VAULTSPEED
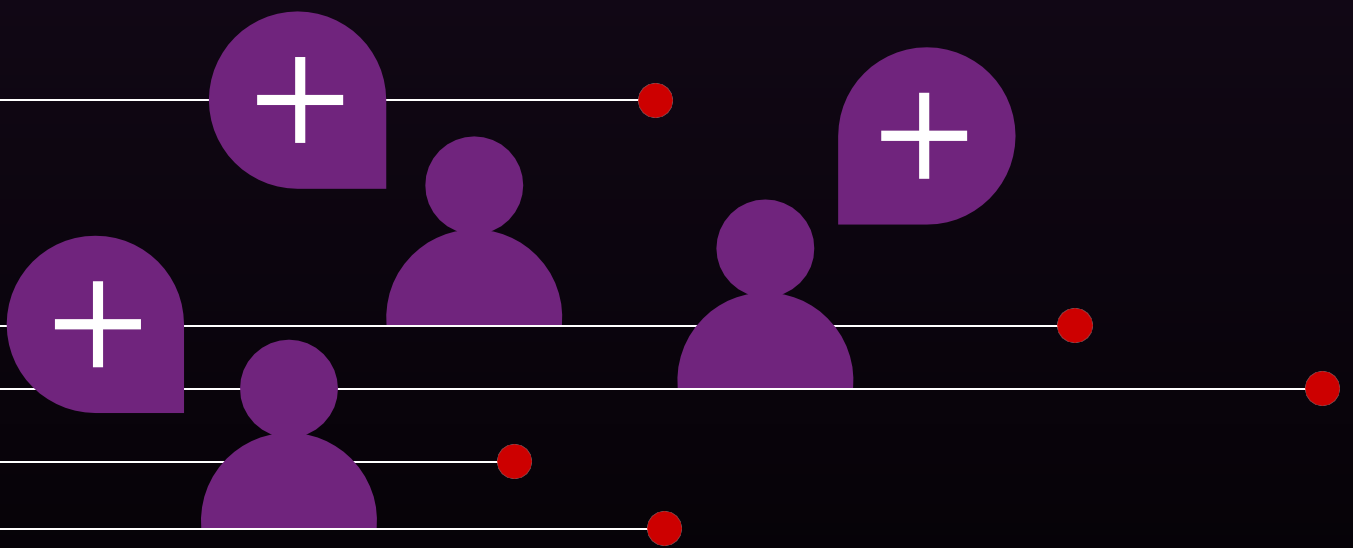
VaultSpeed Studio

Fact on Many 2 Many / Object Link Satellite with Snapshot Dimension

USE CASE FOR THIS TEMPLATE

This document describes how a user can configure a template in the VaultSpeed Studio to generate a Fact on an "Object Based" (Many to Many Link) Satellite with Snapshot Dimension based on an insert-only RDV.

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:

- Based on an Object-Based Link Satellite

- Snapshot Dimension

- Hardcoded generation of the dimension key values, no check for existence. A non-existing version will lead to record loss at query time

- No aggregation in the template

- the date used for the FACT and dimension snapshot selection must be tagged using a Signature Attribute

- the measure fields must be tagged using a Signature Attribute

- All HUBs in the link will be used as a dimension in the Fact

Example

The example that is used in this document is based on a many 2 many link on the purchased products which has multiple satellites.

Components of the implementation

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- Signature objects
- Assign Signature objects to the correct tables
- Create Signature attribute type and assigned in the requested fields
- Create the Template
- Create Target definition
- Fill in the Dependency

Create Signature objects

For this template implementation, there is no need for specific signature objects.

Signature objects are assigned

For this template implementation, there is no need for specific signature objects.

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

In order to build the fact with the correct transaction date (FACT_LDS_TRANSACTION_DATE) and select the requested fields in the fact (FACT_LDS_MEASURE_SELECTION)

FACT_LDS_MEASURE_SELECTION

FACT_LDS_TRANSACTION_DATE

And assign this

LDS_SLS_PURCHASED_PRODUCT_PURCHA… Satellites on Object Based Links		
	CUSTOMER_NUMBER	FOREIGN_KEY
	SERIAL_NUMBER	FOREIGN_KEY
	SHOP_ID	FOREIGN_KEY, FACT_LDS_MEASURE_SEL…
	LND_PURCHASED_PRODUCT_HKEY	OBJECT_L_H_KEY
	LOAD_DATE	LOAD_TIMESTAMP, FACT_LDS_TRANSAC…
	LOAD_CYCLE_ID	LOA LOAD_TIMESTAMP, FACT_LDS_TRANSACTION_DATE

Create the template

Template definition, according to the standard that you want to use. An essential element here is the Signature Object naming. That name is used in the .dvt file containing the dimension template's definition. You might want or are needed to go for a different name if you have multiple implementations. But then you must adapt the template file accordingly and replace all the <signature object name> references with your chosen name.

In the example, we use FACT_LDS_SNAP, because this is a FACT based on a LDS and using Snapshot Dimension.

Ensure you have this use case's latest version from the following location:
https://github.com/Vaultspeed/studio-templates/pull/1 .

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

Take the "Fact on NHL with Snapshot Dimension.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:

Signature Object		Signature Attribute
LDS		OBJECT_L_H_KEY
LDS	LDS	FOREIGN_KEY
LDS		LOAD_TIMESTAMP
LDS		FACT_LDS_TRANSACTION_DATE
LDS		FACT_LDS_MEASURE_SELECTION

Add new attributes to enable the correct working of the template:
For the Dimension keys and for the transaction_day

New Attributes	Search...						
Overview	Unique	Name	Prefix	Suffix	Signature Object	Signature Attribute	Data Type
	⬤		DIM		LND	OBJECT_F_H_KEY	VARCHAR
	⬤	TRANSACTION_DAY			LDS	FACT_LDS_TRANSACTION_DATE	TIMESTAMP_TZ

Fill in the Dependency

Define on which NHL table this template must be implemented.

Example:

Search Linked...	Unlink

☐ Object Name (Linked)

☐ LDS_SLS_PURCHASED_PRODUCT_PURCHASEDBICYCLE (LDS) ⌄

☐ LDS_SLS_PURCHASED_PRODUCT_PURCHASEDEBICYCLE (LDS) ⌄

☐ LDS_SLS_PURCHASED_PRODUCT_PURCHASEDMCYCLE (LDS) ⌄

☐ LDS_SLS_PURCHASED_PRODUCT_PURCHASEDPASSCAR (LDS) ⌄