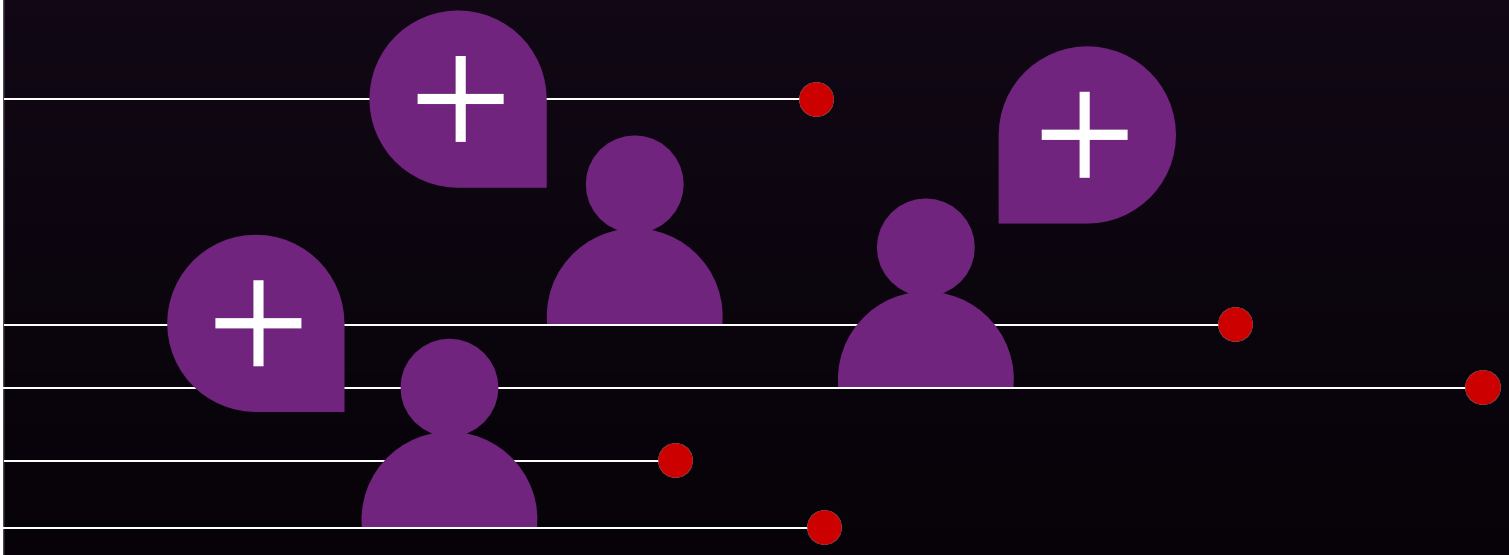
VAULTSPEED

VaultSpeed Studio

Snapshot dimension on a HUB



USE CASE FOR THIS TEMPLATE

This document describes how a user can configure a template in the VaultSpeed Studio to generate a Snapshot dimension based on an insert-only RDV on a single HUB based on the transaction or load timestamp. In the setup, all descriptive attributes will be shown in the dimension.

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:

- DIMENSION creation based on a HUB
- Snapshot Dimension
- PIT table must exist on the HUB

Example

The example that is used in this document is based on a customer.

In the Raw Data Vault model this is a HUB_CUSTOMER.

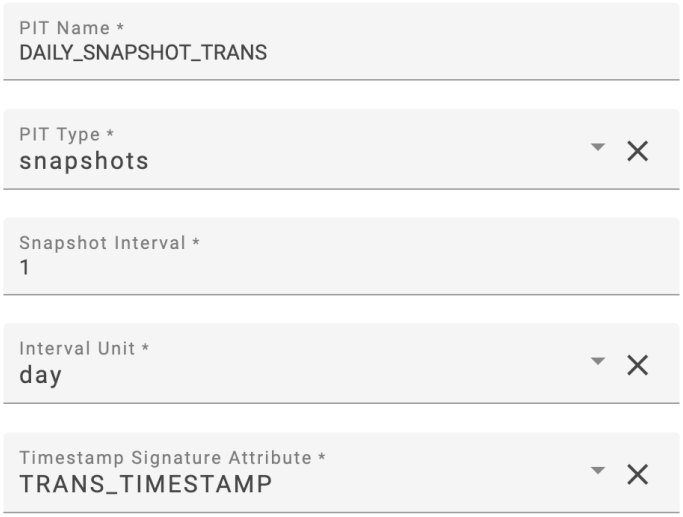
Components of the implementation

- PIT table on the HUB of choice
- 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

PIT table is created on the HUB

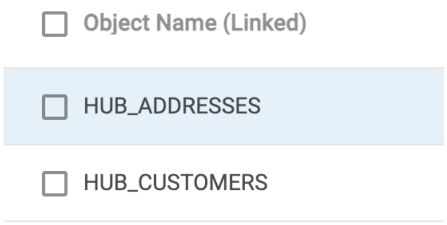
The Dimension is a snapshot dimension, for this we need to have a snapshot PIT implementation on the HUB based on the timestamp of choice; depending on the reporting requirement, this will be TRANS_TIMESTAMP or LOAD_TIMESTAMP. In the example the TRANS_TIMESTAMP is used.

The PIT setup is like the following:



DAILY_SNAPSHOT_TRANS	snapshots	1	day	TRANS_TIMESTAMP

After that, the PIT is applied on the HUBs



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

No signature attribute required in this template

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 SNAP_DIM_HUB, because this is a Snapshot Dimension based on a HUB template

Take the dim_etl_template.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:

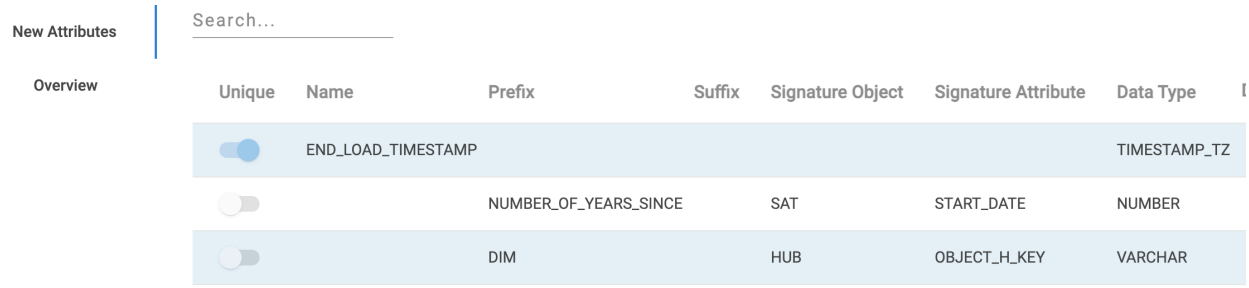
Signature Object	Signature Attribute
SAT	START_DATE
SAT	OTHER_ATTR
HUB	LOAD_TIMESTAMP
HUB	OBJECT_H_KEY
HUB	BUSINESS_KEY

Add new attributes for the:

- calculated end snapshot
- dim_<entity>_hkey

The template uses an extra attribute “end_load_timestamp”

You also see an extra attribute, “NUMBER_OF_YEARS_SINCE”. This is the name of the Signature attribute created for a calculated satellite based on a HUB that will be included as a dependency on this template. This list should be extended with all the Signature Attributes you want to include in all dimensions that will be created by this template.



Fill in the Dependency

Define on which HUB table this template must be implemented.

Example: