WhereScape®

WhereScape® 3D

Release Notes

Version 8.5.1.0 | April 2020

Table of Contents

WhereScape 3D Version 8.5.1.0 Release Update 3
Version 8.5.1.0 4
Significant Features in Version 8.5.1.0 4
Business Vault category support 4
Point in Time (PIT) and Bridge tables 9
Bridge Table Wizard 14
Support for SQL Server 2019 17
RED Export 17
Detailed list of changes in Version 8.5.1.0 18
Previous Release Significant Features 19
Significant Features in 8.4.2.0 19
Significant Features in 8.4.1.0 19
Significant Features in 8.3.1.0 and 8.3.1.1 19
Significant Features in 8.2.1.1 19
Significant Features in 8.1.1.0 19
Significant Features 8.0.1.0 20
Significant Features 2.10.0.0 20
Significant Features 2.9.0.0 20
Significant Features 2.8.0.2 20
Significant Features 2.8.0.1 20
Significant Features 2.8.0.0 20
Significant Features 2.7.2.0 BETA 21
Significant Features 2.7.1.0 BETA 21
Significant Features 2.7.0.1 21
Significant Features 2.7.0.0 21
Significant Features 2.6.2.0 BETA 21
Significant Features 2.6.1.0 BETA 22
Significant Features 2.6.0.0 22
Significant Features 2.5.2.0 BETA 22
Significant Features 2.5.1.0 BETA 23
Significant Features 2.5.0.0 23
Significant Features 2.4.2.0 24
Significant Features 2.3.2.0 24
Significant Features 2.2.1.0 25
Significant Features 2.1.0.1 25
Significant Features 2.1.0.0 25
Significant Features 2.0.0.8 26
Significant Features 2.0.0.7 26
Significant Features 2.0.0.6 26

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WhereScape 3D Version 8.5.1.0 Release Update

WhereScape is pleased to announce that the WhereScape 3D Version 8.5.1.0 is now available. The Version 8.5.1.0 release notes document details the changes since the last release.

Upgrading to Version 8.5.1.0

To upgrade to Version 8.5.1.0, login to **www.wherescape.com** to download 3D from the downloads page in the Support section.

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

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Version 8.5.1.0

Significant Features in Version 8.5.1.0

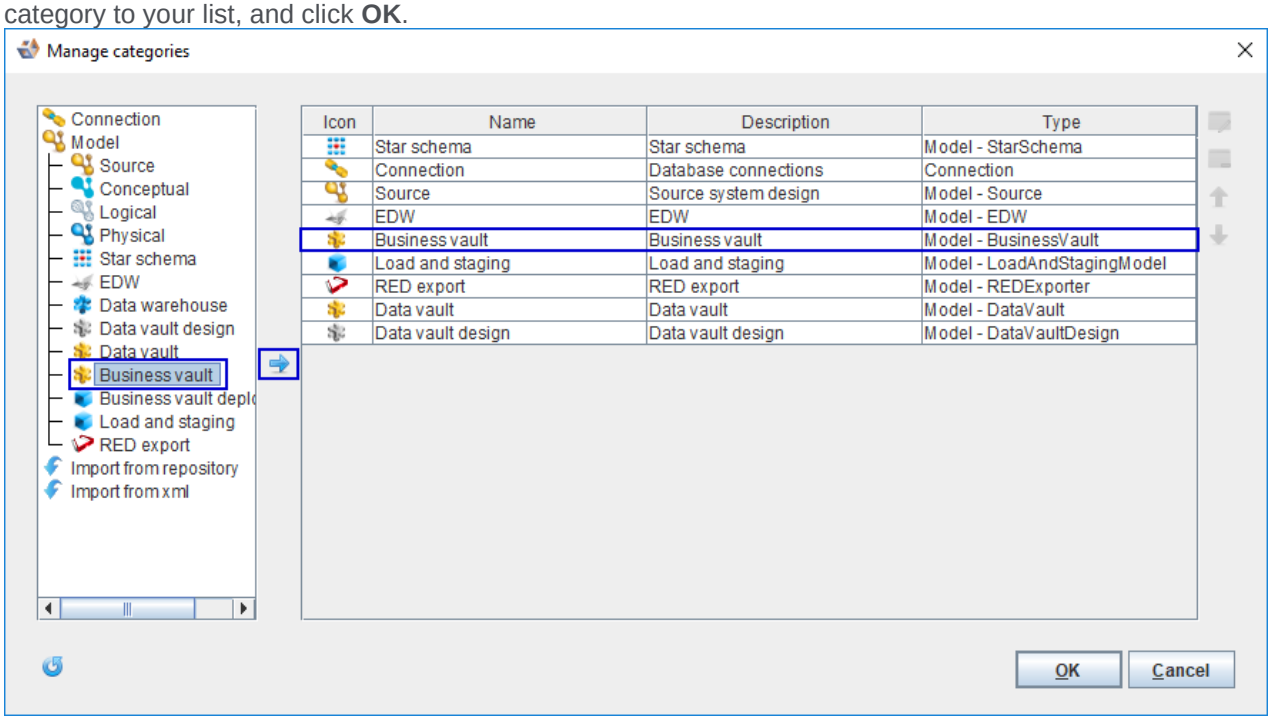
The following enhancements have been made since Version 8.4.2.0:

- 3D has included support for 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.

Business Vault category support

3D has included support for the Business Vault category. Follow these steps to add this category to your model category list:

1. Right-click your Repository and select **Manage categories**.
2. The Manage categories window opens, select **Business Vault** from the left list, click to add the category to your list, and click **OK**.



3. Follow the same steps to create a **Business vault deployment** category. Your category list updates under the **Repositories** window.

Additionally, when you select a model under the Data vault category, the **Generate business vault** workflow button displays.

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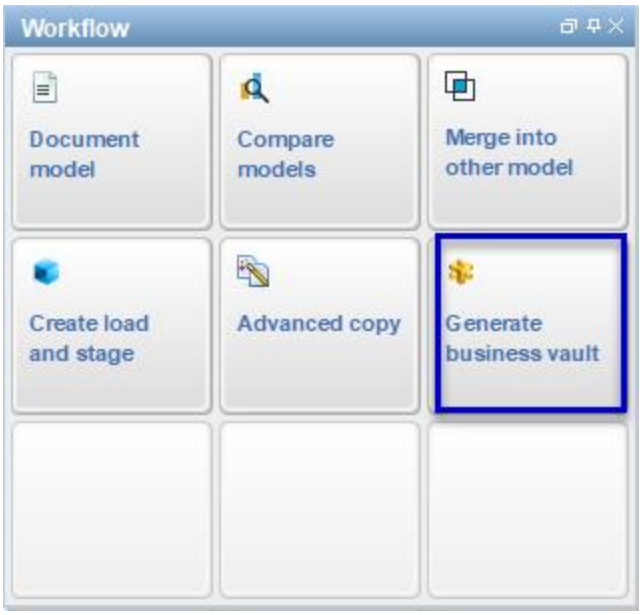
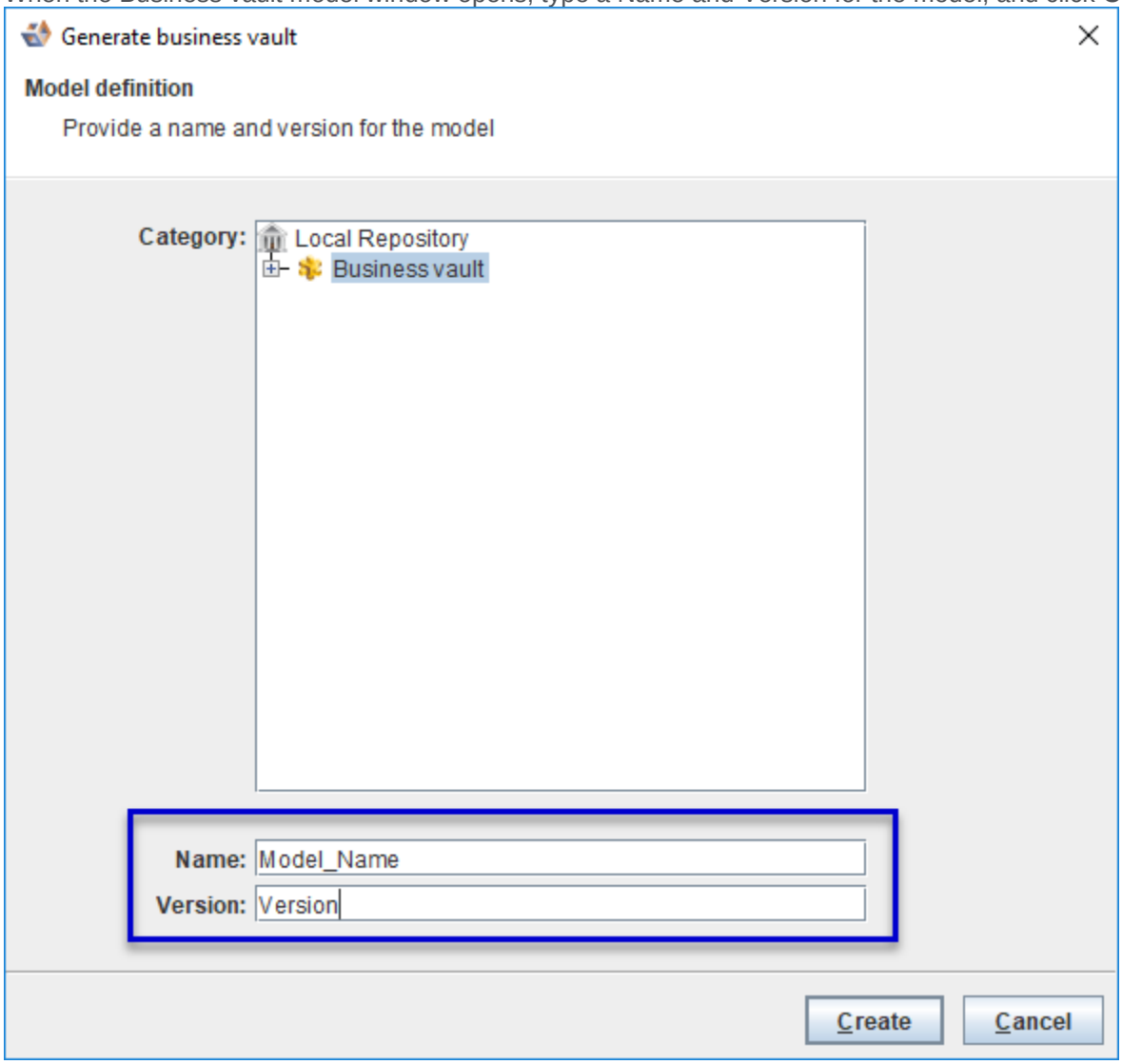


1. Click the **Generate business vault** button to create and configure the Business vault model.
2. When the Business vault model window opens, type a Name and Version for the model, and click **Create**.



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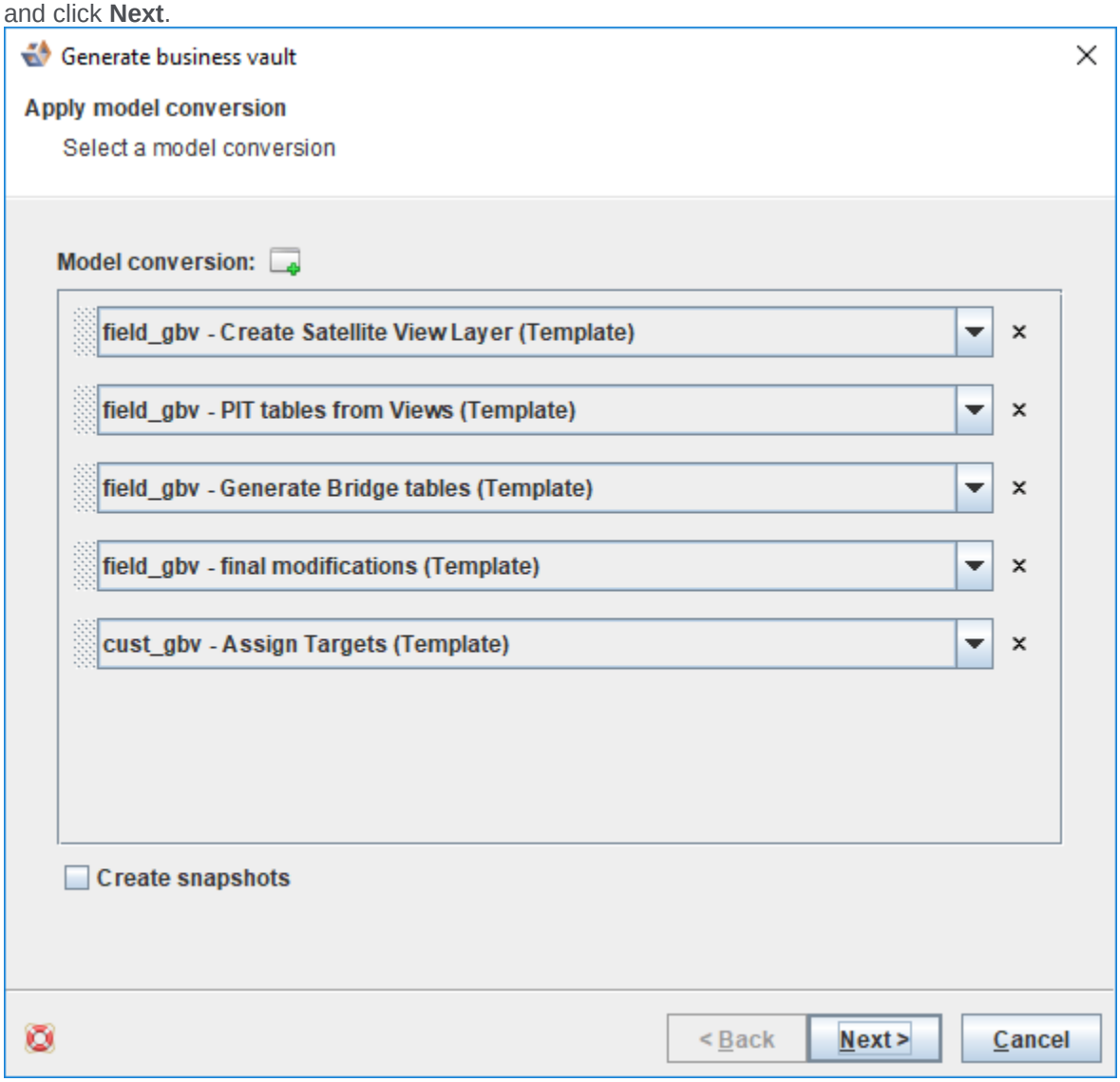
3. In the Apply model conversion dialog, click , select a model conversion from the drop-down list; otherwise, remove any model conversions that are selected by default.
4. If you want to create a snapshot, check the Create snapshots box, enter a name for the snapshot copy, and click **Next**.



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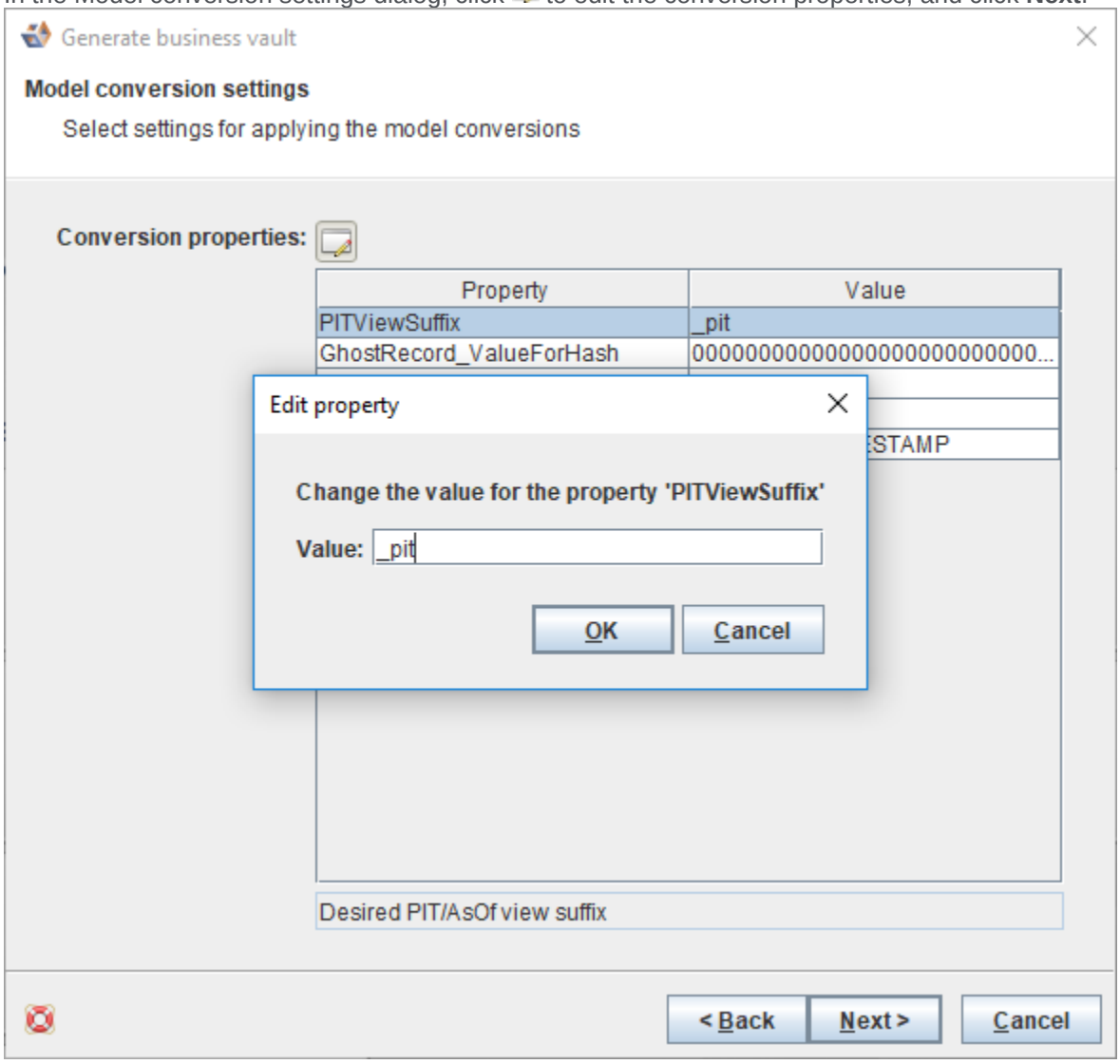
5. In the Model conversion settings dialog, click to edit the conversion properties, and click **Next**.



6. The model conversion executes, the Apply model conversion complete dialog displays, and click **Finish**.

Also, the **Create business vault deployment** button displays in the Business vault model workflow.

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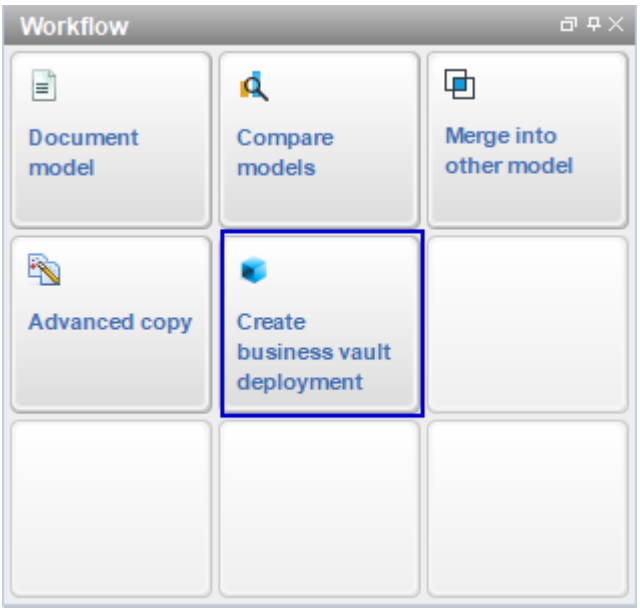

1. Click the **Create business vault deployment** button, the **Generate business vault deployment** wizard opens, type the Name and the Version, and click **Create**.

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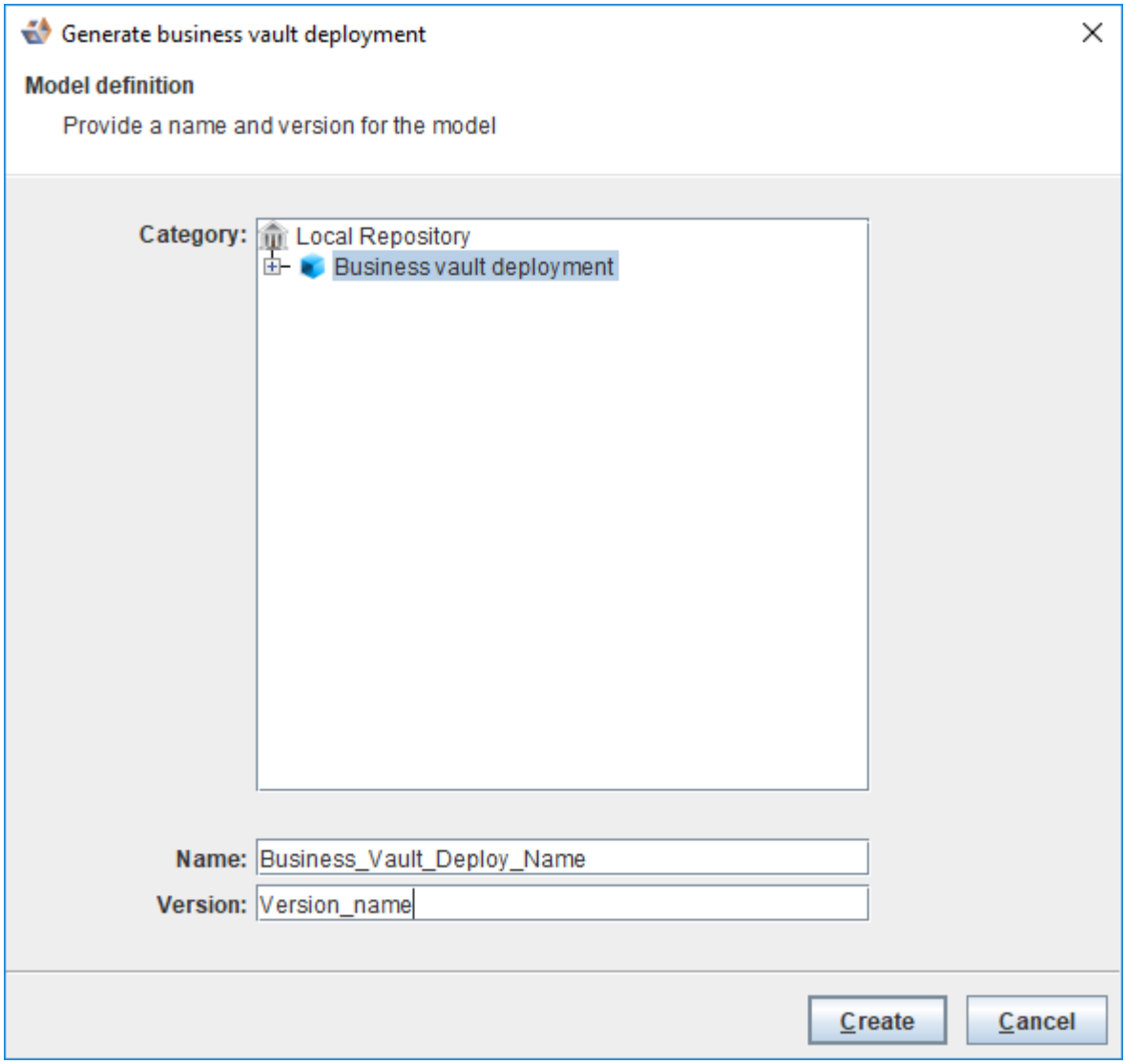

Tip

The support for Business data vault is extended to your existing repositories when you upgrade to the newer version.

Point in Time (PIT) and Bridge tables

A Point in Time table is an entity that is used for optimizing data search at a selected point in time from all or a selected set of related Satellites from a single Hub or Link. In addition to this entity, 3D has included the Bridge tables which are used to improve the performance of joining multiple Hubs and Links.

Point In Time and Bridge table candidates:

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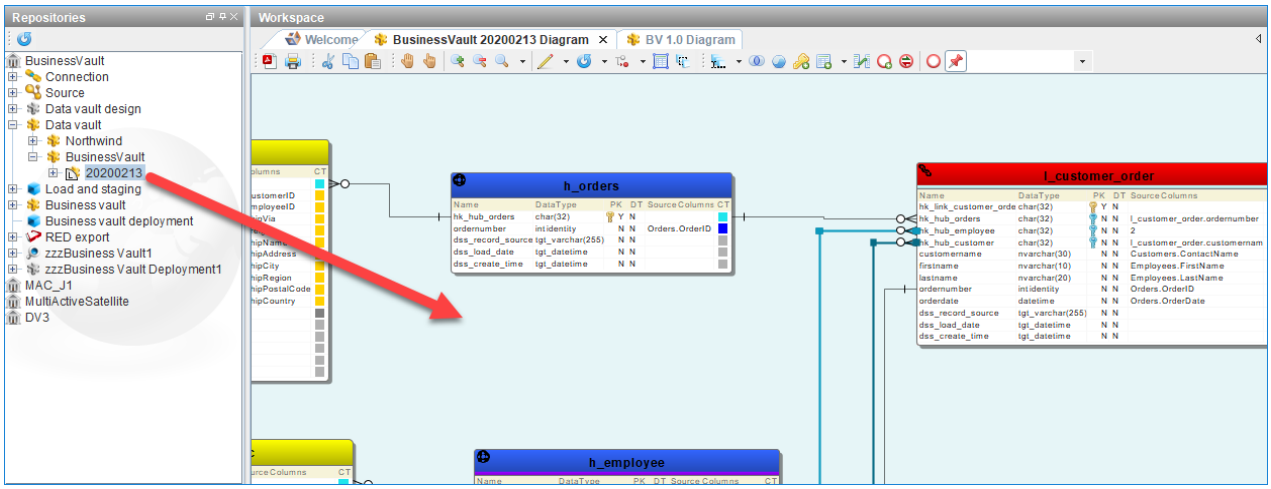
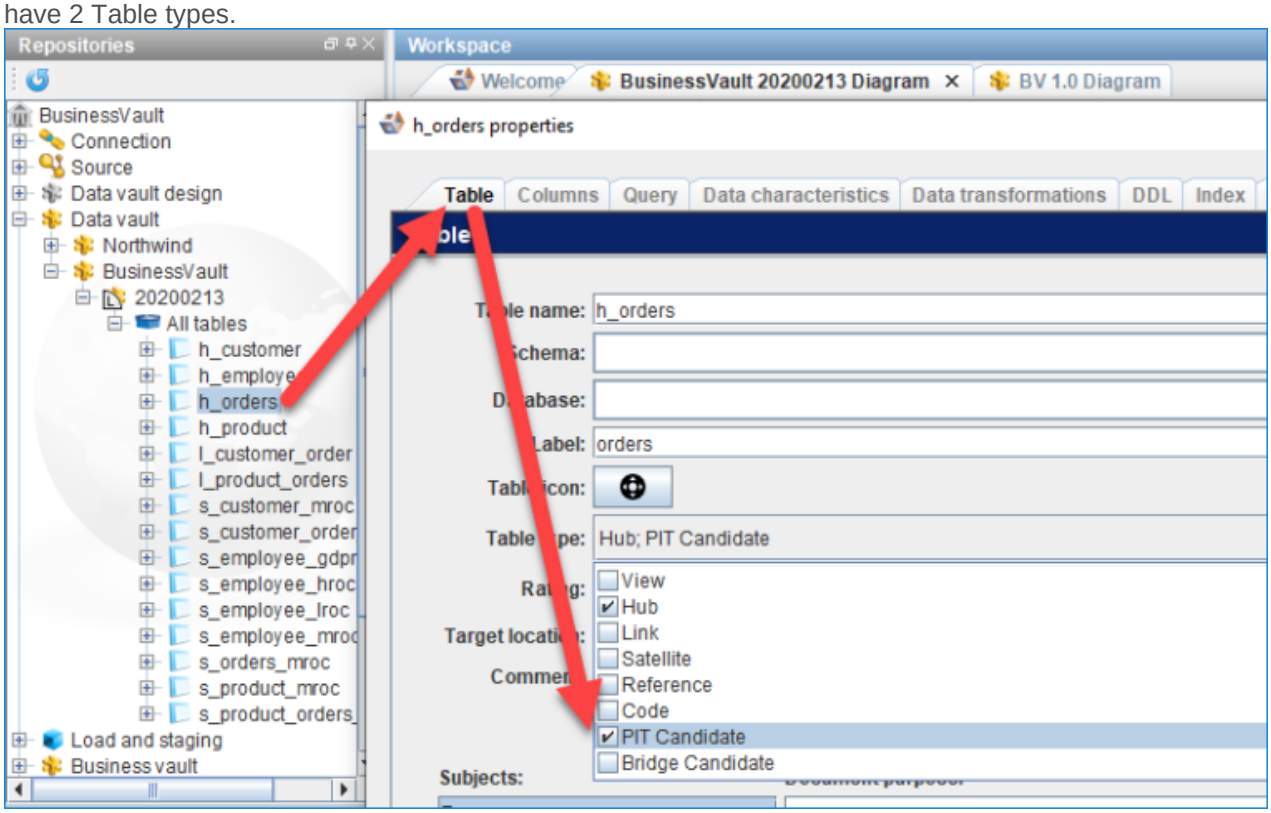
1. To create a PIT and/or Bridge table with model conversion rules from Data Vault to Business Vault, open the Data Vault model.



2. Open a Hub and add PIT Candidate to the Table type. Do not remove Hub for Table type. The table will have 2 Table types.



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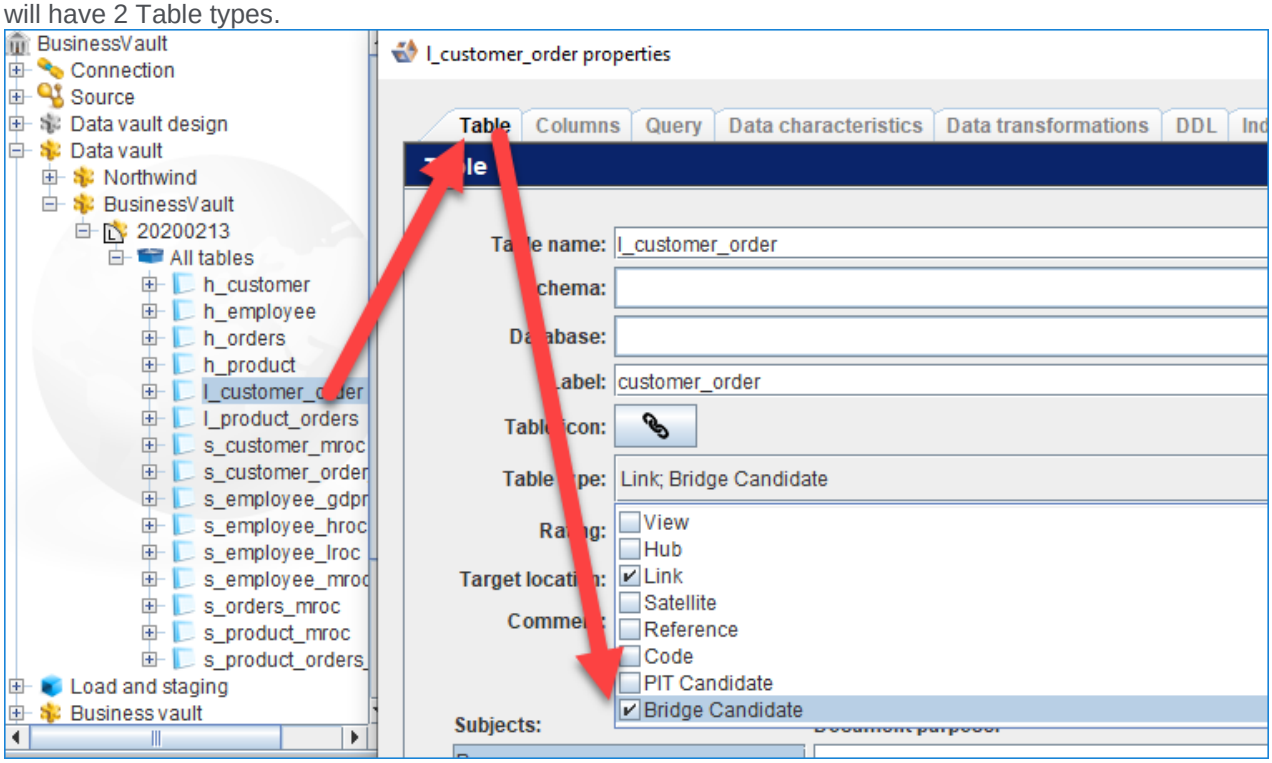
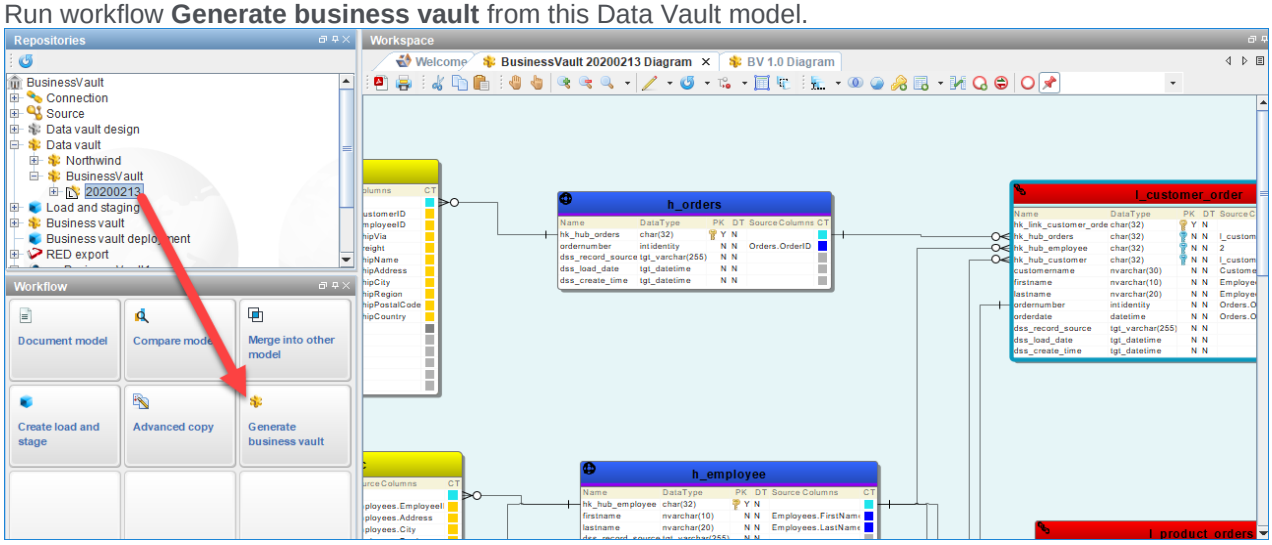
3. Open a Link table and select Bridge Candidate for Table type. Do not remove Link for Table type. The table will have 2 Table types.



4. Run workflow **Generate business vault** from this Data Vault model.



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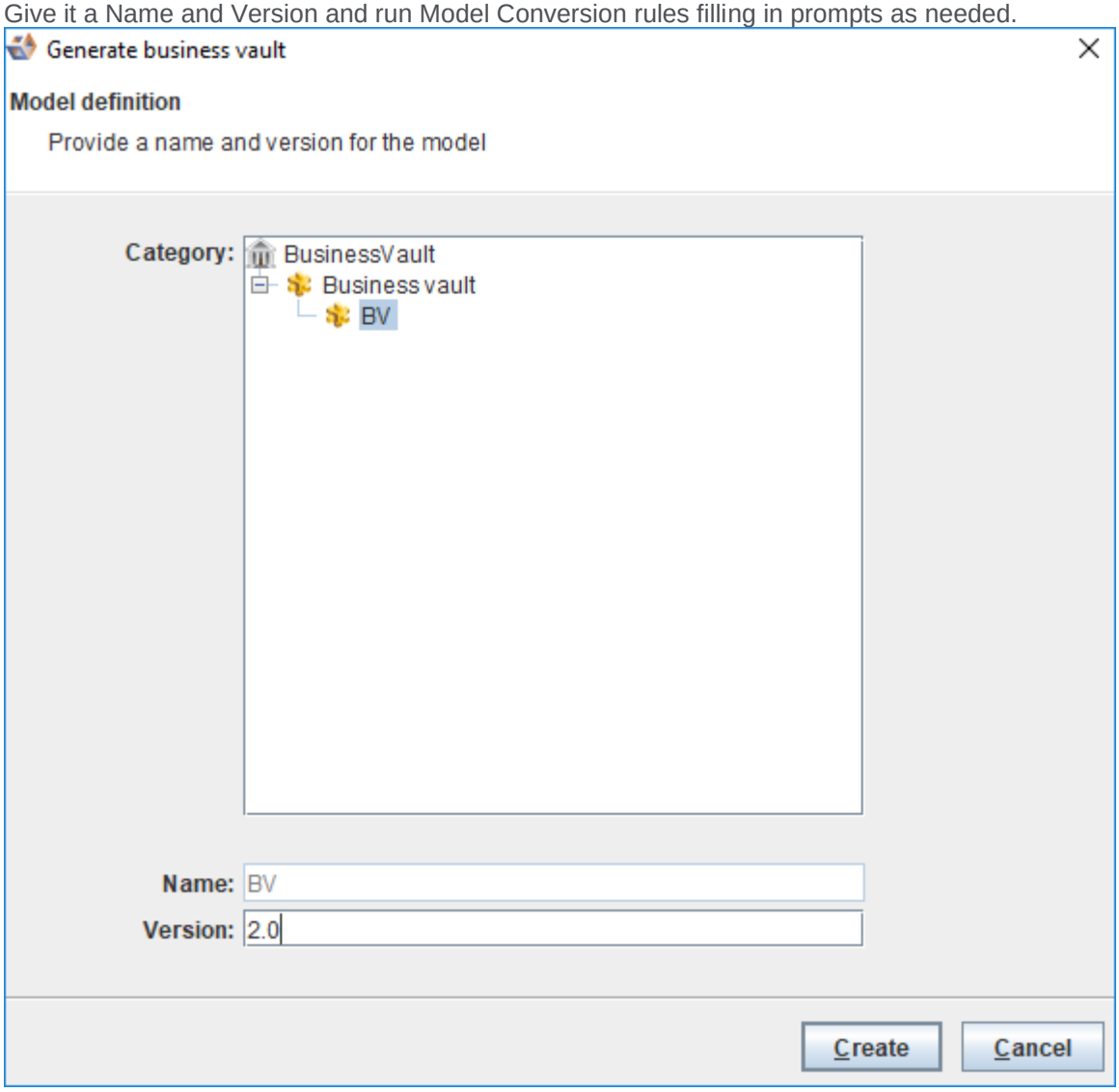
5. Give it a Name and Version and run Model Conversion rules filling in prompts as needed.



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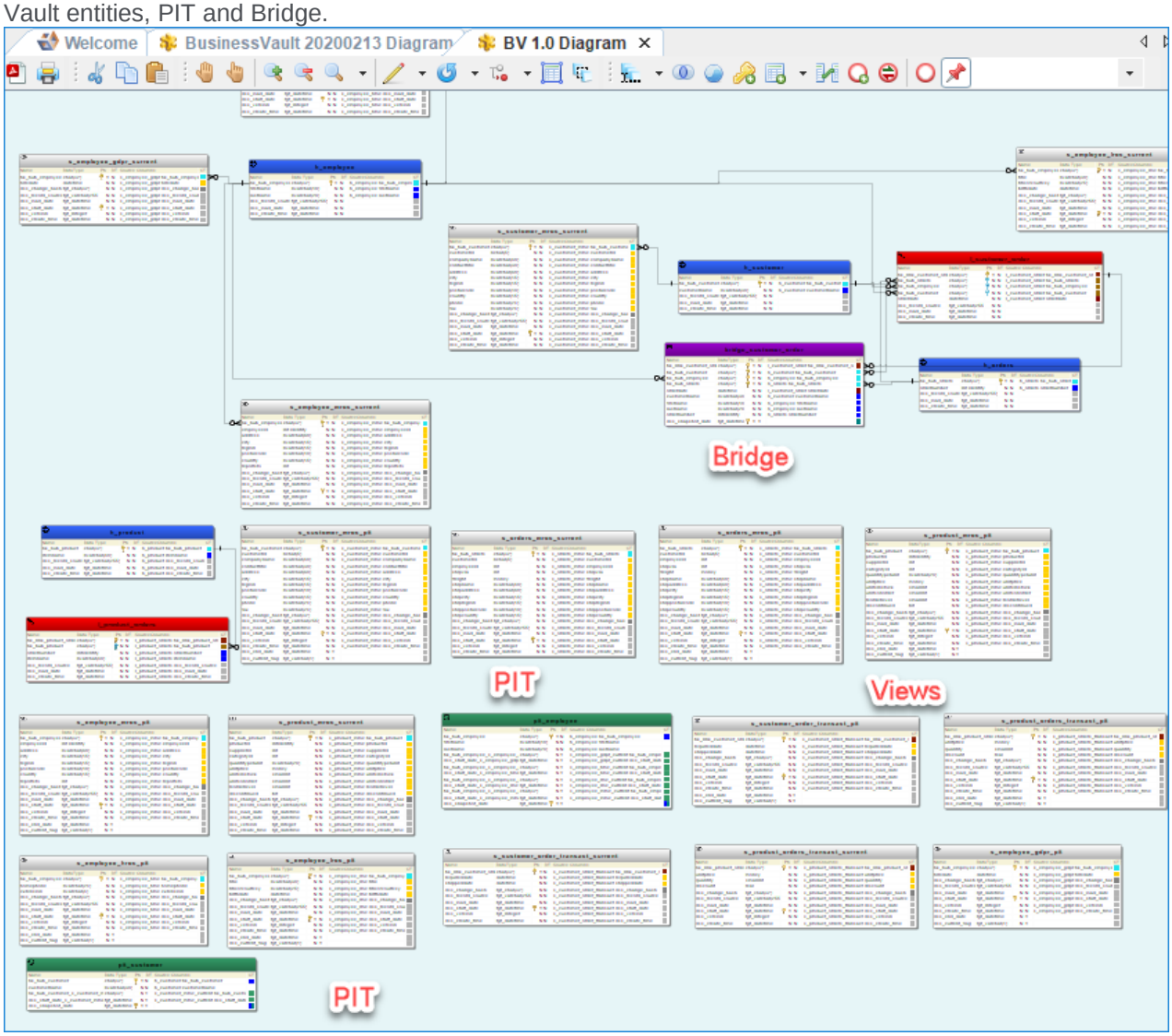
6. The supporting view (As-Of and Current) is created along with the Data Vault model plus new Business Vault entities, PIT and Bridge.



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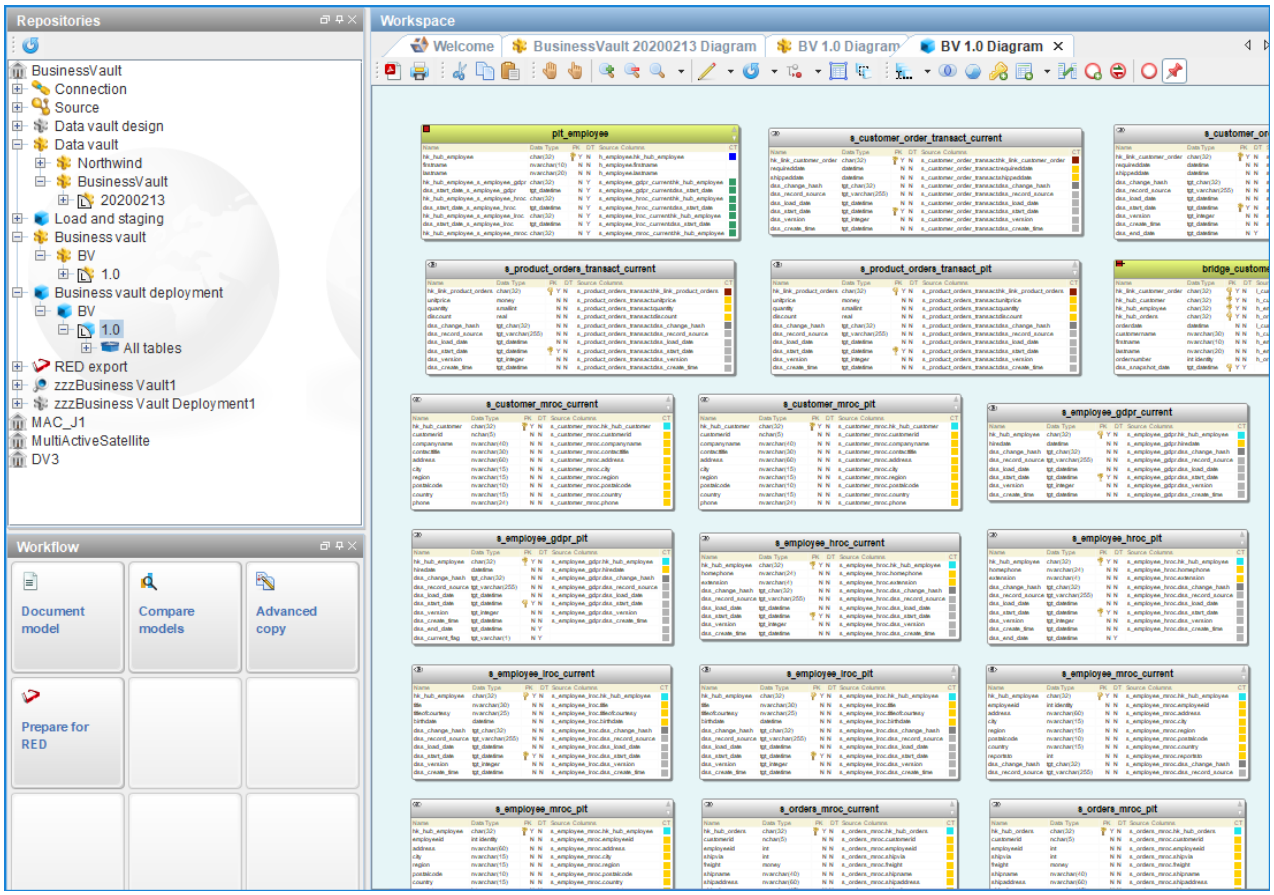
7. Run Generate business vault deployment from Business Vault category to get a Load and Staging format for the Business Vault.

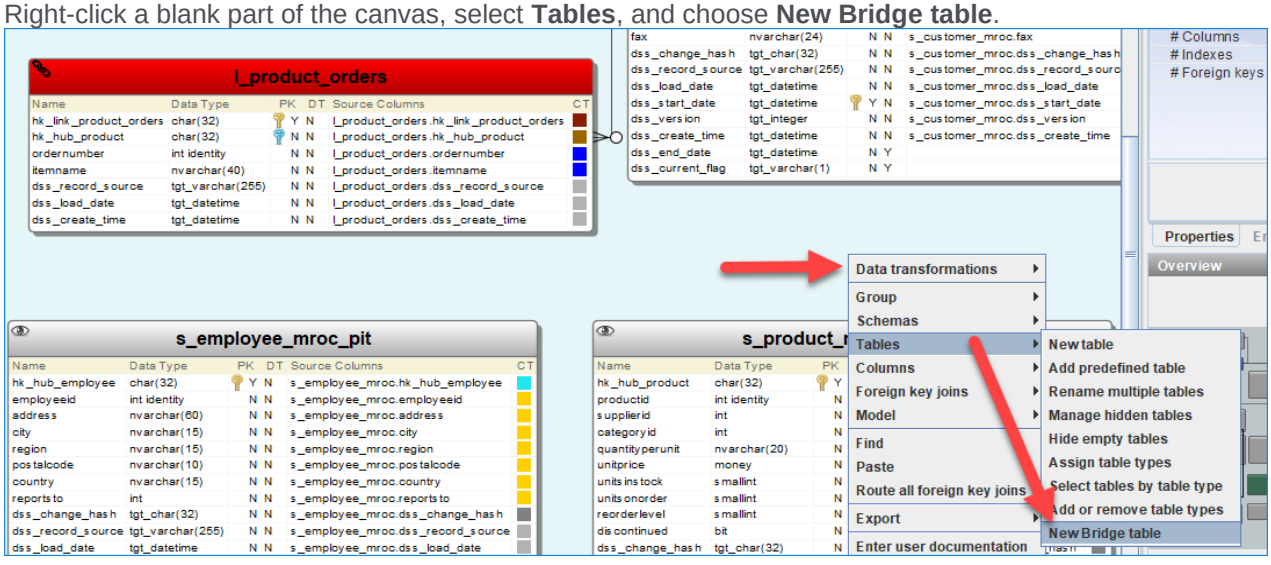


8. You can create a RED Export from this model.

Bridge Table Wizard

3D has included a Bridge table wizard to assist with developing a single link bridge with related hubs. Follow these steps:

1. Open the Business Vault category.
2. Right-click a blank part of the canvas, select **Tables**, and choose **New Bridge table**.



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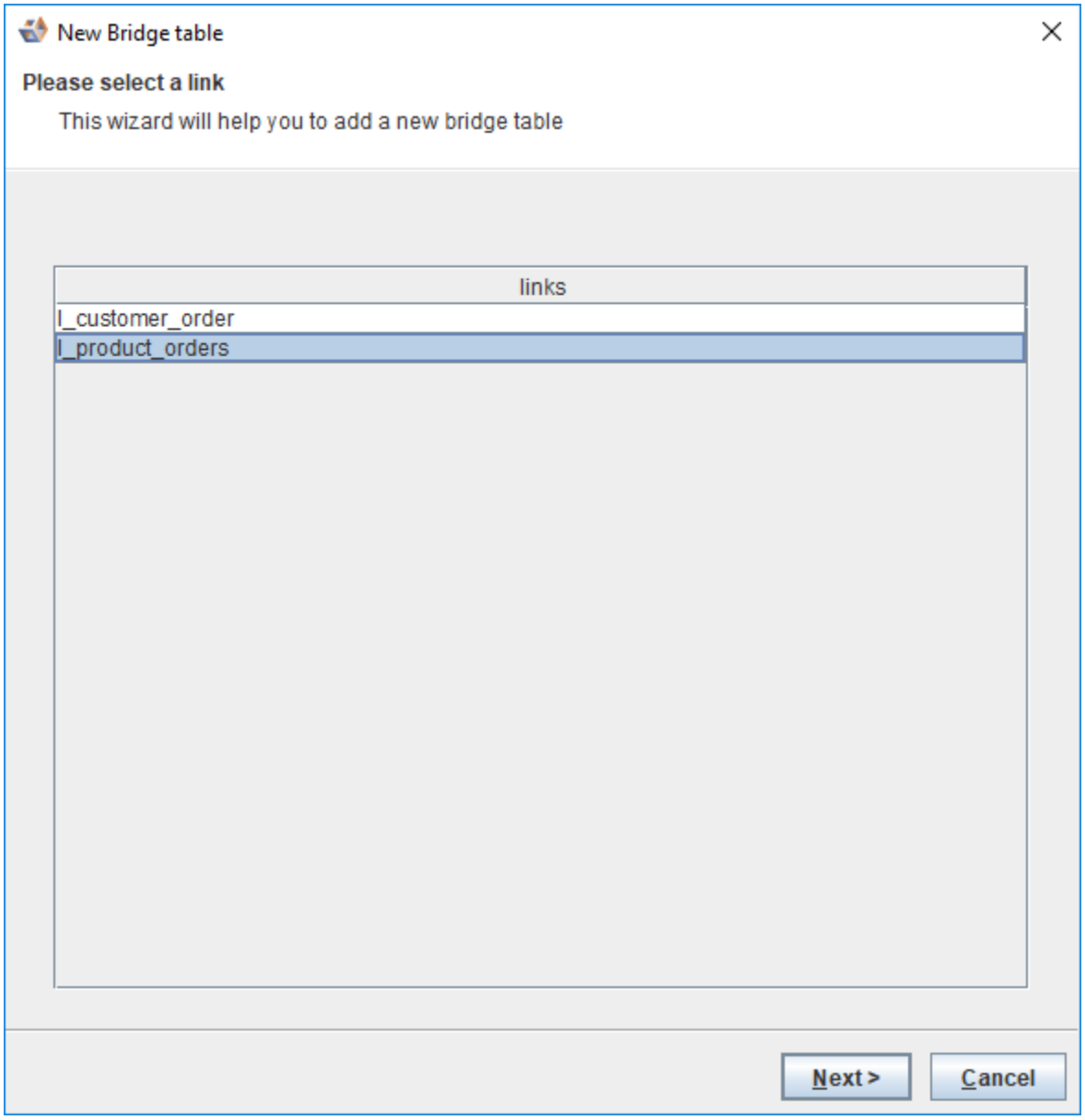
3. Select the Link table.



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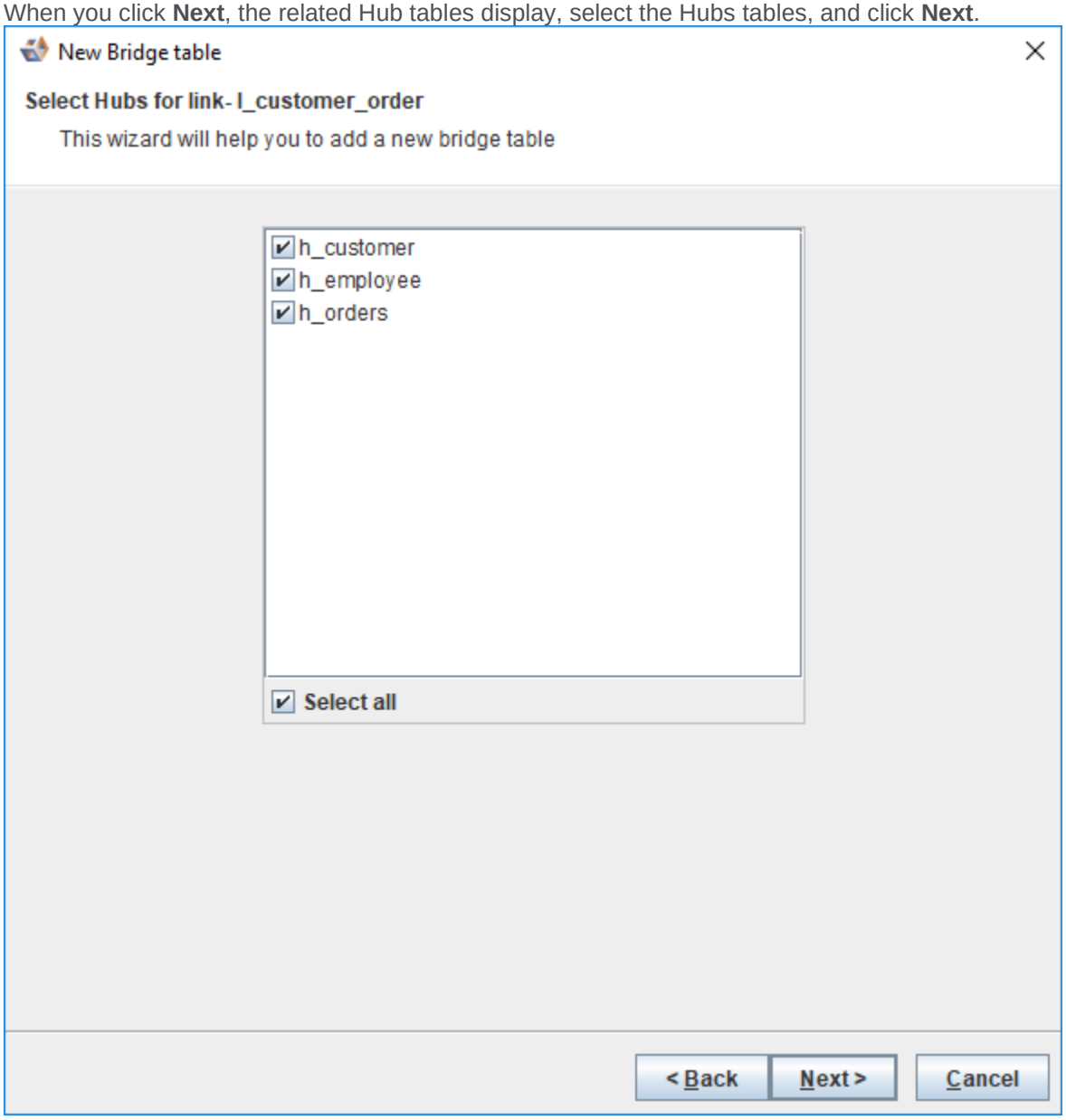
4. When you click **Next**, the related Hub tables display, select the Hubs tables, and click **Next**.



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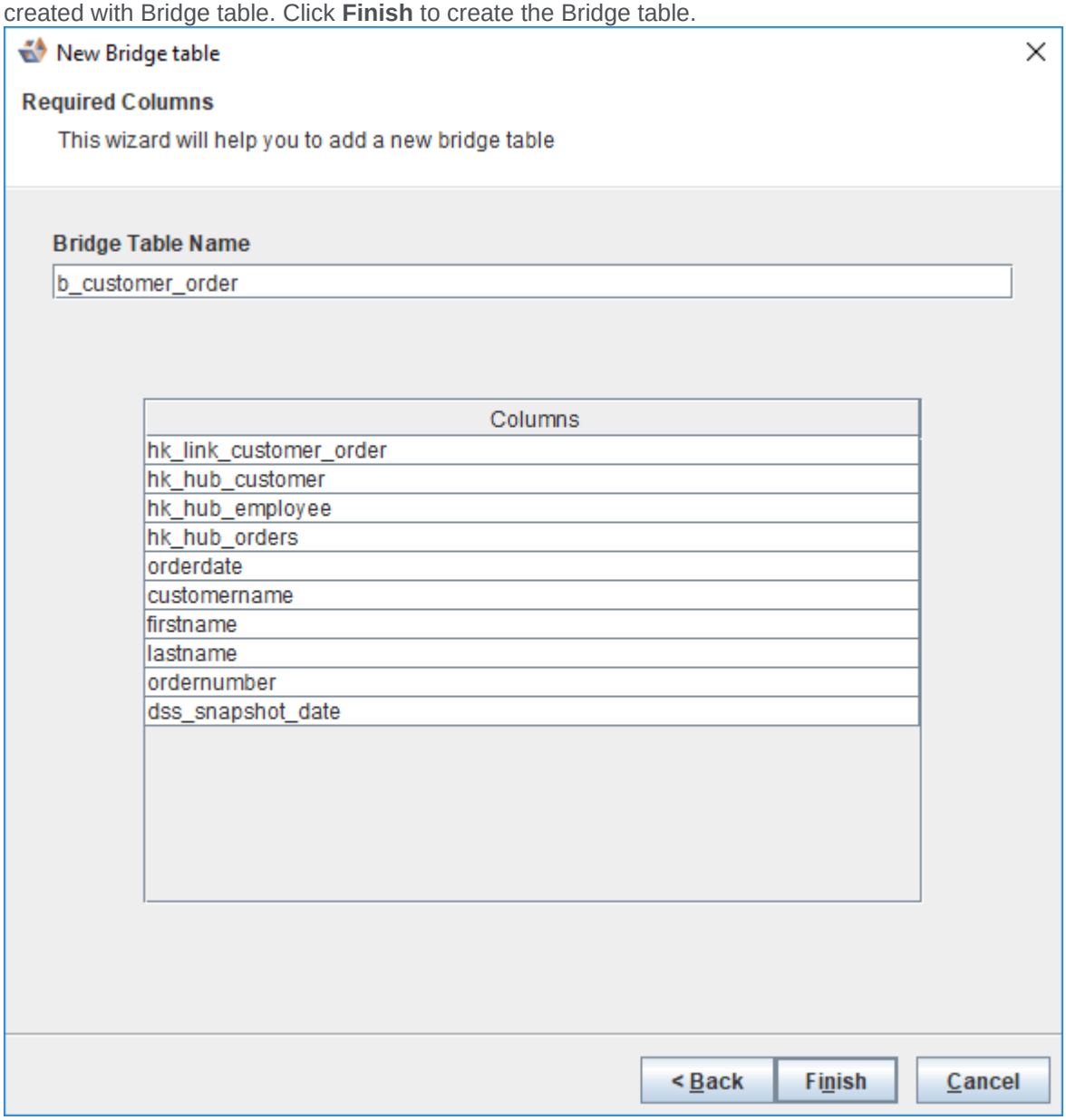
5. The required Columns screen has an editable prompt for table name and shows the columns that will be created with Bridge table. Click **Finish** to create the Bridge table.



Support for SQL Server 2019

This version includes support for Microsoft SQL Server 2019.

RED Export

This version includes the 'Multi-Active Satellite Natural key' and 'Multi-Active Satellite Sequence key' attributes types for RED export. Also, some indicators were added to the RED export XML, these changes were applied for Stage and Satellite tables

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Detailed list of changes in Version 8.5.1.0

The following changes have been implemented since Version 8.4.2.0

Notes

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.

Jira Number	Description
Improvements	
BLUE-2374	Creation of PIT (Point in Time) tables under the Business Vault category.
BLUE-2375	Creation of Bridge tables under the Business Vault category.
BLUE-2446	Support for Business Vault category.
BLUE-2449	This version includes the 'Multi-Active Satellite Natural key' and 'Multi-Active Satellite Sequence key' attributes types for RED export.
BLUE-2475	Support for SQL Server 2019.

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Previous Release Significant Features

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

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    - 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

Significant Features 2.10.0.0

The following significant new features have been added since Version 2.9.0.0:

- Model conversion logger and snapshots.
- Alignment of Data Vault 2.0 with RED changes and improvements to the model conversions.

Significant Features 2.9.0.0

The following significant features or improvements have been added since Version 2.8.0.2

- Added changing hash to Satellites of a Data Vault
- Data type mappings for Hive and to support TPT loads in Teradata
- Allow deletion of profiling results
- Updated tutorials

Significant Features 2.8.0.2

The 3D 2.8.0.2 update fixes a RED export issue by providing a prompt to determine how potentially invalid data types for dss columns for Teradata are processed.

Significant Features 2.8.0.1

The 3D 2.8.0.1 update fixes an issue when upgrading a repository with an entity type named 'View' which would cause the repository upgrade to fail.

Significant Features 2.8.0.0

The following significant new features have been added since Version 2.7.0.1

- Data Vault improvements
    - Add relationship between Links and Hubs
    - Entity types added to RED design category
- Model conversion rules

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    - New rule: Assign relationship type
    - The 'Exclude views' option in 'Copy entities' rule has been removed
    - The 'Create view' rule requires setting a 'View' entity type
    - Described in the user guide
    - The entity object property field was removed
- Improvements to synchronizing RED object types
    - The improvements have been incorporated for use with the upcoming RED release
    - Allow custom databases for target locations
    - Discovery of view queries
    - Support for Teradata timestamp(0) and MSSQL varchar(max)
    - Additional features to the UI

Significant Features 2.7.2.0 BETA

- No significant features were added in this release.

Significant Features 2.7.1.0 BETA

- Data Vault entity types added to RED design category
- Discovery of view queries
- Support for Teradata timestamp(0) and MSSQL varchar(max)

Significant Features 2.7.0.1

- CSV parser supporting multi-character delimiters and newlines in values
- Model conversion rules have a description field
- Discovery improvements
    - Oracle XML discovery includes data type size and scale
    - Teradata indexes without names

Significant Features 2.7.0.0

- CSV parser supporting multi-character delimiters and newlines in values
- Model conversion rules have a description field
- Discovery improvements
    - Oracle XML discovery includes data type size and scale
    - Teradata indexes without names

Significant Features 2.6.2.0 BETA

- Data vault 2.0 support
    - Entity type icons for hub, link and satellite tables
- Model conversion rules
    - Additional rule
        - Delete attribute source mappings
- Improvements to existing rules

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    - Support for more variables
    - New options for some rules

Significant Features 2.6.1.0 BETA

- DDL language expansions
    - Table type filtering
    - Source query support
- Data Vault 2.0 support
    - Hash key transformations
    - Data Vault staging out views
- RED external targets
- Model conversion rules
    - Additional rules
        - Adding relations
        - Removing transformations
        - Merge entities by source entity
        - Populate entity queries
        - Assign schema
    - Improvements to existing rules
        - Applying steps only for certain RDBMS
        - Variables and basic logic support for transformations
- Diagram walker for large diagrams
- Derive relations wizard can assign primary keys

Significant Features 2.6.0.0

- Improved usability
    - Regenerating DDL on an entity allows manual changes to be merged back in
    - XML and Generic Profiling allow a connection retry period to be set
    - Display data shows calculated columns
    - Display data generates SQL aliases
- Performance improvements
    - CSV file discovery can be performed on a limited number of rows
    - File profiling (CSV, XML and JSON) can be performed on a limited number of rows
    - Export to RED on a shared repository has been optimized for speed

Significant Features 2.5.2.0 BETA

- Model conversions
    - Direction of source mappings when copying tables
    - Apply data type mappings

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    - Copy columns within a table
    - Table and column names as variables
    - Schema handling
    - Setting views
- Generated documentation
    - Hidden entities and attributes
- Handling of simple JSON and XML files
    - Discovery
    - Profiling
    - Sample data
    - Pivot table
    - Duplicate data

Significant Features 2.5.1.0 BETA

- Additional RED integration
    - Generated JOIN queries can now be altered before exporting to RED
- Support for composite joins
    - Generic and XML defined Discovery
    - Generic profiling
    - Query generation
    - DDL generation
    - RED integration
- Hierarchical joins supported
- Joins with aliases supported
- JDBC connections can now have multiple JAR files assigned

Significant Features 2.5.0.0

- Additional RED integration
    - Transformations created from the data type mappings
    - Catering for altering index types
    - Default values and nullable columns
- User defined content
    - Custom reports
    - Stored queries
- Shared repositories
    - Storing connection passwords central, local or entering when connecting
- Updated branding

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Significant Features 2.4.2.0

- 3D work flow assistance
  - Simplified default functionality
- Prototyping capabilities to verify the data warehouse design
  - Denormalizes a sample of the data behind the data warehouse design
  - Shows a basic pivot table for the designed star schema
- Merging models
  - Allows for moving changes between models
  - Supports conflict resolution
- Improved usability and user experience
  - Setting under View to increase the fonts
- Runs on a bundled version of Java 8
- New model conversion to generate load and stage tables for data vaults
- Data type mappings have been updated
- Improved RED integration
- Improved diagram performance
- Updated tutorials and user guide

Significant Features 2.3.2.0

- Usability / ease of use redesign
  - Improved handling of surrogate keys
  - Adjustment of default values
  - Allowing diagrams to open as read only
  - Navigating from the tree to the diagram
  - Introduction of a category manager
  - Restoring the tree state at start-up
- Setting table background colors in the diagram
- Search and replace functionality in the model conversion rules
- Improved lineage tracking
- Improved subtype handling by the model conversion
- Discovery of files without header rows
- General maintenance and bug fixes
- Added query join types (only INNER JOIN was being supported before)
- Teradata views now get their data types correctly discovered
- Generated documentation has been expanded to contain additional business semantics
- Display data now uses the data transformations
- Models now can be exported in the Common Warehouse Metamodel format
- RED integration Level One
  - Joins on stage tables
  - Unique short names

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    - Change detection fields
    - RED projects
    - Syncing of object types
    - Business key flags
    - Surrogate key flags

Significant Features 2.2.1.0

- Simplified database schema selection on connections
- WhereScape 3D can now be installed in a custom location
- Events viewer
- New wizard to rename multiple columns
- Java 8 support (a custom JDBC-ODBC bridge supporting ODBC 3.x was added)
- Model conversions
    - Sharing model conversions (export and import functionality)
    - Model naming standards (a new rule to enforce naming standards and automate abbreviations)
    - A new rule to generate indexes
    - The 'Delete entities' rule now provides the option to cascade delete any foreign keys
- Simplified connection and model creation
- Redesigned the copy/import/transition functionality
- Large diagrams handling
- Diagrams can now be saved as PNG images

Significant Features 2.1.0.1

- Effort calculation
- Distribution keys enhancements
- Improved RED integration
- Extended relationship profiling
- Duplicate data detection

Significant Features 2.1.0.0

- 3D to RED export/import is now enabled
- New model conversion rules for:
    - Rename attribute
    - Redirect attribute source mappings
    - Add attributes from source entities

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Significant Features 2.0.0.8

- Data transformations (BETA)
- PowerDesigner support for views, groups and code as name
- Hadoop Distributed File System can now be a host connection
- File encoding can now be selected on local file system host connections (e.g.: various EBCDIC encodings)
- Updated context menus

Significant Features 2.0.0.7

- Data quality functionality
- Business rule validation
- Automated star schema design generation from source systems
- Automated stage and load tables generation from star schemas
- New filtering and validation screens for profiling results (BETA)
- WhereScape RED “fixed” categories
- Silent installation options

Significant Features 2.0.0.6

- Significantly improved diagram layouts using a new layout engine
- Sample data generation can now be scheduled.
- Several enhancements to model conversion rules.
- Referential integrity profiling.

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