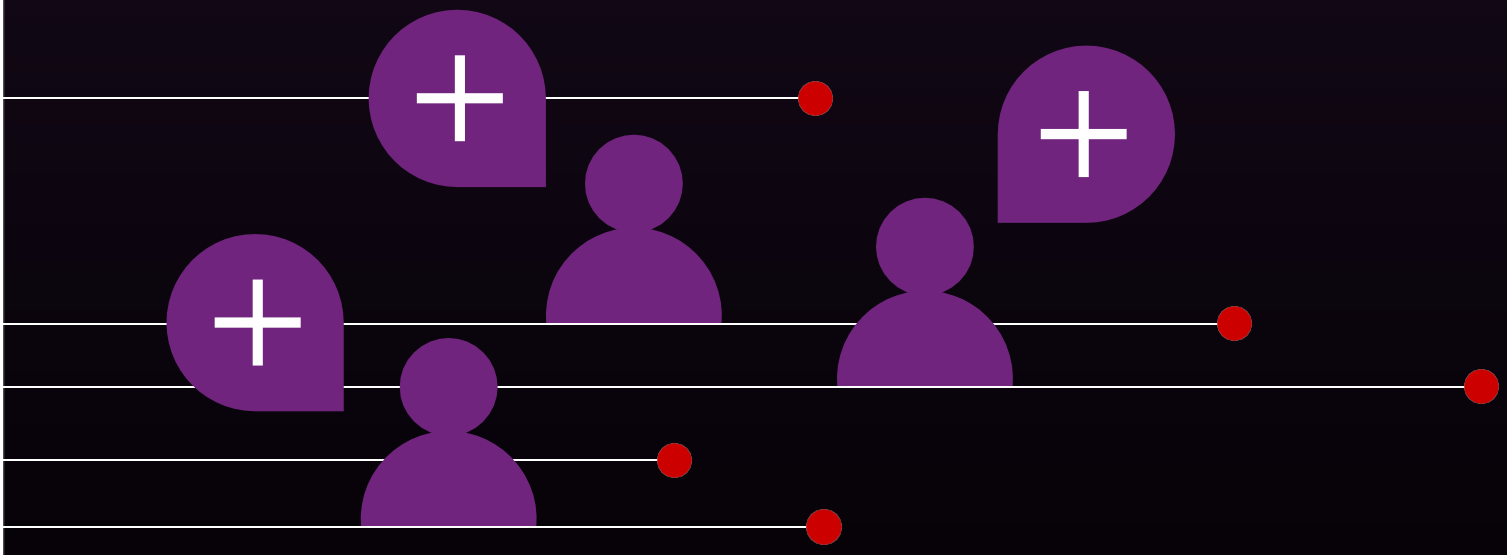
VAULTSPEED

VaultSpeed Studio

Fact on Non Historized Link with SCD2 Dimension



USE CASE FOR THIS TEMPLATE

This document describes how a user can configure a template in the VaultSpeed Studio to generate a view that represents a FACT based on a Non-historized-Link with multiple HUBs. The dimensions that are included in the fact is based on the correct tagging of multiple SCD Type 2 dimensions. The selection of the correct dimension record is based on a date that is available in the Non-historized-Link.

Before you explore and use this example template, ensure that you understand the example SQL attached to understand what the template does and that it covers your needs.

This template is designed for:

- FACT creation based on a Non-historized-Link
- SCD Type 2 Dimension
- Hard Join with dimension, no check for existence, a not existing version will lead to record loss at loading time
- No aggregation in the template
- the date used for the FACT must be tagged using a Signature Attribute
- all attributes with SA OTHER_ATTR from the NHL will be loaded in the FACT
- The dimensions are dimensions created with the SCD2_DIM_HUB template

Example

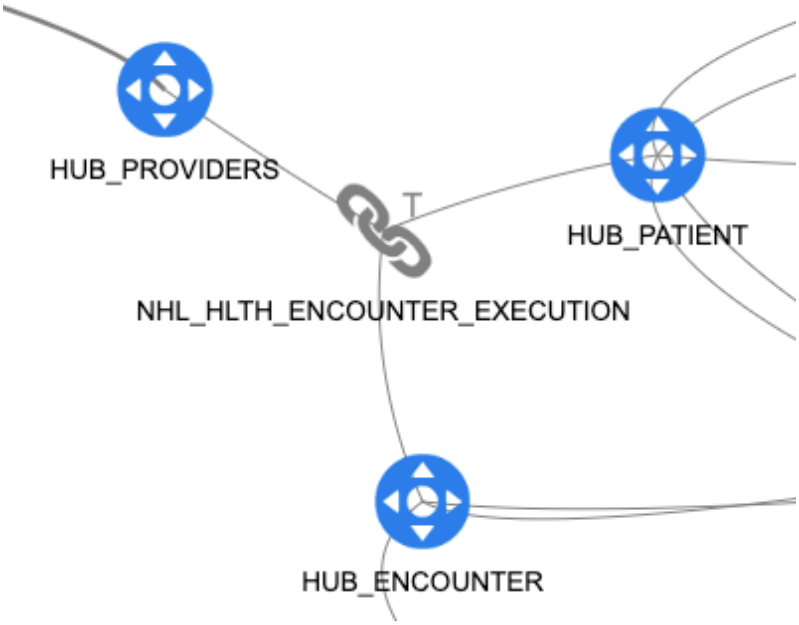
The example that is used in this document is based on healthcare data

Components of the implementation

- Standard Raw Data Vault Non-Historized-Link
- Ensure there are SCD Type 2 dimensions for each HUB
- Signature objects
- Assign Signature objects to the correct tables
- Create Signature attribute and assign them in the requested fields
- Create the Template
- Create Target definition
- Fill in the Dependency

Select the Standard raw vault Non-Historized-Link table

For use within the template, the Non-Historized-Link is used to create the fact. The desired granularity must exist within the NHL. Certain dimensions can be chosen to not show them in the fact.



Create Signature objects

In order for the template to know which tables to use for which purpose, we need to create some specific Signature Objects.

FACT_ON_NHL_DIM_SELECTION: From the NHL, not all HUBs should become dimensions. The template expects the user that configures this fact uses the SO to flag those HUBs for which the dimension must be visible in the fact.

Signature objects are assigned

FACT_ON_NHL_DIM_SELECTION

Object Name	Object Type	Signature Object
Filter...	Hubs	FACT_ON_NHL_DIM_SELECTION
HUB_PROVIDERS	Hubs	HUB, FACT_ON_NHL_DIM_SELECTION
HUB_PATIENT	Hubs	HUB, FACT_ON_NHL_DIM_SELECTION
HUB_ENCOUNTER	Hubs	HUB, FACT_ON_NHL_DIM_SELECTION

Create Signature attribute type and flag the usage in the requested fields

In order to identify the field in the SAT which is used to select the correct version of the dimension

NHL_HLTH_ENCOUNTER_EXECUTION	Non-historized Link		
	NHL_ENCOUNTER_EXECUTION_HKEY	OBJECT_L_H_KEY	STRING
	PROVIDERS_HKEY	OBJECT_F_H_KEY	STRING
	PATIENT_HKEY	OBJECT_F_H_KEY	STRING
	ENCOUNTER_HKEY	OBJECT_F_H_KEY	STRING
	LOAD_DATE	LOAD_TIMESTAMP	TIMESTAMP
	LOAD_CYCLE_ID	LOAD_CYCLE_ID	INTEGER
	START	TRANS_INDICATOR, FACT_ON_NHL_TIM...	TIMESTAMP
	RECORD_SOURCE	RECORD_SOURCE	STRING

Create the template

Template definition, according to the standard that you want to use. Important element here is the Signature Object naming. That name comes back in the .dvt file that contains the definition of the dimension template. If you have multiple implementations, you might want to go for a different name. But then you will need to adapt the template file accordingly and replace all the references to the Signature Object of your choice with your chosen name.

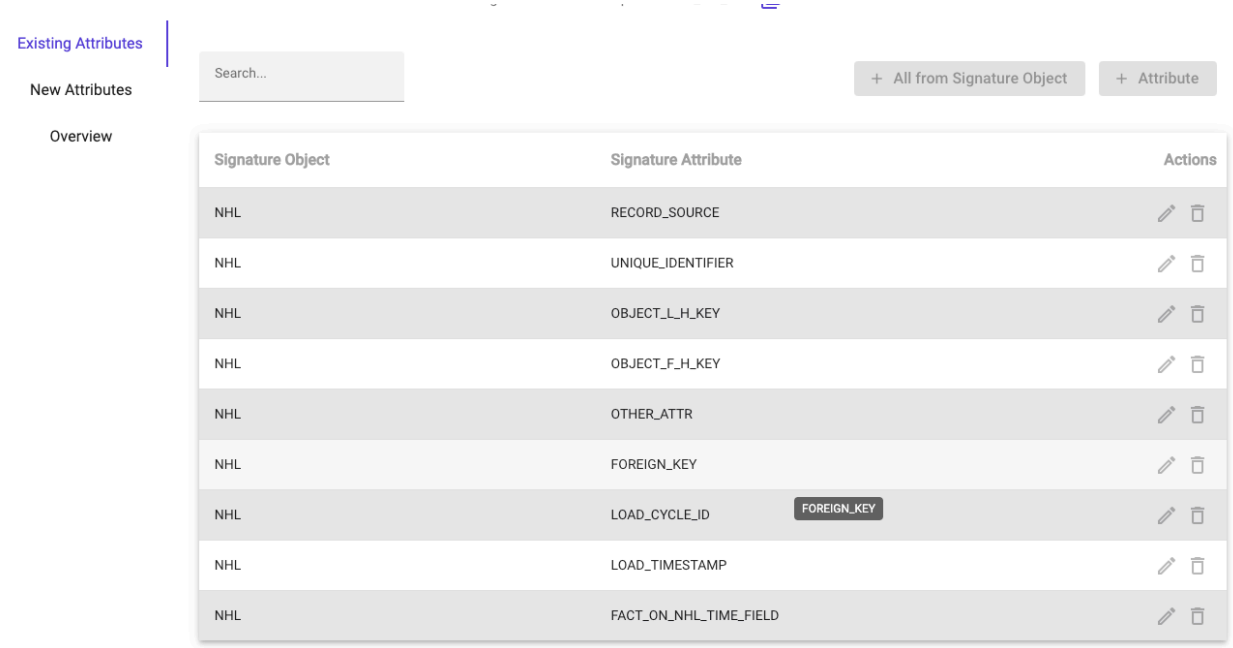
Ensure you have this use case's latest version from the following location: https://github.com/Vaultspeed/studio-templates .

Each of our templates has its folder where the code resides.

Take the fact_view_on_nhl_etl.dvt file and upload it for the ETL template of this view.

Fill in the Target Definition

The target definition is very specific to the template:



And the new attribute

Fill in the Dependency

Define on which BRIDGE table this template must be implemented.