Multi-Temporal Sources

Source systems often do not store only a single version of the data. There are multiple fields that describe the temporality of the source data. This could be technical dates, business effective dates and even CDC dates (or a combination of all). This leaves a question of how to adequately load the data into the Raw Vault. An option is simply to add all of the fields describing the temporality as additional metadata on the satellites. Then the correct effectivity can be determined downstream as this would consist of some business logic.

WhereScape 3D

Dependent objects

Sample Repo

- Look at the examples created in 3D repo **wsDVSamples**

Model Conversion Rules

- Group Temporal Metadata from Source
    - ws3d_grv - Add Temporal Metadata to all Satellites
    - ws3d_rvls - Remove Custom Attribute types

Copy from wsDVSamples or import **Temporal_Source_additional_fields.xml**
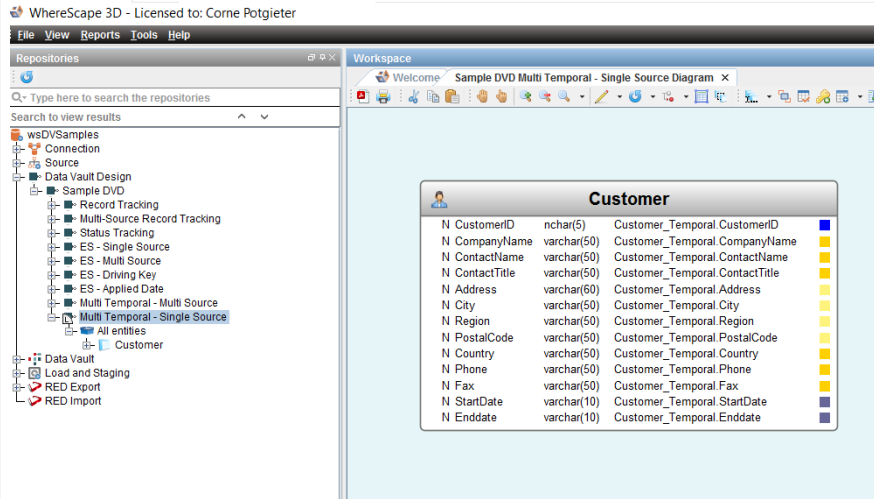
Template

No additional templates required

Steps to implement

If a particular stage is not mentioned, then you can assume it would follow the standard process of generating a Data Vault.
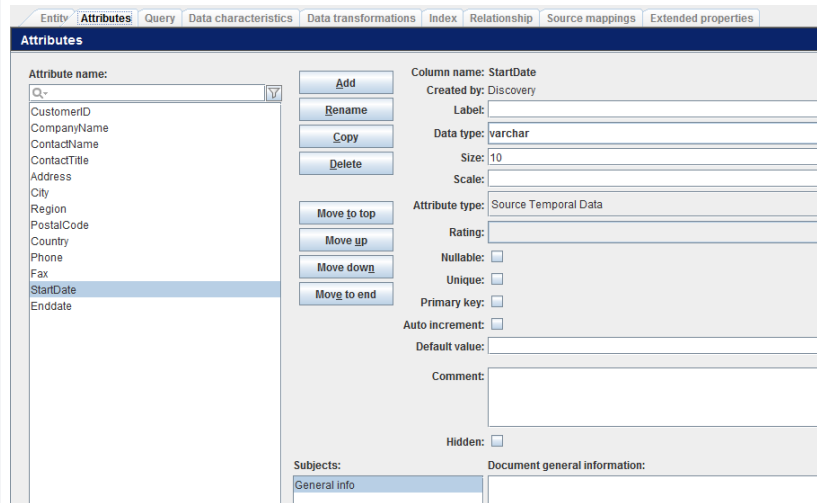
#	Category	Description

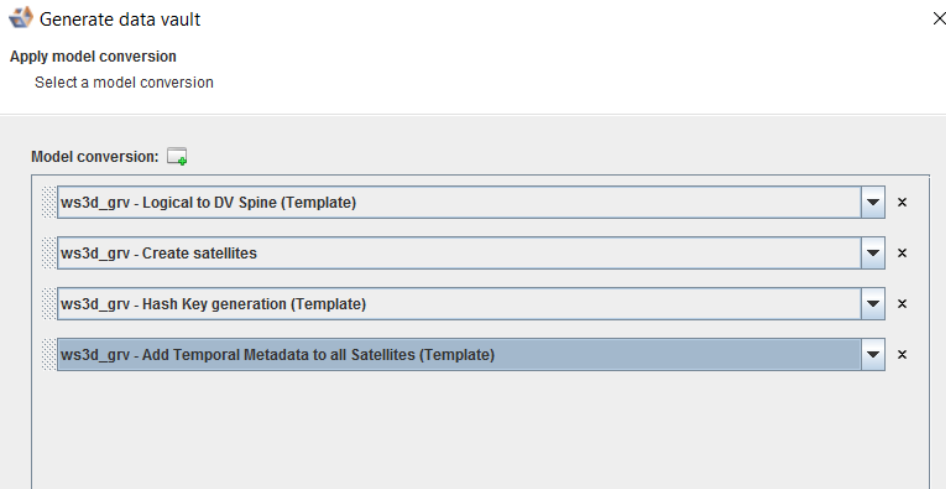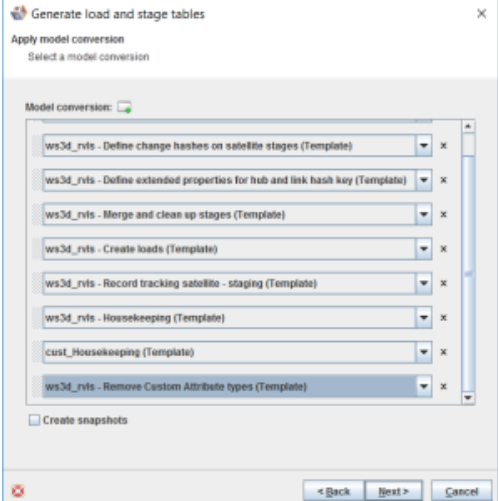| 1	Data Vault Design	See these multi temporal examples in the Samples repo
		Tag the source fields that describe the temporality or effectivity as "Source Temporal Data"
2	Generating Data Vault	When generating the Data Vault, this additional MCR (ws3d_grv - Add Temporal Metadata to all Satellites) should be used to copy the fields to all relevant satellites

3	Generating Load and Stage	During the generation of Load and Stage the model conversion rule "ws3d_rvls - Remove Custom Attribute types" should be applied at the end
		Prerequisite: Multi-Active Satellite Natural Key Attribute type needs to be an attribute type for Load and Stage. We are reusing this field for deploying to RED to allow for multiple versions of the data to be active based on the source temporality

WhereScape RED

No prerequisites are required for RED. The templates should handle the inserts into the Satellites if there is a Multi-active Natural key present. The loads will be aware of the additional keys and will allow multiple versions of the same business key.