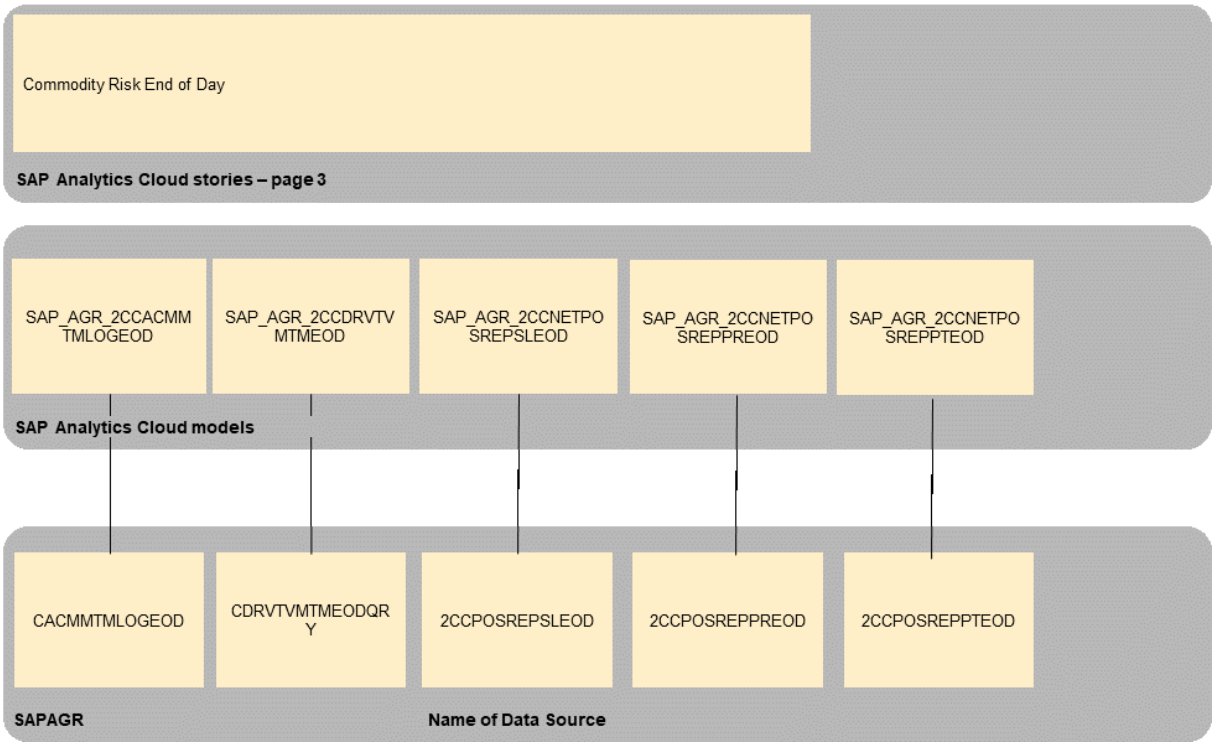
SAP Agricultural Origination, Trading & Risk Management covers analytics for Trader and Risk Manager.

Architecture

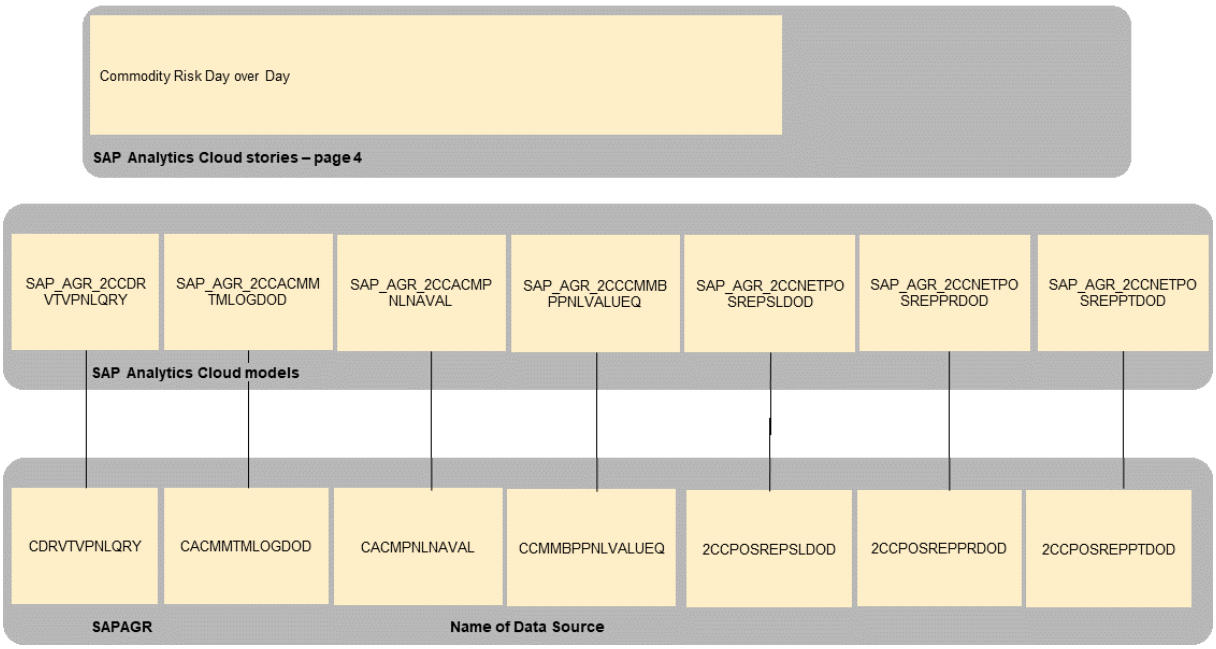
Agriculture Business Trading Origination and Risk Management



Agribusiness Trading, Origination and Risk Management



Agribusiness Trading, Origination and Risk Management



Agribusiness Trading, Origination and Risk Management

3.1.2 Dashboard

gribusiness Trading, Origination and Risk Management Story (no Dashboard)

Root Topic Name	Topic Level 1 name	Topic Level 2 name	Model Name / CDS Query
Agribusiness Trading, Origination and Risk Management SAP_AGR	Commodity Risk – Current – page 2		
		Position	SAP_AGR_2CCNETPOSREPSL / 2CCPOSREPSL
		Mark to Market	SAP_AGR_2CCACMMTMLOGCUR SAP_AGR_2CCDRVTVMTMCURQRY SAP_AGR_2CCACMSTKMTMQLTY
		Premium Position	SAP_AGR_2CCNETPOSREPPR / 2CCPOSREPPR
		Position Price Type	SAP_AGR_2CCNETPOSREPPT / 2CCPOSREPPT
	Commodity Risk - End of Day		
		Position	SAP_AGR_2CCNETPOSREPSLEOD
		Mark to Market	SAP_AGR_2CCACMMTMLOGEOD SAP_AGR_2CCDRVTVMTMEODQRY SAP_AGR_2CCCMMMTMSTKEODQRY
		Premium Position	SAP_AGR_2CCNETPOSREPPREOD
	Commodity Risk - Day over Day		
		Position	SAP_AGR_2CCNETPOSREPSLDOD
		Mark to Market	SAP_AGR_2CCACMMTMLOGDOD
		Premium Position	SAP_AGR_2CCNETPSOREPPRDOD
		PnL	SAP_AGR_2CCCMMBPPNLVALUEQ SAP_AGR_2CCACMPNLNAVAL SAP_AGR_2CCDRVTVPNLQRY

	Business Partner Trade		
		Position	SAP_AGR_2CCNETPOS-REPPT SAP_AGR_2CCNET-POSREPSL
		Mark to Market	SAP_AGR_2CCACMMTM-LOGCUR

3.1.3 Stories

- Commodity Risk Current
- Commodity Risk End of Day
- Commodity Risk Day over Day
- Business Partner Contracts

3.1.3.1 Commodity Risk Current

Measure Name	Type	Formula/Properties
Hedge %	Calculated Measure	-Futures Trade / Total Physical (Flat +NBE)
Total Physical (Flat+NBE)	Calculated Measure	Total Physical + Unpriced NFE Purchase + Unpriced NFE Sales

3.1.3.2 Commodity Risk End of Day

Measure Name	Type	Formula/Properties
Hedge % EoD	Calculated Measure	-Futures Trade / Total Physical (Flat +NBE)
Total Physical (Flat+NBE) EoD	Calculated Measure	Total Physical + Unpriced NFE Purchase + Unpriced NFE Sales

3.1.3.3 Commodity Risk Day over Day

Measure Name	Type	Formula/Properties
Total Physical (Flat+NBE) DoD	Calculated Measure	Total Physical + Unpriced NFE Purchase + Unpriced NFE Sales

3.1.3.4 Business Partner Trade

Measure Name	Type	Formula/Properties
Contractual Value	Restricted Measure	Value in Stat. Crcy (measure) + Short Descript. (dimension)
Unpriced NFE	Calculated Measure	Unpriced NFE Purchase + Unpriced NFE Sales
Unrealized Contract Quantity	Calculated Measure	Open Contracts+ Inventory on Unrealized Transactions

3.1.4 Models

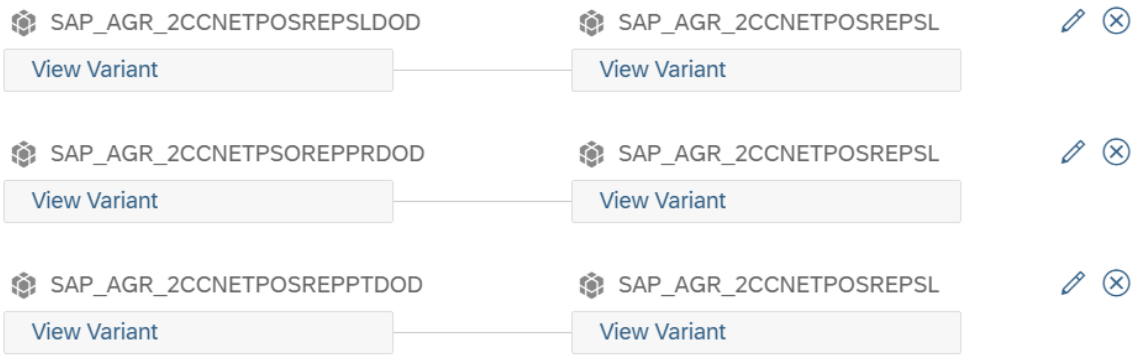
All models in this build are Live Models, no planning models were used and from same data source (SAPAGRH, Direct).

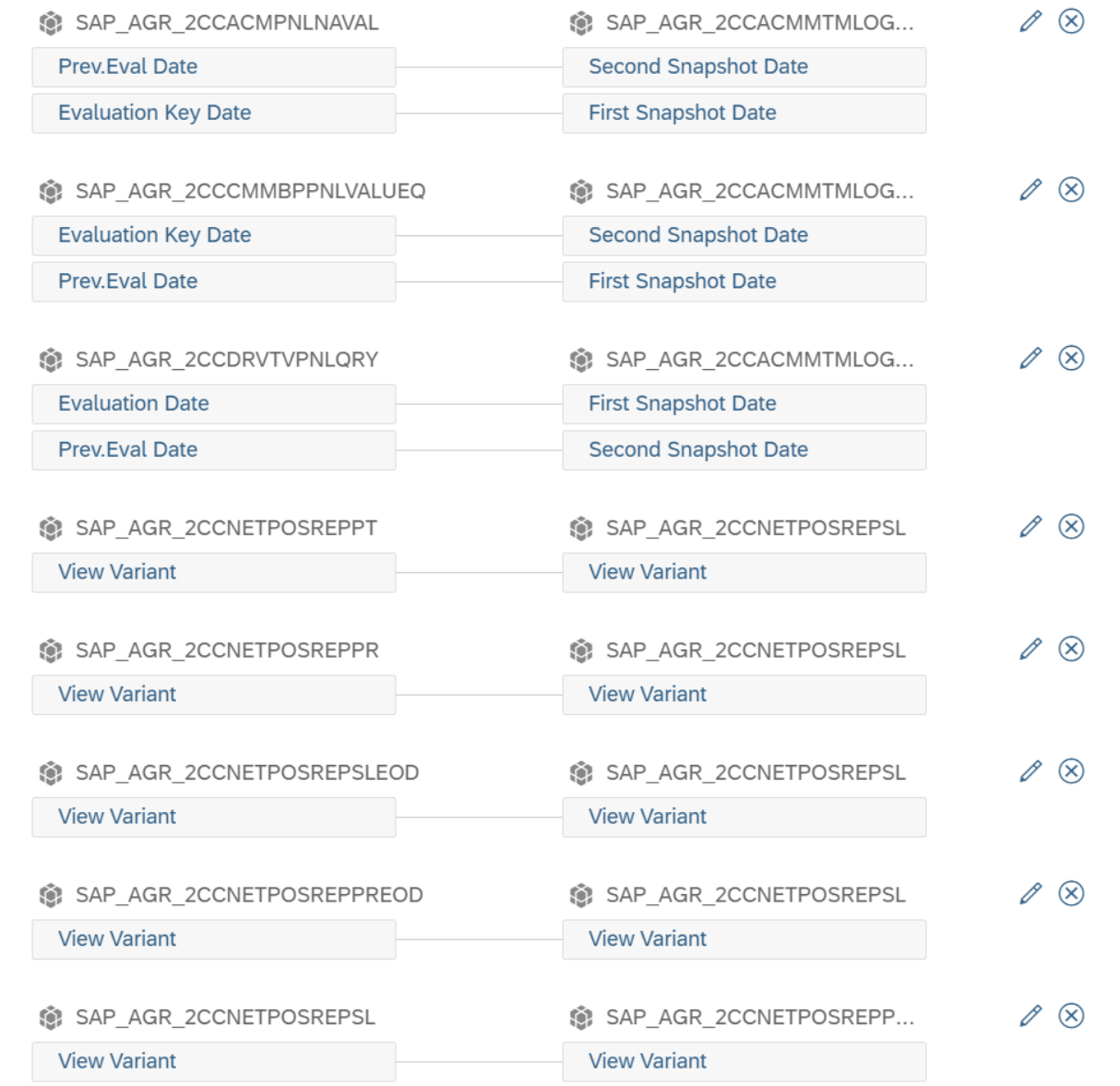
Variables (Prompt)

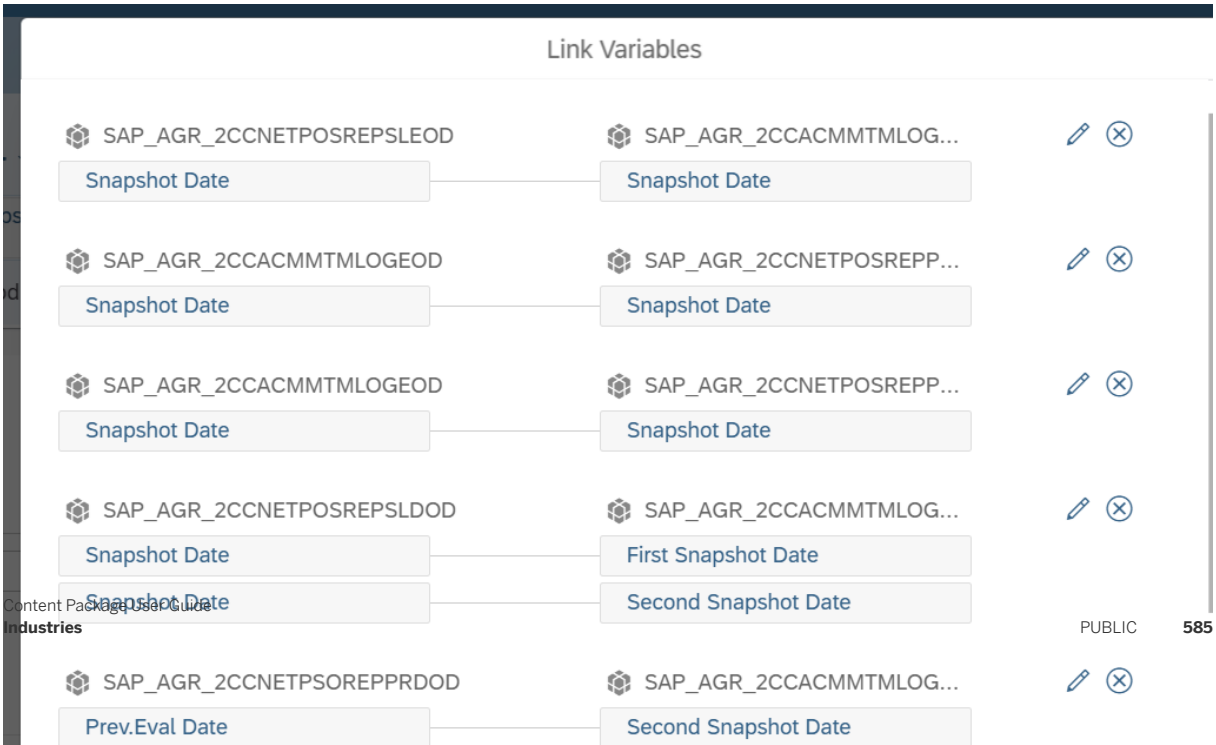
Variables

Model	Variable	Prompt Value
SAP_AGR_2CCNETPOSREPSL	View Variant	In Mass UoM
SAP_AGR_2CCACMMTMLOGDOD	First Snapshot Date	20191218
SAP_AGR_2CCACMMTMLOGDOD	Second Snapshot Date	20191205
SAP_AGR_2CCNETPOSREPSLDOD	View Variant	In Mass UoM
SAP_AGR_2CCNETPOSREPSLDOD	Snapshot Date	20191218
SAP_AGR_2CCNETPOSREPSLDOD	Snapshot Date	20191205
SAP_AGR_2CCACMMTMLOGEOD	Snapshot Date	20191218
SAP_AGR_2CCDRVTVPNLQRY	Evaluation Date	20191218
SAP_AGR_2CCDRVTVPNLQRY	Prev.Eval Date	20191205
SAP_AGR_2CCDRVTVPNLQRY	View Variant	In Physical Commodity UoM
SAP_AGR_2CCDRVTVPNLQRY	Currency Var.	In Statistics Currency
SAP_AGR_2CCDRVTVMTMCURQRY	View Variant	In Physical Commodity UoM
SAP_AGR_2CCDRVTVMTMEODQRY	View Variant	In Physical Commodity UoM
SAP_AGR_2CCDRVTVMTMEODQRY	Evaluation Date	20191218
SAP_AGR_2CCACMPNLNAVAL	Evaluation Key Date	20191218
SAP_AGR_2CCACMPNLNAVAL	Prev.Eval Date	20191205
SAP_AGR_2CCCMMBPPNLVALUEQ	Evaluation Key Date	20191205
SAP_AGR_2CCCMMBPPNLVALUEQ	Prev.Eval Date	20191218

Links for Model Prompts




SAP_AGR_2CCACMPNLNAVAL
SAP_AGR_2CCACMMTMLOG...
Prev.Eval Date
Second Snapshot Date
Evaluation Key Date
First Snapshot Date
SAP_AGR_2CCCMMBPPNLVALUEQ
SAP_AGR_2CCACMMTMLOG...
Evaluation Key Date
Second Snapshot Date
Prev.Eval Date
First Snapshot Date
SAP_AGR_2CCDRVTVPNLQRY
SAP_AGR_2CCACMMTMLOG...
Evaluation Date
First Snapshot Date
Prev.Eval Date
Second Snapshot Date
SAP_AGR_2CCNETPOSREPPT
SAP_AGR_2CCNETPOSREPSL
View Variant
View Variant
SAP_AGR_2CCNETPOSREPPR
SAP_AGR_2CCNETPOSREPSL
View Variant
View Variant
SAP_AGR_2CCNETPOSREPSLEOD
SAP_AGR_2CCNETPOSREPSL
View Variant
View Variant
SAP_AGR_2CCNETPOSREPPREOD
SAP_AGR_2CCNETPOSREPSL
View Variant
View Variant
SAP_AGR_2CCNETPOSREPSL
SAP_AGR_2CCNETPOSREPP...
View Variant
View Variant


Link Variables
SAP_AGR_2CCNETPOSREPSLEOD
SAP_AGR_2CCACMMTMLOG...
Snapshot Date
Snapshot Date
SAP_AGR_2CCACMMTMLOGEOD
SAP_AGR_2CCNETPOSREPP...
Snapshot Date
Snapshot Date
SAP_AGR_2CCACMMTMLOGEOD
SAP_AGR_2CCNETPOSREPP...
Snapshot Date
Snapshot Date
SAP_AGR_2CCNETPOSREPSLDOD
SAP_AGR_2CCACMMTMLOG...
Snapshot Date
First Snapshot Date
Snapshot Date
Second Snapshot Date
SAP_AGR_2CCNETPSOREPPRDOD
SAP_AGR_2CCACMMTMLOG...
Prev.Eval Date
Second Snapshot Date

Model Links

Model Links			
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPPT
Dimension	Vendor	-	Vendor
Dimension	Commodity UoM	-	Commodity UoM
Dimension	Company Code	-	Company Code
Dimension	Root Document	-	Root Document
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPSL
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Company Code	-	Company Code
Dimension	Vendor	-	Vendor
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPPR
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Company Code	-	Company Code
Dimension	Vendor	-	Vendor
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGEOD	-	SAP_AGR_2CCNETPOSREPSLEOD
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Company Code	-	Company Code
Dimension	Vendor	-	Vendor
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCACMMTMLOGEOD
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Company Code	-	Company Code
Dimension	Vendor	-	Vendor
Dimension	Root Document	-	Root Document
Dimension	Adj. Rep. Year	-	Adj. Rep. Year

Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPSLEOD
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Vendor	-	Vendor
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGDOD	-	SAP_AGR_2CCNETPOSREPSLDOD
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Company Code	-	Company Code
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGDOD	-	SAP_AGR_2CCNETPSOREPPRDOD
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGEOD	-	SAP_AGR_2CCNETPOSREPPREOD
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Company Code	-	Company Code
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGEOD	-	SAP_AGR_2CCNETPOSREPPTEOD
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPPREOD
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document

Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPPTEOD
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCDRVTVMTMCURQRY
Dimension	DCS Commodity	-	Commodity
Dimension	Company Code	-	Company Code
Dimension	Contr. Maturity Code	-	Contr. Maturity Code
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPSLDOD
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCACMMTMLOGDOD
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPSOREPPRDOD
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Dimension	Adj. Rep. Year	-	Adj. Rep. Year

Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCNETPOSREPPTDOD
Dimension	Adj. Rep. Month	-	Adj. Rep. Month
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Dimension	Adj. Rep. Year	-	Adj. Rep. Year
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCACMPNLNAVAL
Dimension	Company Code	-	Company Code
Dimension	DCS Commodity	-	DCS Commodity
Dimension	Root Document	-	Root Document
Model	SAP_AGR_2CCACMMTMLOGCUR	-	SAP_AGR_2CCCMMBPPNLVALUEQ

Page Filters

Commodity Risk - Current Overview		
Page Filter		
Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	DCS Commodity	HARD RED WHEAT
SAP_AGR_2CCACMMTMLOGCUR	Company Code	SAP A.G., Country Template DE, Country Template US
Commodity Position		
Model	Dimension	Value
SAP_AGR_2CCNETPOSREPSL	DCS Commodity	HARD RED WHEAT, FEED WHEAT
Commodity Mark-to-Market		
Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	Key Figures	Value in Stat. Crcy, Contractual Value, Market Value

Commodity Risk - EoD

Page Filter

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	DCS Commodity	HARD RED WHEAT, FEED WHEAT
SAP_AGR_2CCACMMTMLOGCUR	Company Code	(All)

Mark-to-Market End of Day

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGEOD	Key Figures	ELTUIDCMP6

Commodity Position End of DAy

Model	Dimension	Value
SAP_AGR_2CCNETPOSREPSLEOD	DCS Commodity	HARD RED WHEAT

Commodity Risk - DoD

Page Filter

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	Company Code	SAP A.G., Country Template DE, Country Template US
SAP_AGR_2CCACMMTMLOGCUR	DCS Commodity	FEED WHEAT, HARD RED WHEAT

Net Future Position (Slate)

Model	Dimension	Value
SAP_AGR_2CCNETPOSREPSLDOD	Company Code	SAP A.G.
SAP_AGR_2CCNETPOSREPSLDOD	DCS Commodity	FEED WHEAT, HARD RED WHEAT

Profit & Loss (New Activity)

Model	Dimension	Value
SAP_AGR_2CCACMPNLNAVAL	Company Code	SAP A.G.
SAP_AGR_2CCACMPNLNAVAL	DCS Commodity	FEED WHEAT, HARD RED WHEAT

Business Partner Contracts

Page Filter

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	DCS Commodity	HARD RED WHEAT, FEED WHEAT
SAP_AGR_2CCACMMTMLOGCUR	Company Code	(All)

MtM per Customer

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	Application	V

MtM per Vendor

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	Application	M

Contractual Value per Customer

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	Application	V
SAP_AGR_2CCACMMTMLOGCUR	Short Descript.	Contractual Value

Contractual Value per Vendor

Model	Dimension	Value
SAP_AGR_2CCACMMTMLOGCUR	Application	M
SAP_AGR_2CCACMMTMLOGCUR	Short Descript.	Contractual Value

Undelivered Contracts current month per Vendor

Model	Dimension	Value
SAP_AGR_2CCNETPOSREPPT	Delivery Date	Dec (2019) - Dec (2019)

Contract Price Type per Vendor

Model	Dimension	Value
SAP_AGR_2CCNETPOSREPPT	Application	M

Unpriced NFE requires Rolling/Pricing per Vendor

Model	Dimension	Value
SAP_AGR_2CCNETPOSREPSL	Application	M
SAP_AGR_2CCNETPOSREPSL	Delivery Date	Nov (2019) - Jan (2020)

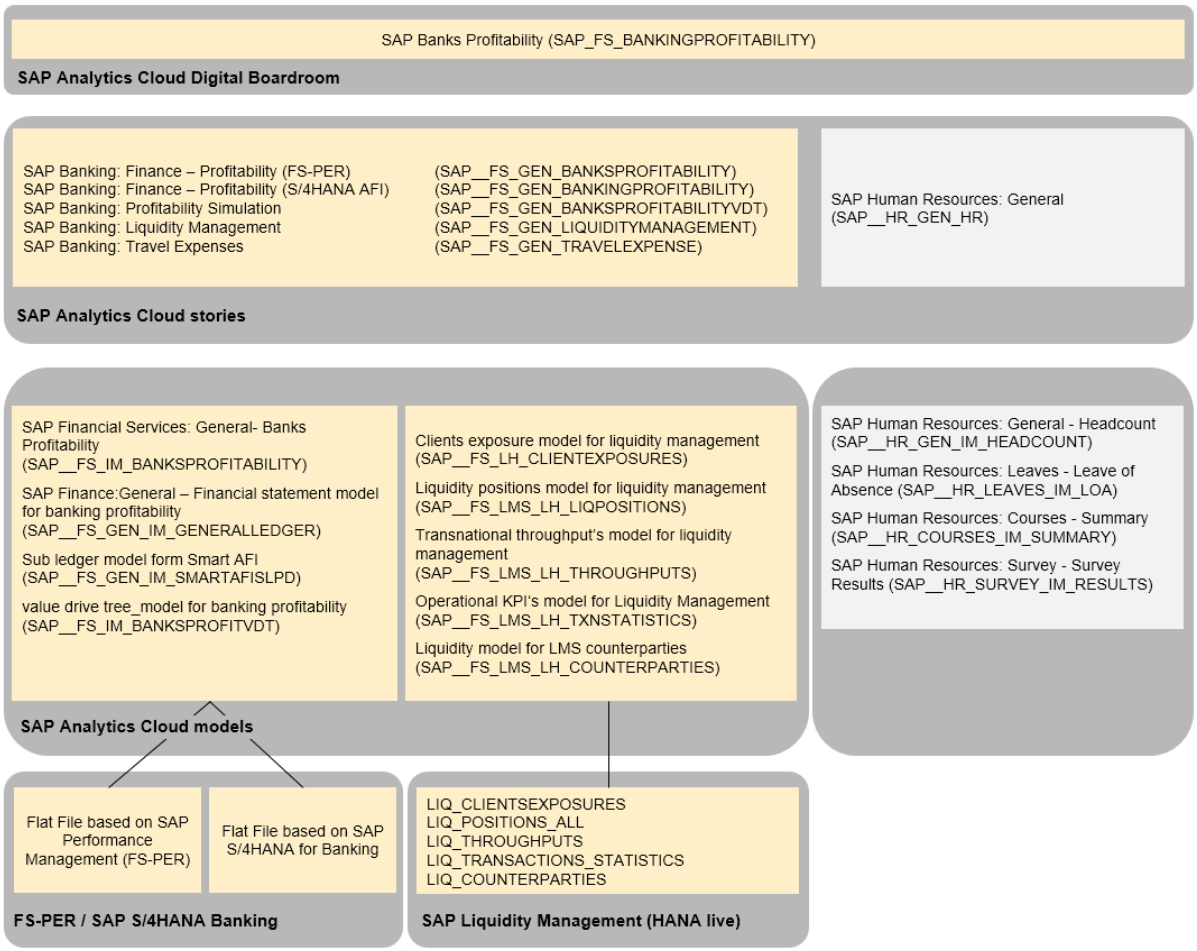
Unrealized Contract Quantity per Vendor

Model	Dimension	Value
SAP_AGR_2CCNETPOSREPPT	Application	M

3.2 Banking

3.2.1 Architecture and Abstract

The Banking Digital Boardroom provides banking career decision makers with a real-time data driven platform to track LOB and profitability specific KPI's around Finance, Human Resource, and Travel Management.



3.2.2 Dashboard

Banking delivers the Digital Boardroom Dashboard SAP Banks Profitability (SAP_FS_BANKINGPROFITABILITY).

3.2.3 Stories

- SAP Banking: Finance – Profitability (FS-PER) (SAP__FS_GEN_BANKSPROFITABILITY)
- SAP Banking: Finance – Profitability (S/4HANA AFI) (SAP__FS_GEN_BANKINGPROFITABILITY)
- SAP Banking: Profitability Simulation (SAP__FS_GEN_BANKSPROFITABILITYVDT)
- SAP Banking: Liquidity Management (SAP__FS_GEN_LIQUIDITYMANAGEMENT)
- SAP Banking: Travel Expenses (SAP__FS_GEN_TRAVELEXPENSE)

SAP Banking: Finance – Profitability (FS-PER) (SAP__FS_GEN_BANKSPROFITABILITY)

This story contains some overview KPIs that are relevant for all agenda topics. It contains some overview level income and cost KPIs such as Income break-down, Trading Income, and Direct-Cost break-down or Indirect-Cost break-down.

SAP Banking: Finance – Profitability (S/4HANA AFI) (SAP__FS_GEN_BANKINGPROFITABILITY)

This story contains the analysis of the Return on Assets subject, with details about income and assets. Furthermore, it includes the detail breakdown of loans and impairments as well as deposits and liabilities.

SAP Banking: Profitability Simulation (SAP__FS_GEN_BANKSPROFITABILITYVDT)

Use this story and the embedded value driver trees to simulate profitability, expenses and revenue.

Be advised, that the import of value driver trees from the Content Library is currently not working. Please refer to SAP Note 2644005. This note provides the missing value driver trees and a detailed explanation of how to install them in your SAP Analytics Cloud.

SAP Banking: Liquidity Management (SAP__FS_GEN_LIQUIDITYMANAGEMENT)

This story is based on a live data connection of type SAP HANA. The story will therefore not show any data unless a suitable connection SAPLM is created.

The connection can be set up prior or after the import of the content package SAP FS Banking. If the connection does not exist when the content package is imported, the live models will be imported with warnings. They will be active, but unusable until the connection is created.

The connection has to have the name SAPLM. Enter a suitable description. Specify the connection details for the SAP Liquidity Management backend system and provide the required credentials.

Depending on your specific data, the layout in the story SAP Banking: Liquidity Management can be adjusted (filter values, number scaling, etc.)

SAP Banking: Travel Expenses (SAP__FS_GEN_TRAVELEXPENSE)

This story is a placeholder. For technical reasons, the travel and expense story cannot be included.

Refer to chapter SAP- Travel & Expense (TE) - Concur for details.

3.2.4 Models

3.2.4.1 General- Banks Profitability (SAP__FS_IM_BANKSPROFITABILITY)

SAP__FS_IM_BANKSPROFITABILITY		Connection
• SAP Financial Services: General- Banks Profitability • Planning Enabled: Yes		Local File based on SAP Performance Management for Financial Services
Account Dimension		
ID	**Description**	**Mapping/Formula**
KF_CLSNG_PRC	Closing Price	KF_CLSNG_PRC
KF_FACE_VALUE	Face/Notional Value	KF_FACE_VALUE
KF_MARKET_VALUE	Market Value	KF_MARKET_VALUE
KF_TRADE_PL	Trading Profit/Loss Amount	KF_TRADE_PL
NXI_ALLOCF	Allocation Factor	NXI_ALLOCF
NXI_ASSET	AI Asset	NXI_ASSET
NXI_CRVDCR	Curve Discount Rat	NXI_CRVDCR
NXI_CRVRATE	Curve Rate	NXI_CRVRATE
NXI_CRVTERM	Curve Term	NXI_CRVTERM
NXI_FCCOST	Fee & Commission Cos	NXI_FCCOST
NXI_FCINCOME	Fee & Commission Inc	NXI_FCINCOME
NXI_INTASSR	Interest Rate Asset	NXI_INTASSR
NXI_INTLIABR	Interest Rate Liabil	NXI_INTLIABR
NXI_LIAB	AI Liability	NXI_LIAB

NXI_NPASSET	NP Asset	NXI_NPASSET
NXI_PAYMENT	Payment	NXI_PAYMENT
NXI_QA	Quantity	NXI_QA
TRADINGINCOME	Trading Income	TRADINGINCOME
YBALANCE	Balance Strip Funding FTP	YBALANCE
YBASERATE	Base Rate	YBASERATE
YBEHRCT	BE Haircut	YBEHRCT
YCC	Capital Growth	YCC
YCCNPV	Capital Growth NPV	YCCNPV
YDURATION	Duration	YDURATION
YECOT	Effective Capital over Time	YECOT
YEVENTTER	Event Term	YEVENTTER
YEXPFEE	Expense Fee	YEXPFEE
YEYRATE	Effective Yield Rate	YEYRATE
YFINCOST	Finance Cost	YFINCOST
YFTPRATE	FTP Rate	YFTPRATE
YGMCOST	GM Cost	YGMCOST
YHRCOST	HR Cost	YHRCOST
YINCFEE	Income Fee	YINCFEE
YINTAMT	Interest Amount	YINTAMT
YINTEXP	Interest Expense	YINTEXP
YINTINC	Interest Income	YINTINC
YITCOST	IT Cost	YITCOST
YLIBORMRT	YLIBORMRT	YLIBORMRT
YLOCAITONLAT	YLOCAITONLAT	YLOCAITONLAT
YLOCATIONLONG	YLOCATIONLONG	YLOCATIONLONG
YLPRATE	1 Month LIBOR Rate	YLPRATE
YLTWGHT	Long Term Weight	YLTWGHT
YMFC	Marginal Funding Curve	YMFC
YMSPREAD	Margin Spread	YMSPREAD
YNCM	Net Commissions Margin (CM2)	YNCM
YNIM	Net Interest Margin (CM1)	YNIM
YNINTINC	Net Interest Income	YNINTINC
YNOM	Net Overall Margin (CM4)	YNOM
YNONINTINC	Non Interest Income	YNONINTINC
YNPVS	(Net) Present Value Sum	YNPVS

YNSM	Net Standard Margin (CM3)	YNSM
YOTHCOST	Other Cost	YOTHCOST
YOTHINCM	Other Income	YOTHINCM
YPAMOUNT	Principal Amount	YPAMOUNT
YPFC	Periodic Funding Costing	YPFC
YPRIMERT	Prime Rate	YPRIMERT
YPROVIS	Provision	YPROVIS
YREFAMNT	Refinancing Amount	YREFAMNT
YREPORT	Repo Rate	YREPORT
YRESERVES	Bank Reserves	YRESERVES
YREVSA	Revenue Split Acquisition	YREVSA
YREVSC	Revenue Split Control	YREVSC
YSALECOST	Sales Cost	YSALECOST
YSPCOST	Standard Process Cost	YSPCOST
YSPREADRT	Spread Rate	YSPREADRT
YSPWGHT	Spread Weight	YSPWGHT
YSRC	Standard Risk Cost	YSRC
YSTPCOSTT	Standard Proc Cost Tarif	YSTPCOSTT
YSTRCOSTT	Standard Risk Cost Rate	YSTRCOSTT
YSTRHRCT	Stress Haircut	YSTRHRCT
YSTWGHT	Short Term Weight	YSTWGHT
YVOLUME	Volume	YVOLUME
YWHLSALER	Whole Sale Rate	YWHLSALER
YALLOC	Allocated Cost	YALLOC
Dimensions		
Name	**Description**	**Mapping**
		Connection Type Name of the Report
Time*	Time	NXI_TS
Event Type*	Event Type	NXI_EVTTYPE
Company Code*	Company Code	NXI_COMPCODE
Position ID*	Position ID	NXI_POSID
Profit Center*	Profit Center	NXI_PROFITC
Product Name*	Product Name	NXI_PRODUCT
Channel Code/Name*	Channel Code/Name	NXI_CHANNEL

Customer Id*	Customer Id	NXI_CUSID
Agency ID/Code*	Agency ID/Code	NXI_AGCID
Flow ID*	Flow ID	NXI_FLWID
Curve ID*	Curve ID	NXI_CRVID
Transaction Currency*	Transaction Currency	NXI_CURR
Curve Type*	Curve Type	NXI_CRVTYPE
Banking Product Type*	Banking Product Type	NXI_PRODTYPE
Sub Product Type*	Sub Product Type	NXI_SUB_PRODTYPE
Location Country*	Location Country	YLOCATION
Location City*	Location City	YLOCATIONCITY
Security Type [Trading]*	Security Type [Trading]	SECURITYTYPE
Trading Instrument ID*	Trading Instrument ID	CH_INSTRUM_ID
Trading Security Issuer*	Trading Security Issuer	CH_ISSUER
Credit Quality [trading security]*	Credit Quality [trading security]	CH_CRED_QUAL
Trading Desk Name [City Name]*	Trading Desk Name [City Name]	CH_DESK
Portfolio Name*	Portfolio Name	CH_TRAD_PORTF
Instrument Type*	Instrument Type	CH_INSTRUM_TYPE
Additional Notes about the model		
Provide additional information about the model (if needed).		

> **i** Note
>
> * Private dimension and other dimensions are public.

Customers should have SAP Performance Management for Banking at their end. The above profitability model is designed to work with a Hana database table/view which should have the above columns.

Clients can create this table/view as per their table structure. The only condition is, they should contain all the columns which are defined in above list.

3.2.4.2 General – Financial Statement Model for Banking Profitability (SAP__FS_GEN_IM_GENERALLEDGER)

For Details about this model, please check model SAP__FI_GEN_IM_GENERALLEDGER

SAP__FS_GEN_IM_GENERALLEDGER	Connection
• SAP Finance: General – Financial statement model for banking profitability • Planning Enabled: Yes	• Local File based on SAP S/4HANA for Banking • Use CDS view 2CCFITRIALBALQ0001

3.2.4.3 Sub Ledger Model from Smart AFI (SAP__FS_GEN_IM_SMARTAFISLPD)

SAP__FS_GEN_IM_SMARTAFISLPD	Connection
• Sub ledger model from Smart AFI • Planning Enabled: Yes	• Local File based on SAP S/4HANA for Banking • Use CDS View 2CCFITRIAL-BALQ0001

Account Dimension		
ID	**Description**	**Mapping/Formula**
Amount_in_Transaction_Currency	Amount_in_Transaction_Currency	Amount_in_Transaction_Currency
Amount_in_Functional_Currency	Amount_in_Functional_Currency	Amount_in_Functional_Currency
PeriodFiscal_Year	PeriodFiscal_Year	PeriodFiscal_Year
Nominal_Amount	Nominal_Amount	Nominal_Amount
Product_Segment	Product_Segment	Product_Segment
Dimensions		
Name	**Description**	**Mapping**
		Connection Type Name of the Report
Time*	Time	NXI_TS
Posting Date	Posting Date	Posting Date
G/L AccountDescription	G/L AccountDescription	G/L AccountDescription
G/L Account	G/L Account	G/L Account
Business Transaction ID	Business Transaction ID	Business Transaction ID
Contract ID	Contract ID	Contract ID
Profit Center	Profit Center	Profit Center
Description Trans. Type	Description Trans. Type	Description Trans. Type
Amount in Transaction Currency	Amount in Transaction Currency	Amount in Transaction Currency
Transaction Currency	Transaction Currency	Transaction Currency
Amount in Functional Currency	Amount in Functional Currency	Amount in Functional Currency

Functional CurrencySubledger Account	Functional CurrencySubledger Account	Functional CurrencySubledger Account
Description Subledger Acct	Description Subledger Acct	Description Subledger Acct
Description Prodctn	Description Prodctn	Description Prodctn
ControlBusiness Partner	ControlBusiness Partner	ControlBusiness Partner
Description Industry Seg.	Description Industry Seg.	Description Industry Seg.
Debit/Credit Flag	Debit/Credit Flag	Debit/Credit Flag
Posting Record	Posting Record	Posting Record
Description	Description	Description
Product SegmentDescription Lifecycle Seg.	Product SegmentDescription Lifecycle Seg.	Product SegmentDescription Lifecycle Seg.
ID of Organizational Unit	ID of Organizational Unit	ID of Organizational Unit
Description Organiz. Unit ID	Description Organiz. Unit ID	Description Organiz. Unit ID
Asset/Liability Status	Asset/Liability Status	Asset/Liability Status
Accounting System	Accounting System	Accounting System
/B20/S_MOVE_TYPE	/B20/S_MOVE_TYPE	/B20/S_MOVE_TYPE
Accrual Status	Accrual Status	Accrual Status
Banking/Trading Book	Banking/Trading Book	Banking/Trading Book
BT Posting Direction	BT Posting Direction	BT Posting Direction
BT Source System	BT Source System	BT Source System
Chart of accounts	Chart of accounts	Chart of accounts
Classification	Classification	Classification
Contract Category	Contract Category	Contract Category
Contract StatusCurrency - Nominal Amount	Contract StatusCurrency - Nominal Amount	Contract StatusCurrency - Nominal Amount
Description /B20/S_MOVE_TYPE	Description /B20/S_MOVE_TYPE	Description /B20/S_MOVE_TYPE
Description Accountg System	Description Accountg System	Description Accountg System
Description Accrual Status	Description Accrual Status	Description Accrual Status
Description Asset/Liab. Status	Description Asset/Liab. Status	Description Asset/Liab. Status
Description Book	Description Book	Description Book
Description BT Posting Dir.	Description BT Posting Dir.	Description BT Posting Dir.
Description Classification	Description Classification	Description Classification
Description Contract Cat.	Description Contract Cat.	Description Contract Cat.
Description Contract Status	Description Contract Status	Description Contract Status
Description Debit/Credit	Description Debit/Credit	Description Debit/Credit
Description Impairment Status	Description Impairment Status	Description Impairment Status
Description Inverter	Description Inverter	Description Inverter

Description Legal Entity	Description Legal Entity	Description Legal Entity
Description Partner LE	Description Partner LE	Description Partner LE
Description Postproc. Stat.	Description Postproc. Stat.	Description Postproc. Stat.
Description Reset Document	Description Reset Document	Description Reset Document
Description Reversal Bus. Trans.	Description Reversal Bus. Trans.	Description Reversal Bus. Trans.
Description S/L Acct Crcy	Description S/L Acct Crcy	Description S/L Acct Crcy
Description Sec. Acct Trans Role	Description Sec. Acct Trans Role	Description Sec. Acct Trans Role
Description Securities Acct Cat.	Description Securities Acct Cat.	Description Securities Acct Cat.
Description Securities Stat	Description Securities Stat	Description Securities Stat
Description Tax Country	Description Tax Country	Description Tax Country
Description Write-Dwn Stat.	Description Write-Dwn Stat.	Description Write-Dwn Stat.
Document Date	Document Date	Document Date
Financial Instrument ID	Financial Instrument ID	Financial Instrument ID
Industry	Industry	Industry
Industry Segment	Industry Segment	Industry Segment
Industry System	Industry System	Industry System
Instrument Type	Instrument Type	Instrument Type
Inverted Doc. Ref.	Inverted Doc. Ref.	Inverted Doc. Ref.
Inverting Document	Inverting Document	Inverting Document
Legal Entity	Legal Entity	Legal Entity
Lifecycle Segment	Lifecycle Segment	Lifecycle Segment
Nominal Amount	Nominal Amount	Nominal Amount
Process Step ID	Process Step ID	Process Step ID
Product Segment	Product Segment	Product Segment
Production Control	Production Control	Production Control
Business Area	Business Area	Business Area
Transaction Type	Transaction Type	Transaction Type
Write-Down Status	Write-Down Status	Write-Down Status
City_Region	City_Region	City_Region
City_Name	City_Name	City_Name
City_Lat	City_Lat	City_Lat
City_Long	City_Long	City_Long
LOB	LOB	LOB
Impairment Status	Impairment Status	Impairment Status
Master Rating	Master Rating	Master Rating
Customer Rating	Customer Rating	Customer Rating

Customer Segments	Customer Segments	Customer Segments
Description Market Conformity	Description Market Conformity	Description Market Conformity
Market Conformity	Market Conformity	Market Conformity
Description Process Step ID	Description Process Step ID	Description Process Step ID
Fiscal Year	Fiscal Year	Fiscal Year
ID of Reference Bus.Trans	ID of Reference Bus.Trans	ID of Reference Bus.Trans
ID of Reversed BT	ID of Reversed BT	ID of Reversed BT
Transaction Key	Transaction Key	Transaction Key
Customer Name	Customer Name	Customer Name
Additional Notes about the model		
Provide additional information about the model (if needed).		

> **i** Note
>
> * Private dimension and other dimensions are public.

3.2.4.4 Value Drive Tree Model for Banking Profitability (SAP__FS_IM_BANKSPROFITVDT)

SAP__FS_IM_BANKSPROFITVDT	Connection
• Value drive tree model for banking profitability • Planning Enabled: Yes	• Local File based SAP FS Performance management (FS-PER) • Custom HANA view

Account Dimension		
ID	**Description**	**Mapping/Formula**
KF_CLSNG_PRC	Closing Price	KF_CLSNG_PRC
KF_FACE_VALUE	Face/Notional Value	KF_FACE_VALUE
KF_MARKET_VALUE	Market Value	KF_MARKET_VALUE
KF_TRADE_PL	Trading Profit/Loss Amount	KF_TRADE_PL
NXI_ALLOCF	Allocation Factor	NXI_ALLOCF
NXI_ASSET	AI Asset	NXI_ASSET
NXI_CRVDCR	Curve Discount Rat	NXI_CRVDCR
NXI_CRVRATE	Curve Rate	NXI_CRVRATE
NXI_CRVTERM	Curve Term	NXI_CRVTERM
NXI_FCCOST	Fee & Commission Cos	NXI_FCCOST

NXI_FCINCOME	Fee & Commission Inc	NXI_FCINCOME
NXI_INTASSR	Interest Rate Asset	NXI_INTASSR
NXI_INTLIABR	Interest Rate Liabil	NXI_INTLIABR
NXI_LIAB	AI Liability	NXI_LIAB
NXI_NPASSET	NP Asset	NXI_NPASSET
NXI_PAYMENT	Payment	NXI_PAYMENT
NXI_QA	Quantity	NXI_QA
TRADINGINCOME	Trading Income	TRADINGINCOME
YBALANCE	Balance Strip Funding FTP	YBALANCE
YBASERATE	Base Rate	YBASERATE
YBEHRCT	BE Haircut	YBEHRCT
YCC	Capital Growth	YCC
YCCNPV	Capital Growth NPV	YCCNPV
YDURATION	Duration	YDURATION
YECOT	Effective Capital over Time	YECOT
YEVENTTER	Event Term	YEVENTTER
YEXPFEE	Expense Fee	YEXPFEE
YEYRATE	Effective Yield Rate	YEYRATE
YFINCOST	Finance Cost	YFINCOST
YFTPRATE	FTP Rate	YFTPRATE
YGMCOST	GM Cost	YGMCOST
YHRCOST	HR Cost	YHRCOST
YINCFEE	Income Fee	YINCFEE
YINTAMT	Interest Amount	YINTAMT
YINTEXP	Interest Expense	YINTEXP
YINTINC	Interest Income	YINTINC
YITCOST	IT Cost	YITCOST
YLIBORMRT	YLIBORMRT	YLIBORMRT
YLOCAITONLAT	YLOCAITONLAT	YLOCAITONLAT
YLOCATIONLONG	YLOCATIONLONG	YLOCATIONLONG
YLPRATE	1 Month LIBOR Rate	YLPRATE
YLTWGHT	Long Term Weight	YLTWGHT
YMFC	Marginal Funding Curve	YMFC
YMSPREAD	Margin Spread	YMSPREAD
YNCM	Net Commissions Margin (CM2)	YNCM
YNIM	Net Interest Margin (CM1)	YNIM

YNINTINC	Net Interest Income	YNINTINC
YNOM	Net Overall Margin (CM4)	YNOM
YNONINTINC	Non Interest Income	YNONINTINC
YNPVS	(Net) Present Value Sum	YNPVS
YNSM	Net Standard Margin (CM3)	YNSM
YOTHCOST	Other Cost	YOTHCOST
YOTHINCM	Other Income	YOTHINCM
YPAMOUNT	Principal Amount	YPAMOUNT
YPFC	Periodic Funding Costing	YPFC
YPRIMERT	Prime Rate	YPRIMERT
YPROVIS	Provision	YPROVIS
YREFAMNT	Refinancing Amount	YREFAMNT
YREPORT	Repo Rate	YREPORT
YRESERVES	Bank Reserves	YRESERVES
YREVSA	Revenue Split Acquisition	YREVSA
YREVSC	Revenue Split Control	YREVSC
YSALECOST	Sales Cost	YSALECOST
YSPCOST	Standard Process Cost	YSPCOST
YSPREADRT	Spread Rate	YSPREADRT
YSPWGHT	Spread Weight	YSPWGHT
YSRC	Standard Risk Cost	YSRC
YSTPCOSTT	Standard Proc Cost Tarif	YSTPCOSTT
YSTRCOSTT	Standard Risk Cost Rate	YSTRCOSTT
YSTRHRCT	Stress Haircut	YSTRHRCT
YSTWGHT	Short Term Weight	YSTWGHT
YVOLUME	Volume	YVOLUME
YWHLSALER	Whole Sale Rate	YWHLSALER
YALLOC	Allocated Cost	YALLOC
DRV0000	Drivers	DRV0000
DRV00001	Growth Rate %	DRV00001
DRV00002	Sales Cost Growth Rate %	DRV00002
DRV00003	Other Cost Growth Rate %	DRV00003
DRV00004	IT Cost Growth Rate %	DRV00004
DRV00005	HR Cost Growth Rate %	DRV00005
DRV00006	GM Cost Growth Rate %	DRV00006
DRV00007	Finance Cost Growth Rate %	DRV00007

DRV00008	Fee & Comn Cost Growth Rate %	DRV00008
DRV00009	Interest Expense Growth Rate %	DRV00009
DRV00010	Provisions Growth Rate %	DRV00010
DRV00011	Non-Interest Income Growth Rate %	DRV00011
DRV00012	Other Income Growth Rate %	DRV00012
DRV00013	Interest Income Growth Rate %	DRV00013
DRV00014	Fee&Comn Income Growth Rate %	DRV00014
DRV00015	Operating Income Growth Rate %	DRV00015
DRV00016	Operating Expense Growth Rate %	DRV00016
Profit	Profit	Profit
Dimensions		
Name	**Description**	**Mapping**
Time*	Time	NXI_TS
NXI_EVTTYPE	Event Type	NXI_EVTTYPE
NXI_COMPCODE	Company Code	NXI_COMPCODE
NXI_POSID	Position ID	NXI_POSID
NXI_PROFITC	Profit Center	NXI_PROFITC
NXI_PRODUCT	Product Name	NXI_PRODUCT
NXI_CHANNEL	Channel Code/Name	NXI_CHANNEL
NXI_CUSID	Customer Id	NXI_CUSID
NXI_AGCID	Agency ID/Code	NXI_AGCID
NXI_FLWID	Flow ID	NXI_FLWID
NXI_CRVID	Curve ID	NXI_CRVID
NXI_CURR	Transaction Currency	NXI_CURR
NXI_CRVTYPE	Curve Type	NXI_CRVTYPE
NXI_PRODTYPE	Banking Product Type	NXI_PRODTYPE
NXI_SUB_PRODTYPE	Sub Product Type	NXI_SUB_PRODTYPE
YLOCATION	Location Country	YLOCATION
YLOCATIONCITY	Location City	YLOCATIONCITY
SECURITYTYPE	Security Type [Trading]	SECURITYTYPE
CH_INSTRUM_ID	Trading Instrument ID	CH_INSTRUM_ID
CH_ISSUER	Trading Security Issuer	CH_ISSUER
CH_CRED_QUAL	Credit Quality [trading security]	CH_CRED_QUAL
CH_DESK	Trading Desk Name [City Name]	CH_DESK
CH_TRAD_PORTF	Portfolio Name	CH_TRAD_PORTF
CH_INSTRUM_TYPE	Instrument Type	CH_INSTRUM_TYPE

Additional Notes about the model
Provide additional information about the model (if needed).

> **i** Note
>
> * Private dimension and other dimensions are public.

Customers should have SAP Performance Management for Banking at their end. The above profitability model is designed to work with a Hana database table/view which should have the above columns.

Clients can create this table/view as per their table structure. The only condition is, they should contain all the columns which are defined in above list.

3.2.4.5 Clients Exposure Model for Liquidity Management (SAP__FS_LH_CLIENTEXPOSURES)

SAP__FS_LH_CLIENTEXPOSURES	Connection
• Clients exposure model for liquidity management • Planning Enabled: No	• Live Data Connection to SAP HANA (Use connection SAPLM as described in chapter 6.2.3.4) • HANA View: LIQ_CLIENTSEXPOSURES

Account Dimension		
ID	**Description**	**Mapping/Formula** **not required for Live Data**
BOOKEDINAMOUNT	Booked IN amount	
BOOKEDOUTAMOUNT	Booked OUT amount	
CLIENTEXPOSURE	Client exposures	
OPENINGBALANCE	Clients opening balance for the day	

Dimensions		
Name	**Description**	**Mapping** **not required for Live Data**
Time*	Time	
CURRENCY*	Currency	
CHANNELID*	Channels	
BRANCH*	Branch	
STREAMCUSTOMER*	Stream Customer name	
STREAMCLASSIFICATIONTYPE2*	Classification type	

Additional Notes about the model
Provide additional information about the model (if needed).

> **i** Note
>
> * Private dimension and other dimensions are public.

3.2.4.6 Liquidity Positions Model for Liquidity Management (SAP__FS_LMS_LH_LIQPOSITIONS)

SAP__FS_LMS_LH_LIQPOSITIONS	Connection
• Liquidity positions model for liquidity management • Planning Enabled: No	• Live Data Connection to SAP HANA (Use connection SAPLM as described in chapter 6.2.3.4) • HANA View: LIQ_POSITIONS_ALL

Account Dimension		
ID	**Description**	**Mapping/Formula** **not required for Live Data**
CALCULATEDACTUALCASH	Actual cash	
CALCULATEDFORECASTCASH	Forecast cash	
CASHLIMIT	Cash Limit	
CASHPLEDGEDAMOUNT	Pledged Cash Amount	
UNENCUMBEREDBALANCE	Collateral Amount	

Dimensions		
Name	**Description**	**Mapping** **not required for Live Data**
Time*	Time	VALUEDATE
CURRENCY*	Currency	
CHANNELID*	Channels	
BRANCH*	Branch	

Additional Notes about the model
Provide additional information about the model (if needed).

> **i** Note
>
> * Private dimension and other dimensions are public.

3.2.4.7 Transnational Throughput's Model for Liquidity Management (SAP__FS_LMS_LH_THROUGHPUTS)

SAP__FS_LMS_LH_THROUGHPUTS		Connection
• Transnational throughput's model for liquidity management • Planning Enabled: No		• Live Data Connection to SAP HANA (Use connection SAPLM as described in chapter 6.2.3.4) • HANA View: LIQ_THROUGHPUTS
Account Dimension		
ID	**Description**	**Mapping/Formula** **not required for Live Data**
ACTUALPAYMENTAMOUNT	Actual payment amount	
ACTUALRECEIPTS	Actual receipt amount	
TRANX_IN_DENOMINATOR	Calculated column 1	
TRANX_OUT_DENOMINATOR	Calculated column 2	
IN	Calculated IN rate	
OUT	Calculated OUT rate	
Dimensions		
Name	Description	Mapping not required for Live Data
Time*	Time	VALUEDATE
CURRENCY*	Currency	
CHANNELID*	Channels	
BRANCH*	Branch	
Additional Notes about the model		
Provide additional information about the model (if needed).		

> **i Note**
>
> * Private dimension and other dimensions are public.

3.2.4.8 Operational KPI's Model for Liquidity Management (SAP__FS_LMS_LH_TXNSTATISTICS)

SAP__FS_LMS_LH_TXNSTATISTICS	Connection

• Operational KPI's model for Liquidity Management • Planning Enabled: No	• Live Data Connection to SAP HANA (Use connection SAPLM as described in chapter 6.2.3.4) • HANA View: LIQ_TRANSAC-TIONS_STATISTICS

Account Dimension		
ID	**Description**	**Mapping/Formula** not required for Live Data
CLASSIFICATIONAMOUNT	Classified Amount	
Dimensions		
Name	**Description**	**Mapping** **not required for Live Data**
Time*	Time	VALUEDATE
CURRENCY*	Currency	
CHANNELID*	Channels	
BRANCH*	Branch	
Additional Notes about the model		
Provide additional information about the model (if needed).		

> **i** Note
>
> * Private dimension and other dimensions are public.

3.2.4.9 Liquidity Model for LMS Counterparties (SAP__FS_LMS_LH_COUNTERPARTIES)

SAP__FS_LMS_LH_COUNTERPARTIES	**Connection**
• Liquidity model for LMS counterparties • Planning Enabled: No	• Live Data Connection to SAP HANA (Use connection SAPLM as described in chapter 6.2.3.4) • HANA View: LIQ_COUNTERPAR-TIES

Account Dimension		
ID	**Description**	**Mapping/Formula** **not required for Live Data**
ACTUALAMOUNT	Actual movement amount	

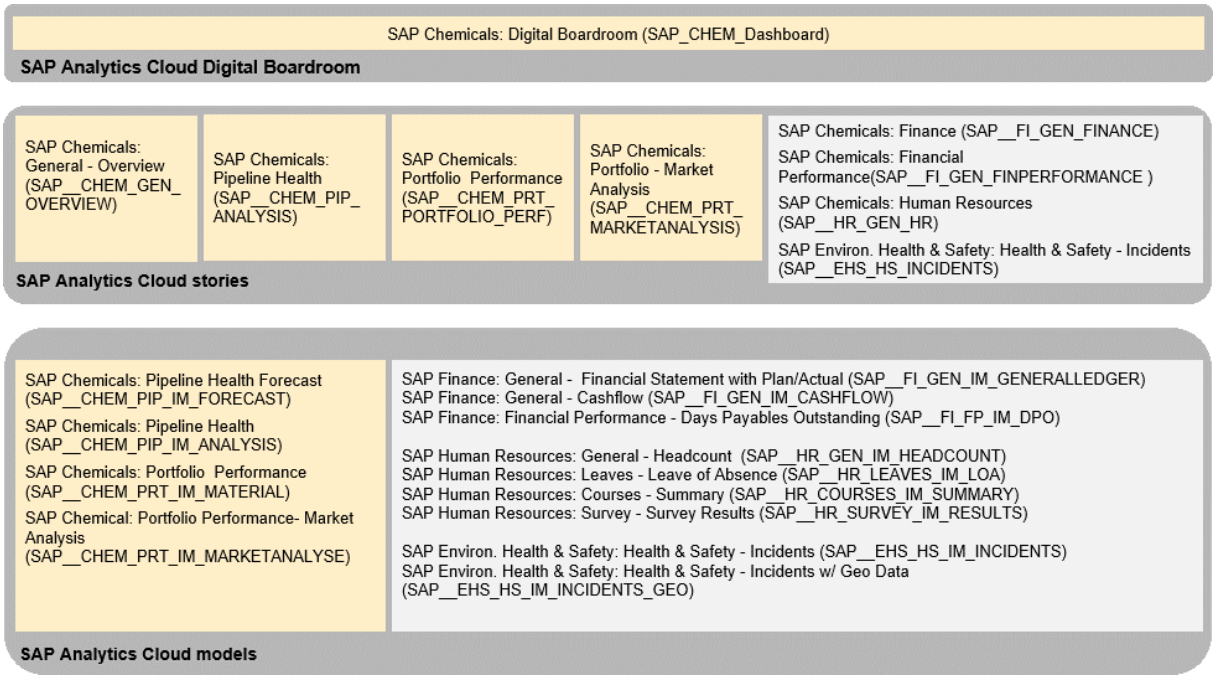
EXPECTEDAMOUNT	Expected movement amount	
FORECASTAMOUNT	Forecast movement amount	
Dimensions		
Name	**Description**	**Mapping** **not required for Live Data**
Time*	Time	VALUEDATE
CURRENCY*	Currency	
CHANNELID*	Channels	
BRANCH*	Branch	
COUNTERPARTY*	Counterparty	
Additional Notes about the model		
Provide additional information about the model (if needed).		

> **i** Note
>
> * Private dimension and other dimensions are public.

3.3 Chemicals (CHEM)

3.3.1 Architecture

Architecture



3.3.2 Dashboard

The following Digital Boardroom Dashboard is available SAP_CHEM_Dashboard.

In the topic Pipeline Health, the healthiness of the sales pipeline is checked and analysed for an chemical example company. This future oriented analysis of the sales pipeline is based on opportunities by time, market segments, customer region, and material groups. As time dimensions the current quarter and the next three quarters are offered.

Opportunities represent potential sales, are usually maintained by the salespeople and include information on the target customer, products/materials that are positioned and the expected sales value. Each opportunity has information on the sales phase or status it is in which relates to a defined probability of success.

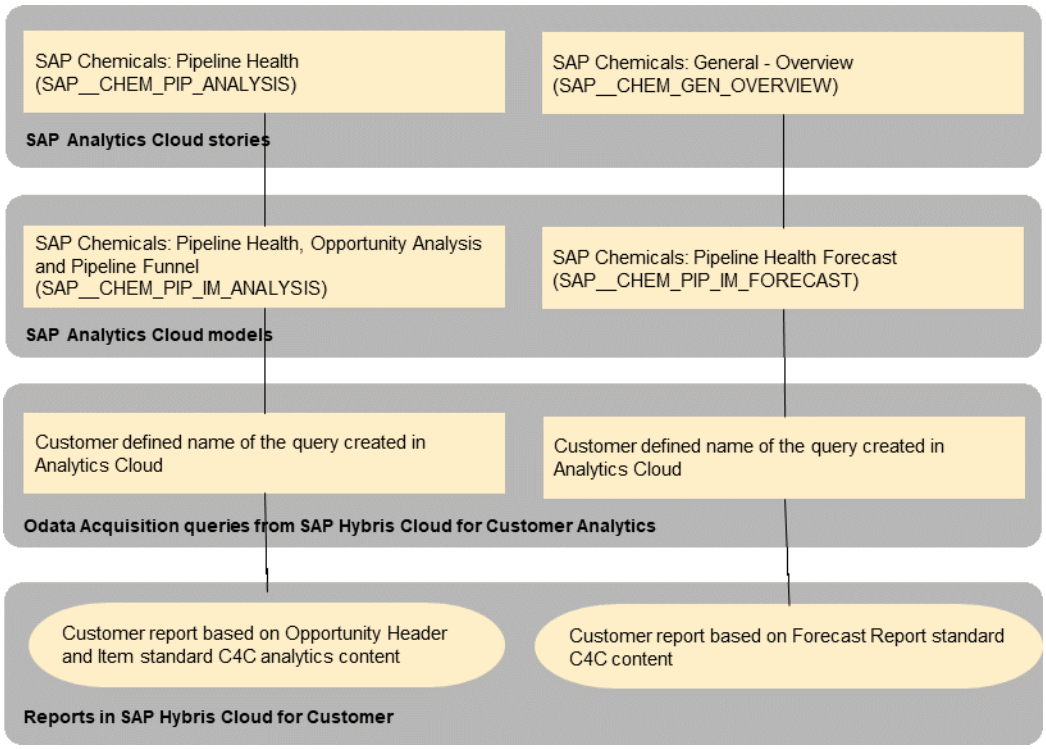
The expected revenue multiplied with this probability is the weighted revenue of the opportunity. So, an opportunity in an early sales phase has a lower probability of success than when the offer is officially placed. The monitoring of the pipeline funnel gives insights into the question if enough opportunities are identified and being worked on to fulfil the revenue targets.

For the current quarter, more information can be analysed as the opportunities can already have the status lost or won and the reasons for this result can be analysed.

For analyzing the pipeline healthiness also, the weighted revenue is compared to the forecasted revenue and the planned revenue targets.

The Story Pipeline Health is built based on SAP Hybris Cloud for Customer Analytics data extract. Reports created in SAP Hybris Cloud for Customer can be consumed by SAP Analytics Cloud as queries and updated on constant basis. The reporting functions of SAP Hybris Cloud for Customer allow easy creation of custom report by copying existing reports and adding or removing characteristics and key figures.

The building blocks are shown in the following diagram:



3.3.3 Stories

The following stories are part of the chemicals content package:

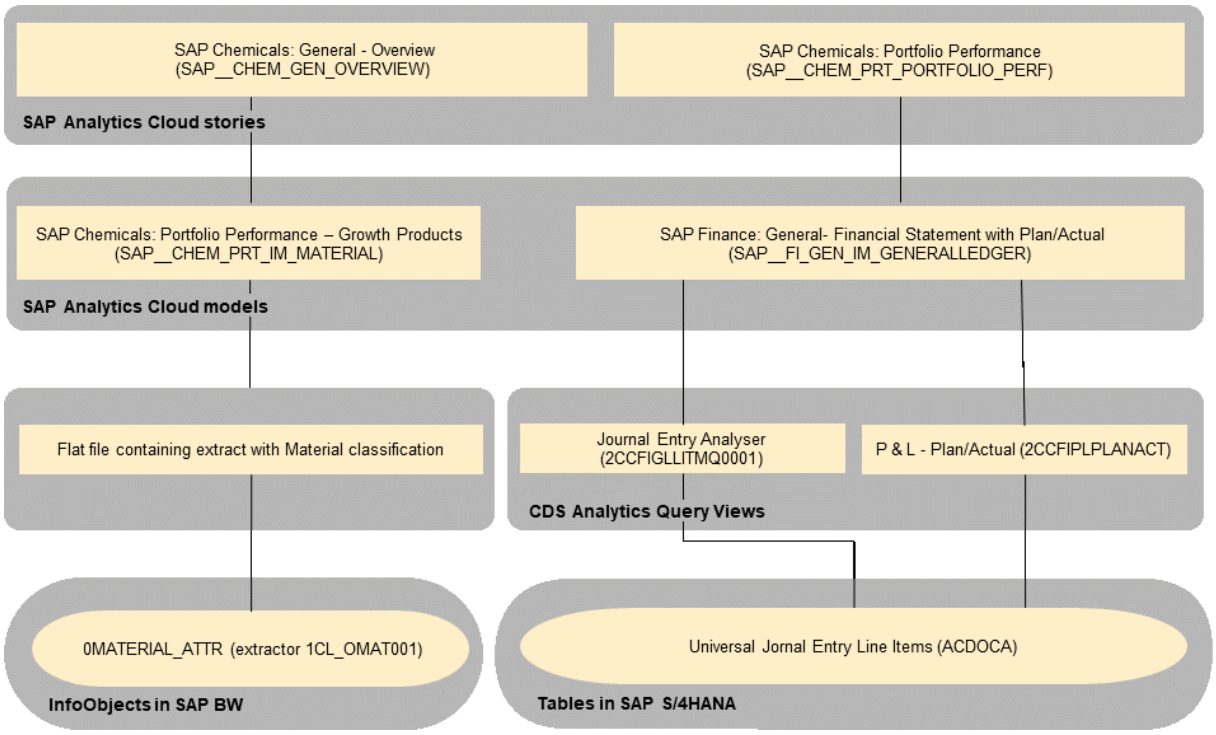
- SAP Chemicals: General - Overview (SAP__CHEM_GEN_OVERVIEW)
- SAP Chemicals Finance (SAP__CHEM_GEN_FINANCE)
- SAP Chemicals: Human Resources (SAP__CHEM_HR_HR)
- SAP Chemicals: Pipeline Health (SAP__CHEM_PIP_ANALYSIS)

3.3.3.1 Portfolio Performance (SAP__CHEM_PRT_PORTFOLIO_PERF)

In the agenda item Portfolio Performance of this board meeting, the portfolio performance of the chemical example company is assessed. This future oriented analysis of the product portfolio is based on the product margins by time, business area, region, market segments, and material groups. As time dimensions the 12 months of the current year are offered.

The story on the portfolio performance is built mainly based on S/4HANA financial data extract and for the definition of the innovation materials the material attribute is extracted.

The building blocks are shown in the following diagram:



3.3.3.2 Portfolio - Market Analysis (SAP__CHEM_PRT_MARKETANALYSIS)

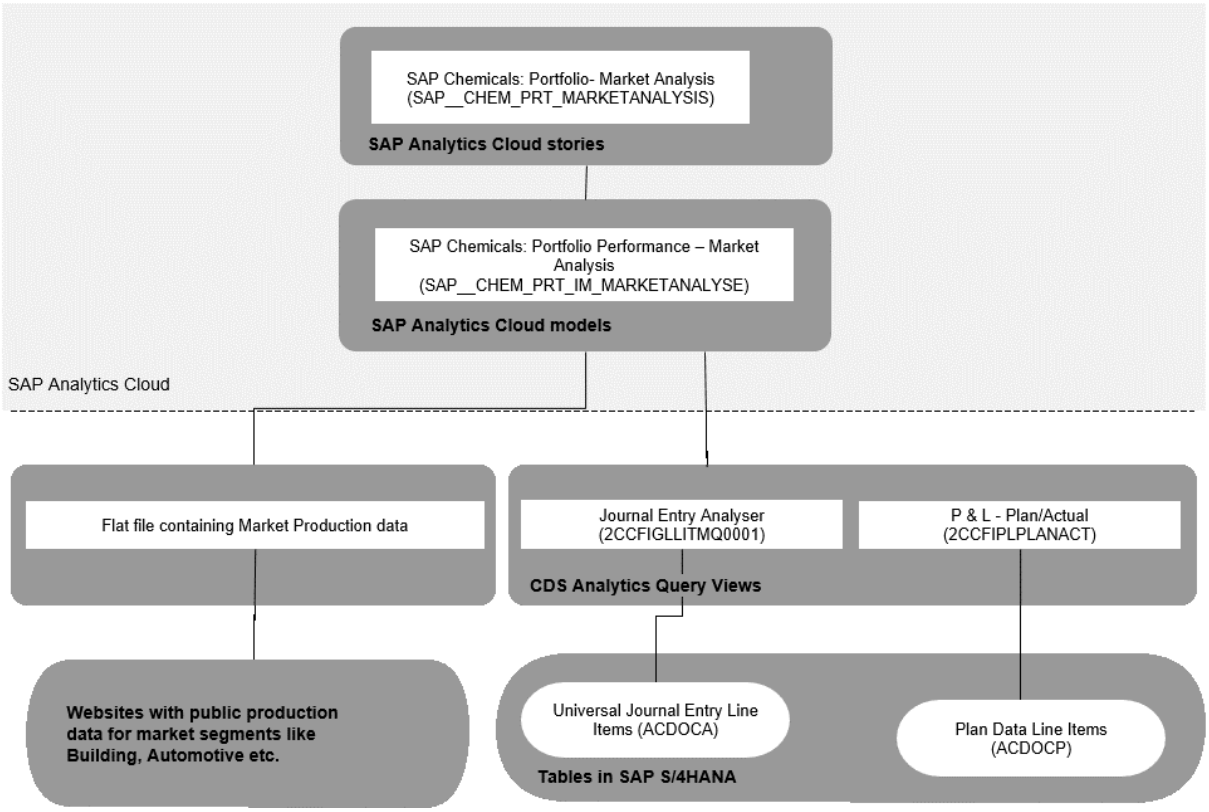
Name: SAP__CHEM_PRT_MARKETANALYSIS
Description: SAP Chemicals: Portfolio - Market Analysis
All charts in this story use the model SAP__CHEM_PRT_IM_MARKETANALYSE
Page – Market Overview for Coatings
Here we see the volume and revenue of Coatings for the different Market segments it is sold to for the country UK.
Charts
My Total Coatings Marketshare
These 2 sliders can be used to dynamically set the Market Share of Coatings for this company in country UK for current and previous year. We provide this as a slider to be able to simulate the effects based on Marketshare selected.
Volume per Market
This chart shows the volume of coatings sold for each Market Segment for the current year and variance with the previous year.
My Materials Market Share
This chart shows the market share for each specific material and deviation from previous year's market share.
Contribution Margin per Market

Name: SAP__CHEM_PRT_MARKETANALYSIS
For each Market, this chart shows its contribution margin, share and market growth since last year.
Contribution Margin per Customer Group
For each Customer Group belonging to a market, this chart shows its revenue and Contribution Margin vs growth.
Net Revenue by Customer Group
For each Customer Group belonging to a market, this chart shows its Contribution Margin w.r.t revenue and COGS for the current year.
Forecasted Contribution Margin by Customer Group
Based on the Market Share simulation and Market Production Forecast, the Contribution Margin is forecasted for each Customer Group for individual Market segments.
Page – Market Analysis for Coatings
In this page, the details of Coatings sold by my company in country UK for the different Market Segments is shown. This page is designed to provide a swim lane for each of the Market Segments Building, Automotive, and Industrial. For sake of simplicity in reading, we will explain the charts for Building Market segment. The other swim lanes have identical charts only the market segments are different.
Charts
Building Production Trend
A trend of Building Production is shown based on external data source. Additionally, forecast till end of the year is provided by the Predictive capabilities of SAP Analytics Cloud. This forecast information is valuable in forecasting our net revenue for this market segment.
Building Units Produced
This chart shows total units produced this year and variance with previous year.
My Volume per Unit
Current year's volume of coating I have sold for each Building unit produced and variance with previous year.
My Revenue per Unit
Current year's revenue of coating I have sold for each Building unit produced and variance with previous year.
Revenue - Top 5 Materials
Revenue generated by Top 5 Materials this year and its variance with previous year.
Contribution Margin per Material
Contribution Margin generated per Material for current and previous year.

For most chemical companies, critical resources such as capital, capacity, and people are not abundant. One of the most important functions of senior management then is to ensure that these scarce resources are put to best effect to both maximize shareholder return while enabling profitable and sustainable growth.

These analytics are the most challenging one for senior management. To efficiently allocate resources in this complex environment, companies must possess both a granular understanding of each key markets as well as a forward view of how those markets will develop. These data should be combined with internal cost structure, margin, and other data to allow an assessment not only about a market position of a product (group) but also about internal levers how to react on market challenges.

The story Market Analysis is built based on the following architecture:



3.3.3.3 Health & Safety - Incidents (SAP__CHEM_EHS_HS_INCIDENTS)

For a description of the Story and the models used please check the following chapter: *Environment, Health and Safety Management (EHS)*

3.3.4 Models

3.3.4.1 Pipeline Health, Opportunity Analysis and Pipeline Funnel (SAP__CHEM_PIP_IM_ANALYSIS)

This story assumes, that the customer is using SAP Sales Cloud, Cloud for Customer. As you can see in the in the System Requirements and Technical Prerequisites, the data acquisition from SAP Hybris Cloud for Customer is based on OData connection.

Create a connection between SAP Analytics Cloud and SAP Sales Cloud, Cloud for Customer to import data from customized OData sources. For further information on how to setup the connection please follow the link and in addition see the link: Import Data Connection to OData services.

For general information on SAP Sales Cloud, Cloud for Customer please follow the link to the SAP Help Portal.

Integration help for SAP Sales Cloud, Cloud for Customer is provided by this link. Integration guides and additional resources are published on SAP Service Marketplace in English.

Functional Prerequisites on SAP Hybris Cloud for Customer side:

- For analyzing the pipeline health as shown on the overview screen, the customer has to use the Sales Planning and Sales Target Planning.
- For analyzing the opportunities, the opportunity management has to be used including the key figures and characteristics described below.

Model Name: SAP__CHEM_PIP_IM_ANALYSIS		**Connection**
• Model Description: SAP Chemicals: Pipeline Health, Opportunity Analysis, and Pipeline Funnel • Planning Enabled: No		Connection Type: Import: ODATA (SAP Sales Cloud – Cloud for Customer)
Account*		
ID	**Description**	**Formula/Mapping**
Weighted_Revenue	Weighted Revenue	Weighted Value (key figure)
Expected_Revenue	Expected Revenue	Expected Value (key figure)
Number_Opportunities	Number of Opportunities	Number of Opportunities (key figure)
Item_Revenue	Item Revenue	Item Value (key figure)
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Close Date Id (characteristic)
SAP_ALL_CUSTOMER	Customer	Account ID (characteristic)
SAP_CHEM_PIP_Owner	Owner	Employee Responsible ID (characteristic)
SAP_CHEM_PIP_Status	Status	Lifecycle Status ID (characteristic)
SAP_CHEM_PIP_OpportunityName	Opportunity Name	Opportunity ID (characteristic)
SAP_ALL_MATERIALGROUP	Material Group	Product Category ID (characteristic)
SAP_ALL_MATERIAL	Material	Product ID (characteristic)
SAP_ALL_SEGMENT	Segment	Industry ID (characteristic)
SAP_CHEM_PIP_WinLossReason	Win/Loss Reason	Reason for Status ID(characteristic)
SAP_CHEM_PIP_SalesPhase	Sales Phase	Sales Phase ID (characteristic)
SAP_ALL_BUSINESSAREA	Business Area	Sales Unit ID (characteristic)
SAP_CHEM_PIP_Source	Source	Source ID (characteristic)
SAP_ALL_CUSTOMERREGION	Customer Region	Territory ID (characteristic)
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	Country ID (characteristic)
SAP_CHEM_PIP_Probability	Probability	Probability (key figure)
Additional Notes about the model		

Model Name: SAP__CHEM_PIP_IM_ANALYSIS	Connection
Please pay attention that the Probability field in SAP Analytics Cloud is modelled as a dimension and not used in calculations, while it is represented as a key figure in SAP Sales Cloud, Cloud for Customer.	

> **i Note**
>
> * Private dimension and other dimensions are public.

3.3.4.2 Pipeline Health Forecast (SAP__CHEM_PIP_IM_FORECAST)

Model Name: SAP__CHEM_PIP_IM_FORECAST		Connection
• Model Description: SAP Chemicals: Pipeline Health Forecast • Planning Enabled: No		Connection Type: Import: ODATA (SAP Sales Cloud, Cloud for Customer) See details in additional comments below
Account		
ID	**Description**	**Formula/Mapping**
Weighted Revenue	Weighted Revenue	Weighted Value (key figure)
Forecast_Revenue	Forecast Revenue	Forecast Revenue (key figure)
Pipeline_Revenue	Pipeline Revenue	Target Quota / Target Revenue (key figure)
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Close Date ID (characteristic)
Additional Notes about the model		
Connection Report: New report created in SAP Sales Cloud, Cloud for Customer based on the data source: Opportunity, Forecast, and Sales Planning (select and deselect the key figures and Characteristics according to the list below). Comment: As we only used very limited data in the chart, the model is very thin with limited measures and dimensions. But the Forecast Report offered by SAP Sales Cloud, Cloud for Customer offers much more measures (called key figures by SAP Sales Cloud, Cloud for Customer) and dimensions (called characteristics) that can be used to create a more comprehensive model and more detailed charts in the customer project if requested.		

> **i Note**
>
> * Private dimension and other dimensions are public.

3.3.4.3 Portfolio Performance – Growth Products (SAP__CHEM_PRT_IM_MATERIAL)

Model Name: SAP__CHEM_PRT_IM_MATERIAL		Connection
• Model Description: SAP Chemicals: Portfolio Performance, Growth Products • Planning Enabled: No		Connection Types
Account*		
ID	**Description**	**Formula/Mapping**
Count	Count	Set to constant value “1” (instead of mapping)
InnovationSales	Innovation Sales	Link([t.S.SAP__FI_GEN_IM_GENERAL-LEDGER:SAP__FI_GEN_IM_GENERAL-LEDGER];[INT/00015703010000]; [t.S:SAP_ALL_MATERIAL(all)], [t.S:SAP_CHEM_PRT_Innovation=Inno-vation])
CoreSales	Core Sales	Link([t.S.SAP__FI_GEN_IM_GENERAL-LEDGER:SAP__FI_GEN_IM_GENERAL-LEDGER];[INT/00015703010000]; [t.S:SAP_ALL_MATERIAL(all)], [t.S:SAP_CHEM_PRT_Innova-tion=Core])
Sales	Sales	Link([t.S.SAP__FI_GEN_IM_GENERAL-LEDGER:SAP__FI_GEN_IM_GENERAL-LEDGER];[INT/00015703010000]; [t.S:SAP_ALL_MATERIAL(all)], [Time(all)],[t.S:SAP_CHEM_PRT_Inno-vation=Innovation])
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	
SAP_ALL_MATERIAL	Material	0MATERIAL_ATTR
SAP_CHEM_PRT_Innovation	Innovation	Custom (indication of innovative mate-rial)
Additional Notes about the model		
Provide additional information about the model (if needed).		

> **i** Note
>
> * Private dimension and other dimensions are public.

3.3.4.4 Portfolio Performance – Market Analysis (SAP__CHEM_PRT_IM_MARKETANALYSIS)

The model is very similar to the model SAP__FI_GEN_IM_GENERALLEDGER described in section 5.1.4.1. For all purposes of uploading data please refer to the mentioned section.

The differences are the following:

- The account dimension is not a global dimension but a private dimension.
- There is 1 additional account member EXTPROD in the account dimension. The purpose of having this is to be able to populate market production data available from external sources.
- Data regarding production for a market segment can be loaded using an excel file or OData service into the model. The data should be loaded with the option Append.
- The structure of data import for EXTPROD is

Date
Country
Material Group
Segment
EXTPROD

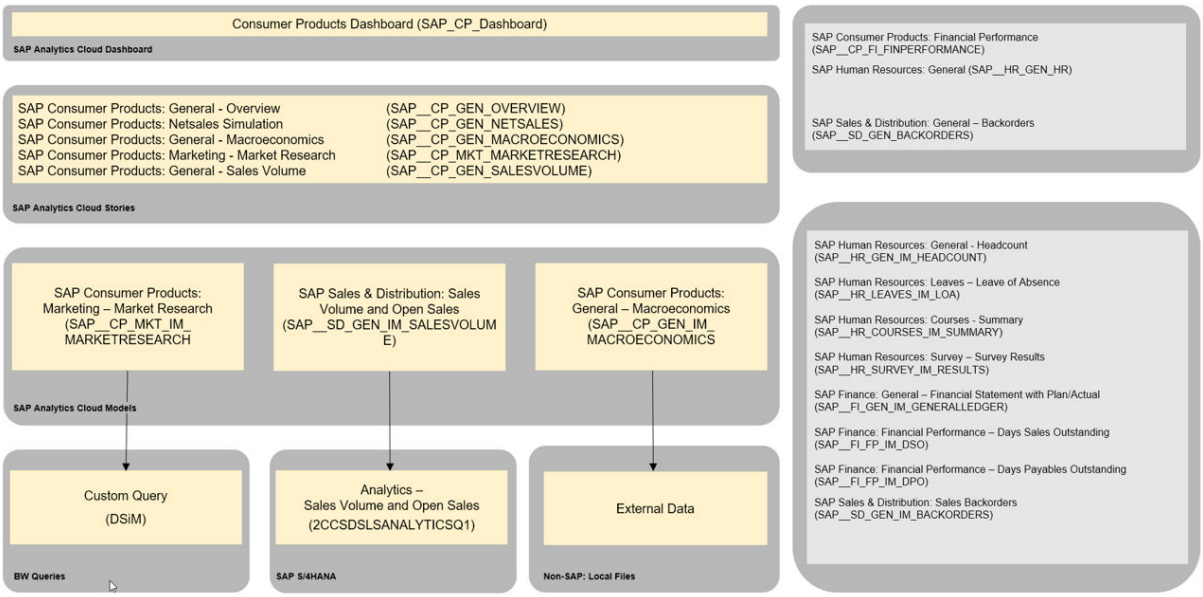
3.4 Consumer Products

3.4.1 Architecture

The Consumer Products Dashboard covers the following topics:

- Finance
- Marketing (Market Shares)
- HR
- Sales (Sales fulfillment)

Architecture



3.4.2 Dashboard

The dashboard which provides the insights is: *SAP_CP_Dashboard*

3.4.3 Stories

SAP Consumer Products: General - Overview (SAP__CP_GEN_OVERVIEW)

Purpose: The overview page provides the most relevant Key Performance Indicators (KPI) from Lines of Business Human Resource, Sales, and Marketing and Finance.

SAP Consumer Products: Financial Performance (SAP__CP_FI_FINPERFORMANCE)

This story is an enhancement of story SAP__FI_GEN_FINPERFORMANCE (for details compare chapter 5.5.3). Basically, the story is enhanced by the page Growth Analysis External, which shows drivers of KPI Net Sales Growth, i.e. organic sales growth, acquisitions/divestments, and currency. Additionally, some pages are adapted to CP specific requirements, showing breakdowns to other more CP specific dimensions.

> **i Note**
>
> Compared to story SAP__FI_GEN_FINPERFORMANCE this story is using the additional model SAP__FI_SALES_GROWTH (for details, see below).

SAP Consumer Products: Marketing – Market Research (SAP__CP_MKT_MARKETRESEARCH)

This story analyses the value/volume market share for your own company and compares your own company's market share to competitor's market share.

SAP Consumer Products: General – Macroeconomics (SAP__CP_GEN_MACROECONOMICS)

This is story illustrates some macroeconomic KPI's such as Gross Domestic Product, Income per Capita, Consumer Confidence Index, and others. It is using external non-SAP data.

SAP Consumer Products: General - Netsales Simulation (SAP__CP_GEN_NETSALES)

This story is an example on how to use a value driver tree (VDT) to simulate the development over time of a target key figure by changing influencers (or drivers). In the VDT of this story the target KPI is Net Sales (in VDT called Net Revenue), which is calculated by Gross Revenue, Deductions. The drivers in the VDT are Media Spend Growth, Price Growth, and Trade Allowances Growth. These drivers change Gross Revenue (Trade Allowances Growth also Deductions). The VDT offers the opportunity to simulate the time evolution of net sales by changing driver values.

SAP Consumer Products: General - Sales Volume (SAP__CP_GEN_SALESVOLUME)

Main purpose of stories SAP__CP_SD_SALESVOLUME is to provide insights into current status of sales by analyzing KPIs

- Sales Volume: net sales of delivered and billed sales order item
- Open Deliveries: net sales of delivered but not billed sales order item
- Open Orders: net sales of not delivered and not billed sales order item.

SAP Consumer Products: Human Resources (SAP__CP_HR_BOARDROOM)

This is a copy of the story SAP__HR_GEN_HR (SAP Human Resources: General).

3.4.4 Models

3.4.4.1 Sales – Growth – (SAP__FI_SALES_IM_GROWTH)

This model is a copy of model SAP__FI_GEN_IM_GENERALLEDGER. This copy was enhanced by:

- Currency conversion (using currency conversion table SAP_ALL_CURRENCY)
- CP specific measures: Organic sales growth

This chapter only describes the enhancement to model SAP__FI_GEN_IM_GENERALLEDGER.

Model Name: SAP__FI_SALES_IM_GROWTH		Connection
• Model Description: Model Description: SAP Finance: Sales – Growth • Planning Enabled: Yes		Compare SAP__FI_GEN_IM_GENERAL-LEDGER for connection and mapping
G/L Account		
ID	**Description**	**Formula/Mapping**
AD1	A&D Sales revenues-dom.	
AD2	A&D Sales revenue-forgn	
AD3	A&D Customer discounts	
AD4	A&D Other costs	

Model Name: SAP__FI_SALES_IM_GROWTH		Connection
AD5	A&D Consumptn, raw mat.1	
AD6	A&D Net Sales	[ACQ6]+[DIV6]
AD7	A&D Net Sales	[AD6]*(-1)
ACQ1	Acquisitions Sales revenues-dom.	
ACQ2	Acquisitions Sales revenue-forgn	
ACQ3	Acquisitions Customer discounts	
ACQ4	Acquisitions Other costs	
ACQ5	Acquisitions Consumptn, raw mat.1	
ACQ6	Acquisitions Net Sales	[ACQ1]+[ACQ2]-[ACQ3]
DIV1	Divestments Sales revenues-dom.	
DIV2	Divestments Sales revenue-forgn	
DIV3	Divestments Customer discounts	
DIV4	Divestments Other costs	
DIV5	Divestments Consumptn, raw mat.1	
DIV6	Divestments Net Sales	[DIV1]+[DIV2]-[DIV3]
NS	Net Sales	[F26]
OS	Organic Sales	[F26]-[AD6]
OS_CC	Organic Sales	LOOKUP([OS] ,[d/Version]= "public.Constant Currency" ,[d/Version])
OS_CURR_QRT	Organic Sales Current Quarter	LOOKUP([OS_CC] ,[d/Time]="20173" ,[d/Time])
OS_PAST_QRT	Organic Sales Past Quarter	LOOKUP([OS_CC] ,[d/Time]="20163" ,[d/Time])
OSG_CURR_QRT	Organic Sales Growth Current Quarter	([OS_CURR_QRT]-[OS_PAST_QRT])/[OS_PAST_QRT]
OS_CURR_YTD	Organic Sales Current YTD	LOOKUP([OS_CC] ,[d/Time]=("20171","20172","20173") ,[d/Time])
OS_PAST_YTD	Organic Sales Past YTD	LOOKUP([OS_CC] ,[d/Time]=("20161","20162","20163") ,[d/Time])
OSG_CURR_YTD	Organic Sales Growth Current YTD	([OS_CURR_YTD]-[OS_PAST_YTD])/[OS_PAST_YTD]
NS_CC	Net Sales Constant Currency	LOOKUP([F26] ,[d/Version]= "public.Constant Currency" ,[d/Version])
NS_CC_CURR_QRT	Net Sales CC Current Quarter	LOOKUP([NS_CC] ,[d/Time]="20173" ,[d/Time])
NS_CC_PAST_QRT	Net Sales CC Past Quarter	LOOKUP([NS_CC] ,[d/Time]="20163" ,[d/Time])

Model Name: SAP__FI_SALES_IM_GROWTH		Connection
NSG_CC_CURR_QRT	Net Sales Growth CC Current Quarter	([NS_CC_CURR_QRT]-[NS_CC_PAST_QRT])/[NS_CC_PAST_QRT]
NS_CC_CURR_YTD	Net Sales CC Current YTD	LOOKUP([NS_CC] ,[d/Time]=("20171","20172","20173") ,[d/Time])
NS_CC_PAST_YTD	Net Sales CC Past YTD	LOOKUP([NS_CC] ,[d/Time]=("20161","20162","20163") ,[d/Time])
NSG_CC_CURR_YTD	Net Sales Growth CC Current YTD	([NS_CC_CURR_YTD]-[NS_CC_PAST_YTD])/[NS_CC_PAST_YTD]
OSG_NSGCC_CURR_QRT	A&D Effect Current Quarter	[NSG_CC_CURR_QRT]-[OSG_CURR_QRT]
OSG_NSGCC_CURR_YTD	A&D Effect Current YTD	[NSG_CC_CURR_YTD]-[OSG_CURR_YTD]
NS_CURR_QRT	Net Sales Current Quarter	LOOKUP([F26] ,[d/Time]="20173" ,[d/Time])
NS_PAST_QRT	Net Sales Past Quarter	LOOKUP([F26] ,[d/Time]="20163" ,[d/Time])
NSG_CURR_QRT	Net Sales Growth Current Quarter	([NS_CURR_QRT]-[NS_PAST_QRT])/[NS_PAST_QRT]
NS_CURR_YTD	Net Sales Current YTD	LOOKUP([F26] ,[d/Time]=("20171","20172","20173") ,[d/Time])
NS_PAST_YTD	Net Sales Past YTD	LOOKUP([F26] ,[d/Time]=("20161","20162","20163") ,[d/Time])
NSG_CURR_YTD	Net Sales Growth Current YTD	([NS_CURR_YTD]-[NS_PAST_YTD])/[NS_PAST_YTD]
NSCC_NS_CURR_QRT	Currency Effect Current Quarter	[NSG_CURR_QRT]-[NSG_CC_CURR_QRT]
NSCC_NS_CURR_YTD	Currency Effect Current YTD	[NSG_CURR_YTD]-[NSG_CC_CURR_YTD]
NSG_HIER1	Sales YTD	[NSG_CURR_YTD]
OSG	Organic	[OSG_CURR_YTD]
AD	A & D	[OSG_NSGCC_CURR_YTD]
CC	Currency	[NSCC_NS_CURR_YTD]
NSG_HIER2	Sales Q3	[NSG_CURR_QRT]
OSG_2	Organic	[OSG_CURR_QRT]
AD_2	A & D	[OSG_NSGCC_CURR_QRT]
CC_2	Currency	[NSCC_NS_CURR_QRT]

Model Name: SAP__FI_SALES_IM_GROWTH		Connection
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	
(generic name)*	GL Account	
SAP_ALL_BUSINESSAREA	Business Area	
SAP_ALL_COMPANY_CODE	Legal Entity	
SAP_ALL_COUNTRY	Country	
SAP_ALL_CUSTOMERGROUP	Customer Group	
SAP_ALL_MATERIAL	Material	
SAP_ALL_MATERIALGROUP	Material Group	
SAP_ALL_PLANT	Plant	
SAP_ALL_PROFITCENTER	Profit Center	
SAP_ALL_REGION	Region	
SAP_ALL_SEGMENT	Segment	
Additional Notes about the model		

Model Name: SAP__FI_SALES_IM_GROWTH	Connection

Organic Sales Growth:

For organic sales growth, the following calculation is applied (compare for example, calculated account OSG_CURR_QRT):

Organic sales growth (CP) = [Net Sales CP (with FX rates of PP) – A&D Net Sales CP (with FX rates of PP)] –[Net Sales PP (with FX rates of PP) – A&D Net Sales PP (with FX rates of PP)]

with CP: Current period, PP: Previous period, A&D: Acquisitions & Divestments, and FX: Foreign exchange.

According to this formula it is for example necessary to apply the exchange rate of a previous period (for example, 2017) to net sales of current period (for example, 2018). This is not the default how currency conversion behaves. The default currency conversion would take the exchange rate valid to the date when net sales occurred. For example: Net sales in Euro occurring in 2017 will be converted into US Dollar using exchange rate 1.1, and net sales in Euro occurring in 2018 will be converted into US Dollar using exchange rate 1.15 according to the last two lines in figure 3. But for the organic sales growth formula for net sales occurred in 2018, the exchange rate of 2017 must be taken. To fulfill this requirement two additional lines were added to the currency table which have the value Planning in column Category. Now, for model SAP__FI_SALES_GROWTH, a version of category Planning with name Constant Currency is added. For this version, values in source currencies to be converted into target currency USD (for example, EUR) are currency converted using exchange rates as defined in the currency conversion table, i.e. the lines with Category = Planning. For example: Net sales in EUR occurred in 2018 are converted into USD using exchange rate 1.1 (so not 1.15). This is exactly the requirement of the organic sales growth formula.

Figure 1: Currency conversion table

Source Currency	Valid From	Target Currency	Category	Rate Version	Rate Type	Exchange Rate
EUR	2011.01.01	USD				0.9
EUR	2013.01.01	USD				1.2
EUR	2017.01.01	USD			Average	1.17682
EUR	2017.01.01	USD				1
EUR	2017.01.01	USD	Planning		Average	1.1
EUR	2018.01.01	USD	Planning		Average	1.1
EUR	2017.01.01	USD	Actuals		Average	1.1
EUR	2018.01.01	USD	Actuals		Average	1.15

Accounts AD1, AD2, AD3, AD4, and AD5 contain the domestic/foreign sales revenue, customer discounts, other costs, and raw material costs for the sales of the acquired (acquisitions) and sold (divestments) units (similar to the accounts INT/0000800000, INT/0000801000, INT/0000880000, INT/0000476900, and INT/0000400000).

Accounts ACQ1, ACQ2, ACQ3, ACQ4, ACQ5 and DIV1, DIV2, DIV3, DIV4, DIV5 hold the same information separated for acquired and sold units.

Compared to model SAP__FI_GEN_IM_GENERALLEDGER

- The following dimensions are not available: Customer, Cost Center, and Supplier
- Account dimension is private (not public)

> **i Note**
>
> * Private dimension and other dimensions are public.

3.4.4.2 Marketing – Market Research (SAP__CP_MKT_IM_MARKETRESEARCH)

Model Name: SAP__CP_MKT_IM_MARKETRESEARCH		Connection
• Model Description: Description of Model • Planning Enabled: No/Yes		Connection Types
Account		
ID	**Description**	**Formula/Mapping**
VALUE	Sales	
VOLUME	Volume	
PRICE	Avg. Price	[VALUE]/[VOLUME]
MY_VAL	My Sales	RESTRICT([VALUE] ,[d/SAP_ALL_MANUFACTURER]= 'M1')
MY_VAL_MS	My Value Market Share	[MY_VAL]/[VALUE]
GT_VAL	Grand Total (Sales)	GrandTotal([VALUE])
VAL_MS	Value Market Share	[VALUE]/[GT_VAL]
MY_VOL	My Volume	RESTRICT([VOLUME] ,[d/SAP_ALL_MANUFACTURER]='M1')
MY_VOL_MS	My Volume Market Share	[MY_VOL]/[VOLUME]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	
Account Dimension*	Market Research Account	
SAP_ALL_COUNTRY	Country	
SAP_ALL_BRAND	Brand	
SAP_ALL_MATERIALGROUP	Material Group	
SAP_ALL_MANUFACTURER	Manufacturer	
Additional Notes about the model		

Please note that for measures MY_VAL and MY_VOL there is a restriction of dimension Manufacturer to value M1. Please adapt these formulas with the value of your company.

Unfortunately, there is no standard query delivered by SAP available to feed the model. But it is very easy to create an appropriate query.

Open the SAP BEx Query Designer to create a new query. Search for the InfoProvider /DDF/CP03.

Add the following key figures:

- /DDF/GMSVAL Global Market Research: Sales (Value)
- /DDF/GMSVOL Global Market Research: Sales (Volume)

Add the following dimensions:

- /DDF/MANGM_TXT (Global Manufacturer)
- /DDF/BRAGM_TXT (Global Brand)
- 0COUNTRY (Country)
- /DDF/PCAGM_TXT (Global Category)
- 0CALMONTH (Cal. year / month)

Save the new query. Your new query should look like this:

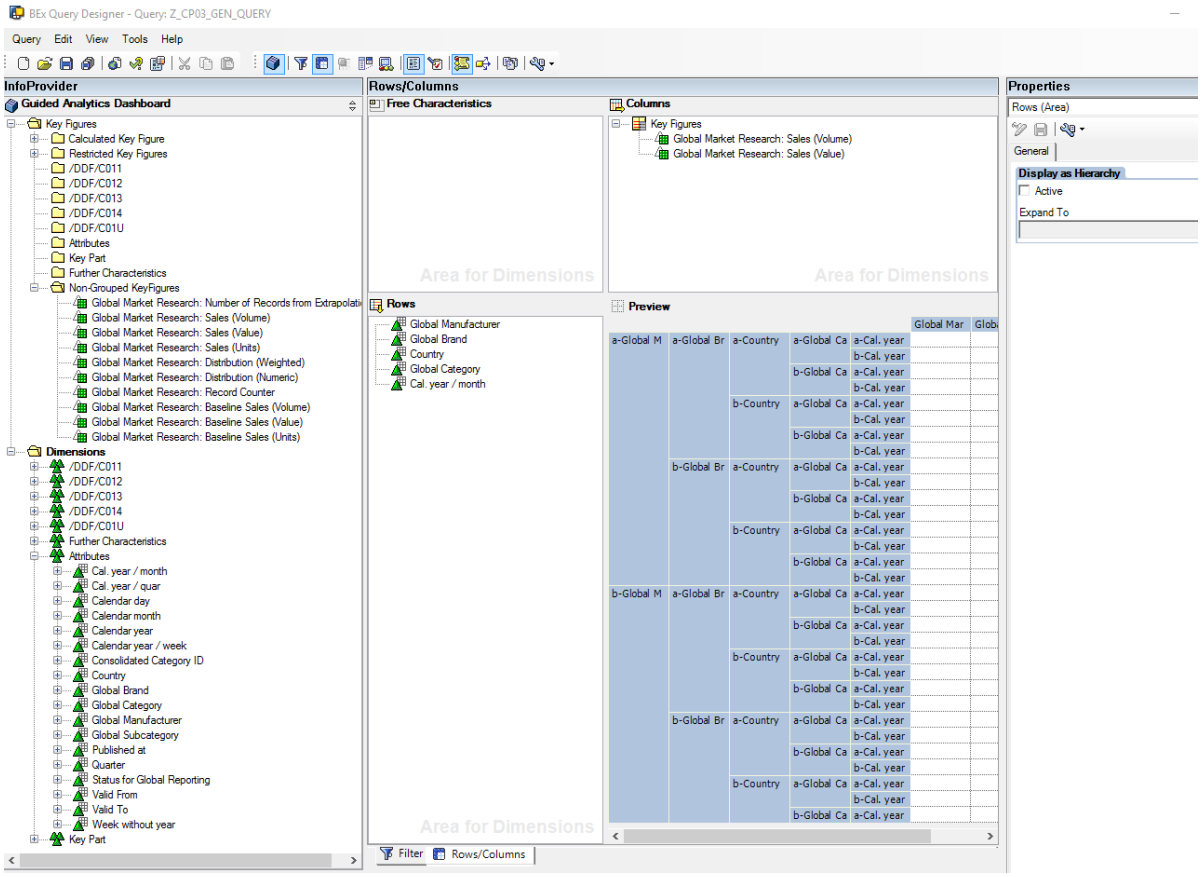


Figure 2: Key figures and dimension of the custom query.

> **Note**
>
> * Private dimension and other dimensions are public.

3.4.4.3 General - Macroeconomics (SAP__CP_GEN_IM_MACROECONOMICS)

Model Name: SAP__CP_GEN_IM_MACROECONOMICS	**Connection**
• Model Description: SAP Consumer Products: General - Macroeconomics • Planning Enabled: No	• Connection Type: File upload • Source of Import: External (non-SAP) data

Macroeconomics Account*		
ID	**Description**	**Formula/Mapping**
GDP	Gross Domestic Product	Matching field in file
UNEMP	Unemployment	Matching field in file
INFLATION	Inflation	Matching field in file
CPINCOME	Income Per Capita	Matching field in file
CONSUMPTION	Household Consumption Expenditures	Matching field in file
CCI	Consumer Confidence Index	Matching field in file
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Matching field in file
SAP_ALL_Country	Country	Matching field in file

> **Note**
>
> * Private dimension and other dimensions are public.

3.4.4.4 Sales Volume and Open Sales (SAP__SD_GEN_IM_SALESVOLUME)

Model Name: SAP__SD_GEN_IM_SALESVOLUME	Connection

• Model Description: SAP Sales & Distribution: Sales Volume and Open Sales
• Planning Enabled: No
	• Connection Type: SAP BW Connection
	• Source of Import: CDS View Analytics - Sales Volume and Open Sales (2CCSDSLSANALYTICQ1)
	• Technical name of Info Provider: 2CISDSLSANACUBE1
	• Connection Variables:
	  ○ Exchange Rate Type: Please choose a valid exchange rate type (for example, M)
	  ○ Currency: The displayed currency has to map the currency in the target model. Model SAP Sales & Distribution - Sales Volume uses currency the USD (US Dollar).

Sales Volume Account*

ID	Description	Formula/Mapping
SALES_VOL	Sales Volume	Sales Volume ELTUIDCMP14
OPEN_DEL	Open Deliveries	Open Deliveries ELTUIDCMP8
OPEN_ORDERS	Open Orders	Open Orders ELTUIDCMP5

Dimensions

ID	Description	Mapping
Time*	Time	Month of Billing
SAP_ALL_COMPANY_CODE	Company Code	Navigation attribute Company Code of dimension Sales Organization
SAP_ALL_COUNTRY	Country	Navigation attribute Country of dimension Sold-to-Party
SAP_ALL_CUSTOMER	Customer	Sold-to-Party
SAP_ALL_CUSTOMERGROUP	Customer Group	Customer Group
SAP_ALL_DISTRIBUTIONCHANNEL	Distribution Channel	Distribution Channel
SAP_ALL_MATERIAL	Material	Material
SAP_ALL_MATERIALGROUP	Material Group	Material Group
SAP_ALL_SALESORGANISATION	Sales Organisation	Sales Organisation

Model Name: SAP__SD_GEN_IM_SALESVOLUME	Connection	
SAP_ALL_BUSINESSAREA	Business Area	This dimension is not available in the data source. Please set '#' ("Unassigned") as default value

> **i** Note
>
> * Private dimension and other dimensions are public.

3.4.4.5 Value Driver Tree: SAP__CP_GEN_NETSALES

General Remarks:

The value driver tree (VDT) simulates the growth of net revenue by means of the following drivers:

- Price Driver
- Media Spend Driver
- Allowances Driver

Net revenue is calculated as follows:

Net revenue = gross revenue – deductions = (sales revenue domestic + sales revenue foreign) – customer discounts

Underlying model

All the data for the Value Driver Tree is retrieved from the model SAP__FI_GEN_IM_GENERALLEDGER. For this purpose, this model was enhanced.

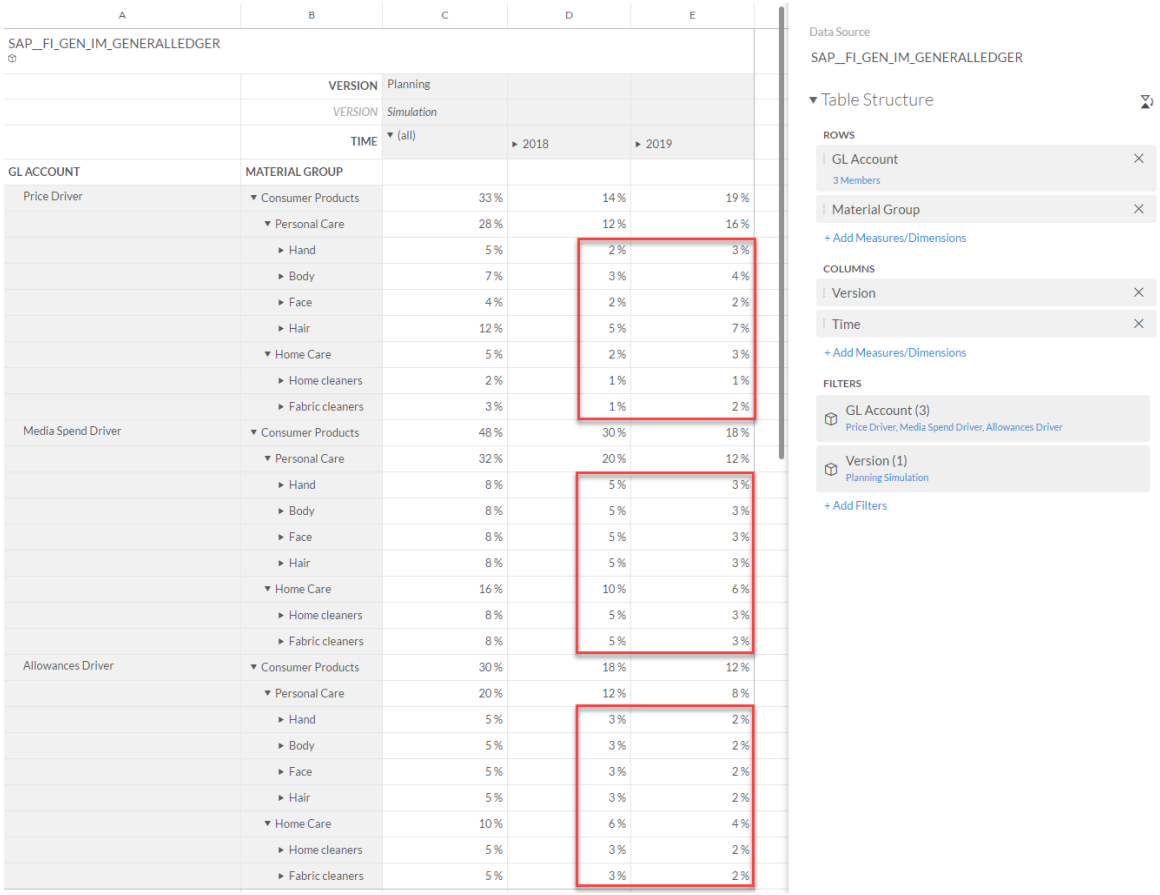
The documentation for model SAP__FI_GEN_IM_GENERALLEDGER can be found in the following chapter: *SAP Finance: General- Financial Statement with Plan/Actual (SAP__FI_GEN_IM_GENERALLEDGER)*

- A new public version Simulation of category Planning was created. This version was created as a copy of version Actual.
- Dimension GL Account was enhanced by additional members (measures).

ID	Description	Usage
VDT	Value Drivers	Hierarchy node
VDT_CP	Value Drivers – Consumer Products	Hierarchy node
VDT_CP_MS	Media Spend Driver	Driver node
VDT_CP_P	Price Driver	Driver node
VDT_CP_PR	Price Response	For calculating price elasticity
VDT_CP_PR2	Price Response 2	For calculating price elasticity
VDT_CP_PR3	Price Response 3	For calculating price elasticity
VDT_CP_AL	Allowances Driver	Driver node

ID	Description	Usage
VDT_CP_ALR	Allowances Response	Applying optional correction factor to allowance driver (here: 0,5)
VDT_CP_NET	Net Sales	Account for net sales

- Values for measures Media Spend Driver, Price Driver, and Allowances Driver were maintained for several material groups into model version Simulation, i.e. drivers are material group specific (compare figure).



A	B	C	D	E
SAP__FI_GEN_IM_GENERALLEDGER				
	VERSION	Planning		
	VERSION	Simulation		
	TIME	▾ (all)	▸ 2018	▸ 2019
GL ACCOUNT	MATERIAL GROUP			
Price Driver	▾ Consumer Products	33 %	14 %	19 %
	▾ Personal Care	28 %	12 %	16 %
	▸ Hand	5 %	2 %	3 %
	▸ Body	7 %	3 %	4 %
	▸ Face	4 %	2 %	2 %
	▸ Hair	12 %	5 %	7 %
	▾ Home Care	5 %	2 %	3 %
	▸ Home cleaners	2 %	1 %	1 %
	▸ Fabric cleaners	3 %	1 %	2 %
Media Spend Driver	▾ Consumer Products	48 %	30 %	18 %
	▾ Personal Care	32 %	20 %	12 %
	▸ Hand	8 %	5 %	3 %
	▸ Body	8 %	5 %	3 %
	▸ Face	8 %	5 %	3 %
	▸ Hair	8 %	5 %	3 %
	▾ Home Care	16 %	10 %	6 %
	▸ Home cleaners	8 %	5 %	3 %
	▸ Fabric cleaners	8 %	5 %	3 %
Allowances Driver	▾ Consumer Products	30 %	18 %	12 %
	▾ Personal Care	20 %	12 %	8 %
	▸ Hand	5 %	3 %	2 %
	▸ Body	5 %	3 %	2 %
	▸ Face	5 %	3 %	2 %
	▸ Hair	5 %	3 %	2 %
	▾ Home Care	10 %	6 %	4 %
	▸ Home cleaners	5 %	3 %	2 %
	▸ Fabric cleaners	5 %	3 %	2 %

Figure 3: Example values for the drivers Price Driver, Media Spend Driver, and Allowances Driver are maintained for members of dimension Material Group.

Value driver tree

Simulation of net revenue growth is calculated separately for each member of dimension Material Group maintained for model SAP__FI_GEN_IM_GENERALLEDGER. The top node of the VDT aggregates all material group specific net revenues into a total Net Revenue node.

Price Elasticity:

The values p of driver node Price Growth (<material group>) are corrected by a calculated factor c that takes price elasticity e into account, so not p is applied but p_{eff} = p * c:

p_{eff} = {[(1 + p/100) * (1 + ep/100)] - 1} * 100

= (1 + ep/100 + p/100 + ep2/1002 - 1) * 100

= ep + p + ep2/100

= p (1 + e + ep/100)

= p * c

VDT SAP__CP_GEN_NETSALES is using e = -0,1.

Example: a price growth of p = 5% is corrected to p_{eff} = 4,48%.

When opening the VDT (following the path Browse → Processes → Value Driver Trees) you will find the calculations on the Calculation view (compare figure).

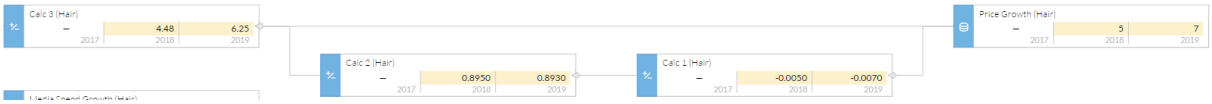


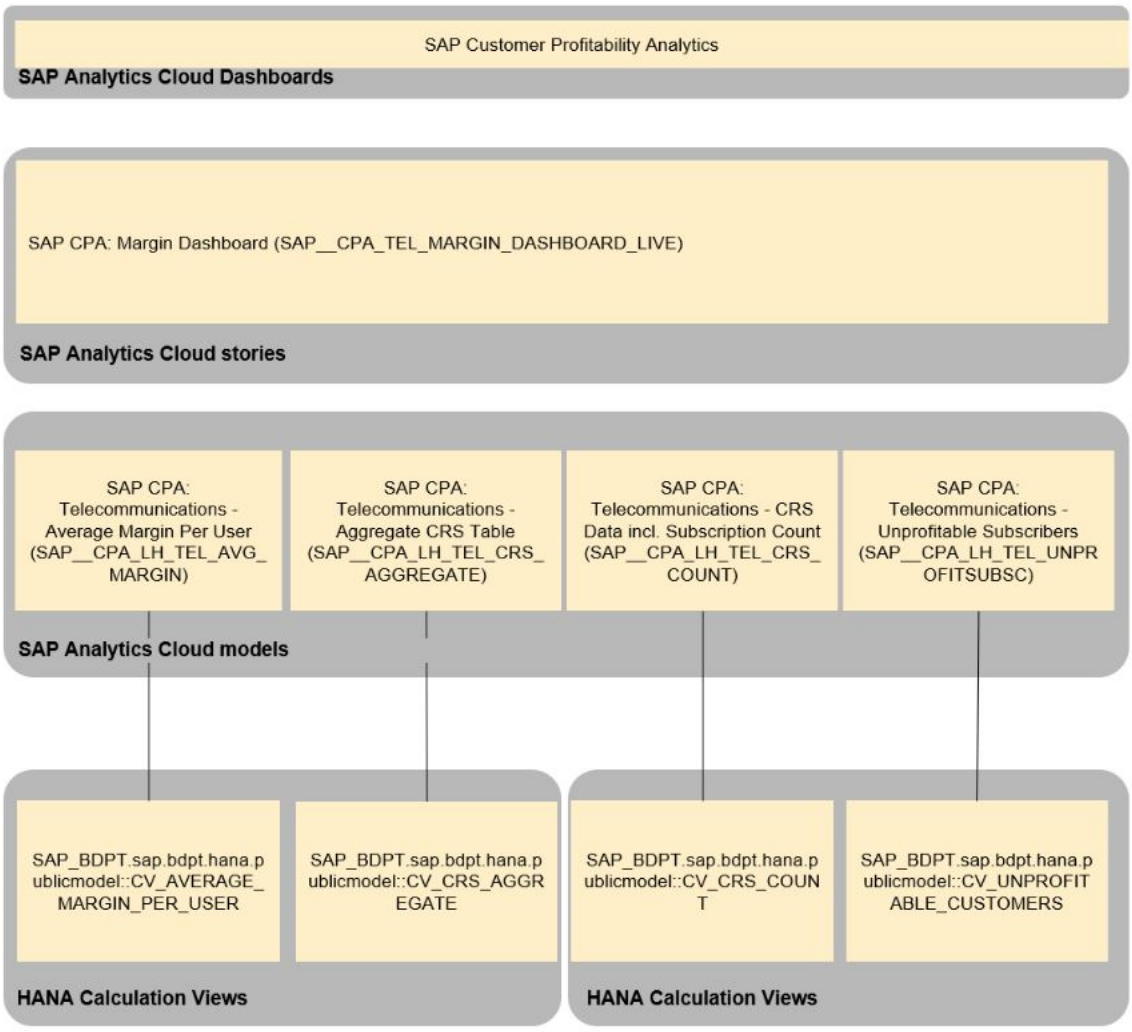
Figure 4: Modeling of price elasticity

3.5 Customer Profitability Analytics (CPA)

3.5.1 Architecture and Abstract

The SAP Analytics Cloud Standard Content for CPA provides an out of the box view for the Telco's to monitor their AMPU and ARPU on a monthly basis. A detailed picture of the Margin breakdown with respect to their Product Offerings and few other KPIs such as Region, Sales Channels are also provided. Appropriate filters based on Total Margin and Relevant Margin are also applied for relevant charts such as the heat map to provide a concise breakdown for the Margin Assurance and product teams to investigate and act upon based on these KPIs and trends shown through this dashboard.

Architecture



3.5.2 Prerequisite

You should have installed CPA (CPA 2.1 or higher) Application with Container (Schema) name as: SAP_BDPT.

Demo data has to be distributed equally into analytics tables from Execute Operational Activities tile of CPA Application when you want to explore CPA Standard Content with its sample demo data.

> **i Note**
>
> In case of CPA installation other than Container/Schema SAP_BDPT:
>
> - You should have SAP Analytics Cloud >= wave 2019.05

- From SAP Analytics Cloud with Wave 2019.05, the SAP Analytics Cloud Models for CPA with Schema other than **SAP_BDPT** will display a warning as shown below:

- You can change its underlying Data Source by mapping it to its exact Schema
- If you have already imported previous version of SAP Analytics Cloud Standard Content for CPA (in the name of BDMA), you should overwrite when importing the SAP Analytics Cloud Standard Content to get the latest updated Story and Models.
- HANA 2.0 with > Rev 33

3.5.3 Stories

- SAP CPA: Margin Dashboard (SAP__CPA_TEL_MARGIN_DASHBOARD_LIVE)

The Story consists of three pages namely: Executive Summary, Margin Breakdown - Products, and Margin Breakdown - Miscellaneous.

Executive Summary:

This story page consists of the following three lanes:

AMPU and ARPU - The lane is broken down into two sections. The first section gives the overview of the AMPU and ARPU for the current month along with the MoM (Month on Month) AMPU Growth number and the AMPU for the previous month to indicate the overall growth or decline in AMPU

AMPU growth = [AMPU of current month - AMPU previous month] / abs (AMPU of previous month)

The second section in this lane has a trend chart for a period of 6 months to compare on a MoM (Month on Month) basis between AMPU and ARPU

Subscriber and Margin Trends. The first section in this lane shows a comparison trend between subscriptions and Total Margin. The next section compares unprofitable subscriptions with Total Margin. Both the trend charts are for a period of 6 months.

Product Margins: The last lane of the Executive Summary Page shows the comparison of Revenue and Total Margin aggregated for different product offerings. There are two charts in this lane, and both are meant for giving a very high-level breakdown of Revenue drivers vs. the Margin Drivers. Both the charts in this lane show information for the current month.

Margin Breakdown – Products:

This story page consists of the following two lanes as mentioned below and predominantly focuses on providing a high-level overview of how various products fare against each other based on Margin.

Margins by Products:

This lane consists of a bubble chart. Bottom 20 least performing products based on their Relative Margin are plotted in the chart. Note that the X-Axis is the Total Margin while the Y-Axis is the Relative Margin.

Margins by multiple dimensions: This lane consists of two heat maps. The overall idea is to show how bottom 20 products based on Relative Margin by breaking it down to their respective Sales Channel (in the first chart) or their Region (in the second chart).

> **i Note**
>
> The data shown in this story page is for the current month. Also, in a few lanes of the story page Relative Margin alone is considered, whereas in a few others both Relative Margin and Total Margin are considered.

Margin Breakdown - Miscellaneous:

This story page gives a very crisp overview of what all Sales channels, Region and Customer Type impacts Margin the most. There are 3 sections / charts in this lane. The first bubble chart plots the bottom 20 Sales channel based on their Total Margin (X-Axis) and Relative Margin (Y-Axis). The second bubble chart plots the bottom 20 Regions on their Total Margin (X-Axis) and Relative Margin (Y-Axis). For both these bubble filter bottom 20 is applied on Total Margin metric. The third chart in the lane is the heatmap plotted with Sales Channel (X-Axis) and Customer Type (Y-Axis).

> **i Note**
>
> The data shown in this story page is for the current month. Also, in a few lanes of the story page Relative Margin alone is considered, whereas in a few others both Relative Margin and Total Margin are considered.

Measure Name	Type	Formula/Properties
AMPU Current Month	Restricted Measure	Measure [Average Margin per User] Restricted by Dimension [Month] on value [201703]
AMPU previous month	Calculated Measure	Measure [Average Margin per User] Restricted by Dimension [Month] on value [201702]
AMPU growth	Calculated Measure	- Measure ([AMPU Current Month]-AMPU previous month]) / ABS([AMPU previous month])
AMPU current month	Threshold	Compare To: Number Range OK: >= 10 Warnings: >=0 and < 10 Critical: < 10
Average Margin per User	Calculated Measure	[SAP__CPA_LH_TEL_CRS_COUNT:TOTAL_MARGIN_AMOUNT]/ [SAP__CPA_LH_TEL_CRS_COUNT:Subscriptions]

Measure Name	Type	Formula/Properties
Relative Margin	Calculated Measure	[SAP__CPA_LH_TEL_CRS_AGGRE-GATE:TOTAL_MARGIN_AMOUNT]/ [SAP__CPA_LH_TEL_CRS_AGGRE-GATE:REVENUE_AMOUNT]

3.5.4 Models

3.5.4.1 Telecommunications - Average Margin Per User (SAP__CPA_LH_TEL_AVG_MARGIN)

Model Name: Technical Name of Model	Connection
• Model Description: SAP CPA: Telecommunications - Average Margin Per User • Planning Enabled: No	• Connection Type: Direct - SAP HANA Live Data Connection with Authentication Method SAML Single Sign On • Connection Name: SAPCPA (SAP CPA: Customer Profitability Analytics) • Calculation View: SAP_BDPT.sap.bdpt.hana.publicmodel::CV_AVERAGE_MARGIN_PER_USER

Measures		
ID	**Description**	**Mapping/Formula**
AVERAGE_MARGIN_PER_USER	Average Margin per User	Threshold: Critical: AVERAGE_MARGIN_PER_USER<=0 Warning: 0< AVERAGE_MARGIN_PER_USER<=8 OK: 8< AVERAGE_MARGIN_PER_USER
NUMBER_OF_SUBSCRIPTIONS	Number of Subscriptions	NUMBER_OF_SUBSCRIPTIONS
TOTAL_MARGIN_AMOUNT	Total Margin	TOTAL_MARGIN_AMOUNT
Dimensions		
Name	**Description**	**Mapping**
VALID_FOR_MONTH	Month	VALID_FOR_MONTH

Model Name: Technical Name of Model		Connection
CURRENCY	Currency	CURRENCY

3.5.4.2 Telecommunications - Aggregate CRS Table (SAP__CPA_LH_TEL_CRS_AGGREGATE)

Model Name: Technical Name of Model	Connection
• Model Description: SAP CPA: Telecommunications - Aggregate CRS Table • Planning Enabled: No	• Connection Type: Direct - SAP HANA Live Data Connection with Authentication Method SAML Single Sign On • Connection Name: SAPCPA (SAP CPA: Customer Profitability Analytics) • Calculation View: SAP_BDPT.sap.bdpt.hana.publicmodel::CV_CRS_AGGREGATE

Measures

ID	Description	Mapping/Formula/Threshold
ACQUISITION_COST_AMOUNT	ACQUISITION_COST_AMOUNT	ACQUISITION_COST_AMOUNT
ACQUISITION_NON_SPECIFIC_COST_AMOUNT	ACQUISITION_NON_SPECIFIC_COST_AMOUNT	ACQUISITION_NON_SPECIFIC_COST_AMOUNT
ACTIVATION_COST_AMOUNT	ACTIVATION_COST_AMOUNT	ACTIVATION_COST_AMOUNT
ACTIVATION_FEE_REVENUE_AMOUNT	ACTIVATION_FEE_REVENUE_AMOUNT	ACTIVATION_FEE_REVENUE_AMOUNT
BAD_DEBT_DIRECT_COST_AMOUNT	BAD_DEBT_DIRECT_COST_AMOUNT	BAD_DEBT_DIRECT_COST_AMOUNT
BASE_CHARGE_AFTER_DISCOUNT_AMOUNT	Base Charge after Discount	BASE_CHARGE_AFTER_DISCOUNT_AMOUNT Threshold Critical: BASE_CHARGE_AFTER_DISCOUNT_AMOUNT < 0 Warning: 0 < = BASE_CHARGE_AFTER_DISCOUNT_AMOUNT < 5000000 OK : 5000000 < BASE_CHARGE_AFTER_DISCOUNT_AMOUNT
BASE_CHARGE_DISCOUNT_AMOUNT	BASE_CHARGE_DISCOUNT_AMOUNT	BASE_CHARGE_DISCOUNT_AMOUNT

Model Name: Technical Name of Model		Connection
BASE_CHARGE_REVENUE_AMOUNT	Base Charge	BASE_CHARGE_REVENUE_AMOUNT
BONUS_POINT_PAYMENT_AMOUNT	BONUS_POINT_PAYMENT_AMOUNT	BONUS_POINT_PAYMENT_AMOUNT
BUNDLE_CHARGE_REVE-NUE_AMOUNT	BUNDLE_CHARGE_REVE-NUE_AMOUNT	BUNDLE_CHARGE_REVE-NUE_AMOUNT
BUNDLE_DISCOUNT_AMOUNT	BUNDLE_DISCOUNT_AMOUNT	BUNDLE_DISCOUNT_AMOUNT
COMMISSION_DI-RECT_COST_AMOUNT	COMMISSION_DI-RECT_COST_AMOUNT	COMMISSION_DI-RECT_COST_AMOUNT
CONTENT_BASE_CHARGE_DIS-COUNT_AMOUNT	CONTENT_BASE_CHARGE_DIS-COUNT_AMOUNT	CONTENT_BASE_CHARGE_DIS-COUNT_AMOUNT
CONTENT_BASE_CHARGE_REVE-NUE_AMOUNT	CONTENT_BASE_CHARGE_REVE-NUE_AMOUNT	CONTENT_BASE_CHARGE_REVE-NUE_AMOUNT
CONTENT_DIRECT_COST_AMOUNT	CONTENT_DIRECT_COST_AMOUNT	CONTENT_DIRECT_COST_AMOUNT
CONTENT_DURATION_USAGE	CONTENT_DURATION_USAGE	CONTENT_DURATION_USAGE
CONTENT_EVENT_USAGE	CONTENT_EVENT_USAGE	CONTENT_EVENT_USAGE
CONTENT_MARGIN_AMOUNT	Content Margin	CONTENT_MARGIN_AMOUNT Threshold: Critical CONTENT_MARGIN_AMOUNT< 200000 Warning: 200000 <= CONTENT_MAR-GIN_AMOUNT< 1000000 OK: 1000000 <=CONTENT_MAR-GIN_AMOUNT
CONTENT_REVENUE_AMOUNT	CONTENT_REVENUE_AMOUNT	CONTENT_REVENUE_AMOUNT
CONTENT_VOLUME_USAGE	CONTENT_VOLUME_USAGE	CONTENT_VOLUME_USAGE
CREDIT_NOTE_COST	CREDIT_NOTE_COST	CREDIT_NOTE_COST
CUSTOMER_ASSIGNABLE_COST	CUSTOMER_ASSIGNABLE_COST	CUSTOMER_ASSIGNABLE_COST
CUSTOMER_ASSIGNABLE_NON_SPE-CIFIC_COST	CUSTOMER_ASSIGNABLE_NON_SPE-CIFIC_COST	CUSTOMER_ASSIGNABLE_NON_SPE-CIFIC_COST
CUSTOMER_SERVICE_COST	CUSTOMER_SERVICE_COST	CUSTOMER_SERVICE_COST
DATA_REVENUE_AMOUNT	DATA_REVENUE_AMOUNT	DATA_REVENUE_AMOUNT
DATA_USAGE	DATA_USAGE	DATA_USAGE
DIRECT_COST_AMOUNT	DIRECT_COST_AMOUNT	DIRECT_COST_AMOUNT
DIRECT_MARGIN_AMOUNT	DIRECT_MARGIN_AMOUNT	DIRECT_MARGIN_AMOUNT
DISCOUNT_AMOUNT	DISCOUNT_AMOUNT	DISCOUNT_AMOUNT
EVENT	EVENT	EVENT
EXACT_DURATION	EXACT_DURATION	EXACT_DURATION

Model Name: Technical Name of Model		Connection
HARDWARE_BASE_CHARGE_DIS-COUNT_AMOUNT	HARDWARE_BASE_CHARGE_DIS-COUNT_AMOUNT	HARDWARE_BASE_CHARGE_DIS-COUNT_AMOUNT
HARDWARE_DIRECT_COST_AMOUNT	HARDWARE_DIRECT_COST_AMOUNT	HARDWARE_DIRECT_COST_AMOUNT
HARDWARE_REVENUE_AMOUNT	HARDWARE_REVENUE_AMOUNT	HARDWARE_REVENUE_AMOUNT
INDIRECT_COST_AMOUNT	INDIRECT_COST_AMOUNT	INDIRECT_COST_AMOUNT
INTERCARRIER_COST_AMOUNT	INTERCARRIER_COST_AMOUNT	INTERCARRIER_COST_AMOUNT
INTERCARRIER_MESSAGING_DI-RECT_COST_AMOUNT	INTERCARRIER_MESSAGING_DI-RECT_COST_AMOUNT	INTERCARRIER_MESSAGING_DI-RECT_COST_AMOUNT
INTERCARRIER_MESSAGING_REVE-NUE_AMOUNT	INTERCARRIER_MESSAGING_REVE-NUE_AMOUNT	INTERCARRIER_MESSAGING_REVE-NUE_AMOUNT
INTERCARRIER_MESSAGING_USAGE	INTERCARRIER_MESSAGING_USAGE	INTERCARRIER_MESSAGING_USAGE
INTERCARRIER_NON_SPE-CIFIC_COST_AMOUNT	INTERCARRIER_NON_SPE-CIFIC_COST_AMOUNT	INTERCARRIER_NON_SPE-CIFIC_COST_AMOUNT
INTERCARRIER_NON_SPECIFIC_REVE-NUE_AMOUNT	INTERCARRIER_NON_SPECIFIC_REVE-NUE_AMOUNT	INTERCARRIER_NON_SPECIFIC_REVE-NUE_AMOUNT
INTERCARRIER_REVENUE_AMOUNT	INTERCARRIER_REVENUE_AMOUNT	INTERCARRIER_REVENUE_AMOUNT
INTERCARRIER_VOICE_DI-RECT_COST_AMOUNT	INTERCARRIER_VOICE_DI-RECT_COST_AMOUNT	INTERCARRIER_VOICE_DI-RECT_COST_AMOUNT
INTERCARRIER_VOICE_REVE-NUE_AMOUNT	INTERCARRIER_VOICE_REVE-NUE_AMOUNT	INTERCARRIER_VOICE_REVE-NUE_AMOUNT
INTERCARRIER_VOICE_USAGE	INTERCARRIER_VOICE_USAGE	INTERCARRIER_VOICE_USAGE
INTERCONNECT_COST_AMOUNT	INTERCONNECT_COST_AMOUNT	INTERCONNECT_COST_AMOUNT
INTERCONNECT_MESSAGING_DI-RECT_COST_AMOUNT	INTERCONNECT_MESSAGING_DI-RECT_COST_AMOUNT	INTERCONNECT_MESSAGING_DI-RECT_COST_AMOUNT
INTERCONNECT_MESSAGING_REVE-NUE_AMOUNT	INTERCONNECT_MESSAGING_REVE-NUE_AMOUNT	INTERCONNECT_MESSAGING_REVE-NUE_AMOUNT
INTERCONNECT_NON_SPE-CIFIC_COST_AMOUNT	INTERCONNECT_NON_SPE-CIFIC_COST_AMOUNT	INTERCONNECT_NON_SPE-CIFIC_COST_AMOUNT
INTERCONNECT_NON_SPECIFIC_REV-ENUE_AMOUNT	INTERCONNECT_NON_SPECIFIC_REV-ENUE_AMOUNT	INTERCONNECT_NON_SPECIFIC_REV-ENUE_AMOUNT
INTERCONNECT_REVENUE_AMOUNT	INTERCONNECT_REVENUE_AMOUNT	INTERCONNECT_REVENUE_AMOUNT
INTERCONNECT_VOICE_DI-RECT_COST_AMOUNT	INTERCONNECT_VOICE_DI-RECT_COST_AMOUNT	INTERCONNECT_VOICE_DI-RECT_COST_AMOUNT
INTERCONNECT_VOICE_REVE-NUE_AMOUNT	INTERCONNECT_VOICE_REVE-NUE_AMOUNT	INTERCONNECT_VOICE_REVE-NUE_AMOUNT
MESSAGING_REVENUE_AMOUNT	MESSAGING_REVENUE_AMOUNT	MESSAGING_REVENUE_AMOUNT
MESSAGING_USAGE	MESSAGING_USAGE	MESSAGING_USAGE
NETWORK_INDIRECT_COST_AMOUNT	NETWORK_INDIRECT_COST_AMOUNT	NETWORK_INDIRECT_COST_AMOUNT
NON_SPECIFIC_DATA_USAGE	NON_SPECIFIC_DATA_USAGE	NON_SPECIFIC_DATA_USAGE

Model Name: Technical Name of Model		Connection
NON_SPECIFIC_DI-RECT_COST_AMOUNT	NON_SPECIFIC_DI-RECT_COST_AMOUNT	NON_SPECIFIC_DI-RECT_COST_AMOUNT
NON_SPECIFIC_DISCOUNT_AMOUNT	NON_SPECIFIC_DISCOUNT_AMOUNT	NON_SPECIFIC_DISCOUNT_AMOUNT
NON_SPECIFIC_DURATION_USAGE	NON_SPECIFIC_DURATION_USAGE	NON_SPECIFIC_DURATION_USAGE
NON_SPECIFIC_EVENT_USAGE	NON_SPECIFIC_EVENT_USAGE	NON_SPECIFIC_EVENT_USAGE
NON_SPECIFIC_INDI-RECT_COST_AMOUNT	NON_SPECIFIC_INDI-RECT_COST_AMOUNT	NON_SPECIFIC_INDI-RECT_COST_AMOUNT
NON_SPECIFIC_MESSAGING_USAGE	NON_SPECIFIC_MESSAGING_USAGE	NON_SPECIFIC_MESSAGING_USAGE
NON_SPECIFIC_PAYMENT_AMOUNT	NON_SPECIFIC_PAYMENT_AMOUNT	NON_SPECIFIC_PAYMENT_AMOUNT
NON_SPECIFIC_REVENUE_AMOUNT	NON_SPECIFIC_REVENUE_AMOUNT	NON_SPECIFIC_REVENUE_AMOUNT
NON_SPECIFIC_VOICE_USAGE	NON_SPECIFIC_VOICE_USAGE	NON_SPECIFIC_VOICE_USAGE
NON_SPECIFIC_VOLUME_USAGE	NON_SPECIFIC_VOLUME_USAGE	NON_SPECIFIC_VOLUME_USAGE
NON_USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	NON_USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	NON_USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT
NON_USAGE_REVENUE_AMOUNT	NON_USAGE_REVENUE_AMOUNT	NON_USAGE_REVENUE_AMOUNT
OFF_NET_MESSAGING_USAGE	OFF_NET_MESSAGING_USAGE	OFF_NET_MESSAGING_USAGE
OFF_NET_VOICE_USAGE	OFF_NET_VOICE_USAGE	OFF_NET_VOICE_USAGE
ONE_OFF_DIRECT_COST_AMOUNT	ONE_OFF_DIRECT_COST_AMOUNT	ONE_OFF_DIRECT_COST_AMOUNT
ONE_OFF_DISCOUNT_AMOUNT	ONE_OFF_DISCOUNT_AMOUNT	ONE_OFF_DISCOUNT_AMOUNT
ONE_OFF_FEE_REVENUE_AMOUNT	ONE_OFF_FEE_REVENUE_AMOUNT	ONE_OFF_FEE_REVENUE_AMOUNT
ON_NET_DATA_REVENUE_AMOUNT	ON_NET_DATA_REVENUE_AMOUNT	ON_NET_DATA_REVENUE_AMOUNT
ON_NET_DATA_USAGE	ON_NET_DATA_USAGE	ON_NET_DATA_USAGE
ON_NET_MESSAGING_REVE-NUE_AMOUNT	ON_NET_MESSAGING_REVE-NUE_AMOUNT	ON_NET_MESSAGING_REVE-NUE_AMOUNT
ON_NET_MESSAGING_USAGE	ON_NET_MESSAGING_USAGE	ON_NET_MESSAGING_USAGE
ON_NET_NON_SPECIFIC_REVE-NUE_AMOUNT	ON_NET_NON_SPECIFIC_REVE-NUE_AMOUNT	ON_NET_NON_SPECIFIC_REVE-NUE_AMOUNT
ON_NET_REVENUE_AMOUNT	ON_NET_REVENUE_AMOUNT	ON_NET_REVENUE_AMOUNT
ON_NET_VOICE_REVENUE_AMOUNT	ON_NET_VOICE_REVENUE_AMOUNT	ON_NET_VOICE_REVENUE_AMOUNT
ON_NET_VOICE_USAGE	ON_NET_VOICE_USAGE	ON_NET_VOICE_USAGE
OPERATIONAL_MARGIN_AMOUNT	OPERATIONAL_MARGIN_AMOUNT	OPERATIONAL_MARGIN_AMOUNT
ORIGINAL_DIRECT_COST_AMOUNT	ORIGINAL_DIRECT_COST_AMOUNT	ORIGINAL_DIRECT_COST_AMOUNT
ORIGINAL_DISCOUNT_AMOUNT	ORIGINAL_DISCOUNT_AMOUNT	ORIGINAL_DISCOUNT_AMOUNT
ORIGINAL_INDIRECT_COST_AMOUNT	ORIGINAL_INDIRECT_COST_AMOUNT	ORIGINAL_INDIRECT_COST_AMOUNT
ORIGINAL_REVENUE_AMOUNT	ORIGINAL_REVENUE_AMOUNT	ORIGINAL_REVENUE_AMOUNT
PAYMENT_AMOUNT	PAYMENT_AMOUNT	PAYMENT_AMOUNT

Model Name: Technical Name of Model		Connection
PRE_DISCOUNT_REVENUE_AMOUNT	PRE_DISCOUNT_REVENUE_AMOUNT	PRE_DISCOUNT_REVENUE_AMOUNT
PRODUCT_INDIRECT_COST_AMOUNT	PRODUCT_INDIRECT_COST_AMOUNT	PRODUCT_INDIRECT_COST_AMOUNT
RETENTION_COST_AMOUNT	RETENTION_COST_AMOUNT	RETENTION_COST_AMOUNT
REVENUE_AMOUNT	Revenue	REVENUE_AMOUNT
ROAMING_COST_AMOUNT	ROAMING_COST_AMOUNT	ROAMING_COST_AMOUNT
ROAMING_DATA_DIRECT_COST_AMOUNT	ROAMING_DATA_DIRECT_COST_AMOUNT	ROAMING_DATA_DIRECT_COST_AMOUNT
ROAMING_DATA_REVENUE_AMOUNT	ROAMING_DATA_REVENUE_AMOUNT	ROAMING_DATA_REVENUE_AMOUNT
ROAMING_IC_MARGIN_AMOUNT	Roaming and IC Margin	ROAMING_IC_MARGIN_AMOUNT Threshold: Critical: ROAMING_IC_MARGIN_AMOUNT<= 5000000 Warning: 5000000< ROAMING_IC_MARGIN_AMOUNT <= 10000000 OK: 10000000 < ROAMING_IC_MARGIN_AMOUNT
ROAMING_INVOICED_DATA_USAGE	ROAMING_INVOICED_DATA_USAGE	ROAMING_INVOICED_DATA_USAGE
ROAMING_INVOICED_MESSAGING_USAGE	ROAMING_INVOICED_MESSAGING_USAGE	ROAMING_INVOICED_MESSAGING_USAGE
ROAMING_INVOICED_VOICE_USAGE	ROAMING_INVOICED_VOICE_USAGE	ROAMING_INVOICED_VOICE_USAGE
ROAMING_MESSAGING_DIRECT_COST_AMOUNT	ROAMING_MESSAGING_DIRECT_COST_AMOUNT	ROAMING_MESSAGING_DIRECT_COST_AMOUNT
ROAMING_MESSAGING_REVENUE_AMOUNT	ROAMING_MESSAGING_REVENUE_AMOUNT	ROAMING_MESSAGING_REVENUE_AMOUNT
ROAMING_NON_SPECIFIC_COST_AMOUNT	ROAMING_NON_SPECIFIC_COST_AMOUNT	ROAMING_NON_SPECIFIC_COST_AMOUNT
ROAMING_NON_SPECIFIC_REVENUE_AMOUNT	ROAMING_NON_SPECIFIC_REVENUE_AMOUNT	ROAMING_NON_SPECIFIC_REVENUE_AMOUNT
ROAMING_PLAN_MARGIN_AMOUNT	ROAMING_PLAN_MARGIN_AMOUNT	ROAMING_PLAN_MARGIN_AMOUNT
ROAMING_PLAN_REVENUE_AMOUNT	ROAMING_PLAN_REVENUE_AMOUNT	ROAMING_PLAN_REVENUE_AMOUNT
ROAMING_REVENUE_AMOUNT	ROAMING_REVENUE_AMOUNT	ROAMING_REVENUE_AMOUNT
ROAMING_VOICE_DIRECT_COST_AMOUNT	ROAMING_VOICE_DIRECT_COST_AMOUNT	ROAMING_VOICE_DIRECT_COST_AMOUNT
ROAMING_VOICE_REVENUE_AMOUNT	ROAMING_VOICE_REVENUE_AMOUNT	ROAMING_VOICE_REVENUE_AMOUNT
SUBSIDY_DIRECT_COST_AMOUNT	SUBSIDY_DIRECT_COST_AMOUNT	SUBSIDY_DIRECT_COST_AMOUNT
TERMINATION_FEE_REVENUE_AMOUNT	TERMINATION_FEE_REVENUE_AMOUNT	TERMINATION_FEE_REVENUE_AMOUNT

Model Name: Technical Name of Model		Connection
TOP_UP_AMOUNT	TOP_UP_AMOUNT	TOP_UP_AMOUNT
TOTAL_COST_AMOUNT	Total Cost	TOTAL_COST_AMOUNT
TOTAL_MARGIN_AMOUNT	Total Margin	TOTAL_MARGIN_AMOUNT
USAGE_COST_AMOUNT	USAGE_COST_AMOUNT	USAGE_COST_AMOUNT
USAGE_DISCOUNT_AMOUNT	USAGE_DISCOUNT_AMOUNT	USAGE_DISCOUNT_AMOUNT
USAGE_NON_SPE-CIFIC_COST_AMOUNT	USAGE_NON_SPE-CIFIC_COST_AMOUNT	USAGE_NON_SPE-CIFIC_COST_AMOUNT
USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT
USAGE_REVENUE_AMOUNT	USAGE_REVENUE_AMOUNT	USAGE_REVENUE_AMOUNT
VAS_DATA_USAGE	VAS_DATA_USAGE	VAS_DATA_USAGE
VAS_DIRECT_COST_AMOUNT	VAS_DIRECT_COST_AMOUNT	VAS_DIRECT_COST_AMOUNT
VAS_MESSAGING_USAGE	VAS_MESSAGING_USAGE	VAS_MESSAGING_USAGE
VAS_REVENUE_AMOUNT	VAS_REVENUE_AMOUNT	VAS_REVENUE_AMOUNT
VAS_VOICE_USAGE	VAS_VOICE_USAGE	VAS_VOICE_USAGE
VOICE_REVENUE_AMOUNT	VOICE_REVENUE_AMOUNT	VOICE_REVENUE_AMOUNT
VOICE_USAGE	VOICE_USAGE	VOICE_USAGE
VOLUME	Volume	VOLUME
Dimensions		
Name	**Description**	**Mapping**
VALID_FOR_MONTH	Month	VALID_FOR_MONTH
TECHNOLOGY	TECHNOLOGY	TECHNOLOGY
SERVICE_SPECIFICATION_TYPE	SERVICE_SPECIFICATION_TYPE	SERVICE_SPECIFICATION_TYPE
RESOURCE	RESOURCE	RESOURCE
CARRIER_ID	CARRIER_ID	CARRIER_ID
THIRD_PARTY_ID	THIRD_PARTY_ID	THIRD_PARTY_ID
COST_REV_TYPE	COST_REV_TYPE	COST_REV_TYPE
CUSTOMER_TYPE	Customer Type	CUSTOMER_TYPE
GENDER	GENDER	GENDER
NATIONALITY	NATIONALITY	NATIONALITY
CUSTOMER_COUNTRY	CUSTOMER_COUNTRY	CUSTOMER_COUNTRY
POSTCODE	POSTCODE	POSTCODE
REGION	REGION	REGION
MARITAL_STATUS	MARITAL_STATUS	MARITAL_STATUS
CUSTOMER_CLASSIFICATION_01	CUSTOMER_CLASSIFICATION_01	CUSTOMER_CLASSIFICATION_01

Model Name: Technical Name of Model		Connection
CUSTOMER_CLASSIFICATION_02	CUSTOMER_CLASSIFICATION_02	CUSTOMER_CLASSIFICATION_02
CUSTOMER_CLASSIFICATION_03	CUSTOMER_CLASSIFICATION_03	CUSTOMER_CLASSIFICATION_03
CUSTOMER_CLASSIFICATION_04	CUSTOMER_CLASSIFICATION_04	CUSTOMER_CLASSIFICATION_04
CUSTOMER_CLASSIFICATION_05	CUSTOMER_CLASSIFICATION_05	CUSTOMER_CLASSIFICATION_05
CUSTOMER_CLASSIFICATION_06	CUSTOMER_CLASSIFICATION_06	CUSTOMER_CLASSIFICATION_06
BILLING_ACCOUNT_CLASSIFICATION_01	BILLING_ACCOUNT_CLASSIFICATION_01	BILLING_ACCOUNT_CLASSIFICATION_01
BILLING_ACCOUNT_CLASSIFICATION_02	BILLING_ACCOUNT_CLASSIFICATION_02	BILLING_ACCOUNT_CLASSIFICATION_02
SUBSCRIPTION_PRODUCT_OFFERING_ID	Product Offering	SUBSCRIPTION_PRODUCT_OFFERING_ID
SUBSCRIPTION_CLASSIFICATION_01	SUBSCRIPTION_CLASSIFICATION_01	SUBSCRIPTION_CLASSIFICATION_01
SUBSCRIPTION_CLASSIFICATION_02	SUBSCRIPTION_CLASSIFICATION_02	SUBSCRIPTION_CLASSIFICATION_02
SUBSCRIPTION_SALES_CHANNEL	Sales Channel	SUBSCRIPTION_SALES_CHANNEL
SUBSCRIPTION_ORG_UNIT	SUBSCRIPTION_ORG_UNIT	SUBSCRIPTION_ORG_UNIT
SUBSCRIPTION_STATUS	SUBSCRIPTION_STATUS	SUBSCRIPTION_STATUS
SUBSCRIPTION_MARKET_ID	SUBSCRIPTION_MARKET_ID	SUBSCRIPTION_MARKET_ID
LOYALTY_STATUS	LOYALTY_STATUS	LOYALTY_STATUS
CARRIER_COUNTRY	CARRIER_COUNTRY	CARRIER_COUNTRY
CARRIER_ROAMING_ZONE	CARRIER_ROAMING_ZONE	CARRIER_ROAMING_ZONE
CARRIER_IS_PREFERRED	CARRIER_IS_PREFERRED	CARRIER_IS_PREFERRED
THIRD_PARTY_TYPE	THIRD_PARTY_TYPE	THIRD_PARTY_TYPE
CLASSIFICATION_01	CLASSIFICATION_01	CLASSIFICATION_01
CLASSIFICATION_02	CLASSIFICATION_02	CLASSIFICATION_02
CLASSIFICATION_03	CLASSIFICATION_03	CLASSIFICATION_03
CLASSIFICATION_04	CLASSIFICATION_04	CLASSIFICATION_04
CLASSIFICATION_05	Item Type 5	CLASSIFICATION_05
CLASSIFICATION_06	CLASSIFICATION_06	CLASSIFICATION_06
SUBSCRIPTION_PRODUCT_GROUP	SUBSCRIPTION_PRODUCT_GROUP	SUBSCRIPTION_PRODUCT_GROUP
SUBSCRIPTION_PRODUCT_TECHNOLOGY	SUBSCRIPTION_PRODUCT_TECHNOLOGY	SUBSCRIPTION_PRODUCT_TECHNOLOGY
SUBSCRIPTION_PRODUCT_MARKET_ID	SUBSCRIPTION_PRODUCT_MARKET_ID	SUBSCRIPTION_PRODUCT_MARKET_ID
SUBSCRIPTION_PRODUCT_STATUS	SUBSCRIPTION_PRODUCT_STATUS	SUBSCRIPTION_PRODUCT_STATUS
CURRENCY	CURRENCY	

3.5.4.3 Telecommunications - CRS Data incl. Subscription Count (SAP__CPA_LH_TEL_CRS_COUNT)

Model Name: Technical Name of Model	Connection
• Model Description: SAP CPA: Telecommunications - CRS Data incl. Subscription Count • Planning Enabled: No	• Connection Type: Direct - SAP HANA Live Data Connection with Authentication Method SAML Single Sign On • Connection Name: SAPCPA (SAP CPA: Customer Profitability Analytics) • Calculation View: SAP_BDPT.sap.bdpt.hana.publicmodel::CV_CRS_COUNT

Measures

ID	Description	Mapping/Formula/Threshold
ACQUISITION_COST_AMOUNT	Acquisition Cost	ACQUISITION_COST_AMOUNT
ACQUISITION_NON_SPECIFIC_COST_AMOUNT	Other Acquisition Cost	ACQUISITION_NON_SPECIFIC_COST_AMOUNT
ACTIVATION_COST_AMOUNT	Activation Cost	ACTIVATION_COST_AMOUNT
BAD_DEBT_DIRECT_COST_AMOUNT	Bad Debt	BAD_DEBT_DIRECT_COST_AMOUNT
BASE_CHARGE_DISCOUNT_AMOUNT	Base Charge Discount	BASE_CHARGE_DISCOUNT_AMOUNT
BASE_CHARGE_REVENUE_AMOUNT	Base Charge	BASE_CHARGE_REVENUE_AMOUNT
BONUS_POINT_PAYMENT_AMOUNT	Bonus Points Payment	BONUS_POINT_PAYMENT_AMOUNT
BUNDLE_CHARGE_REVENUE_AMOUNT	Bundle Charge	BUNDLE_CHARGE_REVENUE_AMOUNT
BUNDLE_DISCOUNT_AMOUNT	Bundle Discount	BUNDLE_DISCOUNT_AMOUNT
COMMISSION_DIRECT_COST_AMOUNT	Commission Cost	COMMISSION_DIRECT_COST_AMOUNT
CONTENT_DIRECT_COST_AMOUNT	Content Cost	CONTENT_DIRECT_COST_AMOUNT
CONTENT_DURATION_USAGE	Content Duration Usage	CONTENT_DURATION_USAGE
CONTENT_EVENT_USAGE	Content Messaging Usage	CONTENT_EVENT_USAGE
CONTENT_REVENUE_AMOUNT	Content Revenue	CONTENT_REVENUE_AMOUNT
CONTENT_VOLUME_USAGE	Content Volume Usage	CONTENT_VOLUME_USAGE
CREDIT_NOTE_COST	Credit Notes Cost	CREDIT_NOTE_COST
CUSTOMER_ASSIGNABLE_COST	Customer Assignable Cost	CUSTOMER_ASSIGNABLE_COST
CUSTOMER_ASSIGNABLE_NON_SPECIFIC_COST	Other Customer Assignable Cost	CUSTOMER_ASSIGNABLE_NON_SPECIFIC_COST
CUSTOMER_SERVICE_COST	CUSTOMER_SERVICE_COST	CUSTOMER_SERVICE_COST
DATA_REVENUE_AMOUNT	DATA_REVENUE_AMOUNT	DATA_REVENUE_AMOUNT

Model Name: Technical Name of Model		Connection
DATA_USAGE	DATA_USAGE	DATA_USAGE
DIRECT_COST_AMOUNT	DIRECT_COST_AMOUNT	DIRECT_COST_AMOUNT
DIRECT_MARGIN_AMOUNT	Direct Margin	DIRECT_MARGIN_AMOUNT
DISCOUNT_AMOUNT	DISCOUNT_AMOUNT	DISCOUNT_AMOUNT
EVENT	EVENT	EVENT
EXACT_DURATION	EXACT_DURATION	EXACT_DURATION
HARDWARE_DIRECT_COST_AMOUNT	HARDWARE_DIRECT_COST_AMOUNT	HARDWARE_DIRECT_COST_AMOUNT
HARDWARE_REVENUE_AMOUNT	HARDWARE_REVENUE_AMOUNT	HARDWARE_REVENUE_AMOUNT
INDIRECT_COST_AMOUNT	INDIRECT_COST_AMOUNT	INDIRECT_COST_AMOUNT
INTERCONNECT_COST_AMOUNT	INTERCONNECT_COST_AMOUNT	INTERCONNECT_COST_AMOUNT
INTERCONNECT_MESSAGING_DIRECT_COST_AMOUNT	INTERCONNECT_MESSAGING_DIRECT_COST_AMOUNT	INTERCONNECT_MESSAGING_DIRECT_COST_AMOUNT
INTERCONNECT_MESSAGING_REVENUE_AMOUNT	INTERCONNECT_MESSAGING_REVENUE_AMOUNT	INTERCONNECT_MESSAGING_REVENUE_AMOUNT
INTERCONNECT_NON_SPECIFIC_COST_AMOUNT	INTERCONNECT_NON_SPECIFIC_COST_AMOUNT	INTERCONNECT_NON_SPECIFIC_COST_AMOUNT
INTERCONNECT_NON_SPECIFIC_REVENUE_AMOUNT	INTERCONNECT_NON_SPECIFIC_REVENUE_AMOUNT	INTERCONNECT_NON_SPECIFIC_REVENUE_AMOUNT
INTERCONNECT_REVENUE_AMOUNT	INTERCONNECT_REVENUE_AMOUNT	INTERCONNECT_REVENUE_AMOUNT
INTERCONNECT_VOICE_DIRECT_COST_AMOUNT	INTERCONNECT_VOICE_DIRECT_COST_AMOUNT	INTERCONNECT_VOICE_DIRECT_COST_AMOUNT
INTERCONNECT_VOICE_REVENUE_AMOUNT	INTERCONNECT_VOICE_REVENUE_AMOUNT	INTERCONNECT_VOICE_REVENUE_AMOUNT
MESSAGING_REVENUE_AMOUNT	MESSAGING_REVENUE_AMOUNT	MESSAGING_REVENUE_AMOUNT
MESSAGING_USAGE	MESSAGING_USAGE	MESSAGING_USAGE
NETWORK_INDIRECT_COST_AMOUNT	NETWORK_INDIRECT_COST_AMOUNT	NETWORK_INDIRECT_COST_AMOUNT
NON_SPECIFIC_DATA_USAGE	NON_SPECIFIC_DATA_USAGE	NON_SPECIFIC_DATA_USAGE
NON_SPECIFIC_DIRECT_COST_AMOUNT	NON_SPECIFIC_DIRECT_COST_AMOUNT	NON_SPECIFIC_DIRECT_COST_AMOUNT
NON_SPECIFIC_DISCOUNT_AMOUNT	NON_SPECIFIC_DISCOUNT_AMOUNT	NON_SPECIFIC_DISCOUNT_AMOUNT
NON_SPECIFIC_DURATION_USAGE	NON_SPECIFIC_DURATION_USAGE	NON_SPECIFIC_DURATION_USAGE
NON_SPECIFIC_EVENT_USAGE	NON_SPECIFIC_EVENT_USAGE	NON_SPECIFIC_EVENT_USAGE
NON_SPECIFIC_INDIRECT_COST_AMOUNT	NON_SPECIFIC_INDIRECT_COST_AMOUNT	NON_SPECIFIC_INDIRECT_COST_AMOUNT
NON_SPECIFIC_MESSAGING_USAGE	NON_SPECIFIC_MESSAGING_USAGE	NON_SPECIFIC_MESSAGING_USAGE
NON_SPECIFIC_PAYMENT_AMOUNT	NON_SPECIFIC_PAYMENT_AMOUNT	NON_SPECIFIC_PAYMENT_AMOUNT
NON_SPECIFIC_REVENUE_AMOUNT	NON_SPECIFIC_REVENUE_AMOUNT	NON_SPECIFIC_REVENUE_AMOUNT

Model Name: Technical Name of Model		Connection
NON_SPECIFIC_VOICE_USAGE	NON_SPECIFIC_VOICE_USAGE	NON_SPECIFIC_VOICE_USAGE
NON_SPECIFIC_VOLUME_USAGE	NON_SPECIFIC_VOLUME_USAGE	NON_SPECIFIC_VOLUME_USAGE
NON_USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	NON_USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	NON_USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT
NON_USAGE_REVENUE_AMOUNT	NON_USAGE_REVENUE_AMOUNT	NON_USAGE_REVENUE_AMOUNT
OFF_NET_MESSAGING_USAGE	OFF_NET_MESSAGING_USAGE	OFF_NET_MESSAGING_USAGE
OFF_NET_VOICE_USAGE	OFF_NET_VOICE_USAGE	OFF_NET_VOICE_USAGE
ONE_OFF_DIRECT_COST_AMOUNT	ONE_OFF_DIRECT_COST_AMOUNT	ONE_OFF_DIRECT_COST_AMOUNT
ONE_OFF_DISCOUNT_AMOUNT	ONE_OFF_DISCOUNT_AMOUNT	ONE_OFF_DISCOUNT_AMOUNT
ONE_OFF_FEE_REVENUE_AMOUNT	ONE_OFF_FEE_REVENUE_AMOUNT	ONE_OFF_FEE_REVENUE_AMOUNT
ON_NET_DATA_REVENUE_AMOUNT	ON_NET_DATA_REVENUE_AMOUNT	ON_NET_DATA_REVENUE_AMOUNT
ON_NET_DATA_USAGE	ON_NET_DATA_USAGE	ON_NET_DATA_USAGE
ON_NET_MESSAGING_REVE-NUE_AMOUNT	ON_NET_MESSAGING_REVE-NUE_AMOUNT	ON_NET_MESSAGING_REVE-NUE_AMOUNT
ON_NET_MESSAGING_USAGE	ON_NET_MESSAGING_USAGE	ON_NET_MESSAGING_USAGE
ON_NET_NON_SPECIFIC_REVE-NUE_AMOUNT	ON_NET_NON_SPECIFIC_REVE-NUE_AMOUNT	ON_NET_NON_SPECIFIC_REVE-NUE_AMOUNT
ON_NET_REVENUE_AMOUNT	ON_NET_REVENUE_AMOUNT	ON_NET_REVENUE_AMOUNT
ON_NET_VOICE_REVENUE_AMOUNT	ON_NET_VOICE_REVENUE_AMOUNT	ON_NET_VOICE_REVENUE_AMOUNT
ON_NET_VOICE_USAGE	ON_NET_VOICE_USAGE	ON_NET_VOICE_USAGE
OPERATIONAL_MARGIN_AMOUNT	OPERATIONAL_MARGIN_AMOUNT	OPERATIONAL_MARGIN_AMOUNT
ORIGINAL_DIRECT_COST_AMOUNT	ORIGINAL_DIRECT_COST_AMOUNT	ORIGINAL_DIRECT_COST_AMOUNT
ORIGINAL_DISCOUNT_AMOUNT	ORIGINAL_DISCOUNT_AMOUNT	ORIGINAL_DISCOUNT_AMOUNT
ORIGINAL_INDIRECT_COST_AMOUNT	ORIGINAL_INDIRECT_COST_AMOUNT	ORIGINAL_INDIRECT_COST_AMOUNT
ORIGINAL_REVENUE_AMOUNT	ORIGINAL_REVENUE_AMOUNT	ORIGINAL_REVENUE_AMOUNT
PAYMENT_AMOUNT	PAYMENT_AMOUNT	PAYMENT_AMOUNT
PRE_DISCOUNT_REVENUE_AMOUNT	PRE_DISCOUNT_REVENUE_AMOUNT	PRE_DISCOUNT_REVENUE_AMOUNT
PRODUCT_INDIRECT_COST_AMOUNT	PRODUCT_INDIRECT_COST_AMOUNT	PRODUCT_INDIRECT_COST_AMOUNT
RETENTION_COST_AMOUNT	RETENTION_COST_AMOUNT	RETENTION_COST_AMOUNT
REVENUE_AMOUNT	REVENUE_AMOUNT	REVENUE_AMOUNT
ROAMING_COST_AMOUNT	ROAMING_COST_AMOUNT	ROAMING_COST_AMOUNT
ROAMING_DATA_DI-RECT_COST_AMOUNT	ROAMING_DATA_DI-RECT_COST_AMOUNT	ROAMING_DATA_DI-RECT_COST_AMOUNT
ROAMING_DATA_REVENUE_AMOUNT	ROAMING_DATA_REVENUE_AMOUNT	ROAMING_DATA_REVENUE_AMOUNT
ROAMING_INVOICED_DATA_USAGE	ROAMING_INVOICED_DATA_USAGE	ROAMING_INVOICED_DATA_USAGE

Model Name: Technical Name of Model		Connection
ROAMING_INVOICED_MESSAG-ING_USAGE	ROAMING_INVOICED_MESSAG-ING_USAGE	ROAMING_INVOICED_MESSAG-ING_USAGE
ROAMING_INVOICED_VOICE_USAGE	ROAMING_INVOICED_VOICE_USAGE	ROAMING_INVOICED_VOICE_USAGE
ROAMING_MESSAGING_DI-RECT_COST_AMOUNT	ROAMING_MESSAGING_DI-RECT_COST_AMOUNT	ROAMING_MESSAGING_DI-RECT_COST_AMOUNT
ROAMING_MESSAGING_REVE-NUE_AMOUNT	ROAMING_MESSAGING_REVE-NUE_AMOUNT	ROAMING_MESSAGING_REVE-NUE_AMOUNT
ROAMING_NON_SPE-CIFIC_COST_AMOUNT	ROAMING_NON_SPE-CIFIC_COST_AMOUNT	ROAMING_NON_SPE-CIFIC_COST_AMOUNT
ROAMING_NON_SPECIFIC_REVE-NUE_AMOUNT	ROAMING_NON_SPECIFIC_REVE-NUE_AMOUNT	ROAMING_NON_SPECIFIC_REVE-NUE_AMOUNT
ROAMING_PLAN_MARGIN_AMOUNT	ROAMING_PLAN_MARGIN_AMOUNT	ROAMING_PLAN_MARGIN_AMOUNT
ROAMING_PLAN_REVENUE_AMOUNT	ROAMING_PLAN_REVENUE_AMOUNT	ROAMING_PLAN_REVENUE_AMOUNT
ROAMING_REVENUE_AMOUNT	ROAMING_REVENUE_AMOUNT	ROAMING_REVENUE_AMOUNT
ROAMING_VOICE_DI-RECT_COST_AMOUNT	ROAMING_VOICE_DI-RECT_COST_AMOUNT	ROAMING_VOICE_DI-RECT_COST_AMOUNT
ROAMING_VOICE_REVENUE_AMOUNT	ROAMING_VOICE_REVENUE_AMOUNT	ROAMING_VOICE_REVENUE_AMOUNT
SUBSIDY_DIRECT_COST_AMOUNT	SUBSIDY_DIRECT_COST_AMOUNT	SUBSIDY_DIRECT_COST_AMOUNT
SUBSCRIPTIONS	Subscriptions	SUBSCRIPTIONS
SUBSCRIPTIONS_BY_PRODUCT	Subscriptions_by_Product	SUBSCRIPTIONS_BY_PRODUCT
TERMINATION_FEE_REVE-NUE_AMOUNT	TERMINATION_FEE_REVE-NUE_AMOUNT	TERMINATION_FEE_REVE-NUE_AMOUNT
TOP_UP_AMOUNT	TOP_UP_AMOUNT	TOP_UP_AMOUNT
TOTAL_COST_AMOUNT	Total Cost	TOTAL_COST_AMOUNT
TOTAL_MARGIN_AMOUNT	Total Margin	TOTAL_MARGIN_AMOUNT
USAGE_COST_AMOUNT	Usage Cost	USAGE_COST_AMOUNT
USAGE_DISCOUNT_AMOUNT	Usage Discount	USAGE_DISCOUNT_AMOUNT
USAGE_NON_SPE-CIFIC_COST_AMOUNT	USAGE_NON_SPE-CIFIC_COST_AMOUNT	USAGE_NON_SPE-CIFIC_COST_AMOUNT
USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT	USAGE_NON_SPECIFIC_REVE-NUE_AMOUNT
USAGE_REVENUE_AMOUNT	USAGE_REVENUE_AMOUNT	USAGE_REVENUE_AMOUNT
VAS_DATA_USAGE	VAS_DATA_USAGE	VAS_DATA_USAGE
VAS_DIRECT_COST_AMOUNT	VAS_DIRECT_COST_AMOUNT	VAS_DIRECT_COST_AMOUNT
VAS_MESSAGING_USAGE	VAS Messaging Usage	VAS_MESSAGING_USAGE
VAS_REVENUE_AMOUNT	VAS Revenue	VAS_REVENUE_AMOUNT
VAS_VOICE_USAGE	VAS Voice Usage	VAS_VOICE_USAGE
VOICE_REVENUE_AMOUNT	Voice Revenue	VOICE_REVENUE_AMOUNT

Model Name: Technical Name of Model		Connection
VOICE_USAGE	Voice Usage	VOICE_USAGE
VOLUME	Volume	VOLUME
Dimensions		
Name	**Description**	**Mapping**
SUBSCRIPTION_ID	SUBSCRIPTION_ID	SUBSCRIPTION_ID
VALID_FOR_MONTH	Month	VALID_FOR_MONTH
TECHNOLOGY	TECHNOLOGY	TECHNOLOGY
SERVICE_SPECIFICATION_TYPE	SERVICE_SPECIFICATION_TYPE	SERVICE_SPECIFICATION_TYPE
RESOURCE	RESOURCE	RESOURCE
CARRIER_ID	CARRIER_ID	CARRIER_ID
THIRD_PARTY_ID	THIRD_PARTY_ID	THIRD_PARTY_ID
COST_REV_TYPE	COST_REV_TYPE	COST_REV_TYPE
CUSTOMER_TYPE	CUSTOMER_TYPE	CUSTOMER_TYPE
GENDER	GENDER	GENDER
NATIONALITY	NATIONALITY	NATIONALITY
CUSTOMER_COUNTRY	CUSTOMER_COUNTRY	CUSTOMER_COUNTRY
POSTCODE	POSTCODE	POSTCODE
REGION	REGION	REGION
MARITAL_STATUS	MARITAL_STATUS	MARITAL_STATUS
CUSTOMER_CLASSIFICATION_01	CUSTOMER_CLASSIFICATION_01	CUSTOMER_CLASSIFICATION_01
CUSTOMER_CLASSIFICATION_02	CUSTOMER_CLASSIFICATION_02	CUSTOMER_CLASSIFICATION_02
CUSTOMER_CLASSIFICATION_03	CUSTOMER_CLASSIFICATION_03	CUSTOMER_CLASSIFICATION_03
CUSTOMER_CLASSIFICATION_04	CUSTOMER_CLASSIFICATION_04	CUSTOMER_CLASSIFICATION_04
CUSTOMER_CLASSIFICATION_05	CUSTOMER_CLASSIFICATION_05	CUSTOMER_CLASSIFICATION_05
CUSTOMER_CLASSIFICATION_06	CUSTOMER_CLASSIFICATION_06	CUSTOMER_CLASSIFICATION_06
BILLING_ACCOUNT_CLASSIFICA-TION_01	BILLING_ACCOUNT_CLASSIFICA-TION_01	BILLING_ACCOUNT_CLASSIFICA-TION_01
BILLING_ACCOUNT_CLASSIFICA-TION_02	BILLING_ACCOUNT_CLASSIFICA-TION_02	BILLING_ACCOUNT_CLASSIFICA-TION_02
SUBSCRIPTION_PRODUCT_OFFER-ING_ID	SUBSCRIPTION_PRODUCT_OFFER-ING_ID	SUBSCRIPTION_PRODUCT_OFFER-ING_ID
SUBSCRIPTION_CLASSIFICATION_01	SUBSCRIPTION_CLASSIFICATION_01	SUBSCRIPTION_CLASSIFICATION_01
BILLING_ACCOUNT_CLASSIFICA-TION_02	BILLING_ACCOUNT_CLASSIFICA-TION_02	BILLING_ACCOUNT_CLASSIFICA-TION_02
SUBSCRIPTION_PRODUCT_OFFER-ING_ID	SUBSCRIPTION_PRODUCT_OFFER-ING_ID	SUBSCRIPTION_PRODUCT_OFFER-ING_ID

Model Name: Technical Name of Model		Connection
SUBSCRIPTION_CLASSIFICATION_01	SUBSCRIPTION_CLASSIFICATION_01	SUBSCRIPTION_CLASSIFICATION_01
SUBSCRIPTION_CLASSIFICATION_02	SUBSCRIPTION_CLASSIFICATION_02	SUBSCRIPTION_CLASSIFICATION_02
SUBSCRIPTION_SALES_CHANNEL	SUBSCRIPTION_SALES_CHANNEL	SUBSCRIPTION_SALES_CHANNEL
SUBSCRIPTION_ORG_UNIT	SUBSCRIPTION_ORG_UNIT	SUBSCRIPTION_ORG_UNIT
SUBSCRIPTION_STATUS	SUBSCRIPTION_STATUS	SUBSCRIPTION_STATUS
SUBSCRIPTION_MARKET_ID	SUBSCRIPTION_MARKET_ID	SUBSCRIPTION_MARKET_ID
LOYALTY_STATUS	LOYALTY_STATUS	LOYALTY_STATUS
CARRIER_COUNTRY	CARRIER_COUNTRY	CARRIER_COUNTRY
CARRIER_ROAMING_ZONE	CARRIER_ROAMING_ZONE	CARRIER_ROAMING_ZONE
CARRIER_IS_PREFERRED	CARRIER_IS_PREFERRED	CARRIER_IS_PREFERRED
THIRD_PARTY_TYPE	THIRD_PARTY_TYPE	THIRD_PARTY_TYPE
CLASSIFICATION_01	CLASSIFICATION_01	CLASSIFICATION_01
CLASSIFICATION_02	CLASSIFICATION_02	CLASSIFICATION_02
CLASSIFICATION_03	CLASSIFICATION_03	CLASSIFICATION_03
CLASSIFICATION_04	CLASSIFICATION_04	CLASSIFICATION_04
CLASSIFICATION_05	CLASSIFICATION_05	CLASSIFICATION_05
CLASSIFICATION_06	CLASSIFICATION_06	CLASSIFICATION_06
SUBSCRIPTION_PRODUCT_GROUP	SUBSCRIPTION_PRODUCT_GROUP	SUBSCRIPTION_PRODUCT_GROUP
SUBSCRIPTION_PRODUCT_TECHNOL-OGY	SUBSCRIPTION_PRODUCT_TECHNOL-OGY	SUBSCRIPTION_PRODUCT_TECHNOL-OGY
SUBSCRIPTION_PRODUCT_MAR-KET_ID	SUBSCRIPTION_PRODUCT_MAR-KET_ID	SUBSCRIPTION_PRODUCT_MAR-KET_ID
SUBSCRIPTION_PRODUCT_STATUS	SUBSCRIPTION_PRODUCT_STATUS	SUBSCRIPTION_PRODUCT_STATUS
CURRENCY	CURRENCY	CURRENCY
VALID_FOR_DATE	VALID_FOR_DATE	VALID_FOR_DATE
SUBSCRIPTION_INTERNAL_ID	SUBSCRIPTION_INTERNAL_ID	SUBSCRIPTION_INTERNAL_ID
START_DATE	START_DATE	START_DATE
END_DATE	END_DATE	END_DATE

3.5.4.4 Telecommunications - CRS Data incl. Subscription Count (SAP__CPA_LH_TEL_UNPROFITSUBSC)

Model Name: Technical Name of Model	Connection
• Model Description: SAP CPA: Telecommunications - Unprofitable Subscribers • Planning Enabled: No	• Connection Type: Direct - SAP HANA Live Data Connection with Authentication Method SAML Single Sign On • Connection Name: SAPCPA (SAP CPA: Customer Profitability Analytics) • Calculation View: SAP_BDPT.sap.bdpt.hana.publicmodel::CV_UNPROFITABLE_CUSTOMERS

Measures		
ID	**Description**	**Mapping/Formula/Threshold**
DIRECT_MARGIN_AMOUNT	Direct Margin	DIRECT_MARGIN_AMOUNT
OPERATIONAL_MARGIN_AMOUNT	Operational Margin	OPERATIONAL_MARGIN_AMOUNT
ROAMING_PLAN_MARGIN_AMOUNT	Roaming Plan Margin	ROAMING_PLAN_MARGIN_AMOUNT
TOTAL_MARGIN_AMOUNT	Total Margin	TOTAL_MARGIN_AMOUNT
UNPROFITABLE_SUBSCRIPTIONS	Unprofitable Subscriptions	Unprofitable_Subscriptions
Dimensions		
Name	**Description**	**Mapping**
VALID_FOR_MONTH	Month	VALID_FOR_MONTH
SUBSCRIPTION_ID	Subscription ID	SUBSCRIPTION_ID
SUBSCRIPTION_PRODUCT_MARKET_ID	Product Market	SUBSCRIPTION_PRODUCT_MARKET_ID
CURRENCY	Currency	CURRENCY

3.6 Engineering, Construction and Operations (ECO)

3.6.1 Architecture and Abstract

With the SAP Analytics Cloud content engineering, construction, and operations companies can leverage consistent business intelligence from all phases of the construction lifecycle.

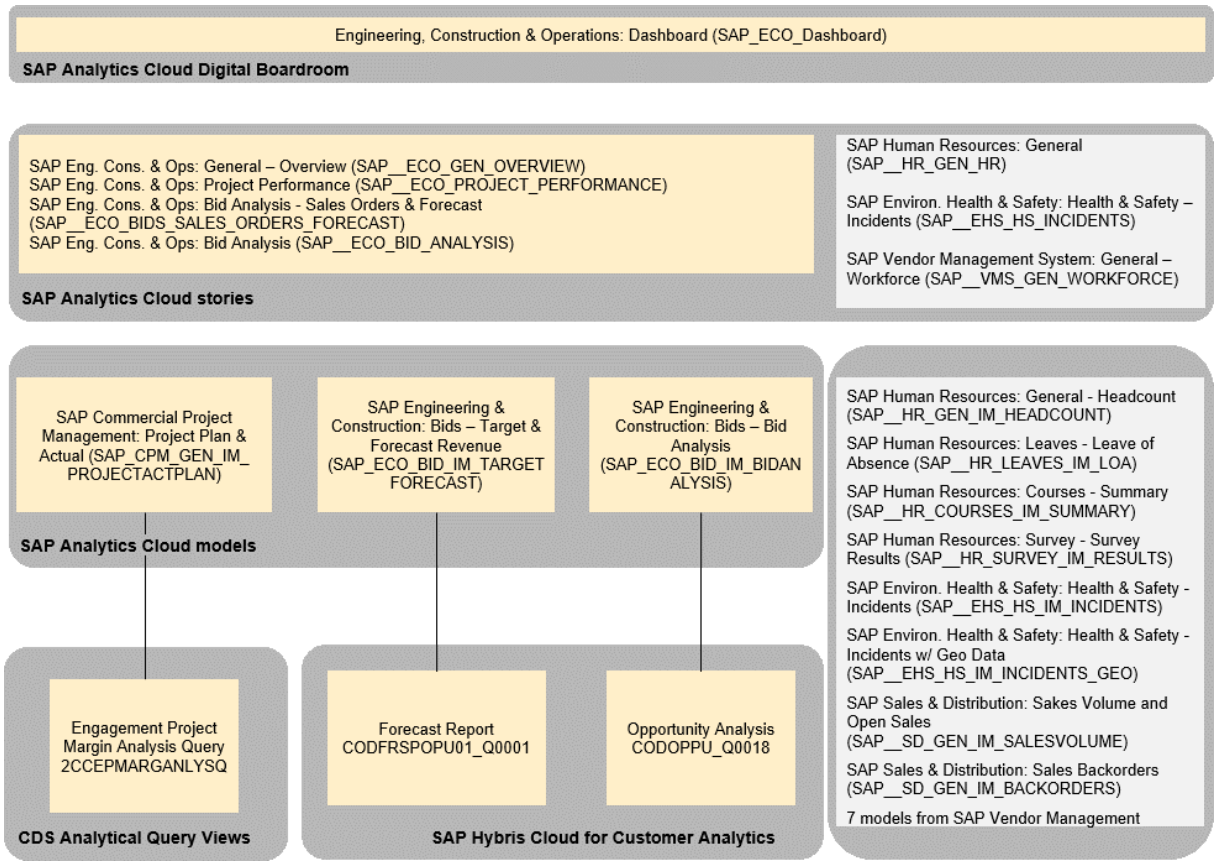
Companies can visualize data to support optimal decision making, see the status of business and project execution at a glance, and use ad-hoc query functionality for further data analysis when required.

Furthermore, it will help the business users to monitor and analyse business and operational performance and investigate the sources of variances. Thus, enabling business users to initiate decisive and optimal actions.

The content will help to:

- Analyse the current and historical bids, reasons for being awarded across all business units to learn and improve probability of future success
- Monitor backlog and work done to gain insight on productivity of the workforce
- Control current projects, analyse margin, and variances
- Investigate root causes for margin variances including multi-level analysis of revenue, costs and productivity for the construction project
- Improve overall insight and track the company's performance

Architecture



3.6.2 Dashboard

The dashboard which provides insights is: *SAP_ECO_Dashboard*

3.6.3 Stories

3.6.3.1 General - Overview (SAP__ECO_GEN_OVERVIEW)

Name: SAP__ECO_GEN_OVERVIEW	
Description: SAP Eng. Cons. & Ops: General - Overview	
Scenario is used to get an overall performance overview across the different board areas Operations, Business development, and HR.	
Page: Overview	
Charts	
Title	**Models Used**
Pipeline Health	SAP__ECO_BID_IM_TARGETFORECAST
This chart shows the Pipeline health for the next quarter and the variance of forecast from target.	
Actual Revenue per Project	SAP__CPM_GEN_IM_PROJECTACTPLAN
This chart shows the relation between Actual Margin % and PoC. The bubble size shows the actual revenue. The chart shows by the position and size of the bubbles how lucrative each project is.	
Headcount Movement	SAP__HR_GEN_IM_HEADCOUNT*
This chart shows the movement of Headcount for the current year.	
Injuries	SAP__EHS_HS_IM_INCIDENTS *
This chart shows the Injuries per month for the current year.	

3.6.3.2 Project Performance (SAP__ECO_PROJECT_PERFORMANCE)

Name: SAP__ECO_PROJECT_PERFORMANCE	
Description: SAP Eng. Cons. & Ops: Project Performance	
Scenario is used to gain insight into current and past project portfolio performance across line of work, regions, etc.	
Page: Project Overview	
Charts	
Title	**Models Used**
Margin	SAP__CPM_GEN_IM_PROJECTACTPLAN
This tile provides the actual, planned, and deviation from plan for Margin and the actual margin% for the current year.	
Revenue	SAP__CPM_GEN_IM_PROJECTACTPLAN
This tile provides the actual, planned, and deviation from plan for Revenue for the current year.	
Costs	SAP__CPM_GEN_IM_PROJECTACTPLAN

Name: SAP__ECO_PROJECT_PERFORMANCE	
This tile provides the actual, planned, and deviation from plan for Costs for the current year.	
Stages of Current Projects	SAP__CPM_GEN_IM_PROJECTACTPLAN
This chart shows number of projects currently in each stage.	
Actual Revenue per Project	SAP__CPM_GEN_IM_PROJECTACTPLAN
This chart shows the relation between Actual Margin % and PoC. The bubble size shows the actual revenue. The chart shows by the position and size of the bubbles how lucrative each project is.	
Actual Margin % per Business Area	SAP__CPM_GEN_IM_PROJECTACTPLAN
Show the actual margin% for the current year for each Business area.	
Project Resources	SAP__CPM_GEN_IM_PROJECTACTPLAN linked with SAP__HR_GEN_IM_HEADCOUNT*
Through model linkage this chart gets information from HR on persons allocated in each country.	

The documentation for the model

SAP Human Resources: General - Headcount (SAP__HR_GEN_IM_HEADCOUNT) can be found in the following chapter: 5.14.4.2.

Page: Detail	
This page provides details about projects that can be selected based on page filters for Country and Business area.	
Charts	
Title	**Models Used**
Profitability per Customer	SAP__CPM_GEN_IM_PROJECTACTPLAN
The actual margin % per customer and its deviation from planned margin% is shown.	
Profitability per Project	SAP__CPM_GEN_IM_PROJECTACTPLAN
The actual margin % per project and its deviation from planned margin% is shown.	
Monthly Revenue	SAP__CPM_GEN_IM_PROJECTACTPLAN
This chart shows planned and actual revenue and actual margin% on a monthly basis for the current year.	
Monthly Costs	SAP__CPM_GEN_IM_PROJECTACTPLAN
This chart shows planned and actual cost and deviation between plan and actual on a monthly basis for the current year.	
Page: Context	
This is a fact sheet where you can select all projects for a specific project and get all relevant information.	
Charts	
Title	**Models Used**
Margin	SAP__CPM_GEN_IM_PROJECTACTPLAN
This tile provides the actual, planned, and deviation from plan for Margin for the current year.	
Actual Margin%	SAP__CPM_GEN_IM_PROJECTACTPLAN
This tile provides information on how the Actual margin% has moved monthly for the current year.	
Revenue	SAP__CPM_GEN_IM_PROJECTACTPLAN

Name: SAP__ECO_PROJECT_PERFORMANCE	
This tile provides the actual, planned, and deviation from plan for Revenue for the current year.	
Costs	SAP__CPM_GEN_IM_PROJECTACTPLAN
This tile provides the actual, planned, and deviation from plan for Costs for the current year.	
Revenue	SAP__CPM_GEN_IM_PROJECTACTPLAN
The monthly planned and actual revenue of a project and its phase during each month, along with deviation of plan actual for the current year are shown in this chart.	
Cost	SAP__CPM_GEN_IM_PROJECTACTPLAN
The monthly planned and actual costs of a project and its phase during each month, along with deviation of plan actual for the current year are shown in this chart.	

3.6.3.3 Bid Analysis - Sales Orders & Forecast (SAP__ECO_BIDS_SALES_ORDERS_FORECAST)

Name: SAP__ECO_BIDS_SALES_ORDERS_FORECAST	
Description: SAP Eng. Cons. & Ops: Bid Analysis - Sales Orders & Forecast	
Scenario is used to track current business development activities, their impact on plan, and forecast.	
Page: Overview	
This page shows sales order volume related information and trend of pipeline. The page can be filtered based on Business area.	
Charts	
Title	**Models Used**
Total Order Volumes by Business Area	SAP__SD_GEN_IM_SALESVOLUME
This chart shows the total order volumes by Business area for the current quarter which is split into open deliverables, open orders, and sales volume.	
Total Order Volumes Trend by Business Area	SAP__SD_GEN_IM_SALESVOLUME
Shows the trend of total orders per month for the current quarter for each Business area.	
Backlogs and Work Done	SAP__SD_GEN_IM_BACKORDERS
This chart shows the order backlog and work done by Business area for the current and the sales backlog ratio per industry.	
Pipeline Trend	SAP__ECO_BID_IM_TARGETFORECAST
This chart shows the trend of weighted value, forecast, and target on a quarterly basis.	

3.6.3.4 Bid Analysis (SAP__ECO_BID_ANALYSIS)

Name: SAP__ECO_BID_ANALYSIS

Description: SAP Eng. Cons. & Ops: Bid Analysis	
Scenario is used to analyses bid performance and mitigate risk for not getting awarded.	
Page: Detail	
This page provides insights into all bids that have not yet reached closing date. The bids can be filtered for the overall page based on Business area and Country	
Title	**Models Used**
• Total Bids • Bids Won • Bids Lost • Bids in Process • Open Bids • Expected Value • Weighted Value	SAP__ECO_BID_IM_BID_ANALYSIS
These tiles provide KPIs of all applicable bids	
Bids Won and Lost	SAP__ECO_BID_IM_BID_ANALYSIS
Shows the bids won and lost per Business area and the bid hit ratio for each Business area	
Bids lost per Sales Phase	SAP__ECO_BID_IM_BID_ANALYSIS
Shows how many bids were lost in each sales phase	
Distribution of Bids across Sales Phases	SAP__ECO_BID_IM_BID_ANALYSIS
Shows the bid pipeline funnel based on sales stages at its current state	
Bid Hit Ratio vs Weighted Value	SAP__ECO_BID_IM_BID_ANALYSIS
This bubble chart can explain the lucrative bids by Business area. The bids that have larger expected value and bid hit ratios are more lucrative.	
Reason for Winning/Losing Bids	SAP__ECO_BID_IM_BID_ANALYSIS
Shows the bids won or lost due to different reasons.	

3.6.3.5 Human Resources (SAP__ECO_HR_BOARDROOM)

This is a copy of the story *SAP__HR_GEN_HR (SAP Human Resources: General)*.

3.6.3.6 Health & Safety – Incidents (SAP__HR_HS_INCIDENTS)

For a description of the story and the models used please check the following chapter: 5.4 Environment, Health and Safety Management (EHS)

3.6.4 Models

3.6.4.1 General - Project Plan & Actual (SAP__CPM_GEN_IM_PROJECTACTPLAN)

Model Name: SAP__CPM_GEN_IM_PROJECTACTPLAN	Connection
• Model Description: SAP Commercial Project Management: General - Project Plan & Actual • Planning Enabled: No	• Connection Type: Import > SAP BW • Connection Query: CDS View: Engagement Project Margin Analysis Query 2CCEPMARGANLYSQ • Query Defaults: The default value for this mapping is C for Project Type.

Project Account*		
ID	**Description**	**Formula/Mapping**
PlannedCost	Planned Cost	Planned Cost In Company Code Currency
PlannedRevenue	Planned Revenue	Planned Revenue In Company Code Currency
ActualRevenue	Actual Revenue	Actual Revenue In Company Code Currency
ActualCost	Actual Cost	Actual Cost In Company Code Currency
PlannedMarginAmount	Planned Margin	[PlannedRevenue] - [PlannedCost]
ActualMarginAmount	Actual Margin	[ActualRevenue] - [ActualCost]
poc	Percentage of Completion	1- (([PlannedCost] - [ActualCost]) / [PlannedCost])
PlannedMarginPercent	Planned Margin %	[PlannedMarginAmount] / [PlannedRevenue]
ActualMarginPercent	Actual Margin %	[ActualMarginAmount] / [ActualRevenue]

Dimensions		
ID	**Description**	**Mapping**
Time*	Time	
SAP_ALL_CUSTOMER	Customer	Customer
SAP_ALL_COUNTRY	Country	Country Key
SAP_ALL_COMPANY_CODE	Legal Entity	Company code
SAP_ALL_BUSINESSAREA	Business Area	Service Organization
SAP_ALL_PROFITCENTER	Profit Center	Profit Center

Model Name: SAP__CPM_GEN_IM_PROJECTACTPLAN		Connection
SAP_ALL_PROJECT_DEFINITION	Project Definition	Project
SAP_ALL_FISCALYEAR	Year	Fiscal Year
SAP_CPM_STAGE	Project Stage	Stage

> **i** Note
>
> * Private dimension and other dimensions are public.

3.6.4.2 General – Incoming Sales Orders (SAP__SD_GEN_IM_INCOMING_ORDERS)

Model Name: SAP__SD_GEN_IM_INCOMING_ORDERS		Connection
• Model Description: SAP Sales and Distribution: General- Incoming Sales Orders • Planning Enabled: No		• Connection Type: Import > SAP BW • Connection Query: CDS View: 2CCSDSLSORDERITEMQ Incoming Sales Orders • Query Defaults: Exchange rate type: M
Incoming Order Account*		
ID	**Description**	**Formula/Mapping**
NetAmount	Net Amount	
Backlog	Backlog	LOOKUP([NetAmount] ,[d/SAP_SD_DELIVERYSTATUS] ='A')
Workdone	Work done	LOOKUP([NetAmount] ,[d/SAP_SD_DELIVERYSTATUS] =('B','C'))
Backlogratio	Sales backlog ratio	[backlog]/[NetAmount]
Completedorders	Completed Orders	LOOKUP([NetAmount] ,[d/SAP_SD_DELIVERYSTATUS] ='C')
Ordercompletionratio	Order completion ratio	[completedorders]/[NetAmount]
Other measures in the model	Not relevant for ECO, for more information see Consumer Products Models.	
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Month of Order
SAP_ALL_BUSINESSAREA	Business Area	Business Area
SAP_ALL_SALESORGANISATION	Sales Organisation	Sales Organization

Model Name: SAP__SD_GEN_IM_INCOMING_ORDERS		Connection
SAP_SD_DELIVERYSTATUS	Delivery Status	Delivery Status
SAP_SD_CONFIRMATIONSTATUS	Confirmation Status	Dlv. Conf.Status
SAP_ALL_DISTRIBUTIONCHANNEL	Distribution Channel	Assign to #
SAP_ALL_MATERIAL	Material	Assign to #
SAP_ALL_MATERIALGROUP	Material Group	Assign to #
SAP_ALL_COUNTRY	Country	Assign to #
SAP_ALL_CUSTOMER	Customer	Assign to #
SAP_ALL_REGION	Region	Assign to #
SAP_ALL_CUSTOMERGROUP	Customer Group	Assign to #

> **i** Note
>
> * Private dimension and other dimensions are public.

3.6.4.3 Bids -Target & Forecast Revenue (SAP__ECO_BID_IM_TARGETFORECAST)

Model Name: SAP__ECO_BID_IM_TARGETFORECAST	Connection
• Model Description: SAP Engineering & Construction: Bids - Target & Forecast Revenue • Planning Enabled: No	• Connection Type: Connection type: ODATA Connection > Import from SAP Hybris Cloud for Customer Analytics • Connection Query: Forecast Report CODFRSPOPU01_Q0001

Forecast Target Account*		
ID	**Description**	**Formula/Mapping**
weightedamount	Weighted Amount	Weighted Value
forecastamount	Forecast Amount	Forecast Revenue
targetamount	Budget Amount	Target Revenue
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Close Date Id
SAP_ALL_BUSINESSAREA	Business Area	Sales Unit

> **i** Note
>
> * Private dimension and other dimensions are public.

3.6.4.4 Bids -Bid Analysis (SAP__ECO_BID_IM_BID_ANALYSIS)

Model Name: SAP__ECO_BID_IM_BID_ANALYSIS	Connection
• Model Description: SAP Engineering & Construction: Bids - Bid Analysis • Planning Enabled: No	• Connection Type: ODATA Connection → Import from SAP Hybris Cloud for Customer Analytics • Connection Query: Opportunity Analysis CODOPPU_Q0018

Bidanalysis Account*		
ID	**Description**	**Formula/Mapping**
ChanceofSucces	Chance of Success	
ExpectedValue	Expected Value	
NumberofOpportunities	Number of Bids	
WeightedValue	Weighted Value	
won	Won	LOOKUP([NumberofOpportunities] ,[d/SAP_ECO_BID_LIFECYCLESTATUS]='4')
lost	Lost	LOOKUP([NumberofOpportunities] ,[d/SAP_ECO_BID_LIFECYCLESTATUS]='5')
bidhitratio	Bid hit ratio	[won] / [NumberofOpportunities]
inprocess	In Process	LOOKUP([NumberofOpportunities] ,[d/SAP_ECO_BID_LIFECYCLESTATUS]='2')
open	Open	LOOKUP([NumberofOpportunities] ,[d/SAP_ECO_BID_LIFECYCLESTATUS]='1')

Dimensions		
ID	**Description**	**Mapping**
Time	Time	Close Date Id
SAP_ECO_BID_LIFECYCLESTATUS	Lifecycle status	Lifecycle Status
SAP_ECO_BID_STATUSREASON	Reason for Status	Reason for Status
SAP_ALL_COUNTRY	Country	Country
SAP_ALL_SALESORGANISATION	Sales Organization	Sales Organization
SAP_ECO_BID_SALESPHASE	Sales Phase	Sales Phase
SAP_ALL_BUSINESSAREA	Business Area	Sales Unit

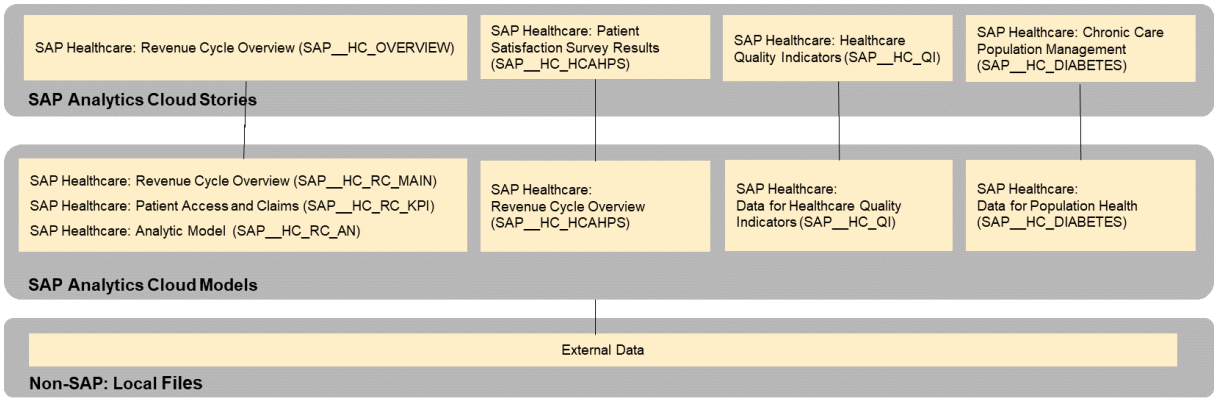
> **i** Note
>
> * Private dimension and other dimensions are public.

3.7 Healthcare (HC)

3.7.1 Architecture

The Healthcare content is organized in four stories that can be combined in dashboards or digital boardrooms to meet the business requirements of the implementing facility.

- Revenue Cycle (SAP__HC_RC_OVERVIEW)
- Quality Reporting (SAP__HC_QI)
- Patient Satisfaction Survey (SAP__HC_HCAHPS)
- Population Health Management (SAP__HC_DIABETES)



3.7.2 Stories

3.7.2.1 SAP__HC_RC_OVERVIEW

The Healthcare Story covers topics related to Revenue Cycle management in the US Market.

US Provider organizations submit healthcare claims to payer in accordance with contracts that are negotiated by payers or, in the case of public sector payers, mandated by federal or state regulations. Messages between payer and providers such as insurance verification, authorization requests and responses, and claims and remittance advices are exchanged using the X12n message set as specified by federal regulation. Claims submitted by providers is adjudicated by payers. Denials are notifications to the payer that the payment requested by the provider is denied due to some discrepancy in the claim such as failure to obtain authorization from the payer for the procedure or failure to document medical necessity. If denials are not processed by the provider and resubmitted for consideration, the provider is not compensated for the service provided to the patient.

The purpose of the story is to provide managers with the visibility of revenue cycle operations and KPIs that is proven to reduce denials.

NAME: SAP__HC_RC_OVERVIEW
Description: Provides the ability to monitor and manage Revenue cycle function.
The Revenue Cycle function in a US provider organization is critical to the financial performance and sustainability of the organization. This story provides the ability to monitor the performance of the revenue cycle operations and measure the effectiveness of critical functions determine operational effectiveness. All KPIs in this story are common industry standards that are published in industry publications and web sites.
Page: Net Revenue
This page provides an overview of Net Revenue versus budget. Net Revenue is the Gross Revenue minus Contractual Allowances. Budgets for Net Revenue are assumed to be provided at the Facility, Financial Class, and month. If contractual allowances or budget is not available to that level of granularity, they can be derived from historical data and updated on a rolling basis. The page shows trends in revenue overtime and highlights areas where revenue is less than expectations or greater that expectations.
Page: Collections
The Collections page shows status of the goal of Revenue Cycle operations: Cash Collections. Cash Collections trends and performance are shown in comparison to budget or historical performance. Areas of under and over performance are shown to assist management in identification of anomalies.
Page: Accounts Receivable
This page shows the effectiveness of Revenue Cycle operations by tracking the status of unpaid balances overtime. The page tracks DAYS in AR and Percent of AR over 90 Days, KPIs typically used to measure the effectiveness of collections.
Page: Denials
The Denials page tracks the status of denials: claims that is denied payment by payers. Two critical KPIs are tracked: Percent of claims denied and dollar amount of the denials. Charts show the areas that are experiencing the greatest increase in denials and greatest decrease in denials to identify areas where there are anomalies for management follow-up.
Page: Patient Access I
The purpose of this page is to monitor organizational performance in patient intake that affect the accuracy and completeness of information submitted to payers for payment.
Charts
Current Year Pre-registration rate (percentage of scheduled patients that are preprocessed prior to admitting.)
Current Month Pre-Registration Rate
Enterprise Pre-Registration Performance
Six Month (Pre-Registration) Trend by Facility
Current Year Insurance Verification Rate (percentage of scheduled patients that have had insurance verified)
Current Month Insurance Verification Rate
Enterprise Insurance Verification Performance
Six Month (Insurance Verification) Trend by Facility
Current Year Inpatient and Observation Authorization Rate (percentage of encounters that require authorization receive authorization)
Current Month Inpatient and Observation Authorization Rate
Enterprise Inpatient and Observation Authorization Rate Performance
Six Month (Inpatient and Observation Authorization Rate) Trend by Facility
Page: Patient Access II

NAME: SAP__HC_RC_OVERVIEW
The purpose of this page is to monitor organizational performance in patient intake that affect the accuracy and completeness of information submitted to payers for payment.
Charts
Current Year Outpatient Authorization Rate (percentage of encounters that require authorization receive authorization)
Current Month Outpatient Authorization Rate
Enterprise Outpatient Authorization Rate Performance
Six Month (Outpatient Authorization Rate) Trend by Facility
Current Year Insurance Verification Rate (percentage of scheduled patients that have had insurance verified)
Current Month Insurance Verification Rate
Enterprise Insurance Verification Performance
Six Month (Insurance Verification) Trend by Facility
Current Year Inpatient and Observation Authorization Rate (percentage of scheduled patients that have had insurance verified)
Current Month Inpatient and Observation Authorization Rate
Enterprise Inpatient and Observation Authorization Rate Performance
Six Month (Inpatient and Observation Authorization Rate) Trend by Facility
Current Year Conversion of Self-Pay to Insurance Rate (percentage of self-pay patients to Insurance)
Current Month Conversion of Self-Pay to Insurance Rate
Enterprise Conversion of Self-Pay to Insurance Rate Performance
Six Month (Conversion of Self-Pay to Insurance Rate) Trend by Facility
Current Year POS Collection Rate (percentage of self-pay payments collected prior to service)
Current Month POS Collection Rate
Enterprise POS Collection Rate Performance
Six Month (POS Collection Rate) Trend by Facility
Page: Claims Processing
The purpose of this page is to monitor organizational performance in the preparation and submission of claims. It monitors the time in days from discharge to various stages in submission of the claim to payers.
Charts
Current Year Discharged not Final Billed (average number of days between discharge and production of final bill)
Current Month Discharge not Final Billed
Enterprise Discharge not Final Billed Performance
Six Month (Discharge not Final Billed) Trend by Facility
Current Year Final Billed not Submitted (average number of days between creation of final bill and submission to payer)
Current Month Final Billed not Submitted
Enterprise Final Billed not Submitted Performance
Six Month (Final Billed not Submitted) Trend by Facility

NAME: SAP__HC_RC_OVERVIEW
Current Year Discharged not Submitted (average number of days between discharge and submission of claim to payer)
Current Month Discharged not Submitted
Enterprise Discharged not Submitted Performance
Six Month (Discharged not Submitted) Trend by Facility
Page: Claims Quality
The purpose of this page is to monitor organizational performance in the quality of claims submitted and rate of late charges.
Charts
Current Year Clean Claim Rate (percentage of claims that pass resubmission edits)
Current Month Clean Claim Rate
Enterprise Clean Claim Rate Performance
Six Month (Clean Claim Rate) Trend by Facility
Current Year Late Charge Percentage (percentage of charges that were submitted after final billing)
Current Month Late Charge Percentage
Enterprise Late Charge Percentage Performance
Six Month (Late Charge Percentage) Trend by Facility
Page: Analysis
The purpose of this page is to demonstrate Smart Discovery by analyzing factors that impact denial rate.
Charts
Trend of Denials and Authorization Rates
Data Discovery (a chart generated by Smart Discovery that depicts the impact of Authorization Rate and Facility on Denial Rate)
What Influences Denial Rate (Smart Discovery)

3.7.2.2 Quality Reporting (SAP__HC_QI) Story

NAME: SAP__HC_QI	
Description: Provides a template for reporting and managing quality assurance indicators.	
It can be used as a template for Quality Indicators of interest for the using organization.	
Page: QI Rankings	
This page shows ranks the quality indicators in descending order of compliance by the selected organization. A story level filter allows filtering by one or more organization. A page level date range filter permits filtering by time period.	
Charts	
Title	**Models Used**

NAME: SAP__HC_QI	
Overall Ranking By Facility	SAP__HC_QI
Ranking By Measure	SAP__HC_QI
Page: QI Trending	
QI Trending displays trending information for the selected indicator by the entire organization and selected facility.	
Charts	
Title	**Models Used**
Actual vs. Expected % by Facility	SAP__HC_QI
Actual % vs Expected %	SAP__HC_QI
Actual % by Facility	SAP__HC_QI
Actual vs Expected	SAP__HC_QI
Page: QI Detail	
QI Detail Provides Detail on the Quality Indicator across the organization.	
Charts	
Title	**Models Used**
Overall Performance by Measure	SAP__HC_QI
Quality Indicators by Measure and Facility	SAP__HC_QI

3.7.2.3 Patient Satisfaction Survey (SAP__HC_HCAHPS) Story

NAME: SAP__HC_HCAHPS	
Description: Provides a template for reporting and managing patient satisfaction survey results.	
Page: HCAHPS Summary	
This page shows ranks of the patient survey results in descending order of rankings for the selected organization. A story level filter allows filtering by one or more organization. A date filter permits filtering of data by date period.	
Charts	
Title	**Models Used**
HCHPS Score by Facility	SAP__HC_HCAHPS
Performance by Measure	SAP__HC_HCAHPS
Page: HCAHPS Trends	
HCAHPS displays trending information for the survey response by the entire organization and selected facility.	
Charts	
Title	**Models Used**
Scores per Facility	SAP__HC_HCAHPS

NAME: SAP__HC_HCAHPS	
Enterprise HCAHPS Score	SAP__HC_HCAHPS
HCAHPS Score by Facility	SAP__HC_HCAHPS
Actual vs Expected Score	SAP__HC_HCAHPS
Page: HCAHPS Detail	
HCAHPS Detail Provides Detail on the survey results across the organization.	
Charts	
Title	**Models Used**
HCAHPS Score per Measure	SAP__HC_HCAHPS
HCAHPS Score per Facility	SAP__HC_HCAHPS

3.7.2.4 Population Health Management (SAP__HC_DIABETES) Story

NAME: SAP__HC_Diabetes	
Description: Provides a template for reporting and managing population health using Diabetes as an example.	
Page: Overview	
The Overview page provides an overview of the effectiveness of population management by physician or PCP.	
Charts	
Title	**Models Used**
Number of Patients	SAP__HC_Diabetes
Number or Physicians	SAP__HC_Diabetes
Diabetes Under Control	SAP__HC_Diabetes
PCP to Patient Ratio	SAP__HC_Diabetes
Pt Count by Facility	SAP__HC_Diabetes
Patient Status by Physician	SAP__HC_Diabetes
Percent Diabetic by Age and Gender	SAP__HC_Diabetes
Number of Patients	SAP__HC_Diabetes
Patients by Gender	SAP__HC_Diabetes
Page: Patient Location by Physician	
Provides Patient Location information using ESRI map	
Charts	
Title	Models Used
Actual vs. Expected % by Facility	SAP__HC_Diabetes

NAME: SAP__HC_Diabetes	
Page: QI Analytics	
Provides Static Charts from Smart Discovery	
Charts	
Title	**Models Used**
Static Graphs	SAP__HC_Diabetes

3.7.3 Models

3.7.3.1 Revenue Cycle Analytics (SAP__HC_RC_MAIN)

Model Name: SAP__HC_RC_MAIN		Connection
• Model Description: SAP Healthcare: Revenue Cycle Analytics • Planning Enabled: No		Connection Type: All data provided from Spreadsheet
Account*		
ID	**Description**	**Formula/Mapping**
Revenue_Budget	Revenue Budget	
Revenue	Revenue	
Net_Revenue_Budget	Net Revenue Budget	
Net_Revenue	Net Revenue	
Day_Guide	Day Guide	
Daily_Revenue	Daily Revenue	
AR	AR	
AR_Age_30	AR Age 30	
AR_Age_60	AR Age 60	
AR_Age_90	AR Age 90	
AR_Age_90_Plus	AR Age 90 Plus	
WriteOff	Write-Off	
Denial_Amount	Denial Amount	
Denial_Count	Denial Count	
Encounters	Encounters	
Collection_Goal	Collection Goal	
Actual_Collections	Actual Collections	
Denial_Amount_Trend	Denial Amount Trend	

Model Name: SAP__HC_RC_MAIN		Connection
Denial_Count_Trend	Denial Count Trend	
Net_Revenue_Variance	[Net_Revenue]-[Net_Revenue_Budget]	[Net_Revenue]-[Net_Revenue_Budget]
Net_Revenue_Var_Percent	[Net_Revenue_Variance]/[Net_Revenue_Budget]	[Net_Revenue_Variance]/[Net_Revenue_Budget]
Net_Gross_Percent	[Net_Revenue]/[Revenue]	[Net_Revenue]/[Revenue]
Collections_Variance	[Actual_Collections]-[Collection_Goal]	[Actual_Collections]-[Collection_Goal]
Collections_Var_Percent	[Collections_Variance]/[Actual_Collections]	[Collections_Variance]/[Actual_Collections]
Denial_Amt_Change_Percent	([Denial_Amount]-[Denial_Amount_Trend])/[Denial_Amount_Trend]	([Denial_Amount]-[Denial_Amount_Trend])/[Denial_Amount_Trend]
Denial_Count_Change_Percent	([Denial_Count]-[Denial_Count_Trend])/[Denial_Count_Trend]	([Denial_Count]-[Denial_Count_Trend])/[Denial_Count_Trend]
AR_Age_30_Percent	[AR_Age_30]/[AR]	[AR_Age_30]/[AR]
AR_Age_60_Percent	[AR_Age_60]/[AR]	[AR_Age_60]/[AR]
AR_Age_90_Percent	[AR_Age_90]/[AR]	[AR_Age_90]/[AR]
AR_Age_90_Plus_Percent	[AR_Age_90_Plus]/[AR]	[AR_Age_90_Plus]/[AR]
AR_Days	[AR]/[Daily_Revenue]	[AR]/[Daily_Revenue]
Denial_Amt_Pct	[Denial_Amount]/[Net_Revenue]	[Denial_Amount]/[Net_Revenue]
Denial_Count_PCT	[Denial_Count]/[Encounters]	[Denial_Count]/[Encounters]
Net_rolling		
Cash_pcnt	[Actual_Collections]/[Net_Revenue]	[Actual_Collections]/[Net_Revenue]
Cash_goal	.35	.35
Cash_var	[Actual_Collections]-[Collection_Goal]	[Actual_Collections]-[Collection_Goal]
AR_Days_Goal	60	60
AR_Days_Var	[AR_Days]-[AR_Days_Goal]	[AR_Days]-[AR_Days_Goal]
AR_90_Goal	.24	.24
AR_90_Variance	[AR_Age_90_Plus_Percent]-[AR_90_Goal]	[AR_Age_90_Plus_Percent]-[AR_90_Goal]
Dimensions		
ID	**Description**	**Mapping**
Date	Year Month	
Facility	Facility (Hospital)	
Financial Class	Payer Class	

> **Note**
>
> * Private dimension and other dimensions are public.

3.7.3.2 Revenue Cycle KPIs (SAP__HC_RC_KPI)

Model Name: SAP__HC_RC_KPI		Connection
• Model Description: SAP Healthcare: Revenue Cycle Analytics • Planning Enabled: No		Connection Type: All data provided from Spreadsheet
Account*		
ID	**Description**	**Formula/Mapping**
Revenue	Revenue	
Rev_Budget	Rev Budget	
Occurrences	Occurrences	
Scheduled	Scheduled	
Preregistered	Preregistered	
Verified	Verified	
Auth_Reqd	Auth Reqd	
Auth_Obtnd	Auth Obtnd	
Self_Pay	Self Pay	
Conversion	Conversion	
POS	POS	
SP_Cash	SP Cash	
Daily_Rev	Daily Rev	
DNFB	DNFB	
FBNS	FBNS	
DNSP	DNSP	
Clean	Clean	
Late_Chgs	Late Chgs	
Denials	Denials	
Denail_WO	Denail W-O	
Bad_Debt	Bad Debt	
Charity	Charity	
Credit_B	Credit B	
PreRegRate	Pre-Registration Rate	[Preregistered]/[Scheduled]

Model Name: SAP__HC_RC_KPI		Connection
InsVerRate	Insurance Verification Rate	[Verified]/[Occurences]
AuthRate	Authorization Rate	[Auth_Obtnd]/[Auth_Reqd]
PreRegGoal	Pre-Registration Goal	.322
PreRegVar	Pre-Registration Variance	[PreRegRate]-[PreRegGoal]
InsVerGoal	Insurance Verification Goal	.568
InsVerVar	Insurance Verification Variance	[InsVerRate]-[InsVerGoal]
AuthGoal	Authorization Goal	.759
AuthVar	Authorization Variance	[AuthRate]-[AuthGoal]
Uninsured_Conversion	Uninsured Conversion Rate	[Conversion]/[Self_Pay]
Uninsured_Conversion_Goal	Uninsured Conversion Goal	.15
Uninsured_Conversion_Variance	Uninsured Conversion Variance	[Uninsured_Conversion]-[Uninsured_Conversion_Goal]
POS_Rate	POS Collection Rate	[POS]/[SP_Cash]
POS_Goal	POS Collection Goal	.29
POS_Var	POS Collection Variance	[POS_Rate]-[POS_Goal]
DNFB_DAYS	DNFB Days	[DNFB]/[Daily_Rev]
DNFB_Goal	DNFB Goal	5.9
DNFB_Variance	DNFB Variance	[DNFB_DAYS]-[DNFB_Goal]
FBNS_DAYS	FBNS Days	[FBNS]/[Daily_Rev]
FBNS_Goal	FBNS Goal	.02
FBNS_Variance	FBNS Variance	[FBNS_DAYS]-[FBNS_Goal]
DNSP_DAYS	DNSP Days	[DNSP]/[Daily_Rev]
DNSP_Goal	DNSP Goal	.02
DNSP_Variance	DNSP Variance	[DNSP_DAYS]-[DNSP_Goal]
CLEAN_Rate	Clean Claim Rate	[Clean]/[Occurences]
Clean_Goal	Clean Claim Goal	.78
Clean_Var	Clean Claim Variance	[CLEAN_Rate]-[Clean_Goal]
Late_Rate	Late Charge Rate	[Late_Chgs]/[Revenue]
Late_Goal	Late Charge Goal	.04
Late_Variance	Late Charge Variance	[Late_Rate]-[Late_Goal]
Auth_Base	Auth Base	
Denial_Count	Denial Count	
Denial_Value	Denial Value	
Prereg_Base	Prereg Base	
Rolling_Auth	Rolling Auth	

Model Name: SAP__HC_RC_KPI		Connection
Rolling_Denials	Rolling Denials	
Rolling_Reqd	Rolling Reqd	
Rolling_Occurrences	Rolling Occurrences	
Verify_Base	Verify Base	
Verify_Rate	Verification Rate	[Verified]/[Occurrences]
Dimensions		**Mapping**
Rolling_Denials	Rolling Denials	
Rolling_Reqd	Rolling Reqd	
Rolling_Occurrences	Rolling Occurrences	
Verify_Base	Verify Base	
Verify_Rate	Verification Rate	[Verified]/[Occurrences]
Denial_Rate	Denial Rate	[Denial_Count]/[Occurrences]

> **i** Note
>
> * Private dimension and other dimensions are public.

3.7.3.3 Revenue Cycle KPIs (SAP__HC_RC_AN) Model Structure

Model Name: SAP__HC_RC_AN		
Model Description: SAP Healthcare: Revenue Cycle Analytics Module		
Model Purpose: Extracts Data for Healthcare Revenue Cycle Analytics		
Planning Enabled: No		
Account		
ID	**Description**	**Formula**
Denials	Denials	
InsVerRate	Insurance Verification Rate	[Verified]/[Occurrences]
AuthRate	Authorization Rate	[Auth_Obtnd]/[Auth_Reqd]
Verify_Rate	Verification Rate	[Verified]/[Occurrences]
Denial_Rate	Denial Rate	[Denial_Count]/[Occurrences]

Dimensions			
Dimension Name	**Dimension Description**	**Dimension type**	**Public/Private Dimension**

Model Name: SAP__HC_RC_AN			
Date	Year Month	Time	Private
Facility	Facility (Hospital)	Generic	Private
Financial Class	Payer Class	Generic	Private
Patient Type	Type of Patient	Generic	Private
Additional Notes about the model			
All the data is provided from the Spreadsheet.			

3.7.3.4 Quality Reporting (SAP__HC_QI) Model Structure

Model Name: SAP__HC_QI			
Model Description: SAP Healthcare: Quality Reporting			
Model Purpose: Provides Data for Quality Reporting			
Planning Enabled: No			
Account			
ID	**Description**	**Formula**	
Actual	Actual Numerator		
Denominator	Actual Denominator		
Goal	Goal Numerator		
GS_Den	Goal Standard Denominator		
Expected	Expected Count	[Denominator]*[Goal]/[GS_Den]	
Actual_P	Actual Percentage	[Actual]/[Denominator]	
Expected_P	Expected Percentage	[Goal]/[GS_Den]	
Dimensions			
Dimension Name	**Dimension Description**	**Dimension type**	**Public/Private Dimension**
Date	Year Month	Time	Private
Facility ID	Facility (Hospital)	Generic	Private
Measure ID	Measure Description	Generic	Private
		Generic	Private
Additional Notes about the model			
All the data is provided from the Spreadsheet.			

3.7.3.5 Patient Satisfaction Survey (SAP__HC_HCAHPS) Model Structure

Model Name: SAP__HC_HCAHPS			
Model Description: SAP Healthcare: Patient Survey Reporting			
Model Purpose: Provides Data for Patient Survey			
Planning Enabled: No			
Account			
ID	**Description**	**Formula**	
Num_Val	Actual Numerator		
Dem_Val	Actual Denominator		
HCAHPS_SCORE	Calculated Score	[Num_Val]/[Dem_Val]	
Expected_val	Exected Count	[Dem_Val] * .8	
Dimensions			
Dimension Name	**Dimension Description**	**Dimension type**	**Public/Private Dimension**
Date	Year Month	Time	Private
Facility ID	Facility (Hospital)	Generic	Private
Measure ID	Measure Description	Generic	Private
Additional Notes about the model			
All the data is provided from the Spreadsheet.			

3.7.3.6 Population Health Management (SAP__HC_DIABETES) Model Structure

Model Name: SAP__HC_Diabetes		
Model Description: SAP Healthcare: Population Health Reporting		
Model Purpose: Provides Data for Population Health		
Planning Enabled: No		
Account		
ID	**Description**	**Formula**
PT_Count	Patient Count	1
Compliance_Count	Compliance Count	1 if compliant
A1C	A1C Value	
LDL	LDL Value	

Model Name: SAP__HC_Diabetes

BMI	BMI Value	
Diabetic_Count	Diabetic Count	1 if diabetic
Under_Control	Under Control	1 if under control
LDL_High_Count	LDL High Count	1 if LDL High
Hypertensive_Count	Hypertensive Count	1 if hypertensive
BMI_High_Count	BMI High Count	1 if BMI high
Obese_Count	Obese Count	1 if Obese
PCT_Under_Control	% Under Control	[Under_Control]/[PT_Count]
PCT_DIABETIC	% Diabetic	[Diabetic_Count]/[PT_Count]
PCT_LDL_HIGH	% LDL High	[LDL_High_Count]/[PT_Count]
PCT_OBESE	% Obese	[BMI_High_Count]/[PT_Count]
PCT_COMPLIANT	% Compliant	[Compliance_Count]/[PT_Count]

Dimensions

Dimension Name	Dimension Description	Dimension type	Public/Private Dimension
Date	Year Month	Time	Private
Facility ID	Facility (Hospital)	Generic	Private
ID	Patient ID	Generic	Private
Patient Name	Patient Name	Generic	Private
Gender	Gender	Generic	Private
Age	Age	Generic	Private
Marital Status	Marital Status	Generic	Private
Race	Race	Generic	Private
Compliance	Y if all required tests complete	Generic	Private
Foot Exam	Y if Foot Exam within 12 months	Generic	Private
Eye Exam	Y if Eye Exam within 12 months	Generic	Private
Smoker	Y if Smoker	Generic	Private
Colonoscopy	Y if Colonoscopy taken in required period	Generic	Private
Diabetic State	Normal/Pre-Diabetic / Diabetic	Generic	Private
Physician	Physician Name	Generic	Private
Lat	Latitude of Patient Address	Generic	Private
Long	Longitude of Patient Address	Generic	Private

Additional Notes about the model

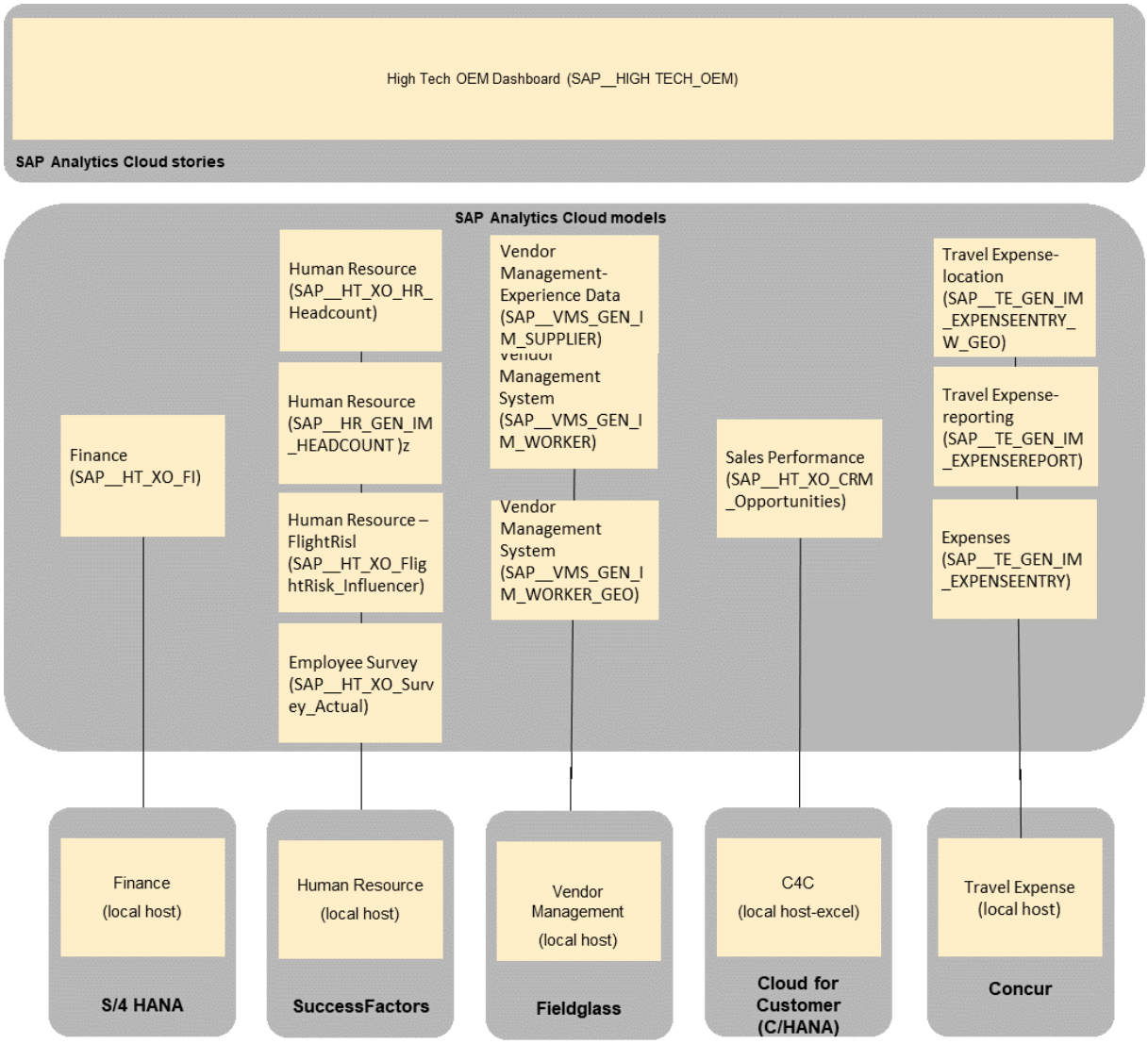
All the data is provided from the Spreadsheet.

3.8 High Tech

3.8.1 Architecture and Abstract

This SAP Analytics Cloud content provides a 360° health and performance view of an OEM company. They use S4/HANA, Concur, Fieldglass, SuccessFactors and Cloud of Customer (C/HANA) to run their business. Access to this dashboard, provides C-level and managers of various LoBs within the organization to gain access to necessary information easily especially during board meetings.

Architecture



The colored objects are documented in this chapter.

The documentation for the greyed-out stories and models can be found in the respective Lines of Business (LoB) chapters

3.8.2 Stories

3.8.2.1 SAP High Tech for OEM (SAP_HIGH TECH_OEM)

Measure Name	Type	Formula/Properties
Net Prompter Score	Calculated Measure	[## Prompters]*100/[#Unique Count] - [## Detractors]*100/[#Unique Count]
Current Month Item Values	Restricted Measure	Item Value [Measure 1] restricted by Time on Q1 (2019)
Open Sale	Restricted Measure	Measure [Item Value] + Dimension [Lifecycle Status] and Input Controls [1,2]
	Restricted Measure	Item Value [Measure 1] + Time [Dimension 1] and Input Controls
Difference From Example	Difference From	Measure [Measure 1] and Time Dimension [Dimension 1] Compare (A) [Period A] to (B) [Period B] Nth Period [Period] Set No Data as Zero [Yes/No] Calculate as Percentage [Yes/No]
Aggregation Example	Aggregation	Operation [SUM/COUNT/COUNT DIMENSION/MIN/MAX] Measure [Measure 1] by Aggregation Dimension [Dimension 1] Conditional Aggregation [Yes/No]
Avg Product Quality Satisfaction	Aggregation	Operation [AVERAGE excl. NULL] Measure [Product quality Satisfaction] by Aggregation Dimension [Opportunity]
Avg Customer Support Satisfaction	Aggregation	Operation [AVERAGE excl. NULL] Measure [Customer support Satisfaction] by Aggregation Dimension [Opportunity]

Measure Name	Type	Formula/Properties
Avg Product Design Satisfaction	Aggregation	Operation [AVERAGE excl. NULL] Measure [Product Design Satisfaction] by Aggregation Dimension [Opportunity]
Avg Product Packaging Satisfaction	Aggregation	Operation [AVERAGE excl. NULL] Measure [Product Packaging Satisfaction] by Aggregation Dimension [Opportunity]
Avg Product	Aggregation	Operation [AVERAGE excl. NULL] Measure [Brand Recognition Satisfaction] by Aggregation Dimension [Opportunity]

3.8.3 Models

SAP Finance (SAP__HT_XO_FI)

Model Name: SAP__HT_XO_FI	Connection
• Model Description: SAP Finance: General - Financial Statement • Planning Enabled: Yes	• Connection type - Data import from S/4 HANA • Local host - Excel

SAP Human Resource (SAP__HT_XO_HR_Headcount)

Model Name: (SAP__HT_XO_HR_Headcount)	Connection
• Model Description: SAP Human Resources: Headcount • Planning Enabled: No	• Import data connection from SuccessFactors • Local host - Excel

SAP Human Resource: General - Headcount (SAP__HR_GEN_IM_HEADCOUNT)

Model Name: Technical Name of the Model	Connection
• Model Description: SAP Human Resources: General - Headcount • Planning Enabled: No	• Import data connection from SuccessFactors • Local host - Excel

SAP Vendor Management System (SAP__VMS_GEN_IM_WORKER_GEO)

Model Name: Technical Name of the Model	Connection
• Model Description: SAP Vendor Management System: General - Location • Planning Enabled: No	• Import data connection from Fieldglass • Local host - Excel

SAP Vendor Management System (SAP__VMS_GEN_IM_WORKER)

Model Name: Technical Name of the Model	Connection
• Model Description: SAP Vendor Management System: General - Workforce • Planning Enabled: No	• Import data connection from Fieldglass • Local host - Excel

SAP Employee Survey (SAP__HT_XO_Survey_Actual)

SAP__HT_XO_Survey_Actual	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

SAP Customer Survey - Flight Risk Influencer (SAP__HT_XO_FlightRisk_Influencer)

Technical Name of the Model	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

SAP Vendor Management - Experience Data (SAP__VMS_GEN_IM_SUPPLIER)

Technical Name of the Model	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

SAP Customer Relationship Management - (SAP__CRM_GEN_IM_OPPORTUNITIES)

Technical Name of the Model	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

SAP Travel Expense by location (SAP__TE_GEN_IM_EXPENSEENTRY_W_GEO)

Technical Name of the Model	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

SAP Travel Expense Reporting (SAP__TE_GEN_IM_EXPENSEREPORT)

Technical Name of the Model	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

SAP Travel Expense - General (SAP__TE_GEN_IM_EXPENSEENTRY)

Technical Name of the Model	Connection
• Model Description: Description of the Model • Planning Enabled: No	• Import data connection from Customer Data Management • Local host - Excel

3.9 Industry Innovation Kit - Zero Waste

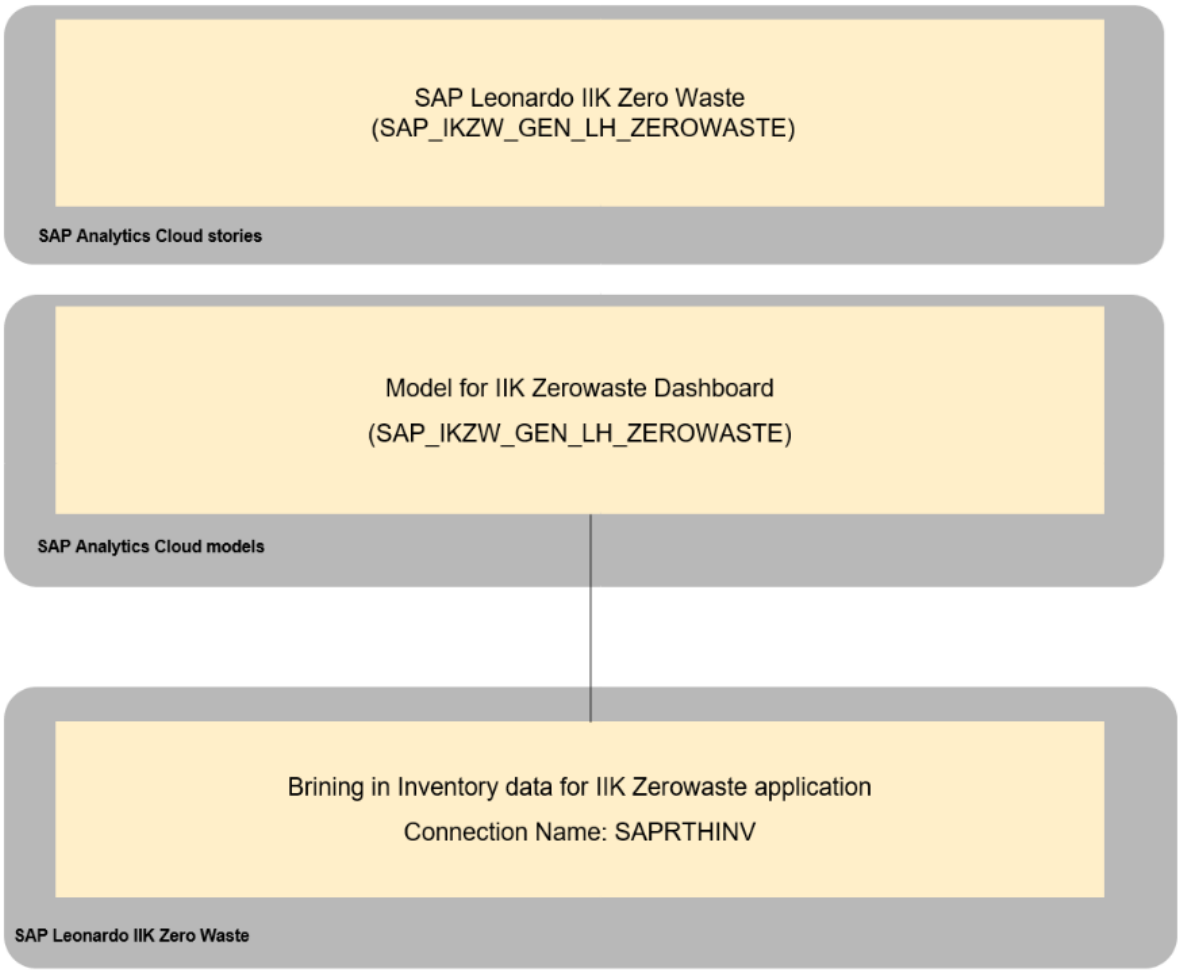
3.9.1 Architecture and Abstract

Retail organizations make educated guesses about store traffic from day to day and stock their shelves to match it. However, they often overestimate, resulting in expired food and lost revenue. In 2010, retail industry wasted 43 billion pounds of food in the United States alone, the equivalent of 46.7 billion USD. In an industry characterized by thin margins, tapping into this pool grants a critical advantage.

SAP Leonardo for Retail

Zero Waste takes the guesswork out of the equation by leveraging daily demand forecasting, powered by machine learning. Our solution combines crucial elements, feeding in information about products, marketing campaigns, and external events to predict units sold. Maintain a balance between selling what you shelve, but not leaving the shelves empty. Seamlessly integrate with your current opening routine. Automate instructions daily to butcher, bake, prepare, or stock only what your customers need (and what you stand to profit from).

Architecture



The colored objects are documented in this chapter.

The documentation for the greyed-out stories and models can be found in the respective Line(s) of Business (LoB) chapters

3.9.2 Dashboard

The SAP Analytics Cloud dashboard (SAP_IKZW_GEN_LH_ZEROWASTE), which is included as part of Retail Zero-Waste IIK, comprises of a story with five pages and each page contains multiple visualizations. Each SAP Analytics Cloud visualization focuses on a set of KPIs that combine to provide helpful insights for the store manager. For example, the Sales Analysis page provides information about the total sales and forecasted sales of the product. This information enables the store manager to initiate an investigation and understand the status of availability and the demand of the product. Details of stories in below section.

3.9.3 Stories

This story consists of five pages:

Page Name	Page Overview
Sales analysis	• It has comparison of actual vs estimated sales for current and previous year. • Forecasted sales of next 7 days. • Top and bottom 3 stocks of various products.
Wastage analysis	• It has a numeric indicator showing the • Revenue Loss on Wastage and %Wastage. • Bar chart which indicates Revenue Loss per Category (Damaged, Lost, Expired). • Tree map (Top 5) showing the Wastage per Product Category.
Key influencers	• It has a numeric indicator on top left corner indicating the Sales Forecast • Quality of model. • Influencing factors on sales. • Monthly influence on sales.
Store comparison	• It has option to compare sales among multiple stores. • Numeric indicators for actual vs estimated sales for selected stores. • Line chart showing influencers impacting sales. • Revenue loss on wastage for selected stores. • Wastage per category for selected stores.
Location analysis	• It has bubble chart with Temperature along x-axis, Total Sales along y-axis and the bubbles showing values for Wastage. • Comparison between compare sales among multiple stores per month. • Table with details of Store ID, Store, • Temperature, Humidity, and % Wastage, • Total Wastage and Last Day Total Sales.

3.9.3.1 Story Description (Story Technical Name)

Measure Name	Type	Formula/Properties
Actual Sales Vector	Calculated Measure	Actual sales* cost
Actual Sales This Year	Restricted Measure	Restricted Measure(Actual Sales) with Filter (Date, Dynamic, Lookback (0 Years))

Measure Name	Type	Formula/Properties
Actual Sales	Aggregation	Aggregation(Actual Sales Vector) with SUM Dimensions (Date, Store, Product)
Actual Sales till Last Year	Aggregation	Aggregation (Actual Sales Vector) with SUM Dimensions (Date, Store, Product), Conditional Aggregation, do not have measure values for conditions, Condition (Date, Dynamic Lookback (0 Years))
Actual Sales Last Year	Restricted Measure	Restricted Measure (Actual Sales till Last Year) with Filter (Date, Dynamic, Lookback (1 Year))
Estimated Sales Vector	Calculated Measure	forecastedquantity * cost
Estimated Sales	Aggregation	Aggregation (Estimated Sales Vector) with SUM, Dimensions (Date, Store, and Product)
Estimated Sales This Year	Restricted Measure	Restricted Measure (Estimated Sales) with Filter (Date, Dynamic , Lookback (0 Years))
Estimated Sales till Last Year	Aggregation	Aggregation (Estimated Sales Vector) with SUM Dimensions (Date, Store, and Product), Conditional Aggregation, do not have measure values for conditions with Condition (Date, Dynamic, and Lookback (0 Years))
Estimated Sales Last Year	Restricted Measure	Restricted Measure (Estimated Sales till Last Year) with Filter (Date, Dynamic, Lookback(1 Year))
Damaged Vector	Calculated Measure	destroyedcapacity* cost
Damaged	Aggregation	Aggregation(Damaged Vector) with SUM Dimensions(Date, Store, and Product)
Expired Vector	Calculated Measure	expiredcapacity* cost
Expired	Aggregation	Aggregation(Expired Vector) with SUM Dimensions(Date, Store, and Product)
Lost Vector	Calculated Measure	lostcapacity* cost
Lost	Aggregation	Aggregation(Lost Vector) with SUM Dimensions(Date, Store, and Product)
InStore + InTransit Vector	Calculated Measure	(onshelfcapacity + intransitcapacity + storagecapacity)* cost
InStore + InTransit	Aggregation	Aggregation(InStore + InTransit Vector) with SUM Dimensions(Date, Store, and Product)
InStore	Calculated Measure	(onshelfcapacity + storagecapacity) * cost

Measure Name	Type	Formula/Properties
InTransit	Calculated Measure	InTransit
Influence	Calculated Measure	decomp_val / forecastedquantity
MAPE	Aggregation	Aggregation(mape_value) with AVG Dimensions(Date, Store, and Product)
Demand	Calculated Measure	Estimated Sales
Difference in Stock	Calculated Measure	InStore + InTransit – Demand
Difference	Calculated Measure	(Actual Sales – Estimated Sales) / Actual Sales
Difference This Year	Calculated Measure	(Actual Sales This Year – Estimated Sales This Year) / Actual Sales This Year
Difference Last Year	Calculated Measure	(Actual Sales Last Year – Estimated Sales Last Year) / Actual Sales Last Year
Montly Influence	Restricted Measure	Restricted Measure(Influence) with Filter(decomp_tag ,Member(SYS:CAL:YR:HRM))
Sales Forecast Quality	Calculated Measure	1 – MAPE
Top 3	Calculated Measure	InStore + InTransit Vector – Estimated Sales Vector
Total Sales	Calculated Measure	Actual Sales
Total Wastage	Calculated Measure	Lost + Damaged + Destroye
Sold Quantity Last 23 Days	Restricted Measure	Restricted Measure(totalunitssold) with Filter(Date, Dynamic, and Lookback(23 Days))
Forecasted Quantity 7 Days	Restricted Measure	Restricted Measure(forecastedquantity) with Filter(Date, Dynamic, and Lookahead(7 Days))
Sold Quantity Last Year filtered for 23 days	Calculated Measure	Aggregation(totalunitssold) with SUM Dimensions(Date, Store, and Product), Conditional Aggregation , Do not have values for conditions , Condition(Date, Dynamic, and Lookback(358 Days))
Sold Quantity Last Year	Restricted Measure	Restricted Measure(Sold Quantity Last Year filtered for 23 days) with Filter(Date, Dynamic, and Lookback(388 Days))

Measure Name	Type	Formula/Properties
MonthOrder	Calculated Measure	Sample Code

```
MonthOrder
Calculated
Measure
IF([month]="Jan",

                1,


IF([month]="Feb",

                2,


IF([month]="Mar",

                3,


IF([month]="Apr",

                4,


IF([month]="May",

                5,


IF([month]="Jun",

                6,


IF([month]="Jul",

                7,


IF([month]="Aug",

                8,


IF([month]="Sep",

                9,


IF([month]="Oct",

                10,


IF([month]="Nov",

                11,


IF([month]="Dec",
```

Measure Name	Type	Formula/Properties
		12, 13))))))))))))

3.9.4 Models

3.9.4.1 Model Description (SAP_IKZW_GEN_LH_ZEROWASTE)

Model Name: SAP_IKZW_GEN_LH_ZEROWASTE	Connection
• Model Description: Model created for consuming HANA View • Planning Enabled: No	• HANA Live Connection • Connection Name: SAPRTHINV • HANA View: ZerowasteIIKDashboard

Dimensions		
Name	**Description**	**Mapping**
PRODUCTNAME	Product	PRODUCTNAME
CATEGORY	Category	CATEGORY

Model Name: SAP_IKZW_GEN_LH_ZEROWASTE		Connection
SUBCATEGORY	Subcategory	SUBCATEGORY
PRODUCTDESCRIPTION	Product description	PRODUCTDESCRIPTION
PRODUCTUNIT	Product Unit	PRODUCTUNIT
BARCODE	Barcode	BARCODE
COSTUNIT	Currency Unit	COSTUNIT
SKUID	SKUID	SKUID
STOREID	Store ID	STOREID
CITYID	City	CITYID
STORENAME	Store	STORENAME
ADDRESS	Address	ADDRESS
LATITUDE	Latitude	LATITUDE
LONGITUDE	Longitude	LONGITUDE
PRODUCTLOCATION	Product Location	PRODUCTLOCATION
REVIEWSTATUS	Review Status	REVIEWSTATUS
CURRENTTIMESTAMP	Date	CURRENTTIMESTAMP
PROMOTIONCATEGORY	Promotion Category	PROMOTIONCATEGORY
DATE	Date	DATE
WEATHERMAIN	Weather Main	WEATHERMAIN
WEATHER DESCRIPTION	Weather Description	WEATHER DESCRIPTION
CLOUD_ALL	Cloud_All	CLOUD_ALL
WEEKDAY	Weekday	WEEKDAY
MONTH	Month	MONTH
DAY	Day	DAY
YEAR	Year	YEAR
HOL_ID	HOL_ID	HOL_ID
OPER_STATUS	OPER_STATUS	OPER_STATUS
OFR_ID	OFR_ID	OFR_ID
DECOMP_TAG	Influencer	DECOMP_TAG
DECOMP_ATTR	DECOMP_ATTR	DECOMP_ATTR
MONTHNAME	Month	MONTHNAME

3.9.5 Known Limitations

Limitations	Solution
In the Analytics Dashboard, a store manager will be able to view the charts for all the stores as currently there is no store specific restriction/authorization. But in the Fiori application, a store manager can only view the data of the stores for which the access is provided.	User must have store manager role.
Currency must be same across all the stores and there is no support for currency conversion. If you import data with multiple currencies, you might encounter issues in the functionality of the product.	Currency Conversion feature will be planned in future releases.
You can import any measurement unit for a product, and it will be respected, but there is no provision for unit conversion.	Unit conversion feature will be available planned in future releases.

3.10 Insurance

3.10.1 Architecture and Abstract

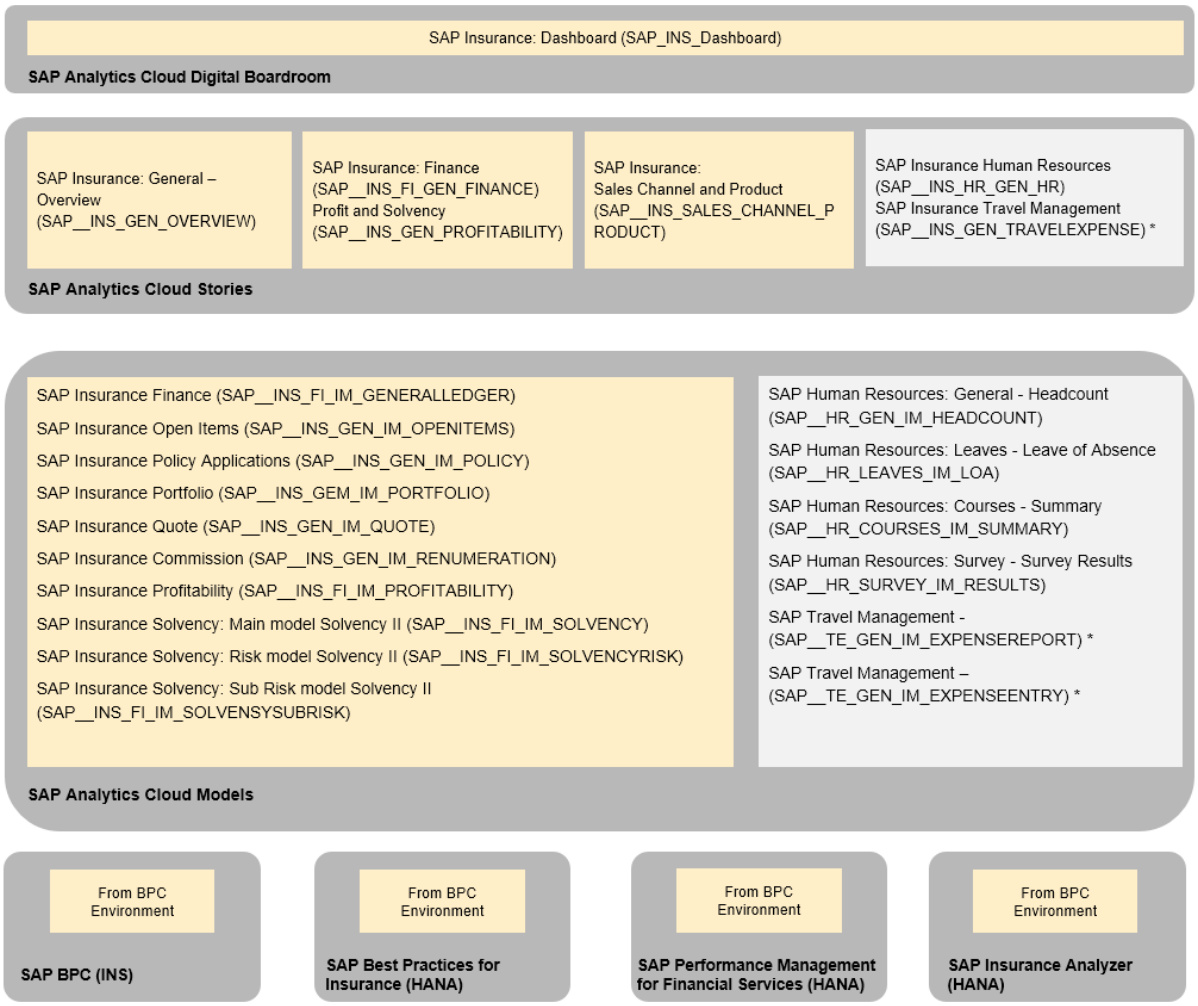
The Insurance Digital Boardroom provides Insurance carrier decision makers with a real-time data driven platform to track LOB and Insurance specific KPI's around Finance, Sales, and Channel Analysis, People, and Travel Management.

The complete Insurance content is built with data acquisition models in order to provide sample data. In general, the data models can be copied and filled with data from customer systems.

Some of the insurance models, however, are sourced from SAP HANA views of the SAP Cloud Appliance Library. Data from SAP HANA views cannot be used to stage data into data acquisition models.

For those cases, new live data connection models need to be created. The documentation describes the required SAP HANA views and their fields in detail. The structure of the live models corresponds to the delivered data acquisition models. Thus, stories can easily be switched to run on the live data models once these are created.

Architecture



3.10.2 Dashboard

Insurance delivers the Digital Boardroom SAP Insurance: Dashboard (SAP_INS_Dashboard).

3.10.3 Stories

SAP Insurance: General - Overview (SAP__INS_GEN_OVERVIEW)

This story provides the most important KPIs and thus provides a comprehensive overview of the business.

SAP Insurance: Finance (SAP__INS_FI_GEN_FINANCE)

This story contains insurance specific and LOB Finance KPI's with year over year and multiple actual versus plan comparisons.

SAP Insurance: Profitability and Solvency (SAP__INS_GEN_PROFITABILITY)

This story contains insurance specific and LOB Profitability and Solvency KPI's with year over year over year comparisons.

SAP Insurance: Exp., Rev., Profit. Value Driver Trees (SAP__FS_GEN_PROFITVDT)

This story enables insurance carriers to plan and simulate results for multiple expense and revenue value drivers.

SAP Insurance: IFRS 17 Accounting Standard (SAP__INS_GEN_IFRS17)

This story contains IFRS17 specific measures such as contractual Service Margin, Insurance Service Result, and many others to help Insurance carriers comply with the IFRS17 accounting standard.

SAP Insurance: Sales Channel and Product (SAP__INS_SALES_CHANNEL_PRODUCT)

This story contains insurance specific KPI's to manage insurance sales, product, and channel distribution.

SAP Insurance: People Review (SAP__INS_HR_GEN_HR)

This is a copy of the story SAP__HR_GEN_HR (SAP Human Resources: General).

SAP Insurance: Travel Management (SAP__INS_GEN_TRAVELEXPENSE)

This story is a placeholder for the story SAP__TE_GEN_IM_EXPENSEREPORTS (SAP Travel Management: General). For technical reasons, the travel and expense story cannot be included.

3.10.4 Models

3.10.4.1 Finance – General Ledger: SAP__INS_FI_IM_GENERALLEDGER

Model Name: SAP__INS_FI_IM_GENERALLEDGER	Connection
• Model Description: SAP Finance –BPC Finance with Plan vs Actual • Planning Enabled: Yes	• Connection Type: Import Data Connection to an SAP BPC System • BPC Model: Planning • BPC Environment Name: INS21_FI_C

Calculated Measures in GL Account		
ID	**Description**	**Formula/Mapping**
F1	Revenues	Revenue
F10	Loss Ratio	Insurance Benefits/Revenue
F11	Combined Ratio	Insurance Benefits + Commissions + Operating Expenses/Revenue

Model Name: SAP__INS_FI_IM_GENERALLEDGER		Connection
F12	Net profit Margin	Net Income After Taxes / Revenue
F13	Policy Count	Policies Accepted
F2	Expenses	Benefit Expenses
F3	Contribution Margin	Revenue – Benefit Expenses
F4	Losses Incurred	Insurance Benefits
F5	Net Written Premium	Gross Written Premium + Sales Revenue – Insurance Premiums
F6	Net Fixed Assets	Net Fixed Assets
F7	UW Profit/Loss	Revenue – Insurance Benefits - Commissions
F8	Commission Expense	Commissions
F9	Operating Expense	Operating Expenses

Dimensions

ID	Description	Mapping
AUDIT_TRAIL	Audit Trail	AUDIT_TRAIL
CLAIM_YEAR	Claim Year	CLAIM_YEAR
COMPANY_CODE	Company Code	COMPANY_CODE
COST_CENTER	Cost Center	COST_CENTER
CURRENCY	Currency	CURRENCY
Flow	Flow	FLOW
FUNCTIONAL_AREA	Functional Area	FUNCTIONAL_AREA
LEDGER	Ledger	LEDGER
LINE_OF_BUSINESS	Line of Business	LINE_OF_BUSINESS
PROFIT_CENTER	Profit Center	PROFIT_CENTER
RISK_LOCATION	Risk Location	RISK_LOCATION
RISK_REGION	Risk Region	RISK_REGION
SALES_CHANNEL	Sales Channel	SALES_CHANNEL
SEGMENT	Segment	SEGMENT
TRADING_PARTNER	Trading Partner	TRADING_PARTNER

> **i Note**
>
> * Private dimension and other dimensions are public.

3.10.4.2 General - Open Items: SAP__INS_GEN_IM_OPENITEMS

Model Name: SAP__INS_GEN_IM_OPENITEMS		Connection
• SAP Insurance: General - Open Items • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_OPENITEMSCOMMISIONCONTRACT
Open Item Account		
ID	**Description**	**Formula/Mapping**
OpenTotal	OpenTotal	InsurOpenTotAmt
Open 1 to 30 Days	Open 1 to 30 Days	InsurOpen1to30DayOverduAmt
Open Over 90 Days	Open Over 90 Days	InsurOpenOver90DayOverduAmt
Open 61 to 90 Days	Open 61 to 90 Days	InsurOpen61to90DayOverduAmt
Open 31 to 60 Days	Open 31 to 60 Days	InsurOpen31to90DayOverdueAmt
Not Overdue	Not Overdue	InsurOpenNotOverduAmt
Dimensions		
ID	**Description**	**Mapping**
SAP_INS_COMMISSIONBP	Commission Business Partner	CommissionBPName
SAP_INS_COMMISSIONCONTRACT	Commission Contract	CommissionContract
SAP_INS_POLICY	Policy	InsurancePolicy
SAP_INS_INSURANCECONTRACT	Insurance Contract	InsuranceContract
SAP_INS_INSURANCEMAINTRANS	Insurance Main Transaction	InsurMainTransactionName
SAP_INS_INSURANCESUBTRANS	Insurance Sub Transaction	InsurSubtransName
SAP_INS_POLICYHOLDERNAME	Policy Holder	BusinessPartnerFullName
Additional Notes		

*The Hana View Z_OPENITEMSCOMMISSIONCONTRACT is available in SAP Best Practices for Insurance which is an innovative solution allowing insurance carriers to operate their entire business for P&C and Life on the SAP Hana platform in the Cloud provided by the SAP Cloud Appliance Library.

Link to deploy the CAL solutions: https://cal.sap.com/

3.10.4.3 General - Policy Applications: SAP__INS_GEN_POLICY

Model Name: SAP__INS_GEN_IM_POLICY	Connection

• SAP Insurance: General - Policy Application • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_POLICYAPPLICATIONCOMMISSION-CONTRACT
Policy Account		
ID	**Description**	**Formula/Mapping**
Number of Applications	Number of Applications	NumbrofInsurAppls
Dimensions		
ID	**Description**	**Mapping**
SAP_INS_PRODUCTGROUP	Product Group	InsurPlcyProdnCtrlCatName
SAP_INS_PRODUCT	Product	InsurPlcyProdnLongName
SAP_INS_POLICY	POLICY	InsurancePolicy
SAP_INS_APPLICATION	Application	InsuranceApplication
SAP_INS_BUSPROCTYPE	Business Process Type	InsurPlcyBusProcTypeName
SAP_INS_APPTYPE	Application Type	InsurPlcyAcqnTypeName
SAP_INS_CHANNEL	Channel	InsurPlcyDistrChnlName
SAP_INS_COMISSIONBP	Commission Business Partner	CommissionBPName
SAP_INS_APPSTATUS	Application Status	InsurApplLifeCycStsName
Additional Notes about the model		

[1]The Hana View Z_POLICYAPPLICATIONCOMMISSIONCONTRACT is available in SAP Best Practices for Insurance which is an innovative solution allowing insurance carriers to operate their entire business for P&C and Life on the SAP Hana platform in the Cloud provided by the SAP Cloud Appliance Library.

Link to deploy the CAL solutions: https://cal.sap.com/

3.10.4.4 General – Portfolio: SAP__INS_GEN_IM_PORTFOLIO

Model Name: SAP__INS_GEN_IM_PORTFOLIO		**Connection**
• SAP Insurance: General – Portfolio • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_PORTFOLIOASSIGNMENT_POLICY
Portfolio Account		
ID	**Description**	**Formula/Mapping**
Number of Policies	Number of Policies	NumbrPolicies
Number of Contracts	Number of Contracts	NumbrOfInsurContrs
Premium After Tax	Premium After Tax	InsurPerdPremAftTaxPayAmt
Dimensions		
ID	**Description**	**Mapping**

Model Name: SAP__INS_GEN_IM_PORTFOLIO		Connection
SAP_INS_COMMISSIONBP	Commission Business Partner	CommissionBPName
SAP_INS_COMMISSIONCONTRACT	Commission Contract	CommissionContract
SAP_INS_POLICYHOLDERNAME	Policy Holder	PolicyHolderName
SAP_INS_CHANNEL	Channel	InsurPlcyDistrChnlName
SAP_INS_PRODUCTGROUP	Product Group	InsurPlcyProdnCtrlCatName
SAP_INS_POLICY	Policy	InsurancePolicy
SAP_INS_INSURANCECONTRACT	Insurance Contract	InsuranceContract
SAP_INS_PRODUCT	Product	InsurPlcyProdnLongName
Additional Notes about the model		

*The Hana View Z_PORTFOLIOASSIGNMENT_POLICY is available in SAP Best Practices for Insurance which is an innovative solution allowing insurance carriers to operate their entire business for P&C and Life on the SAP Hana platform in the Cloud provided by the SAP Cloud Appliance Library.

Link to deploy the CAL solutions: https://cal.sap.com/

3.10.4.5 General – Quote: SAP__INS_GEN_IM_QUOTE

Model Name: SAP__INS_GEN_IM_QUOTE		Connection
• SAP Insurance: General – Quote • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_LEADQUOTEPOLICYCOMMISSION-CONTRACT
Account		
ID	**Description**	**Formula/Mapping**
NumberOfLeads	Number of Leads	NumberOfLeads
NumberOfQuotes	Number of Quotes	NumberOfQuotes
NumberOfPolicies	Number of Policies	NumberOfPolicies
Dimensions		
ID	**Description**	**Mapping**
SAP_INS_COMMISSIONBP	Commission Business Partner	CommissionBPName
SAP_INS_COMMISSIONCONTRACT	Commission Contract	CommissionContract
Additional Notes about the model		

Model Name: SAP__INS_GEN_IM_QUOTE	Connection
Data Source Connection and Integration	

[1]The Hana View Z_LEADQUOTEPOLICYCOMMISSIONCONTRACT is available in SAP Best Practices for Insurance which is an innovative solution allowing insurance carriers to operate their entire business for P&C and Life on the SAP Hana platform in the Cloud provided by the SAP Cloud Appliance Library.

Link to deploy the CAL solutions: https://cal.sap.com/

3.10.4.6 General – Renumeration: SAP__INS_GEN_IM_RENUMERATION

Model Name: SAP__INS_GEN_IM_RENUMERATION		Connection
• SAP Insurance: General – Renumeration • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_RENUMERATIONENTITLEMENT
Account		
ID	**Description**	**Formula/Mapping**
RENUM_AMT	Renumeration Amount	REM_CONAMNT
Dimensions		
ID	**Description**	**Mapping**
SAP_INS_BUSINESSPARTNER	Business Partner	Business PartnerID
SAP_INS_COMMISSIONCONTRACT	Commission Contract	CommissionContract
SAP_INS_RENUMPROD	Renumeration Product	ElementProd_Txt
SAP_INS_ORGUNIT	Org Unit	OrgUnit_Parent_Txt
Additional Notes about the model		

[1]The Hana View Z_RENUMERATIONENTITLEMENT is available in SAP Best Practices for Insurance which is an innovative solution allowing insurance carriers to operate their entire business for P&C and Life on the SAP Hana platform in the Cloud provided by the SAP Cloud Appliance Library.

Link to deploy the CAL solutions: https://cal.sap.com/

3.10.4.7 Finance - Profitability: SAP__INS_FI_IM_PROFITABILITY

Model Name: SAP__INS_FI_IM_PROFITABILITY		Connection
• SAP Insurance: Finance – Profitability • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_PROFITABILITY
Account		
ID	**Description**	**Formula/Mapping**
NXI_AMT	Amount (TC)	NXI_AMT
NXI_ASSET	AI Asset	NXI_ASSET
NXI_FCCOST	Fee & Commission Cos	NXI_FCCOST
NXI_FCINCOME	Fee & Commission Inc	NXI_FCINCOME
NXI_INTASSR	Interest Rate Asset	NXI_INTASSR
NXI_INTLIABR	Interest Rate Liabil	NXI_INTLIABR
NXI_LIAB	AI Liability	NXI_LIAB
NXI_PAYMENT	Payment	NXI_PAYMENT
NXI_QA	Quantity	NXI_QA
YACOST	Acquisition Costs	YACOST
YCLAIMRES	Claims Reserve	YCLAIMRES
YCLAIMSD	Claims	YCLAIMSD
YCLAIMS	Claims	YCLAIMS
YDURATION	Duration	YDURATION
YEPREMD	Earned Premium	YEPREMD
YEPREM	Earned Premium	YEPREM
YFINCOST	Finance Cost	YFINCOST
YGMCOST	GM Cost	YGMCOST
YGWPREMD	Gross Written Premium	YGWPREMD
YGWPREM	Gross Written Premium	YGWPREM
YHRCOST	HR Cost	YHRCOST
YITCOST	IT Cost	YITCOST
YNCM	Net Commissions Margin (CM2= CM1 + Fee & Commission Income – Fee & Commission Costs)	YNCM
YNEPREM	Net Earned Premium	YNEPREM
YNOM	Net Overall Margin (CM4 =CM3 – Indirect & Direct Costs)	YNOM

Model Name: SAP__INS_FI_IM_PROFITABILITY		Connection
YNPM	Net Premium Margin (CM1 = Net Earned Premium – Claims – Standard Acquisition Costs)	YNPM
YNSM	Net Standard Margin (CM3= CM2 – Standard Process Costs)	YNSM
YORPREMD	Outwards RI Premium	YORPREMD
YORPREM	Outwards RI Premium	YORPREM
YOTHCOST	Other Cost	YOTHCOST
YREVSA	Revenue Split Acquisition	YREVSA
YREVSC	Revenue Split Control	YREVSC
YSACOSTD	Standard Acquisition Cost	YSACOSTD
YSALECOST	Sales Cost	YSALECOST
YSPCOSTR	SP Cost Rate	YSPCOSTR
YSPCOST	Standard Process Cost	YSPCOST
YSTPCOSTT	Standard Proc Cost Tarif	YSTPCOSTT
YUNPREM	Unearned Premium	YUNPREM
YVOLUME	Volume	YVOLUME
Dimensions		
ID	**Description**	**Mapping**
NXI_TS	Time Stamp	NXI_TS
NXI_COMPCODE	Company Code	NXI_COMPCODE
NXI_PROFITC	Profit Centre	NXI_PROFITC
NXI_CHANNEL	Channel	NXI_CHANNEL
NXI_CURR	Transaction C.	NXI_CURR
NXI_PRODTYPE	Product & Service Type	NXI_PRODTYPE
NXI_PRODUCT	Product	NXI_PRODUCT
Additional Notes about the model		

*Customers should have SAP Performance Management for Financial Services (in this case for insurance) at their end. The profitability model mentioned above is designed to work with the existing SAP Hana database view.

The SAP HANA database view should have the below columns which are based on underlying Profitability database table from the SAP HANA database.

Clients can create this view as per their table structure, the only condition is, they should contain all the columns which are defined in below mapping tables.

3.10.4.8 Main Model for Solvency II: SAP__INS_FI_IM_SOLVENCY

Model Name: SAP__INS_FI_IM_SOLVENCYRISKS		Connection
• SAP Insurance: Risks model for Solvency II • Planning Enabled: Yes		Local File based on View[1]: Z_SOLVENCY_RISKS
Account		
ID	**Description**	**Formula/Mapping**
KF_SCR_GROSS	Overall SCR	KF_SCR
Dimensions		
ID	**Description**	**Mapping**
CH_LEGAL_ENTITY	Legal Entity	CH_LEGAL_ENTITY
CH_RISK_MOD	Risk Module	CH_RISK_MOD
CH_FUNC_CURR	Functional Currency	CH_FUNC_CURR
CH_KEY_DATE	Key Date	CH_KEY_DATE
Additional Notes about the model		

*Customers should have SAP Performance Management for Financial Services (in this case for insurance) at their end. This Solvency model is designed to work with the existing Hana database view which is defined above.

The SAP Hana database view should have the below columns which are based on underlying Solvency database table from Hana database.

Clients can create this view as per their table structure, the only condition is, they should contain all the columns which are defined in below mapping tables.

This view/table will have all the broader level risks information such as Market/Health/default/Life/Non-Life. Each row will have consolidated information for any given risk type such as Market/Health/etc. against given date, currency, and company code.

3.10.4.9 Risks Model for Solvency II: SAP__INS_FI_IM_SOLVENCYRISKS

Model Name: SAP__INS_FI_IM_SOLVENCYRISKS	Connection
SAP Insurance: Risks model for Solvency II Planning Enabled: Yes	Local File based on View[1]: Z_SOLVENCY_RISKS
Account	

Model Name: SAP__INS_FI_IM_SOLVENCYRISKS		Connection
ID	**Description**	**Formula/Mapping**
KF_SCR_GROSS	Overall SCR	KF_SCR
Dimensions		
ID	**Description**	**Mapping**
CH_LEGAL_ENTITY	Legal Entity	CH_LEGAL_ENTITY
CH_RISK_MOD	Risk Module	CH_RISK_MOD
CH_FUNC_CURR	Functional Currency	CH_FUNC_CURR
CH_KEY_DATE	Key Date	CH_KEY_DATE
Additional Notes about the model		

[1] Customers should have SAP Performance Management for Financial Services (in this case for insurance) at their end. This Solvency model is designed to work with the existing HANA database view which is defined above.

The SAP HANA database view should have the below columns which are based on underlying Solvency database table from HANA database.

Clients can create this view as per their table structure, the only condition is, they should contain all the columns which are defined in below mapping tables.

This view/table will have all the broader level risks information such as Market/Health/default/Life/Non-Life. Each row will have consolidated information for any given risk type such as Market/Health/etc. against given date, currency, and company code.

3.10.4.10 Sub risks Model for Solvency II: SAP__INS_FI_IM_SOLVENCYSUBRISKS

Model Name: SAP__INS_FI_IM_SOLVENCYSUBRISK		Connection
• SAP Insurance: Sub risks model for Solvency II • Planning Enabled: Yes		Local File based on SAP HANA View[1]: Z_SOLVENCY_SUBRISKS
Account		
ID	**Description**	**Formula/Mapping**
KF_SCR_GROSS	Overall SCR	KF_SCR
Dimensions		
ID	**Description**	**Mapping**
CH_LEGAL_ENTITY	Legal Entity	CH_LEGAL_ENTITY
CH_RISK_MOD	Risk Module	CH_RISK_MOD
CH_FUNC_CURR	Functional Currency	CH_FUNC_CURR
Additional Notes about the model		

Model Name: SAP__INS_FI_IM_SOLVENCYSUBRISK	Connection

*Customers should have SAP Performance Management for Financial Services (in this case for insurance) at their end. This Solvency model is designed to work with the existing Hana database view which is defined above.

The SAP Hana database view should have the below columns which are based on underlying Solvency database table from Hana database.

Clients can create this view as per their table structure, the only condition is, they should contain all the columns which are defined in below mapping tables.

This view/table will have all the lower level risks information such as Equity/Currency/Mortality/CAT etc.,

3.10.4.11 IFRS17 (SAP__INS_FI_IM_IFRS17)

Model Name: SAP__INS_FI_IM_IFRS17	Connection
• SAP Insurance: IFRS17 • Planning Enabled: Yes	• Connection Types: Local file based on SAP Insurance Analyser • The raw data to calculate all measures below can be found in Insurance Analyser table SBASE view of display result data or also in the delivered Hana view BV_RDL_SBA_SF

Account		
ID	**Description**	**Formula/Mapping**
F1	Cash inflows(Premium)	Refer to PKF for premium and other cash inflows
F10	Cash Outflows (Claim)	Refer to PKF for guaranteed benefits, discretionary benefits, acquisition costs, other expenses
F11	Insurance Contract (Asset/Liability)	PV FCF Liability for Remaining Coverage + Liability for Insured Claims
F12	Reinsurance Contract (Asset/Liability)	Subtotal to be calculated
F13	Liability for Remaining Coverage	Subtotal of LRC CSM, LRC RA and LRC PV of FCF
F2	Liability for Incurred Claims	GL account IS Ba L: Liability for Incurred Claims (PV FCF)
F3	Loss Component	GL account IS PL: Loss/Gain on Onerous Contract/Group
F4	PV of future cash flows	GL Account PV of Future Cash Flows – LRC PV of FCF

Model Name: SAP__INS_FI_IM_IFRS17		Connection
F5	Risk Adjustment non – financial risk	GL Account Risk Adjustment non-financial risk – LRC RA
F6	Contractual Service Margin	GL Account Contractual Service Margin – LRC CSM
F7	Insurance Contract Revenue	GL Account Insurance Contract Revenue
F8	Insurance Services Expense	Incurred Claims D220271 + Incurred Expenses D471811 + Amortization D471721
F9	Insurance Service Result	Insurance Revenue – Insurance Service Expense
F10	Gain/Loss from Reinsurance	Reinsurance Service Result + Finance Result
F11	Investment Income	GL Account IS PL I: Investment Income
F14	Insurance Finance Expense	Subtotal to be calculated
F15	Finance Result	Investment Income D471912 – Finance Expense
F16	Profit/Loss	Insurance services Result + Finance Result (Profit before tax)
Dimensions		
ID	**Description**	**Mapping**
Time	Time	Time
P_ACCOUNT	Account	P_ACCOUNT
SAP Insurance Policy	SAP Insurance Policy	SAP Insurance Policy
SAP Insurance Portfolio	SAP Insurance Portfolio	SAP Insurance Portfolio
SAP Insurance Legal Entity	SAP Insurance Legal Entity	SAP Insurance Legal Entity

3.10.4.12 Exp., Rev., Profit. Value Driver Trees (SAP__INS_FI_IM_PROFITVDT)

Model Name: SAP__INS_FI_IM_PROFITVDT	Connection
• SAP Insurance: Exp., Rev., Profit. Value Driver Trees • Planning Enabled: Yes	Connection Types: Offline Data Model. All measures and dimensions required to build the PROFITVDT planning model are found in the SAP__INS_FI_IM_PROFITABILITY model
Measures in the Insurance Profitability Account	

Model Name: SAP__INS_FI_IM_PROFITVDT		Connection
ID	**Description**	**Mapping**
YNPM	Net Premium Margin	YNPM
YNCM	Net Commissions Margin	YNCM
YNSM	Net Standard Margin	YNSM
YNOM	Net Overall Margin	YNOM
YUNPREM	Unearned Premium	YUNPREM
YNEPREM	Net Earned Premium	YNEPREM
YHRCOST	HR Cost	YHRCOST
YFINCOST	Finance Cost	YFINCOST
YGMCOST	General Management Cost	YGMCOST
YSALECOST	Sales Costs	YSALECOST
YOTHCOST	Other Costs	YOTHCOST
YCLAIMRES	Claims Reserves	YCLAIMRES
YITCOST	IT Costs	YITCOST
YREVSA	Revenue Split Acquisition	YREVSA
YVOLUME	Volume	YVOLUME
YDURATION	Duration	YDURATION
YREVSC	Revenue Split Control	YREVSC
YSTPCOSTT	Standard Proc Cost Tarif	YSTPCOSTT
NXI_QA	Quantity	NXI_QA
NXI_FCCOST	Fee and Commission Costs	NXI_FCCOST
NXI_FCINCOME	Fee and Commission Income	NXI_FCINCOME
NXI_PAYMENT	Payment	NXI_PAYMENT
NXI_ASSET	AI Asset	NXI_ASSET
NXI_INTASSR	Interest Rate Asset	NXI_INTASSR
NXI_INTLIABR	Interest Rate Liability	NXI_INTLIABR
NXI_LIAB	Liability	NXI_LIAB
YGWPREM	Gross Written Premium	YGWPREM
YEPREM	Earned Premium	YEPREM
YORPREM	Outwards RI Premium	YORPREM
YCLAIMS	Claims	YCLAIMS
YACOST	Acquisition Costs	YACOST
YSPCOSTR	Standard Processing Costs	YSPCOSTR
YSPCOST	Standard Process Cost	YSPCOST

Model Name: SAP__INS_FI_IM_PROFITVDT		Connection
YGWPREMD	Gross Written Premium Discounted	YGWPREMD
YEPREMD	Earned Premium Discounted	YEPREMD
YCLAIMSD	Claims Discounted	YCLAIMSD
YORPREMD	Outwards RI Premium Discounted	YORPREMD
YSACOSTD	Standard Acquisition Cost Discounted	YSACOSTD
NXI_AMT	Amount (TC)	NXI_AMT
F1	Direct Cost	F1
F2	Indirect Costs	F2
F3	Net Overall Margin Ratio	F3
F4	Net Standard Margin Ratio	F4
F5	Net Commission Margin Ratio	F5
DRV0000	Drivers	DRV0000
DRV00001	Growth Rate %	DRV00001
DRV00002	Sales Cost Growth Rate %	DRV00002
DRV00003	Other Cost Growth Rate %	DRV00003
DRV00004	IT Cost Growth Rate %	DRV00004
DRV00005	HR Cost Growth Rate %	DRV00005
DRV00006	GM Cost Growth Rate %	DRV00006
DRV00007	Finance Cost Growth Rate %	DRV00007
DRV00008	Fee & Comn Cost Growth Rate %	DRV00008
DRV00009	Claims Growth Rate %	DRV00009
DRV00010	Provisions Growth Rate %	DRV00010
DRV00011	Non-Interest Income Growth Rate %	DRV00011
DRV00012	Other Income Growth Rate %	DRV00012
DRV00013	Interest Income Growth Rate %	DRV00013
DRV00014	Fee&Comn Income Growth Rate %	DRV00014
F6	Operating Income	F6
Other_Income	NA	Other_Income
F7	Operating Expenses	F7
F8	Net Operating Income	F8
Profit	Profit	Profit
DRV00015	Earned Premium Income Growth Rate %	DRV00015
Dimensions		
ID	**Description**	**Mapping**

Model Name: SAP__INS_FI_IM_PROFITVDT		Connection
NXI_TS	Time	NXI_TS
NXI_COMPCODE	Company Code	NXI_COMPCODE
NXI_PROFITC	Profit Center	NXI_PROFITC
NXI_PRODUCT	Product Name	NXI_PRODUCT
NXI_CHANNEL	Channel Code/Name	NXI_CHANNEL
NXI_CURR	Transaction Currency	NXI_CURR
NXI_PRODTYPE	Banking Product Type	NXI_PRODTYPE

3.11 Mill Products (MIL)

3.11.1 Architecture and Abstract

With the SAP Analytics Cloud content, Mill Products companies can leverage consistent business intelligence to drive business decisions for production and sales strategies based on an increased transparency into the demand within their configurable product portfolio and other key business drivers.

Companies can visualize data to support optimal decision making, see the status of business at a glance, and use ad-hoc query functionality for further data analysis when required.

Furthermore, it will help business users to monitor and analyse business and operational performance and investigate the sources of variances, thus enabling business users to initiate decisive and optimal actions.

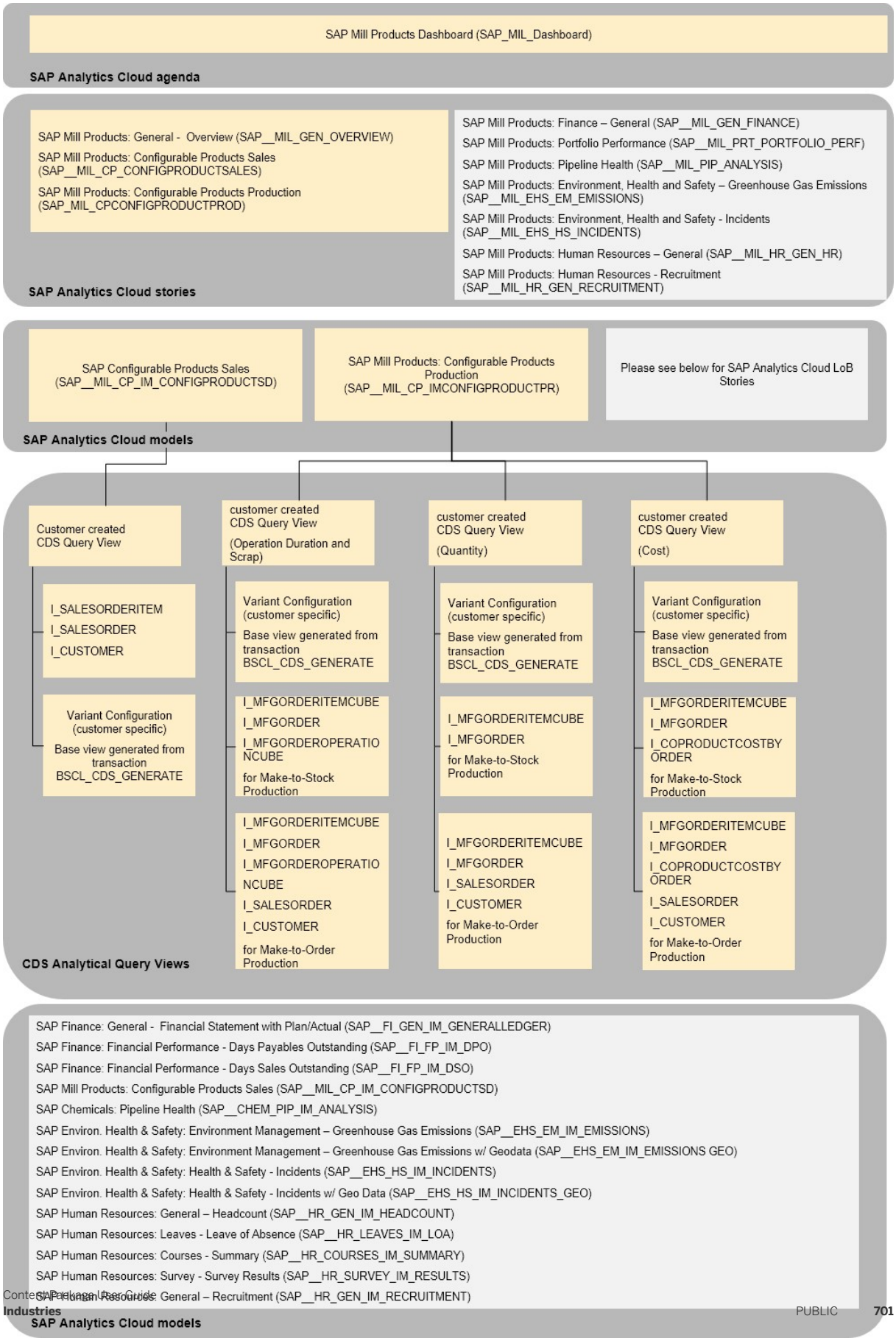
The content will help to:

- Analyse the financial performance including detailed information on Profit and Loss, Net and Gross Profit Margin, and Earnings and Expenses for the current year.

- Assess the product portfolio performance of business units with respect to contribution margin by material groups and configurable products.

- Analyse best- and non-selling configurable products to drive production planning decisions.
- Identify increased usage of lower quality grades and average weight per order within the customer base to create customer-tailored sales incentive programs.
- Assess the opportunity pipeline as an indicator for future business health.
- Analyse incidents and the root causes for injuries.
- Provide transparency into the company's greenhouse gas emission reduction target.
- Monitor key information related to the workforce and recruiting.
- New with CI7: Review the production performance of a configurable product portfolio with regards to quantity, scrap, and operation duration and costs of production orders.

Architecture



3.11.2 Dashboard

The dashboard which provides insights is: *SAP_MIL_Dashboard*

3.11.3 Stories

SAP Mill Products: General - Overview (SAP__MIL_GEN_OVERVIEW)

The overview page provides most relevant information from Finance, Sales, Environment, Health and Safety, and Human Resources.

Page: Overview	
Charts	
Title	**Models Used**
Financial Overview	SAP__FI_GEN_IM_GENERALLEDGER
This chart shows EBIT, Contribution Margin, and ROCE per month YTD.	
5 Best-Selling Grades	SAP__MIL_CP_IM_CONFIGPRODUCTSD
This chart shows the 5 best-selling configurable products by Grade in Net Value, Item Gross Weight, and Average Item Gross Weight YTD.	
Injuries	SAP__EHS_HS_IM_INCIDENTS
This chart shows the total number of injuries per month YTD.	
Workforce Distribution	SAP__HR_GEN_IM_HEADCOUNT
This chart shows the workforce distribution across countries YTD.	
Sales Pipeline	SAP__CHEM_PIP_IM_FORECAST
This chart shows Forecasted Revenue, Target Revenue, and Weighted Revenue per quarter.	
Greenhouse Gas Emissions in CO2e	SAP__EHS_EM_IM_EMISSIONS
This chart shows the Greenhouse Gas Emissions in CO2e of the last 10 years including the total target.	

SAP Mill Products: Finance - General (SAP__MIL_GEN_FINANCE)

General assessment of financial performance – based on P&L, investments, and account positions. This is a copy of the story SAP__FI_GEN_FINANCE (SAP Finance: Financial Boardroom).

SAP Mill Products: Portfolio Performance (SAP__MIL_PRT_PORTFOLIO_PERF)

Analysis of product portfolio performance of business units with respect to contribution margin by material groups and configurable products. This is a copy of the story SAP__CHEM_PRT_PORTFOLIO_PERF (SAP Chemicals: Portfolio Performance).

SAP Mill Products: Configurable Products Production (SAP_MIL_CPCONFIGPRODUCTPROD)

Review of the production performance of a configurable product portfolio with regards to quantity, scrap, and operation duration and costs of production orders.

SAP Mill Products: Configurable Products Sales (SAP__MIL_CP_CONFIGPRODUCTSALES)

Analysis of best and non-selling configurable products, increased usage of lower quality grades, and average weight per order within the customer base.

Page: Details	
Charts	
Title	**Models Used**
Net Value in million USD (MUSD) and Item Gross Weight in million tons (Mte) Distribution	SAP__MIL_CP_IM_CONFIGPRODUCTSD
This chart shows the % distribution of the measures Net Value and Item Gross Weight YTD. Allows drilling down and up in the Material dimension. From Product Group to Configurable Product.	
Configurable Products Sales Overview	SAP__MIL_CP_IM_CONFIGPRODUCTSD
This chart shows the Configurable Products Sales in Net Value, Item Gross Weight and Average Item Gross Weight per month YTD.	
Configurable Products Sales by Country	SAP__MIL_CP_IM_CONFIGPRODUCTSD
This chart shows the Configurable Product Sales by Country in Net Value, Item Gross Weight, and Average Item Gross Weight YTD.	
Configurable Products Sales by Grade	SAP__MIL_CP_IM_CONFIGPRODUCTSD
This chart shows the Configurable Product Sales by Grade in Net Value, Item Gross Weight, and Average Item Gross Weight YTD.	
Page: Context	
Charts	
Title	Models Used

Page: Details	
Net Value Best-Selling Configurable Products by Grade and Thickness	SAP__MIL_CP_IM_CONFIGPRODUCTSD
Filtered to show the 20 Best-Selling Products by Grade and Thickness in Net Value YTD.	
Net Value Best-Selling Products by Grade and Outside Diameter	SAP__MIL_CP_IM_CONFIGPRODUCTSD
Filtered to show the 20 Best-Selling Products by Grade and Outside Diameter in Net Value YTD.	

SAP Mill Products: Pipeline Health (SAP__MIL_PIP_ANALYSIS)

This is a copy of the story SAP__CHEM_PIP_ANAYSIS (SAP Chemicals: Pipeline Health).

SAP Mill Products: Environment, Health and Safety – Greenhouse Gas Emissions (SAP__MIL_EHS_EM_EMISSIONS)

This is a copy of the story SAP__EHS_EM_EMISSIONS (SAP Environment, Health, and Safety: Environment Management - Greenhous Gas Emissions).

SAP Mill Products: Environment, Health and Safety - Incidents (SAP__MIL_EHS_HS_INCIDENTS)

This is a copy of the story SAP__EHS_HS_INCIDENTS (SAP Environment, Health, & Safety: Health & Safety - Incidents).

SAP Mill Products: Human Resources - General (SAP__MIL_HR_GEN_HR)

This is a copy of the story SAP__HR_GEN_HR (SAP Human Resources: General).

SAP Mill Products: Human Resources - Recruitment (SAP__MIL_HR_GEN_RECRUITMENT)

This is a copy of the story SAP__HR_GEN_RECRUITMENT (SAP Human Resources: Recruitment)

3.11.4 Models

3.11.4.1 Configurable Products Production (SAP__MIL_CP_IMCONFIGPRODUCTPR)

Remark:

Actual and plan data is used in this model. There always exists one measure that contains the actual value and one measure that contains the plan value.

Two separate loads are needed to fill the correct data. For the version Actual the measure from the column Mapping/Formula from the table below that are marked with A (=Actuals) have to be mapped and for the version Plan the measure marked with P (=plan) have to be mapped.

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTPR		**Connection**
• Model Description: SAP Mill Products: Configurable Products Production • Planning Enabled: Yes		Analytical CDS Query View: Customer created CDS View
Account Dimension SAP_MIL_CP_CONFIGPRODUCTPR		
ID	**Description**	**Mapping/Formula**
WorkdayDurnInSeconds	Operation Duration in Sec	I_MfgOrderOperationCube: Planned-WorkdayDurnInSeconds (P) ActualWorkdayDurnInSeconds (A)
ScrapQuantity	Scrap Quantity	I_MfgOrderOperationCube: OpPlanned-ScrapQuantity (P) OpTotalConfirmedScrapQty (A)
OperationQuantity	Operation Quantity	I_MfgOrderOperationCube: OpPlanned-TotalQuantity (P) OpTotalConfirmedYieldQty (A)
MfgOrderItemQty	Item Quantity	I_MfgOrderItemCube: MfgOrderItem-PlannedTotalQty (P) MfgOrderItemGoodsReceiptQty (A)
CostInCtrlgAreaCrcy	Costs	I_COProductCostByOrder: PlanCostInCtrlgAreaCrcy (P) ActlCostInCtrlgAreaCrcy (A)
WorkdayDurInMinutes	Operation Duration	[WorkdayDurnInSeconds]/60
ScrapPerc%	Scrap %	[ScrapQuantity]/[MfgOrderItemQty]
Dimensions		

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTPR		Connection
Name	**Description**	**Mapping**
Time*	Time	I_MFGORDER: MfgOrderCreationDate
Version	Version	Actual Plan
SAP_MIL_CP_CONFMATERIAL*	Configurable Material	Base view: <ZCONFMATERIAL>**
SAP_MIL_CP_LENGTH*	Length	Base view: <ZLength>**
SAP_MIL_CP_WIDTH*	Width	Base view: <ZWidth>**
SAP_MIL_CP_THICKNESS*	Thickness	Base view: <ZThickness>**
SAP_MIL_CP_GRADE*	Grade	Base view: <ZGrade>**
SAP_MIL_CP_SURFACE*	Surface	Base view: <ZSurface>**
SAP_MIL_CP_WALLTHICKNESS*	Wall Thickness	Base view: <ZWall Thickness>**
SAP_MIL_CP_HEIGHT*	Height	Base view: <ZHeight>**
SAP_MIL_CP_OUTSIDEDIAMETER*	Outside diameter	Base view: <ZOutside diameter>**
SAP_MIL_CP_INSIDEDIAMETER*	Inside diameter	Base view: <ZInside diameter>**
SAP_MIL_CP_DIAMETER*	Diameter	Base view: <ZDiameter>**
SAP_ALL_MATERIAL	Material	I_MfgOrderItemCube: Material
SAP_SD_ORDERNUM	Sales Order Number	I_MfgOrderItemCube: SalesOrder
SAP_SD_ITEMNUMER	Sales Order Item number	I_MfgOrderItemCube: SalesOrderItem
SAP_ALL_CUSTOMER	Customer	I_CUSTOMER: CustomerName
SAP_ALL_CUSTOMERGROUP	Customer Group	I_SALESORDER: CustomerGroup
SAP_MFG_ORDERNUM	Production Order Number	I_MfgOrderItemCube: Manufacturing-Order
SAP_MFG_ORDERITEMNUM	Production order item	I_MfgOrderItemCube: Manufacturin-gOrderItem
SAP_MFG_ORDEROPERATION	Operation	I_MfgOrderOperationCube: Manufac-turingOrderOperation
SAP_MFG_PRODUCTIONUNIT	Production Unit	I_MfgOrderItemCube: ProductionUnit
SAP_MFG_WORKCENTER	Work Center	I_MfgOrderOperationCube: WorkCenter
SAP_MFG_OPERATIONUNIT	Operation Unit	I_MfgOrderOperationCube: Operatio-nUnit
SAP_MFG_PLANNEDDURATIONUNIT	Planned duration unit	I_MfgOrderOperationCube: Planned-DurationUnit
SAP_MFG_ACTUALDURATIONUNIT	Actual duration unit	I_MfgOrderOperationCube: ActualDurationUnit

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTPR		Connection
SAP_ALL_COMPANY_CODE	Company Code	I_COProductCostByOrder: Company-Code
SAP_ALL_PLANT	Plant	I_MfgOrderItemCube: ProductionPlant
Additional Notes about the model		

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTPR	Connection

** Naming of the characteristics depends on how it is defined in the backend system.

1. Core Data Service (CDS) views are SAP's strategic modeling approach for business entities. You can benefit from pre-delivered CDS cube and query views.
   For example, analyse sales order data. However, in case you want to analyse classification/configuration data, SAP cannot deliver CDS cubes upfront. The classes and characteristics for Classification/Configuration originate in the customer system and additional steps are required. Please review the following notes:
   - 2330518 - Generating CDS views for classification/configuration
   - 2384092 - Restrictions regarding CDS view generation
   - 2490285 - Generating CDS views for classification/configuration in SAP S/4 HANA On Premise 1709
2. The delivered example content does not support that the configuration of a sales order item is updated after the production order was created. This can result in wrong configuration values being displayed for the production order in the SAP Analytics Cloud story due to multiple versions of configuration for the sales order item.
3. The delivered example content is only available for S/4 HANA On-Premise. The CDS views are not released for S/4 HANA Cloud.
   The content assumes that an analytical CDS query view is created in the SAP S/4HANA backend system by the customer joining information by the following CDS views:
   - I_MFGORDERITEMCUBE
     - ManufacturingOrder
     - ManufacturingOrderItem
     - Material
     - ProductionPlant
     - SalesOrder
     - SalesOrderItem
     - Material
     - ProductionUnit
     - MfgOrderItemPlannedTotalQty
     - MfgOrderItemGoodsReceiptQty
   - I_MFGORDER
     - MfgOrderCreationDate
   - I_MFGORDEROPERATIONCUBE
     - WorkCenter
     - ManufacturingOrderOperation
     - OperationUnit
     - PlannedDurationUnit
     - ActualDurationUnit
     - PlannedWorkdayDurnInSeconds
     - ActualWorkdayDurnInSeconds
     - OpPlannedTotalQuantity
     - OpTotalConfirmedYieldQty
     - OpTotalConfirmedScrapQty
   - I_SALESORDER
     - CustomerGroup

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTPR	Connection
○ I_CUSTOMER ○ CustomerName ○ I_COPRODUCTCOSTBYORDER ○ CompanyCode ○ PlanCostInCtrlgAreaCrcy ○ ActCostInCtrlgAreaCrcy	

> **i** Note
>
> * Private dimension and other dimensions are public.

3.11.4.2 Configurable Products Sales (SAP__MIL_CP_IM_CONFIGPRODUCTSD)

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTSD	Connection
• Model Description: SAP Mill Products: Configurable Products Sales • Planning Enabled: No	• Connection type: Import Data Connection to OData Services • Which systems: SAP S/4HANA On Premise and Cloud • Analytical CDS Query View: Customer created CDS View

SAP_MIL_CP_CONFIGPRODUCTSD*	Formula/Mapping	
ID	**Matching Account Description in the Data Source(depends on customer definition)**	**Underlying Data Source and Technical Name of Account in the CDS views (see above). (depends on customer definition)**
ItemGrossWeight	<ITEMGROSSWEIGHT>	I_SALESORDERITEM: ITEMGROSSWEIGHT
OrderQuantity	<ORDERQUANTITY>	I_SALESORDERITEM: ORDERQUANTITY
NetValue	<NETAMOUNT>	I_SALESORDERITEM: NETAMOUNT
Dimensions	**Mapping**	
ID	**Matching Dimension in Data Source (depends on customer definition)**	**Underlying Data Source and Technical Name of Account in the CDS views (see above). (Depends on customer definition.)**
Time*	<CREATIONDATE>	I_SALESORDER: CREATIONDATE
SAP_ALL_BUSINESSAREA	<BUSINESSAREA>	I_SALESORDER: BUSINESSAREA
SAP_ALL_CUSTOMER	<SOLDTOPARTY>	I_SALESORDER: SOLDTOPARTY

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTSD	Connection	
Customer Name	<CUSTOMERNAME>	I-CUSTOMER: CUSTOMERNAME
SAP_ALL_CUSTOMERCOUNTRY	<COUNTRY>	I_CUSTOMER: COUNTRY
SAP_ALL_CUSTOMERGROUP	<CUSTOMERGROUP>	I_SALESORDER-CUSTOMERGROUP
SAP_ALL_DISTRIBUTIONCHANNEL	<DISTRIBUTIONCHANNEL>	I_SALESORDER-DISTRIBUTIONCHANNEL
SAP_ALL_MATERIAL	<MATERIAL>	I_SALESORDERITEM: MATERIAL
SAP_ALL_MATERIALGRPOUP	<MATERIALGROUP>	I_SALESORDERITEM: MATERIALGROUP
SAP_ALL_SALESORGANISATION	<SALESORGANIZATION>	I_SALESORDER-SALESORGANIZATION
SAP_SD_ORDERNUM	<SALESORDER>	I_SALESORDERITEM: SALESORDER
SAP_SD_ITEMNUMER	<SALESORDERITEM>	I_SALESORDERITEM-SALESORDERITEM
SAP_MIL_CP_CLASS	Currently not provided by the source: please set to "#" (unassigned)	Not available
SAP_MIL_CP_DIAMETER	<Diameter>[1]	Base view: <ZDiameter>[1]
SAP_MIL_CP_GRADE	<Grad>[1]	Base view: <ZGrade>[1]
SAP_MIL_CP_HEIGHT	<Height>[1]	Base view: <ZHeight>[1]
SAP_MIL_CP_INSIDEDIAMETER	<Inside diameter>[1]	Base view: <ZInside diameter>[1]
SAP_MIL_CP_LENGTH	<Length>[1]	Base view: <ZLength>[1]
SAP_MIL_CP_OUTSIDEDIAMETER	<Outside diameter>[1]	Base view: <ZOutside diameter>[1]
SAP_MIL_CP_SURFACE	<Surface>[1]	Base view: <ZSurface>[1]
SAP_MIL_CP_THICKNESS	<Thickness>[1]	Base view: <ZThickness>[1]
SAP_MIL_CP_WALLTHICKNESS	<Wall Thickness>[1]	Base view: <ZWall Thickness>[1]
SAP_MIL_CP_WIDTH	<Width>[1]	Base view: <ZWidth>[1]
SAP_MIL_CP_CONFMATERIAL	<Configurable Material>	Base view: <ZCONFMATERIAL>[1]
Additional Notes about the model		

Model Name: SAP__MIL_CP_IM_CONFIGPRODUCTSD	Connection

[1] Naming of the characteristics depends on definition in the backend system.

Data Source Connection and Integration.

Core Data Service (CDS) views are SAP's strategic modeling approach for business entities. You can benefit from pre-delivered CDS cube and query views.

For example, analyse sales order data.

However, in case you want to analyse classification/configuration data, SAP cannot deliver CDS cubes upfront. The classes and characteristics for Classification/Configuration originate in the customer system and additional steps are required. Please review the following notes:

- 2330518 - Generating CDS views for classification/configuration
- 2384092 - Restrictions regarding CDS view generation
- 2490285 - Generating CDS views for classification/configuration in SAP S/4HANA On Premise 1709
- 2490167 - Generating CDS views for classification/configuration in SAP S/4HANA Cloud 1708

The content assumes that an analytical CDS query view is created in the SAP S/4HANA backend system by the customer joining information on sales orders, sales order items, and customers with configuration characteristics provided by the following CDS views:

1. Base view generated from transaction BSCL_CDS_GENERATE
    - All fields (including the configuration characteristics)
2. I_SALESORDERITEM
    - SALESORDER
    - SALESORDERITEM
    - ORDERQUANTITY
    - ORDERQUANTITYUNIT
    - NETAMOUNT
    - TRANSACTIONCURRENCY
    - ITEMGROSSWEIGHT
    - ITEMWEIGHTUNIT
    - MATERIAL
    - MATERIALGROUP
3. I_SALESORDER
    - SOLDTOPARITY
    - CREATIONDATE
    - BUSINESSAREA
    - CUSTOMERGROUP
    - DISTRIBUTIONCHANEEL
    - SALESORGANIZATION
4. I_CUSTOMER
    - CUSTOMERNAME
    - COUNTRY

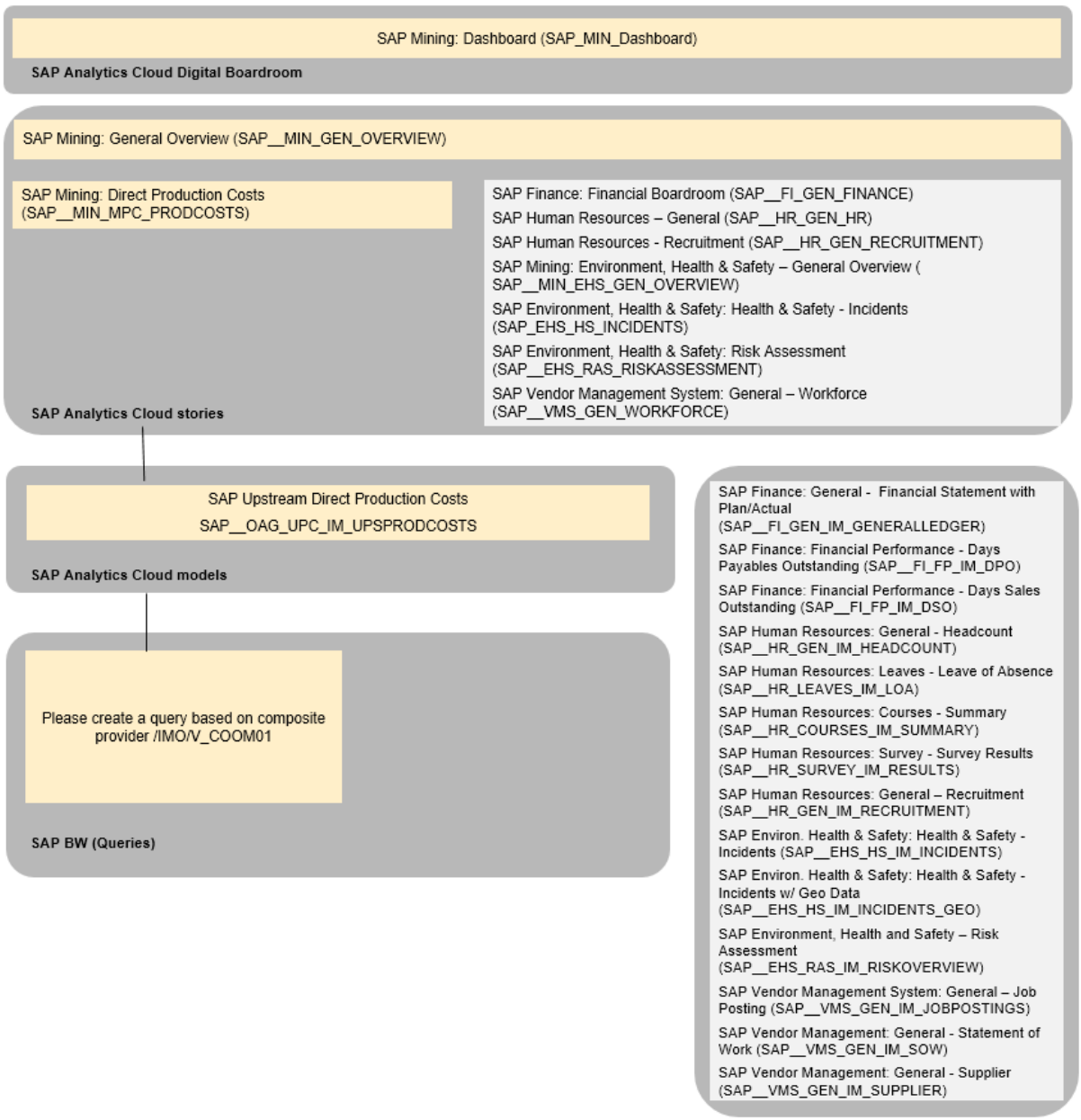
> **i** Note
>
> * Private dimension and other dimensions are public.

3.12 Mining (MIN)

3.12.1 Architecture and Abstract

Using SAP Analytics Cloud and its industry specific content Mining companies can visualize data to support optimal decision making, see the status of business and projects at a glance, and use ad-hoc query functionality for further data analysis when required. Furthermore, users can monitor and analyse business and operational performance and investigate the sources of variances. Thus, enabling them to initiate decisive and optimal actions. The solution improves the overall insight and tracks the company's performance.

Architecture



3.12.2 Digital Boardroom

The Dashboard which can be used to obtain insights is: *SAP_MIN_Dashboard*

3.12.3 Stories

SAP Mining: General Overview (SAP__MIN_GEN_OVERVIEW)

The overview page provides industry relevant Key Performance Indicators (KPI) from Lines of Business such as Finance, Human Resources, Health and Safety, Production, and Vendor Management.

SAP Mining: Direct Production Costs (SAP__MIN_MPC_PRODCOSTS)

Benchmark direct production costs per cost type per ton of ore for all locations being represented as cost centers in a hierarchy. Simulate effects of cost changes on the direct costs per ton to meet demanding efficiency targets. Direct costs instead of indirect costs are used in the simulation as they can easier be influenced.

SAP Mining: Environment, Health & Safety – General Overview (SAP__MIN_EHS_GEN_OVERVIEW)

This is a copy of the story SAP__EHS_GEN_OVERVIEW.

3.12.4 Models

3.12.4.1 SAP__OAG_UPC_IM_UPSTRPRODCOSTS

Model Name: SAP__OAG_UPC_IM_UPSTRPRODCOSTS	Connection
• Model Description: SAP Oil & Gas: Upstream Production Costs - Direct Costs • Planning Enabled: Yes; • Currency conversion: No	• Connection Type: Import Data Connection to an SAP BW System • Connection Analytical Query: Please create a query based on the composite provider /IMO/V_COOM01 using the below mentioned measure and dimensions.

Account*		
ID	**Description**	**Formula/Mapping**
Costs	Costs	0AMOUNT
Production Quantity	Production Quantity	External Data[1]
Valuated Quantity	Valuated Quantity	External Data[1]

Model Name: SAP__OAG_UPC_IM_UPSTRPRODCOSTS		Connection
Reference Price	Reference Price	External Data[1]
Costs Threshold	Costs Threshold	External Data[1]
Material Costs	Material Costs	RESTRICT([Costs],[d/SAP_OAG_UPC_COSTELEMENT]=("500000"))
Energy Costs	Energy Costs	RESTRICT([Costs],[d/SAP_OAG_UPC_COSTELEMENT]=("611000"))
Labour Costs	Labour Costs	RESTRICT([Costs],[d/SAP_OAG_UPC_COSTELEMENT]=("943100","943200"))
Direct Total Costs	Direct Total Costs per Barrel	[Costs]/[ProductionQuantity]
Direct Material Costs	Direct Material Costs per Barrel	[Material Costs]/[ProductionQuantity]
Direct Energy Costs	Direct Energy Costs per Barrel	[Energy Costs]/[ProductionQuantity]
Direct Labour Costs	Direct Labour Costs per Barrel	[Labour Costs]/[ProductionQuantity]
Benchmark Costs Threshold	Benchmark Costs Threshold	Details([Reference Price]*[Costs Threshold])
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0FISCPER
Material	SAP_ALL_MATERIAL	External Data[1]
Controlling Area	SAP_ALL_COAREA	0CO_AREA
Cost Center	SAP_ALL_COSTCENTER	0COSTCENTER
Cost Element	SAP_OAG_UPC_COSTELEMENT	0COSTELMNT
Additional Notes about the model		
[1]External Data: The production volumes and the valuated production volumes (quantity x price) for the produced material (barrels of crude oil or m3 of gas) are typically sourced from an external system. The BW data model needs to be enhanced to include this data on project basis.		

> **i Note**
>
> * Private dimension and other dimensions are public.

3.12.4.2 SAP__INV_IM_GOODSMOVEMENT

Model Name: SAP__INV_IM_GOODSMOVEMENT	Connection
• Model Description: SAP Inventory Management – Goods Movement • Planning Enabled: No • Currency conversion: Enabled	• Connection Type: Import Data Connection to an SAP BW System • Connection Analytical Query: Data source name: 2CCGDSMVTQUERY • CDS view name: C_GoodsMovementQuery

Account*

ID	Description	Formula/Mapping
Valuation	Absolute Valuation	Stock Change Amount
Input	Input	RESTRICT([Valuation],[d/SAP_INV_MOVEMENT-TYPE]=("MT291","MT292"))
Output	Output	RESTRICT([Valuation],[d/SAP_INV_MOVEMENT-TYPE]=("MT521","MT522"))
GRM	Gross Refining Margin	[Output] - [Input]
Pct_Input	% of Input	[GRM]/[Input]

Dimensions		Mapping	
ID	**Description**	**Dimension Name**	**Technical Name**
Time*	Time	Posting Date	2CI8Y43VHMIRVF4RJRA-ZEM218HU
Plant	SAP_ALL_PLANT	Plant	2CIPLANT
Legal Entity	SAP_ALL_COMPANY_CODE	Legal Entity	2CIFICOMPANYCODE
Valuation Type	SAP_INV_VALUATIONTYPE	Valuation Type	2CIFIINVVALTYPE
Material	SAP_ALL_MATERIAL	Material	2CIMATERIAL
Material Group	SAP_ALL_MATERIALGROUP	Material Group	2CIMATERIAL-MATERI-ALGROUP
Movement Type	SAP_INV_MOVEMENTTYPE	Movement Type	2CIGDSMVTTYPE
Profit Center	SAP_ALL_PROFITCENTER	Profit Center	2CQNCGI0DLB6F8TG1TWCL2IQX6G

Additional Notes about the model

It is recommended to filter data during upload on the following Movement Types so that only data for these 4 types are uploaded:

- 521 Receipt w/o Order
- 522 RE Receipt w/o Order
- 291 GI all acc. Assigmts
- 292 RE all acc. Assigmts

> **i Note**
>
> * Private dimension and other dimensions are public.

3.12.4.3 SAP__OAG_TSW_IM_SHIPMENT

Model Name: SAP__OAG_TSW_IM_SHIPMENT	Connection
• Model Description: SAP Oil and Gas: TSW – Shipment (Plan VS Actual) • Planning Enabled: No	• Connection Type: Import Data Connection to OData Services • Connection OData: Service name: (/sap/opu/odata/SAP/TSW_SHIPMENT_PLAN_VS_ACTUAL_SRV[1] • CDS name: C_PlanVsActualNomination[1])

TSW Account*		Formula/Mapping
ID	**Description**	**ID in data source**
Delta_Load_Discharge_Time_Hours	Delta Load Discharge Time [Hours]	NominationDeltaActualPlan
Planned_Transit_Time_Hours	Planned Transit Time [Hours]	PlannedTransitTime
Actual_Transit_Time_Hours	Actual Transit Time [Hours]	ActualTransitTime
Delta_Transit_Time_Hours	Delta Transit Time [hours]	DeltaTransitTime
Location_Specific_Scheduling_Deviation_Hours	Location Specific Scheduling Deviation [Hours]	NominationLocSpcfcDvtn
Planned_Quantity	Planned Quantity (BBL)	PlannedQuantity
Actual_Quantity	Actual Quantity (BBL)	ActualScheduledQuantity
Delta_Quantity	Delta Quantity (BBL)	NominationDeltaQuantity
Delta_Quantity_%	Delta Quantity (%)	[Delta_Quantity]/[Planned_Quantity]
Delta_Transit_Time_%	Delta Transit Time (%)	[Delta_Transit_Time_Hours]/[Planned_Transit_Time_Hours]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	PlannedStartDate
SAP_OAG_TSW_NOMKEY	Nomination Key	NominationDoc
SAP_OAG_TSW_NOMITEM	Nomination Item	NominationDocItem
SAP_OAG_TSW_NOMNUMBER	Nomination Number	NominationExtNumber
SAP_OAG_TSW_LOCID	Location ID	LocationId
SAP_OAG_TSW_LOCID	Location Description	LocationName
SAP_OAG_TSW_LOCTYPE	Location Type	LocationType
SAP_ALL_MATERIAL	Material	ScheduledMaterial
SAP_ALL_MATERIALGROUP	Material Group ID	MaterialGroup
SAP_ALL_MATERIALGROUP	Material Group Description	MaterialGroupName
SAP_OAG_TSW_CARRIER	Carrier ID	NominationCarrier
SAP_OAG_TSW_CARRIER	Carrier Description	CarrierName

Model Name: SAP__OAG_TSW_IM_SHIPMENT		Connection
SAP_OAG_TSW_MOT	Mode Of Transport ID	NominationModeOfTransport
SAP_OAG_TSW_MOT	Mode Of Transport Description	ModeOfTransportText
SAP_OAG_TSW_VEHICLEID	Vehicle ID	VehicleId
SAP_OAG_TSW_VEHICLEID	Vehicle Description	VehicleDescription
SAP_OAG_TSW_ROUTE	Route	ShippingRoute
SAP_OAG_TSW_UNIQUELOCID	Unique Location Indicator	IsNominationLocationUnique
SAP_OAG_TSW_LDINDICATOR	Load/Discharge Indicator	IsLoad
SAP_OAG_TSW_PLSTARTDATETIME	Planned Start Date/Time	PlannedStartDateTime
SAP_OAG_TSW_LOCADATETIME	Location Actual Date/Time	NominationLocActlStrtDteTme
SAP_OAG_TSW_TTADATETIME	Transit Time Actual Date/Time	TT Actual Date Time
Additional Notes about the model		
*The CDS view and OData service are on the S/4 HANA Roadmap Industry: Oil and Gas, 2018 future direction. This is the current state of planning and can be changed by SAP at any time without notice.		

> **i Note**
>
> Private dimension and other dimensions are public.

3.13 Oil & Gas (OAG)

3.13.1 Architecture and Abstract

With SAP Analytics Cloud including the content Oil & Gas companies can leverage consistent business intelligence to drive decisions for efficiency as the drop-in oil prices have put pressure on margins.

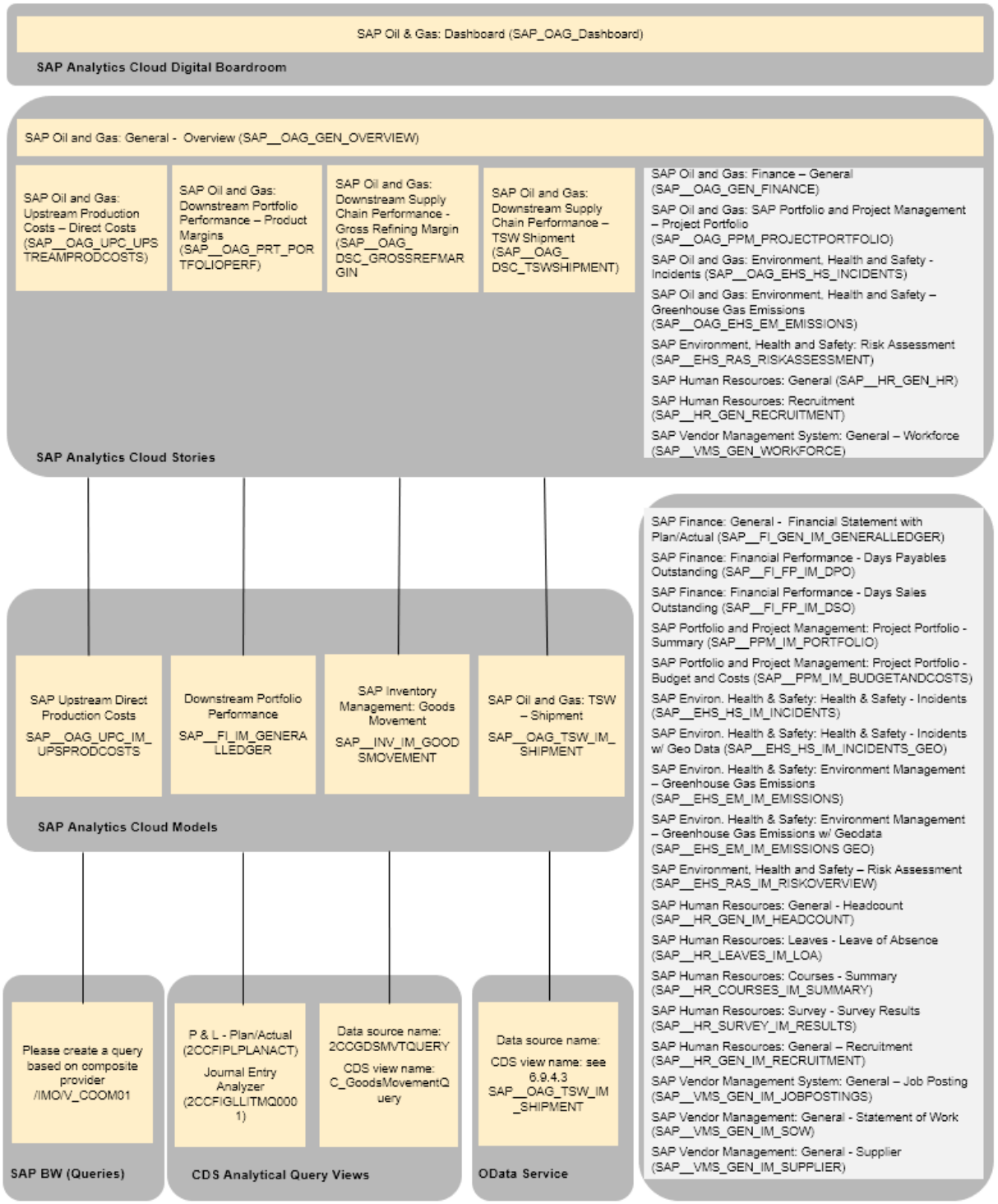
Companies can visualize data to support optimal decision making, see the status of business and projects at a glance, and use ad-hoc query functionality for further data analysis when required. Furthermore, it will help business users to monitor and analyse business and operational performance and investigate the sources of variances. Thus, enabling business users to initiate decisive and optimal actions. The solution improves the overall insight and tracks the company's performance.

The content will help to:

- Analyse your current financial performance including detail information on the Profit & Loss situation, your Net and Gross Profit Margin, and the Earnings and Expense situation for the current year.
- Benchmark direct production costs and simulate effects of cost changes on the direct costs per barrel to meet demanding efficiency targets.
- Assessment of the product portfolio performance of downstream and chemical business units.
- Comparison of the refineries economics based on the difference of the cost of the raw materials and feedstocks consumed and the value of the finished products produced to improve. For example, decisions on matching supply/demand, refinery planning, or investments.

- Monitoring execution performance of O&G shipments (TSW nominations) by key parameters such as carrier, mode of transport, route, vehicle, and site to improve the lead time and delivery quality in the supply chain.
- Improve decisions on the current portfolio of capital and STO project and analyse deviations of budget and costs per project including the root cause analysis.
- Monitor the headcount, recruitment, age diversity, time-offs, and training spend.
- The stories are based on integration via data acquisition to SAP S/4HANA via CDS Query Views, to SAP SuccessFactors via Connector, to SAP ERP and SAP PPM via SAP BW Query.

Architecture



The colored objects are documented in this chapter.

The documentation for the story SAP__OAG_GEN_FINANCE can be found in the following chapter: 5.5 Finance (FI).

The documentation for the story SAP__OAG_PPM_PROJECTPORTFOLIO can be found in the following chapter: 5.20 Portfolio and Project Management (PPM).

The documentation for the story SAP__OAG_EHS_HS_INCIDENTS, SAP__OAG_EHS_EM_EMISSIONS and SAP__EHS_RAS_RISKASSESSMENT can be found in the following chapter: 5.4 Environment, Health and Safety Management (EHS).

The documentation for the story SAP__HR_GEN_HR and SAP__HR_GEN_RECRUITMENT can be found in the following chapter: 5.14 Human Resources (HR).

The documentation for the story SAP__VMS_GEN_WORKFORCE can be found in the following chapter:

3.13.2 Digital Boardroom

SAP_OAG_Dashboard

The Dashboard provides a company summary and performance overview to the Board for the last quarters. The Dashboard has stable elements that will be monitored continuously such as Finance or Human Resources. The health and safety topic is an example for a one-time actual topic with high industry relevance that should be analysed and solved due to current problems. Date of the meeting is 20th of October 2018, as the provided data corresponds to this date.

The following topics are covered:

- Finance: General assessment of financial performance based on P&L, investments, and account positions.
- Upstream Direct Production Cost: Benchmark direct production costs per cost type per barrel of crude for all districts, fields, wells or well completions. Simulate effects of cost changes on the direct costs per barrel to meet demanding efficiency targets.
- Downstream Portfolio Performance: Assessment of the product portfolio performance of downstream and chemical business units with respect to contribution margin by markets, regions, and customer segments.
- Downstream Supply Chain Performance:
    - Gross Refining Margin - Comparison of the refineries profits based on the difference of the cost of the raw materials and value of the petroleum products produced to improve for example, productivity related decision and decisions on supply-demand matching or investments.
    - TSW Shipments - Monitoring execution performance of O&G shipments (TSW nominations) by key parameters such as carrier, mode of transport, route, vehicle, and site to improve the lead time and delivery quality in the supply chain.
    - Capital and STO Projects: Improve decisions on the current portfolio of capital and STO (Shutdowns, Turnarounds, and Outages) projects based on budgets, costs, commercial value, risks, and ROI including analysis of budget deviations.
- Environment, Health, and Safety:
    - Greenhouse Gas Emissions - Monitor how well the oil platforms, fields, terminals, and refineries reach the companies greenhouse gas emission reduction target.
    - Risk Assessment - This story enables customers to analyse and compare the risk situation of their operational units (in this example plants), it shows how well this risk situation is managed by the implementation of mitigating risk controls.
- Human Resources:
    - Human Resources - Overview on the most important of HR topics.
    - Recruitment - Overview on the recruitment

- Contingent Worker, Statement of Work and Supplier Mgmt.

3.13.3 Stories

Name: SAP__OAG_GEN_OVERVIEW		
SAP Oil & Gas: General - Overview		
Purpose: The overview page provides the most relevant Key Performance Indicators (KPI) from Line(s) of Business such as Upstream, Downstream and Chemicals, Human Resource, Health and Safety, Product Management, and Finance.		
Page: Overview		
KPI´s Gross Revenue SAP__FI_GEN_IM_GENERALLEDGER* Contribution Margin SAP__FI_GEN_IM_GENERALLEDGER* Injuries SAP__EHS_HS_IM_INCIDENTS*		
Charts		
Title	**Models Used**	**Navigate to Agenda Item**
Financial Overview for the Current Year	SAP__FI_GEN_IM_GENERALLEDGER*	Financial
EBIT, Contribution Margin, and ROCE YTD monthly values.		
Downstream Sales Revenue by Business Unit	SAP__FI_GEN_IM_GENERALLEDGER*	Downstream Portfolio Performance
YTD plan / actual comparison of the sales revenues of the Downstream Refineries and Chemical Business Units.		
Upstream Production Overview	SAP__OAG_UPC_IM_UPSSTRPROD-COSTS	Upstream Direct Production Costs
YTD plan / actual production of barrel of crude in BBL.		
Top 5 Projects by Budget	SAP__PPM_IM_PORTFOLIO *	Capital and STO Projects
Top 5 project of current portfolio by total budget and actual costs in million USD.		
European Gross Refining Margin Benchmark	SAP__INV_IM_GOODSMOVEMENT	SCP - Gross Refining Margin
Comparison of the European refineries economics by YTD margin in million USD.		
Greenhouse Gas Emissions in CO2e	SAP__EHS_EM_IM_EMISSIONS*	Greenhouse Gas Emissions
Company's total greenhouse gas emissions in CO2e of the last 10 years including the total target.		
Injuries	SAP__EHS_HS_IM_INCIDENTS*	Incidents
Company's total monthly number of incidents were people were injured of current year.		
Shipment Performance in Primary Distribution	SAP__OAG_ DSC_TSWSHIPMENT	SCP - TSW Shipments
Company's Shipment performance: Delta Transit Time (%), Delta Quantity (%) and Avg. Location Spec Deviation.		

* The documentation for the model SAP Finance: General- Financial Statement with Plan/Actual (SAP__FI_GEN_IM_GENERALLEDGER) can be found in the following chapter

The documentation for the model SAP Portfolio and Project Management: Project Portfolio (SAP__PPM_IM_PORTFOLIO) can be found in the following chapter:

- The documentation for the model SAP Environ. Health & Safety: Health & Safety – Incidents (SAP__EHS_HS_IM_INCIDENTS) can be found in the following chapter: SAP Environ. Health & Safety: Health & Safety - Incidents (SAP__EHS_HS_IM_INCIDENTS)
- The documentation for the model SAP Human Resources: General – Headcount (SAP__HR_GEN_IM_HEADCOUNT) can be found in the following chapter: SAP Human Resources: General - Headcount (SAP__HR_GEN_IM_HEADCOUNT)

Name: SAP__OAG_GEN_FINANCE

SAP Oil & Gas: Finance - General
General assessment of financial performance – based on P&L, investments, and account positions.
This is a copy of the story SAP__FI_GEN_FINANCE (SAP Finance: Financial Boardroom). For a description of the story and the models used please check the following chapter: Finance (FI).

Name: SAP__OAG_UPC_UPSTREAMPRODCOSTS

SAP Oil & Gas: Upstream Production Costs – Direct Costs		
Benchmark direct production costs per cost type per barrel of crude for all operating units, districts, fields, or wells being represented as cost centers in a hierarchy. Simulate effects of cost changes on the direct costs per barrel to meet demanding efficiency targets. Direct costs instead of indirect costs are used in the simulation as they can easier be influenced.		
Page: Details		
Charts		
Title	**Models Used**	**Navigate to**
Upstream Direct Production Cost Benchmark	SAP__OAG_UPC_IM_UPSTRPROD-COSTS	
This chart compares direct production costs per barrel of crude oil of various wells and platforms and showing a costs threshold. This is calculated as a percentage of the monthly average oil price. The percentage depends the production system, here well and platform. The threshold is created to indicate potential profitability issues.		
Direct Material Costs per Barrel by Cost Center	SAP__OAG_UPC_IM_UPSTRPROD-COSTS	
This chart shows all cost elements related to materials per barrel of crude for the selected cost center/production unit for the time period.		
Direct Energy Costs per Barrel by Cost Center	SAP__OAG_UPC_IM_UPSTRPROD-COSTS	
This chart shows all costs elements related to energy costs per barrel of crude for the selected cost center/production unit for the time period.		
Direct Labour Costs per Barrel by Cost Center	SAP__OAG_UPC_IM_UPSTRPROD-COSTS	
This chart shows all cost elements related to labour per barrel of crude for the selected cost center/production unit for the time period.		
Page: Context		

Name: SAP__OAG_UPC_UPSTREAMPRODCOSTS

In this page, simulation of costs can be performed. A copy of the actual costs version is saved as a planned version and simulation of costs can be done in this planned version of costs.

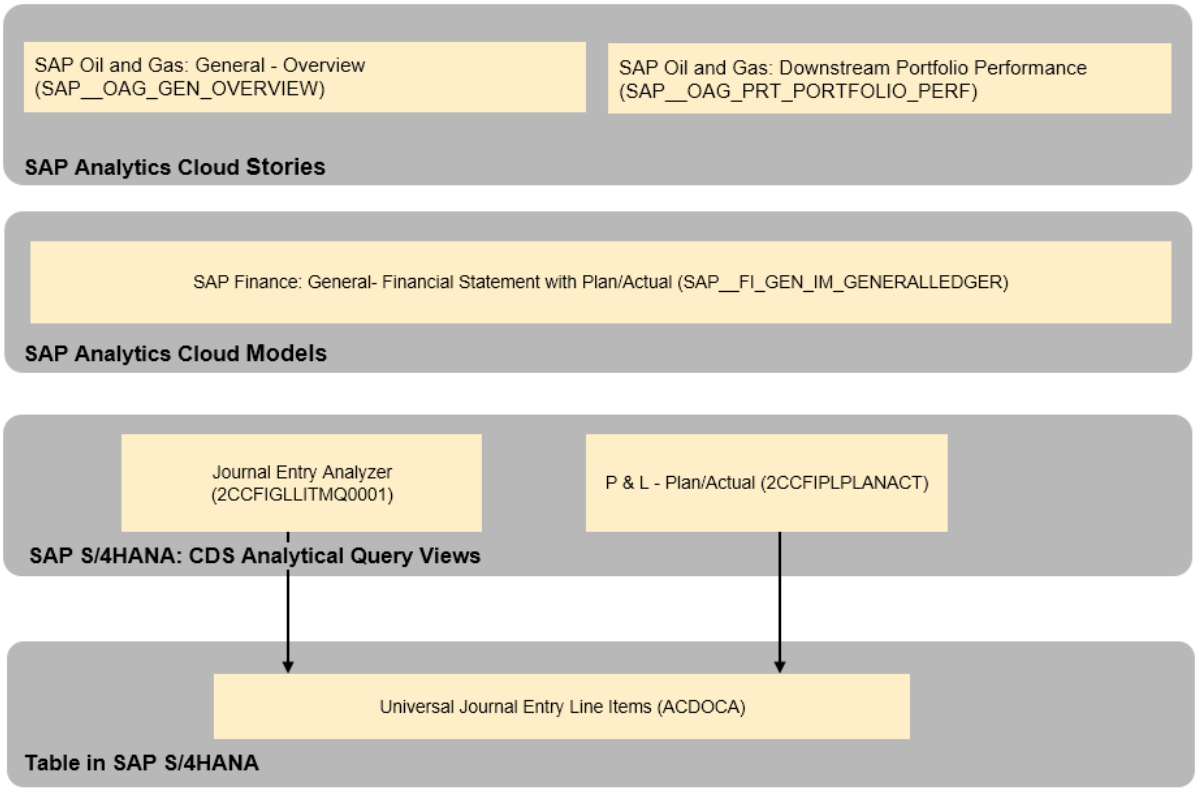
The upper chart reflects the Simulated costs based on data manipulated in the lower table.

Charts		
Title	**Models Used**	**Navigate to**
Simulation of Costs	SAP__OAG_UPC_IM_UPSTRPROD-COSTS	
Chart shows the result of the simulation. The simulated direct total cost per barrel of crude oil are shown and compared to the costs threshold.		
Input for Simulation of Total Costs	SAP__OAG_UPC_IM_UPSTRPROD-COSTS	
Simulate the effects of cost increases or decreases on the total direct production's costs per barrel of crude oil. Compare cost to the cost threshold. Including the simulation on how changing market price for crude oil would influence the threshold.		

Name: SAP__OAG_PRT_PORTFOLIOPERF

SAP Oil & Gas: Downstream Portfolio Performance – Contribution Margin		
Assessment of the product portfolio performance of downstream and chemical business units with respect to contribution margin by markets, regions, and customer segments.		
Page: Details		
Charts		
Title	**Models Used**	**Navigate to**
Contribution Margin by Downstream and Chemicals	SAP__FI_IM_GENERALLEDGER*	Explorer
Contribution Margin by Segment for Selected Period	SAP__FI_IM_GENERALLEDGER*	Explorer
Contribution Margin	SAP__FI_IM_GENERALLEDGER*	Explorer
Contribution Margin by Segment	SAP__FI_IM_GENERALLEDGER*	Explorer
Page: Context		
Charts		
Title	**Models Used**	**Navigate to**
Contribution Margin by Segment and Product Group	SAP__FI_IM_GENERALLEDGER*	Explorer
Contribution Margin by Customer Group	SAP__FI_IM_GENERALLEDGER*	Explorer
Sales Deductions by Customer Group	SAP__FI_IM_GENERALLEDGER*	Explorer
Sales Revenue, Sales Deductions and Contribution Margin by Material Group	SAP__FI_IM_GENERALLEDGER*	Explorer

The documentation for the model SAP Finance: General- Financial Statement with Plan/Actual (SAP__FI_GEN_IM_GENERALLEDGER) can be found in the following chapter: 5.5.4.1



Name: SAP__OAG_ DSC_GROSSREFMARGIN		
SAP Oil & Gas: Downstream Supply Chain Performance - Gross Refining Margin		
Purpose: Comparison of the refineries profits based on the difference of the cost of the raw materials and value of the petroleum products produced to improve. For example, productivity related decision, decisions on supply-demand matching or investments. This scenario offers an internal benchmark to compare the performance of different refineries. The gross refining margin is calculated based on the valued consumption of crude oil and other feedstocks and the valued production outputs.		
Page: Details		
Charts		
Title	**Models Used**	**Navigate to**
Gross Refining Margin by Plant	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows the total gross refining margin of the different refineries in Mio US $.		
% Gross Refining Margin by Plant	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows the total gross refining margin of the different refineries in % of input.		
Output by Material Group	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows for the selected plants the produced outputs by material group as % of total output.		
Gross Refining Margin Trend	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows for the selected plants the monthly gross refining margins in Mio US $.		

Name: SAP__OAG_ DSC_GROSSREFMARGIN

% Gross Refining Margin Trend	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows for the selected plants the monthly gross refining margins in % of Input.		
Page: Context		
Output by Plant	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows the valuated output by plant YTD for the selected refineries, material groups, and output unit.		
Output by Material Group	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows the valuated output by material group YTD for the selected refineries, material groups, and output unit.		
Output by Material	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows the valuated output by material YTD for the selected refineries, material groups, and output unit.		
Output by Plant and Material Group	SAP__INV_IM_GOODSMOVEMENT	Open in Explorer
This chart shows the valuated output by material group and plant YTD for the selected refineries, material groups, and output unit.		

Story Name: SAP__OAG_ DSC_TSWSHIPMENT

SAP Oil & Gas: Downstream Supply Chain Performance - TSW Shipment		
Purpose: Monitoring execution performance of O&G shipments (TSW nominations) by key parameters such as carrier, mode of transport, route, vehicle and site to improve the lead time and delivery quality in the supply chain.		
Page: Supply Chain Performance		
Charts		
Title	**Models Used**	**Navigate to**
Planned Quantity per Material Group	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Planned Quantity per Material Group in %.		
Delta Transit Time	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Transit Time in %.		
Avg. Scheduling Deviation	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Avg. Scheduling Deviation in hours.		
Delta Quantity	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Quantity in %.		
Delta Quantity, Delta Transit Time and Avg. Scheduling Deviation	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows for each Material Group the Delta Quantity, Delta Transit Time, and Avg. Scheduling Deviation in %.		
Planned, Actual and Delta Transit Time	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Planned, Actual, and Delta Transit Time for each Material Group in hours and %.		

Story Name: SAP__OAG_ DSC_TSWSHIPMENT		
Scheduling Deviation and Avg. Scheduling Dev.	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Scheduling Deviation and Avg. Scheduling Dev. for each Material Group in hours.		
Planned, Actual and Delta Quantity (%)	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Planned, Actual, and Delta Quantity for each Material Group (%) in BBL and %.		
Page: Carrier Performance		
Charts		
Title	**Models Used**	**Navigate to**
Planned and Delta Transit Time per Carrier	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Planned and Delta Transit Time per Carrier in hours and %.		
Delta Transit Time per Carrier and Mode of Transport	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
Delta Transit Time per Carrier and Mode of Transport in %		
Delta Transit Time per Carrier, Mode Of Transport and Vehicle	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Transit Time per Carrier, Mode Of Transport and Vehicle in %.		
Page: Mode of Transport Performance		
Charts		
Title	**Models Used**	**Navigate to**
Delta TT and Average Scheduling Deviation	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta TT and Average Scheduling Deviation in %.		
Average Scheduling Deviation per Mode Of Transport and Time	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Average Scheduling Deviation per Mode Of Transport and Time in hours.		
Delta Transit Time per Mode of Transport and Route	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Transit Time per Mode of Transport and Route in %.		
Page: Location Performance		
Charts		
Title	**Models Used**	**Navigate to**
Delta Quantity and Average Scheduling Deviation per Location	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Quantity and Average Scheduling Deviation per Location in BBL and hours.		
Avg. Scheduling Deviation	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Avg. Scheduling Deviation for each Material Group in hours of Load (L) and Discharge (D).		

Story Name: SAP__OAG_ DSC_TSWSHIPMENT

Delta Quantity per Material Group	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Quantity per Material Group in BLL for Load (L) and Discharge (D).		
Delta Quantity per Location and Time	SAP__OAG_TSW_IM_SHIPMENT	Open in Explorer
This chart shows the Delta Quantity per Location and Time in BBL.		

Calculations

Calculation – name	Type	Data Source name
Counter	Aggregation	SAP__OAG_TSW_IM_SHIPMENT
Properties	Operation: Count Aggregation Dimensions: Nomination Item, Nomination Key Measure: Location Specific Scheduling Deviation (Hours)	
Avg. Location Spec. Deviation	calculated	SAP__OAG_TSW_IM_SHIPMENT
Formula	[SAP__OAG_TSW_IM_SHIPMENT: Location_Specific_Scheduling_Deviation_Hours]/[#Counter]	

Name: SAP__OAG_PPM_PROJECTPORTFOLIO

SAP Oil & Gas: Portfolio and Project Management – Project Portfolio

This is a copy of the story SAP__PPM_PROJECTPORTFOLIO (SAP Portfolio and Project Management: Project Portfolio).

For a description of the story and the models used please check the following chapter:

Portfolio and Project Management (PPM).

Name: SAP__OAG_EHS_HS_INCIDENTS

SAP Oil & Gas: Environment, Health and Safety - Incidents

This is a copy of the story SAP__EHS_HS_INCIDENTS (SAP Environ. Health & Safety: Health & Safety - Incidents).

For a description of the story and the models used please check the following chapter: EHS: Stories.

Name: SAP__OAG_EHS_EM_EMISSIONS*

SAP Oil & Gas: Environment, Health and Safety – Greenhouse Gas Emissions

This is a copy of the story SAP__EHS_EM_EMISSIONS (SAP Environment, Health and Safety: Environment Management - Greenhous Gas Emissions)

For a description of the story and the models used please check the following chapter: EHS: Stories.

Story Name: SAP__EHS_RAS_RISKASSESSMENT

SAP Environment, Health and Safety – Risk Assessment

This is a reused story. For a description of the story and the models used please check the following chapter 5.4 Environment, Health and Safety Management (EHS).

Name: SAP__HR_GEN_HR
SAP Oil & Gas: Human Resources - General
This is a copy of the story SAP__HR_GEN_HR (SAP Human Resources: General) For a description of the story and the models used please check the following chapter: 5.6 Human Resources (HR).

Story Name: SAP__VMS_GEN_WORKFORCE
SAP Vendor Management System: General - Workforce
This is a reused story. The documentation for the story SAP__VMS_GEN_WORKFORCE can be found in the following chapter: 5.28 Vendor Management (VMS)

3.13.4 Models

3.13.4.1 SAP__OAG_UPC_IM_UPSTRPRODCOSTS

Model Name: SAP__OAG_UPC_IM_UPSTRPRODCOSTS	Connection
i Note Model Description: SAP Oil & Gas: Upstream Production Costs - Direct Costs Planning Enabled: Yes Currency conversion: No	• Connection type: Import Data Connection to an SAP BW System • Connection Analytical Query: Please create a query based on the composite provider /IMO/V_COOM01 using the below mentioned measure and dimensions

Accounts

ID	Description	Formula/Mapping
Costs	Costs	0AMOUNT
Production Quantity	Production Quantity	External Data **
Valuated Quantity	Valuated Quantity	External Data **
Reference Price	Reference Price	External Data **
Costs Threshold	Costs Threshold	External Data **
Material Costs	Material Costs	RESTRICT([Costs],[d/SAP_OAG_UPC_COSTELEMENT]=("500000"))
Energy Costs	Energy Costs	RESTRICT([Costs],[d/SAP_OAG_UPC_COSTELEMENT]=("611000"))
Labour Costs	Labour Costs	RESTRICT([Costs],[d/SAP_OAG_UPC_COSTELEMENT]=("943100","943200"))

Model Name: SAP__OAG_UPC_IM_UPSTRPRODCOSTS		Connection
Direct Total Costs	Direct Total Costs per Barrel	[Costs]/[ProductionQuantity]
Direct Material Costs	Direct Material Costs per Barrel	[Material Costs]/[ProductionQuantity]
Direct Energy Costs	Direct Energy Costs per Barrel	[Energy Costs]/[ProductionQuantity]
Direct Labour Costs	Direct Labour Costs per Barrel	[Labour Costs]/[ProductionQuantity]
Benchmark Costs Threshold	Benchmark Costs Threshold	Details([Reference Price]*[Costs Threshold])
Dimensions		
ID	**Description**	**Mapping**
Time	Time	0FISCPER
Material	SAP_ALL_MATERIAL	0MATERIAL**
Controlling Area	SAP_ALL_COAREA	0CO_AREA
Cost Center	SAP_ALL_COSTCENTER	0COSTCENTER
Cost Element	SAP_OAG_UPC_COSTELEMENT	0COSTELMNT
Dimension that only exists in SAP Analytics Cloud model and not in data source		Assign to #

> **i Note**
>
> ** External Data: The production volumes and the valuated production volumes (quantity x price) for the produced material (barrels of crude oil or m3 of gas) are typically sourced from an external system. The BW data model needs to be enhanced to include this data on project basis.

3.13.4.2 SAP__INV_IM_GOODSMOVEMENT

Model Name: SAP__INV_IM_GOODSMOVEMENT	Connection
• Model Description: SAP Inventory Management - Goods Movement • Planning Enabled: No • Currency Conversion: Enabled	Connection Type: Import Data Connection to an SAP BW System • Connection Analytical Query: Data source name: 2CCGDSMVTQUERY • CDS View Name: C_GoodsMovementQuery It is recommended to filter data during upload on the following Movement Types so that only data for these 4 types are uploaded: • 521 Receipt w/o Order • 522 RE Receipt w/o Order • 291 GI all acc. Assigmts • 292 RE all acc. Assigmts

Accounts

ID	Description	Formula/Mapping
Valuation	Absolute Valuation	Stock Change Amount
Input	Input	RESTRICT([Valuation],[d/SAP_INV_MOVEMENTTYPE]=("MT291","MT292"))
Output	Output	RESTRICT([Valuation],[d/SAP_INV_MOVEMENTTYPE]=("MT521","MT522"))
GRM	Gross Refining Margin	[Output] - [Input]
Pct_Input	% of Input	[GRM]/[Input]

Dimensions

ID	Description	Mapping (Technical Names)
Time	Time	Posting Date (2CI8Y43VHMIRVF4RJRAZEM218HU)
INV Account Goods Movements	SAP_INV_ACCOUNT_GOODSMOVEMENT	Stock Change Amount
Plant	SAP_ALL_PLANT	Plant (2CIPLANT)
Legal Entity	SAP_ALL_COMPANY_CODE	Legal Entity (2CIFICOMPANYCODE)
Valuation Type	SAP_INV_VALUATIONTYPE	Valuation Type (2CIFIINVVALTYPE)
Material	SAP_ALL_MATERIAL	Material (2CIMATERIAL)
Material Group	SAP_ALL_MATERIALGROUP	Material Group (2CIMATERIAL-MATERIALGROUP)
Movement Type	SAP_INV_MOVEMENTTYPE	Movement Type (2CIGDSMVTTYPE)

Model Name: SAP__INV_IM_GOODSMOVEMENT		Connection
Profit Center	SAP_ALL_PROFITCENTER	Profit Center (2CQNCGI0DLB6F8TG1TWCL2IQX6G)
Dimension that only exists in SAP Analytics Cloud model and not in data source		Assign to #

3.13.4.3 SAP__OAG_TSW_IM_SHIPMENT

Model Name: SAP__OAG_TSW_IM_SHIPMENT	Connection
• Model Description: SAP Oil and Gas: TSW – Shipment (Plan VS Actual) • Planning Enabled: No • Currency Conversion: No	• Connection type: Import Data Connection to OData Services • Connection OData: Service name: (/sap/opu/odata/SAP/TSW_SHIPMENT_PLAN_VS_ACTUAL_SRV* • CDS name: C_PlanVsActualNomination*)

Accounts

ID	Description	Formula/Mapping (Technical Names)
Delta_Load_Discharge_Time_Hours	Delta Load Discharge Time [Hours]	Scheduling Date Delta [Hours]* (NominationDeltaActualPlan*)
Planned_Transit_Time_Hours	Planned Transit Time [Hours]	Planned Transit Time [Hours]* (PlannedTransitTime*)
Actual_Transit_Time_Hours	Actual Transit Time [Hours]	Actual Transit Time [Hours]* (ActualTransitTime*)
Delta_Transit_Time_Hours	Delta Transit Time [hours]	Delta Transit Time [Hrs]* (DeltaTransitTime*)
Location_Specific_Scheduling_Deviation_Hours	Location Specific Scheduling Deviation [Hours]	Location Specific Scheduling Deviation* (NominationLocSpcfcDvtn*)
Planned_Quantity	Planned Quantity (BBL)	Planned Quantity* (PlannedQuantity*)
Actual_Quantity	Actual Quantity (BBL)	Actual Quantity* (ActualScheduledQuantity*)

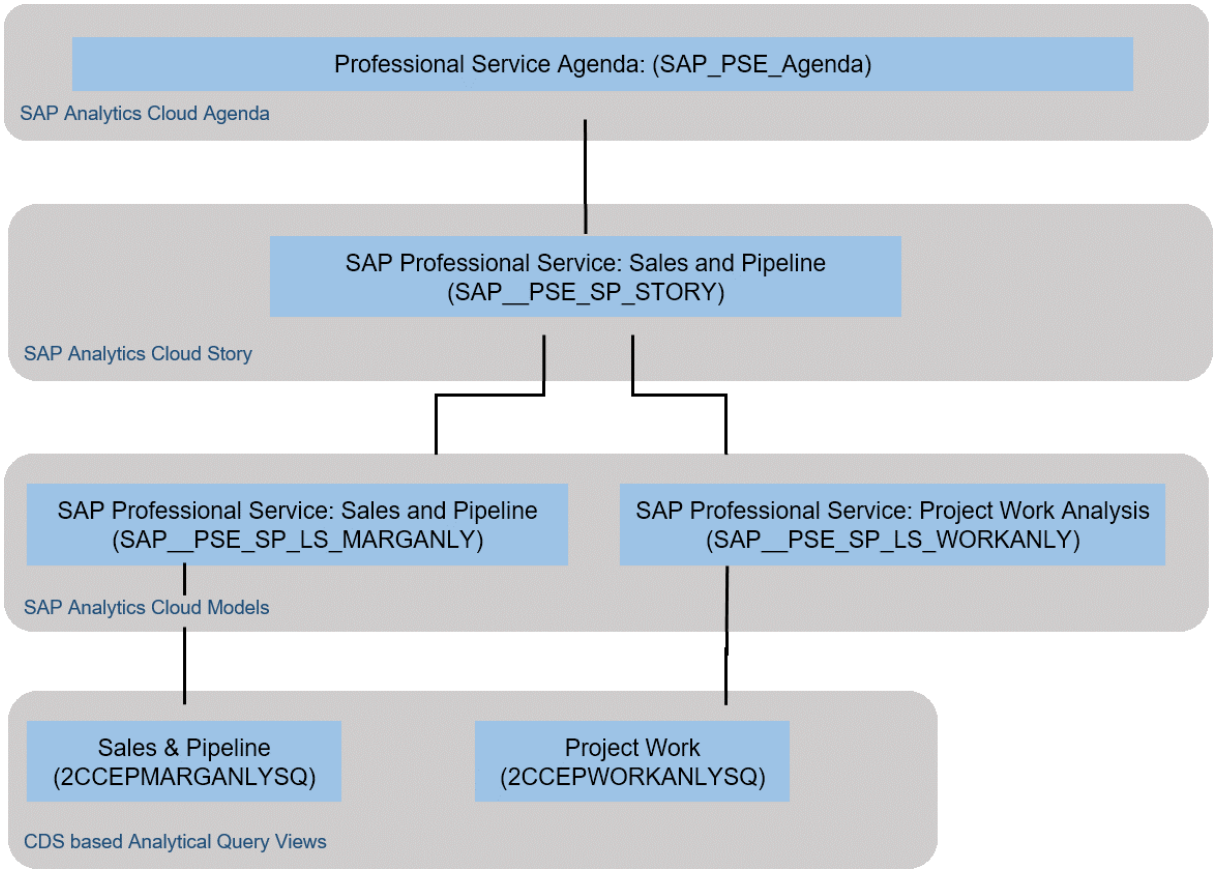
Model Name: SAP__OAG_TSW_IM_SHIPMENT		Connection
Delta_Quantity	Delta Quantity (BBL)	Delta Quantity* (NominationDeltaQuantity*)
Delta_Quantity_%	Delta Quantity (%)	[Delta_Quantity]/[Planned_Quantity]
Delta_Transit_Time_%	Delta Transit Time (%)	[Delta_Transit_Time_Hours]/[Planned_Transit_Time_Hours]
Dimensions		
ID	**Description**	**Mapping (Technical Names)**
TSW_ACCOUNT	TSW Account	Planned Start Date* (
SAP_OAG_TSW_NOMKEY	Nomination Key	Nomination Key* (NominationDoc*)
SAP_OAG_TSW_NOMITEM	Nomination Item	Nomination Item* (NominationDocItem*)
SAP_OAG_TSW_NOMNUMBER	Nomination Number	Nomination Number* (NominationExtNumber*)
SAP_OAG_TSW_LOCID	Location Id	Location Id* (LocationId*) Description: Location Name* (LocationName*)
SAP_OAG_TSW_LOCTYPE	Location Type	Location Type* (LocationType*)
SAP_ALL_MATERIAL	Material	Material* (ScheduledMaterial*)
SAP_ALL_MATERIALGROUP	Material Group	Material Group* (MaterialGroup*) Description: Material Group Desc* (MaterialGroupName*)
SAP_OAG_TSW_CARRIER	Carrier	Carrier* (NominationCarrier*) Description: Carrier Name* (CarrierName*)
SAP_OAG_TSW_MOT	Mode Of Transport	Mode Of Transport* (NominationModeOfTransport*) Description: Mode Of Transport Text* (ModeOfTransportText*)
SAP_OAG_TSW_VEHICLEID	Vehicle Id	Vehicle Id* (VehicleId*) Description: Vehicle Name* (VehicleDescription*)
SAP_OAG_TSW_ROUTE	Route	Route* (ShippingRoute*)
SAP_OAG_TSW_UNIQUELOCID	Unique Location Indicator	Unique Location Indicator* (IsNominationLocationUnique*)
SAP_OAG_TSW_LDINDICATOR	Load/Discharge Indicator	Load/Discharge Indicator* (IsLoad*)

Model Name: SAP__OAG_TSW_IM_SHIPMENT		Connection
SAP_OAG_TSW_PLSTARTDATETIME	Planned Start Date/Time	Planned Start Date Time* (Planned-StartDateTime*)
SAP_OAG_TSW_LOCADATETIME	Location Actual Date/Time	Location Actual Date Time* (Nomina-tionLocActlStrtDteTme*)
SAP_OAG_TSW_TTADATETIME	Transit Time Actual Date/Time	ActualStartDateTime* (TT Actual Date Time*)
Dimension that only exists in SAP Ana-lytics Cloud model and not in data source		Assign to #

> **i Note**
>
> * The CDS view and OData service are on the S/4 HANA Roadmap Industry Oil and Gas, 2018 future direction. This is the current state of planning and can be changed by SAP at any time without notice.

3.14 Professional Services for SAP S/4HANA Cloud (SAP BEST PRACTICES)

3.14.1 Architecture



SAP S/4HANA Cloud Professional Services content with SAP Analytics Cloud (28W) is using live connections. Before importing the content, please read the documentation carefully and set up the required connections.

Find all details and documentation about this scope item in SAP Best Practices Explorer: SAP Best Practices for Analytics – Professional Services Content.

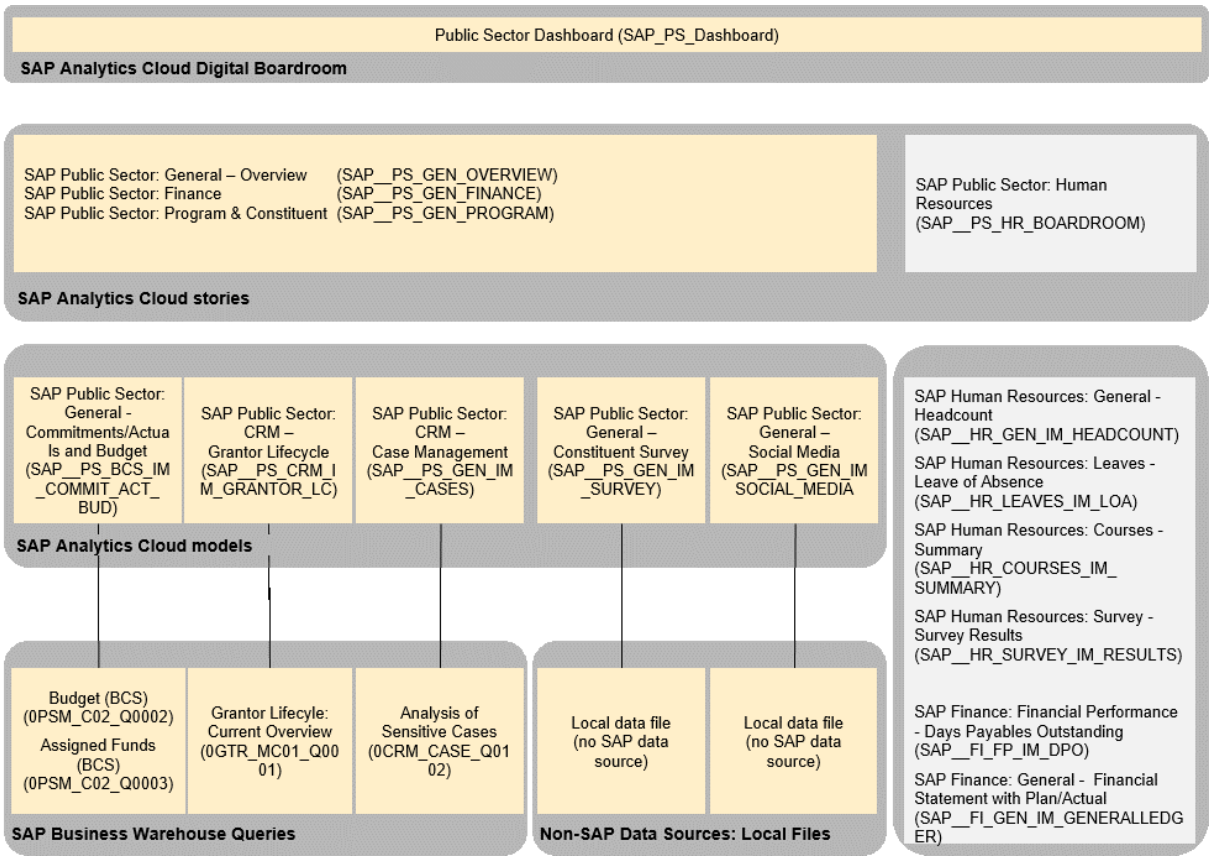
3.15 Public Sector (PS)

3.15.1 Architecture and Abstract

The Public Sector Boardroom is an overview for management of public sector organizations in all segments. The Financial Perspective provides the user with the ability to navigate across the Funds Management to understand budget definition and budget consumption for the year and compare year over year.

In addition, revenue, expenditure, and receivables/payables can be analysed. The Program Perspective includes a sampling of constituent service and program execution analyses and the People Perspective an understanding of an organization's workforce.

The data for the models is generated primarily from existing SAP BW Queries that are public sector specific. The People perspective is taken from a generic story created for all the industries and based on SuccessFactors data sources.



3.15.2 Dashboard

The dashboard which is used to obtain insights is: *SAP_PS_Dashboard*.

3.15.3 Stories

- SAP Public Sector: General - Overview (SAP__PS_GEN_OVERVIEW)
- SAP Public Sector: Finance (SAP__PS_GEN_FINANCE)
- SAP Public Sector: Program & Constituent (SAP__PS_GEN_PROGRAM)

3.15.4 Models

3.15.4.1 General - Commitments/Actuals and Budget (SAP__PS_BCS_IM_COMMIT_ACT_BUD)

Model Name: SAP__PS_BCS_IM_COMMIT_ACT_BUD	Connection
• Model Description: SAP Public Sector: General - Commitments/Actuals and Budget • Planning Enabled: No	• Connection Types: Import Data Connection > SAP BW • Connection Queries: 0PSM_C02_Q0002, 0PSM_C02_Q0003

Commitments/Actuals and Budget Account*

ID	Description	Formula/Mapping
0C02_RK001	Current budget	0C02_RK001 (Query 0PSM_C02_Q0002)
0C02_RK002	Original budget	0C02_RK002 (Query 0PSM_C02_Q0002)
0C02_RK003	Returns	0C02_RK003 (Query 0PSM_C02_Q0002)
0C02_RK004	Supplements	0C02_RK004 (Query 0PSM_C02_Q0002)
0C02_RK005	Transfer - sender	0C02_RK005 (Query 0PSM_C02_Q0002)
0C02_RK006	Transfer - receiver	0C02_RK006 (Query 0PSM_C02_Q0002)
0C02_RK007	Budget for assigned funds	0C02_RK007 (Query 0PSM_C02_Q0003)
0C02_RK008	Assigned amount (assigned budget)	0C02_RK008 (Query 0PSM_C02_Q0003)
0C02_CK001	Available budget	0C02_CK001 (Query 0PSM_C02_Q0003)
0C02_RK009	Commitment and actual	0C02_RK009 (Query 0PSM_C02_Q0003)

Dimensions

ID	Description	Mapping
SAP_PS_BCS_FUND	Fund	0FUND (Fund)
SAP_PS_BCS_FUNDSCENTER	Funds Center	0FUNDS_CTR (Funds Center)
SAP_PS_BCS_Grant	Grant	0GRANT_NBR (Grant)

Model Name: SAP__PS_BCS_IM_COMMIT_ACT_BUD		Connection
SAP_PS_BCS_COMMITMENTITEM	Commitment Item	0CMMT_ITEM (Commitment Item)
SAP_PS_BCS_FUNCTIONALAREA	Functional Area	0FUNC_AREA (Functional Area)
SAP_PS_BCS_FUNDEDPROGRAM	Funded Program	0PU_MEASURE (Funded Program)

> **i Note**
>
> * Private dimension and other dimensions are public.

3.15.4.2 CRM – Grantor Lifecycle (SAP__PS_CRM_IM_GRANTOR_LC)

Model Name: SAP__PS_CRM_IM_GRANTOR_LC	Connection
• Model Description: SAP Public Sector: CRM – Grantor Lifecycle • Planning Enabled: No	• Connection Types: Import Data Connection > SAP BW • Connection Query: 0GTR_MC01_Q0001

Account*		
ID	**Description**	**Formula/Mapping**
0GTR_TOTREQ	Total Requested Amount	0GTR_TOTREQ
0GTR_TOTELG	Total Eligible Amount	0GTR_TOTELG
0GTR_TOTAGR	Total Authorized Amount	0GTR_TOTAGR
0FC_OI	Open Items	0FC_OI
0FC_CI	Cleared Items	0FC_CI
Dimensions		
ID	**Description**	**Mapping**
SAP_PS_FM_PROGRAMTYPE	Funded Program Type	0GTR_GPMELM__0GTR_PRGTYP
SAP_PS_BCS_FUNDEDPROGRAM	Funded Program	0GTR_GPMELM__0GTR_GPM_ID

> **i Note**
>
> * Private dimension and other dimensions are public.

3.15.4.3 CRM – Case Management (SAP__PS_CRM_IM_CASES)

Model Name: SAP__PS_CRM_IM_CASES		Connection
• Model Description: SAP Public Sector: CRM – Case Management • Planning Enabled: No		• Connection Types: Import Data Connection > SAP BW • Connection Query: 0CRM_CASE_Q0102
Account*		
ID	**Description**	**Formula/Mapping**
NUM		See comment below[1]
Dimensions		
ID	**Description**	**Mapping**
SAP_PS_CRM_CASETYPE	Case Type	0CSM_TYPE
SAP_PS_CRM_CASEPRIO	Case Priority	0CSM_PRIO
SAP_PS_CRM_CASESTATUS	Case Status	0CRM_CSKEY__0CSM_STAT
Additional Notes about the model		

[1]There is no corresponding measure in the data source. In order to fill the NUM (Number) account ID follow this approach:

1. After finishing all the mappings during the Data Integration step, duplicate one of the existing columns: open the menu for this column and choose Duplicate Column (Remark: Ideally, choose a column which has only few distinct values).
2. Now replace all values of this column by value "1": Open the Details panel for this column and find the Record Summary. Click on a value listed there and replace the value by the numeric value 1, continue with all other values.
3. For this new duplicated column select the mapping Measure and choose the account member with ID NUM.

> **i Note**
>
> * Private dimension and other dimensions are public.

3.15.4.4 General – Constituent Survey (SAP__PS_GEN_IM_SURVEY)

Model Name: SAP__PS_GEN_IM_SURVEY		Connection
• Model Description: SAP Public Sector: General – Constituent Survey • Planning Enabled: No		Connection Type: Local file
Account*		
ID	**Description**	**Formula/Mapping**

Model Name: SAP__PS_GEN_IM_SURVEY		Connection
PRIO	Priority	Suitable column in local file
EVAL	Evaluation	Suitable column in local file
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Suitable column in local file
SAP_PS_GEN_SURVEY	Survey Questions	Suitable column in local file
Additional Notes about the model		
There is no standard SAP data source to fill this model but you can upload the data from a local file.		

> **Note**
>
> * Private dimension and other dimensions are public.

3.15.4.5 General – Social Media (SAP__PS_GEN_IM_SOCIAL_MEDIA)

Model Name: SAP__PS_GEN_IM_SOCIAL_MEDIA		Connection
• Model Description: SAP Public Sector: General – Social Media • Planning Enabled: No		Connection Type: Local file
Account*		
ID	**Description**	**Formula/Mapping**
PAR	Participation	Suitable column in local file
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Suitable column in local file
SAP_PS_GEN_SOCIAL_MEDIA_TYPE	Social Media Type	Suitable column in local file
Additional Notes about the model		
There is no standard SAP data source to fill this model but you can upload the data from a local file.		

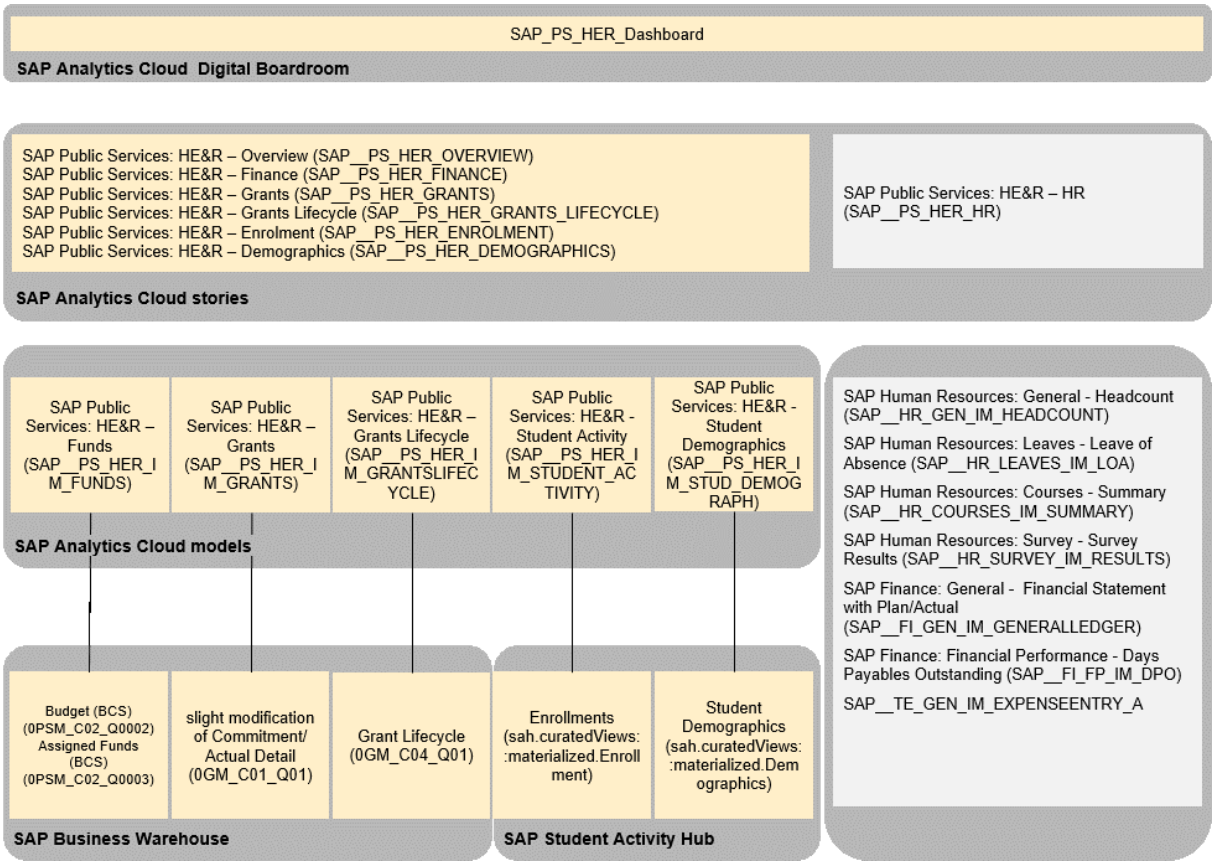
> **Note**
>
> * Private dimension and other dimensions are public.

3.16 Public Services - Higher Education and Research

3.16.1 Architecture and Abstract

The Boardroom for Higher Education and Research is aiming at providing an overview for universities. It gives them insight into their financial situation as well as their students demographic and enrolment distribution.

Architecture



3.16.2 Dashboard

The model which can be used ot obtain the insight is: **SAP_PS_HER_Dashboard**

3.16.3 Stories

- SAP Public Services: HE&R - Overview (SAP__PS_HER_OVERVIEW)
- SAP Public Services: HE&R - Demographics (SAP__PS_HER_DEMOGRAPHICS)

Calculated measures in story	
Average Age	Average age aggregated on students
Avg SAT	Average SAT Score aggregated on students
Avg SAT Math	Average SAT Math Score aggregated on students
Avg SAT Writing	Average SAT Writing Score aggregated on students

- SAP Public Services: HE&R - Enrolment (SAP__PS_HER_ENROLMENT)

Calculated Measures in Story	
Enrolled Students	Restricted measure on student headcount over enrolment dimension
Waitlisted Students	Restricted measure on student headcount over waitlist dimension
Associate Degree Students	Restricted measure on student headcount for Associate of Arts and Science students
Bachelor Degree Students	Restricted measure on student headcount for Bachelor of Arts and Science students
Master Degree Students	Restricted measure on student headcount for Master of Arts and Science students
Doctoral Degree Students	Restricted measure on student headcount for PhD students
College Availability	[SAP__PS_HER_IM_STUDENTACTIVITY:COL_CAP] - [#Enrolled Students]
Capacity Utilization	[#Enrolled Students] / [SAP__PS_HER_IM_STUDENTACTIVITY:COL_CAP]
A	Restricted measure on student headcount for students with grade ‘A’
B	Restricted measure on student headcount for students with grade ‘B’
C	Restricted measure on student headcount for students with grade ‘C’
D	Restricted measure on student headcount for students with grade ‘D’
F	Restricted measure on student headcount for students with grade ‘F’
Total # of Grades	[#A] + [#B] + [#C] + [#D] + [#F]
% of Top Grades	[#A] / [#Total # of Grades]
% of Bottom Grades	[#F] / [#Total # of Grades]
Units Attempted	Restricted Measure on Student Headcount with grades ABCDF
Units Passed	Restricted Measure on Student Headcount with grades ABC

Calculated Measures in Story	
Attempted to Passed Ratio	: [#Units Attempted] / [#Units Passed]

- SAP Public Services: HE&R - Finance (SAP__PS_HER_FINANCE)
- SAP Public Services: HE&R - Grants (SAP__PS_HER_GRANTS)

Calculated measures in story	
Released Budget	Restricted measure on Amount with GM value type 'R1'
Supplement	Restricted measure on Amount with Business Transaction -> Supplement
Transfer	Restricted measure on Amount with Business Transaction -> Receive
Return	Restricted measure on Amount with Business Transaction -> Return
Original Budget	Restricted measure on Amount with Business Transaction -> Enter
Current Budget	[#Original Budget] + [#Supplement] + [#Transfer] + [#Return]
Available Budget	[#Current Budget] - [#Commitments and Actuals]
Δ % Released	[#Released Budget] / [#Original Budget]
Commitments and Actuals	[#Commitments] + [#Actuals]
% Available	[#Available Budget] / [#Current Budget]
% Commitment and Actuals	[#Commitments and Actuals] / [#Current Budget]
Commitments	Restricted Measure on amount for 50, 51, and 52
Actuals	Restricted Measure on amount for 61, 64, and 66

- SAP Public Services: HE&R – Grants Lifecycle (SAP__PS_HER_GRANTS_LIFECYCLE)

Calculated measures in story	
# of Grants Proposal Status	Number of grants with the Grant life cycle status: Proposal
# of Grants Application Status	Number of grants with the Grant life cycle status: Application
# of Grants Award Status	Number of grants with the Grant life cycle status: Award
# of Grants Closeout Status	Number of grants with the Grant life cycle status: Closeout
# of Grants Closed Status	Number of grants with the Grant life cycle status: Closed
Proposal /Count	[## of Grants Proposal Status] / [SAP__PS_HER_IM_GRANTSLIFECYCLE:Count]
Application/Proposal	[## of Grants Application Status] / [## of Grants Proposal Status]
Award/Application	[## of Grants Award Status] / [## of Grants Application Status]

Calculated measures in story	
Award/Proposal	[## of Grants Award Status] / [## of Grants Proposal Status]
Closeout/Award	[## of Grants Closeout Status] / [## of Grants Award Status]
Closeout/Proposal	[## of Grants Closeout Status] / [## of Grants Proposal Status]
Closed/Closeout	[## of Grants Closed Status] / [## of Grants Closeout Status]
Closed/Proposal	[## of Grants Closed Status] / [## of Grants Proposal Status]
Rejected/Application	[## of Grants Appl Rejected] / [## of Grants Application Status]
Completed/Award	[## of Grants Award Completed] / [## of Grants Award Status]
Closed with Assets/Closeout	[## of Grants Closeout Closed] / [## of Grants Closeout Status]

3.16.4 Models

3.16.4.1 Funds (SAP__PS_HER_IM_FUNDS)

This model is a copy of SAP__PS_BCS_IM_COMMIT_ACT_BUD documented in chapter: *SAP Public Sector: General - Commitments/Actuals and Budget (SAP__PS_BCS_IM_COMMIT_ACT_BUD*)

3.16.4.2 Grants (SAP__PS_HER_IM_GRANTS)

Model Name: SAP__PS_HER_IM_GRANTS	Connection
• Model Description: SAP Public Services: HE&R – Grants • Planning Enabled: No	• Import Data Connection to an SAP BW System • Connection Query: Slight modification of Commitment/Actual Detail (0GM_C01_Q01)[1]

Grants Account*		
ID	**Description**	**Formula/Mapping**
AMT	Amount	Amount
Dimensions		

Model Name: SAP__PS_HER_IM_GRANTS		Connection
ID	**Description**	**Mapping**
Time*	Time	0FISCPER[2]
SAP_PS_HER_GRANT	Grant	0GRANT_NBR
SAP_PS_HER_SPONSORED_PROGRAM	Sponsored Program	0GM_SPNPG
SAP_PS_HER_SPONSORED_CLASS	Sponsored Class	0GM_SPNCL
SAP_PS_HER_FUND	Fund	0FUND
SAP_PS_HER_BUDGET_RLS_STATUS	Budget Release Status	0GM_BDRLS
SAP_PS_HER_BUDGET_PHASE	Budget phase	0GM_BDPH
SAP_PS_HER_BUDGET_VALIDITY_NR	Budget Validity Number	0GM_BDVLN
SAP_PS_HER_CURRENCY_TYPE	Currency Type	0CURTYPE
SAP_ALL_FISCALYEAR	Fiscal Year	0FISCALYEAR
SAP_ALL_COMPANY_CODE	Legal Entity	0COMP_CODE
SAP_PS_HER_FM_AREA	FM area	0FM_AREA
SAP_PS_HER_BUDGET_VER	Budget version	0GM_BDVER
SAP_PS_HER_GM_VALUE_TYPE	GM Value Type	0GM_VLTYP
SAP_PS_HER_BUSINESSTRANSACTION	Business Transaction	0GM_RTRAN
SAP_PS_HER_GM_STATISTICALINDIC	GM Statistical Indicator	0GM_STATI
Additional Notes about the model		

[1]Modification of Commitment/Actual Detail (0GM_C01_Q01)

- Copy query 0GM_C01_Q01 first.
- Open the copy with the SAP BEx Query Designer and navigate to the Rows/Columns Tab.
- In the Rows area, add the four characteristics
- Necessary
- 0GM_BDVER Budget Version
- 0GM_RTRAN Business Transaction
- 0FISCPER Fiscal year/period
- 0FISCALYEAR Fiscal Year
- 0COMP_CODE Legal Entity
- Optional (while Mapping, assign to # if not existing in query)
- 0CURTYPE Currency Type
- 0GM_STATI GM Statistical Indic
- Suppress the Results Rows for all characteristics (Properties Display)

Save your work.

[2]The Fiscal Period can be mapped to the Time Dimension if the Fiscal Period is similar to a YYYY/MM Structure. In the data wrangling view, you can adjust the Fiscal Period to the time dimension by using the replace function.

For columns in the BW Query which are not mentioned in this table and cannot be mapped to the SAP Analytics Cloud model, chose the Do not map option.

> **Note**
>
> * Private dimension and other dimensions are public.

3.16.4.3 Grants Lifecycle (SAP__PS_HER_IM_GRANTSLIFECYCLE)

Model Name: SAP__PS_HER_IM_GRANTSLIFECYCLE		**Connection**
• Model Description: SAP Public Services: HE&R – Grants Lifecycle • Planning Enabled: No		• Connection Type: Import Data Connection to an SAP BW System • Query: 0GM_C04_Q01
Grants Lifecycle Account*		
ID	**Description**	**Formula/Mapping**
Count	Count	Counter Field, fill in SAP Analytics Cloud with “1”
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0GM_Date
SAP_PS_HER_GRANT	Grant	0GRANT_NBR
SAP_PS_HER_GRANT_TYPE	Grant Type	0GM_GRNTP
SAP_PS_HER_LIFECYCLE_STATUS	Grant Lifecycle Status	0GM_LFSTA
SAP_PS_HER_USER_STATUS	Grant User Status	0GM_USSTA

> **Note**
>
> * Private dimension and other dimensions are public.

3.16.4.4 Student Activity (SAP__PS_HER_IM_STUDENT_ACTIVITY)

Model Name: SAP__PS_HER_IM_STUDENT_ACTIVITY	**Connection**
Model Description: SAP Public Services: HE&R - Student Activity Planning Enabled: No	• Connection Type: Hana Live connectivity • Connection Hana View: Calculation View based on Industry Specific View Enrollment sah.curatedViews:materialized.Enrollment
Account*Mapping	

Model Name: SAP__PS_HER_IM_STUDENT_ACTIVITY		Connection	
ID	**Description**	**Exception Aggregation, Dimension**	**Mapping**
STD_HDCNT	Student Headcount	COUNT, SAP_PS_HER_STUDENT	Counter Field, fill in SAP Analytics Cloud with “1”
INST_HDCNT	Instructor Headcount	COUNT, SAP_PS_HER_PRIMARY_INSTRUCTOR	Counter Field, fill in SAP Analytics Cloud with “1”
COL_CAP	College Capacity		Do not map, See next table
Dimensions			
ID		Description	Mapping
Time*		Time	Can be mapped to: EnrollmentStatusEffectiveDate However, in the content “Academic Year” is used as a primary time filter
SAP_PS_HER_STUDENT		Student	StudentID
SAP_PS_HER_ACADEMIC_YEAR		Academic Year	AcademicYear
SAP_PS_HER_ACADEMIC_TERM		Academic Term ID	AcademicTerm
SAP_PS_HER_ACADEMIC_TERM		Academic Term Description	AcademicTermName
SAP_PS_HER_CLASSCOLLEGE		Class College ID	ClassCollegeShort
SAP_PS_HER_CLASSCOLLEGE		Class College Description	ClassCollege
SAP_PS_HER_CLASS_DEPARTMENT		Class Department ID	ClassDepartmentID
SAP_PS_HER_CLASS_DEPARTMENT		Class Department Description	ClassDepartment
SAP_PS_HER_CLASSID		Class ID	ClassID
SAP_PS_HER_CLASSID		Class Description	Class
SAP_PS_HER_ENROLLMENT		Enrolment	Enrollment
SAP_PS_HER_WAITLISTED		Student is on the waitlist	Waitlisted
SAP_PS_HER_ONLINE_COURSE		Online Course	IsOnlineCourse
SAP_PS_HER_IS_RETAKE		Course is Retake	IsRetake
SAP_PS_HER_GRADE		Grade	Grade
SAP_PS_HER_GRADE_SCALE		Grade Scale	GradeScale
SAP_PS_HER_GRADE_VALUE		Grade Value	GradeValue
SAP_PS_HER_PRIMARYDELIVERYMODE		Primary Delivery Mode ID	PrimaryDeliveryModeID
SAP_PS_HER_PRIMARYDELIVERYMODE		Primary Delivery Mode Description	PrimaryDeliveryMode

Model Name: SAP__PS_HER_IM_STUDENT_ACTIVITY	Connection	
SAP_PS_HER_PRIMARY_INSTRUCTOR	Primary Instructor	PrimaryInstructorID
SAP_PS_HER_PRIMARY_INS_DEPT	Primary Instructor Department ID	PrimaryInstructorDepartmentID
SAP_PS_HER_PRIMARY_INS_DEPT	Primary Instructor Department Description	PrimaryInstructorDepartment
SAP_PS_HER_PRIM_STUD_COLLEGE	Primary Student College	PrimaryStudentCollege
SAP_PS_HER_PRIM_STUD_DEPT	Primary Student Department ID	PrimaryStudentDepartmentID
SAP_PS_HER_PRIM_STUD_DEPT	Primary Student Department Description	PrimaryStudentDepartment
SAP_PS_HER_PRIM_STUD_DEGREE	Primary Student Degree ID	PrimaryStudentDegreeName
SAP_PS_HER_PRIM_STUD_DEGREE	Primary Student Degree Description	PrimaryStudentDegree
SAP_PS_HER_PRIM_STUD_MAJOR	Primary Student Major ID	PrimaryStudentMajorID
SAP_PS_HER_PRIM_STUD_MAJOR	Primary Student Major Description	PrimaryStudentMajorName
SAP_PS_HER_PRIMARY_INS_TITLE	Primary Instructor Title Series ID	PrimaryInstructorTitleSeries
Additional Notes about the model		

Connection type:

SAP Student Activity Hub can be connected to SAC via a Hana Live connectivity.

Calculation views need to be created on top of the materialized tables of SAP Student Activity Hub.

The complete Student Activity Hub content is built with the data acquisition models to provide sample data. Data from SAP Hana views cannot be used to stage data into data acquisition models.

For those cases, new live data connection models need to be created. The following documentation describes the required SAP HANA views and their fields in detail. The structure of the live models corresponds to the delivered data acquisition models. Thus, stories can easily be switched to run on the live data models once these are created.

> **i** Note
>
> * Private dimension and other dimensions are public.

Model Name: SAP__PS_HER_IM_STUDENT_ACTIVITY	Connection
• Model Description: SAP Public Services: HE&R - Student Activity • Planning Enabled: No	• To add information on the capacity of colleges, which cannot be retrieved from the original data source, an additional excel file needs to be uploaded. • Connection type: Import data from Excel

Account		
ID	**Description**	**Mapping**
STD_HDCNT	Student Headcount	Do not map
INST_HDCNT	Instructor Headcount	Do not map
COL_CAP	College Capacity	College Capacity Column

Dimensions		
ID	**Description**	**Mapping**
Time	Time	Time
SAP_PS_HER_STUDENT	Student	Assign to #
SAP_PS_HER_ACADEMIC_YEAR	Academic Year	AcademicYear
SAP_PS_HER_ACADEMIC_TERM	Academic Term ID	AcademicTerm
SAP_PS_HER_CLASSCOLLEGE	Class College ID	ClassCollegeShort
SAP_PS_HER_CLASS_DEPARTMENT	Class Department ID	Assign to #
SAP_PS_HER_CLASSID	Class ID	Assign to #
SAP_PS_HER_ENROLLMENT	Enrolment	Assign to #
SAP_PS_HER_WAITLISTED	Student is on the waitlist	Assign to #
SAP_PS_HER_ONLINE_COURSE	Online Course	Assign to #
SAP_PS_HER_IS_RETAKE	Course is Retake	Assign to #
SAP_PS_HER_GRADE	Grade	Assign to #
SAP_PS_HER_GRADE_SCALE	Grade Scale	Assign to #
SAP_PS_HER_GRADE_VALUE	Grade Value	Assign to #
SAP_PS_HER_PRIMARYDELIVERYMODE	Primary Delivery Mode ID	Assign to #
SAP_PS_HER_PRIMARY_INSTRUCTOR	Primary Instructor	Assign to #
SAP_PS_HER_PRIMARY_INS_DEPT	Primary Instructor Department ID	Assign to #
SAP_PS_HER_PRIM_STUD_COLLEGE	Primary Student College	PrimaryStudentCollege
SAP_PS_HER_PRIM_STUD_DEPT	Primary Student Department ID	Assign to #

Model Name: SAP__PS_HER_IM_STUDENT_ACTIVITY		Connection
SAP_PS_HER_PRIM_STUD_DEGREE	Primary Student Degree ID	Assign to #
SAP_PS_HER_PRIM_STUD_MAJOR	Primary Student Major ID	Assign to #
SAP_PS_HER_PRIMARY_INS_TITLE	Primary Instructor Title Series ID	Assign to #

Additional Notes about the model

Create an excel sheet with the following columns, 1 row for every College in a specific year/term and add college capacity for that college in that year/term.

AcademicTerm	AcademicYear	PrimaryStudent College	ClassCollege Short	College Capacity

3.16.4.5 Student Demographics (SAP__PS_HER_IM_STUD_DEMOGRAPH)

Model Name: SAP__PS_HER_IM_STUD_DEMOGRAPH	Connection
• Model Description: SAP Public Services: HE&R - Student Demographics • Planning Enabled: No	• Connection Type: Hana Live connectivity • Connection Hana View: Calculation View based on Industry Specific View Student Demographics sah.curatedViews:materialized.Demographics

Account*

ID	Description	Formula/Mapping
ActiveHoldsAcademicCurrent	Academic Holds	ActiveHoldsAcademicCurrent
ActiveHoldsAdministrativeCurrent	Administrative Holds	ActiveHoldsAdministrativeCurrent
ActiveHoldsFinancialCurrent	Financial Holds	ActiveHoldsFinancialCurrent
AgeCurrent	Age	AgeCurrent
SAT	SAT Score	SAT
SATMath	SAT Math Score	SATMath
SATMax	SAT Max Score	SATMax
SATWriting	SAT Writing Score	SATWriting

NumberOfPellTerms	Number of Pell Terms	NumberOfPellTerms
count	Number of Students Exception Aggregation COUNT, Dimension: SAP_PS_HER_STUDENT	Counter Field, fill in SAP Analytics Cloud with "1"

Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Can be mapped to GRADGraduationEffectiveDate or UGGraduationEffectiveDate but in the content Academic Year is used as the primary time filter
CountyOfOrigin_6s6e6y0737[2]	County – State of Origin	CountyOfOriginName
CountryOfOriginCode[2]	Country of Origin Geo	CountryOfOriginCode
SAP_PS_HER_COUNTY_OF_ORIGIN[2]	County of Origin	CountyOfOriginCode
SAP_PS_HER_ETHNICITY	Ethnicity	Ethnicity
SAP_PS_HER_GENDERIDENTITY_CUR	Gender Identity Current	GenderIdentityCurrent
SAP_PS_HER_HIGHSCHOOL	High School	HighSchoolID
SAP_PS_HER_RESIDENCY_STATUS	Residency Status Current	ResidencyStatusCurrent
SAP_PS_HER_IS_ATHLETE	Student is Athlete	IsAthleteCurrent
SAP_PS_HER_HAS_PELL_CURRENT	Has Pell Current	HasPellCurrent
SAP_PS_HER_HAS_PELL_EVER	Has Pell Ever	HasPellEver
SAP_PS_HER_LATEST_PELL_AWARDED	Latest Pell Awarded Term ID	LatestPellAwardedTerm
SAP_PS_HER_LATEST_PELL_AWARDED	Latest Pell Awarded Term Description	LatestPellAwardedTermName
SAP_PS_HER_LATEST_PELL_YEAR	Latest Pell Awarded Year	LatestPellAwardedYear
SAP_PS_HER_STUDENT	Student	StudentID
SAP_PS_HER_STATEOFORIGIN	State of Origin	StateOfOriginCurrent
SAP_PS_HER_ACADEMIC_TERM	Academic Term ID	AcademicTerm
SAP_PS_HER_ACADEMIC_TERM	Academic Term Description	AcademicTermName
SAP_PS_HER_ACADEMIC_YEAR	Academic Year	AcademicYear
Additional Notes about the model		

Connection type:

SAP Student Activity Hub can be connected to SAP Analytics Cloud via a HANA Live connectivity.

Calculation views need to be created on top of the materialized tables of SAP Student Activity Hub.

The complete Student Activity Hub content is built with data acquisition models to provide sample data. Data from SAP HANA views cannot be used to stage data into data acquisition models.

For those cases, new live data connection models need to be created. The following documentation describes the required SAP HANA views and their fields in detail. The structure of the live models corresponds to the delivered data acquisition models. Thus, stories can easily be switched to run on the live data models once these are created.

[2]The Geo capabilities vary by connection type that is used. If you are using a live HANA Connection instead of a data import connection, find information how to create a Geo Model in the Official SAP Analytics Cloud Documentation.

> **i** Note
>
> * Private dimension and other dimensions are public.

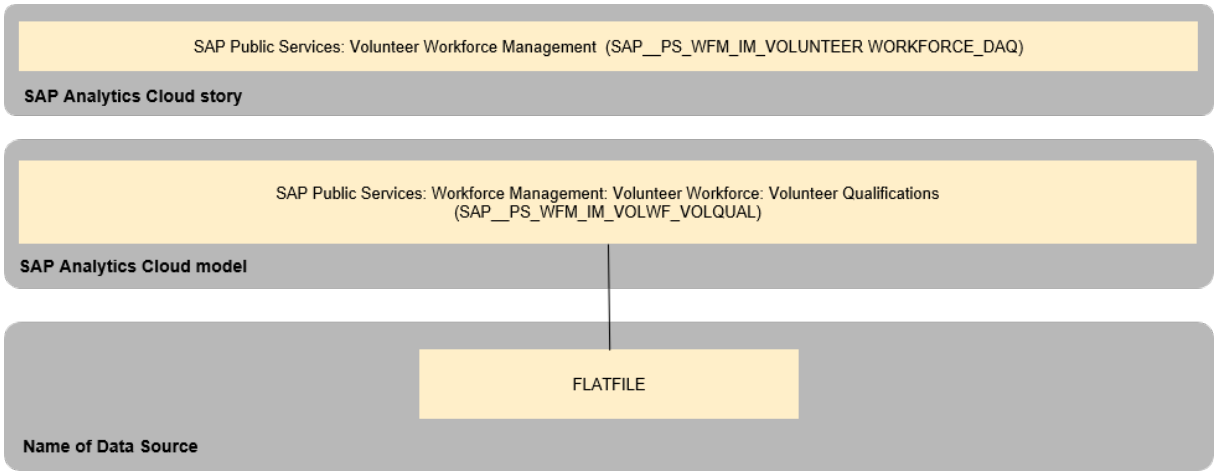
3.17 Public Services - Volunteer Workforce Management

3.17.1 Architecture and Abstract

The content package consists out of the 1 story **Volunteer Workforce**.

This story consists of six pages which provide a public agency user with a few dashboards to get a quick overview of the agency's volunteers and their readiness, i.e. qualifications, to help with a certain type of an emergency incident.

The data acquisition of the Volunteer Workforce is based on a flat file.



3.17.2 Stories

SAP__PS_WFM_IM_VOLUNTEER WORKFORCE_DAQ

In the Volunteers overview a public sector agency user gets transparency about the number of the agency's volunteers and the number of professional qualifications they possess as well as sees the percentage of volunteers who did not yet acquire a certification.

A public sector agency user gets a closer insight into the gender, geographical, age, etc. diversity of volunteers. She/he is also provided with an opportunity to inspect qualifications attainment depending on different volunteer groups formed using the above-mentioned social grouping.

A public sector agency user can also see historic trends in attainment of different qualifications for both males and females. She/he is provided with a closer look on the time trend per current fiscal year.

A user can quickly react to the real time incidents by selecting a pair of required volunteer skills and drilling to the individual names of volunteer members qualified to assist.

Calculations

The following table contains the calculations, that are provided in the story to display all charts properly.

Measure Name	Type	Formula/Properties
100%	Calculated Measure	• Formula • 1
Command a medium scale incident	Restricted Measure	- Measure: - Members with Qualification Count - Dimension: - Service Standard Function / Role - Values or Input Controls: - Command a medium scale incident, or a sector of multiple strike teams
Command a small incident	Restricted Measure	- Measure: - Members with Qualification Count - Dimension: - Service Standard Function / Role - Values or Input Controls: - Command a small incident, or a strike team

Measure Name	Type	Formula/Properties
Fight a bush / grass fire under supervision	Restricted Measure	- Measure: - Members with Qualification Count - Dimension: - Service Standard Function / Role - Values or Input Controls: - Fight a bush / grass fire under supervision
Fight a fire without direct supervision	Restricted Measure	- Measure: - Members with Qualification Count - Dimension: - Service Standard Function / Role - Values or Input Controls: - Fight a fire without direct supervision
Fight a village type fire (structure/vehicle)	Restricted Measure	- Measure: - Members with Qualification Count - Dimension: - Service Standard Function / Role - Values or Input Controls: - Fight a village type fire (structure/vehicle)
Lead a crew fighting a bush fire	Restricted Measure	- Measure: - Members with Qualification Count - Dimensions: - Service Standard Function / Role - Values or Input Controls: - Lead a crew fighting a bush fire
Lead a crew fighting a village type fire	Restricted Measure	- Measure: - Members with Qualification Count - Dimensions: - Service Standard Function / Role - Values or Input Controls: - Lead a crew fighting a village type fire

Measure Name	Type	Formula/Properties
Member %	Calculated Measure	- Formula - %GrandTotal (["SAP__PS_WFM_IM_VOLWF_VOLQUAL": Member Count])
Members Aged 25 and Under	Calculated Measure	- Formula: - #Members Aged 25 Under / #Members where Age is Known
Members Aged 25 Under	Restricted Measure	- Measure: - Member Count - Dimension: - Member Age Range - Values of Input Controls: - 16-17, Under 16, 18-25
Members Aged 55 and Over	Restricted Measure	- Measure: - Member Count - Dimension: - Member Age Range - Values or Input Controls: - 55-64, 65-74, 75 and older
Members Aged 55 and Over	Calculated Measure	- Formula: - #Members Aged 55 and Over / #Members where Age is Known
Member Subset	Calculated Measure	- Formula: ["SAP__PS_WFM_IM_VOLWF_VOLQUAL": Member Count])/18343
Members where Age is Known	Restricted Measure	- Measure: - Member Count - Dimension: - Member Age Range

Measure Name	Type	Formula/Properties
Qualifications Attained YTD	Restricted Measure	- Measure: - Qualifications Count - Dimension: - Qual Assigned On - Values or Input Controls - Current Year

3.17.3 Models

SAP Public Services: Volunteer Workforce Management: Volunteer Workforce: Volunteer Qualifications

Model Name: SAP__PS_WFM_IM_VOLWF_VOLQUAL	Connection
• Model Description: SAP Public Services: Volunteer Workforce Management: Volunteer Workforce: Volunteer Qualifications • Planning Enabled: No	• Data File

Account

ID	Description	Formula/Mapping
SAP_PS_WFM_VOLUNTEERQUALS	Measures	

Dimensions

Name	Description	Mapping
Reporting_Date	Reporting Date	
Vol_Start_Date	Member Start Date	
Qual_Start_Date_FY	Qual. Start Date Fiscal Year	
Qual_Start_Date_Cal	Qual Start Date Calendar	
Qual_Assigned_On	Qual Start Date Calendar	
SAP_PS_WFM_PERAREA	Region	
SAP_PS_WFM_PERSUBAREA	Personnel Subarea	
SAP_PS_WFM_EMPLGROUP	Employee Group	
SAP_PS_WFM_EMPLSUBGROUP	Employee Subgroup	
SAP_PS_WFM_ORGSTRUCTURE	Organizational Structure	
SAP_PS_WFM_GENDER	Gender	
SAP_PS_WFM_VOLMASTER	Members	
SAP_PS_WFM_MEMSTAT	Member Status	
SAP_PS_WFM_MEMTYPE	Member Type	

Model Name: SAP__PS_WFM_IM_VOLWF_VOLQUAL	Connection
SAP_PS_WFM_VOLROLE	Member Role
SAP_PS_WFM_VOLSTATUS	Volunteer Status
SAP_PS_WFM_VOTINGRIGHTS	Member Voting Rights
SAP_PS_WFM_MOVETYPE	Move Type
SAP_PS_WFM_MOVEREASON	Reason for Movement
SAP_PS_WFM_VOLRANK	Member Rank
SAP_PS_WFM_QUALIFICATION	Qualification
SAP_PS_WFM_ENDDATE	End Date
SAP_PS_WFM_ZZADF	ADF
SAP_PS_WFM_ZZADF_OPER	ADF Operational
SAP_PS_WFM_ZZHIGH_ED	Higher Education Qualification
SAP_PS_WFM_HR_ATSI	ATSI Status
SAP_PS_WFM_HR_MOVEC	Racial / Ethnic Status
SAP_PS_WFM_HR_FSLNG	Employee Group
SAP_PS_WFM_HR_DISAP	Disability Status
SAP_PS_WFM_VOLAGERANGE	Employee Group
SAP_PS_WFM_HR_QUAL_EXP_RANGE	Qualifaction Expiry
SAP_PS_WFM_HR_LENGTH_SERVICE	Length of Service
SAP_PS_WFM_MAIN_NON_ENGLISH	Main Language Spoken
SAP_PS_WFM_COUNTRY_BIRTH	County of Birth
SAP_PS_WFM_HR_PERSSUBAFLAT	District

3.18 Real Estate Management (RE)

3.18.1 Architecture and Abstract

3.18.1.1 Introduction

The content package consists out of the 3 stories and a dashboard "Real Estate Management".

1. Location Management
2. Workspace Utilization Management
3. Contract & Lease Management

Depending on your Real Estate products in use, only some of them might be relevant for you. The stories differ in data acquisition but also demonstrate how different sources contribute into the same analytical environment: SAP Analytics Cloud and the Digital Boardroom.

Location Management

This story is based on "SAP Cloud for Real Estate, Location Management". It is a new Software as a Service solution on SAP Cloud Platform that supports our customers in their corporate real estate management. The application focuses on location management, providing insights you need to expertly manage your enterprise real estate portfolio. A predefined analytical story gives transparency on the global portfolio compositions, area management, workplace management & workspace occupancy. Data acquisition is recommended to be run once a month, examples show the last day of a month.

Workspace Utilization Management

This story is based on the SAP Cloud for Real Estate Workspace Utilization Management Solution. The Workspace Utilization Management Solution is a component of SAP Cloud for Real Estate and provides transparency and insights on actual office workspace utilization to corporate real estate managers. The solution integrates a variety of sensor platform providers, stores and processes their sensor measurement data and consolidates everything on dashboards based on live data connections in SAP Analytics Cloud.

Contract & Lease Management

This story is based on the classic RE-FX. It offers Real Estate customers analyses about their contracts, their conditions, renewal options and cash flow valuations by various dimensions, for example, country, time, company, status, and type.

It is an improved reporting solution, based on SAP guidelines and Best Practices. Also it is a major step towards IFRS 16 compliancy for lease contract and property asset reporting.

The following chapters explain both parts in detail.

Location Management Live

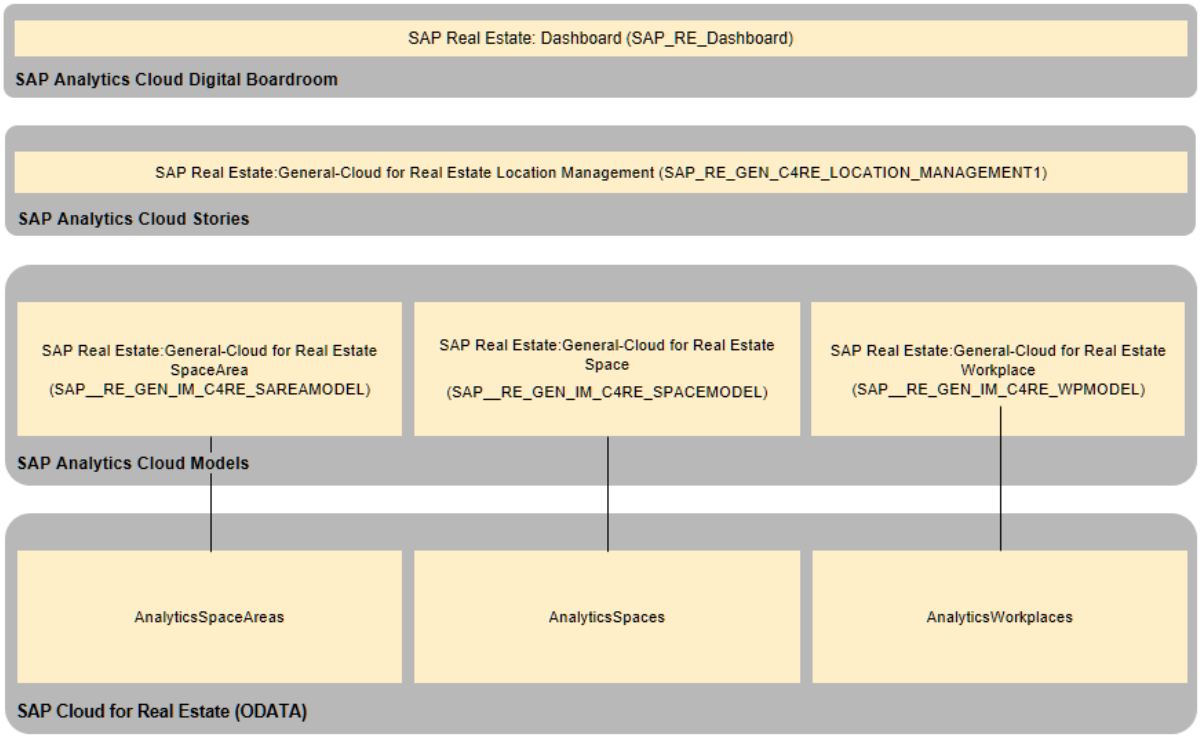
As the Location Management story based on OData data aquisition, this story is based on **SAP Cloud for Real Estate, Location Management**. It is a new Software as a Service solution on SAP Cloud Platform that supports our customers in their corporate real estate management. The Location Management Live story is based on a live data connection, that enables the customer to always have a contemporary overview on you real estate porfolio. The predefined analytical story gives

3.18.1.2 Architecture

Location Management

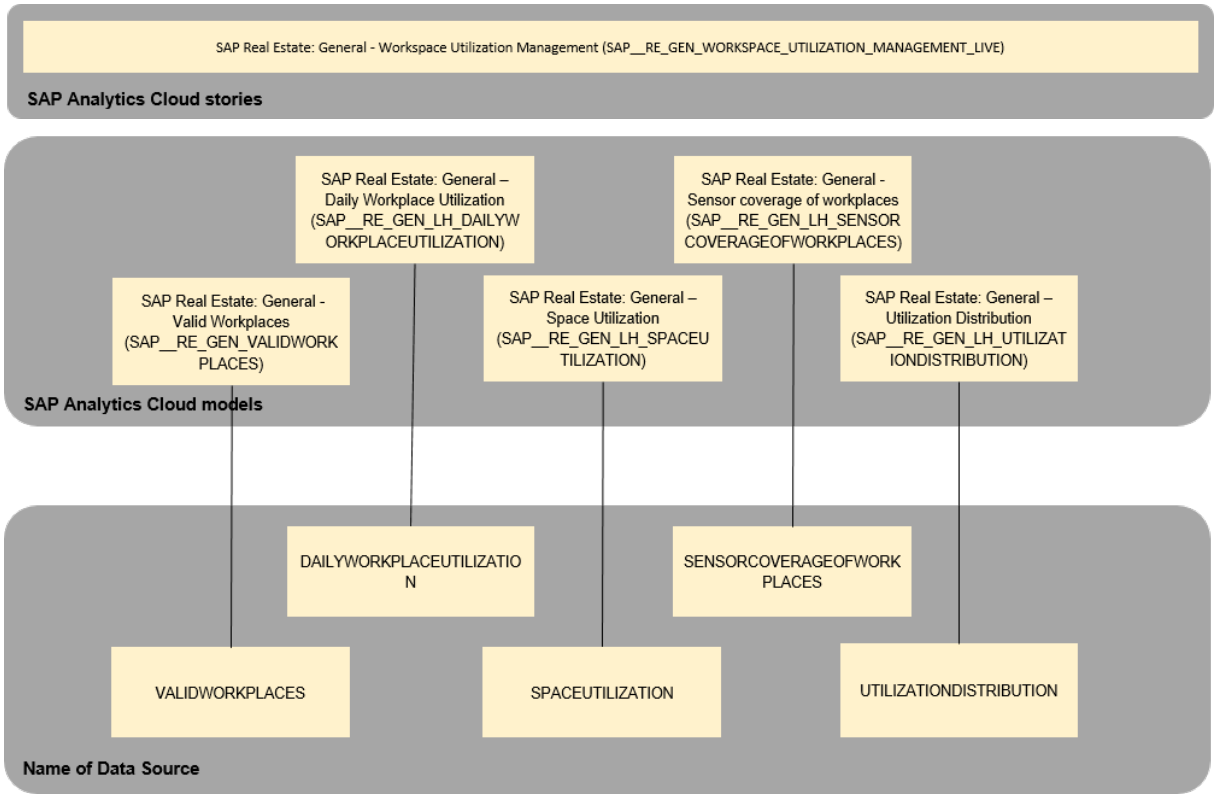
The data acquisition of the Location Management is based on OData connection.

The OData service provides three entities, each of which corresponds to one model.



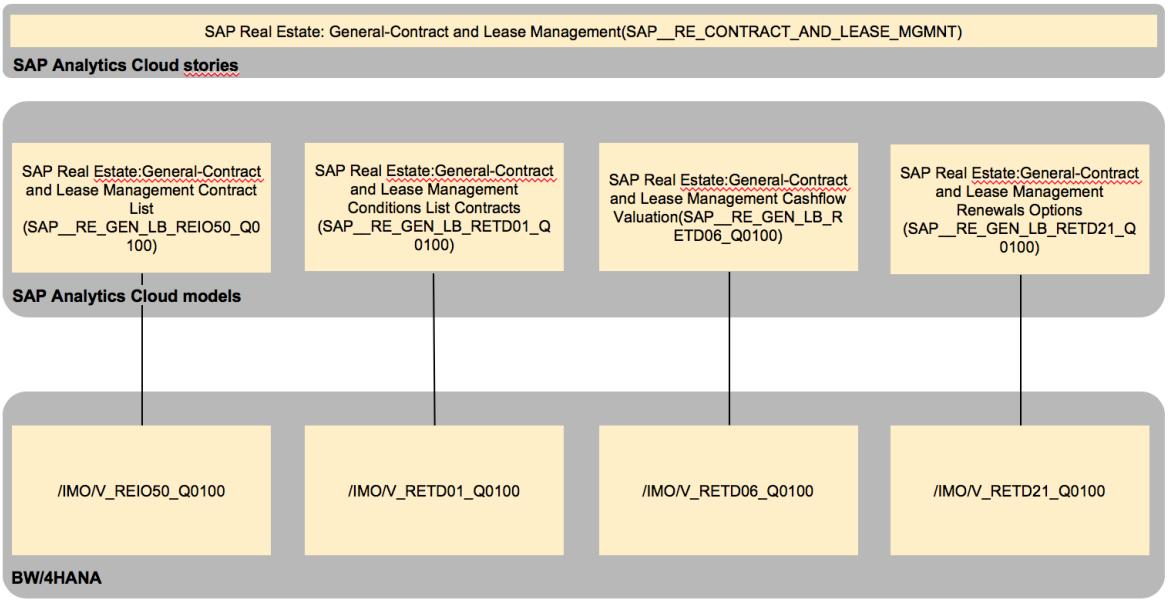
Workspace Utilization Management Solution

The data access of the Workspace Utilization Management is based on a live data connection to the SAP Cloud Foundry subscription of the Workspace Utilization Management application. The application exposes two entities, which each correspond to one model.



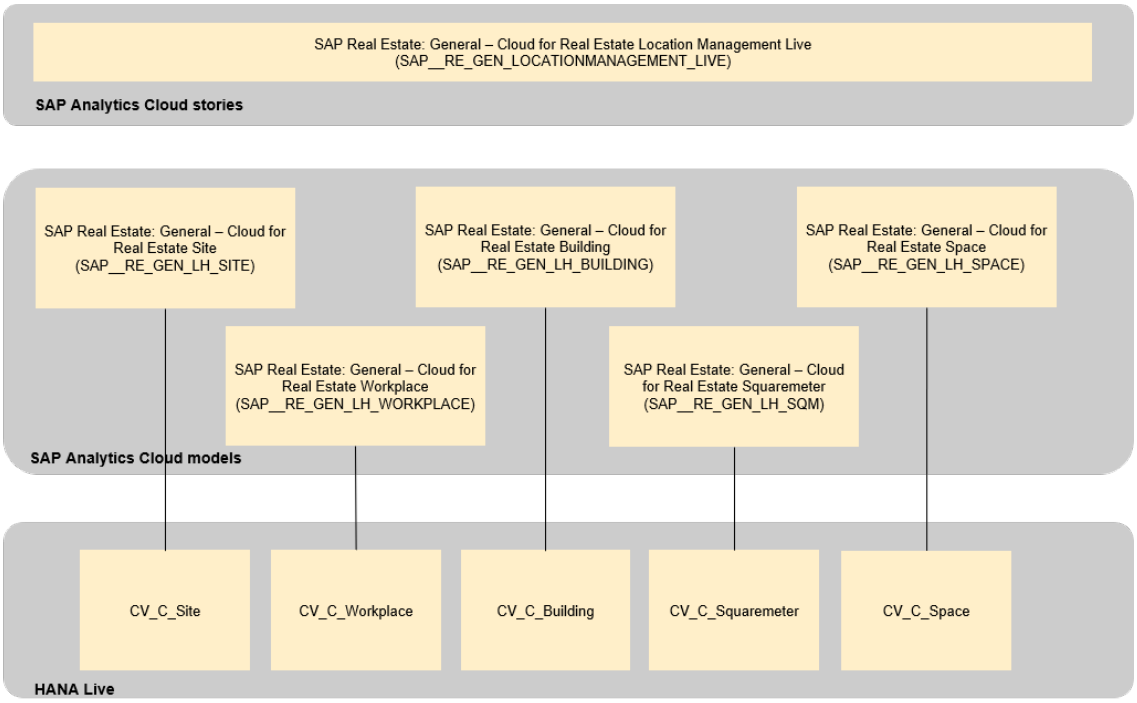
Contract & Lease Management

The data acquisition of the Contract and Lease Management is based on a SAP BW/4HANA Live Data Connection



Location Management Live

The data access of the Location Management Live is based on a live data connection to the Cloud for Real Estate HDI Container. The application exposes five entities, which each correspond to one model.



3.18.2 Dashboard

The name of the Real Estate Dashboard is SAP_RE_Dashboard. Both Story (Location Management as well as Contract & Lease Management) are included.

3.18.3 Stories

3.18.3.1 SAP__RE_GEN_C4RE_LOCATION_MANAGEMENT1

SAP Real Estate: General-Cloud for Real Estate Location Management

In the Portfolio Overview a global real estate portfolio manager gets transparency about the most relevant key figures, like numbers of sites & buildings, occupancy rate or average portfolio age. His portfolio is visualized on a map which can be used as a filter too. Various filters on the top support detailed insights.

One objective of a real estate manager lies in the most efficient space management. That's why the Area Details page provides various perspectives on how square meters are used. Variances in comparison to previous month indicate positive or negative changes.

Corporate Real Estate Management requires active workspace management to manage buildings in the most efficient manner. Thereof the total occupancy rate as well as detailed views on the workplace types are indicators of action required or opportunities to leverage.

Another important element that a real estate manager has to consider is the age of his portfolio. The **Age Details** page visualises the most important statements that apply to the age.

3.18.3.1.1 Calculations

The following table contains the calculations, that are provided in the story to display all charts properly

Measure Name	Type	Formula/Properties
Sites	Aggregation	Operation: COUNT DIMENSION Dimension: Sitename
Buildings	Aggregation	Operation: COUNT DIMENSION Dimension: BuildingShortname
Workplaces	Calculated Measure	Formula: AvailableWorkplaces+Occupied Workplaces
Area per Workplace	Calculated Measure	Formula: Area/Workplaces
Average Age	Calculated Measure	Formula: Age / Buildings

Measure Name	Type	Formula/Properties
Workplace Area	Restricted Measure	Measure: Area Dimensions: AreaComponent
Non Workplace Area	Calculated Measure	Formula Area - WorkspaceArea
Workplace Area (percentage)	Calculated Measure	Formula - Workplace Area (percentage)
Occupancy Proportion	Calculated Measure	Formula - Occupancy Proportion / Workplaces
Available Proportion	Calculated Measure	Formula - 1 - Occupancy Proportion
Occupancy Proportion (shared workplaces only)	Calculated Measure	Formula - Occupancy Proportion / #Spaces
Available Proportion (shared workplaces only)	Calculated Measure	Operation - COUNT DIMENSION Dimensions: Spacename BuildingShortName
Delta to Target Capacity	Calculated Measure	Formula: TargetCapacity - Workplaces

Explanation:

- **Area per Workplace**
  This calculation shows the average area for each workplace.
- **WorkspaceArea**
  The calculation shows the area, that is only categorized as Workspace.
- **Workplace Area Efficiency**
  Shows the WorkspaceArea in relation to the Grossarea
- **Occupancy Proportion**
  The amount of occupied workplaces in percent.
- **Delta to Target Capacity**
  Describes the gap between used workplaces and workplaces which would ideally fit in these spaces.

> **i** Note
>
> The aggregation and representation of the data, like it is in the story, won't work if you trigger it more often than once in a month. Append the data only once per month. Do not load multiple times in a month, otherwise align variance period to your trigger period

3.18.3.2 SAP__RE_GEN_WORKSPACE_UTILIZATION_MANAGEMENT_LIVE

SAP Real Estate: General - Workspace Utilization Management

In the Workspace Utilization Management Overview, a corporate real estate manager gets transparency about the actual utilization of office workplaces and spaces.

3.18.3.2.1 Calculations

Measure Name	Type	Formula/Properties
Average Daily Workplace Utilization	Aggregation	Operation: Average Measure: Daily Workplace Utilization Dimensions: Year, Month, DAYOF-MONTH
Average Daily Space Utilization	Aggregation	Operation: Average Measure: Connected Devices per Work-space Area Dimensions: DAYNAME

3.18.3.3 SAP__RE_Contract_and_Lease_Mgmnt

SAP Real Estate: General -Contract and Lease Management

The Contract and Lease Management story offers Real Estate customers analyses about their contracts, their conditions, renewal options and cash flow valuations by various dimensions, e.g. country, time, company, status, and type.

3.18.3.3.1 Calculations

Measure Name	Type	Formula/Properties
Condititon per Year (*12)	Calculated Measure	Condition per Month *12
Operational Costs	Restricted Measure	Measure [Condition per Month] re-stricted by [Condition Type] on [Operat-ing Cost LI]
Base Rent	Restricted Measure	Measure [Condition per Month] re-stricted by [Condition Type] on [Rent Lease In]

3.18.3.4 SAP__RE_GEN_LOCATIONMANAGEMENT_LIVE

In the Portfolio Overview a global real estate portfolio manager gets transparency about the most relevant key figures, like numbers of sites and buildings, occupancy rate or average portfolio age. His portfolio is visualized on a map.

Corporate Real Estate Management requires active workspace management to manage buildings in the most efficient manner. Thereof the total occupancy rate as well as detailed views on the workplace types are indicators of action required or opportunities to leverage.

In large companies, the occupancy of workplaces is changing very frequently. With the Location Management Live a Real Estate Manager is always able to look into current details.

Further parts a real estate manager has to examine are the details of his buildings.

In the Building Details page, he is able to investigate the most important details, which include but are not limited to charts based on the age or the region.

3.18.3.4.1 Calculations

The following table contains the calculations that are provided in the story to display all charts properly.

Measure Name	Type	Formula/Properties
Occupied workplaces in %	Calculated Measure	Formula: count workplaces which are occupied / count workplaces
Delta to Target Capacity	Calculated Measure	Formula: TargetCapacity / count workplaces
Age	Aggregation	- Operation: SUM - Measure: age of building in years - Dimensions: Building Name
Building_Count	Aggregation	- Operation: COUNT excluding 0, NULL - Measure: Age - Dimensions: Building Name
Age AVG	Calculated Measure	Formula: Age / Building_Count

Explanation:

- Occupancy Proportion

The amount of occupied workplaces in percent.

- Delta to Target Capacity

Describes the gap between used workplaces and workplaces which would ideally fit in this spaces.

3.18.4 Models

3.18.4.1 General-Cloud for Real Estate Space

Model Name: SAP__RE_GEN_IM_C4RE_SPACEMODEL	**Connection**

• Model Description: SAP Real Estate: General-Cloud for Real Estate Space
• Planning Enabled: Yes
	• Connection Type: OData Services
	• Connection Queries:
	  ○ AnalyticsSpacesQuery
	  ○ AnalyticsSpacesDataQuery

Account		
ID	**Description**	**Mapping/Formula**
		OData Services: AnalyticsSpacesQuery
Latitude	Latitude	Latitude
Longitude	Longitude	Longitude
		OData Services: AnalyticsSpacesDataQuery
TargetCapacity	TargetCapacity	TargetCapacity
Age	Age	BuildingAge
Dimensions		
Name	**Description**	**Mapping**
		OData Services: AnalyticsSpacesQuery
Account*	Account	
BuildingShortname*		BuildingShortname
Date*	Date	Date
		OData Services: AnalyticsSpacesDataQuery
SAP_RE_GEN_C4RE_AGEINTERVAL	AgeInterval	BuildingAgeGroup
SAP_RE_GEN_C4RE_BUILDINGSTATUS	Building Status	BuildingStatus
SAP_RE_GEN_C4RE_BUILDINGTYPE	Building Type	BuildingType
SAP_RE_GEN_C4RE_CONSTRUCTIONY	Construction Year	BuildingConstructionYear
SAP_RE_GEN_C4RE_COUNTRY	Country	CountryAlpha2Code
SAP_RE_GEN_C4RE_COUNTRYSUB	Country Subdivision	CountrySubdivisionId
SAP_RE_GEN_C4RE_FLOORNAME	Floorname	FloorShortName
SAP_RE_GEN_C4RE_FLOORSTATUS	Floor Status	FloorStatus

Model Name: SAP__RE_GEN_IM_C4RE_SPACEMODEL		Connection
SAP_RE_GEN_C4RE_OWNERSHIP	Ownership Status	BuildingOwnershipStatus
SAP_RE_GEN_C4RE_REGION	Region	RegionId
SAP_RE_GEN_C4RE_SITENAME	Sitename	SiteShortName
SAP_RE_GEN_C4RE_SPACENAME	Spacename	SpaceShortName
SAP_RE_GEN_C4RE_SPACESTATUS	Space Status	SpaceStatus
SAP_RE_GEN_C4RE_SPACETYPE	Space Type	SpaceUsageType
SAP_RE_GEN_C4RE_SUBREGION	Subregion	SubregionId
Additional Notes about the Model		
Please append the data of both queries only once per month, if you have representative values for each month.		

*Private dimension, other dimensions are public.

3.18.4.2 General-Cloud for Real Estate SpaceArea (SAP__RE_GEN_IM_C4RE_SAREAMODEL)

Model Name: SAP__RE_GEN_IM_C4RE_SAREAMODEL		Connection

• Model Description: SAP Real Estate: General-Cloud for Real Estate Space-Area
• Planning Enabled: Yes
		• Connection Type: OData Services
		• Connection Queries:
		  ○ AnalyticsSpaceAreasQuery
		  ○ AnalyticsSpaceAreasData-Query

Account		
ID	**Description**	**Mapping/Formula**
		OData Services: AnalyticsSpaceAreas-Query
Latitude	Latitude	Latitude
Longitude	Longitude	Longitude
		OData Services: AnalyticsSpaceAreas-DataQuery
Area	Area	Area
Age	Age	BuildingAge
Dimensions		
Name	**Description**	**Mapping**

Model Name: SAP__RE_GEN_IM_C4RE_SAREAMODEL		Connection
		OData Services: AnalyticsSpaceAreas-Query
Account*	Account	
BuildingShortname*		BuildingShortname
Date*	Date	Date
		OData Services: AnalyticsSpaceAreas-DataQuery
SAP_RE_GEN_C4RE_AGEINTERVAL	AgeInterval	BuildingAgeGroup
SAP_RE_GEN_C4RE_BUILDINGSTA-TUS	Building Status	BuildingStatus
SAP_RE_GEN_C4RE_BUILDINGTYPE	Building Type	BuildingType
SAP_RE_GEN_C4RE_CONSTRUCTI-ONY	Construction Year	BuildingConstructionYear
SAP_RE_GEN_C4RE_COUNTRY	Country	CountryAlpha2Code
SAP_RE_GEN_C4RE_COUNTRYSUB	Country Subdivision	CountrySubdivisionId
SAP_RE_GEN_C4RE_FLOORNAME	Floorname	FloorShortName
SAP_RE_GEN_C4RE_FLOORSTATUS	Floor Status	FloorStatus
SAP_RE_GEN_C4RE_OWNERSHIP	Ownership Status	BuildingOwnershipStatus
SAP_RE_GEN_C4RE_REGION	Region	RegionId
SAP_RE_GEN_C4RE_SITENAME	Sitename	SiteShortName
SAP_RE_GEN_C4RE_SPACENAME	Spacename	SpaceShortName
SAP_RE_GEN_C4RE_SPACESTATUS	Space Status	SpaceStatus
SAP_RE_GEN_C4RE_SPACETYPE	Space Type	SpaceUsageType
SAP_RE_GEN_C4RE_SUBREGION	Subregion	SubregionId
SAP_RE_GEN_C4RE_AREACOMPO-NENT	Area Component	AreaComponent
SAP_RE_GEN_C4RE_AREASUBCOM-PONENT	Area Subcomponent	AreaSubComponent
Additional Notes about the Model		
Please append the data of both queries only once per month, if you have representative values for each month.		

*Private dimension, other dimensions are public.

3.18.4.3 General-Cloud for Real Estate Workplace

Model Name: SAP__RE_GEN_IM_C4RE_WPMODEL	Connection

• Model Description: SAP Real Estate: General-Cloud for Real Estate Workplace
• Planning Enabled: Yes
	• Connection Type: OData Services
	• Connection Queries:
	  ○ AnalyticsWorkplaceQuery
	  ○ AnalyticsWorkplaceDataQuery

Account		
ID	**Description**	**Mapping/Formula**
		OData Services: AnalyticsWorkplacesQuery
Latitude	Latitude	Latitude
Longitude	Longitude	Longitude
		OData Services: AnalyticsWorkplacesDataQuery
Available Workplace	Available Workplaces	AvailableWorkplaces
Occupied Workplaces	Occupied Workplaces	OccupiedWorkplaces
Occupancy Proportion	Occupancy Proportion	OccupancyProportion
Age	Age	BuildingAge
Dimensions		
Name	**Description**	**Mapping**
		OData Services: AnalyticsWorkplacesQuery
Account*	Account	
BuildingShortname*		BuildingShortname
Date*	Date*	Date*
		OData Services: AnalyticsWorkplacesDataQuery
SAP_RE_GEN_C4RE_AGEINTERVAL	AgeInterval	BuildingAgeGroup
SAP_RE_GEN_C4RE_BUILDINGSTATUS	Building Status	BuildingStatus
SAP_RE_GEN_C4RE_BUILDINGTYPE	Building Type	BuildingType
SAP_RE_GEN_C4RE_CONSTRUCTIONY	Construction Year	BuildingConstructionYear
SAP_RE_GEN_C4RE_COUNTRY	Country	CountryAlpha2Code
SAP_RE_GEN_C4RE_COUNTRYSUB	Country Subdivision	CountrySubdivisionId

Model Name: SAP__RE_GEN_IM_C4RE_WPMODEL		Connection
SAP_RE_GEN_C4RE_FLOORNAME	Floorname	FloorShortName
SAP_RE_GEN_C4RE_FLOORSTATUS	Floor Status	FloorStatus
SAP_RE_GEN_C4RE_OWNERSHIP	Ownership Status	BuildingOwnershipStatus
SAP_RE_GEN_C4RE_REGION	Region	RegionId
SAP_RE_GEN_C4RE_SITENAME	Sitename	SiteShortName
SAP_RE_GEN_C4RE_SPACENAME	Spacename	SpaceShortName
SAP_RE_GEN_C4RE_SPACESTATUS	Space Status	SpaceStatus
SAP_RE_GEN_C4RE_SPACETYPE	Space Type	SpaceUsageType
SAP_RE_GEN_C4RE_SUBREGION	Subregion	SubregionId
SAP_RE_GEN_C4RE_WORKPLACE-TYPE	Workplace Type	WorkplaceType
Additional Notes about the model		
Please append the data of both queries only once per month, if you have representative values for each month.		

*Private dimension, other dimensions are public.

3.18.4.4 General- Workplace Utiilization

Model Name: SAP__RE_GEN_LH_ WORKPLACEUTILIZATION		Connection
Model Description: SAP Real Estate: General - Workplace Utilization		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: WORK-PLACEUTILIZATION
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• Live Connection • WORKPLACEUTILIZATION
TOTALWORKPLACES	Number of Total Workplaces	TOTALWORKPLACES
UTILIZEDWORKPLACES	Number of Utilized Workplaces	UTILIZEDWORKPLACES
DAILYWORKPLACEUTILIZATION	Daily Workplace Utilization	[UTILIZEDWORKPLACES]/[TOTAL-WORKPLACES]
Dimensions		
Name	**Description**	**Mapping**
		Live Connection: WORKPLACEUTILIZA-TION
COUNTRYCODE	Country	COUNTRYCODE

Model Name: SAP__RE_GEN_LH_ WORKPLACEUTILIZATION		Connection
DAYNAME	Name of the Day	DAYNAME
DAYOFMONTH	Day of the Month	DAYOFMONTH
MONTH	Month	MONTH
QUARTER	Quarter	QUARTER
SITENAME	Sitename	SITENAME
YEAR	Year	YEAR
REGIONID	Region	REGIONID

3.18.4.5 General – Space Utilization (SAP__RE_GEN_LH_SPACEUTILIZATION)

Model Name: SAP__RE_GEN_LH_SAP__RE_GEN_LH_SPACEUTILIZATION		Connection
Model Description: SAP Real Estate: General - Space Utilization		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: SPACE-UTILIZATION
Account Dimension		
ID	**Description**	**Mapping/Formula**
		Live Connection: SPACEUTILIZATION
MEASUREVALUE	Measured Number of Connected Devices	MEASUREVALUE
WORKSPACEAREA	Size of Workspace Area	WORKSPACEAREA
SAP_RE_CONNECTED_DEVICES_PER_WORKSPACE_AREA	Connected Devices per Workspace Area	[MEASUREVALUE]/[WORKSPACEAREA]
Dimensions		
Name	**Description**	**Mapping**
		Live Connection: SPACEUTILIZATION
COUNTRYCODE	Country	COUNTRYCODE
DAYNAME	Name of the Day	DAYNAME
DAYOFMONTH	Day of the Month	DAYOFMONTH
MONTH	Month	MONTH
QUARTER	Quarter	QUARTER
SITENAME	Sitename	SITENAME
YEAR	Year	YEAR

Model Name: SAP__RE_GEN_LH_SAP__RE_GEN_LH_SPACEUTILIZATION		Connection
REGIONID	Region	REGIONID
WORKSPACEAREAUNIT	Workspace Area Unit	WORKSPACEAREAUNIT

3.18.4.6 General - Contract and Lease Management Contract List (SAP__RE_GEN_LB_REIO50_Q01000)

Model Name: SAP__RE_GEN_LB_REIO50_Q0100	Connection
• Model Description: SAP Real Estate: General • Contract and Lease Management Contract List	• Live Data Connection to SAP BW/4HANA • Connection name: SAPREBW • /IMO/V_REIO50_Q0100 • https://help.sap.com/viewer/06e872f914a44d77b6c692b0273ca400/1.0.7/en-US/cbf48fbfdb64464a8ec9eda61dc4dd65.html

Measures		
ID	**Description**	**Mapping/Formula**
00O2TFIS8KH9NX7CI0633UERO	Number of Records	
Dimensions		
See Screen Shot below		

ID	Description
0AUTHGRP	*Authorization Group*
0BUS_AREA	*Business Area*
0COMP_CODE__0COUNTRY	*Country*
0CONTRCATEG	*Contract Category*
0CONTRELOBJ	*Object Reference*
0CONTRPART2	*Contract:2nd Partner*
0CONTRROLE1	*Contract:1st BP Role*
0CONTRROLE2	*Contract:2nd BP Role*
0CONTRSTART__0CALMONTH	*Month of Contract Start Date*
0CONTRSTART__0CALYEAR	*Year of Contract Sta*
0COSTCENTER	*Cost Center*
0CO_AREA	*Controlling Area*
0IND_NUMSYS	*Partner:Ind. System*
0IND_SEC	*BP: Industry*
0NOTICEKEY	*Notice Key*
0NOTPER	*Notice Period*
0NOTREASON	*Reason for Notice*
0NOTTYPE	*Notice Type*
0NTLANDLRD__0CALMONTH	*Month of Notice Date - Landlord*
0NTLANDLRD__0CALYEAR	*Year of Notice Date*
0NTTENANT__0CALMONTH	*Month of Notice Date - Tenant*
0NTTENANT__0CALYEAR	*Year of Notice Date*
0REINTRENO	*Internal RE-Number (*
0RENEWALRAT	*Aut. Renewal Type*
0RENEWALRLE	*Renewal Rule*
0RENEWALRTY	*Renewal Type*
0RESP_USER	*Person Responsible*
0RE_DELETED	*Deleted*
0SALESRENT	*Relevant to Sales*
0STATUSRES1	*Status: Condition*
0STATUSRES2	*Status: Lock*
0STATUSREU1	*Status: User 1*
0STATUSREU2	*Status: User 2*
0STATUSREU3	*Status: User 3*
0STATUSREU4	*Status: User 4*
0STATUSREU5	*Status: User 5*
0TENAN_LAW	*Tenancy Law*
0COUNTRY	*Country*
0COMP_CODE	*Company Code*
0RECONTRACT	*Contract*
0CONTRTYPE	*Contract Type*
0CONTRSTART	*Contract Start Date*
0CONTREND	*End of Term*
0CONTR1END	*Contract End Date*
0CONTR1END__0CALMONTH	*Month of Contract 1. End Date*
0CONTR1END__0CALYEAR	*Year of Contract 1.*
0NTTENANT	*Notice Date - Tenant*
0NTLANDLRD	*Notice Date-Landlord*
0RERELEVAL	*Valuation Relevance*
0CONTRPART1	*Contract:1st Partner*
0PROFIT_CTR	*Profit Center*

3.18.4.7 General - Contract and Lease Management Conditions List Contract (SAP__RE_GEN_LB_RETD01_Q0100)

Model Name: SAP__RE_GEN_LB_RETD01_Q0100	Connection
• Model Description: SAP Real Estate: General • Contract and Lease Management Conditions List Contract	• Live Data Connection to SAP BW/4HANA • Connection name: SAPREBW • /IMO/V_RETD01_Q0100 • https://help.sap.com/viewer/06e872f914a44d77b6c692b0273ca400/1.0.7/en-US/f420dc0943f34cf2bc2c0619885be952.html

Measures

ID	Description	Mapping/Formula
00O2TFIS8KH7XMRI9T4T9GVV9	Condition per Month	
00O2TGHPRZ53NWVHQ8MB5CG4I	Cumulated	
00O2TGHPRZ53NWVI8OJIP3BIJ	Percentage	

Dimensions

See Screen Shot below

ID	Description
0CALMONTH	Calendar Year/Month
0BUSENTITY	Business Entity
0CONDPURP	Condition Purpose
0REBUILDING	Building
0RECDTYPE	Condition Type
0RECONTRACT__0CONTREND	End of Term
0RECONTRACT__0CONTRSTART	Contract Start Date
0RENTOBJECT	Rental Object
0RENTOBJECT__0RENTTYPE	Rental Object Type
0RENTOBJECT__0REOCCUP	Occupancy
0RENTOBJECT__0USAGETYPE	RU Usage Type
0REOBJECT	Real Estate Object
0REOBJTYPE	Object Type
0REPROPERTY	Land
0COMP_CODE	Company Code
0RECONTRACT	Contract
0RECONTRACT__0CONTRTYPE	Contract Type

3.18.4.8 General - Contract and Lease Management Cash Flow Valuation (SAP__RE_GEN_LB_RETD06_Q0100)

Model Name: SAP__RE_GEN_LB_RETD06_Q0100	Connection
• Model Description: SAP Real Estate: General • Contract and Lease Management Cash Flow Valuation	• Live Data Connection to SAP BW/4HANA • Connection name: SAPREBW • /IMO/V_RETD06_Q0100 • https://help.sap.com/viewer/06e872f914a44d77b6c692b0273ca400/1.0.7/en-US/9a4078097f9146adaf2bc732029d0ab3.html

Measures		
ID	**Description**	**Mapping/Formula**
00O2TFIS8KH7XMRJAB4DFG5LP	Assets	
00O2TFIS8KH7XMRJAB4DFGBX9	Depreciation	
00O2TFIS8KH7XMRJAB4DFGI8T	Interest	
00O2TFIS8KH7XMRJAB4DFGOKD	Repayment	
00O2TFIS8KH7XMRJAB4DFGUVX	Transfer Posting	
00O2TFIS8KH7XMRJAB4DFH17H	Clearing	
Dimensions		
See Screen Shot below		

ID	Description
0ASSET	Subnumber
0ASSET_MAIN	Attachment
0BPARTNER	Business Partner
0BUSENTITY	Business Entity
0CFORIGIN	Cash Flow Origin
0CFSTATUS	Cash Flow Status
0COMP_CODE__0COUNTRY	Country
0COORDER	Order
0COSTCENTER	Cost Center
0CO_AREA	Controlling Area
0CO_OBJNR	CO: Object number
0CURRENCY	Currency
0FISCVARNT	Fiscal Year Variant
0PART_OBJNR	Object Number Partne
0PSTNG_DATE	Posting Date
0PSTNG_DATE__0CALMONTH	0PSTNG_DATE__0CALMONTH
0PSTNG_DATE__0CALWEEK	0PSTNG_DATE__0CALWEEK
0PSTNG_DATE__0CALYEAR	0PSTNG_DATE__0CALYEAR
0REBUILDING	Building
0RECDTYPE	Condition Type
0RECERULE	Valuation Rule
0RECFTYPE	Cash Flow Type
0RECONTRACT__0CONTRTYPE	Contract Type
0RECONTRACT__0COUNTRY	Country
0REDBERBIS	Calculation to
0REDBERVON	Calculation From
0REDBPERIOD	Period start
0REDEPERIOD	Period end
0REDFAELL	Due Date
0REDVALUT	Calculation date
0REFFLOWTY	Relationship Type
0RENTOBJECT	Rental Object
0REOBJECT	Real Estate Object
0REOBJTYPE	Object Type
0REPROPERTY	Land
0RETAXGRP	Tax Group
0RETAXTYPE	Tax Type
0RE_FLW_TP	Flow Type
0TAXJURCODE	BAS:TaxJurisdctnCode
0WBS_ELEMT	WBS Element
0FISCPER	Fiscal year / period
0COMP_CODE	Company Code
0RECONTRACT	Contract
0RECONTRACT__0CONTRPART1	Contract:1st Partner
0RECONTRACT__0CONTRSTART	Contract Start Date
0RECONTRACT__0CONTREND	End of Term

3.18.4.9 General - Contract and Lease Management Renewal Options (SAP__RE_GEN_LB_RETD21_Q0100)

Model Name: SAP__RE_GEN_LB_RETD21_Q0100	Connection
• Model Description: SAP Real Estate: General • Contract and Lease Management Renewal Options	• Live Data Connection to SAP BW/4HANA • Connection name: SAPREBW • /IMO/V_RETD21_Q0100 • https://help.sap.com/viewer/06e872f914a44d77b6c692b0273ca400/1.0.7/en-US/67d9013f1baa4d6ba08c6046ea53d4c2.html

Measures

ID	Description	Mapping/Formula
00O2TFIS8KH9NXQTRE8RNKQOU	Counter	

Dimensions

See Screen Shot below

ID	Description
0REDPRENOTE__0CALMONTH	Month of Notification
0REDPRENOTE__0CALYEAR	Year of Notification
0RERNENDNEW__0CALMONTH	Month of Next End
0RERNENDNEW__0CALYEAR	Year of Next End
0COMP_CODE	Company Code
0COMP_CODE__0COUNTRY	Country
0RECONTRACT__0CONTRTYPE	Contract Type
0RECONTRACT	Contract
0RECONTRACT__0CONTRPART1	Contract:1st Partner
0RECONTRACT__0CONTRSTART	Contract Start Date
0RECONTRACT__0CONTREND	End of Term
0SEQUNO	Sequence No
0RERNRULETY	Renewal Rule Type (O
0REDPRENOTE	Notification by
0RERNENDNEW	Next End Date
0RERNENDOLD	Previous End Date
0RERNACTIVE	Renewal Active
0ACTDATE	LO Activation
0REDREVERSE	Reversed on

3.18.4.10 General - Cloud for Real Estate Sites

Model Name: SAP__RE_GEN_LH_ SITE		Connection
Model Description: SAP Real Estate: General - Sites		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: CV_C_Site
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• Live Connection • Sites
Site ID		
Alpha2Code		
Base Unit Conversion Factor		
Country Subdivision Assignable		
Site Long Name		
Measurement Standard Text		
Measurement System		
Measurement Unit Category Text		
Measurement Unit Text		
Country Subdivision Name		
Country Name		
Subregion Name		
Site Status Active Flag		
Region Name		
Site Short Name		
Site Status Text Value		

3.18.4.11 General - Cloud for Real Estate Building

Model Name: SAP__RE_GEN_LH_ Building		Connection
Model Description: SAP Real Estate: General - Building		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: CV_C_Building
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• Live Connection • Building
Alpha2Code		
Alpha3Code		
Base Unit Conversion Factor		
Building Short Name		
Building Address Locator		
Building Status		
Building Usage		
Building Active Status Flag		
Building ID		
Latitude		
Longitude		
Building Long Name		
Building Omni Class Name		
Omni Class Number		
Ownership Status		
Site Long Name		
Measurement Standard Text		
Measurement System		
Measurement Unit Category Text		

Model Name: SAP__RE_GEN_LH_ Building	Connection
Measurement Unit Text	
Country Subdivision Name	
Country Name	
Subregion Name	
Site Status Active Flag	
Region Name	
Site Short Name	
Site Status Text Value	

3.18.4.12 General - Cloud for Real Estate Workplace

Model Name: SAP__RE_GEN_LH_ WORKPLACE		Connection
Model Description: SAP Real Estate: General - Workplace		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: CV_C_Workplace
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• Live Connection • Workplace
Alpha2Code		
Alpha3Code		
Floor ID		
Floor Level		
Floor Long Name		
Floor Short Name		
Workplace is Enabled Flag		
Building Short Name		

Model Name: SAP__RE_GEN_LH_ WORKPLACE	Connection
Building ID	
Building Long Name	
Site Long Name	
Country Subdivision Name	
Country Name	
Subregion Name	
Region Name	
Site Short Name	
Site ID	
Space ID	
Space Long Name	
Space Short Name	
Space Status is Active	
Space Status Text Value	
Space Usage Type Text Value	
Target Capacity	
Workplace ID	
WorkplaceId Occupied	
Workplace Name	
Workplace Type	
Workplace Type Text	

3.18.4.13 General - Cloud for Real Estate Geo

Model Name: SAP__RE_GEN_LH_ SQM		Connection
Model Description: SAP Real Estate: General - SQM		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: CV_C_Squaremeter
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• Live Connection • Squaremeter
Account Dimension		
ID	**Description**	**Mapping**
		• Live Connection • Squaremeter
ComponentId		
SubcomponentId		
Measurement Space Net Area Id		
Measurement Unit Category Text		
Measurement Unit Category		
Measurement Unit Text		
Base Unit Conversion Factor		
Measurement Unit		
Measurement Unit Category Text		
Measurement System		
Measurement Space Net Area		
Measurement Space Net Area Text		
Area Category		
Area Category Text		
Area		
BuildingIRN		

Model Name: SAP__RE_GEN_LH_ SQM	Connection
FloorIRN	
SpaceIRN	
SiteIRN	

3.18.4.14 General - Cloud for Real Estate Space

Model Name: SAP__RE_GEN_LH_ SPACE		Connection
Model Description: SAP Real Estate: General - Space		• Live Data Connection to SAP SCP CF with SSO (Simple URLs) • Name of SAP HANA View: CV_C_Space
Account Dimension		
ID	**Description**	**Mapping/Formula**
		• Live Connection • Space
Space is Enabled Flag		
Occupancy Proportion		
Occupant Type		
Space Long Name		
Space Short Name		
Space Status is Active		
Space Status Text Value		
Space Usage Type Text Value		

3.18.5 Customization

3.18.5.1 Changing Default Variable Setting (Optional)

Default variables are set in the SAP Analytics Cloud Stories. Follow the steps below to change them to the appropriate value according to your requirements.

Procedure

Perform the activities on the SAP Analytics Cloud platform.

1. Log on to the SAP Analytics Cloud.
2. Open the *Browser* > *Stories* in the main menu.
3. Access the Public folder and find the SAP Analytics Cloud Story.
4. Enter the credentials. The story is displayed.
5. On the menu bar, choose *Data* > *Edit Prompts* > *<your datasource>*. In the Set Variables for <your datasource> dialog box, navigate to Display Currency (or other variables you want to adjust), change it to a proper value for the variable and then choose Set.
6. Story data will be refreshed.

Result

The default variable setting has been configured for the SAP Analytics Cloud Story.

3.18.5.2 Changing Data source (Optional)

Default Data Source can be changed according to your requirements.

Follow the steps below to make the update.

1. Log on the SAP Analytics Cloud.
2. Create a new connection with the new data source.
3. Open the *Browser* > *Model* to find the model whose data source you want to update.
4. Choose Change Data Source to open this model.
5. Choose the new connection that you created on Step 2.
6. Find the new data source and save it.
7. Open the aim story and you can see that the database has been switched successfully.

Result

The data source has been updated.

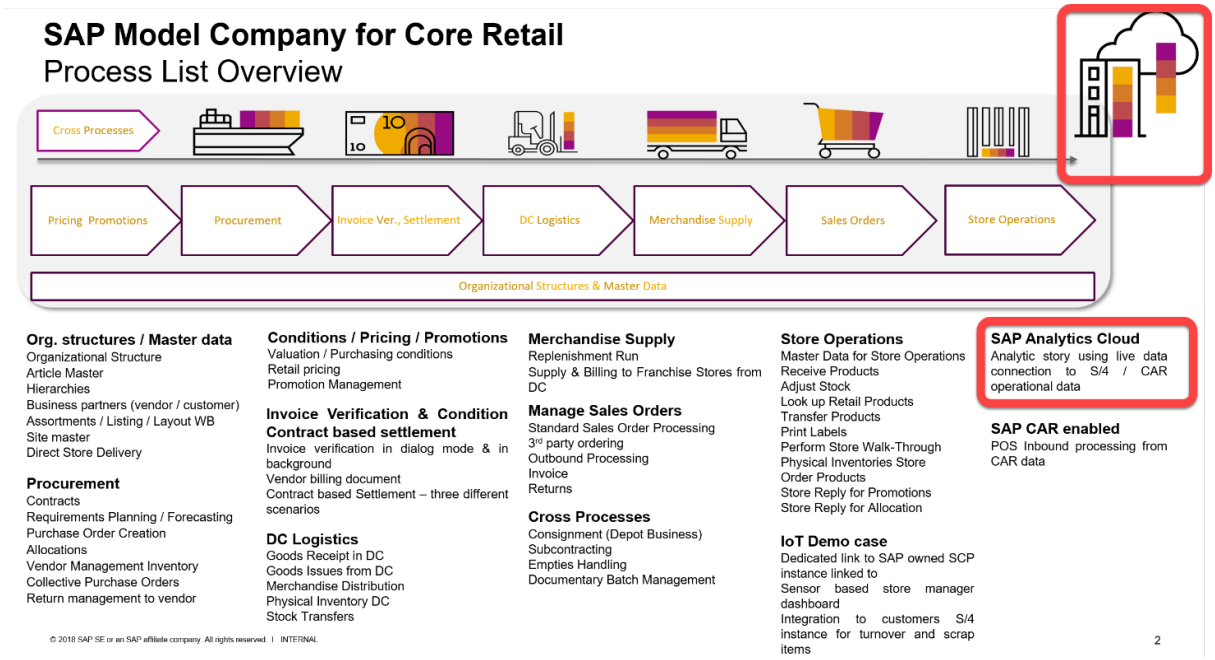
3.19 Retail - Model Company Core Retail (RT-MC)

3.19.1 Retail - Model Company Core Retail (RT-MC)

In the retail industry, it is important to have immediate insights into consumer behaviour and business-critical data. This need of insights is spread within the organization and goes from board level through management into the regions to local market managers.

The SAP Model Company for Core Retail is offered as a SAP predefined service with all the benefits of this new SAP brand category. It provides a complete SAP S/4HANA Retail for Merchandise Management system landscape for retailers and contains example data and configuration out of the box.

The SAP Model Company is technically built on a retail specific reference architecture based on additional sample master data, configuration and developments. This is the basis for implementation projects.

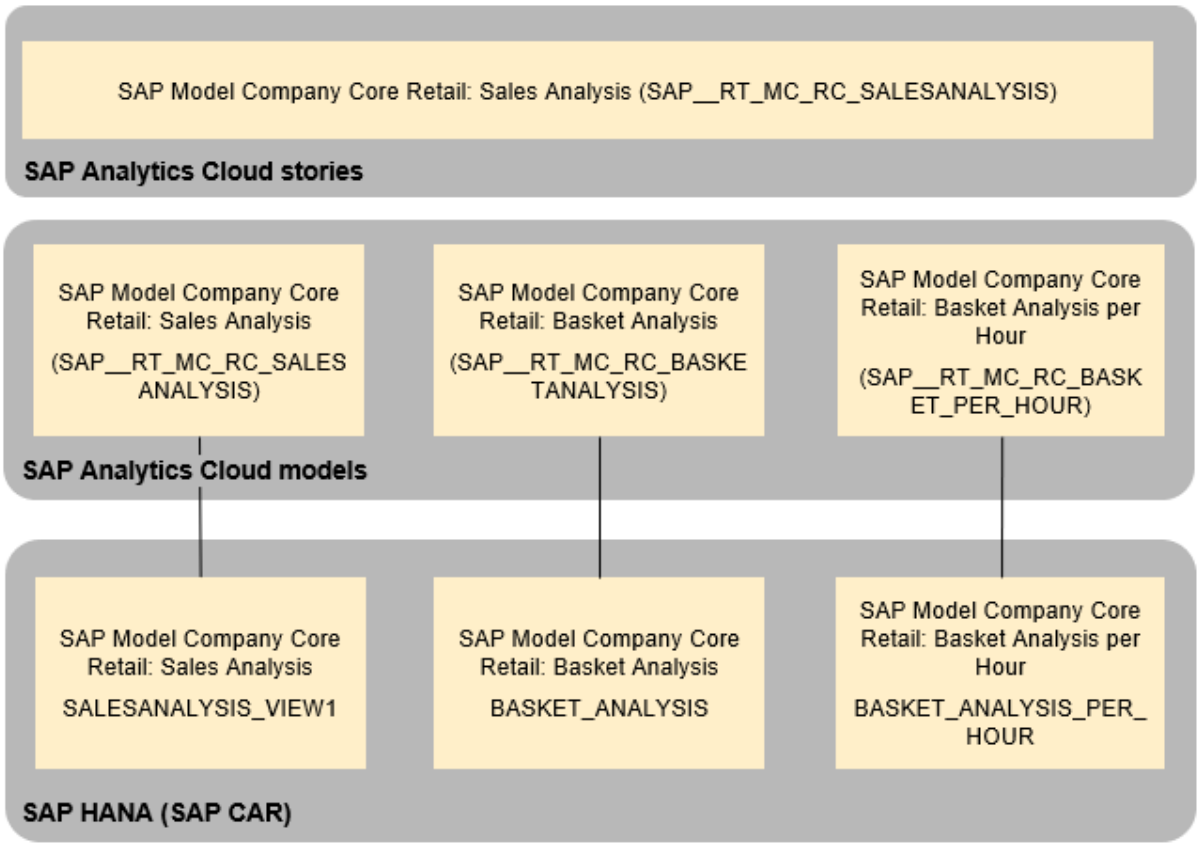


SAP Analytics Cloud content is available, visualizing the example data that comes with the deployment.

Ticket details and regional components play a significant role when reporting non-aggregated sales data. The data foundation is SAP Customer Activity Repository (SAP CAR), specifically the POS data processed by the POS DTA application. This data structure is the basis for the given story.

3.19.1.1 Architecture and Abstract

The SAP Analytics Cloud content for the Retail Model Company story is based on a live connection to the SAP CAR data with dedicated HANA views. The generated POS sample data set is consumed by all the pages within this story. It shows examples of how a real time view on sales data within different dimensions (region cluster) as well as different use cases (sales by category vs. basket analysis) can be set up.



3.19.1.2 Stories

The following story is included in the content package:

SAP Model Company Core Retail: Sales Analysis (SAP__RT_MC_RC_SALESANALYSIS)

The story contains the following pages:

- **Sales Analytics Homepage**
  This landing page shows one chart from each page together with a generic RSS feed from SAP. The regions views show the regions cluster for the current year where the sales chart shows the top 10 stores.
  The Basket Analysis chart shows the top 5 weeks turnover, where the second basket view shows the details of one day only with the breakdown to hourly levels for the top five stores.
- **Sales Analytics by Region**
  To get insights into regions' performances, this page gives insights into top regions as well as the top 10 material groups. In case you are operating omnichannel, the sales channel split (walk in vs web) is shown as well.
- **Sales Analytics by Location**
  The location view shows the top ten locations as heat map as well as indicators on a map. The map allows to drill-down a given area and to set filters with an easy to use selection (lasso) to drill into selections of interest.
- **Basket analysis by Week**

The basket Analysis on time dimensions often starts with a week by week view. On this page, you can select multiple weeks to compare the average sales per transaction, net sales amount on best, and slow sellers as well as sales items by weekdays
For insights into consumer behaviour that is correlated to special events or local activities, you need to drill-down sales figures to hourly level. Average sales by the hour allows you to understand the customer clusters based on their day plan as well as to understand at what time of day high priced items are sold better.

3.19.1.3 Models

As already mentioned, this content package is based on a live connection to SAP CAR (SAP HANA).

The following models are connected to a corresponding HANA calculation as follows:

SAC Model name	SAP CAR - SAP HANA calculation view name
SAP__RT_MC_RC_SALESANALYSIS	SALESANALYSIS_VIEW1
SAP__RT_MC_RC_BASKETANALYSIS	BASKET_ANALYSIS
SAP__RT_MC_RC_BASKET_PER_HOUR	BASKET_ANALYSIS_PER_HOUR

The documentation of the underlying HANA views of the above-mentioned SAP Analytics Cloud models is part of the documentation delivered with the SAP Model Company for Core Retail.

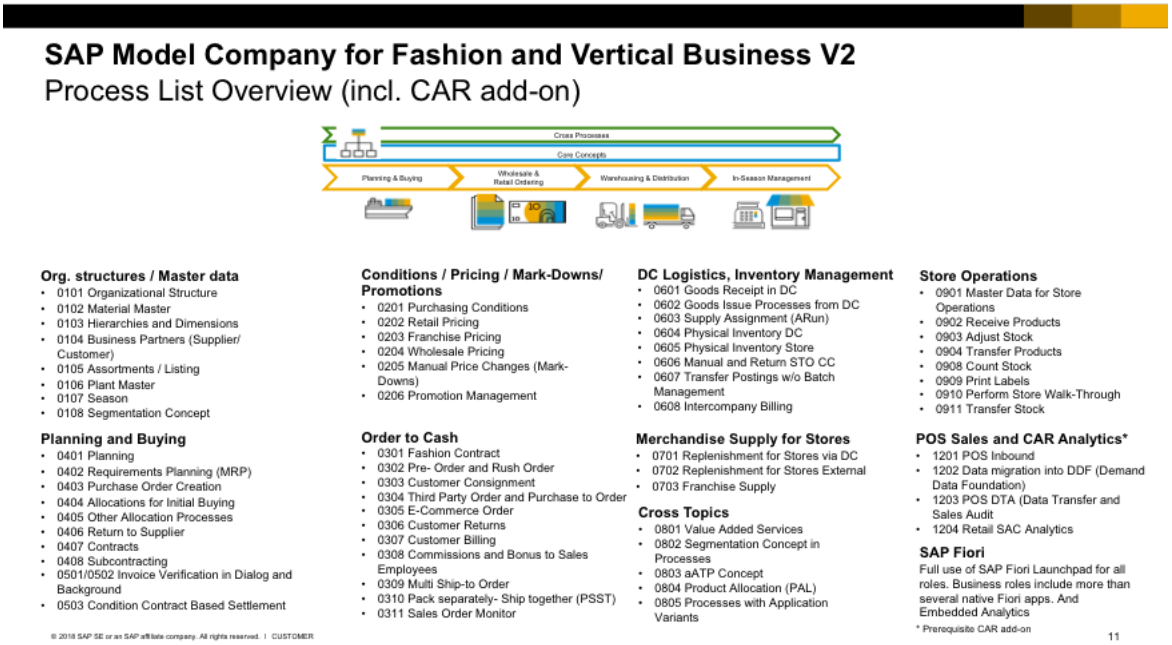
3.20 Retail - Model Company Fashion for Vertical Business

3.20.1 Retail - Model Company Fashion for Vertical Business

In the retail industry it is key to have immediate insights into consumer behaviour and business critical data. This need of insights is spread within the organization and goes from board level, through management into the regions and to local market managers.

The SAP Model Company for Core Retail is offered as a “SAP predefined service” with all benefits of this new SAP brand category. It provides a complete SAP S/4HANA Retail for Merchandise Management system landscape for retailers and contains example data and configuration out of the box.

The SAP Model Company is technically built on a retail specific reference architecture based on additional sample master data, configuration and developments. This is the basis for implementation projects.

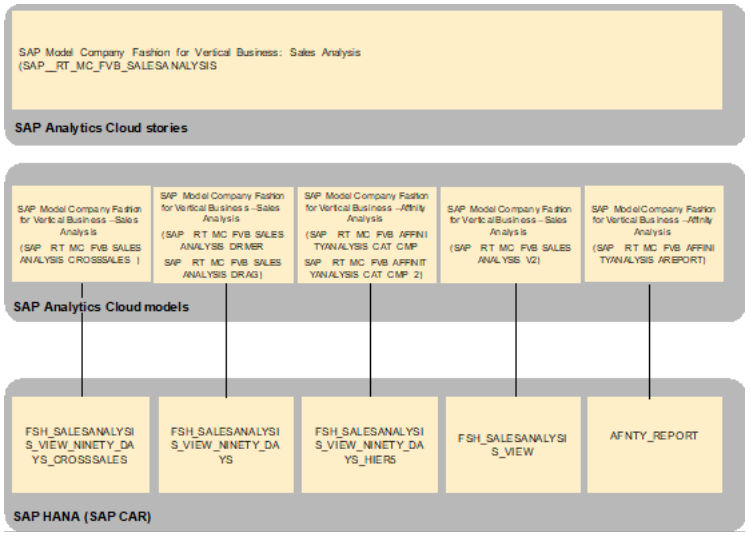


The user interface for analytical content is the SAP Analytics Cloud consuming example data that comes with the deployment.

In this context reporting on non-aggregated sales data, ticket details, regional components play a significant role. The data foundation allows to make those kinds of reporting based on SAP Customer Activity Repository (SAP CAR), and the POS data that are processed by the POS DTA application. This data structure is the basis for the given story.

3.20.1.1 Architecture and Abstract

The SAP Analytics Cloud for the Model Company story is set up as live connection to the SAP CAR data with dedicated HANA views. The generated POS sample data set is consumed for all sites within this story and shows examples of how a real time view on sales data within different dimensions (region cluster) as well as different use cases (sales by division vs. shopping bag analysis) can be set up.



The colored objects are documented in this chapter.

3.20.1.2 Stories

The following story is included in the content package:

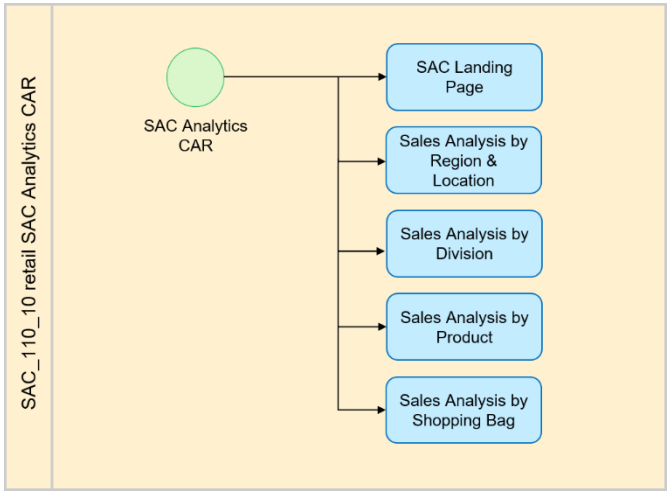
SAP Model Company Fashion for Vertical Business: Sales Analysis (SAP__RT_MC_FVB_SALESANALYSIS)

The story contains the following pages:

- *"Sales Analytics Homepage"*
  This landing page shows one chart from each page together with a generic RSS feed from SAP. The regions views show the regions cluster.
  The Sales Analysis by Gender chart visualizes the share within the article hierarchy node gender.
  Sales Analysis by Product shows the ratio of Net Sales and Gross Margin % by top 10 products.
  The Affinity Analysis by Top 15 Products visualizes the affinity by product and shows key performance indicators and key attributes of those. The affinity is telling you in percentage how often the listed top 15 products were sold together in the same shopping bag.
  The right section shows a RSS feed for SAP related information. This would typically be used to show Retail specific content or content from the own business.
- *"Sales Analytics by Region & Location"*
  To get insights into regions performances this page gives insights into top regions as well as the top 10 article hierarchy nodes on the level gender. In case you are operating omnichannel the sales channel split (walk in vs web) is shown as well.
  The location hierarchy can drill down to the lowest level and shows the top ten locations as heat map as well as indicators on a map. The map allows to drill down a given area and to set filters with an easy use selection (lasso) to drill into selections of interest.
  The lower left chart brings the top 10 gender nodes into relation to the regions to visualize their dependencies and ratios. How is a gender node performing in specific region?
- *"Sales Analysis by Division"*
  The upper left chart shows the share of gross margin % per article hierarchy node gender.

The upper middle chart visualizes the year over year ratio of gross margin % per top 15 article hierarchy nodes which is preselected to gender. The navigation can be adjusted to show this ratio for other nodes of the article hierarchy.
The upper right chart splits up the net sales per order channel. The given setup sets all POS related sales as store sales and all sales orders as web channel.
The lower column & line chart gives an overview how gross margin % in dependency to net sales evolves across the different article hierarchy nodes.

- *"Sales Analysis by Product"*
  Sales Analysis by Product adds an additional indicator to the main KPIs – Average Sales Price and Discounts.
  The charts on top identify the top and slow selling 5 products within selected nodes of the article hierarchy. Furthermore, the top 5 analyzing colors and brands.
  The chart in the middle provides a weekly comparison of the net sales revenue originally set across all the dates and helps to select individual weeks in order to slice down the time selection.
- *"Sales Analysis by Shopping Bag"*
  Sales Analysis by Shopping Bag comes with the net sales revenue, cost, average sales price, discounts and number of products per transaction as KPIs. The POS data is shown at a shopping bag level and discovers the affinity relationship of items across various attributes. The analysis helps to better understand what items occur to be purchased together and predict shopping behaviour of end customers. This gives you insights on how to set the marketing strategy to drive revenue.



3.20.1.3 Models

This content package is based on a live connection to SAP CAR (SAP HANA).

The following models are connected to a corresponding HANA calculation as follows:

SAC Model Name	SAP CAR - SAP HANA Calcination view name
SAP__RT_MC_FVB_SALESANALYSIS_V2	FSH_SALESANALYSIS_VIEW
SAP__RT_MC_FVB_AFFINITYANALYSIS_AREPORT	AFNTY_REPORT
SAP__RT_MC_FVB_AFFINITYANALYSIS_CAT_CMP	FSH_SALESANALYSIS_VIEW_NINETY_DAYS_HIER5

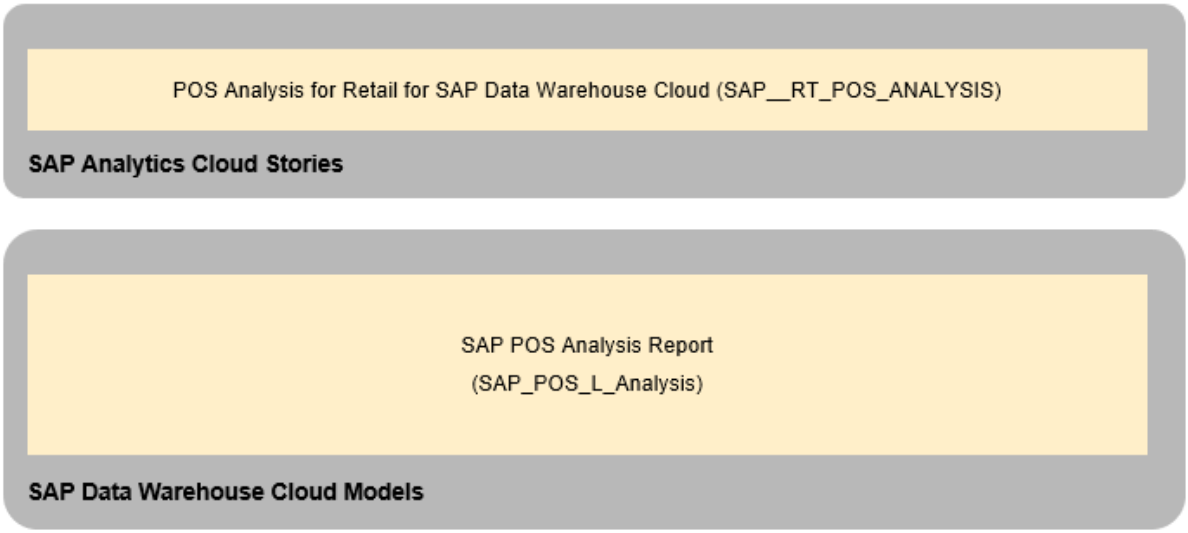
SAC Model Name	SAP CAR - SAP HANA Calcination view name
SAP__RT_MC_FVB_AFFINITYANALYSIS_CAT_CMP_2	FSH_SALESANALYSIS_VIEW_NINETY_DAYS_HIER5
SAP__RT_MC_FVB_SALESANALYSIS_DRIVER	FSH_SALESANALYSIS_VIEW_NINETY_DAYS
SAP__RT_MC_FVB_SALESANALYSIS_DRAG	FSH_SALESANALYSIS_VIEW_NINETY_DAYS
SAP__RT_MC_FVB_SALESANALYSIS_CROSSSALES	FSH_SALESANALYSIS_VIEW_NINETY_DAYS_CROSSSALES

The documentation of the underlying HANA views of the above-mentioned SAP Analytics Cloud models is part of the documentation delivered with the SAP Model Company for Core Retail.

3.21 Retail - POS Analysis for Retail

3.21.1 Architecture and Abstract

Analyze point-of-sale (POS) transactions – all in one place, from anywhere, and in real time with the SAP Data Warehouse solution.



3.21.2 POS Analysis for Retail for SAP Data Warehouse Cloud (SAP__RT_POS_ANALYSIS)

The story "POS Analysis for Retail for SAP Data Warehouse Cloud" contains the following pages:

Page **Cockpit**:

Analyze point-of-sale (POS) transactions in a condensed overview of your current business: Compare year-to-date values (YTD) by last-year-to-date values (LYTD). Immediately understand the TOP and FLOP merchandise categories and sites for each KPI.

Compare net sales amount, sales quantity and number of transactions between last year and this year over month.

Included KPIs are net sales amount, sales quantity, number of transactions and average basket value.

POS Sales Analysis:

Analyze data of the current and last year by countries, regions and cities. Directly understand the TOP and FLOP merchandise categories, products, and sites.

Included KPIs are net sales amount, sales quantity, number of transactions, average basket value and average number of items per basket.

Store Analysis

Drill into the shopping basket to the sales hour per site, to get a detailed understanding of the consumer behavior. Review best and slow seller. Get an overview of the traffic load per workstation, operator and merchandise category for number of transactions.

Data Connectivity

Based on SAP Data Warehouse Cloud live connection (local tables).

Measure Name	Type	Formula/Properties
Average # of Items per Basket Average # of Items per Basket YTD Average # of Items per Basket LYTD	Calculated Measure	[Sales Quantity (Actual, YTD, LYTD)] / [# Transactions (Actual, YTD, LYTD)]
Average Basket Value Average Basket Value YTD Average Basket Value LYTD	Calculated Measure	[Sales Amount (Actual, YTD, LYTD)] / [# Transactions (Actual, YTD, LYTD)]

3.21.3 Models

The story is using the following Data Warehouse Cloud models. It is based on a live connection to the SAP Data Warehouse Cloud system. Setup the connection with the name **SAPDWC** if not already available.

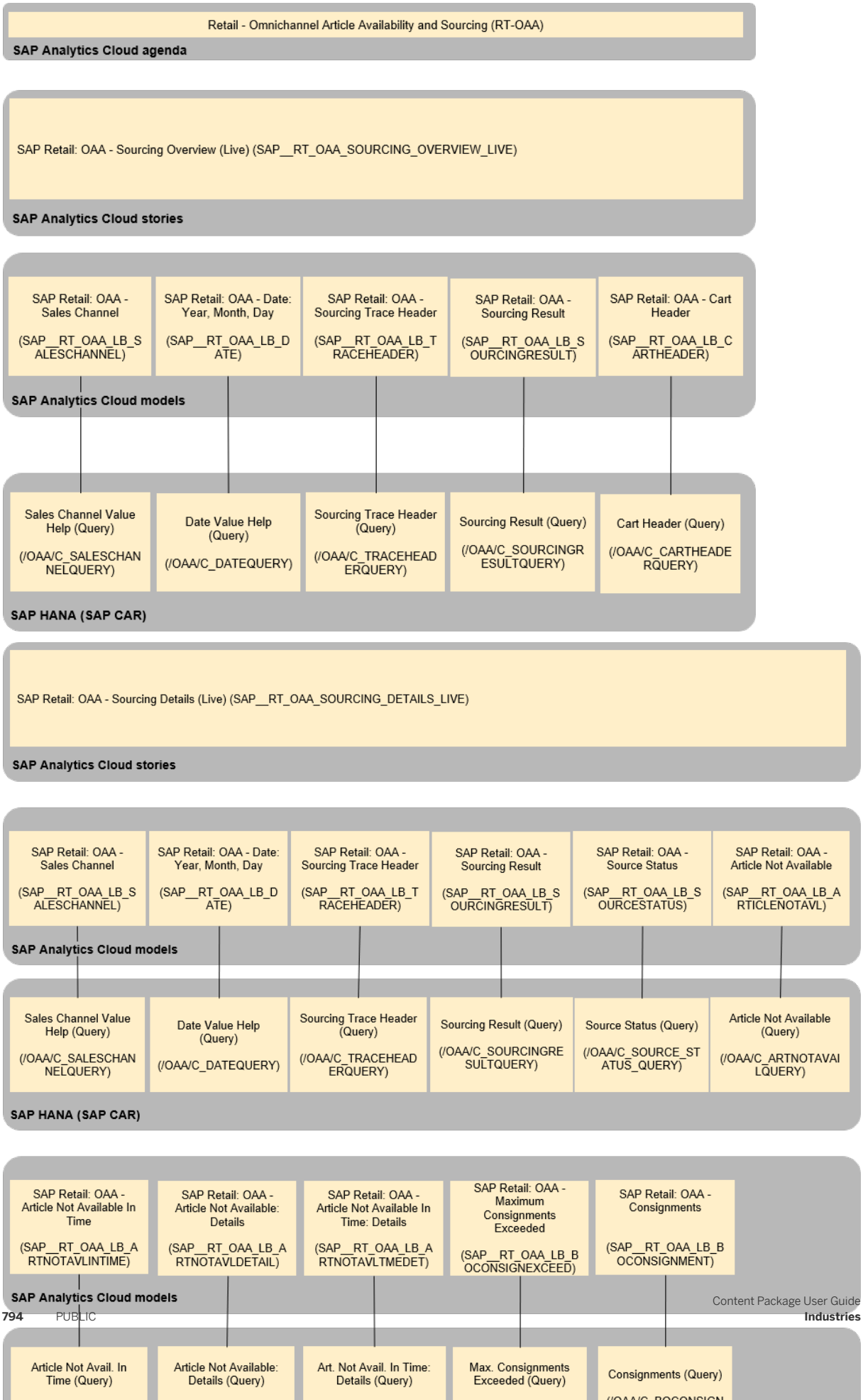
You can go to the SAP Data Warehouse Cloud content documentation for details.

Business Name	Technical Model Name	Connection
SAP POS Analysis Report	SAP_POS_L_Analysis	- SAPDWC

3.22 Retail - Omnichannel Article Availability and Sourcing

3.22.1 Architecture

The SAP Analytics Cloud content for the Omnichannel Article Availability and Sourcing (OAA) stories are based on a SAP BW live connection to SAP Customer Activity Repository (CAR) data with dedicated CDS views exposed via BICS/InA interface.


Retail - Omnichannel Article Availability and Sourcing (RT-OAA)
SAP Analytics Cloud agenda
SAP Retail: OAA - Sourcing Overview (Live) (SAP__RT_OAA_SOURCING_OVERVIEW_LIVE)
SAP Analytics Cloud stories
SAP Retail: OAA - Sales Channel (SAP__RT_OAA_LB_SALESCHANNEL)
SAP Retail: OAA - Date: Year, Month, Day (SAP__RT_OAA_LB_DATE)
SAP Retail: OAA - Sourcing Trace Header (SAP__RT_OAA_LB_TRACEHEADER)
SAP Retail: OAA - Sourcing Result (SAP__RT_OAA_LB_SOURCINGRESULT)
SAP Retail: OAA - Cart Header (SAP__RT_OAA_LB_CARTHEADER)
SAP Analytics Cloud models
Sales Channel Value Help (Query) (/OAA/C_SALESCHANNELQUERY)
Date Value Help (Query) (/OAA/C_DATEQUERY)
Sourcing Trace Header (Query) (/OAA/C_TRACEHEADERQUERY)
Sourcing Result (Query) (/OAA/C_SOURCINGRESULTQUERY)
Cart Header (Query) (/OAA/C_CARTHEADERQUERY)
SAP HANA (SAP CAR)
SAP Retail: OAA - Sourcing Details (Live) (SAP__RT_OAA_SOURCING_DETAILS_LIVE)
SAP Analytics Cloud stories
SAP Retail: OAA - Sales Channel (SAP__RT_OAA_LB_SALESCHANNEL)
SAP Retail: OAA - Date: Year, Month, Day (SAP__RT_OAA_LB_DATE)
SAP Retail: OAA - Sourcing Trace Header (SAP__RT_OAA_LB_TRACEHEADER)
SAP Retail: OAA - Sourcing Result (SAP__RT_OAA_LB_SOURCINGRESULT)
SAP Retail: OAA - Source Status (SAP__RT_OAA_LB_SOURCESTATUS)
SAP Retail: OAA - Article Not Available (SAP__RT_OAA_LB_ARTICLENOTAVL)
SAP Analytics Cloud models
Sales Channel Value Help (Query) (/OAA/C_SALESCHANNELQUERY)
Date Value Help (Query) (/OAA/C_DATEQUERY)
Sourcing Trace Header (Query) (/OAA/C_TRACEHEADERQUERY)
Sourcing Result (Query) (/OAA/C_SOURCINGRESULTQUERY)
Source Status (Query) (/OAA/C_SOURCE_STATUS_QUERY)
Article Not Available (Query) (/OAA/C_ARTNOTAVAILQUERY)
SAP HANA (SAP CAR)
SAP Retail: OAA - Article Not Available In Time (SAP__RT_OAA_LB_ARTNOTAVLINTIME)
SAP Retail: OAA - Article Not Available: Details (SAP__RT_OAA_LB_ARTNOTAVLDETAIL)
SAP Retail: OAA - Article Not Available In Time: Details (SAP__RT_OAA_LB_ARTNOTAVLTMEDET)
SAP Retail: OAA - Maximum Consignments Exceeded (SAP__RT_OAA_LB_BOCONSIGNEXCEED)
SAP Retail: OAA - Consignments (SAP__RT_OAA_LB_BOCONSIGNMENT)
SAP Analytics Cloud models
Article Not Avail. In Time (Query)
Article Not Available: Details (Query)
Art. Not Avail. In Time: Details (Query)
Max. Consignments Exceeded (Query)
Consignments (Query)

3.22.2 Stories

The sourcing overview and detail, live and demo stories are included in the content package: SAP Retail Omnichannel Article Availability and Sourcing.

The documentation of the underlying dimensions and measures of the SAP Analytics Cloud models mentioned below is part of the documentation delivered with SAP CARAB 4.0 FPS01. In addition, the chart details are described there as well.

3.22.2.1 OAA - Sourcing Overview (SAP__RT_OAA_SOURCING_OVERVIEW_LIVE)

Name: SAP__RT_OAA_SOURCING_OVERVIEW_LIVE	
Description: SAP Retail: OAA - Sourcing Overview	
The story provides a list of analyses that gives an overview of how successful the sourcing was in your online store. The analyses is grouped by tab. The data analysed is always restricted to the sales channel. You can select the time frame you set (sales channel story filter, model: SAP__RT_OAA_LB_SALESCHANNEL and the time frame page filter, model: SAP__RT_OAA_LB_DATE).	
Page: Sourcing Success	
Charts	
Title	**Models Used**
Sourcing Key Figures	SAP__RT_OAA_LB_TRACEHEADER SAP__RT_OAA_LB_CARTHEADER
Sourcing Success Rate	SAP__RT_OAA_LB_TRACEHEADER
Carts with Successful Sourcing, Converted to Orders	SAP__RT_OAA_LB_TRACEHEADER
Sourcing Success Rate: Details	SAP__RT_OAA_LB_TRACEHEADER
Page: Failed Sourcing	
Charts	
Title	**Models Used**
Sourcing Key Figures	SAP__RT_OAA_LB_TRACEHEADER
Total Value for Carts with Failed Sourcing	SAP__RT_OAA_LB_CARTHEADER
Failed Sourcing per Country and Region (Top 5)	SAP__RT_OAA_LB_TRACEHEADER
Page: Successful Sourcing	
Charts	
Title	**Models Used**
Sourcing Key Figures	SAP__RT_OAA_LB_TRACEHEADER SAP__RT_OAA_LB_SOURCINGRESULT

Name: SAP__RT_OAA_SOURCING_OVERVIEW_LIVE	
Total Value for Carts with Successful Sourcing	SAP__RT_OAA_LB_CARTHEADER
Cart-to-Order Conversion Rate	SAP__RT_OAA_LB_TRACEHEADER
Carts with Successful Sourcing, Not Converted to Orders	SAP__RT_OAA_LB_TRACEHEADER
Top 5 Sources Used in Sourcing Result	SAP__RT_OAA_LB_SOURCINGRESULT

3.22.2.2 OAA - Sourcing Details (SAP__RT_OAA_SOURCING_DETAILS_LIVE)

Name: SAP__RT_OAA_SOURCING_DETAILS_LIVE	
Description: SAP Retail: OAA - Sourcing Details	
The story provides a list of analyses that provide further insight into the reasons for failed sourcing. The analyses are grouped by tab. The data analysed is always restricted to the sales channel you select and the time frame you set (sales channel story filter, model: SAP__RT_OAA_LB_SALESCHANNEL and time frame page filter, model: SAP__RT_OAA_LB_DATE).	
Page: Sourcing Success	
Charts	
Title	**Models Used**
Sourcing Key Figures	SAP__RT_OAA_LB_TRACEHEADER
Sources Used in Sourcing Result, per Priority	SAP_RT_OAA_LB_SOURCINGPRIO
Top 5 Sources Used in Sourcing Result, on Item Level	SAP__RT_OAA_LB_SOURCINGRESULT
First Successful Business Objective	SAP__RT_OAA_LB_SOURCINGBO
Page: Business Objectives	
Charts	
Title	**Models Used**
Business Objective Success	SAP__RT_OAA_LB_SOURCINGBO
Failure Reasons	SAP__RT_OAA_LB_BOFAILUREREASON
Page: Sources: Cart Level	
Charts	
Title	**Models Used**
Sourcing Key Figures	SAP__RT_OAA_LB_TRACEHEADER
Top 5 Sources Not Used in Sourcing Result (Successful Sourcing Only)	SAP__RT_OAA_LB_SOURCESTATUS
Top 5 Sources Filtered Out by Distance	SAP__RT_OAA_LB_SOURCESTATUS
Top 5 Blocked Sources	SAP__RT_OAA_LB_SOURCESTATUS
Top 5 Sources Filtered Out by Capacity	SAP__RT_OAA_LB_SOURCESTATUS

Name: SAP__RT_OAA_SOURCING_DETAILS_LIVE	
Page: Sources: Details	
The page content depends on the selected source (page filter, model: SAP__RT_OAA_LB_SOURCESTATUS).	
Charts	
Title	**Models Used**
Sourcing Key Figures	SAP__RT_OAA_LB_SOURCINGRESULT
Source Prioritization	SAP__RT_OAA_LB_SOURCEPRIORITY
Reasons Why Source Was Not Considered in Sourcing Call	SAP__RT_OAA_LB_SOURCESTATUS
Page: Articles Not Available	
Charts	
Title	**Models Used**
Top 5 Articles Not Available	SAP__RT_OAA_LB_ARTICLENOTAVL
Top 5 Articles Not Available by Source (using filter: Source)	SAP__RT_OAA_LB_ARTNOTAVLDETAIL
Top 5 Sources Where Article is Not Available (using filter: Article)	SAP__RT_OAA_LB_ARTNOTAVLDETAIL
Page: Articles Not Avail. In Time The page content depends on the selected Business Objective and Sourcing Success (page filter, model: SAP__RT_OAA_LB_ARTNOTAVLINTIME)	
Charts	
Title	**Models Used**
Top 5 Articles Not Available in Time	SAP__RT_OAA_LB_ARTNOTAVLINTIME
Top 5 Articles Not Available in Time by Source (using filter: Source)	SAP__RT_OAA_LB_ARTNOTAVLTMEDET
Top 5 Sources Where Article is Not Available in Time (using filter: Article)	SAP__RT_OAA_LB_ARTNOTAVLTMEDET
Page: Consignments The page content depends on the selected Business Objective and Sourcing Success (page filter, model: SAP__RT_OAA_LB_BOCONSIGNEXCEED)	
Charts	
Title	**Models Used**
Carts Where Allowed No. of Consignments Exceeded	SAP__RT_OAA_LB_BOCONSIGNEXCEED
Allowed No. of Consignments	SAP__RT_OAA_LB_BOCONSIGNMENT

3.22.3 General Remarks

If you want to see the models a story is based on, use the Save as PDF functionality in the story, including the attachment.

Describe how to Assign to #.

> **i** Note
>
> *Other dimensions are public.

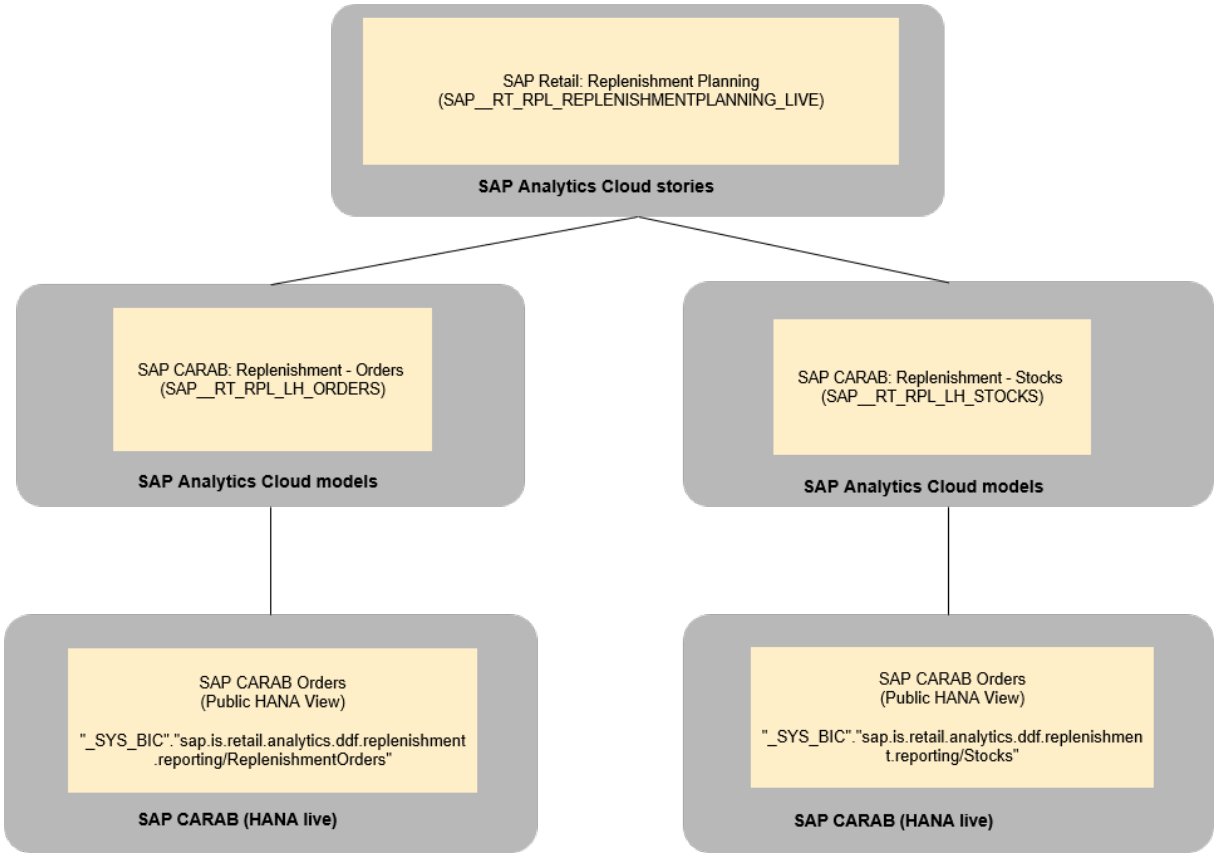
3.23 SAP Retail: Replenishment Planning

3.23.1 Abstract and Architecture

The SAP Analytics Cloud content for the Replenishment Planning story helps retailers analyze their replenishment data with reference to order dates over certain time periods to identify patterns and monitor trends that influence their business. This story is based on a live connection to the SAP Customer Activity Repository data with dedicated HANA views.

Alerts indicate that certain aspects of the SAP Replenishment Planning processes are not in a good condition and need urgent attention. Alerts can be triggered by the occurrence of certain exceptions, evolvement of KPIs beyond threshold, or other unexpected situations. Based on alerts, planners check the details of orders to make calculated decisions on the order plan items and change them, if necessary. To support the process, this story has the Orders model, which not only provides an analytical overview of changed order quantities and items, it also offers detailed analyses of order quantities and rate of changed items based on the order date for product locations.

Planners can further use this model in combination with the Sales and Forecasts model in the Unified Demand Forecast story to analyze how well the order quantities compare with the actual sales and forecasts.



3.23.2 Replenishment Planning (SAP__RT_RPL_REPLENISHMENTPLANNING_LIVE)

This story allows planners to assess the overall situation with regards to order plan items, such as, rate of changed items, proposed order quantity, changed order quantity, additional order quantity, and stocks and drill down to details (by location, by product, and by order date) and take necessary actions where required.

In this story, the following page filters apply to every chart:

Page Filters	Description
Location Hierarchy	Location hierarchy - filter by region/city/location
Product Hierarchy	Product hierarchy - filter by product category down to the products
Supplier	Suppliers - filter by suppliers
Replenishment Type	Replenishment type - filter by replenishment types
Date	Date - filter by Date (A date range to include 90 days in the past and 30 days in the future is set as default)

The story consists of several charts. They are organized in three sections as explained below.

- Changed Order Quantities and Items section
  - Order Quantities chart
  - Changed Items (%) chart

Chart Description	Type	Description
Order Quantities	Comparison - Combination Column and Line	A planner can see and compare the quantities proposed by the system with the changed order quantities, additional order quantities and stocks on specific dates, over a time period, as lines on the chart and the percentage of changed items per day are displayed as columns. This chart allows to quickly visualize big changes in order quantities.
Changed Items (%)	Distribution - Heat Map	The heat map allows a planner to quickly identify product locations with high or low order change rates.

- Detailed Analysis of Order Quantities and Changed Items section
  - [Measure] by [Dimension 1] chart
  - [Measure] by [Dimension 2] chart
- For these two charts, the user can display information related to one of the following measures:
  - Changed Order Quantity (Cumulative)
  - Positive Order Adjustments
  - Negative Order Adjustments
  - Changed Items (%)
  - Additional Order Quantity (Cumulative)
  - Proposed Order Quantity (Cumulative)

The selected measure is applied to both the charts in the section.

Chart Description	Type	Description	Dimensions
[Measure] by [Dimension 1]	Trend - Line	A planner can look at different measures at a product or location hierarchy node for a time period.	[Dimension 1] is either Product Hierarchy or Location Hierarchy
[Measure] by [Dimension 2]	Comparison - Bar/Column	A planner can analyze specific products or locations for measures on individual order dates for a time period. Product and location results are ranked (top or bottom) for more clarity. This chart allows drill down to understand exact locations with discrepancies in product quantities.	[Dimension 2] is either Product or Location

- Comparison of Changed Order Quantities for Different Order Dates section
  - Difference in Changed Order Quantities by Location Hierarchy chart

- Difference in Changed Order Quantities by Product Hierarchy chart

Chart Description	Type	Description	Dimensions
Difference in Changed Order Quantities by Location Hierarchy	Comparison - Bar/Column	A planner can analyze the difference in changed order quantities between two dates at a location hierarchy node.	Difference between two dates (Order Date 1 and Order Date 2) is calculated
Difference in Changed Order Quantities by Product Hierarchy	Comparison - Bar/Column	A planner can analyze the difference in changed order quantities between two dates at a product hierarchy node.	Difference between two dates (Order Date 1 and Order Date 2) is calculated

The measures defined in this story are listed in the following table:

Measure Name	Type	Formula/Properties
Changed Items (%)	Calculated	([Total Number of Changed Orders] / ([Total Number of Orders]) * 100
Changed Order Quantity for Order Date 1	Restricted	Measure: Total Number of Changed Orders Input Controlled Dimension: Order Date Input Control: Order Date 1 (By member, single selection)
Changed Order Quantity for Order Date 2	Restricted	Measure: Total Number of Changed Orders Input Controlled Dimension: Order Date Input Control: Order Date 2 (By member, single selection)
Difference in Changed Order Quantities Between Order Dates	Calculated	[#Changed Order Quantity for Order Date 1] - [#Changed Order Quantity for Order Date 2]

Calculated measures similar measures 2,3, and 4 in the above table are created for the following:

- Additional Order Quantity (Cumulative)

- Negative Order Adjustments

- Positive Order Adjustments

- Proposed Order Quantity (Cumulative)

- Changed Items (%)

3.23.3 Models

3.23.3.1 SAP CARAB: Orders (SAP__RT_RPL_LH_ORDERS)

Model Name: SAP__RT_RPL_LH_ORDERS	Connection
- Model Description: SAP CARAB: Orders - Planning Enabled: No	- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.Order.Orders view

Measures

ID	Description	Aggregation(A)/Formula(F)
AdditionalOrderQuantity	Additional Order Quantity (Cumulative)	A: SUM
AdjustedOrderQuantity	Changed Order Quantity (Cumulative)	A: SUM
NegativeOrderAdjustmentQuantity	Negative Order Adjustments	A: SUM
PositiveOrderAdjustmentQuantity	Positive Order Adjustments	A: SUM
ProposedOrderQuantity	Proposed Order Quantity (Cumulative)	A: SUM
TotalNumberOfAdjustedOrders	Total Number of Changed Orders	A: SUM
TotalNumberOfOrders	Total Number of Orders	A: SUM
OrderChangeRate	Changed Items (%)	F: ([Total Number of Changed Orders] / ([Total Number of Orders]) * 100

Dimensions

Name	Description	Mapping
OrderDate	Order date	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyChildNode	Location hierarchy child node	
ProductHierarchyChildNodeName	Name of the product hierarchy child node	
ProductHierarchyParentNodeName	Name of the product hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Product	Product	
ProductName	Product name	
MRPType	Replenishment type	
MRPTypeName	Replenishment type description	
LocationHierarchyChildNodeName	Name of the location hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	

Model Name: SAP__RT_RPL_LH_ORDERS	Connection
LocationHierarchyParentNodeName	Name of the location hierarchy parent node
Supplier	Supplier
SupplierName	Supplier name
Additional Notes about the model	
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) These are input fields that must be entered by the user to execute the SAC story.	

3.23.3.2 SAP CARAB: Stocks (SAP__RT_RPL_LH_STOCKS)

Model Name: SAP__RT_RPL_LH_Stocks	Connection	
- Model Description: SAP CARAB: Orders - Planning Enabled: No	- Live data connection to SAP HANA: SAPRTCARAB - - sap.is.retail.analytics.ddf.replenishment.Reporting.Stocks view	
Measures		
ID	**Description**	**Aggregation(A)/Formula(F)**
Stocks	Stocks	A: SUM
Dimensions		
Name	**Description**	**Mapping**
Date	Date	
Additional Notes about the model		

Model Name: SAP__RT_RPL_LH_Stocks	Connection
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) These are input fields that must be entered by the user to execute the SAC story.	

3.23.4 Known Issues

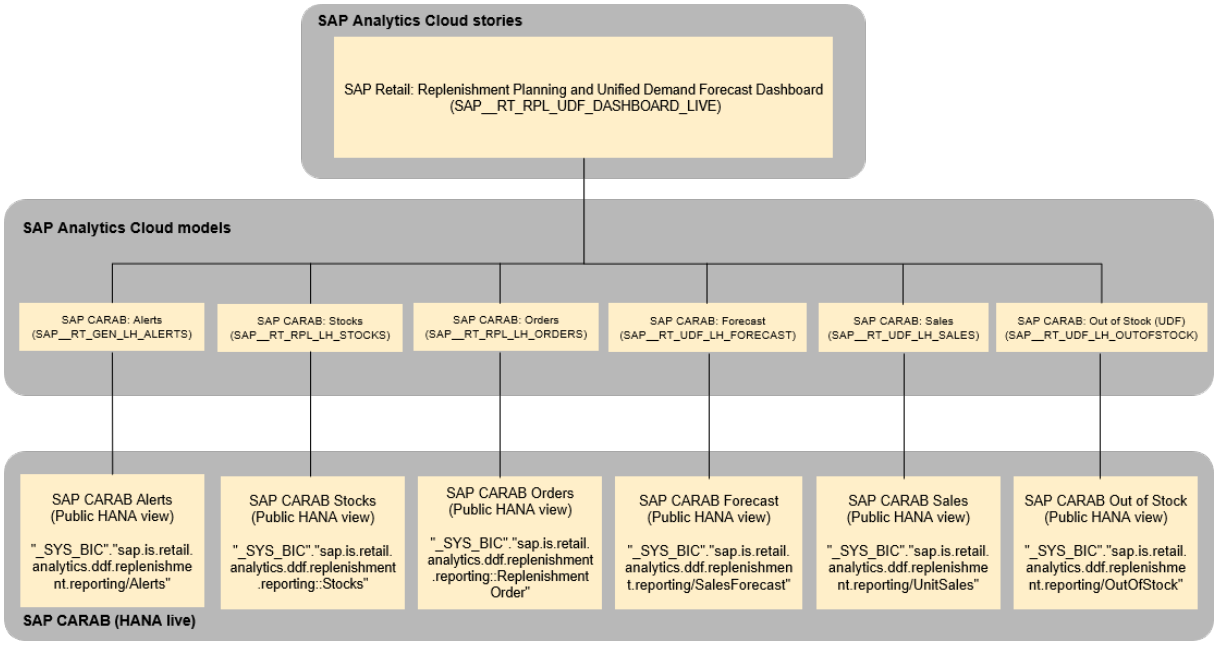
Issue	Solution
The measure label for Changed Items (%) is not translated in any other language and available only in English	To be fixed by SAC Translation service as they do not support translation of the Calculated Measures created in a model based on HANA Live Connection.

3.24 SAP Retail: Replenishment Planning and Unified Demand Forecast Dashboard

3.24.1 Architecture and Abstract

The SAP Analytics Cloud content for the Replenishment Planning and Unified Demand Forecast Dashboard story helps retailers analyze forecast data over certain time periods to identify patterns and monitor trends that influence the business. The story is based on a live connection to the SAP Customer Activity Repository data with dedicated HANA views.

Alerts are collections of one or more similar exceptions that are very important and need urgent attention. Based on alerts, planners check planners check the details of orders as well as sales and forecast details to make calculated judgements on order plan items and forecasted quantities and to change them, if necessary. To aid the process, this story has the Dashboard model, which provides an analytical overview of changed order quantities and items, actual sales and system forecasts along with the out-of-stock rate for product locations, and alerts by alert type based on products and locations.



3.24.2 Retail: Replenishment Planning and Unified Demand Forecast scenario (SAP__RT_RPL_UDF_DASHBOARD_LIVE)

This story is designed to give the planners the overview of the key retail KPI's related to replenishment orders, sales forecasts, and alerts.

In this story, the following page filters apply to the widget:

Page Filters	Description
Location Hierarchy	Filter by region/city/location
Product Hierarchy	Filter by product category down to the products
Replenishment Type	Filter by replenishment type
Date	Filter by date on Order Quantities and Forecasts (A date range to include 90 days in the past and 30 days in the future is set as default)

This story consists of the following charts:

Page Filters		Description
Order Quantities	Comparison - Combination Column and Line	A planner can see and compare the quantities proposed by the system with the changed order quantities, additional order quantities and stocks on specific dates, over a time period, as lines on the chart and the percentage of changed items per day are displayed as columns. This chart allows to quickly visualize big changes in order quantities.
Forecasts	Comparison - Combination Column and Line	A planner can assess the overall situation with regards to actual sales and system forecasts by looking at out-of-stock rate in product locations over a time period.
Alerts by Alert Type	Column Chart	A planner can see the number of alerts as columns against the alert types. **i Note** Only alerts that are new or in process for the product locations are considered.
Alerts by Product	Marimekko Chart	A planner can see products with alerts based on alert types.
Alerts by Location	Marimekko Chart	A planner can see locations with alerts based on alert types.

3.24.3 Models

3.24.3.1 Forecasts (SAP__RT_UDF_LH_FORECAST

Model Name: SAP__RT_UDF_LH_FORECAST		Connection
- Model Description: SAP CARAB: Sales and Forecasts - Planning Enabled: No		- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/SalesForecast view
Dimensions		
ID	**Description**	**Mapping/Formula**
Date	Date	

Model Name: SAP__RT_UDF_LH_FORECAST	Connection
LocationHierarchyChildNode	Location hierarchy child node
LocationHierarchyChildNodeName	Name of the location hierarchy child node
ProductHierarchyChildNode	Product hierarchy child node
ProductHierarchyChildNodeName	Name of the product hierarchy child node
LocationHierarchyParentNode	Location hierarchy parent node
LocationHierarchyParentNodeName	Name of the location hierarchy parent node
ProductHierarchyParentNode	Product hierarchy parent node
ProductHierarchyParentNodeName	Name of the product hierarchy parent node
Location	Location
LocationName	Name of the location
OrderChannel_ATTRIBUTE	Order channel
OrderChannelName	Name of the order channel
DistributionChannel_ATTRIBUTE	Distribution channel
DistributionChannelName	Name of the distribution channel
SalesOrganization_ATTRIBUTE	Sales organization
SalesOrgDescription	Description of the sales organization
MRPType	Replenishment type
MRPTypeName	Replenishment type description
Product	Product
ProductName	Name of the product
Additional Notes About the Model	

Model Name: SAP__RT_UDF_LH_FORECAST	Connection
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.	

3.24.3.2 Orders (SAP__RT_RPL_LH_ORDERS)

Model Name: SAP__RT_UDF_LH_ORDERS	Connection
- Model Description: SAP CARAB: Orders - Planning Enabled: No	- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/ReplenishmentOrder view

Dimensions		
ID	**Description**	**Mapping/Formula**
OrderDate	Order Date	
LocationHierachyChildNode	Location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Supplier	Supplier	
Location_ATTRIBUTE	Location	
Product_ATTRIBUTE	Product	

Model Name: SAP__RT_UDF_LH_ORDERS		Connection
MRPType	Replenishment Type	
Additional Notes About the Model		
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) These are input fields that must be entered by the user to execute the SAC story.		

3.24.3.3 Stocks

Model Name: SAP__RT_UDF_LH_STOCKS		Connection
- Model Description: SAP CARAB: Stocks - Planning Enabled: No		- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/ReplenishmentOrder view
Dimensions		
ID	**Description**	**Mapping/Formula**
Date	Date	
LocationHierachyChildNode	Location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Location_ATTRIBUTE	Location	
Product_ATTRIBUTE	Product	
MRPType	Replenishment Type	
Additional Notes About the Model		

Model Name: SAP__RT_UDF_LH_STOCKS	Connection
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) These are input fields that must be entered by the user to execute the SAC story.	

3.24.3.4 Out of Stock (UDF)

Model Name: SAP__RT_UDF_LH_OUTOFSTOCK	Connection
- Model Description: SAP CARAB: OutofStock (UDF) - Planning Enabled: No	- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/OutOfStock view

Dimensions

ID	Description	Mapping/Formula
Date	Date	
LocationHierachyChildNode	Location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Location	Location	
Product	Product	
MRPType	Replenishment Type	
OrderChannel_ATTRIBUTE	Order channel	
DistributionChannel_ATTRIBUTE	Distribution channel	
SalesOrganization_ATTRIBUTE	Sales organization	
SalesOrgDescription	Description of the sales organization	

Model Name: SAP__RT_UDF_LH_OUTOFSTOCK	Connection
Additional Notes About the Model	
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.	

3.24.3.5 Sales

Model Name: SAP__RT_UDF_LH_SALES	Connection
- Model Description: SAP CARAB: SALES - Planning Enabled: No	- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/UnitSales view

Dimensions		
ID	**Description**	**Mapping/Formula**
Date	Date	
LocationHierachyChildNode	Location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Location	Location	
Product	Product	
MRPType	Replenishment Type	
OrderChannel_ATTRIBUTE	Order channel	
DistributionChannel_ATTRIBUTE	Distribution channel	
SalesOrganization_ATTRIBUTE	Sales organization	

Model Name: SAP__RT_UDF_LH_SALES		Connection
SalesOrgDescription	Description of the sales organization	
Additional Notes About the Model		
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.		

3.24.3.6 Alerts

Model Name: SAP__RT_UDF_LH_ALERTS		Connection
- Model Description: SAP CARAB: Alerts - Planning Enabled: No		- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/Alerts view
Dimensions		
ID	**Description**	**Mapping/Formula**
CreatedOn	Created On	
LocationHierachyChildNode	Location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Location	Location	
Product_ATTRIBUTE	Product	
MRPType	Replenishment Type	
OrderChannel_ATTRIBUTE	Order channel	
DistributionChannel_ATTRIBUTE	Distribution channel	

Model Name: SAP__RT_UDF_LH_ALERTS	Connection
SalesOrganization_ATTRIBUTE	Sales organization
AlertStatusID	Alert Status
AlertTypeID	Alert Type
Additional Notes About the Model	
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) These are input fields that must be entered by the user to execute the SAC story.	

3.25 Rural Sourcing Management (RSM)

3.25.1 General Remarks

The SAP Rural Sourcing Management content provides two independent analytical scenarios:

- Cotton Reports
- Palm Oil Reports

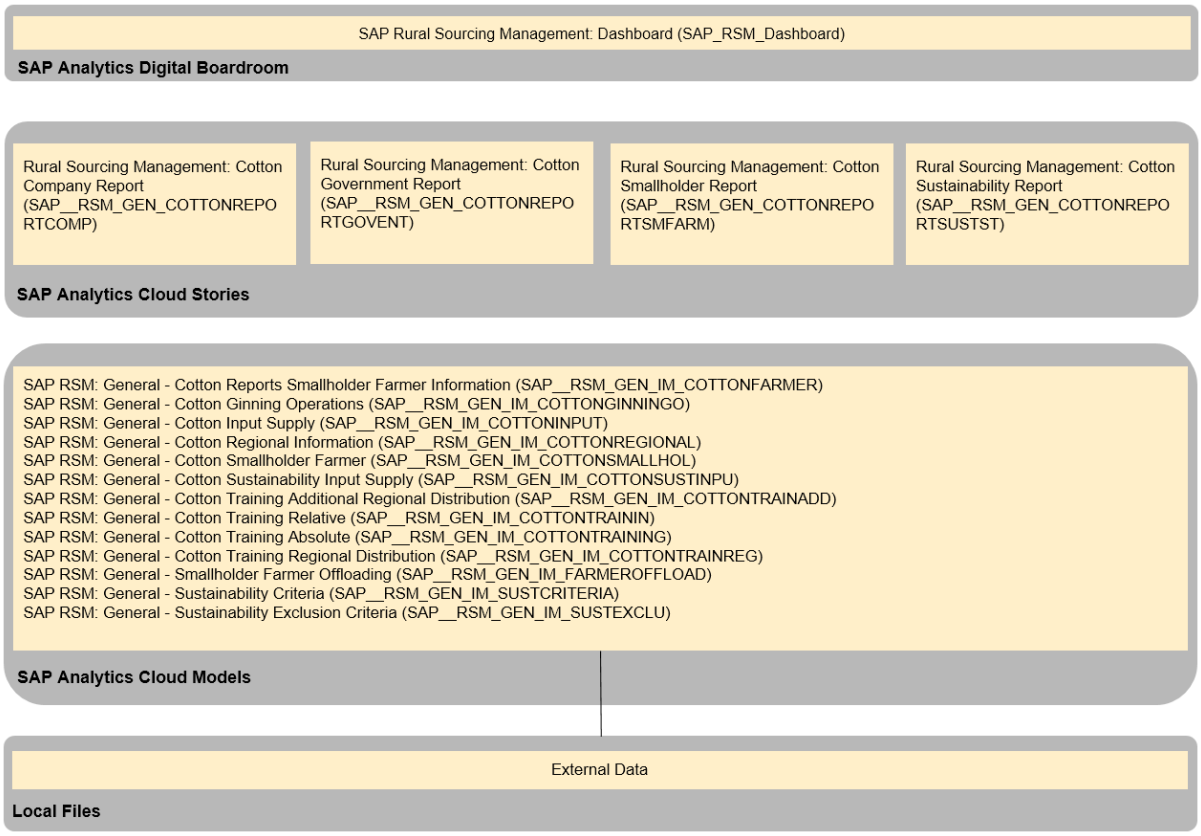
The two scenarios will be explained individually in the following chapters.

3.25.2 Architecture and Abstract

Cotton Reports

The SAP Rural Sourcing Management provides cotton production and training details of smallholder farmers for the perspectives of cotton companies, sustainability standards, government entities, and smallholder farmers. Each perspective is visualized through an according SAP Analytics Cloud story which base on models that apply data from local files. These stories are then presented as a dashboard in a digital boardroom.

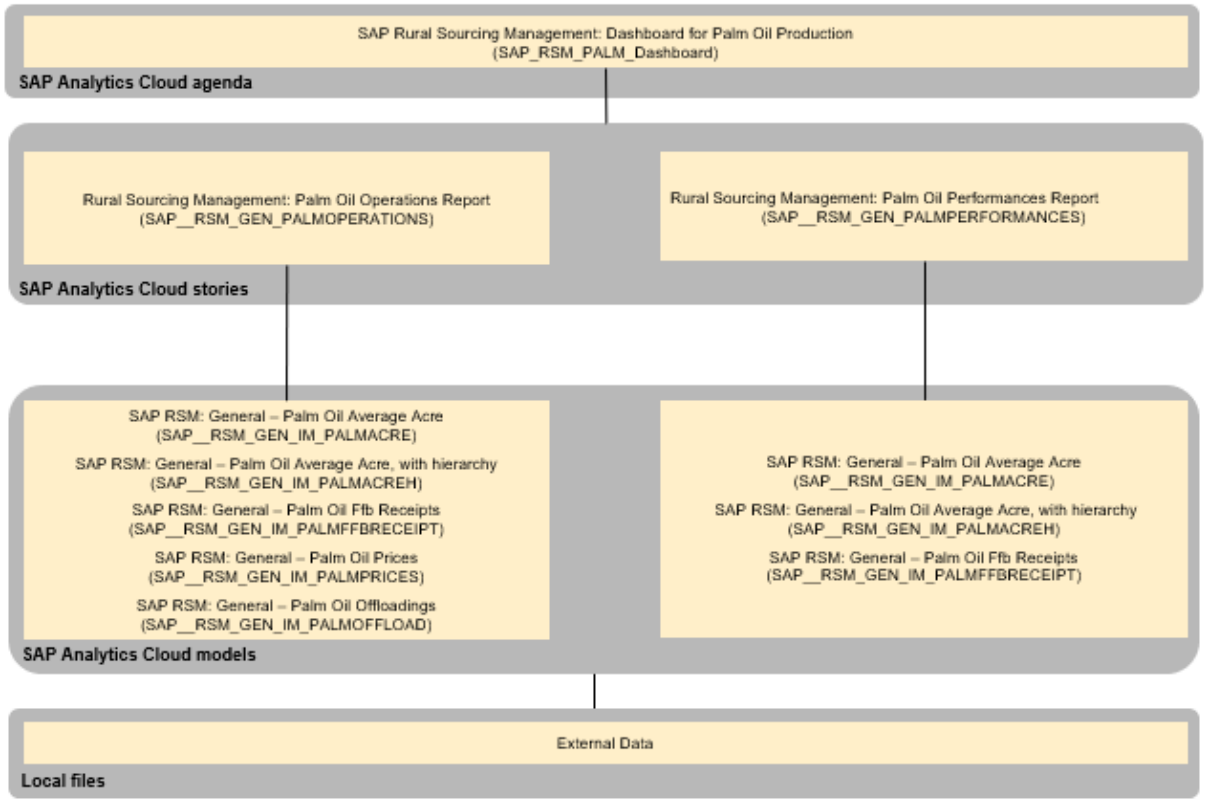
Architecture



Palm Oil Reports

The SAP Rural Sourcing Management provides palm oil production and performances analysis for the perspectives of palm oil companies, smallholder farmer groups and individuals. Each analysis is visualized through an according SAP Analytics Cloud story which base on models that apply data from local files.

Architecture



3.25.3 Dashboard

Cotton Reports

SAP Rural Sourcing Management: Dashboard (SAP_RSM_Dashboard)
Cotton Company
Regional Productivity and Ginning Operations
Training Information
Smallholder Farmer Information
Smallholder Farmer Data
Cotton Smallholder Farmer
Cotton Smallholder Farmer Report
Cotton Sustainability Standard
Company Information
Sustainability Criteria Rating
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SAP Rural Sourcing Management: Dashboard (SAP_RSM_Dashboard)
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Palm Oil Reports

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3.25.4 Stories

- SAP RSM: General - Cotton Report Company (SAP__RSM_GEN_COTTONREPORTCOMP)
- SAP RSM: General - Cotton Report Government Entity (SAP__RSM_GEN_COTTONREPORTGOVENT)
- SAP RSM: General - Cotton Report Smallholder Farmer (SAP__RSM_GEN_COTTONREPORTSMFARM)
- SAP RSM: General - Cotton Report Sustainability Standard (SAP__RSM_GEN_COTTONREPORTSUSTST)
- SAP RSM: General - Palm Oil Operations (SAP__RSM_GEN_PALMOPERATIONS)
- SAP RSM: General - Palm Oil Performances (SAP__RSM_GEN_PALMPERFORMANCES)

3.25.4.1 General - Cotton Report Company (SAP__RSM_GEN_COTTONREPORTCOMP)

Measure Name	Type	Formula/Properties
Accumulated Amount of Input Supplies	Calculated Measure	[SAP__RSM_GEN_IM_COTTON-FARMER:Judo_5_EC_] +[SAP__RSM_GEN_IM_COTTON-FARMER:Ester_20_SC_] +[SAP__RSM_GEN_IM_COTTON-FARMER:Snowmethrin]+ [SAP__RSM_GEN_IM_COTTON-FARMER:Snowkill] +[SAP__RSM_GEN_IM_COTTON-FARMER:Glyphon_480] +[SAP__RSM_GEN_IM_COTTON-FARMER:Treated_Cotton_Seed] +[SAP__RSM_GEN_IM_COTTON-FARMER:Untreated_Cotton_Seed] +[SAP__RSM_GEN_IM_COTTON-FARMER:Agrofeed_NPK
Agricultural Training	Calculated Measure	[SAP__RSM_GEN_IM_COTTON-FARMER:Basic_Agricult_5jp1305y4n] +[SAP__RSM_GEN_IM_COTTON-FARMER:Conservation_A_3g215t4w5f] +[SAP__RSM_GEN_IM_COTTON-FARMER:Integrated_Pla_2061510546] +[SAP__RSM_GEN_IM_COTTON-FARMER:Proper_Use_and_Stor-age_of_Pesticides] +[SAP__RSM_GEN_IM_COTTON-FARMER:Cotton_Storage]
Ginning Performance	Calculated Measure	[SAP__RSM_GEN_IM_COTTONRE-GIONAL:Lint_Cotton_Production] /[SAP__RSM_GEN_IM_COTTONRE-GIONAL:Seed_Cotton_Production]

Measure Name	Type	Formula/Properties
Number of Female Participants	Calculated Measure	[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_Trained_Female_Lead_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_ReTrained_Female_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_Trained_Female_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_ReTrained_Female_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_ReTr_2c6ya06d4s]+[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_Trai_3v1n5d03d1]
Number of Male Participants	Calculated Measure	[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_Trained_Male_Lead_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_ReTrained_Male_Lead_Farmer] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_Trained_Male_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_ReTrained_Male_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_Trai_3w701305h1] +[SAP__RSM_GEN_IM_COTTONTRAINING:Number_of_ReTr_3j4v4y04zi]
Rejected Seed Cotton per Farmer	Calculated Measure	[SAP__RSM_GEN_IM_COTTONFARMER:Rejected_Seed_Cotton] /[#Number of Smallholder Farmers]
Number of Smallholder Farmers	Aggregation	[COUNT DIMENSION] Farmer

3.25.4.2 General - Cotton Report Government Entity (SAP__RSM_GEN_COTTONREPORTGOVENT)

Measure Name	Type	Formula/Properties
Total Number of Female Participants	Calculated Measure	[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Trained_Fe-male_Lead_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Num-ber_of_ReTr_4n634y05v3]+ [SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Trained_Fe-male_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_ReTrained_Fe-male_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Trai_2p601q01x2] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_ReTr_72I5k05372]
Total Number of Male Participants	Calculated Measure	[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Num-ber_of_Trained_Male_Lead_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Re-Trained_Male_Lead_Farmer] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Trained_Male_Farm-ers] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Re-Trained_Male_Farmers] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_Trai_r4k2s04o29] +[SAP__RSM_GEN_IM_COTTONTRAI-NADD:Number_of_ReTr_231c4n0j3q]

3.25.4.3 General - Cotton Report Smallholder Farmer (SAP__RSM_GEN_COTTONREPORTSMFARM)

No calculated key figures in this story.

3.25.4.4 General - Cotton Report Sustainability Standard (SAP__RSM_GEN_COTTONREPORTSUSTST)

Measure Name	Type	Formula/Properties
Warning	Calculated Measure	IF([SAP__RSM_GEN_IM_COTTONSUSTINPU:Dosage_per_Hectare]>[SAP__RSM_GEN_IM_COTTONSUSTINPU:Recommended_Dosage_per_Hectare],1 ,0)

3.25.4.5 General - Palm Oil Operations (SAP__RSM_GEN_PALMOPERATIONS)

No calculated key figures in this story.

3.25.4.6 General - Palm Oil Performances (SAP__RSM_GEN_PALMPERFORMANCES)

Measure Name	Type	Formula/Properties
Warning	Calculated Measure	IF([SAP__RSM_GEN_IM_COTTONSUSTINPU:Dosage_per_Hectare]>[SAP__RSM_GEN_IM_COTTONSUSTINPU:Recommended_Dosage_per_Hectare],1 ,0)

3.25.5 Models

3.25.5.1 General - Cotton Reports Smallholder Farmer Information (SAP__RSM_GEN_IM_COTTONFARMER)

Model Name: SAP_RSM_GEN_IM_COTTONFARMER	Connection
• Model Description: SAP RSM: General - Cotton Reports Smallholder Farmer Information • Planning Enabled: No	Local File

Account Dimension		
ID	**Description**	**Mapping/Formula**
Age	Age	
Number_of_Dependents	Number of Dependents	
Field_Size	Field Size	
Seed_Cotton_Delivered	Seed Cotton Delivered	
Seed_Cotton_Production	Seed Cotton Production	
Average_Yield	Average Yield	
Seed_Cotton_Delivery_Agreement	Seed Cotton Delivery Agreement	
Rejected_Seed_Cotton	Rejected Seed Cotton	
Basic_Agricult_5jp1305y4n	Basic Agricultural Technologies /GAP	
Conservation_A_3g215t4w5f	Conservation Agriculture Techniques to Increase Soil Fertility	
Integrated_Pla_2061510546	Integrated Plant and Pest Management (IPPM)	
Proper_Use_and_Storage_of_Pesticides	Proper Use and Storage of Pesticides	
Certification_Child_Labor_Criteria	Certification Child Labor Criteria	
Cotton_Storage	Cotton Storage	
Occupational_H_5f35580494	Occupational Health and Safety for Gin Staff	
Other_Training_Topics	Other Training Topics	
Number_of_Attended_Trainings	Number of Attended Trainings	
Judo_5_EC_	Judo 5 EC	
Ester_20_SC_	Ester 20 SC	
Snowmethrin	Snowmethrin	
Snowkill	Snowkill	

Model Name: SAP_RSM_GEN_IM_COTTONFARMER		Connection
Glyphon_480	Glyphon 480	
Treated_Cotton_Seed	Treated Cotton Seed	
Untreated_Cotton_Seed	Untreated Cotton Seed	
Agrofeed_NPK	Agrofeed (NPK)	
Home_LAT	Home_LAT	
Home_LON	Home_LON	
Field_LAT	Field_LAT	
Field_LON	Field_LON	
Dimensions		
Name	**Description**	**Mapping**
Farmer	Farmer	
Farmer's First Name	Farmer's First Name	
Gender	Gender	
Region	Region	
District	District	
Village	Village	
Lead Farmer	Lead Farmer	
National Registration Number	National Registration Number	
Languages Spoken	Languages Spoken	
Highest Level of Schooling	Highest Level of Schooling	
Season	Season	
HOM_LOC	Home GPS Location	
FIELD_LOC	Field GPS Location	
Additional Notes about the model		

3.25.5.2 General - Cotton Ginning Operations (SAP__RSM_GEN_IM_COTTONGINNINGO)

Model Name: SAP__RSM_GEN_IM_COTTONGINNINGO	Connection
• Model Description: SAP RSM: General - Cotton Ginning Operations • Planning Enabled: No	• Local File
Account Dimension	
ID	**Description**	**Mapping/Formula**

Model Name: SAP__RSM_GEN_IM_COTTONGINNINGO		Connection
Ginning_Capacity_t_per_24h	Ginning Capacity (t per 24h)	
Lint_Cotton_	Lint Cotton	
Number_of_Permanent_Employees	Number of Permanent Employees	
Number_of_Temporary_Employees	Number of Temporary Employees	
Dimensions		
Name	**Description**	**Mapping**
Ginnery	Ginnery	
Address of Ginnery	Address of Ginnery	
Season	Season	

3.25.5.3 General - Cotton Input Supply (SAP__RSM_GEN_IM_COTTONINPUT)

Model Name: SAP__RSM_GEN_IM_COTTONINPUT		Connection
• Model Description: SAP RSM: General - Cotton Input Supply • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Net_Sales_to_Certified_Farmers	Net Sales to Certified Farmers	
Stocks	Stocks	
Order_for_Season	Order for Season	
Region_LAT	Region_LAT	
Region_LON	Region_LON	
Dimensions		
Name	**Description**	**Mapping**
Region	Region	
Input Supply	Input Supply	
Target of Input Supply	Target of Input Supply	
Season	Season	
KPI_LOC	GPS Coordinates of Region	
Additional Notes about the model		

General - Cotton Regional Information (SAP__RSM_GEN_IM_COTTONREGIONAL)

Model Name: SAP__RSM_GEN_IM_COTTONREGIONAL	Connection
• Model Description: SAP RSM: General - Cotton Regional Information • Planning Enabled: No	Local File

Account Dimension		
ID	**Description**	**Mapping/Formula**
Number_of_Female_Farmers	Number of Female Farmers	
Number_of_Male_Farmers	Number of Male Farmers	
Total_Number_of_Farmers	Total Number of Farmers	
Hectares_Planted_in_Cotton	Hectares Planted in Cotton	
Average_Hectare_per_Farmer	Average Hectare per Farmer	
Seed_Cotton_Production	Seed Cotton Production	
Lint_Cotton_Production	Lint Cotton Production	
Average_Yield	Average Yield	
Region_LAT	Region_LAT	
Region_LON	Region_LON	

Dimensions		
Name	**Description**	**Mapping**
Region	Region	
Ginnery	Ginnery	
Season	Season	
KPI_LOC	KPI__LOC	

3.25.5.4 General - Cotton Smallholder Farmer (SAP__RSM_GEN_IM_COTTONSMALLHOL)

Model Name: SAP__RSM_GEN_IM_COTTONSMALLHOL	Connection
• Model Description: SAP RSM: General - Cotton Smallholder Farmer • Planning Enabled: No	Local File

Account Dimension		
ID	**Description**	**Mapping/Formula**
Age	Age	
Number_of_Dependents	Number of Dependents	
Field_Size	Field Size	
Seed_Cotton_Delivered	Seed Cotton Delivered	

Model Name: SAP__RSM_GEN_IM_COTTONSMALLHOL		Connection
Seed_Cotton_Production	Seed Cotton Production	
Average_Yield	Average Yield	
Seed_Cotton_Delivery_Agreement	Seed Cotton Delivery Agreement	
Rejected_Seed_Cotton	Rejected Seed Cotton	
Basic_Agricult_4583z0454t	Basic Agricultural Technologies /GAP	
Conservation_A_66s6g04x4d	Conservation Agriculture Techniques to Increase Soil Fertility	
Integrated_Pla_nwm0a4z1i0	Integrated Plant and Pest Management (IPPM)	
Proper_Use_and_Storage_of_Pesticides	Proper Use and Storage of Pesticides	
Certification_Child_Labor_Criteria	Certification Child Labor Criteria	
Cotton_Storage	Cotton Storage	
Occupational_H_3s01t03w64	Occupational Health and Safety for Gin Staff	
Other_Training_Topics	Other Training Topics	
Number_of_Attended_Trainings	Number of Attended Trainings	
Judo_5_EC_	Judo 5 EC	
Ester_20_SC_	Ester 20 SC	
Snowmethrin	Snowmethrin	
Snowkill	Snowkill	
Glyphon_480	Glyphon 480	
Treated_Cotton_Seed	Treated Cotton Seed	
Untreated_Cotton_Seed	Untreated Cotton Seed	
Agrofeed_NPK	Agrofeed (NPK)	
Home_LAT	Home_LAT	
Home_LON	Home_LON	
Field_LAT	Field_LAT	
Field_LON	Field_LON	
Dimensions		
Name	**Description**	**Mapping**
Farmer	Farmer	
Farmer's First Name	Farmer's First Name	
Gender	Gender	
Region	Region	
District	District	

Model Name: SAP__RSM_GEN_IM_COTTONSMALLHOL	Connection
Village	Village
Lead Farmer	Lead Farmer
National Registration Number	National Registration Number
Languages Spoken	Languages Spoken
Highest Level of Schooling	Highest Level of Schooling
Season	Season
Farmer_Homestead	GPS Location of Farmer's Home

3.25.5.5 General - Cotton Sustainability Input Supply (SAP__RSM_GEN_IM_COTTONSUSTINPU)

Model Name: SAP__RSM_GEN_IM_COTTONSUSTINPU		Connection
• Model Description: SAP RSM: General - Cotton Sustainability Input Supply • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Net_Sales_to_Certified_Farmers	Net Sales to Certified Farmers	
Stocks_	Stocks	
Order	Order	
Dosage_per_Hectare	Dosage per Hectare	
Recommended_Dosage_per_Hectare	Recommended Dosage per Hectare	
Dimensions		
Name	**Description**	**Mapping**
Input Supply	Input Supply	
Season	Season	
Target of Input Supply	Target of Input Supply	
Field Size	Field Size	

3.25.5.6 General - Cotton Training Additional Regional Distribution (SAP__RSM_GEN_IM_COTTONTRAINADD)

Model Name: SAP__RSM_GEN_IM_COTTONSUSTINPU		Connection
• Model Description: SAP RSM: General - Cotton Sustainability Input Supply • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Net_Sales_to_Certified_Farmers	Net Sales to Certified Farmers	
Stocks_	Stocks	
Order	Order	
Dosage_per_Hectare	Dosage per Hectare	
Recommended_Dosage_per_Hectare	Recommended Dosage per Hectare	
Dimensions		
Name	**Description**	**Mapping**
Input Supply	Input Supply	
Season	Season	
Target of Input Supply	Target of Input Supply	
Field Size	Field Size	

3.25.5.7 General - Cotton Training Relative (SAP__RSM_GEN_IM_COTTONTRAININ)

Model Name: SAP__RSM_GEN_IM_COTTONTRAININ		Connection
• Model Description: SAP RSM: General - Cotton Training Relative • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Basic_Agricult_531j3i01j1	Basic Agricultural Technologies /GAP	
Conservation_A_2s392a03a3	Conservation Agriculture Techniques to Increase Soil Fertility	
Integrated_Pla_13q6y0323c	Integrated Plant and Pest Management (IPPM)	
Proper_Use_and_Storage_of_Pesticides	Proper Use and Storage of Pesticides	

Model Name: SAP__RSM_GEN_IM_COTTONTRAININ		Connection
Certification_Child_Labor_Criteria	Certification Child Labor Criteria	
Cotton_Storage	Cotton Storage	
Occupational_H_i1ns006yo3	Occupational Health and Safety for Gin Staff	
Other_Training_Topics	Other Training Topics	
Dimensions		
Name	**Description**	**Mapping**
Participant	Participant	
Season	Season	

3.25.5.8 General - Cotton Training Absolute (SAP__RSM_GEN_IM_COTTONTRAINING)

Model Name: SAP__RSM_GEN_IM_COTTONTRAINING		Connection
• Model Description: SAP RSM: General - Cotton Training Absolute • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Number_of_Trained_Female_Lead_Farmers	Number of Trained Female Lead Farmers	
Number_of_Trained_Male_Lead_Farmers	Number of Trained Male Lead Farmers	
Total_Number_of_Trained_Lead_Farmer	Total Number of Trained Lead Farmer	
Number_of_ReTr_67183a02k3	Number of Re-Trained Female Lead Farmer	
Number_of_ReTrained_Male_Lead_Farmer	Number of Re-Trained Male Lead Farmer	
Total_Number_of_ReTrained_Farmers_5f5aw02f63	Total Number of Re-Trained Lead Farmers	
Number_of_Trained_Female_Farmers	Number of Trained Female Farmers	
Number_of_Trained_Male_Farmers	Number of Trained Male Farmers	
Total_Number_of_Trained_Farmers	Total Number of Trained Farmers	
Number_of_ReTrained_Female_Farmers	Number of Re-Trained Female Farmers	
Number_of_ReTrained_Male_Farmers	Number of Re-Trained Male Farmers	

Model Name: SAP__RSM_GEN_IM_COTTONTRAINING		Connection
Total_Number_of_ReTrained_Farmers_x1j6q5c456	Total Number of Re-Trained Farmers	
Number_of_ReTr_2c6ya06d4s	Number of Re-Trained Female Extension Agents	
Number_of_ReTr_3j4v4y04zi	Number of Re-Trained Male Extension Agents	
Total_Number_o_1l346h0f17	Total Number of Re-Trained Extension Agents	
Number_of_Trai_3v1n5d03d1	Number of Trained Female Extension Agents	
Number_of_Trai_3w701305h1	Number of Trained Male Extension Agents	
Total_Number_o_6p6k2t05jf	Total Number of Trained Extension Agents	
Total_Number_of_Participants	Total Number of Participants	
Dimensions		
Name	**Description**	**Mapping**
Training	Training	
Season	Season	

3.25.5.9 General - Cotton Training Regional Distribution (SAP__RSM_GEN_IM_COTTONTRAINREG)

Model Name: SAP__RSM_GEN_IM_COTTONTRAINREG		Connection
• Model Description: SAP RSM: General - Cotton Training Regional Distribution • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Basic_Agricult_394g1e0647	Basic Agricultural Technologies /GAP	
Conservation_A_722n2m01ju	Conservation Agriculture Techniques to Increase Soil Fertility	
Integrated_Pla_645y5i0s60	Integrated Plant and Pest Management (IPPM)	
Proper_Use_and_Storage_of_Pesticides	Proper Use and Storage of Pesticides	
Certification_Child_Labor_Criteria	Certification Child Labor Criteria	
Cotton_Storage	Cotton Storage	

Model Name: SAP__RSM_GEN_IM_COTTONTRAINREG		Connection
Occupational_H_2g662b073d	Occupational Health and Safety for Gin Staff	
Other_Training_Topics	Other Training Topics	
Dimensions		
Name	**Description**	**Mapping**
Participant	Participant	
Season	Season	
Region	Region	

3.25.5.10 General - Smallholder Farmer Offloading (SAP__RSM_GEN_IM_FARMEROFFLOAD)

Model Name: SAP__RSM_GEN_IM_FARMEROFFLOAD		Connection
• Model Description: SAP RSM: General - Smallholder Farmer Offloading • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Delivered_Seed_Cotton	Delivered Seed Cotton	
Rejected_Seed_Cotton	Rejected Seed Cotton	
Sold_Seed_Cotton	Sold Seed Cotton	
Earnings	Earnings	
Dimensions		
Name	**Description**	**Mapping**
Transaction ID	Transaction ID	
Region	Region	
Buying Station	Buying Station	
Year	Year	
Month	Month	
Month_num	Month_num	
Season	Season	
Day	Day	

3.25.5.11 General - Sustainability Criteria (SAP__RSM_GEN_IM_SUSTCRITERIA)

Model Name: SAP__RSM_GEN_IM_SUSTCRITERIA		Connection
• Model Description: SAP RSM: General - Sustainability Criteria • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
Rating	Rating	
Dimensions		
Name	**Description**	**Mapping**
Sustainability Criterion	Sustainability Criterion	
Number	Number	
Category	Category	
Principle	Principle	

3.25.5.12 General - Sustainability Exclusion Criteria (SAP__RSM_GEN_IM_SUSTEXCLU)

Model Name: SAP__RSM_GEN_IM_SUSTEXCLU		Connection
• Model Description: SAP RSM: General - Sustainability Exclusion Criteria • Planning Enabled: No		Local File
Account Dimension		
ID	**Description**	**Mapping/Formula**
YesNo	Rating	
Dimensions		
Name	**Description**	**Mapping**
Exclusion Criterion	Exclusion Criterion	
Number	Number	
Principle	Principle	

3.25.5.13 General - Palm Oil Average Acre, with hierarchy (SAP__RSM_IM_GEN_PALMACREH)

Model Name: SAP_RSM_GEN_IM_PALMACREH		Connection
• Model Description: SAP RSM: General - Palm Oil Average Acre, with hierarchy • Planning Enabled: No		Local File
Name of Account Dimension		
ID	**Description**	**Mapping/Formula**
Counting	Counting	
Total_Field_size	Total Field size	
Total_Net_income	Total Net income	
Total_Unused_field_size	Total Unused field size	
Total_Field_size_in_use	Total Field size in use	
Block_Field_size	Block Field size	
Block_Net_income	Block Net income	
Block_Net_weight	Block Net weight	
Block_Field_size_in_use	Block Field size in use	
Block_unused_field_size	Block unused field size	
Unit_Field_size_in_use	Unit Field size in use	
Unit_Net_weight	Unit Net weight	
Unit_Net_income	Unit Net income	
Unit_Unused_field_size	Unit Unused field size	
Unit_Field_size	Unit Field size	
Unit_Average_n_u3i7201a65	Unit Average net weight per acre	
Unit_Average_n_2l6r102d5m	Unit Average net income per acre	
Block_Net_weight_per_acre	Block Net weight per acre	
Block_Average__5q6k5e0364	Block Average net income per acre	
Average__2q4w3c01a1	Total Average net weight per acre	
Total_Average_net_income_per_acre	Total Average net income per acre	
Unit_latitude	Unit latitude	
Unit_longitude	Unit longitude	
Block_latitude	Block latitude	
Block_lon	Block_lon	
Dimensions		
Name	**Description**	**Mapping**

Model Name: SAP_RSM_GEN_IM_PALMACREH		Connection
Year	Year	
Month number	Month number	
Unit	Unit	Hierarchy: Unit -> Block -> Total
Unit_location	Unit location	
Block_location	Block location	

3.25.5.14 General - Palm Oil Average Acre (SAP__RSM_GEN_IM_PALMACRE)

Model Name: SAP_RSM_GEN_IM_PALMACRE		Connection
• Model Description: SAP RSM: General - Palm Oil Average Acre • Planning Enabled: No		Local File
Name of Account Dimension		
ID	**Description**	**Mapping/Formula**
Counting	Counting	
Total_Field_size	Total Field size	
Total_Net_income	Total Net income	
Total_Unused_field_size	Total Unused field size	
Total_Field_size_in_use	Total Field size in use	
Block_Field_size	Block Field size	
Block_Net_income	Block Net income	
Block_Net_weight	Block Net weight	
Block_Field_size_in_use	Block Field size in use	
Block_unused_field_size	Block unused field size	
Unit_Field_size_in_use	Unit Field size in use	
Unit_Net_weight	Unit Net weight	
Unit_Net_income	Unit Net income	
Unit_Unused_field_size	Unit Unused field size	
Unit_Field_size	Unit Field size	
Unit_Average_n_u3i7201a65	Unit Average net weight per acre	
Unit_Average_n_2l6r102d5m	Unit Average net income per acre	
Block_Net_weight_per_acre	Block Net weight per acre	
Block_Average__5q6k5e0364	Block Average net income per acre	

Model Name: SAP_RSM_GEN_IM_PALMACRE		Connection
Average__2q4w3c01a1	Total Average net weight per acre	
Total_Average_net_income_per_acre	Total Average net income per acre	
Unit_latitude	Unit latitude	
Unit_longitude	Unit longitude	
Block_latitude	Block latitude	
Block_lon	Block_lon	
Dimensions		
Name	**Description**	**Mapping**
Year	Year	
Month number	Month number	
Unit	Unit	
Block	Block	
Total	Total	
Unit_location	Unit location	
Block_location	Block location	

3.25.5.15 General - Palm Oil Ffb Receipts (SAP__RSM_GEN_IM_PALMFFBRECEIPT)

Model Name: SAP__RSM_GEN_IM_PALMFFBRECEIPT		Connection
• Model Description: SAP RSM: General - Palm Oil Ffb Receipts • Planning Enabled: No		Local File
Name of Account Dimension		
ID	**Description**	**Mapping/Formula**
Offloading_gross_weight	Offloading gross weight	
Offloading_truck_net_weight	Offloading truck net weight	
Offloading_net_weight	Offloading net weight	
Field_weight_26541v3k21	Field weight	
Field_size_5x5m3m01g3	Field size	
Number_of_farmers	Number of farmers	
Transport_cost	Transport cost	
Farmer_offloading_contribution	Farmer offloading contribution	
N_offloagings	Number of transfers	

Model Name: SAP__RSM_GEN_IM_PALMFFBRECEIPT		Connection
Price_2	Price	
Field_weight_6a6a1c05o5	Field Weight	
Gross_weight	Gross weight	
Net_weight	Net Weight	
Truck_weight	Truck weight	
Weight_before_grading	Weight before grading	
Transportation_costs	Transportation costs	
Gross_income	Gross income	
Net_income	Net income	
Net_income_67	Net income 67%	
Net_income_33	Net income 33%	
Net_value	Net value	
Field_size_4o2h273k55	Field Size	
Payment	Payment	
Net_weight_per_acre	Net weight per acre	
Net_income_per_acre_6l2b5q4o28	Net income per acre	
Unit_latitude	Unit latitude	
Unit_longitude	Unit longitude	
Block_latitude	Block latitude	
Block_longitude	Block longitude	
Dimensions		
Name	**Description**	**Mapping**
Offloading_capture_date	Offloading capture date	
Loading_capture_date	Loading capture date	
Loading_transaction_date	Loading transaction date	
Transaction_date	Transaction date	
Price_start_date	Price start date	
Total	Total	
License plate	License plate	
Representative	Representative	
BUYING_TRANSTYPE	Buying transaction type	
Farmer	Farmer	
Gender	Gender	
Unit	Unit	

Model Name: SAP__RSM_GEN_IM_PALMFFBRECEIPT	Connection
Block	Block
Driver	Driver
Price	Price
Price id	Price id
Year	Year
Month number	Month number
Payment purpose	Payment purpose
Month	Month
Buying CID	Buying CID
Buying ID	Buying ID
Offloading ID	Offloading ID
Garden entity	Garden entity
Buying person ID	Buying person ID
Loading CID	Loading CID
Day	Day
Unit_Location	Unit location
Block_Location	Block location
Additional Notes about the model	

3.25.5.16 General - Palm Oil Offloadings (SAP__RSM_GEN_IM_PALMOFFLOAD)

Model Name: SAP__RSM_GEN_IM_PALMOFFLOAD		Connection
• Model Description: SAP RSM: General - Palm Oil Offloadings • Planning Enabled: No		Local File
Name of Account Dimension		
ID	**Description**	**Mapping/Formula**
Estimated_ffb	Estimated ffb	
Average_bunch_weight	Average bunch weight	
Gross_weight	Gross weight	
Truck_weight	Truck weight	
Net_weight	Net weight	
Deductions	Deductions	

Model Name: SAP__RSM_GEN_IM_PALMOFFLOAD		Connection
Price_2	Price_2	
Net_value	Net value	
Unripe	Unripe	
Underripe	Underripe	
Overripe	Overripe	
Old	Old	
Empty	Empty	
Rotten	Rotten	
Sick	Sick	
Partenocarpic	Partenocarpic	
V_shape	V shape	
Long_stalk	Long stalk	
Dirt	Dirt	
Stone	Stone	
Number_of_buyings	Number of buyings	
Weight_before_grading	Weight before grading	
Count	Count	
Dimensions		
Name	**Description**	**Mapping**
Date_6e1h4m0lno	Date	
Year	Year	
Month number	Month number	
Driver	Driver	
License plate	License plate	
Price	Price	
Mill	Mill	
Block	Block	
Day	Day	
Additional Notes about the model		

3.25.5.17 General - Palm Oil Prices (SAP__RSM_GEN_IM_PALMPRICES)

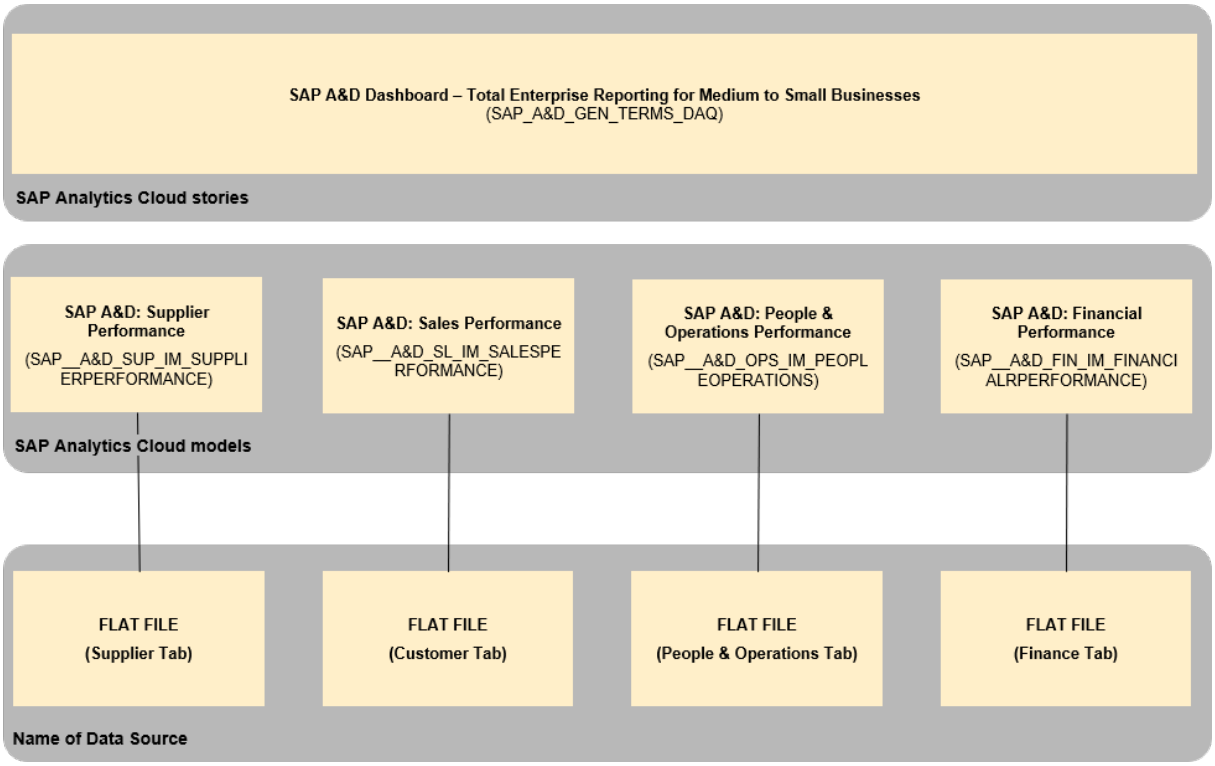
Model Name: SAP__RSM_GEN_IM_PALMPRICES		Connection
• Model Description: SAP RSM: General - Palm Oil Prices • Planning Enabled: No		Local File
Name of Account Dimension		
ID	**Description**	**Mapping/Formula**
Price	Price	
Month	month	
Month_3	Order	
Dimensions		
Name	**Description**	**Mapping**
Year	Year	
Month	Month	

3.26 SAP Aerospace and Defense TERMS Dashboard

3.26.1 Architecture and Abstract

This SAP Analytics Cloud (SAC) content for the Aerospace and Defense (A&D) industry is designed to provide small to medium businesses with a total enterprise view of their company across all major dimensions of KPI: from their people, customers, operations to finance. You simply map your data to our template, with whatever data you have - whether you're on a modern ERP or running your company on spreadsheets - either way, it works.

With SAC's built-in predictive capabilities, the SAP Total Enterprise Reporting for Medium / Small Businesses (TERMS) dashboard helps businesses analyze their performance over time, identify patterns and causal relationships, and forecast changes across their organization. Target thresholds for critical KPIs are adjusted out of the box to A&D industry standards, but they can be customized for your business with a simple slider. And predictive forecasting lets you plan your next move with algorithmic insight - no programming required.



3.26.2 Stories

The package contains one story with 22 pages.

Story Name: **SAP Total Enterprise Reporting for Medium to Small Businesses (TERMS) (SAP_A&D_GEN_TERMS_DAQ)**

The story pages are:

- KPI Summary (focusing on four main areas - Financials, Customer, Operations, and People)
- Quick Ratio
- Inventory Turnover Ratio
- Operating Cash Flow (OCF) Ratio
- Pretax Net Profit Margin
- Revenue Per Employee
- SG&A as a % of Sales
- Gross Margin
- Labor to Revenue Ratio
- Backlog
- On-Time Delivery
- Customer Escapes
- Customer Concentration
- Supplier OTD

- Machine Capability
- Strategic Spend
- SRR
- Labor Productivity
- Employee Turnover Rate
- Overtime Rate
- TRIR
- LDIR

In this story, the following page filters apply to the widget.

Page Filter	Description
Plant Filter	Filter by plant
Work center Filter	Filter by work center
Customer Name Filter	Filter by customer name
Customer ID Filter	Filter by customer ID
Product Name Filter	Filter by product name
Product ID Filter	Filter by product ID
Supplier Name Filter	Filter by supplier name
Supplier Part Number Filter	Filter by part number

The measures defined in this story are listed in the following table.

Measure Name	Type	Formula/Properties
Quick Ratio	Calculated Measure	([Current Assets] - [Inventory]) / [Current Liabilities]
Inventory Turnover Ratio	Calculated Measure	[COGS] / [Inventory]
Operating Cash Flow (OCF) Ratio	Calculated Measure	[Operating Cash Flow] / [Current Liabilities]
Pretax Net Profit Margin	Calculated Measure	[EBT] / [Gross Revenue]
Revenue per Employee	Calculated Measure	[Gross Revenue] / [Monthly Headcount]
SG&A as a % of Sales	Calculated Measure	[SGA] / [Gross Revenue]
Gross Margin	Calculated Measure	([Gross Revenue] - [COGS]) / [Gross Revenue]
Direct Labor as a % of Sales (Labor to Revenue Ratio)	Calculated Measure	[Total Labor Costs] / [Gross Revenue]
Backlog %	Calculated Measure	[Backlog] / [Gross Revenue]

Measure Name	Type	Formula/Properties
On Time Delivery Ratio	Aggregation	- Operation [AVERAGE excl. 0, NULL] - Measure [On Time Delivery Precalc] by Aggregation Dimensions [Date] and [Customer Name] - Conditional Aggregation [No]
Customer Concentration (by sales)	Aggregation	- Operation [MAX] - Measure [% of Revenue Precalc] by Aggregation Dimensions [Date], [Customer ID], and [Customer Name] - Conditional Aggregation [No]
Supplier OTD	Aggregation	- Operation [AVERAGE excl. 0, NULL] - Measure [Supplier Delivery Performance] by Aggregation Dimension [Date], [Supplier Name], and [Supplier Part Number] - Conditional Aggregation [No]
Machine Capacity	Calculated Measure	[Actual Runtime] / [Overall Available Capacity]
Strategic Spend	Calculated Measure	[Strategic Managed Spend ($ Spend on LTA)] / [Total Spend]
Labor Productivity	Calculated Measure	[Utilized Hours] / [Scheduled Hours]
Employee Turnover Rate	Calculated Measure	[Separations] / [Monthly Total Head Count]
Overtime Rate	Calculated Measure	([Total Hours Actual] / [Total Hours Planned]) - 1
TRIR (Total Recordable Incident Rate)	Calculated Measure	[# of Recordable Incidents] * 200000 / ([Monthly Total Headcount] * 2080)
LDIR (Lost Day Incident Rate)	Calculated Measure	[# of Lost Days] * 200000 / ([Monthly Total Head Count] * 2080)

3.26.3 Models

3.26.3.1 Data Source

To utilize this content package, you can simply load enterprise metrics into our pre-designed spreadsheet SAP_Content_A&D_TERMS_Dataset in the format listed, then upload each of the four (4) tabs into SAP Analytics Cloud models.

Delete the example records, and add a single row for every available column for each of the four (4) tabs.

If you want to enable drilldown and lower-level forecasting to any of the following dimensions, add a separate row per month in the spreadsheet for each of the dimensions:

- Plant, Workcenter, Supplier Name, Supplier Part Number, Customer ID, Customer Name, Product Line, Product ID, Product Name

For example, each tab consists of one row of data per month. If I want to enable drilldown and forecasting across every Customer Name, every Customer Name will require a single spreadsheet row for each month.

Please make sure that all rows and columns are aligned to the template as follows:

Model Name: SAP__A&D_OPS_IM_PEOPLEOPERATIONS

Tab Name	Column Name	Note
People & Operations	Date	YYYY-MM-DD
	Category	Actual/Plan
	Year	YYYY
	Month	Jan/Feb/...
	Workcenter	
	Plant	Name or Number
	Lost Days/Incidents	
	Total Hours - Actual	
	(Total Hours - Planned) /Budgeted	
	Monthly Total Head Count	
	Monthly Direct Labor Head Count	
	Actual Run Time	
	Overall Available Capacity	
	Machine Capacity	
	Scrap, Repair, & Rework Rate	
	Overtime Rate	

Tab Name	Column Name	Note
	Separations	
	Production Run Time (Scheduled Hours)	
	Total Labor Hours	
	Total Overtime Hours	
	Total PTO Hours	

Model Name: SAP__A&D_SUP_IM_SUPPLIERPERFORMANCE

Tab Name	Column Name	Note
People & Operations	Date	YYYY-MM-DD
	Category	Actual/Plan
	Year	YYYY
	Month	Jan/Feb/...
	Supplier Name	
	Supplier Part Number	
	Supplier Delivery Performance	
	Strategic Managed Spend ($ Spend on LTA)	
	Total Spend	
	Units Received	
	Units Returned	
	Units Scrapped	

Model Name: SAP__A&D_SL_IM_SALESPERFORMANCE

Tab Name	Column Name	Note
People & Operations	Date	YYYY-MM-DD
	Category	Actual/Plan
	Year	YYYY
	Month	Jan/Feb/...
	Customer ID	

Tab Name	Column Name	Note
	Customer Name	
	Product Line	
	Product ID	
	Product Name	
	Total # of Products Shipped	
	Total # of Products Returned	
	On Time Deliveries	
	Customer Return Rate	
	Backlog of Orders	
	Gross Revenue	
	COGS	
	Gross Margin %	
	Customer Escapes	

Model Name: SAP__A&D_FIN_IM_FINANCIALRPERFORMANCE

Tab Name	Column Name	Note
People & Operations	Date	YYYY-MM-DD
	Category	Actual/Plan
	Year	YYYY
	Month	Jan/Feb/...
	Plant	Name or Number
	Gross Revenue	
	COGS	
	SG&A	
	EBT	
	Taxes	
	Depreciation	
	Net Income	

Tab Name	Column Name	Note
	Operating Cash Flow	
	Total Labor Costs	
	A/P	
	Cash and Other Equivalents	
	Inventory	
	A/R	
	Short-Term Investment	
	Current Assets	
	Current Liabilities	
	Monthly Revenue	
	Quick Ratio	
	OCF Ratio	
	Pretax Net Profit Margin	
	Pretax Net Profit Margin	
	Inventory Turnover Ratio	
	Labor to Revenue Ratio	
	Revenue Per Employee	
	Gross Margin %	
	Top Customer Revenue Ratio	
	Strategically Managed Spend Ratio	
	Overtime Rate	

3.26.3.2 SAP A&D: Supplier Performance

Model Name: SAP__A&D_SUP_IM_SUPPLIERPERFORMANCE		Connection
- Model Description: SAP A&D: Supplier Performance - Planning Enabled: No		- Connection Type: Flat file
Measures		
ID	**Description**	**Mapping/Formula**
Strategic_M_2n6gi0685l	Strategic Managed Spend ($ Spend on LTA)	
Supplier_De_2d51g01z5o	Supplier Delivery Performance	
Total_Spend	Total Spend	
Units_Received	Units Received	
Units_Returned	Units Returned	
Units_Scrapped	Units Scrapped	
Dimensions		
Name	**Description**	**Mapping**
Category	Data Category	
Year	Year	
Month	Month	
Supplier_Name_	Name of Suppliers	
Suppllier_Part_Number	Supplier Part Numbers	
Name Dimension that only exists in SAC model and not in data source		N/A
Additional Notes about the model		
Provide additional information about the model if needed		N/A

3.26.3.3 SAP A&D: Sales Performance

Model Name: SAP__A&D_SL_IM_SALESPERFORMANCE		Connection
- Model Description: SAP A&D: Sales Performance - Planning Enabled: No		- Connection Type: Flat file
Measures		
ID	**Description**	**Mapping/Formula**
Backlog_of_Orders	Backlog of Orders	

Model Name: SAP__A&D_SL_IM_SALESPERFORMANCE		Connection
COGS	COGS	
Customer_Escapes	Customer Escapes	
Customer_Return_Rate	Customer Return Rate	
Gross_Margin_	Gross Margin %	
Gross_Revenue	Gross Revenue	
On_Time_Deliveries_	On Time Deliveries	
Total__of_P_2i1r2h04yj	Total # of Products Returned	
Total__of_P_372t2602k2	Total # of Products Shipped	
Dimensions		
Name	**Description**	**Mapping**
Category	Data Category	
Year	Year	
Month	Month	
Customer_ID	Customer ID	
Customer_Name	Name of Customers	
Product_Line	Name of product line	
Product_ID	Product ID	
Product_Name	Product Name	
Name Dimension that only exists in SAC model and not in data source		N/A
Additional Notes about the model		
Provide additional information about the model if needed		N/A

3.26.3.4 SAP A&D: People & Operations Performance

Model Name: SAP__A&D_OPS_IM_PEOPLEOPERATIONS	Connection
- Model Description: SAP A&D: People & Operations Performance - Planning Enabled: No	- Connection Type: Flat file
Measures	

Model Name: SAP__A&D_OPS_IM_PEOPLEOPERATIONS		Connection
ID	**Description**	**Mapping/Formula**
Actual_Run_Time	Actual Run Time	
ID__Monthly_64q3m04x38	Monthly Total Head Count	
Labor_Productivity	Labor Productivity	
Lost_DaysIncidents	Lost Days/Incidents	
Machine_Capacity	Machine Capacity	
Monthly_Dir_2l5h1a05o5	Monthly Direct Labor Head Count	
Overall_Ava_385p1m1s5c	Overall Available Capacity	
Overtime_Rate	Overtime Rate	
Production__3i1o4802y2	Production Run Time (Scheduled Hours)	
Recordable_Incidents	Recordable Incidents	
Scrap_Repai_5p1980556c	Scrap, Repair and Rework	
Scrap_Repai_6j3q2406b6	Scrap, Repair, & Rework Rate	
Separations	Separations	
Total_Hours__Actual	Total Hours - Actual	
Total_Hours_3z5f80396q	Total Hours - Planned/Budgeted	
Total_Labor_Hours	Total Labor Hours	
Total_Overtime_Hours	Total Overtime Hours	
Total_PTO_Hours	Total PTO Hours	
Dimensions		
Name	**Description**	**Mapping**
Category	Data Category	
Year	Year	
Month	Month	
Workcenter	Work Center Name/Number	
Plant	Plant Name/Number	
Name Dimension that only exists in SAC model and not in data source		N/A
Additional Notes about the model		
Provide additional information about the model if needed		N/A

3.26.3.5 SAP A&D: Financial Performance

Model Name: SAP__A&D_FIN_IM_FINANCIALRPERFORMANCE		Connection
- Model Description: SAP A&D: Financial Performance - Planning Enabled: No		- Connection Type: Flat file
Measures		
ID	**Description**	**Mapping/Formula**
AP	A/P	
AR	A/R	
Cash_and_Ot_6n2m2c02x2	Cash and Other Equivalents	
COGS	COGS	
Current_Assets	Current Assets	
Depreciation	Depreciation	
EBT	EBT	
Gross_Margin_	Gross Margin %	
Gross_Revenue	Gross Revenue	
Inventory	Inventory	
Inventory_T_r5j6301712	Inventory Turnover Ratio	
Labor_to_Revenue_Ratio	Labor to Revenue Ratio	
Monthly_Revenue	Monthly Revenue	
Net_Income	Net Income	
OCF_Ratio	OCF Ratio	
Operating_Cash_Flow	Operating Cash Flow	
Monthly_Revenue	Monthly Revenue	
Net_Income	Net Income	
OCF_Ratio	OCF Ratio	
Operating_Cash_Flow	Operating Cash Flow	
Overtime_Rate	Overtime Rate	

Model Name: SAP__A&D_FIN_IM_FINANCIALRPERFORMANCE		Connection
Pretax_Net__2e562x01u6	Pretax Net Profit Margin	
Quick_Ratio	Quick Ratio	
Revenue_Per_Employee	Revenue Per Employee	
SGA	SG&A	
ShortTerm_Investment	Short-Term Investment	
Strategical_264s5g5k18	Strategically Managed Spend Ratio	
Taxes	Taxes	
Top_Custome_2u5f2m5c6r	Top Customer Revenue Ratio	
Total_Labor_Costs	Total Labor Costs	
Dimensions		
Name	**Description**	**Mapping**
Category	Data Category	
Year	Year	
Month	Month	
Plant	Plant Name/Number	
Name Dimension that only exists in SAC model and not in data source		N/A
Additional Notes about the model		
Provide additional information about the model if needed		N/A

3.27 SAP Automotive: Responsive Supply Network, Sales and Inventory

3.27.1 Overview

This package covers the business scenario the "Responsive Supply Networks" of the industry Automotive. It is based on data from S/4HANA source systems. The content consists of two packages:

- a SAP Analytics Cloud content package (this package) for the visualizations
- a SAP Data Warehouse Cloud package for the data models, remote connection amongst others

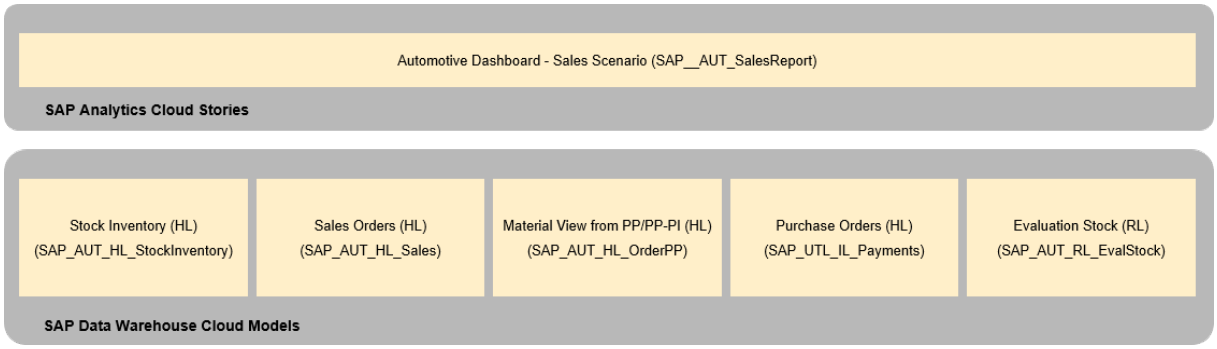
You need both packages to setup this scenario. Check the Data Warehouse Cloud content package and SAP Data Warehouse Cloud content documentation on how to install the SAP Data Warehouse Cloud content.

3.27.2 Architecture and Abstract

The first delivery will focus on stock and demand data, as a first building block aiming to build the complete scenario.

The report will focus on sales and purchase orders with stock at current date at material/plant level, additionally product costing and production orders information is also available.

The SAP Analytics Cloud story provides overviews and details pages for four sections, purchasing, sales, inventory stock and production costs. The user has access to a consequent panel of filters to play with the data as he wishes.



3.27.3 Stories

The package contains one story with 9 pages.

Story name: Automotive Dashboard Sales Scenario (SAP__AUT_SalesReport)

These are the 9 pages:

- Home
- Automotive Overview
- Purchasing Overview
- Purchasing Details
- Sales Overview
- Sales Details
- Inventory Stock Overview
- Inventory Stock Details
- Production Costs Details

3.27.4 Models

The following SAP Datawarehouse Cloud models are used in the Automotive Dashboard Sales Scenario (SAP_AUT_SalesReport) story:

- Purchase Orders (HL) (SAP_AUT_HL_Purchasing)
- Stock Inventory (HL) (SAP_AUT_HL_StockInventory)
- Sales Orders (HL) (SAP_AUT_HL_Sales)
- Material View from PP/PP-PI (HL) (SAP_AUT_HLOrderPP)
- Evaluation Stock (RL) (SAP_AUT_RL_EvalStock)

Find more details on the Data Warehouse Cloud data models in the SAP Data Warehouse Cloud content documentation.

3.28 SAP Consumer Products: Revenue Growth Management – Foundation

3.28.1 Overview

This package covers the business scenario the "Revenue Growth (Foundation)" of the industry consumer products It is based on data from S/4HANA source systems. The content consists of two packages:

- a SAP Analytics Cloud content package (this package) for the visualizations
- a SAP Data Warehouse Cloud package for the data models, remote connection amongst others.

You need both packages to setup this scenario. Check the Data Warehouse Cloud content package and SAP Data Warehouse Cloud content documentation on how to install the SAP Data Warehouse Cloud content.

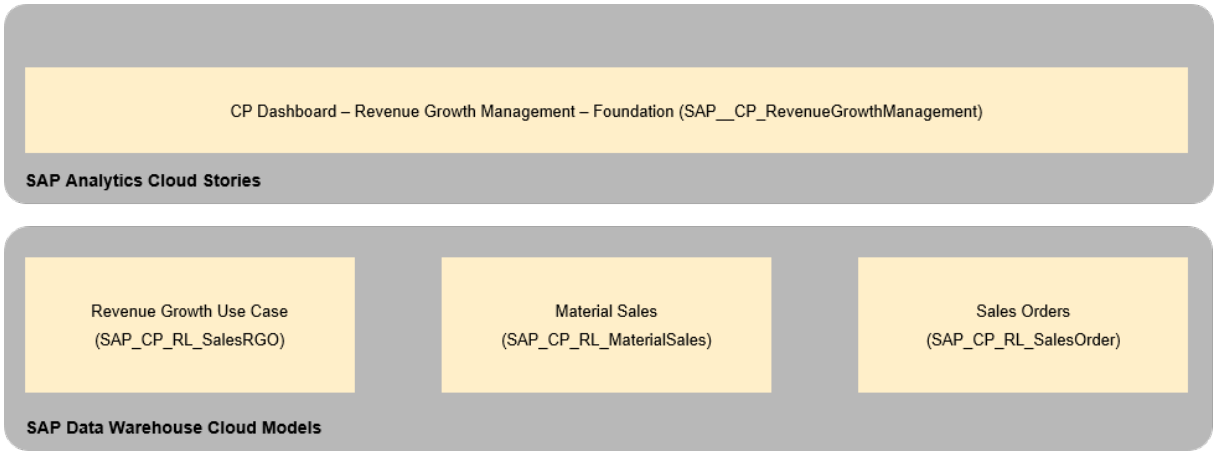
3.28.2 Architecture and Abstract

The **Revenue Growth** scenario is an analytical modeling to measure the effectiveness of past promotions and intelligent recommendations to adjust future promotions to meet sales objectives.

Micro-testing to evaluate potential effectiveness of new promotions or existing promotions on new products.

The SAC Content provides overviews and details pages for three sections: Sales Orders, Material Orders, and Promotions Sales.

The user has access to a consequent panel of filters to play with the data as per their wish.



3.28.3 Story

The package contains one story with 8 pages.

Story name: CP Dashboard - Revenue Growth Management - Foundation (SAP__CP_RevenueGrowthManagement)

These are the 8 pages:

- Home
- Utilities Overview
- Sales Orders Overview
- Sales Orders Details
- Material Sales Overview
- Material Sales Details
- Promotions Sales Overview
- Promotions Sales Details

3.28.4 Models

The following SAP Datawarehouse Cloud models are used in the story CP Dashboard - Revenue Growth Management - Foundation (SAP__CP_RevenueGrowthManagement):

- Harmonized Report View on Sales Orders (RL) (SAP_CP_RL_SalesOrder)
- Harmonized Report View on Material Sales (RL) (SAP_CP_RL_MaterialSales)
- Harmonized Report View on RGO Use Case (RL) (SAP_CP_RL_RGOUseCase)

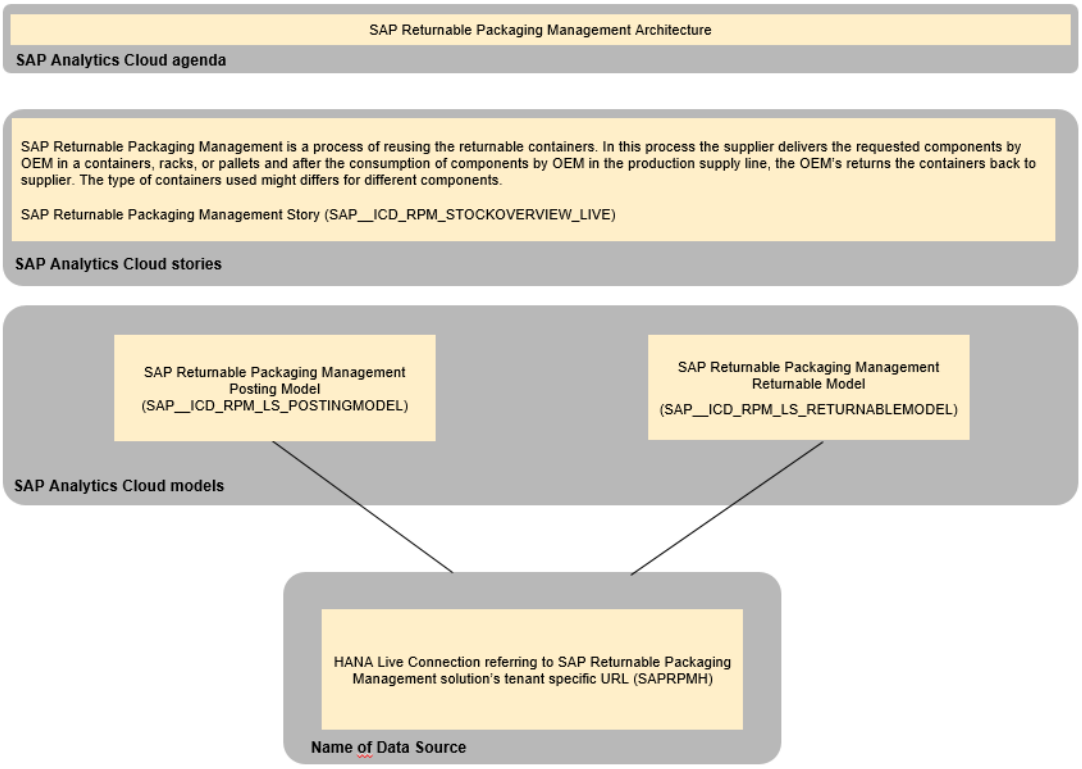
Find more details on the Data Warehouse Cloud data models in the SAP Data Warehouse Cloud content documentation.

3.29 SAP Cloud Platform Intelligent Returnable Packaging Dashboard

3.29.1 Architecture and Abstract

SAP Returnable packaging is a process of reusing the returnable containers. In this process the supplier delivers the requested components by OEM in a containers, racks, or pallets and after the consumption of components by OEM in the production supply line, the OEM's returns the containers back to supplier. The type of containers used might differs for different components.

This document helps in starting the analytics journey in SAC that is specific to Returnable packaging that gives the stock quantity overview of the Returnable Material.



Usage in Industry specific Boardrooms

Industry	Story
Industry cloud and Content Development	SAP__ICD_RPM_STOCKOVERVIEW_LIVE

3.29.2 Dashboards

Returnable Packaging Material-Overview	Key Indicators
	Charts(Stock Quantity)
	Charts(Posting quantity)
	Number of Postings by Period

3.29.3 Models

Model Name	SAP__ICD_RPM_LS_POSTINGMODEL

Model Description	SAP Returnable Packaging Posting Model
Planning Enabled	no
Connection	Live connection

Model Name	SAP__ICD_RPM_LS_RETURNABLEMODEL
Model Description	SAP Returnable Packaging Returnable Model
Planning Enabled	no
Connection	Live connection

3.29.4 Stories

SAP__ICD_IRP_LS_POSTINGMODEL

Measure Name	Type
Returnable Material Quantity	SUM
Posting Documents with Error	SUM
Days since last movement	COUNT
Total Postings	SUM

SAP__ICD_IRP_LS_RETURNABLEMODEL

Measure Name	Type
Moving Price	SUM
REORDERPOINT	SUM
Standard Price	SUM
Total Account Balance	SUM
Partner Stock on Hand	SUM
Stock with Partner	SUM
Value of Partner Stock	SUM
Value of Stock with Partner	SUM

SAP__ICD_RPM_STOCKOVERVIEW_LIVE

Stock Overview	
The table provides a detailed description of the suppliers.	
Page: Stock Overview with Key Indicators	
Type: Canvas	
Charts	
Title	**Model Used**

Performance (Single Supplier)	SAP__ICD_IRP_LS_POSTINGMODEL SAP__ICD_IRP_LS_RETURNABLEMODEL
Value of Stock with Partner	SUM

Returnable Material description, Material code, Returnable Material Account Number and Period are dynamic filters.

Posting model Gives the details regarding posting types and number of postings.

3.30 SAP Telecommunication: Customer Value Management (CVM)

3.30.1 Architecture and Abstract

Customer Value Management (CVM) measures the behavior and performance of each product and service over time, at customer level. It can:

- automatically identify the customers basket performance and percentage share for every service but also over all services.

- highlight the best opportunity for every marketing action based on potential revenue.

- identify automatically the next best action for each customer based on potential revenue.

The solution minimizes the time to build the campaigns and provides a simple way to evaluate their impact by tracking the movement of the customer between the different target groups over time.

The solution gives automated recommendations and insights either per product (above the line campaigns - ATL) or tailored offers per customer (Below the line campaigns - BTL).

3.30.2 Stories

3.30.2.1 CVM KPIs Overview

The following details are displayed for the specified period in the header of the page:

- Total number of customers.

- Total number of active customers.

- Current period Usage: Total revenue usage generated.

- ARPU: Average revenue usage per user.

- ARPAU: Average revenue usage per active user.

- The CVM KPIs for each selected period (Date filter) can be viewed for each selected date and in our case the date refers to month (default).

- The end user can also choose different segments to display, by default all of them are preselected.

- The definition also of the service is provided as text in the first page of the story.

The following details are displayed for the charts shown in this page:

- Revenue usage and customer base comparison between the services for the specified period.

- Distribution of usage and number of active customers for each service and for each activation channel.

- The trend analysis of usage and active number of customers in time with the forecast for the future period. These charts can highlight immediately a potential trend for each service usage and also provide a future potential forecast of what can happen based on historical pattern.

3.30.2.2 Delta Management

This page provides the information related to Δelta calculations and the insights generated from the calculation for each customer segment and service for the specified period.

The following filters are displayed in the header of the page:

- Delta Performance Indicator: By default, the value ranges from -30 to 30. The delta performance indicator defines the percentage difference of the customer usage for the selected period compared to the previous. The end user can modify these ranges in order to view the full distribution of customers across all delta ranges.

- Date (selected period): By default, is month.

- Segment name: By default, all segments are selected.

- Service name: By default, all services are selected.

The following details are displayed for the charts shown in this page:

- Delta distribution of segments based on number of customers, current period and historical usage for the specified period.

- The distribution of the base (number of customers) and the usage for each segment and service.

3.30.2.3 Potential Incremental Revenue

Here the information related to the Potential Incremental Revenue calculated by CVM, the service configuration parameters and the insights generated from CVM for each customer segment and service for the specified period related to the potential incremental revenue is shown.

The following configuration measures and filters are displayed in the top of the page:

- Date (selected period): By default, is month.

- Service name: By default, all services are selected except TOTAL.

- Weighted Average of Actual Historical Usage: Seasonality configuration per service. The end user has the option of increasing or decreasing the weight for specific period based on the market situation.

- Start date of Service Validity is date parameter that defines the start date of the service.

- End date of Service Validity is the expiry date for the service.

- Total average of actual usage and Total weighted average are flags (0/1) enabling the user switching between the calculation from the normal historical average to the weighted average calculations for the CVM historical usage measures (only one of the flags can be 1 not both).

- Total discount/increase factor for service usage is a parameter to enable the end user to decrease/increase the final expected target per service based on the marketing strategy and the CMO approval.

The following details are displayed for the charts shown in this page:

- Variance of Potential incremental usage versus the average usage per customer value segment group and compared to the total number of customers for this group.

- Distribution of potential incremental usage across customer population and attributes by gender and customer value group. In these charts, anomalies of the customer base distribution can be easily highlighted.

- Highlighted potential incremental usage for all customers (low, medium, high) per service and immediate comparison of total vs customer potential.

3.30.2.4 Campaign and Customer View

This page shows the information related to the CVM results for each and every customer linked to a specific marketing campaign and wave.

The following filters are displayed in the header of the page:

- Date (selected period): By default, is month.

- Campaign Wave: By default, wave 1 is selected (only 1 option is available).

- Marketing Action: By default, CROSS_SELL_HIGH_INTER is selected (only 1 option is available).

The following details are displayed for the charts shown in this page:

- Top 10 marketing campaigns with highest potential incremental usage in total and per customer for immediate comparison. The main filters of the page do not impact these charts.

- Campaign KPIs dynamic view of the filters selected in the header of the story page.

- Distribution of Potential incremental versus current period usage for the top N customers based on Potential incremental usage across customer value group.

- Customer trend analysis for one selected customer (in this example is 99889) for potential incremental and current period usage and forecasts for the future period.

- Customer attributes (gender, marital status, dealer activation and level of education) and potential incremental usage for the selected customer (in this example is 99889)

3.30.2.5 Customer Value Management Insights for Telco

(SAP_TEL_CVM_INSIGHTS)

Measure	Type	Formula/Properties
No of active customers	Count excluding 0 and null	- Operation [COUNT] - Measure [Current period usage] by Aggregation Dimension [Usage delta, segment, service, customer] - Conditional Aggregation [No]
ARPAU	Calculated Measure	- [Current period usage] / [No of active customers]
ARPU	Calculated Measure	- [Current period usage] / [Number of customers]
Average current usage per customer	Calculated Measure	- [Current period usage] / [Total customers]
Pot Incr Usage per customer	Calculated Measure	- [Potential Incremental Usage] / [Total customers]
Var (Pot.incr.revenue - Avg.usage)	Difference From	- Measure A [Potential Incremental Usage] - Measure B [Average Historical Usage] - Compare (A) to (B) - Set No Data as Zero [No] - Calculate as Percentage [No]
Pot Incr usage per customer against average usage per customer	Threshold	- Measure A [Potential Incremental Usage per customer] - Measure B [Average Usage per customer] - Compare (A) to (B) - Calculate as Percentage [Yes]

3.30.3 Models

The Story is using the following Data Warehouse Cloud models. They are all based on a live connection to the SAP Data Warehouse Cloud system. Setup the connection with the name **SAPDWC**.

Model Name	Technical Name
Service Usage Segmentation (CVM_TEL) (RL)	SAP_TEL_CVM_RL_SERVICE_SEGMENT
Service Configuration (CVM_TEL) (RL)	SAP_TEL_CVM_RL_SERVICE_CONF
Service Usage Insights (CVM_TEL) (RL)	SAP_TEL_CVM_RL_SERV_USG_INS

Please navigate to the SAP Data Warehouse Cloud content documentation for details.

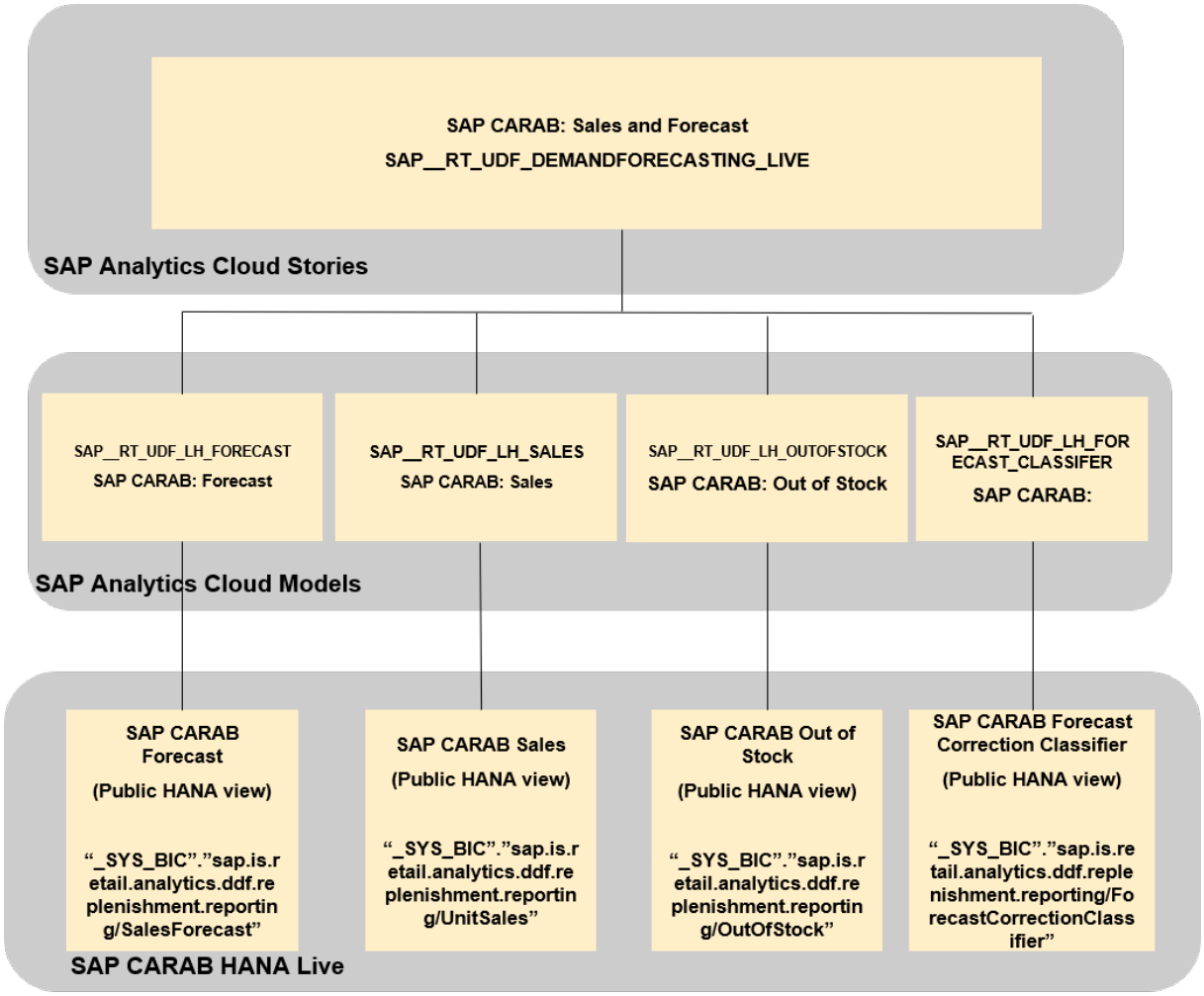
3.31 SAP Unified Demand Forecast

3.31.1 Architecture and Abstract

The SAP Analytics Cloud content for the Unified Demand Forecast story helps retailers analyze forecast data over certain time periods to identify patterns and monitor trends that influence the business. The story is based on a live connection to the SAP Customer Activity Repository data with dedicated HANA views.

Alerts are collections of one or more similar exceptions that are very important and need urgent attention. Based on alerts, planners check sales and forecast details to make calculated judgements on forecasted quantities and to change them, if necessary. To aid the process, this story has the Sales and Forecasts model, which provides an analytical overview of actual sales and system forecasts along with the out-of-stock rate for product locations and with the Forecast Correction Classifier model, planners can get a detailed insight based on the different forecast adjustments made, like the forecast adjustments , absolute forecast adjustments, positive or negative forecast adjustments across various products and location hierarchies.

Planners can further use this model in combination with the Orders model in the Replenishment Planning story to analyze how well the actual sales and system forecasts compare with order quantities.



3.31.2 Unified Demand Forecast (SAP__RT_UDF_DEMANDFORECASTING_LIVE)

This story allows planners to assess the overall situation with regards to actual sales and system forecasts by looking at out-of-stock rate in product locations. Planners can then ensure forecast quality is in alignment with the target.

In this story, the following page filters apply to the widget:

Page Filters	Description
Location Hierarchy	Filter by region/city/location
Product Hierarchy	Filter by product category down to the products
Sales Organization	Filter by sales organizations
Distribution Channel	Filter by distribution channels

Page Filters	Description
Order Channel	Filter by order channels
Replenishment Type	Filter by replenishment types
Date	Filter by date (A date range to include 90 days in the past and 30 days in the future is set as default)

The story consists of several charts. They are organized in two sections as explained below.

- Forecasts section

Chart	Type	Description
Forecasts	Comparison - Combination Column and Line	A planner can assess the overall situation with regards to actual sales and system forecasts by looking at out-of-stock rate in product locations over a time period.

- Detailed Analysis of Forecast Adjustments section

For the first four charts, planners can display information related to one of the following measures:

- Forecast Adjustments (Cumulative)
- Absolute Forecast Adjustments (Cumulative)
- Positive Forecast Adjustments (Cumulative)
- Negative Forecast Adjustments (Cumulative)

The selected measure is applied to all four charts in the section.

Chart description	Type	Description	Dimensions
[Measure] by [Dimension 1]	Trend - Line	A planner can look at different measures at a product or location hierarchy node for a time period.	[Dimension 1] is either Product Hierarchy or Location Hierarchy
[Measure] by Location Hierarchy, Product Hierarchy	Distribution - Heat Map	A planner can analyze specific products or locations for measures.	
[Measure] by Product, Date	Comparison - Bar/Column	A planner can analyze specific products on dates for measures.	
[Measure] by Date, Location	Comparison - Bar/Column	A planner can analyze specific locations on dates for measures.	

For the last two charts, planners can display information related to one of these two dimensions:

- Location Hierarchy
- Product Hierarchy

The selected dimension is applied to all four charts in the section.

Chart description	Type	Description
Forecast Adjustments (Cumulative) by Classification, [Dimension 2]	Comparison - Bar/Column	A planner can look at forecast adjustments by classification for the selected dimension.
Distribution of Absolute Forecast Adjustments (Cumulative) by Classification, [Dimension 2]	Donut	A planner can analyze the distribution of absolute forecast adjustments by classification for the selected dimension.

The measures defined in this story are listed in the following table:

Measure Name	Type	Formula/Properties
Out of Stocks (%)	FORMULA	([Total Out of Stock Product Locations]) / ([Total Product Locations]) * 100
System Forecast	SUM	
Unit Sales	SUM	
Total Out of Stock Product Locations	SUM	
Total Product Locations	SUM	
Adjusted Forecast	SUM	
Forecast Adjustments (Cumulative)	SUM	
Absolute Forecast Adjustments (Cumulative)	SUM	
Positive Forecast Adjustments (Cumulative)	SUM	
Negative Forecast Adjustments (Cumulative)	SUM	
Forecast Adjustments (Cumulative)	SUM	

3.31.3 Models

3.31.3.1 Forecasts (SAP__RT_UDF_LH_SALESFORECAST)

Model Name: SAP__RT_UDF_LH_SALESFORECAST		Connection
- Model Description: SAP CARAB: Sales and Forecasts - Planning Enabled: No		- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/SalesForecast view
Dimensions		
ID	**Description**	**Mapping/Formula**
Date	Date	
LocationHierarchyChildNode	Location hierarchy child node	
LocationHierarchyChildNodeName	Name of the location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
ProductHierarchyChildNodeName	Name of the product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
LocationHierarchyParentNodeName	Name of the location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
ProductHierarchyParentNodeName	Name of the product hierarchy parent node	
Location	Location	
LocationName	Name of the location	
OrderChannel_ATTRIBUTE	Order channel	
OrderChannelName	Name of the order channel	
DistributionChannel_ATTRIBUTE	Distribution channel	
DistributionChannelName	Name of the distribution channel	
SalesOrganization_ATTRIBUTE	Sales organization	
SalesOrgDescription	Description of the sales organization	

Model Name: SAP__RT_UDF_LH_SALESFORECAST		Connection
MRPType	Replenishment type	
MRPTypeName	Replenishment type description	
Product	Product	
ProductName	Name of the product	
Additional Notes About the Model		
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.		

3.31.3.2 Forecast Classifier (SAP__RT_UDF_LH_FORECAST_CLASSIFIER)

Model Name: SAP__RT_UDF_LH_FORECAST_CLASSIFIER		Connection
- Model Description: SAP CARAB: Forecast Classifier - Planning Enabled: No		- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/ForecastCorrectionClassifier view
Dimensions		
ID	**Description**	**Mapping/Formula**
Date	Date	
LocationHierarchyChildNode	Location hierarchy child node	
ProductHierarchyChildNode	Product hierarchy child node	
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	

Model Name: SAP__RT_UDF_LH_FORECAST_CLASSIFIER	Connection
Location	Location
OrderChannel_ATTRIBUTE	Order channel
DistributionChannel_ATTRIBUTE	Distribution channel
SalesOrganization_ATTRIBUTE	Sales organization
SalesOrgDescription	Description of the sales organization
MRPType	Replenishment type
Product	Product
CorrectionClassifier	Classification
Additional Notes About the Model	
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.	

3.31.3.3 Sales (SAP__RT_UDF_LH_SALES)

Model Name: SAP__RT_UDF_LH_SALES	Connection
- Model Description: SAP CARAB: Sales - Planning Enabled: No	- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/UnitSales view
Dimensions	
Date	Date
LocationHierarchyChildNode	Location hierarchy child node
ProductHierarchyChildNode	Product hierarchy child node

Model Name: SAP__RT_UDF_LH_SALES		Connection
LocationHierarchyParentNode	Location hierarchy parent node	
ProductHierarchyParentNode	Product hierarchy parent node	
Location	Location	
OrderChannel_ATTRIBUTE	Order channel	
DistributionChannel_ATTRIBUTE	Distribution channel	
SalesOrganization_ATTRIBUTE	Sales organization	
SalesOrgDescription	Description of the sales organization	
MRPType	Replenishment type	
Product	Product	
Additional Notes About the Model		
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.		

3.31.3.4 Out of Stock(UDF) (SAP__RT_UDF_LH_OUTOFSTOCK)

Model Name: SAP__RT_UDF_LH_OUTOFSTOCK		Connection
- Model Description: SAP CARAB: Sales - Planning Enabled: No		- Live data connection to SAP HANA: SAPRTCARAB - sap.is.retail.analytics.ddf.replenishment.reporting/OutOfStock view
Dimensions		
ID	Description	Mapping/Formula
Date	Date	

Model Name: SAP__RT_UDF_LH_OUTOFSTOCK	Connection
LocationHierarchyChildNode	Location hierarchy child node
ProductHierarchyChildNode	Product hierarchy child node
LocationHierarchyParentNode	Location hierarchy parent node
ProductHierarchyParentNode	Product hierarchy parent node
Location	Location
OrderChannel_ATTRIBUTE	Order channel
DistributionChannel_ATTRIBUTE	Distribution channel
SalesOrganization_ATTRIBUTE	Sales organization
SalesOrgDescription	Description of the sales organization
MRPType	Replenishment type
Product	Product
Additional Notes About the Model	
The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) The model contains the following variables: - SAP Client (P_SAPClient) - Logical System (P_LogicalSystem) - Product Hierarchy (P_ProductHierarchy) - Location Hierarchy (P_LocationHierarchy) - Time Series Source (P_TSSource) These are input fields that must be entered by the user to execute the SAC story.	

3.32 SAP Utilities: Meter to Cash

3.32.1 Overview

This package covers the business scenario the **Meter to Cash** of the industry utilities. It is based on data from S/4HANA source systems. The content consists of two packages:

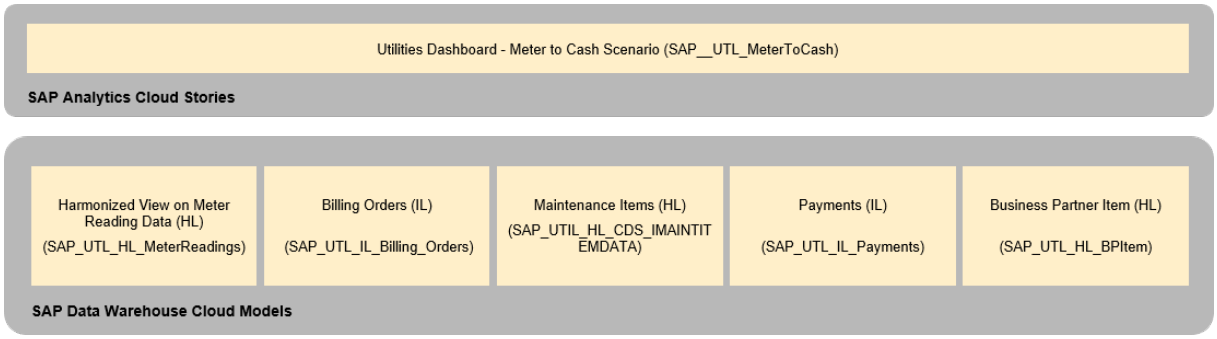
- a SAP Analytics Cloud content package (this package) for the visualizations and
- a SAP Data Warehouse Cloud package for the data models, remote connection etc.

You need both packages to setup this scenario. Check the Data Warehouse Cloud content package and SAP Data Warehouse Cloud content documentation on how to install the SAP Data Warehouse Cloud content.

3.32.2 Architecture and Abstract

The **Meter to Cash** (M2C) business process is a relevant use case for the Utilities Industry as it allows the company to see its revenue cycle as well as the impact on the end customer. The goal is to ensure that the bills are created on reliable meter reading data and that the customer pays on due date.

This SAP Analytics Cloud Content provides overviews and details pages for five sections, Meter Reading, Maintenance, Billing Orders, Payments and Account Receivables. The user has access to a consequent panel of filters to play with the data as per their wish.



> **i** Note
>
> The colored objects are documented in this chapter. In SAP Data Warehouse Cloud, we defined three layers:
>
> - Inbound Layer (IL): A view that recalls only the extractors and no other view.
> - Harmonization Layer (HL): A view that recalls other views.
> - Reporting Layer (RL): A view that recalls Harmonization Layers.

3.32.3 Story

The package contains one story with 12 pages.

Story name: Utilities Dashboard - Meter to Cash Scenario (SAP__UTL_MeterToCash)

These are the 12 pages:

- Home
- Utilities Overview
- Reading Overview
- Reading Details
- Maintenance Overview
- Maintenance Details
- Billing Orders Overview
- Billing Orders Details
- Payments Overview
- Payments Details
- Account Receivables Overview
- Account Receivables Details

Measure Name	Type	Formula/Properties
Billed VS Real Percentage in the Harmonized View on Meter Reading Data (HL)	Calculated Measure	(["Harmonized View on Meter Reading Data (HL)":MR_BILL]-["Harmonized View on Meter Reading Data (HL)":MRESULT])/["Harmonized View on Meter Reading Data (HL)":MRESULT]

3.32.4 Models

The following SAP Datawarehouse Cloud models are used in the story Utilities Dashboard - Meter to Cash Scenario (SAP__UTL_MeterToCash):

- Harmonized View on Meter Reading Data (HL) (SAP_UTL__HL_MeterReadings)
- Billing Orders (IL) (SAP_UTL_IL_Billing_Orders)
- Maintenance Items (HL) (SAP_UTIL_HL_CDS_IMAINTITEMDATA)
- Payments (IL) (SAP_UTIL_IL_Payments)
- Business Partner Item (HL) (SAP_UTL_HL_BPItem)

Find more details on the Data Warehouse Cloud data models in the SAP Data Warehouse Cloud content documentation.

3.33 Sports One Analytics Version 2

3.33.1 Sports One Analytics

SAP Sports One Analytics Contains two folders:

- **SAP Sports One Analytics**
- **SAP Sports One Analytics (German)**

Find the Details of the content below along with the links:

- **Overall Transparency:**
  360-degree overview of all sports areas of a club, for example, Team Management, Health, Performance Diagnostics, Load, Training Planning, Scouting, and many others
- **Deep Insights:**
  360-degree overview of a team, a position or a single player/athlete
- **User Experience**
  - Fitting visualizations and context information
  - Possibility of ad-hoc analyses to go even more into data details to find hidden results

For More Details please refer the below links:

- Sports One Documentation
- What's New?

3.34 Supply Chain Management for Life Sciences

3.34.1 Architecture and Abstract

The Life Sciences industry is currently at the center of everyone's attention. In a pandemic context it is more critical than ever that the supply chain supporting the industry works in a efficient way, guaranteeing maximum quality of supply in order to minimize risks, while at the same time keeping costs low.

This initial release of the content provides broad Supply Chain Management models as well as an inbound quality model, in order to support the Supply Chain for Life Sciences Scenario.

The data models are catered for further exploration and drill-downs into relevant dimensions and measures.

It is based on data from SAP S/4HANA on premise source systems.

This release will focus on a complete foundation for Supply Chain Management related concepts in terms of modelling. It also provides some additional quality metrics related to the inspection lots in order to evaluate the inbound delivery quality.

The SAP Analytics Cloud story covers the following topics:

- Inbound Deliveries with Inspection Lot quality

- Goods Movements

- Sales Documents

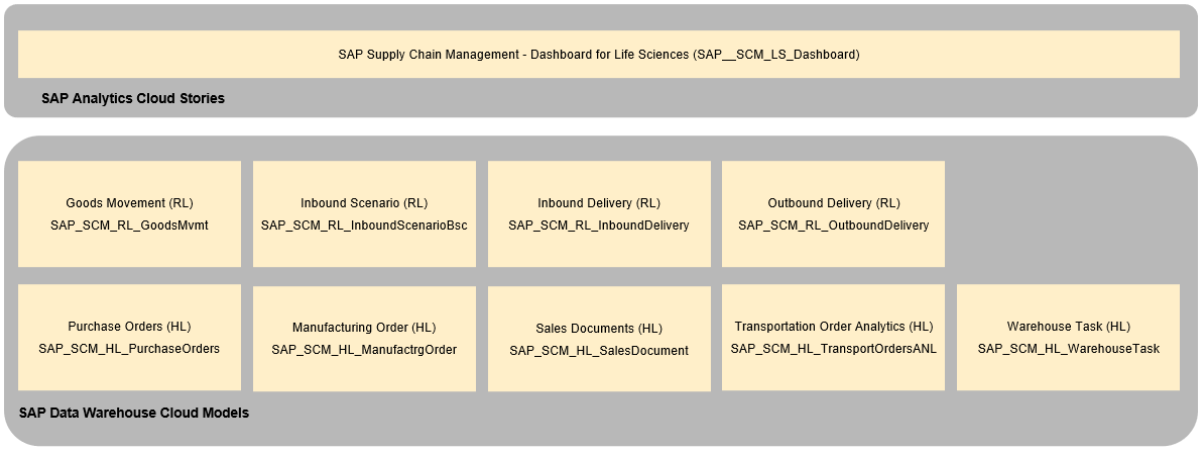
- Purchase Orders

- Transportation Orders

- Manufacturing Orders

- Warehouse Tasks

- Outbound Deliveries



3.34.2 Stories

The package contains one story with 10 pages:

Story name: Life Sciences Supply Chain Dashboard (SAP__SCM_LS_Dashboard)

These are the 10 pages:

- Home

- Inbound Quality

- Basic Inbound Scenario

- Purchase Orders

- Goods Movements

- Manufacturing Orders

- Sales Documents

- Transportation Orders

- Warehouse Task

- Outbound Deliveries

Depending on the data and the filters selection, some measures or calculations might show multiple currencies or units.

All measures for the 'Home' page, and some presented at the top of the 'Inbound Quality' page are restricted by time (i.e. YTD or Previous Year).

3.34.3 Models

The following SAP Datawarehouse Cloud models are used in the Life Sciences Supply Chain Dashboard (SAP__SCM_LS_Dashboard) story:

- Goods Movement (RL) ((SAP_SCM_RL_GoodsMvmt)

- Inbound Scenario (RL) (SAP_SCM_RL_InboundScenarioBsc)

- Sales Documents (HL) (SAP_SCM_HL_SalesDocument)

- Purchase Orders (HL) (SAP_SCM_HL_PurchaseOrders)

- Transportation Order Analytics (HL) (SAP_SCM_HL_TransportOrdersANL)

- Manufacturing Order (HL) (SAP_SCM_HL_ManufactrgOrder)

- Inbound Delivery (RL) (SAP_SCM_RL_InboundDelivery)

- Warehouse Task (HL) (SAP_SCM_HL_WarehouseTask)

- Outbound Delivery (RL) (SAP_SCM_RL_OutboundDelivery)

- Warehouse Task (HL) (SAP_SCM_HL_InboundDelivery)

Some details related to customer custom configurations or parametrizations will have to be added to the models and stories in order to be consumed, for example custom material classifications.

Find more details on the Data Warehouse Cloud data models in the SAP Data Warehouse Cloud content documentation:

https://help.sap.com/doc/4b618244ad5f4fbb8423d08996f8b891/cloud/en-US/SAP_Data_Warehouse_Cloud_Content.pdf

3.35 Supply Demand Overview for SAP S/4HANA Fashion and Vertical Business

3.35.1 Prerequisites

- The minimum requirement for SAC content should be connected to SAP S/4HANA 2020 FPS0.
- All prerequisites and details on SAC views for Supply and Demand Overview are mentioned in the SAP Note 2979783.

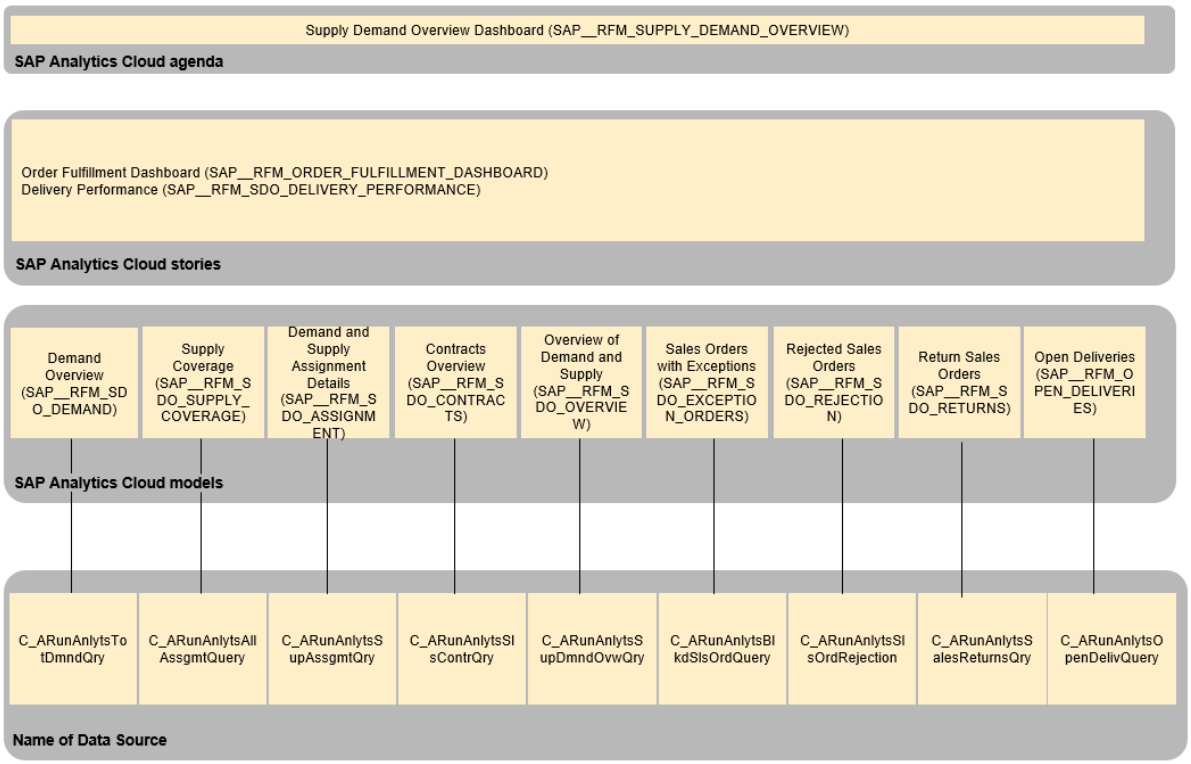
3.35.2 Architecture and Abstract

With SAP Analytics Cloud content for the supply and demand overview, fashion companies can leverage consistent business intelligence to drive business decisions on fulfilling customer orders and supply planning based on better visibility into the demand and supply situation.

The content helps you to do the following:

- Analyze the overall demand situation and its fulfillment rates
- Analyze the supply availability and supply delivery delay and there by optimizing supply chain planning.
- Analyze reference rates of sales contracts.
- Analyze the reasons for customer returns and rejections.

The SAP Analytics Cloud content for the supply and demand overview is based on a live connection to the SAP S/4HANA Fashion and vertical business with dedicated CDS views.



3.35.3 Digital Boardroom

The following digital boardroom is available: SAP__RFM_SUPPLY_DEMAND_OVERVIEW (Supply Demand Overview Dashboard).

This digital boardroom provides insights into the overall supply and demand situation.

The key features of this digital boardroom are:

- Overall situation of open demand, open supply and assigned supply, and demand.
- Demand with exceptions such as incomplete orders, orders with billing block.
- Assignment status of the demand such as open demand, Ready for Delivery (F), on Reservation (R), and so on.
- Visibility of supply availability (early/on-time/delay).

This digital boardroom consists of 2 stories:

- Order Fulfillment Dashboard (SAP__RFM_ORDER_FULFILLMENT_DASHBOARD)
- Delivery Performance (SAP__RFM_SDO_DELIVERY_PERFORMANCE)

These stories are documented further in the Stories section.

3.35.4 Stories

The following stories are part of the Retail and Fashion Management - Supply Demand Overview (RFM_SDO) content package:

- Order Fulfillment Dashboard (SAP__RFM_ORDER_FULFILLMENT_DASHBOARD)
- Delivery Performance (SAP__RFM_SDO_DELIVERY_PERFORMANCE)

3.35.4.1 Order Fulfillment Dashboard (SAP__RFM_ORDER_FULFILLMENT_DASHBOARD)

This story provides visibility of the overall demand and supply situation. The story contains the following pages.

Supply Demand Overview by Location

This page contains information about the following:

- Distribution of demand from plant country to customer country
- Open demand and open supply per plant location
- Amount per country or region dimensions

Fulfillment Overview

This page contains information about the following:

- Order fulfillment % per selected dimension
- Delivered % per selected dimension
- Overall ordered, confirmed, assigned quantities

Supply Coverage Overview

This page contains information about the following:

- Supply availability and supply availability delay
- Assigned quantities per supply source

- Assigned quantities per supply availability
- Assigned quantities per dimension
- Assigned quantities with early or on-time supply per selected dimension

Sales Orders with Exceptions

This page contains information about the following:

- Amount per exception
- Amount per selected dimension
- Number of items per exception
- Number of items per selected dimension

Contracts Overview

This page contains information about the following:

- Open referenced, total assigned, open for reference
- Assignment % by supply source
- Open contracts, total assigned and total referenced % per selected dimension
- Open contracts per expiry range

Rejections and Returns

This page contains information about the following:

- Amount per reason for rejections
- Amount per selected dimension
- Number of items per selected dimension
- Amount per reason for return
- Amount per plant
- Number of returns item per plant

Measure Name	Type	Formula/Properties
Amount	CDS Measure	Amount
Open Demand	CDS Measure	Ordered Quantity - [Assigned Quantity + Delivered Quantity]
Open Supply	CDS Measure	Supply Quantity - Assigned Quantity
Open Demand (%)	Calculated Measure	Open Demand Quantity / Ordered Quantity * 100
Open Supply (%)	Calculated Measure	Open Supply Quantity / Total Supply Quantity * 100
Overall Fulfillment (%)	Calculated Measure	[Assigned Quantity + Delivered Quantity] / Ordered Quantity * 100
Confirmed as Requested	Calculated Measure	Confirmed Quantity / Ordered Quantity * 100

Measure Name	Type	Formula/Properties
Delivered as Requested	Calculated Measure	Delivered Quantity / Ordered Quantity * 100
Fulfilled Quantity	Calculated Measure	Assigned Quantity + Delivered Quantity
Assigned By Physical Supply	Calculated Measure	Assigned with Physical Supply / Ordered Quantity * 100
Assigned By Early / On Time Supply	Calculated Measure	Assigned by Early and On Time Supply / Ordered Quantity * 100
Total Referenced % (Contracts)	Calculated Measure	Referenced / Ordered Quantity * 100
Ready for Delivery %	Calculated Measure	Ready for Delivery / Ordered Quantity * 100

3.35.4.2 Delivery Performance Overview (SAP__RFM_SDO_DELIVERY_PERFORMANCE)

This story provides an overview of the current situation of demand documents that are ready for delivery and open for delivery. The story contains the following pages.

Ready for Delivery

This page contains information about the following:

- Ready for delivery for next 7 days.

  > **i** Note
  >
  > You can specify your own value for the number of days according to your requirements.

- Ready for delivery per selected dimension
- Assigned quantities with Ready for Delivery (F), Open for Release Check (O), On Reservation (R) and On Hold (H) statuses

Open Deliveries

This page contains information about the following:

- Open deliveries for next 15 days

  > **i** Note
  >
  > You can specify your own value for the number of days according to your requirements.

- Delivered quantities per demand type
- Delivered quantities per delivery priority
- Delivered quantities per document type

- Delivered quantities per selected dimension

Measure Name	Type	Formula/Properties
Ready for Delivery %	Calculated Measure	Ready for Delivery / Ordered Quantity * 100

3.35.5 Models

Demand Overview

Model Name: SAP__RFM_SDO_DEMAND	Connection
Model Description: Demand Overview	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNALYTSTOTDMND
	CDS Query view name: C_ARunAnlytsTotDmndQry

Supply Coverage

Model Name: SAP__RFM_SDO_SUPPLY_COVERAGE	Connection
Model Description: Supply Coverage	Connection Analytical Query: 2CCARNALYTSALLAGQ
Planning Enabled: No	CDS Query view name: C_ARunAnlytsAllAssgmtQuery
	Connection Type: Live connection SAP S/4HANA

Demand and Supply Assignment Details

Model Name: SAP__RFM_SDO_ASSIGNMENT	Connection
Model Description: Demand and Supply Assignment Details	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNALYTSASGMTQY
	CDS Query view name: C_ARunAnlytsSupAssgmtQry

Contracts Overview

Model Name: SAP__RFM_SDO_CONTRACTS	Connection
Model Description: Contracts Overview	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNALYTSCONTR
	CDS Query view name: C_ARunAnlytsSlsContrQry

Overview of Demand and Supply

Model Name: SAP__RFM_SDO_OVERVIEW	Connection
Model Description: Overview of Demand and Supply	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CARNANLYTSADOVWQ
	CDS Query view name: C_ARunAnlytsSupDmndOvwQry

Sales Orders with Exceptions

Model Name: SAP__RFM_SDO_EXCEPTION_ORDERS	Connection
Model Description: Sales Orders with Exceptions	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNALYTSOBLK
	CDS Query view name: C_ARunAnlytsBlkdSlsOrdQuery

Rejected Sales Orders

Model Name: SAP__RFM_SDO_REJECTION	Connection
Model Description: Rejected Sales Orders	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNANLYTSREJSO
	CDS Query view name: C_ARunAnlytsSlsOrdRejection

Return Sales Orders

Model Name: SAP__RFM_SDO_RETURNS	Connection
Model Description: Return Sales Orders	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNANLYTSRETSO
	CDS Query view name: C_ARunAnlytsSalesReturns

Open Deliveries

Model Name: SAP__RFM_OPEN_DELIVERIES	Connection
Model Description: Open Deliveries	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNALYTSOPDLV
	CDS Query view name: C_ARunAnlytsOpenDelivQuery

Supply Overview

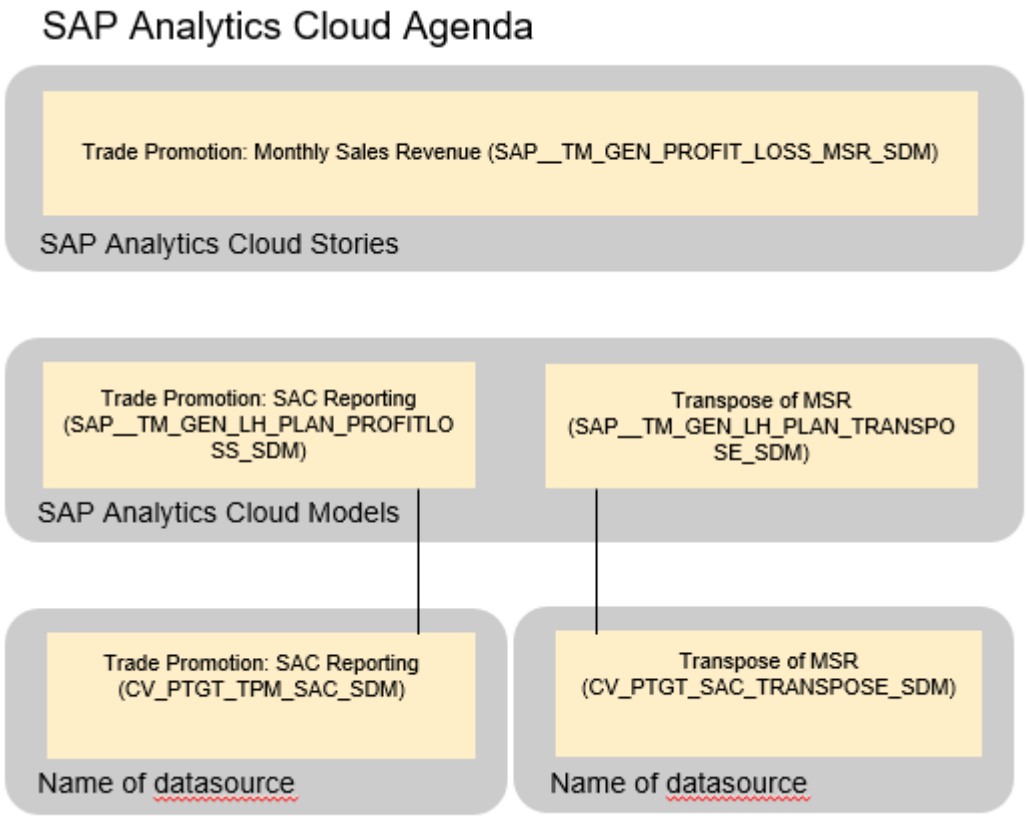
Model Name: SAP__RFM_SDO_SUPPLY	Connection
Model Description: Supply Overview	Connection Type: Live connection SAP S/4HANA
Planning Enabled: No	Connection Analytical Query: 2CCARNANLYTSADSUPQ
	CDS Query view name: C_ARunAnlytsTotSupQry

3.36 Trade Management (TM)

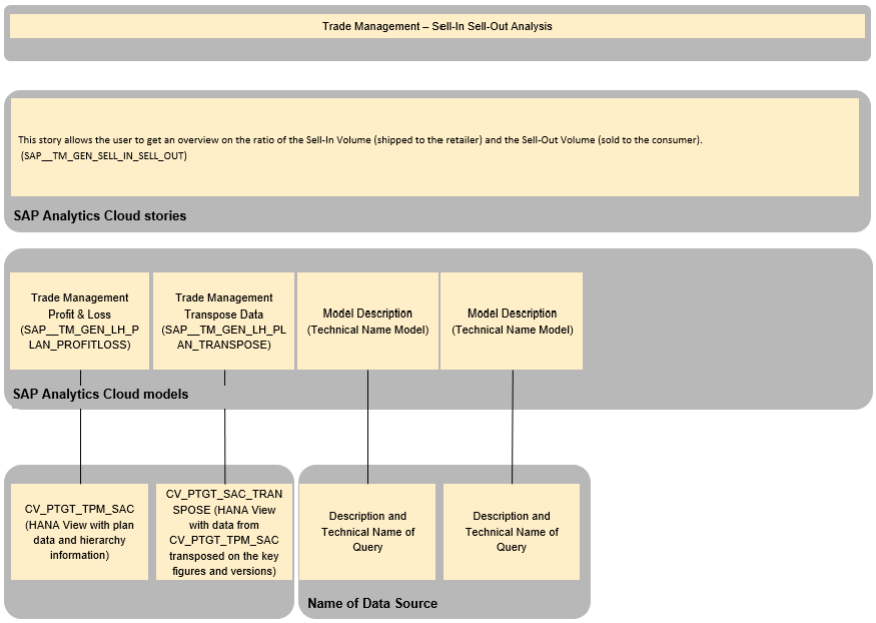
3.36.1 Architecture and Abstract

Retailer View: Typically, in consumer products industries, the Key Account Manager (KAM) is frequently talking to the retailer to review the business plan progress as well as discuss upcoming and completed activities such as trade promotions. It is important that a KAM has key information on the plan from a retailer's perspective. That includes data such as retailer profit and retailer margin. Typically, the retailer uses a formula to calculate his margin that is different from the one the manufacturer uses. In addition, sell-out data is very important for this scenario.

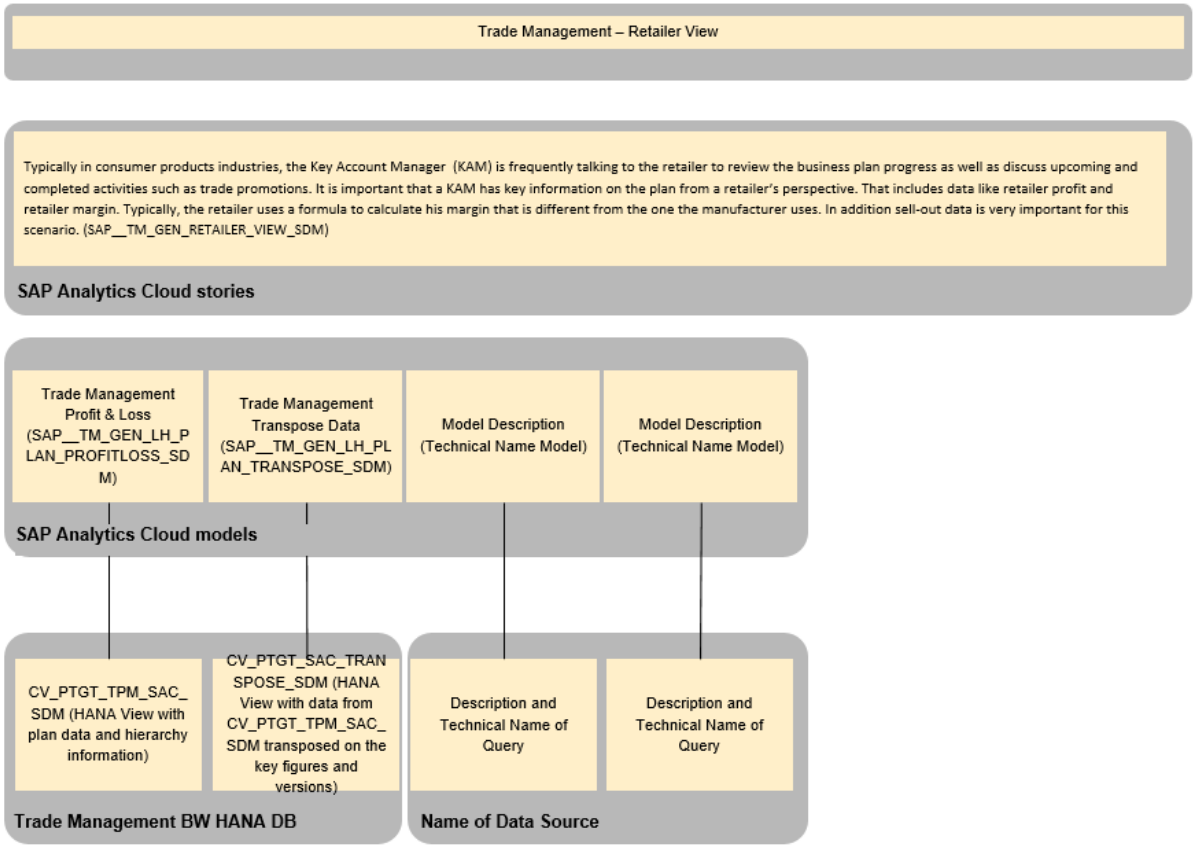
Architecture: SAP Trade Management – Monthly Sales Review/ Sell-In Sell-Out Analysis / Retailer View



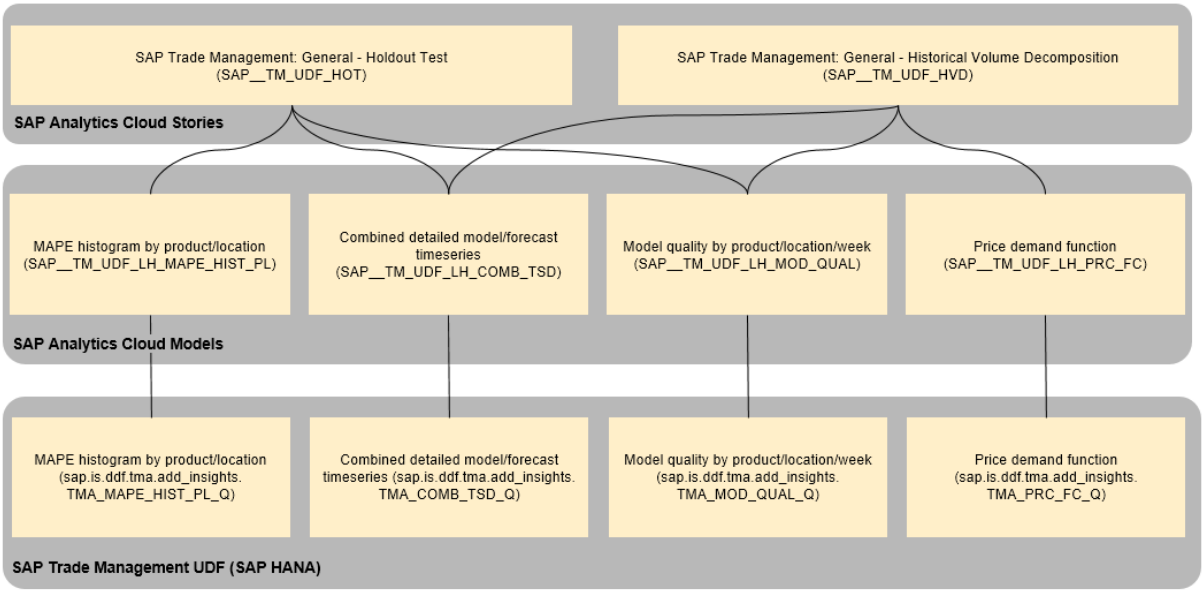
Trade Management – Sell-in/Sell Out Comparison Report



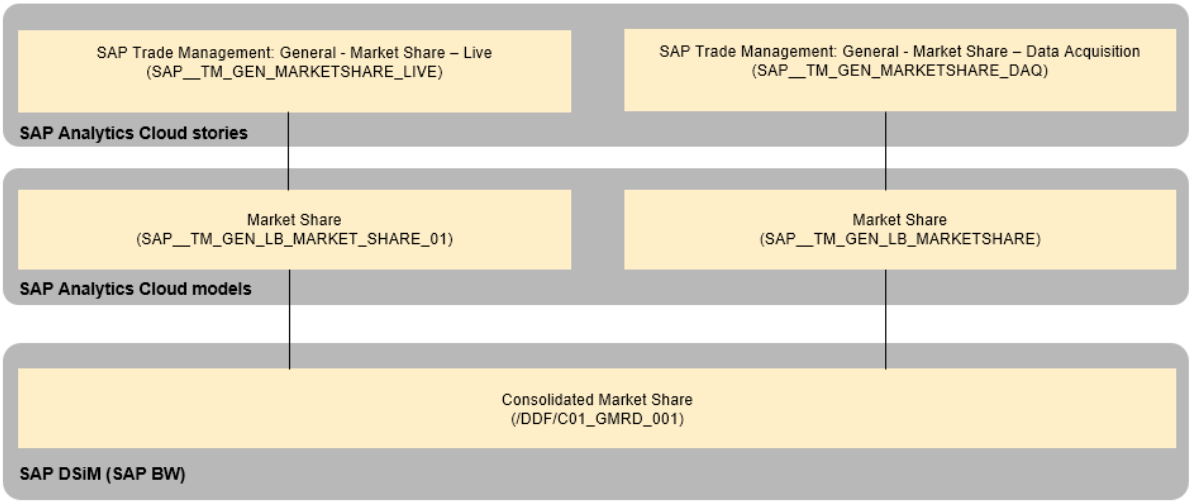
Architecture: SAP Trade Management – Retailer View



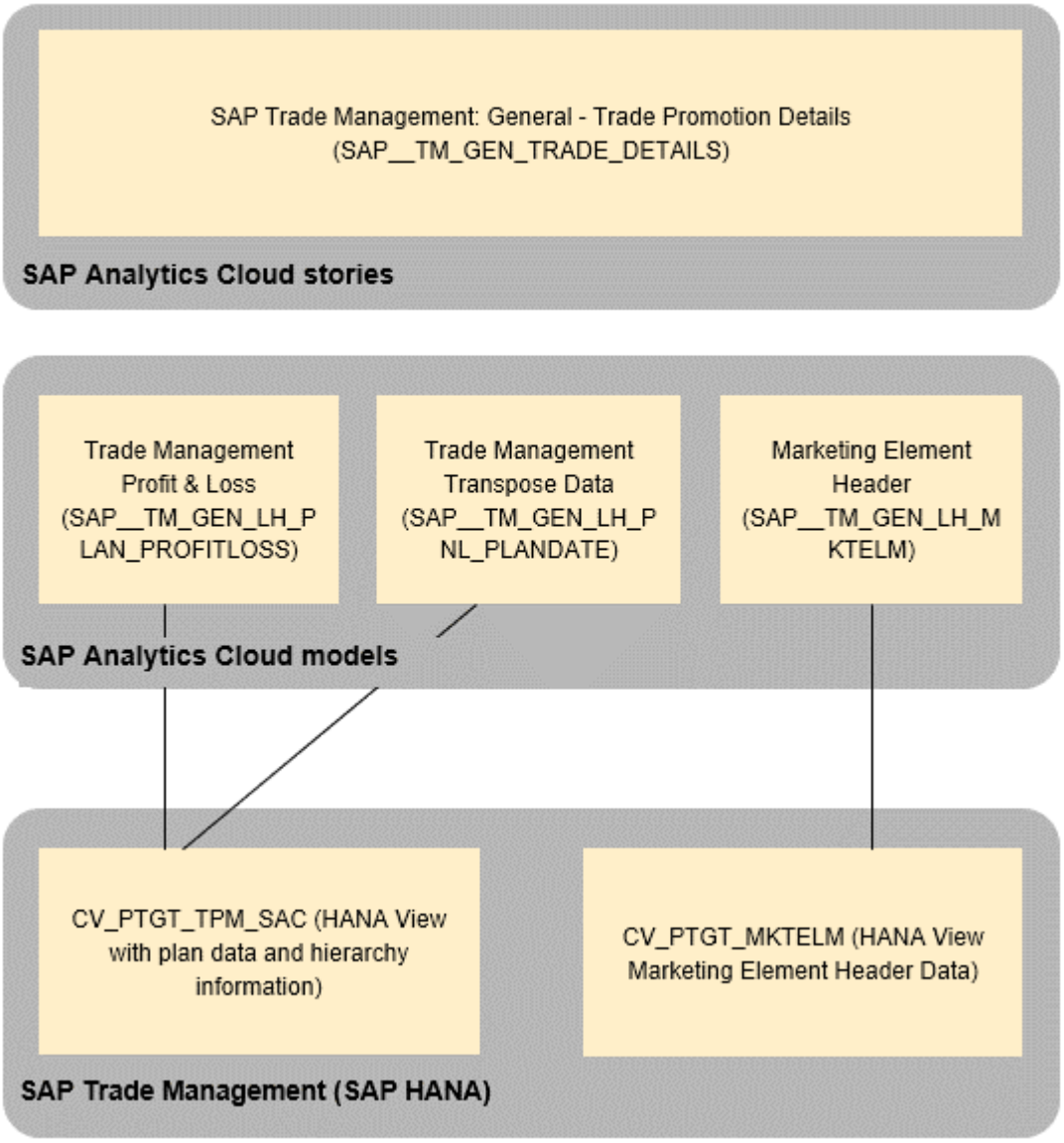
Architecture: SAP Trade Management – Historical Volume Decomposition / Holdout Report

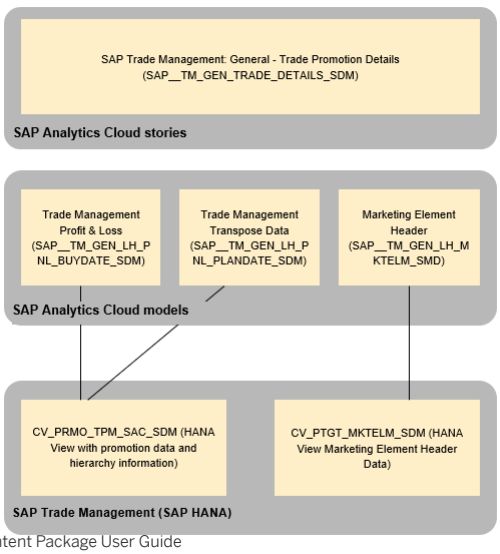


Architecture: SAP Trade Management – Historical Volume Decomposition / Holdout Report



Architecture: SAP Trade Management – Trade Promotion Details





3.36.2 Stories

The following stories are included in the content package:

- SAP Trade Management: General - Monthly Sales Review (SAP__TM_GEN_PROFIT_LOSS_MSR)
- SAP Trade Management: General - Sell-In Sell-Out Analysis (SAP__TM_GEN_SELL_IN_SELL_OUT)
- SAP Trade Management: General - Retailer View (SAP__TM_GEN_RETAILER_VIEW)
- SAP Trade Management: General - Holdout Test (SAP__TM_UDF_HOT)
- SAP Trade Management: General - Historical Volume Decomposition (SAP__TM_UDF_HVD)
- SAP Trade Management: General - Market Share - Live (SAP__TM_GEN_MARKETSHARE_LIVE)
- SAP Trade Management: General - Market Share - Acquisition (SAP__TM_GEN_MARKETSHARE_DAQ)
- Trade Management - Trade Promotion Details (SAP__TM_GEN_TRADE_DETAILS)

3.36.2.1 General - Monthly Sales Review (SAP__TM_GEN_PROFIT_LOSS_MSR)

The Monthly Sales Review Dashboard and the specific detailed KPI pages are used by consumer products manufacturers to review the performance of retailers and categories right down to product level. The key audience targeted comprises sales directors and key account managers.

Measure Name	Type	Formula/Properties
Δ LE vs PY	Calculated Measure	[SAP__TM_GEN_LH_PLAN_TRANS-POSE_SDM:Latest_Estimates] - [SAP__TM_GEN_LH_PLAN_TRANS-POSE_SDM:Previous_Year]
Δ LE vs PY (%)	Calculated Measure	Δ LE vs PY / [Previous Year]
Δ LE vs Target	Calculated Measure	[SAP__TM_GEN_LH_PLAN_TRANS-POSE_SDM:Latest_Estimates] - [SAP__TM_GEN_LH_PLAN_TRANS-POSE_SDM:Target]
Δ LE vs Target (%)	Calculated Measure	Δ LE vs Target / [Target]
Sell-In Total PY	Restricted Measure	[Sell_In_Total] restricted by [d/Version_2] = ('Previous Year') ,[d/VERSION])
Promo Invest Over GSV (%) - LE	Restricted Measure	Promo Invest Over GSV (%) [Promo_Invest_Over_GSV_Percentage] restrict ed by [d/Version_2] on [Latest Estimates]
Promo Invest Over GSV (%) - Target	Restricted Measure	Promo Invest Over GSV (%) [Promo_Invest_Over_GSV_Percentage] restricted by [d/Version_2] on [Target]

3.36.2.2 General - Sell-In Sell-Out Analysis (SAP__TM_GEN_SELL_IN_SELL_OUT)

This story allows the user to get an overview on the ratio of the Sell-In Volume (shipped to the retailer) and the Sell-Out Volume (sold to the consumer).

Measure Name	Type	Formula/Properties
Adjusted Sell-Out	Calculated Measure	[SAP__TM_GEN_LH_PLAN_PROFIT-LOSS:Sell_Out_Total_BaseUplift] * [Avg Coverage Factor]
Moving Avg Sell-In	Calculated Measure	Average ([Sell-In Total])
Moving Avg Sell-Out	Calculated Measure	Average ([Sell-Out Total])
Retail Coverage Factor	Calculated Measure	[Moving Avg Sell-Out] / [Moving Avg Sell-In]
Avg Coverage Factor	Calculated Measure	Average ([Retail Coverage Factor])

3.36.2.3 General - Retailer View (SAP__TM_GEN_RETAILER_VIEW)

Typically, in consumer products industries, the Key Account Manager (KAM) is frequently talking to the retailer to review the business plan progress as well as discuss upcoming and completed activities such as trade promotions. It is important that a KAM has key information on the plan from a retailer's perspective. That includes data such as retailer profit and retailer margin. Typically, the retailer uses a formula to calculate his margin that is different from the one the manufacturer uses. In addition, sell-out data is very important for this scenario.

3.36.2.4 General - Holdout Test (SAP__TM_UDF_HOT)

Every time data is streamed into the UDF science engine and a new statistical model is created, the accuracy of the model itself and, most important of all, the forecast power needs to be evaluated. If the level of accuracy is not as high as expected, the data scientist or analyst will want to iterate on the customer product combinations that account for a substantial share of unit sales. It is often helpful to review the time series in order to identify data issues or what's known as model tweaking potential. It's essential in this step to focus on the most important items, that is products and customers with high unit sales paired with a high MAPE.

3.36.2.5 General - Historical Volume Decomposition (SAP__TM_UDF_HVD)

It is essential to know which merchandizing tactics, such as secondary displays or features, generate the best uplift. Of course, this is also true of the retailer shelf price because understanding how consumer price

elasticity behaves allows better decisions to be made, for example, when a promotion is created. Having the right merchandizing tactics and retailer shelf prices in a promotion ultimately helps to cut costs because knowledge about a frontpage feature not generating more uplift than say a normal page keeps the investment smaller. Knowing the price elasticity can help to find the right price to generate the necessary uplift to meet sales targets, for example.

3.36.2.6 General - Market Share - Live (SAP__TM_GEN_MARKETSHARE_LIVE)

Provides an overview of current market shares across categories, sub-categories, manufacturers, brands, and sub-brands. See who wins and who loses in the market and where customers are moving to within the categories.

3.36.2.7 General - Market Share - Data Acquisition (SAP__TM_GEN_MARKETSHARE_DAQ)

This story is identical to story SAP__TM_GEN_MARKETSHARE_LIVE besides the underlying model. This story is based on a model with imported data.

3.36.2.8 Trade Promotion Details (SAP__TM_GEN_TRADE_DETAILS)

Measure Name	Type	Formula/Properties
Sell-In Total	Calculated Measure	[_JBPB_AVOLB_T] + [_JBPB_AVOLU_T]
Sell-Out Total	Calculated Measure	[_JBPB_AVSOB_T] + [_JBPB_AVSOU_T]
Average List Price	Calculated Measure	Average ([List Price])
Average Retailer Shelf Price	Calculated Measure	Average ([Retailer Shelf Price])

3.36.2.9 Trade Promotion Details (SAP__TM_GEN_TRADE_DETAILS_SDM)

Measure Name	Type	Formula/Properties
Sell-In Total	Calculated Measure	[_JBPB_AVOLB_T] + [_JBPB_AVOLU_T]
Sell-Out Total	Calculated Measure	[_JBPB_AVSOB_T] + [_JBPB_AVSOU_T]
Average List Price	Calculated Measure	Average ([List Price])
Average Retailer Shelf Price	Calculated Measure	Average ([Retailer Shelf Price])

3.36.3 Models

3.36.3.1 SAP Analytics Cloud Reporting (SAP__TM_GEN_LH_PLAN_PROFITLOSS)

Model Name: SAP__TM_GEN_LH_PLAN_PROFITLOSS	Connection
• Model Description: Trade Management: SAC Reporting • Planning Enabled: No	• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_TPM_SAC

Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	
0DISTR_CHAN	Distribution Channel	
0DIVISION	Division	
/JBPB/PLAN	Plan ID	
/JBPB/SCEN	Scenario ID	
/JBPB/TUCUPRD	TU CU Product	
/JBPB/VERSION	JBP Version	
/JBPB/TUCU	Unit of Data	

Model Name: SAP__TM_GEN_LH_PLAN_PROFITLOSS	Connection
Version	Version or Source of Data
Additional Notes about the model	
N/A	

> **i** Note
>
> * Private dimension and other dimensions are public.

Trade Promotion SAC reporting: KPI's defined in Data source

Measure Name	Type	Formula/Properties
Sell-In Total	Calculated Measure	[_JBPB_AVOLB_T] + [_JBPB_AVOLU_T]
Sell-In Base	Calculated Measure	[_JBPB_AVOLB_T]
Sell-In Uplift	Calculated Measure	[_JBPB_AVOLU_T]
Sell-Out Total	Calculated Measure	[_JBPB_AVSOB_T] + [_JBPB_AVSOU_T]
Sell-Out Base	Calculated Measure	[_JBPB_AVSOB_T]
Sell-Out Uplift	Calculated Measure	[_JBPB_AVSOU_T]
List Price	Calculated Measure	[_JBPB_ARLIST] / [Sell_In_Total]
Gross Sales Value	Calculated Measure	[Sell_In_Total] * [List_Price]
Net Net Value Total	Calculated Measure	[Net_Invoice_Value_Total] – [Off_Invoice_Total]
Slotting Fee(ON)	Calculated Measure	(([Slotting_Fee_Discount_pU] + [Slotting_Fee_Discount_percentage] * [List_Price]/100)) * [Sell_In_Total]
Slotting_Fee_Discount_pU	Calculated Measure	Case([Sell_In_Total],0,0, ([_JBPB_ARPLF_I]/[Sell_In_Total]))
Slotting Fee Discount (%)	Calculated Measure	Case(abs([Gross_Sales_Value]),0,0, (([_JBPB_APPLF_I]*100)/ abs([Gross_Sales_Value])))
Promo Discounts (ON)	Calculated Measure	([Promo_Discount_pU]+[Promo_Discount_percentage]*[List_Price]/ 100)*[_JBPB_AVPRM_T]
Promo Discount (pU)	Calculated Measure	Case([_JBPB_AVPRM_T],0, 0 , ([_JBPB_AREXV_I]/ [_JBPB_AVPRM_T]))
Promo Discount (%)	Calculated Measure	case(abs([Promo_GSV]),0,0, (([_JBPB_APEXV_I]*100)/ abs([Promo_GSV])))

Measure Name	Type	Formula/Properties
Slotting Fee (OFF)	Calculated Measure	(([Slotting_Fee_Rebate_pU]+[Slotting_Fee_Rebate_percentage])*([List_Price]/100))*[Sell_In_Total]+[_JBPB_LPLF_O]
Slotting Fee Rebate (pU)	Calculated Measure	Case([Sell_In_Total],0,0,([_JBPB_ARPLF_O]/[Sell_In_Total]))
Slotting Fee Rebate (%)	Calculated Measure	case(abs([Gross_Sales_Value]),0,0,(([_JBPB_APPLF_O]*100)/abs([Gross_Sales_Value])))
Slotting Fee Rebates (Fixed)	Calculated Measure	[_JBPB_LPLF_O]
Promo Rebates (OFF)	Calculated Measure	(([Promo_Rebate_pU]+[Promo_Rebate_percentage])*([List_Price]/100))*[_JBPB_AVPRM_T]+[_JBPB_LCPP_O]
Promo Rebate (pU)	Calculated Measure	Case([_JBPB_AVPRM_T],0,0,([_JBPB_ARCPP_O]/[_JBPB_AVPRM_T]))
Promo Rebate (%)	Calculated Measure	Case([Promo_GSV],0,0,(([_JBPB_APCPP_O]*100)/abs([Promo_GSV])))
Promo Rebate (Fixed)	Calculated Measure	[_JBPB_LCPP_O]
On Invoice Total	Calculated Measure	[Slotting_Fee_ON] + [Promo_Discounts_ON]
Net Invoice Value Total	Calculated Measure	[Gross_Sales_Value] – [On_Invoice_Total]
Net Invoice Value (pU)	Calculated Measure	[Net_Invoice_Value_Total] / [Sell_In_Total]
Off Invoice Total	Calculated Measure	[Slotting_Fee_OFF] + [Promo_Rebates_OFF]
Net Net Value Total	Calculated Measure	[Net_Invoice_Value_Total] – [Off_Invoice_Total]
Net Net Value (pU)	Calculated Measure	[Net_Net_Value_Total] / [Sell_In_Total]
Base Investment Total	Calculated Measure	[Slotting_Fee_ON] + [Slotting_Fee_OFF]
Promotion Investment Total	Calculated Measure	[Promo_Discounts_ON] + [Promo_Rebates_OFF]
Promoted RSP (per CU)	Calculated Measure	Case([Sell_In_Total_CU],0,0,([_JBPB_ARSVPR]/[Sell_In_Total_CU]))
Regular RSP (per CU)	Calculated Measure	Case([Sell_In_Total_CU],0,0,([_JBPB_ARSV]/[Sell_In_Total_CU]))
Retailer Shelf Price (per CU)	Calculated Measure	If([Promoted_RSP_per_cU]=0,[Regular_RSP_per_cU],[Promoted_RSP_per_cU])

Measure Name	Type	Formula/Properties
Customer Profit (pU)	Calculated Measure	[Customer_profit_pu1]*Case([Sell_Out_Total],0,0,([Sell_Out_Total_CU]/[Sell_Out_Total]))
Customer Profit Total	Calculated Measure	[Customer_Profit_pU]*[Sell_Out_Total]
Customer Profit (%)	Calculated Measure	Case(abs([Retailer_Shelf_Price_per_cU]*([4BJBPB_C_PTGT_AVSONPC]+[4BJBPB_C_PTGT_AVSOP_C])),0,0,(([Customer_Profit_Total]*100)/abs([Retailer_Shelf_Price_per_cU]*([4BJBPB_C_PTGT_AVSONPC]+[4BJBPB_C_PTGT_AVSOP_C]))))
Customer ROI (%)	Calculated Measure	Case([Customer_ROI_1],0,0,([Customer_ROI_2]*100/[Customer_ROI_1]))
Cost per Incremental Unit	Calculated Measure	Case([_JBPB_AVOLU_T],0,0,([Promotion_Investment_Total]/[_JBPB_AVOLU_T]))
Store Open/Close (%)	Calculated Measure	Case ([_JBPB_PY_VOLB], 0 , 0, ([_JBPB_ASGRWTH]/[_JBPB_PY_VOLB]))
Store Open/Close Volume Change	Calculated Measure	[Store_Open_Close_percentage]*[_JBPB_PY_VOLB]/100
Distribution (%)	Calculated Measure	Case ([_JBPB_PY_VOLB], 0 , 0, ([_JBPB_ADISTRI]/[_JBPB_PY_VOLB]))
Distribution Volume Change	Calculated Measure	[_JBPB_PY_VOLB]*[Distribution_percentage]/ 100
Base Volume Sub-Total	Calculated Measure	[_JBPB_PY_VOLB]+[Store_Open_Close_Volume_Change]+[Distribution_Volume_Change]
Previous Year Baseline Sellout (CU)	Calculated Measure	[_JBPB_PY_SOB]*Case([_JBPB_CUFACTD],0,0,([_JBPB_CUFACTN]/[_JBPB_CUFACTD]))
Previous Year Uplift Sellout (CU)	Calculated Measure	[_JBPB_PY_SOU]*Case([_JBPB_CUFACTD],0,0,([_JBPB_CUFACTN]/[_JBPB_CUFACTD]))
PY Retail Price (per CU)	Calculated Measure	CASe([PY_Sell_Out_Total_CU],0,0,[_JBPB_PY_RSP]/[PY_Sell_Out_Total_CU])

Measure Name	Type	Formula/Properties
PY Sell-Out Total Vol CU	Calculated Measure	[Previous_Year_Baseline_Sellout_CU]+ [Previous_Year_Uplift_Sellout_CU]
Retail Price Increase (%)	Calculated Measure	Case([PY_Retail_Price_per_CU],0,0, (([Retailer_Shelf_Price_per_cU]- [PY_Retail_Price_per_CU])/([PY_Retail_Price_per_CU]*100)))
Every Day RSP Volume Change	Calculated Measure	[_JBPB_AVSOI_T]
Category (%)	Calculated Measure	Case([_JBPB_PY_VOLB],0,0, ([_JBPB_ACATEG]/ [_JBPB_PY_VOLB]))
Category Volume Change	Calculated Measure	[Base_Volume_Sub_Total]*[Category_percentage]/100
Other Drivers (%)	Calculated Measure	Case([_JBPB_PY_VOLB],0,0, [_JBPB_AOTHERS]/ [_JBPB_PY_VOLB])
Other Volume Change	Calculated Measure	[Base_Volume_Sub_Total]*[Other_Drivers_percentage]/100
PY Base Volume Change (%)	Calculated Measure	Case([_JBPB_PY_VOLB],0,0, ([_JBPB_AVOLB_T]- [_JBPB_PY_VOLB])/ [_JBPB_PY_VOLB]*100)
PY Uplift Volume Change (%)	Calculated Measure	Case([_JBPB_PY_VOLU],0,0, ([_JBPB_AVOLU_T]- [_JBPB_PY_VOLU])/ [_JBPB_PY_VOLU]*100)
PY Sell-Out Total Vol	Calculated Measure	[_JBPB_PY_SOB]+[_JBPB_PY_SOU]
PY Sell-Out Total Change (%)	Calculated Measure	Case([PY_Sell_Out_Total_Vol],0,0, ([Sell_Out_Total_BaseUplift]- [PY_Sell_Out_Total_Vol])/ [PY_Sell_Out_Total_Vol]*100)
PY Base Volume	Calculated Measure	[_JBPB_PY_VOLB]
Advertising & Promotion (%)	Calculated Measure	Case([PY_Base_Volume],0,0, ([_JBPB_AADVP]/[PY_Base_Volume]))
Adv. & Promo Volume Change	Calculated Measure	([Base_Volume_Sub_Total]*[Advertising_and_Promotion_percentage])/100
Cost of Goods Sold	Calculated Measure	[_JBPB_ACOGS] / [Sell_In_Total]
Promo Invest Over GSV (%)	Calculated Measure	[Promotion_Investment_Total] / [Gross_Sales_Value]
Internal Profit (pU)	Calculated Measure	[Net_Net_Value_pU] – [Cost_of_Goods_Sold]
Internal Profit Total	Calculated Measure	[Internal_Profit_pU] * [Sell_In_Total]
Internal Profit (%)	Calculated Measure	Case([Net_Net_Value_pU],0,0,(([Internal_Profit_pU]*100/ abs([Net_Net_Value_pU]))))

Measure Name	Type	Formula/Properties
Total Investment	Calculated Measure	[Base_Investment_Total]+[Promotion_Investment_Total]
Innovation Baseline	Calculated Measure	[_JBPB_AVINV_T]
Return on Investment (%)	Calculated Measure	(([Net_Net_Value_Total]] * 100) / abs([Base_Investment_Total] + [Promotion_Investment_Total]))

3.36.3.2 SAC Reporting (SAP__TM_GEN_LH_PLAN_PROFITLOSS_SDM)

Model Name: SAP__TM_GEN_LH_PLAN_PROFITLOSS_SDM	Connection
• Model Description: Trade Management: SAC Reporting • Planning Enabled: No	• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_TPM_SAC_SDM

Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	
0DISTR_CHAN	Distribution Channel	
0DIVISION	Division	
/JBPB/PLAN	Plan ID	
/JBPB/SCEN	Scenario ID	
/JBPB/TUCUPRD	TU CU Product	
/JBPB/VERSION	JBP Version	
/JBPB/TUCU	Unit of Data	
Version	Version or Source of Data	

Additional Notes about the model
Provide additional information about the model if needed

3.36.3.3 SAC Reporting Transpose Data (SAP__TM_GEN_LH_PLAN_TRANSPOSE_SDM)

Model Name: SAP__TM_GEN_LH_PLAN_TRANSPOSE_SDM	Connection
• Model Description: Trade Management: SAC Reporting Transpose Data • Planning Enabled: No	• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_SAC_TRANSPOSE_SDM

Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	
0DISTR_CHAN	Distribution Channel	
0DIVISION	Division	
/JBPB/PLAN	Plan ID	
/JBPB/SCEN	Scenario ID	
/JBPB/TUCUPRD	TU CU Product	
/JBPB/VERSION	JBP Version	
/JBPB/TUCU	Unit of Data	
Version	Version or Source of Data	
Additional Notes about the model		
None		

3.36.3.4 SAP Analytics Cloud Reporting Transpose Data (SAP__TM_GEN_LH_PLAN_TRANSPOSE)

Model Name: SAP__TM_GEN_LH_PLAN_TRANSPOSE	Connection
• Model Description: Trade Management: SAC Reporting Transpose Data • Planning Enabled: No	• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_SAC_TRANSPOSE

Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	
0DISTR_CHAN	Distribution Channel	
0DIVISION	Division	
/JBPB/PLAN	Plan ID	
/JBPB/SCEN	Scenario ID	
/JBPB/TUCUPRD	TU CU Product	
/JBPB/VERSION	JBP Version	
/JBPB/TUCU	Unit of Data	
Version	Version or Source of Data	
Additional Notes about the model		
N/A		

Trade Promotion SAP Analytics Cloud Transpose: KPI's defined in Data source

Measure Name	Type	Formula/Properties
Latest_Estimate_RKF	Restricted Measure	Restrict[Value] WHERE VERSION = 'Latest Estimates'
Actuals_RKF	Restricted Measure	Restrict[Value] WHERE VERSION = 'Actuals

Measure Name	Type	Formula/Properties
YTG_RKF	Restricted Measure	Restrict[Value] WHERE VERSION = 'YTG
Plan_RKF	Restricted Measure	Restrict[Value] WHERE VERSION = 'Plan'
Previous Year	Restricted Measure	Restrict[Value] WHERE VERSION = 'Previous Year'
Target_RKF	Restricted Measure	Restrict[Value] WHERE VERSION = 'Target'
Latest Estimates	Calculated Measure	If(isnull([Latest_Estimate_RKF]),0,[Latest_Estimate_RKF])
Actuals	Calculated Measure	If(isnull([Actuals_RKF]),0,[Actuals_RKF])
YTG	Calculated Measure	If(isnull([YTG_RKF]),0,[YTG_RKF])
Previous Year	Calculated Measure	If(isnull([Previous_Year_RKF]),0,[Previous_Year_RKF])
Plan	Calculated Measure	If(isnull([Plan_RKF]),0,[Plan_RKF])
Target	Calculated Measure	If(isnull([Target_RKF]),0,[Target_RKF])

3.36.3.5 MAPE histogram by product/location (SAP__TM_UDF_LH_MAPE_HIST_PL)

Model Name: SAP__TM_UDF_LH_MAPE_HIST_PL	Connection
• Model Description: MAPE histogram by product/location • Planning Enabled: No	• SAP HANA Live Connection • Name of Report: sap.is.ddf.tma.add_insights.TMA_MAPE_HIST_PL_Q

Account Dimension		
ID	**Description**	**Mapping/Formula**
AMOUNT_PROD_LOCS	Amount Product/Location Combinations	Aggregation: Sum
SUM_UNIT_SALES	Unit Sales	Aggregation: Sum
MAPE_GROUP_SORT	MAPE group the can be used in advanced sorting	Aggregation: Min

Dimensions		
Name	**Description**	**Mapping**
MANDT	Client	
PROD_ID	Product GUID	

Model Name: SAP__TM_UDF_LH_MAPE_HIST_PL	Connection
LOC_ID	Location GUID
MAPE_GROUP_MIN	MAPE Group Low
MAPE_GROUP_MAX	MAPE Group High
SALES_UOM	Unit of Measure
MAPE_GROUP	MAPE Group
EXT_PROD_ID	Product ID
EXT_LOC_ID	Location ID
EXT_PROD_NAME	Product Name
EXT_PRODLOC_ID	Product/Location Combination
Additional Notes about the model	
N/A	

3.36.3.6 Combined detailed model/forecast timeseries (SAP__TM_UDF_LH_COMB_TSD)

Model Name: SAP__TM_UDF_LH_COMB_TSD	Connection
• Model Description: Combined detailed model/forecast timeseries • Planning Enabled: No	• SAP HANA Live Connection • Name of Report: sap.is.ddf.tma.add_in-sights::TMA_COMB_TSD_Q
Account Dimension	

ID	Description	Mapping/Formula
COUPON_INSTORECOUPON_ACV	Coupon/Instore Coupon Uplift ACV	
COUPON_INSTORECOUPON_UL	Coupon/Instore Coupon Uplift Volume	
DISPLAY_FOURWAY_ACV	Display/Fourway Uplift ACV	
DISPLAY_FOURWAY_UL	Display/Fourway Uplift Volume	
DUS_BASE	Baseline Volume	
DUS_CANN	Cannibalization Volume	
DUS_HOL	Holiday Volume	
DUS_OFR_TACTIC	Tactic Volume	
DUS_OTHER_DIF	Other Volume	
DUS_PRICE	Price Volume	
DUS_SEAS	Seasonality Volume	
FC_VAL	Total Demand From Forecast	

Model Name: SAP__TM_UDF_LH_COMB_TSD		Connection
FC_VAL_HIGH	Total Demand From Forecast High	
FC_VAL_LOW	Total Demand From Forecast Low	
FEATURE_ROLLBACK_ACV	Feature/Rollback Uplift ACV	
FEATURE_ROLLBACK_UL	Feature/Rollback Uplift Volume	
MOD_FC_VAL	Total Demand Combined	
MOD_VAL	Total Demand From Model	
MOD_VAL_HIGH	Total Demand From Model High	
MOD_VAL_LOW	Total Demand From Model Low	
PROMO_SHELF_PRICE	Promoted Shelf Price	
REGULAR_SHELF_PRICE	Regular Shelf Price	
STORE_ACV	Store ACV	
TPR_ACV	TPR ACV	
TPR_UL	TPR Uplift Volume	
UNIT_SALES	Unit Sales	
Dimensions		
Name	**Description**	**Mapping**
MANDT	Client	
PROD_ID	Product GUID	
LOC_ID	Location GUID	
SALES_ORG_ID	Sales Organization	
DISTR_CHNL_ID	Distribution Channel	
ORDER_CHNL_ID	Order Channel	
TSTMP_FR	Timestamp From	
OFR_ID	Offer ID	
EXT_EVENT_ID	Event ID	
TSTMO_TO	Timestamp To	
EXT_PROD_ID	Product ID	
EXT_LOC_ID	Location ID	
UOM	UoM	
CURRENCY	Currency	
PROD_NAME	Product Name	
EXT_PRODLOC_ID	Product/Location Combination	
FCST_FLAG	Forecast Flag	
DATE_FR_DATS	Date From	

Model Name: SAP__TM_UDF_LH_COMB_TSD		Connection
DATE_TO_DATS	Date To	
Additional Notes about the model		
N/A		

3.36.3.7 Model quality by product/location/week (SAP__TM_UDF_LH_MOD_QUAL)

Model Name: SAP__TM_UDF_LH_MOD_QUAL	Connection
• Model Description: Model quality by product/location/week • Planning Enabled: No	• SAP HANA Live Connection • Name of Report: sap.is.ddf.tma.add_in-sights.TMA_MOD_QUAL_Q

Account Dimension		
ID	**Description**	**Mapping/Formula**
UNIT_SALES	Unit Sales	Aggregation: Sum
FC_VAL	Total Demand From Forecast	Aggregation: Sum
ABS_ERROR	Absolute Error	Aggregation: Sum
MAPE	Mean Average Percentage Error	Aggregation: Avg
BIAS	Bias	Aggregation: Avg
REGULAR_SHELF_PRICE	Regular Shelf Price	Aggregation: Avg
PROMOTED_SHELF_PRICE	Promoted Shelf Price	Aggregation: Avg
Dimensions		
Name	**Description**	**Mapping**
MANDT	Client	
PROD_ID	Product GUID	
LOC_ID	Location GUID	
TSTMP_FR	Timestamp From	
EXT_PROD_ID	Product ID	
PROD_NAME	Product Name	
EXT_LOC_ID	Location ID	
TSTMP_TO	Timestamp To	
SALES_UOM	Unit of Measure	
EXT_PRODLOC_ID	Product/Location Combination	
DATE_FR_DATS	Date From	

Model Name: SAP__TM_UDF_LH_MOD_QUAL		Connection
DATE_TO_DATS	Date To	
FCST_FLAG	Forecast Flag	
CURRENCY	Currency	
Additional Notes about the model		
N/A		

3.36.3.8 Price demand function (SAP__TM_UDF_LH_PRC_FC)

Model Name: SAP__TM_UDF_LH_PRC_FC		Connection
• Model Description: Price demand function • Planning Enabled: No		• SAP HANA Live Connection • Name of the Report: sap.is.ddf.tma.add_in-sights.TMA_PRC_FC_Q
Account Dimension		
ID	**Description**	**Mapping/Formula**
PRICE_UPLIFT_VOLUME	Price Uplift Volume	Aggregation: Sum
BASELINE_VOLUME	Baseline Volume	Aggregation: Sum
TOTAL_VOLUME	Total Volume	Aggregation: Sum
Dimensions		
Name	**Description**	**Mapping**
MANDT	Client	
PROD_ID	Product GUID	
LOC_ID	Location GUID	
SALES_ORG_ID	Sales Organization	
DISTR_CHNL_ID	Distribution Channel	
ORDER_CHNL_ID	Order Channel	
RSP_PERCENTAGE	Retail Store Price Percentage	
UOM	Unit of Measure	
EXT_PROD_ID	Product ID	
EXT_LOC_ID	Location ID	
EXT_PRODLOC_ID	Product/Location Combination	
Additional Notes about the model		
N/A		

3.36.3.9 Market Share (SAP__TM_GEN_LB_MARKET_SHARE_01)

Market Share (SAP__TM_GEN_LB_MARKET_SHARE_01)	Connection
• Model Description: The model shows sales and units, the value of products, the classification, and the share of each product. • Planning Enabled: No	LIVE Based on query /DDF/C01_GMRD_001

Additional Notes about the model
Replicate the Query /DDF/C01_GMRD_001 as model into SAP Analytics Cloud.

Information on the query /DDF/C01_GMRD_001: The measures are built on a concept comprising a base measure and time periods.

Measure

- Sales <Base Measure> <Time Periods>
- Sales <Base Measure> <Time Periods> Δ % vs. PY
- Share <Base Measure> <Time Periods>
- Share <Base Measure> <Time Periods> Δ % vs. PY

Base Measure

- Sales (Value)
- Sales (Units)

Restrictions <Time Periods>

- MAT: Current Month -11 – Current Month
- MAT-1: Current Month -23 – Current Month-12
- P3M: Current Month -2 – Current Month
- P3M-1: Current Month -14 – Current Month-12
- P1M: Current Month
- P1M-1: Current Month-12

Measure Name	Type	Formula/Properties
Baseline Sales (Units)		
Baseline Sales (Value) Sales (Units)		
Sales (Value)		
Sales (Value) (MAT)	Restricted Measure	Current Month -11 – Current Month
Sales (Value) (MAT-1)	Restricted Measure	Current Month -23 – Current Month-12

Measure Name	Type	Formula/Properties
Sales (Value) (MAT) Δ % vs. PY	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (MAT)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (MAT-1)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (MAT) Δ % vs. PY	Calculated Measure	[Share (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Share (<Base Measure>) (<Time Period>)] – [Share (<Base Measure>) (<Time Period-1>)]
Sales (Value) (P3M)	Restricted Measure	Current Month -2 – Current Month
Sales (Value) (P3M-1)	Restricted Measure	Current Month -14 – Current Month-12
Sales (Value) (P3M) Δ % vs. PY	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (P3M)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (P3M-1)	Calculated Measure	- [Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (P3M) Δ % vs. PY	Calculated Measure	- [Share (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Share (<Base Measure>) (<Time Period>)] – [Share (<Base Measure>) (<Time Period-1>)]
Sales (Value) (P1M)	Restricted Measure	Current Month
Sales (Value) (P1M-1)	Restricted Measure	Current Month-12
Sales (Value) (P1M) Δ % vs. PY	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (P1M)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]

Measure Name	Type	Formula/Properties
Share (Value) (P1M-1)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Value) (P1M) Δ % vs. PY	Calculated Measure	[Share (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Share (<Base Measure>) (<Time Period>)] – [Share (<Base Measure>) (<Time Period-1>)]
Sales (Unit) (MAT)	Restricted Measure	Current Month -11 – Current Month
Sales (Unit) (MAT-1)	Restricted Measure	Current Month -23 – Current Month-12
Sales (Unit) (MAT) Δ % vs. PY	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (MAT)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (MAT-1)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (MAT) Δ % vs. PY	Calculated Measure	[Share (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Share (<Base Measure>) (<Time Period>)] - [Share (<Base Measure>) (<Time Period-1>)]
Sales (Unit) (P3M)	Restricted Measure	Current Month -2 – Current Month
Sales (Unit) (P3M-1)	Restricted Measure	Current Month -14 – Current Month-12
Sales (Unit) (P3M) Δ % vs. PY	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (P3M)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (P3M-1)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (P3M) Δ % vs. PY	Calculated Measure	[Share (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Share (<Base Measure>) (<Time Period>)] - [Share (<Base Measure>) (<Time Period-1>)]
Sales (Unit) (P1M)	Restricted Measure	Current Month

Measure Name	Type	Formula/Properties
Sales (Unit) (P1M-1)	Restricted Measure	Current Month-12
Sales (Unit) (P1M) Δ % vs. PY	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (P1M)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (P1M-1)	Calculated Measure	[Sales (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Sales (<Base Measure>) (<Time Period>)] – [Sales (<Base Measure>) (<Time Period-1>)]
Share (Unit) (P1M) Δ % vs. PY	Calculated Measure	- [Share (<Base Measure>) (<Time Period>) Δ % vs. PY] = [Share (<Base Measure>) (<Time Period>)] - [Share (<Base Measure>) (<Time Period-1>)]

3.36.3.10 Market Share (SAP__TM_GEN_LB_MARKETSHARE)

Market Share (SAP__TM_GEN_LB_MARKETSHARE)		Connection
• Model Description: The model shows sales and units, the value of products, the classification, and the share of each product. • Planning Enabled: No		DAQ Based on query /DDF/C01_GMRD_001
Account Dimension		
ID	**Description**	**Mapping/Formula**
All measures from query /DDF/C01_GMRD_001		
Dimensions (DAQ)		
Name	**Description**	**Mapping**
Harmonized Location ID	Harmonized Location ID	/DDF/LOCATION-/DDF/GLID - Key <blank> needs renaming in download
Harmonized Location	Harmonized Location	/DDF/LOCATION-/DDF/GLID - Text Harmonized Location
Category (Cons)	Category (Cons)	/DDF/GMPID-/DDF/PCAGM_TXT Category (Cons)

Market Share (SAP__TM_GEN_LB_MARKETSHARE)		Connection
Sub-Category (Cons)	Sub-Category (Cons)	/DDF/GMPID-/DDF/PSCGM_TXT Sub-Category (Cons)
Manufacturer (Cons)	Manufacturer (Cons)	/DDF/GMPID-/DDF/MANGM_TXT Manufacturer (Cons)
Brand (Cons)	Brand (Cons)	/DDF/GMPID-/DDF/BRAGM_TXT Brand (Cons)
Time	Time	/DDF/GTIMEREF-0CALMONTH Month (Split)
Additional Notes about the model		
Download the query /DDF/C01_GMRD_001 with the Harmonized Location showing Key and Text. Have all Attributes/ Dimension in the rows and only the Key figures in the columns. Typically, the Harmonized Location ID does have a blank header field, rename it to Harmonized Location ID. Key Figures names stay they are, make sure to show all of them in the download.		

3.36.3.11 SAP Analytics Cloud Reporting (SAP__TM_GEN_LH_PNL_BUYDATE)

Model Name: SAP__TM_GEN_LH_PNL_BUYDATE		Connection
• Model Description: Trade Management: SAP Analytics Cloud Reporting Transpose Data • Planning Enabled: No		• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PRMO_TPM_SAC
Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	

Model Name: SAP__TM_GEN_LH_PNL_BUYDATE	Connection
0DISTR_CHAN	Distribution Channel
0DIVISION	Division
/JBPB/PLAN	Plan ID
/JBPB/SCEN	Scenario ID
/JBPB/TUCUPRD	TU CU Product
/JBPB/VERSION	JBP Version
/JBPB/TUCU	Unit of Data
Version	Version or Source of Data
Additional Notes about the model	
N/A	

3.36.3.12 SAC Reporting (SAP__TM_GEN_LH_PNL_BUYDATE_SDM)

Model Name: SAP__TM_GEN_LH_PNL_BUYDATE_SDM		Connection
• Model Description: Trade Management: SAC Reporting Transpose Data • Planning Enabled: No		• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PRMO_TPM_SAC_SDM
Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	
0DISTR_CHAN	Distribution Channel	
0DIVISION	Division	
/JBPB/PLAN	Plan ID	
/JBPB/SCEN	Scenario ID	

Model Name: SAP__TM_GEN_LH_PNL_BUYDATE_SDM		Connection
/JBPB/TUCUPRD	TU CU Product	
/JBPB/VERSION	JBP Version	
/JBPB/TUCU	Unit of Data	
Version	Version or Source of Data	
Additional Notes about the model		
N/A		

3.36.3.13 SAP Analytics Cloud Planning Period (SAP__TM_GEN_LH_PNL_PLANDATE)

Model Name: SAP__TM_GEN_LH_PNL_PLANDATE		Connection
• Model Description: Trade Management: SAP Analytics Cloud Reporting Transpose Data • Planning Enabled: No		• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_SAC
Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0BP_GRP	Account	
0CRM_MKTELM	Marketing Element	
0CRM_PROD	Product	
0CRM_SALORG	Sales Organization	
0DISTR_CHAN	Distribution Channel	
0DIVISION	Division	
/JBPB/PLAN	Plan ID	
/JBPB/SCEN	Scenario ID	
/JBPB/TUCUPRD	TU CU Product	
/JBPB/VERSION	JBP Version	
/JBPB/TUCU	Unit of Data	
Version	Version or Source of Data	

Model Name: SAP__TM_GEN_LH_PNL_PLANDATE	Connection
Additional Notes about the model	
N/A	

3.36.3.14 SAP Analytics Cloud Marketing Element Header (SAP__TM_GEN_LH_MKTELM_)

Model Name: SAP__TM_GEN_LH_PNL_PLANDATE	Connection
• Model Description: Trade Management: SAP Analytics Cloud Reporting Transpose Data • Planning Enabled: No	• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_MKTELM

Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	Description	Mapping
Time	Time Dimension	
0CRM_MKTELM	Marketing Element	
Planning Date From	Planning Date From	
Planning Date To	Planning Date To	
Buying Date From	Buying Date From	
Buying Date To	Buying Date To	
Additional Notes about the model		
N/A		

3.36.3.15 SAC Marketing Element Header (SAP__TM_GEN_LH_MKTELM_SDM)

Model Name: SAP__TM_GEN_LH_MKTELM		Connection
• Model Description: Trade Management: SAC Reporting Transpose Data • Planning Enabled: No		• Connection Types: Live Data Connection to SAP HANA or SAP HCP via Apache HTTP Server • Name of the HANA View: CV_PTGT_MKTELM_SDM
Account Dimension		
ID	**Description**	**Mapping/Formula**
P&L		
Dimensions		
Name	**Description**	**Mapping**
Time	Time Dimension	
0CRM_MKTELM	Marketing Element	
Planning Date From	Planning Date From	
Planning Date To	Planning Date To	
Buying Date From	Buying Date From	
Buying Date To	Buying Date To	
Additional Notes about the model		
N/A		

3.37 Utilities (UTL)

3.37.1 Architecture and Abstract

The Utilities Digital Boardroom content described in detail below provides information to the board of a fictional utility company named BestRun Utility. Here are a few of the BestRun Utility company statistics:

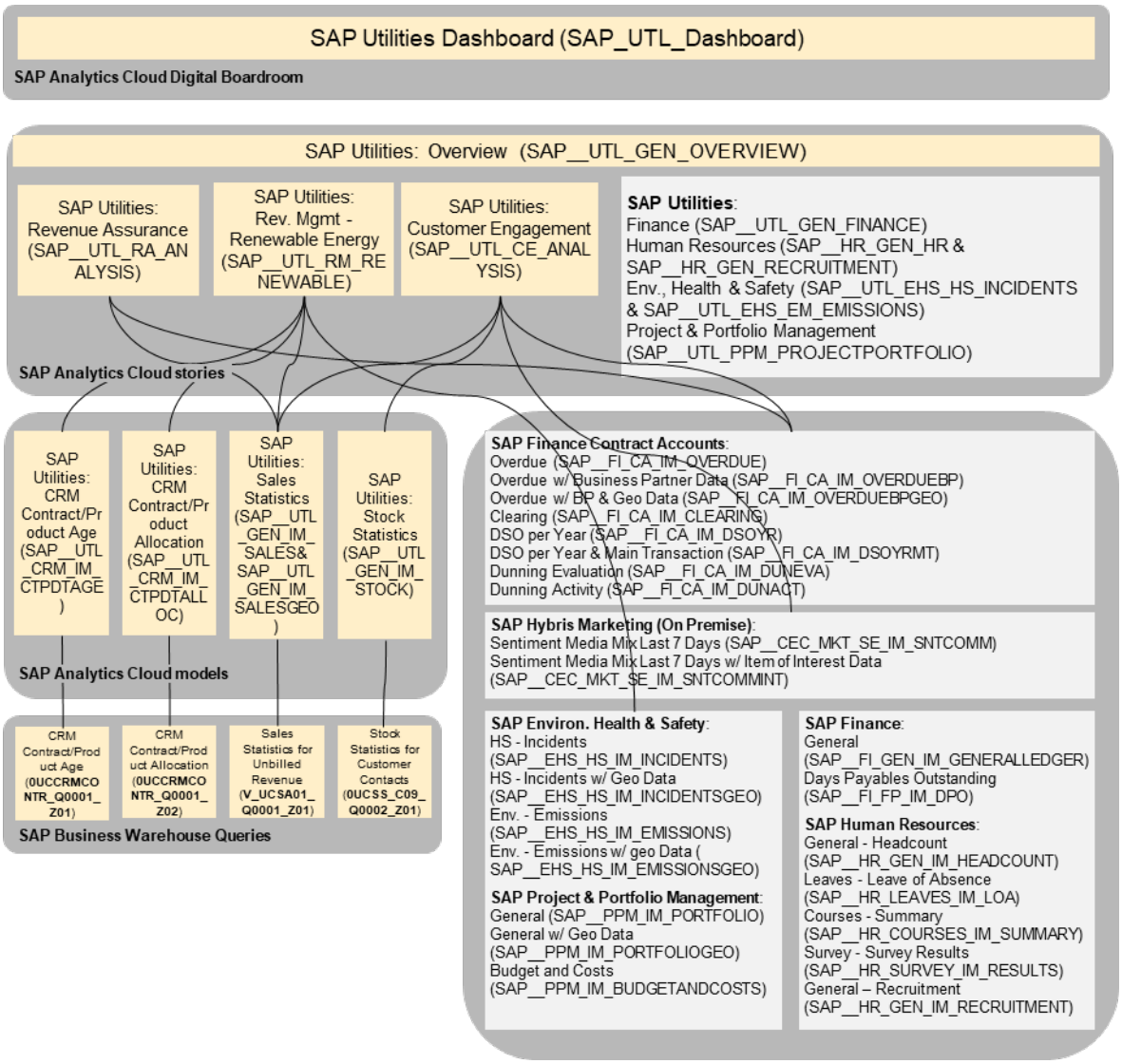
- 3 million customers. 2 divisions (Electricity & Gas). 3 regions (MI, OH & PA).
- 4.5 million contracts. Each customer gets one bill per quarter.
- 18 million bills issued every year. 350,000 bills issued every week. Average bill amount: $300.
- Electricity: Generation, Purchase, Distribution, and Sale to 3 million customers.
- Gas: Purchase, Storage, Transportation, Distribution, and Sale to 1.5 million customers.

Seven perspectives are covered in the Utilities Digital Boardroom:

- Financial Performance

- Revenue Assurance
- Customer Engagement
- Renewable Energy
- Customer Engagement
- Renewable Energy
- Capital and STO (Shutdown - Turnaround - Outage) Projects
- Human Resources (General & REcruitement)
- Environment, Health & Safety (Incidents & Emissions)

Architecture



3.37.2 Dashboard

The dashboard which canbe used to obtain the insights is: **SAP_UTL_Dashboard**

3.37.3 Stories

SAP Utilities: General - Overview (SAP__UTL_GEN_OVERVIEW)

SAP Utilities: Finance (SAP__UTL_GEN_FINANCE)

This is a copy of the story SAP__FI_GEN_FINANCE (SAP Finance: Financial Boardroom).

SAP Utilities: Human Resources - General (SAP__UTL_HR_HR)

This is a copy of the story SAP__HR_GEN_HR (SAP Human Resources: General).

SAP Utilities: Human Resources - Recruitment (SAP__UTL_HR_RECRUITMENT)

This is a copy of the story SAP__HR_GEN_RECRUITMENT (SAP Human Resources: Recruitment).

SAP Utilities: Environment, Health & Safety - Incidents (SAP__UTL_EHS_HS_INCIDENTS)

This is a copy of the story SAP__EHS_HS_INCIDENTS (SAP Environ. Health & Safety: Health & Safety - Incidents).

SAP Utilities: Environment, Health & Safety – Greenhouse Gas Emissions (SAP__UTL_EHS_EM_EMISSIONS)

This is a copy of the story SAP__EHS_EM_EMISSIONS (SAP Environ. Health & Safety: Greenhouse Gas Emissions).

SAP Utilities: Portfolio & Project Management - Analysis (SAP__UTL_PPM_PROJECTPORTFOLIO)

This is a copy of the story SAP__PPM_PROJECTPORTFOLIO (SAP Portfolio & Project Management: Analysis).

SAP Utilities: Revenue Assurance (SAP__UTL_RA_ANALYSIS)

Name: SAP__UTL_RA_ANALYSIS	
Description: SAP Utilities: Revenue Assurance	
Analyse the liquidity trend: Contract Accounts DSO & Overdue Items (from FI-CA). Billed/unbilled revenue (from IS-U Sales Statistics).	
Page: Detail	
Charts	
Title	Models Used
DSO Trend	SAP__FI_CA_IM_DSOYR
Sub ledger Days Sales Outstanding by Year	
DSO by Main Transaction	SAP__FI_CA_IM_DSOYRMT
Sub ledger Days Sales Outstanding by Main Transaction for Current year	
Current Overdue Amounts	SAP__FI_CA_IM_OVERDUE

Overdue amount by Time bucket (<1 day, 1 – 30 days, 31 – 60 days, 61 – 90 days, > 90 days) at Current date	
Overdue Amount by Main Transaction	SAP__FI_CA_IM_OVERDUE
Total overdue amount by Main transaction at Current date	
Clearing Analysis Last 12 Months	SAP__FI_CA_IM_CLEARING
Total clearing amount and Total number of cleared items by Clearing reason Last 12 months	
Billed and Unbilled Revenue	SAP__UTL_GEN_IM_SALES
Billed and Unbilled Revenue by quarter across the last 2 years.	
Top 100 Customers Overdue	SAP__FI_CA_IM_OVERDUEBP
Top 100 customers overdue amount by Division (Electricity or Gas) at Current date.	

Page: Context	
Charts	
Title	Models Used
Top 100 Customers Overdue	SAP__FI_CA_IM_OVERDUEBPGEO
Combination of Geomap and Grid visualizations allowing interactive analysis of Top 100 customers overdue by Geo location.	

SAP Utilities: Revenue Management - Renewable Energy (SAP__UTL_RM_RENEWABLE)

SAP Utilities: Customer Engagement (SAP__UTL_CE_ANALYSIS)

Name: SAP__UTL_CE_ANALYSIS	
Description: Sap Utilities: Customer Engagement	
Analyse customer activities (from IS-U Partner Contacts) and sentiments (from SAP Marketing). Report on payment behaviour and dunning activities (from FI-CA).	
Page: Detail	
Charts	
Title	**Models Used**
Social Media Posts Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMM
Number of positive, neutral and negative posts on social media by day over the last 7 days.	
Social Media Posts Last 7 Days by Comm. Medium	SAP__CEC_MKT_SE_IM_SNTCOMM
Number of positive, neutral and negative posts on social media by communication medium over the last 7 days.	
All Divisions	SAP_FI_CA_IM_DUNEVA
Number of dunning notices, Dunning balance (USD) and Average dunning success (%) for All divisions	
Electricity Division	SAP_FI_CA_IM_DUNEVA
Number of dunning notices, Dunning balance (USD) and Average dunning success (%) for Electricity division	
Gas Division	SAP_FI_CA_IM_DUNEVA
Number of dunning notices, Dunning balance (USD) and Average dunning success (%) for Gas division	

Name: SAP__UTL_CE_ANALYSIS	
Dunning Activities Last 12 Months	SAP__FI_CA_IM_DUNACT
Dunning activities by dunning procedure and dunning level for the last 12 months.	
Customer Contacts Last 12 Months	SAP__UTL_GEN_IM_STOCK
Number of customer contacts by contact class for the last 12 months.	
Page: Context	
Charts	
Title	**Models Used**
Top 5 Interests with Pos. Sentiments Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMMINT
Top 5 items of interest with regards to number of positive posts over the last 7 days.	
Top 5 Interests with Neg. Sentiments Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMMINT
Top 5 items of interest with regards to number of negative posts over the last 7 days.	
# Posts for Top 5 Int. with Pos. Sent. Last 7 Days	SAP__CEC_MKT_SE_IM_SNTCOMMINT
# of positive, neutral & negative posts for each of the Top 5 items of interest with regards to # of pos. posts over the last 7 days.	
# of Customer Complaints Last 2 Quarters	SAP__UTL_GEN_IM_STOCK
Number of customer contacts by complaint action and by month for the last 2 quarters.	
Overdue Amount Last 2 Quarters	SAP__FI_CA_IM_OVERDUE
Overdue amount by overdue bucket over the last 2 quarters.	
Dunning Balance Last 2 Quarters	SAP__FI_CA_IM_DUNACT
Dunning balance by dunning level over the last 2 quarters.	

3.37.4 Models

3.37.4.1 CRM Contract/Product Age (SAP__UTL_CRM_IM_CTPDTAGE)

Model Name: SAP__UTL_CRM_IM_CTPDTAGE	Connection
• Model Description: SAP Utilities: CRM Contract/Product Age • Planning Enabled: No	• Connection Type: Import Data Connection to an SAP BW System • Connection Query: Custom Query 0UCCRMCONTR_Q0001_Z01

Account*		
ID	**Description**	**Formula/Mapping**
Number_of_contracts	Number of contracts	1ROWCOUNT

Model Name: SAP__UTL_CRM_IM_CTPDTAGE		Connection
Dimensions		
ID	**Description**	**Mapping**
Time	Time	0CRM_BEGDAT
SAP_ALL_DIVISION	Division	0DIVISION
SAP_ALL_PRODUCT	Product	0CRM_PROD
Additional Notes about the model		

Model Name: SAP__UTL_CRM_IM_CTPDTAGE	Connection

Connection Query: Custom Query 0UCCRMCONTR_Q0001_Z01

Start a new query creation with SAP BEx Query Designer.

Select 0UCCRMCONTR as InfoProvider to build this new query against.

Navigate to the Rows/Columns tab.

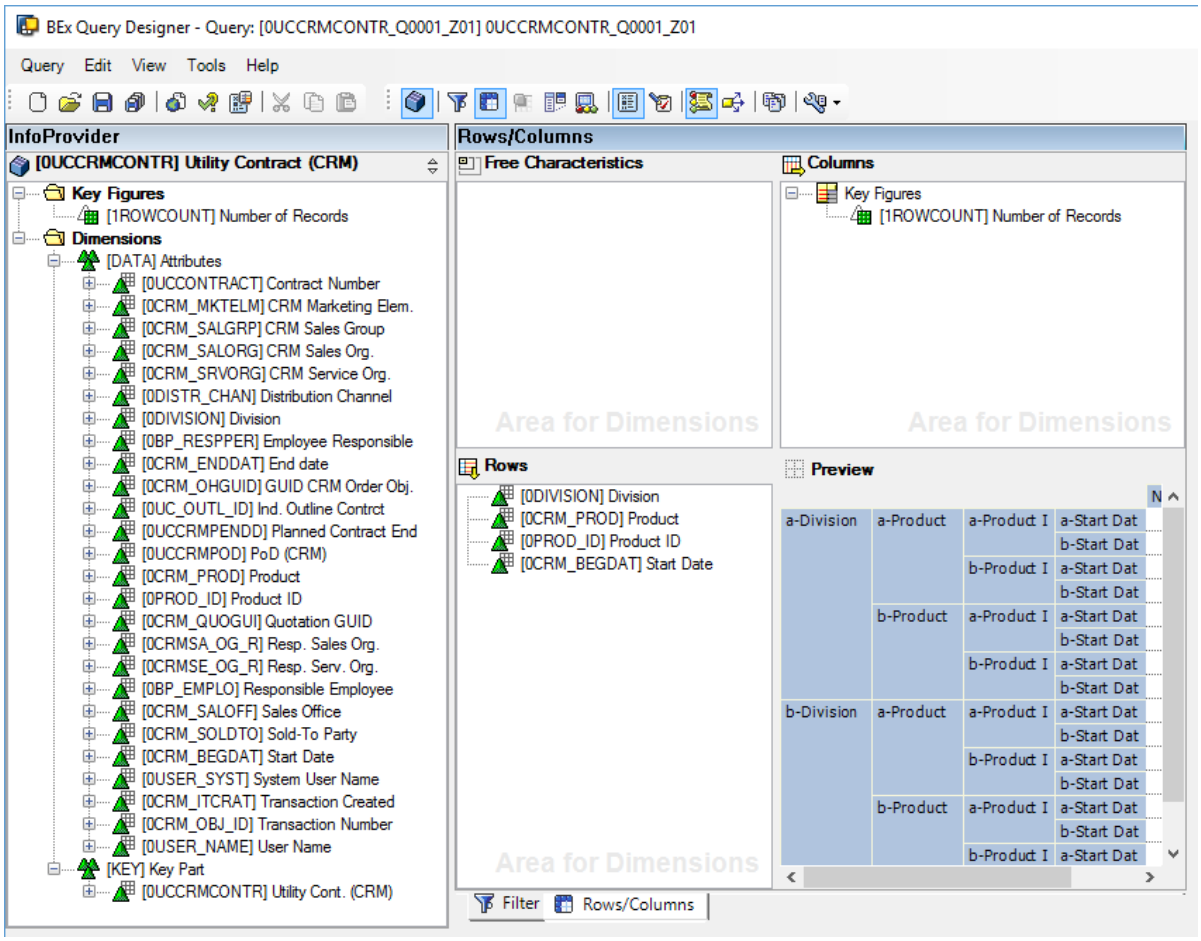
Rows

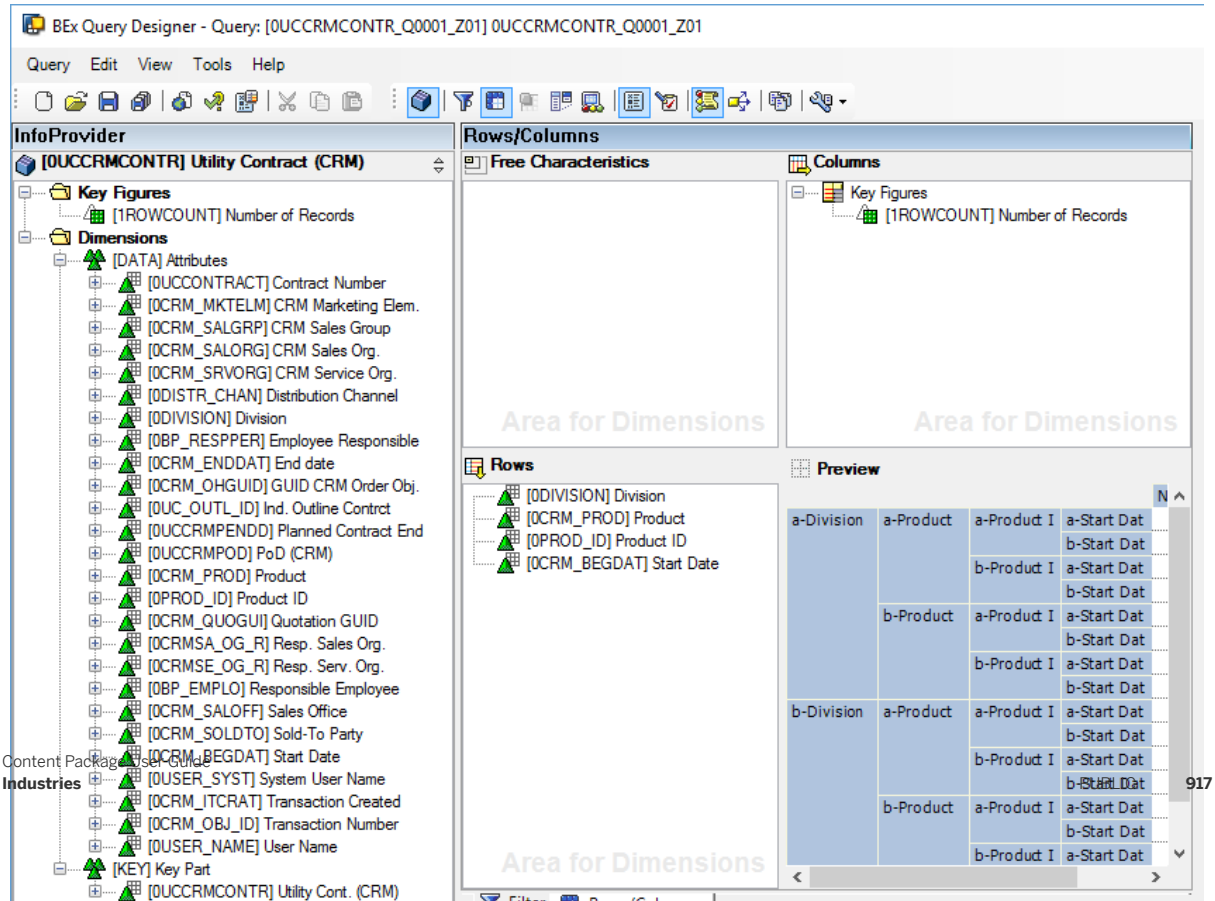
Drag/Drop dimensions [0DIVISION] Division, [0CRM_PROD] Product, [0PROD_ID] Product ID and [0CRM_BEGDATE] Start Date from InfoProvider [0UCCRMCONTR] Utility Contract (CRM)

Columns

- Drag/Drop key figure [1ROWCOUNT] Number of Records from InfoProvider [0UCCRMCONTR] Utility Contract (CRM).

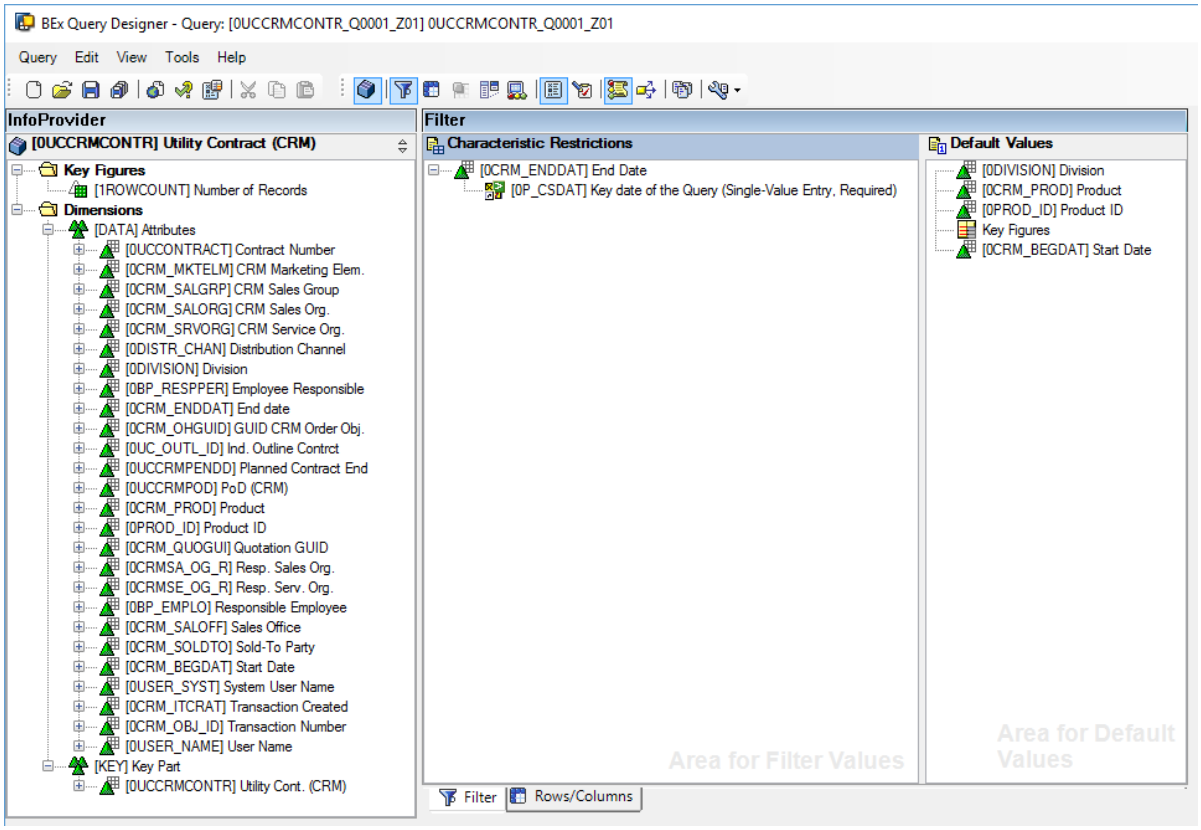
Save the query as 0UCCRMCONTR_Q0001_Z01. The result is shown in the screenshot below.

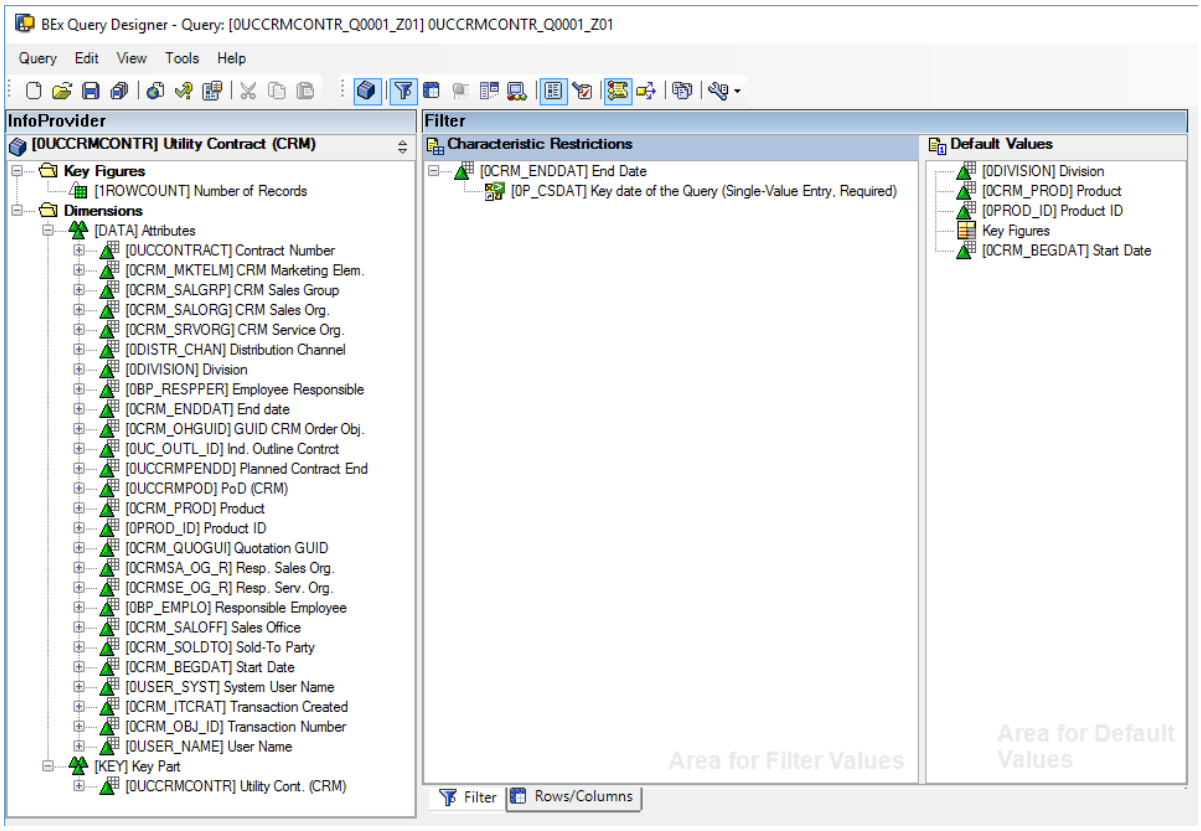




Model Name: SAP__UTL_CRM_IM_CTPDTAGE	Connection
Navigate to the Filter tab **Characteristic Restrictions** Drag/Drop dimension [0CRM_ENDDAT] End Date from InfoProvider [0UCCRMCONTR] Utility Contract (CRM) Set variable [OP_CSDAT] to only select products that are still valid within the contracts. The result is shown in the screenshot below.	

Model Name: SAP__UTL_CRM_IM_CTPDTAGE Connection





Model Name: SAP__UTL_CRM_IM_CTPDTAGE	Connection
- Save the query	
Connection Variables: Key Date of the Query (Manual Entry, Single Value, and Required) (0P_CSDAT) for example 20.10.2017.	

> **i** Note
>
> * Private dimension and, other dimensions are public.

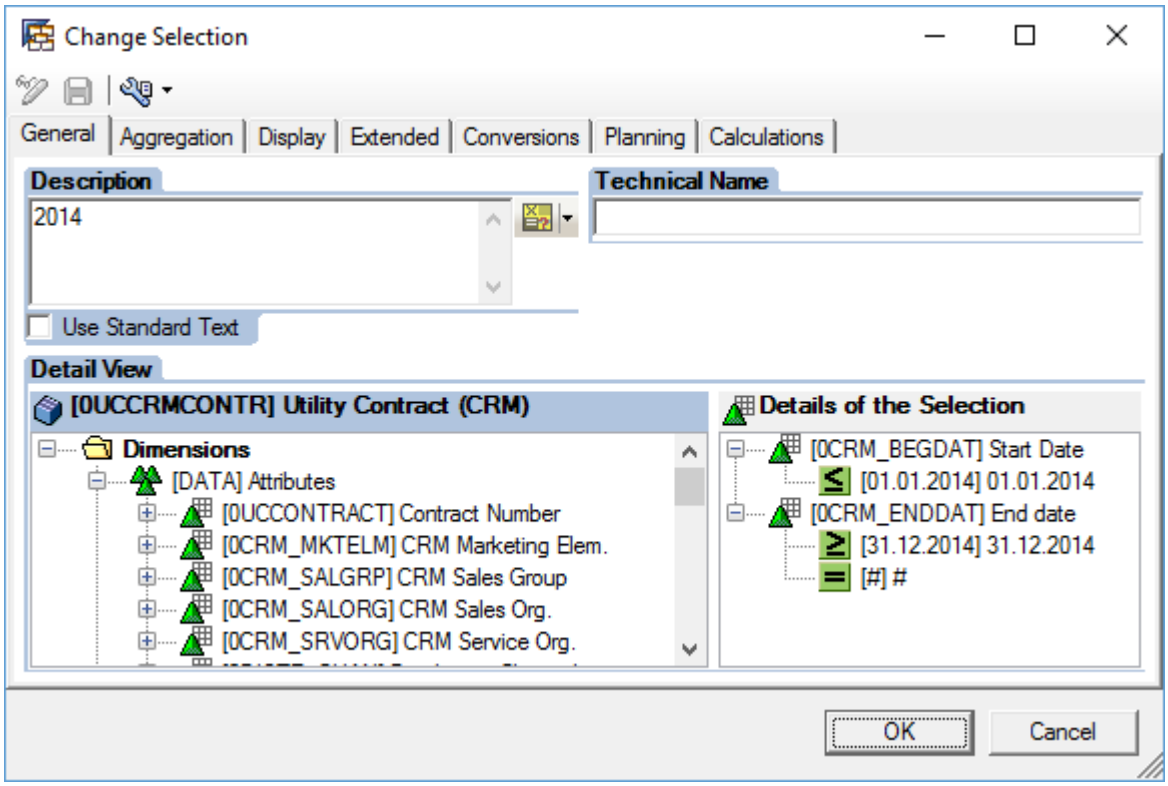
3.37.4.2 CRM Contract/Product Allocation (SAP__UTL_CRM_IM_CTPDTALLOC)

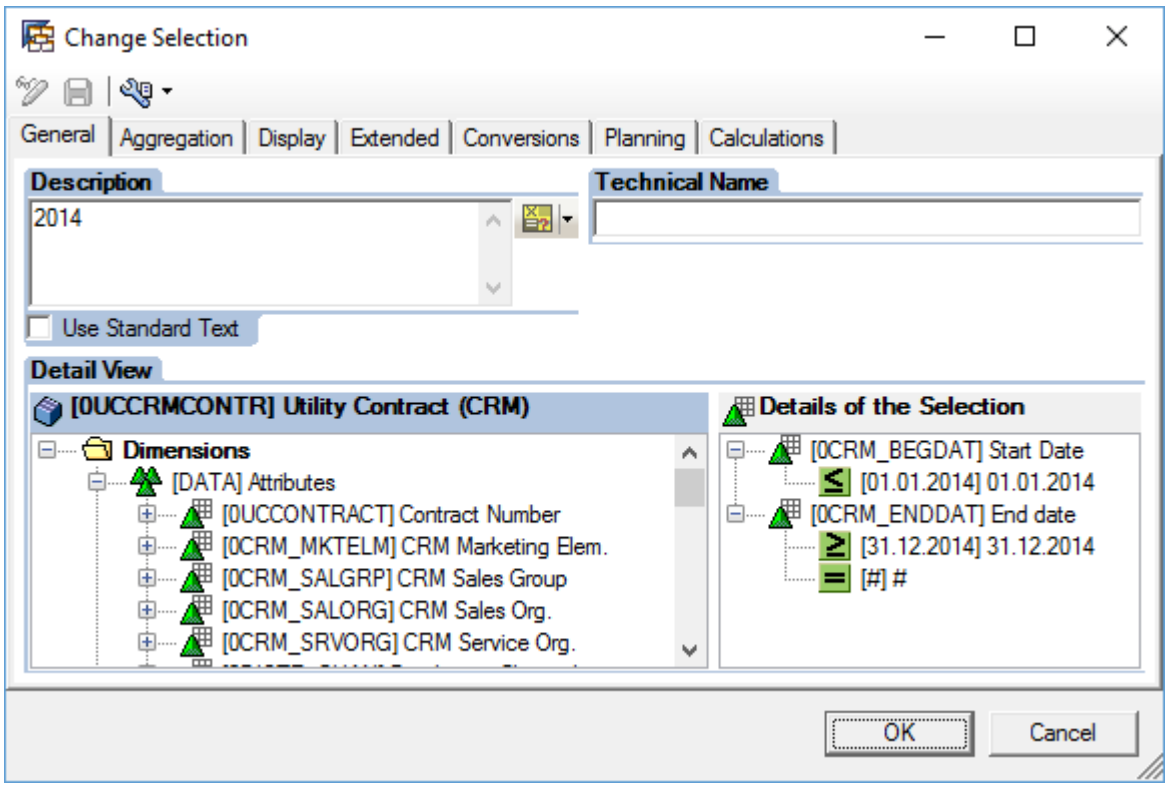
Model Name: SAP__UTL_CRM_IM_CTPDTALLOC	Connection
• Model Description: SAP Utilities: CRM Contract/Product Allocation • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query 0UCCRMCONTR_Q0001_Z02

Account*		
ID	**Description**	**Formula/Mapping**
Number_of_contracts	Number of contracts	1ROWCOUNT
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	Calendar Year
SAP_ALL_DIVISION	Division	0DIVISION
SAP_ALL_PRODUCT	Product	0CRM_PROD
Additional Notes about the model		

Model Name: SAP__UTL_CRM_IM_CTPDTALLOC	Connection
Open 0UCCRMCONTR_Q0001_Z01 with SAP BEx Query Designer	
Save it as 0UCCRMCONTR_Q0001_Z02	
Navigate to the Filter tab	
Characteristic Restriction	
Remove the restriction on CRM_ENDDAT	
Navigate to the Rows/Columns tab	
Rows	
Remove [OCRM_BEGDAT] Start Date	
Columns	
Create a new structure and name it Calendar Year	
Within this structure, create a selection 2014	

Define selection 2014 as displayed in the screenshot below.

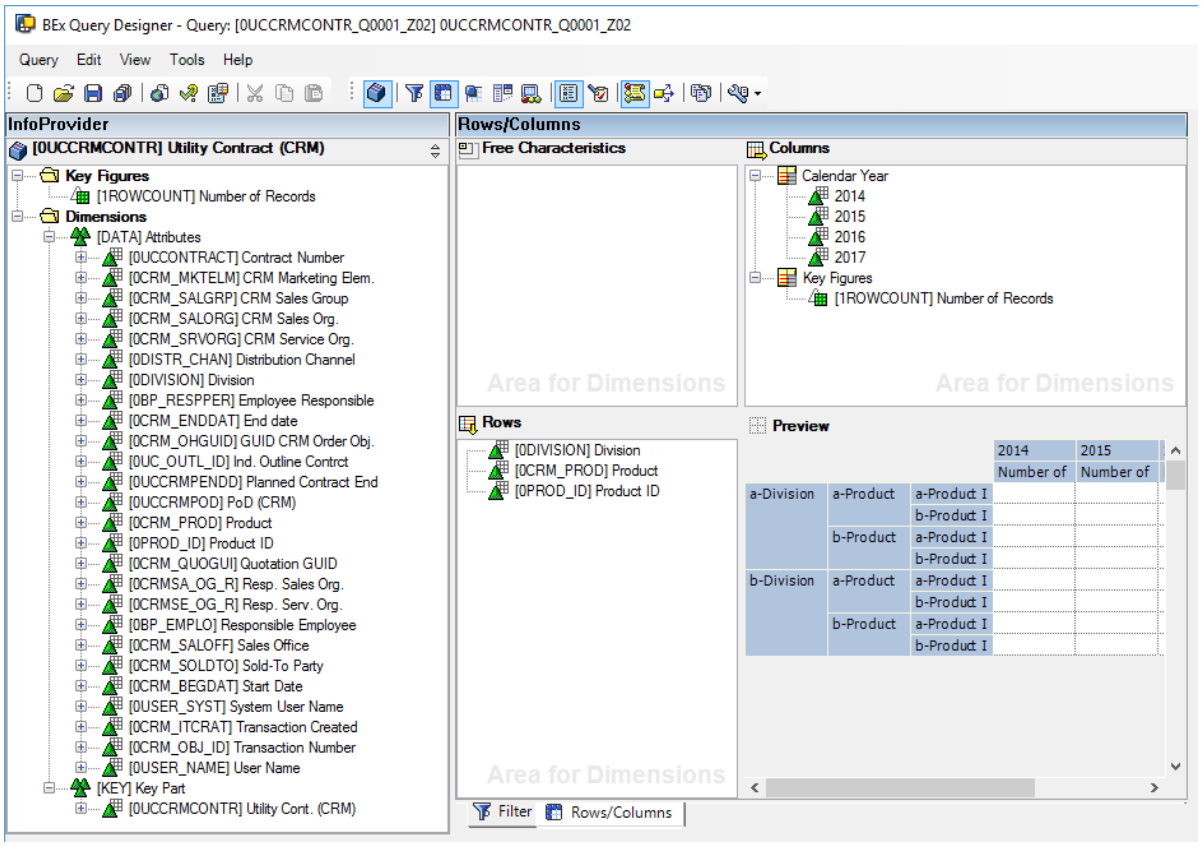


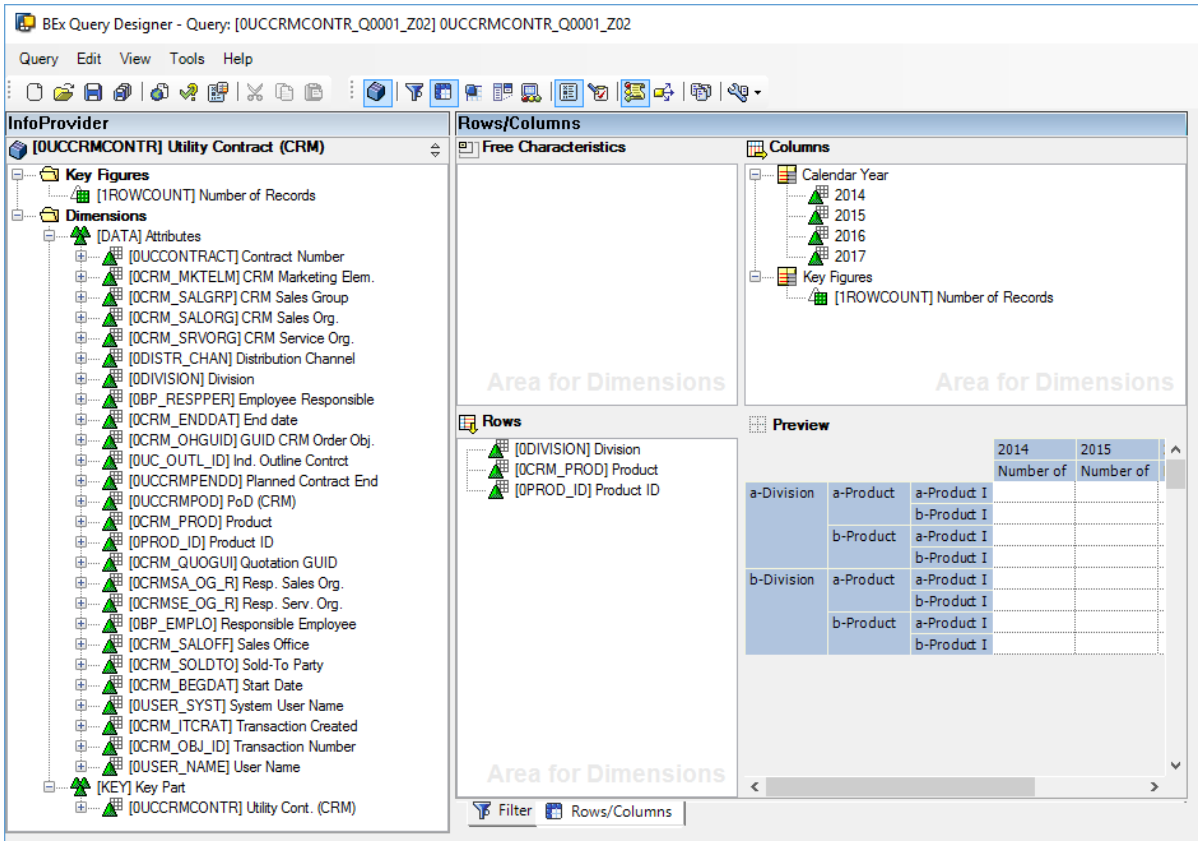


Model Name: SAP__UTL_CRM_IM_CTPDTALLOC	Connection

Define selections 2015, 2016, and 2017 by replacing 2014 by 2015, 2016, and 2017 respectively.

The result is displayed in the screenshot below.





Model Name: SAP__UTL_CRM_IM_CTPDTALLOC	Connection
Save the query.	

> **i** Note
>
> * Private dimension and other dimensions are public.

3.37.4.3 Sales Statistics (SAP__UTL_GEN_IM_SALES)

Model Name: SAP__UTL_GEN_IM_SALES	Connection
• Model Description: SAP Utilities: Sales Statistics • Planning Enabled: No	• Connection Type: Import Data Connection to an SAP BW System • Connection Query: Custom Query V_UCSA01_Q0001_Z01

Account*		
ID	**Description**	**Formula/Mapping**
Variable_Amount	Variable Amount	0VAR_VR
Number_of_Billing_Docs	Number of Billing Docs	0UCBILLING
Quantity	Quantity	0UCQUANT
Renewable_Revenue_Amount	Renewable Revenue Amount	RESTRICT([Variable_Amount], [d/SAP_UTL_GEN_RATECATEGORY]='UT-GREEN')
Billed_Revenue	Billed Revenue	RESTRICT([Variable_Amount], [d/SAP_UTL_GEN_SIMULATIONPERIO-DID]='#')
Unbilled_Revenue	Unbilled Revenue	RESTRICT([Variable_Amount], [d/SAP_UTL_GEN_SIMULATIONPERIO-DID]='S17')
Renewable_Revenue_Ratio	Renewable Revenue Ratio	[Renewable_Revenue_Amount]/[Varia-ble_Amount]

Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0CALMONTH
SAP_ALL_COMPANYCODE	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	0BUS_AREA
SAP_UTL_GEN_BILLINGCLASS	Billing Class	0UCBILL_CLA
SAP_UTL_GEN_SIMULATIONPERIODID	Simulation Period ID	0UC_SIM_ID

Model Name: SAP__UTL_GEN_IM_SALES		Connection
SAP_UTL_GEN_RATECATEGORY	Rate Category	0UCRATE_CAT
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	0COUNTRY
SAP_ALL_CUSTOMERREGION	Customer Region	0REGION
Additional Notes about the model		

Model Name: SAP__UTL_GEN_IM_SALES	Connection

Connection Query: Custom Query V_UCSA01_Q0001_Z01

Open /IMO/V_UCSA01_Q0001 with BEx Query Designer

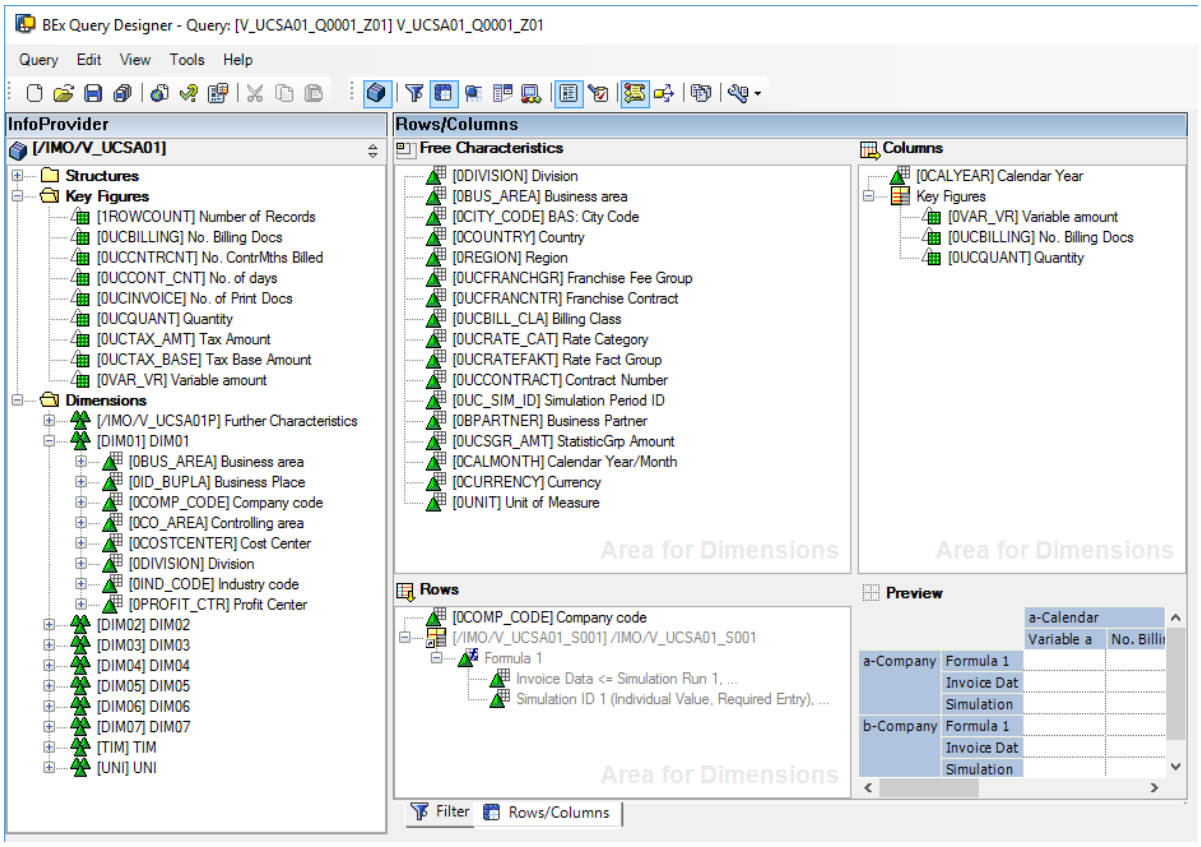
Save it as V_UCSA01_Q0001_Z01

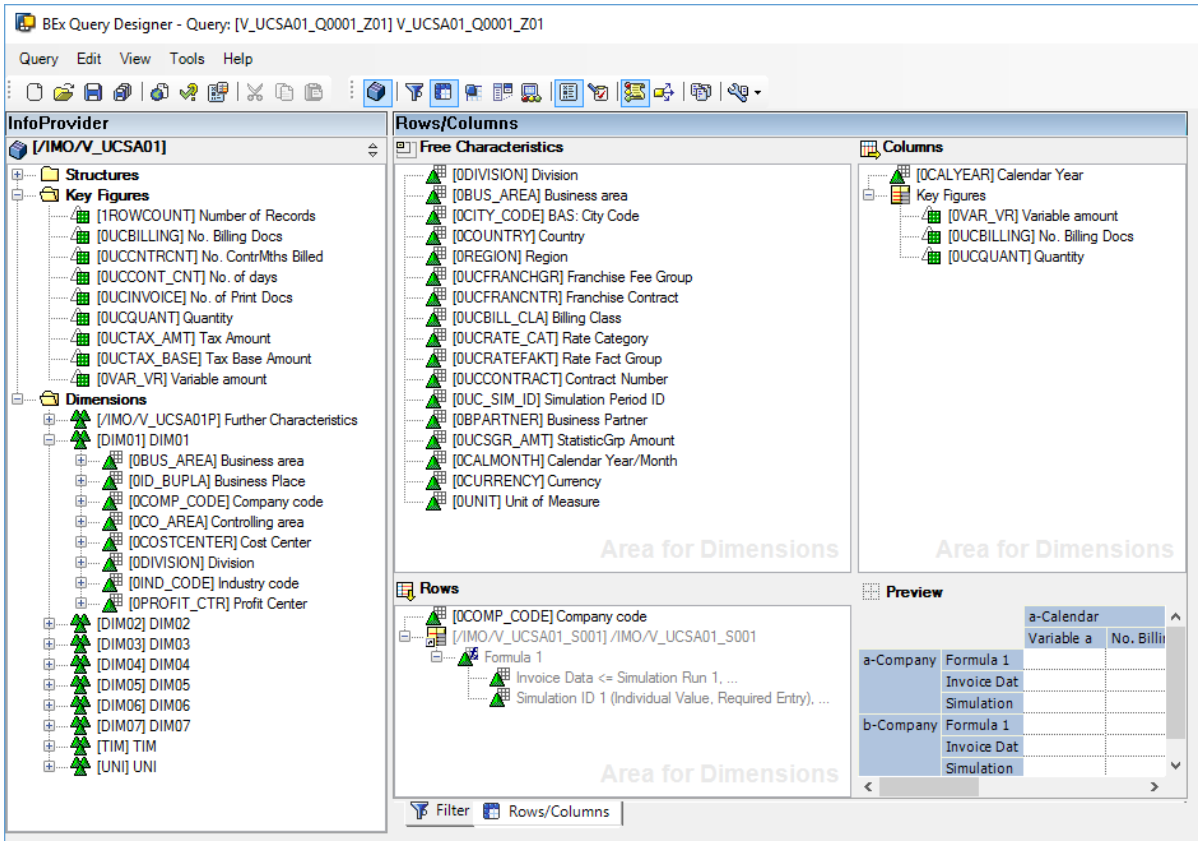
Navigate to the Rows/Columns tab

Columns

Drag/Drop [0UCQUANT] Quantity from InfoProvider /IMO/V_UCSA01 into the Columns area.

The result is displayed in the screenshot below.





Model Name: SAP__UTL_GEN_IM_SALES	Connection
Save the query. **Connection Variables:** Company Code (Manual Entry to set Company Code) (0CMPCODE) for example U100 Calendar Year (Manual Entry to set a range for Calendar Year) (0I_CALYE) for example 2014 - 2017 Simulation ID (Manual Entry to set Simulation ID value) (0P_SIMD1) for example S17	

> **i** Note
>
> * Private dimension and other dimensions are public.

3.37.4.4 Sales Statistics w/ Geo Data (SAP__UTL_GEN_IM_SALESGEO)

Model Name: SAP__UTL_GEN_IM_SALESGEO	Connection
• Model Description: SAP Utilities: Sales Statistics w/ Geo Data • Planning Enabled: No	• Connection type: Import Data Connection to an SAP BW System • Connection Query: Custom Query V_UCSA01_Q0001_Z01

Account*		
ID	**Description**	**Formula/Mapping**
Variable_Amount	Variable Amount	0VAR_VR
Number_of_Billing_Docs	Number of Billing Docs	0UCBILLING
Quantity	Quantity	0UCQUANT
Renewable_Revenue_Amount	Renewable Revenue Amount	RESTRICT([Variable_Amount], [d/SAP_UTL_GEN_RATECATEGORY]='UTGREEN')
Billed_Revenue	Billed Revenue	RESTRICT([Variable_Amount], [d/SAP_UTL_GEN_SIMULATIONPERIOD]='#')
Unbilled_Revenue	Unbilled Revenue	RESTRICT([Variable_Amount], [d/SAP_UTL_GEN_SIMULATIONPERIOD]='S17')

Model Name: SAP__UTL_GEN_IM_SALESGEO		Connection
Renewable_Revenue_Ratio	Renewable Revenue Ratio	[Renewable_Revenue_Amount]/[Variable_Amount]
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0CALMONTH
SAP_ALL_COMPANYCODE	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	0DIVISION
SAP_ALL_BUSINESSAREA	Business Area	0BUS_AREA
SAP_UTL_GEN_BILLINGCLASS	Billing Class	0UCBILL_CLA
SAP_UTL_GEN_SIMULATIONPERIODID	Simulation Period ID	0UC_SIM_ID
SAP_UTL_GEN_RATECATEGORY	Rate Category	0UCRATE_CAT
SAP_ALL_CUSTOMERCOUNTRY	Customer Country	0COUNTRY
CustomerRegionGeo	Customer Region	0REGION
Additional Notes about the model		

The model SAP__UTL_GEN_IM_SALESGEO is delivered as an example with geocoded data pertinent to the delivered sample data set. You need to manually create your own SAP__UTL_GEN_IM_SALESGEO model, as a derivative of model SAP__UTL_GEN_IM_SALES, by injecting your own geocoding information.

You can refer to the detailed documentation on how to create model SAP__FI_CA_OVERDUEBPGEO as a derivative of model SAP__FI_CA_OVERDUEBP for instructions.

Connection Variables:

- Company Code (Manual Entry to set Company Code) (0CMPCODE): for example U100
- Calendar Year (Manual Entry to set a range for Calendar Year) (0I_CALYE): for example 2014 - 2017
- Simulation ID (Manual Entry to set Simulation ID value) (0P_SIMD1): for example S17

> **i** Note
>
> * Private dimension and other dimensions are public.

3.37.4.5 Stock Statistics (SAP__UTL_GEN_IM_STOCK)

Model Name: SAP__UTL_GEN_IM_STOCK	Connection
• Model Description: SAP Utilities: Stock Statistics • Planning Enabled: No	• Connection Type: Import Data Connection to an SAP BW System • Connection Query: Custom Query 0UCSS_C09_Q0002_Z01
Account*	

Model Name: SAP__UTL_GEN_IM_STOCK		Connection
ID	**Description**	**Formula/Mapping**
Change_in_Stock	Change in Stock	0UCCOUNTDIF
Dimensions		
ID	**Description**	**Mapping**
Time*	Time	0CALMONTH
SAP_ALL_COMPANYCODE	Company Code	0COMP_CODE
SAP_ALL_DIVISION	Division	0DIVISION
SAP_UTL_GEN_CONTACTCLASS	Contact Class	0UCCONT_CL
SAP_UTL_GEN_CONTACTACTION	Contact Action	0UCCONT_ACT
SAP_UTL_GEN_CONTACTTYPE	Contact Type	0UCCONT_TY
SAP_UTL_GEN_CONTACTPRIORITY	Contact Priority	0UCCT_PRIOR
SAP_UTL_GEN_CONTACTORIGIN	Contact Origin	0UCCONT_SRC
Additional Notes about the model		

Model Name: SAP__UTL_GEN_IM_STOCK	Connection

Connection Query: Custom Query 0UCSS_C09_Q0002_Z01

Open 0UCSS_C09_Q0002 with BEx Query Designer

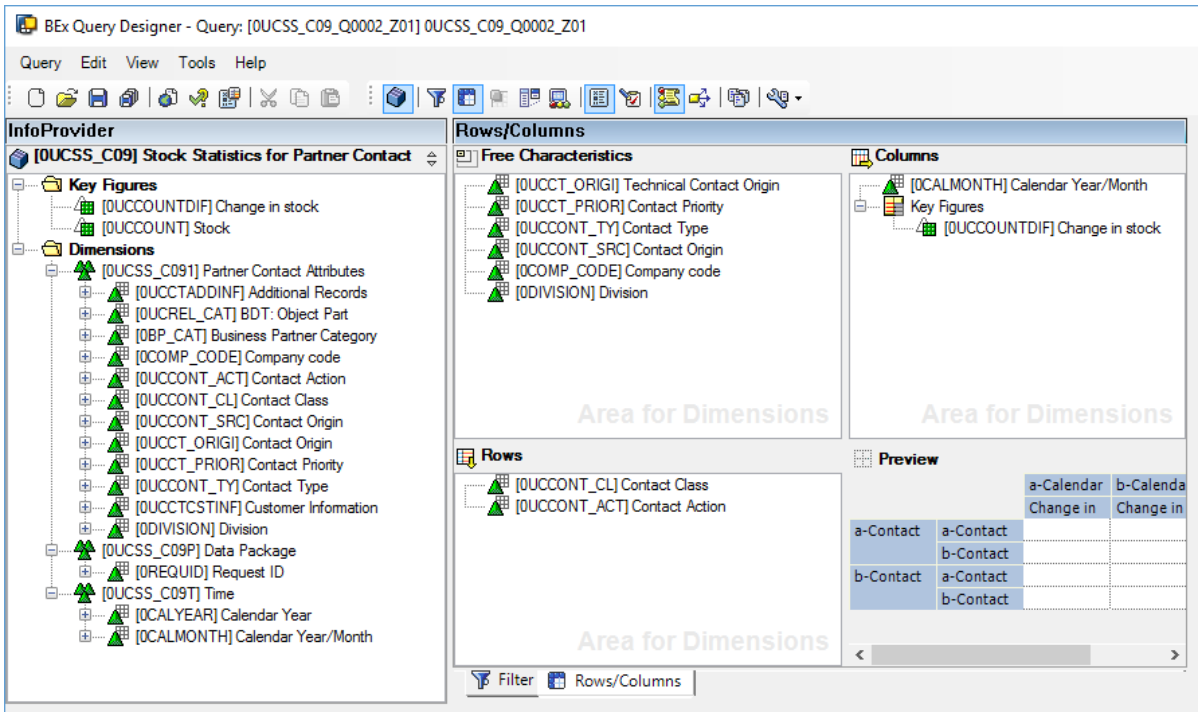
Save it as 0UCSS_C09_Q0002_Z01

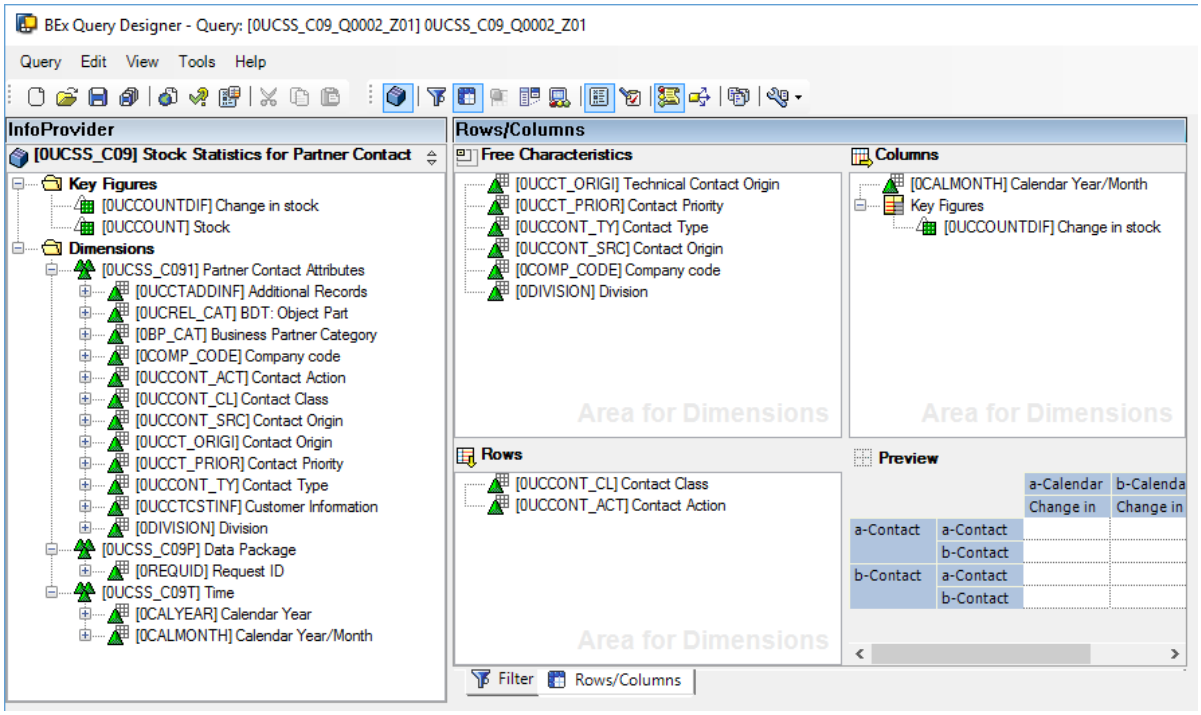
Navigate to Rows/Columns

Free Characteristics

Drag/Drop [0COMPCODE] Company Code and [0DIVISION] Division in the Free Characteristics Area.

The result is displayed in the screenshot below.





Save the query.

Connection Variables:

Calendar Year/Month (Manual Entry to set date range for analysis.) (0I_CMNTH)

Model Name: SAP__UTL_GEN_IM_STOCK	Connection
for example 01.2014 – 12.2017.	

> **i** Note
>
> *Private dimension and other dimensions are public

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