

How-To: Data Model Series (Part 3): Attributes and Versioning



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About this series

This series is all about **how to build and use Data Models**. You are in **Part 3**, which provides step-by-step instructions on how to add and manage attributes and Versioning in a Data Model.

This series was designed to be read in order. If you don't have any previous experience with the Data Model tool, we recommend that you follow this approach, starting with Part 1. But if you are already familiar with Vena Data Models and are just looking for a refresher, you can also feel free to dip in anywhere within this series.

Part 1: [Building a Data Model](#)

Part 2: [Hierarchies and Roll-ups](#)

Part 3: Attributes and Versioning - **you are here**

Part 4: [ETL Tool](#)

Before you begin

To follow the instructions in this article, you will need at least **Modeler** access. If Data Permissions are set up in your environment, you will also need the appropriate permissions for the data that you are working with.

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Attributes overview

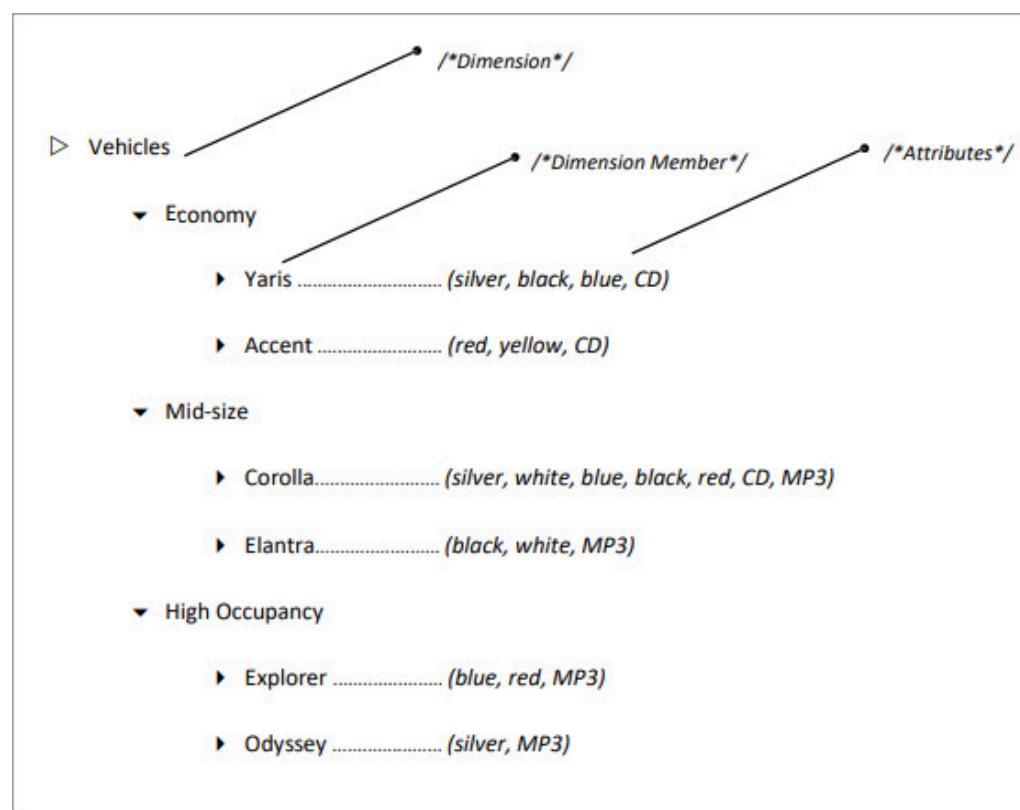
Attributes

Data model members, including bottom-level and parent members, can be labeled with Attributes. Attributes group members with shared properties, even if they are in different parts of the hierarchy. For example, office supplies like pens and markers may share a color attribute, such as blue.

Using attributes allows for the easy retrieval of members with specific characteristics, regardless of their location within the hierarchy.

In Vena templates, attributes can be used with the Expression Editor to dynamically map members based on selected page options. For instance, choosing a page option can filter table rows to show only members with the corresponding attribute.

The following is an example of tagging members with attributes:

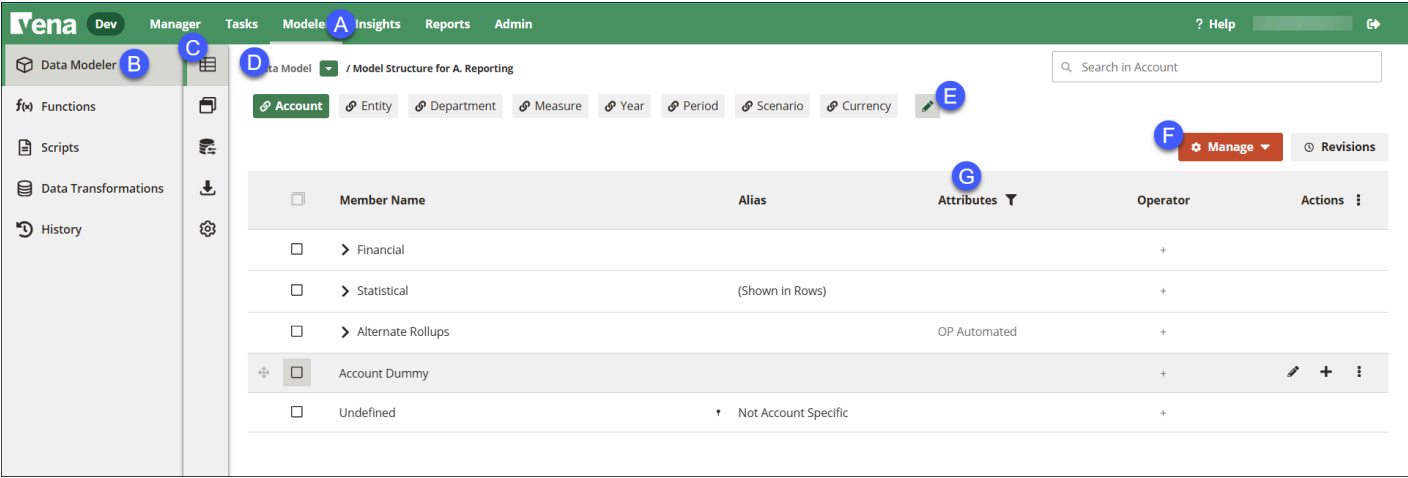


As an example, Vena can produce a Dynamic Range based on any of the attributes.

- 'silver' will produce the list of Members: Yaris, Corolla, and Odyssey
- 'silver' UNION 'CD' will produce a list of Members: Yaris, Accent, Corolla, Odyssey

Attribute tools

A Modeler can leverage the Attributes functionality to tag Dimension Members with specific attribute names. For example, a department Dimension Member can be tagged with a location attribute, such as London.

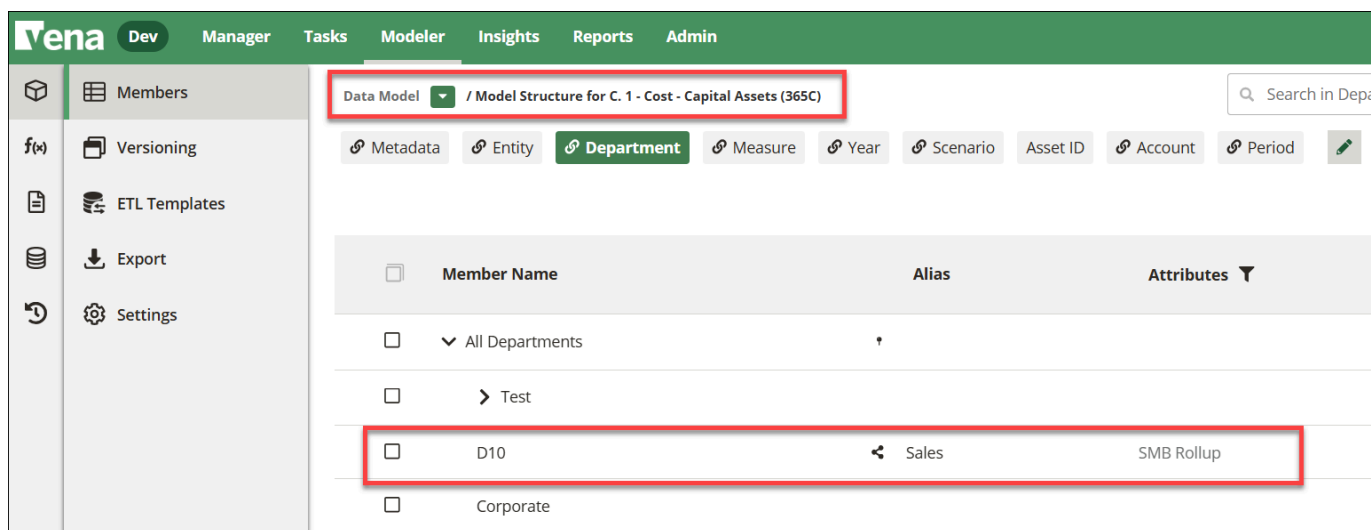


A	Modeler tab	The area of the application where elements such as data models, integrations and the ETL tool reside.
B	Data Modeler page	This page used to create and manage data models, attributes and versioning.
C	Members page	The Members page is how you access, create and manage your dimensions and members.
D	Choose Data Model	Select a data model from the available list.
E	Dimensions	View, edit or delete dimensions.
F	Manage	Lists existing attributes, as well as the options to create or delete attributes. Note: In Standard Models, you will see a Manage drop-down menu. Under the drop-down menu, you can manage your attributes and range rules. Visit this article for more information on range rules.
G	Attached Members	Displays current attributes assigned to members.

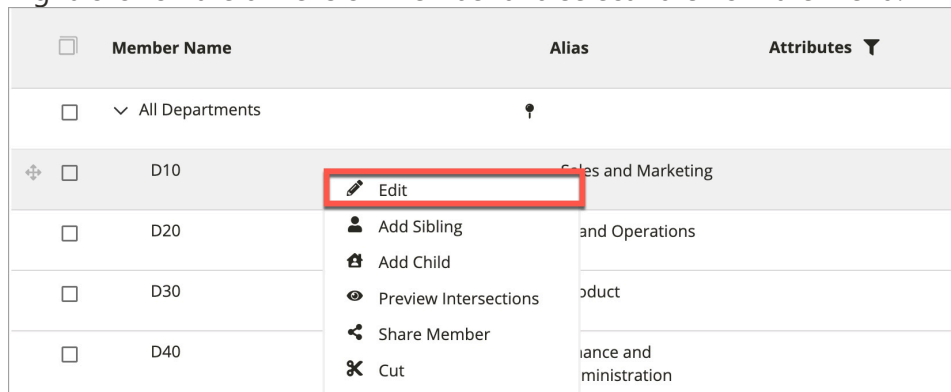
How to

Create an attribute

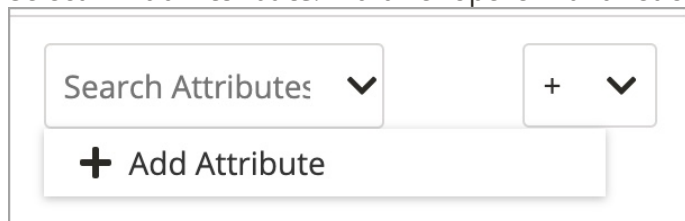
1. Navigate to the **Modeler** tab.
2. Navigate to the appropriate **data model**.
3. Locate the dimension member you want to add an attribute to.



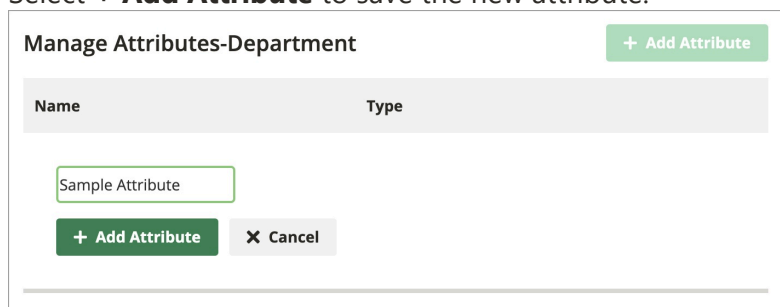
4. Right-click on the dimension member and select **Edit** from the menu.



5. Select **+ Add Attribute**. A drawer opens with a list of existing attributes.




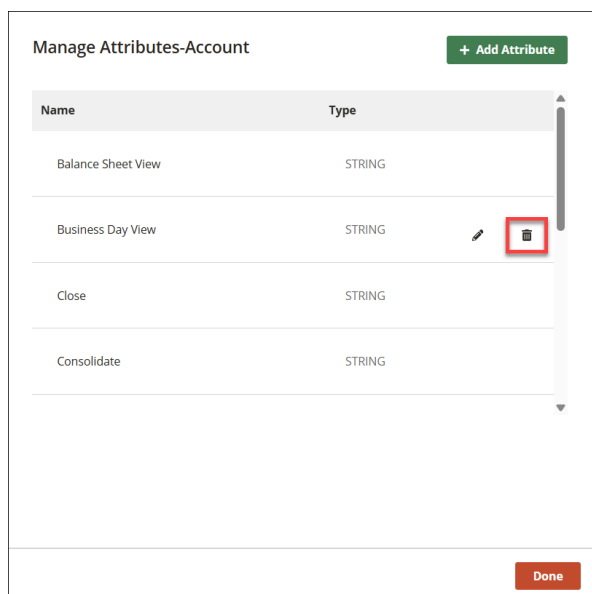
6. Select **+ Add Attribute**.
7. Enter an attribute name.
8. Select **+ Add Attribute** to save the new attribute.



9. Select **Done** to close the drawer.

Delete an attribute

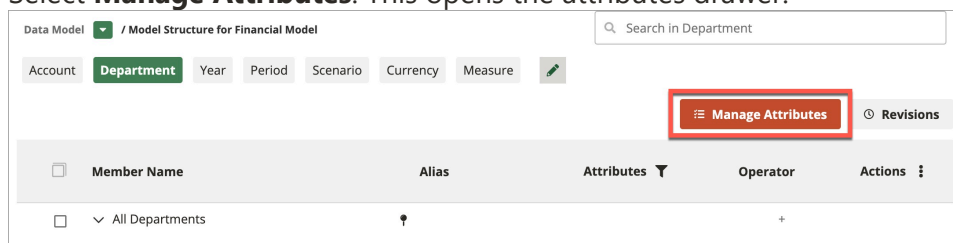
1. Navigate to the **Modeler** tab.
2. Navigate to the appropriate **data model**.
3. Select **Manage Attributes**. This opens the attributes drawer.
4. Hover over the attribute you want to delete and select the  (**delete**) icon.



5. Select **Yes, Delete Attribute** in the pop-up confirmation.

Edit an attribute name

1. Navigate to the **Modeler** tab.
2. Navigate to the appropriate **data model**.
3. Select **Manage Attributes**. This opens the attributes drawer.




Note

If you are using a Standard Model, select **Manage > Attributes**.

4. Hover over the attribute you want to edit and select the  (**pencil**) icon.

Manage Attributes-Account

+ Add Attribute

Name	Type	
Balance Sheet View	STRING	
Business Day View	STRING	
Close	STRING	
Consolidate	STRING	

Done

5. Rename your attribute.

6. Select **Update** to finalize the changes.

+ Update

✕ Cancel

7. Select **Done** to close the drawer.

Attach a dimension member to an attribute

1. Navigate to the **Modeler** tab.

2. Navigate to the appropriate **data model**.

3. Locate the dimension member you want to add an attribute to.

The screenshot shows the Vena Data Model interface. The breadcrumb path is **Data Model / Model Structure for C. 1 - Cost - Capital Assets (365C)**. The 'Department' dimension is selected. The table lists dimension members:

Member Name	Alias	Attributes
▼ All Departments		
► Test		
D10	Sales	SMB Rollup
Corporate		

4. Right-click on the dimension member and select **Edit** from the menu.

The screenshot shows the context menu for the 'D10' dimension member. The 'Edit' option is highlighted.

Member Name	Alias	Attributes
▼ All Departments		
D10	Sales and Marketing	
D20	and Operations	
D30	Product	
D40	ance and ministration	

5. Select the check-box next to each attribute in the drop-down menu that you want to attach to the dimension member.

6. Select **+ Update** to save your changes.

The screenshot shows the 'Edit' dialog for the 'D10' dimension member. The 'Sales and Marketing' attribute is selected. The '+ Update' button is highlighted.

Remove a dimension member from an attribute

1. Navigate to the **Modeler** tab.
2. Navigate to the appropriate **data model**.

3. Locate the dimension member you want to add an attribute to.

The screenshot shows the Vena Data Modeler interface. The breadcrumb path 'Data Model / Model Structure for C. 1 - Cost - Capital Assets (365C)' is highlighted. Below it, a row of filters includes 'Department', 'Measure', 'Year', 'Scenario', 'Asset ID', 'Account', and 'Period'. The main table lists dimension members: 'All Departments', 'Test', 'D10', and 'Corporate'. The 'D10' row is highlighted, showing an alias of 'Sales' and an attribute of 'SMB Rollup'.

4. Right-click on the dimension member and select **Edit** from the menu.

The screenshot shows the Vena Data Modeler interface. The 'D10' row is right-clicked, and a context menu is open. The 'Edit' option is highlighted. Other options in the menu include 'Add Sibling', 'Add Child', 'Preview Intersections', 'Share Member', and 'Cut'.

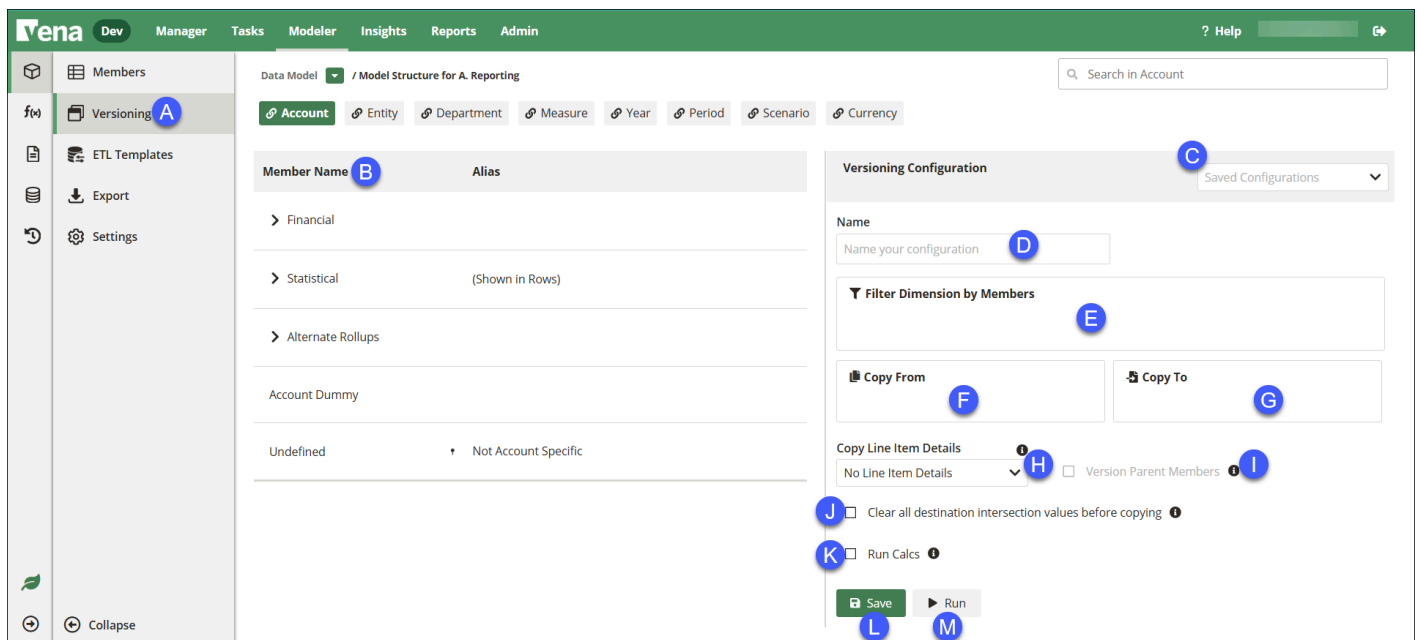
5. Uncheck the check-box next to each attribute in the drop-down menu that you want to remove from the dimension member.

6. Select **+ Update** to save your changes.

The screenshot shows the Vena Data Modeler interface. The 'D10' row is selected, and the 'Attributes' column shows a dropdown menu with 'Sales and Marketing' selected. The 'Update' button is highlighted.

Versioning overview

Versioning allows Modelers to bulk copy data from one group of intersections and write them to another group of intersections within the same data model. The desired data set can be isolated by adding Dimension Members in the Page(s) box. The Page(s) box acts as a list of filters for identifying the data set to copy. For example, a Modeler may want all collected "Plan" data to become the pre-populated "Forecast" data for a particular year.



A Versioning Displays utilities used to bulk copy data between dimension members.

B Dimension Members Navigate and select dimension member.

C Saved Configurations Existing versioning configurations that you can run and edit.

D Configuration Name Choose a name for your versioning configuration.

E Filter Dimensions by Members Use the *Filter* section to narrow down what data you want to copy, i.e., limit copying to data involving your selected members.

F Copy From Copy from dimension member.

G Copy To Copy to dimension member.

H Copy Line Items Choose whether line items are copied; and if so, in which format.

I Version Parent Members Choose whether parent members will be included or not when defining what to copy.

J Clear Destination Intersections Before Copy If selected, Vena will clear out all values in the destination ("Copy To") intersections, then copy over the values from the source ("Copy From").

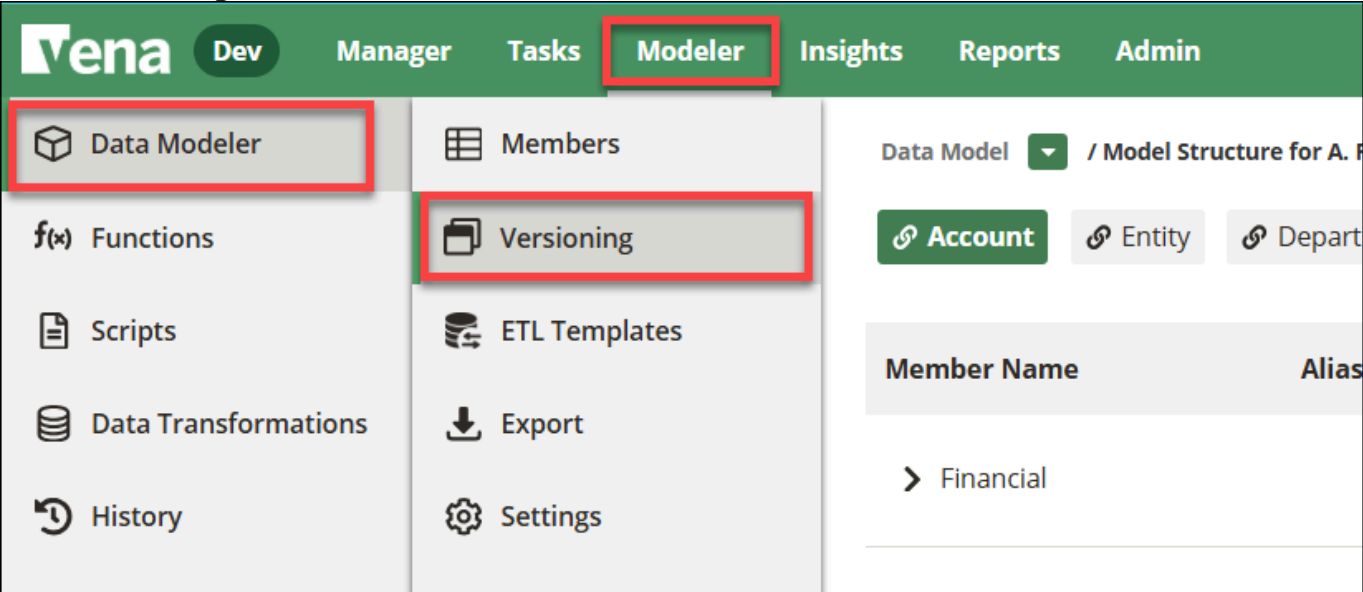
K	Run Calcs	If you have any Vena Calcs set up that include the destination intersections in their scope, this option allows you to specify whether or not those calcs are executed when the data copy is performed.
L	Save	Save your versioning configuration.
M	Run	Execute copy based on chosen parameters.

Learn more about Versioning in Modeler.

How to

Version data

- 1. Log in to Vena and navigate to the **Modeler** tab.
- 2. Select **Data Modeler**.
- 3. Select **Versioning** from the sidebar tab.



- 4. Select the appropriate data model from the data model drop-down list at the top of the page.



- 5. Input a name for your Versioning Configuration.

Versioning Configuration


Name

Name your configuration

Note

If you choose to run your Versioning configuration immediately, you do not have to input a name. However, if you intend to save the configuration for a later date, you must include a name.

6. Select the dimension that you want to copy.

Data Model  / Model Structure for Financial Model

Account Department **Year** Period Scenario Currency Measure

7. Choose a member that describes the type of intersections you would like to bulk copy, then hover over that member row. Three icons should appear:




Filter Dimension by Members






Copy From




Copy To

Select the  (**Filter Dimension by Members**) button to add your member to the *Filter Dimension by Members* section under *Versioning Configuration*.

> US002 Los Angeles

> Peak Mexico Operations   


8. Use the *Filter* section to narrow down what data you want to copy, i.e., limit copying to data involving your selected members. For example, if you were copying your budget, you would choose the Budget member (or similar).

 **Filter Dimension by Members**

Note


You can add more than one member from unique dimensions. For example, during a cycle rollover, if you want to version last year's December Actuals to January Budget, Copy from:

2020 (Year), Actuals (Scenario), December (Month). Copy to: 2021 (Year), Budget (Scenario), January (Month).

9. Next, choose the member that you would like to copy from and select  (**Copy From**) in the *Member* row to add it to the *Copy From* section. This is where you select the source of the data to be copied.

For example, if it were currently 2020 and you wanted to copy your 2020 budget to 2021, you would choose the Y2020 (or similar) member here. If you leave this section blank, Vena will copy all data for all dimensions in the data model.



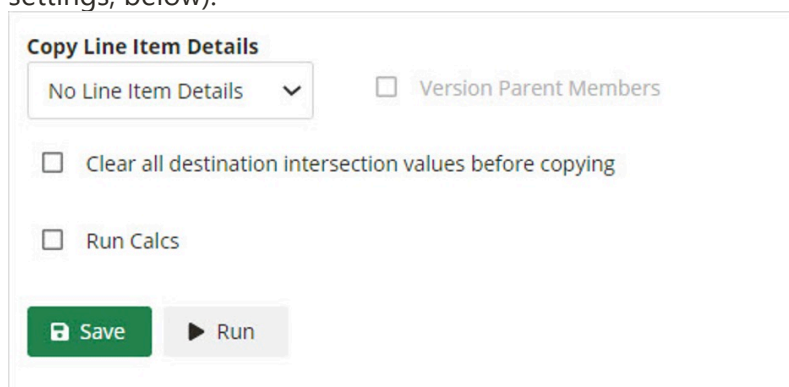
10. Now, choose the member that you would like to copy to and select the  (**Copy To**) button to add it to the *Copy To* section. This is where you select the destination of the copied data. For example, if you wanted to copy your 2020 budget to 2021, you would choose the Y2021 (or similar) member here.



Note

The member you choose for *Copy To* and *Copy From* must be the same dimensions.

11. For basic Versioning, do not change the options from their default settings (see a screenshot of default settings, below):



By leaving the default settings unchanged, this means you answer "No" to the following questions:

- Do you want to clear all destination intersection values before copying? No
- Do you want to copy line items? No
- Do you want to run calls? No
- Do you want to version parent members? No

- o See [Advanced Versioning Options](#) below for more information on these functions.

12. Select **Run** to start the Versioning job, which will copy the specified values. You can also select **Save** to save your configuration without running it.
13. If you select the **Run** button, Vena will create and process a new Versioning job, and display a message confirming that your Versioning job has started.
14. Versioning jobs appear with ETL jobs in the *History* section of the Modeler interface, where you can see their status.

For information on Versioning in the Modeler, please refer to **this article**.

Background processing

The Versioning process may take longer depending on the volume of intersections being copied. During this time, the data model remains unlocked, allowing users to use Vena regularly while the data copy processes in the background.

To view the status of your job:

1. Select **Data Modeler**.
2. Select **History** from the sidebar.
3. Your job should be visible on the ETL Jobs page.
4. In the table, you'll see Versioning jobs with Versioning in the *Job Name* column, along with an outline of the configured job.
5. You can check the job status using the indicators on the right side.

Related topics

- Check out [this article](#) to learn how to dynamically map tables based on attributes.
- Check out [this article](#) to learn how to **copy data in bulk with Versioning**.

Questions? Comments? Reach out to us directly at support@venasolutions.com.
(Please include the link to the article for reference.)