LTI
Let's Solve

Celebrating 20 Years

SAP HANA internal training – Session 3

March 2018

A Larsen & Toubro Group Company

Star Join – Calculation view

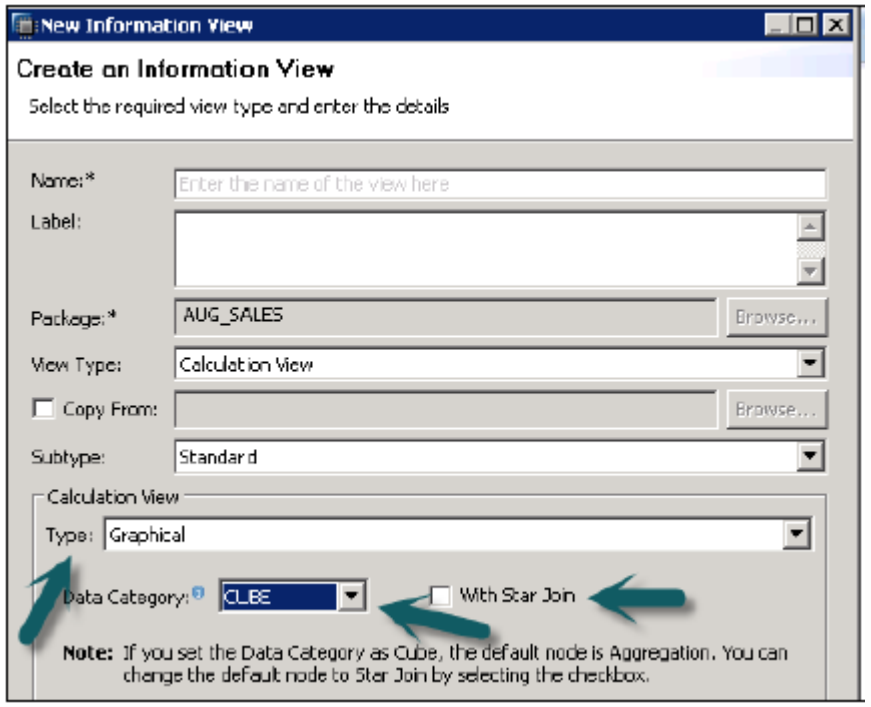
Details

Star joins in calculation views help to join a fact table with dimensional data. The fact table contains data that represent business facts such price, discount values, number of units sold and so on. Dimension tables represent different ways to organize data, such as geography, time intervals, contact names and so on.

To create a calculation view based on star join, data category should be selected as ‘CUBE’ and star join check-box should be marked.

Calculation views as a data source in star join nodes behaves as shared dimensions. Modeler includes all attributes and hierarchies of the shared dimension to the output of the star join calculation view.

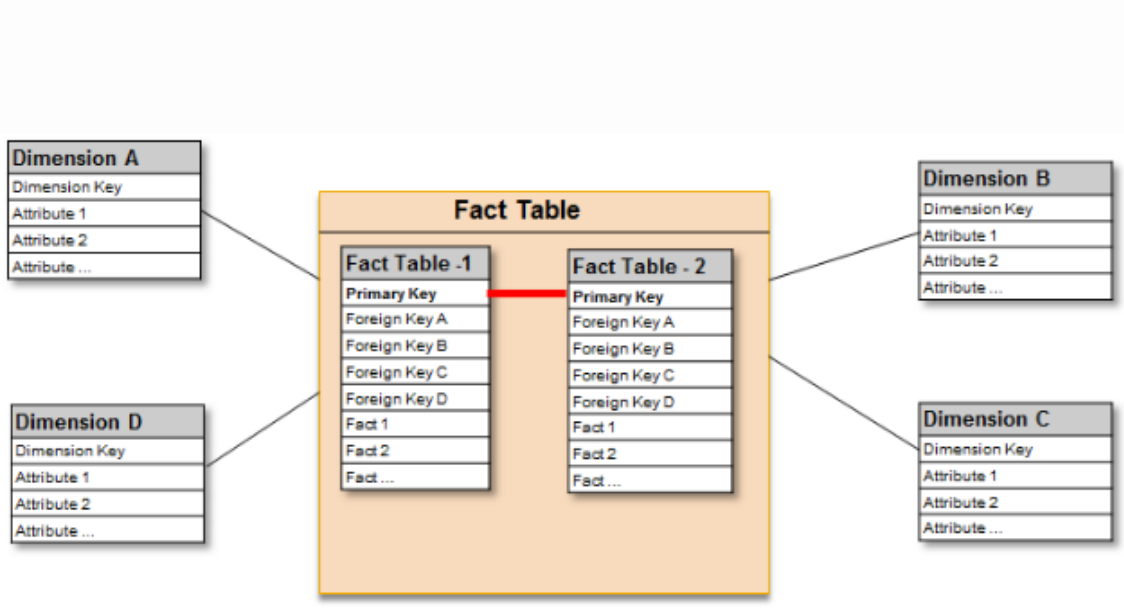
Restrictions –
It does not allow base column tables, Attribute Views or Analytic views to add at data foundation. All Dimension tables must be changed to Dimension Calculation views to use in Star Join. All Fact tables can be added and can use default nodes in Calculation View.

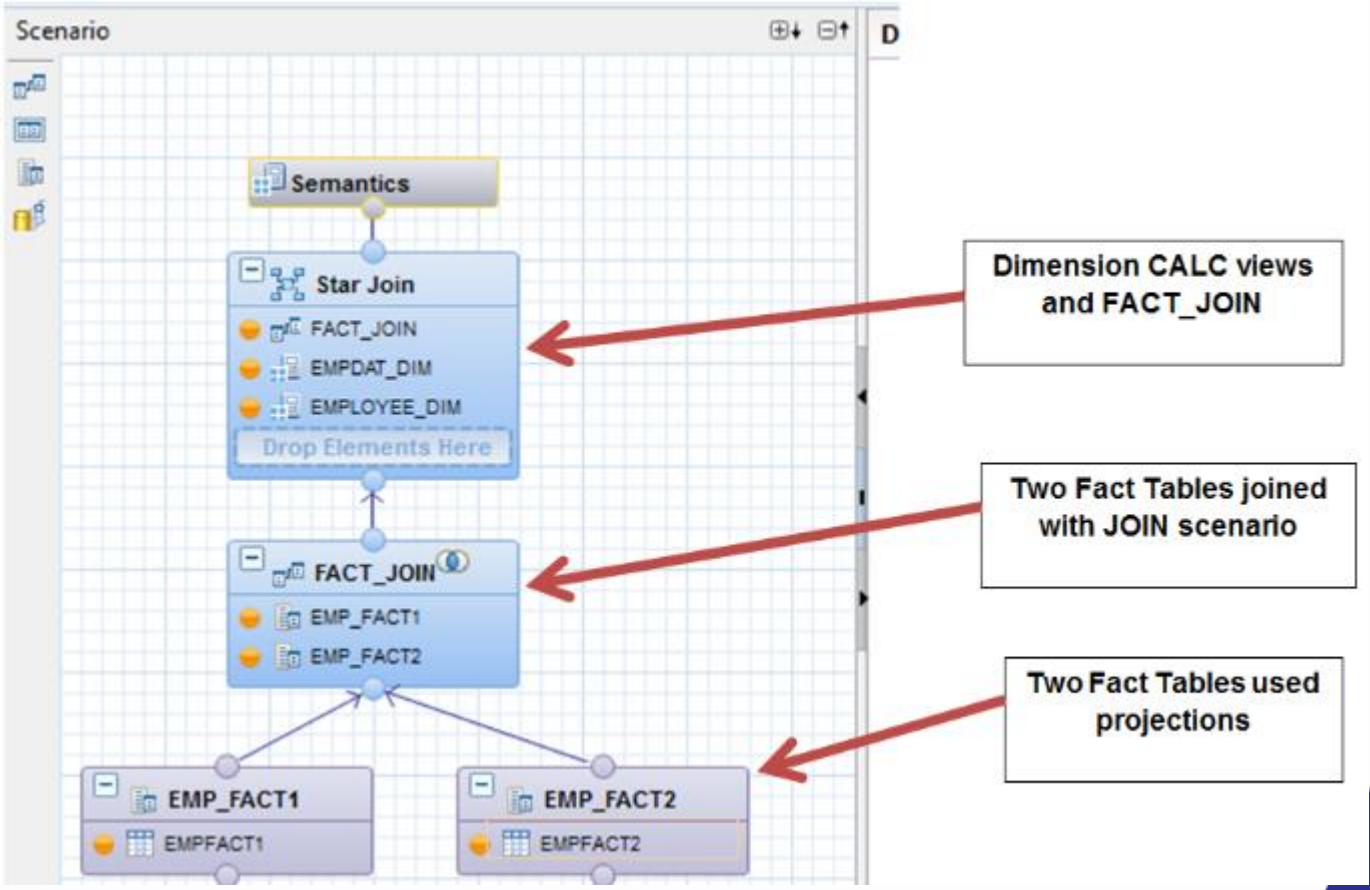


Star Join – Calculation view

Example

Below scenario is modelled in calculation view as star join(left).





Currency Conversion

Details

- Modeler performs currency conversions based on the source currency value, target currency value, exchange rate, and date of conversion. Similarly, it performs unit conversions based on the source unit and target unit.
- Input parameters could be used in currency conversion and unit conversion to provide the target currency value, the exchange rate, the date of conversion or the target unit value at runtime.

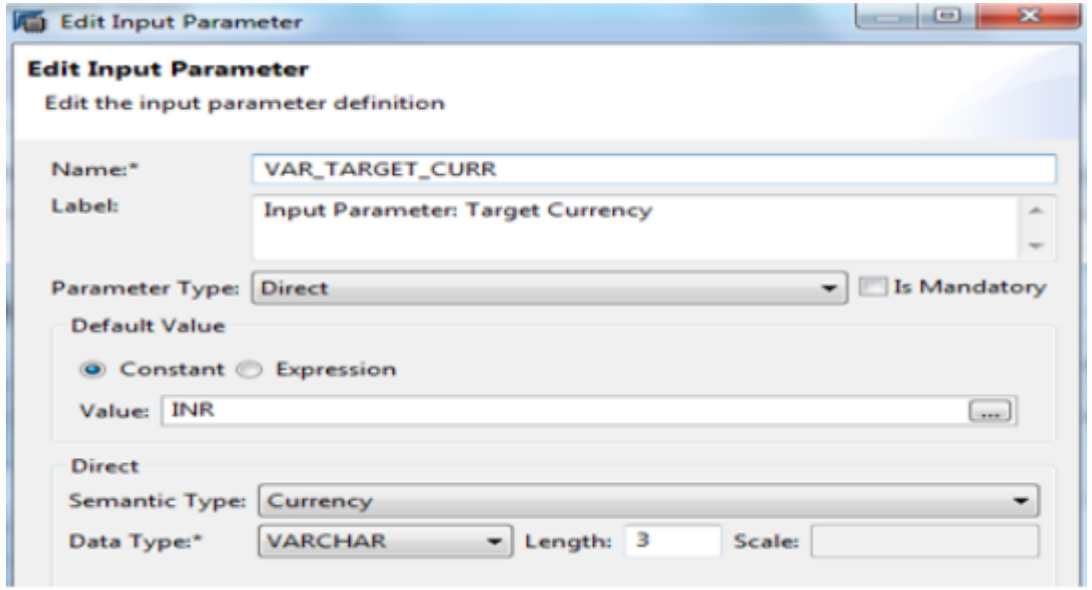
Pre-requisite – Following Currency Conversion related tables (TCUR*) should be present in schema with updated data.

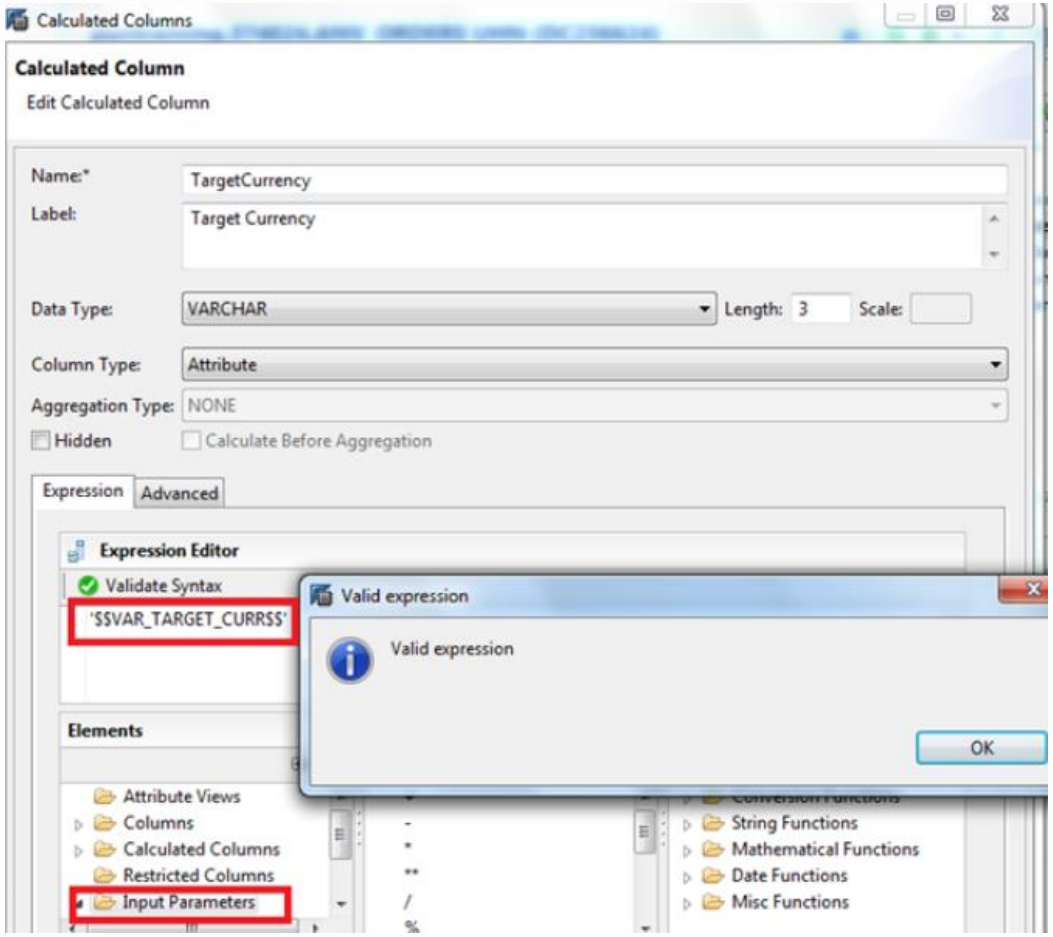
Table Name	Description
TCURR	Exchange Rates
TCURV	Exchange rate types for currency translation
TCURF	Conversion Factors
TCURN	Quotations
TCURX	Currency Decimals

Currency Conversion

Example

To enable dynamic currency conversion, define an input parameter to receive the currency input from user. Also, a calculated column based on it to associate it with measure with amount values.





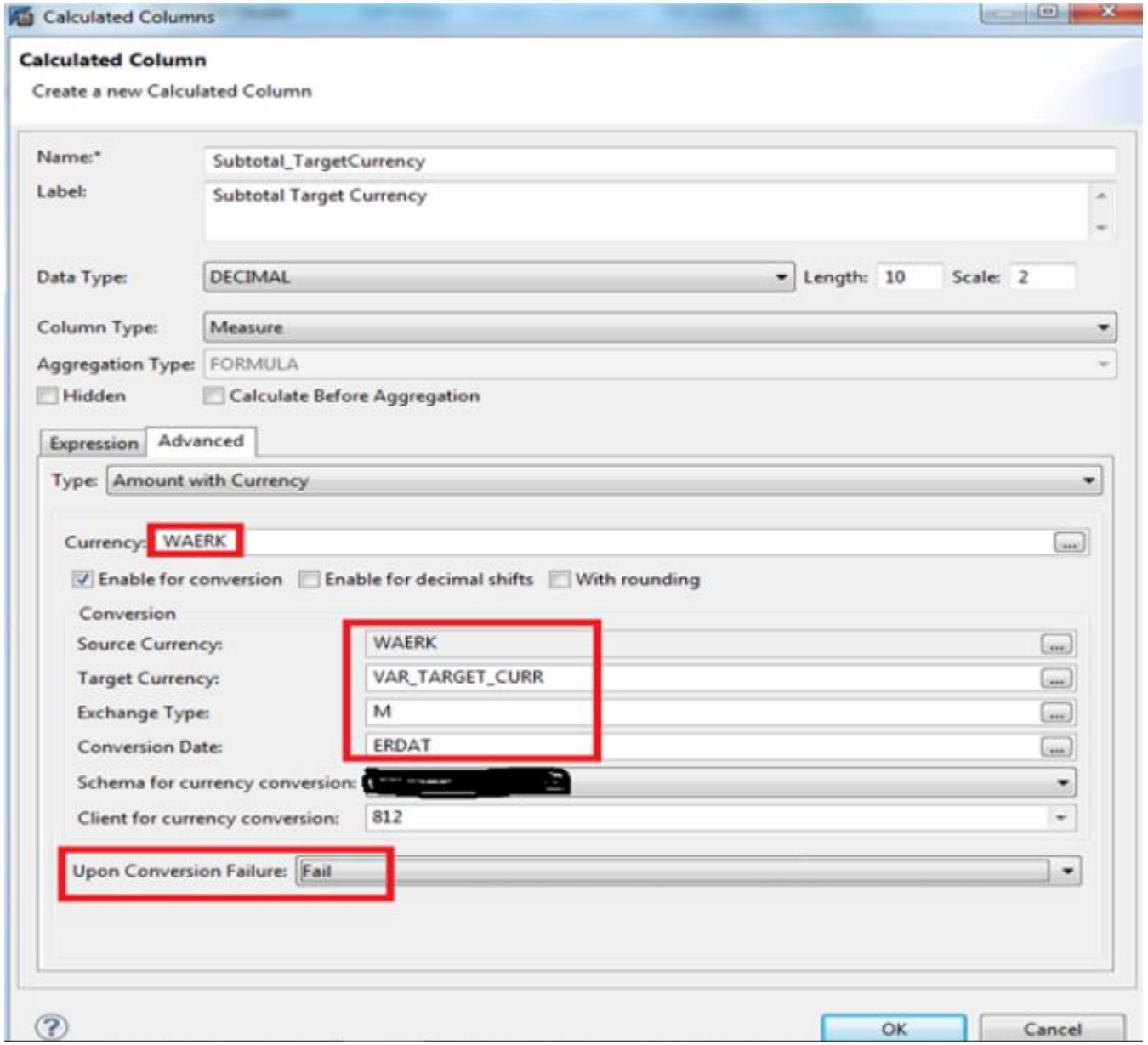
Currency Conversion

Example

Calculated column having currency conversion could be then defined.

- Here, ‘Schema for currency conversion’ should contain the currency conversion tables mentioned earlier.
- Source currency could be fixed or from a column.
- Just like target currency, Exchange rate type, and conversion date could also be fixed, from a column, or from input parameter.
- In case of error, error handling options are as below:

Value	Description
Fail	Modeler displays error for conversion failures at data preview.
Set to NULL	Modeler sets the values for corresponding records to NULL at data preview.
Ignore	Modeler displays unconverted value for the corresponding records at data preview.



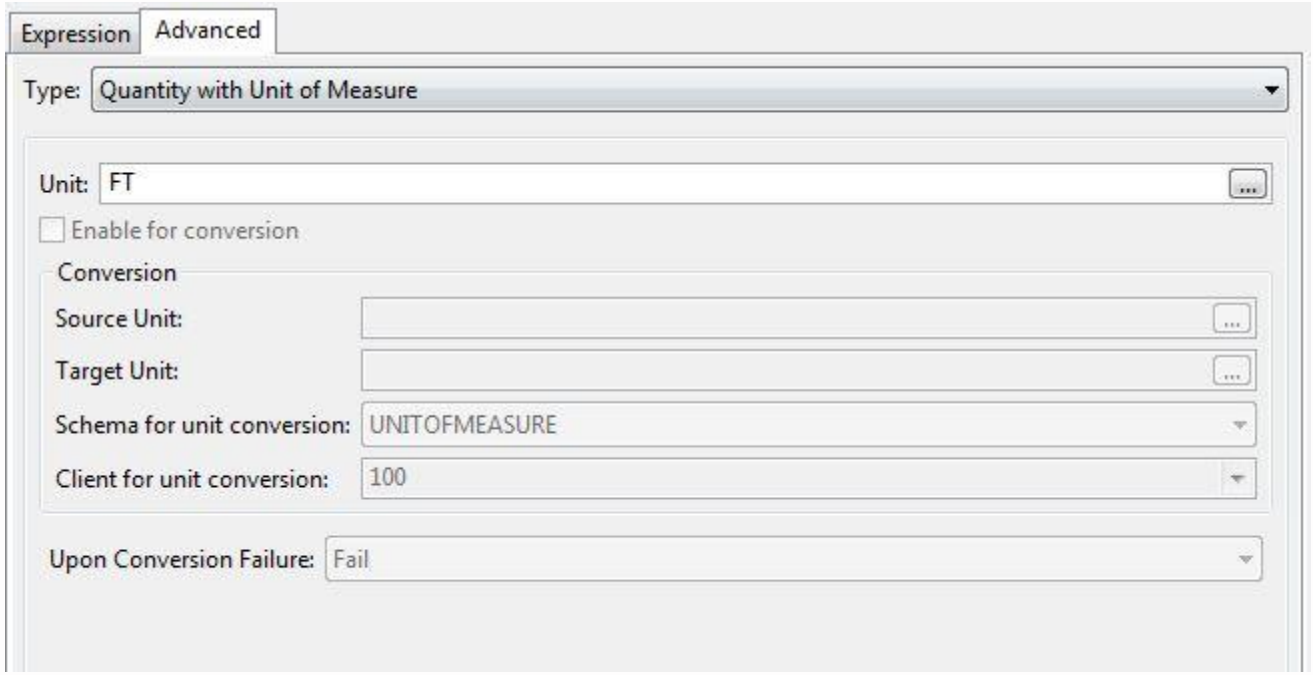
Unit Conversion

Details

- Modeler performs unit conversions based on the source unit and target unit.
- Input parameters could be used in unit conversion to provide the target unit value at runtime.

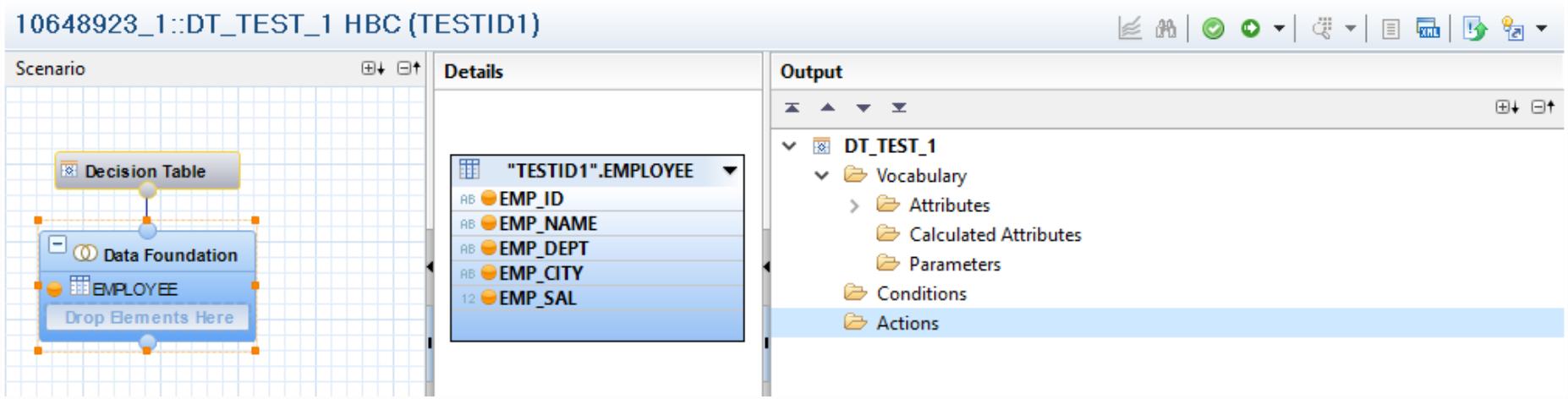
Pre-requisite – Following Unit Conversion related tables should be present in schema with updated data.

- T006
- T006D
- T006A



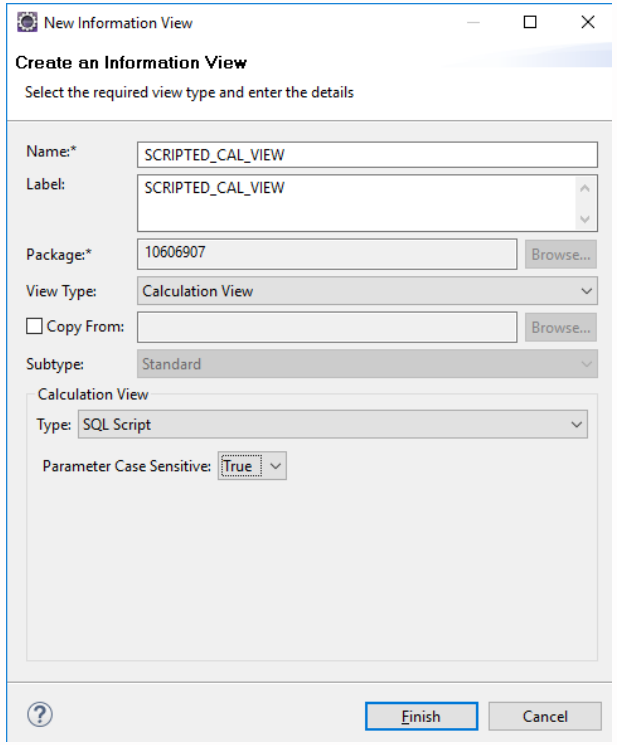
Decision Tables

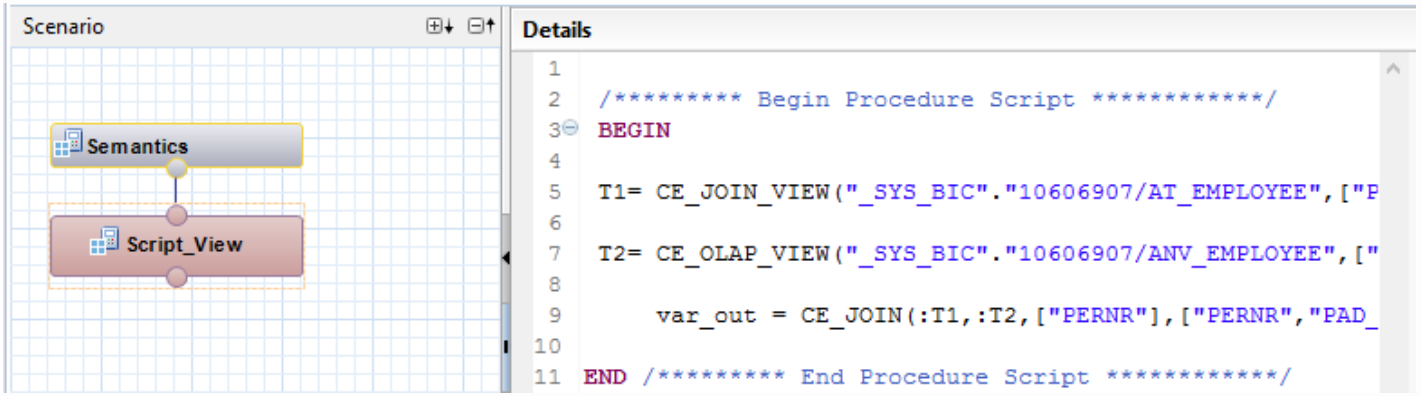
- Decision tables are used to manage business rules, data validation, and data quality rules.
- It consists of three panes: Scenario, Details, and Output.
- The **Scenario** pane of the editor consists of the Decision Table and Data Foundation nodes. Selecting any of these nodes shows the specific node information in the Details pane.
- The **Details** pane of the Data Foundation node displays the tables or information models used for defining the decision table. The Details pane of the Decision Table node displays the modeled rules in tabular format.
- The **Output** pane displays the vocabulary, conditions, and actions, and allows you to perform edit operations. Expand the vocabulary node to display the parameters, attributes, and calculated attributes sub-nodes. In the Output pane, you can also view properties of the selected objects within the editor.

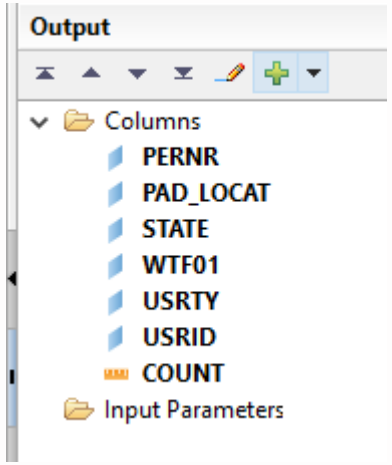


Calculation View - Scripted: Concept

- Script-based calculation view is a viable alternative to depict complex business scenarios, which you cannot achieve by creating other information views.
- For example, if you want to create information views that require certain SQL functions (i.e. window), or predictive functions (i.e. R-Lang), then you use script-based calculation views.
- While creating the view, you write your SQL code in Script View Node and define the output structure in the Output Pane.







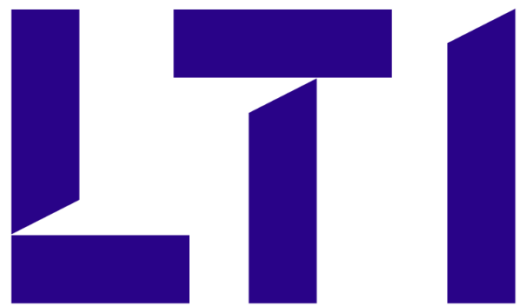
Appendices

How to – Step By Step


Microsoft Word Document


Microsoft Word Document


Microsoft Word Document


Let’s Solve