Enterprise Data Warehousing | Sales Execution | Trade Program Management | Market & Consumer Insights

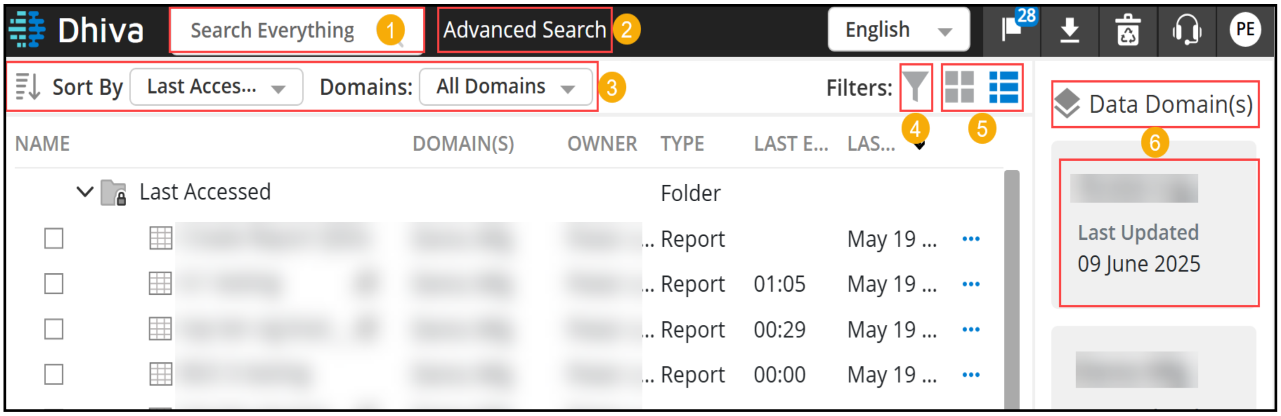
Dhiva - Comprehensive Quick Start Guide

Table of Contents

- **Home Page Walkthrough** ---- 3
- **Report Screen Walkthrough** ---- 5
- **Create Report** ---- 7
- **Manage Hierarchies** ---- 8
  - Replacement Hierarchy
  - Nested Hierarchy
    - Displaying Nested Attributes in Separate Columns
  - Stacked Hierarchy
    - Exclude Filters in Report Layout of Hierarchies
  - Copy/Edit Name/Delete Hierarchy
- **User Filters** ---- 16
  - Creating a User Filter
  - User Filters for Measures
- **Stubs** ---- 21
  - Create New Stub
    - Create Stub to use on Report
    - Create Stub to use as a User Filter
  - Copy/Edit Name/Delete Stubs
- **Manage Lists** ---- 28
  - Create List
  - Import List
  - Dynamic List
  - Copy/Edit/Delete List
- **Manage Conditional Lists** ---- 39
  - Create Conditional List
  - Add Conditional List to Report
  - Copy/Edit Name/Delete Conditional List
  - Grouping within a Conditional List
    - Creating the Multi-Statement Conditional List with Grouping

- **Manage Groups** ---------- 48
  - Create New Group
    - Create Group with No Sub Group
    - Create Group with Sub Groups
  - Copy/Edit Name/Delete Group
- **Manage Dynamic Groups** ---------- 54
  - Group Containing a Single List - Aggregate
  - Group Containing Multiple Lists - Aggregates
- **Chart Screen Walkthrough** ---------- 57
- **Create Chart** ---------- 58
- **Storyboard Screen Walkthrough** ---------- 59
- **Create Storyboard** ---------- 61
- **Offline Viewer** ---------- 63
  - Introduction
  - Key Features of the Offline Viewer Module
  - Accessing the Offline Viewer
  - Downloading Assets
  - Exporting Assets
  - Enabling Content for the Offline Viewer
  - Special Attribute
  - Assumptions and Limitations of the Offline Viewer
- **Artifact Color/Access** ---------- 70
  - Artifacts
    - Personal
    - Global
    - Report-specific
      - Managing Report-specific Artifacts
        - Hierarchies
        - Other Artifacts

Home Page Walkthrough



1. **Search** - Type a keyword or phrase in the **Search** textbox to limit assets displayed.

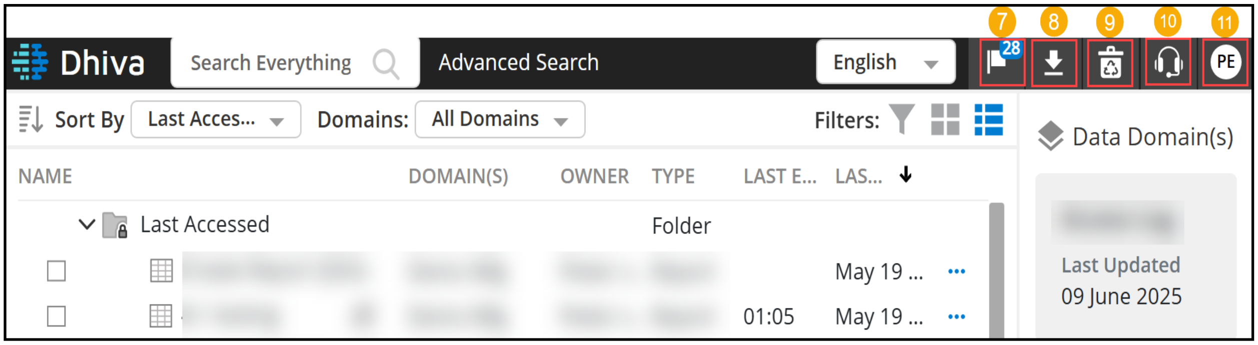
2. **Advanced Search** - It allows you to search for assets based on additional search criteria such as “Published by Me”, “Published to Me”, “Scheduled by Me” and “Scheduled to Me”.

3. **Sort** - By default, assets will be sorted after folders and based on the date/time in the Last Accessed column. At a broad level, you can sort assets based on Domains. In addition, you can sort assets based on Name, Owner, Type, or Last Accessed using the **Sort By** dropdown list or you can sort by clicking the desired column header. Lastly, you can use the icon to sort assets in Ascending or Descending order based on the date/time in the Last Accessed column.

4. **Filters** - Use the icon to locate the desired assets based on specified criteria such as Starred, Storyboards, Reports, Custom Reports, and Merged Reports.

5. **Tile View and List View** - Use the and icons to toggle between the Tile View and the List View respectively. When users switch from the Tile View to the List view, the screen displays only the “Last Accessed” assets. Click the **All Assets** link if you want to view all available assets.

6. **Data Domain** - The available dataset(s) are listed on the right side of the screen in the List View. In the Tile View, click the icon to display the dataset(s). Select the desired dataset to create a new Report.



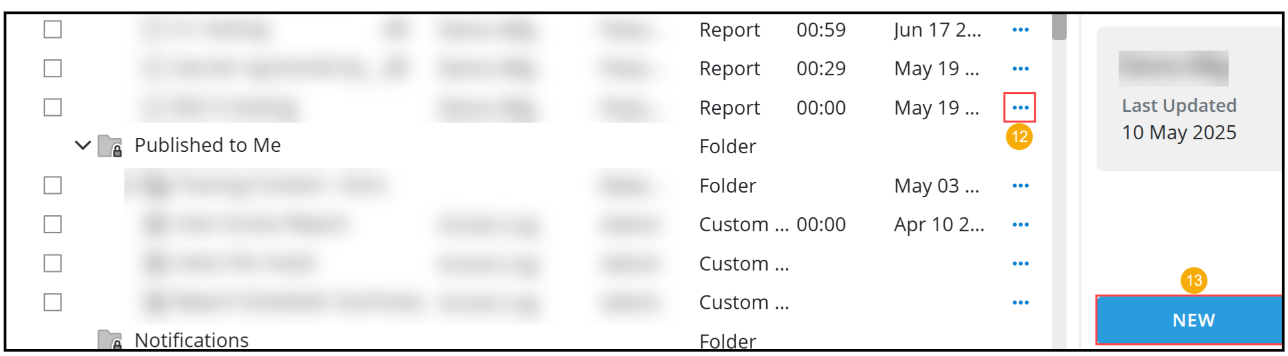
7. **Notifications** - Click the icon to view the system-generated notifications. As an alternative, you can also view notifications by opening the Notifications folder.

8. **Downloads** - Click the icon to access completed exports. As an alternative, you can also view your downloads by opening the Downloads folder.

9. **Recycle Bin -** Click on the icon to navigate to the Recycle Bin tab. The Recycle Bin tab allows users to view assets that have been deleted. Items in the Recycle Bin can be restored or permanently deleted by the user. Once an asset has been moved to the recycle bin, it will be stored there for 30 days. After that period of time the asset will expire and be permanently deleted.

10. **Support** - Click the icon to get the contact details of the MSA Product Support Helpdesk and a link to the support documentation.

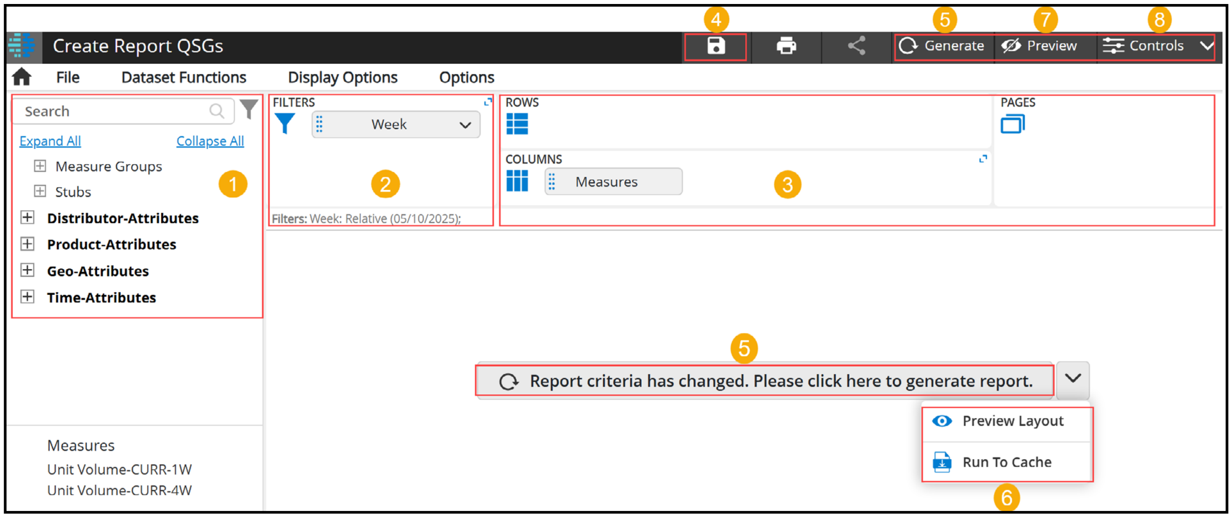
11. **User Options** - Click your Username initial placed at the top right corner of the screen to define user preferences, change user password, set mobile accessibility and to logout from the application.



12. **Right-click / Ellipses** - Click the ··· icon placed at the right of any desired asset to open the menu and select from the list of the most frequently performed tasks such as Rename, Export, Publish, Delete, Schedule, etc. Some menu options are available to the asset owners only.

13. **New** - Use this button to create new Folders, Reports (Databooks), or Storyboards.

Report Screen Walkthrough



1. **Attribute Panel** - Placed on the left, this panel contains available Attributes organized in folders.

2. **Report Filters** - Select any Attribute as a Report filter which will be applicable to the entire Report.

3. **Report Rows, Columns, and Pages** - These are the dimensions of a Report, and they serve as locations for dragging the Attributes and Measures.

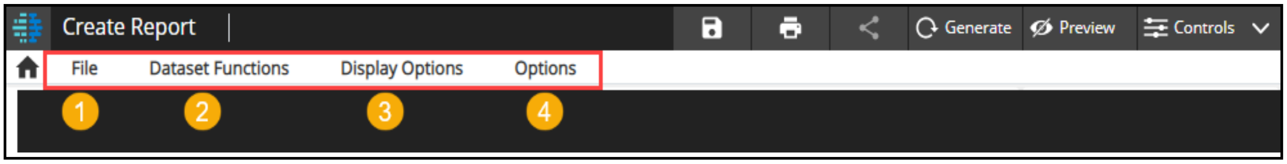
4. **Save -** Use the Save button to save a Report.

5. **Generate** - There are two Generate buttons on the screen: one at the top of the screen and another placed at the center of the screen. Use either button to generate a Report after specifying the Report dimensions.

6. **Generate Dropdown Menu** - Clicking on the arrow next to the lower Generate button causes a dropdown menu to appear, which has two options: “Preview Layout” and “Run to Cache”. Preview Layout allows users to view what the Report will look like when generated without fully loading the data. The Run to Cache option is available after a Report has been saved, and it generates a version of the Report based on current data that users can access quickly without having to go through the data loading process.

7. **Preview** - The Preview button can be used to view the Report in a non-editable mode prior to publishing it.

8. **Controls** - Use the Controls menu to navigate pages and to select user filter values in a Report/chart.



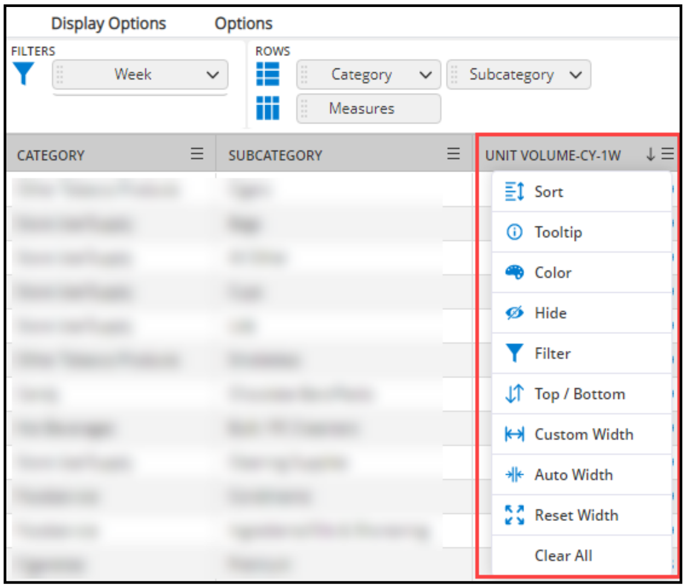
1. **File Menu** - This menu contains option to save, publish, export, etc. Some menu options are greyed out until you generate or save a copy of the Report. Also note that some menu options are only available to the asset owner.

2. **Dataset Functions Menu** - This menu helps to enhance the Report data using the post-Report generation functions mentioned below. Some options are grayed out until the Report is generated:
   - **Alerts and Color Conditions** to apply color conditions to data in the Report.
   - **Filter Conditions** to include or exclude certain data values based on conditions.
   - **New Attribute Value** to create custom values for Attributes.
   - **New Measure Value** to create new Measures.

3. **Display Options Menu** - This menu provides a variety options to manage various Report elements such as filter Attribute, User Filter Attribute, footer, Report specifications, hide Attribute values, and control text wrapping.

4. **Report Options Menu** - Use this menu option to create Report links, set publishing locks or apply row/column Functions such as sum, mean, and so on.

Grid Column Options



After a user generates a Report, click on ☰ in any desired Report column to open the column options dropdown menu. The menu options differ for Attributes vs. metrics. This menu provides a variety of options to organize data in a desired manner. Some of the options available are: Sort, Filter, Top/Bottom, Color, Hide, and so on.

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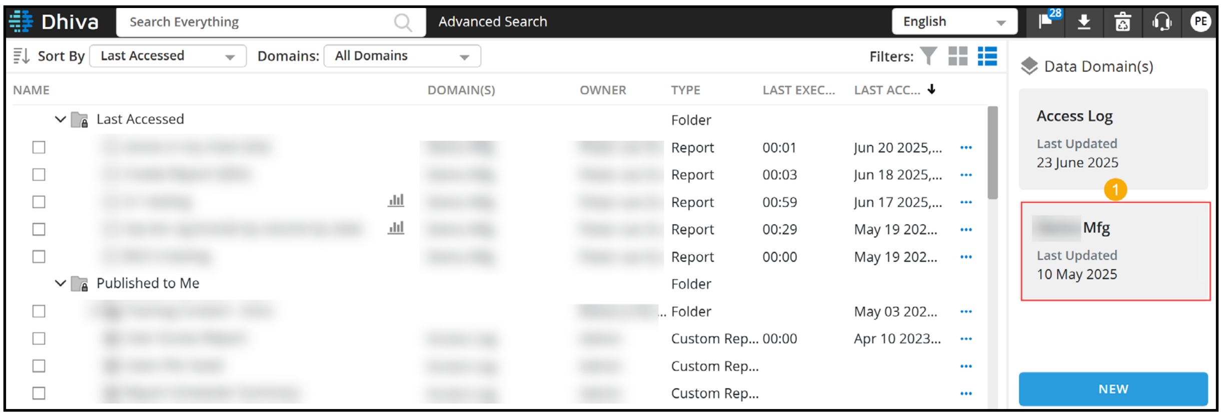
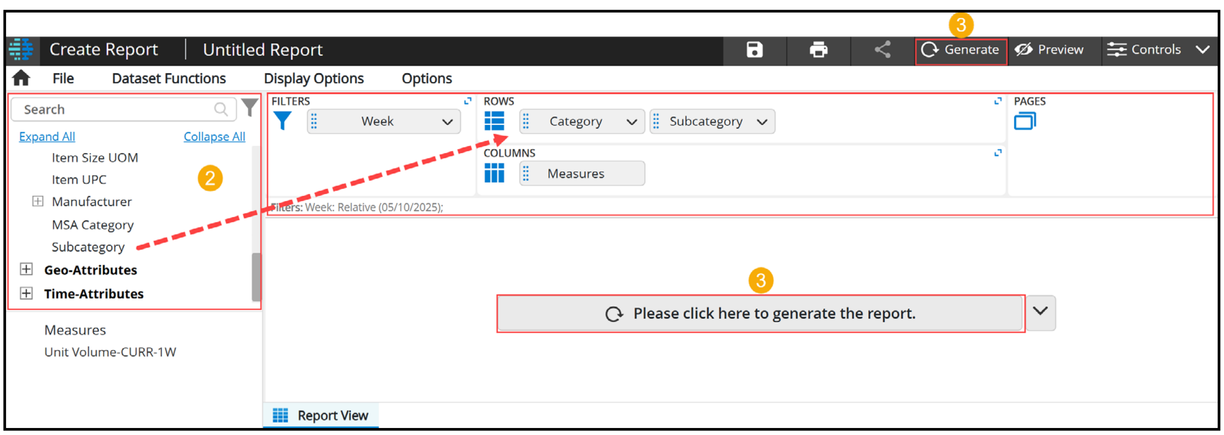
Create Report

1. On the Home page, click on the desired **Data Domain.** Doing this will open a new Report in that Domain. New Reports can also be created using the **New** button by clicking on the button, selecting Report, then selecting the appropriate data domain(s).

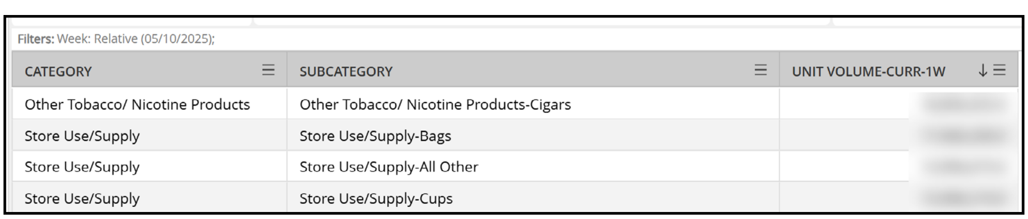


2. Drag the desired Attributes from the left panel onto the **rows**, **columns**, **pages**, and **filters** areas then select the desired Measure(s).

3. Generate data for the Report by clicking the **Generate button**. There are two Generate buttons, which can be used interchangeably. One is located at the top of the page and the other is located in the middle of the page.



4. The system will process the request and generate a Report.

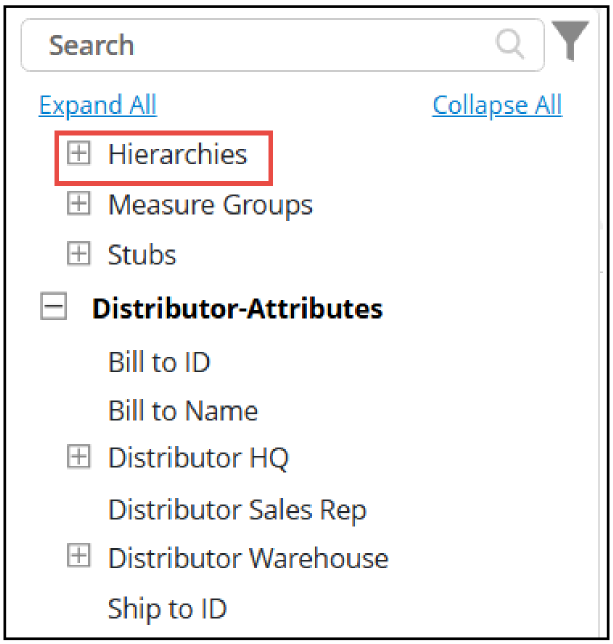

Filters: Week: Relative (05/10/2025);

CATEGORY	SUBCATEGORY	UNIT VOLUME-CURR-1W
Other Tobacco/ Nicotine Products	Other Tobacco/ Nicotine Products-Cigars	
Store Use/Supply	Store Use/Supply-Bags	
Store Use/Supply	Store Use/Supply-All Other	
Store Use/Supply	Store Use/Supply-Cups	

Manage Hierarchies

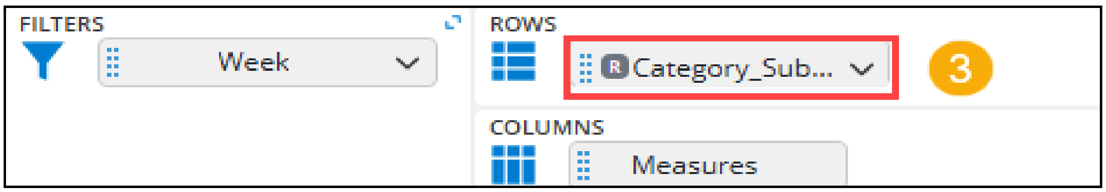
Adding a Hierarchy to a Report allows the information to be presented in a condensed format and provides the ability to drill to the additional levels of details as needed or to stack and view all requested items without drilling. Hierarchies can contain Attributes, Lists, and/or Groups.

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.



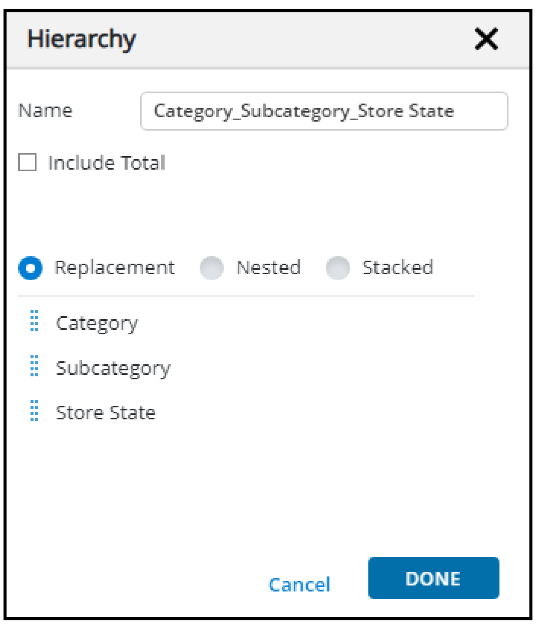
1. Drag the Attributes that will be the second level and third level (child level) of the Hierarchy (for example, **Subcategory** and **Store State**) on top of the Attribute that will be the top level (parent level) of the Hierarchy (for example, **Category**) in the Report dimension section.
2. In 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 **Artifact Color/Access Quick Start Guide**.

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



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.



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

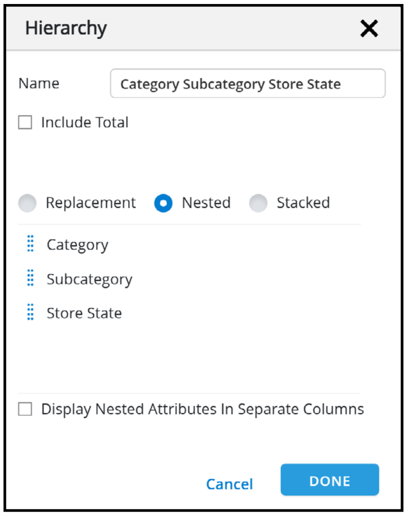
Category: Other Tobacco/ Nicotine Products;

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

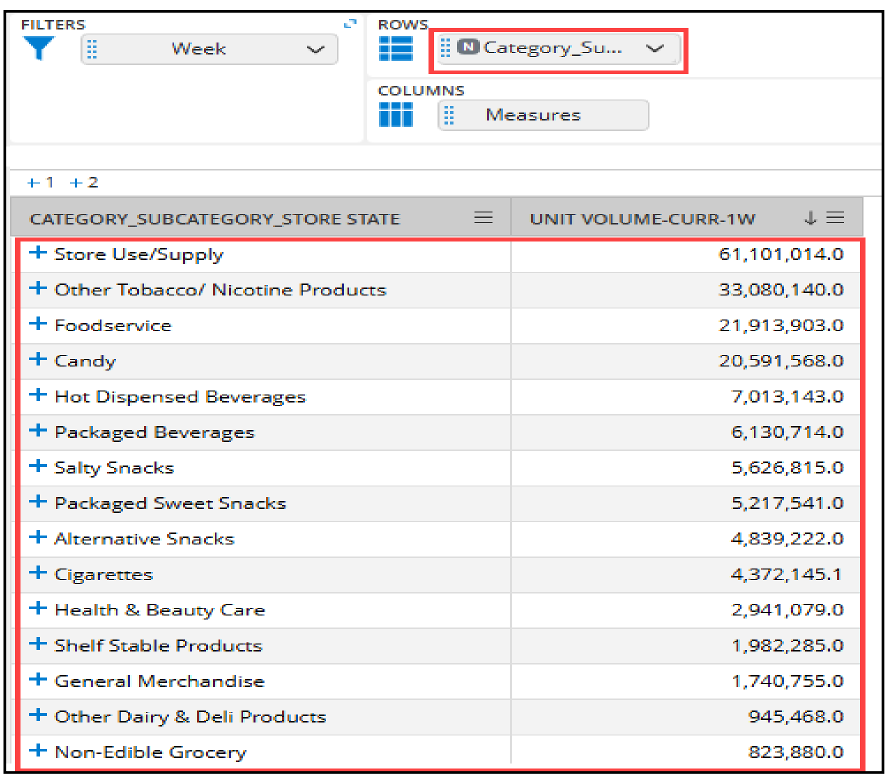
The blue plus signs at this level indicate that there is another level available to drill. As we defined, it would drill to Store States in the Subcategory. The link levels will continue as you drill.

Nested Hierarchy

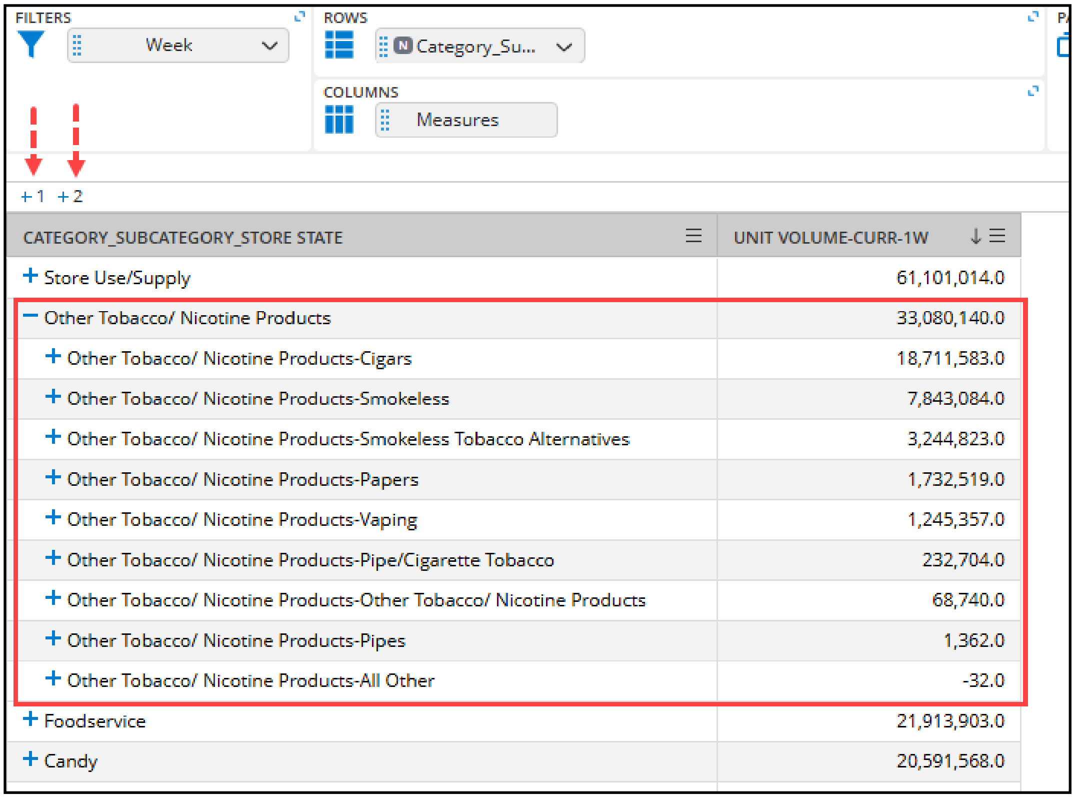
The **Nested** Hierarchy provides the drill ability on the Report and displays the parent and the child data simultaneously.



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.



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

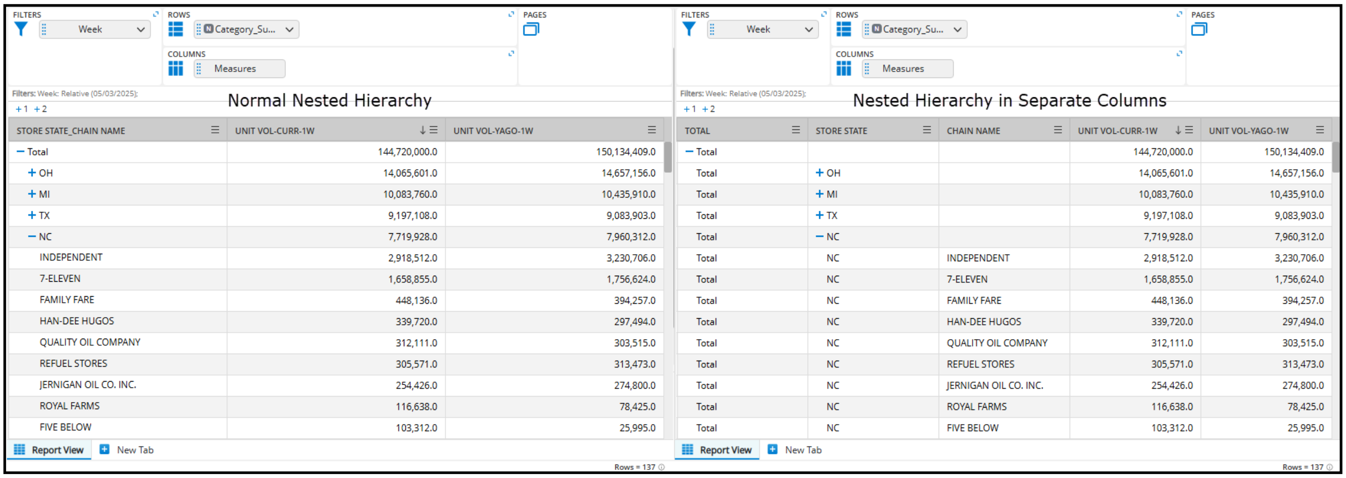


CATEGORY_SUBCATEGORY_STORE STATE	UNIT VOLUME-CURR-1W
+ Store Use/Supply	61,101,014.0
− Other Tobacco/ Nicotine Products	33,080,140.0
+ Other Tobacco/ Nicotine Products-Cigars	18,711,583.0
+ Other Tobacco/ Nicotine Products-Smokeless	7,843,084.0
+ Other Tobacco/ Nicotine Products-Smokeless Tobacco Alternatives	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.



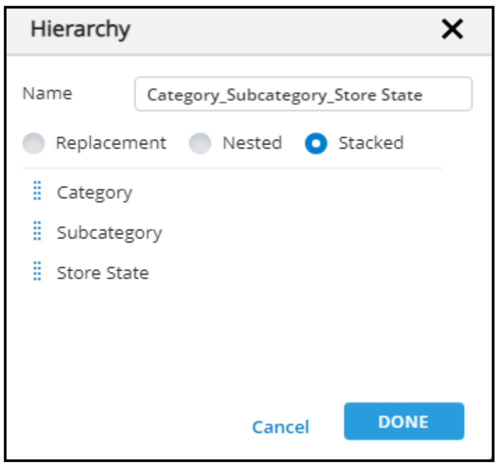
STORE STATE_CHAIN NAME	UNIT VOL-CURR-1W	UNIT VOL-YAGO-1W
− Total	144,720,000.0	150,134,409.0
+ OH	14,065,601.0	14,657,156.0
+ MI	10,083,760.0	10,435,910.0
+ TX	9,197,108.0	9,083,903.0
− NC	7,719,928.0	7,960,312.0
INDEPENDENT	2,918,512.0	3,230,706.0
7-ELEVEN	1,658,855.0	1,756,624.0
FAMILY FARE	448,136.0	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

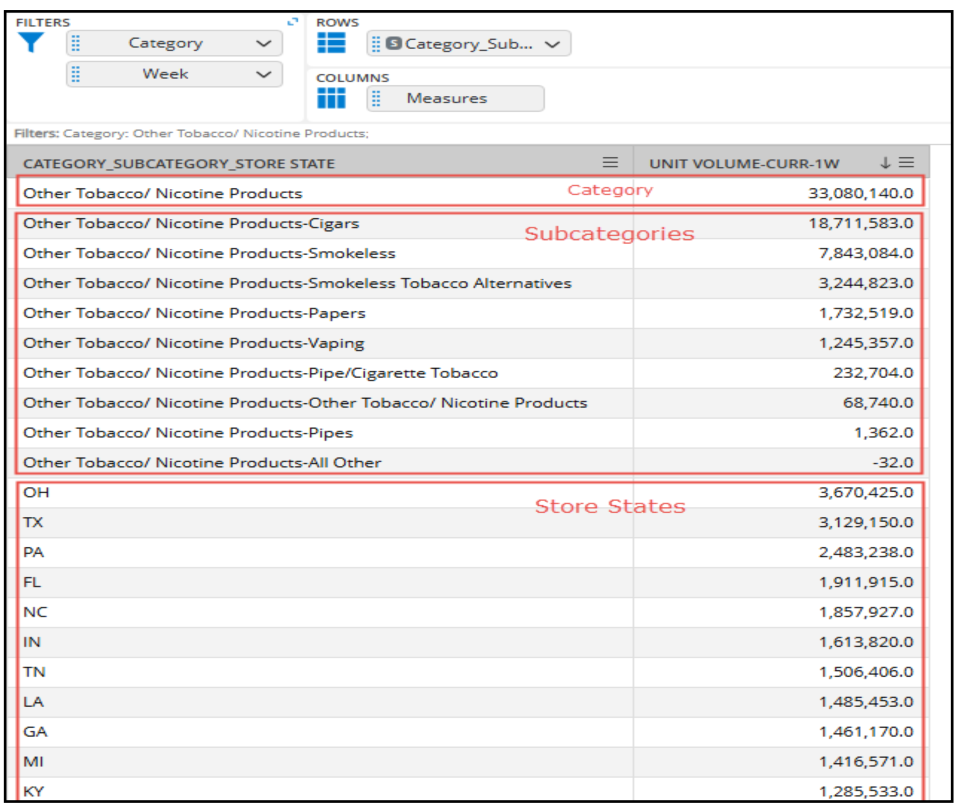
TOTAL	STORE STATE	CHAIN NAME	UNIT VOL-CURR-1W	UNIT VOL-YAGO-1W
− Total			144,720,000.0	150,134,409.0
Total	+ OH		14,065,601.0	14,657,156.0
Total	+ MI		10,083,760.0	10,435,910.0
Total	+ TX		9,197,108.0	9,083,903.0
Total	− NC		7,719,928.0	7,960,312.0
Total	NC	INDEPENDENT	2,918,512.0	3,230,706.0
Total	NC	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.*

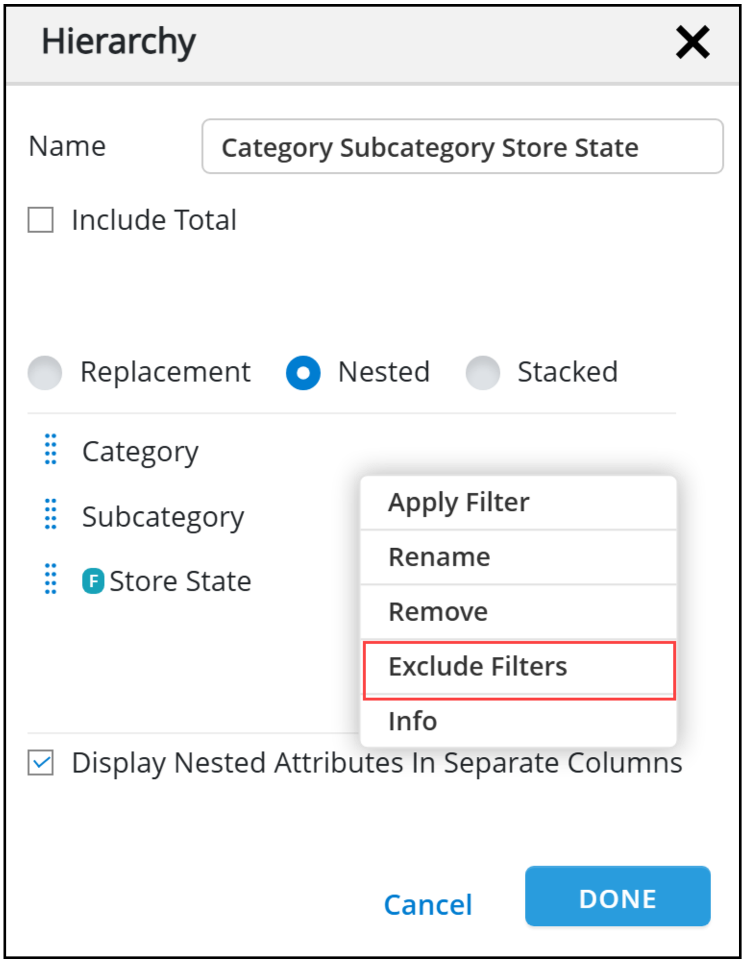




CATEGORY_SUBCATEGORY_STORE STATE	UNIT VOLUME-CURR-1W
Other Tobacco/ Nicotine Products	33,080,140.0
Other Tobacco/ Nicotine Products-Cigars	18,711,583.0
Other Tobacco/ Nicotine Products-Smokeless	7,843,084.0
Other Tobacco/ Nicotine Products-Smokeless Tobacco Alternatives	3,244,823.0
Other Tobacco/ Nicotine 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.

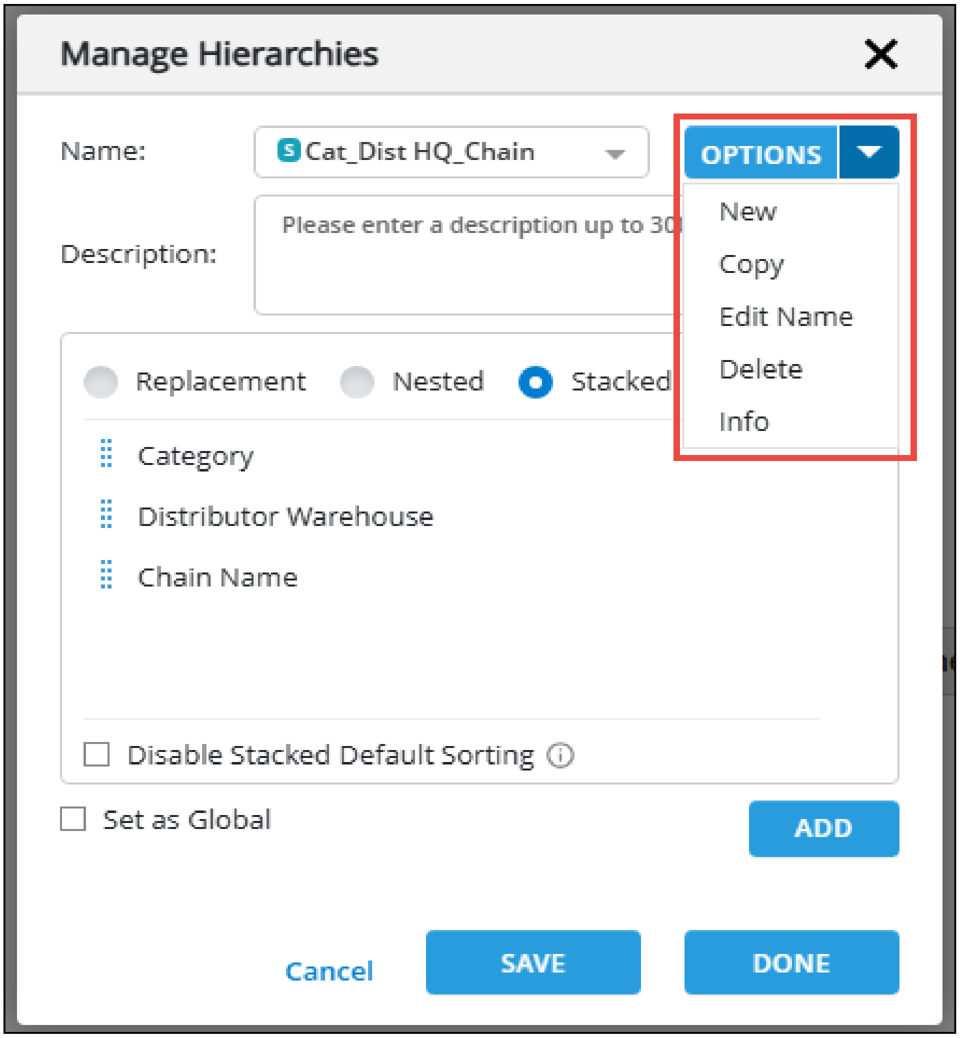


Copy/Edit Name/Delete Hierarchies

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 an Artifact. Also, the menu options will vary if "Manage" is selected on an individual Hierarchy.*



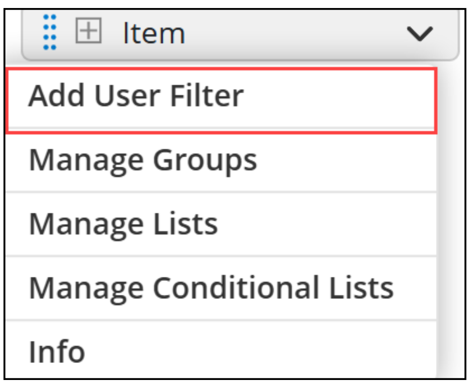
User Filters

Creating a User Filter

User Filters can be applied on a Report or Storyboard, enabling users to easily slice and dice the data for a custom view. User Filters can be applied at any point while creating/running assets. A User Filter on a Storyboard behaves similarly to a User Filter in a Report. The main difference is that the User Filter can apply to all or select Dashboards, and they are added via the options menu in a Storyboard.

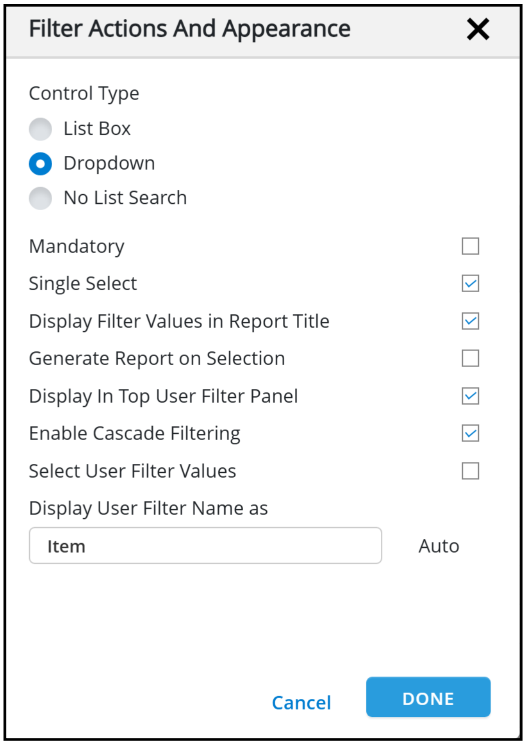
The example below explains adding a User Filter on an Attribute/Artifact, but User Filters can also be applied on Stubs and Measure Groups using similar steps via the dropdown on the respective folder in the left-hand panel. In order for the “Add User Filter” option to become available for Stubs, be sure that a Stub is first placed on rows/columns/pages.

1. Click the desired Attribute, List, or Group from the left panel and select the Add User Filter option from the dropdown list. User Filters can also be added for Measure Groups or Measure parameters.



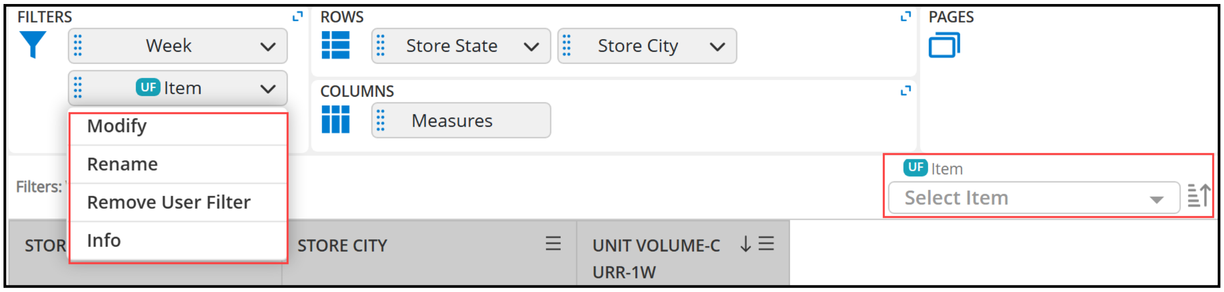
2. Select the desired **User Filter Display and Functionality** options and click **Done**.

Note: *Using the* ***Control Type*** *setting in this window will change the appearance of the User Filter. We are keeping the default selection of Dropdown in these examples, but User Filters can be a selection list, dropdown list, or text search.*



3. The User Filter (indicated as UF) will now appear on the right-hand side of the page. Here, the user can use the dropdown box (the default option, else whichever Control Type was selected in the Filter Actions and Appearance window in the previous step) to modify User Filter(s) to be applied to the data.

   Notice that the User Filter is also listed in the Filters area. Users may modify or delete the User Filter here by clicking the down arrow and selecting the corresponding option from the dropdown menu.

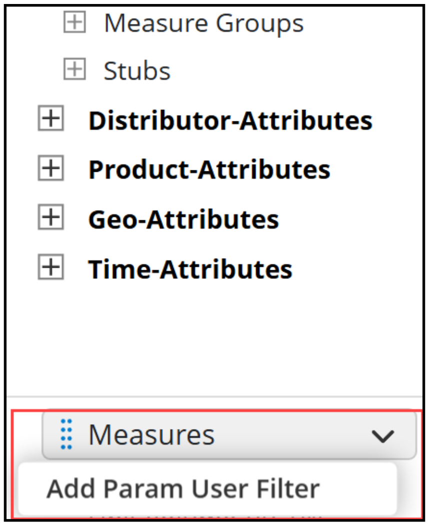


If selection(s) are made from User Filter menus, the data will reflect the applied User Filter(s) once regenerated.

User Filters for Measures

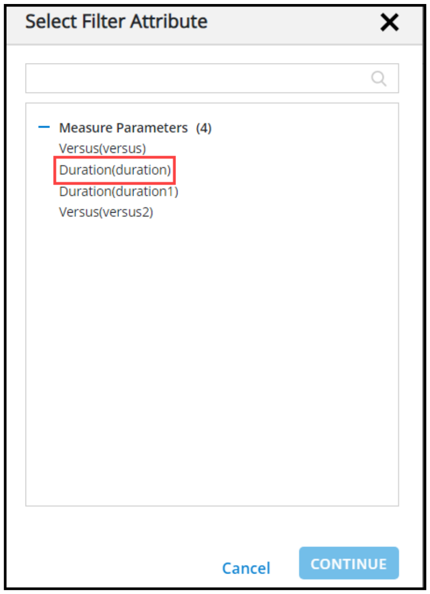
Users also have the ability to add a User Filter for Measure Durations and Versus Periods. This enables users to select the duration and/or versus period across the Measures on a Report.

1. Click on **Measures** in the lower left corner of the page.
2. Select **Add Param User Filter** from the dropdown list that appears.



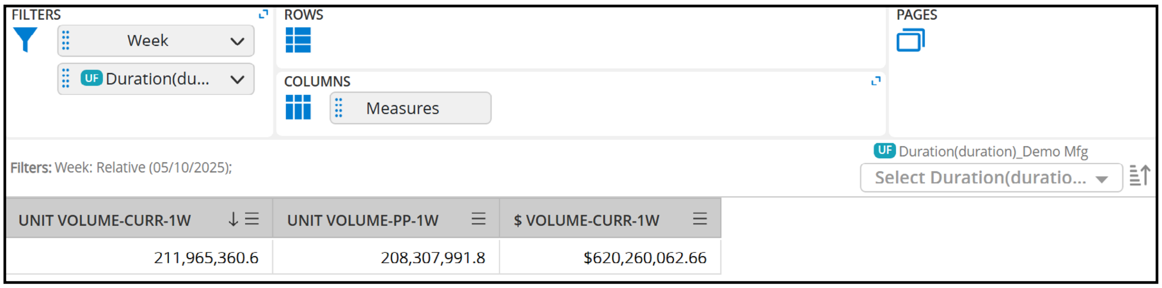
3. Click the **+** symbol to expand the list of **Measure Parameters**. Select the option **Duration(duration)**.

Each different numbered “duration” and “versus” in this Attribute List represents a different set of duration/versus options. We typically recommend selecting the base duration(duration) and versus(versus) as shown here because they have all duration/versus options respectively.

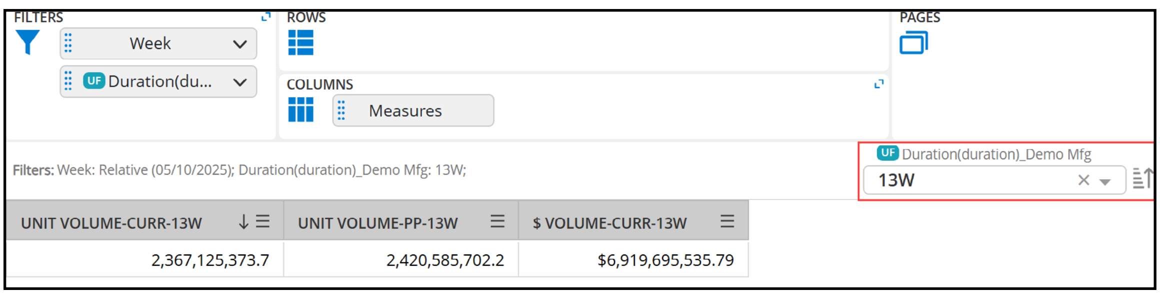


4. Select the desired Measures for the Report.

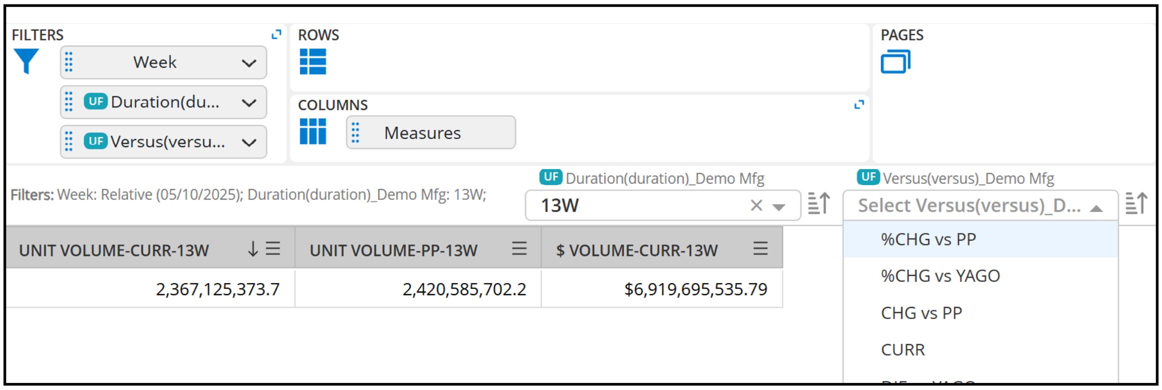
Best Practices Recommendation: *Measures should all be defined with the same duration when adding a Duration User Filter. Upon selecting a Duration from the User Filter, all metrics will refresh and populate with the selected Duration applied.*

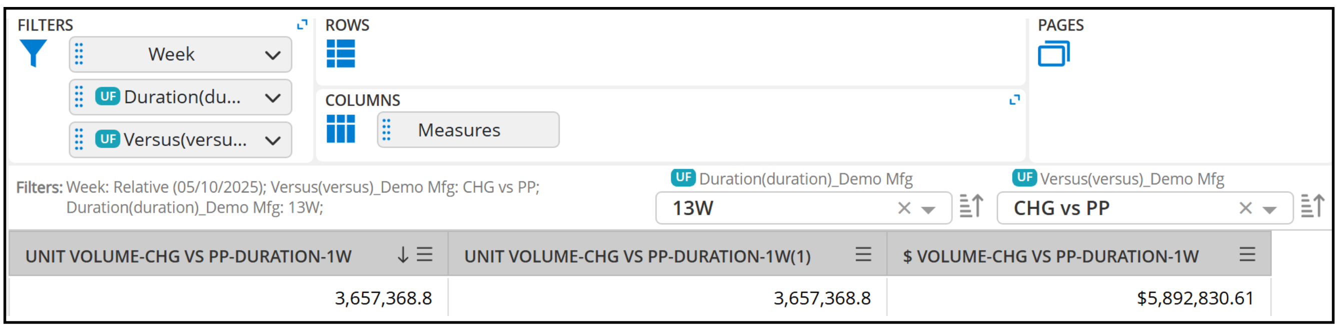


5. Select the **13W** option from the Duration User Filter dropdown menu.



Note: *Users can also create a Measure* ***Versus*** *User Filter to change the lookbacks of all the Measures on the Report. The process of adding it to the Report would be identical, but the user would instead select a* ***Versus*** *option. In addition, this User Filter would function like the* ***Duration*** *User Filter in the example above.*





After selecting an option from the User Filter dropdown menu, the selection will be reflected in the filters line as shown above.

Stubs

Stubs in Dhiva are made up of a combination of Attributes and static/dynamic Artifacts (Lists, Group, Conditional Lists). They are structured and function similarly to a Stacked Hierarchies. Stubs are notated with an "ST" prefix and is listed in the Stubs section at the top of the Attribute panel. A Stub can be used in any Report on pages, columns, rows, or as a User Filter.

Note: *Stubs cannot be used directly as a Filter.*

Producer users can create Stubs. A Stub can be Personal (indicated with a blue icon) or can be made Global (indicated by a green icon) by an admin.

Stubs can be used anywhere on the Report Layout but cannot be used as a Report filter. In addition to being placed on rows/columns/pages, Stubs can be used as User Filters. Using Stubs as User Filters enables the user to change the focus of the Report.

Under the Manage Stubs option, users can perform the following tasks:
- Create New Stub
- Copy/Edit Name/Delete Stubs

Create New Stub

The following are two scenarios for Stub creation and examples of how to create them:
- Create Stub to use on Report
- Create Stub to use as a User Filter

Create Stub to use on Report

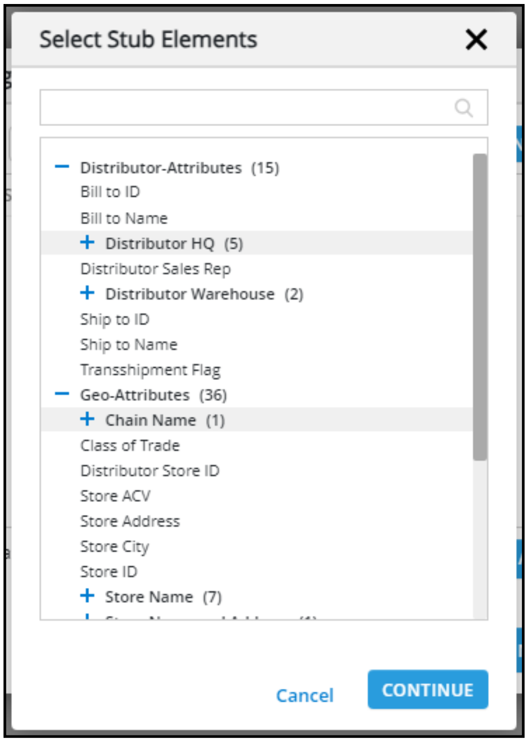
Adding multiple Artifacts to a Stub stacks all the selected values into one column, allowing similar functionality to a Stacked Hierarchy.

1. From the left panel, click on the **Stubs** dropdown and Select **Manage Stubs**.

2. If a user hasn't created a Stub before, a pop-up will prompt them to name the first one they create. Otherwise, select **Options** -> **New**.

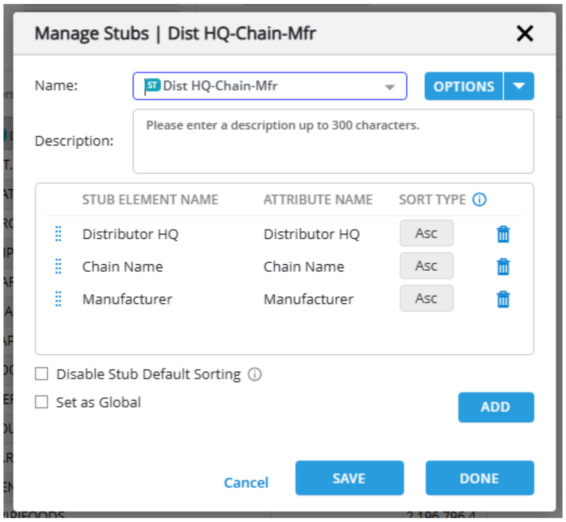
3. Provide an appropriate name for the Stub (for example "Dist HQ-Chain-Mfr").

4. By using text search or by navigating the folder structure of available Attributes, Lists, and Groups, find and select the following Attributes to add to this Stub: **Distributor HQ**, **Chain Name**, and **Manufacturer**.



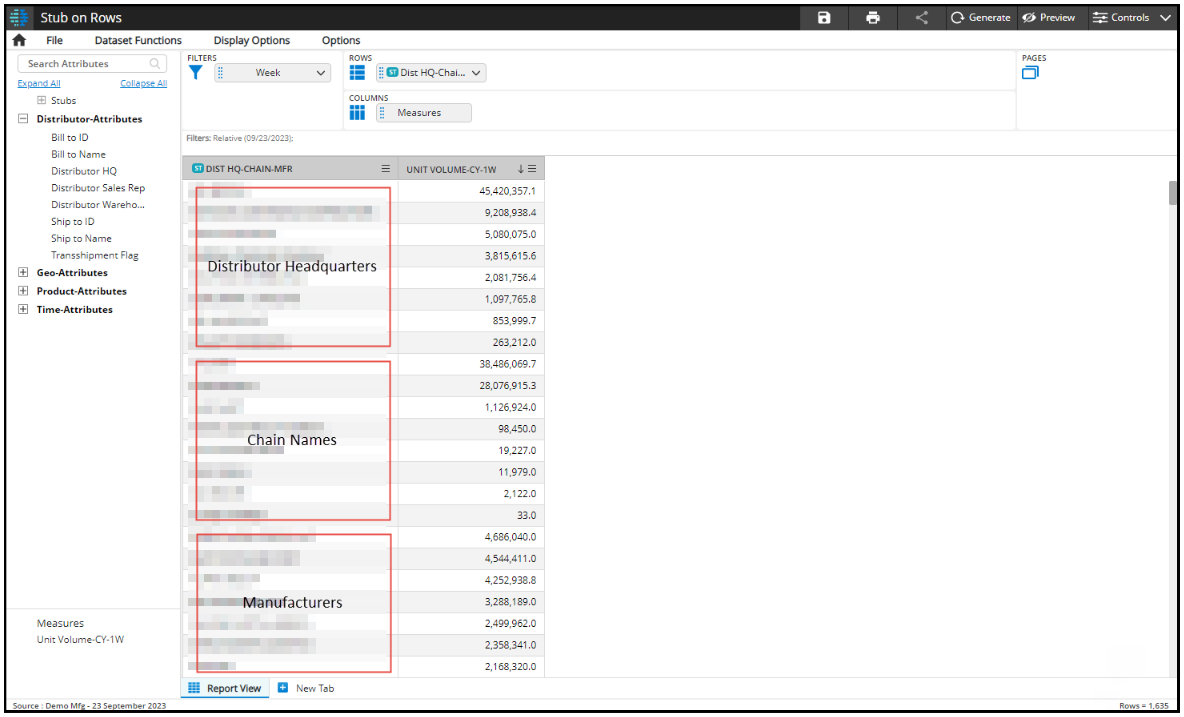
Note: *In addition to Attributes, Stubs can also contain Groups, Lists, and Conditional Lists.*

5. Click **Continue**.



Note: *In this window, users can also rearrange and delete Attributes/Artifacts. Using the* ***Add*** *button, additional Attributes/Lists/Groups can be added to the Stub.*

6. Click **Save**. Now this Stub will be available under the **Stubs section** of the **Attribute panel**.
7. Expand the **Stubs section** in the lefthand panel, locate the new Stub **Dist HQ-Chain-Mfr**, then drag it into the **rows section**.
8. After clicking **Generate**, users will see that all values for Distributor HQ, Chain Name, and Manufacturer are displayed in one column, like they would be when placed in a Stacked Hierarchy.

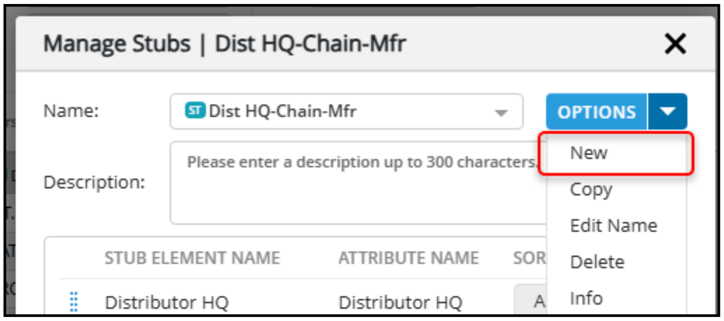


Note: *Any Filters/User Filters added to the Report will be respected in the stub as well.*

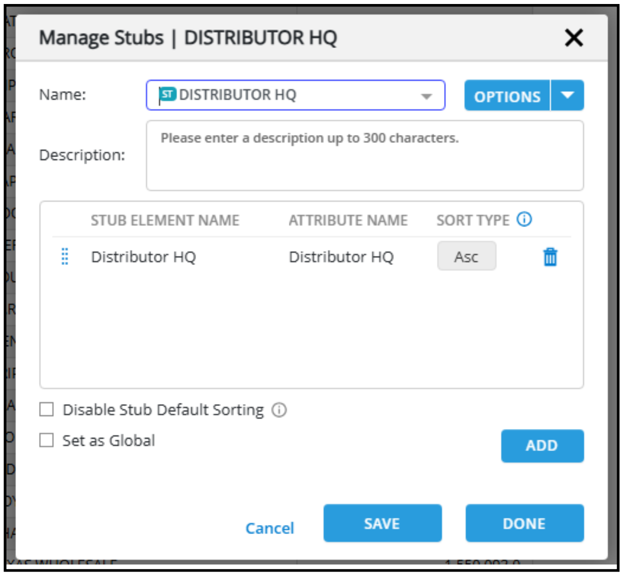
Create Stub to use as a User Filter

To use Stubs as a User Filter, at least one Stub must be added to the Report to get the **Add User Filter** option to appear in the Stubs section. Then in the pop-up window, the user must select the **Select User Filter Values** to customize the list of Stubs in the User Filter dropdown menu.

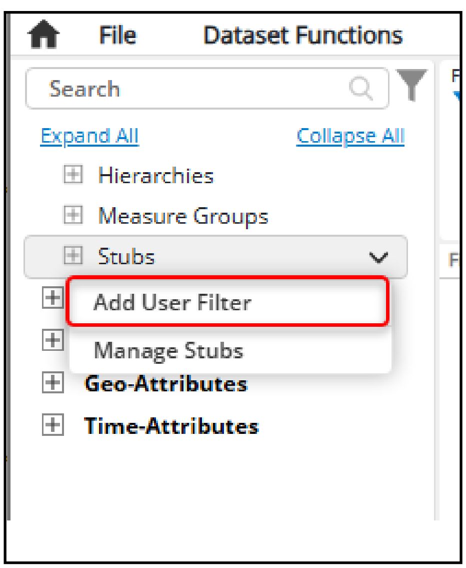
1. From the left panel, click on the **Stubs** dropdown and Select **Manage Stubs**.
2. In the pop-up window, select **Options -> New** to create a new Stub.



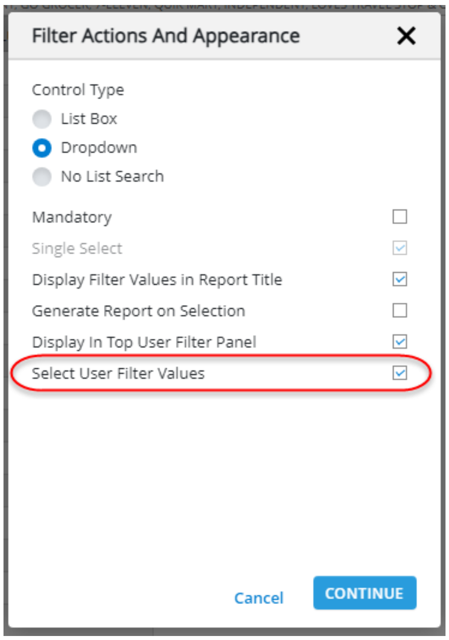
3. Provide an appropriate name for the Stub (for example “DISTRIBUTOR HQ”), as this Stub will contain the Distributor HQ Attribute.
4. Locate the Attribute **Distributor HQ**, select it, then click **Continue**.



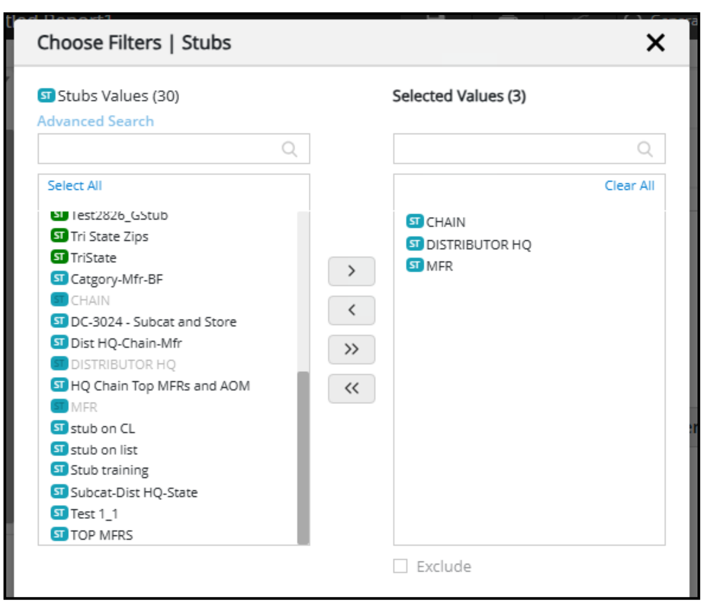
5. Click **Save**. Now this Stub will be available under the **Stubs section** of the **Attribute panel**.
6. Create another Stub by clicking on **Options -> New**.
7. Repeat steps 3-5 to create Stubs for **Chain** (with the name "CHAIN" provided in this example) and **Manufacturer** (with the name "MFR" provided in this example) as well.
8. Expand the Stubs section in the lefthand panel, locate the Stub **CHAIN**, then drag it into the **rows section**.



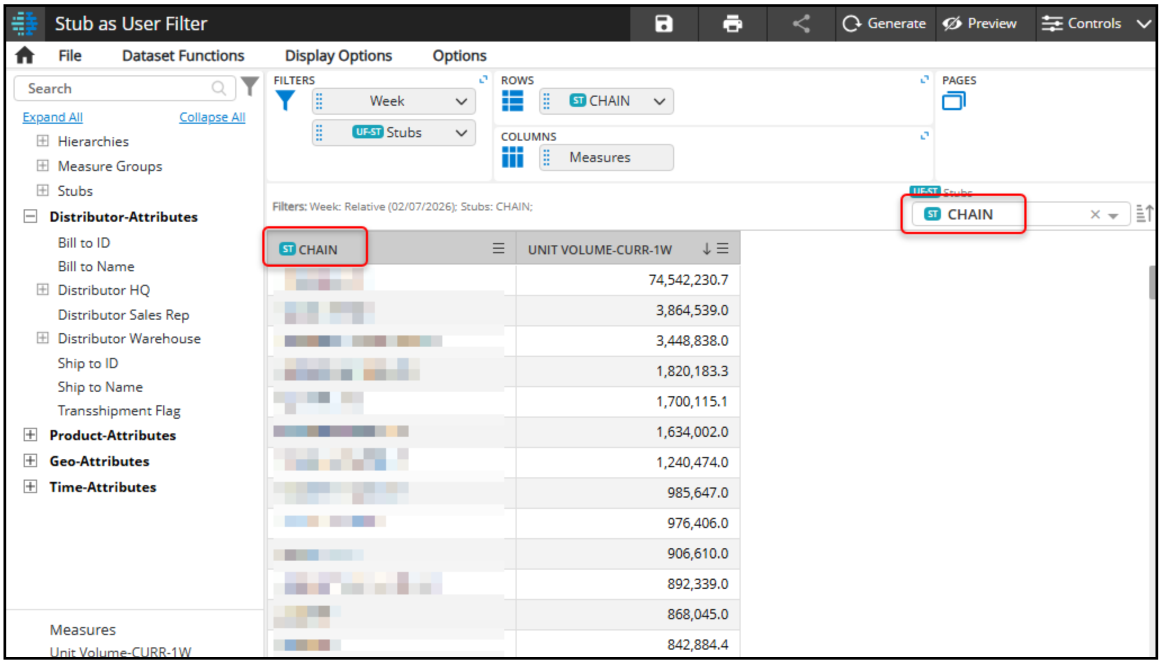
9. Once a Stub has been placed onto the Report, a new option will appear in the Stubs dropdown menu. Click **Add User Filter**. Here, users can select Filter Actions and Appearance settings, such as whether a selection is mandatory, generation settings, etc. Select the option **Select User Filter Values**. This will allow the user to hand pick the Stubs to include in this User Filter dropdown in the Report. Without selecting this option, all available Stubs (Personal and Global) will be listed in the User Filter dropdown.



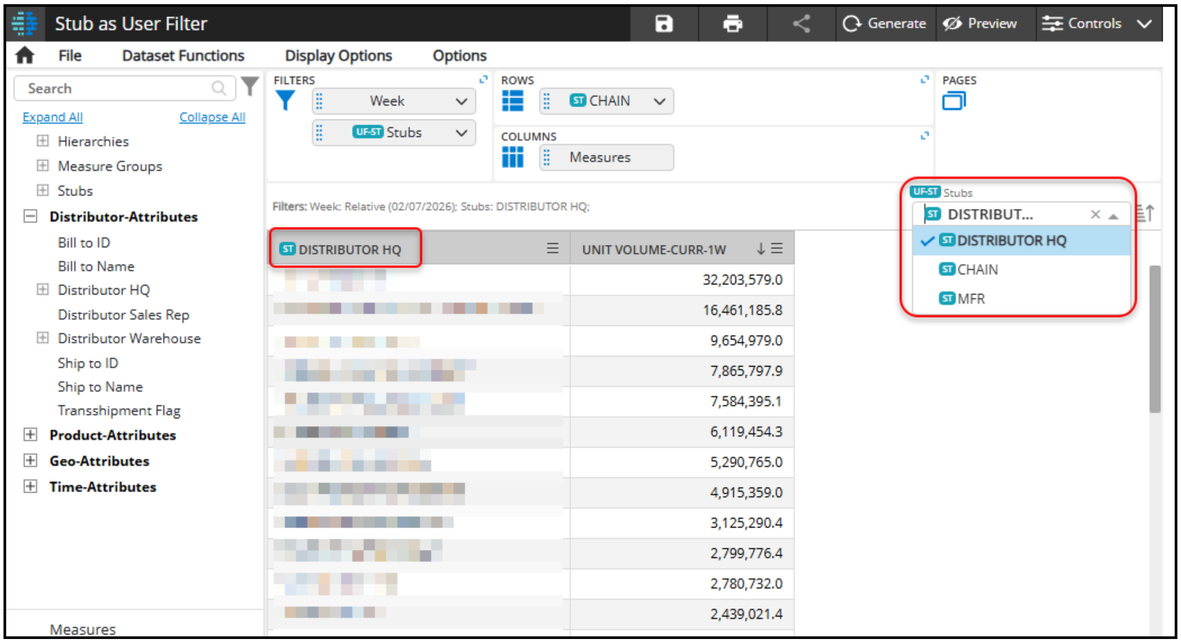
10. Click **Continue.**
11. In the next window, select the three Stubs that were created in this example (**CHAIN**, **DISTRIBUTOR HQ**, **MFR**) then use the right arrow to add them to the **Selected Values List**, as pictured below.



12. Click **Done**. A User Filter selection box will appear in the top right of the Report. Notice that only the three Stubs we selected are shown in this list.
13. Select **CHAIN** in the User Filter dropdown. Then click **Generate**.



14. In the Stub User Filter dropdown, select **DISTRIBUTOR HQ**. Then click **Generate**. Now the values for CHAIN are swapped out for those of DISTRIBUTOR HQ.

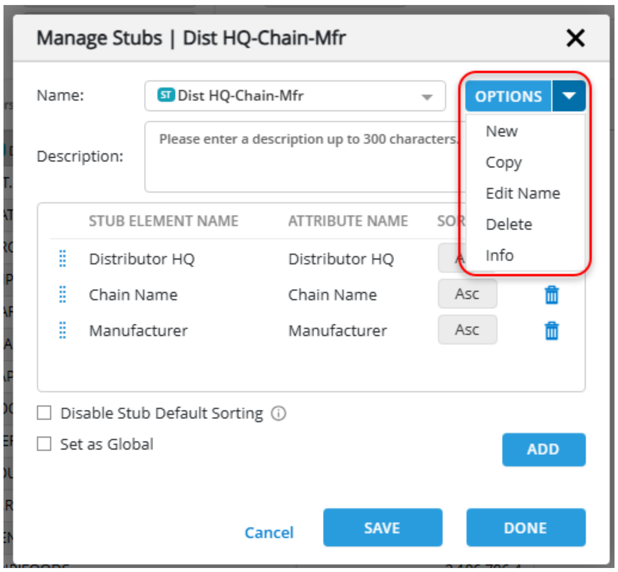


Copy/Edit Name/Delete Stubs

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

1. Select the desired **Stub** in the Attribute panel or click on the Stubs dropdown menu.
2. Click the down arrow and select the **Manage Stub** option.
3. Select the appropriate Stub name from the name dropdown list.
4. Click the **Options** dropdown menu and select the **Copy**, **Edit Name**, or **Delete** option.

Note: *These options will vary if the user is not the owner of a Stub.*



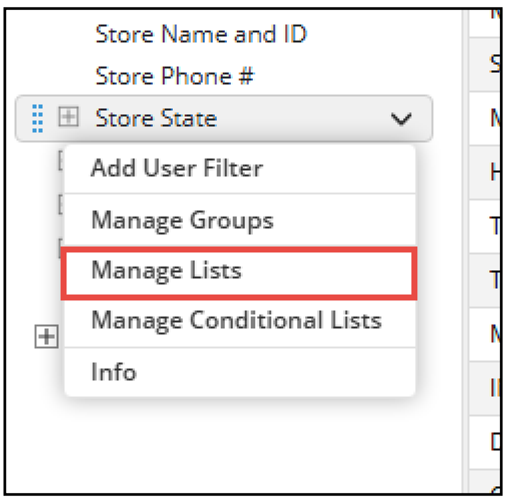
Manage Lists

A List is a preset of values within an Attribute that can be used as a Filter or added to the Report layout on rows, columns or pages. Users can manually select, dynamically filter, or import a file with multiple items.

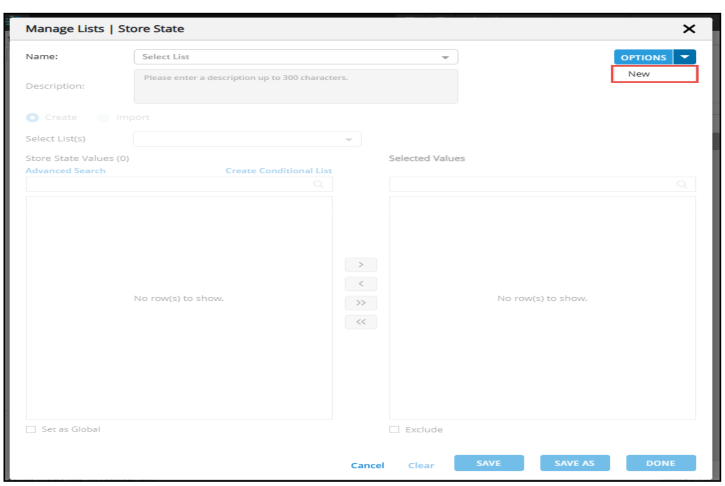
Create List

You can select multiple items in an Attribute and create a List. For example, for the **Store State** Attribute, you may create a List of your favorite states, such as Arizona, California, and Florida, then use it as a Report filter. An example is demonstrated below.

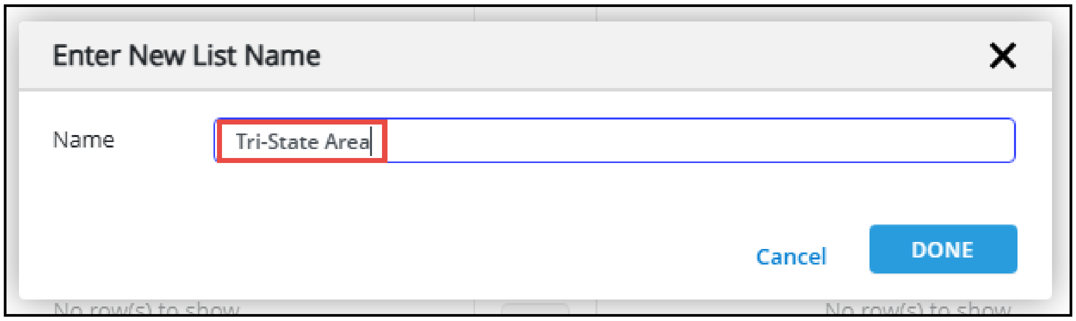
1. On the **Create Report** screen, locate the desired Attribute (for example, **Store State**) in the Attribute panel.
2. Click the down arrow and select the **Manage Lists** option.



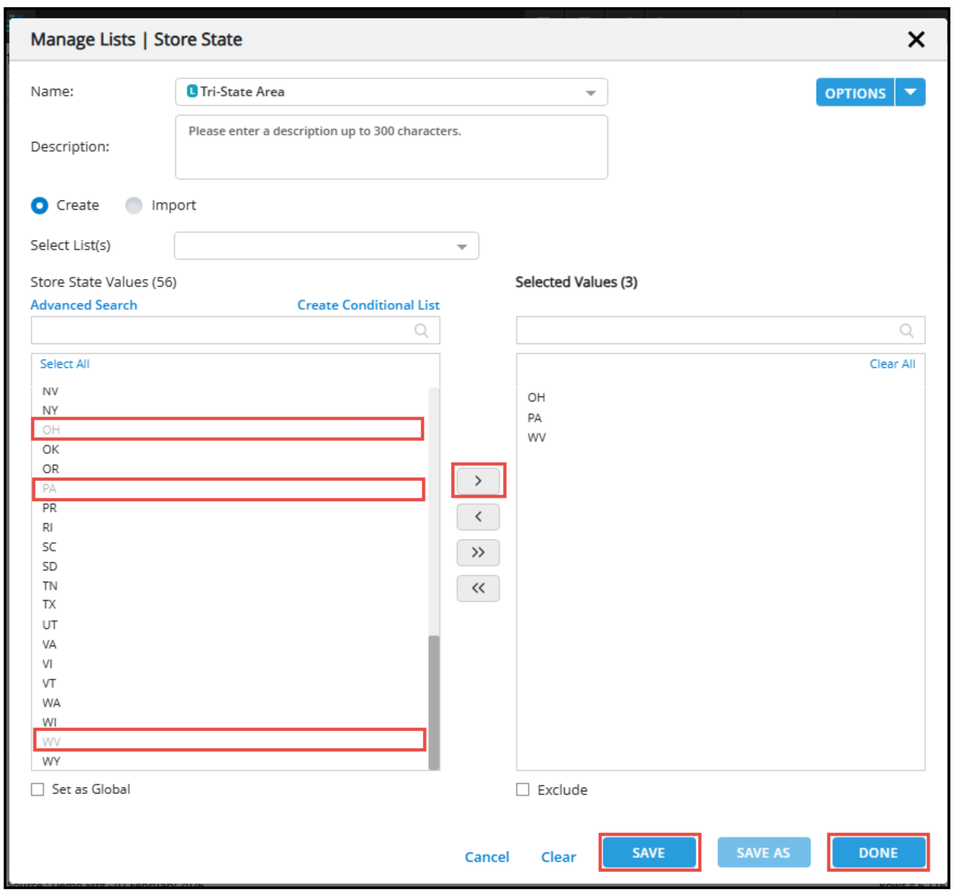
***Note:** If a user hasn't created a List before, a pop-up will prompt them to name the first one they create. Otherwise, select **New** from the options menu in the top-right corner.*



3. Enter an appropriate List Name (for example, "Tri-State Area") in the **Enter New List Name** dialog box and click **Done**.



4. Select the desired Attribute values (for example, **AZ**, **CA** and **FL**) in the left side of the selection panel and click the single arrow pointing to the right to move them to the right side of the panel.



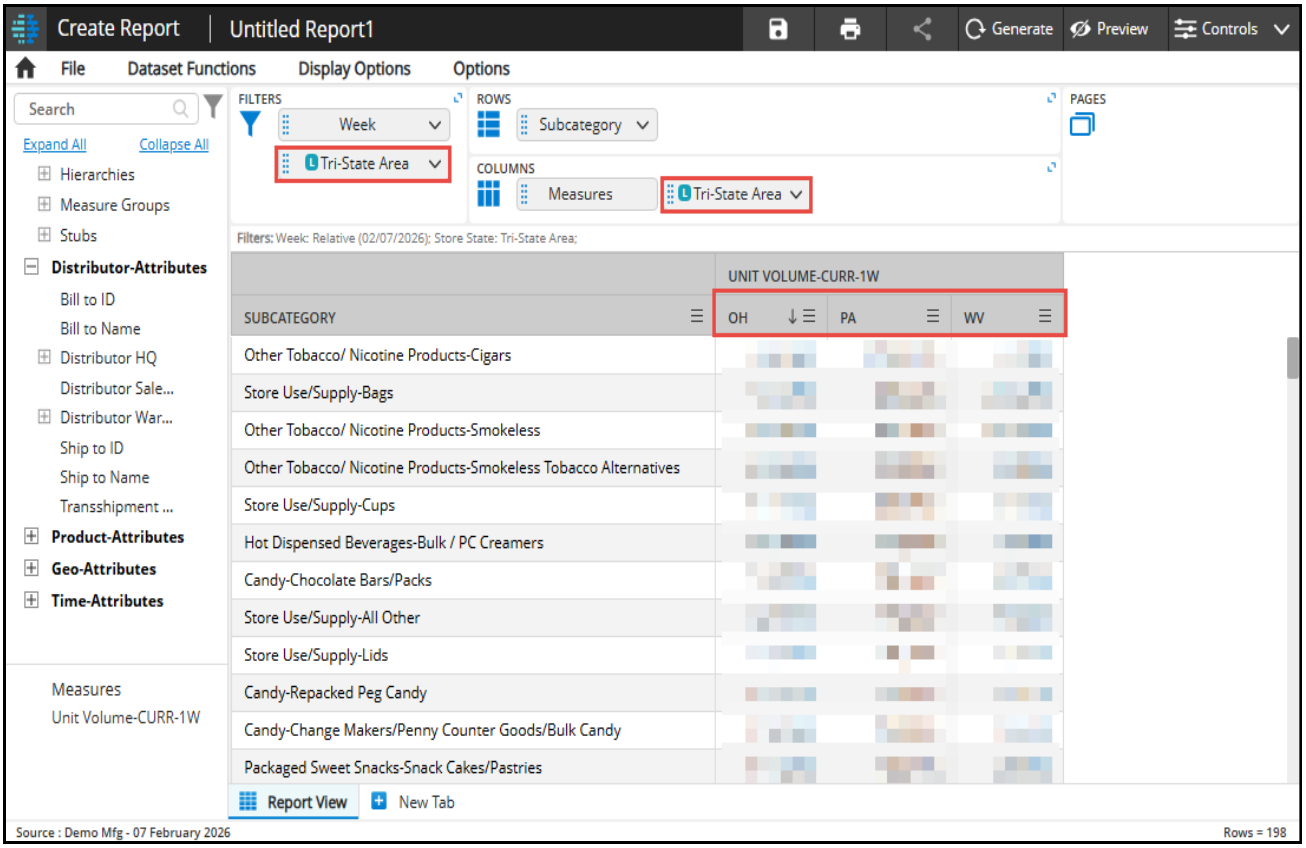
Note: *Press the* ***Shift*** *key to select multiple adjacent items in an Attribute. As the left-pointing arrows remove selection(s) from the List, use the right-pointing arrows to add selection(s) to the List. The Exclude checkbox in this window may be used to include all but the selected item(s).*

5. Click **Save**. The system will display the message “List created successfully”.
6. Click **Done**.

While generating a new Report, users can use this List in filters, rows, columns, or pages as needed as demonstrated below.

7. On the **Create Report** screen, drag the List (**Tri-State Area**) from the left-hand panel onto the **Filters** area.
8. Drag the desired Attributes onto the rows, columns, and pages as needed and then click the **Generate Report** button.

Running a Report with a List (for example, Tri-State Area) as a Report filter and placed on rows/columns will return data for only the values in the List while also separating by value (not as an aggregate) as shown in the below screenshot.

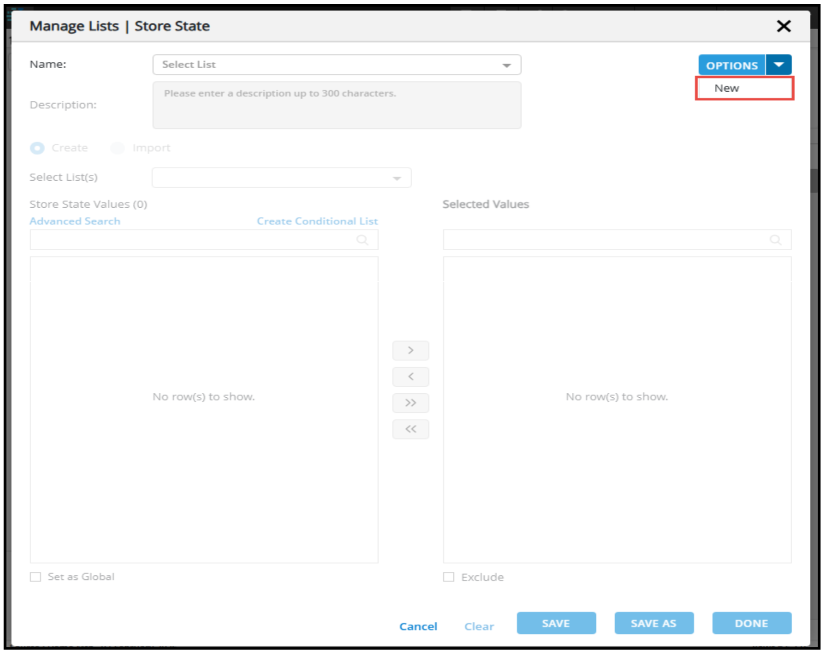


Import List

Instead of creating a hand-selected List, you can also import a List into Dhiva by using a template. An example of importing a List is demonstrated below.

1. On the **Create Report** screen, locate the desired Attribute (for example, **Store State**) in the Attribute panel**.**
2. Click the down arrow and select the **Manage Lists** option.

Note: *If a user hasn't created a List before, a pop-up will prompt them to name the first one they create. Otherwise, select* ***New*** *from the options menu in the top-right corner.*

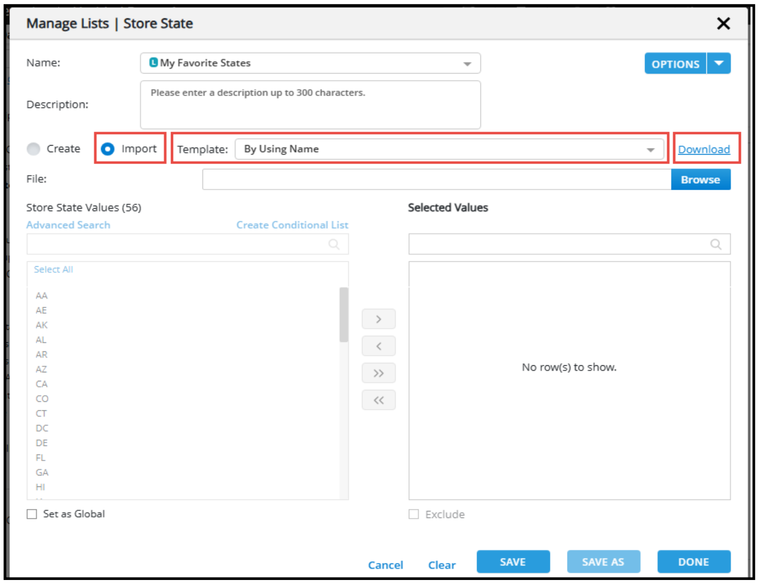


3. Enter an appropriate List Name (for example, "My Favorite States") in the **Enter New List Name** dialog box and click **Done**.

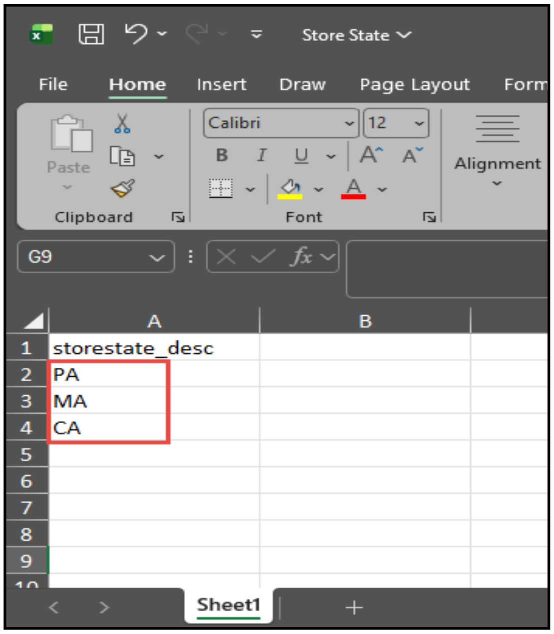
4. In the **Manage Lists** dialog box, select the **Import** option.
5. Select the **By Using ID** or **By Using Name** options from the template dropdown menu depending on how you would like to enter values into the template.

Note: *In most cases, “By Using Name” is the best practice.*

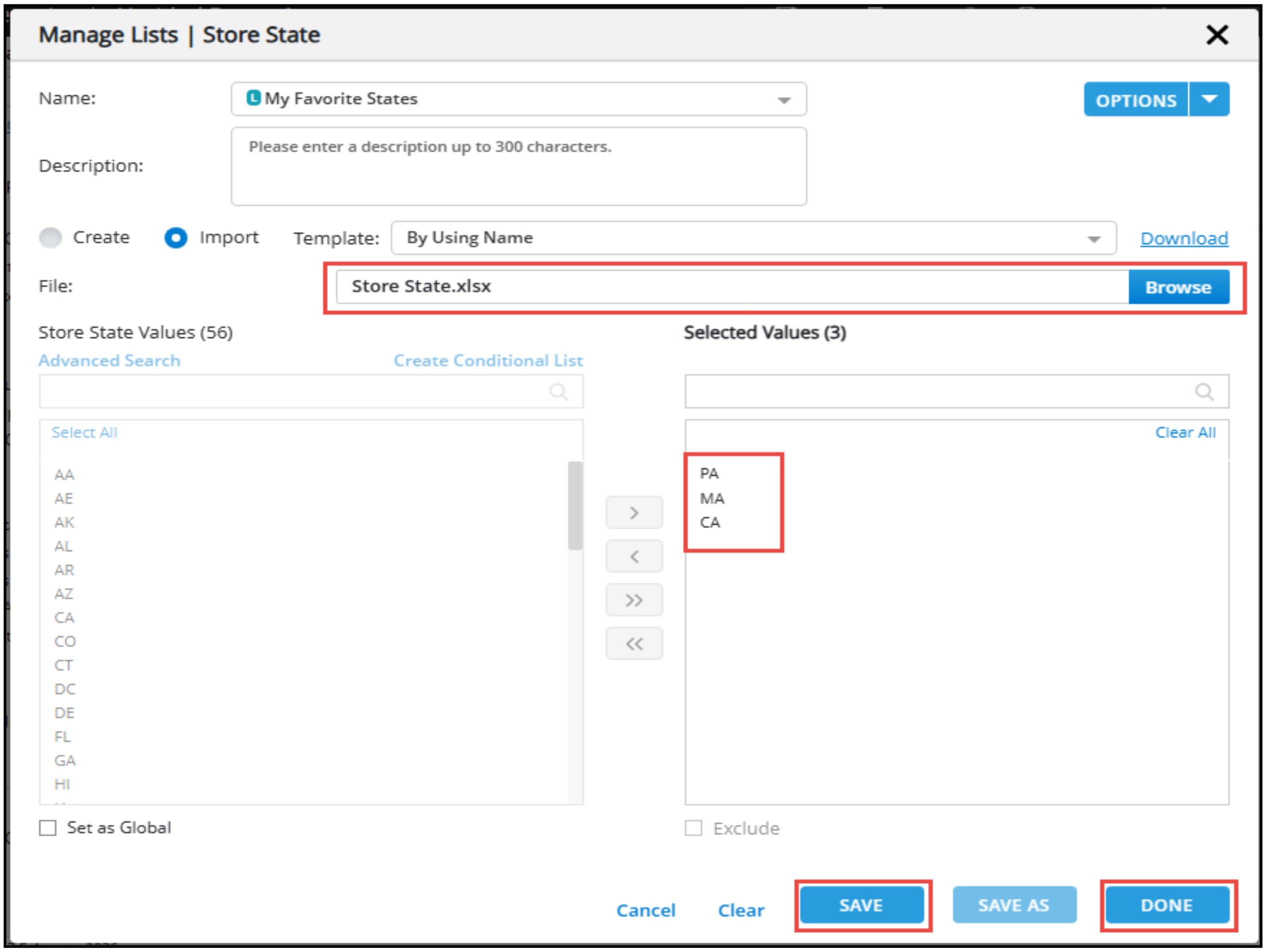
6. Click the **Download** link to download the corresponding template. In this example, users should download the **Store State.xlsx** file onto their desktop.



7. Open the file and click the **Enable Editing** button to enter the relevant data (for example, favorite store states) in the first column.



8. Once done, save the import file in Excel and close the file.
9. In the **Manage Lists** dialog box, click the **Browse** button to navigate to the import file location and click the **Open** button to load the file.

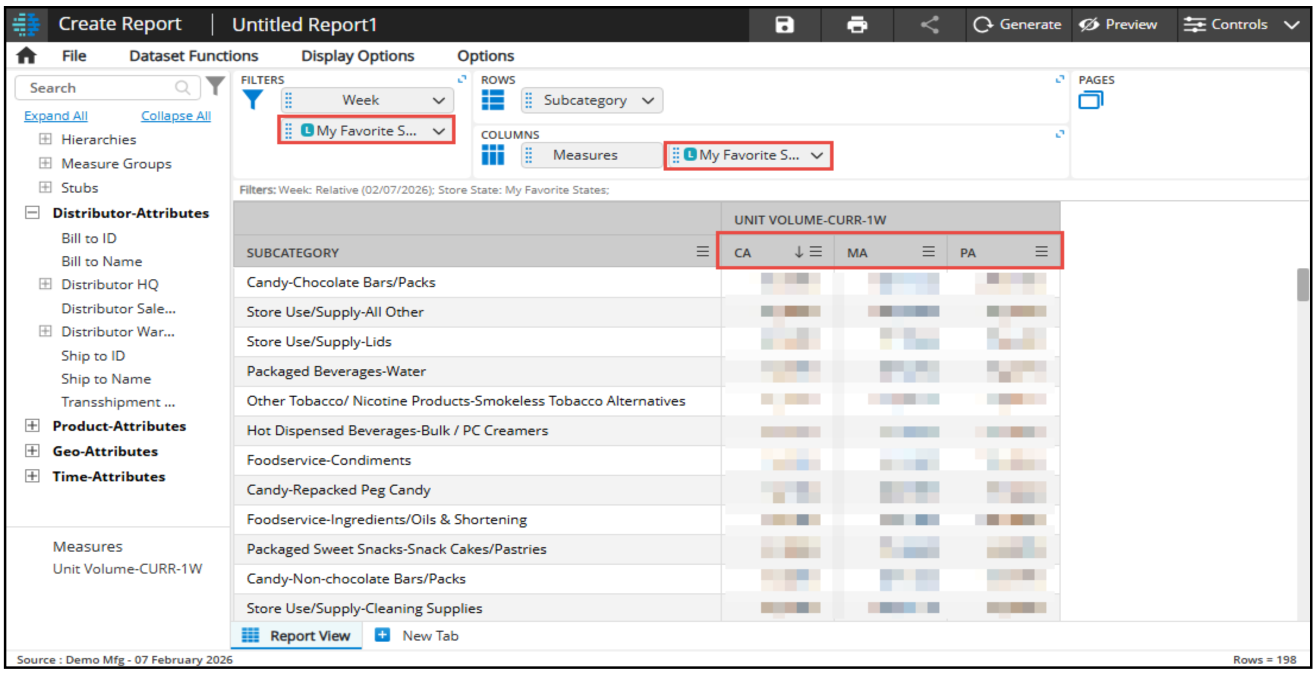


10. Click the **Save** button to save the List.
11. Click the **Done** button to close the **Manage Lists** dialog box.

While generating a Report using the List you just created, choose the appropriate List Name from the **Apply Filter** dialog box as mentioned in the “Create a List” procedure steps 7 to 9.

Running a Report with a List (for example, My Favorite States) as a Report filter placed on rows/columns will return data for only the values in the List. The data will be separated by value as shown in the below screenshot.

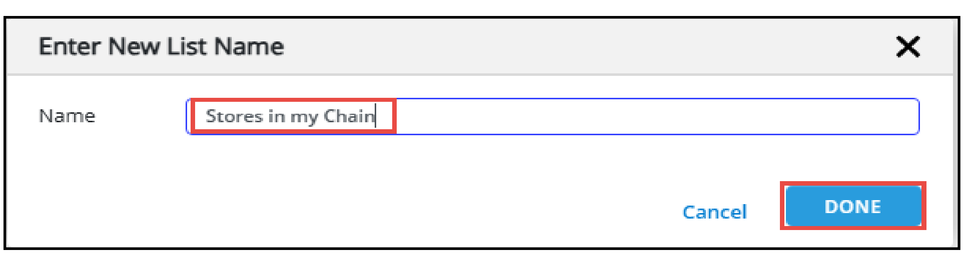
Note: *If the system Attribute on which the List was created has Display Attributes configured, the additional Attributes will not show when the List is on rows. The original Attribute must be placed on rows for the additional Attributes to be displayed.*



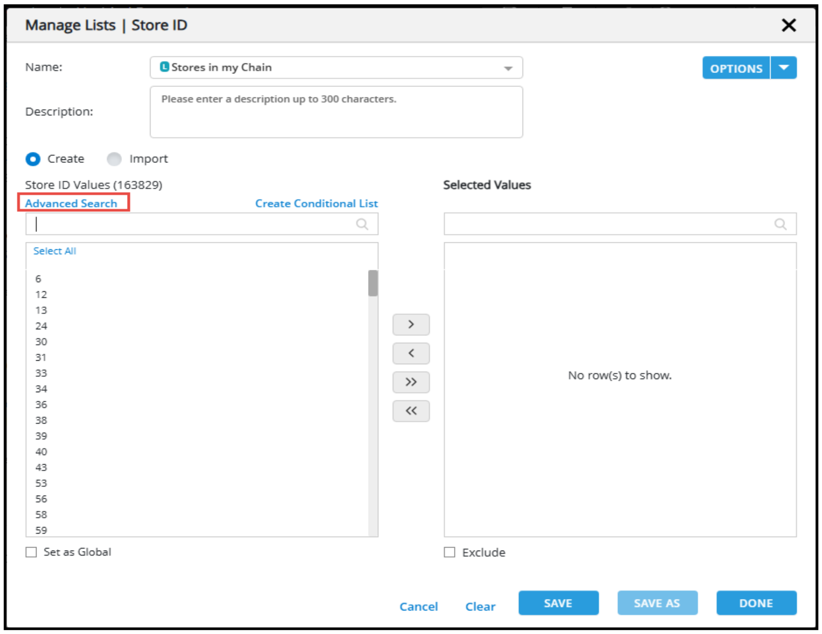
Dynamic List

Dynamic Lists allows users to save and apply criteria defined through the advanced search features in the Manage Lists window to create a list of values which will update when data is refreshed.

1. On the **Create Report** screen, locate the desired Attribute (for example, **Store ID**) in the Attribute panel.
2. Click the down arrow and select the **Manage Lists** option.
3. Create a new List and enter an appropriate List name (for example, “Stores in my Chain”).



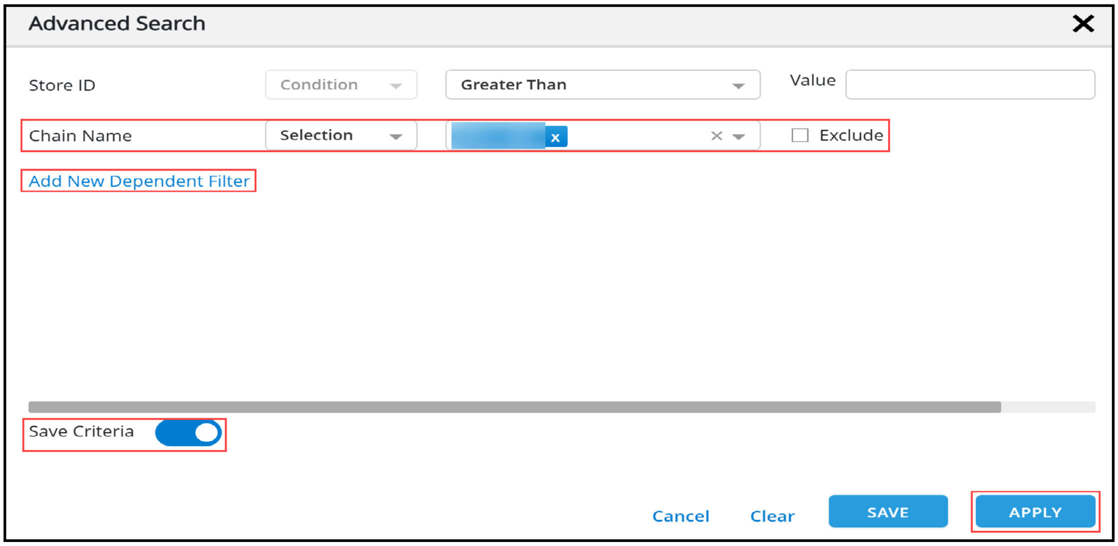
4. In the **Manage Lists** dialogue box, select the **Advanced Search** option.



5. Click **Add New Dependent Filter** then select the desired Attribute to filter (for example, **Chain Name**) and select the desired **Chain Name**. This will filter Store IDs down to the selected Chain.
6. Toggle the Save Criteria option on, then click **Apply**. This will create a Dynamic List of the Store IDs in the selected Chain. which will update each time the data is refreshed.

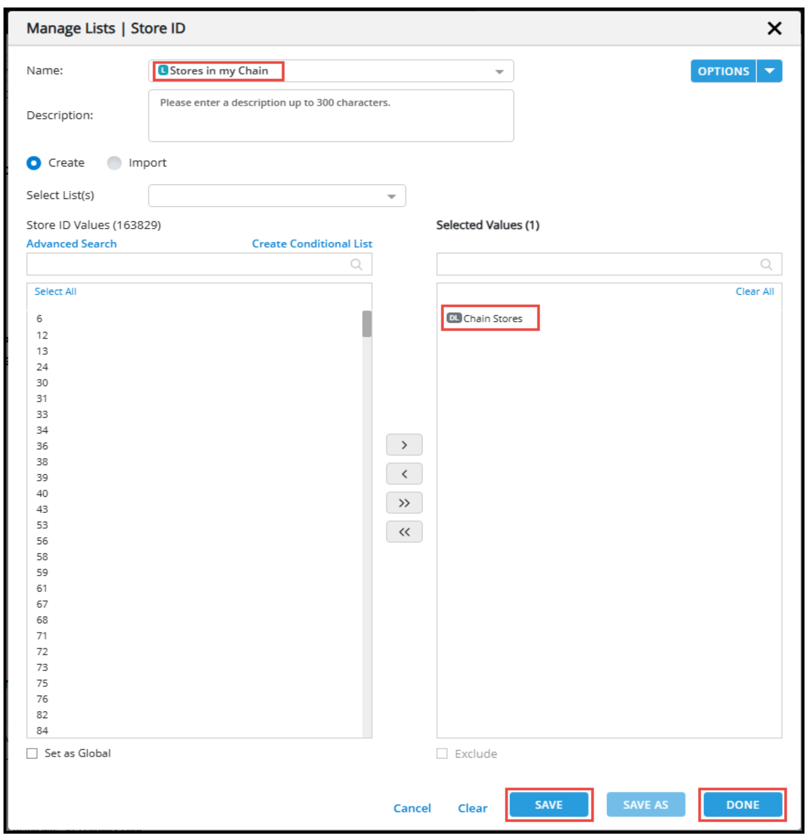
   If **Save** is selected instead, this will save the criterion to the current List as well as create a separate List saved to the Attributes panel.

   See the **Artifact Color/Access Quick Start Guide** for more information on these save options.



7. A dialogue box will prompt you to name this Dynamic List (for example, “Chain Stores”), and then click **Done**. The system will display the message “List created successfully”.

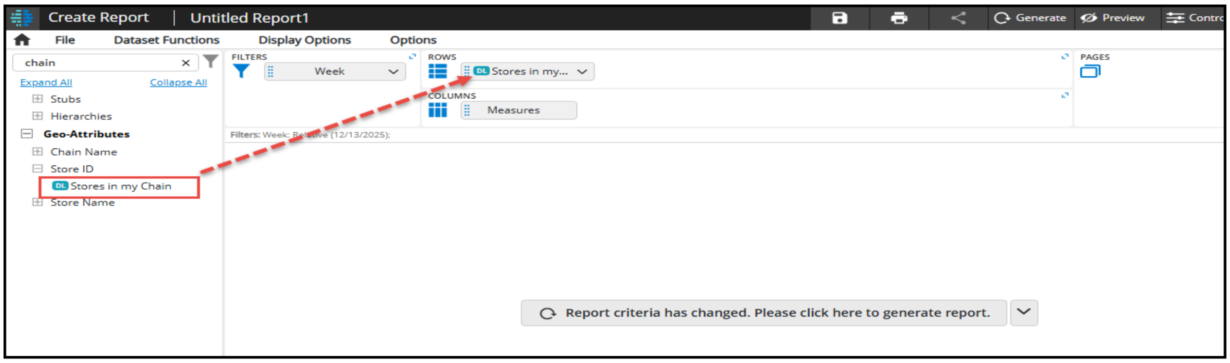
After this step, you will see the following screen. Notice that the List is titled “Stores in my Chain” (as named in step 3), while the Dynamic List/criteria is titled as “Chain Stores” (as named in step 7). They can have the same name, but we made them differ for demonstration purposes.



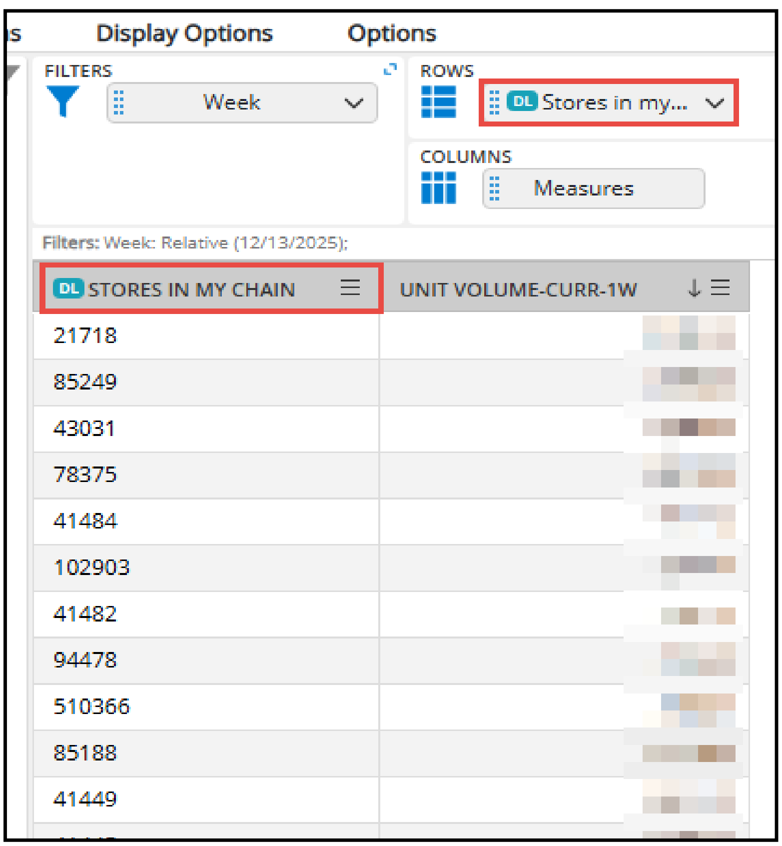
8. Click Save. The system will display the message “List created successfully”.
9. Click Done. This List will now be available in the Attributes panel to add to Reports.

While generating a new Report, users can use this List in filters, rows, columns, or pages as needed as demonstrated below.

10. Drag the List that was just created on Store ID onto rows. Users can use Lists and Conditional Lists as Attributes on a Report. Standard Lists are indicated by an “L” icon, while Conditional Lists and Dynamic Lists are indicated by “CL” and “DL” icons respectively. Green icons represent Global Artifacts, blue icons represent personal Artifacts, and grey icons represent Report-specific Artifacts.



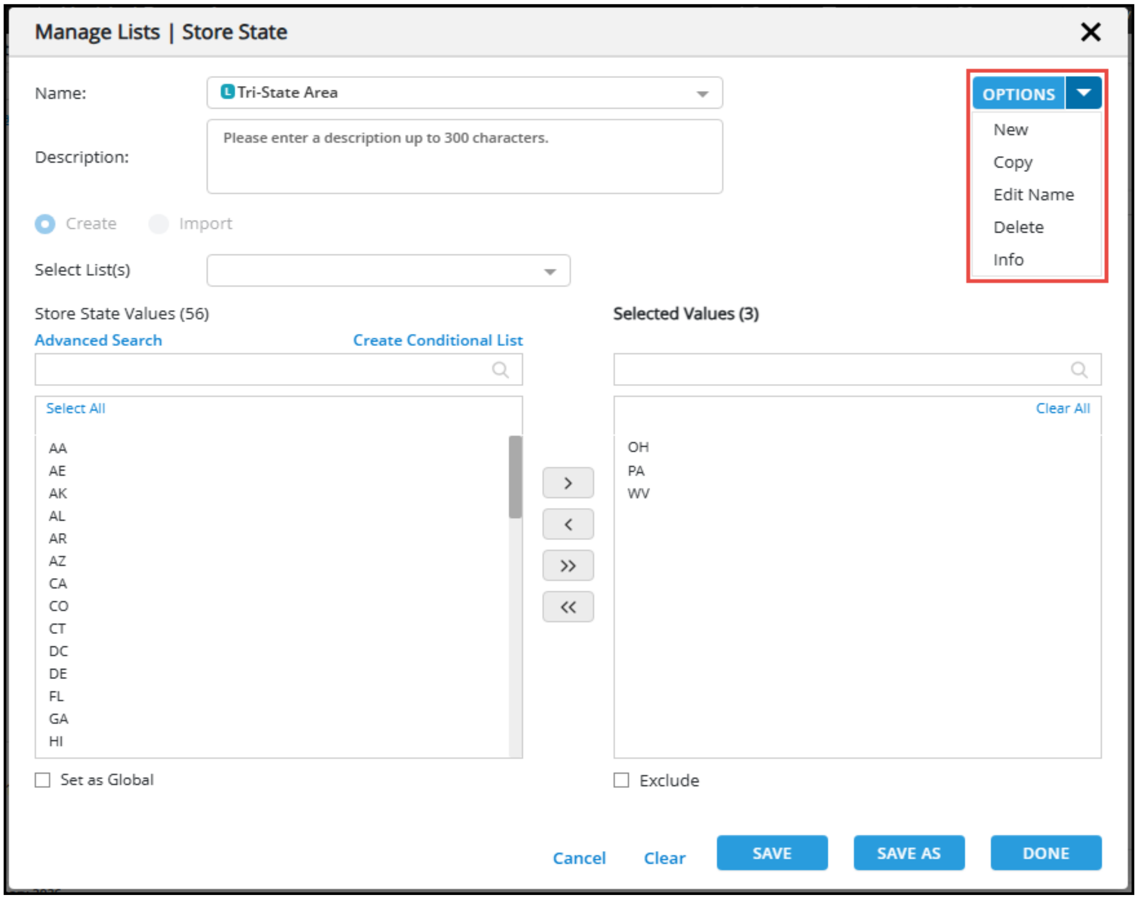
Generating the Report with the newly created List on rows will output the Store IDs associated with the selected Chain. This List will dynamically update as data is refreshed, whether a new store is added, or an existing store is removed from the Chain.



Copy/Edit/Delete List

Once you save a List you have created or imported, you will also see the options to copy, edit name, and delete a List. These options are available for any saved Lists that you own. The procedure is demonstrated below.

1. Locate the desired Attribute in the Attribute panel.
2. Click the down arrow and select the **Manage Lists** option.
3. In the **Manage Lists** dialog box, select the appropriate List name from the **Name** dropdown menu.
4. Click the **Options** dropdown menu and select the **Copy**, **Edit Name** or **Delete** option to perform the corresponding actions.



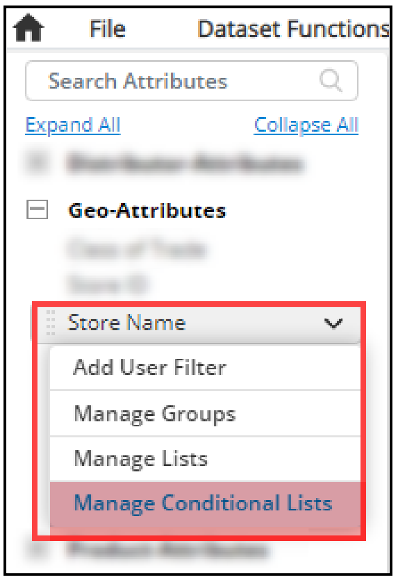
Manage Conditional Lists

A Conditional List is a dynamic list of Attribute items that meet the criteria of the expression statement(s). Expression statement(s) are similar to IF/THEN statements in programming languages. The list of items included in a Conditional List is updated with each data refresh.

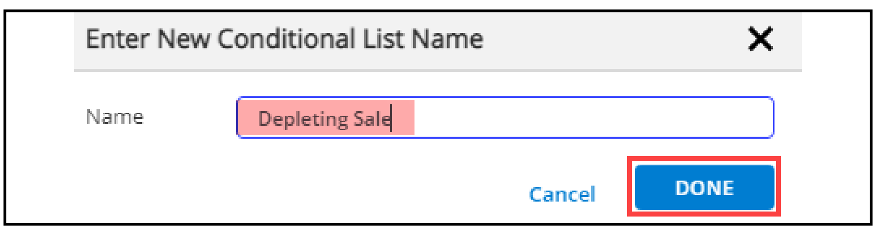
Create Conditional List

For a Conditional List, first users create a List and then specify conditions. When a Conditional List is selected, the system generates a Report with the data fulfilling the condition(s). For example, you may wish to generate a store name Report where the sale of a particular product is declining. The same example is demonstrated below:

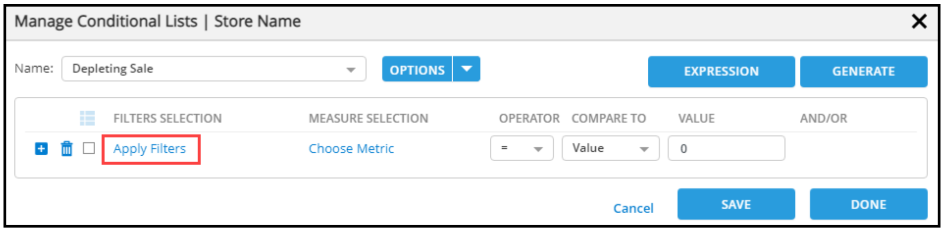
1. On the **Create Report** screen, select the desired Attribute (for example, **Store Name**) in the Attribute panel.
2. Click the down arrow and select the **Manage Conditional Lists** option.



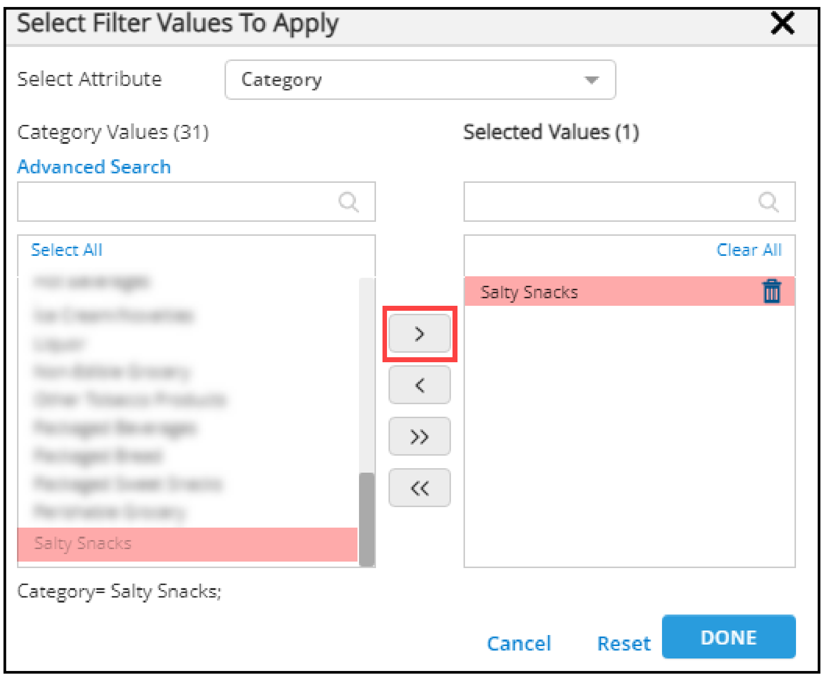
3. Enter an appropriate name (for example, "Depleting Sale") in the **Enter New Conditional List Name** dialog box and click **Done**.



4. In the **Manage Conditional Lists** dialog box, click the **Apply Filters** link.



5. In the **Select Filter Values To Apply** dialog box, select the desired Attribute (for example, **Category**) from the dropdown menu.
6. *Optional:* You may use the textbox to search for the desired item by text string or use the **Advanced Search** to limit the available List based on Attribute values. (For example, **Salty Snacks**).

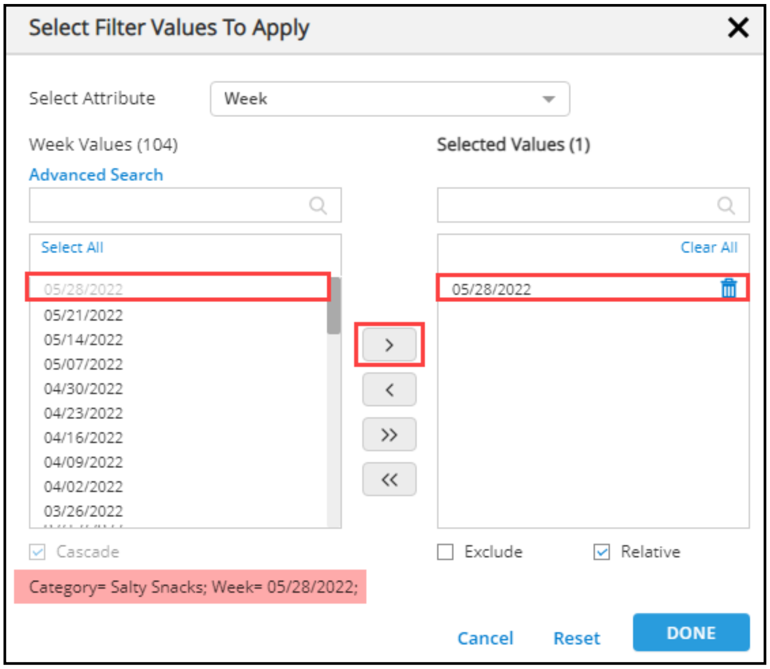


7. Select the desired item (for example, **Salty Snacks**) from the left side of the **Selection Panel** and click the right-pointing arrow to move it to the right side of the panel.

***Note**: Press the **Shift** key to select multiple adjacent items in an Attribute, while press the **Ctrl** key to select multiple non-adjacent items in the Attribute.*

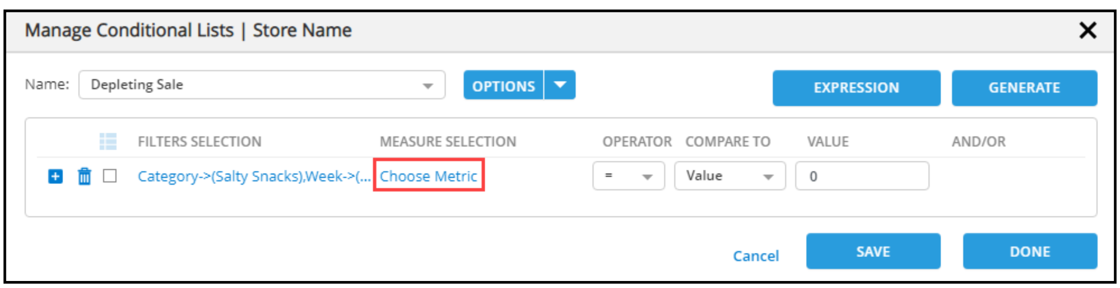
8. Select another Attribute (for example, **Week**) from the **Select Attribute** dropdown box.

9. Select and add the desired item (for example, **Current Relative Week**) to the right side of the panel as shown below:



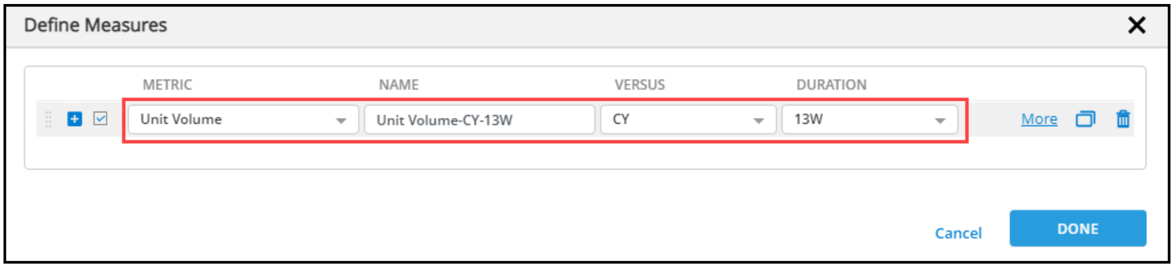
***Note**: Select the **Relative** checkbox in order to select the current relative week.*

10. Click **Done**.
11. In the **Manage Conditional List** dialog box, click the **Choose Metric** link to define Measures.

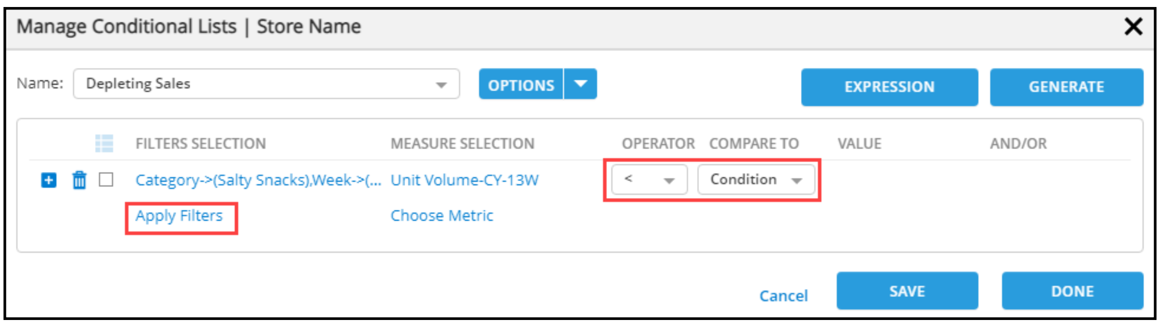


12. Select the appropriate option (for example, **Unit Volume**) from the **Metric** dropdown list.

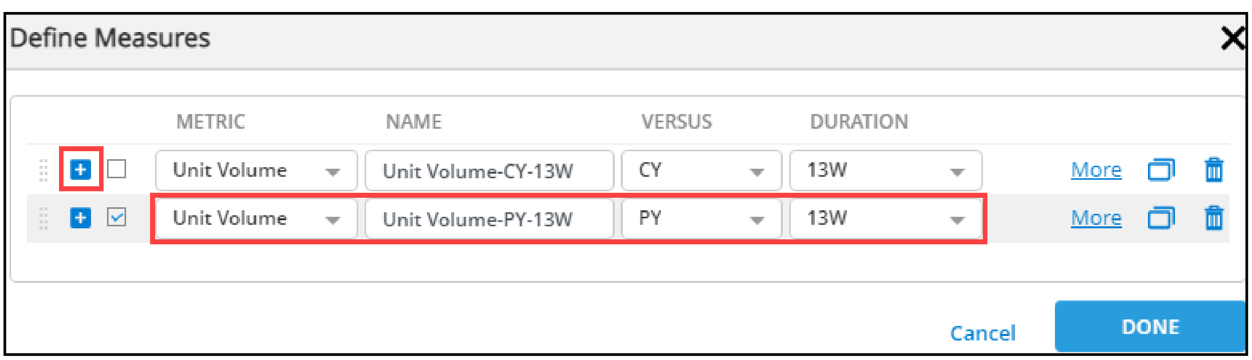
13. Select the appropriate values (for example, **CY** and **13W**) from the **Versus** and **Duration** dropdown lists respectively, then click **Done**.



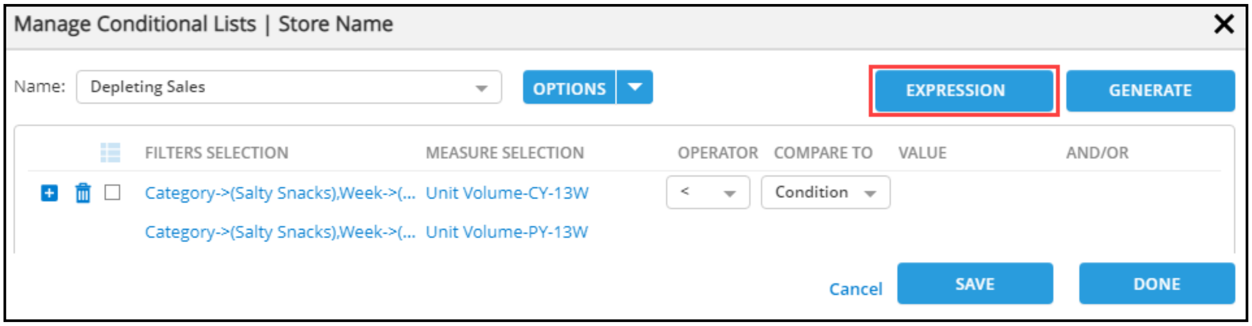
14. Select the **<** from the **Operator** dropdown list.
15. In the **Compare To** dropdown list, select **Condition**. This will create the second condition.

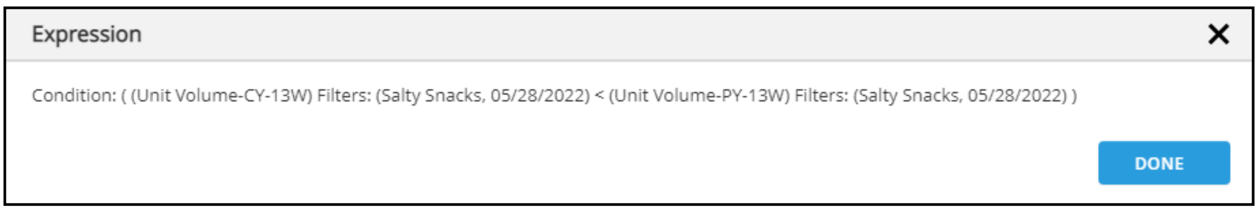


16. Click the **Apply Filters** link.
17. Repeat steps 5, 6, and 7 to select **Salty Snacks** as a **Category**.
18. Repeat steps 8, 9, and 10 to add **Week** Attribute.
19. Click the **Choose Metric** link to define the Measure for the second clause.
20. In the **Define Measures** dialog box, click the plus sign to duplicate the first Measure.
21. On the second Measure, select appropriate values (for example, **PY** and **13W**) from the **Versus** and **Duration** dropdown lists respectively, then click **Done**.



22. On the **Manage Conditional Lists** dialog box, click the **Expression** button to review the conditional expression.



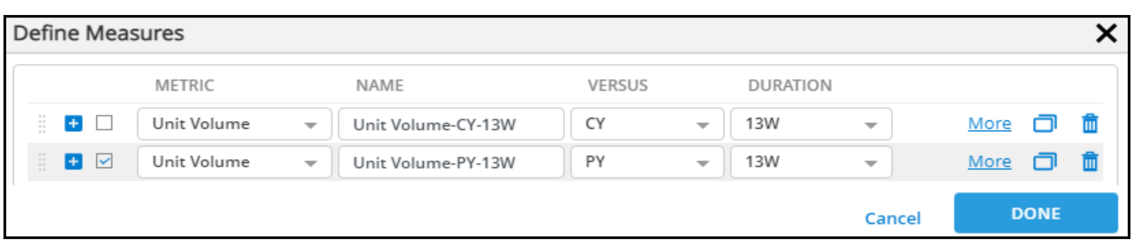


23. Click **Done** to return to the **Manage Conditional Lists** dialog box.
24. Click **Save** to save the Conditional List, then click **Done** to close the dialog box. The application will send a message that says “Conditional List saved successfully.”

Add Conditional List to Report

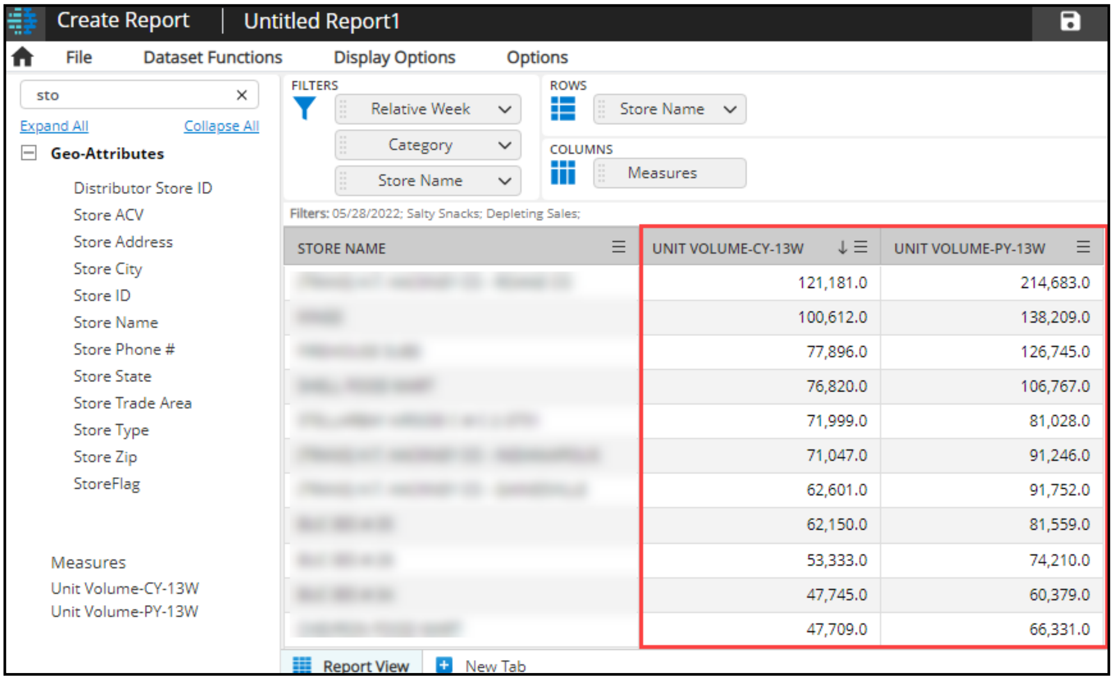
On the **New Report Template** screen, there will be some default Attributes appearing in the **Filters** and **Columns** area such as **Relative Week** in **Filters** and **Measures** in **Columns**. Users may add more Attributes to generate a desired Report. For example, you can generate a Report to get the store names where the sale of salty snacks is declining for 13 weeks in the current year as compared to sales in the previous year for the same period (13 weeks). In this example, users will add Attributes such as **Category**, **Store Names, Conditional List**, and **Measures** to the filters, rows, and columns areas as demonstrated below:

1. Drag the **Category** Attribute from the left panel to the **Filters** area and select **Salty Snacks**.
2. Drag the **Store Name** Attribute to the **Filters** area and select **Depleting Sales** from the **Select List** dropdown menu.
3. Add the **Store Name** Attribute in the **rows** area.
4. Click **Measures** to add the second Measure and select the desired **Versus** and **Duration** (for example, **PY** and **13W**), then click **Done**.



5. Click the **Generate Report** button.

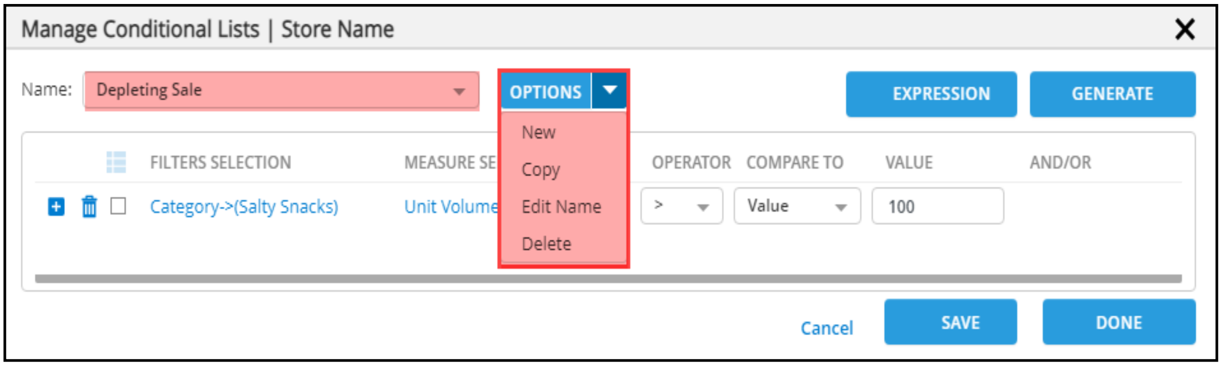
The Report will reflect the names of the stores where the sale of salty snacks is dropping in the current year compared to the previous year.



Copy/Edit Name/Delete Conditional List

Users can make a copy of a Conditional List, edit a Conditional List name or delete a saved Conditional List by following the procedure mentioned below:

1. Select the desired Attribute in the Attribute panel.
2. Click the down arrow and select the **Manage Conditional Lists** option.
3. Select the appropriate List name from the dropdown list.
4. Click the **Options** dropdown menu and select the **Copy**, **Edit Name,** or **Delete** option.



Grouping within a Conditional List

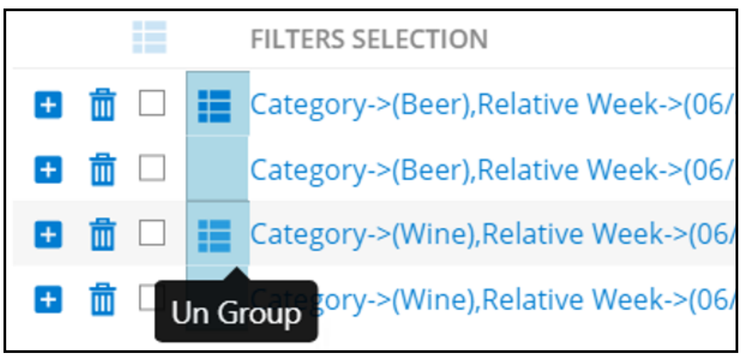
Within a Conditional List, users have the option to include multiple expression statements connected by either **AND** or **OR** operators. Evaluation of the statements follows the standard rules for order of operations.

When a Conditional List contains 3 or more statements, it is recommended to apply grouping to ensure expected results. Grouping places parentheses around statements while compiling the query, resulting in that group of statements being evaluated first. When multiple groupings are present, they are evaluated from the innermost grouping and then expands outward to the outermost grouping.

Note: *Grouping is not necessary when all statements are joined by the same logical conjunction (such as all "AND"s or all "OR"s), as the order of operations does not impact the results in such instances. However, when using a combination of logical conjunctions, grouping is recommended.*

In order to create a group of statements, users need to select the checkbox next to the statements they want to be included in the Group. When the checkboxes are checked for 2 or more consecutive statements, the Group icon ( ) will be enabled, allowing users to group the statements.

As shown in the screenshot below, if a grouping needs to be undone, users can ungroup the statements by clicking the **Group** icon for the relevant grouping.

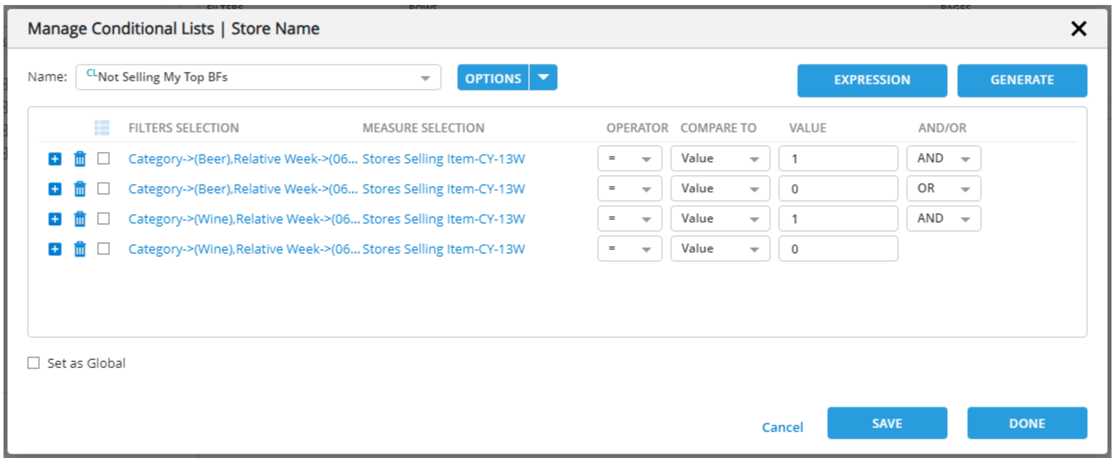


Create the Multi-Statement Conditional List with Grouping

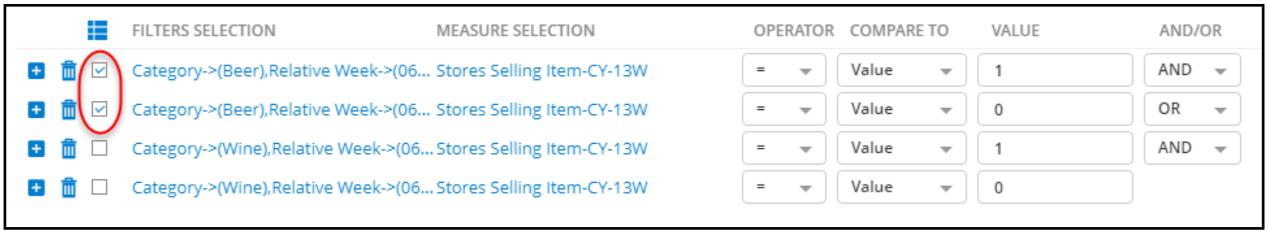
When a Conditional List is selected, the system generates a Report with the data fulfilling the condition(s). For example, a user might want to produce a Report listing stores that are selling products from their manufacturer within both Category A and Category B. However, consider that they want to identify stores that haven't sold any items from their top brand families within those categories (Brand B in the Beer category and Brand W in the Wine category) during the past 13 weeks. This example is demonstrated in the following example.

***Note:** We are using the Store Name Attribute in the demo database in this example. We recommend using a store number Attribute if available, to create a unique List of stores.*

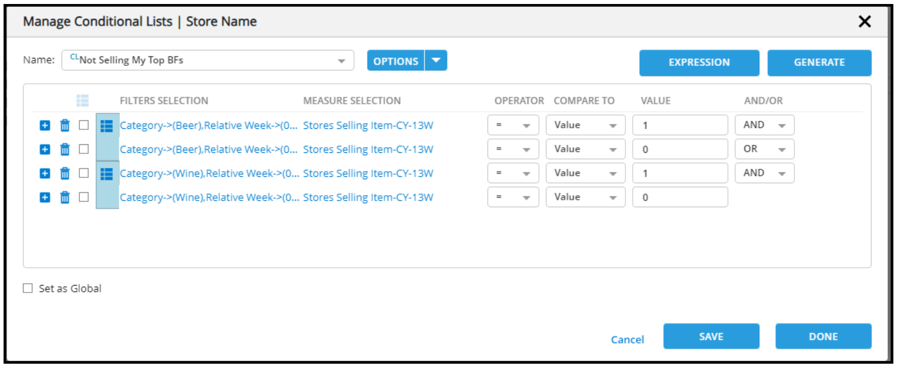
1. On the Create Report screen, select the desired Attribute (for example, **Store Name**) in the Attribute panel.
2. Click the down arrow and select the **Manage Conditional Lists** option.
3. Enter an appropriate name (for example, "Not Selling My Top BFs") in the Enter New Conditional List Name dialog box or select "New" from the options dropdown menu and then click Done.
4. Create the required statements in a logical sequence. In order to group statements, they must be consecutive or sequential.



5. Once all statements are finished, users can start grouping them as shown below. Notice the Grouping button ( ) is grey until a user selects multiple consecutive statements. To do this, select the checkboxes next to the first two statements and then click the **Grouping** button located above them. This action will result in the addition of a blue shading beside those statements.



6. Select the checkbox for the third and fourth statements then click the **Group** button. Blue shading will be added to the left side of the statements and users should see something like this.



Dhiva will evaluate the first two statements, followed by the last two, and conclude by combining them using the **OR** operator. We can better visualize this by viewing the **Expression**.

In other words, it reads:

((Statement 1 AND Statement 2
OR
(Statement 3 AND Statement 4))

7. Click **Save** and **Done**. This Conditional List is now ready to be added to a Report.

Manage Groups

A Group is a virtual Attribute that can include a List and/or aggregates of the members of the selected Attribute. It is denoted with a "G" pre-fix in the Attribute panel.

Under the Manage Groups option, users can perform the following tasks:
- Create New Group
- Copy Group, Edit Group Name, Delete Group

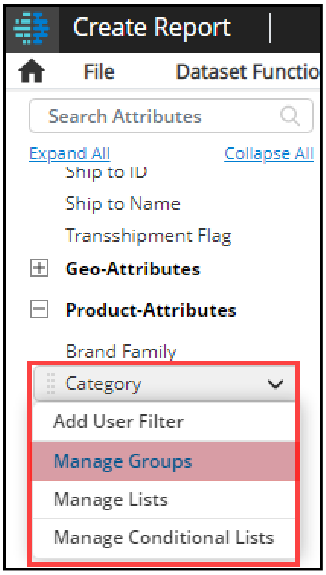
Create New Group

The following are the two scenarios for Group creation:
- Create Group with No Sub Groups
- Create Group with Sub Groups

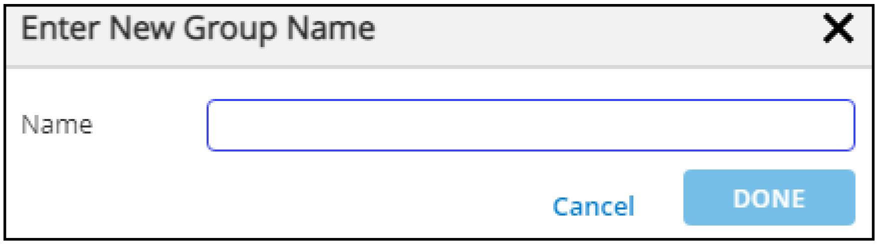
Create Group with No Sub Groups

You can place multiple items in an Attribute and create a Group. For example, in the Category Attribute a user may create a Group called "Confectionary" and place the items such as Alternate Snacks and Candy under it. This example is demonstrated below:

1. Select the desired Attribute (for example, **Category**) in the Attribute panel.
2. Click the arrow and select the **Manage Groups** option.

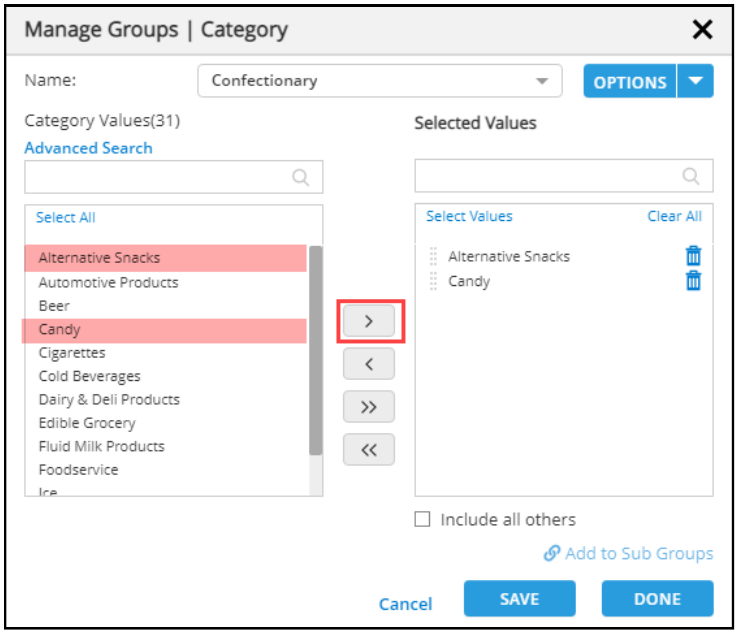


3. Enter an appropriate Group Name (for example, "Confectionary") in the **Enter New Group Name** dialog box and click **Done**.



***Note**: If the selected Attribute has saved Groups, click the **Options** menu and select the **New** option to display the **Enter New Group Name** dialog box.*

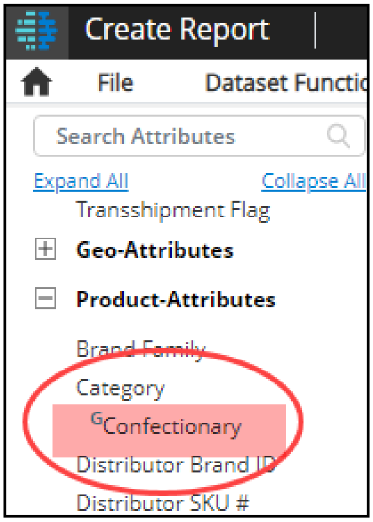
4. Select the desired items (for example, **Alternate Snacks and Candy**) from the left side of the selection panel and click the right-pointing arrow to move them to the right side of the panel.



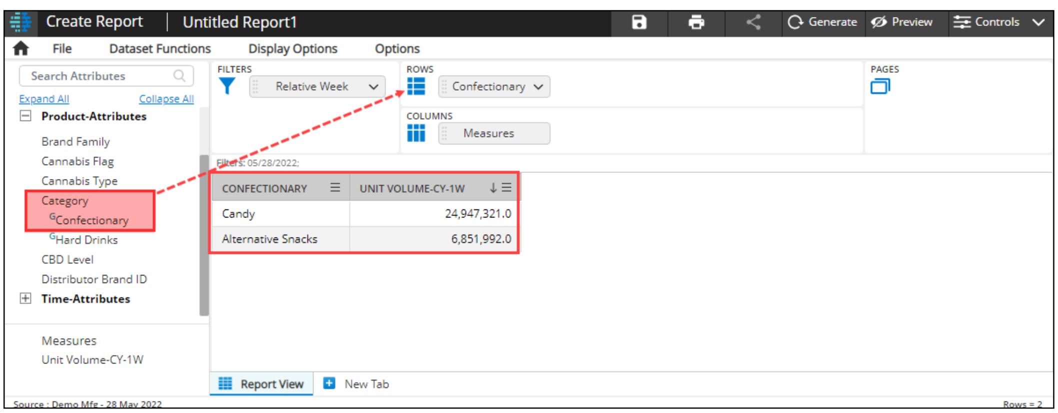
***Note:** Press the **Shift** key to select multiple adjacent items in an Attribute, while press the **Ctrl** key to select multiple non-adjacent items in the Attribute. Use the left-pointing arrow to remove selections from the list.*

5. Click **Save**. The system displays the message "Group saved successfully."
6. Click **Done**.

Users will find the Group denoted with a "G" prefix in the Attribute panel as shown in the screenshot.



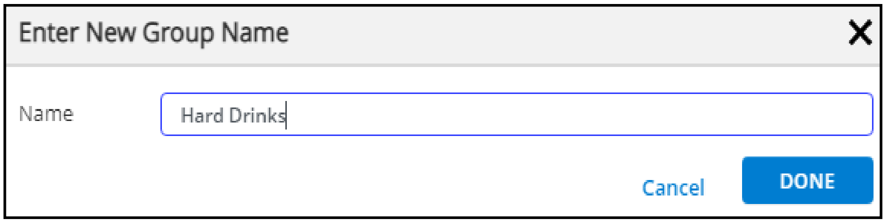
Running a Report with a Grouped variable (for example, **Confectionary**) will provide sum total of each item included in a Group as shown in the below screenshot.



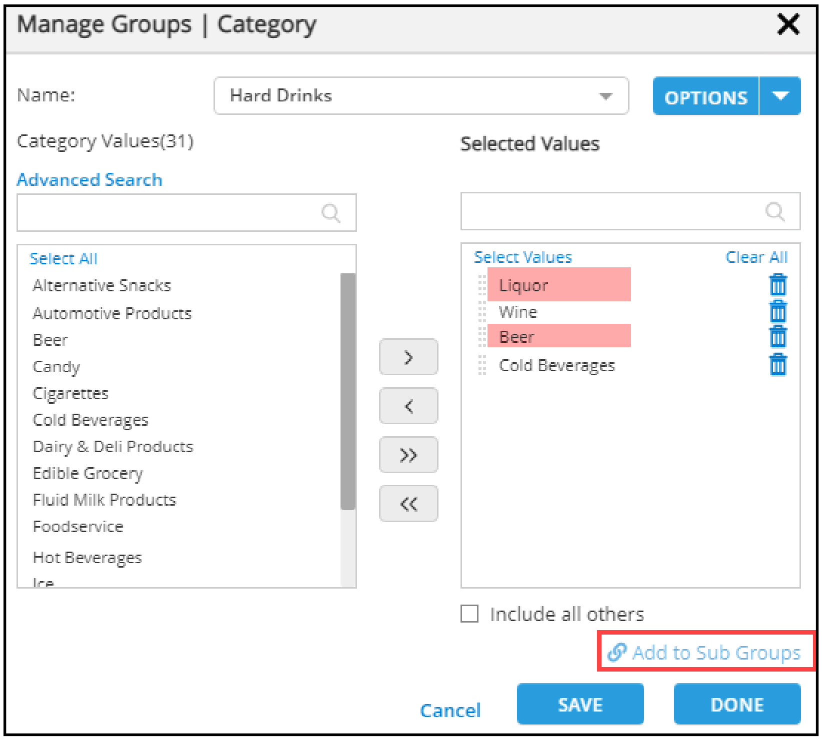
Create Groups with Sub Groups

Users can create multiple subgroups in a Group. It is an aggregate of the selected Attribute members. For example, a Group called "Hard Drinks" can have “Liquor & Beer” and “Wine & Cold Beverages” as Sub Groups. An example is demonstrated below:

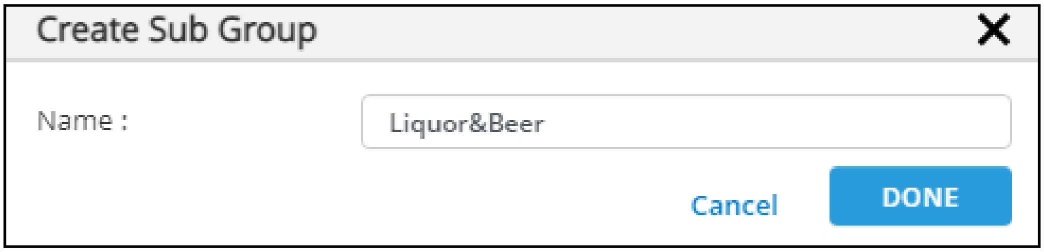
1. Select the desired Attribute (for example, **Category**) in the Attribute panel.
2. Click the down arrow and select the **Manage Groups** option.
3. Enter an appropriate Group name (for example, **Hard Drinks**) in the **Enter New Group Name** dialog box and click **Done**.



4. Select the desired items from the left side of the selection panel and click the right-pointing arrow to move them to the right side of the panel.
5. To create a Sub Group within a Group, select the desired items from the right side of the panel (for example, **Liquor and Beer**) and click the **Add to Sub Groups** button.

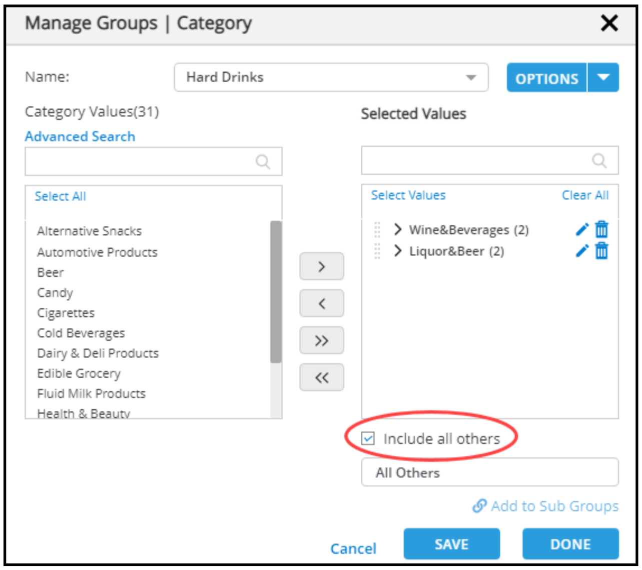


6. Enter the name of the Sub Group in the **Create Sub Group** dialog box and click **Done**.



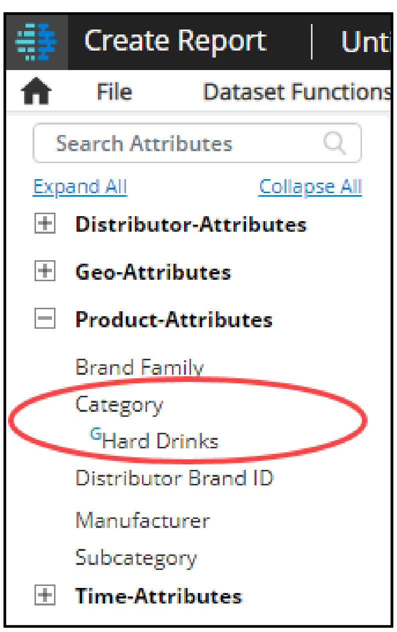
Optional: Repeat steps 4 to 6 to create another Sub Group (for example, "Wine&Beverages") in a similar way.

***Note**: You can also create a Sub Group of the remaining items in the selected Attribute by simply selecting the* **Include all others** *checkbox. It will enable you to compare one Sub Group against the rest of the items in the Attribute. You also have the option to rename this Sub Group if desired by clicking and typing in the text field that currently reads "All Others".*

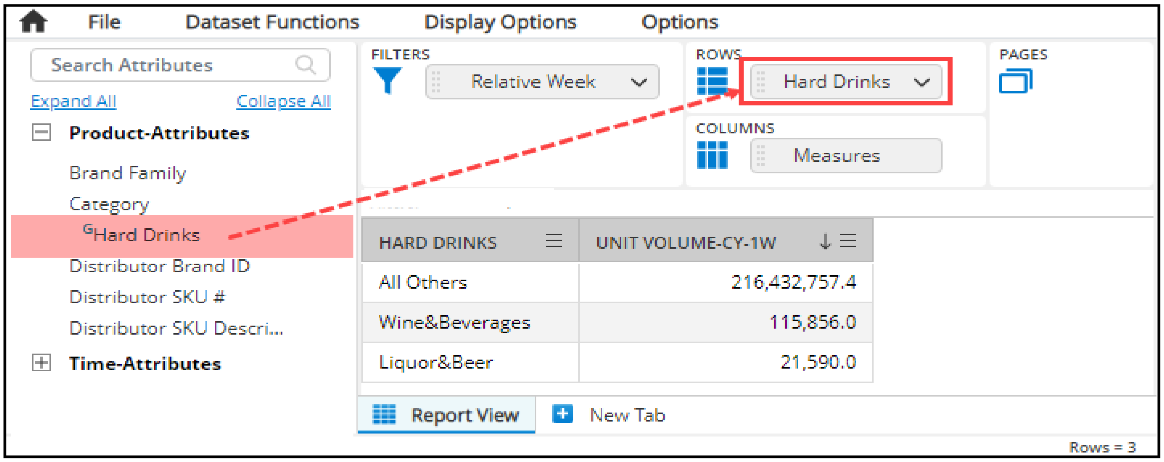


7. Click **Save**. The system displays the success message "Groups saved successfully."
8. Click **Done**.

Users will find the Group (for example, "Hard Drinks") denoted with a "G" prefix in the Attribute panel as shown in the screenshot.



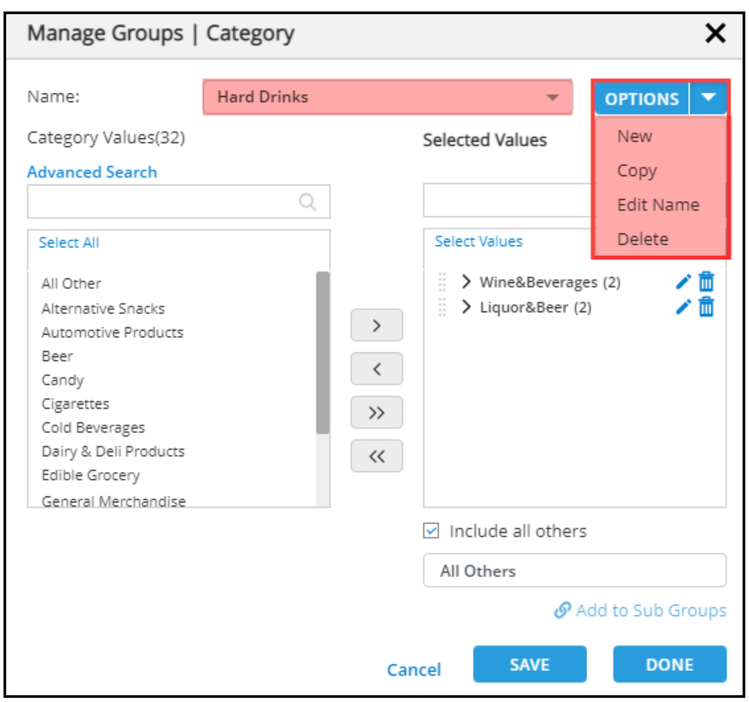
Running a Report with a Grouped variable (for example, "Hard Drinks") will provide sum total for each specified Sub Groups (for example, All Others, Wine&Beverages, Liquor&Beer) separately as shown in the below screenshot.



Copy/Edit Name/Delete Group

Users can make a copy of a Group, edit a Group name, or delete a saved Group by following the below mentioned procedure:

1. Select the desired **Group Attribute** in the Attribute panel.
2. Click the down arrow and select the **Manage Groups** option.
3. Select the appropriate Group name from the **Name** dropdown list.
4. Click the **Options** dropdown menu and select the **Copy**, **Edit Name** or **Delete** option.



Manage Dynamic Groups

A Group is a derived Attribute created on an existing Attribute. It may contain static Lists or Conditional Lists. In addition, it can also be composed of a subset of values or these values may be grouped into Sub Groups/aggregates. Dynamic Groups will be updated with each data refresh, as well as anytime a List/Group is resaved.

You can create and manage a Dynamic Group using two options. When you create a Dynamic Group, both of these options are selected by default:

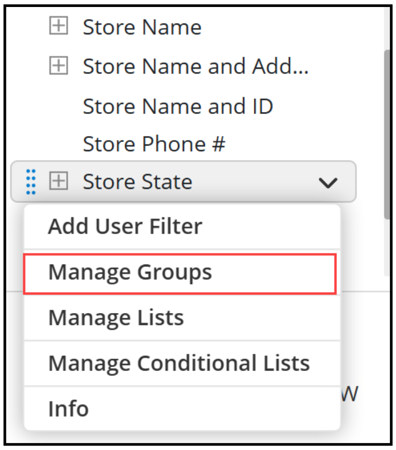
- **Link to List** - When selected, it will update the Group when the List is updated.
- **Create List Based Sub Groups** - When selected, the List(s) will be aggregated as a single value instead of a list of values.

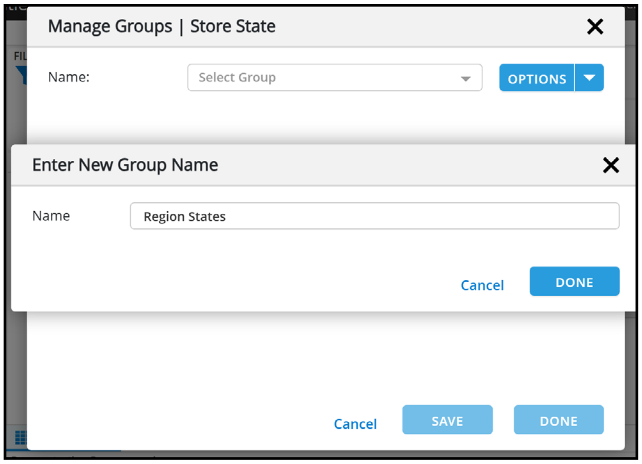
In this Quick Start Guide, you will learn to create Dynamic Groups pertaining to the following scenarios:

- Group containing a single List - Aggregate
- Group containing multiple Lists - Aggregates

Group Containing a Single List - Aggregate

1. From the **Home Page**, select the desired data domain on the right-hand side of the page to open the **New Report Template** screen.
2. Select a desired Attribute in the Attribute panel, click on it to select the **Manage Groups** option from the dropdown menu.
3. Enter an appropriate Group name in the **Enter New Group Name** dialog box and click **Done**.

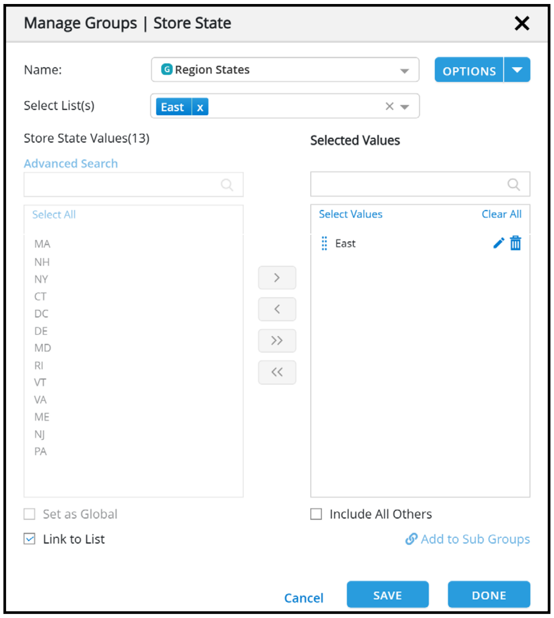




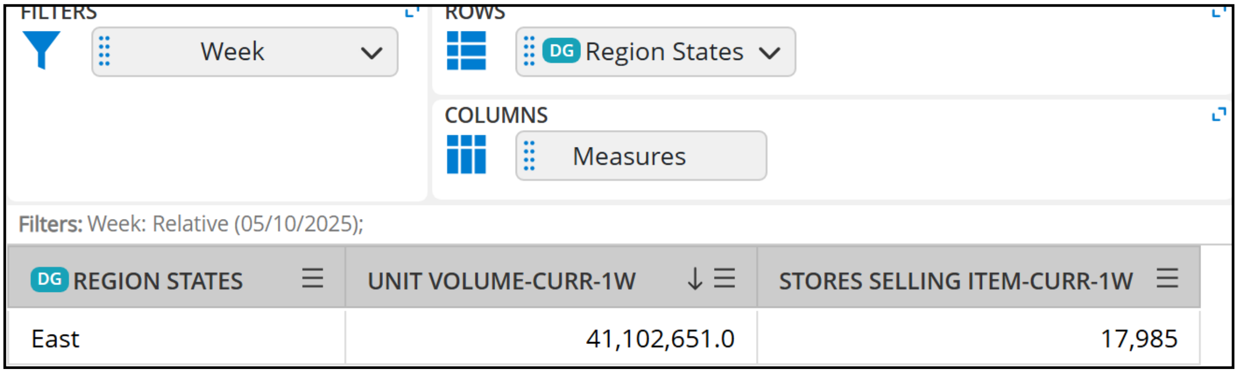
In the new Group, there will be a section under the Group **Name** labeled “Select List(s)”. This area opens a dropdown with all Lists created on this Attribute if the selected Attribute has any. Selecting a List will populate the right panel with all values of that List, as shown below.

4. Select the desired List name from the dropdown menu.
5. Confirm that the **Link to List** checkbox is selected. These boxes should be checked by default.

For example, the “East” List, which represents east coast states, would be an aggregate of all the values of the List titled “East”.



6. Click **Save** and then **Done** in the **Manage Groups** window.
7. Drag new Group onto rows in the Report grid then, click the **Generate** button.
8. As pictured below, this group yields one dynamic aggregate/subgroup.



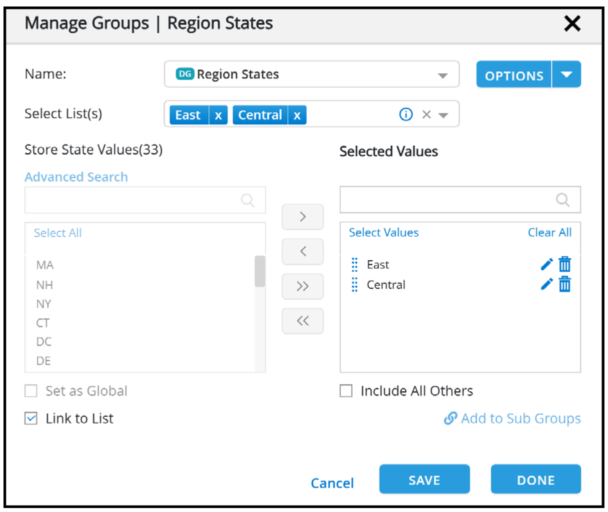
With **Link to List** selected, the List will be dynamic and will update whenever the related List changes.

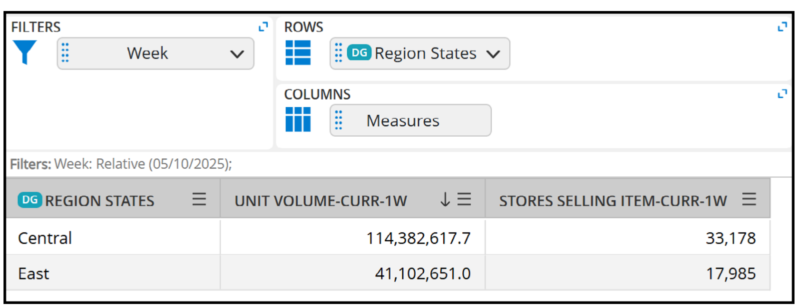
If the user unchecks **Link to List**, the List will be static and will not change even if the List is modified. Unselecting **Link to List** can be used as a tool to select all or a subset of the Lists values and/or to create subgroup(s) of all or a subset of values. By unchecking the **Link to List**, the **Include All Others** and **Add to Sub Group** options will be re-enabled as well.

If more than one List is selected from the dropdown, the left panel shows the union of the values of the selected Lists.

Group Containing Multiple Lists - Aggregates

In the example below, a Group was created using more than one List. Notice that there are two subgroups in the right panel. When placed in a Report, this Group yields two subgroups based on the List definitions. The values of each List are aggregated (one aggregate per List) as shown in the Report.

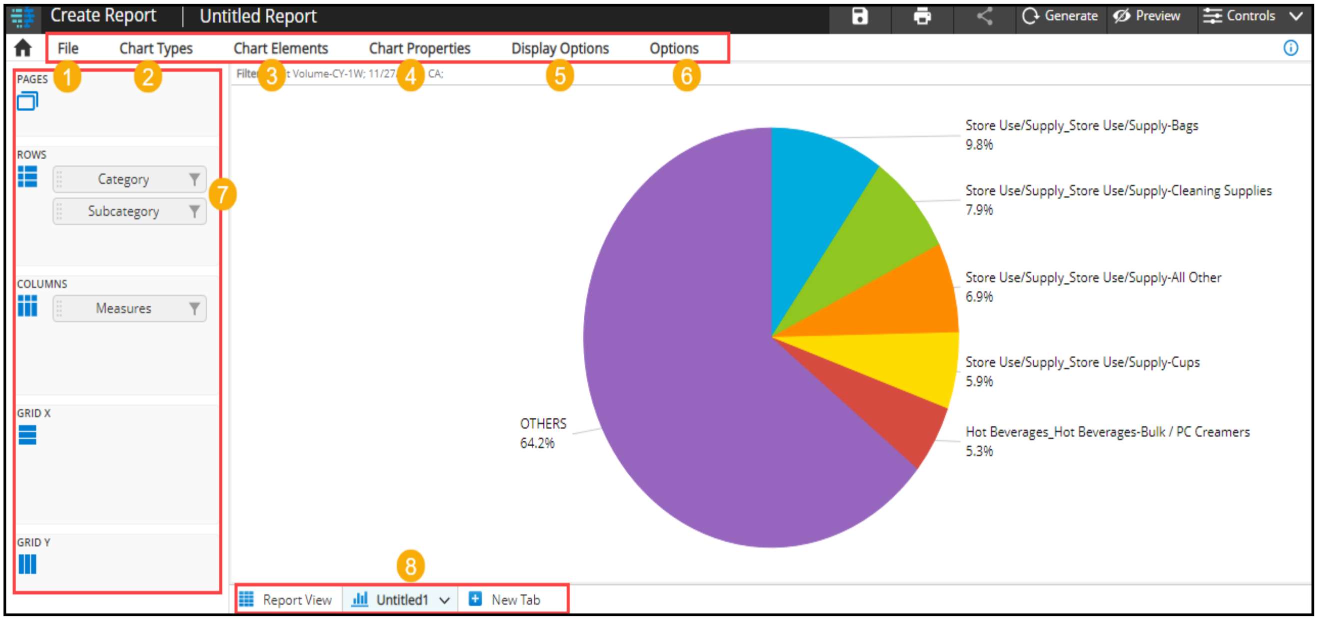




Dynamic Groups can be used in filters and user filters; and they will be treated the same as static Groups.

***Note**: See the Manage Lists and Manage Groups Quick Start Guides for more information.*

Chart Screen Walkthrough



1. **File** - This menu provides options to save, rename, publish, schedule, and export a chart. Some menu options are available to the asset owner only.

2. **Chart Types** - This menu provides different types of charts to choose from including bar, column, line, pie, combo, scatter, target, gauge, tree, and so on. Some of them may be grayed out based on the Report Layout and selections.

3. **Chart Elements** - Use this menu to specify options common to most chart types such as chart title, hide/show data labels, legends, and background color.

4. **Chart Properties** - Options inside this menu vary based on chart type and enable customization of the data ranges used in terms of color, line/bar style, and other factors relevant for the type of chart.

5. **Display Options** - This menu provides options to manage display of Report elements in the chart view such as filters, User Filter Attribute names + selections, footer, Report specifications and so on.

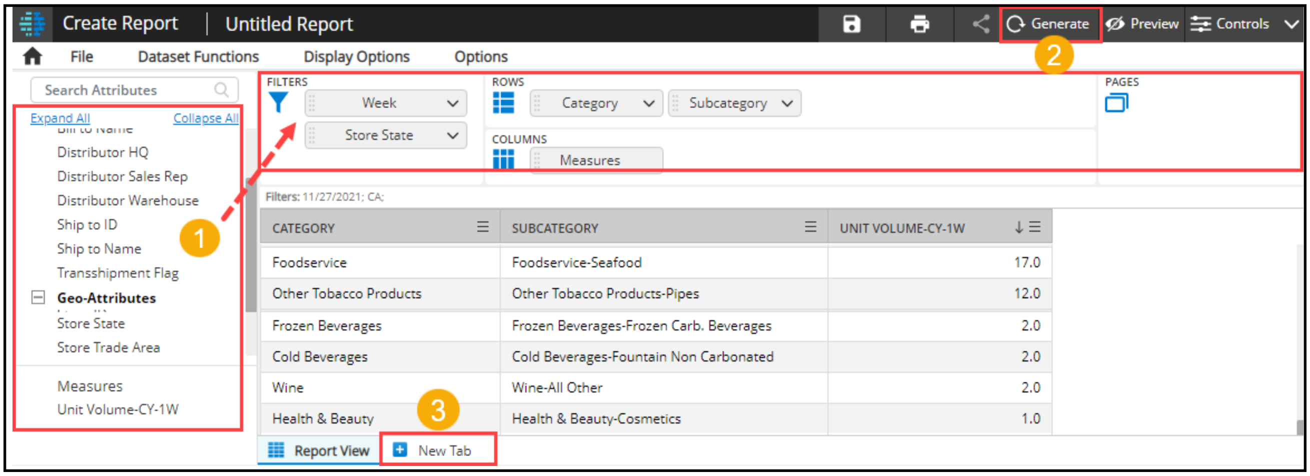
6. **Options** - Use this menu option to show/hide data labels, set target values, enable scroll bar and so on.

7. **Left Panel** - This panel displays the Report dimensions used to create the chart. You may move these Attributes by interchanging their positions among rows, columns, pages, and grid and accordingly, the data representation in the chart changes.

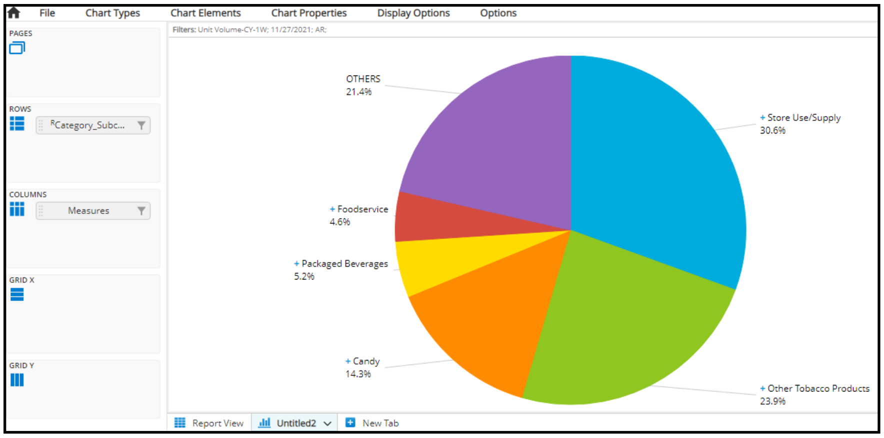
8. **Tabs at the Bottom** - Click the **Report View** tab to visit/change the data Report. Click **New Tab** to add a new chart type to the Report. After you add a chart type, you can rename, duplicate or delete it by clicking the down arrow of the tab. and selecting the corresponding option from the menu.

Create Chart

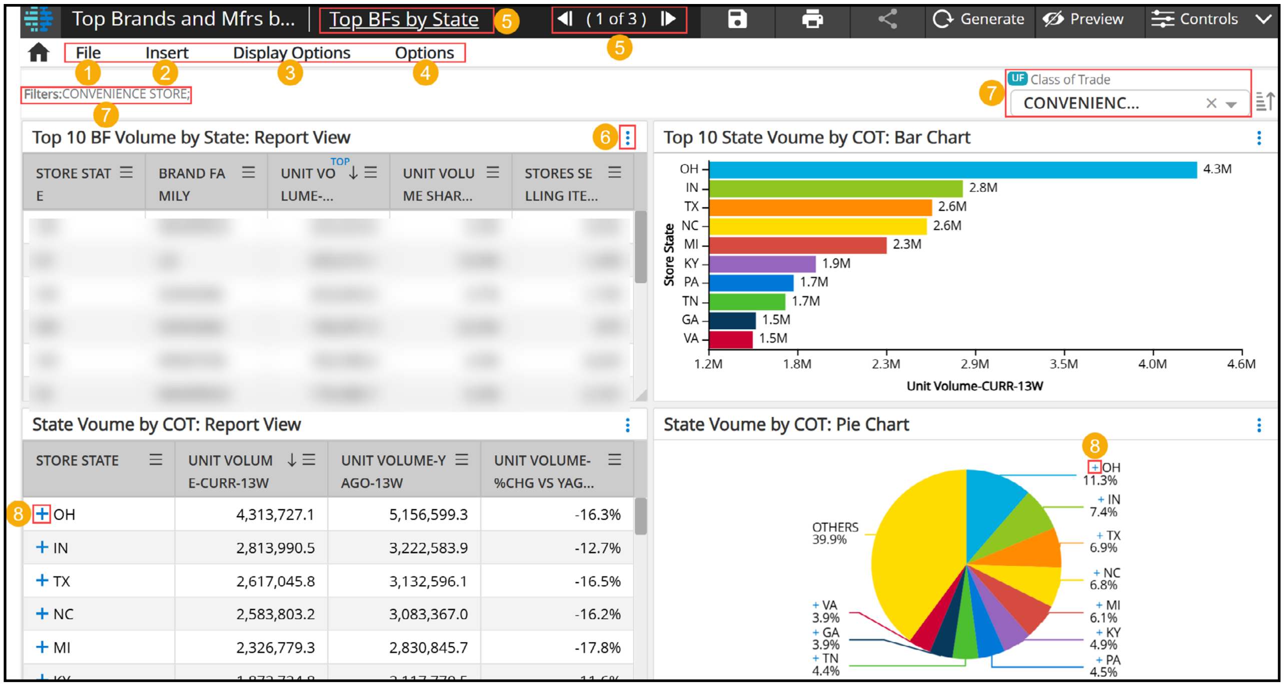
1. On the **Create Report** screen, drag the desired Attributes from the left panel onto the **row**, **columns**, **pages**, and **filters** areas.
2. Click **Generate**.



3. After the Report is generated, click the **New Tab** placed beside the Report View tab.
4. Select the appropriate **Chart Type** from the menu. Options may be limited based on the data in the Report view.
5. The system processes the request and presents the Report in the selected chart format.



Storyboard Screen Walkthrough



1. **File** - This menu provides options to save, publish, schedule, and export a Storyboard. Some menu options are available only to the asset owner.

2. **Insert** - This menu provides options to add a Report, Static Object, Dashboard title, new Dashboard or an existing Dashboard to the Storyboard.

3. **Display Options** - Use this menu to specify the display options with respect to User Filters and the scroll bar.

4. **Options** - Use this menu to rename Storyboard and/or Dashboards, manage User Filters, manage Dashboards, and so on.

5. **Dashboard Navigation** - Click the navigation arrows to walk through multiple Dashboards within a Storyboard. Alternatively, click the Dashboard link to directly navigate to a specific Dashboard in a Storyboard.

6. **Ellipsis** - Click the respective ellipsis icon to modify the corresponding Report widget individually. It enables you to:
   - Open a Report widget in full screen to modify.
   - Edit/format the border, title, display filters, display source, and dimensions of a widget.
   - Use the **Change Report** option to replace a Report widget with a new Report.
   - Specify locks on certain Report widgets.
   - Link a Report widget to an asset.
   - Link a Report widget to an external URL.
   - Delete a Report widget.

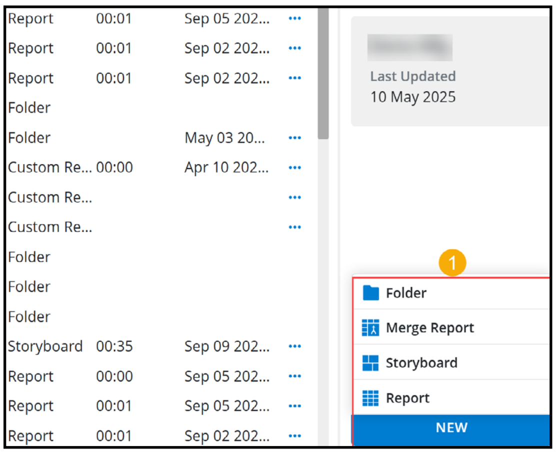
7. **User Filters** - Any User Filters that are currently applied to a Storyboard are displayed in the Filters line on the top of the screen above the Reports. User Filter values can be selected/unselected through the corresponding section for each filter located in the top right of the screen. You can clear currently applied filters by clicking on the X icon in the corresponding UF menu, or you can click on the down arrow icon and select a new filter option from the dropdown menu that appears.

8. **Plus Icons** - Some Storyboards will have blue plus icons next to the data signifying that they are part of a Hierarchy and drilling is enabled. Clicking on these blue plus icons/the desired section of the chart will allow users to drill down to lower levels of the Hierarchy as defined by the Report owner.

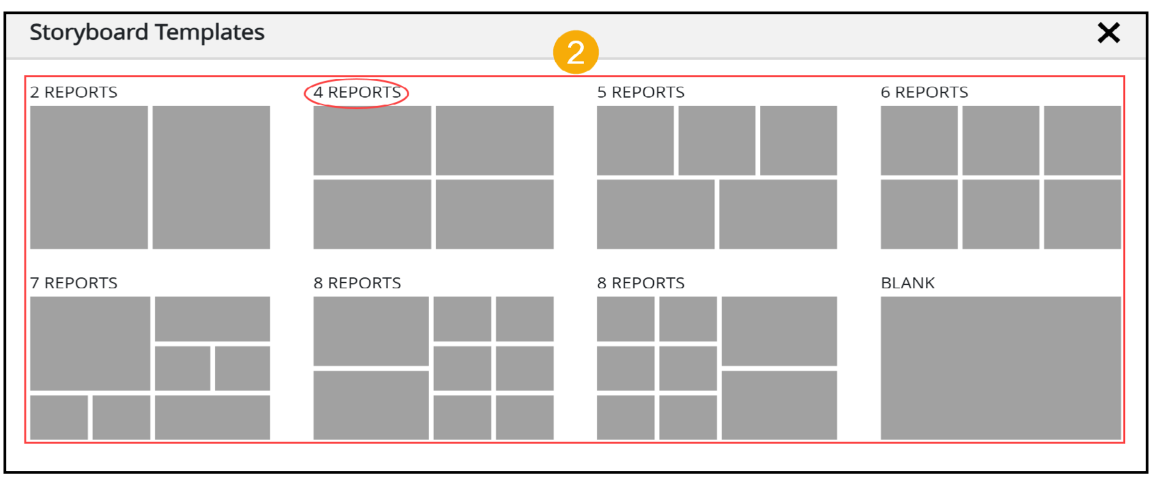
Create Storyboard

In this guide we will demonstrate how to create a Storyboard. A Storyboard is comprised of Dashboards. Dashboards are comprised of Reports/charts and Static Objects (often used as titles or informational text).

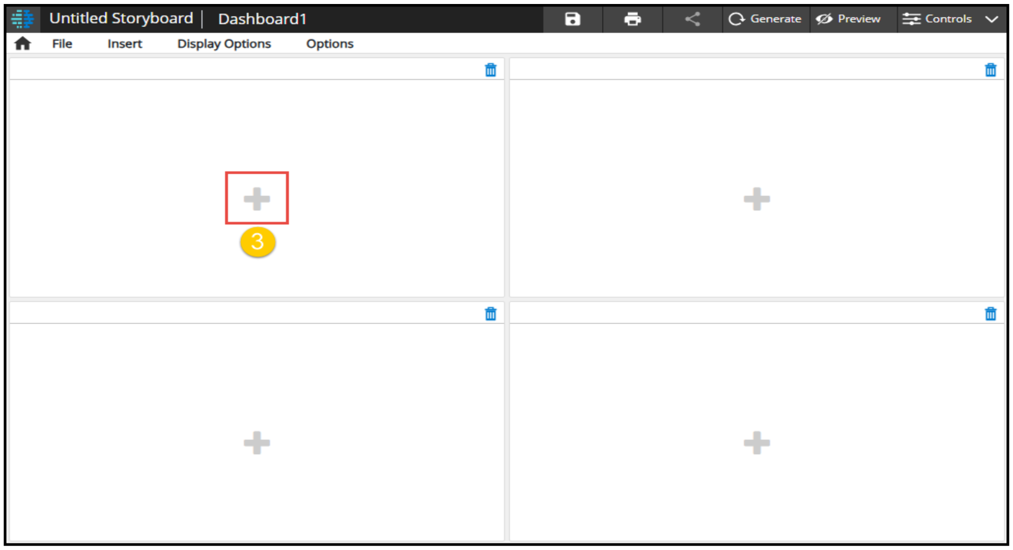
1. On the **Home** screen, click the **New** button located in the bottom right corner and select the **Storyboard** option from the menu.



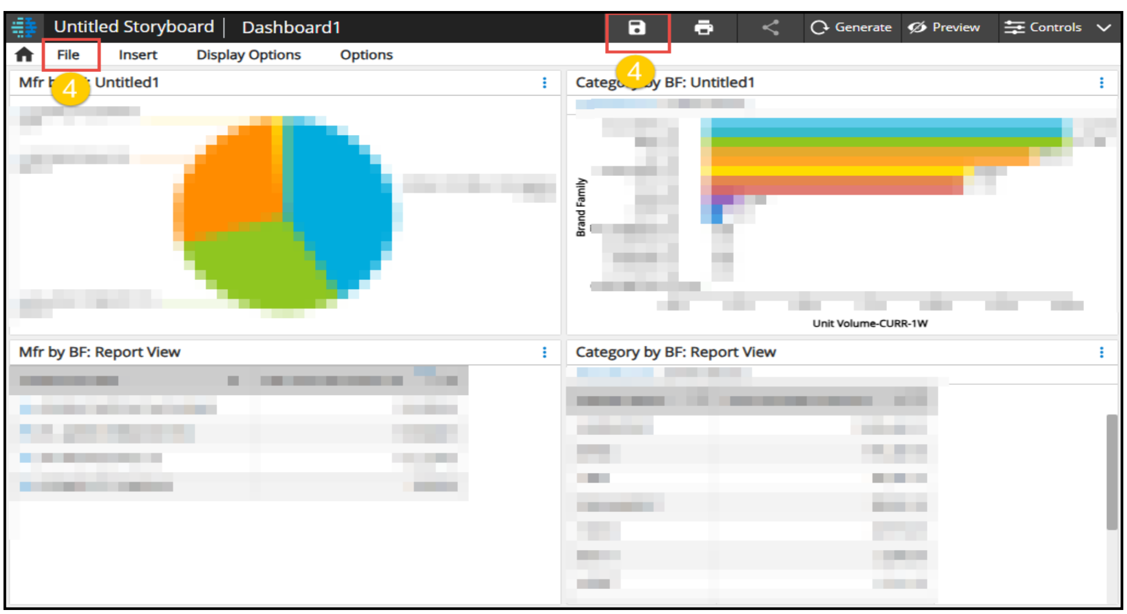
2. Select the desired **Storyboard template**.



3. Click the **Plus** icon to add a desired Report into the Dashboard. Repeat the step until you add Reports to all the placeholders. Or, if you selected a **Blank** template, click the **Insert** -> **Report** option to add one Report at a time. In any template, Reports can be resized by dragging and dropping the edges of a widget.



4. Click **Save** via the File menu or use the Save button in the top-right corner.



Offline Viewer

Introduction

The Dhiva Offline Viewer allows users to download Reports to their browser cache and view them in Dhiva regardless of whether they are connected to the internet. The Offline Viewer is available to all Dhiva users, though users licensed as Offline Users will only have access to the Offline Viewer module.

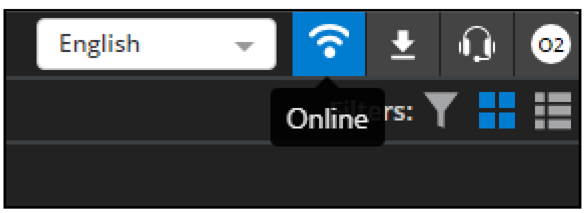
Key Features of the Offline Viewer Module

With an internet connection:
- Download, view, and interact with Reports and Storyboards.
- Change chart types or create temporary charts.
- Export downloaded Reports and Storyboards.
- Download export files scheduled by other users.

Without an internet connection:
- View and interact with Reports and Storyboards that were previously downloaded when connected to the internet.*

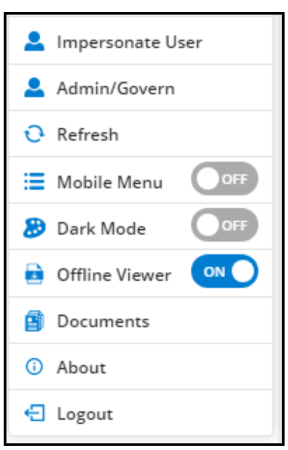
* Requires use of the same device and browser.

There is an indicator of online/offline status in the application status bar.

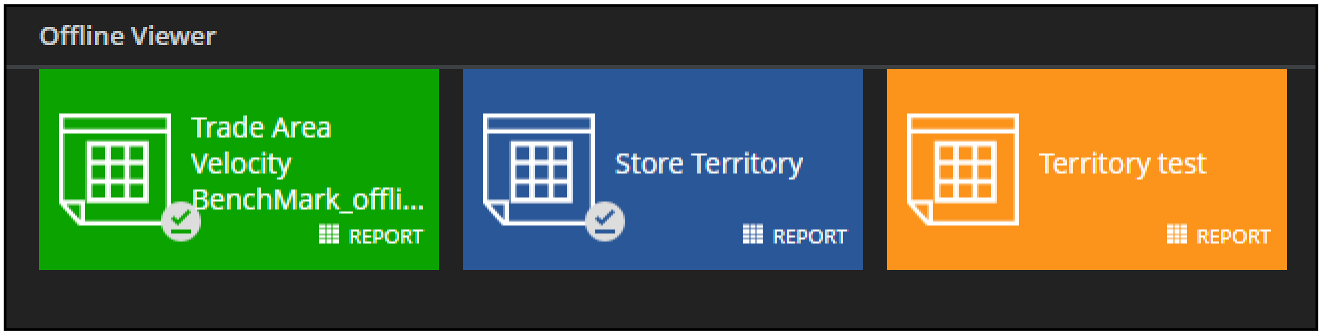


Accessing the Offline Viewer

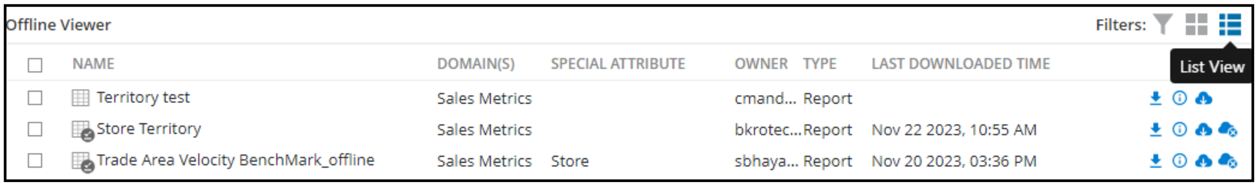
Producer and Consumer users can access the Offline Viewer using the menu under their initials in the upper right corner of the page.



Offline Licensed Users (Offline Users) will load the Offline Viewer in Tile View upon logging into Dhiva. This initial screen shows assets that are available to the user. There is text and an icon bottom right corner of the tiles which indicates whether the asset is a Report or a Storyboard. A checkmark on a tile indicates that the asset has been downloaded to the local cache.



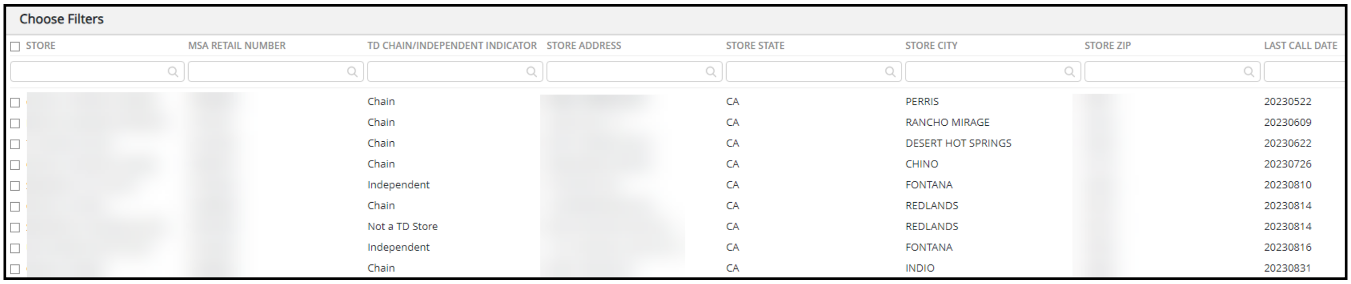
The List View provides a more detailed view of the available assets including the data domain, asset owner, presence of a Special Attribute, and last download time. Icons at the right provide the ability to export or download assets, view information, or delete the Report previously downloaded.



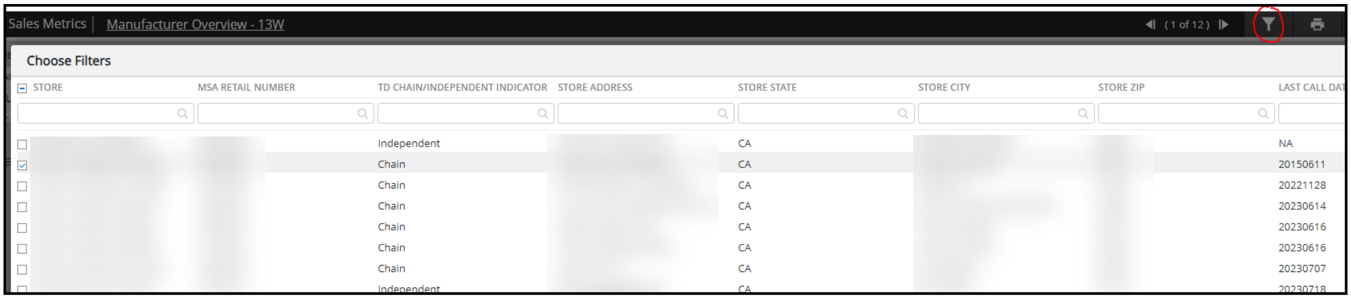
Downloading Assets

To download a Report or Storyboard, click on the name of the Report or the **Download** icon. The assets are downloaded to the local browser cache. Once an asset has been downloaded, it will remain available for use without an internet connection, provided that Dhiva is accessed via the same device and browser used to download the assets and the cache has not been cleared.

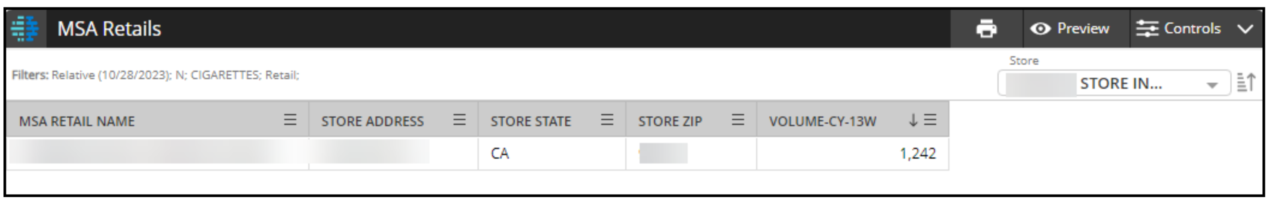
If a Special Attribute is present, an additional screen will prompt users to select members of the Special Attribute to download. Stores acts as a Special Attribute in most scenarios. The search options at the top of each column can be used to filter the list. Up to 10 stores can be selected.



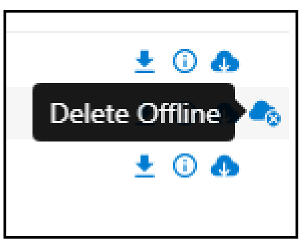
When selecting multiple stores from the download pop-up window of a Storyboard, use the **Funnel** icon to select an individual store from those that have been downloaded.



When the Report layout has stores on pages, a dropdown menu in the upper right corner allows users to switch between stores if they have more than one store downloaded.



To delete a downloaded asset from the browser cache, click the **Delete Offline** button in list view.

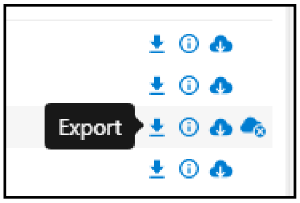


Exporting Assets

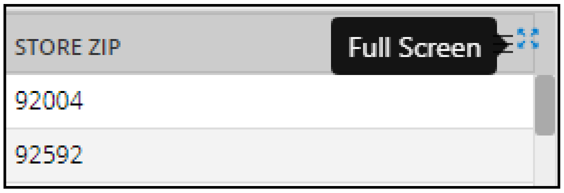
Reports and Storyboards available in Offline Viewer can be exported to other file types. Reports can be exported to Excel, CSV, PDF, or PPT; Storyboards can be exported to PDF or PPT.

There are several methods users have access to in order to export a Report or Storyboard:

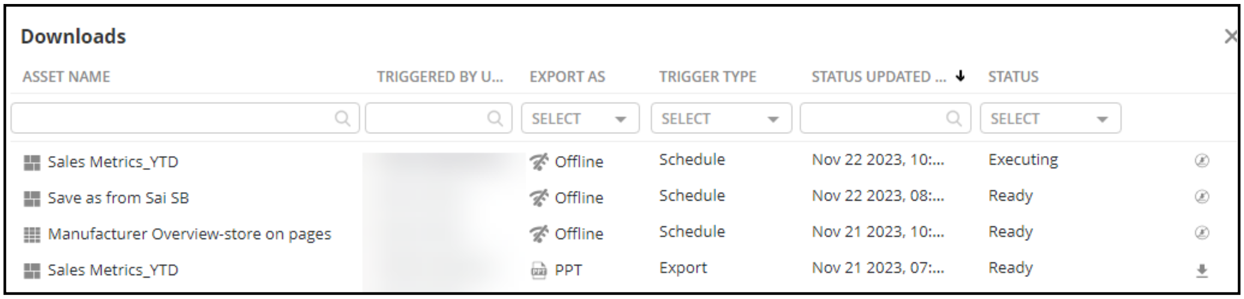
- **Right-click** on the asset name in the list view.
- Click on the **Export** icon next to the asset.



- Exit Preview mode, and select **Export** from the File menu.
- If the asset contains a Special Attribute, users will be prompted to select stores to export. This is recommended to avoid failed exports due to file size limitations.
- To export a single Report or chart from a Storyboard, use the full screen icon in the upper right corner of the Report users wish to export, exit preview mode, then choose **Export** from the File menu.

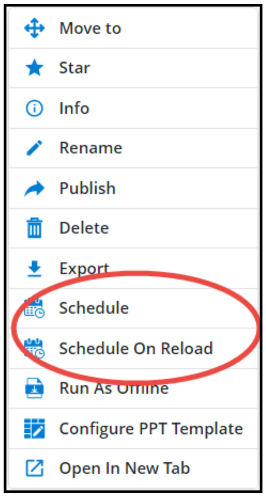


The Download Manager can be used to view the status of assets scheduled for offline use and to download any documents (Excel, PDF, PPT, etc.) scheduled to the account or exported by the user.

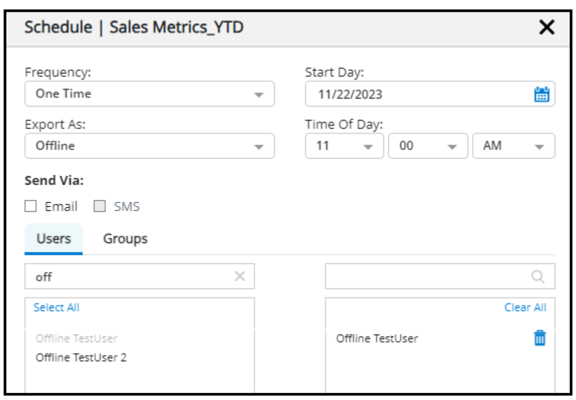


Enabling Content for the Offline Viewer

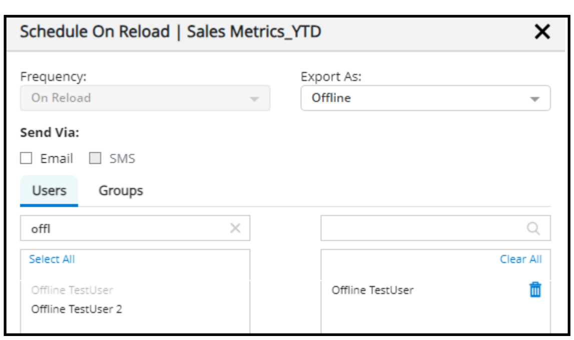
A user must be a Producer user in order to enable a Report or Storyboard for offline use. To enable an asset for offline use, users are able to use either the **Schedule** or **Schedule On Reload** menu option from list view or right click on the asset.



Under the **Schedule** options, choose Export type as **Offline**, then select when and how often the Report will be scheduled to be sent to the Offline Viewer, as well as listing other potential offline recipients.



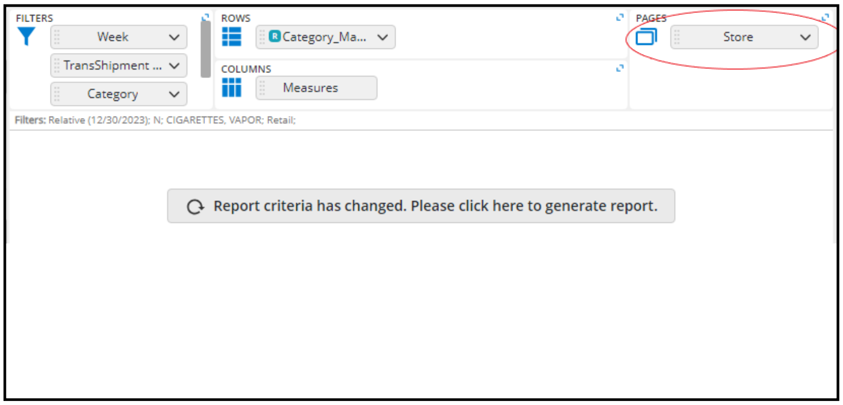
Note: *To run the Report after each data refresh instead of scheduling it on a set frequency, select* ***Schedule On Reload****.*



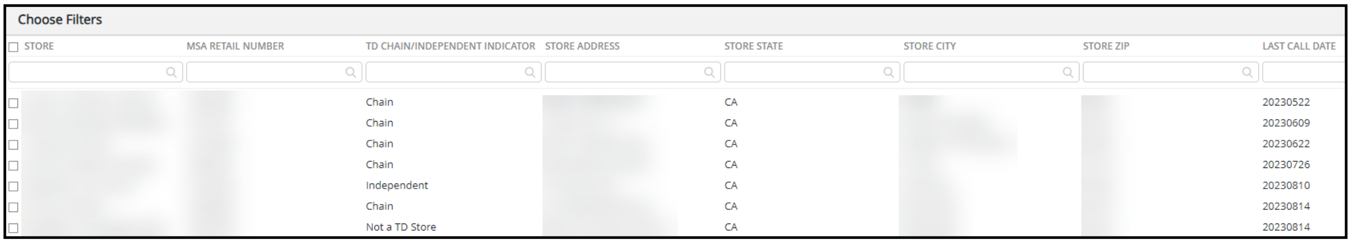
Special Attribute

The Special Attribute is typically a store Attribute such as Store Number that has been configured to enable store level reporting. The presence of this Attribute on rows, columns, or pages of a Report will prompt the download pop-up window to appear when a user tries to download an asset with a Special Attribute.

An example of a Report with a **Store Special Attribute** on pages is shown below:



Additional Store Attributes such as Store State, City, Address, Zip, Type, etc., appear in the download screen along with the Special Attribute and can be configured to help narrow the selection of stores available to download.



Choose Filters

STORE	MSA RETAIL NUMBER	TD CHAIN/INDEPENDENT INDICATOR	STORE ADDRESS	STORE STATE	STORE CITY	STORE ZIP	LAST CALL DATE
		Chain		CA			20230522
		Chain		CA			20230609
		Chain		CA			20230622
		Chain		CA			20230726
		Independent		CA			20230810
		Chain		CA			20230814
		Not a TD Store		CA			20230814

Notes on Special Attributes:

- The Special Attribute will not prompt the download pop-up screen to appear when used in a Hierarchy.
- A Storyboard may contain Reports with and without the Special Attribute. Only Reports with the Special Attribute will be filtered when the asset is downloaded in the Offline Viewer.
- Consult your MSA client representative for information about using Special Attributes in your Dhiva environment.

Assumptions and Limitations of the Offline Viewer

- User filters will not function in the Offline Viewer. The UF will appear on the Report if enabled but will be grayed out.
- Report links and other links do not work in Offline Mode. The underline that indicates a clickable link will not appear in the Offline Viewer.
- Merged Reports cannot be scheduled for offline use.
- Report data limits apply; Reports with assets exceeding the data limits will fail when scheduled for offline use.
- Offline users cannot refresh Reports on their own. Recommended practice is for the Producer to use the **Schedule On Reload** option so that the latest data is available when using the Offline Viewer.
- Folders are not available in the Offline Viewer.
- If a Special Attribute is present in a Hierarchy, it will not prompt the download pop-up store selection screen to appear.
- Nested, Replacement, and Stacked Hierarchies can be used in the Offline Viewer.
- Offline Viewer is not supported on smart phones.
- Offline users can add charts or change chart type while connected to the internet. These changes are temporary and will not be retained after closing the asset or when disconnected from the internet.

Artifact Color/Access

Artifacts

An Artifact is a user-defined entity. This includes Groups, Lists, Conditional Lists, Hierarchies, Stubs, and Measure Groups (see respective QSGs for additional information on each).

In many cases, Artifacts function as system-defined Attributes. For example, they can be placed on the Report Layout, added to Hierarchies, etc.

One difference between Artifacts and system-defined Attributes is that Artifacts are indicated with a small icon as shown below. The indicators/icons in Dhiva represent the type of Artifacts (including if it is "Dynamic") and its Artifact Type. Where system-defined Attributes are available to all users who have access to that domain, Artifacts can be Personal (blue), Global (green), or Report-specific (grey). This document will explain what each Artifact Type means.

All the Artifact icons and what they represent are listed below:

N – Nested Hierarchy
R – Replacement Hierarchy
S – Stacked Hierarchy
MG – Measure Group
ST – Stub

CL – Conditional List
DG – Dynamic Group
G – Group
DL – Dynamic List
L – List

Personal

A **Personal Artifact** is only visible/usable by the current user and will be denoted by a blue icon:

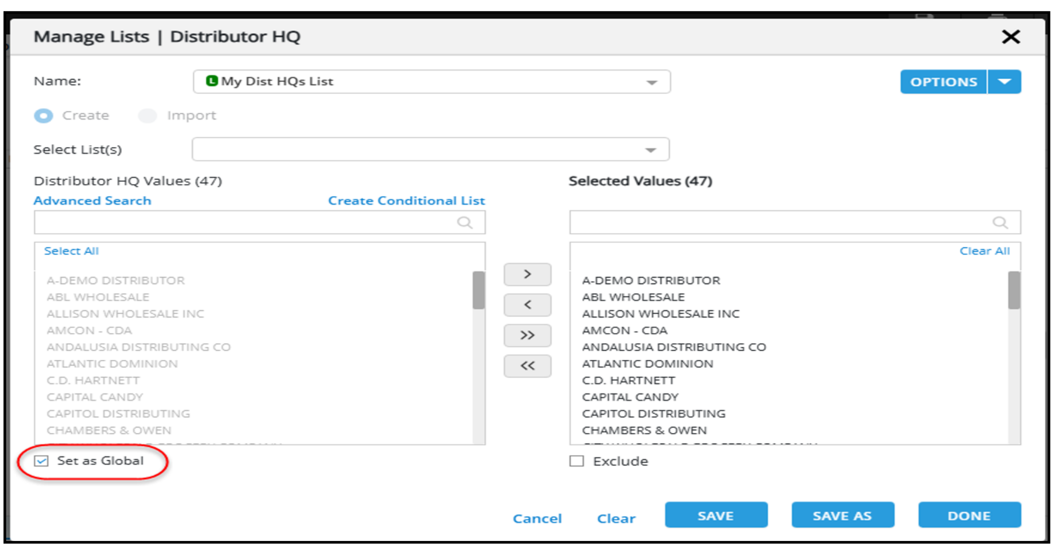
This is the default setting when creating any Artifact. A Personal Artifact will only be displayed in the left-hand panel for the owner's account. Likewise, only the Artifact owner can use it when creating assets.

Global

A **Global Artifact** is one that is shared with all users of that domain and will be denoted by a green icon:

An Artifact is made global by the owner selecting "Set as Global" in the Artifact's "Manage" window. This ability is available only to administrative users in Dhiva.

Global Artifacts are listed in the left-hand Attributes panel for all users with access to the domain in which the Artifact was created. They can be used by any user, but only the Artifact's owner can modify it.



To request a new Global Artifact or any edits to existing Global Artifacts on your client's site, please contact your Client Relations team.

Report-Specific

In addition to the saved Artifact types discussed above, Producers can also make temporary edits to Personal or Global Artifacts from the Report layout. These Artifacts will not be saved to the left-hand panel for use in other Reports. This results in a **Report-specific** Artifact, denoted by a grey icon:

The "Report-specific" editing feature is only available for Hierarchies, Lists, Conditional Lists, and Groups. It is not available for Measure Groups or Stubs.

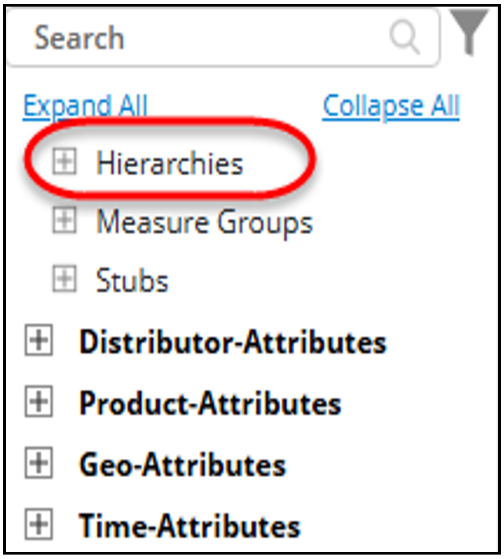
Managing Report-Specific Artifacts

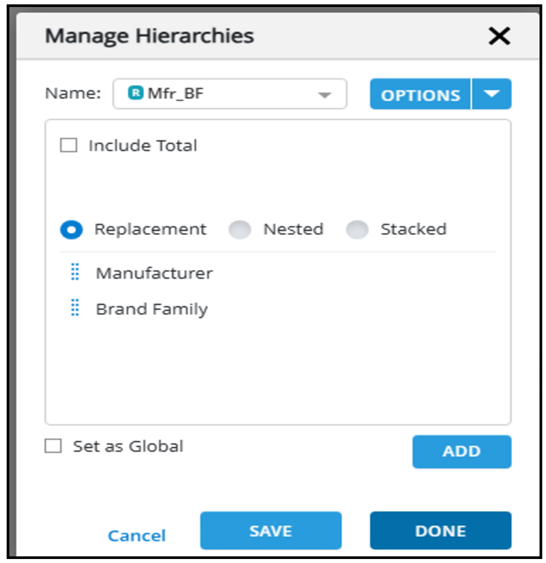
The method used to create and manage a Report-specific Artifact depends on the Artifact type. The next sections have information on the different procedures.

Hierarchies

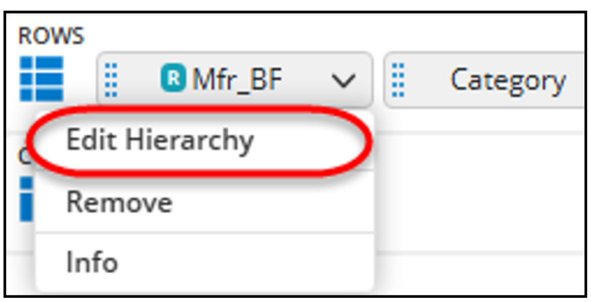
One method to create a Hierarchy involves dragging-and-dropping Attributes on top of one another. When creating a Hierarchy using the drag-and-drop method, the Hierarchy will automatically become Report-specific. This Hierarchy will not be listed in the Attributes panel for use in other Reports.

In addition to the drag-and-drop method of creating Hierarchies, Producers can also create and save Hierarchies in the "Hierarchy" section of the Attributes panel.





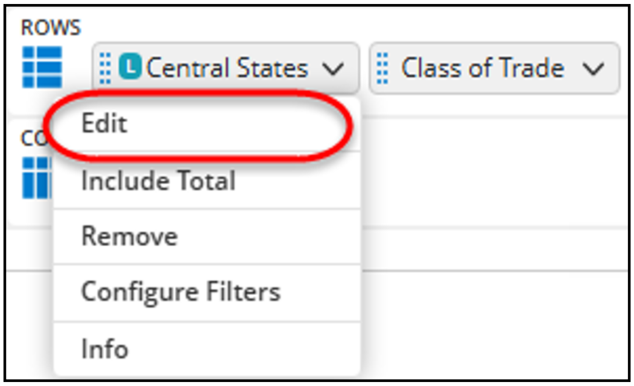
When using a saved Hierarchy on a Report, the Edit Hierarchy option is available in the dropdown menu. Performing an edit on a Hierarchy via this method will automatically create a Report-specific copy of the Hierarchy. Limited functionality is available in this Edit option, compared to the full Manage Hierarchy window.



Note: *To edit and save changes to a saved Hierarchy, changes must be made in the* ***Manage Hierarchies*** *menu accessed via the left-hand Attributes panel.*

Other Artifacts

When a saved List, Conditional List, or Group is placed on a Report, Producers have the ability to Edit this Artifact via the Artifact's dropdown menu when clicked on the Report Layout. Users can make modifications to Artifacts this way, such as adding/removing Attributes.



After making modifications, the user can retain changes made to the Artifact by selecting Save, Save As, or Apply.

Note: *If a user wants to create a Report-specific Artifact from a Global Artifact owned by someone else, they must first perform a "Save As" in order to have the "Save" or "Apply" options available.*

Cancel will discard any changes and close the dialogue window.

Save and **Save As** function similar to saving a Report/Storyboard in Dhiva. Using Save will update the existing Artifact, thus overwriting it in the left-hand panel. On the other hand, Save As will save a copy of the Artifact to the left-hand panel with the current changes applied and leave the original Artifact unchanged.

The **Apply** button allows Producers to create ad hoc changes without overwriting the original Artifact by making the Artifact Report-specific.

By selecting "Apply", the new version of the List/Group will not be added to the left-hand Attributes panel. Instead, this modified Artifact (now with a grey indicator) will replace the previous Artifact on the Report Layout.