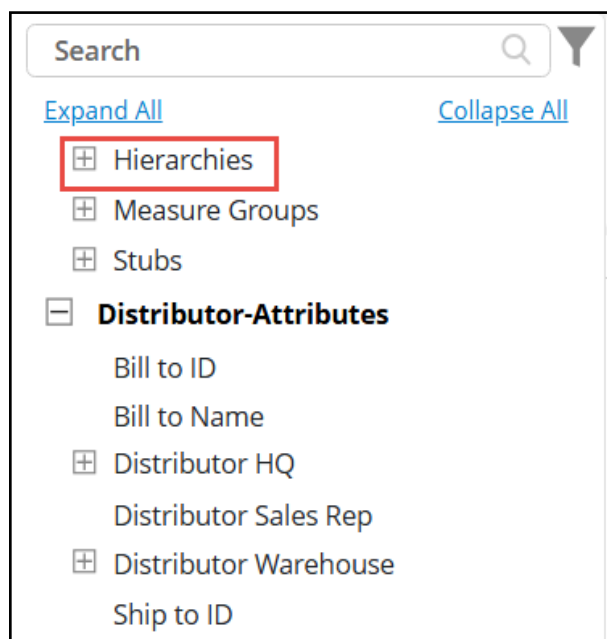




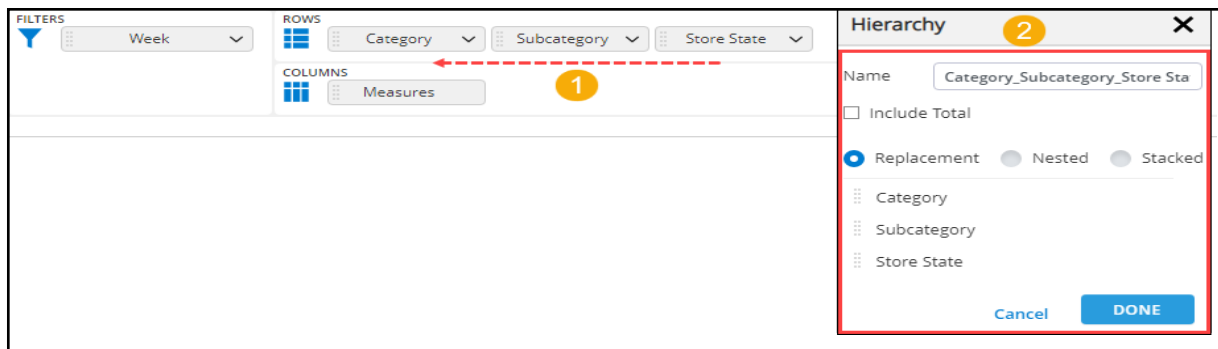
Dhiva - Manage Hierarchies

Adding a Hierarchy to a Report allows the information to be presented in a condensed format and provides the ability to drill to the additional levels of details as needed or to stack and view all requested items without drilling. Hierarchies can contain Attributes, Lists, and/or Groups.

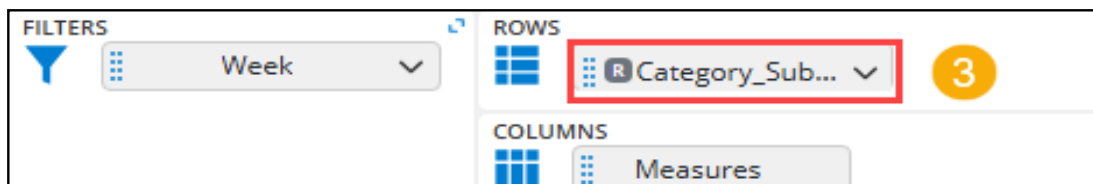
The examples below demonstrate how to create a 3-level Hierarchy of each type using the drag-and-drop method in the Report Layout. This method will create Report-specific Hierarchies, as indicated by the grey icons. Users can also create, save, and manage Hierarchies in the "Hierarchy" section of the left-hand Attributes panel. These saved Hierarchies can either have blue (Personal) or green (Global) icons.



1. Drag the Attributes that will be the second level and third level (child level) of the Hierarchy (for example, **Subcategory** and **Store State**) on top of the Attribute that will be the top level (parent level) of the Hierarchy (for example, **Category**) in the Report dimension section.
2. In the **Hierarchy** dialog box, enter the new name and select the appropriate type for the Hierarchy. Note that the order of the Attributes/Artifacts specified in this window determines the order in the Hierarchy. Manage the levels by using the handlebars to drag and drop to the desired order.
3. Click **Done**. The color of the icon will indicate the Hierarchy's access (Report-specific (grey), Personal (blue), or Global (green)). More information on this can be found in the "Artifacts Quick Start Guide".



The selected type of Hierarchy (Replacement, Nested, or Stacked) is indicated with its new name in the Report Layout section.



Users will learn about the three types of Hierarchies and more in the following sections of the guide:

- [Replacement Hierarchy](#)
- [Nested Hierarchy](#)
 - [Displaying Nested Attributes within Separate Columns](#)
- [Stacked Hierarchy](#)
- [Exclude Filters in Report Layout Hierarchies](#)
- [Copy, Edit Name, Delete Hierarchies](#)



Replacement Hierarchy

The **Replacement** Hierarchy is the default Hierarchy selection and enables a drill-down to the child level(s), displaying only the child level of the drilled item.

Hierarchy

X

Name

Category_Subcategory_Store State

☐

Include Total

☒

Replacement

☐

Nested

☐

Stacked

Category

Subcategory

Store State

Cancel

DONE

In the following example, if you click the plus sign of the **Other Tobacco/Nicotine Products** category, the system will navigate you to the **Subcategories** of the **Other Tobacco/Nicotine Products** category in the table. Use the **Category** link (indicated with a dotted arrow in the right-side screenshot) to navigate back to the parent level.

FILTERS Week

ROWS Category_Sub...

COLUMNS Measures

CATEGORY	UNIT VOLUME-CURR-1W
+ Store Use/Supply	61,101,014.0
+ Other Tobacco/ Nicotine Products	33,080,140.0
+ Foodservice	21,913,903.0
+ Candy	20,591,568.0
+ Hot Dispensed Beverages	7,013,143.0
+ Packaged Beverages	6,130,714.0
+ Salty Snacks	5,626,815.0
+ Packaged Sweet Snacks	5,217,541.0
+ Alternative Snacks	4,839,222.0
+ Cigarettes	4,372,145.1
+ Health & Beauty Care	2,941,079.0
+ Shelf Stable Products	1,982,285.0
+ General Merchandise	1,740,755.0
+ Other Dairy & Deli Products	945,468.0
+ Non-Edible Grocery	823,880.0
+ Perishable Grocery	759,409.0

FILTERS Week

ROWS Category_Sub...

COLUMNS Measures

Category: Other Tobacco/ Nicotine Products;

SUBCATEGORY	UNIT VOLUME-CURR-1W
+ Other Tobacco/ Nicotine Products-Cigars	18,711,583.0
+ Other Tobacco/ Nicotine Products-Smokeless	7,843,084.0
+ Other Tobacco/ Nicotine Products-Smokeless Tobacco Alternatives	3,244,823.0
+ Other Tobacco/ Nicotine Products-Papers	1,732,519.0
+ Other Tobacco/ Nicotine Products-Vaping	1,245,357.0
+ Other Tobacco/ Nicotine Products-Pipe/Cigarette Tobacco	232,704.0
+ Other Tobacco/ Nicotine Products-Other Tobacco/ Nicotine Products	68,740.0
+ Other Tobacco/ Nicotine Products-Pipes	1,362.0
+ Other Tobacco/ Nicotine Products-All Other	-32.0

The blue plus signs at this level indicate that there is another level available to drill. As we defined, it would drill to Store States in the Subcategory. The link levels will continue as you drill.

Nested Hierarchy

The **Nested** Hierarchy provides the drill ability on the Report and displays the parent and the child data simultaneously.

Hierarchy

Name

Category Subcategory Store State

☐ Include Total

☐ Replacement
 ☒ Nested
 ☐ Stacked

Category

Subcategory

Store State

☐ Display Nested Attributes In Separate Columns

Cancel

DONE

In the below example, if you click the plus sign of the **Other Tobacco/Nicotine Products** category, the system will display the **Subcategories** related to the **Other Tobacco/Nicotine Products** in the same table along with their totals. If you click on a minus sign next to a category, it will close that level of Hierarchy.

FILTERS

Week

ROWS

N Category_Su...

COLUMNS

Measures

CATEGORY_SUBCATEGORY_STORE STATE	UNIT VOLUME-CURR-1W
+ Store Use/Supply	61,101,014.0
+ Other Tobacco/ Nicotine Products	33,080,140.0
+ Foodservice	21,913,903.0
+ Candy	20,591,568.0
+ Hot Dispensed Beverages	7,013,143.0
+ Packaged Beverages	6,130,714.0
+ Salty Snacks	5,626,815.0
+ Packaged Sweet Snacks	5,217,541.0
+ Alternative Snacks	4,839,222.0
+ Cigarettes	4,372,145.1
+ Health & Beauty Care	2,941,079.0
+ Shelf Stable Products	1,982,285.0
+ General Merchandise	1,740,755.0
+ Other Dairy & Deli Products	945,468.0
+ Non-Edible Grocery	823,880.0

FILTERS Week **ROWS** Category_Su... **COLUMNS** Measures

+1 +2

CATEGORY_SUBCATEGORY_STORE STATE	UNIT VOLUME-CURR-1W
+ Store Use/Supply	61,101,014.0
- Other Tobacco/ Nicotine Products	33,080,140.0
+ Other Tobacco/ Nicotine Products-Cigars	18,711,583.0
+ Other Tobacco/ Nicotine Products-Smokeless	7,843,084.0
+ Other Tobacco/ Nicotine Products-Smokeless Tobacco Alternatives	3,244,823.0
+ Other Tobacco/ Nicotine Products-Papers	1,732,519.0
+ Other Tobacco/ Nicotine Products-Vaping	1,245,357.0
+ Other Tobacco/ Nicotine Products-Pipe/Cigarette Tobacco	232,704.0
+ Other Tobacco/ Nicotine Products-Other Tobacco/ Nicotine Products	68,740.0
+ Other Tobacco/ Nicotine Products-Pipes	1,362.0
+ Other Tobacco/ Nicotine Products-All Other	-32.0
+ Foodservice	21,913,903.0
+ Candy	20,591,568.0

Note: Clicking on the +1 and/or +2 control (placed at the left corner above the table) would expand all parents to display their corresponding child levels in a single click. The number of + hyperlink numbers that appear depends on the number of Attributes/Artifacts that are currently in the Nested Hierarchy.

Displaying Nested Attributes in Separate Columns

Producers have the option to output each level of a Nested Hierarchy in a separate column using the “Display Nested Attributes In Separate Columns” setting. This setting can be modified in the Hierarchy window and is only available for Nested Hierarchies.

FILTERS Week **ROWS** Category_Su... **COLUMNS** Measures

Normal Nested Hierarchy

+1 +2

STORE STATE_CHAIN NAME	UNIT VOL-CURR-1W	UNIT VOL-YAGO-1W
- Total	144,720,000.0	150,134,409.0
+ OH	14,065,601.0	14,657,156.0
+ MI	10,083,760.0	10,435,910.0
+ TX	9,197,108.0	9,083,903.0
- NC	7,719,928.0	7,960,312.0
INDEPENDENT	2,918,512.0	3,230,706.0
7-ELEVEN	1,658,855.0	1,756,624.0
FAMILY FARE	448,136.0	394,257.0
HAN-DEE HUGOS	339,720.0	297,494.0
QUALITY OIL COMPANY	312,111.0	303,515.0
REFUEL STORES	305,571.0	313,473.0
JERNIGAN OIL CO. INC.	254,426.0	274,800.0
ROYAL FARMS	116,638.0	78,425.0
FIVE BELOW	103,312.0	25,995.0

Nested Hierarchy in Separate Columns

+1 +2

TOTAL	STORE STATE	CHAIN NAME	UNIT VOL-CURR-1W	UNIT VOL-YAGO-1W
- Total			144,720,000.0	150,134,409.0
Total	+ OH		14,065,601.0	14,657,156.0
Total	+ MI		10,083,760.0	10,435,910.0
Total	+ TX		9,197,108.0	9,083,903.0
Total	- NC		7,719,928.0	7,960,312.0
Total	NC	INDEPENDENT	2,918,512.0	3,230,706.0
Total	NC	7-ELEVEN	1,658,855.0	1,756,624.0
Total	NC	FAMILY FARE	448,136.0	394,257.0
Total	NC	HAN-DEE HUGOS	339,720.0	297,494.0
Total	NC	QUALITY OIL COMPANY	312,111.0	303,515.0
Total	NC	REFUEL STORES	305,571.0	313,473.0
Total	NC	JERNIGAN OIL CO. INC.	254,426.0	274,800.0
Total	NC	ROYAL FARMS	116,638.0	78,425.0
Total	NC	FIVE BELOW	103,312.0	25,995.0

Stacked Hierarchy

The **Stacked** Hierarchy is a type of Hierarchy that enables users to view all selections at the root level without drilling. Stacking will display the Attributes/Artifacts in the selected order and will sort the items within each Attribute/Artifact. An example of a generated Report applying the Stacked Hierarchy is demonstrated below wherein the Attributes **Category**, **Subcategory**, and **Store State** are arranged in a Stacked Hierarchy, and the Report is filtered using the **Category** Attribute with **Measures** in the **Columns** area.

Note: In a Stacked Hierarchy, there is no Parent-Child relationship between the Attributes/Artifacts.

Hierarchy

Name

Category_Subcategory_Store State

Replacement

Nested

Stacked

Category

Subcategory

Store State

Cancel

DONE

FILTERS

Category

Week

ROWS

Category_Sub...

COLUMNS

Measures

Filters: Category: Other Tobacco/ Nicotine Products;

CATEGORY_SUBCATEGORY_STORE STATE	UNIT VOLUME-CURR-1W
Other Tobacco/ Nicotine Products	33,080,140.0
Other Tobacco/ Nicotine Products-Cigars	18,711,583.0
Other Tobacco/ Nicotine Products-Smokeless	7,843,084.0
Other Tobacco/ Nicotine Products-Smokeless Tobacco Alternatives	3,244,823.0
Other Tobacco/ Nicotine Products-Papers	1,732,519.0
Other Tobacco/ Nicotine Products-Vaping	1,245,357.0
Other Tobacco/ Nicotine Products-Pipe/Cigarette Tobacco	232,704.0
Other Tobacco/ Nicotine Products-Other Tobacco/ Nicotine Products	68,740.0
Other Tobacco/ Nicotine Products-Pipes	1,362.0
Other Tobacco/ Nicotine Products-All Other	-32.0
OH	3,670,425.0
TX	3,129,150.0
PA	2,483,238.0
FL	1,911,915.0
NC	1,857,927.0
IN	1,613,820.0
TN	1,506,406.0
LA	1,485,453.0
GA	1,461,170.0
MI	1,416,571.0
KY	1,285,533.0

Exclude Filters in Report Layout of Hierarchies

Producers can choose to ignore Report filters or User Filters for a selected Attribute on the Report layout using the dropdown menu for an Attribute on rows/columns/pages. This allows the user to create a total on a Report by excluding selected filters for a specific Attribute. If an Attribute has any filters excluded, they will be indicated by an “F” icon in the Hierarchy window. The excluding filters feature is only available within a Hierarchy, and it functions the same for Artifacts.

Hierarchy ✕

Name

Category Subcategory Store State

☐ Include Total

☐ Replacement

☒ Nested

☐ Stacked

Category

Subcategory

F

Store State

Apply Filter

Rename

Remove

Exclude Filters

Info

☒ Display Nested Attributes In Separate Columns

Cancel

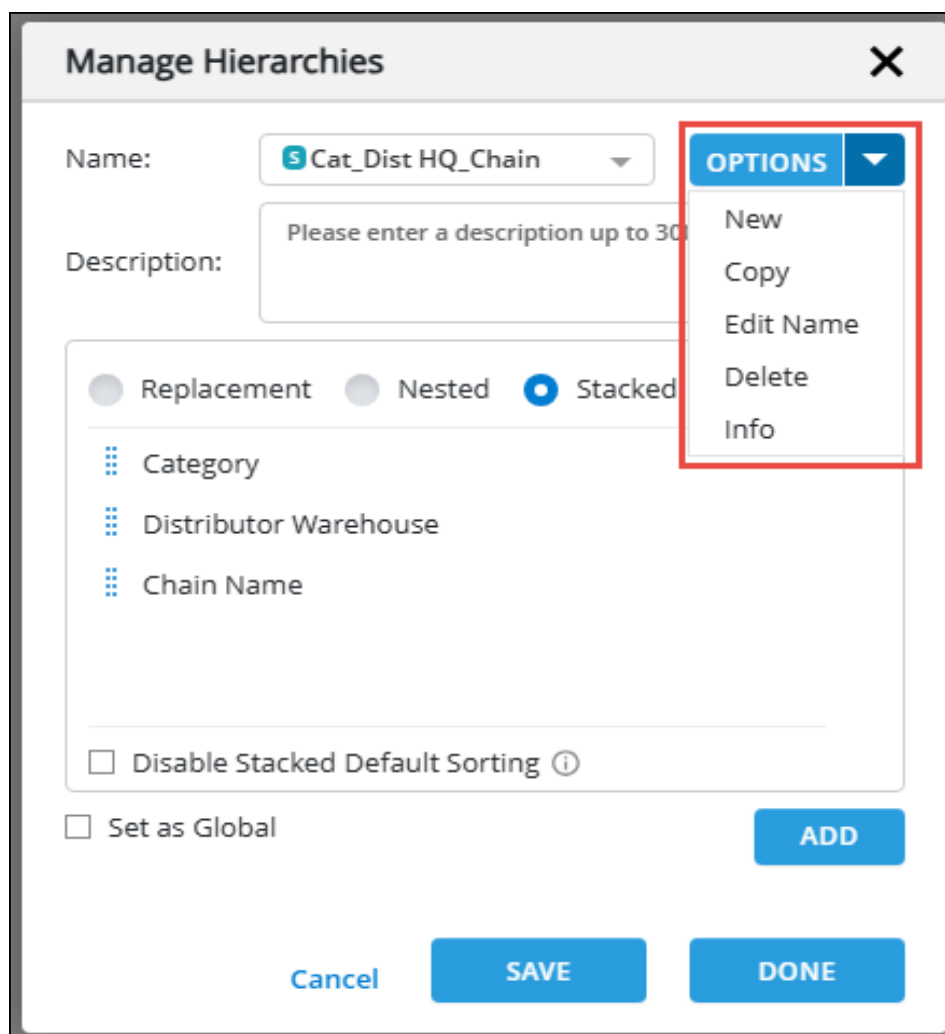
DONE

Copy, Edit Name, Delete Hierarchies

Users can create a Hierarchy, make a copy of a Hierarchy, edit a Hierarchy name, or delete a saved Hierarchy by using the following procedure:

1. Click on the "Hierarchies" heading in the Attributes panel to open the **Manage Hierarchies** window.
2. Select the appropriate Hierarchy name from the **Name** dropdown list.
3. Click the **Options** dropdown menu and select the **Copy**, **Edit Name**, **Delete**, or **Info** option. A new Hierarchy can also be created in this window using the **New** option in this dropdown.
4. Click **Save** to retain any changes made to the Hierarchy.

Note: These options will vary if the user is not the Owner of and Artifact. Also, the menu options will vary if "Manage" is selected on an individual Hierarchy.



The screenshot shows the "Manage Hierarchies" window. At the top, there's a title bar with a close button (X). Below the title bar, there's a "Name:" field with a dropdown menu showing "Cat_Dist HQ_Chain". To the right of this field is an "OPTIONS" dropdown menu, which is highlighted with a red rectangle. The "OPTIONS" menu is open, showing a list of options: "New", "Copy", "Edit Name", "Delete", and "Info". Below the "Name:" field is a "Description:" field with a placeholder text "Please enter a description up to 300 characters". Below the description field, there are three radio buttons: "Replacement", "Nested", and "Stacked". The "Stacked" radio button is selected. Below the radio buttons, there's a list of categories: "Category", "Distributor Warehouse", and "Chain Name". Below the categories, there's a checkbox labeled "Disable Stacked Default Sorting" with an information icon. At the bottom left, there's a checkbox labeled "Set as Global". At the bottom right, there are three buttons: "Cancel", "SAVE", and "DONE".

