Salient Dashboards

Training Guide

for Dashboard Designers

Version 8.6

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Limited warranty

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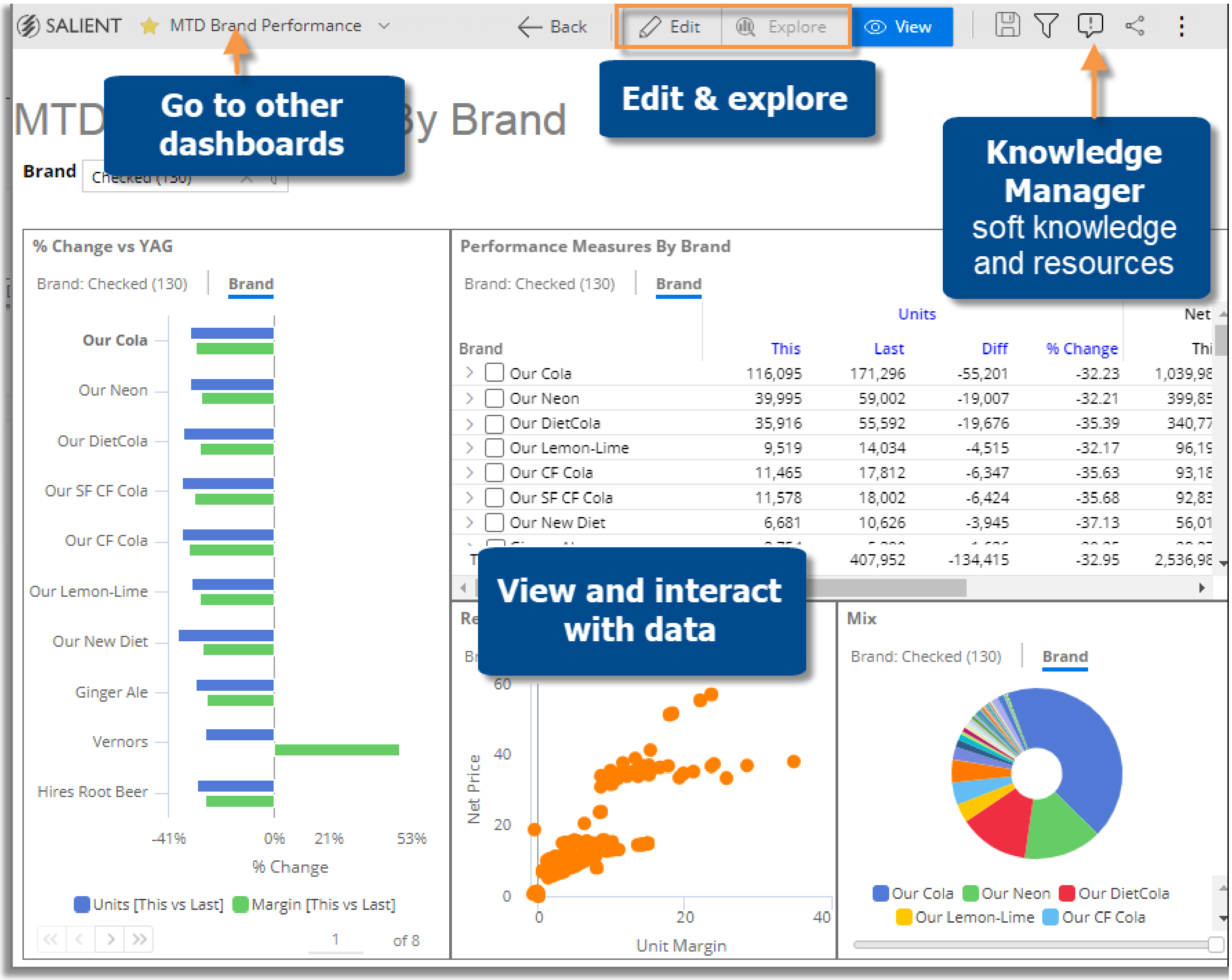
Introduction

About Salient Dashboards

The Salient Dashboards application enables your team to create and access interactive, consolidated visualizations of decision support intelligence in a browser for consumption from any computer or mobile device.

Like Salient's other applications, dashboards start with UXT® technology, which transforms huge volumes of data into a highly-optimized analytical data mart. Salient Dashboards provides role-based access to dashboard building, viewing, and exploring capabilities. Dashboard Designers can create and publish dashboards in "edit" mode using a variety of widget types (Comparative, Trend, Scattergram, etc.) and options to provide the exact information users need—from an overview of the entire organization down to a single fact. Users can then view and interact with the customized dashboards and, if they wish, go on to perform their own data investigation in "explore" mode. Portal dashboards provide easy access to dashboards. In addition, a mobile application is available to provide touch-enabled access on mobile devices.



Overview of dashboard creation

The following is a general process for creating dashboards.

1. Choose a starting point for dashboard creation.

Create a new dashboard or open a dashboard with similar characteristics to the one you want to create (i.e., template). You can also import dashboard options (see page 31) and copy widgets (see page 17) from other dashboards to facilitate dashboard creation.

2. Set up layouts.

Set up layouts (see page 10) for optimal display on different devices. In general, the desktop/tablet layout will be used when viewing a dashboard in a browser window, and the phone layout (optional) will be used in the Salient mobile app.

3. Add content widgets.

You can add widgets, such as tabs (see page 19), images (see page 29), text/HTML (see page 23), buttons (see page 25), lines (see page 26), dashboard widgets (see page 27), and Knowledge Manager widgets, that help with the overall design. These widgets may be added before or after data analysis widgets. Some content widgets do not display in the Salient mobile app.

4. Add and customize data analysis widgets.

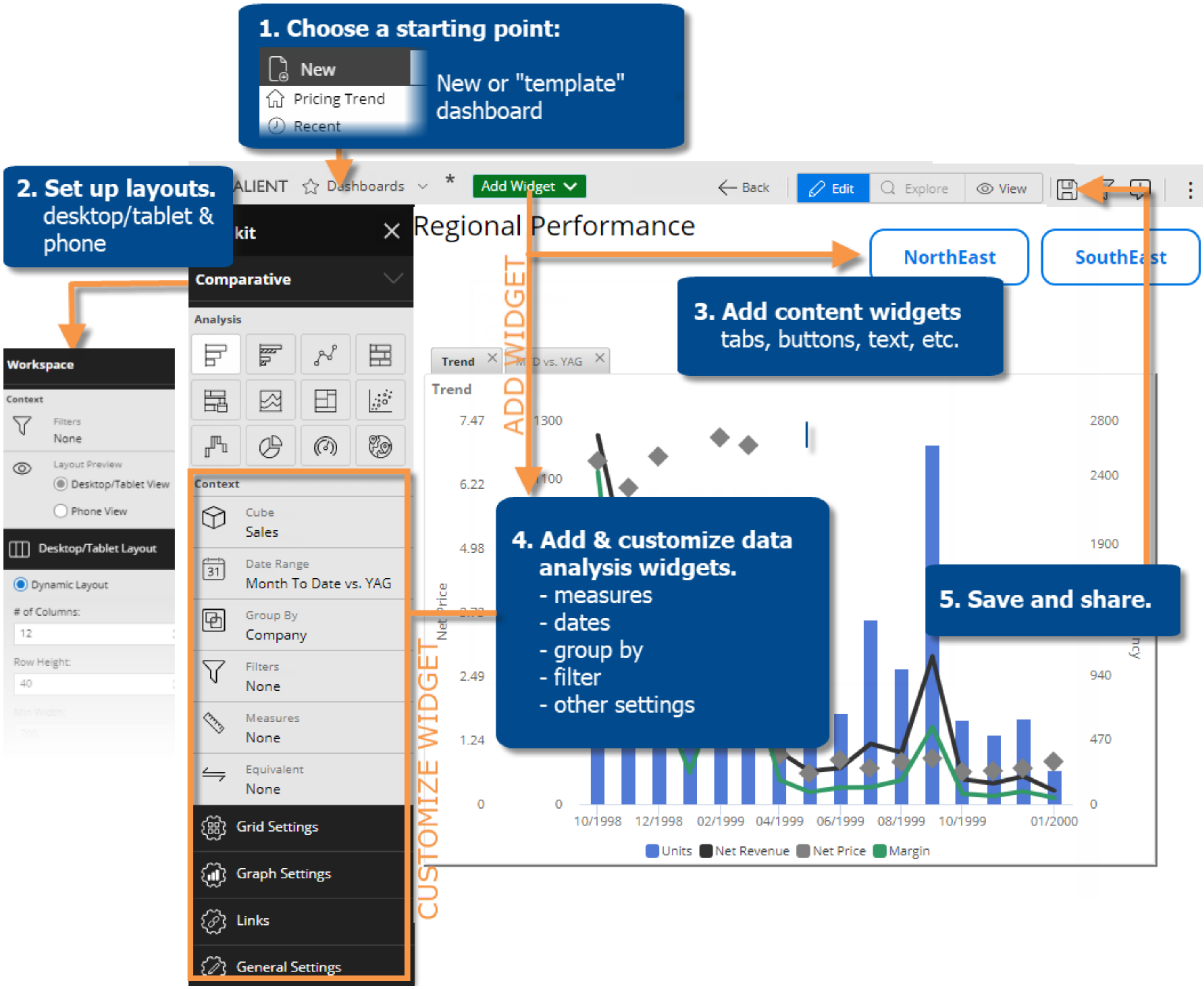
These widgets display data to help users make better decisions. A variety of analysis types are available. For each widget, perform the following steps:

> **Tip:** If a similar widget already exists, you can copy it to eliminate some setup.

1. Add a data widget (see page 17).
2. Add measures (see page 38).
3. Select the dates (see page 45) (Dates may be linked across the dashboard.)
4. Group by attributes (see page 52).
5. Filter (see page 69) (Filters may be applied to the entire dashboard at once via workspace filters.)
6. Customize by sorting (see page 66), highlighting (see page 101), changing widget settings, etc.
7. Place the widget in the desired location for each layout (see page 10). To switch between desktop/tablet and phone layouts, go to workspace settings in the toolkit and make your selection under **Layout View**.

5. Save and share the dashboard.

We recommend saving the dashboard as you build it to avoid losing any changes (e.g., save as private until you are ready to share it). When the dashboard is finished, save it in the desired location (see page 106). Other users have access to "published" dashboards. You may also share a dashboard's URL, create links to the dashboard, or use other methods of sharing.

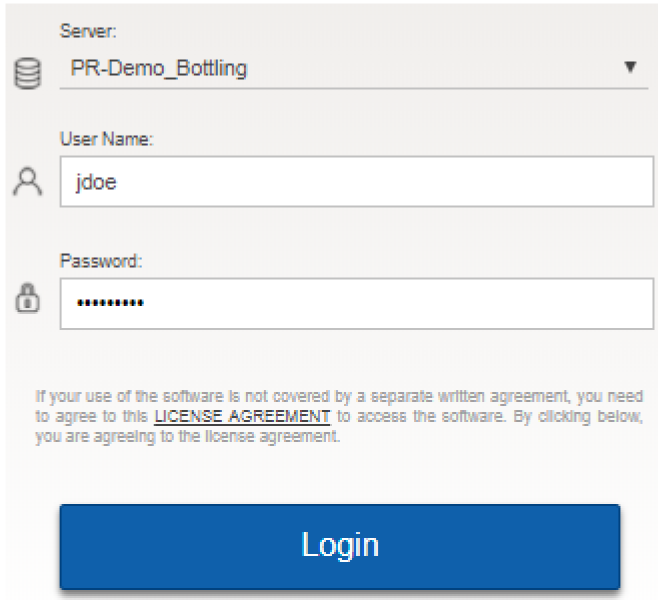

1. Choose a starting point:
New
Pricing Trend
Recent
New or "template" dashboard
2. Set up layouts. desktop/tablet & phone
3. Add content widgets tabs, buttons, text, etc.
4. Add & customize data analysis widgets.
- measures
- dates
- group by
- filter
- other settings
5. Save and share.
ADD WIDGET
CUSTOMIZE WIDGET
Regional Performance
NorthEast
SouthEast
Add Widget
Back
Edit
Explore
View
Workspace
Context
Filters
None
Layout Preview
Desktop/Tablet View
Phone View
Desktop/Tablet Layout
Dynamic Layout
# of Columns:
Row Height:
Comparative
Analysis
Context
Cube
Sales
Date Range
Month To Date vs. YAG
Group By
Company
Filters
None
Measures
None
Equivalent
None
Grid Settings
Graph Settings
Links
General Settings
Trend
Units
Net Revenue
Net Price
Margin

Getting started

Log in

Before you can use Salient Dashboards, you must log into a dataset. Contact your administrator if you don't know your user name and password or the login page URL.

1. In your web browser, go to the address of the Salient Dashboards login page.
2. From the **Server** menu, select a dataset.
3. *For classic login* (i.e., credentials entered directly in Salient Dashboards), enter your user name and password. Then, click **Login**.



External/SSO authentication: Click the **SSO Login** button. If you are not already logged in, the next screen will allow you to enter your user name and password and **Sign in**.

LDAP login (i.e., machine login used for authentication): The user name and password entries may not be needed.

Tips:

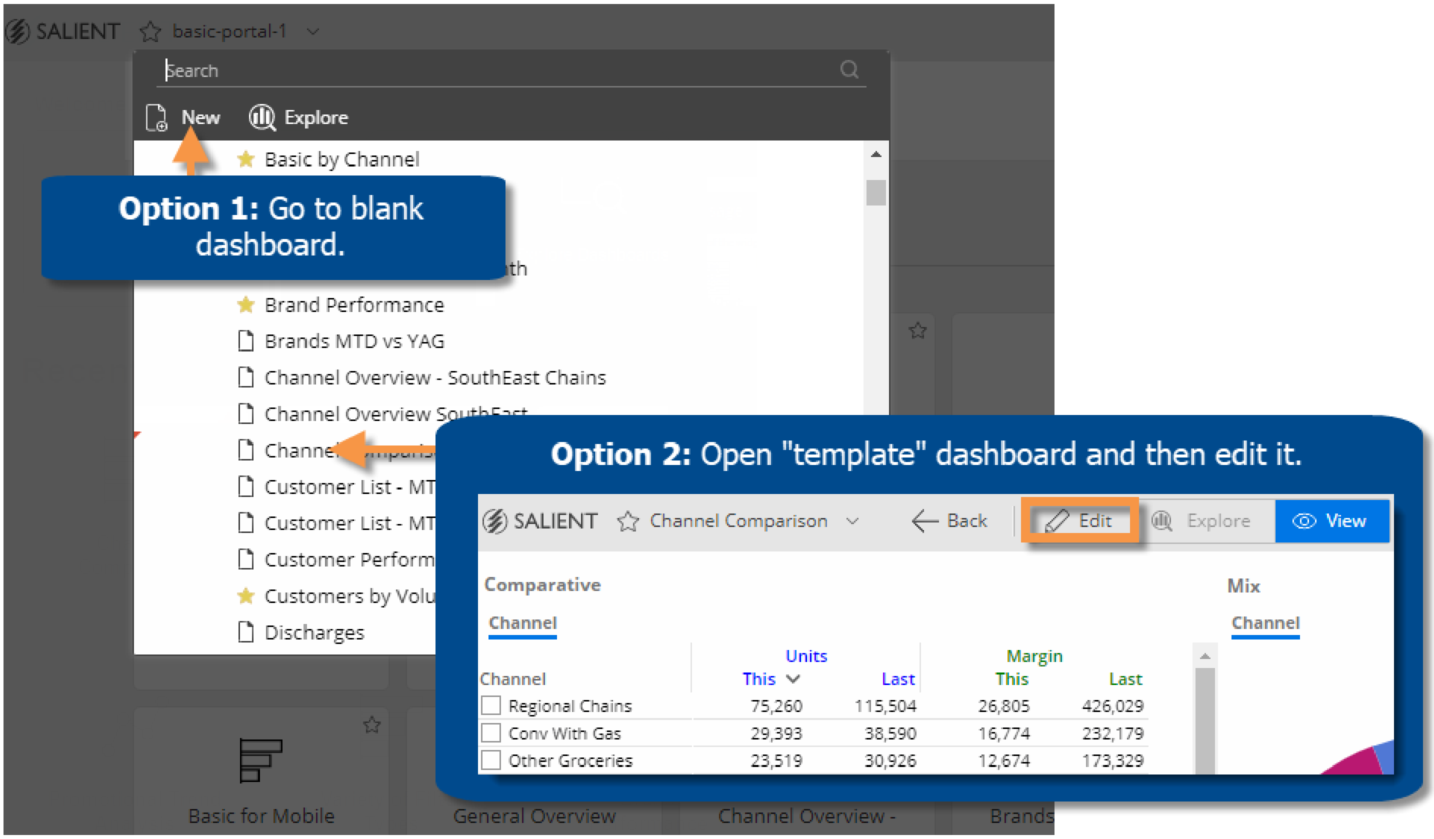
- The portal dashboard opens after login unless you have entered a URL for a specific dashboard or changed the home page in user preferences.
- In general, Salient recommends Google Chrome™; however, other browsers are supported.
- A dataset may be configured for a specific language. In this case, the login page will immediately switch to that language after it is selected.
- The first login is typically the slowest due to the downloading and caching of application files.
- Do not attempt to log in to the same dataset more than once at the same time using the same user ID. Multiple logins are not supported.
- You can log out at any time by clicking ⋮ in the upper-right corner of the dashboard screen and selecting **Logout**.

Choose a starting point for dashboard creation

You might start building from a blank dashboard, or a dashboard with similar properties to the one you want to create. Either way, you must be in edit mode to add widgets. Only Dashboard Designers can access edit mode.

Option 1: In the dashboards menu, click **New** *(keyboard shortcut: n*) to go to a blank dashboard in edit mode.

Option 2: Open a specific dashboard and then click the Edit button at the top of the screen.



General dashboard design

When designing a dashboard, you should set up layouts (see page 10) for optimal display on different devices. You can then create widgets (see page 17) and arrange them in the dashboard. Many different types of widgets are available to design customized dashboards that meet the needs of every user:

- *Content widgets:* tabs (see page 19), images (see page 29), text/HTML (see page 23), buttons (see page 25), lines (see page 26), dashboard widgets (see page 27), and Knowledge Manager widgets - These widgets improve the appearance and functionality of the dashboard.
- *Data analysis widgets:* Comparative, Multi Comparative, Trend, Share Trend, Mix, Gauge, Scattergram, etc. - These widgets display data to help users make better decisions.

Layout settings

A dashboard can have two separate layouts to optimize its appearance on different devices.

Desktop/tablet layout (see page 11)

This layout is used any time the dashboard is opened in a browser whether it is on a desktop, tablet, or phone.

The desktop/tablet layout may also be used in the mobile app on wide screens (e.g., tablet or landscape orientation) depending on layout settings.

Phone layout (see page 14)

If enabled, this layout controls the dashboard's appearance in the Salient mobile app on a phone or tablet below a specified screen size.

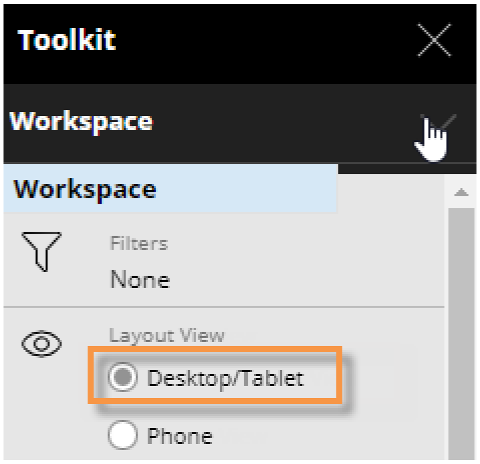
Each layout stores its own arrangement of the dashboard's widgets in addition to other settings, as explained in the following sections.

As you design dashboards, consider the best placement of each widget in both layouts. In general, the recommended process for adding a widget would be to place the new widget in the desired location in the desktop/tablet layout, switch to the phone layout (if used), place the widget in the desired location in that layout, and then save your changes.

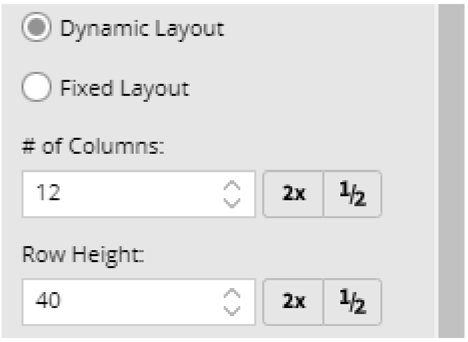
Desktop/tablet layout

To set up the desktop/tablet layout

1. In edit mode, open the dashboard you want to design, or start a new dashboard.
2. Select the workspace by clicking in a blank area of the dashboard and selecting **Workspace** in the toolkit menu, or pressing **w** on the keyboard.
3. Under **Layout View**, choose **Desktop/Tablet**.



4. In the **Desktop/Tablet Layout** section of the toolkit, choose a dynamic layout or fixed layout and select from the following options.



Option 1: Dynamic layout

In a dynamic layout, the widgets will dynamically resize relative to the width of the browser window or screen.

# of columns - Choose the number of columns (i.e., vertical grid) for arranging widgets. (Widgets can span multiple columns.) A larger number will provide more precise control over the layout; however, an unreasonably large number may affect performance.

Row height - Choose the row height (i.e., horizontal grid) in pixels. A smaller number will provide more precise control over the layout. (A widget can span multiple rows.)

> **Tip:** For **# of columns** or **Row height**, you can enter a number, use the arrow buttons to increase/decrease the number, or click the **2x** or **1/2** buttons. However, these methods affect existing widgets differently (see page 10).

For **Min width** and **Max width**, specify the minimum and maximum width (in pixels) of the dashboard. Widgets will dynamically resize when the browser window or screen is within this range.

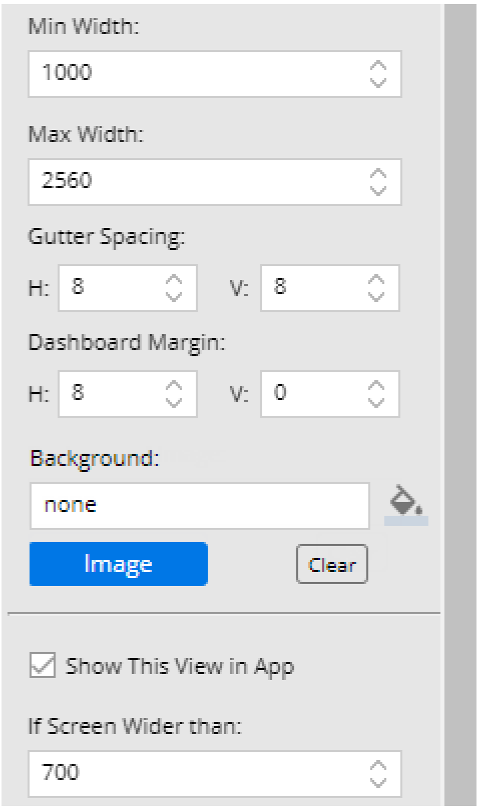
Gutter Spacing - To add space between columns, enter a horizontal (H) value in pixels. To add space between rows, enter a vertical (V) value in pixels. Gutter spacing can be used to add a uniform amount of space between widgets. Note that widgets that span multiple rows/columns will also include the gutters.

Dashboard Margin - To add space on the sides of the dashboard, enter a horizontal (H) value in pixels. To add space at the top of the dashboard, enter a vertical (V) value in pixels.

Background - Optionally, select a background image and/or color for the dashboard. The background will appear behind widgets and work with widget transparency (in general widget settings).

To choose an image, click the **Image** button and select from the Image Manager. The background image will repeat to fill the dashboard area. If the background image has transparency, the background color will display behind it.

To choose a background color, click and pick a color from the palette or enter a custom HEX value.



Show This View in App - To use this layout in the Salient mobile app, check this box and enter a screen width (in pixels) above which the mobile app will use the desktop/tablet layout. The mobile app will use the phone layout (see below) when the screen width is below this value. In general widget settings, you can optionally hide any of the widgets in the mobile app.

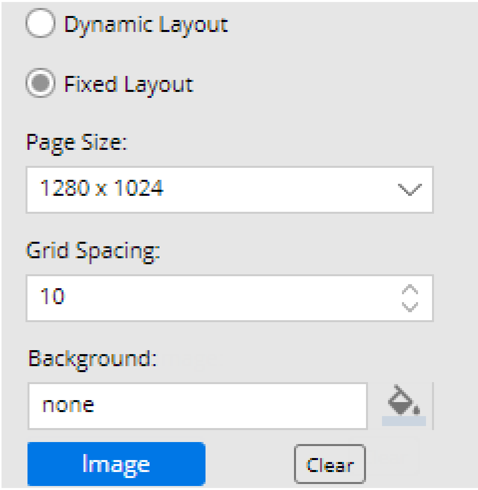
Option 2: Fixed layout

In a fixed layout, the dashboard and widgets will remain the same size regardless of the width of the browser window.

Page size - Select the width and height in pixels of the dashboard. To select a custom size, select Set Custom Size and then enter your own values.

Grid spacing - Salient Dashboards snap widgets to a grid when you move or resize them. The grid spacing is the number of pixels between grid points.

Background - Optionally, select a background image and/or color for the dashboard as explained under dynamic layout settings.

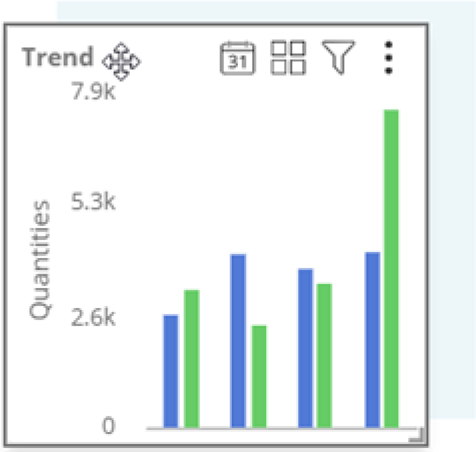


5. Add and arrange widgets in the workspace.

   • To move a widget, drag and drop it in the desired location. Widgets will snap to columns and rows in a dynamic layout. In a fixed layout, widgets will snap to the grid.

   • To resize a widget, drag and drop one of its handles.

6. Save the dashboard.

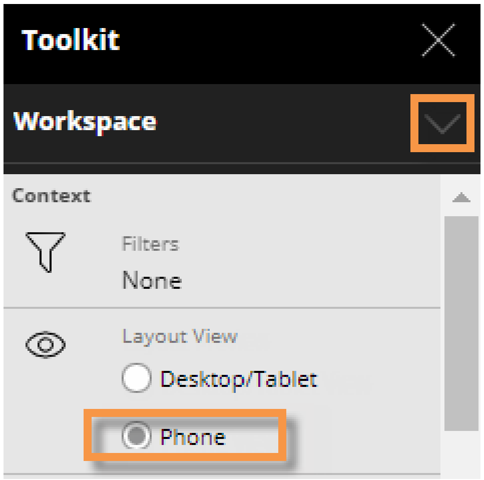


Tip: To reuse layout settings, you may want to apply them to a "template" dashboard to use as a starting point when building dashboards.

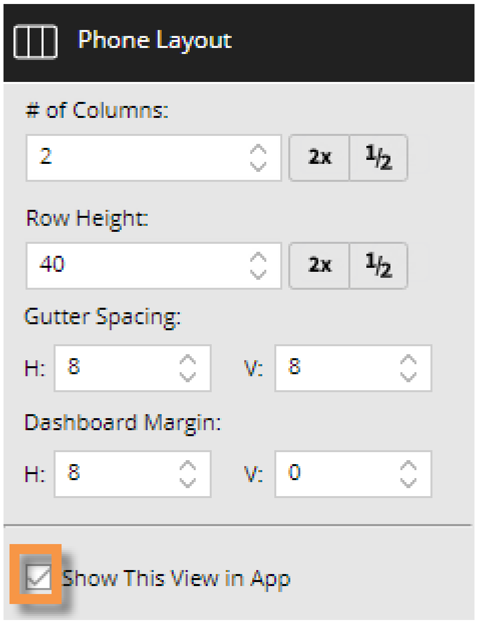
Phone layout

To set up the phone layout

1. In edit mode, select the workspace by clicking in a blank area of the dashboard, selecting **Workspace** in the toolkit menu, or pressing **w** on the keyboard.
2. Under **Layout View**, choose **Phone**. This will open the **Phone Layout** section where you can choose settings.



3. Choose the **# of Columns** (i.e. vertical grid) for arranging widgets. (Widgets can span multiple columns.) A larger number will provide more precise control over the layout; however, an unreasonably large number may affect performance. You can enter the number, use the arrow buttons to increase/decrease the number, or click the **2x** or **1/2** buttons. However, these methods affect existing widgets differently, as explained below (see page 16).
4. Choose the **Row Height** (i.e. horizontal grid) in pixels. A smaller number will provide more precise control over the layout. (A widget can span multiple rows.) You can enter the number, use the arrow buttons to increase/decrease the number, or click the **2x** or **1/2** buttons. However, these methods affect existing widgets differently, as explained below (see page 16).
5. **Gutter Spacing -** To add space between columns, enter a horizontal (H) value in pixels. To add space between rows, enter a vertical (V) value in pixels. Gutter spacing can be used to add a uniform amount of space between widgets.
6. **Dashboard Margin -** To add space on the sides of the dashboard, enter a horizontal (H) value in pixels. To add space at the top of the dashboard, enter a vertical (V) value in pixels.



7. **Important:** Make sure the **Show This View in App** box is checked to enable the phone layout in the mobile app. Depending on the desktop/tablet settings, the mobile app may switch from the phone layout to the desktop/tablet layout (see the previous section) when the screen width is above a specified width (e.g., on a large tablet or when a device rotates).

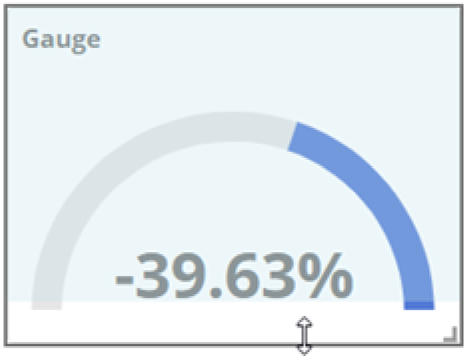
   If the **Show This View in App** box is cleared, the mobile app will use the default one-pane layout or the layout defined in the mobile app itself if one exists.

To set up the phone layout

8. Add and arrange widgets in the workspace. Widgets will snap to columns and rows as you move or resize them.

   • To move a widget, drag and drop it in the desired location.

   • To resize a widget, drag and drop one of its handles.



9. (*Optional*) If the dashboard includes tabs, you can choose a different tab style (see page 19) for the phone layout than the desktop/tablet layout.
10. (*Optional*) The following settings allow you to hide widgets in the mobile app but keep them in browser-based dashboards. For example, you might want to hide some widgets on mobile devices to save screen space. You can access these settings in general widget settings or the widget's menu.

    • **Show in Mobile -** Leave this option on to show the widget in the mobile app; the widget may be hidden on narrow screens using the **Hide For Phone** setting (see below). Clear this option to always hide the widget in the mobile app.

    • **Hide For Phone -** Turn this option on to hide the widget when the phone layout is used (i.e. on narrow screens such as phones) but show it when the desktop/tablet layout is used in the mobile app (e.g., on tablets). The screen width in the desktop/tablet layout controls when the phone layout is used.

    Note that hiding the widget using either option will remove it from the phone preview. You can switch to the desktop/tablet preview to modify the widget's settings if necessary.

    Line, dashboard, and Knowledge Manager widgets will not display in the mobile app; therefore, they do not have these settings.
11. Save the dashboard.

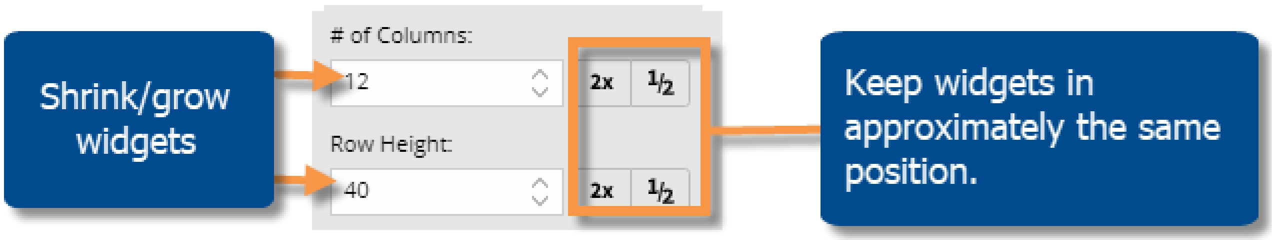
Options for changing number of columns and row height in layouts

To keep widgets in approximately the same position

Click 2x to double the value or 1/2 to halve the value. This will adjust the number of columns/rows in existing widgets proportional to the total columns/rows in the dashboard; therefore relative widget widths will stay approximately the same and the widget arrangement will not change significantly in most situations. (Some rounding may occur.) For example, a widget that spans 6 out of 12 columns or 50% would span 12 out of 24 columns or 50%.

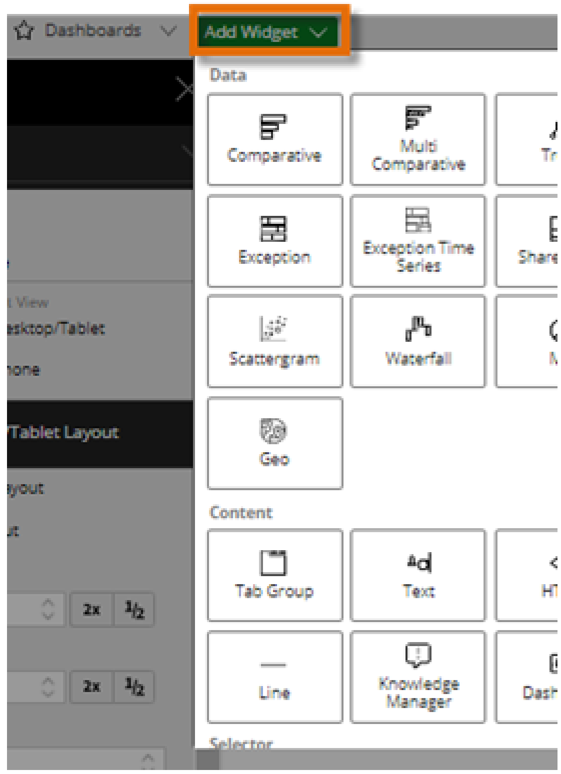
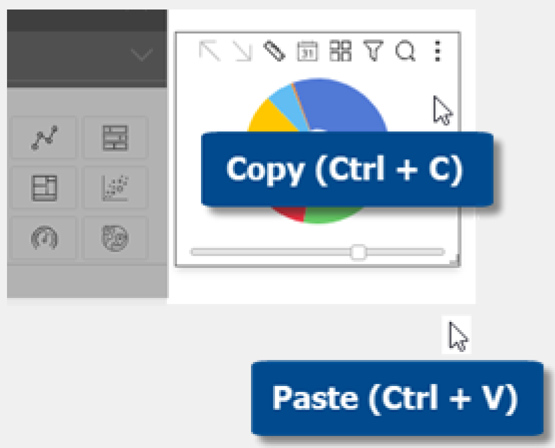
To shrink/grow widgets

Enter a value in the corresponding box or use the arrows. This will not adjust the number of columns/rows in existing widgets; therefore, their relative widths and heights will change as compared to the total columns/rows in the dashboard. For example, a widget that spans 6 out of 12 columns or 50% would span 6 out of 24 columns or 25%.



Create widgets

You can use any of the following methods to create data widgets (see page 32) or content widgets (tabs, text/HTML, buttons, etc.), depending on whether you want to make them from scratch or copy/duplicate existing widgets. In general, widgets must be created in edit mode. After creating widgets, you can position them within the dashboard (see page 18).

Option	Explanation	
Add a blank widget	**Tip:** If you click on another widget prior to adding a data widget, the new widget will inherit its context settings (date range, group by, etc.). Otherwise, the new widget will use the default settings. 1. Click the **Add Widget** button at the top of the screen. 2. In the pop-up window, click and drag the button of the widget type onto the workspace. If you prefer, you can click the button to place the widget in the upper-left corner.	
Copy a widget (from the same dashboard or a different dashboard)	1. Click on the widget you want to copy. 2. Press **Ctrl** + **C** on the keyboard. 3. Click on the dashboard where you want to paste the widget. 4. Press **Ctrl** + **V** on the keyboard. **Tips:** • You may want to open a new browser window if you plan to copy multiple widgets from another dashboard. • You can also import settings from other dashboards (see page 31).	

Option	Explanation	
Duplicate a widget within a dashboard	1. Select the widget you want to duplicate. 2. On the widget title bar, click the ⋮ menu button and select ❐ Duplicate Widget, or press + on the keyboard. **Tip:** In explore mode, the new widget will be maximized in its own tab.	

Position widgets

After creating widgets (see page 17), you should arrange them in the desktop/tablet layout and phone layout (if used). Each layout (see page 10) can store a different size/position for a widget.

To position widgets

1. In the Workspace area of the toolkit, select the layout (desktop/tablet or phone) for which you want to arrange widgets.
2. Position widgets in the workspace.

- Drag and drop to move a widget. The widget will snap to the underlying grid (columns and rows) as defined in the layout.
- To resize the widget, drag its bottom or right border, or enter a precise size in general settings.
- To place a widget in a tab, drag and drop it onto the tab or go to Tab Settings (see page 19).

3. Repeat the process for the phone layout (if used)—moving and resizing widgets as desired. In addition, you can optionally hide widgets in the phone layout (see page 15) to save screen space on mobile devices.

Tips:

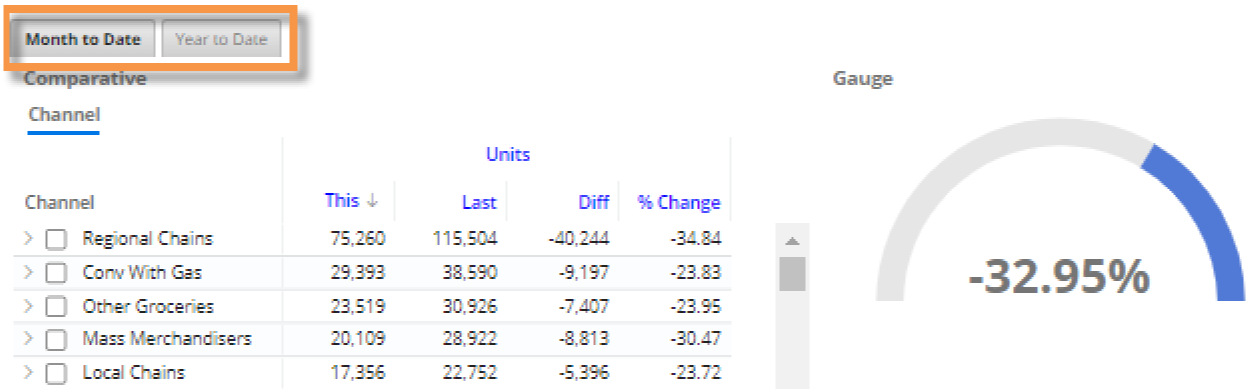
- To control the order of overlapping widgets, go to general settings where you can send a widget to the back or front.
- General settings (see page **Error! Bookmark not defined.**) provide additional design options for widgets, such as widget styles, transparency, borders, and customized titles.

Content widgets

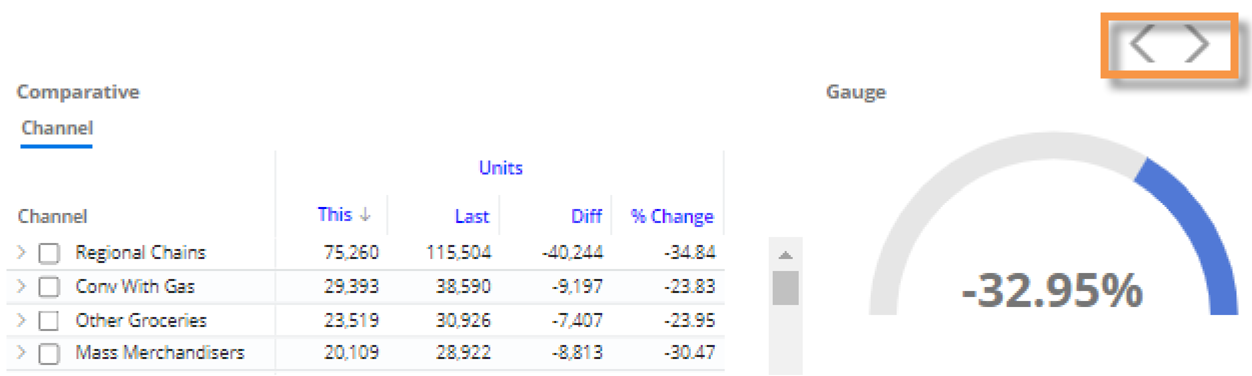
Tab group

The tab group widget can organize a dashboard and maximize screen space by providing a tabbed or carousel view of multiple widgets. The user simply clicks to switch between the tabs. Each tab can have one or more widgets. Tab groups are available in browser-based dashboards as well as the mobile app.

Tab format

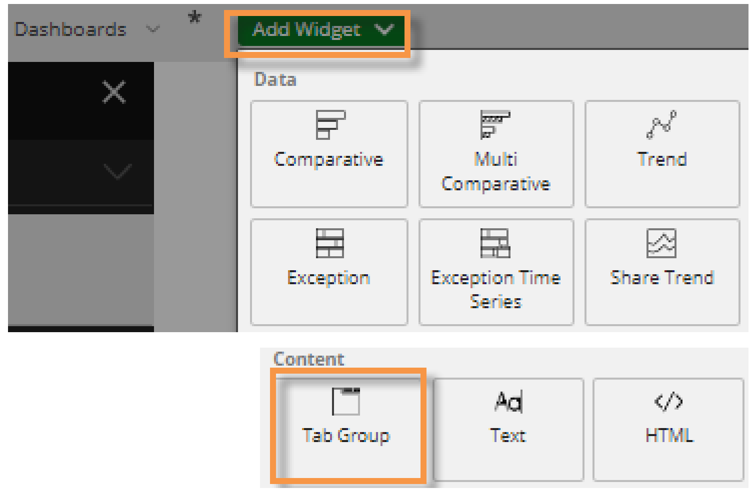


Carousel format

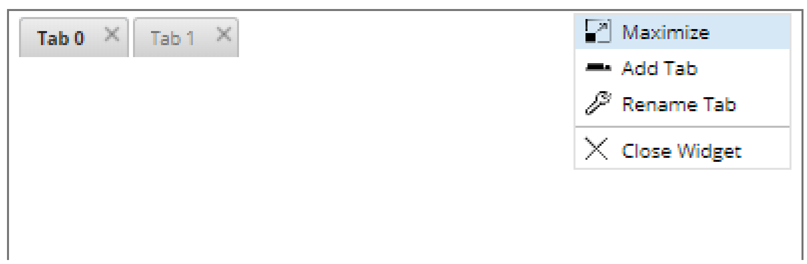


To add a tab group

1. Click the Add Widget button at the top of the screen.
2. In the pop-up window, click and drag Tab Group onto the workspace.



3. The tab group has two tabs when you first add it. To add additional tabs, click the ⋮ button in the upper-right corner (visible on mouseover) and select **Add Tab**, or click in the tab settings area (see the next step).



To add a tab group

4. Configure display options for the tab group.

   i. Click **Tab Settings** in the toolkit (the tab group must be selected). The pop-up window will list all widgets in the dashboard.

   ii. Hover over the tab group and click .

   iii. Select from the following options.

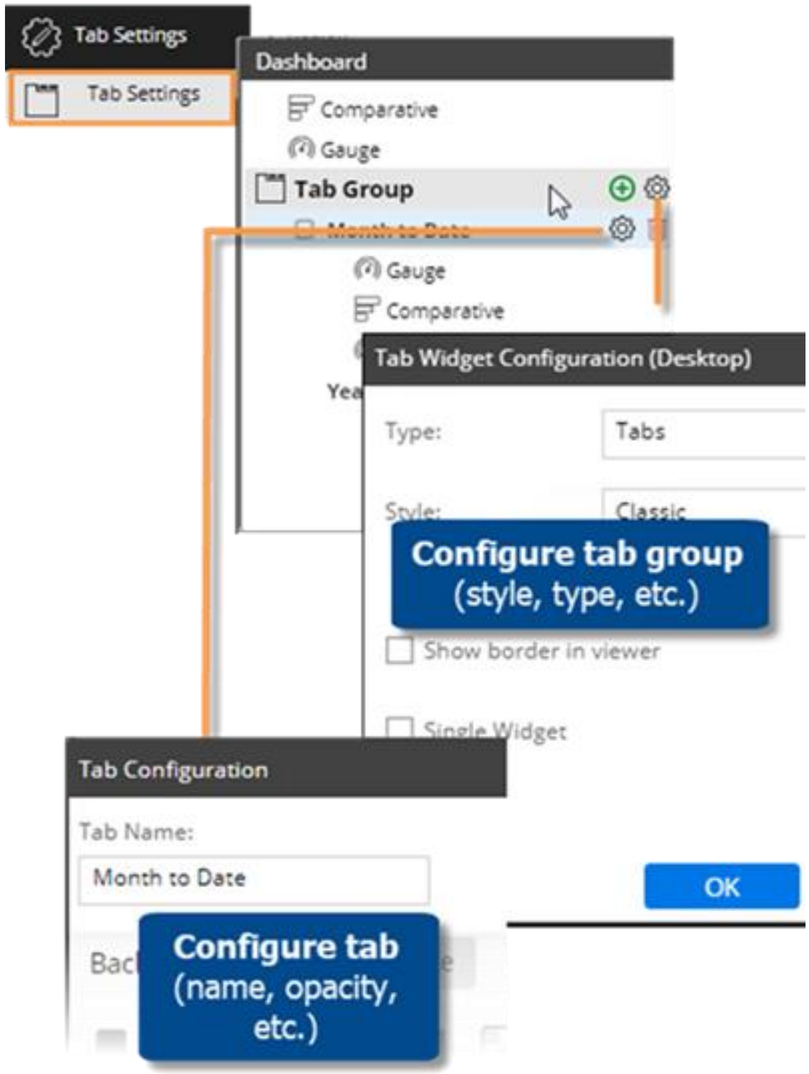
   Type - Tabs or carousel

   Style - A variety of styles are available. These may be configured by your administrator.

   Show border in viewer

   Single widget (in desktop/tablet layout only) - This option facilitates the creation of a simple tabbed view by allowing one widget per tab, automatically maximizing each widget in its tab, and populating the tab name with the widget title.

   iv. (Optional) To use different display settings in the desktop/tablet and phone layouts, switch the layout type (under Layout View in the toolkit) and repeat step 4, selecting your preferred type and style for the layout.



5. Configure tabs within tab group.

   i. In the pop-up window, hover over the tab and click .

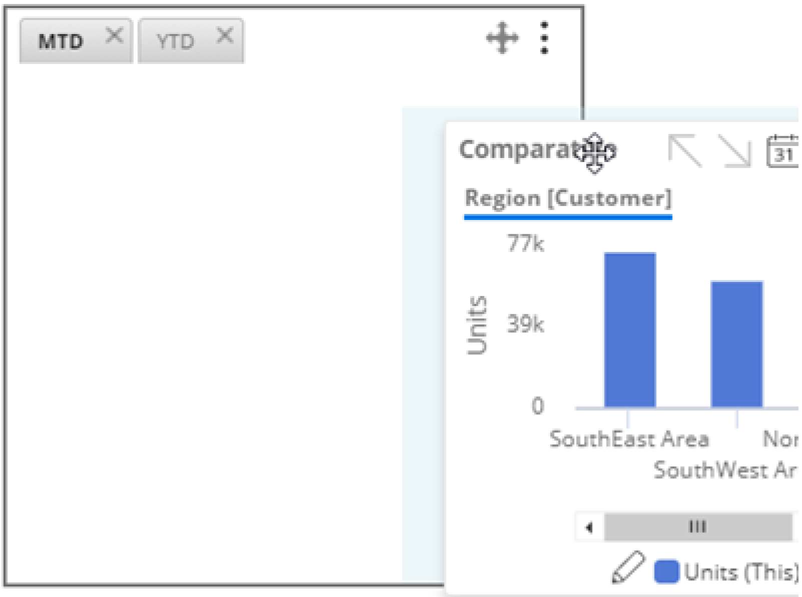
   ii. Enter a tab name and choose display settings, including the background color, if desired.

To add a tab group

6. Add widgets to the tabs using either of the following methods.

   • In the workspace, select the tab and then drag a widget onto it.

   • In the tab settings pop-up window (see step 5), drag the name of a widget onto the row of a tab.



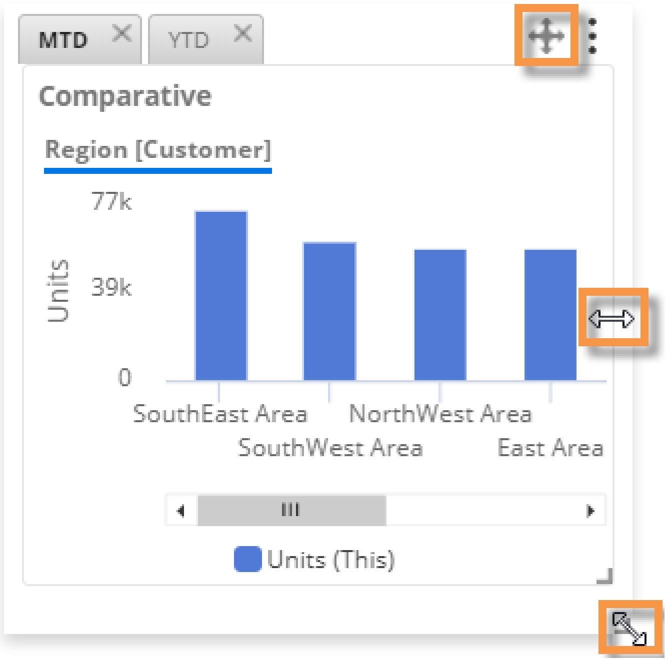
7. Position and size the tab group and its widgets.

   • To move the tab group, drag and drop the ✛ icon.

   • To resize the tab group, drag its border or enter a precise size in the tab group's general settings.

   • Position each widget within the tab group as desired by dragging and dropping or entering values in the widget's general settings.

   • Repeat this step for the desktop/tablet layout and phone layout (if used). Each layout can store a different tab group size and position as well as arrangement of widgets within each tab.



Tip: To change the layout of the tab group (# of columns, row height, etc.), change the layout settings (see page 10) of the dashboard itself. In a dynamic layout, the tab group uses a "mini-layout" with the same settings. For example, if the dashboard has 12 columns, the tab group will have 12 columns within its allocated space. Likewise, the tab group will have the same margins and padding as the dashboard. In a fixed layout, the grid spacing will affect the tab group.

Text and HTML widgets

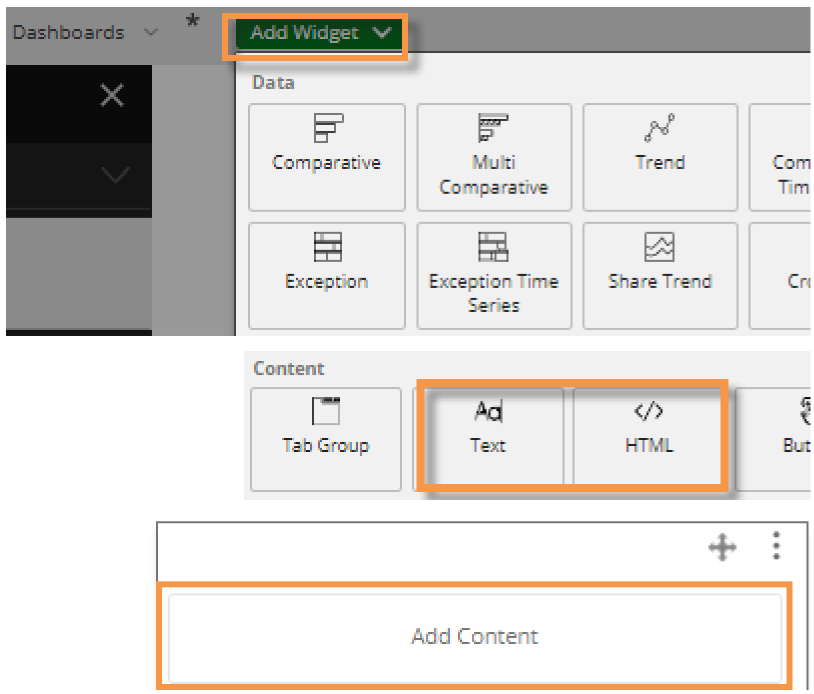
Text and HTML widgets show text or other content. These widgets can include hyperlinks and embedded content from other web pages. The only difference between HTML and text widgets is that the default editor is source (i.e., code) mode for HTML widgets and WYSIWYG mode (i.e., formatting controls) for content widget.

Text/HTML widgets are available in browser-based dashboards and the mobile app (if turned on as explained in step 7). Due to the flexibility of text and HTML content widgets, we cannot guarantee their appearance, especially for information pasted into the editor, on all browsers. As always, you should preview a dashboard before publishing it.

To add a text or HTML widget

1. Click the 

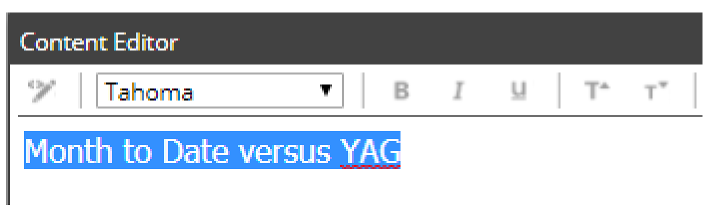
button at the top of the screen.
2. In the pop-up window, click and drag Text or HTML onto the workspace, depending on your preferred edit mode (WYSIWYG for text or source code for HTML).
3. Click **Add Content** in the widget, or click the ⋮ button at the top of the widget and then select **Edit**.



4. Depending on the edit mode, enter text or HTML code into the **Content Editor**.

   To switch between modes, click on the Content Editor toolbar.
5. Click **OK**.

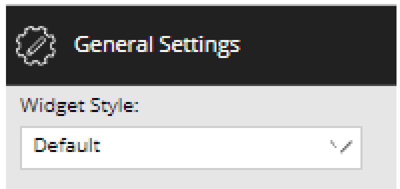
Content Editor (WYSIWYG mode):



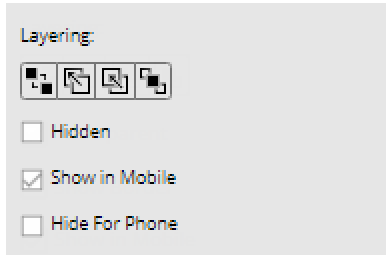
Content Editor (source edit mode):

To add a text or HTML widget

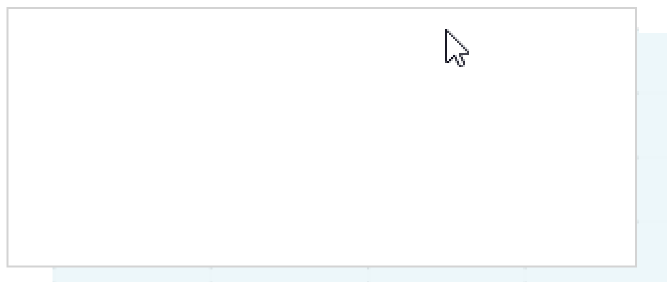
6. To customize display settings, go to General Settings in the toolkit, where you can choose a style, turn on/off borders, select transparency, etc.



7. (Optional) To allow the text/HTML to be shown in the mobile app regardless of screen width, keep the **Show in Mobile** box checked and the **Hide for Phone** box cleared.



8. Position and size the widget (see page 18) in the desktop/tablet layout and the phone layout (if used in the mobile app).



Button widgets

You can add a button(s) to allow users to quickly go to a URL, open a dashboard (with or without filters applied), filter the current dashboard, turn on equivalents, or change the date range.

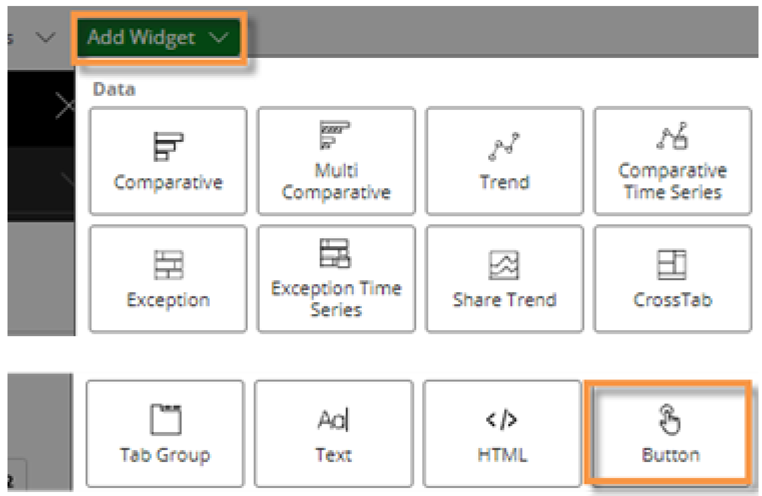
Button widgets are available in browser-based dashboards and the mobile app (if turned on as explained in step 4).

To add a button widget

1. Click the 

button at the top of the screen.
2. In the pop-up window, click and drag Button onto the workspace.

Tip: The button should be automatically selected so that you can customize it in the next step. If not, you can select it from the menu at the top of the toolkit.



3. In the toolkit, configure button settings:

   - Enter the button label and apply text formatting as desired.

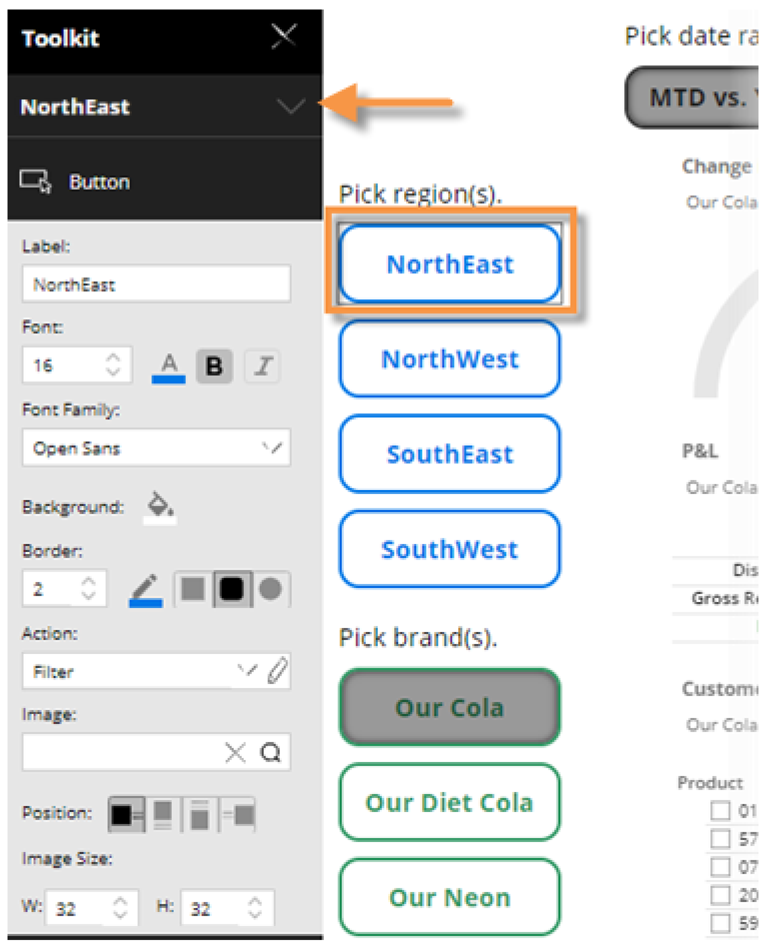
   - Customize the button appearance by choosing a background color, border, and image (optional). If you choose an image, you can select its size and position relative to the button label. You may also be able to change the widget style under general settings.

   - Choose an action (URL, Dashboard, Date Range, or Filter) and enter settings.

Tips:

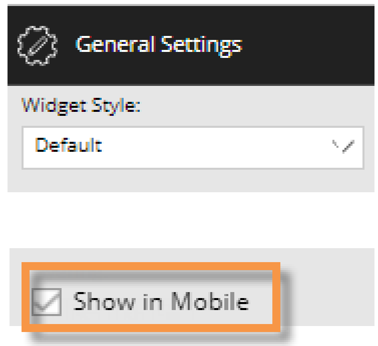
• To create a button that goes to a different mode (e.g., explore mode), choose URL and enter an appropriate URL (see page 154).

• Any widget can ignore filter, date, or equivalent buttons if you wish. Select the widget, go to general settings, and then clear the option for the type of button to ignore.



To add a button widget

4. To show the button in the mobile app, checkmark the **Show in Mobile** box in General Settings. To hide the button in the mobile app, clear this option.



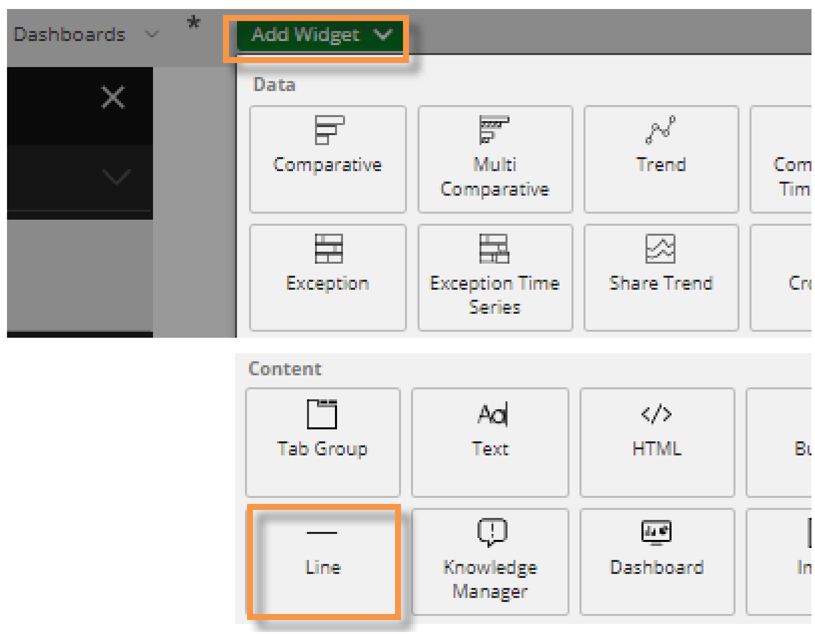
Line widgets

You can add lines to organize or enhance a dashboard. Line widgets will be hidden in the mobile app.

To add a line

1. Click the  button at the top of the screen.
2. In the pop-up window, click and drag Line onto the workspace.

Tip: The new widget should be automatically selected so that you can format it. If the line widget is not selected, click on it.



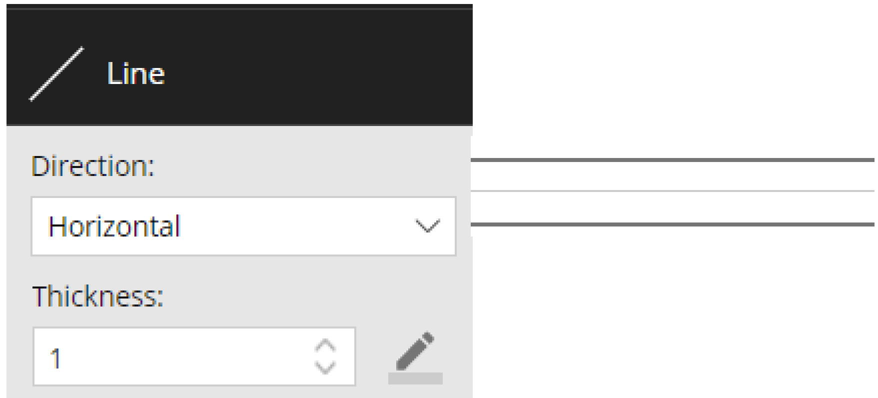
To add a line

3. In the toolkit, configure line settings:

   - Choose a line direction.

   - Choose a line thickness and color.

> **Tip:** To change the line length, click and drag in the workspace or go to general settings. You may also be able to change the widget style under general settings.



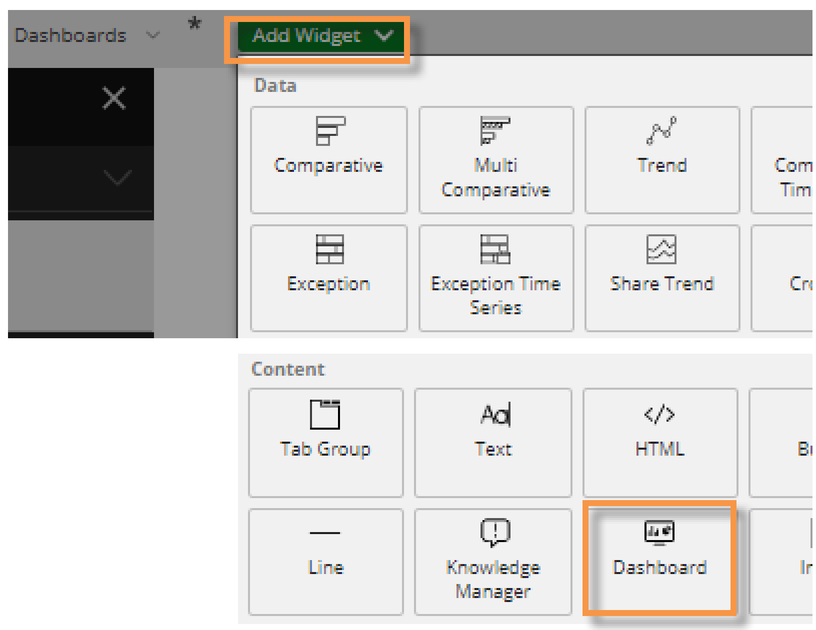
Dashboard widgets

A dashboard widget provides a set of links to other dashboards, such as recent dashboards, favorite dashboards, all dashboards, published dashboards, or a custom assortment of dashboards. Dashboard widgets will be hidden in the mobile app.

To add a dashboard widget

1. Click the Add Widget button at the top of the screen.
2. In the pop-up window, click and drag Dashboard onto the workspace.

> **Tip:** The new widget should be automatically selected so that you can customize it in the next step. If the widget is not selected, click on it.



To add a dashboard widget

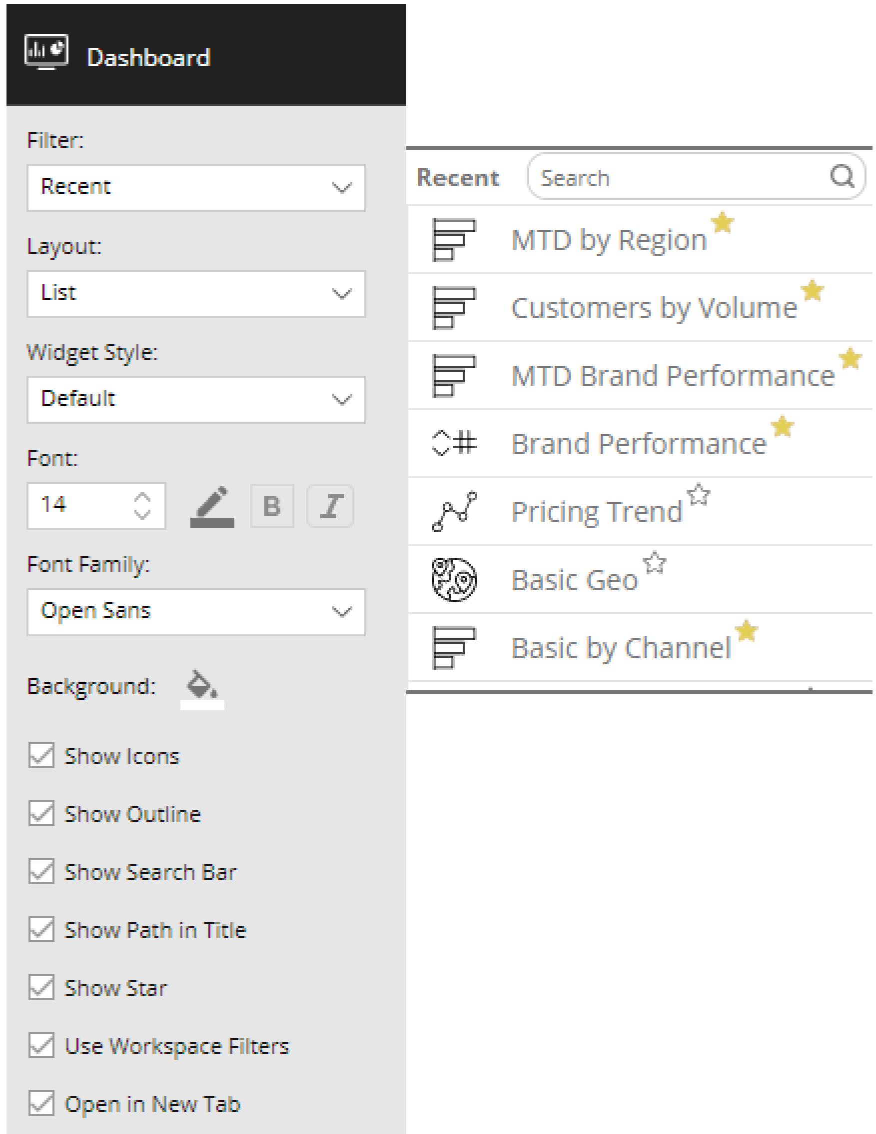
3. From the **Filter** menu in the toolkit, select the type/category of dashboards for which to provide links:

   - **Favorites** or **Recent** shows a simple list or tile array.

   - **All**, **Published**, **Unpublished**, or **Private** reflects the folder structure; users will be able to navigate to folders and select dashboards.

   - **Custom** provides links to specific dashboards. After selecting this option, you can select the dashboards from the pop-up window.

   Keep in mind that a user must have the necessary rights to a dashboard to open it.



4. In the toolkit, select formatting options, including the layout (list or tile), style, font, and background. In addition, you can show or hide the following: icons (i.e. badges, chart symbols, and folder icons), outline, search bar, and favorite stars.

   The **Show Path in Title** option affects widgets that include the dashboard folder structure (e.g., All). If enabled, the widget title will reflect path of the current folder.

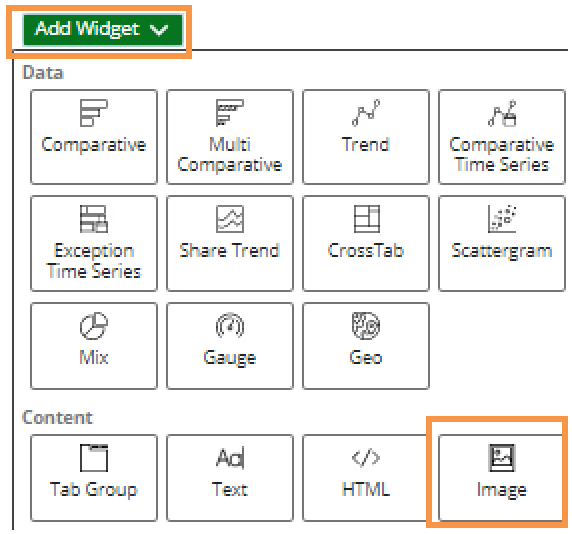
5. If you want to carry forward any applied workspace filters to the linked dashboards, check the **Use Workspace Filters** box. This would allow a user to narrow down on a business segment, and then continue their investigation in another dashboard.
6. To open linked dashboards in a new browser tab, check the **Open in New Tab** box. Or, clear this option to open dashboards in the same browser tab.
7. To apply additional formatting options, such as a widget style, title, transparency, and border, go to General Settings in the toolkit.

Image widgets

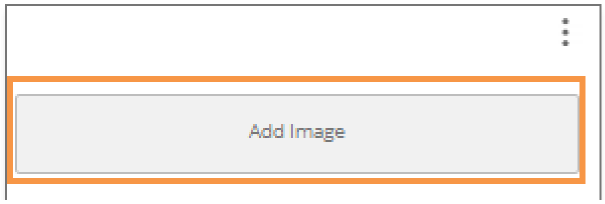
Image widgets allow you to add images to a dashboard. Image widgets are available in browser-based dashboards and the mobile app (if turned on as explained in step 7).

To add an image

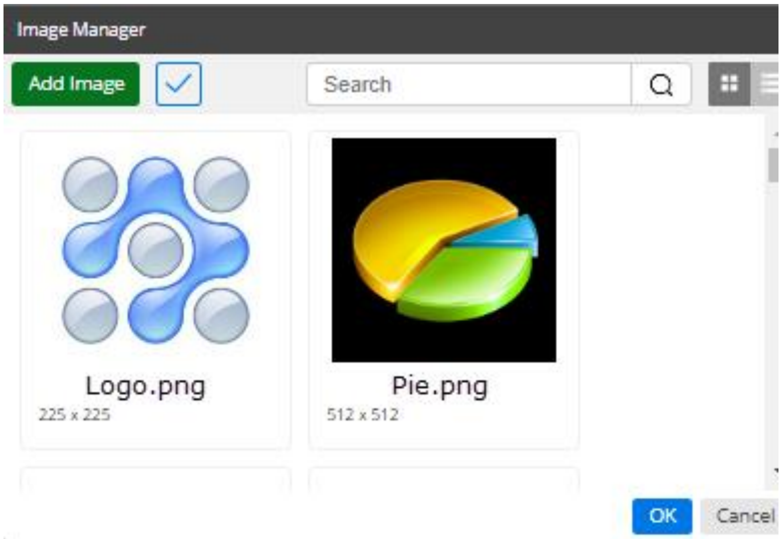
1. Click the Add Widget button at the top of the screen.
2. In the pop-up window, click and drag Image onto the workspace.



3. Click **Add Image** in the widget, or click the ⋮ button at the top of the widget and then select **Edit**.

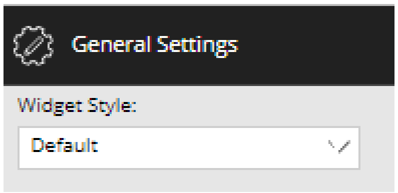


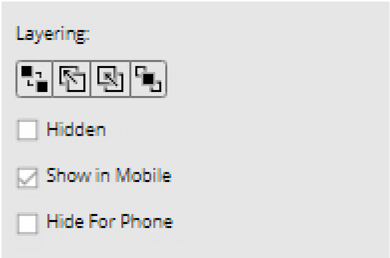
4. This opens the image manager, which stores all images used in dashboards. Select an image or click Add Image to upload a new image. You can also search for an image. The image file type must be supported by the web browser used.
5. After selecting an image, click OK.



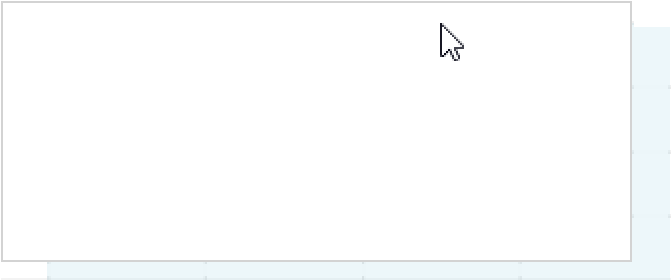
To add an image

6. To customize display settings, go to General Settings in the toolkit, where you can choose a style, turn on/off borders, adjust layering, select transparency, etc.
7. (Optional) To allow the image to be shown in the mobile app regardless of screen width, keep the **Show in Mobile** box checked and the **Hide for Phone** box cleared.





8. Position and size the widget (see page 18) in the desktop/tablet layout and the phone layout (if used in the mobile app).

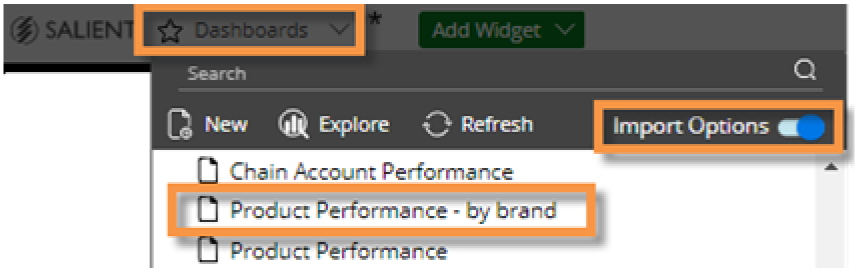


Import dashboard options

You can import settings from other dashboards to facilitate dashboard design. For example, you might want to import filters, member coloring, and other dashboard settings.

To import dashboard options

1. Open the dashboard to which you want to apply the settings.
2. Go to the dashboards menu at the top of the screen.
3. Turn on **Import Options**.
4. Click on the name of the dashboard that has the settings you want to import.



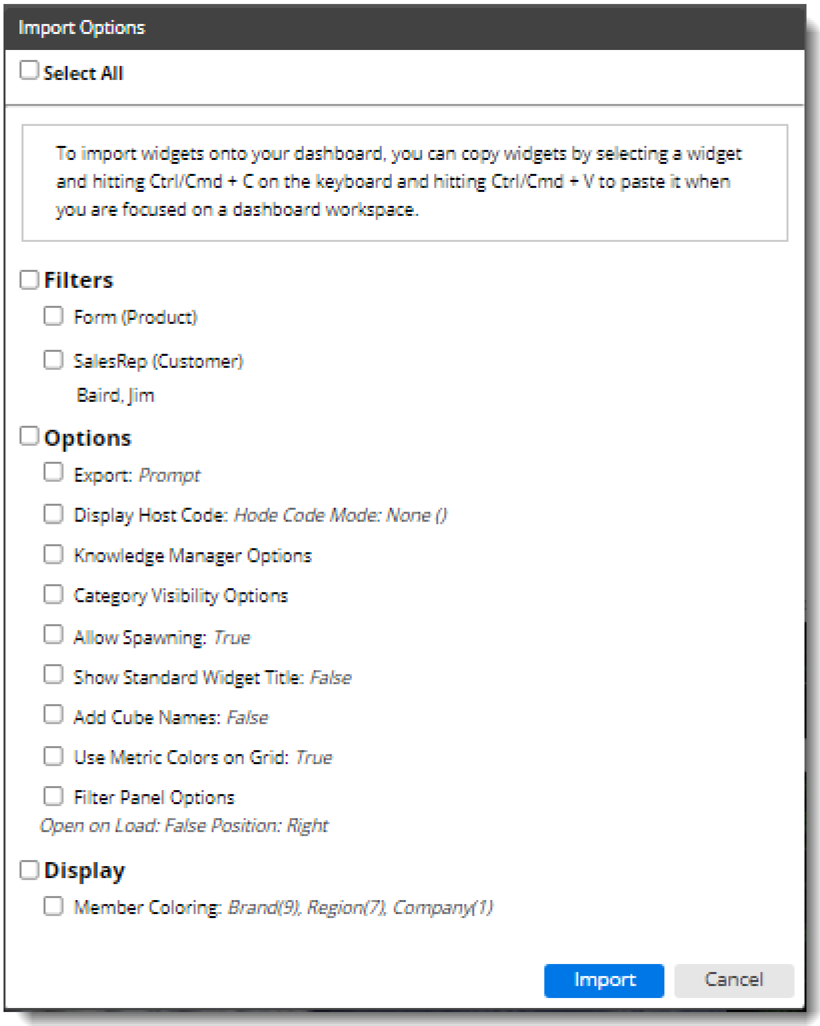
5. In the Import Options dialog, check the settings you wish to import, or check Select All to quickly import all available settings.

   Filters - includes filters that have been applied to the workspace. (Workspace filters associated with filter widgets are not available for import.)

   Options - include various dashboard settings (see page 114).

   Display - includes settings for custom coloring of members (see page 98) and may also include a background image (see page 10) and badge image (if used).

6. Click **Import**.



Tip: You can also copy widgets (see page 17) from other dashboards.

Data analysis widgets

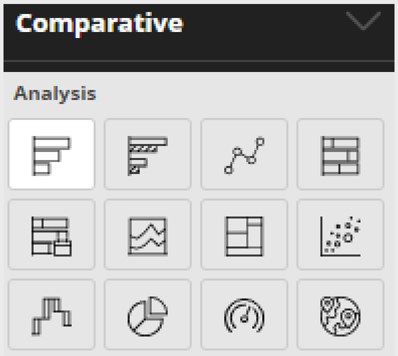
Many different [types of data widgets](#) (see page 33) are available to show performance metrics and answer questions such as: How did we do compared to last year or another timeframe? How is performance changing over time? What are the outliers or areas of concern? Who or what met performance criteria?

You can [create data analysis widgets](#) (see page 17) by adding them directly from the Add Widget menu at the top of the screen, copying widgets, or duplicating widgets. After creating data analysis widgets, you should set them up by:

- [Adding measures](#) (see page 38)
- [Selecting the By to group the data](#) (see page 52)
- [Changing the date range](#) (see page 45)
- [Filtering the data](#) (see page 69)
- [Switching between numbers and graphs](#) (see page 88)
- [Customizing settings](#) (see page **Error! Bookmark not defined.**) - including grid, graph, and general settings
- [Positioning widgets](#) (see page 18) within the desktop/tablet layout and phone layout (if used)

Tip:

You can change the analysis type of an existing data widget by clicking on it and then clicking in the analysis area of the toolkit.



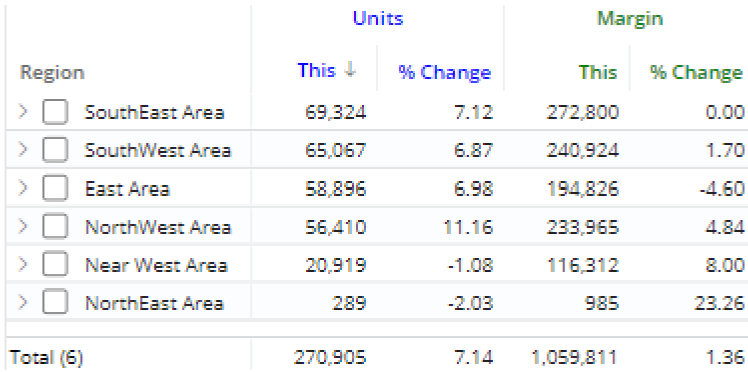
Types of data analysis widgets

You can choose from various analysis types depending on what you want to find out about the data. Most analysis types are available as either a grid or graph.

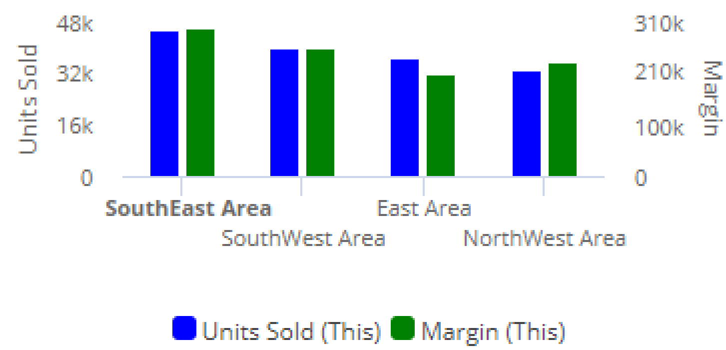
Analysis type	Examples

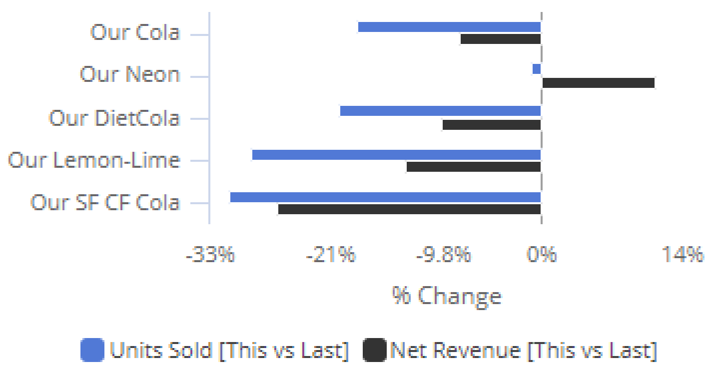
Comparative

Comparison of members for one or two date ranges; any number measures.



Region	Units This ↓	Units % Change	Margin This	Margin % Change
SouthEast Area	69,324	7.12	272,800	0.00
SouthWest Area	65,067	6.87	240,924	1.70
East Area	58,896	6.98	194,826	-4.60
NorthWest Area	56,410	11.16	233,965	4.84
Near West Area	20,919	-1.08	116,312	8.00
NorthEast Area	289	-2.03	985	23.26
Total (6)	270,905	7.14	1,059,811	1.36

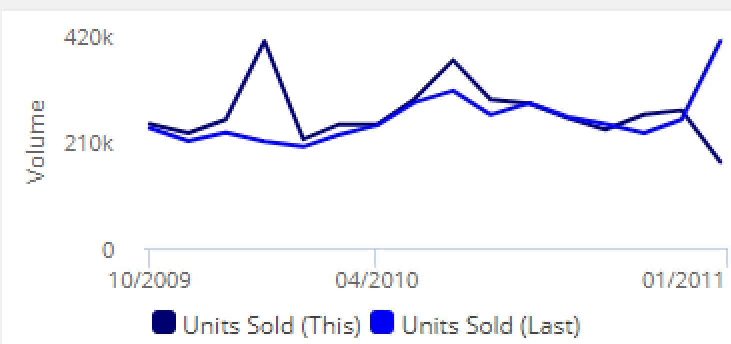




Comparative Time Series

Trend over time for two date ranges; any number of measures

Tip: This option in the Add Widget menu adds a Trend widget for two date ranges (This and Last).



Analysis type	Examples

Crosstab

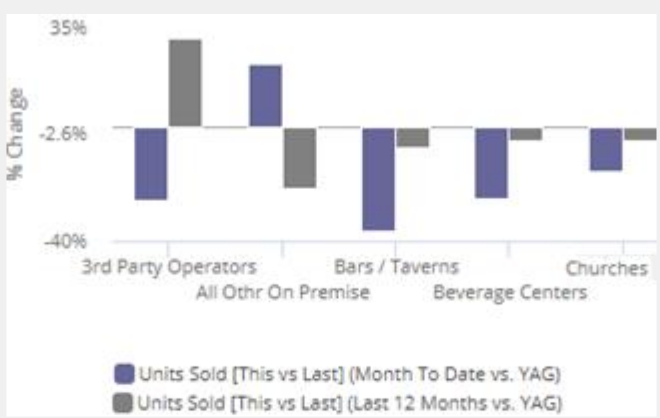
Comparison grid or graph that organizes data by two different attributes (i.e., dimensions) to examine cross-sections of data.

Region	Our Cola	Our Neon	Our DietCola	Our Lemon-Lime
SouthEast Area	27,332	10,090	9,316	2,650
SouthWest Area	27,513	8,239	9,750	3,362
East Area	25,313	10,343	8,364	2,644
NorthWest Area	23,342	9,620	7,189	2,358
Near West Area	5,634	2,352	2,772	868
NorthEast Area	182	10	32	11
Total (6)	109,316	40,654	37,423	11,893

Multi Comparative

Comparison of members for any number of date ranges and measures; column filters (see page 159) may be applied to focus on specific subsets of data and provide dynamic benchmark comparisons (see page 161).

	Last Month vs. YAG		Last Year vs. YAG	
	Units		Units	
Region	This ↓	% Change	This	% Change
SouthEast Area	69,324	7.12	910,342	17.80
SouthWest Area	65,067	6.87	762,082	9.38
East Area	58,896	6.98	706,588	10.04
NorthWest Area	56,410	11.16	703,359	12.11
Near West Area	20,919	-1.08	279,479	12.90
NorthEast Area	289	-2.03	5,114	-40.75
Total (6)	270,905	7.14	3,366,964	12.41

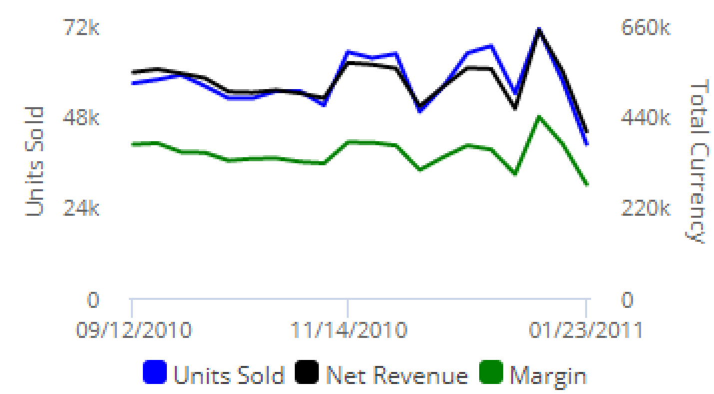


Analysis type	Examples

Trend

Trend over time for one or two date ranges for multiple measures

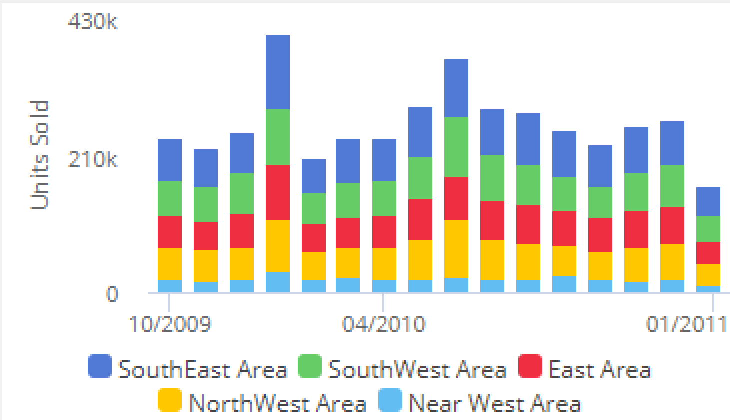
> **Tip:** This option in the Add Widget menu adds a Trend widget for one date range (This).



Date	Units Sold	Avg List Price per Unit	Margin
12/12/2010	55,849	12.56	340,300
12/19/2010	64,570	12.49	368,206
12/26/2010	66,486	12.50	358,264
1/2/2011	53,978	12.48	298,829
1/9/2011	70,920	12.40	437,850
1/16/2011	57,179	12.80	371,473
1/23/2011	40,547	13.01	274,320
Total	4,290,796	12.33	24,743,785

Share Trend

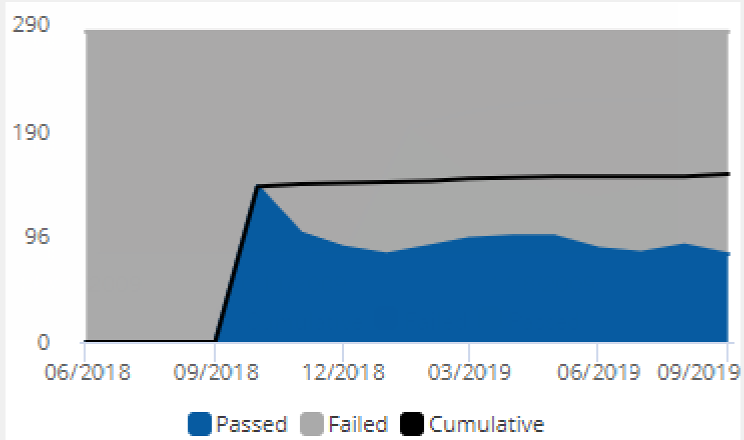
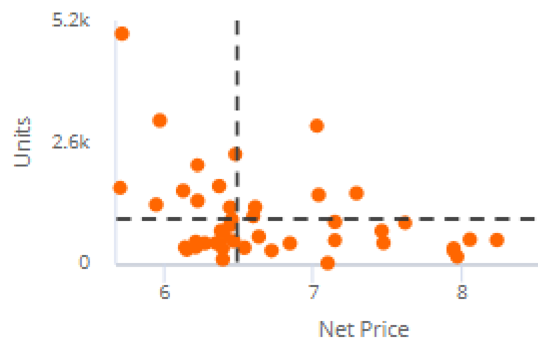
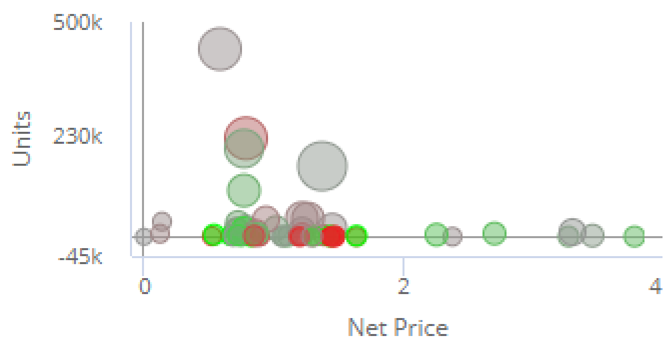
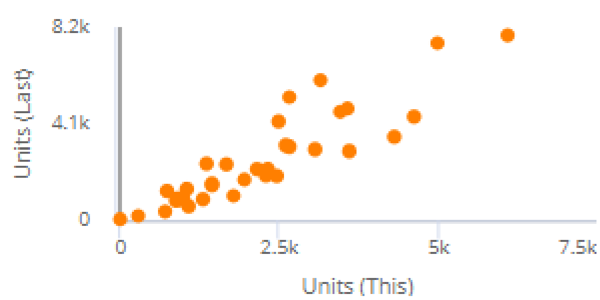
Comparison trend for multiple members; either actual values or percent of the total for single measure

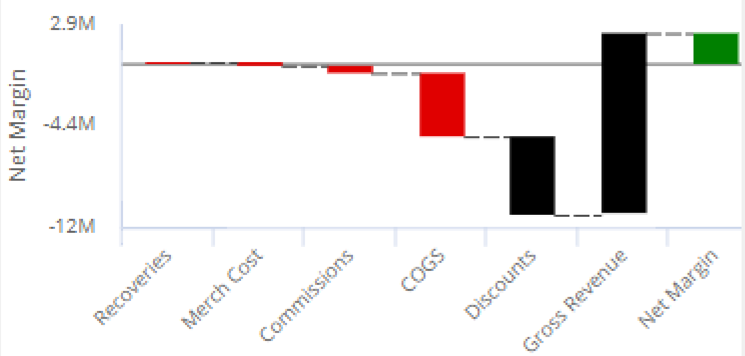
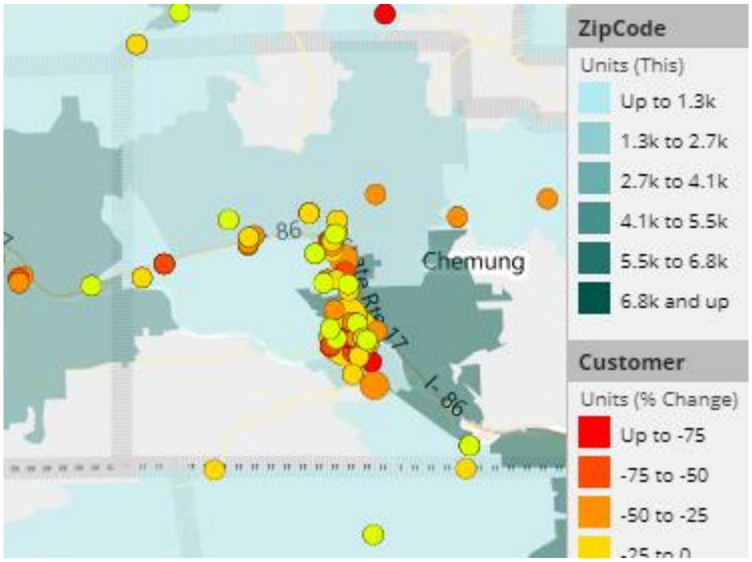
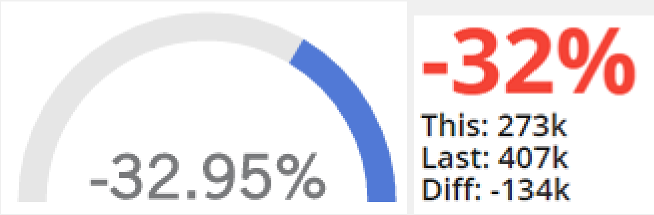
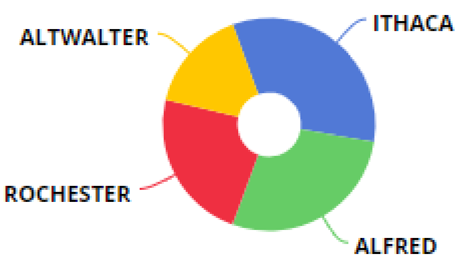


Exception

Pass and fail of key members for an exception test (e.g., customers with units >=1)

Channel	Totals ↓	Passed	% Passed	Failed	% Failed
All Othr On Premise	1,122	184	16.4	938	83.6
Industrial	578	303	52.4	275	47.6
Schools	459	330	71.9	129	28.1
Recreation	444	215	48.4	229	51.6
Restaurants	411	245	59.6	166	40.4
Fast Food	395	266	67.3	129	32.7
Other Groceries	283	182	64.3	101	35.7
Colleges	262	230	87.8	32	12.2
Total (38)	5,863	3,166	54.0	2,697	46.0

Analysis type	**Examples**
Exception Time Series Pass and fail of key members for an exception test over time	
Scattergram Plot of members along two axes to show trends and outliers. The points can represent key members (e.g., customers) or dimension members (e.g., regions). Additional variables can be used to color and size the points (i.e., "bubble chart").	  

Analysis type	Examples
Waterfall How the components of a calculated measure affect its make-up	
Geo Map showing data values and/or change since another date range	
Gauge A simple visual tool showing performance; single measure	
Mix Percent of the total for multiple members for one or two date ranges; any number of measures	

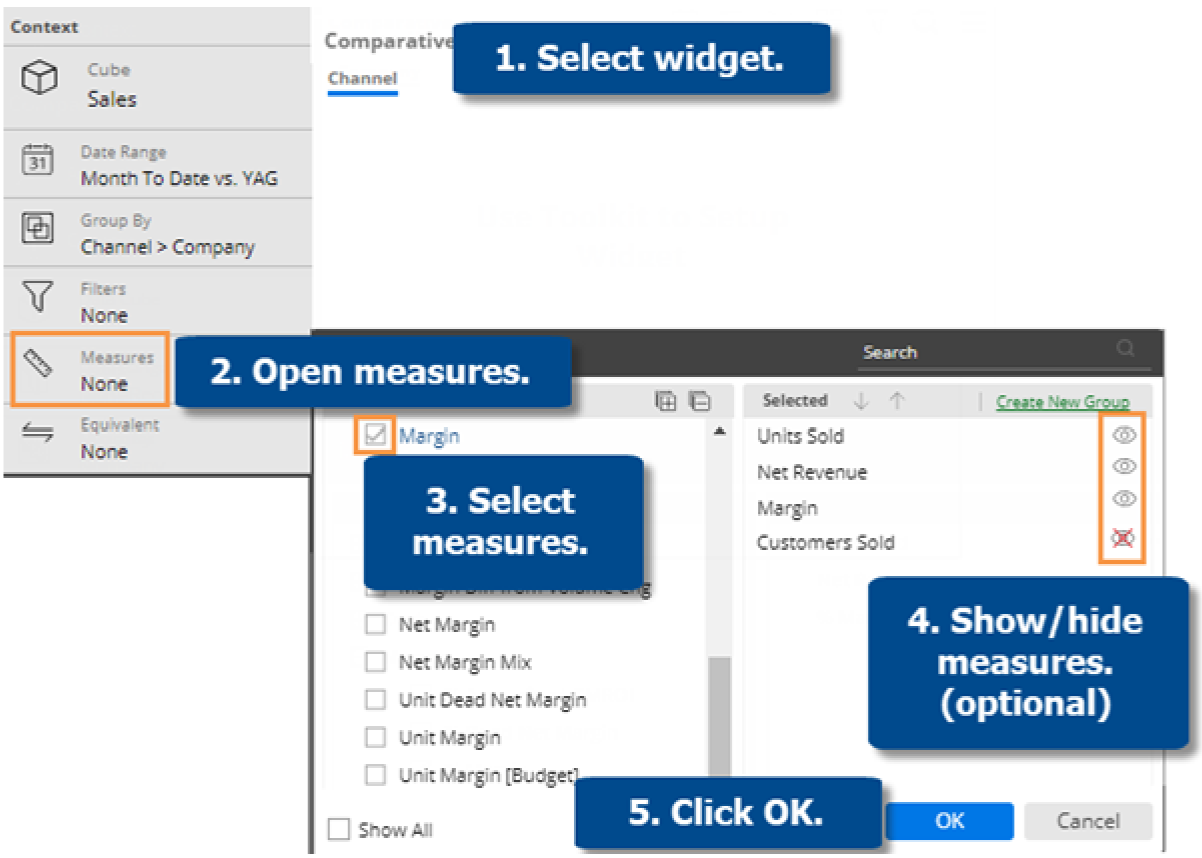
Tips:

- To view record-level data similar to that in SIM's Line Item or Time in Place analysis, you can group the data by Record Details (see page 132).
- Custom views (see page 154) may be configured to show representations of data beyond the graphs and grids shown here.

Add measures

You can add measures or "data fields" to data widgets using the measures area of the toolkit (located under Context). Users will be able to easily show or hide the any of the selected measures (see page 40) using the button, or go into the edit area to add more measures, depending on dashboard and user account settings.

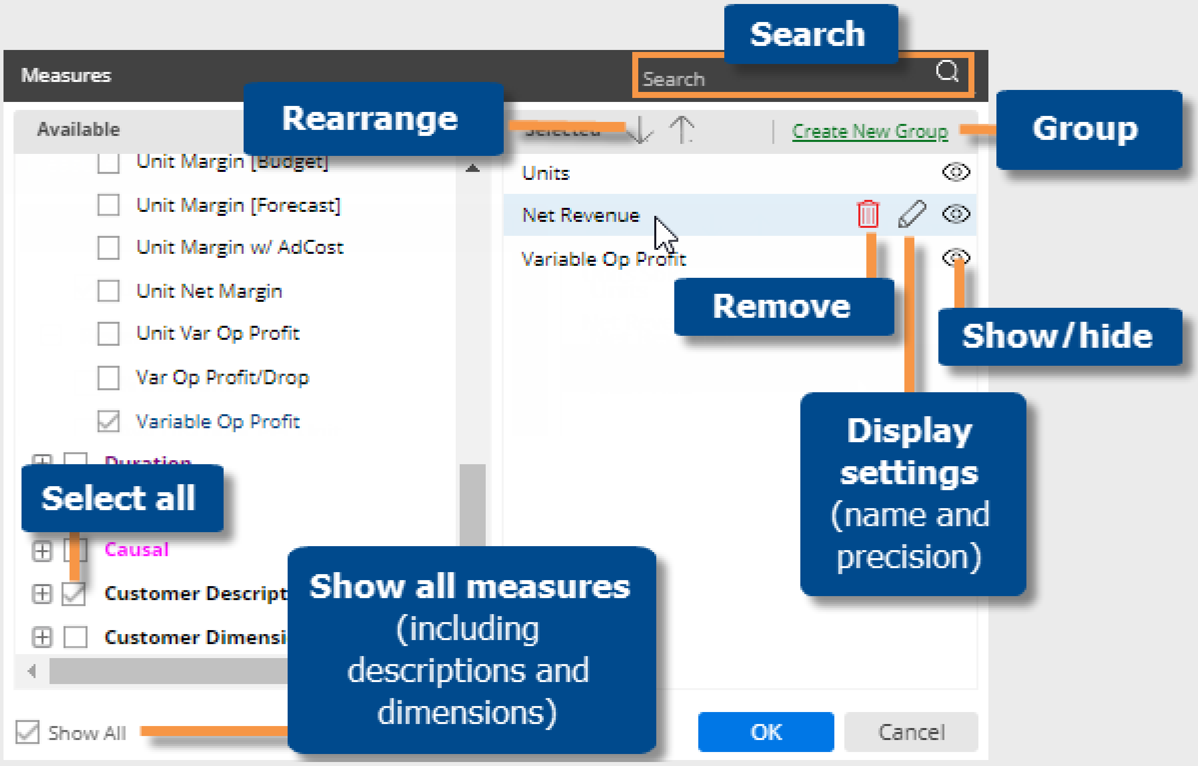
To add measures



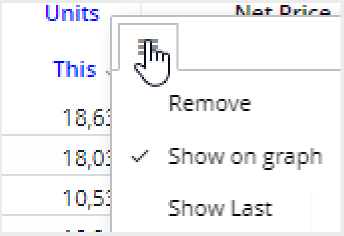
1. **Select widget** - Click on the widget if it's not already selected.
2. **Open measures** - In the Toolkit panel, click on **Measures**.
3. **Select measures** - Under **Available**, expand the category of the measure. Then, check the box(es) of the measure(s), or drag a measure to the right (**Selected**) pane to add it at a specific location. You can add all measures in a category by checking the category box. You may want to add several measures to provide easy access for users and then hide some of the measures in the next step. The number of allowed measures depends on the widget type.
4. Optionally, hide all measures except those that you want to show when the dashboard initially loads.
5. Click **OK**.

Tips:

- In the Measures area, the tools in the right pane allow you to search for a measure, remove a measure, rearrange measures, change measure display settings, create measure groups, and show/hide measures.



- By default, the available measures depend on the context (data cube, By, etc.). You can check the **Show All** box at the bottom of the dialog to see all measures regardless of the context.
- The measures dialog also lets you add descriptions (e.g., name, address, UPC, etc.) and dimensions that can be viewed in a key list (e.g., Customer List). These categories are available if the data is grouped by a "List." If the List is the 2nd By, 3rd By, etc., you may need to turn on the **Show All** option to access descriptions and dimensions.
- Measures may also be limited by the analysis type.
- To hide or show a subcolumn (e.g., This or Last), click the menu icon ≡ in its heading and select **Remove** or **Show**.



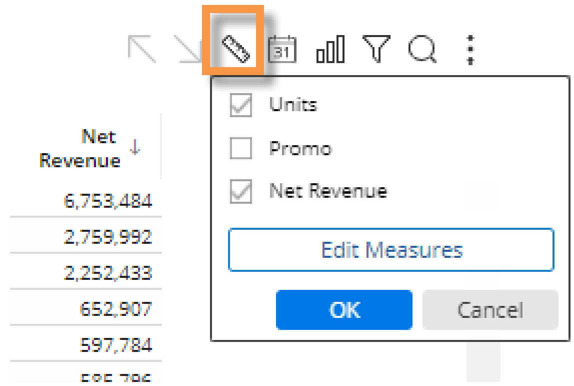
Select measures

You can select measures using the measure selection tool in any mode of Salient Dashboards. (This tool may be turned off in general settings.)

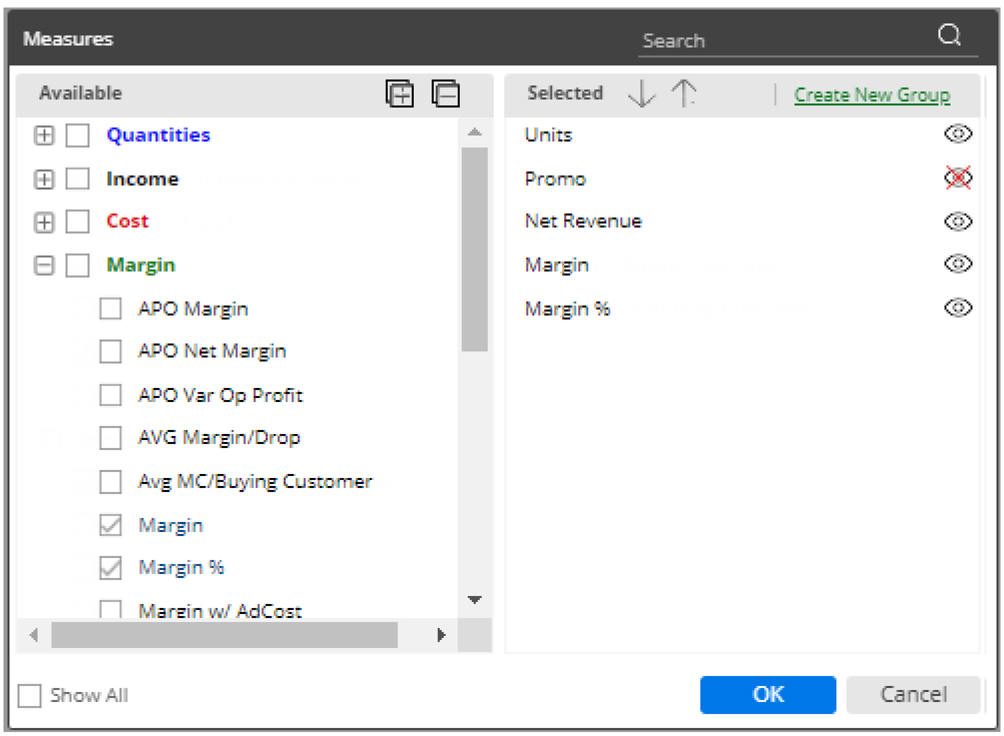
To select measures

1. On the widget toolbar, click the button (visible on mouseover). If the widget only has one measure, this will take you directly to the Measures window (Step 3).
2. In the pop-up menu, check the boxes of the measures to show and clear the boxes of the measures to hide; then, click OK. This menu lists the measures that have been added to the widget. If you don't see the desired measure(s), click on **Edit Measures** and continue to Step 3.

Note: The ability to edit measures in view mode may be restricted by dashboard or user account settings.

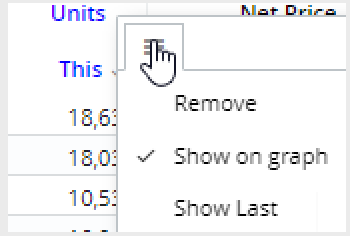


3. *To edit measures:* Expand a data category in the left (Available) pane. Then, check the box(es) of the measure(s), or drag a measure to the right (Selected) pane. Click OK when you are finished editing measures.



Tips:

To hide or show a subcolumn (e.g., This or Last), click the menu icon in its heading and select **Remove** or **Show**.



In an Exception widget, the measure selection tool lets you show or hide individual exception columns (Passed, Passed %, etc.). The Measures window (i.e., Edit Measures) controls the measures that will be shown in exception lists.

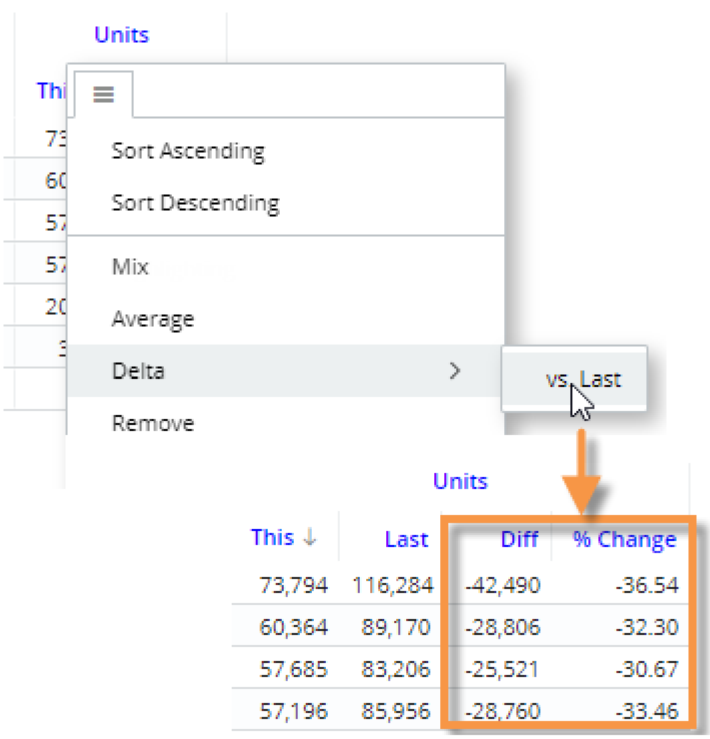
Insert calculations

Insert difference and percent change

In grids that compare two date ranges, you can insert the difference and percent change (i.e., variance).

To insert difference and percent change

1. Switch to the grid (see page 88) if you haven't already.
2. To add standard variance calculations (This-Last), place your cursor over the column containing the newer values (i.e., This), and click the menu icon . From the pop-up menu, select Delta, vs. Last. This type of variance calculates the change from the earlier date range to the newer date range; values will be positive if values increased over time.



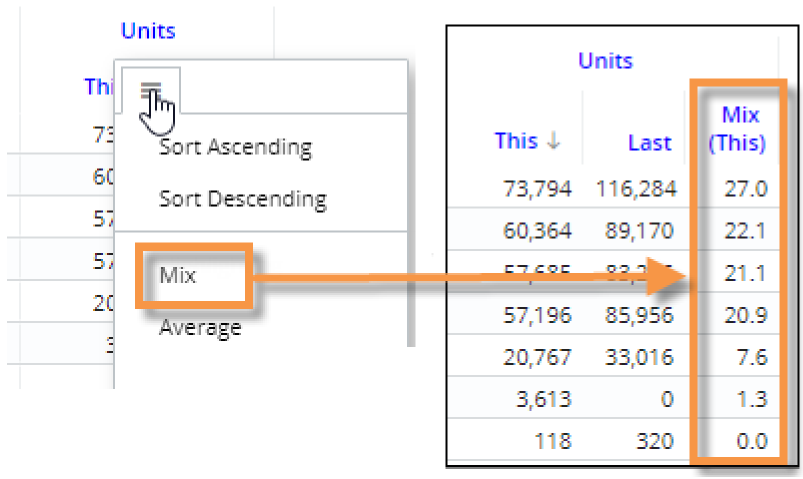
Tip: To add the difference/percent change between any other values (e.g. This vs. budget), place your cursor over the first subheading in the formula, click the drop-down arrow, and then make your selection.

Insert mix

In grids that compare members, you can insert the percent of the total (mix) contributed by each member. In a Trend or Comparative Time Series widget, this adds the percent of the total for each unit of time. You cannot add mix for fields calculated with multiplication or division (such as per unit fields).

To insert mix

1. Switch to the grid (see page 88) if you haven't already.
2. Place your cursor on the column for which you want to add mix values.
3. Click the menu icon ≡.
4. On the pop-up menu, select Mix.



Tip: Additional options are available in Crosstab grids.

- Column (Mix - C) - percent of the total of all columns within the given row.
- Row (Mix - R) - percent of the total of all rows within the given column.
- Total (Mix - T) - percent of the total of all rows and columns.

For example, the following shows Mix for Mocha Coffee in the SouthEast region:

	Mocha Coffee Units				Total Units	
	This	Mix - C (Units)	Mix - R (Units)	Mix - T (Units)	This	Mix (Units)
SouthEast Area	185	40.3	69.0	28.4	459	70.5
SouthWest Area	34	39.5	12.7	5.2	86	13.2
East Area	25	45.5	9.3	3.8	55	8.4
NorthWest Area	24	48.0	9.0	3.7	50	7.7
NorthEast Area	0	0.0	0.0	0.0	1	0.2
Total (5)	268		100.0	41.2	651	100.0

Mix - C = 185 (Mocha Coffee in SouthEast)/459 (All brands in SouthEast) x 100% = 40.3%

Mix - R = 185 (Mocha Coffee in SouthEast)/268 (Mocha Coffee in all regions) x 100% = 69.0%

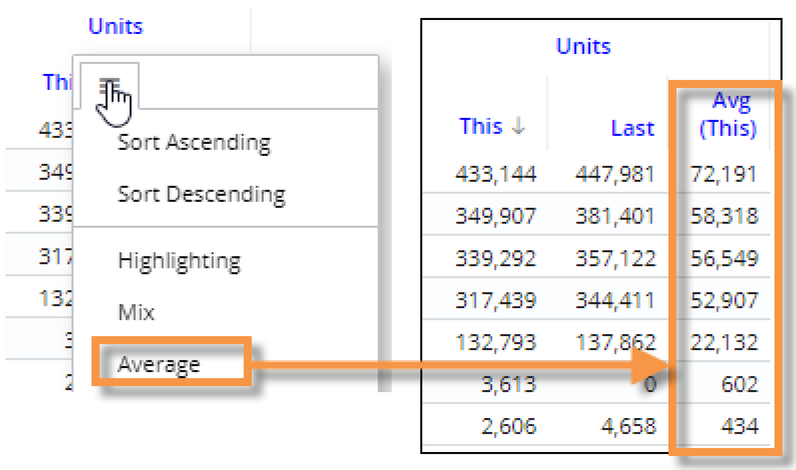
Mix - T = 185 (Mocha Coffee in SouthEast)/651 (total for all brands in all regions) x 100% = 28.4%

Insert average

In comparative grids, you can insert a column that shows the average per day, week, month, or period in the date range. For example, if the view totals data for past 6 months, the average column would show the average value per month.

To insert average

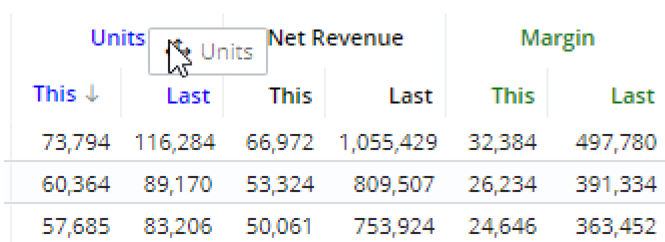
1. Switch to the grid (see page 88) if you haven't already. For the average column to be meaningful, the widget should show at least two units of time (days, weeks, months, etc.)
2. To add the average for This date range, place your cursor over This column; to add the average for Last date range, place your cursor over Last column.
3. Click the menu icon ≡ and then, from the pop-up menu, select **Average**.



Move and resize columns

To move columns

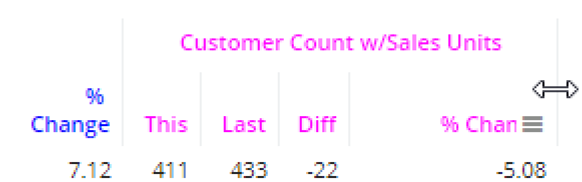
1. In a grid, click the heading of the column you want to move.
2. Press the left mouse button, drag the cursor to the new location, and release the mouse button.



To resize a column

Click and drag the right side of the column to the desired width.

> **Tip:** To go back to the default width (i.e., autosize), click the menu icon at the top of the column and select **Reset to Auto Width**.



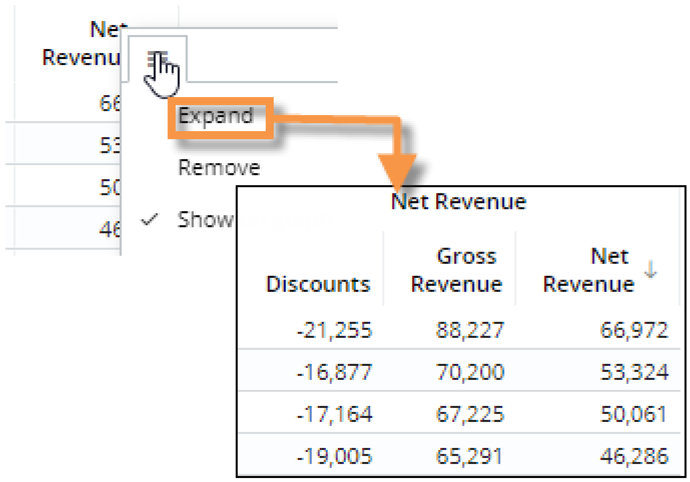
Expand a calculated measure

Many data values are calculated within the UXT system using other measures. To see the formula for a measure, place your cursor over its heading. If you have the necessary rights, you can expand a measure to see all measures used in its formula.

To expand a calculated measure

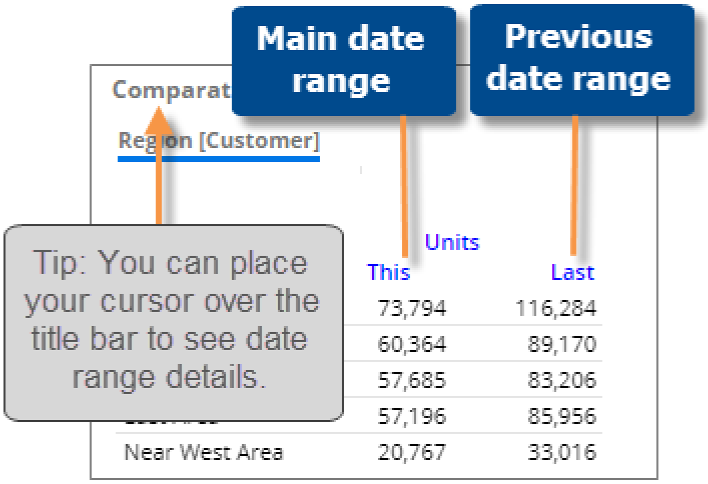
1. In a grid, place your cursor over the heading of the measure you want to expand and then click the drop-down arrow.
2. On the pop-up menu, select **Expand**.

> **Tip:** To remove the measures, access the pop-up menu and select the collapse option.



Select the dates

Each widget shows data for a range of dates (days, weeks, months, etc.). The date range can update automatically over time as new data becomes available. The main date range is referred to as "This" date range. Some widget types allow comparison with a previous date range (i.e., "Last").



Most widget types aggregate data over all dates in a date range (e.g., total of last six months). However, time-series analysis shows each date (e.g., each month) individually.

Salient Dashboards provide several ways to select the date ranges, including:

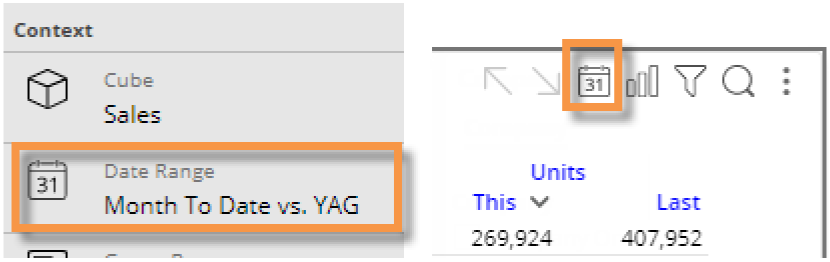
- Comprehensive date setup options, including resolution, number of dates, and advanced options, are available in the date setup area (see page 45). Date settings can be applied per widget and/or linked across multiple widgets.
- A date selector (see page 49) allows users to shift the end date.
- A dashboard may include buttons to quickly change the date.

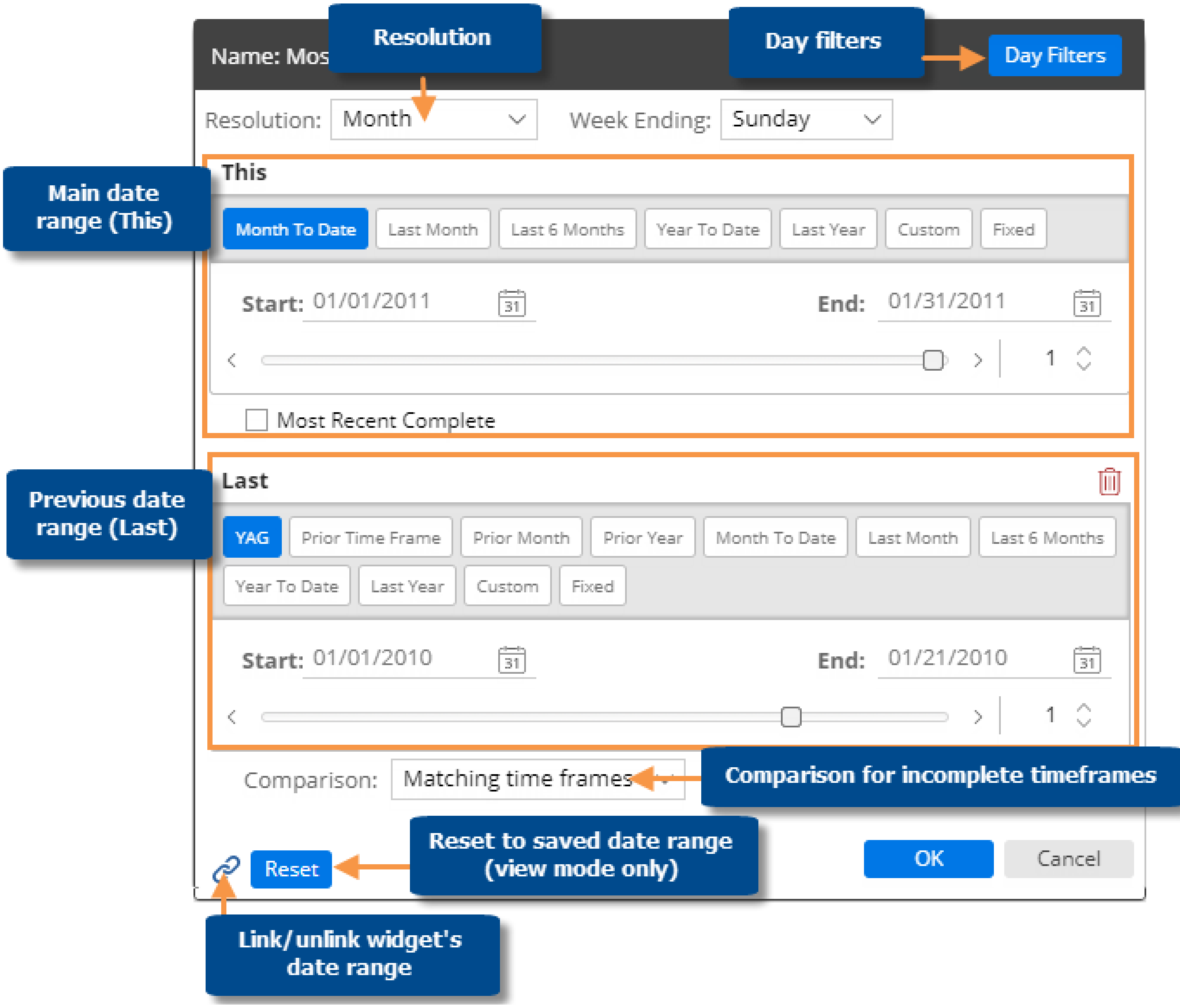
Date setup

Select from the following options to choose the initial date range to display when the user opens the dashboard. You can also select from these options as you investigate the data in Salient Dashboards.

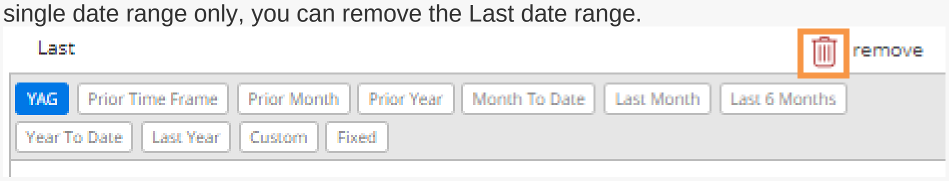
To select the date setup

1. Click the date setup icon 31 in the title bar of the widget, or click on the widget and then click on Date Range under Context in the toolkit.
2. In the dialog, choose from the following date settings. The available options depend on the dataset and may be pre-configured by your administrator.





Option	Explanation
Resolution (i.e. days, weeks, months, or customized periods, etc.)	Choose the units of time from the menu at the top of the dialog. This selection controls which date presets will be available.
Main date range (This)	Under **This**, click the button of the date range to view (e.g. Month To Date). The available date presets depend on the resolution selected above and the dataset configuration. If you wish, you can customize the date range further after making your selection.
Day filters (optional)	Optionally, click the **Day Filters** button at the top of the dialog to choose specific days of the week or business days within the date range to analyze. Data for all other dates will be filtered out.

Option	Explanation
Comparison date range (Last) - optional	Under **Last**, click the button of the previous date range (e.g., YAG). The available options depend on the resolution selected above. If the dialog does not include a Last section, click Add Date Range at the bottom of the dialog to include a previous date range if desired. **Tip:** A comparison date range is optional in many widget types. If you want to look at a single date range only, you can remove the Last date range. 
Comparison for incomplete timeframes	A **Comparison** option at the bottom of the dialog controls the selection of the previous (Last) date range when This date range is incomplete. • **Matching time frames** - Adjust the number of days in Last date range to match the number of days in This date range for a precise view of gain/loss (i.e. how much better/worse are we doing). For example, compare March 1 through 15 of this year with March 1 through 15 last year. • **Complete last period** - Do not adjust the number of days in Last date range; instead show the complete last month or period for a gap or goal perspective (i.e. how much more to go). For example, compare March through 15 of this year with the full month of March last year.
Linked dates (i.e., use dashboard date)	Toggle the link icon at the bottom of the dialog to link or unlink the widget's date range, depending on whether you want the date range to update with the dashboard date.  - indicates that the widget's date will update when the dashboard date changes. In view mode, the date ranges of all linked widgets update simultaneously when one of them is changed.  - indicates that the widget's date range is unlinked and, therefore, has its own stand-alone date range. **Tips:** Even if date ranges of widgets are linked, they operate independently in edit mode to allow you to set different initial date ranges for the widgets. The date icon setting must be on (in general widget settings) for linked date ranges to function. You can also link/unlink a widget using the **Use Dashboard Date** setting in general widget settings.

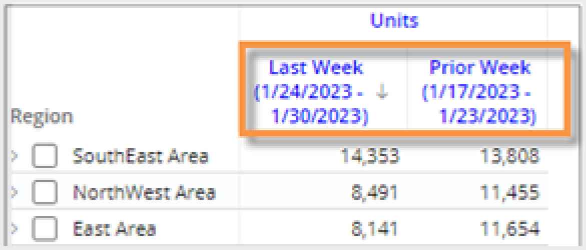
Tips:

The date range selected in edit mode (prior to saving) is used as the default that appears when users open the dashboard in view mode.

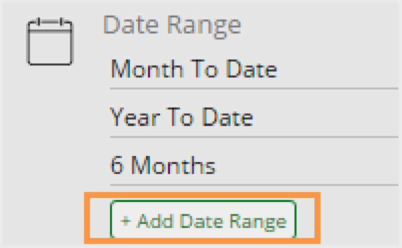
In view mode, you can click the Reset button to revert the date range back to the last saved settings.

Tips:

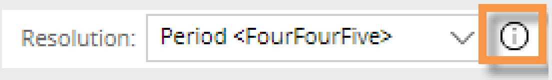
By default Comparative and Multi Comparative widgets will show the data in "This" and "Last" columns, but you can customize the headers (see page 93) to show more information about the date range(s) if you wish.



Multi Comparative widgets can show additional date ranges besides the standard This and Last ranges. To add date ranges, select the widget and then click **Add Date Range** in the toolkit. To edit a date range, click the date setup icon in the widget's toolbar and then select the name of the date range. Multi Comparative date ranges cannot be linked to other widgets.



When custom fiscal periods are selected, you can click the **i** icon to view the start date and end dates of each period.

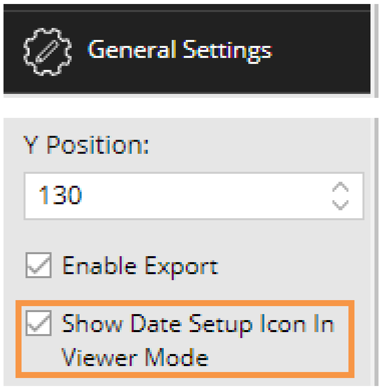


Enable or disable date setup for view mode

By default, the date setup icon is enabled in view mode, allowing users to change the date of a widget. This provides full access to date options including the resolution, number of dates, start/end dates, and more. If you wish, you can disable this icon for any widget. Other methods of date selection, such as an end-date menu or buttons may still be available.

To enable/disable date setup icon for view mode

1. Select the widget for which you want to disable or enable the date setup icon.
2. Expand **General Settings** in the toolkit.
3. Locate the **Show Date Setup Icon in Viewer Mode** property and check or clear its box.



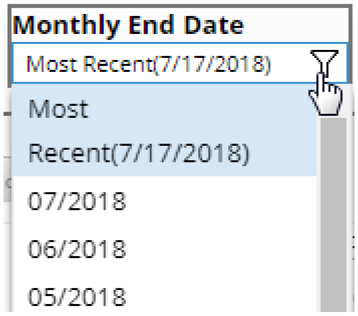
End date selection

A date selector allows users to choose the dashboard end date to shift the date ranges of multiple widgets across the dashboard at once. This type of date selection does not change the resolution (days, weeks, months, etc.) or number of dates in the date ranges.

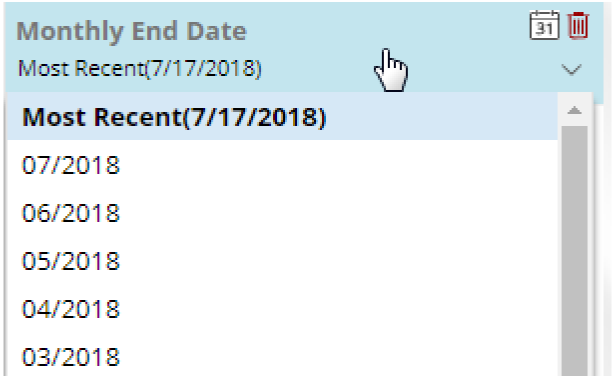
To select the dashboard end date

1. Click a date selector to open it. A date selector may be in the filters panel or within the dashboard as a separate widget, depending on the dashboard's setup. If the dashboard doesn't include a date selector in either of these areas, you can add one (see page 50).
2. Select a dashboard end date from the menu. This controls what is considered the current date or "today" and will, therefore, adjust dynamic date ranges relative to this date. Fixed date ranges and date ranges that are unlinked (i.e., do not use the dashboard date) are not affected by end date selection.

As a separate widget in the dashboard:



In filter panel:

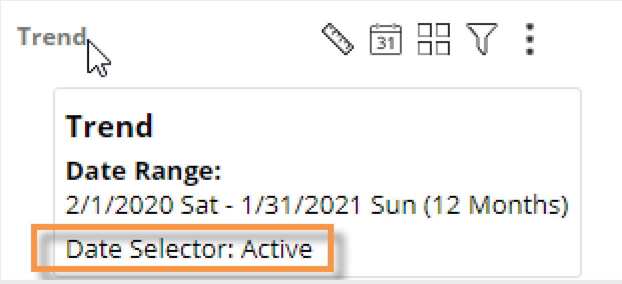


Tips:

If the resolution of an end date selector is different than a widget's date range, then Salient Dashboards will use an appropriate end date based on the selection. For example, if the date selector is monthly and a widget's date range is last week, the resulting date range is the last full week in the selected month.

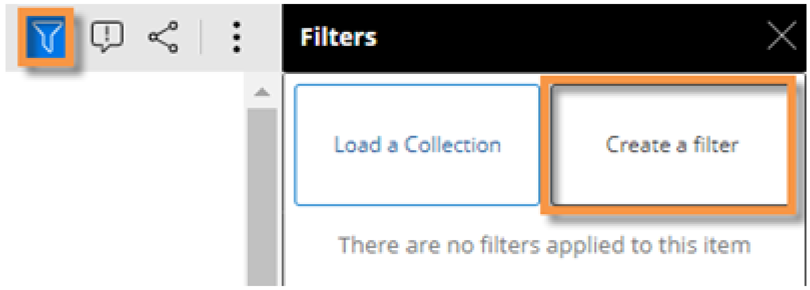
Depending on how it has been set up, the date selector may include a Most Recent or Most Recent Complete option.

A date selector can be selectively turned off for a widget in edit mode (under General Settings, Use Dashboard Date), so that it does not affect the widget's date range. You can see whether a date selector is active or inactive for a given widget by placing your cursor over the widget's title to see the tooltip.



To add a date selector to the filters panel

1. Click the at the top of the dashboard screen to open the filter panel.
2. Click **Create a filter**.
3. Click **Date**.



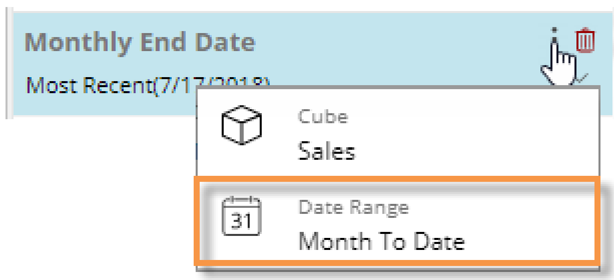
4. Set the dates that will appear as choices in the menu.

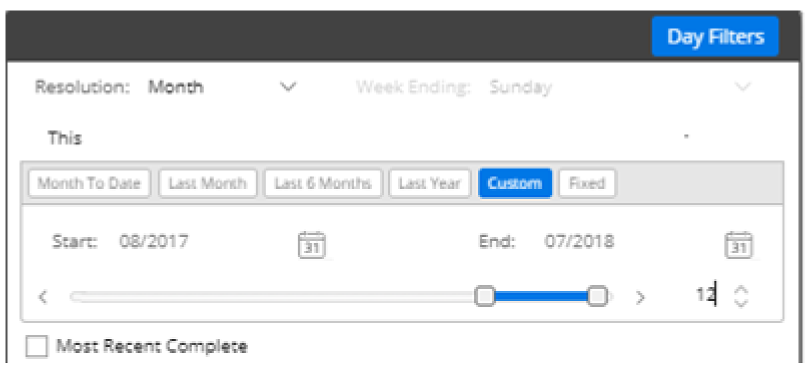
   i. Mouseover the date selector in the filters panel, and then click the icon.

   ii. Click on Date Range.

   iii. Select the resolution of the dates to appear in the menu (e.g., months).

   iv. Configure the date range so that it includes all of dates that should appear as choices in the menu. The dates can be fixed or move automatically based on available data. For example, you might want to allow users to select from the last twelve months.

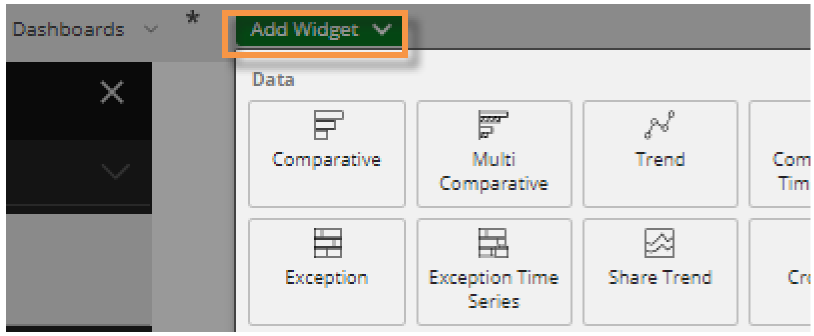


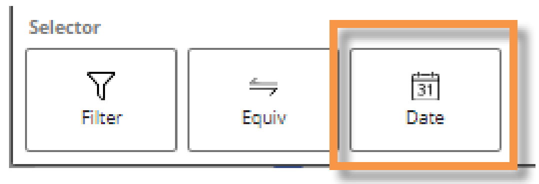


To add a date selector widget (edit mode only)

This method places a date selector widget within the dashboard and adds a corresponding menu in the filters panel. Users will not be able to remove the selector in view mode.

1. Click the **Add Widget** button at the top of the screen.
2. In the pop-up window, click the Date button or drag it onto the workspace.



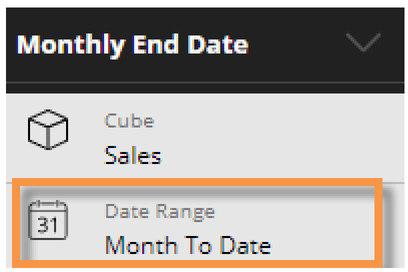


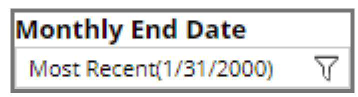
3. Set the dates that will appear as choices in the menu.

   i. Click on the date widget, and then click on Date Range in the toolkit.

   ii. Select the resolution of the dates to appear in the menu (e.g., months).

   iii. Configure the date range so that it includes all of dates that should appear as choices in the menu.





Tips:

The selected date cube controls the available dates. You may need to change the data cube associated with the date selector to make the desired dates available.

In the Filter panel, this can be done by clicking the ⋮ icon and selecting **Cube**.

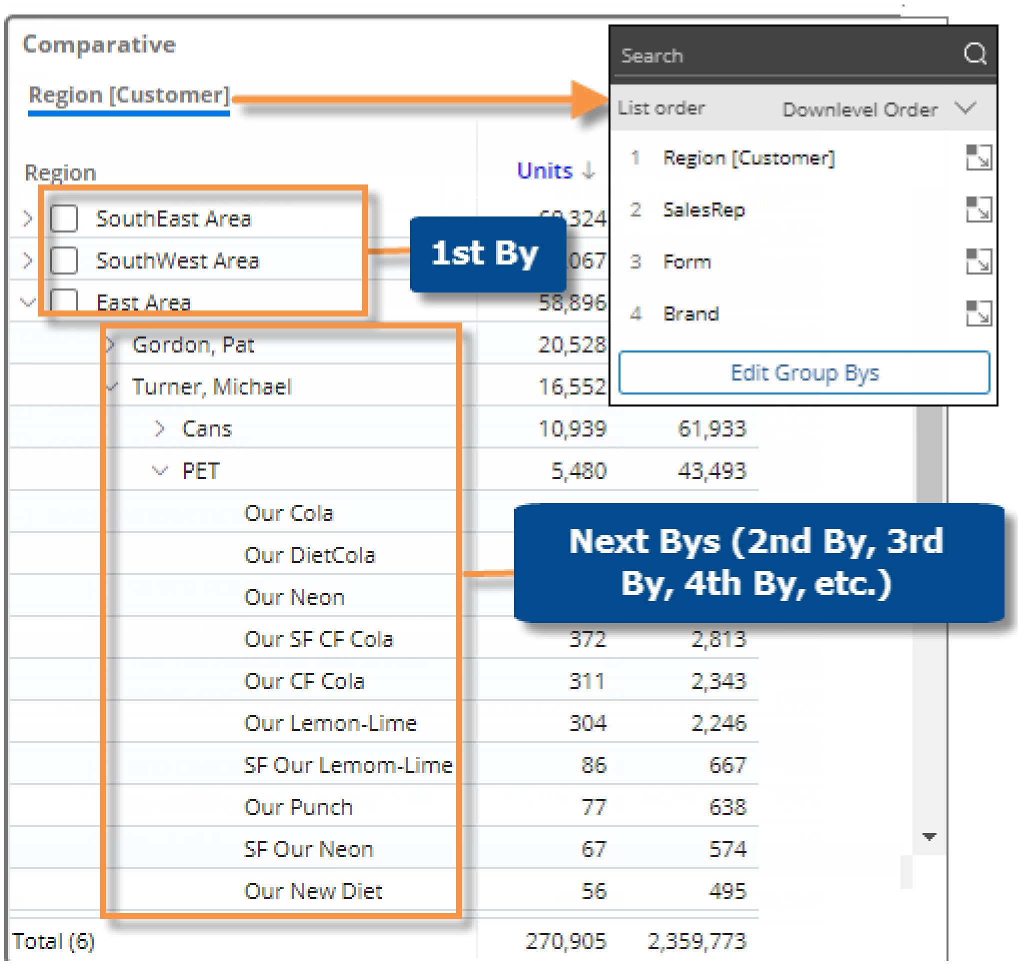
For a date selector widget, the data cube can be selected in the toolkit.

The date selector will affect all widgets that use the dashboard date (i.e., linked dates). This is the default setting, but it can be changed in general widget settings.

Group By attributes

The "Group By" attributes control the following aspects of widgets that compare members (Comparative, Multi Comparative, etc.):

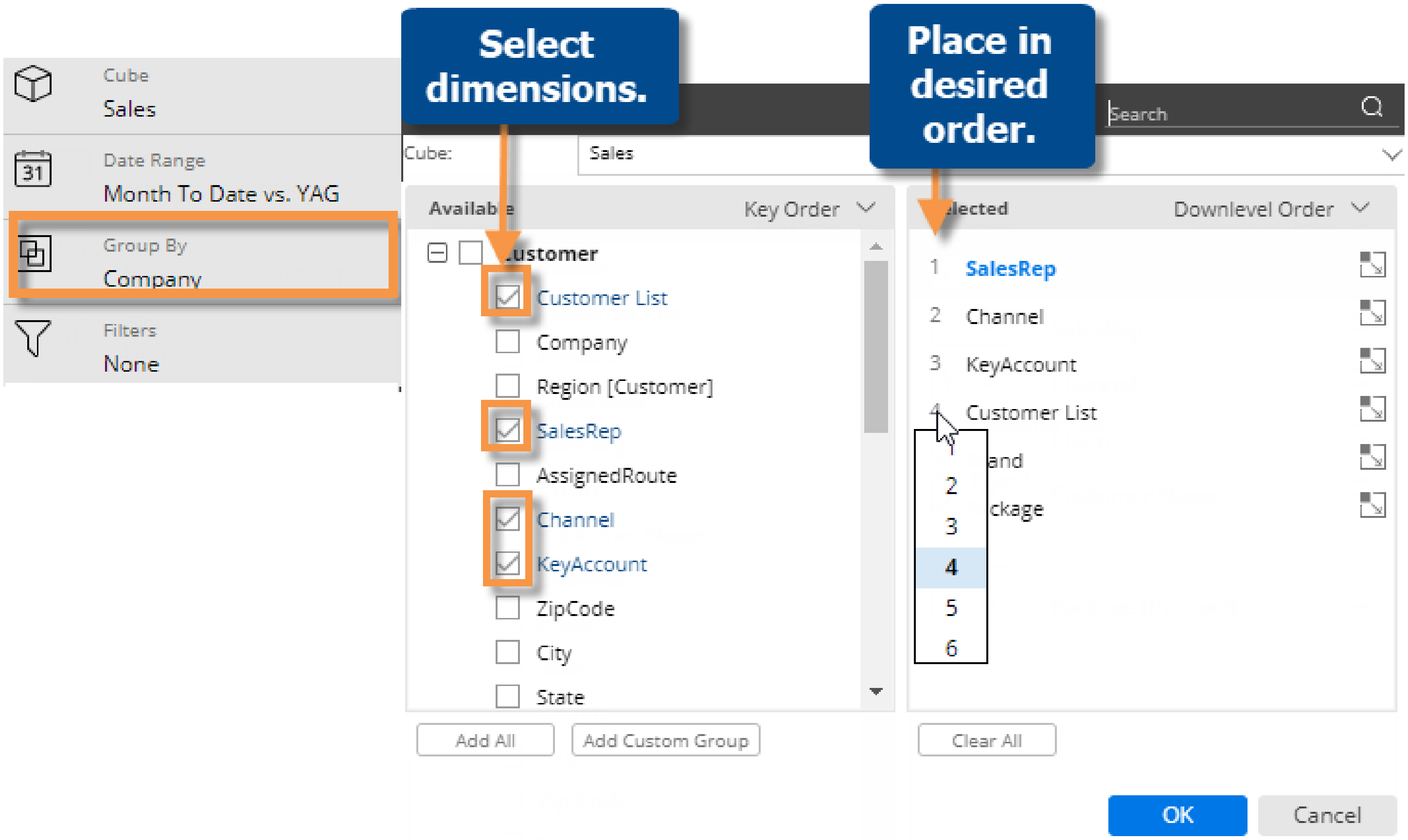
- How data is grouped at the highest level (1st By).
- If and how members can be expanded into additional levels of data (2nd By, 3rd By, etc.).
- The default order of dimensions when drilling down (i.e., drill order).
- What dimensions users can drill into.
- What global filters can be applied.
- What dimensions are available in the Group By menu in the breadcrumb path. (Users will be able to access additional dimensions via an "edit" option.)



To select the Group By (in widgets that compare members)

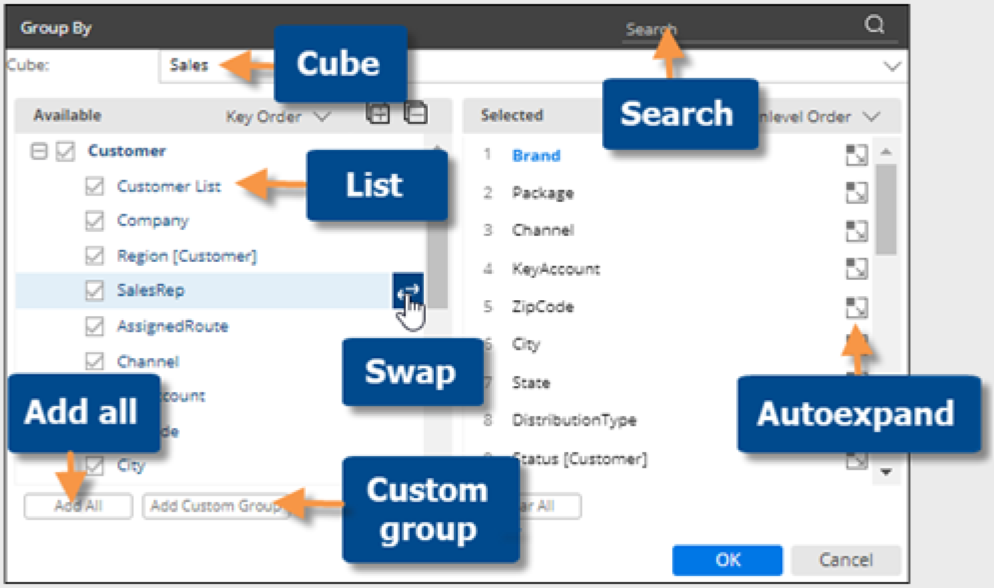
1. Click on the widget and then click on **Group By** in the toolkit.
2. In the Group By window, check the box(es) of any dimension(s) you wish to use for grouping the data, including the dimension for the highest-level groupings (1st By) and additional dimensions to use when drilling or expanding members (2nd By, 3rd By, etc.). Also include any dimensions you wish to make available to end users in the breadcrumb menu. To search for a dimension, enter the first few characters in the search box. If the desired By is not listed, you may need to change the data cube at the top of the window.

3. In the right pane, place the selected dimensions in the desired order for grouping data, drilling, and expanding members. You can drag and drop dimensions or click the dimension's number to select from a menu.
4. *(Optional)* To turn on auto-expand for a dimension, click the button in the right pane. The icon is blue when auto-expand is on. This will expand all members of the dimension to the next level. The results will be different depending on the type of view: standard grid (i.e., tree) (see page 56); flat view grid (see page 58); or expanded graph formats (see page 60). Auto-expand is available in Comparative, Multi Comparative, and Mix widget types.
5. Click **OK**.



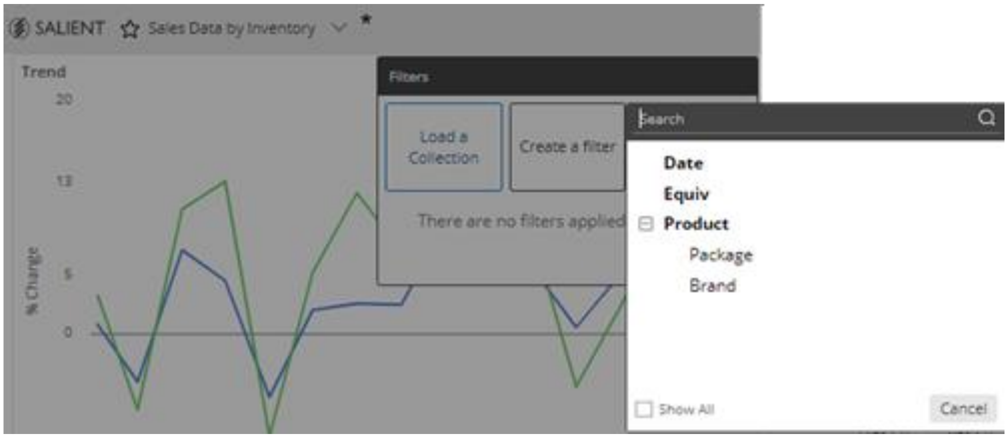
Tips:

- You can swap the selected dimension in the right pane with an available dimension in the left pane to quickly add it.
- You can add all dimensions using a button.
- To view key-level details (e.g., customers), group the data by the "List" option.
- To view record-level details (see page 132), group the data by Record Details, which is located after all keys/dimensions in the left pane.
- You can add a custom group (see page 129) to create your own custom method for grouping and comparing data.



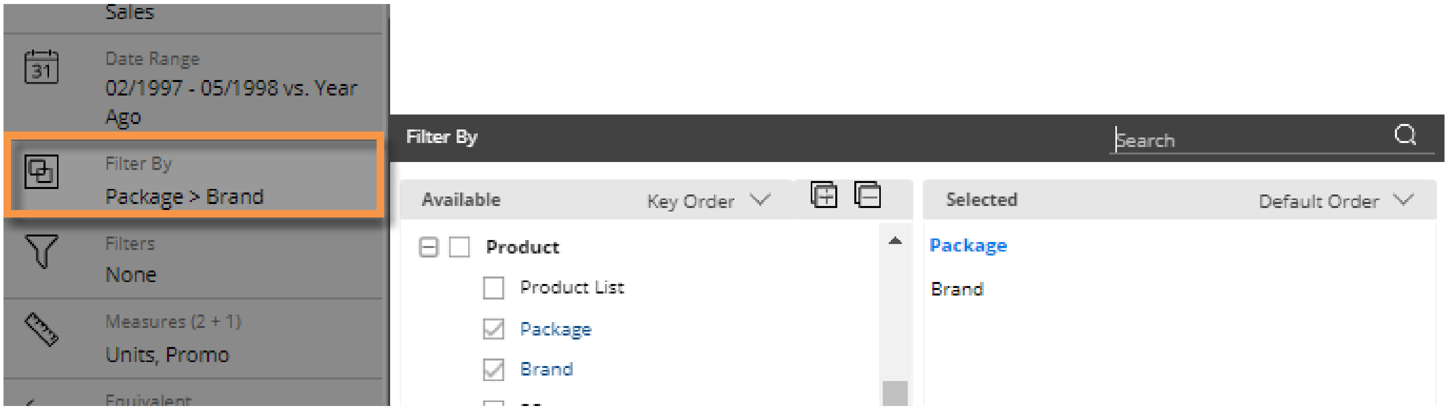
Filter By

In non-comparative widgets (Trend, Gauge, Waterfall, etc.), data is aggregated rather than grouped by a dimension. Therefore, instead of a Group By, a Filter By controls the default filter choices for view mode. Additional dimensions will be available for filtering via a Show All option. For example:



To set the default filter choices (in non-comparative widgets)

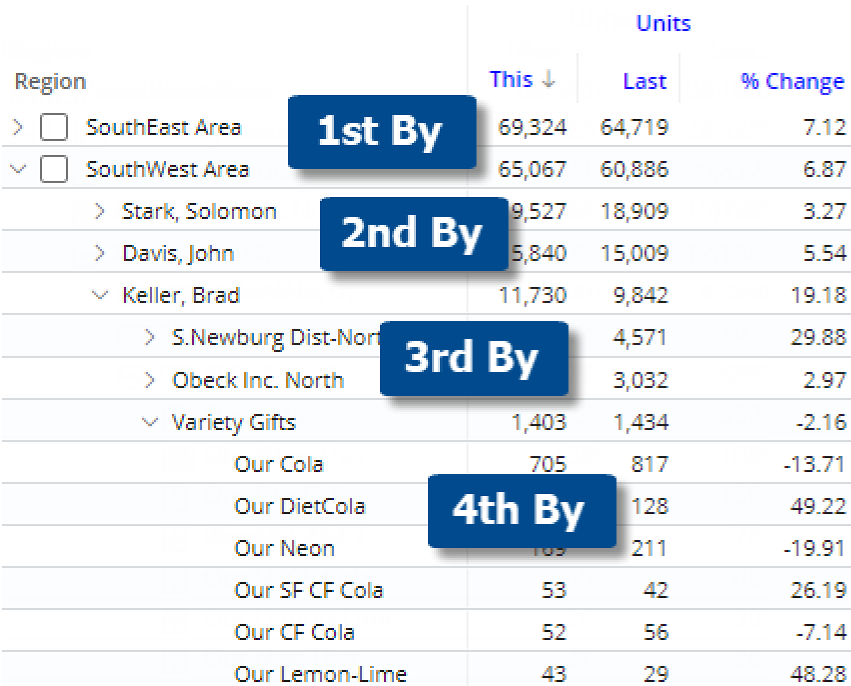
1. Click on the widget and then click on **Filter By** in the toolkit.
2. In the dialog, check the box(es) of the dimensions to set as default filter choices.



Expand data

Tree expansion

In standard grids that compare members, you can expand one or more members to see subgroupings underneath them. You can expand the 1st By dimension to see the 2nd By, the 2nd By dimension to see the 3rd By, etc. You can expand members individually or auto-expand all members of a dimension (only available in some analysis types).



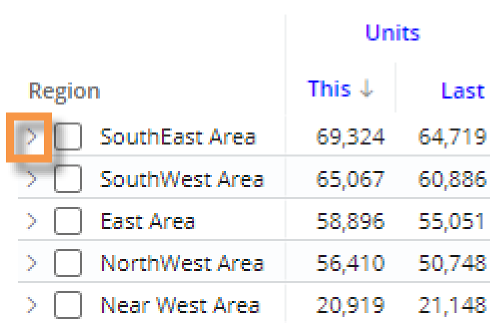
Region	Units		
	This ↓	Last	% Change
SouthEast Area	69,324	64,719	7.12
SouthWest Area	65,067	60,886	6.87
Stark, Solomon	9,527	18,909	3.27
Davis, John	5,840	15,009	5.54
Keller, Brad	11,730	9,842	19.18
S.Newburg Dist-Nor		4,571	29.88
Obeck Inc. North		3,032	2.97
Variety Gifts	1,403	1,434	-2.16
Our Cola	705	817	-13.71
Our DietCola		128	49.22
Our Neon		211	-19.91
Our SF CF Cola	53	42	26.19
Our CF Cola	52	56	-7.14
Our Lemon-Lime	43	29	48.28

To expand members individually

Click the › arrow beside the member(s) that you want to expand.

You can expand additional levels of data (e.g., 2nd By, 3rd By, etc.) if you wish.

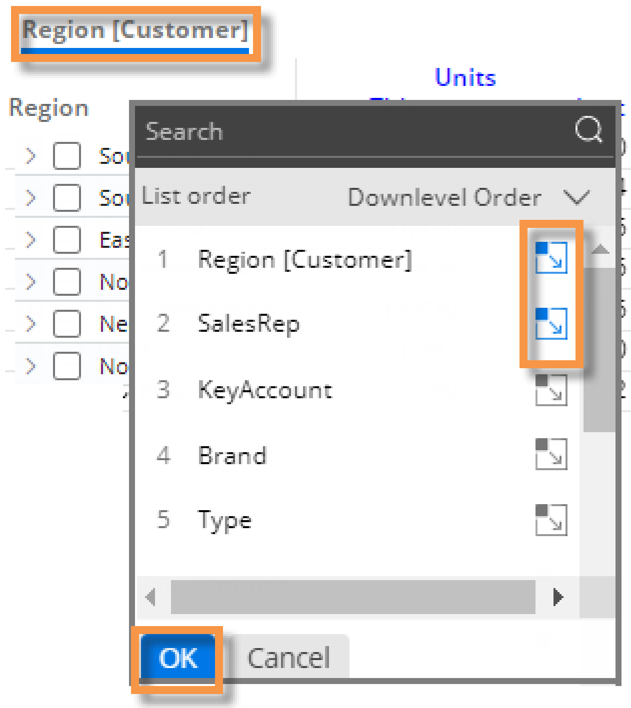
Tip: The widget must have multiple Group By dimensions; otherwise, the › arrow is not available.



Region	Units	
	This ↓	Last
SouthEast Area	69,324	64,719
SouthWest Area	65,067	60,886
East Area	58,896	55,051
NorthWest Area	56,410	50,748
Near West Area	20,919	21,148

To auto-expand all members of a dimension or key

(only available in Comparative, Multi Comparative, and Mix grids)



1. Click the By in the breadcrumb path (underlined) or open the Group By area in the toolkit.
2. In the pop-up dialog, click the button beside the dimension(s) and/or key(s) that you want to expand to the next level. The icon is blue when auto-expand is on.

   If you skip a level, the view will stop expanding members at that level; however, auto-expansion may resume at a lower level after you drill, manually expand members, or change the By, if the new By is auto-expanded.
3. Click **OK**.

Tips:

The previous instructions show how to expand members within a standard grid (i.e., tree hierarchy). If you prefer, you can quickly expand dimensions into separate columns using flat view (see page 58). When deciding whether to use tree expansion or flat view, consider the following:

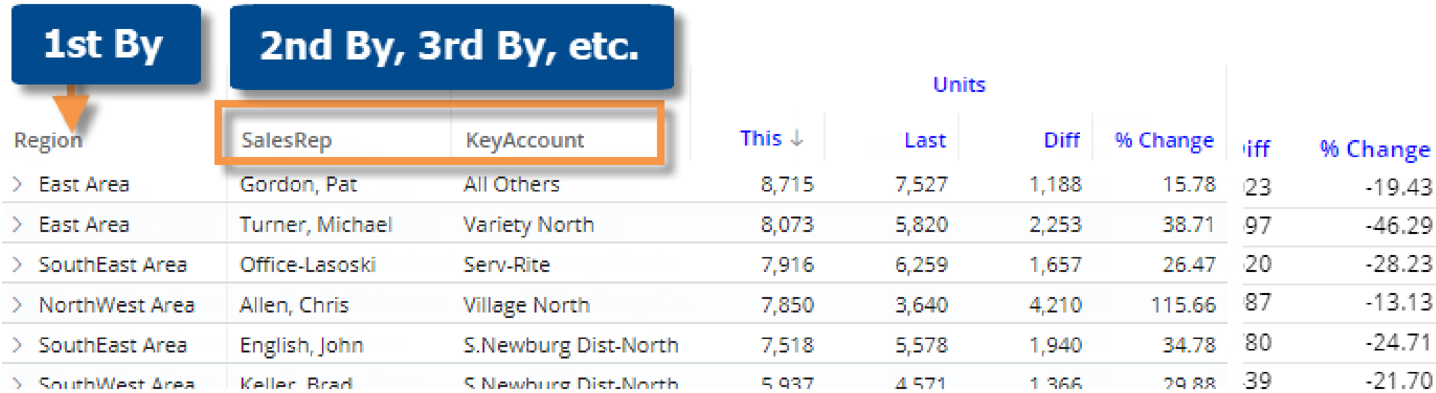
- An expanded tree in a standard grid includes subtotals for the "parent" row; a flat view does not include subtotals for auto-expanded dimensions.
- The rows in a flat view can be sorted independently of the parent-level data; therefore, you can more easily find the highest and lowest performing combinations.

When you save a dashboard, it will remember the expanded rows and show them whenever a user opens the dashboard. In addition, you can make the top number of rows automatically expand (not applicable to auto-expansion). This setting is available in grid settings.

Depending on the grid page size, you may not be able to see all available 2nd By dimension members at once. In this case, you can increase the grid page size or change the sort (see page 66) to bring the desired members closer to the beginning of the list.

Auto-expansion in flat view

In a "flat" view, dimensions and keys can be expanded into columns to provide detailed, cross-key information. Each unique combination of members (i.e., attributes) has its own row. You can interact with rows by drilling, sorting, and more, to investigate performance.



To expand in a flat view

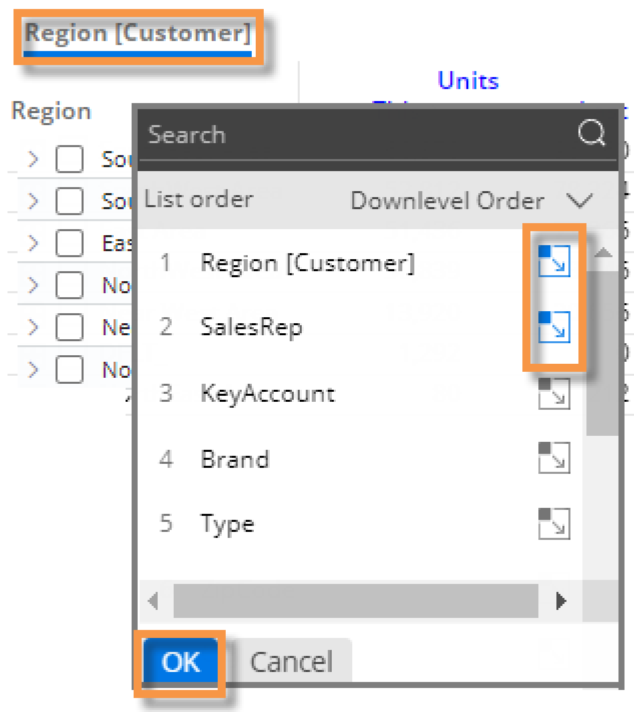
1. Start with one of the following widget types in grid format: Comparative, Multi Comparative, or Mix.
2. Select dimensions and/or keys.

   - Click the By in the breadcrumb path (underlined) or open the Group By area in the toolkit.

   - Place dimensions and/or keys in the desired order. This will control the order of columns in flat view (e.g., 1st By will be first column).

   - Click the button beside the level(s) that you want to auto-expand (i.e., show next dimension as separate column). The icon is blue when auto-expand is on.

   - Click **OK**.



To expand in a flat view

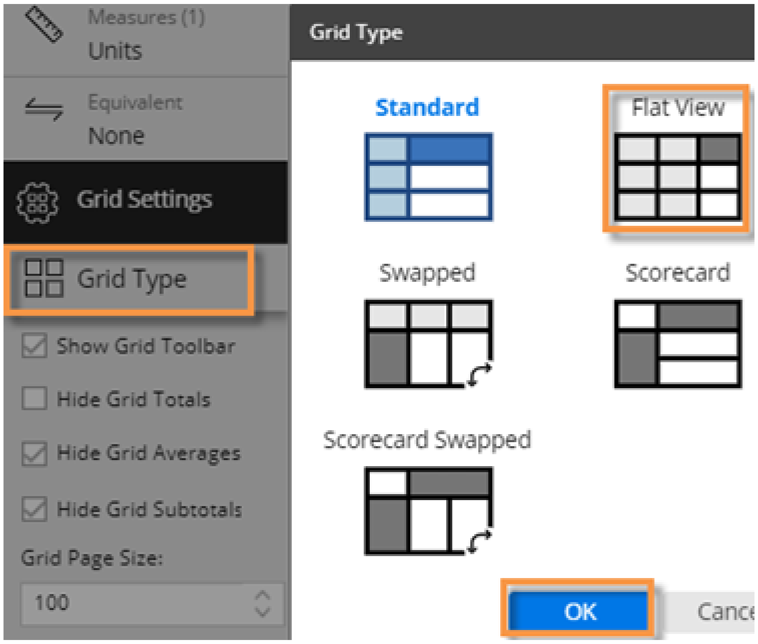
3. Turn on "flat view" grid type (see page 91) if it is not already selected. This setting is only available in explore and edit modes. In view mode, users can access whatever grid type has been built into the dashboard.

   - In the toolkit, go to **Grid Settings**.

   - Click on **Grid Type**.

   - Choose **Flat View**.

   - Click **OK**.



Tips:

If you skip a level for auto-expansion, the view will stop expanding members at that level; however, auto-expansion may resume at a lower level after you drill, manually expand members, or change the By, if the new By is auto-expanded.

You cannot auto-expand down to record details; instead, drill down, change the Group By, or expand items individually.

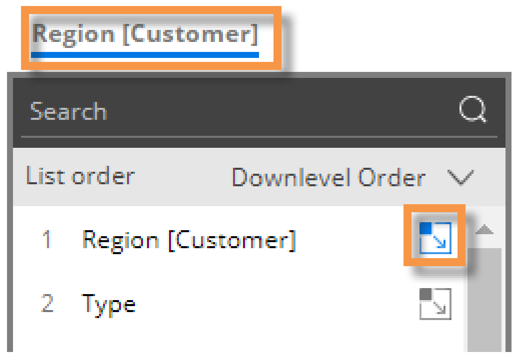
Auto-expansion in graphs

In some graphs, dimensions and keys can be expanded to see granular results. In Comparative and Multi Comparative graphs (see below), you can expand data to visualize performance of subgroupings. Mix graphs (see page 62) can show pie slices for subgroupings—in either a "sunburst" format or as independent pie slices. You can also expand data in a Trellis (see page 116).

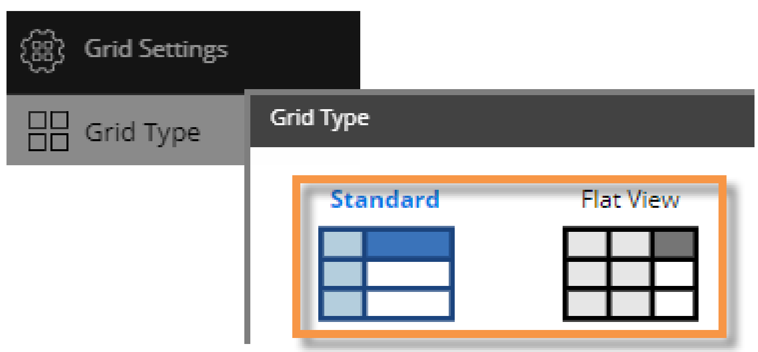
Expand data in Comparative/Multi Comparative graphs

1. Go to a Comparative or Multi Comparative graph. In general, horizontal bars can display more data than vertical bars when data is expanded.
2. In the Group By menu or toolkit area, turn on auto-expand for the top level (1st By) and additional levels if desired. The icon is blue  when auto-expand is on.

   If you skip a level, the view will stop expanding members at that level; however, auto-expansion may resume at a lower level after you drill, manually expand members, or change the By, if the new By is auto-expanded.

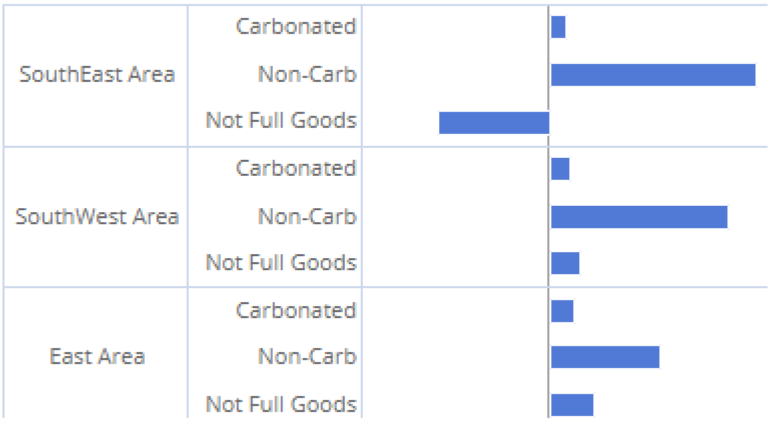


3. Under Grid Settings in the toolkit, choose a standard or flat grid type (see below). These options are only available in explore and edit modes.



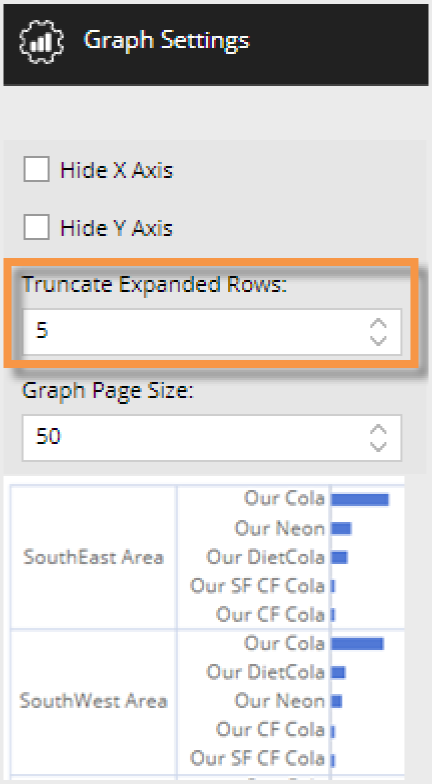
Comparative/multi comparative graph with "standard" grid type

This graph shows subgroupings within the parent-level.



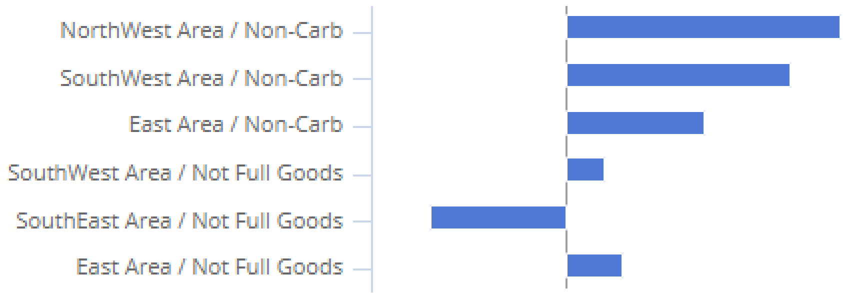
Tips: To limit the number of subgroupings displayed for each expanded member (e.g., top 5 brands for each region), you can change the **Truncate Expanded Rows** setting in Graph Settings. This can help fit the most important information on the screen.

You can also set the page size in this area. Note that the number of members per page includes members in all levels (e.g. 4 regions plus 5 brands per region is 4 + 4x5 = 24).



Comparative/multi comparative graph with "flat view" grid type

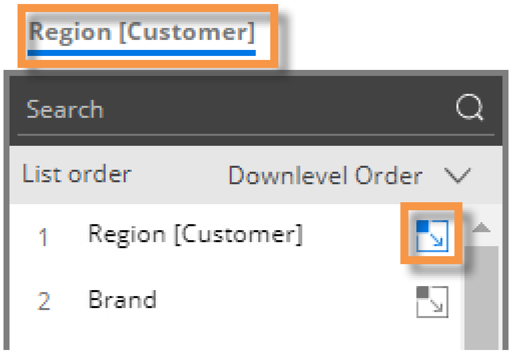
This graph has separate bars at the same level for each unique combination. Bars can be sorted independently of the parent level.



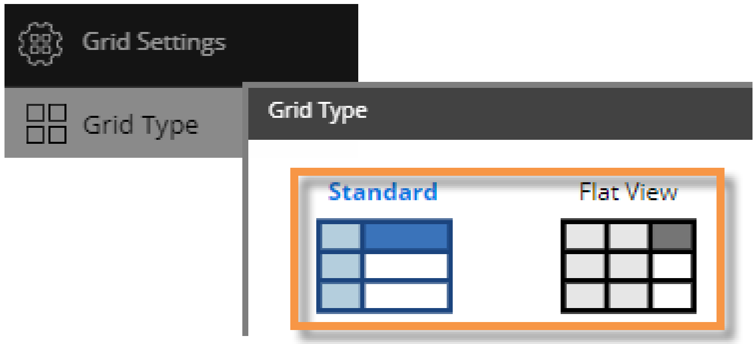
Expand data in Mix graphs

1. Go to a Mix graph.
2. In the Group By menu or toolkit area, turn on auto-expand for the top level dimension (1st By) and additional levels if desired. The icon is blue  when auto-expand is on.

   If you skip a level, the view will stop expanding members at that level; however, auto-expansion may resume at a lower level after you drill, manually expand members, or change the By, if the new By is auto-expanded.



3. Under Grid Settings in the toolkit, choose a standard or flat grid type (see below). These options are only available in explore and edit modes.

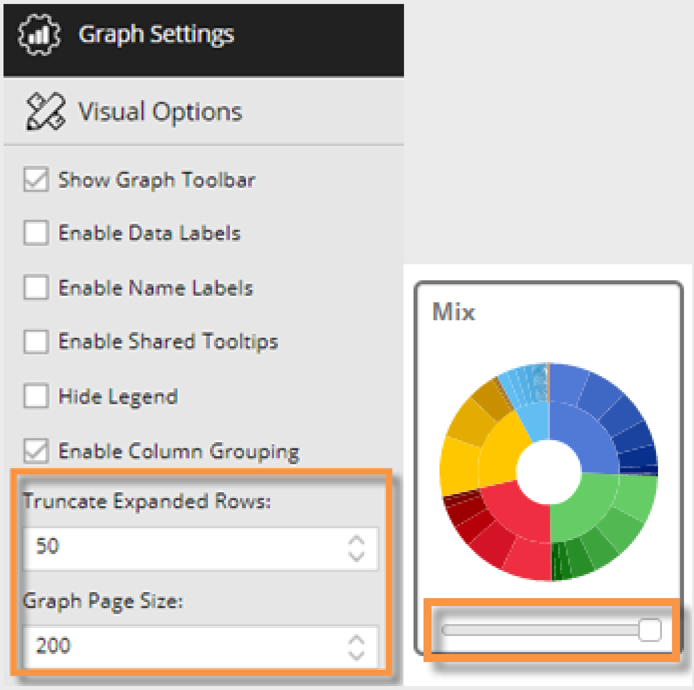


Mix graph with "standard" grid type (Sunburst)

This graph shows the hierarchy and magnitude of data in a "sunburst" chart. The center ring represents the top-level data (1st By); the data becomes more granular as you move outward. For example, the next ring represents the 2nd By. The slices are sized based on data values and aligned with their parent level to show how much each piece contributed (e.g., brands within each region) .

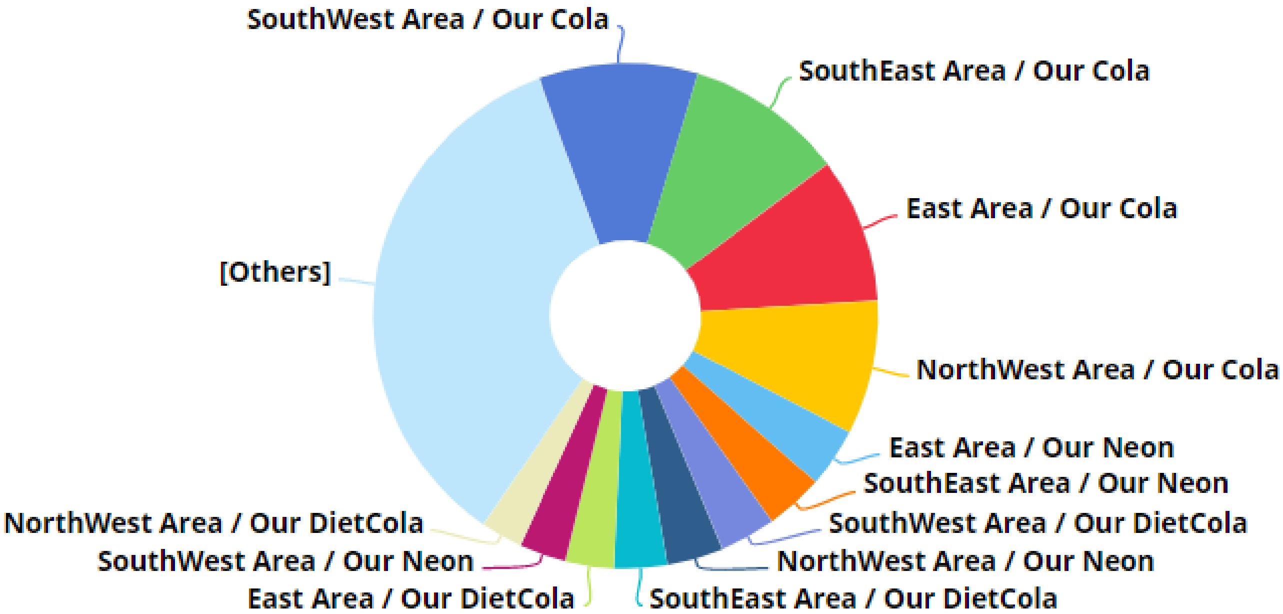
Tip: For a sunburst, we recommend setting the **Graph Page Size** to a large number; otherwise, the pie may only show a subset of the data. To set the graph page size, go to graph settings in the toolkit or use the slider at the bottom of the graph (i.e., drag the slider all the way to the right).

In addition, you can control the maximum number of subgroups (i.e., outer pie slices) for each expanded dimension member using the **Truncate Expanded Rows** setting. If this setting is lower than the actual number of subgroups, the sunburst will show blank space.



Mix graph with "flat view" grid type

This graph has separate pie slices for each combination of members. The pie slices are at the same level to show each unique combination's contribution to the total.

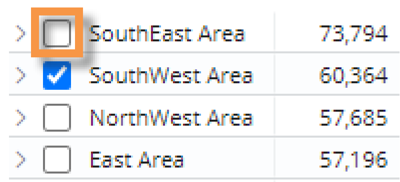


Check members

In standard grids that compare members, you can selectively checkmark any dimension members or key members to view their subtotals, drill down on them, show the checked members in graphs, and more.

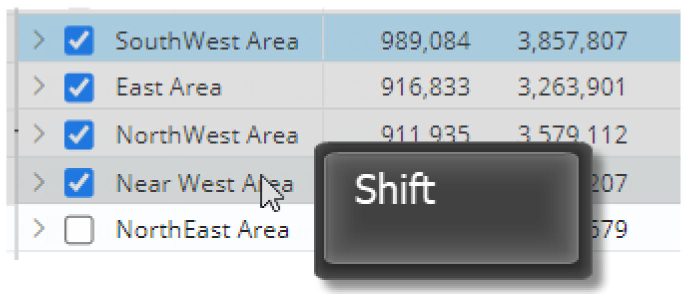
To checkmark members individually

Click the ☐ box(es) beside the member(s).



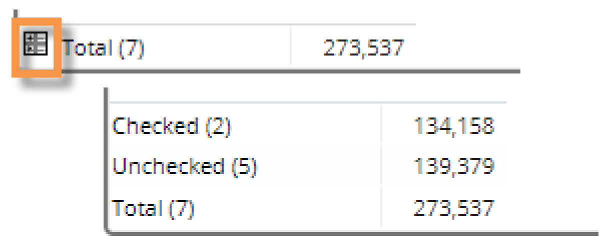
To checkmark a range (i.e., block) of members

1. Click on the top row of the desired range to select it. If you do not select a row, the grid will use the first row by default.
2. Press **Shift** as you click on the bottom row of the desired range.

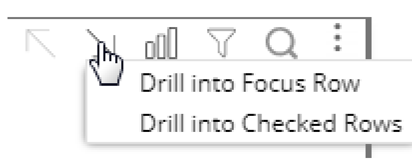


After checking members:

You can view subtotals by clicking the subtotal button at the bottom of the widget, or clearing the Hide Grid Subtotals option in Grid Settings.



You can drill down on the checked members by clicking the Downlevel button and selecting Drill into Checked.



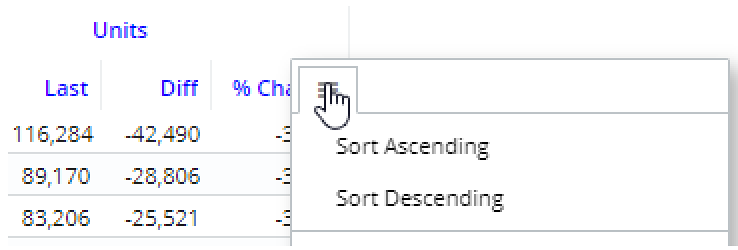
Sort

You can sort data to rank results. In most widgets, you can sort by values, difference, percent change, names, host codes, etc.

To choose the primary sort

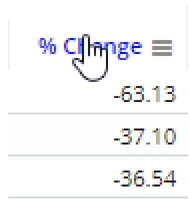
Option 1:

1. Place your cursor over the heading or subheading of the column by which you want to sort.
2. Click the menu icon ≡.
3. In the pop-up menu, select a sort option.



Option 2:

Click the heading to sort by that column; click again to reverse the sort order.

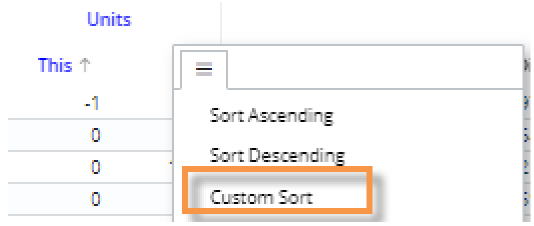


Additional sort levels (custom sort)

To control the order of members with matching values (e.g., zeros or matching names) for the primary sort, you can set additional sort levels.

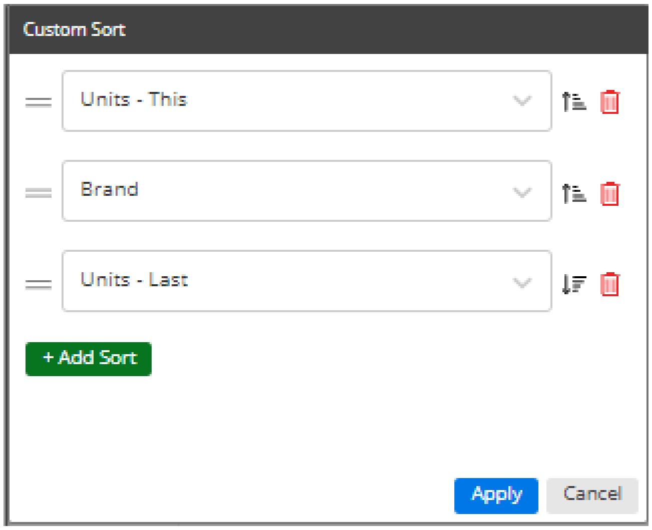
To set more sort levels (custom sort)

1. Place your cursor over a column heading.
2. Click the menu icon ≡.
3. In the pop-up menu, select **Custom Sort**.



To set more sort levels (custom sort)

4. In the Custom Sort dialog, click **+ Add Sort** to add a sort level(s).
5. For each level, select the column by which to sort and choose ascending or descending. To rearrange levels, click and drag the ═ icon.



Any rows that have the same values for the primary sort will be ranked according to the secondary sort; any rows with the same primary and secondary sort values will be ranked according to the 3rd sort level; and so on. For example, list products that didn't sell this month (zeros), grouped by brand and then ranked by sales for last month.

2nd		1st	3rd
Brand	Package	This ↑	Last
Our Cola	8PkCnsPa	0	1,230
Our Cola	8Pk Cans	0	923
Our Lemon-Lime	16Oz NR	0	319
Our Neon	8PkCnsPa	0	443
Our Neon	8Pk Cans	0	263
Our New Diet	16PNR8	0	668
Our New Diet	8PkCnsPa	0	190
Our New Diet	16PNR8Pa	0	167
Our New Diet	24Oz NR	0	163

Crosstab sorting

By default, Crosstab widgets use the same sort method for rows and columns; however, you can choose different sort methods if you wish. For example, you could sort rows (accounts) by name and columns (packages) by sales units. (Note that the sort is based on total values.)

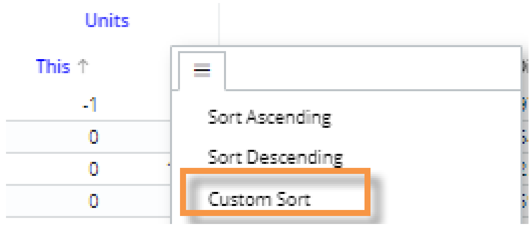
Name

Units (This)

	12Pk Cn		2Ltr-8		6Pk Cn	
	Units		Units		Units	
KeyAccount	This	Last	This	Last	This	Last
A Plus Marts	89	144	593	477	69	70
Acorn Mkts	6	105	0	59	0	0
All Others	7,845	6,800	8,188	7,493	24,375	18,228
American Food & Vend	0	0	0	0	845	780
Arrow Mart	220	115	160	295	20	7
B. English-North	122	129	192	78	2	78
B. English-South	0	134	0	0	0	0

To sort Crosstab widgets

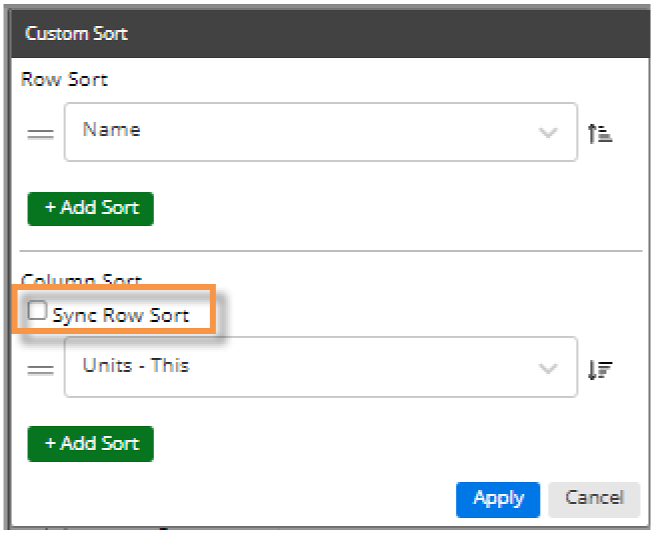
1. Place your cursor over a column heading in a Crosstab grid.
2. Click the menu icon ≡.
3. In the pop-up menu, select Custom Sort.



4. In the Custom Sort dialog, leave **Sync Row Sort** checked to use the same sort method for rows and columns. Then choose sort options.

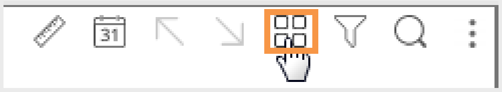
   OR

   Clear the **Sync Row Sort** box to use different sort methods. Then, choose how to sort rows and columns. For each sort, you can select the measure, add sort levels (for matching values), and toggle between ascending and descending.



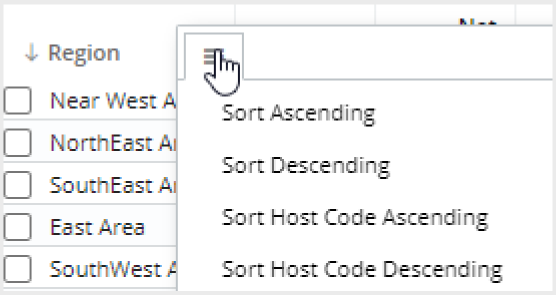
Tips:

To sort a graph, switch to the grid format and then perform these same tasks; then switch back to the graph.



When sorting by dimension member, additional options are available in the menu. You can use either sorting method even if host codes are not currently displayed.

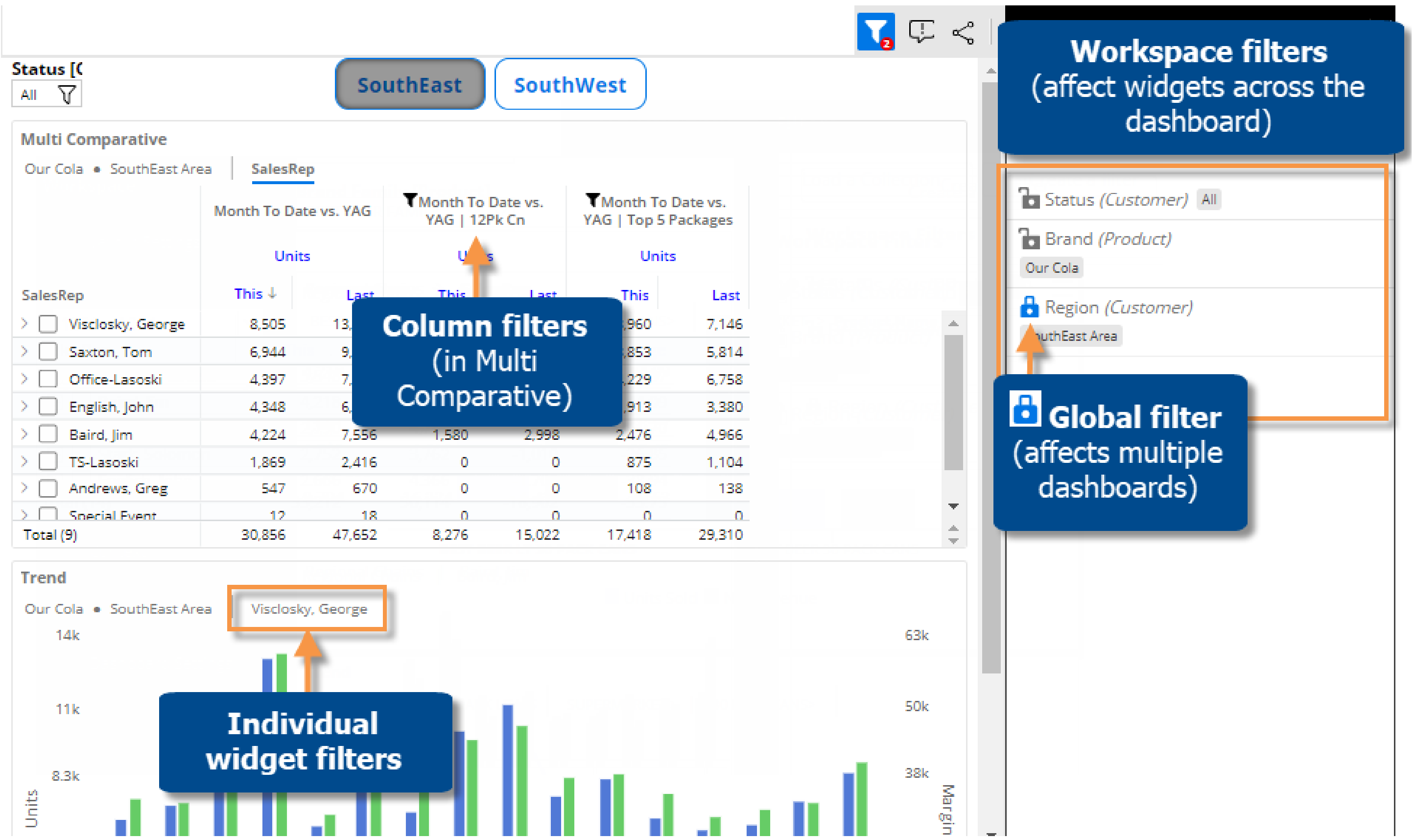
- **Sort Ascending/Descending** uses dimension member names.
- **Sort Host Code Ascending/Descending** uses dimension member codes.



Filter

Filters allow you to narrow down on the exact information needed. You can filter data globally as you use different dashboards, filter across a single dashboard (e.g., workspace filters), filter an individual widget, and apply a filter to a column (in Multi Comparative widgets). Filtering methods include simple menus to select one or more members, saved sets of members (i.e. collections), and dynamic filtering based on tests. When building a dashboard, you should determine what filtering options should be available to users. You can:

- Apply filters prior to saving the dashboard to provide specific, action-oriented information that is immediately available when the user opens the dashboard.
- Provide a high-level dashboard and allow users to narrow on whatever information interests them via menus, downlevel functions (see page 87), filter buttons (see page 25), linked widgets (see page 167), or other methods.



Breadcrumb path

The breadcrumb path at the top of the widget shows the filters currently applied. Just click on a filter in the breadcrumb path to edit or remove it.

Tip: The breadcrumb path does not show filters based on collections, filters based on user account rights (e.g., password collections), or column filters. However, you can place your cursor over the title bar to see a tooltip that shows all filters.

Collections are saved sets of members. Collections can be applied to a single widget or the workspace (i.e., all widgets) to filter the data. If the collection is applied to a single widget, it is considered to be a "widget filter"; if the collection is applied to the workspace (i.e., workspace filter), it filters across the dashboard.

Dynamic filters are based on test criteria (e.g., volume greater than zero) rather than a static set of members. When a dynamic filter is applied to a widget, the Salient Dashboards application runs a test and filters out data for members that do not meet criteria. This type of collection is only available for key members (e.g., customers). Dynamic filters may be saved as dynamic collections so they can be reused and shared.

Workspace filters

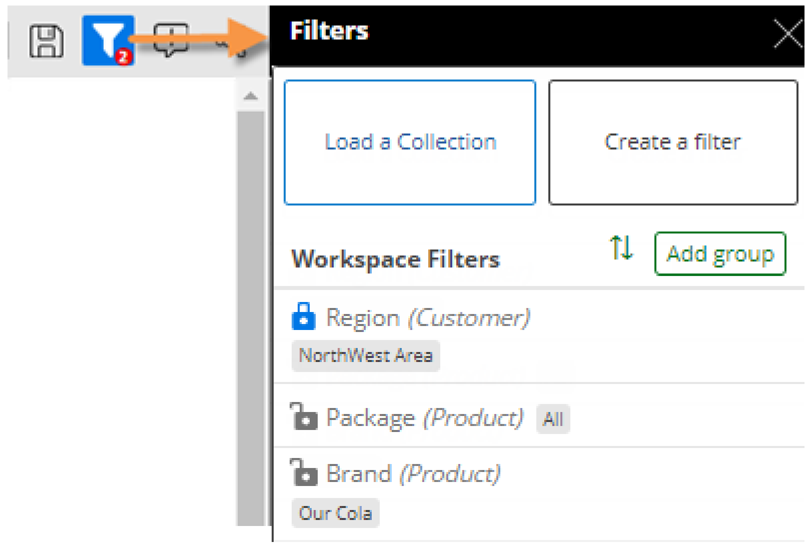
A workspace filter affects widgets across the dashboard. A filter panel provides streamlined access to these filters.

To use workspace filters

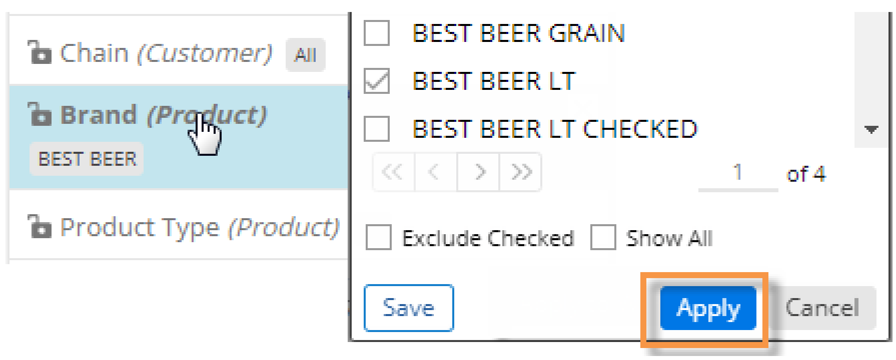
Click at the top of the screen to open the filter panel (*keyboard shortcut: f*). This button is blue when the filter panel is open.

Tips:

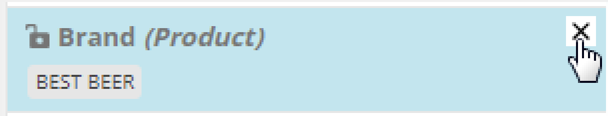
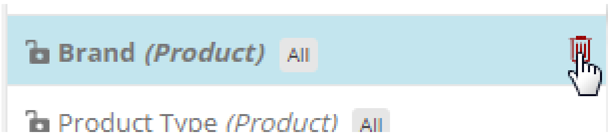
- The red number indicates how many workspace filters are currently on (does not include filters set to "All").
- A contrasting symbol or means that at least one global filter (see page 74) is turned on.



In the filter panel, choose from existing workspace filters or create a new workspace filter (see page 72).

<table>
<tr><th>Option</th><th>Instructions</th></tr>
<tr><td>Make a filter selection (e.g., select a different member)</td><td>Click on the workspace filter and make your selections in the pop-up window. Click Apply.


Tips:
• By default, the window only shows members with data in the current context. You can click Show All in the dialog to list all members.
• You can import a file (see page 85) to quickly filter on a list of members. Click at the top of the pop-up window to access this option.</td></tr>
</table>

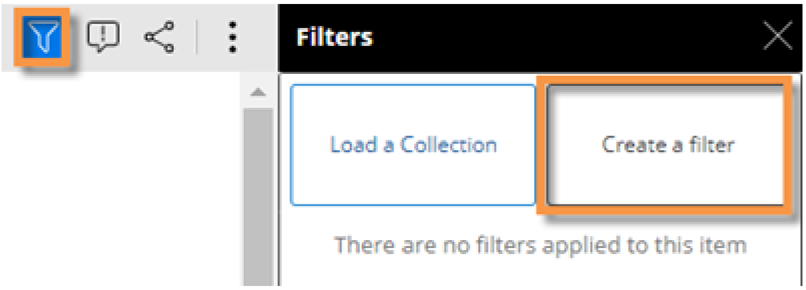
Option	Instructions
Reset a filter	Place the cursor over the filter and click the **X** button. The filter will still be present but will show data for all members. 
Remove a filter	Reset the filter as explained above. Then, place the cursor over the filter and click the button. 

Create workspace filters

You may want to build workspace filters into the dashboard to make filter selection easier for users.

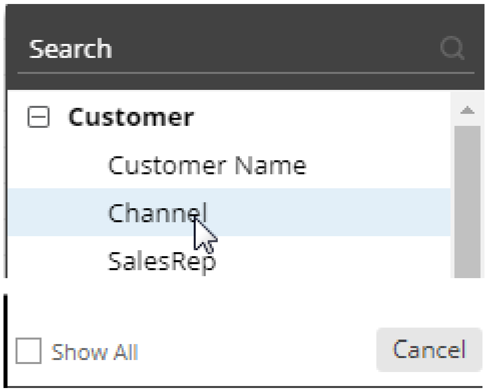
To create workspace filters

1. Click the at the top of the dashboard screen to open the filter panel.
2. Click **Create a filter**. This option allows you to select members from a menu. If you prefer, you can filter on a [collection of members](#) (see page 77).



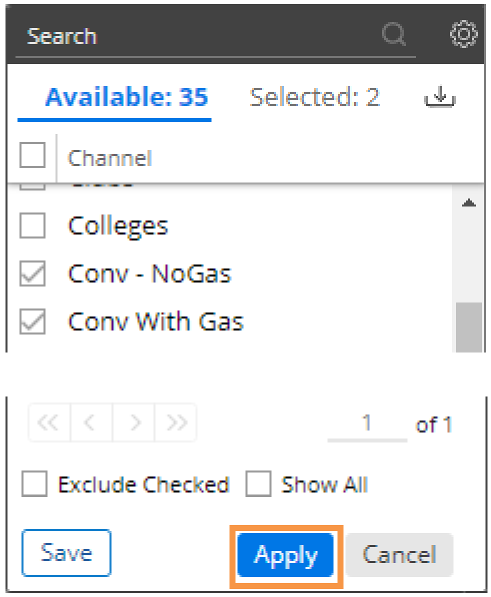
3. Select the dimension for which to create a filter.

   If you do not see the dimension listed (in view mode): Check the **Show All** box to access dimensions besides those that were built into the dashboard.



To create workspace filters

4. Checkmark the member(s) to filter on, or leave checkboxes cleared if you wish to create the menu without immediately filtering on members.



Tips:

• The **Exclude Checked** option lets you show data for all members except the selected members.

• You can import a file (see page 85) to quickly select members. Click at the top of the selection window to access this option.

• You can optionally click **Save** to create a collection of the checked members so that they can be reused later.

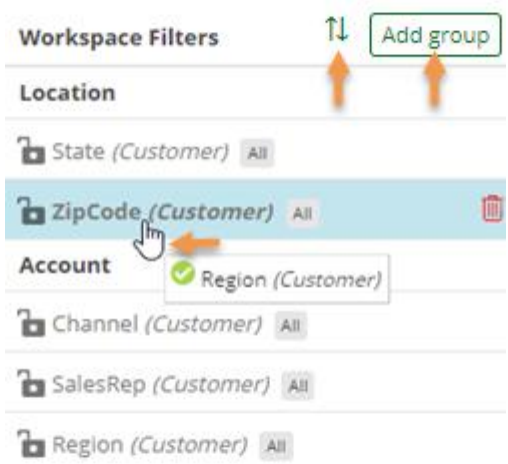
5. Click **Apply**.
6. Repeat steps 2 through 5 to create additional workspace filters if you wish.

7. *(Optional)* Organize the filters by arranging them in groups, sorting them, and/or reordering them (drag and drop).

   Group: Click **Add group** at the top of the panel and enter a custom name for the group; then drag it to the desired location and arrange filters underneath it.

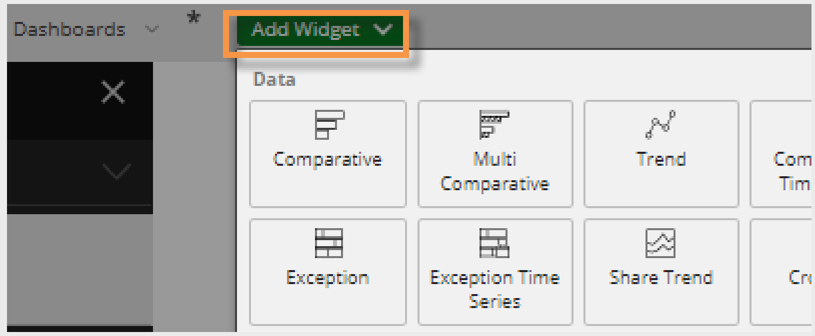
   Sort: Click the icon at the top of the filter panel and then select an option. To switch from ascending to descending order, select the option again. When used with groups, these options sort the filters underneath each group.

   Reorder: Drag and drop a workspace filter to move it up or down in the list. To move an entire group, press Shift as you drag and drop it onto another group.



Tips:

If you want to include a separate menu in the dashboard, you can add a filter widget rather than using the previous method to add the workspace filter. You could also add a button for filtering (see page 25).



The filter panel is on by default, but it may be hidden in dashboard settings (see page 114) if you wish to disable this feature.

By default, workspace filters affect all widgets in the dashboard; however, you can turn off these types of filters for a specific widget (for example, to show summary-level data) by clearing **Use Workspace Filters** in general settings.

If the data cube of a widget does not include the key/dimension of the filter, then the filter is not applicable and, therefore, does not affect the widget. For example, if the widget shows weather data that is only associated with a customer key, then a product filter, such as brand, will not affect the widget.

Global filters

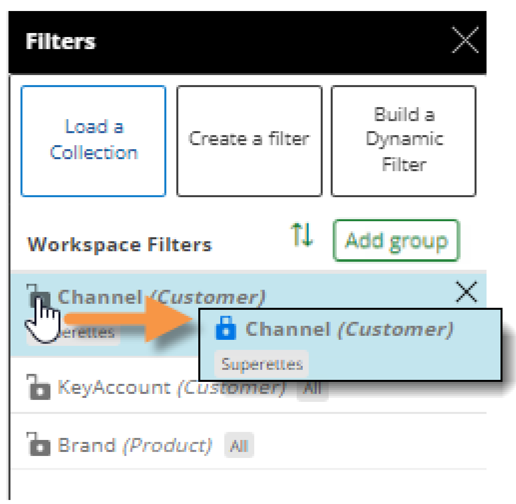
A global filter is a workspace filter that is "locked" so that it stays on when you open other dashboards. You can access these filters using the filter panel just like other workspace filters.

To turn on a global filter

1. Click the button at the top of the dashboard screen to open the filter panel.
2. In the filter list, locate or create the filter you want to turn on globally.
3. Click the lock/unlock button to "lock" the filter. The locked symbol is blue .

When you open another dashboard, it will automatically use global filters. Note that only applicable global filters will be applied (i.e., attribute matches a "Group By" in the dashboard).

Tip: The filter button at the top of the screen shows a contrasting filter symbol if global filters are on: if panel is closed; if panel is open

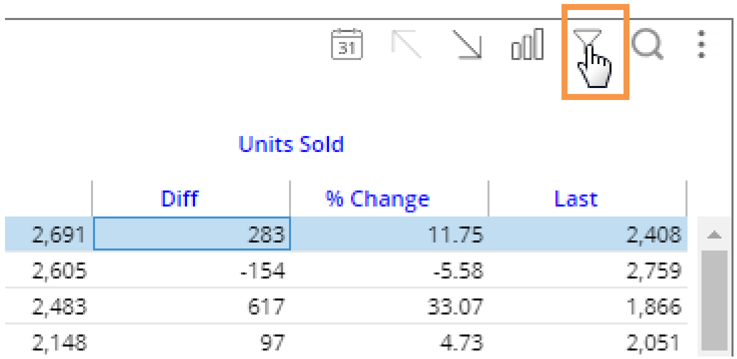


Individual widget filters

Individual widget filters let you filter data in a specific widget without affecting the entire dashboard.

To create a widget filter

1. Click the filter button at the top of the widget (visible on mouseover if enabled).



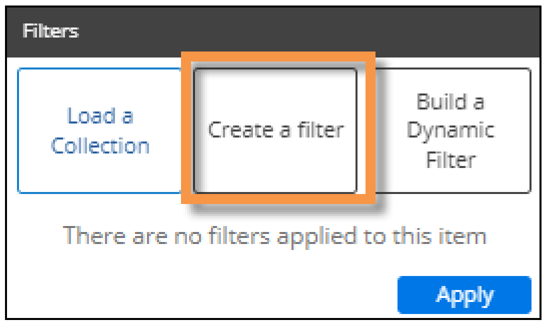
2. In the pop-up dialog, click **Create a Filter**.

   Other options may be available:

   • **Checked** - If the widget has checked members, you can filter on them.

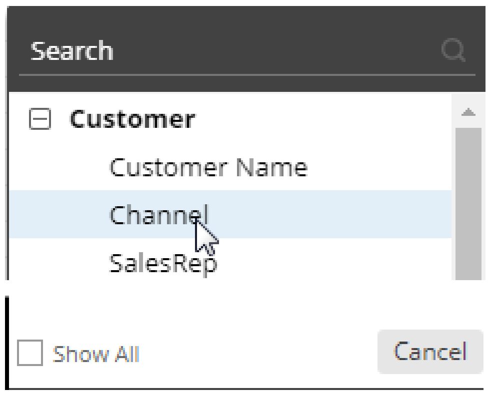
   • **Load a Collection** - You can filter on a saved [collection of members](#) (see page 77).

   • **Build a Dynamic Filter** - You can [filter based on test criteria](#) (see page 78).



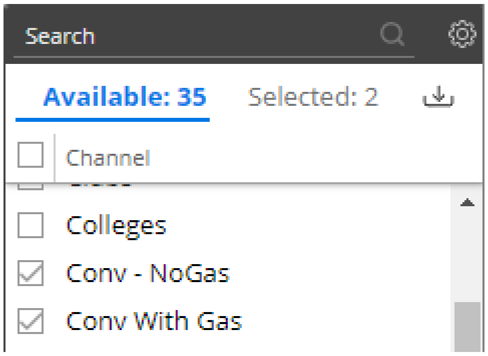
3. Select the dimension (i.e., attribute) for which to create a filter.

   If you do not see the dimension listed (in view mode): Check the **Show All** box to access dimensions besides those that were built into the widget.



To create a widget filter

4. Checkmark the desired member(s).



Tips:

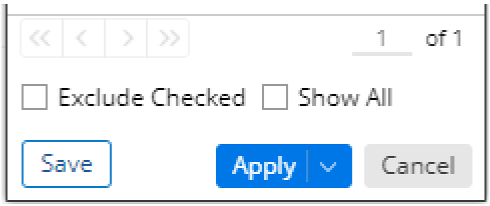
• By default, the filter choices only include members with data in the current context. If you wish, you can check **Show All** to list all members.

• The **Exclude Checked** option lets you show data for all members except the selected members.

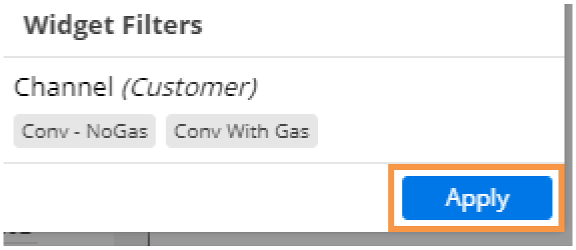
• You can import a file (see page 85) to quickly select members. Click at the top of the selection window to access this option.

• You can optionally click **Save** to create a collection of the checked members so that they can be reused later.

5. Click **Apply** to apply the filter to the selected widget only.



6. Click **Apply** again in the filters area.



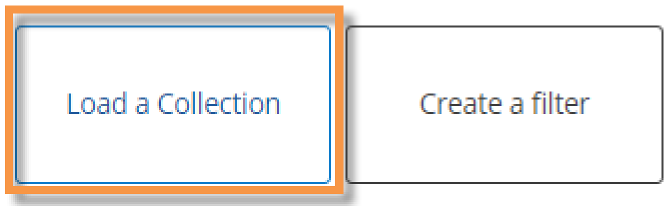
Tip: To allow viewers to create widget filters, make sure widget's filter button is enabled (on by default) in general settings.

Filter data by a collection

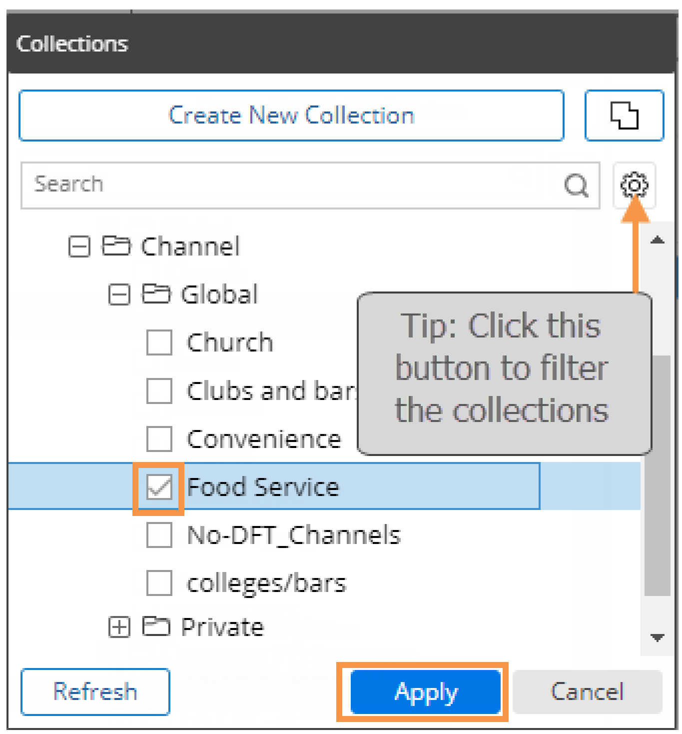
Collections can be applied to a single widget, individual column, or the workspace (i.e., entire dashboard) to filter the data by a saved set of members.

To apply a collection as a filter

1. Do one of the following to open the filters area:
   - *To apply a collection to a single widget:* Click the filter button at the top of the widget (visible on mouseover).
   - *To apply a collection to the entire dashboard:* Click the filters button at the top of the screen to open the Filters panel. In edit mode, you should then select the workspace by clicking the blank area of the dashboard or pressing **w** on the keyboard. In view mode, the workspace is automatically selected. (Collections cannot be applied to the workspace in explore mode.)
   - *To apply a collection to an individual column (in Multi Comparative only):* Click the column header, and select Filter Date Range.
2. Click **Load a Collection**.



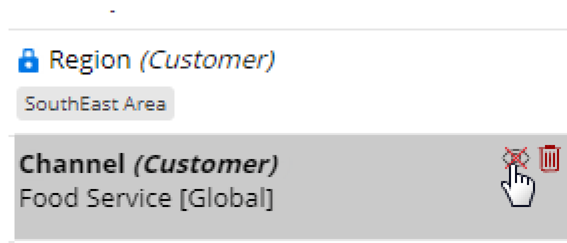
3. In the Collections dialog, locate the collection and place a checkmark beside it. You may need to expand a key, dimension, and category to find the collection. A search option is also available.
4. Click **Apply**.



Tips:

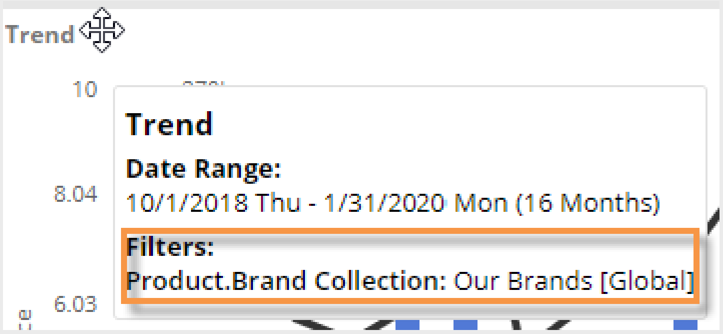
- If you select more than one collection within the same key or dimension, results will be limited to members that are common to all selected collections.
- The symbol represents a dynamic collection (see page 78). This type of collection updates dynamically based on test criteria.
- The symbol represents a dynamic collection that has been created in SIM. You can apply this type of collection but not edit it in Salient Dashboards.
- The button lets you merge multiple collections into a single new collection.

5. By default, collections that were applied in edit mode will be locked in view mode. This means that viewers will not see the collection listed in the filters area and will not be able to turn the collection off. To show a classic collection in the filters area of view mode, and, therefore, allow users to turn the collection off, click the icon in the filter panel.



Tips:

The breadcrumb path does not show when collection-based filters are on, but the widget tooltip (shown when placing the cursor over the title bar) shows collection filters even if they are hidden in view mode.



Dynamic filters

Dynamic filters are based on test criteria (e.g., volume greater than zero). When a dynamic filter is on, the widget only includes data for the members that meet the test criteria. The filter updates automatically based on the data context rather than storing a static list of members. Dynamic filters may be saved as dynamic collections so they can be reused and shared.

To apply a dynamic filter

1. Go to the filters area for the widget or column:

   To apply a dynamic filter to a widget - Select the widget and click the filter button in its upper-right corner (visible on mouseover).

   To apply a dynamic filter to an individual column (in Multi Comparative only) - Click the column heading and select **Filter Date Range**.

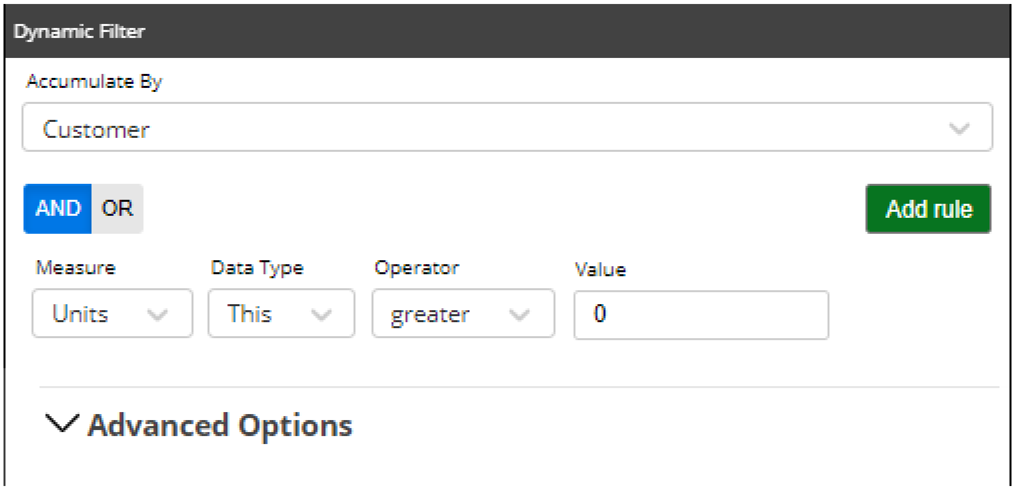
2. Click **Build a Dynamic Filter**.

3. In the **Dynamic Filter** area, choose the key to test from the Accumulate By menu (e.g., create a cohort of customers that pass the test).
4. Set up one or more rules:

- Select the measure to test.

- Select the date range (This or Last) or the variance (Diff or % Change) you wish to test. By default, the date ranges correspond to the widget date ranges. For example, if the widget compares the month-to-date with the prior month, then a rule for "This" would look at the month-to-date and a rule for "Last" would look at the prior month. If the widget does not have a Last date range, then a rule for "Last" will default to one year earlier (YAG) than the "This" date range. If you prefer, you can test a different date range (i.e., something other than the widget date range) by changing the Advanced settings as explained below.
- Select an operator (e.g., greater than).
- Enter a value to compare against.
- To use multiple rules, click Add Rule, repeat the above steps, and choose AND or OR to control which rules must be met.

Tip: If the desired key or measure is not available, you may need to change the cube under Advanced Options.



5. Optionally, expand the Advanced Options area and choose settings to refine the test.

Advanced option	Explanation
Cubes	To test based on data from a different cube, select from the Cubes menu. This controls which keys and measures are available for selection.
Equivalent	To test data after it has been converted to equivalent units (if applicable), select from the Equivalent menu. An equivalent table selected here overrides an equivalent table applied to the widget.
Passed In	Choose the part of the date range to consider for the test. These options affect the outcome when the date range includes multiple units of time (e.g., 12 weeks). • All Periods (In Total) - looks at the entire date range (e.g., total of all 12 weeks). • First and Last Period - looks at the first and last units of time (e.g., 1st week and 12th week); both units of time are needed to pass the test. • First Time Period - only considers first unit of time (e.g., 1st week). • Last Time Period - only considers last unit of time (e.g., 12th week). • Any Period (Individually) - considers all units of time individually with only one unit of time needed to pass the test (any week). • All Periods (Individually) - considers all units of time individually with all units of time needed to pass the test (e.g., every week).

<table>
<tr><th>Advanced option</th><th>Explanation</th></tr>
<tr><td>Date Range</td><td>Choose the date range to test.
Dynamic Date Range (default) - When this option is on, the test will use the date range of the widget. For example, if the widget shows the month-to-date, the test will look at that month to determine which members pass. If the month updates over time (e.g., November to December) <u>or</u> the widget timeframe changes (e.g., one month to 6 months), then the test will automatically update to look at the new dates.
Specific Date Range - You can choose this option to test data for a specific date range, which can be different than the widget's date range. For example, you might want to find new products based on three months of data but look at data for a longer timeframe in the widget. After choosing this option, the date setup dialog will appear. You can then select the date range(s) for the test. Any "This" rules in the test will look at the "This" date range you select here; any Last" rules will look at the "Last" date range. The date range(s) can be fixed or update over time based on the current date (e.g. month-to-date). However, the resolution and number of dates used in the test will not change.</td></tr>
<tr><td>Filters</td><td>To filter the data used in the test based on a static selection of members, click the arrow beside the Filters menu and load a collection or create your own filter. This option will filter the data used in the test but will not directly filter the data shown in the widget. In addition, the filter will be static; it will not change if you adjust widget or workspace filters.

For example, create a cohort of customers that bought more than 10 units of a specific brand. Also see the following examples.

As in other areas of dashboards, you can combine multiple filters.</td></tr>
<tr><td>Dynamically Applied Filters</td><td>To dynamically filter the data used in the test based on filters that are applied to the widget, dashboard, and/or notifications, click the arrow beside the Dynamically Applied Filters menu and select the type of filter(s) to apply. Filter types include workspace filters, downlevel filters, widget filters, linked widget filters, and notification (i.e. per recipient) filters. In general, this option will filter the data used in the test <u>and</u> the data shown in the widget based on whatever is selected at the time.

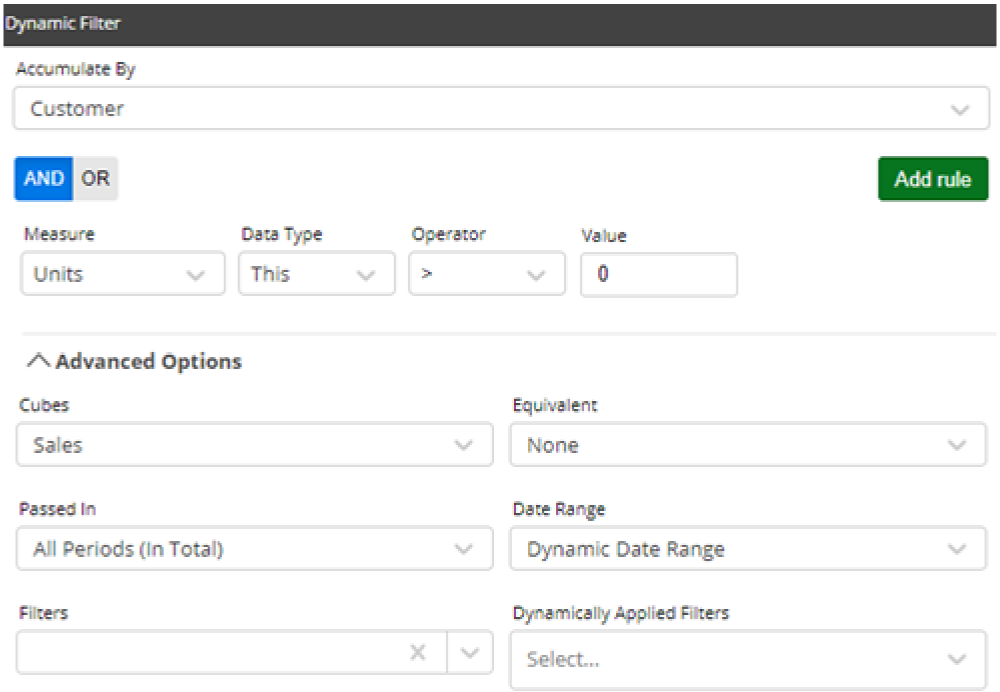
For example, create a cohort of customers that bought more than 10 units of whatever brand is selected. Also see the following examples and a notification example (see page 152).

For workspace filters, additional settings are available in the General Settings area to control what the workspace filters affect.
Use Workspace Filters - When this setting is on and "Workspace" filters are selected in the dynamic filter setup, the data shown in the widget is filtered <u>and</u> the data being tested is filtered regardless of the following setting (e.g., only show data for the selected brand for the customers that bought more than 10 units of the brand).
Always Apply Workspace Filters to Dynamic Filters - This setting is <u>only applicable when Use Workspace Filters is off</u> and "Workspace" filters are selected in the dynamic filter setup. In this case, you can turn on Always Apply Workspace Filters to Dynamic Filters if you do not want to filter the data shown in the widget but you do want to filter the data used in the test (e.g., show data for all brands for the customers that bought more than 10 units of the selected brand).</td></tr>
</table>

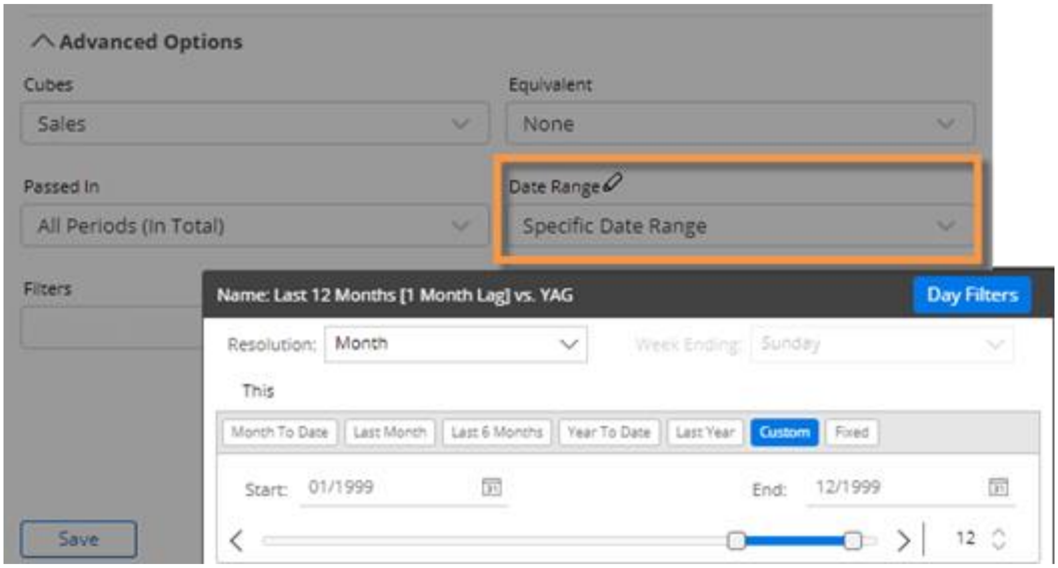
6. Do one of the following:
   - To immediately apply the filter without saving it, click **Apply**.
   - To save the filter as a dynamic collection, click **Save**. Note that this will save the test criteria rather than a list of members.

Example - Active customers

You could use a dynamic test to filter on active customers. In this example, a customer would be included if it had volume of greater than zero during This date range (based on the widget's This timeframe). Because no additional filters are applied (under Advanced), a customer would be considered active it it purchased any product.

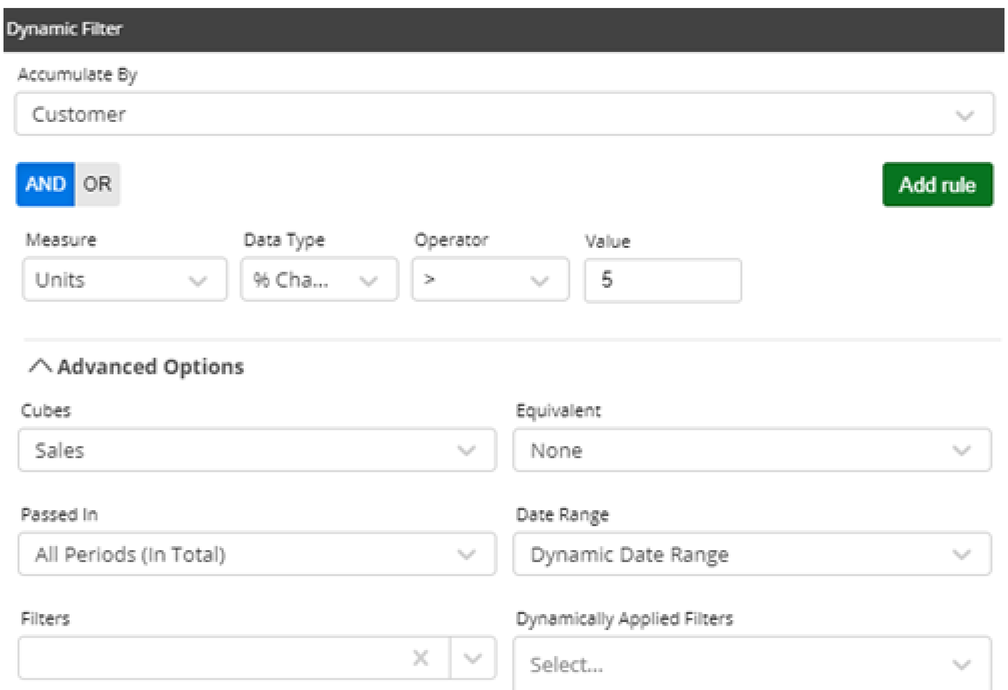


If your definition of an active customer is based on a more precise timeframe (e.g., sales during last 12 months), you could assign a specific date range that is not based on the widget date range. This would allow you to change the date range of the widget without affecting the test.

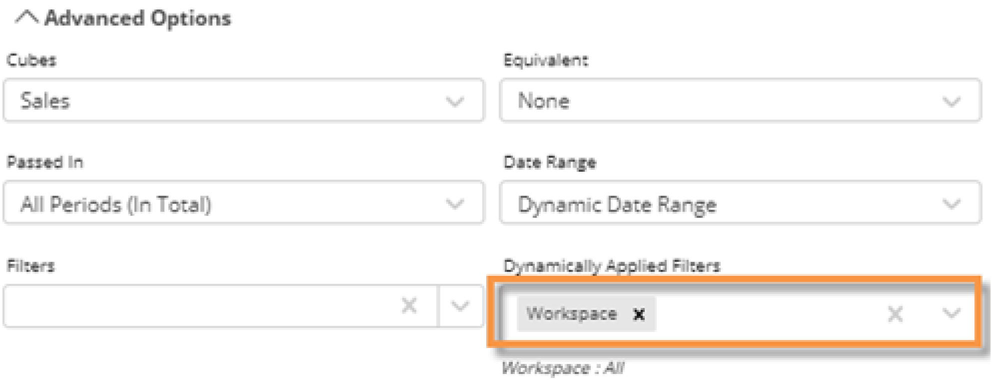


Example - Customers with increased sales

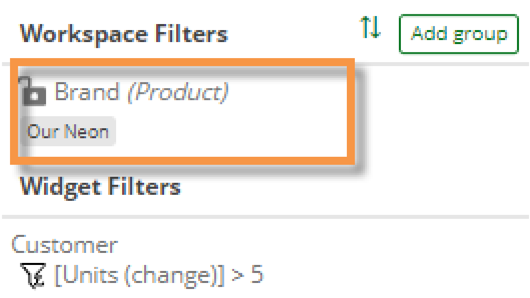
You could use a dynamic filter to focus on customers with significantly improved sales volume. In this example, a customer will be included if change in sales units is greater than 5% (based on the widget's This and Last timeframes). Because no additional filters are applied, the filter will look at overall sales for each customer.



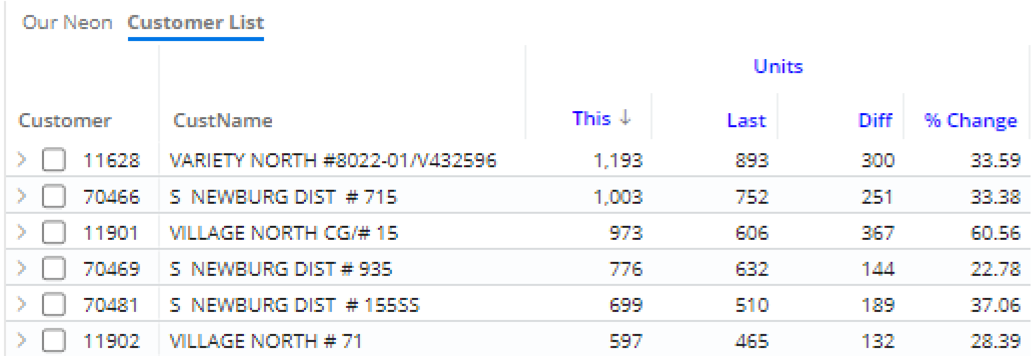
Now suppose you are interested in customers with increased sales for a brand rather than overall sales. You could turn on dynamically applied filters in the advanced area to allow users to customize the test for whatever brand interests them. This example uses a workspace filter; other types of filters could be used for this purpose as well.



Then, add a workspace filter to the dashboard and select a brand.

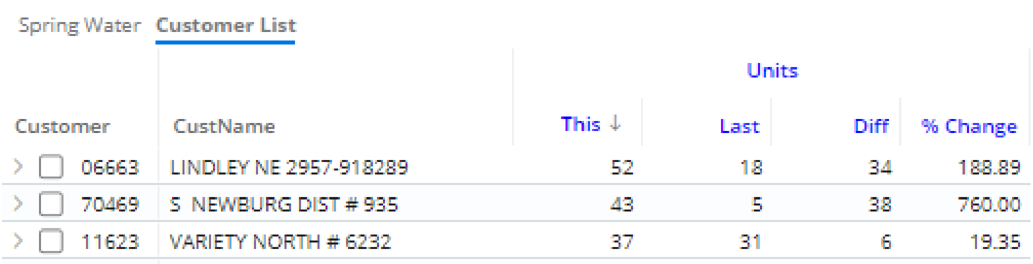


By default, workspace filter will affect both the test and the data shown. As a result, the widget will will show sales of the selected brand (Our Neon) to customers that bought more of the brand (>5%) this period.


Our Neon Customer List

Customer	CustName	Units			
		This ↓	Last	Diff	% Change
11628	VARIETY NORTH #8022-01/V432596	1,193	893	300	33.59
70466	S NEWBURG DIST # 715	1,003	752	251	33.38
11901	VILLAGE NORTH CG/# 15	973	606	367	60.56
70469	S NEWBURG DIST # 935	776	632	144	22.78
70481	S NEWBURG DIST # 15555	699	510	189	37.06
11902	VILLAGE NORTH # 71	597	465	132	28.39

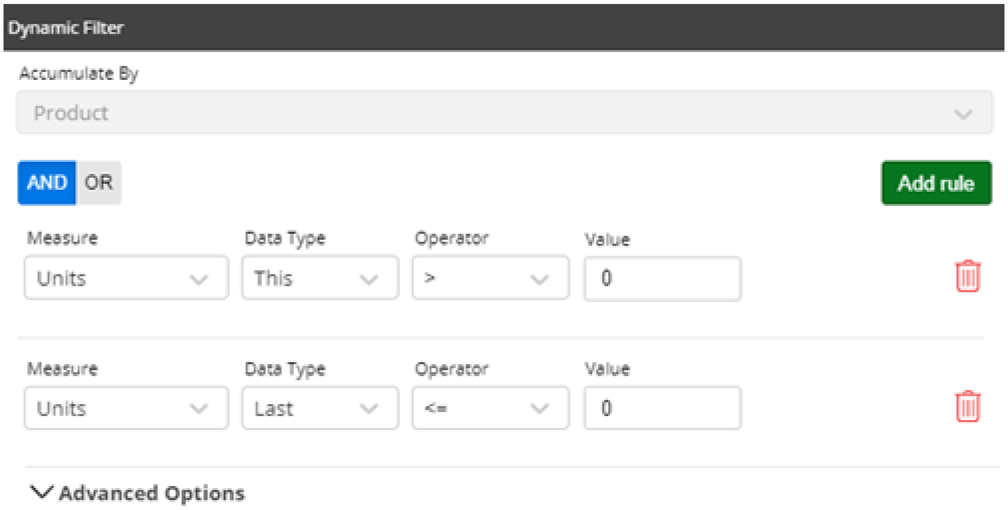
Because the filter is dynamically applied, the test will update if a user selects a different brand in a workspace filter. For example, view sales of spring water to customers that bought more spring water (>5%) this period.


Spring Water Customer List

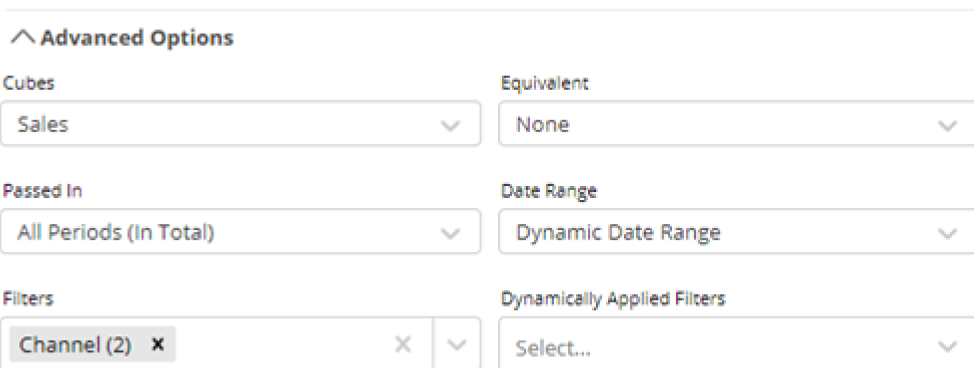
Customer	CustName	Units			
		This ↓	Last	Diff	% Change
06663	LINDLEY NE 2957-918289	52	18	34	188.89
70469	S NEWBURG DIST # 935	43	5	38	760.00
11623	VARIETY NORTH # 6232	37	31	6	19.35

Example - New products

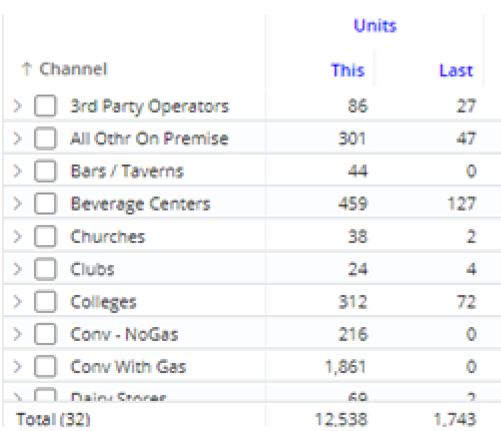
You could use a dynamic filter to find and analyze products that were recently introduced. In this example, a product would be included if it had volume greater than zero during This date range (based on the widget's This timeframe) and volume of zero or less during Last date range (based on the widget's Last timeframe).



Now suppose you are interested in products that are new to convenience customers (Conv - No Gas and Conv With Gas). You could use a filter in the advanced area of the test to find those products. Unlike the previous example, this test filter is static; it will always be based on sales to convenience channels.



When this setting is on, the test runs on the filtered data (e.g., sales for convenience stores only) but does not directly filter the data in the widget. In this example, the widget includes data for other channels, but the results are filtered on products that are new to convenience channels.



Channel	Units This	Units Last
3rd Party Operators	86	27
All Othr On Premise	301	47
Bars / Taverns	44	0
Beverage Centers	459	127
Churches	38	2
Clubs	24	4
Colleges	312	72
Conv - NoGas	216	0
Conv With Gas	1,861	0
Dairy Stores	69	2
Total (32)	12,538	1,743

Import filters

You can import a text file (i.e., local collection) to quickly select members for a filter as explained below. This method works for several types of filters, including workspace filters, individual widget filters, and filter widgets. In addition, text files can be used when creating filter buttons and collections. This feature may be turned off globally by your administrator.

In addition to the method explained below, you can import options, including filters, from other dashboards (see page 31). However, this option is not available for filter widgets.

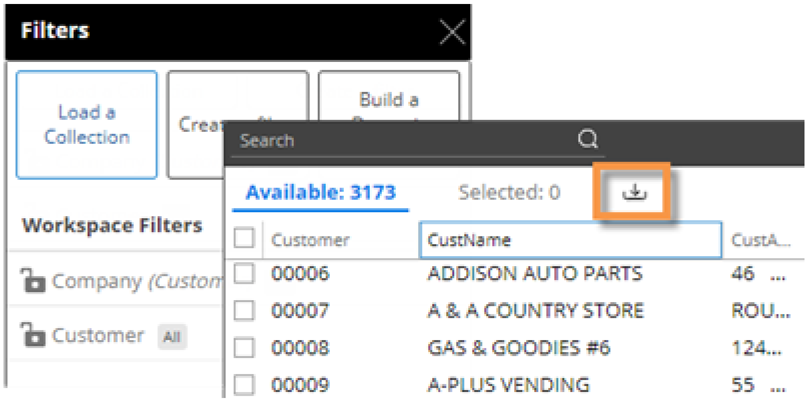
To import a text file for a filter

1. If you haven't already, create a text file that lists the members. It should have the CSV extension. Each line should list the host code of a single member.

Example CSV file

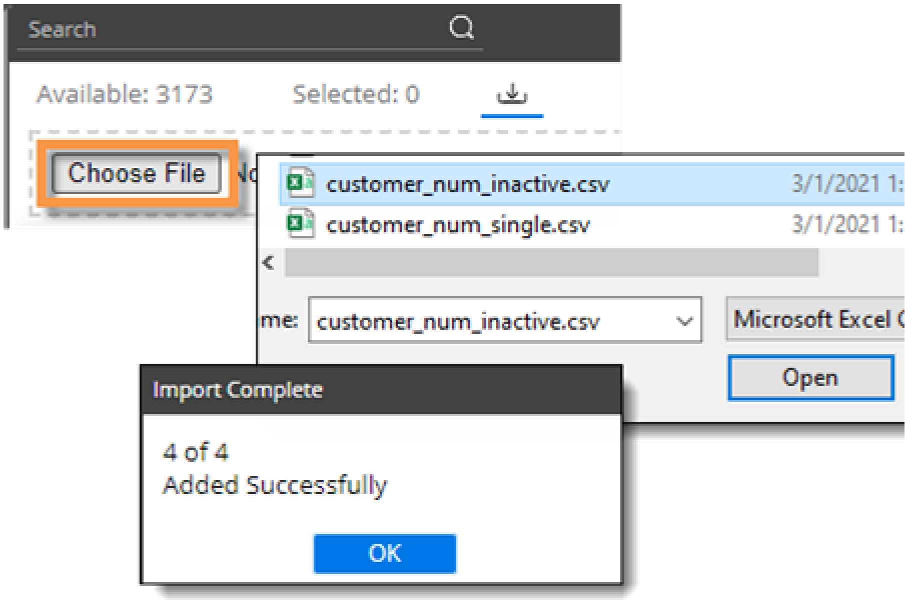
```
91857
11904
11880
00000
```

2. Go to the selection window for the filter. For example, to import a text file for a workspace filter, click on the workspace filter in the filters panel.
3. Click the button at the top of the window.



4. Choose the file and click Open.

   Salient Dashboards will show a summary of the members imported.



5. Click **Apply**.

Drill down (i.e., downlevel filters)

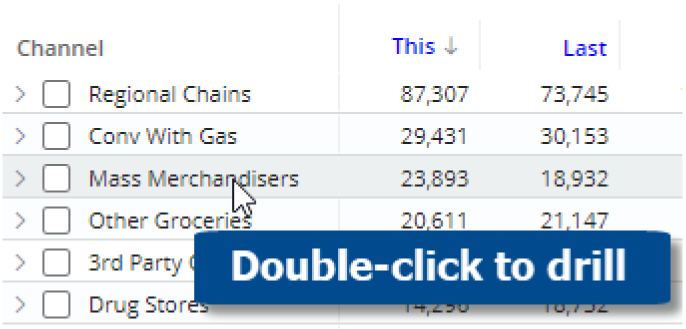
You can drill down on one or more members to filter the data in a widget. When you drill, Salient Dashboards adds a downlevel filter to remove data for all other members.

Drilling is only available in data widgets that have multiple Group By dimensions.

To drill down on a single member

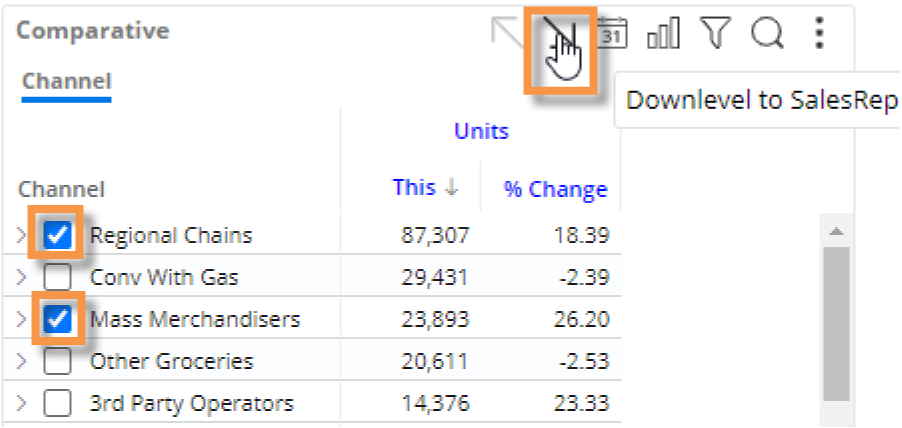
Double-click on the row, bar, pie slice, etc., representing that member.

> **Tip:** You can also drill by clicking on a member to select it and then clicking the button at the top of the widget.



To drill down on multiple members

1. [Check the desired members](#) (see page 65) in a grid.
2. Click on the title bar at the top of the widget.
3. If a drop-down appears, select **Drill into Checked Rows**.

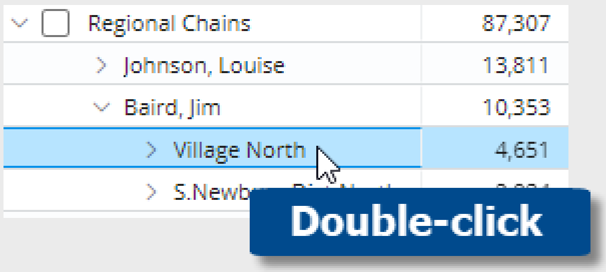


Tips:

When you drill, the By becomes what was previously the 2nd By. You may be able to change the By and/or downlevel order as you drill to follow a flexible drill path.

After you have drilled down, you can drill back up at any time by clicking on the widget toolbar.

You can drill down on expanded grid rows to filter on multiple levels at once. In this case, drilling back up will remove all the drill levels simultaneously.



Tips:

If a custom drill-down is configured, drilling down may take you to another dashboard with the downlevel filters applied.

Drilling affects other widgets in the dashboard if the dashboard has a corresponding workspace filter.

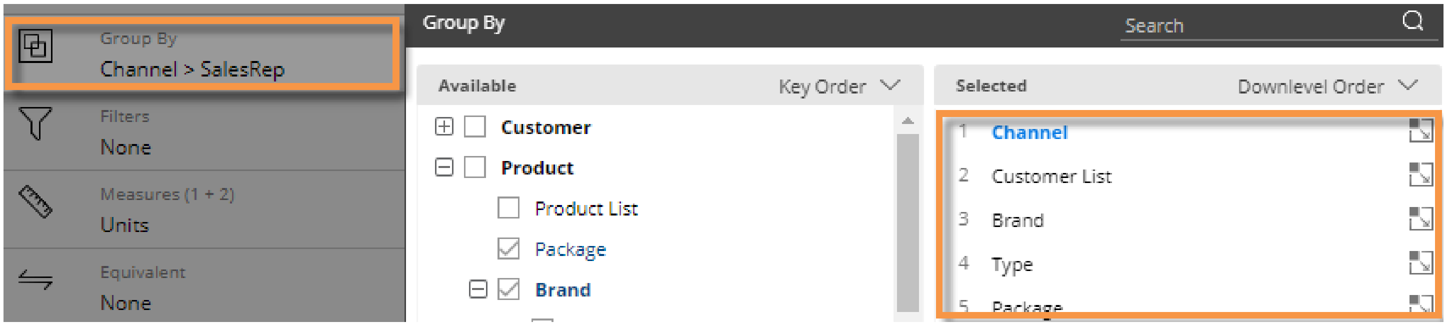
Set up drill-down capabilities in a dashboard

The following settings control drilling capabilities for end-users in view mode.

How the Group By affects drilling

If a widget has multiple Group By dimensions (see page 52), users can drill down (see page 86) through those dimensions in view mode to narrow their view of the data; therefore, you should select those dimensions in the group by area during the dashboard design process if you wish to enable drilling. (Group By dimensions are not required for custom drill-downs (see page 138).)

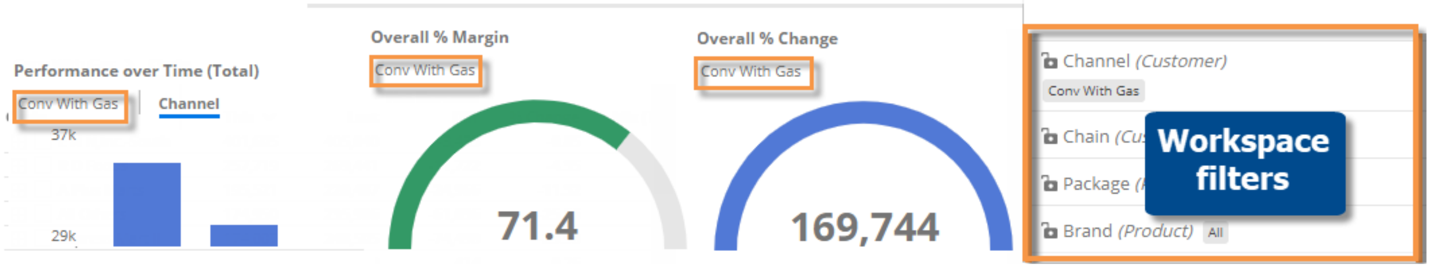
In addition, the Group By order controls the default drill down order for a widget.



Tip: Users cannot drill in non-comparative widgets (e.g., Trend, Gauge, etc.); instead, they can add filters if enabled in the **Filter By** area (see page 55).

Concurrent drill-down across a dashboard

Drilling can affect other widgets in the dashboard if the dashboard has a corresponding workspace filter; the dashboard will automatically populate the workspace filter when you drill. Therefore, you may want to add workspace filters (see page 72) (even if they are set to "All") to enable downlevel filters to work across the dashboard. For example:



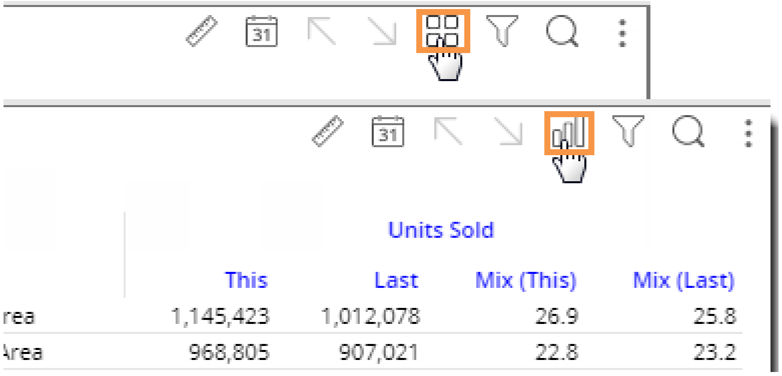
Customize widgets

Switch between grid and graph

Most data analysis widgets are available in grid and graph formats.

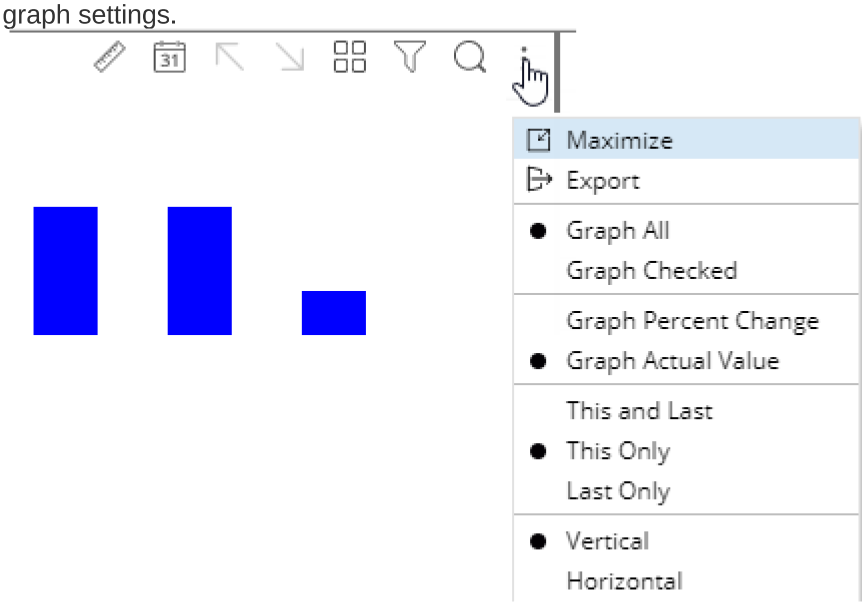
To toggle between a grid and a graph

On the title bar of the widget, click (visible on mouseover) to change from grid to graph or to change from graph to grid of numbers. (This button may be deactivated in general settings.)



To select a graph format

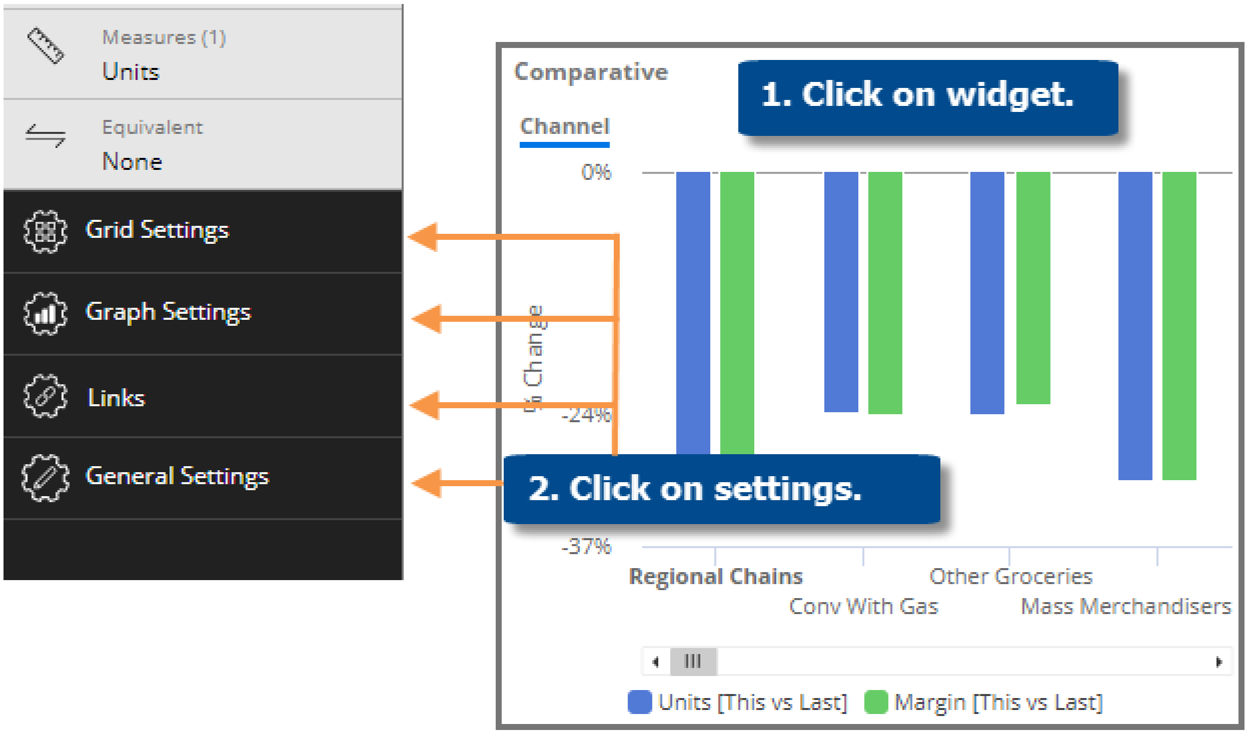
For graphs, click ⋮ in the upper-right corner of the widget (visible on mouseover) to select from available graph formats for the analysis type (e.g. percent change, actual value, bar, pie, etc.). Additional options are available in graph settings.

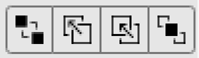


Tip: If the widget uses custom programming (i.e., custom view), the graph/grid button is not available.

Grid, graph, and general widget settings

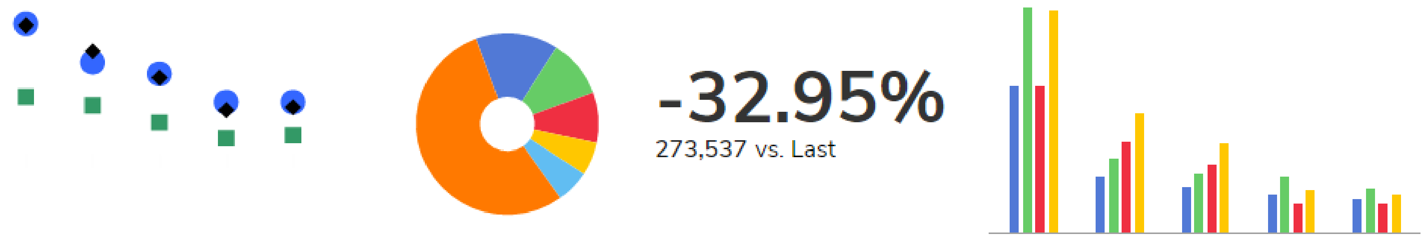
In edit mode, you can configure several widget options by clicking on the widget and then clicking one of the settings areas in the toolkit.



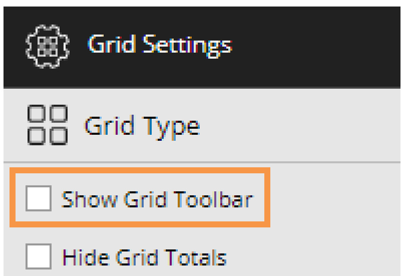
Area	Settings
Grid Settings	Settings that control the appearance and functionality of grids, including: • Grid types (see page 91) • Show or hide grid components such as totals, averages, paging toolbar, etc. • Number of members to show per page (i.e., grid page size) • Method for accessing members beyond the grid page size: infinite scrolling or paging
Graph Settings	Graph page size; orientation; show/hide the legend and other graph components; visual options (see page 94), etc.
Links	Navigation links (see page 169) to other dashboards and links between widgets (see page 167) for interactive filtering
General Settings	Widget title, style, size, position, transparency, enable/disable options for view mode, show/hide in mobile, date display (see page 93), etc. **Tip:** Set the desired layer order (i.e., what widgets are on top) using the following buttons in general settings. End-users will not be able to change this order. 

Simplified widgets

In settings (located in the toolkit), you can turn off the legend, axis labels, and more, to create simplified widgets (for example, mini-widgets for optimal display on smaller devices).

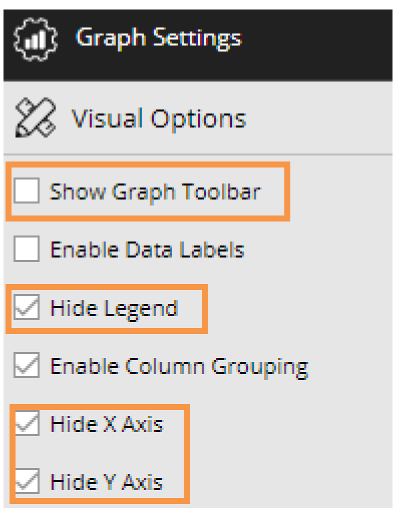


Recommended settings for simplified widgets



In grid settings:

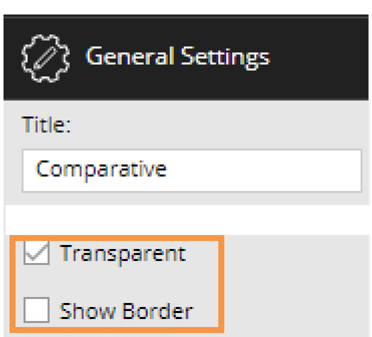
Clear the **Show Grid Toolbar** option. This will hide the paging toolbar at the bottom of the widget.



In graph settings:

Clear the **Show Graph Toolbar** option. This will hide the paging toolbar at the bottom of the widget.

Hide the legend, x axis, and y axis.



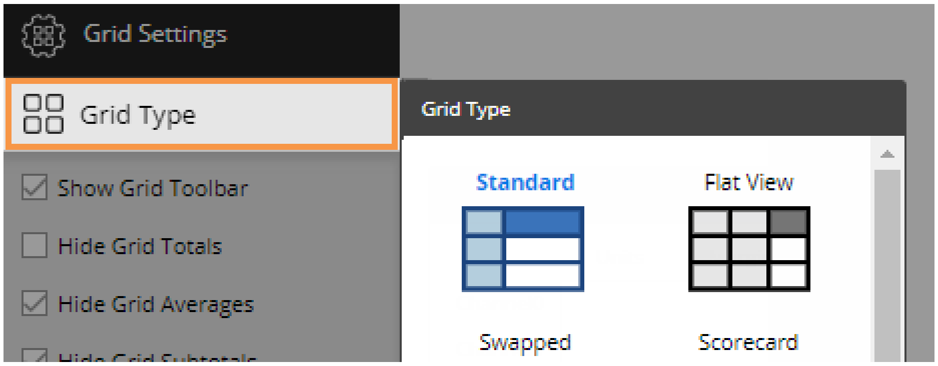
In general settings:

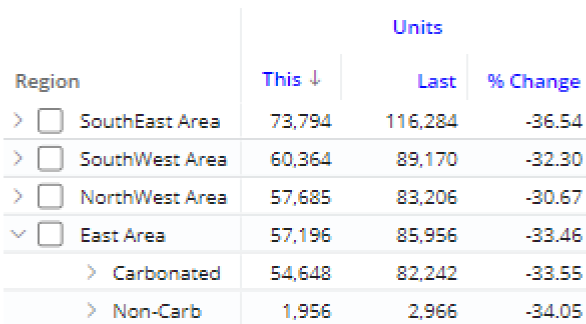
Turn on transparency.

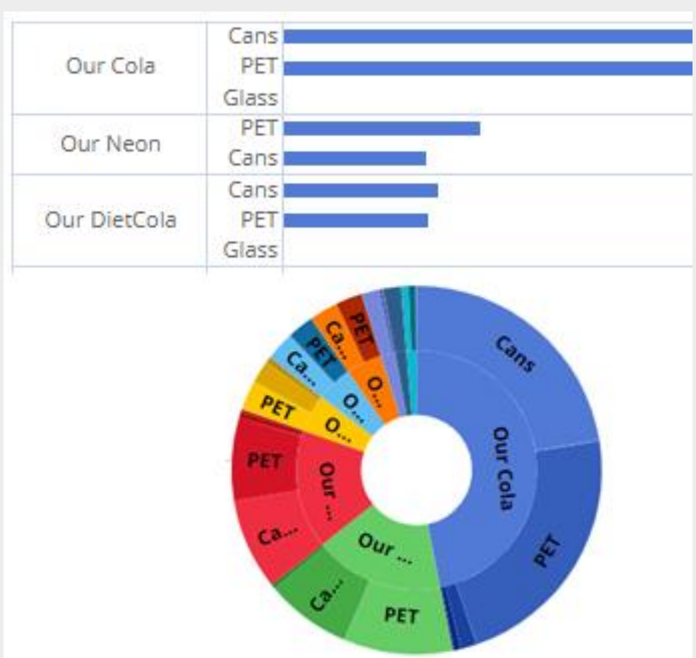
Clear the border option (i.e., hide the border).

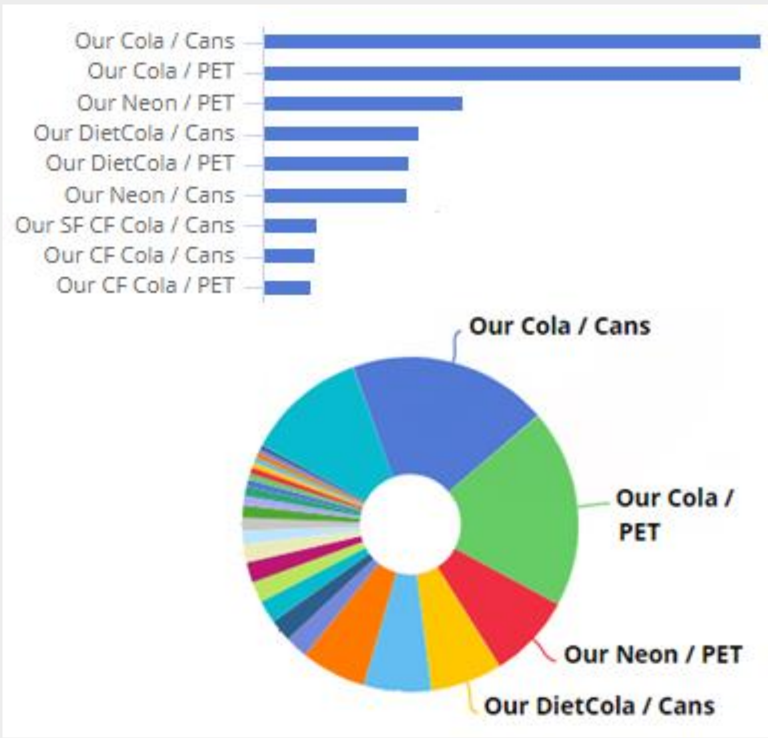
Grid types

The grid type affects the layout of columns and rows. In addition, some grid types affect the format of graphs when auto-expand is on (see page 60). To change the grid type, go to Grid Settings in the toolkit and click on Grid Type. In explore mode, you may need to check Advanced at the bottom of the toolkit to see these settings. The available types depend on the selected widget.

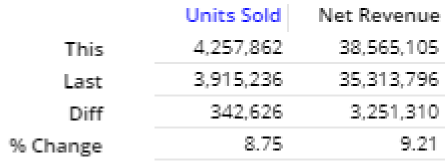


<table>
<tr><th>Grid type</th><th>Example</th><th>Explanation</th></tr>
<tr><td rowspan="2">Standard</td><td>
<table>
<tr><th></th><th colspan="3">Units</th></tr>
<tr><th>Region</th><th>This ↓</th><th>Last</th><th>% Change</th></tr>
<tr><td>SouthEast Area</td><td>73,794</td><td>116,284</td><td>-36.54</td></tr>
<tr><td>SouthWest Area</td><td>60,364</td><td>89,170</td><td>-32.30</td></tr>
<tr><td>NorthWest Area</td><td>57,685</td><td>83,206</td><td>-30.67</td></tr>
<tr><td>East Area</td><td>57,196</td><td>85,956</td><td>-33.46</td></tr>
<tr><td>Carbonated</td><td>54,648</td><td>82,242</td><td>-33.55</td></tr>
<tr><td>Non-Carb</td><td>1,956</td><td>2,966</td><td>-34.05</td></tr>
</table></td><td>In general, a standard grid shows measures in columns and members in rows.

Expanded dimensions will be in a "tree."</td></tr>
<tr><td>
</td><td>In graphs with auto-expanded dimensions (see page 60), the standard grid type will cause members to be grouped under the parent category.</td></tr>
</table>

<table>
<tr><th>Grid type</th><th>Example</th><th>Explanation</th></tr>
<tr><td rowspan="2">Flat view</td><td>
<table>
<tr><th></th><th></th><th colspan="3">Units</th></tr>
<tr><th>Region</th><th>Type</th><th>This ↓</th><th>Last</th><th>% Change</th></tr>
<tr><td>SouthEast Area</td><td>Carbonated</td><td>67,439</td><td>106,188</td><td>-36.49</td></tr>
<tr><td>SouthWest Area</td><td>Carbonated</td><td>57,028</td><td>84,426</td><td>-32.45</td></tr>
<tr><td>NorthWest Area</td><td>Carbonated</td><td>54,707</td><td>79,084</td><td>-30.82</td></tr>
<tr><td>East Area</td><td>Carbonated</td><td>54,648</td><td>82,242</td><td>-33.55</td></tr>
<tr><td>Near West Area</td><td>Carbonated</td><td>16,829</td><td>24,866</td><td>-32.32</td></tr>
<tr><td>SouthEast Area</td><td>Non-Carb</td><td>5,067</td><td>8,340</td><td>-39.24</td></tr>
</table>
</td><td>The flat view grid (see page 58) is like the standard format except it places expanded dimensions in separate columns so rows can be treated independently.</td></tr>
<tr><td>


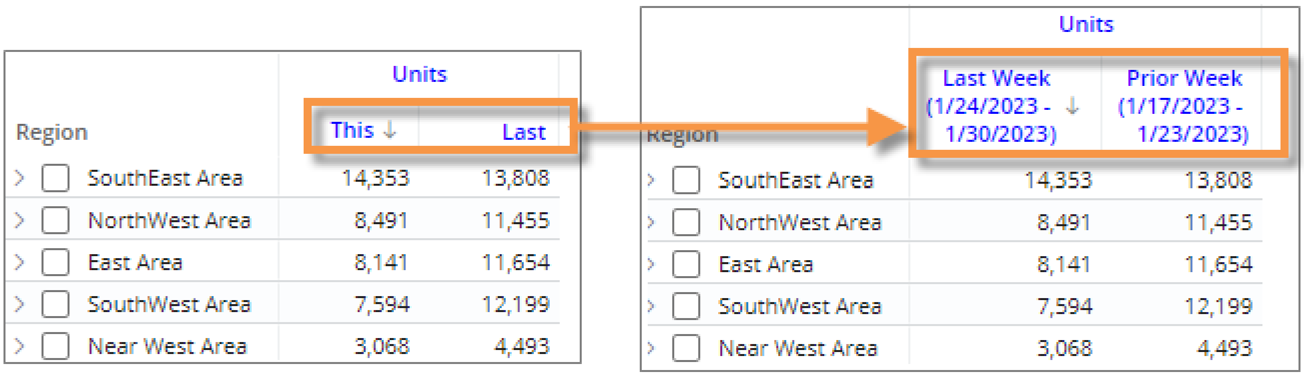
</td><td>In graphs with auto-expanded dimensions (see page 60), the flat view displays combinations of members in a single level. The combinations can be sorted independently.</td></tr>
<tr><td>Swapped</td><td>
<table>
<tr><th></th><th>Region</th><th>SouthEast Area</th><th>SouthWest Area</th></tr>
<tr><td>Units Sold</td><td>This</td><td>1,145,423</td><td>968,805</td></tr>
<tr><td></td><td>Last</td><td>1,012,078</td><td>907,021</td></tr>
<tr><td></td><td>Diff</td><td>133,345</td><td>61,784</td></tr>
<tr><td></td><td>% Change</td><td>13.18</td><td>6.81</td></tr>
</table>
</td><td>In a swapped grid, columns and rows are switched.</td></tr>
<tr><td>Scorecard</td><td>
<table>
<tr><th></th><th>This</th><th>Last</th><th>Diff</th><th>% Change</th></tr>
<tr><td>Units Sold</td><td>4,257,862</td><td>3,915,236</td><td>342,626</td><td>8.75</td></tr>
<tr><td>Net Revenue</td><td>38,565,105</td><td>35,313,796</td><td>3,251,310</td><td>9.21</td></tr>
</table>
</td><td>The scorecard grid shows measures in rows and timeframes (This, Last, difference, etc.) in columns; does not compare members.</td></tr>
</table>

Grid type	Example	Explanation
Scorecard swapped		The swapped scorecard shows measures in columns and timeframes (This, Last, difference, etc.) in rows; does not compare members.

	Units Sold	Net Revenue
This	4,257,862	38,565,105
Last	3,915,236	35,313,796
Diff	342,626	3,251,310
% Change	8.75	9.21

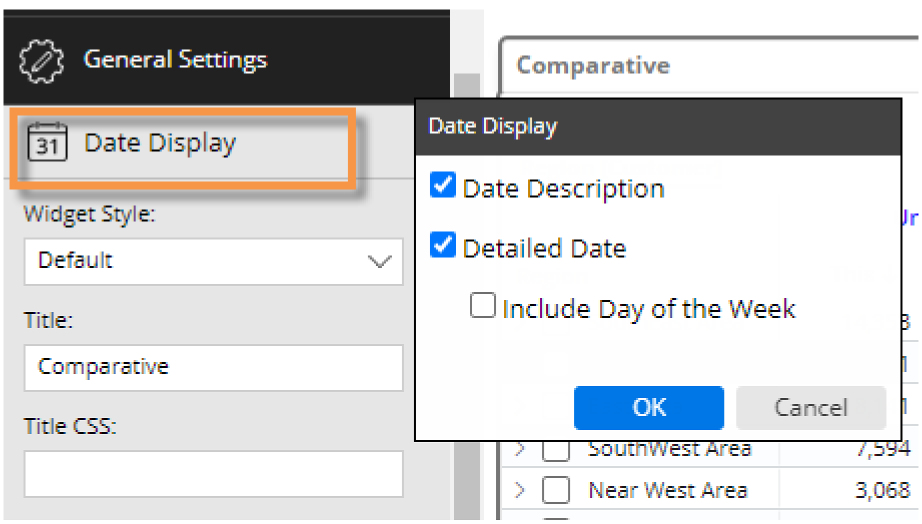
Date display settings

You can customize the column headers in Comparative and Multi Comparative grids to show information about the dates being reported rather than the default "This" and "Last" labels. The headers can include descriptions based on the date settings and/or the beginning and ending dates of the date ranges.



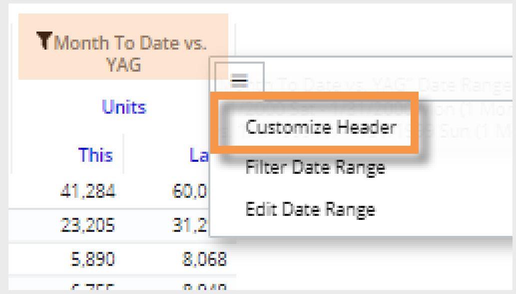
To choose date display settings

1. Select a Comparative or Multi Comparative widget.
2. In the toolkit (in edit or explore mode), expand **General Settings**, and click on **Date Display**.
3. Check the following boxes to show information about the date range.



- Date Description - Show a date range description, which is based on the resolution, number of dates, and customizations such as offsets or most recent complete settings. Examples include Month To Date, Last 6 Months, Year To Date, Last 4 Weeks, YAG, Prior Month, etc.
- Detailed Date - Show the start and end dates of the date range (e.g., 10/1/2023-10/20/2023).
- Include Day of the Week - Include the day of the week in the detailed date (e.g., 10/1/2023 Sun – 10/20/2023 Fri).

Tip: In Multi Comparative widgets, you can also customize the top-level column header.



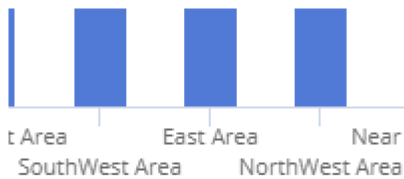
Visual options

Using visual options, you can customize the colors and styles used in most graphs.

To access visual options

In view mode:

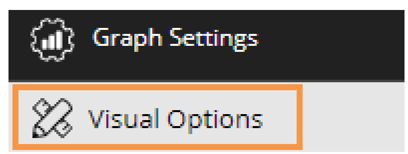
Click in the graph legend (visible on mouseover if the legend is enabled).



In explore/edit mode:

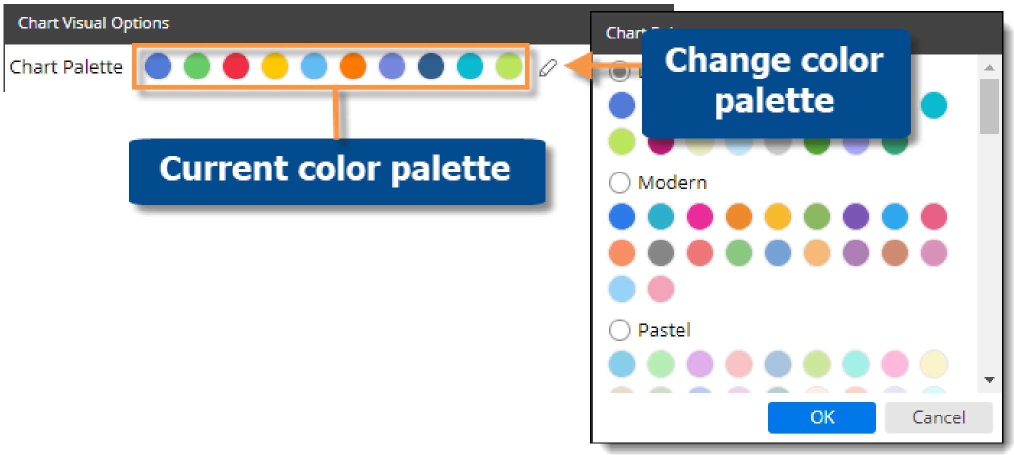
Expand Graph Settings in the toolkit.

Click on Visual Options.



Choose a color palette

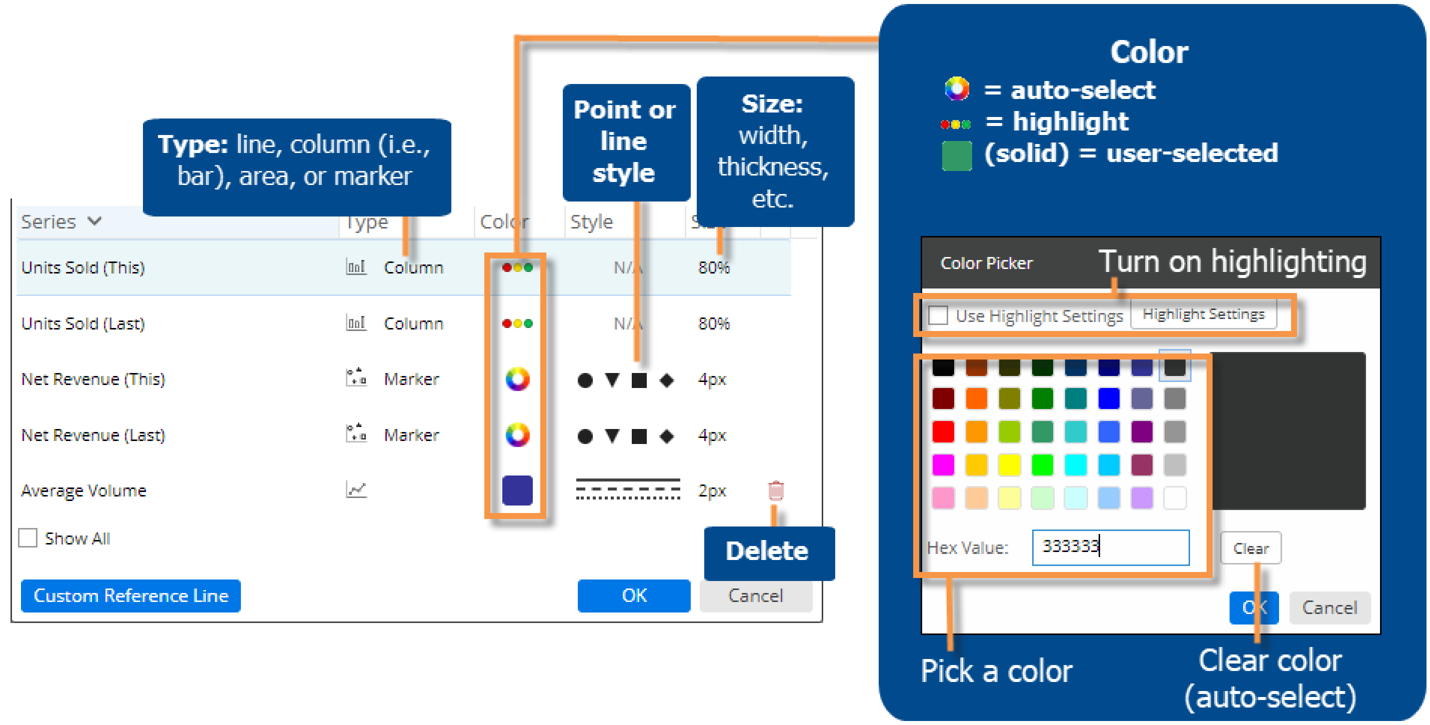
At the top of visual options, click ✎ to change the color palette, which controls the default colors of most graph components. Salient Dashboards will apply the selected palette's colors in the order they are shown (e.g., blue to first component, green to second component, etc.). The available palettes depend on the dataset configuration.



Tip: You can override the selected palette by:
- choosing a color for an individual graph component as explained below.
- applying member coloring (see page 98) to make colors consistent across the dashboard for the defined dimension members (only available in some graph types).

Customize graph components

Depending on the graph type, you can customize individual graph components (e.g., bars, lines, points, etc.). In visual options, click in the row of the component to make the following changes:



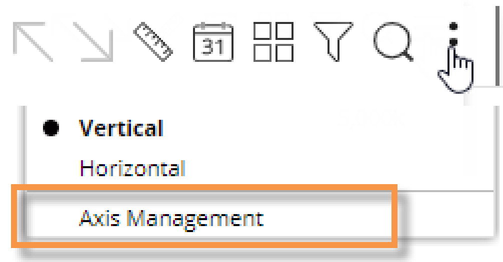
Tip: If you don't see the measure/format, checkmark the **Show All** box.

Axis management

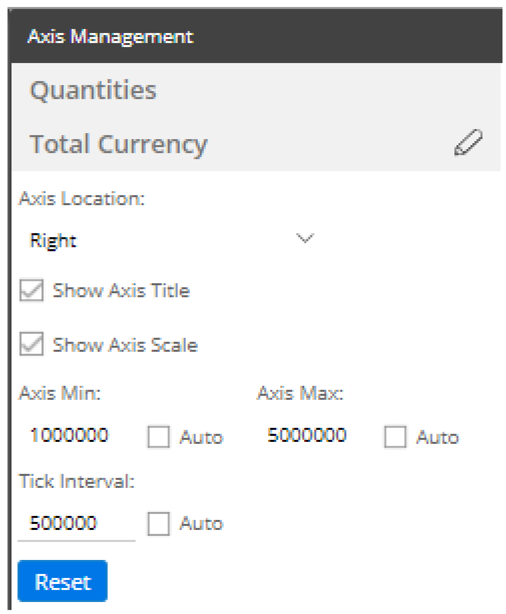
You can customize the axes of several graph types, including Trend, Comparative, and Multi Comparative.

To customize axes

Before proceeding, add the desired measures (see page 38).



1. Click in the upper-right corner of the widget, and select Axis Management, or click on Axis Management under Graph Settings in edit mode.



2. For an actual value graph, choose the axis to customize (e.g., Quantities, Total Currency, etc.). Depending on the selected measures, the graph may include multiple axes, each of which represents a measure or data family.

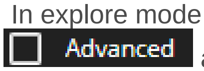
   For a percent change graph, all % change data will be plotted along a single axis so this step is not necessary.
3. To change the axis title, click .
4. Choose the axis location.
5. Show or hide the axis title.
6. Show or hide the axis scale.
7. Choose scale settings, including the minimum, maximum, and tick interval. These may be automatic or custom values.
8. Click Save when you are finished.

Member coloring

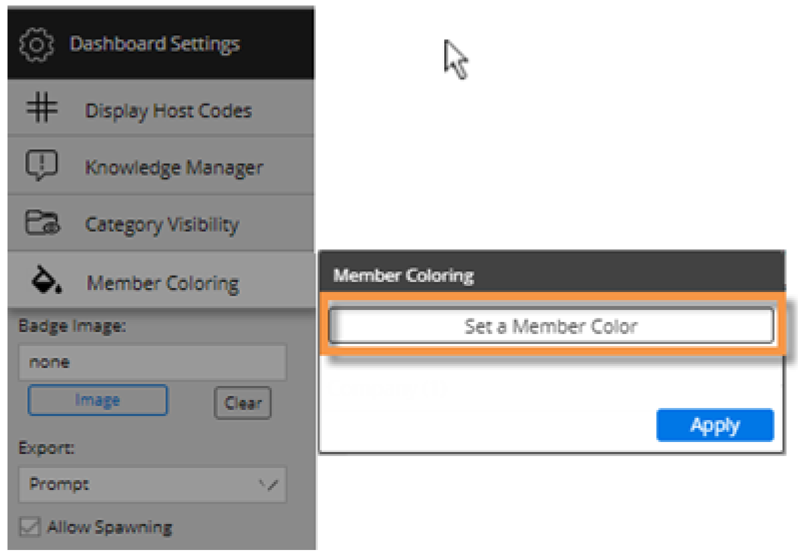
You can assign custom colors to specific dimension members to enhance visual understanding in some types of graphs. For example, you might assign blue to represent a certain region. The colors will be applied consistently in all applicable widgets, which include Mix, Share Trend, and some Crosstab graphs (see the following tips), within the dashboard. For members with assigned colors, the member coloring will override the color palette (see page 94). Member colors do not carry over from one dashboard to another; however, you can import settings for member coloring (see page 31).

To apply member coloring

1. In edit mode, click in the workspace (i.e. not on a widget).

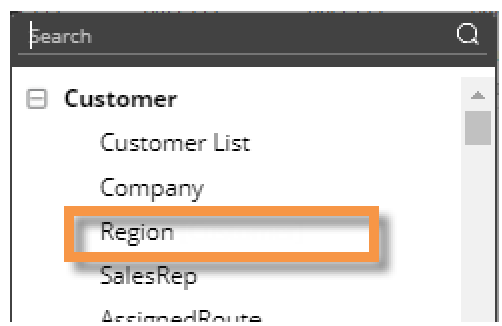
   In explore mode, click on 

 at the bottom of the toolkit.
2. In the toolkit, expand **Dashboard Settings**, and click on **Member Coloring**.
3. Click on **Set a Member Color**.



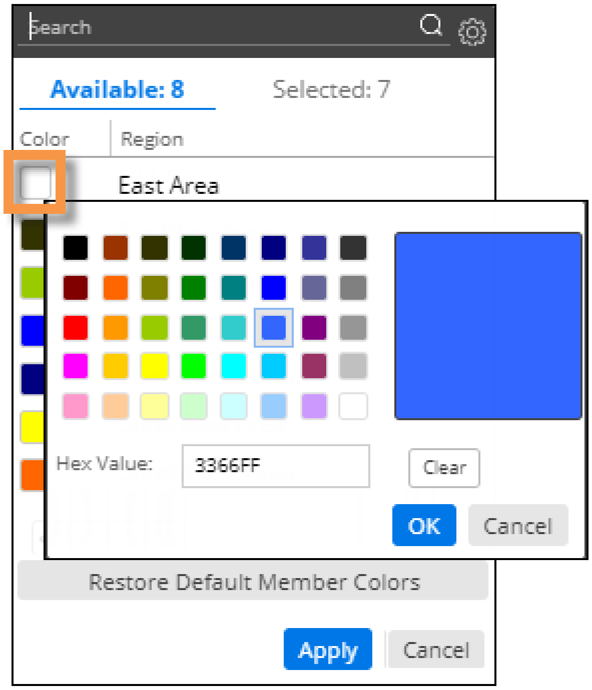
> **Tip:** This menu shows a summary of the member colors that have already been defined. You can click on a dimension to edit its colors.

4. In the next menu, choose the dimension.

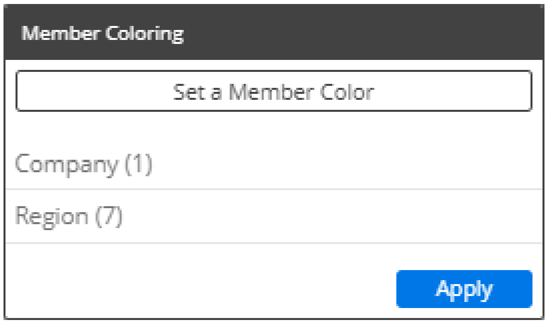


To apply member coloring

5. Locate a member to which you want to assign a color. If you wish, you can search for a member.
6. Click the square beside the member and choose a color. Repeat this step to choose colors for additional members. You may skip a member(s); in this case, the default color from the palette will be applied to the member(s).
7. When you are finished choosing colors for a dimension, click **Apply**.



8. Click **Apply**, or repeat this procedure to choose coloring for additional dimensions.

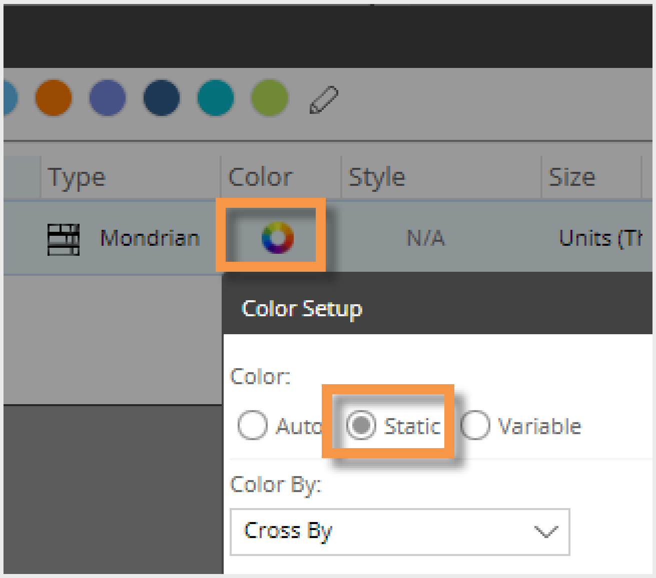


Tips:

Only Mix, Share Trend, and Crosstab graphs with static colors show member coloring, because other types of widgets use coloring to represent measures, percent change, pass/fail, etc.

To turn on static colors for a Crosstab so that member coloring can be utilized, go to its color setup in **Visual Options**.

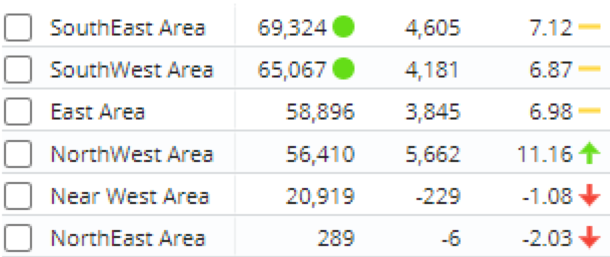
Crosstab static coloring (in visual options):



Highlight data

You can highlight data based on custom criteria or percent of the total (i.e., heatmap) to spot areas of concern or importance. The availability of highlighting depends on the widget type.

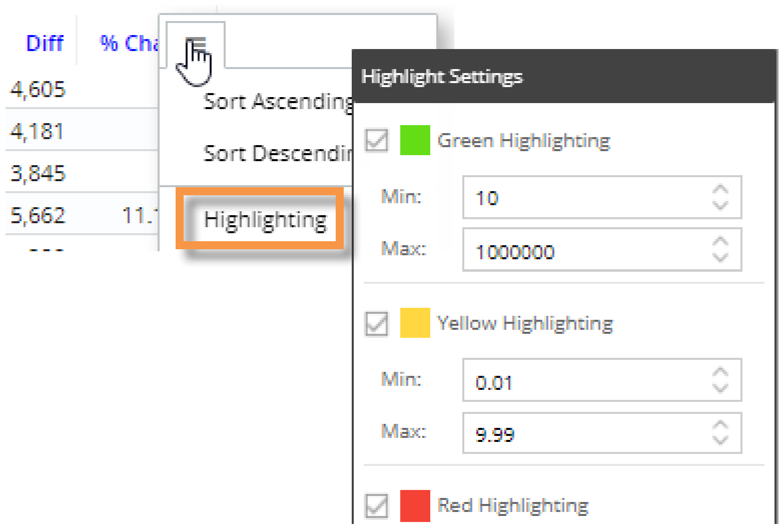
Grid highlighting based on custom criteria



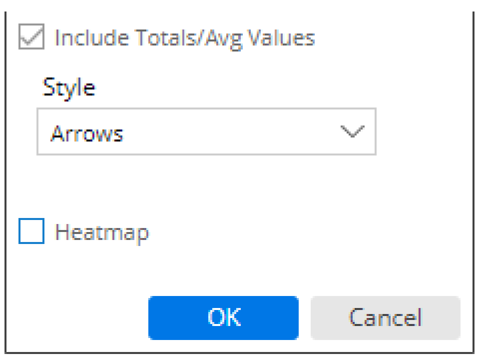
SouthEast Area	69,324	4,605	7.12
SouthWest Area	65,067	4,181	6.87
East Area	58,896	3,845	6.98
NorthWest Area	56,410	5,662	11.16
Near West Area	20,919	-229	-1.08
NorthEast Area	289	-6	-2.03

To highlight data based on custom criteria in a grid (in edit or explore mode)

1. Place your cursor on the heading of the column to highlight. You can highlight actual values (This or Last), percent change, difference, etc., for any measure.
2. Click the menu icon ≡.
3. Select **Highlighting**.
4. In Highlight Settings, check **Green highlighting**, **Yellow highlighting**, and/or **Red highlighting**, depending on the highlighting color(s) you want to use.
5. For each color range, type a minimum value and maximum value. If you use multiple ranges, they cannot overlap.



6. Optionally, check **Include Totals/Avg Values** to apply the highlight settings to applicable totals, averages, and subtotals (i.e., checked/unchecked) in the grid.
7. From the **Style** drop-down, select a highlighting style. The style controls the symbol used in grids.
8. Click **OK**.



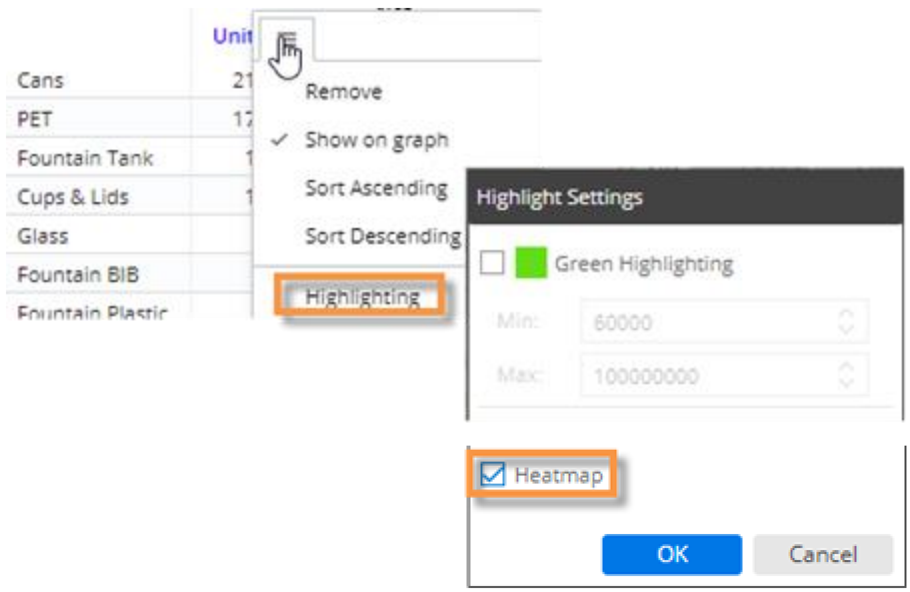
Heatmap highlighting in grids

You can highlight grid cells based on the percent of the total for a given column to create a "heatmap"; the darkest shades represent the largest values. This method does not require you to enter criteria because the shades are calculated automatically.

Form	Units ↓	Net Revenue	Margin
Cans	21,320	15,773	7,444
PET	17,360	17,516	9,229
Fountain Tank	1,192	1,718	1,009
Cups & Lids	1,152	101	-35
Glass	962	1,462	628

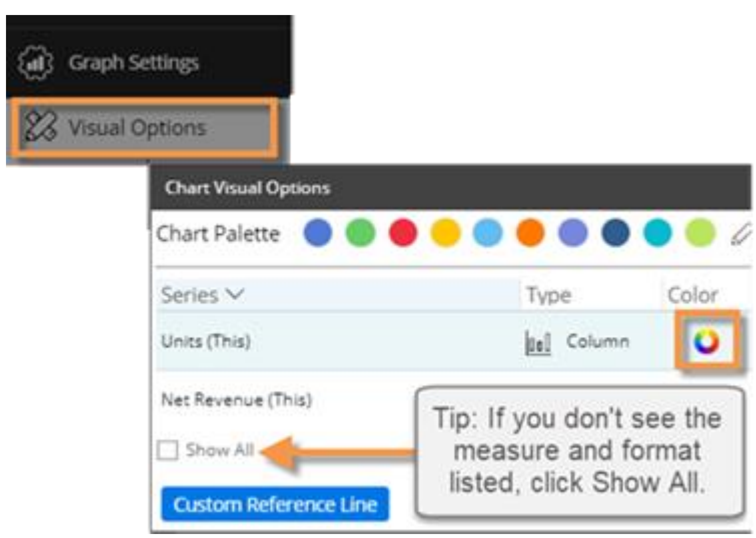
To turn on heatmap highlighting (in edit or explore mode)

1. Place your cursor on the heading of the column to highlight.
2. Click the drop-down arrow that appears.
3. Select **Highlighting**.
4. In **Highlight Settings**, check the **Heatmap** box.
5. Click **OK**.

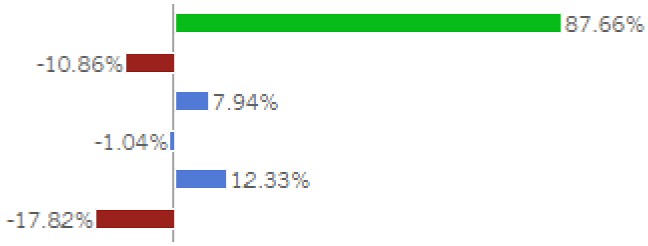


6. Optionally, choose a custom color in Graph Settings, Visual Options. Locate the specific measure and format (e.g., Units for This date range) and then click in the Color column. This color will serve as the darkest shade possible, with other shades calculated accordingly.

   If you skip this step, then the grid will use the color of the data type (i.e., blue for volume, black for revenue, etc.)

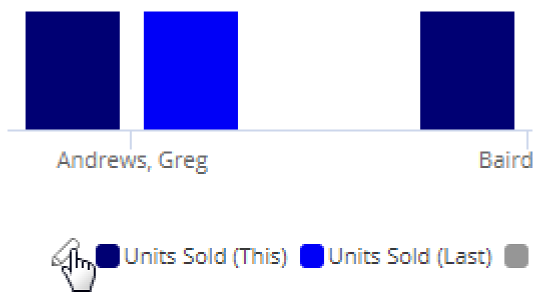


Graph highlighting



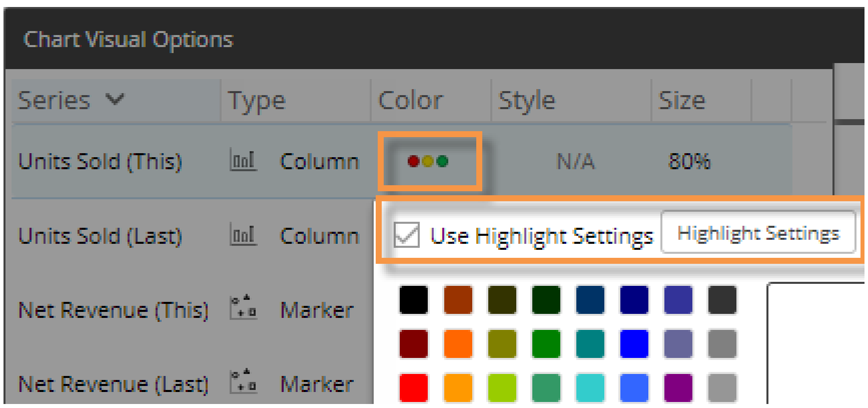
To highlight data in graphs

1. Access visual options by clicking in the graph legend (available on mouseover if the legend is enabled).



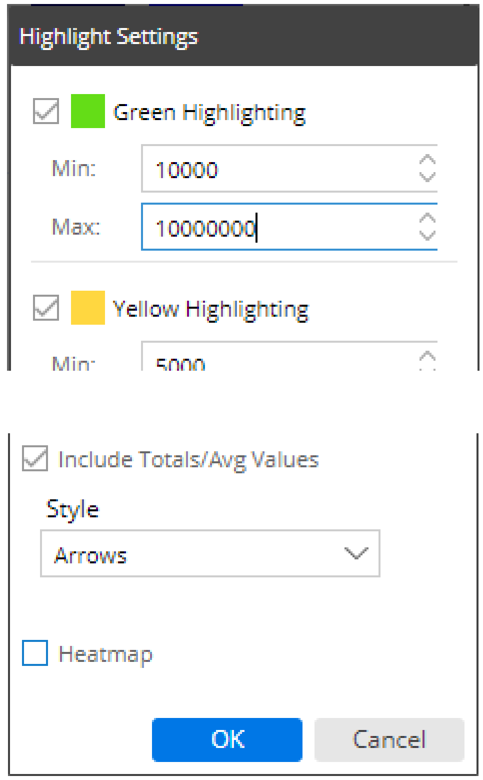
Tip: You can also access visual options under Graph Settings in the toolkit (in explore or edit mode).

2. For the measure/format to highlight, click in the Color column.
3. Check the **Use Highlight Settings** box.
4. If highlight settings are not already configured, click the **Highlight Settings** button and set highlighting ranges as explained below.



To highlight data in graphs

- For each color you wish to use, check the box and type a minimum value and maximum value. Ranges cannot overlap.
- Optionally, check **Include Totals/Avg Values** to apply the highlight settings to applicable totals in the graph. This setting only affects graphs that compare members and include the graph total, which can be turned on in graph settings.
- Select a style. In graphs, the style controls custom highlighting colors if they are configured.
- When you are finished, click OK.

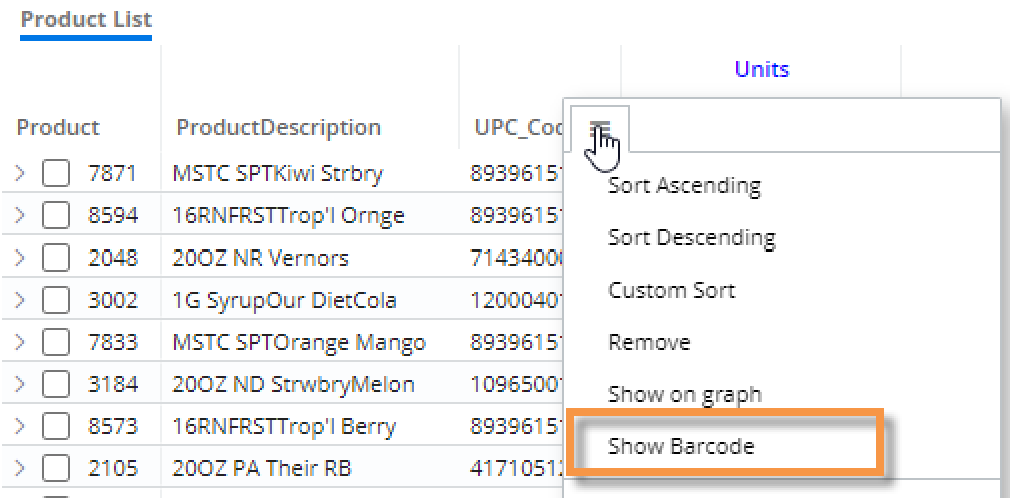


Show barcodes

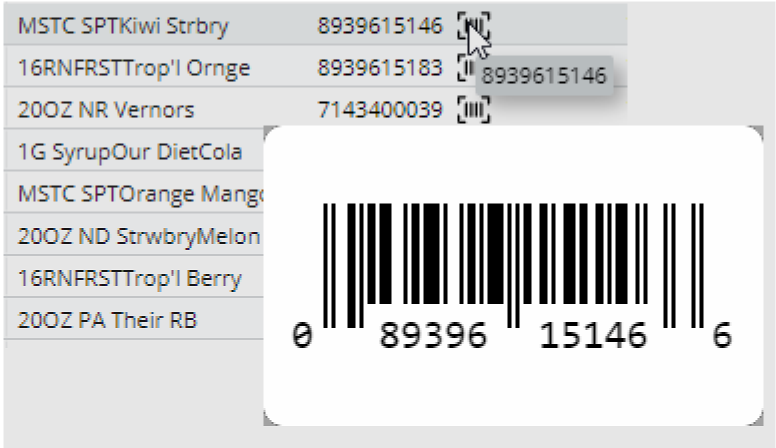
If the dataset includes UPCs and barcode rendering is set up by your administrator, you can display scannable barcodes within Salient Dashboards.

To show barcodes

1. Add or select a grid that compares members (e.g., Comparative widget).
2. Group the data by a key list or dimension that has UPCs (e.g. Product List).
3. Add the description field that contains the UPCs.
4. In the grid, click on the header of the UPC field and select **Show Barcode**.



5. Click on the UPC or icon in the grid to view a barcode.



Save & share

Save and publish dashboards

We recommend saving dashboards frequently to avoid losing any changes. To "publish" a dashboard so that it is available to end-users, save it under the "Published" folder.

To save and publish a dashboard

1. Click on at the top of the dashboards screen.
2. In the pop-up dialog, type a dashboard name. The name will be automatically populated if you are modifying an existing dashboard.
3. In the dashboard tree, select one of the following locations. You may need to expand a location (single-click) to see subfolders.

Published - Select this location or one of its subfolders to publish the dashboard so that it is available to all users in browser-based dashboards and the Salient Mobile app. (Access may be restricted based on user account settings).

Unpublished - This option makes the dashboard global so that it is available to other Dashboard Designers but is hidden from viewers.

Private - This option makes the dashboard private so that you are the only user who can access it.

4. Click **OK**.

Tips:

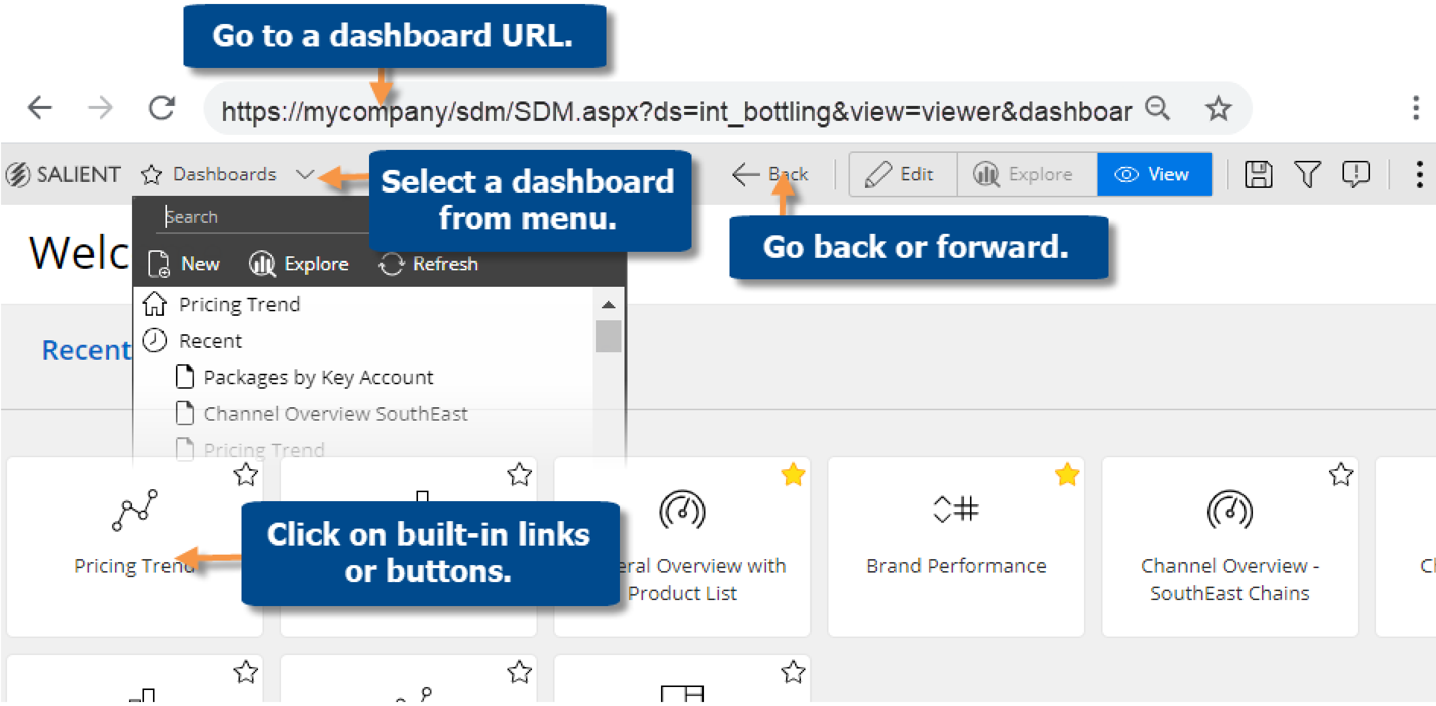
We recommend previewing a dashboard in view mode (click View on the toolbar) prior to publishing it.

You can check the **Set as Home** box to make this dashboard the home dashboard.

After saving a dashboard, you can access the its URL (see page 108) to share it or go directly to the dashboard in a browser.

How users can access dashboards

Use any of the following methods to open a dashboard.



URL	Go directly to a specific dashboard by entering its URL in your browser or clicking on a link (e.g., in an email) This may be the dashboard's permanent URL (see page 108) or a temporary URL created by sharing a dashboard (see page 109).
Built-in links	Click on buttons, links, icons, etc., in the portal or other dashboards.
Dashboards menu	Open the dashboards menu at the top of the screen *(keyboard shortcut: o)*; then, click on a dashboard name.
Back & forward buttons	Go back and forward to dashboards you visited within a Salient Dashboards session. Click the browser's back and forward buttons or use the back button in the dashboard toolbar. Note that the history is cleared when you go to another page.

On a mobile device:

Access dashboards through the Salient mobile app for optimal viewing, or user a browser if you prefer. Going to a dashboard URL will prompt you to choose one of these methods. (To reset your preferred method, clear browser cookies.)

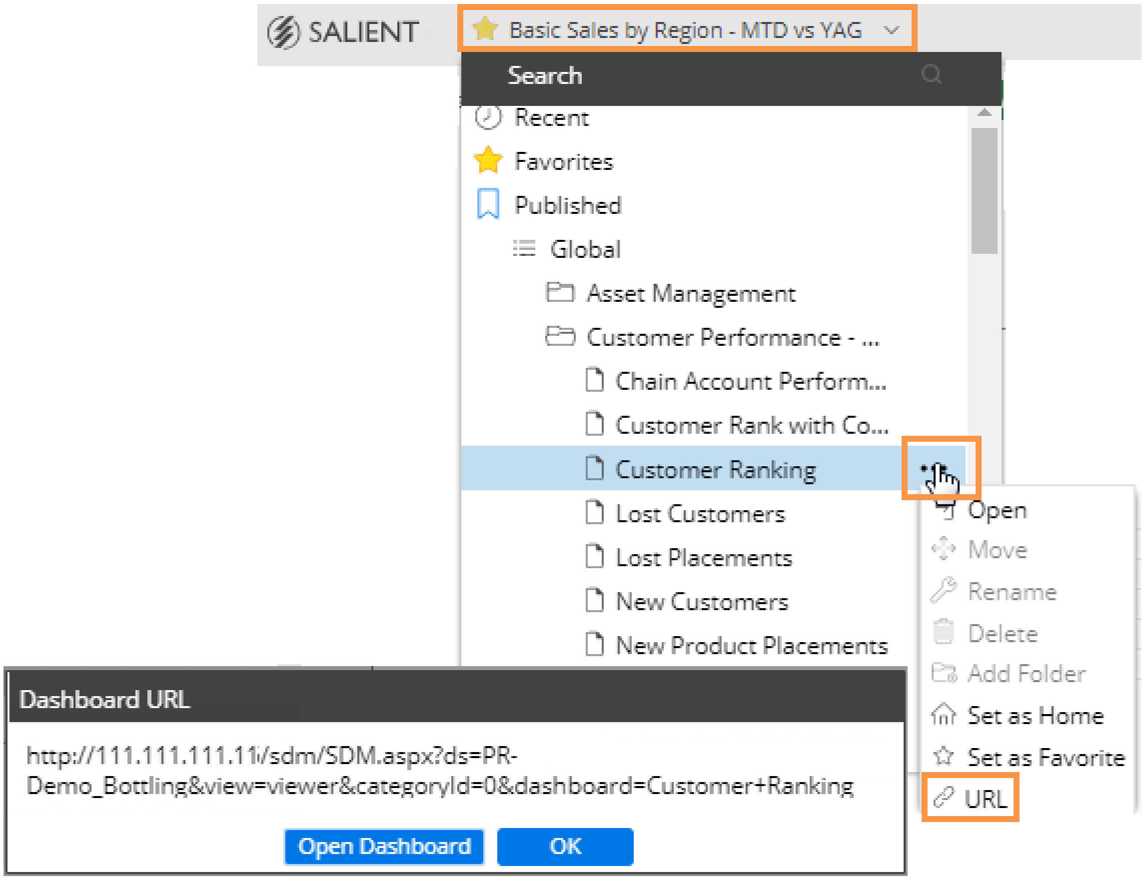
Additional installation and setup are required for the mobile app.

Access a dashboard's URL

A dashboard URL allows you to go directly to a dashboard, share the URL with other users, create a link to a dashboard, save the dashboard as a bookmark in your browser, and more.

To access a dashboard's URL

1. Click the dashboard menu at the top of the screen.
2. Locate the dashboard and place the cursor over it.
3. Click the ... button that appears.
4. In the pop-up menu, select URL.
5. A dialog shows the URL of the dashboard. You can copy and paste it into an email program or other application.



Tip: If you wish, you can add parameters to the URL to do the following.

• Filter the dashboard to see data for specific key or dimension members. For example: `...&filters=Customer&filterValues=11901`

• Open specific tabs if the dashboard has tab groups. For example: `...&tab=1-0_2-1`

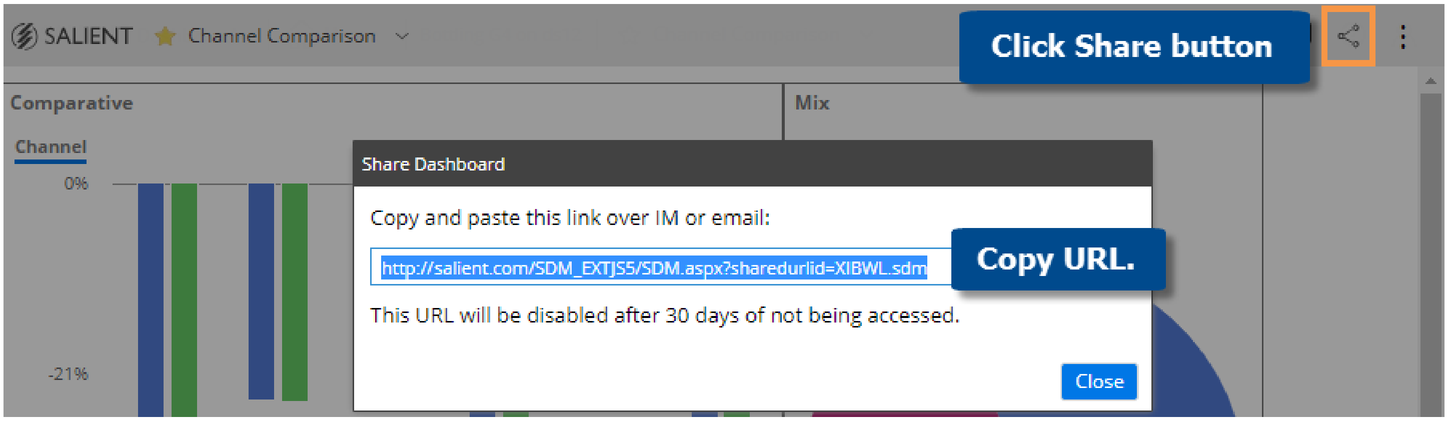
Share a dashboard

Sharing a dashboard creates a temporary dashboard URL, which you can access in future sessions and/or share with other users. A shared URL retains any changes that you made, such as filters, date range selections, etc., and is therefore, a useful method for returning to a dashboard with your preferred settings already applied.

The URL is valid for a number of days (set by your administrator) after the last time it is accessed; therefore, if users continue to access the URL, it will remain available.

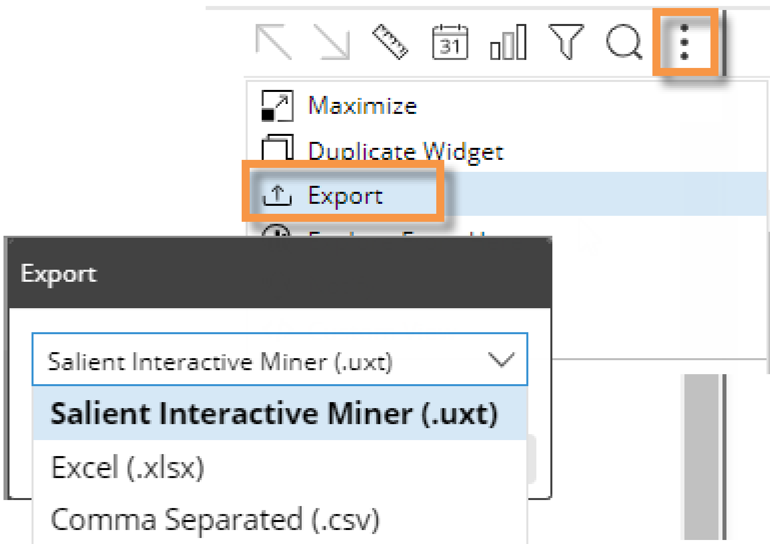
To share a dashboard

1. Open the dashboard and make the desired changes. For example, you might filter or change the date.
2. Click  in the upper-right corner of the screen.
3. In the **Share Dashboard** window, copy the URL using the browser controls (for example, right-click and select Copy in most desktop browsers).
4. Share or save this URL for use by other users or in future sessions.



Limiting export options for users

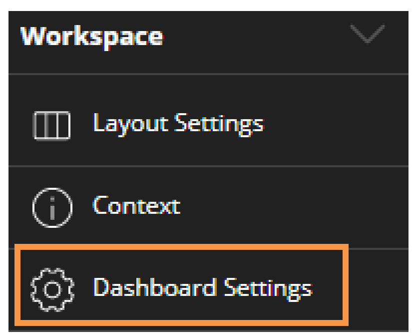
If allowed, users can export dashboard data by clicking the ⋮ button and selecting Export. The default export options include an Excel, comma-separated, or UXT-compatible file. If you wish, you can turn this capability off or limit the allowed formats.



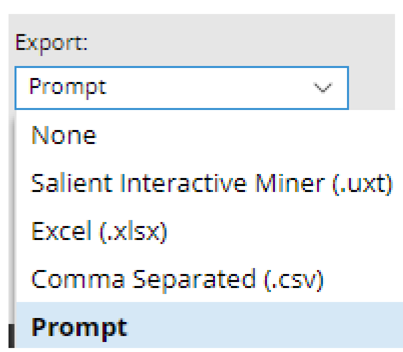
To turn off or limit export options for all widgets in a dashboard

Note: This method does not affect explore mode.

1. Click the workspace to select it.
2. In the toolkit, select Dashboard Settings.

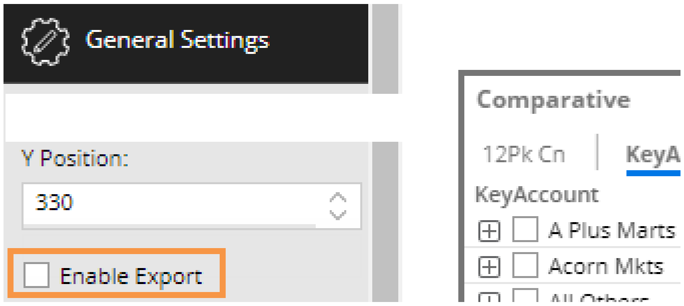


3. From the Export menu, select a single format, None to turn off exporting, or Prompt to allow all formats.



To turn off exporting for a single widget

1. Click the widget to select it.
2. In the toolkit, select General Settings.
3. Clear the Enable Export box.



Tip: These methods do not limit the ability to create a PDF file.

Knowledge Manager

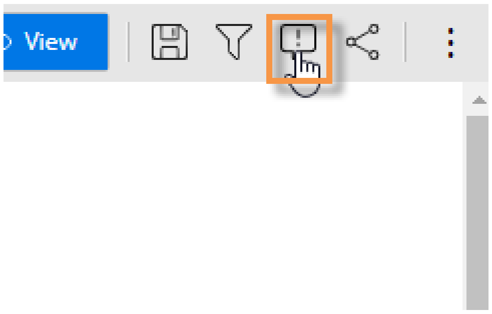
Knowledge Manager enables users to organize thoughts or "soft knowledge" for collaboration. You can add text descriptions, upload images or other resources, and add comments. In addition, this information can be shared between all users across multiple devices in SIM, Salient Dashboards, and the Salient Mobile app (additional setup required).

To show the Knowledge Manager panel

Click the Knowledge Manager button at the top of the screen to open the panel.

Knowledge Manager includes the following tabs.

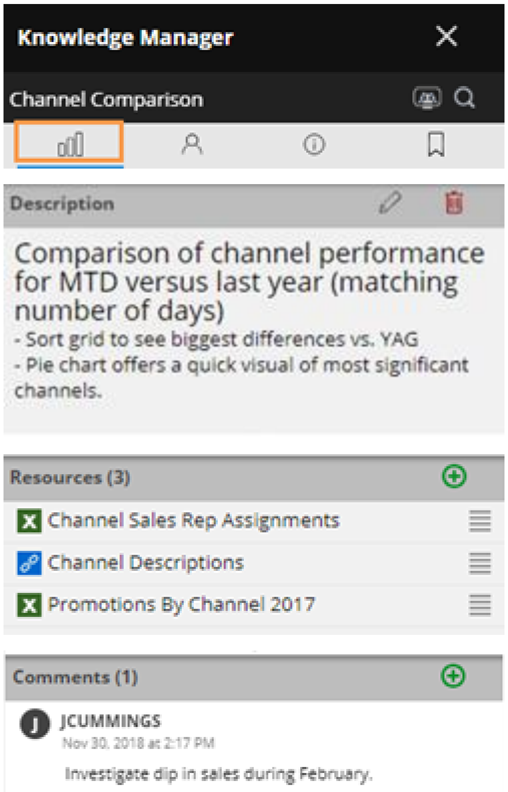
Tip: The use of Knowledge Manager depends on your user account rights.



Dashboard Info

Allows users who create dashboards to write descriptions and purposes for them.

Resources (links to web pages, pictures or documents) and comments can be included as future reference materials become available.



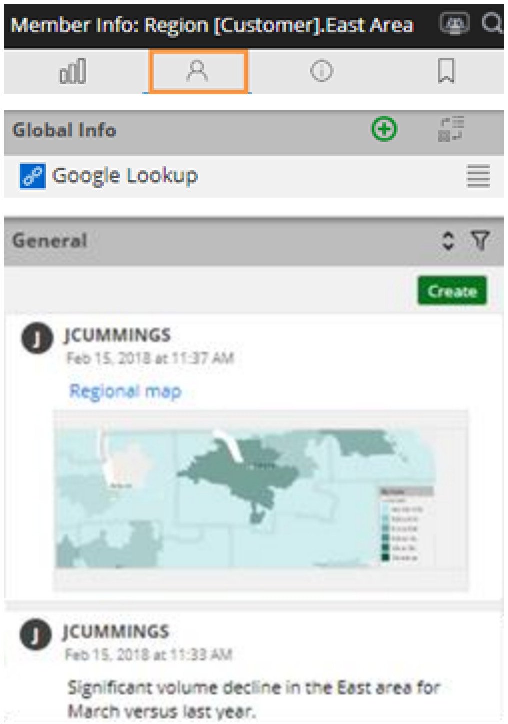
Member Info

Allows you to connect media or non-media information to specific customers, sales reps, products, dates, etc.

Entries can be filtered and sorted to keep the most current information on top.

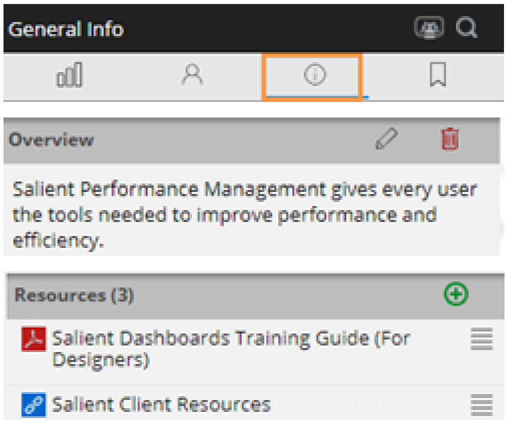
Media examples include news stories, events or related websites.

Non-media can be details on location, entry, specific contact info, or security issues.



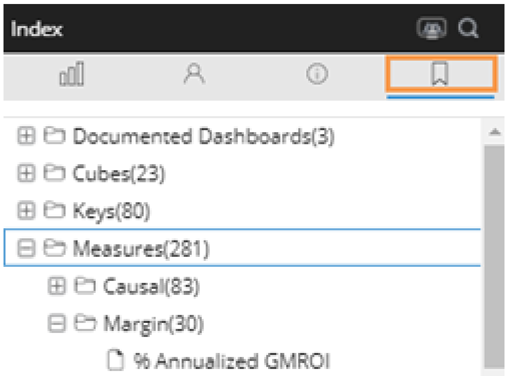
General Info

Add global information such as manuals, training material, or information about the dataset.



Index/Search

Search, view, or add information about the schema (keys, dimensions, measures, etc.).



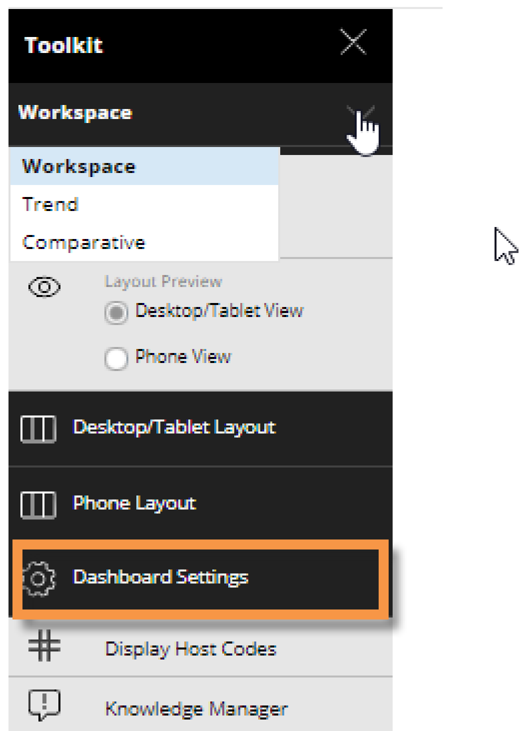
Additional concepts

Dashboard settings

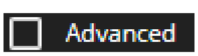
Dashboard settings allow you to control a variety of options, such as a member coloring, host code display options, badge image, export choices, etc. You can select these settings in the toolkit, as explained below, or [import settings from other dashboards](import) (see page 31).

To access dashboard settings in edit mode

1. In edit mode, select the workspace by clicking in a blank area of the dashboard, selecting **Workspace** in the toolkit menu, or pressing **w** on the keyboard.
2. Expand **Dashboard Settings** the toolkit.



To access dashboard settings in explore mode

Click on 

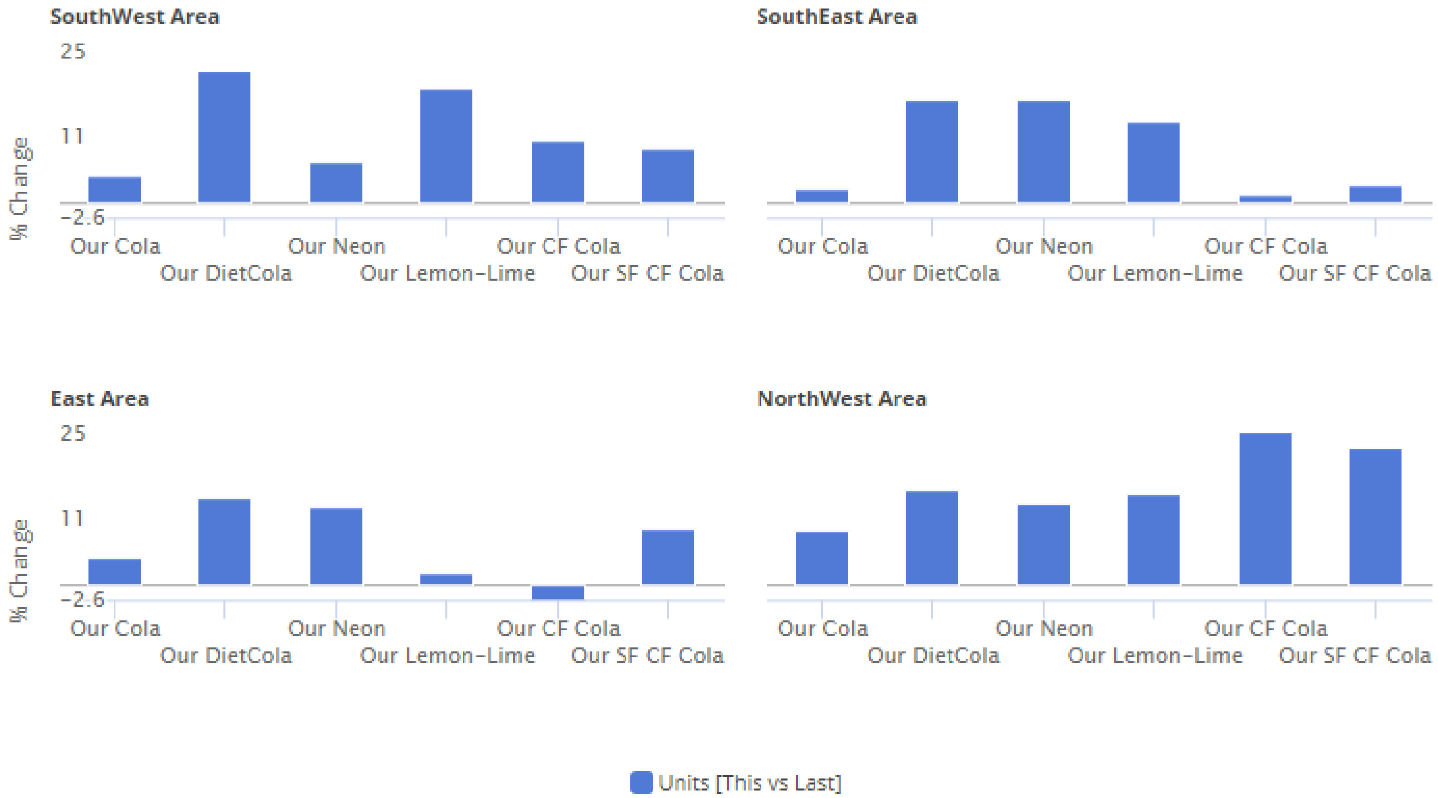
at the bottom of the toolkit and then select Dashboard Settings.

Setting	Explanation
Display Hostcodes	If you wish, you can display dimension member codes along with or instead of their descriptions throughout the dashboard.
Knowledge Manager	Click **Knowledge Manager** to select settings for the Knowledge Manager panel.
Category Visibility	In this area, you can control which global and private collection categories are available or "visible" in view mode. Power Viewers will be able to access and/or create collections within these categories, depending on their user account settings.

Setting	Explanation
Member Coloring	In this area, choose specific colors to represent members in the dashboard (see page 98). This allows you to apply consistent colors across multiple widgets.
Badge Image	Optionally, select an icon to represent the dashboard. This icon will appear in dashboard widgets (e.g., in the portal) if enabled. If you skip this selection, the icon will be based on the analysis type of the widget in the upper-left corner.
Export	Select the format for exporting data when the user selects the Export option in a widget. In addition to this setting, you can disable exporting for any widget in its settings.
Allow Spawning	Check this box if you want users to be able to create new widgets by clicking or double-clicking.
Show Standard Widget Title	Check this box to include the standard text describing the widget's timeframe after the widget title. (The widget title is defined in the widget's general settings.)
Add Cube Name to Data Field	Check this box to display the name of a data cube from which the measure originates in measure headings and the Measures area.
Use Metric Colors on Grid	Check this box to color grid headings based on the measure category (e.g., blue for volume), or clear the box to use dark gray for all measure headings across the dashboard.
Restrict Power Viewers from adding Measures, Bys, and Filters in View Mode	To provide unlimited editing of measures, Group By dimensions, and filters in view mode, leave this box cleared. To limit these selections to what was built into the dashboard, check this box.
Docked Filter Panel Position	Choose display options for the panel that allows users to manage filters (see page 69). To disable this panel, choose **Hidden**.
Open Filter Panel on Load	Check this box to automatically expand the filters panel when the user opens the dashboard.
Remove Filter Widgets from Dashboard	This option removes all filter widgets from the dashboard but retains them as workspace filters, which can be accessed using the collapsible filter panel. This option maximizes screen space and is useful when upgrading your existing dashboards to Version 7.10+ if you want to use the new streamlined format.
Clear Workspace Filters	This option deletes all workspace filters, including global filters.

Trellis setup

A trellis chart (i.e., small multiple) repeats the same graph for multiple sub-categories to break the data into smaller pieces. When a standard trellis is on, the widget shows an array of small graphs; each graph shows data for a member of the 1st By (e.g., each region). The data is then broken down according to the 2nd By (e.g., brands in each region). The trellis allows Dashboard Designers to build several visualizations into a dashboard using a single widget.



A measure trellis (see page 120) is also available.

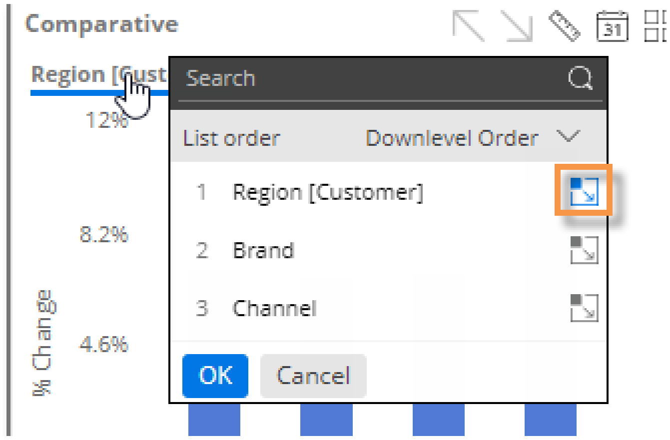
To set up a trellis

1. Start with a comparative graph.
2. To show a series of subgroupings (i.e., standard trellis), select how to group the data:

   - Choose at least two levels (i.e., 1st By and 2nd By).

   - Turn on auto-expand for at least the top-level dimension or key.

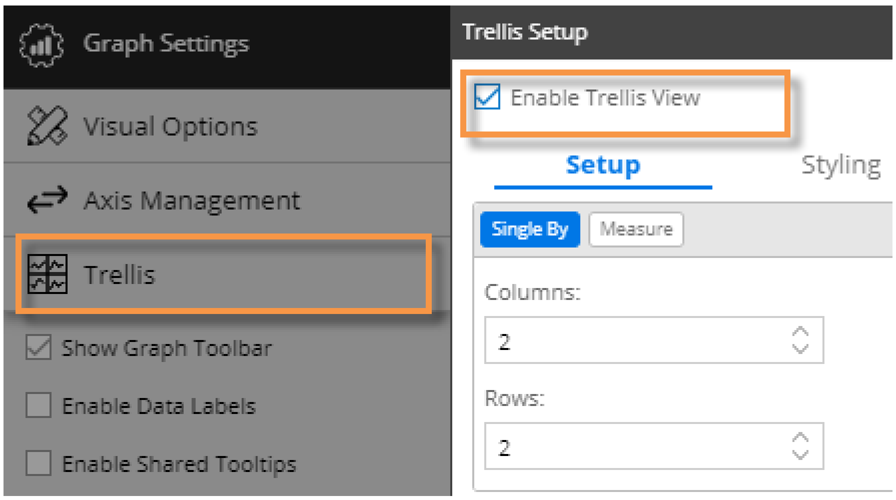
   The trellis will show small multiple charts for individual members of the 1st By. The data in each small graph will be grouped according to the 2nd By.



3. In the toolkit (in edit or explore mode), expand **Graph Settings**, and click on **Trellis**.
4. Check the **Enable Trellis** box.
5. In the **Setup** tab, choose from the following:

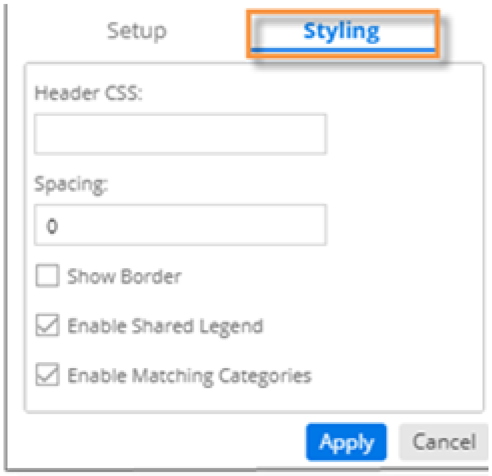
   To create a standard trellis that shows a small graph for each subgrouping, leave Single By selected. Alternatively, you can create a measure trellis (see page 120).

   Choose the number of columns and rows for the trellis array. For example, 2x2 will result in four small graphs.



To set up a trellis

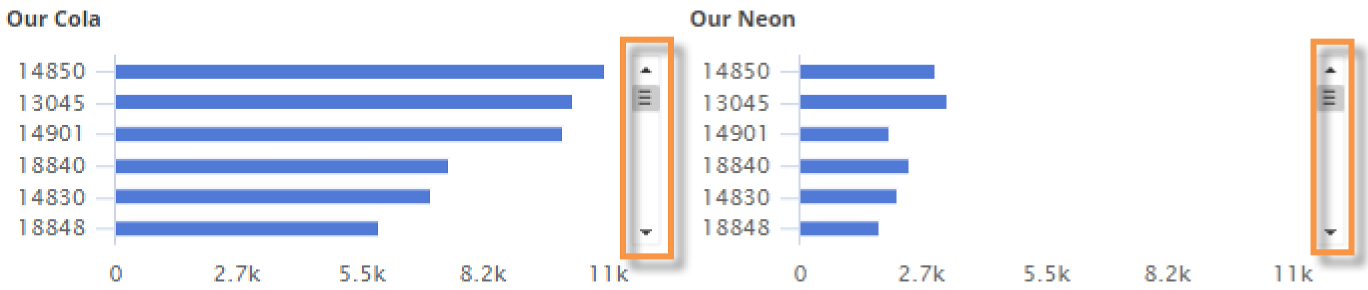
6. In the **Styling** tab, choose the following:



- Optionally, enter css code to apply formatting to small graph headings. For example:
  `font-size: 14pt`
- To add space around the small graphs, enter a spacing value in pixels.
- To add borders around the small graphs, check the **Show Border** box.
- Leave the **Enable Shared Legend** box checked to share the legend between small graphs. In general, this is recommended.
- Check or clear the **Enable Matching Categories** box.

Enable Matching Categories on

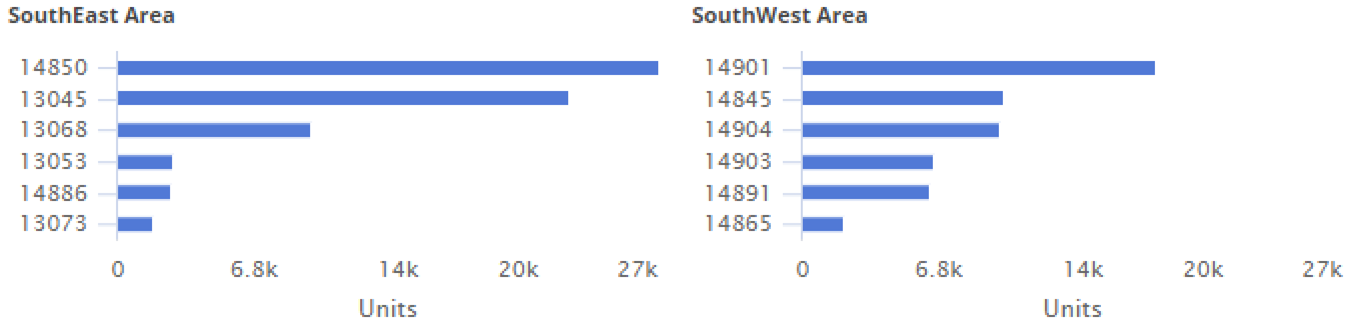
To order subgroupings consistently in the small graphs (i.e., same order in graph 1 as graph 2, graph 3, etc.), check the **Enable Matching Categories** box. In general, this option is recommended if the small graphs have most subgroupings in common because it allows for easier comparison and synchronous scrolling. For example:



The trellis uses an asterisk (*) to indicate that a member is <u>not</u> in the top results for that particular small graph but is included because it is in the combined list.

Enable Matching Categories off

If small graphs do not have common subgroupings, you should generally turn off the **Enable Matching Categories** option. This will allow each small graph to sort and size its subgroupings independently.

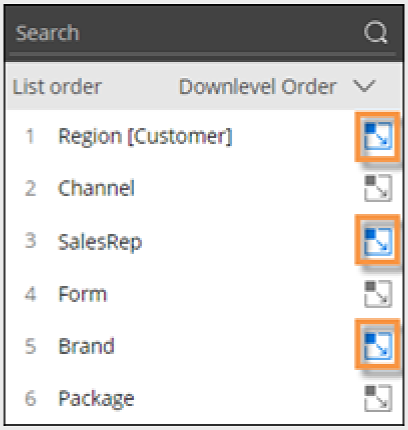


Note that matching categories is disabled in the following situations: two or more levels of auto-expansion (i.e., 1st By and 2nd By auto-expanded) or key-level as the 2nd By.

7. Click **Apply**.

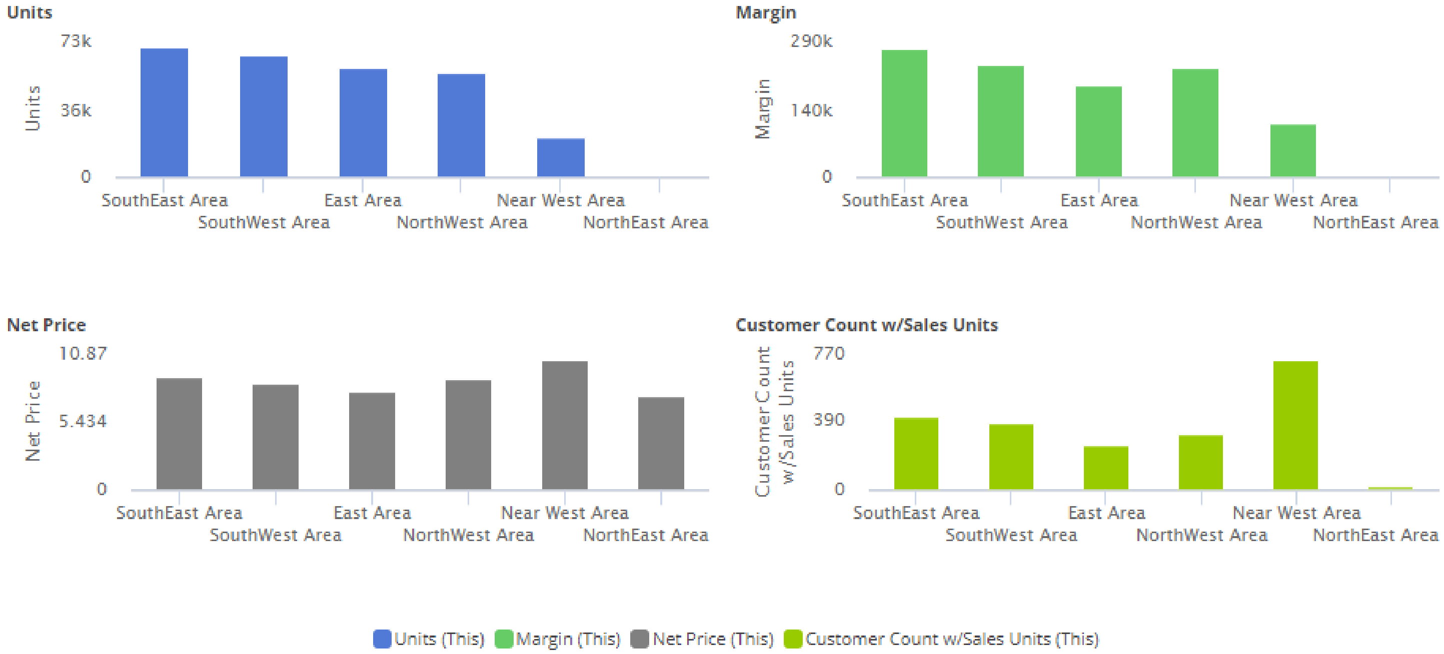
Tip:

To enable drilling through a series of trellis graphs, every other level should be expanded; otherwise, users will need to manually turn on auto-expand after drilling.



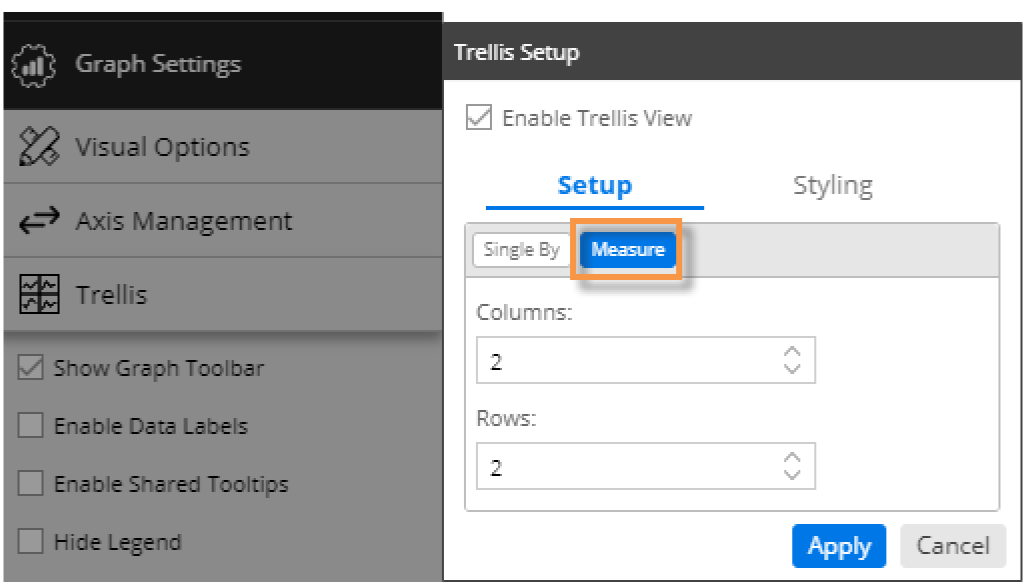
Measure trellis

A trellis can show a small graph for each measure rather than each sub-category. In this case, all graphs break down data according to the top-level dimension (and additional levels if auto-expand is on). A measure trellis may be useful when comparing several measures across a dimension.



To set up a measure trellis

1. Add the measures to the comparative widget in the order you want them to appear.
2. Set up a trellis as previous explained except choose the Measure option in the **Trellis Setup** area.

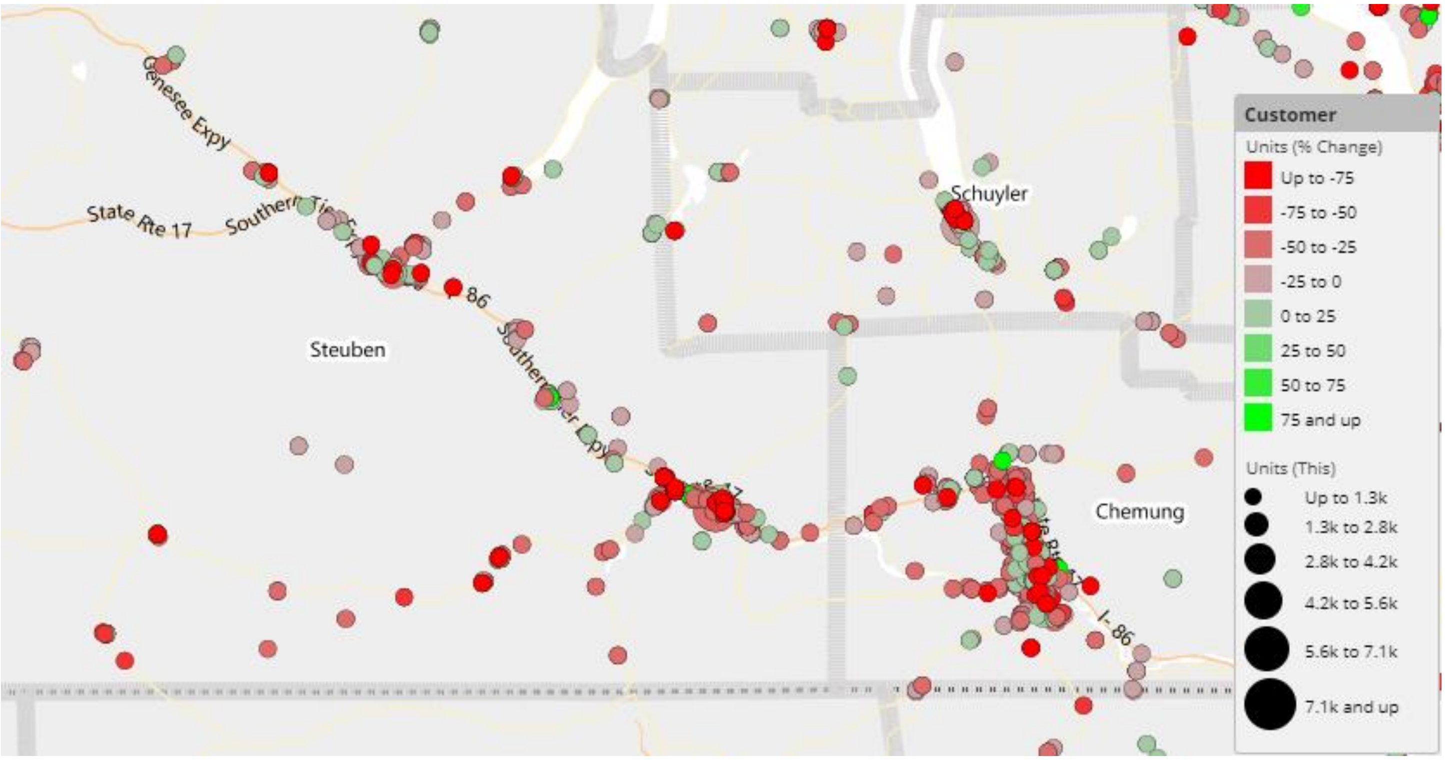


Geo

Geo is a type of widget that provides geospatial intelligence by showing performance for individual locations (i.e. points). Depending on its setup, the map may also aggregate performance across areas to reveal geographic trends. This widget requires additional installation and setup.

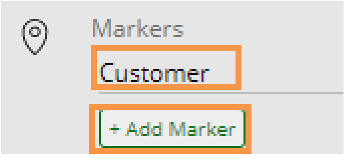
Geo point map colored and sized by measure

The Geo map typically has markers that represent member locations (e.g., customer locations). The color and/or size of markers can indicate data values, difference, or percent change (e.g., green indicates positive change; red indicates negative change).



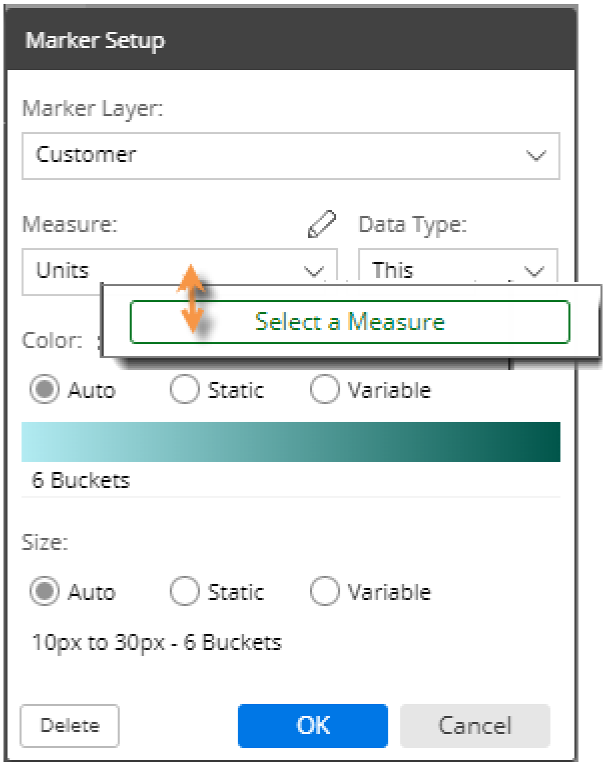
To set up a geo point map colored and sized by measure

1. After adding a Geo widget, access marker setup by clicking **Add Marker** under **Markers** in the toolkit. (If you have already added the marker, you can click on its name to edit it.)
2. In the **Marker Setup** dialog, select the following settings.



Tip: Users will be able to change the marker setup in view mode by clicking on the map legend.

To set up a geo point map colored and sized by measure



Marker Layer - Select the key or dimension to plot on the map (e.g., customer).

Measure - Click **Select a Measure** to add the measure, or select from the **Measure** drop-down menu if measures have already been added. measuremeasure

Data Type - Select values (This or Last), Diff, % Change, etc.

Color - Select from the following.

- Auto - Markers are colored in shades of teal based on data; uses the default number of equally-sized buckets (i.e., ranges); requires no additional setup.
- Static - uses the same color/shade for all points regardless of data. You can also select the opacity of static markers.
- Variable - (see the following instructions) Allows you to choose the bucket selection method, colors, opacity, number of buckets.

Size - Select from the following.

- Auto - Markers are sized based on data; uses the default number of equally-sized buckets; requires no additional setup.
- Static - uses the same point size for all markers regardless of data.
- Variable - (see the following instructions) allows you to choose the bucket selection method, pixel size, and number of buckets.

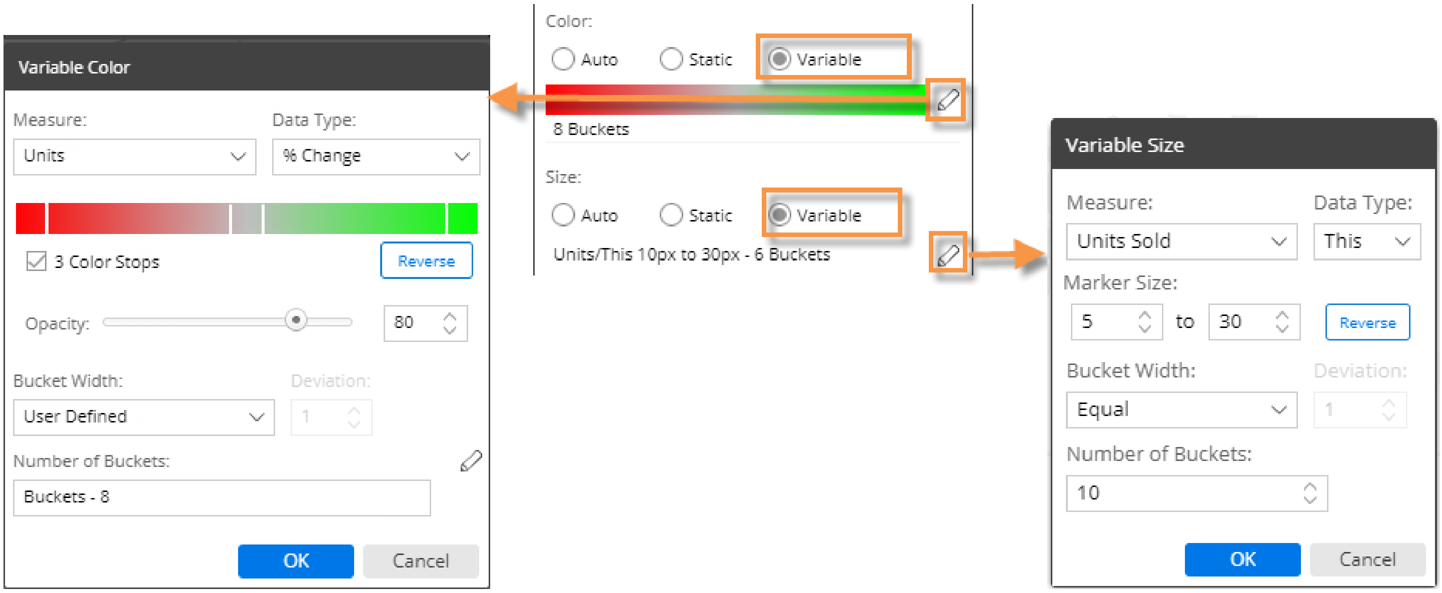
Tip: If you select variable for one option (color or size) and use Auto for the other, then the map will automatically use appropriate Auto settings that correspond to the variable settings (i.e. number and size of buckets will match).

Variable (i.e., customized) point color and size options

The variable color and size options in Geo allow you to do any of the following:

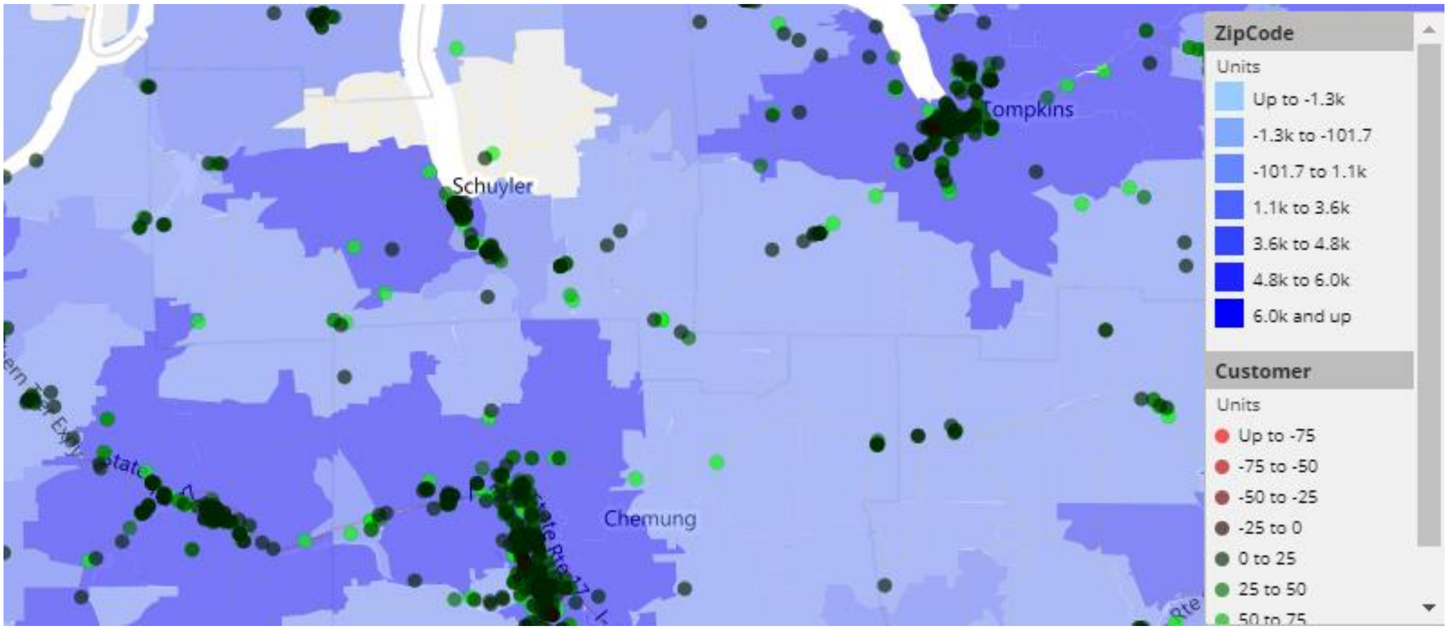
- Select the number of buckets (e.g., 8 ranges of percent change)
- Select how the buckets are determined (equal size, standard deviation, or user-defined)
- Select a color gradient (2 or 3 color stops)
- Select a level of opacity
- Select a range of point size in pixels
- Use different measures or data types for color and size (e.g., size based on values and color based on percent change)

To access these options, choose the variable option for color or size in the Marker Setup dialog.



Geo area map colored by measure

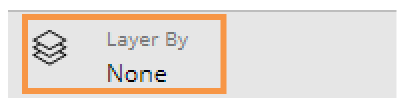
Geo maps can shade areas based on data totals, data averages, percent change, or difference, for each area within a layer. The map can overlay points (see page 121) on the colored areas, or you can view the area map without points. For example, view zip codes by units sold (darker areas have higher values).

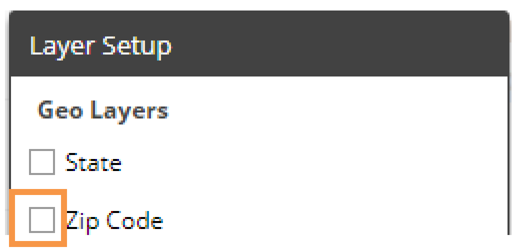


To set up a geo area map colored by measure

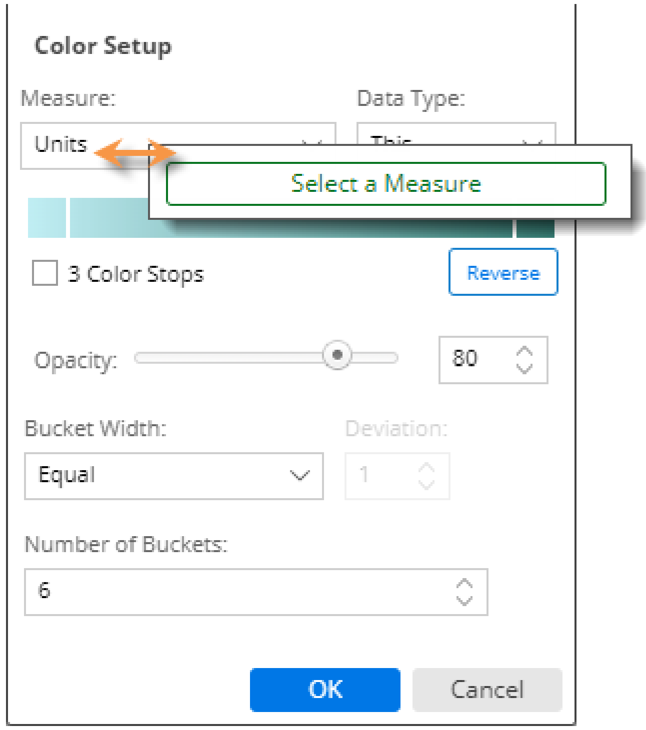
1. After adding a Geo widget, access layer setup by clicking **Layer By** in the toolkit.
2. In the **Layer Setup** dialog, check the box of the layer for which want to color areas. Only pre-configured spatial layers are available for selection.
3. Select from the following options.

Tip: Users will be able to change the layer setup in view mode by clicking on the map legend.





To set up a geo area map colored by measure



Measure - Click **Select a Measure** to add the measure, or select from the **Measure** drop-down menu if measures have already been added.

Data Type - Select values (This or Last), Diff, % Change, etc.

To customize the colors, select from the following options.

- **3 color stops** - Optionally, use three color stops to define the lowest, average, and highest data points with a gradient in-between. Or, leave this option cleared to use a two-color gradient.
- **Colors** - Click each stop in the color bar to define the color. You can also click **Reverse** to reverse the colors.

- **Opacity** - Select the level of opacity for the layer. A low opacity value will allow you to see background layers; a high opacity value may hide other layers behind the marker layer, depending on the zoom level.

To customize the buckets (i.e., ranges represented by various shades), select one of the following from the **Bucket Width** menu:

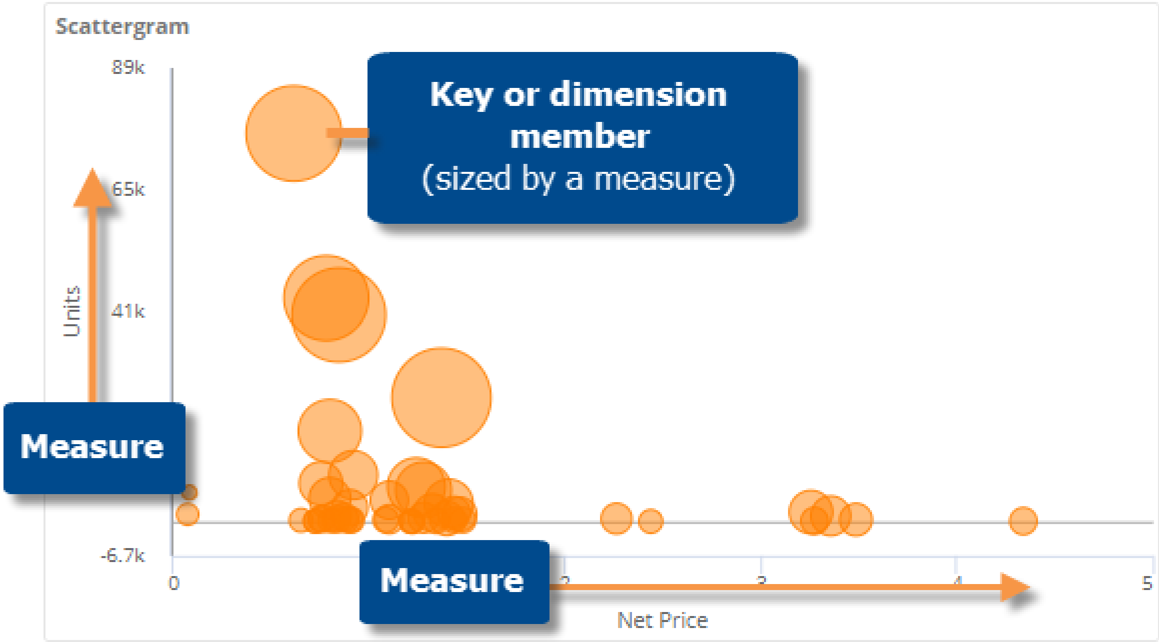
- Standard deviation - centers the buckets around the mean.

- Equal - creates a defined number of equally-sized ranges between the minimum and maximum values.

- User Defined - allows you to create custom buckets.

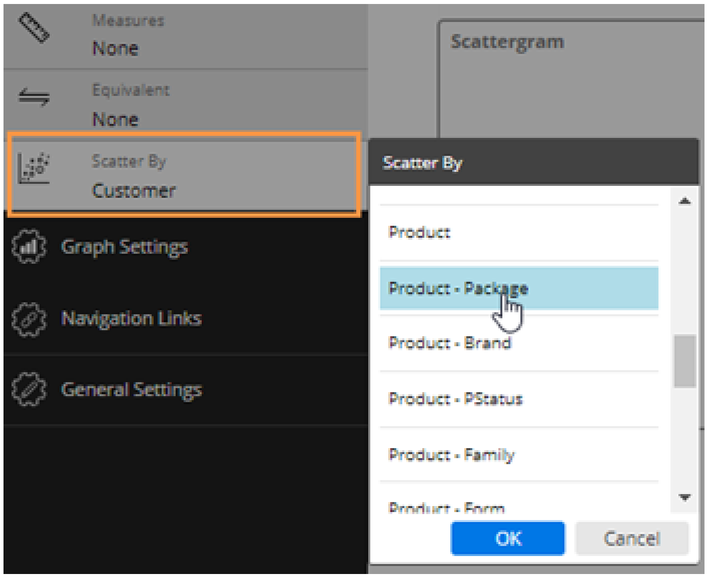
Bubble chart

The bubble chart is a scattergram that sizes its points based on a variable to show the relative importance of the items that they represent in addition to trends and outliers.



To configure a bubble chart

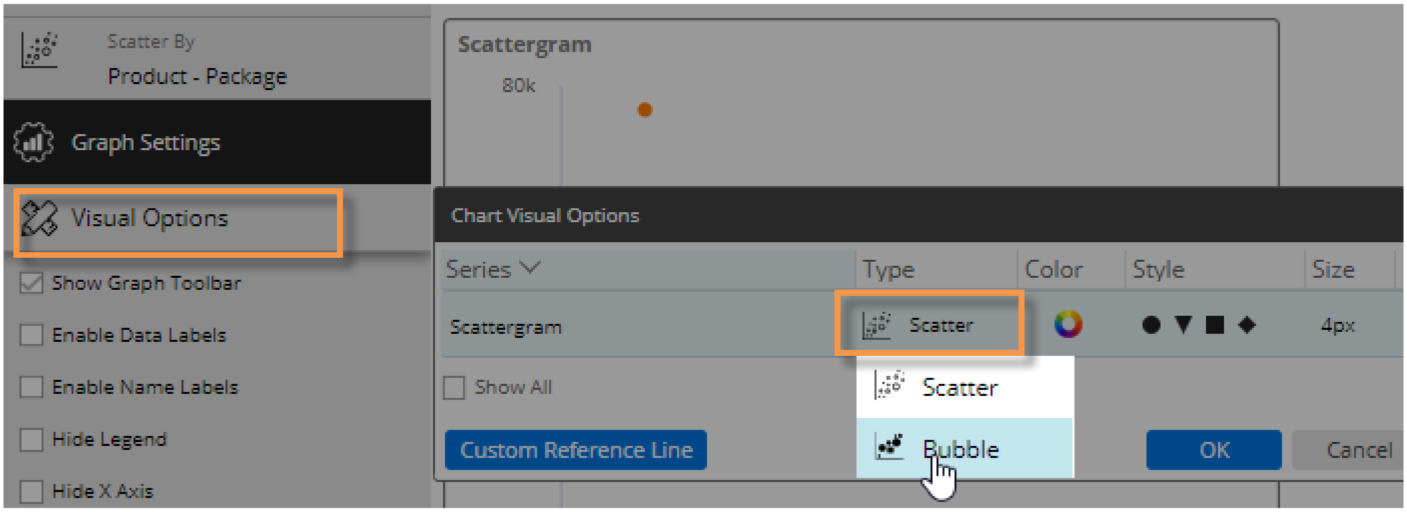
1. In edit or explore mode, add or select a Scattergram graph.
2. Select the "Scatter By" to control what will be plotted on the bubble chart.



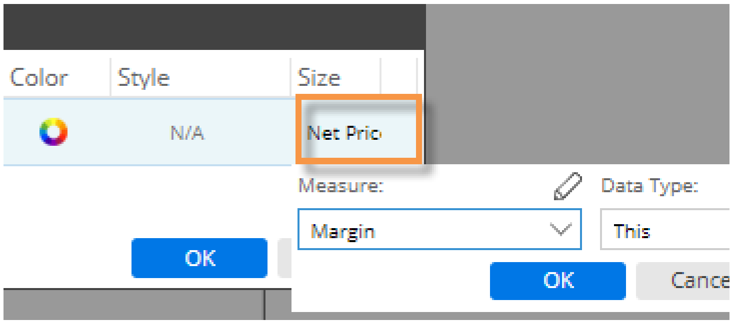
To configure a bubble chart

3. Add measures for the x axis and y axis as well as a measure for sizing the bubbles. The bubble size measure can be the same or different than an axis measure.

4. Under Graph Settings in the toolkit, click on Visual Options.
5. Click under Type in Visual Options and select Bubble

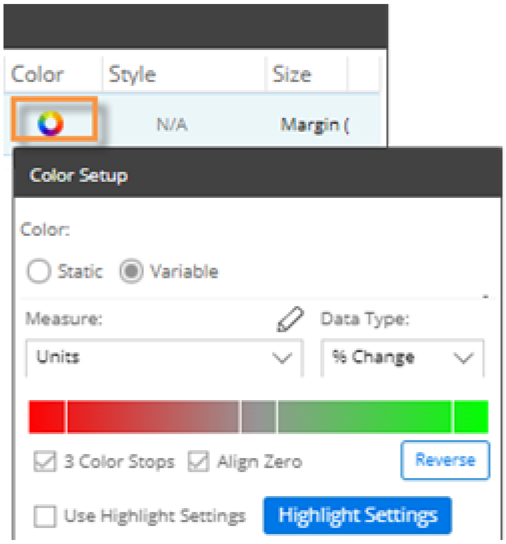


6. Click under Size in Visual Options to choose the measure and type (timeframe or calculation) to use for sizing bubbles. If you don't see the measure listed, click ✎ to add it.



To configure a bubble chart

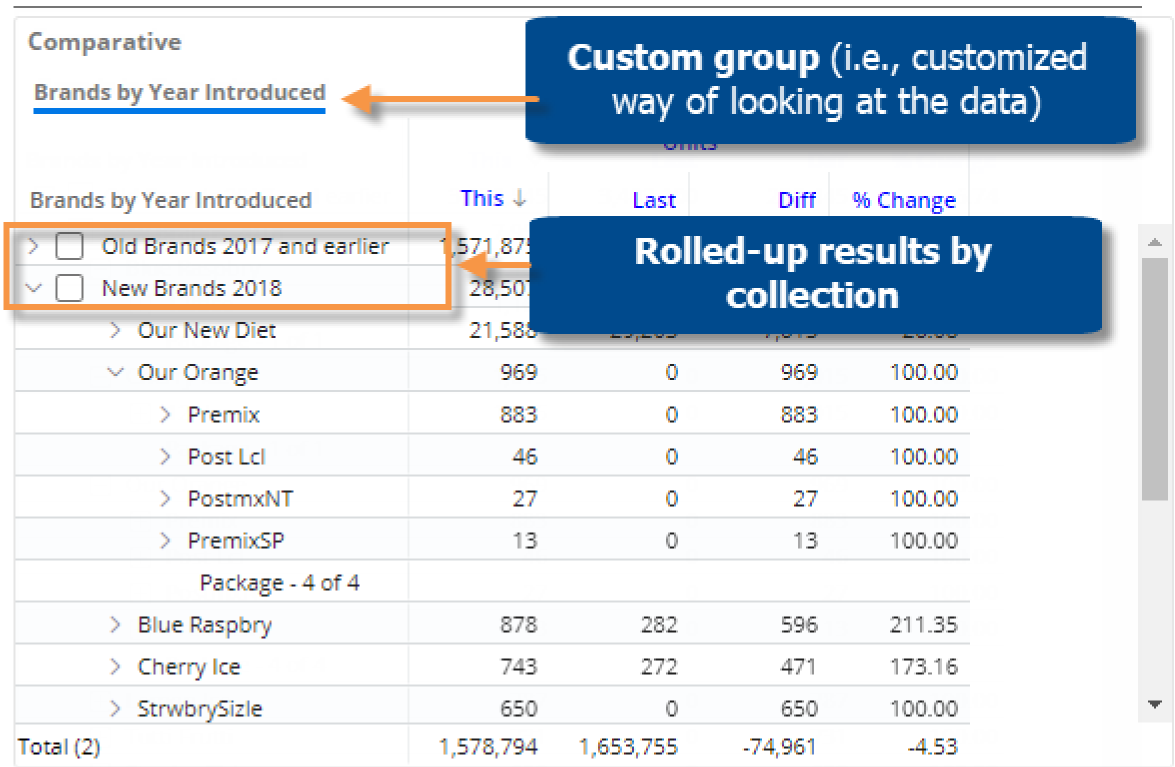
7. *(Optional)* Click under Color in Visual Options to choose bubble colors. You can choose a static color or a variable color to represent data values.



8. *(Optional)* Go to graph settings to turn on labels showing what each bubble represents and/or data values.

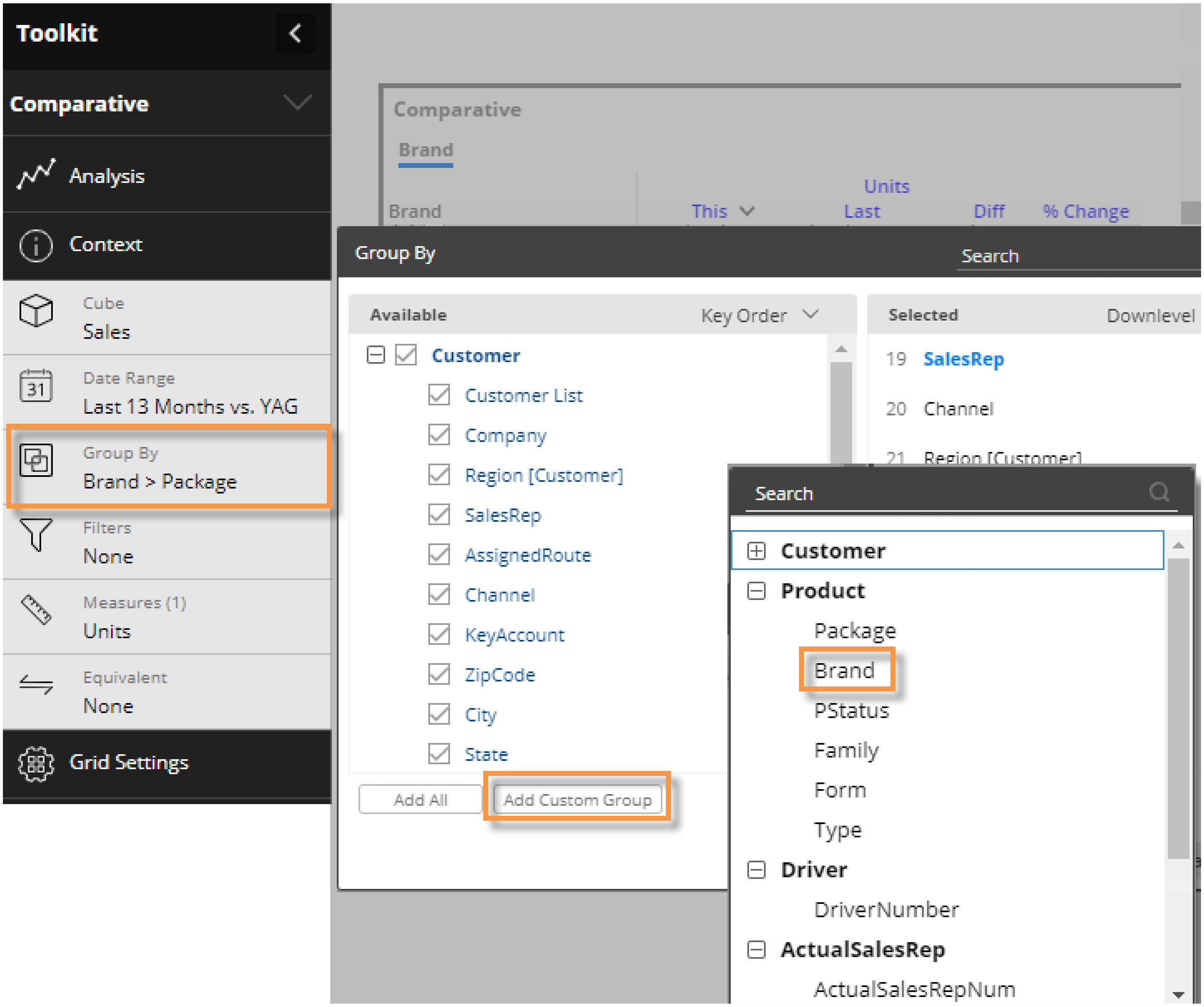
Custom groups

A custom group lets users create their own unique methods for organizing and comparing results based on collections. Each custom group can include any number of collections within an attribute. When the custom group is turned on as the "group by," the widget will roll up the results for each of its collections so that you can compare and investigate them. If a custom group is selected as a Group By for a widget, users can then select it to group the data just like regular Group By attributes. Custom groups are only available in widgets that compare multiple members.

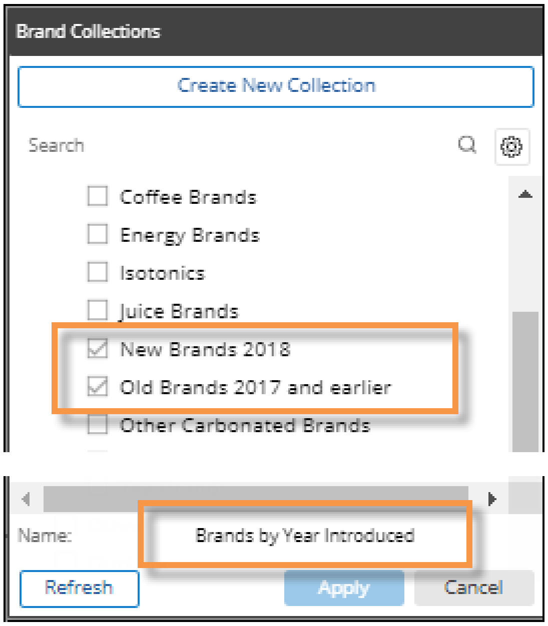


Add a custom group

1. Click on the widget and then click on **Group By** in the toolkit.
2. In the dialog, click the **Add Custom Group** button.
3. Select the attribute (i.e., dimension) for which to create a custom group.

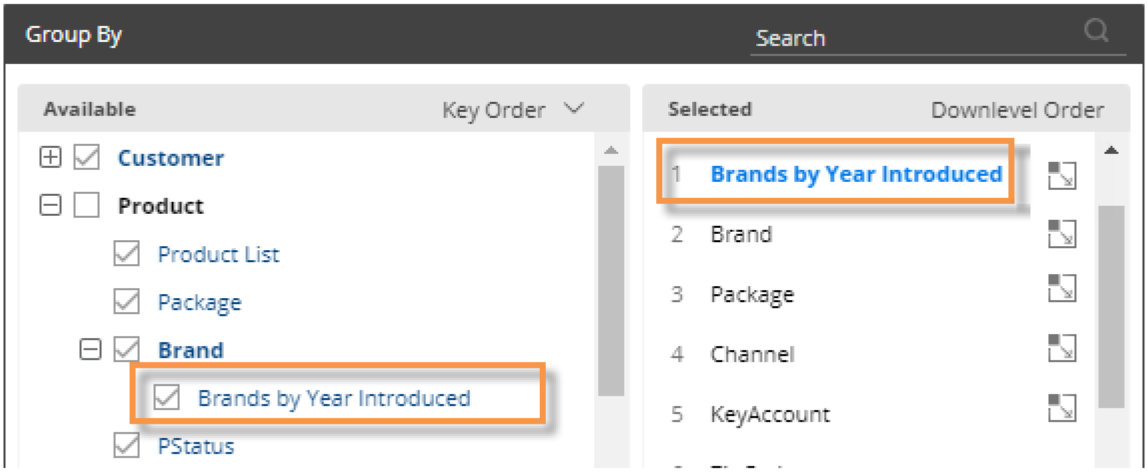


4. In the next dialog, checkmark all of the collections you want to compare and investigate in the custom group.
5. Type the name of the custom group at the bottom of the dialog. This name will appear as the "By" when the custom group is selected.
6. Click Apply.



Turn on a custom group

The custom group is available underneath its attribute in the Group By area. You can select it and place it in the desired drill order just like any other dimension. This will also make it available in the breadcrumb path (if enabled) so that it can be selected in view mode.



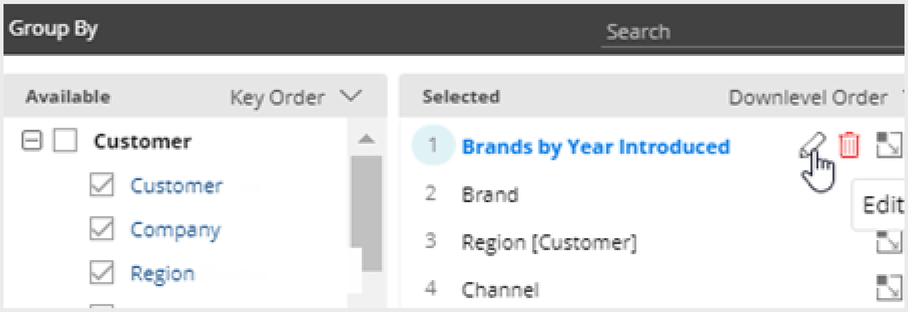
Tips:

Custom groups are available across a dashboard and, therefore, can be used in other widgets within the same dashboard.

Tips:

If a collection changes (e.g., a new member is added to a collection), any custom groups that include the collection will be automatically updated.

If you want to switch out the collections in a custom group, you can edit it. Place the cursor over the custom group in the in the Group By area and click the button.

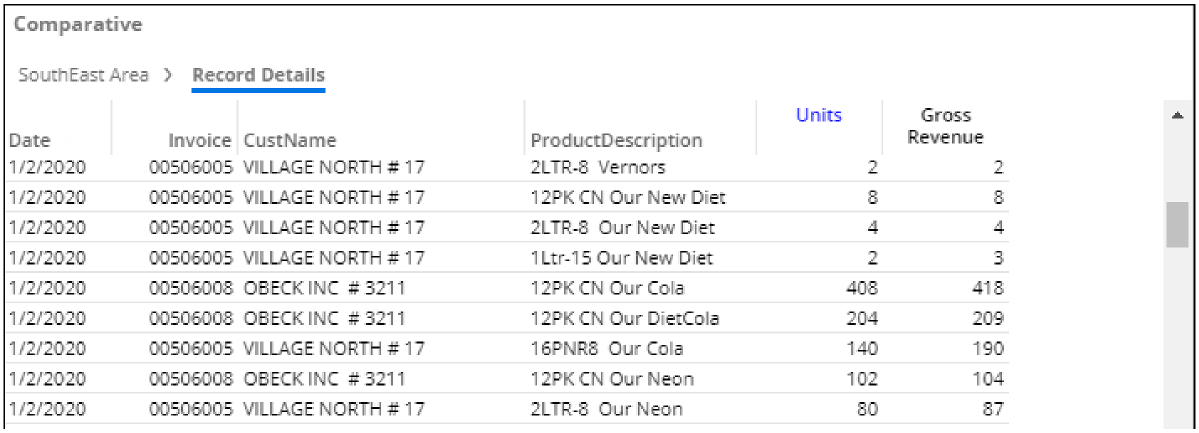


Custom groups may contain overlapping members. Therefore, the total of a custom group is not necessarily the sum of all rows, but rather the total of all unique members.

Record details

Salient Dashboards can show record-level data (e.g. invoices, work records, inventory, etc.) in a graph or grid. To see data at this level, group the data by "Record Details." The details show each individual record for the given context. Record details may include dates (single date for transactions or start/end dates for non-transactional data), measures, key descriptions, dimensions, and invoice numbers (if configured).

Record details may be used as the primary way of viewing the data (i.e., 1st By) or further down in the hierarchy to allow flexible drilling into record details. The details may be filtered like other views to show any subset of data records. Record details are the lowest-level data possible; therefore, you cannot drill or expand beyond record details.


Comparative

SouthEast Area > Record Details

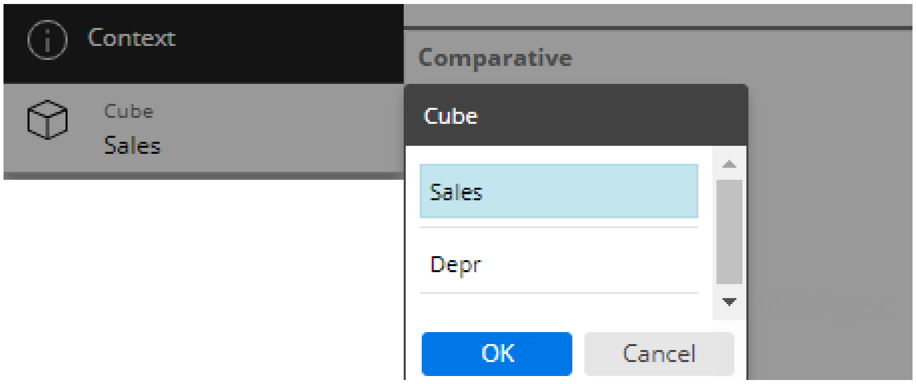
Date	Invoice	CustName	ProductDescription	Units	Gross Revenue
1/2/2020	00506005	VILLAGE NORTH # 17	2LTR-8 Vernors	2	2
1/2/2020	00506005	VILLAGE NORTH # 17	12PK CN Our New Diet	8	8
1/2/2020	00506005	VILLAGE NORTH # 17	2LTR-8 Our New Diet	4	4
1/2/2020	00506005	VILLAGE NORTH # 17	1Ltr-15 Our New Diet	2	3
1/2/2020	00506008	OBECK INC # 3211	12PK CN Our Cola	408	418
1/2/2020	00506008	OBECK INC # 3211	12PK CN Our DietCola	204	209
1/2/2020	00506005	VILLAGE NORTH # 17	16PNR8 Our Cola	140	190
1/2/2020	00506008	OBECK INC # 3211	12PK CN Our Neon	102	104
1/2/2020	00506005	VILLAGE NORTH # 17	2LTR-8 Our Neon	80	87

To build record details into a widget (in edit mode)

1. Add a comparative or mix widget if you haven't already. Record details are limited to these analysis types.
2. Optionally, switch to a graph/grid format (see page 88) that supports record details. These include:

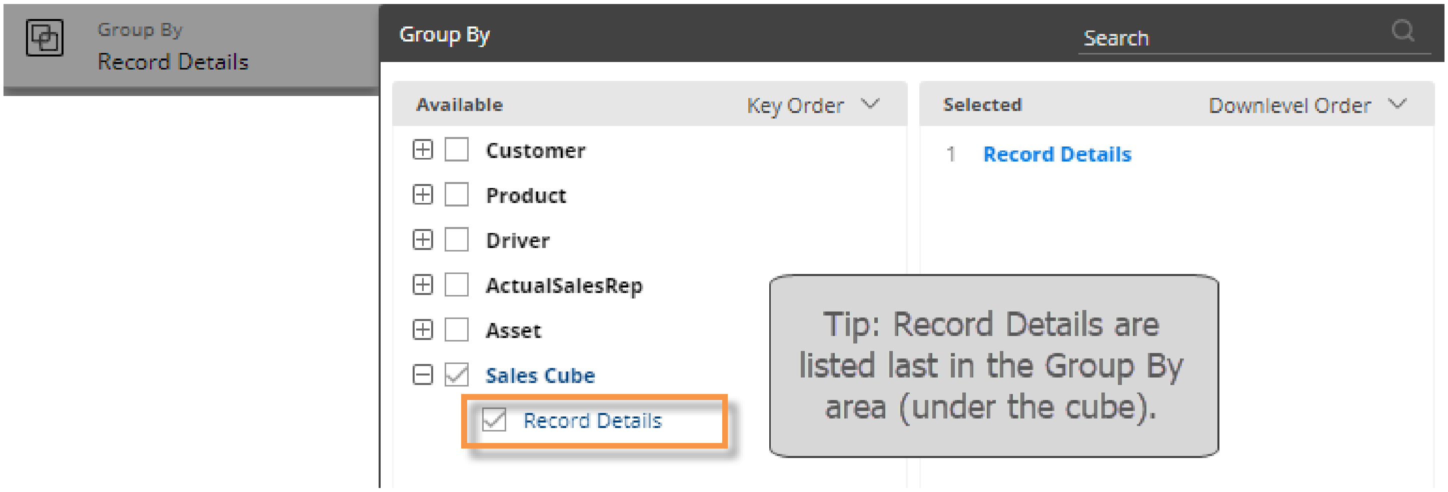
   • Mix - grid only (If you attempt to group by record details in a mix graph, it will automatically switch to a grid.)

   • Comparative - grid or actual value graph (If you attempt to group by record details in a percent change graph, the widget will show a message as explained in the following tips.)

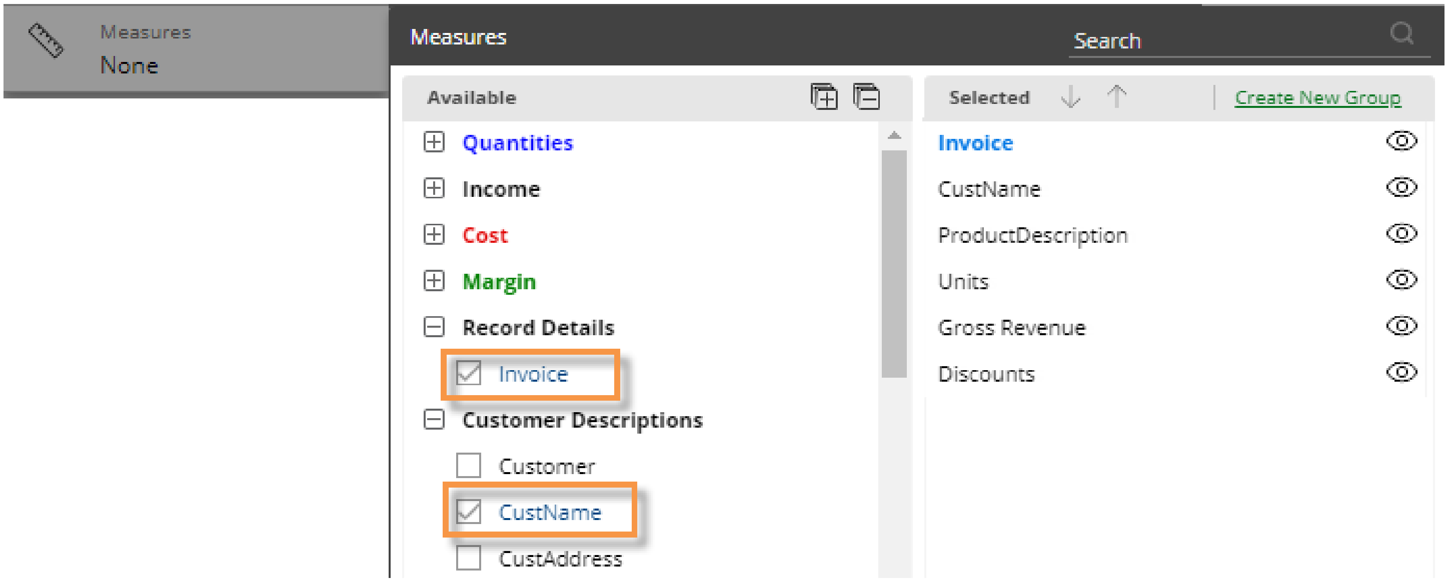


3. Choose the data cube for which to view record details. The cube represents the activity or source of the data records.

3. Group the data by Record Details—either as the 1st By to immediately see record-level details or further down to allow drilling to record-level details.

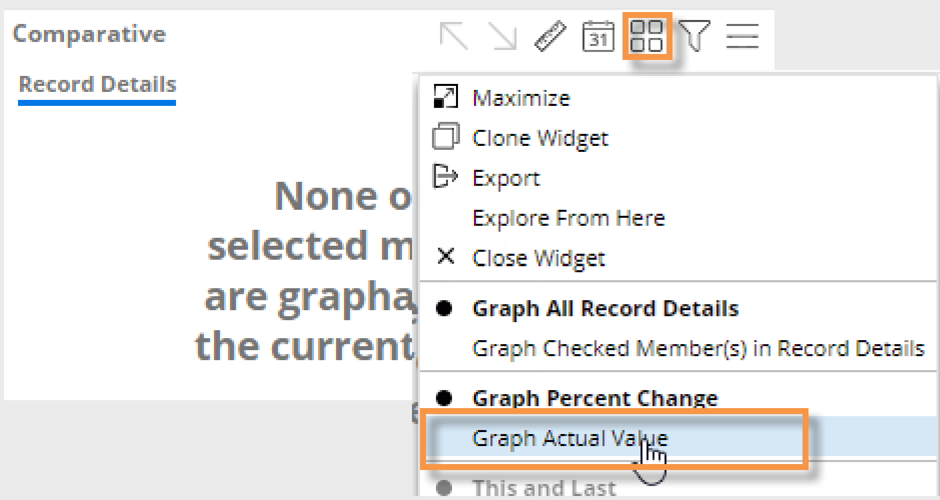


4. Add at least one measure. Available measures are limited to those in the data cube.
5. Optionally, add the invoice number. If configured, this is located under Record Details in the Measures area. You can rename this field if you wish.
6. Optionally, add descriptions and/or dimensions for the keys in the records.



Tips:

If you see a message that none of the selected measures are graphable, make sure that you are not in a Percent Change graph. This graph type does not support record details. Instead, switch to a grid or an Actual Value graph.



The data cube must include at least one measure to allow viewing of record details in Salient Dashboards.

Records details are limited to one million records. If records exceed this limit, reduce the amount of data using filters or by changing the date range.

The auto-expand option does not expand down to record details; instead, drill down, change the Group By, or expand items individually to reach record details.

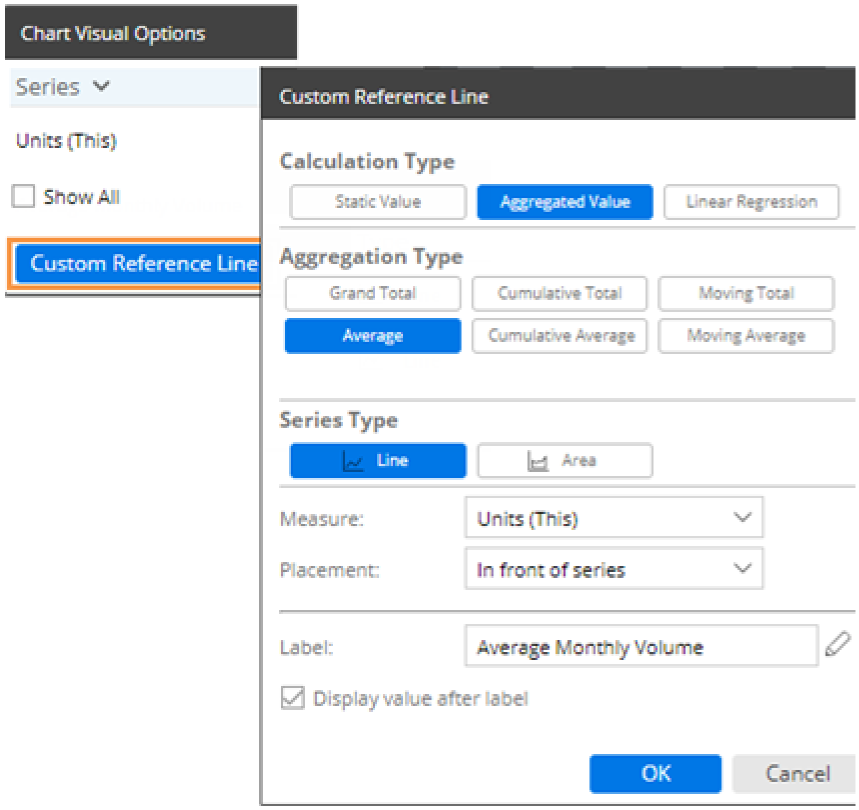
Record details provide information similar to SIM's Line Item analysis (for transactional data) and Time in Place analysis (for non-transaction data).

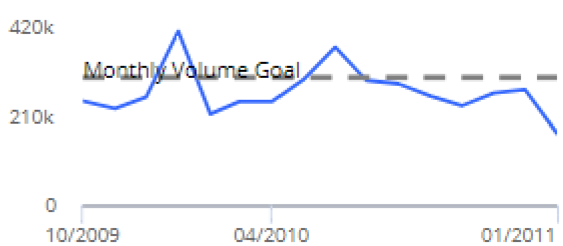
Reference lines

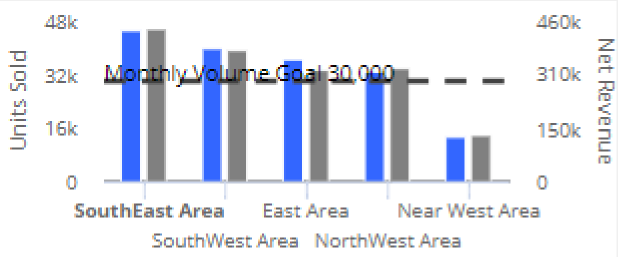
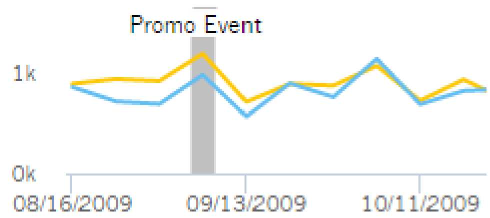
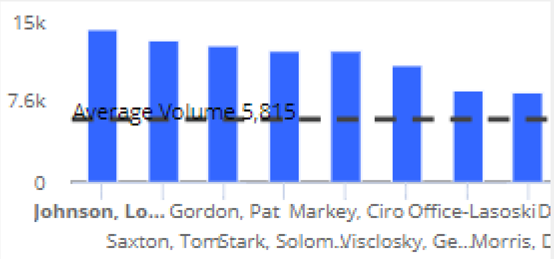
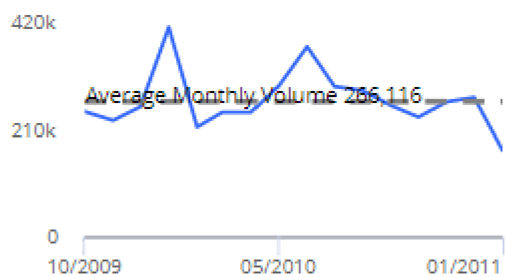
You can add custom lines to enhance data visualizations. Custom lines can show thresholds, important dates, and calculated values such as averages, totals, moving averages/totals, cumulative values, and projections.

To add reference lines

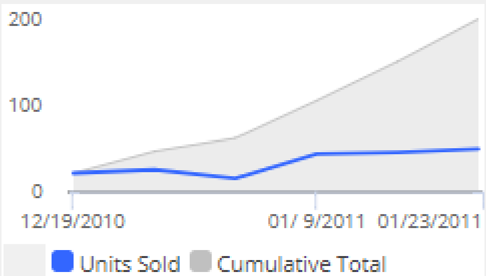
1. Go to Visual Options (see page 94) under graph settings in the toolkit or by clicking in the graph legend (visible on mouseover).
2. Click the **Custom Reference Line** button.
3. Select from the available settings, depending on what you want the reference line to show.



Reference line examples	Recommended settings
Compare values to a fixed, user-defined threshold: Over time in time-series:  	Calculation Type - Static Value Axis -  Y Value or From/To - Enter a static value. For a shaded area, enter the start value and the end value.

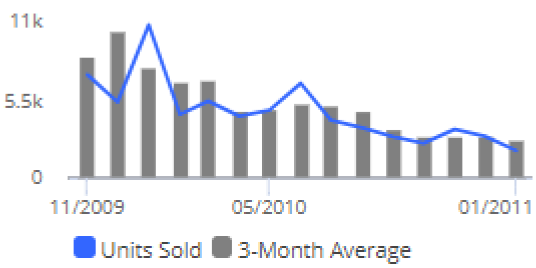
Reference line examples	Recommended settings
Compare values to a fixed, user-defined threshold: Across members in comparative:  	Calculation Type - Static Value Y Value or From/To - Enter a static value. For a shaded area, enter the start value and the end value.
Important dates on a time-series  	Calculation Type - Static Value Axis -  X Value - Click the date control(s) and select a single date (for Line) or the beginning and ending dates (for Area).
Calculated average or total over multiple members (e.g., average volume per sales rep)  	Calculation Type - Aggregated Value Aggregation Type - Grand Total of all members, or Average of all members
Calculated average across dates (e.g., average volume per month)  	Calculation Type - Aggregated Value Aggregation Type - Average

<table>
<tr><th>Reference line examples</th><th>Recommended settings</th></tr>
<tr><td>
Cumulative average or total over date range (e.g., cumulative volume over time)



</td><td>
Calculation Type - Aggregated Value

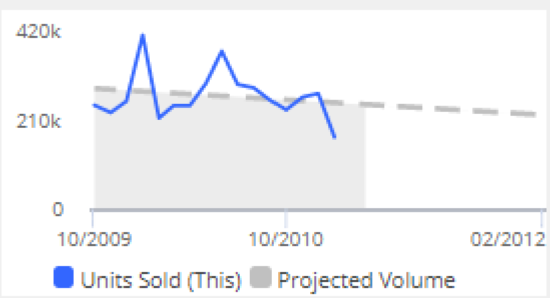
Aggregation Type - Cumulative Average or Cumulative Total
</td></tr>
<tr><td>
Moving averages or totals for a set number of prior dates; smooths data fluctuations



</td><td>
Calculation Type - Aggregated Value

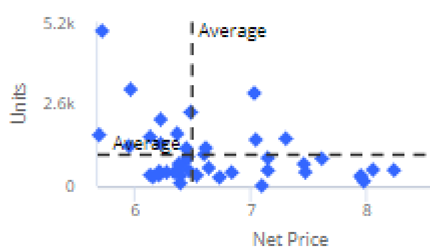
Aggregation Type - Moving Average or Moving Total

Duration - Select the number of prior dates to include in the calculation.
</td></tr>
<tr><td>
Calculated trends with future projections



</td><td>
Calculation Type - Linear Regression

Projection Duration - Select the number of future dates for which to project data based on a linear regression.
</td></tr>
<tr><td>
Scattergram quadrants based on averages



</td><td>
Calculation Type - Aggregated Value

Aggregation Type - Average

Series Type - Line

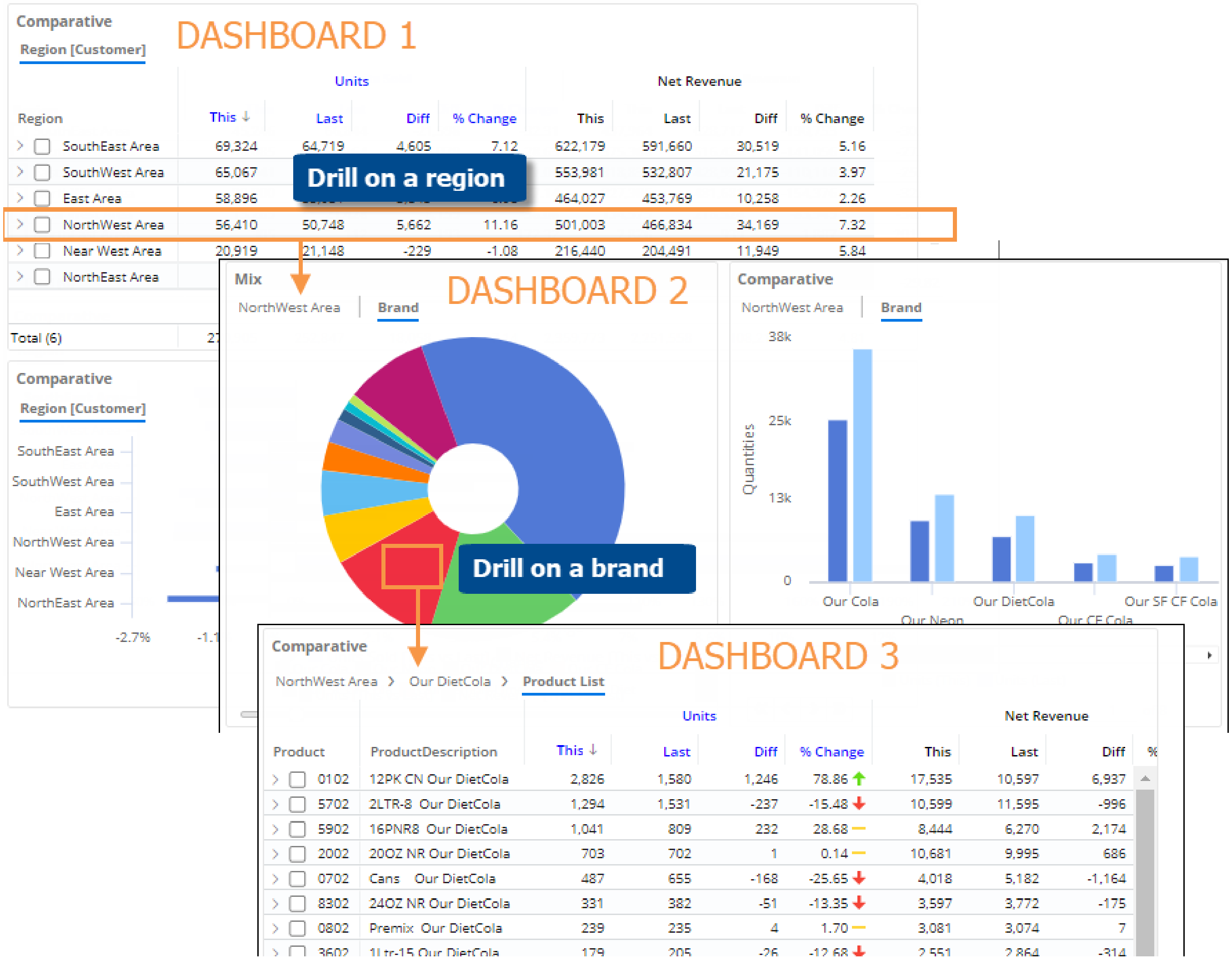
Measure - X Axis Measure

Repeat for the Y Axis Measure.
</td></tr>
</table>

Custom drill-downs

A custom drill-down is a set of preconfigured dashboards through which the user can drill. The custom drill path can include a variety of widget types and display settings to optimize the investigative process while allowing the user to select the item(s) on which to drill.

Custom drill-downs must be created (see page 139) in edit mode by a Dashboard Designer. All dashboards in a custom drill-down must be published.



Create a custom drill-down

1. Create, configure, and publish a dashboard to use for each "step" in the drill-down. Within each dashboard, make sure you select and save the appropriate widget type(s), By dimensions, date range, display settings, etc. Consider the following when building the dashboard steps.

   Filters - When the user drills, the selected member will automatically be used as a filter in the next dashboard; therefore, you do not need to manually add the filter for the "drill" attribute in subsequent dashboards. In addition, the following filters will automatically be carried forward from the previous dashboard: downlevel filters, widget and workspace filters (except those that use saved collections), and selections from filter widgets. Collections that are used as filters will not be carried forward to the next dashboard automatically; therefore, you may want to manually apply those prior to saving.

   By - Configure one or more Group By dimensions to determine what should be available for By and filter selection. Depending on the following settings (Step 2v), you can require users to drill through all the configured By dimensions before going to the next dashboard, or skip the Bys and go straight to the next dashboard.

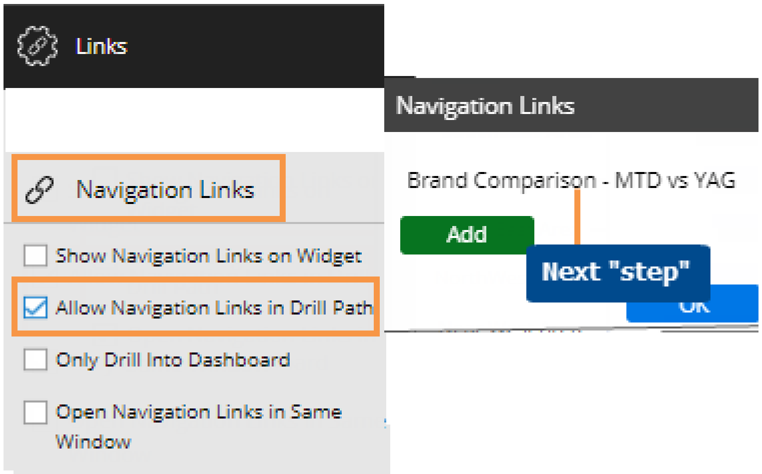
2. Open the first dashboard or "step" and set up the navigation link(s).

   i. Click on a widget for which you want to set up custom drill-down. The widget must compare members.

   ii. Expand Links in the toolkit and then click on **Navigation Links**.

   iii. Select the dashboard to use as the next step. You can add multiple dashboards if you want the user to be able to select which one to go to when they drill.

   iv. Under Navigation Links, check the **Allow Navigation Links in Drill Path** box.



   v. Choose an option for handling additional By levels (2nd By, 3rd By, etc.) in the widget. To go straight to the next dashboard (i.e. skip Bys) when the user drills, check **Only Drill into Dashboard**. To drill through all By levels within the widget before going to the next dashboard, clear this option.

   vi. Check or clear the option to open the link in a same window. If cleared, this option will open the link in a new tab or browser window.

   vii. Repeat for all widgets from which custom drill-down should be allowed.

3. Save changes to the dashboard.

4. Repeat Steps 2 and 3 for each dashboard used as a step in the drill-down (except the last step)—specifying the next step and saving each one.
5. Share the dashboard of the first step with users.

Notify

Salient Dashboards can send automated notifications based on dashboard data. Notifications can use custom business conditions (e.g., negative change since last month) to determine whether to send a message. Alternatively, you can turn off conditions to simply send messages according to your preferred schedule. Messages may be sent as emails and/or mobile app notifications (Salient mobile app required). Upon receiving a notification, a user can quickly go the underlying data in the associated dashboard: tapping on a mobile notification will open the dashboard in the Salient mobile app; clicking on an email notification will open the dashboard in the browser-based dashboard application. Users can interact with the data and investigate it further in either application. Notifications may also include the data itself embedded in the message or as an attachment (email only).

You can create and manage notifications in the Salient Dashboards browser-based application if you belong to a user group with rights to save notifications.

Widget requirements for notifications

Each notification is based a widget in a dashboard. The widget must meet the following requirements.

Analysis type

The widget must be Comparative, Multi Comparative, or Share Trend.

Measures/columns

The widget should include the measures and subcolumns (e.g., This, Last, Diff, % Change) to report. If the notification will have conditions, the subcolumn to test should also be included.

If the widget is Multi Comparative and the notification will have conditions, the first main column of the grid should contain the data to be tested.

Format

The grid format of the widget must be standard or flat view.

Groupings

The widget should group the data by the attribute to be reported in the notifications. For example, if the Group By is package, the notifications will report packages.

Date range

The widget should use the date range(s) on which to report. In general, the date range should move over time (i.e., not fixed) so that notifications continuously look at new data.

Filters

To filter on the same subset of data for all notification recipients (e.g., same region), apply filters prior to saving the dashboard.

To apply custom filters based on notification recipient (e.g., different regions for various recipients), you can apply filters in the Recipients area of the notification setup as explained below. This type of filter may also be used to send a notification for each selected subset of data (e.g. a separate notification for each region).

To automatically apply filters based on user account, an administrator can create and apply password collections in the Admin Portal.

A combination of these filter methods may be used as shown in the following example (see page 149).

Security

The widget and its data should be available to the intended recipients. Otherwise, the recipients will not have the necessary rights and errors may occur.

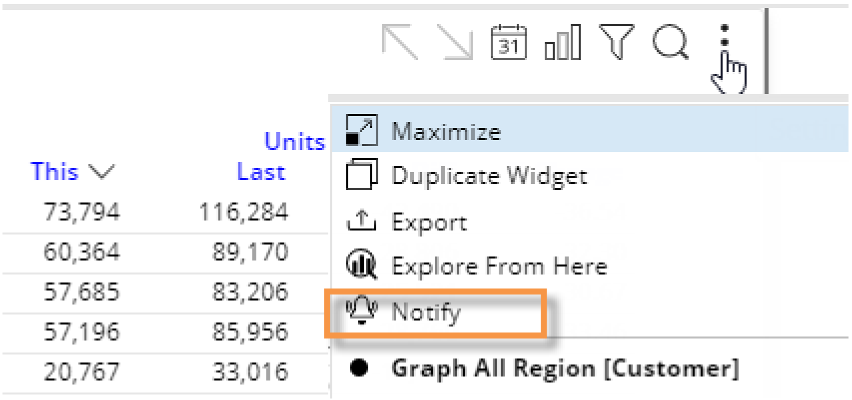
Save location

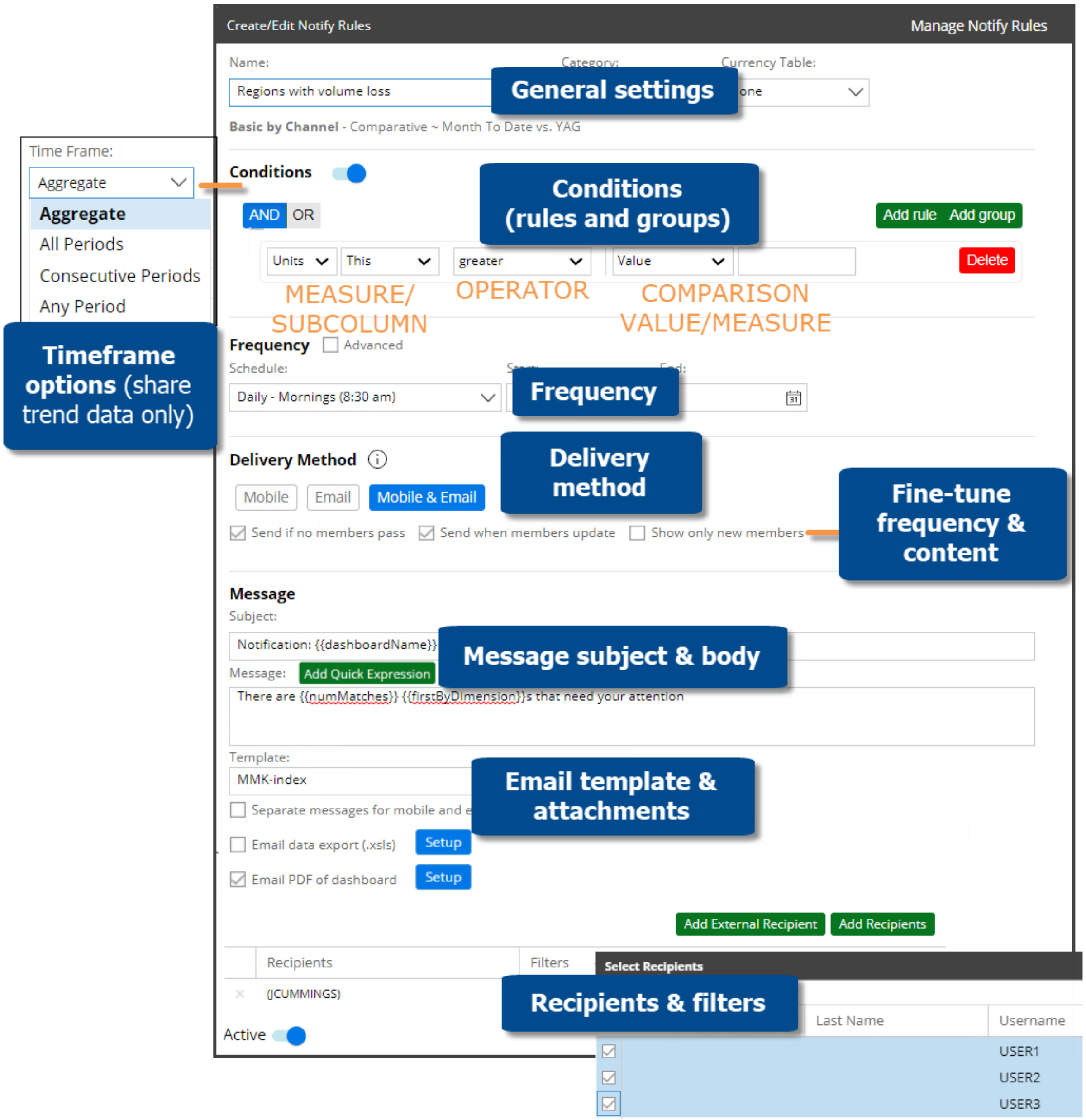
The dashboard should already be saved. If not, you will be prompted to save it in the next step. In general, the dashboard should be saved in a global folder. Notifications for a private dashboard can only be sent to the associated user account.

Create a notification

1. Open the dashboard containing the widget on which the notifications will be based. The widget should meet the previously explained requirements.
2. Click the ⋮ button in the upper-right corner of the widget and select 🔔 **Notify**.
3. In the next screen, enter the following settings that determine what notifications will be sent, how and when they will be sent, what they will include, and who will receive them.

Tip: If you wish, you can import a notification rather than creating a notification from scratch.





Setting	Explanation
Name	Enter a unique name for the notification.
Category	The category controls who can access and edit the notification definition, but not who can receive the notifications.
Currency	If the dataset has multiple currency tables, select the currency on which to base the notifications.

<table>
<tr><th>Setting</th><th>Explanation</th></tr>
<tr><td>Conditions
(optional)</td><td>
Conditions off:
To always send the notification without basing it on conditions, turn off the Conditions control:


With this option off, the notification will function like an automated report. Note that you may also want to turn off Send when members update and Show only new members under Delivery Method.
Conditions on:
To use conditions to control when notifications are sent and what they include, leave this option on and enter test condition(s). You can enter one or more rules and, optionally, group them as explained below (see page Error! Bookmark not defined.) to create complex logic statements. For each rule:

Select the measure and subcolumn (This, Last, Diff, % Change) to test. Note that a test on a Multi Comparative will look at whatever subcolumn is selected for the first date range in the grid.
Select an operator (e.g., less than).
Choose what to compare against, which can be a static value, another measure, or budgets for the test measure (if added to the widget).
When multiple rules/groups are used, choose AND or OR to control which rules must be met.

In general, notifications are sent when data meets the conditions. You can fine-tune frequency and contents using options in the Delivery Method section.
</td></tr>
<tr><td>- Timeframe
(only for share trend with conditions on)</td><td>
For share trend data only: Select a timeframe option to determine which value(s) within the date range will be compared to condition(s) for each member.

Aggregate - Use the aggregate value over the entire date range.
All periods - Evaluate all individual units of time (e.g., all weeks) in the date range. All units of time must meet criteria to send a notification.
Consecutive periods - Consider values for consecutive, individual units of time in the date range. Enter the number of time periods to evaluate (e.g. increasing values over three months).
Any period - Send notifications if any individual unit of time in the date range meets criteria (e.g. any week over 100).

For comparative or multip comparative data: The test will always aggregate data. No timeframe selection is required.
</td></tr>
<tr><td>Frequency</td><td>

Choose a schedule for checking the data and sending notifications if conditions are met. Select a preconfigured schedule from the drop-down. Or, create your own schedule by checking Advanced and entering a chron expression that is compatible with Quartz.
Choose the start and end dates for the notifications. If you omit the end date, notifications will continue indefinitely.

</td></tr>
</table>

Setting	Explanation
Delivery method - Mobile, email, or both	Choose the method of delivery: • **Mobile** - Send notifications to recipients' mobile devices. The Salient mobile app must be installed on recipients' devices and notifications must be allowed. Tapping the mobile notification will go to the underlying data in the mobile app. • **Email** - Send emails to recipients. The email message can include attachments and/or link to the underlying data in a browser-based dashboard. • **Mobile & Email** - Send to mobile devices <u>and</u> email as described above. When using both methods, you can optionally check the **Separate messages for mobile and email** box (below the message and template section) to use different messages (e.g., a shorter message for mobile and a longer, more detailed message for email).
- Settings for fine-tuning message frequency and content	Use the following options to adjust how often messages are sent and what they contain. <u>You may want to clear the second option to ensure that notifications are sent according to your preferred frequency regardless of whether the list of returned members changes between runs.</u> • **Send if no members pass** - If conditions are on, this option will send notifications even if no members pass the test conditions. If clicked, a notification with zero passing members will lead to the original widget (i.e. will show all members). If conditions are off, this setting does not affect notifications. • **Send when members update** - This option will only send notifications if the list of returned members changes from the previous run. The resulting widget (if opened by clicking the notification) will show all members returned for the current run. The exception is a notification that returns zero members with "Send if no members pass" also on; in this case, the resulting widget will show the original widget without conditions applied. OR: • **Show only new members** - Like the previous option, this option will only send notifications if the list of returned members changes from the previous run. The resulting widget (if opened by clicking the notification) would show <u>only</u> new members in the current run that did not pass in the previous run. If this option is selected, the previous options are not available.

Setting	Explanation
Message - Subject and message	Enter the notification subject and message, or leave as is to use the default settings. These fields can include a combination of text and variables. Click the **Add Quick Expression** button to insert any of these variables into the message. You may also use these variables in the subject by copying them or manually typing them. • {{dashboardName}} - The name of the dashboard on which the notification is based. • {{dashboardUrl}} - The URL to open the dashboard in the Salient Dashboards browser-based application. • {{dashboardMobileUrl}} - The URL to open the dashboard in the Salient mobile app. • {{widgetTitle}} - The title of the widget on which the notification is based. • {{firstByKey}} - The key associated with the 1st By (e.g., customer). • {{firstByDimension}} - The 1st By dimension or key. • {{numMatches}} - The number of 1st By members that meet the test criteria or total members if conditions are off. • {{matchedMembers}} - A listing of the 1st By members that meet the test criteria or all members if conditions are off. • {{embeddedGrid}} - A grid showing the data returned by the notification. If conditions are on, the grid shows data that meets the test criteria. If conditions are off, the grid includes all data for the widget. The grid is limited to the maximum number of rows defined in the configuration files (default of 50). • {{totalRowGrid}} - The total row from the grid (e.g., total of regions). • {{averageRowGrid}} - The average per row for the grid (e.g., average per region). • {{totalAverageRowGrid}} - The total row and average per row. • {{totalColumnGrid}} (for Share Trend only) - Information about the total column in the grid (i.e., total across all dates), including the average per row and total row. • {{averageColumnGrid}} (for Share Trend only) - Information about the average column in the grid (i.e., average across all dates), including the average per row and total row. • {{totalAverageColumnGrid}} (for Share Trend only) - Information about the average column and total column, including the average per row and total row. • {{widgetDatePlaceholder}} - Descriptions of the dates being reported. • {{foreachOptionMemberNames}} - The name of the member being reported when the "for each" option is on. • {{foreachOptionMemberCodes}} - The code of the member being reported when the "for each" option is on. For email messages, a text editor allows you to apply formatting.
Template (for email only)	Select a template to control the appearance of the email message. To create or edit templates, click the **Manage Templates** button to go to the Admin Portal. Additional rights may be required. See the *Salient Dashboards Installation and Configuration Manual* for more information.

Setting	Explanation
Attachments (for email only)	Optionally, check either or both of the following boxes to include attachments: • **Email data export** - XLSX file containing the data returned by the notification. If the notification includes conditions, this will only include the passing members. Click **Setup** to choose export options. • **Email PDF of dashboard** - PDF file of the original dashboard. Click **Setup** to choose options.
Recipients	The notification creator is automatically added as the first recipient.
- Salient users	*To add recipients that have user accounts in the Salient system:* Click **Add Recipients**. Select recipients from a list of dataset users. You can search for a user at the top of the window. The recipients should meet the requirements for the selected delivery method(s): • Mobile - Salient mobile app installed with notifications allowed • Email - email address defined for the Salient user account (Email addresses can be added in the Admin Portal.) Each recipient's account rights will control what data can be sent.
- external recipients (for email only)	*To add an external recipient (i.e. no Salient account):* Click **Add External Recipient**. Enter the email address. Click OK. Notes: • This option requires that the notification creator belongs to a user group with permission to email external addresses. See the *Salient Dashboards Installation and Configuration Manual* for more information. • Use caution when sending notifications that could contain sensitive information because external messages cannot be filtered based on individual user account rights. Instead, external email messages will use the security context of the first recipient that has a Salient account and permissions to email externally. By default, this is the dashboard creator account. • Links to dashboards will not work for users without Salient accounts; therefore, you may want to customize a template that does not have a "Go to Dashboard" button for use with external accounts. See the *Salient Dashboards Installation and Configuration Manual* for more information

<table>
<tr><th>Setting</th><th>Explanation</th></tr>
<tr><td>Recipient filters</td><td>

To filter the data sent to a specific recipient:

- Add the recipient.
- Click in the **Filters** column for that recipient.
- Click **Create a filter** to choose the key/dimension and members. Or, click **Load a Collection** to choose a saved collection of members (classic or dynamic).

For example, you could send each sales representative his or her own data, filtering out data for other sales reps.

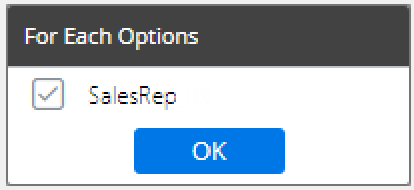
Notification filters will work with benchmarking (see page 161) to compare specific member(s) to All, All Others, or custom cohorts. In addition, a dynamic filter (see page 78) in the source widget can use notification filters to dynamically focus on different subsets of the data. This requires a special setting in the dynamic filter advanced setup. See the following examples (see page 149).

Note: If you select multiple members and leave For Each off (None), the notification will aggregate data for those members.

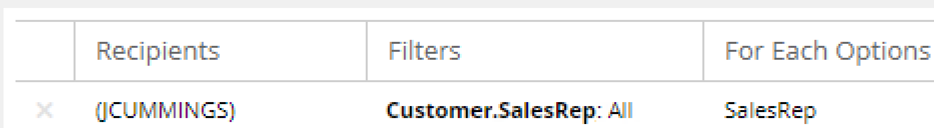
</td></tr>
</table>

<table>
<tr><th>Setting</th><th>Explanation</th></tr>
<tr><td>For each option</td><td>
To send a separate notification for each filter member to the recipient:

Add the recipient.
Click in the Filters column to choose the key/dimension and members for which to send notifications. You can check specific members, exclude members, leave the checkboxes clear (i.e. set to All) to send notifications for all members, or choose a collection to send notifications for each of its members.
Click in the For Each Options column and check the box of the key/dimension/collection. You can turn on the "for each" option for multiple categories; however, you should carefully consider the number of notifications that could be generated as explained below.



For example, you could send a separate notification for each sales representative to a recipient. Also see the following examples (see page 149).



Note: When setting up "for each" notifications, consider the number of notifications that could be generated. For example, a notification for each member of a key list could potentially generate an unmanageable number of messages. Likewise, if "for each" is on in multiple keys/dimensions (e.g., for each brand in each city), the number of messages may exceed practical limits. A configuration setting controls the maximum number of messages that may be attempted per recipient, including items that do not pass test conditions. If the limit is exceeded, the notification will generate an error message when it runs. The default limit is 1,000; your organization can change this setting in the Admin Portal.
</td></tr>
</table>

Tips:

To test the notification, go to Manage Notify Rules and click ▶. For a test run, the notification will only be sent to the user who tests it.

Leave the **Active** button on to immediately activate the notification, in which case it will run at the next scheduled time, or turn this option off to leave the notification deactivated (e.g., if you are not finished setting it up).

A notification will run according to the timezone of the user who created it.

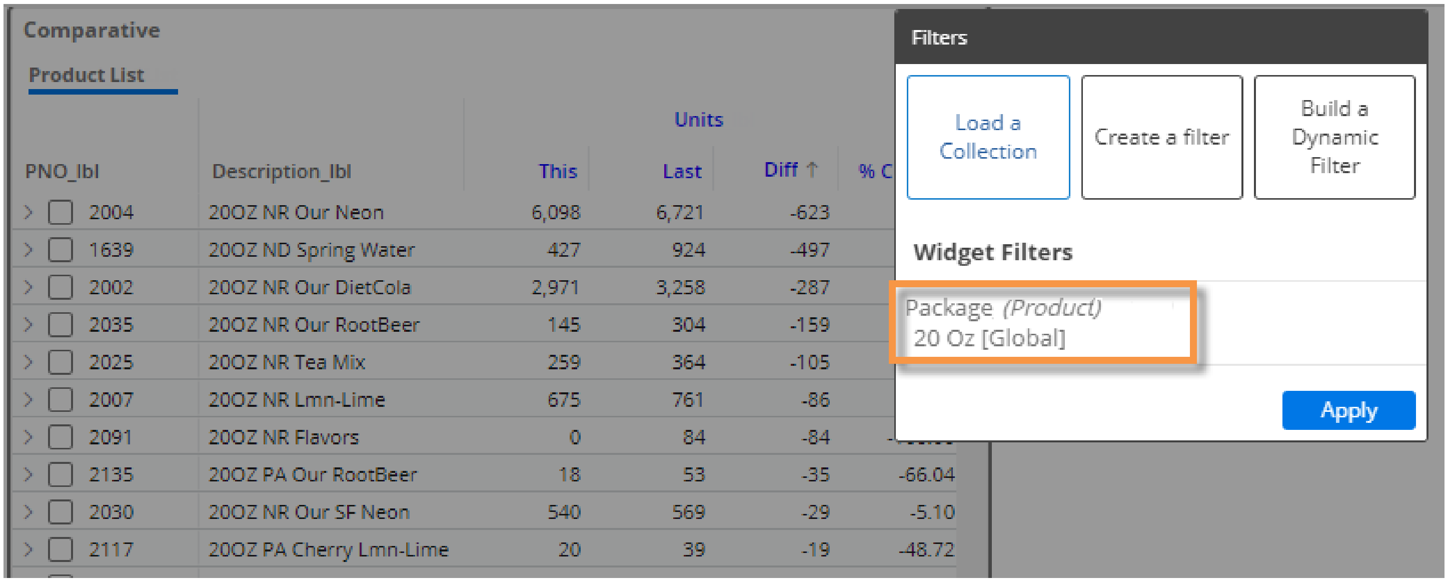
To edit and manage existing notifications and see notification history, Click the ⋮ button in the upper-right corner of the dashboards screen and select **Notifications**.

Notification examples

Example: Multiple types of filters in notifications

The following example uses multiple types of filters to send an alert to a regional manager for each of his or her sales representatives that have declining volume (less than -20% change) for one or more products within a certain group.

The widget has a "static" filter to focus on a group of 20-ounce products. Because this filter is applied to the widget itself, notifications for all recipients will be filtered on this group of products.

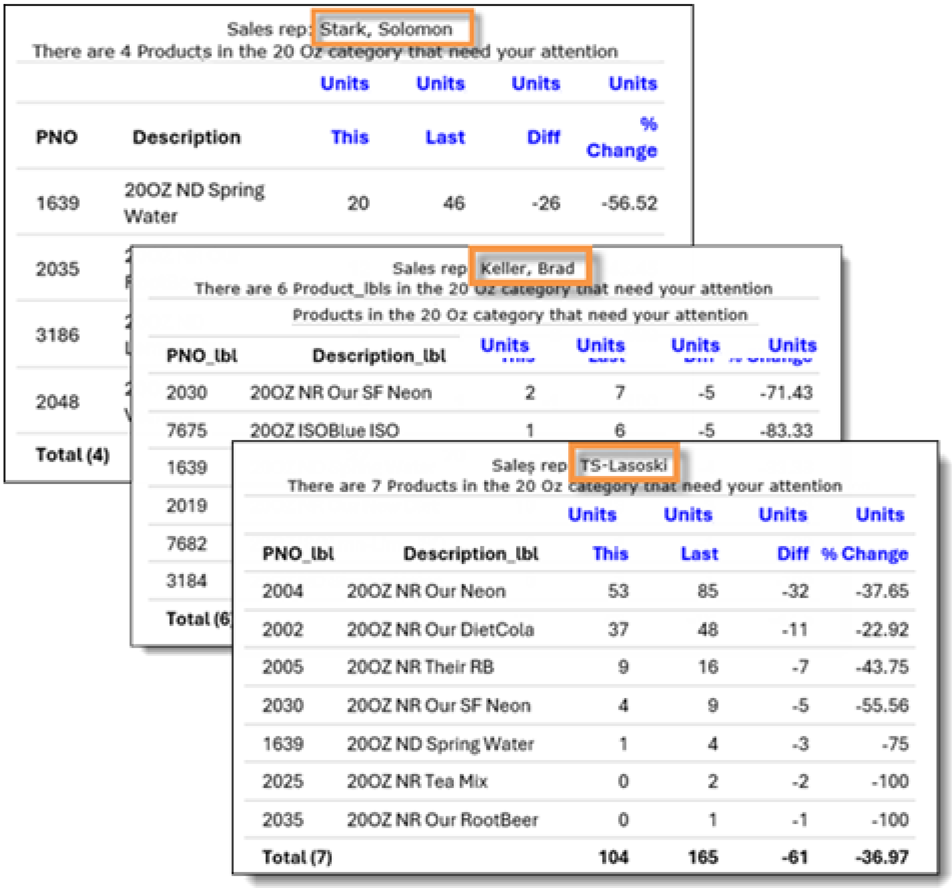


The notification has the following recipient filters to further limit the data returned:

- Each recipient (manager) has a region filter to limit the data to his or her area.
- Each recipient also has a sales rep filter to report on each sales representative separately. Notice that the "for each" option is on for this filter.

	Recipients	Filters	For Each Options
×	(JCUMMINGS)	**Customer.Region**: SouthEast Area; **Customer.SalesRep**: All	SalesRep
×	(JDOE)	**Customer.Region**: SouthWest Area; **Customer.SalesRep**: All	SalesRep
×	(BSMITH)	**Customer.Region**: NorthWest Area; **Customer.SalesRep**: All	SalesRep

A recipient might receive multiple notifications—one for each sales representative—depending on the data. Each notification will contain any products in the 20-ounce group that meet the test criteria (< -20% change) for that sales representative.



Example: Benchmarking with notification filters

The following example sends a separate notification for each sales representative—grouping the sales data by package and comparing the sales representative to a benchmark of all other sales reps.

The source widget is multi comparative and includes a column to show the sales representative's data and another column to show data for all other sales representatives. A recipient filter will be used to narrow down on each sales representative; therefore, the sales representative column (first column) is unfiltered in the source widget. The All Others column has a Sales Rep filter set to "All Others" in Advanced filter settings (see page 161).

	Last Month	Last Month | All Others
Package	Units ↓	Units
12Pk Cn	79,172	79,172
2Ltr-8	47,979	47,979
6Pk Cn	33,742	33,742
20Oz NR	24,875	24,875
16PNR8	19,531	19,531

The notification has the following recipient filter with "for each" turned on to return a notification for each of the selected sales representatives.

	Recipients	Filters	For Each Options
×	(JCUMMINGS)	**Customer_lbl.SalesRep_lbl**: Baird, Jim, Cline, Jose, Davis, John	SalesRep_lbl

The recipient would receive a notification for each of the selected sales representatives. Each notification would filter the first column by the sales representative and show All Others in the second column.

Baird, Jim - Package Sales

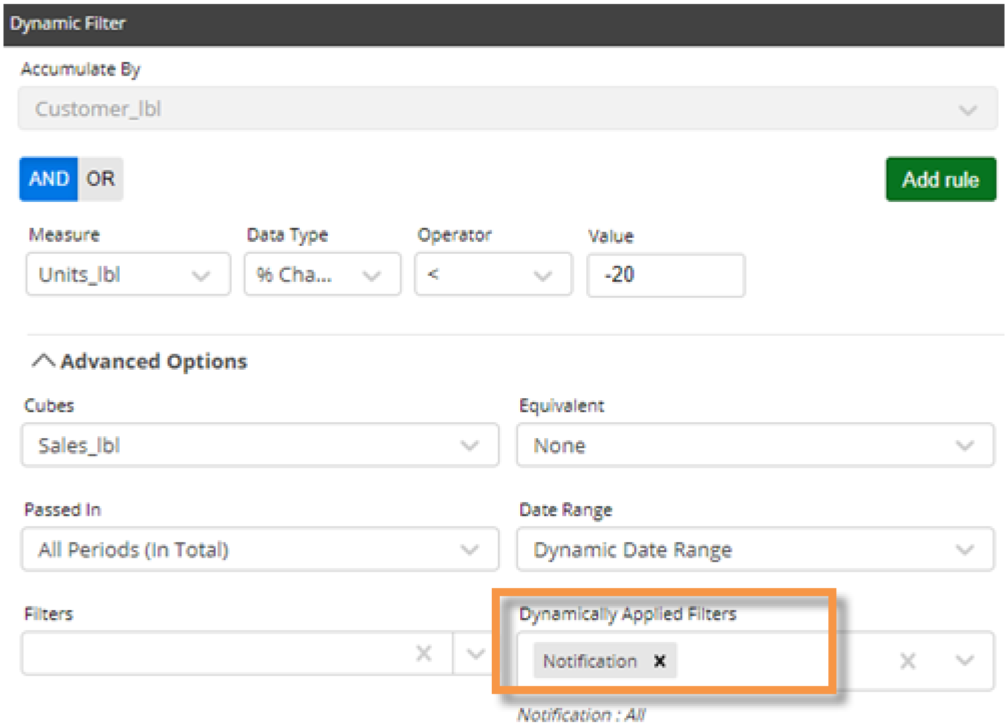
Sales Rep: Baird, Jim

	Last Month	Last Month | All Others
Package	**Units**	**Units**
12Pk Cn	4,028	75,144
2Ltr-8	2,224	45,755
16PNR8	1,621	17,910
6Pk Cn	692	33,050

Example: Notification filters in dynamic filters

The following example sends an alert for each brand—listing out customers that purchased less of that particular brand (<-20% change) during this timeframe versus last.

The source widget has a dynamic filter to narrow down on customers that declined in volume. In the advanced area of the dynamic filter setup, "Notification" is selected to dynamically apply the notification filter when the notification is sent (i.e., filter on customers that bought less of a given brand).



The notification has the following recipient filter with "for each" turned on to return a notification for each of the selected brands.

	Recipients	Filters	For Each Options
×	(JCUMMINGS)	**Product.Brand**: Our Neon, Our Lemon-Lime, Our Cola	Brand

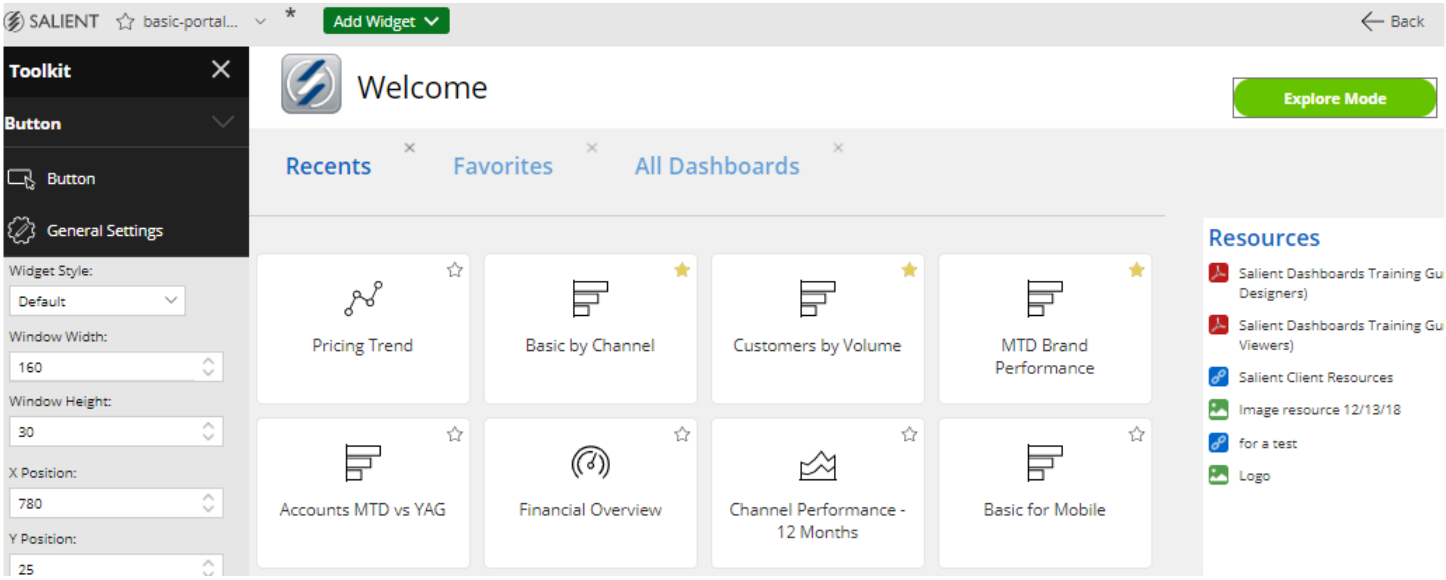
Because the dynamic filter has "Notification" filters applied, each notification will include data for customers that passed the test for that particular brand (e.g., customers that declined more than 20% for Our Cola). The customers could be listed out individually as shown below or grouped by attribute.

Notification: Brand Alert: Our Cola

		Units	Units	Units	Units
Cust	**Name**	**This**	**Last**	**Diff**	**% Change**
12119	XTRA MARTS	328	412	-84	-20.39
70227	OBECK INC # 3211	992	1,248	-256	-20.51
06631	LINDLEY NE # 3174/918289	1,073	1,350	-277	-20.52

Customize the portal dashboard

The dashboard installation comes with a portal dashboard to provide users with easy access to dashboards. The default portal dashboard opens automatically at initial login, and may be accessed through the Salient button in the upper-left corner of the screen. You can configure and choose a different portal dashboard if you wish.



To customize a portal dashboard

1. Start with a blank dashboard or the default portal dashboard.
2. Go to edit mode.
3. Add widgets to provide links to commonly-used dashboards, include other information, and enhance the appearance of the portal. The following widgets are useful when creating portals:

   Dashboard widgets (see page 27) - provide a set of links to other dashboards, such as recent dashboards, favorite dashboards, all dashboards, published dashboards, or a custom assortment of dashboards.

   Button widgets (see page 25) - allow users to quickly go to a URL, open a dashboard, change the date, or filter the current dashboard. To create a button that goes to another mode (i.e., explore or edit mode), select the URL option and enter the appropriate URL (see below).

   Tab group widgets (see page 19) - organize widgets and maximizse screen space by providing a tabbed or carousel view.

   Knowledge Manager widgets - shows the general overview or general resources from Knowledge Manager.

   Text/HTML (see page 23), Line (see page 26) and Image (see page 29)widgets - enhance the appearance of the dashboard and provide content.
4. When you are finished, save the dashboard (see page 106).
5. To make it the default portal for users:

   i. Export the dashboard to an sdm file. Do not use the name StandardPortal.sdm.

   ii. Open the Admin Portal, go to Default Dashboards (under System Settings), upload the sdm file, and then select it as the portal dashboard (requires Dashboard Designer licensing).

Buttons for dashboard modes

You can configure a button to go to a specific mode in Salient Dashboards. Add the button, select the URL action, and enter the URL. At minimum, the URL should include the following parameters after the sdm.aspx page location:

- view - Enter one of the following to control the mode: viewer for view mode; explore for explore mode; or sdmView for edit mode.
- dashboardId - Enter the dashboard ID. To determine the ID of a specific dashboard, view its URL (see page 108) and locate the dashboardId in the URL. For a blank dashboard in edit mode (view=sdmView) or the default dashboard for exploring (view=explore), the dashboardId should be 00000000-0000-0000-0000-000000000000. A URL can open a specific dashboard in explore mode only if the dashboard was saved in explore mode.

Examples:

http://mycompany.com/SDM.aspx?dashboardId=00000000-0000-0000-0000-000000000000&view=sdmView

This URL would open a blank dashboard in edit mode.

http://mycompany.com/SDM.aspx?dashboardId=00000000-0000-0000-0000-000000000000&view=explore

This URL would open the default dashboard for exploring (e.g., comparative widget) in explore mode.

http://mycompany.com/SDM.aspx?dashboardId=6e6ff843-c167-499a-ad6c-b55152391ddb&view=viewer

This URL would open the dashboard with the given dashboard ID in view mode.

http://mycompany.com/SDM.aspxdashboardId=b382a462-9a2c-46d9-976d-b1feef821c39&view=explore

This URL would open the dashboard with the given dashboard ID in explore mode if the dashboard was saved in explore mode. Otherwise, the dashboard will open in view mode.

Custom views

You can build custom views to create visualizations beyond those available in standard widget types. The Salient Dashboards installation provides some custom view templates as shown in the following examples (see page 156). You can use these templates and/or build your own custom views.

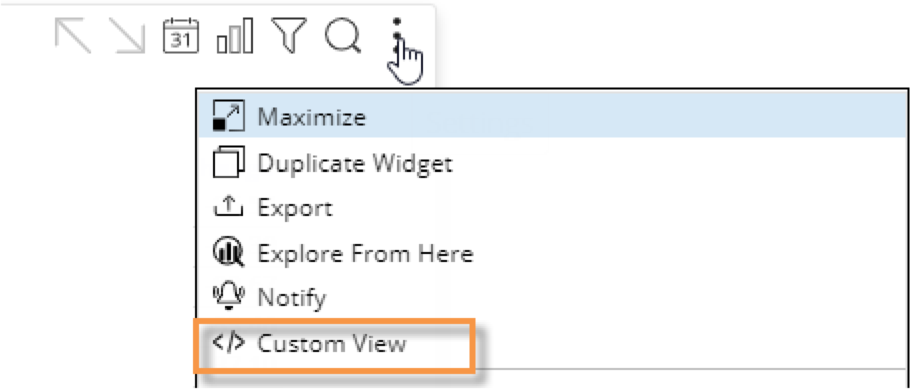
Data in custom views will update like other widgets when a user makes changes, such as adjusting the date range, changing the Group By, and filtering. In addition, users can switch to a grid to see the underlying data.

To build a custom view (in edit mode)

1. Add a widget and configure it to include the data for the custom view by choosing the analysis type, adding a measure(s), and selecting the Group By. Data will be limited to the first page of data for the 1st By dimension (i.e., cannot expand data). If the custom view will not be used to display widget data, the context selections are not relevant.

To build a custom view (in edit mode)

2. Click in the upper-right corner of the widget and select **Custom View** from the menu.

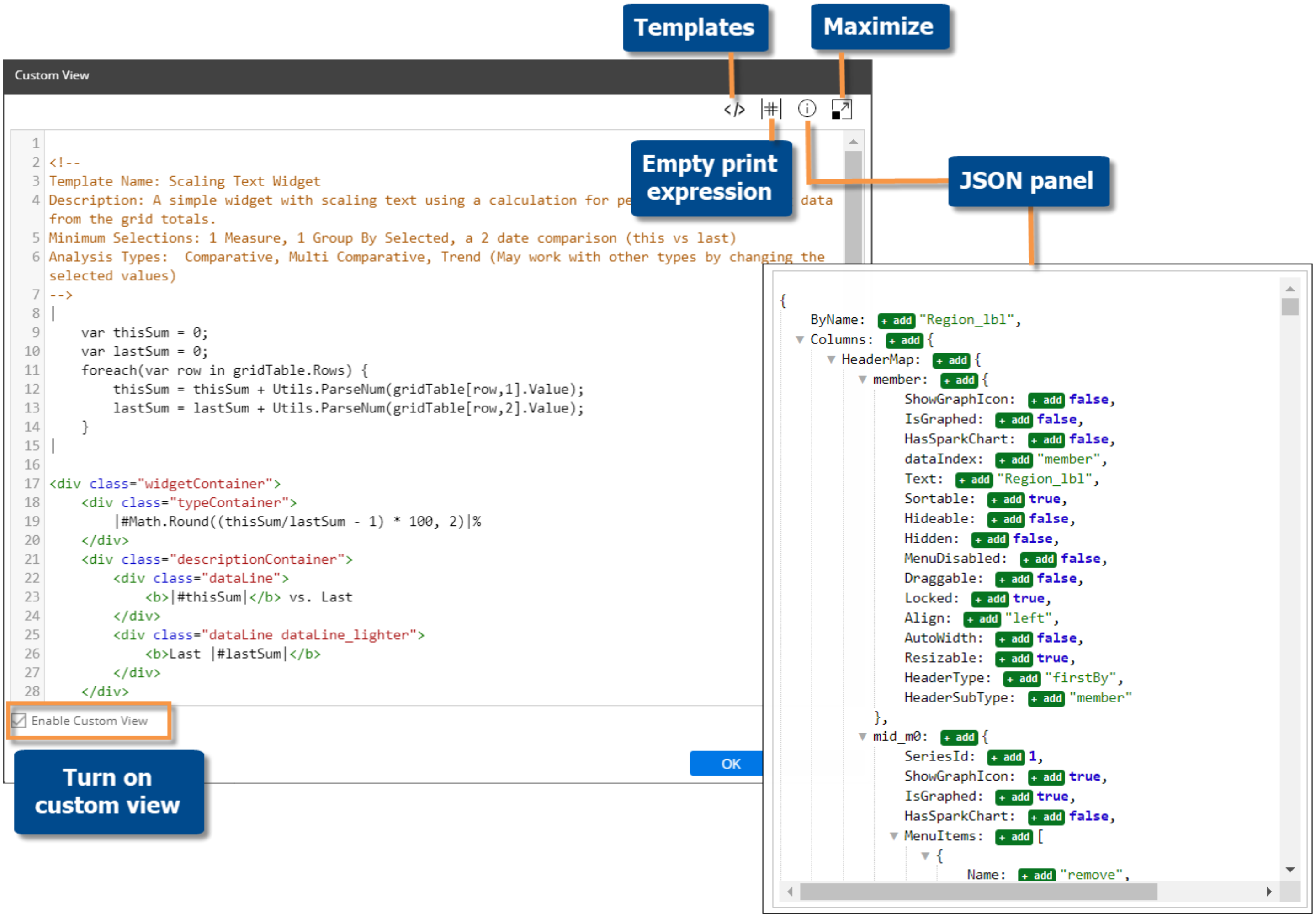


3. In the editing window, enter code to define the custom visualization. You can start with any of several predefined templates (if configured), or create a custom view from scratch.

   To start with a predefined template, click at the top of the window and choose the template. This will populate the editing window with the template code, which you can customize further. The comments at the top show the requirements for the template, including supported analysis types and measure(s). If you don't see the template button, the dataset may not be configured to use templates. See the *Salient Dashboards Installation and Configuration Manual* for more information.

   Both HTML and JavaScript may be used. In addition, you can query and select data using a simple, built-in scripting language similar to C#. To display data, enclose it in the print expression |#|. To access a list of available values, open the JSON panel by clicking at the top of the editing window. You can then click to insert any values from the underlying grid. The following libraries are built into Salient Dashboards, so that you may use them without importing them: some Highcharts modules (bullet, exporting, funnel, heatmap, solid-gauge, treemap), Jquery, Open Sans font style.

4. When you are finished, check the **Enable Custom View** box at the bottom of the screen, and click **OK**. <u>If you do not check this box, the custom view will not display.</u>



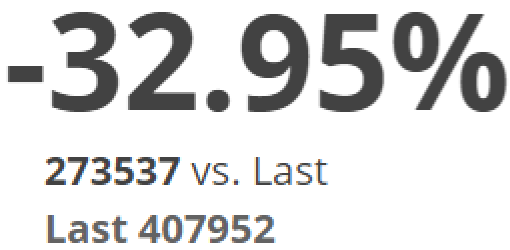
Tip: If a template does not display as expected (e.g., blank or error), make sure the widget meets the requirements in the notes at the top of the template code.

5. Optionally, adjust widget settings to restrict functions and/or data based on the purpose and context of the custom view. For example, if the custom view compares two date ranges, you may want to lock down date settings by removing the date setup icon in general widget settings.

Custom view examples

The Salient Dashboards installation includes the following custom view templates. Your organization can modify these templates and/or provide additional templates.

Scaling text widget



Simple sentence

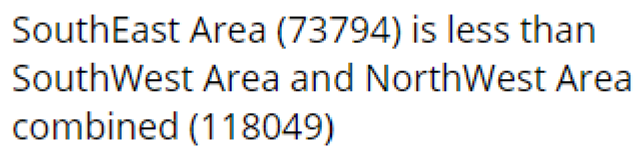
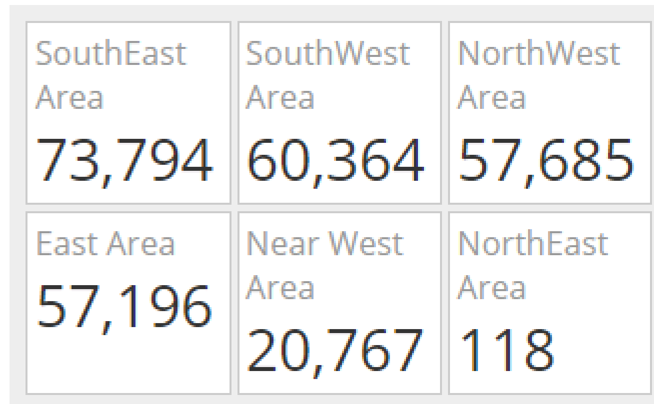
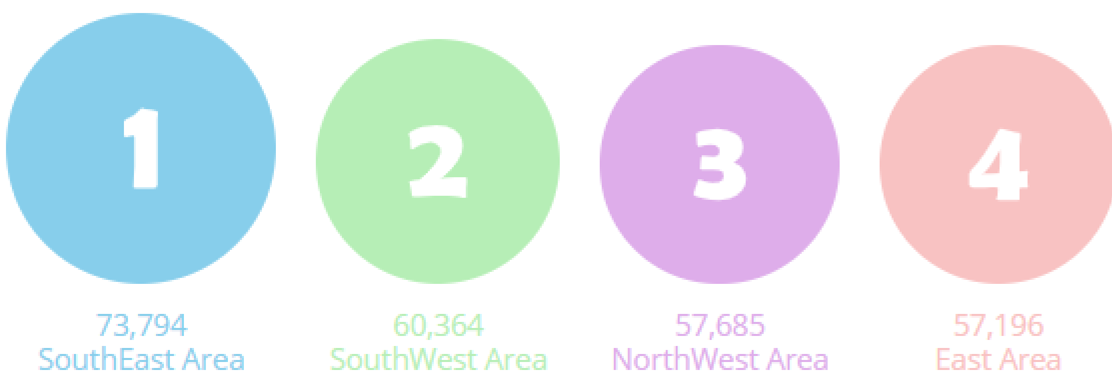


Image overlay

Tile view

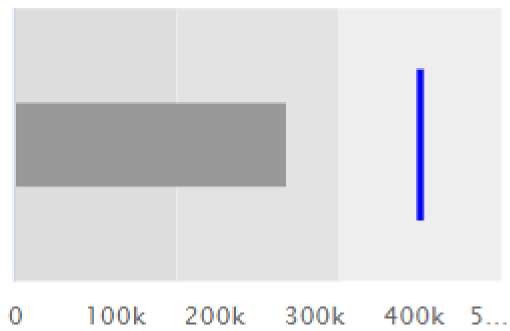


Volume comparative

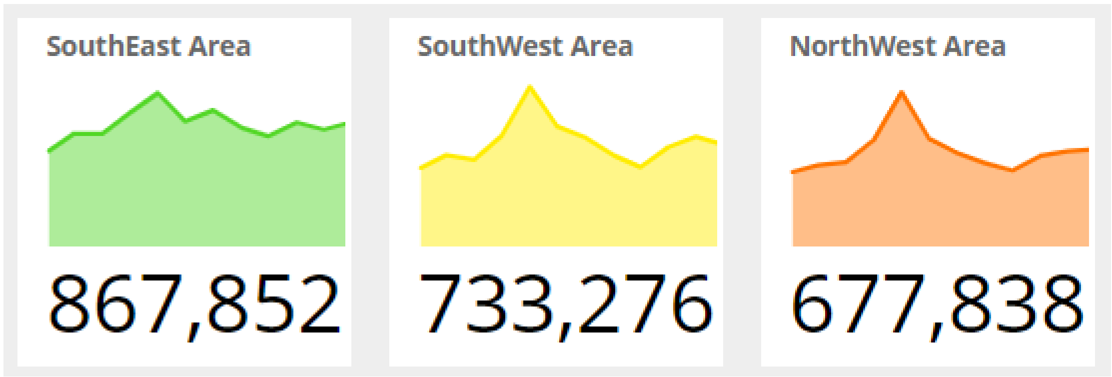


Goal percentage

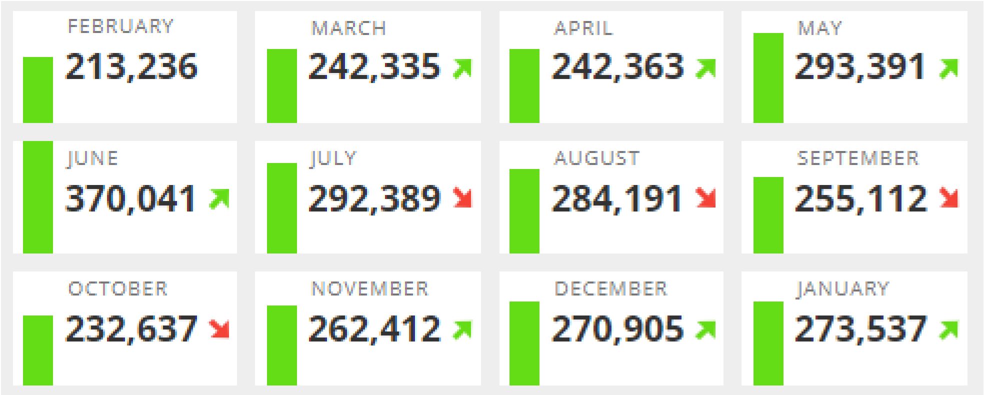
Gauge bullet



Multi Trend



Calendar trend tiles



Column filters (in Multi Comparative)

The columns in a Multi Comparative widget can be filtered on various subsets of data. The filters, date ranges, measures, and equivalents can be the same or different across columns. Any number of columns can be included to provide a customized view of performance. For example, compare performance across individual brands, packages, and custom groups of products in one view. A filter icon indicates that a column is filtered. The filtered data is also available when you switch to graph format.

	All Products		Our Cola			12 Pack Cans		Our Carbonated Brands		Products with Net Price > $10	
	Units		Units			Units		Units		Units	
Channel	This ↓	% Change	This	Last	% Change	This	% Change	This	% Change	This	% Change
Regional Chains	87,307	18.54	35,909	29,847	20.31	38,902	2.26	80,345	20.11	5,365	-18.64
Conv With Gas	29,431	10.01	12,751	11,590	10.02	5,568	14.54	26,121	10.67	12,266	-6.59
Mass Merchandisers	23,893	-27.25	10,975	15,990	-31.36	15,290	-40.53	23,059	-27.99	1,798	2.98
Other Groceries	20,611	4.06	8,880	7,889	12.56	3,185	88.46	17,308	8.88	7,557	-12.16
3rd Party Operators	14,376	-8.29	5,523	5,951	-7.19	201	55.81	12,165	-9.69	5,953	-16.47
Drug Stores	14,296	10.74	5,965	5,797	2.90	7,311	3.32	13,532	9.89	1,223	8.71
Local Chains	11,851	5.16	5,377	5,191	3.58	4,195	6.91	10,979	5.96	1,118	-18.45
Industrial	9,576	8.47	2,151	2,159	-0.37	1	-80.00	5,241	4.78	2,215	6.70
Superettes	9,020	-7.84	3,681	4,215	-12.67	2,349	-25.31	7,875	-10.14	1,551	-22.84

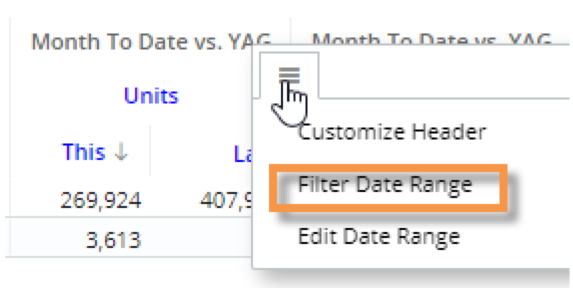
The following instructions explain how to filter individual columns. Column filters can also be set up to work with dashboard filters to compare whatever is selected to benchmarks, (see page 161) such as all, all others, or custom cohorts.

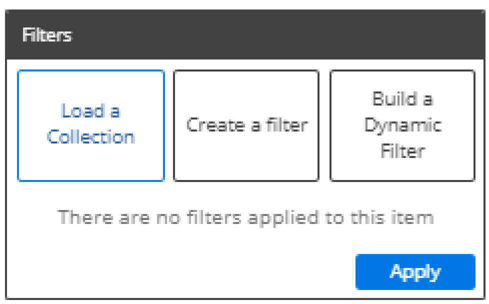
To apply a filter to a column

1. Add or select a Multi Comparative widget. Column filtering is only available in this widget type.

   - The widget must have at least one measure.
   - The widget must be in grid format.

2. Place the cursor over the main heading of the column to filter and click the menu icon.
3. Select **Filter Date Range**.
4. In the next menus, choose how to filter the column. These options are the same as those available for other types of filters. For example, you can filter on a saved collection (see page 77), create a new filter for any available dimension (see page 75), apply a dynamic filter (see page 78), etc.

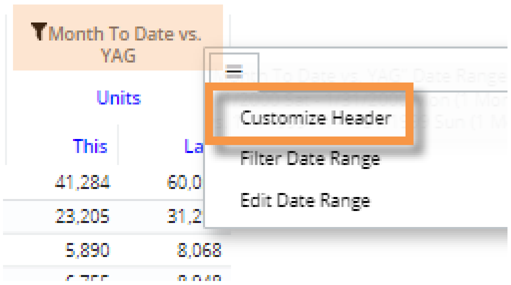




To apply a filter to a column

5. *(Recommended)* Customize the column header to indicate what the column is filtered on:

 - Place the cursor over the column and click the ≡ menu icon.
 - Select **Customize Header**.
 - Choose header options.



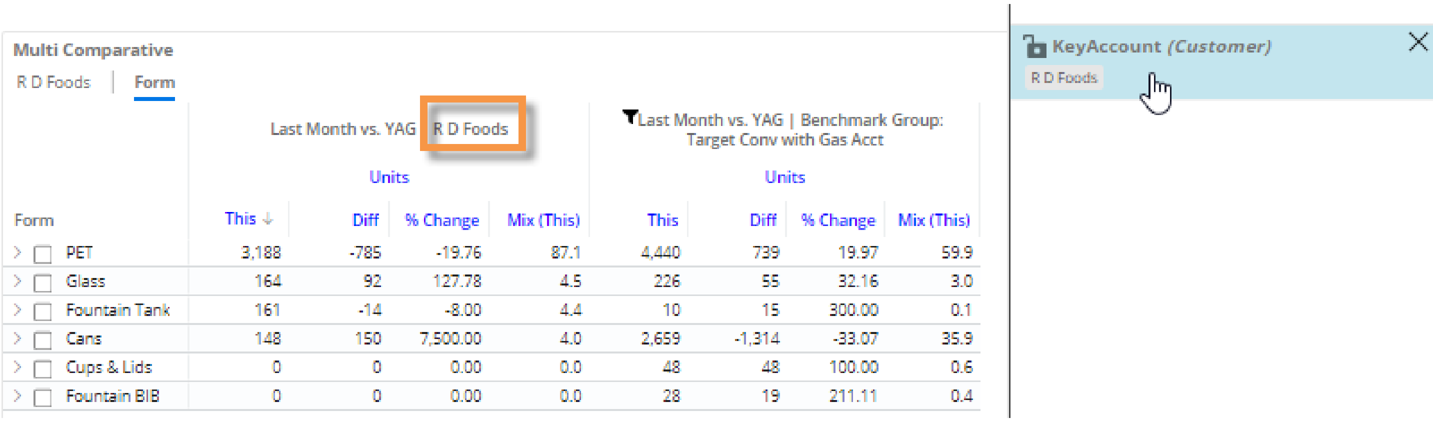
Tips:

• Column filters also allow you to apply equivalents to individual columns to compare converted data within a widget. Equivalents are available via the **Create a filter** option.

• Depending on the dataset configuration, you may be able to include custom calculations (see page 165) that compare one column to another (e.g., difference between one brand and all products). This feature requires temporal measures.

Benchmarking

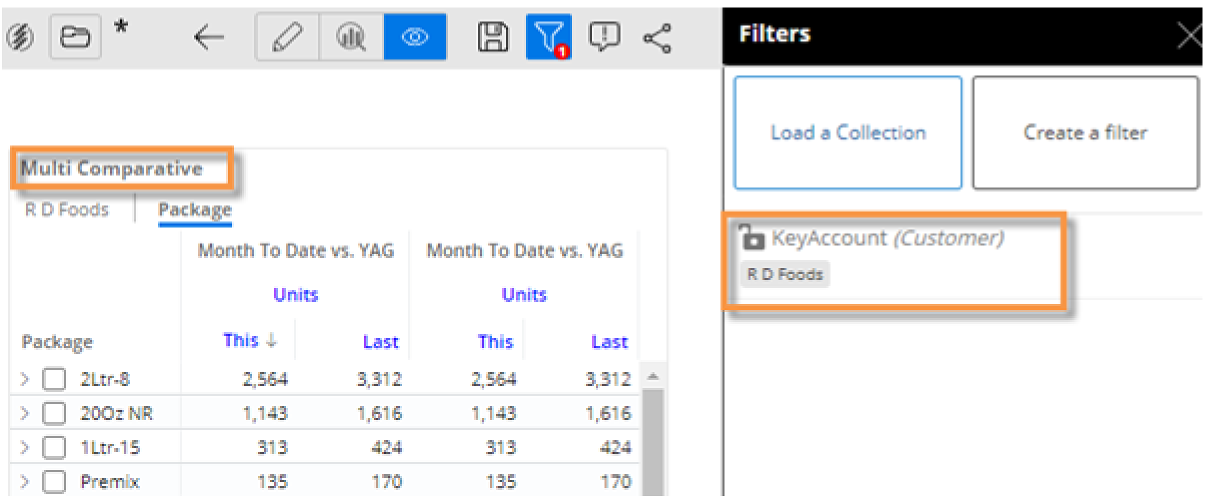
Benchmarking allows you to compare the performance of any part of your organization to other parts that represent standards and industry bests. In Salient Dashboards, you can dynamically benchmark performance of whatever is selected against "all", "all others", or custom peer groups (i.e., cohorts) using advanced options in Multi Comparative column filters. For example, compare a single account to all other accounts and/or a top-performing group of similar accounts. The results update dynamically based on whatever filter is selected at the time; just pick from the filter to benchmark a different part of the organization (e.g., a different account).



The filtered data is also available when you switch to graph format.

To compare performance to a benchmark

1. Add or select a Multi Comparative widget. Column filtering is only available in this widget type.
   - The widget must have at least one measure.
   - The widget must be in grid format.
   - The widget should have at least two date columns, which should typically use the same date (e.g. MTD vs. YAG) as each other to provide a direct comparison.
2. Apply a workspace filter to focus on the member (e.g., account) that you want to compare to a benchmark. The workspace filter may be applied via a filter widget, filter panel, or other method. To preview results as you work, select a member from the filter (e.g., a single account). A different member may be selected at any time; the columns will update dynamically.

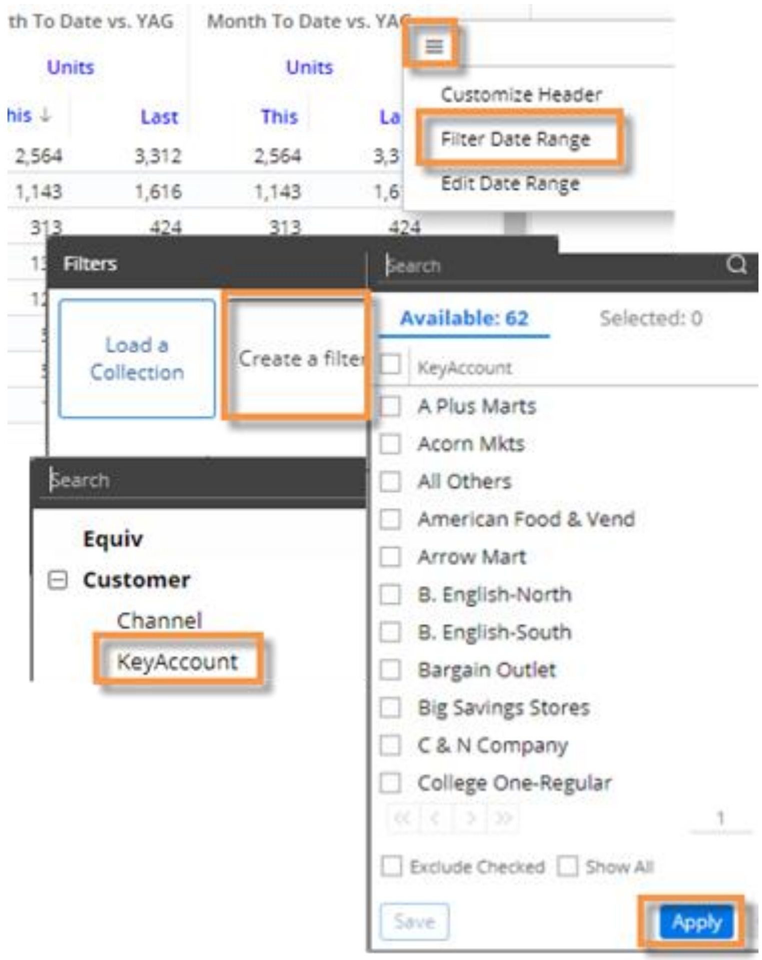


3. Leave at least one column as is to show results for whatever is selected in the filter.

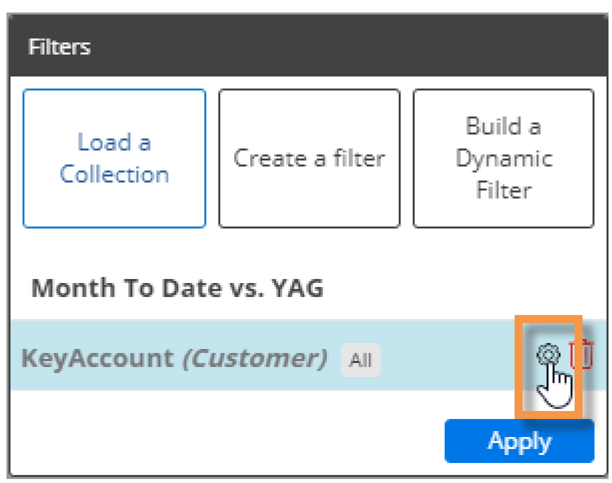
To compare performance to a benchmark

4. In another column, apply a filter for the same dimension or key as the workspace filter (e.g., key account)—leaving it set to All.

   - Place the cursor over the column and click the ≡ menu icon.
   - Select **Filter Date Range**.
   - Click **Create a filter**.
   - Select the dimension or key list.
   - Do not check any members. Click **Apply** once.

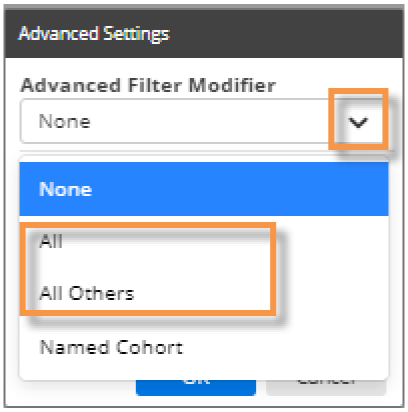


5. In the Filters area, place the cursor over the new filter and click the button to access advanced settings.



To compare performance to a benchmark

6. Select one of the following from the Advanced Filter Modifier menu:



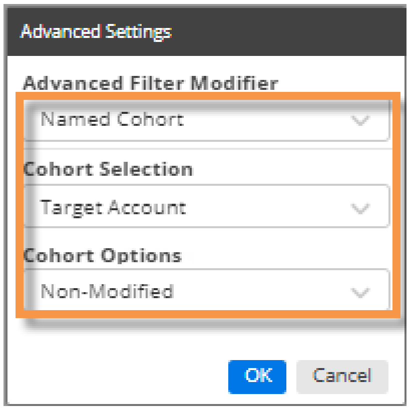
Option 1: Compare to All

To show data for all members including the member you are filtered on, select **All**.

Option 2: Compare to All Others

To show data for all members except the member you are filtered on, select **All Others**.

Option 3: Compare to a Cohort



To show data for a custom group of members (must be pre-defined by an administrator), make the following selections and click OK.

Select **Named Cohort**.

From the Cohort Selection menu, select the name of the cohort group. The Salient Dashboards application will search within this group to find the corresponding cohort for the filter member (e.g., target account for R D Foods) and show results for the cohort member(s).

From the Cohort Options menu, choose from the following options to add or remove the filter member from the results:

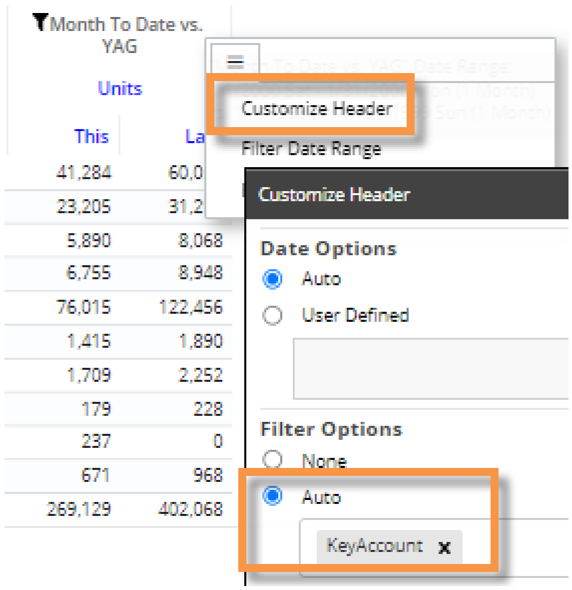
- **Non-Modified -** Leave the cohort as is; do not add or remove the filter member.
- **Include Filtered Members -** If the cohort does not include the filter member, add it to the results.
- **Exclude Filtered Members -** If the cohort includes the filter member, remove it from the results.

7. After choosing Advanced Settings, click **Apply** to apply the filter to the column.

To compare performance to a benchmark

8. *(Recommended)* Repeat the following steps for each column to modify headings so that they show what the column is filtered on:

- Place the cursor over the column and click the ≡ menu icon.
- Select **Customize Header**.
- In the **Filter Options** section, select **Auto** and then select the filter dimension to automatically show the member(s) that the column is filtered on; then click OK. Other options for custom headers are available.



Tips:

For a cohort comparison:

- If the filter member does not have a cohort within the selected group, the column will show zero data and the column header will show "Group Not Found" (if filter label is on).
- You cannot compare a cohort to multiple members at once (i.e., filter on multiple members); the column will show zeros if multiple members are on.

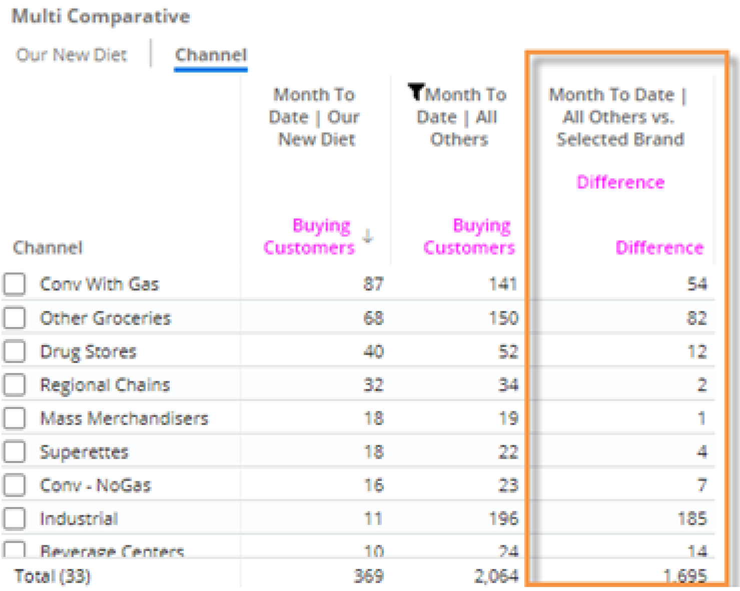
Depending on the dataset configuration, you may be able to include custom calculations (see page 165) that compare one column to another (e.g., difference between an account and a target account). This feature requires temporal measures.

See the *Salient Dashboards Installation and Configuration Manual* for information about creating and editing cohorts.

To provide automatic comparisons of user-assigned data to benchmarks (e.g., how am I doing compared to everyone else), your organization can use password collections to filter the data in a column and include another column with "all", "all others", or cohorts applied. This feature requires additional setup.

Custom calculations for columns

In Multi Comparative columns, you can override the formula of a temporal measure to apply special calculations—such as difference in volume for one sales rep versus another or number of customers buying one package versus all other packages—based on columns rather than specific timeframes (This/Last). This feature requires that the dataset has temporal measures that can be overridden to show the desired information.



Multi Comparative

Our New Diet | Channel

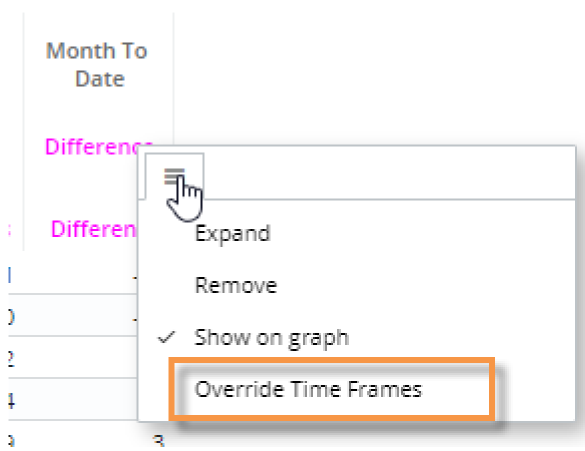
Channel	Month To Date | Our New Diet Buying Customers	Month To Date | All Others Buying Customers	Month To Date | All Others vs. Selected Brand Difference Difference
Conv With Gas	87	141	54
Other Groceries	68	150	82
Drug Stores	40	52	12
Regional Chains	32	34	2
Mass Merchandisers	18	19	1
Superettes	18	22	4
Conv - NoGas	16	23	7
Industrial	11	196	185
Beverage Centers	10	24	14
Total (33)	369	2,064	1,695

To apply custom calculations to a Multi Comparative column

1. Add or select a Multi Comparative widget. The widget should be in grid format.
2. Set up individually filtered columns (see page 159) and/or benchmark columns (see page 161) for the date ranges and members you wish to include in the custom calculations.
3. Add a temporal measure in its own column or a subcolumn. Its formula should correspond to the information you want to show. In the measure's formula, "#1" indicates the first timeframe (This) and "#2" indicates the second timeframe (Last). You will be able to swap out these timeframes with specific columns in the following steps. For example, to show difference in Buying Customers for two different columns, the temporal measure should calculate difference in Buying Customers for two timeframes.

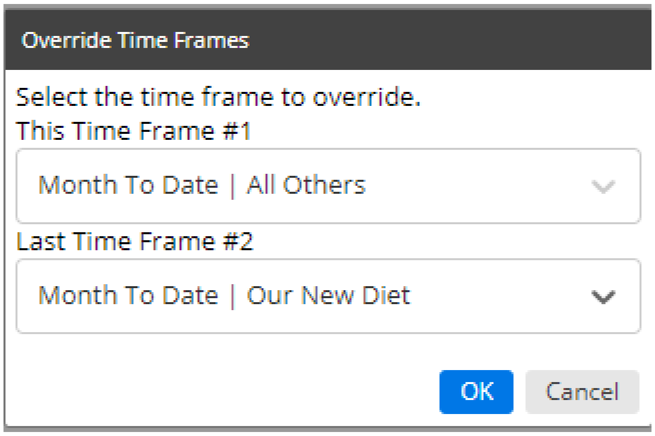
Tip: To see a measure's formula, add it and then place your cursor over its name in the heading.

4. Place your cursor over the temporal measure heading and click the ≡ menu icon.
5. Select **Override Time Frames**.



To apply custom calculations to a Multi Comparative column

6. In the first menu, select the column to substitute for the #1 timeframe in the formula (e.g., Month to Date | All Others).
7. In the second menu, select the column to substitute for the #2 timeframe in the formula (e.g., Month to Date | Our New Diet).
8. Click OK.



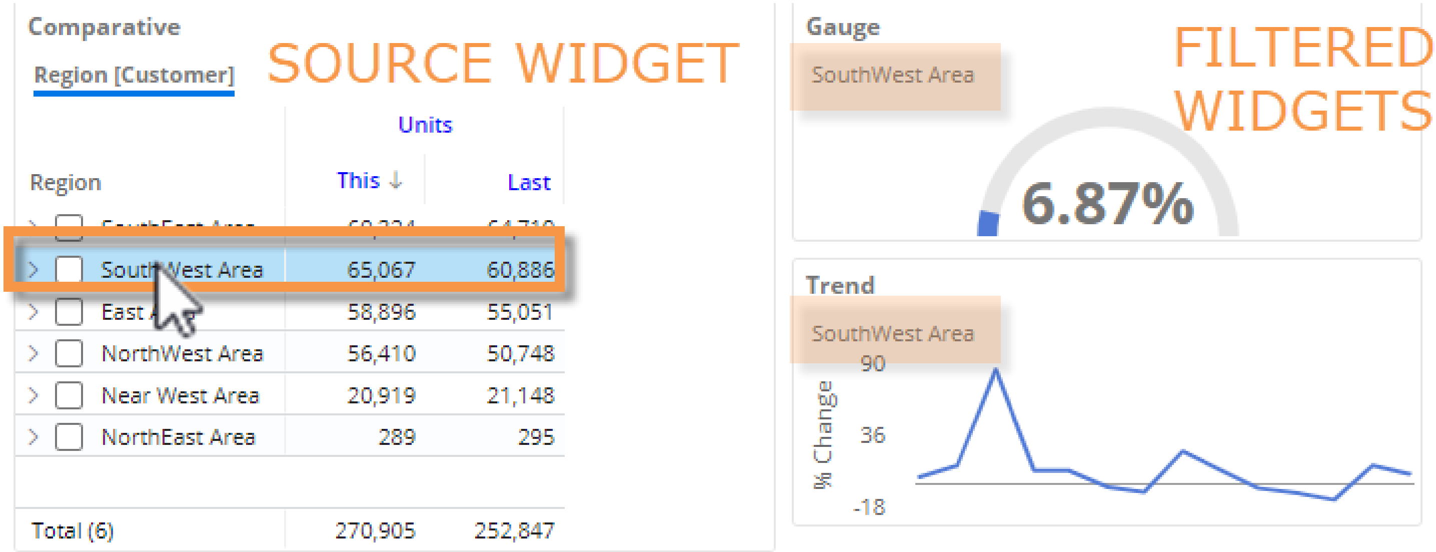
9. *(Optional)* Customize the column headers to indicate what the column shows:

To customize the main heading:
- Place the cursor over the column and click the ≡ menu icon.
- Select **Customize Header**.
- Choose header options.

To customize the subheading (i.e., measure name):
- Go to the measures area.
- Place your cursor over the measure name in the right pane.
- Click the icon.
- Enter a display name.

Widget linking

Widgets can be linked together to enable filtering via a single click on a "source" widget. A Dashboard Designer chooses one or more source widget(s) and sets up custom relationships to determine which widget(s) will be filtered.

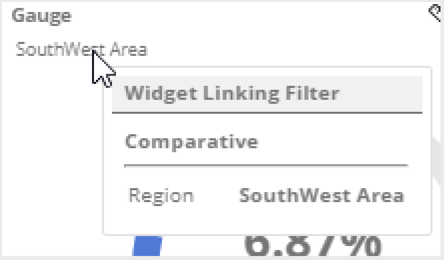


To use linked widgets

- In a source widget, click on a member to apply it as a filter in linked widgets.
  - In a grid, click on the member's row or column. The selected member will be highlighted.
  - In a graph, click on a bar, point, pie slice, or another component that represents the member. The member's label will be bold.
- To change the filter, click on a different member in the source widget.
- To clear the filter, click again on the member in the source widget.

Tip:

In a filtered widget, you can place your cursor over the breadcrumb path to see more information, including the title of the source widget.



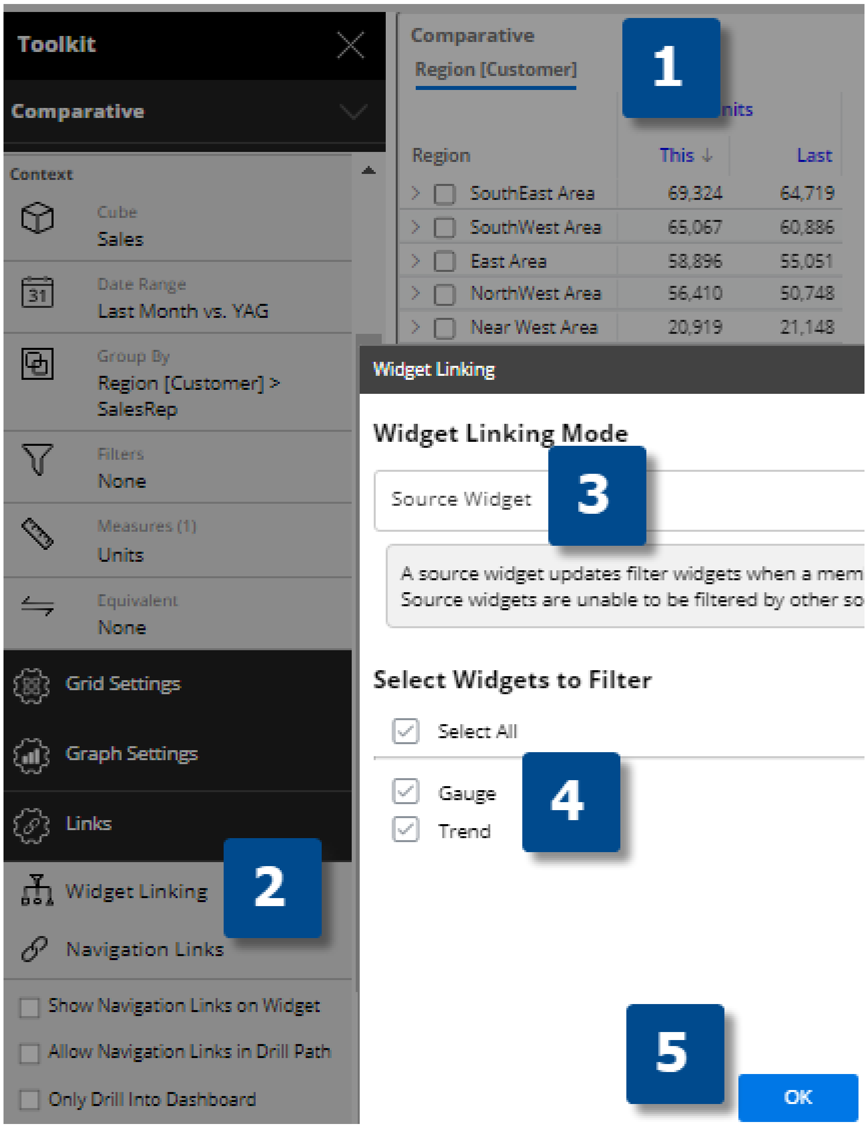
To link widgets

Before beginning, open or create a dashboard that has at least one source widget (i.e., what the user will click on to filter the data) and at least one widget to be filtered.

- The source widget must compare members (e.g., Comparative or Multi Comparative).
- The source widget should group the data by dimension that will be used to filter the data.

Option 1 - Set up source widget(s)

1. In edit mode, click on the source widget.
2. In the toolkit, expand the **Links** section and click on **Widget Linking**.
3. In the Widget Linking area, select **Source Widget** from the Widget Linking Mode menu.
4. In the Widget Linking area, check the box(es) of the widget(s) to filter or choose Select All to filter all widgets. The "Filtered Widget" setting will be applied to widgets that are selected in this area.
5. Click **OK**.
6. Repeat if you want to set up multiple source widgets. For example, a widget could be filtered by region based on one source widget and by package based on a second source widget. Another scenario for multiple source widgets would be to filter various sets of widgets based different source widgets (e.g., in different tabs).



Option 2 - Set up filtered widget(s)

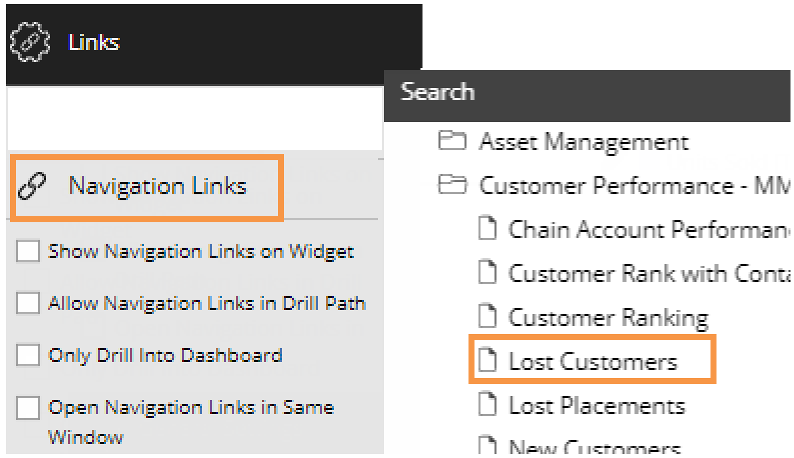
1. In edit mode, click on a widget that you want to filter.
2. In the toolkit, expand the **Links** section and click on **Widget Linking**.
3. In the Widget Linking area, select **Filtered Widget** from the Widget Linking Mode menu.
4. In the Widget Linking area, check the box(es) of the widget(s) to use as the source. The "Source Widget" setting will be applied to the selected widgets.
5. Click **OK**.
6. Repeat if you want to set up multiple filtered widgets.

Navigation links

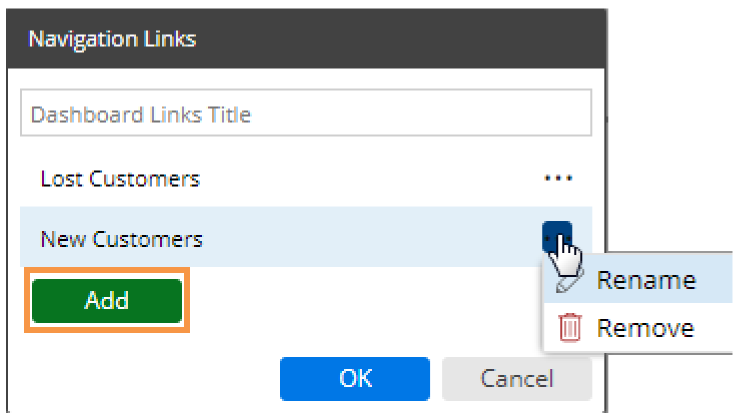
You can embed links to published dashboards within a widget to provide easy access to related dashboards. The links will be listed at the bottom of the widget or available via custom drill-downs (see page 138).

To add dashboard links to a widget

1. Click on a widget.
2. In the toolkit, expand the **Links** section and click on **Navigation Links**.
   (In explore mode, click on Advanced to access Links.)
3. Select the dashboard to which you want to link. Only published dashboards are available for dashboard links.

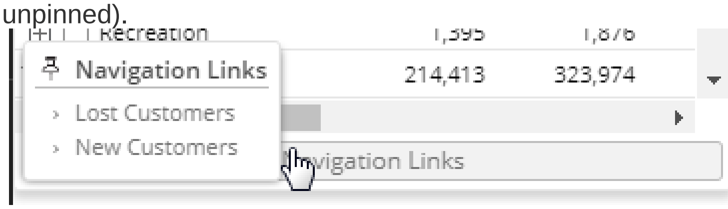


4. To link to multiple dashboards, click Add and select additional dashboards. If you wish, you can enter a custom name for the group of dashboard links (defaults to "Dashboard Links" if not specified).
5. If you want to change the display name of any dashboard link, click the ... button and select **Rename**. This assigns a temporary display name but does not change the actual dashboard name.
6. Click OK.



7. Under Navigation Links in the toolkit, select from the following options:

   Show Navigation Links on Widget - Check this box to show the links at the bottom of the widget (pinned or unpinned).



   Allow Navigation Links in Drill Path - Check this box if you want to make the links available via a custom drill-down (see page 139). Otherwise, leave this box cleared.

   Only Drill Into Dashboard - This option is used with Allow Navigation Links in Drill Path (i.e. custom drill-down) to control whether the user can go directly to the next dashboard upon drilling (check this option) or must first drill through all By levels in the widget (clear this option).

   Open Navigation Links in Same Window - Check this box to open the linked dashboards in the same window as the original dashboard, or clear to open in a new window.