WhereScape®

WhereScape® 3D

Release Notes

Version 8.6.2.0 | March 2021

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WhereScape 3D Version 8.6.2.0 Release Update

WhereScape is pleased to announce that the WhereScape 3D Version 8.6.2.0 is now available. The Version 8.6.2.0 release notes document details the changes since the last release.

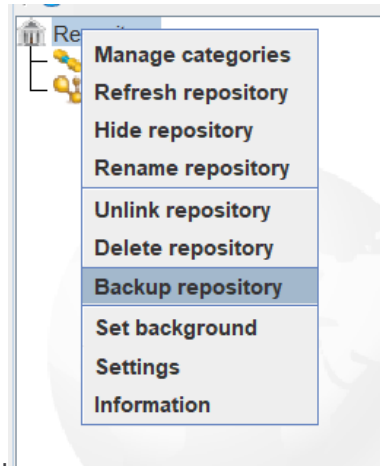
Upgrading to Version 8.6.2.0

The version of PostgreSQL used by the WhereScape Metadata server has been upgraded from version 10.3 to version 12.2 in 3D 8.6.2.0, however, upgrading the WhereScape Metadata server is not a requirement for using WhereScape 3D 8.6.2.0

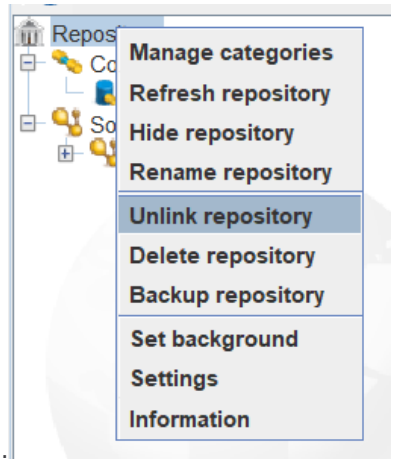
PostgreSQL 12.2 offers a number of improvements, including some relating to security. Full details available **here.**

To upgrade the metadata server, you must also upgrade all repositories. Follow the steps below:

- Backup all repositories via the Backup repository option in WhereScape 3D

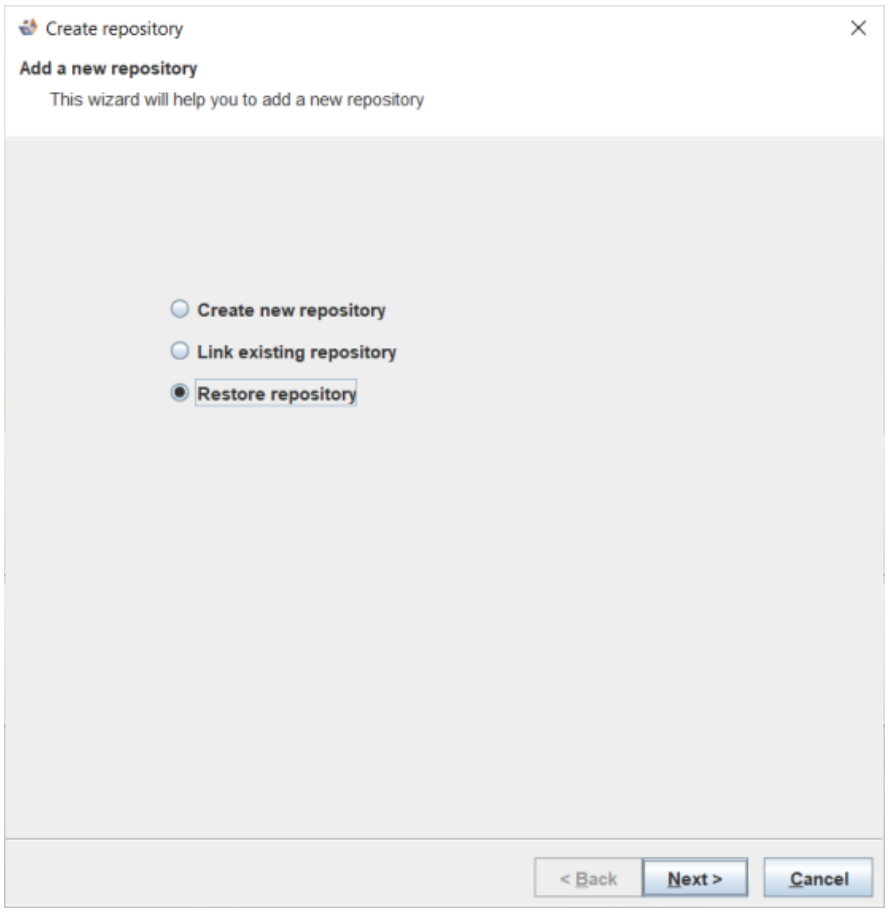


  - Right-click on the repository name in 3D
  - Select backup repository.
  - Select a location to store the backups and optionally change the name of the backup file.
- Unlink all repositories via the Unlink repository option in WhereScape 3D

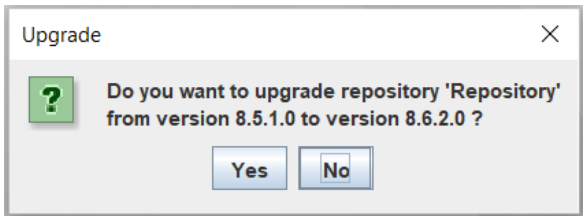


  - Right-click on the repository name in 3D.
  - Select Unlink repository.

- Uninstall the WhereScape Metadata Server via the Windows Control Panel.
- Manually remove the WhereScape Metadata Server database directory.
  - In Windows File Explorer delete the following directory: C:\Program Files\WhereScape\WsMetaServer\data
  - Reboot the Windows machine.
- Install WhereScape 3D and the WhereScape Metadata Server using the installer found at: **https://www1.wherescape.com/support/software-downloads-documentation/wherescape-3d/release-version/**
- When the upgraded version of WhereScape 3D is first opened you will be prompted to add a repository. Select Restore repository, then browse to the location where you backup is saved. If there are multiple repositories to be upgraded, they can be restored via the File > Add Repository option in WhereScape 3D.



- When asked whether you want to upgrade your repository select: Yes.



Upgrading WhereScape 3D

To upgrade to WhereScape **3D** without upgrading the WhereScape Metadata server. The user must select only to install WhereScape 3D when prompted as shown in the screenshot below, then follow the steps detailed in the installation guide.

Detailed Changes from Previous Versions

Details of changes made in previous versions of 3D are available on the **http://www.wherescape.com/support/3d-release-notes/** page in the Support section.

Kind Regards,
WhereScape 3D Team

Version 8.6.2.0

Significant Features in Version 8.6.2.0

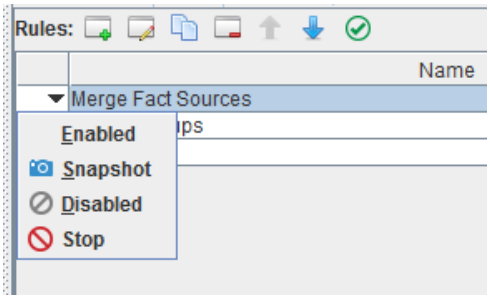
The following enhancements have been made since Version 8.5.2.0.

- Model Conversion Rule Editor
  - Ability to Stop a rule set at a specified point
  - New Validation Panel
- Model Conversion Rule Improvements
  - Group Management: Create, Delete, Rename, Assign / Remove Entities
  - Populate Entity Queries - now source mapping aware
  - Add Data Transformation - now source mapping aware
  - Change Attribute Properties - now supports hiding / unhiding
- Business Vault Design
  - New Bridge Wizard
  - New PIT Wizard
  - Model Conversion Updates
  - Satellite current and history view query improvements
- PostgreSQL and Java Support libraries update
- New installations use PostgreSQL 12

Model Conversion Rule Editor

- **Ability to Stop a rule set at a specified point**

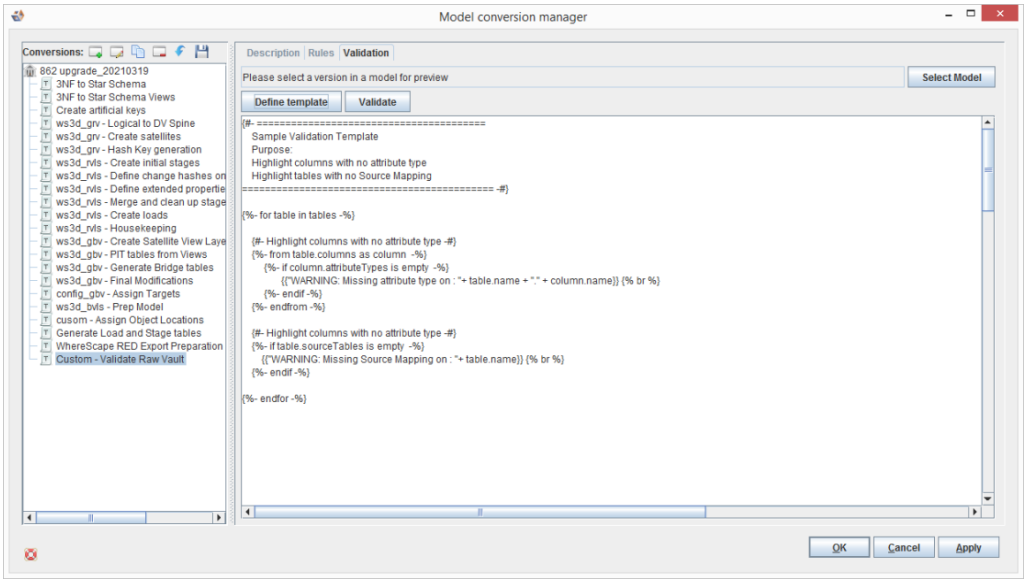
  Rules can now be flagged as **Stop**. If the 'Stop' flag has been selected for a rule then all subsequent rules will be skipped. Any model conversions set to run after the conversion containing the 'Stop' flag will also be skipped.



- **New Validation Panel**

  Validation scripts can now be applied to any custom model conversion rule using the Validation Panel in the Model Conversion manager. This allows users to add template code to determine whether a model is suitable for conversion. For example, when generating the raw vault scripts could be written to validate the following:

  - Does each attribute have an attribute type?
  - Does each attribute have a source mapping?
  - Is there at least a business key or link business key defined on each entity.
  - Do links have foreign keys to hubs and are they from link bk to bk?



Note

Validation templates can only be saved for **user defined rules**.

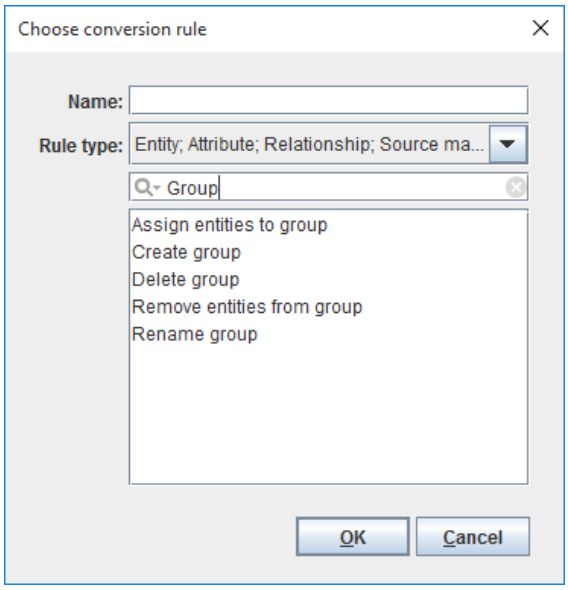
Model Conversion improvements

There have been many enhancements and additions to Model Conversion Rule sets.

1. **Group Manipulations**

   New model conversion rules have been created for group manipulation. Like **Delete Group**, **Rename Group**, **Remove Entities from Group**, and **Assign Entities to Group**.

   The **Create Group** rule has been modified.



   Create Group has been updated

   a. The Define Template button has been added to help customize the name of the group rather than hardcoding a name

   b. **Assign entities to group**

      Outside of creating a new group, you can modify a group to include additional entities. The first set of matching conditions allows the user to specify entities to assign. The second set of matching conditions allow the user to specify the group(s) involved. A Custom group template can be used to define code to locate the group(s).

   c. **Delete group**

      Provides the user with the ability to delete a group, based on either the group name or a Template to locate the group.

   d. **Remove entities from group**

      Removes entities from the group

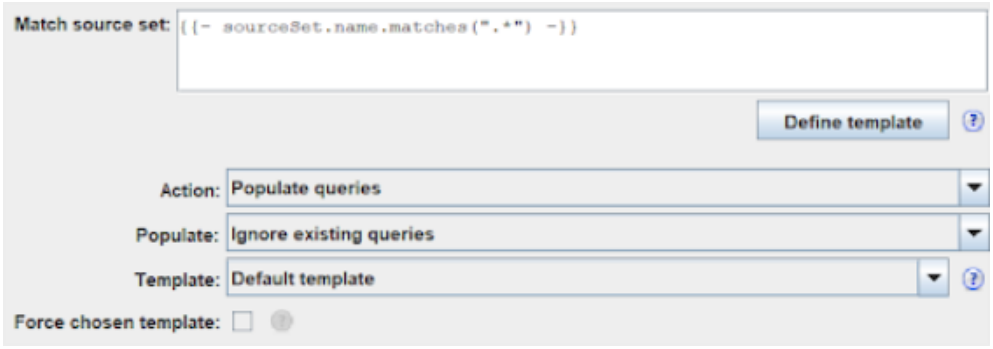
      - **Match for entities rule:** Select the criteria for finding the matching entities from the drop-down list.
      - **Match for group rule:** Select the criteria for finding the matching groups from the drop-down list.

   e. **Rename group**

      Renames a group for the model. Name of the group is defined using a template.

2. **Populate Entity Queries**

   The Populate Entity Queries rule has been modified to include an area to select Source Mapping Sets. The previous rule only allowed the user generate a query for the Default Source Set. The rule allows the use of a template to code the name of the Source Mapping Set. A default will be in the prompt for any existing use of the rule



   .

   - **Match source set:** Select the matching source set name using template.

     The following variables are available:

     sourceSet: The source set object of the matched entity.

     By default, the value of this rule is set to "`{{- sourceSet.name.matches(".*") -}}`". This preserves old behavior of this rule to generate queries for all available source sets.
   - **Action:** Which queries to process:
     - **Populate queries:** Generates the queries.
     - **Delete queries:** Deletes the queries.
     - **Populate DW queries:** Generates the Data Warehouse queries.
     - **Delete DW queries:** Deletes the Data Warehouse queries.
   - **Populate:** When to generate queries:
     - **Ignore existing queries:** Only generate a query for the entities that do not have one defined.
     - **Overwrite existing queries:** Always generate a query for the entities.
   - **Template:** Select a template to use when generating this model conversion.
   - **Force chosen template:** Check to force the selected template to be used. If this option is not selected, the matched entities' set template will be used to generate the query.

3. **Add Data Transformation**

   Two rules, Add Data Transformation and Delete Data Transformation, have been improved with the addition of using a Source Mapping Set (Match Source Set) rather than just the default source set. Any existing Model Conversion using either rule set will have the value "`{{- sourceSet.name.matches(".*") -}}`" as the default for the 'Match source set' in the conversion for a model.

   The Define Template button can be used to customize the selection of the source set to map the new data transformation as well as selection of transformation to delete. All other functionality is the same.

4. **Change Attribute Properties now supports Hide/Unhide**

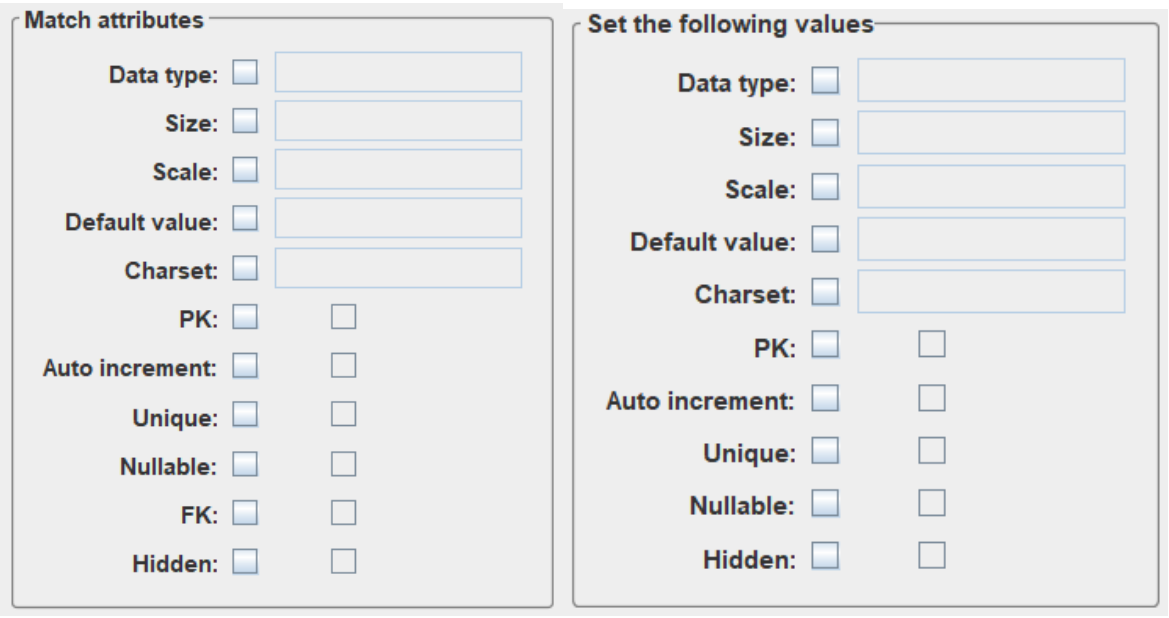
   The rule set 'Change attribute properties' is updated. It has a new search criteria and settings. Below you can see the search criteria first, then the settings for changing an attribute.

   If the first box is checked, that means the property is being used in the search criteria or the property will be changed.

   The second check box indicates in a search to see if the condition is met like is the Nullable checked for the attribute.

   To set to hidden, the first and second check boxes need to be selected in the 'Set the following values' section.

   To unhide, the second check box needs to be unselected.

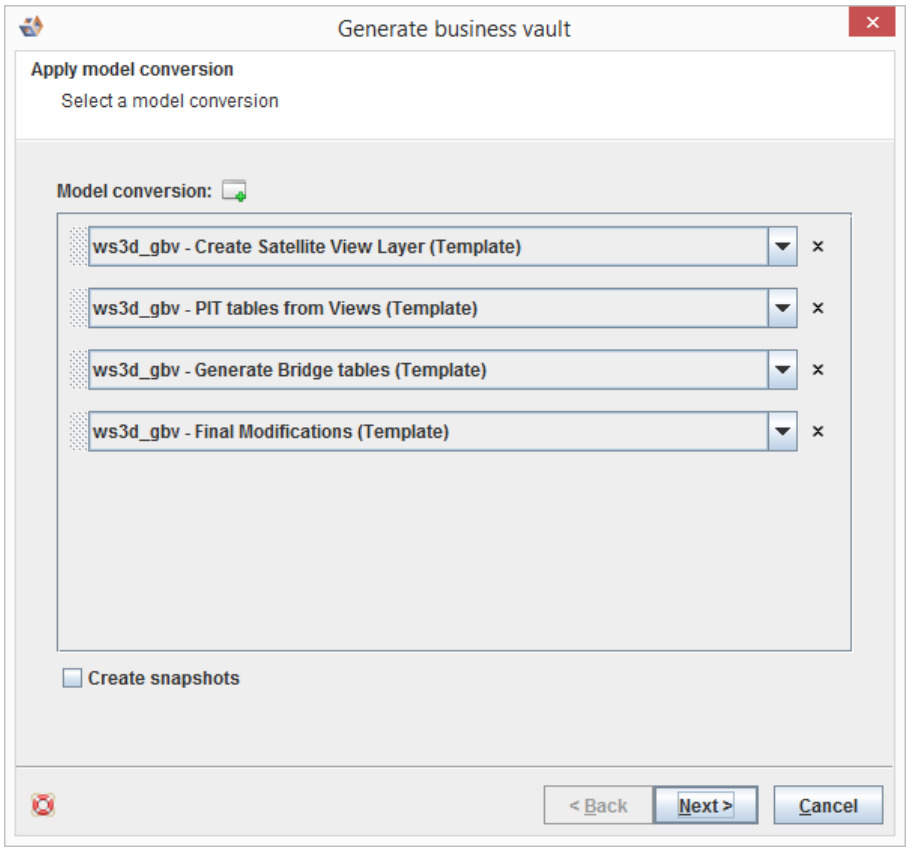


- **Match for attribute/entity rule:** Select the criteria for finding the matching attribute/entity from the drop-down list.
- **Match attributes:** The first checkbox indicates whether to match on that property. The second field is the value to be matched; or the respective check box is ticked, it indicates the parameter is true, unchecked means false.
  - **Note:** Hidden entities and properties would be available for performing model conversion only if both checkboxes for the Hidden attribute are checked.
- **Set the following values:** The first checkbox indicates that the matching value must be changed. The second field is the new value; or if the respective check box is ticked, it indicates the new parameter is true, unchecked means false.

Business Vault Model Conversion

There have been a number of improvements to the Business Vault model conversion rules:

- Naming conventions have been applied, now starting with **ws3d_gvb**.
- The field `dss_snapshot_date` has been mapped to `dss_create_time` in the RED Export
- Unmapped attribute types have been removed.
- The **config_gbv - Assign Targets** step that maps location targets has been removed from the default list.
- The **ws3d_gbv - Final Modifications** step has an additional rule that creates joins to the Satellite Current Views.



Note

The workflows for Business Vault and Business Vault Deployment are now available in **Standard Mode**.

Business Vault Deployment Model Conversion

There have been a number of improvements to the Business Vault model conversion rules:

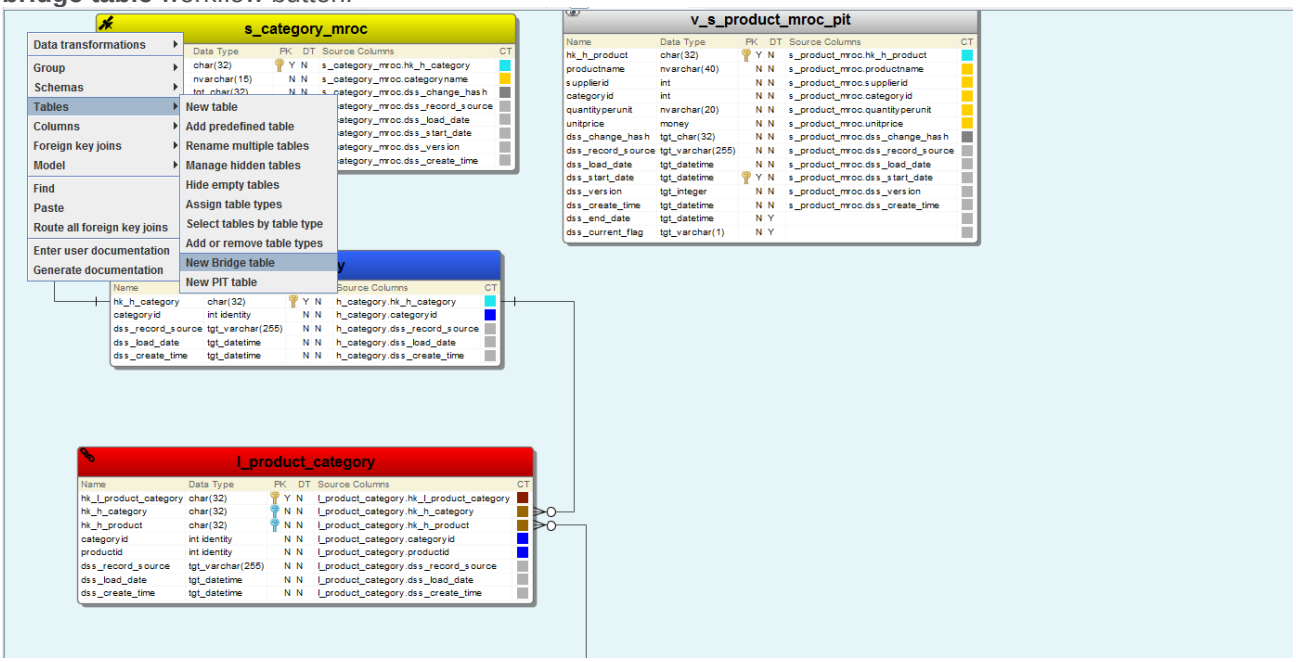
- The **ws3d_bvls - Prep Model** step has the following improvements:
  - The **Generate PIT query** and **Generate Bridge query** rules have been removed so they now have the standard **ws3d_query_dw** template applied during the RED Export stage.
  - A new **Generate Satellite Current View query** rule now applies the **ws3d_query_dv_sat_curr_view** template

Bridge Wizard

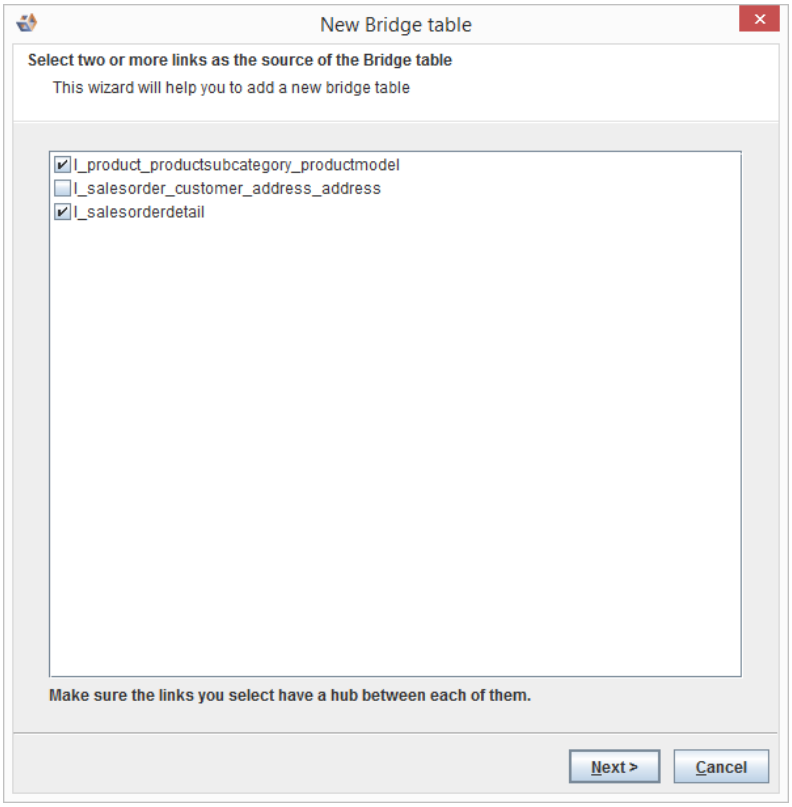
The Bridge Wizard enables you to create Bridge tables that pull fields from multiple links and their related hubs and Satellite Current Views. Options are available for adding a surrogate key and calculated columns.

These are the steps for creating a Bridge table with the new wizard:

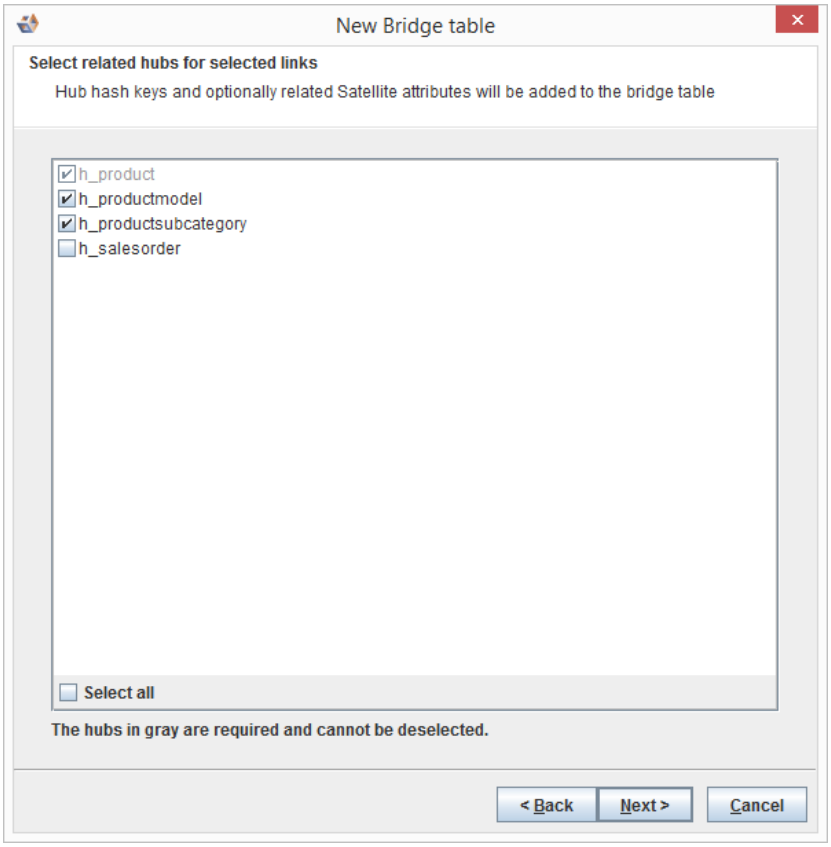
1. Open the Business Vault Category
2. Right-click a blank part of the canvas, select **Tables** and choose **New Bridge table** or click on the **Create bridge table** workflow button.



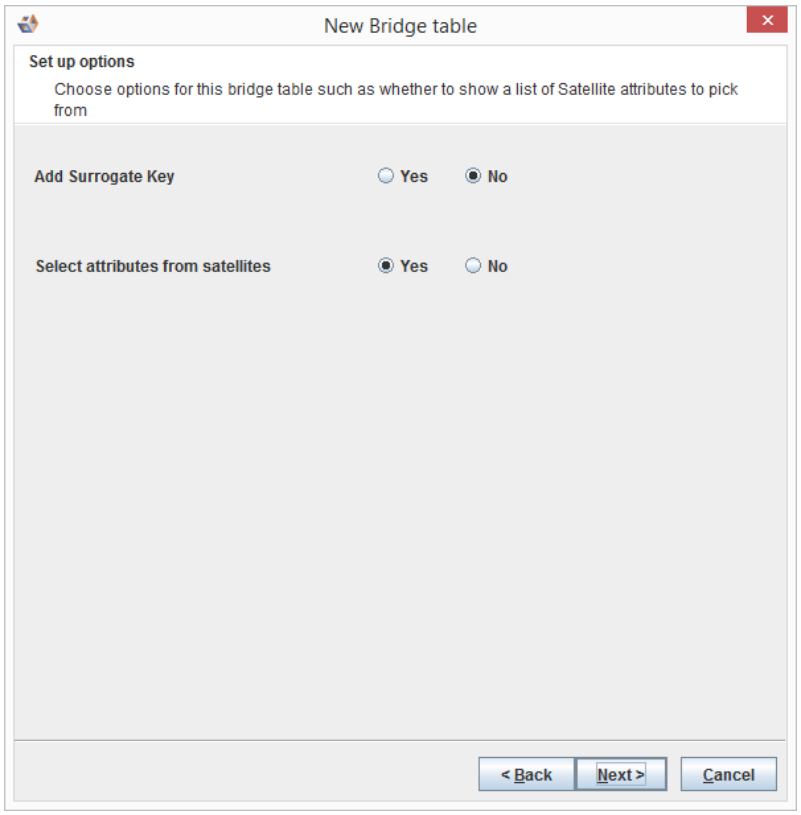
3. Select two or more links with hubs between them.



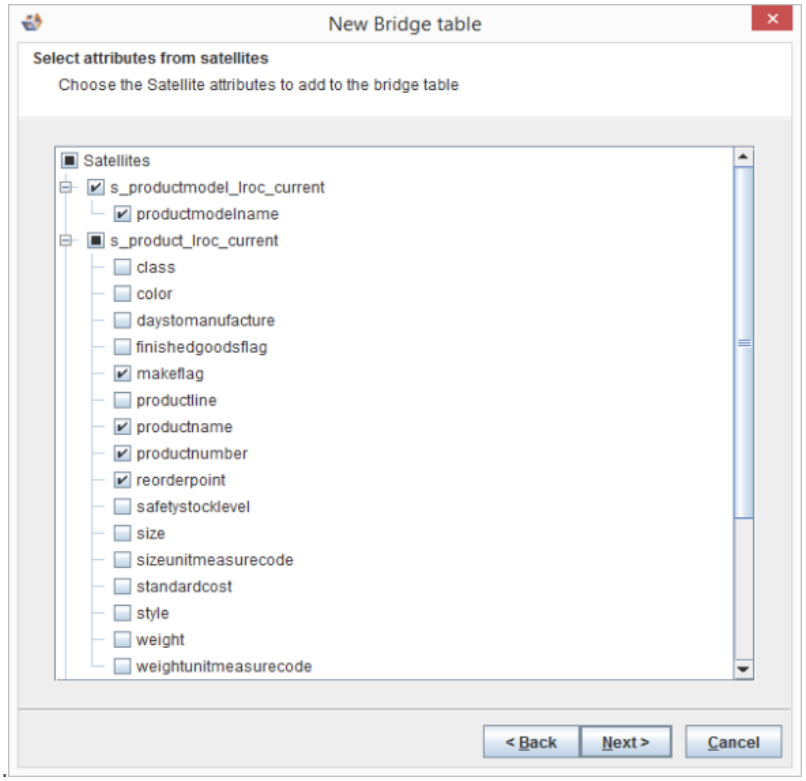
4. Select the hubs you would like to include in the Bridge table. The hub(s) required for the relationships between the links ***cannot*** be unselected.



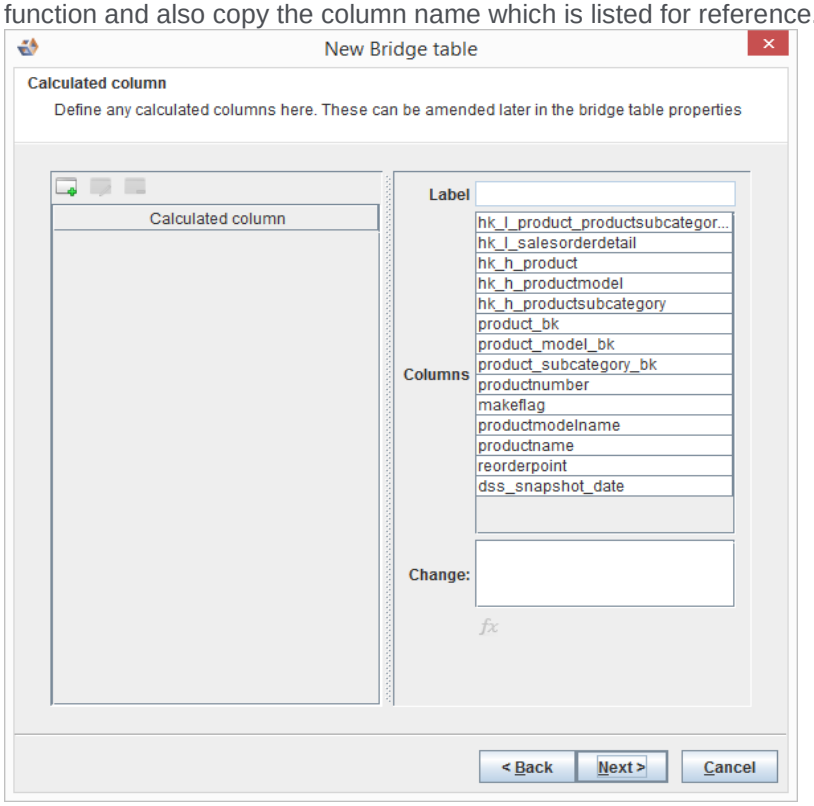
5. Choose whether you would like to introduce a surrogate key and whether you wish to include attributes from satellite current views.



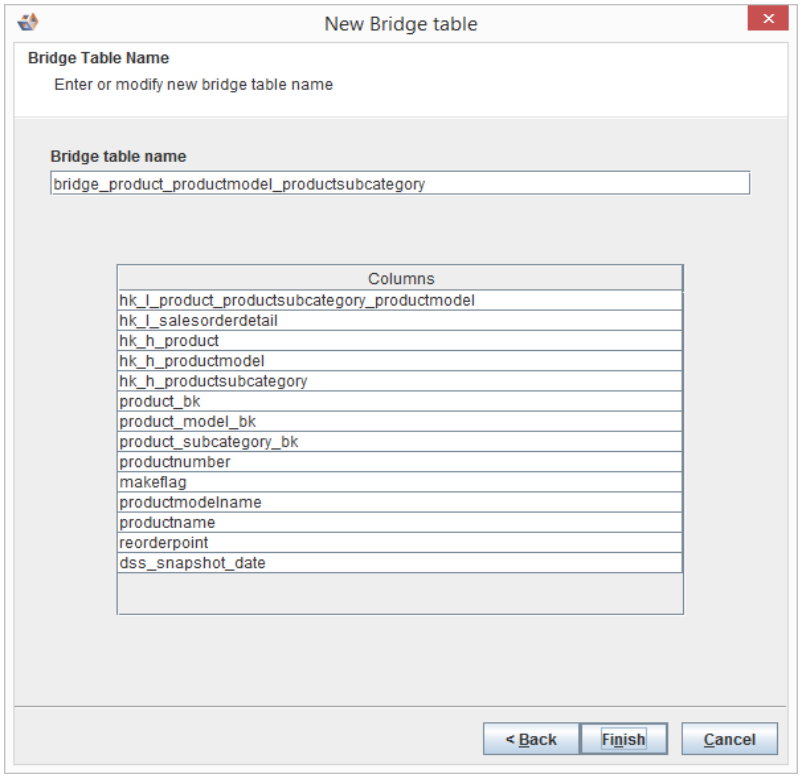
6. If you have chosen to select attributes from any related Satellite Current Views then you can now choose those attributes



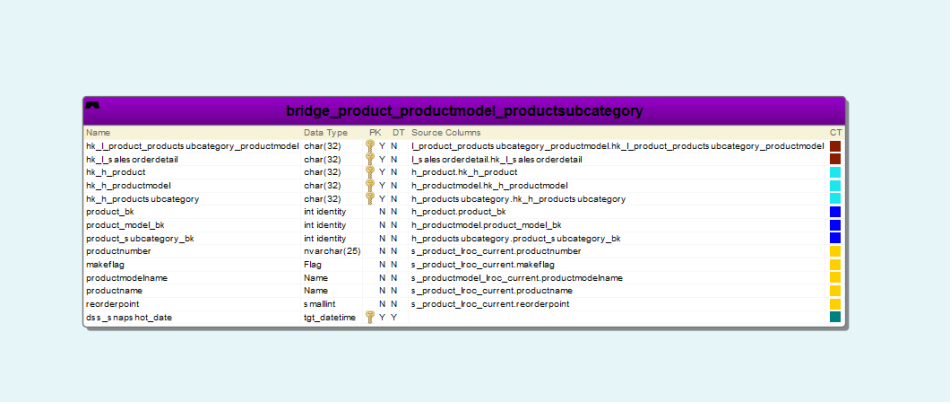
7. You can add calculated columns with name, label and change. For change field value, you can insert a function and also copy the column name which is listed for reference.



8. You can now modify the suggested name of the table, which defaults to the name of the selected hubs. Columns which will be added in the table will also be displayed below.



9. Your newly defined Bridge table will be displayed in your model.



Note

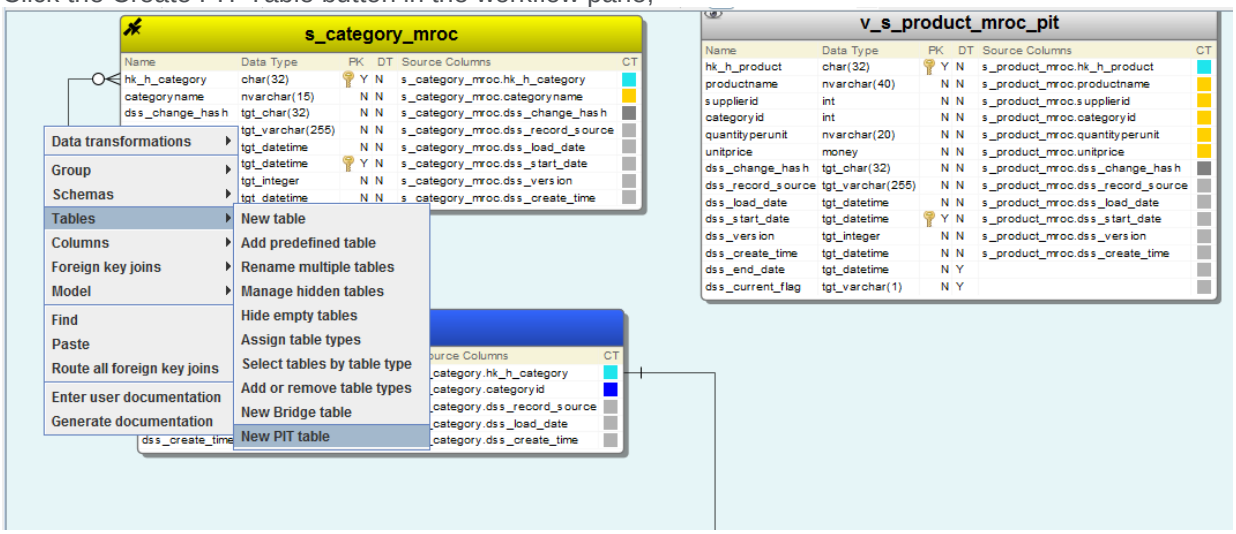
Bridge tables have their DW Query generated in a later step when the Business Vault Deployment model is converted to a RED Export model. This is when the SQL join statements are generated for WhereScape RED.

PIT Wizard

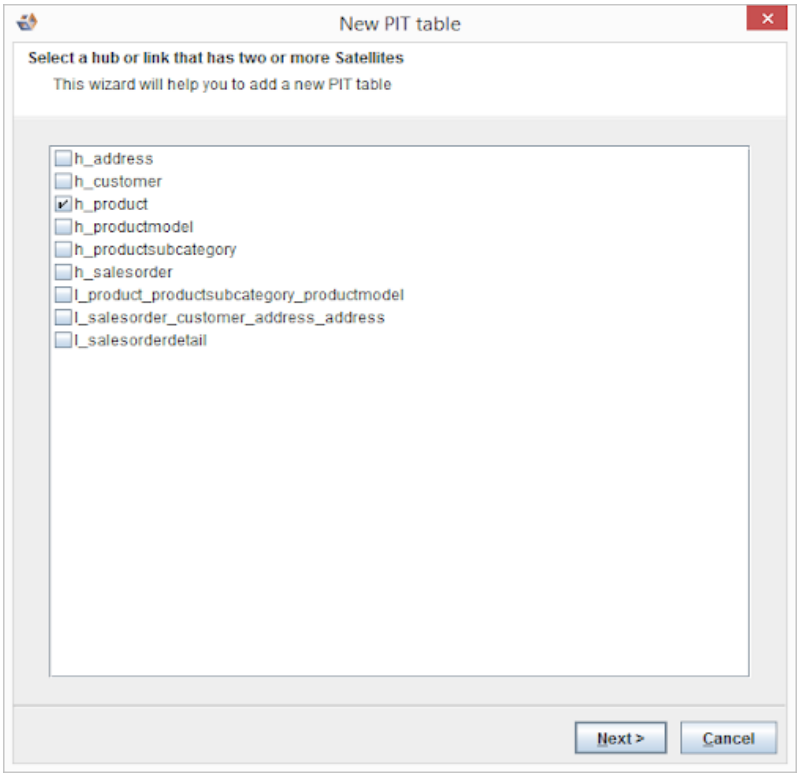
The Business Vault category now has a PIT (Point in Time) Wizard to create PIT tables.

The steps required for creating a PIT table with the new wizard are:

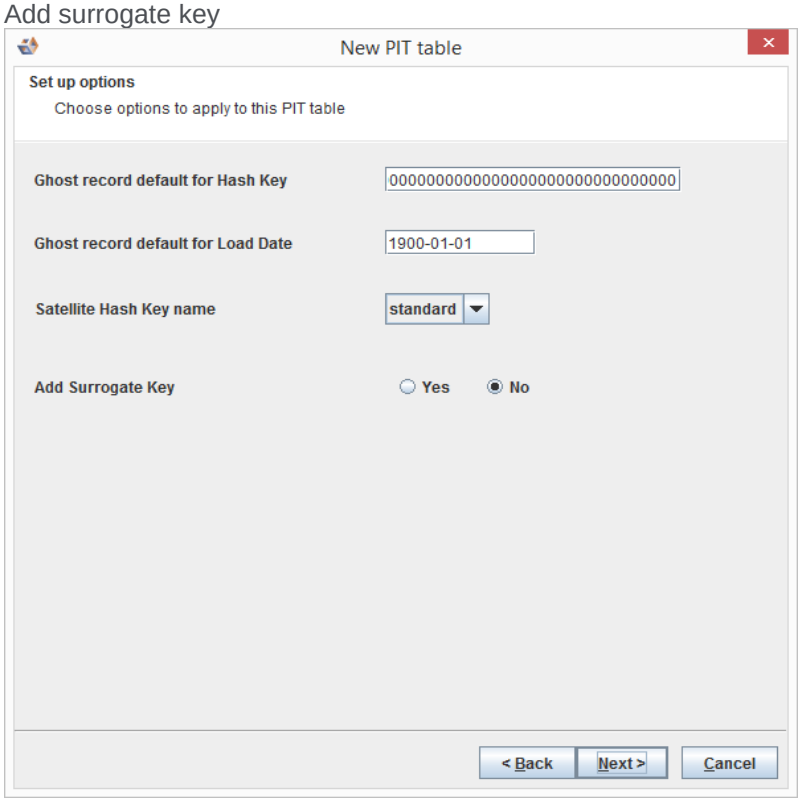
1. Open the Business Vault Category
2. You can start the PIT wizard by either of the following methods:
   a. Right-click on a blank part of the canvas, select Tables and choose New PIT table.
   b. Click the Create PIT Table button in the workflow pane,



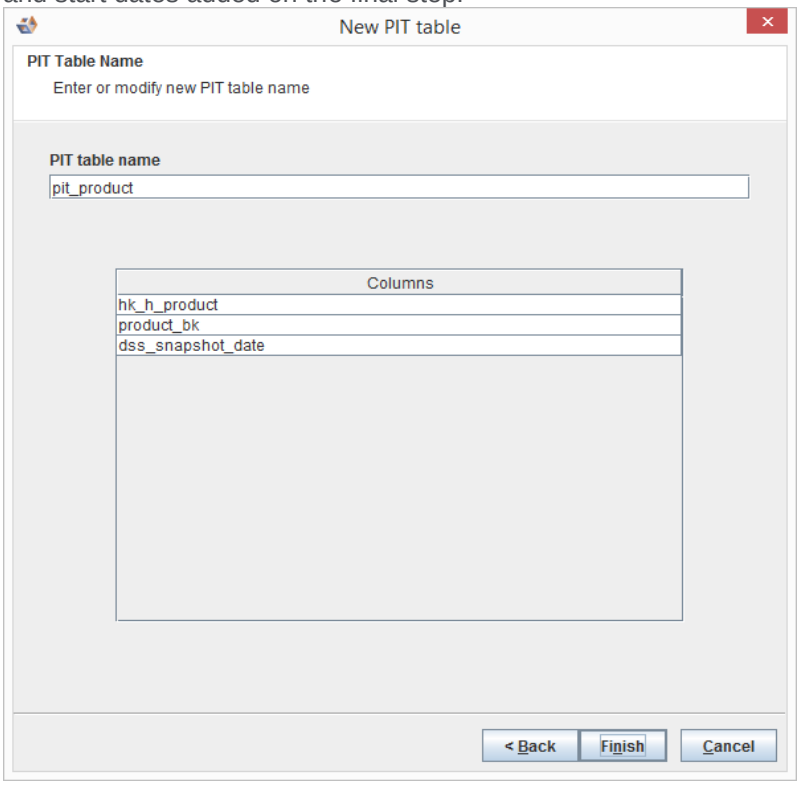
3. Select a hub or a Link table from the current model



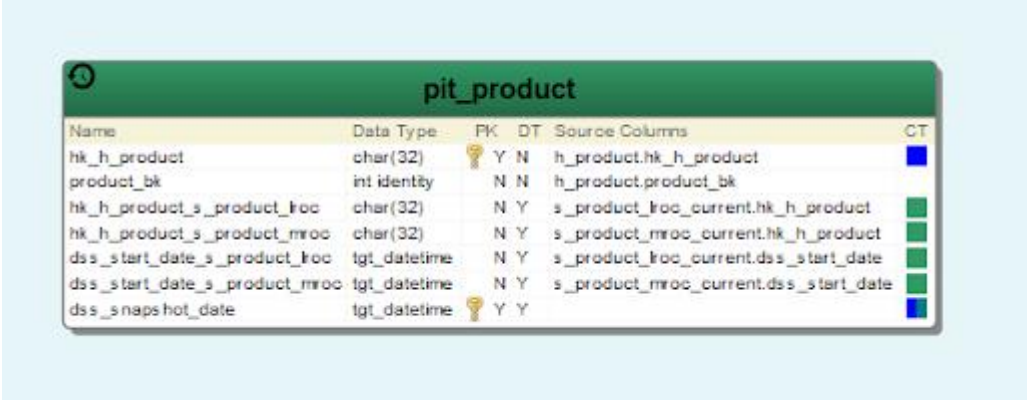
4. Setup options for: (This is not required)
   a. Ghost record default for Hash Key
   b. Ghost record default for Load Date
   c. Satellite Hash Key name: standard/short
   d. Add surrogate key



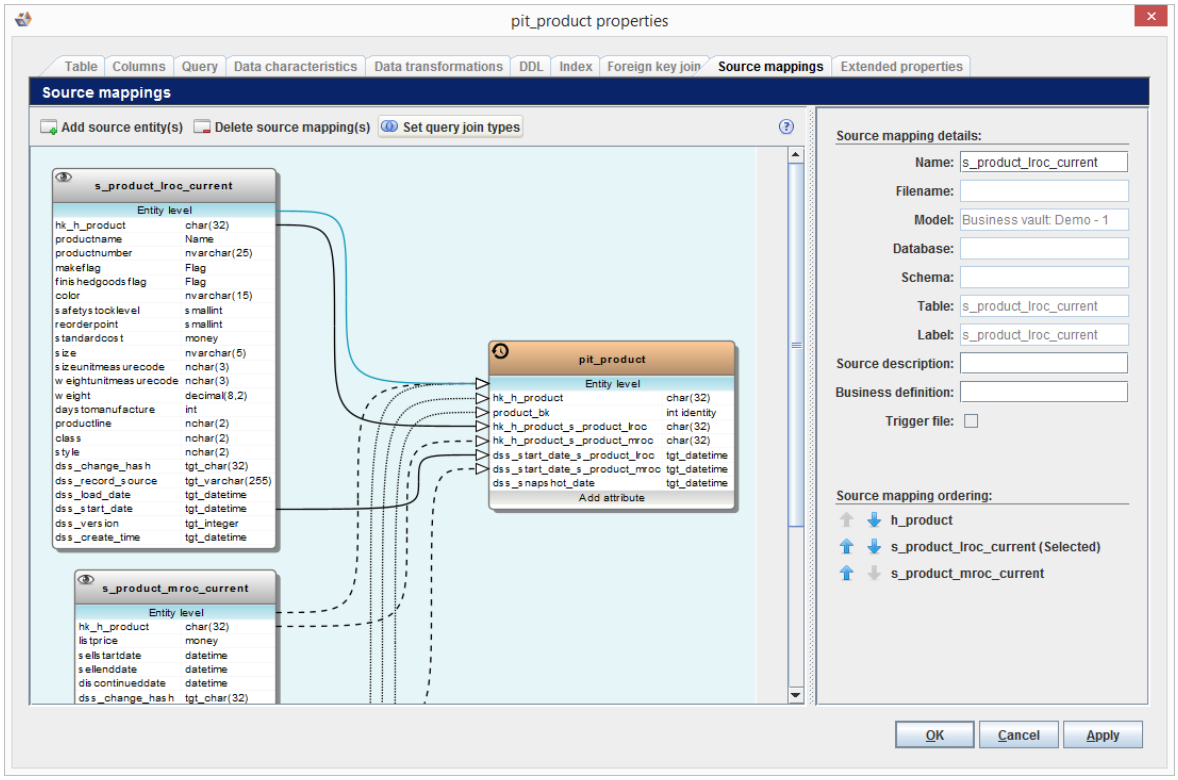
5. You can now modify the suggested name of the table, which defaults to the name of the selected hub or link. Core columns being added to the table will be displayed below with Satellite current view hash keys and start dates added on the final step.



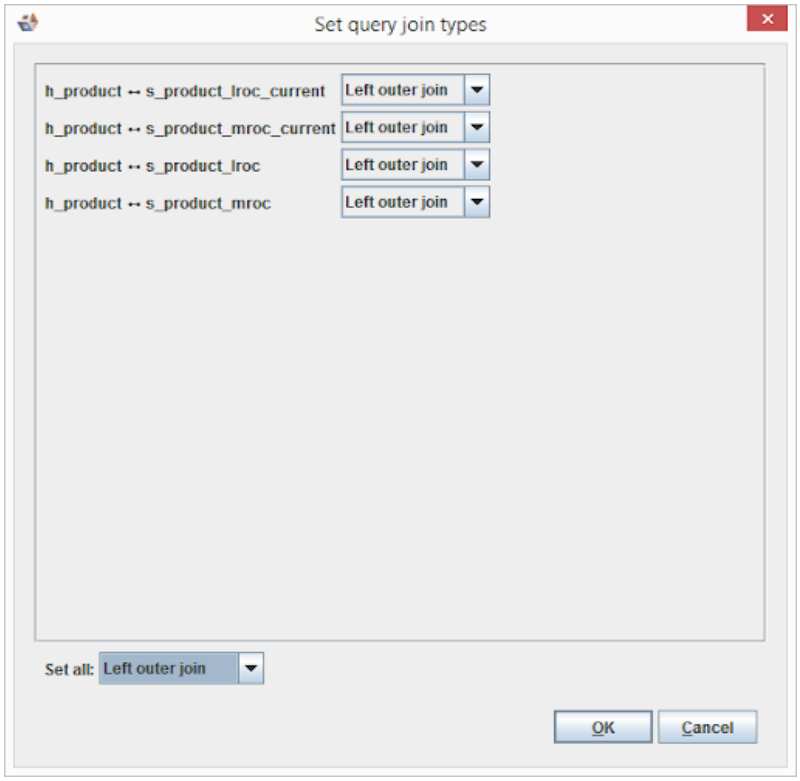
6. Your newly defined PIT table will be displayed in your model.



7. Open the PIT Table properties and choose Source mappings > Set query join types to customize the join types.



8. In this example all join types are set to LEFT OUTER, for use in the query templates within the RED Export model.



PostgreSQL and Java Support libraries update

Java support libraries have been upgraded to the latest releases. PostgreSQL new installations will use PostgreSQL 12.2. Existing installations can be upgraded through standard PostgreSQL upgrade process or using the WhereScape installer (see the section Upgrading to Version 8.6.2.0).

Detailed list of changes in Version 8.6.2.0

The following changes have been implemented since Version 8.5.2.0

Jira Number	Description
BLUE-2169	Source mappings available for XML export
BLUE-2300	New rule to Hide Entities/ Attributes
BLUE-2352	New rule to Delete Groups
BLUE-2379	New method for validating model conversion rules at design time
BLUE-2435	Teradata error during discovery 'QVCI feature disabled'
BLUE-2453	Copied Satellite Model Conversions produced unexpected output
BLUE-2462	Merge Model error. 'comparison method violates its general contract'
BLUE-2477	Transformation & Source mapping rule improvements
BLUE-2487	New rule for Group Manipulation
BLUE-2488	Enable Group name to be set by template
BLUE-2492	'Split entities' rule improvements
BLUE-2496	Transformation & Source mapping rule improvements
BLUE-2510	Change 'Populate entity queries' rule to support source mappings
BLUE-2511	Ability to run Conversion rules up to a specified point
BLUE-2512	Change 'Add data transformation' rule to support source mappings
BLUE-2517	Business Vault - PIT Wizard
BLUE-2519	Business Vault - Bridge Wizard
BLUE-2520	Update naming and contents of Business Vault default rules
BLUE-2521	Remove requirement for advanced setting for Business Vault
BLUE-2522	Upgrade JRE and jTDS
BLUE-2523	Upgrade PostgreSQL to latest 12.x
BLUE-2524	Improve 'mapping warning' when rediscovering a source
BLUE-2535	Merge Model error: 'duplicate key value violates unique constraint'
BLUE-2549	'Copy attribute withing entity' rule improvements
BLUE-2561	User Defined Discovery Method selection bug
BLUE-2597	'Copy attribute' rule improvements
BLUE-2635	Hashkey order standardized
BLUE-2679	Satellite current/history view DW query improvements

Previous Release Significant Features

Significant Features in 8.5.2.0

- Remapping Multi-source Map Sets.
- More Predictable Hash-key Member with Quick Copy.
- Business Vault Model Conversion Enhancements.
- Multi-Active Satellite supports all naming in stage table.

Significant Features in 8.5.1.0

- 3D has included support for the Business Vault category.
- This version allows you to create Point in Time (PIT) and Bridge tables under Data Vault and Business Vault models.
- Bridge table wizard is accessible in the Business Vault category for creating a Bridge table with a single link and related hubs.
- 3D now supports Microsoft SQL Server 2019.
- This version includes the 'Multi-Active Satellite Natural key' and 'Multi-Active Satellite Sequence key' attributes types for RED export.

Significant Features in 8.4.2.0

- Table with multiple source connections
- Hidden Objects in Tree View
- Inaccuracy in the display overview when display scaling is used
- Memory leak of multiple track-back diagrams when closing them

Significant Features in 8.4.1.0

- Enhanced Data Vault generation workflows
- Advanced copy performance enhancements
- Added Snowflake and RedShift database support
- Enhanced model conversion criteria matching
- Other enhancements
    - Entity type robots
    - New attribute type colors
    - RED category

Significant Features in 8.3.1.0 and 8.3.1.1

- A new installer with an option to install metadata server
- The metadata repository has transitioned from Apache Derby to the WhereScape Metadata Server
- A new dialog has been introduced to migrate from 32-bit ODBC DSNs to 64-bit ODBC DSNs
- There is support for native resolution scaling
- WhereScape 3D now encrypts all profiling data that is stored in the metadata repository

- Template editor preview enables testing against other areas than the current entity. The previewer has also been added to the model conversion editor
- DevOps changes
    - New DevOps command line arguments enable you to create, restore, link and backup a repository
    - New DevOps command line option enables you to advanced copy a model with model conversions
    - New DevOps command line option enables you to create the XML for export to RED
- HTML Help enhancements
    - Pebble syntax help information has been added to the HTML help

Significant Features in 8.2.1.1

- Introduced source mapping sets for multi-source
- Reinvigorate user guide with HTML5

Significant Features in 8.1.1.0

- Improvements to model conversions
    - Customizable matching in model conversion rules
    - Use profiling for matching criteria
    - Run multiple model conversions sequentially
    - Customizable RDBMS filter
    - WhereScape provided model conversions are read only
    - Improved renaming support
    - Entity type synchronization
- New template features
    - Variable type conversions
    - String support functions
- Improved the interface for source mappings

Significant Features 8.0.1.0

The following significant new features have been added since Version 2.10.0.0

- Improved DDL template support
- Added template support for queries

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