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- Archive of documentation for Logi Symphony v24

Logi Symphony 24

Use Managed Dashboards, Reports, and Visualizations in Symphony 24



Quick Start Reference - Use Managed Dashboards, Reports, and Visualizations

This applies to: *Managed Dashboards, Managed Reports*

Managed Dashboards

- [Use the Managed Dashboards and Managed Reports Work Areas](#)
- [View Data With a Chart and Drill Down](#)
- [Building Dashboards With Performance In Mind](#)
- [Edit Versus View Mode and Sandbox View](#)
- [Use a Scorecard in a Managed Dashboard](#)
- [Use a Dashboard in a Report](#)
- [Share and Export Symphony Dashboards and Reports](#)
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- [Add a Script to Set the Dashboard Title](#)
- [Connect to OLAP Data and Apply a Formula](#)
- [Set Up Date Mapping on a Native OLAP Cube](#)
- [Database Write Back](#)



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- [Implementing a Mobile Optimized Navigation Menu](#)
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Managed Reports

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- [Totals \(Sum\)](#)
- [Trend and Forecasting](#)
- [Trend Confirmation Indicator](#)
- [Ultimate Oscillator](#)
- [Variance](#)
- [Volume Oscillator](#)
- [Weighted Moving Average](#)



- [Williams %R \(or Percent Range\)](#)
- [Zig Zag Subset](#)

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- [Using Interactions](#)
- [Create a Help Overlay Using Layers](#)
- [Expand Or Collapse a Template Grid Cell](#)
- [Navigate to URL](#)
- [Set Up a Data Input Interaction](#)
- [Set Up a Drill Down Interaction](#)
- [Set Up a Filter Interaction](#)
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- [Set Up a Navigate Interaction](#)
- [Use a Button to Apply a Filter Value](#)
- [Using the Script Editor](#)
- [Context Menu Not Working](#)



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- [Symphony Metric Sets](#)
- [Select and Group Data for a Metric Set](#)
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- [Replace Data in a Metric Set with a Hierarchy](#)
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Use the Managed Dashboards and Managed Reports Work Areas

This applies to: *Managed Dashboards, Managed Reports*

Launch the Managed Dashboards or Managed Reports work area by selecting the appropriate **Open** button on the Symphony [home page](#). You can access any tasks you need to accomplish in the Managed Dashboards or Managed Reports modules here.

Use the [main menu](#) to switch projects, create new items, open existing work, edit your user profile, and perform other main application functions.

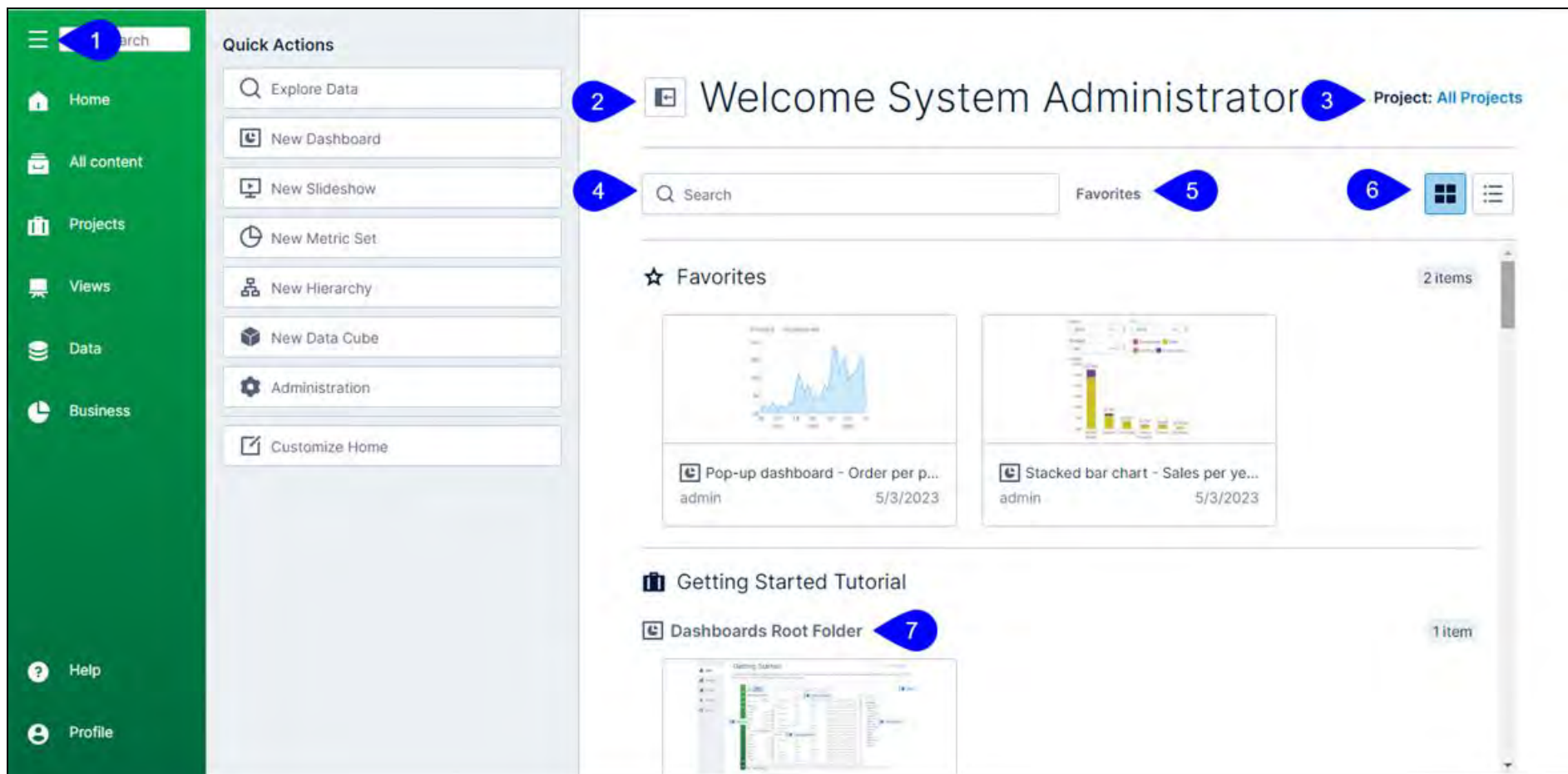
You can access this [menu](#) at any time when you use Symphony. Select the expand () and collapse () arrows or menu icon () to expand and collapse the main menu. Depending on the module you're working in, your application privileges, and licensed features, the menu reflects what you can do. Select the Home button at any time to return to the [home page](#) and navigate to another section or module of Symphony.

As you select from the available options, each section may open new work area or series of nested menus expanding from the main menu you can use to navigate existing content or create new content.

The main pane of this work area, by default, allows you access to your existing dashboards, reports, and other views, organized by folder. When you select a menu option, more menu options may expand, and the pane changes to reflect the tasks you're performing.

Default Managed Dashboards and Managed Reports Work Area

Dashboards, reports, and other views available to open with a click are listed with thumbnail preview images, and organized by folder. As you scroll, the breadcrumbs displayed at the top of the work area update to reflect the location of the content. Select a folder in the path to scroll back to the top of that section.



The main work area includes:

1. The [main menu](#). Expand and collapse to access navigation options.
2. The [Quick Actions](#) menu toggleD. Select to open or close the menu, then select a task.
3. Project view filter. Select to filter the content shown in this work area by selecting a specific project, or selecting all projects.
4. Search bar. Enter a search term to filter content shown in this work area by folder name or content name.
5. Breadcrumbs. Reflects the path of the content you're scrolling through; select a folder in this path to scroll to the top of that section.



6. Tile/List toggle. Select the tile or list icon to switch your view between thumbnail tiles and a text list of content and content information. You can hover over a tile and select the star icon to make it a favorite. Thumbnails are not generated until your content is checked in.
7. Folder name. Indicates the name of the folder that contains the content below.

Quick Actions Menu

Select the Quick Actions icon next to your name to open the Quick Actions menu. The list of options available to you may vary based on your application privileges and licensed features. Select a quick action to switch quickly to a new task. Options available are listed below:

Menu Option	Select this option to...
Explore Data	Opens a new workspace where you can start exploring, analyzing, and building visualizations for your data. This may open a new Metric Set or new Dashboard work area, depending on your seat type .
New Dashboard	Opens a new dashboard work area.
New Slideshow	Opens a new slideshow work area.
New Metric Set	Opens a new metric set work area.
New Hierarchy	Opens a new hierarchy work area.
New Data Cube	Opens a new blank data cube work area.
Administration	Opens the administration work area.
Customize Home	Open to customize the items shown in this work area.

Customize Home

You can customize this work area by selecting **Customize Home** in the quick actions menu. The work area changes, allowing you favorite or hide content as needed.

- Select the hide icon to hide content from your main work area. The content is hidden from it's current location, and shown in a Hidden group in the work area. This hidden group and content is only visible when you are customizing this work area. Select the hide icon again to unhide it and remove it from the hidden group.
- Select the favorites icon to mark content as a favorite. This adds the content to a Favorites section at the top of the work area, while leaving it in it's original content location. Select the favorites icon again to remove the content from the Favorites section.



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Note: Content cannot be simultaneously hidden and a favorite.



Note: Remove content from view for all users by adding the tag `HideFromHome` to a [file's properties](#) or a [folder](#).

When you're done customizing the content in this work area, select **Finish Customizing** in the quick actions menu to close this customization interface.



View Data With a Chart and Drill Down

This applies to: *Managed Dashboards, Managed Reports*

The following walkthrough shows you how to:

- Choose data to display directly on a dashboard or other view as a table visualization.
- Apply a time dimension to date and time data.
- Re-visualize the table as a bar chart.
- Drill down and drill up on the data.

These steps create a [metric set](#) on the dashboard for analyzing the data from your data source. You can work with multiple metric sets at once when editing a view like the dashboard in this example, or you can follow similar steps when editing a single metric set full screen.

The [Adventure Works](#) SQL database is used as an example.

Create a New Dashboard

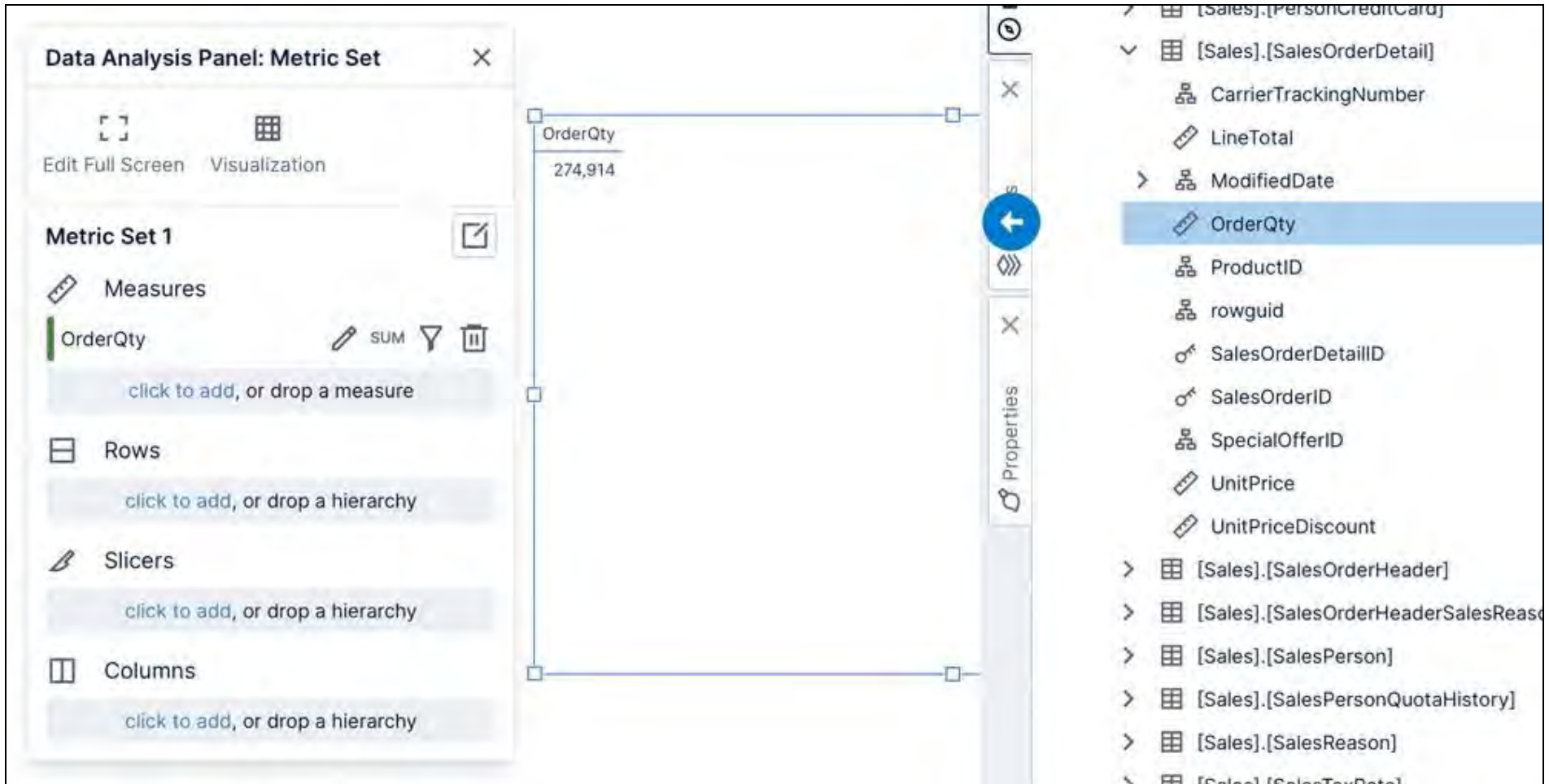
From the [main menu](#), choose **Views**, and then click to **Create** a dashboard.

Choose the **Blank** option to drag and drop content anywhere, or a template with a grid-like layout instead if you prefer.

Add a Measure

In the [Explore window](#), locate the data you want to display from within a green folder such as *Data Connectors* or *Data Cubes*.

For this example, we will expand the data connector for a database, then expand its database table *[Sales].[SalesOrderDetail]*, and drag the *OrderQty* column to the canvas.



The screenshot displays the Logi Symphony interface. On the left, the **Data Analysis Panel: Metric Set** is open, showing a table visualization. The panel includes sections for **Metric Set 1**, **Measures**, **Rows**, **Slicers**, and **Columns**. The **Measures** section shows **OrderQty** with a **SUM** aggregation. The **Rows** section is empty. The **Slicers** and **Columns** sections are also empty. The table visualization shows a single row with the value **274,914** for **OrderQty**. On the right, a list of data sources is visible, including **[Sales].[PersonCreditCard]**, **[Sales].[SalesOrderDetail]**, **[Sales].[SalesOrderHeader]**, **[Sales].[SalesOrderHeaderSalesReason]**, **[Sales].[SalesPerson]**, **[Sales].[SalesPersonQuotaHistory]**, **[Sales].[SalesReason]**, and **[Sales].[SalesTaxRate]**. The **OrderQty** field is highlighted in the **[Sales].[SalesOrderDetail]** table.

By default, data is displayed within a new table visualization. The *Data Analysis Panel* appears to the left with the new **metric set** it's based on, which you can use to determine how data is displayed.

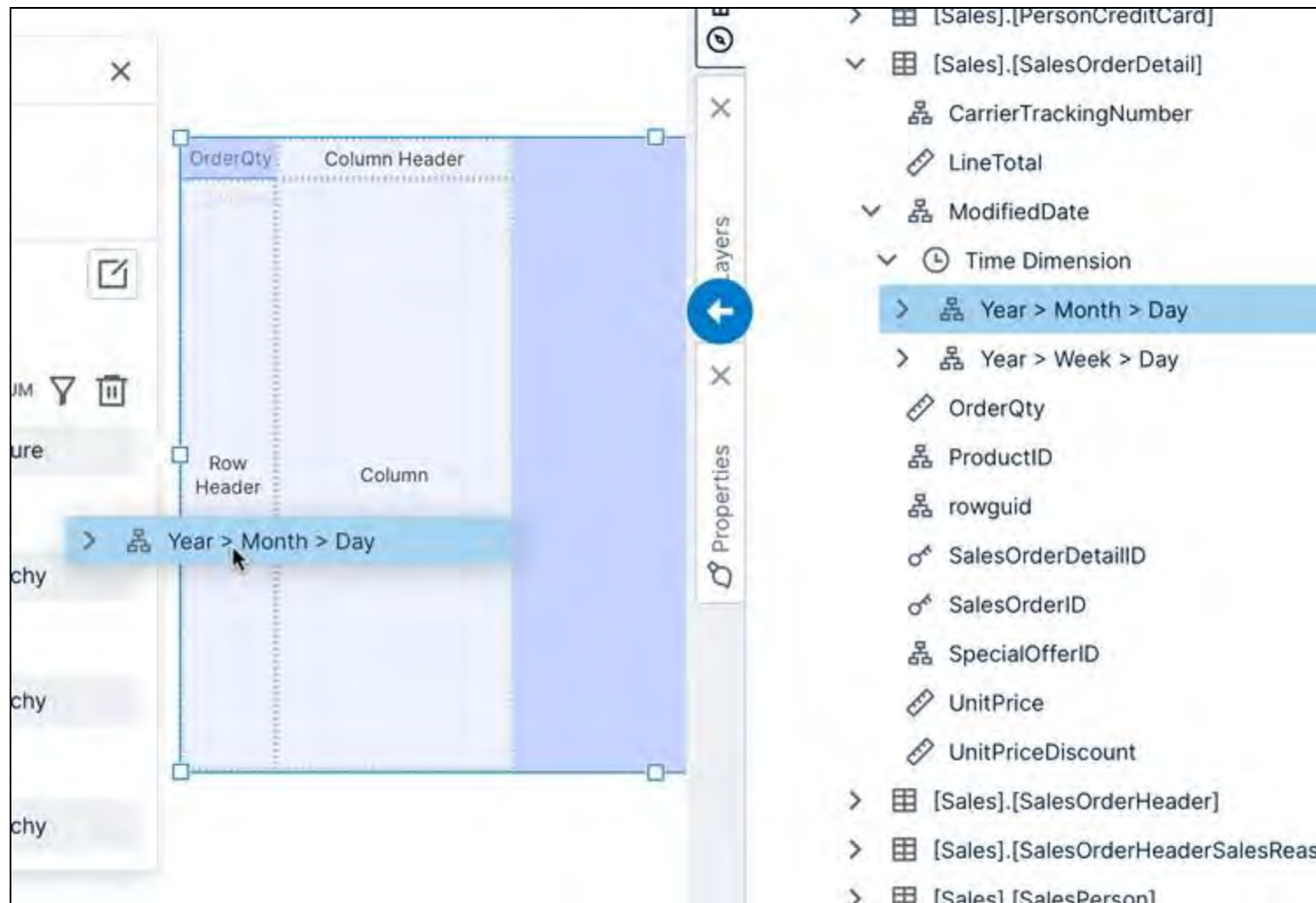
OrderQty contains numeric data, which is normally used as a 'measure' and it was added under Measures in the Data Analysis Panel by default. Only a single, aggregated number (the sum or total) appears in the table because no hierarchies (e.g., non-numeric data) have been added yet.

When editing a view like this dashboard, you can drag and drop data from any data source to create new metric sets and visualizations, or drag existing metric sets created ahead of time, and display them all together.

Add a Hierarchy

Under the *[Sales].[SalesOrderDetail]* table, locate the *ModifiedDate* column and expand it. You'll see a Time Dimension item for columns like this containing date/time data, and this contains date and time hierarchies you can use to group and explore through the individual dates.

Drag the *Year > Month > Day* hierarchy onto the area labeled *Row Header* over the table visualization. You can also expand the hierarchy first and drag one of its levels.



The screenshot displays the Logi Symphony interface. On the left, a table visualization is shown with a 'Row Header' and a 'Column Header' labeled 'OrderQty'. A blue bar with the hierarchy 'Year > Month > Day' is being dragged onto the 'Row Header' area. On the right, the 'Properties' pane is open, showing a list of tables and columns. The 'ModifiedDate' column is expanded, revealing a 'Time Dimension' section. The 'Year > Month > Day' hierarchy is highlighted in blue, indicating it is the selected item to be added to the visualization.



Note:

You can also drag the original date column directly (e.g., *ModifiedDate*) if you don't want to group them, drill down, etc. Or if other time dimension levels such as Hour or Minute are not listed that you want to use, create or edit a [time dimension](#) to enable them.

The hierarchy is added under **Rows** in the Data Analysis Panel, which groups the data so that the table visualization displays one row for each year. Note the OrderQty values are now broken down by year.

Data Analysis Panel: Metric Set

Edit Full Screen

Visualization

Metric Set 1

Measures

OrderQty

SUM

click to add, or drop a measure

Rows

ModifiedDate

click to add, or drop a hierarchy

Slicers

click to add, or drop a hierarchy

Columns

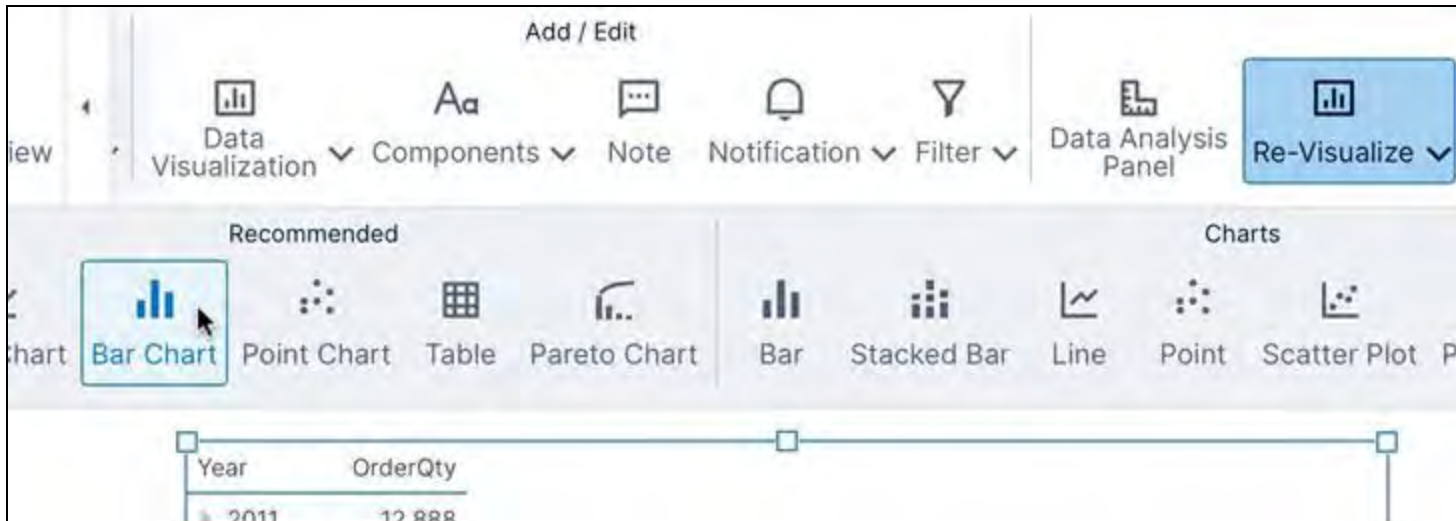
click to add, or drop a hierarchy

Year	OrderQty
2011	12,888
2012	68,579
2013	131,788
2014	61,659
Grand Total	274,914

([Flat Table](#) in a table visualization have certain features compared to regular columns, such as the triangular buttons like those displayed here next to the years to [expand them down](#) to lower levels.)

Re-Visualize as a Chart

With the table visualization selected on your dashboard, click **Re-Visualize** in the toolbar and select **Bar Chart**.



The table is re-visualized as a bar chart.

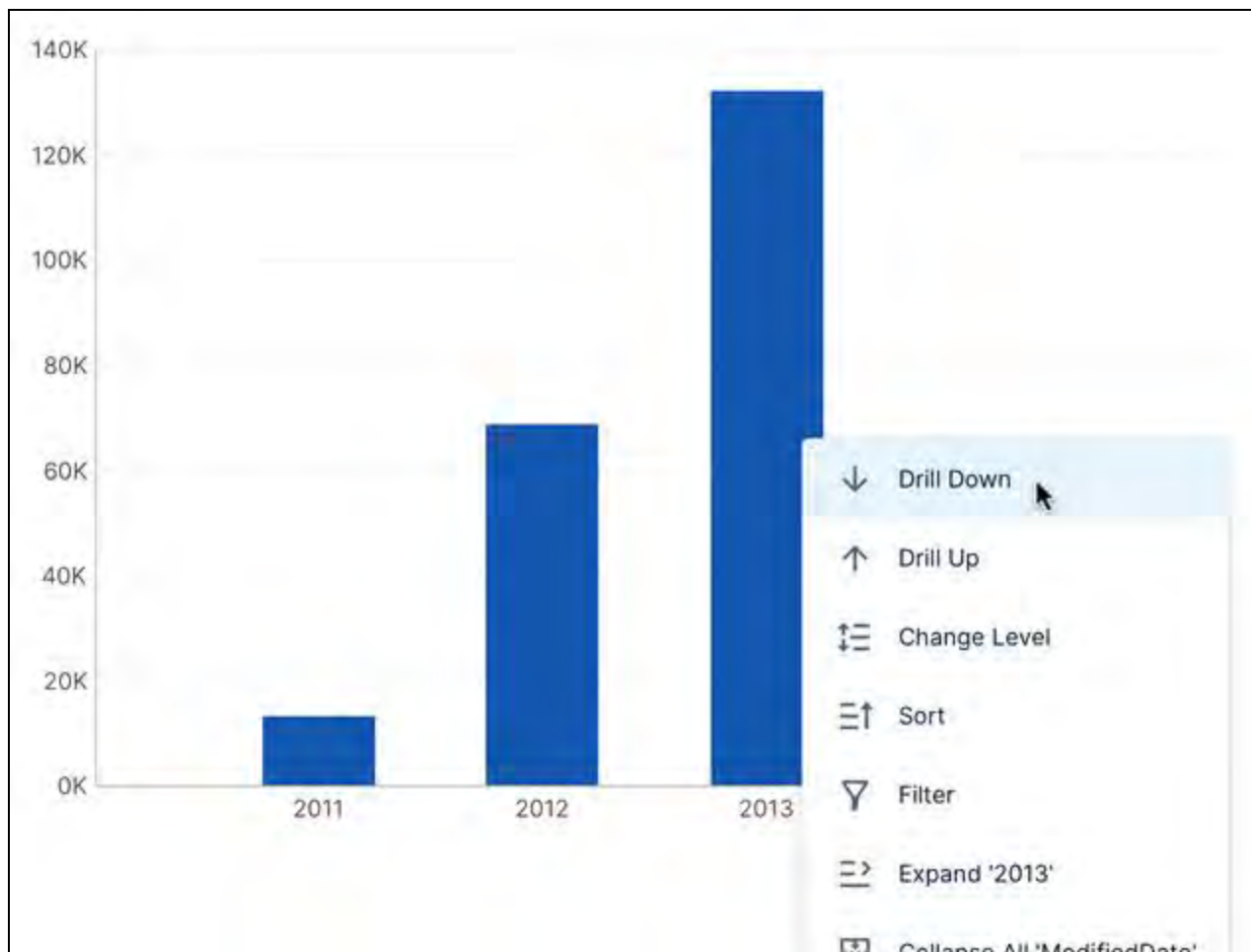
Drill Down and Drill Up

In order to interact directly with the data and drill down, click **View** in the toolbar to switch from the current Edit mode. In **View mode**, the rulers are hidden and the options available in the right-click menu for a visualization are different.



While in **View mode**, right-click (or long-tap) over any data, in this case one of the bars in the chart. From the context menu that appears, select **Drill Down**.

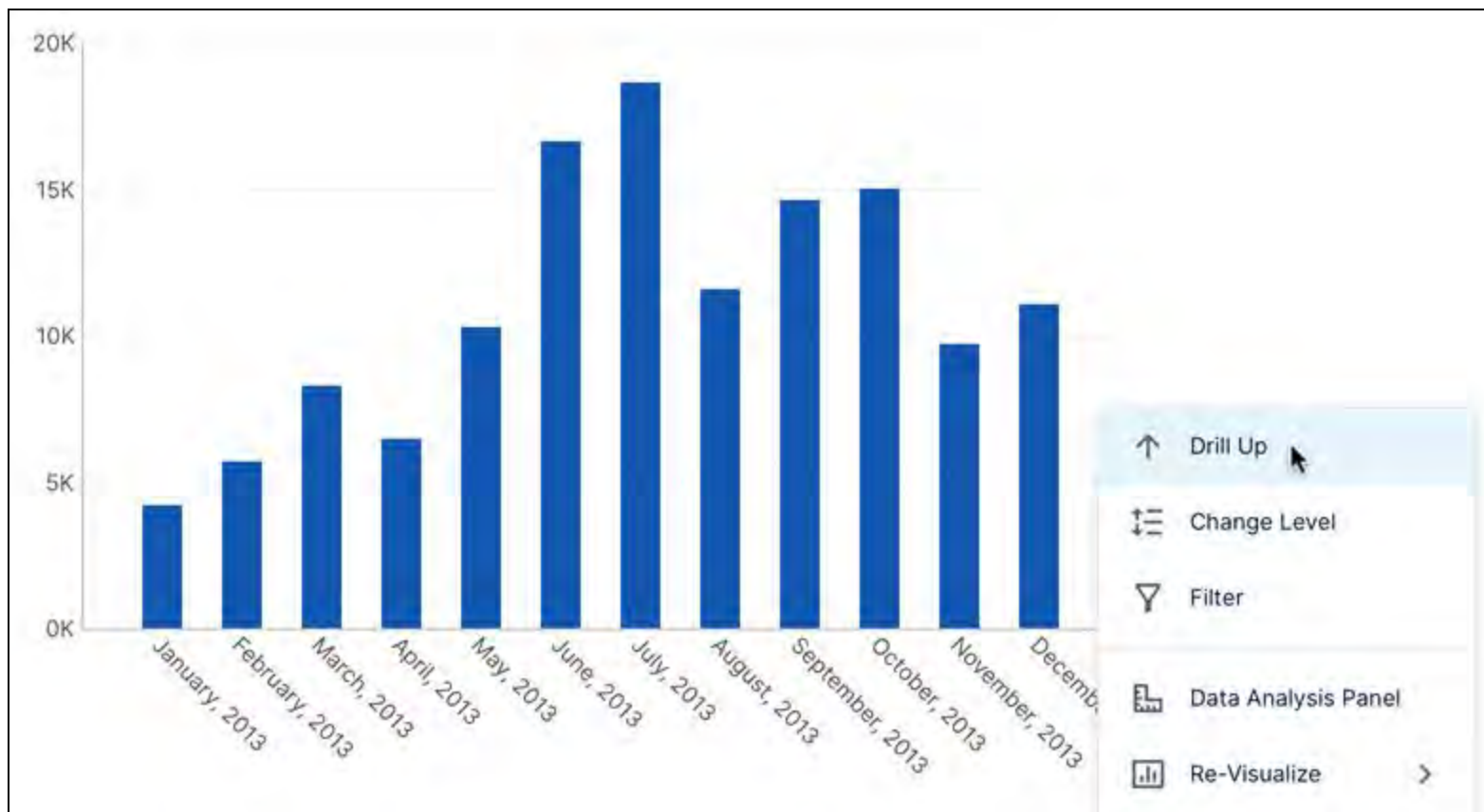
This option is available because of the time dimension we applied earlier, which allows us to explore the data through different levels like *Year* and *Month*.



Note: You can also set up [drill down or other interactions](#) to happen with a single left-click (or tap).

The chart now displays date members that are one hierarchy level down and which correspond to the bar that you just drilled down. For example: drilling down from the year 2014 to the individual months of that year.

You can continue drilling down further, or drill back up using the same context menu.



This is one of several options for exploring data that anyone can access from the context menu for any visualization when viewing a dashboard or other view, taking advantage of the metric set's analysis capabilities without necessarily needing to edit the metric set directly. For more details, see [Symphony Metric Sets](#).

To go back to Edit mode, go to the toolbar and click **Edit**.

Now you can also **Check In** your dashboard [for others to see it](#), or you can [share](#) a link to it. Everyone who views this dashboard can access the same drill down options and other View mode interactivity (unless these are restricted by [application privileges](#) or in [properties](#)).

For more information, see:

- [Connect to Data and View it on a Dashboard](#)
- [Create a Time Dimension](#)



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- [Check In, Check Out and Auto Saving](#)
- [Edit Versus View Mode and Sandbox View](#)
- [Symphony Metric Sets](#)
- [Using a Table Visualization](#)



- Archive of documentation for Logi Symphony v24

Design Overview

This applies to: *Managed Dashboards, Managed Reports*

This article provides an overview of the design experience when creating and editing dashboards and other views such as reports. You will also find a subset of these features when editing [metric sets](#), and [data cubes](#), for example.

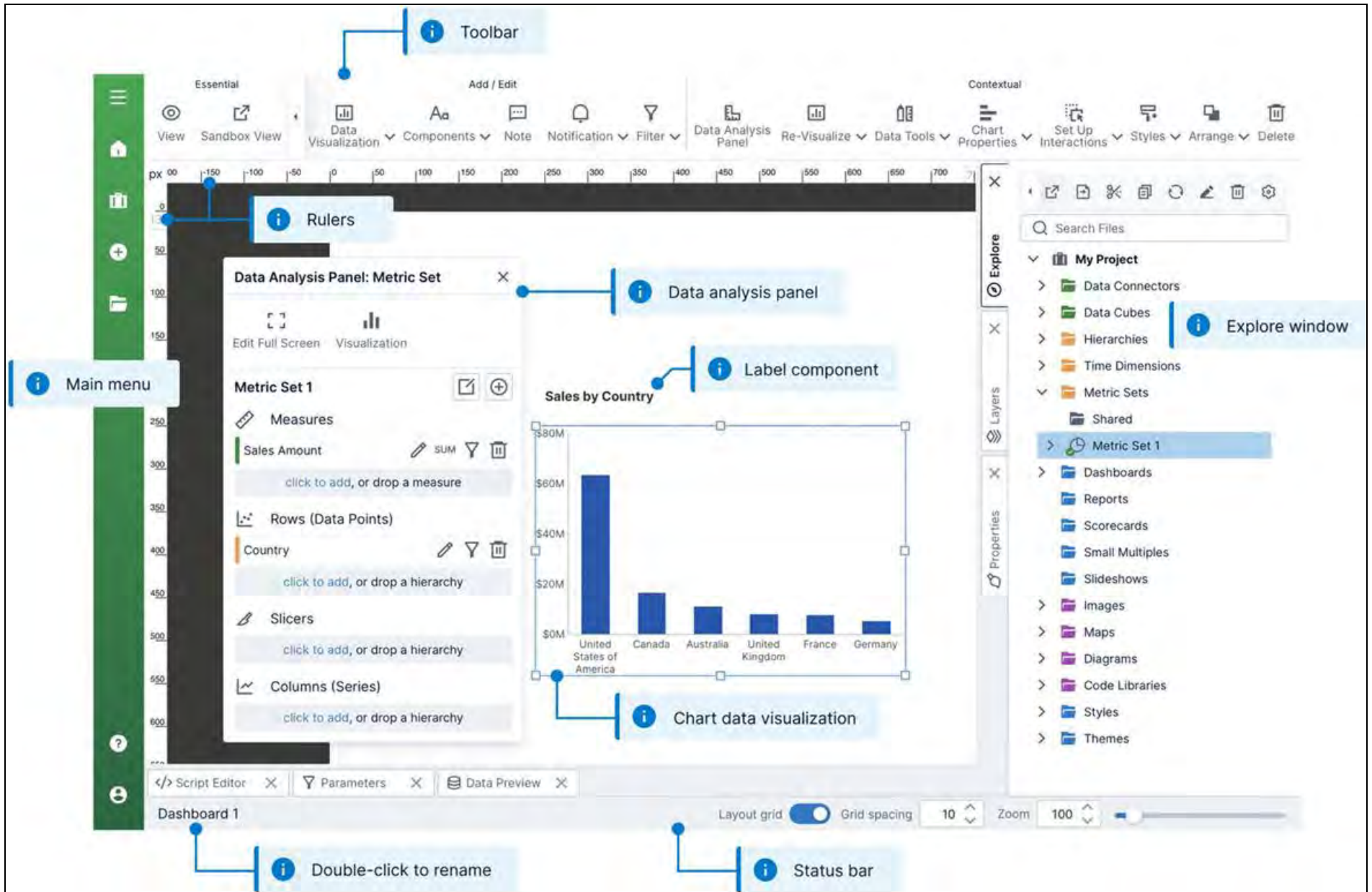
Related video: [Design Dashboards](#)

Walkthrough: [View Data With a Chart and Drill Down](#)

Elements

Elements of the editing canvas include the toolbar at the top, a status bar along the bottom, and the actual design surface with horizontal and vertical rulers. The white, rectangular portion of the design surface represents your dashboard and is generally referred to as the canvas.

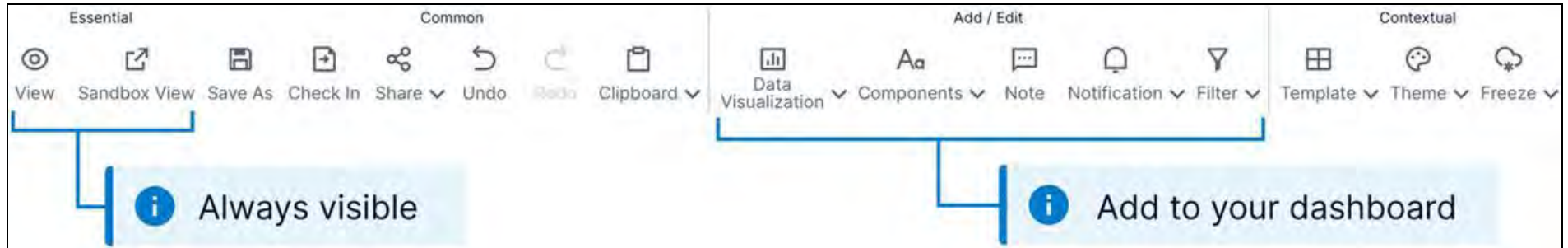
You design dashboards and other views simply by dragging items from the Explore window on the right, and placing them on the canvas. For example, drag a [metric set](#) to the canvas and it will automatically appear as a chart or other type of visualization showing actual data values. Or, add a label component to the canvas and use the **Properties** popup or window to change its font size and color.



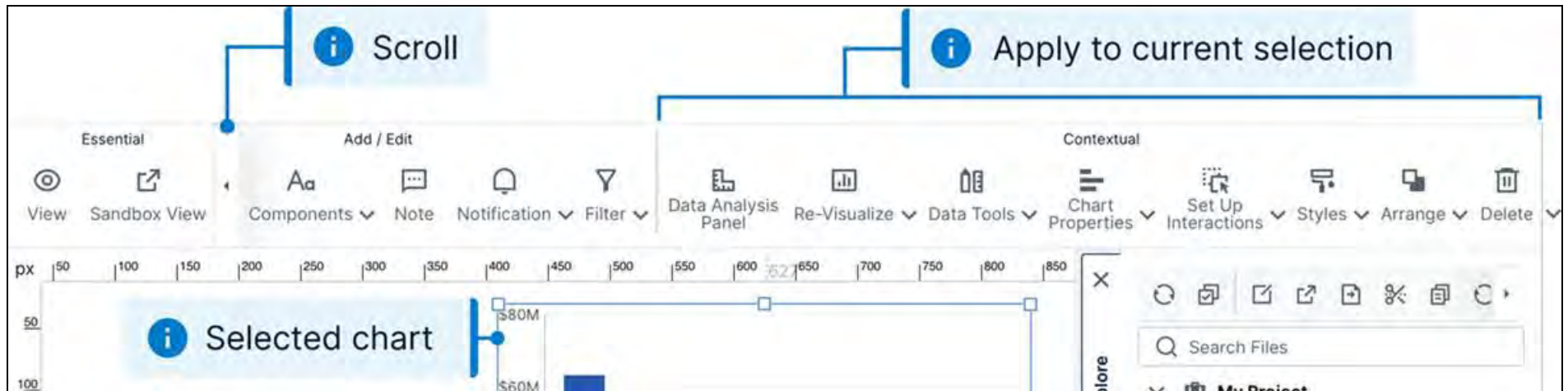
Here's a quick tour of the main elements of the user interface (UI) for editing views.

Toolbar

The toolbar at the top of the screen lets you perform a wide range of design functions. You can copy and paste items from the clipboard, add different types of content to the canvas, or apply a [style or theme](#). Essential operations such as switching to [view mode](#) are always visible in the toolbar while the remaining buttons may be scrolled left or right depending on the available space.



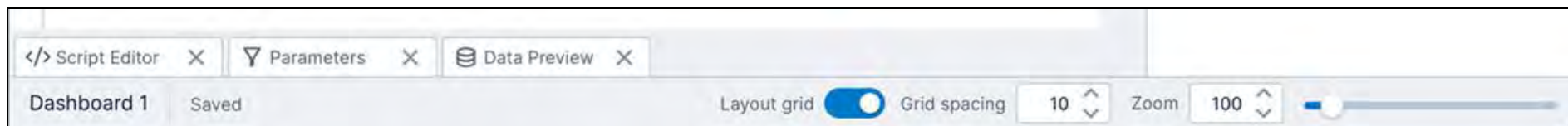
Certain operations appear or disappear from the toolbar according to the current selection. For example, if you select a data visualization on the canvas, you'll see a set of Contextual buttons on the right corresponding to the selected visualization, such as **Re-Visualize**.



Status Bar

The status bar (also known as a taskbar) displays the name of the current dashboard or view, and lets you [rename](#) it as well with a double-click. Hover over or long-tap the name to see its location, including its project and any subfolders.

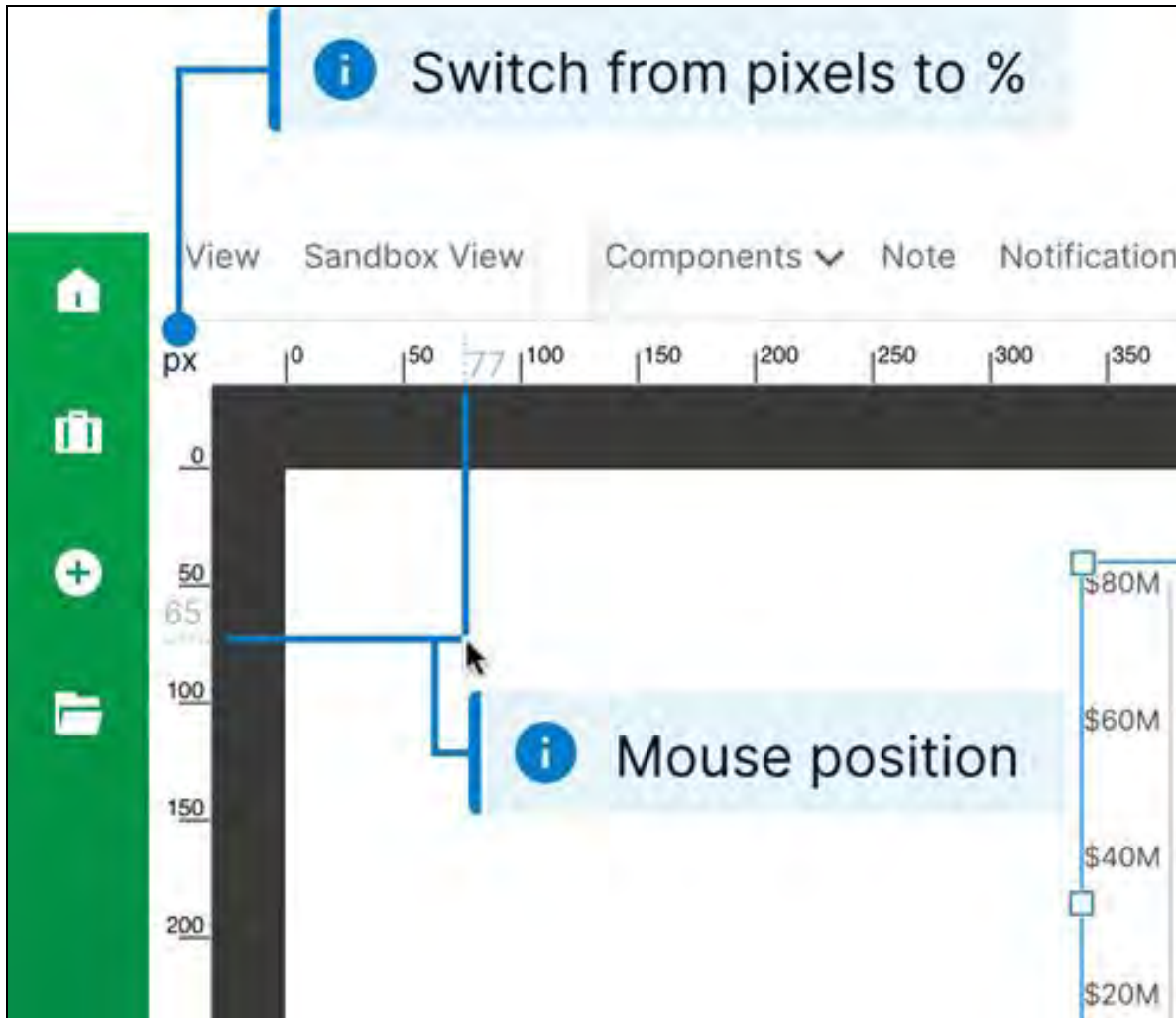
Next to the name is a message area that informs you whenever your editing has been [auto-saved](#). Further to the right, you'll find a set of controls for adjusting the zoom level and snap-to-grid options for the canvas.



See the section below on the canvas and [Using the Status Bar](#).

Rulers

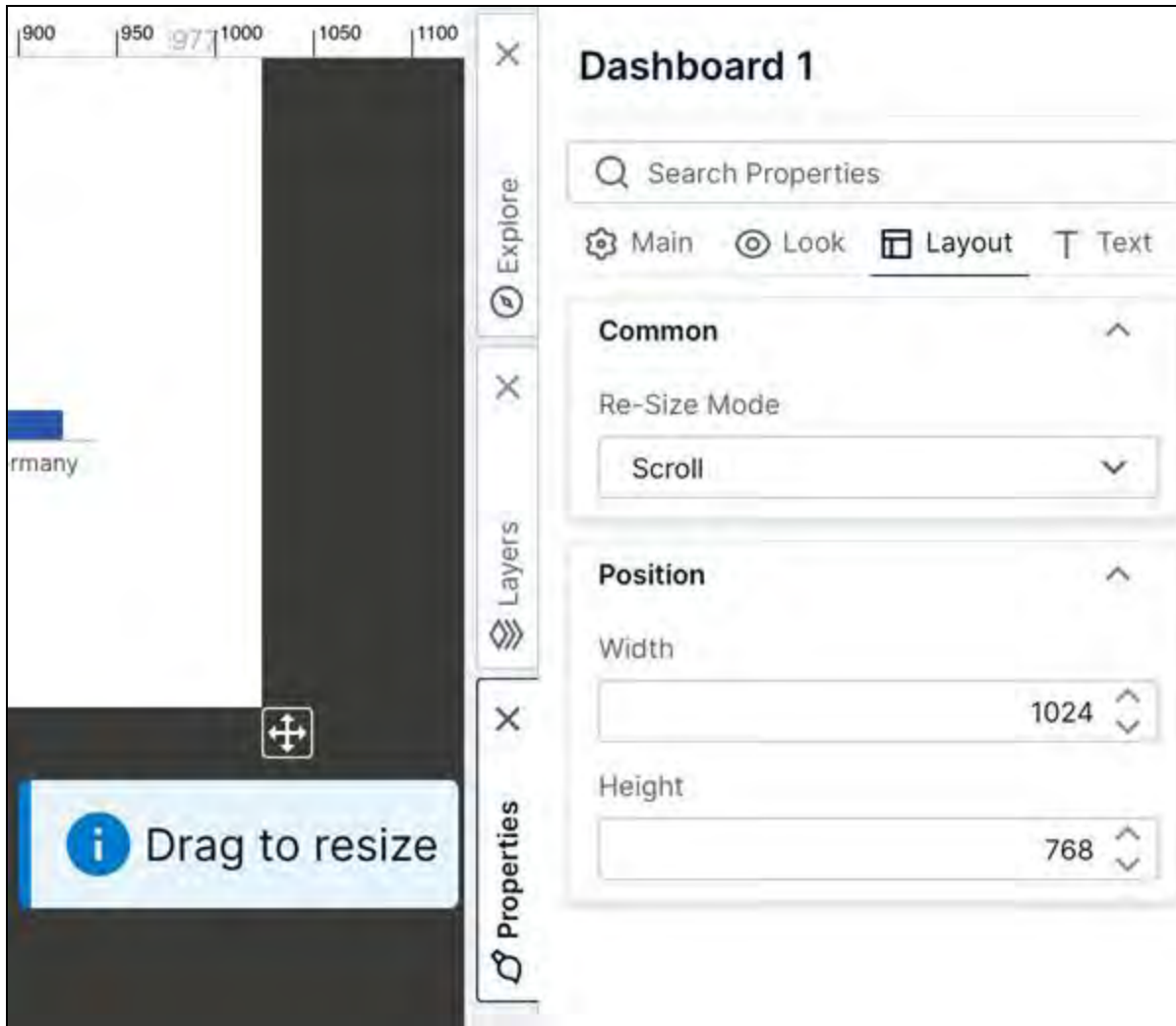
The horizontal and vertical rulers attached to the design surface help you to size and position items on the canvas. The default units are pixels (px), with the top-left corner of the canvas corresponding to the position 0,0. The rulers also track the location of your mouse pointer as you move it.



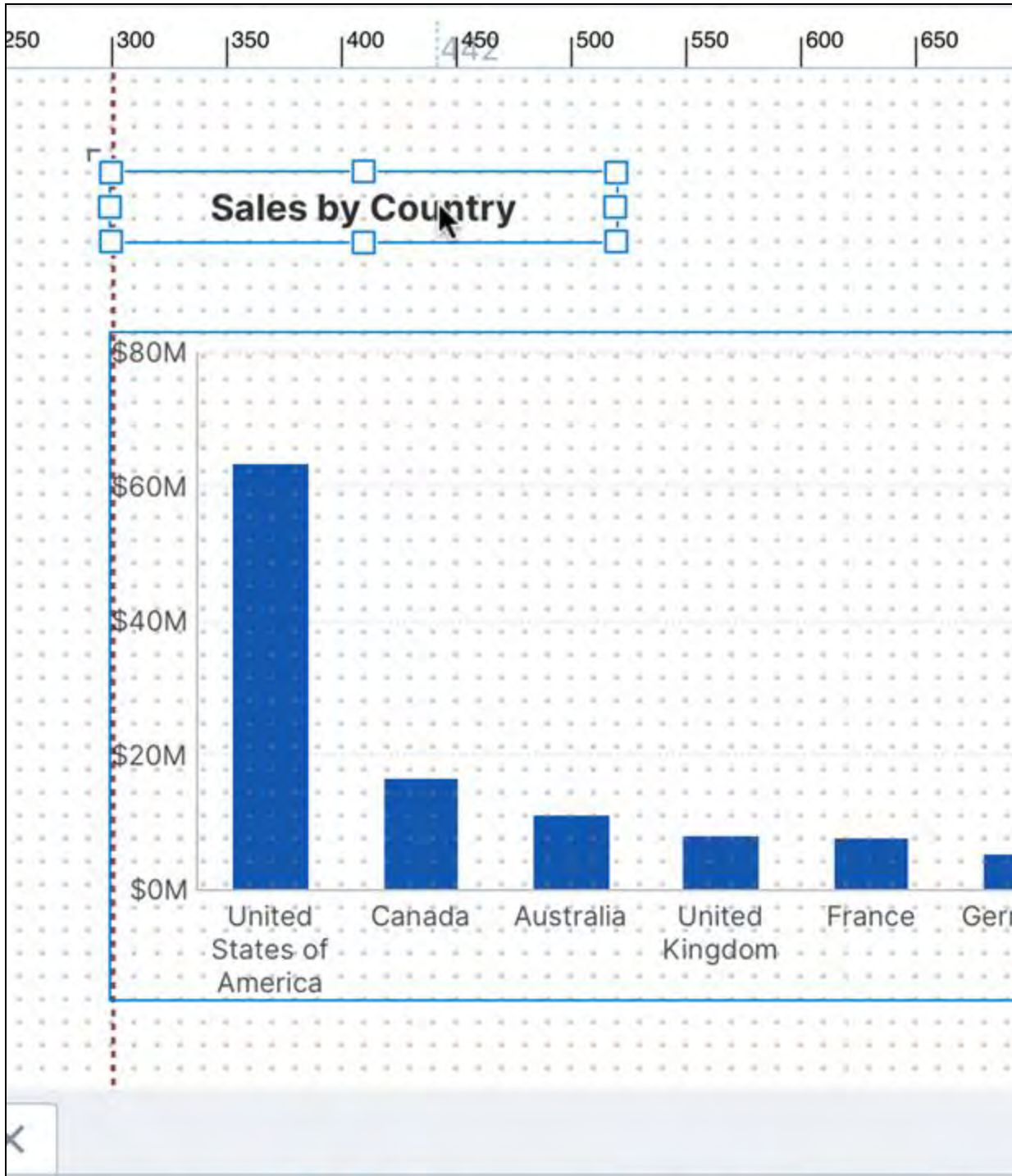
To switch the rulers to percent units, select **px**. In this mode, the bottom-right corner of the canvas corresponds to the position 100%, 100%.

Canvas

The canvas is the rectangular portion of the design surface that corresponds to the dashboard (or other view) that you are editing. When you click outside of any content, the toolbar presents options that are applicable to the view itself and the Properties window displays its properties such as *Re-Size Mode* and *Height*.



As you drag content around the canvas, a grid of dots appears by default to snap content into place to help you with pixel-perfect positioning and spacing. When one item lines up with an edge or the center of another, dashed red lines also appear to easily line them up.



There are [more design tools](#) to help with aligning content. You can also choose a [dashboard template](#) based on a grid when creating a new dashboard, or [add a template grid](#) yourself to more easily snap content into a grid layout.

Right-click (or long-tap) an item on the canvas to open a context menu, which gives you convenient access to many of the same functions available from the toolbar.



Windows

A set of tabbed windows are docked along the bottom and right sides of the screen that you can click to expand, collapse, or switch between. By default, the windows docked on the bottom are collapsed (e.g., the [Parameters](#) window), while the ones docked on the right are expanded (e.g., the Explore window). For details on how to work with and arrange these windows, see [Using dockable windows](#).

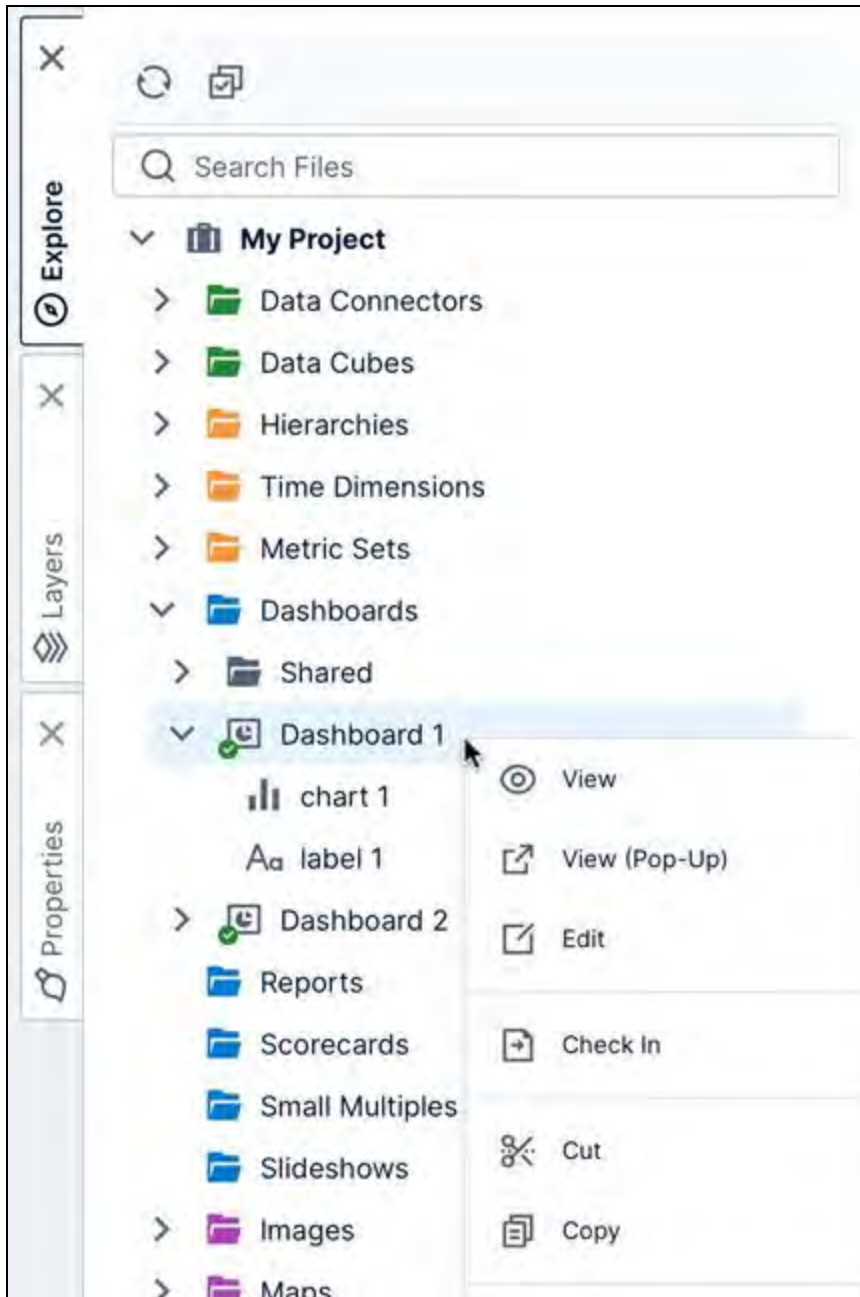


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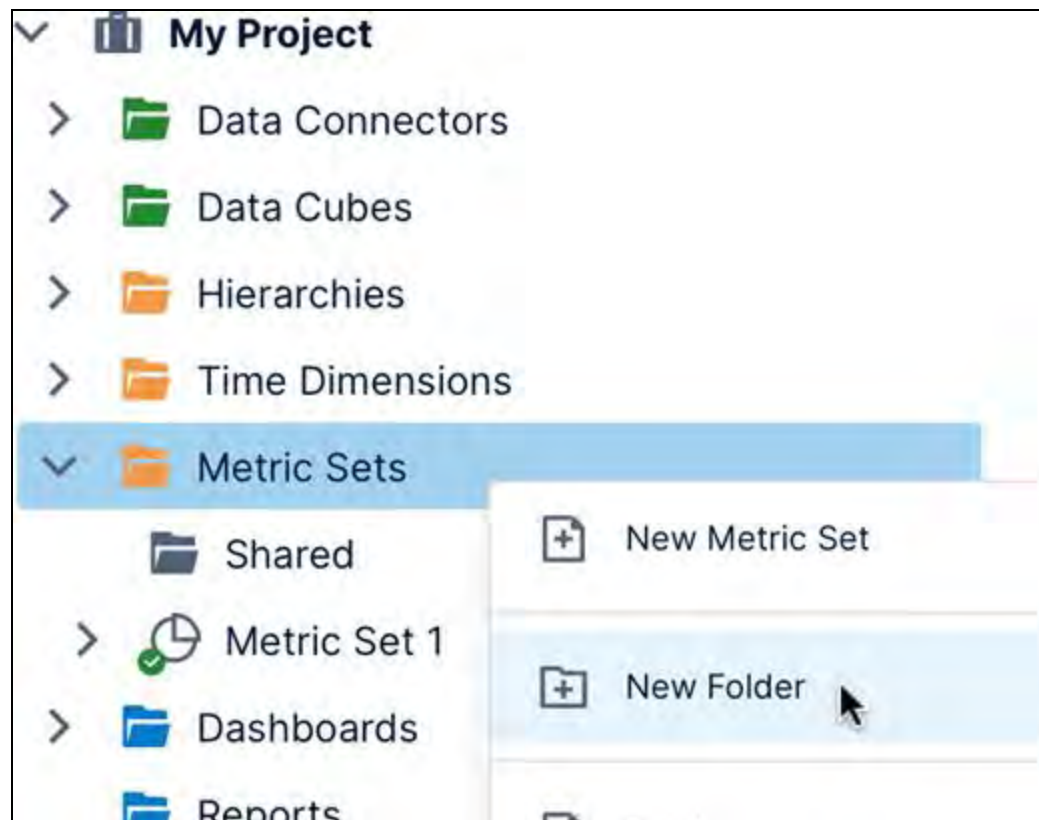
Explore

All of your work is done within the context of a current [project](#), which allows users to collaborate together on the same dashboard or BI effort. The Explore window lets you navigate this project, which appears as a collection of folders containing files such as data connectors, metric sets, and dashboards, some of which can be expanded further.

You can drag almost any of these items directly onto the canvas or on top of one content on it, including all types of data, metric sets, maps, themes, and even other dashboards or views. Expand another dashboard or other view to find its visualizations, which you can drag onto your canvas to reuse.

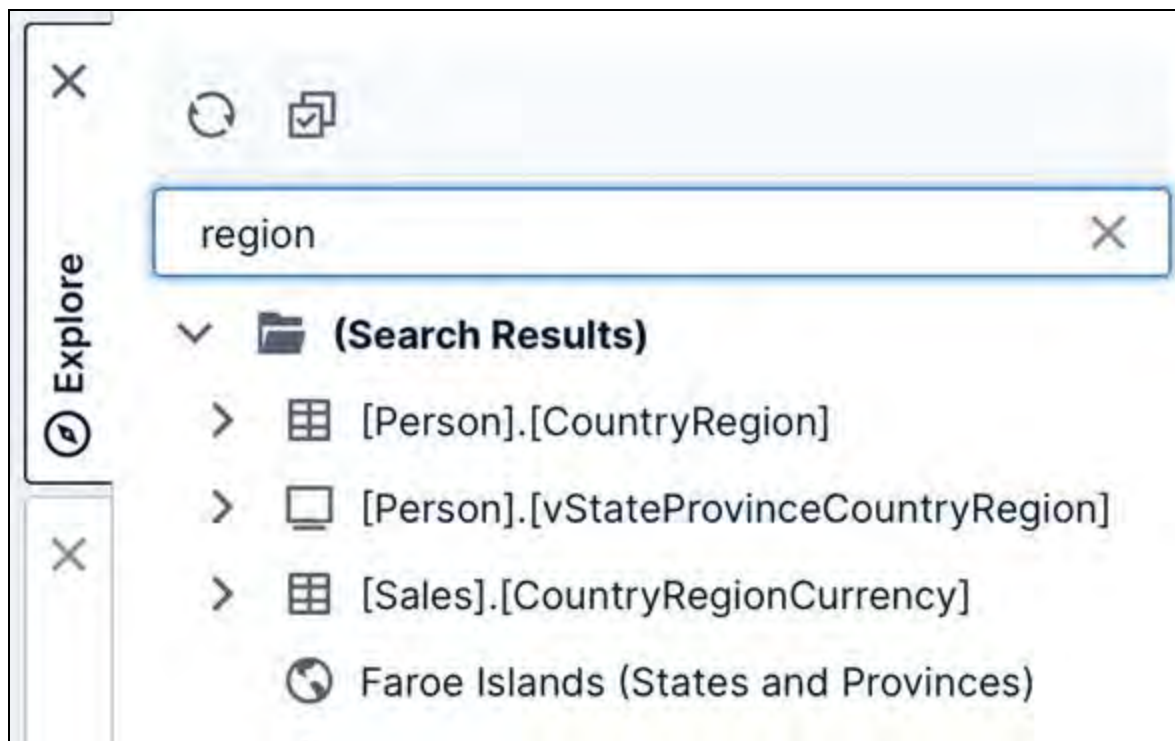


You can quickly switch between different kinds of tasks using the Explore window as an alternative to the [main menu](#), from editing dashboards to creating data cubes and more. For example, right-click (or long-tap) on the Metric Sets folder and select **New Metric Set** to edit a metric set full-screen. Or, select **New Folder** to create a sub-folder, then right-click and **Cut** and **Paste** files to better organize your project items.

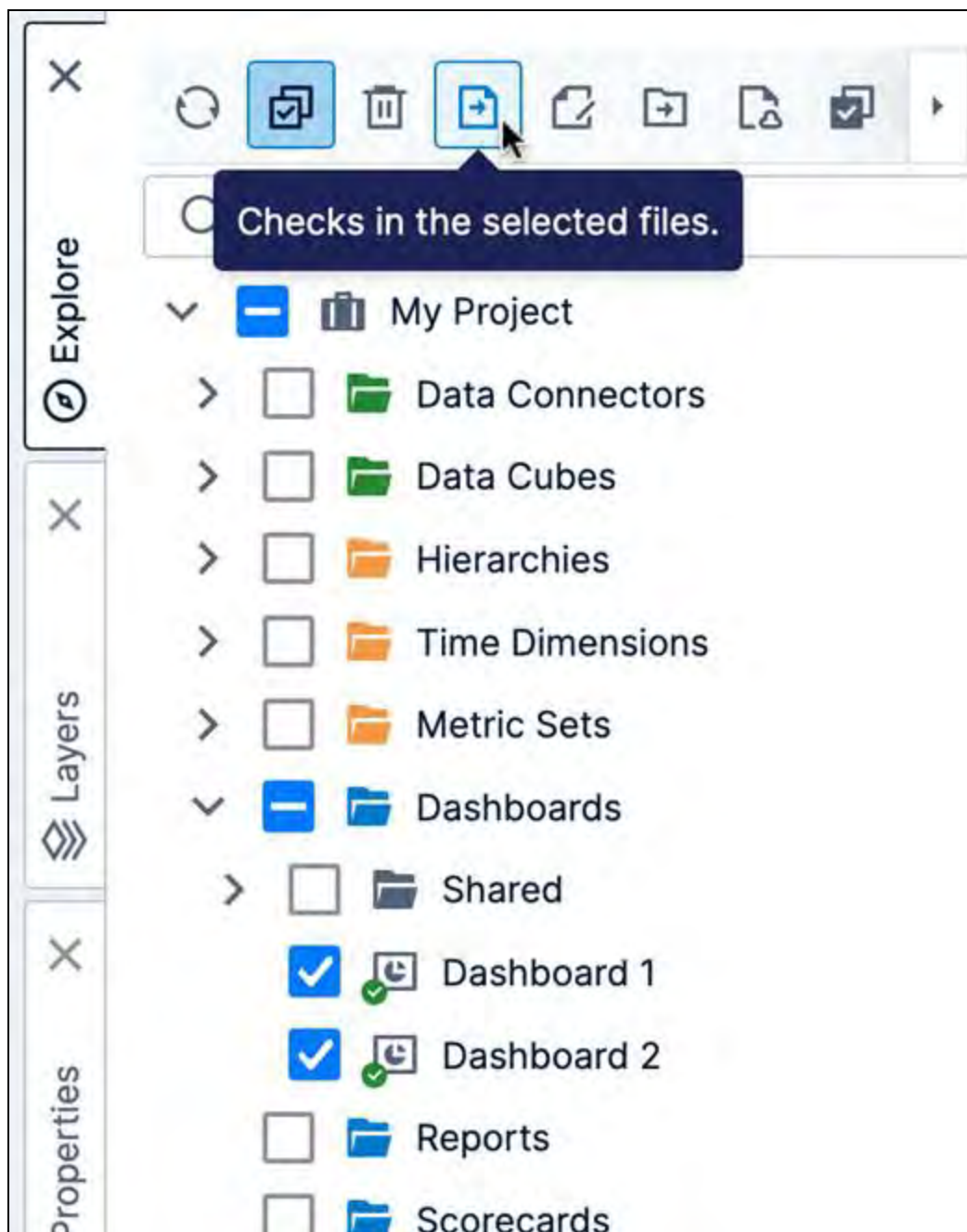


Note: You can hold the [Shift key](#) while dragging files between folders to move them.

Enter search terms in the search box to quickly find the files you want, from database tables to maps.

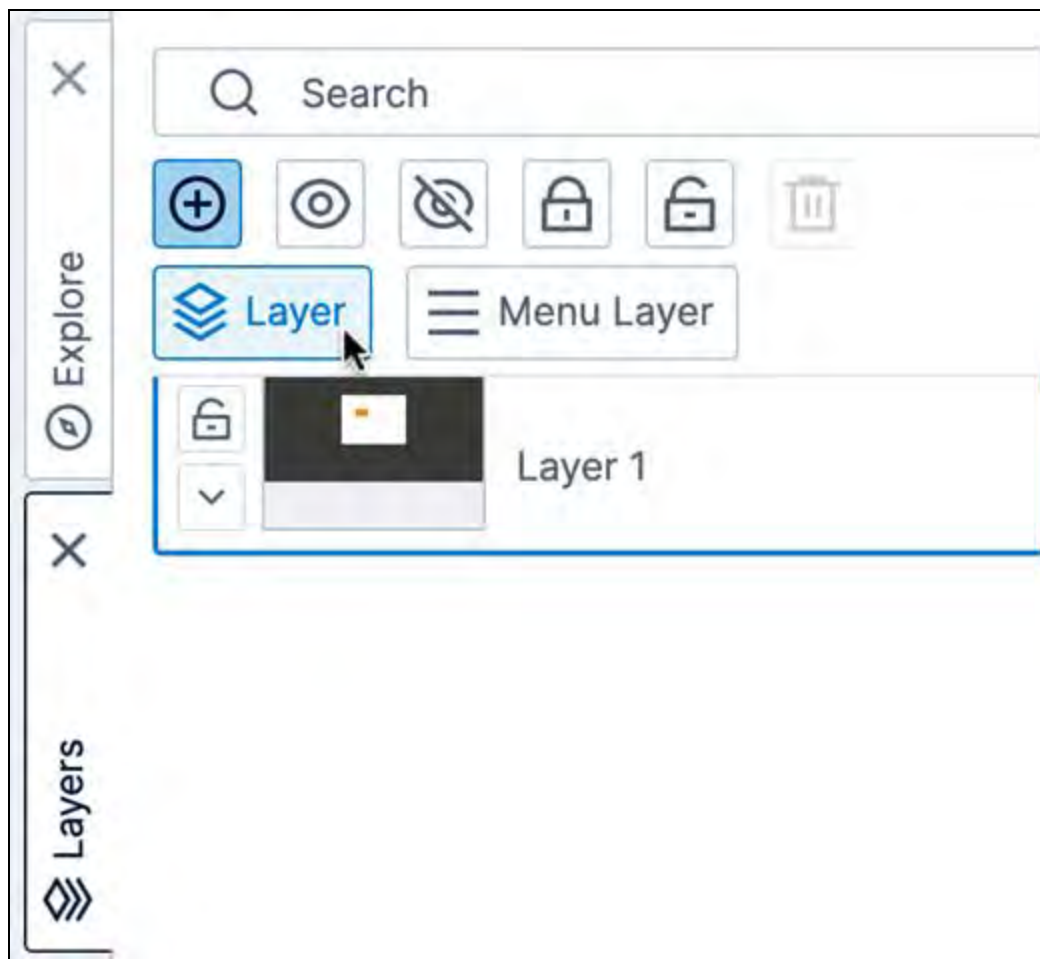


The toolbar at the top of the Explore window lets you enable checkboxes on project items and apply operations such as check in and check out on multiple files at once. The Explore toolbar is also responsive to the current selection in the treeview and presents options similar to those of the context menu.



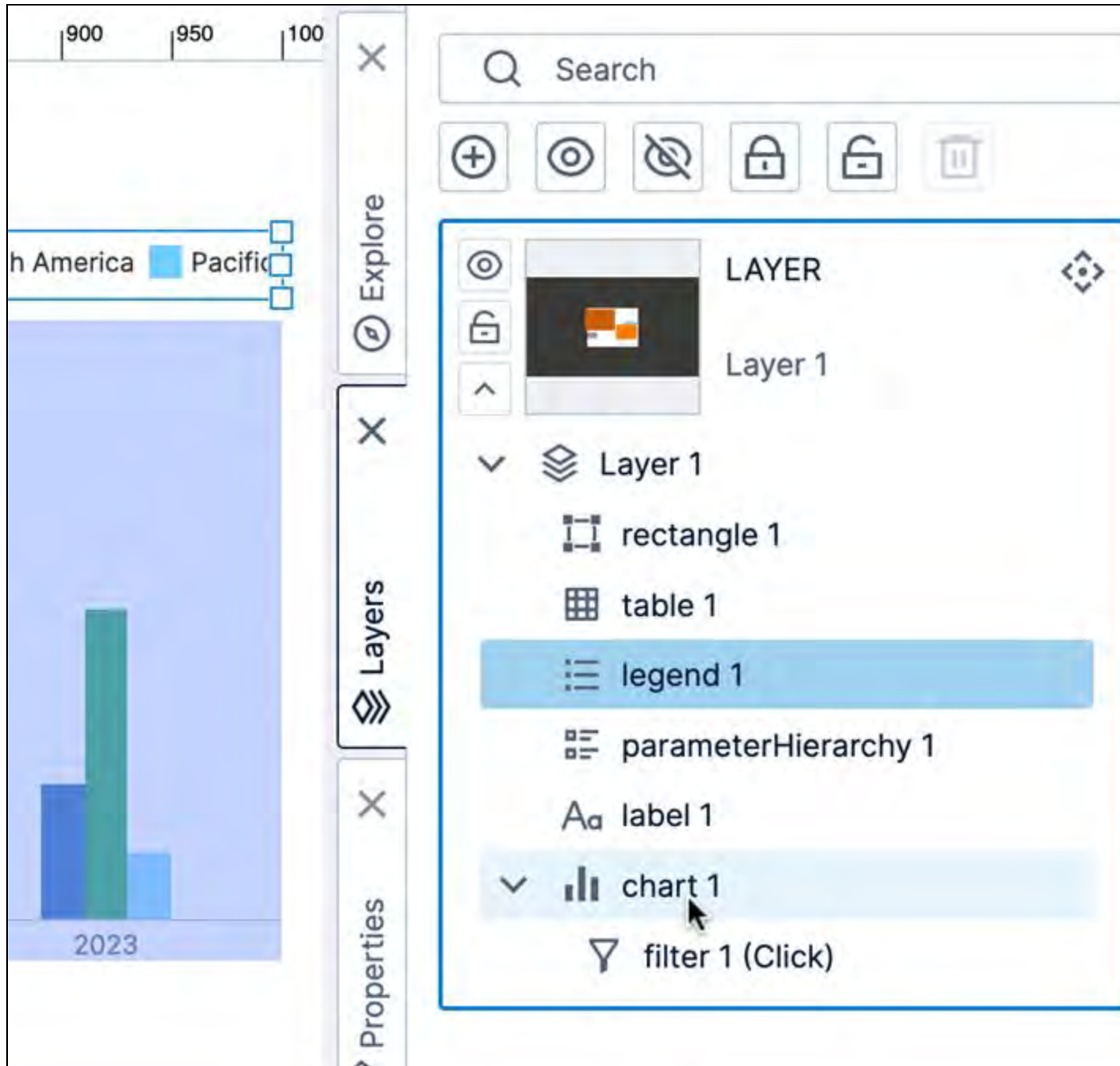
Layers

For [power users](#) and up, **Layers** give you a way to organize items on your canvas as a collective unit, which you can either show or hide while editing, or set up for viewers through interactions to show additional content. When editing a complex dashboard with overlapping content, you can hide or lock layers that you aren't working on.



Every view starts with one layer. Even if you don't add any additional ones, the Layers window is useful for navigating around your canvas because it lists all of its content elements as well as any interactions such as filtering or scripting.

Select to expand a layer to list its elements placed on the canvas. You can also click a listed element to select it or hover over one to highlight it on the canvas.

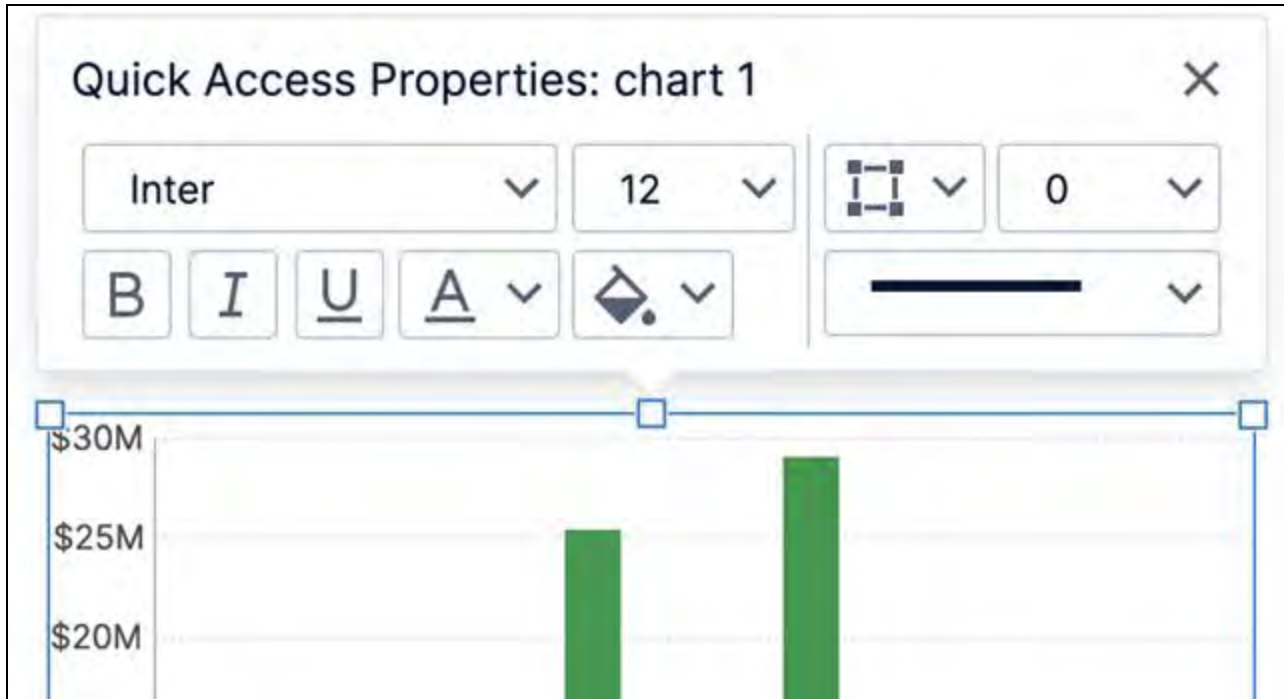


For more details, see [Layers and Groups](#).

Properties

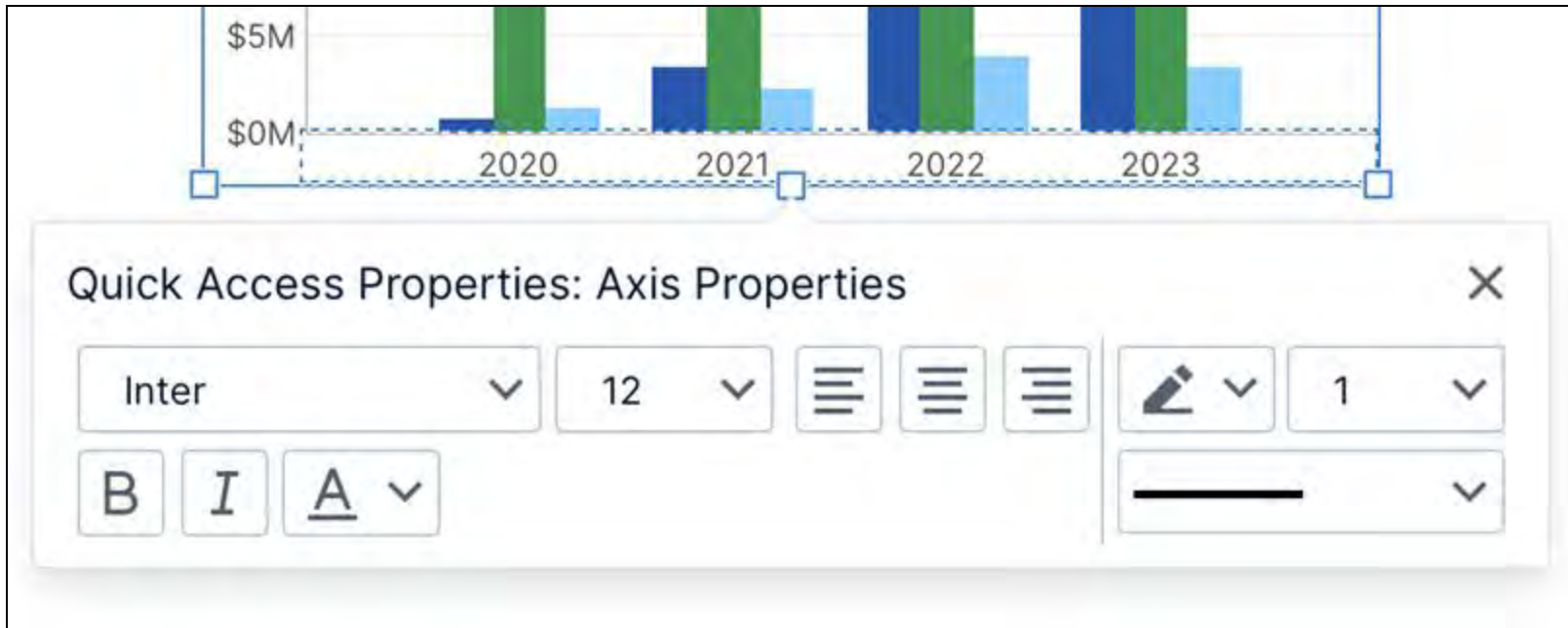
Properties are settings you can customize for visualizations, components, or parts of a view such as the dashboard's canvas.

Some of the most common properties can be accessed from the **Quick Access Properties** panel that appears when selecting an item on the canvas or clicking the canvas itself. All user types can access these properties when editing, which can include various font settings, fill color, and border/outline styling.



The first time a visualization is selected, the **Quick Access Properties** lists properties that apply to the whole visualization, such as the overall font and outer border.

Many visualizations contain various elements within them that each have their own settings. Click again on an individual element that you want to customize, such as a cell in a table, a chart axis and its labels, or a data point series in a chart. The **Quick Access Properties** updates to show the settings that currently apply to that particular element if available.



The full Properties window is available to users with at least a [power user](#) seat type, and lets you view and change the complete set of properties available for the selected items.

Hover over (or long-tap) a property name to view its description in a tooltip. Click the + button to set a value if currently not set, or to add an item.

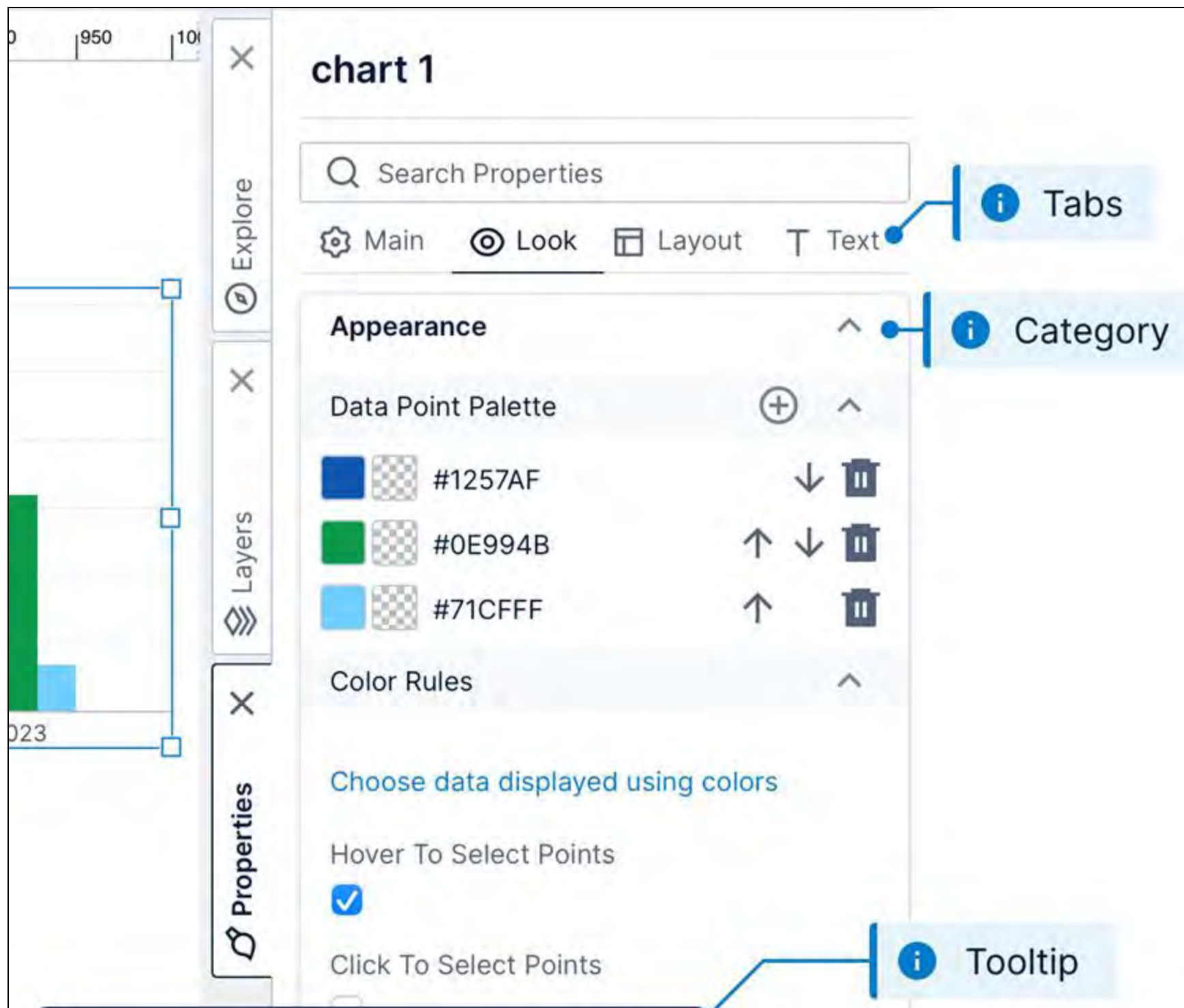


chart 1

Search Properties

Main Look Layout Text

Appearance

Data Point Palette

		#1257AF	↓	
		#0E994B	↑ ↓	
		#71CFFF	↑	

Color Rules

Choose data displayed using colors

Hover To Select Points

☒

Click To Select Points

Tabs

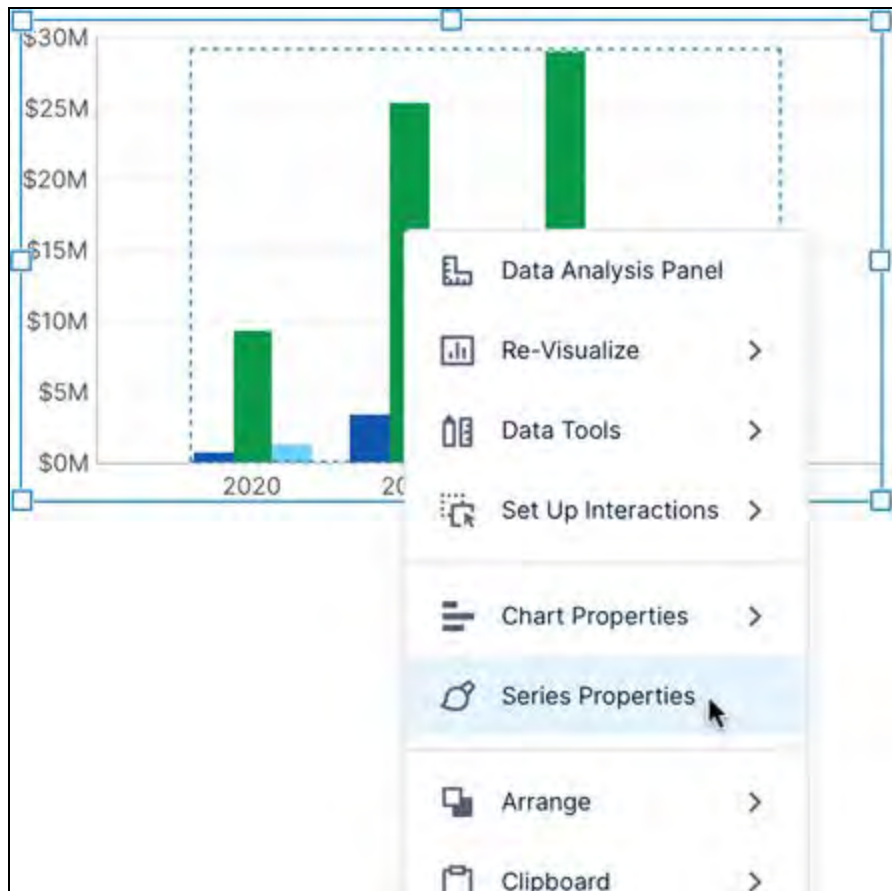
Category

Tooltip

Note: Double-click or right-click a category to expand or collapse them all when navigating through many properties.

If nothing is selected (e.g., you clicked on the canvas outside of any content), the Properties window shows the properties of your dashboard or whichever type of view you are editing. When multiple items are selected, you can set any available properties that are in common for them all at once.

Similar to the **Quick Access Properties**, click on part of your selected visualization or right-click to select a particular element (such as a chart axis or table column) and open its particular subset of properties. Alternatively, go to the **Main** tab of a visualization's properties to find a list of its elements and click one to customize it.

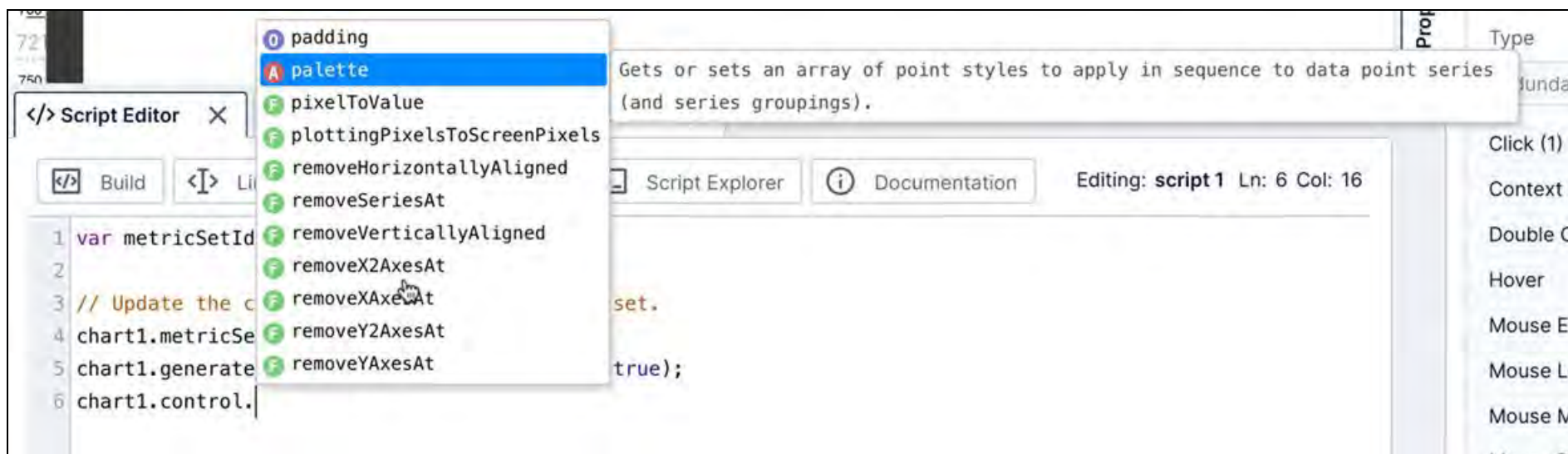


The Properties window also gives you access to the complete set of events supported by the selected item or view. You can add actions to these to trigger some behavior when an event occurs while viewing. See [Using Interactions](#) for details.

Script Editor

The [script editor](#) lets [developer users](#) write JavaScript code using the API to further customize and enhance views beyond the built-in interactions. Various script examples can be found in our [script library](#).

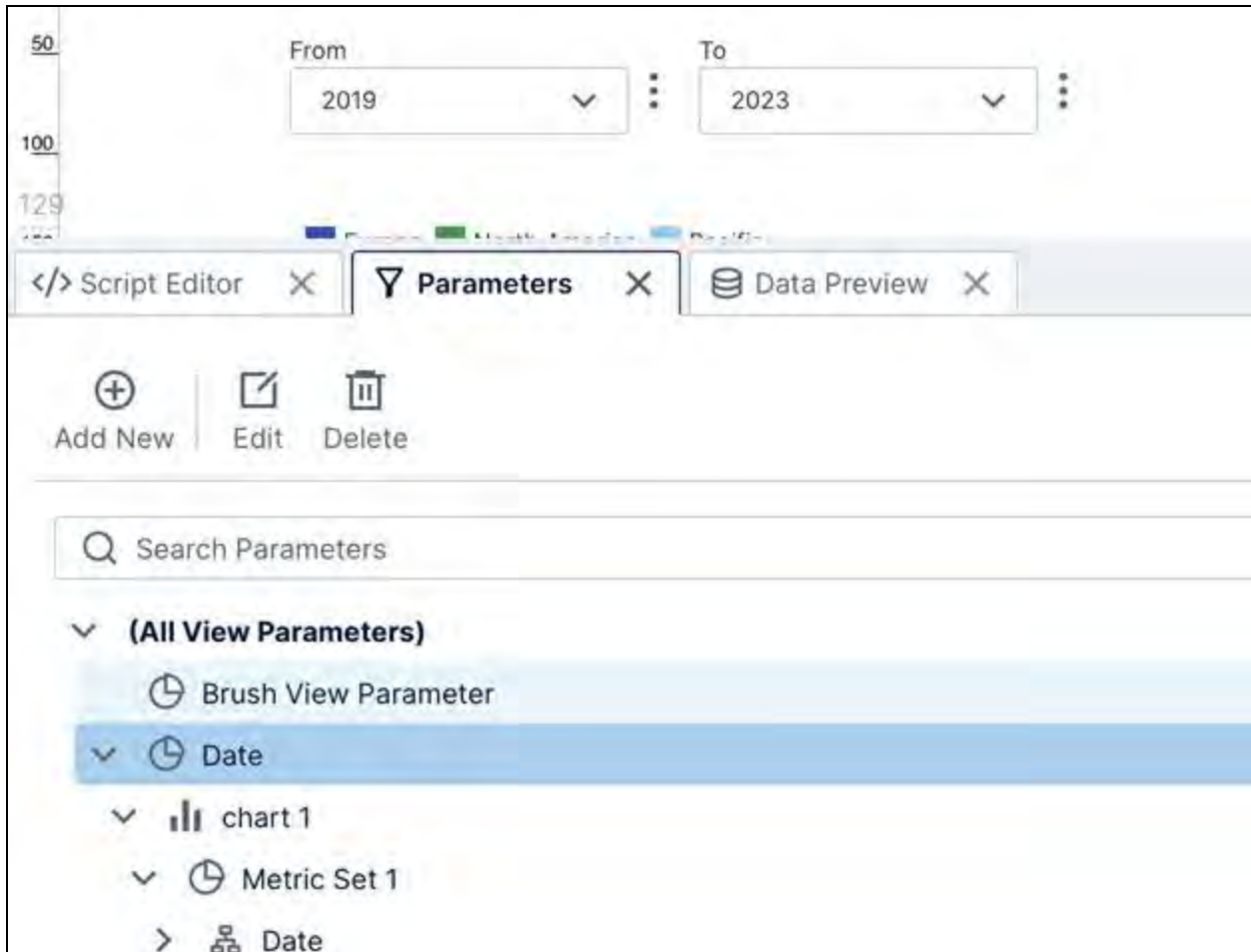
There are built-in pop-ups listing members and descriptions as you type that can you insert into your script, with direct links to the API reference. You can use [code libraries](#) to organize and reuse code between multiple scripts, dashboards, or other views.



Parameters

View parameters pass selected values to data visualizations from a filter, interaction, or script. When you [add a filter](#), a view parameter connects it to visualizations to pass them the selected filter values, or you can create one without a filter control.

Open the **Parameters** window to view and manage the parameters of your dashboard, report, or other view.

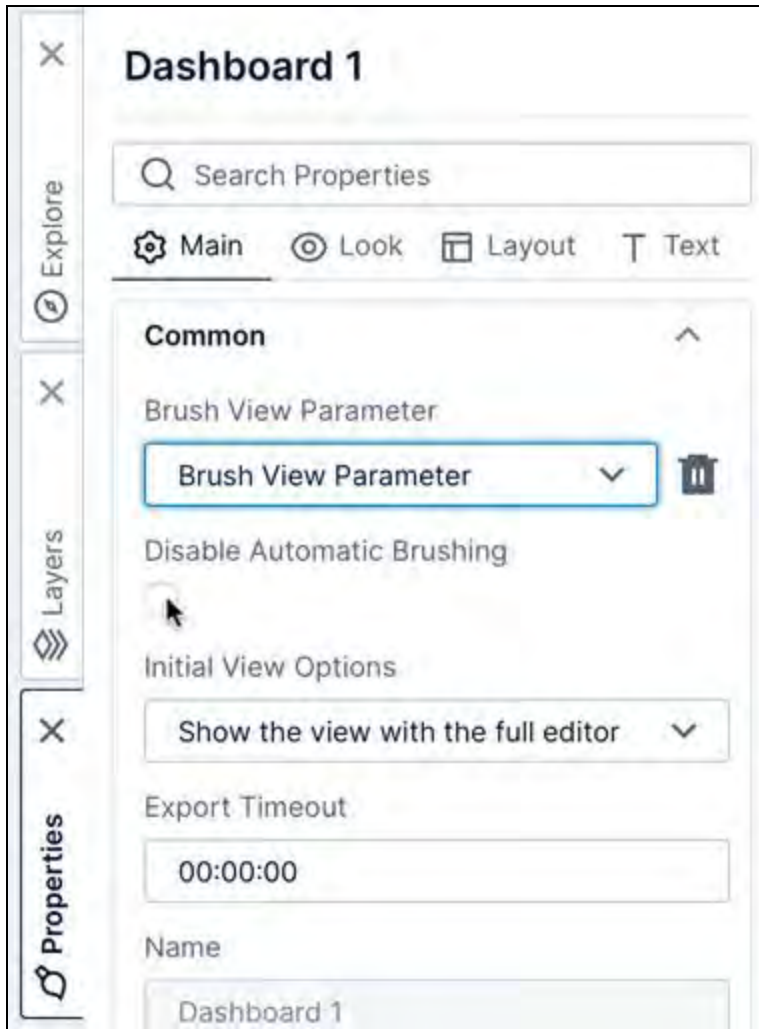


Parameters are used when setting up [interactions](#) to pass data from one visualization or component to another, so that you can click directly on data, for example, to filter, drill down, navigate to details and more.

The **Brush View Parameter** that appears by default in the Parameters window is used for **data brushing** (or **brushing and linking**), which is a built-in feature that allows you to select or hover over data in one visualization and have the same data automatically selected or highlighted in another. The brush view parameter facilitates communication between different data visualizations on your view, automatically indicating the selected data item based on its measure and hierarchy values behind the scenes.



Open the **Properties** window for the view itself (click an empty part of the canvas to de-select any other items) to change the view parameter used for data brushing or disable automatic brushing.



With automatic brushing disabled, you can set up your own custom brushing or selection behavior by [setting up a filter interaction](#) with the **Brush View Parameter** as the target parameter.



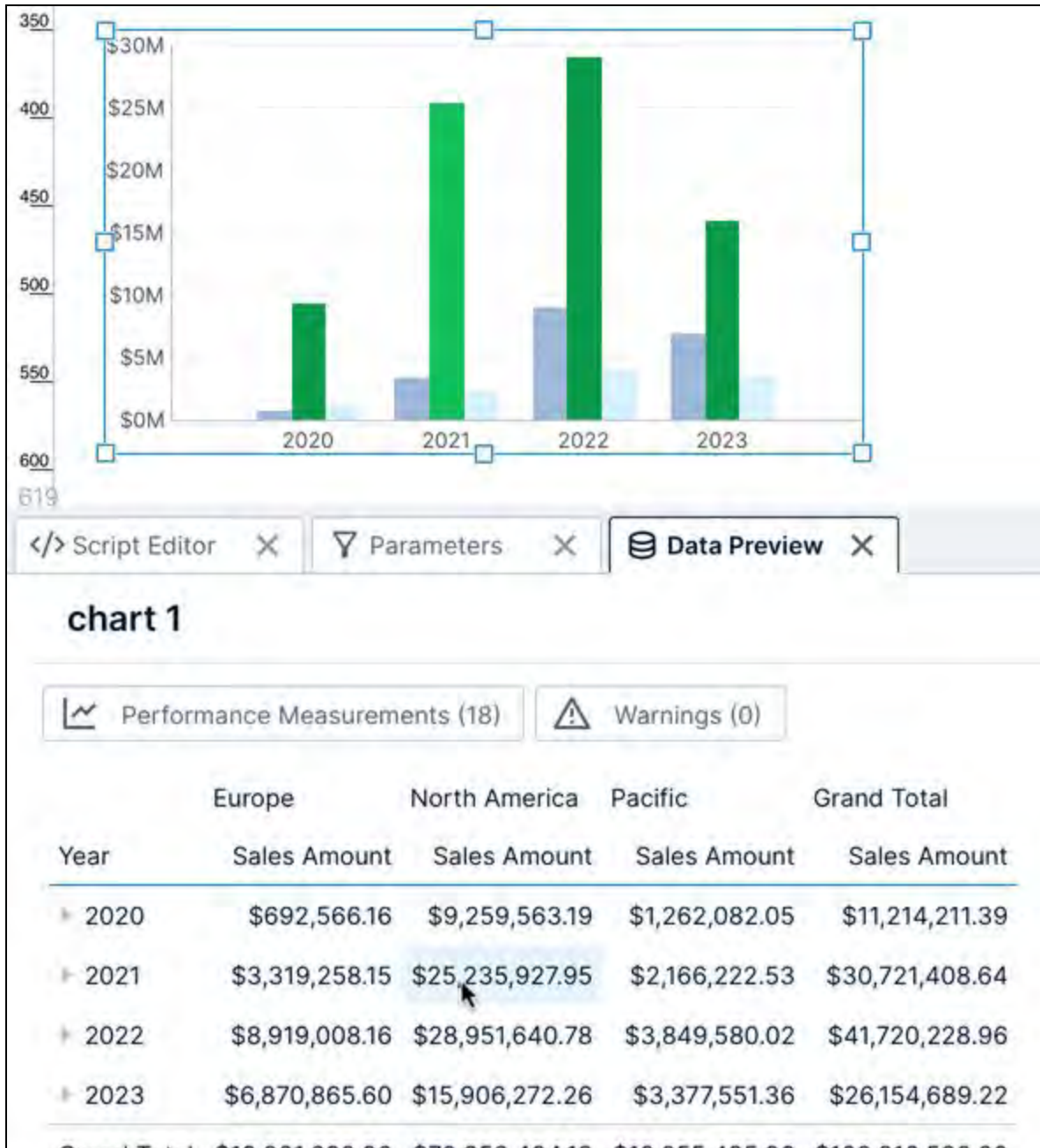
Note: For charts and tables that load additional data as you scroll or zoom, only the loaded data can be passed through parameters.



Data Preview

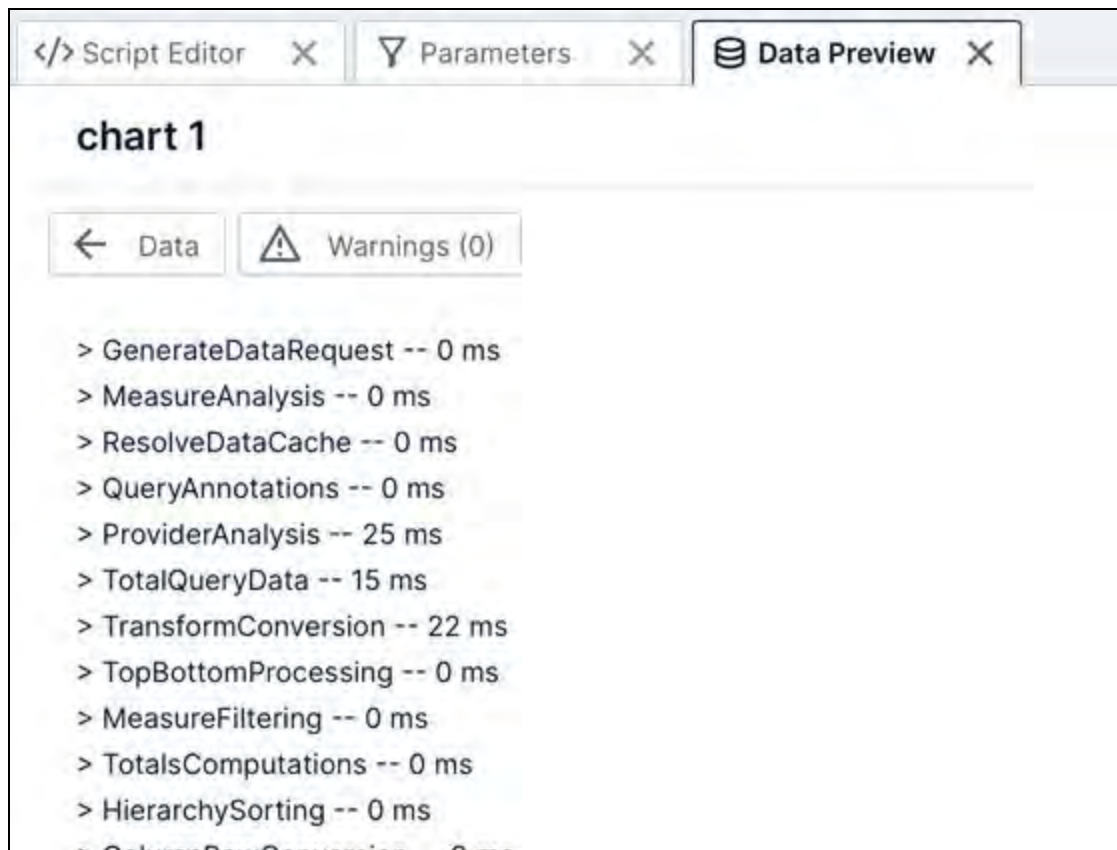
Select a data visualization on the canvas if you are editing a dashboard or view, and then open the Data Preview window to see the underlying data values displayed in a table. Note that the displayed preview may differ from the resulting data visualization, for example totals are normally [hidden](#) in charts.

Hover over a table cell, or click to select a row or column in the **Data Preview** window, and corresponding data will be highlighted in your own visualizations. This is an example of the automatic data brushing.



Clicking to select rows or columns will also display corresponding statistics in the [status bar](#).

The Data Preview window also lets you [view performance measurements](#) and warning messages related to data retrieval for the selected data visualization on the canvas.



Note: The performance measurements and warnings shown when nothing is selected reflect only the First load information, and will not update with changes to the dashboard.

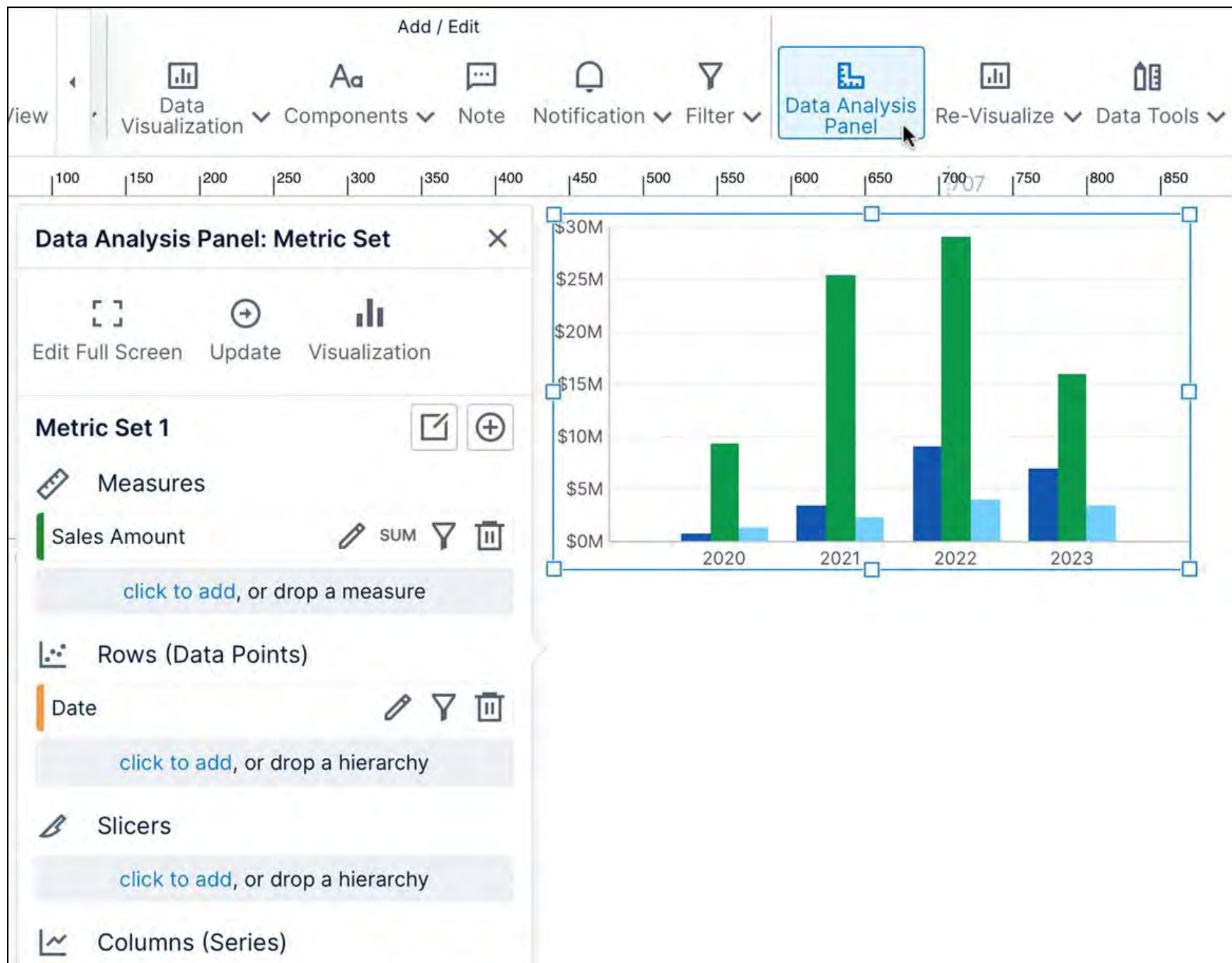
Data Analysis Panel

For every data visualization, there is a corresponding metric set that encapsulates the data itself, and visualization settings that assign data to parts of the data visualization. The **Data Analysis Panel** manages all these data-related settings, whereas the [Properties window](#) is used for visualization- specific settings for appearance, animation, interactivity, etc.



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If not yet open, click to select a visualization and choose it from the toolbar or right-click/context menu.





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If the metric set is [checked out](#) to you (including if you [created it on the dashboard](#) or view directly), you can add or remove data and change other metric set settings from the Data Analysis Panel. Switch to the **Visualization** settings using the button at the top.

See [Slicers Versus Columns and Rows](#), and [Setting Up the Visualization](#).

For more information, see:

- Walkthrough: [View Data With a Chart and Drill Down](#)
- [Symphony Metric Sets](#)
- [Setting Up the Visualization](#)
- [Slicers Versus Columns and Rows](#)
- [Using the HTML Label Component](#)
- [Accessibility](#)
- [Using Personalization](#)
- [Using Menu Layers](#)
- [Using Image Brushes](#)
- [Edit Versus View Mode and Sandbox View](#)
- [Using a Template Grid for Resizing](#)
- [Using Interactions](#)
- [Working With Projects](#)
- [List of Keyboard Shortcuts](#)



Design Tips

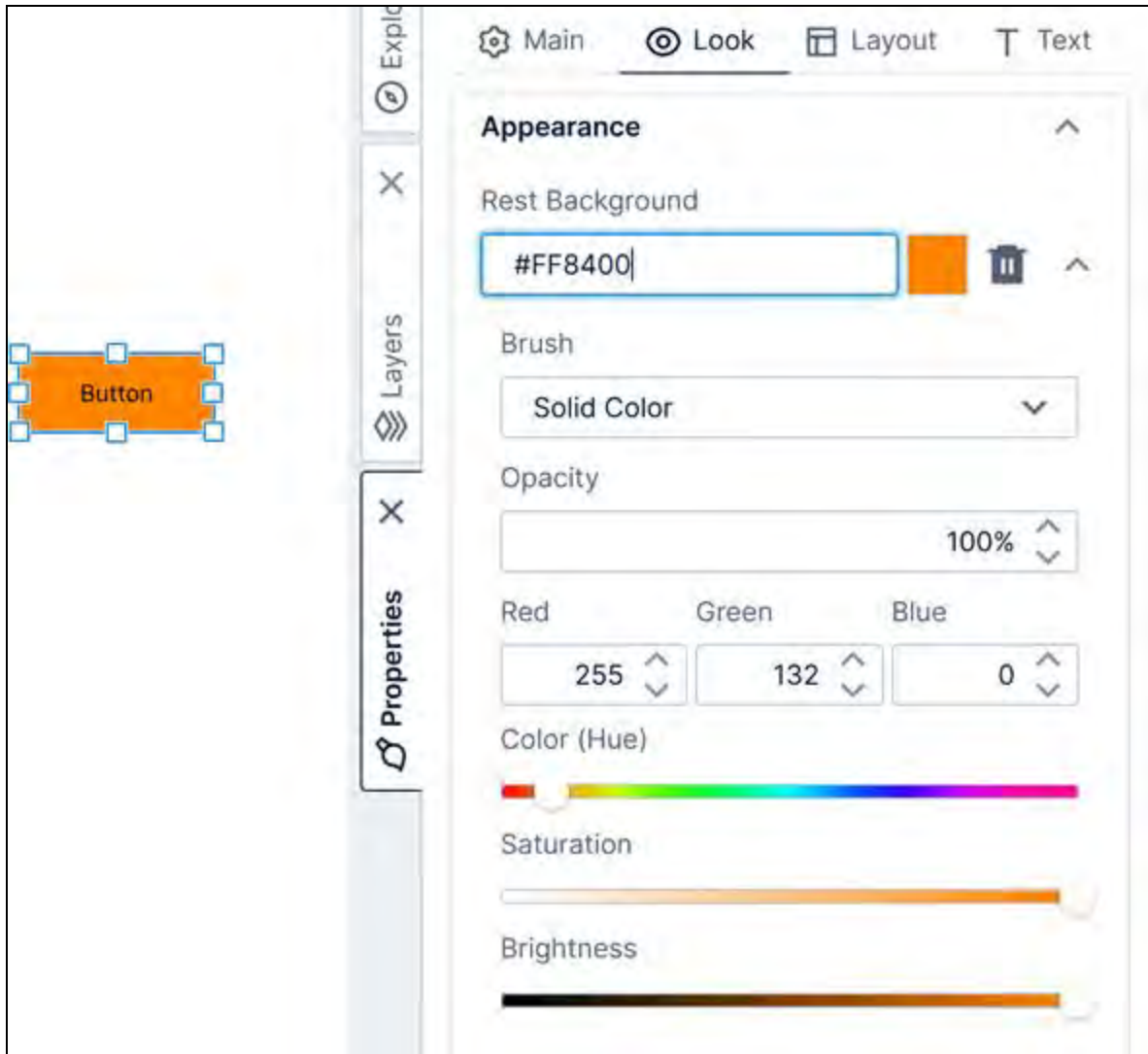
This applies to: *Managed Dashboards, Managed Reports*

Here are some design tips for designing dashboards, reports, and other views.

Brush Editor

When setting a color in the **Properties** window, you can choose or enter a color in a number of ways:

- Type a color name into the text box or choose one from the list that appears.
- Type or paste in a hex code or RGB/RGBA value like those described below to precisely enter or paste in any color.
- Click the down arrow button to expand a set of inputs and sliders you can use to interactively find and adjust your color.



Hex codes and other color codes like the following are common, and make it easy to to paste in an existing color you have from another app.

You can also copy one from one property and paste it into another using **Ctrl+C** and **Ctrl+V** or ⌘ **C** and ⌘ **V** on your keyboard.

Format	Sample	Color
3 hex characters	#F00	Red

Format	Sample	Color
3 hex characters without hashmark	F0F	Fuchsia
6 hex characters	#FFFFFF	White
6 hex characters without hashmark	808080	Gray
8 hex characters	#FF00007F	Red at 50% Opacity
rgb()	rgb(255,255,0)	Yellow
rgba()	rgba(0,255,255,0.5)	Aqua with 50% Opacity
RGB values with spaces	255 255 255	White
RGB values with commas	255,255,255	White
RGBA values with spaces	255 255 0 0.75	Yellow with 75% Opacity
color name with alpha	red 0.5	Red with 50% Opacity
3 hex characters with alpha	333 .5	#333333 with 50% Opacity
6 hex characters with alpha	696969 .5	DimGray with 50% Opacity

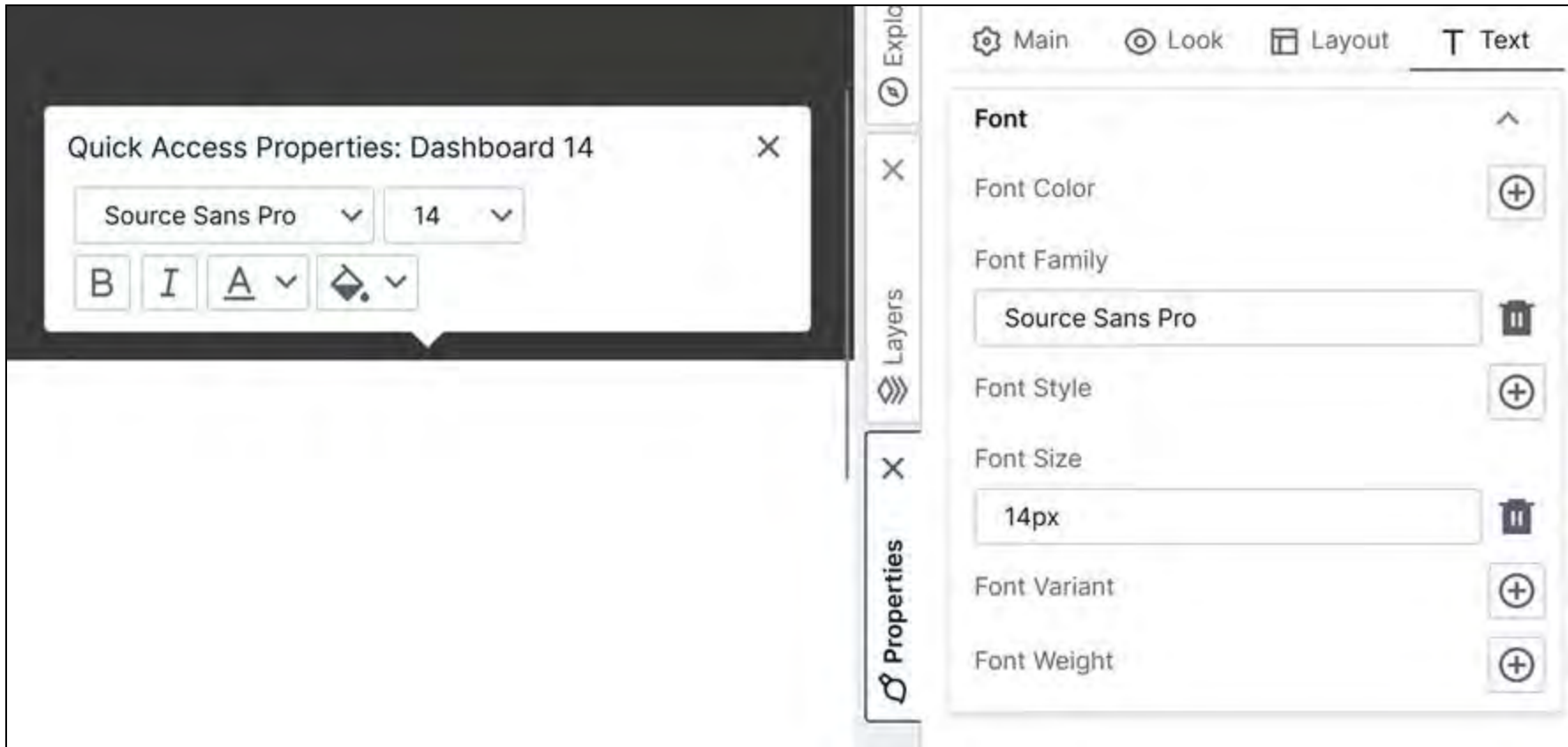
When the **Brush** drop-down appears, you can change it from Solid Color to more complex fill options such as:

- Linear Gradient
- Radial Gradient
- [Using Image Brushes](#)
- Hatching

Default Font Settings

You can define the font settings for the whole dashboard or [template](#). All items on the dashboard will default to these settings, but you can still override them when necessary by setting font properties separately on an individual item.

With nothing selected on the dashboard, open the **Properties** panel and go to the **Text** tab. Or select an empty area of the canvas and the **Quick Access Properties** pop up opens, giving you access to most of the same options.



Note: All web browsers render fonts slightly differently. For example, this may cause a [table visualization](#) in some browsers to show a vertical scrollbar that does not appear when using other browsers. In most cases, you can resolve such issues by resizing the table a bit larger. Alternatively, check that the sizing looks correct in other browsers.

Re-Size Action

You can add a **Re-Size** script action on a view such as a dashboard to respond when the view is resized. This may occur when the user resizes their browser or when the orientation is changed on the user's device (orientation changes may not always be detected because some devices fire a different event in this situation).

Scripting the Re-Size action may be useful for responsive design. For example:



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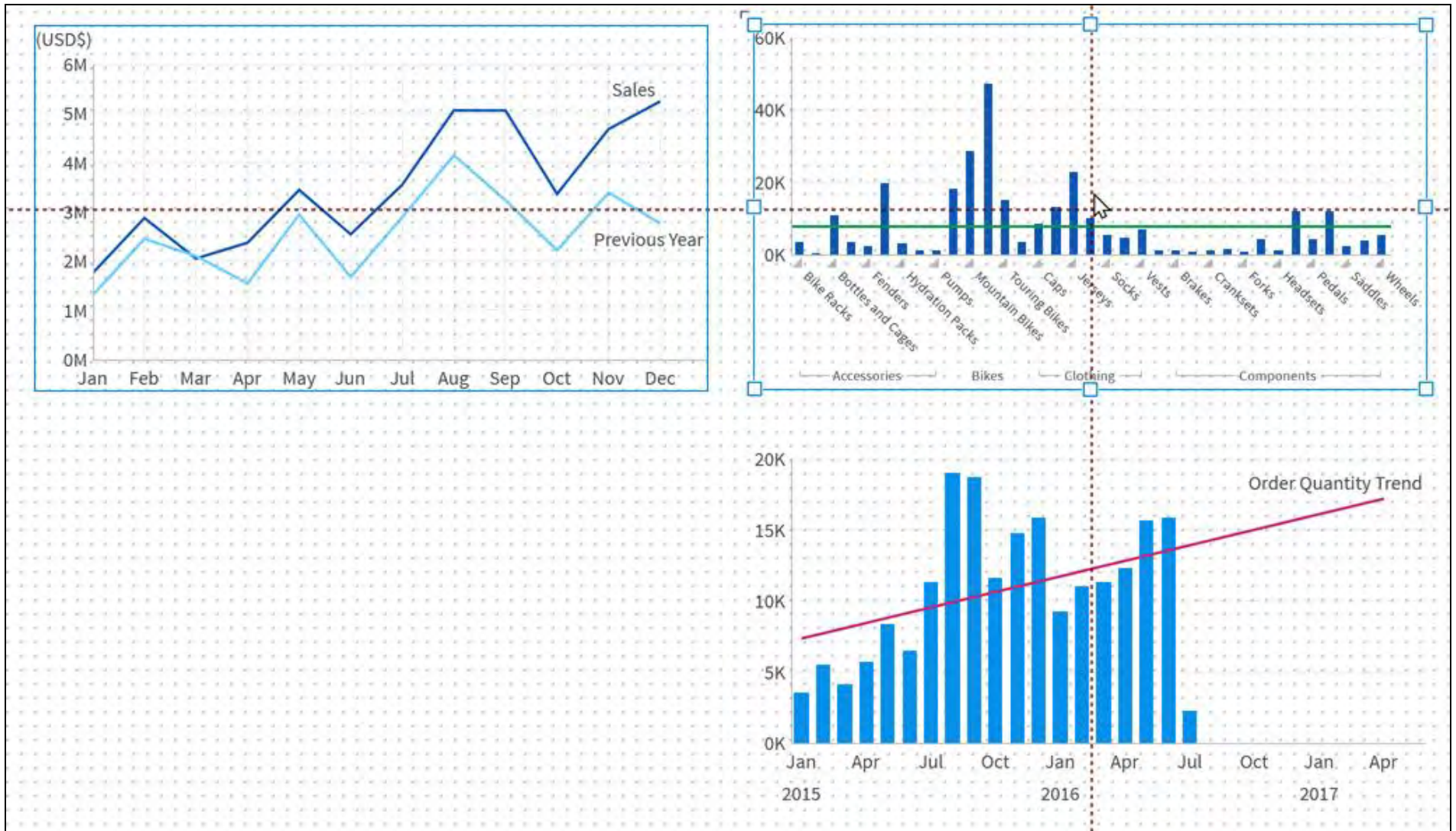
- Add a script to detect a change in screen width (e.g., from 500 px to 1200 px), and then show or hide layers in response.
- Add a script to detect a change in screen width, and then redirect to another dashboard more suited for the size of the screen.

See [Using Interactions](#) for details on adding actions in the **Properties** window.

Align Content

As you drag or resize any item, contextual guidelines (dotted lines) appear to help you align it with other content.

When your item snaps into alignment with another, a red line is displayed along the points that are being aligned (such as the center or edge of each element), and the outer boundaries of the other items appear.

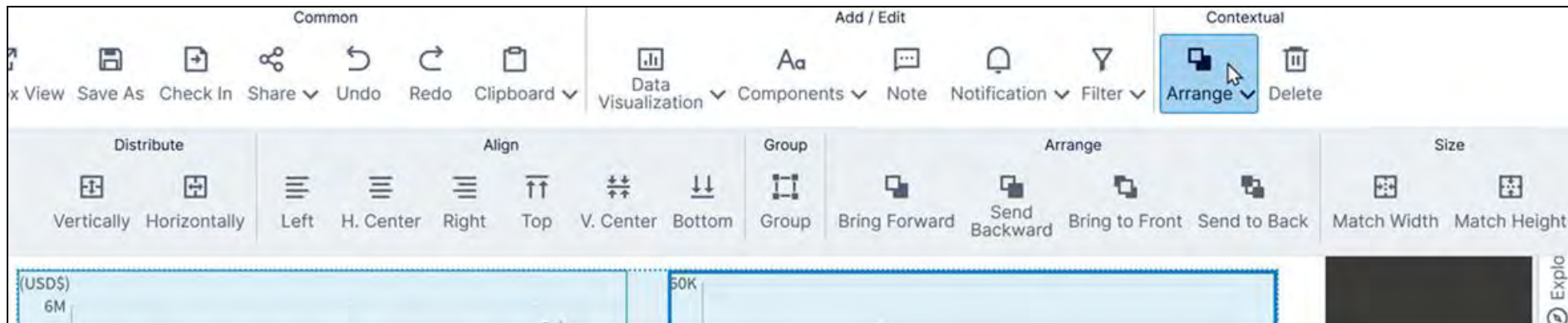


If you want to temporarily disable snapping to other content, hold the [List of Keyboard Shortcuts](#) while dragging or resizing.

If the snap grid is enabled, positions are also snapped to the grid of dots that appear while dragging or resizing. You can turn this off in [the status bar](#) or by holding the **Ctrl** (control) key.

Arrange Multiple Items

When multiple elements are selected, you can adjust their alignment using the **Arrange** option on the toolbar.

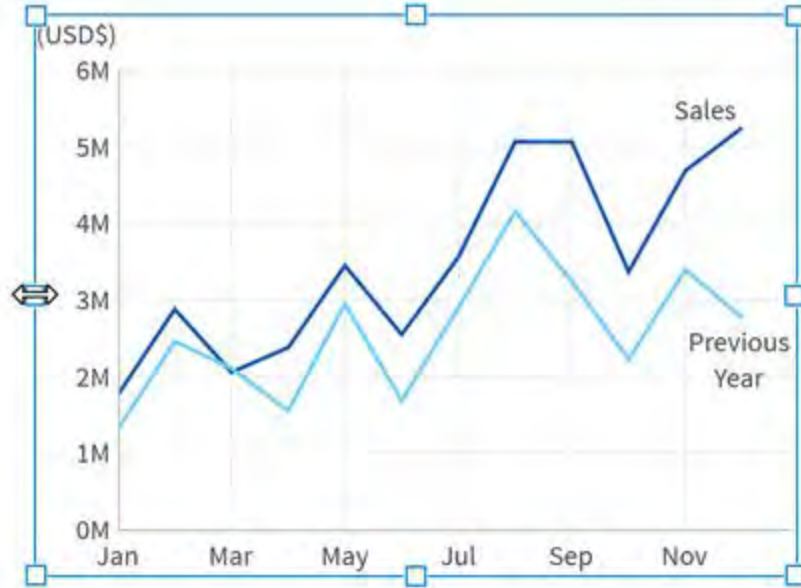


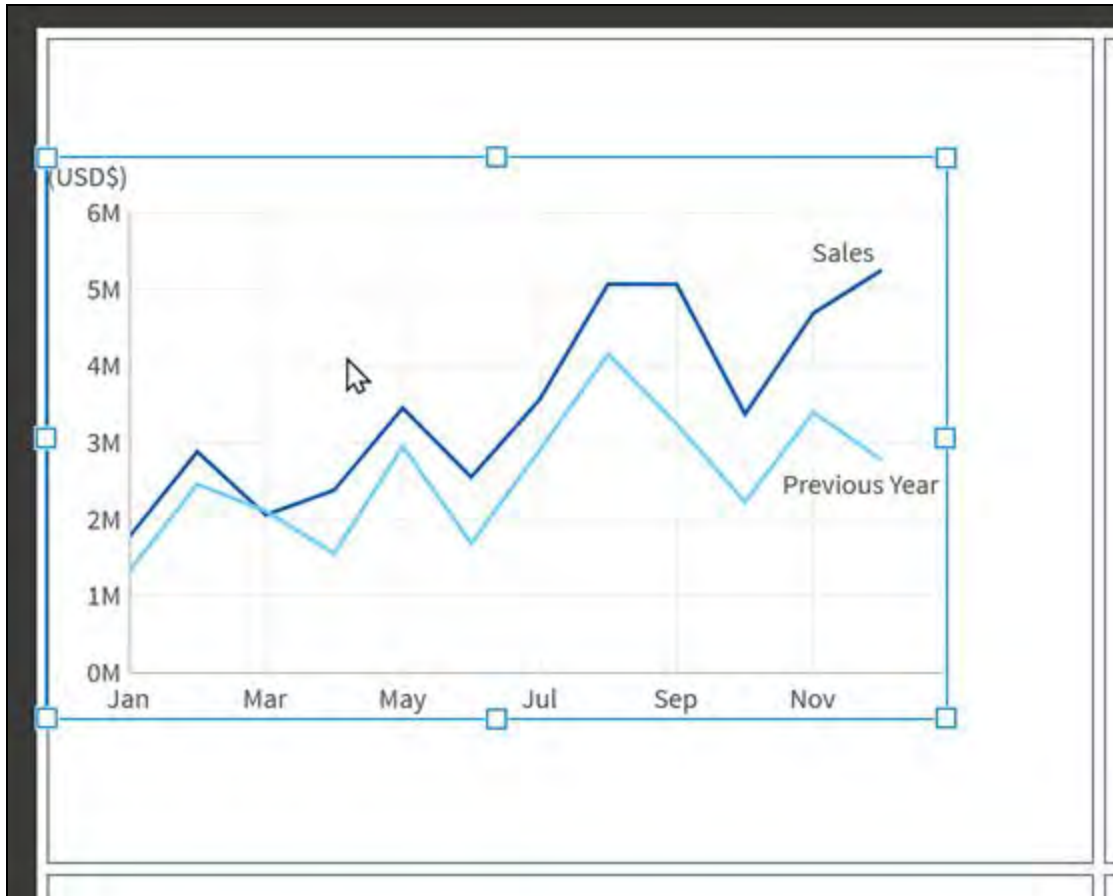
You can use these options to quickly distribute, align, and size.

Note: The options **Match Width** and **Match Height** will match the last- selected item, which will be indicated by bold borders.

Resize Within Template Grid

Double-click the resize handle of an element that has been placed within a [template grid](#) cell to expand/contract that side or corner to the template cell's edge or corner.

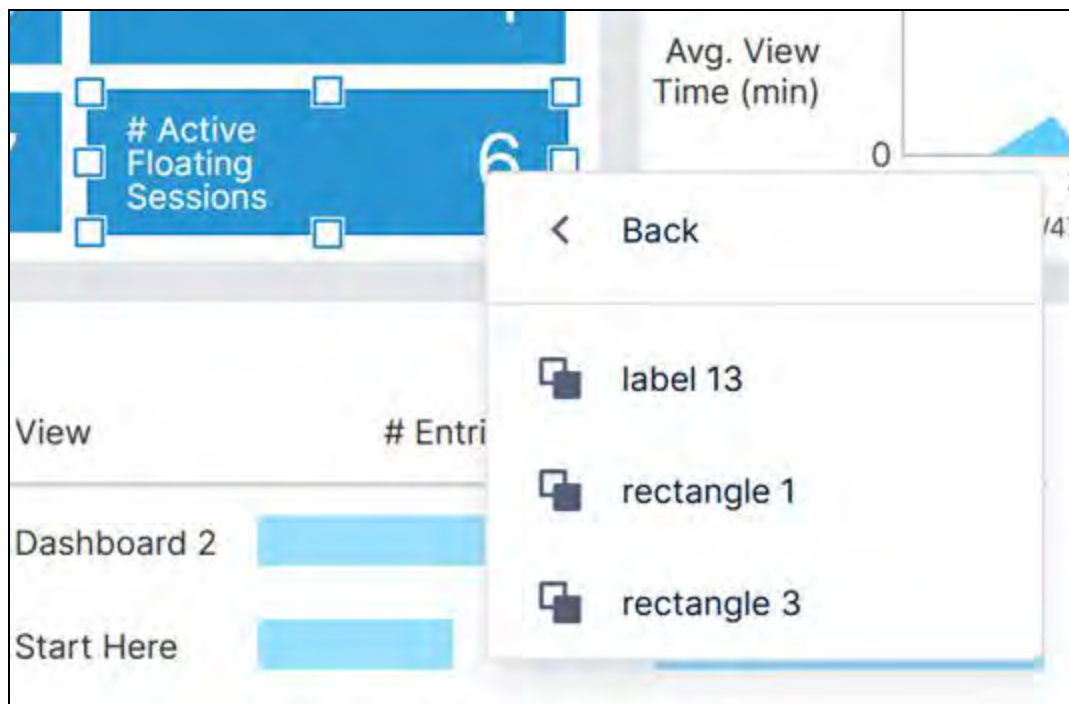




Select Overlapping Items

When elements are overlapping each other, it can be harder to select elements below the one on top when you want to re-position them or change their settings.

You can right-click or long-tap any of these elements and choose **Select** to choose from a list of the overlapping items.

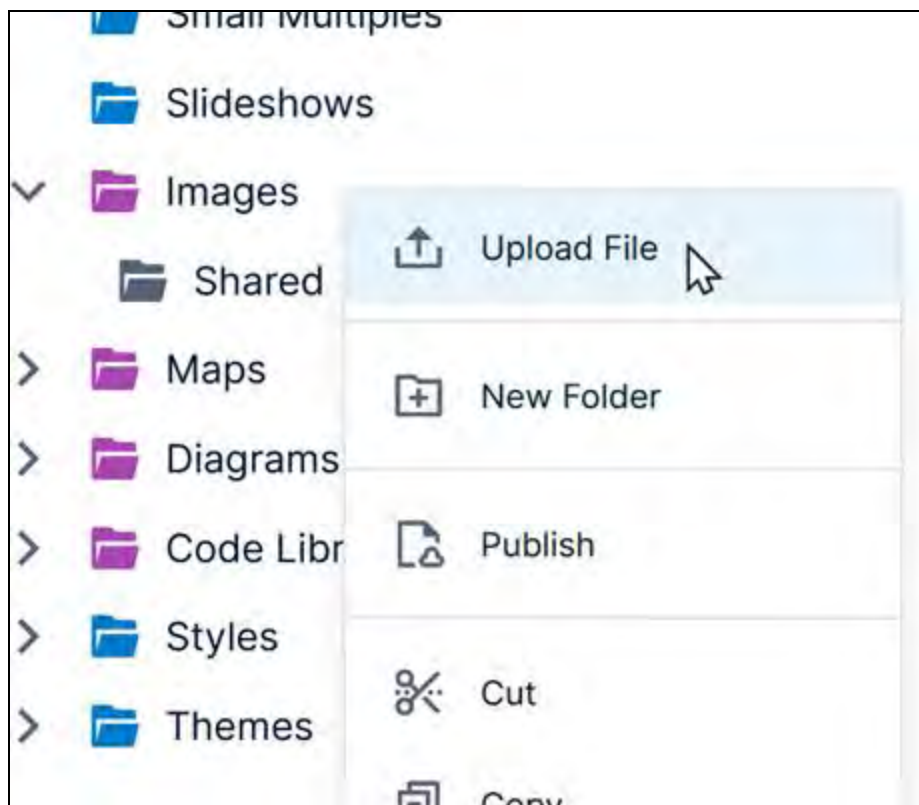


Note: Another option is to use the [layers window](#) to select from a list of all elements.

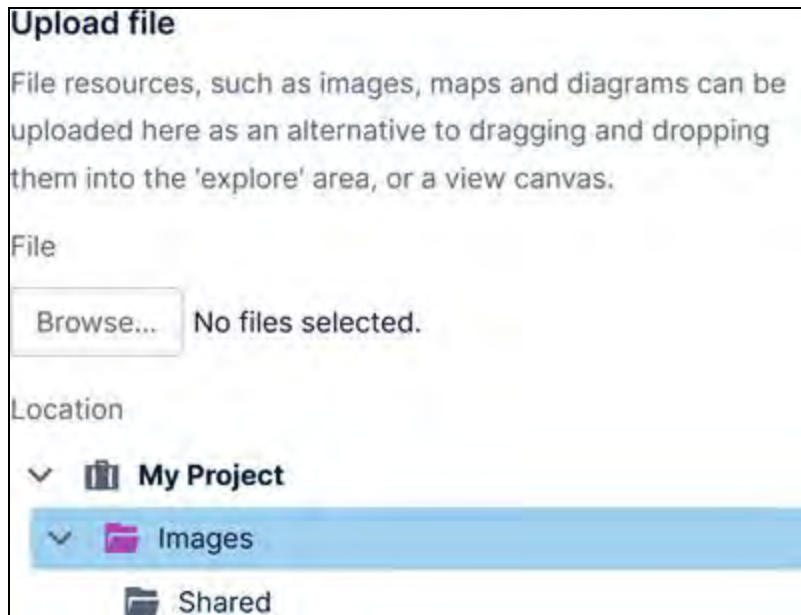
Upload Multiple Files

Instead of using drag-and-drop, you can upload one or more image files, maps, or diagrams to folders in the **Explore** window using a context menu option.

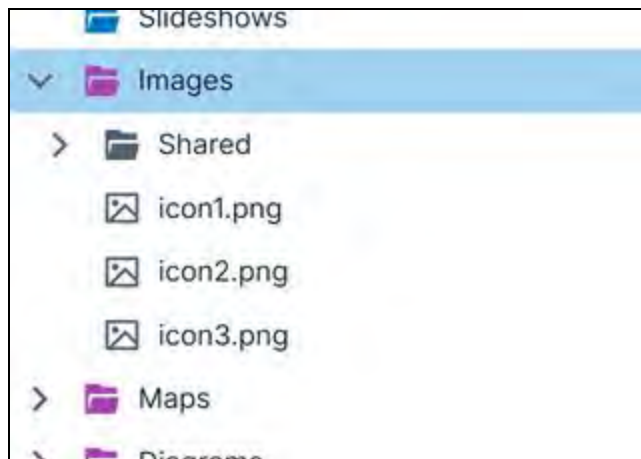
For example, right-click on the **Images** folder and select **Upload File**.



In the Upload File dialog, click **Choose Files** or **Browse**, then select one or more files from your computer or device.



The images will be uploaded to the folder.



For more information, see:



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- [Design Overview](#)
- [List of Keyboard Shortcuts](#)
- [Using a Template Grid for Resizing](#)
- [Layers and Groups](#)
- [Design Tips for Reports and Scorecards](#)



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Drag and Drop an Image File (JPEG or PNG)

This applies to: *Managed Dashboards, Managed Reports*

Add your own images to Symphony using simple drag-and-drop operations, and more.

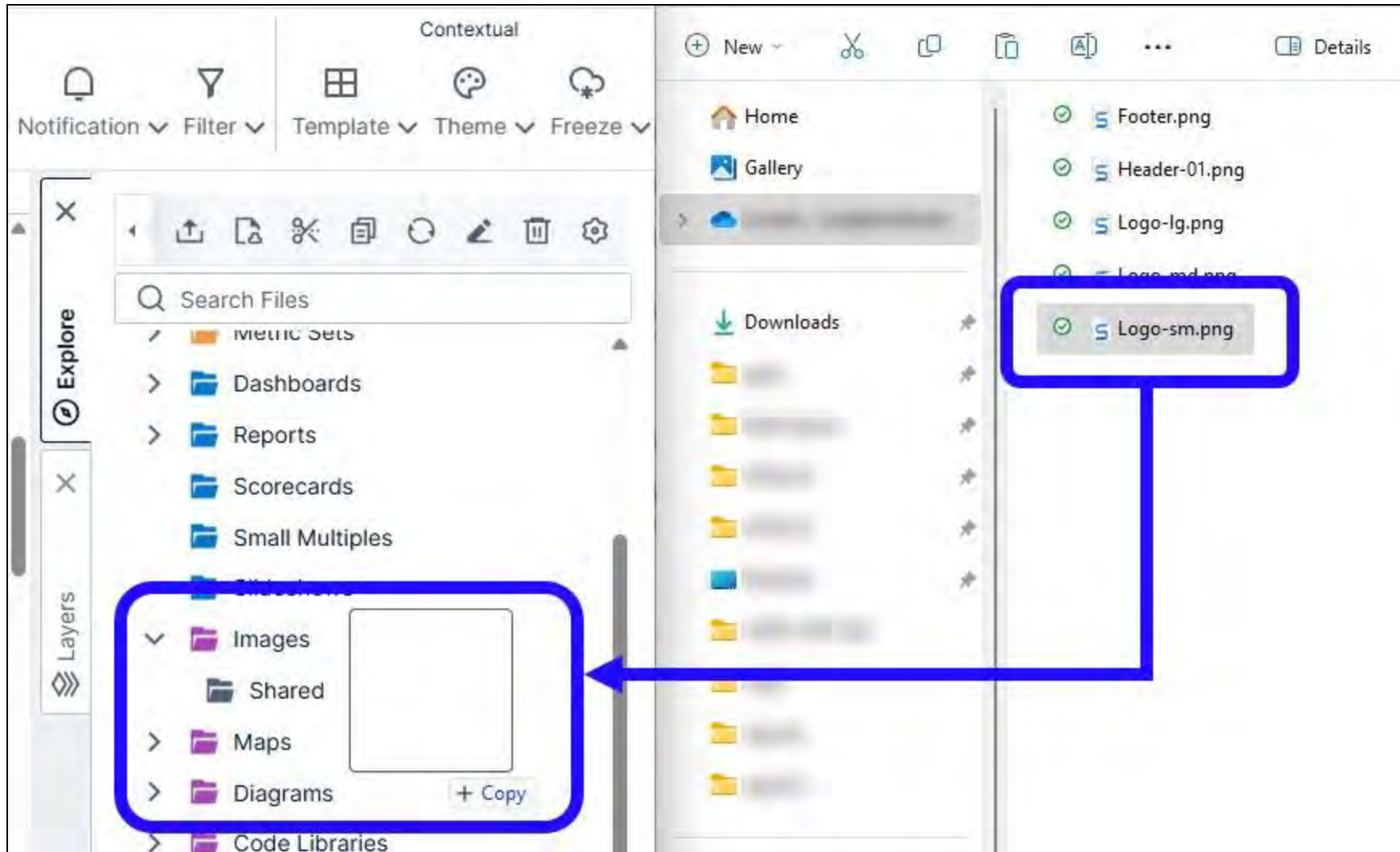
Add images for styling or branding purposes, such as icons or your company logo. Symphony supports JPEG, PNG, and other common image file formats.

Related video: [Dashboard Components](#)

Drag an Image File to the Explore Window

When you are creating or editing a metric set, or a view such as a dashboard, you can add images to Symphony via the Explore window. Locate your image file in Windows Explorer or Finder.

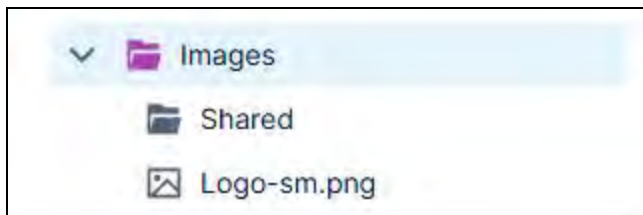
Drag the image file and drop it over the **Explore** window in Symphony.



The image file is automatically imported into Symphony under the *Images* folder in the Explore window.



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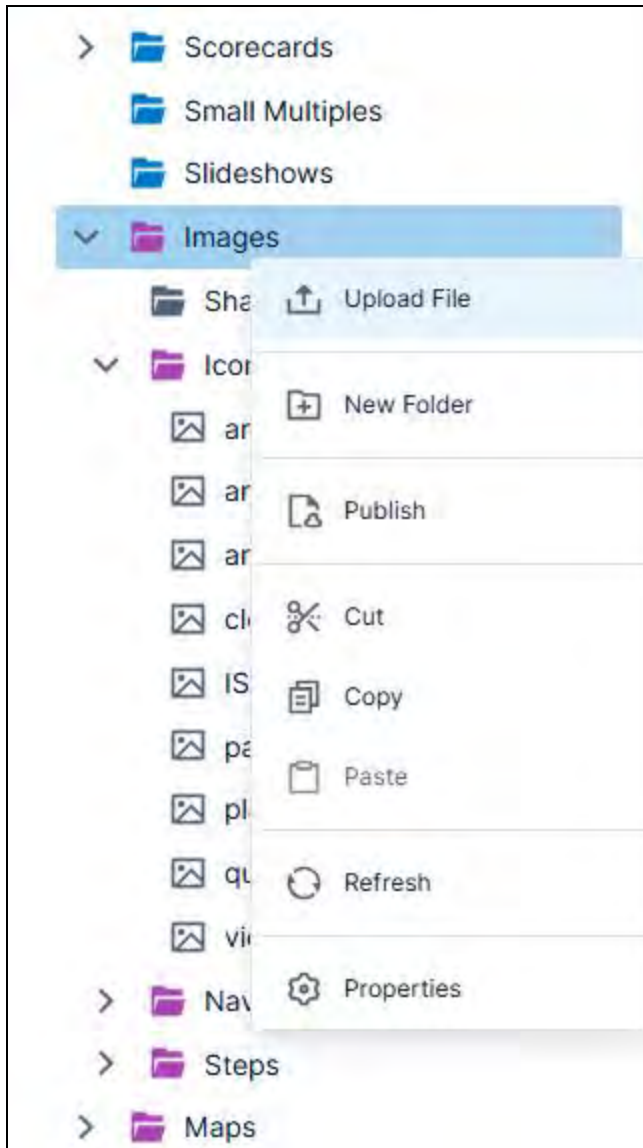
Note: SVG files are imported to the Diagrams folder by default, for use with a [diagram visualization](#). To use an SVG file as an image instead, upload it directly into the Images folder as shown next.

Browse to Upload an Image

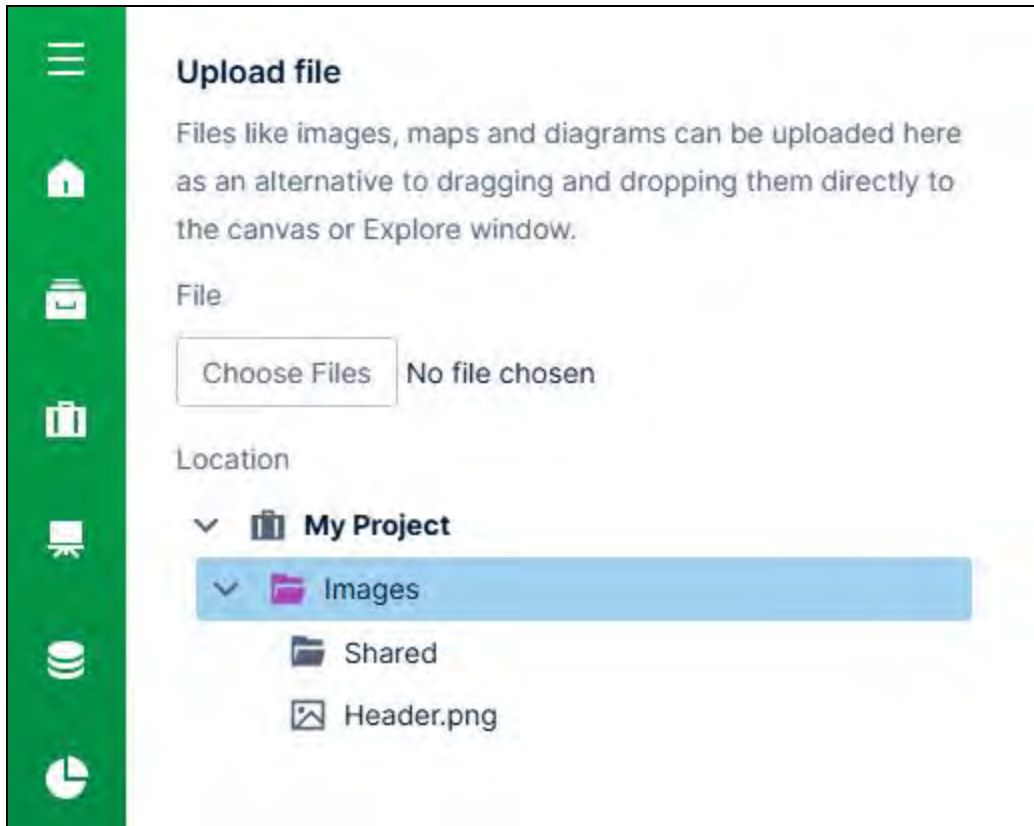
You can also browse for your file through a dialog as an alternative to dragging and dropping your image.

When editing a metric set or view in Symphony, open the **Explore** window.

Right-click (or long-tap) the **Images** folder, then choose **Upload File**.



In the Upload File dialog, click the **Browse...** button to locate your image file from your computer or device.

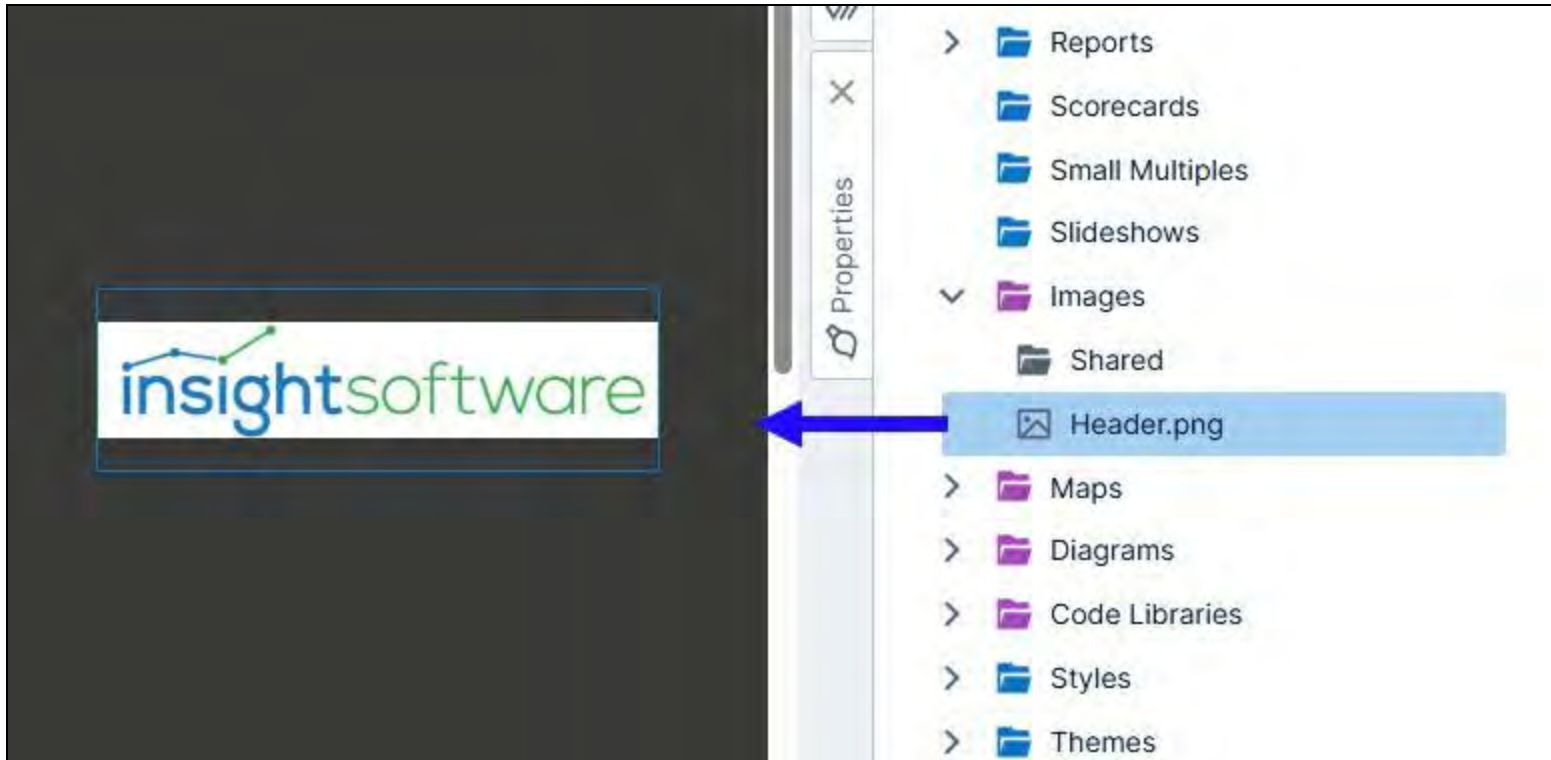


You can click to change the **Location** within your Images folder where the file will be uploaded. To create a new subfolder, right-click a **folder**, choose **New Folder**, then type a name.

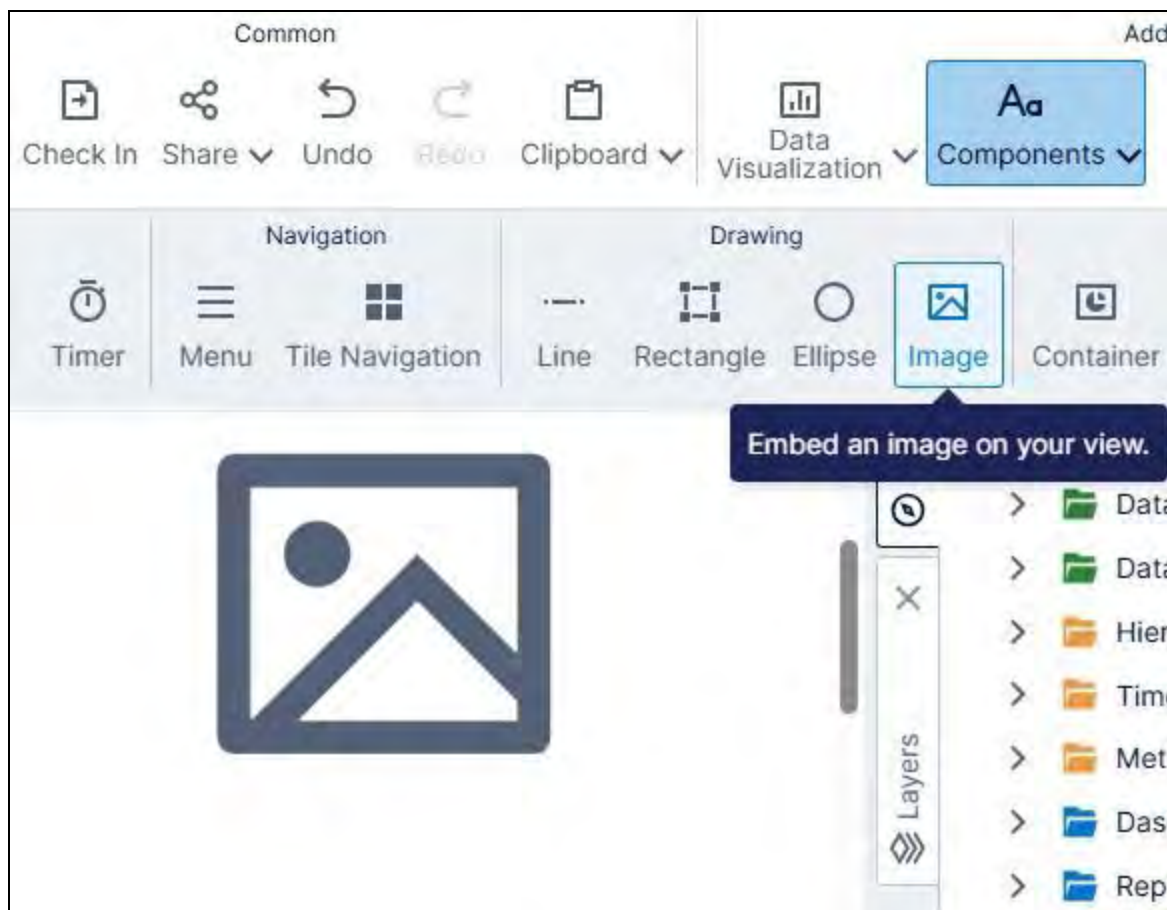
Click the **Submit** button at the bottom of the dialog to upload your image.

Drag an Image to the Canvas

There are multiple ways you can drag and drop your image to make use of it on your dashboard or other view. First, make sure you are in Edit mode. To use an image that you already uploaded, drag it from the Images folder in the Explore window to the dashboard canvas.



If you add an Image component to your view from the toolbar first, you can also set the image by dragging it from the Images folder in the Explore window and dropping it onto the existing image component on the canvas.



Finally, you can also drag an image file from your computer and drop it directly onto the dashboard canvas instead of onto the Explore window. The image file will also be added to the Images folder in the Explore window automatically, and an Image component will appear on the canvas displaying your image.

Using an Uploaded Image

Once added, images can be used in many ways besides in an Image component if you have access to the Properties window. Almost every component, visualization, and filter has properties that can optionally be set to use an image as a background, fill color, and more.

In the **Properties** window, navigate to the **Brush** option on the **Look** tab, and select **Image** from the dropdown options. To add an image, select **Select Image** and choose a file using the **Open** dialog.

Look for a **Brush** option, and click to change it to **Image**.



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Next, you can click **Select Image** and choose which image to use from the **Open** dialog. To upload a new image from the **Open** dialog, right-click the **Images** folder and choose **Upload File**.



Note: You can download an image file that was previously uploaded to Symphony by right-clicking it and choosing **Download File**.

For more information, see:

- Video: [Dashboard Components](#)
- [Design Overview](#)
- [Working With Projects](#)
- [Using Dockable Windows](#)
- [Drag and drop an Excel file](#)



Setting Up the Visualization

This applies to: *Managed Dashboards, Managed Reports*

For every data visualization, there is an underlying [metric set](#) that encapsulates the data, and there are settings that determine how each element in the data is visualized.

The visualization options are different depending on the type. A bar chart, for instance, has a number of options for each series of bars, such as:

- **Bar Height** - lets you specify the measure that determines the height of each bar data point.
- **Horizontal Axis** - lets you specify what values determine the position of each bar data point along the x-axis.
- **Description** - lets you specify what measures or hierarchies should identify this series in the legend or a series label.
- **Tooltip** - lets you specify values to be displayed in a popup when the user hovers over or long-taps a data point.
- **Data Point Label** - lets you specify values to display in labels on or next to each data point.
- **Color** - lets you change the colors of data points based on the values you select.
- **Note** - lets you specify values to display as notes, the same way user-added notes or annotations are displayed.
- **Series Grouping** - lets you specify or remove hierarchies used to group this series into multiple series.
- **Side-By-Side Position** - lets you specify a hierarchy that determines which bar chart series or similar are overlaid or stacked together based on matching values.

Other chart types and other data visualization types have different options (although there may be some in common).

Related video: [Configuring Metric Sets](#).

Metric Set Editor

Default Visualization

When you create a new [metric set](#) from the main menu, the visualization created there acts as a default visualization for that metric set. It serves as a template for a new data visualization when you add this metric set to a dashboard or other view, although from then on the two visualizations are separate. A metric set can be reused in multiple views and by different users, or multiple times on one view, and each visualization customized or visualized differently.



Note: If you want to reuse a visualization in multiple places and be able to make changes to all of them at once, you can create a dashboard for that visualization and drag it onto other [dashboards and views](#).

In the **Visualization** tab of the Data Analysis Panel, you can see how the data was set up to be visualized automatically when it was first added to the metric set.



In the example below, the *LineTotal* measure and *OrderDate* were automatically added under Tooltip for the LineTotal Series.



Assign Data To the Visualization

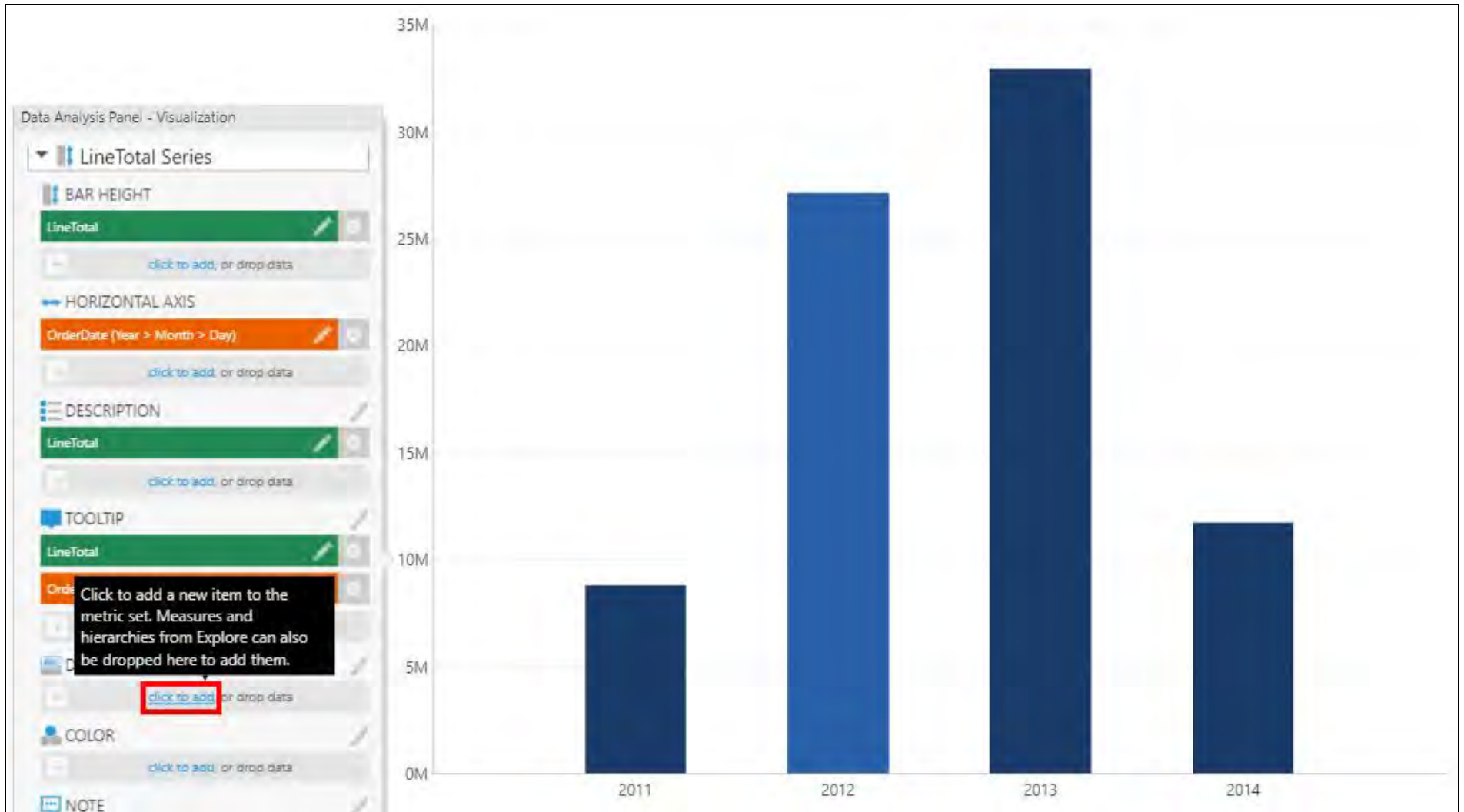
There are several ways to assign data to visualization options for the current visualization.



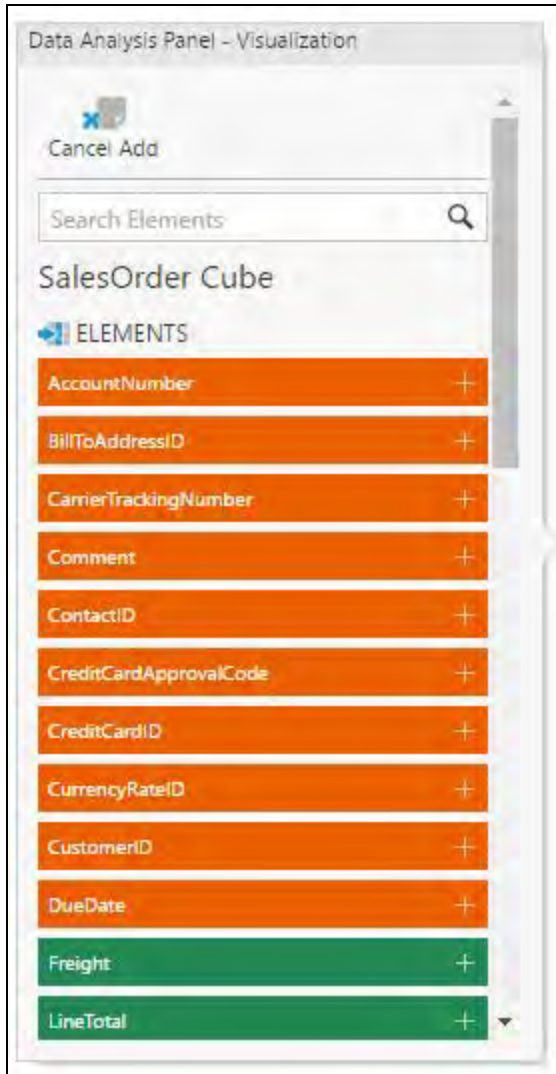
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- Drag from the Explore window: drag a **measure** or **hierarchy** (or one of its levels) from the Explore window and drop it under an option in the Visualization tab (similar to adding elements to the metric set), or drop it onto one of the corresponding labeled areas over the visualization.
- Drag within the Visualization tab: drag a **measure** or **hierarchy** already selected elsewhere in the Visualization tab and drop it where you want to add it. Note that if you press the **Shift** key while you drag within the Visualization tab, this will actually move the measure/hierarchy from one option to another.
- Click to add: use the **click to add** link in the Visualization's drop region and select the measure or hierarchy you want from a list.

For example, **click to add** under Data Point Label to display data as labels.



Choose **data** from the list that appears.



The visualization will be updated with the new setting. The bar chart visualization now displays the *LineTotal* value at each data point.



If you drag or click to add a new element not previously added to the metric set, it will be added to the metric set as you can see in the Data Analysis Panel after leaving the Visualization tab.

Next, if you drag this metric set onto the canvas of a dashboard, the resulting bar chart will also display data point labels because of this setting in the metric set's default visualization.



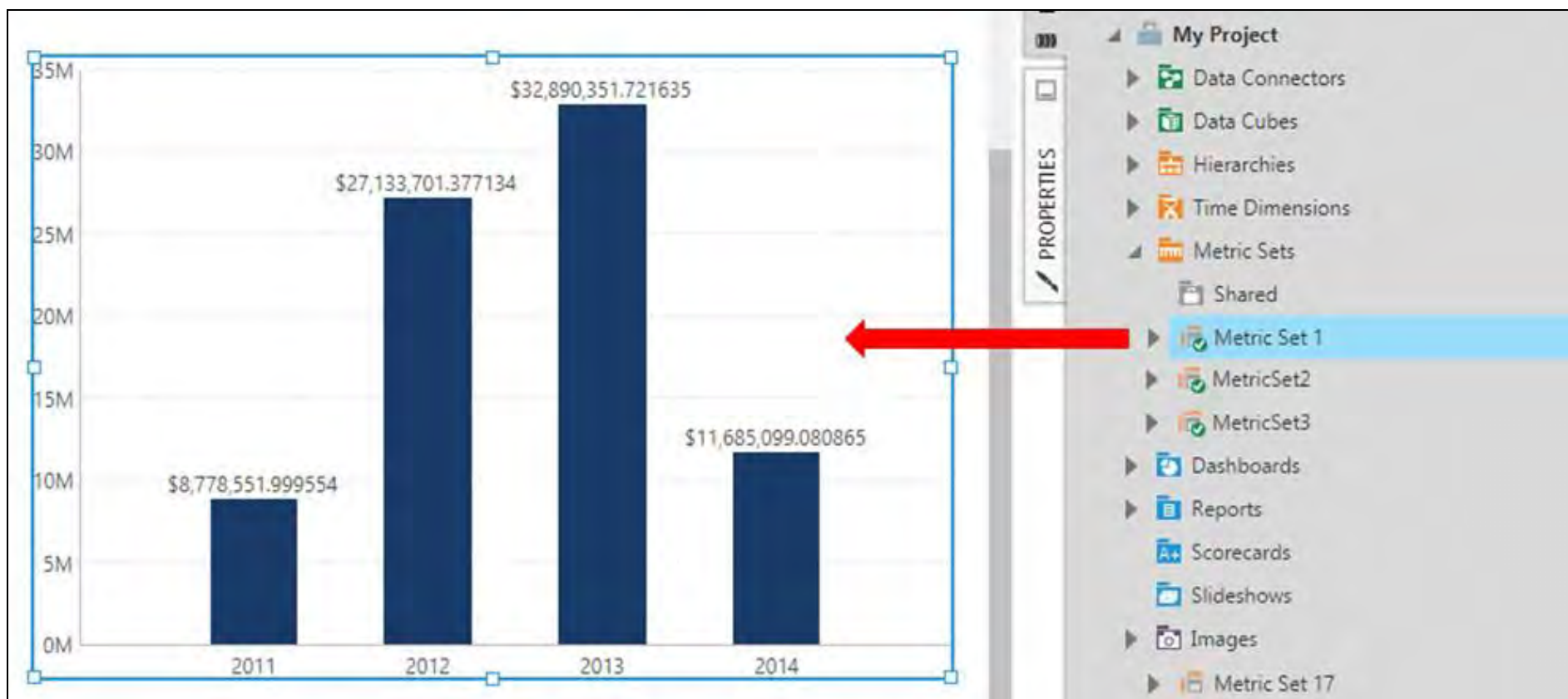
Note: You can click any green or orange tile in the Data Analysis Panel to configure settings including number [formatting](#). These are [metric set settings](#) that take effect everywhere the metric set is reused.

Click the **x** button next to one of the tiles in the Visualization tab if you want to remove it from that part of the visualization.

Editing Dashboards and Other Views

When you add an existing metric set to a dashboard or other view, for example by dragging it from the Explore window onto the canvas, a new data visualization is created based on the metric set's default visualization.

In the figure below, the newly added bar chart displays data point labels just like the metric set's default visualization.



You can also create a new metric set [directly on a dashboard](#) or other view by dragging data from a data connector or data cube directly onto the canvas or onto a new visualization.

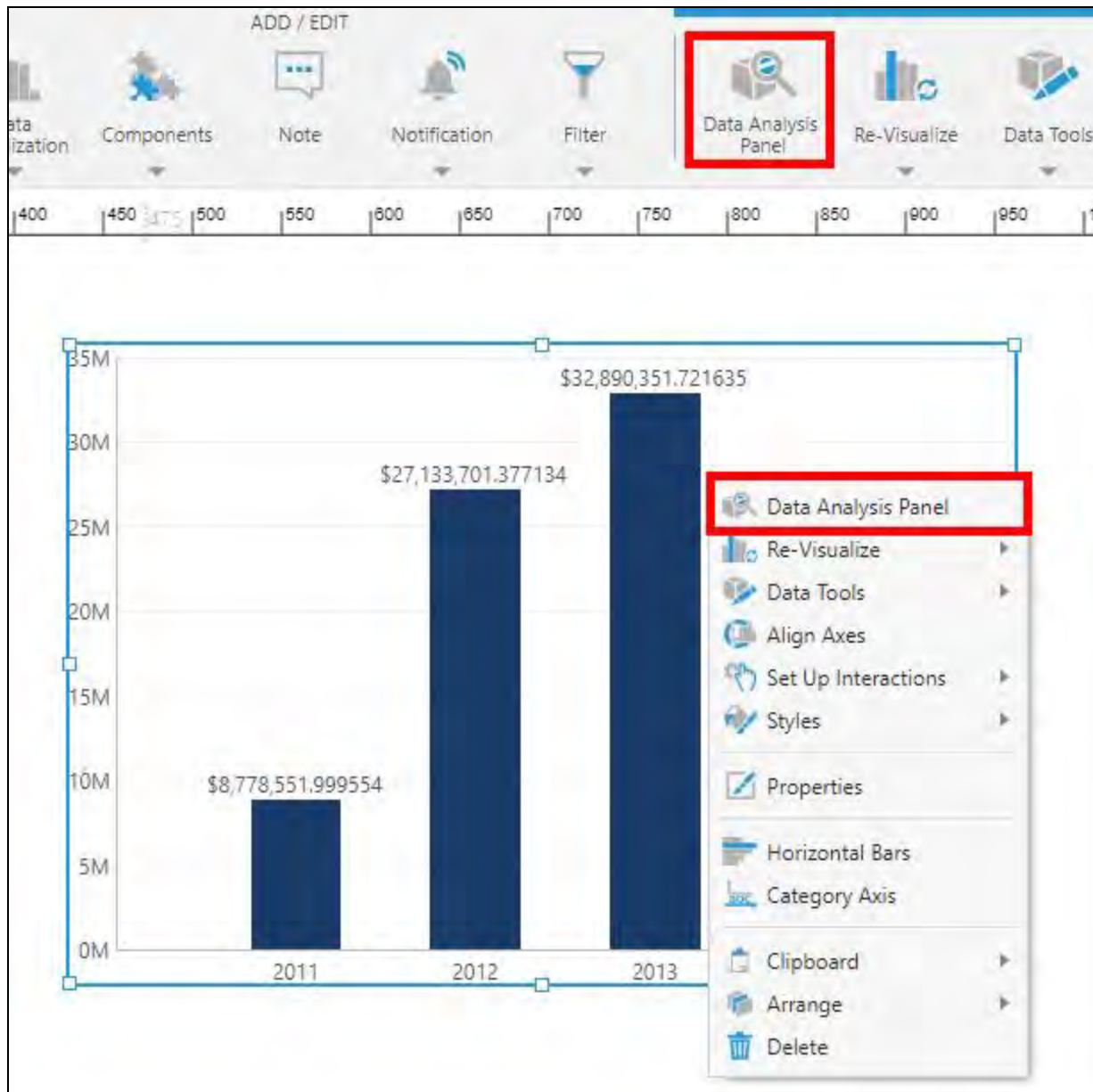


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Each visualization's settings can be customized differently even when reusing a metric set. Just like when editing a metric set full screen, you can customize the visualization from the Data Analysis Panel.

Data Analysis Panel

The Data Analysis Panel is open by default when adding a new data visualization instance, but will close if you click away. To open the Data Analysis Panel, use the **context menu**, or select the **visualization** on the canvas and click **Data Analysis Panel** in the toolbar.



This Data Analysis Panel is the same as in the full screen metric set editor, but the Visualization tab settings are specific to this data visualization on the dashboard or view and are not saved with the metric set itself. This allows you to reuse a metric set and visualize it differently.

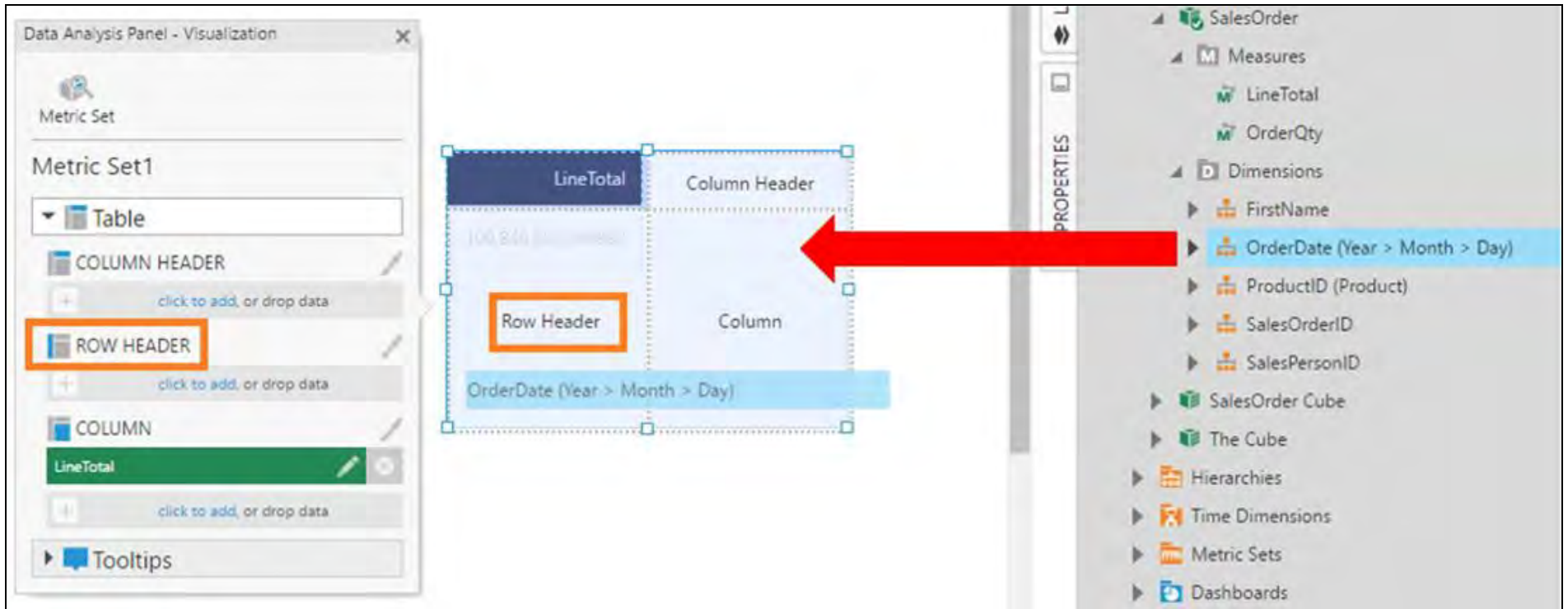


A metric set handles the data itself and is separate from its visualizations, so the Data Analysis Panel has a separate tab for the visualization. Metric sets consist of the data-related settings shown when its title reads Data Analysis Panel - Metric Set as well as the options in Data Tools in the toolbar.

Data Visualization Drop Zones

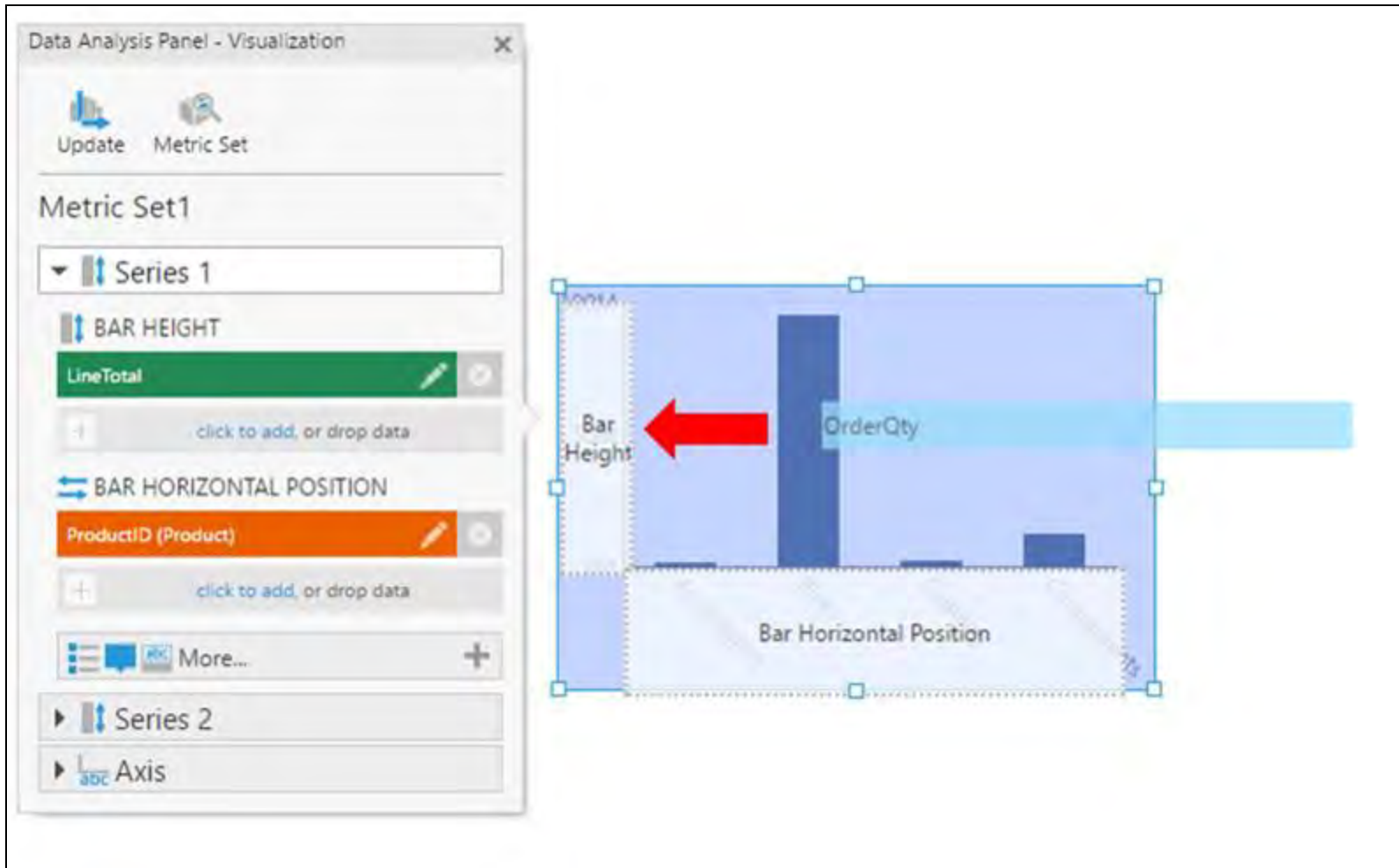
An easy way to configure the Visualization tab is to drag a measure, hierarchy, or hierarchy level from the Explore window and drop it onto a *data visualization drop zone*. These labeled overlays that appear over a visualization correspond directly to the visualization settings, allowing you to choose how to visualize the data rather than allowing this to be assigned for you.

These drop zones appear when dragging additional data after some initial data was already added - for example, a *LineTotal* measure has already been added to the table in the figure below.



The screenshot displays the 'Data Analysis Panel - Visualization' interface. On the left, the 'Metric Set' panel shows 'Metric Set1' with a 'Table' visualization type. The 'COLUMN HEADER' and 'ROW HEADER' sections are visible, with 'ROW HEADER' highlighted by an orange box. The 'COLUMN' section shows 'LineTotal' as the selected measure. The 'Tooltips' section is also present. In the center, a table visualization is shown with a grid. The top row is labeled 'LineTotal' and 'Column Header'. The first data row has a value of '100,244' under 'LineTotal' and 'OrderDate (Year > Month > Day)' under 'Column'. The 'ROW HEADER' label is positioned to the left of the first data row. On the right, the 'PROPERTIES' pane shows the 'SalesOrder' cube with various dimensions and measures. The 'OrderDate (Year > Month > Day)' dimension is highlighted in blue, and a red arrow points from it to the 'ROW HEADER' area of the table visualization.

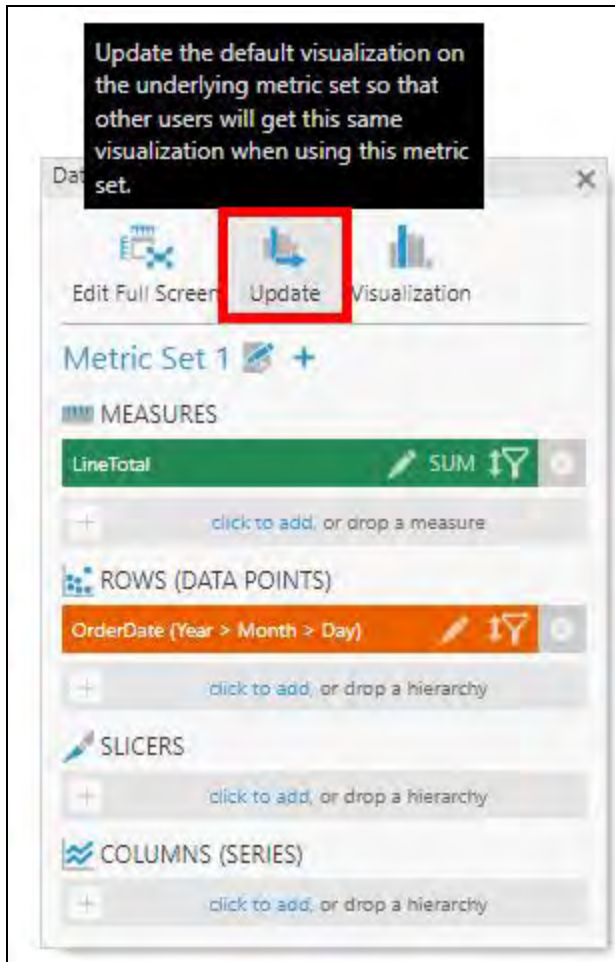
The available drop zones are different depending on the type of data visualization, whether you're adding a measure or hierarchy, and where data has already been assigned.



Update the Default Visualization

If you added a metric set from the *Metric Sets* folder to your view, once you've customized its visualization, you can apply its settings back to the metric set's default visualization by clicking the **Update** button in the Data Analysis Panel.

In newer versions, switch to the **Visualization** tab in the Data Analysis Panel first to find this option.

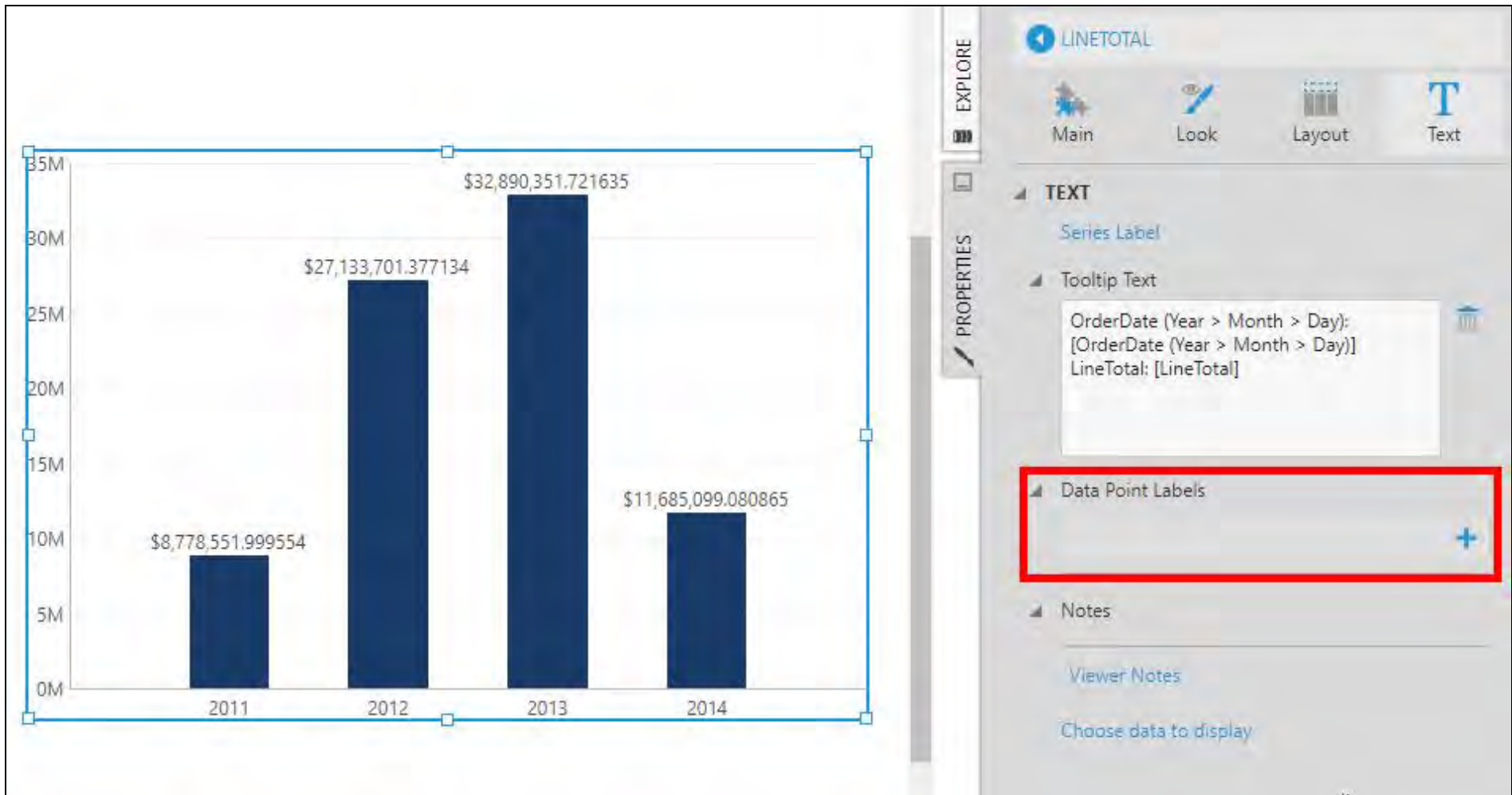


Afterwards, the next time this metric set is dragged to the canvas, the newly added data visualization will be of the same type and have the same settings as the updated default visualization.

Properties

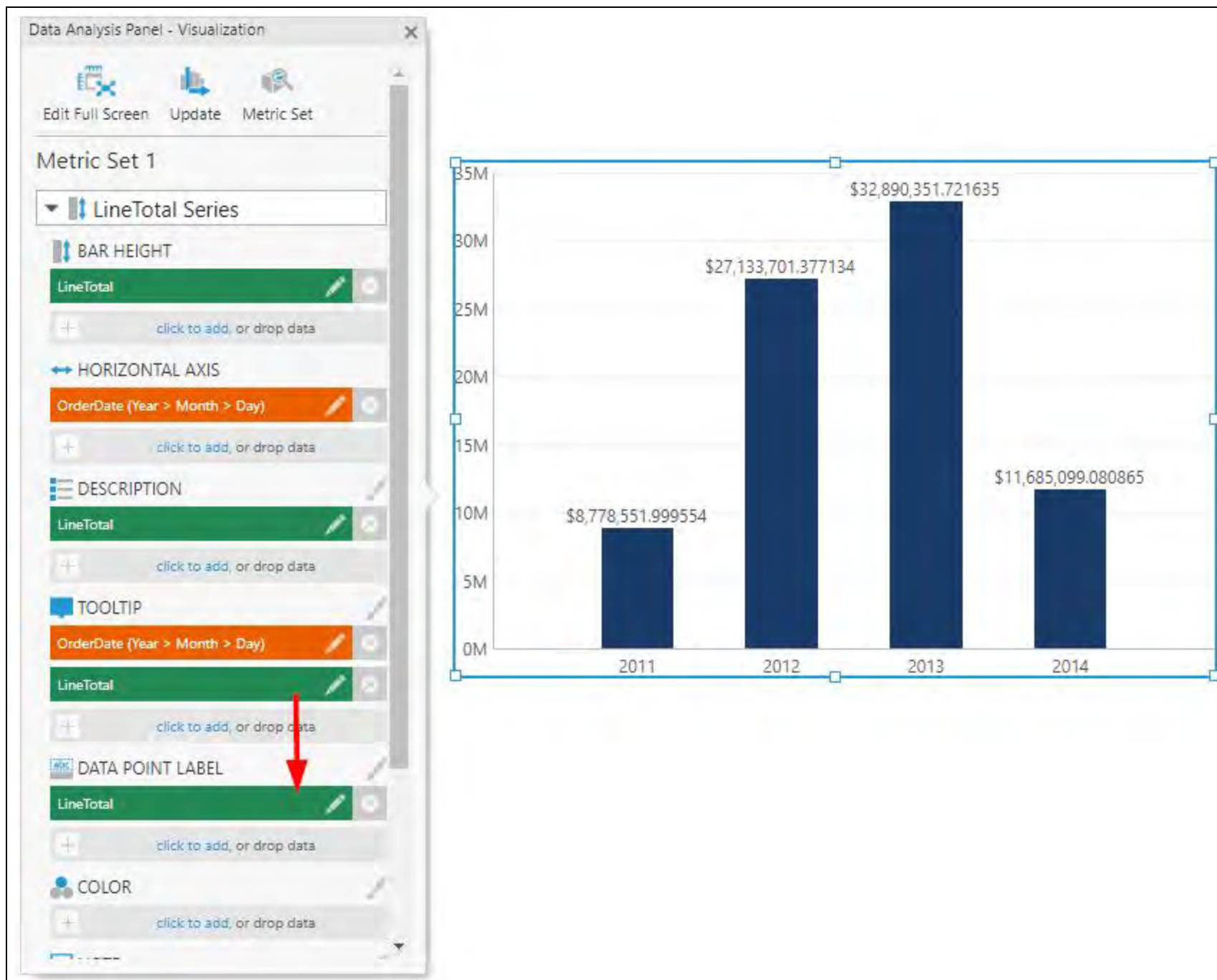
You can use the **Properties** window or the [Properties](#) pop-up for a data visualization to customize its settings, including colors, fonts, or further customizing how the visualization displays data you've assigned in the Data Analysis Panel. For example, you can [customize how the colors of the data points should change](#) according to the data. For text properties such as data point label text and tooltip text, you can use the Properties window to customize how the data is formatted into text.

As an example, consider a bar chart that does not have any measures assigned to its Data Point Label visualization option in the Data Analysis Panel. Go to the Properties window for the chart series, click the **Text** tab, and you'll see that the Data Point Labels property is empty.



Next, open the **Data Analysis Panel** for this chart, click **Visualization**, and then assign the **measure** to Data Point Label.

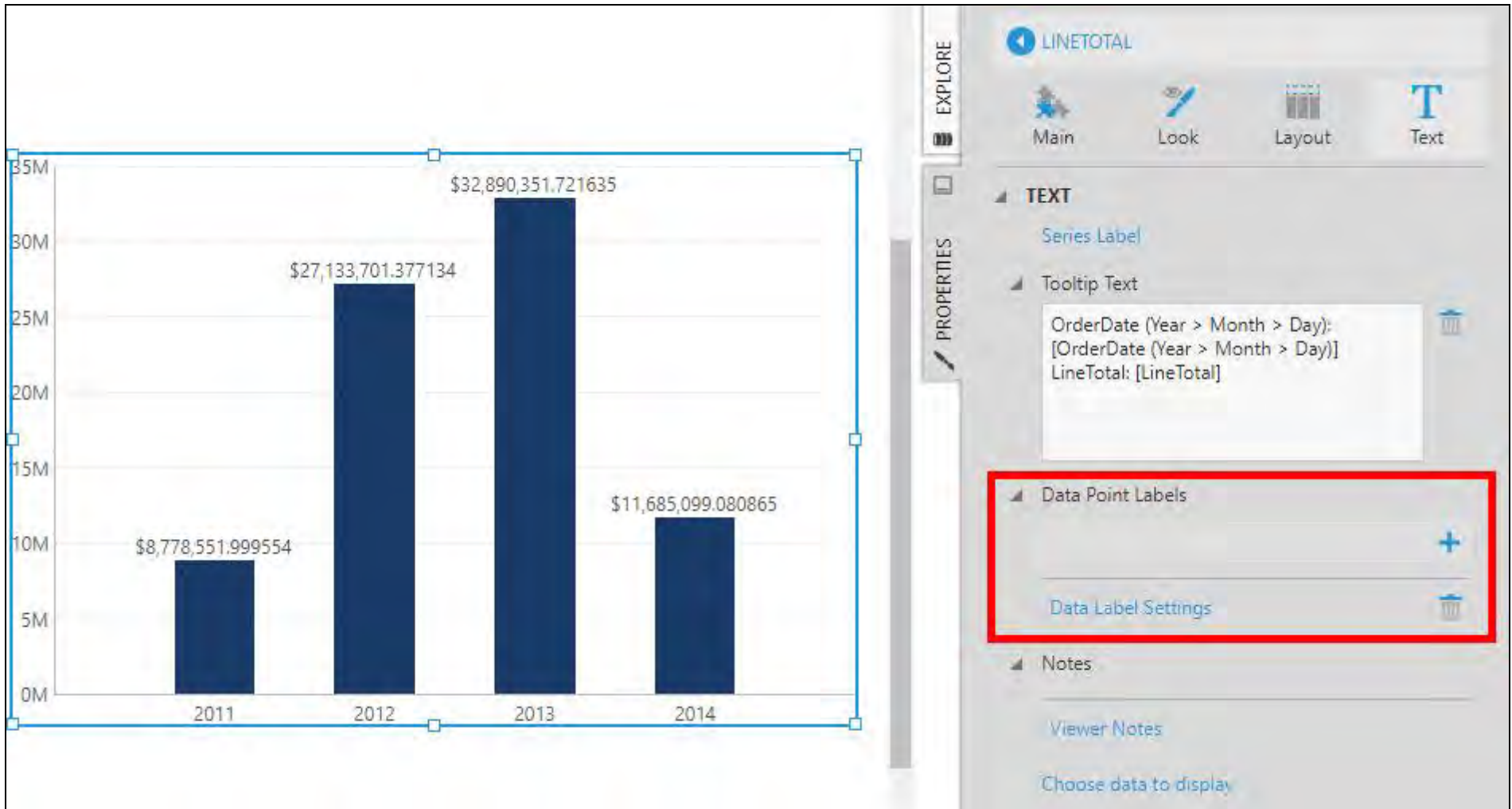
You can drag this **measure** from elsewhere in this panel or from the Explore window, or **click to add** it.





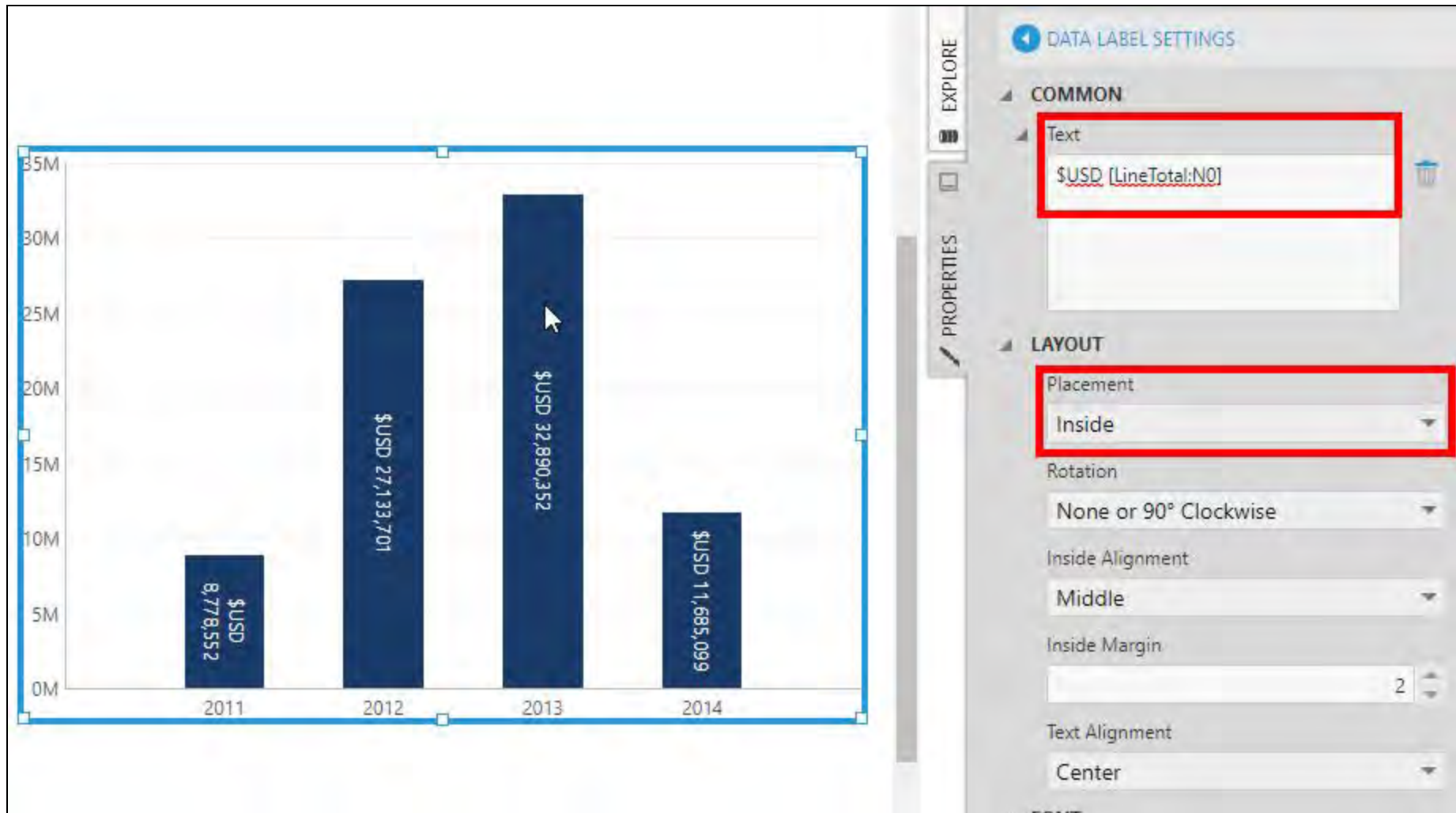
Note: Click the **paintbrush** icon next to a heading like Data Point Label to open the Properties window directly to the related settings.

Now go back to the Properties window for the chart series, click the **Text** tab, and you'll see that data point label settings have been automatically added. You can also add these data label settings yourself as an alternative to using the Data Analysis Panel.



Click on the **Data Label Settings** item to customize the placement of the labels, and the text to display. The Text property has been automatically populated based on the data you assigned, but you are able to change it to include any arbitrary text in addition to one or more placeholder keywords (such as the name of a

measure or hierarchy) enclosed in square brackets. You can also optionally customize the value's formatting referred to by the keyword. See [Formatting text](#) for details on how you can set text properties using placeholder keywords.



For more information, see:

- Video: [Configuring Metric Sets](#)
- [Visualization Tab Examples](#)



- Archive of documentation for Logi Symphony v24

- [Other Metric Set Tools](#)
- [Design Overview](#)
- [Using Chart Properties](#)
- [Apply Colors to Data Points or Series Using Color Rules](#)
- [Formatting Text](#)



Visualization Tab Examples

This applies to: *Managed Dashboards, Managed Reports*

This article gives specific examples of how to configure the visualization tab of the Data Analysis Panel for various types of data visualizations. The visualization tab helps you assign data elements from the underlying metric set to parts of the data visualization. Using the Data Analysis Panel and simple drag-and-drop operations, you can display data in the form of labels, headers, tooltips, colors, etc.

See [Setting Up the Visualization](#) to learn more about the visualization tab.

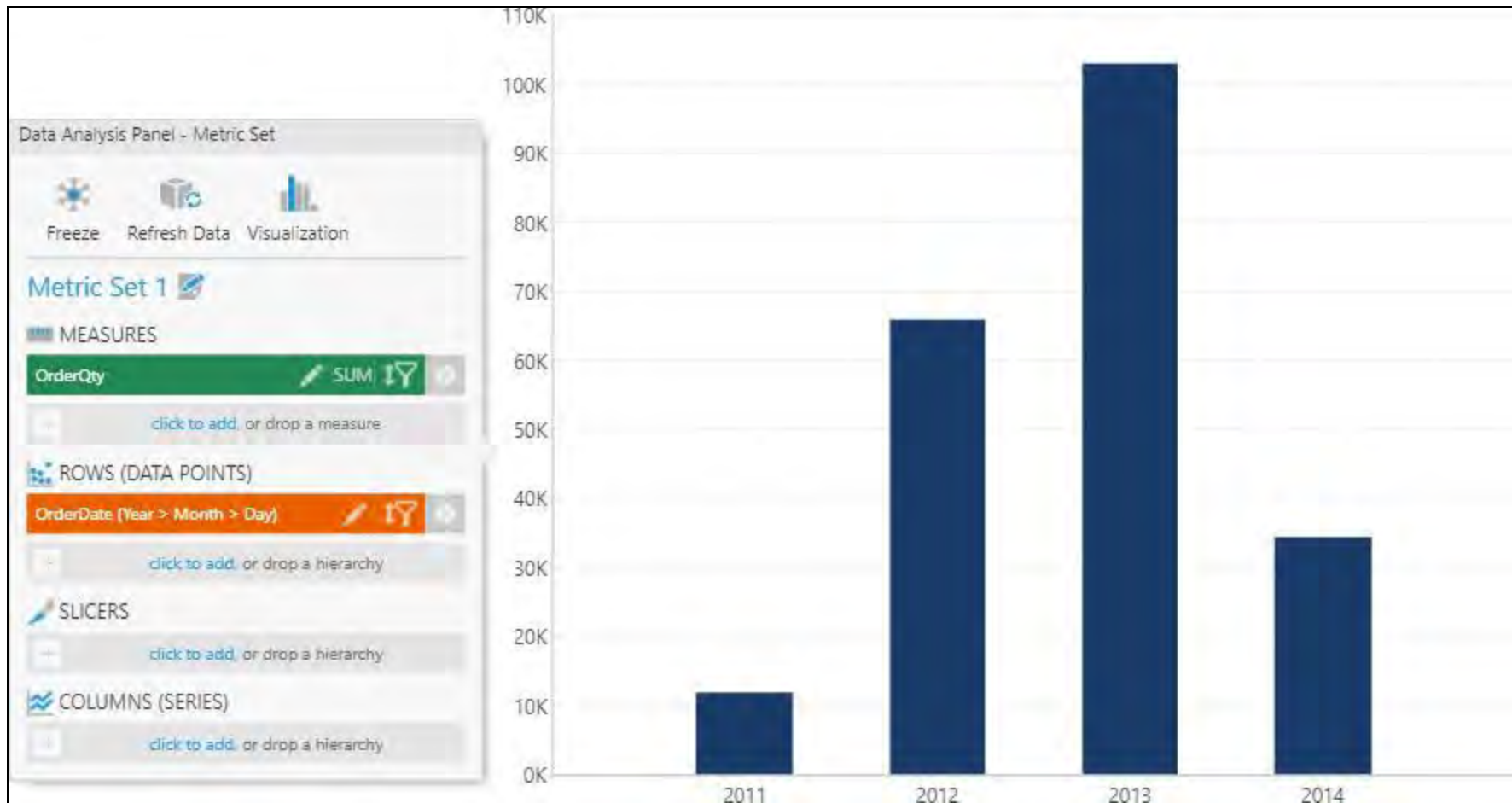
Related video: [Configuring Metric Sets](#).

Chart Visualizations

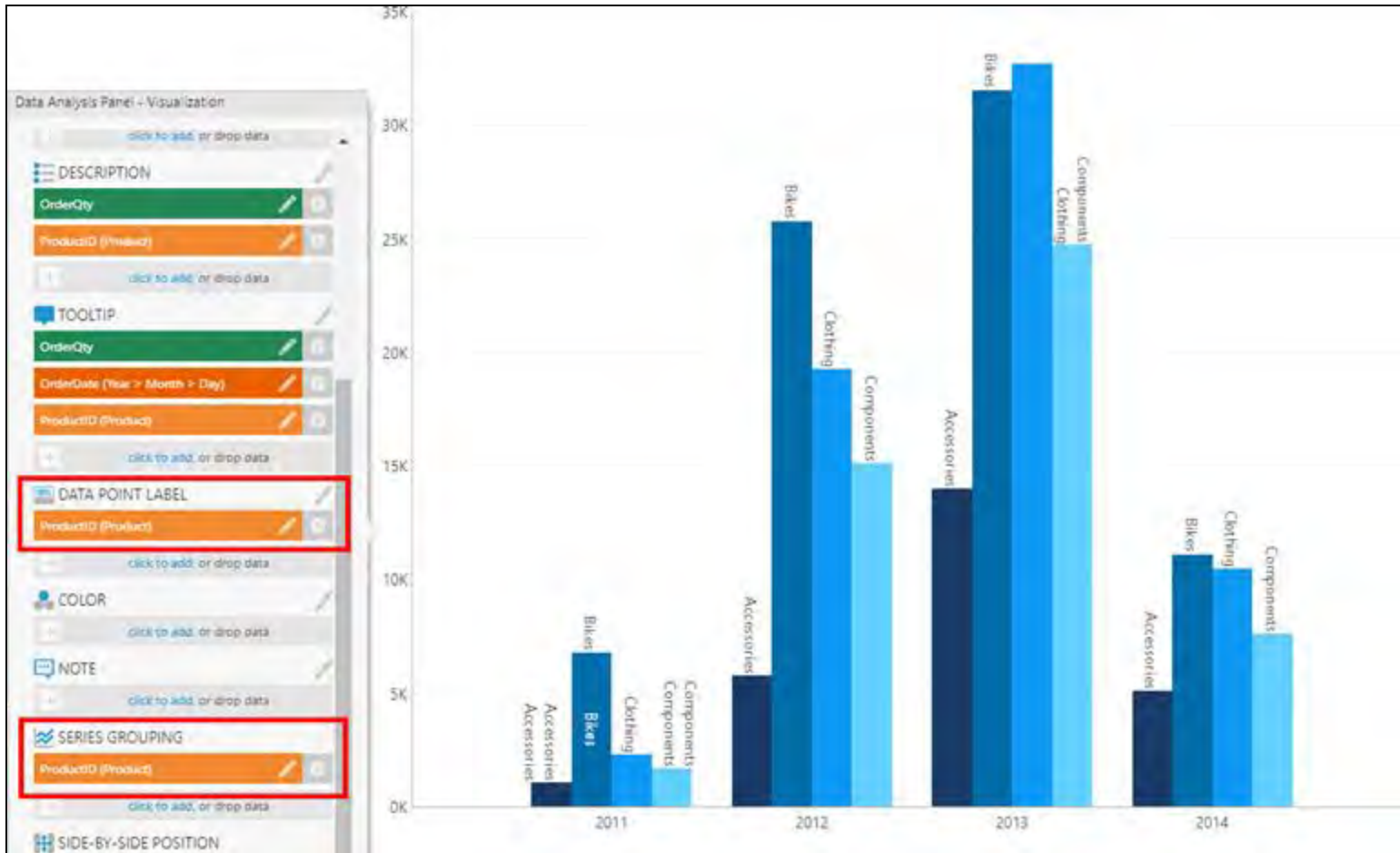
Grouping Series in a Bar Chart

The Series Grouping option of a series allows you determine whether a data point series is grouped into multiple series based on a hierarchy's values. As an example, consider a metric set with the following data selected and visualized as a bar chart:

- **Measures:** *OrderQty*
- **Rows:** *OrderDate* hierarchy



Click the **Visualization** button in the top-right corner of the Data Analysis Panel to switch to the Visualization tab. Under the first series, click **More** to see additional options. Locate **Data Point Label** and **Series Grouping**. Drag the *Product* hierarchy from the Explore window and drop it under each. The resulting bar chart shows a cluster of bars over each year, each with a bar for each value in the top level of the *Product* hierarchy.

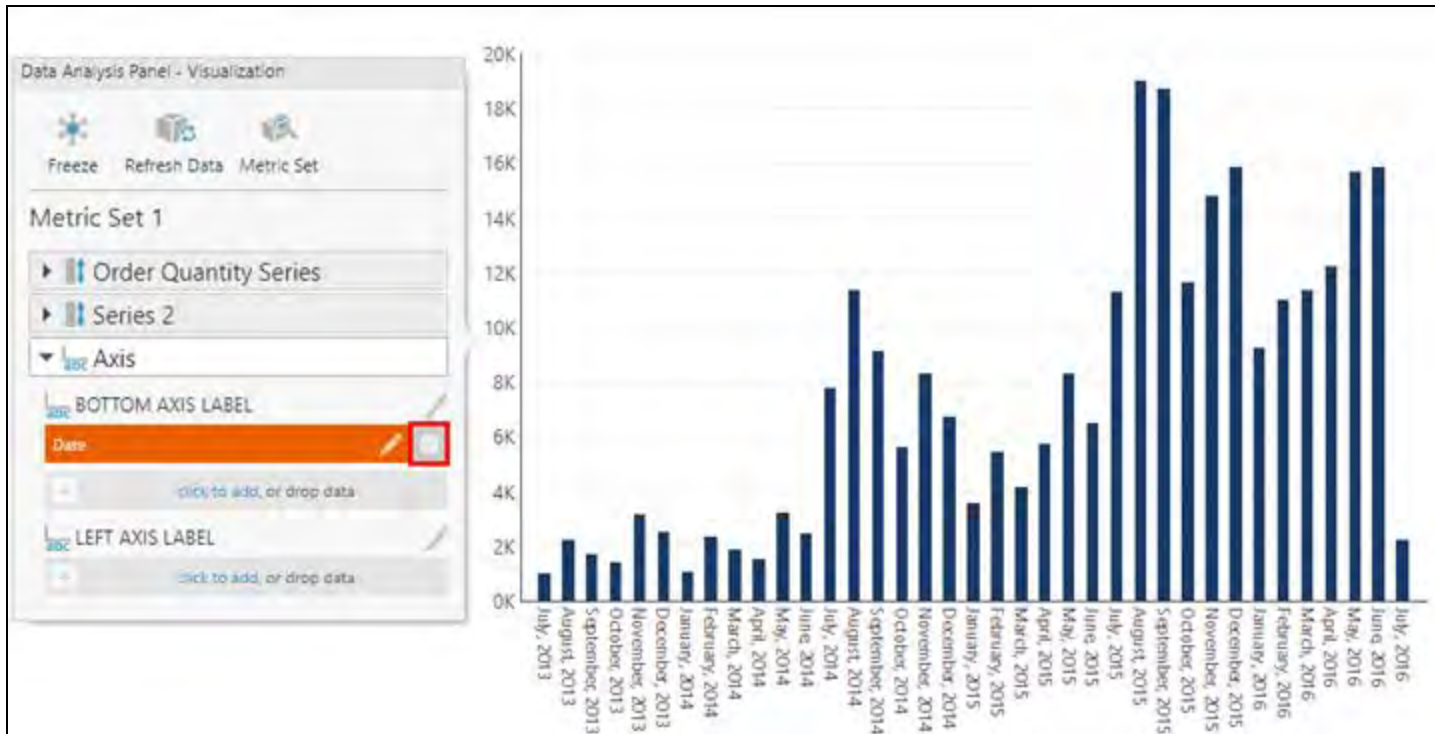


If there is a series in your chart that repeats the same values in each grouping, you can remove the hierarchy from Series Grouping to prevent it from being displayed multiple times.

Axis Labels

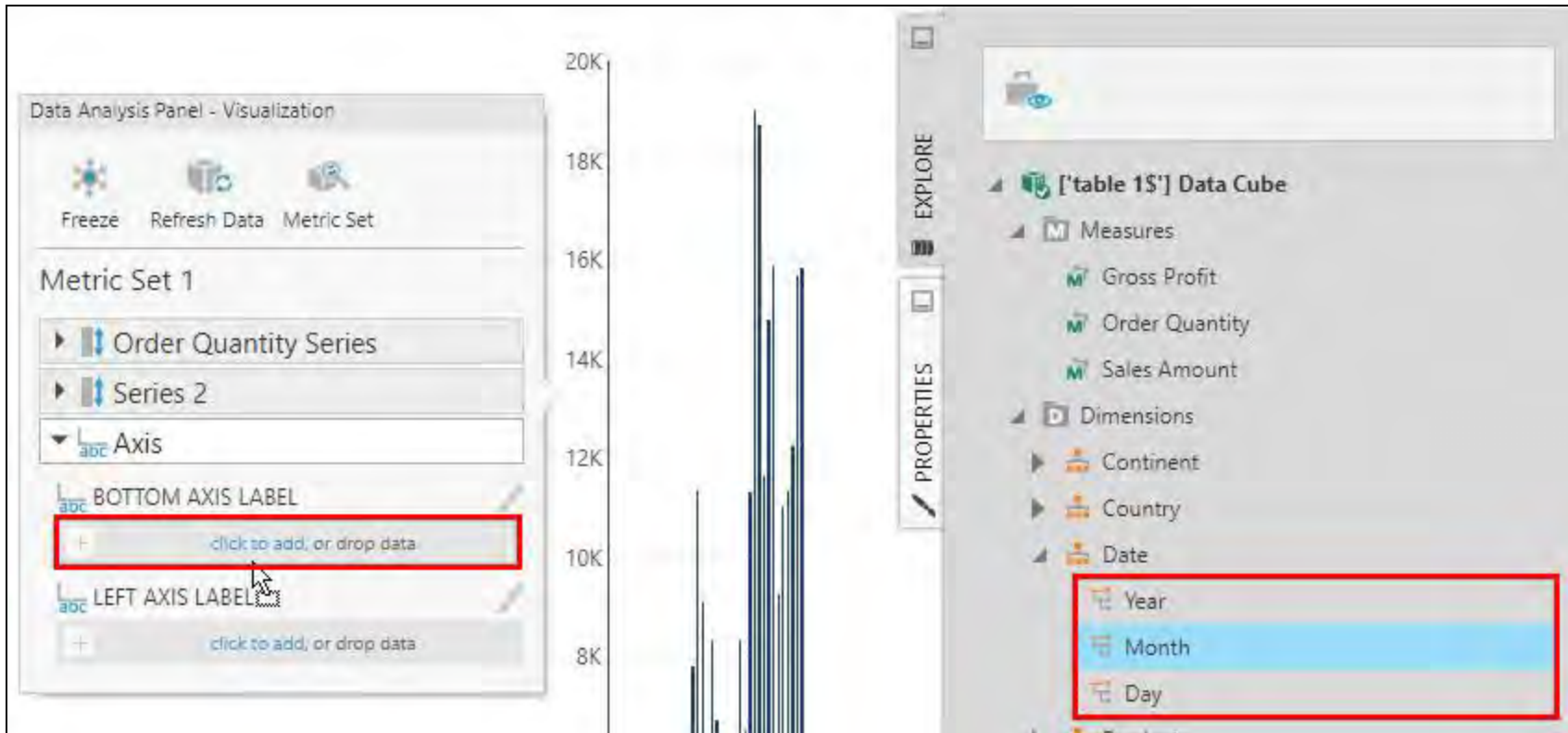
Axis labels can be used to display labels from upper levels of a hierarchy (e.g., *Month* grouping labels under *Day* labels) by dragging a **hierarchy level** from the Explore window, or to display measure values by dragging a measure.

For example, consider the chart below showing typical axis labels displayed for a time dimension hierarchy. They combine the month names with the year repeated in consecutive labels.



To replace this, switch to the **Visualization** tab in the Data Analysis Panel. Click to expand the **Axis** section, and remove the time dimension from under Bottom Axis Label.

Find and expand a time dimension hierarchy in the Explore window to list its levels, then click and drag each individual level you want labeled to Bottom Axis Label.



Each level will be displayed as a separate row, and instead of repeating values like the year, each value is displayed once with leader lines grouping the values below. The values are displayed using the short caption format settings in the [time dimension](#).



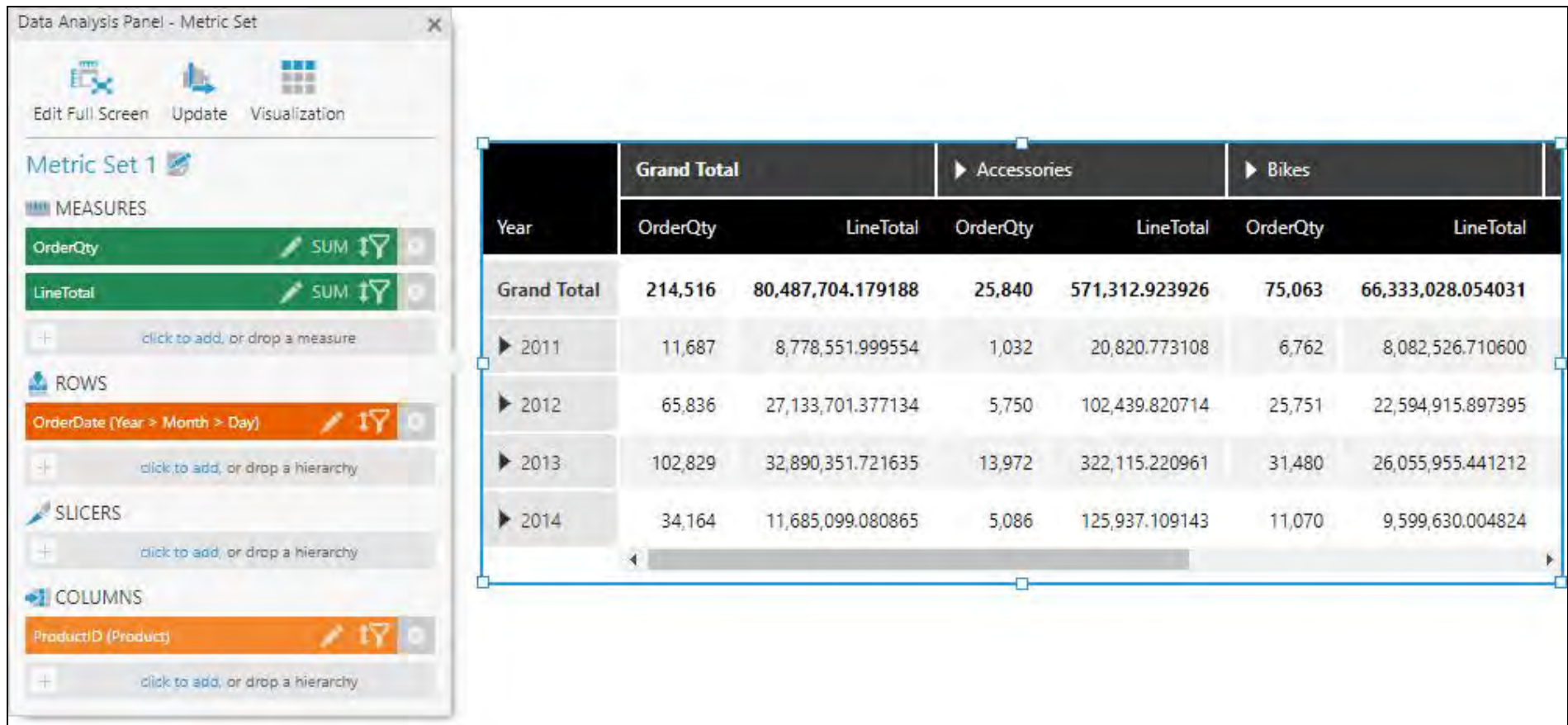
Table Visualization

Page 145 of 1031

- **Measures:** *OrderQty, LineTotal*
- **Rows:** *OrderDate* hierarchy
- **Columns:** *Product* hierarchy

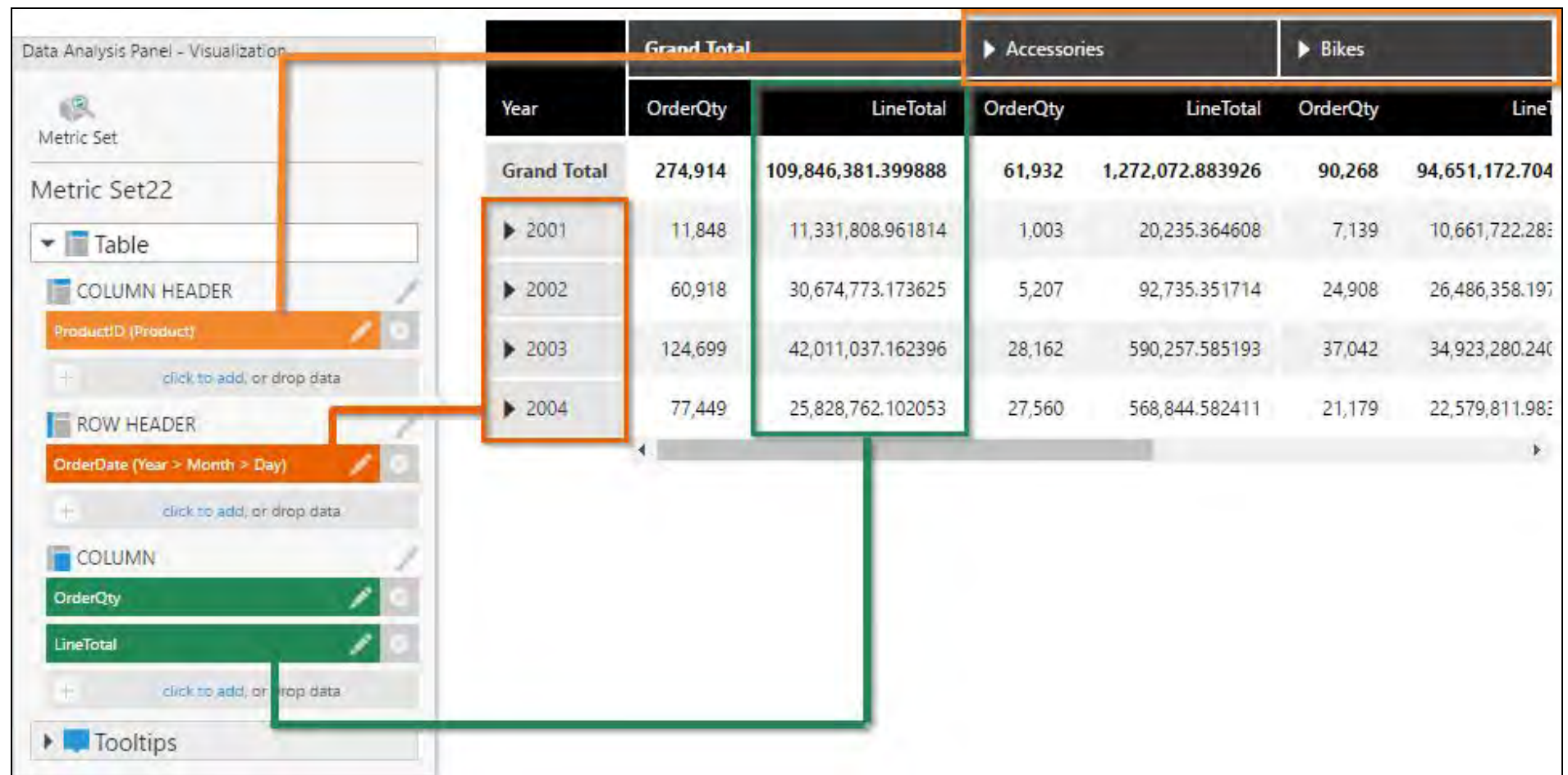
This metric set configuration is not specific to a table visualization, but rather it describes how data will be grouped into a tabular result (of rows and columns), which can then be visualized in a variety of ways including both charts and tables.

The figure below shows this set up in the Data Analysis Panel, and the corresponding table visualization displaying a row for each *OrderDate* (year) and a column for each different *Product* (or product category):



Click the **Visualization** button in the top-right corner of the Data Analysis Panel to see and change which data is displayed in different parts of the [table visualization](#):

- **Column Header** - Displayed as a row of column headers above the table's columns.
- **Row Header** - Displayed as a column of row headers to the left of the table's columns. Row headers are a special kind of column designed to visually group data appearing on the right, where values are displayed once for consecutive rows instead of repeated. There may also be triangular expander buttons you can click to expand or collapse data to switch between summaries and details.
- **Column** - Displayed as regular (or 'flat') table columns. These columns are repeated for each column hierarchy value (e.g., each *Product* hierarchy value).



The screenshot shows the 'Data Analysis Panel - Visualization' interface. On the left, there are three sections: 'Metric Set' (containing 'Metric Set22'), 'COLUMN HEADER' (containing 'ProductID (Product)'), and 'ROW HEADER' (containing 'OrderDate (Year > Month > Day)'). Below these are 'COLUMN' (containing 'OrderQty' and 'LineTotal') and 'Tooltips'. The main table displays data with columns for Year, OrderQty, LineTotal, and two product categories: Accessories and Bikes. Annotations include an orange box around the Column Header and Row Header sections, a green box around the Column section, and a green line connecting the 'LineTotal' column in the Column section to the 'LineTotal' column in the table.

	Grand Total		Accessories		Bikes	
Year	OrderQty	LineTotal	OrderQty	LineTotal	OrderQty	LineTotal
Grand Total	274,914	109,846,381.399888	61,932	1,272,072.883926	90,268	94,651,172.704
▶ 2001	11,848	11,331,808.961814	1,003	20,235.364608	7,139	10,661,722.283
▶ 2002	60,918	30,674,773.173625	5,207	92,735.351714	24,908	26,486,358.197
▶ 2003	124,699	42,011,037.162396	28,162	590,257.585193	37,042	34,923,280.240
▶ 2004	77,449	25,828,762.102053	27,560	568,844.582411	21,179	22,579,811.983

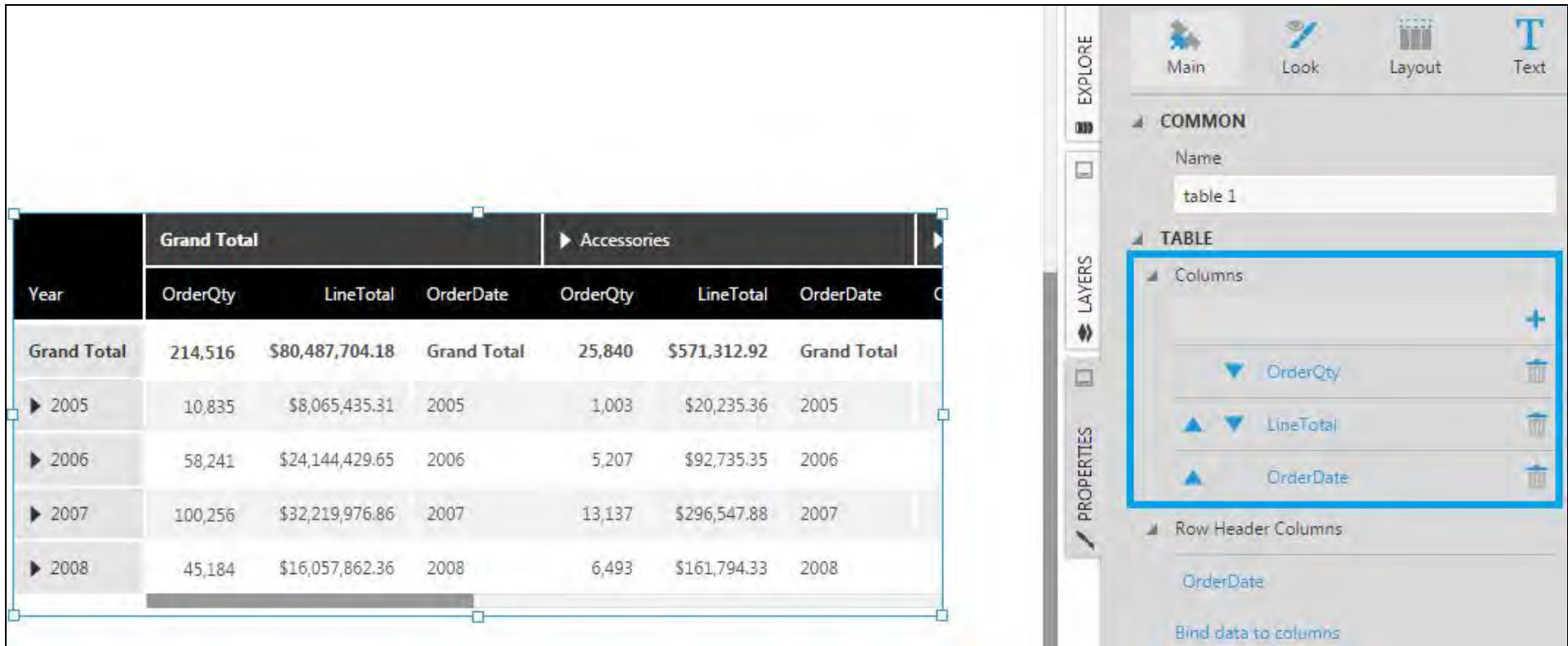
You can drag **data** or **click to add** data under one of these headings to add additional elements to the table, or click **x** to remove them.

For example, only measures *OrderQty* and *LineTotal* are assigned under Column in the example above, but you can add any data there to display as regular columns, including hierarchies. You can also add the same data multiple times as multiple columns that you can customize differently.



Note: Similar to axis labels, drag a **hierarchy level** from the Explore window under Column if you want to display a specific level.

Each table column has settings such as header text, tooltip, appearance, state styles, and different column types, all of which you can further customize in the Properties window.



The screenshot displays a table visualization on the left and its configuration panel on the right. The table has a header with 'Grand Total' and 'Accessories' sections. The data rows show years from 2005 to 2008 with corresponding metrics like OrderQty, LineTotal, and OrderDate. The right panel, titled 'EXPLORE', shows the 'COMMON' section with 'Name' set to 'table 1'. The 'TABLE' section is expanded, showing 'Columns' with 'OrderQty', 'LineTotal', and 'OrderDate' listed. The 'Row Header Columns' section shows 'OrderDate' and a 'Bind data to columns' option.

Year	OrderQty	LineTotal	OrderDate	OrderQty	LineTotal	OrderDate
Grand Total	214,516	\$80,487,704.18	Grand Total	25,840	\$571,312.92	Grand Total
2005	10,835	\$8,065,435.31	2005	1,003	\$20,235.36	2005
2006	58,241	\$24,144,429.65	2006	5,207	\$92,735.35	2006
2007	100,256	\$32,219,976.86	2007	13,137	\$296,547.88	2007
2008	45,184	\$16,057,862.36	2008	6,493	\$161,794.33	2008

When you're setting up interactivity, such as [hover-over interactions](#), you also have the option of targeting a specific table column (e.g., using the **Bound visual** option).



Note: Click **Choose data to display** in the Properties window to open the Data Analysis Panel and go directly to the **Visualization** tab.

The Visualization tab also allows you to remove an element of the metric set from the visualization, or to restrict it to only a certain use. For example, a measure can be removed from under Column so that it is not displayed directly in a column of the table, but added instead to the tooltip of some other column.

For more information, see:

- Video: [Configuring Metric Sets](#)
- [Handling Missing Data](#)
- [Slicers Versus Columns and Rows](#)



- Archive of documentation for Logi Symphony v24

- [Using Chart Properties](#)
- [Using a Table Visualization](#)
- [Set Up a Hover Over Interaction](#)
- [Apply Colors to Data Points or Series Using Color Rules](#)



Accessibility

This applies to: *Managed Dashboards, Managed Reports*

When you create content, take advantage of built-in and available accessibility and design features to ensure as many people as possible can access it.

Content viewed in full screen mode or embedded in your own application can be made accessible for all users. Upgrade to the latest version of Symphony to receive the full benefit of accessibility updates such as keyboard support and screen reader compatibility for filters and components. Guidelines and information about accessible names are included here to help you design with accessibility in mind.

Guidelines

Your organization may require an accessible version of content that meets standards such as WCAG 2.1, and meet the criteria labeled as conformance levels A and AA.

See the [Web Content Accessibility Guidelines \(WCAG\)](#) and [how to meet their criteria](#) when designing your content and deciding on how to provide functionality.

Some examples for meeting specific criteria include:

- **1.4.1 Use of Color:** Include an alternative way to convey information besides [color hues](#). For example, choose colors that also have different lightness/brightness with at least a [3:1 contrast ratio](#) if the color differences are meaningful or required to distinguish between data points, or to label items directly. More options include using different marker/symbol shapes or using the [Hatching](#) option.
- **1.4.10 Reflow:** An option that may work for your organization is to use a [responsive layout](#) or add a responsive version of the content (unless a two-dimensional layout is required for usage or meaning).
- **2.2.2 Pause, Stop, Hide:** if you have a visualization that [automatically refreshes](#), you may need to provide a way to customize or disable the refresh interval.

Accessible Names

You can include accessible names to provide more information in multiple ways. These can include:

- **Non-text content** like charts, or icon buttons without text, should have an accessible name or short description set up to identify it to screen reader users. Unless this text would be a sufficient alternative for non-text content, there should also be a long description such as a table version of the data or a data label conveying the same data, and if necessary you could include instructions for where to find this in your short description (see Situation B in [Understanding Success Criterion 1.1.1](#)).
- Some input controls such as [filters](#) already contain a built-in label that is both displayed visually and accessible to screen reader users, but Drop Down List and Radio Buttons components should have a label component added and associated with it.



- Any type of content that already has a visible title should have it associated as its accessible name. For example, a table visualization is already made up of text accessible to screen readers but you can associate it with its title.

Add or associate an accessible name by setting `ARIA Label` in the **Text** tab of the [Properties window](#):

- Enter an accessible name in the textbox. For example, for non-text content like a chart, you could provide a short description like **Current Month Sales Chart**.
- If the current item already has a visible title provided by a label component or data label, choose it from the dropdown to associate them together for screen reader users.

Decorative images and other non-interactive elements that don't convey meaning should not have an [ARIA label](#) because they should be ignored by screen readers. Hyperlinks and buttons that display text are already accessible to screen readers and normally should not be given an ARIA label.

Working With Gauges

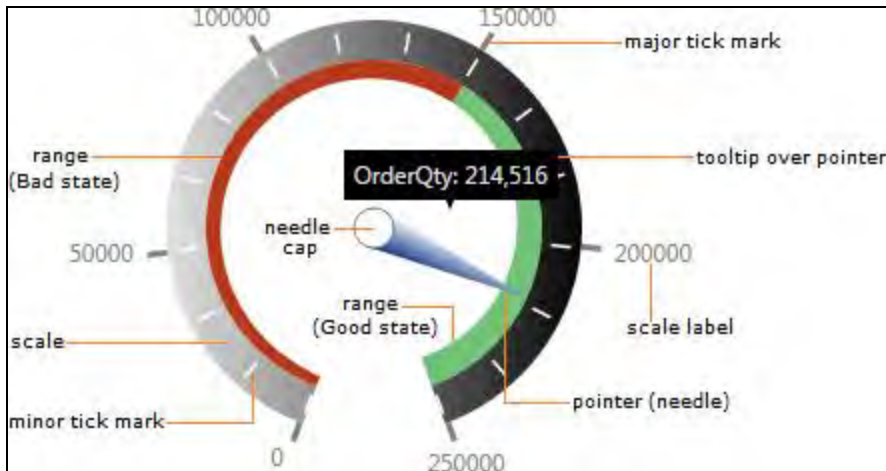
This applies to: *Managed Dashboards, Managed Reports*

A gauge is typically used to visualize metrics having a single value, such as the total revenue for the year-to-date compared with this time last year. In other words, gauges are not designed to display multiple rows of data as in a chart or table, but can display multiple measure values.

There are both linear and radial (circular) gauge types available in a variety of configurations.

Elements of a Gauge

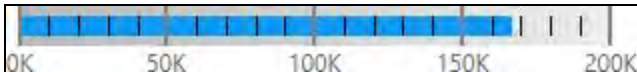
The figure below shows the main elements of a gauge visualization.



Types of Gauges

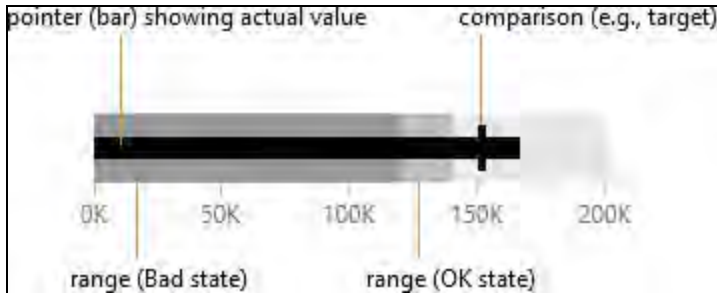
Linear Gauge

A linear gauge is characterized by a scale drawn as a straight line with either a horizontal or vertical orientation.



Bullet Graph

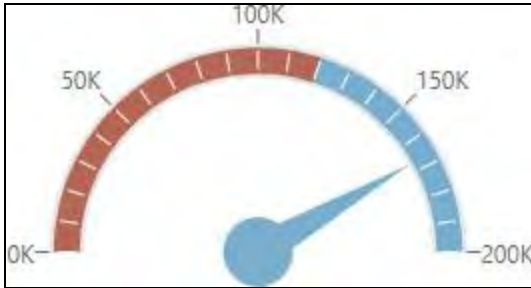
A bullet graph is a variation of a linear gauge that follows a particular design meant to emphasize readability and efficient use of space while allowing for meaningful context around the main value. You can use a series of bullet graphs in a relatively compact space to visualize and evaluate a number of key metrics.



Note: If you have a metric set with multiple rows of data that can each be visualized as a bullet graph, you can use a table visualization's bullet graph column type.

Radial Gauge

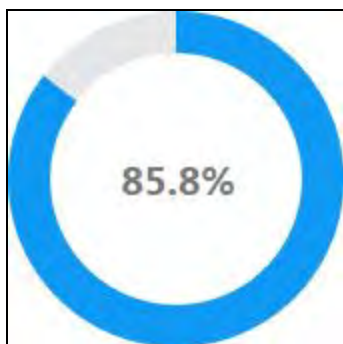
A radial gauge has a pivot point around which its pointers rotate, plus a circular scale.



By default, the radial scale forms an almost complete circle with a sweep angle of 320 degrees, but you can easily adjust its start and sweep angles to any combination of degrees to form an arc (for example), or apply one of Symphony's built-in styles that provide *Half* and *Quarter* gauges.

Pie Gauge

A pie gauge is a variation on a radial gauge that displays a metric as a percentage of the length of a circular scale, like a pie or donut chart with a single slice.

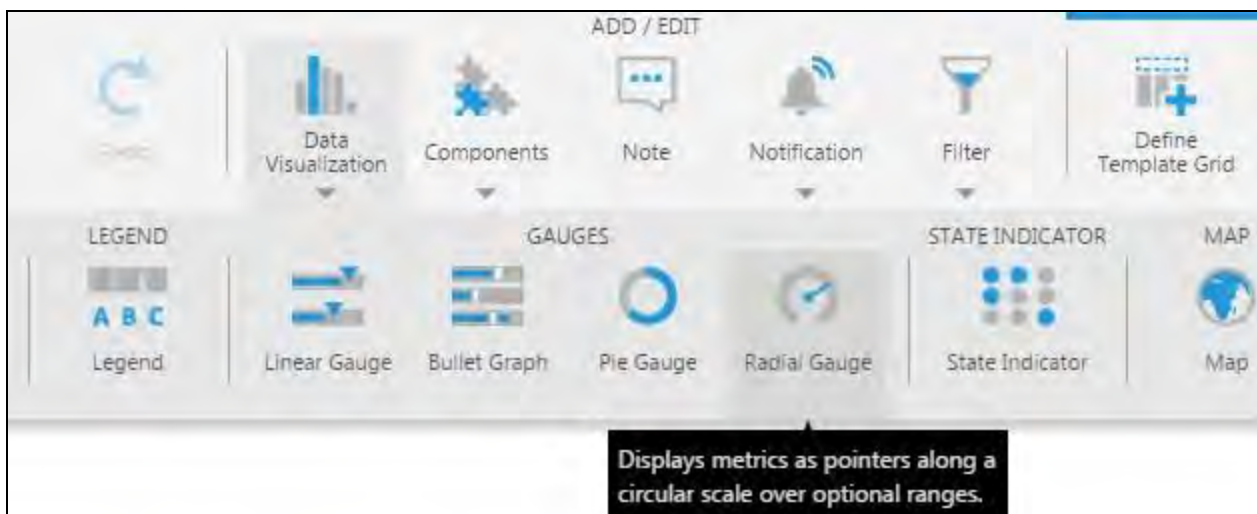


Adding a Gauge

The following is a brief walkthrough that shows you how to add a gauge to your dashboard.

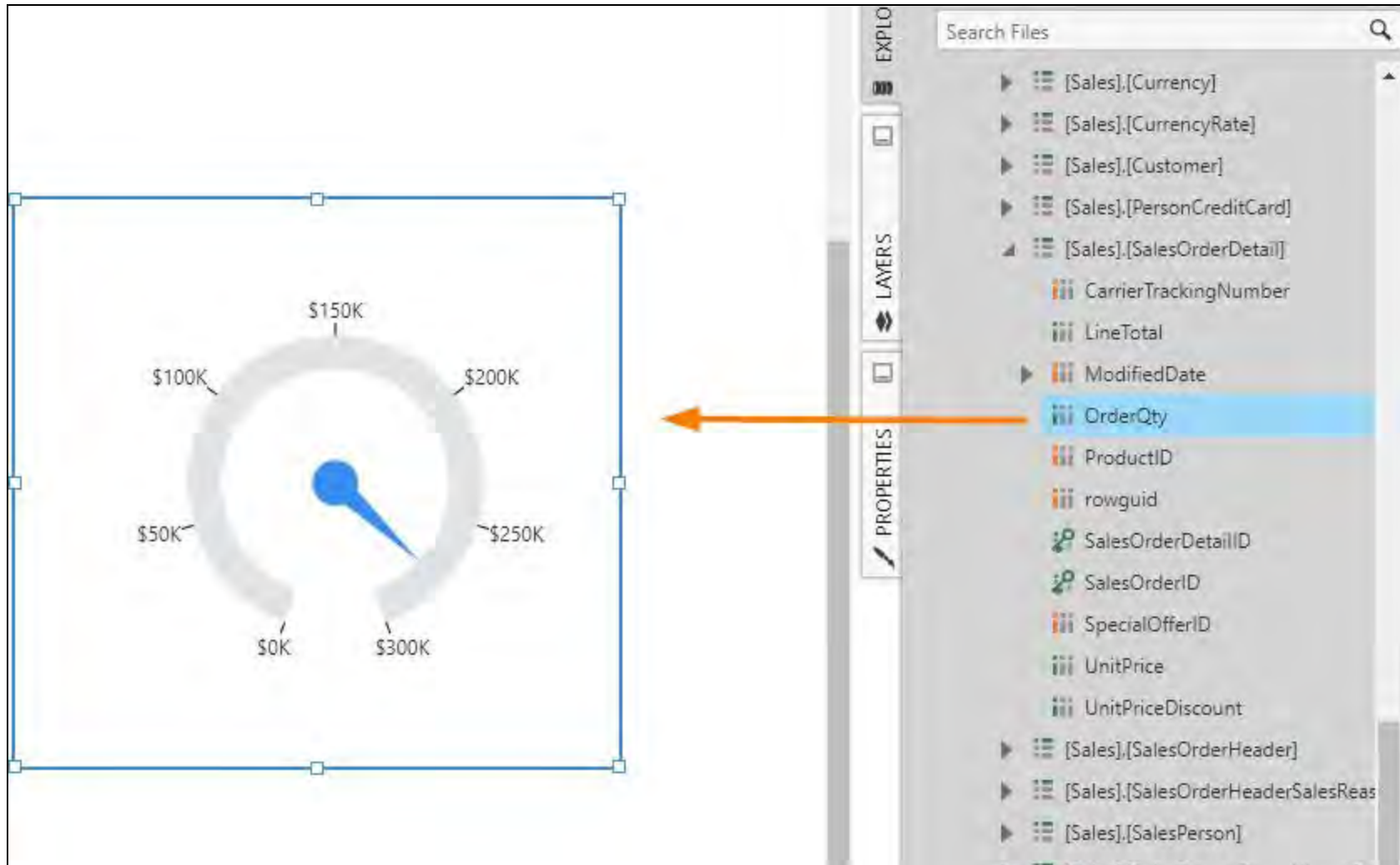
First, create a new dashboard from the main menu and use the **Blank** template.

Go to the toolbar, click **Data Visualization**, scroll to the right, and click **Radial Gauge**.



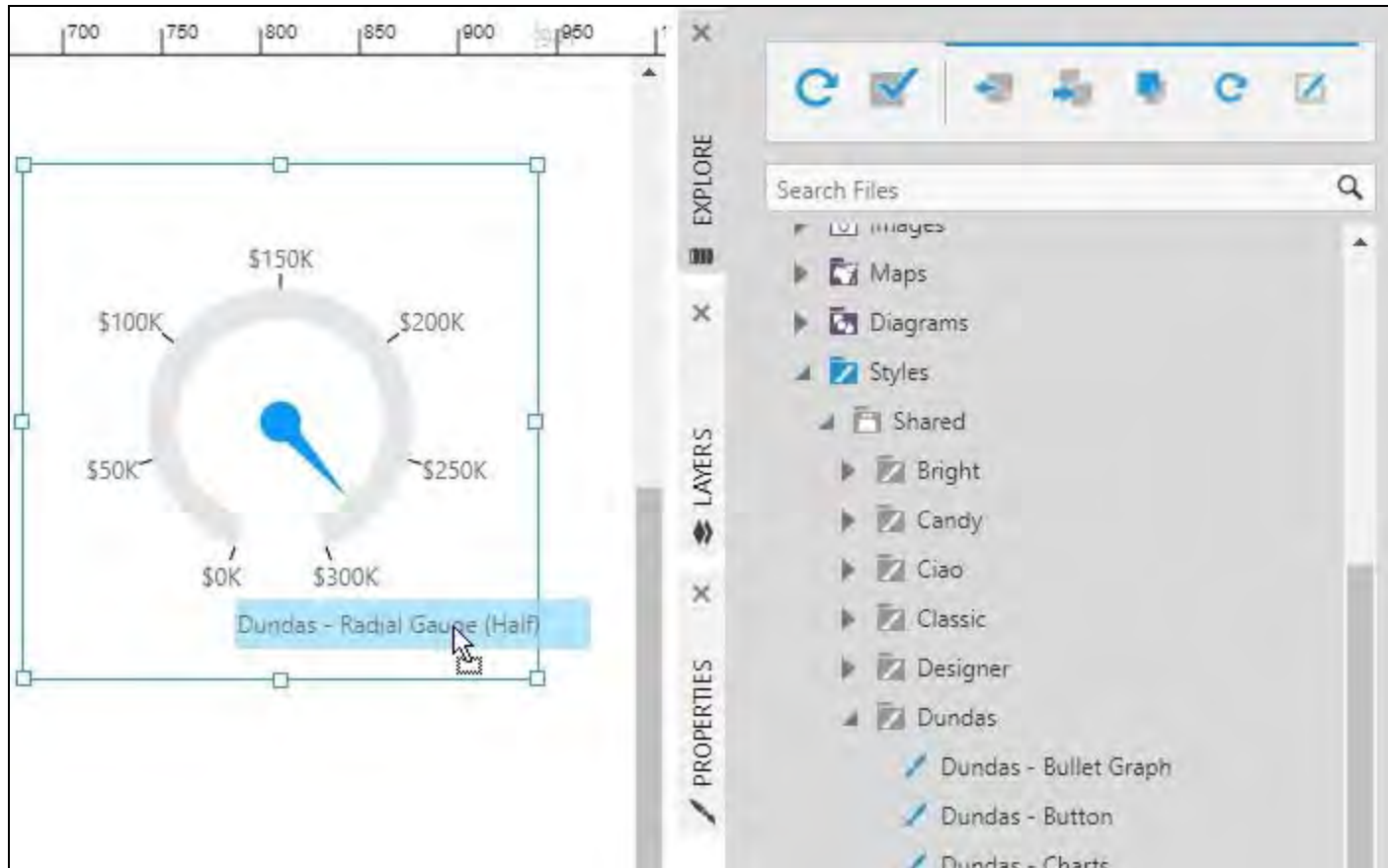
This adds an empty radial gauge to the canvas with its Data Analysis Panel open.

Go to the Explore window and locate a measure column you want to visualize. Drag the **measure** onto the empty gauge.

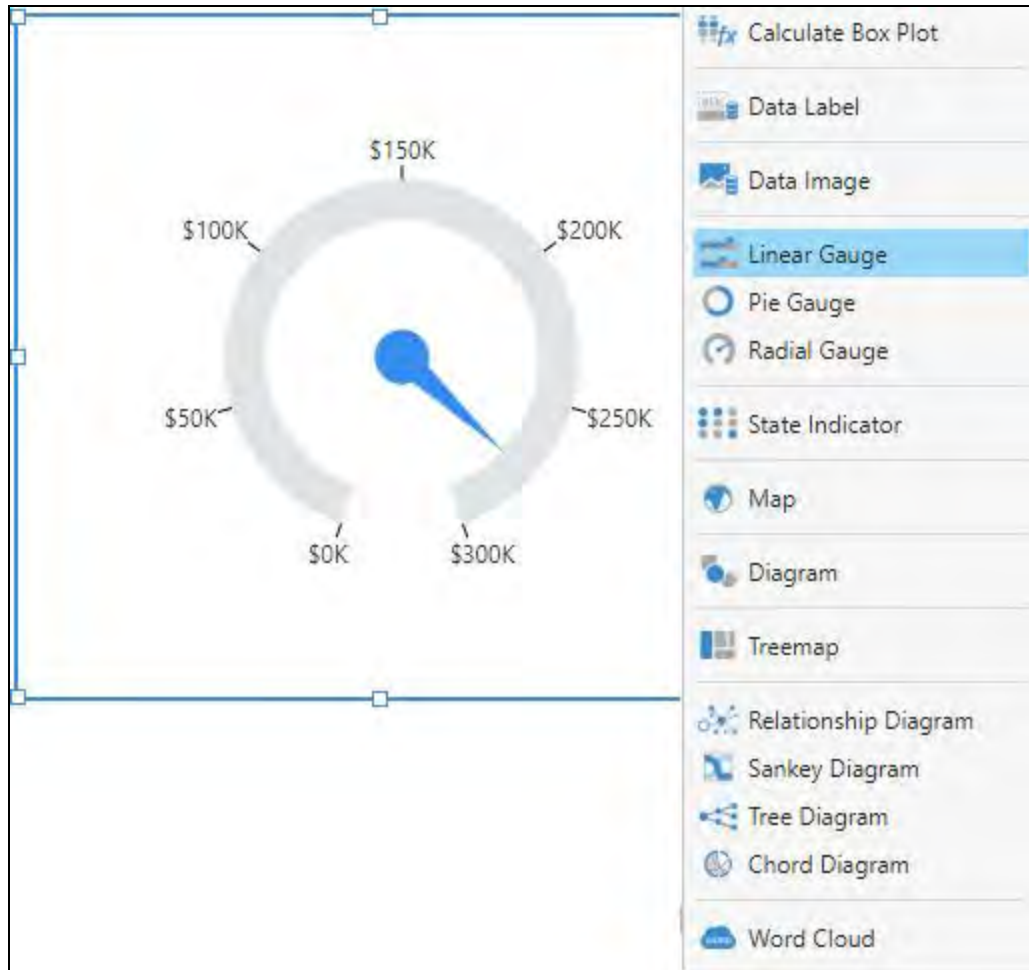


A basic radial gauge is displayed which includes a pointer (of type *Needle*), a scale with labels, and major tick marks.

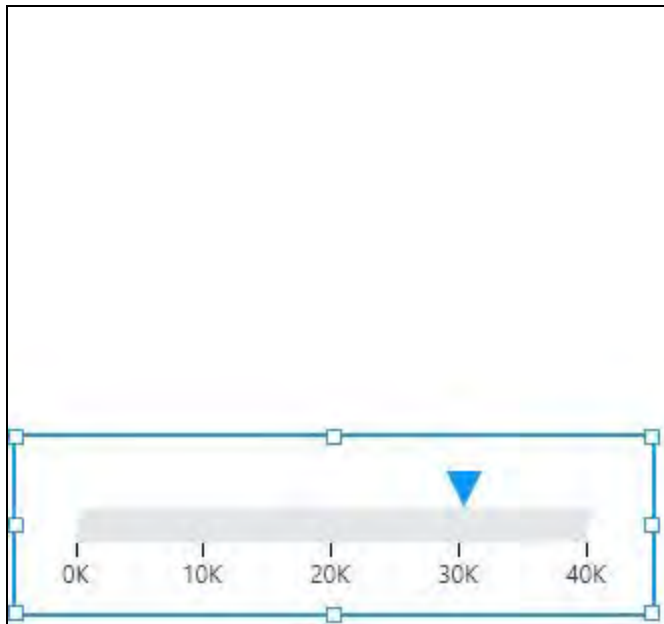
Radial and pie gauges have built-in [styles](#) available that offer different predefined layouts, such as quarter radial gauges and filled pie gauges. In the Explore window, expand the **Styles** and **Shared** folders to look through the different styles available for each theme, then drag a **style** onto a compatible gauge to apply it.



Right-click on the **radial gauge**, click **Re-visualize**, and then select **Linear Gauge**.



This turns it into a linear gauge. Depending on its dimensions, the scale of the linear gauge will be oriented horizontally or vertically. This is because the gauge scale's Orientation property is set to *Auto* by default.



EXPLORE
LAYERS
PROPERTIES

SCALE
Scale
Ticks
Text

Maximum Pin
+

Reversed
☐

Shared Scales
[Share the scale with another gauge](#)

INTERVALS

Interval
+

Interval Count
6

Interval Minimum Length (pixels)
40

Interval Offset
+

Multiplier
1

LAYOUT

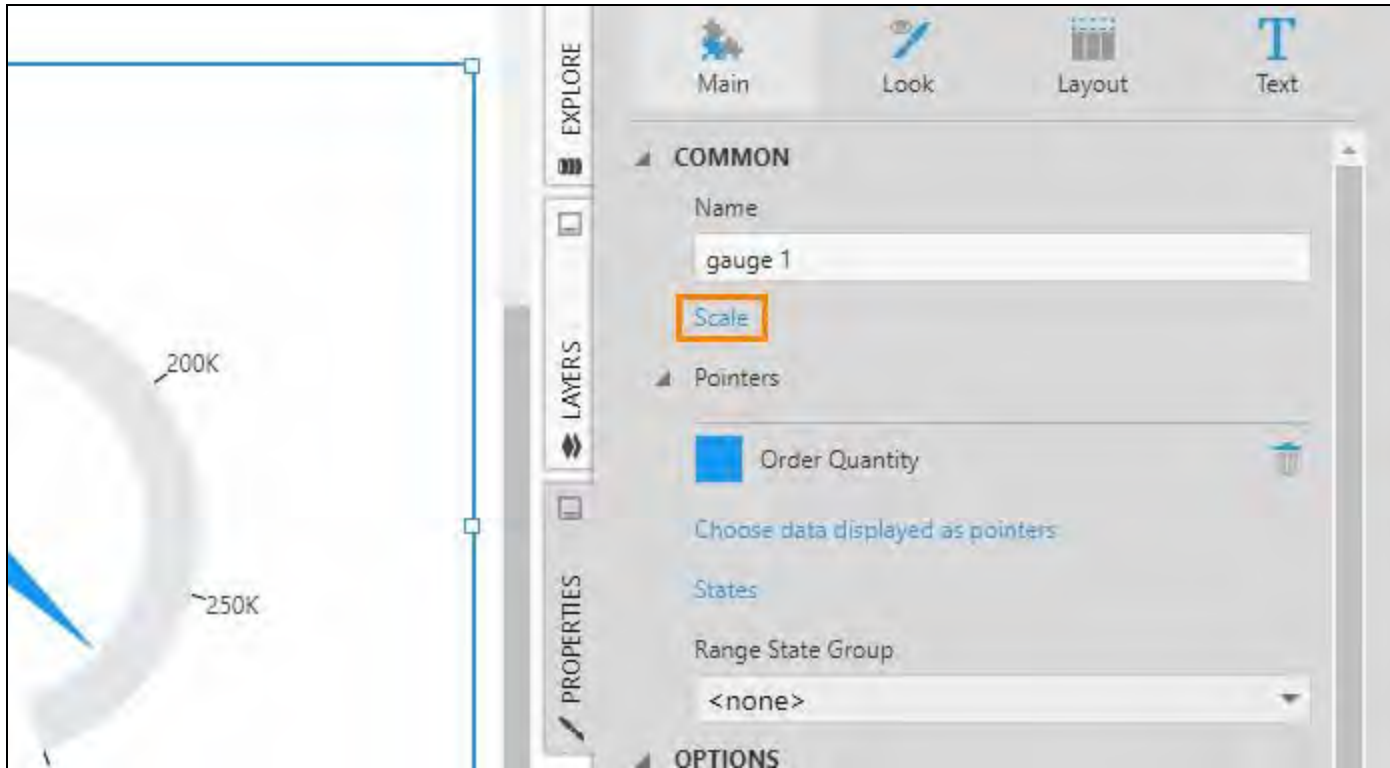
Orientation

Auto
Auto
Horizontal
Vertical

End Margin
10
%

Scale

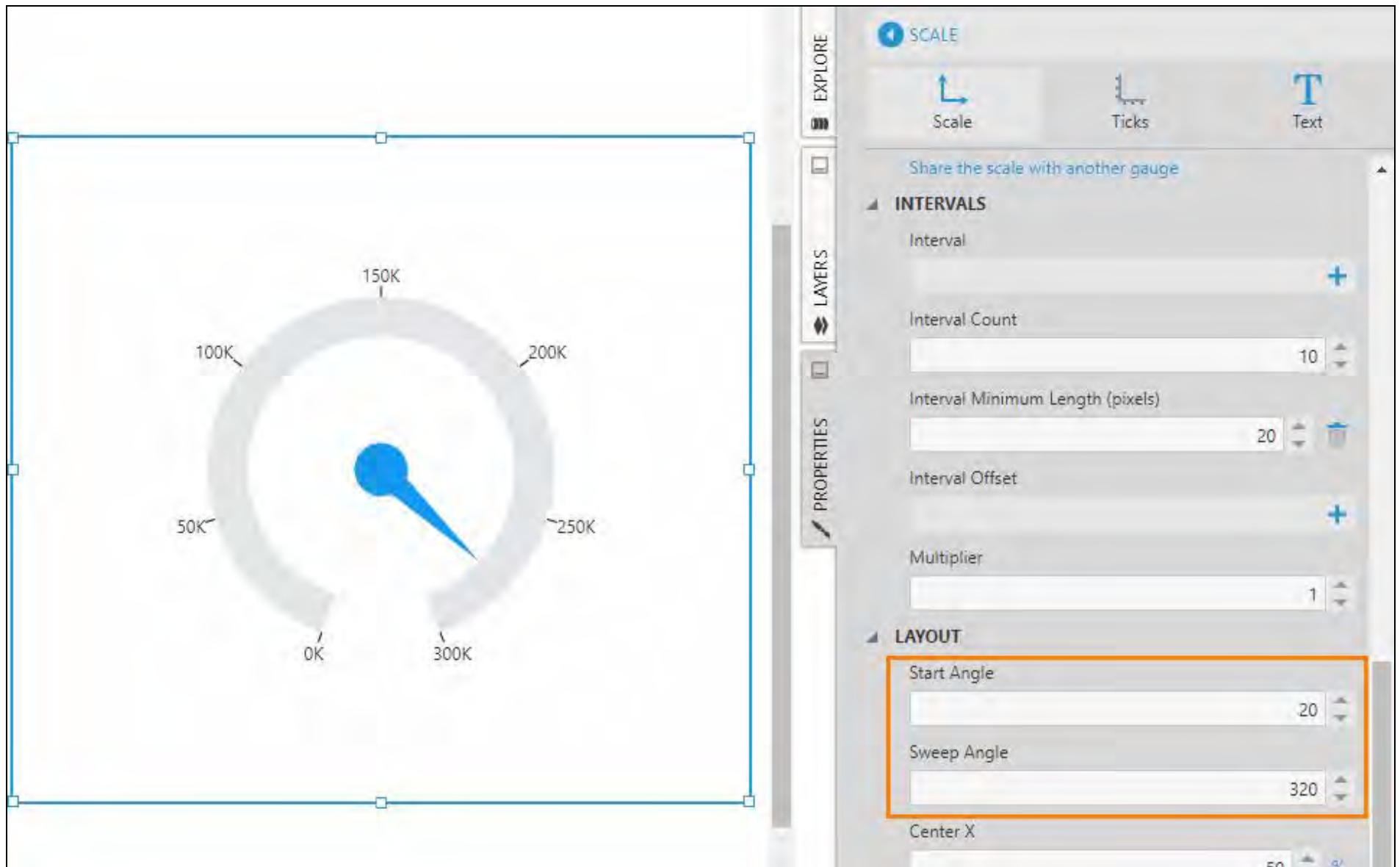
You can access the properties of a gauge scale from the Main tab in the Properties window.



You can also right-click on a **scale element** such as a label to open its properties, or click on it if the gauge's properties are already open to switch to the scale properties.

Start and Sweep Angle

By default, the scale of a radial gauge forms a nearly 360-degree circle. You can change the start and sweep angles of the gauge's scale to have the gauge display as an arc (i.e., a partial circle).



The gauge's Start Angle property specifies the angle at which to start drawing the scale. This is an angle in degrees between 0 and 360, which is measured clockwise from the 6 o'clock position. For example, to produce the semi-circular radial gauge shown at the beginning of this article, set the start angle to 90 degrees.



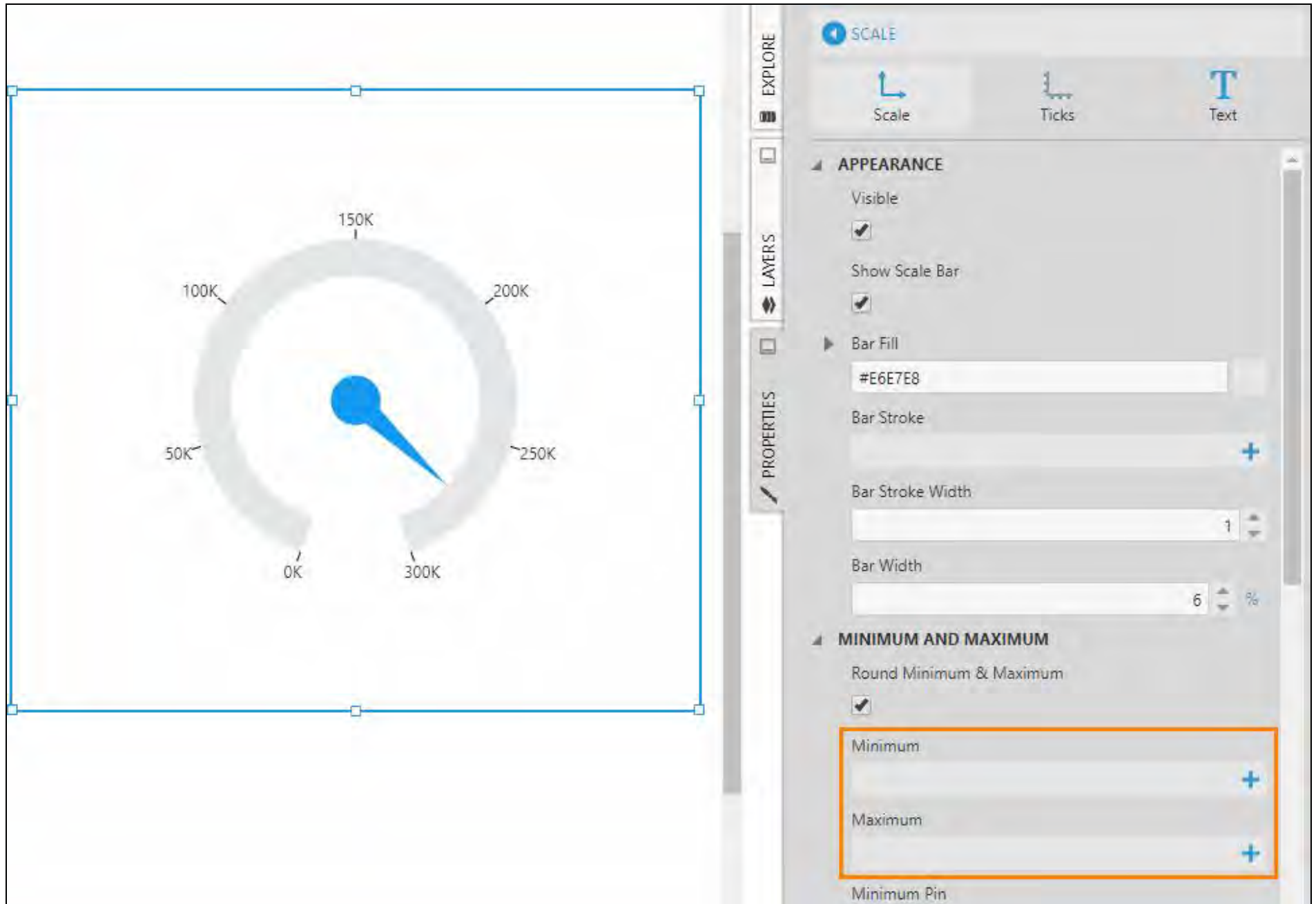
- Archive of documentation for Logi Symphony v24

The Sweep Angle property is an angle representing the length of the arc and is measured in degrees. For example, to produce the semi-circular radial gauge shown at the beginning of this article, set the sweep angle to 180 degrees.

If you decrease the sweep angle below 270 degrees, you may want to position and size the scale to take up more space within the bounds of the gauge. For example, set Center X and Center Y to adjust the scale's position by its center. Then set Radius to adjust the size of the scale.

Minimum and Maximum

The scale's minimum and maximum values are determined automatically based on the gauge's underlying data. However, you can override this by setting the gauge scale's Minimum and/or Maximum properties manually.

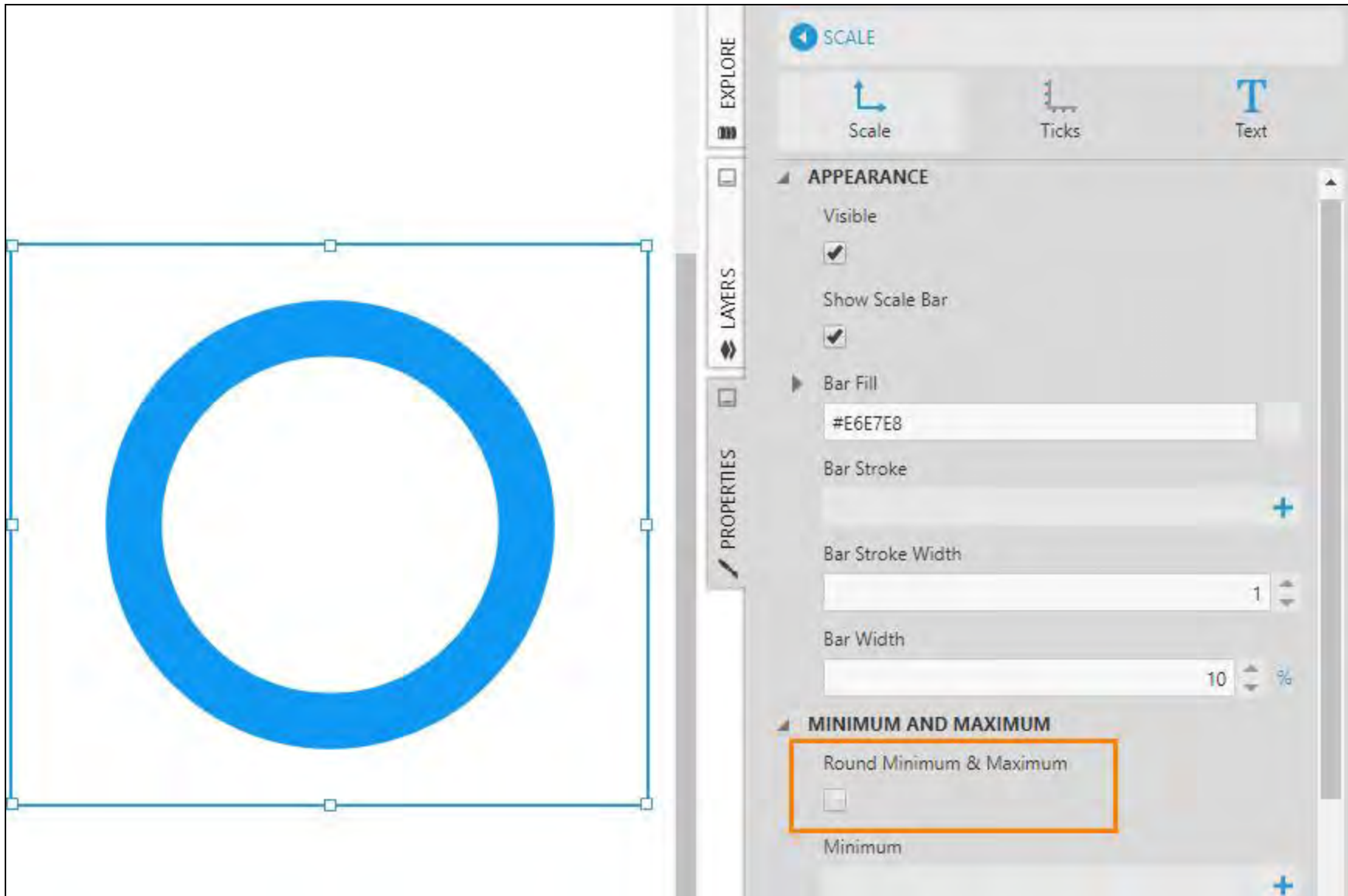




If the Minimum and Maximum properties are not set on a gauge scale, and the Round Minimum & Maximum property is turned on, then rounded values for the scale minimum and maximum will be calculated automatically.

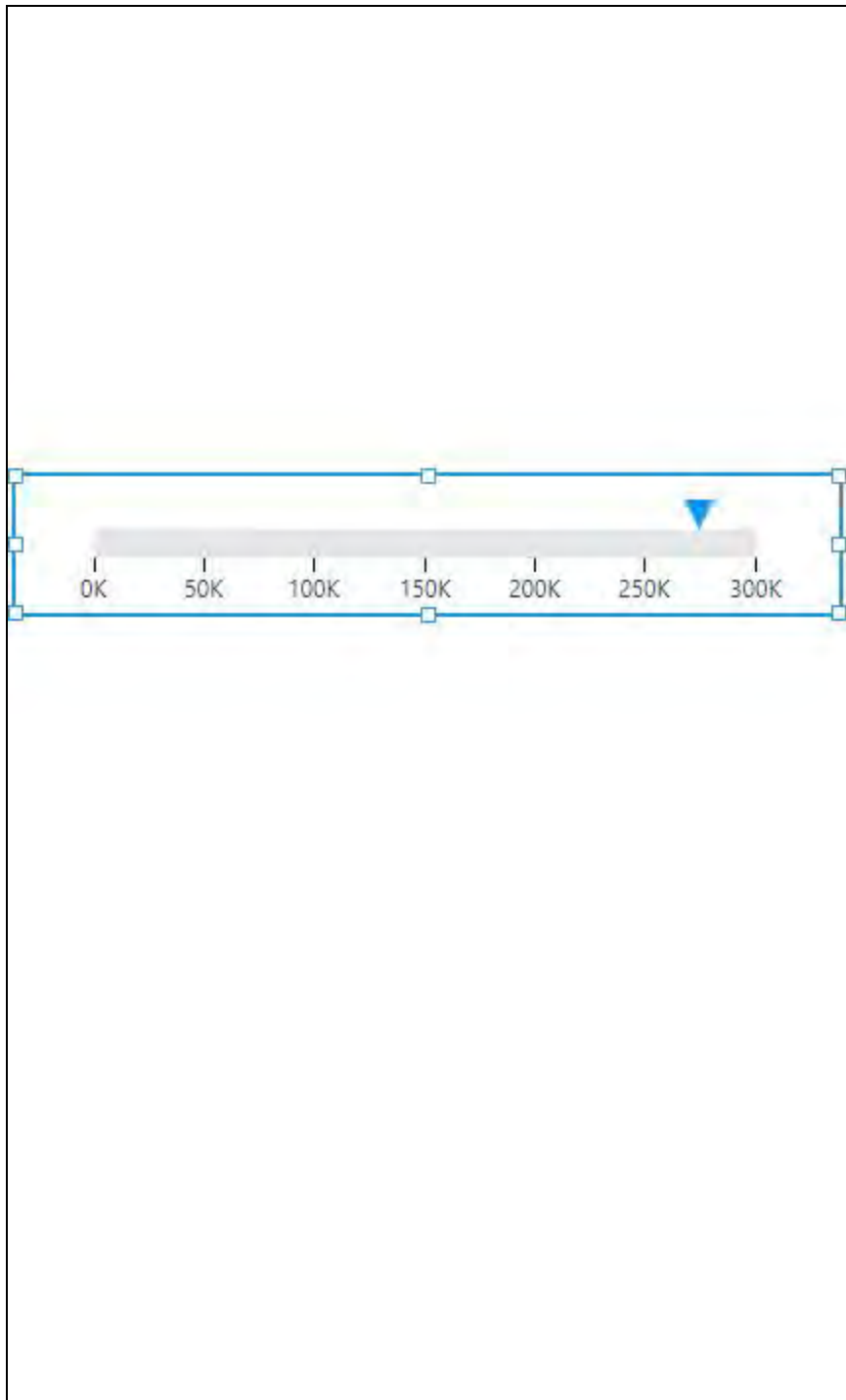
For pie gauges, which do not display any scale labels, the Round Minimum & Maximum property is turned off by default because rounding can be misleading. Instead of using rounding, you can do one of the following for a pie gauge:

- Set up states which are displayed as ranges on the gauge
- Add a second measure which will be displayed as a second pointer (e.g., a target)
- Set the Maximum property manually



Orientation

As shown in the walkthrough, use the gauge scale's Orientation property to orient a linear gauge horizontally or vertically. By default, this property is set to *Auto*, which means the orientation is adjusted automatically based on the width and height of the gauge.



EXPLORE
LAYERS
PROPERTIES

SCALE
Ticks
Text

Maximum Pin
+

Reversed
☐

Shared Scales
[Share the scale with another gauge](#)

INTERVALS

Interval
+

Interval Count
6

Interval Minimum Length (pixels)
40

Interval Offset
+

Multiplier
1

LAYOUT

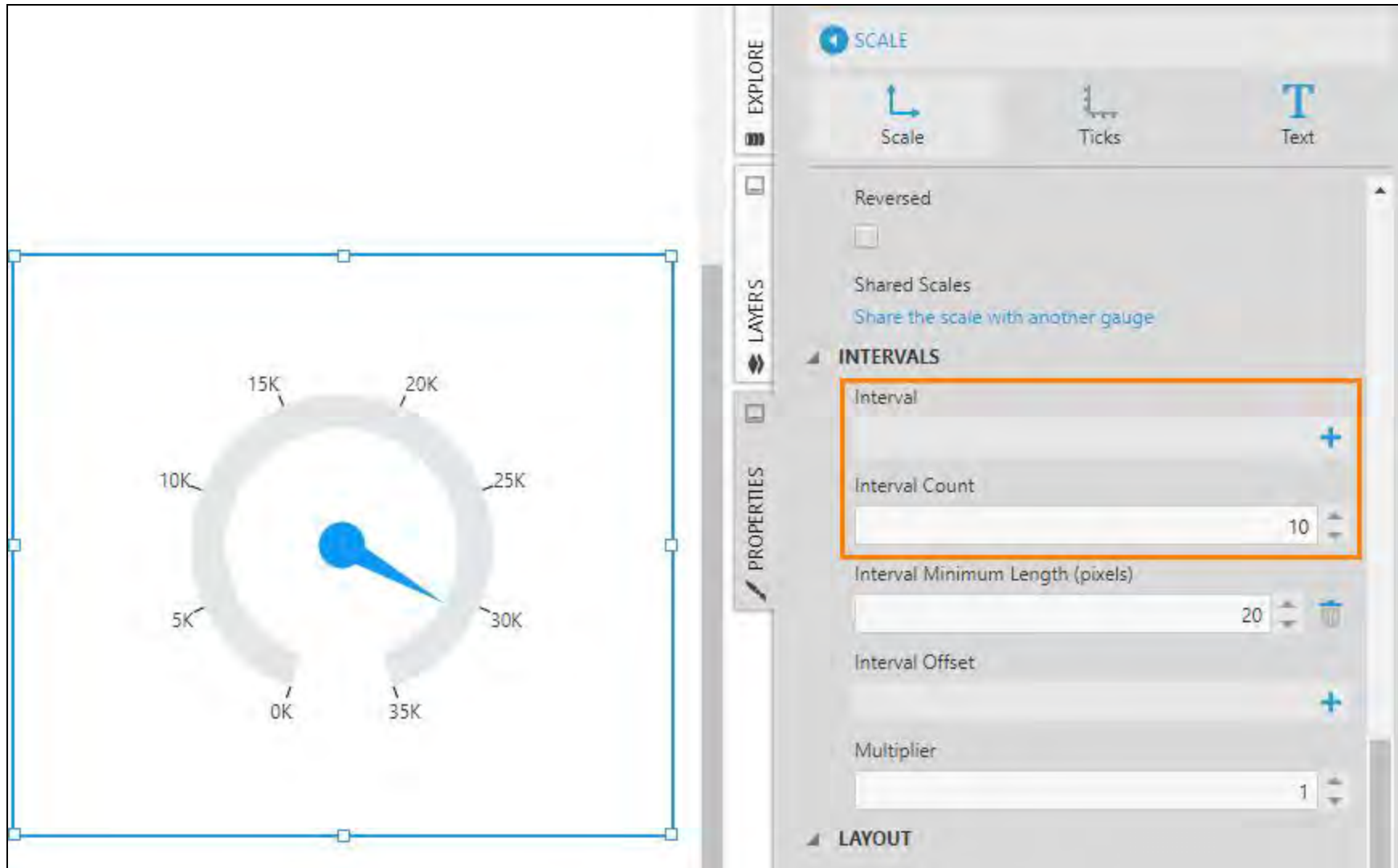
Orientation
Auto

Start Margin
10 %

End Margin

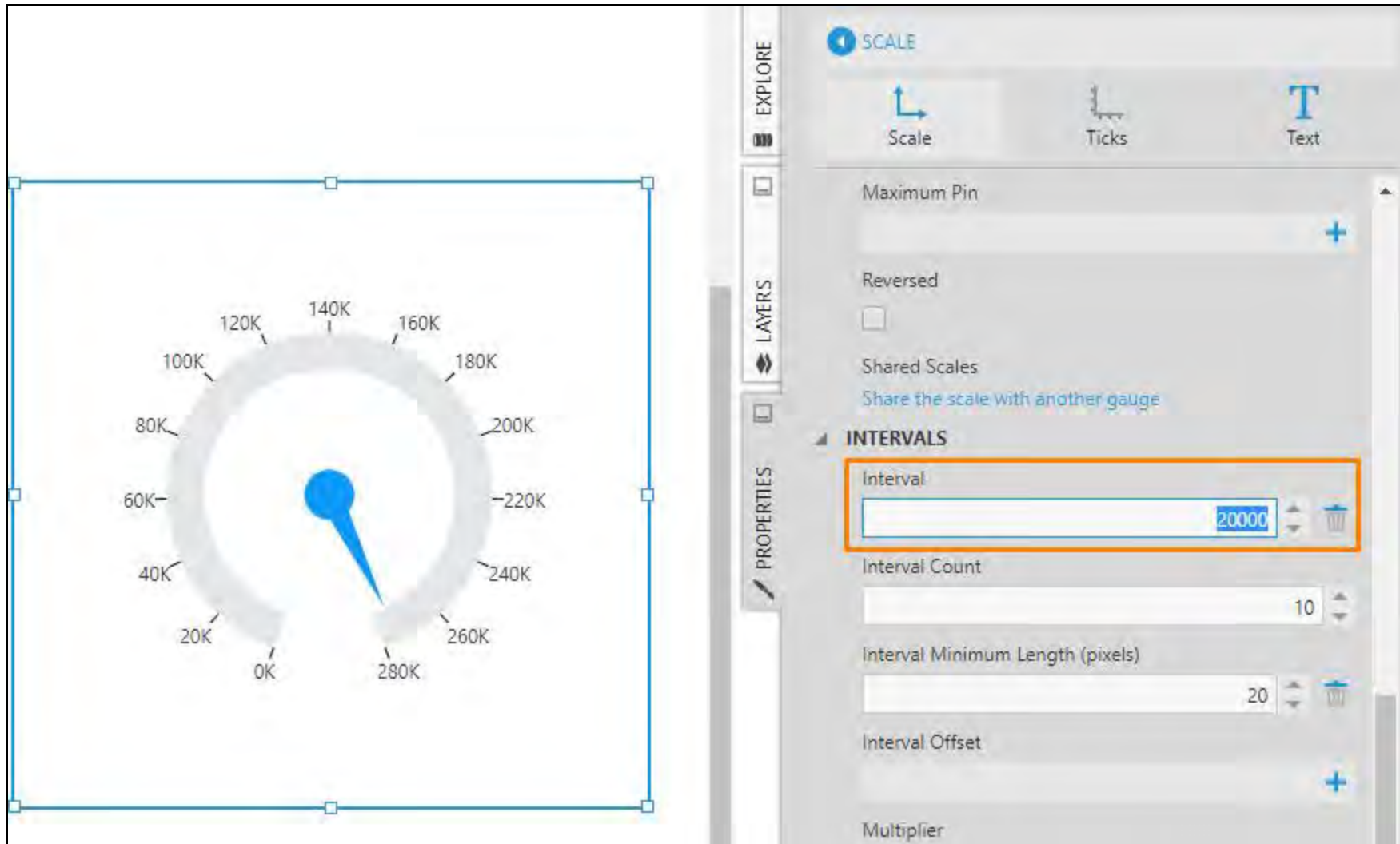
Interval and Interval Count

The Interval and Interval Count properties can be set on a scale itself, or on its major tick marks, minor tick marks, or labels.



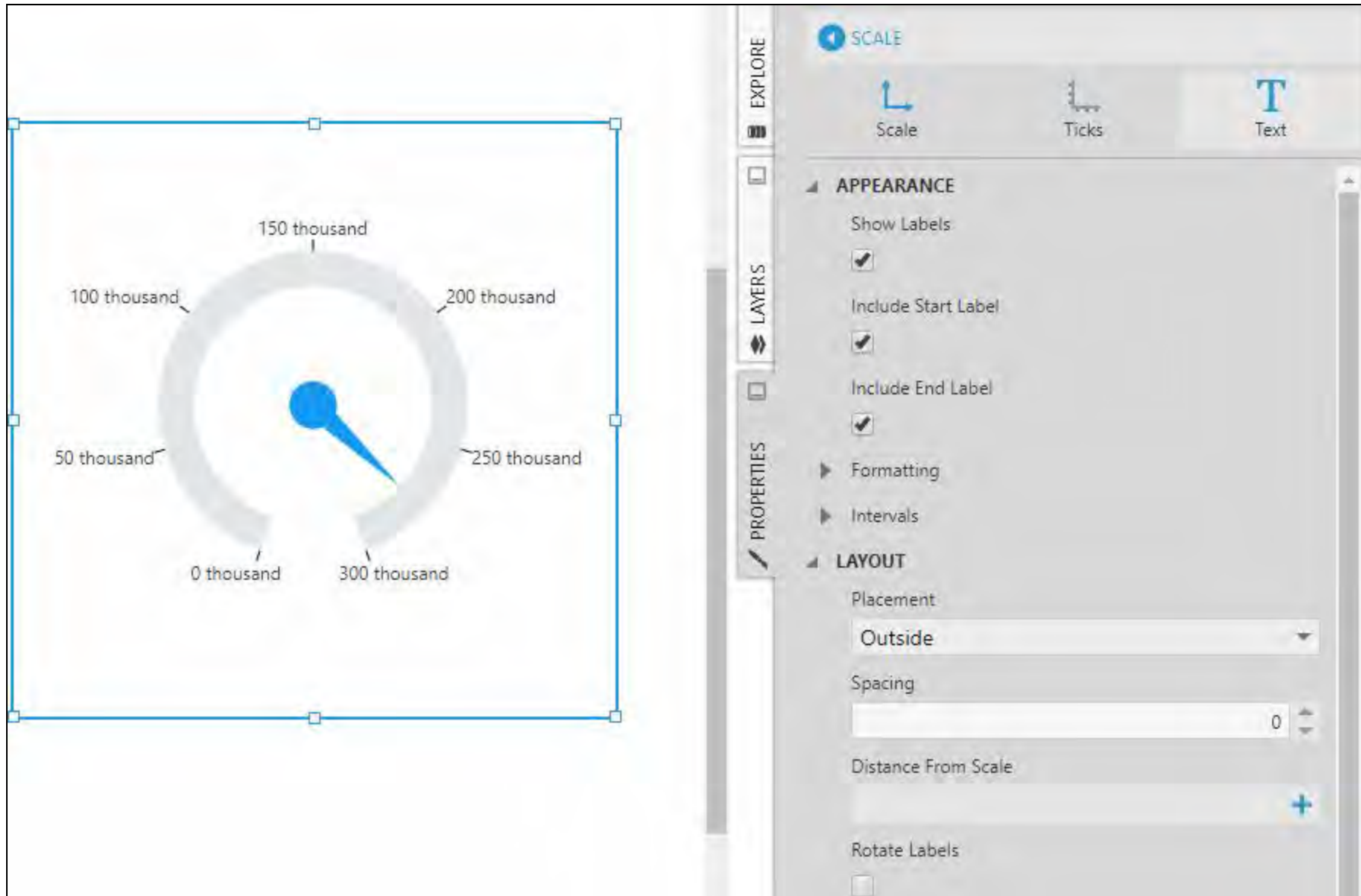
By default, the Interval Count on the scale is set to 5, which means the scale is divided into 5 sections.

The Interval property lets you override the interval count by specifying the size of each interval based on measure units. For example, in the figure below, the interval is set to 20,000 and the total number of intervals is determined automatically based on that value.

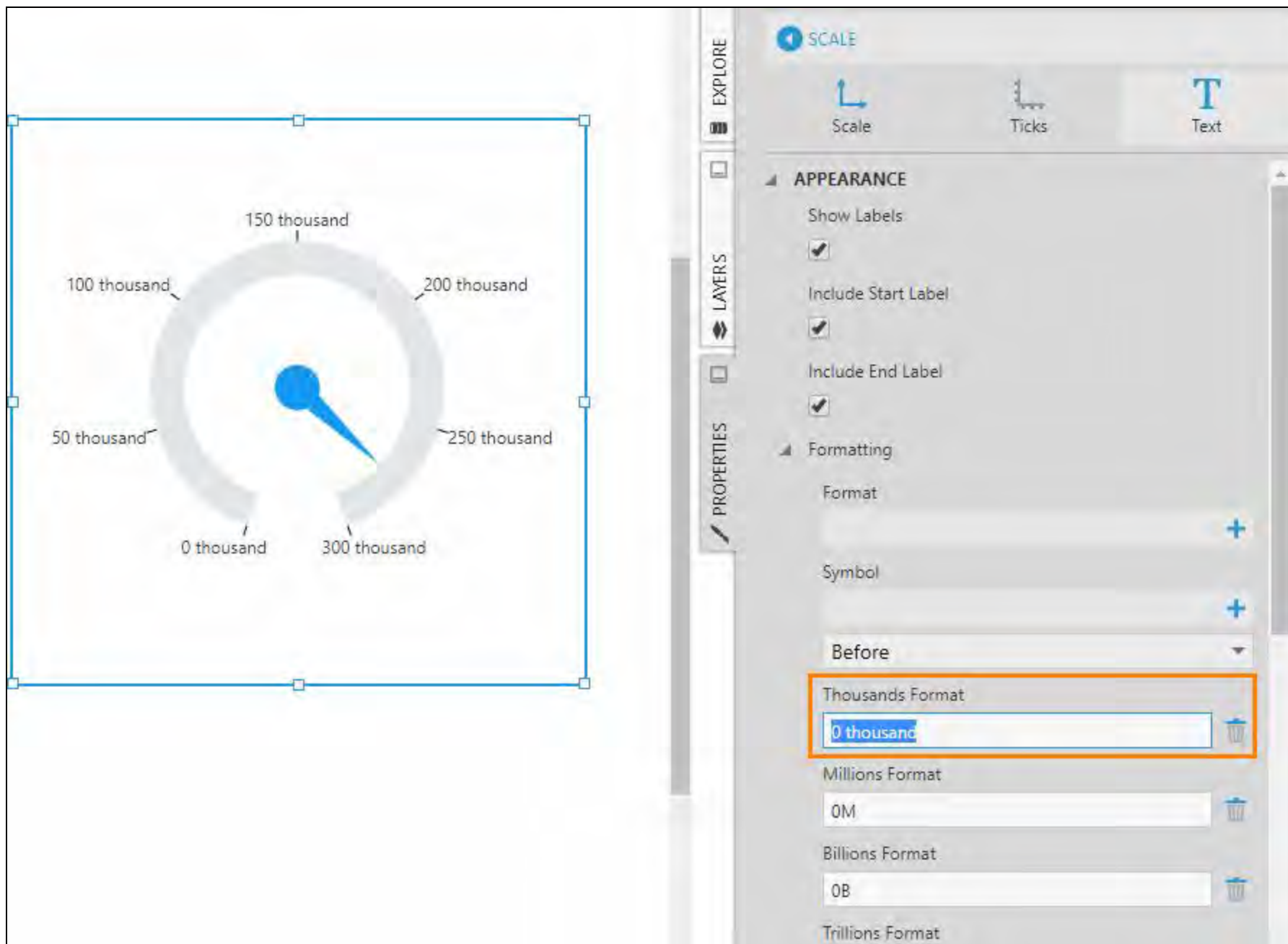


Label Style

To customize gauge labels, go to the Properties window for the scale series, click the **Text** tab.

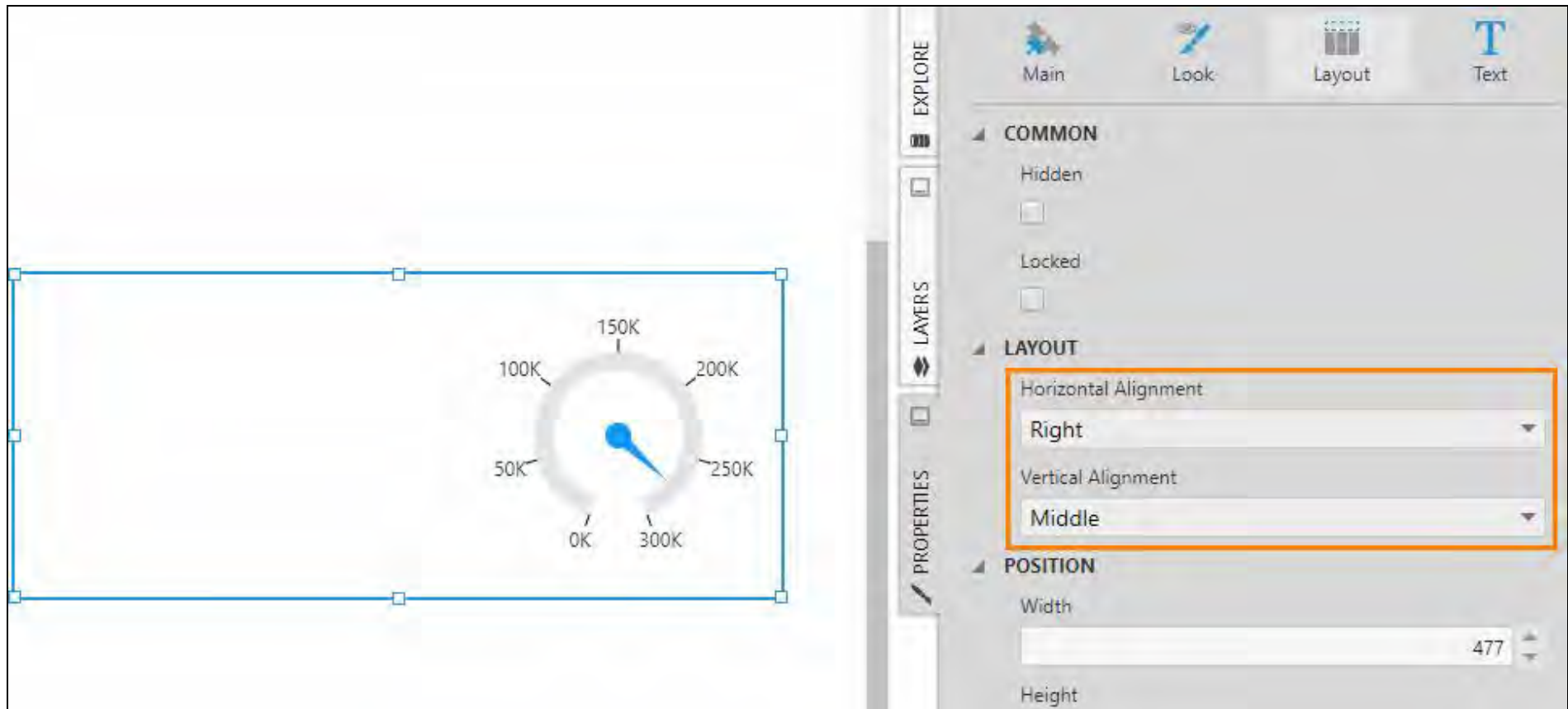


For example, go to the **Text** tab to change how you want large numeric values to be formatted. Note that the defaults are already set up to generate compact labels and avoid overlap when displaying large values.



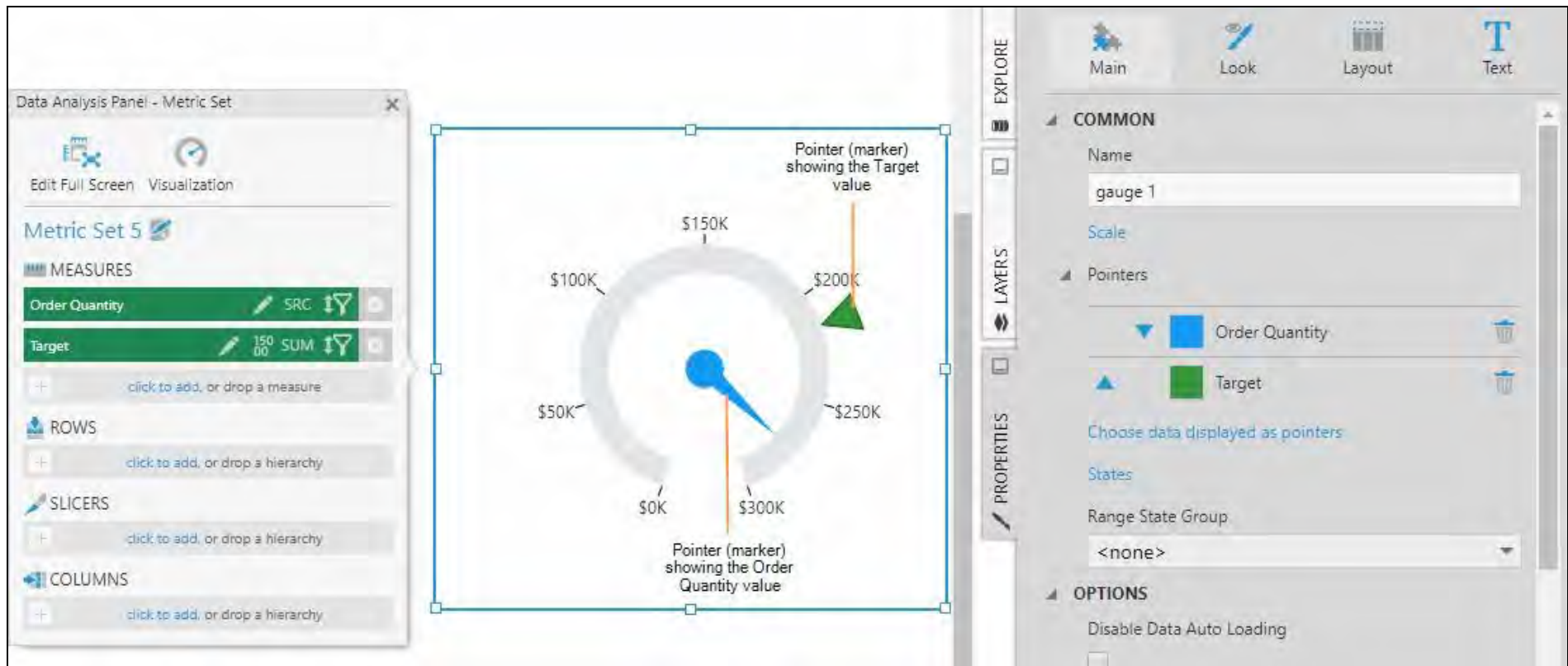
Alignment

By default, a radial gauge is centered within its rectangular bounds when its width and height are not the same. You can change this by going to the Layout properties for the gauge and using the Horizontal Alignment and Vertical Alignment properties to align it as needed.



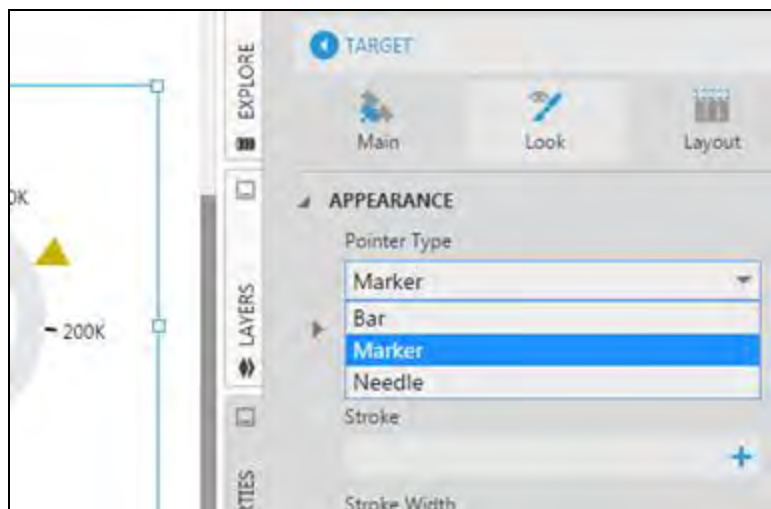
Pointers

A gauge has one or more pointers which correspond to the measures from a metric set. A second pointer is often used in gauges to represent a target measure or contextual metric value. Each pointer can be independently customized in terms of appearance and layout.



Pointer Type

The Pointer Type property has three options: *Bar*, *Marker*, and *Needle*. A radial gauge can use any of these pointer types but a linear gauge only supports *Bar* and *Marker*.



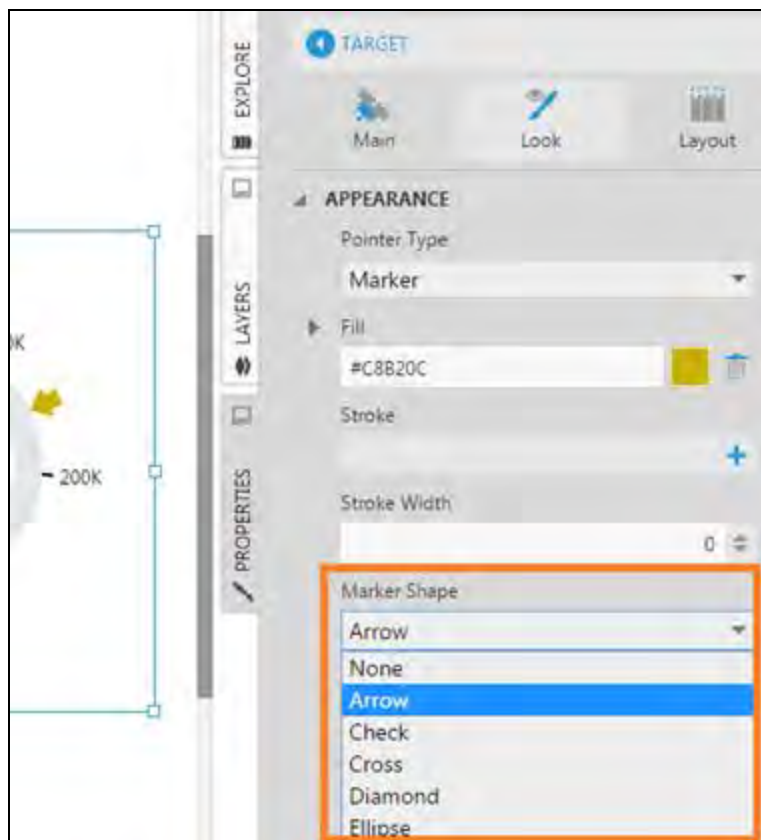
Note that a bar pointer is not visible when its value is zero.



Note: For a bullet graph, the pointer type is set to *Bar* for the primary (actual) measure, and the pointer type is set to *Marker* for the comparative measure.

Marker Shape

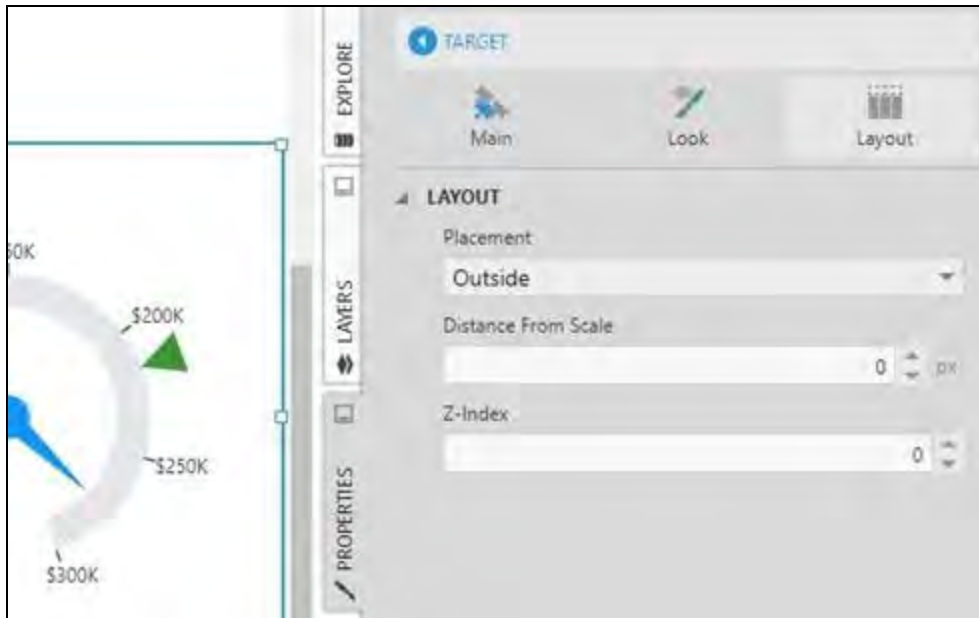
If your pointer type is *Marker*, use the Marker Shape property to choose between a number of available shapes.



Note: For a bullet graph, the comparative pointer's marker shape is set to *Rectangle*. The fill color for the marker and the marker width and height can be adjusted accordingly.

Placement

Go to the Layout section of a pointer's properties to find the Placement property. Use this property to control whether the pointer (e.g., marker) should be placed on the inside or outside of the scale, or placed in the center of the scale.

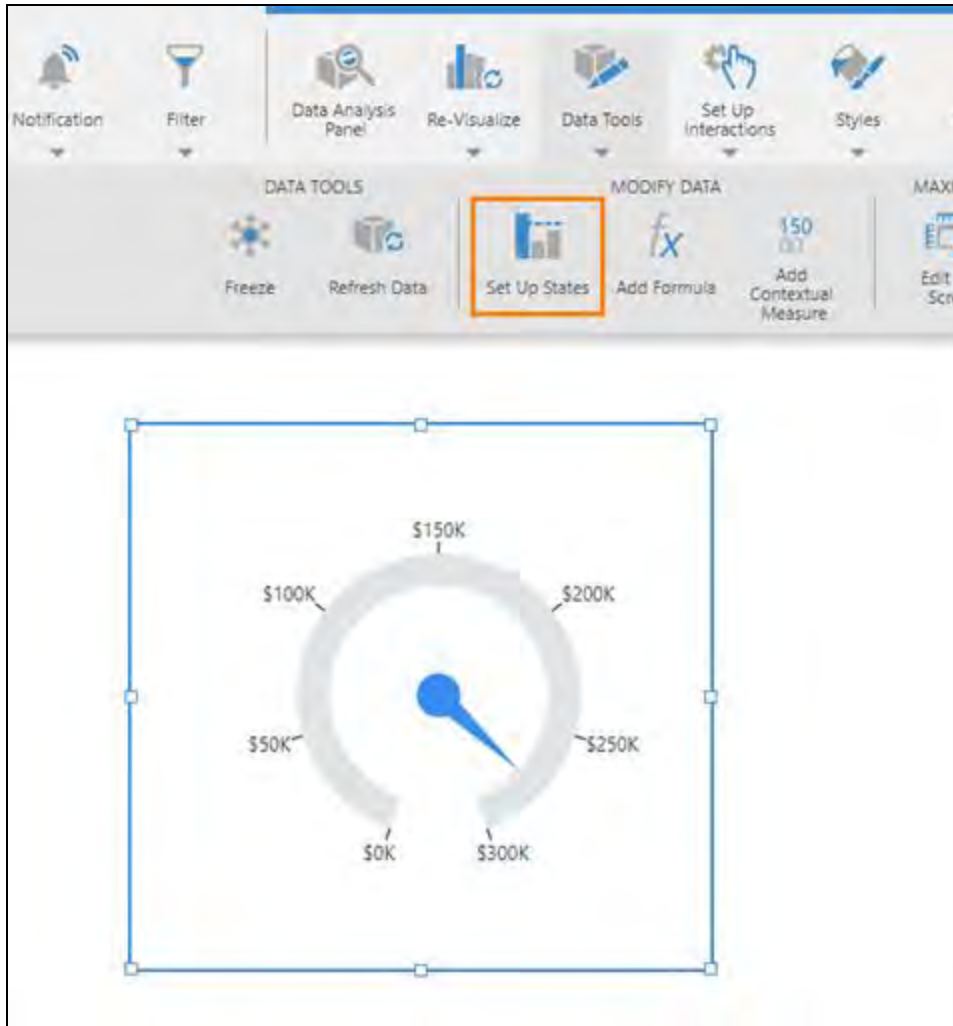


Ranges

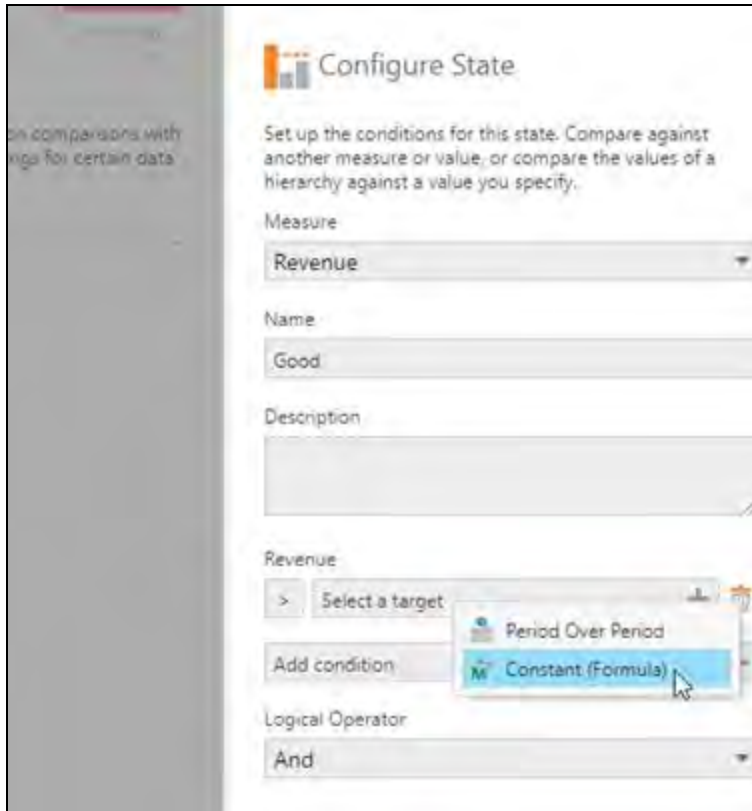
Gauge ranges display [states](#) from your metric set's *state group*. Showing ranges on a gauge helps users to quickly identify the condition of the measure being monitored.

Set Up States

To set up states for a gauge on a dashboard or other view, select the **gauge** on the canvas, go to the toolbar, click **Data Tools**, and then click **Set Up States**. (For a full screen metric set, click **Set Up States** in the toolbar.)



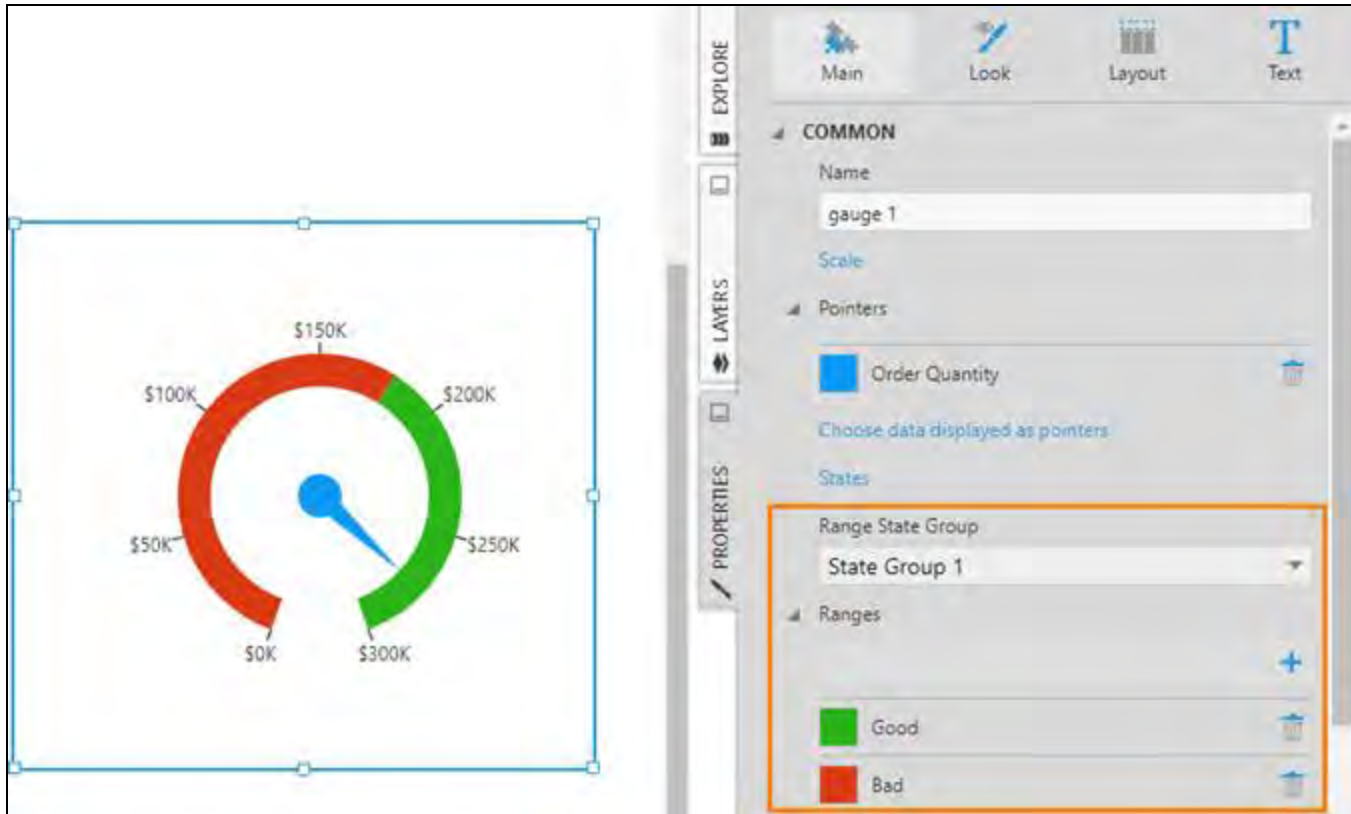
Set Measure to your main measure, then add states that describe ranges of values in a meaningful way. For example, add a *Good* state and a *Bad* state that each compare against a Constant (Formula) value of 150000 but with a different operator (i.e., click the **greater than** sign and choose one).



Range State Group

Next, go to the properties for the gauge. On the Main tab, set the Range State Group property to **State Group 1**, which is the state group that was just created.

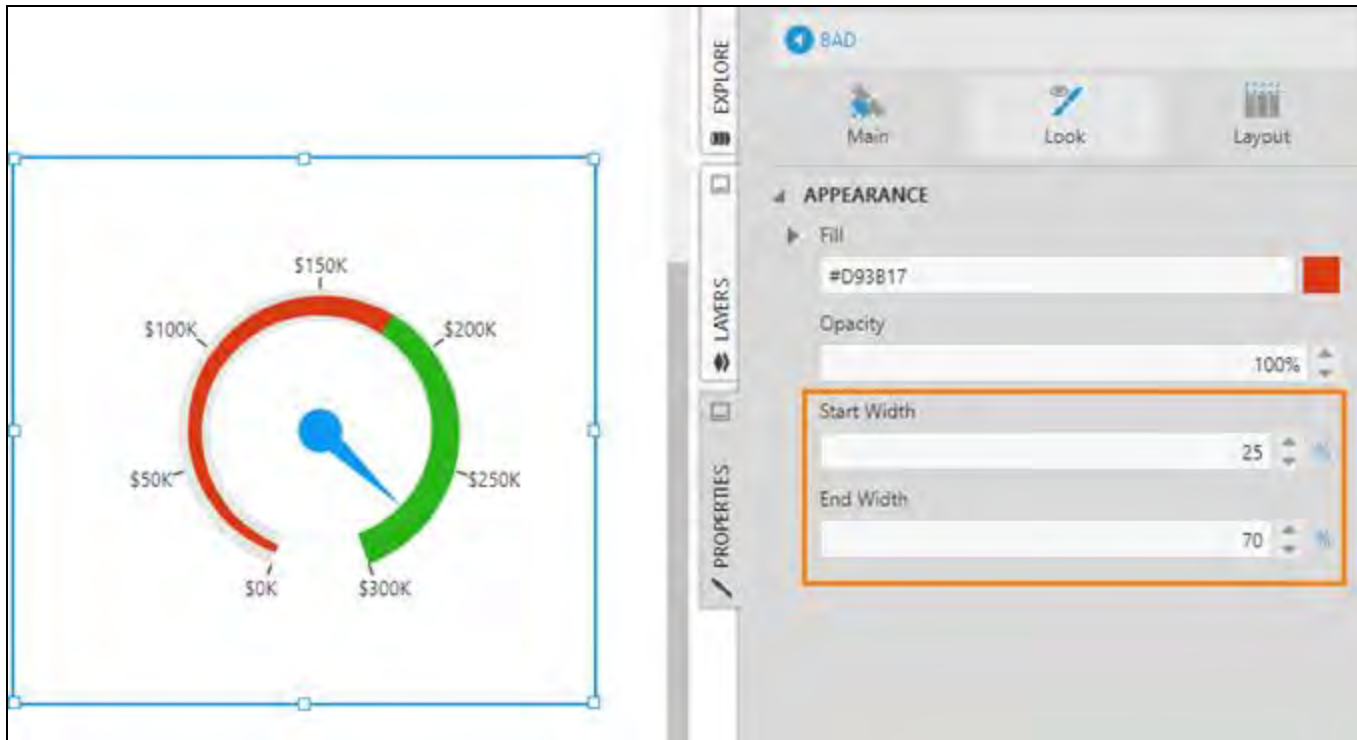
Ranges are automatically added to the gauge with default colors.



Start and End Width

In the Properties for the gauge, on the Main tab, you'll see a list of ranges corresponding to the states (e.g., *Good* and *Bad*). Click on a **range** to edit its appearance.

For example, change the fill color, Start Width, and End Width of the two ranges to achieve the look shown in the figure below.



Note: These and many other properties of a gauge can be expressed using absolute pixel units (e.g., 15px) or as a percentage (e.g., 50%) relative to another size such as the width of the gauge scale.

Using Chart Properties

This applies to: *Managed Dashboards, Managed Reports*

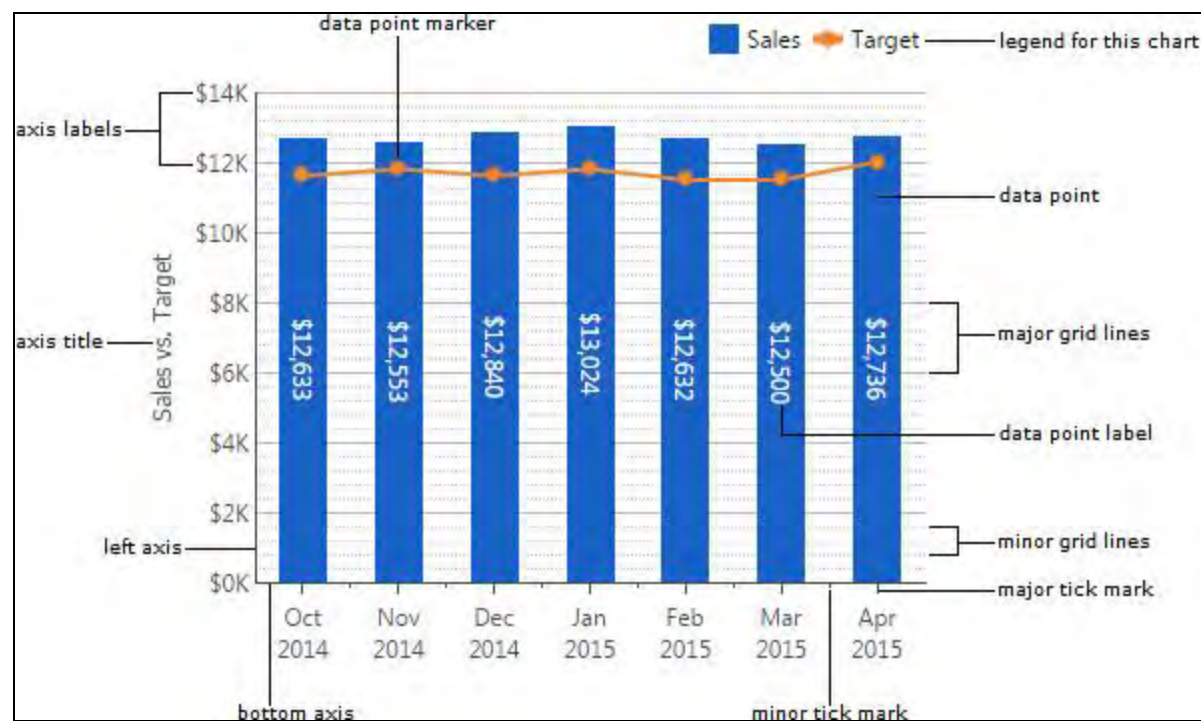
A *chart* (or *graph*) lets you visualize data points along one or more axes. For example, use a chart to compare the sales amount with the sales target for each month, where these values are plotted against a vertical (Y) axis so that you can visually compare their quantities.

Many different types of charts are available to help you communicate your data effectively. This article explains how you can customize some of the key [property settings](#) that are common to multiple chart types.

Related video: [DV Common Properties](#).

Elements of a Chart

The figure below shows the main elements of a chart visualization.

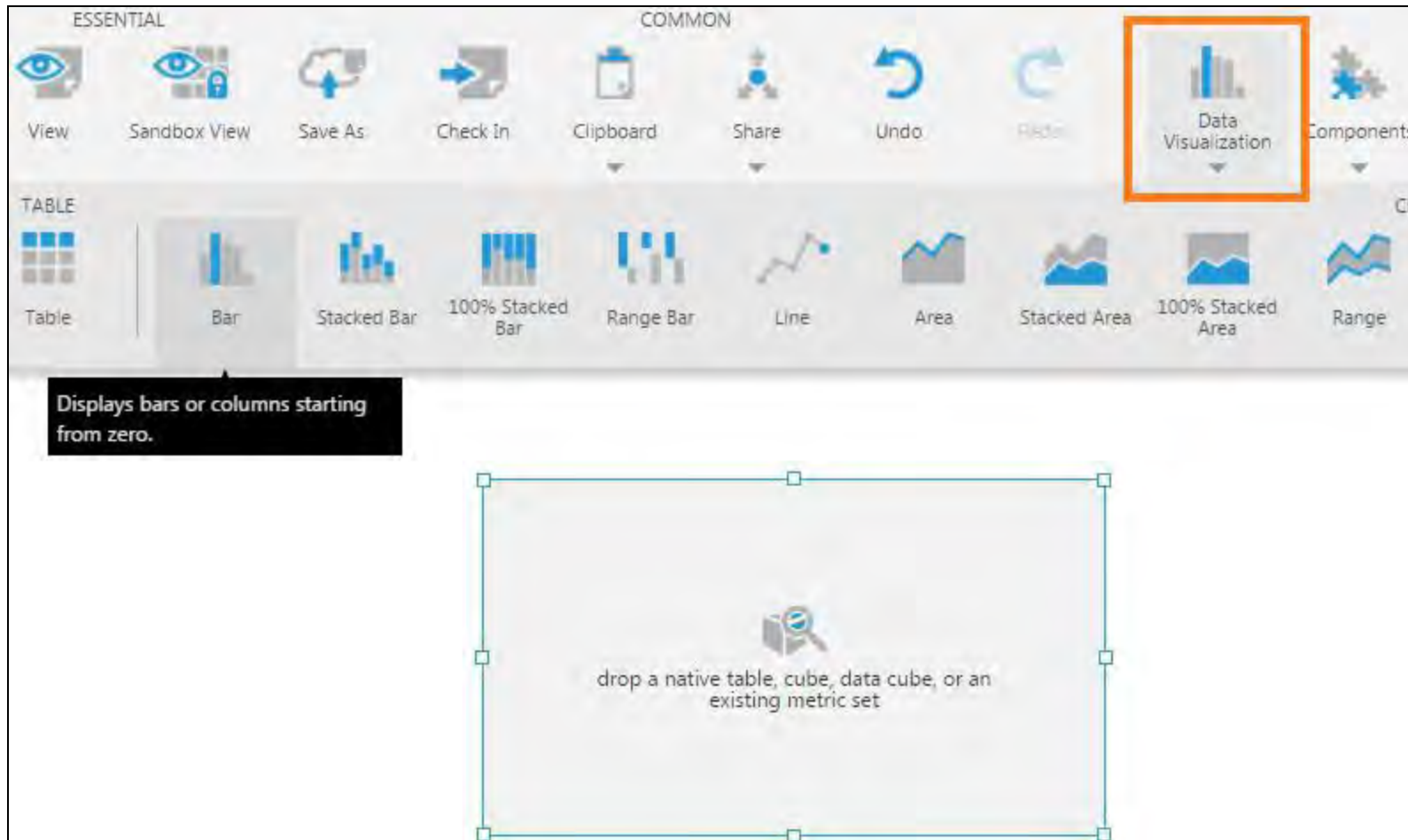


Note: Add a [legend](#) separately when you want one in your chart like the example above. To add a chart title, go to **Components** in the toolbar of a dashboard or view, and add a **Label**.

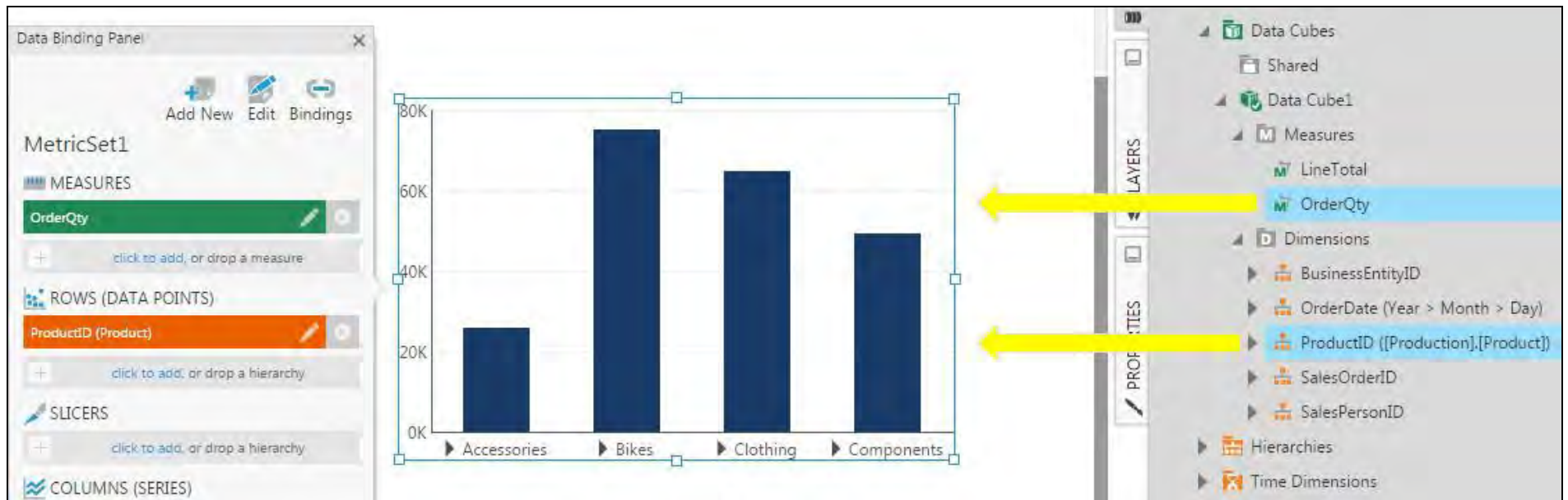
A data point *series* represents a group of related data points. The figure above shows a bar series and a line series, where each data point is displayed as a bar or a portion of the line.

Adding a Chart

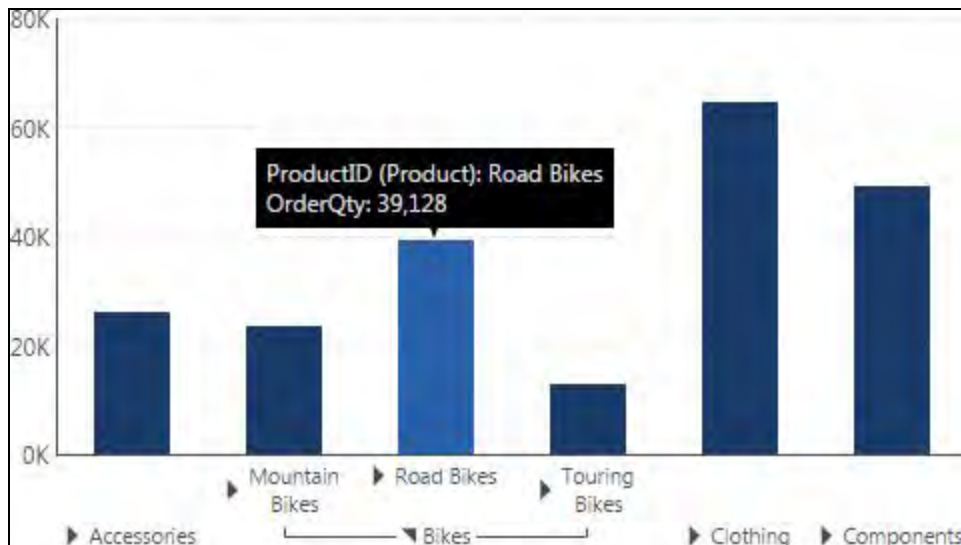
To add a chart when editing a dashboard, report, or other view, click **Data Visualization** in the toolbar and then select the type of **chart** you want to start with.



Next, drag a **measure** and a **hierarchy** from a data connector or data cube in the Explore window onto the empty chart. You'll see the chart automatically reconfigured, for example a bar or line chart will have a left axis, bottom axis, major grid lines, and a series of data points.



To interact with the chart, switch to [View mode](#). If a multi-level hierarchy such as *Product* was added, you can click on a triangle along the bottom axis to expand one of the hierarchy members (e.g., *Bikes*). Hover over one of the expanded bars to see a tooltip which shows the corresponding measure and hierarchy values.

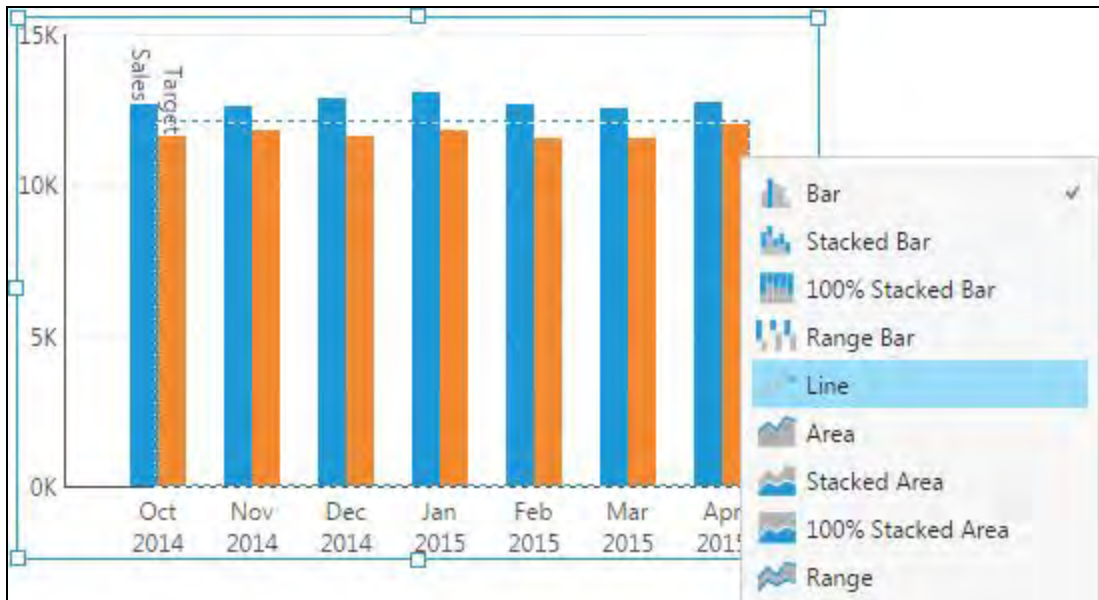


You can also right-click (or long-tap) on the **chart** and use the menu to drill down, change the hierarchy level, and access other [metric set functions](#).

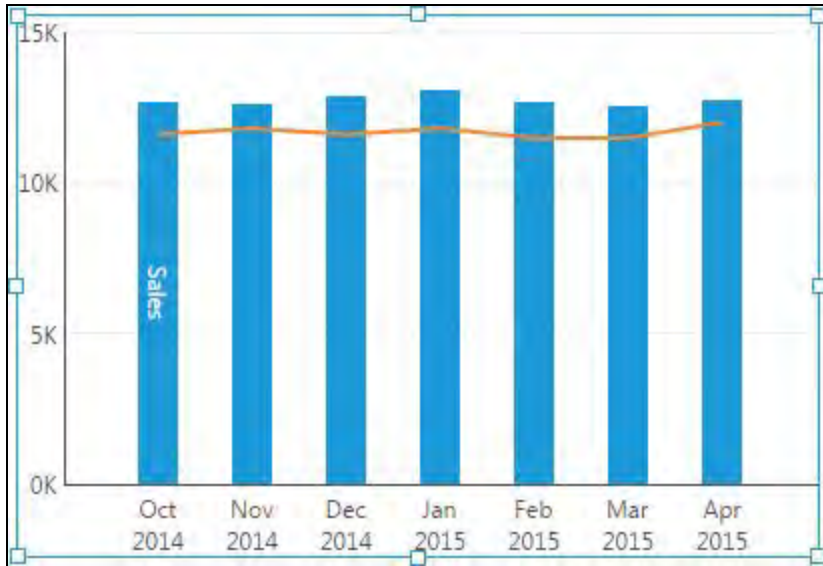
Re-Visualizing

Another way to display a chart is to re-visualize a different type of data visualization. For example, right-click (or long-tap) on a **table visualization** or select it and go to the toolbar, choose **Re-Visualize**, and then select the **chart type** you want. If you already have a chart, this menu will offer to change the chart type of your existing data point series to another type.

If you have multiple series of data points (e.g., for two measures), you can re-visualize each series independently. For example, right-click (or long-tap) on the **second series**, and you'll see a selection rectangle around the corresponding data points. Click **Re-Visualize** from the menu, and then select a different **chart type**, such as Line.



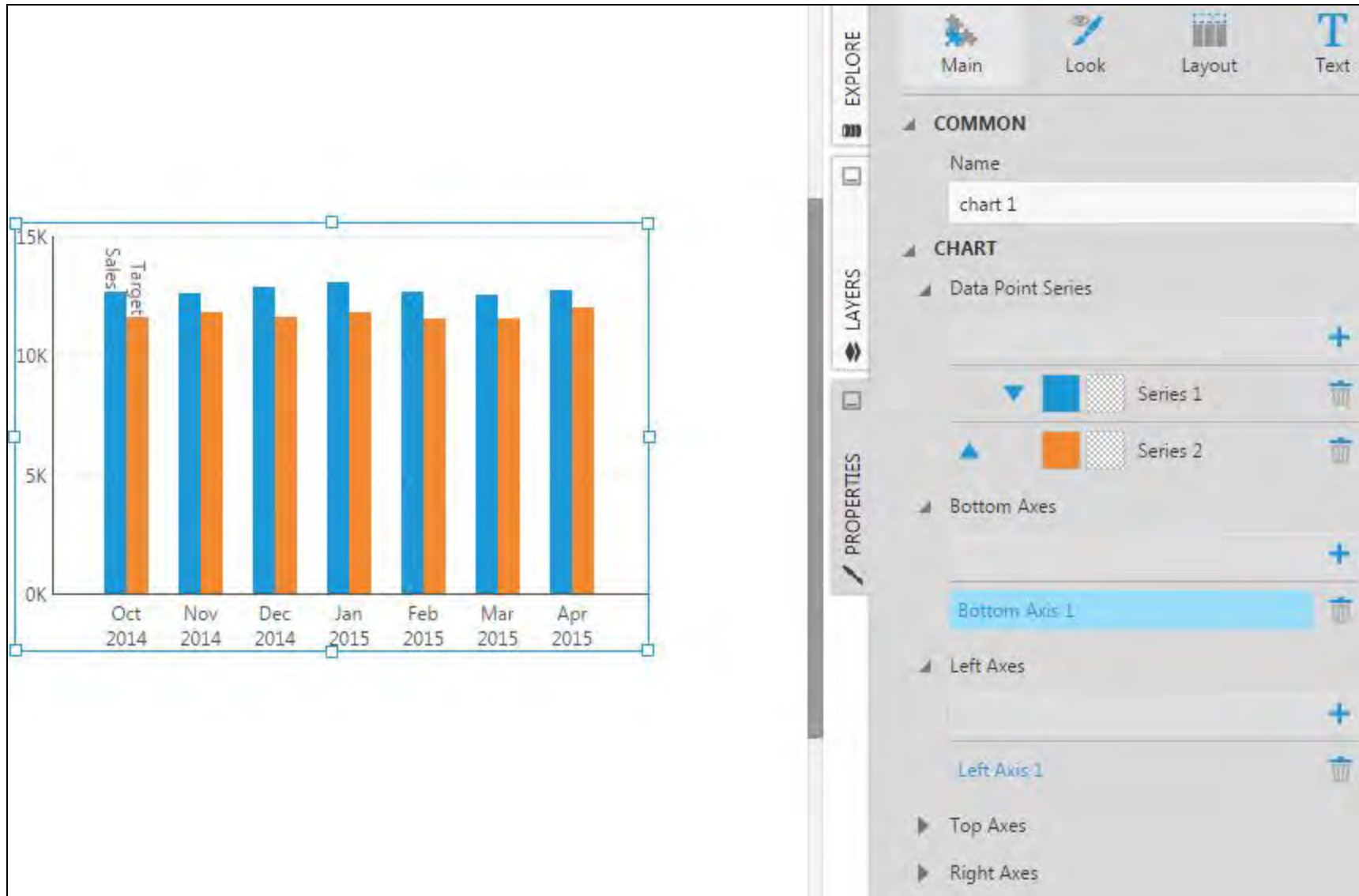
The series for the *Target* measure in this example is now displayed as a line series.



This is the same as setting the [Chart Type](#) of this series in the Properties window.

Axis Properties

Charts are usually configured with a left axis (or y-axis) and a bottom axis (or x-axis). From the Properties window for a chart, go to the **Main** tab to see the list of axes for the chart. You can also click on an **axis** directly in the chart itself to go to its properties.

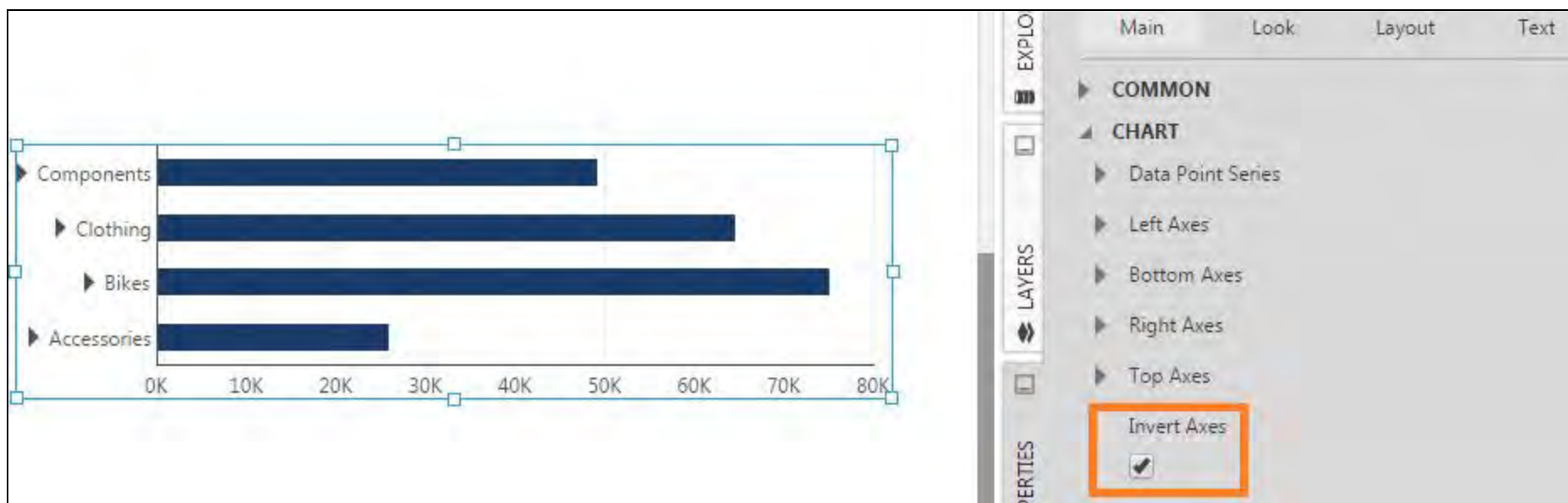


You can also use the [Quick Access Properties](#) pop-up to change common settings such as colors and line widths. With Quick Access Properties already open after selecting the chart, click on a **specific part of the axis**, such as a label or tick mark to update Quick Access Properties with settings for customizing that element.

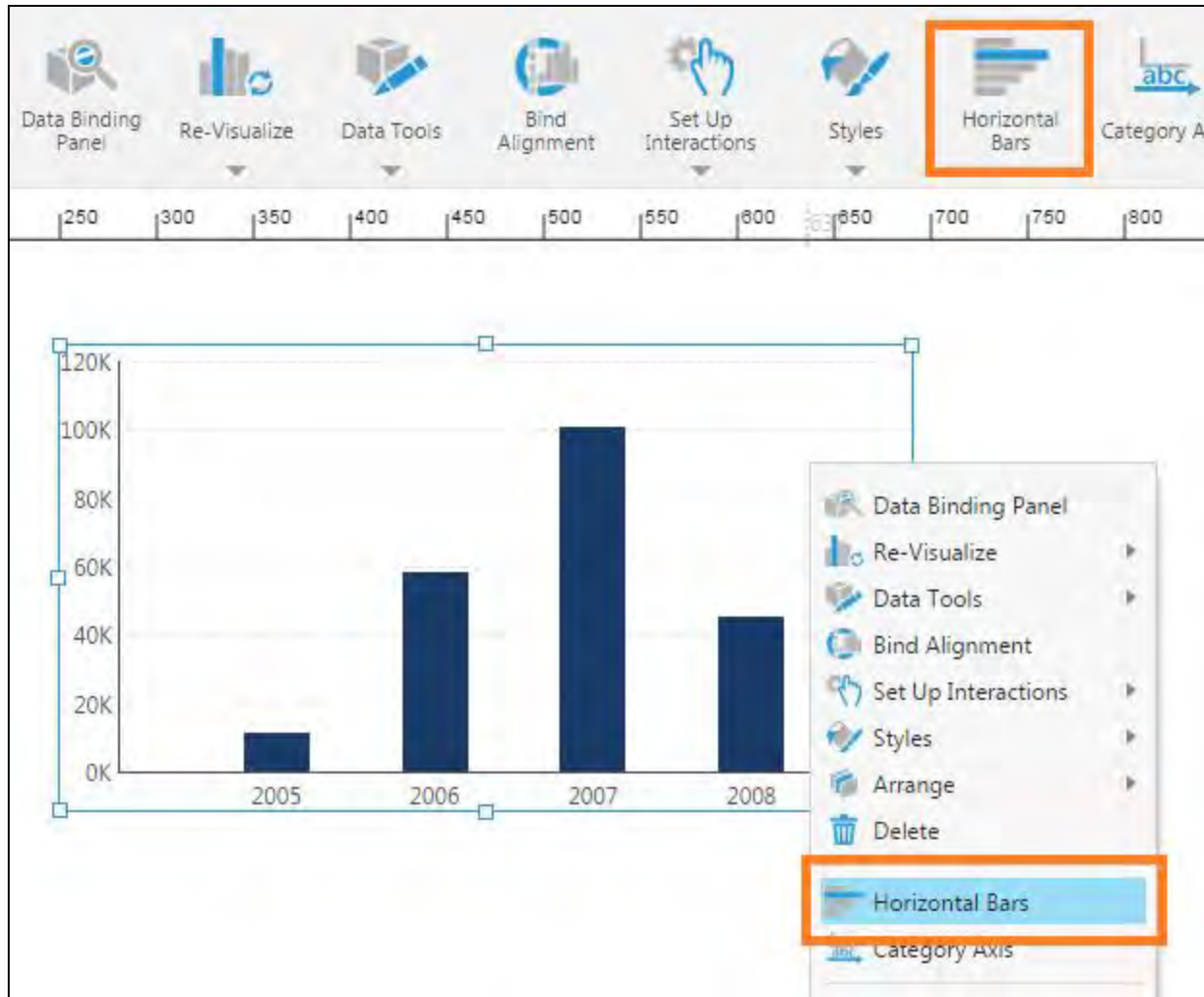
Invert Axes

Located in the overall chart properties (click the **back** button if you have the properties open for a specific axis), use the **Horizontal Bars** or **Invert Axes** property to switch the horizontal and vertical axes.

This option is mostly used on bar charts (including stacked bar and 100% stacked bar) because it changes vertical bars into horizontal bars, which can make it easier to read long axis labels.



You can also use the **Horizontal Bars** option in the toolbar (or the right-click **context menu** for the chart) when the chart is selected.

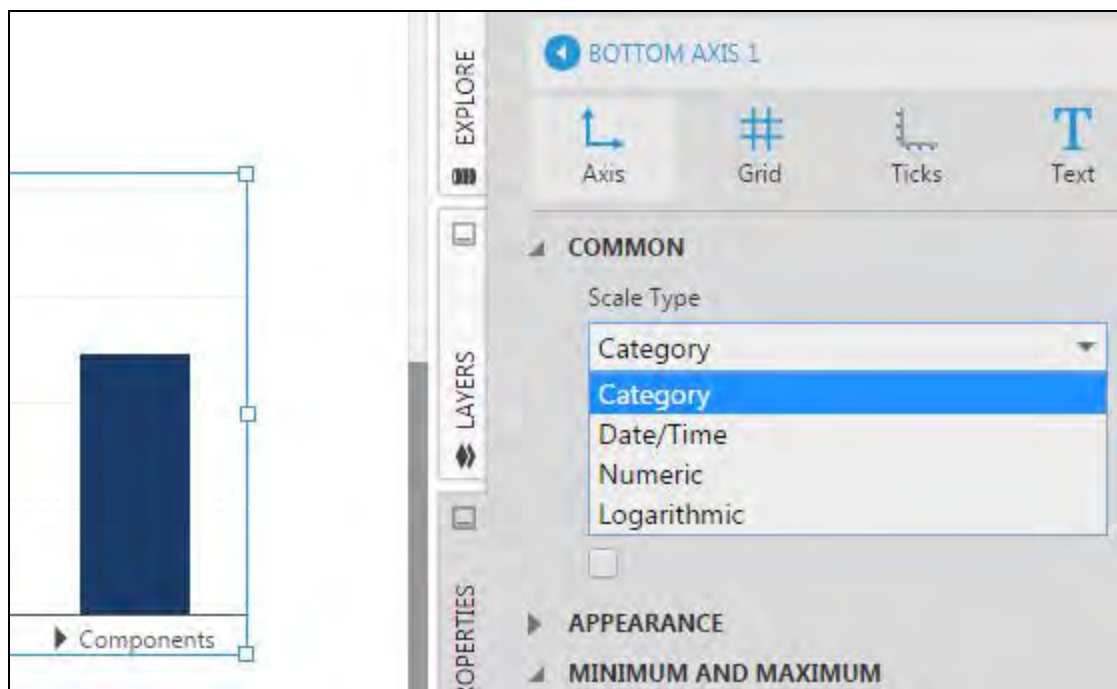


You can choose **Vertical Bars** the same way afterward to switch back.

Scale Type

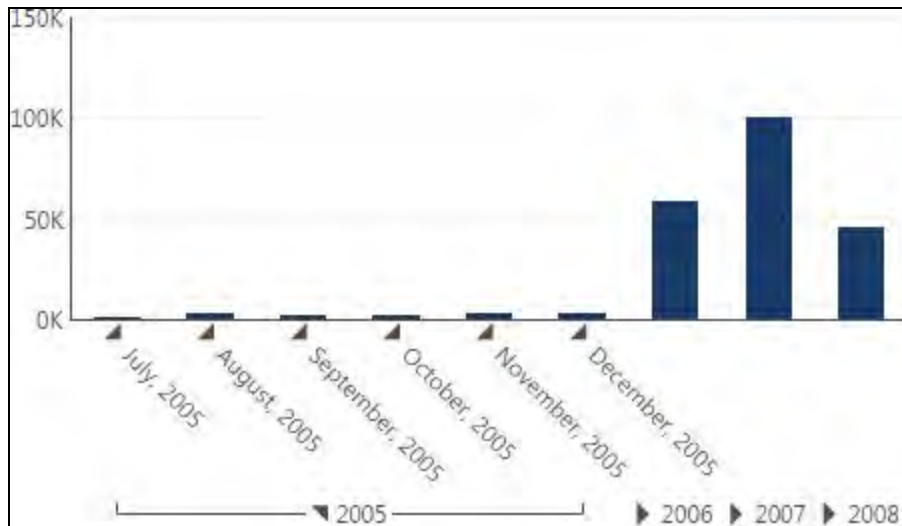
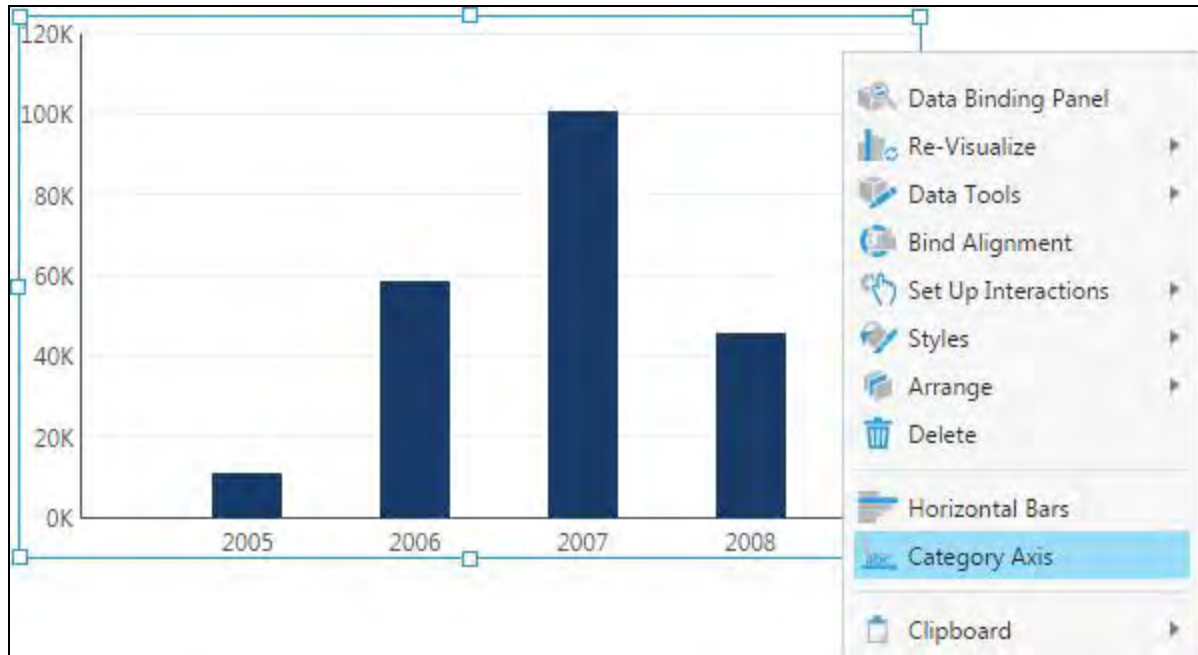
Each chart axis has a scale determining how to position data along its length. Choose one of the following **types** via the Scale Type property:

- **Category** - Designed for text, qualitative data, or other items you want displayed one after the other in sequence.
- **Date/Time** - Designed for date and time values, whether in order at regular intervals or irregular or out of order. They are always plotted in their place along a continuous time axis, even if data is missing for some time periods.
- **Numeric** - Displays numeric data along a linear scale as most people are used to, where the same distance between any two points indicates the same difference in values.
- **Logarithmic** - Displays positive (above zero) numeric data along a nonlinear scale where distance indicates the rate of change or the difference as a percentage rather than a difference in quantity.



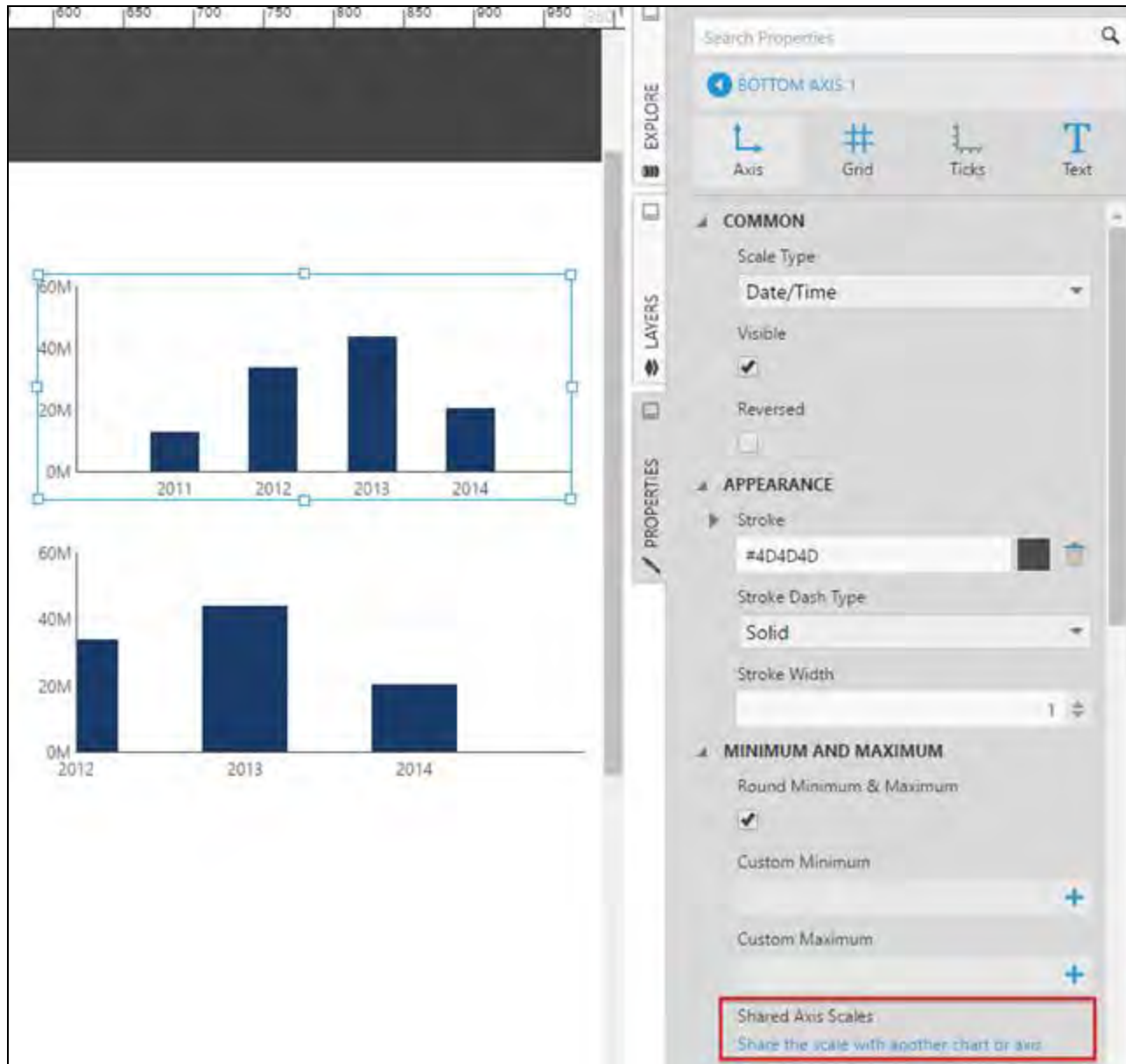
If the first or only hierarchy on the bottom (X) axis is date/time, then the chart will set the scale type to *Date/Time* automatically. If you want to use triangular expander buttons to easily expand and collapse hierarchy members, change the scale type to **Category** instead.

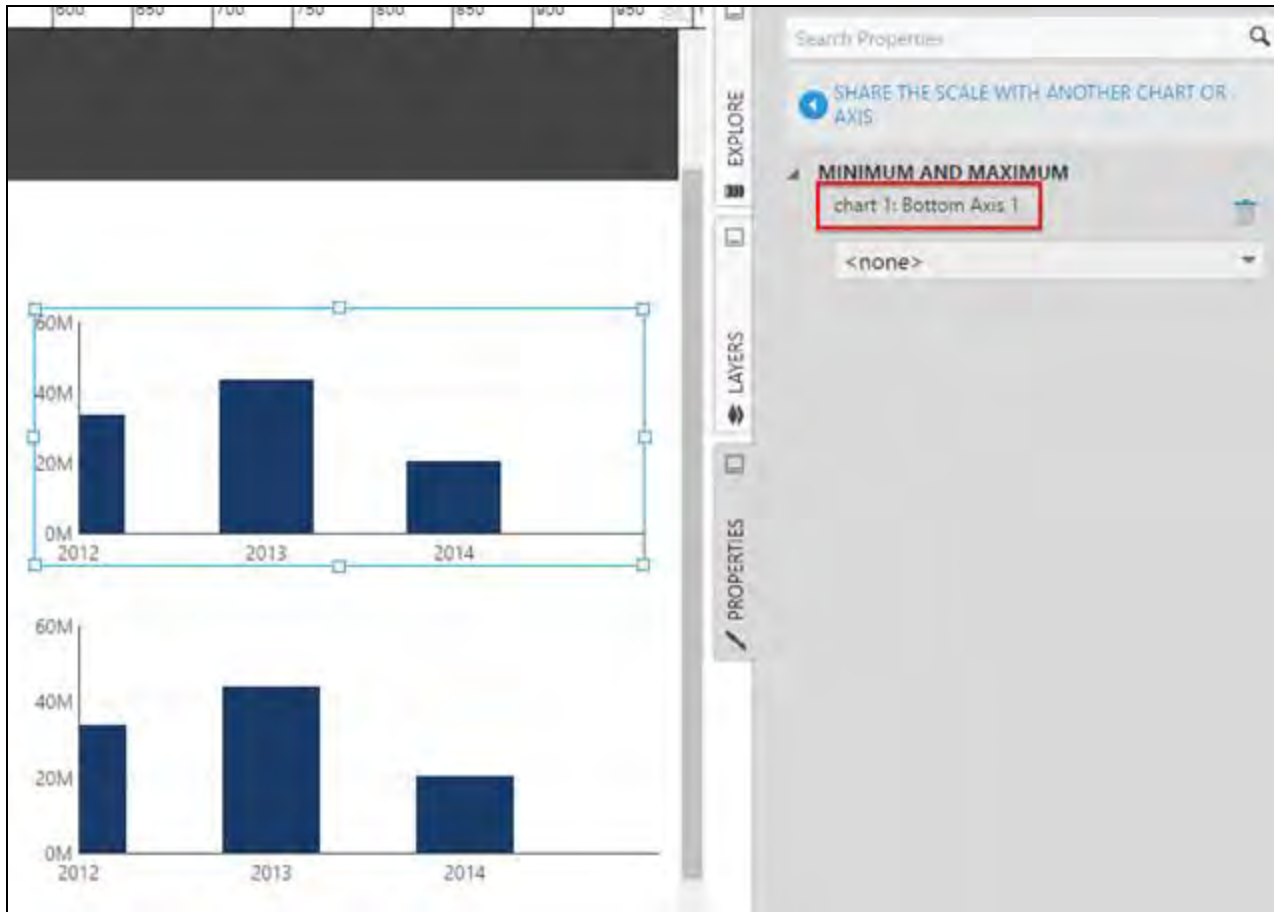
There's an easy way to switch the scale type between types when more than one is compatible with your data: right-click (or long-tap) on the **chart**, or find the option in the toolbar. It may be grouped under Chart Properties when multiple property shortcuts like these are available.



Note: To reverse the order of values on a category scale, set the Reversed property of the axis.

When using the same scale type on multiple axes (either in the same chart or in different charts), you can set the axes to have the same range. Select the option **Share the scale with another chart or axis**, and select the **axis** that should have the same range.

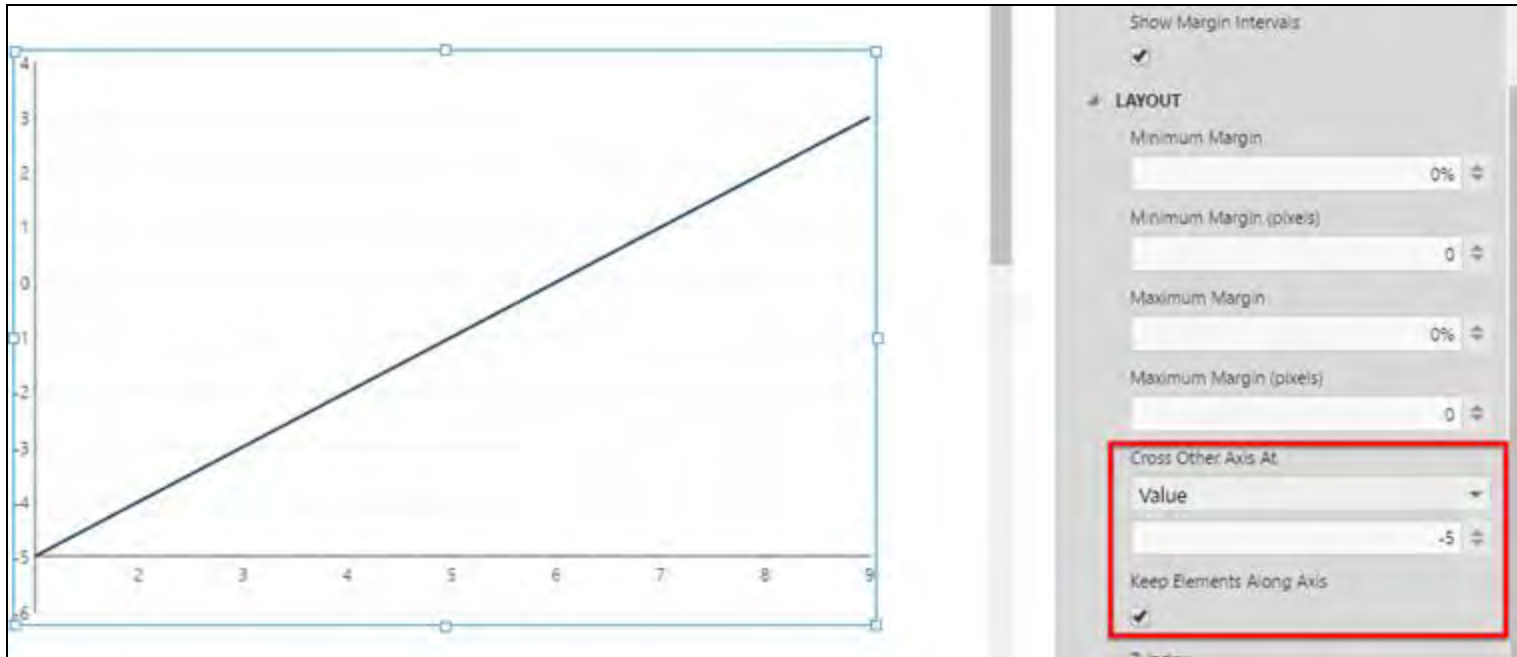




Crossing Axes

The axis property *Cross Other Axis At* defines the position at which two axes intersect.

The default setting *Auto* places the axis intersection at the minimum (usually bottom left corner) unless one of the axes is numeric, in which case the intersection will be at zero.

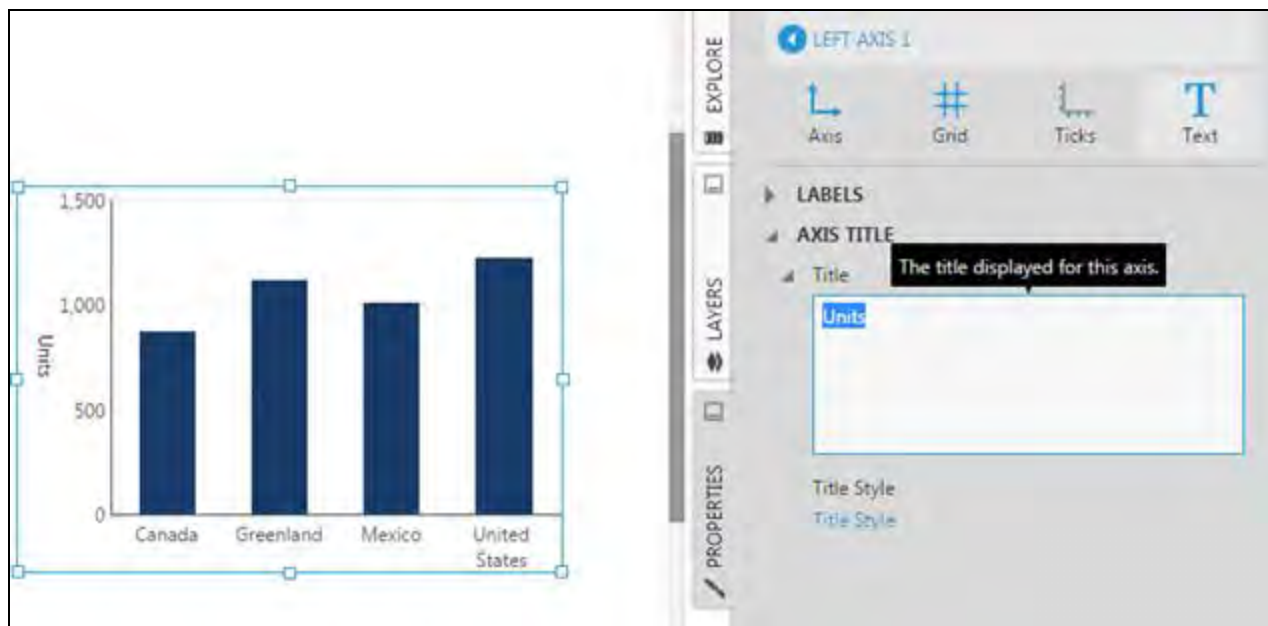


To set a custom intersection point, set the Value property to indicate a value corresponding with that position. Select the property **Keep Elements Along Axis** to position tick marks and labels along the axis.

Titles

Each axis can show a title that is automatically centered along the axis. A typical usage is displaying the name of the quantity or measure along the left axis (or y-axis).

In the Text tab of the properties for an axis, in the Axis Title category, click into the **Title** property setting and enter the text for the title.



In version 23.3 and higher, you can incorporate [placeholder keywords corresponding to filter values](#) into the title, which can change according to interactions or filter changes. A pop-up will list any available keywords you can insert while you edit this setting (slicer filter values, slicer comparison filter values, or dynamic measure & hierarchy captions).

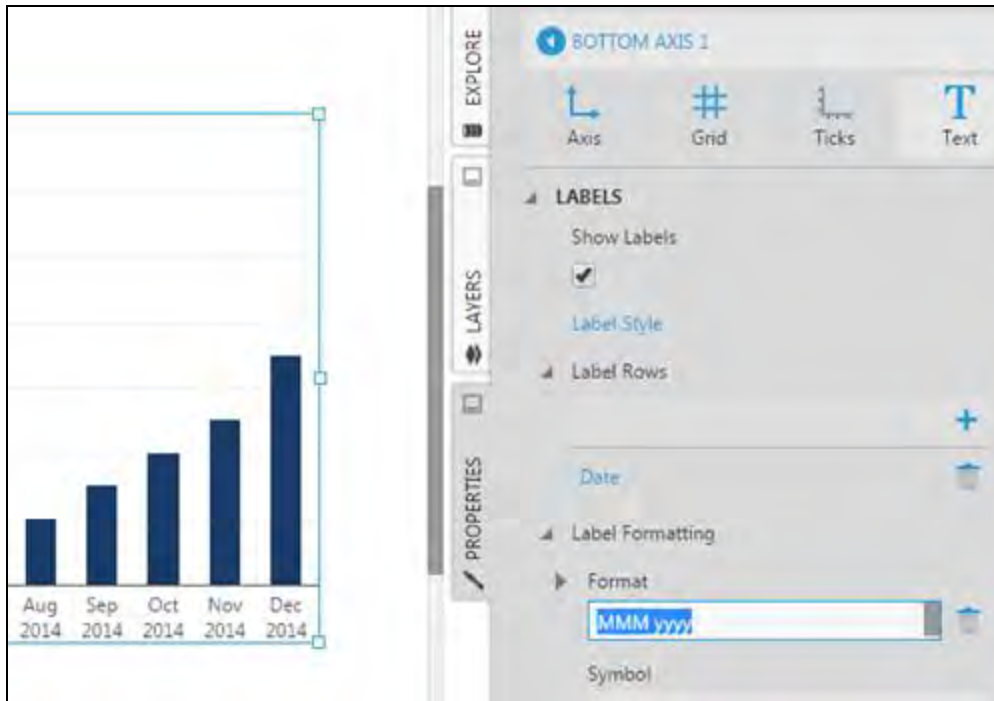
Click **Title Style** to change how the title is displayed. For example, set the Location property to **Along**, and the Rotation of the axis title to **Clockwise**.

Labels

To change the formatting or appearance of the labels for axis values, edit the properties of the axis (e.g., the bottom axis) and go to the **Text** tab.

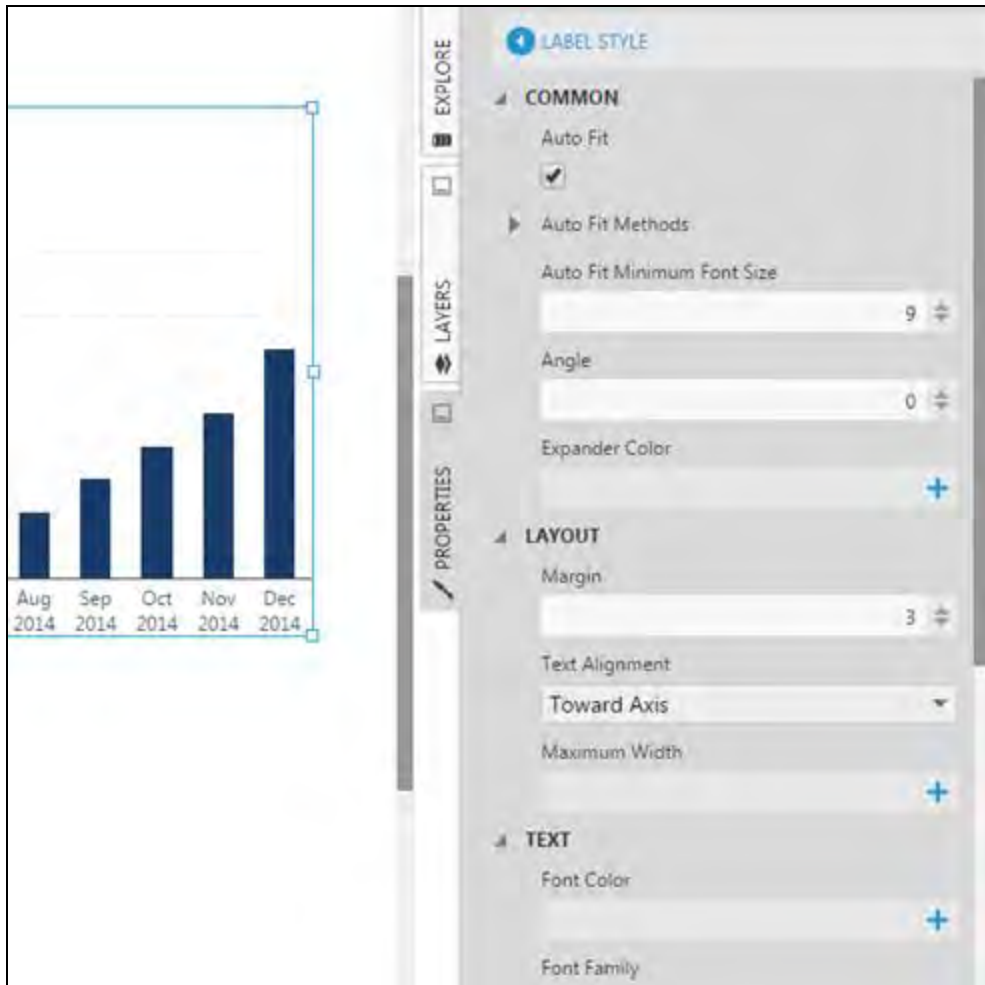
Use the **Show Labels** property to show or hide the axis labels. When displaying a chart within a scorecard, it may be useful to hide the labels to create a more compact chart.

Under Label Formatting, use the Format property to enter a **date format**, for example, which will be applied to each label. See [Formatting text](#) for details on the formatting available.

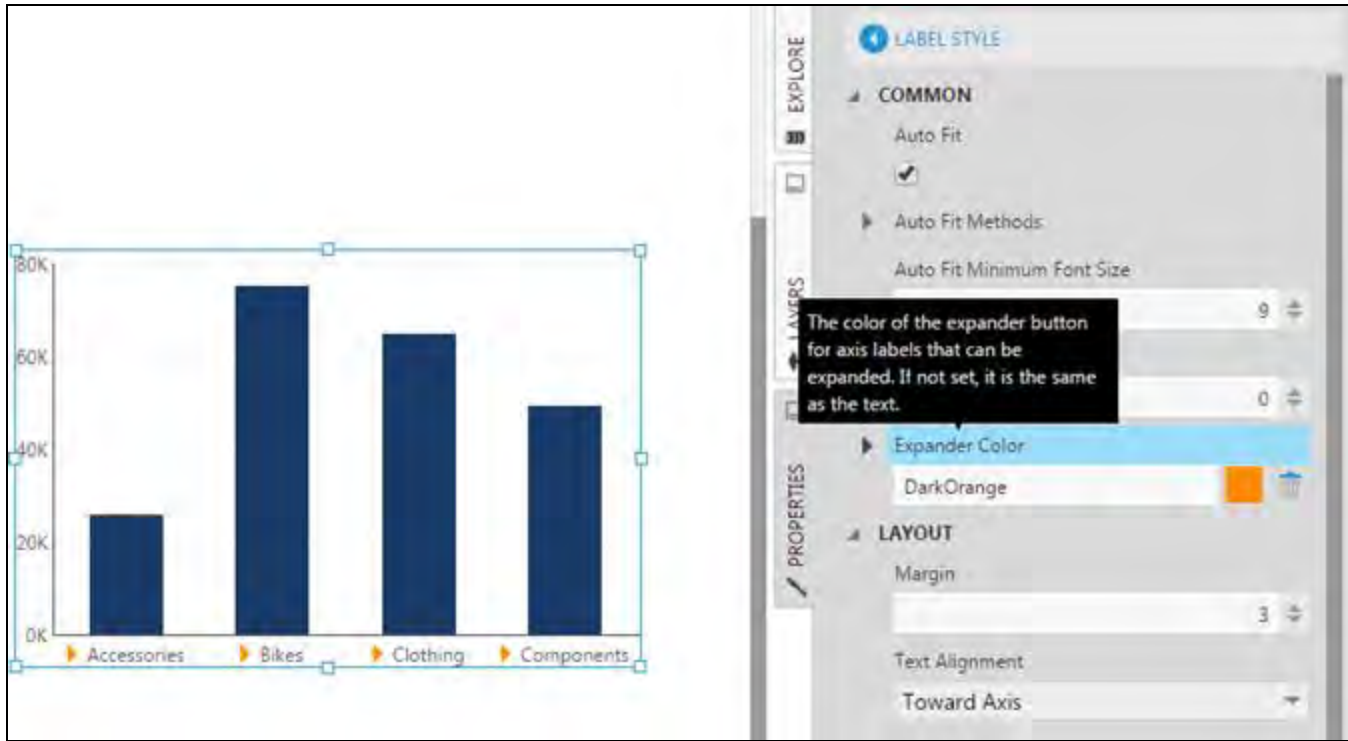


Click **Label Style** to change the appearance of the labels, such as the font size or color.

Keep the **Auto Fit** option selected in order to arrange as many labels on the axis as possible without overlap. Expand and use the options under Auto Fit Methods to customize the auto fit behavior.



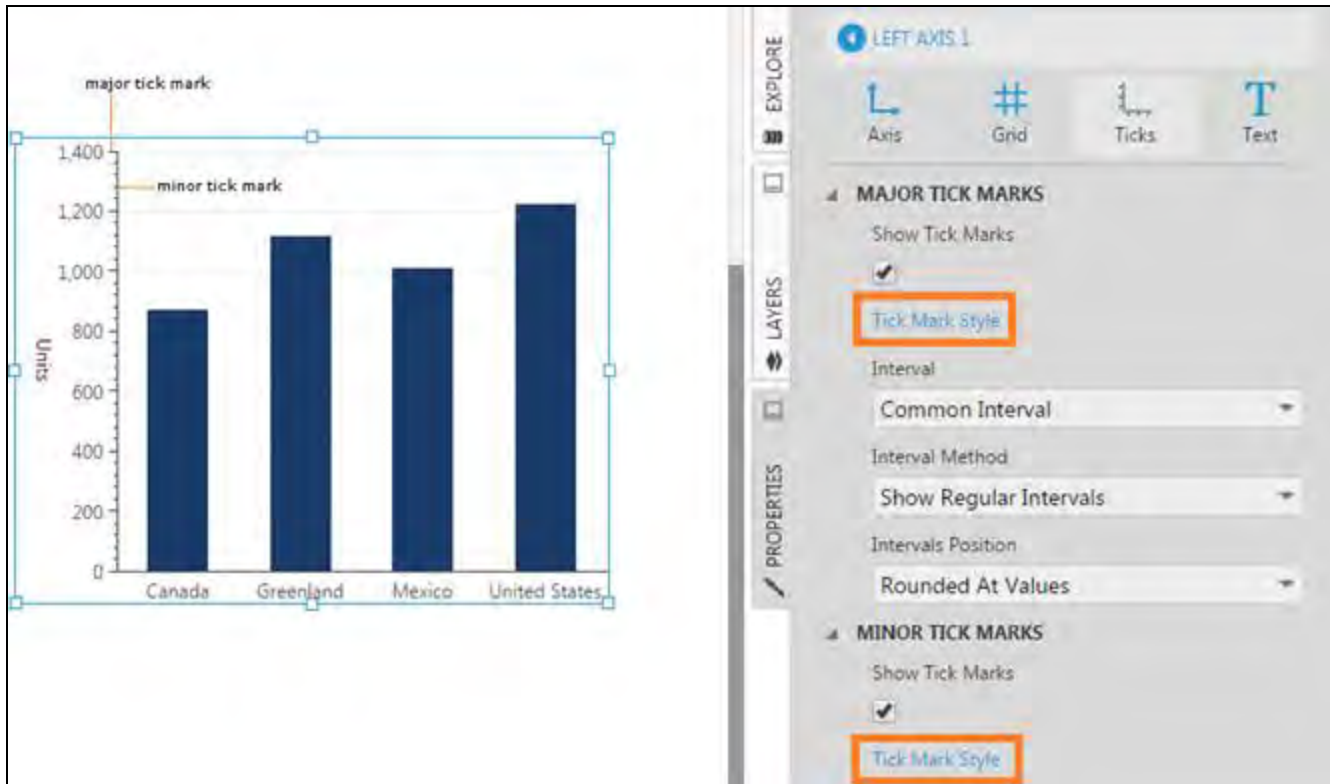
If the axis is categorical and the axis labels can be expanded, use the Expander Color property to change the color of the expander buttons. By default, they take on the same color as the text.



Tick Marks

Tick marks are often not shown by default if grid lines are shown instead. To display tick marks, edit the properties of a chart axis and go to the **Ticks** tab.

Select **Show Tick Marks** to display the major (or minor) tick marks.

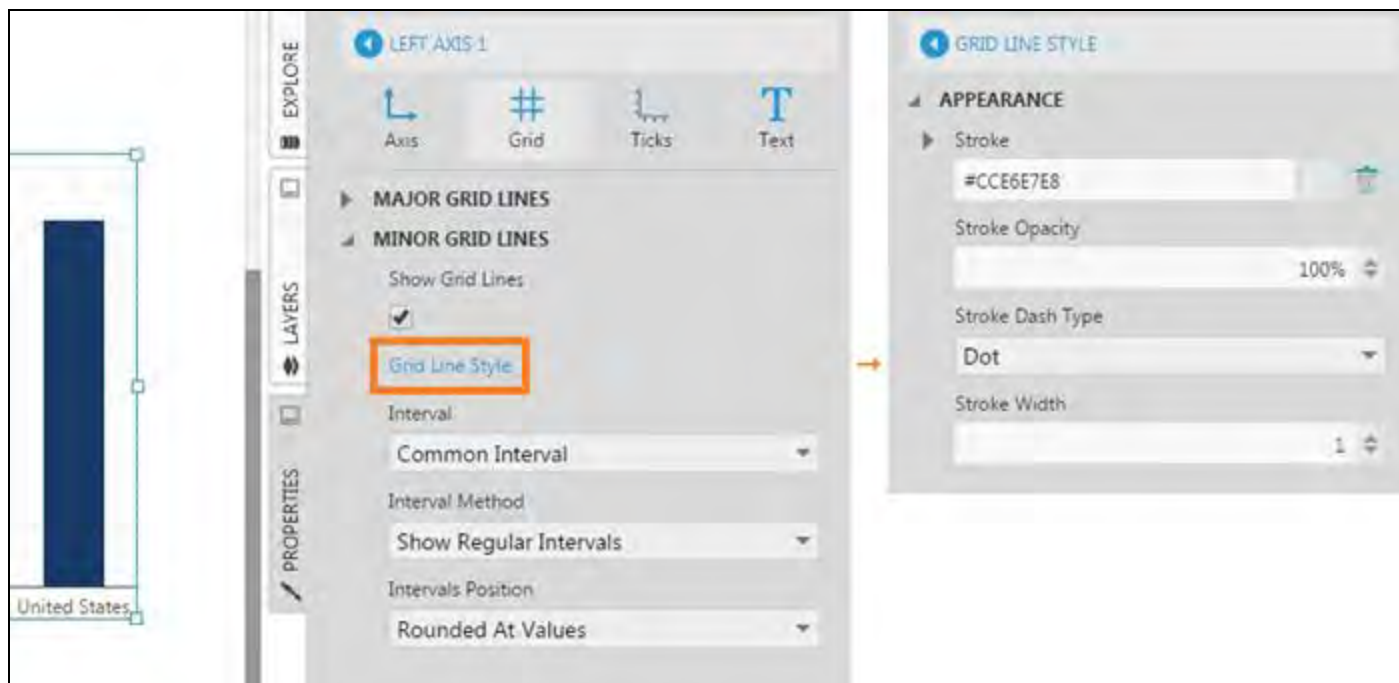


Click **Tick Mark Style** to change the appearance of the major (or minor) tick marks.

Grid Lines

To display grid lines corresponding to values along an axis, edit the properties of that chart axis and go to the **Grid** tab.

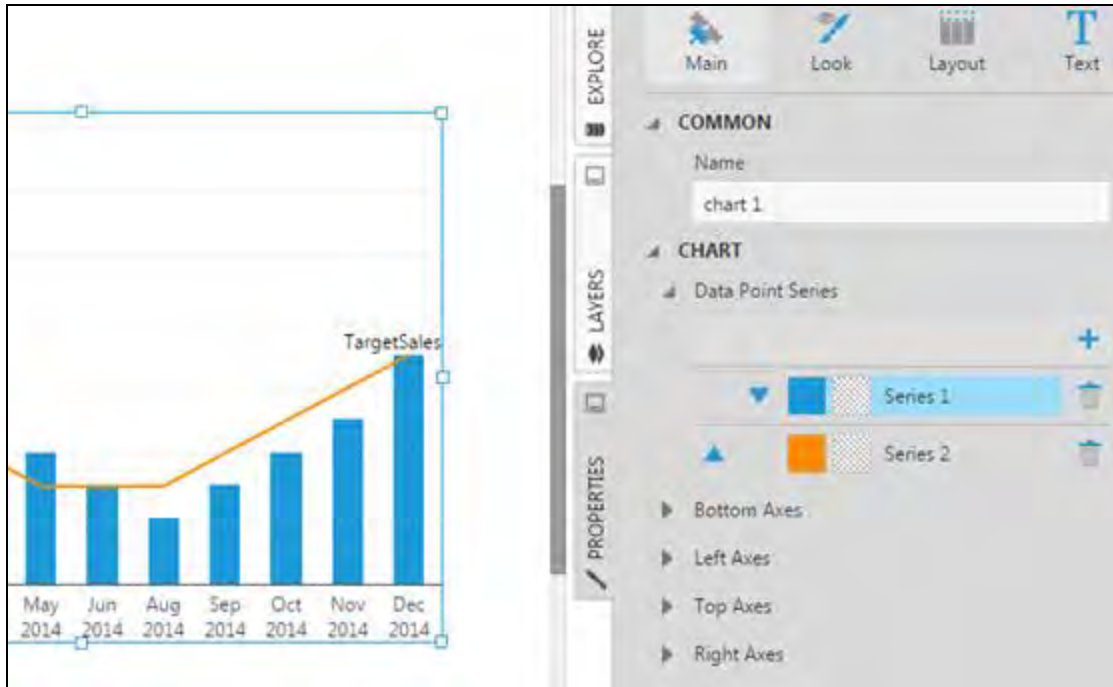
Select **Show Grid Lines** to display major (or minor) grid lines perpendicular to the axis.



Click **Grid Line Style** to change the appearance of the major (or minor) grid lines.

Series Properties

Charts are automatically configured with data point series as you drag and drop measures and hierarchies from the Explore window. In the Properties window for a chart, go to the **Main** tab to see its list of data point series.

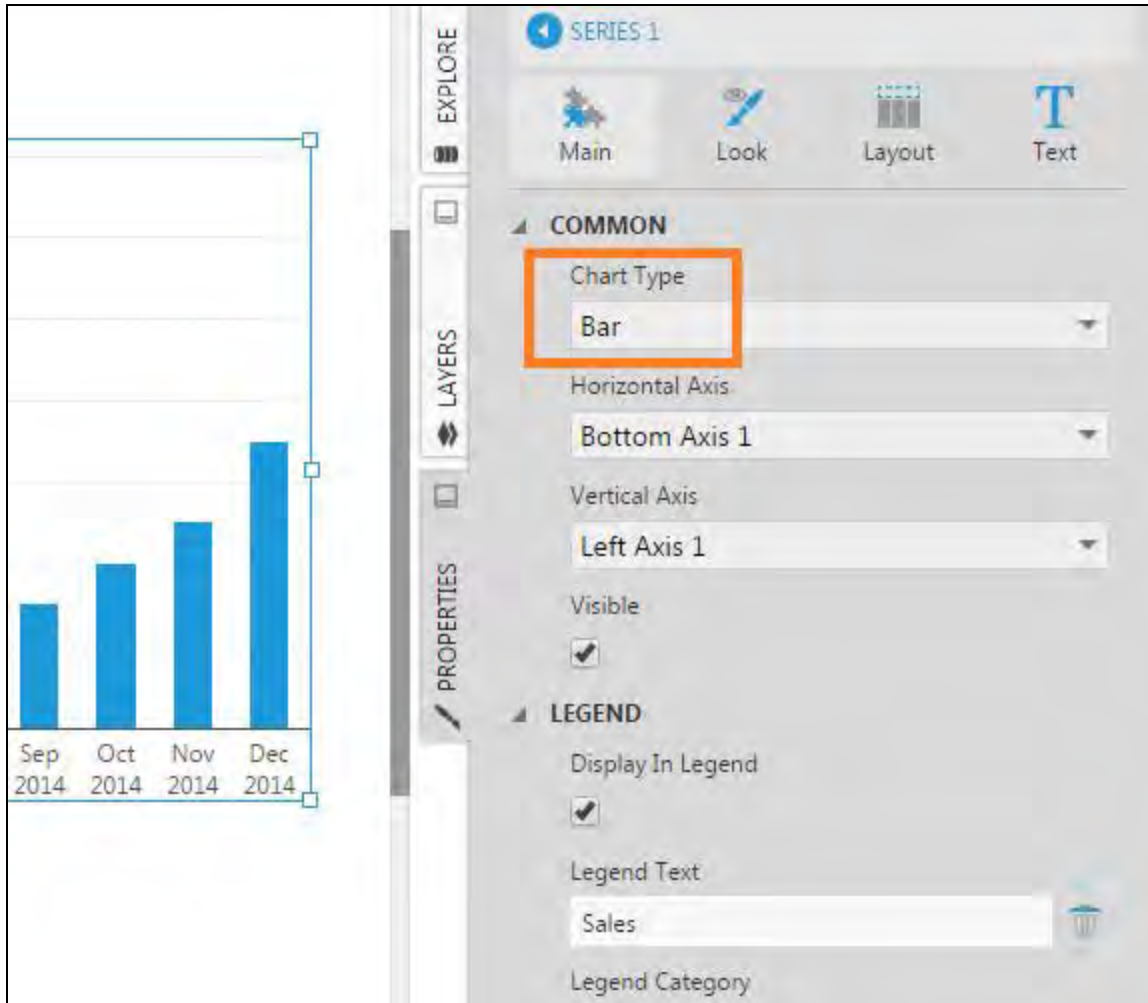


Note: Click once on a **chart** when editing a dashboard to select it and see its properties in the Properties window, and a second time on a **data point** to select its series and properties. Or, right-click a **series** and choose **Series Properties**.

You can also use the [Quick Access Properties](#) pop-up to change common settings, such as colors and borders. With Quick Access Properties already open after selecting the chart, click on a **specific data point** to update Quick Access Properties with settings for customizing that data point series.

Chart Type

Each series has a corresponding Chart Type property which you can set in the Main tab for the series.



You can have multiple series in a chart, each with a different chart type. Most can be combined together, but you can only combine the Pie chart type with other series set to the same type, and Radar chart types are only compatible with each other (e.g., you can combine *Radar Line* with *Radar Point*).

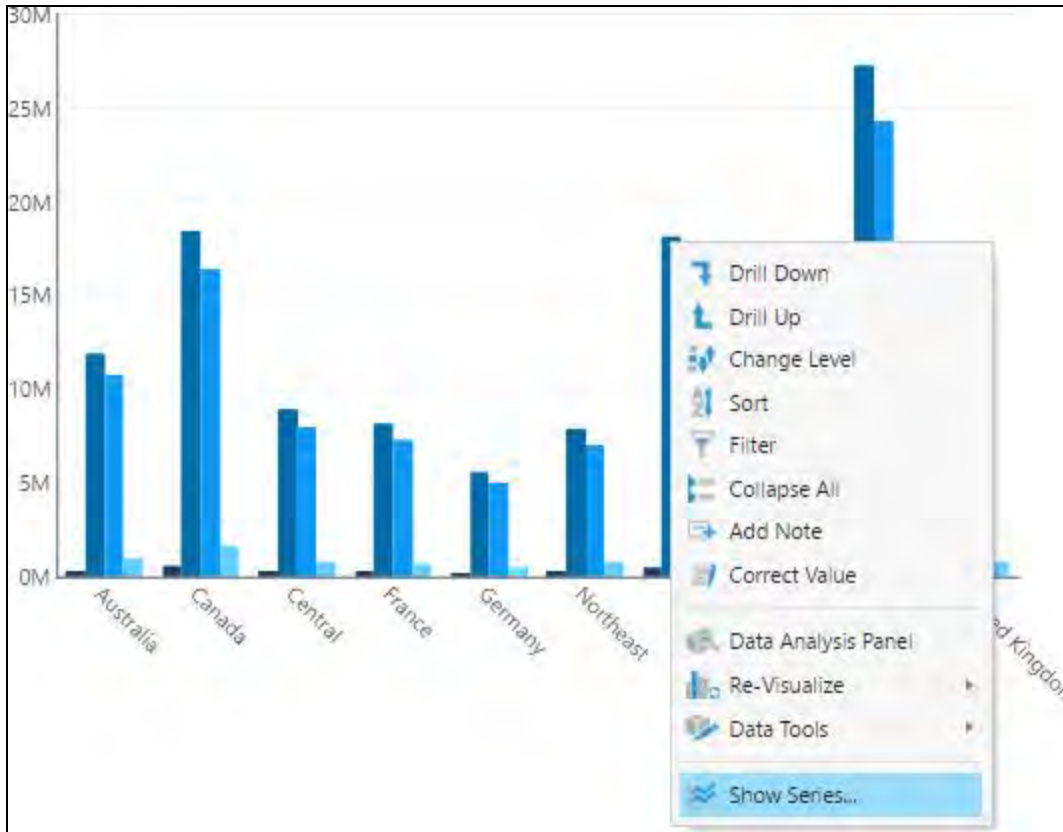
Axis

You can change the Horizontal Axis or Vertical Axis property if you want to plot this series of points against a different axis, or an axis on the other side of the chart. This allows you to set up a chart with multiple Y axes, for example: one left and one right, or more than one on each side.

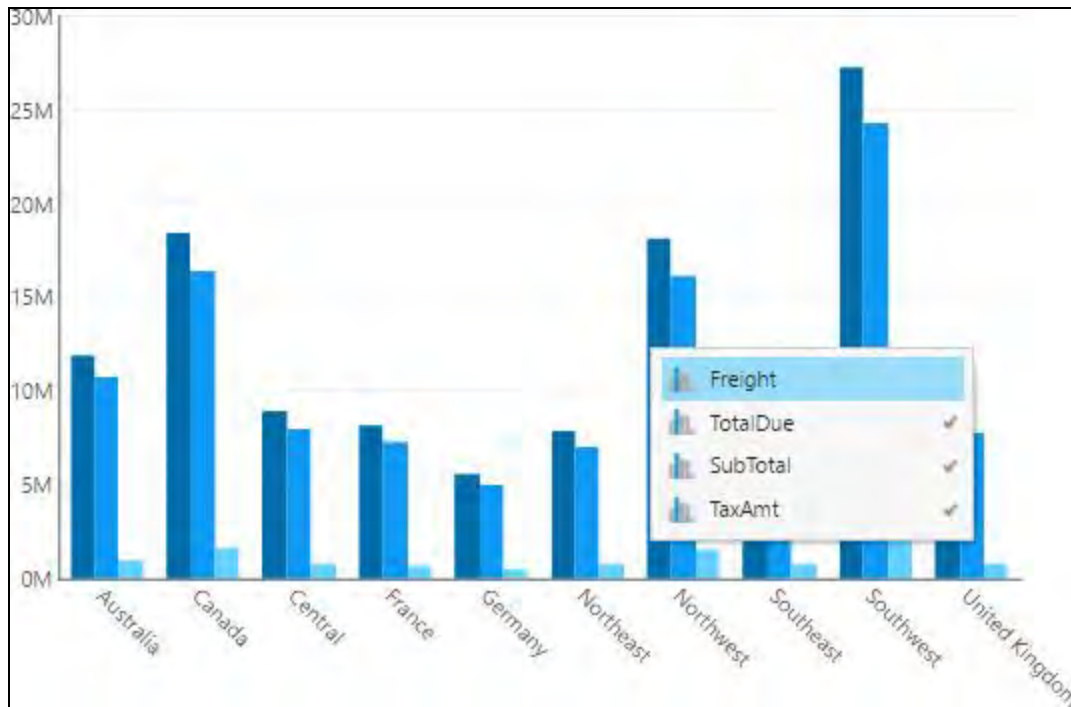
Show or Hide Series

Check or uncheck the **Visible** property to show or hide that series of data points.

Any user viewing a chart with multiple series can also show or hide them using the context menu: right-click (or long-tap) the **chart** and select **Show Series....** Switch to view mode first if you are currently editing a dashboard or other view.

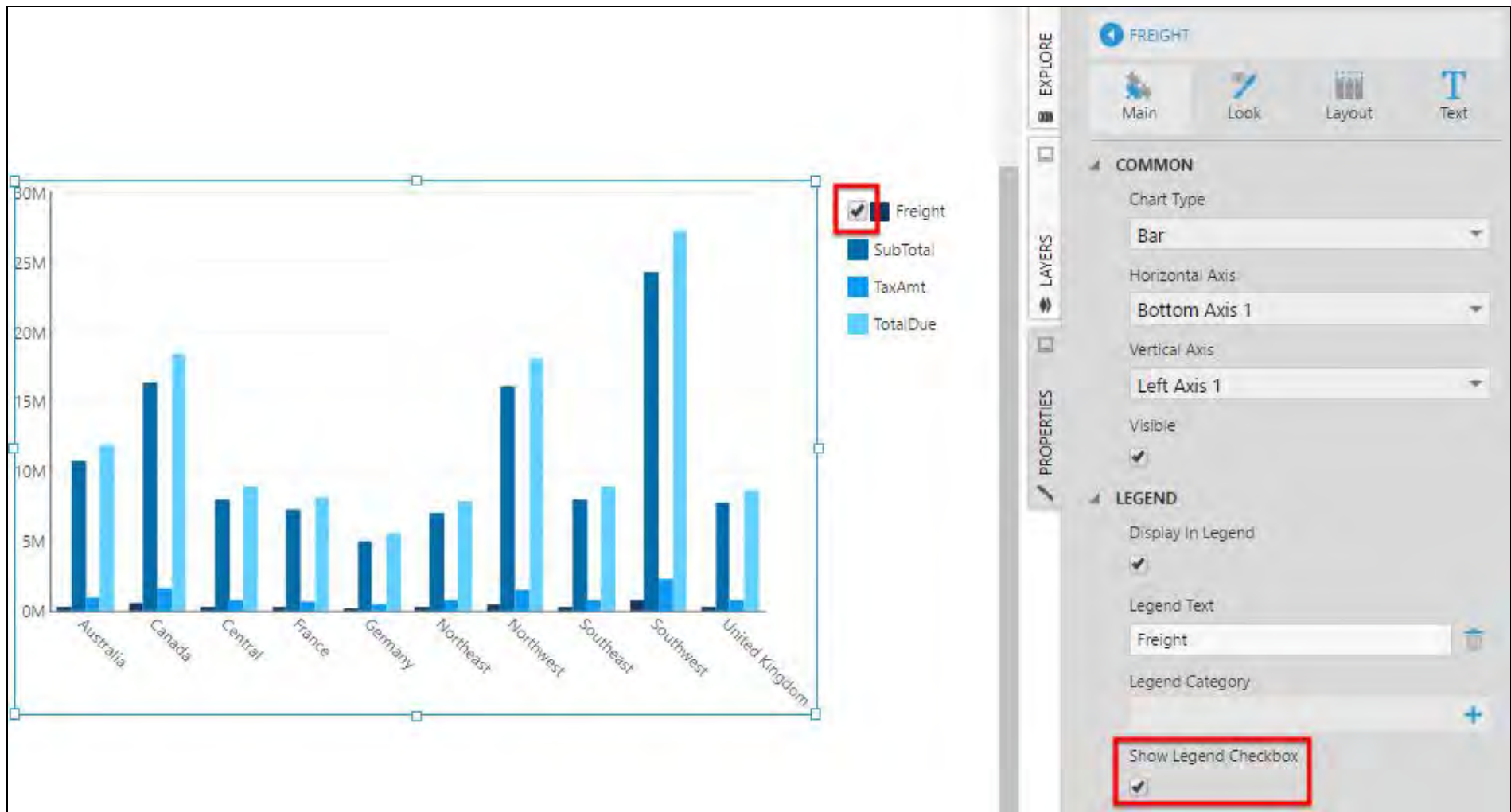


Series are listed with check marks indicating whether they are visible. Click to select or de-select a series.



Alternatively, you can add a checkbox to a connected [legend](#), which will provide the same functionality.

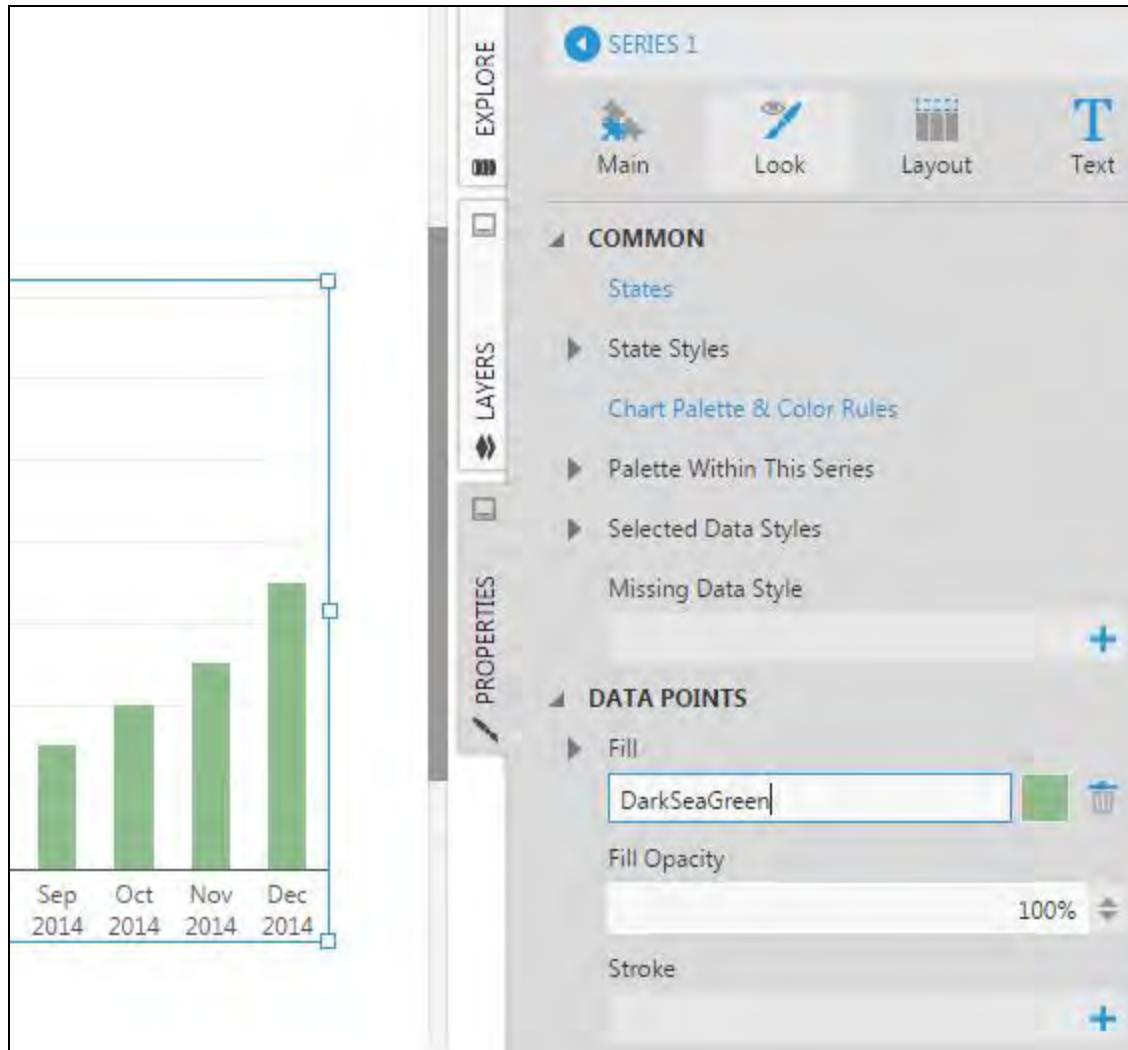
In the Main tab of the series properties, select **Show Legend Checkbox**.



Note: This legend checkbox can't be shown if the series is grouped into multiple series by a Columns hierarchy, since filtering is used instead.

Data Points

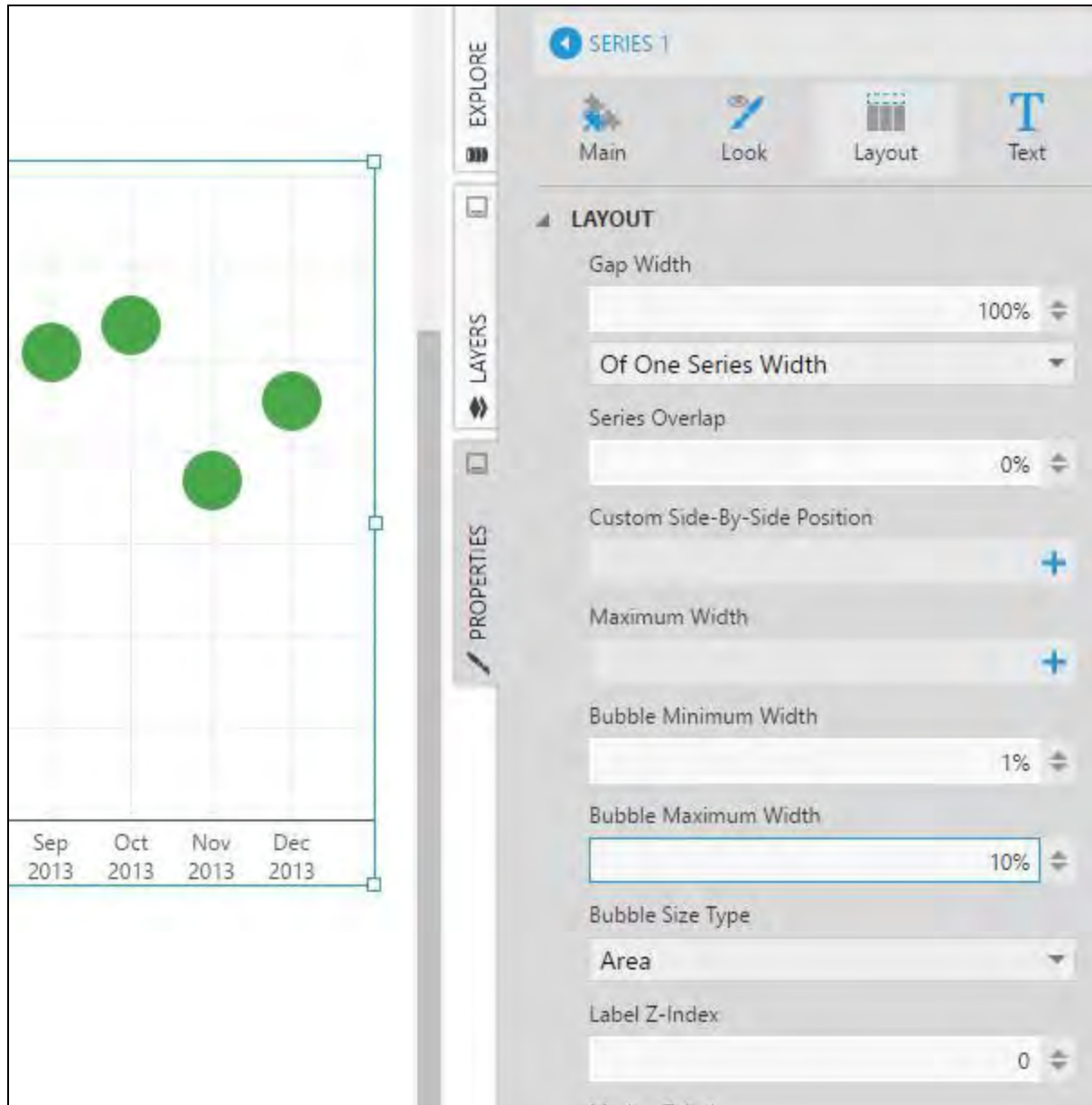
To change the color of data points from the Properties window, select a **data point series** and go to the **Look** tab. You can use the Fill property under Data Points.



Note: Charts have a Data Point Palette property used to determine the colors of data point series by default. Click **Chart Palette & Color Rules** for a shortcut if you want to edit it instead, otherwise the Fill property of a series takes priority when set.

Additional settings to control the appearance of data points for series may be available in this tab, depending on the chart type.

Bar sizes, overlapping, and gaps can be set up in the Layout tab for bar charts. When using a Bubble chart type, you can change the size of the bubbles in the Layout tab.



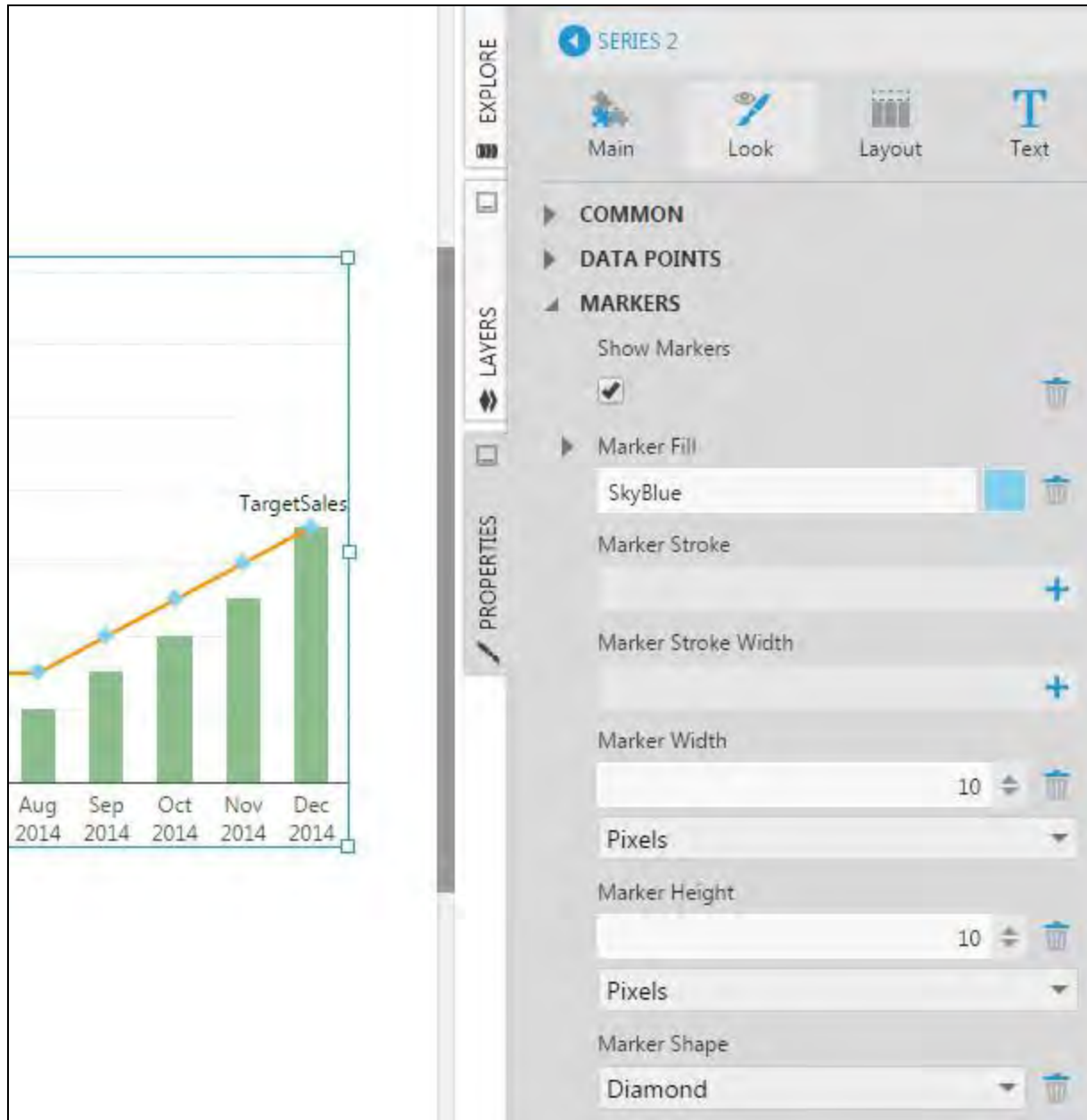
You can apply additional formatting by [setting up states](#) and using state styles. For example, to distinguish between positive and negative bubbles.



Markers

Markers are symbols displayed at the location of the axis value over the data points of any chart type. They make locating this value easier on a chart, and are especially useful for line and area charts to pinpoint the data values along the line or area shape.

To display and customize the markers for a series, edit the properties of the series, click Look, and then scroll down to the Markers category.



Select **Show Markers** to display the markers (e.g., for a line series).

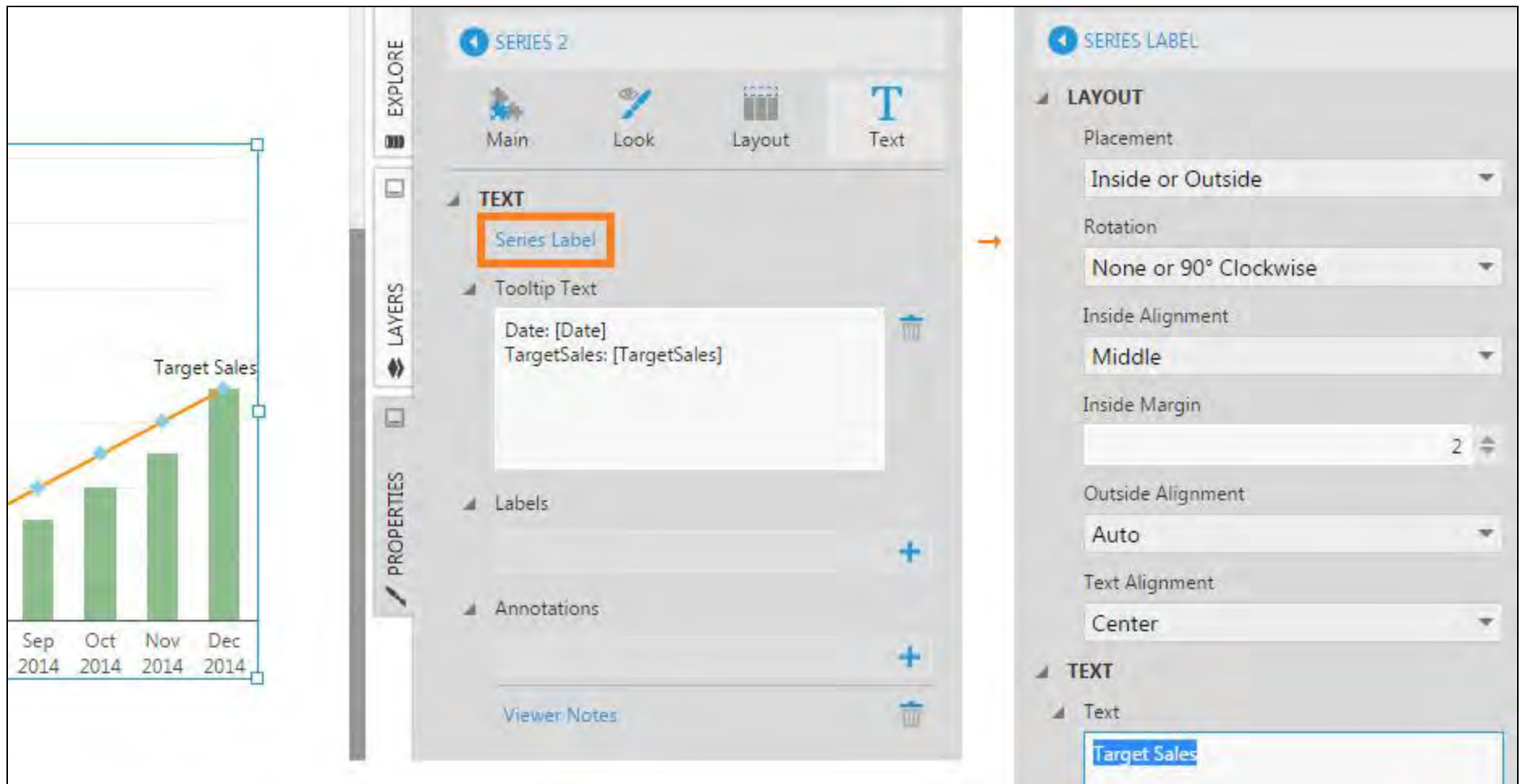
Adjust the size of each marker with the Marker Width and Marker Height properties. Choose a **shape** for the markers using the Marker Shape property.

Series Label

If your chart is not connected to a [legend](#), you'll see a label on the chart identifying each series if you have more than one. This is called a *series label*, and this default behavior helps you to identify and distinguish between groups of data points.

For example, if you have a measure named *Target Sales*, you could see a corresponding label with the text *Target Sales* attached to one of the data points to distinguish it from the other series.

To customize a series label (including its text), edit the properties of the series, click **Text**, and then click **Series Label**.



The screenshot shows the Logi Symphony interface. On the left is a bar chart with four green bars representing months from Sep 2014 to Dec 2014. An orange line series is overlaid on the bars, labeled 'Target Sales'. The right side of the interface shows the 'PROPERTIES' panel. The 'TEXT' tab is selected, and the 'Series Label' property is highlighted with an orange box. Below this, the 'Tooltip Text' is displayed as 'Date: [Date]' and 'TargetSales: [TargetSales]'. The 'Labels' and 'Annotations' sections are empty. The 'Viewer Notes' section is also empty. On the far right, the 'SERIES LABEL' properties panel is visible, showing settings for 'LAYOUT' (Placement: Inside or Outside, Rotation: None or 90° Clockwise, Inside Alignment: Middle, Inside Margin: 2, Outside Alignment: Auto, Text Alignment: Center) and 'TEXT' (Text: Target Sales).



Note: The series label is different than data point labels (described next) since it appears only once for an entire series or grouping of data points.

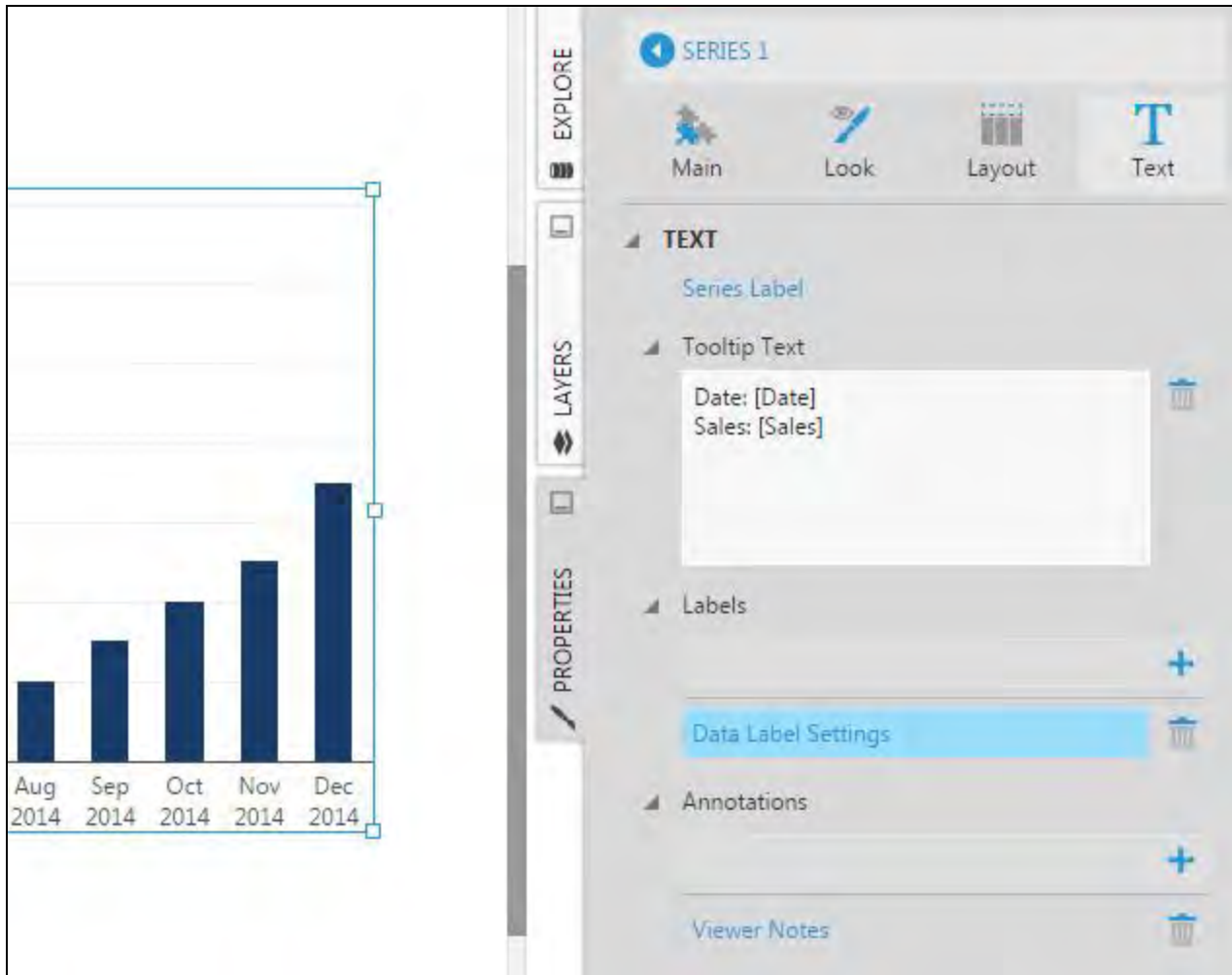
Data Point Labels

You can display a label with each data point in order to show each corresponding value. These labels can be set up in the Data Analysis Panel by following the steps in [Setting Up the Visualization](#).

Chart properties also allow you to further customize the text, or to set up multiple labels: for example, one label on top of each bar to display its value, and another inside each bar displaying its percentage from a formula.

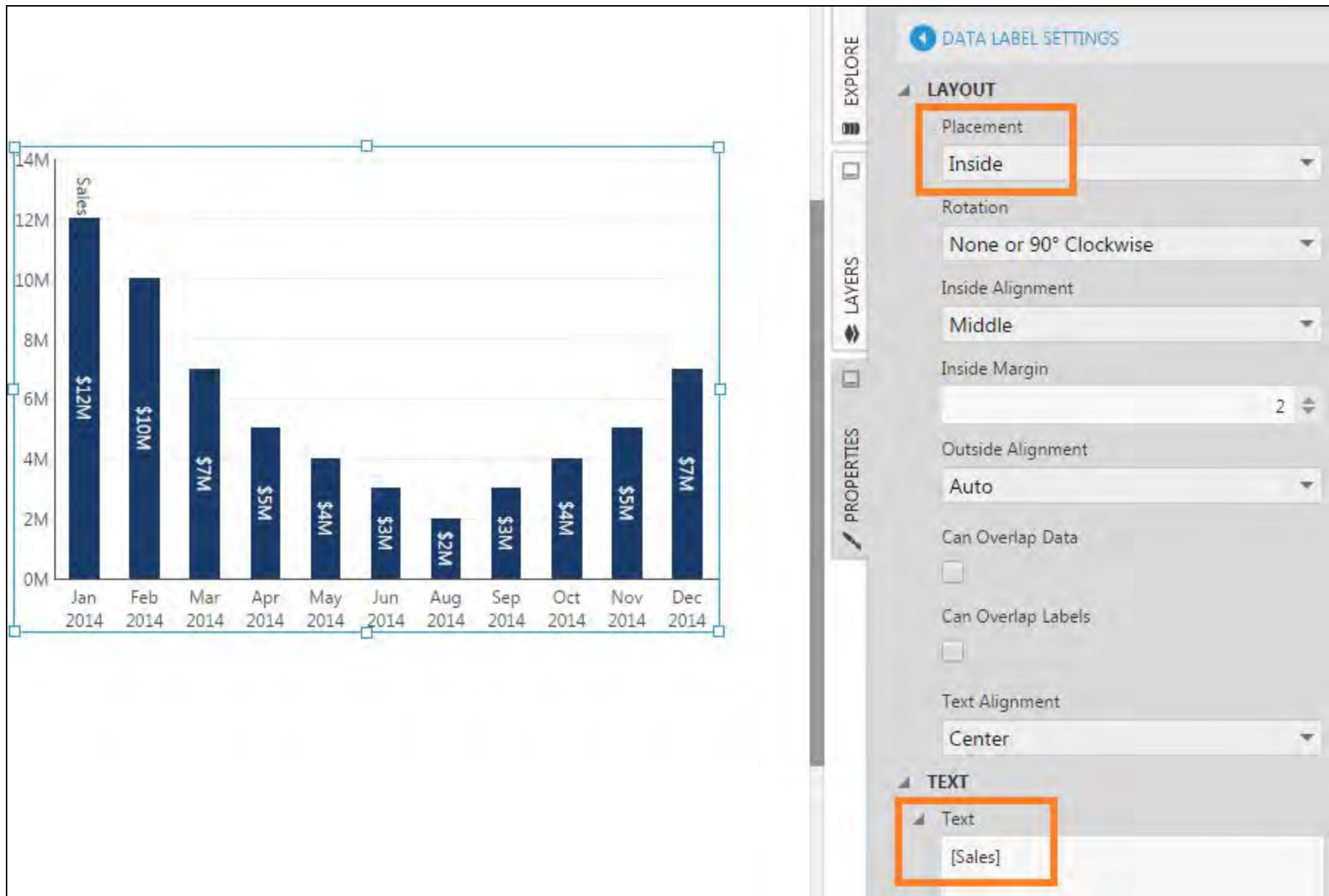
To change label properties, edit the properties of the series and go to the **Text** tab.

Click the **+** button under Data Point Labels to add a new Data Label Settings item. Click an **item** to edit its properties.



In the Data Label Settings, set the Placement property to **Inside** to display text within the bars of the chart. Options, such as Inside or Outside, first try to display labels inside when they fit, and outside when they don't.

Set the Text property using the pop-up menu that appears to insert one or more available placeholder keywords for showing data values.



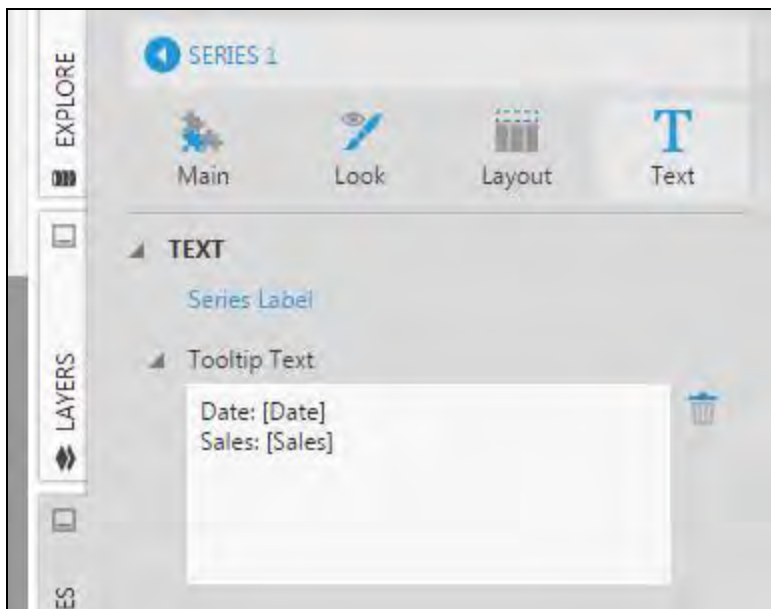
For details on the placeholder keywords and formatting you can use when setting up the text, see [Formatting text](#). You can find examples of placing labels inside data points in [Aligning data point labels inside bars](#).

Tooltip Text

Tooltips pop up with details about data points when you hover over them, or on touch devices when you tap and hold. The details shown can be customized in the Data Analysis Panel by following the steps in [Setting Up the Visualization](#).

You can further customize how the text is arranged and access other options by editing the series Tooltip Text property directly, rather than using the Data Analysis Panel.

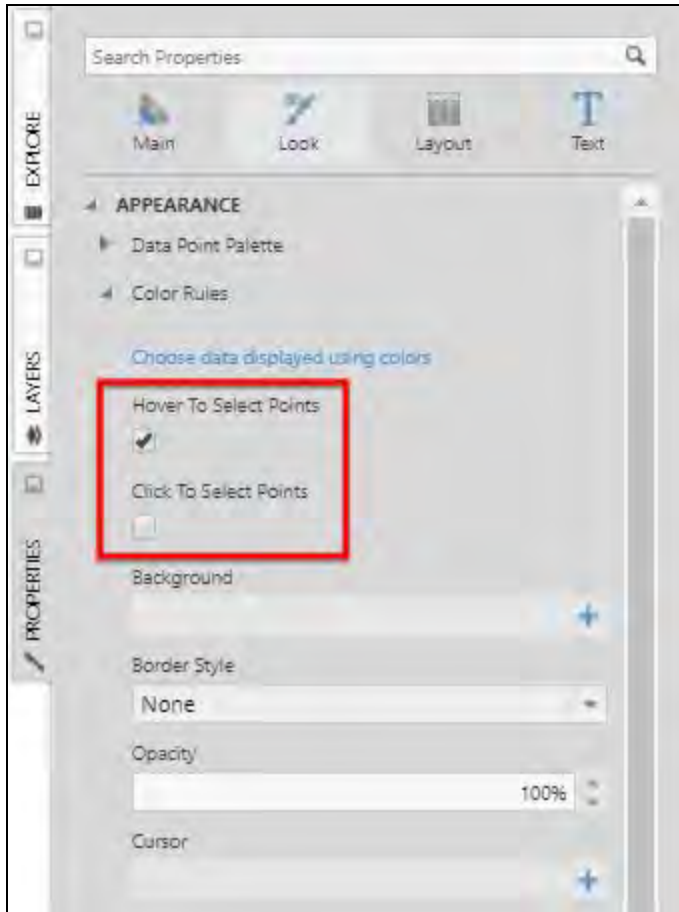
In the properties of a series, go to the **Text** tab to find this property. You can insert regular text, as well as one of the placeholder keyword options that pop up, such as the name of a measure or hierarchy, enclosed in square brackets. See [Formatting text](#) for more details.



Selecting Data Points

By default, users viewing a chart can highlight data points either by hovering over them (tap and hold on touch devices) or by clicking and dragging a selection box around one or more points. This may highlight other related data on a dashboard or other view through [data brushing](#), display [data summary statistics](#) for that data if the status bar is visible, or trigger [custom interactivity](#) via the Selected Data Changed actions.

You can change how viewers select chart data in the Look properties of the chart, such as by disabling **Hover To Select Points**. Enable **Click To Select Points** if you want to click or tap data points to select them.

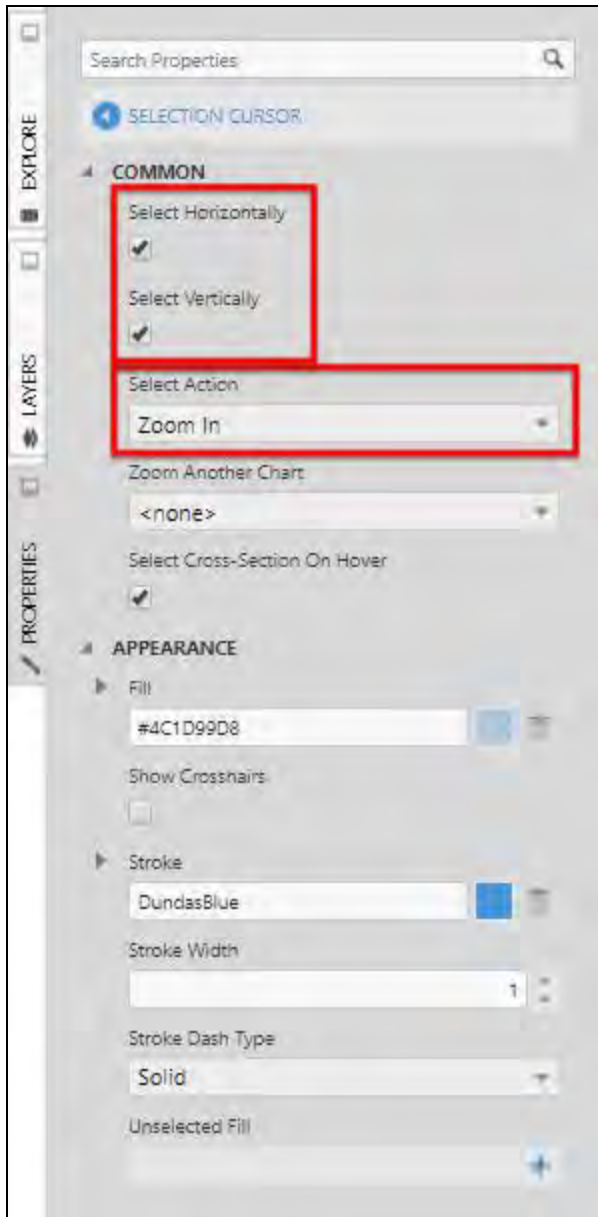


Note: Hold the **Shift**, **Ctrl**, or **⌘** key [on the keyboard](#) when clicking or dragging to select data points when you want to make multiple selections.

You can also change the properties of the selection cursor itself that marks the selected area when dragging: click on **Selection Cursor** in the Main properties.

For example, you can disable both **Select Horizontally** and **Select Vertically** to disable the selection cursor.

Another example is to change the Select Action to **Zoom In** instead of the default Select Data Points, which will automatically zoom the chart to the selection box.

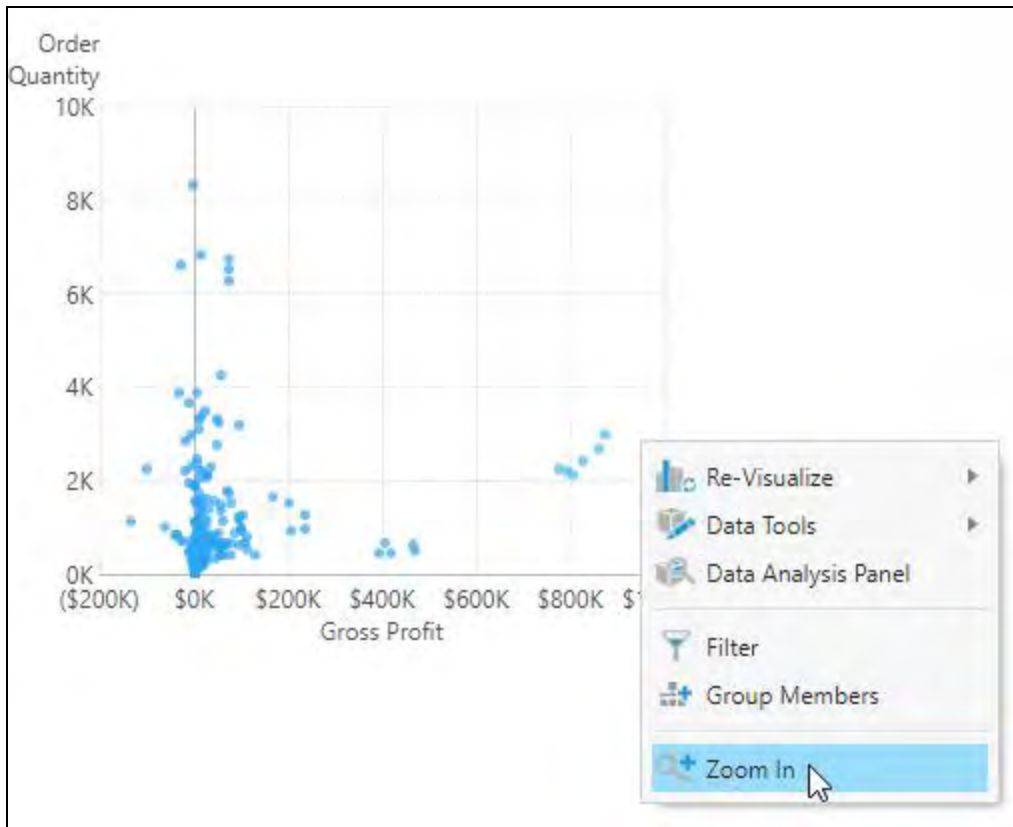


You can also enable **Select Cross-Section On Hover** to display details about all line chart data points located at the mouse's X-axis position.

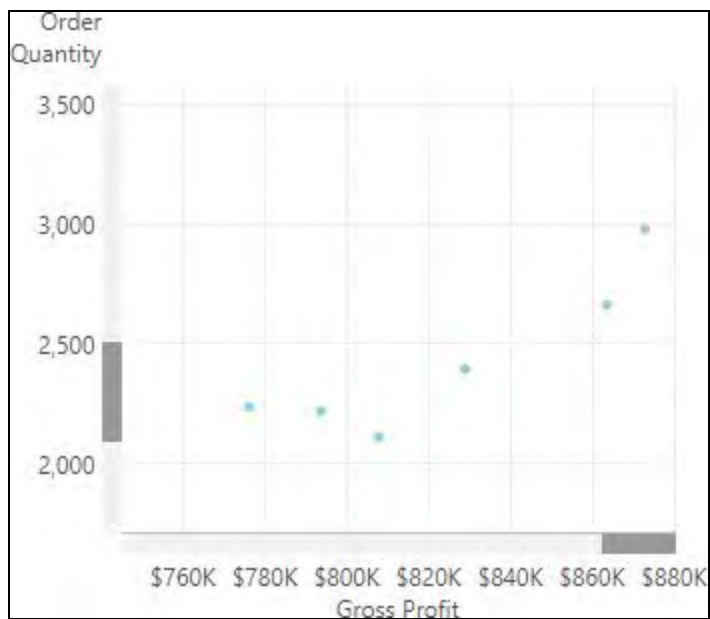
Zooming and Scrolling

Charts typically fit all of their data points into the set size of the chart, but you can also zoom in to view the data in more detail or to restrict the number of data points displayed at a time.

When the selection cursor and context menu are enabled, you can zoom in interactively: click and drag across a region of data to select it, then right-click/long-tap and choose **Zoom In**.

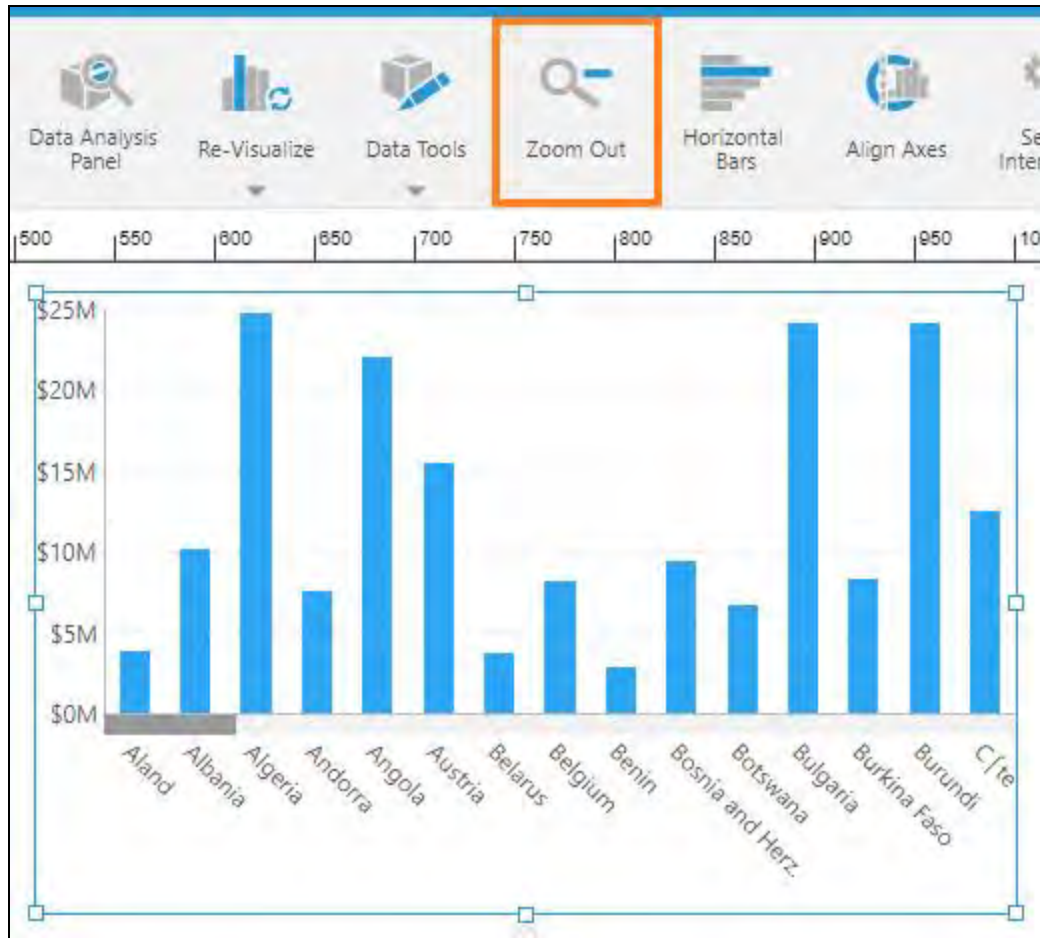


When zoomed in, scrollbars appear to allow you view the rest of the data at the same level of detail.

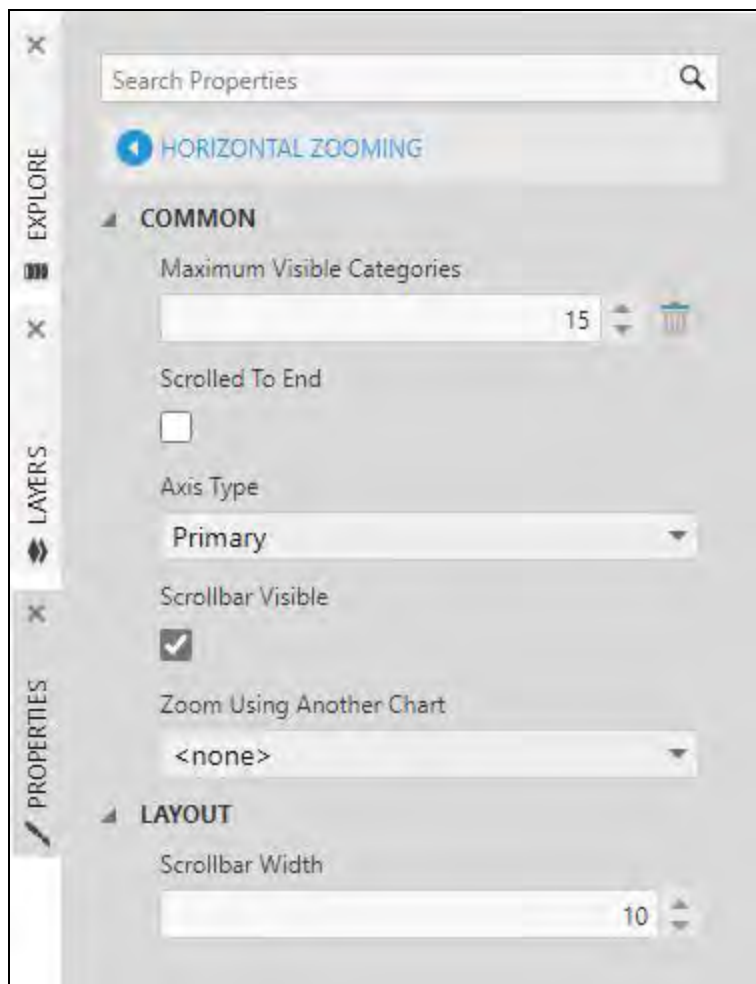


When text values are displayed along an axis or it's switched to the category [scale type](#), charts can zoom in automatically to display only a certain number of values at a time along that axis.

You can easily zoom out by clicking **Zoom Out** in the toolbar or context menu.



To customize zooming and the scrollbar, go to the chart's Horizontal Zooming or Vertical Zooming properties.



The Maximum Visible Categories property customizes how many values are automatically zoomed into along a category scale, or you can clear it to disable this behavior (which is the same as zooming out).

For a date/time axis, the Auto Zoom Start or Auto Zoom Token properties appear instead and can be used to initially display only data from the past year, for example.



Note: The selected date(s) must be between the first and last date in your data, otherwise a different range will be zoomed into instead.

The Zoom Using Another Chart property can be used with another chart set up on the same dashboard with the same data, where viewers can click and drag to select, move, or resize a selected area to zoom and scroll around the original chart.

In the figure below, the light blue area in the bottom chart can be moved and resized to zoom and pan around data in the top chart:



For more information, see:

- Video: [Using the Data Analysis Panel](#)
- [Setting Up the Visualization](#)
- [Formatting Text](#)
- [Add a Legend](#)
- [Set Up States on a Metric Set](#)



- Archive of documentation for Logi Symphony v24

- [Apply Colors to Data Points or Series Using Color Rules](#)
- Script Library: [Chart](#)



Sorting a Table Visualization

This applies to: *Managed Dashboards, Managed Reports*

You can use a table visualization allows you to sort a [metric set](#).

These capabilities are available both when working with a metric set checked out to you, and when viewing a table on a shared dashboard or other view (unless the sorting options were disabled).

Sort on Multiple Hierarchies

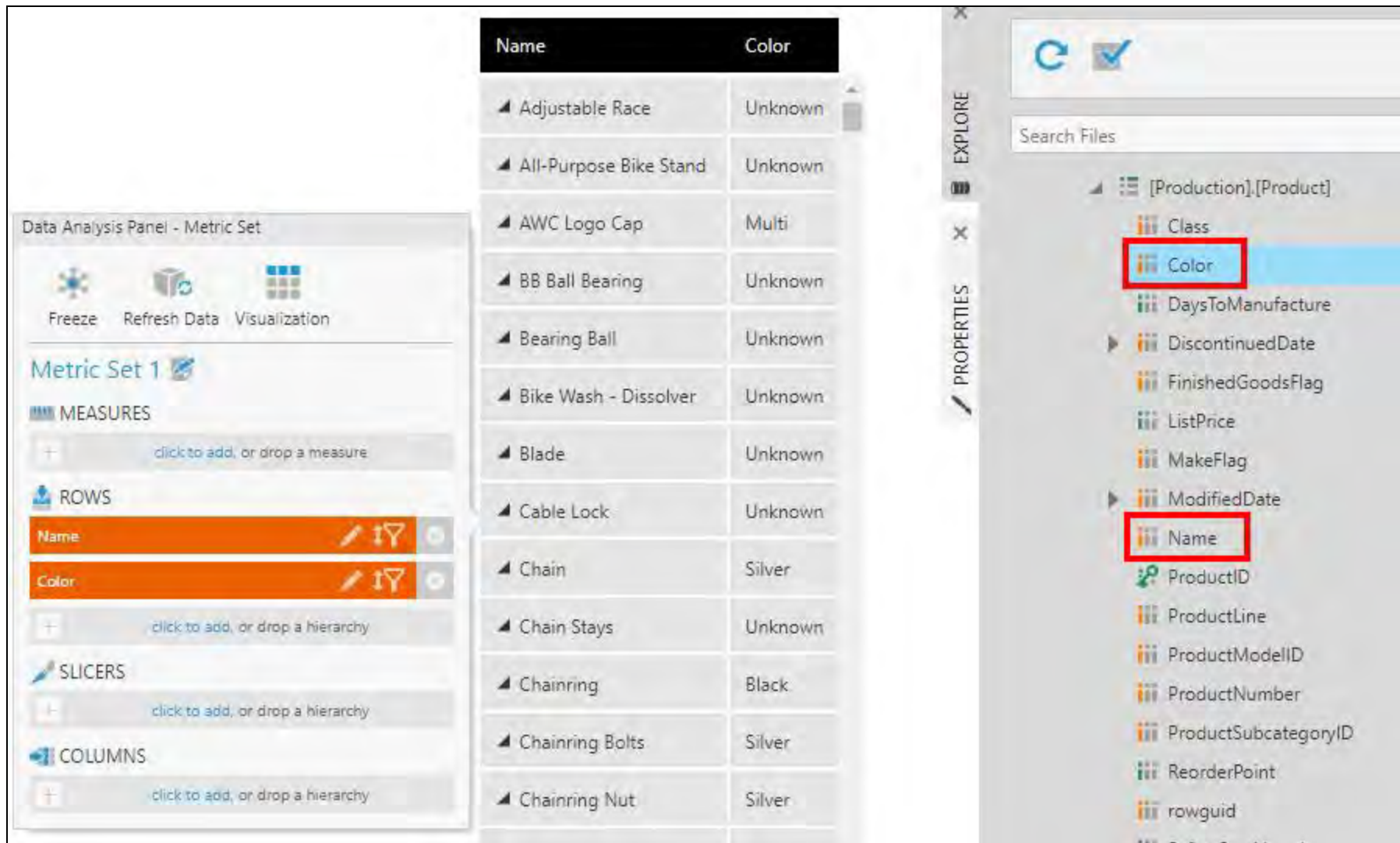
When you use a table visualization to display columns of text or dates (called *hierarchies* in Symphony) the columns in the [table visualization](#) can be formatted as either *row header* columns or regular *flat* columns.

Row header columns are always displayed on the left and indicate how the data is grouped, while flat columns can be displayed in any order regardless of the data grouping and have more customization property options. The default styling for row header cells in Symphony may include a grey background, whereas regular column cells may use alternating lighter background colors. For more information, see the [table elements diagram](#).

Row Header Columns

In the case of row header columns, the sorting priority is determined by the left-to-right order of the columns. This is the same as the order of the hierarchies found under Rows in the Data Analysis Panel for the underlying metric set, and this determines their grouping order.

As an example, create a new metric set with hierarchies under **Rows** in the Data Analysis Panel.

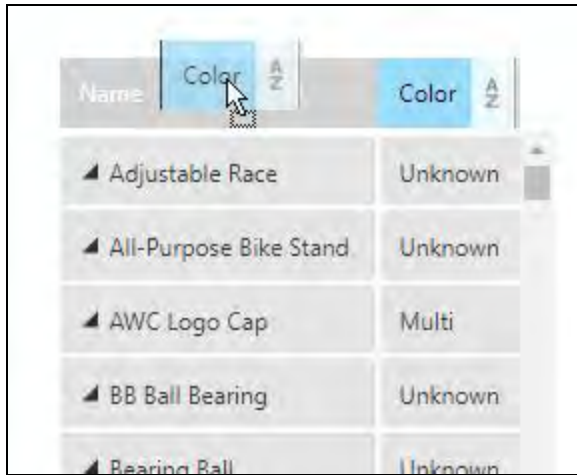


The screenshot displays the Logi Symphony v24 interface. On the left, the 'Data Analysis Panel - Metric Set' is visible, showing 'Metric Set 1' with 'MEASURES', 'ROWS', 'SLICERS', and 'COLUMNS' sections. The 'ROWS' section lists 'Name' and 'Color'. In the center, a table shows product names and their corresponding colors. On the right, the 'EXPLORE' panel shows a file tree with '[Production].[Product]' selected, and the 'PROPERTIES' panel shows the 'Color' and 'Name' fields highlighted with red boxes.

Name	Color
Adjustable Race	Unknown
All-Purpose Bike Stand	Unknown
AWC Logo Cap	Multi
BB Ball Bearing	Unknown
Bearing Ball	Unknown
Bike Wash - Dissolver	Unknown
Blade	Unknown
Cable Lock	Unknown
Chain	Silver
Chain Stays	Unknown
Chainring	Black
Chainring Bolts	Silver
Chainring Nut	Silver

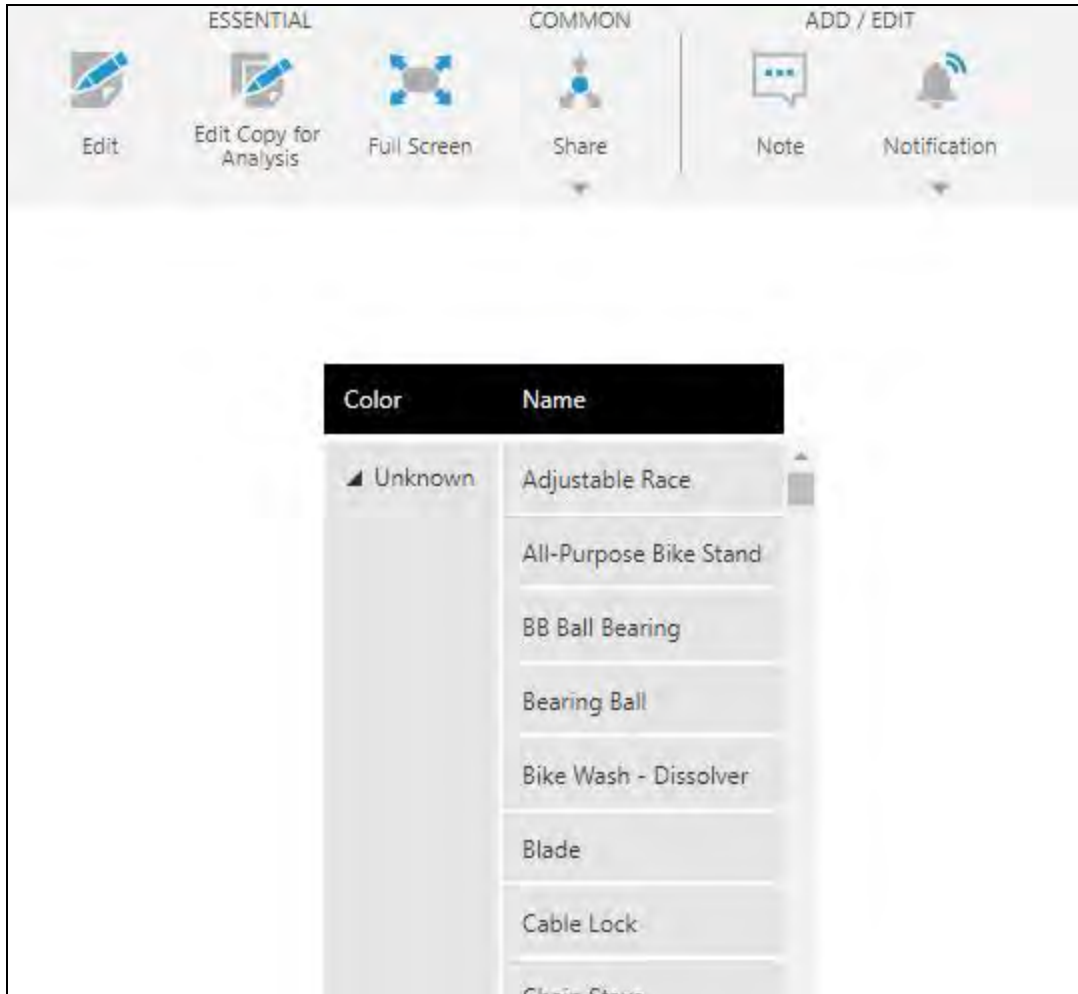
In the figure shown above, the data is grouped first by *Name*, the leftmost column, but each product name has only one color.

Reorder the table columns by dragging the **header** of the second column onto the header of the first column. If your metric set is on a dashboard, switch to **View** mode first.



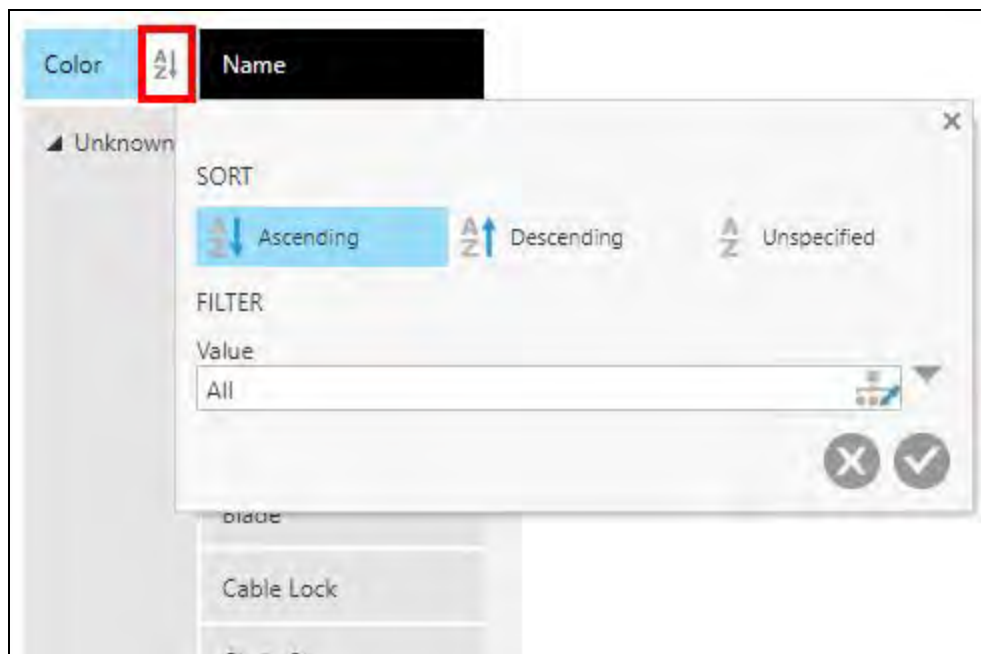
Name	Color
Adjustable Race	Unknown
All-Purpose Bike Stand	Unknown
AWC Logo Cap	Multi
BB Ball Bearing	Unknown
Bearing Ball	Unknown

The columns, as well as the grouping of the hierarchy values, are now swapped. In this example, the data is now grouped first by Color, then by Name.



Note: If the underlying metric set is checked out to you, this change will be saved on the metric set. Open the **Data Analysis Panel** in edit mode to see this.

Hover over the first column header. Click the **A-Z** icon on the right to open the Sort & Filter pop-up.



In the pop-up, click **Descending** to sort the first column in descending order. Do the same for the second column.

You will see the values in the first column are now sorted in descending order. In the second column, the values are also sorted in descending order within each color grouping.

ESSENTIAL



Edit



Edit Copy for Analysis



Full Screen

COMMON



Share

ADD / EDIT



Note



Notification

Color	Name
	HL Touring Frame - Yellow, 50
	HL Touring Frame - Yellow, 46
▲ White	Racing Socks, M
	Racing Socks, L
	Mountain Bike Socks, M
	Mountain Bike Socks, L
▲ Silver/Black	Touring Pedal
	ML Road Pedal
	ML Mountain Pedal
	LL Road Pedal
	LL Mountain Pedal

Another way to re-order the columns is via the Data Analysis Panel. For example, drag the **Name** column over the Color column to switch them back.



You will see the Name column is now first again, with the values still sorted in descending order.

Regular Columns

Regular 'flat' columns can also be reordered by dragging column headers in View mode, which is only a visualization choice that does not affect the data or how it's grouped. However, using the **Sort & Filter** pop-up to sort a regular column displaying text or date values will give that column the highest sorting priority without changing the order of the columns in the displayed table.

As an example, start with the metric set from the previous example with two hierarchies.

Select the **table** if on a dashboard, then click **Re-Visualize** and then **Display As Flat Table** in the toolbar (or directly in the toolbar in earlier versions). The data is now displayed as regular columns instead of row headers.

Name	Color
Women's Tights, S	Black
Women's Tights, M	Black
Women's Tights, L	Black
Women's Mountain Shorts, S	Black
Women's Mountain Shorts, M	Black
Women's Mountain Shorts, L	Black
Water Bottle - 30 oz.	Unknown
Touring-Panniers, Large	Grey
Touring-3000 Yellow, 62	Yellow
Touring-3000 Yellow, 50	Yellow

Switch to **View** mode if using a dashboard, then hover over the header of the second column. Click the **A-Z** icon to open the Sort & Filter pop-up.

Name

Color



Women's Tights, S

Black

Women's Tights, M

Black

Women's Tights, L

Black

Women's Mountain Shorts, S

Black

Women's Mountain Shorts, M

Black

Women's Mountain Shorts, L

Black

Water Bottle - 30 oz.

Unknown

Touring-Panniers, Large

Grey

Touring-3000 Yellow, 62

Yellow

Touring-3000 Yellow, 50

Yellow

SORT


Ascending


Descending


Unspecified

FILTER

Value

All






Click on **Descending** (even if previously selected). Because this is now your last sorting action, the second column now has the highest sorting priority and its values are all sorted in descending order.

Name	Color
HL Touring Frame - Yellow, 54	Yellow
HL Touring Frame - Yellow, 50	Yellow
HL Touring Frame - Yellow, 46	Yellow
Racing Socks, M	White
Racing Socks, L	White
Mountain Bike Socks, M	White
Mountain Bike Socks, L	White
Touring Pedal	Silver/Black
ML Road Pedal	Silver/Black
ML Mountain Pedal	Silver/Black
LL Road Pedal	Silver/Black
LL Mountain Pedal	Silver/Black

Because these are regular columns, the column order doesn't change in the visualization, but this hierarchy is reordered to be first under Rows in the Data Analysis Panel for the underlying metric set in order to provide the expected results.

Sort on Multiple Measures

Sorting multiple numeric columns is similar to sorting multiple row hierarchies displayed as regular columns, as shown in the previous section.

Measure columns can be reordered by dragging column headers as usual. This will not affect the ordering of the measures in the underlying metric set, and vice versa, as it is a visualization choice. Using the **Sort & Filter** pop-up to sort a measure column will give that column the highest sorting priority and cause the corresponding measure to be reordered first in the metric set, without changing the order of any columns in the displayed table.

As an example, create the following table using the *Name*, *SafetyStockLevel*, and *ListPrice* columns from *[Production].[Product]*.

Data Analysis Panel - Metric Set

Edit Visualization

MetricSet1

MEASURES

ListPrice

SafetyStockLevel

click to add, or drop a measure

ROWS

Name

click to add, or drop a hierarchy

SLICERS

click to add, or drop a hierarchy

COLUMNS

click to add, or drop a hierarchy

Name	SafetyStockLevel	ListPrice
Grand Total	269,716	221,087.7900
Adjustable Race	1,000	0.0000
All-Purpose Bike Stand	4	159.0000
AWC Logo Cap	4	8.9900
BB Ball Bearing	800	0.0000
Bearing Ball	1,000	0.0000
Bike Wash - Dissolver	4	7.9500
Blade	800	0.0000
Cable Lock	4	25.0000
Chain	500	20.2400

Switch to **View** mode if using a dashboard, and use the column header's Sort & Filter pop-up to sort *ListPrice* in **Descending** order. Then, sort *SafetyStockLevel* in **Ascending** order.

Name	SafetyStockLevel	ListPrice
Road Bottle Cage	4	8.9900
Bike Wash - Dissolver	4	7.9500
Water Bottle - 30 oz.	4	4.9900
Patch Kit/8 Patches	4	2.2900
Paint - Black	60	0.0000
Paint - Blue	60	0.0000
Paint - Red	60	0.0000
Paint - Silver	60	0.0000
Paint - Yellow	60	0.0000
Road-150 Red, 44	100	3,578.2700
Road-150 Red, 48	100	3,578.2700
Road-150 Red, 52	100	3,578.2700
Road-150 Red, 56	100	3,578.2700
Road-150 Red, 62	100	3,578.2700



Observe that the *SafetyStockLevel* measure values are all in ascending order and the corresponding column has the highest sorting priority because it was sorted most recently. The *ListPrice* measure column has the next highest priority and its values are still sorted in descending order but only within rows with the same *SafetyStockLevel* value.

Sort On a Measure and a Hierarchy

You can mix and match sorting on hierarchies (text or date values) and measures (numbers). When you sort by a measure's values, the grouping between the hierarchies is maintained by default but you have options to change it.

As an example, create the following table using the *Color*, *Name*, and *Weight* columns from *[Production].[Product]*.

Color	Name	Weight
	Mountain-500 Silver, 44	28.13 ▲
	Mountain-500 Silver, 48	28.42
	Mountain-500 Silver, 52	28.68
	Rear Brakes	317.00
	Rear Derailleur	215.00
▲ Silver/Black	(All)	1,124.00
	HL Mountain Pedal	185.00
	HL Road Pedal	149.00
	LL Mountain Pedal	218.00
	LL Road Pedal	189.00
	ML Mountain Pedal	215.00
	ML Road Pedal	168.00
▲ Yellow	(All)	442.26
	HL Touring Frame - Yellow, 46	2.96
	HL Touring Frame - Yellow, 50	3.00
	HL Touring Frame - Yellow, 54	3.04
	HL Touring Frame - Yellow, 60	3.08
	LL Touring Frame - Yellow, 44	3.02 ▼

By default, the *Color* and *Name* columns are sorted in ascending order, while the *Weight* column does not have sorting applied.

In View mode, change the sort on the *Weight* column to **Ascending**. You will see that the groups (the *Color* column) have been reordered based on their totals, and the rows in each group (the *Name* column) have been reordered based on their individual values.

Color	Name	Weight
	Touring-3000 Yellow, 50	29.13
	Touring-3000 Yellow, 54	29.42
	Touring-3000 Yellow, 58	29.79
	Touring-3000 Yellow, 62	30.00
▲ Silver/Black	(All)	1,124.00
	HL Road Pedal	149.00
	ML Road Pedal	168.00
	HL Mountain Pedal	185.00
	LL Road Pedal	189.00
	ML Mountain Pedal	215.00
	LL Mountain Pedal	218.00
▲ Silver	(All)	1,379.70
	HL Mountain Frame - Silver, 38	2.68
	HL Mountain Frame - Silver, 42	2.72
	ML Mountain Frame-W - Silver, 38	2.73
	HL Mountain Frame - Silver, 44	2.76
	ML Mountain Frame-W - Silver, 40	2.77
	HL Mountain Frame - Silver, 48	2.80

Open the **Sort & Filter** pop-up for the *Weight* column again. You can change the hierarchy column responsible for how the data is grouped by selecting another hierarchy from the **Grouped first by** drop-down.

Color	Name	Weight
Touring	Touring	
Touring	Touring	
Touring	Touring	
▲ Silver/Black	(All)	
HL Road	HL Road	
ML Road	ML Road	
	HL Mountain Pedal	185.00
	LL Road Pedal	189.00
	ML Mountain Pedal	215.00
	LL Mountain Pedal	218.00
▲ Silver	(All)	1,379.70
	HL Mountain Frame - Silver, 38	2.68
	HL Mountain Frame - Silver, 42	2.72
	ML Mountain Frame-W - Silver, 38	2.73

Changing this grouping option is the same as dragging to reorder the row header columns, as shown in the [Row Header Columns](#) section above.

In this example, the *Name* column contains a unique name in every row, so the rows are now sorted in ascending order by weight independently without any effective groupings.

Data Analysis Panel - Metric Set

Freeze
Refresh Data
Visualization

Metric Set 1

MEASURES

Weight SUM

+ click to add, or drop a measure

ROWS

Name

Color

+ click to add, or drop a hierarchy

Slicers

Name	Color	Weight
Grand Total		15,184.19
HL Road Frame - Black, 44	Black	2.12
HL Road Frame - Red, 44	Red	2.12
HL Road Frame - Black, 48	Black	2.16
HL Road Frame - Red, 48	Red	2.16
ML Road Frame-W - Yellow, 38	Yellow	2.18
HL Road Frame - Black, 52	Black	2.20
HL Road Frame - Red, 52	Red	2.20
ML Road Frame - Red, 44	Red	2.22
ML Road Frame-W - Yellow, 40	Yellow	2.22



Note: If totals appear that you don't want after changing the grouping, you can [disable totals](#) for that hierarchy or metric set, or consider setting up [hierarchy attributes](#) (*Color* can be a product attribute, for example).

You can also choose the option (**None**) from the drop-down. This is similar to choosing a hierarchy with unique values, such as *Name* in this example, but you may not have such a column. All rows will be sorted independently including any total rows, so the table's total styles will not be displayed in the sorted direction.

Sort Using the Context Menu

You can apply sorting from the context menu when you right-click on a table cell. This option gives you the flexibility of applying sorting to just the rows of a particular hierarchy or level instead of all rows. When the column is sorted, an icon will indicate the direction of the sorting when you move the mouse over the table column header.

As an example, set up a table visualization with a product hierarchy, a date hierarchy, and one measure.

Data Analysis Panel - Metric Set

Edit Visualization

MetricSet1

MEASURES

OrderQty

click to add, or drop a measure

ROWS

ProductID (Product ID)

OrderDate (Year > Month > Day)

click to add, or drop a hierarchy

SLICERS

click to add, or drop a hierarchy

COLUMNS

click to add, or drop a hierarchy

Product Category ID	Year	OrderQty
Grand Total		274,914
Accessories	(All)	61,932
	2011	1,032
	2012	5,750
	2013	32,153
	2014	22,997
Bikes	(All)	90,268
	2011	7,963
	2012	28,494
	2013	37,748

Switch to **View** mode and then right-click over one of the **measure subtotal cells** for a product category. From the context menu, click **Sort**.

Product Category	Year	OrderQty
Grand Total		274,914
▶ Accessories	(All)	61,932
	▶ 2011	1,0
	▶ 2012	5,7
	▶ 2013	32,1
	▶ 2014	22,9
▶ Bikes	(All)	90,2
	▶ 2011	7,9
	▶ 2012	28,4
	▶ 2013	37,7

- Drill Down
- Drill Up
- Change Level
- Sort
- Filter
- Expand
- Collapse
- Collapse All
- Group Members
- Data Analysis Panel
- Re-Visualize
- Data Tools
- Reset Column Width
- Display As Flat Table

A sub-menu appears and asks you to choose the specific measure or hierarchy to sort on. Click the **measure** (*OrderQty*).

Product Category	Year	OrderQty
Grand Total		274,914
▶ Accessories	(All)	61,932
	▶ 2011	1,0
	▶ 2012	5,750
	▶ 2013	32,153
	▶ 2014	22,997
▶ Bikes	(All)	90,268
	▶ 2011	7,963
	▶ 2012	28,494
	▶ 2013	37,748

Click **Descending**.

Product Category	Year	OrderQty
Grand Total		274,914
► Accessories	(All)	61,932
	► 2011	1,0
	► 2012	5,7
	► 2013	32,1
	► 2014	22,997
► Bikes	(All)	90,268
	► 2011	7,963
	► 2012	28,494
	► 2013	37,748



The product categories are now sorted in descending order according to their corresponding subtotal measure values. The date rows within each product category are unchanged.

Product Category	Year	OrderQty
Grand Total		274,914
Bikes	(All)	90,268
	2011	7,963
	2012	28,494
	2013	37,748
	2014	16,063
Clothing	(All)	73,670
	2011	2,246
	2012	19,228
	2013	37,180

Next, right-click on a **measure cell** corresponding to one of the date rows.

Click **Sort**, select **OrderQty**, and then click **Ascending**.

Date rows within the product category are now sorted in ascending order according to their measure values. The product categories are still in order by descending measure value.

Product Category	Year	OrderQty
Grand Total		274,914
► Bikes	(All)	90,268
	► 2011	7,963
	► 2014	16,063
	► 2012	28,494
	► 2013	37,748
► Clothing	(All)	73,670
	► 2011	2,246
	► 2014	15,016
	► 2012	19,228

Multi-Leveled Hierarchy

If there are multiple levels in a hierarchy, you can define sorting for each displayed level using the context menu. These settings will be saved even if you change the displayed hierarchy level: the sorting you previously set for a level will take effect when measure values for that level are displayed again.

Different levels in the hierarchy affect the sorting in a similar way to having multiple hierarchies, because data is grouped by the values in each displayed level. As a viewer, you can change the displayed levels using the context menu.

In the previous example, while in View mode, right-click the **visualization** and select **Change Level**.

Product Category	Year	OrderQty
Grand Total		274,914
Bikes	(All)	90,268
	2011	7,963
	2014	16,063
	2012	
	2013	
Clothing	(All)	
	2011	
	2014	
	2012	

Drill Down
 Drill Up
Change Level
 Sort
 Filter
 Expand
 Collapse
 Collapse All
 Group Members
 Add Note
 Correct Value
 Data Analysis Panel
 Re-Visualize
 Data Tools
 Reset Column Width
 Display As Flat Table

Select the **ProductID** hierarchy and select the **Product** level.

Right-click the **visualization** again and select **Change Level**.

Select the **ProductID** hierarchy and select **Change Top Level**.

Product	Year	OrderQty
Grand Total		274,914
AWC Logo Cap	(All)	8,311
	▶ 2011	545
	▶ 2014	
	▶ 2012	
	▶ 2013	
Water Bottle - 30 oz.	(All)	
	▶ 2014	2,902
	▶ 2013	3,913
Sport-100 Helmet, Blue	(All)	6,743
	▶ 2011	2,600

Select the **Product Category** level.

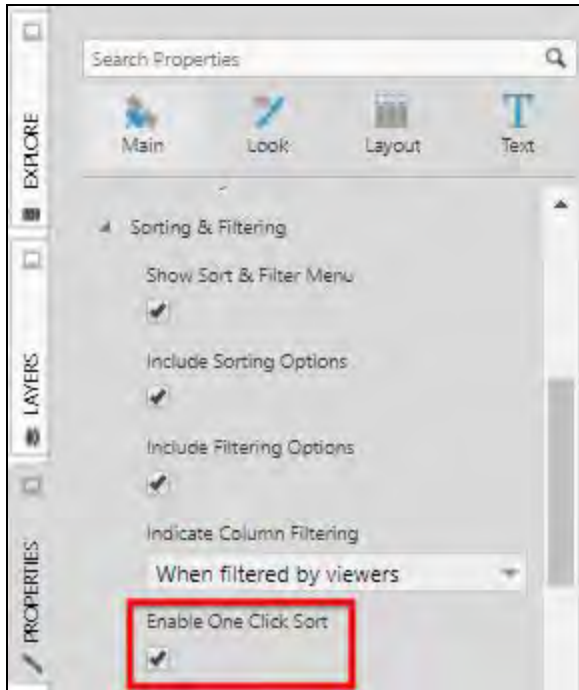
While products are still in descending order by *OrderQty*, and years are in ascending order by *OrderQty* within each product, the sorting has been affected because the products are now first grouped within their subcategories, and subcategories are grouped within their category. This is the result of choosing to display these upper hierarchy levels.

Product Category	Product Subcategory	Product	Year	OrderQty
Grand Total				274,914
Bikes				90,268
	Mountain Bikes			28,321
		Mountain-200 Black, 38	(All)	2,977
			► 2014	619
			► 2012	888
			► 2013	1,470
		Mountain-200 Black, 42	(All)	2,664
			► 2014	513
			► 2012	889
			► 2013	1,262
		Mountain-200 Silver, 38	(All)	2,394
			► 2014	508
			► 2012	722
			► 2013	1,164
		Mountain-200 Silver, 42	(All)	2,234
			► 2014	441
			► 2012	789
			► 2013	1,004

Sort With One Click

Hierarchy headers also support one-click sorting, which allows users to simply click the header to sort the rows in ascending, descending, or unspecified order. A triangle icon above the header text tells you which direction it is currently sorted. If you do not see the icon, it means the sort direction is unspecified.

To use this option, open the **Properties** panel for the table and check the **Enable One Click Sort** property.



Group	Name	SalesLastYear	SalesYTD
Europe	France	2,396,539.7601	4,772,398.3078
	Germany	1,307,949.7917	3,805,202.3478
	United Kingdom	1,635,823.3967	5,012,905.3656
North America	Canada	5,693,988.8600	6,771,829.1376
	Central	3,205,014.0767	3,072,175.1180
	Northeast	3,607,148.9371	2,402,176.8476
	Northwest	3,298,694.4938	7,887,186.7882
	Southeast	3,925,071.4318	2,538,667.2515
	Southwest	5,366,575.7098	10,510,853.8739
Pacific	Australia	2,278,548.9776	5,977,814.9154

Some sorting features are not available when using a Dynamic Hierarchy and editing the metric set full-screen, but you can use them when viewing a dashboard that uses this metric set.

For more information, see:

- [Using a Table Visualization](#)
- [Symphony Metric Sets](#)
- [Define Custom Measure Sorting](#)
- [Define Custom Hierarchy Sorting](#)
- [Create a Metric Set and Add a Filter](#)

Using a Table Visualization

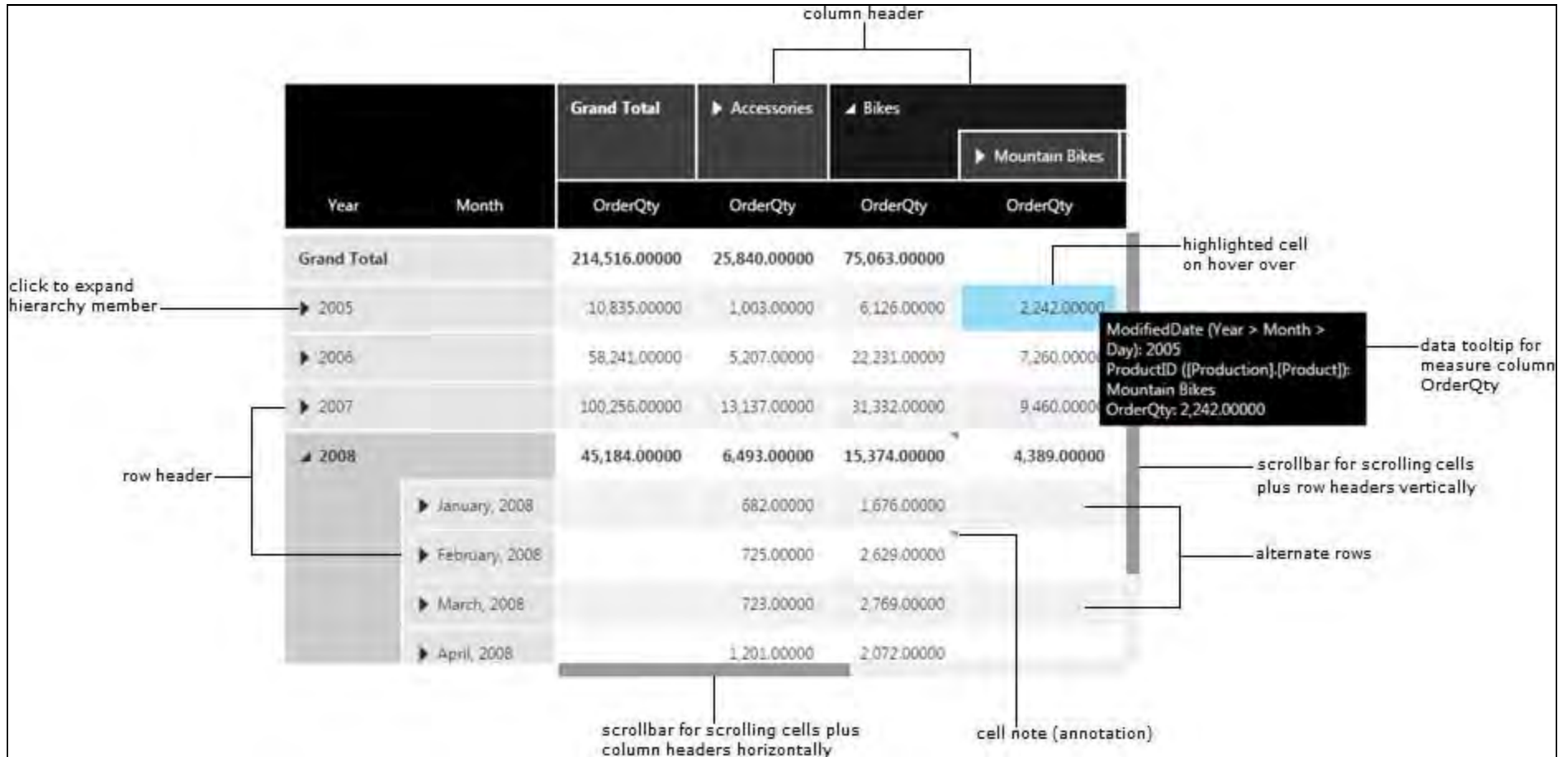
This applies to: *Managed Dashboards, Managed Reports*

A table visualization lets you display data from a metric set using a tabular view. A table is also known as a *data grid* or *data table*, and it is the default type of visualization that is used when first selecting data if you did not choose another type.

Year	Product Category	Canada		United States	
		Sales Amount	Gross Profit	Sales Amount	Gross Profit
2014	Accessories	\$22K	\$7K	\$61K	\$19K
	Bikes	\$4,560K	\$183K	\$16,844K	\$677K
	Clothing	\$116K	\$24K	\$318K	\$66K
	Components	\$747K	\$86K	\$2,527K	\$300K
2015	Accessories	\$102K	\$47K	\$259K	\$118K
	Bikes	\$4,889K	\$121K	\$18,817K	\$808K
	Clothing	\$199K	\$31K	\$548K	\$88K
	Components	\$998K	\$76K	\$3,285K	\$263K
2016	Accessories	\$92K	\$49K	\$224K	\$121K
	Bikes	\$2,491K	\$227K	\$11,047K	\$1,133K
	Clothing	\$110K	\$22K	\$278K	\$56K
	Components	\$371K	\$24K	\$1,137K	\$78K
Grand Total		\$14,696K	\$899K	\$55,345K	\$3,727K

Elements of a Table

The figure below shows the main elements of a table visualization.



The screenshot shows a table visualization with the following structure and annotations:

- Column Header:** A hierarchical structure at the top with levels: Grand Total, Accessories, Bikes, and Mountain Bikes. Each level has an 'OrderQty' measure below it.
- Row Header:** A hierarchical structure on the left with levels: Year (2005, 2006, 2007, 2008) and Month (January, February, March, April for 2008).
- Table Data:**

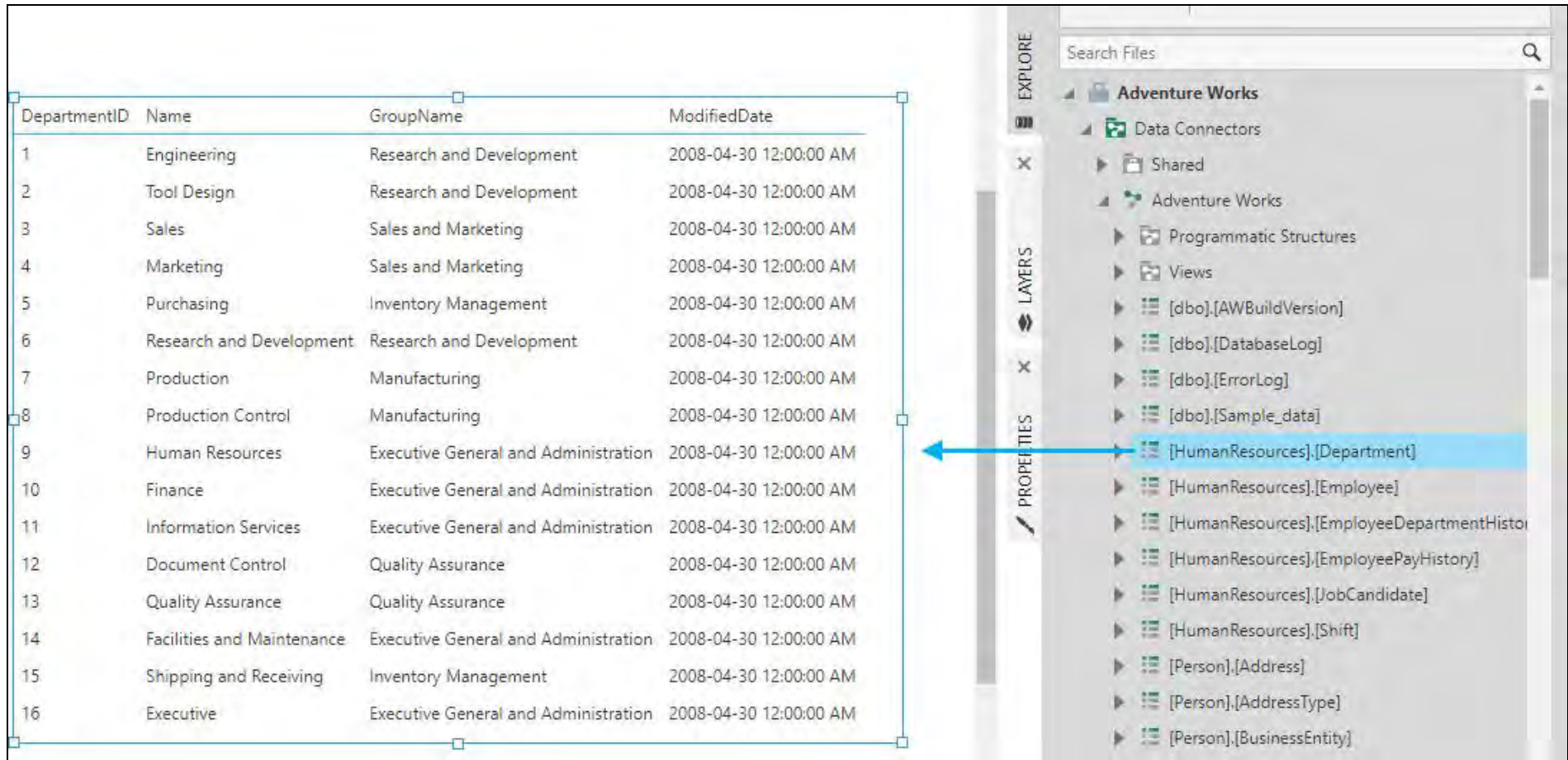
Year	Month	Grand Total OrderQty	Accessories OrderQty	Bikes OrderQty	Mountain Bikes OrderQty
Grand Total		214,516.00000	25,840.00000	75,063.00000	
2005		10,835.00000	1,003.00000	6,126.00000	2,242.00000
2006		58,241.00000	5,207.00000	22,231.00000	7,260.00000
2007		100,256.00000	13,137.00000	31,332.00000	9,460.00000
2008		45,184.00000	6,493.00000	15,374.00000	4,389.00000
	January, 2008		682.00000	1,676.00000	
	February, 2008		725.00000	2,629.00000	
	March, 2008		723.00000	2,769.00000	
	April, 2008		1,201.00000	2,072.00000	
- Annotations:**
 - click to expand hierarchy member:** Points to the right arrow icon next to the year 2005.
 - row header:** Points to the 'Year' column header.
 - highlighted cell on hover over:** Points to the cell containing '2,242.00000' for Mountain Bikes in 2005.
 - data tooltip for measure column OrderQty:** A tooltip box showing: 'ModifiedDate (Year > Month > Day): 2005', 'ProductID ([Production].[Product]): Mountain Bikes', and 'OrderQty: 2,242.00000'.
 - scrollbar for scrolling cells plus row headers vertically:** Points to the vertical scrollbar on the right side of the table.
 - alternate rows:** Points to the alternating light and dark gray row colors.
 - scrollbar for scrolling cells plus column headers horizontally:** Points to the horizontal scrollbar at the bottom of the table.
 - cell note (annotation):** Points to a small note next to the cell containing '2,072.00000'.

Adding a Table

Drag a Database Table or Spreadsheet

One way to create a table visualization is to drag a **table** or **sheet** from under a data connector in the Explore window to the canvas of a metric set or dashboard.

This method of adding a table is mostly for previewing data because it uses the [raw data retrieval mode](#), which has some limitations.



DepartmentID	Name	GroupName	ModifiedDate
1	Engineering	Research and Development	2008-04-30 12:00:00 AM
2	Tool Design	Research and Development	2008-04-30 12:00:00 AM
3	Sales	Sales and Marketing	2008-04-30 12:00:00 AM
4	Marketing	Sales and Marketing	2008-04-30 12:00:00 AM
5	Purchasing	Inventory Management	2008-04-30 12:00:00 AM
6	Research and Development	Research and Development	2008-04-30 12:00:00 AM
7	Production	Manufacturing	2008-04-30 12:00:00 AM
8	Production Control	Manufacturing	2008-04-30 12:00:00 AM
9	Human Resources	Executive General and Administration	2008-04-30 12:00:00 AM
10	Finance	Executive General and Administration	2008-04-30 12:00:00 AM
11	Information Services	Executive General and Administration	2008-04-30 12:00:00 AM
12	Document Control	Quality Assurance	2008-04-30 12:00:00 AM
13	Quality Assurance	Quality Assurance	2008-04-30 12:00:00 AM
14	Facilities and Maintenance	Executive General and Administration	2008-04-30 12:00:00 AM
15	Shipping and Receiving	Inventory Management	2008-04-30 12:00:00 AM
16	Executive	Executive General and Administration	2008-04-30 12:00:00 AM

EXPLORE

Search Files

- Adventure Works
 - Data Connectors
 - Shared
 - Adventure Works
 - Programmatic Structures
 - Views
 - [dbo].[AWBuildVersion]
 - [dbo].[DatabaseLog]
 - [dbo].[ErrorLog]
 - [dbo].[Sample_data]
 - [HumanResources].[Department]**
 - [HumanResources].[Employee]
 - [HumanResources].[EmployeeDepartmentHistory]
 - [HumanResources].[EmployeePayHistory]
 - [HumanResources].[JobCandidate]
 - [HumanResources].[Shift]
 - [Person].[Address]
 - [Person].[AddressType]
 - [Person].[BusinessEntity]

PROPERTIES

Drag a Metric Set

You can add a table to a dashboard or view simply by dragging a **metric set** from the Explore window that is already visualized as a table. For example, consider a [metric set](#) that is configured as follows:

- **Measures:** *Order Quantity*
- **Rows:** *Date* hierarchy
- **Columns:** *Product* hierarchy

ESSENTIAL

 Add To New Dashboard

 Re-Visualize

 Undo

 Redo

EDIT

 Styles

 Shown Totals

 Set Up States

 Add Period Over Period

 Add Formula

 Add Contextual Measure

 Data Tools

COMMON

 Add To New Dashboard

 Re-Visualize

 Undo

 Redo

 Styles

 Shown Totals

 Set Up States

 Add Period Over Period

 Add Formula

 Add Contextual Measure

 Data Tools

Data Analysis Panel - Metric Set

 Freeze

 Refresh Data

 Visualization

Metric Set 4

MEASURES

Order Quantity SUM

click to add, or drop a measure

ROWS

Date

click to add, or drop a hierarchy

SLICERS

click to add, or drop a hierarchy

COLUMNS

Product

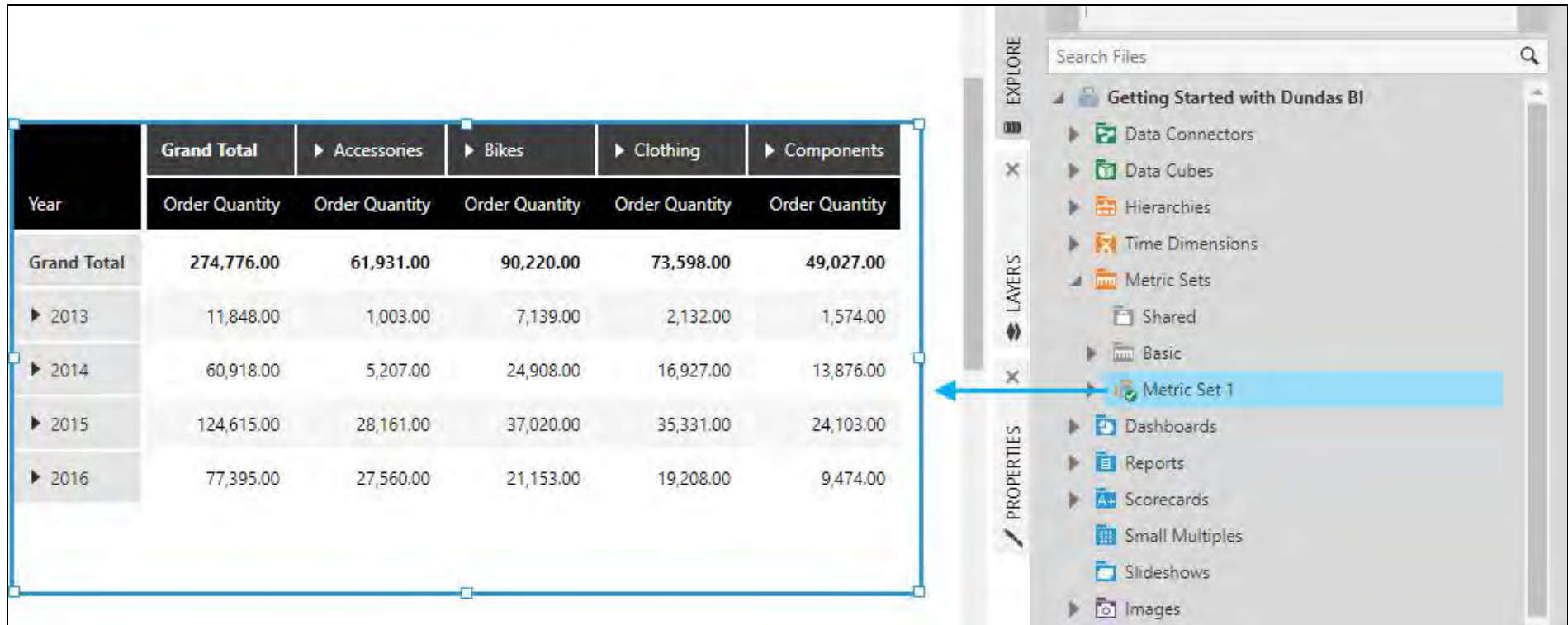
click to add, or drop a hierarchy

DATA PREVIEW

Metric Set 1

	Grand Total	Accessories	Bikes	Clothing	Components
Year	Order Quantity	Order Quantity	Order Quantity	Order Quantity	Order Quantity
Grand Total	274,776.00	61,931.00	90,220.00	73,598.00	49,027.00
2013	11,848.00	1,003.00	7,139.00	2,132.00	1,574.00
2014	60,918.00	5,207.00	24,908.00	16,927.00	13,876.00
2015	124,615.00	28,161.00	37,020.00	35,331.00	24,103.00
2016	77,395.00	27,560.00	21,153.00	19,208.00	9,474.00

Drag this **metric set** to the dashboard canvas to see a table visualization that looks the same as the one created in the full screen metric set.



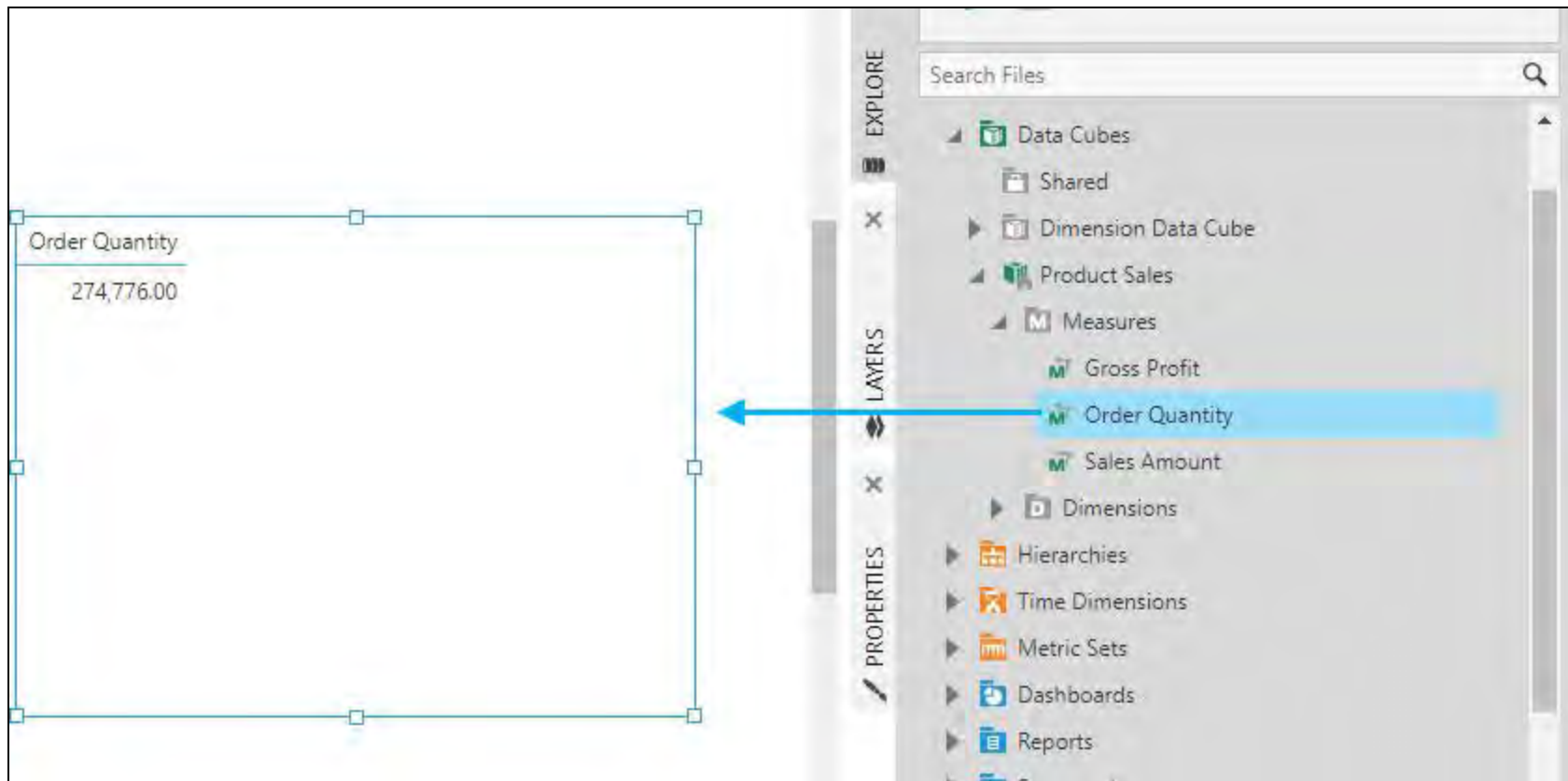
	Grand Total	▶ Accessories	▶ Bikes	▶ Clothing	▶ Components
Year	Order Quantity	Order Quantity	Order Quantity	Order Quantity	Order Quantity
Grand Total	274,776.00	61,931.00	90,220.00	73,598.00	49,027.00
▶ 2013	11,848.00	1,003.00	7,139.00	2,132.00	1,574.00
▶ 2014	60,918.00	5,207.00	24,908.00	16,927.00	13,876.00
▶ 2015	124,615.00	28,161.00	37,020.00	35,331.00	24,103.00
▶ 2016	77,395.00	27,560.00	21,153.00	19,208.00	9,474.00

You can also **Re-Visualize** any other visualization to a Table from the toolbar. Or, add a new table to your view from Data Visualization in the toolbar, and then drag any **metric set** onto the empty table.

Add Data

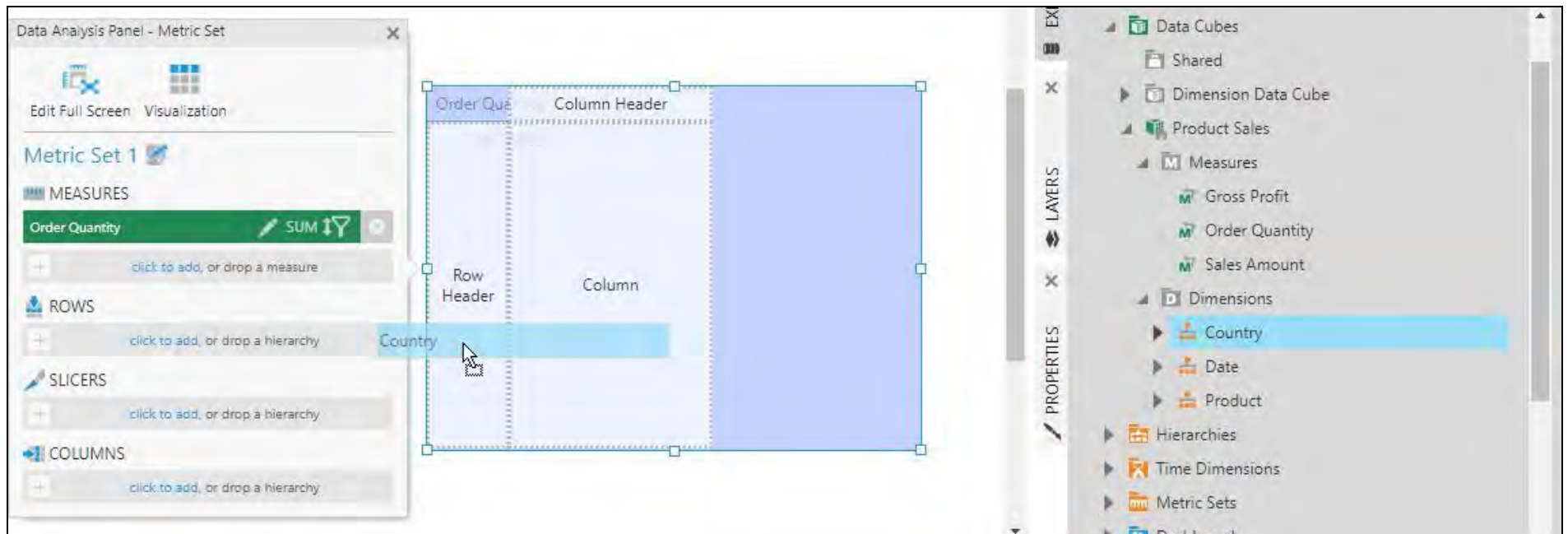
To create your own table, drag any **column of data, measure, or dimension** from a data connector or data cube to the canvas of a metric set or view. It will initially appear as a table visualization.

If it's numeric (a measure), it will appear as a single cell showing an aggregated value such as the sum; otherwise, it will appear as a single column of hierarchy values.

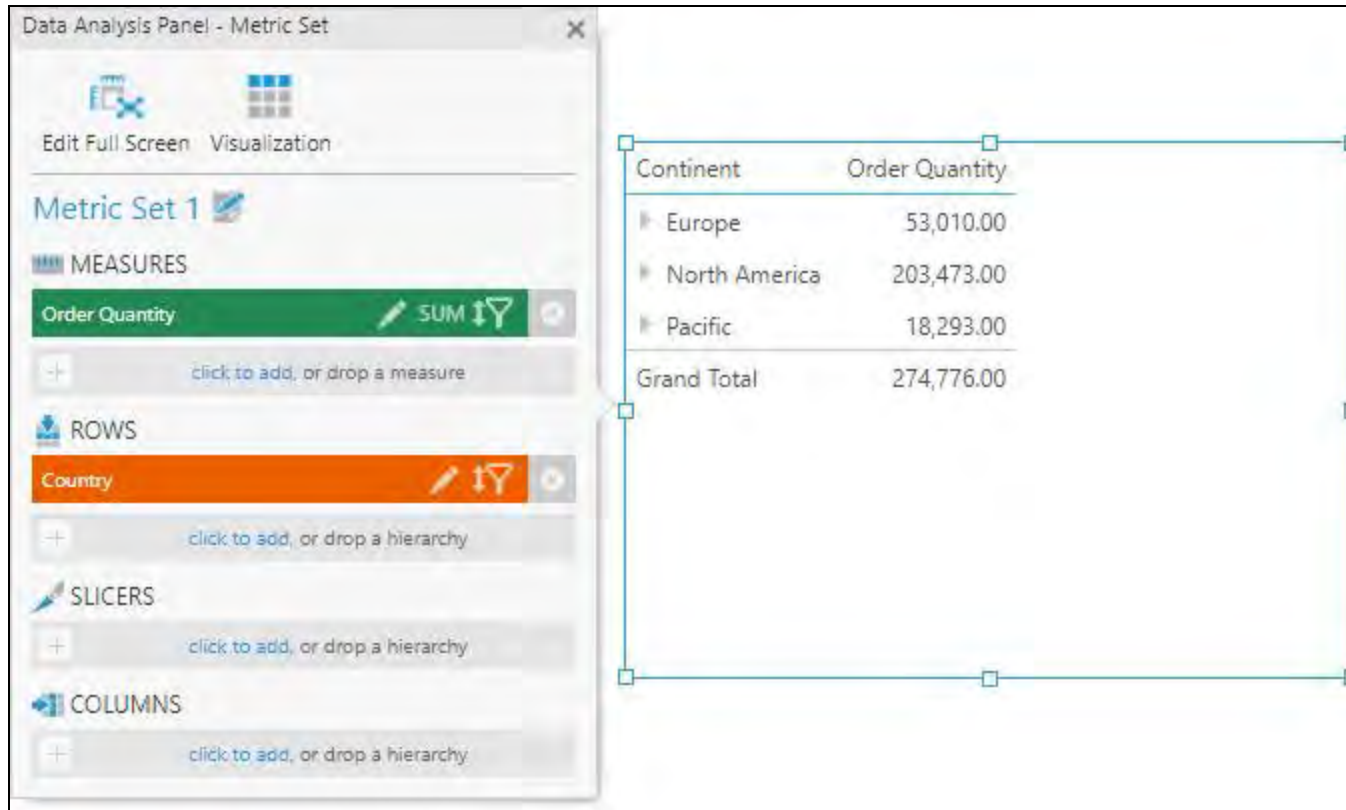


Now drag more **data** anywhere on the table, or onto the Data Analysis Panel.

Your data may be re-visualized automatically according to the [recommendation engine](#) if you haven't chosen a visualization yet. To keep using a table, you can drag **data** onto one of its labeled areas, such as Row Header for non-numeric data like country names.



Otherwise, if the visualization changes you can always choose the highlighted **Re-Visualize** button in the toolbar and change it back to Table. You can also choose a table ahead of time from Re-Visualize or Data Visualization in the toolbar.



These steps create a [metric set](#), which determines which data to display and data-related settings. On a view such as a dashboard, this creates an [auto-generated metric set](#), which you can find listed under your dashboard in the Explore window.

Row Headers Versus Flat Columns

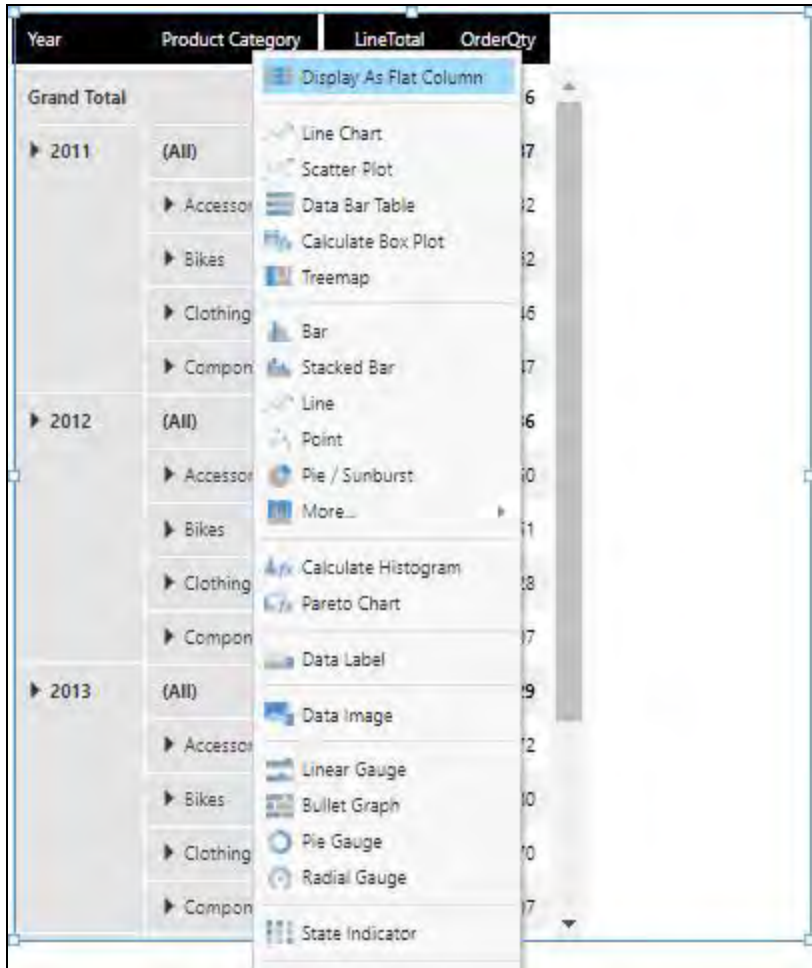
Non-numeric data is usually displayed as row headers, but can also be displayed as a 'flat' column like numeric data. See the [table elements](#) diagram to compare them.

- Row headers are always displayed on the left (and frozen there when scrolling horizontally), and they display how data is [grouped](#). Viewers can drag and drop their column headers to re-order them and change the grouping, and expander buttons can [expand or collapse](#) values. The order of these columns is maintained [when sorting](#), unless you choose to change it.

- Flat columns have a wide variety of customization options. They can be placed in any order (to the right of any row headers), and dragging and dropping their column headers is unrelated to how the data is grouped. [When sorting](#) non-numeric data in a flat column, it is automatically grouped so that it takes priority for sorting.

Flat Columns

To change how non-numeric is displayed, you can right-click a **row header column**, select **Re-Visualize**, and then **Display As Flat Column**.



Similarly, you can select **Display As Row Headers** on a flat column.

Year	ProductID (Product Hierarchy)	Line Total	OrderQty
Grand Total	(All)	1.7K	214,516
► 2011	(All)	3.6K	11,687
	Accessories	821	1,032
	Bikes	2.5K	6,762
	Clothing	031	2,246
	Components	173	1,647
► 2012	(All)	3.7K	65,836
	Accessories	440	5,750
	Bikes	1.9K	25,751
	Clothing	588	19,228
	Components	0.8K	15,107
► 2013	(All)	0.4K	102,829
	Accessories	115	13,972
	Bikes	3.0K	31,480
	Clothing	346	32,670
	Components	2.9K	24,707

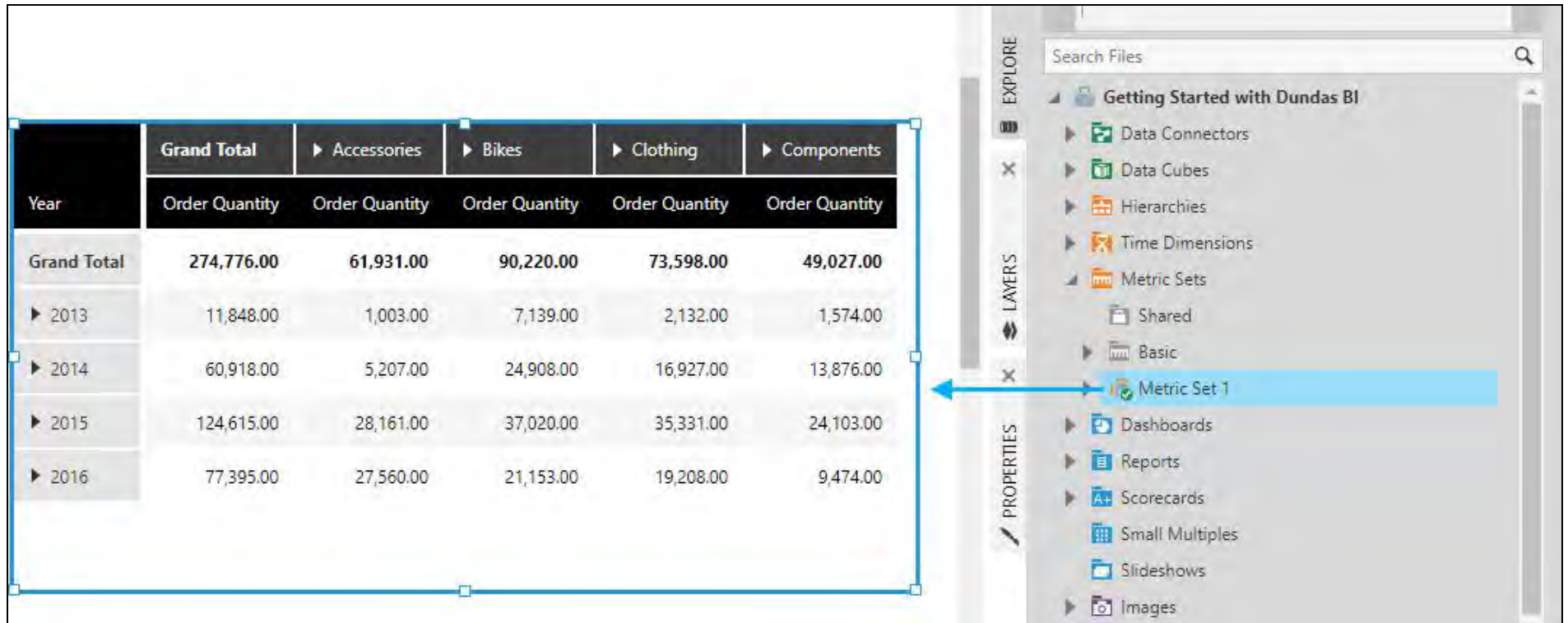
Alternatively, open the [Visualization tab](#) of the Data Analysis Panel and move a hierarchy from Row Header to Column or vice versa.



Note: Hold **Shift** on the keyboard while dragging to move it rather than copy.

Flat Table

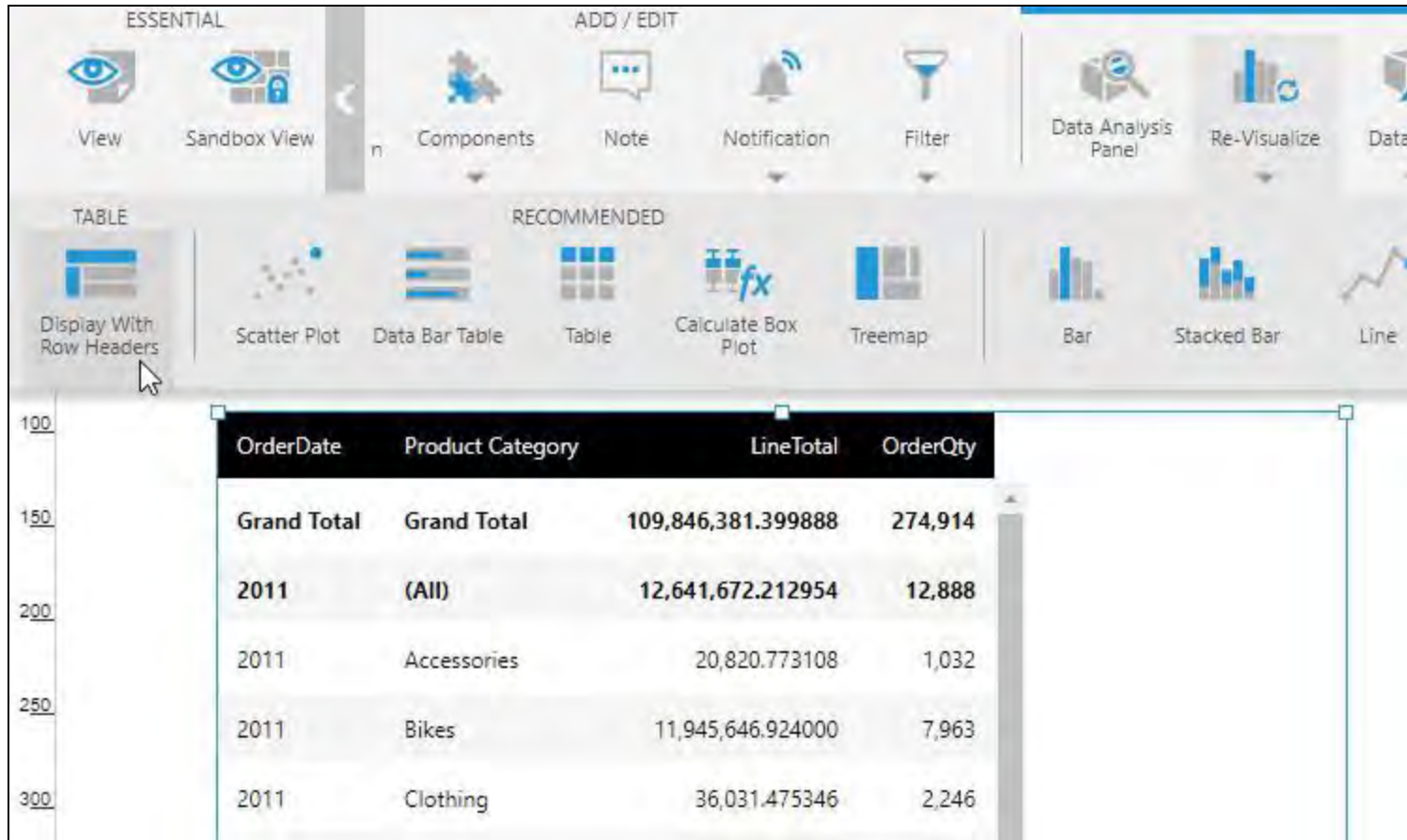
To quickly change the entire table to flat columns, select the **table** and find **Display As Flat Table** in the toolbar under Re-Visualize (or directly in the toolbar in previous versions).



The screenshot displays the Logi Symphony v24 interface. On the left, a table is shown with a 'Year' column and five data columns: 'Grand Total', 'Accessories', 'Bikes', 'Clothing', and 'Components'. Each data column has a sub-header 'Order Quantity'. The table includes a 'Grand Total' row and rows for the years 2013, 2014, 2015, and 2016. On the right, a sidebar contains a 'Search Files' search bar and a file explorer. The file explorer shows a tree structure under 'Getting Started with Dundas BI', including folders like 'Data Connectors', 'Data Cubes', 'Hierarchies', 'Time Dimensions', 'Metric Sets', 'Shared', 'Basic', and 'Metric Set 1'. A blue arrow points from 'Metric Set 1' in the sidebar to the table, indicating a connection or data source.

Year	Grand Total	Accessories	Bikes	Clothing	Components
	Order Quantity	Order Quantity	Order Quantity	Order Quantity	Order Quantity
Grand Total	274,776.00	61,931.00	90,220.00	73,598.00	49,027.00
▶ 2013	11,848.00	1,003.00	7,139.00	2,132.00	1,574.00
▶ 2014	60,918.00	5,207.00	24,908.00	16,927.00	13,876.00
▶ 2015	124,615.00	28,161.00	37,020.00	35,331.00	24,103.00
▶ 2016	77,395.00	27,560.00	21,153.00	19,208.00	9,474.00

For a table with flat columns, you can choose **Display With Row Headers**.



The screenshot shows the Logi Symphony v24 interface. The top toolbar is divided into sections: 'ESSENTIAL' with icons for View, Sandbox View, Components, Note, Notification, and Filter; 'ADD / EDIT' with icons for Data Analysis Panel, Re-Visualize, and Data; 'TABLE' with a 'Display With Row Headers' icon; and 'RECOMMENDED' with icons for Scatter Plot, Data Bar Table, Table, Calculate Box Plot, Treemap, Bar, Stacked Bar, and Line. Below the toolbar, a data table is displayed with the following data:

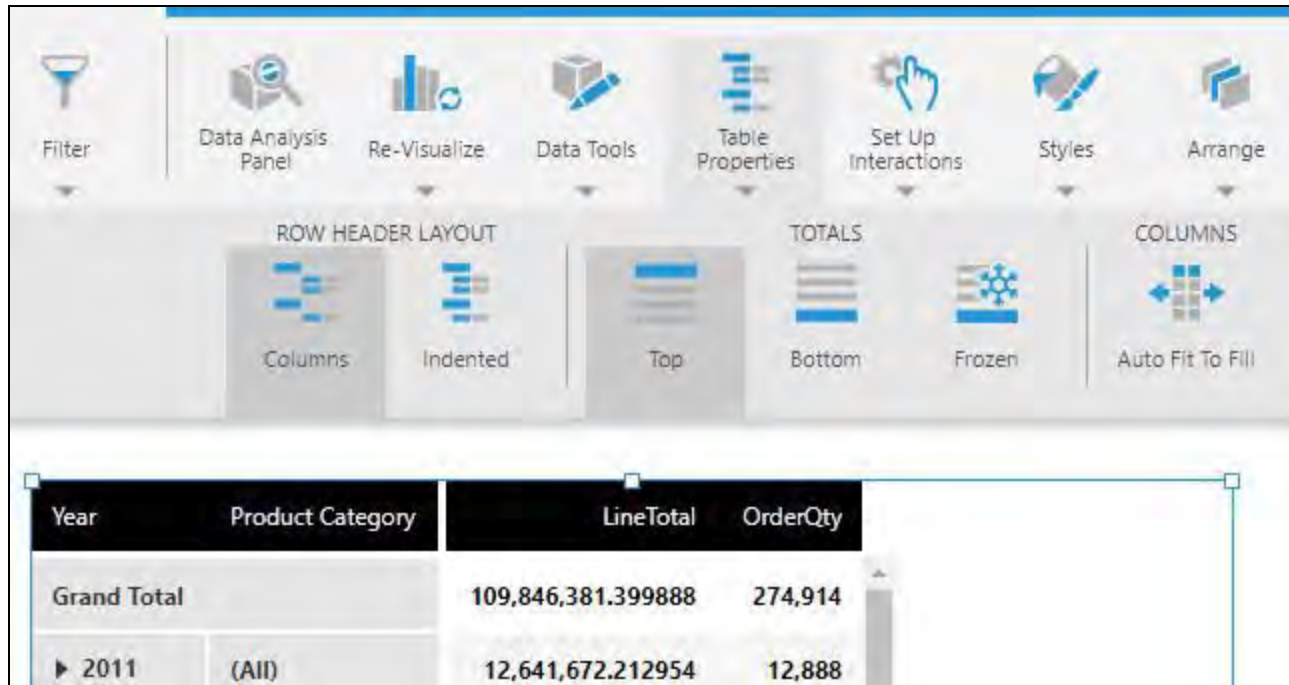
OrderDate	Product Category	LineTotal	OrderQty
Grand Total	Grand Total	109,846,381.399888	274,914
2011	(All)	12,641,672.212954	12,888
2011	Accessories	20,820.773108	1,032
2011	Bikes	11,945,646.924000	7,963
2011	Clothing	36,031.475346	2,246



Note: This re-visualizing affects the entire table and can reset column ordering and properties.

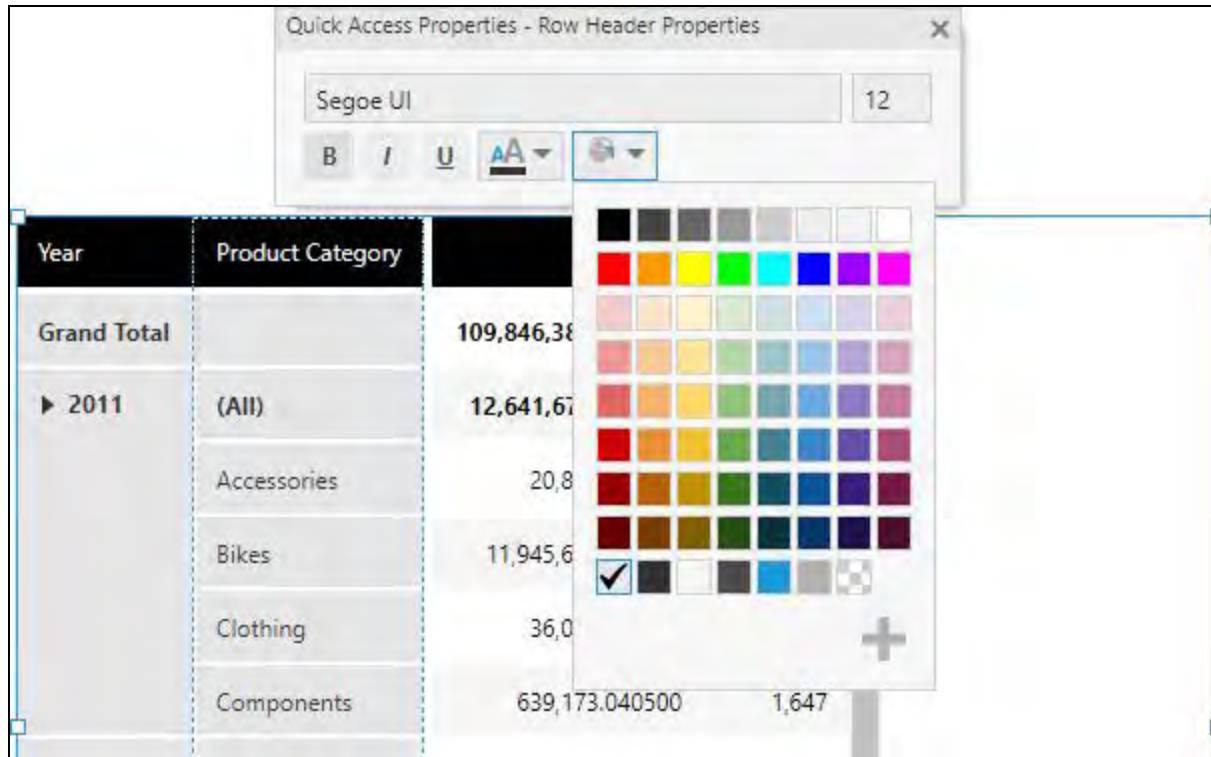
Table Properties

Some important properties for customizing your table can be accessed from the toolbar, such as [row header layout](#), how to display [totals](#), and [auto-fitting of columns](#).



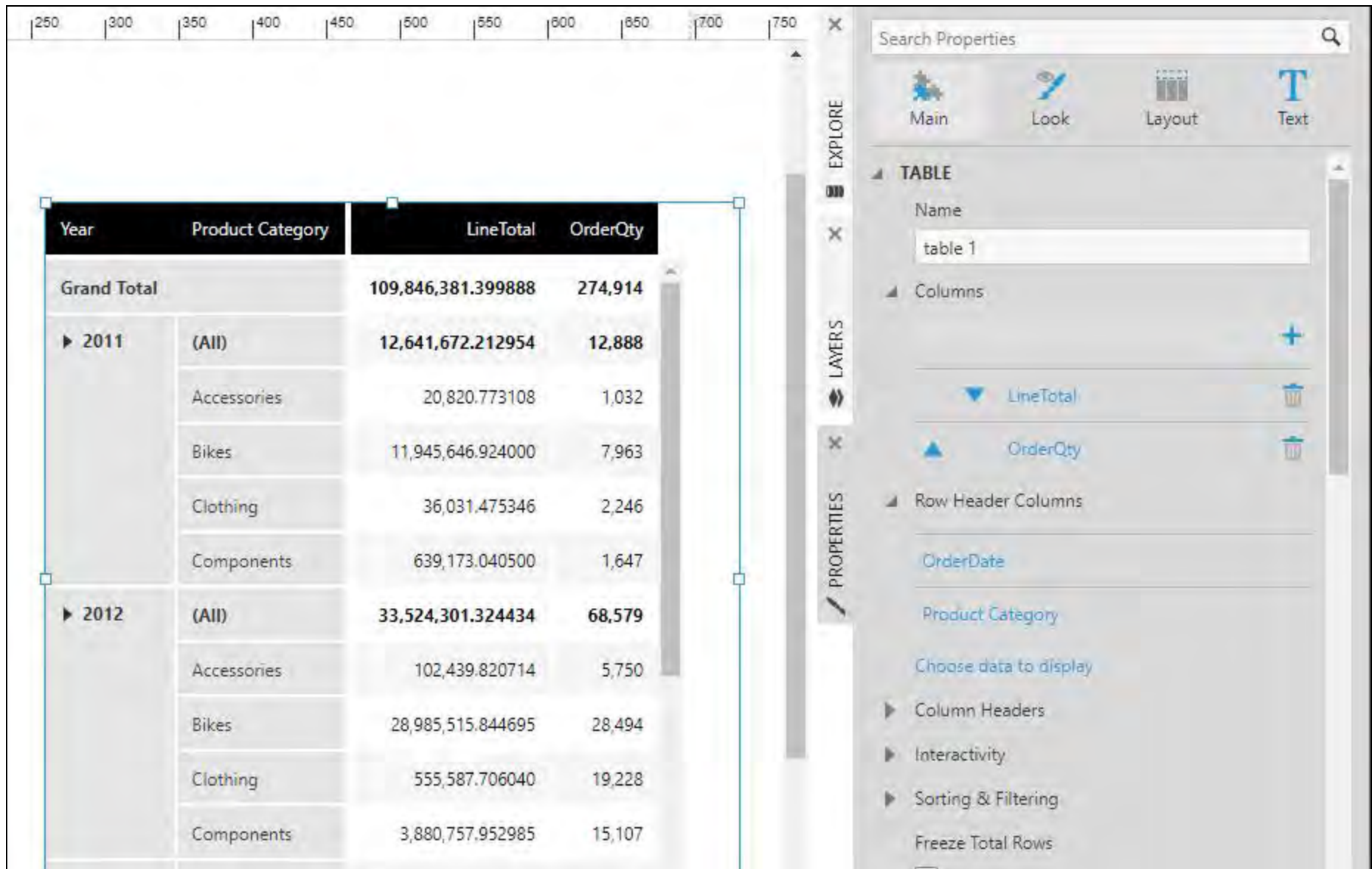
Year	Product Category	LineTotal	OrderQty
Grand Total		109,846,381.399888	274,914
► 2011	(All)	12,641,672.212954	12,888

You can use the Quick Access Properties pop-up to customize properties such as colors and fonts. The pop-up that initially appears customizes the entire table. To customize a specific element, such as row header or alternating row backgrounds, click the **table** again on that element.



Year	Product Category	
Grand Total		109,846,38
► 2011	(All)	12,641,67
	Accessories	20,8
	Bikes	11,945,6
	Clothing	36,0
	Components	639,173.040500

Users with access to the Properties window can customize every aspect of the table's appearance and layout. Some key properties are described in the sections below.



The screenshot displays the Logi Symphony v24 interface. On the left, a data table is shown with columns: Year, Product Category, LineTotal, and OrderQty. The table is filtered by Year (2011 and 2012) and Product Category (All, Accessories, Bikes, Clothing, Components). The right side of the interface features the Properties panel, which is currently set to the 'TABLE' view. The Properties panel includes a search bar, tabs for Main, Look, Layout, and Text, and sections for TABLE (Name: table 1), Columns (LineTotal, OrderQty), Row Header Columns (OrderDate, Product Category), and other settings like Column Headers, Interactivity, Sorting & Filtering, and Freeze Total Rows.

Year	Product Category	LineTotal	OrderQty
Grand Total		109,846,381.399888	274,914
► 2011	(All)	12,641,672.212954	12,888
	Accessories	20,820.773108	1,032
	Bikes	11,945,646.924000	7,963
	Clothing	36,031.475346	2,246
	Components	639,173.040500	1,647
► 2012	(All)	33,524,301.324434	68,579
	Accessories	102,439.820714	5,750
	Bikes	28,985,515.844695	28,494
	Clothing	555,587.706040	19,228
	Components	3,880,757.952985	15,107

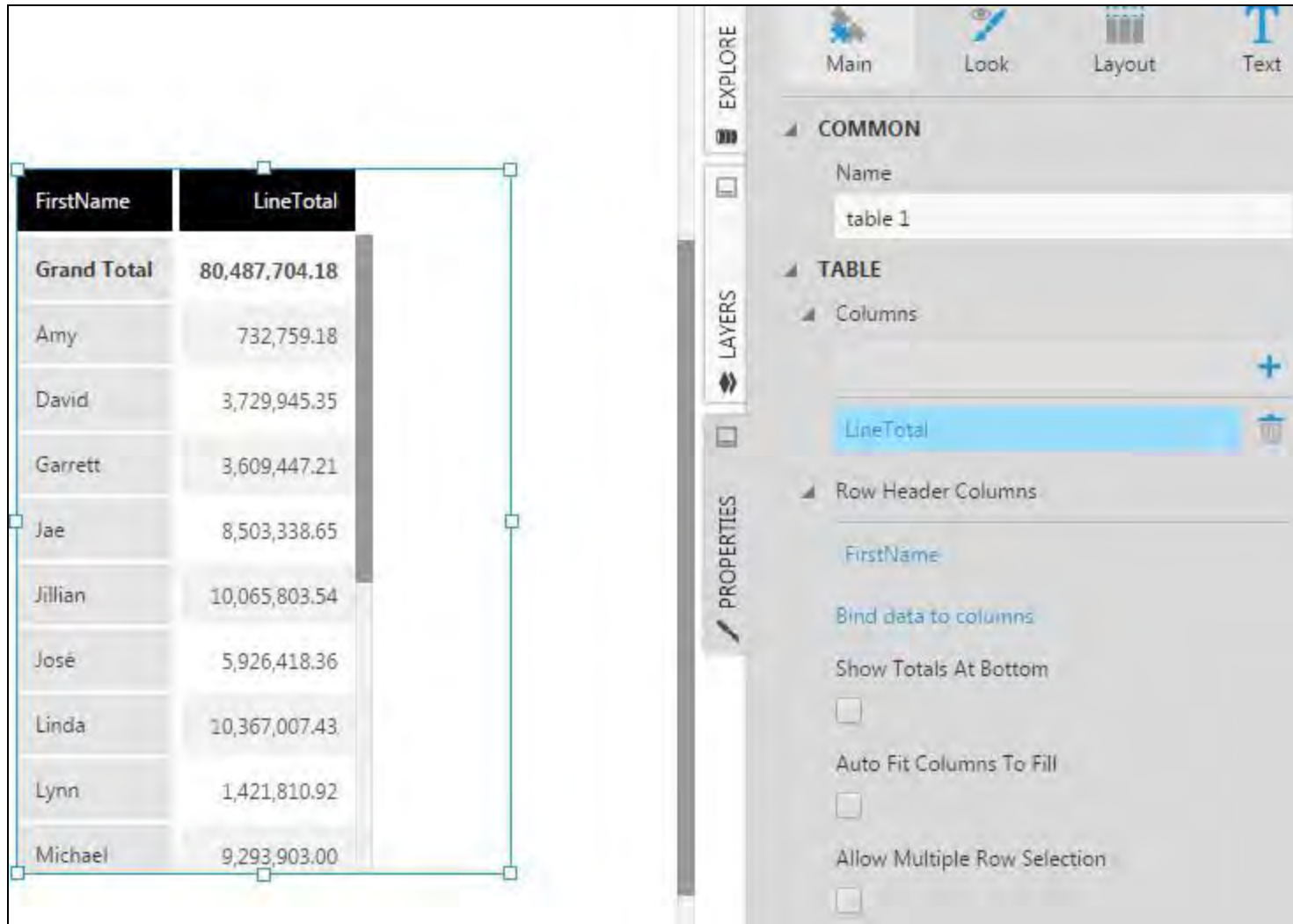


Note: In the Properties window, hover over (or long-tap) a property to see its description in a tooltip pop-up.

Column Properties

Regular columns or 'flat' columns have a wide variety of settings that can be used to customize them.

Select a **column** to customize in the Properties window in the Main tab, under Columns. You can also click directly on a **column** in the table, or right- click and choose **Column Properties**.



The screenshot displays the Logi Symphony interface. On the left, a table is shown with two columns: 'FirstName' and 'LineTotal'. The table includes a 'Grand Total' row and several data rows. On the right, the 'Properties' window is open, showing the 'Columns' section. The 'LineTotal' column is selected, and its properties are displayed.

FirstName	LineTotal
Grand Total	80,487,704.18
Amy	732,759.18
David	3,729,945.35
Garrett	3,609,447.21
Jae	8,503,338.65
Jillian	10,065,803.54
José	5,926,418.36
Linda	10,367,007.43
Lynn	1,421,810.92
Michael	9,293,903.00

The Properties window shows the following settings for the selected 'LineTotal' column:

- COMMON**
 - Name: table 1
- TABLE**
 - Columns: LineTotal
- Row Header Columns**
 - FirstName
- Bind data to columns**
- Show Totals At Bottom**
 - ☐
- Auto Fit Columns To Fill**
 - ☐
- Allow Multiple Row Selection**
 - ☐



Note: Row Header Columns are displayed differently and have fewer settings as they are primarily for indicating the data grouping. You can choose to display data as [flat columns](#) instead of row header columns.

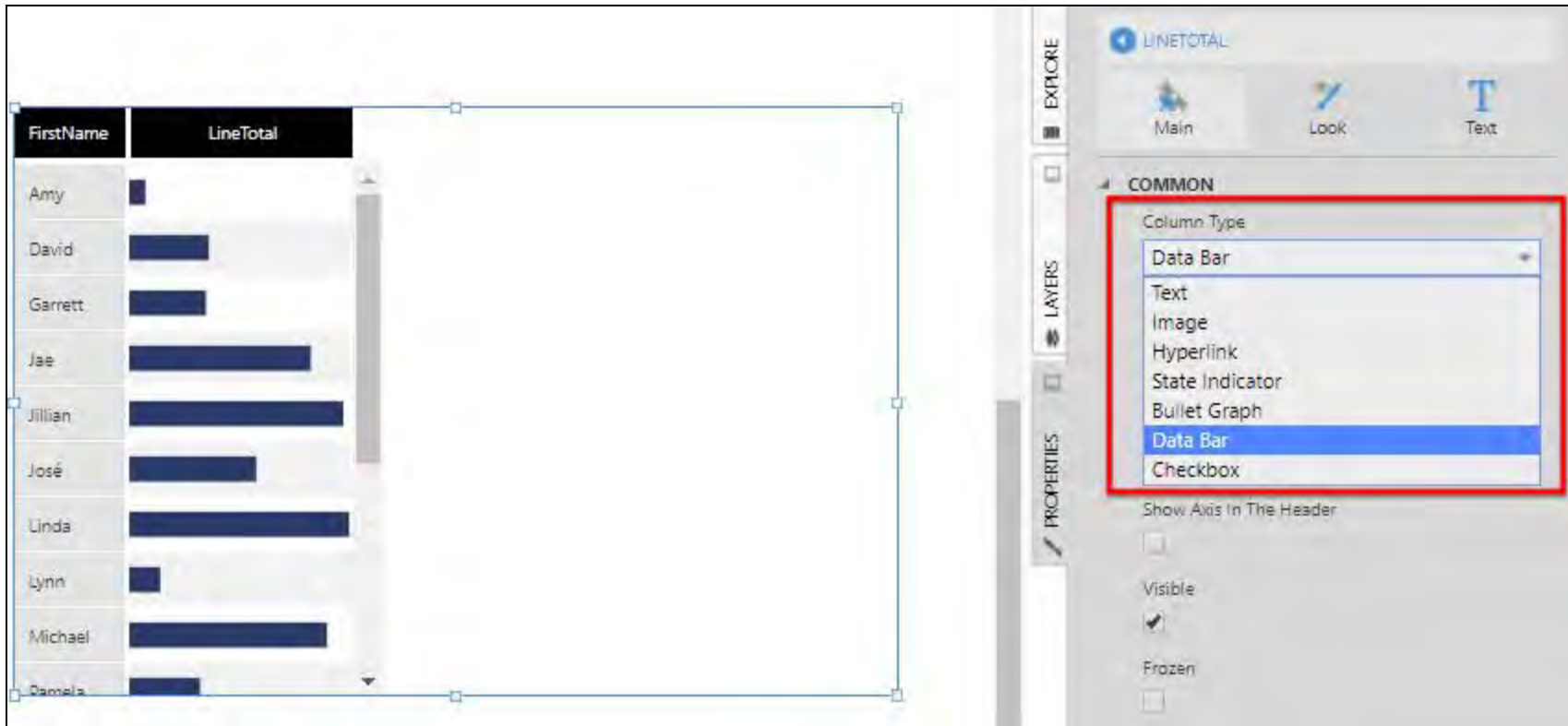
If you want to add new columns, you can use the Data Analysis Panel's [Visualization tab](#). Alternatively, you can click the **+** button in the Properties window shown above to add a new column there and configure it entirely through its properties such as [Custom Text](#).

Column Type

By default, flat column values are displayed as text, but you can change the column type to one of the other supported column types:

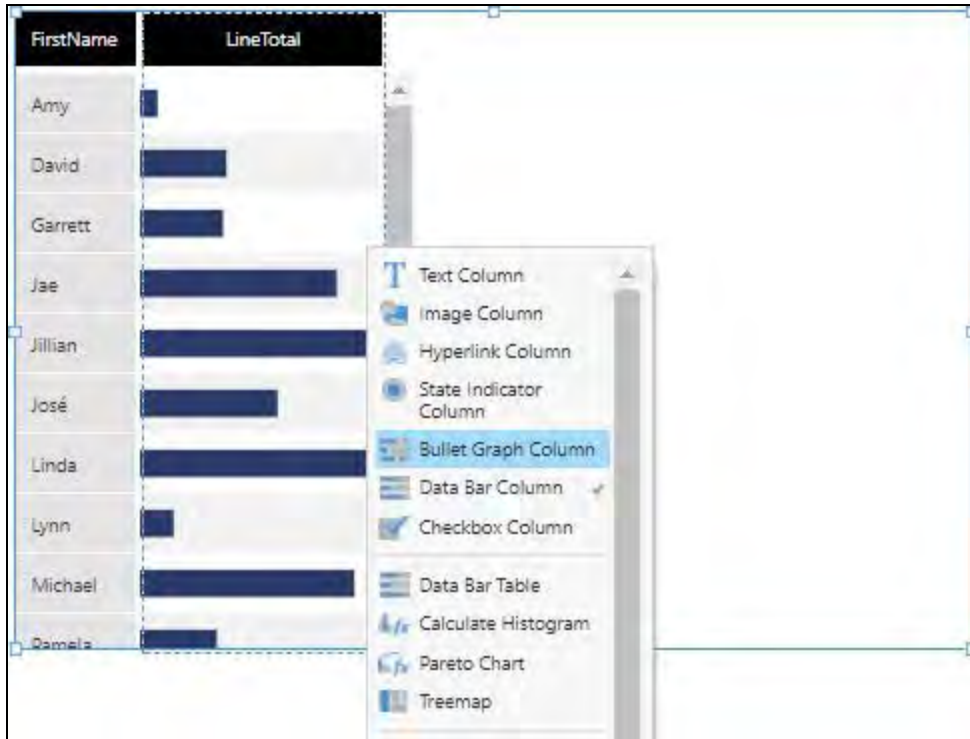
- **Image** - Displays images at URLs/addresses from or based on your data, similar to a [data image](#), as set in the Image Path property.
- **Hyperlink** - Provides clickable links to navigate to URLs or addresses from your data.
- **State Indicator** - Uses a [state indicator](#) in each row to display symbols or other visuals based on each row's [states](#).
- **Bullet Graph** - Displays a [bullet graph](#) type of gauge in each row.
- **Data Bar** - Displays a simple horizontal [bar chart](#) in each row.
- **Checkbox** - Visualizes data as a checkbox that is checked or unchecked based on values such as *True* or *False*, or zero or non-zero.

For example, change the Column Type property to **Data Bar**. The table now shows data bars in the *LineTotal* column instead of text values.



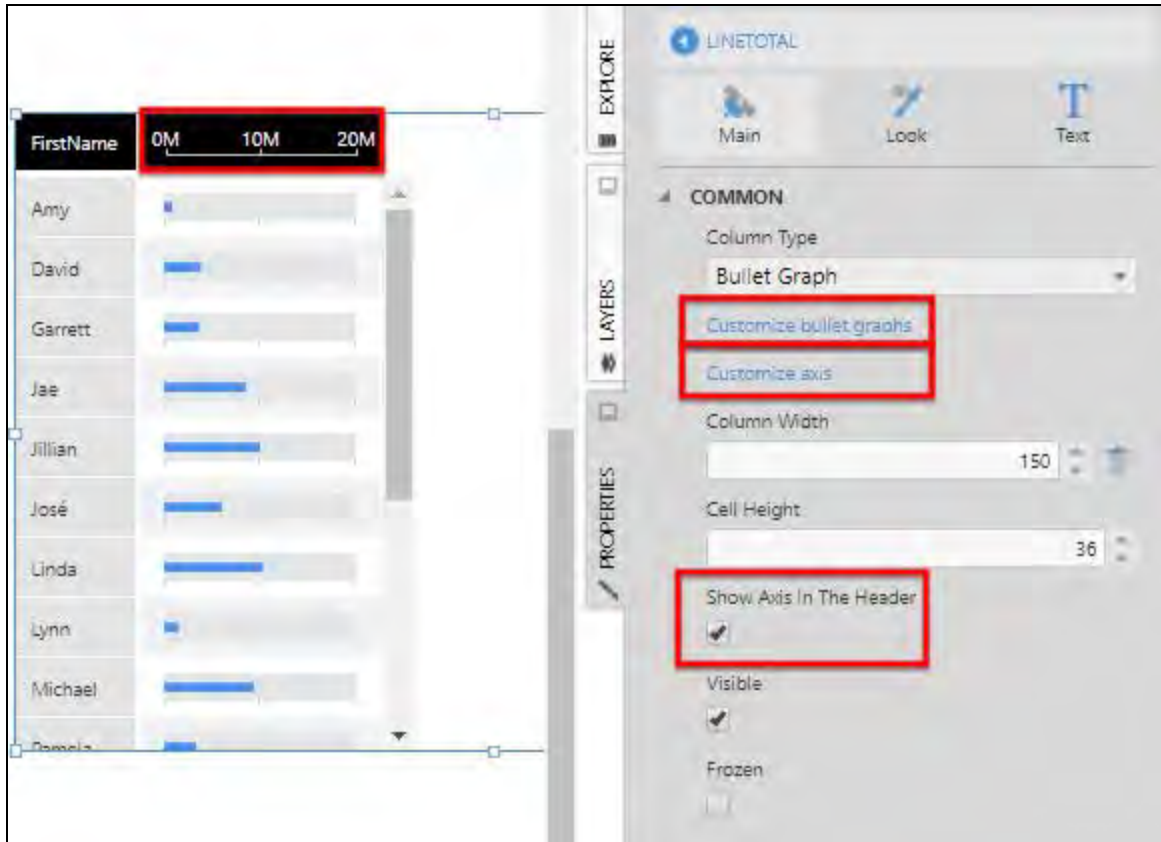
Instead of using the Properties window, you can also change the column type from the context menu.

Right-click the **table column** to open its context menu, click **Re-Visualize**, and then select the new **column type** (for example, *Bullet Graph Column*).



Some of the column's properties in the Properties window will be specific to the selected column type. For example, you can further customize State Indicator, Data Bar, and Bullet Graph columns by clicking **Customize...**

Data Bar and Bullet Graph columns also have the property Show Axis in The Header, which replaces the column header text with an axis and can be further customized by clicking **Customize axis**.

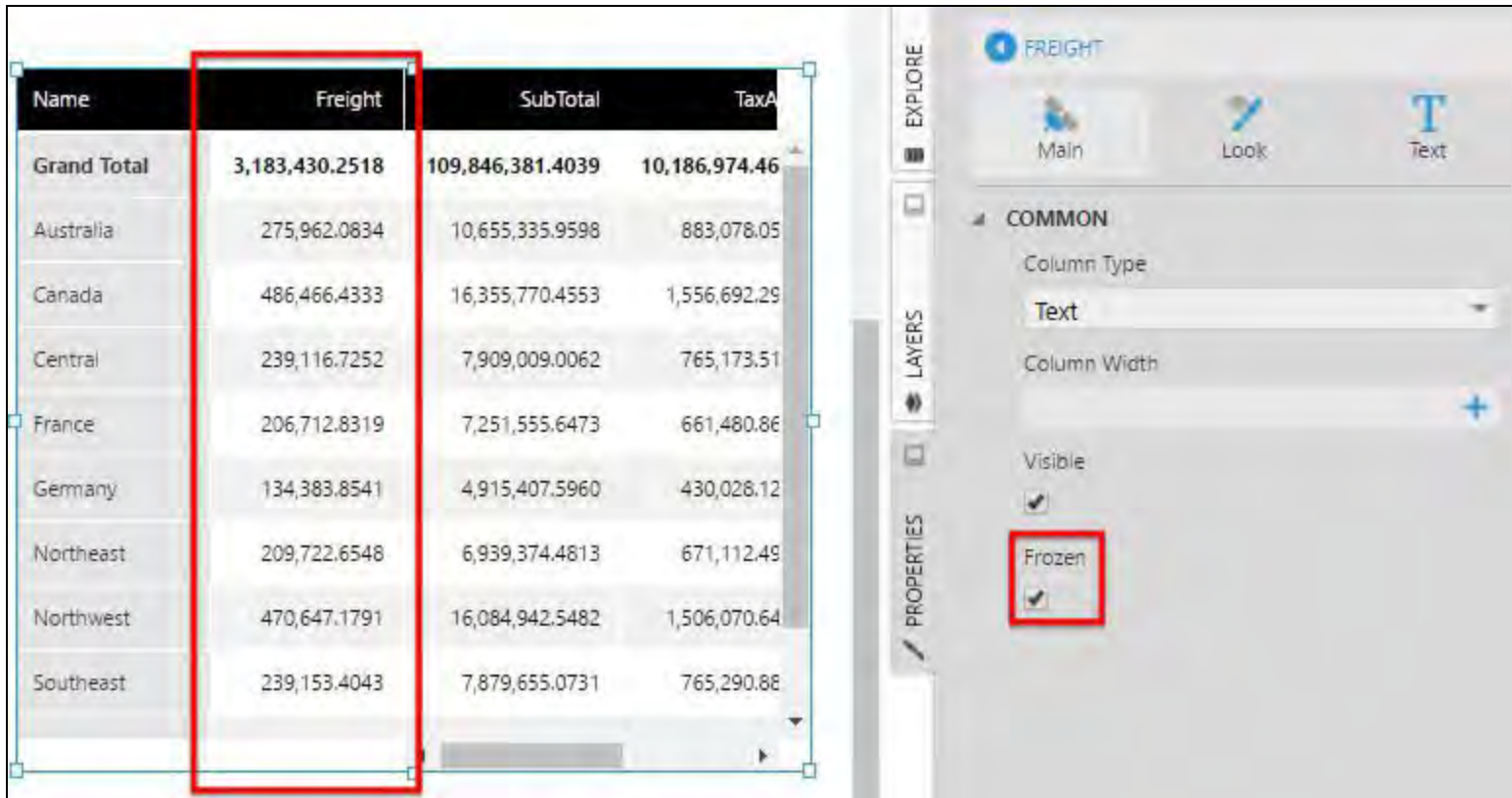


The screenshot displays the Logi Symphony interface. On the left, a table with the header 'FirstName' is shown. The first column, 'FirstName', is highlighted with a red box. The table contains names: Amy, David, Garrett, Jae, Jillian, José, Linda, Lynn, Michael, and Pamela. Each name has a corresponding bullet graph visualization. The 'EXPLORE' panel on the right shows the 'LINETOTAL' view. The 'COMMON' section is expanded, showing 'Column Type' set to 'Bullet Graph'. The 'Customize bullet graphs' and 'Customize axis' links are highlighted with red boxes. The 'Column Width' is set to 150 and 'Cell Height' is set to 36. The 'Show Axis In The Header' checkbox is checked and highlighted with a red box. The 'Visible' checkbox is also checked, and the 'Frozen' checkbox is unchecked.

To customize how measures and other data are visualized by a data bar, bullet graph, or state indicator column, click the **column** to select it and open its Data Analysis Panel to the [Visualization tab](#). The same visualization options are available as for an individual chart, bullet graph, or state indicator.

Frozen Columns

Use the **Frozen** property from the Main tab to display the column on the left side of the table.



Name	Freight	SubTotal	TaxA
Grand Total	3,183,430.2518	109,846,381.4039	10,186,974.46
Australia	275,962.0834	10,655,335.9598	883,078.05
Canada	486,466.4333	16,355,770.4553	1,556,692.29
Central	239,116.7252	7,909,009.0062	765,173.51
France	206,712.8319	7,251,555.6473	661,480.86
Germany	134,383.8541	4,915,407.5960	430,028.12
Northeast	209,722.6548	6,939,374.4813	671,112.49
Northwest	470,647.1791	16,084,942.5482	1,506,070.64
Southeast	239,153.4043	7,879,655.0731	765,290.88

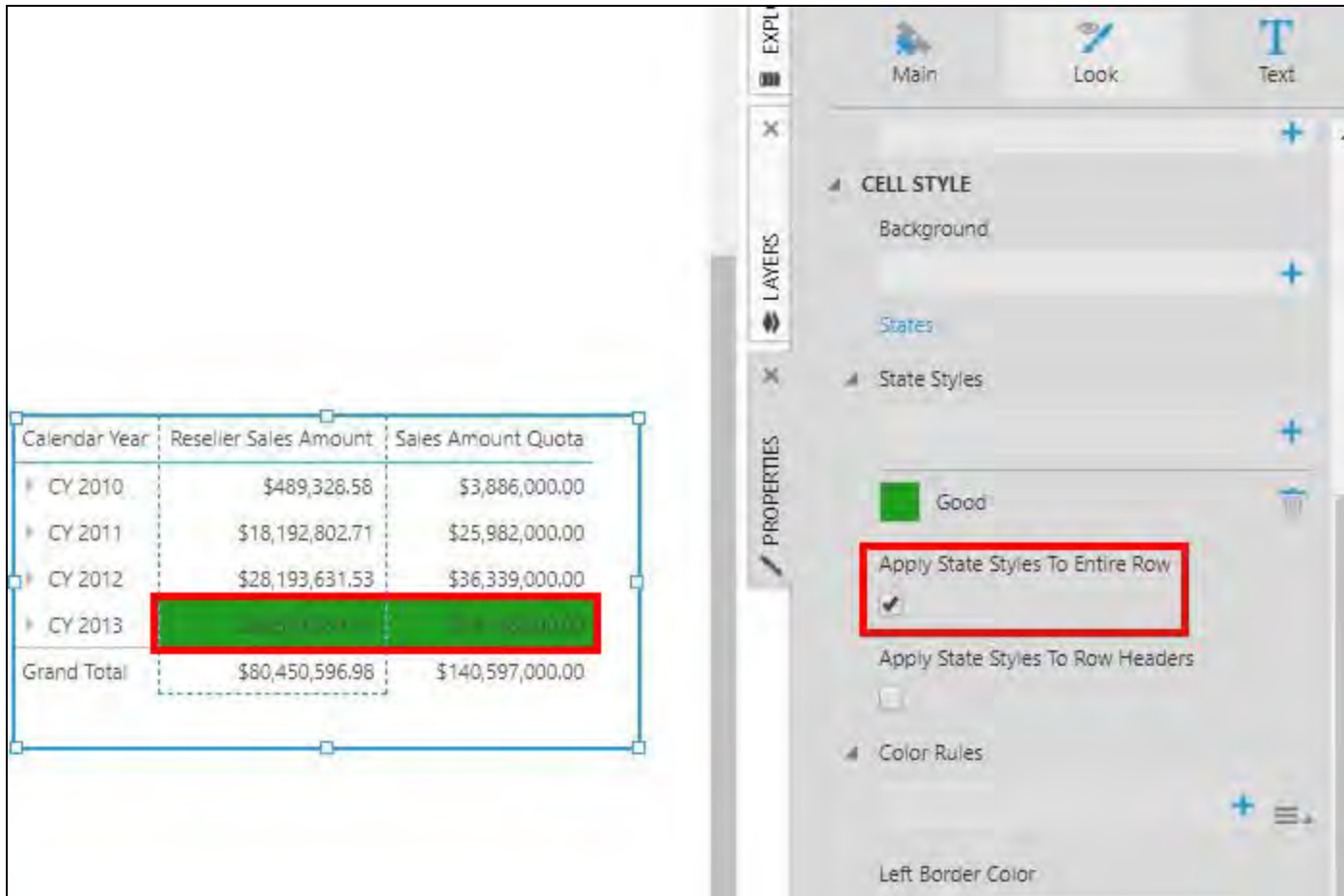
Similar to row header columns, the position of frozen columns will not change when you scroll the table.

Note: This property is not available when using Columns in the metric set or assigning data for Column Headers.

State Styles

You can set up states on your metric set and use State Styles on table columns to change the appearance of different cells based on conditions. The article [Set up states on a metric set](#) demonstrates this with a table visualization.

When using state styles, you can choose to apply them to the whole row instead of just the cells of that column by using the **Apply State Styles To Entire Row** property.



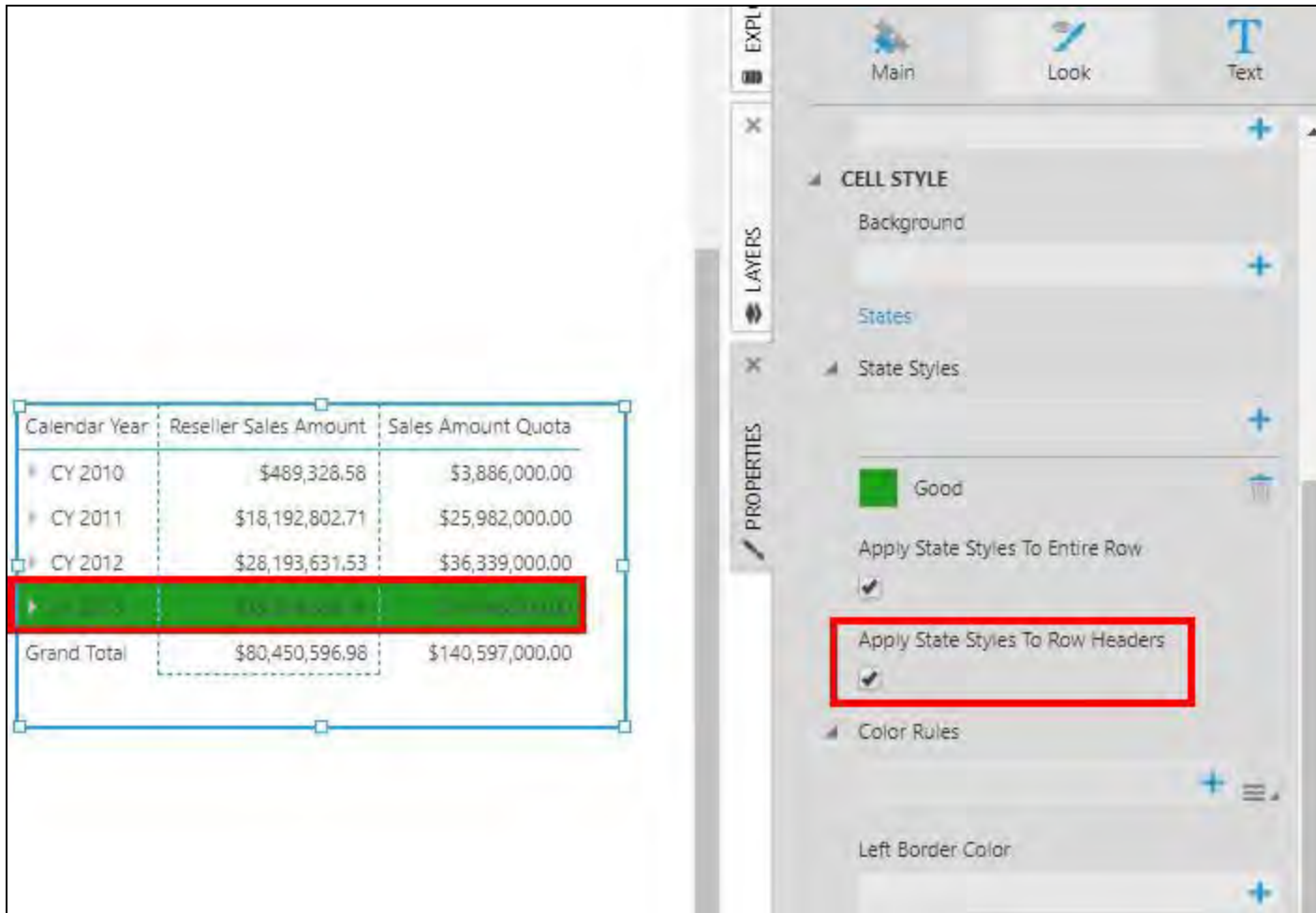
The screenshot displays the Logi Symphony v24 interface. On the left, a table is shown with the following data:

Calendar Year	Reseller Sales Amount	Sales Amount Quota
CY 2010	\$489,328.58	\$3,886,000.00
CY 2011	\$18,192,802.71	\$25,982,000.00
CY 2012	\$28,193,631.53	\$36,339,000.00
CY 2013	\$28,193,631.53	\$36,339,000.00
Grand Total	\$80,450,596.98	\$140,597,000.00

The table is styled with a green background for the 'CY 2013' row. On the right, the 'PROPERTIES' panel is open, showing the 'CELL STYLE' section. The 'Background' property is set to 'Good'. The 'Apply State Styles To Entire Row' checkbox is checked and highlighted with a red box. Other options visible include 'Apply State Styles To Row Headers' (unchecked) and 'Color Rules'.

Note: When using column grouping with this feature, the style will be applied to the row within that column group, not the whole table.

After selecting this option, you can also choose to apply the state styles to the row headers in each row by selecting the property **Apply State Styles To Row Headers** that appears.



The screenshot displays a table with three columns: Calendar Year, Reseller Sales Amount, and Sales Amount Quota. The table data is as follows:

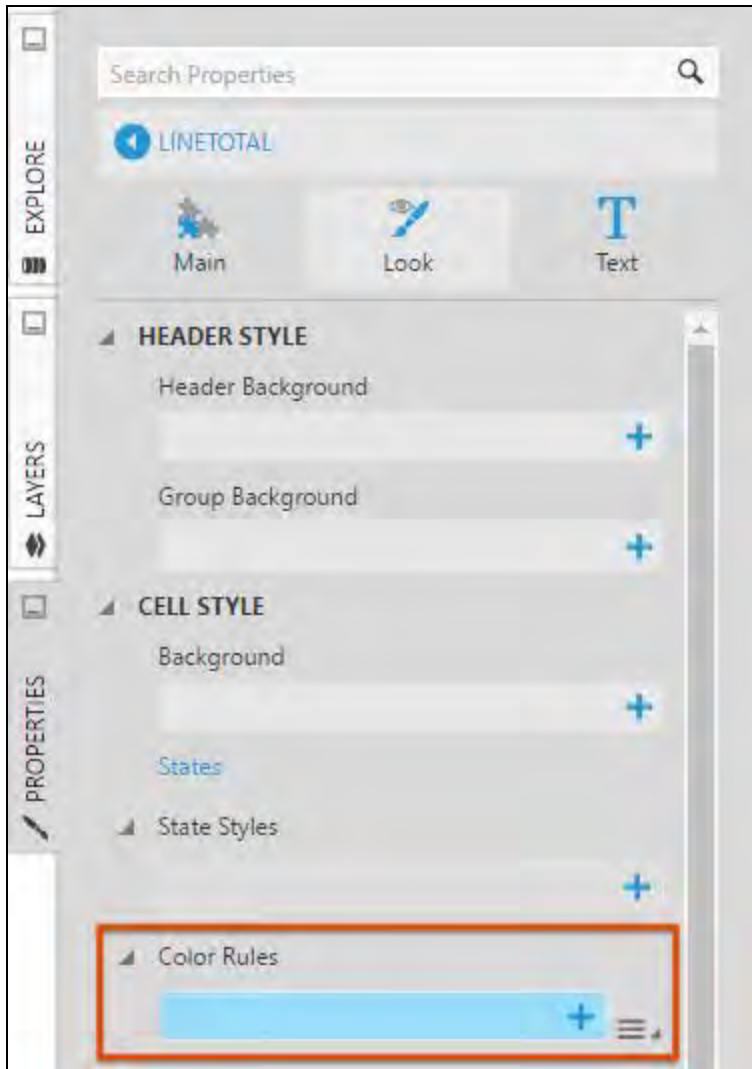
Calendar Year	Reseller Sales Amount	Sales Amount Quota
CY 2010	\$489,328.58	\$3,886,000.00
CY 2011	\$18,192,802.71	\$25,982,000.00
CY 2012	\$28,193,631.53	\$36,339,000.00
Grand Total	\$80,450,596.98	\$140,597,000.00

The 'Grand Total' row is highlighted in green. The right-hand panel shows the 'Look' tab of the properties menu. Under the 'CELL STYLE' section, the 'States' property is expanded, showing 'Good' with a green color swatch. The 'Apply State Styles To Row Headers' checkbox is checked and highlighted with a red box.

This will apply to row headers that do not span multiple rows. For row headers that span multiple rows, consider setting up [color rules](#) on the column in the table's Row Header Columns property instead.

Color Rules

You can change the color of cells in the column based on the data in each cell. Go to the **Look** tab of the column properties and locate the Color Rules property under Cell Style.

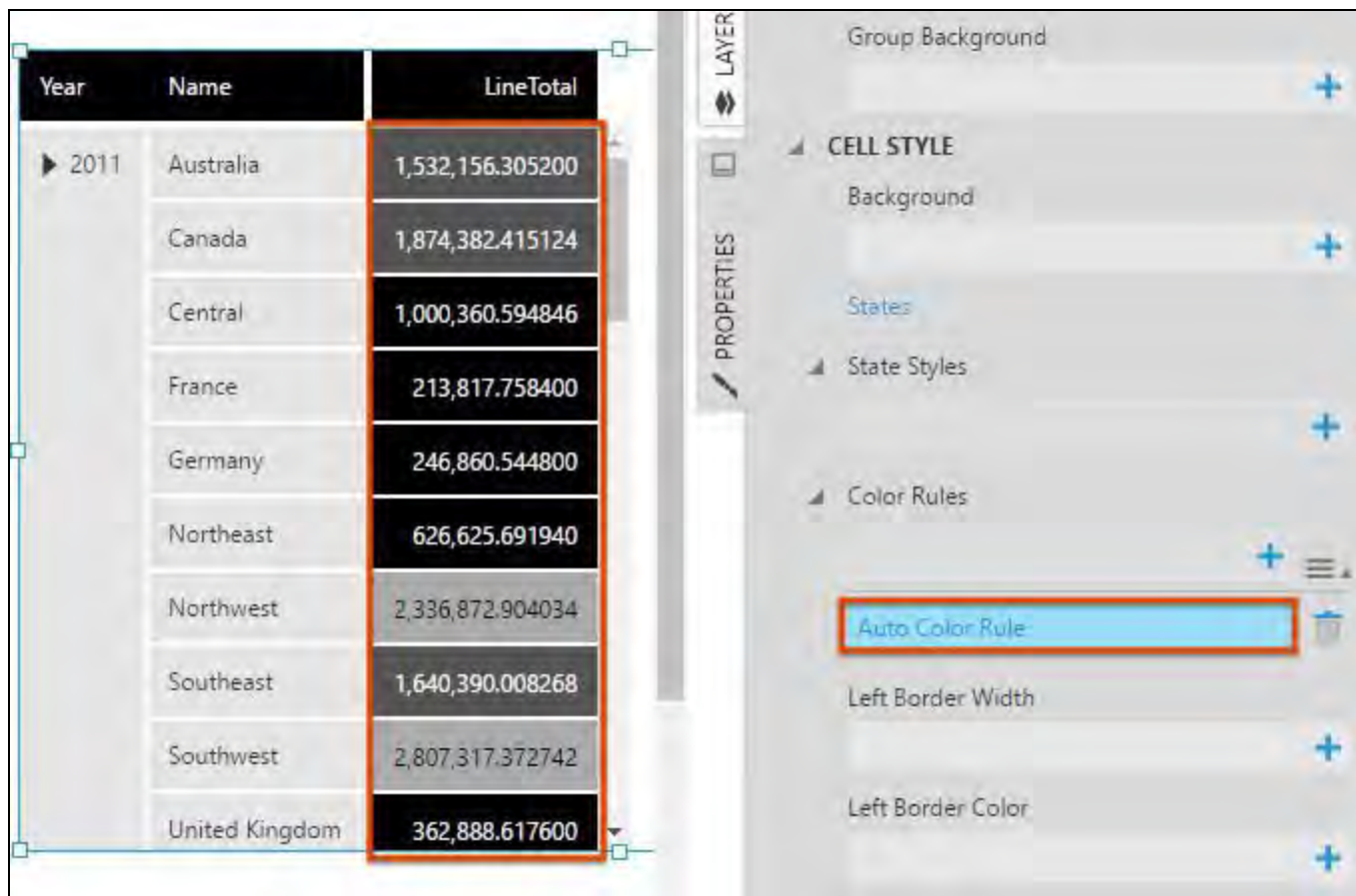


There are three types of color rules you can apply:

- **Auto Color Rule** - Used to automatically determine colors and corresponding ranges based on the values in the cell. This rule can be applied only to measure columns. Click the + button to add to a measure column.

- **Range Color Rule** - Used for setting up each range of values and its corresponding color yourself. This rule can be applied only to measure columns. Use the **menu** icon to the right of the property to choose this rule type.
- **Discrete Color Rule** - Used to set up the corresponding color for a hierarchy member. Click the **+** button to add a rule for each value of a hierarchy column.

Select the added color rule to further customize the applicable range or values, color, and legend text. Color rule properties are the same in all visualizations. See [Apply colors to data points or series using color rules](#) for more details and examples.



The screenshot displays a table with three columns: Year, Name, and LineTotal. The 'Year' column is set to 2011. The 'Name' column lists various regions and countries. The 'LineTotal' column shows numerical values. A red box highlights the 'LineTotal' column. To the right, the 'PROPERTIES' panel is open, showing the 'CELL STYLE' section. The 'Color Rules' property is selected and highlighted with a red box, showing an 'Auto Color Rule'.

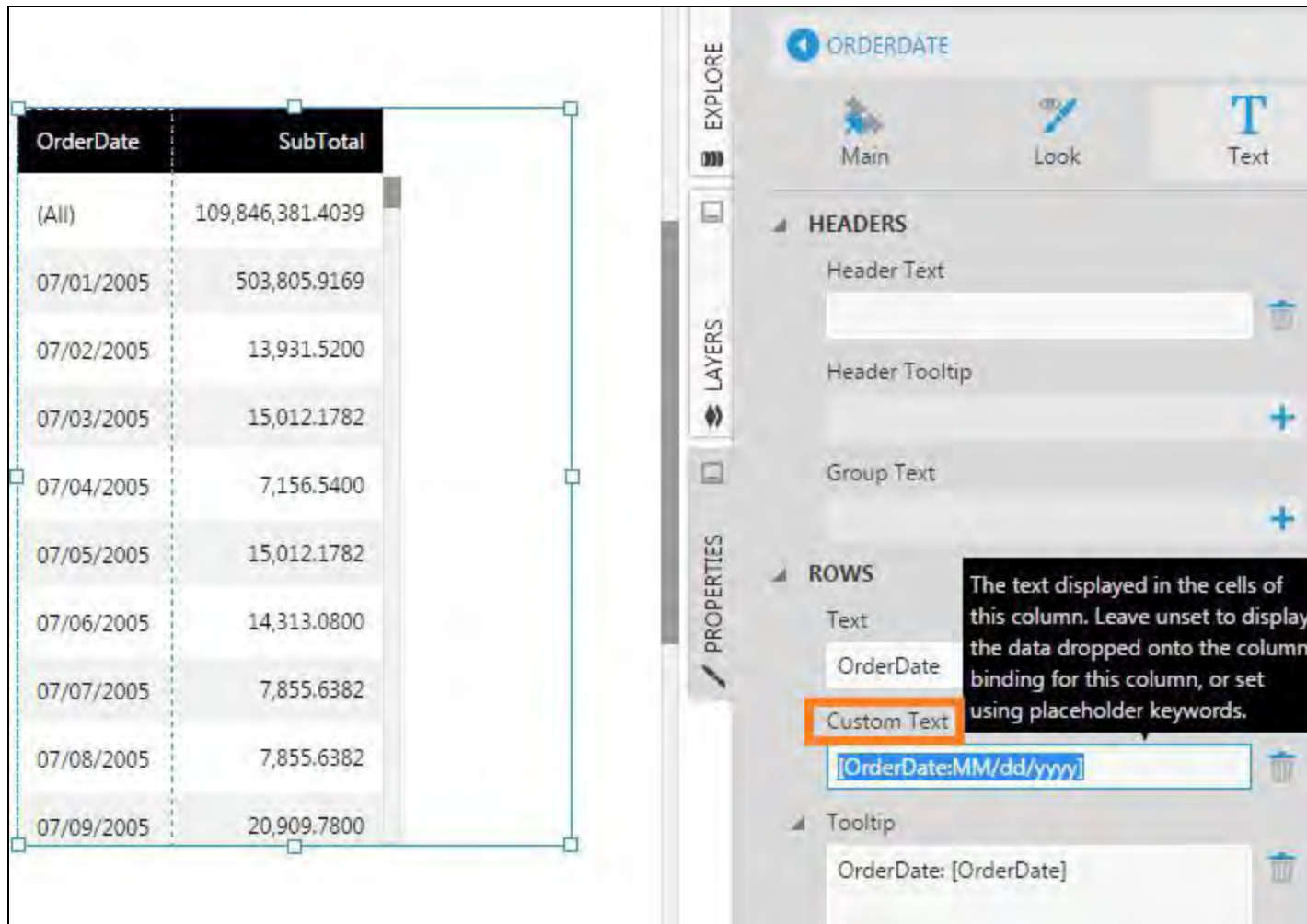
Year	Name	LineTotal
2011	Australia	1,532,156.305200
	Canada	1,874,382.415124
	Central	1,000,360.594846
	France	213,817.758400
	Germany	246,860.544800
	Northeast	626,625.691940
	Northwest	2,336,872.904034
	Southeast	1,640,390.008268
	Southwest	2,807,317.372742
	United Kingdom	362,888.617600



Note: There is a similar Color Rules property in the table's Row Header Columns that supports adding a discrete color rule for each value.

Custom Text

Go to the **Text** tab of the column properties to see text-related properties of the column.



The screenshot shows a table with two columns: **OrderDate** and **SubTotal**. The table contains data for dates from 07/01/2005 to 07/09/2005. To the right, the **Text** tab of the column properties is open for the **ORDERDATE** column. The **ROWS** section shows the **Text** property set to **OrderDate**, and the **Custom Text** property is highlighted with an orange box, showing the value **[OrderDate:MM/dd/yyyy]**. A tooltip explains that the text displayed in the cells of this column is determined by the Custom Text property, which can be left unset to display the data or set using placeholder keywords.

OrderDate	SubTotal
(All)	109,846,381.4039
07/01/2005	503,805.9169
07/02/2005	13,931.5200
07/03/2005	15,012.1782
07/04/2005	7,156.5400
07/05/2005	15,012.1782
07/06/2005	14,313.0800
07/07/2005	7,855.6382
07/08/2005	7,855.6382
07/09/2005	20,909.7800

ORDERDATE

Main Look Text

HEADERS

Header Text

Header Tooltip

Group Text

ROWS

Text

OrderDate

Custom Text

[OrderDate:MM/dd/yyyy]

Tooltip

OrderDate: [OrderDate]

The text displayed in the cells of this column. Leave unset to display the data dropped onto the column binding for this column, or set using placeholder keywords.

Under Rows, the Text property is read-only and indicates what data this column is connected to. You can use the Header Text property to change the text displayed in the column header. This property supports regular text, as well as hierarchy keywords, such as *[Product]*, to refer to a hierarchy placed on Columns in the metric set.

If you want to change the text displayed in the cells of this table column, use the Custom Text property. By default, this property is unset, which means it will display the data connected to this column. You can set it using one or more placeholder keywords for the data values in each row, as well as optionally combining this with



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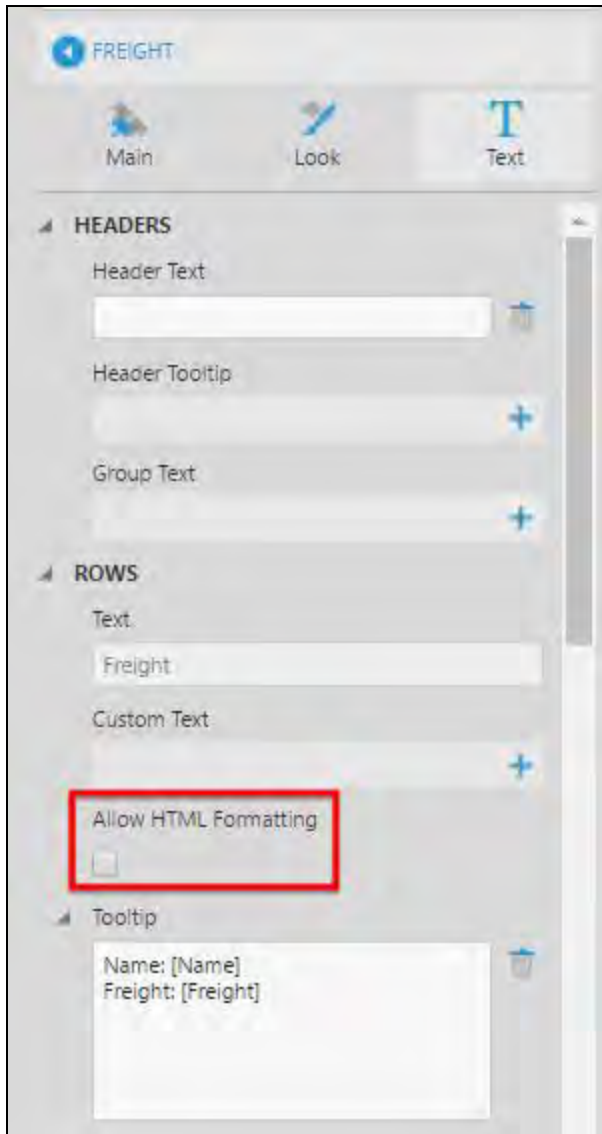
regular text. Keywords also support optional formatting if you don't want to use a time dimension's or measure's formatting options. See [Display Date Only on Column Instead of Date/Time](#) or an example. See [Formatting Text](#) for more on keywords.



Note: Custom text and formatting set up in visualization properties are not included when exporting to Excel, but the [metric set format](#) settings are.

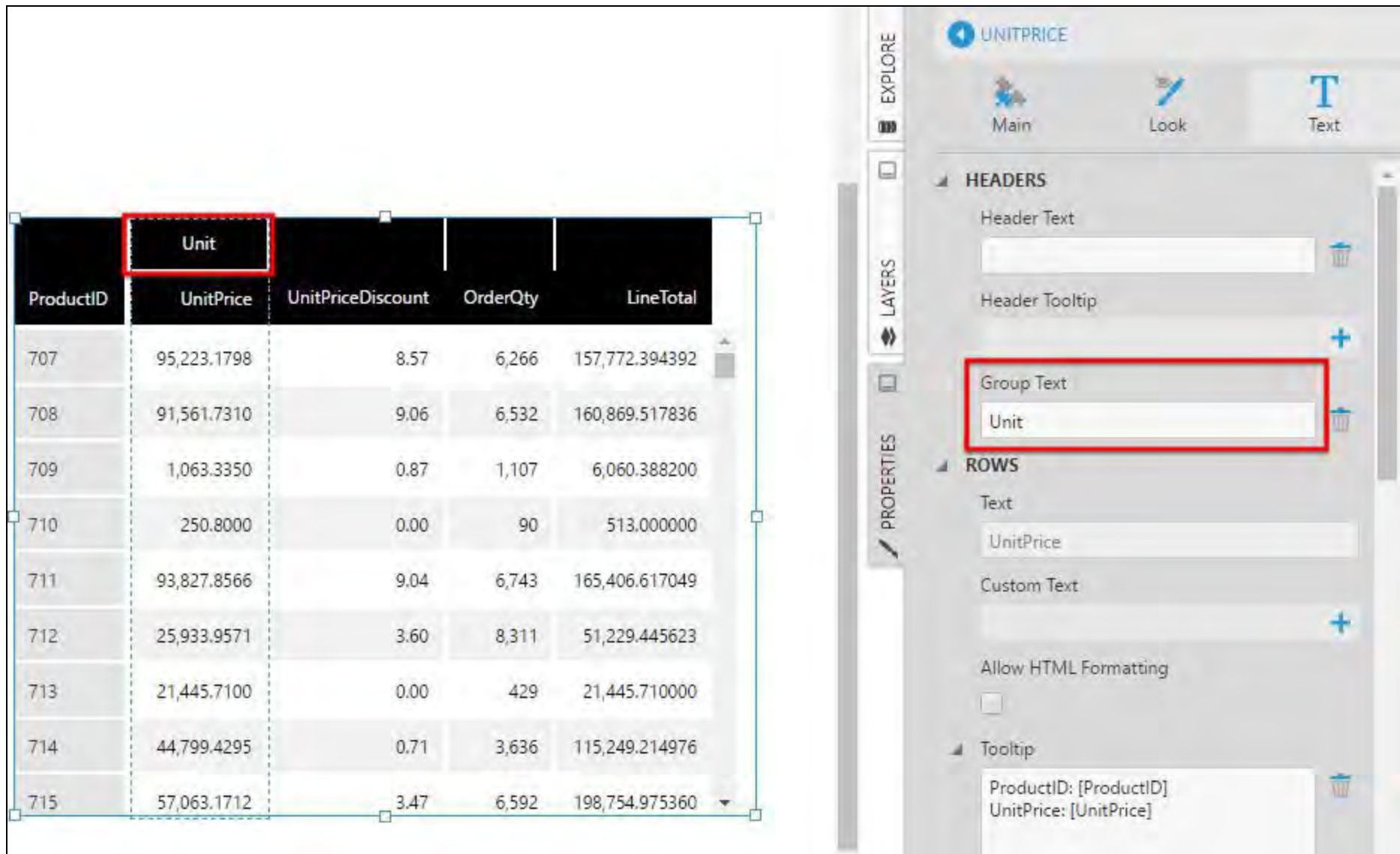
HTML Formatting

If your data contains HTML tags, which you want to apply for formatting rather than display as text, in the Text tab of the column properties, select the **Allow HTML Formatting** option.



Custom Groups

Go to the **Text** tab of the column properties and indicate a Group Text to create a custom group with the provided header.



The screenshot displays the Logi Symphony interface. On the left, a data table is shown with the following columns: ProductID, UnitPrice, UnitPriceDiscount, OrderQty, and LineTotal. The 'Unit' column is highlighted with a red dashed box. On the right, the 'UNITPRICE' properties panel is visible. The 'HEADERS' section has a 'Group Text' field with the value 'Unit' entered, which is also highlighted with a red dashed box. The 'ROWS' section shows 'UnitPrice' as the selected text field. The 'TOOLTIP' section shows the tooltip text: 'ProductID: [ProductID] UnitPrice: [UnitPrice]'.

ProductID	UnitPrice	UnitPriceDiscount	OrderQty	LineTotal
707	95,223.1798	8.57	6,266	157,772.394392
708	91,561.7310	9.06	6,532	160,869.517836
709	1,063.3350	0.87	1,107	6,060.388200
710	250.8000	0.00	90	513.000000
711	93,827.8566	9.04	6,743	165,406.617049
712	25,933.9571	3.60	8,311	51,229.445623
713	21,445.7100	0.00	429	21,445.710000
714	44,799.4295	0.71	3,636	115,249.214976
715	57,063.1712	3.47	6,592	198,754.975360

Add the same Group Text to other columns to group them together.

Scroll down to the Group Header Style section to customize the text in the group header.

ProductID	Unit		OrderQty	LineTotal
	UnitPrice	UnitPriceDiscount		
707	95,223.1798	8.57	6,266	157,772.394392
708	91,561.7310	9.06	6,532	160,869.517836
709	1,063.3350	0.87	1,107	6,060.388200
710	250.8000	0.00	90	513.000000
711	93,827.8566	9.04	6,743	165,406.617049
712	25,933.9571	3.60	8,311	51,229.445623
713	21,445.7100	0.00	429	21,445.710000
714	44,799.4295	0.71	3,636	115,249.214976
715	57,063.1712	3.47	6,592	198,754.975360

EXPLORE

UNITPRICEDISCOUNT



Main



Look



Text

Font weight



Wrap Text



Text Align

Right



Text Decoration



GROUP HEADER STYLE

Font Color

Aqua



Font Family



Font Style



Font Size

16px



Font Variant



Text Decoration



Font Weight

600





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Go to the **Look** tab of the column properties to customize the look of the group header.

ProductID	Unit		OrderQty	LineTotal
	UnitPrice	UnitPriceDiscount		
707	95,223.1798	8.57	6,266	157,772.394392
708	91,561.7310	9.06	6,532	160,869.517836
709	1,063.3350	0.87	1,107	6,060.388200
710	250.8000	0.00	90	513.000000
711	93,827.8566	9.04	6,743	165,406.617049
712	25,933.9571	3.60	8,311	51,229.445623
713	21,445.7100	0.00	429	21,445.710000
714	44,799.4295	0.71	3,636	115,249.214976
715	57,063.1712	3.47	6,592	198,754.975360

EXPLORE

UNITPRICEDISCOUNT

Main

Look

Text

LAYERS

PROPERTIES

CELL STYLE

Background

States

State Styles

Color Rules

Left Border Color

Right Border Color

Cursor

GROUP HEADER STYLE

Background

DarkRed

Left Border Color

Right Border Color

Aquamarine

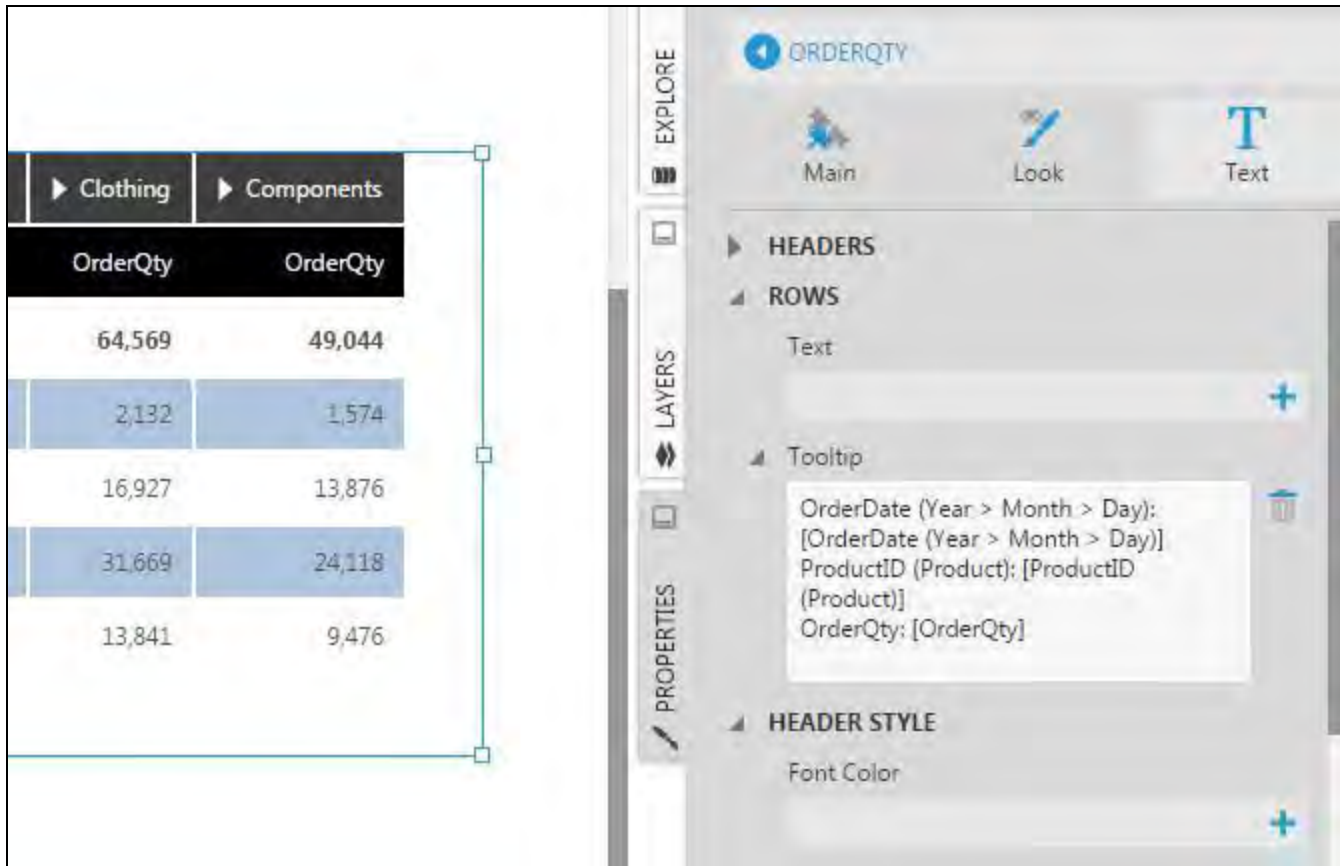
 **Note:** The Right Border Color of the group header will take precedence over the Left Border Color of the following group header.

Tooltip

When you hover over or long-tap a table cell, a tooltip appears which shows the hierarchy and measure values associated with that cell/data point. Switch to [View mode](#) first if editing a view.

You can customize which data is shown in this tooltip, including adding data not already displayed directly in a column's cells. In the Data Analysis Panel, click **Visualization** and expand **Tooltips** to find and change the data assigned to be displayed in each column's tooltip. This same interface is used for customizing various aspects of all visualizations. See [Setting Up the Visualization](#).

For more options and control over the formatting of the tooltip text, you can go to the **Text** tab of the column properties to see the Tooltip property. Like the Custom Text property, this can be set using both regular text and placeholder keywords for inserting data from the row that was hovered over. For more information on keywords including formatting options, see [Formatting Text](#).



The screenshot displays a table with two columns, both labeled 'OrderQty'. The table is filtered by 'Clothing' and 'Components'. The data rows are as follows:

OrderQty	OrderQty
64,569	49,044
2,132	1,574
16,927	13,876
31,669	24,118
13,841	9,476

The right-hand panel shows the 'ORDERQTY' table properties. The 'Main' tab is selected. The 'HEADERS' section shows 'Text' as the header. The 'ROWS' section shows 'Text' as the row content. The 'Tooltip' section shows a tooltip text: 'OrderDate (Year > Month > Day): [OrderDate (Year > Month > Day)]', 'ProductID (Product): [ProductID (Product)]', and 'OrderQty: [OrderQty]'. The 'HEADER STYLE' section shows 'Font Color' as the style.

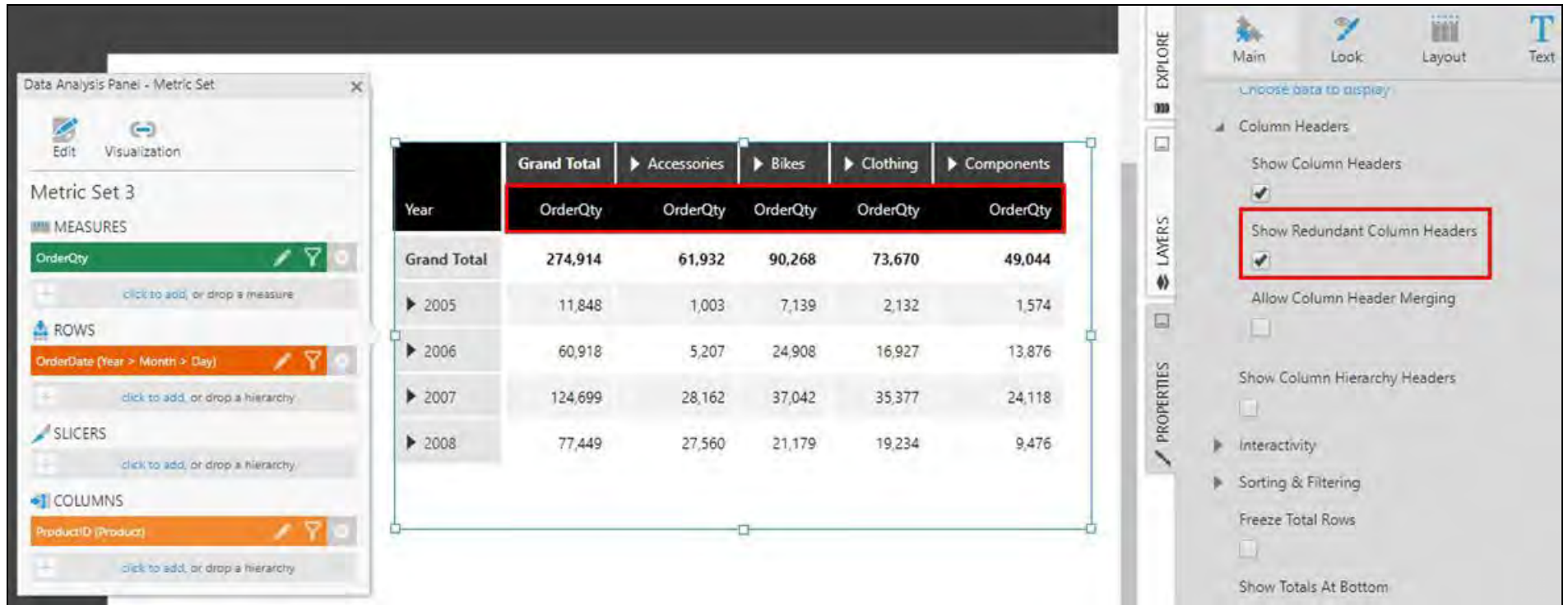
Column Headers

The Main tab of the table's properties contains several options determining which column headers should be displayed. Use the Look tab instead to customize their appearance, including rotated column header text.

Redundant Column Headers

A table with a hierarchy placed on Columns in the metric set (e.g., *Product*) will repeat the column headers for each columns hierarchy value (e.g., repeat *OrderQty* for each *Product* value).

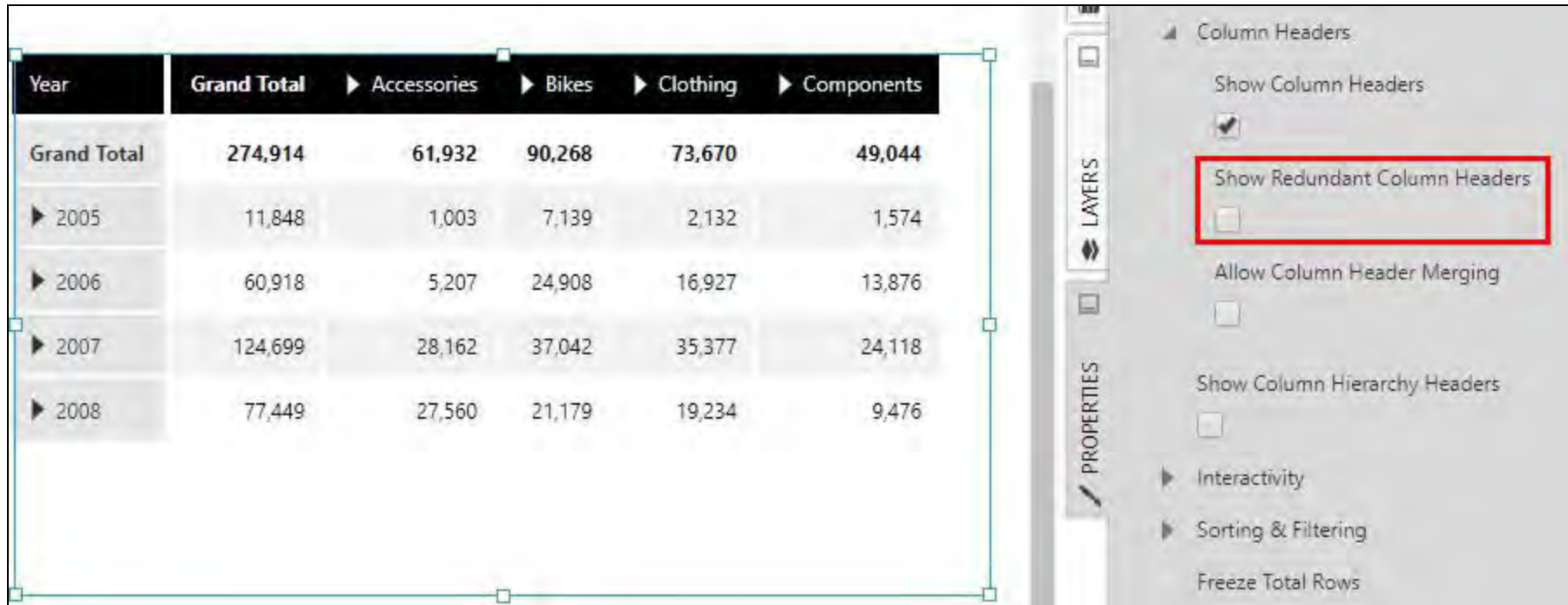
This is displayed for consistency even if there is only one column while you perform your analysis, and this single column header is repeated in this case.



The screenshot displays the Logi Analytics interface. On the left, the 'Data Analysis Panel - Metric Set' is visible, showing 'Metric Set 3' with measures like 'OrderQty' and 'ProductID (Product)'. The central area shows a data table with columns for 'Year', 'Grand Total', 'Accessories', 'Bikes', 'Clothing', and 'Components'. The 'OrderQty' column is highlighted in red. On the right, the 'EXPLORE' panel is open, showing the 'Show Redundant Column Headers' property under 'Column Headers', which is currently checked and highlighted with a red box.

Year	Grand Total	Accessories	Bikes	Clothing	Components
Grand Total	274,914	61,932	90,268	73,670	49,044
2005	11,848	1,003	7,139	2,132	1,574
2006	60,918	5,207	24,908	16,927	13,876
2007	124,699	28,162	37,042	35,377	24,118
2008	77,449	27,560	21,179	19,234	9,476

You can hide these column headers by unchecking the **Show Redundant Column Headers** property.



Year	Grand Total	Accessories	Bikes	Clothing	Components
Grand Total	274,914	61,932	90,268	73,670	49,044
▶ 2005	11,848	1,003	7,139	2,132	1,574
▶ 2006	60,918	5,207	24,908	16,927	13,876
▶ 2007	124,699	28,162	37,042	35,377	24,118
▶ 2008	77,449	27,560	21,179	19,234	9,476

Properties Panel:

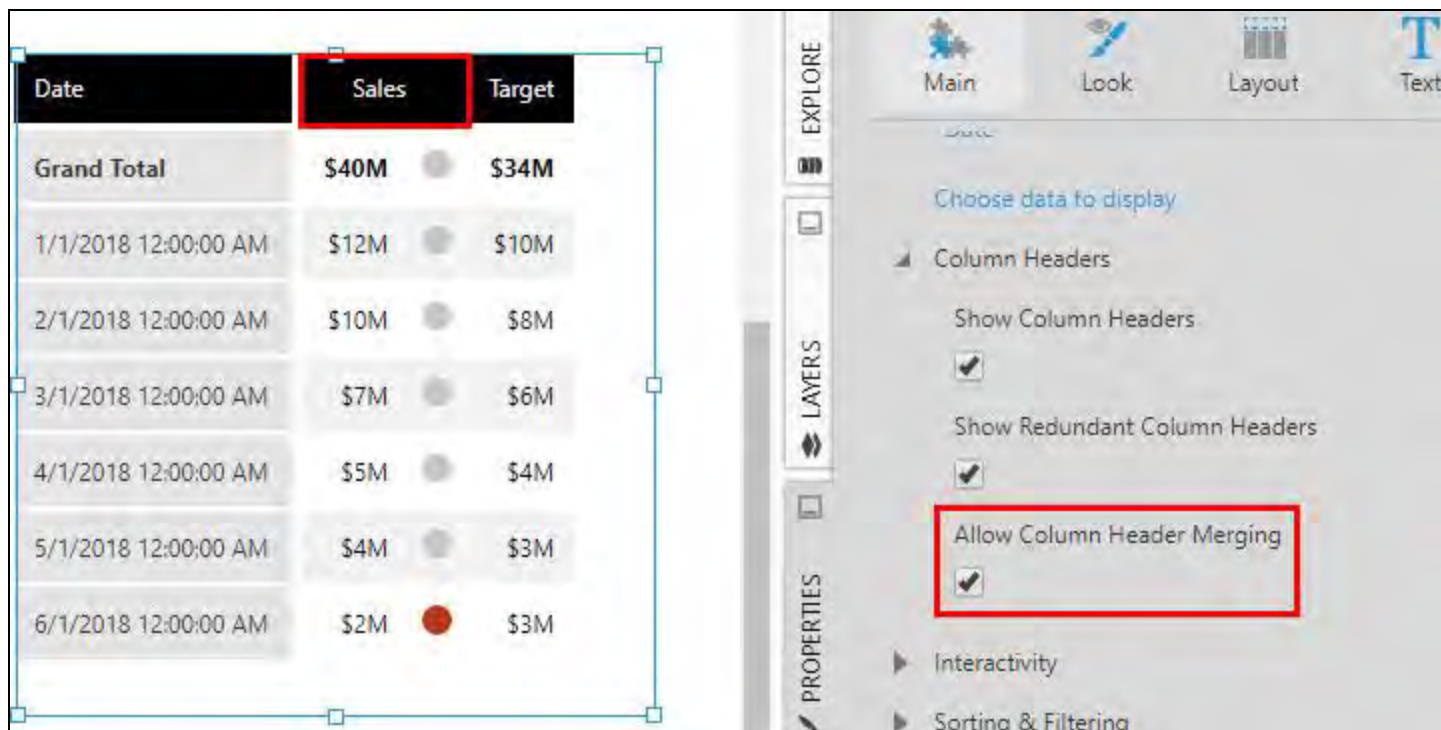
- Column Headers
 - Show Column Headers ☒
 - Show Redundant Column Headers ☒ (highlighted)
 - Allow Column Header Merging ☐
 - Show Column Hierarchy Headers ☐
- Interactivity
- Sorting & Filtering
- Freeze Total Rows

The above functionality will work even if two column headers have been previously merged into a single column header via the Allow Column Header Merging property.

Merging

When your table has two adjacent columns with the same header text, you can merge the text into one header by expanding **Column Headers** and selecting **Allow Column Header Merging**.

For example, if your table has two *Sales* columns, one displaying text values and the other showing state indicators, you can use this property to merge the headers into a single *Sales* header.



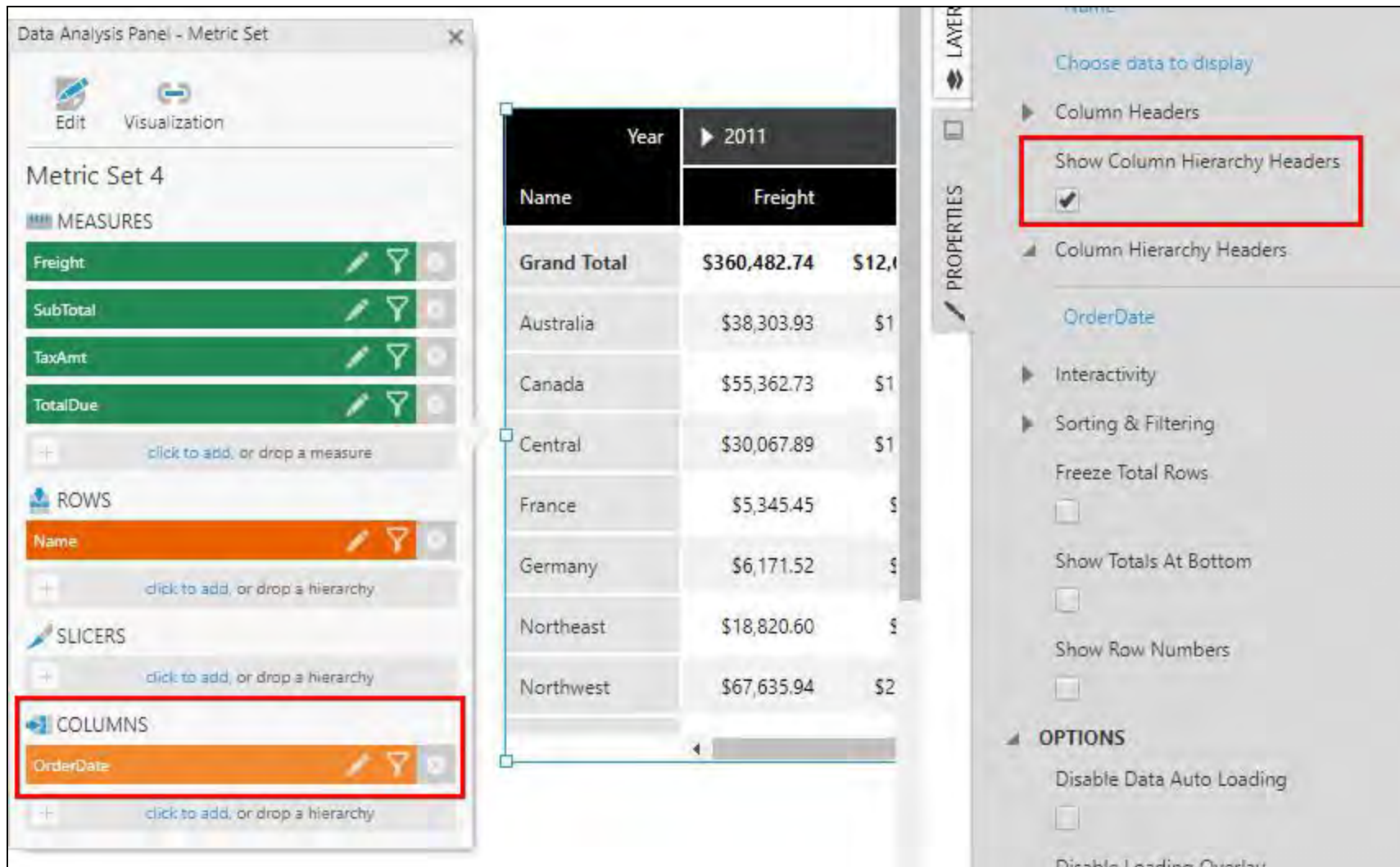
The screenshot displays the Logi Symphony interface. On the left, a data table is shown with columns 'Date', 'Sales', and 'Target'. The 'Sales' column header is highlighted with a red box. The table data is as follows:

Date	Sales	Target
Grand Total	\$40M	\$34M
1/1/2018 12:00:00 AM	\$12M	\$10M
2/1/2018 12:00:00 AM	\$10M	\$8M
3/1/2018 12:00:00 AM	\$7M	\$6M
4/1/2018 12:00:00 AM	\$5M	\$4M
5/1/2018 12:00:00 AM	\$4M	\$3M
6/1/2018 12:00:00 AM	\$2M	\$3M

On the right, the 'Main' tab is selected in the 'EXPLORE' panel. The 'Column Headers' section is expanded, and the 'Allow Column Header Merging' checkbox is checked and highlighted with a red box. Other options in this section include 'Show Column Headers' (checked) and 'Show Redundant Column Headers' (checked).

Column Hierarchy Headers

When working with data organized into columns, you may want to identify each row of column hierarchy headers. In the Main tab, select the **Show Column Hierarchy Headers** property.



Data Analysis Panel - Metric Set

Metric Set 4

MEASURES

- Freight
- SubTotal
- TaxAmt
- TotalDue

ROWS

- Name

SLICERS

-

COLUMNS

- OrderDate

Properties Panel:

- Choose data to display
- Column Headers
 - Show Column Hierarchy Headers ☒
- Column Hierarchy Headers
- OrderDate
- Interactivity
- Sorting & Filtering
 - Freeze Total Rows ☐
 - Show Totals At Bottom ☐
 - Show Row Numbers ☐
- OPTIONS
 - Disable Data Auto Loading ☐
 - Disable Loading Overlay ☐

	Year	2011	
Name		Freight	
Grand Total		\$360,482.74	\$12,0
Australia		\$38,303.93	\$1
Canada		\$55,362.73	\$1
Central		\$30,067.89	\$1
France		\$5,345.45	\$
Germany		\$6,171.52	\$
Northeast		\$18,820.60	\$
Northwest		\$67,635.94	\$2

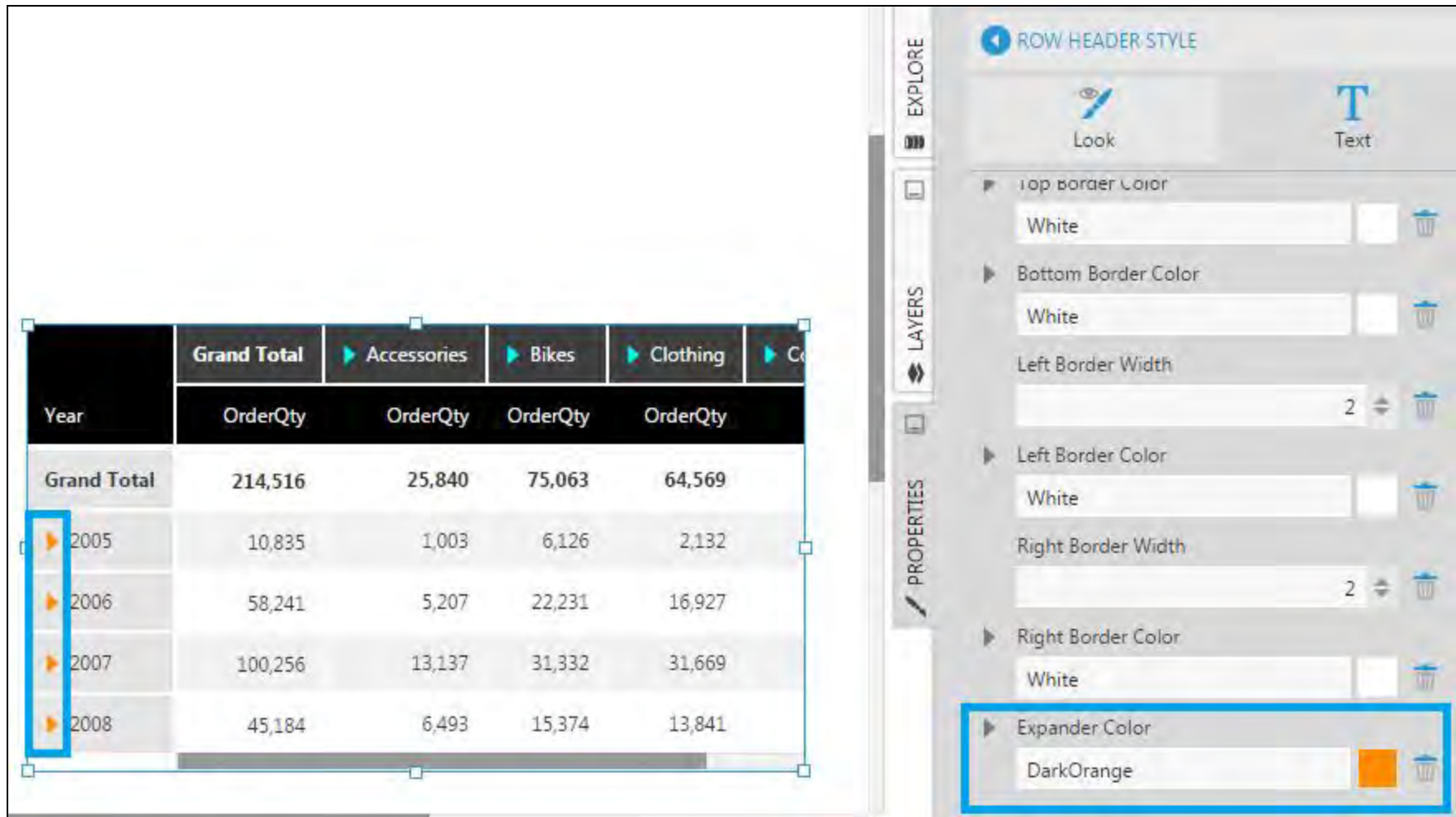
Under the Column Hierarchy Headers property that appears, select a **hierarchy** to customize how its headers appear.

Expanders

In the Main tab under Row Header Columns, you can select a **column** and then the **Hide Expander** option to hide the expander buttons on row headers.

There are other options in the table's properties under Interactivity. Uncheck **Allow Collapsing Separate Hierarchies** to show expander buttons only when displaying an upper level from a multi-level hierarchy. Select the **Show Expanders Only On Hover** option if you want to show expander buttons only when hovering over them or after tapping their cell.

To change the color of the expander buttons in row headers, go to the **Look** tab, and in either the Row Header Style or Column Header Style properties set the **Expander Color**.



The screenshot displays a table with the following data:

	Grand Total	Accessories	Bikes	Clothing	Co
Year	OrderQty	OrderQty	OrderQty	OrderQty	
Grand Total	214,516	25,840	75,063	64,569	
2005	10,835	1,003	6,126	2,132	
2006	58,241	5,207	22,231	16,927	
2007	100,256	13,137	31,332	31,669	
2008	45,184	6,493	15,374	13,841	

The properties panel on the right is set to the **ROW HEADER STYLE** tab. The **Expander Color** property is highlighted with a blue box and set to **DarkOrange**.

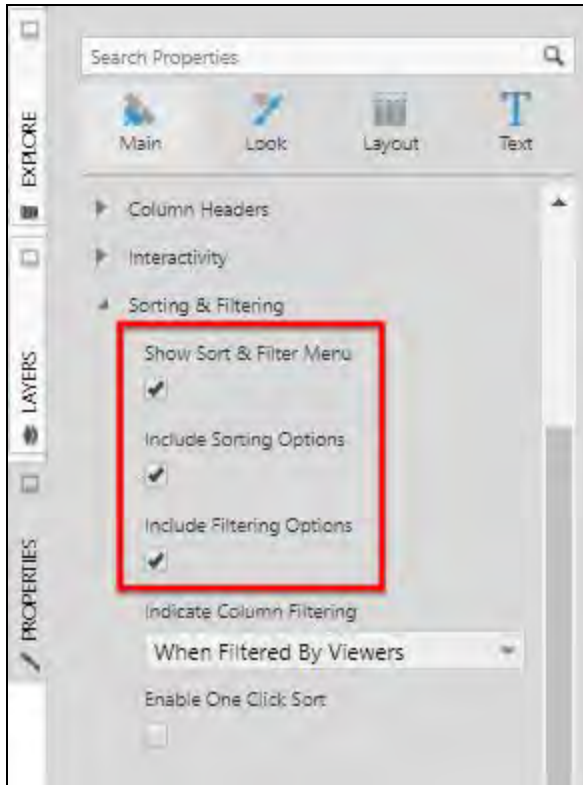
Sorting and Filtering

You can hover over column headers in view mode to access sorting and filtering options. Click the **icon** that appears to view the Sort & Filter menu.

Name	Fre	A	Z	
Grand Total	3,183,430.2518			
Australia	275,962.0834			
Canada	486,466.4333			
Central	239,116.7252			
France	206,712.8319			
Germany	134,383.8541	4,915,407.5960	430,028.1254	5,479,819.5755
Northeast	209,722.6548	6,939,374.4813	671,112.4924	7,820,209.6285
Northwest	470,647.1791	16,084,942.5482	1,506,070.6437	18,061,660.3710
Southeast	239,153.4043	7,879,655.0731	765,290.8895	8,884,099.3669
Southwest	706,187.0115	24,184,609.6011	2,259,797.9767	27,150,594.5893

You can choose to show only the Sort options or only the Filter options in this pop-up by unchecking **Show Filtering Options** or **Show Sorting Options**, found under Sorting & Filtering in the Main tab.

Hide the menu altogether by unchecking **Show Sort & Filter Menu**.

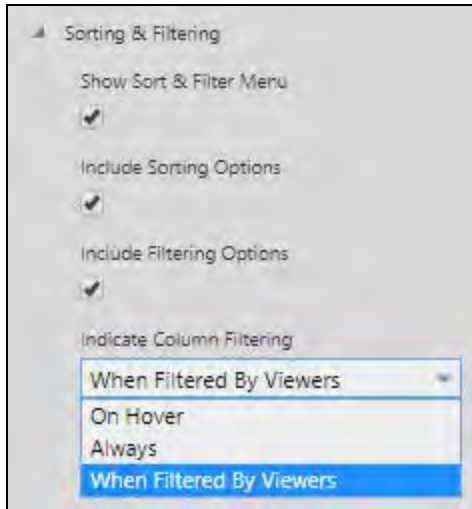


Note: For more information about sorting, see [Sorting a Table Visualization](#).

You can use an icon over column headers to indicate when filtering is applied.

Choose how this indicator appears for filtered columns using the Indicate Column Filtering property:

- **On Hover** - A filter indicator will appear when hovering the mouse cursor over a filtered column or after tapping it.
- **When Filtered by Viewers** (default) - A filter indicator will appear on its own, but only if the filtering was applied by viewers of a checked in metric set (not while [checked out](#) to you).
- **Always** - A filter indicator will always be present for a filtered column.



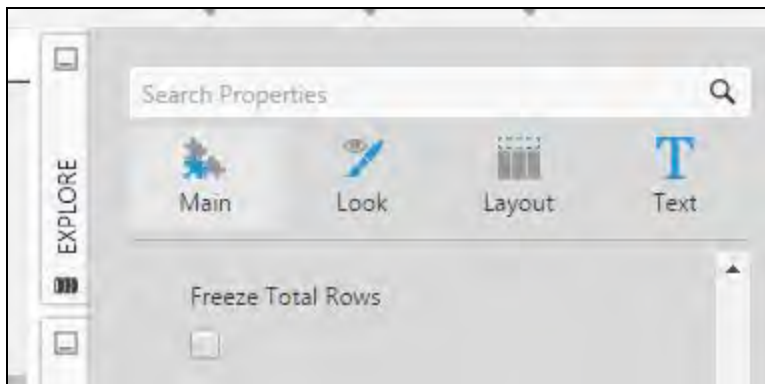
Totals

The settings that determine which totals are displayed are on the [metric set](#), for example, to show them only for some hierarchies, or only on rows or columns.

When totals are enabled, the table's properties described below can customize where they're displayed. To customize their appearance, see the total style properties in the Look tab.

Freeze Total Rows

Use the Freeze Total Rows property from the Main properties tab to display the grand total and subtotals at the edge of the table, even when scrolled out of view.





- Archive of documentation for Logi Symphony v24

Show Totals at Bottom

You can decide between showing total rows at the top or bottom (and total columns left or right) by selecting or unchecking the **Show Totals At Bottom** property in the Main properties tab.

Year	Month	OrderQty
2005	July, 2005	820
	August, 2005	2,053
	September, 2005	1,512
	October, 2005	1,242
	November, 2005	2,963
	December, 2005	2,245
		10,835
2006		58,241
2007		100,256
2008		45,184
Grand Total		214,516

EXPLORE

Main

Look

Layout

Text

COMMON

TABLE

Columns

OrderQty

Row Header Columns

OrderDate (Year > Month > Day)

Bind data to columns

Show Totals At Bottom

Auto Fit Columns To Fill

Allow Multiple Row Selection

HEADERS

Show Expanders Only On Hover

Show Row Numbers

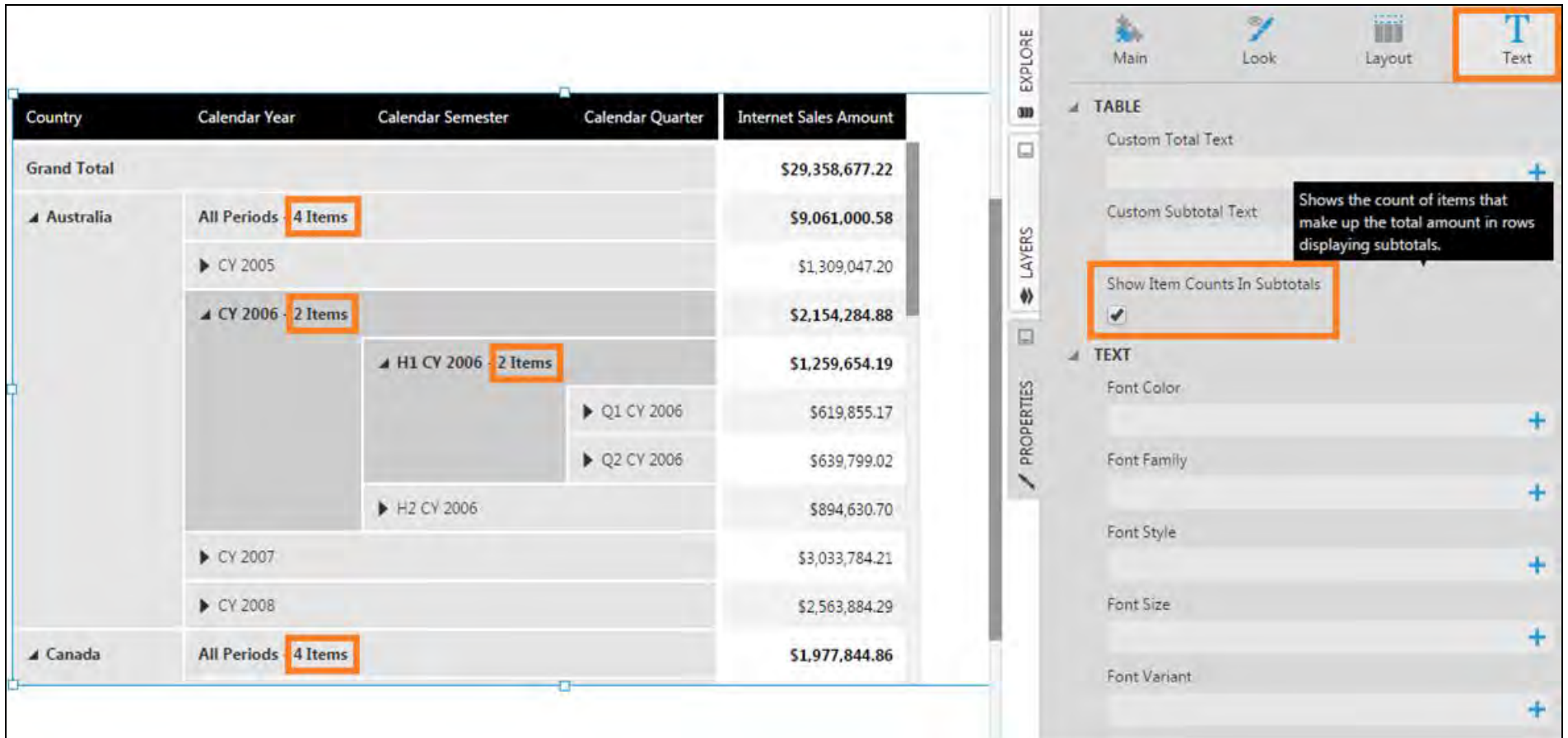
Item Counts in Subtotals

When working with any table that includes subtotals, you can hover over its cell to view the number of items that made up that subtotal amount. Subtotals are displayed if enabled in tables with multiple hierarchies or multiple levels, including when a member is expanded.

Country	Calendar Year	Internet Sales Amount	
Grand Total		\$29,358,677.22	
▲ Australia	All Periods	\$9,061,000.58	
	▶ CY 2005	\$1,509,047.20	Calendar Year: All Periods - 4 Items
	▶ CY 2006	\$2,154,284.88	
	▶ CY 2007	\$3,033,784.21	
	▶ CY 2008	\$2,563,884.29	
▲ Canada	All Periods	\$1,977,844.86	

This can be helpful as context for the subtotal amounts when doing analysis.

If you would prefer to display this item count in the cell text of the table itself, enable the **Show Item Counts In Subtotals** property, found in the Text tab for the table.



The screenshot displays the Logi Symphony v24 interface. On the left, a table is shown with columns: Country, Calendar Year, Calendar Semester, Calendar Quarter, and Internet Sales Amount. The table data includes a Grand Total row, followed by Australia (All Periods, CY 2005, CY 2006 with H1 and H2 subtotals), and Canada (All Periods). On the right, the 'Look' tab of the table's properties is active. The 'TABLE' section shows 'Custom Total Text' and 'Custom Subtotal Text' fields. A callout box points to the 'Custom Subtotal Text' field, stating: 'Shows the count of items that make up the total amount in rows displaying subtotals.' Below this, the 'Show Item Counts In Subtotals' checkbox is checked. The 'TEXT' section lists various font properties like Font Color, Font Family, Font Style, Font Size, and Font Variant, each with a plus icon for expansion.

Country	Calendar Year	Calendar Semester	Calendar Quarter	Internet Sales Amount
Grand Total				\$29,358,677.22
▲ Australia	All Periods	4 Items		\$9,061,000.58
	▶ CY 2005			\$1,309,047.20
	▲ CY 2006	2 Items		\$2,154,284.88
		▲ H1 CY 2006	2 Items	\$1,259,654.19
			▶ Q1 CY 2006	\$619,855.17
			▶ Q2 CY 2006	\$639,799.02
			▶ H2 CY 2006	\$894,630.70
	▶ CY 2007			\$3,033,784.21
	▶ CY 2008			\$2,563,884.29
▲ Canada	All Periods	4 Items		\$1,977,844.86

Look

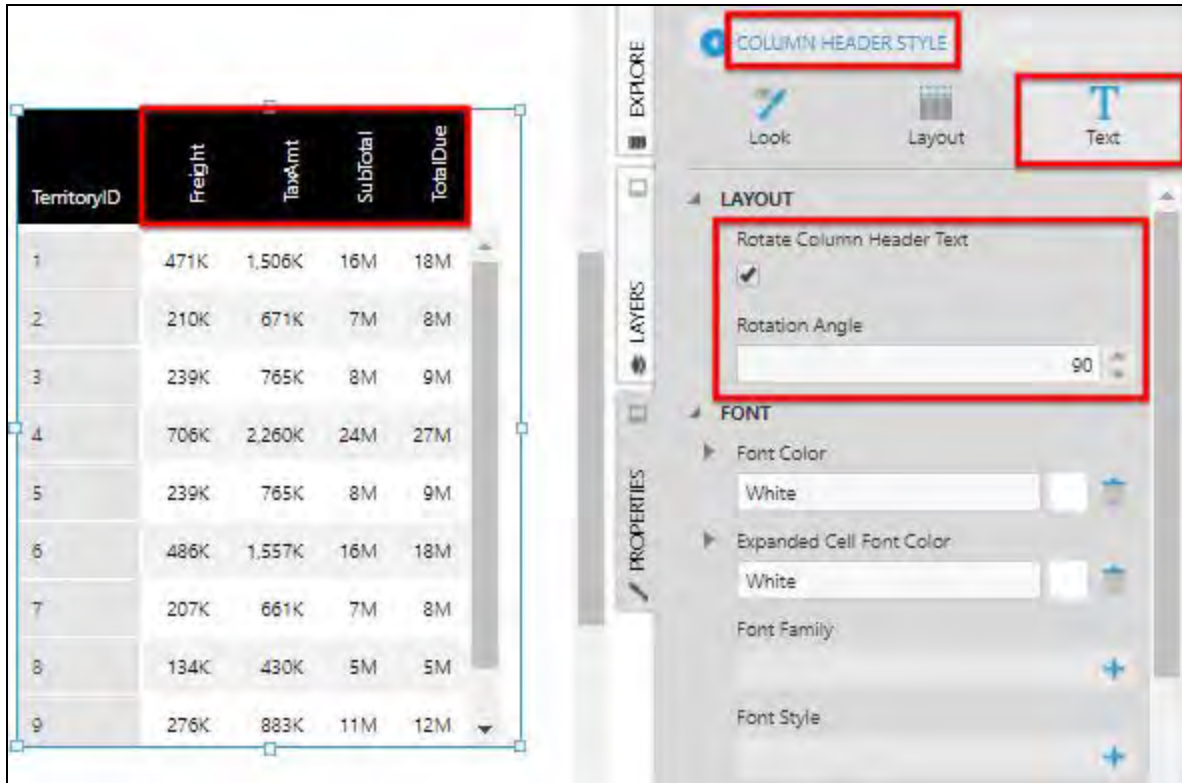
The Look tab of the table's properties is the main place for customizing the appearance of each part of the table. Some appearance properties are also available on individual columns, which take priority when set.

Note: There are a variety of built-in table styles within the **Styles > Shared** folder that you can [apply](#) as a shortcut.

Column Header Style

Use the Column Header Style to change the appearance both for the 'last row' of column headers displayed directly above your rows of data, and additional column headers displayed above when a hierarchy is placed on Columns in the metric set.

Use the tabs to access all the options. In the Text tab, you can enable **Rotate Column Header Text** and set a rotation angle.



The screenshot shows a table with the following data:

TerritoryID	Freight	TaxAmt	SubTotal	TotalDue
1	471K	1,506K	16M	18M
2	210K	671K	7M	8M
3	239K	765K	8M	9M
4	706K	2,260K	24M	27M
5	239K	765K	8M	9M
6	486K	1,557K	16M	18M
7	207K	661K	7M	8M
8	134K	430K	5M	5M
9	276K	883K	11M	12M

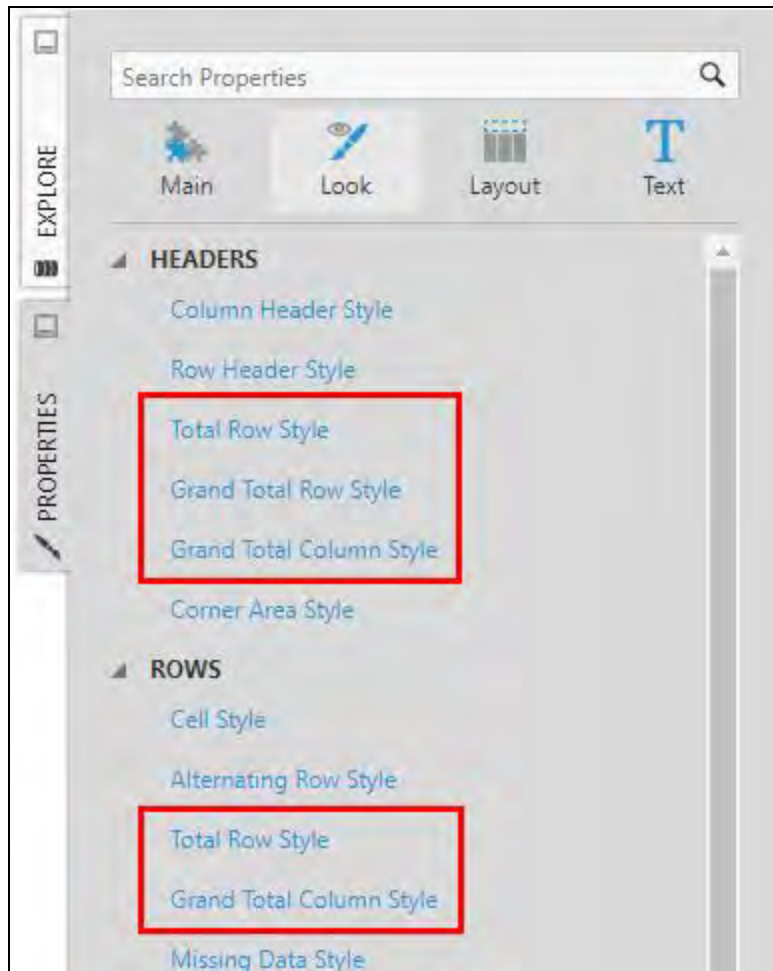
The 'COLUMN HEADER STYLE' panel on the right has the 'Text' tab selected. The 'LAYOUT' section shows 'Rotate Column Header Text' checked and 'Rotation Angle' set to 90. The 'FONT' section shows 'Font Color' and 'Expanded Cell Font Color' both set to 'White'.

Total Styles

To change the appearance of rows or columns containing **totals**, go to the **Look** tab of the table properties and use the total or grand total style options.

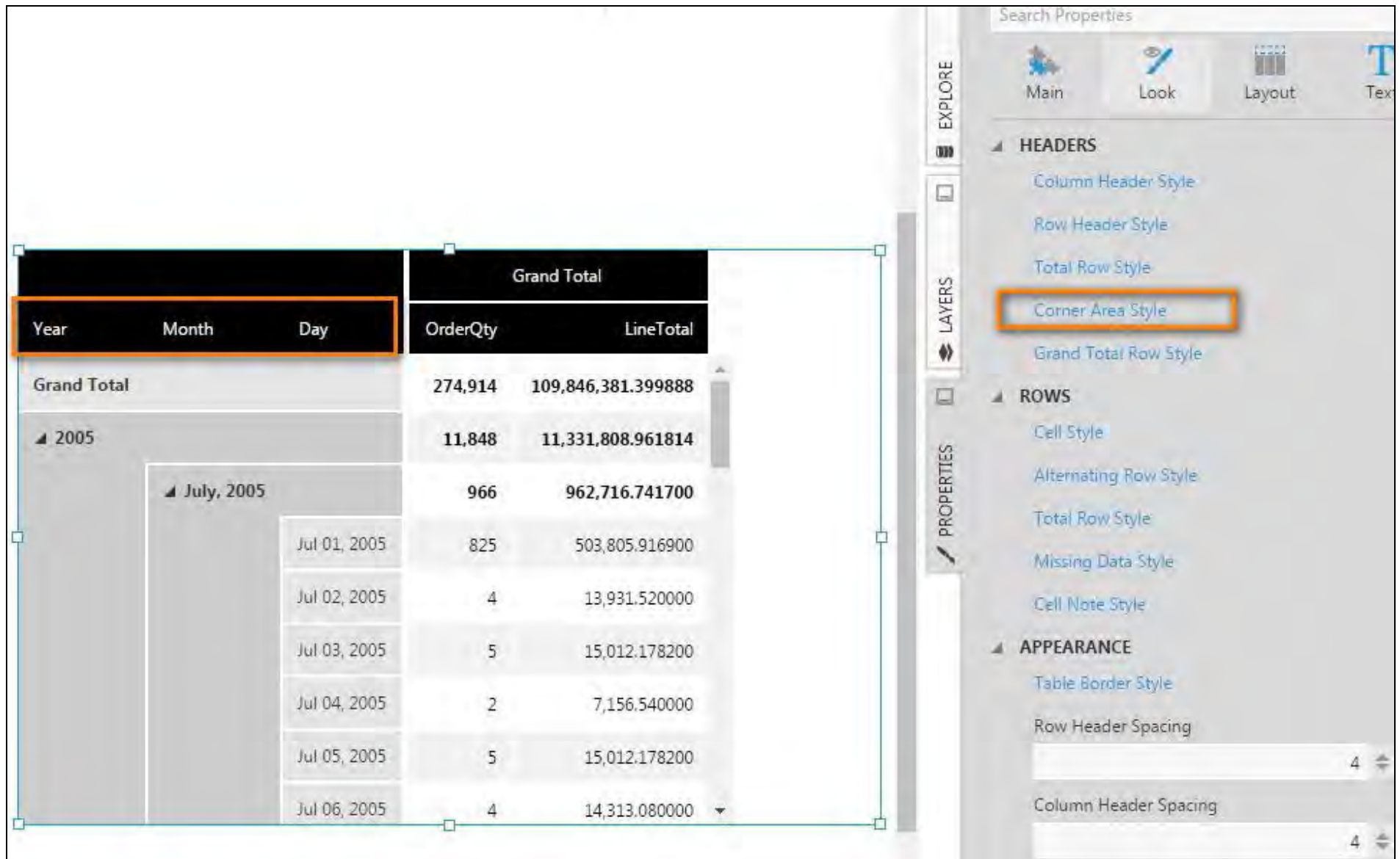
- **Total Row Style** - Change the appearance of rows containing the grand total and subtotals, split between row header styling under Headers and the rest of the row under Rows.
- **Grand Total Row Style** - Change the appearance of the whole row containing the grand total. These properties take precedence over the Total Row Style.
- **Frozen Row Style** - Change the appearance of total rows that are displayed as frozen at the edge of the table when scrolled out of view (if enabled), split between row header styling under Headers and the rest of the row under Rows.

- **Grand Total Column Style** - Change the appearance of the grand total column, split between column header styling under Headers and the rest of the column under Rows.



Corner Area Style

The corner area of a table visualization is the portion that is above the row headers and to the left of the column headers, used to display headers identifying each column of row headers. To edit the corner area properties, in the Properties window go to the **Look** tab's Headers section, and click **Corner Area Style**.

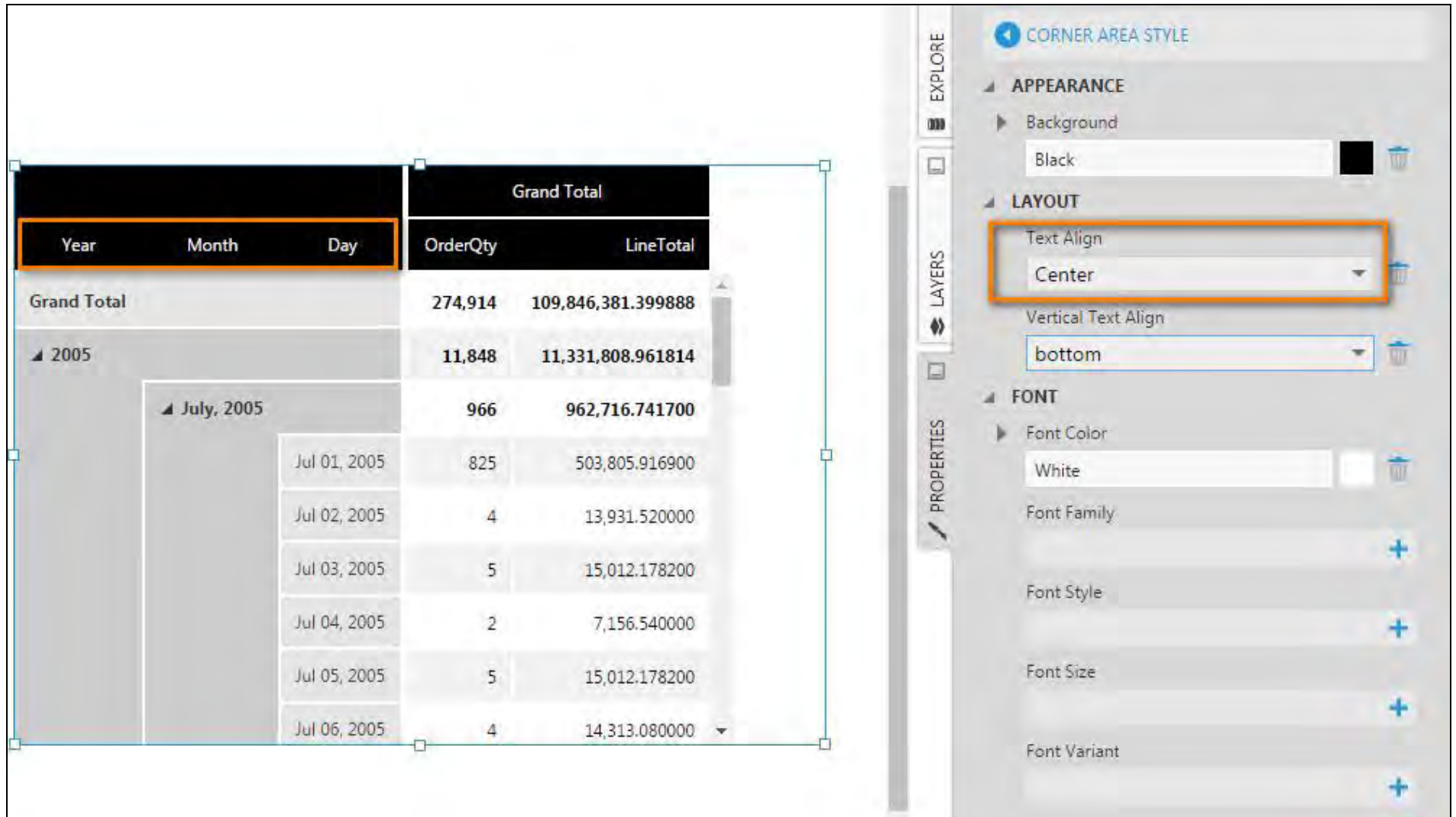


The screenshot displays the Logi Symphony v24 interface. On the left, a table is shown with a hierarchical structure. The table has columns for Year, Month, Day, OrderQty, and LineTotal. The data is organized into a tree view where the 'Grand Total' row is expanded to show the year 2005, which is further expanded to show the month of July, and finally the days of the month. The table is surrounded by a green border with handles for resizing.

On the right, the 'Properties' panel is visible. It contains a search bar and several categories of properties: EXPLORE, HEADERS, ROWS, and APPEARANCE. The 'HEADERS' category is expanded, and the 'Corner Area Style' property is highlighted with an orange box. Below this, the 'APPEARANCE' category is also expanded, showing properties like 'Table Border Style', 'Row Header Spacing', and 'Column Header Spacing'.

Grand Total			OrderQty	LineTotal
Year	Month	Day		
Grand Total			274,914	109,846,381.399888
2005			11,848	11,331,808.961814
July, 2005			966	962,716.741700
Jul 01, 2005			825	503,805.916900
Jul 02, 2005			4	13,931.520000
Jul 03, 2005			5	15,012.178200
Jul 04, 2005			2	7,156.540000
Jul 05, 2005			5	15,012.178200
Jul 06, 2005			4	14,313.080000

For example, set the Text Align property to **Center** in order to position the text in the center horizontally.

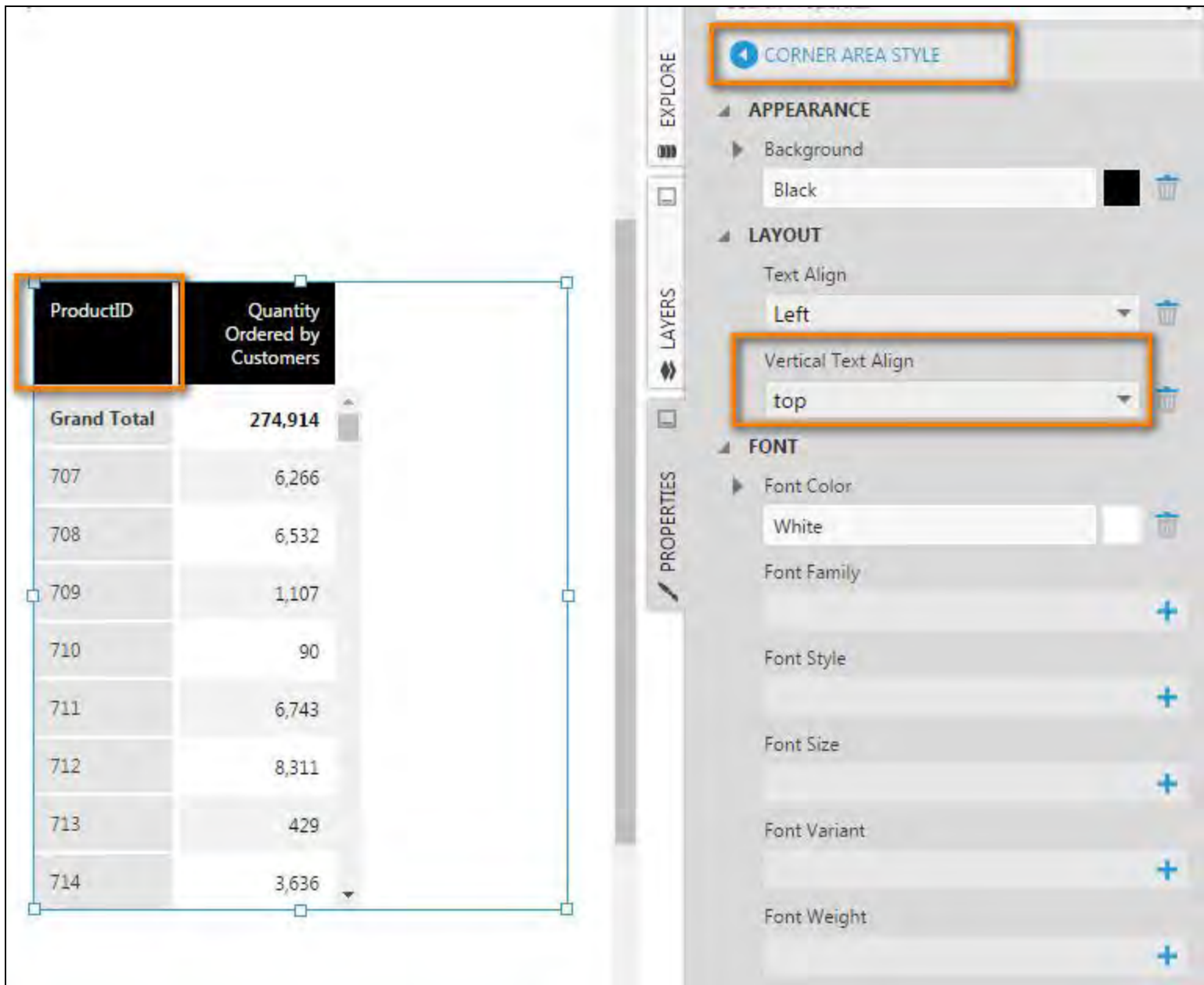


The screenshot displays a data visualization interface. On the left, a table is shown with a hierarchical structure. The table has columns for 'Year', 'Month', 'Day', 'OrderQty', and 'LineTotal'. The data is organized into a tree view where 'Grand Total' is the root, followed by '2005', then 'July, 2005', and finally a list of dates from 'Jul 01, 2005' to 'Jul 06, 2005'. The 'Year', 'Month', and 'Day' columns are highlighted with an orange border.

On the right, the 'CORNER AREA STYLE' properties panel is open. It contains several sections: 'APPEARANCE' (Background: Black), 'LAYOUT' (Text Align: Center, Vertical Text Align: bottom), and 'FONT' (Font Color: White, Font Family, Font Style, Font Size, Font Variant). The 'Text Align' and 'Vertical Text Align' dropdowns are highlighted with an orange border.

Grand Total			OrderQty	LineTotal
Year	Month	Day		
Grand Total			274,914	109,846,381.399888
2005			11,848	11,331,808.961814
July, 2005			966	962,716.741700
Jul 01, 2005			825	503,805.916900
Jul 02, 2005			4	13,931.520000
Jul 03, 2005			5	15,012.178200
Jul 04, 2005			2	7,156.540000
Jul 05, 2005			5	15,012.178200
Jul 06, 2005			4	14,313.080000

Set the Vertical Text Align property to **Top** in order to position the text at the top.



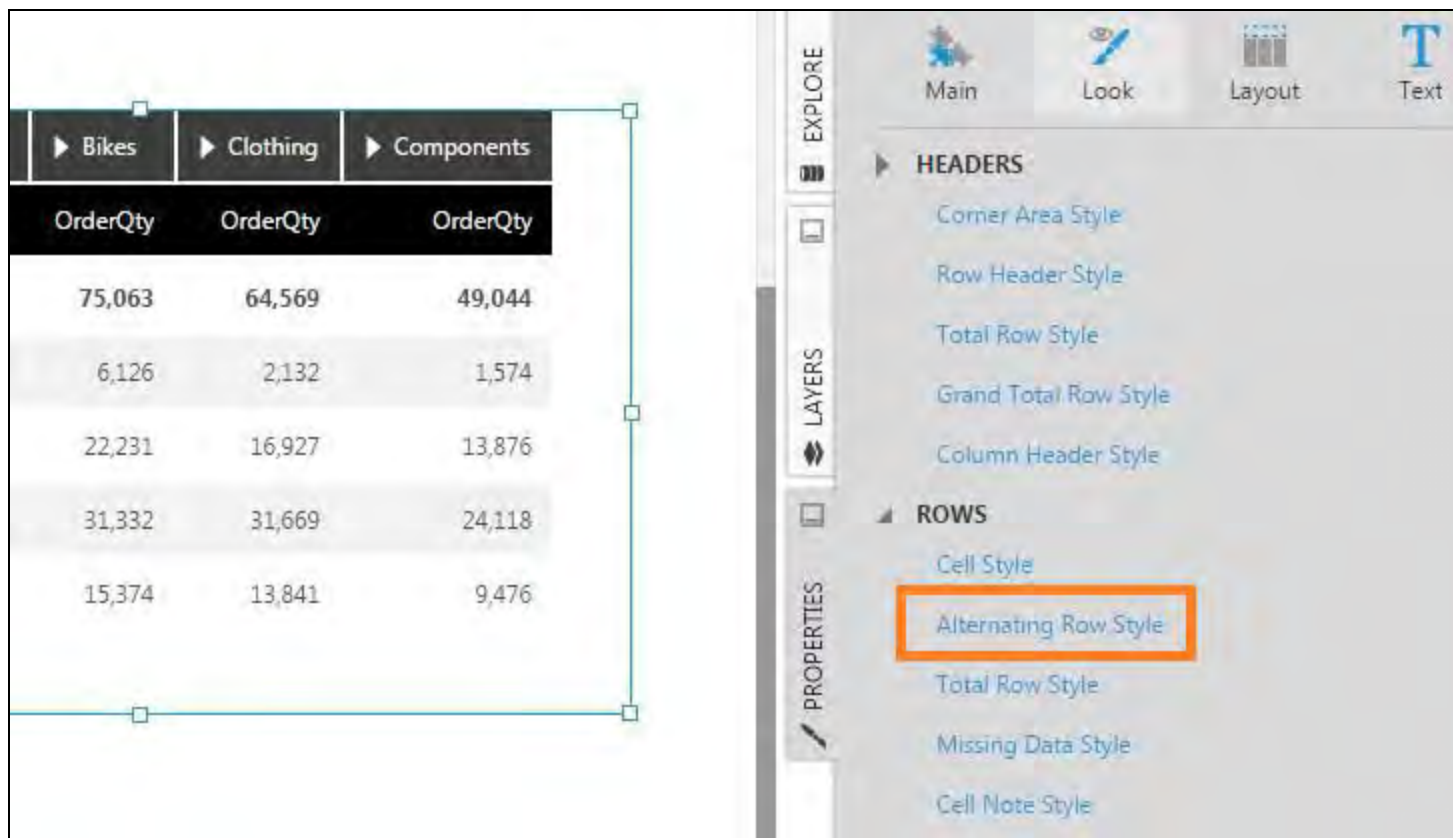
The screenshot displays the Logi Symphony v24 interface. On the left, a table is visible with two columns: 'ProductID' and 'Quantity Ordered by Customers'. The 'ProductID' column is highlighted with an orange box. The table data is as follows:

ProductID	Quantity Ordered by Customers
Grand Total	274,914
707	6,266
708	6,532
709	1,107
710	90
711	6,743
712	8,311
713	429
714	3,636

On the right, the 'CORNER AREA STYLE' panel is open, showing various styling options. The 'APPEARANCE' section includes 'Background' (Black). The 'LAYOUT' section includes 'Text Align' (Left) and 'Vertical Text Align' (top). The 'FONT' section includes 'Font Color' (White), 'Font Family', 'Font Style', 'Font Size', 'Font Variant', and 'Font Weight'. The 'Vertical Text Align' dropdown is highlighted with an orange box.

Alternating Row Style

To change the appearance of alternating rows in a table, in the Properties window go to the **Look** tab's Rows section, and click the **Alternating Row Style**.



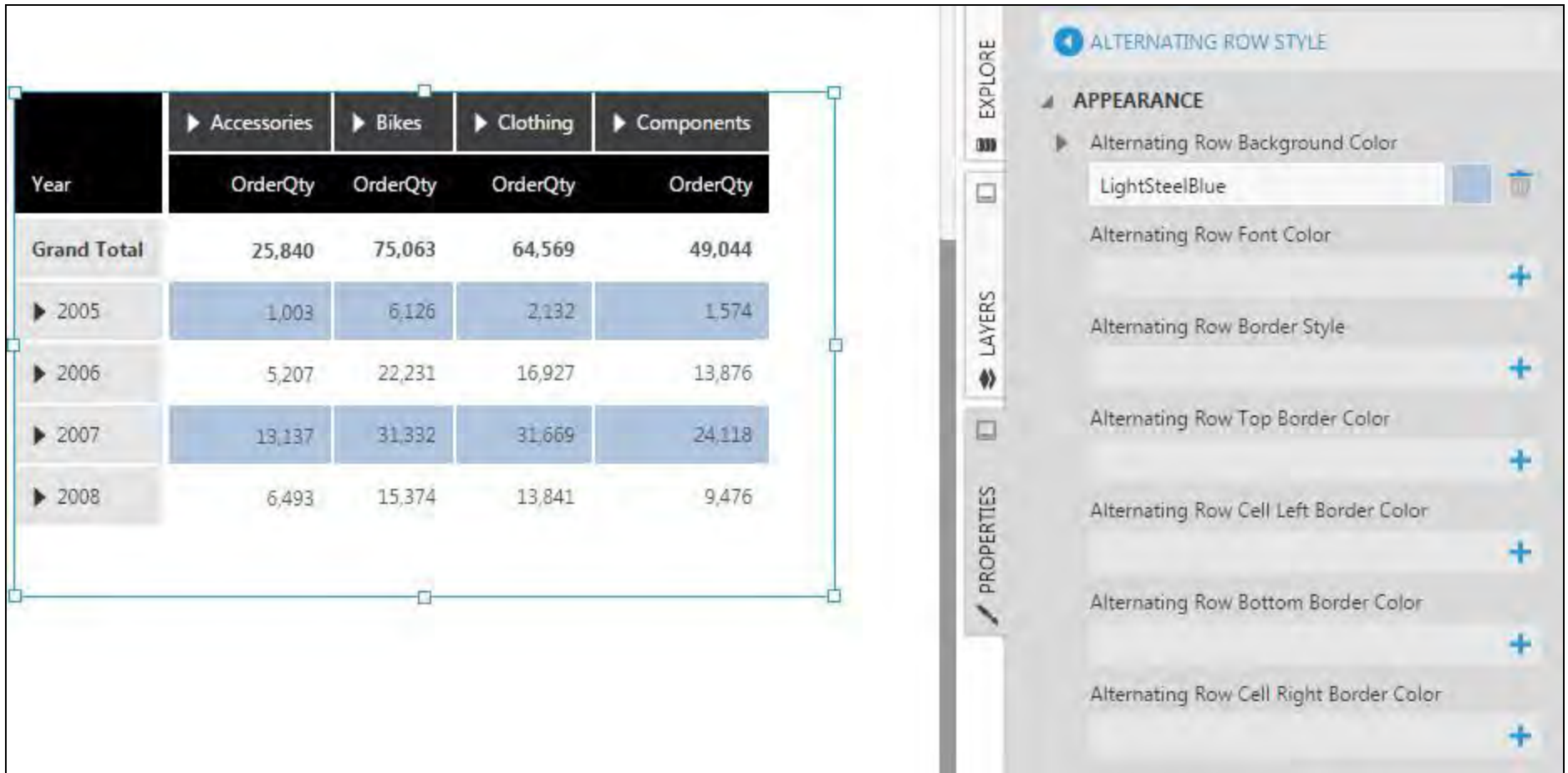
The screenshot shows a table with three columns: Bikes, Clothing, and Components. The table has a header row with 'OrderQty' and a body with six data rows. The rows alternate between a light gray background and a white background. To the right of the table is the Properties window, which has tabs for Main, Look, Layout, and Text. The Look tab is selected, and the ROWS section is expanded. The 'Alternating Row Style' option is highlighted with an orange box.

OrderQty	OrderQty	OrderQty
75,063	64,569	49,044
6,126	2,132	1,574
22,231	16,927	13,876
31,332	31,669	24,118
15,374	13,841	9,476

Properties window (Look tab):

- HEADERS
 - Corner Area Style
 - Row Header Style
 - Total Row Style
 - Grand Total Row Style
 - Column Header Style
- ROWS
 - Cell Style
 - Alternating Row Style**
 - Total Row Style
 - Missing Data Style
 - Cell Note Style

You can change the background color of the alternating rows, for example.



The screenshot displays a table with the following data:

Year	Accessories	Bikes	Clothing	Components
Grand Total	25,840	75,063	64,569	49,044
2005	1,003	6,126	2,132	1,574
2006	5,207	22,231	16,927	13,876
2007	13,137	31,332	31,669	24,118
2008	6,493	15,374	13,841	9,476

The right-hand panel shows the 'ALTERNATING ROW STYLE' settings under the 'APPEARANCE' section. The 'Alternating Row Background Color' is set to 'LightSteelBlue'. Other settings like 'Alternating Row Font Color', 'Alternating Row Border Style', 'Alternating Row Top Border Color', 'Alternating Row Cell Left Border Color', 'Alternating Row Bottom Border Color', and 'Alternating Row Cell Right Border Color' are listed with expandable options indicated by plus signs.

The alternating row style is applied to the cells displayed to the right of any row headers when the Row Header Layout property is set to **Columns**, but general cell styles including the alternating row style are also applied to row headers when this property is set to Indented instead.

Cell Note Style

When you add a [note \(annotation\)](#) on a table cell, the note appears as a small, red triangle in the top-right corner of the cell. Hover over this triangle indicator in **View** mode to see the details of the note.

5,207	22,231	16,927	13,876
13,137	31,332	31,669	24,118
6,493	15,374		

System Administrator 9/16/2015 3:36 PM

This is a note

To customize the appearance of the cell note, go to the **Look** tab of the table's properties. Click **Cell Note Style**.

es	Bikes	Clothing	Components
ty	OrderQty	OrderQty	OrderQty
40	75,063	64,569	49,044
03	6,126	2,132	1,574
07	22,231	16,927	13,876
87	31,332	31,669	24,118
93	15,374	13,841	9,476

EXPLORE

LAYERS

PROPERTIES

Main Look Layout Text

HEADERS

- Corner Area Style
- Row Header Style
- Total Row Style
- Grand Total Row Style
- Column Header Style

ROWS

- Cell Style
- Alternating Row Style
- Total Row Style
- Missing Data Style
- Cell Note Style**

APPEARANCE



- Archive of documentation for Logi Symphony v24

This lets you adjust the size and color of the cell note.

► Bikes

► Clothing

► Components

OrderQty	OrderQty	OrderQty
75,063	64,569	49,044
6,126	2,132	1,574
22,231	16,927	13,876
31,332	31,669	24,118
15,374	13,841	9,476

EXPLORE

LAYERS

PROPERTIES

CELL NOTE STYLE

APPEARANCE

Width

13

Height

13

Fill

Radial Gradient

Brush

Radial

Opacity

100%

Red

213

Green

255

Blue

78

Color (Hue)

Saturation

Brightness

Gradient

Shape

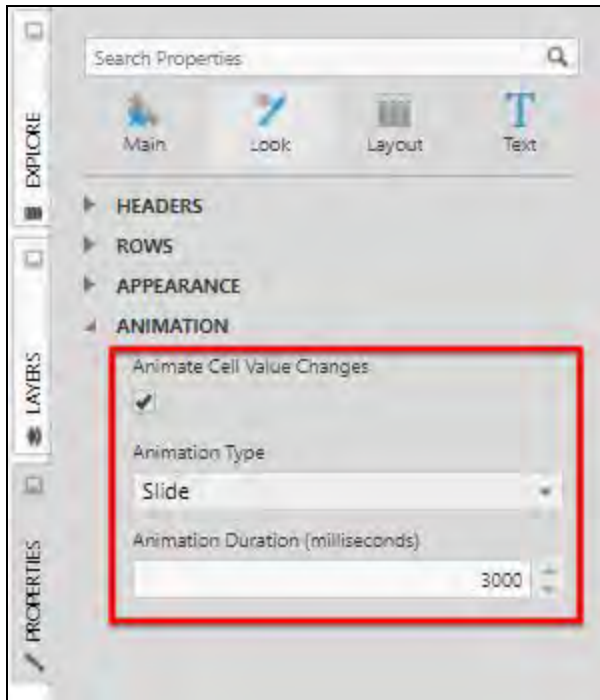
Circle

Animate Cell Value Changes

When a measure value (number) changes, its cell can be animated for a brief duration. These changes could occur as a result of [filtering](#) or [other interactions](#), or from changes in the underlying data when it's set up to [automatically refresh](#), where the measure value corresponding with a particular hierarchy value changes (not when the hierarchy values change).

Go to the **Look** tab of the table properties and scroll down to find the Animation section. Enable the property **Animate Cell Value Changes** and select the type of animation to use:

- Highlight temporarily changes the background color of the changed cell. This animation type comes with the option to select the highlight color.
- Slide moves the values in the direction of the change. Values that go up will slide up, and values that go down will slide down.



Switch to **View** mode and effect a change in the data to see the cell value animation. For example, a [measure value was corrected](#) below to increase sales for Egypt to \$6,000.

Country	SalesYTD
Grand Total	\$132,240.00
Unknown	\$89.00
Brazil	\$8,141.00
Canada	\$65,352.00
China	\$26,578.00
Egypt	\$2,011.00
France	\$47,011.00

Layout

Row Header Layout

In the Layout tab of the Properties window under Table, you will find the Row Header Layout property. You can also use the toolbar to change this property.

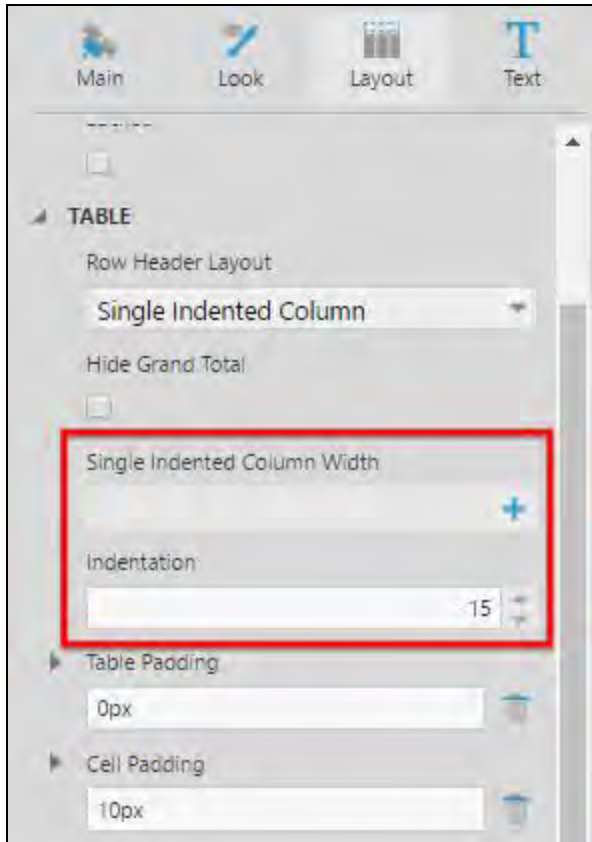
By default, this is set to Columns, which means each hierarchy or hierarchy level has a separate column with its own column header.

			Grand Total
Year	Month	Day	Order
Grand Total			214,5
▲ 2005			10,8
▲ July, 2005			8
Jul 01, 2005			8
▶ August, 2005			2,0
▶ September, 2005			1,5
▶ October, 2005			1,2

When the row header layout is set to **Indented**, row headers are displayed compactly in the same column, and each hierarchy or level is indented separately within it.

	Grand Total	▶ Accessories	▶ Bikes	▶ Cloth
Row Labels	OrderQty	OrderQty	OrderQty	OrderQty
Grand Total	214,516	25,840	75,063	64,613
▲ 2005	10,835	1,003	6,126	2,706
▲ July, 2005	820	84	455	181
Jul 01, 2005	820	84	455	181
▲ August, 2005	2,053	178	1,127	448
Aug 01, 2005	2,053	178	1,127	448
▶ September, 2005	1,512	161	812	539

You can control the width of this column and the amount of indenting using the properties **Single Indented Column Width** and **Indentation**, respectively.



Note that the indented option requires the following:

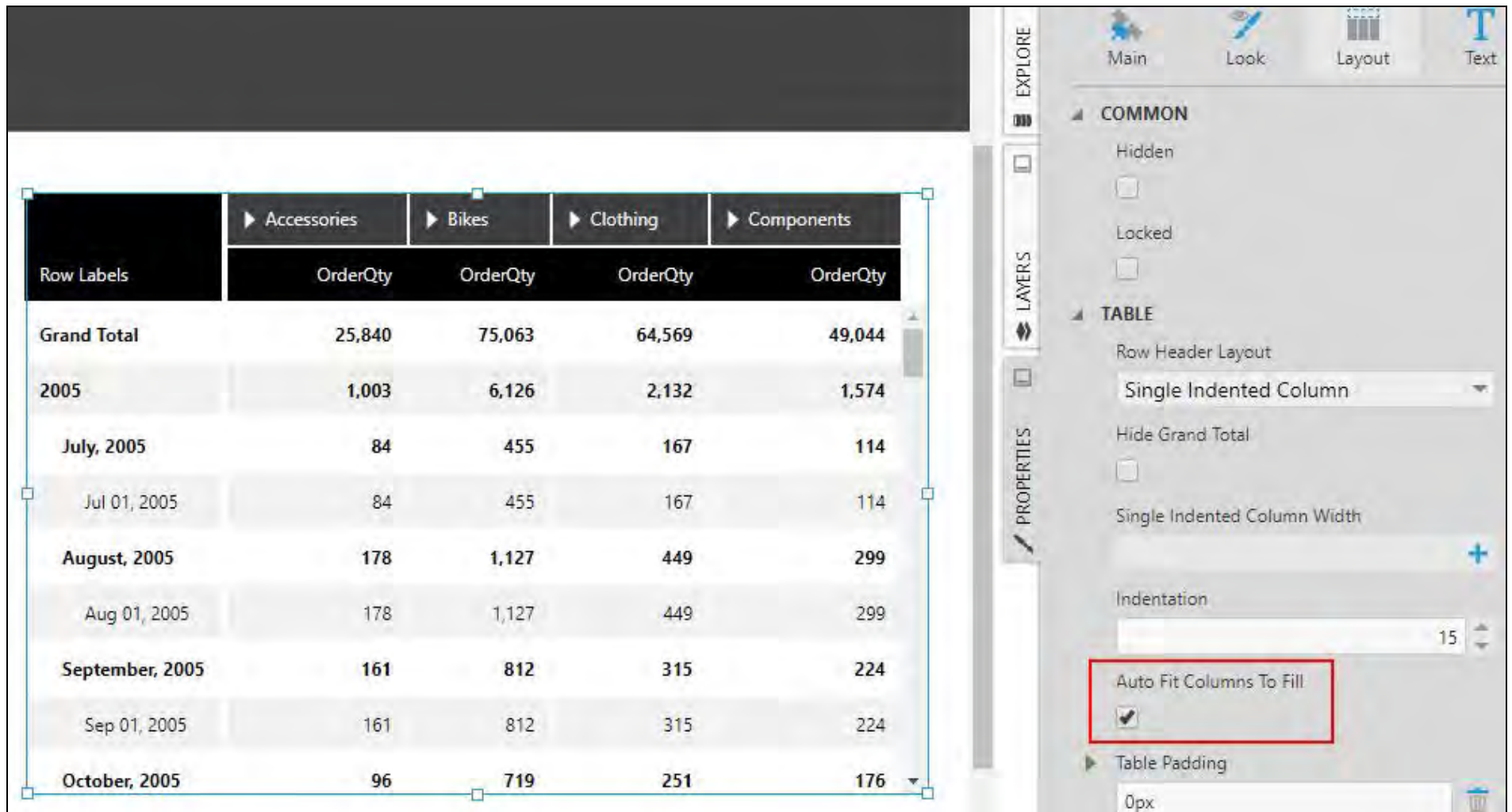
1. Totals must be enabled on the metric set. To find this setting, click the **Edit** button in the Data Analysis Panel and set **Shown Totals**. The grand total can be hidden using the table's Hide Grand Total property.
2. The table must be set to show totals at the top.

Auto Fit Columns to Fill

By default, columns are automatically sized to fit their content. When you resize a table wider than is needed, you'll see an area of white space.

	► Accessories	► Bikes	► Clothing	► Components	
Row Labels	OrderQty	OrderQty	OrderQty	OrderQty	
Grand Total	25,840	75,063	64,569	49,044	
▲ 2005	1,003	6,126	2,132	1,574	extra white space
▲ July, 2005	84	455	167	114	
Jul 01, 2005	84	455	167	114	
▲ August, 2005	178	1,127	449	299	
Aug 01, 2005	178	1,127	449	299	

In the Properties window's **Layout** tab, select the **Auto Fit Columns To Fill** option to have the columns sized to fit the table's available width.



The screenshot displays the Logi Symphony v24 interface. On the left, a table visualization is shown with the following data:

Row Labels	Accessories	Bikes	Clothing	Components
Grand Total	25,840	75,063	64,569	49,044
2005	1,003	6,126	2,132	1,574
July, 2005	84	455	167	114
Jul 01, 2005	84	455	167	114
August, 2005	178	1,127	449	299
Aug 01, 2005	178	1,127	449	299
September, 2005	161	812	315	224
Sep 01, 2005	161	812	315	224
October, 2005	96	719	251	176

On the right, the 'PROPERTIES' panel is visible, showing settings for the table. The 'Auto Fit Columns To Fill' checkbox is checked and highlighted with a red box.

For more information, see:

- [Sorting a Table Visualization](#)
- [Visualization Tab Examples](#)



- Archive of documentation for Logi Symphony v24

- [Expand and Collapse Hierarchy Members](#)
- Script Library: [Table](#)

Using a Chord Diagram

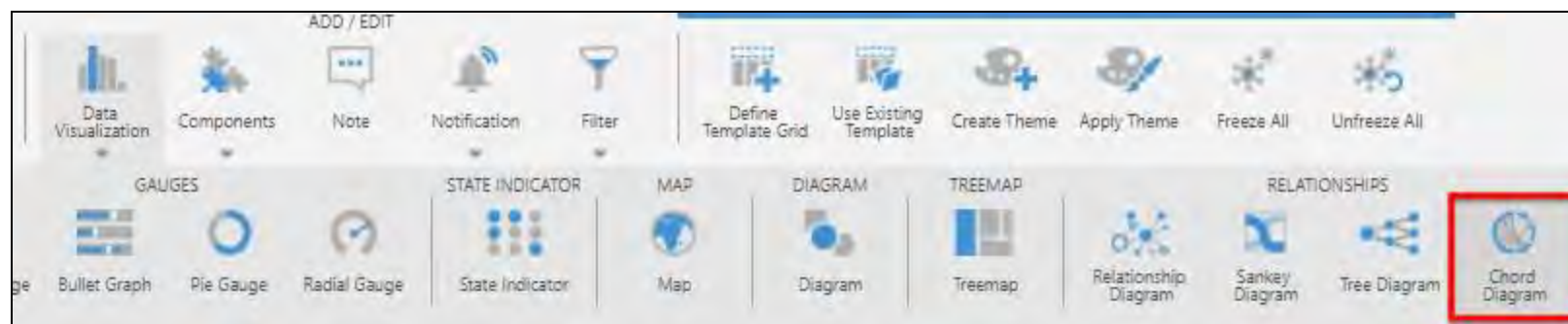
This applies to: *Managed Dashboards, Managed Reports*

A chord diagram displays interrelated data arranged around a circle, and the quantities between each pair of items.

While other relationship visualizations often show multiple levels of a hierarchy or multiple clusters, chord diagrams visualize the relationships between items in a single level or set.

Add a Chord Diagram

In the toolbar, choose Data Visualization or Re-Visualize, and select Chord Diagram.



If you have a blank chord diagram and have not added data yet, drag a **hierarchy** or a **column** identifying items to Rows in the Data Analysis Panel.

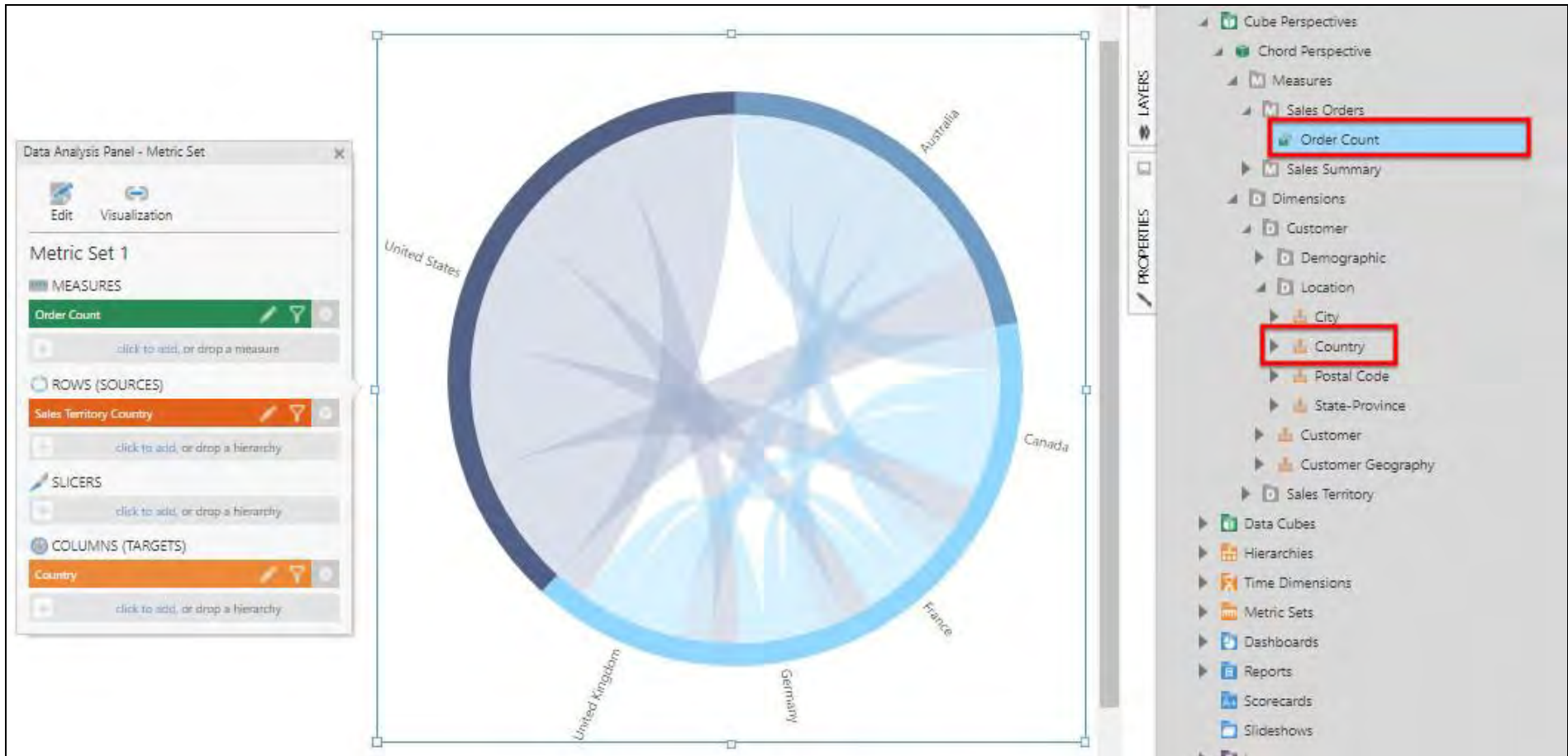


The diagram displays as a circle with "nodes" for each item.

Drag a second **hierarchy** or **column** identifying items to Columns in the Data Analysis Panel.

To get the most out of a chord diagram, both hierarchies should refer to the same items, but one should represent a *source*, such as the "from" field of a message or a shipping origin, and the other should represent a target, such as the "to" field of a message or a shipping destination. Assign sources to **Rows** and targets to **Columns**.

Drag a **measure** (numeric data) to Measures in the Data Analysis Panel. This measure is used to visualize the quantities transferred from each source to each target as semi-transparent filled "links" of varying widths.



Two *Auto Color Rules* are created based on the measure: one for the nodes and one for the links. You can modify the settings of each rule by switching to the **Visualization** tab on the Data Analysis Panel and clicking the **brush** icon next to the respective Color heading, or by going to the Look section of the Properties window and selecting the respective **Auto Color Rule**.

If you prefer to use a palette of colors and assign each node a color in sequence, you can delete the Auto Color Rules or un-assign the measure from under Color in the Data Analysis Panel. The color palette can be customized in the Properties window's Look tab.

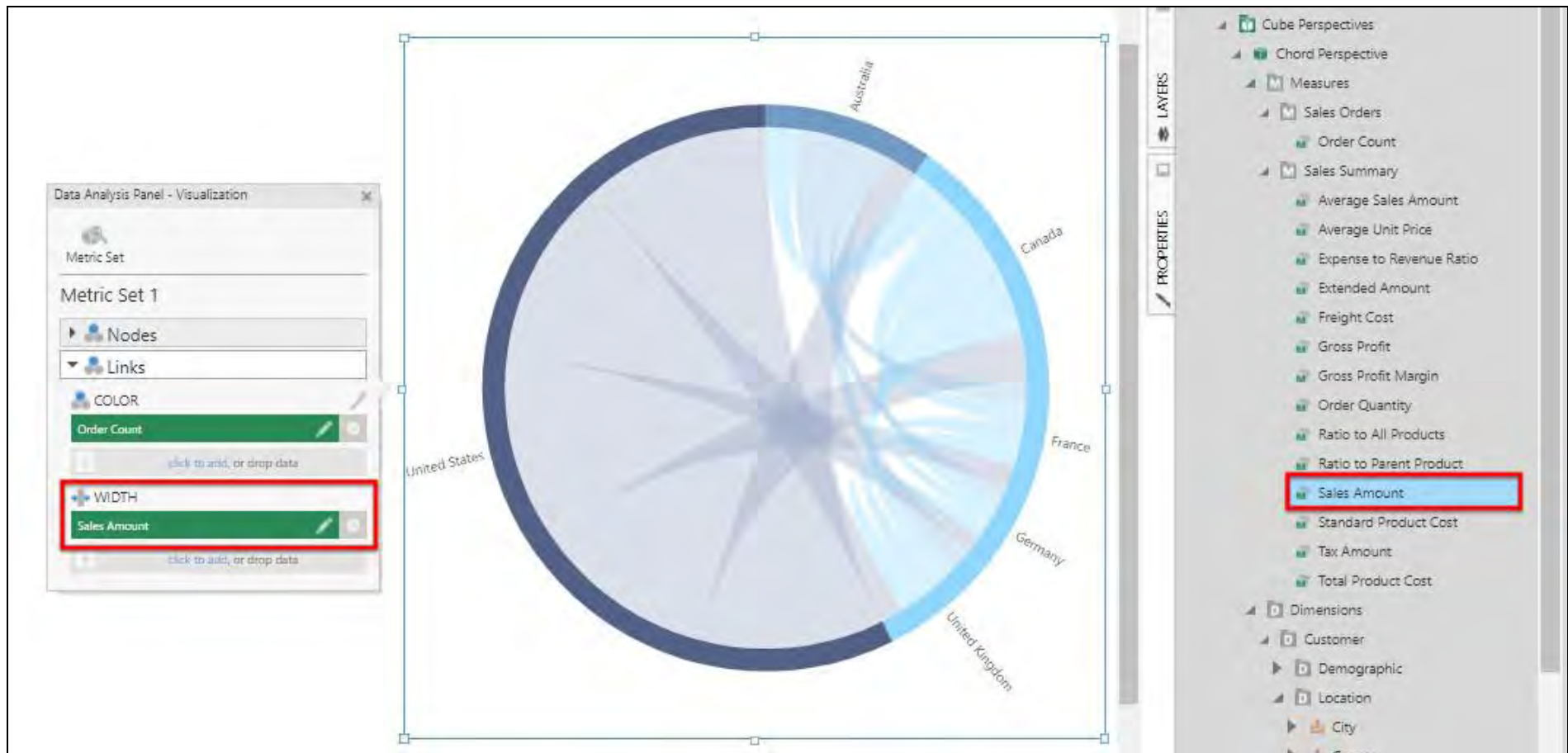
Change the Link Width Measure

The first measure selected when visualizing as a chord diagram is normally used automatically to determine the widths of the links between each pair of nodes. You can assign or change which measure is visualized as links as follows:

Select **Visualization** in the Data Analysis Panel.



Click **Links** and find the Width heading. You can remove a measure here if one is already assigned, and add a measure to use for determining link widths.



The width of each link is now defined by this measure's values.

For more information, see:

- [Setting Up the Visualization](#)
- [Set Up States on a Metric Set](#)
- [Using a Relationship Diagram](#)



- Archive of documentation for Logi Symphony v24

- [Using a Sankey Diagram](#)
- [Using a Tree Diagram](#)



Using a Map Visualization

This applies to: *Managed Dashboards, Managed Reports*

Maps display geographic information in the form of shape, path, and symbol elements. Then you connect these elements to data so that their appearance will change based on data values.

- **Shapes** - Areas defined by boundaries on all sides, such as continents, countries, states/provinces, or lakes.
- **Paths** - Linear features such as roads or rivers, or straight lines drawn by the map to connect pairs of symbols. These can come from a map resource, or from a data source referring to [pairs of symbols](#).
- **Symbols** - Location points on a map such as a city, office, or vehicle. These can either come from a map resource or from [coordinates in your datasource](#).



Map Resources

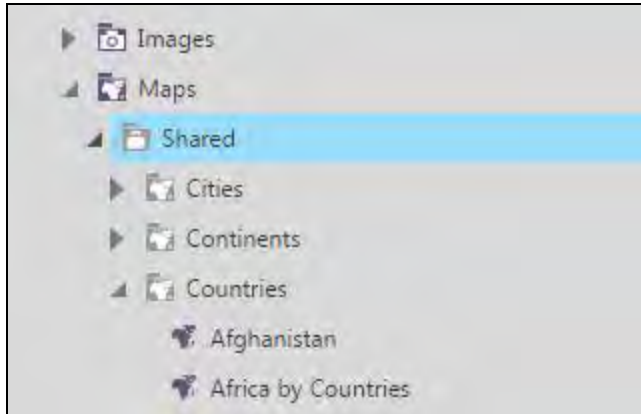
Map elements (shapes, paths and symbols) are saved as *map resources*, which are one of the file types you can find in the [Explore window](#). Map visualizations can automatically find and load a map resource that matches your data, or you can [choose](#) one yourself by dragging it onto your map.

When symbols are displayed at [coordinates that come directly from your data source](#), map resources are still displayed in the background as context, by default.

Built-In Maps

The [Global project](#) includes a set of built-in map resources that you can browse or search for in the Explore window. You can find these in the Shared sub-folder under the Maps folder.

The built-in maps are categorized into different folders such as Cities, Continents, Countries, and States and Provinces. If your data matches map elements within this set of maps, a matching one will be loaded automatically. You can also [drag map resources](#) onto your map that you prefer to use with your data or as additional details to display.



In addition to individual map resources, map visualizations have built-in layers displayed in the background as context, which change automatically as you zoom in. Other map resources are displayed on top. You can view a dashboard containing a blank map visualization with no data to see these layers: you are initially presented with the *Continents* layer, which changes to the *Countries* layer as you zoom in, and then to *States/Provinces*.





Your data might match directly with these layers, for example if your data contains country names. You can use the zooming behavior described above with your data if it contains a multi-level hierarchy that matches two or more of these layers, and the Top Level is set to select multiple levels at once: for example, you can zoom in when viewing to drill down from continent data to country data, then to states & provinces. See [Change Levels in a Hierarchy for a Metric Set](#) for more information about selecting multiple levels.

ESRI Shapefiles

You can also import shapefiles containing map elements besides the ones already included. Once imported, they can be loaded automatically if they match with your data, or you can [drag](#) them onto your map.

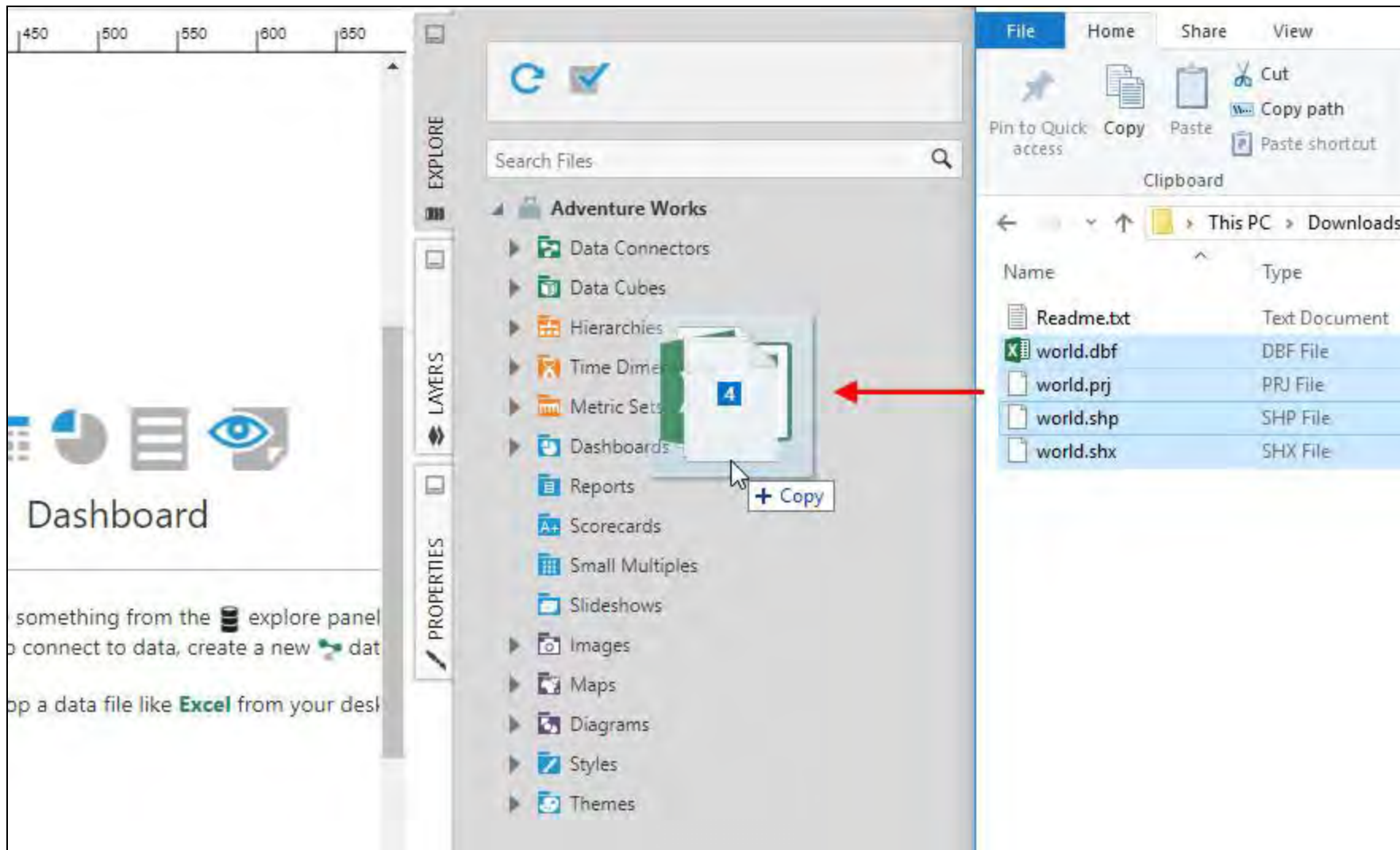
The ESRI (Environmental Systems Research Institute) [shapefile](#) format is a popular file format for storing map data. Shapefiles can be found from a wide variety of online sources, including many government agencies around the world.

An ESRI shapefile is actually composed of several separate files: a main SHP file, an SHX index file, a DBF database file, and optionally more that can help ensure shapefiles from different sources are read correctly. For example, a map of the United States might be represented by the following files:

- **usa.shp** - Main shapefile which contains definitions for one layer of geometry elements (either polygons, polylines, or points).
- **usa.shx** - Index file containing information about how to read the shape data from the SHP file.
- **usa.dbf** - DBF (dBASE) file which defines a database table of attribute values. Contains one record (or row) per geometry element.
- **usa.prj** - (Optional) A Well-known Text (WKT) description of the projection being used to allow for conversion to standard WGS-84 coordinates.
- **usa.cpg** - (Optional) Supported in version 23.3 and higher, specifies the text encoding used in the DBF file as a code page name or identifier. For example: UTF-8.

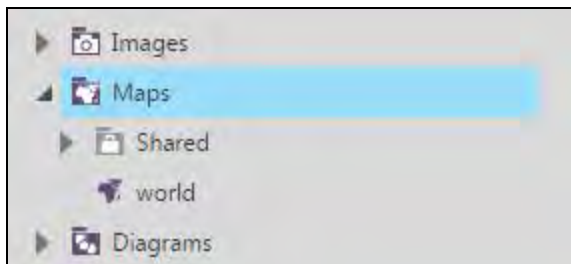
If you downloaded shapefile data in the form of a ZIP file, you'll need to extract the contents to an actual folder first.

Drag the set of 3-5 **files**, like the ones mentioned above from Windows Explorer or Finder, and drop it over the Explore window.



To start using it in a map right away, drop it directly onto your dashboard or other view while editing instead of onto the Explore window.

Either way, the shapefile is imported, so you and others can now find it under the Maps folder of your project in the Explore window.



You can also right-click or long-tap the **Maps folder**, choose **Upload File**, then select the **files** to upload rather than dragging them.

Connecting a Map to Data

As a simple example, consider an Excel file that contains two columns of data:

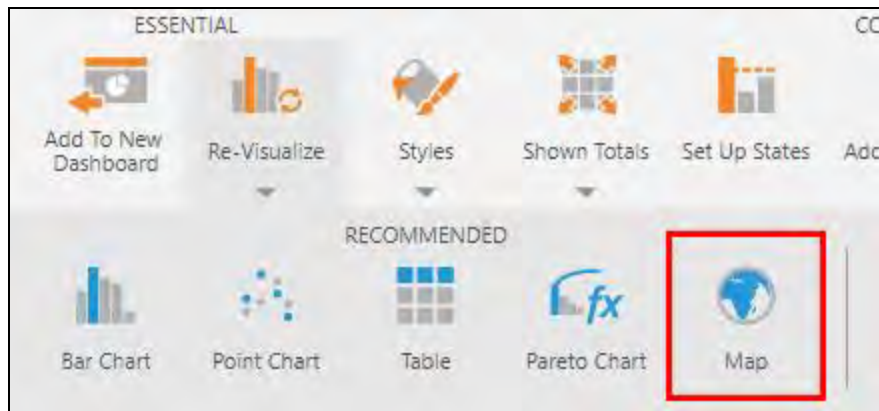
- A column of text values that match the names of some known map features (for example, country names).
- A column of numeric values that can be used as a measure (for example, sales figures for each country).

sales-data.xlsx		
	A	B
1	Country	Sales
2	Canada	1000
3	United States of America	2000
4	Mexico	3000
5	China	4000
6	Germany	5000
7	Brazil	6000

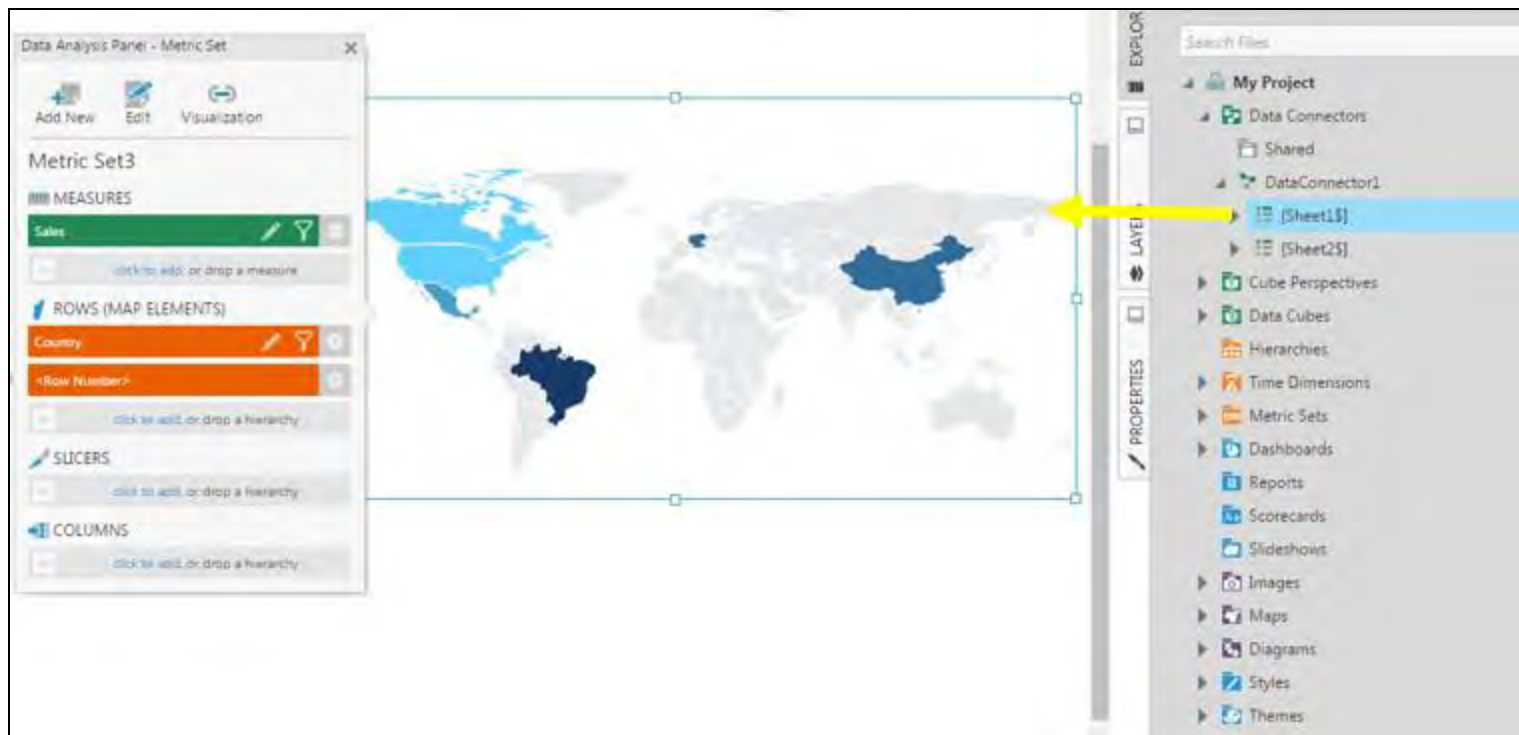
To [import this Excel file](#), drag it from your desktop onto the Explore window, or onto the canvas of a metric set or dashboard.

Add Data To the Map

After selecting your data, you can re-visualize it to a map from the toolbar. If map resources were found to match your data, it will be located under Recommended.



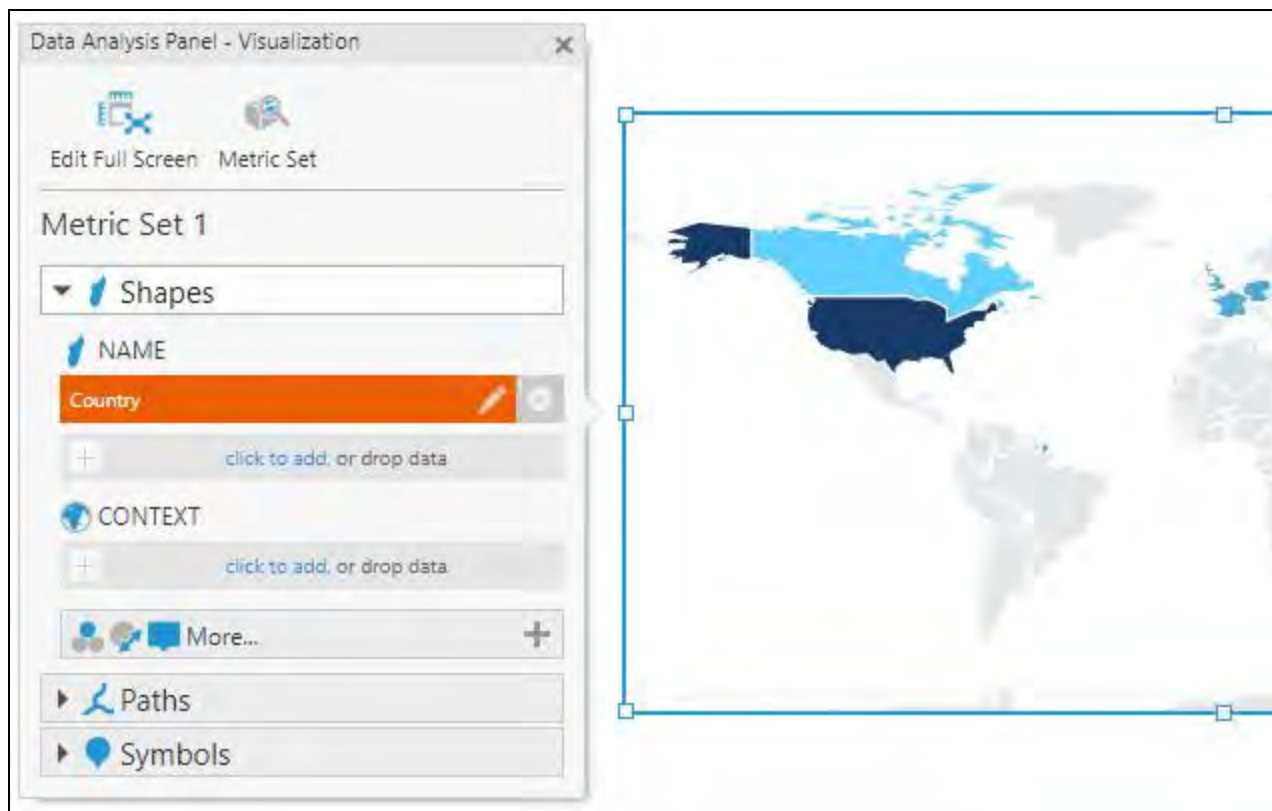
Or add a new map to a dashboard or other view, then drag your **data** (e.g., *Sheet1* from the example Excel data connector) and drop it onto the map.



The data that best matches with the element names in the map resource will be connected automatically in the map visualization. You can then modify these automatically-assigned connections in the Visualization tab of the Data Analysis Panel.

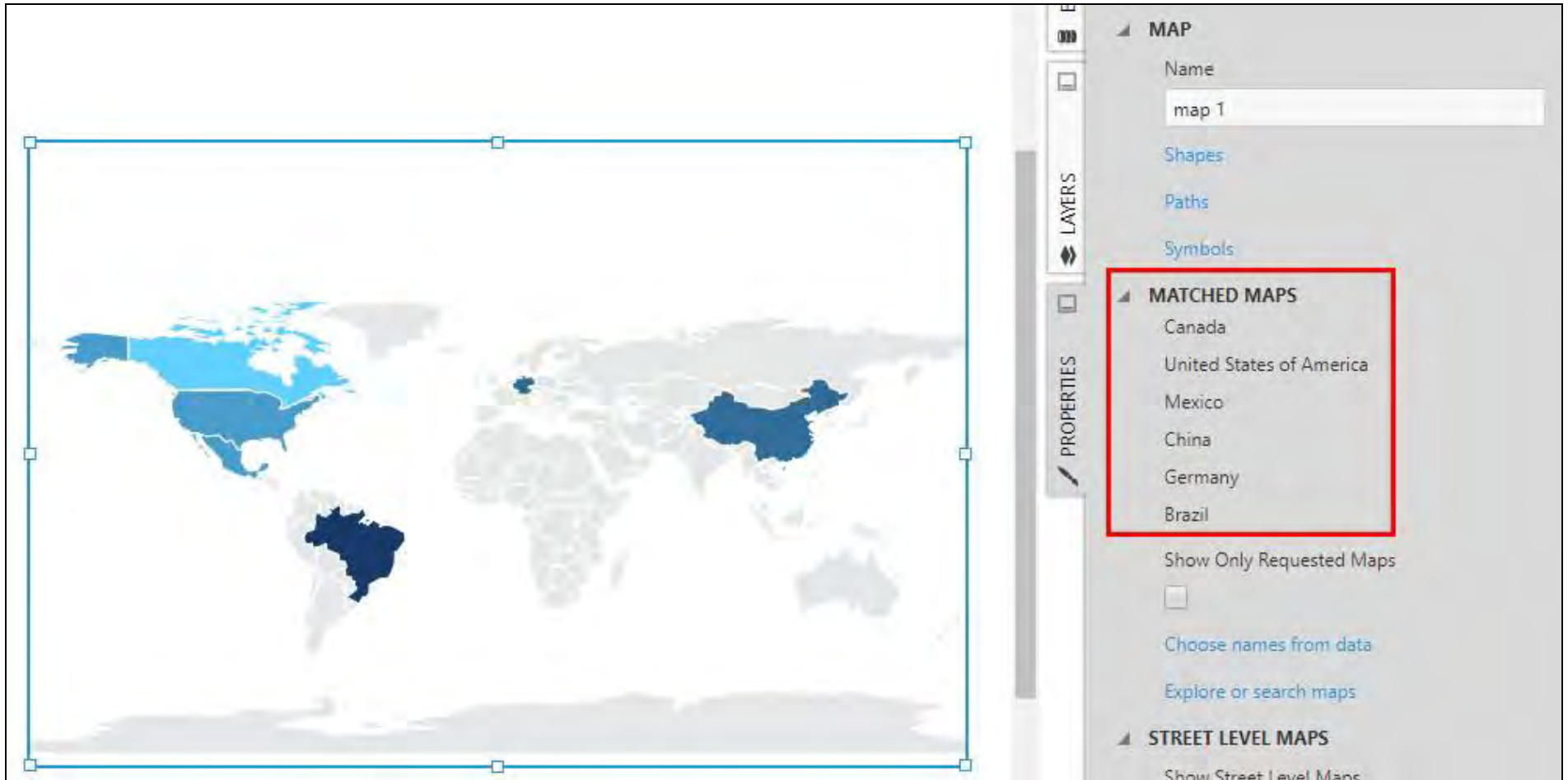
Matching With Map Elements

To determine how your data is matched with map elements, go to the Data Analysis Panel for the map, and click **Visualization**. Expand **Paths** or **Symbols** as needed depending on what type of element corresponds to your data.



The Name data specifies how the matching is done between map elements and the data from the metric set. In the example above, the *Country* hierarchy from the Excel data contains names that match the shape names.

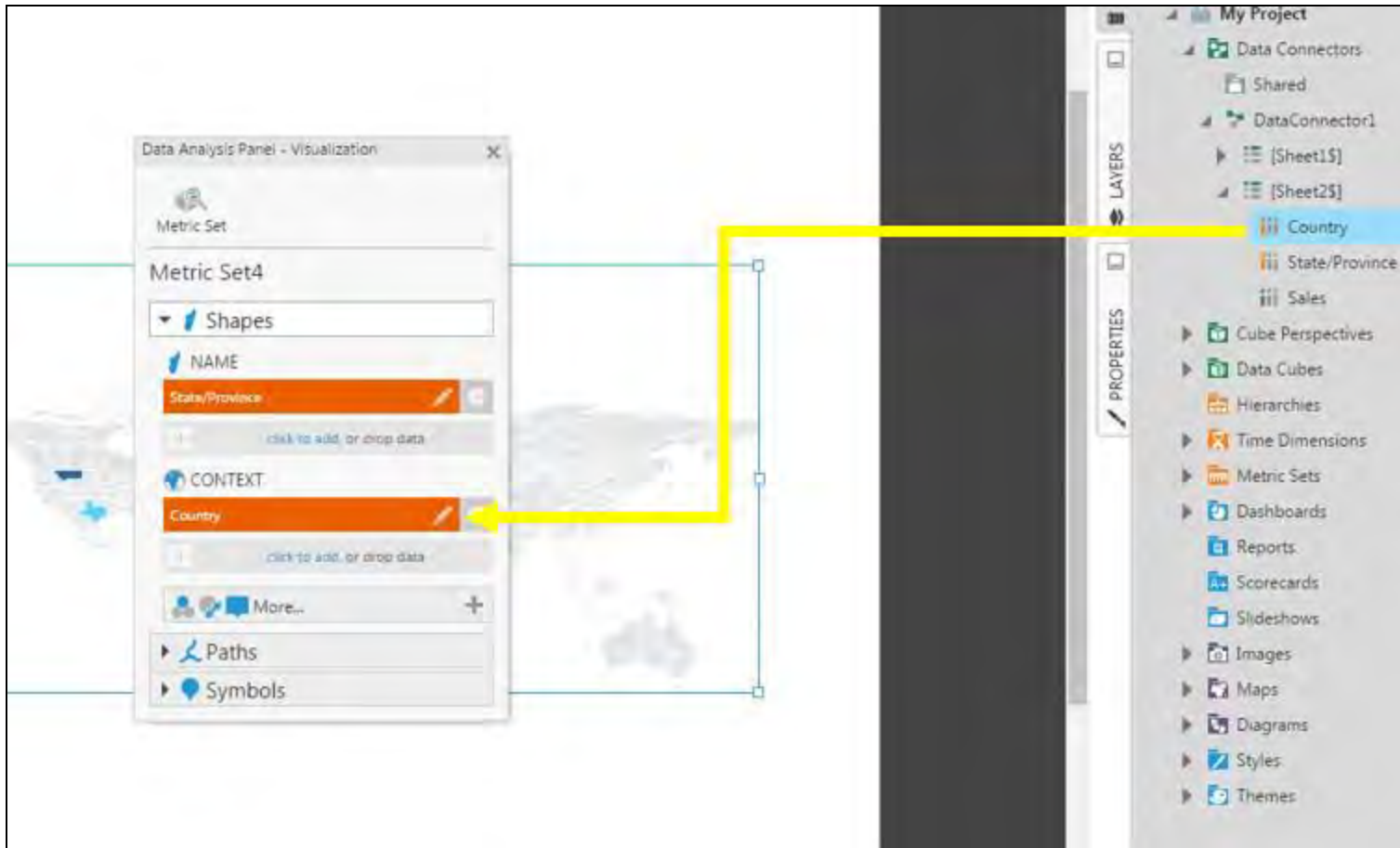
To see the map resources that were loaded automatically, go to the Properties window and find the Matched Maps section. This section will also indicate if there are any Missing Names that were present in your data without a matching map element.



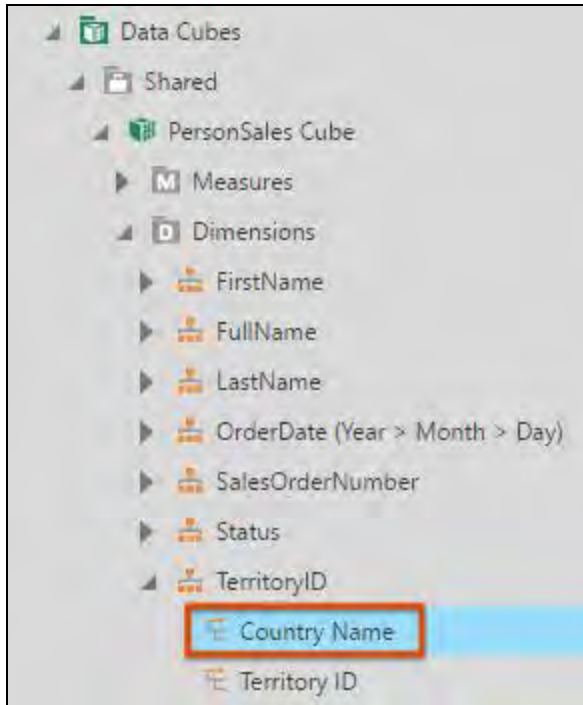
In case there is more than one potential match for any names in your data, assign another column or hierarchy as **Context**. For example, the data for *Montana* in the map below matches both with a US state and with a province in Bulgaria.



In this example, a *Country* column is needed as context in addition to the *State/Province* names.



When using a multi-level hierarchy with a lower level currently selected, the upper level can act as context instead, without assigning data separately as context. In this case, set the Top Level of the hierarchy to include the upper level, or drag the **upper level** from the Explore window onto the map.



Compatible Names

When matching data with map elements, both the names and alternate names included in the map resource will be used if they uniquely identify the elements.

If there is any data without a matching map element, besides changing your data or modifying the shapefile, you can also set the Compatible Name property for an element that you know matches a particular name value in your data.

Find the shape, path, or symbol from the Main tab of the Properties window, or click or right-click the **element** directly on the map to select it and open its properties.

EXPLORE

LAYERS

PROPERTIES

Search Properties

UNITED STATES OF AMERICA

COMMON

Shape Name

United States of America

Alternate Shape Names

United States of America,USA,United States,US,U.

Shape Compatible Name

USofA

Shape Context

North America,Americas,Northern America

APPEARANCE

Fill

Stroke

Stroke Width

TEXT

Tooltip Text

Label



Note: In the case of multiple rows matching a shape because of alternate names, you can use the Shape Compatible Name property to indicate which name to use. This property takes precedence over the other names.

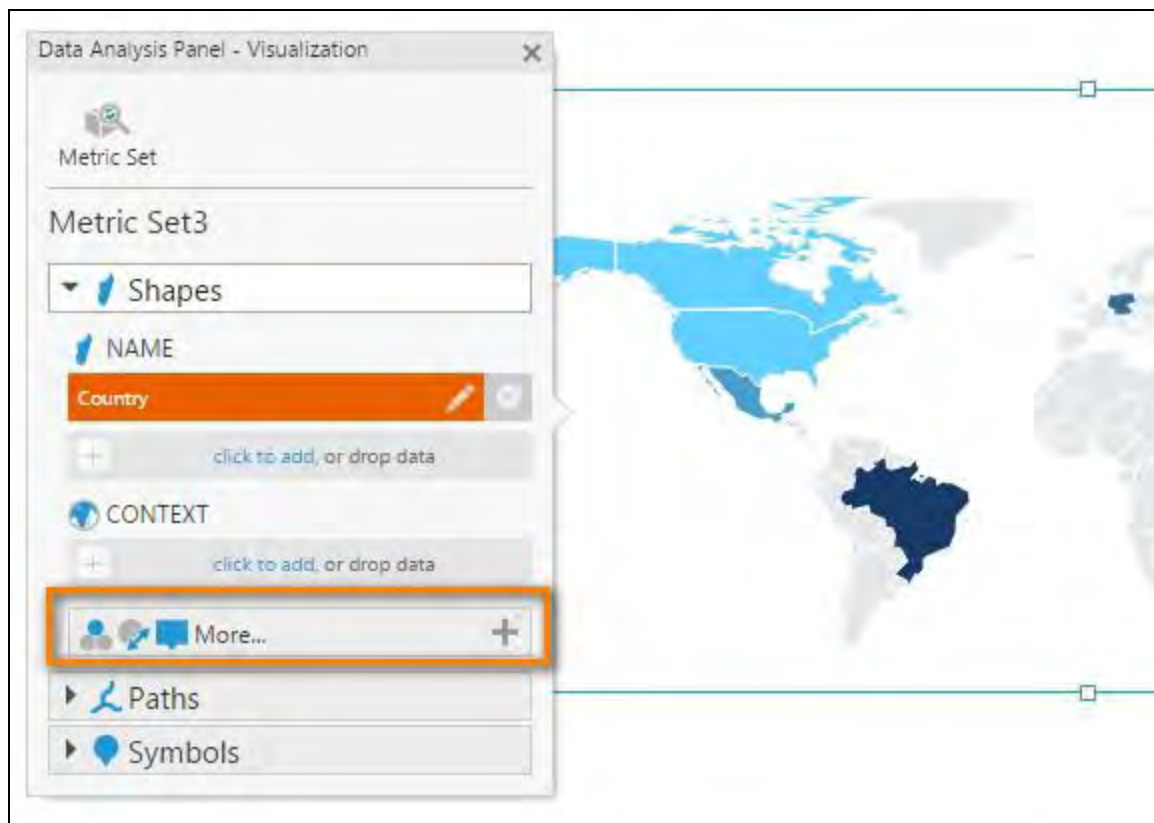
Populating Symbols or Path Connections From Data

Rather than matching with map resources, you can also populate symbols and/or paths connecting symbols directly from your data source by assigning their longitude & latitude coordinates or their names in the Data Analysis Panel's Visualization tab.

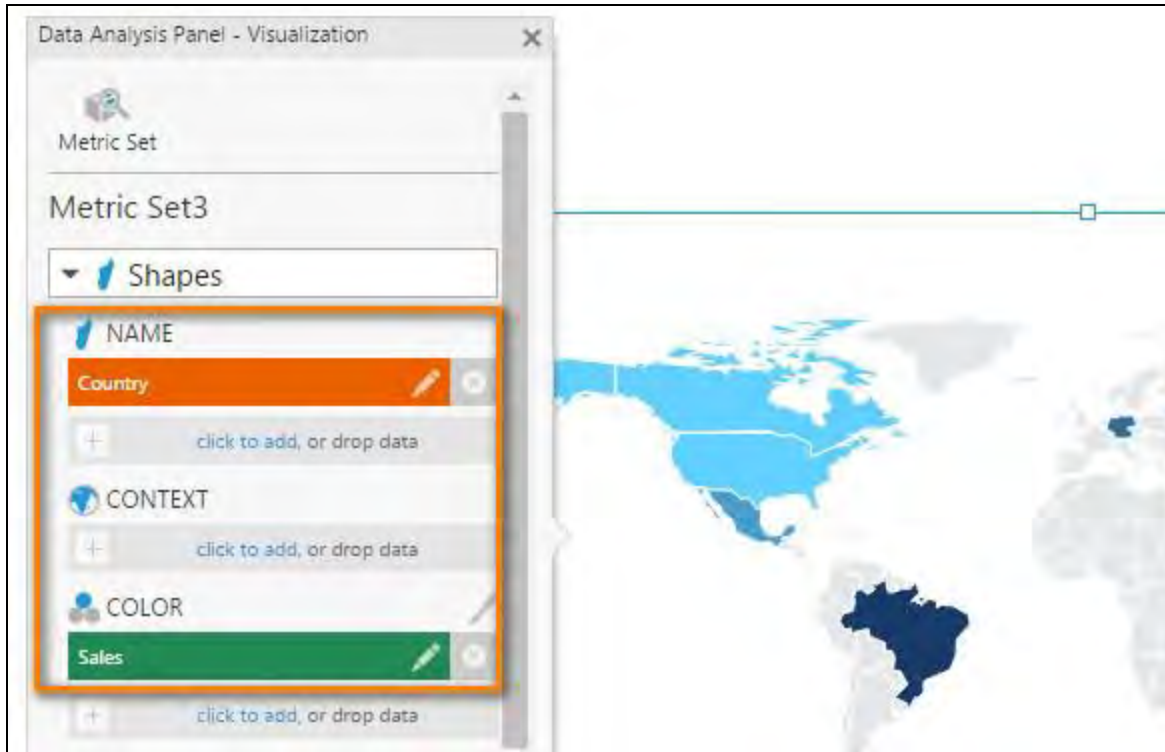
See [Displaying symbols on a map](#).

Colors and Sizes

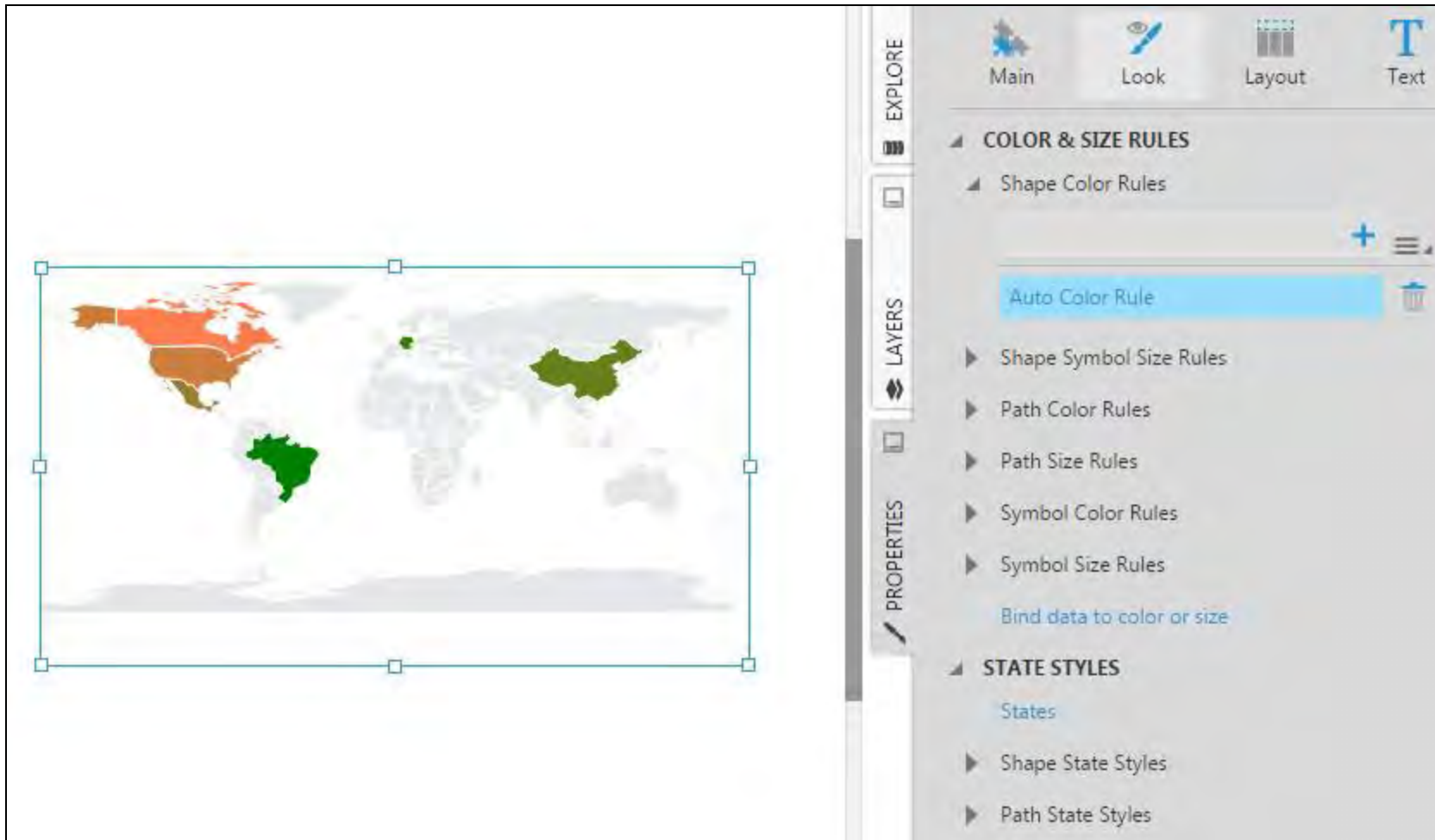
For the optional visualization choices, click the **More** button (if not clicked already) in the Data Analysis Panel's Visualization tab.



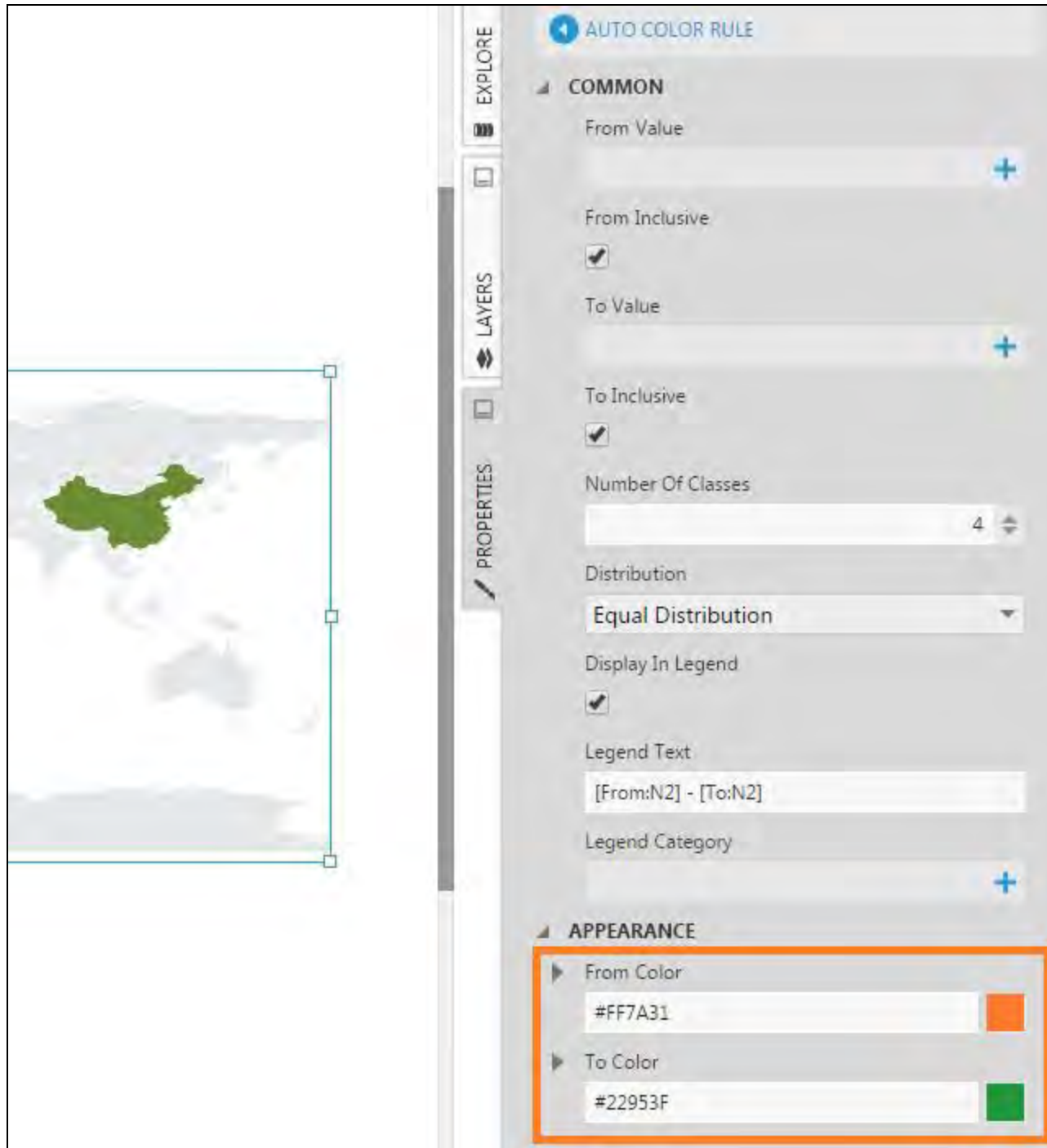
The data added under Shape Color in the image below means the shape colors change according to their *Sales* measure values. You can customize the actual colors and how they are assigned using the color rules in the Properties window.



In the Properties window's Look tab, find the color rules for each type of map element. You can modify the default Auto Color Rule, or add your own custom color ranges.



For example, change the auto color rule's From Color and To Color properties, or change the Distribution to determine [how values are assigned a color](#).



The screenshot displays the Logi Symphony v24 interface. On the left, a map shows a green landmass (likely Japan) on a light blue background. The right panel is titled 'AUTO COLOR RULE' and contains two sections: 'COMMON' and 'APPEARANCE'.

COMMON Section:

- From Value:** A text input field with a blue plus icon to its right.
- From Inclusive:** A checked checkbox.
- To Value:** A text input field with a blue plus icon to its right.
- To Inclusive:** A checked checkbox.
- Number Of Classes:** A numeric input field set to 4.
- Distribution:** A dropdown menu set to 'Equal Distribution'.
- Display In Legend:** A checked checkbox.
- Legend Text:** A text input field containing '[From:N2] - [To:N2]'.
- Legend Category:** A text input field with a blue plus icon to its right.

APPEARANCE Section:

- From Color:** A color picker set to #FF7A31, with a small orange color swatch to its right.
- To Color:** A color picker set to #22953F, with a small green color swatch to its right.

The 'APPEARANCE' section is highlighted with an orange border in the original image.



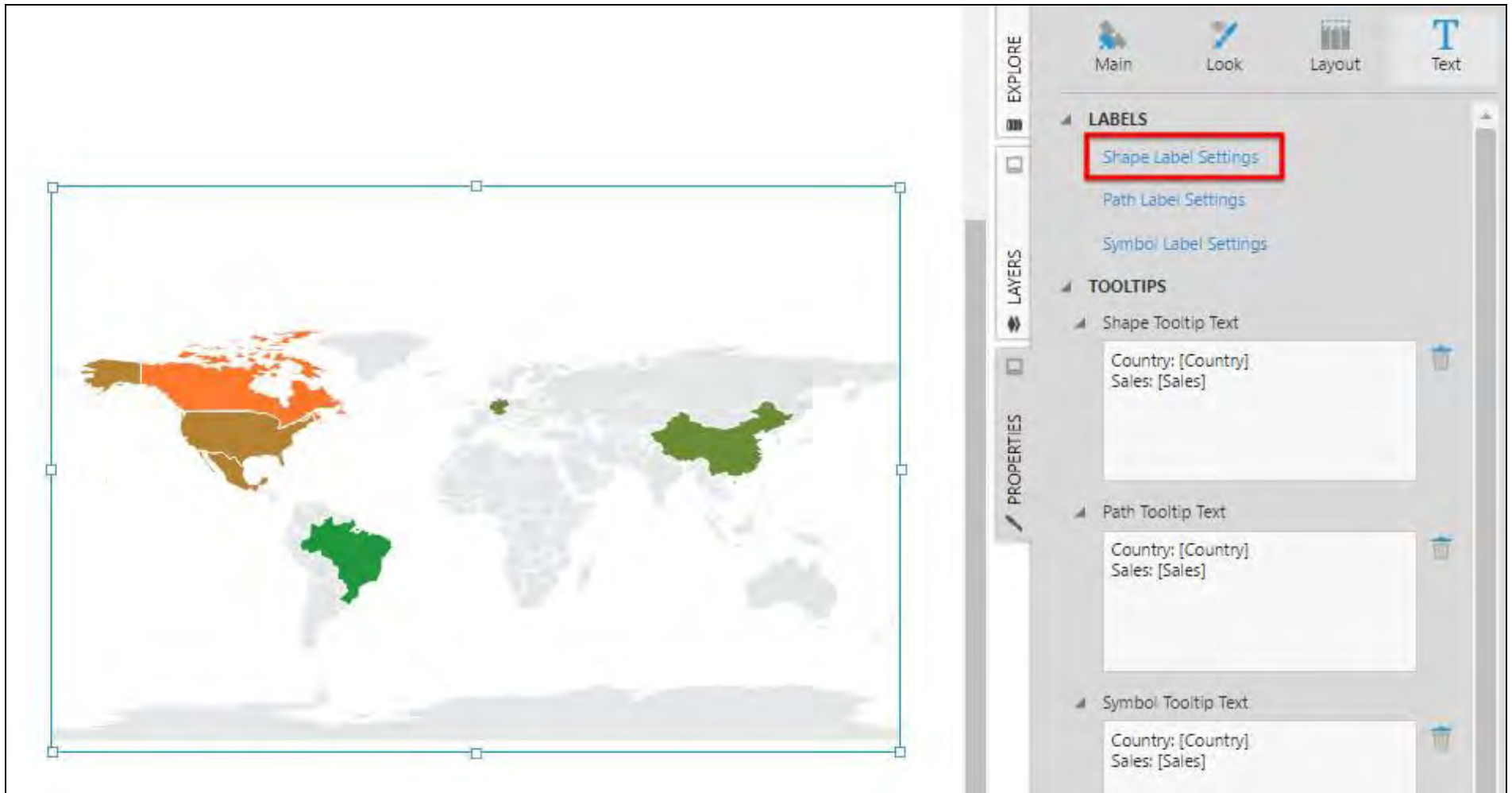
- Archive of documentation for Logi Symphony v24

When data is used to change map element sizes, such as when a measure is assigned to the shape Symbol Size, or the path or symbol Size, the size rules in the Properties window work the same way as color rules to determine the map element sizes. Symbol data can also be used to produce a heat map. See [Displaying symbols on a map](#) for more details and a walkthrough that customizes symbols as an example.

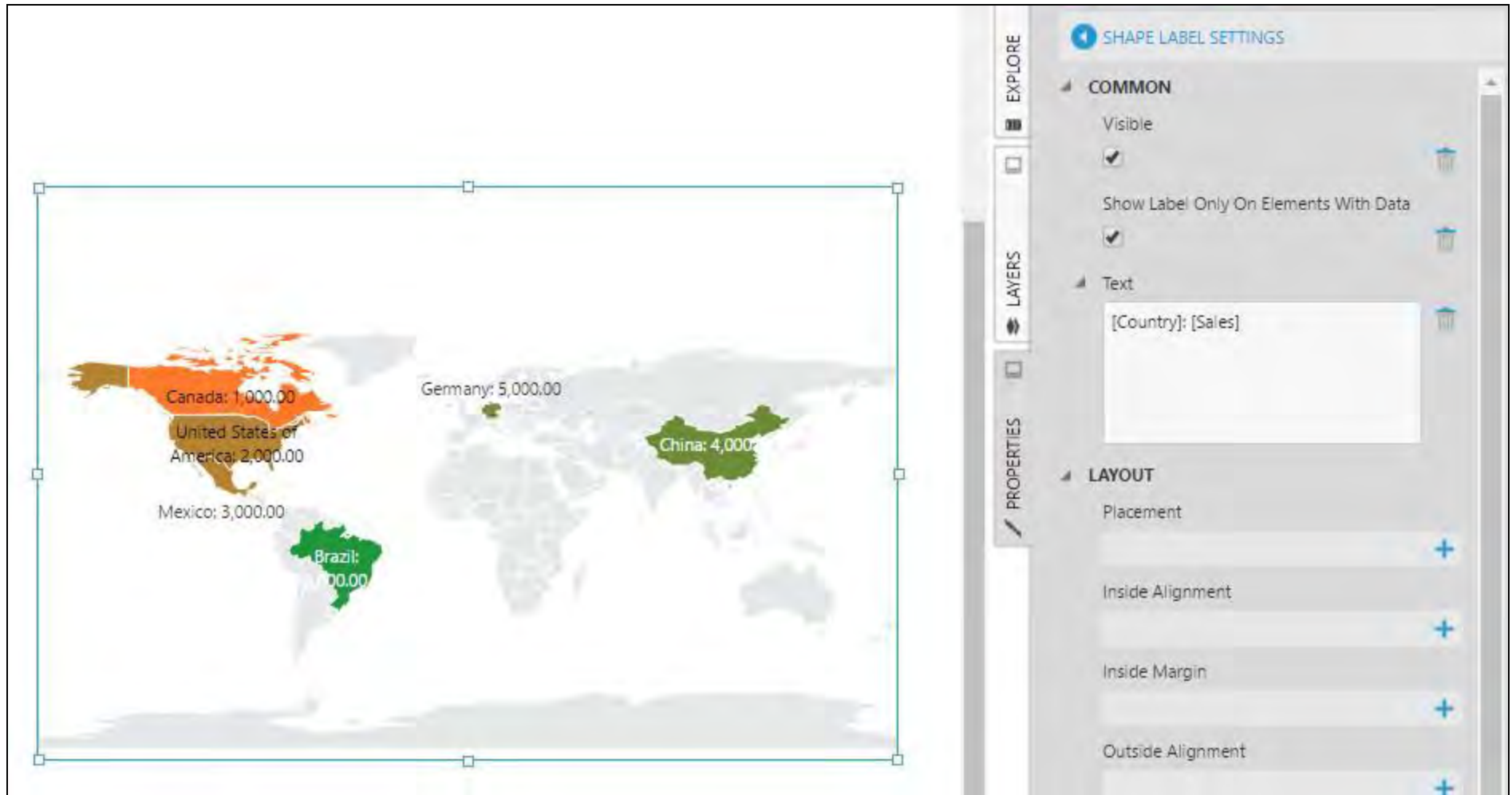
Labels

The Visualization tab in the Data Analysis Panel allows you to assign data you want displayed as a label for each map element.

To make labels visible on the map or to further customize them, go to **Properties**, click **Text**, and then **Shape Label Settings** (or choose path or symbol label settings).



Click the + icon under Visible to set the property and show the labels of all the shapes in the map. To hide labels not connected to data, do the same for Show Label Only On Elements With Data.



Note: You can apply the above two settings to the properties of an individual shape or other map element by setting its Label property.

Using a Map

When you want to interact with the map directly, go to the toolbar and click **View**. In [View mode](#), you can:

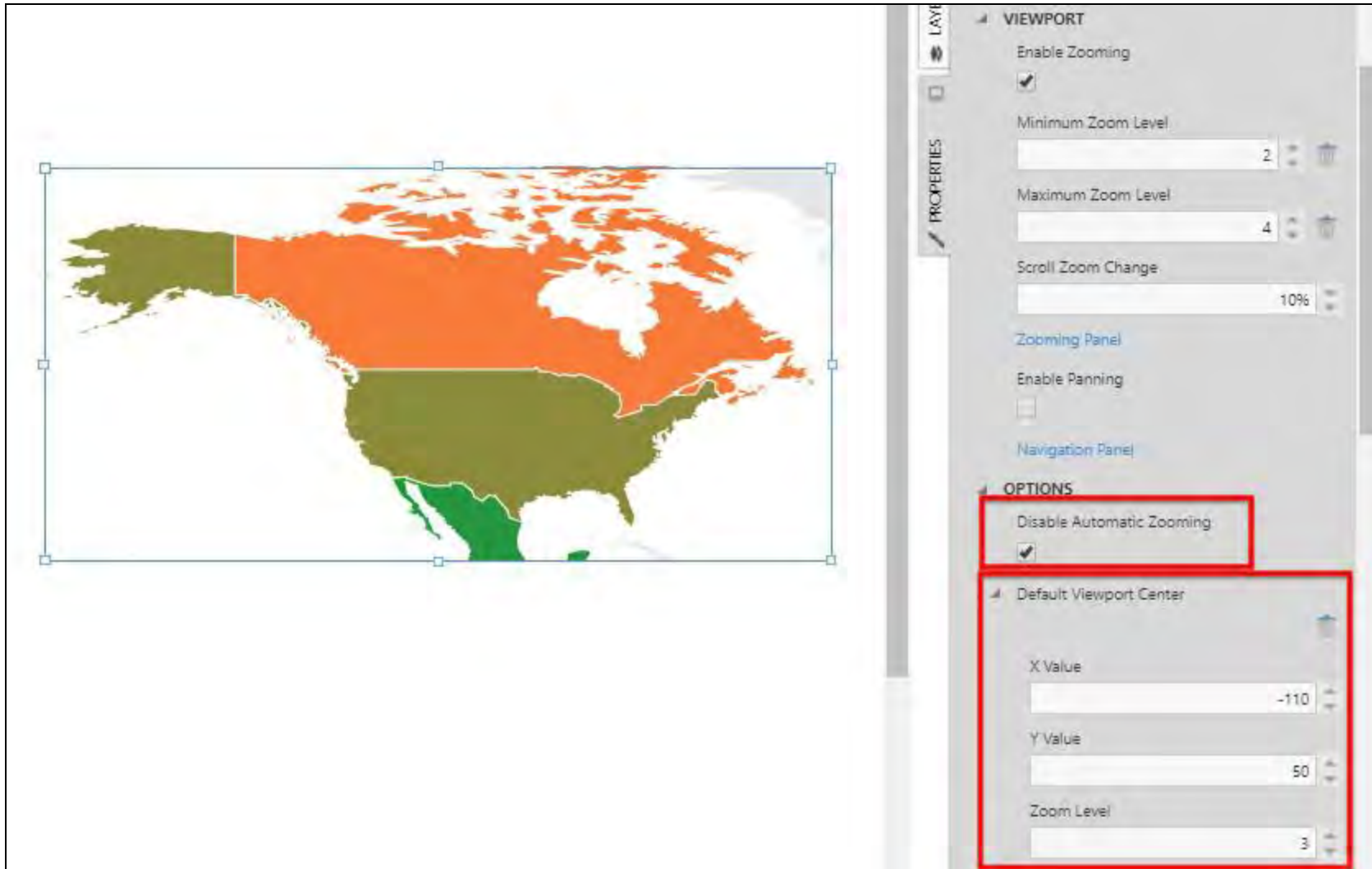
- Zoom in or zoom out on the map by using the mouse wheel, or a gesture on a trackpad or touch screen.
- Pan the map by dragging it in any direction.
- Hover over a shape on the map (long-press on a touch device) to view its corresponding tooltip popup with connected data values.
- Set up optional additional [interactions](#).

Note that the zooming and panning you do in [View mode](#) on a dashboard will be saved if you switch back to Edit mode, unless you [checked in](#) your dashboard before viewing.



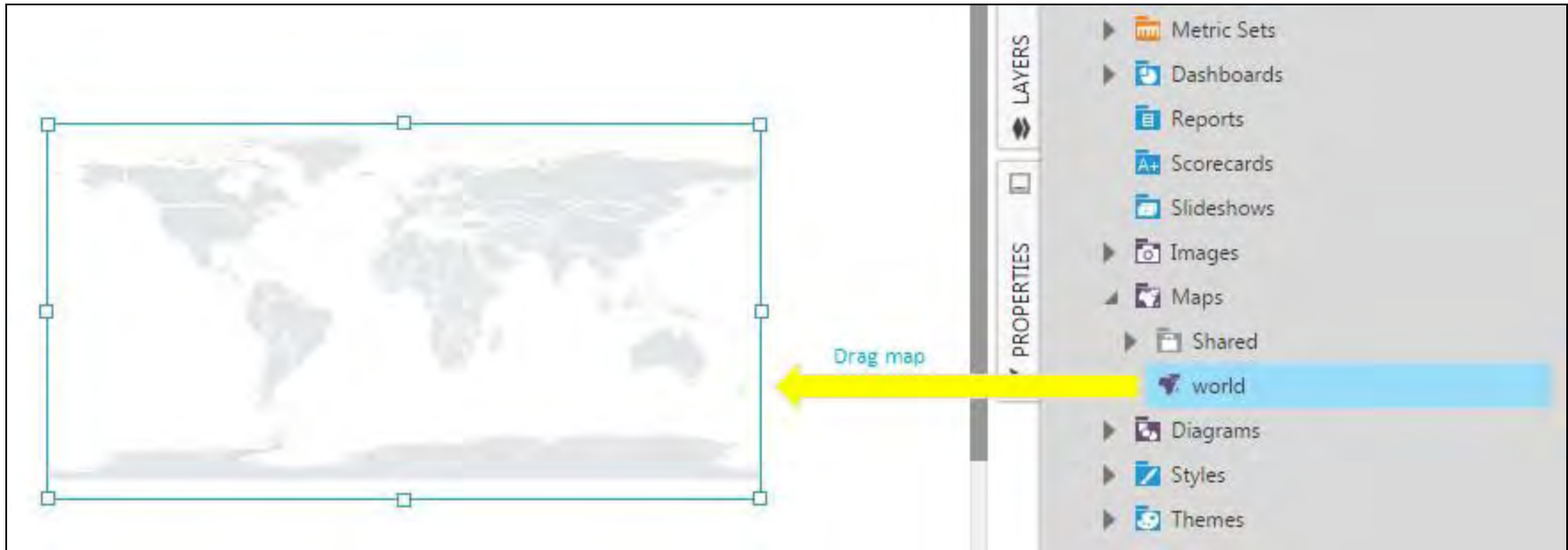
By default, Automatic Zooming is enabled, which means the viewport will automatically zoom and center over map resources displaying data whenever data loads. You can disable this behavior by using the **Disable Automatic Zooming** option in the Properties window.

The Default Viewport Center property enables you to indicate the initial position and zoom level of the viewport when Automatic Zooming is disabled from the Properties window rather than interactively. To activate this option click the + button under this property in the Properties window.

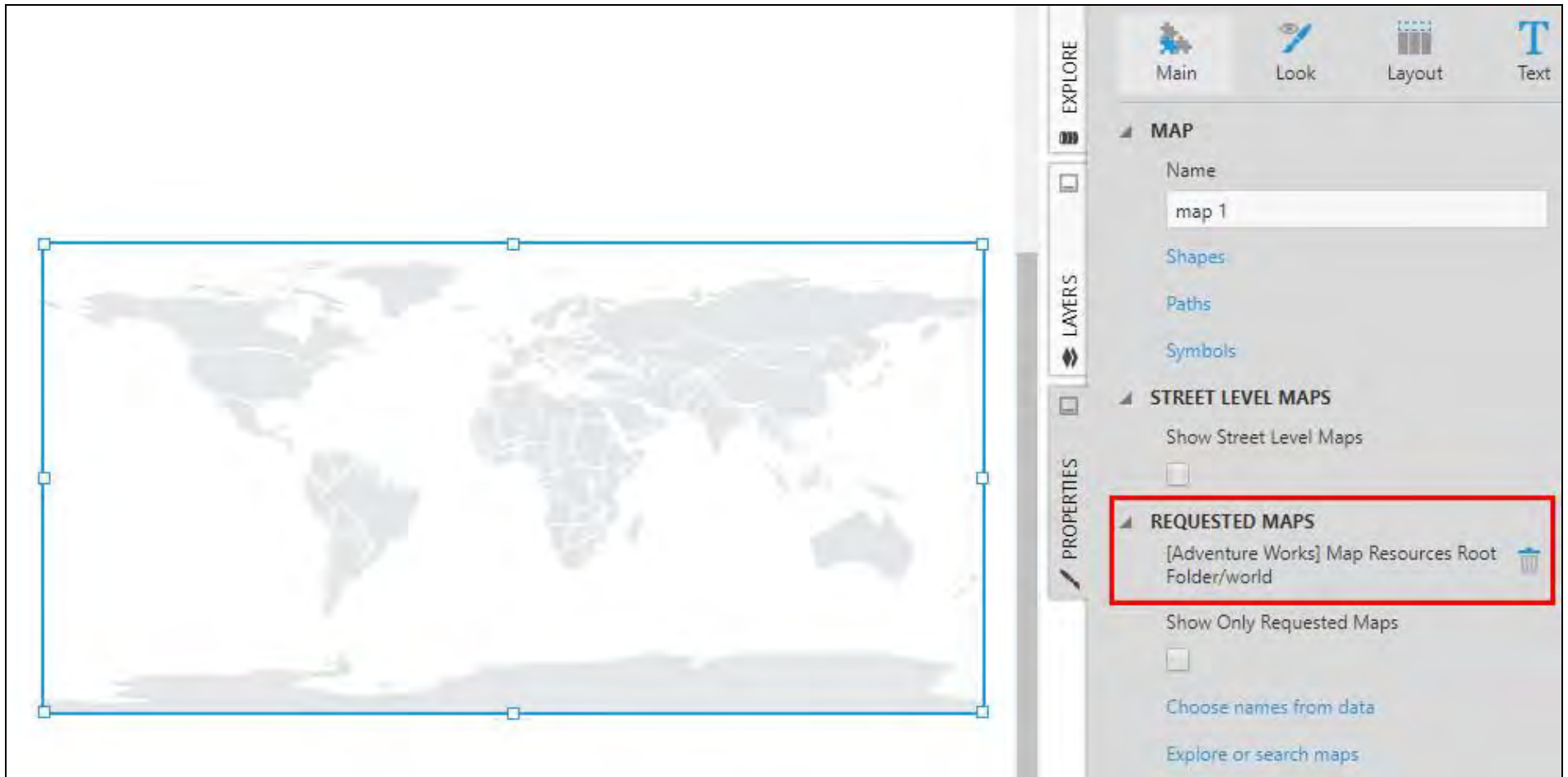


Choosing Map Resources

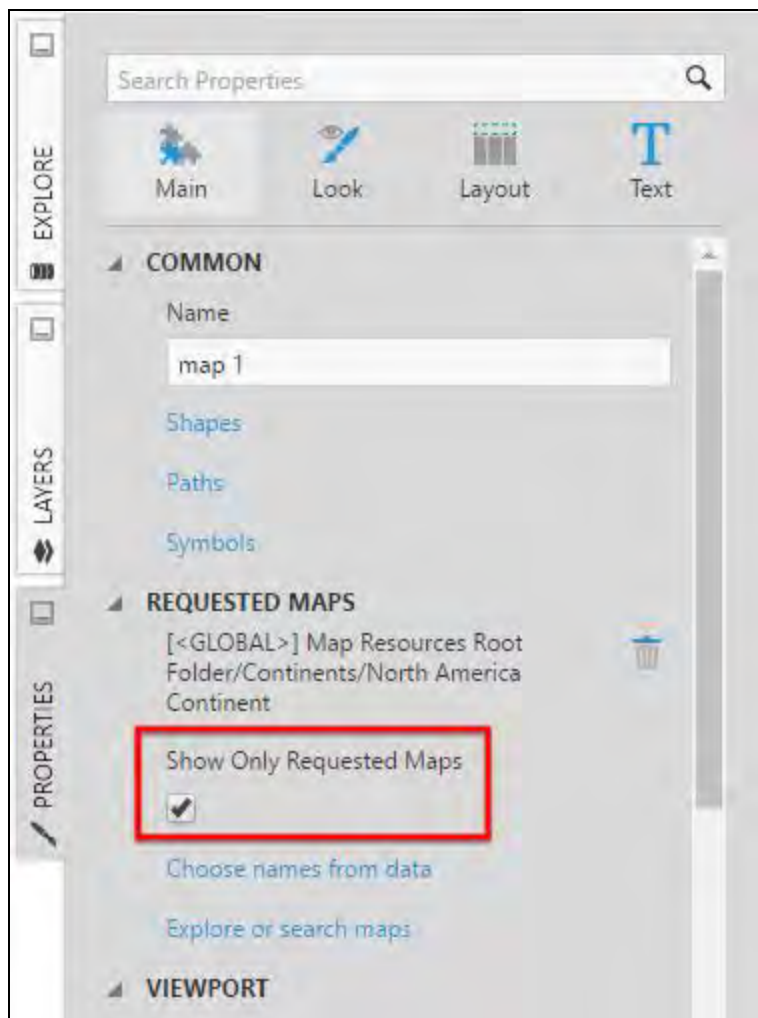
You can also choose map resources yourself to display, rather than allowing them to be matched and loaded automatically based on your data. In the Explore window, you can find or search for a map in the Maps folder.



Go to the Properties window with the map selected. Each requested map will be listed (including its project name and folder location).



Selecting the **Show Only Requested Maps** property displays only the map resources that you selected this way. The built-in world map layers will no longer be displayed and your data will no longer be used to automatically search for and load map resources.

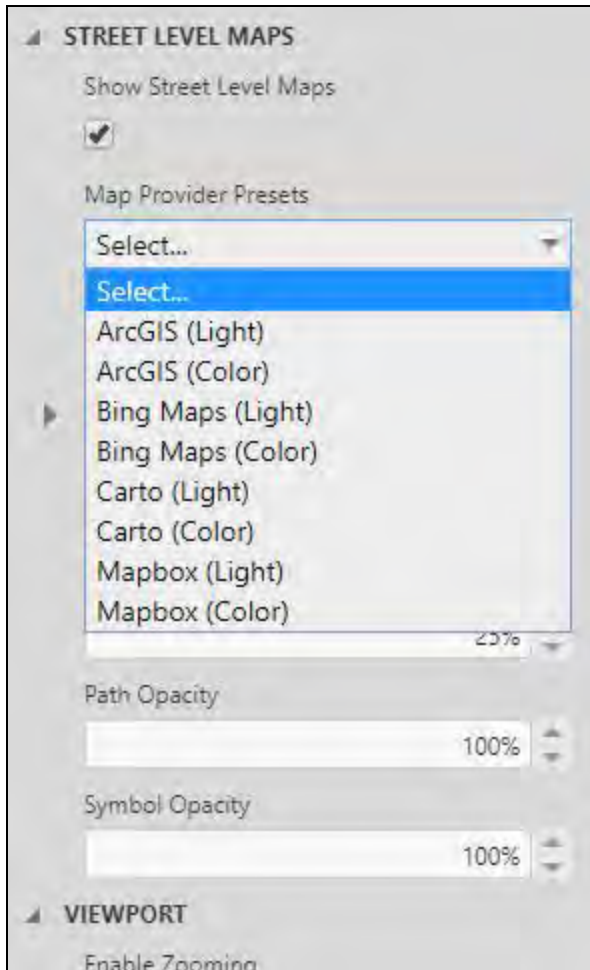


Show Street Level Maps

You can connect to a third-party map provider to display as context for your map content. This is often useful when zooming more closely into maps displaying [symbols](#), where street or city details are needed to understand the symbol locations. Map providers may also display other types of geographic information not easily displayed using shapefiles/map resources.

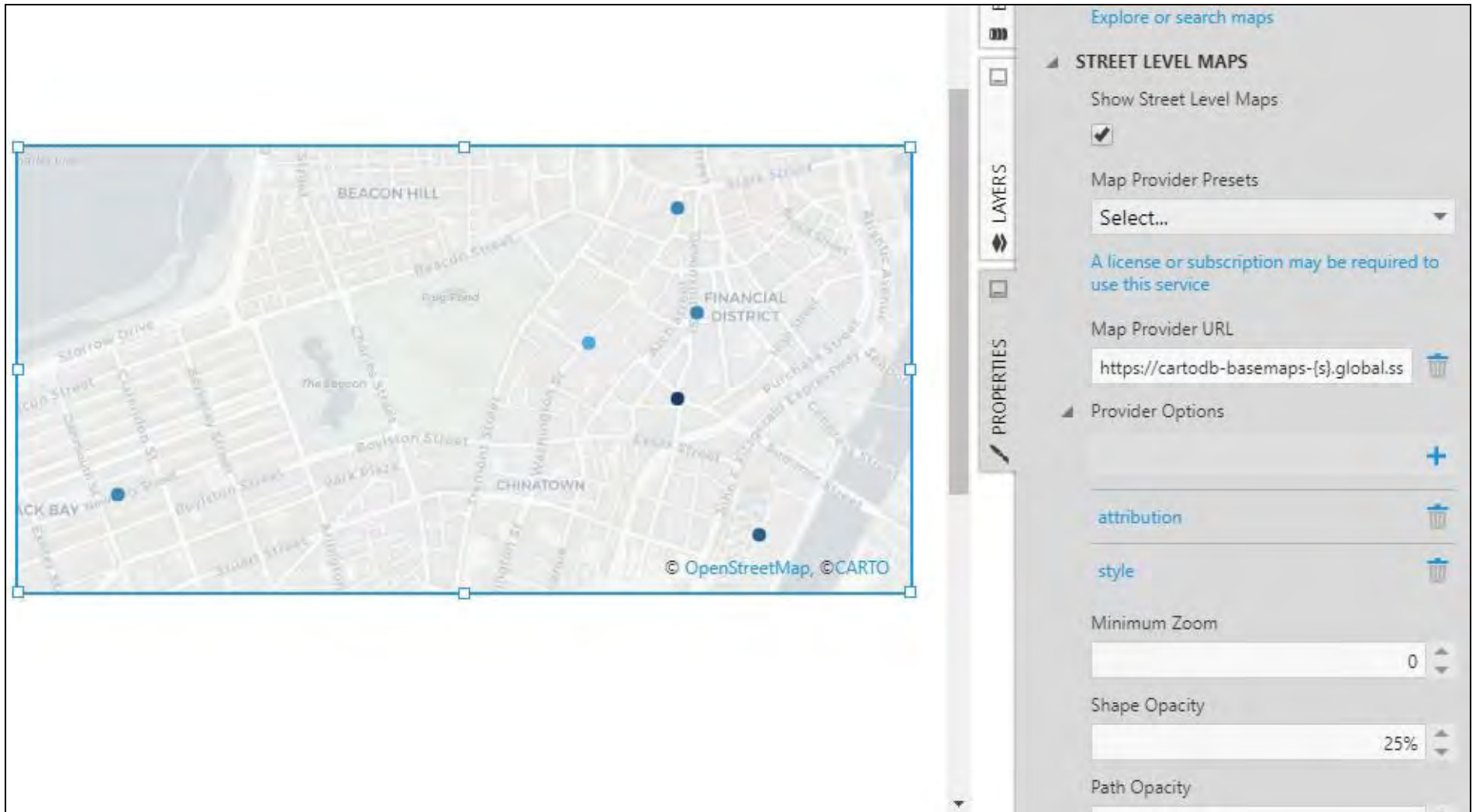
To start, enable the **Show Street Level Maps** property.

You can then choose from several predefined options using **Map Provider Presets**, or enter your own **Map Provider URL**.



Important: Map providers are often not free to use even if you didn't specify a key, and may require a license or subscription. Click the **link** that appears in the Properties window when using a predefined option to check with the provider.

Some map providers require authentication. If required, set the key or access token provider options to the values given to you by the provider.



The geographical data from the map provider is displayed. In case you also have shapes from map resources displayed, the Shape Opacity map property is set to 25% by default, which means you will be able to see the relevant geographical data underneath.

For the predefined map providers, there may be other provider options listed that you can customize. For example, *imagerySet* for [Bing maps](#) can be set to a variety of image types, including Aerial.

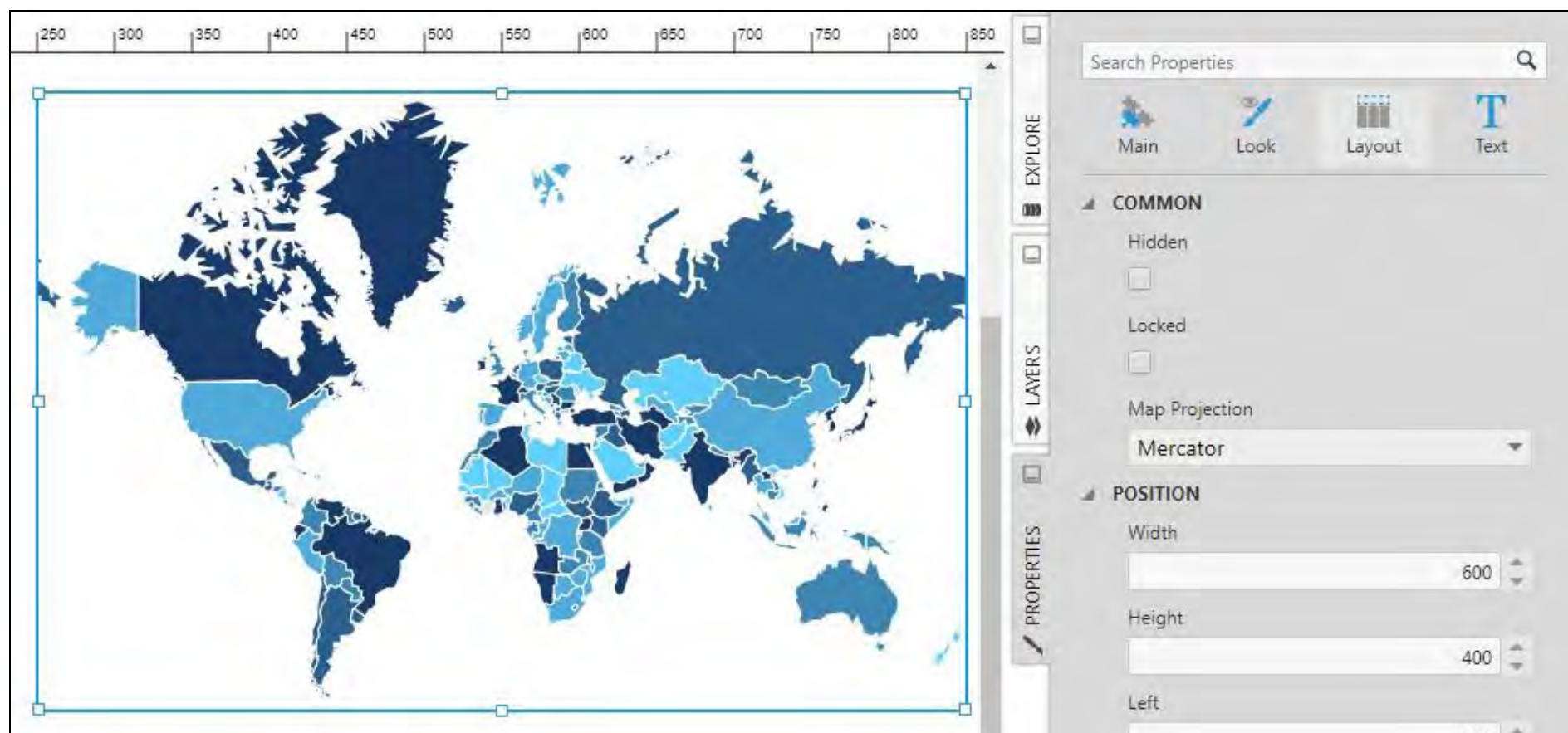
You can use any map provider supporting the 'XYZ' tile server standard, and any of their basemap styles, by setting the Map Provider URL property. Replace the *x*, *y*, and *z* (or zoom) portions of the URL the map service tells you to use with placeholders {*x*}, {*y*}, and {*z*} respectively so that the map visualization can pass these parameter values to the service automatically. If available, also include the optional {*s*} placeholder to take advantage of subdomains for performance.

Map Projection

The map visualization supports two main map projections, which determine how locations and shapes that actually exist on a spherical globe are represented on your screen:

- **Equirectangular** (default) - Common for map visualizations and GIS. Areas near the poles are distorted as shorter.
- **Mercator** - Most common for web mapping and navigation. Areas near the poles are easier to see, but the areas nearest to the poles are more distorted than with equirectangular and distorted as larger.

Another version of Mercator, called Web Mercator, is available and used with street-level maps. You can change the projection in the Layout tab of the map's properties.



Customization Options

Besides the options described above, there are more options for customizing your map available in the Properties window.

- **The Look** tab of the map's properties contains a variety of appearance settings, and the **Text** tab sets up labels and tooltips that apply to all shapes, paths, or symbols at once.
- Like with other visualizations, you can use [states](#) to customize shapes, paths, or symbols on your map when their data matches certain conditions. In the Properties window for the map, go to the **Look** tab to find the **State Styles** section where you can change a variety of settings based on your state conditions, including appearance, labels, and tooltips.
- Each shape, path, or symbol on your map that comes from a map resource also has its own dedicated properties you can optionally set, which would then take priority over the other properties listed above. If you want to customize settings such as appearance, labels, or tooltips for an individual map element, right-click it while in edit mode and choose the **Properties** option to go directly to its settings in the Properties window. You can also click *Shapes*, *Paths*, or *Symbols* in the map's properties for a list of those elements to customize. These are not available, however, for symbols or paths loaded dynamically [from your data](#) (via longitude/latitude coordinates for symbols or pairs of symbol names for paths).
- You can set up [interactions](#) for *Selected Data Changed* and customize whether to select map elements on hover or on click, similar to [treemaps](#).
- Simplification is applied automatically when displaying map resources, but extremely large and detailed shapefiles can still take longer to upload, process and display. You can simplify a shapefile before uploading it using a tool such as [mapshaper](#) to remove unnecessary details.
- Map visualizations load only a certain number of rows by default: if necessary, change the Maximum Row Count property setting. Consider also using the **Show Only Requested Maps** option and disabling automatic zooming when working with large datasets.
- If you have a shapefile that does not import correctly even when including its PRJ File, check the coordinate reference system (CRS) of the shapefile using a third-party application such as [QGIS](#). This tool lets you check the CRS of a shapefile and also save/export it as a new shapefile with a different CRS (for example, WGS-84). You can use QGIS to prepare a shapefile with the appropriate CRS before importing it.

For more information, see:

- [Setting Up the Visualization](#)
- [Adding a Diagram](#)
- Off the Charts: [There's a Map for that](#)



- Archive of documentation for Logi Symphony v24

- Off the Charts: [What Can You Do With The Map?](#)
- [Working With Projects](#)



Using a Pareto Chart

This applies to: *Managed Dashboards, Managed Reports*

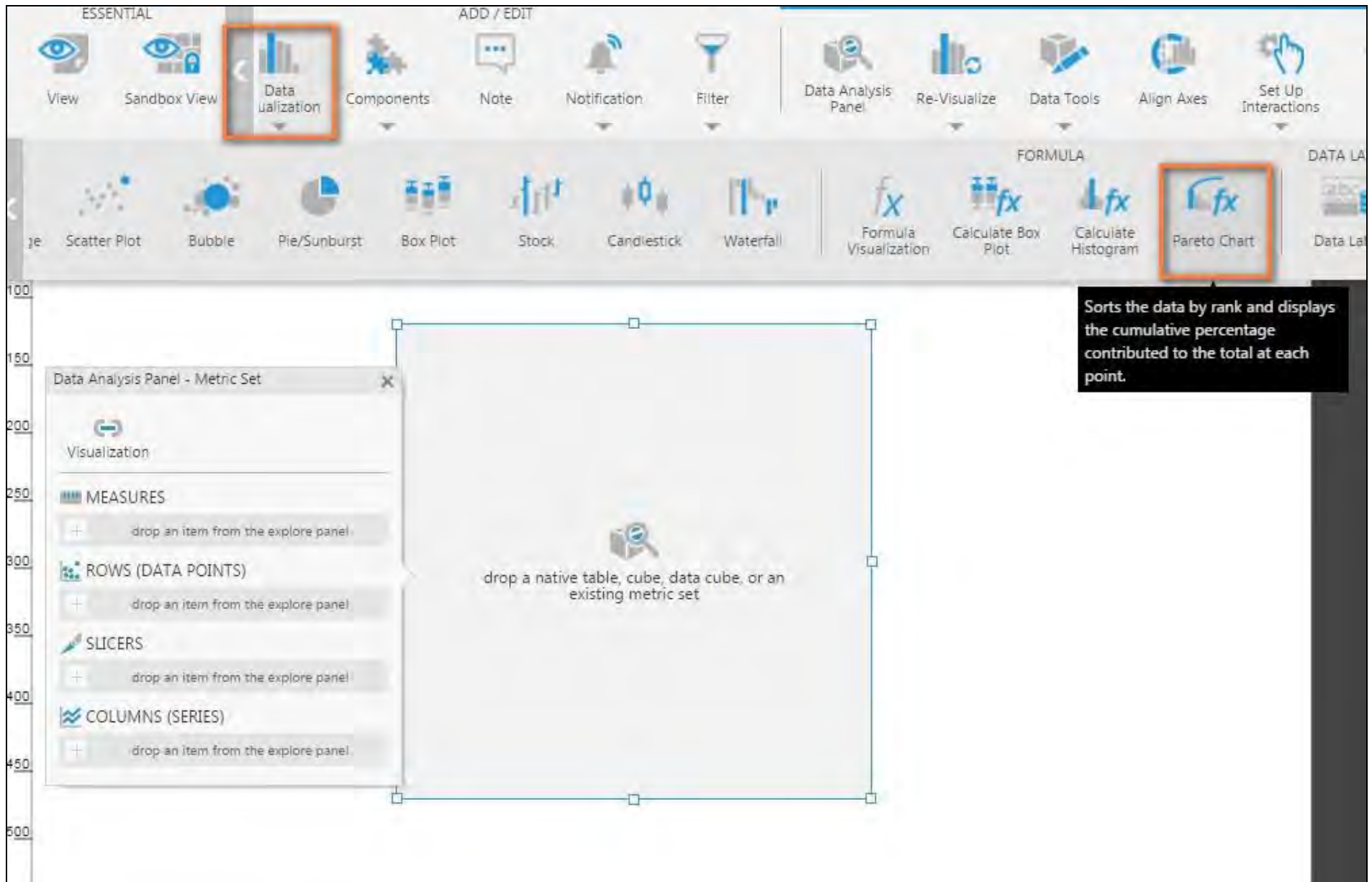
The Pareto principle states that, for many events, roughly 80% of the effects come from 20% of the causes. A Pareto chart displays bars sorted in descending order and a line displaying the cumulative total.

Create a Pareto Chart

You can choose to create a Pareto chart based by adding a new data visualization or by re-visualizing an existing visualization of a set of numbers:

Using the Create Pareto Chart Option

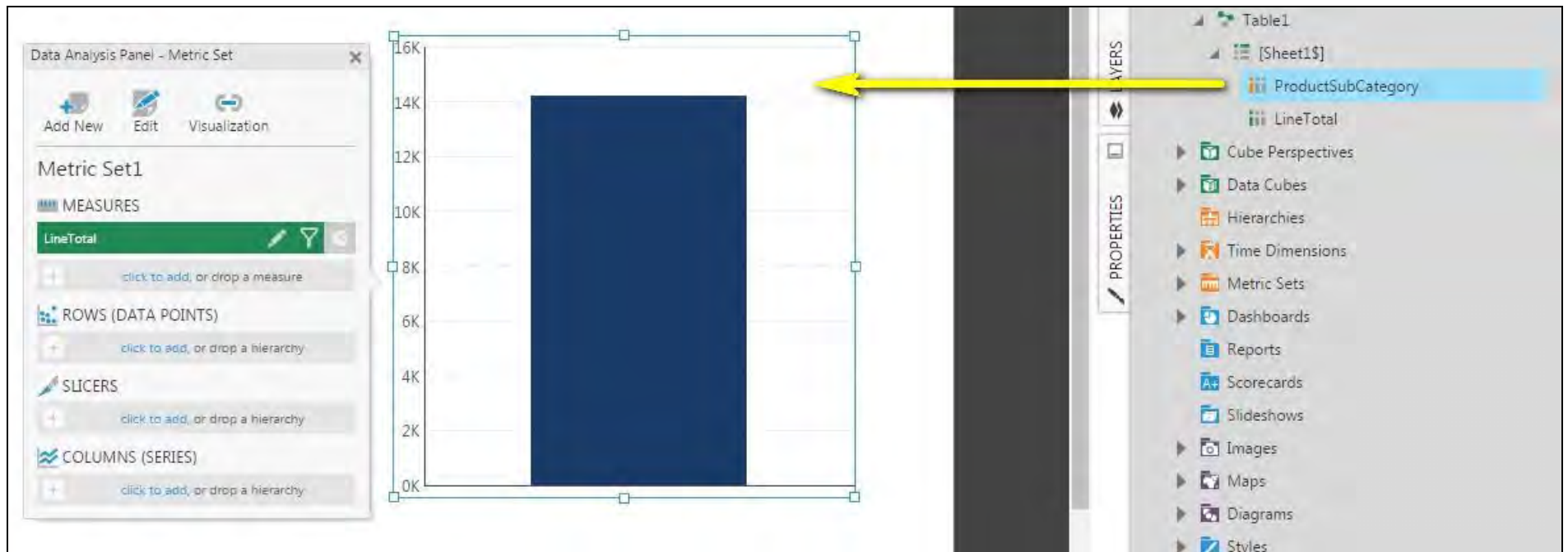
To add a pareto chart to your dashboard, go to the toolbar, click **Data Visualization**, and then select **Pareto Chart**. An empty pareto chart is added to the canvas.



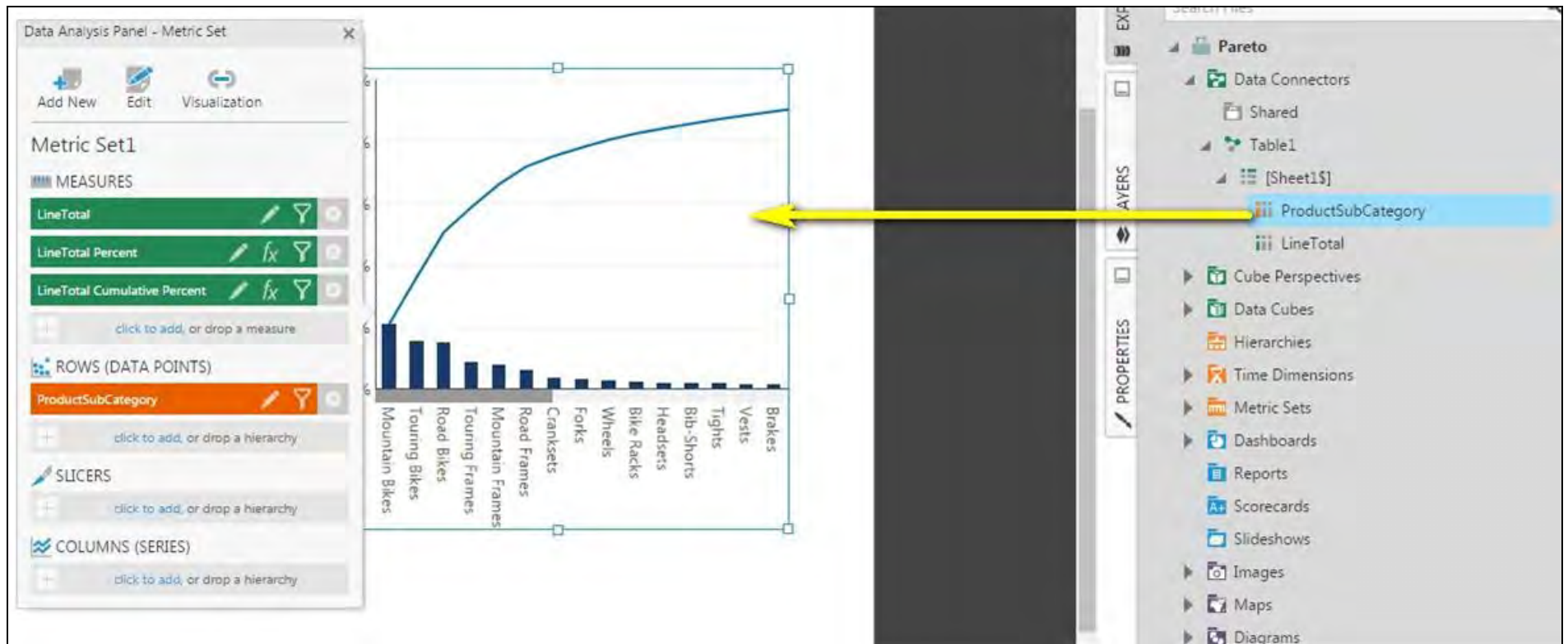
The screenshot displays the Logi Symphony v24 interface. The top toolbar includes sections for 'ESSENTIAL' (View, Sandbox View, Data Visualization, Components, Note, Notification, Filter) and 'ADD / EDIT' (Data Analysis Panel, Re-Visualize, Data Tools, Align Axes, Set Up Interactions). Below this is a 'FORMULA' section with icons for Formula Visualization, Calculate Box Plot, Calculate Histogram, and Pareto Chart. The 'Pareto Chart' icon is highlighted with an orange box. A tooltip for the Pareto Chart icon states: 'Sorts the data by rank and displays the cumulative percentage contributed to the total at each point.'

The main workspace shows a 'Data Analysis Panel - Metric Set' on the left. It contains sections for 'Visualization', 'MEASURES', 'ROWS (DATA POINTS)', 'SLICERS', and 'COLUMNS (SERIES)'. Each section has a plus icon and a text prompt: 'drop an item from the explore panel'. The central area is a large empty box with a magnifying glass icon and the text: 'drop a native table, cube, data cube, or an existing metric set'.

Drag and drop the **LineTotal** measure onto the empty pareto chart. The chart will show a single bar.



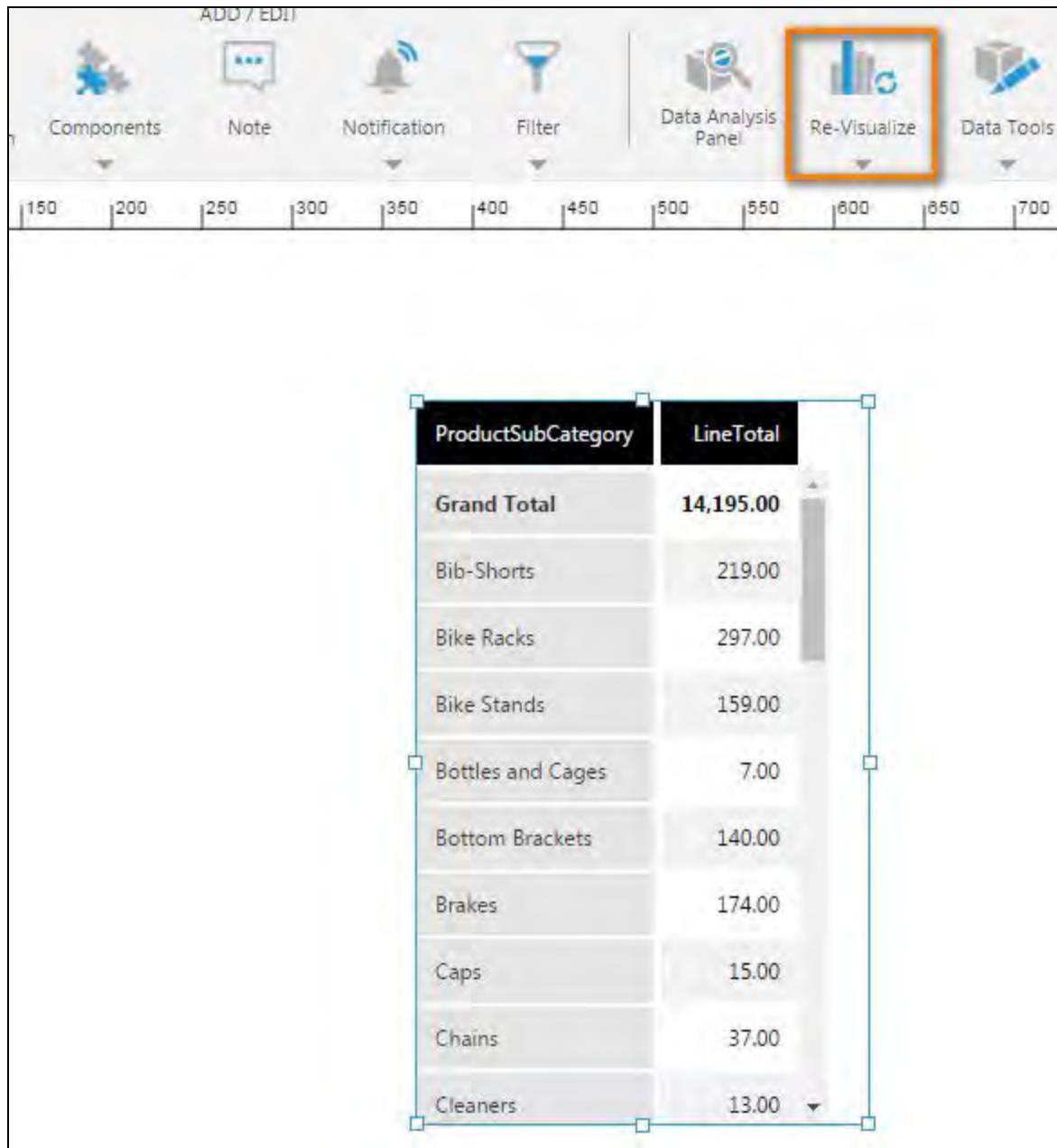
Drag a **hierarchy** or a **column** of non-numeric data from the Explore window onto the Pareto chart, or to Rows in the Data Analysis Panel. You'll see the Pareto chart animate and automatically show a bar chart together with a line chart. The bar chart is sorted in descending order based on the measure, and the line chart shows the cumulative percentage contributed to the total of each point.



Using the Re-Visualize Option

If you have an existing metric set and visualization, you can re-visualize it to a Pareto chart.

Select **Re-Visualize** in the toolbar.



Select **Pareto Chart**.

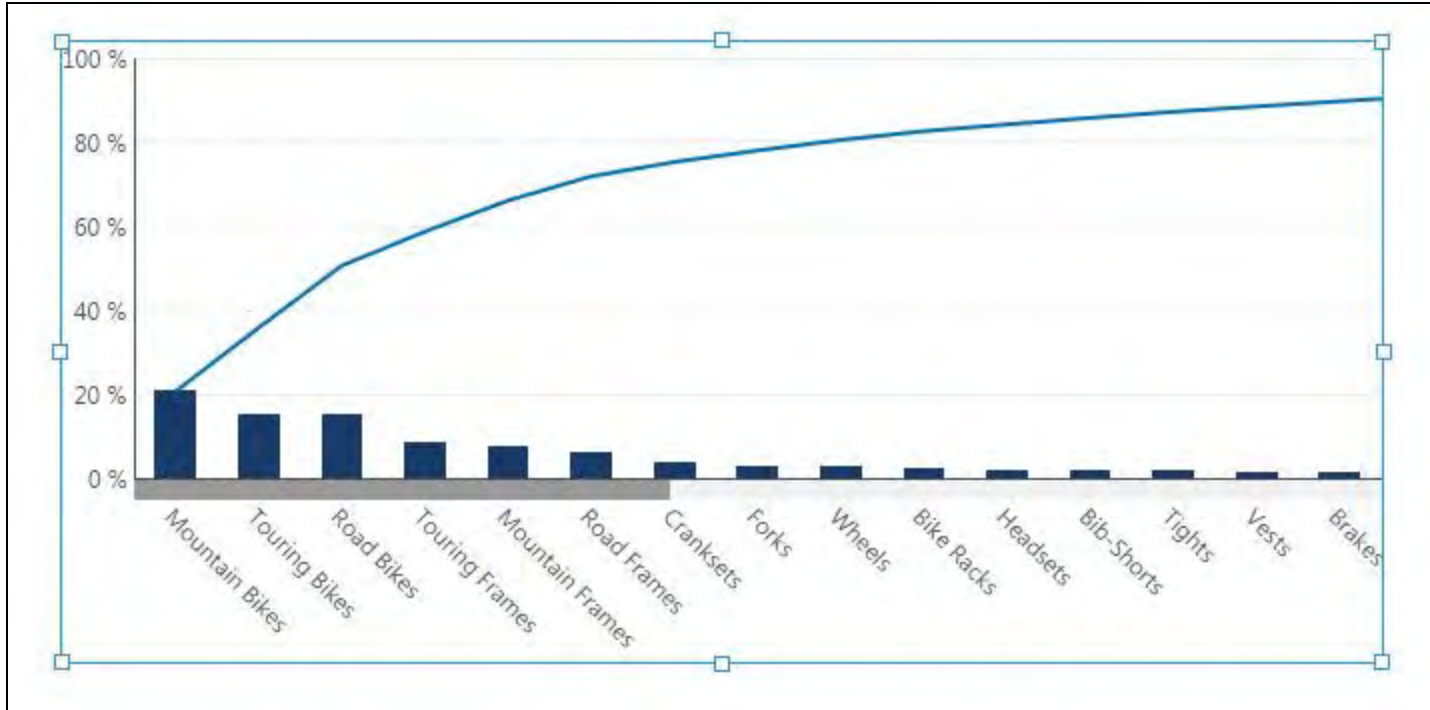
ADD / EDIT

Note Notification Filter Data Analysis Panel Re-Visualize Data Tools

FORMULA

Calculate Box Plot Calculate Histogram **Pareto Chart**

ProductSubCategory	LineTotal
Grand Total	14,195.00
Bib-Shorts	219.00
Bike Racks	297.00
Bike Stands	159.00
Bottles and Cages	7.00
Bottom Brackets	140.00
Brakes	174.00
Caps	15.00
Chains	37.00
Cleaners	13.00

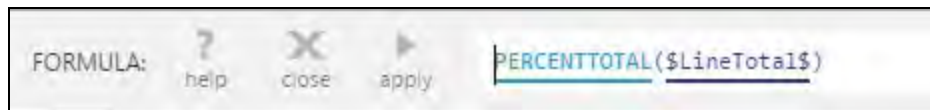


Data Analysis Panel



In the Data Analysis Panel, you will notice that two additional measures were created automatically:

The first formula generated is the [Percent of Total](#):



The second formula generated is the [Cumulative Total](#) (or running sum) of the Percent of Total:

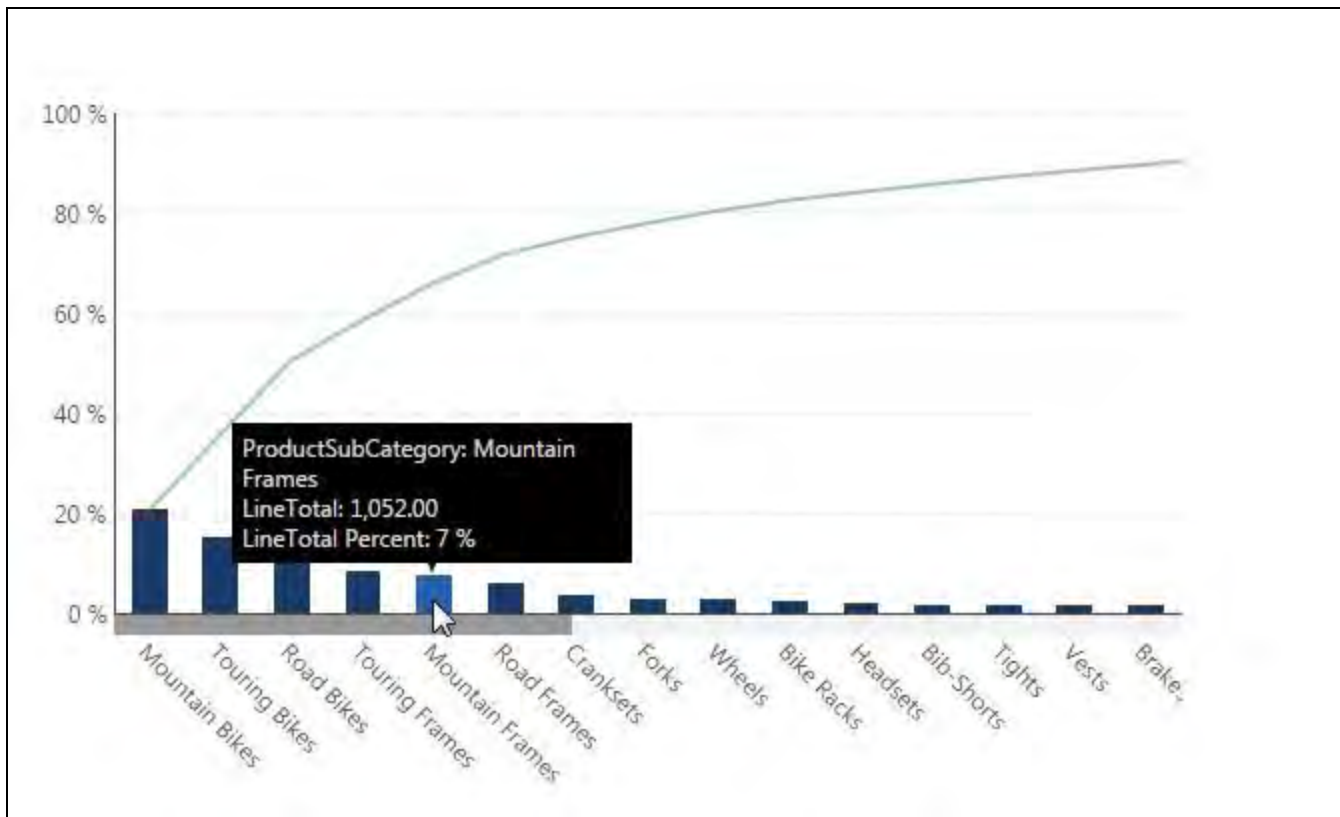
FORMULA:

? help
 X close
 ▶ apply

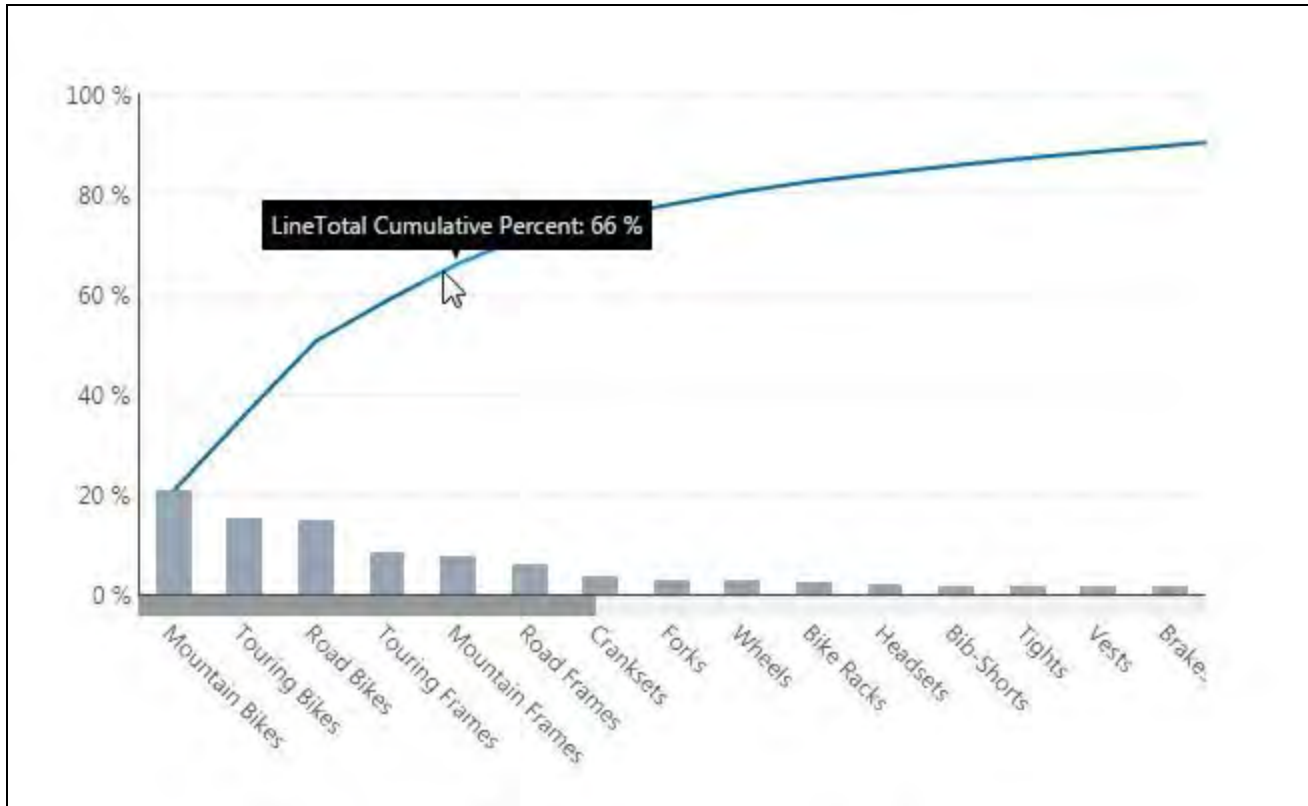
$CMLTOTAL(\$LineTotal PERCENTTOTAL Expression\$)$

Viewing the Pareto Chart

Switch to **View** mode and hover over a bar to see a tooltip showing the measure value and corresponding percentage.



Hover over the line chart to see a tooltip showing the measure's cumulative percent value, which indicates how much each bar and the bars to its left contribute to the total.



For more information, see:

- [Symphony Metric Sets](#)
- [Using Chart Properties](#)
- [Add a Legend](#)
- [Adding Formulas](#)
- [List of Formulas](#)

Using a Pie Chart

This applies to: *Managed Dashboards, Managed Reports*

A pie chart displays each value as part of a pie or donut representing its percentage of the total. Multiple hierarchies and levels can be displayed by a pie chart as multiple rings that each break down the previous ring's values into its component parts, which is sometimes called a *sunburst*.



Note: To combine slices together into an 'other' group or similar, see [Displaying Top/Bottom Records](#).

Add a Pie Chart From the Toolbar

To add a pie chart to your dashboard, report, or other view, click **Data Visualization** in the toolbar, and then select **Pie/Sunburst**. An empty pie chart is added to the canvas.

The steps are similar for a full screen metric set after [re-visualizing](#) to a pie chart.

COMMON

 Check In

 Undo

 Redo

 Clipboard

 Share

 Data Visualization

 Components

 Note

 Notification

 Filter

ADD / EDIT

 Note

 Notification

 Filter

CHARTS

 Range

 Curved Line

 Curved Area

 Curved Range

 Scatter Plot

 Bubble

 Pie/Sunburst

 Box Plot

 Stock

 Candlestick

Displays each value as part of a pie or donut representing its percentage of the total. Multiple hierarchies and levels are displayed as outer rings.

Data Binding Panel

Bindings

MEASURES

+

drop an item from the explore panel

ROWS (DATA POINTS)

+

drop an item from the explore panel

SLICERS

+

drop an item from the explore panel

COLUMNS (SERIES)

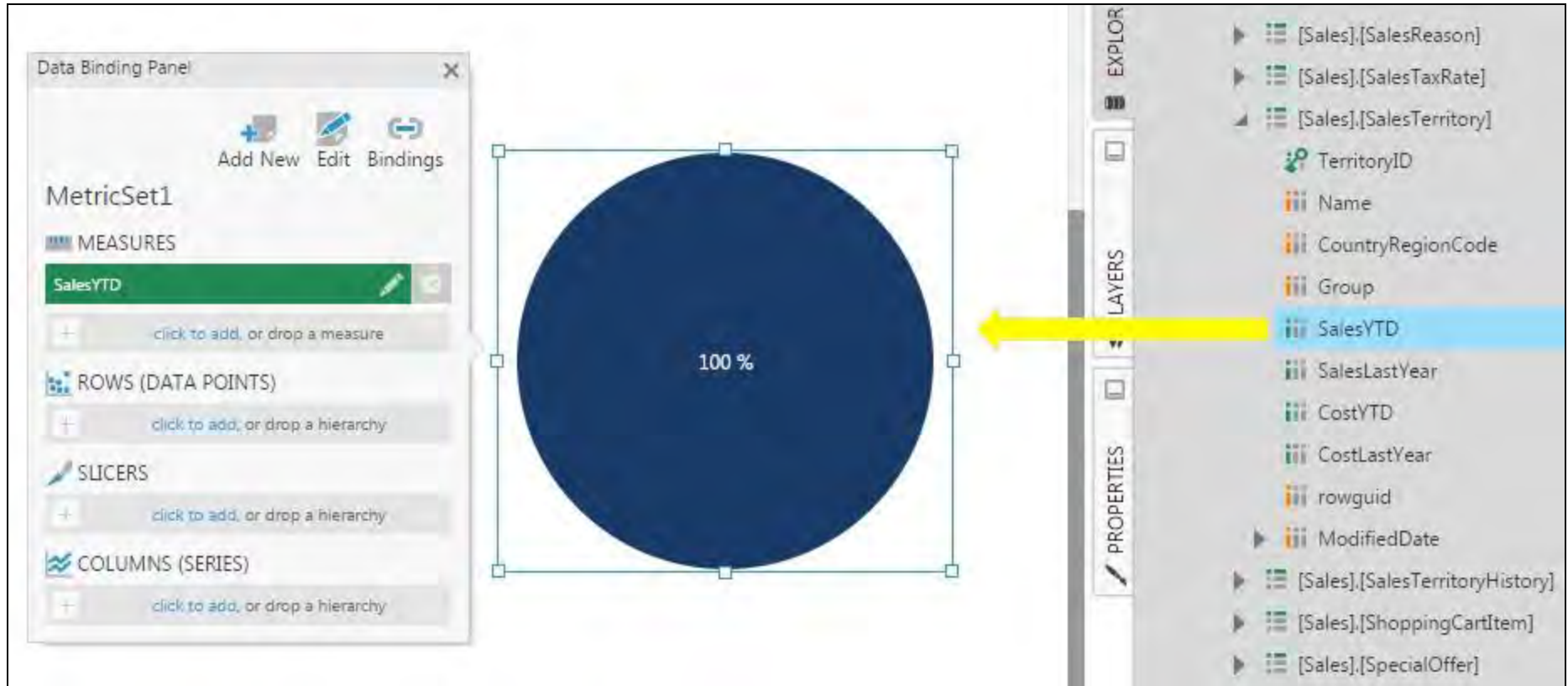
+

drop an item from the explore panel

drop a native table, cube, data cube, or an existing metric set

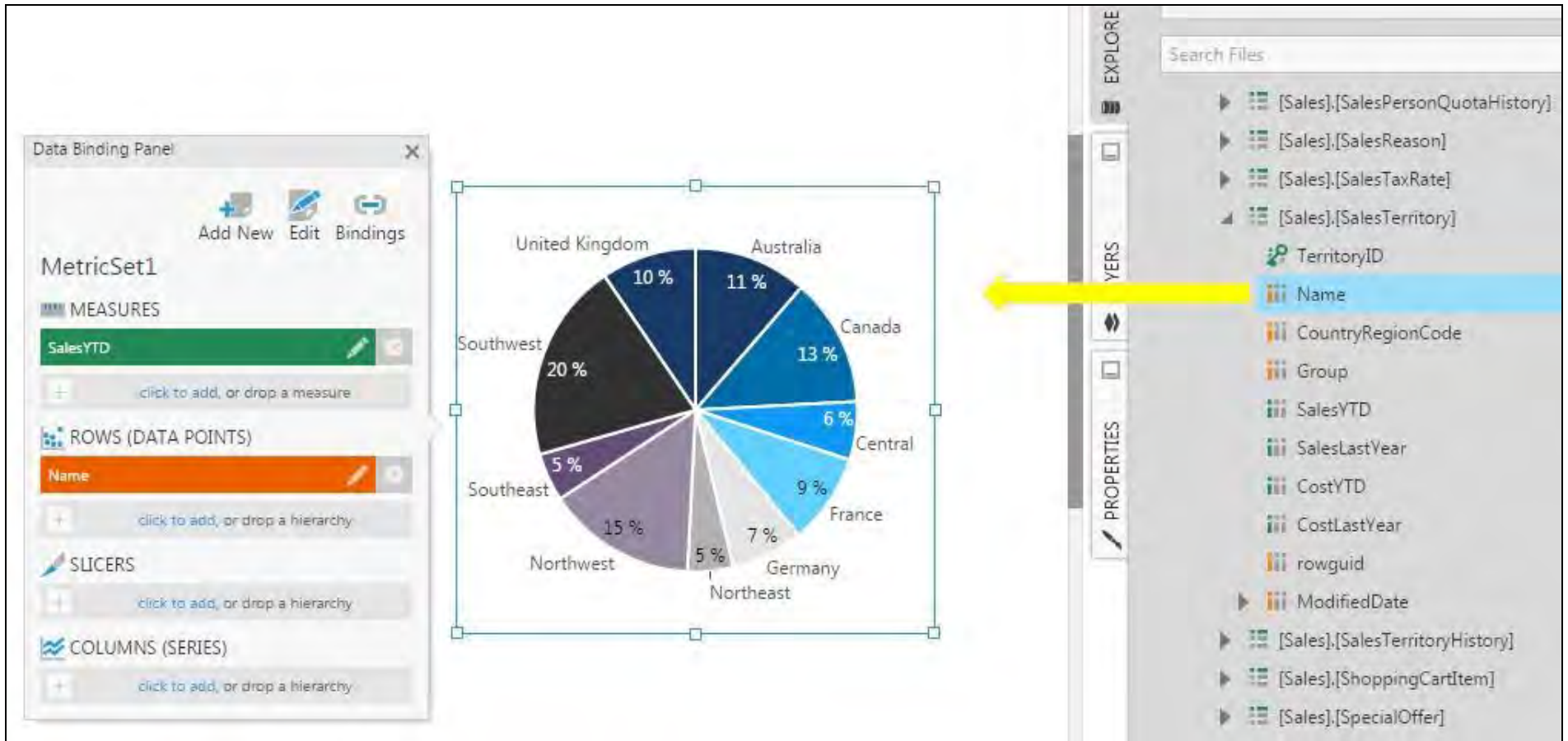
Go to the Explore window and expand a **data connector**. Drag a **measure** (numeric values) onto the pie chart or metric set.

A pie chart will then show a single pie slice representing 100% of the total.



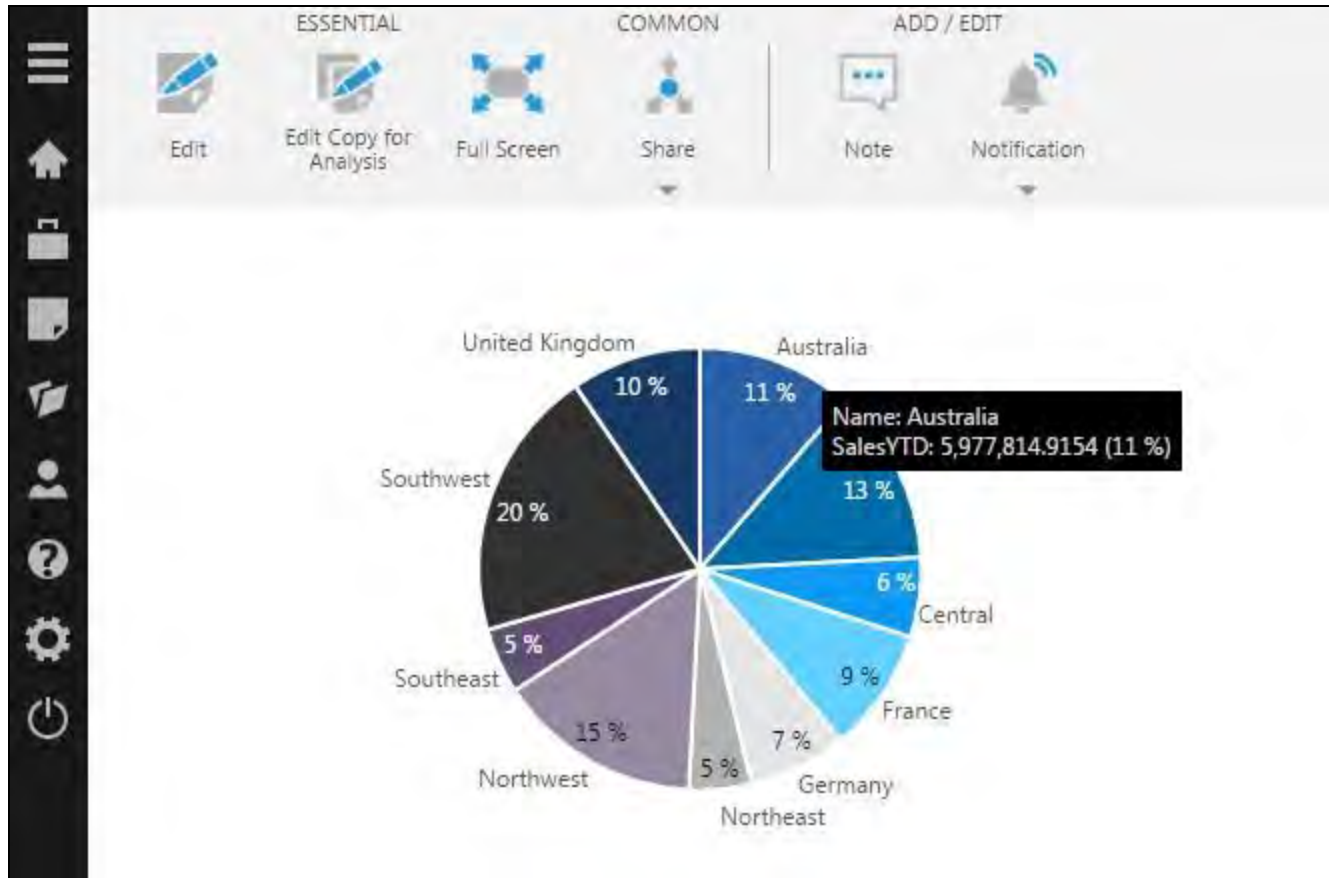
Next, add a hierarchy or a column of text or date/time values, for example a sales territory *Name* column. Drag this onto the pie chart, or directly to Rows (Data Points) in the metric set.

You'll see the pie chart animate into multiple data points or 'slices' where each slice (e.g., for each territory) corresponds to the percentage of the total.

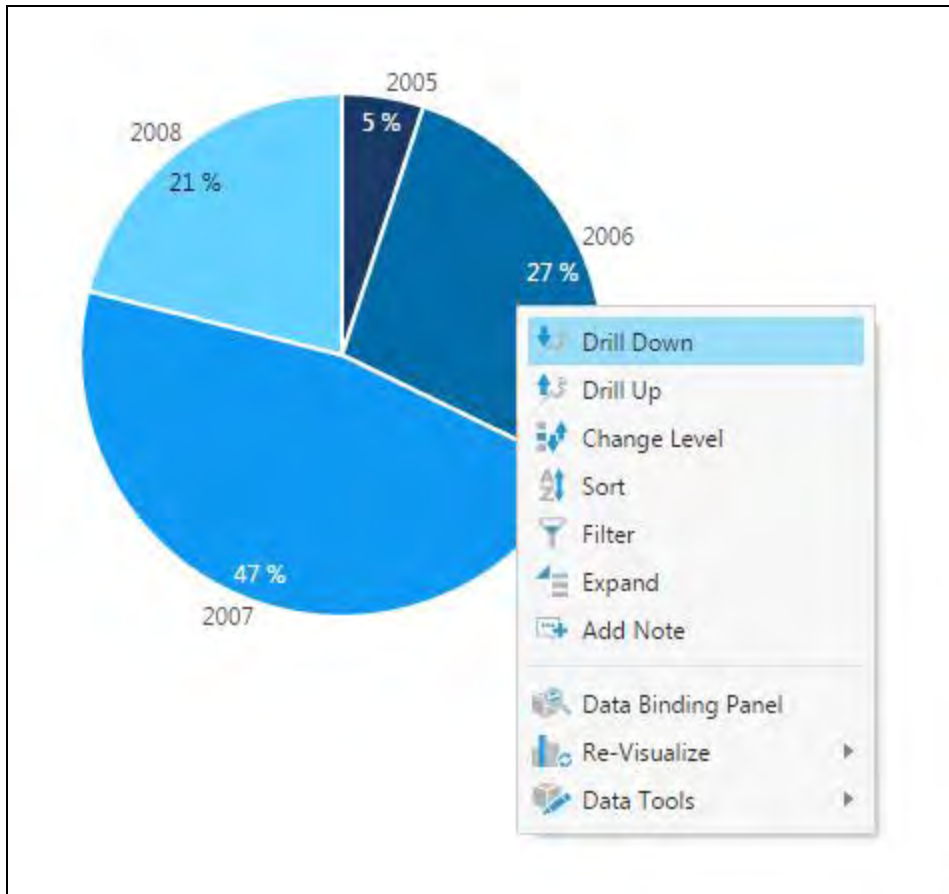


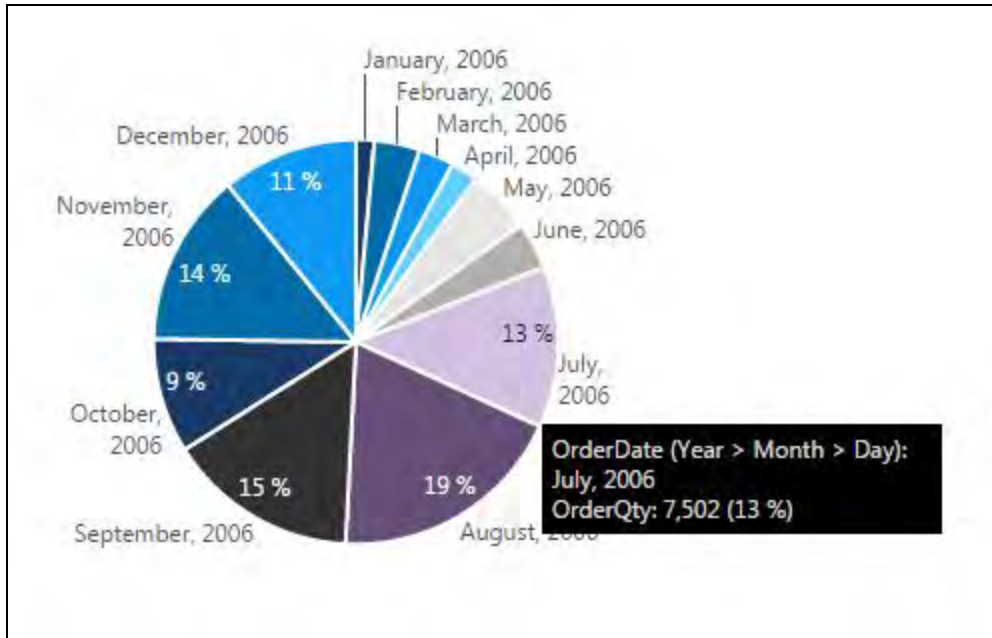
Note: Adding a hierarchy without a measure will display a pie/sunburst made up of the count of its values.

Switch to **View** mode and hover over a pie slice to see a tooltip showing the measure value and corresponding percentage.



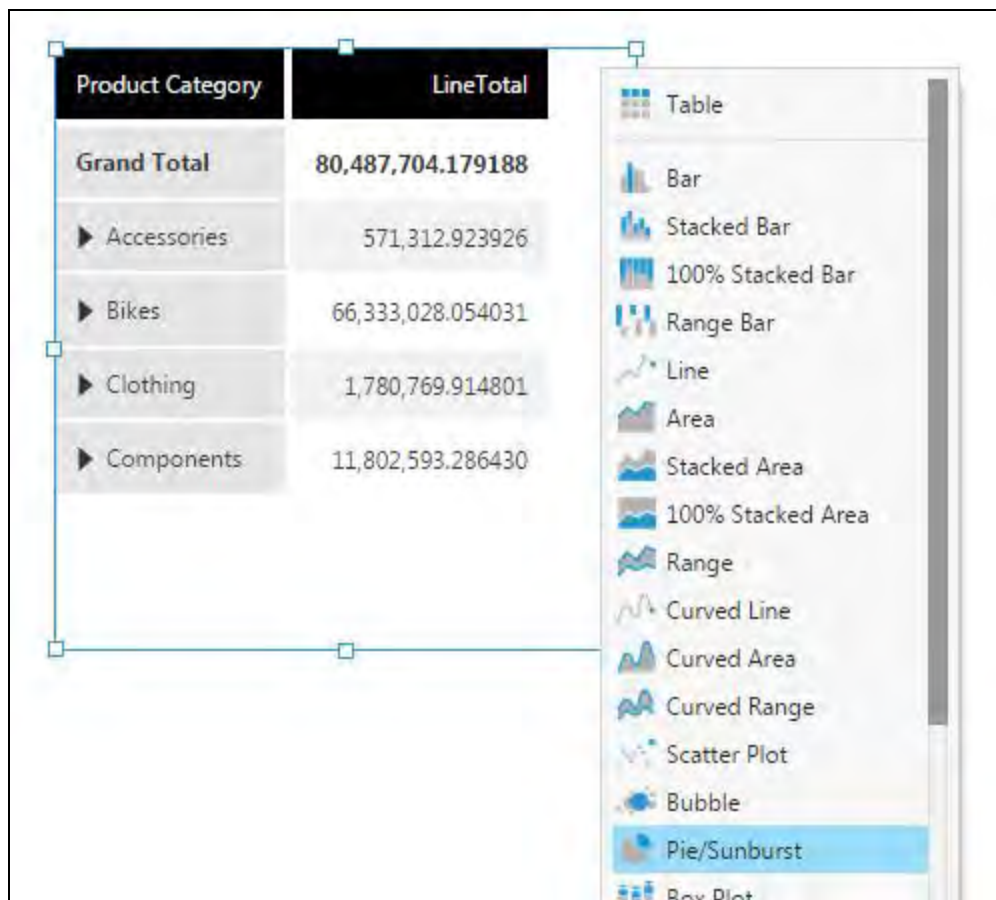
If the hierarchy added to the pie chart has multiple levels, you can drill down, change the level, or access other [metric set](#) functions by right-clicking (or long-tapping) on a **data point** in [View mode](#).

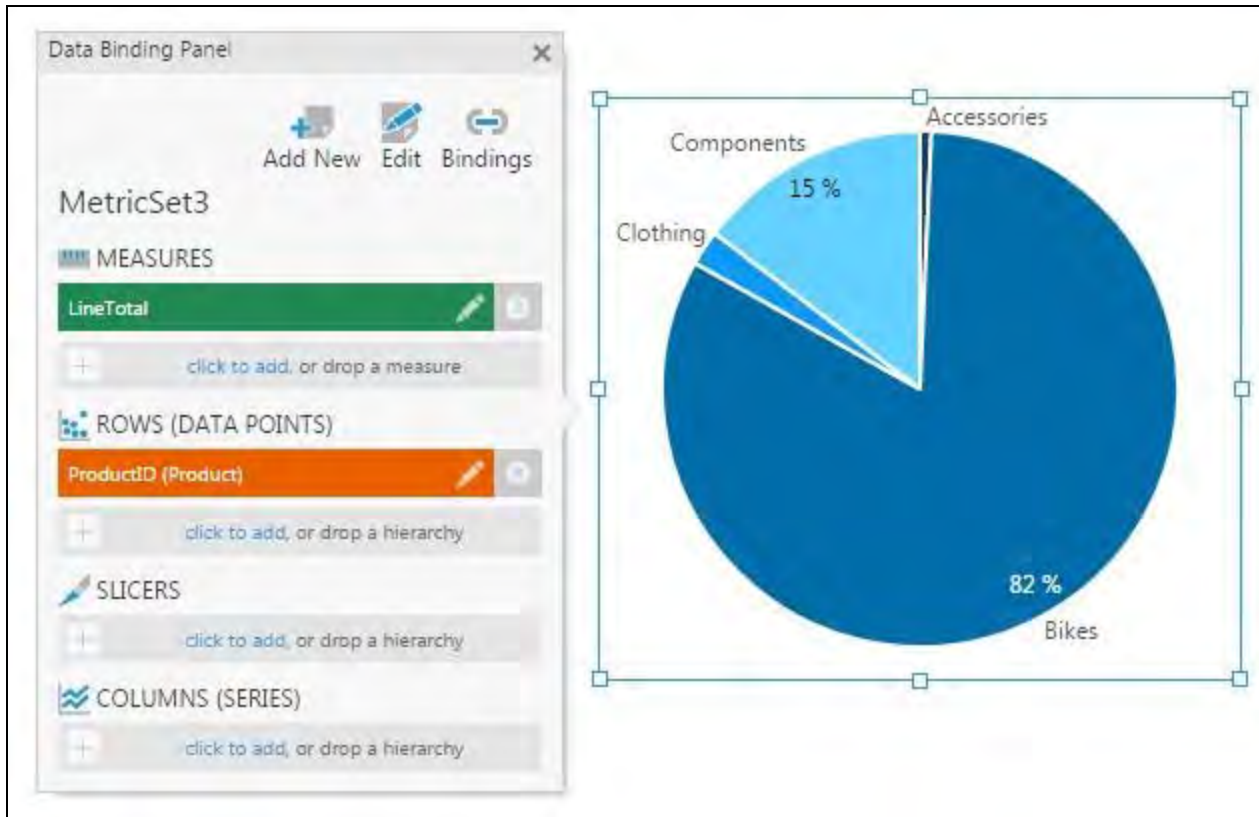




Re-Visualize as a Pie Chart

You can **Re-Visualize** other types of visualizations to a chart and choose the **Pie/Sunburst** chart type, from either the toolbar or the context menu.



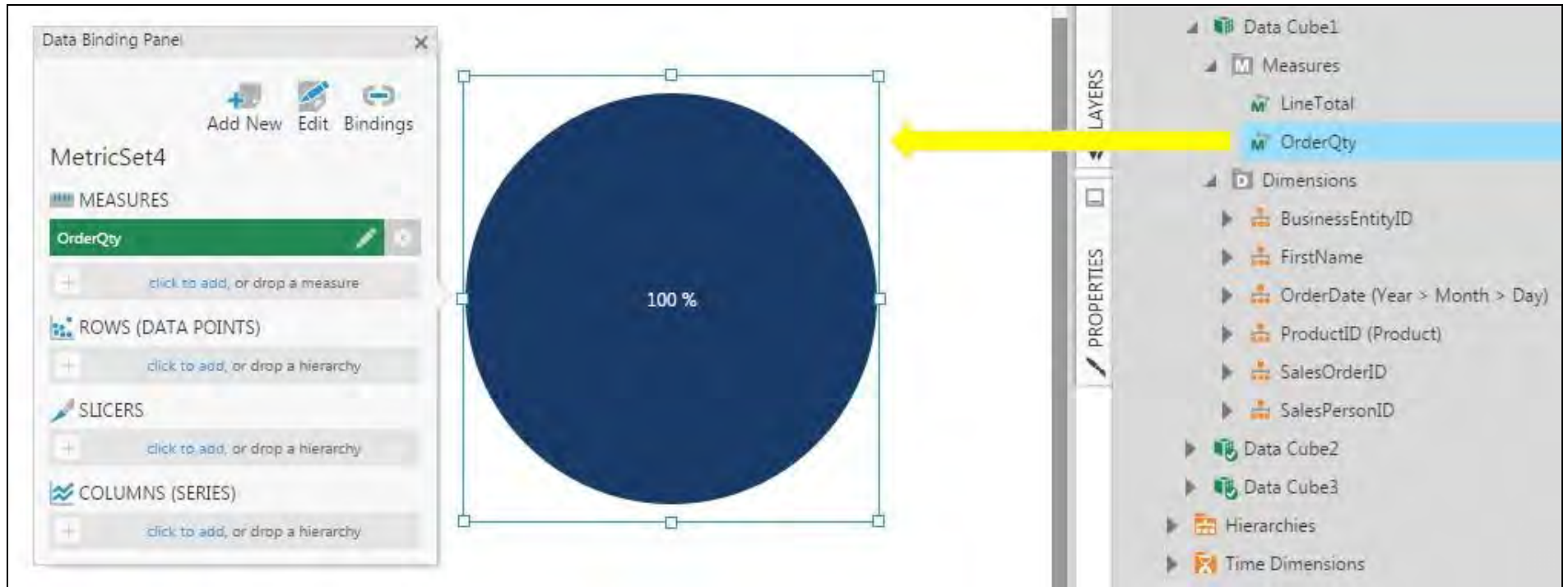


Note: Changing an existing chart to the Pie chart type preserves your existing chart and its other settings, and does not set up the same default appearance as a new pie chart. You could re-visualize to something other than a chart and then to a Pie chart if you wanted to create a new chart instead.

Create a Sunburst

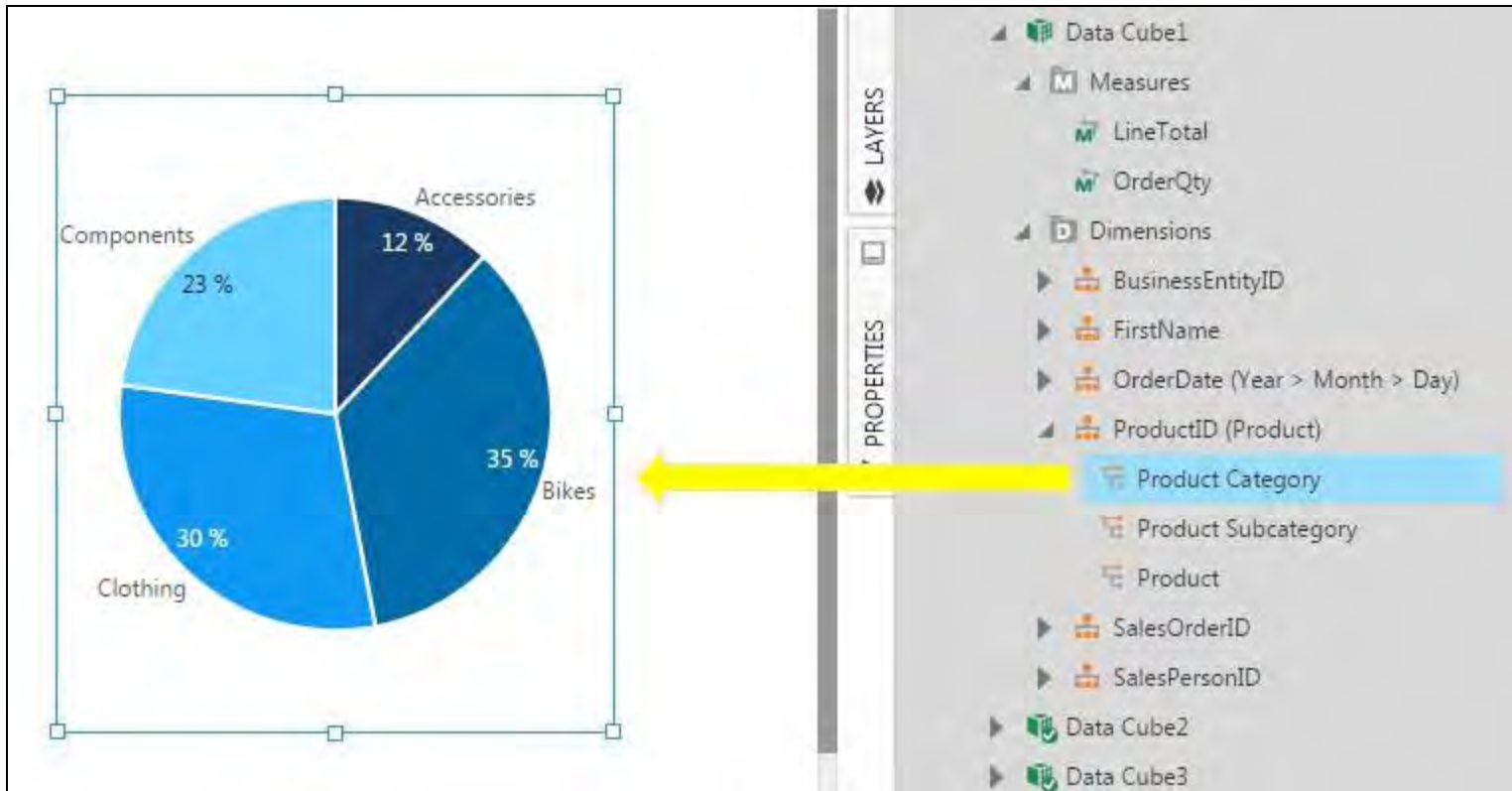
A sunburst displays multiple hierarchy levels using concentric rings, visualizing how data is broken down between higher and lower level groupings. The innermost rings correspond to the top hierarchy levels (e.g., years or product category) whereas the outermost rings correspond to the bottom hierarchy levels (e.g., months or product subcategories). As you move outward from the center of a sunburst chart, the pie pieces are broken down into smaller and smaller pieces. Sunbursts are similar to [treemaps](#) in being useful for representing hierarchical data but use a different layout.

To create a multi-level sunburst chart, first drag a **measure** (your numeric values) onto your pie chart or metric set.



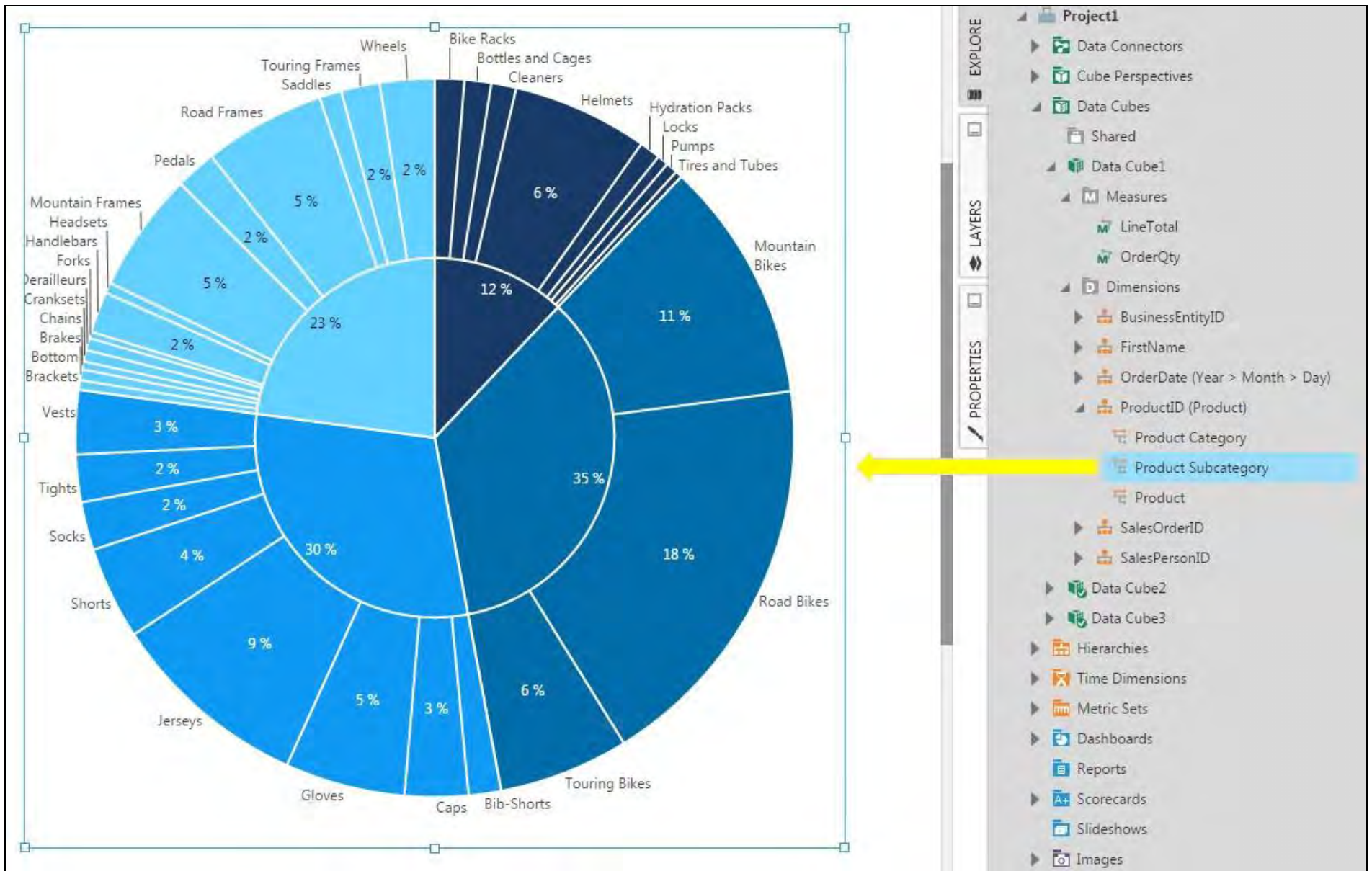
A multi-level [hierarchy](#) is used here as an example, where products are grouped by category, then by subcategory.

In the Explore window, expand the **hierarchy** to view its levels, and drag the **top level** to the chart or directly to Rows (Data Points) on your metric set. This displays a pie chart, which will become the inner ring of the sunburst.

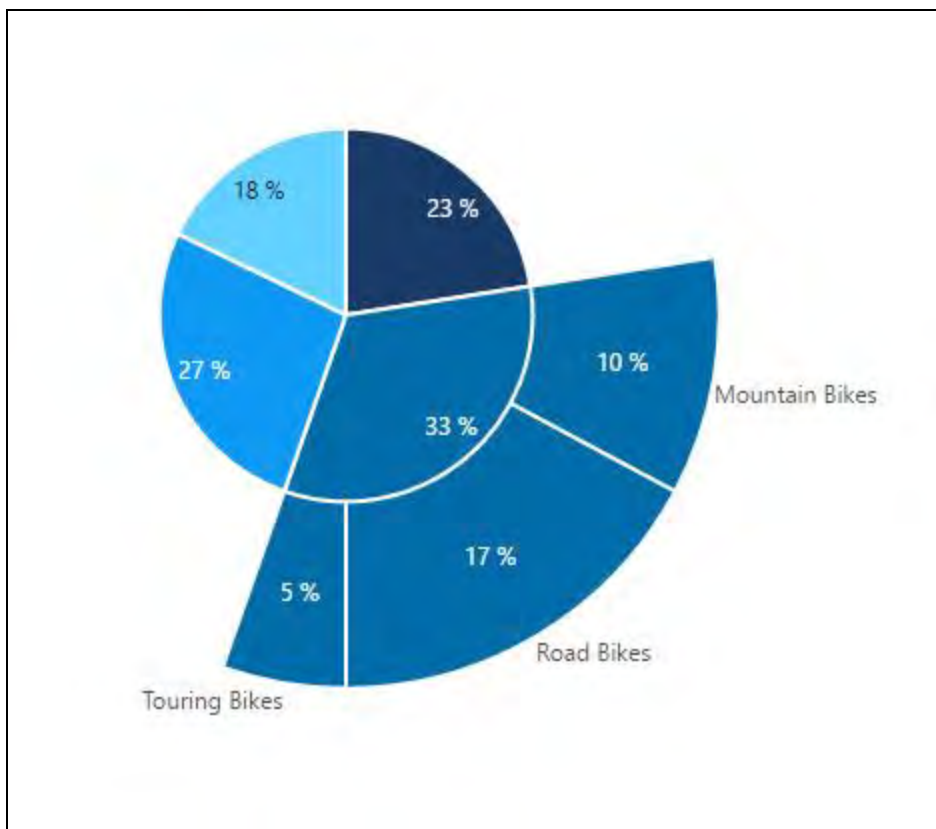


Drag a **lower level** of the hierarchy onto the chart (highlighted in blue) to display the range of levels between this one and the level you dragged earlier. Alternatively, you can set the [Level and Top Level](#) of the hierarchy.

This becomes the outer ring of the sunburst.



When your hierarchy has multiple levels and you are displaying a higher level as a pie chart or sunburst, you can right-click a **data point** and choose **Expand**.



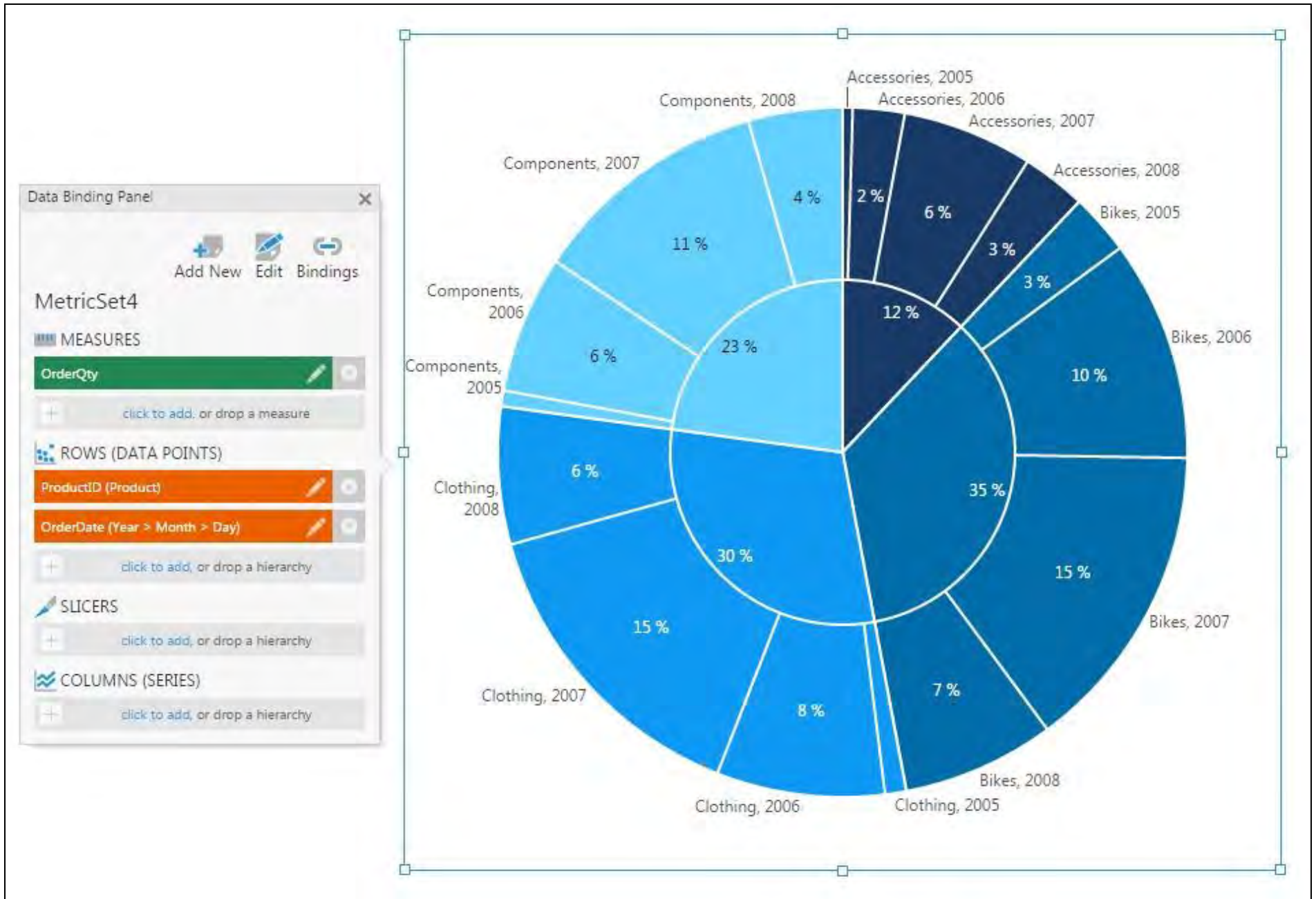
This displays the original chart plus a new outer ring containing just values you expanded in that level. You can continue expanding more slices in this level or further down to lower levels if available. See [Expand and Collapse Hierarchy Members](#) for details and examples.



Important: Total values from the metric set are required to be able to display data points/slices for multiple levels or hierarchies at the same time. If rings are missing or slices not lined up as expected, ensure [Shown Totals](#) is still set to either **Both** or **Rows** on the metric set.

Multiple Hierarchies

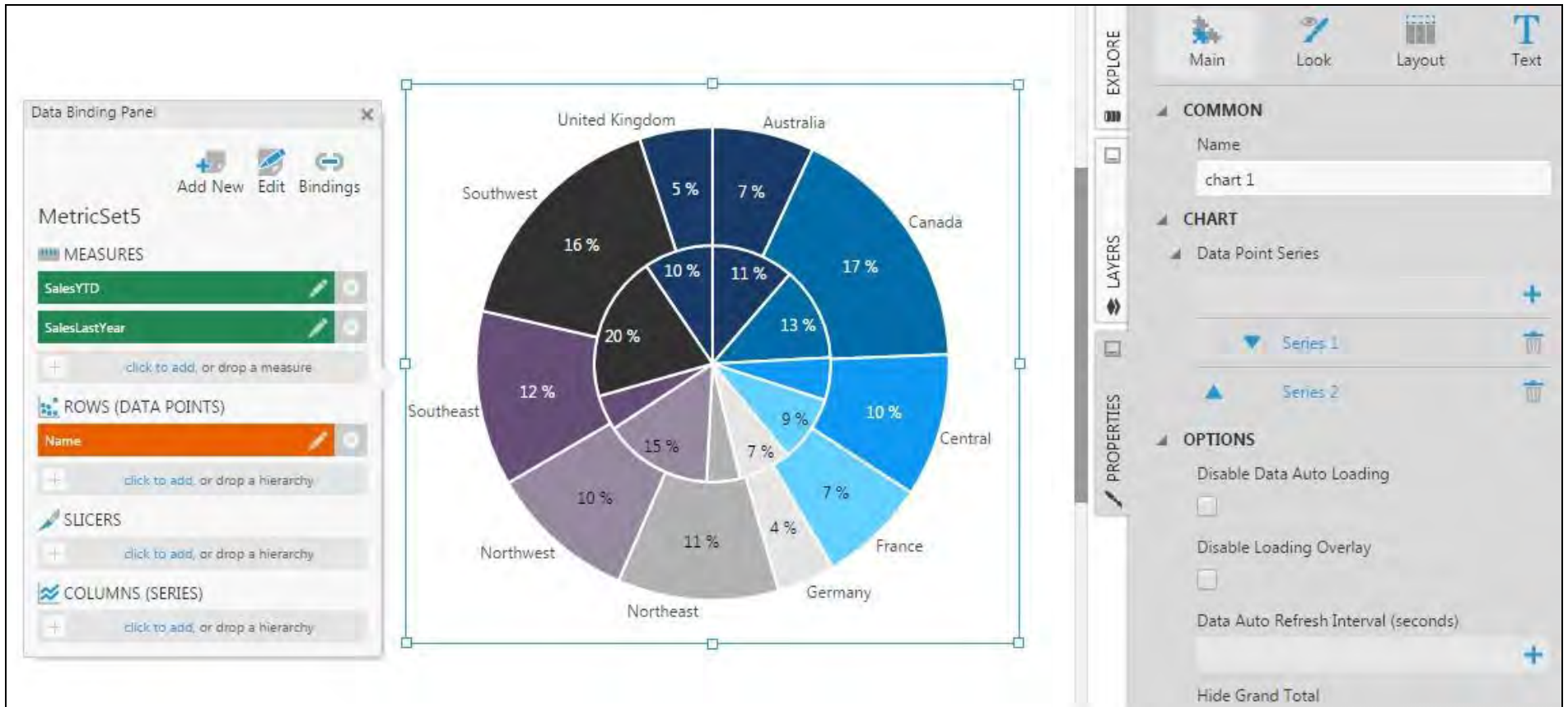
Instead of adding different levels from the same hierarchy, you can add multiple hierarchies, or columns of text or date/time values (e.g., add the Products hierarchy first, and then add a time dimension displaying order dates).



In the same way as with a multi-level hierarchy, this displays your data broken down into smaller groupings by the next hierarchy.

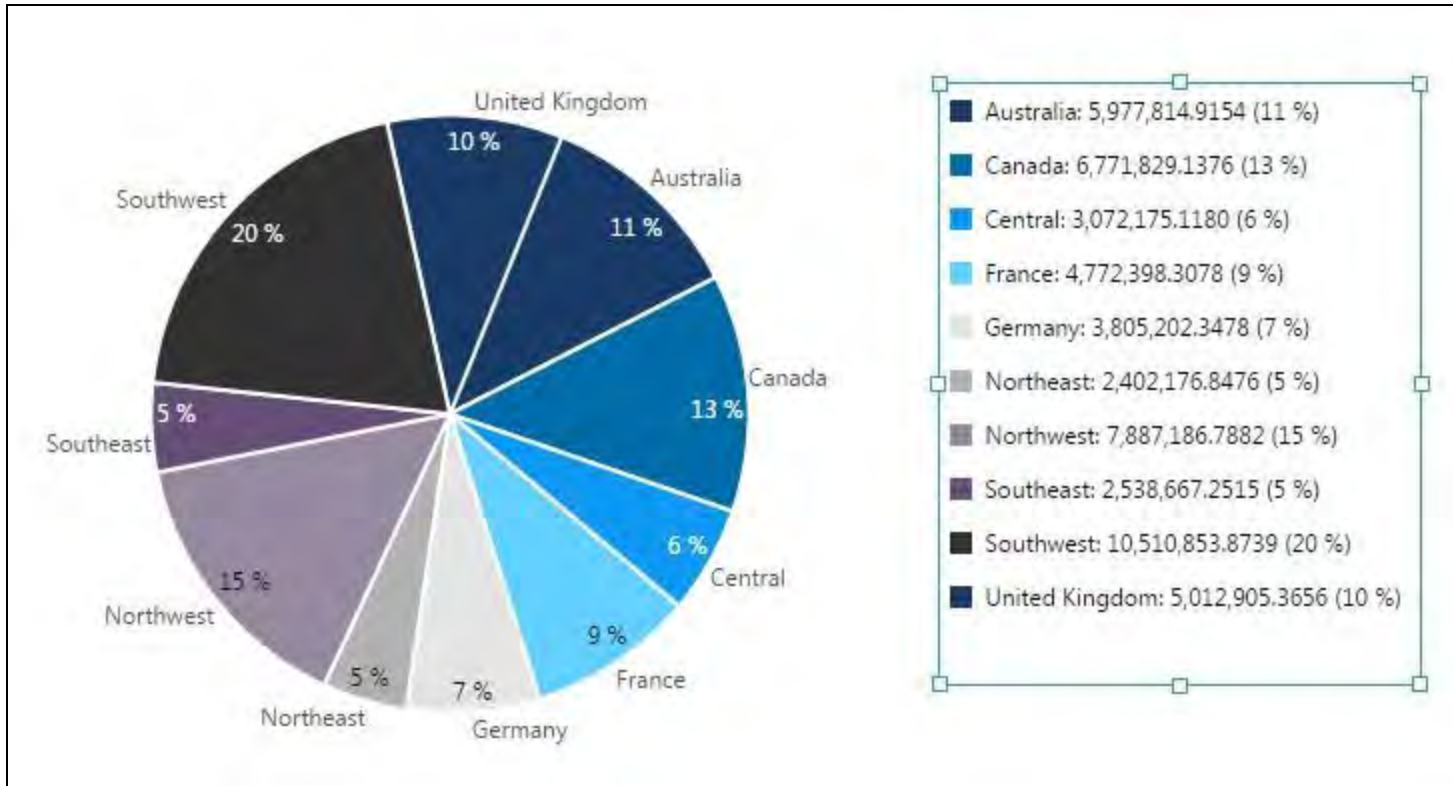
Multiple Measures

It is also possible to add multiple measures to a pie chart. This will result in a ring for each measure, each displayed by a separate chart series, however this type of visualization is generally not considered to be a sunburst. Typically, the slices of one measure will not correspond with the slices for the other measure.



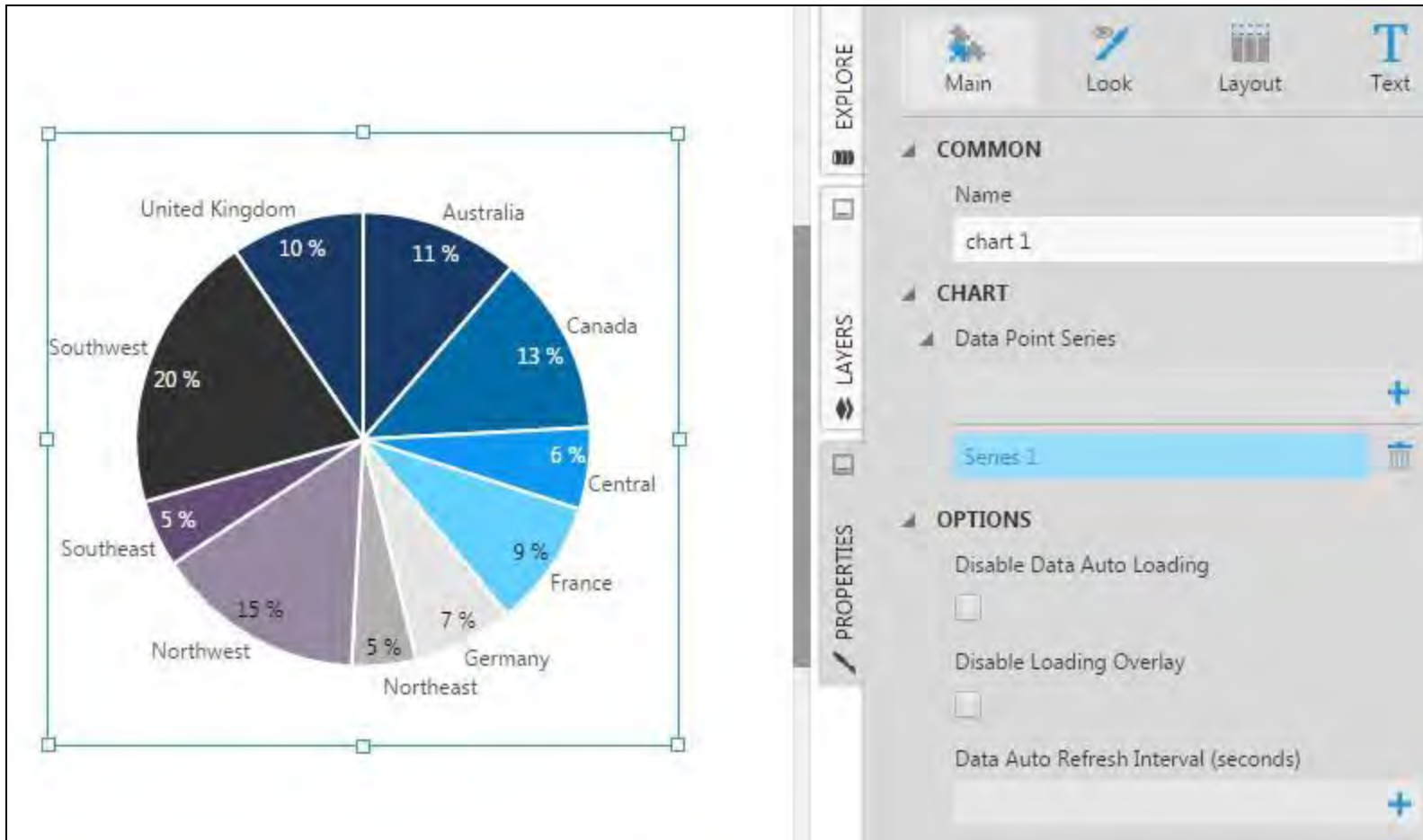
Legend

When you add a legend for a pie chart or sunburst, each slice or data point is represented in the legend instead of each series or grouping.

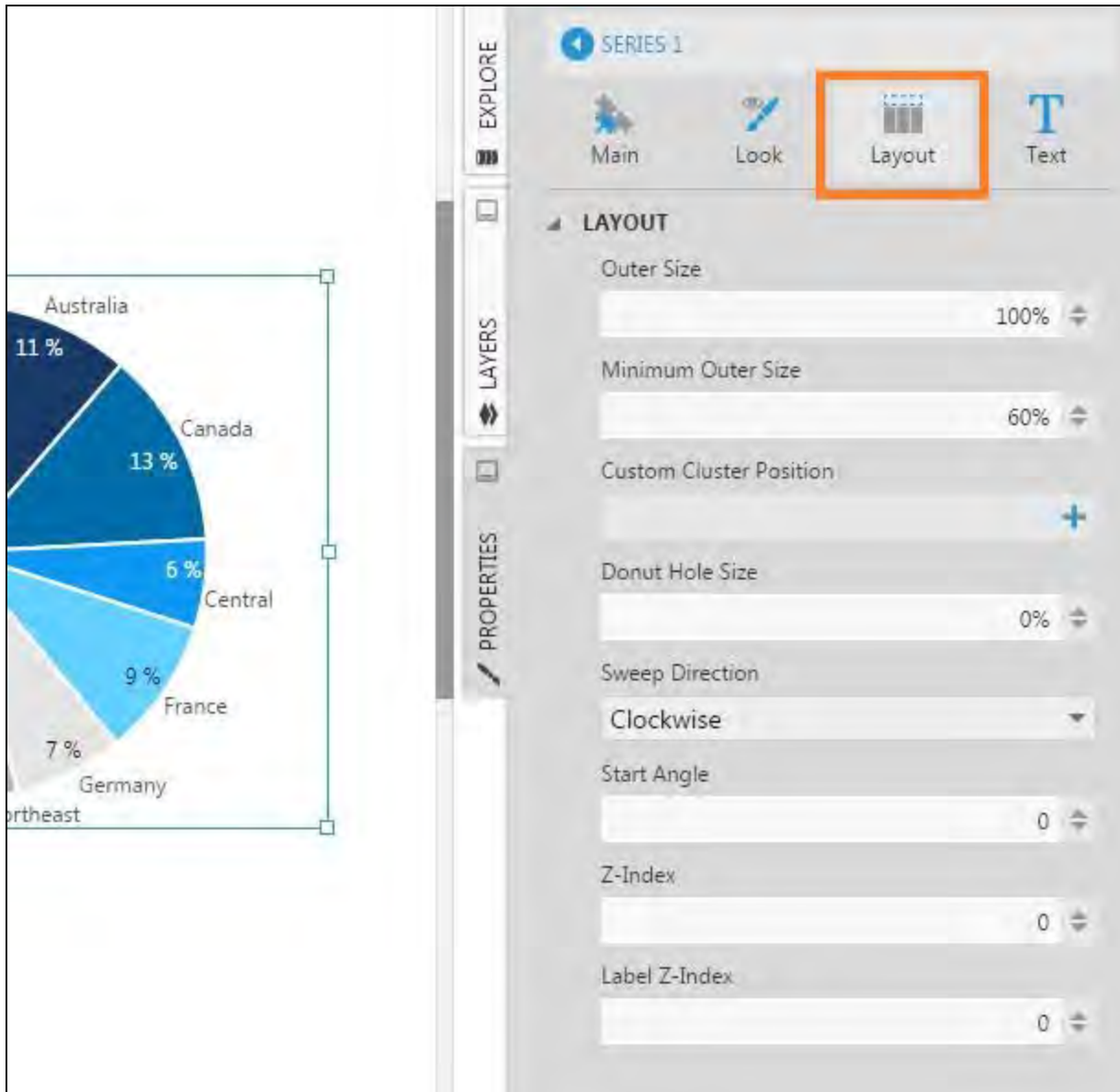


Properties

Pie-specific properties can be found in the pie chart's data point series. Open the **Properties** window, and click on a **series**.

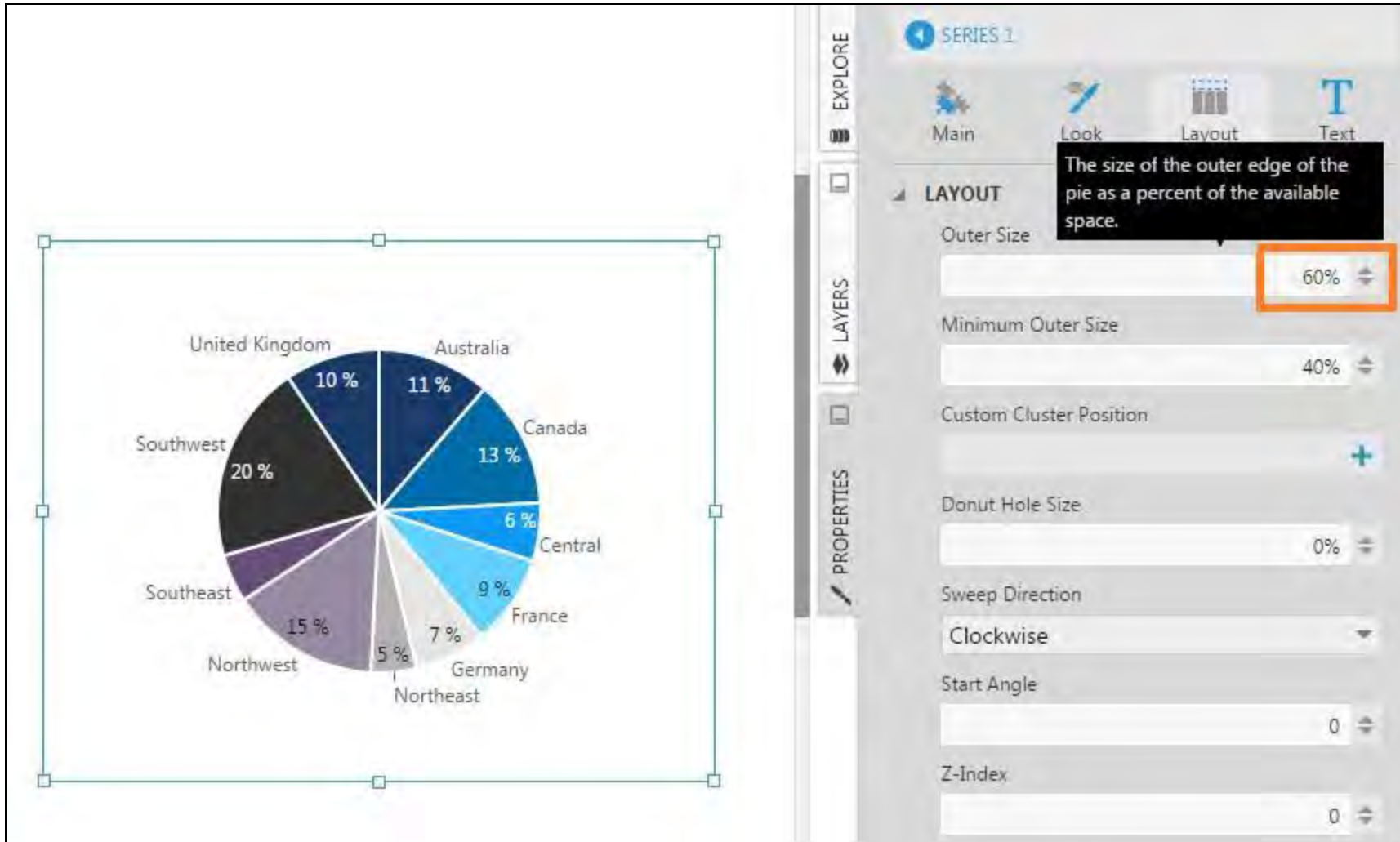


Then click the **Layout** tab to see pie-related properties.



Outer Size

The Outer Size property specifies the size of the outer edge of the pie as a percentage of the available space.

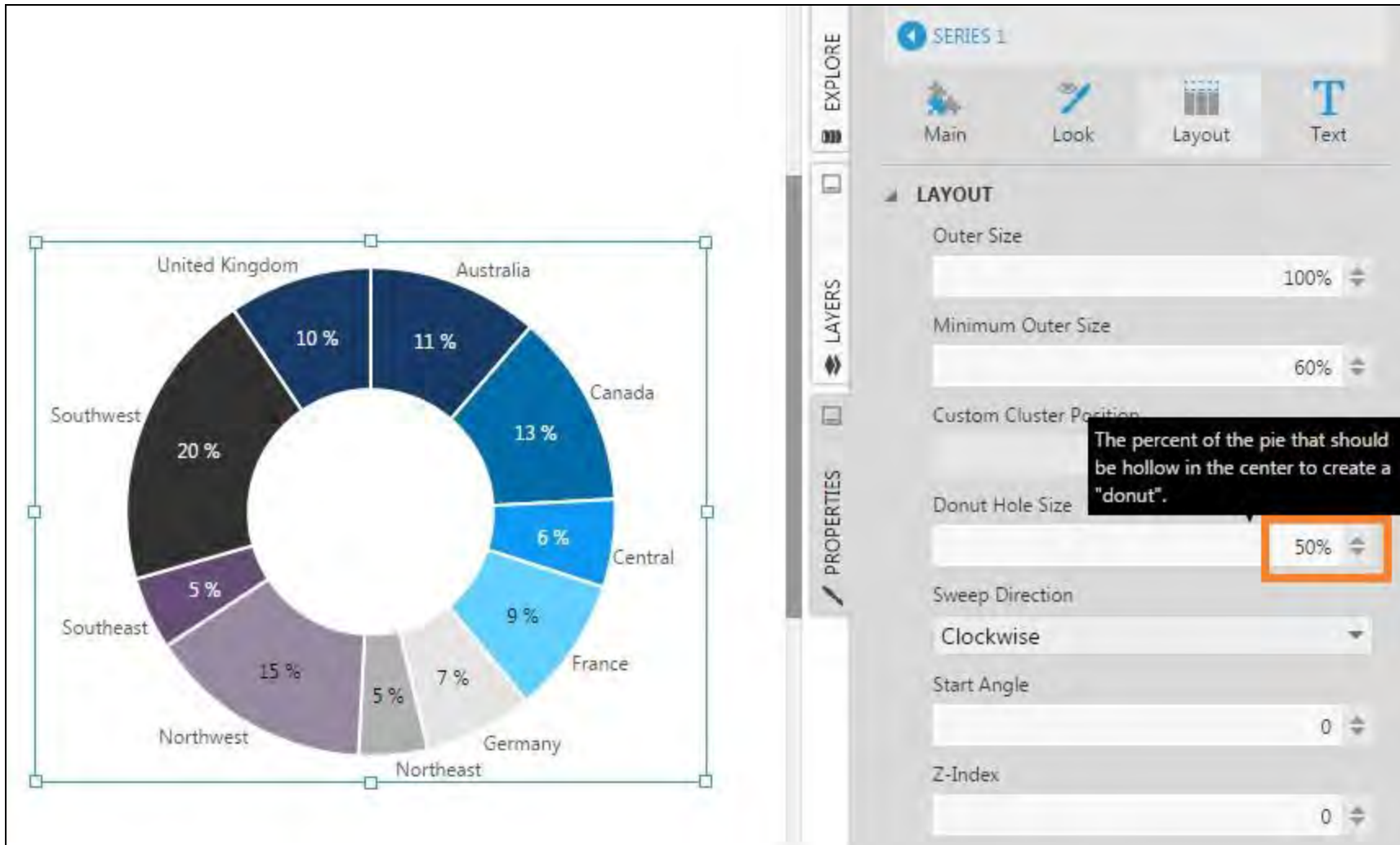


Minimum Outer Size

The Minimum Outer Size property specifies the smallest percentage of the available space that the pie can be reduced to in order to fit labels.

Donut Hole Size

Use the Donut Hole Size property to create a hole in the center of the pie chart and display a donut chart.



Start Angle

The Start Angle property specifies the angle of the start of the first pie slice, measured in degrees from North.

Label Text and Tooltip Text

In the Text tab, you can customize the Data Point Labels and Tooltip Text properties like for other chart types, using regular text as well as placeholder keywords for values from the data.



- Archive of documentation for Logi Symphony v24

For pie/sunburst charts, the *[Percent]* keyword can display the percentage represented by each slice, and a percentage format can be included as in *[Percent:P1]*. For a sunburst displaying multiple hierarchies, the *[Member]* keyword is useful for displaying the member caption for whatever hierarchy is represented by slices in each ring.

For additional information about available keywords and formats, see [Formatting Text](#).

For more information, see:

- [Expand and Collapse Hierarchy Members](#)
- [Using Chart Properties](#)
- [Displaying Top/Bottom Records](#)
- [Add a Legend](#)
- [Using a Treemap](#)
- [Automatic Joins and Hierarchies](#)

Using Radar Charts

This applies to: *Managed Dashboards, Managed Reports*

Radar charts plot data points as symbols, lines or areas in a circular layout.

This can be used for data that can be considered circular such as periods of time, data that indicates a direction, or plotting a set of variables as a series of shapes that can help to track patterns and irregularities.

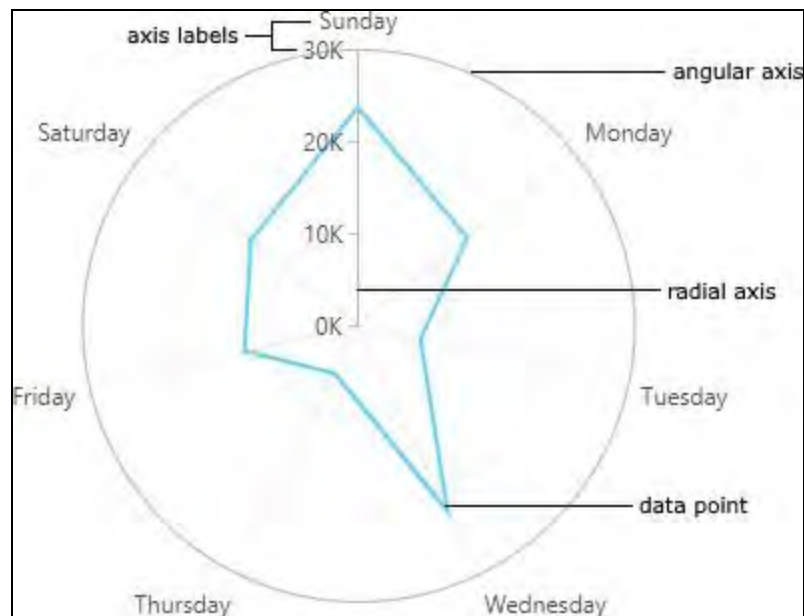


Note: Also consider conventional line or area charts, which are often still best for readability.

Parts of a Radar Chart

When a radar chart type is chosen in a chart visualization, a different layout is used for the axes and for plotting the data points. There are two types of axes in a radar chart, which can be displayed as a reference for data points:

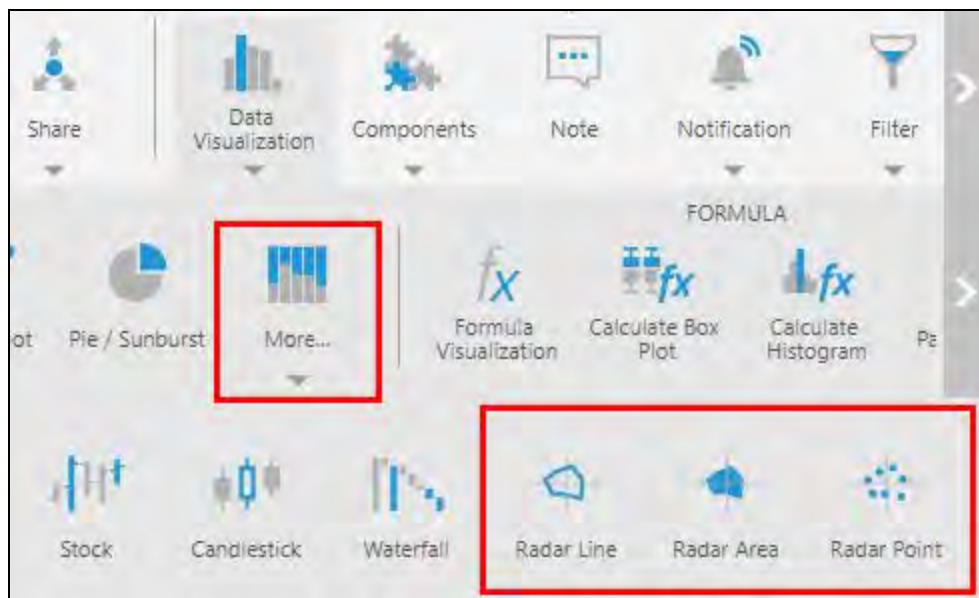
- **Angular (X) axis** - Displayed as a circle, where each value is represented by some angle.
- **Radial (Y) axis** - Displayed as a radial line, where each value is some distance away from the center.



Creating a Radar Chart

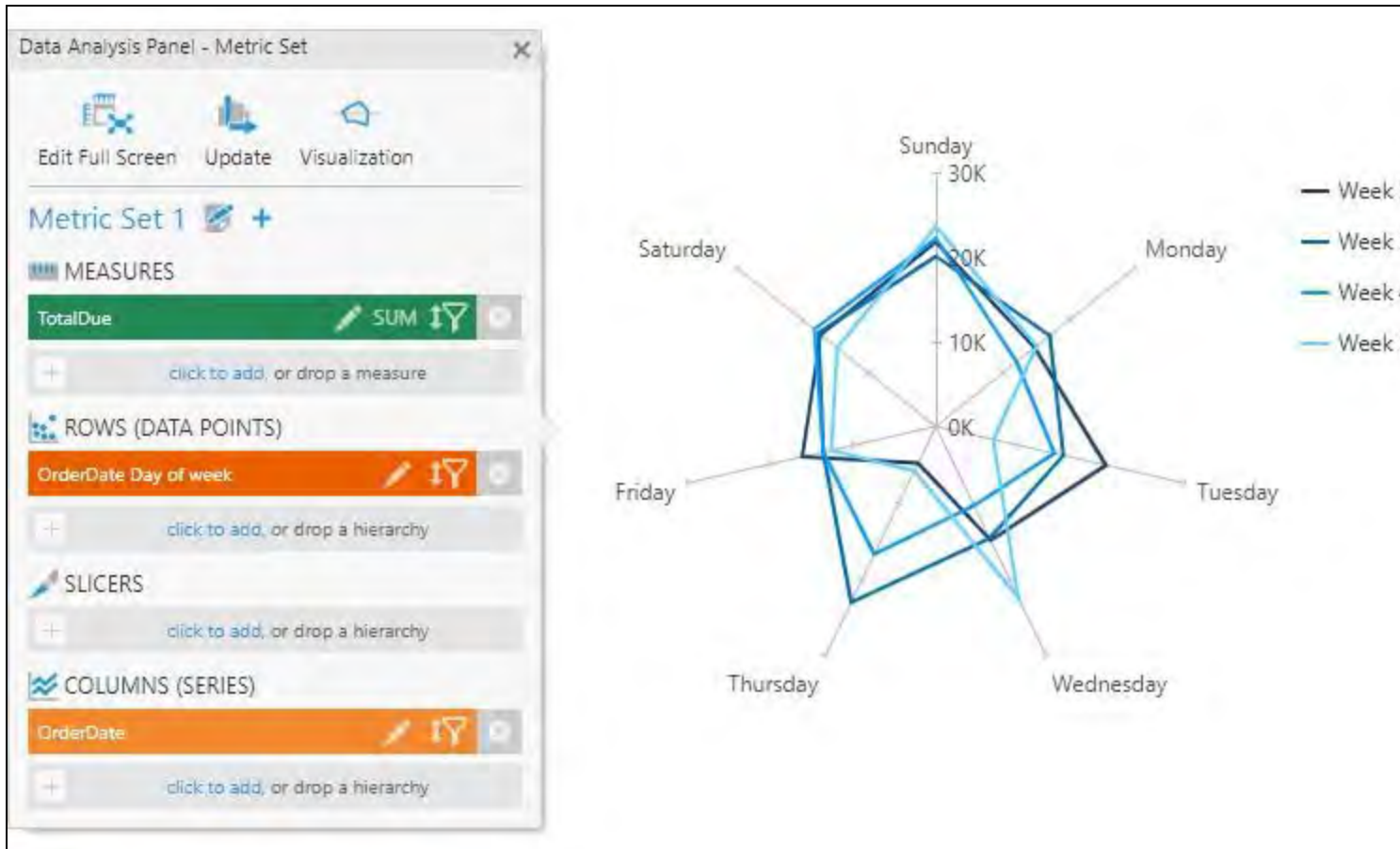
When choosing a new radar chart from the toolbar, the initial chart settings will be different than for other chart types, to produce a more readable radar chart.

For example, when creating a chart or when first re-visualizing to a chart, choose **More...** under Charts, and then under More Charts choose a **radar chart**.



The metric set in the example below selects the [time dimension attribute](#) *Day of week* on Rows and a time dimension hierarchy's weeks level on Columns.

By default, the outer angular axis line itself will be set as hidden, although its labels and grid lines will appear at various angles. Instead of displaying circular grid lines for each radial (Y) axis value, tick marks are displayed near where each data point is plotted.



These settings can be changed in the Properties window, or you can change the chart type from another type of chart that is already displaying axis lines and grid lines.

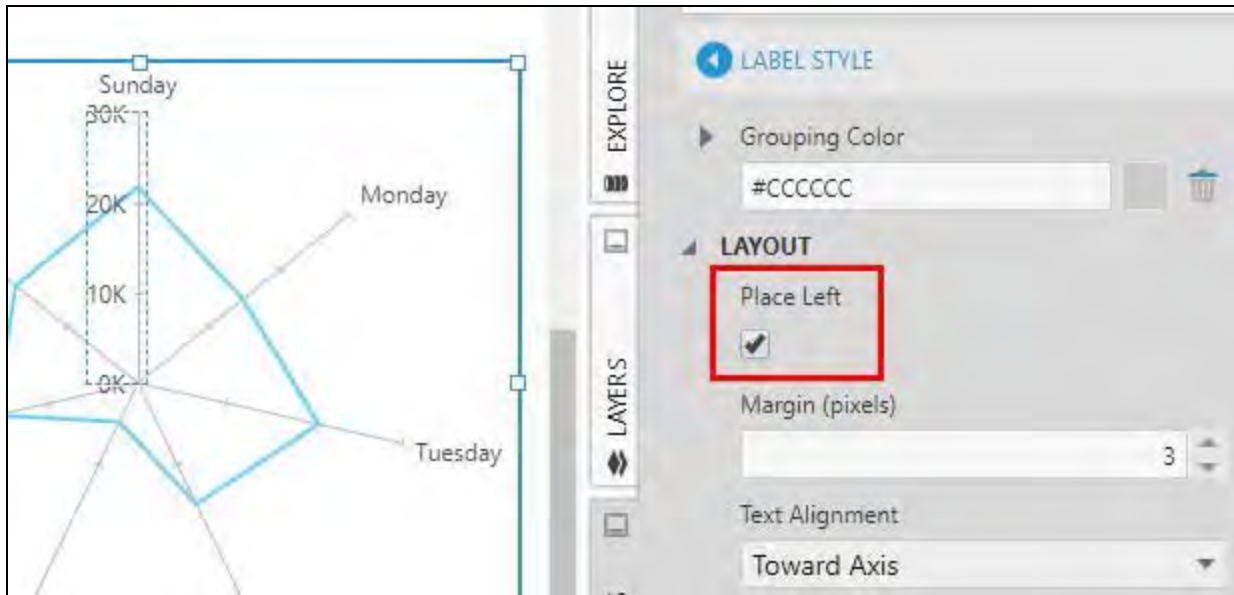
Radar Chart Properties

Most features and properties are the same for radar charts as for most other chart types, but some chart settings apply only to a radar chart's circular layout.

Label Placement

A radar chart's radial axis is centered horizontally in the middle of the chart, and its labels could be placed on either side.

To place its labels on the left side, click to select the **radial axis labels**, and in the Properties window's Text tab, click **Label Style**. Under Layout, select **Place Left**.

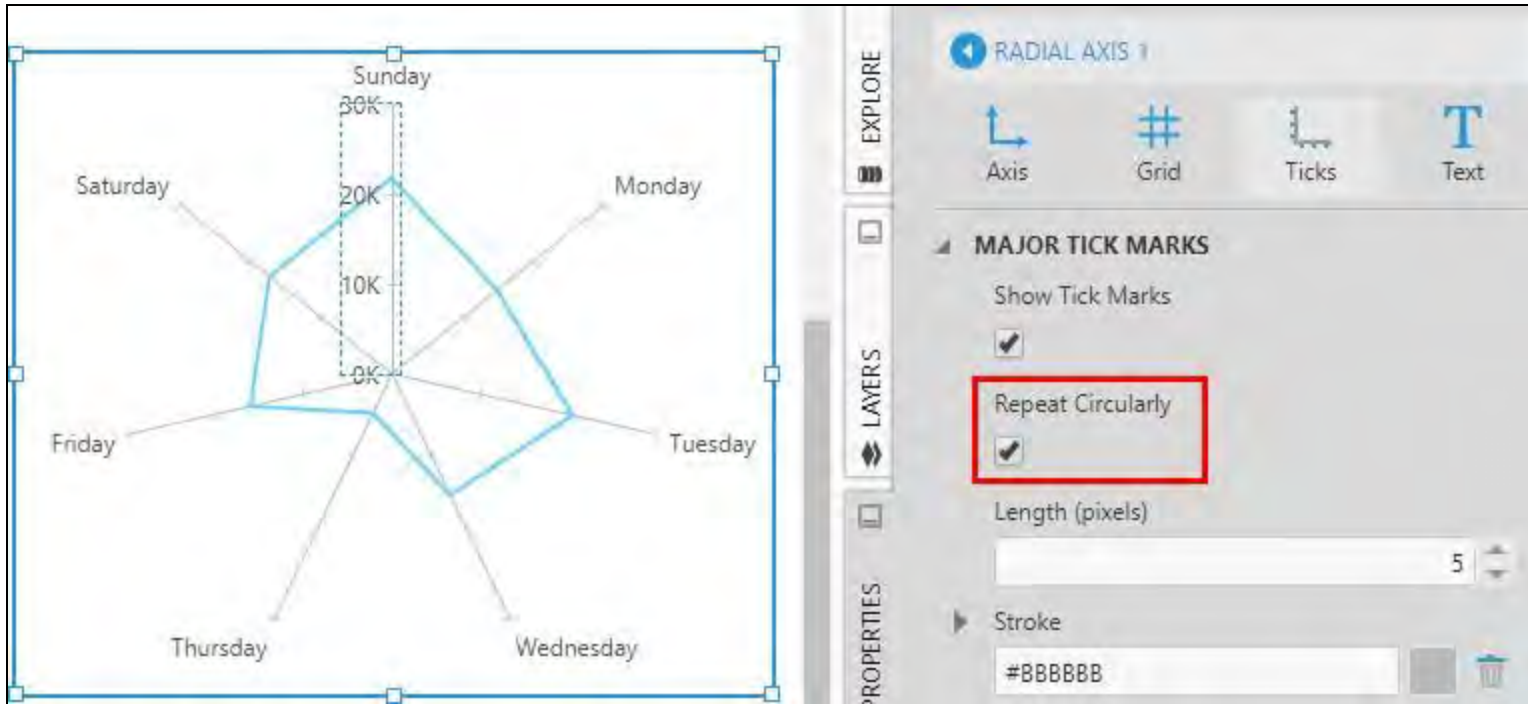


If tick marks are placed Outside (to the right), their Placement property can be changed to Inside.

Repeat Tick Marks Circularly

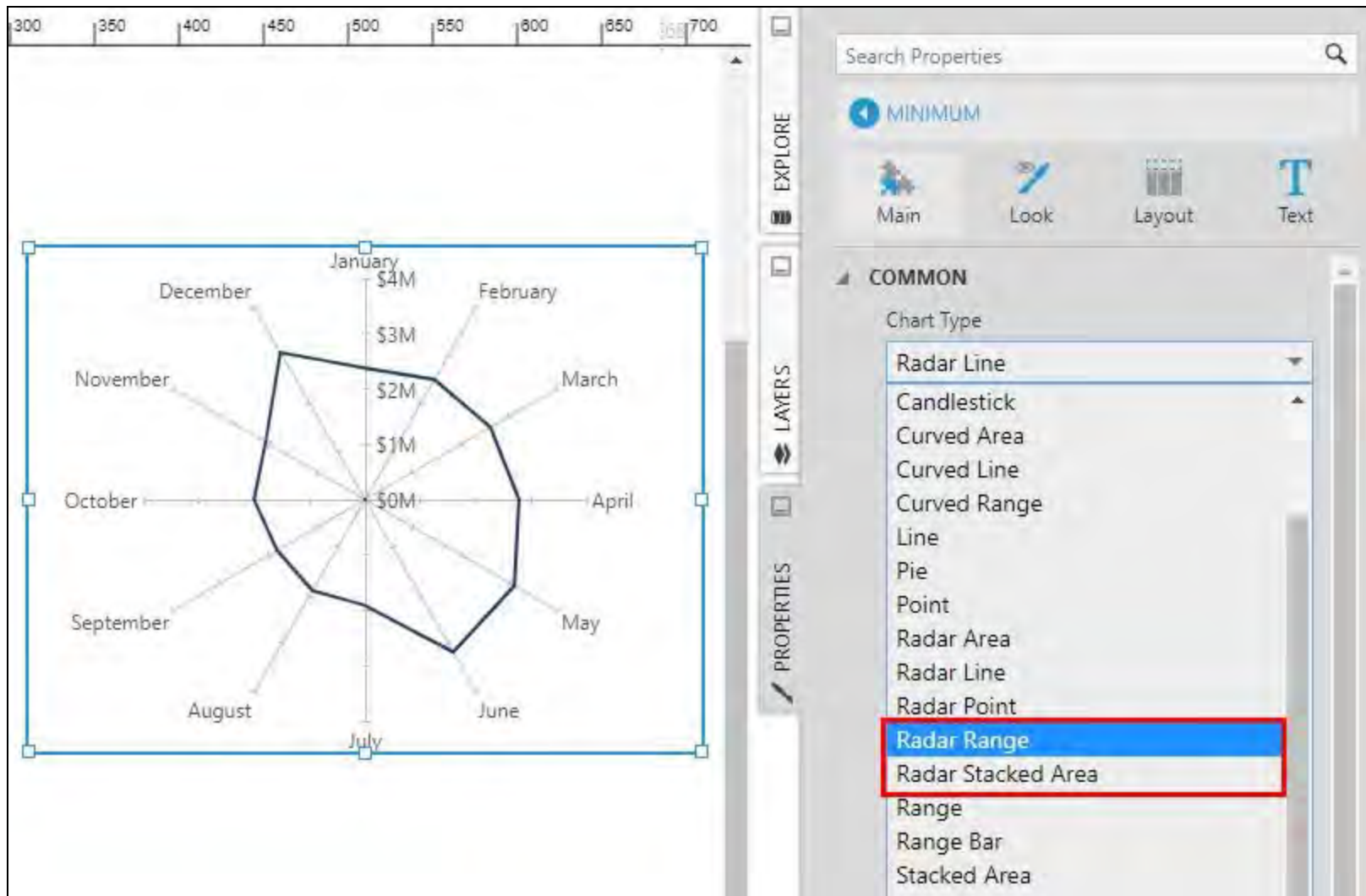
Radial axis tick marks can be repeated along each angular axis grid line, so that the grid lines can function like axes at each angle for reference for nearby data points.

In the Ticks tab of the radial axis properties, set the **Repeat Circularly** property to determine this behavior.



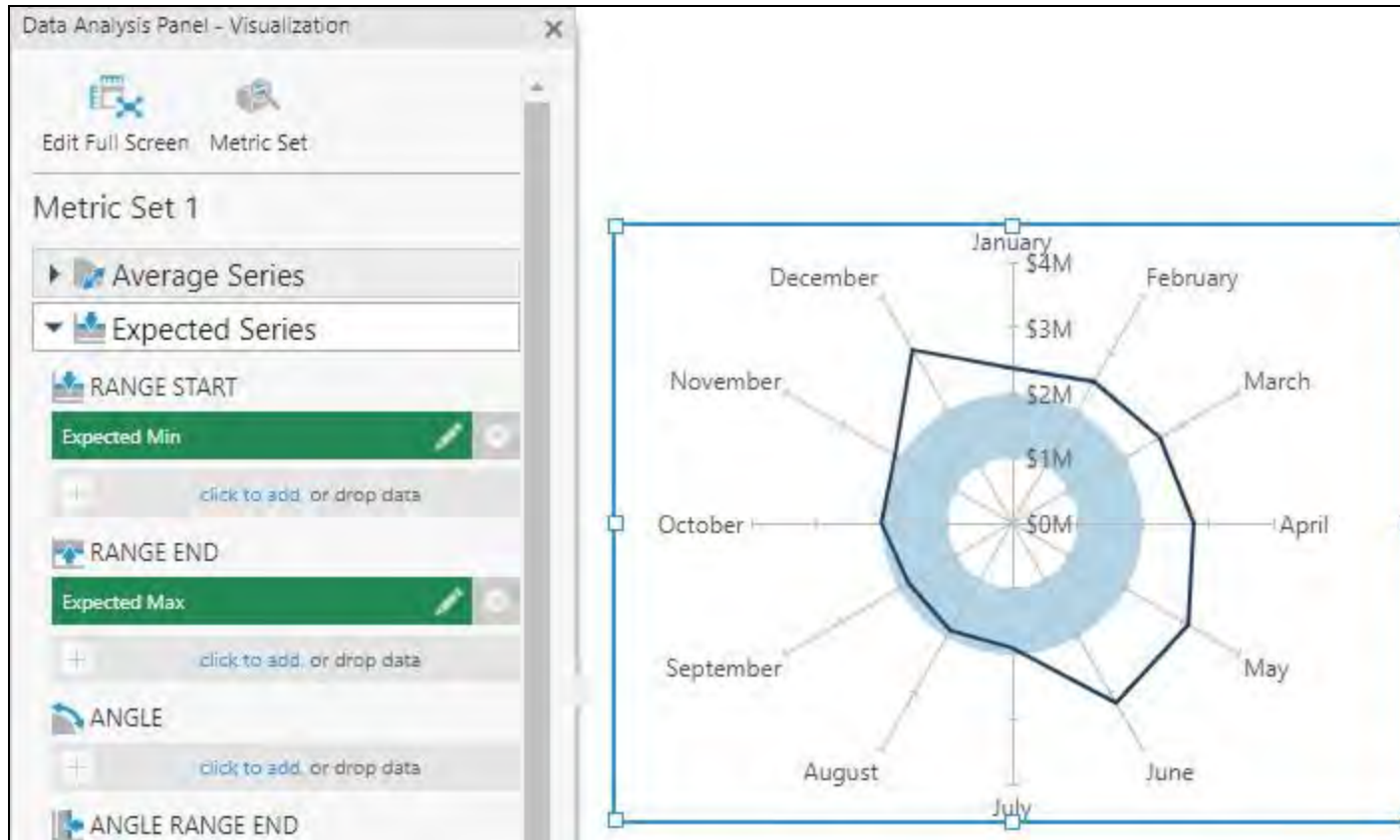
Advanced Chart Types

Two less common chart types can be selected using the Chart Type property of a series: *Radar Stacked Area* and *Radar Range*. These work the same way as the regular *Stacked Area* and *Range* chart types.



You can change the chart type to one of these options for an existing series, or on a new series.

If you've changed the chart type to Radar Range, check the Data Analysis Panel's Visualization tab to see the new Range Start and Range End options, which don't exist for the other chart types. This is how you can use a pair of measures to define a circular range, for example.



For more information, see:

- [Using Chart Properties](#)
- [Create a Time Dimension](#)
- [Symphony Metric Sets](#)
- [Other Metric Set Tools](#)

Using a Range Bar Chart and Visualizing a Project Schedule (Gantt Like Chart)

This applies to: *Managed Dashboards, Managed Reports*

The Range Bar chart is a bar chart that displays bars for each dimension (category), ranging between a start value and an end value. For example, Range Bar charts can be used to represent the beginning and end of operations/tasks along a time axis, similar to a Gantt chart, for tracking project schedule. This article demonstrates a few Range Bar chart configurations that can be used in order to visualize measurement ranges, tasks, and project schedules.

Creating a Range Bar Chart

A range bar chart has at least two measures (to be used as the start and end of the range bars) and one hierarchy. For example, in the following chart, the measures represent low and high temperatures for a day and work as a range of temperature values.



There are also other ways to configure a range bar chart:

- You can switch the bars to be horizontal instead of vertical.
- You can use dates or other types of values to determine each bar's range, along a different type of axis besides numeric.

Showing Task Schedules and Dependencies

A project can have multiple phases, such as Planning, Design, Implementation, etc. Each phase can have milestones and dependencies. You can use a Range Bar chart to show these milestones and their dependencies within a project phase.

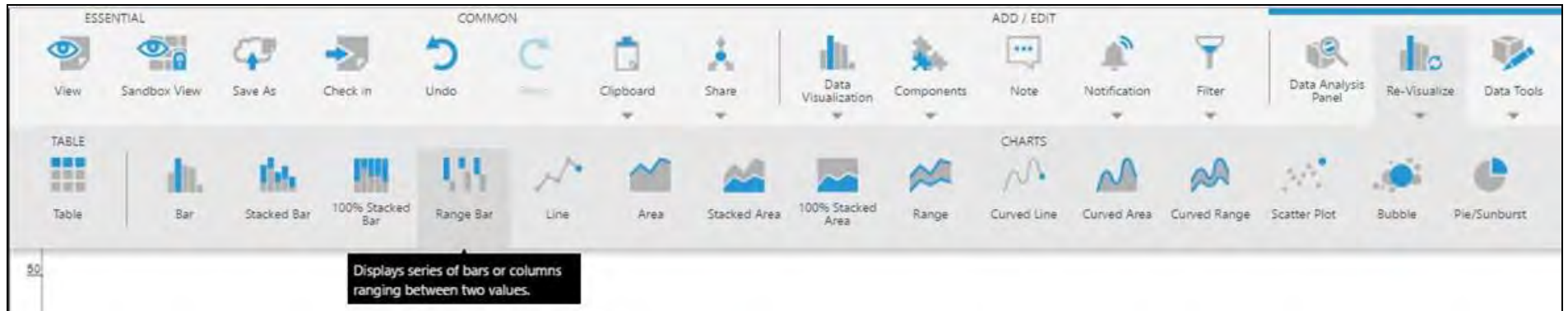
Data Preparation

The following table is used to create the chart. It has five milestones (M1, M2, etc.) and their timelines from the Design phase of a project. M3 is dependent on M2 and M5 is dependent on M4.

Design Phase		
M1: Screen Layouts	Nov 01, 2016	Nov 16, 2016
M2: Business Rules	Nov 01, 2016	Nov 15, 2016
M3: Process Diagrams	Nov 15, 2016	Dec 01, 2016
M4: Pseudo-Code	Nov 15, 2016	Jan 15, 2017
M5: E-R Diagram	Jan 15, 2017	Feb 01, 2017

Creating the Chart

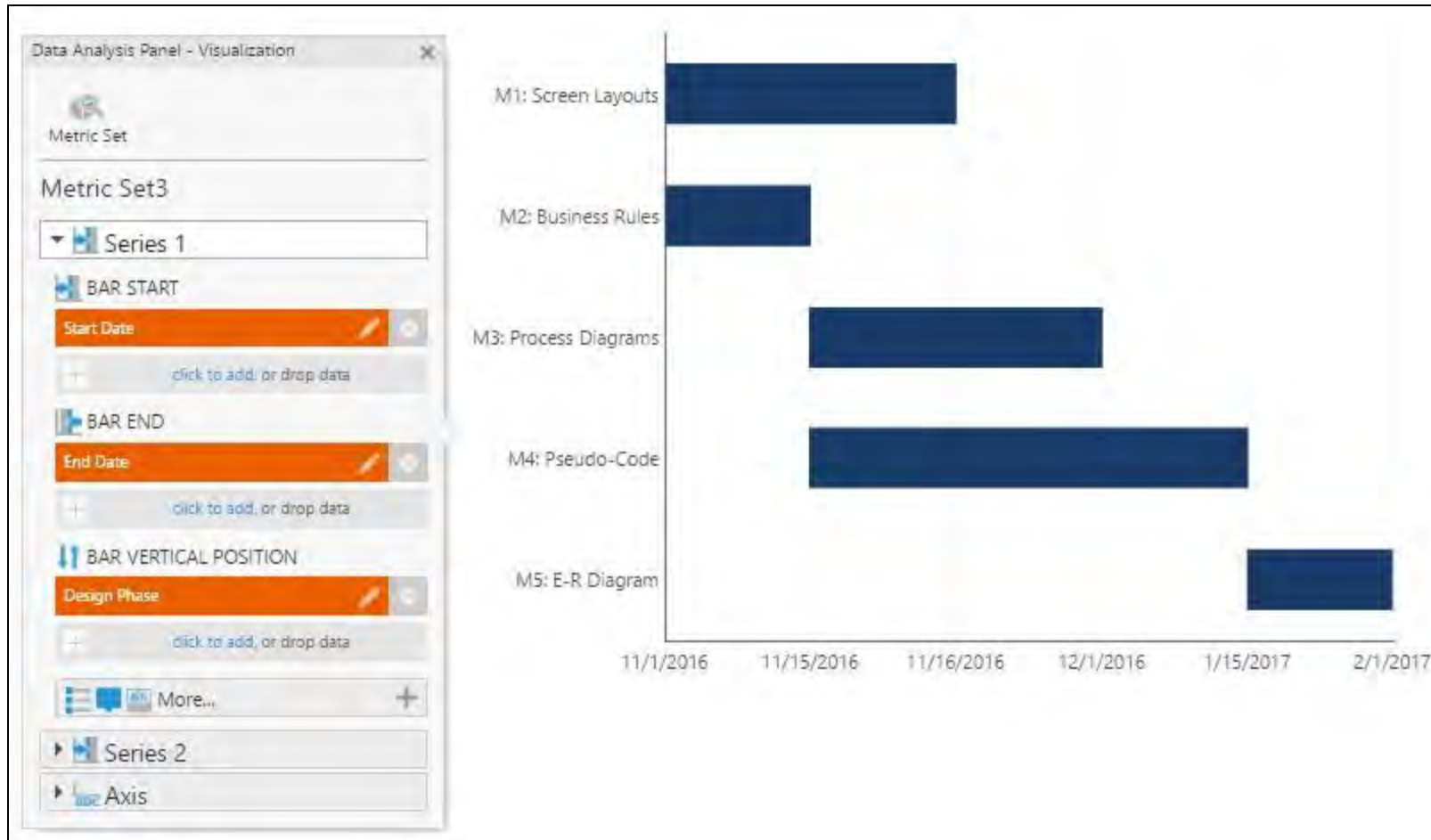
Re-Visualize the table into a Range Bar chart.



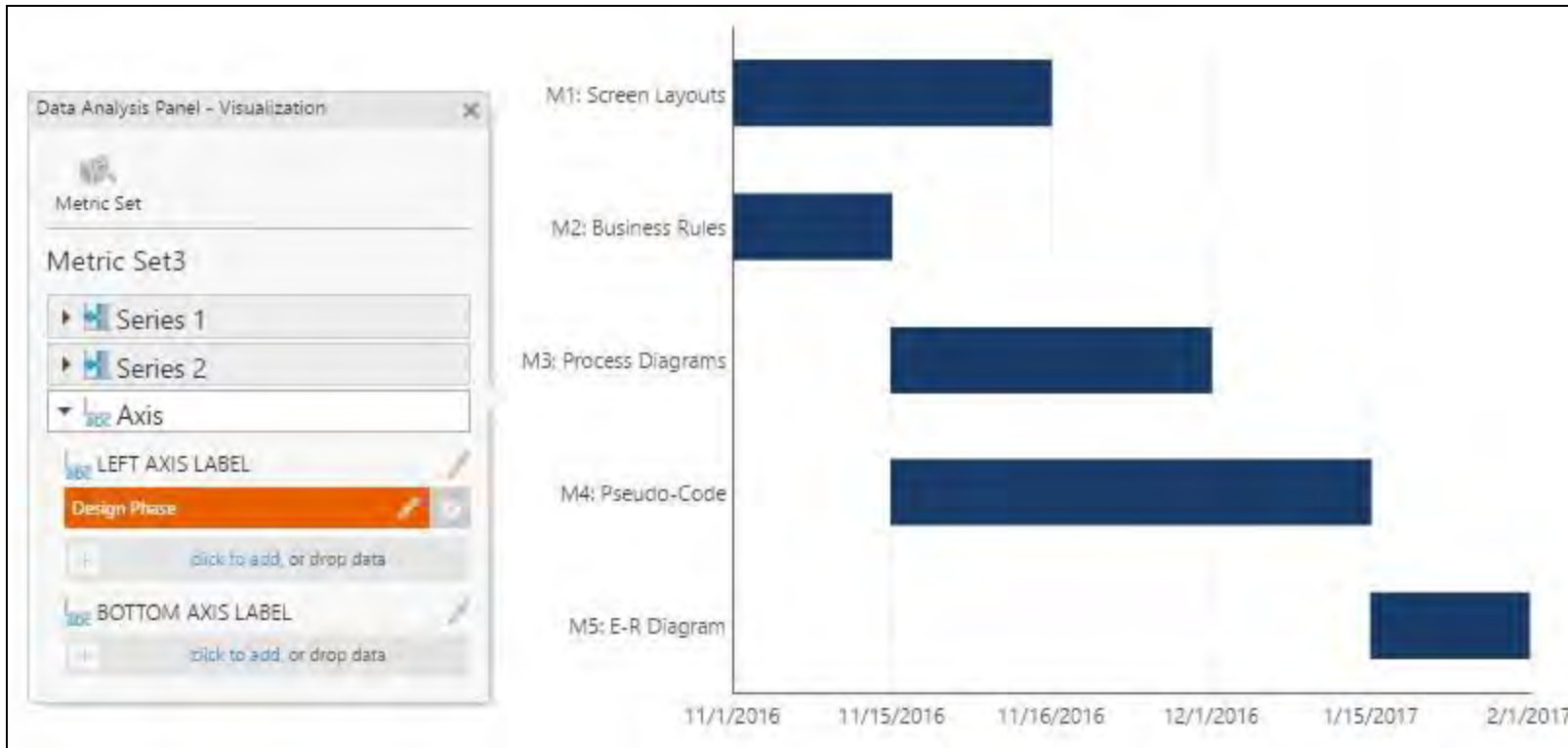
Click **Horizontal Bars** from the toolbar.



Since the range bar series will be created using start and end dates instead of two measures, you may need to configure the Data Analysis Panel **Visualization** settings accordingly:



Also, make sure that you have the appropriate hierarchy as your axis.



Note: The recommended visualization Range Bar Chart applies these settings automatically.

Set the **Scale Type** for the bottom axis to **Date/Time**.

For this chart, check the **Skip Missing Data** under **Bottom Axis (Bottom Axis 1) > Axis > Intervals** in order to show only the dates available in the series.

Indicating Task Dependencies

There are multiple ways to indicate dependencies among tasks. A suitable option is to make use of **states** and creating state styles to indicate dependencies. There must be at least one measure in the metric set to be able to create states.

We have added a **Dependencies** column to our example data for this purpose:

Data Analysis Panel - Metric Set

Edit Visualization

Metric Set7

MEASURES

DummyMeasure

click to add, or drop a measure

ROWS

Design Phase

Start Date

End Date

Dependencies

click to add, or drop a hierarchy

Design Phase	Start Date	End Date	Dependencies	DummyMeasure
M1: Screen Layouts	11/1/2016 12:00:00 AM	11/16/2016 12:00:00 AM	No Dependency	1.00
M2: Business Rules	11/1/2016 12:00:00 AM	11/15/2016 12:00:00 AM	Dependency 1	1.00
M3: Process Diagrams	11/15/2016 12:00:00 AM	12/1/2016 12:00:00 AM	Dependency 1	1.00
M4: Pseudo-Code	11/15/2016 12:00:00 AM	1/15/2017 12:00:00 AM	Dependency 2	1.00
M5: E-R Diagram	1/15/2017 12:00:00 AM	2/1/2017 12:00:00 AM	Dependency 2	1.00

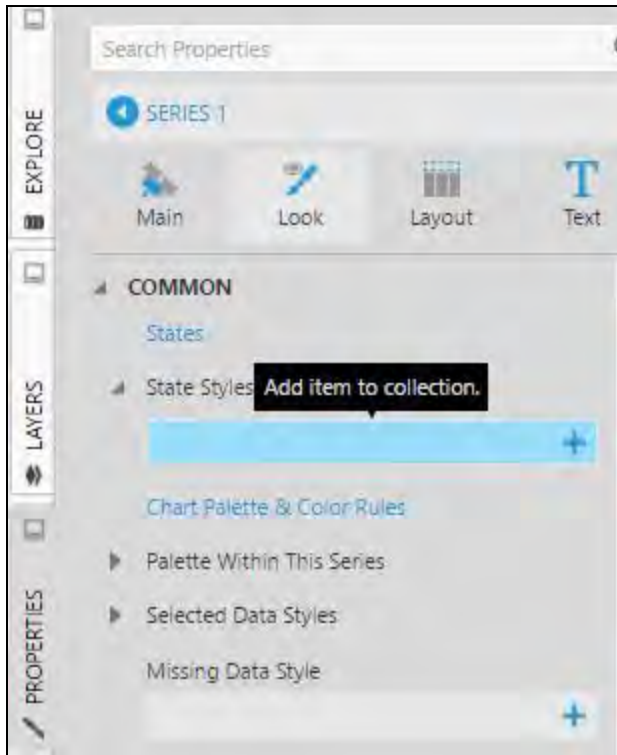
Follow the steps in the previous section to display the project schedule. When the Range Bar chart is ready, continue as follows:

Create a state group named **Dependencies** and add the following states:

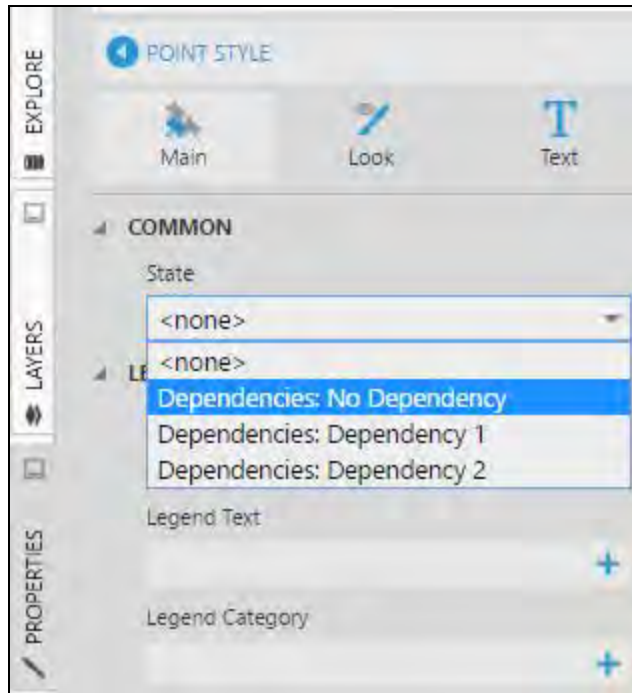


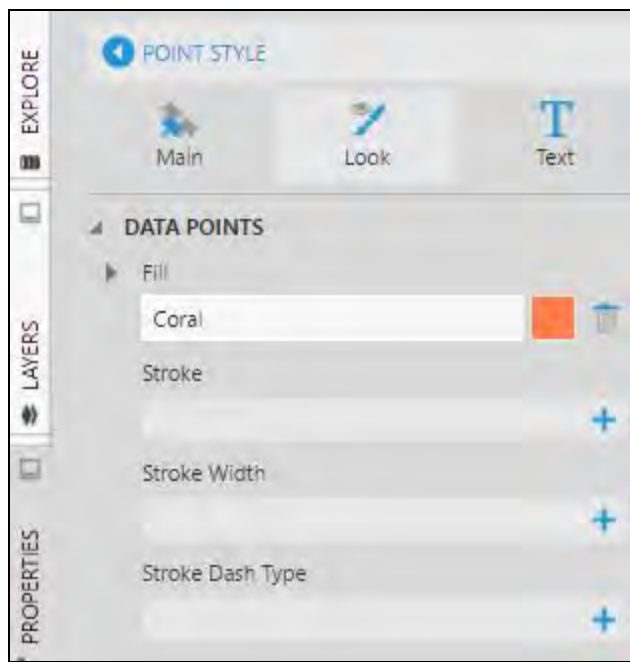
You can add conditions in the **Configure State** dialog to compare hierarchy values. See [Comparing Against a Hierarchy](#) for details on how to do so.

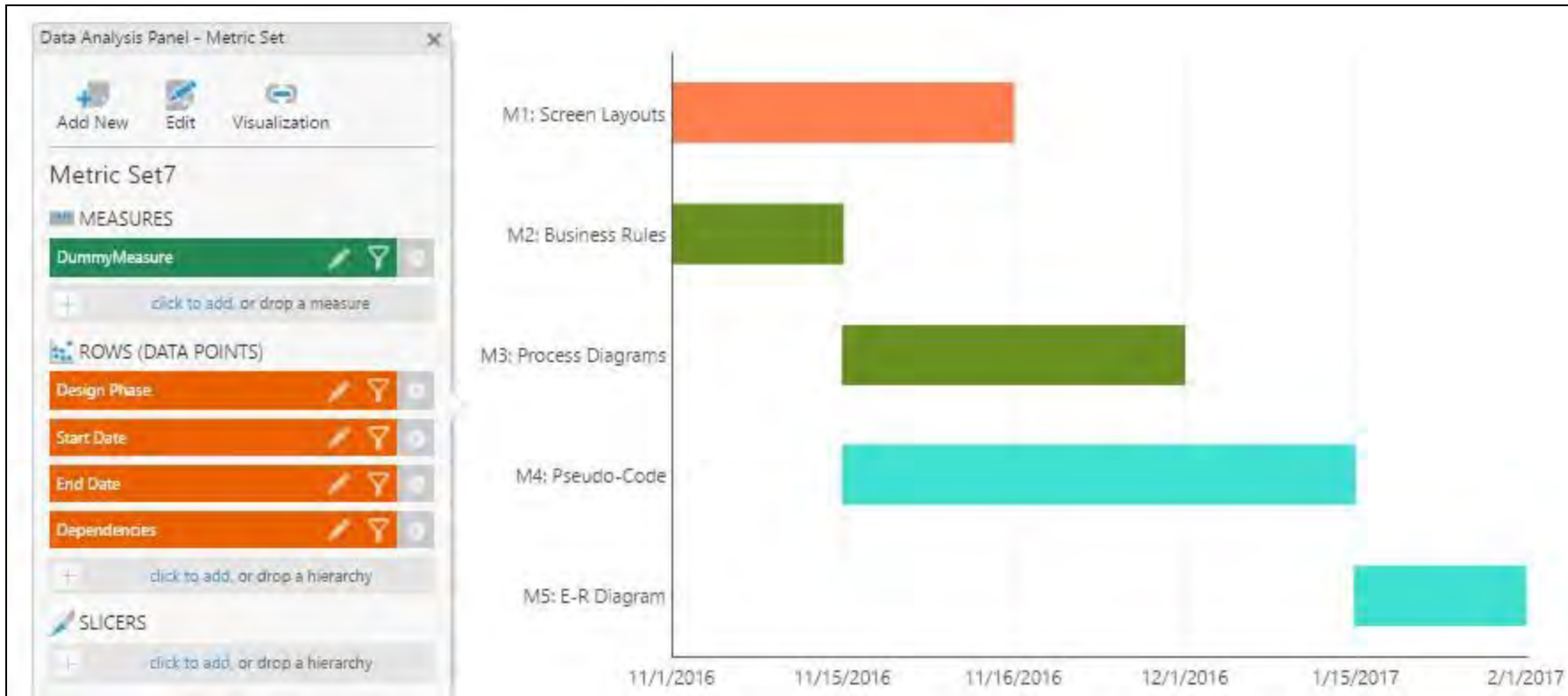
Add styles to the states.



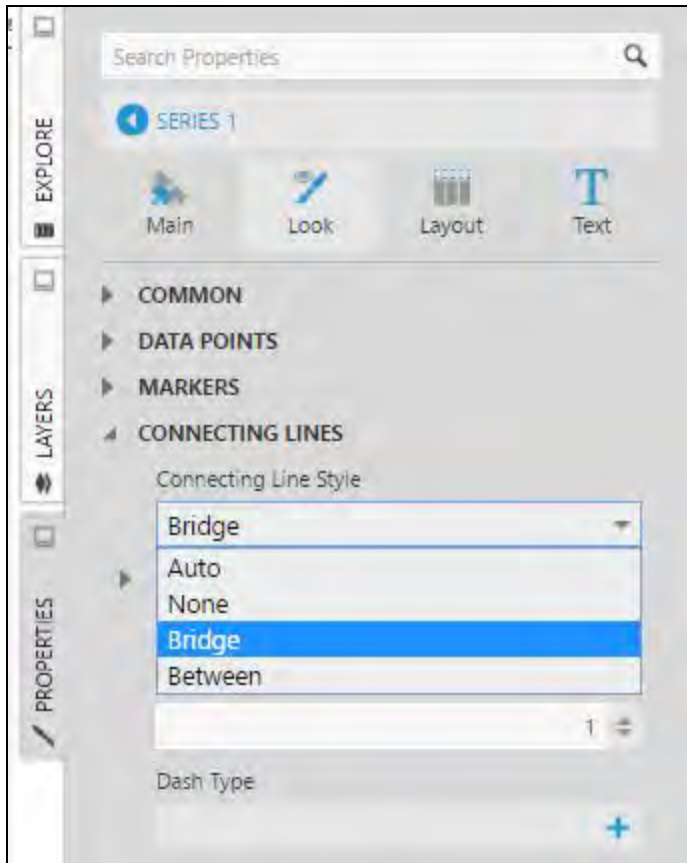
Create three point styles. For each style, set the corresponding `State` and the `Fill` color.



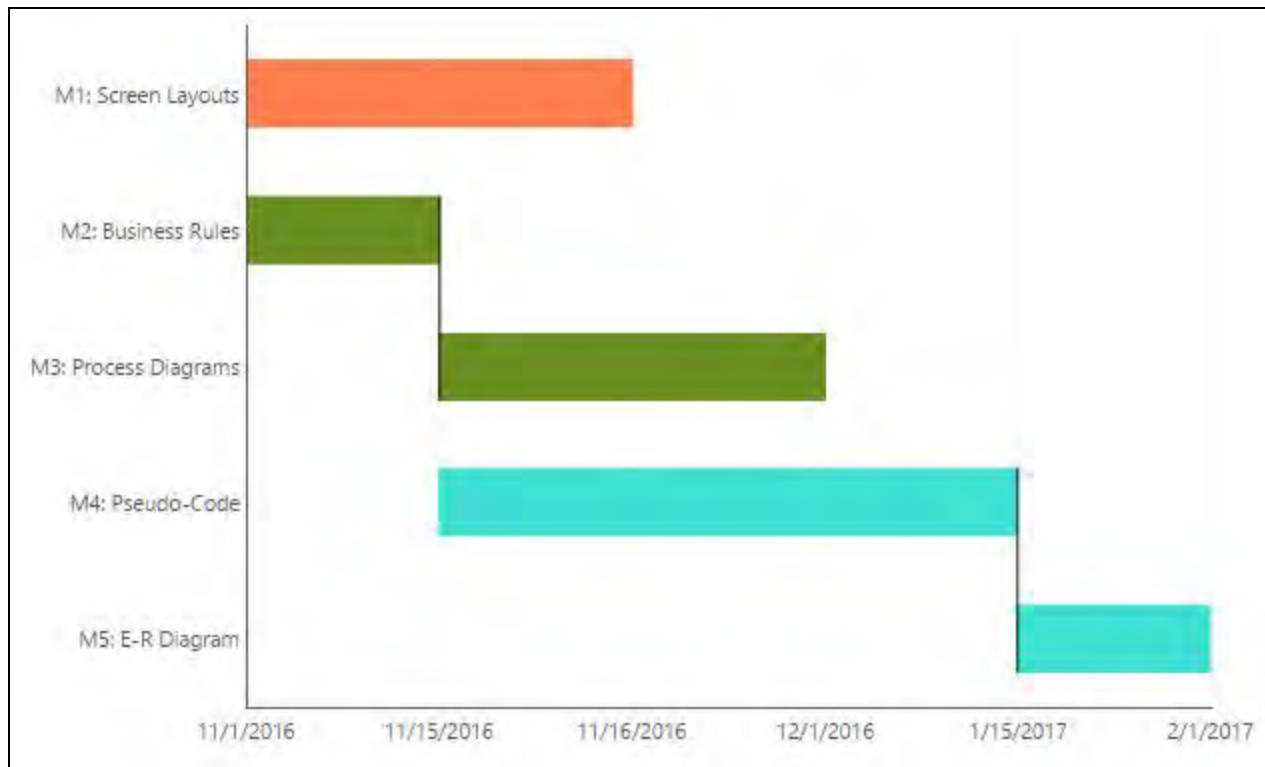




As an additional step, you can show connecting lines between tasks to indicate the tasks that are supposed to run in sequence. To do that, navigate to **Properties** > **Main** > **Data Point Series (Series 1)** > **Look** > **Connecting Lines** and set the value to **Bridge**.



This will show multiple lines connecting M2 to M3 and M4 to M5, indicating the task sequence.

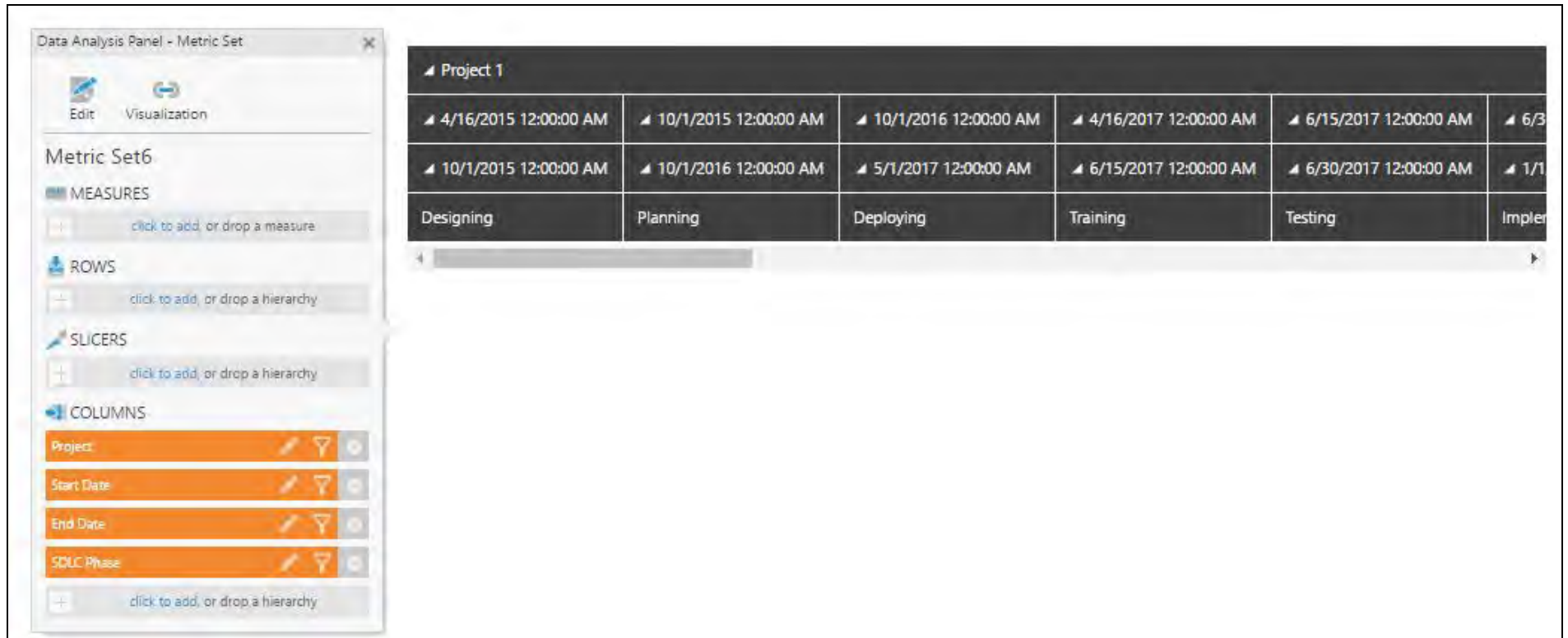


Showing the Project Schedule for Multiple Projects

You can use a Range Bar chart to display a schedule with multiple projects, along with their phases.

Data Preparation

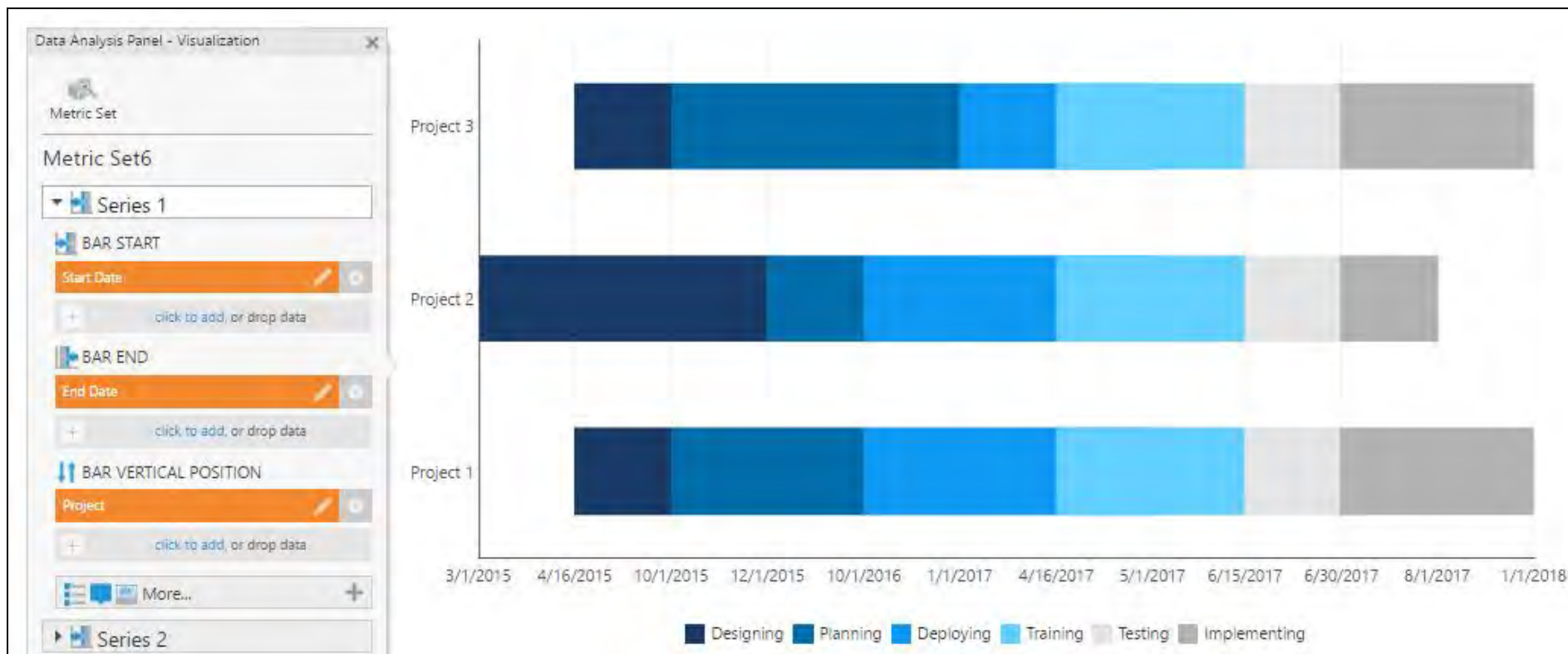
The following table is used to create the chart. It shows several project phases along with the start date and end date for each project.

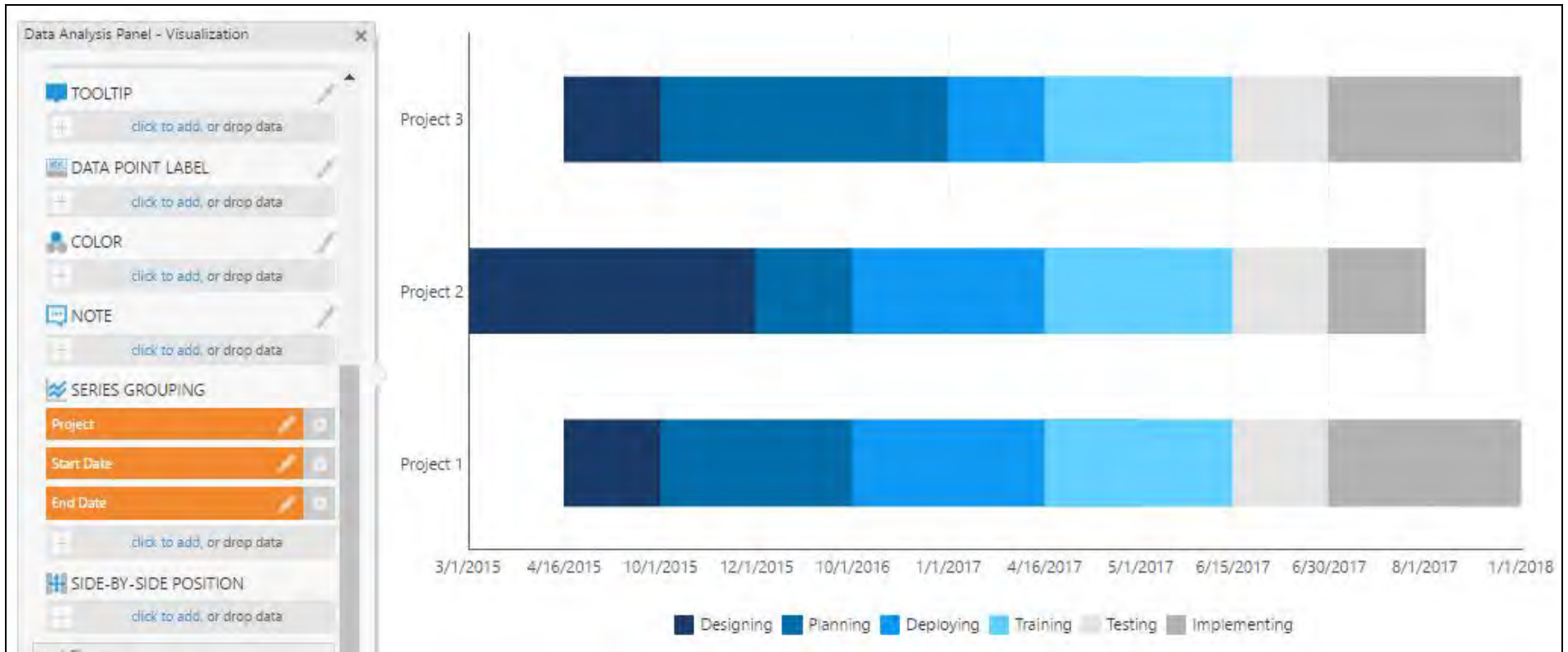


Creating the Chart

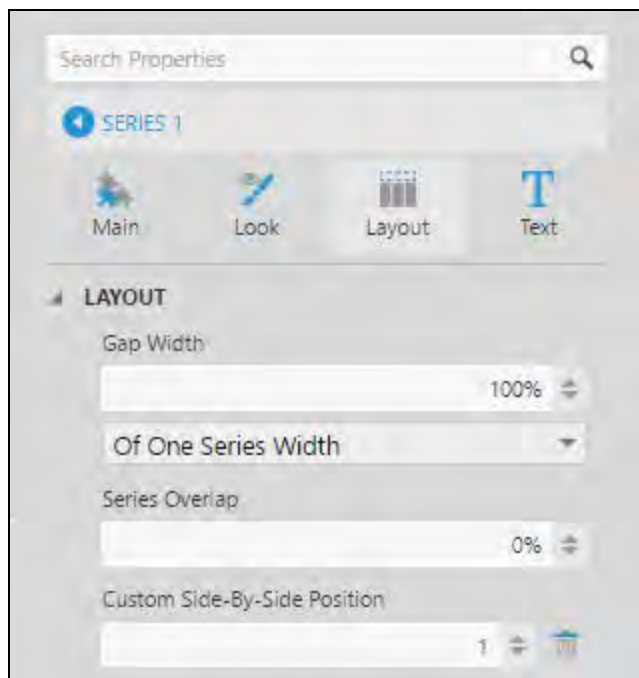
Re-Visualize the table into a Range Bar chart. Select **Horizontal Bars** from the toolbar.

Make sure that the **Visualization** tab of the Data Analysis Panel has the following settings:

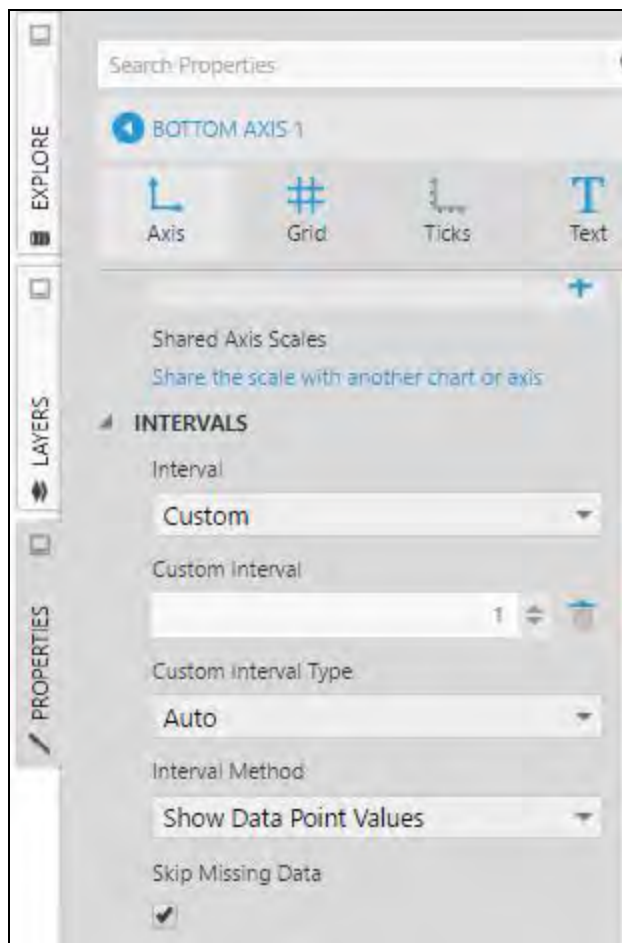




Under **Series Layout**, set the value of Custom Side-By-Side Position to **1**.



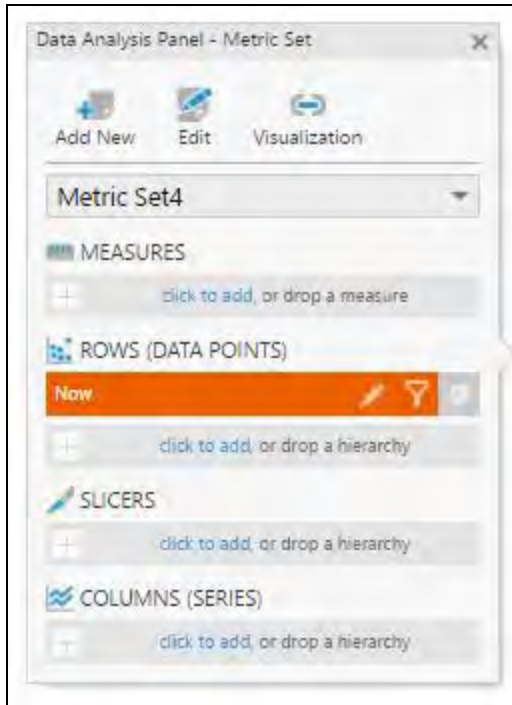
Set the scale type for the bottom axis to **Date/Time**. For this chart, **Skip Missing Data** is checked and **Interval Method** is set to **Show Data Point Values** under **Bottom Axis (Bottom Axis 1) > Axis > Intervals** in order to show only the dates available in the series.



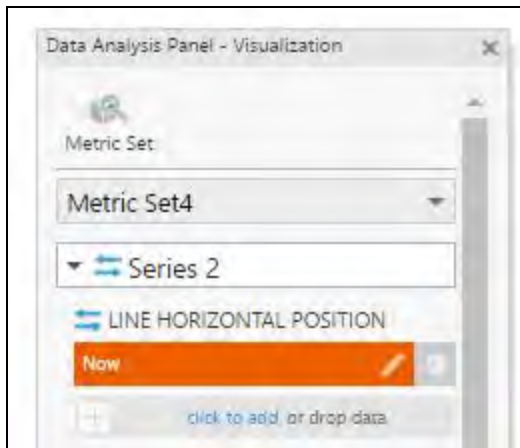
Miscellaneous

Adding a Line to Indicate the Current Date

Often there is a requirement to show a vertical line in the chart to indicate the current date. This is useful to highlight where the project schedule stands. In the example shown above, you can add another metric set to the same chart using the Data Analysis Panel. In the following example, the dimension **Now** has the current date.



This will create a new series for the chart. For the series, set the Chart Type to **Line**. In the **Visualization** tab, add the dimension to **Line Horizontal Position**.

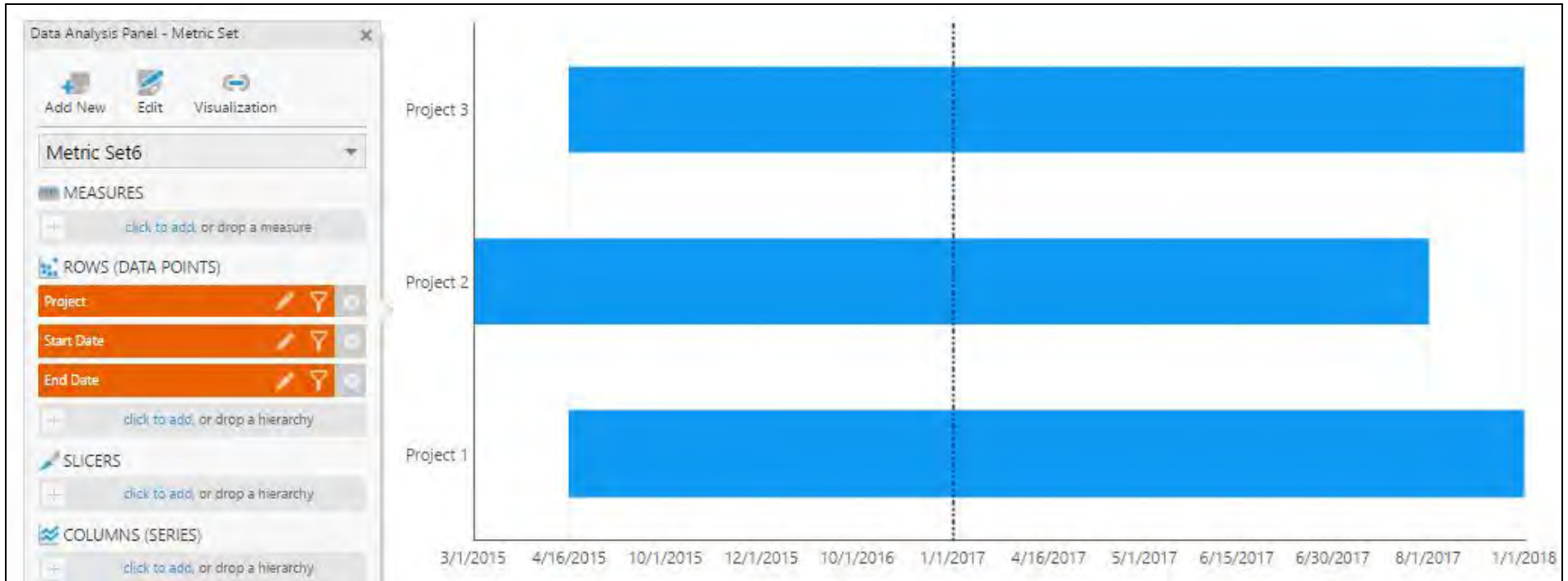


This will show the current date as a vertical line.

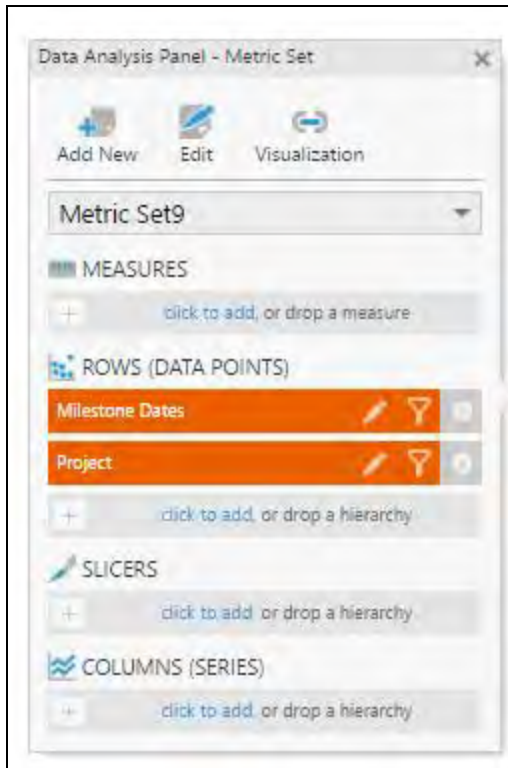


Adding Milestone Dates

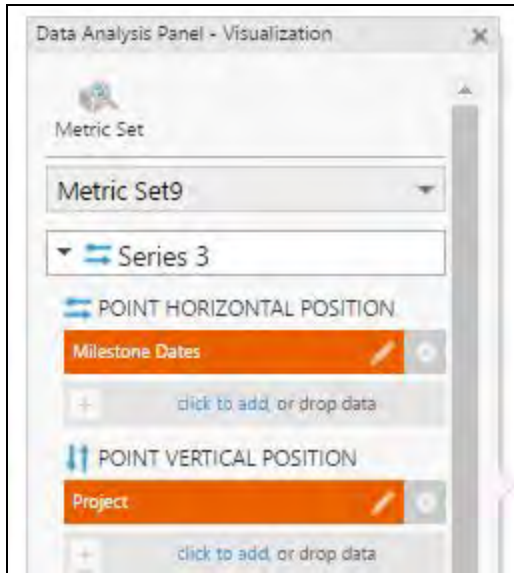
You may want to show the milestone dates of each phase within a project timeline. Assume that you have the following chart:



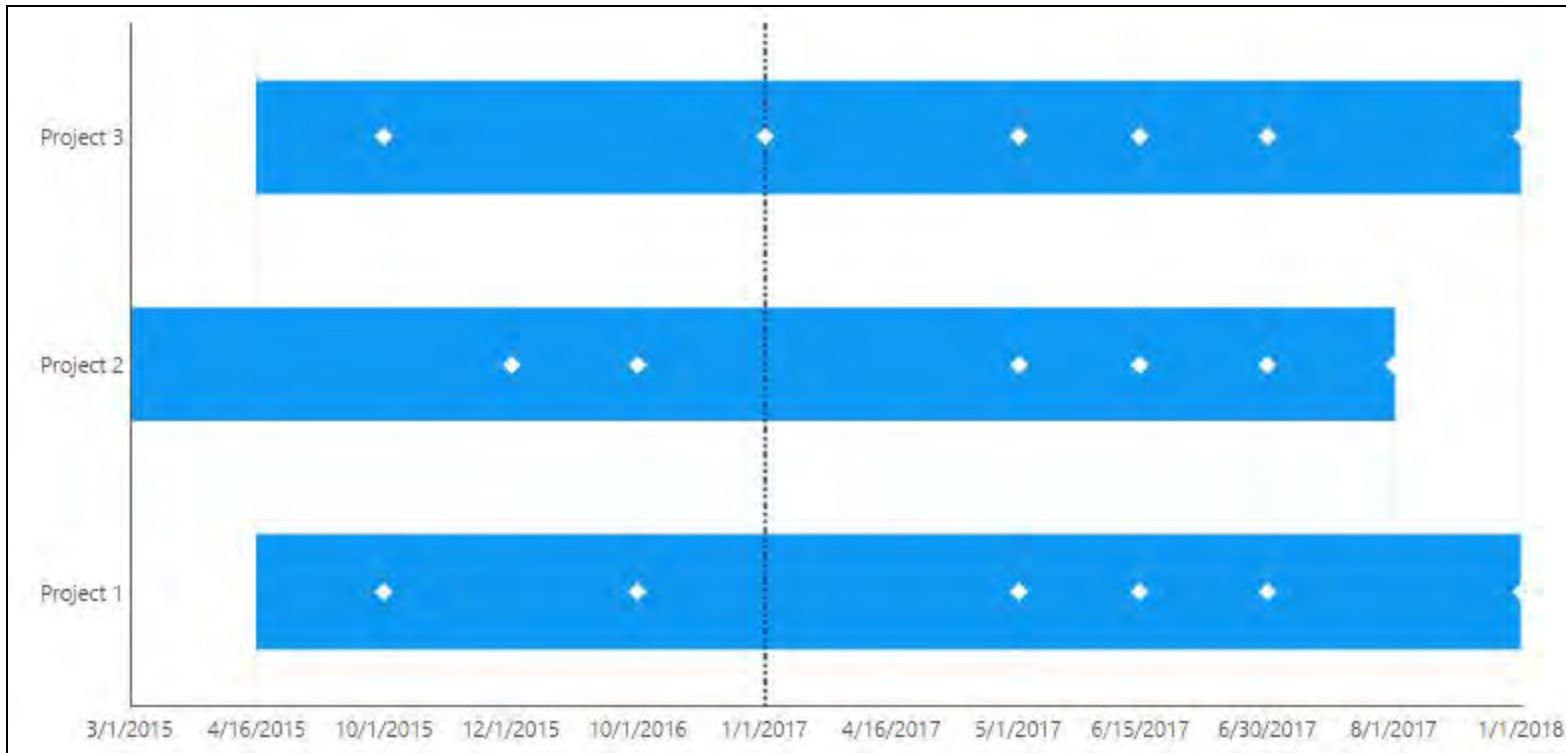
You can add another metric set using the Data Analysis Panel to create a new series and set the Chart Type for the series to a **Point** chart.



The **Visualization** tab should have the following settings:



For the newly created series, navigate to the series properties and set the `Marker Fill` to **White** and the `Marker Shape` to **Diamond**. Now you can see the milestone dates along the project timeline for each project. You can use states and state styles for the point chart to illustrate the status of the milestones (i.e. In-progress, Delayed, Completed, etc.).



You can also make use of [notes](#) to record and show further details about the project milestones.

For more information, see:

- Video: [States](#)
- [Set Up States on a Metric Set](#)
- [Using Chart Properties](#)

Using a Relationship Diagram

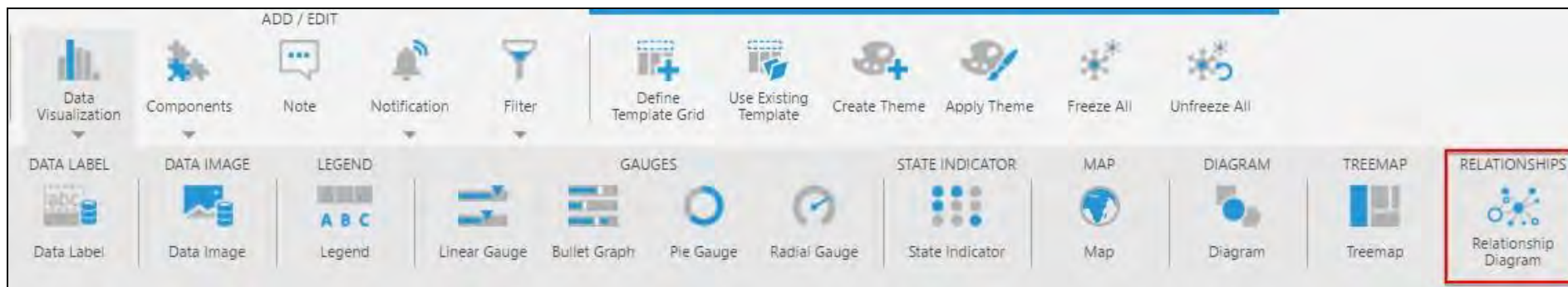
This applies to: *Managed Dashboards, Managed Reports*

The relationship diagram arranges items in your data based on the relationships between them in a freeform graph. Use it to discover unexpected links, group data into clusters according to their relationships, or add additional details or quantitative data (measures) on top of the structure it displays.

While this diagram can be used to display the hierarchical structure and grouping of any data you add to it, it is also capable of visualizing whatever forms of relationships might exist between values in your data by assigning *Source* and *Target* values.

Add a Relationship Diagram

Using the **Data Visualization** or **Re-Visualize** option in the toolbar, select **Relationship Diagram**.

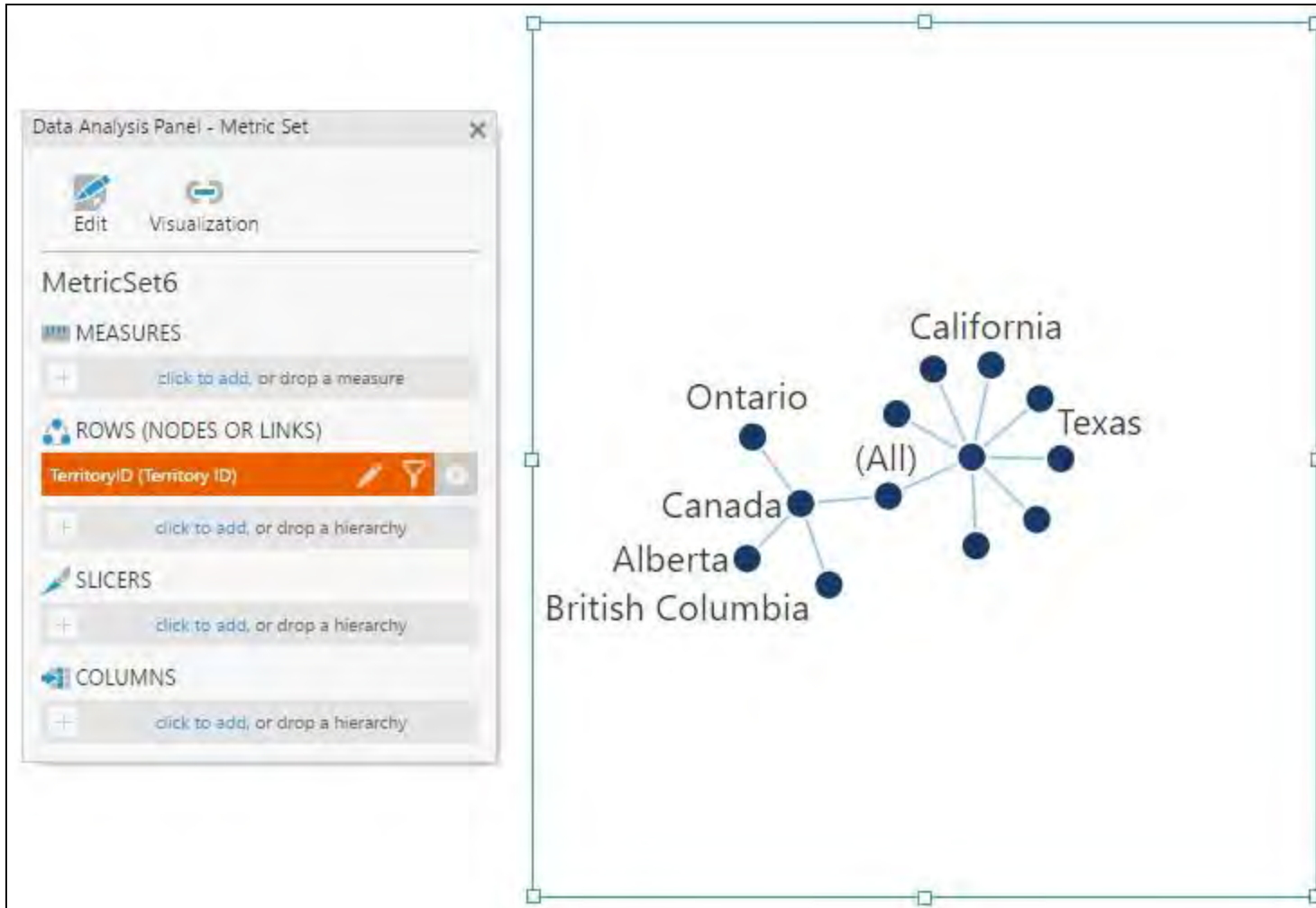


If you haven't already selected **data**, drag it from the Explore window onto Rows to determine what will make up the nodes (circles) of the diagram.

To select and visualize multiple levels from a multi-level hierarchy at once, click to edit the hierarchy in the Data Analysis Panel, then set the Top Level to be different from the Level.



In our example below, the diagram now displays a tree-like arrangement based on the multiple levels of a hierarchy.



Instead of creating a multi-level hierarchy, you can add multiple hierarchies or columns of data.

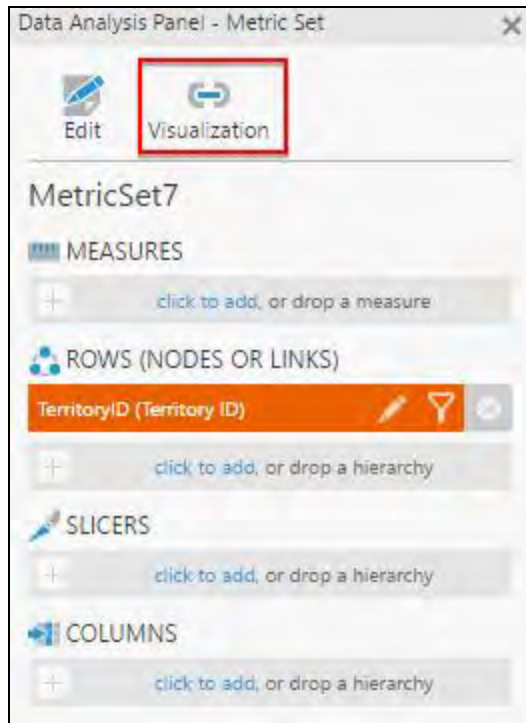
This type of diagram is known as a *force-directed graph* and is non-deterministic, which means it will initially be arranged differently each time it loads based on its current data.

You can zoom in and out, and click and drag nodes to re-arrange them (first click **View** in the toolbar if editing a dashboard or another view). Drag a **child node** to move it, or drag a parent node to move the whole cluster. When dropped, nodes will gravitate toward the parent node and the whole cluster will gravitate toward the center.

Display Custom Relationships

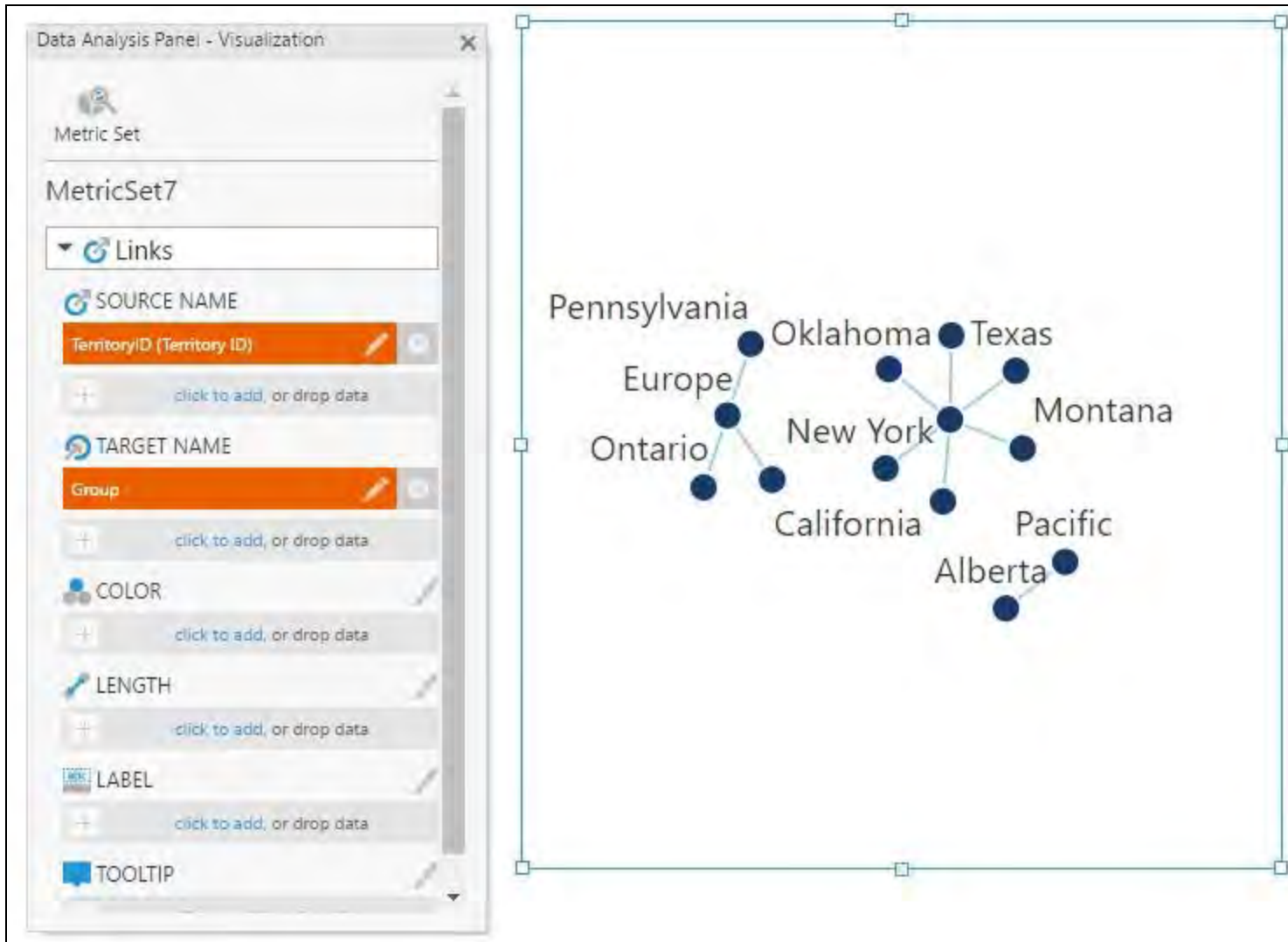
By default, the relationship diagram displays the hierarchical structure between the hierarchies and levels you've added. To display custom relationships between nodes, assign values as *sources* and other values as *targets* from rows of data that can identify pairs of nodes that each represent a relationship. For example, data corresponding with messages may have a from and to address.

To assign sources and targets, click the **Visualization** tab in the Data Analysis Panel.



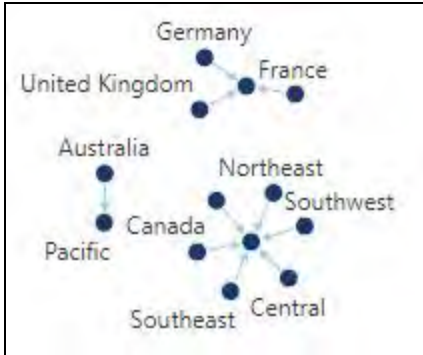
Remove any data not being used as a source from under Source Name (and add it if missing).

Drag **data** from the Explore window or **click to add** data under Target Name.

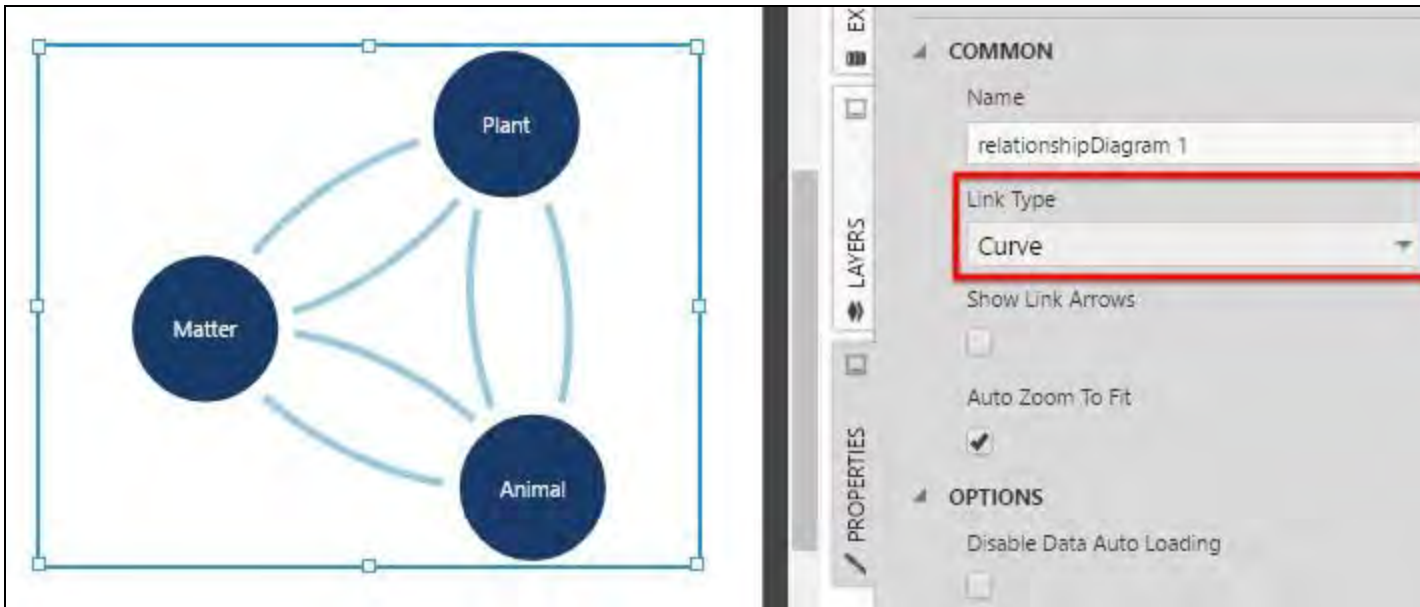


Link Type

By default, links appear as straight lines connecting two nodes. If the relationships between items in your data have an associated direction, select the **Show Link Arrows** option in the Properties window. The links will be drawn as arrows from each source to the target.

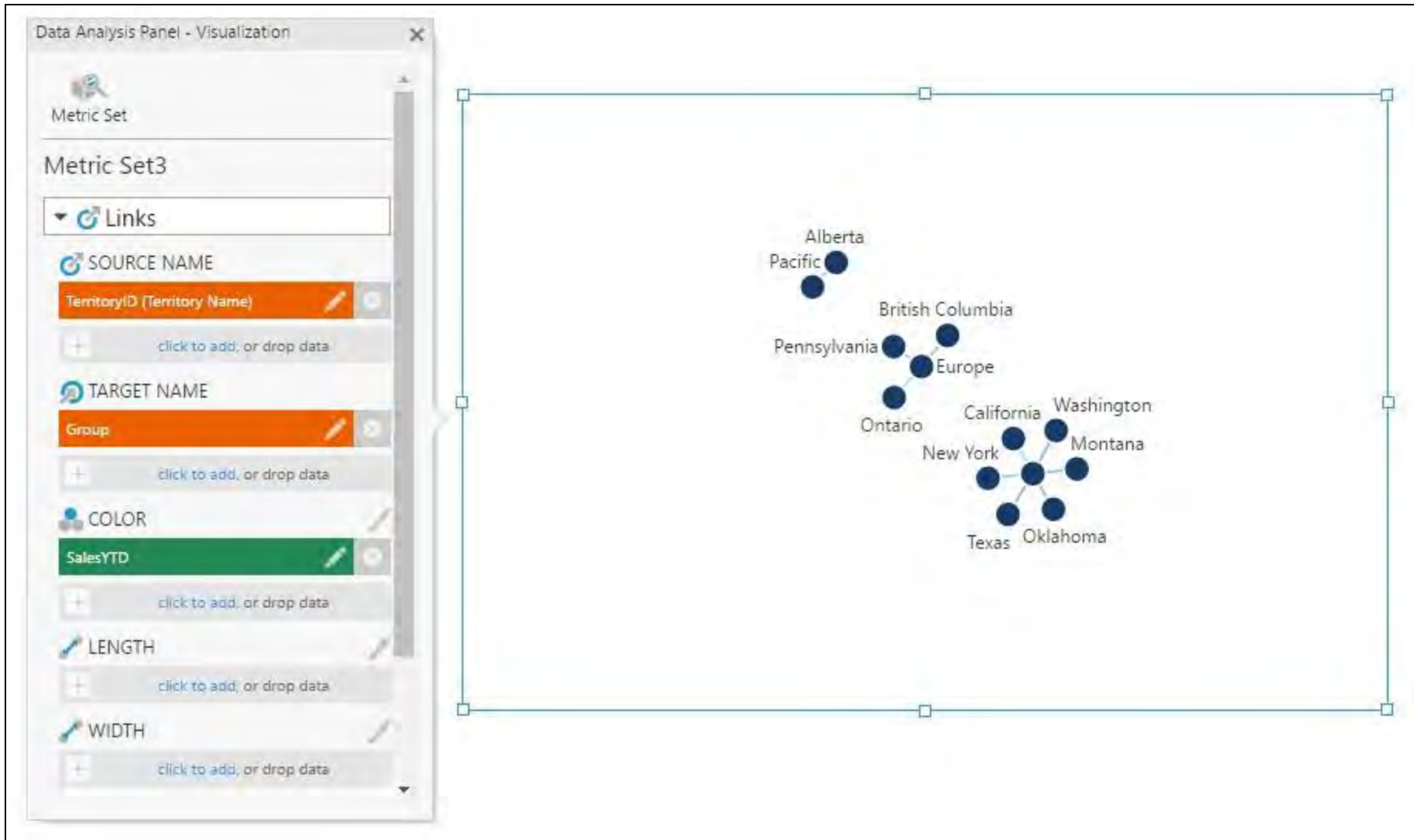


If there are multiple links in your data between the same nodes (e.g., links in both directions), displaying them as straight lines will result in overlap and this relationship will be harder to see. To better visualize this type of relationship, change the Link Type property to **Curve**.



Change Link Appearance

In the Data Analysis Panel's Visualization tab under Links, you can assign data under Color, Length, and/or Width to vary each link according to its values.



When data is assigned, color rules or size rules are created in the corresponding properties in the Properties window (e.g., an *Auto Color Rule* in the links' Color Rules). To change or customize these, click the **brush** icon next to the option in the Data Analysis Panel to go to the corresponding properties, or find them in the Look tab.



Length Rules apply length values to links, and Stroke Width Rules apply width values to links.

Color and size rules work the same as in other visualizations, such as charts. See [Apply Colors to Data Points or Series Using Color Rules](#).

Displaying Node Values and Details

Adding a Second Metric Set

If you have assigned data under Target Name to display custom relationships, the rows of your data each identify a pair of nodes. To display or visualize data for individual nodes, a second metric set must be added to the visualization.



Note: This does not apply to a diagram where no data was assigned under Target Name. In this case, you can visualize data for each node as shown in the following section using only a single metric set.

When editing a metric set directly in the full-screen editor, it must be added to a dashboard or another view first before another metric set can be added. You can do this by choosing **Add To New Dashboard** in the toolbar.

In the Metric Set tab of the Data Analysis Panel, click the **Add New** or **+** button.

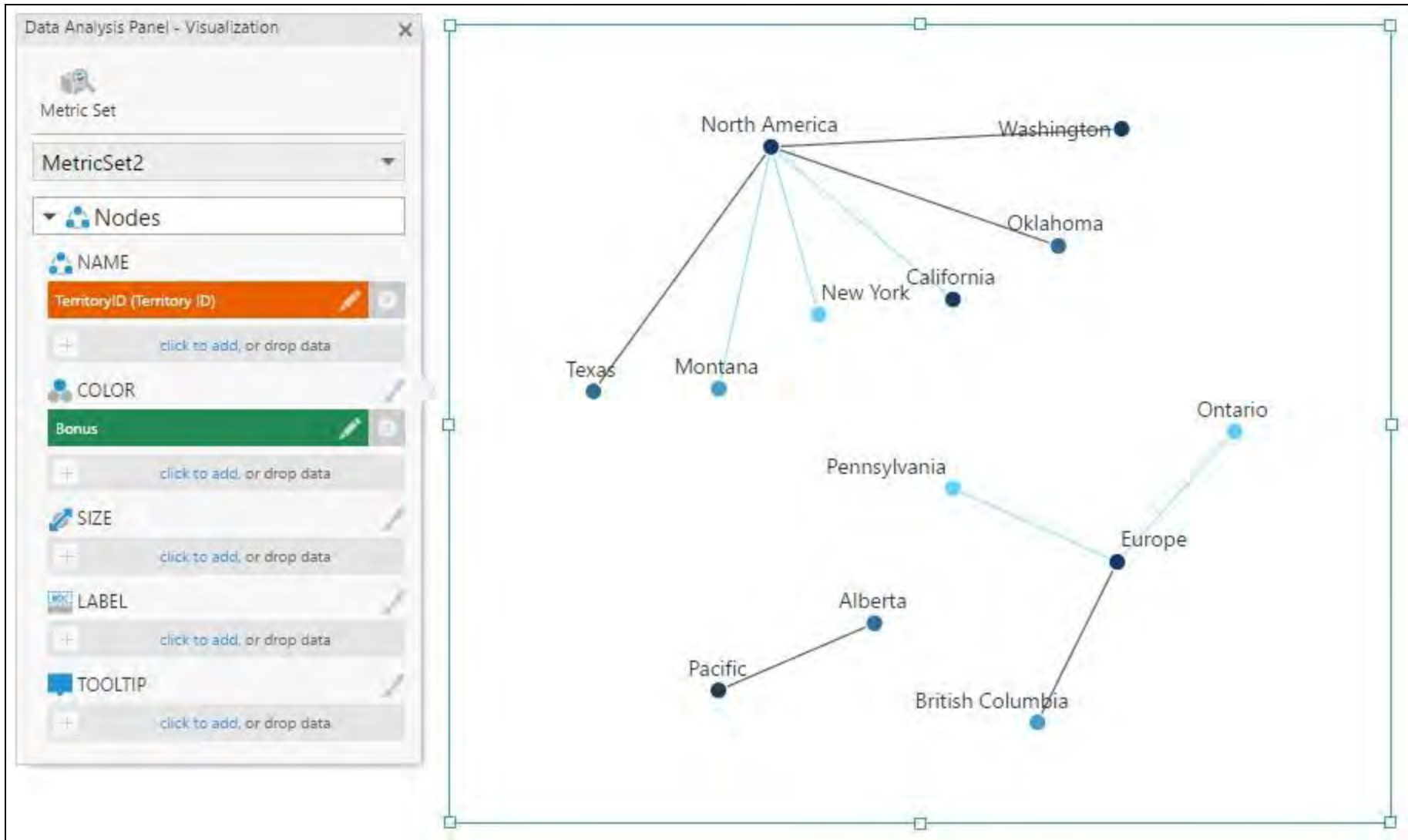


Drag **data** identifying each node onto Rows. These values should correspond with the values already used as source and target names.

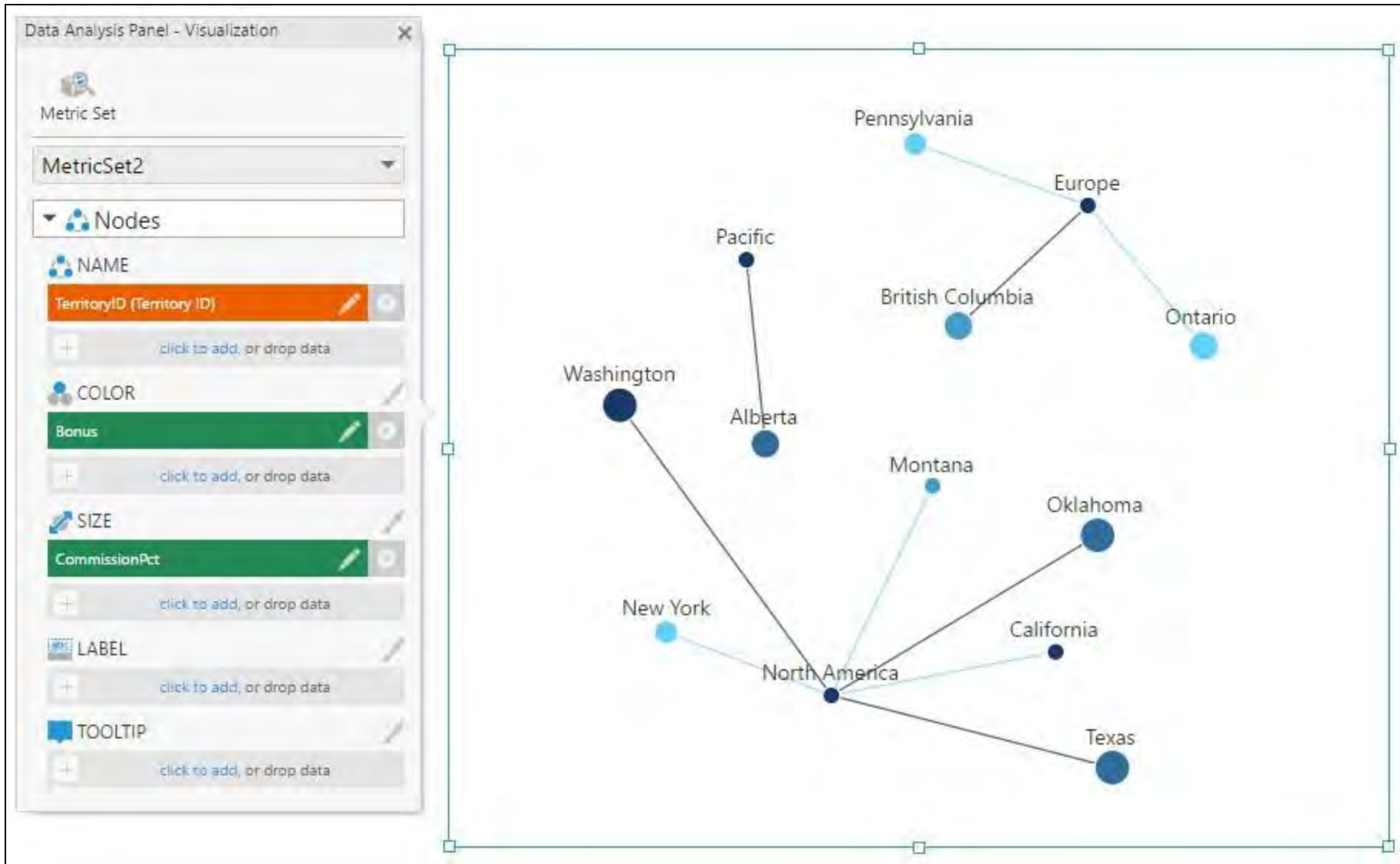
Switch to the **Visualization** tab to confirm the data assigned under Name for the nodes. You can now assign this metric set's data as node color, size, label, or tooltip, as shown below, or use [node state styles](#).

Change Node Appearance

In the Visualization tab of the Data Analysis Panel, you will find the Nodes section available when your second metric set is selected, or when you have a single metric set if no data was assigned under Target Name in the Links section.



As with the links, color or size rules are created automatically when data is assigned as Color or Size. These can be changed or customized in the Properties window in the Look tab, and you can click the paintbrush icon next to the option in the Data Analysis Panel to go to the corresponding properties.



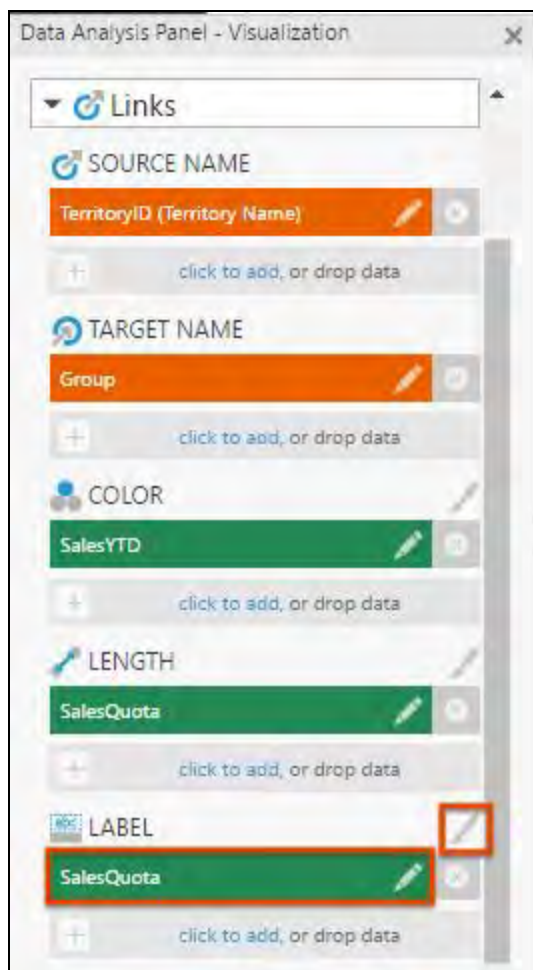
To display different images in each node instead of a color, assign data that can be used to find those images to Image, and optionally customize the corresponding Image Path property in the Look tab of the Properties window if your data does not already contain a full URL to the image. This property works the same way as the [Image Path](#) in other visualizations, similar to how you can combine values from data with static text for labels and tooltips as shown in the following section.

Change Labels and Tooltips

In the Text tab of the Properties window, you can customize the Label Text and Tooltip Text properties for both the links and the nodes.

These properties accept regular text, as well as keywords, such as *[Member]* and *[Level]* for the hierarchy member and level caption respectively, which will be suggested for you as you edit the property. For additional information about available keywords, see [Formatting text](#).

To display specific values from your metric set, you can enter keywords, or you can assign data to Label or Tooltip in the Visualization tab of the Data Analysis Panel.



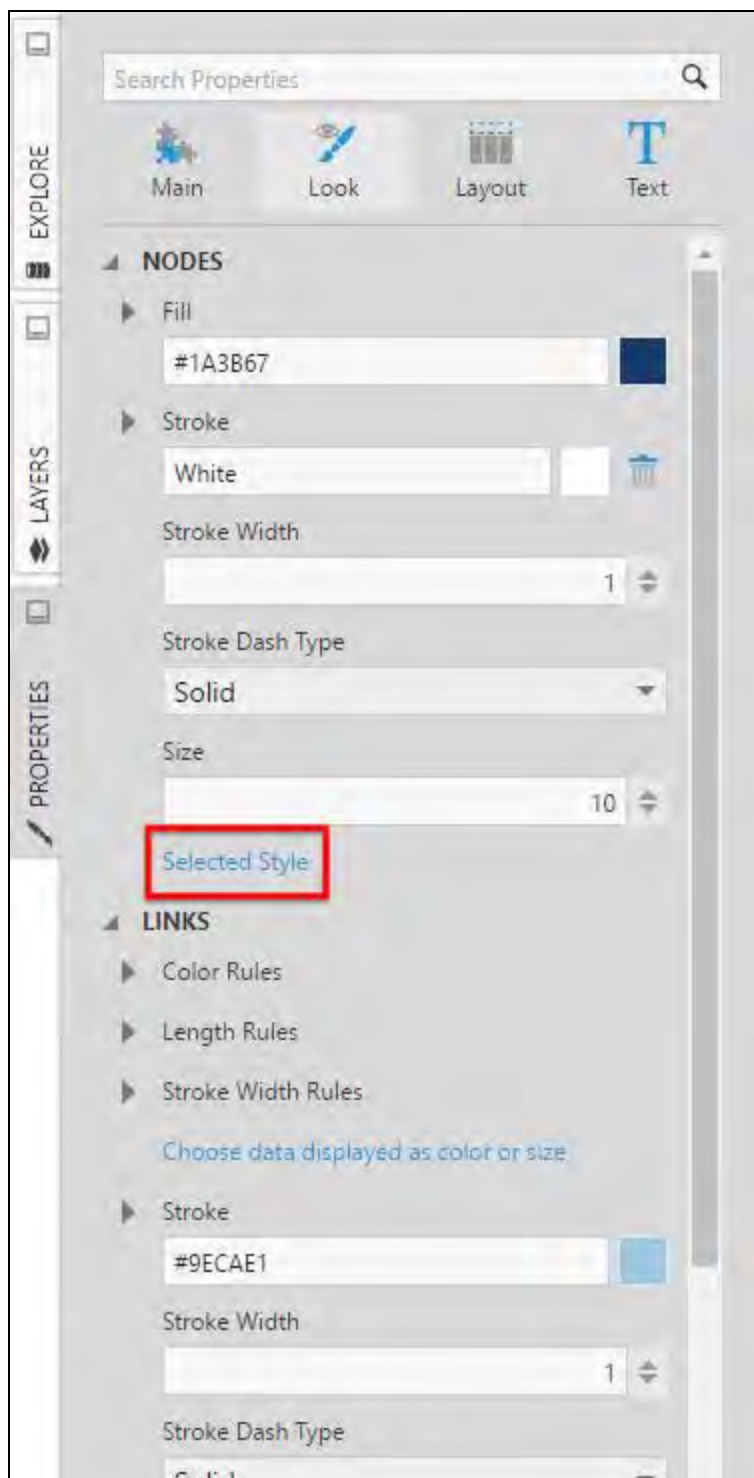
After assigning data in the Data Analysis Panel, you can click the **brush** icon next to the heading to open the corresponding properties.



Selected Styles

You can adjust how nodes or links appear when selected by hovering over them or through [data brushing](#).

In the Look tab of the Properties window, click **Selected Style** in the applicable section.

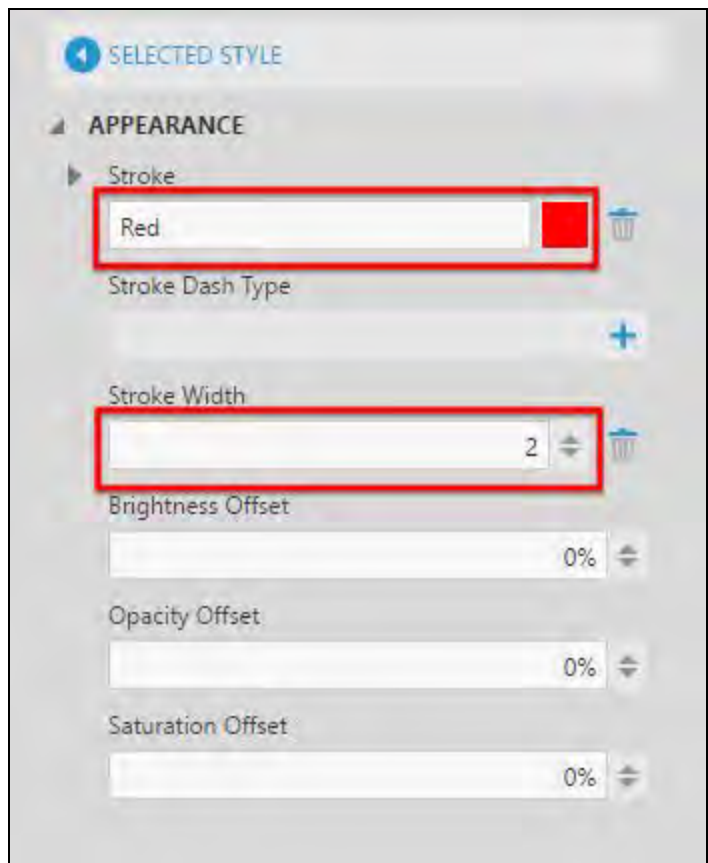


The screenshot displays the 'Properties' panel in Logi Symphony v24. The panel is organized into sections: 'EXPLORE' (Main, Look, Layout, Text), 'LAYERS', and 'PROPERTIES'. The 'PROPERTIES' section is currently active, showing a search bar and a list of properties for a selected object. The 'NODES' section is expanded, showing properties for 'Fill' (color #1A3B67), 'Stroke' (color White, width 1, dash type Solid, size 10), and 'Size'. The 'LINKS' section is also expanded, showing properties for 'Color Rules', 'Length Rules', 'Stroke Width Rules', and 'Stroke' (color #9ECAE1, width 1, dash type Solid). The 'Selected Style' link is highlighted with a red rectangle.

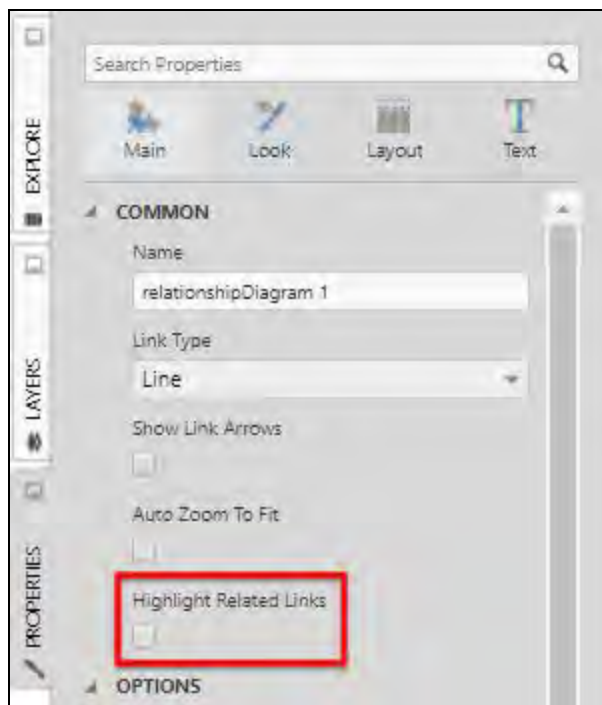
Properties Panel:

- EXPLORE:** Main, Look, Layout, Text
- LAYERS:** (Empty)
- PROPERTIES:**
 - Search Properties:** (Search icon)
 - NODES:**
 - Fill:** #1A3B67
 - Stroke:** White, Stroke Width: 1, Stroke Dash Type: Solid, Size: 10
 - Selected Style** (highlighted)
 - LINKS:**
 - Color Rules
 - Length Rules
 - Stroke Width Rules
 - Choose data displayed as color or size
 - Stroke:** #9ECAE1, Stroke Width: 1, Stroke Dash Type: Solid

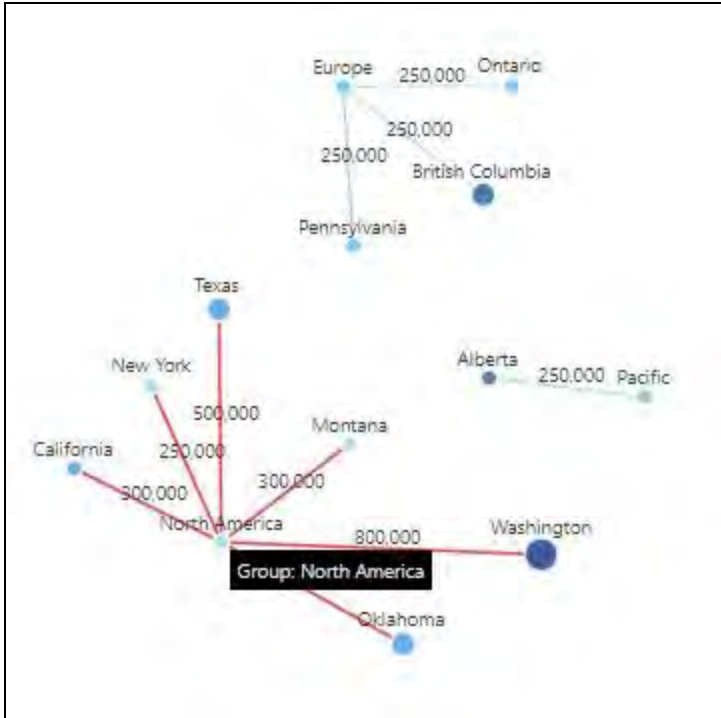
As an example, change the Selected Style for links to use **Red** strokes of a **2-pixel** width.



In the Main tab of the Properties window, select **Highlight Related Links** if all connected links should highlight at once when a node is selected.



If editing a view such as dashboard, switch to **View** in the toolbar before hovering over data in the diagram.



For more information, see:

- [Setting Up the Visualization](#)
- [Setting Up Data Input](#)
- [Using a Sankey Diagram](#)
- [Using a Tree Diagram](#)
- [Using a Chord Diagram](#)

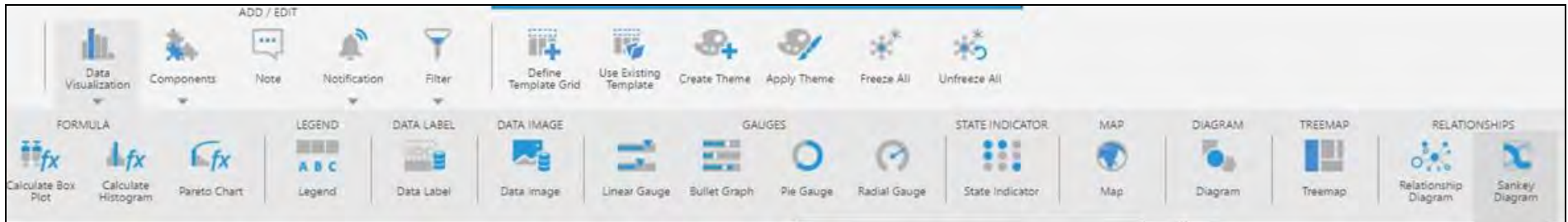
Using a Sankey Diagram

This applies to: *Managed Dashboards, Managed Reports*

The Sankey diagram displays how quantities are distributed among items between two or more stages.

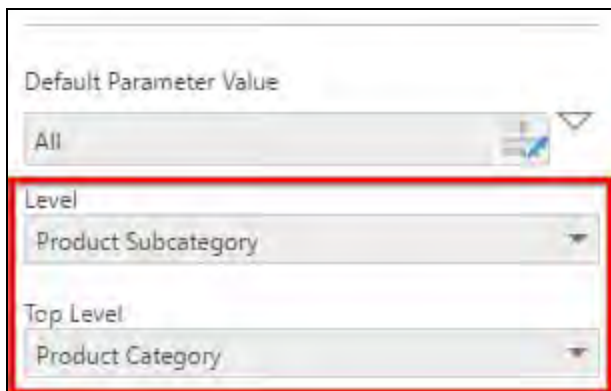
Add a Sankey Diagram

Choose the **Data Visualization** or **Re-Visualize** option from the toolbar and select **Sankey Diagram**.

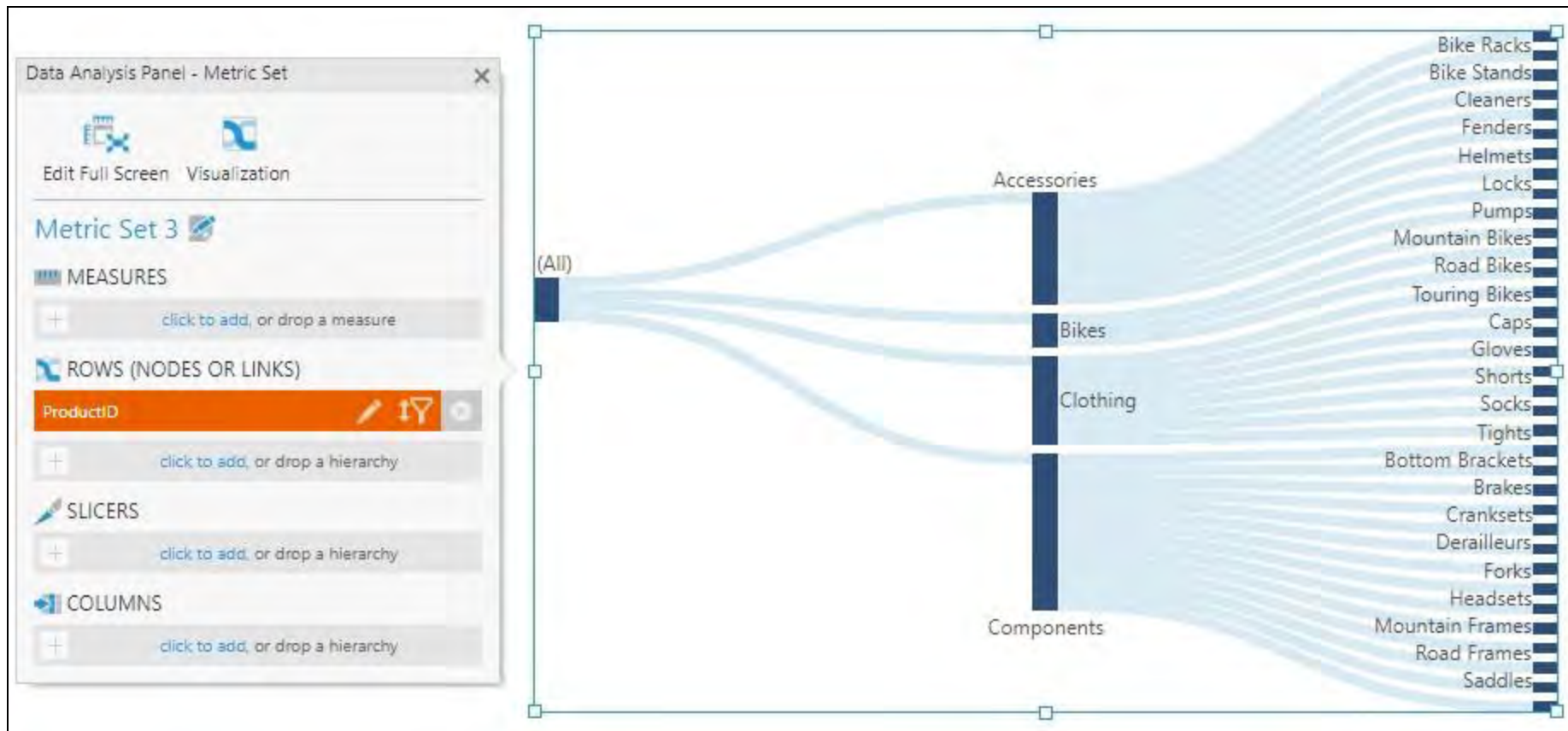


Drag one or more **columns of data** or **hierarchy levels** to Rows in the Data Analysis Panel. Each hierarchy (e.g., non-numeric data) will be displayed as another level or stage in the diagram if you select multiple hierarchies, or you can also select multiple levels of a hierarchy that contains multiple levels.

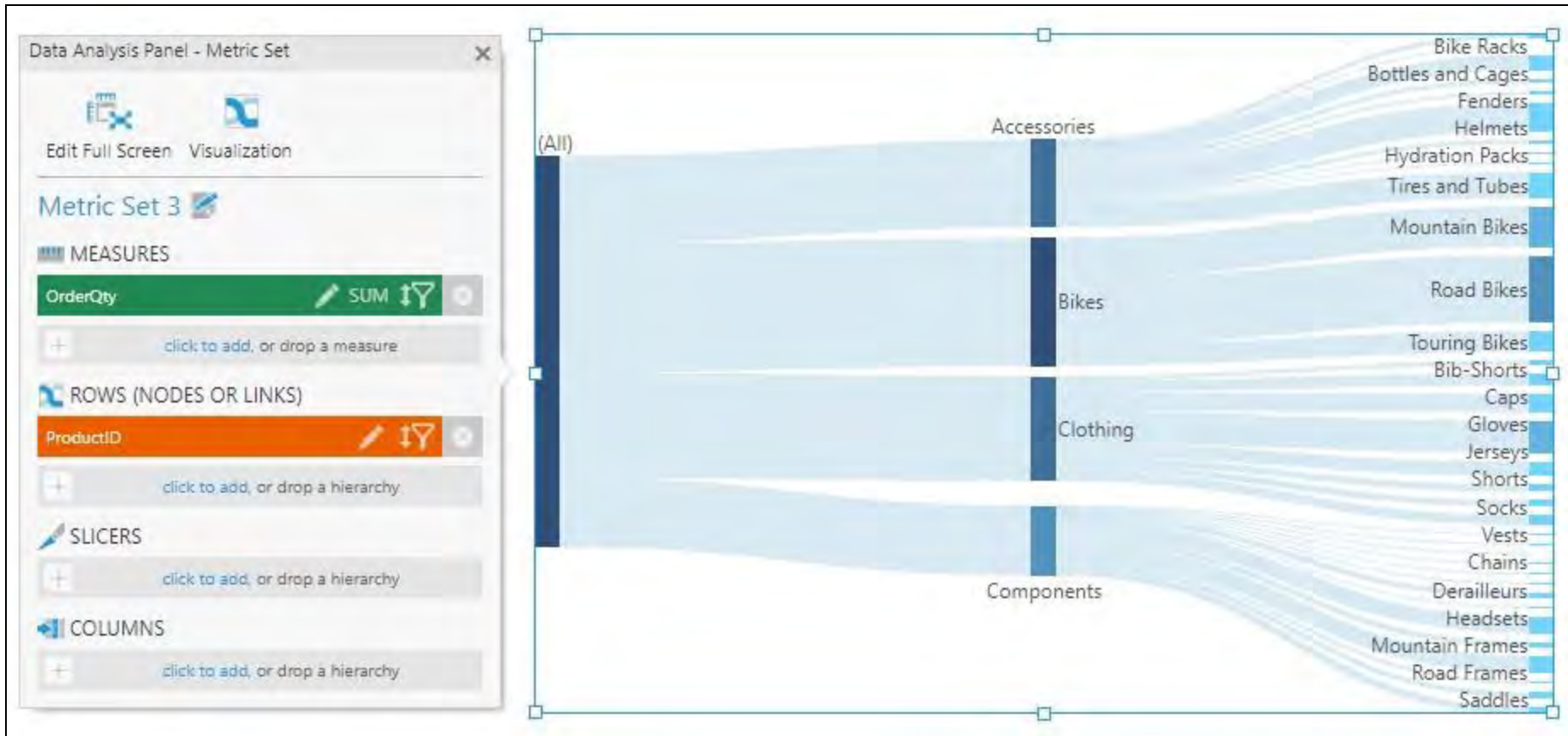
In our example, we have selected a multi-level hierarchy. To visualize multiple levels of a hierarchy at once, click to edit it in the Data Analysis Panel and set the Top Level and Level to a range of levels, or drag a **lower level** from under the hierarchy in the Explore window.



The diagram displays in a river-like arrangement based on the hierarchies and their levels. Each value in the hierarchy is displayed as a rectangle called a "node".



An essential part of a Sankey diagram is a measure that determines the widths of the links between each node. Drag a **measure** (numeric data) to Measures in the Data Analysis Panel to visualize its quantities flowing between the items.

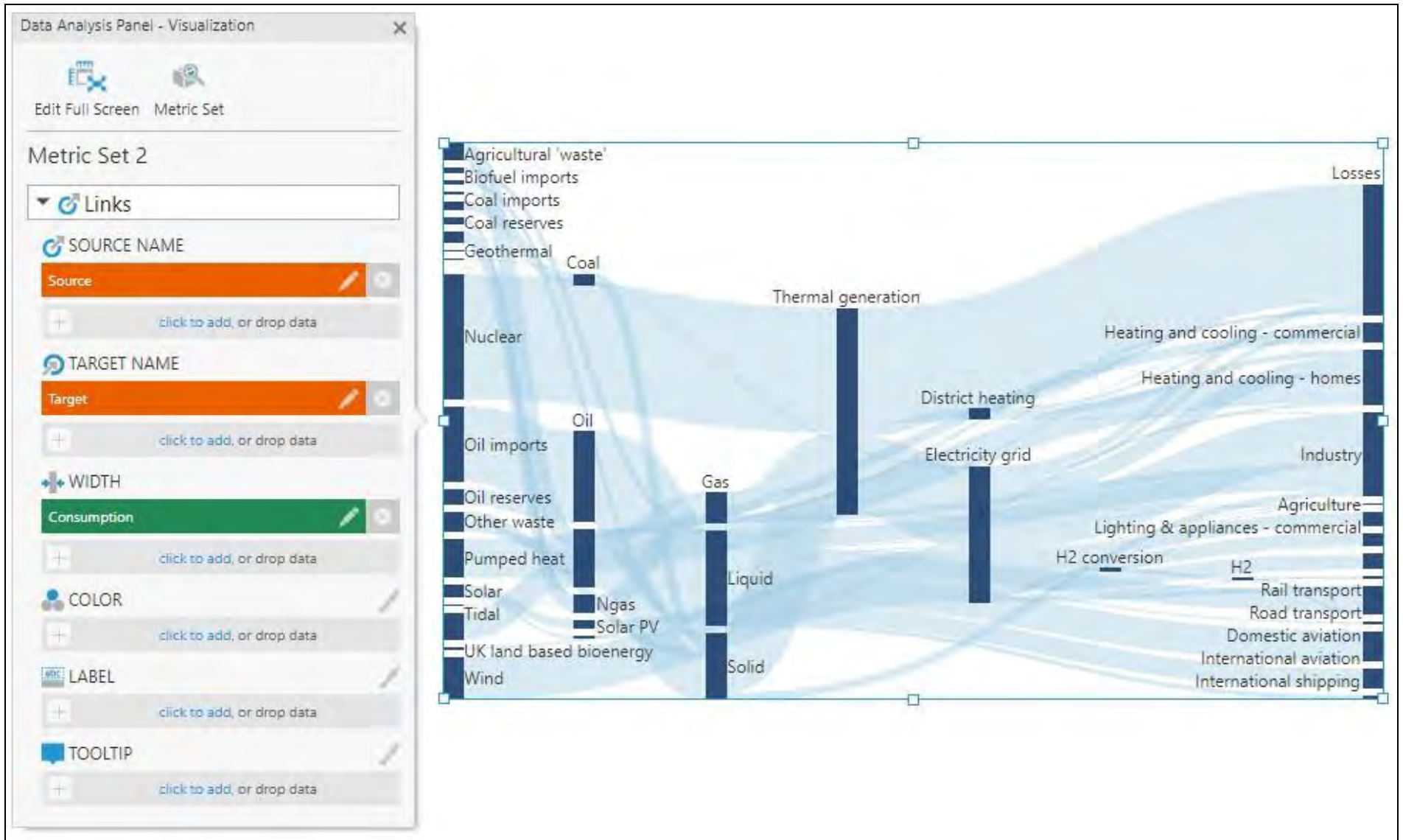


Display Custom Flow

If your data has information about quantities transferring between pairs of items, the Sankey diagram can assemble these into the correct structure and visualize them according to the connections in your data instead of displaying a hierarchical structure.

The Data Analysis Panel's Visualization tab for a Sankey diagram allows you set up a custom flow based on your data as shown in the figure below. By default, the hierarchies you add to the metric set are assigned under Source Name.

Move or remove all of these except the column(s) identifying the source, and add the data identifying each target under Target Name to display the custom flow between each source-target pair. Your measure should be assigned under Width.



The Sankey diagram example pictured above is based on a dataset containing a column coincidentally named *Source*, a column named *Target*, and a measure named *Consumption*, where each row describes a single connection between a pair of nodes and the corresponding quantity moving between them.

The following image shows the rows of data that specify these connections as seen when expanding the Data Preview window:

SCRIPT EDITOR x PARAMETERS x DATA PREVIEW x

sankeyDiagram 1

Performance Measurements (3) Warnings (0)

Source	Target	Consumption
▲ Agricultural waste	Bio-conversion	124.73
▲ Bio-conversion	Gas	81.14
	Liquid	0.60
	Losses	26.86
	Solid	280.32
▲ Biofuel imports	Liquid	35.00
▲ Biomass imports	Solid	35.00

Adding a Second Metric Set

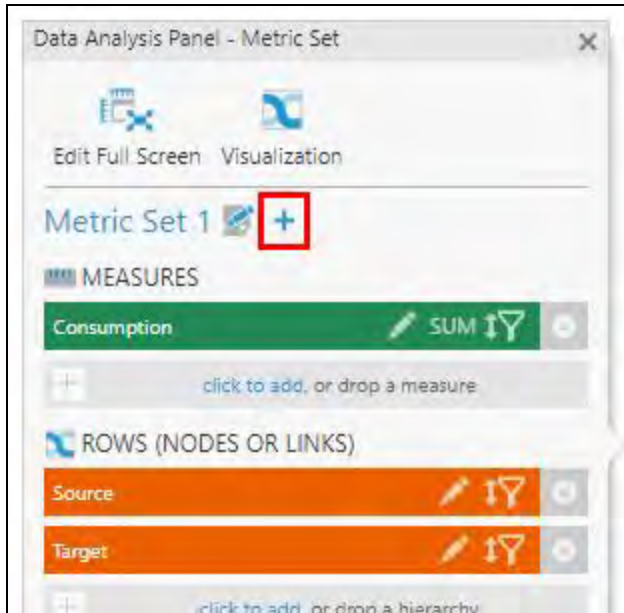
When setting up a custom flow as described above, note that the dataset contains source-target pairs describing the *links* in the diagram between *pairs* of nodes. If you want to customize or display further information about each individual node based on your data, you will need a second metric set providing a row of information describing each node rather than each pair of nodes.



Note: When not using source-target pairs to display a custom flow, all the settings can be configured on the same metric set and you will not be able to add a second metric set to the Data Analysis Panel.

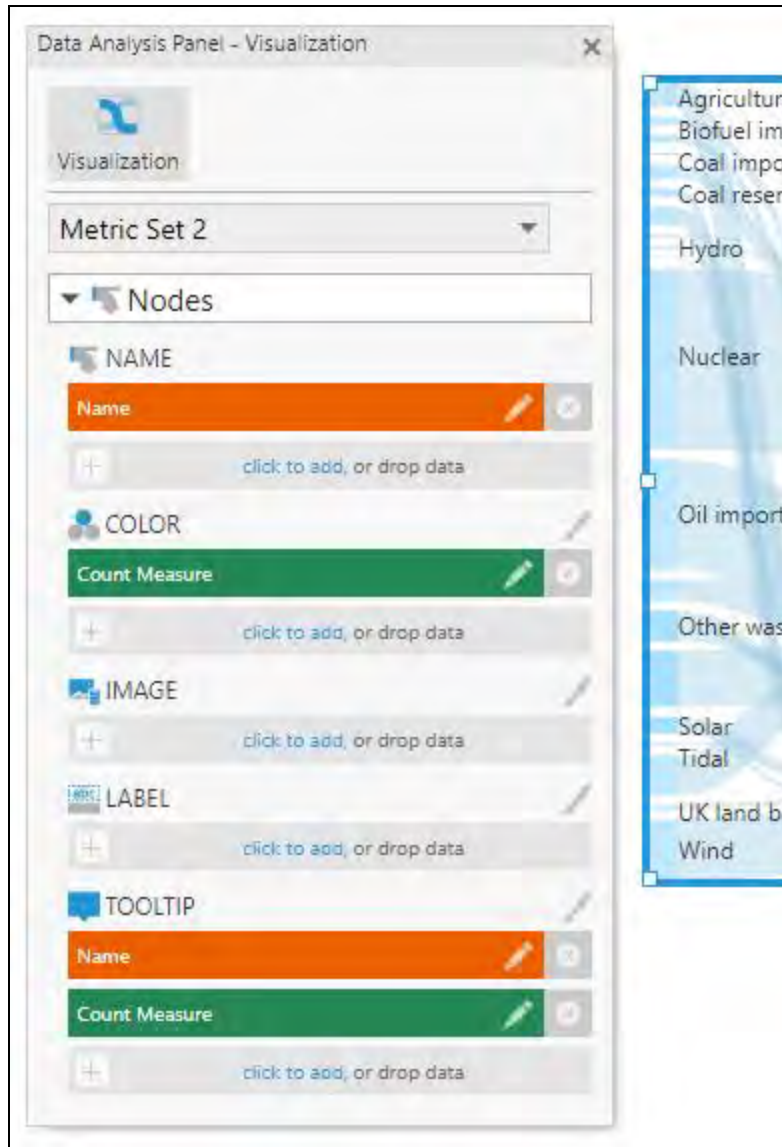
To add a second metric set, the Sankey diagram will need to be added to a dashboard or other view. If you are currently editing a metric set full screen, you can click **Add To New Dashboard** in the toolbar to switch to one easily.

In the Data Analysis Panel's Metric Set tab, click the + button.



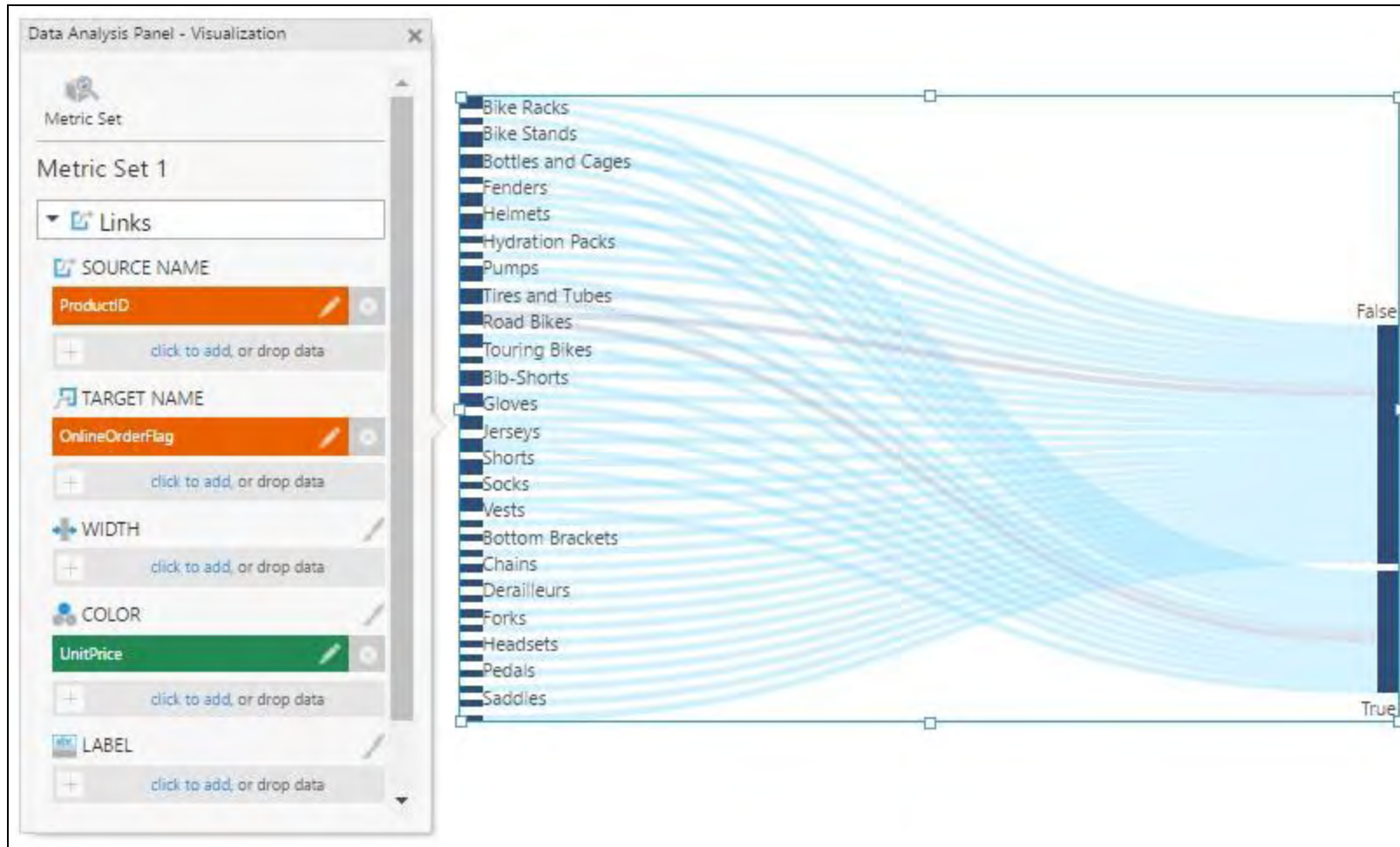
Drag **data** corresponding with the names already used as sources and targets onto Rows. You can then add additional data to use in tooltips, for colors, or other visualization options in the Visualization tab. If you already have another metric set containing this data, you can also drag the entire metric set onto the Sankey diagram.

In the Visualization tab, the options for this second metric set are labeled as *Nodes*, whereas the first metric set's options are labeled *Links*. Your column identifying nodes should be assigned under Name and should match the values used as link sources and targets.



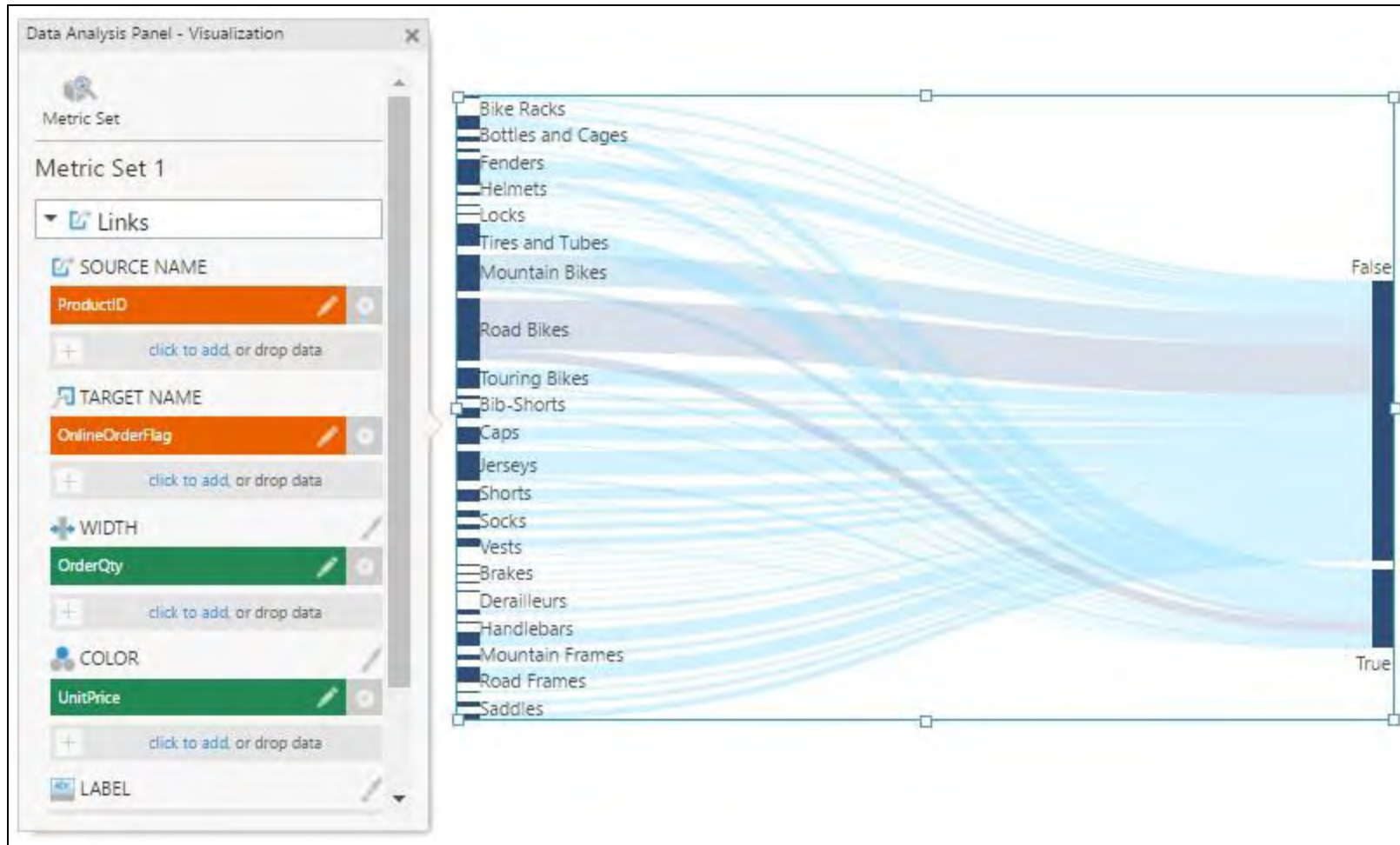
Change Link Color and Width

To display the links in different colors according to data, assign it under Color in the Data Analysis Panel's Visualization tab in the Links section.



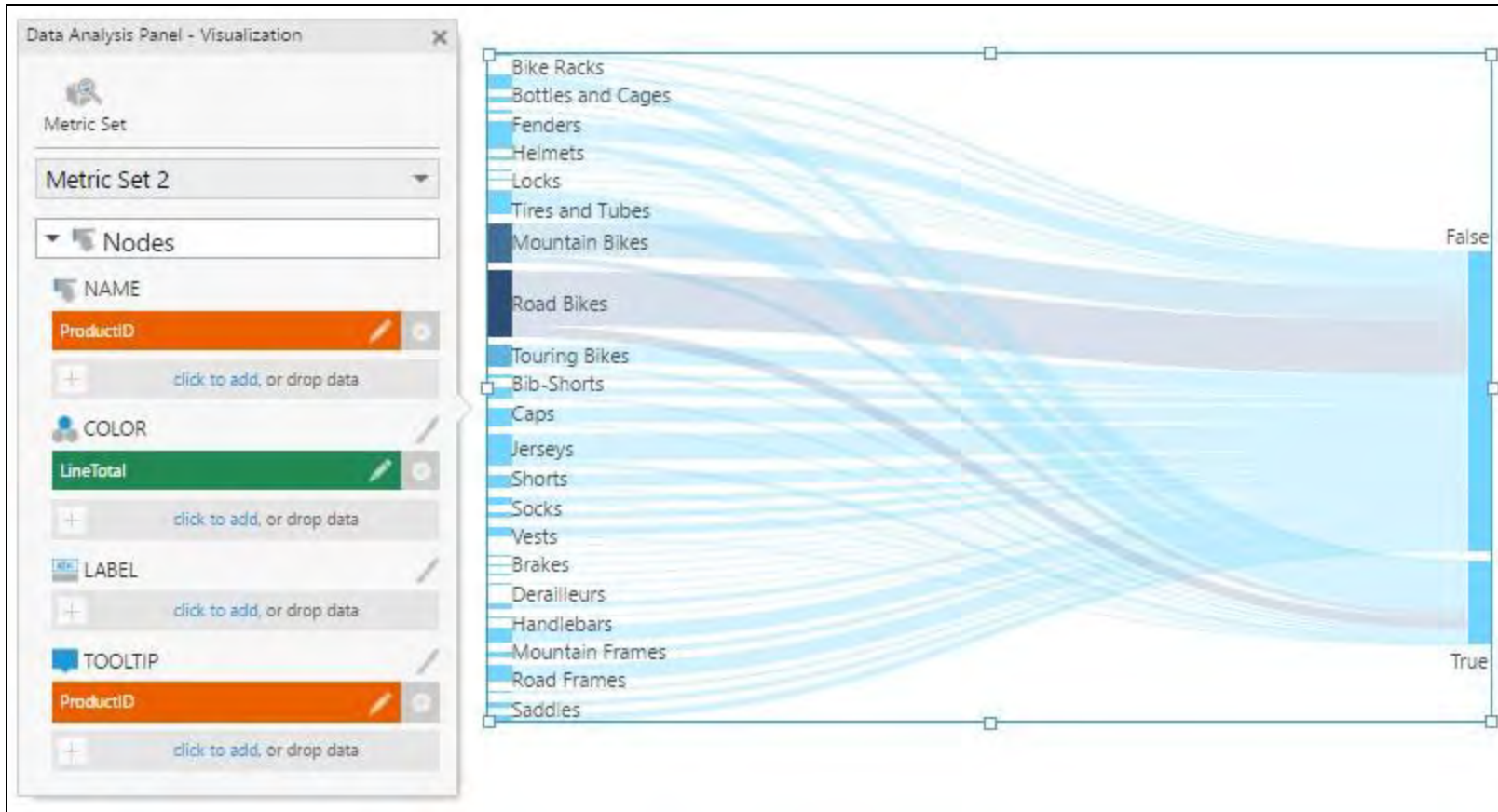
One or more *color rules* are applied to the links in the diagram. You can modify the color rules by clicking the **brush** icon next to Color, or by going to the **Look** tab of the Properties window. These settings work the same way as in other visualizations, such as [charts](#).

To change what measure is used to determine the widths of the links, remove the measure assigned under Width in the Links section if there is one and add the measure of your choice.



Change Node Color

To display the nodes in different colors according to data, assign it under Color in the Data Analysis Panel's Visualization tab in the Nodes section.



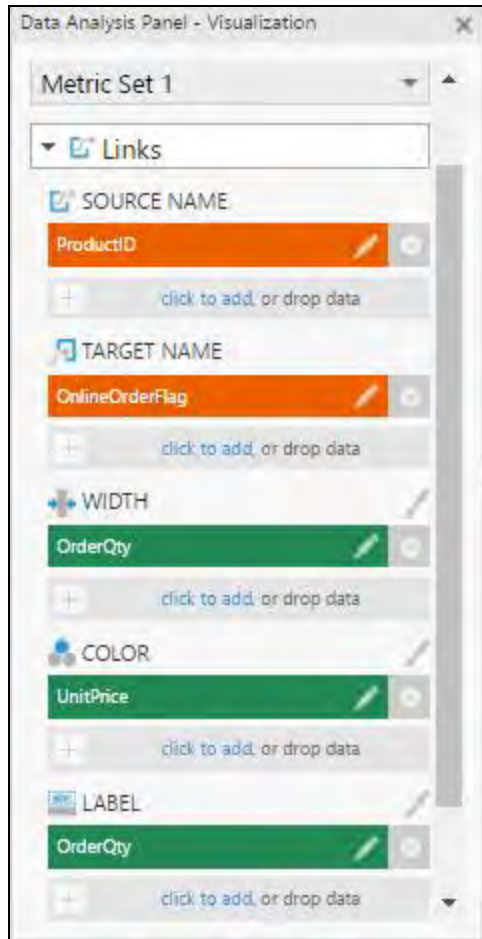
As with the links, one or more color rules are applied to the nodes in the diagram, and can be customized in the Properties window.

Change Labels and Tooltips

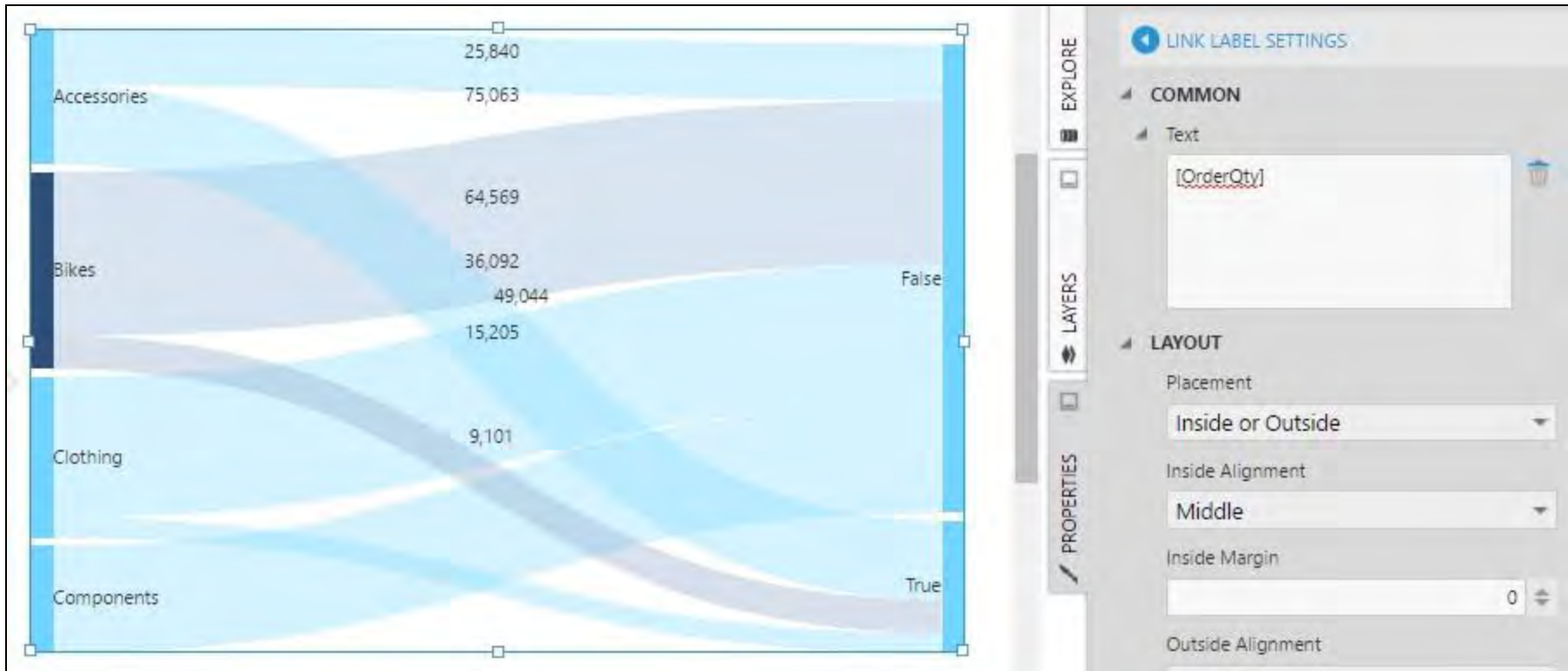
In the Text tab of the Properties window, you can customize the Label Text and Tooltip Text properties for both the links and the nodes.

These properties accept regular text, as well as keywords such as *[Member]* and *[Level]* for the hierarchy member and level captions, respectively. For additional information about available keywords, see [Formatting Text](#).

As a shortcut for applying the proper keyword, you can use the Visualization tab in the Data Analysis Panel. For example, assign data under Label in either the Nodes or Links section to display it as a label over each node or link.



Click the **brush** icon next to the Label heading to open the relevant properties. The keyword (e.g., *[OrderQty]*) has already been added to the Text property.



For more information, see:

- [Setting Up the Visualization](#)
- [Set Up States on a Metric Set](#)
- [Using a Relationship Diagram](#)
- [Using a Chord Diagram](#)
- [Using a Table Visualization](#)



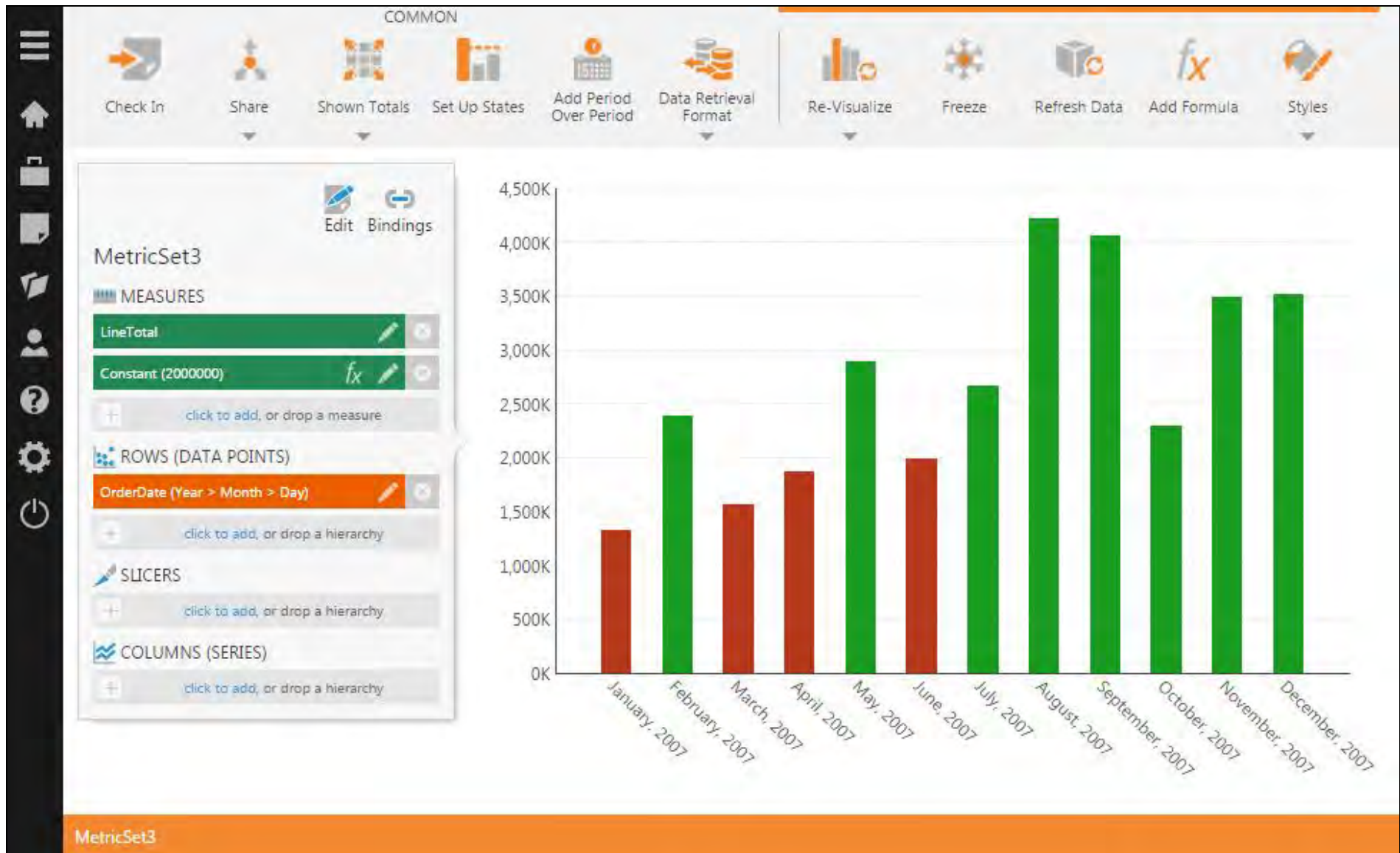
Using a State Indicator

This applies to: *Managed Dashboards, Managed Reports*

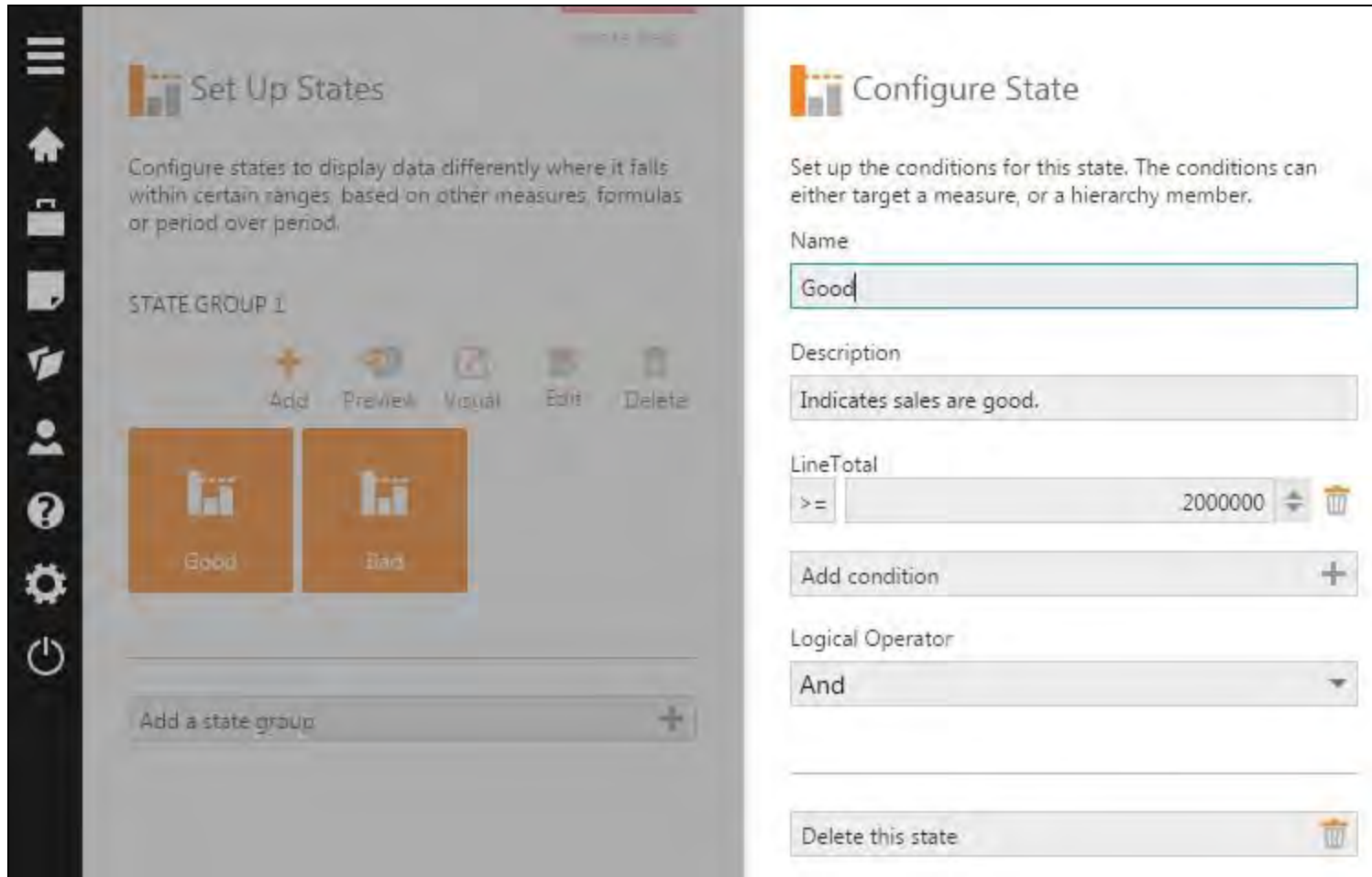
A state indicator is a basic data visualization that displays a different color and/or shape depending on the state of your data. [States](#) are set up in your metric set to check for conditions in your data that you define, and you can either reuse a metric set with states defined or add states in order to display them in a state indicator.

Data Preparation

As an example, consider the following metric set which has two states defined using a constant formula value.



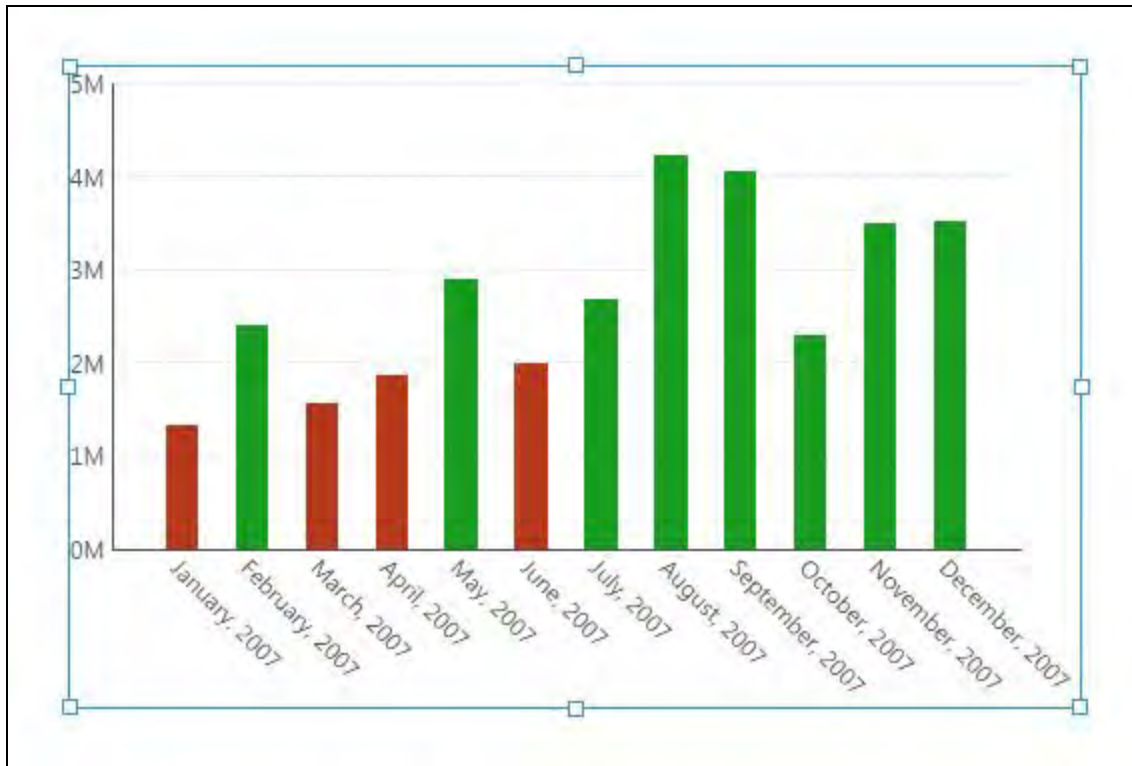
The green bars correspond to a *Good* state, which is defined as line total values greater than or equal to a constant formula value of 2,000,000 (or 2M) for a particular month. The red bars correspond to a *Bad* state, which is defined as line total values less than this constant value.



Create a Dashboard

State indicators are typically sized very small and combined with other visualizations rather than visualized on their own. For this example, create a new dashboard from the main menu.

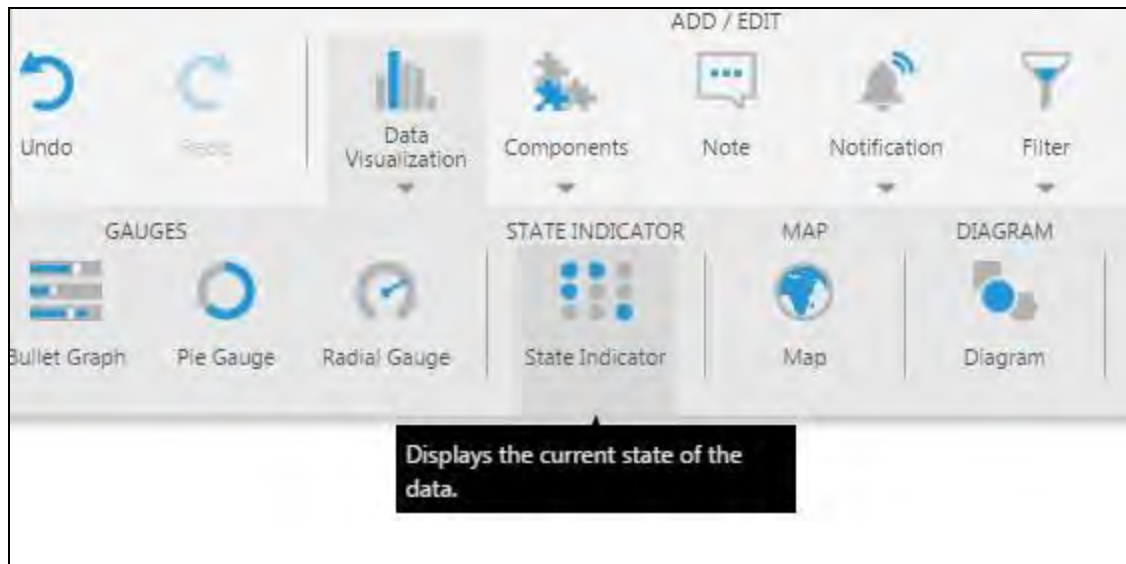
Drag the **metric set** from the Explore window to the canvas. It will appear as a bar chart like the one displayed in the full-screen editor.



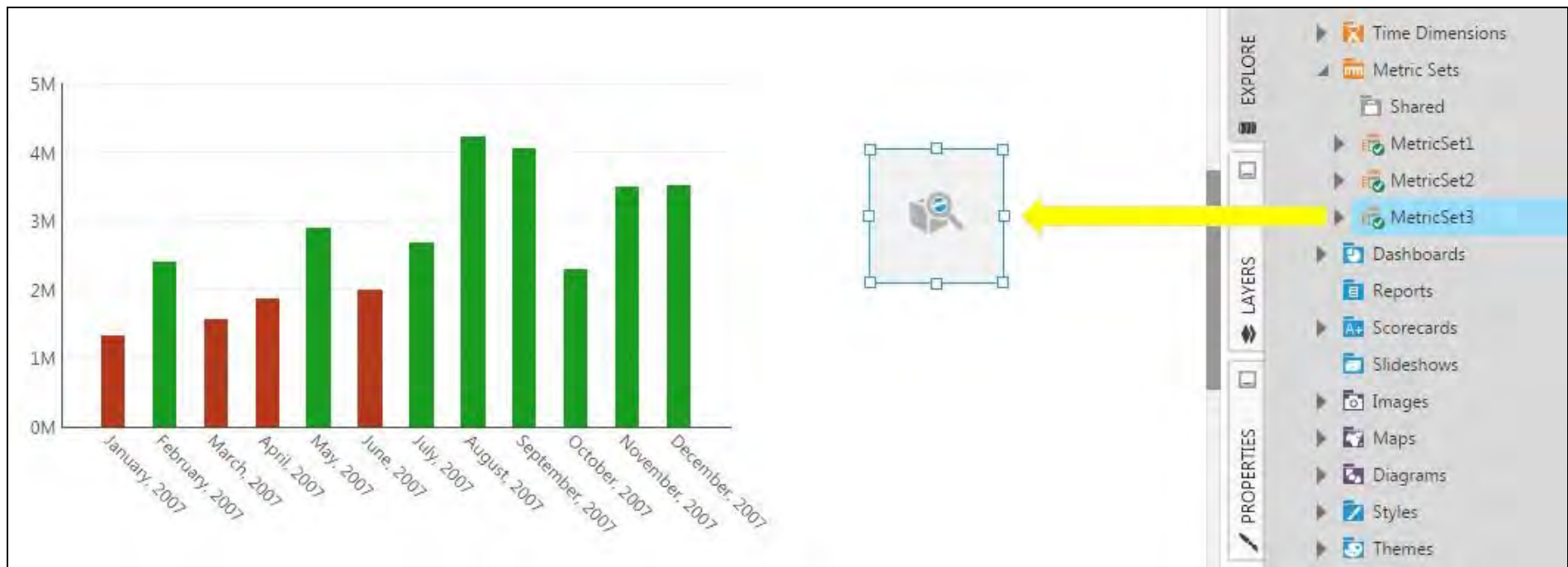
The purpose of the chart in this example is just for confirmation that the state indicator (to be added later) shows the expected result.

Add a State Indicator

Go to the toolbar, click **Data Visualization**, and then select **State Indicator**.

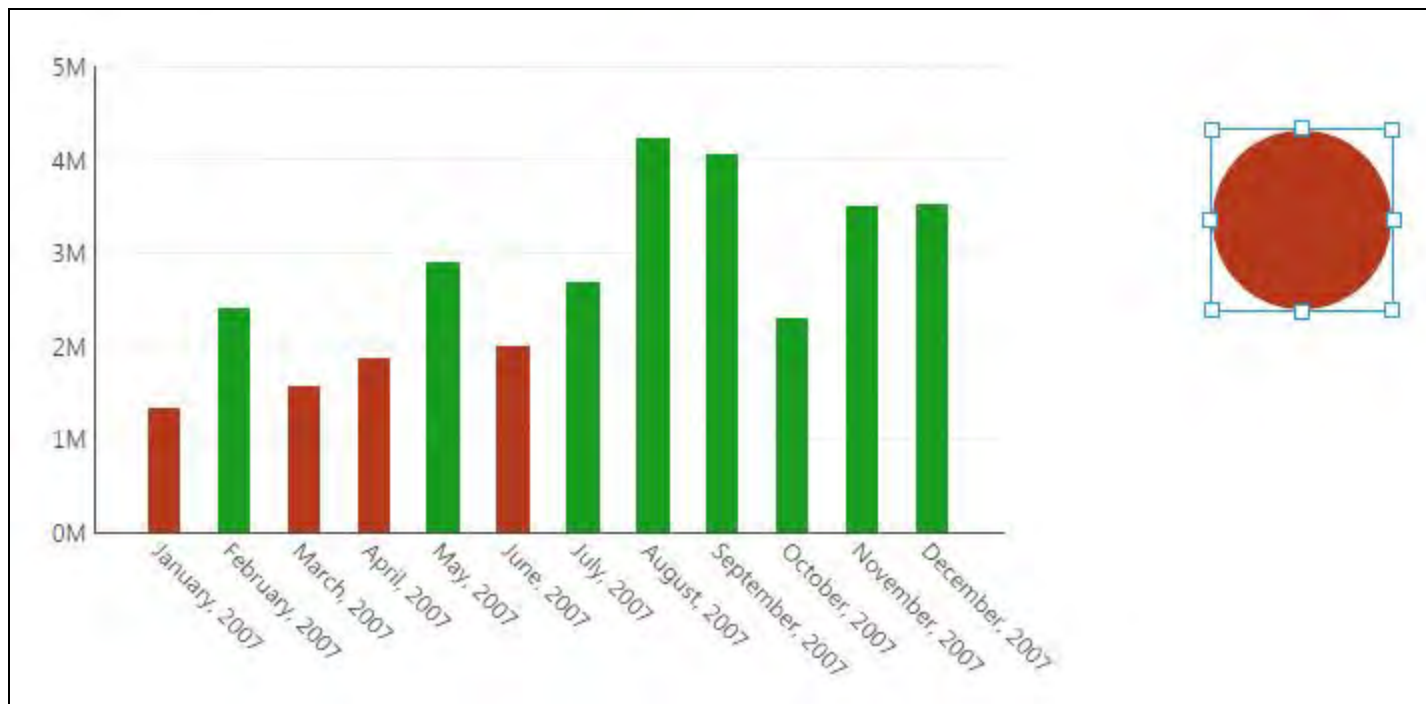


An empty state indicator appears on the canvas without any data. To add our existing metric set, we drag it from the Explore window onto the state indicator.



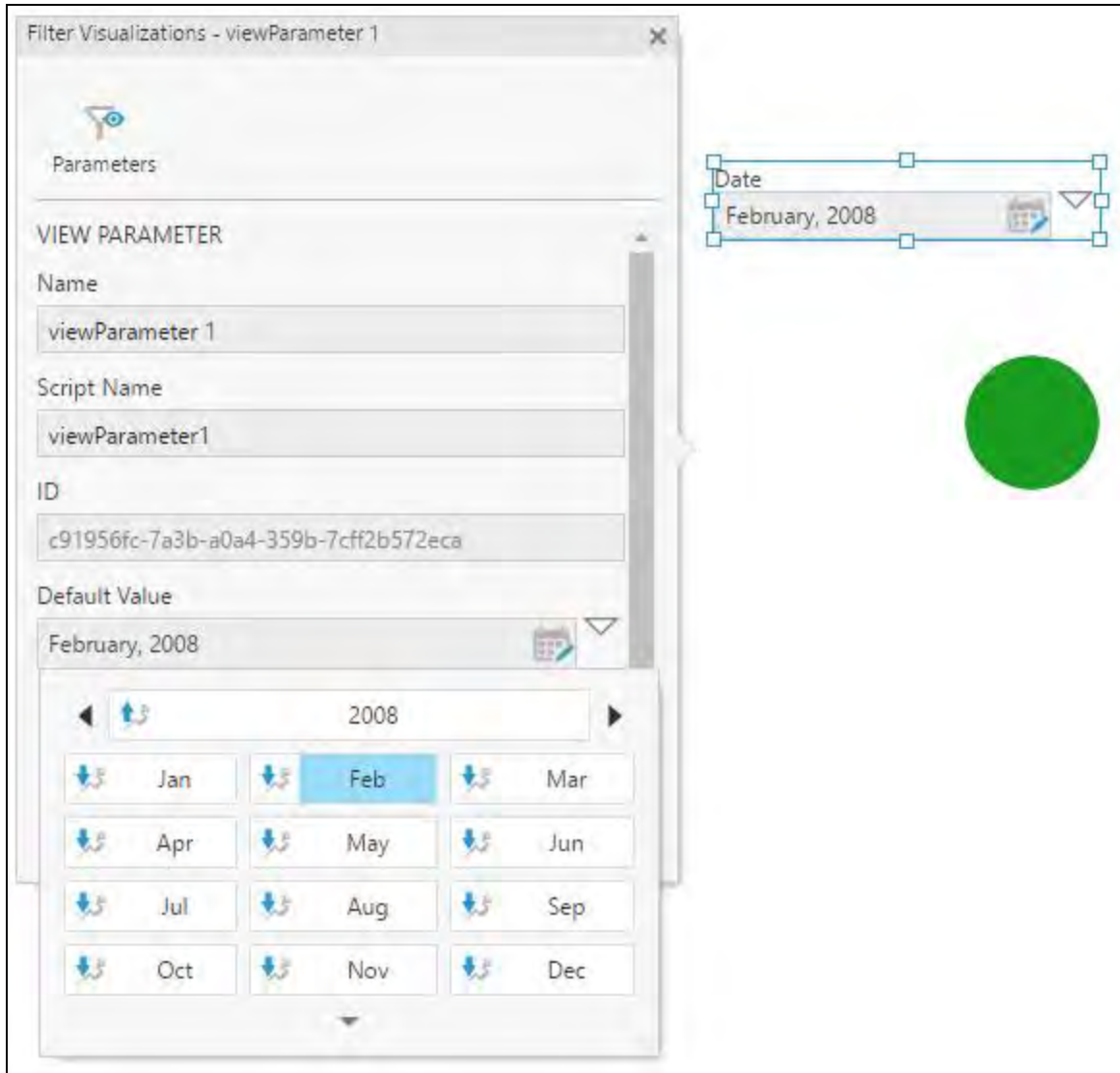
You can also drag **data** directly from a data source onto a state indicator, but will then need to [set up states](#). You can click **States** in the Properties window as a shortcut.

The state indicator is now connected to data and appears as an ellipse (circle) by default.



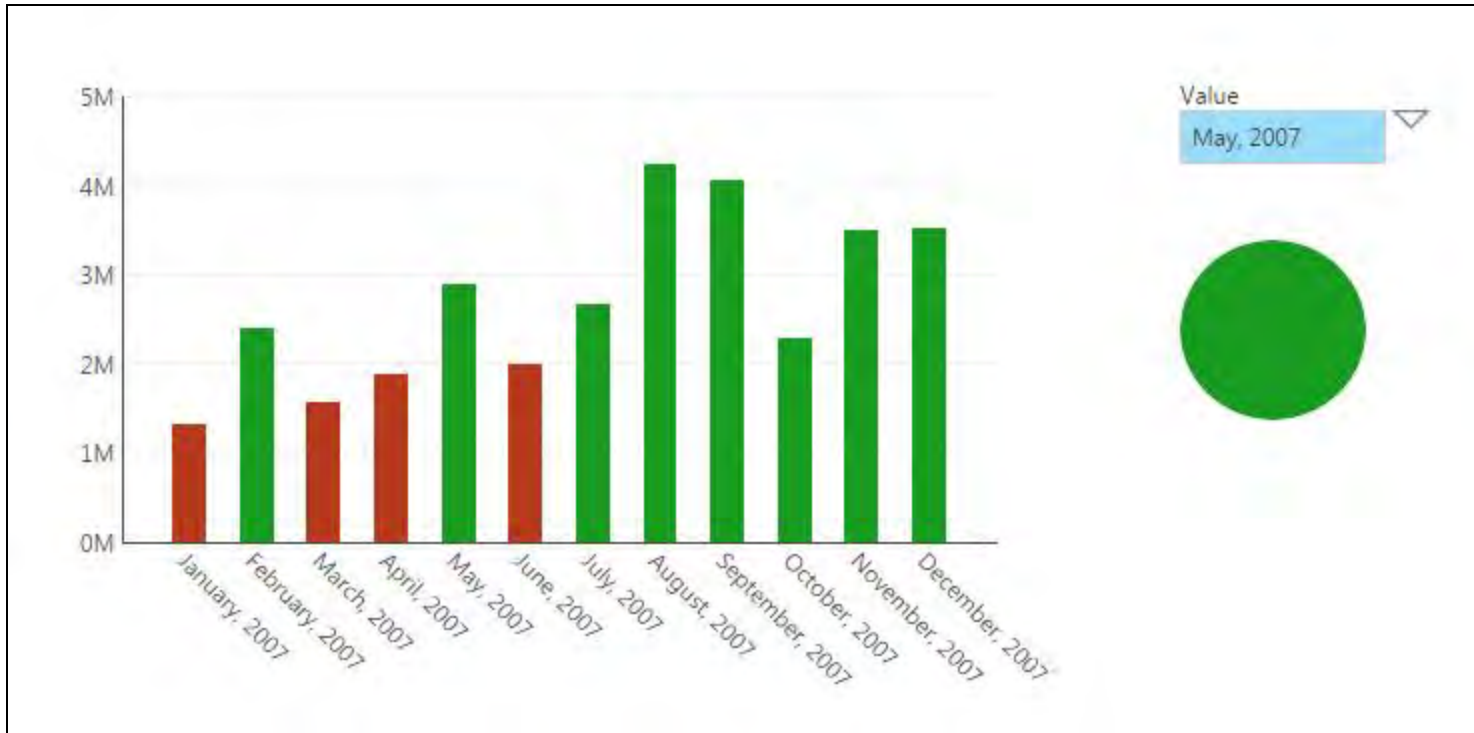
With the state indicator selected on the canvas, go to the toolbar, click **Filter**, and then select **Calendar**. This connects the filter just to the state indicator by default.

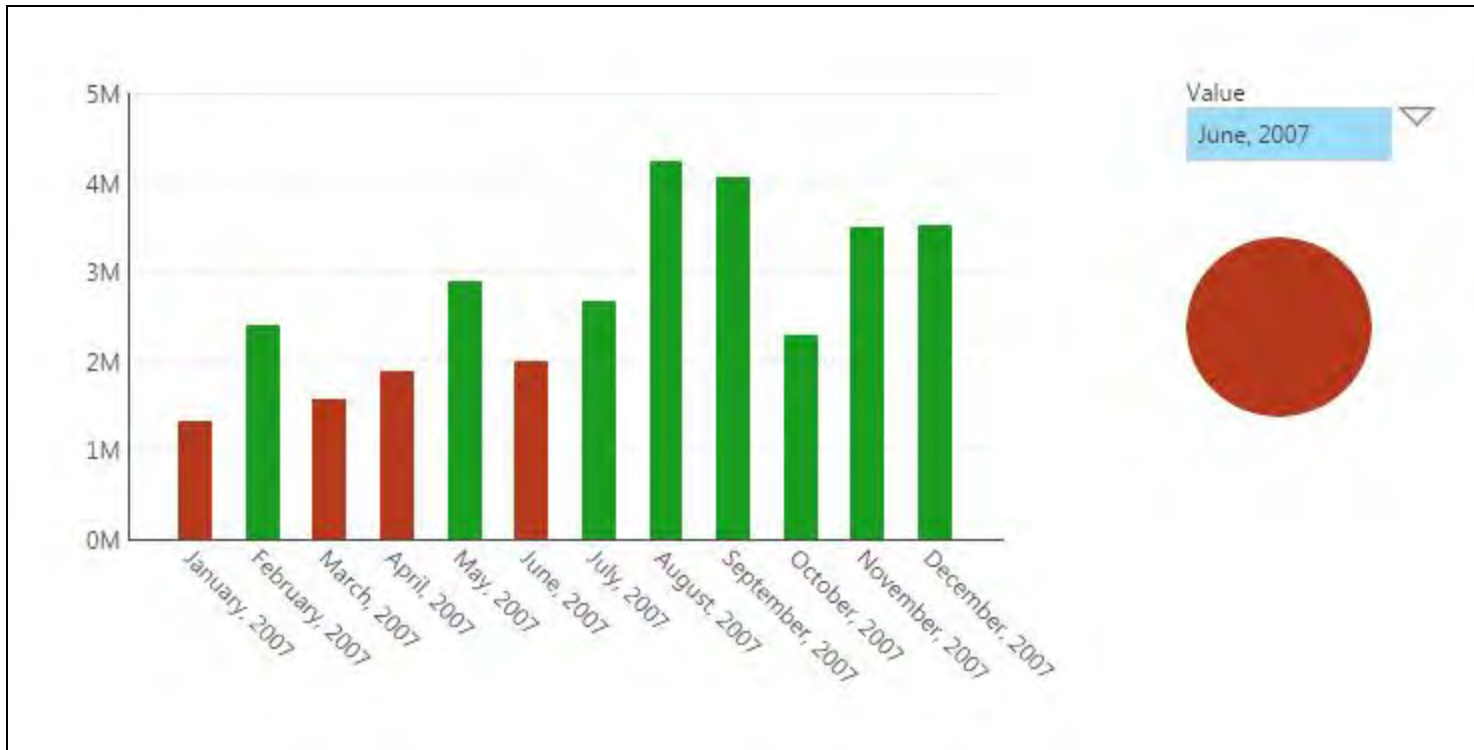
In the Filter Visualizations panel, click the **Default Value** drop-down and select a **month** with data.



The purpose of the calendar filter in this example is to show the effect on a state indicator control when the filter is set to different months (e.g., there are good and bad months concerning the monthly line total).

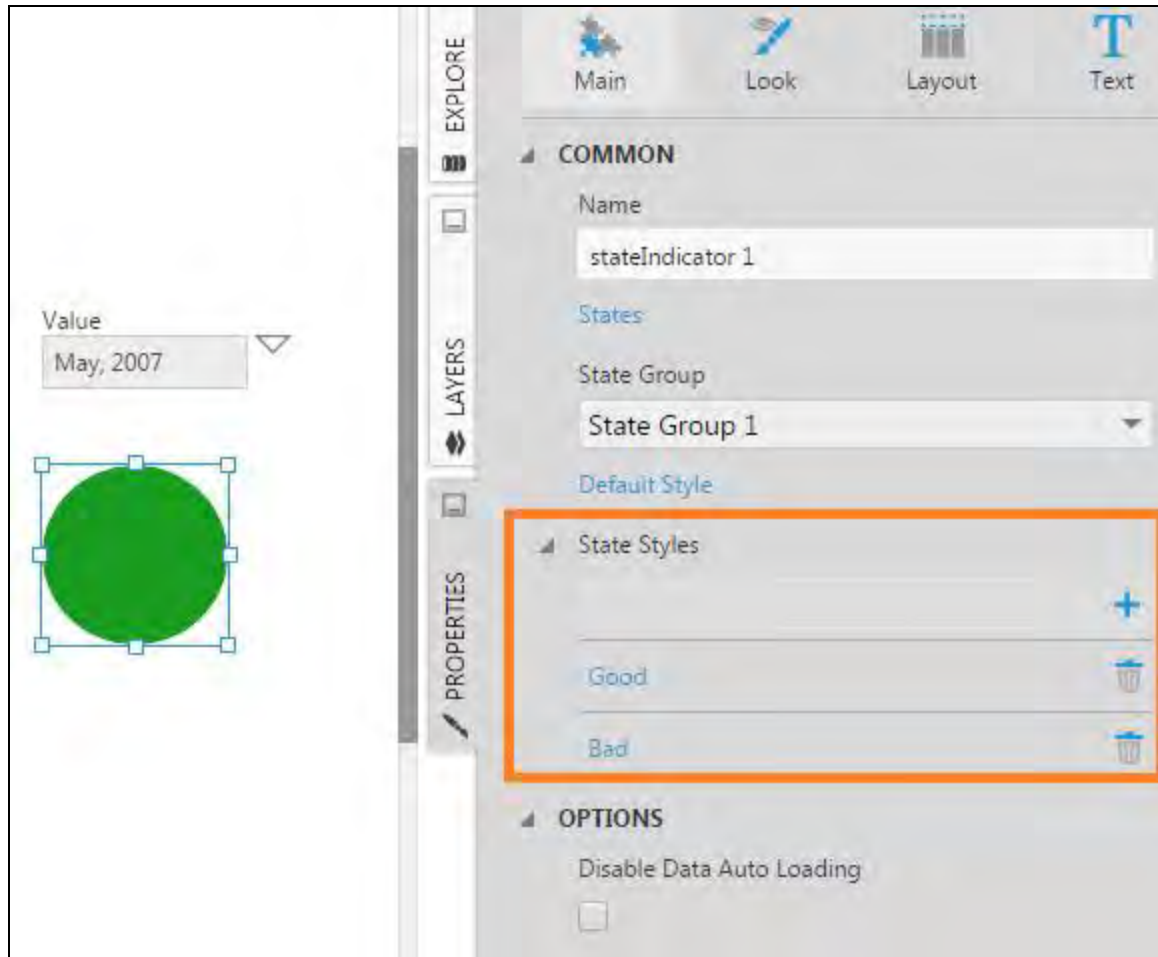
Switch to **View** mode and use the calendar filter. You'll see the state indicator change color accordingly and you can verify that this is correct by comparing against the chart.



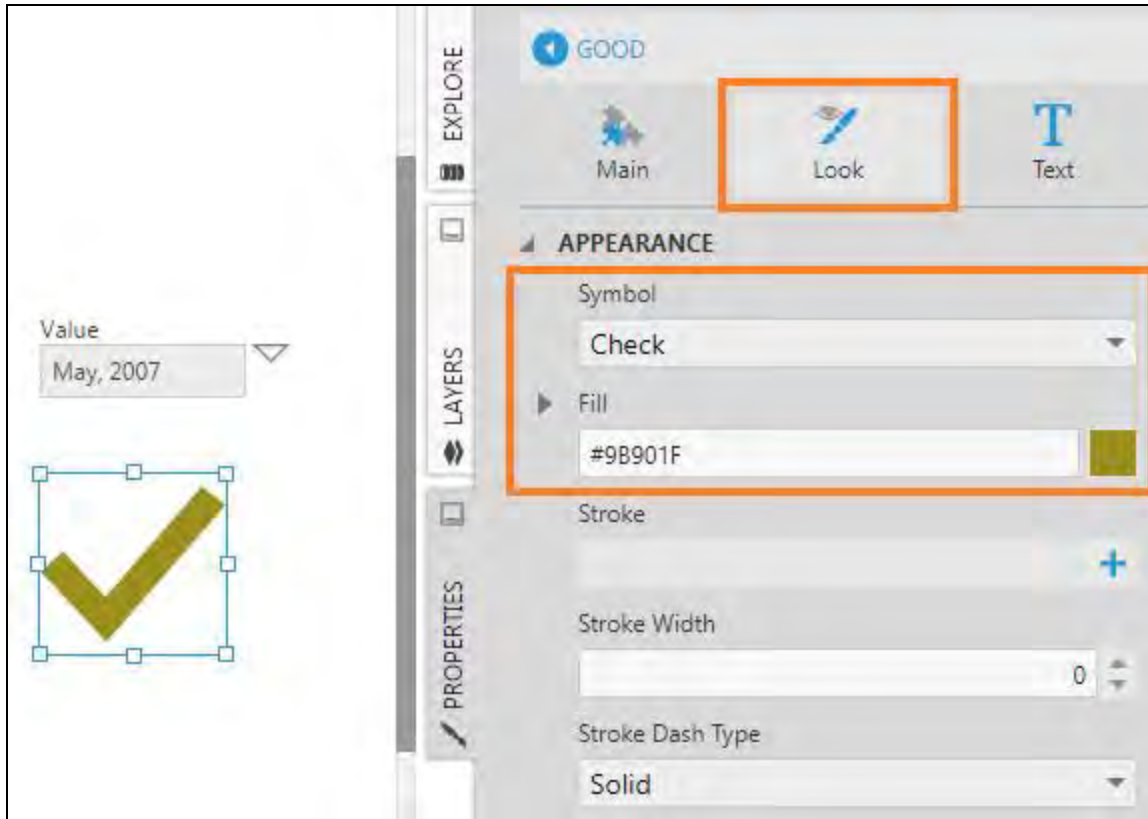


State Styles

When you add a metric set with states to a state indicator, the State Group is automatically set and State Styles are added for each state in the Properties window.



Click on a **state style** to edit its properties, such as Symbol and Fill in the Look tab.



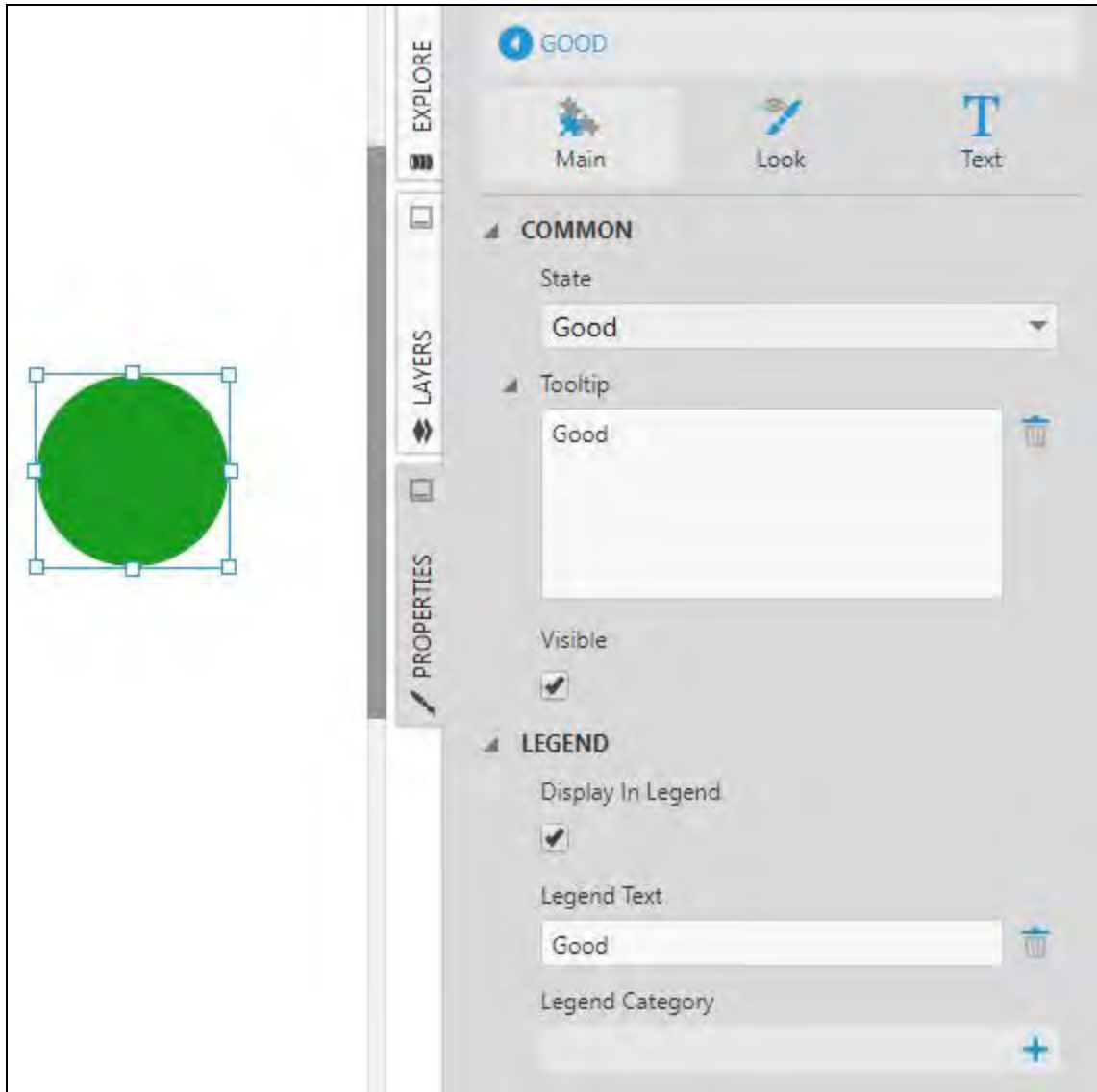
Each state style also has other properties such as:

- **State** - Identifies the metric set state associated with this state style (e.g., Good).
- **Tooltip** - Displays text in a pop-up when viewers hover over or long-taps the state indicator. This can display more details, including values from your data.
- **Legend Text** - The text to be displayed to identify this state in a legend if you add and connect one.
- **Background Symbol** - Can be used to layer the main Symbol on top of another symbol, such as a *Dash* on top of an *Ellipse*. The *Padding* property can be used to make the foreground symbol smaller.



- Archive of documentation for Logi Symphony v24

- **Enable Animation** - Use with the Symbol Animated Fill property to call attention to particular states by repeatedly fading back and forth between two different fill colors.
- **Text** - Displays text over the symbol, optionally including values from your data. To display text outside the symbol, consider using a data label or a table's text column as an alternative.



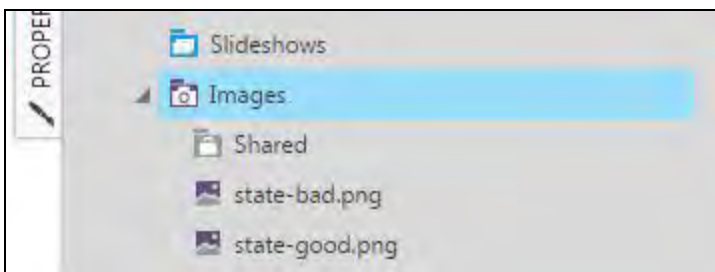
Using an Image For a State

Instead of displaying a built-in symbol for each state, you can upload and use your own images for the different states.

To do this, first prepare your images (one for each state) and [upload them](#) as image resources to Symphony.

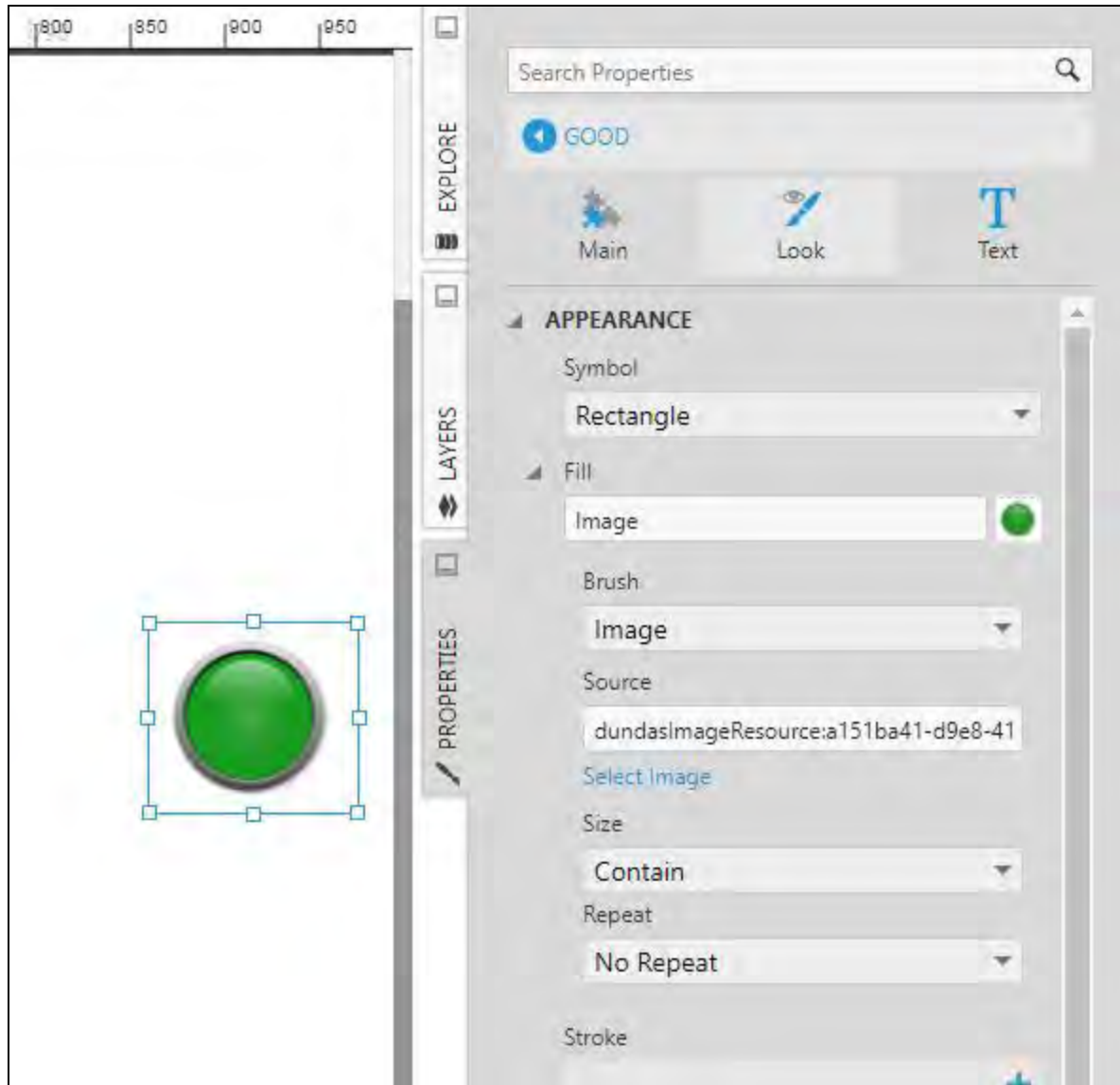


For example, drag a **PNG image file** from your computer to the Symphony Explore window, or right-click/long-tap the **Images folder** and select **Upload File**.



Next, edit the properties of each state style. Go to the Look section and do the following:

1. Set Symbol to **Rectangle**.
2. Expand the **Fill** property and set its Brush to **Image**.
3. Click **Select Image** and choose the **image resource** you previously uploaded.



Using a Tree Diagram

This applies to: *Managed Dashboards, Managed Reports*

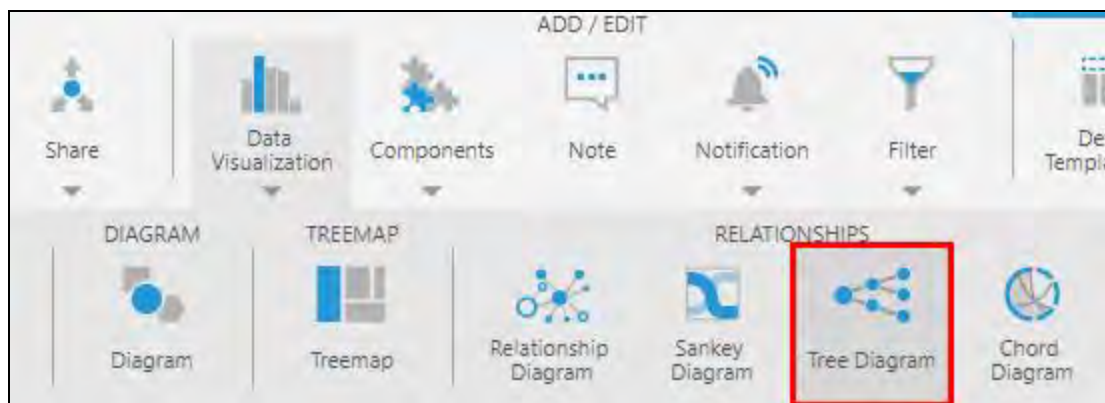
The tree diagram displays the hierarchical structure of your data. A common use is to display an organizational chart, but it can be used to visualize or explore any data broken down into multiple levels.

Here are examples of a tree diagram that uses two types of data:

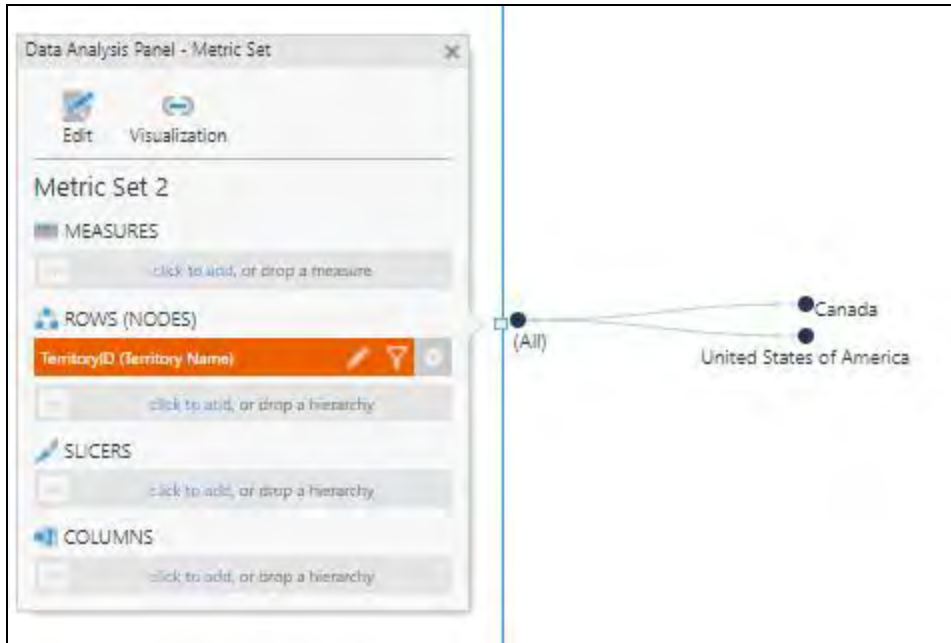
1. A multi-level hierarchy showing countries and territories, which can then be expanded & collapsed, or drilled up & down between the levels.
2. Multiple hierarchies, which are also each presented as one or more levels in the diagram. They can also be expanded and collapsed like the levels of a single hierarchy.

Creating a Tree Diagram

When editing a metric set, or a view such as a dashboard, choose **Data Visualization** or **Re-Visualize** in the toolbar, then find **Tree Diagram** under Relationships.

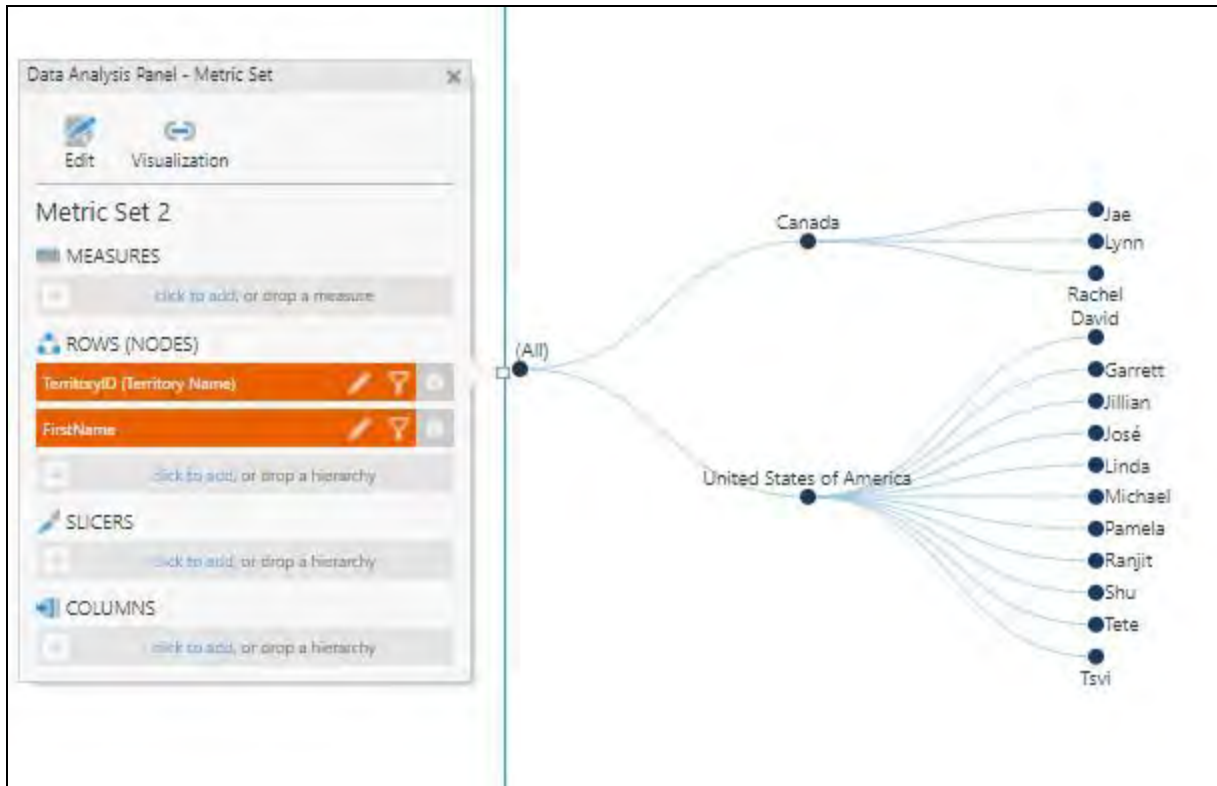


If you have added an empty tree diagram to a dashboard or view and have not selected data yet, drag a **hierarchy** or **column** of data to Rows in the Data Analysis Panel.



The hierarchies placed on Rows in the Data Analysis Panel become the Nodes of the diagram, displayed as circles with connecting links.

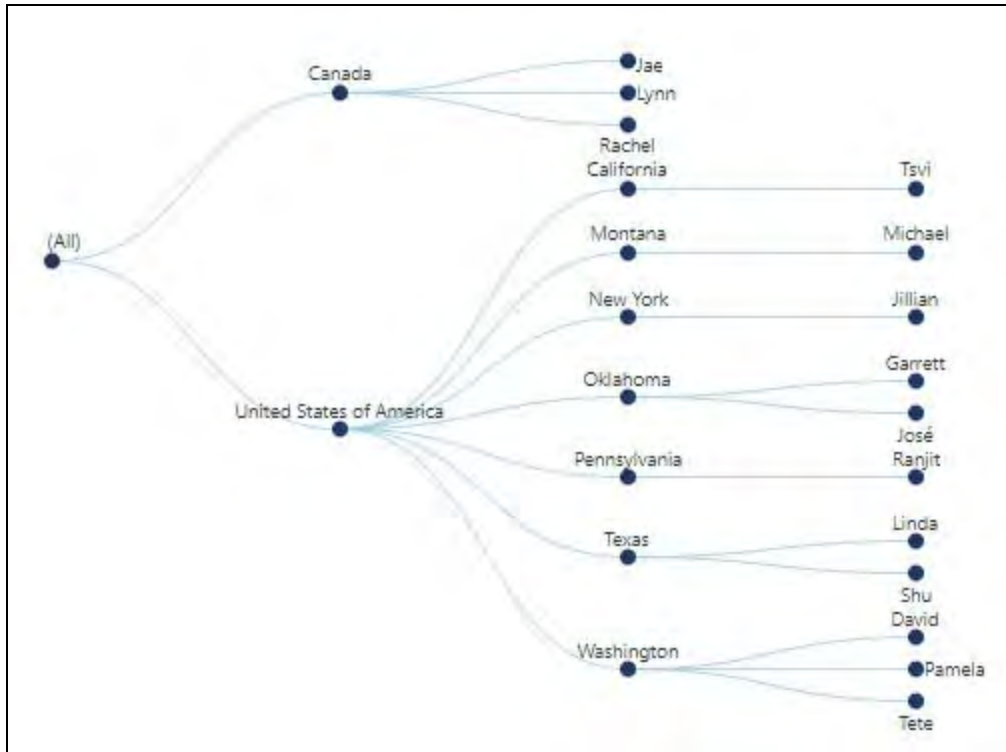
You can choose to add more than one hierarchy, or drag a lower level from a multi-level hierarchy onto the diagram to select the range of levels between them. Both of these actions will expand the diagram to display additional levels.



Expanding and Collapsing

When there are more levels available in the hierarchy, you can right-click an individual **node** and select **Expand** to include the nodes in the level below that are under that node. If editing a dashboard, first choose **View** in the toolbar to interact with the diagram.

In our example, we have expanded *United States of America* and the nodes from the *States & Provinces* level are now displayed, only under that node:



In addition to expanding and collapsing individual nodes, you can expand and collapse entire hierarchies or levels:

- To collapse a hierarchy, right-click a **node** and choose **Collapse All**. You can then right-click the **diagram** and choose **Expand All** to reverse the change for that hierarchy.
- If a hierarchy offers multiple levels, right-click the **diagram** and choose **Change Level**. By setting both a level and a top level, you can display multiple levels or choose which level(s) to display.

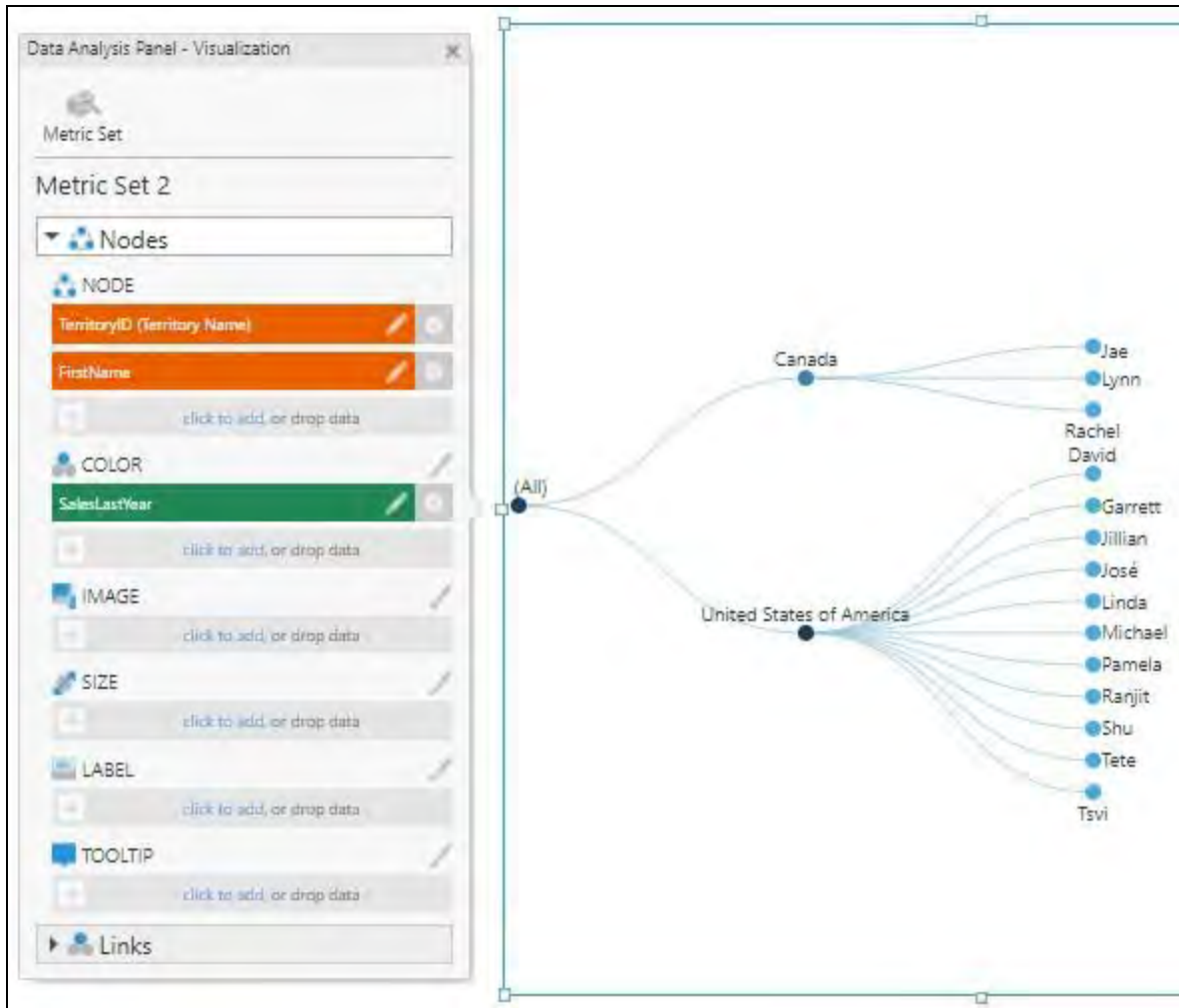
For more details and options for expanding and collapsing data, see [Expand and Collapse Hierarchy Members](#).

Change Node Color and Size

To change the colors or sizes of nodes based on your data, open the **Visualization** tab of the Data Analysis Panel when editing a metric set or dashboard.



Under Nodes, drag or **click to add** a **measure** under Color.

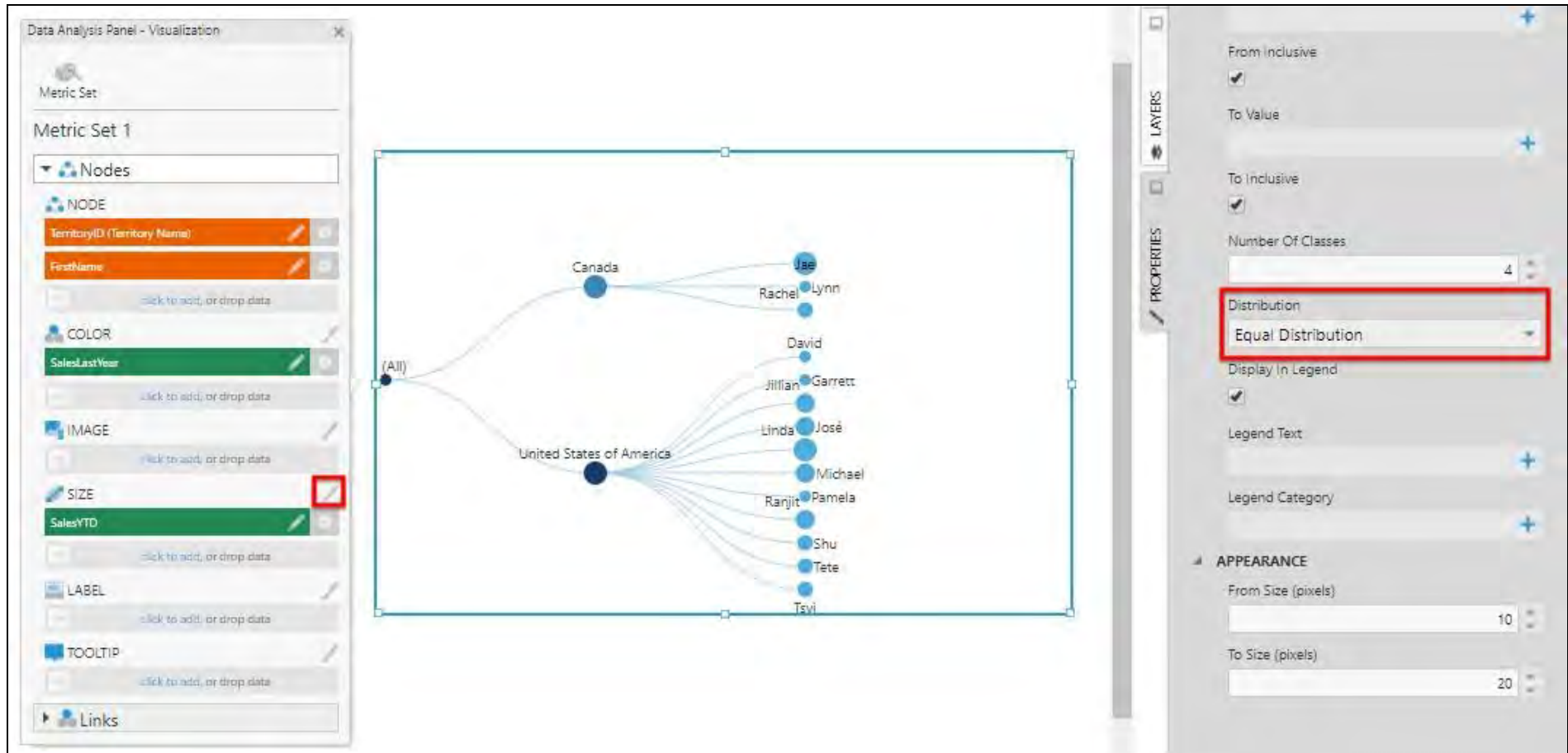


An *Auto Color Rule* is automatically applied to the nodes in the diagram. You can change the settings of the rule by clicking the **brush** icon next to Color, or by finding the color rules in the Look tab of the Properties window under Nodes and selecting **Auto Color Rule**.

Note: Adding a measure directly to the metric set will automatically assign it under Color for both nodes and links.

Under Nodes, drag or **click to add** a **measure** under Size.

Auto Size Rules are automatically applied to the nodes in the diagram. You can change the settings of the size rules in the same manner as for color rules. For example, click the **brush** icon next to Size and change Distribution to **Equal Distribution**.



You can also change node colors and sizes by hierarchy value.

Color and size rules work the same for tree diagrams as in other visualizations. For more details and examples, see [Apply colors to data points](#) or [Aligning Data Point Labels Inside Bars](#).

Display Images in Nodes

You can display images to identify each node in the diagram.

To use the hierarchy member captions to identify each image, open the **Look** properties, and find the Image Path property.

Type the URL to the folder or directory containing your images, and use the [\[Member\] keyword](#) to use the hierarchy member caption as part of the image file name.

For example:

/Content/Images/MyCompany/[Member].jpg



If you have the entire image path for each member in your database, you can add this hierarchy under Image in the Data Analysis Panel's Visualization tab, and the Image Path property will be updated accordingly.



Note: Ensure totals are not preventing your image path data from being included in the row of data displayed by the node by editing the image path hierarchy and setting Shown Totals to **No Totals**. Use [Data Preview](#) to view the data.

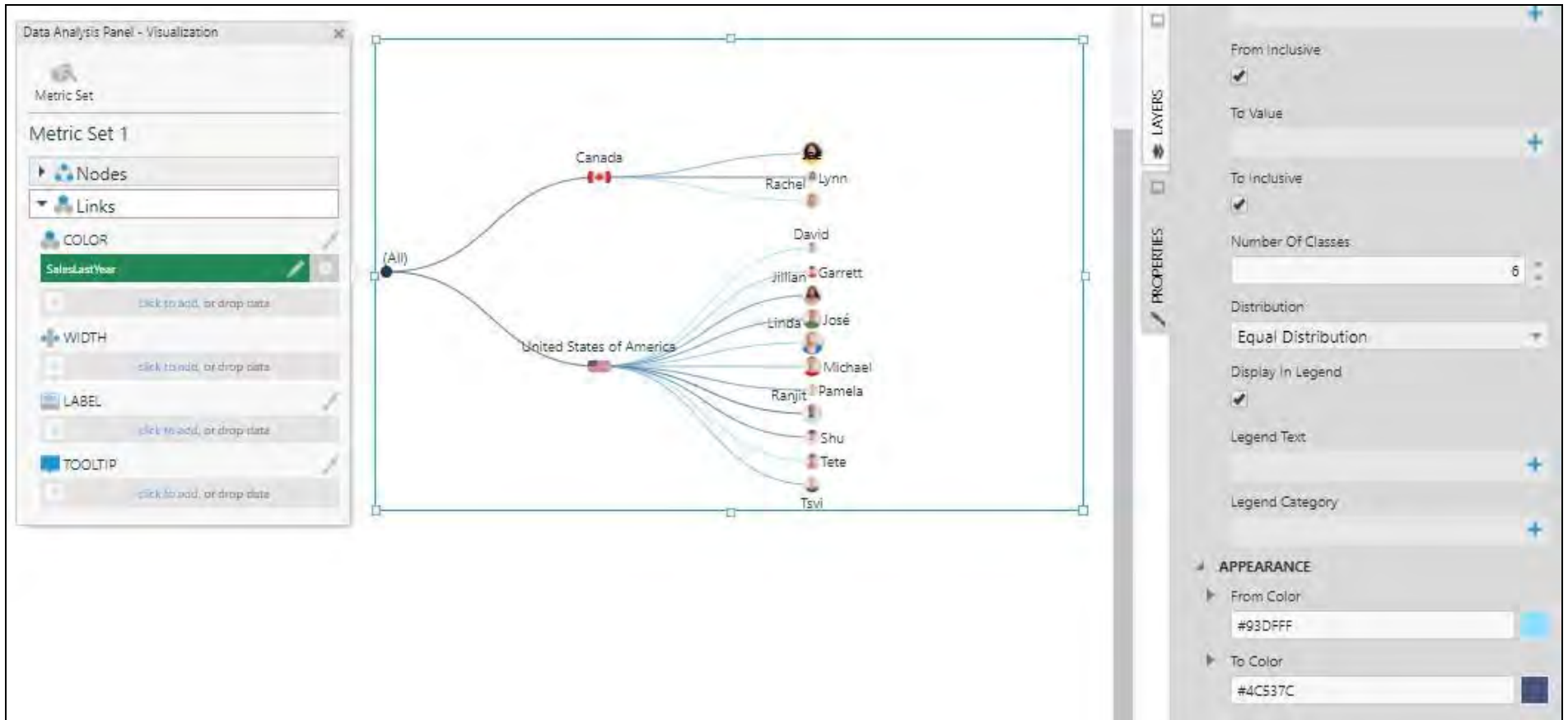
If the images themselves are stored in your database, they can also be displayed this way by assigning it under Image, and then customizing the Image Path property. For details on how to encode image data and set the Image Path property to display it, see [Add a Data Image](#).

Change Link Color and Width

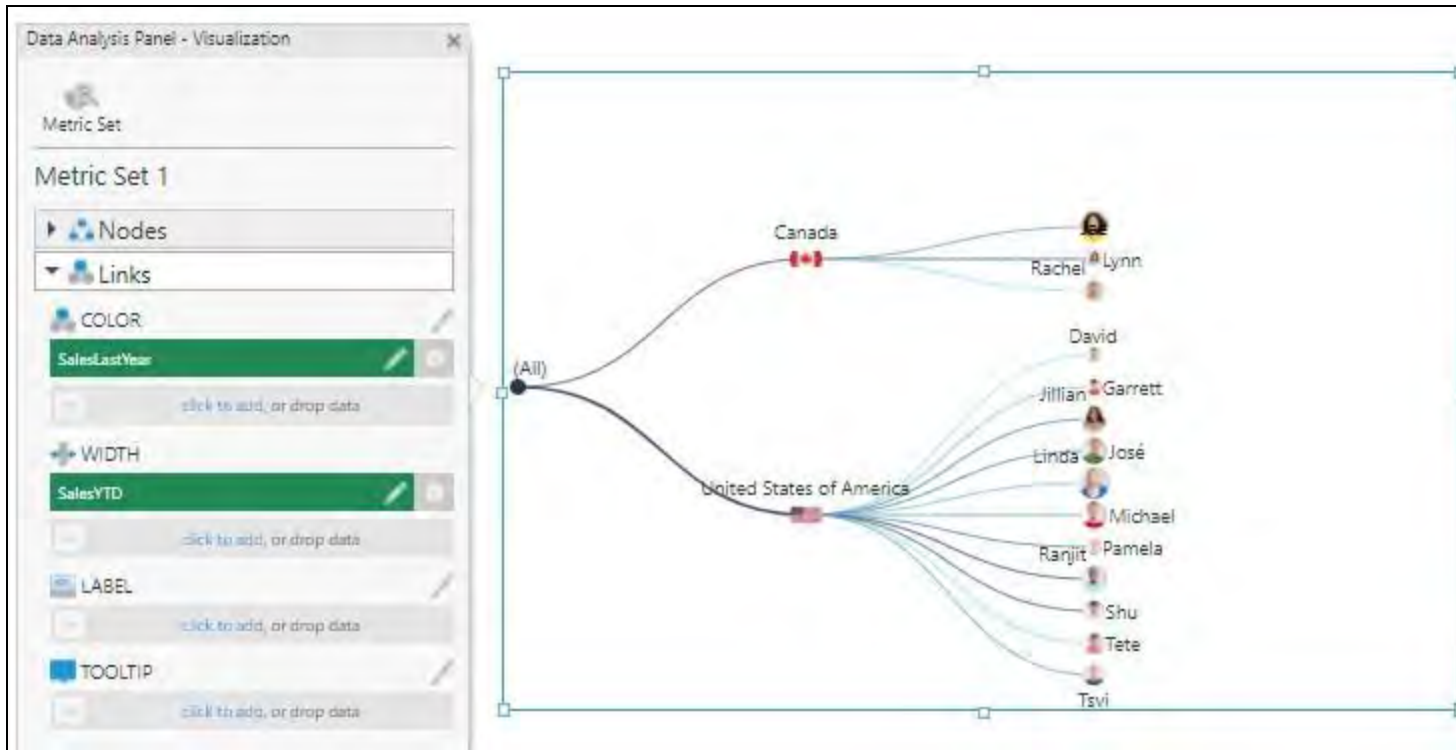
Link colors and widths can be changed based on data the same way as for nodes.

Open the **Visualization** tab of the Data Analysis Panel and expand the **Links** section, then add a **measure** under Color.

An *Auto Color Rule* is applied automatically to the links in the diagram. You can change the settings of the rule by clicking the **brush** icon next to Color, or finding it in the **Look** tab of the Properties window under Links. For example, change Distribution to **Equal Distribution** and adjust the colors.



Add a **measure** under Width.



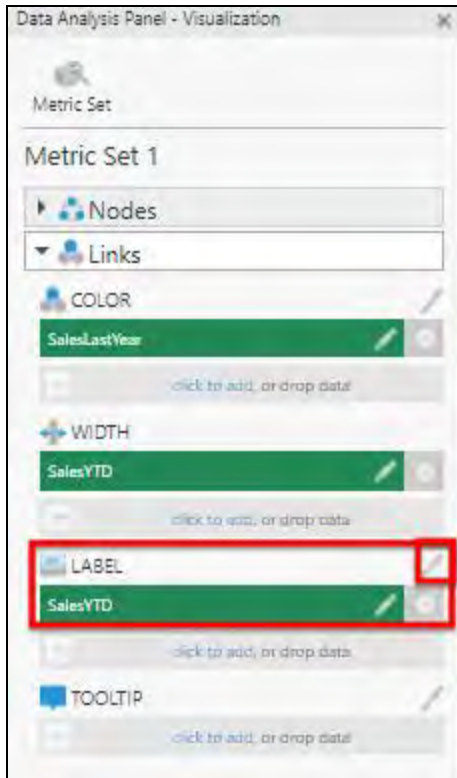
An *Auto Size Rule* is applied automatically to the links in the diagram. You can change the settings of the rule by clicking the **brush** icon next to Width, or going to the **Look** tab of the Properties window and selecting the **rule** under Links in the Stroke Width Rules.

Change Labels and Tooltips

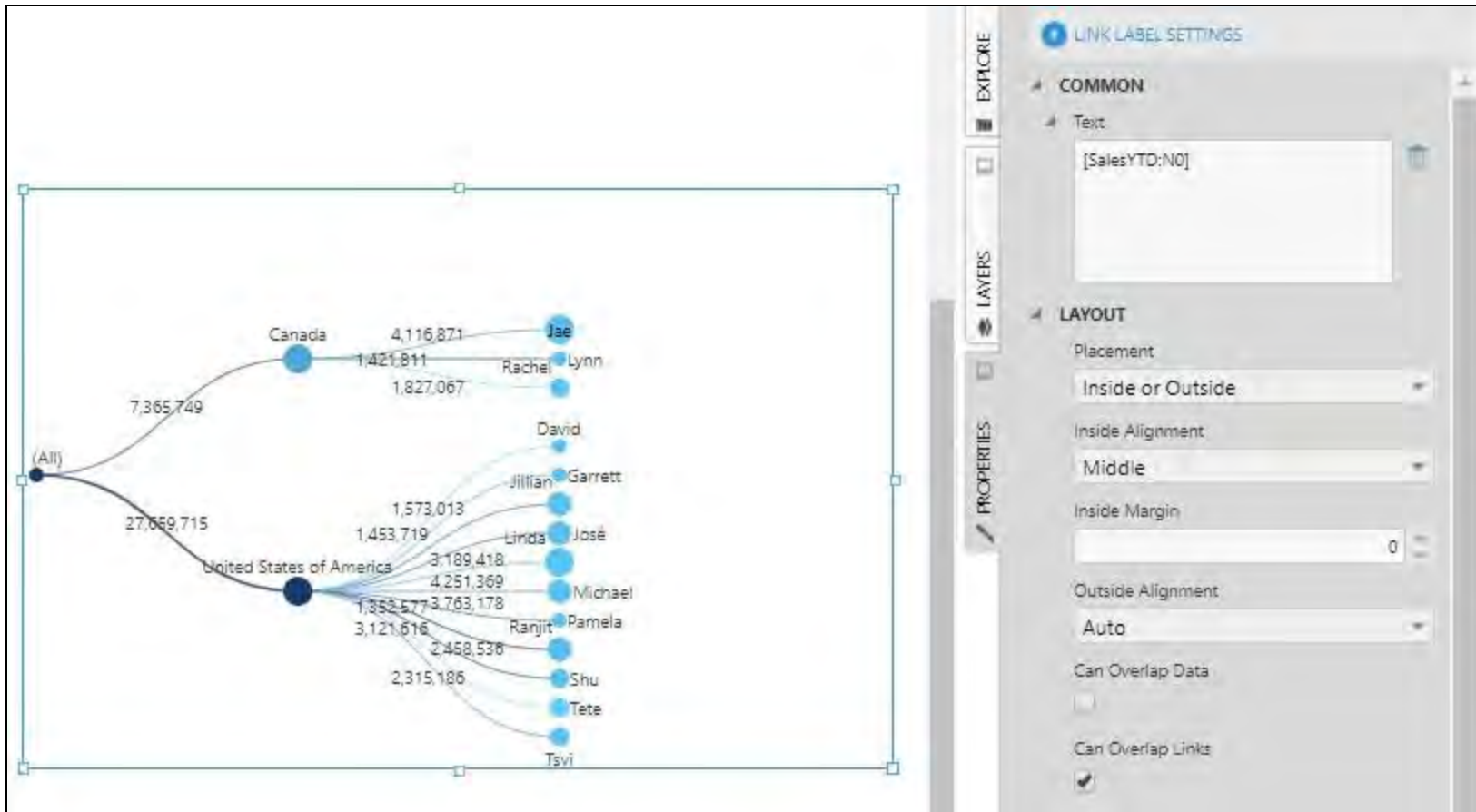
In the **Text** tab of the Properties window, you can customize the Label Text and Tooltip Text properties for both the links and the nodes.

These properties accept regular text, as well as keywords, such as *[Member]* and *[Level]* for the hierarchy member and level caption, respectively. For additional information about available keywords, refer to the [formatting text](#) article.

As a shortcut for applying the proper keyword, you can use the **Visualization** tab in the Data Analysis Panel. For example, add a **measure** under Label in the Links section.

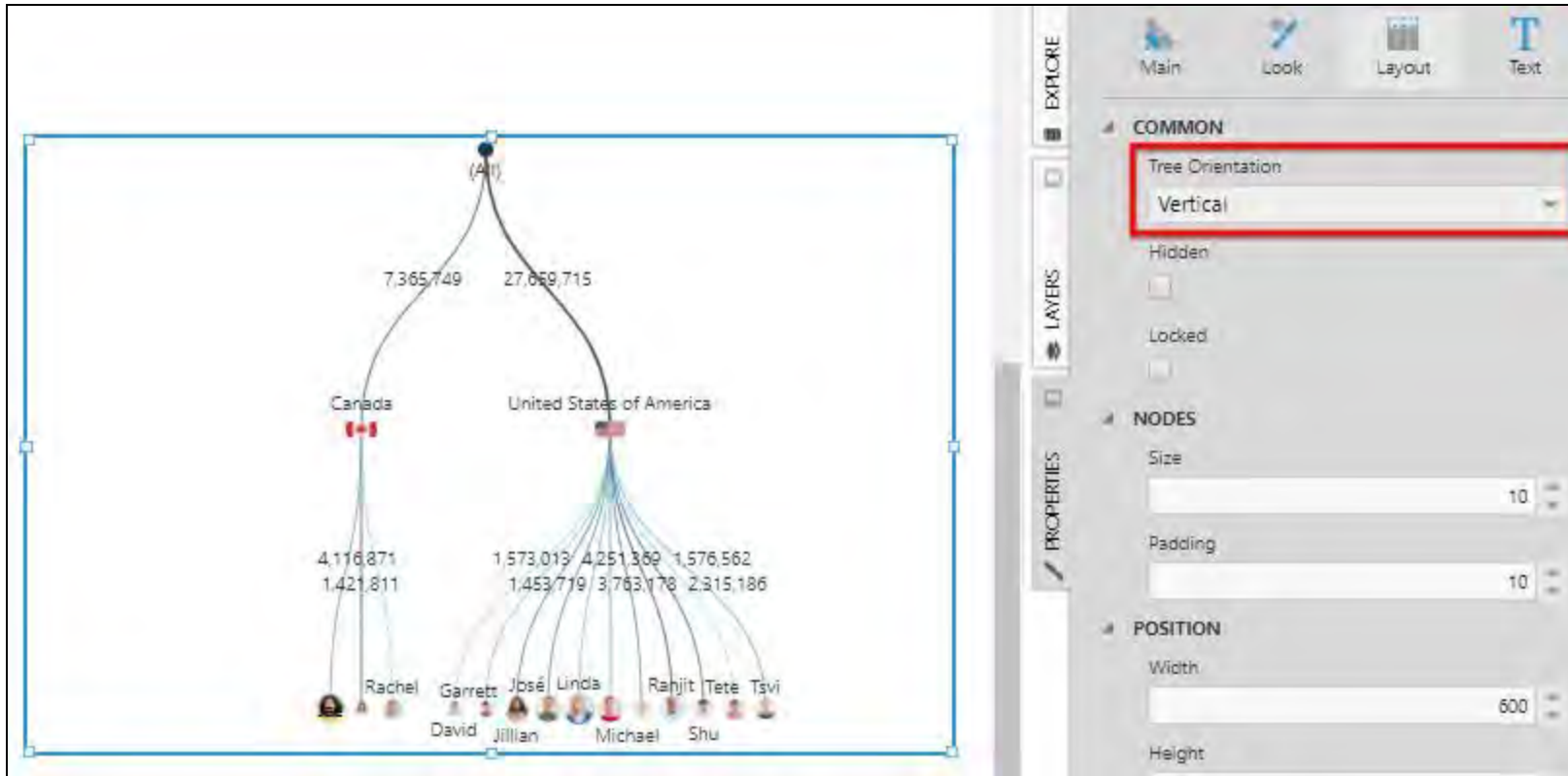


Click the **brush** icon next to the Label field to open the relevant properties section. The keyword (e.g., *[SalesYTD]*) has already been added to the Text property. As with text properties in all visualizations, you can add a format inside the square brackets (e.g., *[SalesYTD:N0]*) to remove the decimal places.



Tree Orientation

The tree layout can be either from left to right (horizontal) or from top to bottom (vertical). To change the orientation, open the **Layout** tab of the Properties window and select your choice from the **Tree Orientation** drop-down.



For more information, see:

- [Setting Up the Visualization](#)
- [Expand and Collapse Hierarchy Members](#)
- [Set Up States on a Metric Set](#)
- [Using a Relationship Diagram](#)
- [Using a Sankey Diagram](#)

Using a Treemap

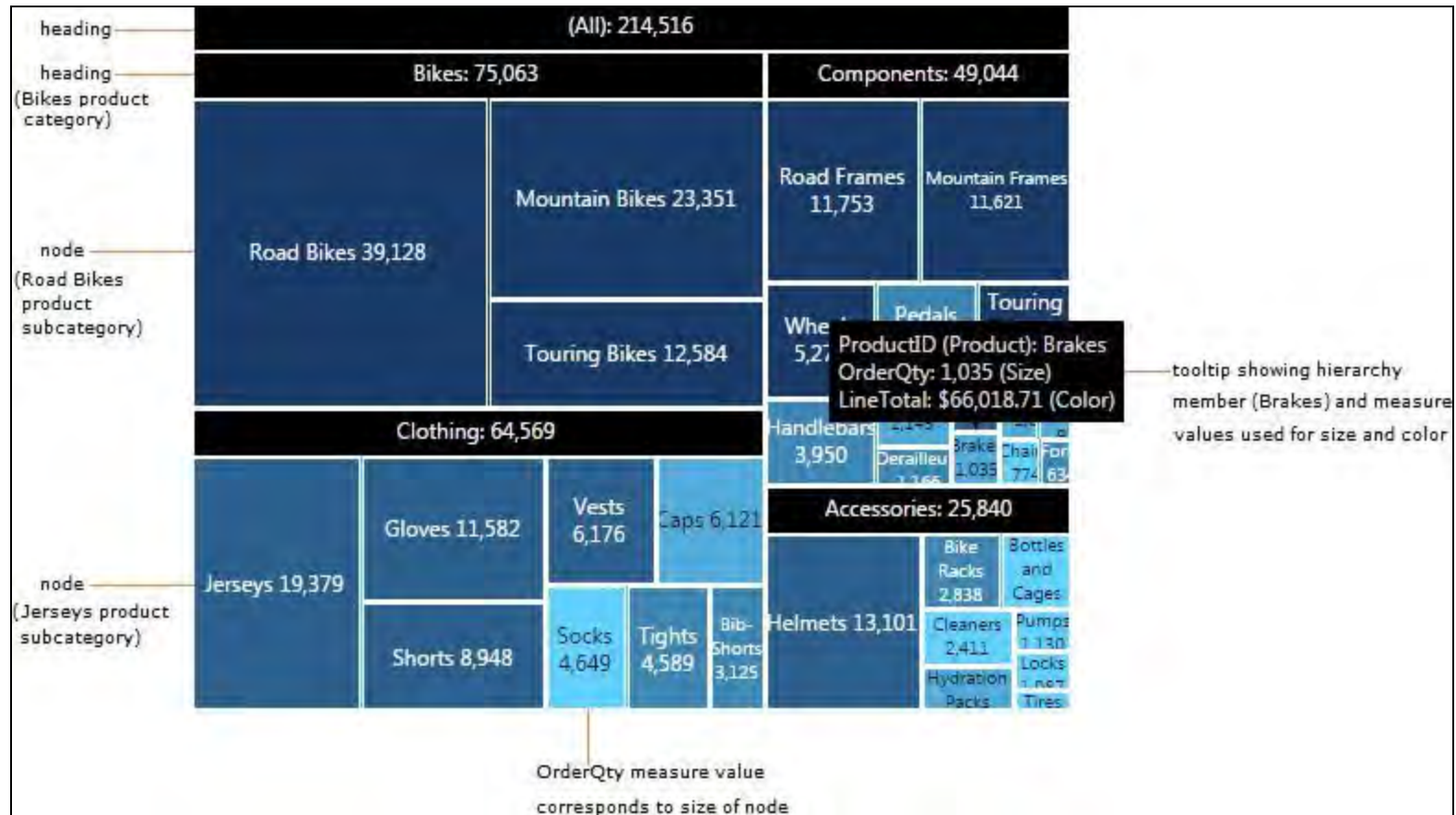
This applies to: *Managed Dashboards, Managed Reports*

A treemap is a visualization that can display a large amount of hierarchical data using nested rectangles of varying size. The total area of a treemap normally reflects the sum of its parts, which consist of inner rectangles or nodes.

Treemaps have the ability to display a second measure as the color or shade of each rectangle.

Elements of a Treemap

The figure below shows the main elements of a treemap data visualization.

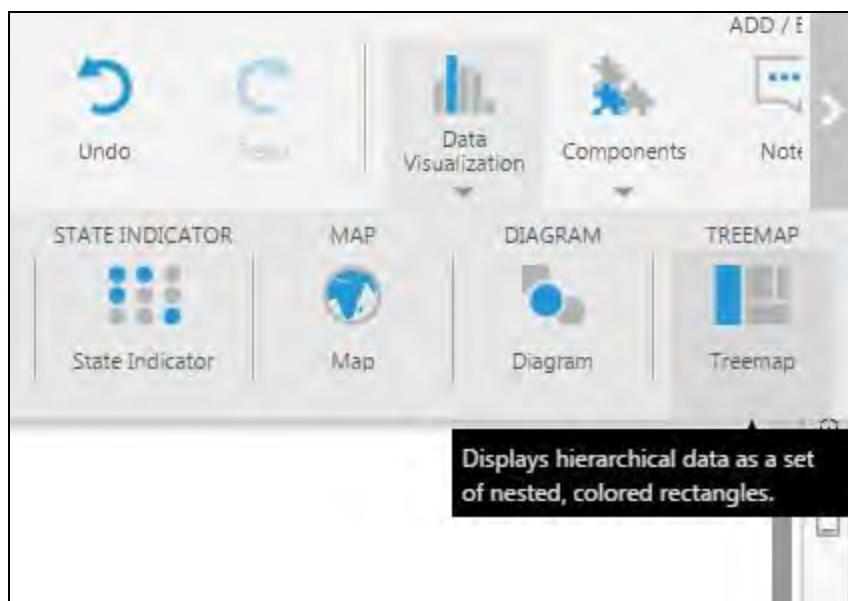


This example is configured with a Product hierarchy, and two measure values (*OrderQty* and *LineTotal*). The *OrderQty* measure is used to determine the size of each treemap node and also displayed as text within each node. The *LineTotal* measure is used to determine the color of each node, where a darker shade of blue implies a higher *LineTotal* value for that node in this case. Hover over or long-tap **part of the treemap** to view details about all of these values in a [configurable](#) tooltip.

Headings (seen here in black) group the rectangular nodes into multiple hierarchical levels: in this case, below the grand total (*All*) value at the top there are product category headings, below which are corresponding product subcategory rectangles/nodes. You can also display more levels than this, and you can drill down or expand portions of a treemap, as shown below.

Choosing a Treemap

When editing a metric set, dashboard, or another view, choose **Treemap** from the **Data Visualization** or **Re-Visualize** toolbar menu. It may also be [recommended](#) if your current data is a good match.



Select at least one **measure** (numeric data) and at least one **hierarchy** in your [metric set](#) to visualize as a treemap.

A measure will automatically be assigned as Size in the Data Analysis Panel's [Visualization tab](#), but you can change this to another measure if preferred. This measure should use a [Sum or Count aggregator](#).

Exploring Data

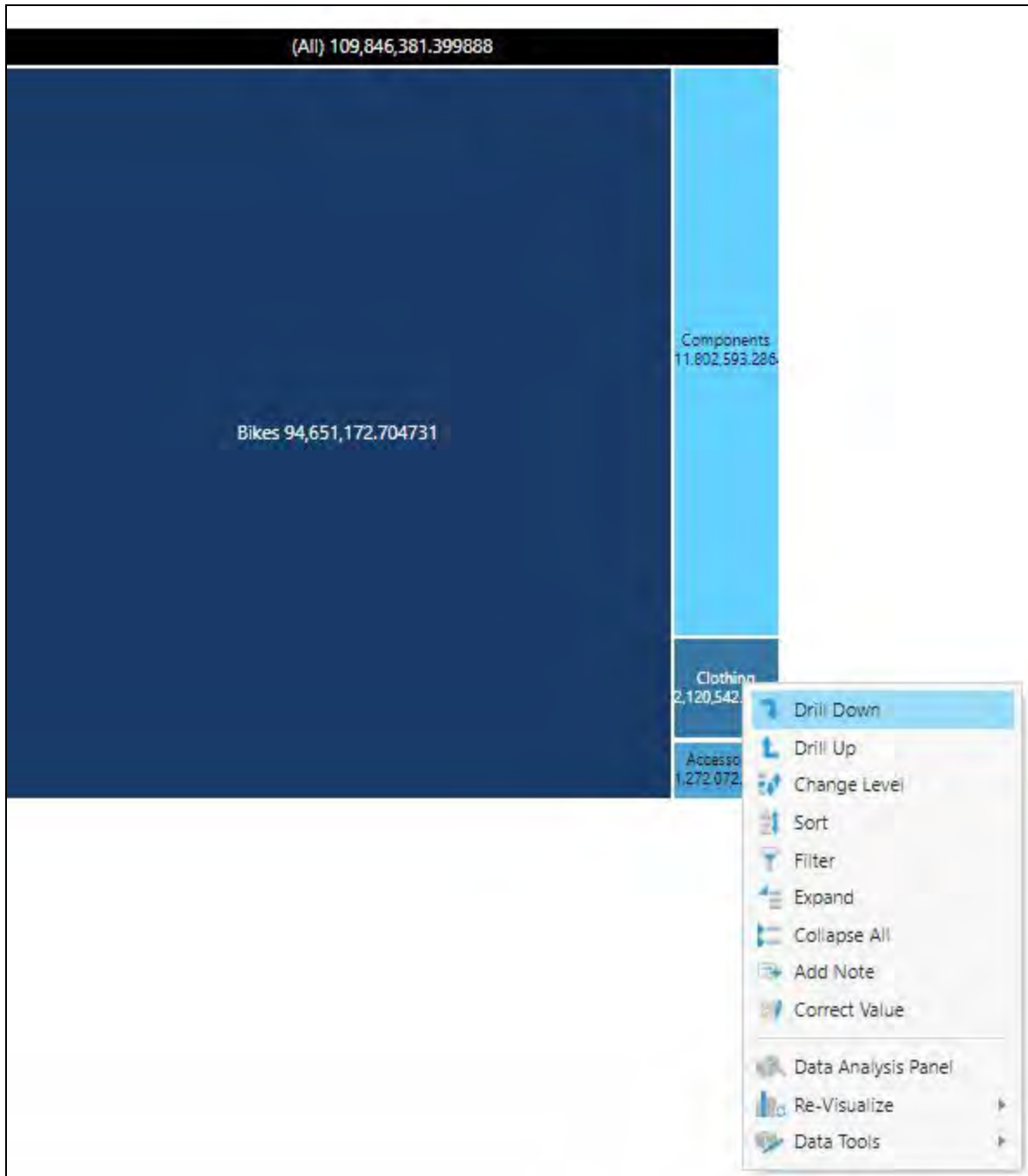
Treemaps excel at visualizing the hierarchical grouping of data. You can explore and navigate hierarchical data interactively using a treemap.



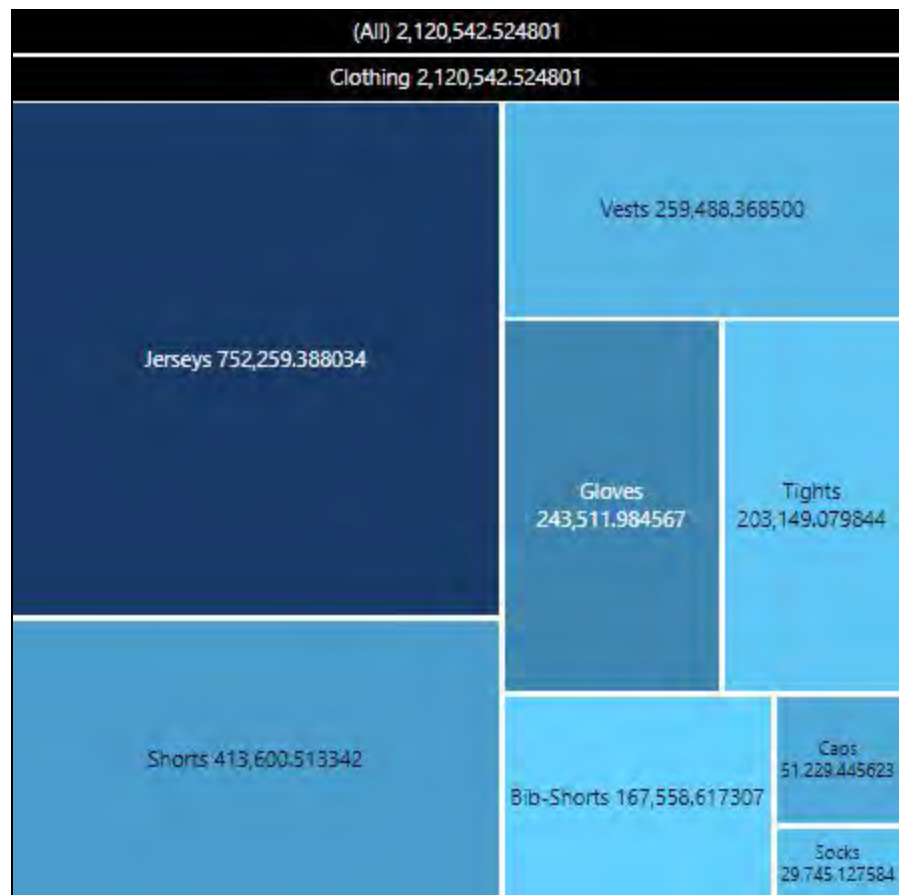
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Drilling Down

When a multi-level hierarchy is selected, right-click the **Clothing** node and select **Drill Down**.



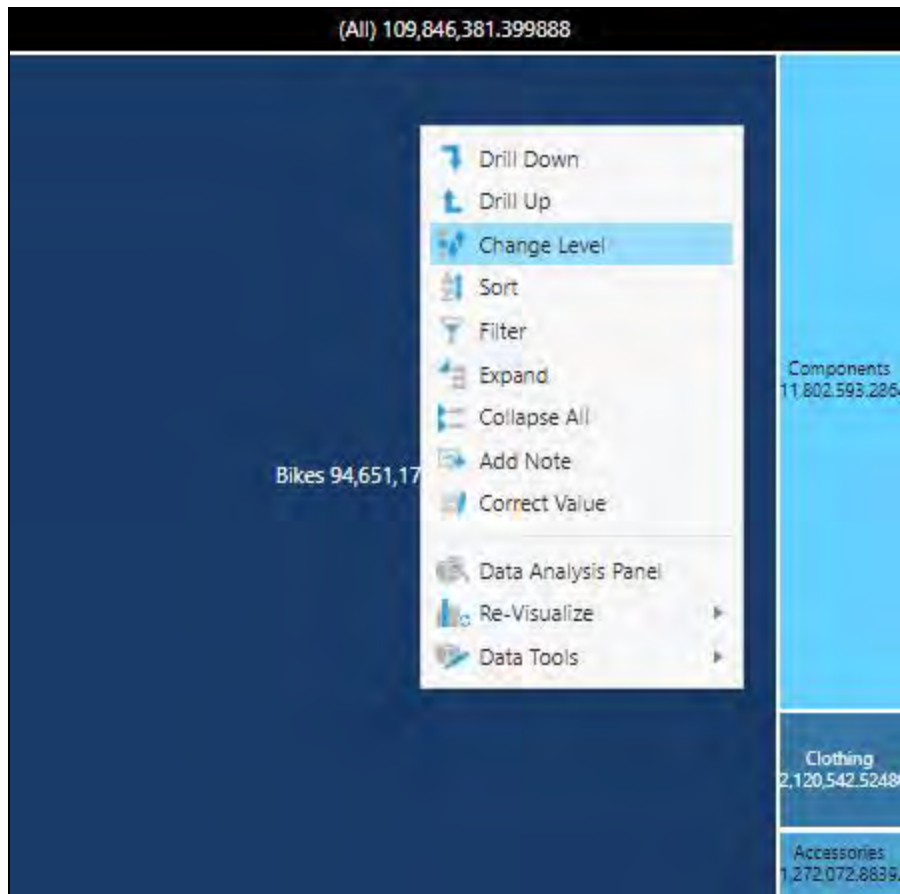
The treemap now shows a new heading corresponding to the *Clothing* product category, which is stacked below the *All* heading. The nodes of the treemap now correspond to product subcategories of the *Clothing* category.



Right-click the **treemap** and click **Drill Up** to go back to the previous view.

Change the Hierarchy Level

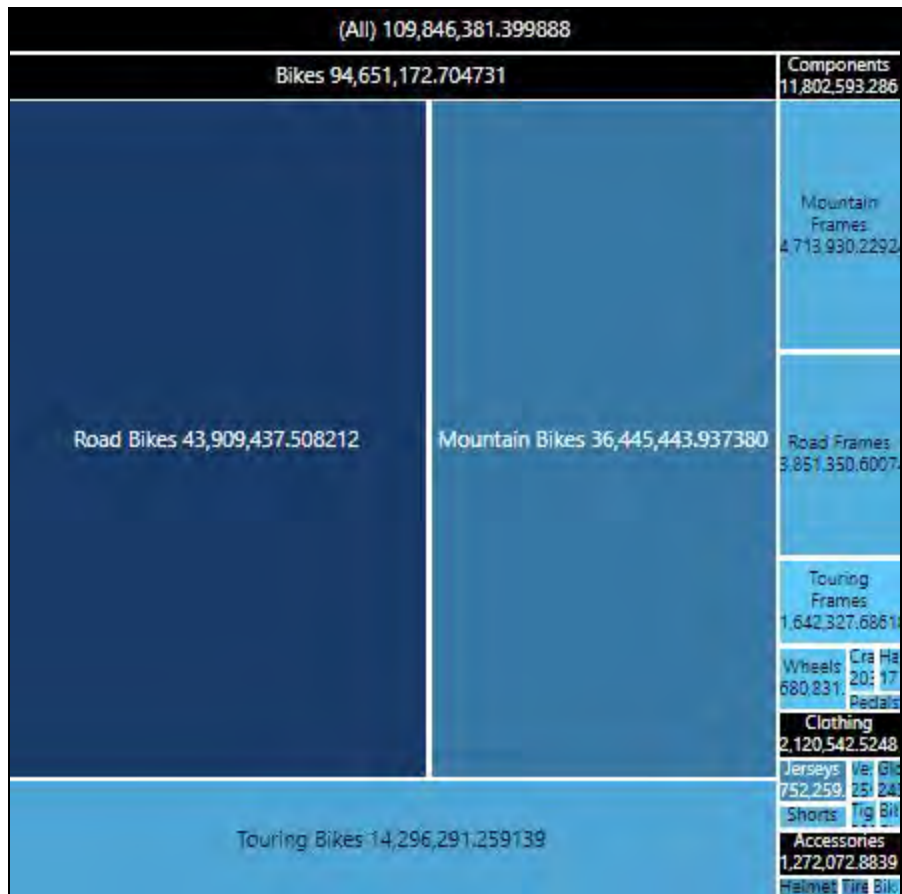
With a multi-level hierarchy, you can change the details level lower and view its data grouped by the upper levels of the hierarchy. To change the displayed hierarchy level, right-click the **treemap**, and then select **Change Level**.



Select a **hierarchy** level from the submenu. For example, select *Product Subcategory*.



The treemap now displays all product subcategories in the form of nodes that are grouped under their respective headings.



You can also change the level from the **Data Analysis Panel** by editing the hierarchy's settings.

Configure Metric Set Element

This is where you can configure this specific metric set element, and see which UI elements it is bound to.

Caption
ProductID (Product)

Unique Name
ProductID

► Visualization

▼ Metric Set Default Values

Retrieve Unknown Members
☒

Unknown Member Caption

Collapse All
☐

Shown Totals
Subtotals and Grand Total

Default Parameter Value
All

Level
Product Subcategory

Top Level
Product Category

Define custom hierarchy sorting

Delete this element

ADP - Edit

Data Visualization Components Annotations Notification Filter Data Analysis Panel Re-Visualize

50 100 150 200 250 300 350 400 450 500 550 600

Data Analysis Panel - Metric Set

Edit Update Visualization

Metric Set 2

MEASURES

LineTotal

OrderQty

ROWS PANNER

ProductID Grouped

SLICERS

COLUMNS (OUTER)

(All) 109,846,381

Bikes 94,651,172.70473

Road Bikes 43,909,437.508212

Mountain Bikes 14,236,301.123



Expanding and Collapsing

When multiple hierarchies or a multi-level hierarchy is selected, you can right-click **data** and choose **Expand** to view that node's data broken up into additional details, or **Collapse** to combine multiple values into a summary.

For details and examples with treemaps and other visualizations, see [Expand and Collapse Hierarchy Members](#).

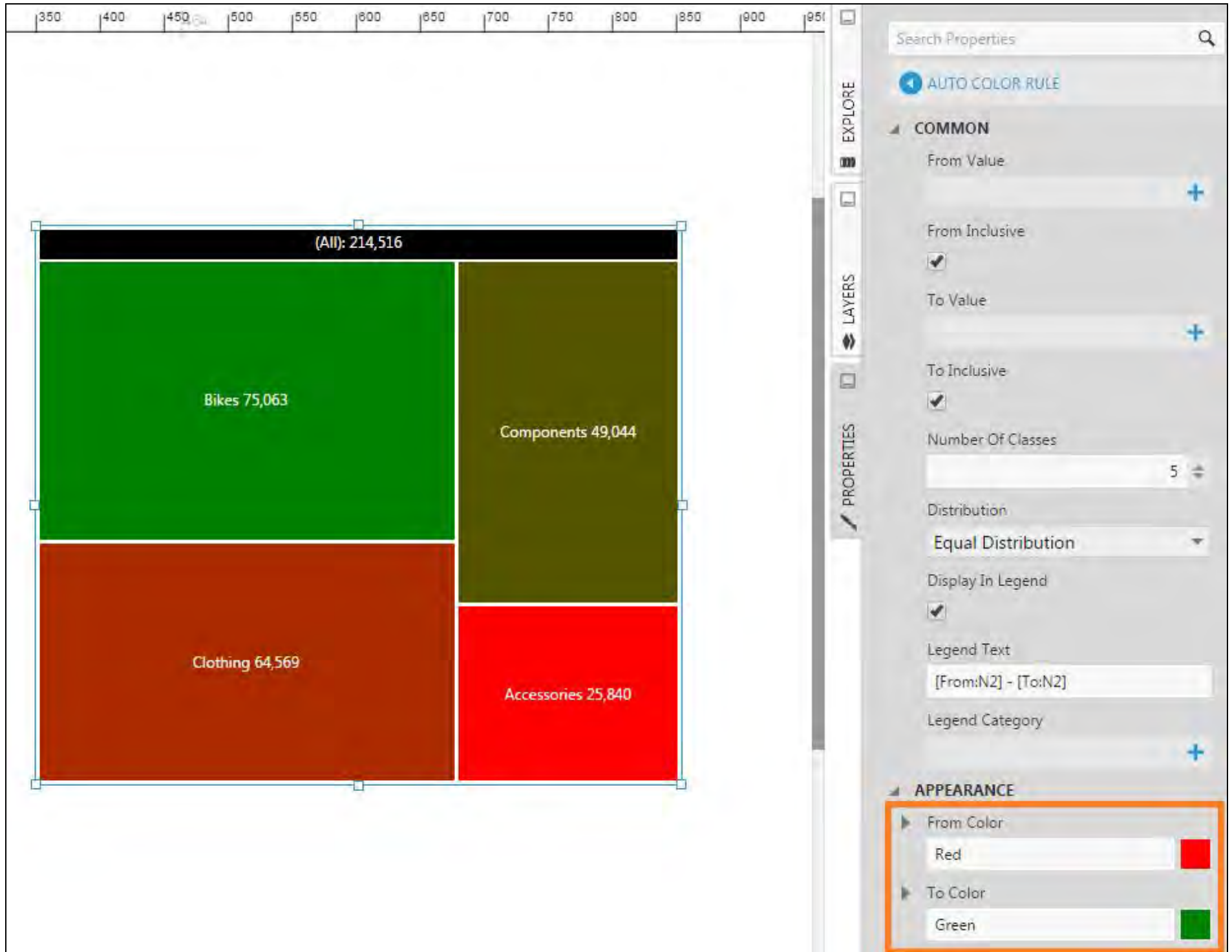
Properties

This section describes some of the key properties of a treemap.

Color Rules

The second measure added to a treemap is assigned automatically as Color in the Data Analysis Panel [Visualization tab](#), or you can add a measure there yourself.

In the Properties window for a treemap, click **Look** and expand the **Color Rules** section. You'll see the default *Auto Color Rule* item which you can click to view or edit.

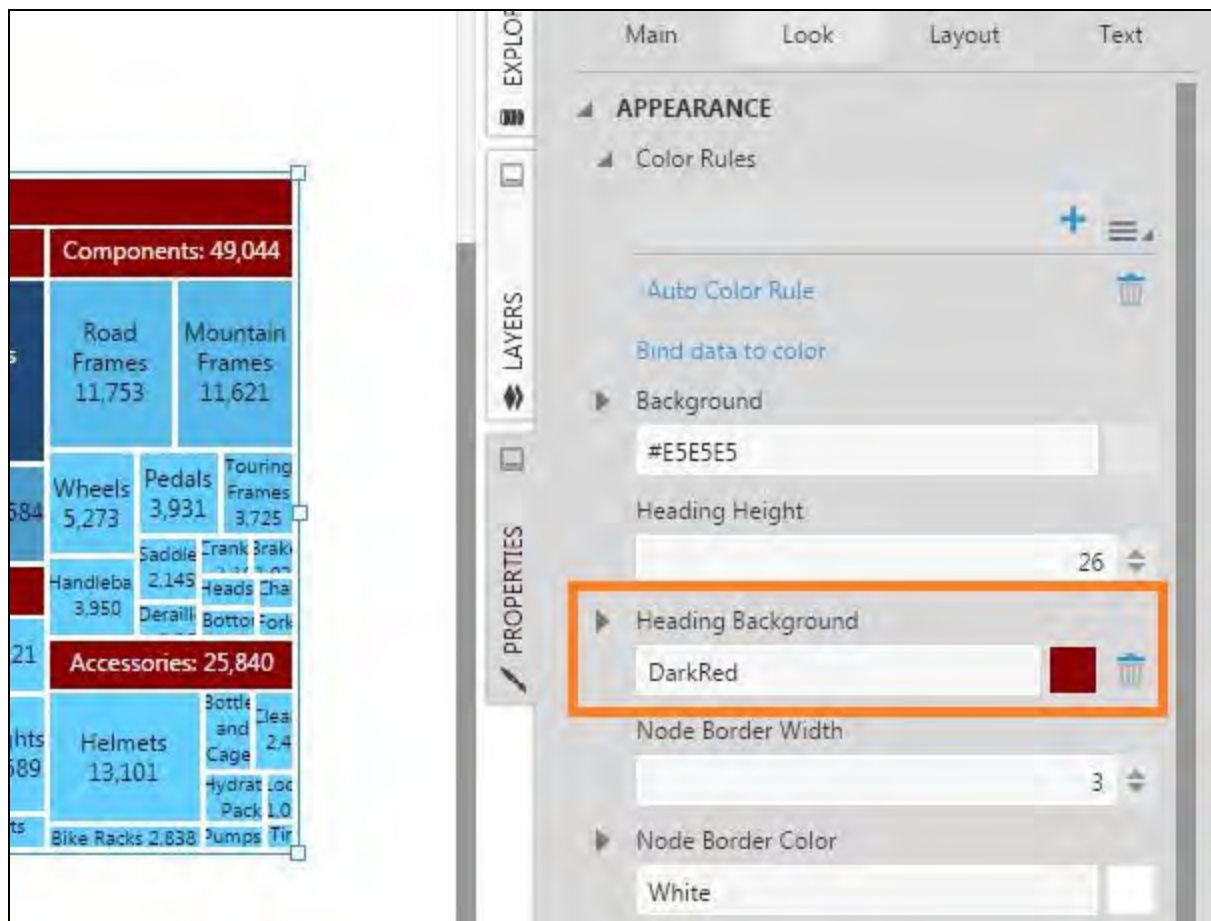


Use the **From Color** and **To Color** properties to set the range of colors for mapping to the measure values. You can choose to have colors ranging from red to green, for example, instead of using different shades of a single color.

There are also some more advanced properties in this section which allow you to set the Number of Classes (the number of different data ranges where each range is associated with a display/color value), and choose the Distribution method for assigning data points to the various classes. For more details on distribution methods, see [Displaying Symbols on a Map](#).

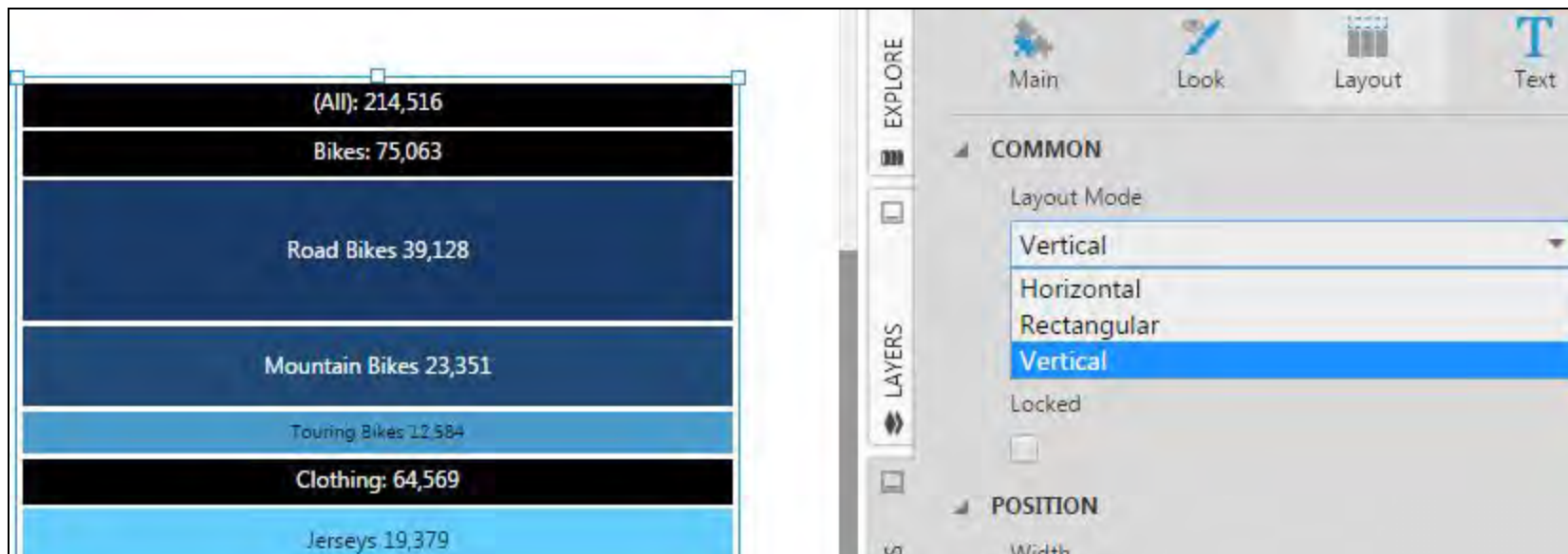
Heading Background

In the Look tab, expand the **Heading Background** property to see options for changing the background color of a heading.



Layout Mode

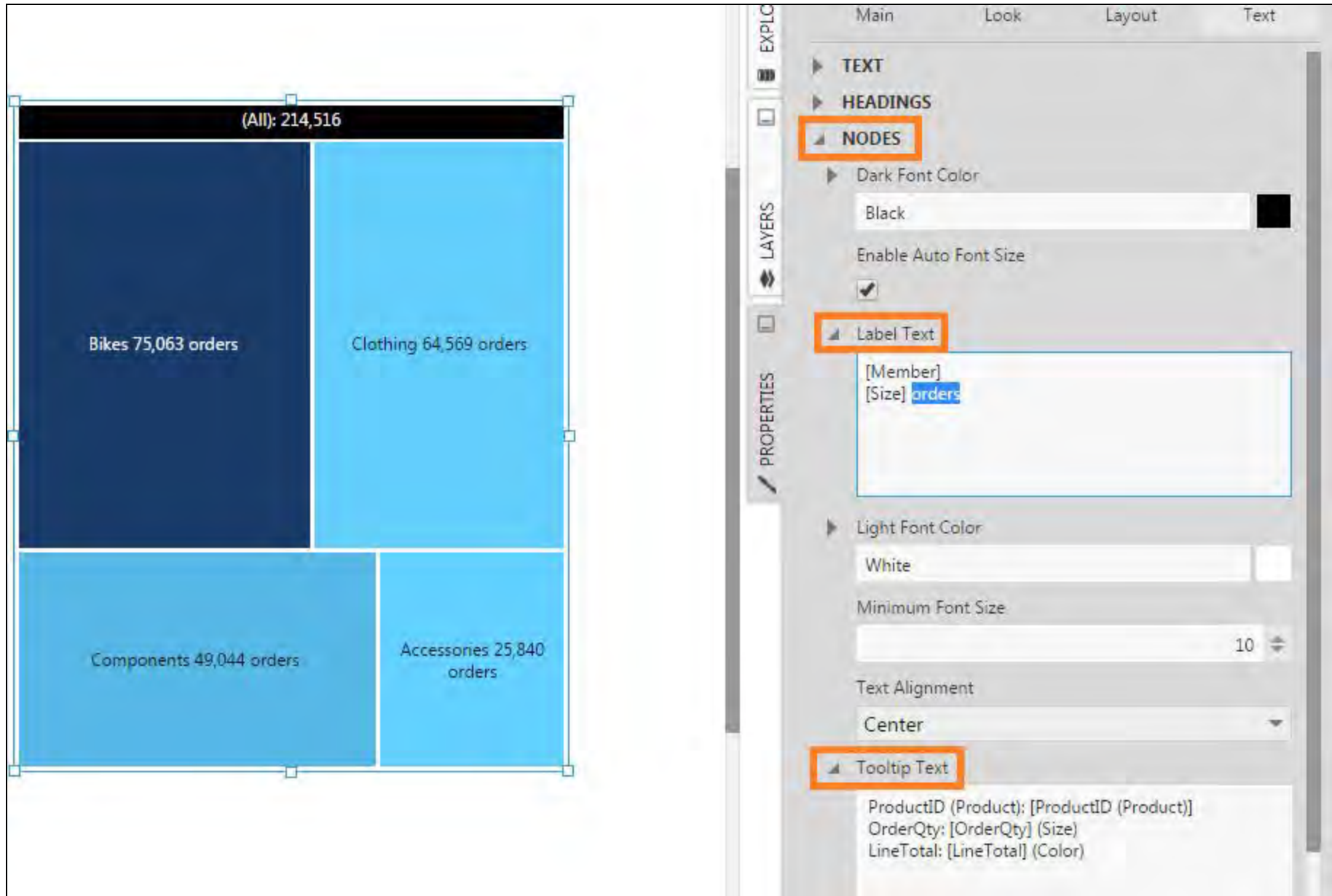
In the Layout tab, you'll find the `Layout Mode` property which is set to Rectangular by default. Rectangular is the most common option but you can change it to a **Vertical** or **Horizontal** layout instead to display a single row or column of rectangles of varying sizes.



Label Text and Tooltip Text

In the Text tab, you can customize the `Label Text` and `Tooltip Text` properties for either headings and/or nodes.

These properties accept regular text as well as placeholder keywords for inserting the hierarchy member name, the value of the **Size** measure, and measure column values.



See [Formatting Text](#) for details about supported keywords and formatting.

Selection

In the **Look** tab, the `Selected Style` and `Unselected Style` determine how elements look when there is some treemap element selected.

To change how elements should be selected:

- `Hover To Select` - determines whether elements become selected while hovering over it with a mouse or long-tapping it.
- `Click To Select` - selects or de-selects an element when clicked or tapped.

 **Note:** Hold the Shift, Ctrl, or ⌘ key on the keyboard when clicking to select elements when you want to select multiple elements.

In the **Main** tab, you can set up interactions for `Selected Data Changed`. For example, add a filter action to automatically filter other visualizations based on the selected data rather than only whichever element was just clicked.

 **Note:** Treemaps require totals from the measure used for sizing to represent rectangles correctly, so totals are **enabled** automatically for the metric set and its hierarchies and should be left enabled.

 **Note:** The measure used to size treemap rectangles should be set to use a *Sum* or *Count* aggregator [in the Data Analysis Panel](#), or in the OLAP cube when using an OLAP database. This is so that total values displayed for outer rectangles are the sum total of their contained values as viewers would expect, as well as to avoid potential performance issues with large datasets.

For more information, see:

- [Expand and Collapse Hierarchy Members](#)
- [Displaying Symbols on a Map](#)



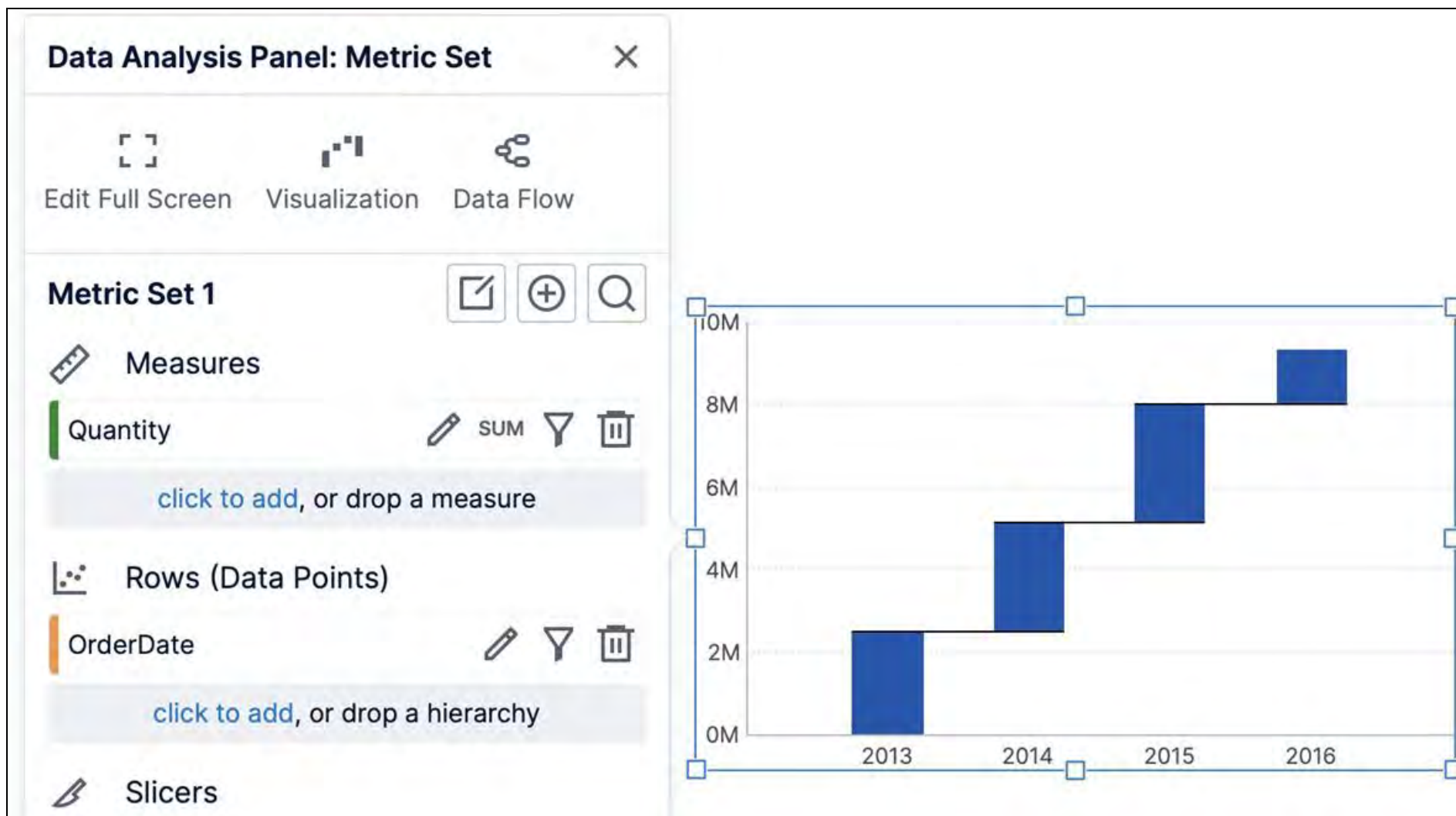
Using a Waterfall Chart

This applies to: *Managed Dashboards, Managed Reports*

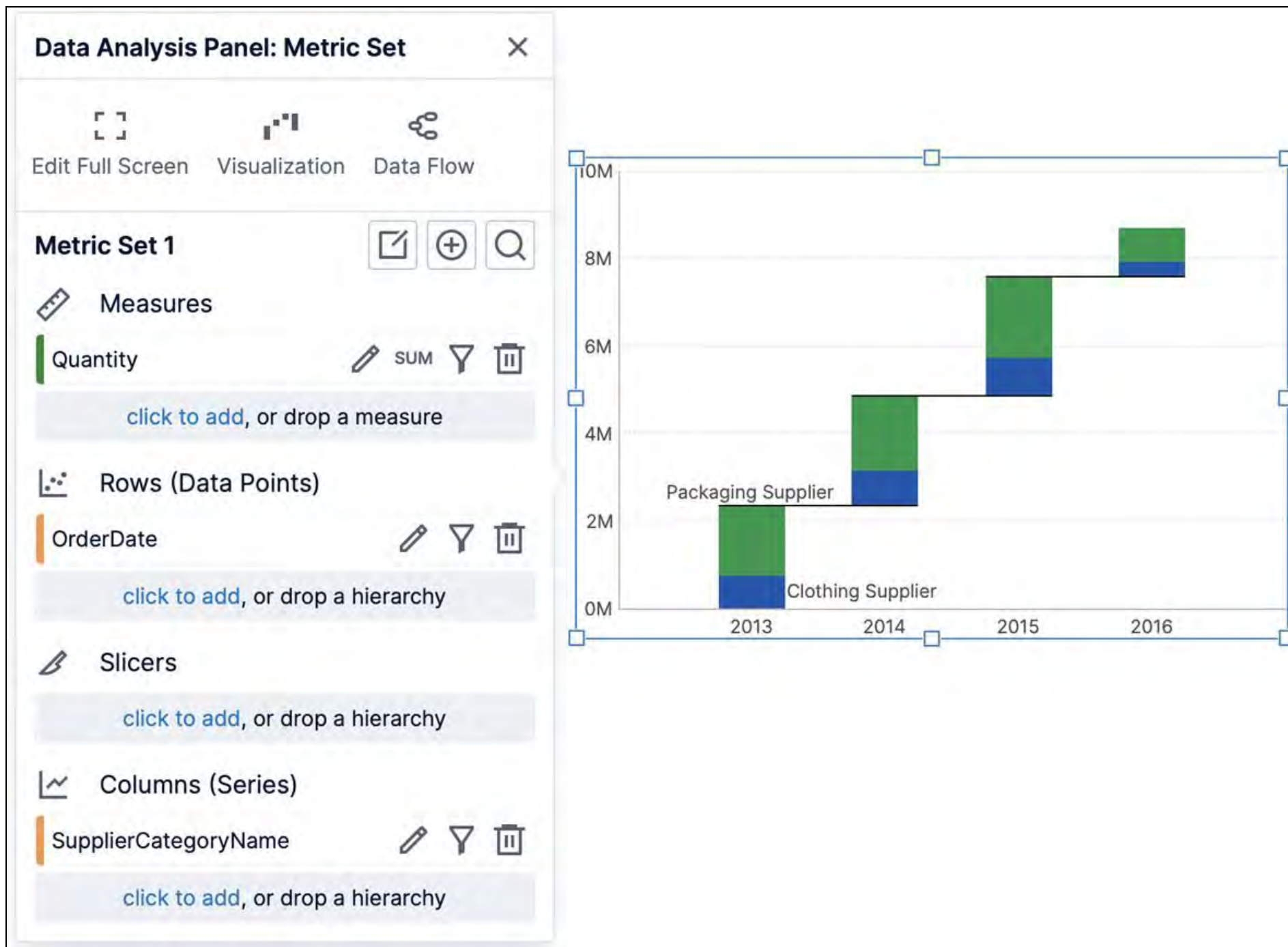
A waterfall chart displays the cumulative sum of a series of values as a specialized type of bar chart. It visualizes a measure's changes over a particular sequence, and well as its totals. For other waterfall options, see [Add Variances](#).

Selecting Data

A basic waterfall chart can have a single measure and a single hierarchy.



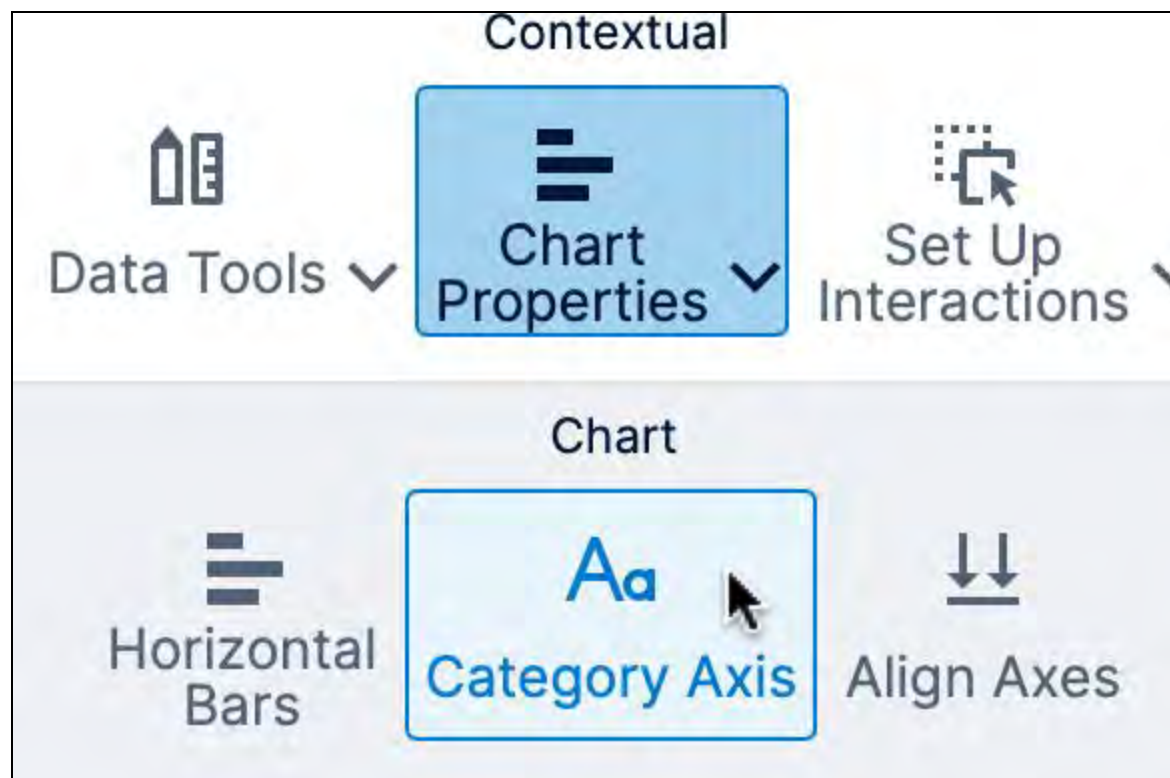
More complex displays are possible using multiple measures, or multiple hierarchies added to Columns (Series) in the Data Analysis Panel. Doing this will stack each set of values on each bar, showing how several component values affect the total.



Totals and Aggregators

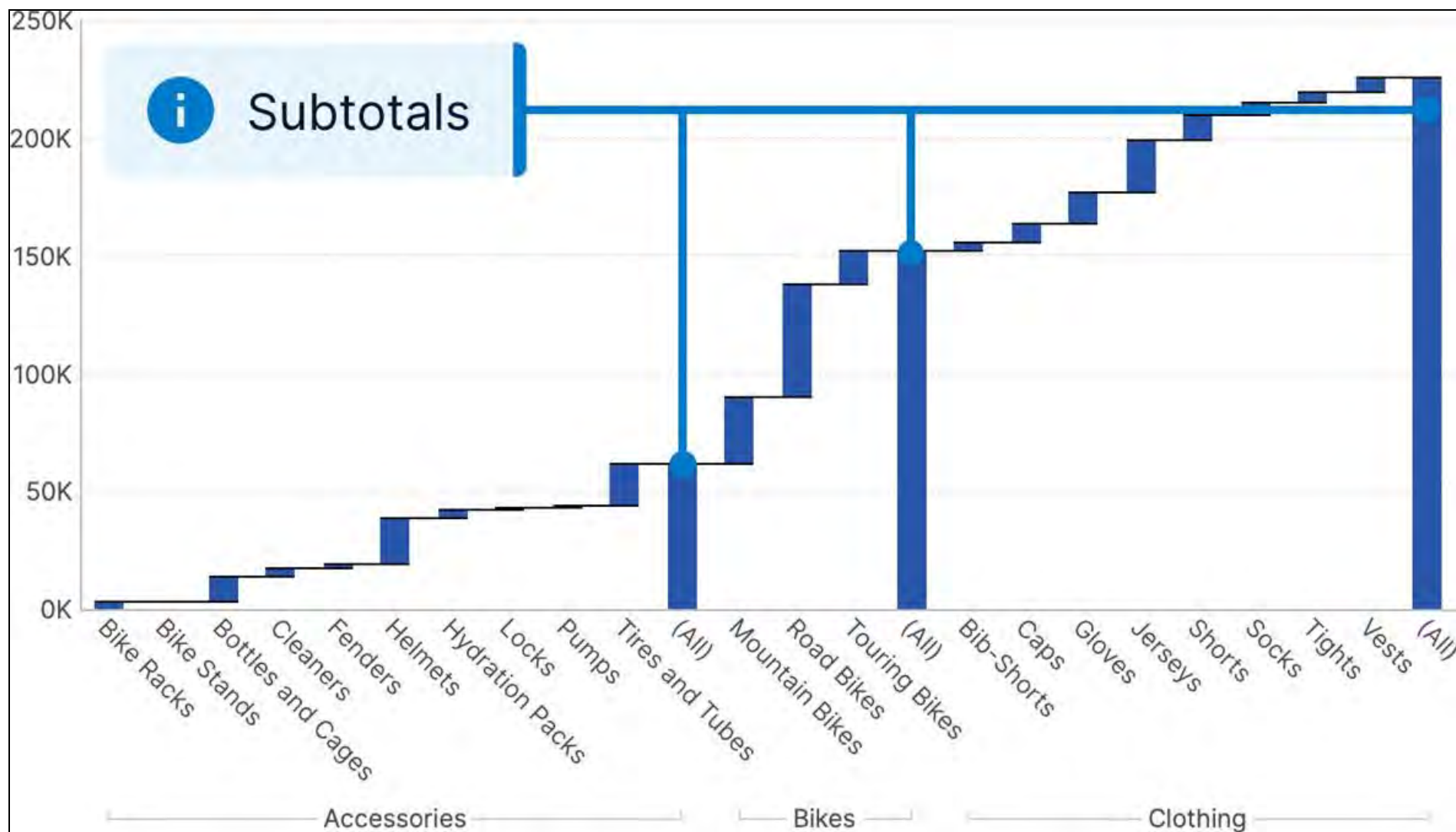
Total values are often displayed on Waterfall charts. To change which total values are included:

- Check your metric set's [Shown Totals setting](#) and set it to **Rows** to display total bars, or else **None**. The other options can result in adding a total series when data is added to Columns (Series) in the Data Analysis Panel, which is usually not used in waterfall charts.
- When displaying date/time data, the bottom axis scale type may have been set to Date/Time by default, which does not support [displaying separate total bars](#). You can find **Chart Properties** in the toolbar and choose **Category Axis** to change the scale type in this case.



- As the chart shows cumulative totals, the [measure's aggregator](#) should be set to **Sum** in the Data Analysis Panel. Using other aggregations may not display the desired result on the chart.

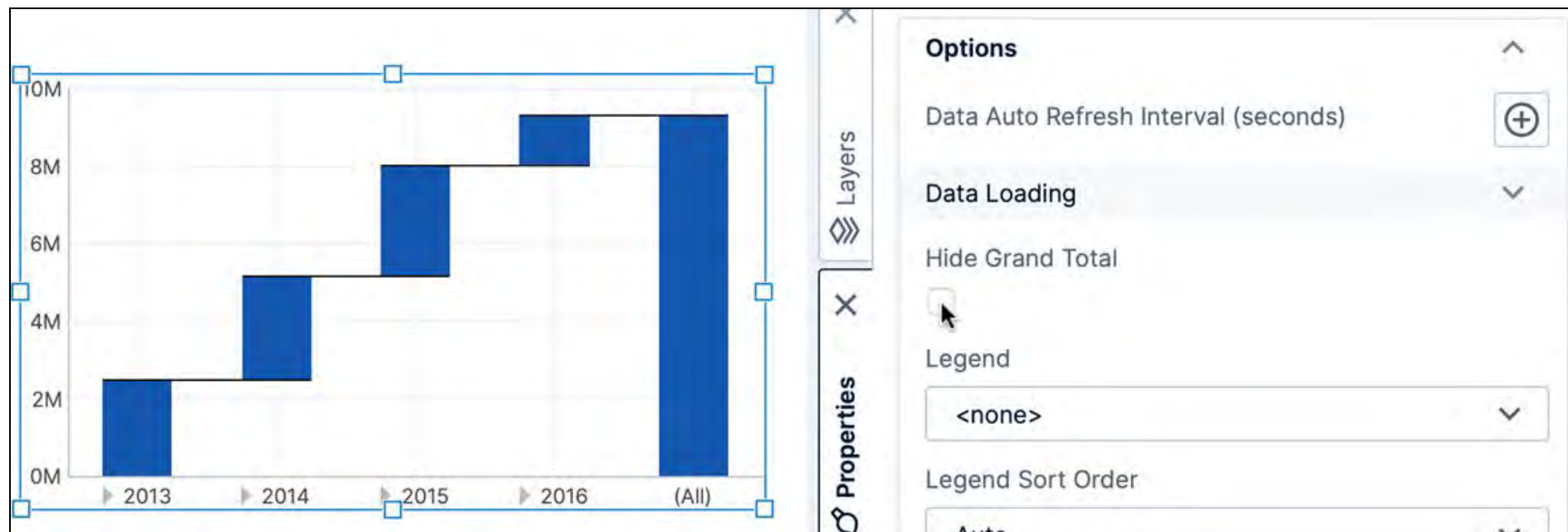
- Subtotal bars will be displayed if there are multiple hierarchies or multiple levels selected on **Rows** in the Data Analysis Panel. To select multiple levels when using a multi-level hierarchy, set the [Top Level](#), or you can drag the **levels** onto the chart from the Explore window.



- To show or hide the grand total, see the Hide Grand Total property described next.

Properties

The grand total bar is hidden by default. To show it, un-check **Hide Grand Total** in the Properties window's Main tab for the chart.



A waterfall chart (sometimes called a 'bridge' chart) typically displays connecting lines bridging the end of one bar with the start of the next. They can be customized using the settings found in the series properties in the Look tab under Connecting Lines.

Properties

Marker Height



Marker Shape



Connecting Lines



Connecting Line Style

Auto



Line Stroke

Black



Width

1

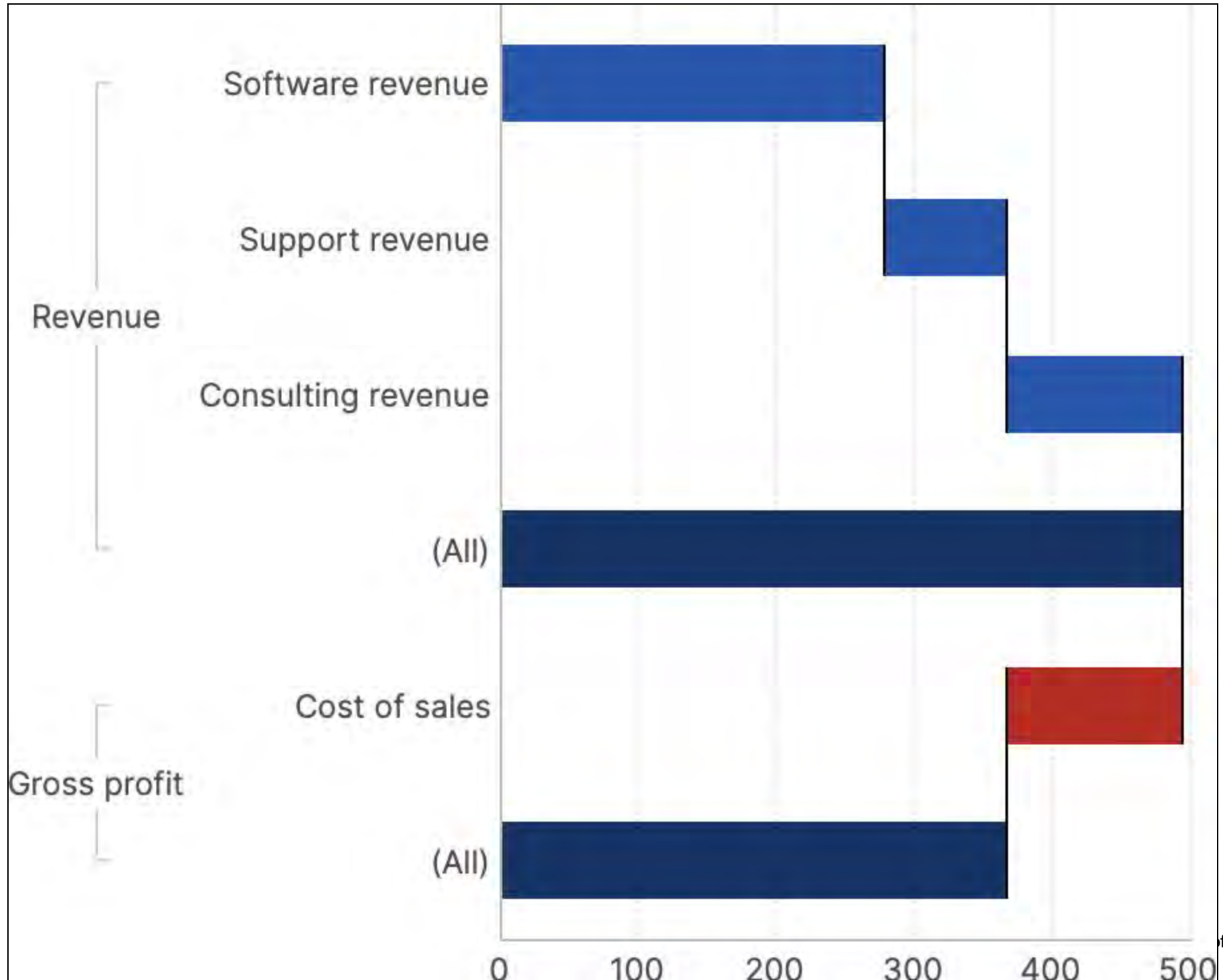




- Archive of documentation for Logi Symphony v24

States

A common choice for waterfall charts is to visually distinguish between bars with positive versus negative values. This can be achieved by using states as shown in [Set up states on a metric set](#).





- Archive of documentation for Logi Symphony v24

Positive and/or negative states can compare against the constant value zero, while states identifying totals can compare against a hierarchy value of *All*.

Configure state

Set up the conditions for this state. Compare against another measure or value, or compare the values of a hierarchy against a value you specify.

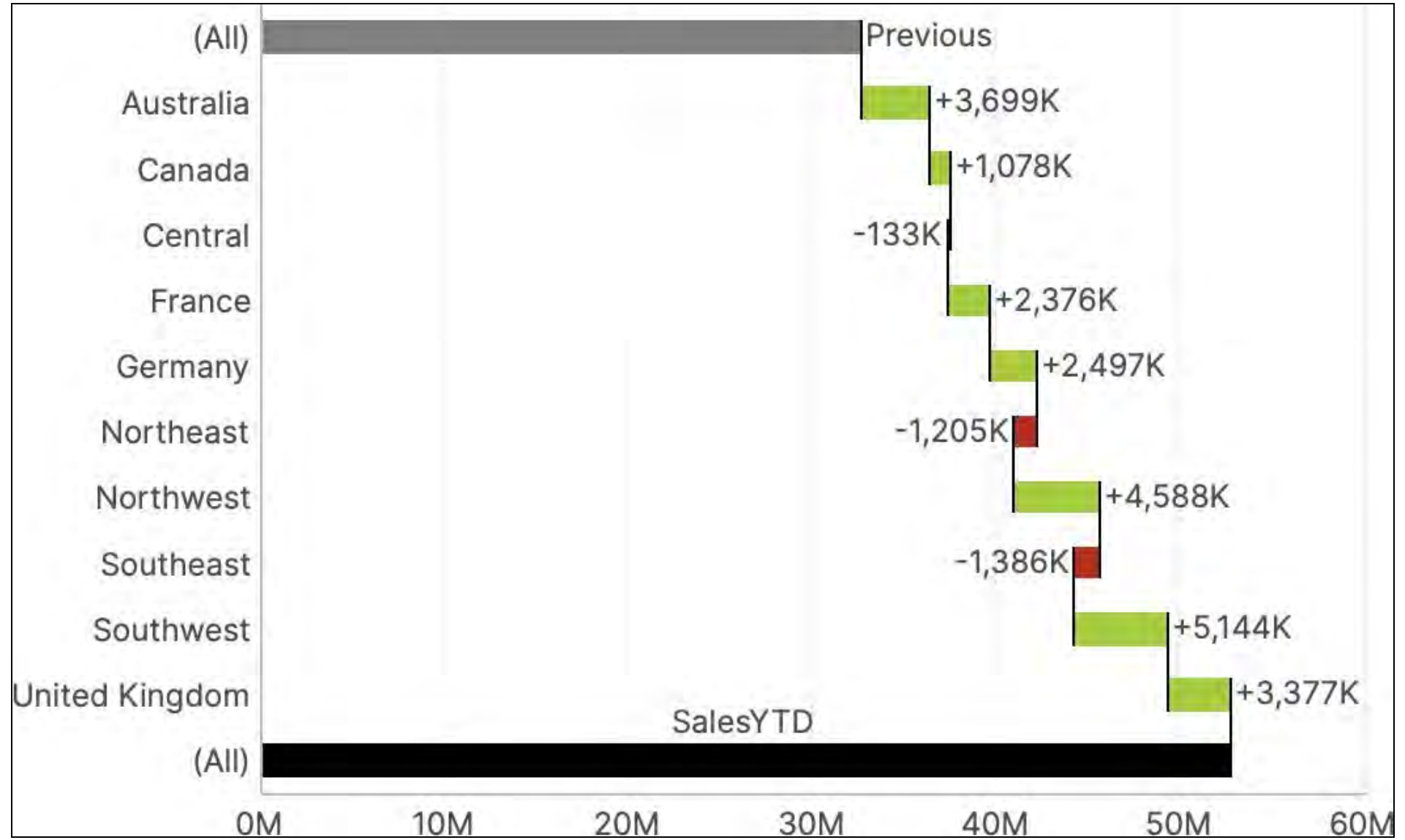
Name

Total

Description

Variance Waterfall

A variance waterfall will set up for you automatically. See [Add Variances](#).



For more information, see:



- Archive of documentation for Logi Symphony v24

- Video: [States](#)
- [Set Up States on a Metric Set](#)
- [Using Chart Properties](#)
- [Show or Hide Total Values On a Chart](#)



Add Variances

This applies to: *Managed Dashboards, Managed Reports*

You can add automatically configured absolute and relative variance charts to your table or chart, or easily set up a waterfall chart as a variance waterfall.

Variance Table

Set up a variance table including absolute and relative variance chart columns by assigning the data to be compared.

In the example below that displays two measures, select **Re-Visualize** to see the option to **Add Variance Columns** under **Recommended** if not already applied to this table.

Re-Visualize

Table | Flat Table | Bar | Stacked Bar | Line

Add Variance Columns

Name	Sales YTD	Previous	Quota
David	\$1,573,013	\$1,371,635	\$2,500,000
Garrett	\$1,453,719	\$1,620,277	\$2,500,000
Jae	\$4,116,871	\$1,635,823	\$2,500,000
Jillian	\$3,189,418	\$1,997,186	\$2,500,000



- Archive of documentation for Logi Symphony v24

When you select it, it opens the Data Analysis Panel to the Visualization tab and expands the Variance Scenarios section. You can also open the Data Analysis Panel to this section yourself at any time.

Assign your data to two or three of the listed scenarios:

- **Actual** - Measured data that occurred in a recent time period.
- **Previous** - Measured data that occurred in a previous time period. You can easily add a period over period comparison measure to use here such as the previous year's values.
- **Plan** - Budgeted or target values. You can add a contextual measure if you want to enter your own target values.
- **Forecast** - Expected data, e.g. sales figures forecasted based on current orders (cannot be compared against Actual).

Re-Visualize

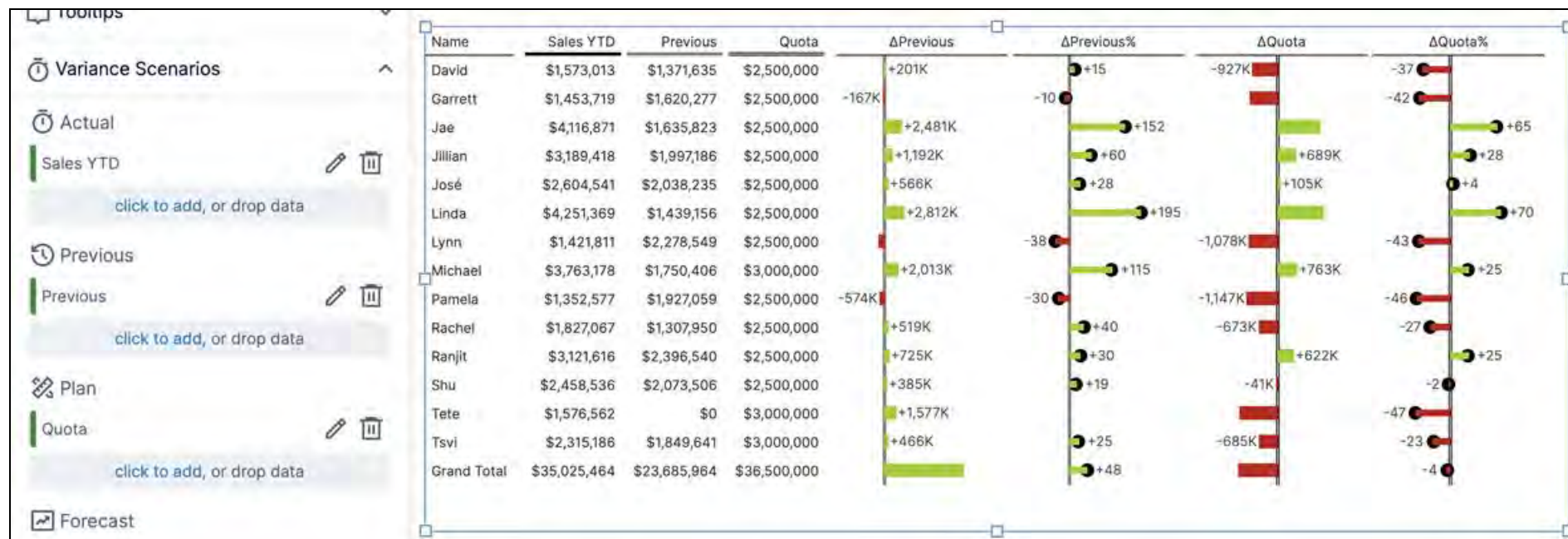
Table | Flat Table | Bar | Stacked Bar | Line

Add Variance Columns

Name	Sales YTD	Previous	Quota
David	\$1,573,013	\$1,371,635	\$2,500,000
Garrett	\$1,453,719	\$1,620,277	\$2,500,000
Jae	\$4,116,871	\$1,635,823	\$2,500,000
Jillian	\$3,189,418	\$1,997,186	\$2,500,000

Note: To adjust or abbreviate the measure names displayed in the table column headers, select a measure and edit its **Caption**.

This automatically calculates the variances (differences) between the assigned values, and configures two data bar columns to display them as charts. You can customize or remove any of the resulting changes, as they are made only once at the moment you assigned the data above.

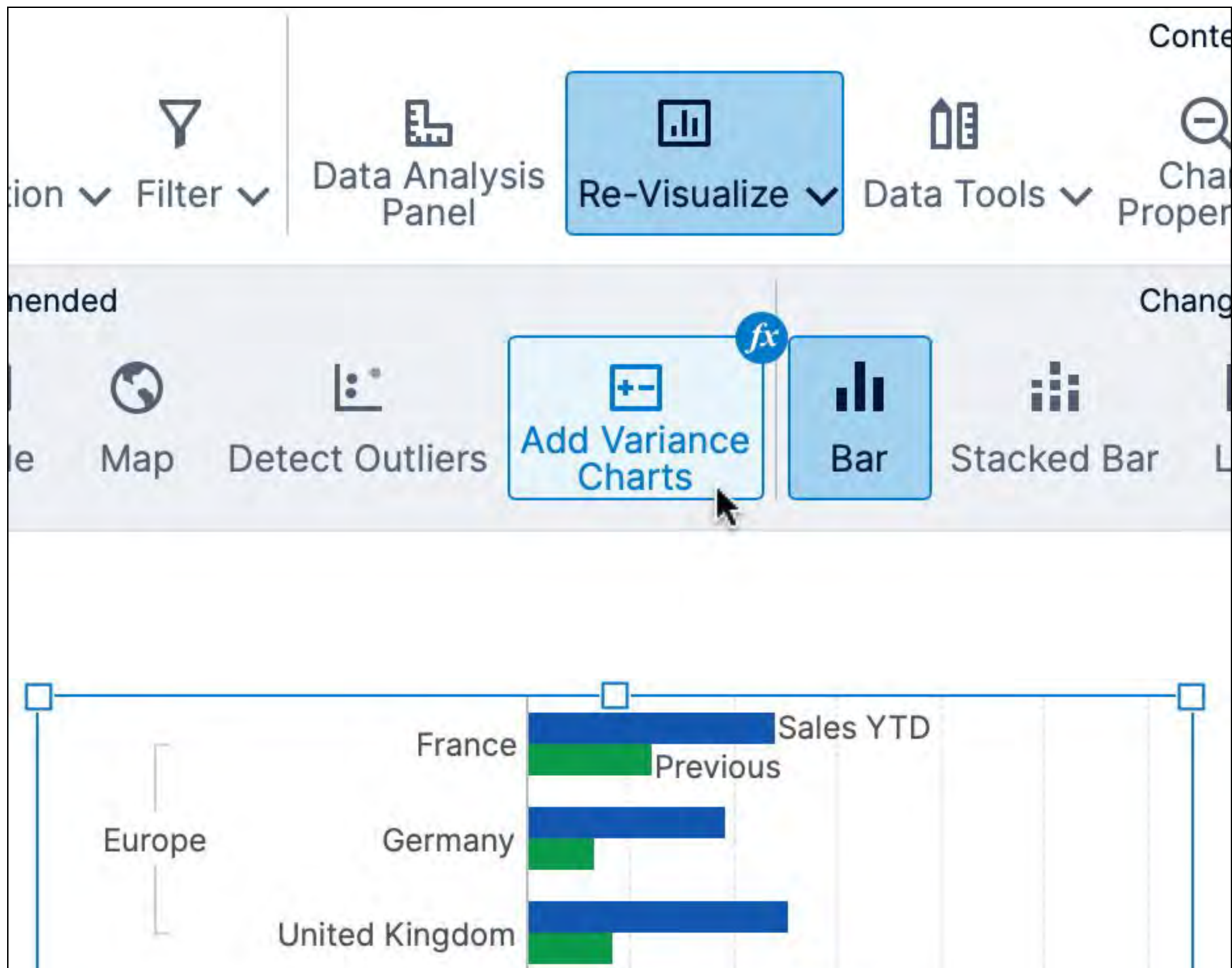


The first new column visualizes the absolute differences between the values, while the second visualizes them as a percentage relative to the size of each comparison value (e.g., relative to **Previous**). You can see and change the formulas used for these by clicking their **fx** button in the Data Analysis Panel. A number of property customizations are made for you in the charts including states highlighting negative variance values.

By default, the column headers displaying your original values are set up with an appearance matching where they are represented in the charts. In the image above, each chart axis matches the corresponding column header for either **Previous** or **Quota** (planned data).

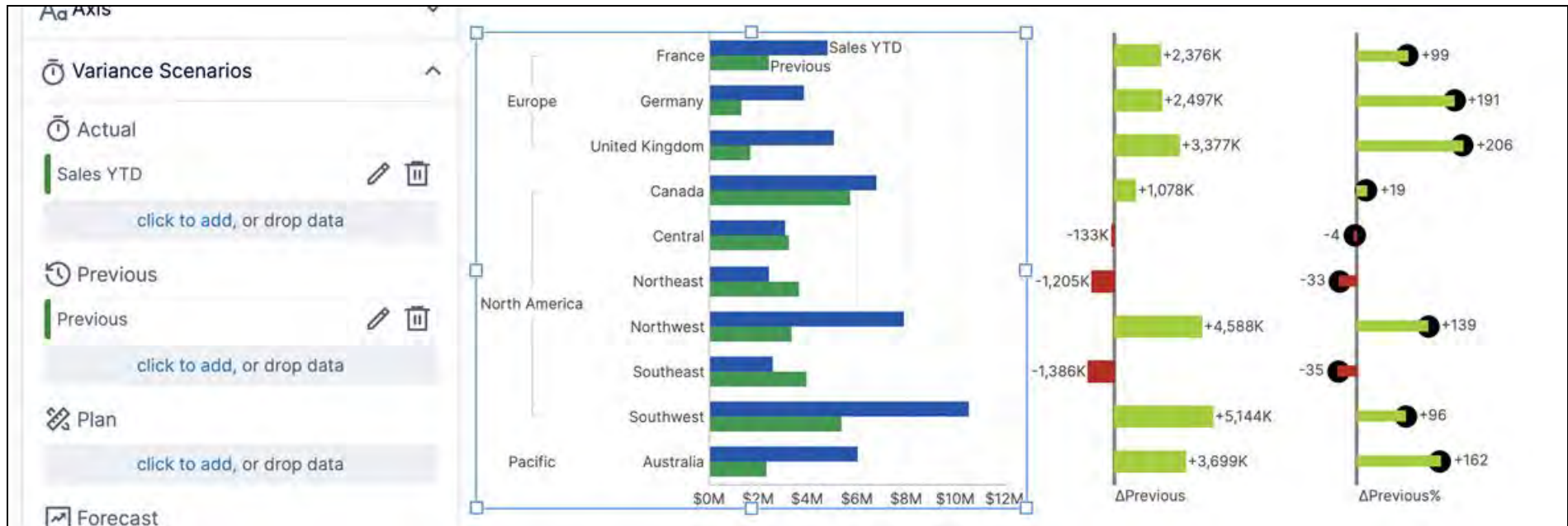
Adding Variance Charts

As with a table, select **Re-Visualize** to see the option to **Add Variance Columns** under **Recommended** if not already applied to this table.



Alternatively, you can open the Data Analysis Panel, click **Visualization**, and click to expand **Variance Scenarios**.

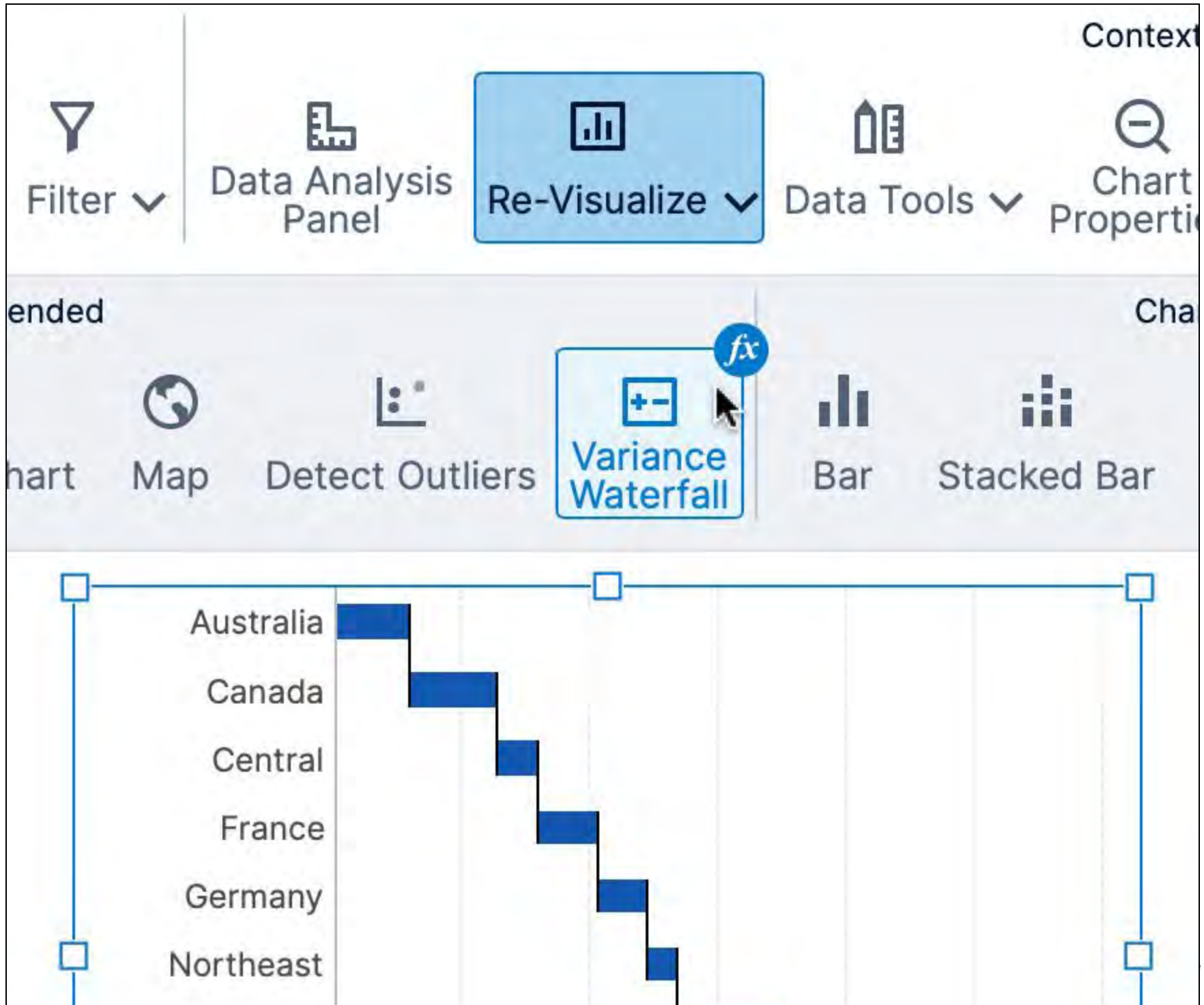
Assign data to two or three of the scenarios the same way as described above for a table.



This will add separate charts positioned to the right or above your chart. They are pre-configured to use the **Align Axes** option in the toolbar and to [share their axis scale](#) with your original chart so that the data points line up.

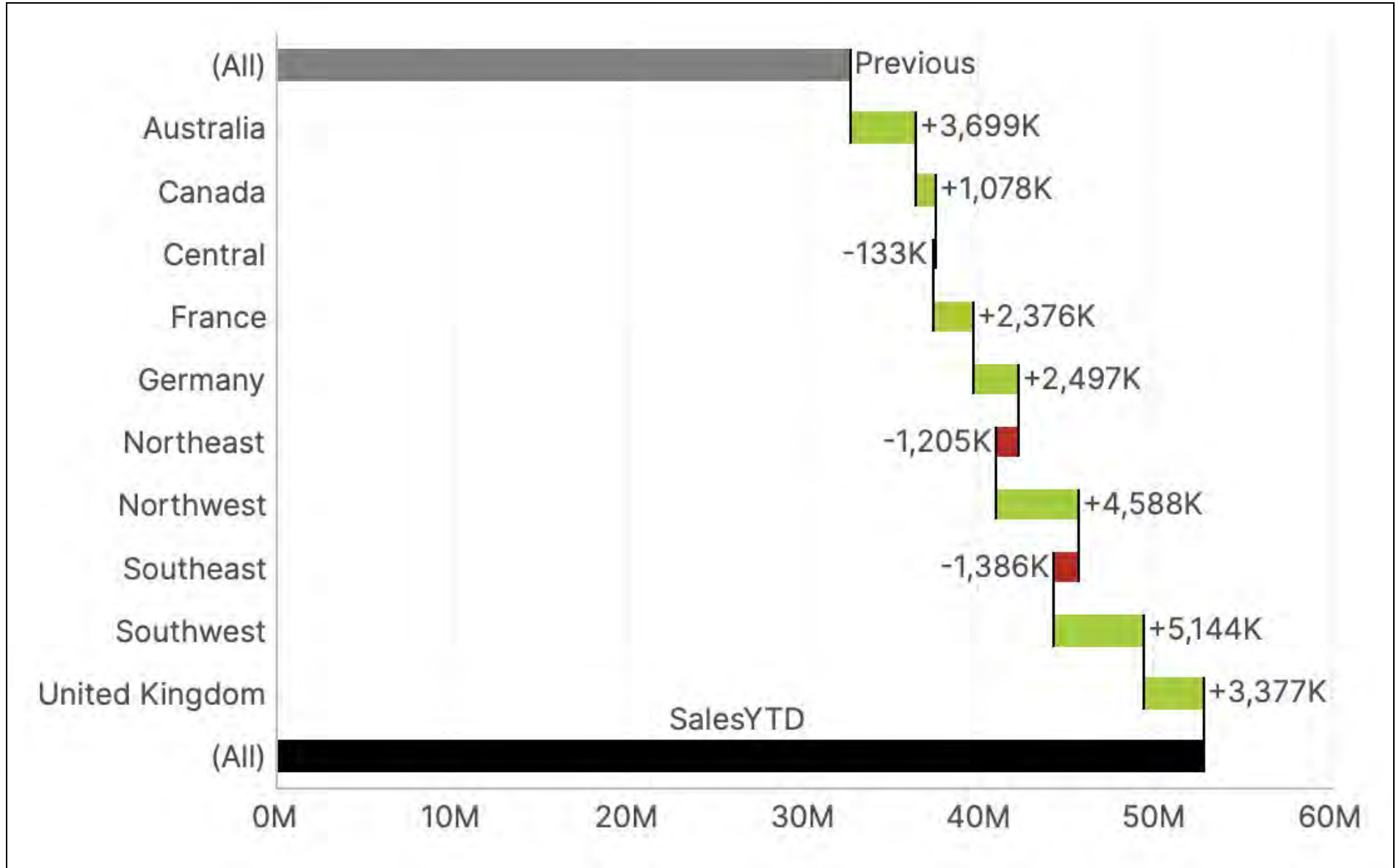
Variance Waterfall

After adding or re-visualizing to a **Waterfall** chart and adding some data, select **Re-Visualize** and find **Variance Waterfall** under **Recommended**.



Alternatively, open the Data Analysis Panel to the **Visualization** tab and expand **Variance Scenarios** for a waterfall chart.

Assign data to either **Actual** or **Forecast**, and then either **Previous** or **Plan**. See tables for more details about scenarios. (Only two scenarios are supported at one time in a single variance waterfall chart.)





The resulting chart is set up for you with three data point series:

- The first series displays only a single total value for your previous or plan data, as a base bar at the beginning of the waterfall.
- The second series displays each of the contribution values in the middle, calculated as the variance (difference) between the scenario values for each value of the data added to **Rows (Data Points)** in the [Data Analysis Panel for the metric set](#).
- The third series displays only a single total value for your actual or forecast data at the end of the waterfall.

If the total values are not displayed, or if you want to disable them, you can change the [metric set's totals settings](#).



Note: The waterfall contribution values should match up with the final total bar with a connecting bridge line between them. If not, check that each [measure's aggregator](#) is set to Sum, and open [Data Preview](#) to check for missing or incorrect values.

For more information, see:

- [Using Symphony Recommendations](#)
- [Set Up States on a Metric Set](#)
- [Using Chart Properties](#)
- [Using a Table Visualization](#)
- [Using a Waterfall Chart](#)
- [Adding Formulas](#)

Using a Word Cloud Visualization

This applies to: *Managed Dashboards, Managed Reports*

The Word Cloud (also known as Tag Cloud) data visualization displays text with color and size emphasis based on measures.



Note: Other data visualizations may be better for data analysis.

Data Preparation

To follow the examples in this article, connect to the Adventure Works sample database for SQL Server. Locate the following dimension from the *[Person].[Person]* table:

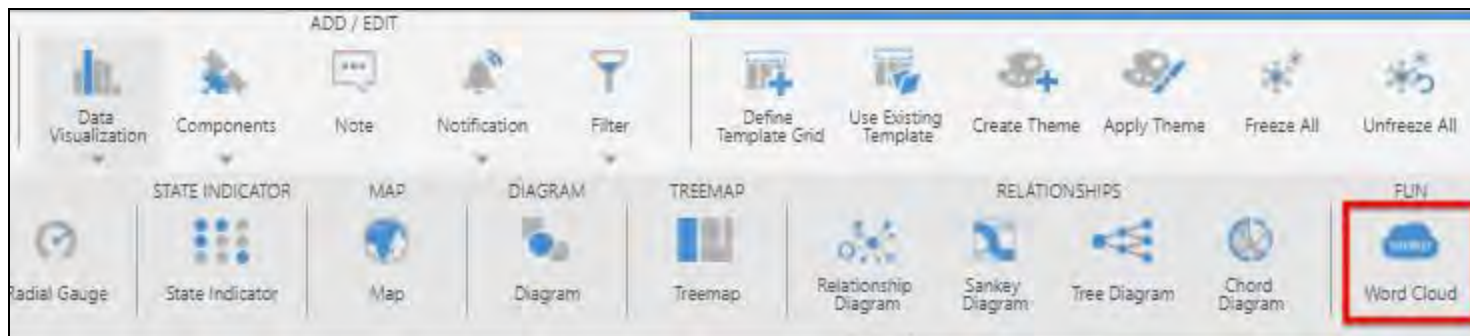
- FirstName

And the following measures from the *[Sales].[SalesPerson]* table:

- SalesYTD
- Bonus

Add a Word Cloud Visualization

While editing a dashboard, use the **Data Visualization** option from the toolbar and select **Word Cloud**.



Drag **FirstName** and drop it under Rows in the Data Analysis Panel.

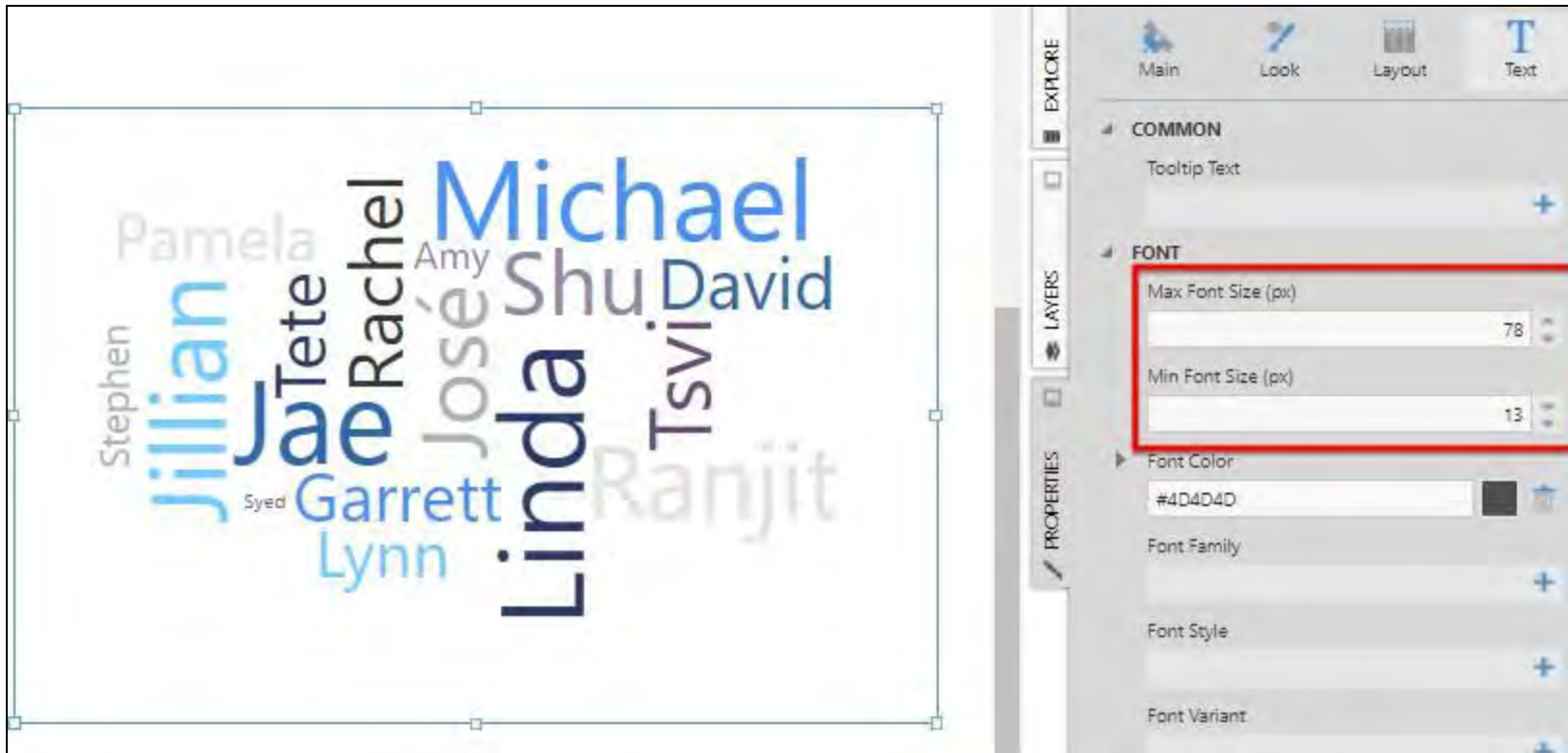


The visualization is displayed as a jumble of all the names in the FirstName dimension. Drag **SalesYTD** and drop it under Measures.



The salespeople names are automatically re-sized according to their year-to-date sales.

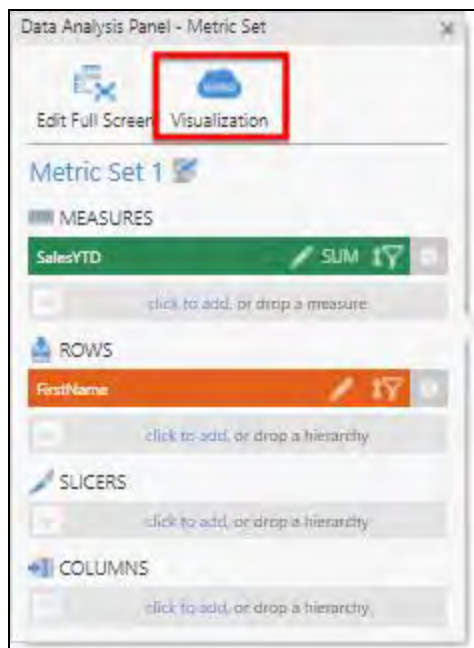
You can adjust the range of text sizing by changing the Max Font Size and Min Font Size text properties.



Important: Words that do not fit within the word cloud given these settings may be excluded. To ensure all words are included, adjust the set maximum font size or the size of the word cloud so that the longest possible word/text will always fit.

Change the Text Color

Select **Visualization** in the Data Analysis Panel.



Drag the **Bonus** measure and drop it under Text Color.

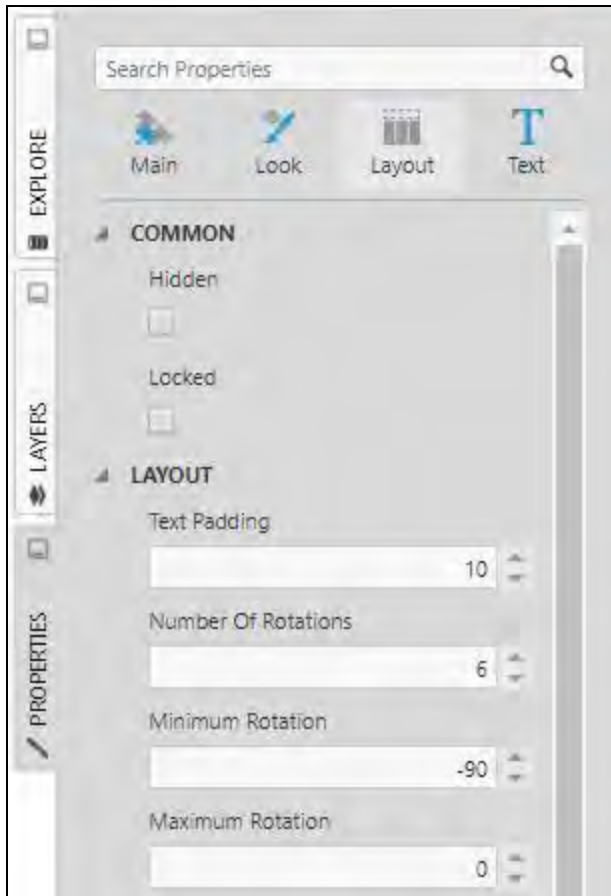


The color of each name is now defined by its *Bonus* amount. You can further adjust the color scheme by introducing color rules in the Look properties.

Adjust the Text Layout

Open the **Layout** tab in the Word Cloud properties.

Adjust the Text Padding and Rotation properties to best match your data.



For more information, see:

- [Setting Up the Visualization](#)
- [Apply Colors to Data Points or Series Using Color Rules](#)



Using Image Brushes

This applies to: *Managed Dashboards, Managed Reports*

Color-based properties of visualizations, components, and other design elements are actually brushes which can be one of the following brush types:

- Solid
- Linear
- Radial
- Image
- Hatching

The image brush type in particular allows a button, for example, to be displayed as an image you specify instead of a solid color. You can also use this option to create customized state indicator states based on images.

Using an Image Brush

For this example, create a new dashboard and add a Button component to it from the toolbar.

Go to the **Properties** for the button, click Look, and then expand the **Rest Background** property. This is the background color of the button when it is in the rest state (unpressed).

800

850

900

950

1000

1050

×

Explore

×

Layers

×

Properties

button 1

Q Search Properties

⚙ Main

👁 Look

📐 Layout

🔤 Text

Appearance

Rest Background

#278838

🗑

^

Brush

Solid Color

⌵

Opacity

100%

⌵

Red

Green

Blue

39

136

56

Color (Hue)

Saturation

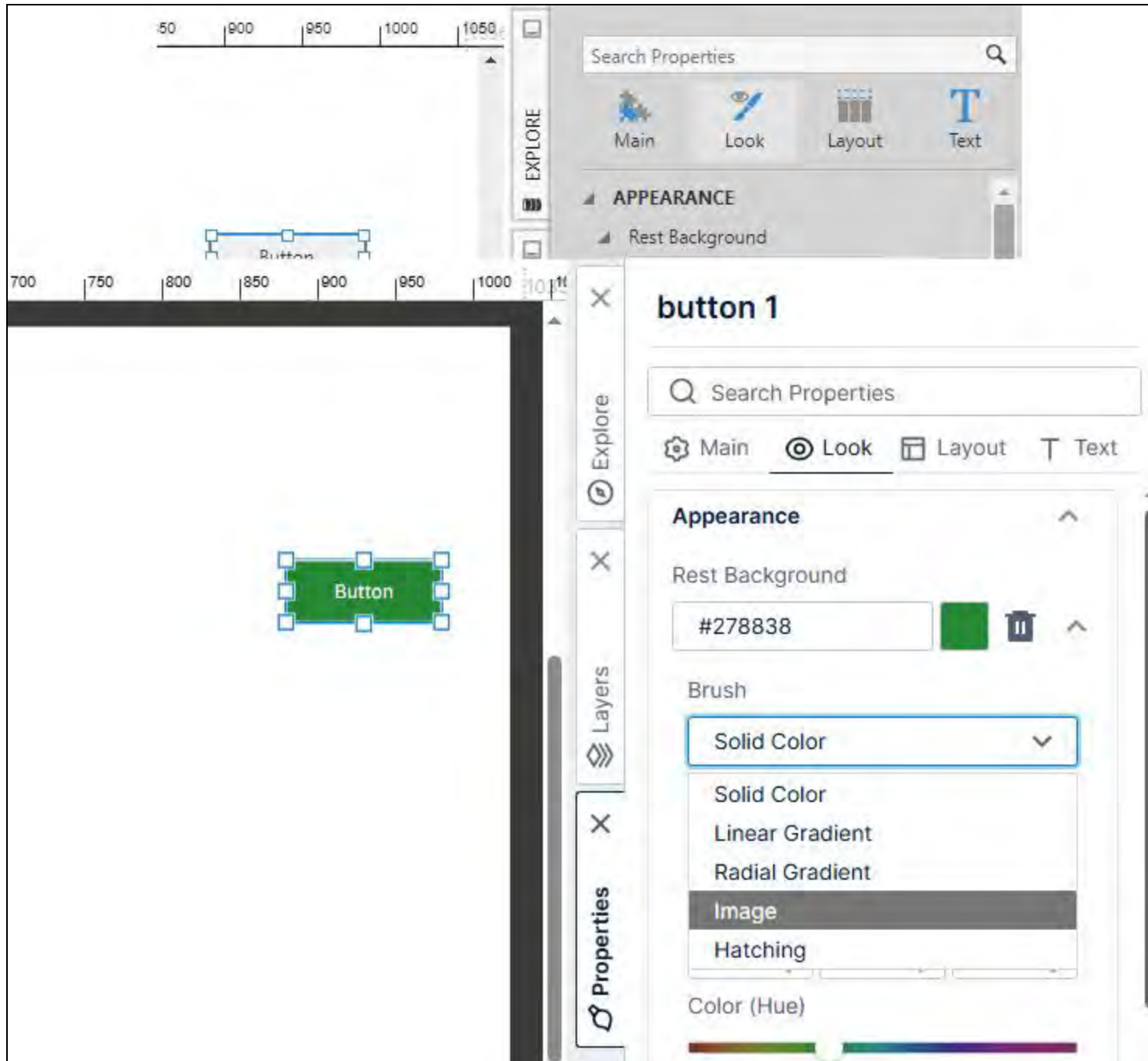
Brightness

Button

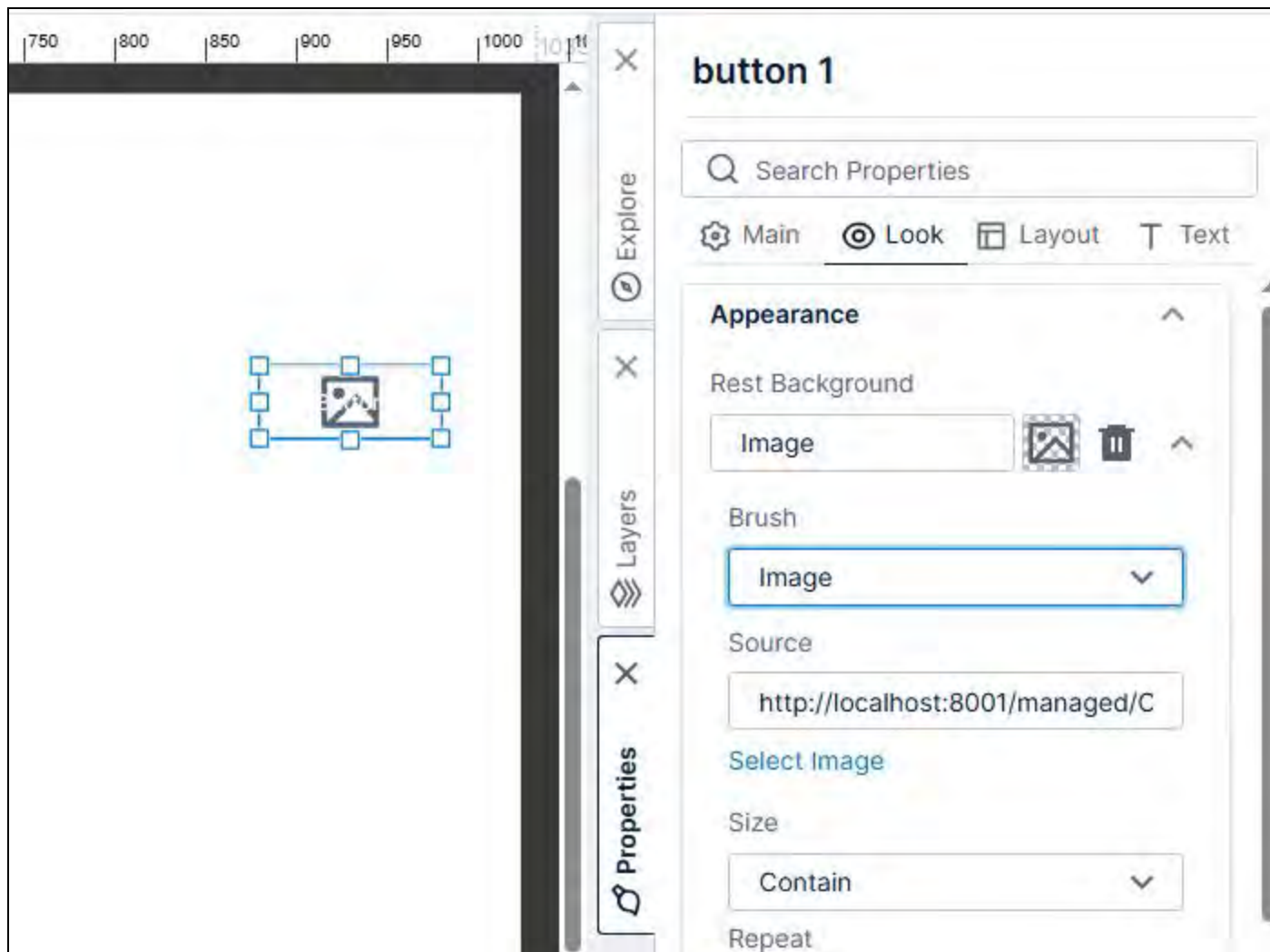


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Select the **Brush** drop-down and set it to *Image*.



The brush loads a placeholder image by default and the button is updated accordingly.

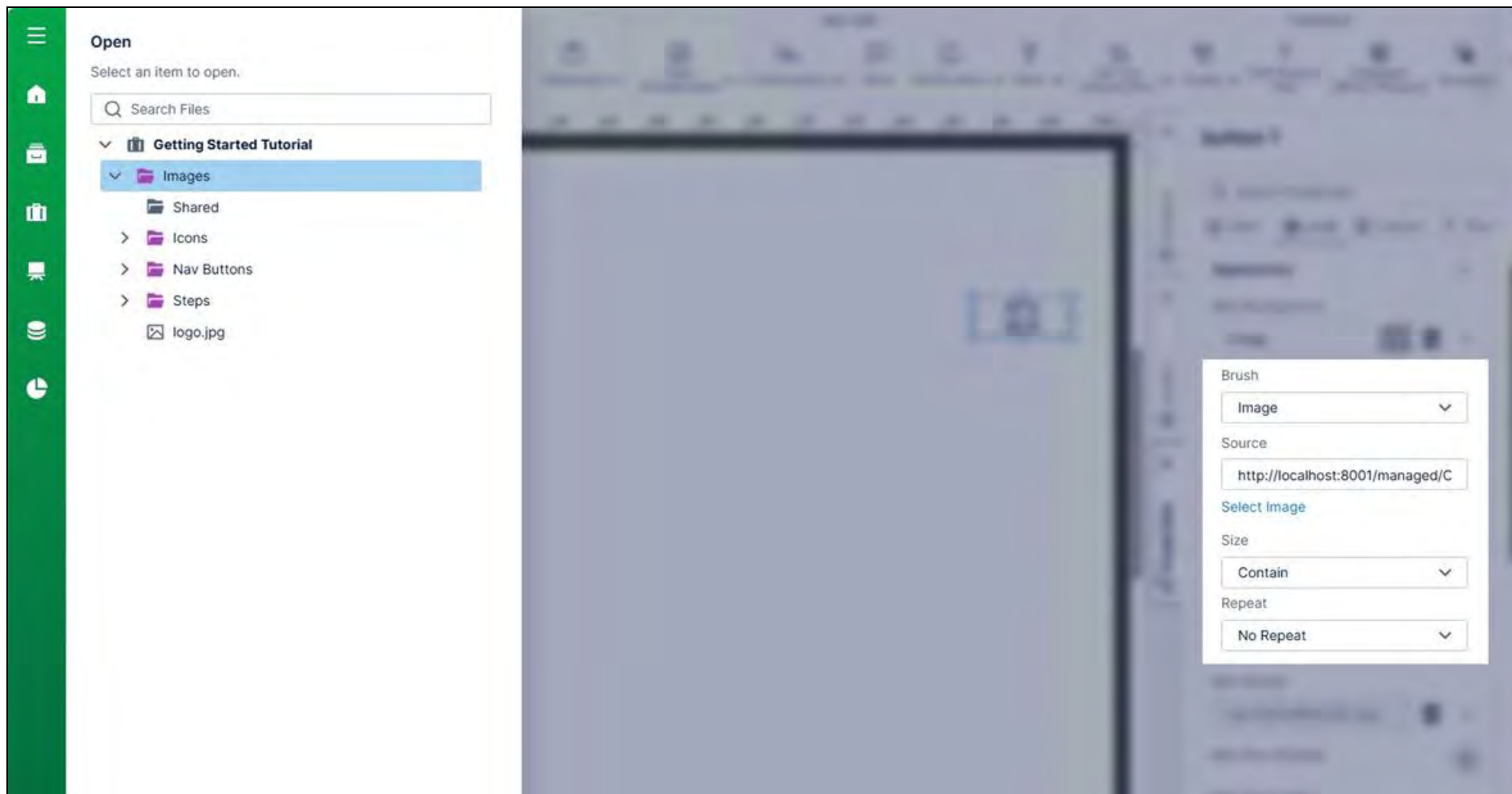


Next, set the properties of the image brush as described in the following sections.

Source

There are two options for specifying the image source. You can supply an absolute URL that points to an image (e.g., <http://www.example.com/images/image1.png>), or you can select an existing [image resource](#).

To use an image resource, select **Select Image**. The **Open File** dialog opens, allowing you to select a resource.

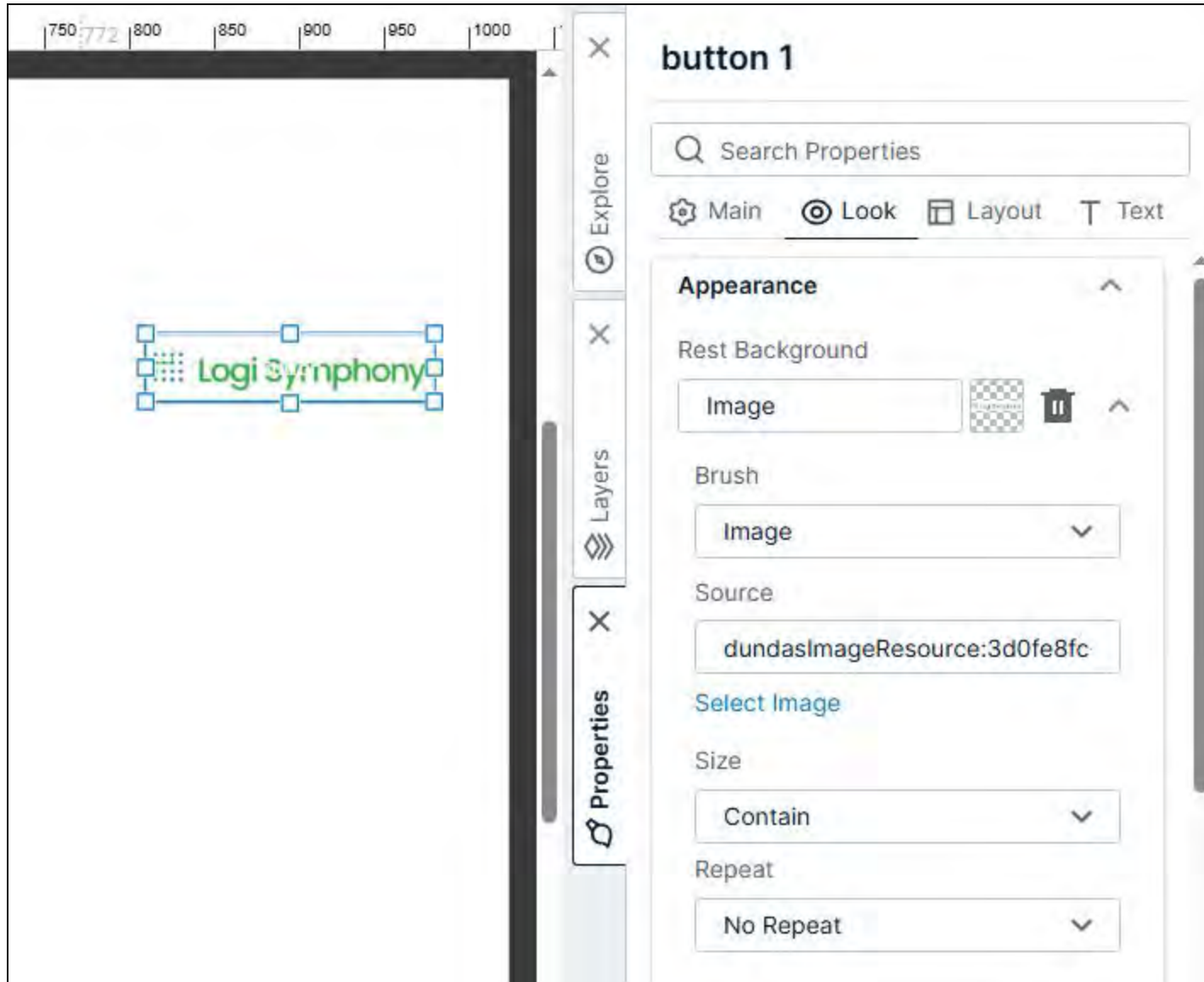


Select the existing image resource you want from the Images folder, and then select **Open**.

The button is now displayed as an image on the canvas. In the Properties window, you can see a small preview of the loaded image as well. In the case of an image resource, the **Source** property looks like this:

```
dundasImageResource:e0011d1d-62ac-4d81-b532-287287741f14
```

The portion of the above text after the colon is the ID of the image resource (which you can also get from the image resource's properties).



Size

The `Size` property offers the following options:



- **Auto** - The image size is automatically determined.
- **Cover** - The image is sized so that it covers the available content area.
- **Contain** - The image is sized so that it is contained within the available content area.
- **Fill** - The image is stretched to fill the content area without taking the aspect ratio into consideration.

Repeat

The **Repeat** property specifies how the image will be repeated within the content area. There are two options:

- Repeat
- No Repeat



Note: The Repeat option may work differently depending on the type of component or element. For CSS-based components (such as the background of a label, or the dashboard itself), the repeat option first scales according to the Size setting, and then repeats based on that. For SVG-based controls (such as a rectangle), the repeat option ignores the Size setting, always starts at (0,0), and repeats based on the original size of the image.

For more information, see:

- [Drag and Drop an Image File \(JPEG or PNG\)](#)
- [Add a Data Image](#)
- [Adding a Data Label](#)
- [Adding a Diagram](#)
- [Add a Legend](#)



Using Menu Layers

This applies to: *Managed Dashboards, Managed Reports*

This article explains how to use a menu layer to display content such as a menu that is separate from the rest of the dashboard's [template grid](#).

Walkthrough

This walkthrough will guide you through the steps for creating a menu layer containing a collapsible navigation menu as an example. Use this type of menu when viewing dashboards, reports, or other views for navigation.

When using the [responsive re-size mode](#), content is automatically re-organized when necessary to remain readable, fill the given screen real estate, and allow all content to be accessed by scrolling in one direction. For smaller screen sizes, you may want to further minimize the amount of space taken up for navigation or other options by using a button to show and hide this content in another [layer](#). By using a menu layer, you can display content that fills the screen independently from the responsive grid.

Add a Menu Button

In this example, an image of a menu button will be used to open the navigation menu on the dashboard.

In the **Explore** window, expand **Images** and drag and drop an [image](#) onto the dashboard. Ensure that the image is positioned properly on the dashboard.



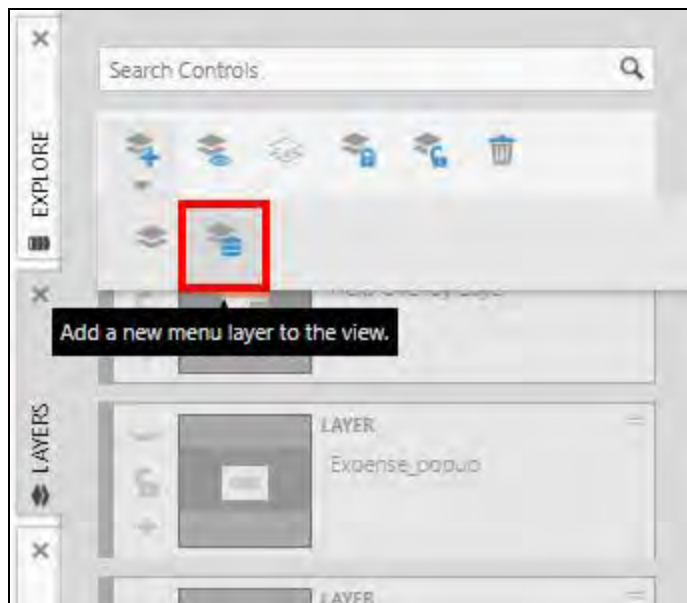
Add a Menu Layer

For this example, a menu layer will be added containing a menu component and a close button.



Note: When you add a new menu layer, all visible layers are deactivated and any other menu layers on the dashboard become active allowing you to edit only the menu layers.

In the **Layers** window, click **Add** in the toolbar and then choose a menu layer.



The new menu layer is now the current layer. Double-click the name if you want to rename it.

Add a Close Button

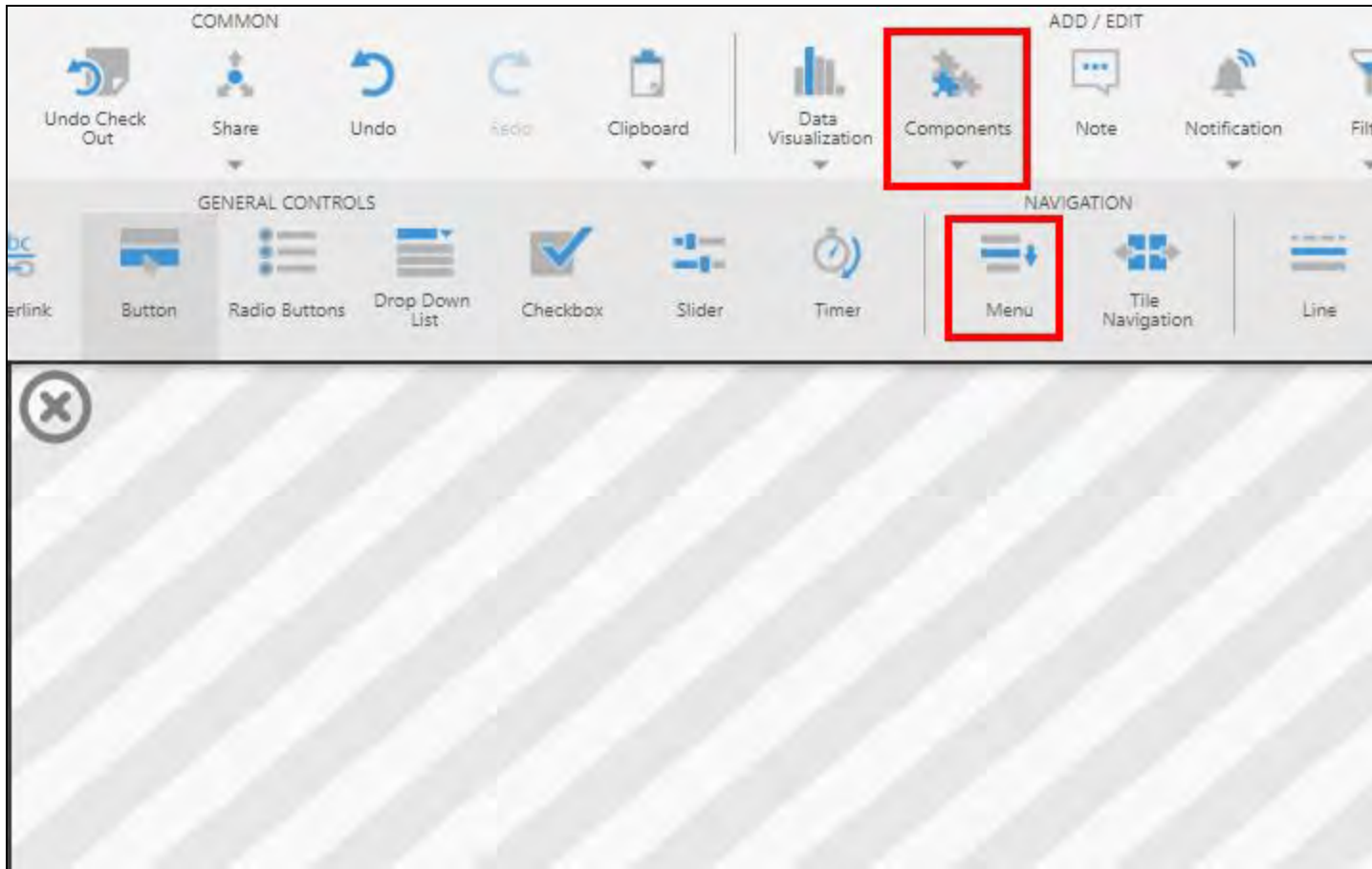
In the **Explore** window, expand **Images** and drag an image to use as the close button onto the canvas. This will allow viewers to close the navigation menu and switch back to the main layer.



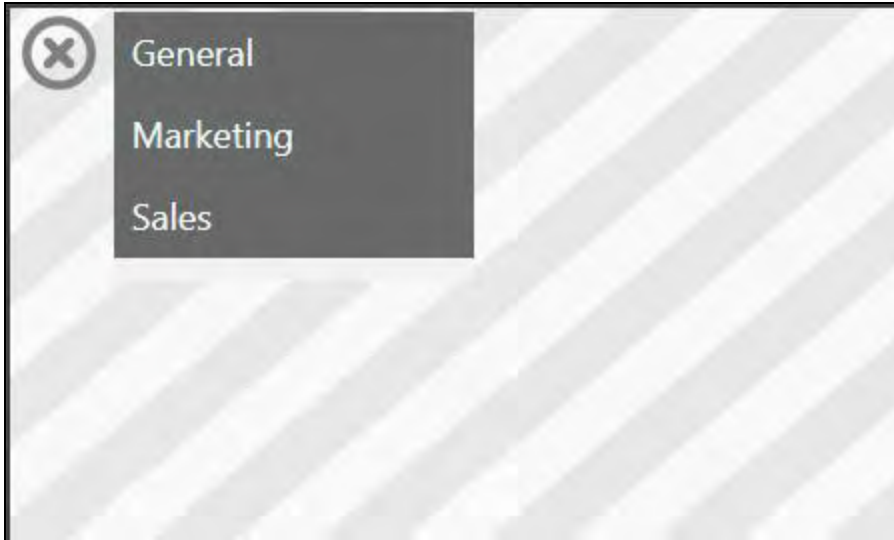
Position the button in such a way that when viewing the dashboard, the button should be aligned properly in relation to the menu button image.

Add and Configure the Menu

With the menu layer still selected as the current layer, go to the toolbar, select **Components**, and then **Menu** to add a menu component. Other components such as buttons or images can also be used for [navigation](#).



Position and size the menu, and set up the menu items as required. For more information about menu components, see [How To Set Up Menu Navigation](#).



Configure Click Actions

The following steps set up [change layer actions](#) to run when the menu button and the close button are clicked.

Configure the Menu Button

In the **Layers** window, click the main layer to switch to it.

Select the menu button image, select **Set Up Interactions** in the toolbar, then choose **Change Layer**.

Under **Hide Layers**, optionally select the main layer. Under **Shown Layers**, select the menu layer.

Configure the Close Button

Switch back to the menu layer, select the close button, and select **Set Up Interactions** again, and choose **Change Layer**.

Under **Hide Layers**, select the menu layer, and if the main layer was set up to be hidden, also select the main layer under **Shown Layers**.

The menu layer is now configured and can be shown and hidden when viewing to access the navigation menu.





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When a template grid is used for the dashboard content below, the menu is positioned separately on top.

For more information, see:

- [Layers and Groups](#)
- [Using a Template Grid for Resizing](#)
- [Responsive Layout Dashboard Mode](#)
- [Using Interactions](#)
- [Set Up a Navigational Image Button](#)



Using Personalization

This applies to: *Managed Dashboards, Managed Reports*

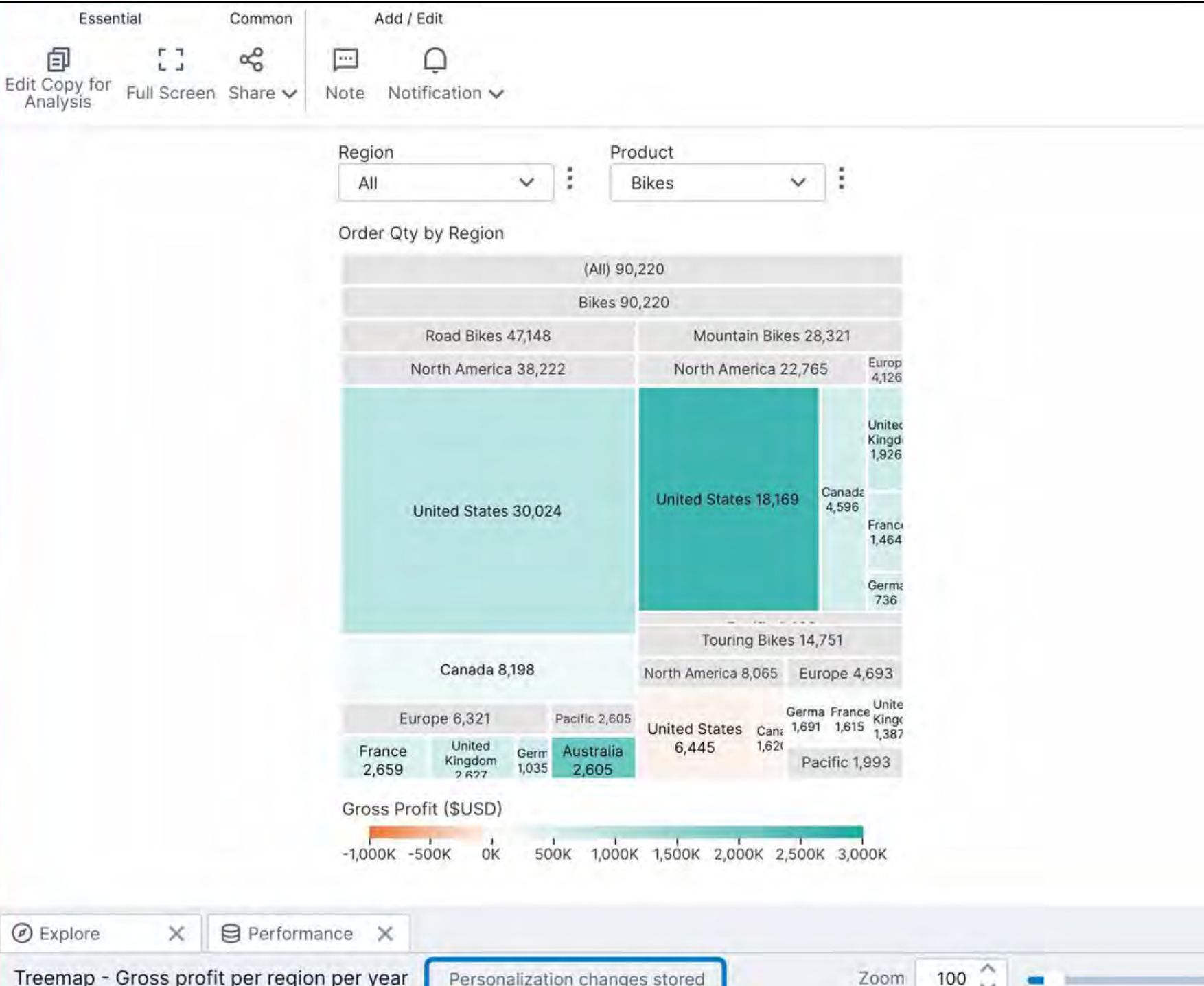
Personalization saves certain changes you made while viewing a dashboard, report, or other view, such as the state of filters and parameters.

Save Personalization Settings

When a user other than an administrator views a dashboard, report, or other view, after several seconds, personalization settings are automatically saved so that they can be recalled the next time the user views this same item. This is beneficial, for example, if your session times out while you stepped away from viewing a particular dashboard after changing some filter selections, because those filtering changes will be preserved.

The personalization settings that are saved include the state of filters and other [parameters](#), whether you're using the full screen option, and generally any other option that is recorded when you [share as a link](#).

A message appears in the status bar whenever personalization settings are saved.





When you open the same item the next time, you'll see that the filters are in the same state as when the personalization was last saved.



Note: Personalization is not saved when a view is [checked out](#) to you for editing. If you want to save changes made when viewing a checked-out dashboard, switch back to [edit mode](#) and allow the changes to save.

Clear Personalization Settings

To clear your personalization settings (for all dashboards, reports, and other views), open your profile, then scroll down and select **Clear personalization**.

Data cubes



Tokens



Clear personalization



Change password



More about this product



Close

Save

You can reopen a view and see that the states of filters have been reset to default values.

Disable Personalization on a View

The *Store View Personalization* privilege can be disabled on the dashboard or view by opening the **Properties** window with nothing selected (or with the canvas selected) and setting the **Disabled Application Privileges** property.

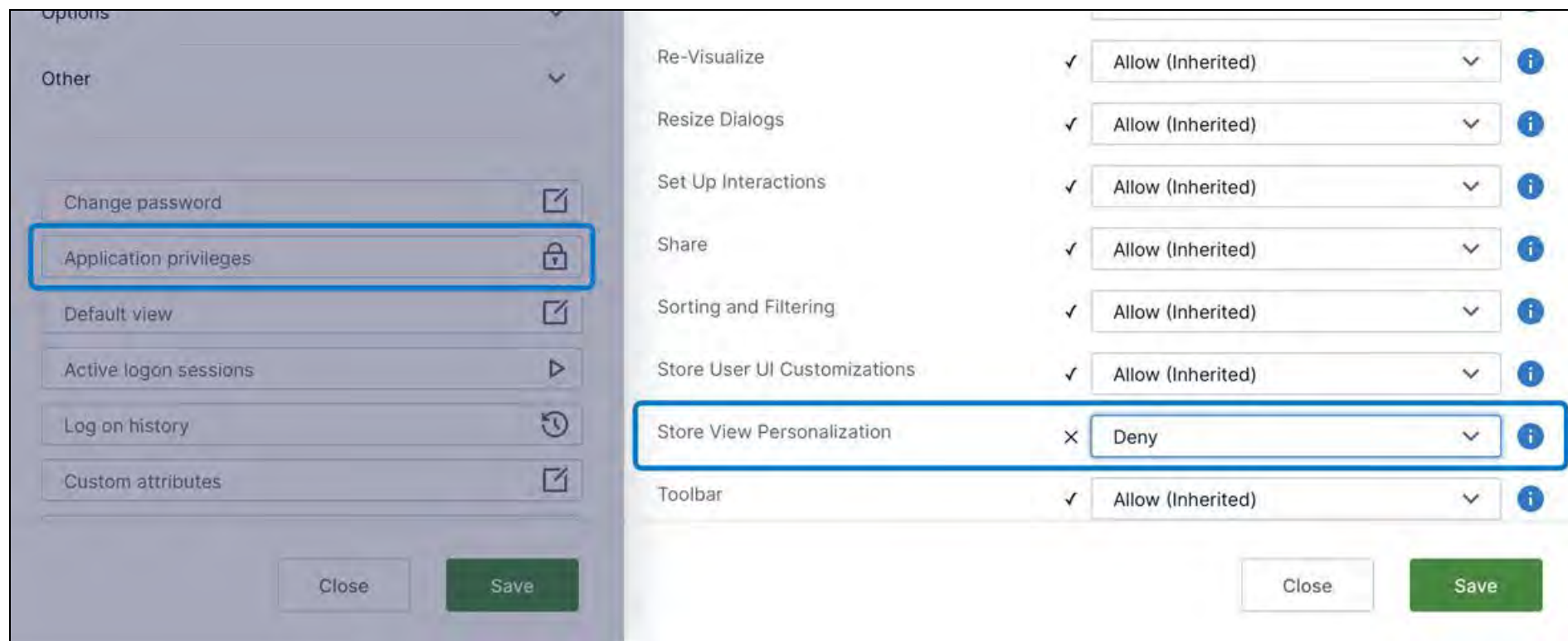
See [Disable View Functionality](#).

Disable Personalization for Users (Admin only)

Administrators can disable the personalization application privilege based on the user that's logged in.

To do this, go to the Administration area, click to expand **Account Service**, and then click **Accounts** or **Groups**.

Edit an account or group and click **Application privileges**.



Privilege	Status	Value	Info
Re-Visualize	✓	Allow (Inherited)	i
Resize Dialogs	✓	Allow (Inherited)	i
Set Up Interactions	✓	Allow (Inherited)	i
Share	✓	Allow (Inherited)	i
Sorting and Filtering	✓	Allow (Inherited)	i
Store User UI Customizations	✓	Allow (Inherited)	i
Store View Personalization	×	Deny	i
Toolbar	✓	Allow (Inherited)	i

Buttons: Close, Save



Locate the *Store View Personalization* privilege and select Deny from the drop-down menu.

For more information, see [Application Privileges](#).

Clear Personalization for Multiple Users (Admin Only)

Administrators can use the API to clear saved personalization settings for all users, and/or for specific views. You might wish to do this after making significant changes to dashboards or reports that you want your users to see in its original state, or if the data changes such that their personalization settings will no longer apply.

The [ShortLinkService's deleteShortLinks method](#) provides options for specifying which personalization to clear. The following example (JavaScript) clears personalization for a dashboard with the specified [file system entry ID](#):

```
dundas.context.getService("ShortLinkService").deleteShortLinks({
  categoryId: dundas.constants.VIEW_PERSONALIZATION_SHORT_LINK_CATEGORY_ID,
  fileSystemEntryId: "66ecb30a-cc3a-4ecf-9961-c476247cde4b"
}).done(function () {
  console.log("Personalization cleared");
});
```



Note: This script only needs to run once. For example, run it from your browser's console when logged in as an administrator rather than saving it in one of your views.

For more information, see:

- [Edit Your Profile and Change Your Password](#)
- [Disable View Functionality](#)
- [Share and Export Symphony Dashboards and Reports](#)
- [Edit Versus View Mode and Sandbox View](#)
- [Check In, Check Out and Auto Saving](#)

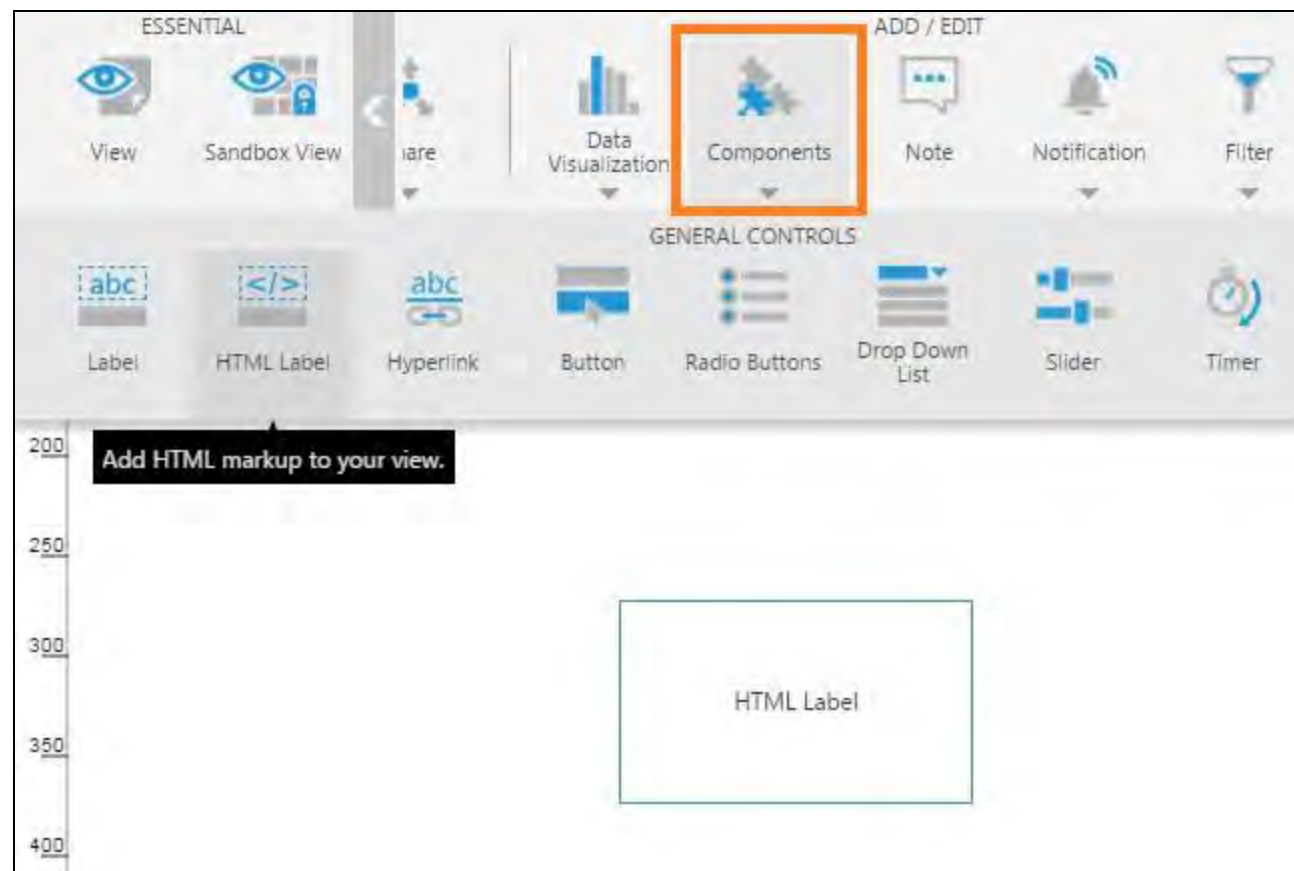
Using the HTML Label Component

This applies to: *Managed Dashboards, Managed Reports*

The HTML Label component lets you display rich text based on HTML markup. You can also show regular text, use CSS, or enter JavaScript code.

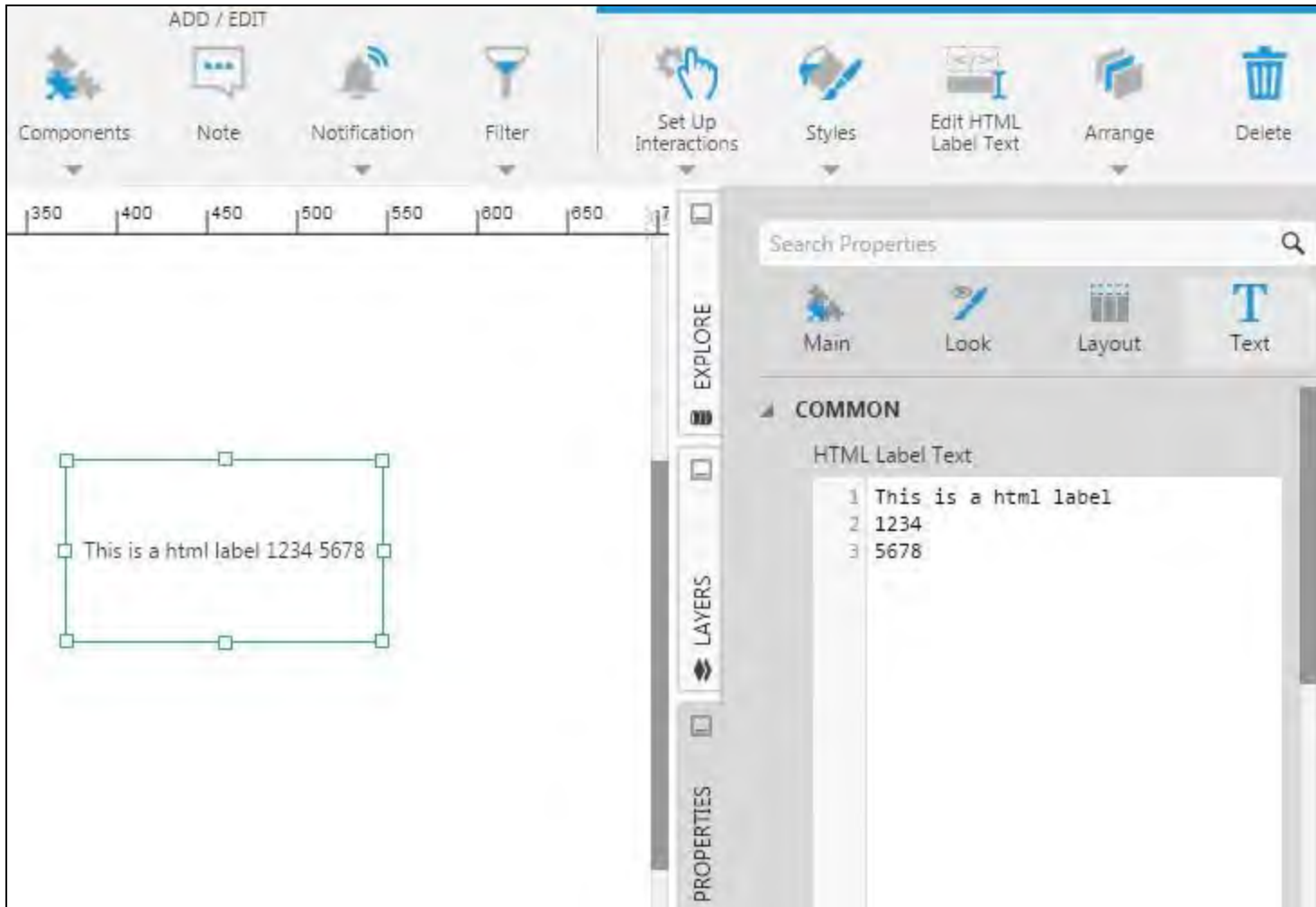
Add the HTML Label

Go to the toolbar, click **Components**, and then select **HTML Label** to add it to the dashboard canvas.



Display Regular Text

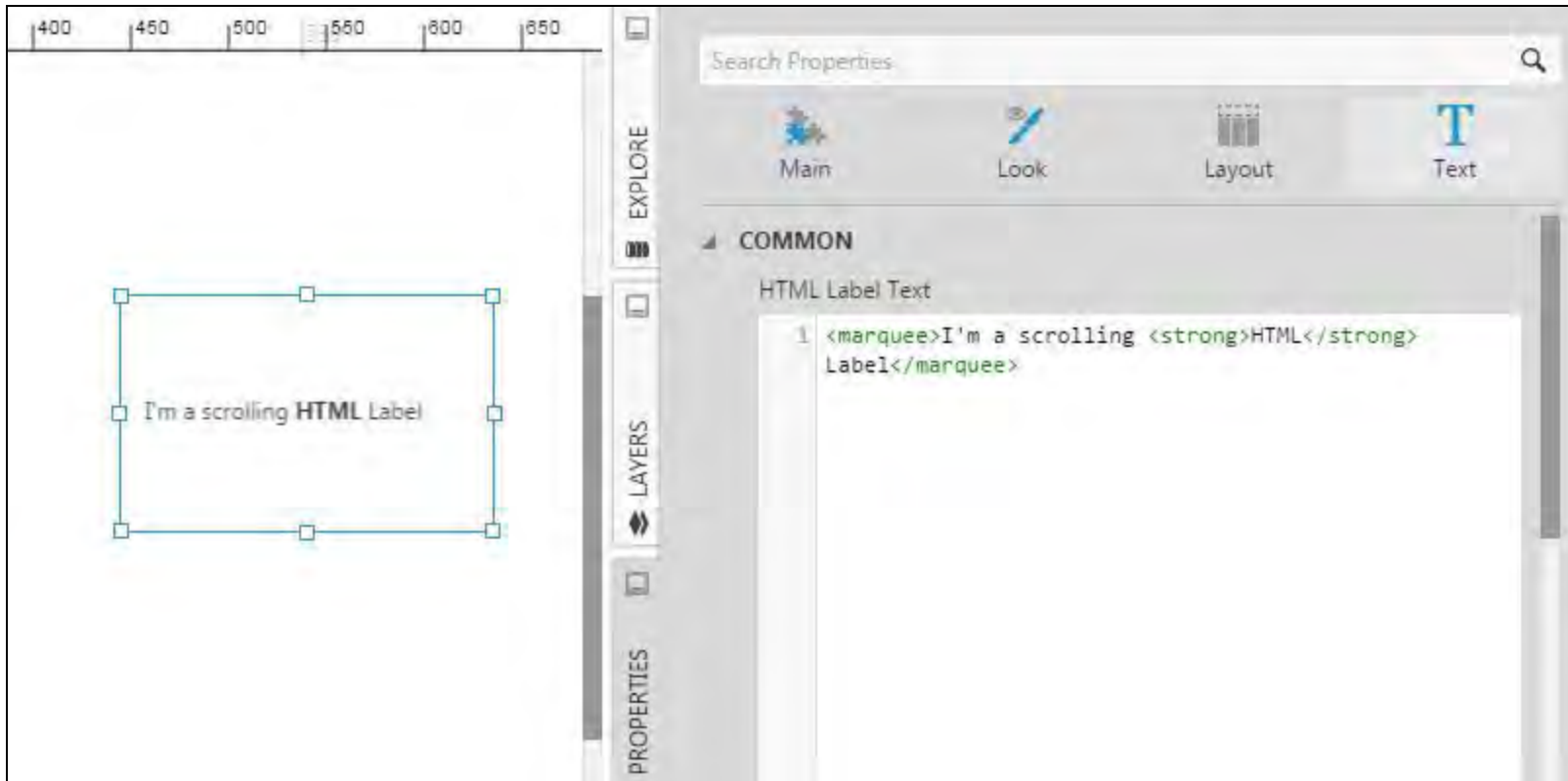
The HTML Label can display regular text without any markup. Just enter the regular text into the **HTML Label Text** property.



Enter HTML

You can enter **HTML** markup on one or more lines. Below is some example HTML markup:

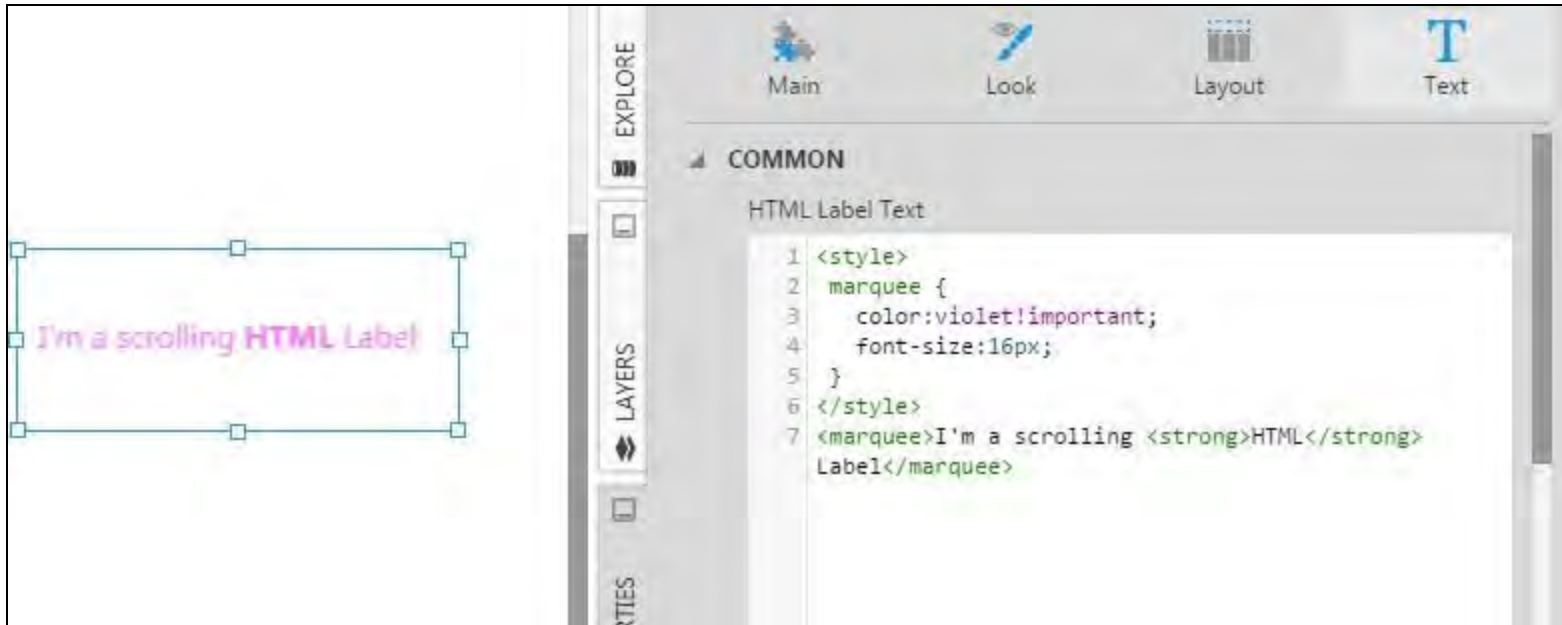
```
<marquee>I'm a scrolling <strong>HTML</strong> Label</marquee>
```



Add CSS

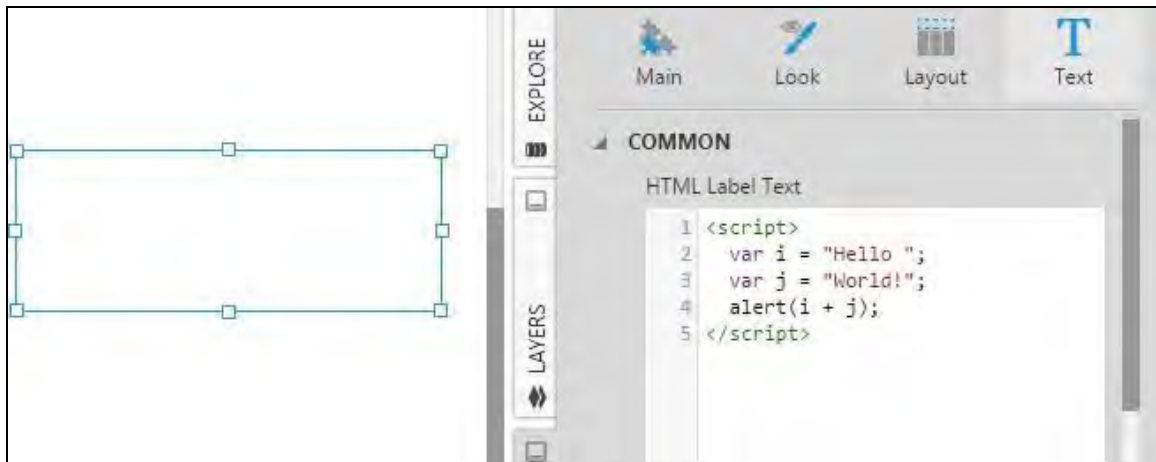
CSS is also supported via the **style** element. Below is some example CSS:

```
<style>
  marquee {
    color:violet!important;
    font-size:16px;
  }
</style>
```



JavaScript

JS code is supported using the **script** element.



For more information, see:



- Archive of documentation for Logi Symphony v24

- [White Labeling the Application](#)
- Script Library: [Insert scripted third party web content](#)
- Off the Charts: [Go Beyond Simple Customization](#)
- [Design Overview](#)



Add Custom Fonts and Font Effects

This applies to: *Managed Dashboards, Managed Reports*

Add custom fonts and font effects to your dashboard or view, or added to the system to use in multiple places.

Add Fonts

If you are using a font provider such as [Google Fonts](#), follow their instructions to embed the fonts on the page. Google Fonts also provides an API you can use to include optional [effects](#) along with the fonts.



Note: Google Fonts are included here as an example. If you have your own font files to host for your users to download, add them as [static resources](#) in the administration area and add CSS or HTML to refer to these instead.

When using Google Fonts, each font and style you want to include has an option to **Select this style**. Select that option, then copy the code provided in the **Embed** section, such as shown below for **<link>** for Selected families:

←

Embed code

Dancing Script

Variable ⓘ

🗑️

Whereas recognition of

↻

Reset all

Weight ⓘ

400 - 700

Full axis

One value

2 styles

Web

Android

iOS

Flutter

☒ <link>
☐ @import

Embed code in the <head> of your html

```
<link rel="preconnect" href="https://fonts.googleapis.com">
<link rel="preconnect" href="https://fonts.gstatic.com" crossorigin>
<link href="https://fonts.googleapis.com/css2?family=Dancing+Script:wght@400..700&display=swap" rel="stylesheet">
```

📋 Copy code

Dancing Script: CSS class for a variable style

Add this code to the page to use it. You can do so in several ways:

App Styling

Add custom fonts as an Administrator in the App Styling screen. See [Modifying Styles](#).

Paste the code provided by your font provider into the relevant app styling section.

For example, double-click to edit the **HTML resource**, then paste in the HTML provided by Google Fonts.

HTML Label

Alternatively, if you only want to add the font to a specific dashboard or another view such as a report, an easy way to do this is to add an **HTML Label**, found under **Components** in the toolbar.

After you add the HTML label, click to edit the label text from the toolbar or double-click the label. Paste or enter the HTML for your fonts.



Note: When you are using a [dashboard template](#), you can add the font to the template. All dashboards using that template will have the font available.

If there is no visible content included in your HTML, you can locate it using the [Layers window](#).

Loading Script

Another alternative adds the font only to a specific view using Loading script actions. These actions are run when the view is opened for viewing.



Important: Script actions only run when the dashboard or view is opened for viewing. When you add a font this way, it is not visible if you open the file in edit mode until you select **Sandbox view** in the toolbar, or switch to **View** in a report, scorecard, or small multiple.

Edit the dashboard or other view, and open the **Properties** window with nothing selected. This brings up the properties of the view.

In the **Main** tab, scroll to the **Actions** category and expand the **Loading** actions.

Select the **+** button to add a script action, then click to edit it in the **Script Editor**.

The following script adds the same HTML to the page that was provided by Google Fonts, but using JavaScript:

```
// ***** Custom Fonts *****
var tag = document.createElement('link');
tag.setAttribute('href', '<a href="https://fonts.googleapis.com/css2?family=Russo+One&family=Tangerine" data-bbox="62 618 908 756">https://fonts.googleapis.com/css2?family=Russo+One&family=Tangerine</a><a href="mailto:wght@400;700" data-bbox="62 618 908 756">wght@400;700</a>;display=swap');
tag.setAttribute('rel', 'stylesheet');
tag.setAttribute('type', 'text/css');
document.head.appendChild(tag);
```

The following script adds HTML that also requests font effects along with the fonts according to Google's [instructions](#):

```
// ***** Font Effects *****
var tag = document.createElement('link');
tag.setAttribute('href', '<a href="https://fonts.googleapis.com/css?family=Rancho&effect=shadow-multiple|fire- data-bbox="62 838 818 890">https://fonts.googleapis.com/css?family=Rancho&effect=shadow-multiple|fire-
```

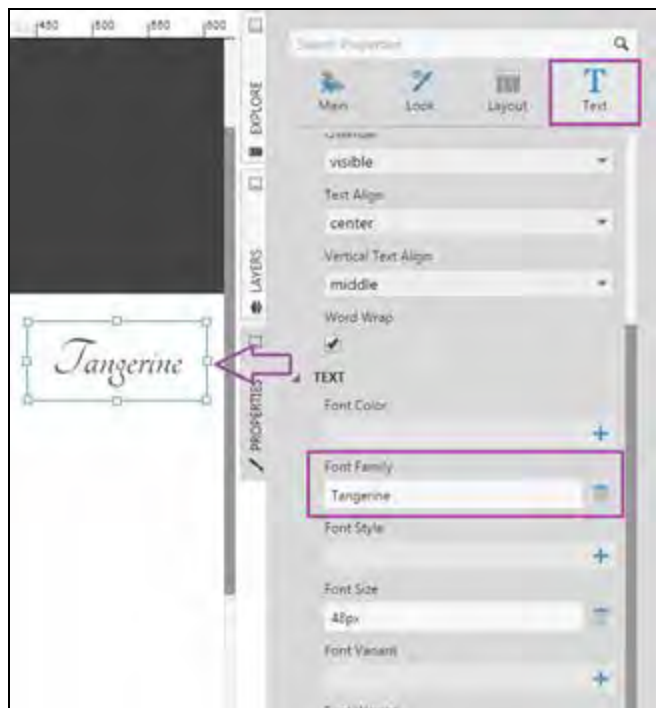
```
animation|distressed-wood|3d'">https://fonts.googleapis.com/css?family=Rancho&effect=shadow-multiple|fire-
animation|distressed-wood|3d'</a>;
tag.setAttribute('rel', 'stylesheet');
tag.setAttribute('type', 'text/css');
document.head.appendChild(tag);
```

You can reuse one of the blocks of script above if you change the href value that begins with **https://** with the **https** address provided for your fonts/effects.

Use the Fonts

After you add the font's HTML or CSS, set the **Font Family** property on the dashboard, or any component or visualization it can be applied to.

Set the Font Family property to any font family setting supported on the page by typing it in; you do not need to use one of the suggestions from the pop up.



Font providers such as Google provide tips for how to best specify the font family along with their embedding code, for example under **CSS rules to specify families** as shown in the [Selected families](#) example.



Font Effects

Unlike using a font or font family as shown above, font effects require applying the effect's CSS class in script.

This example script applies the fire animation effect to a label by assigning its CSS class:

```
// Be sure to refer to the label by its Script Name, found in the Properties window:  
(label1.container).addClass("font-effect-fire-animation");
```



Month	TotalDue
Grand Total	123,216,786.1159
▶ June, 2011	838,249.6892
▶ July, 2011	2,286,647.6668
▶ August, 2011	1,882,105.1723
▶ September, 2011	1,530,275.9112
▶ October, 2011	3,213,765.0018
▶ November, 2011	2,633,474.0091
▶ December, 2011	1,519,463.8678
▶ January, 2012	2,803,313.2808
▶ February, 2012	2,296,062.4350

Font Suggestions

You can always type any value into the **Font Family** property that is compatible with `font-family` in CSS, including a custom font family you've added. You can also add custom font names to the list of suggestions that appears when users are setting this property in the UI. An administrator can use JavaScript similar to the example below in **JavaScript resource** in the [App Styling](#) page to call [addFontFamilyOption](#) after the page loads:



```
$(document).ready(function () {  
  dundas.context.ready(function () {  
    if (dundas.context.baseViewService) {  
      dundas.context.baseViewService.addFontFamilyOption("Russo One");  
    }  
  });  
});
```

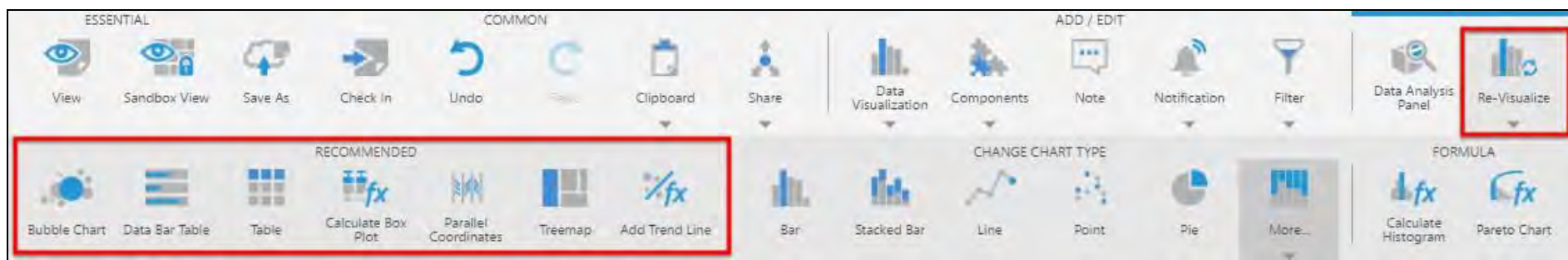
Using Symphony Recommendations

This applies to: *Managed Dashboards, Managed Reports*

To assist you in analysis, a recommendation engine provides guidance to help you find the most fitting visualization according to best practices.

Recommended Data Visualizations

Based on the measures and hierarchies you place on the metric set, certain data visualizations will be recommended. You can find these under the Recommended section of the **Re-Visualize** toolbar option, or at the top of the Re-Visualize context menu.



Note: Re-visualizing to a recommended visualization will be treated as a new visualization using preset settings, so your current visualization and its settings will be changed.

Some of the recommendations include specialized, pre-configured versions of regular visualizations that may incorporate formulas and other analytics:

- **Point Chart** - When Point Chart is recommended, you would use it the same way you would use a bar chart, except that the numeric axis may automatically start above zero, shrinking the range of values displayed along the axis and making it easier to see small differences between the values. When you use a bar chart, the numeric axis should always include zero because each bar starts from zero and it would be misleading otherwise.
- **Correlation Matrix** - This option uses the [correlation matrix formula](#) to create a new table with a color rule applied to the measure cells. This correlation matrix shows how each measure correlates with each other measure over the original dataset, which should ideally include many rows. There may be a positive correlation shown in a shade of blue, a negative correlation shown in a shade of red, or no correlation shown in light gray.
- **Data Bar Table** - A table of data bar columns with totals turned off on the metric set. Data Bar Table allows you to spot patterns of correlation between multiple columns of many bars, especially when sorted by measure. The row heights and padding are reduced to fit more bars.



- **Parallel Coordinates** - This option creates a new line chart where the metric set has been transposed to place measure names along the bottom axis and percentages along the left axis. Parallel Coordinates displays a separate line for each row of data that was originally selected, plotting where each of its values falls within the total range of each measure's values as a percentage. This allows you to look for overall patterns between the measures while also allowing you to single out individual lines to see its movement.
- **Trend Line** - Adds a [trend line](#), also known as a regression line or line of best fit, to your chart. This could be recommended for a chart displaying measure values along a time axis, or for a scatter plot or bubble chart where both axes are numeric.
- **Forecast Analysis** - This option uses the [exponential smoothing formula](#) to add forecasting to a line chart when displaying dates along the bottom axis and numeric values along the left axis. Forecast Analysis produces a detailed forecast using the best available method, taking into account seasonality and emphasizing recent data, and displays it as a line on top of a semi-transparent *confidence interval*.
- **Identify Clusters** - This option automatically analyzes the data, finds the optimal number of clusters and assigns each cluster of data points a number and color. This option could be recommended for a scatter plot or bubble chart where both axes are numeric. For more information, see the [K-means Clustering](#) article.
- **Sort Stacked Totals** - This option automatically calculates the stacked totals if necessary and sorts them in descending order, available when using a stacked bar chart regardless of how the data has been configured.
- **Range Bar Chart** - Also known as a Gantt chart, this may be recommended when two different dates have been added to the metric set's Rows to [visualize the range between each pair of dates](#).
- **Detect Outliers** - Uses the [Data Outliers](#) formula and formats the result using [states](#) to highlight potential outliers when a chart's series each display a single measure.

The following formula-based chart options may also be recommended, but you can also choose them at any time from the Re-Visualize or Data Visualization toolbar options:

- [Calculate Box Plot](#)
- [Calculate Histogram](#)
- [Pareto Chart](#)

If you are currently working with a metric set full screen, choosing some formula-based recommendations, such as Correlation Matrix and Histogram, may take you to a new dashboard so that you can work with your original metric set plus the new automatically generated [formula metric set](#) together.

Smart Data Visualizations

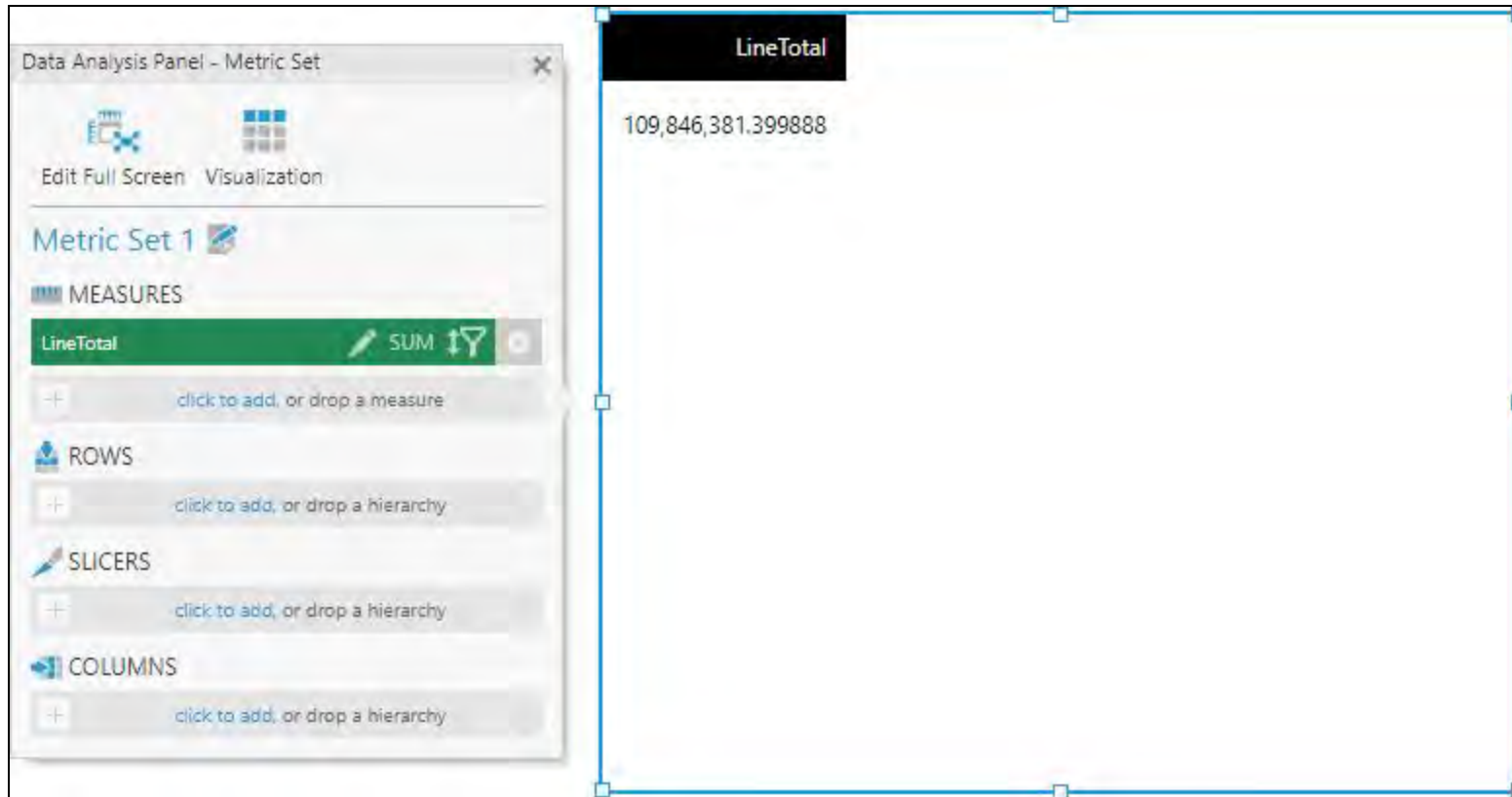
When first selecting data for a new metric set, Smart data visualization functionality can automatically re-visualize to the most fitting recommended data visualization.

To activate this functionality, drop data directly onto a blank part of the canvas. You can also select the **Smart** data visualization from the toolbar in views such as dashboards. Selecting a specific data visualization will not activate this functionality.



As an example of the functionality, create a new metric set from the main menu, or create a blank dashboard.

From the Explore window, drop the *LineTotal* measure from the *[Sales].[SalesOrderDetail]* table of the [Adventure Works sample database](#) onto the canvas.



The initially selected visualization is a table.

Next, add the *OrderQty* and *UnitPrice* measures to the metric set.



The metric set is automatically re-visualized into a bar chart.



Note: Dropping data directly onto the drop zone for a specific part of the current visualization (e.g., *Row Header*) will instead display the data as you asked instead of automatically re-visualizing.

Next, add the *ProductID* hierarchy to the metric set.



The metric set is automatically re-visualized into a bubble chart.

Stopping the Automatic Behavior

You can stop the automatic behavior at any point by either re-visualizing to a data visualization of your choice or customizing the visualization, which includes any of the following actions:

- Making a change on the Visualization tab of the Data Analysis Panel.
- Applying a theme or style.



- Archive of documentation for Logi Symphony v24

- Making a change in the Properties window.
- Using a contextual command from the toolbar or the context menu to change a visualization property.
- Using labeled drop zones that appear directly over a visualization (for example, using the Column drop zone shown over the table will add a column and not re-visualize).
- Navigating away from the metric set or view after it has been saved.

For more information, see:

- [Design Overview](#)
- [Setting Up the Visualization](#)
- [Visualization Tab Examples](#)
- [List of Formulas](#)

Add a Data Image

This applies to: *Managed Dashboards, Managed Reports*

A data image is an image visualization based on your data. Add to your dashboard, report, scorecard, or small multiple. Show a different image depending on data values.

Note: [Table visualizations](#) also have an *Image* column type option, which displays images in each row in a similar way.

Add a Data Image to a Dashboard

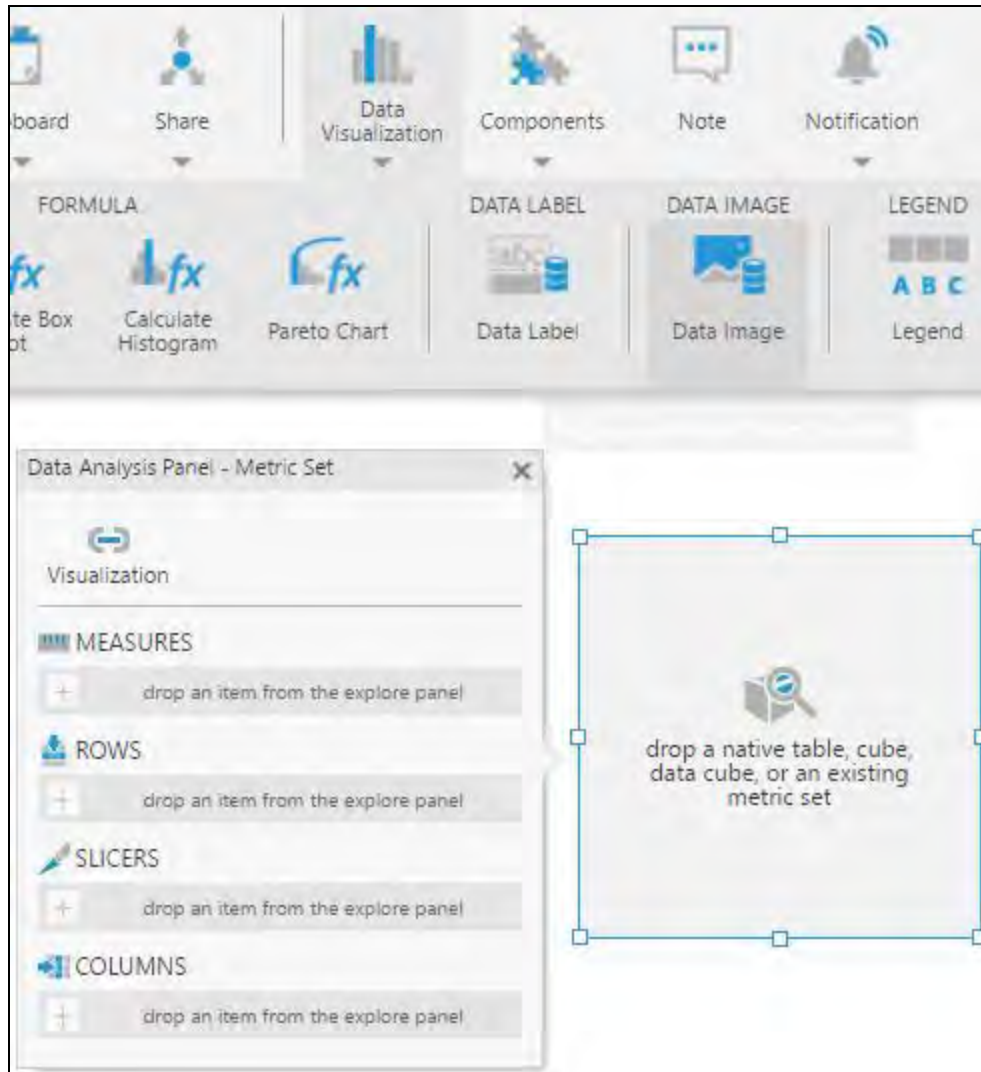
This example shows you how to add a data image visualization to your dashboard.

First, find or create a data connector with data containing addresses to an image, or parts of an address, like in the following SQL Server database table.

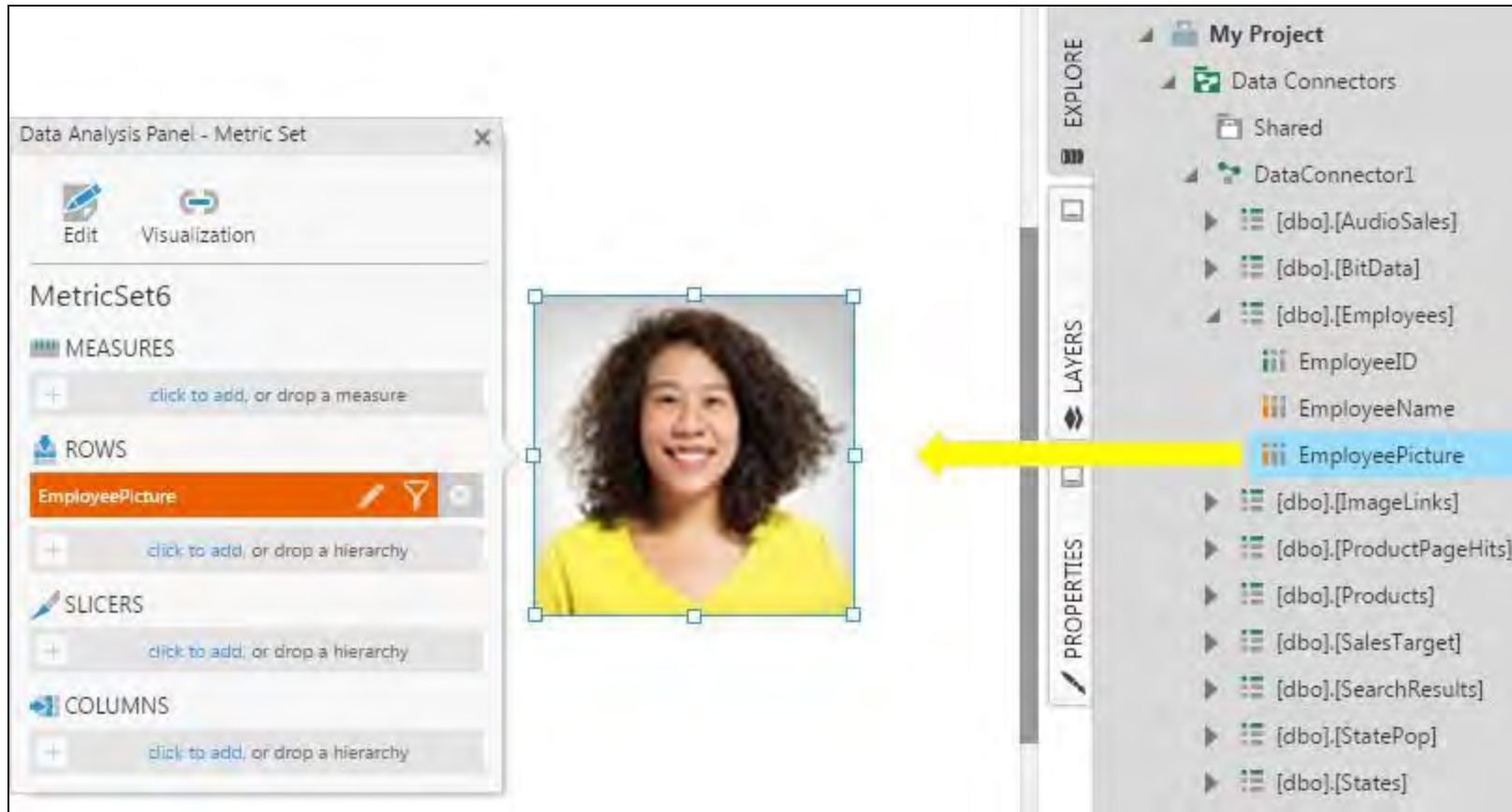
TestDB - dbo.Employees			
	EmployeeID	EmployeeName	EmployeePicture
	100	June Chou	http://www.example.com/images/Picture100.jpg
	101	Tom Grant	http://www.example.com/images/Picture101.jpg
	102	Sam Preston	http://www.example.com/images/Picture102.jpg
	103	Alex Simpson	http://www.example.com/images/Picture103.jpg

This example includes the full URL of a picture to go with each employee. Next, create a new dashboard using the blank template.

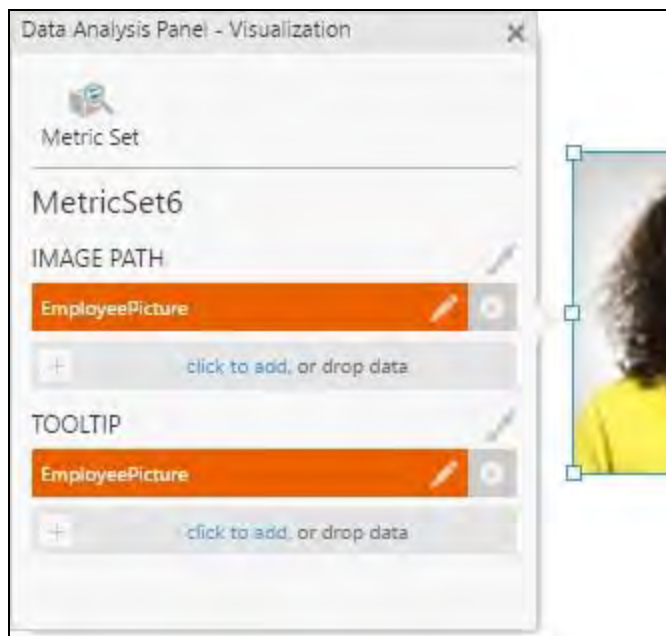
Go to the toolbar, click **Data Visualization**, and then select **Data Image**. An empty data image visualization appears on the canvas with its Data Analysis Panel opened.



In the Explore window, expand the data connector and drag the column containing the image URLs onto the empty data image visualization (or onto the ROWS field of its Data Analysis Panel). The picture corresponding to the first row is displayed by default.

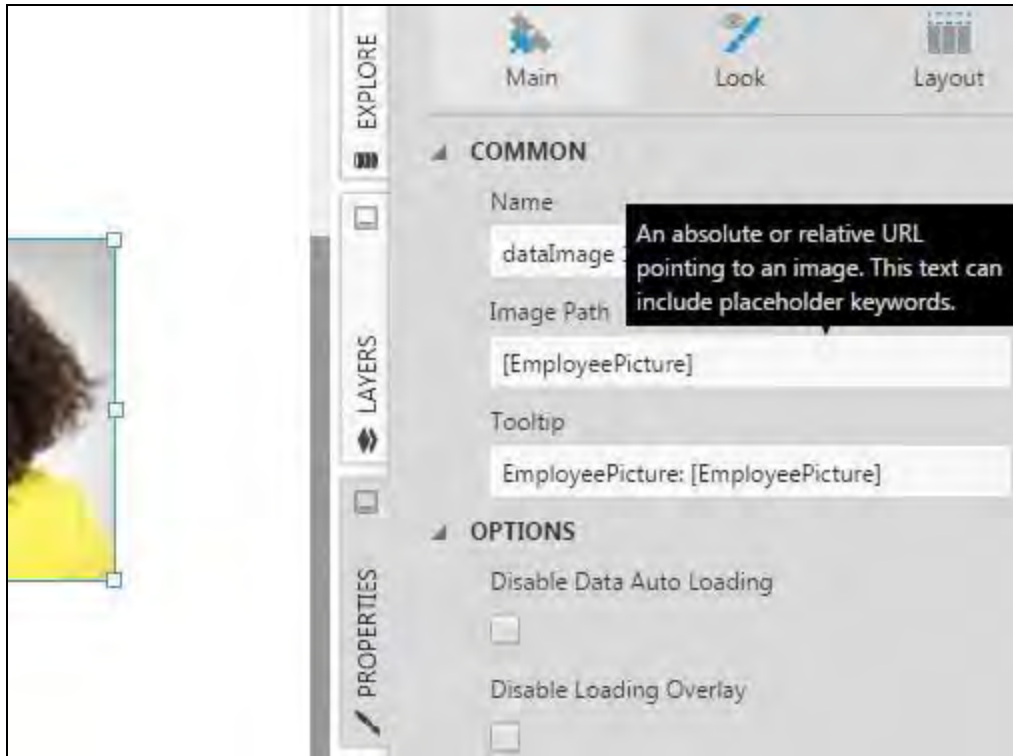


In the Data Analysis Panel, click **Visualization**. You'll see that your data is assigned under Image Path.



Next, go to the **Properties** window for the data image. Look at the value for the `Image Path` property and you'll see that it has a placeholder keyword corresponding to the hierarchy assigned under Image Path in the Data Analysis Panel.

If you have data that forms only part of the URL to an image, edit this property and use the placeholder keywords to insert whichever parts of the address need to change according to the data. See the [image path](#) section below for details.



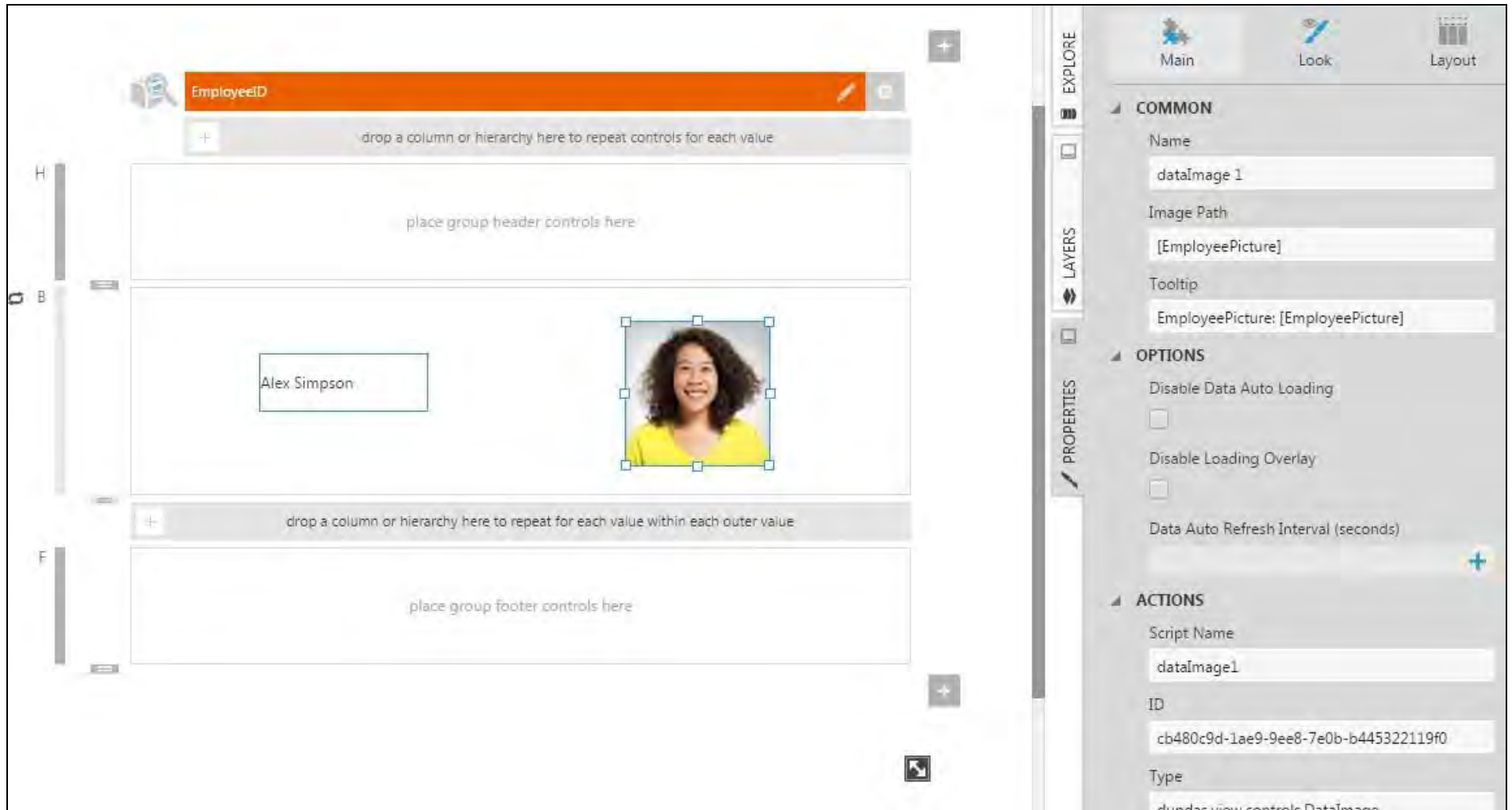
You can filter your data to change which picture is displayed by the data image.

Use a Data Image in a Scorecard

This example shows you how to use a data image visualization in a scorecard to produce a list of images corresponding with data. The same or similar steps also apply to report and small multiple views.

In new scorecard, drag a column identifying each scorecard row to the scorecard's grouping area (labeled *drop data here to repeat...*).

Add a **Data Image** from the toolbar and drag it into the body (labeled B along the left), if not there already. Then drag the data identifying each image onto the data image. If your data only forms part of an image URL or address, edit the **Image Path** property as described in the dashboard example above.



The screenshot displays the Logi Symphony v24 interface. On the left, a scorecard design is shown with a central image of a woman and the text "Alex Simpson". The design is divided into sections for headers, body, and footers. On the right, the "EXPLORE" panel is visible, showing the "COMMON" and "OPTIONS" sections. The "COMMON" section includes fields for "Name", "Image Path", and "Tooltip". The "OPTIONS" section includes checkboxes for "Disable Data Auto Loading" and "Disable Loading Overlay", and a "Data Auto Refresh Interval (seconds)" field. The "ACTIONS" section includes fields for "Script Name" and "ID".

Choose **View** in the toolbar to see the scorecard showing a list of images.

ESSENTIAL

COMMON

ADD / EDIT



Edit



Full Screen



Share



Note



Change Filters



Notification

June Chou



Tom Grant



Sam Preston



Alex Simpson



EXPLORE

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Display Base64 Encoded Image Data

Although Symphony metric sets do not directly support the SQL Server *image* data type, for example, you can use a data cube to convert the binary data to a Base64 string/text encoding that can then be displayed by the data image visualization. The following example shows you how to do this using the AdventureWorks 2012 sample database, which contains image data for various products.

In our example, we have created a data cube in Symphony using the following manual query against SQL Server's Adventure Works sample database:

```
select p.ProductID, p.Name, ph.ThumbNailPhoto, ph.LargePhoto
from [Production].[Product] p
inner join [Production].[ProductProductPhoto] ppp
on p.ProductID = ppp.ProductID
inner join [Production].[ProductPhoto] ph
on ph.ProductPhotoID = ppp.ProductPhotoID
where ph.ProductPhotoID <> 1
```

Regardless of whether you use a manual query, first configure the select transform and ensure the *Binary* columns containing the image data are checked to include them in the cube's result.

Next, insert a [Calculated Element](#) transform that will be used to convert the *LargePhoto* binary column to a new Base64 encoded string column, using the .NET method [Convert.ToBase64String](#).

Double-click the **transform** to configure it, then click the **button** under the Calculated Elements section to add a new element.

Set the Data Type to **String**, set Maximum Length to **0** (unlimited), and use an expression like the following:

```
return Convert.ToBase64String($LargePhoto);
```



Calculated Element

The transform allows for creation of new elements by applying user-defined expressions. The result of each expression is a new output element.

Name

Description




☒ ProductID	Int32
☒ Name	String
☒ ThumbnailPhoto	Binary
☒ LargePhoto	Binary

Calculated Elements

LargePhotoBase64





Define parameters



Rename output elements







Calculated Element

Create a new element by writing an expression.

Settings

Name

Description

Data Type

Expression

```
1 return Convert.ToBase64String($LargePhoto$);
```

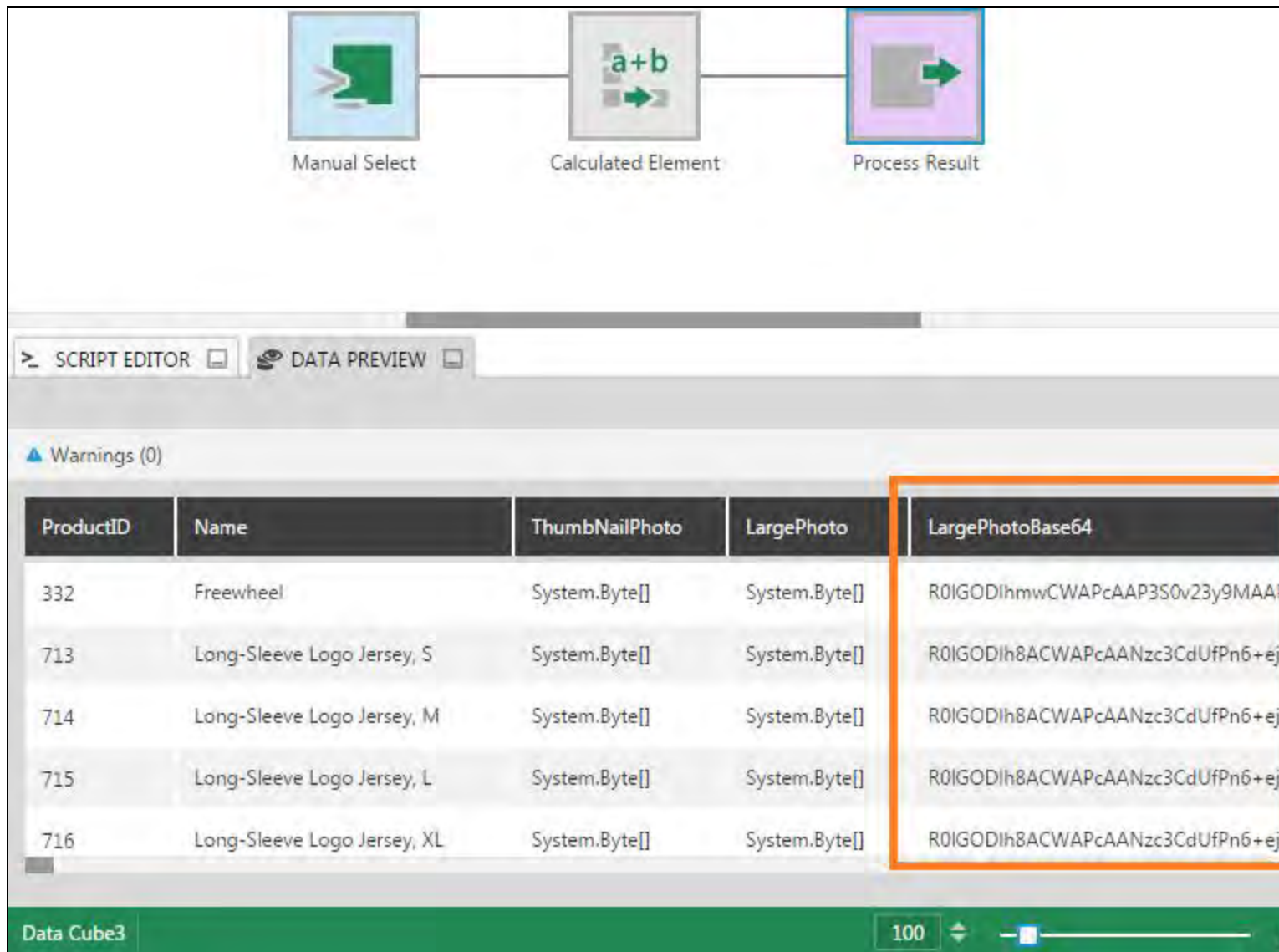
Edit expression in editor



Automatic Placeholders




Click the [Process Result](#) transform and then open the Data Preview window to see the Base64 encoded data.



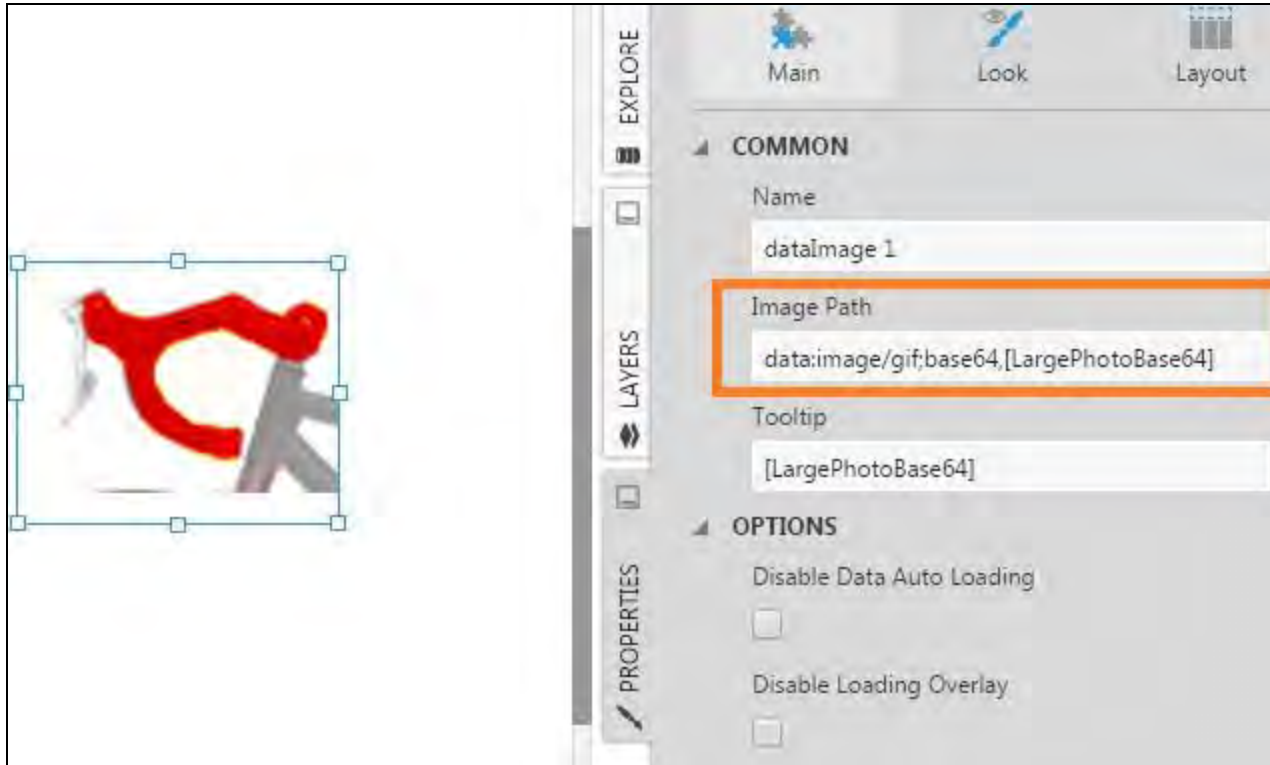
The screenshot displays the Logi Symphony v24 interface. At the top, a workflow diagram shows three steps: 'Manual Select' (blue icon), 'Calculated Element' (green icon with 'a+b'), and 'Process Result' (purple icon). Below the workflow, the 'DATA PREVIEW' tab is active, showing a table with 5 columns: 'ProductID', 'Name', 'ThumbNailPhoto', 'LargePhoto', and 'LargePhotoBase64'. The 'LargePhotoBase64' column is highlighted with an orange border. The table contains 5 rows of data, including 'Freewheel' and 'Long-Sleeve Logo Jersey' in various sizes. At the bottom, a green bar shows 'Data Cube3' and a zoom slider set to 100.

ProductID	Name	ThumbNailPhoto	LargePhoto	LargePhotoBase64
332	Freewheel	System.Byte[]	System.Byte[]	R0IGODIhmwCWAPcAAP3S0v23y9MAAP
713	Long-Sleeve Logo Jersey, S	System.Byte[]	System.Byte[]	R0IGODIh8ACWAPcAANzc3CdUfPn6+ejs
714	Long-Sleeve Logo Jersey, M	System.Byte[]	System.Byte[]	R0IGODIh8ACWAPcAANzc3CdUfPn6+ejs
715	Long-Sleeve Logo Jersey, L	System.Byte[]	System.Byte[]	R0IGODIh8ACWAPcAANzc3CdUfPn6+ejs
716	Long-Sleeve Logo Jersey, XL	System.Byte[]	System.Byte[]	R0IGODIh8ACWAPcAANzc3CdUfPn6+ejs

Next, find or add the data image visualization in a dashboard (or other view).

Add the base64-encoded hierarchy from the data cube to the data image or its Data Analysis Panel in order to connect it.

Open **Properties** for the data image and set its **Image Path** property to: `data:image/gif;base64,[Base64 Hierarchy]`, where *[Base64 Hierarchy]* refers to your hierarchy name. If your image data is not in GIF format, the gif portion of the property setting should be changed to the appropriate file extension or [media type](#), e.g., `image/jpeg` or `image/png`.



Properties

Image Path

The **Image Path** property specifies a URL that points to an image. The URL can be an absolute image path (e.g., `http://www.example.com/images/image1.png`), or a path that is relative to the root of the your website (e.g., `./api/resource/staticresourcefile/image1.png`). As shown in examples below, you can also access an [image resource](#) uploaded to Symphony by its file ID, or set other URLs supported by web browsers such as a [data URL](#) to display a base64-encoded image.

You can insert one or more [keywords](#) to be replaced with values from your data. If your data does not already contain an entire path or address to an image, you can combine keywords with the missing text as shown in examples below.



Data values	Image Path property	Resolved URL
ProductPicture = http://www.example.com/products/Picture200.jpg	[ProductPicture]	http://www.example.com/products/Picture200.jpg
ProductPicture = Picture201.png	http://www.example.com/products/ [ProductPicture]	http://www.example.com/products/Picture201.png
ProductPicture = Picture202	http://www.example.com/products/ [ProductPicture].png	http://www.example.com/products/Picture202.png
ProductPicture = /Content/Images/Picture203.png	[ProductPicture]	>http://www.example.com/Content/Images/Picture203.png
ProductPicture = Picture204.jpg	/Content/Images/[ProductPicture]	>http://www.example.com/Content/Images/Picture204.jpg
State = Maine, City = Portland	/Content/Images/Photo_[State]_[City].jpg	>http://www.example.com/Content/Images/Photo_Maine_Portland.jpg
CompanyLogo = 0f079222-a7ca-4a15-8e7c-b21c96ab4cbb	dundasImageResource:[CompanyLogo]	Displays the uploaded image resource from Symphony with the specified file ID
ImageDataBase64 = RIOGODlmhw...	data:image/gif;base64,[ImageDataBase64]	Displays the base64-encoded image

For more information, see:

- [Symphony Managed Reports](#)
- [Setting Up the Visualization](#)
- [Using a Table Visualization](#)
- [Formatting Text](#)

Adding a Data Label

This applies to: *Managed Dashboards, Managed Reports*

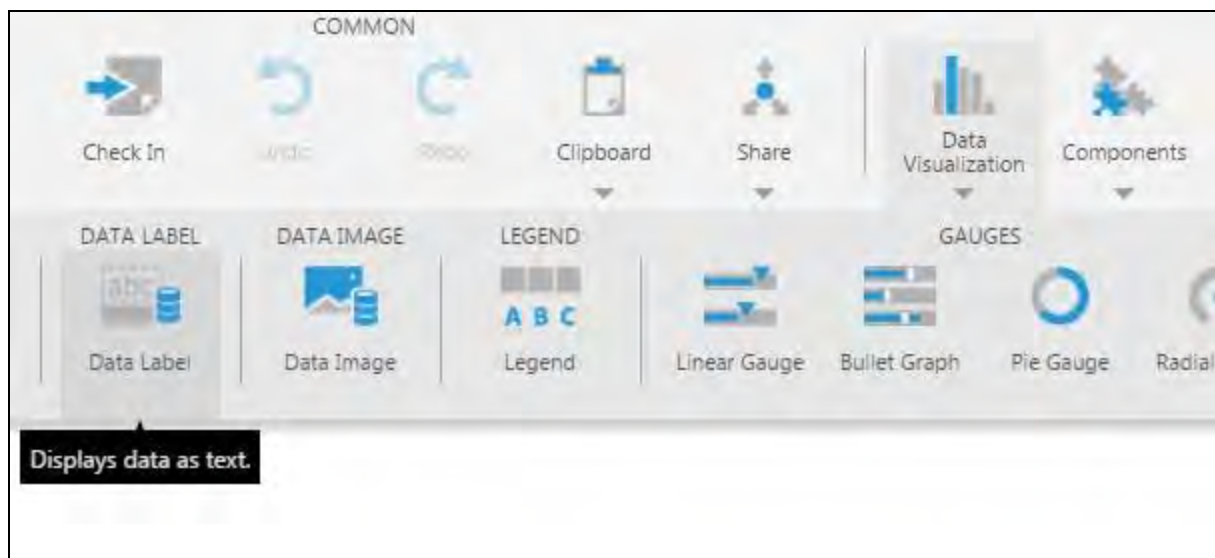
A data label is a data-driven text label that you can add to views including dashboards and reports.

Data is also visualized as text using a data label automatically when you drag it directly onto a report, scorecard, or small multiple.

On a Dashboard

As an example, create a new dashboard based on the *Blank* template.

Click **Data Visualization** in the toolbar, then click **Data Label**.



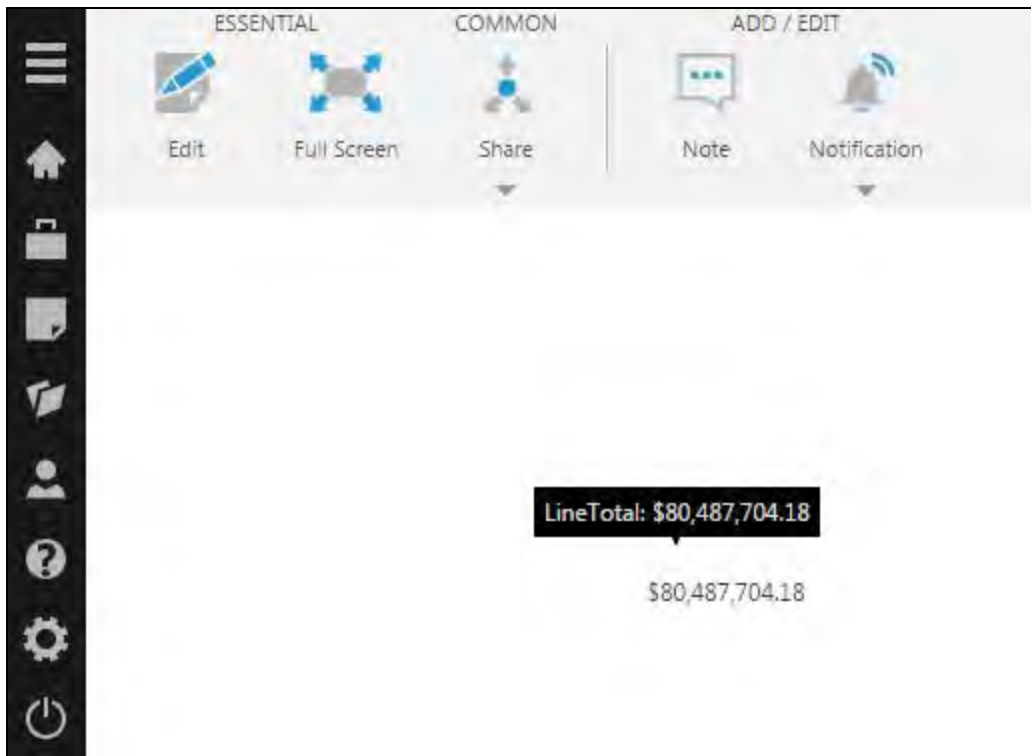
From the Explore window, drag a **column**, **measure**, or **hierarchy** and drop it onto the empty data label.



You can [format measures](#) using metric set options in the Data Analysis Panel, which you can open from the toolbar or context menu.

Click the **LineTotal** measure to edit it and click **Define text formatting**. Type \$ in the Symbol field.

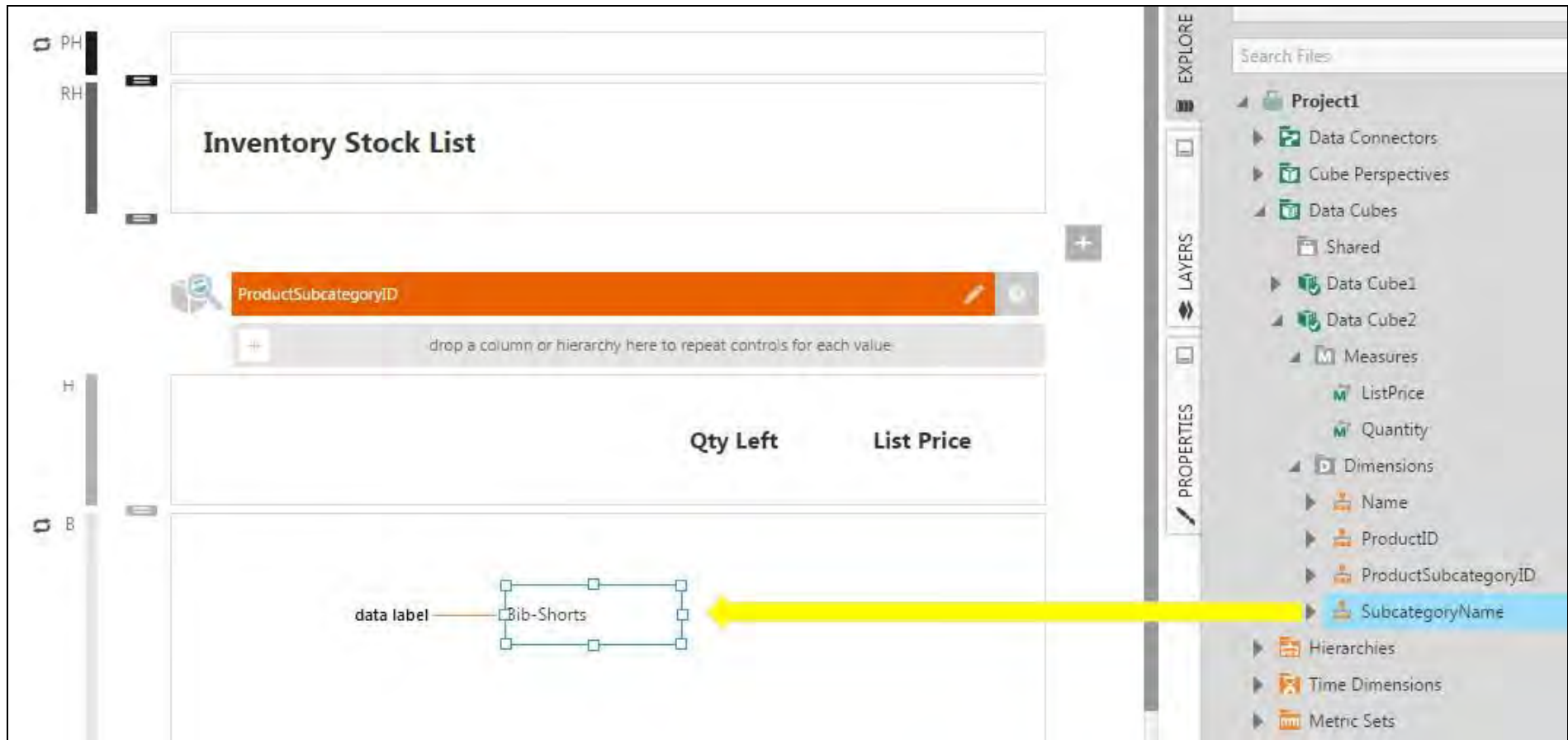
Submit the dialogs and switch to **View** mode, where you can hover over the text (or long-tap) to see its tooltip.



When adding more than one column, measure, or hierarchy to a data label, you can customize which ones are displayed in its text and tooltip in the Data Analysis Panel's [Visualization](#) tab.

In Reports, Scorecards, and Small Multiples

While designing a report, scorecard, or small multiple, drag any **column**, **measure**, or **hierarchy** from the Explore window to any region.



The data will automatically appear as text in a data label.

You can also add a data label yourself from the toolbar and then add data, the same way as described above for dashboards.

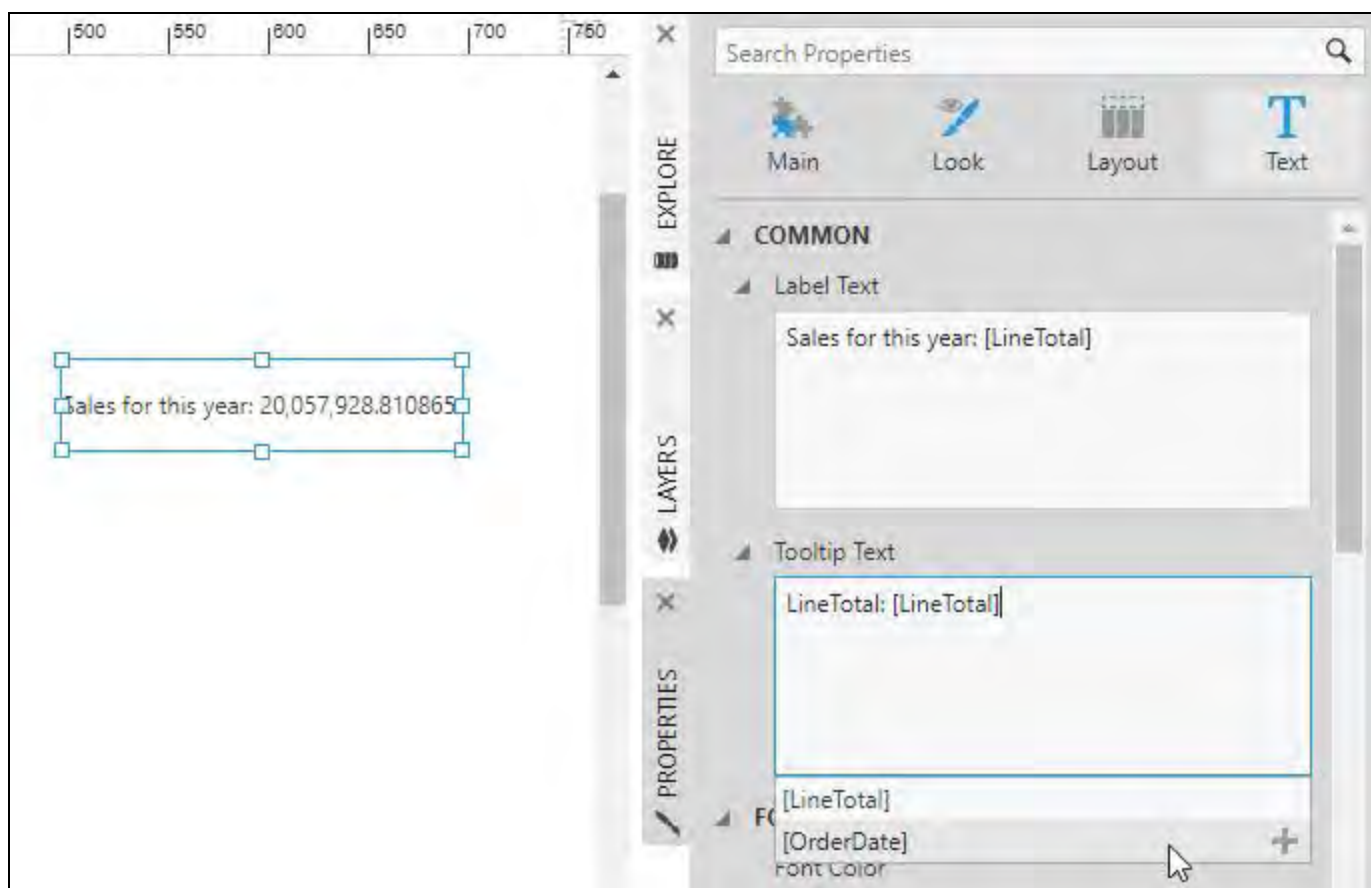


Note: When you drag data directly to the canvas to create data labels, they all retrieve their data using the same group metric set by default to improve performance. For details, see [Design Tips for Reports and Scorecards](#).

Properties

Text and Tooltip

You can further customize how text appears in the data label and its tooltip in the Properties window's Text tab, using the **Label Text** and **Tooltip Text** properties.

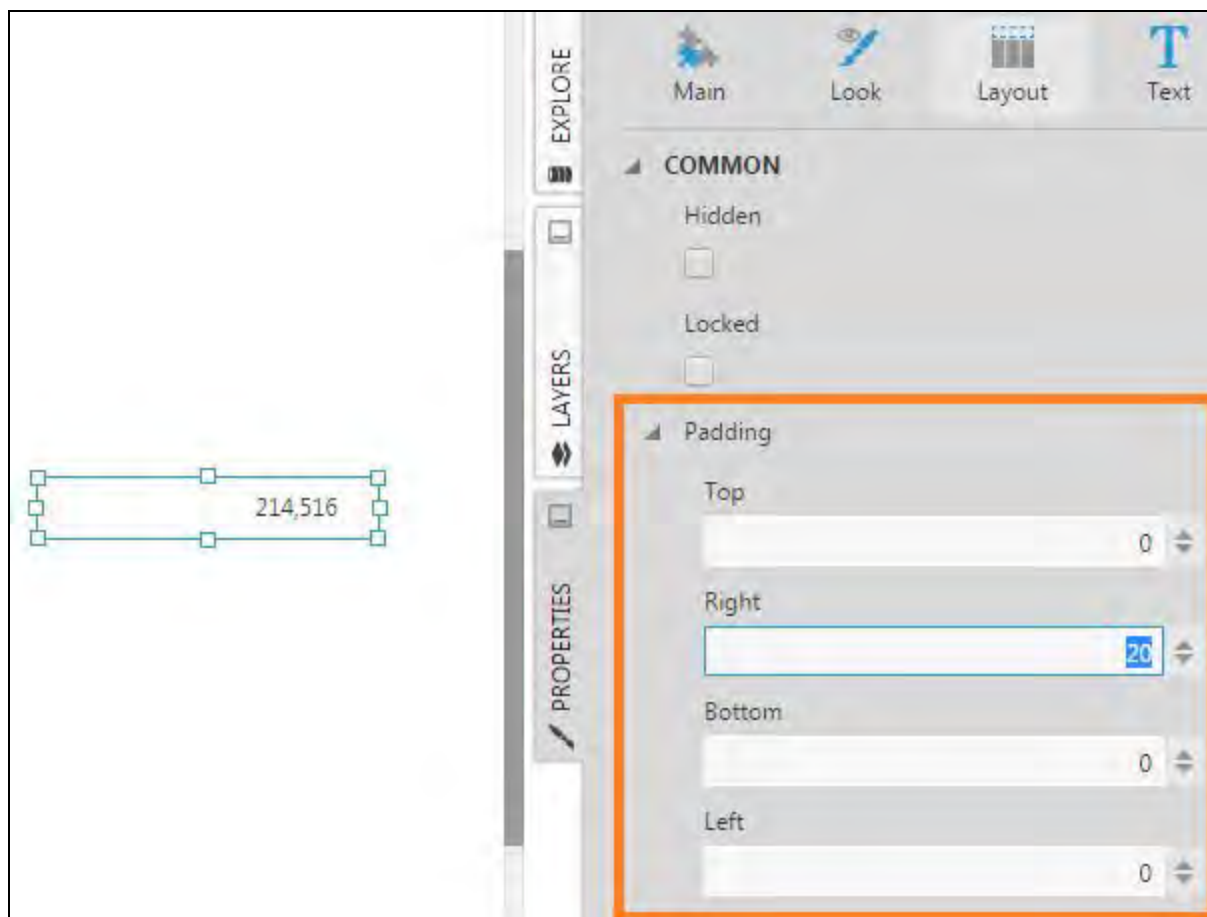


You can combine values from your data with regular text using keywords in square brackets as placeholders for the data, as suggested in the drop-down that appears while editing the text.

Custom formats can optionally be added to the keywords as described in [Visualization Keywords](#).

Padding

Click **Layout** and expand the **Padding** property. This property is useful for lining up data labels and static labels (which also have this property) in the repeating body of a scorecard or report.



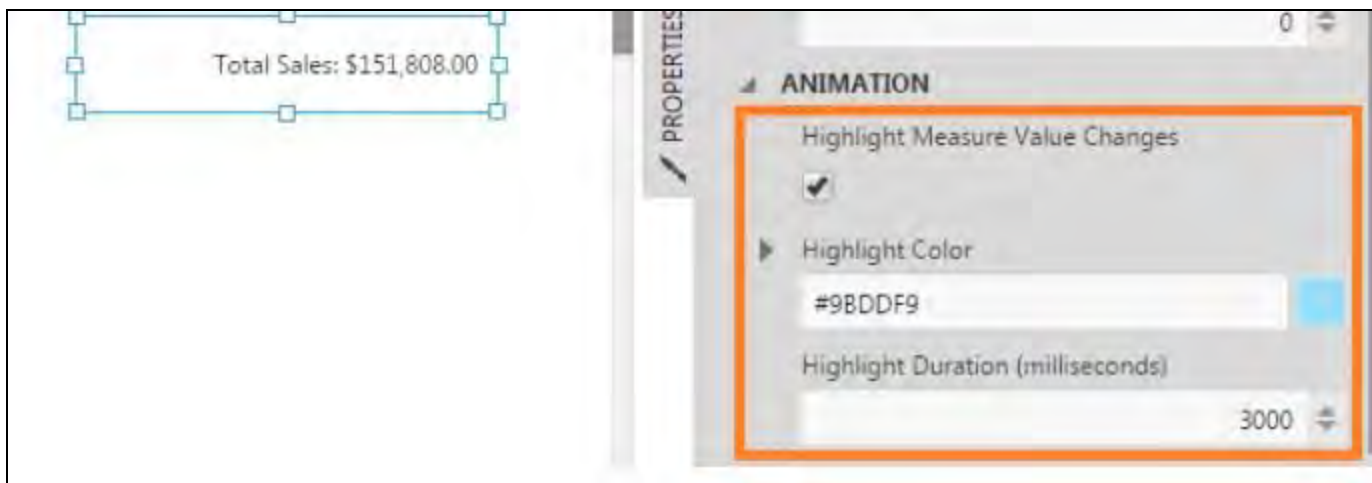
Animation

When a measure displayed by a data label changes value (e.g., at the data source), the data label can be animated with a highlight color for a brief duration. This can help bring the data change to the attention of the user.

To use this feature, open the **Data Analysis Panel** for the data label and click **Edit**. Make sure the **Bypass Data Cache** option is checked so that the latest data is used.

Go to **Properties** for the data label and set a value for the `Data Auto Refresh Interval (seconds)` property, such as 10 seconds.

Then go to the **Look** section and scroll down to find the `Highlight Measure Value Changes` property. Enable it and optionally change the highlight color or duration of the animation (i.e., duration for the highlight color to appear and then fade away in milliseconds).



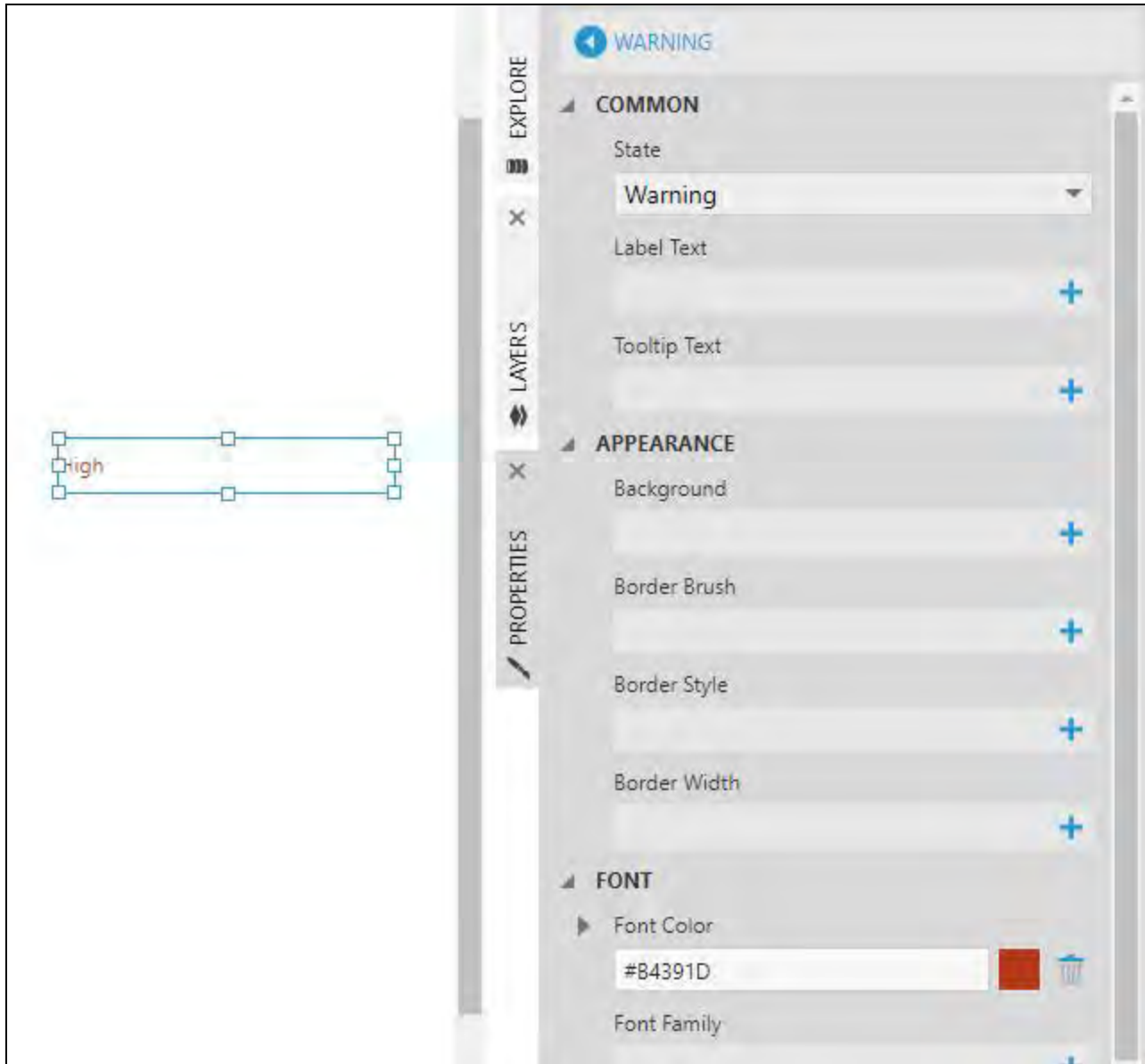
Switch to **View** mode and effect a change in the data to see the animation. The data label will be highlighted in color which then fades away after the specified duration.

Country	Sales	Total Sales: \$152,161.00
Brazil	9,142.0000	
Canada	65,352.0000	
China	26,578.0000	
Egypt	4,077.0000	
France	47,011.0000	

State Styles

Go to **Look** Properties to edit or add a state style for a data label when you've defined [states in your metric set](#).

Use these properties to change various properties for the data label when the data falls within each state, including the background, border, font, or the displayed text.



Allow HTML Formatting

By default, if your data contains HTML tags, such as `<b>` or `<i>`, these will be displayed as just tags in the data label and not interpreted as HTML elements.

If you want the HTML tags to be rendered as HTML by the browser, or if you want to enter your own HTML formatting into the `Text` property, go to **Properties** for your data label and enable the **Allow HTML Formatting** option.

Data Brushing

Go to **Look** Properties to edit or add background and font color. These properties will be applied when a user hovers over the data label during view mode.



Fitting Text

Text that does not fit in the data label is set to Truncate using an ellipsis (...) by default. This can be changed using the `Overflow` property in the Text tab to other options, such as *Hidden*.





- Archive of documentation for Logi Symphony v24

In [reports, scorecards, and small multiples](#), the `Auto Expand To Fit` property is available in the Main tab of the Properties window.

When this option is enabled, the data label can automatically expand in height as necessary to fit longer text, and push content below it down to prevent overlap.

For more information, see:

- [Symphony Managed Reports](#)
- [Create Small Multiples](#)

Add a Legend

This applies to: *Managed Dashboards, Managed Reports*

A legend is used to identify data in visualizations by its color, size, or other distinguishing features.

Simply connect one or more data visualizations to a legend and they will automatically display a table of symbols and descriptions to help users understand what is being displayed.

Related video: [Using a Legend](#).

Elements of a Legend

The figure below shows the main elements of a legend. By default, the background of a legend is transparent, and no border is visible.

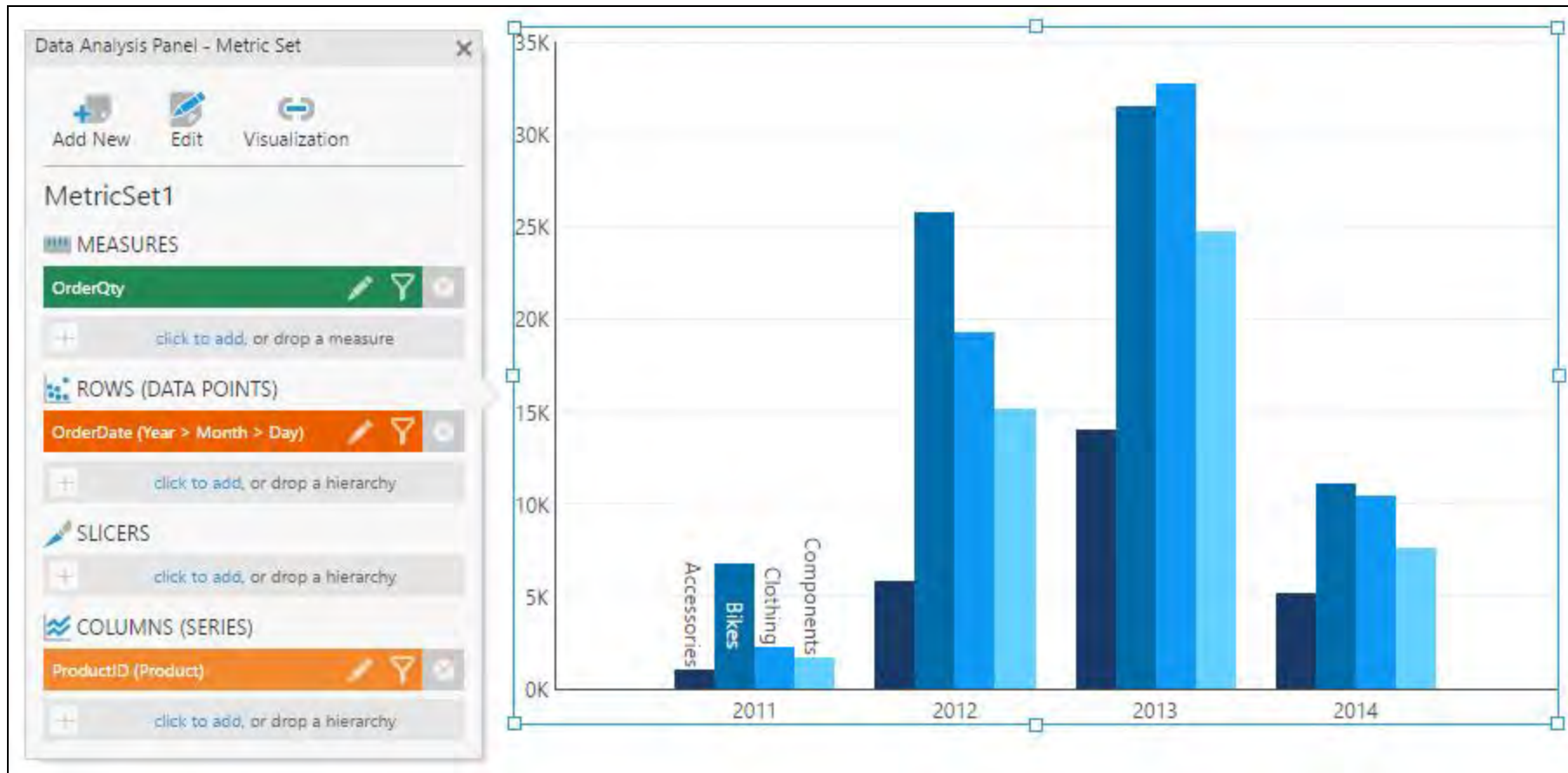


Add a Legend For a Chart

As an example, consider a metric set configured as follows:

- Measures: **OrderQty**
- Rows: **OrderDate**
- Columns: **Product** hierarchy

When this metric set is added to a dashboard, a bar chart appears showing multiple bar series. Each bar series (bars with the same color) corresponds to a different product category, such as Bikes or Accessories.

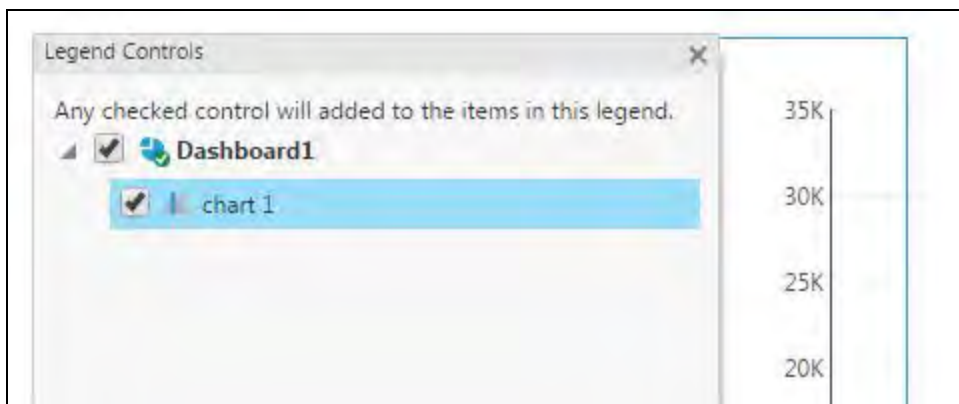


In the figure above, you'll notice that the bar chart displays the name of each product category for the first set of data points. This is the default behavior for the chart when there is no legend attached.

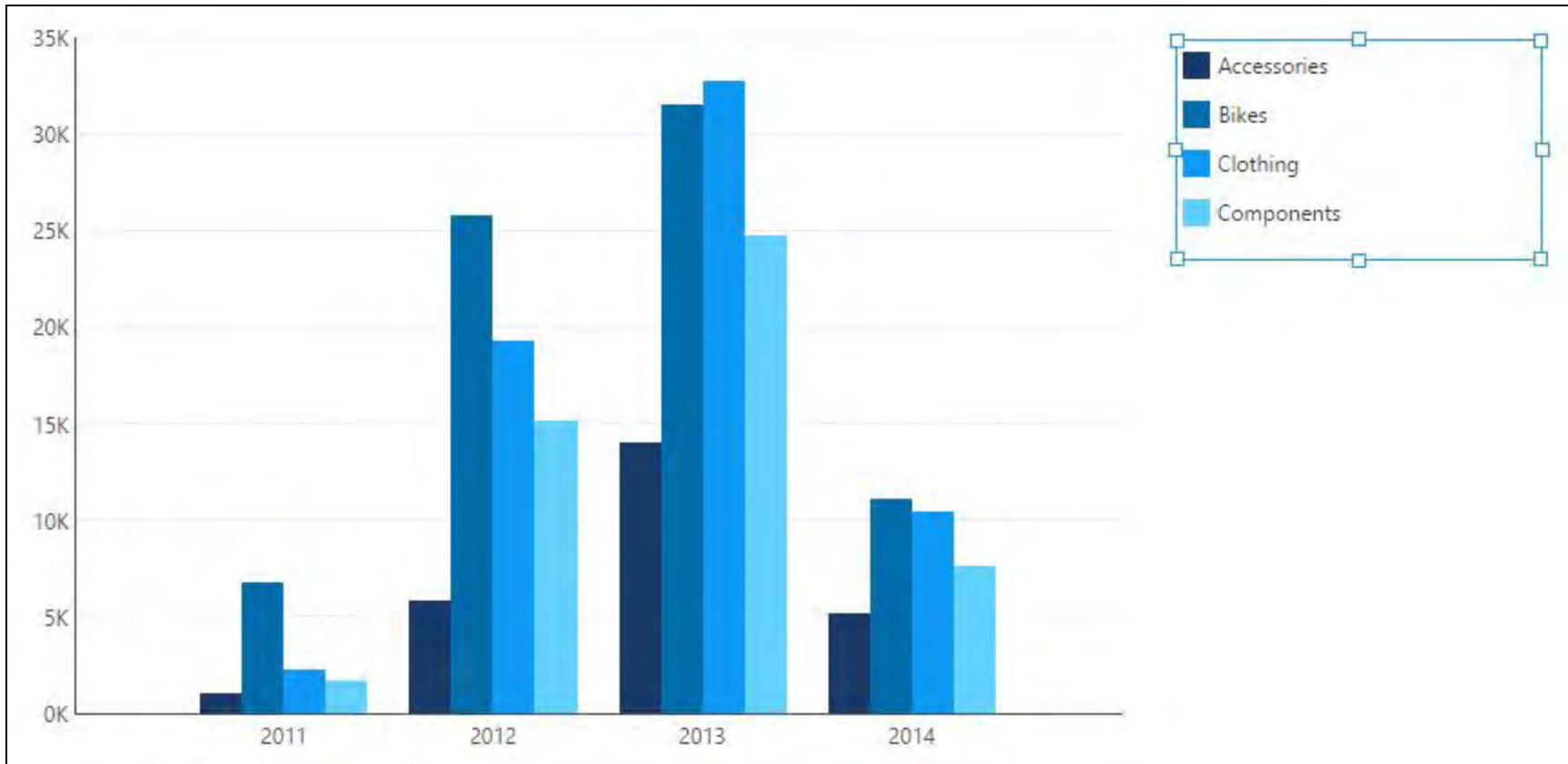
To connect a legend to a visualization, click to select it, then choose **Data Visualization** in the toolbar and then **Legend** (you may need to scroll to the right).



You'll see a pop-up panel asking you to choose one or more data visualizations to associate with the legend. The visualization you had selected should already be checked. You can connect to multiple visualizations to use one legend for all of them. Click the x button when finished.



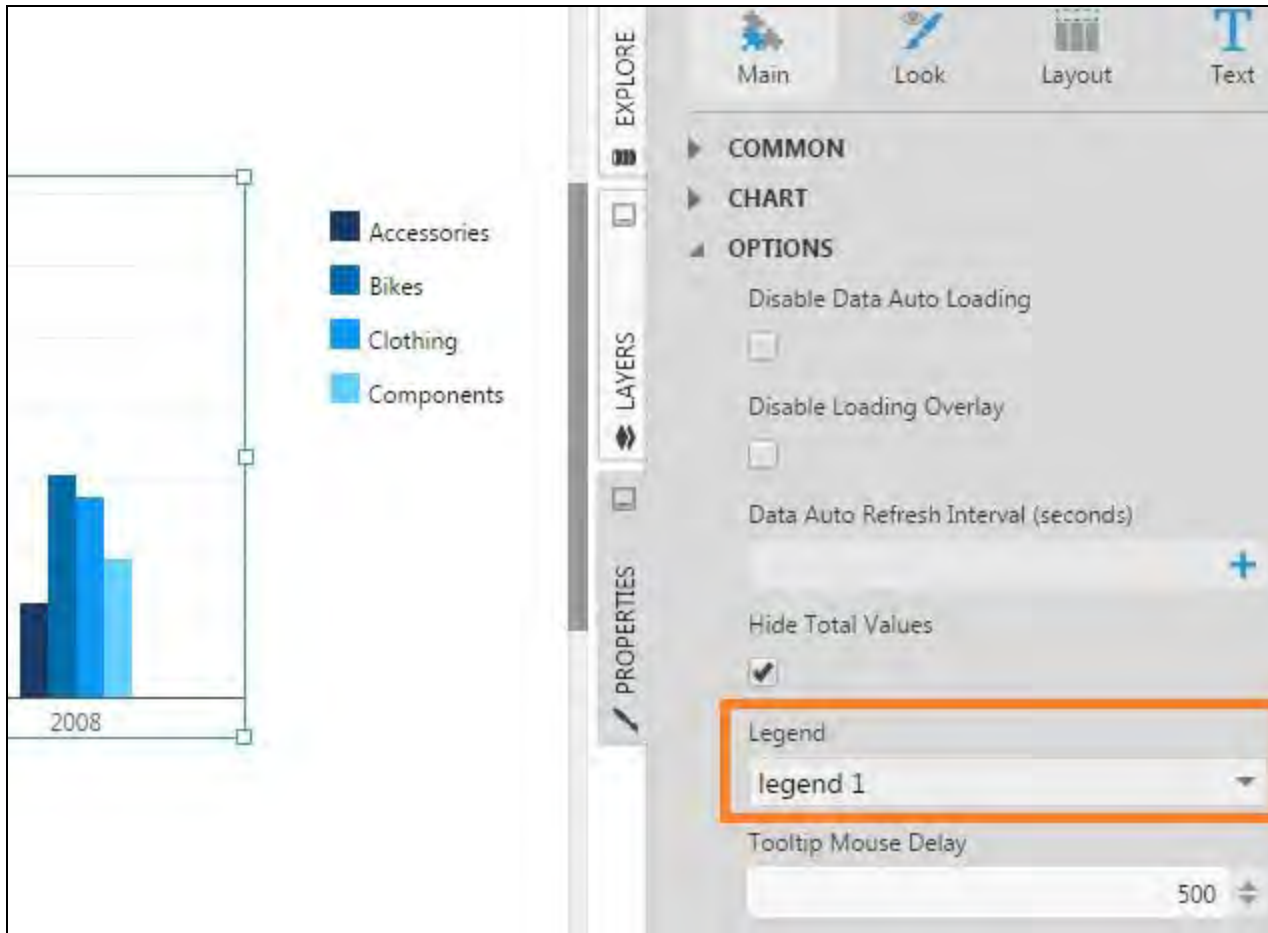
The legend now displays items corresponding to the chart. You can reposition or resize the legend as you like (scrollbars will appear as needed).



Notice that the bar chart no longer displays the product category names for the first set of data points. This is because the chart is now connected to a legend.

Legend-Related Properties

Select the **bar chart** and go to the Properties window. Scroll down and look for the Legend property under Options. You'll see that it is set with the name of the target legend.

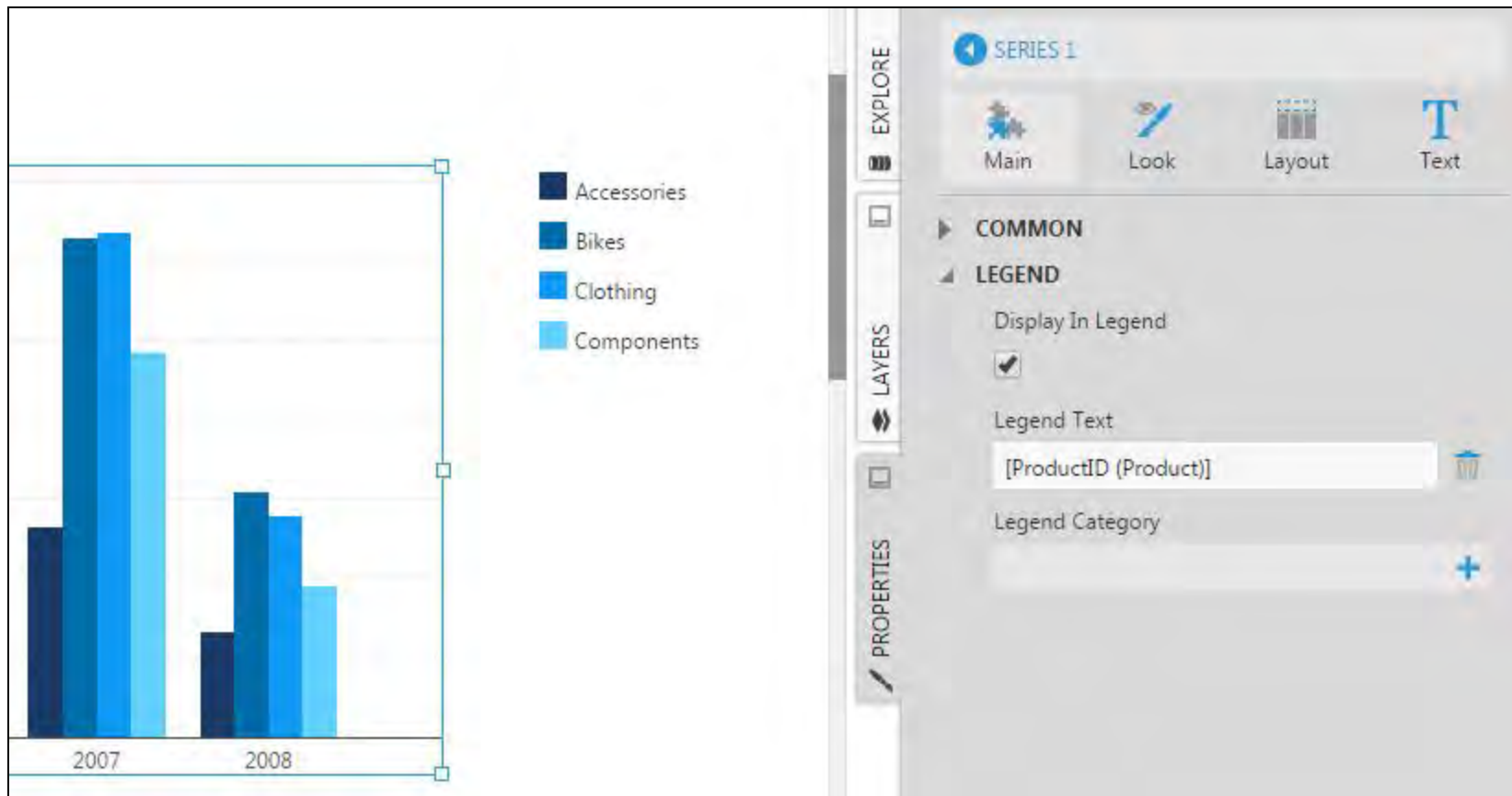


Most visualizations have additional legend-related properties on whichever elements are identified in the legend, for example, in the properties for a chart *series*.

The Display In Legend property determines whether auto-generated legend items should be displayed for this chart series.

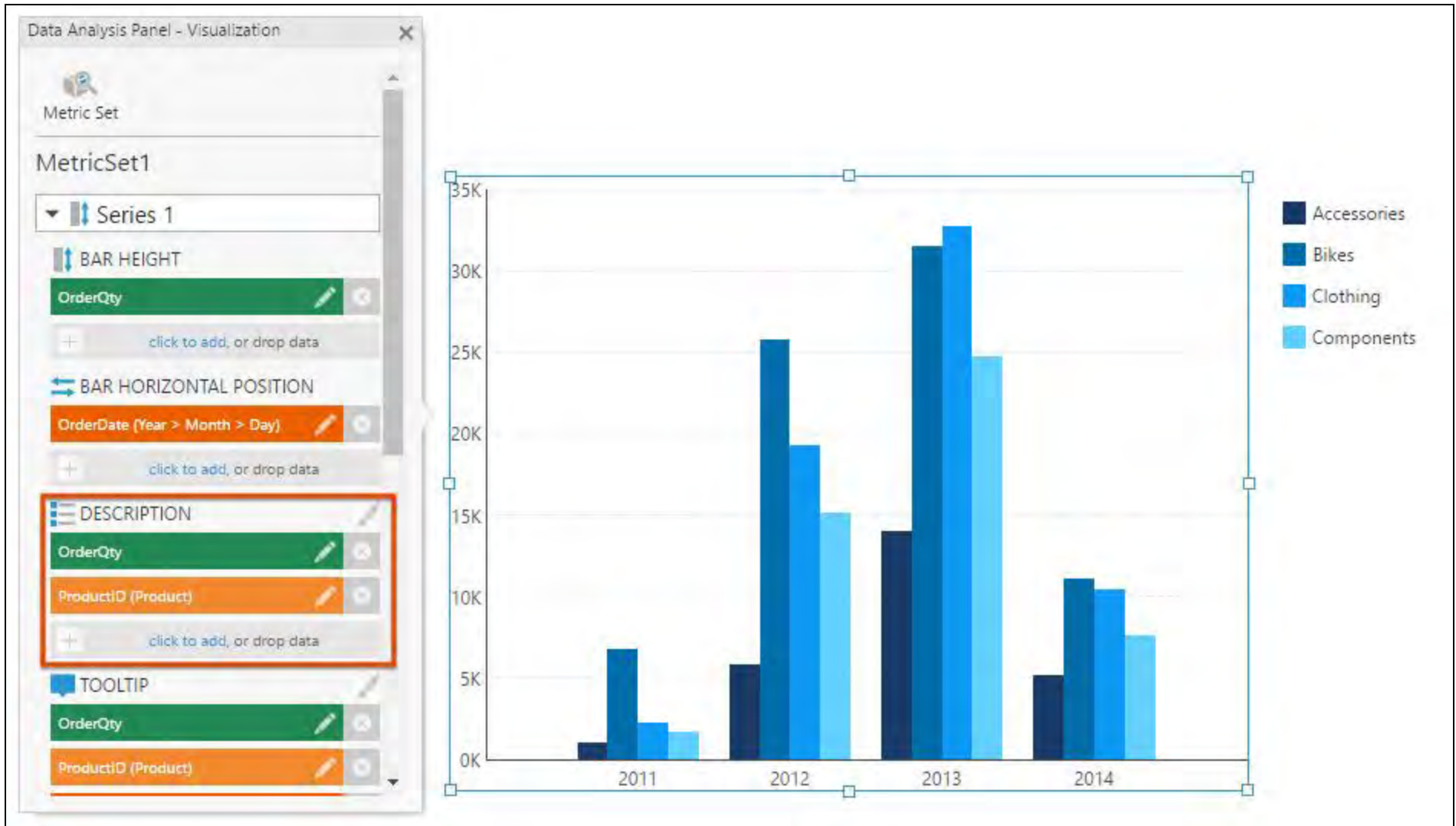
The Legend Text property determines the text for each auto-generated legend item. It may contain the name of a measure, or a placeholder keyword for a Columns hierarchy. You can edit this value and insert some additional text, which will be reflected in the legend items.

Use the Legend Category property to set the text for a category heading which will appear above the auto-generated legend items for this chart series.



Visualization Tab Description

Right-click (or long-tap) on the **bar chart** to open its Data Analysis Panel. Click **Visualization** in the top-right, and then scroll down to find Description for the chart series. You can assign data here or change what data is assigned to determine how this chart will automatically label its legend items for this series.



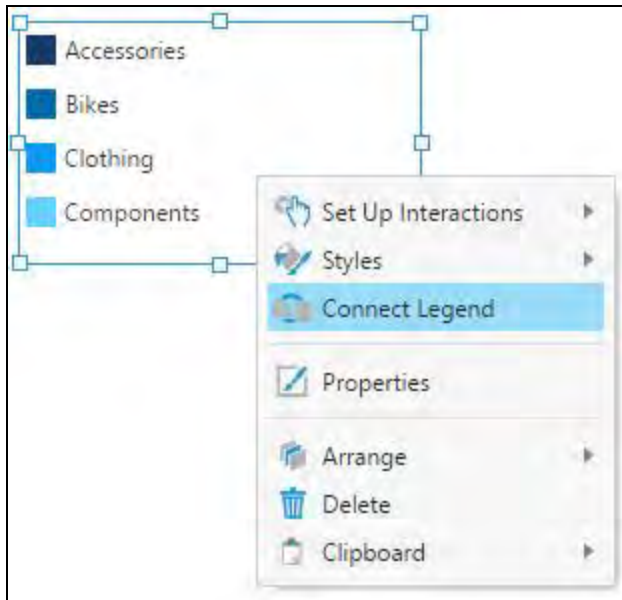
Category Headings

Multiple data visualization controls can be connected to a single legend control on the canvas. For example, two charts can have the Legend property point to the same legend. In this case, some of the items in the legend correspond to one chart, while the remaining items correspond to the second chart. To help group or separate legend items, you can use category headings.

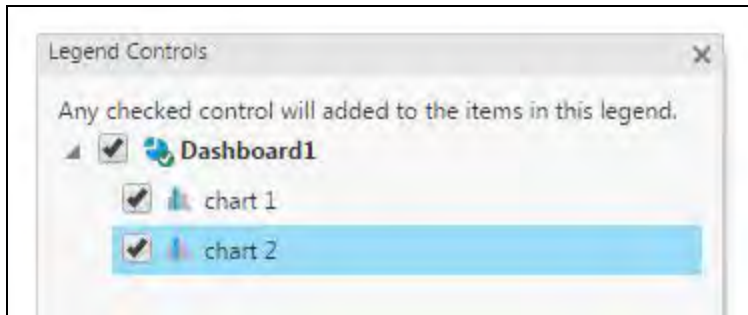
As an example, add a second metric set to the dashboard, as shown below.



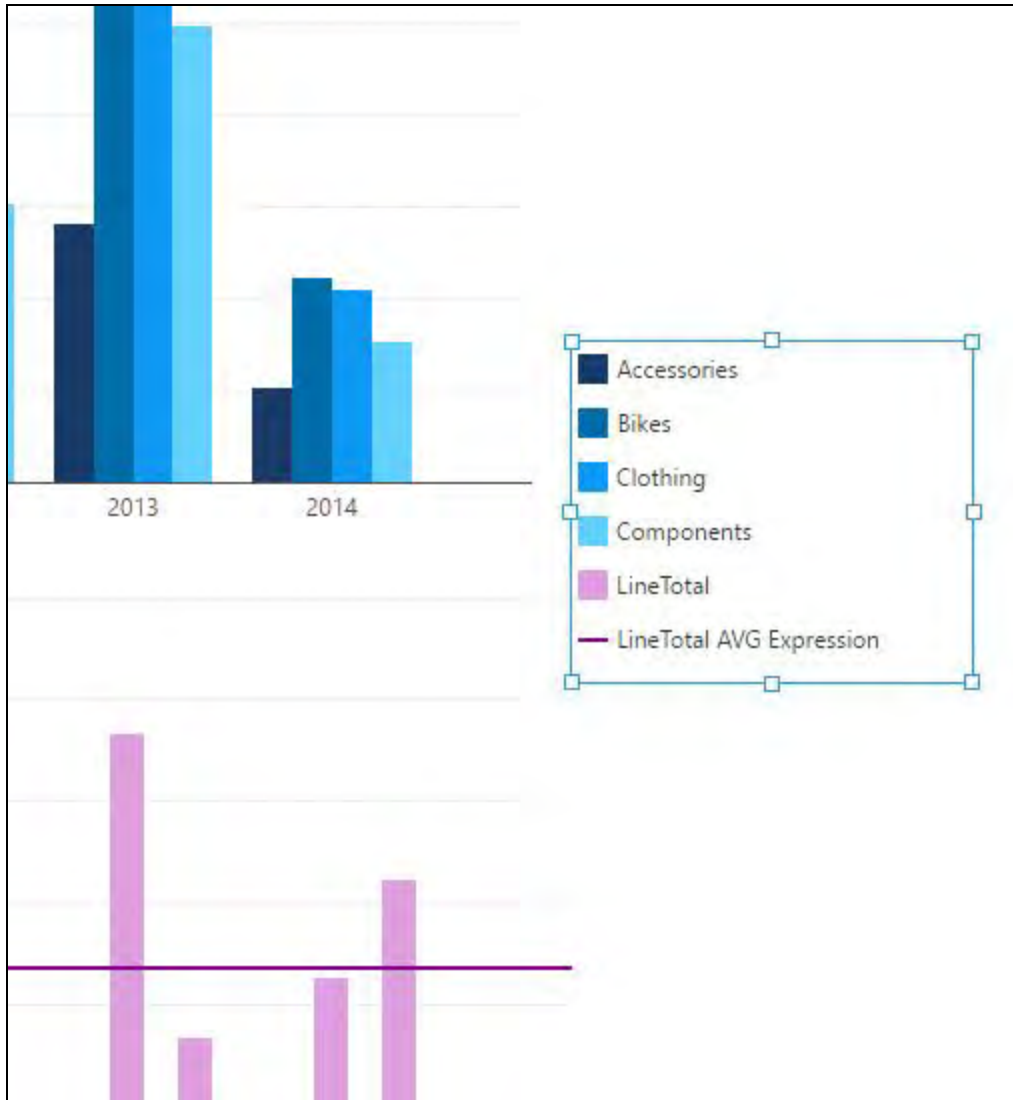
To connect this second chart to the same legend, right-click (or long-tap) on the **legend** and select **Connect Legend** from the menu.



Select the **check box** for the second chart.



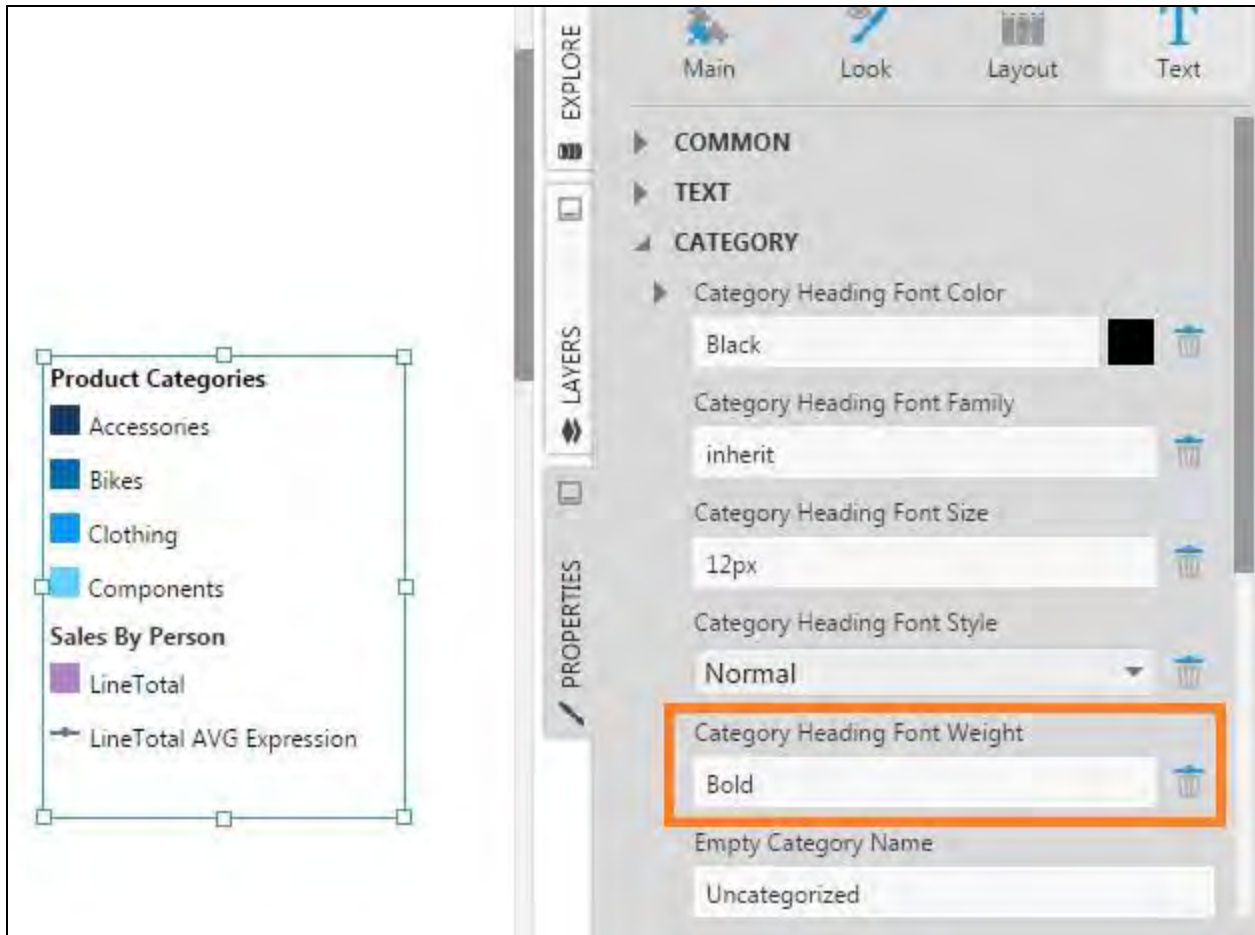
Two legend items corresponding to the second chart are automatically appended to the existing legend (LineTotal and LineTotal AVG Expression).



Since legend items from both charts are grouped together, it's not easy to see which items correspond to which chart.

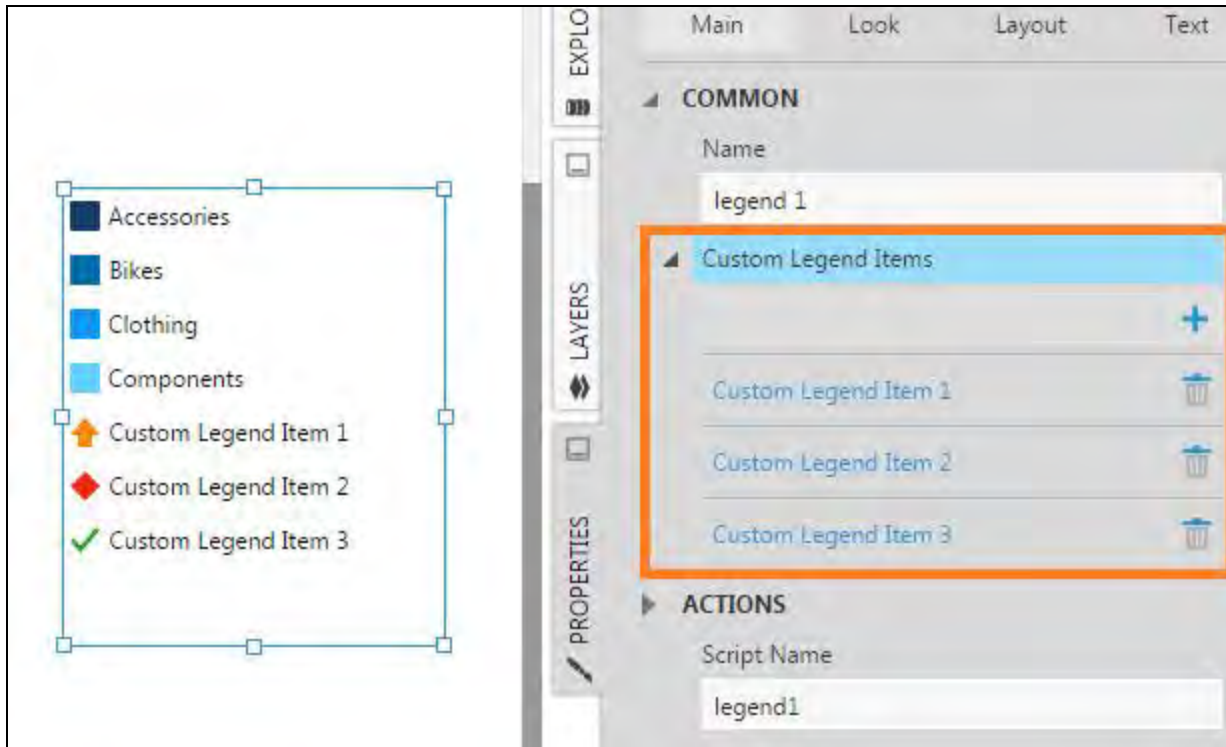
To address this with category headings, go to each chart's properties, edit the series, and set their Legend Category properties.

The category headings appear in the legend just above their legend items. You can select the legend and go to its properties to change the appearance or layout of the category headings. For example, align the headings on the left and set the font weight to bold.

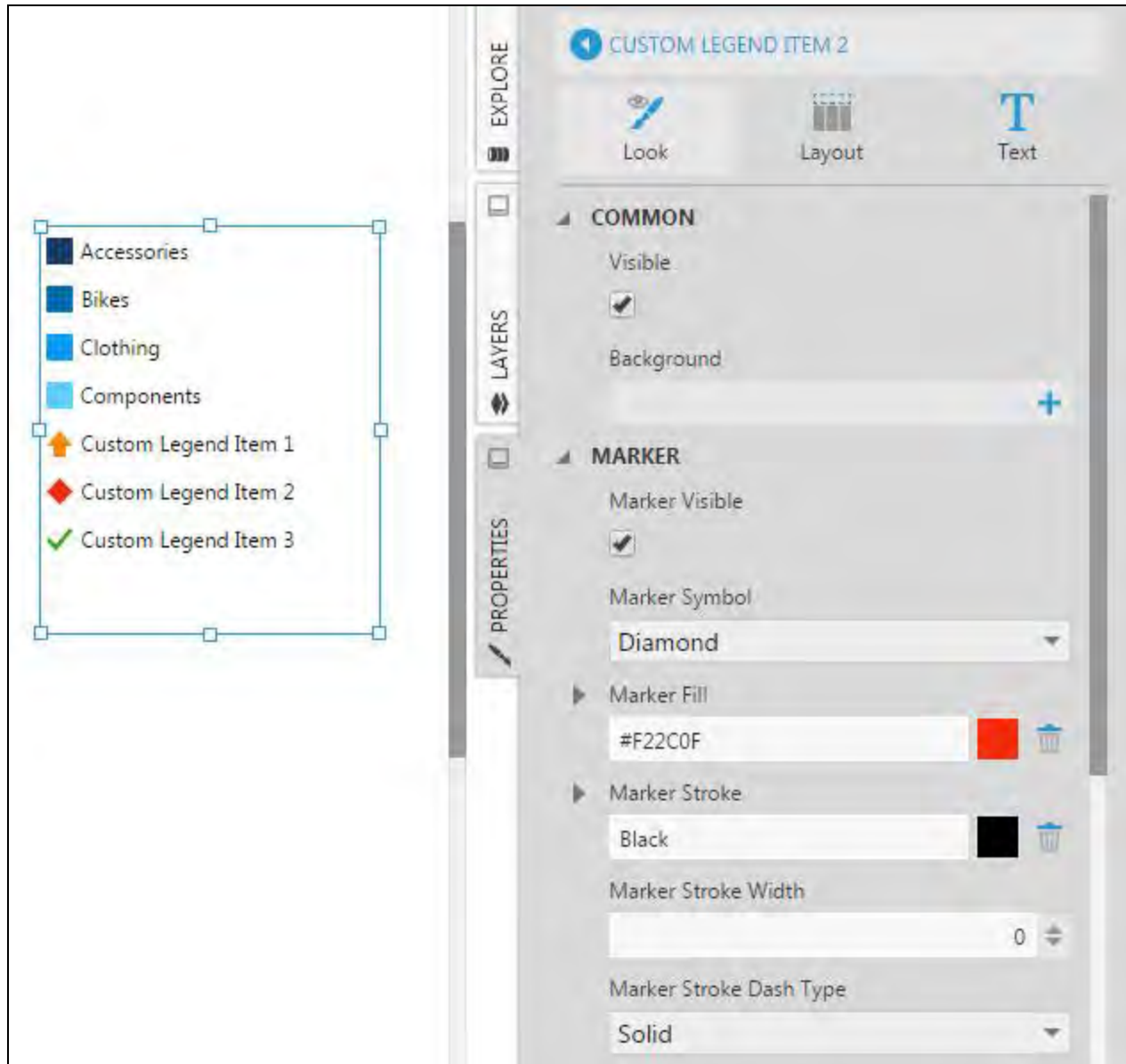


Custom Legend Items

In the **Properties** window with a legend selected, you can add Custom Legend Items in the **Main** tab, each with the text and appearance of your choice.



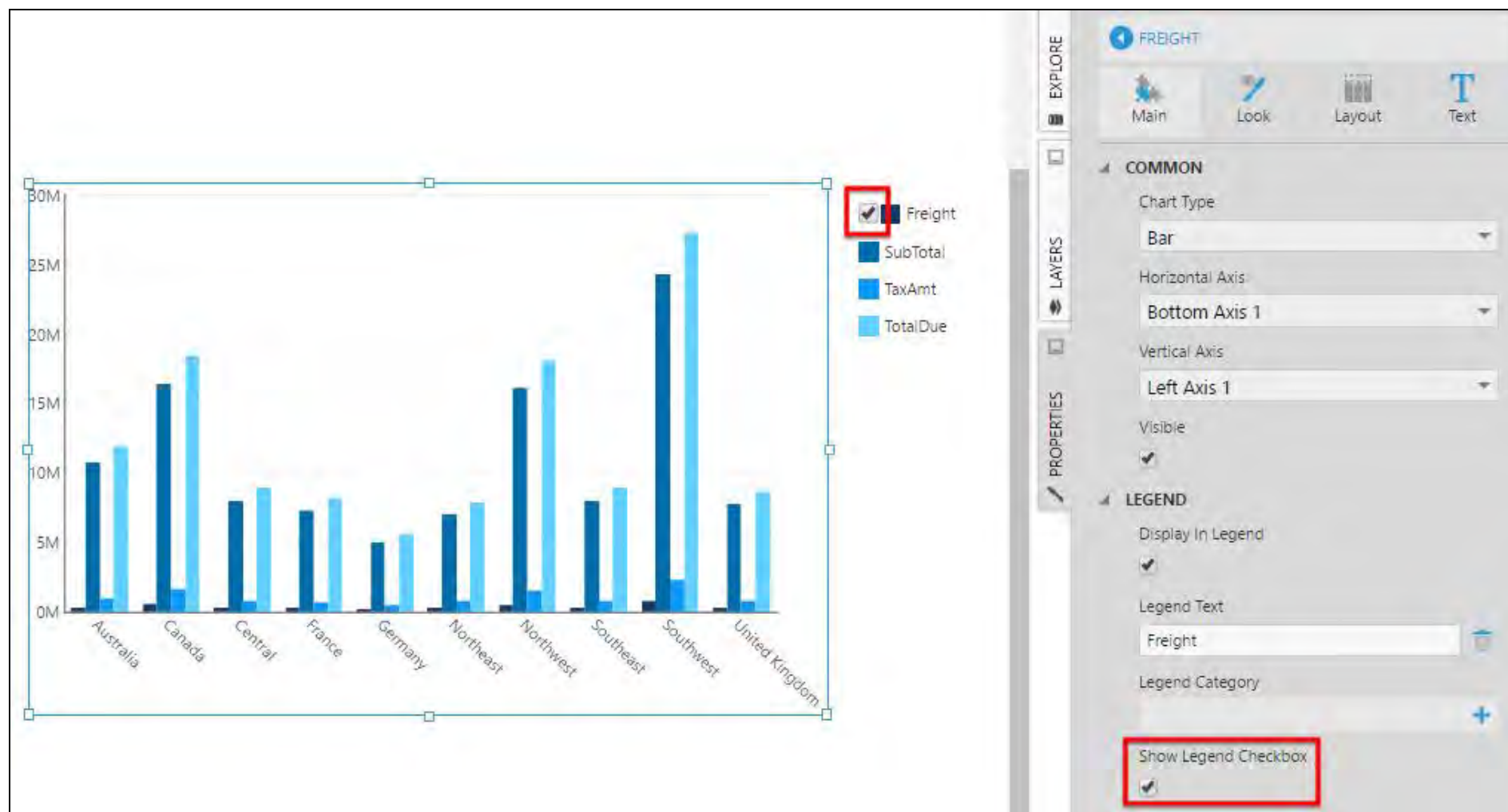
Each custom legend item can have its own Marker Symbol, Marker Fill color, and other property settings.



The screenshot displays the Logi Symphony v24 interface. On the left, a legend box contains several items: 'Accessories' (dark blue square), 'Bikes' (blue square), 'Clothing' (light blue square), 'Components' (light blue square), 'Custom Legend Item 1' (orange arrow), 'Custom Legend Item 2' (red diamond), and 'Custom Legend Item 3' (green checkmark). The right panel, titled 'CUSTOM LEGEND ITEM 2', shows the configuration options for this item. The 'EXPLORE' tab is active, and the 'Text' sub-tab is selected. The 'COMMON' section includes 'Visible' (checked) and 'Background' (with a plus icon). The 'MARKER' section includes 'Marker Visible' (checked), 'Marker Symbol' (set to 'Diamond'), 'Marker Fill' (set to '#F22C0F' with a red color swatch), 'Marker Stroke' (set to 'Black' with a black color swatch), 'Marker Stroke Width' (set to 0), and 'Marker Stroke Dash Type' (set to 'Solid').

Legend Item Check Boxes

Legend items can have check boxes displayed beside them. You can use these with chart series to allow them to be shown or hidden, by editing the properties of the series and selecting **Show Legend Checkbox**.



Switching to [view mode](#), you can now check and uncheck these series from the legend to show or hide them in the chart.



Note: This legend check box can't be shown if the series you're editing in the Properties window is grouped into multiple series in the chart by a [Columns hierarchy](#), since filtering is used to hide and show these series instead.

Scripting Check Boxes

When using custom legend items, you can add your own functionality for their check boxes using script rather than rely on the built-in check box functionality shown above for charts. Select the legend's **Script Checkboxes Visible** property.

For example, add three custom legend items with the text *Total Due*, *Tax* and *Freight*, then show or hide the [pointers](#) of a linear gauge with script like the following in the legend's Item Check Changed actions:

```
var item = e.originalEvent.legendItem;
if (item.text == "TotalDue") {
    gauge1.control.pointers[0].isVisible = item.isCheckboxChecked;
} else if (item.text == "TaxAmt") {
    gauge1.control.pointers[1].isVisible = item.isCheckboxChecked;
} else if (item.text == "SubTotal") {
    gauge1.control.pointers[2].isVisible = item.isCheckboxChecked;
}
```

For more information, see:

- Video: [Using a Legend](#)
- [Using Chart Properties](#)
- [Formatting Text](#)
- [Displaying Symbols on a Map](#)

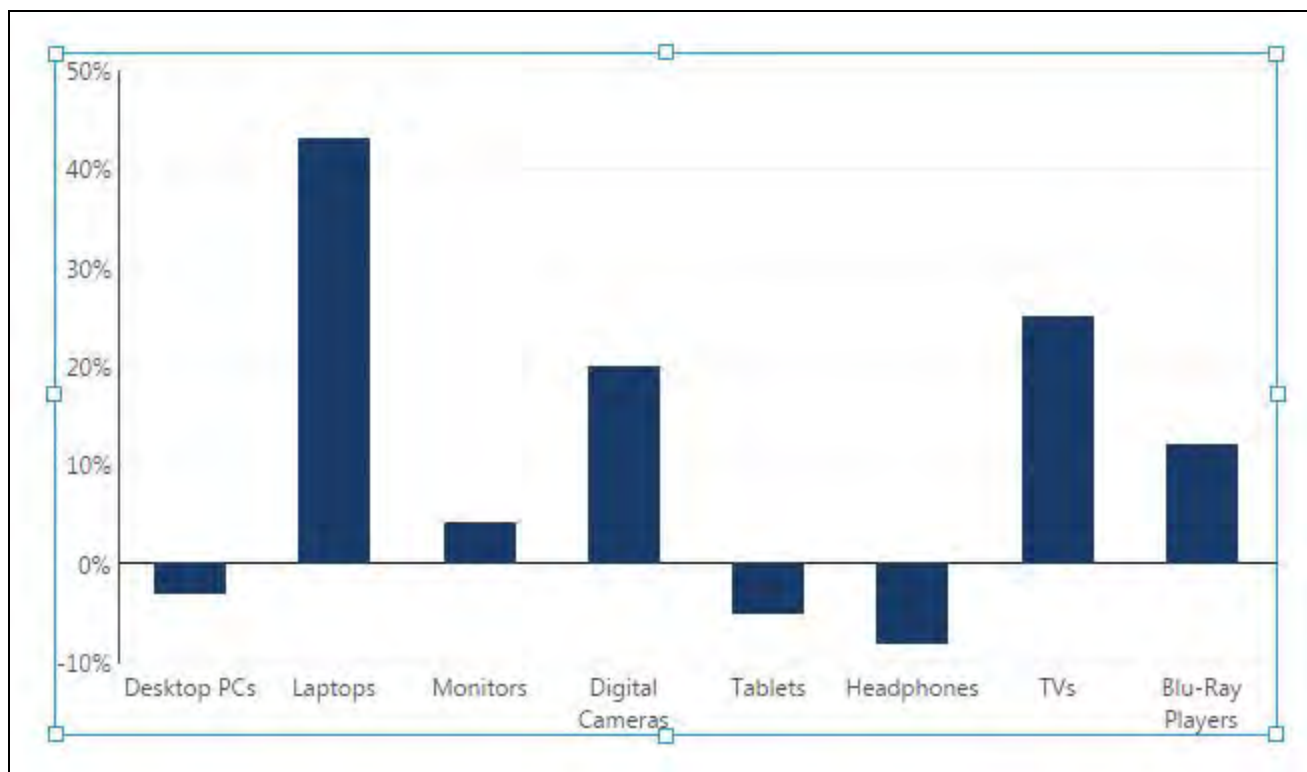
Aligning Data Point Labels Inside Bars

This applies to: *Managed Dashboards, Managed Reports*

Learn how to align chart data point labels inside bars towards the start or the ends of the bars.

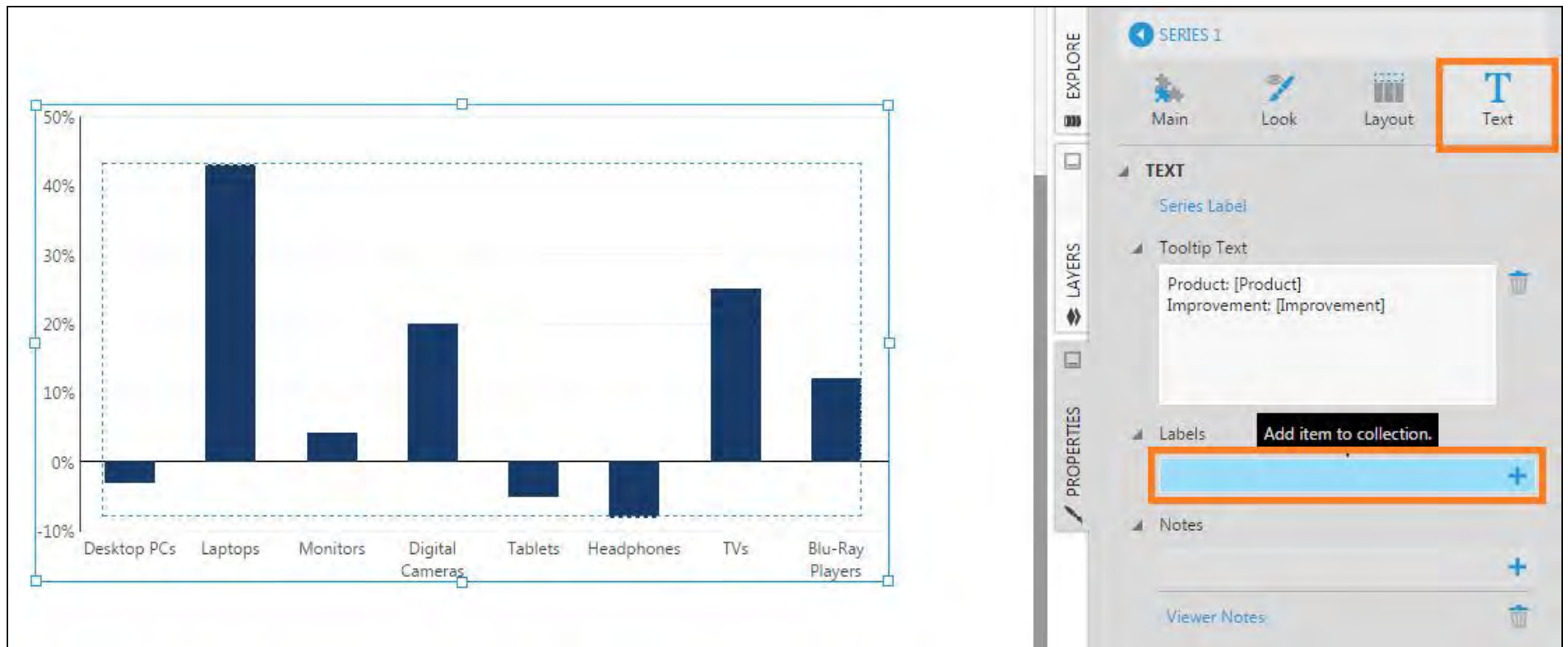
Displaying Labels Inside Bars

Consider the following bar chart which displays vertical bars.



Sub-select the series on the chart (e.g. by left clicking on a **data point**). Go to **Properties** and click **Text** to see the text-related properties of the series.

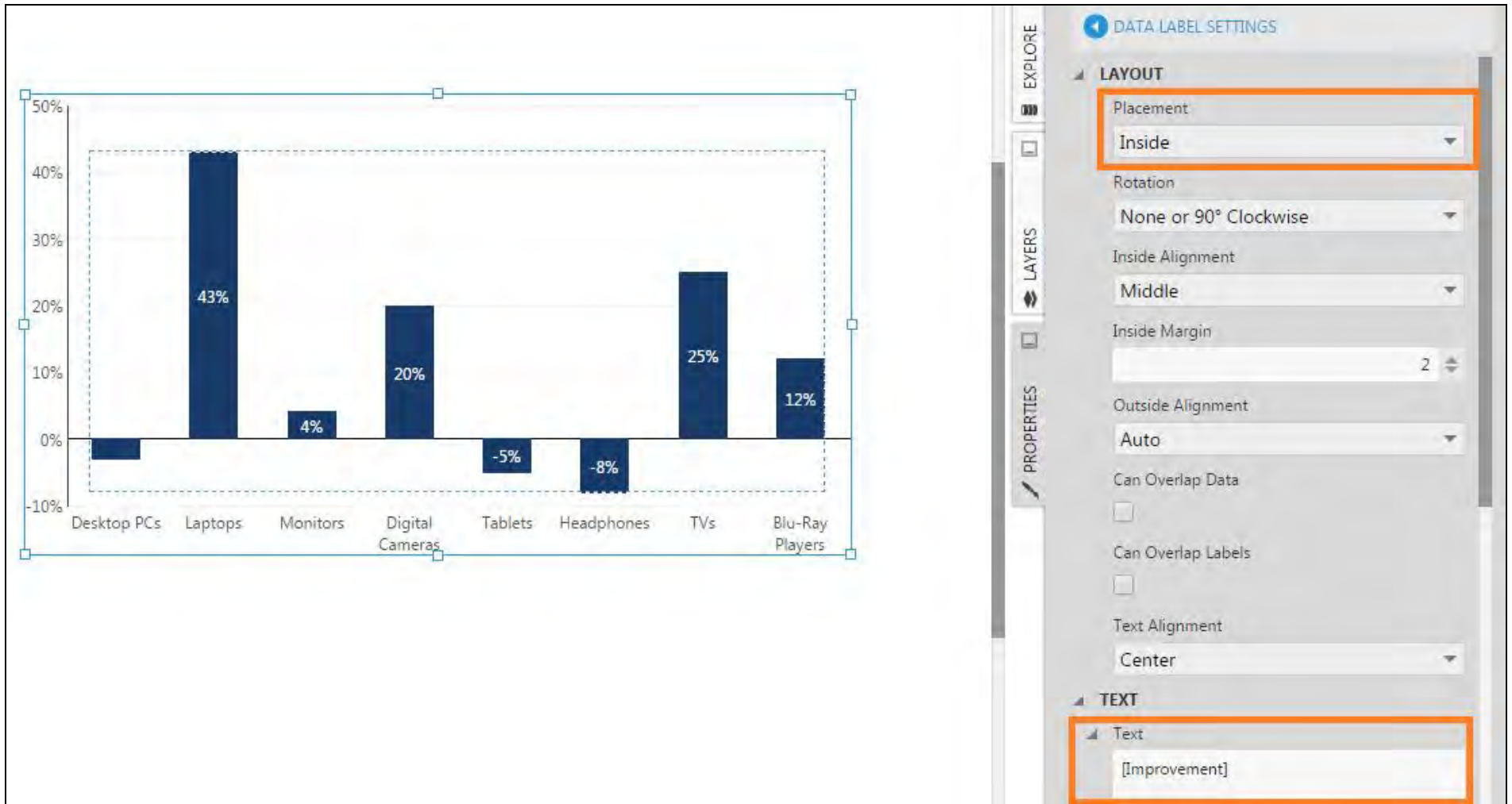
Select the **+** button under **Labels**.



Select the **+** button under **Labels**. A **Data Label Settings** item is added. Select this to edit its properties.



In the Data Label Settings, set the **Placement** to **Inside** and enter the name of the measure in square brackets in the **Text** property. This is a placeholder which will be replaced with the actual measure value at each data point.



Measure values are now displayed within each bar.

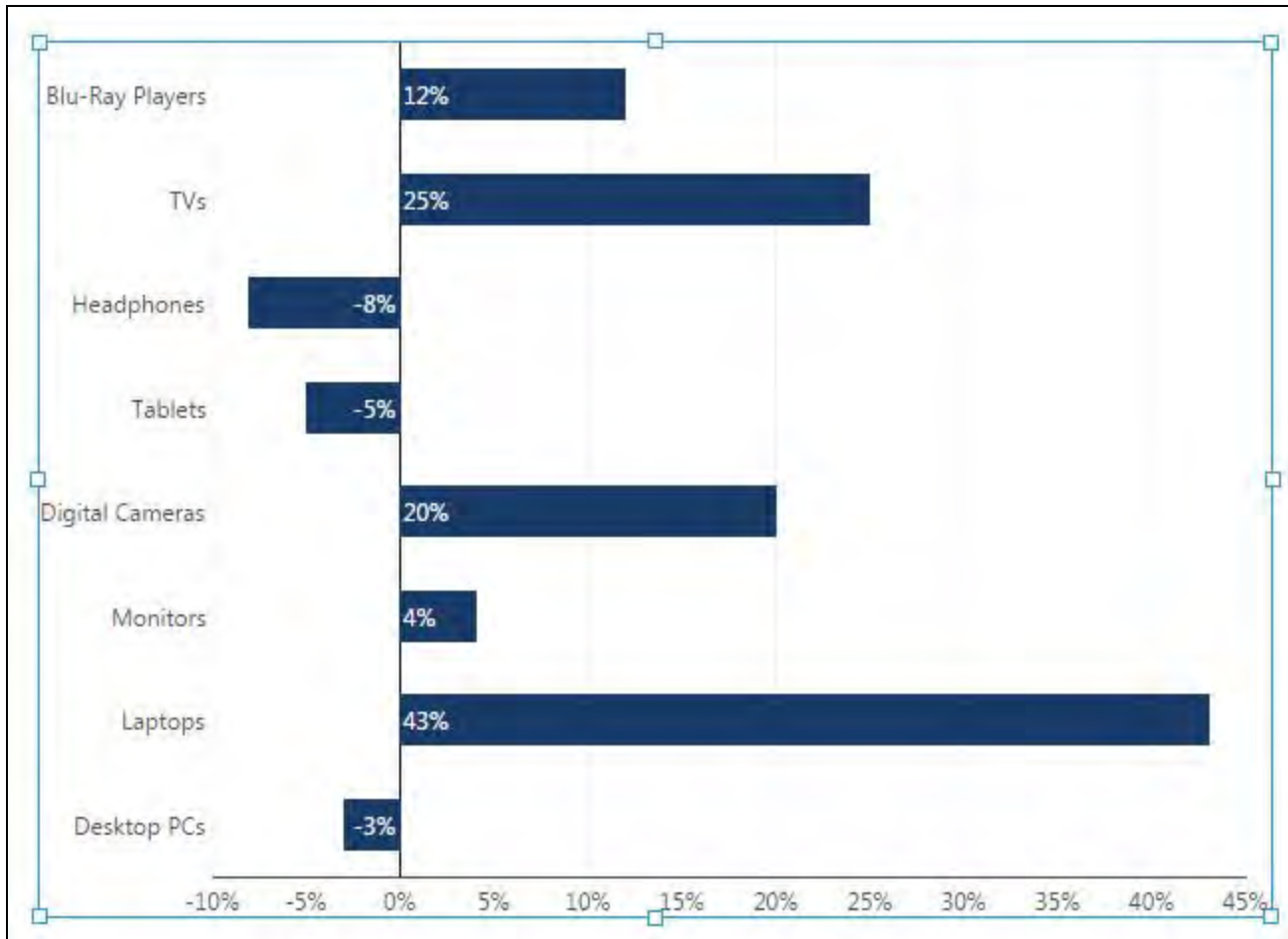
Inside Alignment Toward Start

Data point labels displayed within the bars of a chart can be aligned towards the start of each bar (e.g. towards the zero or minimum value). This applies to bar, area, and range charts, including stacked and curved types.

In the **Data Label Settings** properties, set the **Inside Alignment** to **Toward Start**.



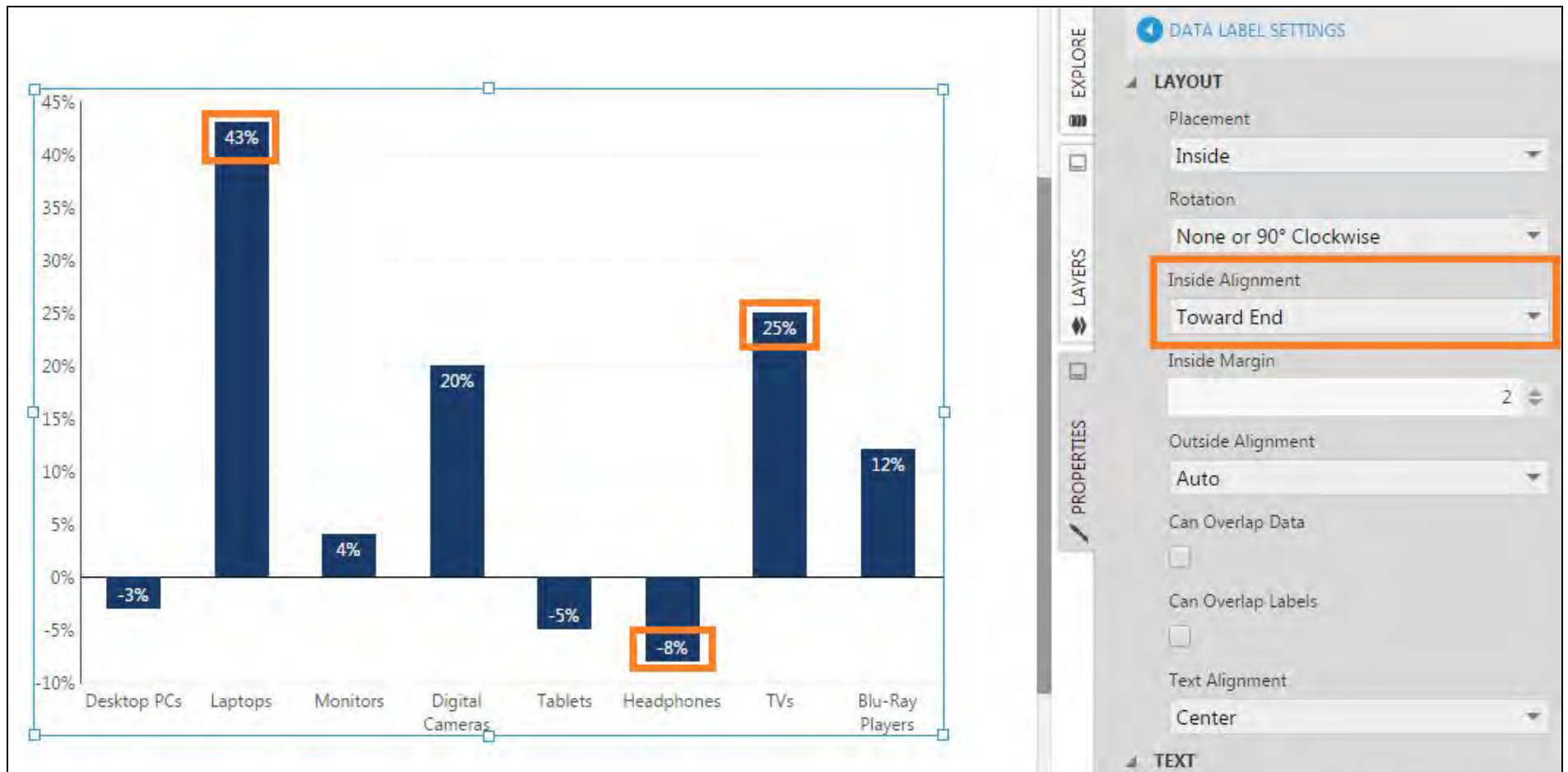
This will also work when the bars are horizontal (i.e. inverted axes). Go to the dashboard designer toolbar and click **Horizontal Bars** to see this.



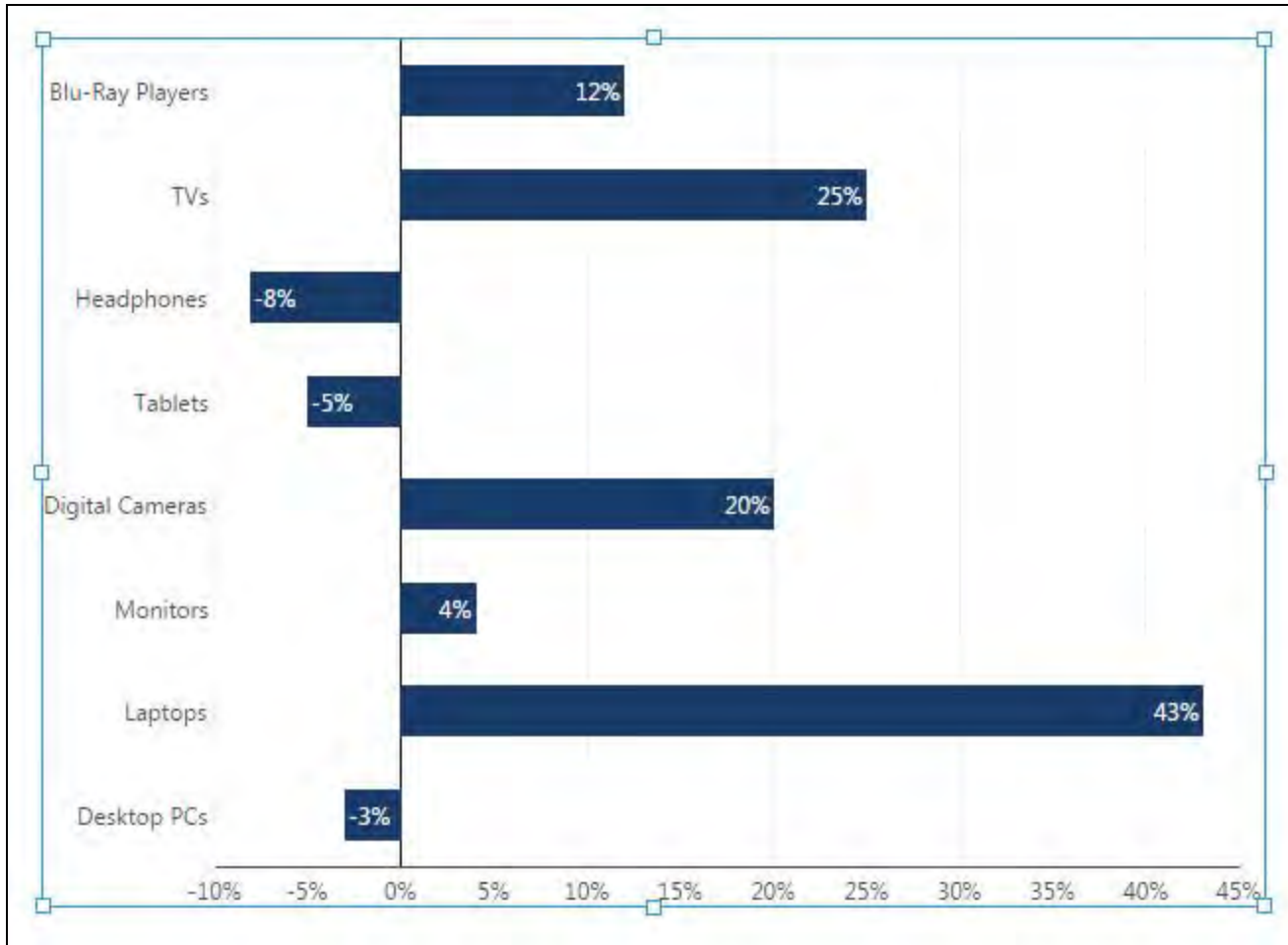
Inside Alignment Toward End

Data point labels displayed within the bars of a chart can be aligned towards the end of each bar (e.g. towards the maximum value). This applies to bar, area, and range charts, including stacked and curved types.

In the **Data Label Settings** properties, set the `Inside Alignment` to **Toward End**.



This will also work when the bars are horizontal (i.e. inverted axes). Go to the dashboard designer toolbar and select **Horizontal Bars** to see this.



For more information, see:

- [Using Chart Properties](#)

Apply Colors to Data Points or Series Using Color Rules

This applies to: *Managed Dashboards, Managed Reports*

Use color rules to apply colors to data points or series based on their values. There are three types of color rules you can apply:

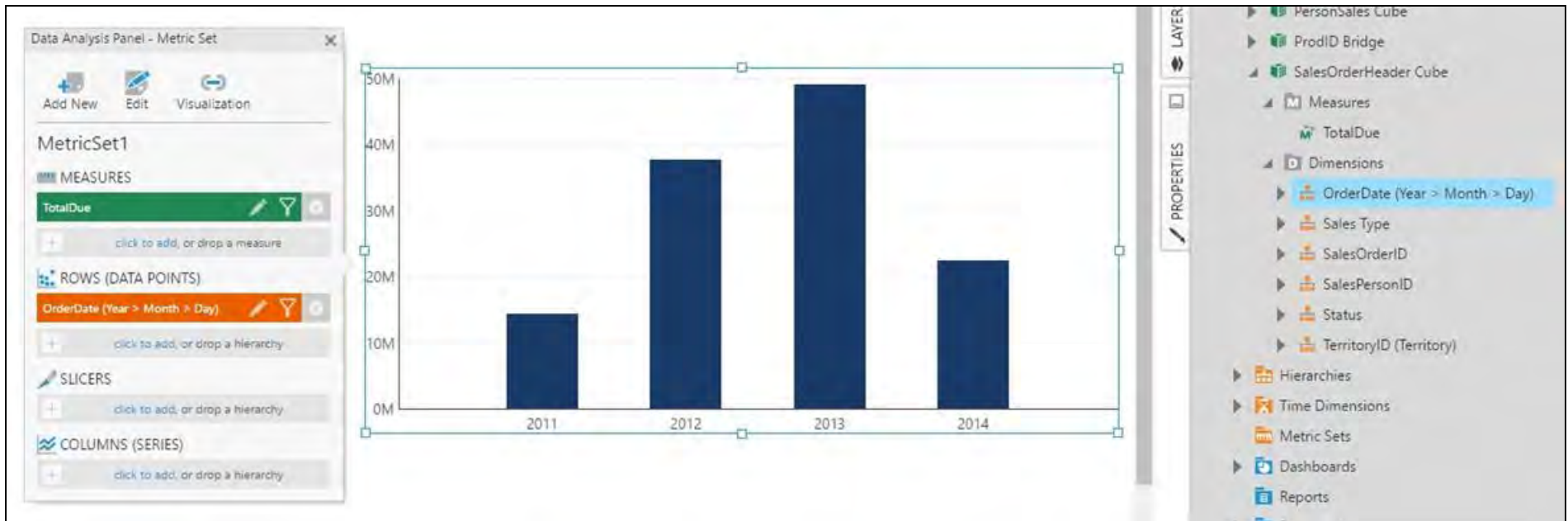
- **Discrete Color Rule** - Applies a specific color to a member of a hierarchy.
- **Auto Color Rule** - Automatically divides the range of data and the set range of colors into ranges of values with colors assigned.
- **Range Color Rule** - Applies a specific color to a set range of values.

Note: The following examples apply to charts, but the settings in the Properties window apply to most other visualizations.

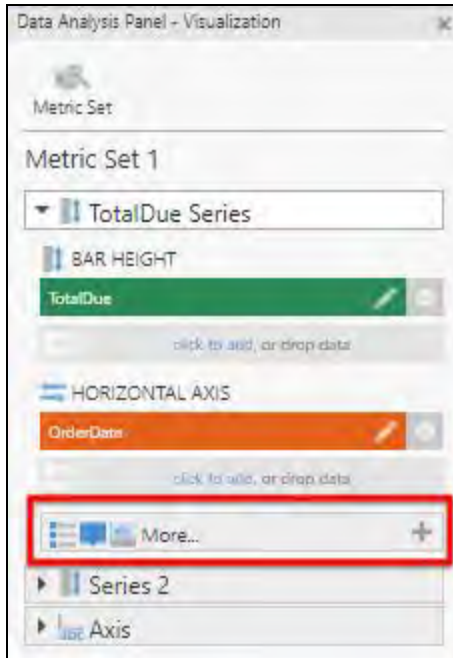
Apply a Discrete Color Rule

Discrete color rules assign what color is used for a particular hierarchy value. You can add multiple to assign different colors for a series of values.

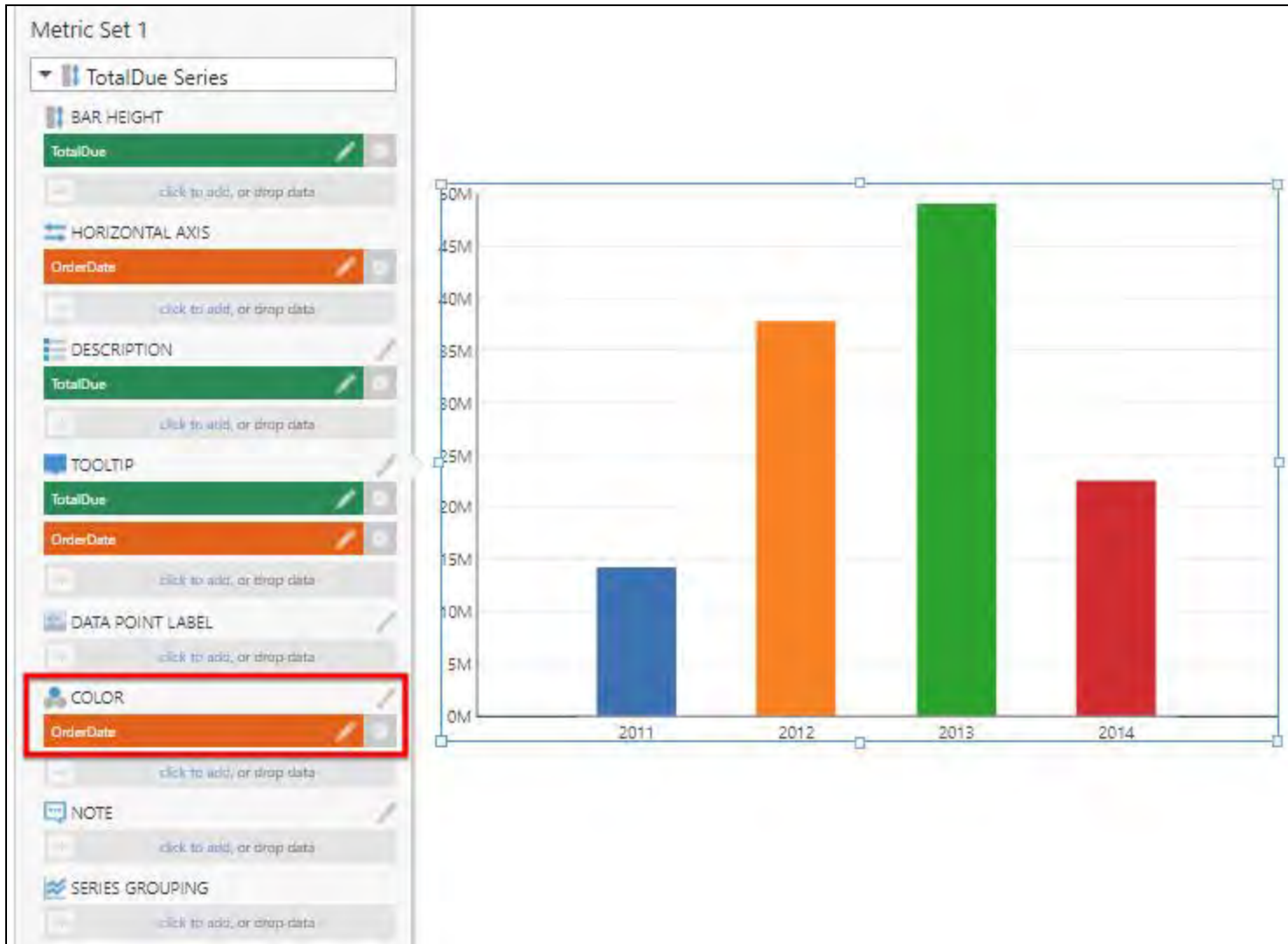
As an example, we will drag **TotalDue** to the canvas as a measure, add **OrderDate** and re-visualize the resulting visualization as a bar chart.



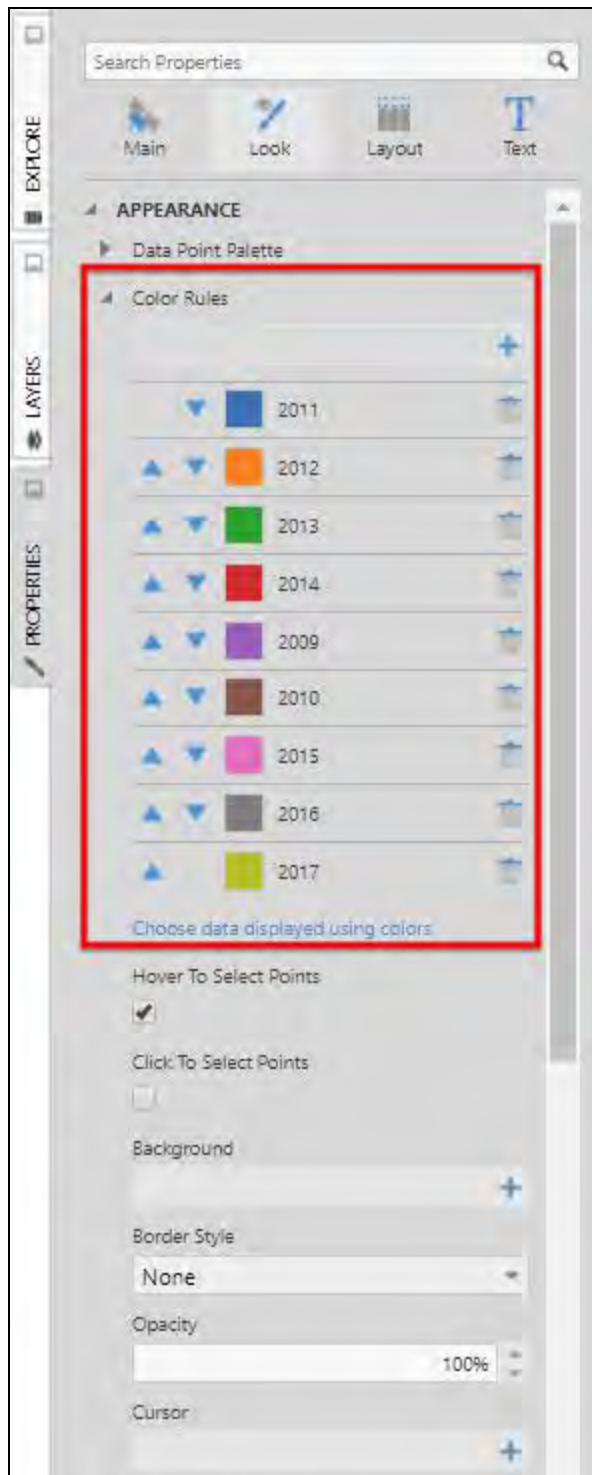
In the Data Analysis Panel, click **Visualization**, then click **More...** under TotalDue Series.



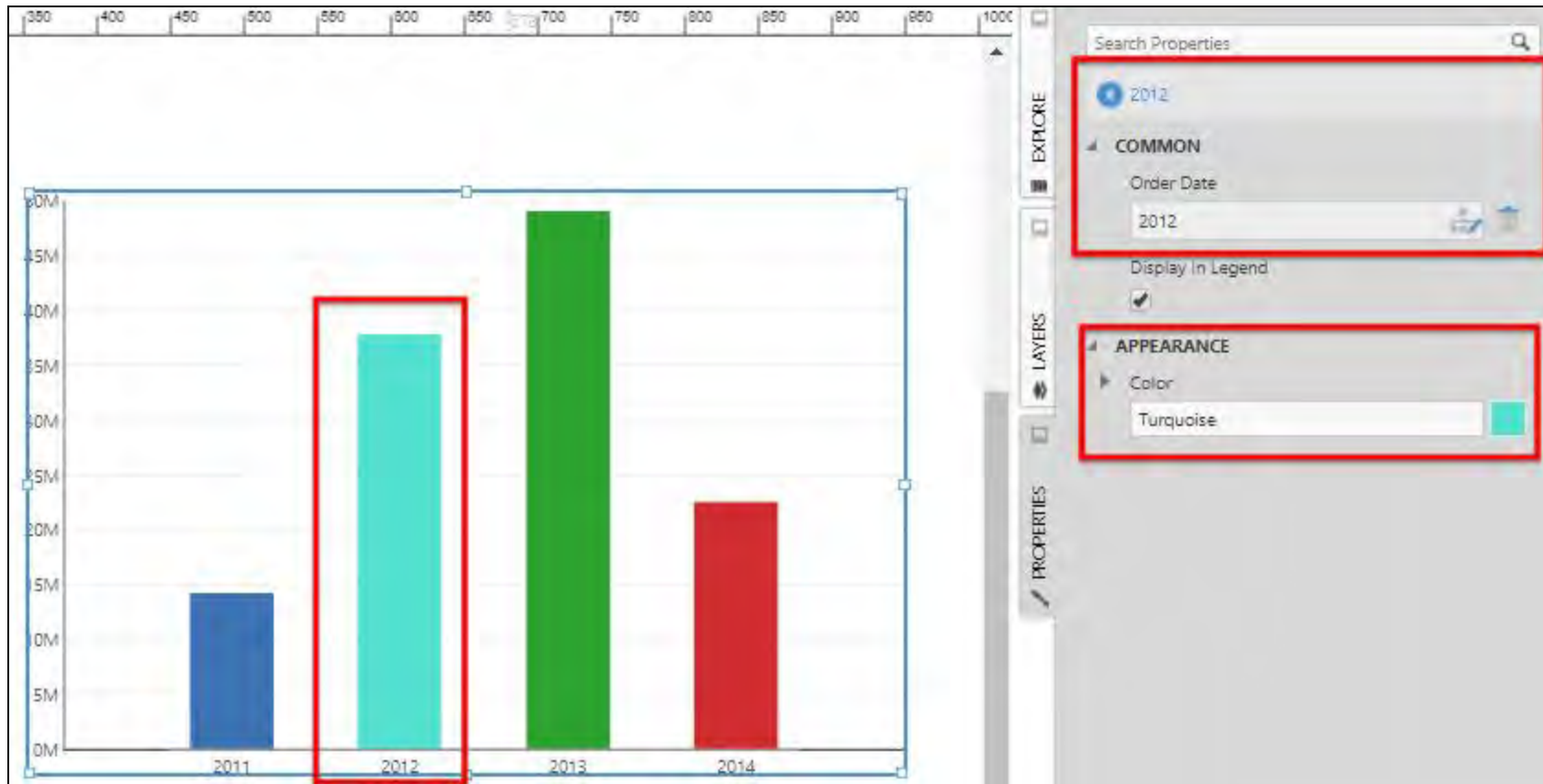
Add the **hierarchy** under Color, which is *OrderDate* in this example. You can click **click to add**, drag the **hierarchy** from the Explore window, or from elsewhere in the Data Analysis panel.



The color rules are now activated and discrete color rules are created for each value. Click the **brush** icon to the right of the Color heading to open the Look properties.



Click the **+** button to add a Discrete Color Rule or click an existing rule (for example, *2012*) to edit it. For each rule, choose the color you want and its corresponding hierarchy value (e.g., *Order Date* value).



Click the **back** button at the top of the properties to go back to the list of color rules.

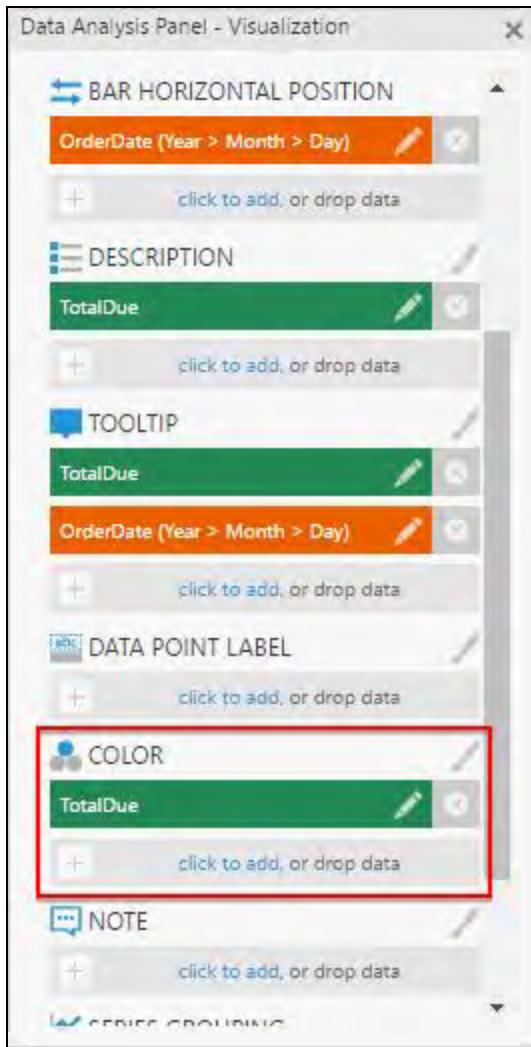


Note: The color rules are applicable for the entire chart. If you use the same hierarchy for the color of another series, the existing color rules will apply to it as well.

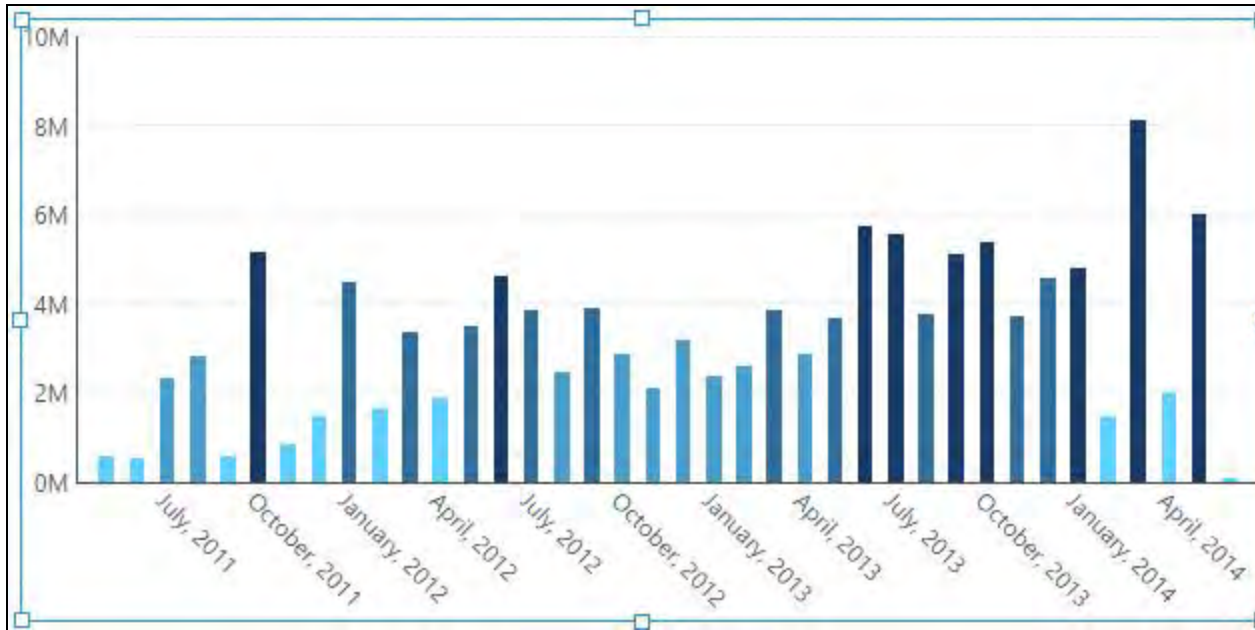
Apply an Auto Color Rule

Auto Color Rules automatically come up with a series of colors applied based on measure values. You can change their settings to determine how different ranges of values are calculated and assigned colors.

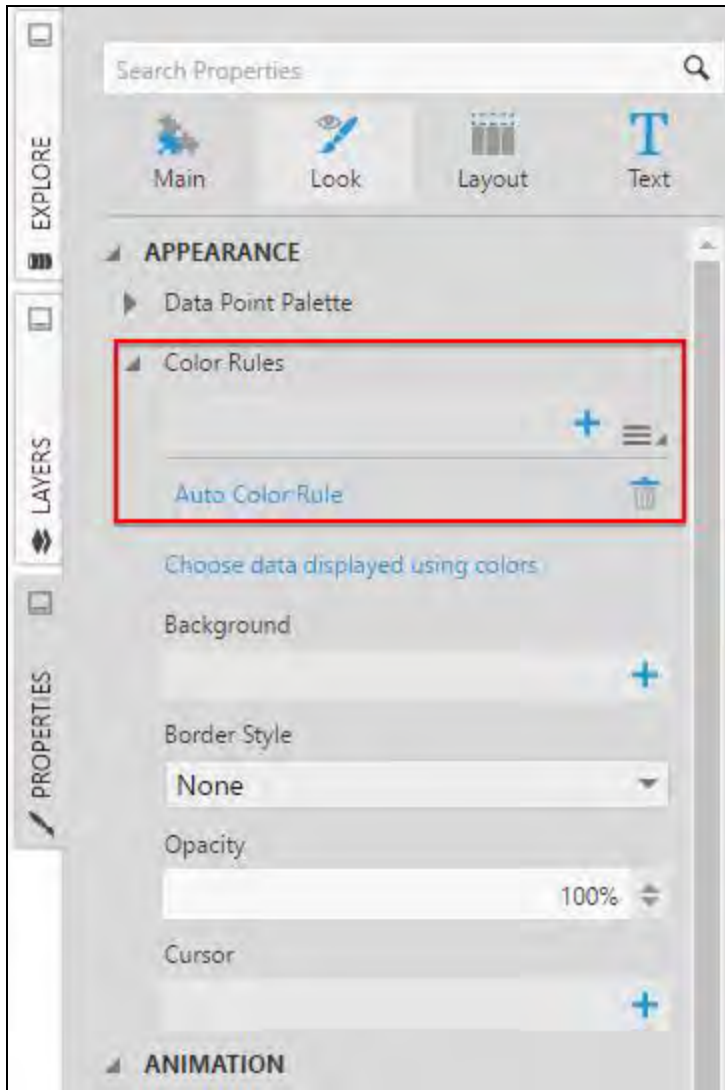
For this example, we will use the same bar chart setup as in the example above, changing the default OrderDate hierarchy level to **Month**. This time, instead of OrderDate, drag the **TotalDue** measure under Color.



An auto color rule is automatically created and applied to the chart.



Click the **brush** icon to the right of the Color heading to open the related properties.



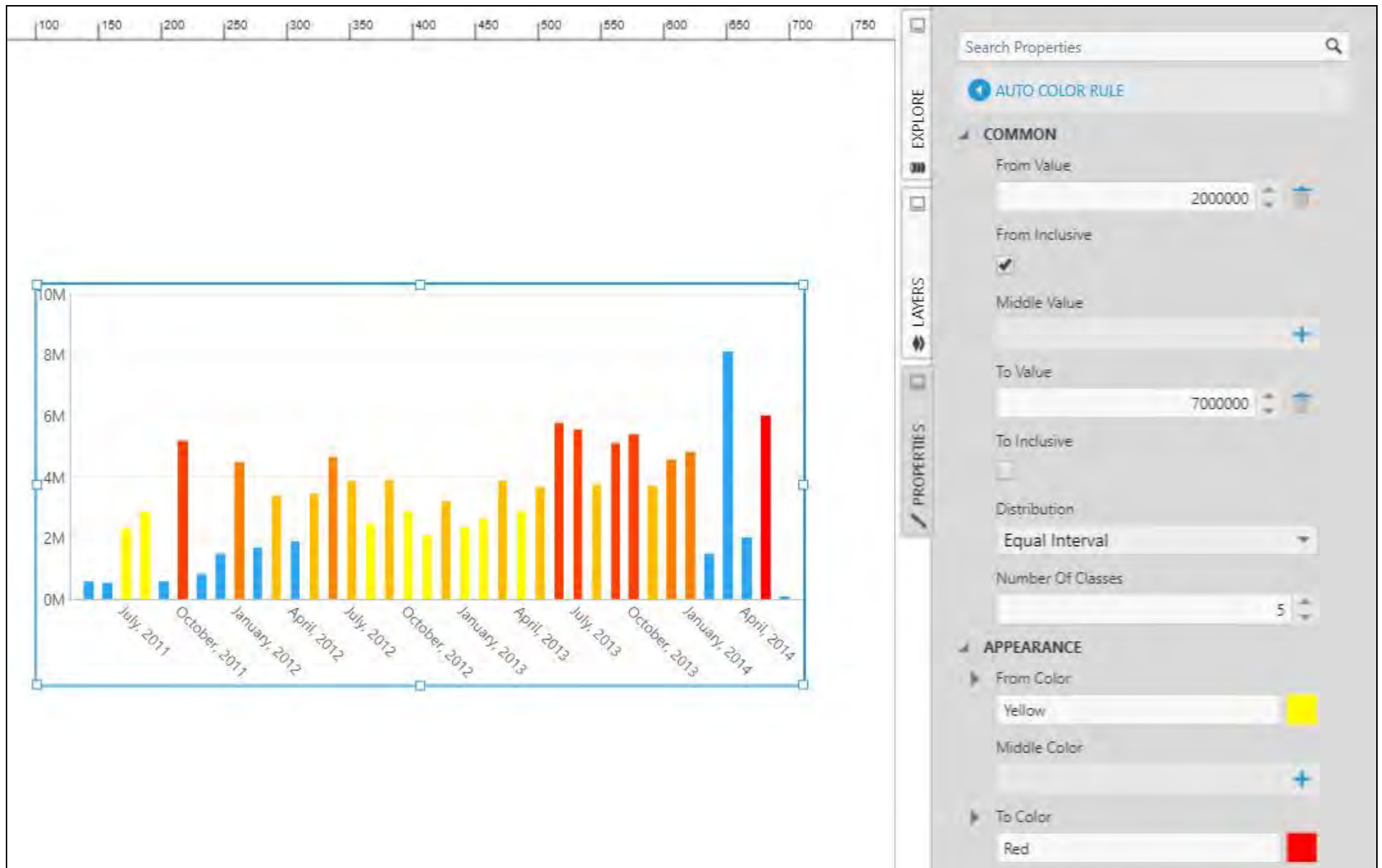
If not already opened, click **Auto Color Rule** to edit it:

1. Click on the **+** button next to From Value and enter 2000000. This will prevent values under 2M from being included in the color rule.
2. You can specify a **Middle Value** if needed.



- Archive of documentation for Logi Symphony v24

3. Click on the **+** button next to To Value and enter 7000000. Uncheck **To Inclusive**. This will prevent values over and including 7M from being included in the color rule.
4. Set Number Of Classes to **5** and the Distribution to **Equal Interval**. This will assign a different color to each million in the range.
5. Set From Color to **Yellow** and the To Color to **Red**. This will create shades of colors where the hue changes from yellow to red as the values increase. If you specified a middle value, then specify a **Middle Color**.



The distribution determines if the ranges and colors will be divided into 'classes' or 'bins' and how. There are more details on each distribution type in the article on displaying symbols in a [map](#).



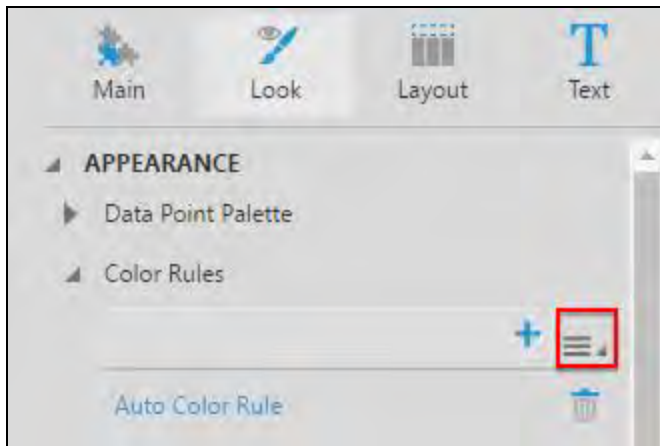
Note: Use **Legend Text** to customize how the ranges of values will be displayed in a legend. See the article on [Formatting text](#) for syntax details. The **Legend Category** property can be set if you want to group the items in a legend under a category heading.

Apply a Range Color Rule

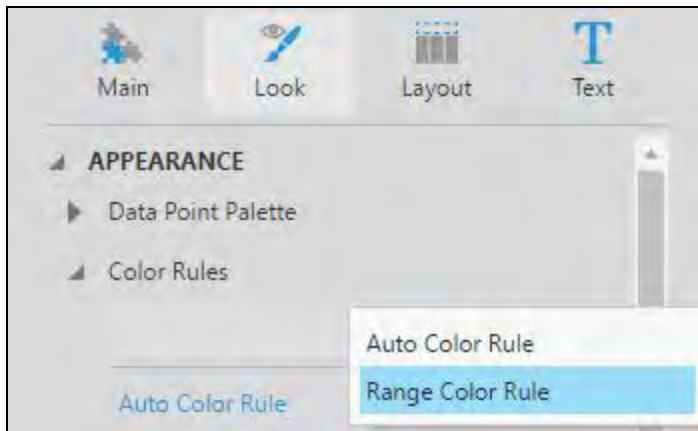
Range Color Rules can set a specific color to use for a range that you specify. You can add multiple to set up a series of ranges.

Open the **Properties** window to the chart's Look properties, and find Color Rules (click the **back** button if continuing from the previous example).

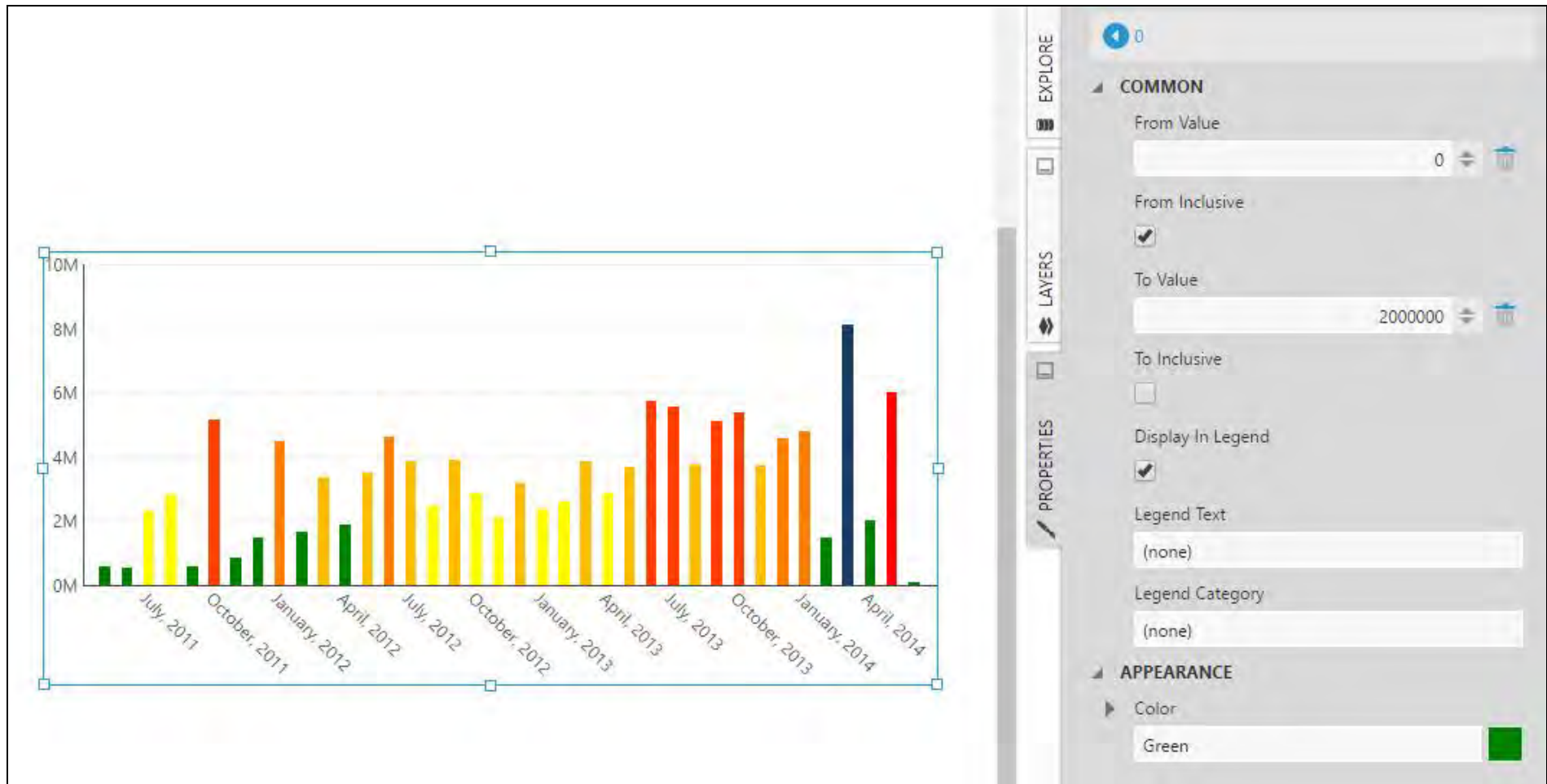
Click on the **menu** icon next to the + button under Color Rules collection.



Select **Range Color Rule** to add a new custom range.



Click the **range color rule** to edit it. For example, set To Value to 2000000, uncheck **To Inclusive**, and select a **color**.



For more information, see:

- Video: [Configuring Metric Sets](#)
- [Displaying Symbols on a Map](#)
- [Symphony Metric Sets](#)



- Archive of documentation for Logi Symphony v24

- [Using Chart Properties](#)
- [Setting Up the Visualization](#)
- [Visualization Tab Examples](#)



Calculate Histogram

This applies to: *Managed Dashboards, Managed Reports*

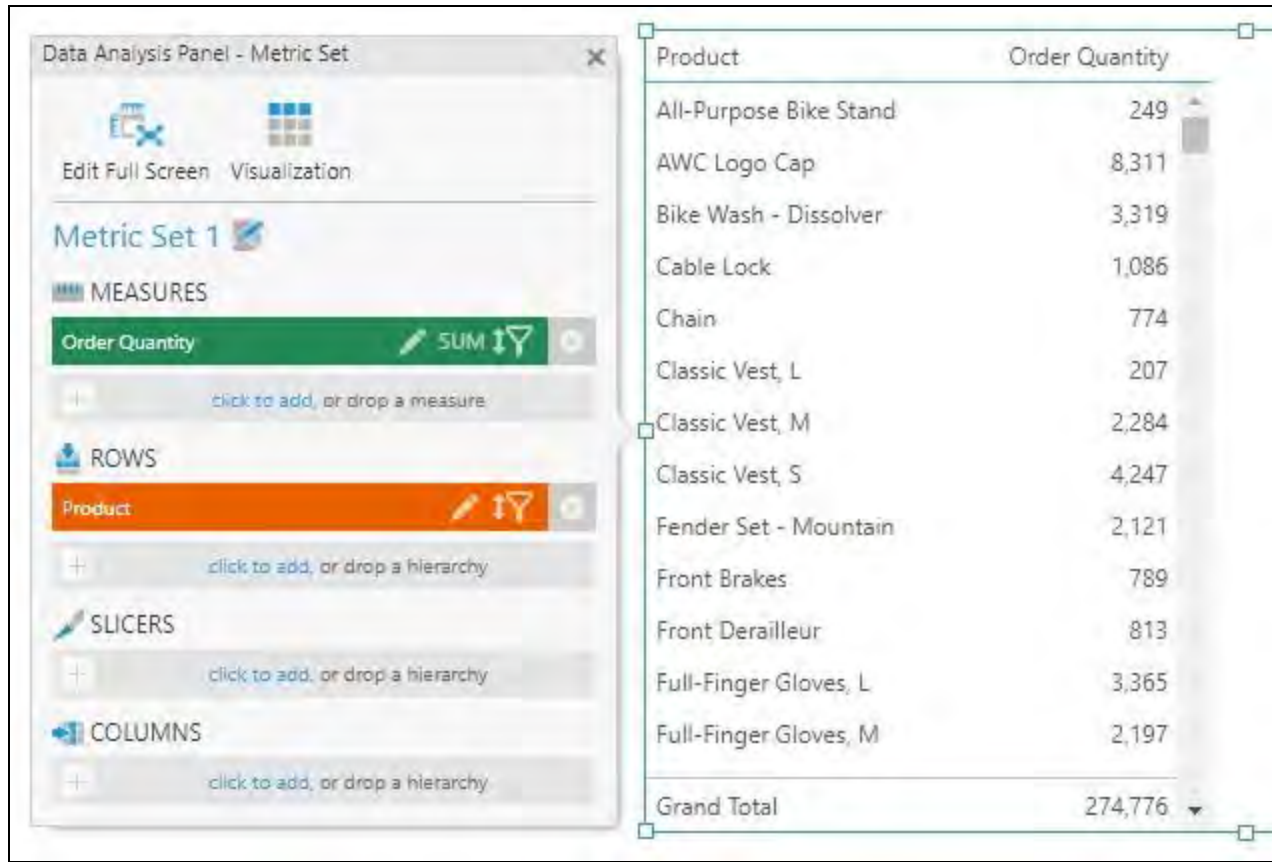
A histogram is a graphical representation of the distribution of values in numerical data, grouping each value into a 'bin' and displaying the bin counts across the range of values. Use a histogram when you have a single set of numeric values (a measure) and are interested in which numeric values occur the most or least, and patterns in how the values occur across the total range. For example, a histogram could show you that most orders have a quantity of 3-5 items, more than orders of 0-2 or 6-8 items, and indicate other patterns to you visually.

The Calculate Histogram option in Symphony can automatically create a histogram chart showing the frequencies of the values in your dataset as shown below. This is a shortcut to creating a [formula visualization](#) yourself that uses the [Histogram](#) function and styling it as a histogram chart.

Creating the Histogram

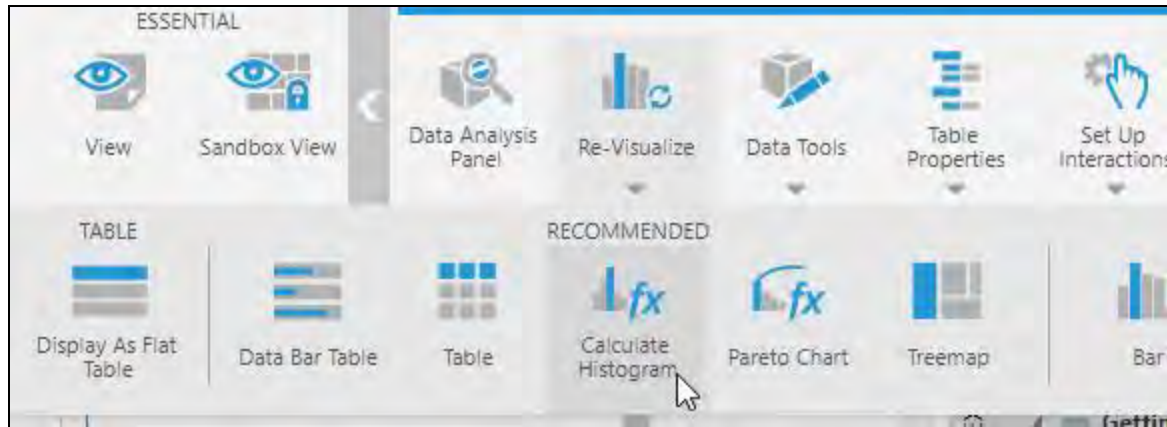
A histogram can be calculated given any set of measure values regardless of their current visualization.

As an example, a table listing order quantities for each product is visualized below:

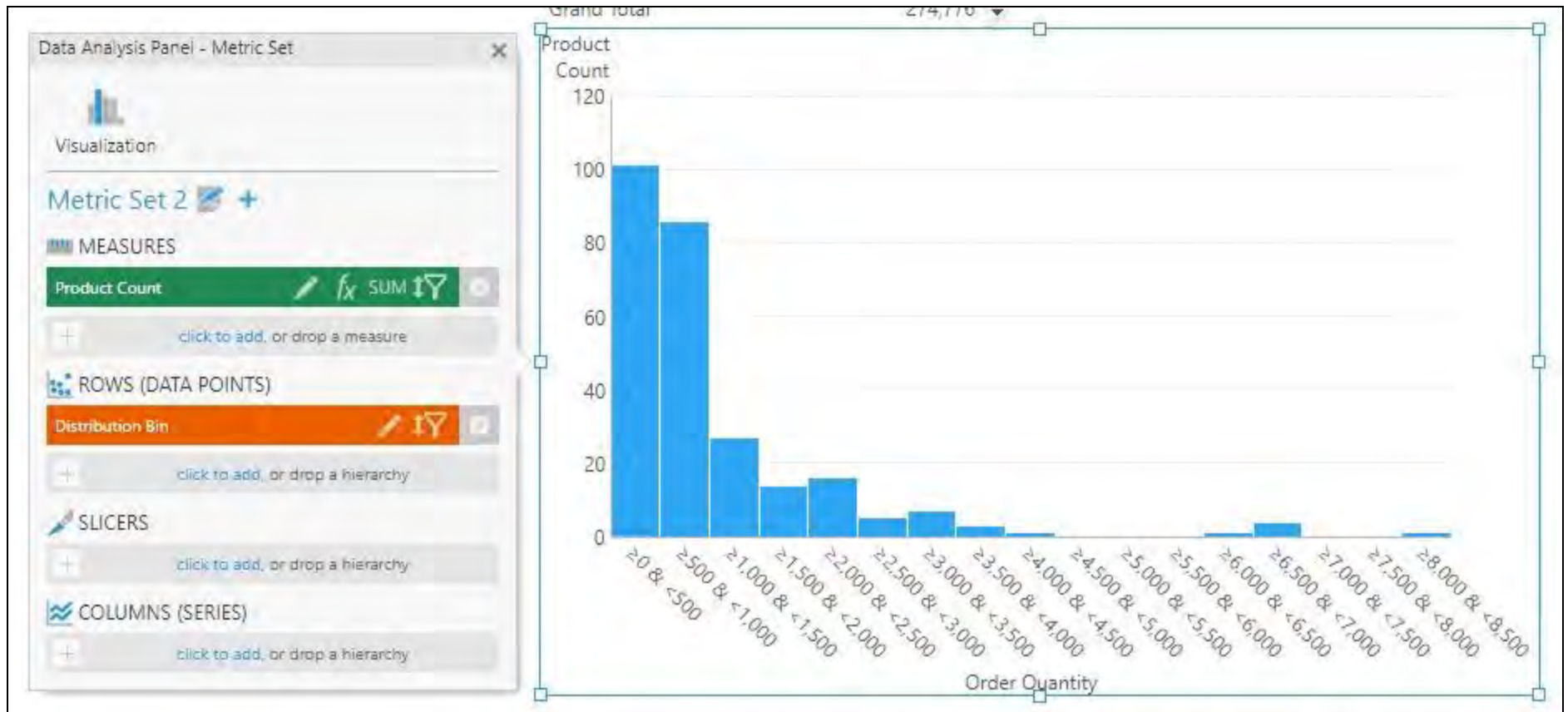


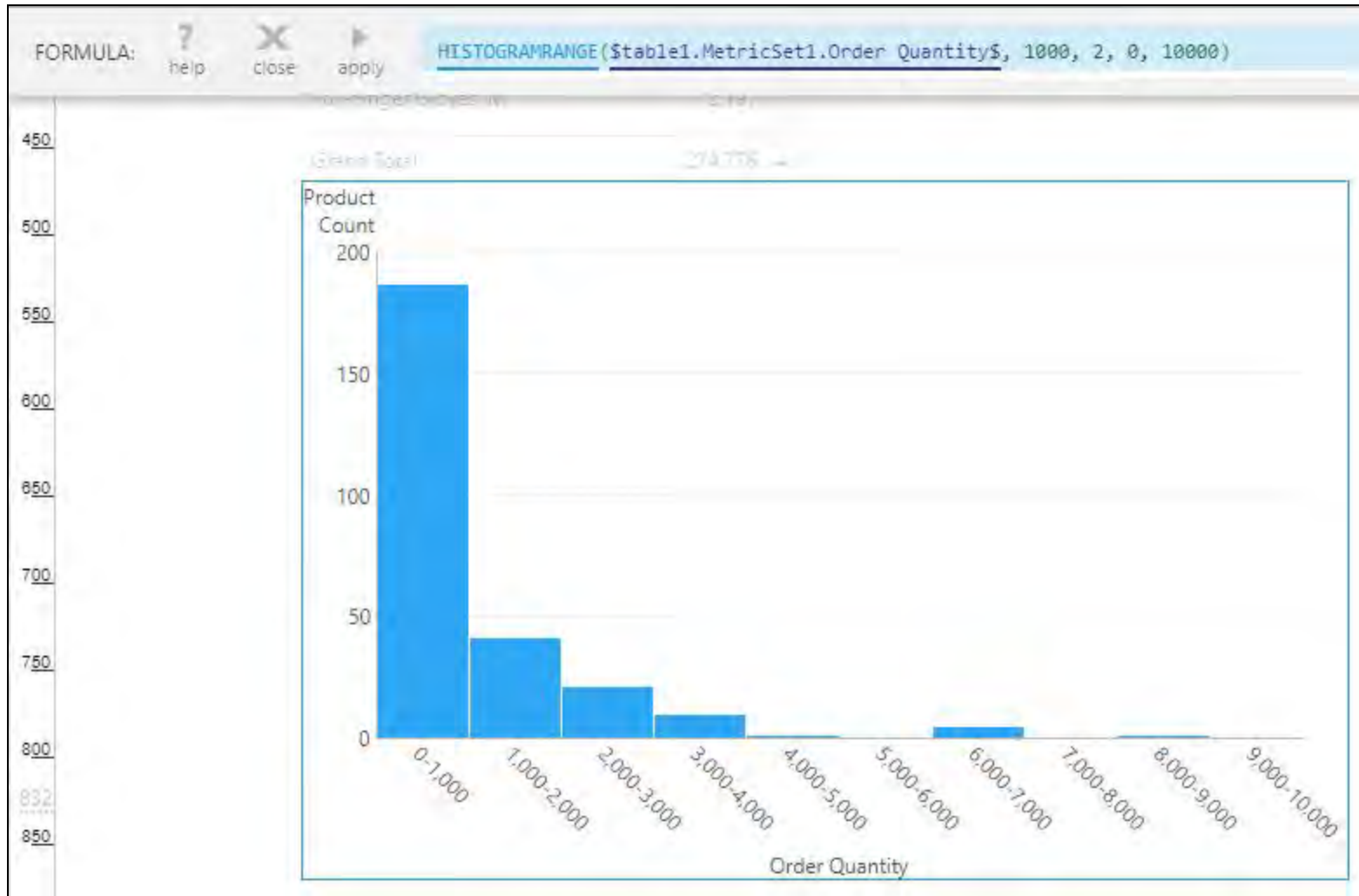
With your data visualization selected that contains this data, select **Re-Visualize** from the toolbar or the context menu, and then select **Calculate Histogram**.

This option may appear under [Recommended](#) in the toolbar, depending on your data.



A new bar chart is created and automatically styled as a histogram. In this example, the heights of the bars indicate how many products there were in each *bin* (left axis) according to each product's order quantity (bottom axis).





Note: Symphony created a [formula metric set](#) behind this chart for you, which works like other formula metric sets for things like connecting filters.

Another way to create this histogram is to start by first adding a **Calculate Histogram** visualization to a view such as a dashboard. This is found under Data Visualization in the toolbar.

After dragging your data onto it, click **Create Histogram** in the toolbar.

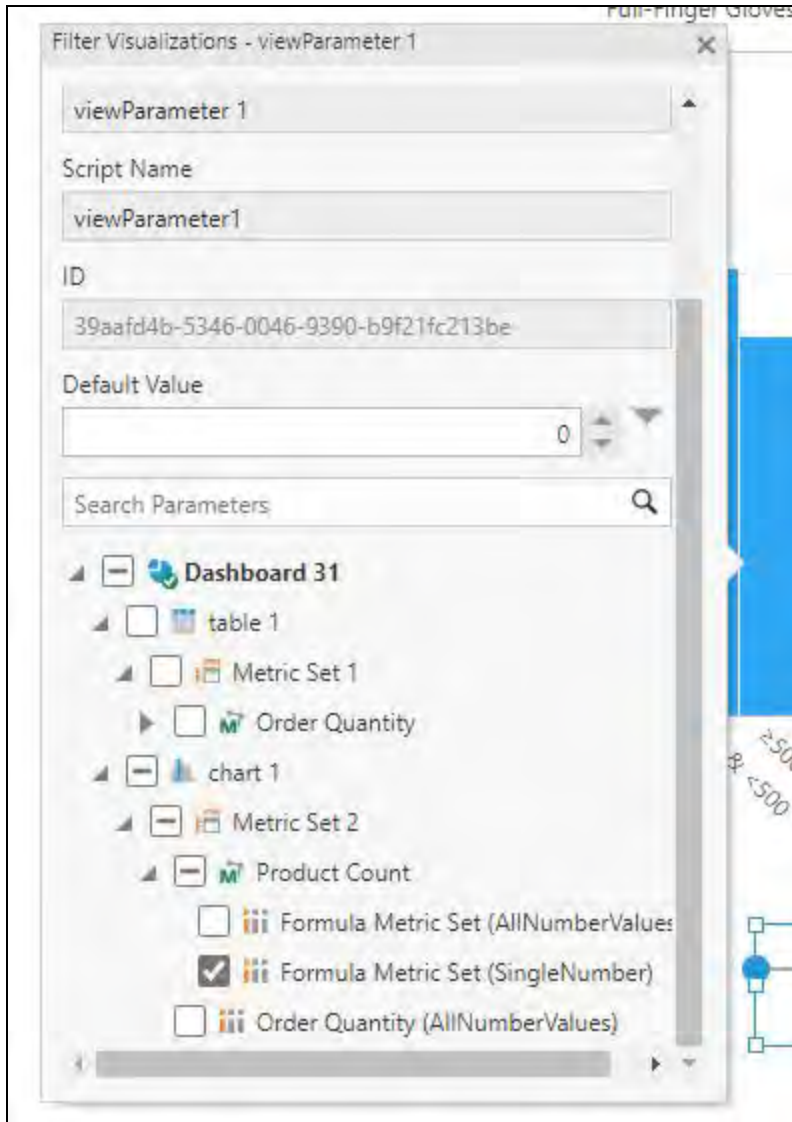


Changing the Bin Size With a Filter

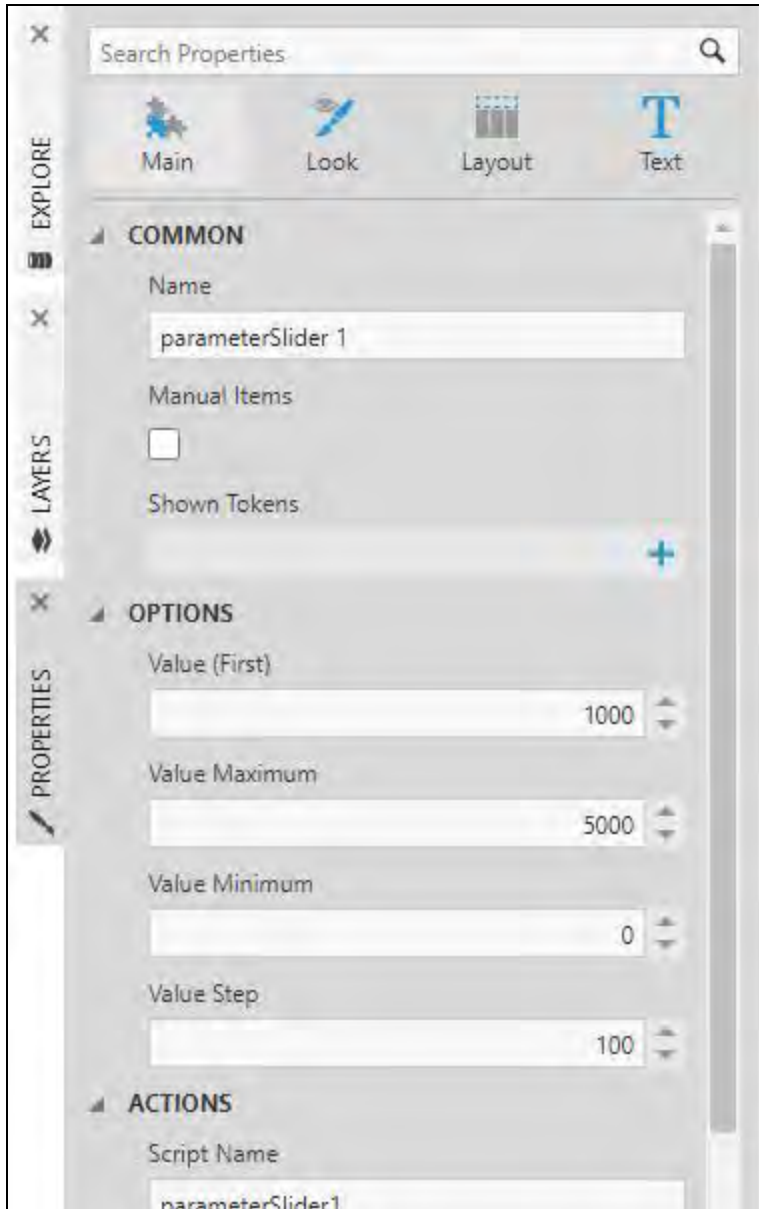
The shape and patterns that you can see in a histogram are determined by the sizes of the 'bins' displayed along its bottom axis. You can change the bin size for a different look at the distribution.

By default, the bin size parameter of the [Histogram](#) function is assigned a [parameter placeholders](#) called `$BinSizeParameter$` when you use the Calculate Histogram option above. This parameter is ready to be connected to a filter on a dashboard or other view to allow you or other viewers to customize the bin size using a **Single Number** or **Slider** filter, found under More when adding a [filter](#) from the toolbar.

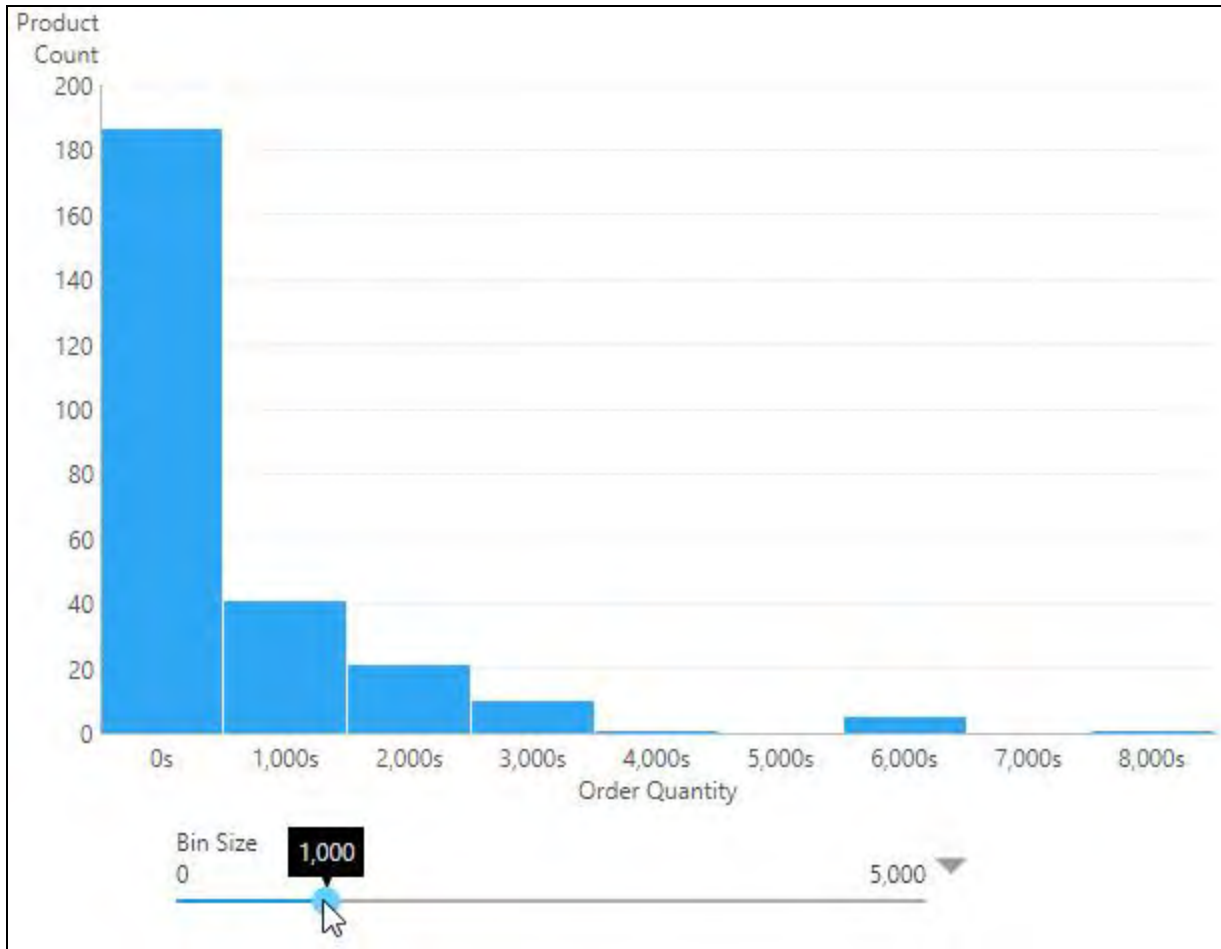
When connecting the filter to the bin size parameter, select the corresponding **SingleNumber** parameter under the histogram's measure. If a different parameter is selected, uncheck it first because incompatible parameters are not listed.



You can customize the filter settings in the Properties window, for example customizing the maximum bin size and a larger step between selectable values.



View the dashboard to use the filter to customize the bin size.

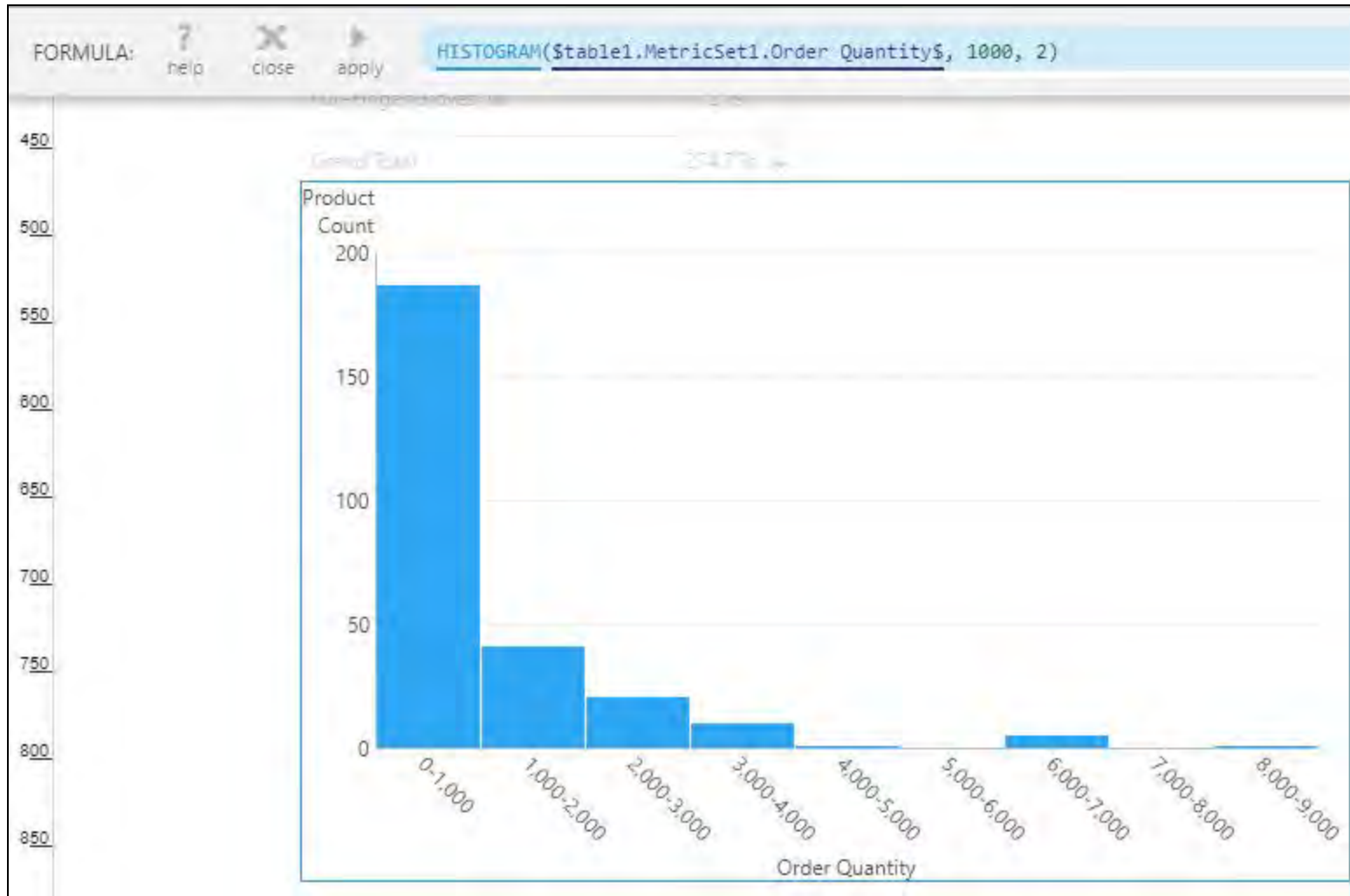


Configuring the Parameters

You can optionally set a specific bin size and/or customize the formatting used for the bins. For details about the parameters in this formula, see [Histogram](#).

In the Data Analysis Panel for the Histogram, edit the formula by clicking its **fx** icon.

You can choose to replace the parameter placeholder with your preferred bin size, and you can specify a preferred value for the format parameter, as shown in the formula bar in the image below.



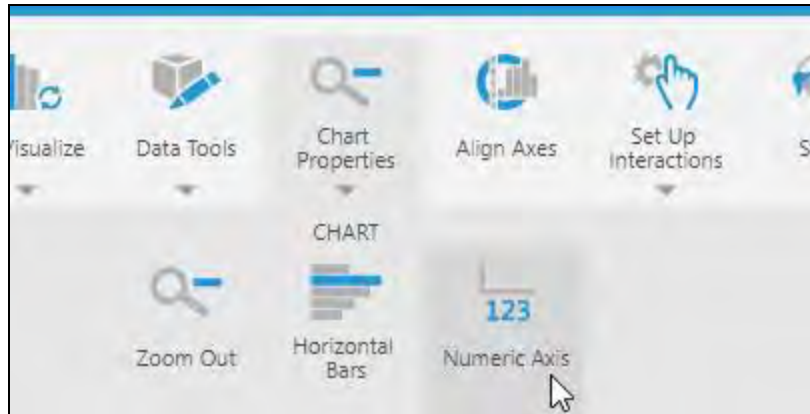
If you want to customize the start or end of the full range of values, you can use the **Histogram Range** function.

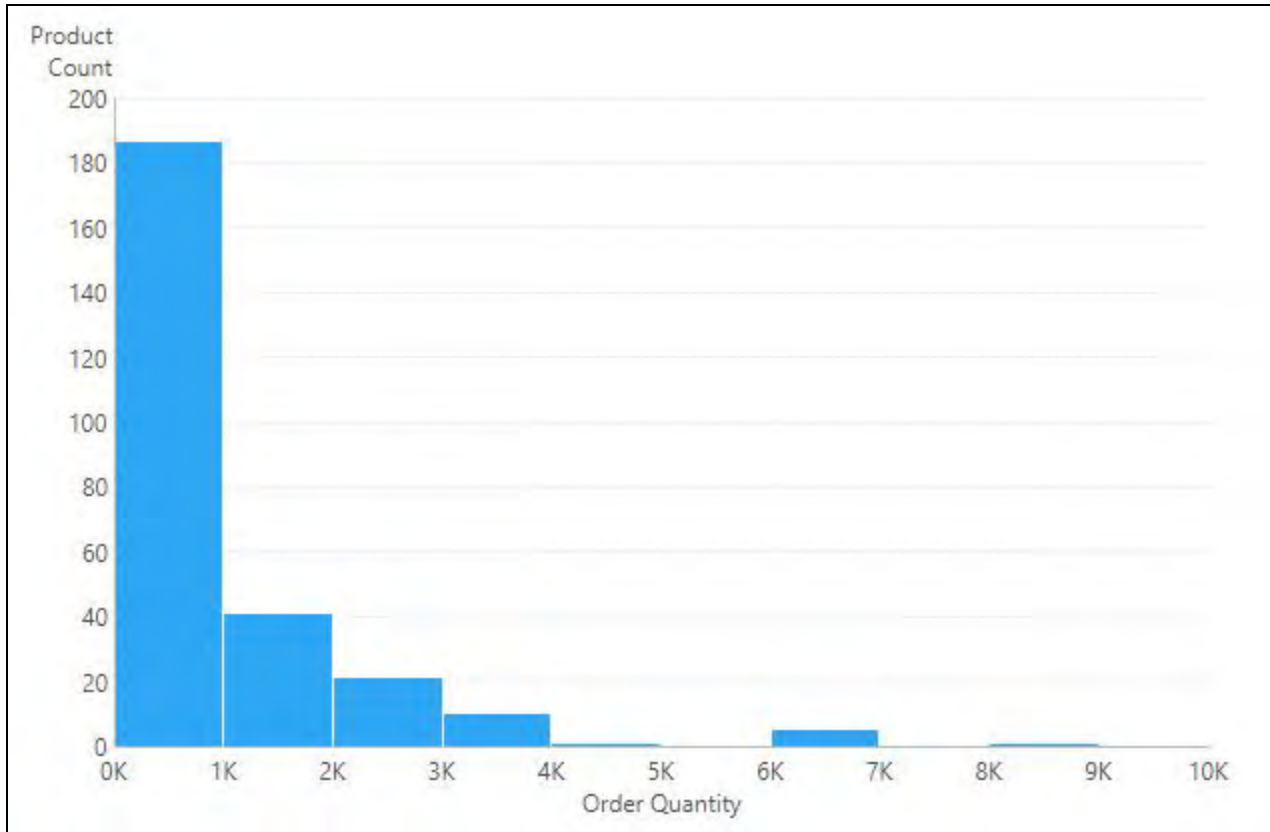
After replacing *HISTOGRAM* with *HISTOGRAMRANGE*, you can add the range start and range end parameters as the 4th and 5th arguments:

Labeling Bin Edges

By default, the bottom axis of a Histogram visualization displays a categorical scale where each bin is labeled in the middle by its range of values (e.g., *2,000s* or $0 < 2,000$).

You can change this representation to a numeric scale, which labels the edges of the bins instead. Simply select **Numeric Axis** from the chart property options in the toolbar.





For more information, see:

- [Creating a Box Plot](#)
- [Using Chart Properties](#)
- [Symphony Metric Sets](#)
- [Wikipedia: Histogram](#)

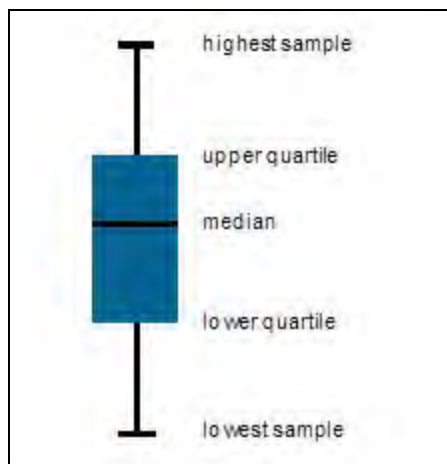
Creating a Box Plot

This applies to: *Managed Dashboards, Managed Reports*

This walkthrough shows you how to set up a box plot chart, also known as a box-and-whisker diagram. Box plots are used to visualize several key indicators at once of how the data is distributed in a dataset.

Background

The following diagram shows the elements of a box plot.



There are typically five measure values associated with a box plot data point:

1. **Upper Whisker (95th Percentile):** Exactly 5 percent of the values in the data are greater than this value. (May instead be the highest value if not displayed separately as dots).
2. **Lower Whisker (5th Percentile):** Exactly 5 percent of the values in the data are less than this value. (May instead be the smallest value if not displayed separately as dots).
3. **Upper Box (Upper Quartile):** Exactly 25 percent of the values in the data are greater than this value.
4. **Lower Box (Lower Quartile):** Exactly 25 percent of the values in the data are less than this value.
5. **Solid Band (Median):** Represents the median (middle) value in the data.



- Archive of documentation for Logi Symphony v24

In the toolbar, **Calculate Box Plot** with an *fx* in its icon will handle the setup and calculations for you, creating a [formula metric set](#) visualized as box plots, with some *outlier* points visible beyond the ends of each box plot.

There is also a **Box Plot** chart type in the toolbar, which is what is used to plot the box plots but does not calculate and summarize the values of a dataset. Use this chart type directly if you have already calculated the statistical values above from your dataset, and assign them to each part of the box plot in the Data Analysis Panel's [Visualization tab](#). Otherwise, the following walkthrough demonstrates using the **Calculate Box Plot** option.

Walkthrough

This walkthrough demonstrates the results when adding data step-by-step to a new Calculate Box Plot visualization on a dashboard. [Adventure Works sample data for Analysis Services](#) is used, but you could use any data with comparable numbers of values.



Note: You can also [re-visualize](#) a complete metric set that already includes all your data to the **Calculate Box Plot** option, available in both the metric set and dashboard screens.

New Calculate Box Plot Visualization

Create a new dashboard using the **Blank** template.

Go to the toolbar, click **Data Visualization**, and then select **Calculate Box Plot**. This adds a blank data visualization to the canvas.

COMMON

ADD / EDIT

Undo Redo Clipboard **Data Visualization** Components Note Notification Filter Data Analysis Panel Re-Visualize Data

CHARTS

Line Point Scatter Plot Pie / Sunburst More...

FORMULA

Formula Visualization Calculate Histogram **Calculate Box Plot** Pareto Chart

LEGEND

Legend

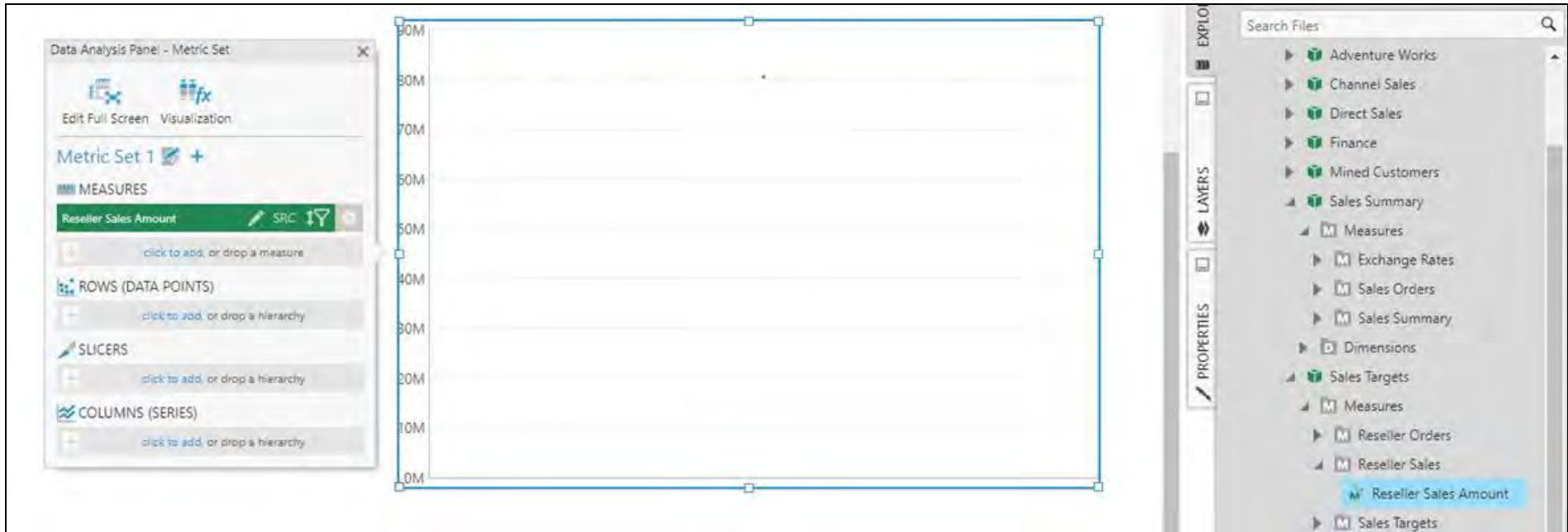
DATA LABEL

Data Label

drop a native table, cube, data cube, or an existing metric set

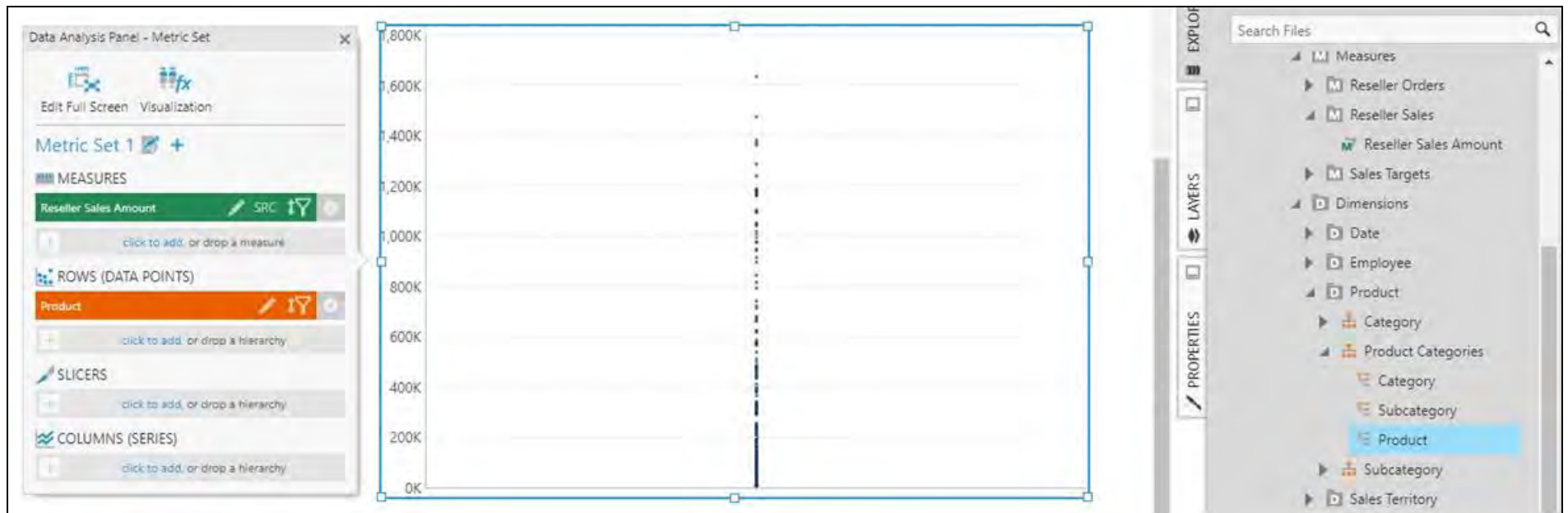
Set Up a Single Strip Plot

Go to Explore and drag the **Reseller Sales Amount** measure onto the data visualization. A single dot or data point is displayed.



Next, add **Product** under Rows (Data Points). The result is a *strip plot*, which displays a vertical arrangement of dots or data points - one for each product.

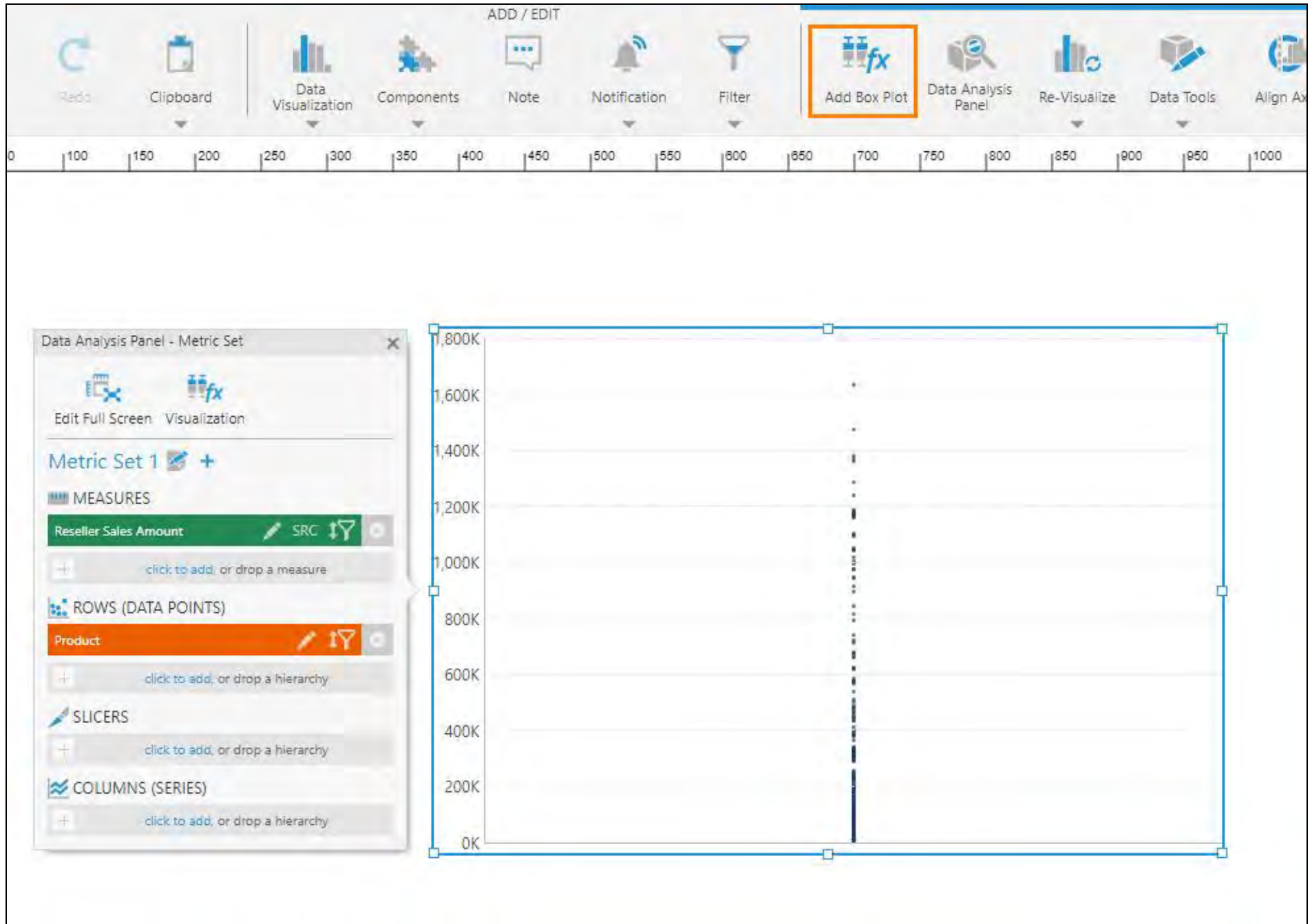
A strip plot like this can already give you an idea about the distribution of data. For example, the dots are drawn semi-transparently so that darker areas indicate where there are many data points close together.



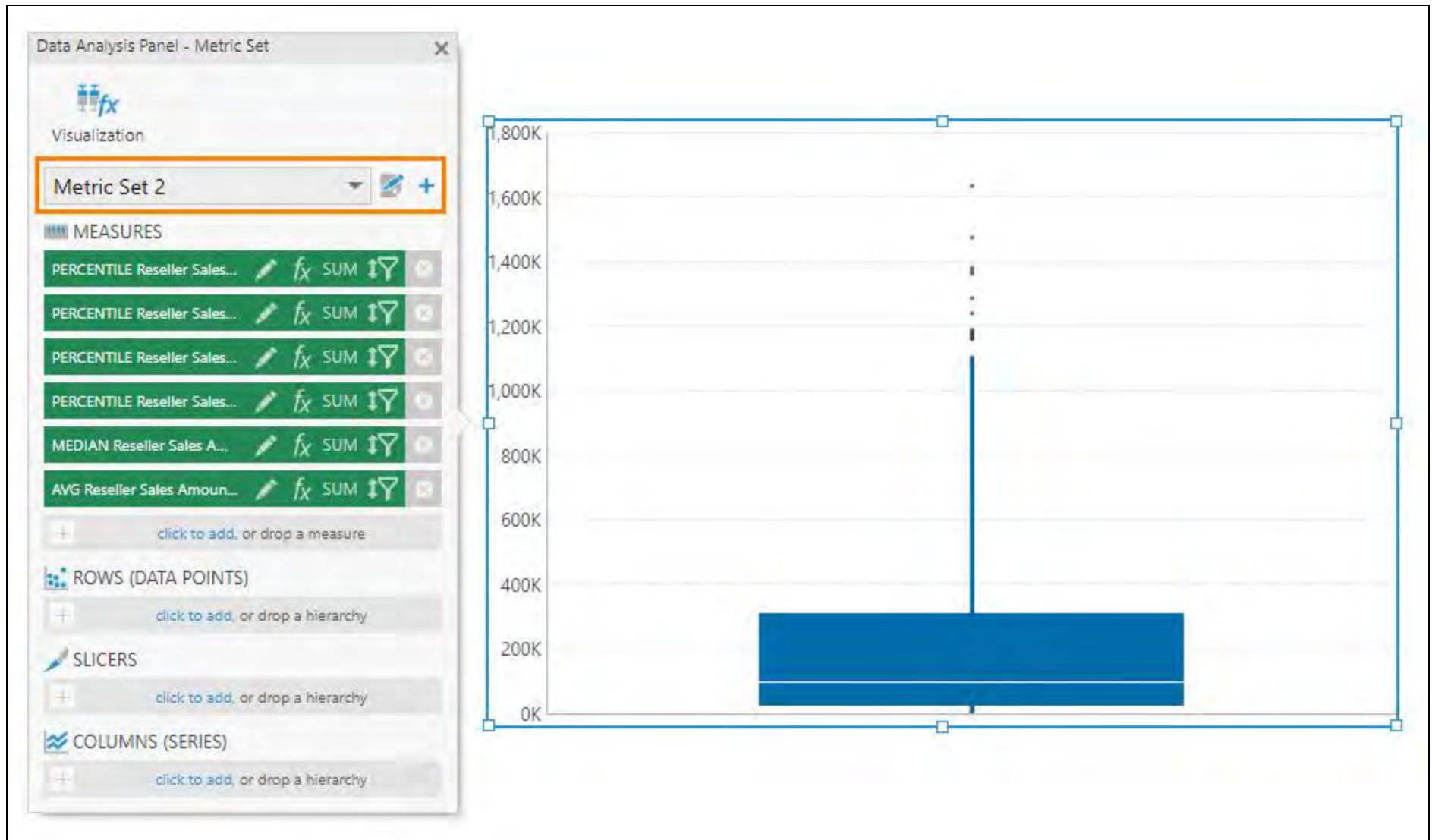
Add Box Plot

If you want to group your data into multiple points or series each with separate box plots, you can do so first as shown in the following sections.

Once you are ready to add box plots over the data you have in your chart, with the chart selected, go to the toolbar and click **Add Box Plot**.

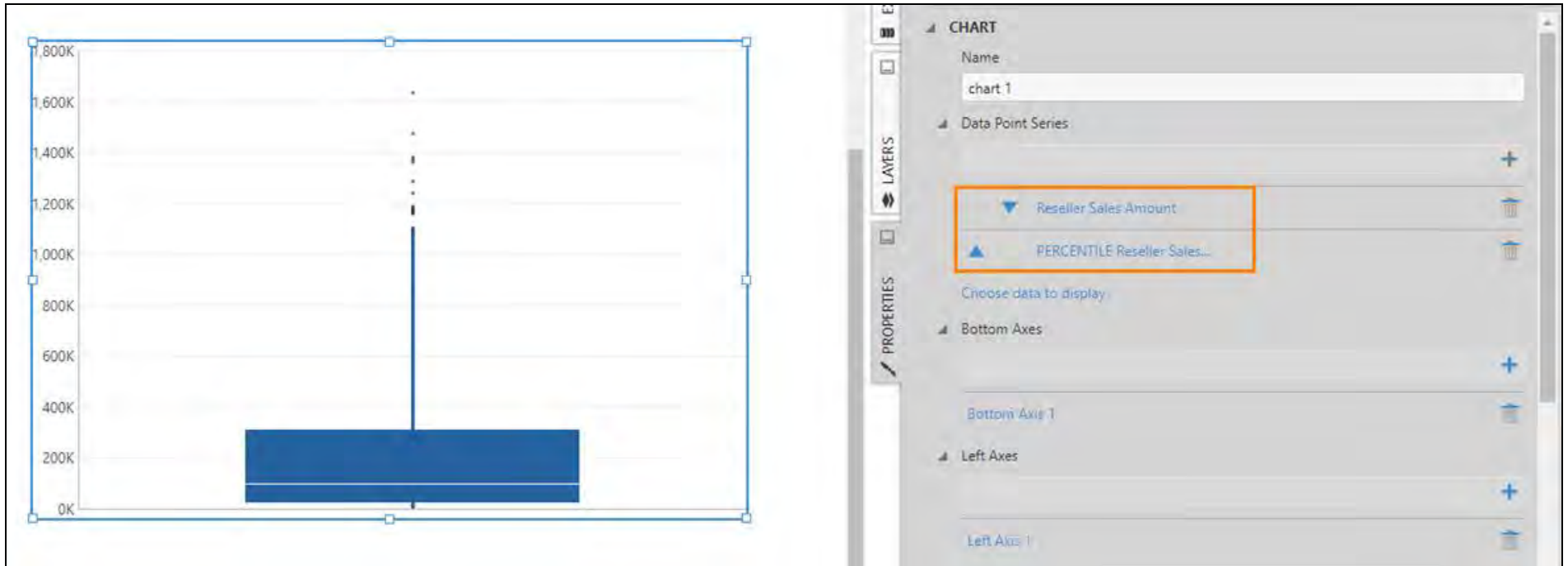


The chart now displays the box-and-whisker diagram as a second series which is actually a formula metric set. Use the drop-down at the top of the Data Analysis Panel to switch to this newly added metric set. You'll see five formula measures listed which represent the necessary calculations for the box plot.

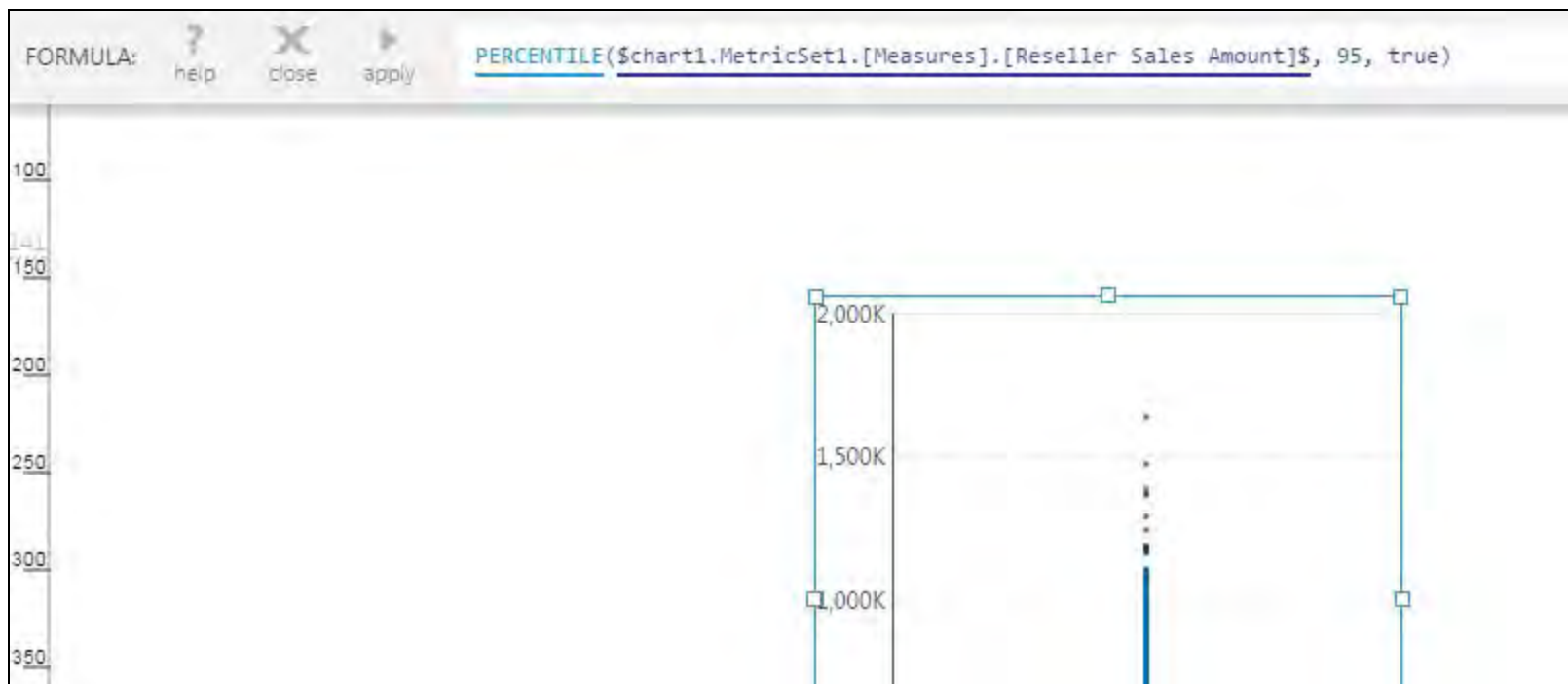


Above the box-and-whisker diagram portion of the chart, you'll see a set of dots. These data points are outliers which belong to the first series.

Go to the **Properties** for the chart to see two series listed. The first series is displayed as a Point chart while the second series is displayed as a Box Plot chart.



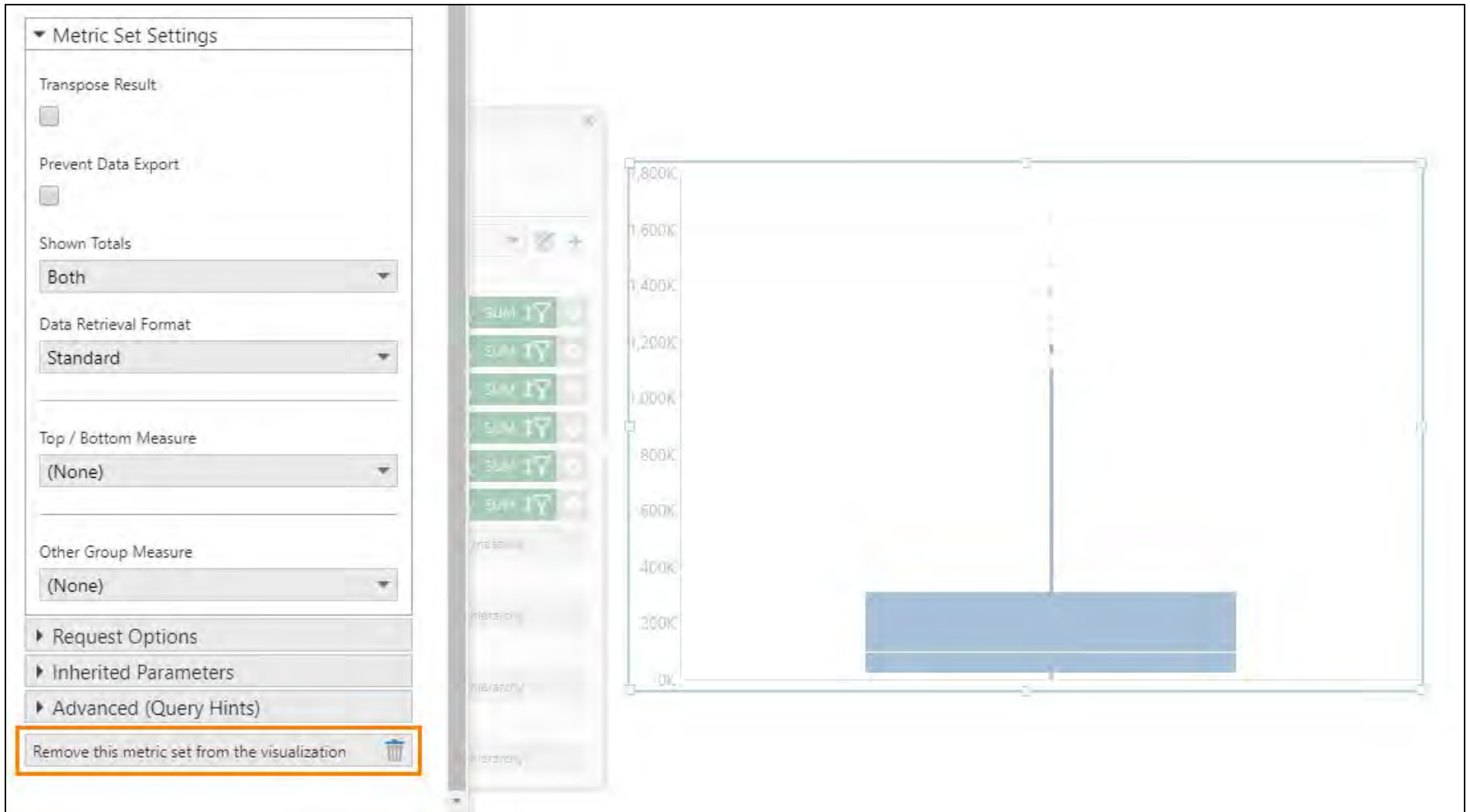
In the Data Analysis Panel, click the **Edit** button of the first formula measure. In the Configure Metric Set Element dialog, scroll down and click **Formula**. In the formula bar, you can see that it calculates the 95th percentile which you can modify as needed (e.g., some box plots use 90th percentile for the highest sample).



Remove Box Plot

If you followed the steps above and want to continue below, you will need to remove the second metric set that calculates the statistical values so that you can first change the grouping of your data.

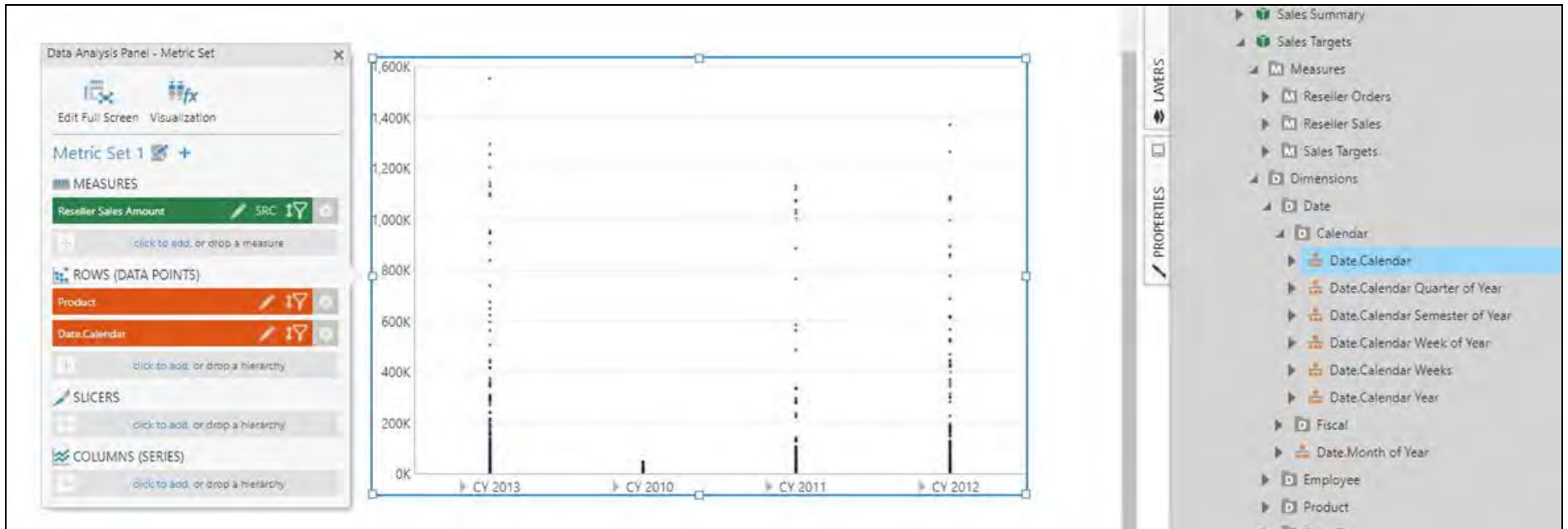
In the Data Analysis Panel, with the formula metric set selected in the drop-down, click the **Edit** icon next to the drop-down. In the Metric Set Configuration dialog, scroll all the way down and click **Remove this metric set from the visualization**.



This will remove the box plot series that was displaying the data from this metric set.

Multiple Box Plot Data Points

Go to Explore and add **Date.Calendar** as a second hierarchy under Rows in the Data Analysis Panel. You'll now see a separate strip plot displayed for each date value.



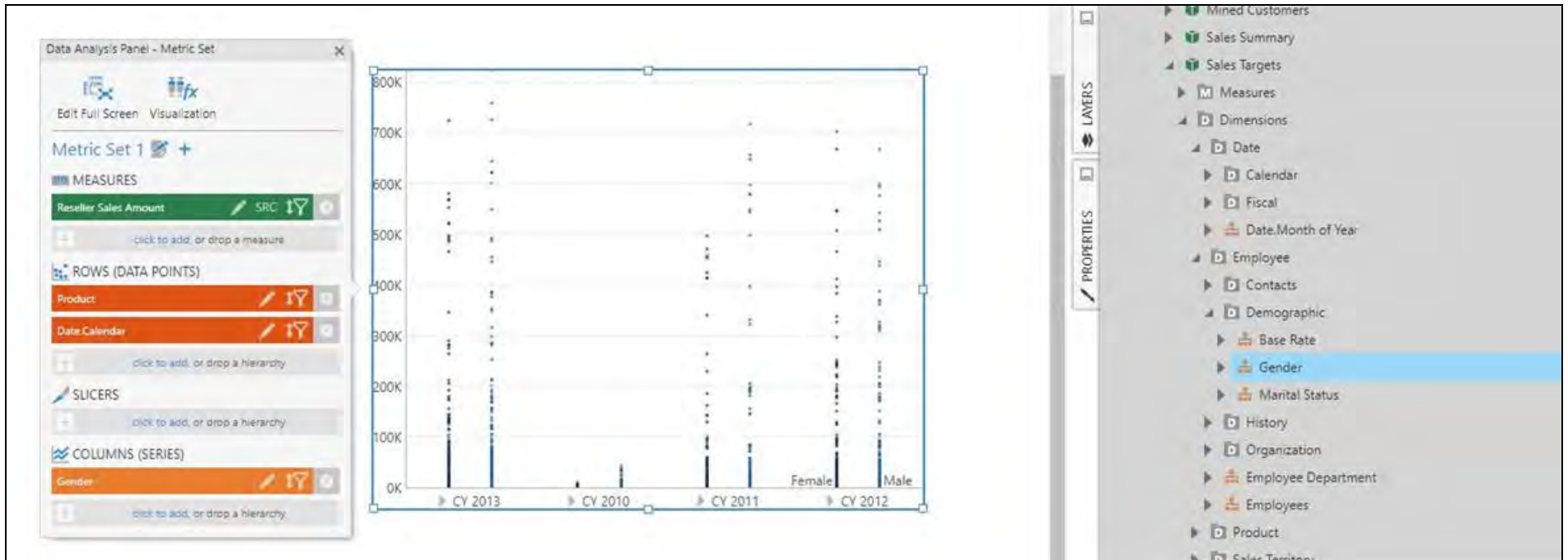
With the chart still selected, go to the toolbar and click **Add Box Plot**. A box-and-whisker diagram is displayed for each date (year).



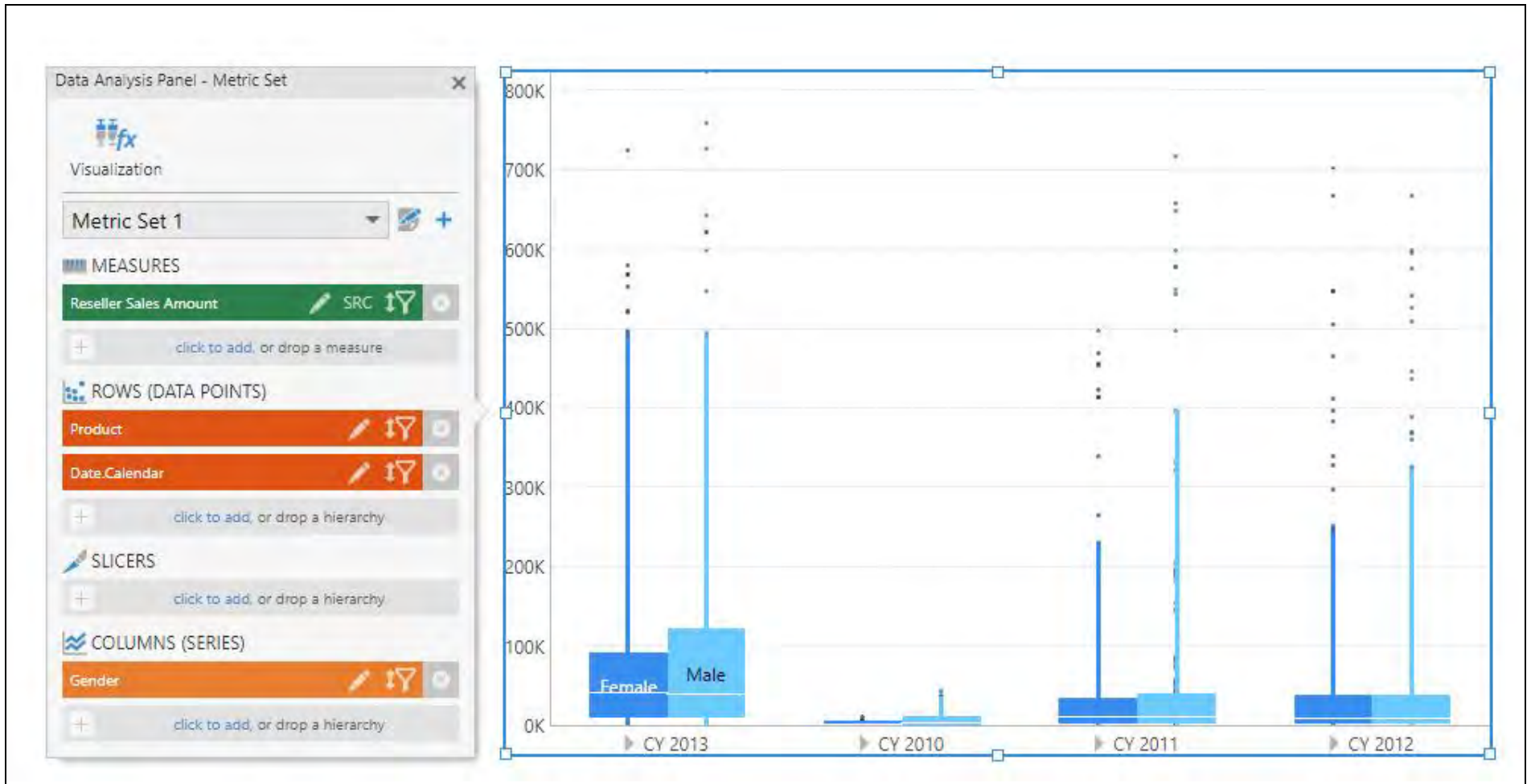
Multiple Box Plot Series

As a variation of the above example, set up a strip plot chart by also adding **Gender** as a Columns hierarchy to the metric set, to group your data into a separate series for each gender. You could also add a second measure instead for comparison with your first measure.

In our example, this gives us a cluster of strip plots for each year, where each cluster has a male and female strip plot.

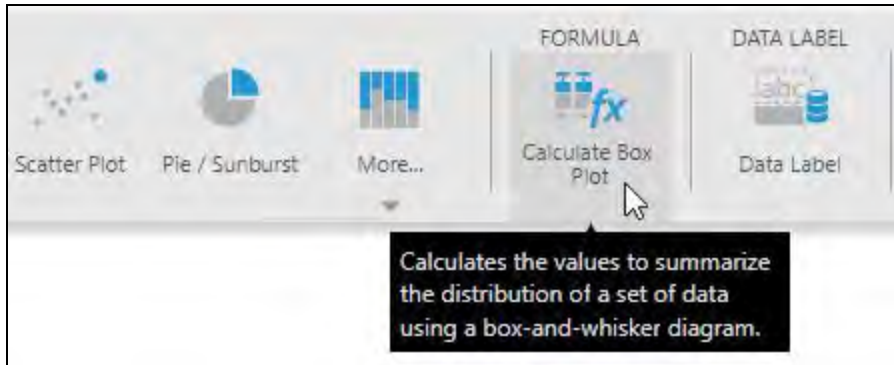


Go to the toolbar and click **Add Box Plot** to get the following result.



Re-Visualizing to Calculated Box Plot

If you have already selected your data in a full screen metric set or in a metric set on a dashboard, you can also find Calculate Box Plot under Re- Visualize in the toolbar.



You can find it either under Recommended to the left, or under the Formula category.

This re-visualize option automatically applies the same formulas and visualization settings as shown in the walkthrough above, but does it all at once based on whichever data you have in your metric set. The first hierarchy under Rows is used to group your data into a strip plot and typically contains many values, while additional hierarchies can group your data into multiple strip plots. A box plot is added over each strip plot.



Note: If you are currently working in a full screen metric set, your metric set and visualization will be added automatically to a new dashboard so that you can work with the new formula metric set and your original metric set together.

For more information, see:

- [Using Chart Properties](#)
- [Adding Formulas](#)
- [Using a Formula Visualization](#)
- [Calculate Histogram](#)

Creating a Funnel Chart

This applies to: *Managed Dashboards, Managed Reports*

Funnel charts are used to represent a sales process by depicting the number of leads remaining at each stage. Use Symphony to create a funnel chart.



Note: A traditional funnel chart does not follow data visualization best practices, and a horizontal bar chart displaying the same data is one easier-to-read alternative.

Setup

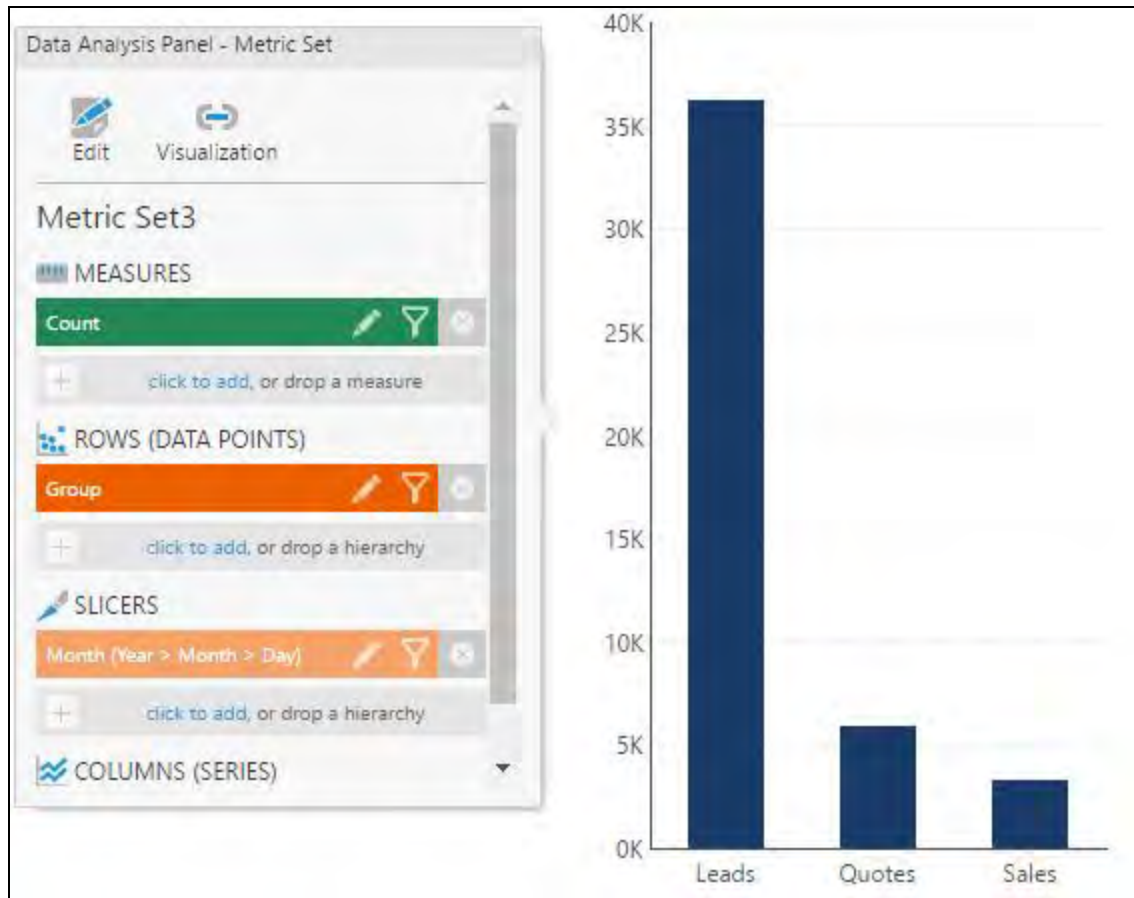
In this example, we are using the data shown in the following figure, but where the time dimension is moved to **Slicers** in the metric set.

Year	Group	Count
▶ 2012	Leads	111
▶ 2013	Leads	6,721
	Quotes	486
	Sales	877
▶ 2014	Leads	11,703
	Quotes	1,599
	Sales	1,335
▶ 2015	Leads	17,686
	Quotes	3,758
	Sales	1,078

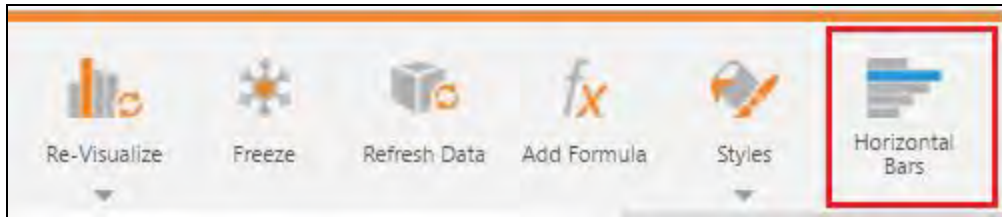
From the [main menu](#), select **Business**, and click to **Create** a metric set.

Start by creating a simple bar chart with the number of leads as the measure and a data point for each process stage.

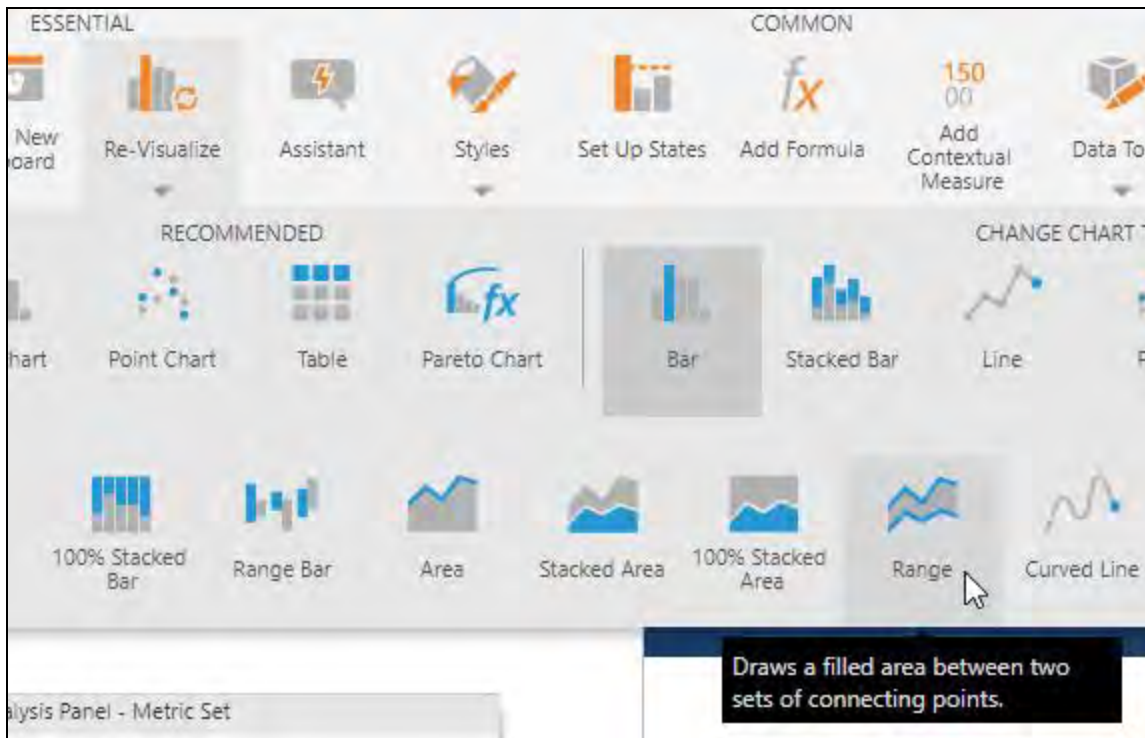
By default, your data is typically sorted alphabetically. If this does not match your process where each bar likely should be shorter than the previous, try clicking the **sort & filter** icon on your measure and sorting **Descending**. You can also use custom [hierarchy sorting](#).



Click on **Horizontal Bars** in the toolbar or Properties window to arrange the data points from top-to-bottom.

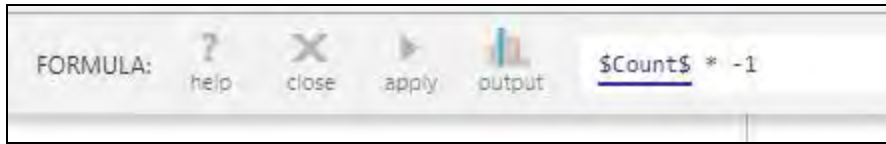


Re-visualize the bar chart to a **Range** chart. This chart type can display your measure as a filled area taking the diagonal shape of a funnel instead of displaying bars.



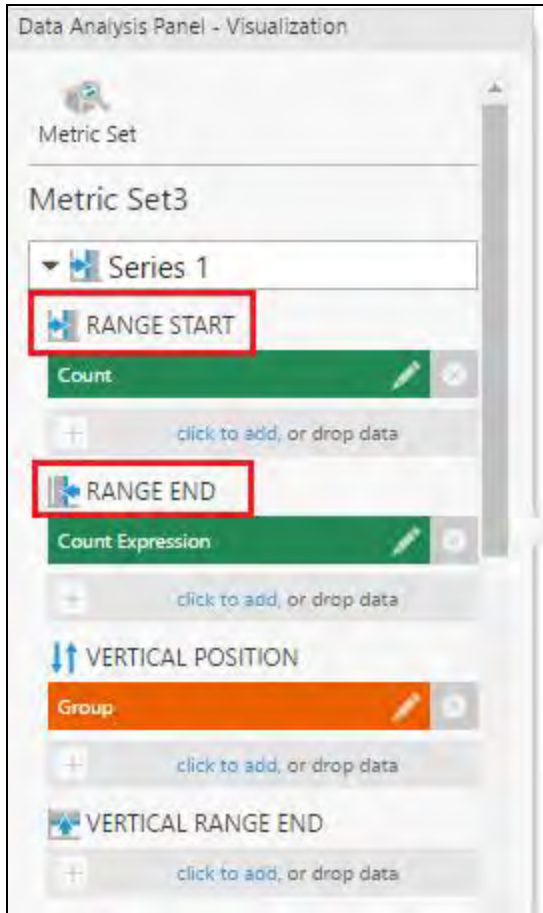
Note: Consider keeping the horizontal bar chart, or switching later to the **Range Bar** chart type instead of Range as easier-to-read alternatives.

Click on **Add Formula** from the toolbar. In the formula bar, enter the expression **\$Measure Name\$ * -1** substituting in your own measure name. Apply and close the formula bar to create a negative version of your measure.

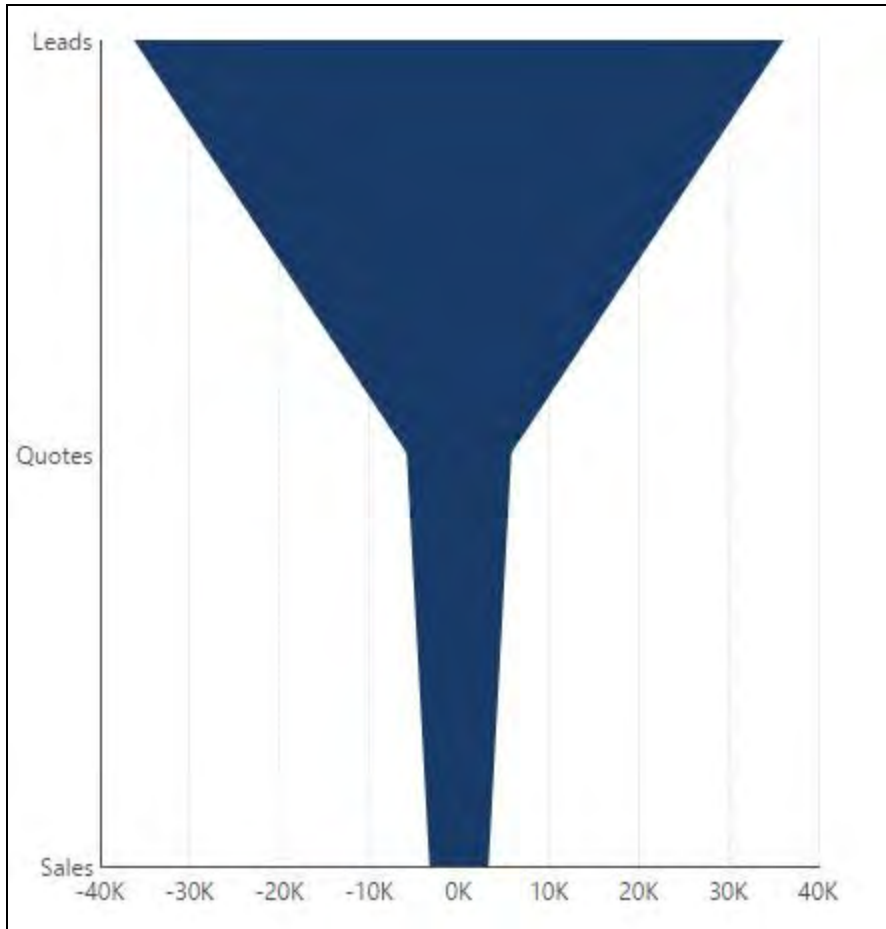


In the Data Analysis Panel, click on **Visualization**.

Ensure your original measure is placed under *Range Start*, and your new formula measure under *Range End* (or vice versa).



This can now display a funnel chart like the following:



Styling the Funnel Chart

You can further style your chart using the following options:

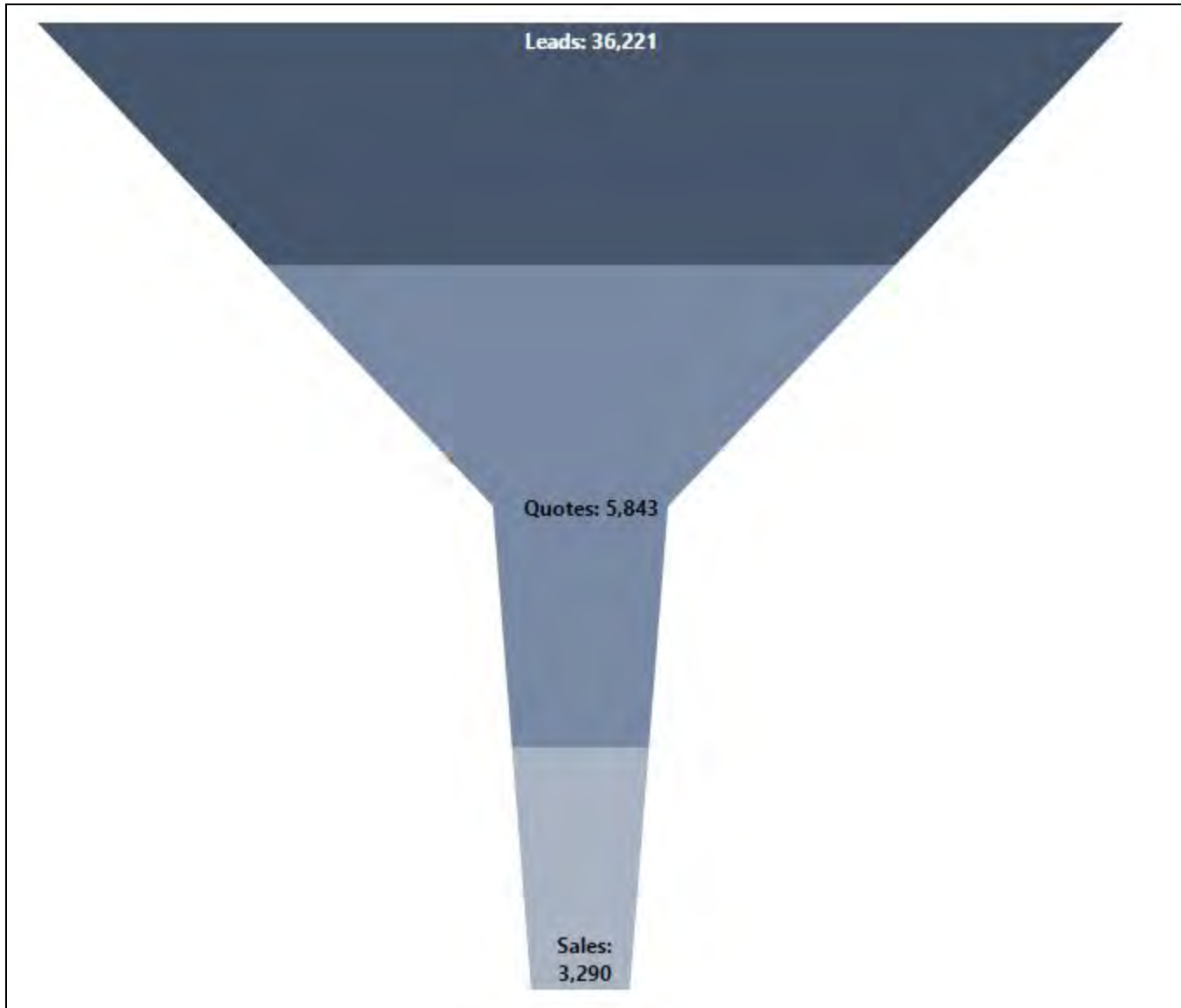
- You can hide the Bottom Axis and the Left Axis by right-clicking them to open their properties and unchecking their **Visible** check box.
- You can use [color rules](#) to color the chart based on the different groups. For example, leads, quotes, and sales can each be given different colors.



- Archive of documentation for Logi Symphony v24

- If you want the coloring to be more dynamic based on the values, you can set up [states](#) using both your measure and your hierarchy values as conditions.
- You can add [data point labels](#) to the stages and right-click them to open their properties to configure how they're placed.

A formatted funnel chart could look like this. Now you can use this chart on any dashboard.



For more information, see:



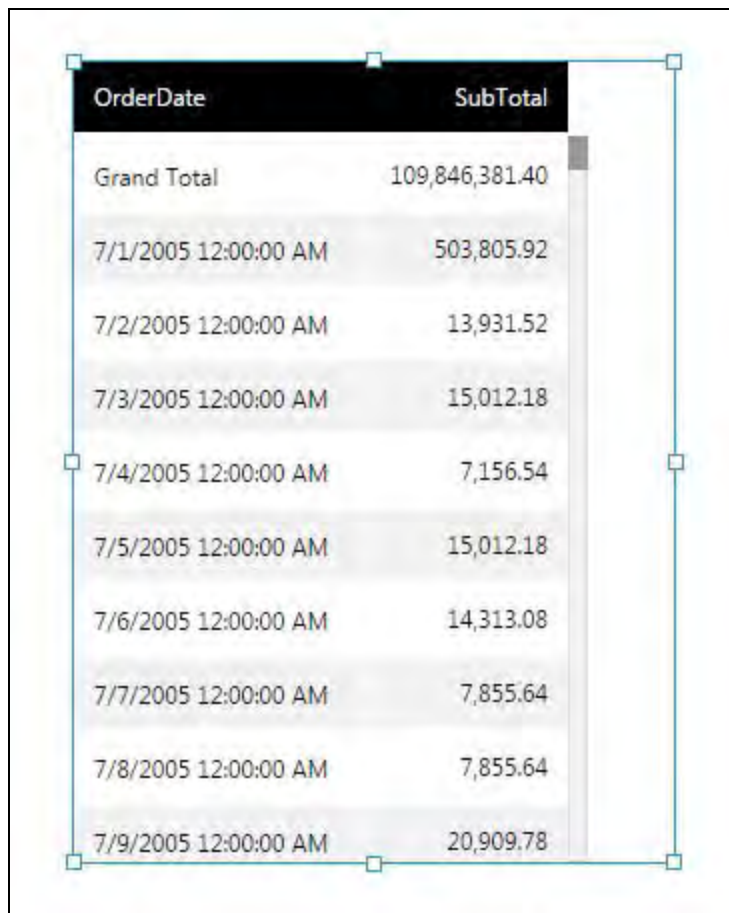
- Archive of documentation for Logi Symphony v24

- [Setting Up the Visualization](#)
- [Using Chart Properties](#)
- [Apply Colors to Data Points or Series Using Color Rules](#)
- [How to Create a Variable Width Column Chart](#)
- [Adding Formulas](#)

Display Date Only on Column Instead of Date/Time

This applies to: *Managed Dashboards, Managed Reports*

Visualizations display the formatting set up in a time dimension, and also have the ability to customize date and time formatting in their properties. For example, a table column can show only the date portion instead of both date and time.

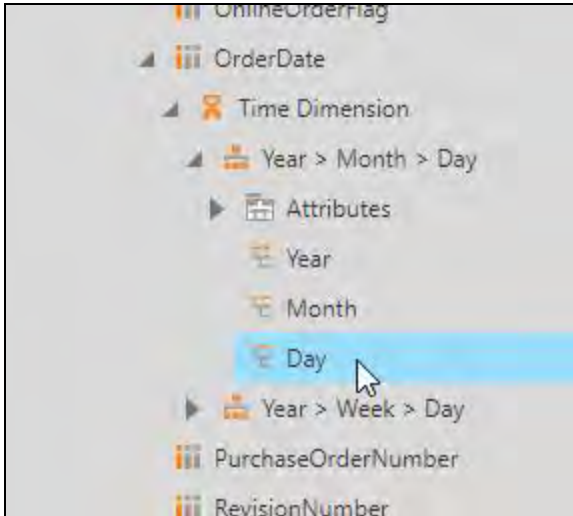


OrderDate	SubTotal
Grand Total	109,846,381.40
7/1/2005 12:00:00 AM	503,805.92
7/2/2005 12:00:00 AM	13,931.52
7/3/2005 12:00:00 AM	15,012.18
7/4/2005 12:00:00 AM	7,156.54
7/5/2005 12:00:00 AM	15,012.18
7/6/2005 12:00:00 AM	14,313.08
7/7/2005 12:00:00 AM	7,855.64
7/8/2005 12:00:00 AM	7,855.64
7/9/2005 12:00:00 AM	20,909.78

Using a Time Dimension

Date/time type columns only display the time portion when you use them directly. Use a [time dimension](#) to display only the *Day* portion, or to group dates into other levels such as *Year* or *Quarter*. Time dimensions also have formatting settings that you can customize.

Before adding a column of dates directly onto your metric set or visualization, find and expand it in the Explore window.



You will see the built-in time dimension, or another time dimension that you or someone created. Expand it further to find a level such as *Day*, then drag that **level** onto your visualization or metric set to display it.

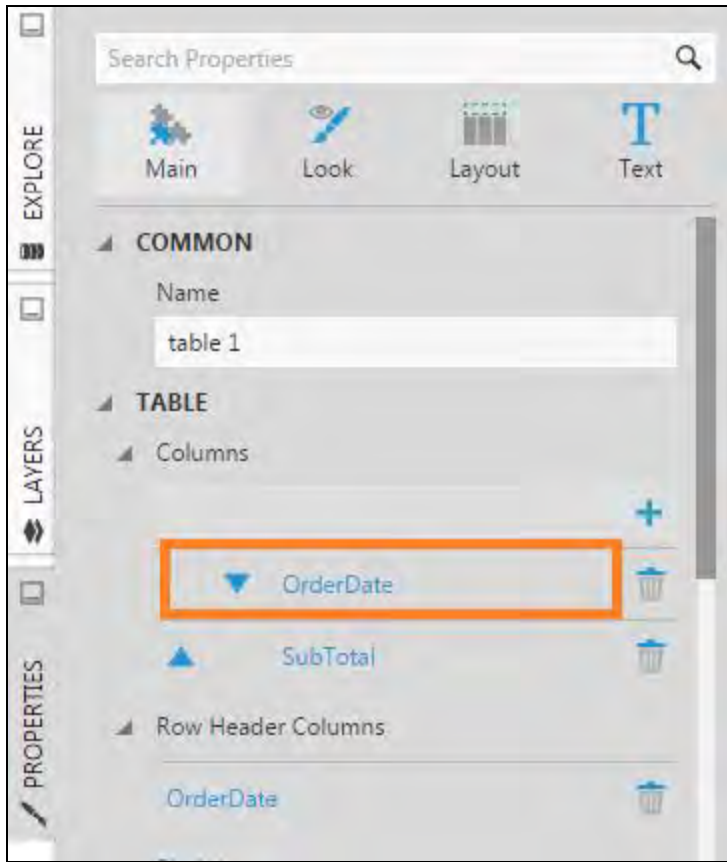
If you already added a column of dates by itself earlier, you can also drag a **time dimension level** on top of it to replace it.

You may want to use a time dimension with your dates in most cases because it allows grouping by and drilling up & down through different time periods. You can find a walkthrough that includes using a time dimension in [View Data With a Chart and Drill Down](#).

Using Visualization Properties

To customize a format through a visualization's settings, open the **Properties** window. If editing a view such as a dashboard, ensure the **visualization** is selected.

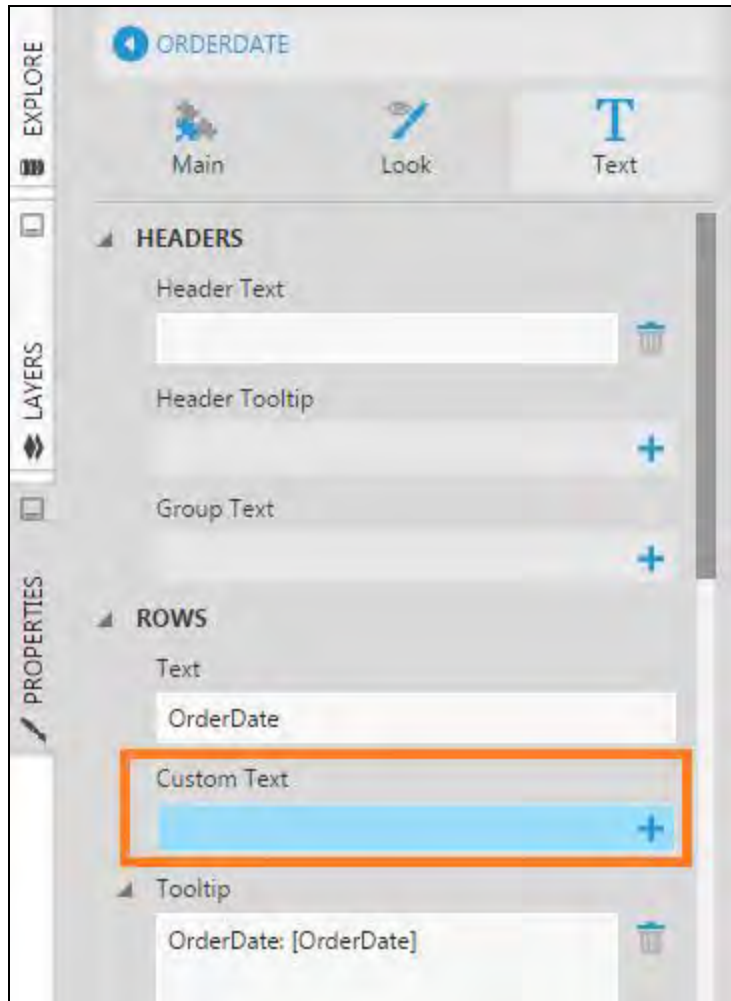
Every visualization has properties you can use to customize text and formatting. Using a table as an example, in the **Main** tab, find and click your **column** under Columns.



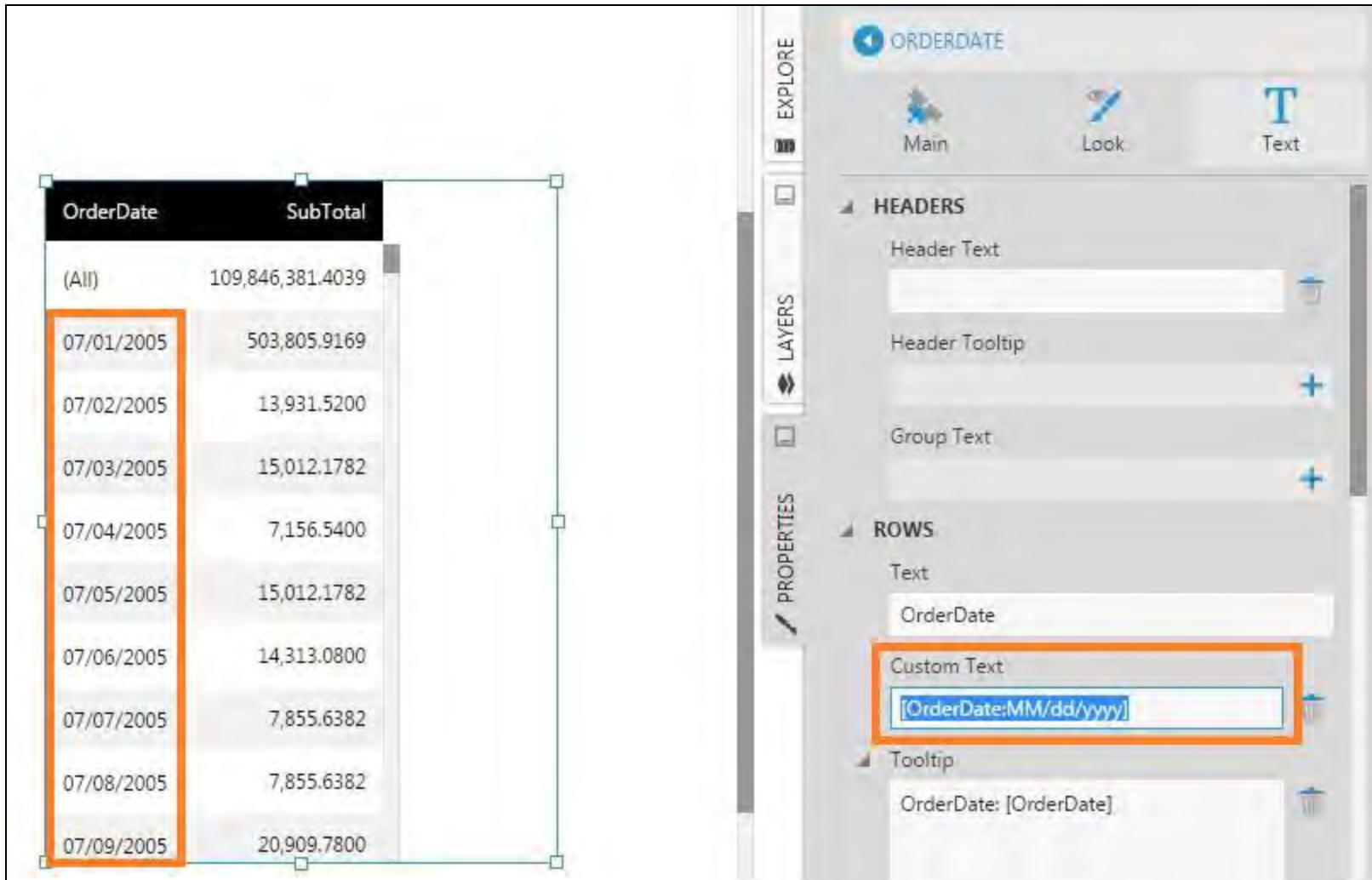
Note: Only 'flat' columns found under Columns have the option to customize the text in tables. If your dates are displayed as a row header column, you can [switch to a flat column or flat table](#).

In the Text tab under Rows, notice the Text property is read-only and shows the name of the metric set element that this column displays.

Click the + button under Custom Text.



Enter the **keyword** for your date element, and edit it to include a colon after the element name followed by a format. For example: *[Date:MM/dd/yyyy]*.

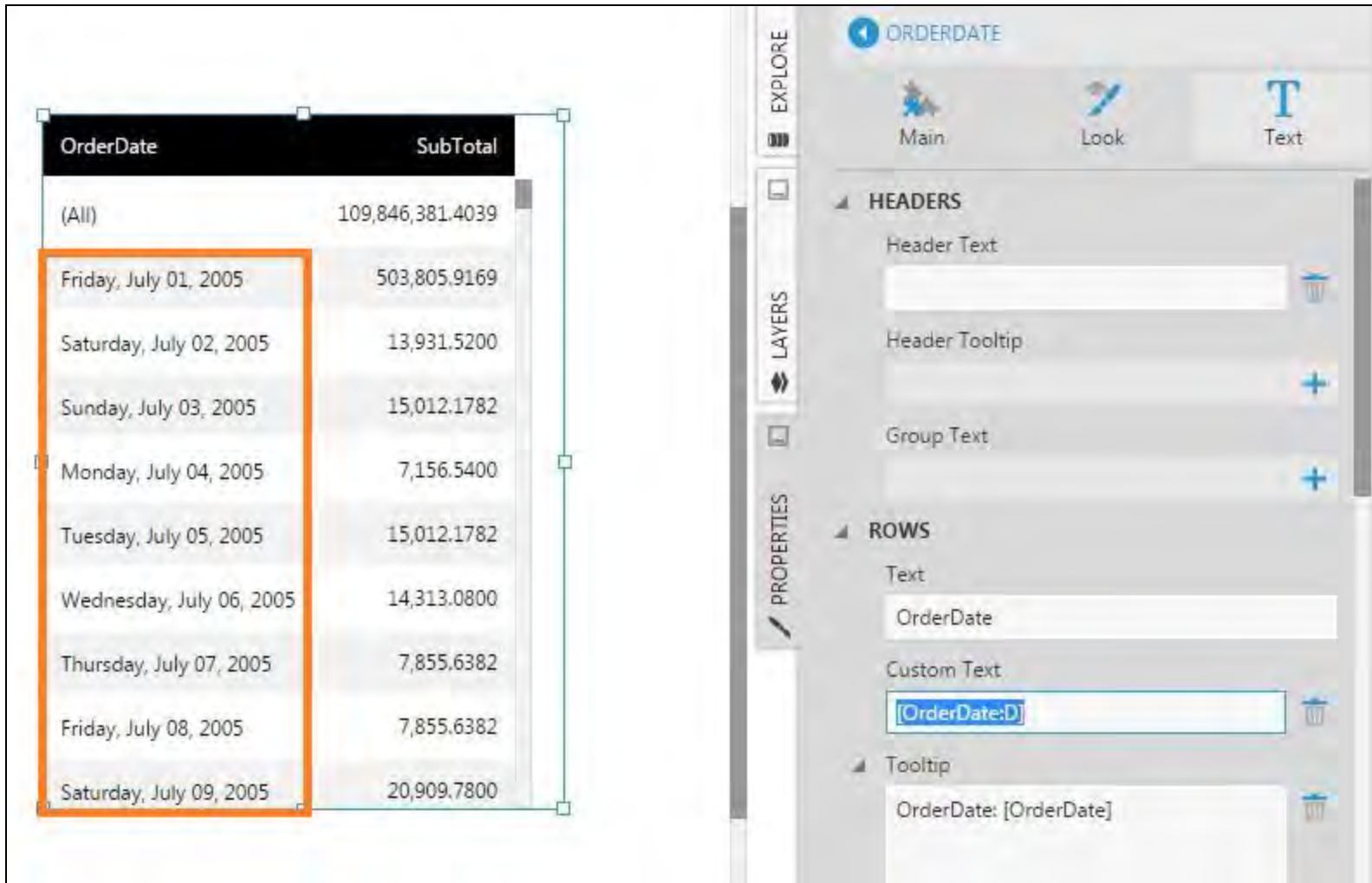


The screenshot displays the Logi Symphony v24 interface. On the left, a table is shown with two columns: 'OrderDate' and 'SubTotal'. The table data is as follows:

OrderDate	SubTotal
(All)	109,846,381.4039
07/01/2005	503,805.9169
07/02/2005	13,931.5200
07/03/2005	15,012.1782
07/04/2005	7,156.5400
07/05/2005	15,012.1782
07/06/2005	14,313.0800
07/07/2005	7,855.6382
07/08/2005	7,855.6382
07/09/2005	20,909.7800

The 'OrderDate' column is highlighted with an orange border. On the right, the 'ORDERDATE' properties panel is open. It shows the 'HEADERS' section with 'Header Text' and 'Header Tooltip' fields. The 'ROWS' section shows 'Text' with 'OrderDate' and 'Custom Text' fields. The 'Custom Text' field is highlighted with an orange border and contains the text '[OrderDate:MM/dd/yyyy]'. The 'Tooltip' field contains the text 'OrderDate: [OrderDate]'.

See [Visualization Keywords](#) for more details about keywords and their formatting options.



The screenshot displays the Logi Symphony v24 interface. On the left, a table is shown with two columns: 'OrderDate' and 'SubTotal'. The table has a header row and several data rows. A selection box highlights the data rows from 'Friday, July 01, 2005' to 'Saturday, July 09, 2005'. On the right, the 'ORDERDATE' properties panel is visible. It includes tabs for 'Main', 'Look', and 'Text'. The 'HEADERS' section contains 'Header Text' and 'Header Tooltip'. The 'ROWS' section contains 'Text' (with 'OrderDate' selected), 'Custom Text' (with '[OrderDate:D]' selected), and 'Tooltip' (with 'OrderDate: [OrderDate]' selected).

OrderDate	SubTotal
(All)	109,846,381.4039
Friday, July 01, 2005	503,805.9169
Saturday, July 02, 2005	13,931.5200
Sunday, July 03, 2005	15,012.1782
Monday, July 04, 2005	7,156.5400
Tuesday, July 05, 2005	15,012.1782
Wednesday, July 06, 2005	14,313.0800
Thursday, July 07, 2005	7,855.6382
Friday, July 08, 2005	7,855.6382
Saturday, July 09, 2005	20,909.7800

For more information, see:

- [Create a Time Dimension](#)
- [View Data With a Chart and Drill Down](#)

Displaying Symbols on a Map

This applies to: *Managed Dashboards, Managed Reports*

Overview

A **symbol** is a type of element that is used to represent location points on a [map visualization](#). These can be added to your map from map resources, or from coordinates in your data source.

Using **size rules**, the sizes of symbols can be varied according their data values like bubbles, known sometimes as a **proportional symbol map**. For example, each symbol can indicate the location of a city, and its size indicate its population. Using **color rules**, the color of each symbol can be varied according to data values, such as sales figures.

The following walkthrough shows you how to create a proportional symbol map in which the symbols and their locations are loaded from your data and where both their size and color vary according to metric values.

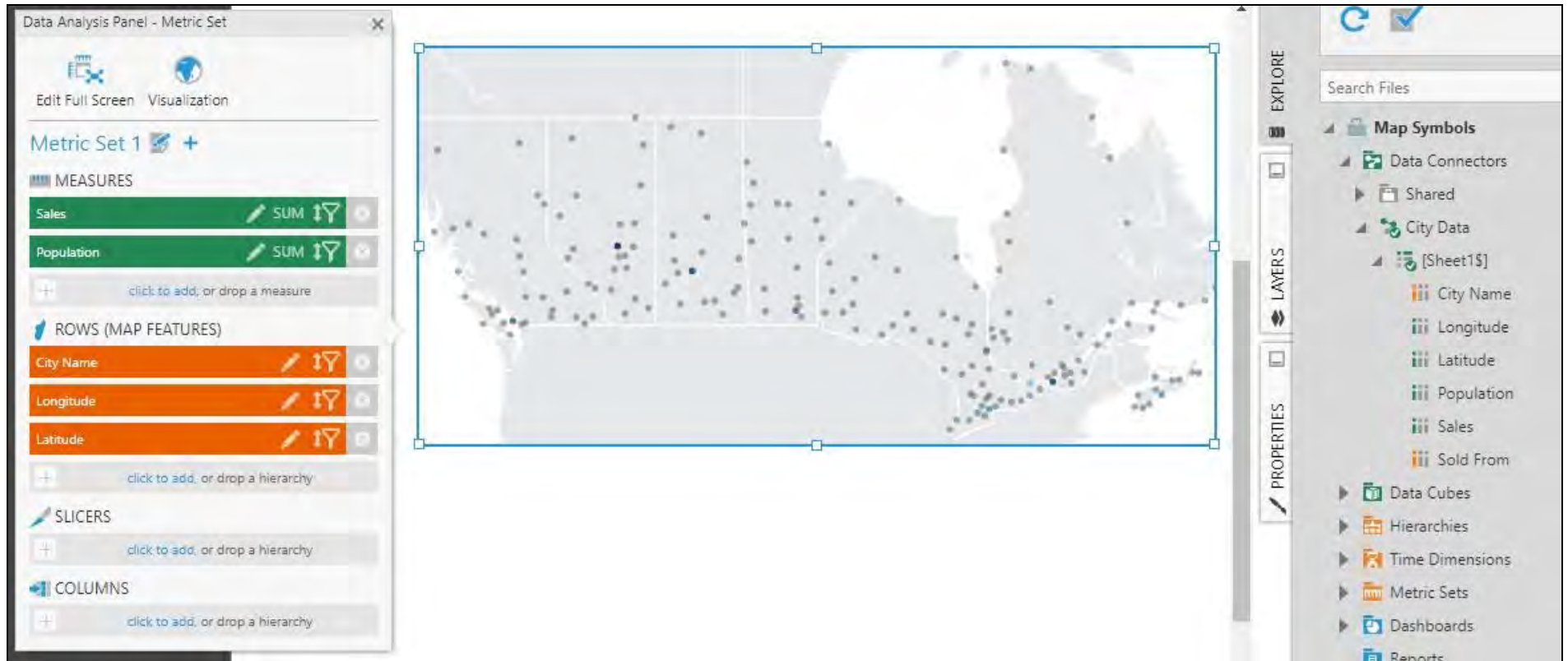
Add Data To the Map

Consider the following example, which specifies the decimal longitude and latitude for various cities in Canada. These values will be used to create and position symbols on the map. There is also some measure data, such as population and sales figures for each city.

	A	B	C	D	E	F
1	City Name	Longitude	Latitude	Population	Sales	Sold From
2	Ottawa	-75.67	45.42	934240	15300	Toronto
3	Toronto	-79.37	43.67	6417516	23000	
4	Halifax	-63.58	44.67	403130	36000	Toronto
5	Vancouver	-123.08	49.25	2463431	42000	
6	Winnipeg	-97.13	49.9	705245	57000	Vancouver
7	Montréal	-73.58	45.5	4027100	65100	Toronto
8	Saskatoon	-106.67	52.13	246375	73200	Vancouver
9	Edmonton	-113.5	53.55	932550	81000	Vancouver

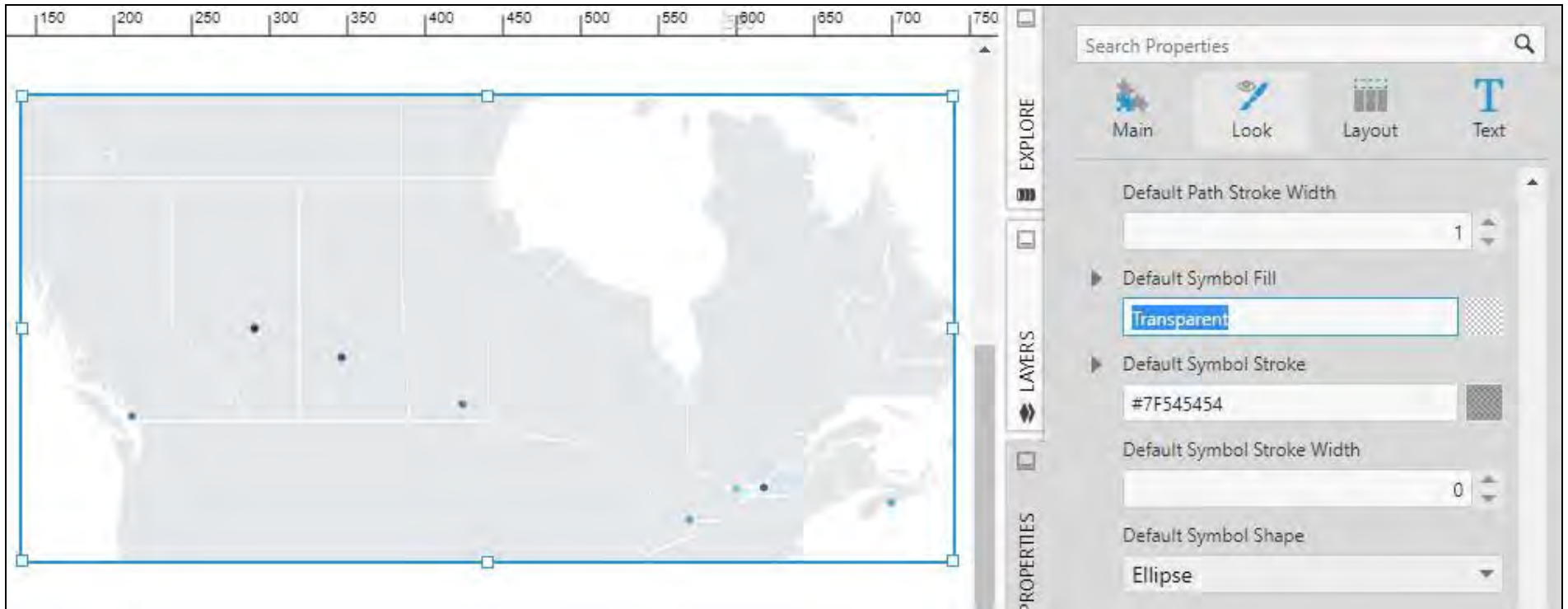
In our example, we [imported our Excel data](#) by dragging and dropping it on the Explore window while editing a dashboard. After adding a new map visualization from the toolbar, we drag **City Name** and **Sales** from the Excel data connector in the Explore window onto the map.

The city names in our example happen to match with the cities included in the [map resources](#) included with Symphony, which are automatically loaded since we have selected only the city names. They include many more symbols in this case than the ones we have data for, which display various shades of blue to indicate measure values.



In the figure above, we have also changed the [Map projection](#) property in the **Layout** tab to **Mercator**, and dragged the map resource **Canada (States and Provinces)** from the Explore window onto the map to display as additional context.

In the **Properties** window, in the **Look** tab, the various `Default Symbol` properties determine the appearance of the symbols whose appearance is not being changed by data. For example, we could decide to change the other symbols to be fully transparent. Or, when using data to change symbol sizes, you could assign a default symbol size of zero.

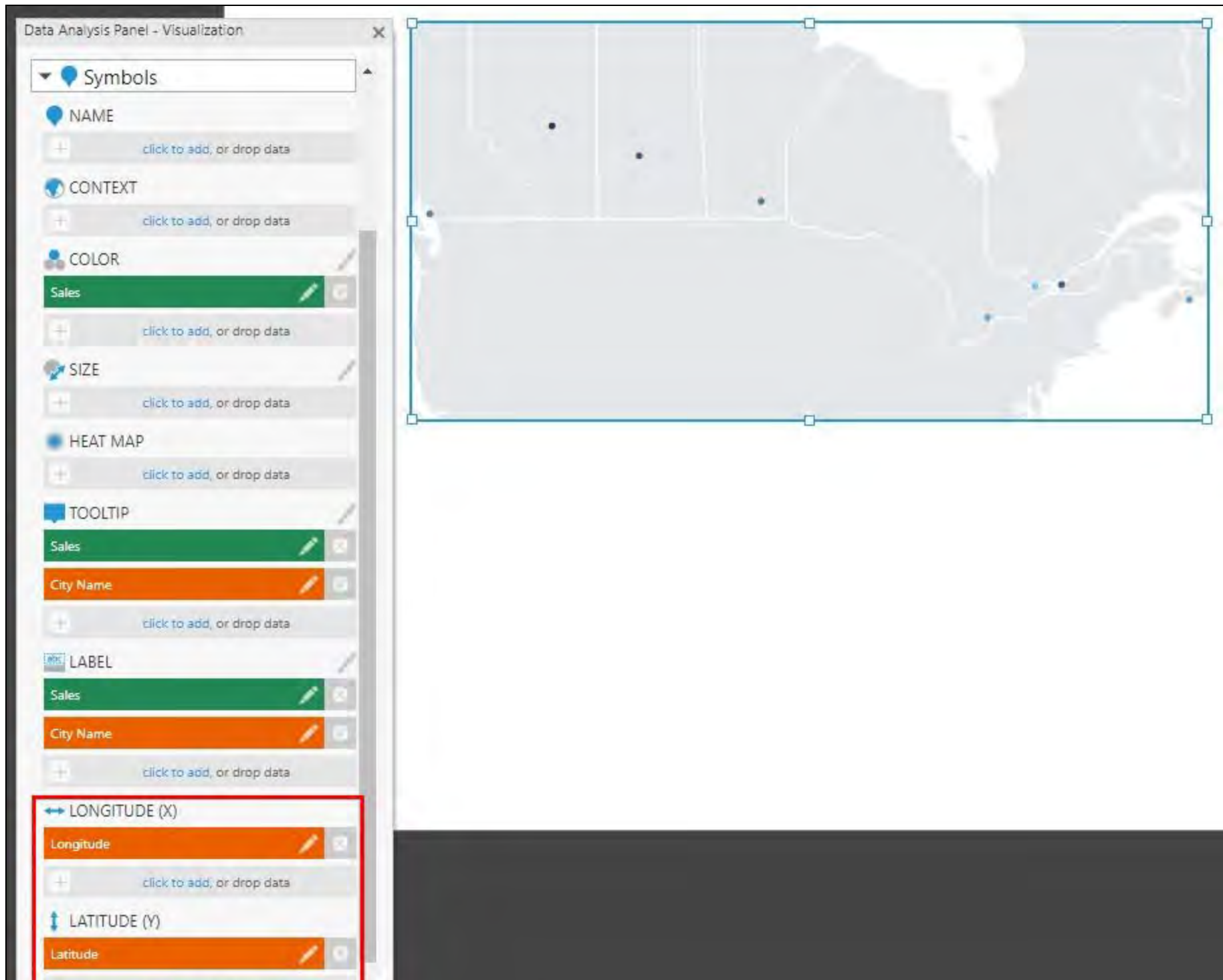


Connect Symbol Location to Data

In our example, our data includes the coordinates of the cities, so we don't need to use map resources and can display symbols directly from the data.

Click **Visualization** in the Data Analysis Panel, expand **Symbols**, and scroll down to **Longitude (X)** and **Latitude (Y)**.

Drag from the **Explore** window or **click to add** the corresponding **longitude** and **latitude coordinates** from the data source.

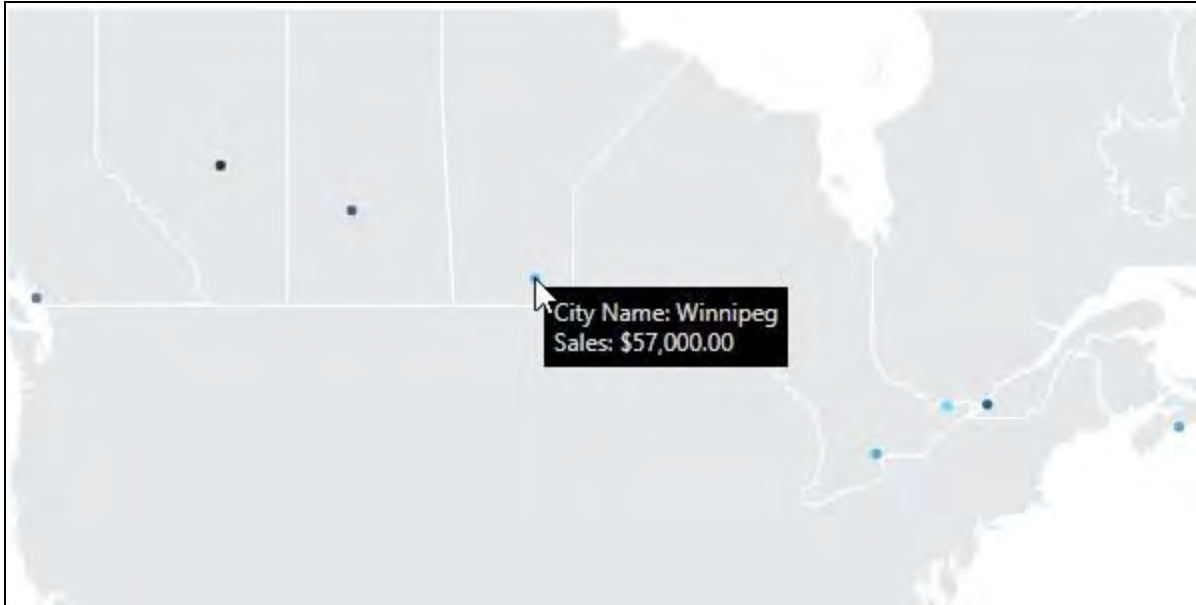




Note: If you have addresses in your data but not longitude and latitude coordinates, you can use a geocoding service to convert them. A [Python Analysis transform](#) can do this, for example.

Symbols for each city are now displayed, and the map will automatically zoom into them.

If you switch to **View** mode, you can access a tooltip on each city that shows its name, sales figure, and other information assigned under the symbol's Tooltip in the Data Analysis Panel.

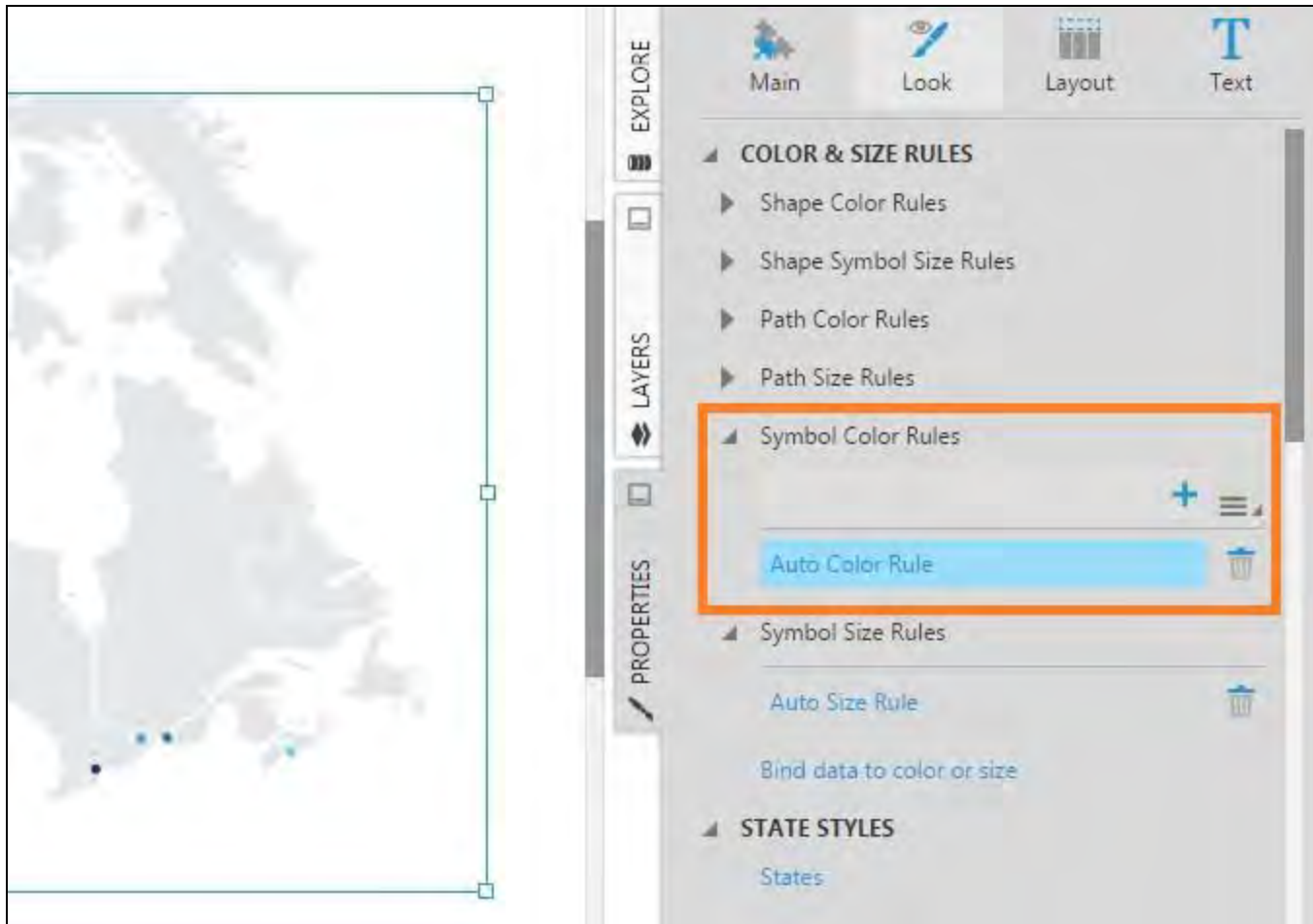


If your symbols are very close together, for example within the same city, you may want to make use of [street-level maps](#) displayed in the background to better understand their context.

Connect Symbol Color to Data

The symbols on the map have different colors based on the values of the measure because it was automatically assigned under **Color** in the Data Analysis Panel **Visualization** tab under **Symbols**. You can go there to remove or change this measure.

The colors that are assigned to each symbol based on these values are determined by the `Symbol Color Rules` property, found in the **Look** tab of the Properties window.



Click **Auto Color Rule** to make adjustments to the default color rule. You can also click the **paintbrush** icon next to **Color** in the Data Analysis Panel's **Visualization** tab as a shortcut.

Colors are automatically produced between the `From Color` and `To Color` set here. You can specify a `Middle Color` if needed. You can also change the `Number of Classes` (number of data ranges assigned a color) and the `Distribution` method used to determine their ranges.

EXPLORE

LAYERS

PROPERTIES

Search Properties

AUTO COLOR RULE

COMMON

From Value

Middle Value

To Value

Distribution

Round Interval

Number Of Classes

6

APPEARANCE

From Color

#64D0FF

Middle Color

To Color

#1A3B67

LEGEND

Display In Legend

☒

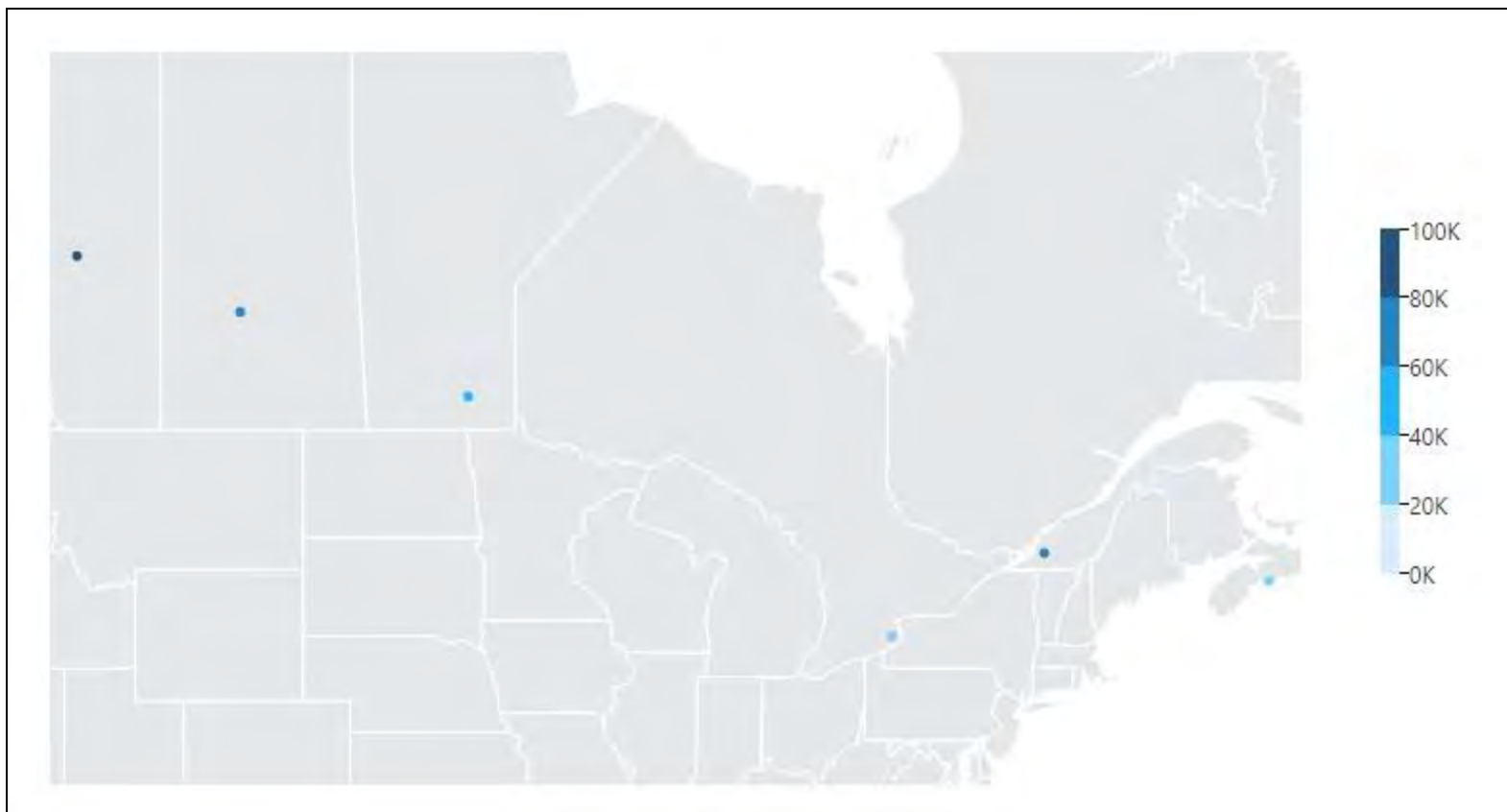
Display In Color Scale

☒

Format

Distribution Methods

The **Round Interval** divides the entire data range into equal-sized ranges defined between rounded values, and represents each range with a particular color. When a [legend is added](#) and connected to the map, these ranges and their corresponding colors are displayed.



This is useful when identifying what the measure values are based on the colors of the data points, because unnecessary precision shown in the legend can be more difficult to follow.

The **Continuous** distribution method maps the entire data range to a continuous range of colours, so that different quantities from your measure are each represented by distinct shades of color (values are not 'binned' into classes or ranges assigned a single color). This can allow you to identify even small differences in measure values between neighboring data points, which will be represented by slight differences in color, although it can be more difficult to judge for yourself which value corresponds with that color (you can use tooltips to find out the exact measure values).

The other distribution methods you might choose to use are:

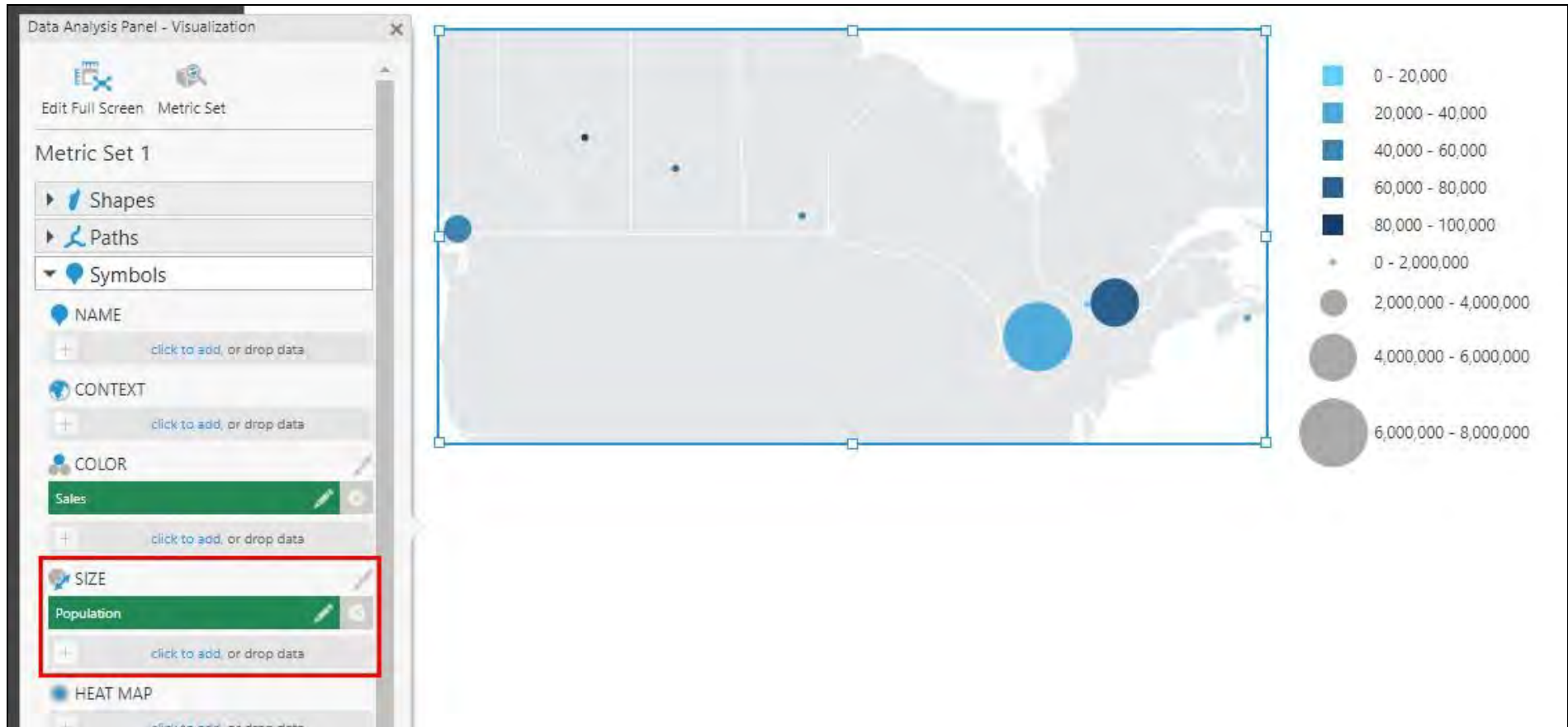


- The **Round Continuous** distribution method assigns a continuous range of colors like the **Continuous** method, but rounds the numbers marking the start and end of the data range, which will be identified on your legend if you have one.
- The **Equal Interval** distribution method divides the entire data range into equal-sized intervals like **Round Interval**, but does not round the values marking the start & end of each range.
- The **Equal Distribution** method determines ranges that assign each color approximately the same number of times, making equal use of each distinct color, whereas **Equal** or **Round Interval** may leave out some colors entirely from the data points if there are no corresponding values within those ranges. The result is that the shades of color don't necessarily change to accurately represent the quantities of the measure values, and a legend should be included to clarify this.

Connect Symbol Size to Data

In the Data Analysis Panel **Visualization** tab, under **Symbols**, you can assign data under **Size**. This changes the size of each symbol to represent its value.

The figure below shows the result of assigning **Population** from our example data source under **Size**.



The sizes of the symbols now vary according to population of each city. Similar to color rules, the **Symbol Size Rules** determine these sizes, which by default correspond to rounded intervals. You can modify this rule in the **Properties** window the same way as for color rules, described in the previous section, except that each range or class is represented by a particular symbol size.

Add Paths Between the Symbols

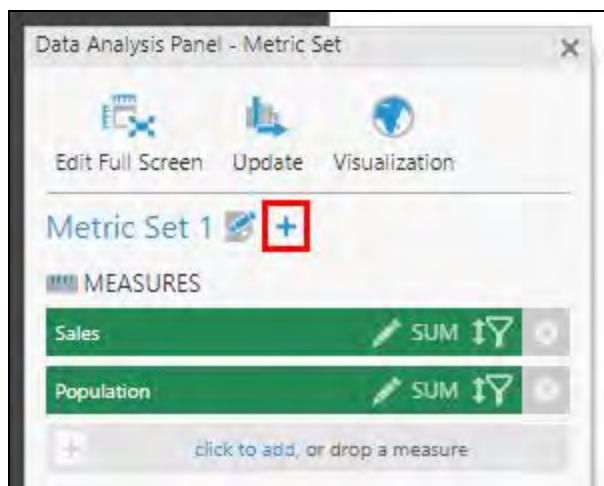
If your data contains pairs of symbol names each defining some connection between two symbols, you can assign these to the map to display these links, similar to a [relationship diagram](#). Links between pairs of cities can be shown to indicate shipments, for example.

Open the **Visualization** tab of the Data Analysis Panel for the map.

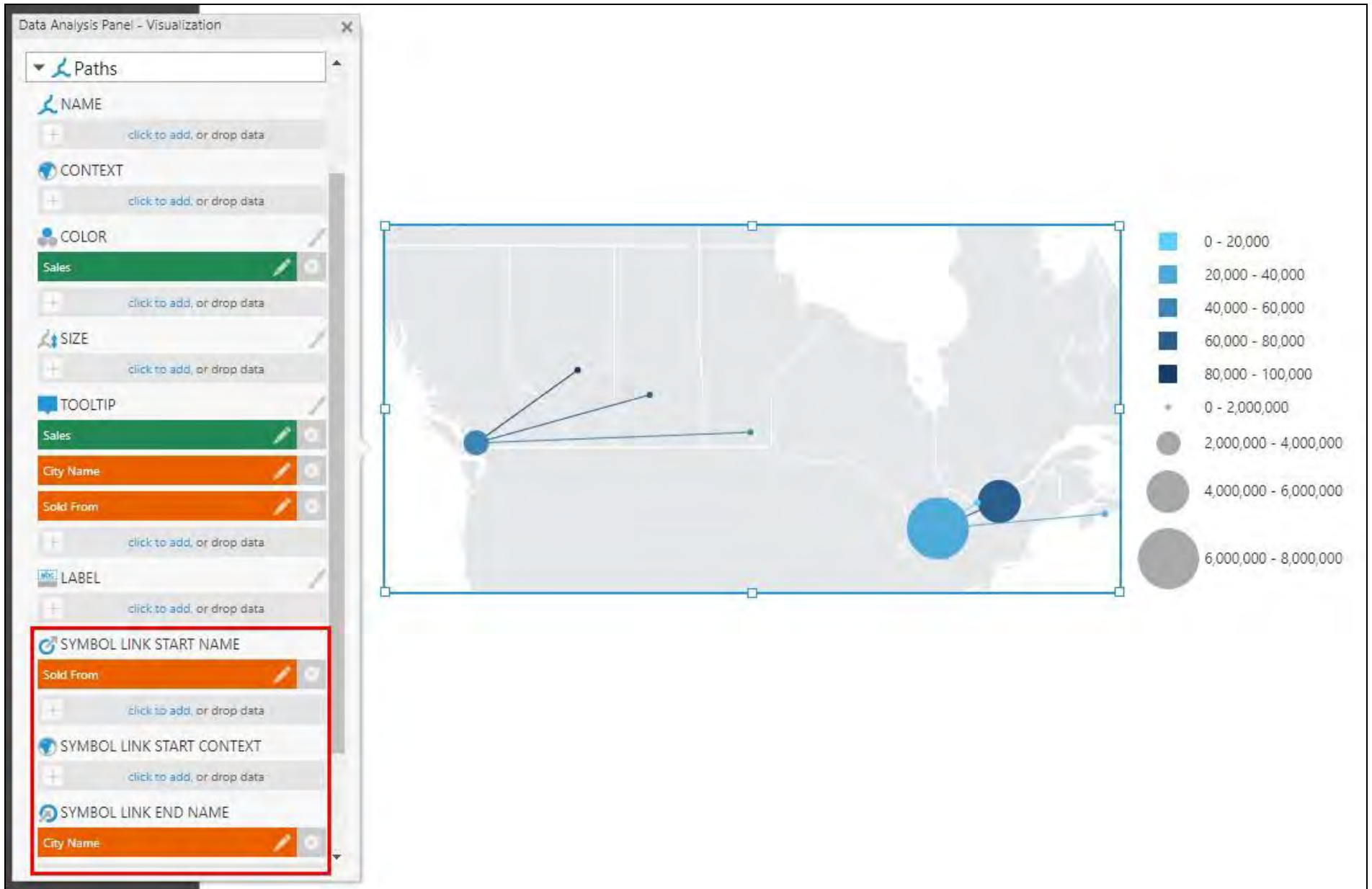
The symbols should have data assigned under **Name** for the map to be able to match up your links with the existing symbols on the map. For the example shown in this article:

1. First expand **Symbols** and re-add **City Name** under Name.
2. Map resources containing matching city names may now re-appear. You can remove these by selecting `Show Only Requested Maps` in the Properties window. For additional context other than the provinces map resource, search for and drag the map resource **United States** from the Explore window onto the map.
3. Disable totals on the metric set to exclude the grand total from the color and size ranges: click the metric set **Edit** button in the **Metric Set** tab and set **Shown Totals** to **None**.

If your symbol link data does not correspond with data already being displayed for individual symbols, you may need to first add a separate metric set for the map in the **Metric Set** tab. For example, the symbol data should contain a single row corresponding with each symbol, while the path data might contain multiple rows defining multiple links in or out of every symbol. The [example data](#) used in this article contains no more than one link ending at each city.



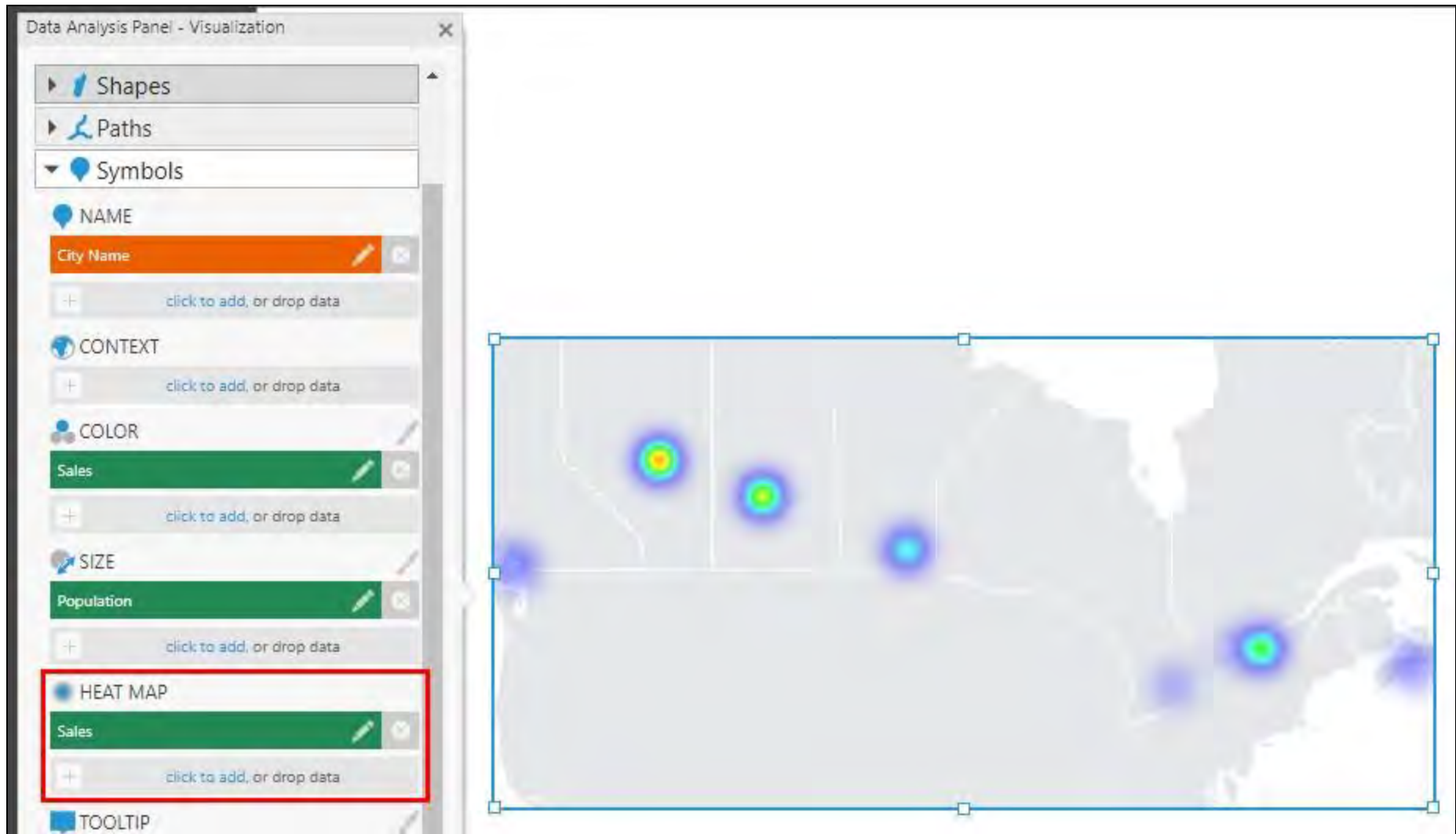
In the Visualization tab, expand the **Paths** section, and add the two hierarchies with names matching symbols: one under **Symbol Link Start Name** and one under **Symbol Link End Name**, that is, **Sold From** and **City Name**.



Like for symbols as shown earlier, a **path color rule** is automatically generated for the data assigned under **Color**, for example, **Sales**, and a **size rule** can be used to determine the path widths by assigning data under **Size**.

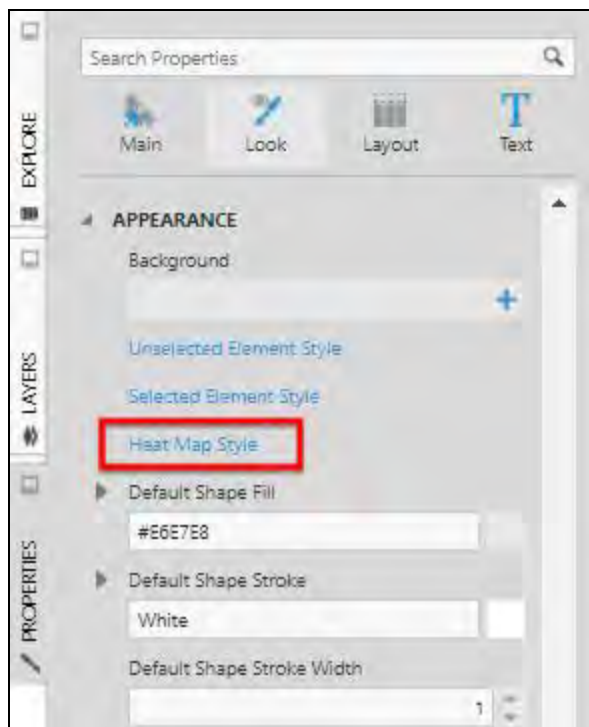
Show Heat Maps

To display symbol data as a heat map rather than individual symbols, add a measure, for example, **Sales** under **Heat Map** in the Data Analysis Panel in the Visualization tab.



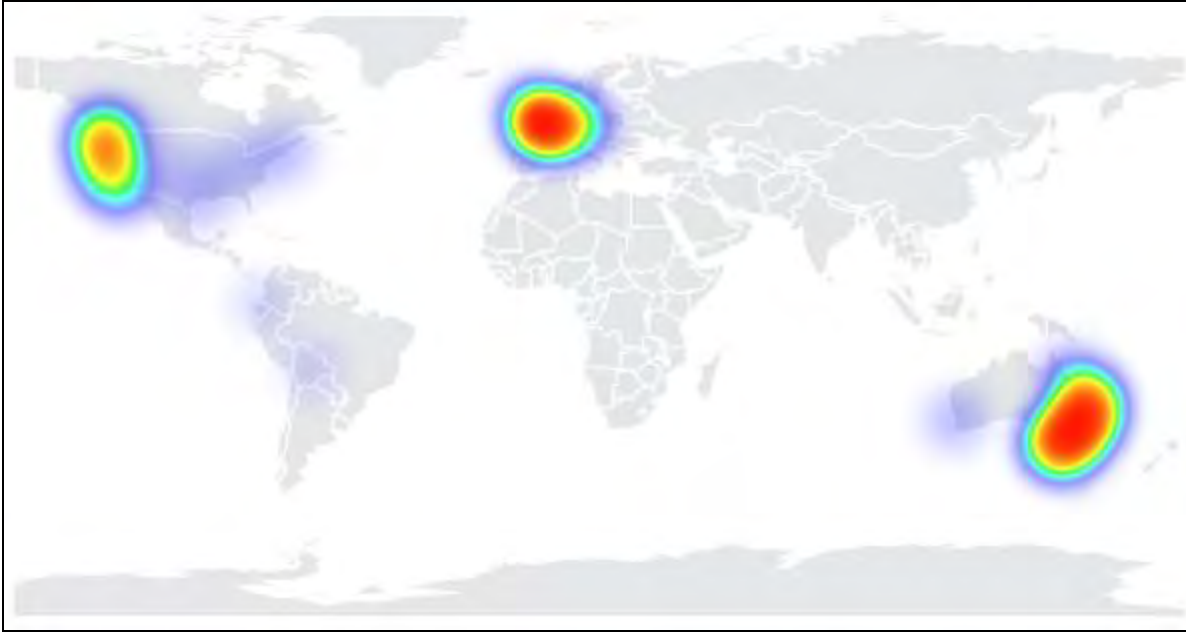
Note: Heat maps combine data from multiple data points into different shades of color, so you cannot interact with individual symbols.

The heat map settings are now used to determine the colors and sizes of the plotted symbol data. If you want to customize these, go to the Properties window in the **Look** tab and select to edit **Heat Map Style**.

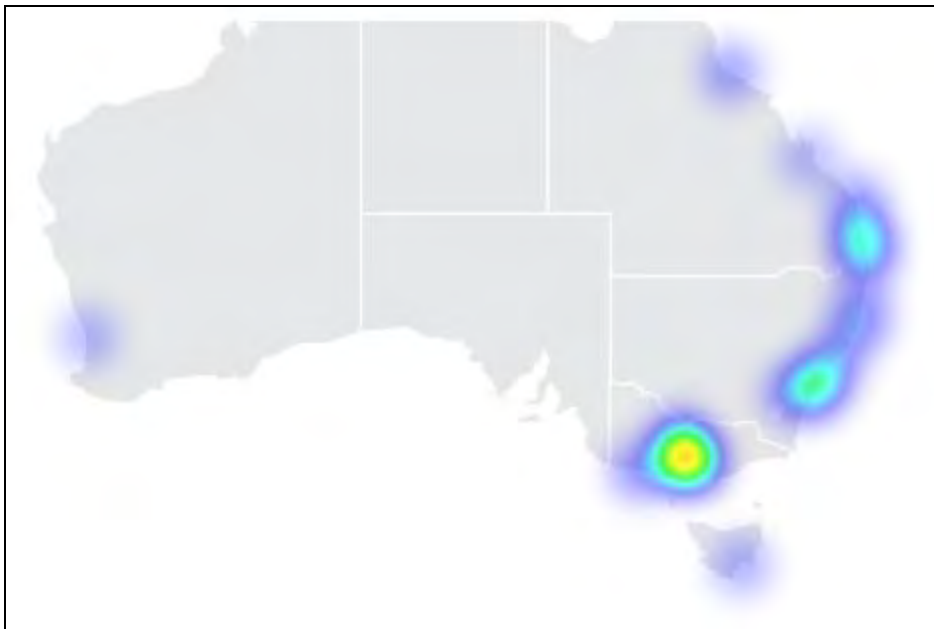


You can change the **Gradient** property to display different shades of a single color, for example.

Heat maps are useful for large datasets containing data for many symbol locations, such as in the example shown below.



Locations that are nearby can merge and change color to indicate their total value. You can zoom into an area and the heat map will update in real time to break down the data at the changing zoom level.



For more information, see:

- [Using a Map Visualization](#)
- [Apply Colors to Data Points or Series Using Color Rules](#)
- [Add a Legend](#)

Handling Null Value in a State Indicator Column

This applies to: *Managed Dashboards, Managed Reports*

Overview

By default, state indicators are colored gray with a shape of ellipse. The default style is simply what the state indicator looks like when the value doesn't fall within any of the states. For example, in the screenshot below, "Tokyo", with no data for "Sales", does not fall within any of the states defined.

Location	Sales
Beijing	
California	
Narita	
Ontario	
Quebec	
Shanghai	
Texas	
Tokyo	

You can display a text instead of a state indicator if your value does not fall within any of the states, such as for a null value. For example, you want to show the text "N/A" instead of a state indicator if the value is null. This article will walk you through the steps needed to accomplish the desired result below:

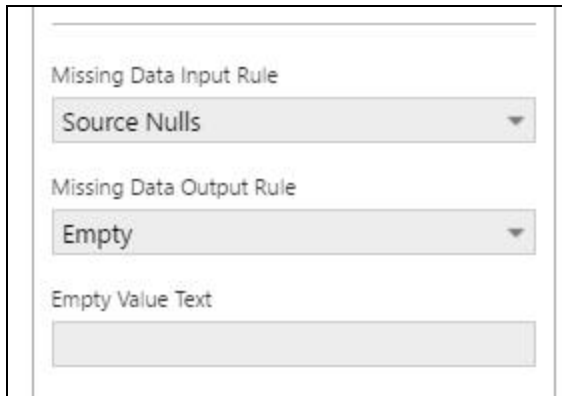
Location	Sales
Beijing	
California	
Narita	
Ontario	
Quebec	
Shanghai	
Texas	
Tokyo	N/A

Sample Data

Location	Sales
California	2500
Texas	2000
Ontario	3000
Quebec	4000
Beijing	5000
Shanghai	2800
Tokyo	NULL
Narita	15000

Missing Data Rule

In order for data with null value to appear on the Data Table, configure the Metric Set Element, set Missing Data Input Rule to **Source Nulls**, and set Missing Data Output Rule to **Empty**.



Missing Data Input Rule

Source Nulls

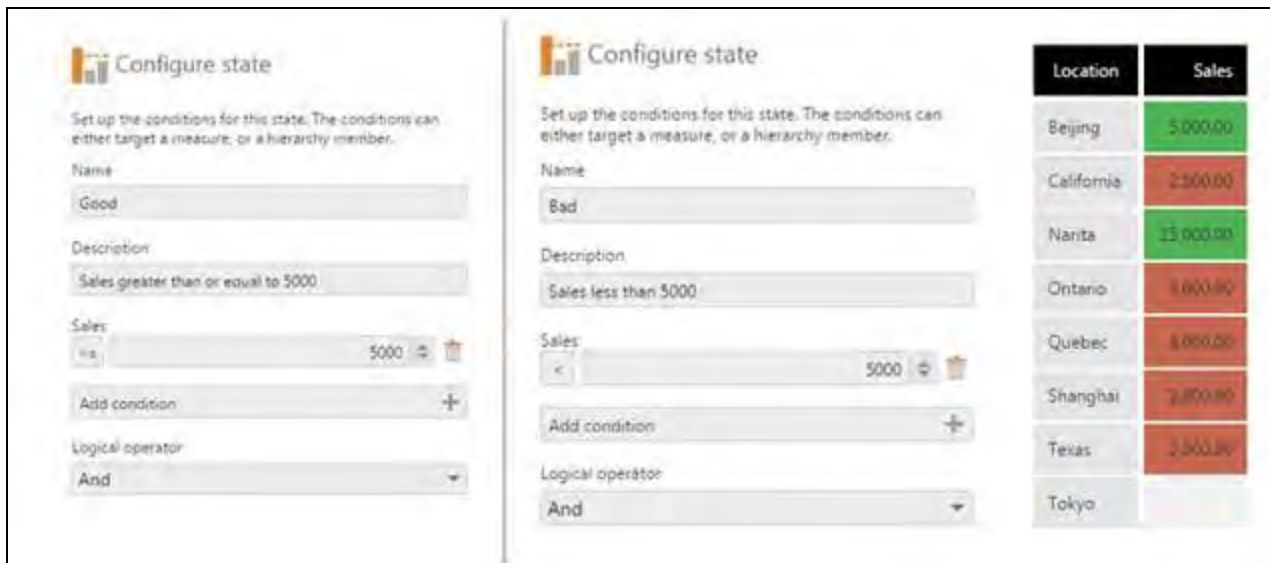
Missing Data Output Rule

Empty

Empty Value Text

Set Up the States

For example, "Good" state is for Sales of 5000 and up. "Bad" state is for Sales of less than 5000.



Configure state

Set up the conditions for this state. The conditions can either target a measure, or a hierarchy member.

Name: Good

Description: Sales greater than or equal to 5000

Sales: 5000

Add condition

Logical operator: And

Configure state

Set up the conditions for this state. The conditions can either target a measure, or a hierarchy member.

Name: Bad

Description: Sales less than 5000

Sales: < 5000

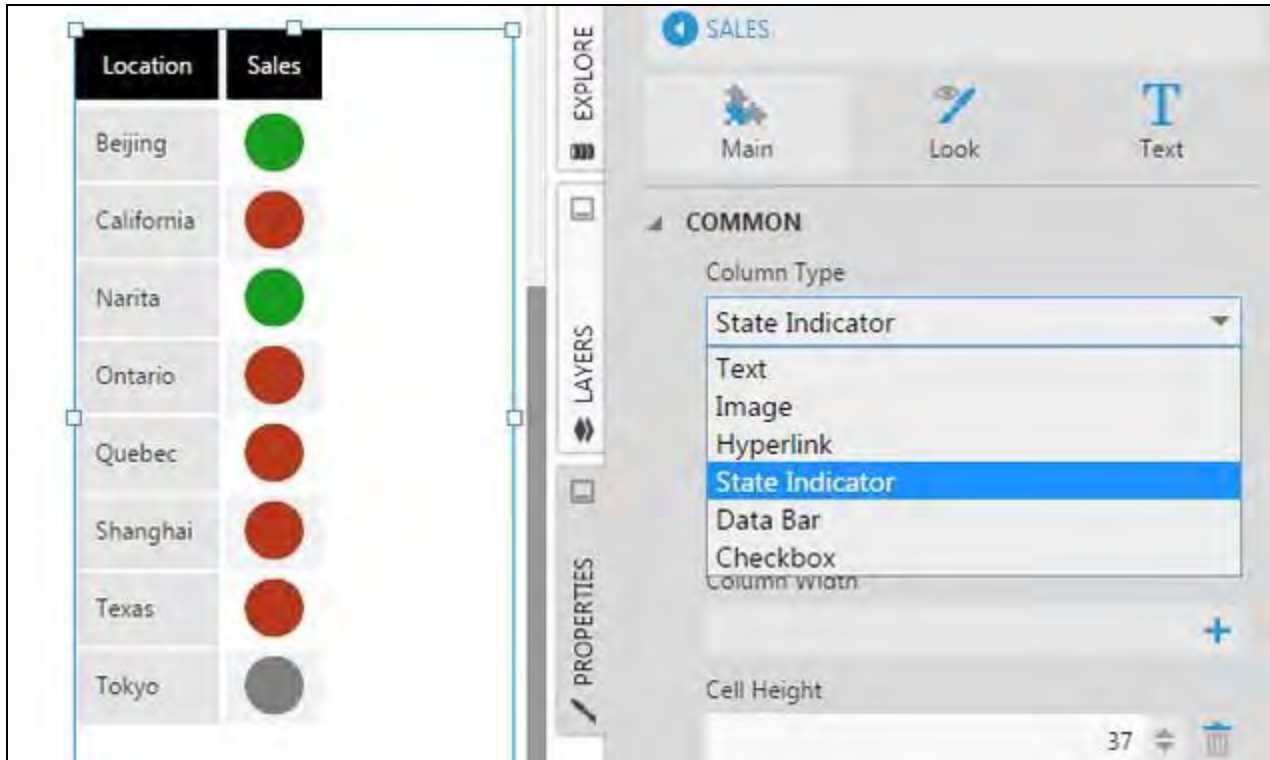
Add condition

Logical operator: And

Location	Sales
Beijing	5,000.00
California	2,500.00
Narita	15,000.00
Ontario	1,000.00
Quebec	4,000.00
Shanghai	2,000.00
Texas	3,500.00
Tokyo	

Column Type

By default, the date in a table is shown as a text. You can set this to show a State Indicator instead by setting the Column Type to **State Indicator**.

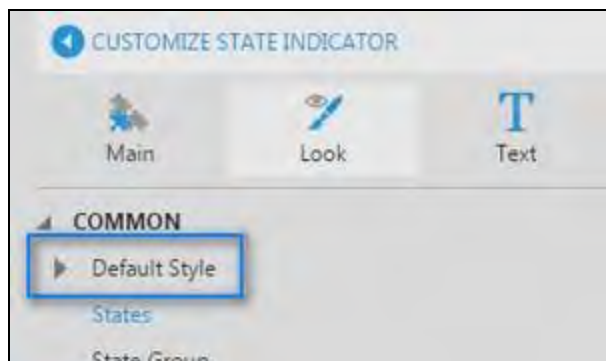


The screenshot shows the Logi Symphony interface. On the left, a table displays data for various locations and their sales status. The 'Location' column lists Beijing, California, Narita, Ontario, Quebec, Shanghai, Texas, and Tokyo. The 'Sales' column shows corresponding state indicators: green for Beijing, Narita, and Quebec; red for California, Ontario, Shanghai, and Texas; and grey for Tokyo. On the right, the 'PROPERTIES' panel is open, showing the 'Column Type' dropdown menu with 'State Indicator' selected. Other options include Text, Image, Hyperlink, Data Bar, and Checkbox. The 'Cell Height' is set to 37.

Location	Sales
Beijing	Green Circle
California	Red Circle
Narita	Green Circle
Ontario	Red Circle
Quebec	Red Circle
Shanghai	Red Circle
Texas	Red Circle
Tokyo	Grey Circle

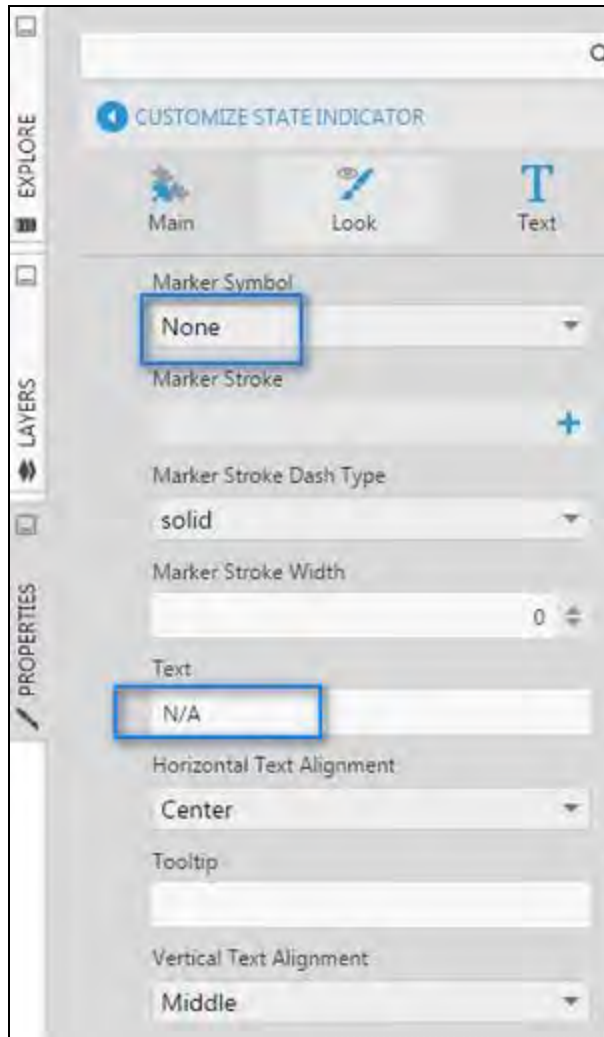
Default Style

Since a null value is an unknown value, it will not fall within any state and will use the default style. In order to set the default style, expand the **Default Style** section to show the default properties.



Edit the appropriate default state style. In this case, the Marker Symbol and Text.

- Marker Symbol = "None"
- Text = "N/A"



Testing

Location	Sales
Beijing	
California	
Narita	
Ontario	
Quebec	
Shanghai	
Texas	
Tokyo	N/A

For more information, see:

- Video: [States](#)
- [Using a State Indicator](#)
- [Using a Table Visualization](#)
- [Handling Missing Data](#)

Hide a Column

This applies to: *Managed Dashboards, Managed Reports*

There are a variety of ways you can hide a column in a table visualization.

Using Properties

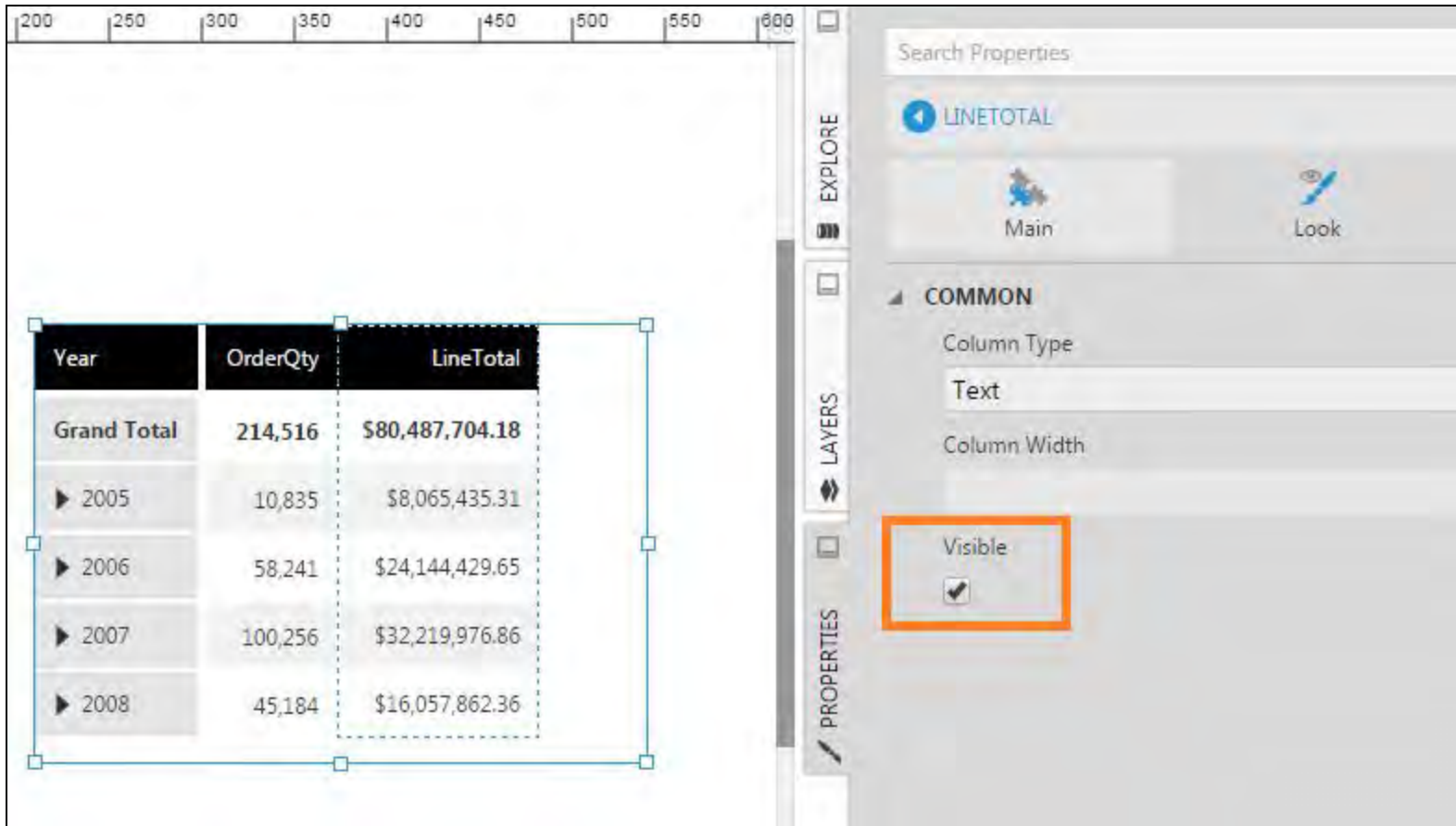
You can show or hide a table column by using its Visible property. You cannot hide a row header column using this method.



Note: Hiding a column only in the visualization properties does not remove or hide the data from the [metric set](#), so viewers can see a hidden column using the **Show Columns** [right-click option](#) and the data can also be exported.

Year	OrderQty	LineTotal
Grand Total	214,516	\$80,487,704.18
▶ 2005	10,835	\$8,065,435.31
▶ 2006	58,241	\$24,144,429.65
▶ 2007	100,256	\$32,219,976.86
▶ 2008	45,184	\$16,057,862.36

In Properties, on the Main tab and under Columns, click the **column** that you want to hide and uncheck the **Visible** property.

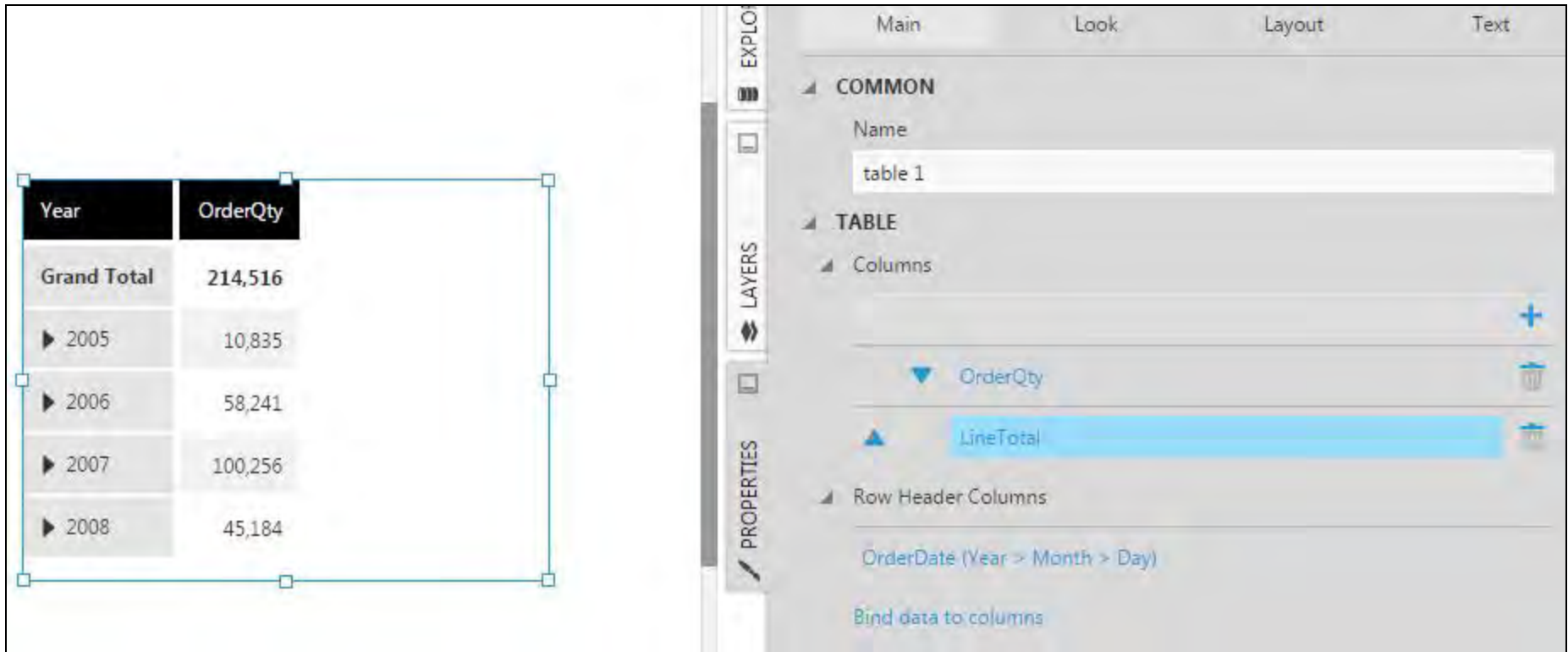


The screenshot shows the Logi Symphony v24 interface. On the left, a table is displayed with the following data:

Year	OrderQty	LineTotal
Grand Total	214,516	\$80,487,704.18
▶ 2005	10,835	\$8,065,435.31
▶ 2006	58,241	\$24,144,429.65
▶ 2007	100,256	\$32,219,976.86
▶ 2008	45,184	\$16,057,862.36

On the right, the Properties panel is open, showing the 'COMMON' section. The 'Visible' property is highlighted with an orange box and has a checked checkbox.

The table column is now hidden.



The screenshot displays the Logi Symphony interface. On the left, a table visualization is shown with the following data:

Year	OrderQty
Grand Total	214,516
▶ 2005	10,835
▶ 2006	58,241
▶ 2007	100,256
▶ 2008	45,184

On the right, the Properties panel is open, showing the configuration for the table visualization. The panel is divided into sections: COMMON, TABLE, and Row Header Columns. The TABLE section is expanded, showing the Columns list. The 'LineTotal' column is highlighted in blue. The Row Header Columns section shows 'OrderDate (Year > Month > Day)' and 'Bind data to columns'.

To make it visible again, click the **column** in Properties and select the **Visible** property.

Using the Data Analysis Panel

You can remove a column from a table visualization using the following method, but you can still use that column in filtering, state rules, etc.

On the Data Analysis Panel, click **Visualization**.

Data Analysis Panel - Visualization

Freeze Refresh Data Metric Set

Sales By Territory

Table

COLUMN HEADER

click to add, or drop data

ROW HEADER

click to add, or drop data

COLUMN

TerritoryID

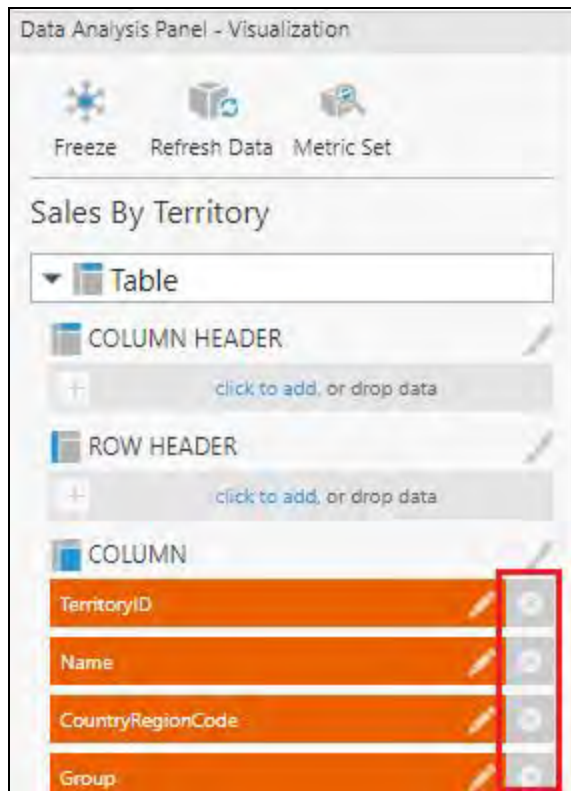
Name

CountryRegionCode

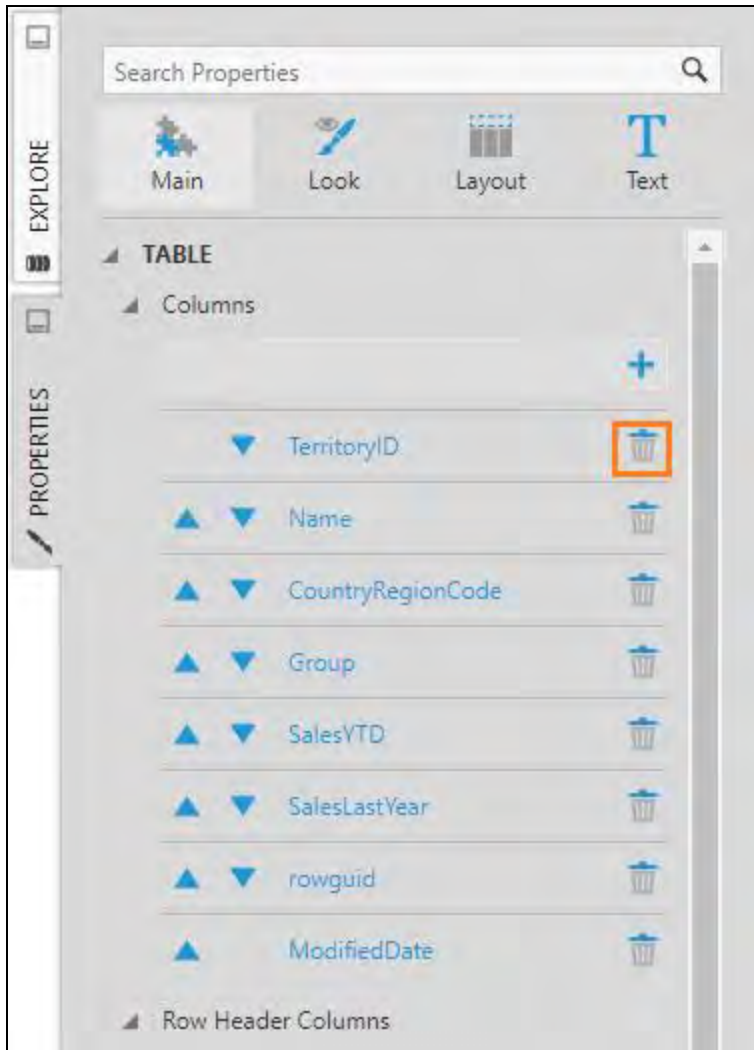
Group

TerritoryID	Name	CountryRegionCode	Group	SalesYTD
1	Northwest	US	North America	7,887,186.7882
2	Northeast	US	North America	2,402,176.8476
3	Central	US	North America	3,072,175.1180
4	Southwest	US	North America	10,510,853.8739
5	Southeast	US	North America	2,538,667.2515
6	Canada	CA	North America	6,771,829.1376
7	France	FR	Europe	4,772,398.3078
8	Germany	DE	Europe	3,805,202.3478
9	Australia	AU	Pacific	5,977,814.9154
10	United Kingdom	GB	Europe	5,012,905.3656

Under Column, click the X icon for the column(s) you want to remove.



You can also remove a column from Properties by clicking the **Main** tab and then clicking the **delete** icon next to the column that you want to remove.

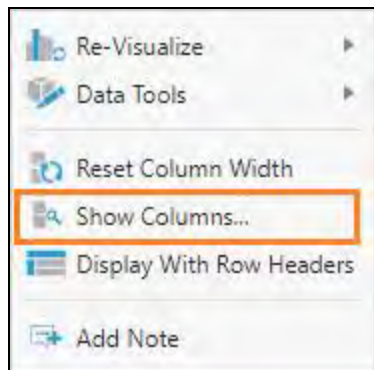


Hiding a Measure

When you want to use a measure for a formula, sorting, or other metric set features but it must be hidden in the visualization and after export, then you can hide the measure itself, rather than just hiding the table column. Access the measure options by clicking its **green tile** or the **edit** icon in the Data Analysis Panel and select the **Hidden** box to prevent the measure's values from being visible.

Show and Hide Columns When Viewing

Viewers can select which columns to view by right-clicking the table visualization when viewing and selecting the **Show Columns** option.



Using Scripting

If you need to use script rather than the built-in context menu option, you can set the [isVisible](#) property:

```
// To hide 1st column
table1.control.columns[0].isVisible = false;

// To show 1st column
table1.control.columns[0].isVisible = true;
```

To remove a table column entirely, call [removeColumnByIndex](#):

```
table1.removeColumnByIndex(0);
```

For more information, see:

- [Design Overview](#)
- [Using a Table Visualization](#)



- Archive of documentation for Logi Symphony v24

- Script Library: [Show and hide columns](#)
- JavaScript API: [dundas.view.controls.DataGrid Class](#)
- [Symphony Metric Sets](#)
- [Other Metric Set Tools](#)



Show or Hide Total Values On a Chart

This applies to: *Managed Dashboards, Managed Reports*

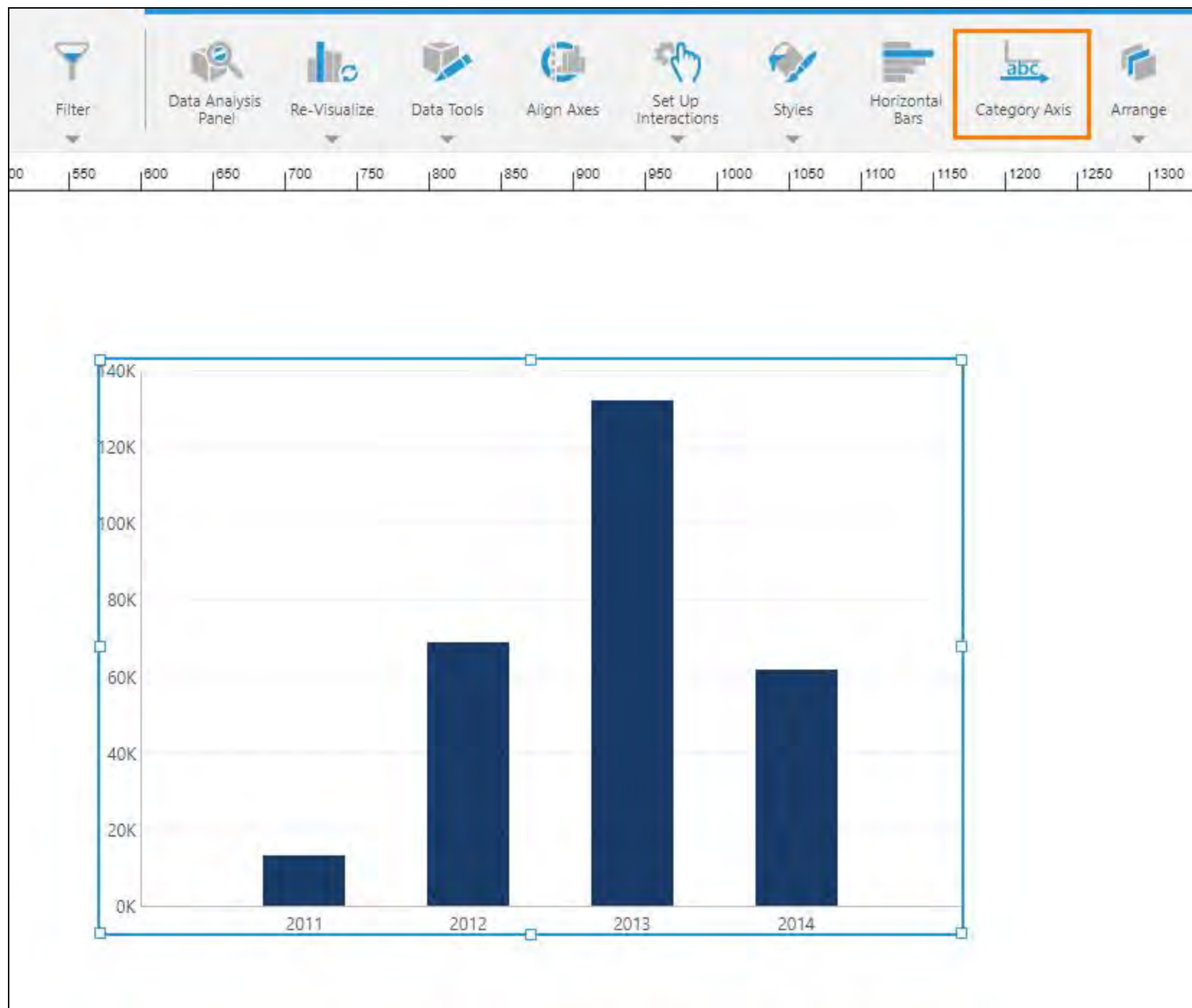
In Symphony, metric sets determine which data to display, including [totals](#) according to the **Shown Totals** setting. Charts typically do not display total values alongside the original values, however, and have their own property setting that normally hides totals by default so that a new chart displays the data as expected.

This article explains how you can show or hide data points representing total values on a chart when totals are already set to display on the metric set.

Show Total Values

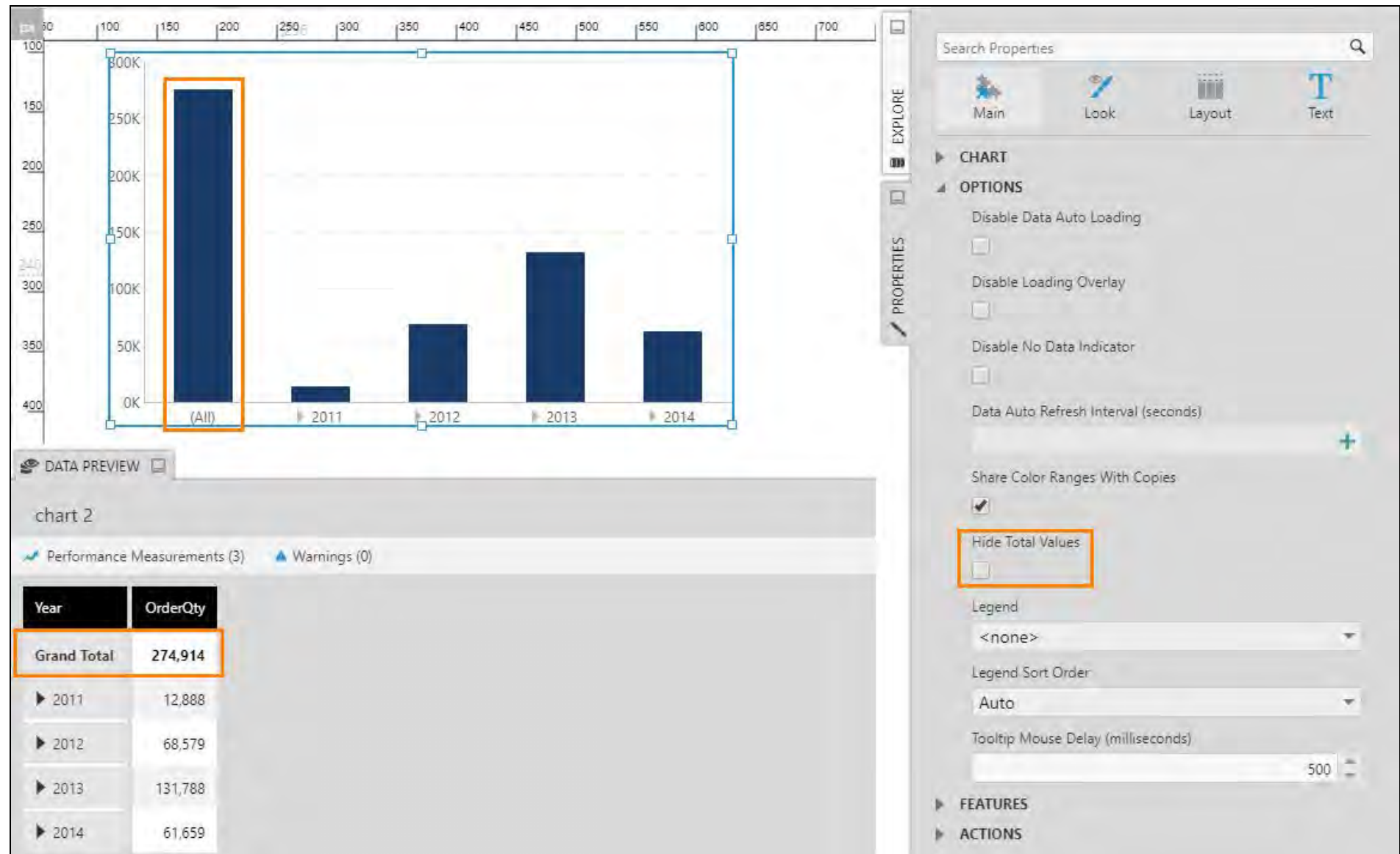
For this example, set up a chart to display *OrderQty* by *OrderDate*.

By default, the chart uses a Date/Time axis, but this won't work with total values. Go to the toolbar and change it to **Category Axis**, which will give you expanders along the X-axis.

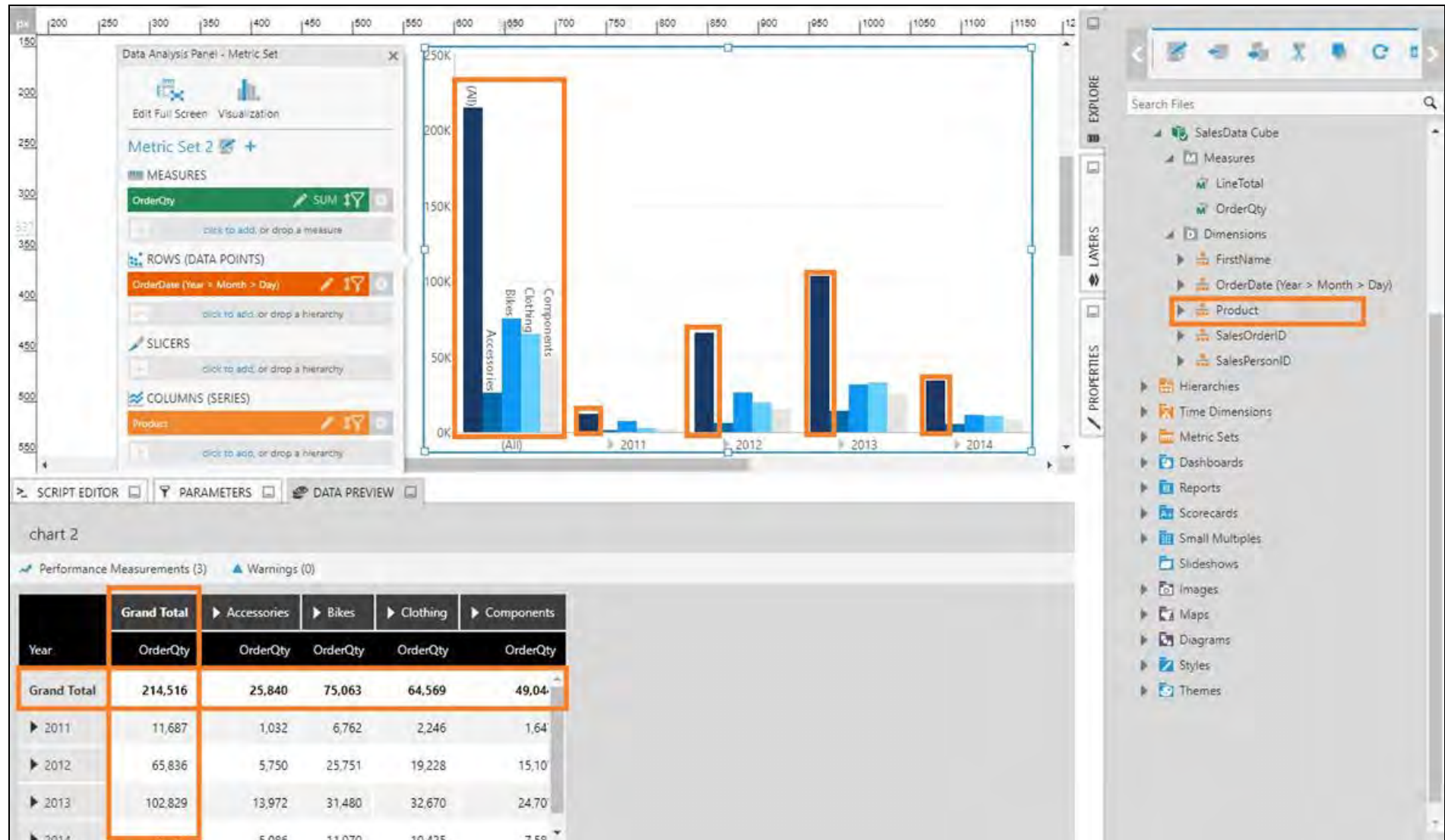


Go to the chart Properties and in the Main tab, uncheck the **Hide Total Values** property, which applies to chart types other than *Pie*. When this property is unchecked, grand totals and subtotals are displayed in the chart.

Specifically, you'll see an (All) data bar added to the chart above which represents the sum of the other data bars. In the Data Preview, the *Grand Total* value in the table visualization corresponds to this newly added data bar.



Next, open the **Data Analysis Panel** for the bar chart and drag the **Product** hierarchy to the **COLUMNS** field. This will generate a chart series for each *Product* value, plus an additional series which displays the grand total for each row or data point. Also, the (All) value turns into a cluster of total values, each representing the grand total for a specific *Product*.



Comparison of values in the above chart may be difficult because the total values are so much larger than the rest. You can improve the situation by hiding the total that is displayed at each cluster using the metric set's settings.



- Archive of documentation for Logi Symphony v24

To do this, open the **Data Analysis Panel** for the bar chart and click the **Edit** button at the top. In the Metric Set Configuration dialog, set Shown Totals to **Rows**. In a full screen metric set, you can also find Shown Totals in the toolbar.

Metric Set Configuration

This is where you can change how we retrieve data for this metric set.

Name
Metric Set1

Script Name
MetricSet1

Binding ID
97f6804e-3a0b-2600-4bfc-c9cc91da95c0

Metric Set Full Name
[My Project] Dashboards Root Folder/Dashboard/Met

Metric Set ID
fd3b5345-6008-4270-98f2-9d914f58199d

Analysis Structure Full Name
[My Project] Data Cubes Root Folder/[Sales].[SalesOrc

Metric Set Settings

Transpose Result
☐

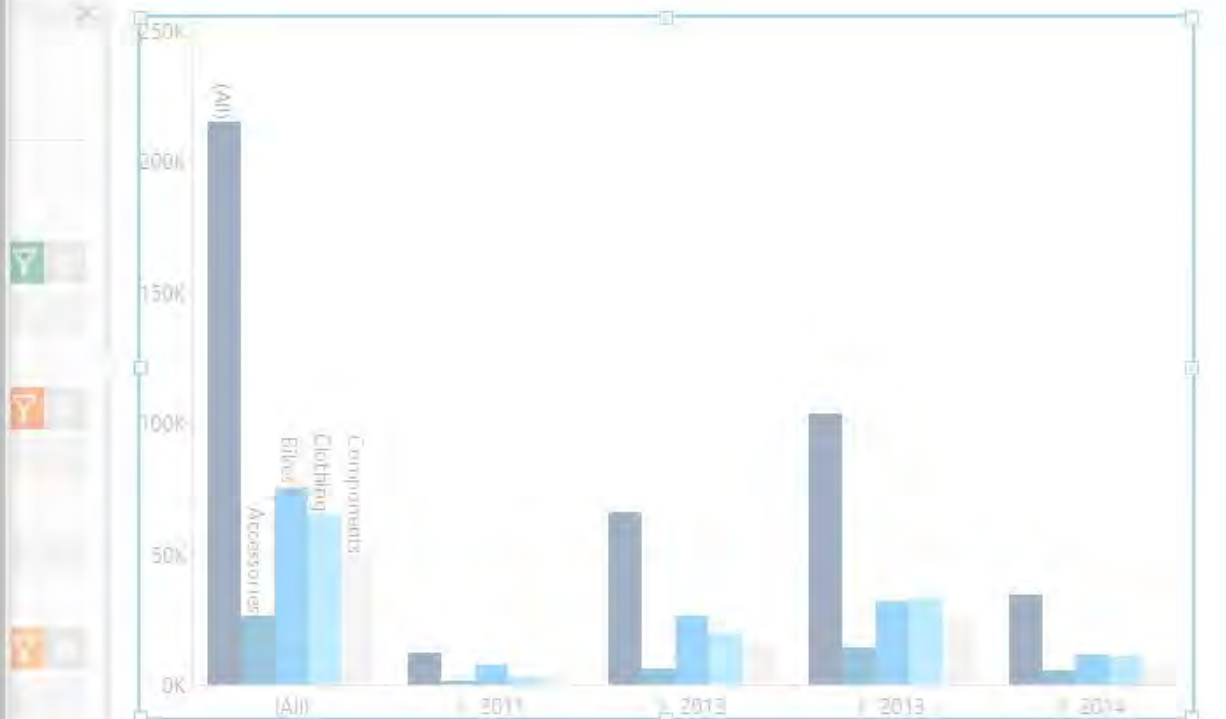
Prevent Data Export
☐

Shown Totals
Both

Top / Bottom Measure
(None)

CONTROL

Undo Clipboard Data visualisation Components Note Notification Filter

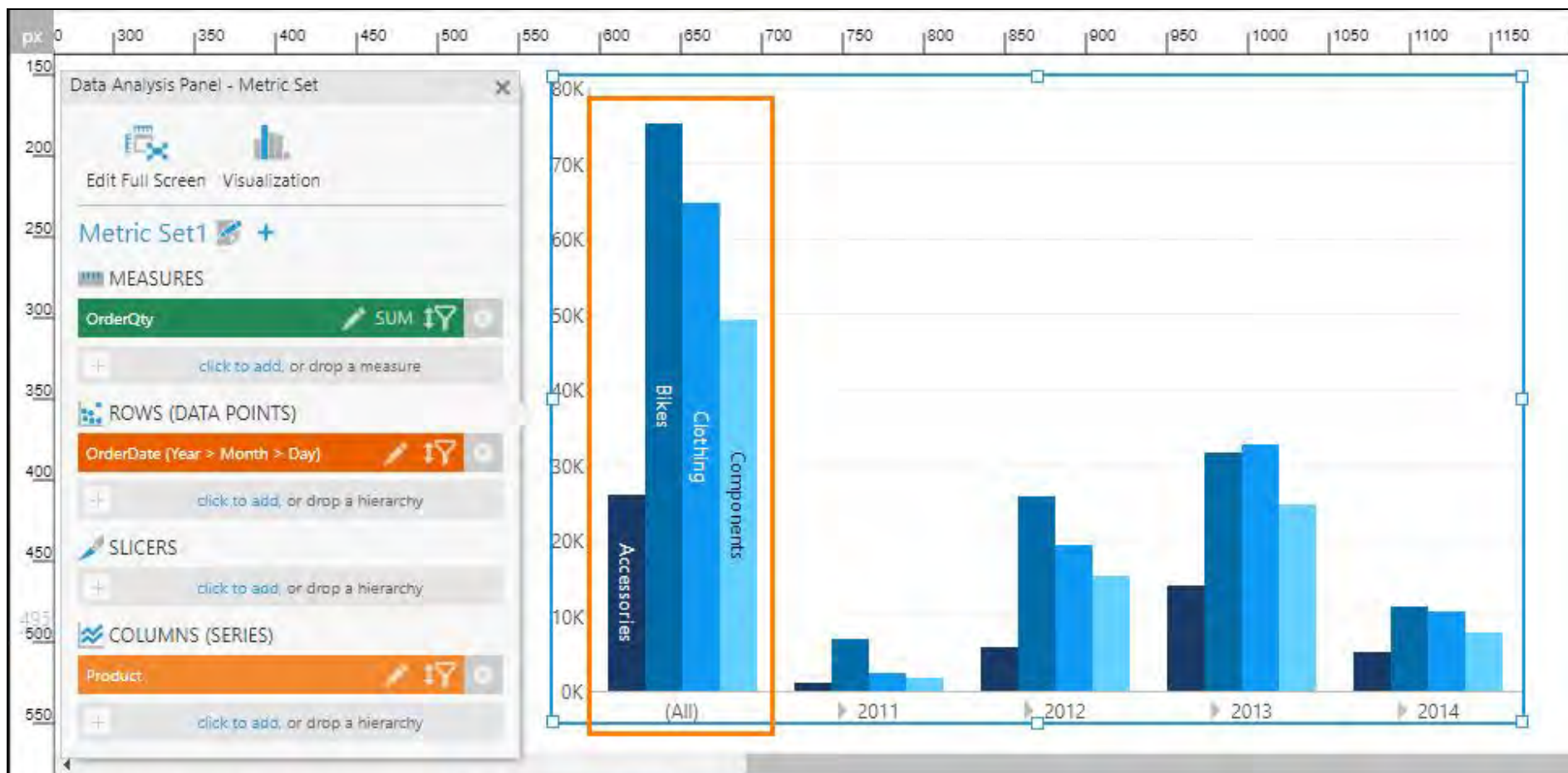


Category	2011	2013	2014
Accessories	~15K	~65K	~35K
Clothing	~10K	~25K	~10K
Components	~5K	~20K	~10K



- Archive of documentation for Logi Symphony v24

The overall total value and the grand total for each row (data point) are not displayed anymore, only the grand total for each *Product*. This makes it easier to compare values in the chart.



SCRIPT EDITOR PARAMETERS DATA PREVIEW

chart 2

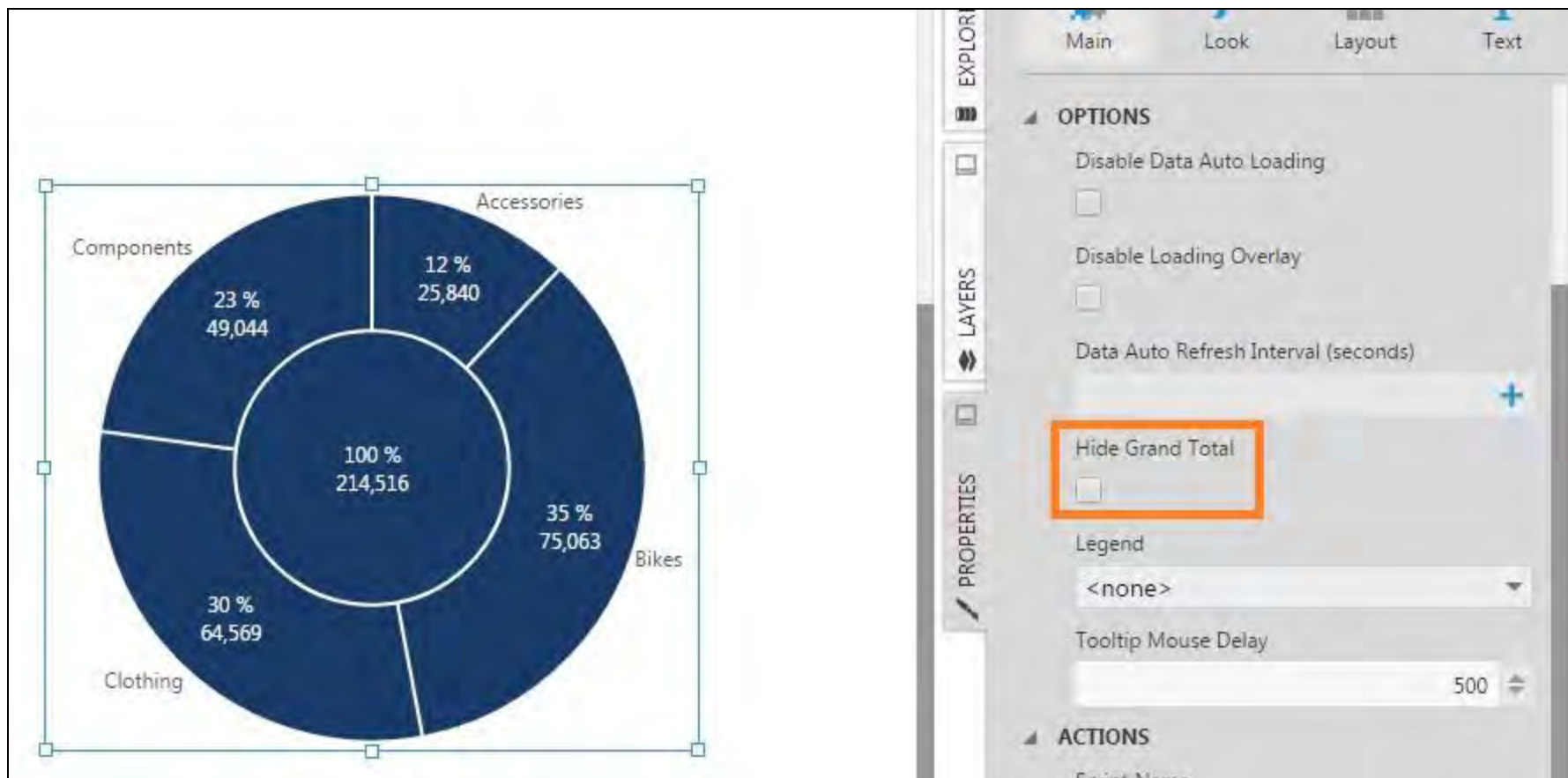
Performance Measurements (6) Warnings (0)

	Accessories	Bikes	Clothing	Components
Year	OrderQty	OrderQty	OrderQty	OrderQty
Grand Total	25,840	75,063	64,569	49,04
2011	1,032	6,762	2,246	1,64

Show Grand Total For a Pie or Waterfall Chart

Pie charts and waterfall charts are handled a bit differently because they already typically display total values, except for grand totals. You can enable or disable totals using only the metric set's settings, and totals are usually enabled by default.

For these charts, uncheck their **Hide Grand Total** property in the Properties window in order to see the grand total value. This is displayed at the center of a pie chart, for example.



For more information, see:

- [Symphony Metric Sets](#)
- [Other Metric Set Tools](#)



- Archive of documentation for Logi Symphony v24

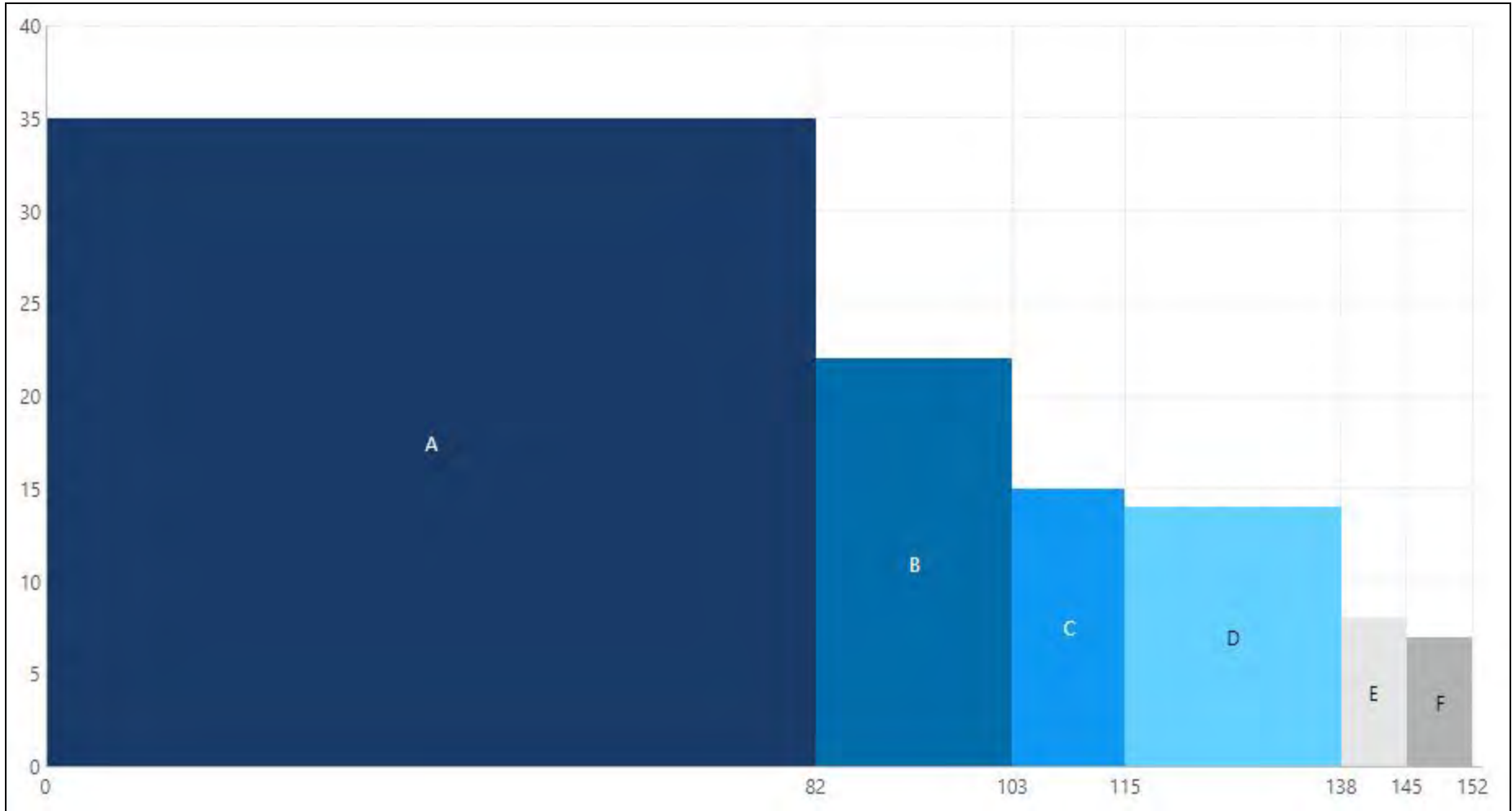
- [Using Chart Properties](#)
- [Using a Pie Chart](#)

How to Create a Variable Width Column Chart

This applies to: *Managed Dashboards, Managed Reports*

A variable width column chart, also known as a bar Mekko chart, is a bar chart where column widths are scaled such that the total width matches the desired chart width and there are no gaps between columns. This chart can be used for tracking the values of two different variables for each category in the data.

This article shows you how to create a variable width column chart using a range chart.



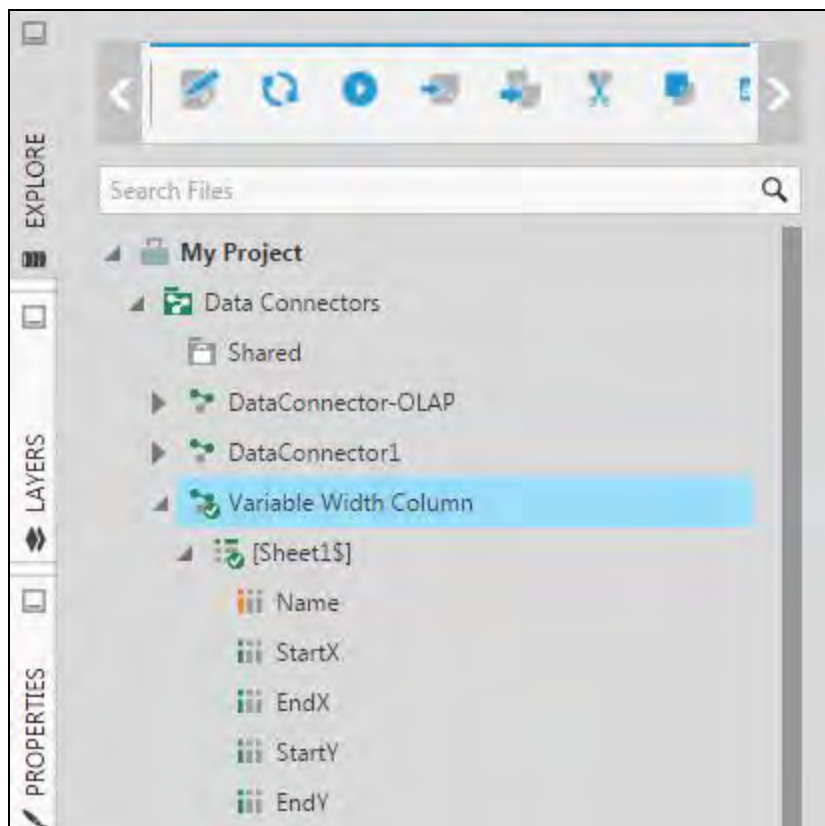
Steps

Prepare Stacked Data Values

A variable width column chart requires measure values that are stacked along the bottom axis. A range chart by itself will not accomplish this so if you have unstacked values, you will need to use the [Cumulative Total](#) formula function to help you calculate measures that will plot a running total of the bottom axis values. The required stacked values should look like the values in the following sample Excel spreadsheet.

Variable Width Column.xlsx [Protected View]						
	A	B	C	D	E	
1	Name	StartX	EndX	StartY	EndY	
2	A	0	82	0	35	
3	B	82	103	0	22	
4	C	103	115	0	15	
5	D	115	138	0	14	
6	E	138	145	0	8	
7	F	145	152	0	7	
8						

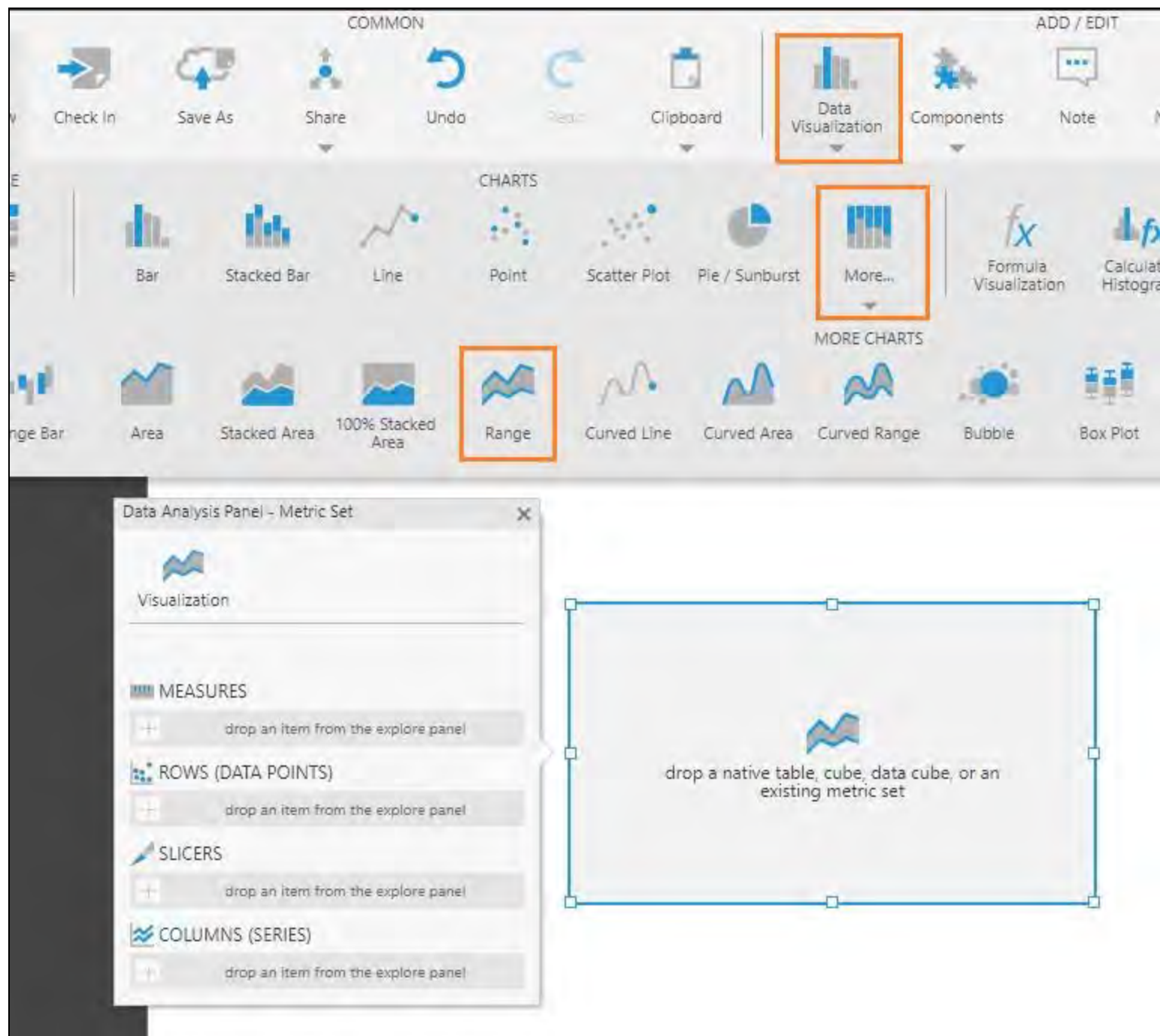
Once you have prepared the data, create a data connector in Symphony to connect to that data. For example, drag the Excel file to Explore.



Add a Range Chart

Create a new dashboard based on the *Blank* [dashboard template](#).

Click **Data Visualization** on the toolbar, then click **More** and select **Range**.



The screenshot displays the Logi Symphony v24 interface, focusing on the Data Visualization toolbar and the Data Analysis Panel.

Toolbar:

- COMMON:** Check In, Save As, Share, Undo, Redo, Clipboard, **Data Visualization** (highlighted), Components, Note.
- CHARTS:** Bar, Stacked Bar, Line, Point, Scatter Plot, Pie / Sunburst, **More...** (highlighted), Formula Visualization, Calculated Histogram.
- MORE CHARTS:** Range Bar, Area, Stacked Area, 100% Stacked Area, **Range** (highlighted), Curved Line, Curved Area, Curved Range, Bubble, Box Plot.

Data Analysis Panel - Metric Set:

- Visualization:** (Icon of a line chart)
- MEASURES:**
 - + drop an item from the explore panel
- ROWS (DATA POINTS):**
 - + drop an item from the explore panel
- SLICERS:**
 - + drop an item from the explore panel
- COLUMNS (SERIES):**
 - + drop an item from the explore panel

The central workspace contains a large rectangular area with a blue border and a small line chart icon. Below the icon, the text reads: "drop a native table, cube, data cube, or an existing metric set".



Set Up the Visualization

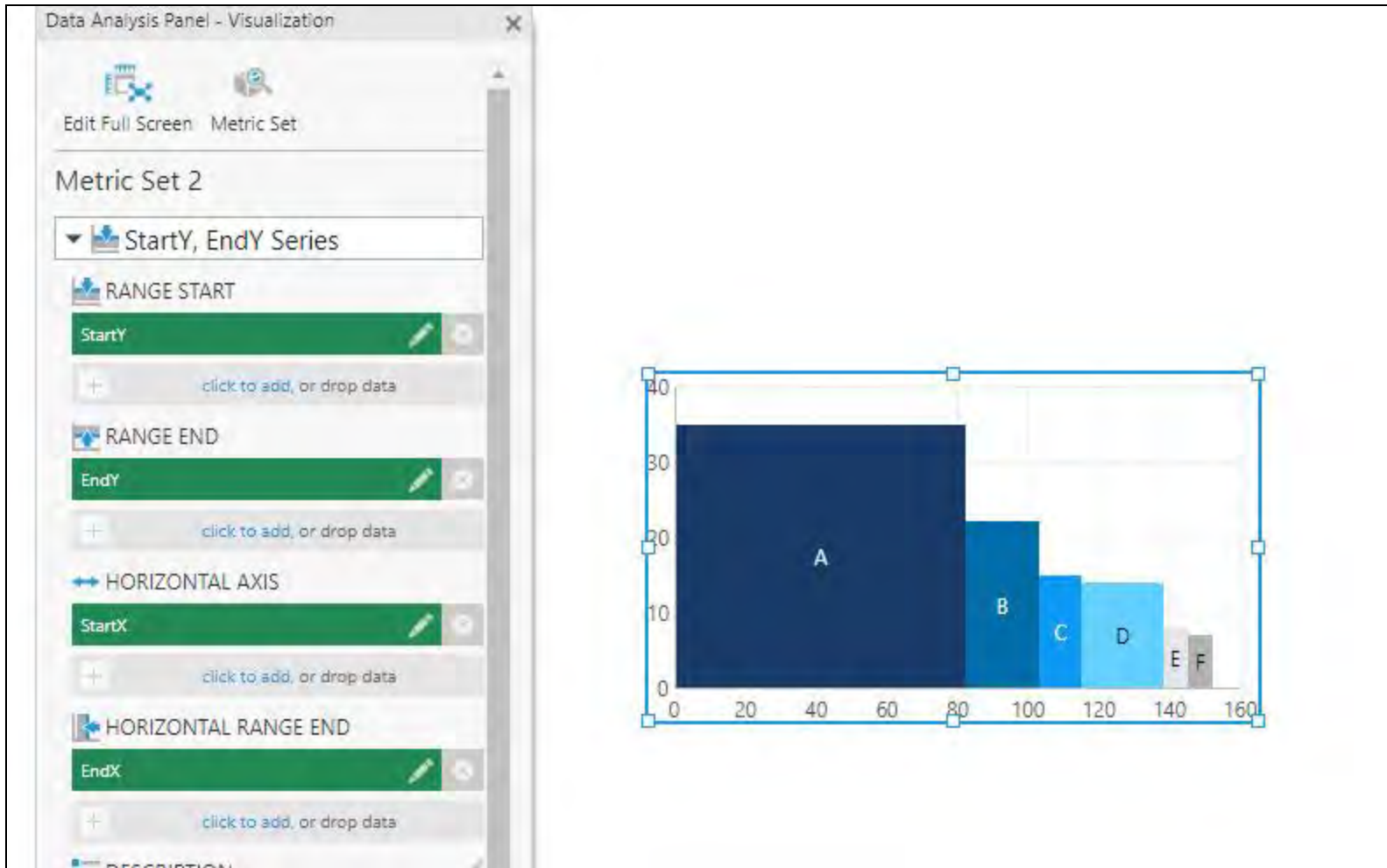
On the Data Analysis Panel for the range chart, click **Visualization**.

Drag-and-drop **data columns** from Explore onto the Data Analysis Panel, as shown in the table below:

Visualization Option	Data Column
Range Start	StartY
Range End	EndY
Horizontal Axis	StartX
Horizontal Range End	EndX
Series Grouping	Name

The goal here is to set up a single range chart series where four measures are used to position each of the four sides of each bar/column.

If the axes were previously plotting non-numeric values, ensure both the left axis and bottom axis have their `Scale Type` property set to **Numeric**.

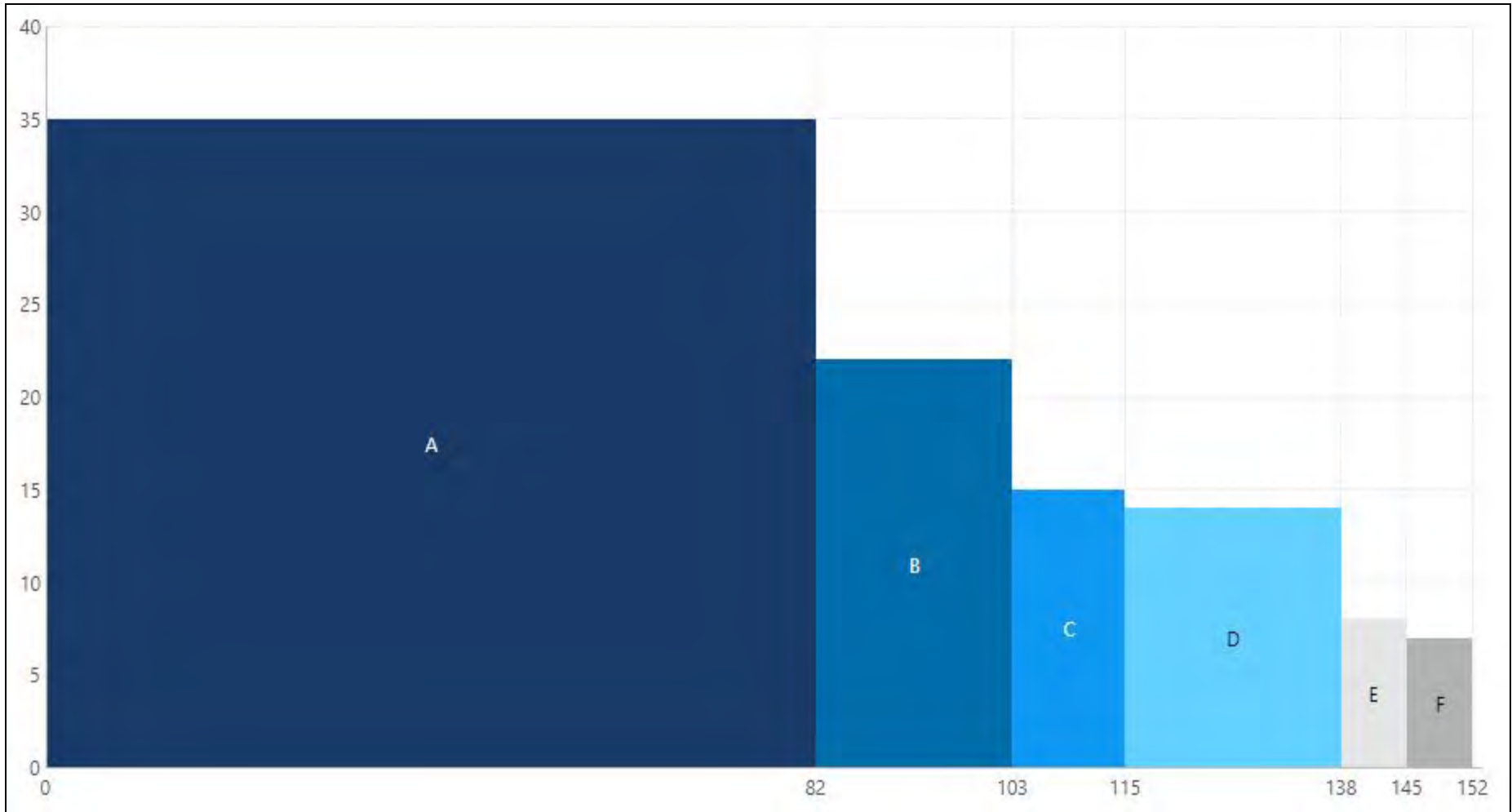


The easiest way to give each data point its own color from the palette is to make each one its own series using a series hierarchy: add a hierarchy to **Columns (Series)** on the metric set or move one there from **Rows (Data Points)**.

Optional Customizations

You can display tick marks by editing the properties of a chart axis and on the **Ticks** tab, select **Show Tick Marks** to display the major (or minor) tick marks.

You can add a label for each data point on the bottom axis. Go to the chart properties and select **Bottom Axis 1**, then select **Show Data Point Values** as the Interval Method.



You can also add a hierarchy under **Color** in the Data Analysis Panel to apply different colors to data points or series based on their values. Colors are applied according to color rules, which you can configure from the Properties window. See [Apply Colors to Data Points or Series Using Color Rules](#).

For more information, see:

- [Using Chart Properties](#)
- Formula: [Cumulative Total](#)



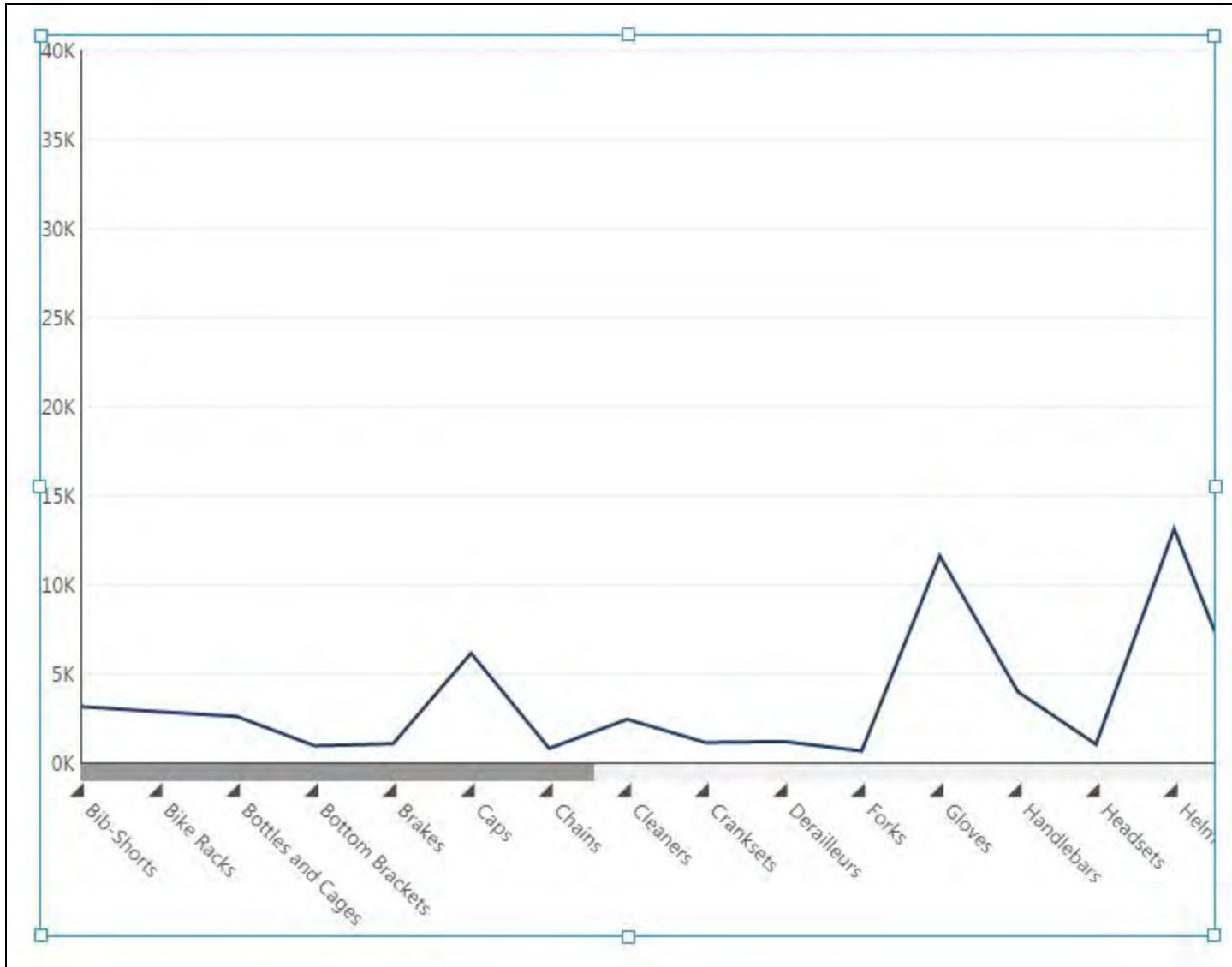
Overlap Labels Placed Outside of Data Points

This applies to: *Managed Dashboards, Managed Reports*

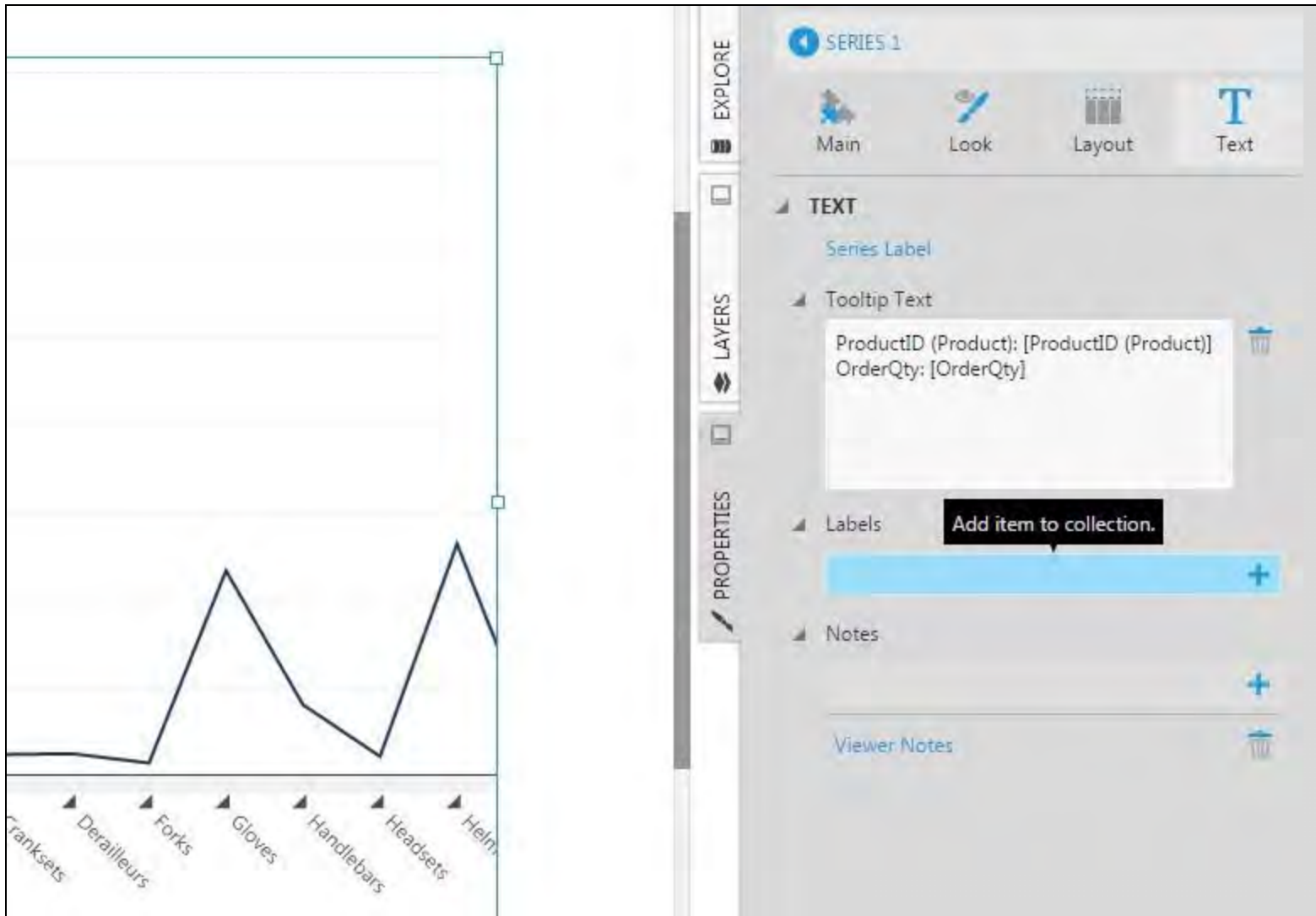
Data point labels placed outside will normally be hidden if they overlap with data or other labels. But there are a couple of chart properties that allow you to override this functionality and have the labels displayed.

Display Data Point Labels Outside

Consider the following line chart.



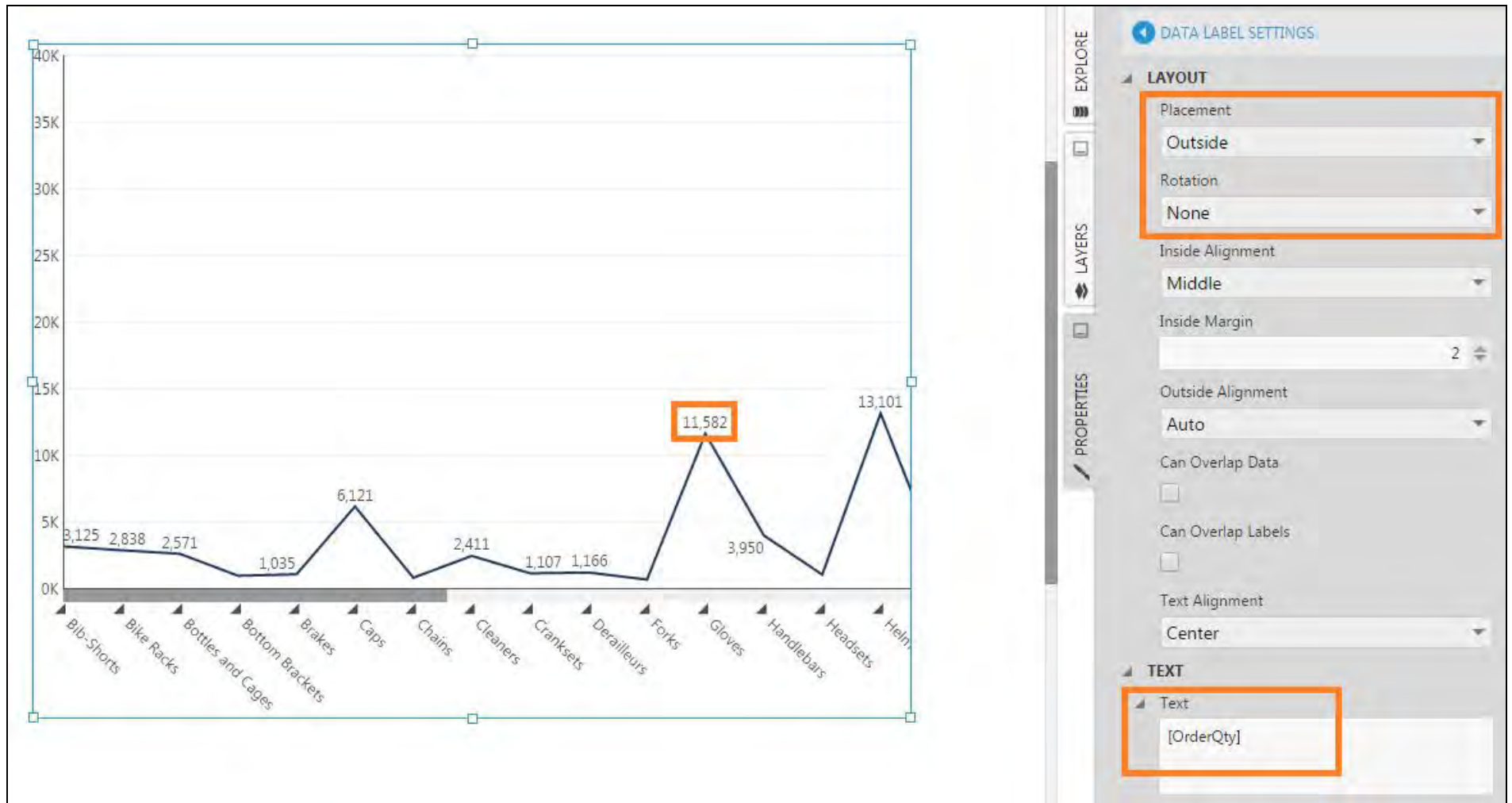
Go to Properties, click **Series 1**, and then select **Text** to see the text-related properties of the series. Select the **+** button under **Labels**.



A **Data Label Settings** item is added. Select it to edit the properties as follows:

- Set the **Placement** to **Outside**.
- Set the **Rotation** to **None**.

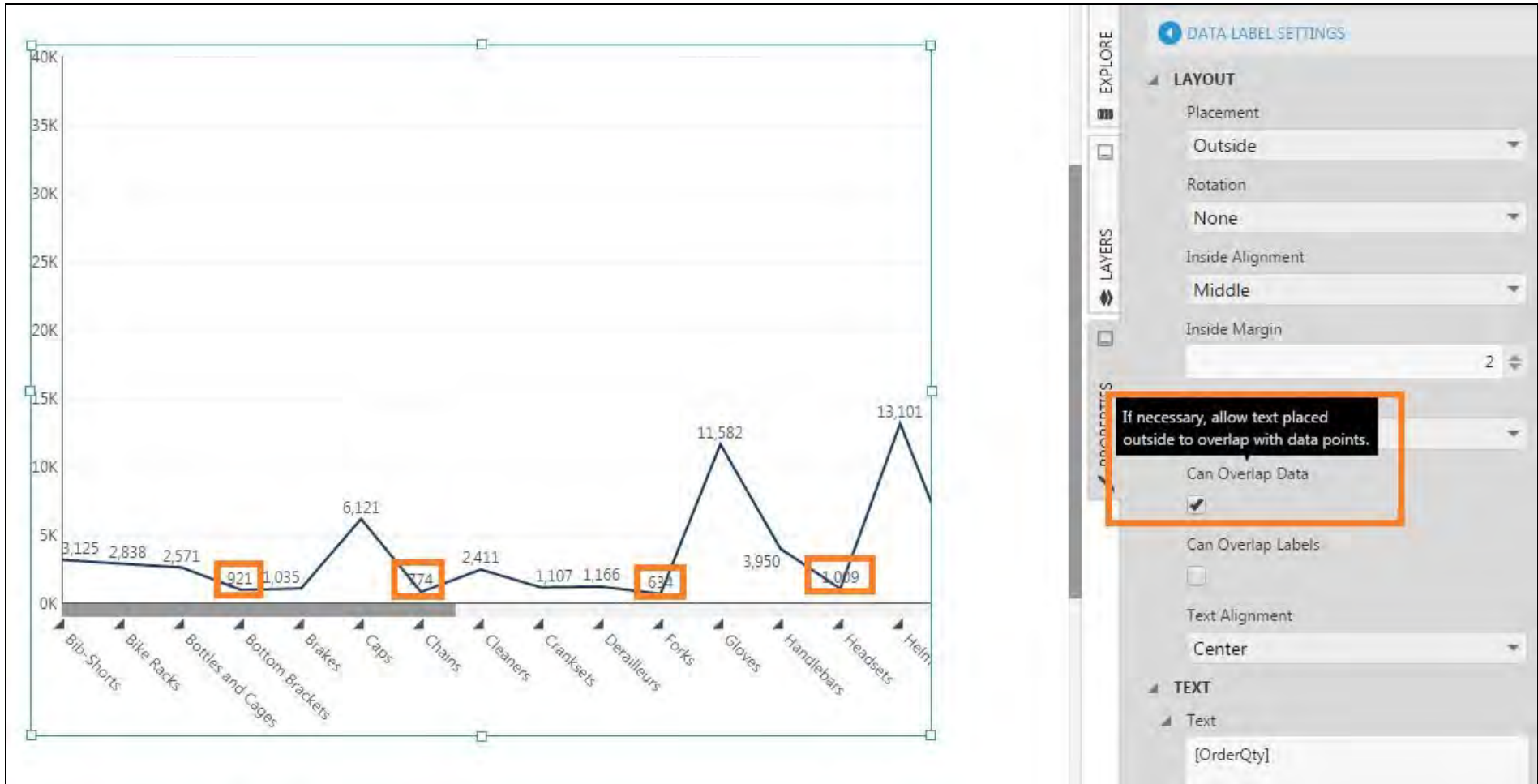
- Enter the name of the measure, for example, **[OrderQty]** in square brackets in the **Text** property. This is a placeholder which will be replaced with the actual measure value at each data point.



Measure values are now displayed outside of data points. Labels for some data points are missing because they would overlap with other labels or data if they were to be shown.

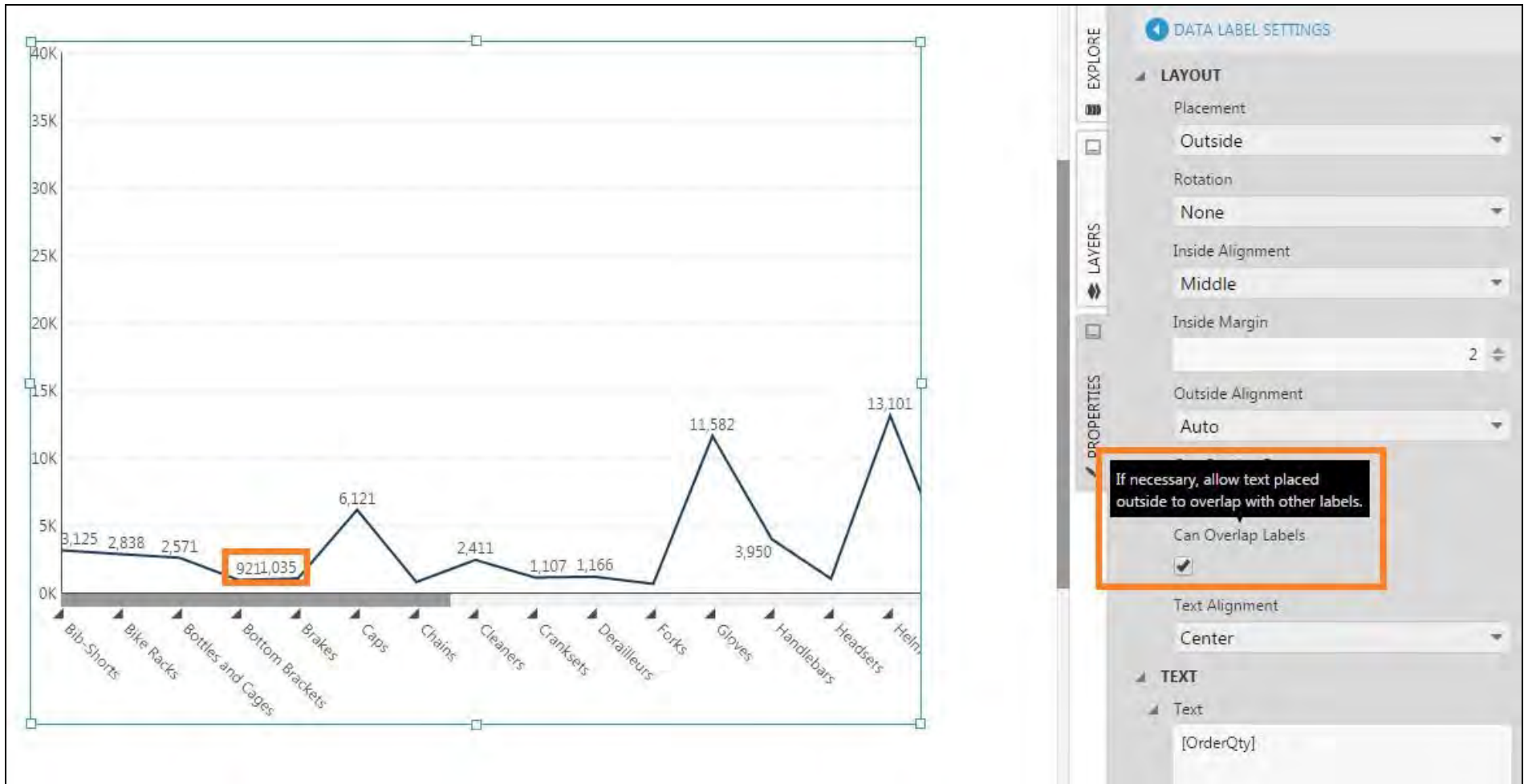
Can Overlap Data

Use the Can Overlap Data option to allow outside data point labels to be shown even though they overlap with data points.



Can Overlap Labels

Use the Can Overlap Labels option to allow outside data point labels to be shown even though they overlap with other data labels.



Note: The other options in **Data Label Settings** can be changed to be more restrictive and force the labels to overlap more often.

For more information, see:

- Aligning Data Point Labels Inside Bars
- Using Chart Properties



Adding a Diagram

This applies to: *Managed Dashboards, Managed Reports*

A diagram connects your data with a custom diagram that can arrange and display your data however you choose. Some examples are an interior floorplan, a figure of a piece of machinery, or a flow chart.

Similar to a [map](#) visualization, diagrams are made up of shape, path, and symbol elements. You assign data to these elements to change their appearance (e.g., color or size) and to display in labels or tooltips.

- Shapes - Areas defined by boundaries on all sides, such as rectangles or circles, or any irregular figure that is also a closed shape.
- Paths - Lines that can have their own attached data, often used to connect two shapes. These can be defined as part of the diagram, or you can use a data source that refers to [pairs of symbols](#).
- Symbols - Location points at a specific place on the diagram. These can either be defined as part of the diagram, or from coordinates in your [datasource](#) that correspond to the coordinates in the original diagram file.

Supported Formats

SVG

The diagram visualization supports the SVG (Scalable Vector Graphics) format. Many tools can produce SVG diagrams, including Microsoft Visio and Adobe Illustrator.

An example SVG file looks like this:

```
<?xml version="1.0" encoding="UTF-8"?>
<svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 1296 864">
...
<g>
<g id="shape2-1" transform="translate(277.795,-680.315)">
<title>Square</title>
<rect x="0" y="750.614" width="113.386" height="113.386" class="st1"/>
</g>
```



```
<g id="shape3-3" transform="translate(85.0394,-680.315)">
<title>Circle</title>
<path d="M0 807.31 A56.6929 56.6929 0 0 1 113.39 807.31 A56.6929 56.6929 0 1 1 0 807.31 Z" class="st1"/>
</g>
<g id="shape4-5" transform="translate(198.425,-729.921)">
<title>Dynamic connector</title>
<path d="M0 856.91 L72.33 856.91" class="st2"/>
</g>
</g>
</svg>
```

Your diagram can name its elements using a `<title>` element or *id* attribute. Alternatively, Symphony will assign elements names when importing the diagram, which you can find listed in the Properties window when using it in a diagram visualization.

In Adobe Illustrator, you can rename the object in the Layers panel. When using Visio to create a diagram, use the right-click option **Data > Define Shape Data** to enter a Label titled *Name* or *ID* and a shape name as its Value. If the Developer tab is enabled, you can use the **Shape Name** option in the ribbon.

XAML

The diagram visualization also supports Microsoft's [XAML](#) file format when Symphony is installed directly on a Windows server. Some tools may support XAML, or you can edit it using Microsoft's Visual Studio.

An example XAML file looks like this:

```
<Canvas xmlns="http://schemas.microsoft.com/winfx/2006/xaml/presentation"
xmlns:x="http://schemas.microsoft.com/winfx/2006/xaml" x:Name="floorplan" Width="800" Height="600" Clip="F1 M 0,0L 800,0L 800,600L 0,600L 0,0">
<Canvas x:Name="Layer_1" Width="800" Height="600" Canvas.Left="0" Canvas.Top="0">
<Path x:Name="OuterWalls" Width="457.932" Height="461.235" Canvas.Left="72.4715" Canvas.Top="93.5018" Stretch="Fill"
StrokeLineJoin="Round" Stroke="#FF000000" Data="F1 M 529.904,141.916L 481.918,94.0018L 120.078,94.0019L 72.9715,141.108C
72.9715,141.108 72.9715,499.975 72.9715,506.173C 72.9715,512.371 121.036,554.237 121.036,554.237L 486.085,554.237L
529.725,510.598L 529.904,141.916 Z "/>
<Rectangle x:Name="Desk1" Width="17" Height="17" Canvas.Left="115" Canvas.Top="125" Stretch="Fill" Fill="#FF000000"/>
```



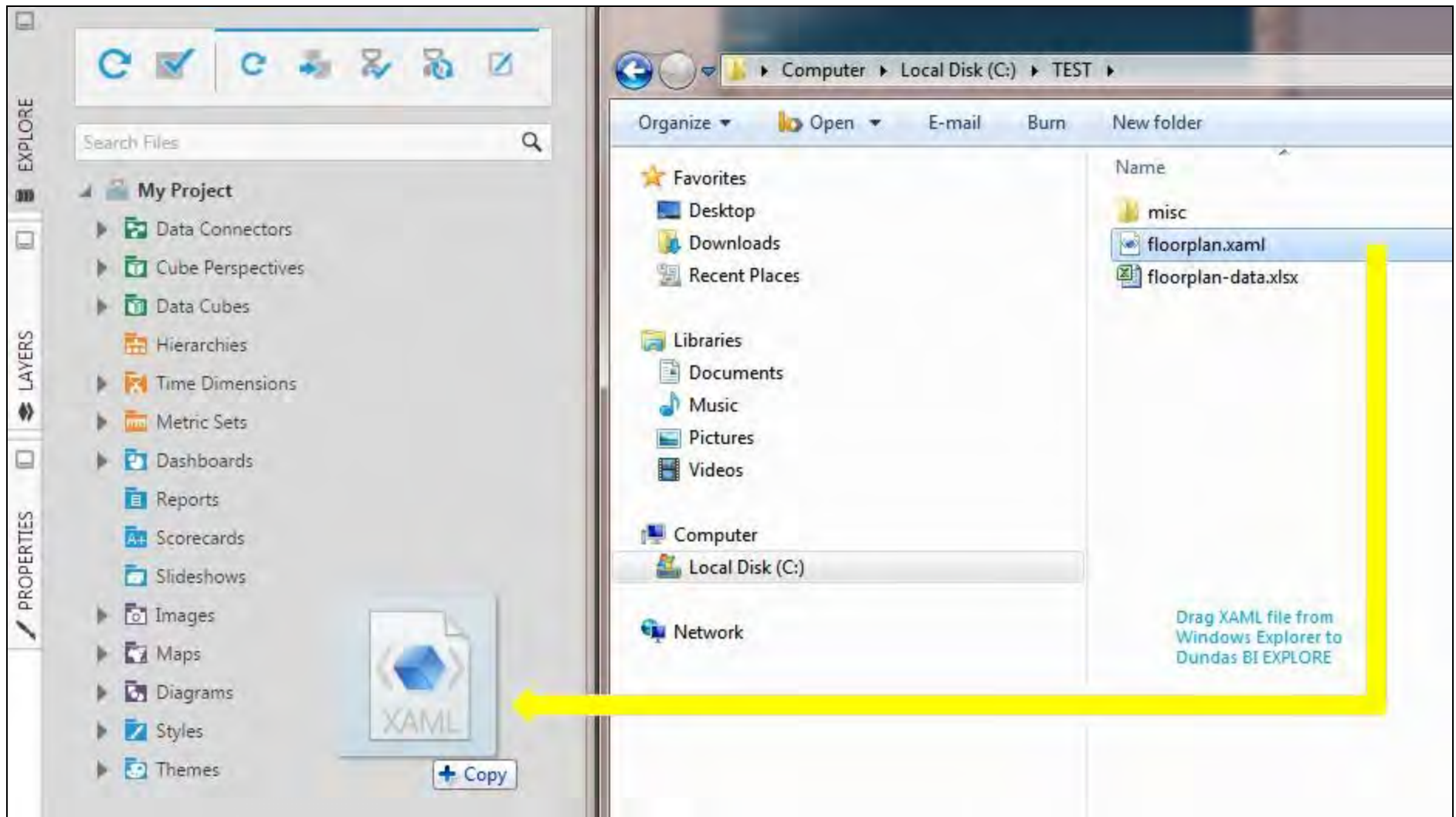
```
<Rectangle x:Name="Desk2" Width="17" Height="17" Canvas.Left="139" Canvas.Top="125" Stretch="Fill" Fill="#FFFF0000"/>  
...
```

Displaying a Diagram

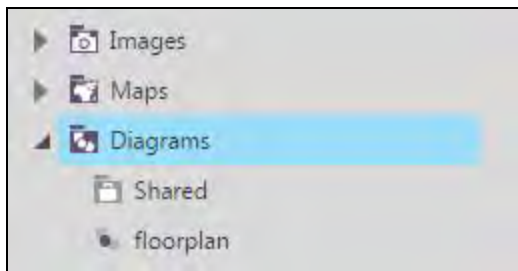
Import a Diagram

You can create a diagram visualization in a metric set, or in a view such as a dashboard. Create or open one for editing from the main menu. Locate your diagram file in Windows Explorer or Finder.

Drag the **file** and drop it over the Explore window in Symphony.



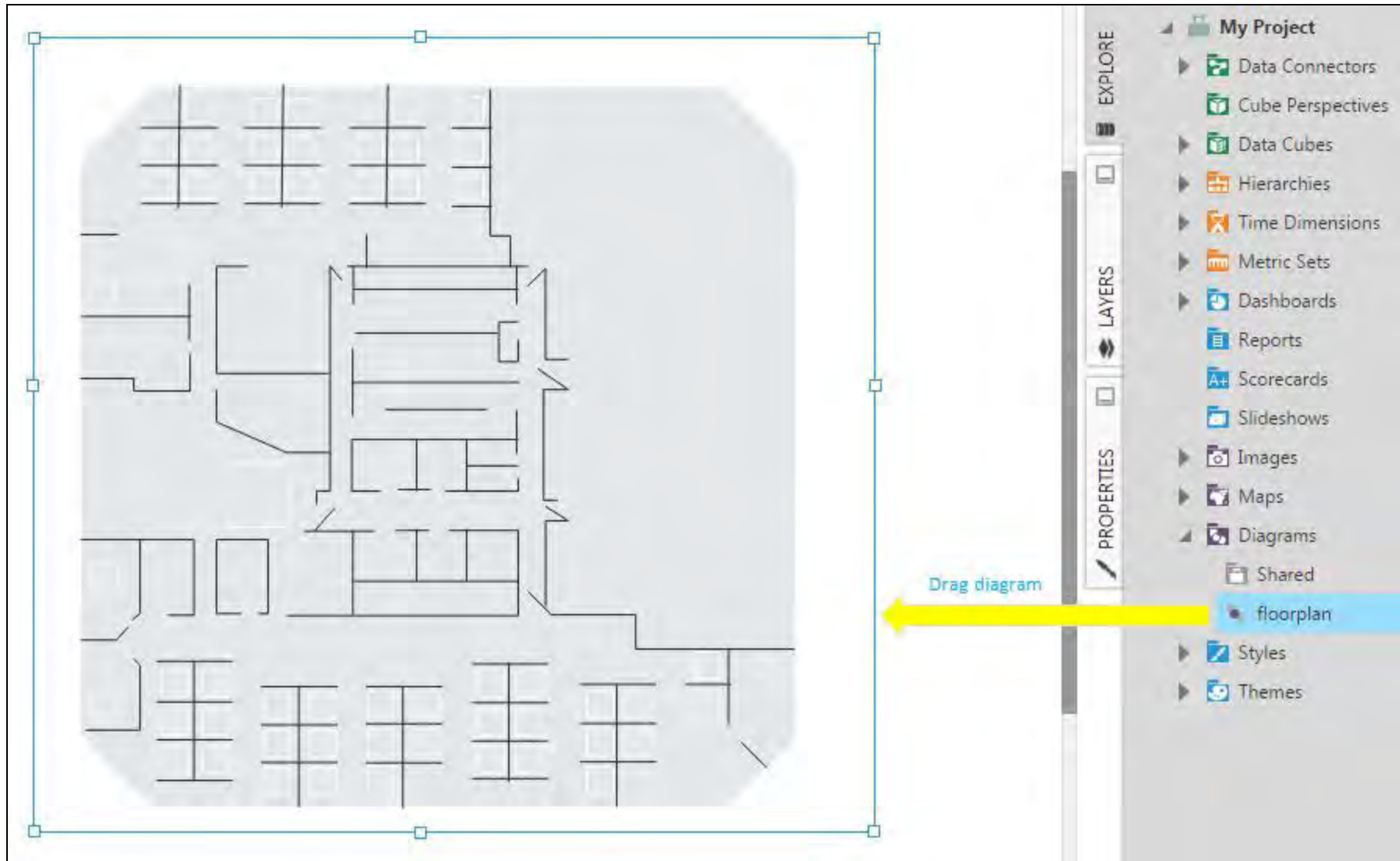
The diagram file is imported into Symphony under the Diagrams folder in the Explore window.



Like with other types of files in Symphony, you can also import a diagram by right-clicking (or long-tapping) the **Diagrams** folder and choosing **Upload File** from the context menu.

Drag the Diagram To the Canvas

When editing a dashboard or other view, drag a **diagram** from the Diagrams folder to the canvas.



A diagram visualization appears on the canvas.

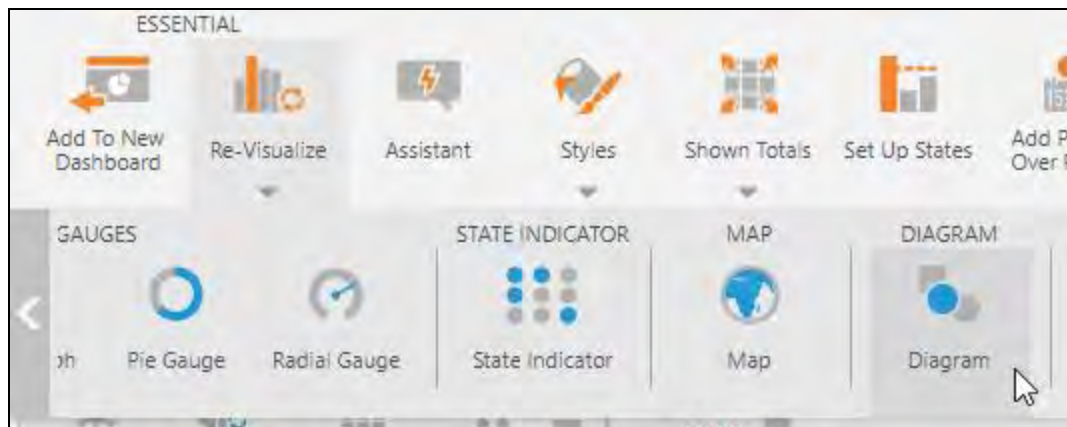


Note: You can also drag a diagram file from your computer directly onto the canvas when editing.

Re-Visualize To a Diagram

When editing a metric set full screen, you will need to start by selecting the data you want displayed in your diagram. You can also start with existing data selected on a dashboard or view.

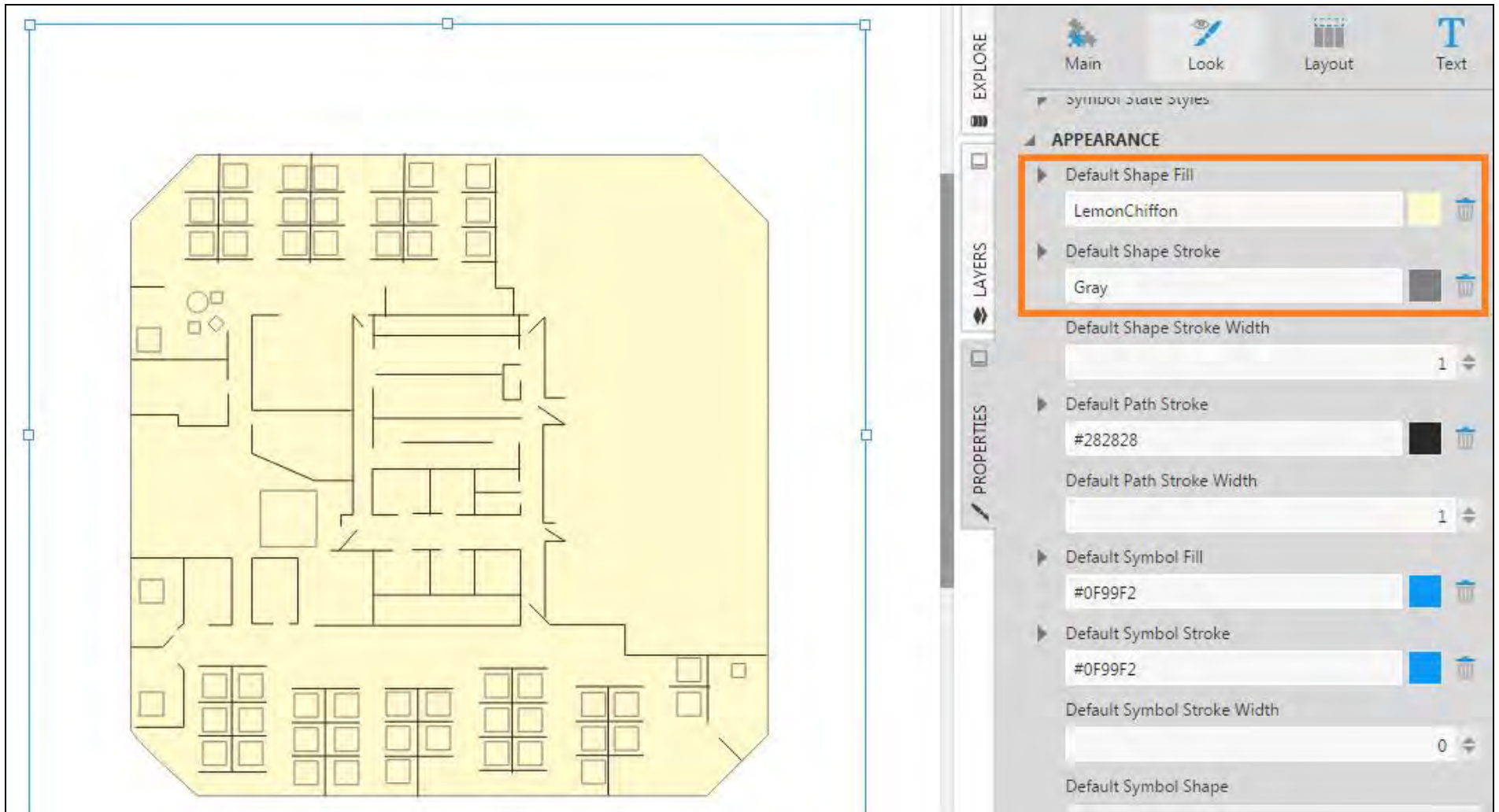
In the toolbar, **Re-Visualize** your data to a **Diagram**.



You can then drag the **diagram** from the Explore window that you imported earlier onto the visualization to display it.

Appearance

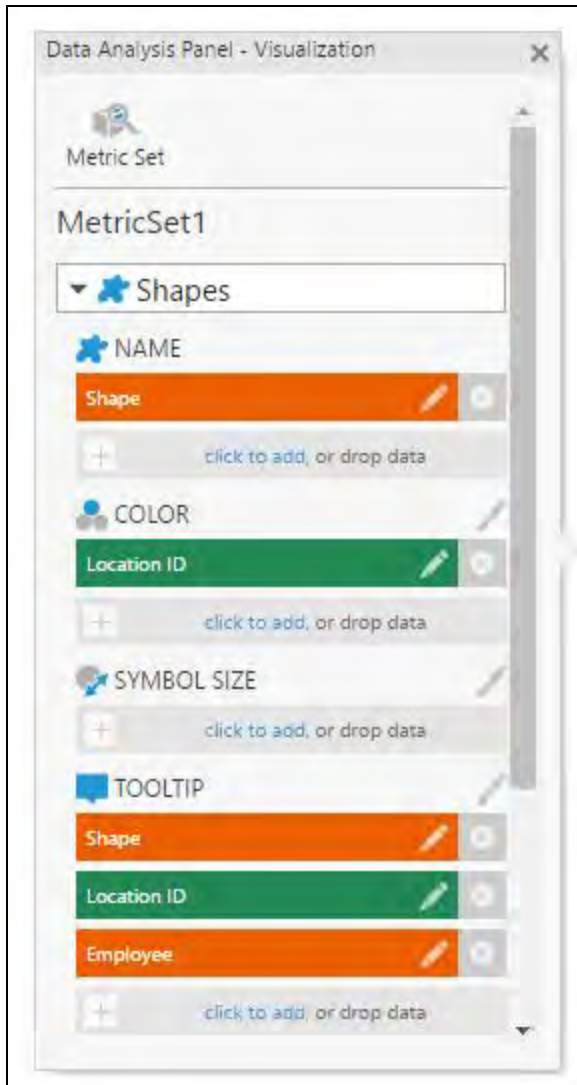
You can go to the **Properties** window and change the default appearance settings that take effect for the diagram when not using data to change colors and sizes.



Add Data To the Diagram

When data is added to a diagram or re-visualized to a diagram, it is connected automatically to the names from one of the hierarchies you selected. A measure is assigned automatically to change the colours of diagram elements based on the values.

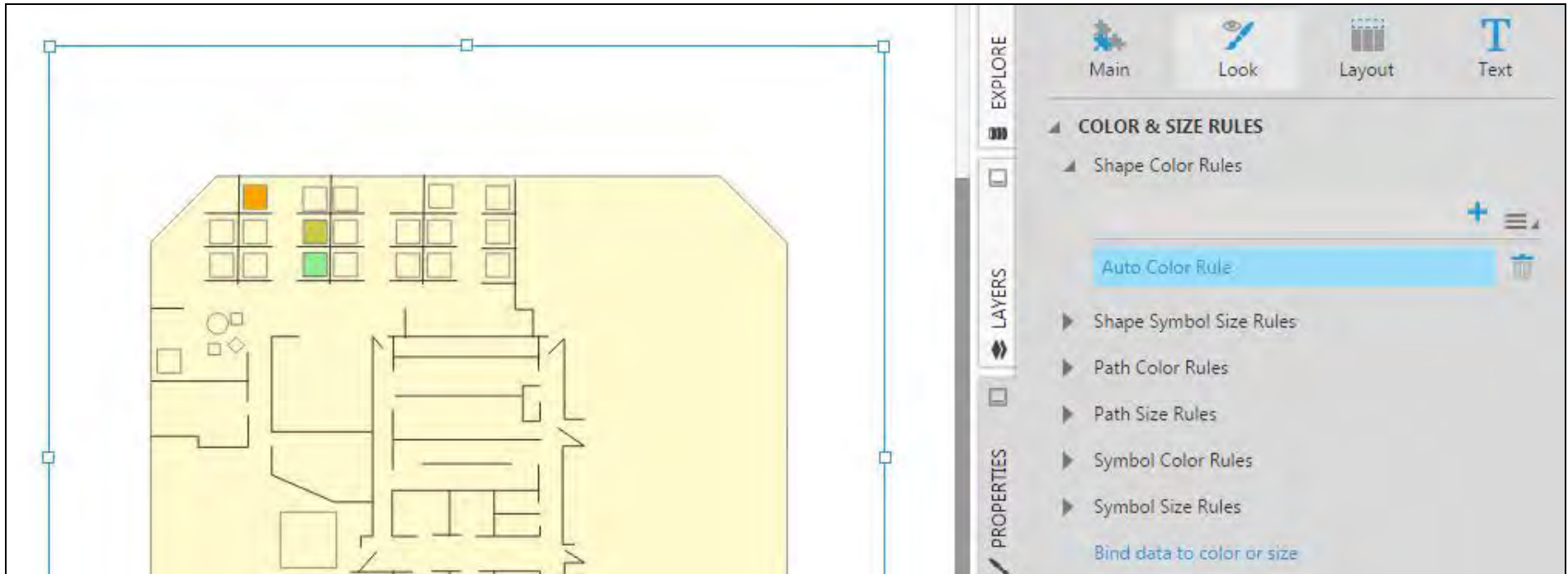
To change which hierarchy or measure is assigned to the diagram and where, go to the Data Analysis Panel, click **Visualization**, add or remove data from the visualization options.



Colors and sizes are determined using color rules and size rules, which you can configure via the Properties window.



For example, select the **diagram**, go to the Properties window, and modify the shape color rule in order to change the colors of the shapes in the diagram.



Symbols can also be placed according to the coordinates from your data source if they correspond with the coordinates used in the diagram, the same way symbols can be plotted on maps with latitude and longitude coordinates. Paths can be set up to connect between pairs of symbol names that come from your data source.

For more details on changing colors and sizes of diagram elements based on data, or plotting symbols and paths from your data source, see [Displaying Symbols on a Map](#).

Compatible Names

In case the data you want to use has column values that cannot be matched against the names of elements from the file, Symphony will attempt to use alternate names. Uploaded diagrams will use groups and custom properties from the diagram file as sources of alternate names.

If the data does not match the names or the alternate names, you can manually set the `Shape Compatible Name` property for the shape element.

EXPLORE

LAYERS

PROPERTIES

Search Properties

Q

◀ NODE1

COMMON

Shape Name

node1

Alternate Shape Names

Shape Compatible Name

1

Shape Context

APPEARANCE

Fill

Black

Stroke

+

Stroke Width

+

TEXT

Tooltip Text

+

Label

+



Note: In the case of multiple rows matching a shape because of alternate names, you can use the Shape Compatible Name property to indicate which name to use. This property takes precedence over the other names.

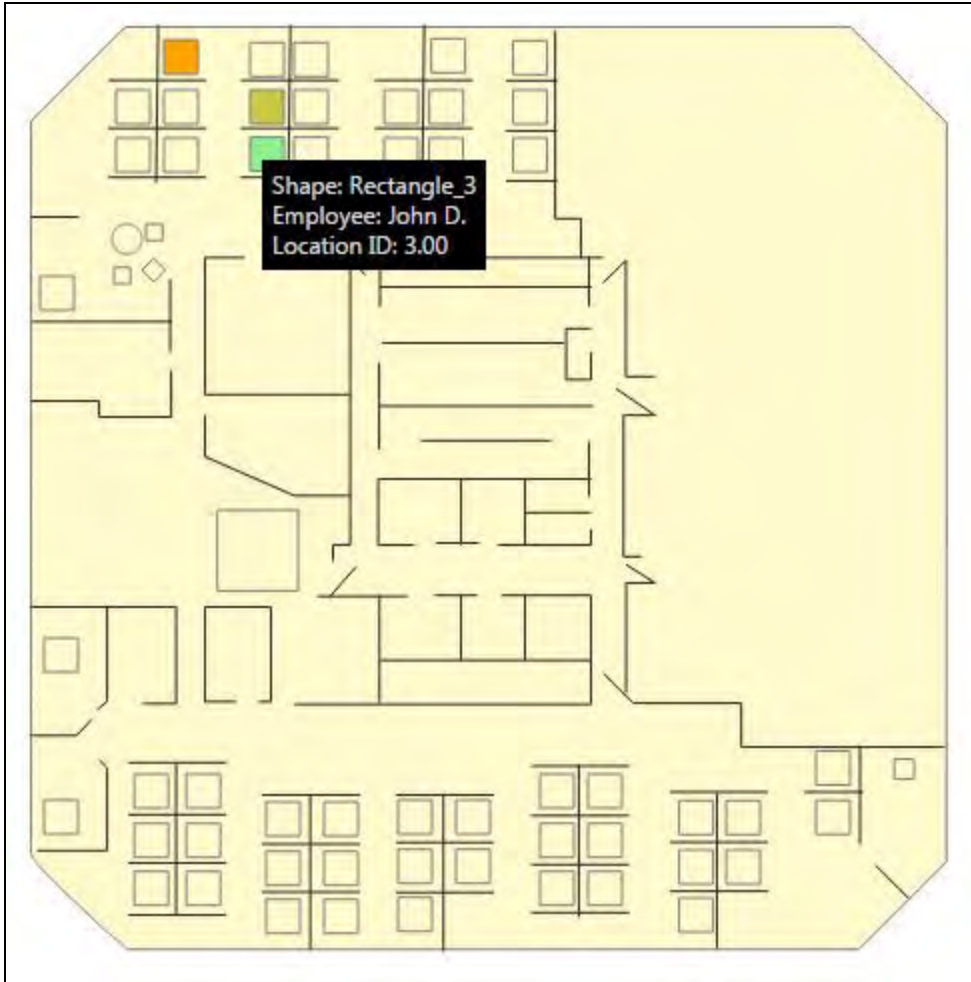
Path and symbol elements also have compatible name properties.

Use a Diagram

Once your design is complete, go to the toolbar and click **View**. In [View mode](#), you can:

- Zoom in or zoom out on the diagram by using the mouse wheel.
- Pan across the diagram by clicking and dragging it in any direction.
- Hover over a shape on the diagram to view its corresponding tooltip (which shows the connected data values).

Note that zoom or pan changes that you make in View mode will persist even when you switch back to Edit mode.



For more information, see:

- Off the Charts: [Why Diagrams Might Be Just What Your Dashboard Is Missing](#)
- [Drag and Drop an Image File \(JPEG or PNG\)](#)

Building Dashboards With Performance In Mind

This applies to: *Managed Dashboards, Managed Reports*

When designing a complex dashboard, report, or other view, it can be important to keep performance concerns in mind. Simple steps taken during the design phase can dramatically improve performance and reduce the overall time to completion. A well-designed view will not only run smoothly for end users, but will also minimize server load. This article provides a set of guidelines and tips for optimizing performance.

 **Note:** You can keep track of load times for your views and metric sets by installing and using the Performance Tracking sample dashboard.

Data Storage

You can reduce querying times in some cases by using data cube storage options, such as when accessing a data source is slow or when running expensive transformations. Note that if you are displaying "live" or real-time data, you should not use data cube storage.

Symphony supports two types of data cube storage:

- *Warehouse* - stores data in a database
- *In-memory* - stores data in server memory

Using one of these options, your data cubes query their data sources once or on a schedule of your choosing. The result is stored by Symphony, and any requests for the data cube's data then comes directly from Symphony. This option is particularly useful for data cubes that need to use expensive queries (for example, with many large joins). For more information, see [Data Cube Data Storage Options](#).

You can check the [performance measurements](#) if you want to determine how long it took a query to complete, or if it's retrieving data from your original data source or from the warehouse.

Data Management

Remove Unused Columns

When creating your data cube, de-select the columns that you do not need as early as possible, such as in your *Select transform* configuration.

The elements discovered from the SQL table:

☒ SalesOrderID
 ☒ SalesOrderDetailID
 ☐ CarrierTrackingNum...
 ☒ OrderQty
 ☒ ProductID
 ☐ SpecialOfferID
 ☐ UnitPrice
 ☐ UnitPriceDiscount
 ☐ LineTotal
 ☐ rowguid
 ☒ ModifiedDate

Int32
Int32
String
Int16
Int32
Int32
Currency
Currency
Double
Guid
DateTime

Select Expressions

SQL Select

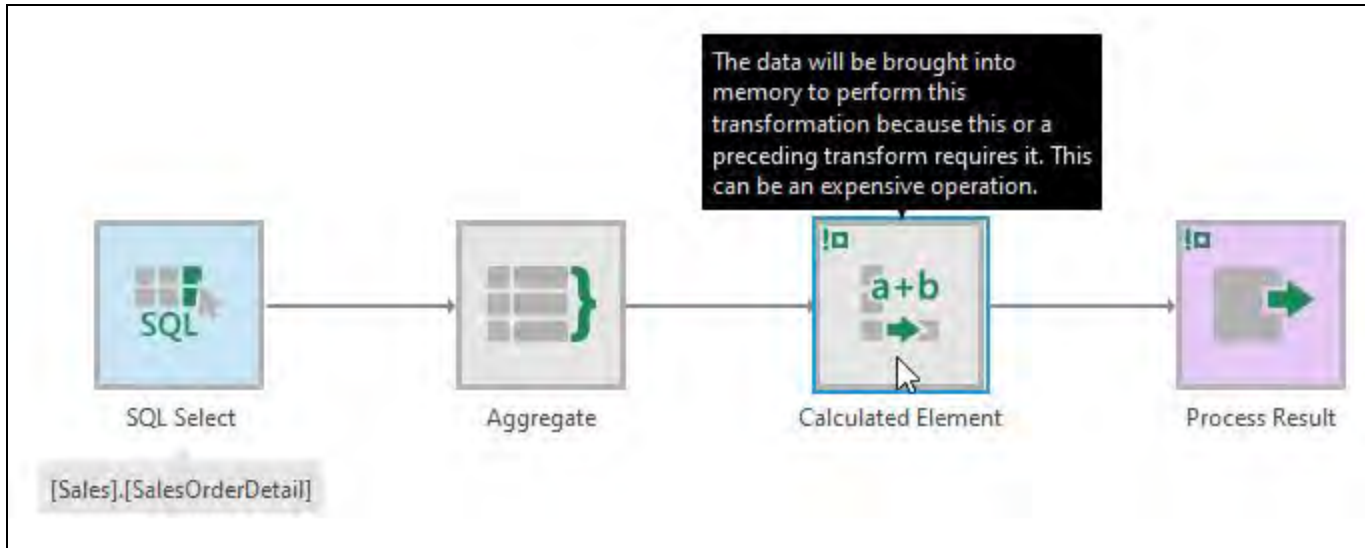
(Sales)(SalesOrderDetail)

Process Result

In-Memory Transforms

When possible, Symphony incorporates the transforms you add to your data cubes into the queries sent to the data providers, so that transformations take advantage of the capabilities of your database or other data source and avoid transferring more data to Symphony than is needed.

Some transforms cannot be performed by the data provider, sometimes depending on their current settings, so the data is loaded into memory on the Symphony server to perform the transformation. This is indicated by a small exclamation mark icon on the transform and the transforms that follow it.



These transforms may noticeably impact performance for large amounts of data. If you want to improve performance, consider:

- Can the in-memory transformation be performed later in the data cube process, after transforms that can be performed by the data provider, by moving it closer to the Process Result at the end?
- Is all of the raw data output by the transform before the in-memory transform needed (view by selecting it and opening Data Preview), or can it be filtered or aggregated first?
- Can the data provider perform the calculation or transformation instead? For example, when you configure a [SQL Select](#) transform, you can add an expression to evaluate in SQL, or edit a column and access options such as [date trimming](#), which will be executed by the data provider.

Aggregate Early

If the granularity of your raw data is higher than the data you intend to display, aggregate it to the smallest granularity you need. For example, you may have data down to the second but only intend to show data by day, month, and year. You could [trim](#) and then group by or [aggregate](#) the raw data into daily data in this case. This can reduce thousands of rows of data into a single row.

When using the Distinct Count aggregator with large datasets containing many distinct values (e.g., millions of distinct values being counted), Symphony may need to query for each of the distinct values themselves if required for metric set analysis features such as totals (you can [disable totals](#) if not needed). If you find that performance should be improved in your case, it is possible to aggregate the data within the data cube instead and calculate the distinct counts you want to display there rather than using the Distinct Count aggregator of the metric set.



Filter Early

Filter data as early as possible. For example, if you only ever visualize data for a certain time range, a specific set of regions, etc., using the Filter transform as early as possible in the data cube can help performance, since it may avoid unnecessary and costly joins.

Location of Data, Server, and Client

Try to keep your data sources, Symphony's server, and the client as close to each other as possible. Network latency can have a major impact on performance if the data you need is on the opposite side of the planet. Warehouse and in-memory storage can help reduce this impact.



Note: An administrator can view the queries sent to the database in the [application logs](#) by configuring the *Query Audit* log filtering in the [configuration settings](#).

Developing Dashboards and Views

Simplify

More data visualizations are not always better. Each needs time to query data and to render, so find the right balance between the number of data visualizations and loading times.

Limit the Initial Amount of Data

Consider using an initial filter setting other than *All*, especially if there's a lot of data involved, or displaying the [top 10](#).

More data points make each phase of loading take longer. For large datasets, [grouping and aggregating](#) into fewer rows/points and columns/series may also help with readability.

For more information, see:

- [Using Transforms](#)
- [Data Cube Data Storage Options](#)
- [Create a New Data Cube](#)
- [Data Cubes](#)



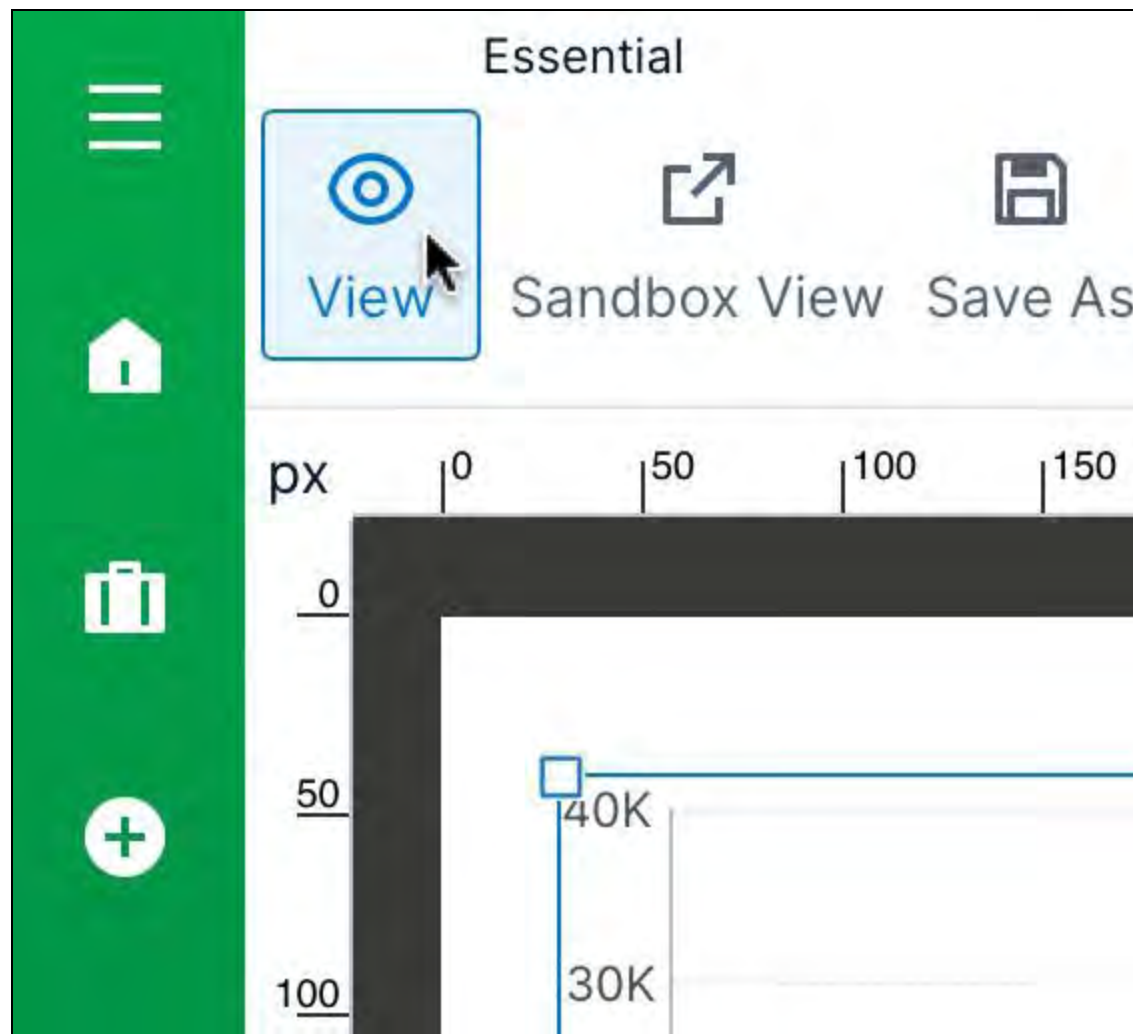
- Archive of documentation for Logi Symphony v24

- [Configuration Settings](#)
- [Viewing Performance Measurements](#)

Edit Versus View Mode and Sandbox View

This applies to: *Managed Dashboards, Managed Reports*

Edit, View, and Sandbox View are options you see in the toolbar of a dashboard, report, or other type of view, depending on which mode you are currently in.



Related video: [Dashboard Modes](#)

Editing Versus Viewing

Edit and view modes are different in how mouse operations are interpreted and include different options in your work area such as the toolbar.

In **Edit** mode, you can use your mouse or touchscreen to select content on the canvas, move it around, and resize it. Options are available to add and remove items, set up custom interactions, and change settings.

In **View** mode, visualizations and other content respond to mouse and touch interactions directly. This allows for you to view tooltips, click data to trigger a filter interaction that was set up, access the context menu to perform drilling down, interact with filter controls, etc. Additionally, reports, scorecards, and small multiples only execute and show repeated content while in View mode.



Important: Any changes you make in View mode (such as drilling down, re-visualizing, or executing a script) will persist if you switch directly back to Edit mode and the item is checked out to you. To test changes made when viewing while ensuring they won't be saved with the item, try the Sandbox View option instead.

Sandbox View

The **Sandbox View** option is available in the toolbar when editing, and displays the current view in a new browser window or tab without any toolbars or docked panels, so that you won't mistakenly switch back to editing after making changes. You can use this to test changes in view mode while that view is checked out to you.

In most cases, changes that you make in the Sandbox View are not persisted/saved. The exception is when you are working with a [checked-out](#) metric set and make a change to how data is retrieved, for example by changing the sorting of some data using the context menu. [A metric set encapsulates the data in a visualization and how it is selected](#). Changes to a checked-out metric set happen immediately, and are separate from changes to a dashboard and its view and edit modes. (Metric sets [created directly on a dashboard](#) are checked out together along with their dashboard, versus [metric sets created first on their own](#).)

If you want to make sure all changes are not saved during viewing, you can check in the metric sets you are using beforehand, then use the Sandbox View option. Or, you can check in the dashboard.

For more information, see:

- [Check In, Check Out and Auto Saving](#)
- [Symphony Metric Sets](#)
- [Symphony Managed Reports](#)
- [Design Tips](#)



Responsive Layout Dashboard Mode

This applies to: *Managed Dashboards, Managed Reports*

Dashboards are traditionally created for displaying on a large device, such as a computer monitor or TV, however some may be viewed on smaller mobile devices such as phones.

Typically, multiple dashboards would need to be created for the best possible use of space on the display. With the responsive dashboard re-size mode, dashboards laid out in a grid can automatically re-flow themselves when necessary to fit different displays.

To build a responsive dashboard, its contents must be docked into the cells of a template grid. See [Using a Template Grid for Resizing](#).

Related video: [Resize Mode](#)

The Responsive Mode Flow Algorithm

Responsive mode re-flows the individual grid cells from left to right, then top to bottom, as the available size of the screen changes:

- The dashboard will attempt to fit as many cells as possible by using the edit-time width of the template cells. When there is not enough space, it will start a new row. The left-over space will then be filled by evenly resizing all the cells.
- The height of the row is defined by the cell with the largest edit-time height, after it was already placed in the row. All the cells in the row will expand to match that height.
- The header in a group of cells will be placed before the content cells, in the left-top position of the group. The remaining content cells in the group will be positioned according to the two points described above.

When the responsive dashboard is loaded, the layout is calculated based on the current page size, and is re-calculated each time it changes size. This can happen either by resizing the browser window or changing the device from portrait to landscape mode.

Grouping and Headings

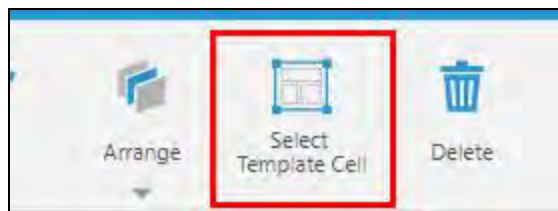
In a regular template grid, headers and groups do not need to be defined because the overall layout does not change. However in responsive mode, some extra information is required on the cells to preserve certain important positioning.

In the layout below, a template grid with 6 rows and 6 columns has been created:

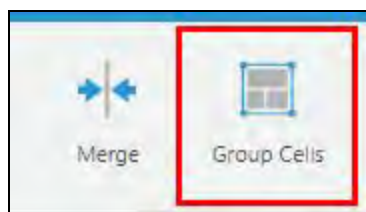
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

Groups

Grouping several cells together ensures that these cells are kept together when the page layout is computed. The group is considered a single cell when the layout is computed. To configure several adjacent cells to form a group, select the cells by holding Shift while clicking them, or click and drag to select elements in the cells and choose **Select Template Cell** in the toolbar.

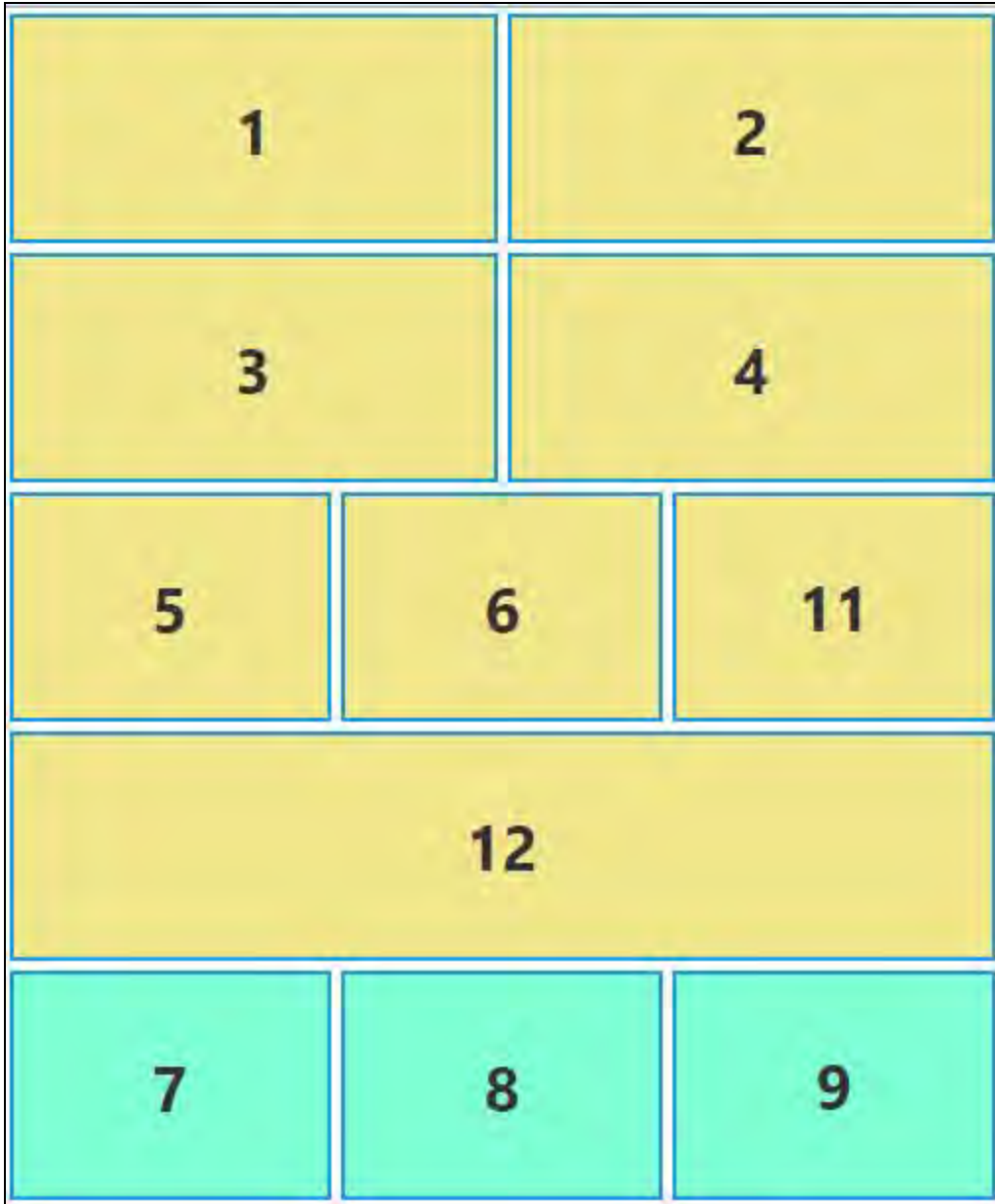


Select **Group Cells** in the toolbar to create a group.



In this example, 1 is grouped with 2, 3 with 4, and 5, 6, and 11 with 12. In responsive mode, the layout is recalculated to keep all groups together. Cells 1 and 2 take up the whole row because while cell 3 can fit onto that row, cells 3 and 4 cannot. Cells 5, 6, 11 and 12 appear before cells 7, 8, 9 and 10 because the group is kept together, and cells 5 and 6 come before cells 7, 8, 9 and 10.

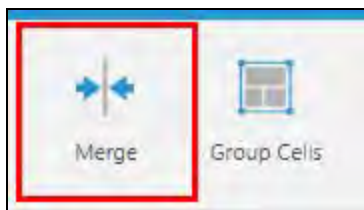
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36



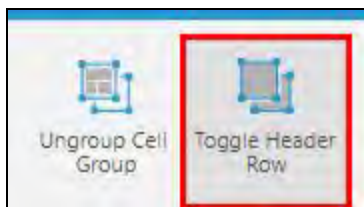
Headers

When displaying related data in adjacent cells, you may want a row along the top to be considered a 'header'. When the layout is computed, a cell or group that is tagged a header row will always span the entire row, even if there is space to display additional cells to the left or right. (When the header row is inside a group, this only applies within the group.)

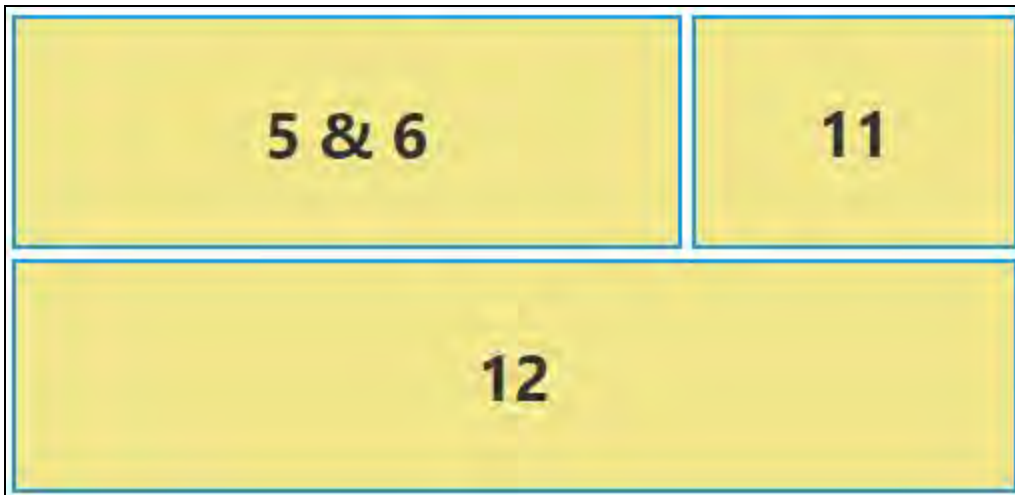
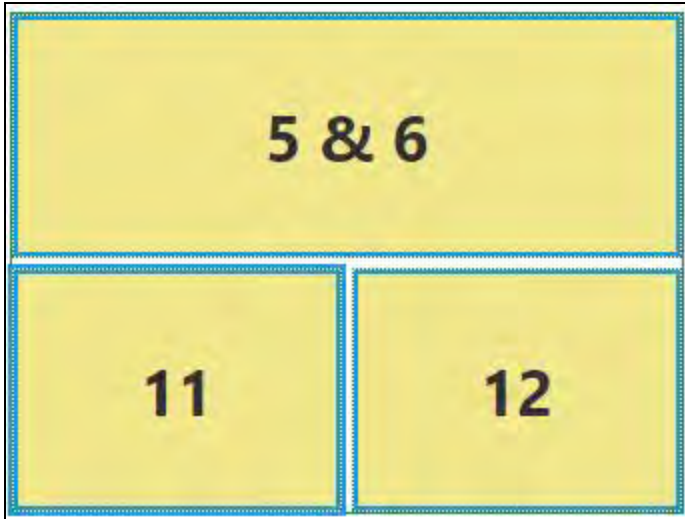
A cell or cell group can be designated a header row if it spans the entire row. If you have grouped rows of cells together and want to designate one of its rows as a header for the group, one cell can be made a header if it spans the entire row within that group (this may require selecting and merging cells to create a header row).



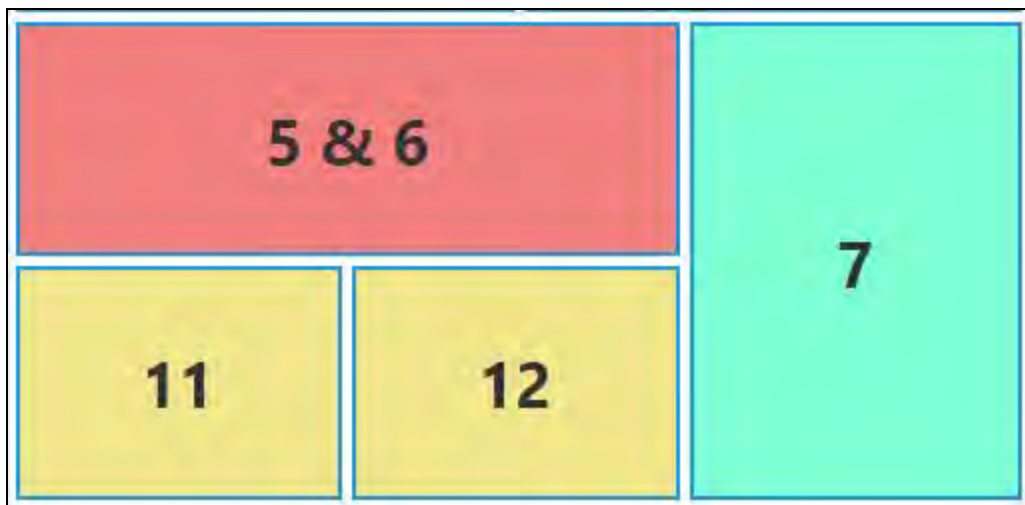
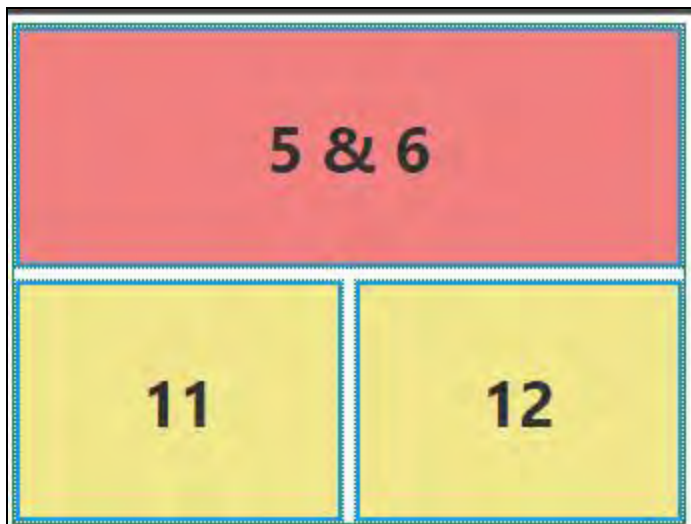
Select the header cell or group, and click **Toggle Header Row** in the toolbar. (When enabled as a header row, the button will appear with a darker background.)



In the example below, cells 5 and 6 have been merged. Note how, despite the merge, they do not function as a header.



When the header property is set, cell 5 & 6 (which is now one cell), contains no cells to the immediate right that are in its group (5 & 6, 11 and 12). As 11 and 12 can fit underneath 5 & 6, the group is shrunk, and cell 7 is placed to the immediate right of the group.

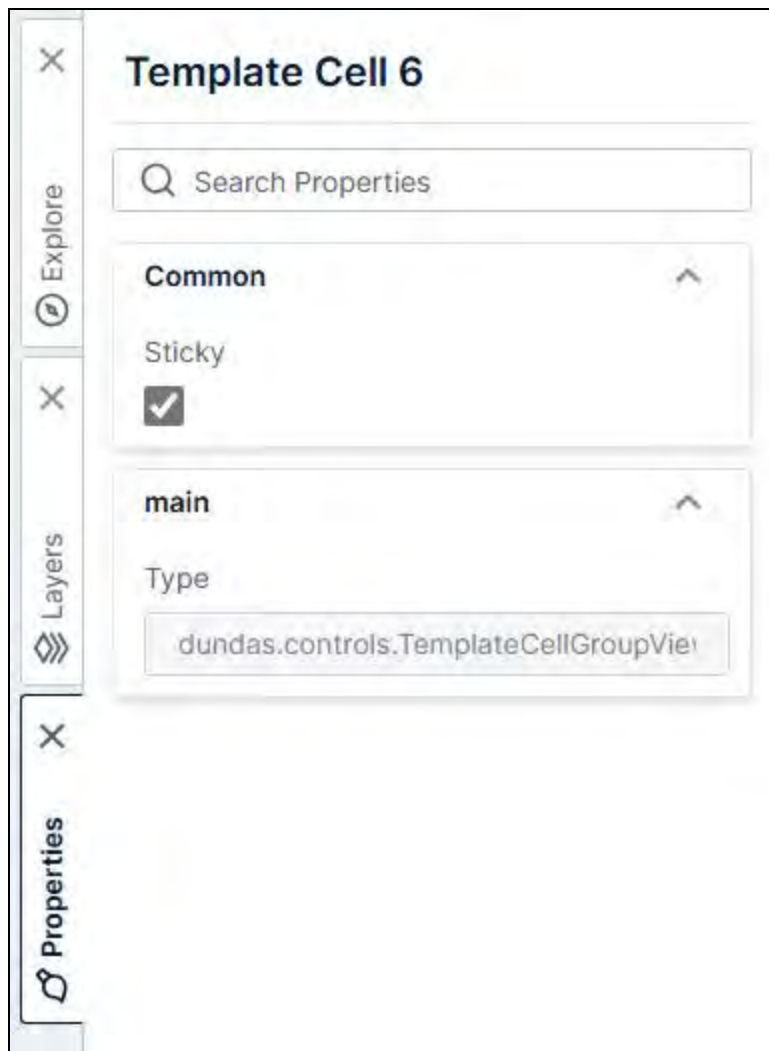


Sticky Headers

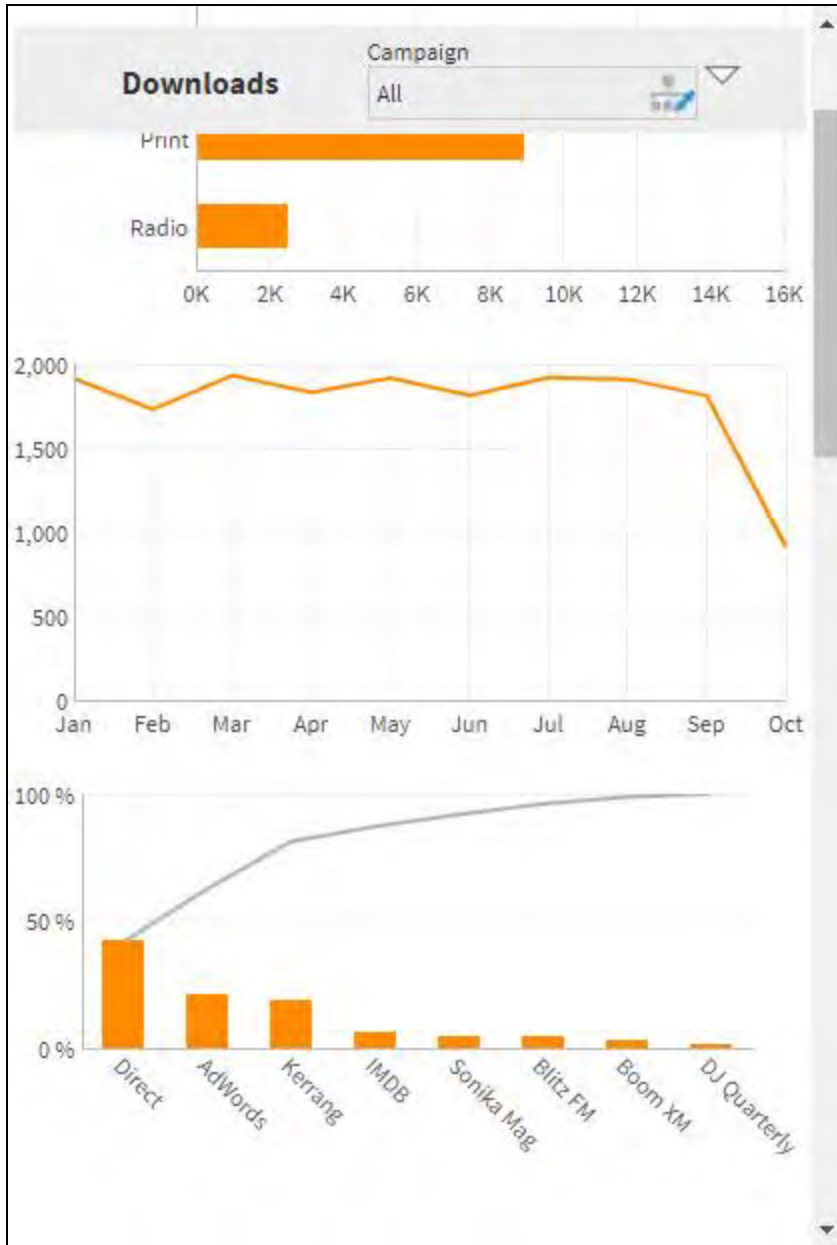
Once a cell or row of cells is toggled as a header row for the dashboard, you also have the option to make it a 'sticky' (or frozen) header, which will stay in position as the rest of the dashboard below is scrolled up.

To enable this setting, select the cell or group that was designated a header. You can click to select it, or select its contents and choose **Select Template Cell** in the toolbar.

Go to the **Properties** window and enable the **Sticky** property.



When viewing the dashboard and scrolling down, once the header would have been scrolled out of view it is pinned back into place with the rest of the contents scrolled below it.



Depending on your header's contents, you may want to place a Rectangle or another component behind the other header contents so that its background is not transparent.

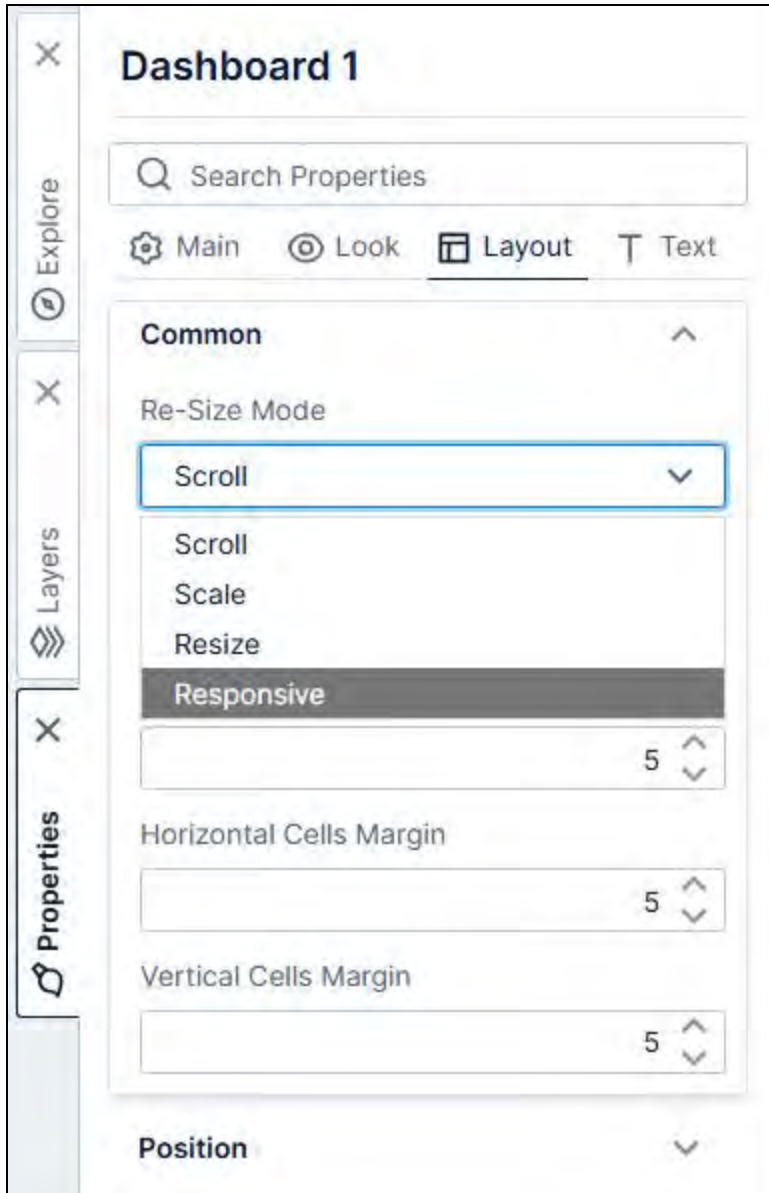


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Enabling Responsive Mode

To enable responsive mode, click on the dashboard and open the **Properties** window.

In the **Layout** tab, set the **Re-Size Mode** property to *Responsive*.



Using Responsive Mode

To use responsive mode, add a template grid to the dashboard and place all contents within a cell. For best results, each element should use relative positioning.

Search Properties

Main

Look

Layout

Text

Padding

+

POSITION

Width

100%

Height

100%

Left

0%

Top

0%

Z Index

1002

Dock Location

None

Position Kind

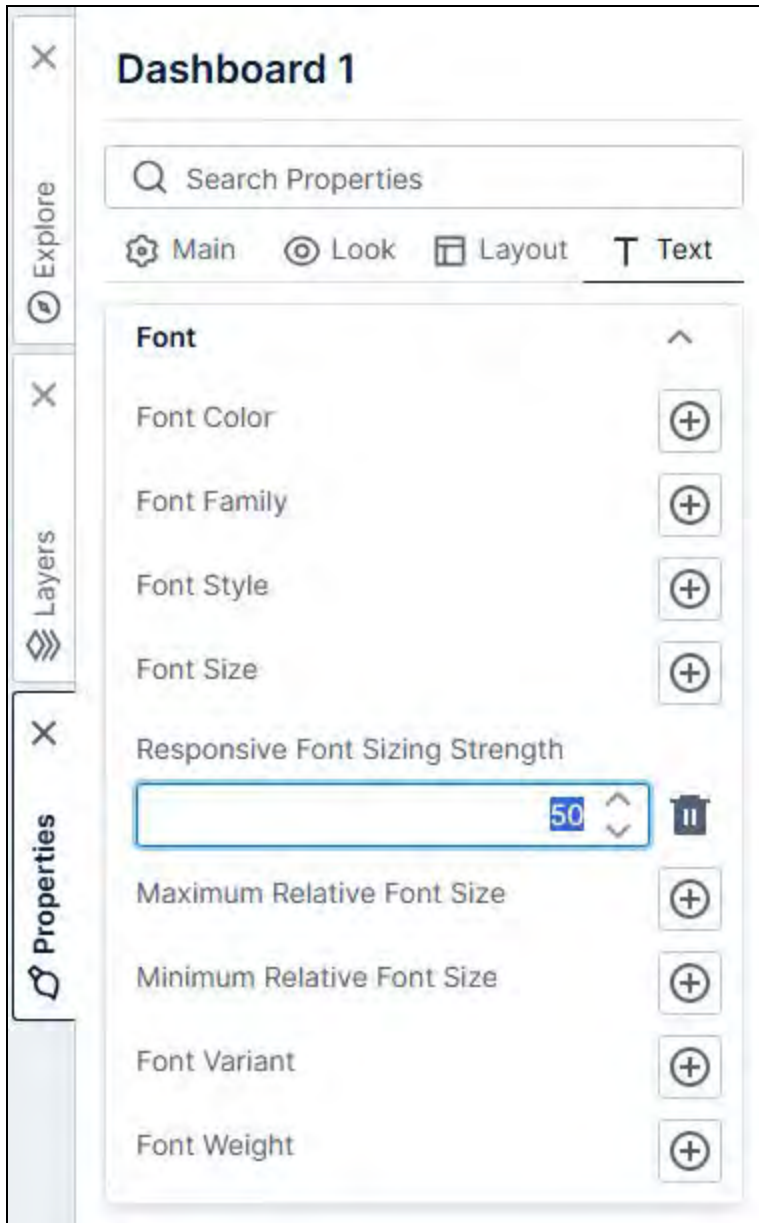
Relative



Relative Font Sizes

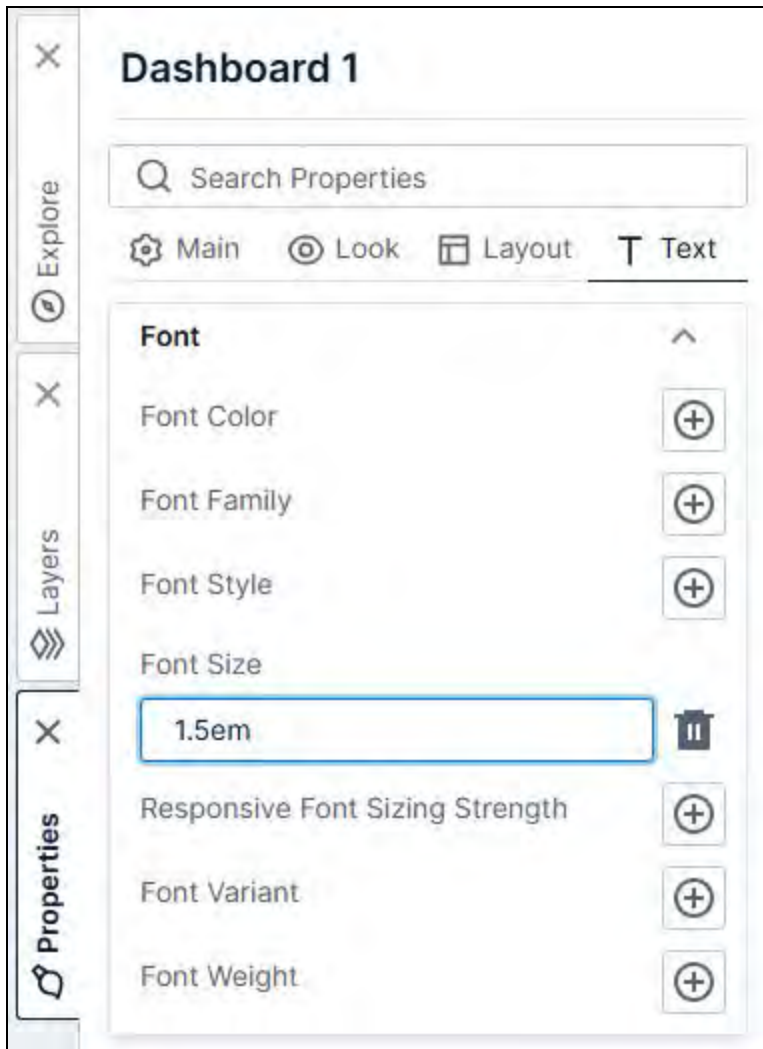
When using responsive resize mode for your dashboard, you can allow Symphony to choose the font size to display based on the browser size or device used for viewing.

In the **Properties** window for the dashboard, go to the **Text** tab and set the **Responsive Font Sizing Strength** property to a number between 1 and 100, where smaller numbers result in smaller font size changes while larger numbers result in larger changes relative to the device or window size:



You can also set minimum and maximum font sizes in em units to ensure they do not go beyond the specified limits. For example, a minimum of 1 em means the font size can only be increased compared with the font size set in edit mode.

When the Responsive Font Sizing Strength property is set, any elements on the dashboard with font sizes set in em units will automatically change in size according to the browser size. This applies to all text by default, or you can make only some text change in size automatically by setting some font sizes to a px size in pixels to always keep their text at the same size, and others to an em size for text that you want to resize automatically. To customize font sizes, click on the dashboard or an element, and in the Text tab of the Properties window, type in your preferred **Font Size** setting:



Any elements that don't have their own set Font Size will inherit their setting from the dashboard.



Design Notes

Responsive mode is designed to cleanly modify the layout of the dashboard when viewing on a device with a smaller display size or different orientation. It's possible that viewing at screen sizes larger than the size the dashboard is designed for may cause undesired layouts, and designing a dashboard targeted for these larger displays is one alternative. For smaller screens, also consider how information is conveyed in a small area with other content potentially scrolled away.

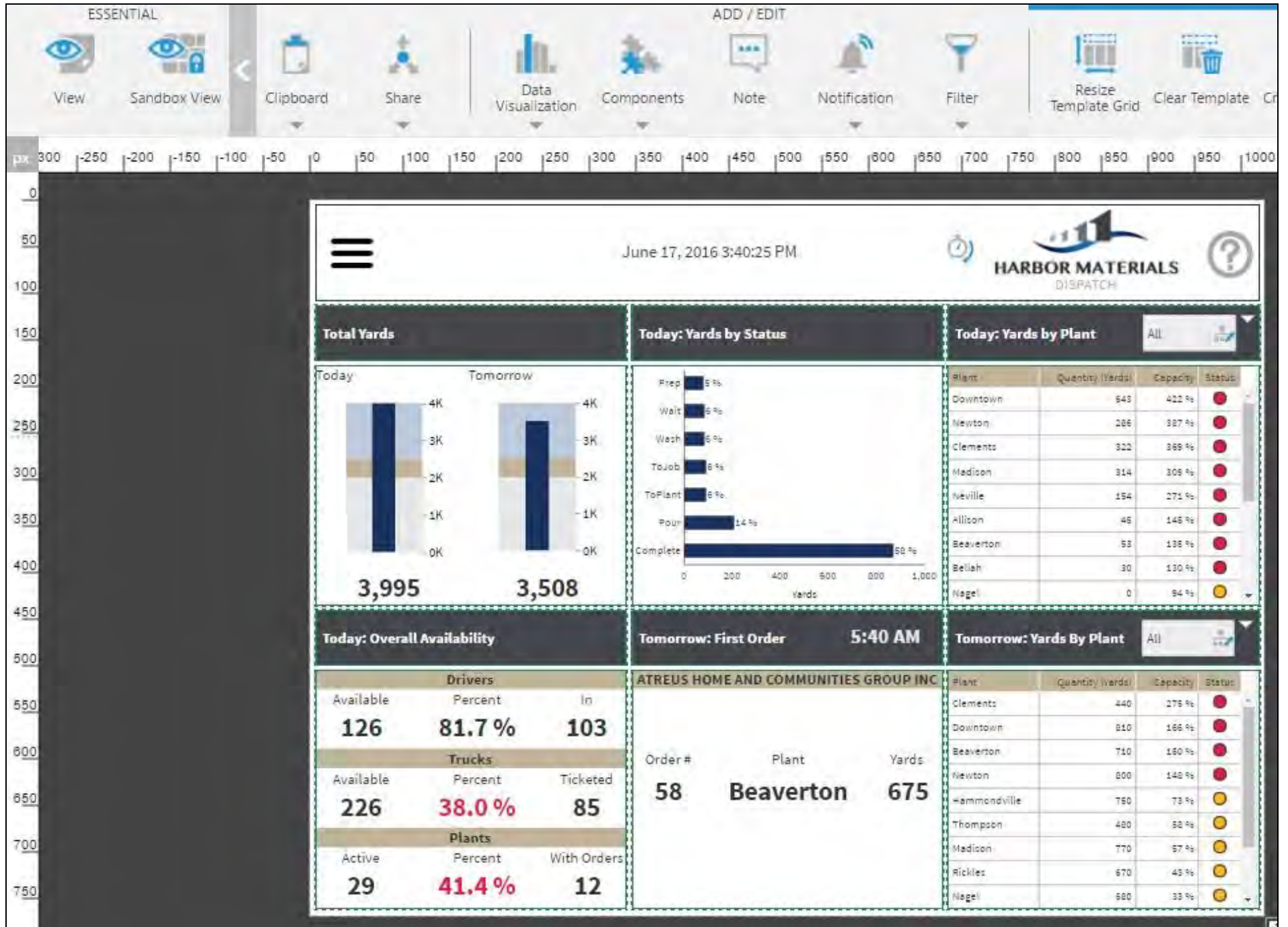
 **Note:** To make specialized adjustments for very large versus very small screens, see [Improving Responsive Mode With CSS](#).

The recalculation of the layout for different screen sizes can impact the positioning of sections of the dashboard, for example two related visualizations that are adjacent at one screen size may not be for another if one has been re-flowed or wrapped into the next row. To ensure that related visualizations are kept together, the cells should be configured in a group.

Example Dashboard

The dashboard below has been created using responsive design. When editing the dashboard there is a base size that is used, however when viewing the dashboard on smaller displays, the dashboard layout is recomputed to take into account the smaller sized display.

When editing, the dashboard is designed to have a grid that is 3 across and 2 down. When viewed at full size, this is the display that is seen.



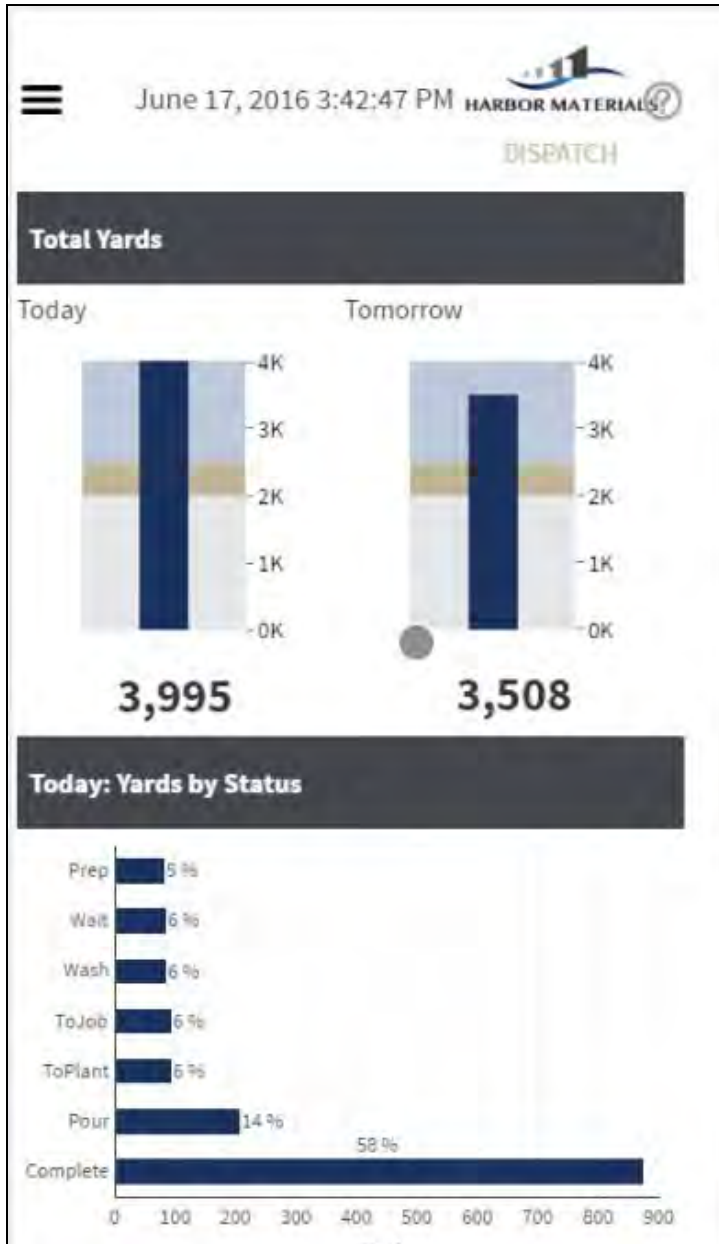


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When the dashboard is viewed on a tablet device, it may be used in portrait mode. In this case, the dashboard layout is re-computed, and it is able to fit a layout of 2 across and 3 down.



On a smartphone, which has a much smaller screen, the layout can only fit a grid one cell wide.





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For more information, see:

- Video: [Template Grids](#)
- Video: [Resize Mode](#)
- [Using a Template Grid for Resizing](#)
- [Design Overview](#)



Symphony Managed Reports

This applies to: *Managed Reports*

This article introduces the concepts behind managed reports in Symphony, which are one type of view you can create. This type of report is sometimes called multi-page or paginated reports.

There are two main differences between Symphony dashboards and reports:

- Reports are designed to be laid out into pages and you typically scroll them to see their content, while dashboards are usually designed for displaying on computer and mobile screens. Reports include page headers and footers and are ideal for saving as a PDF file and printing, although you can also view them directly within Symphony where they are interactive like dashboards.
- Reports enable you to create detailed views made up of visualizations and other content repeated like a template for each of a series of values in your data. Using template regions, you can produce a wide variety of page-formatted reports.

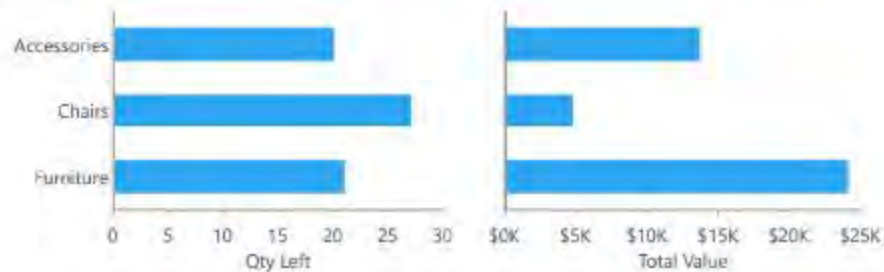
Inventory Stock List

Northeast Warehouse
423 Cayuga Rd
Buffalo NY 14225

	Qty Left	Unit Price
Accessories		
Accents	3	\$26.00
Business Card Holder	10	\$32.50
Foot Stool	2	\$169.00
Ming Vase	5	\$2,508.80
Chairs		
Dining Chair	7	\$149.00
Office Chair	20	\$199.99
Furniture		
Bedroom Set	2	\$1,999.00
Kitchen Cabinet	5	\$999.50
Living Room Set	4	\$1,500.00
Shelf	10	\$99.99

Repeat product categories

Repeat products within category





Note: If the type of report you want to create is not meant to be paginated, and is laid out by hand rather than repeating vertically or can be created with a [table visualization](#), you can use a dashboard instead.

Related video: [Scorecards and Reports](#)

For more information about managed reports, see the following articles:

- [Managed Report Layout Regions](#)

- [Report Headers and Footers](#)
- [Page Headers and Footers](#)
- [Grouping Hierarchy Region](#)
- [Group Headers and Footers](#)
- [Group Body](#)
- [Child Groups](#)
- [Sibling Groups](#)
- [Add a Table of Contents](#)

- [Report Layout Example](#)



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Design an Inventory Report

This applies to: *Managed Reports*

This walkthrough shows you how to design a pixel-perfect multi-page report, similar to the example inventory report shown in [Symphony Managed Reports](#). This example displays two levels of grouping: one for product subcategories, and another for products. Data is displayed here as text using data labels, but you can use any of the same visualizations as are available in dashboards for your data in any report region.

Inventory Stock List

Northeast Warehouse
423 Cayuga Rd
Buffalo NY 14225

	Price	Quantity
Mountain Bikes		
Mountain-100 Silver, 38	\$3,399.99	149
Mountain-100 Silver, 42	\$3,399.99	153
Mountain-100 Silver, 44	\$3,399.99	158
Mountain-100 Silver, 48	\$3,399.99	164
Mountain-100 Black, 38	\$3,374.99	155
Mountain-100 Black, 42	\$3,374.99	194
Mountain-100 Black, 44	\$3,374.99	149
Mountain-100 Black, 48	\$3,374.99	153
Mountain-200 Silver, 38	\$2,319.99	137
Mountain-200 Silver, 42	\$2,319.99	223
Mountain-200 Silver, 46	\$2,319.99	140
Mountain-200 Black, 38	\$2,294.99	188
Mountain-200 Black, 42	\$2,294.99	148
Mountain-200 Black, 46	\$2,294.99	137



Design the Report

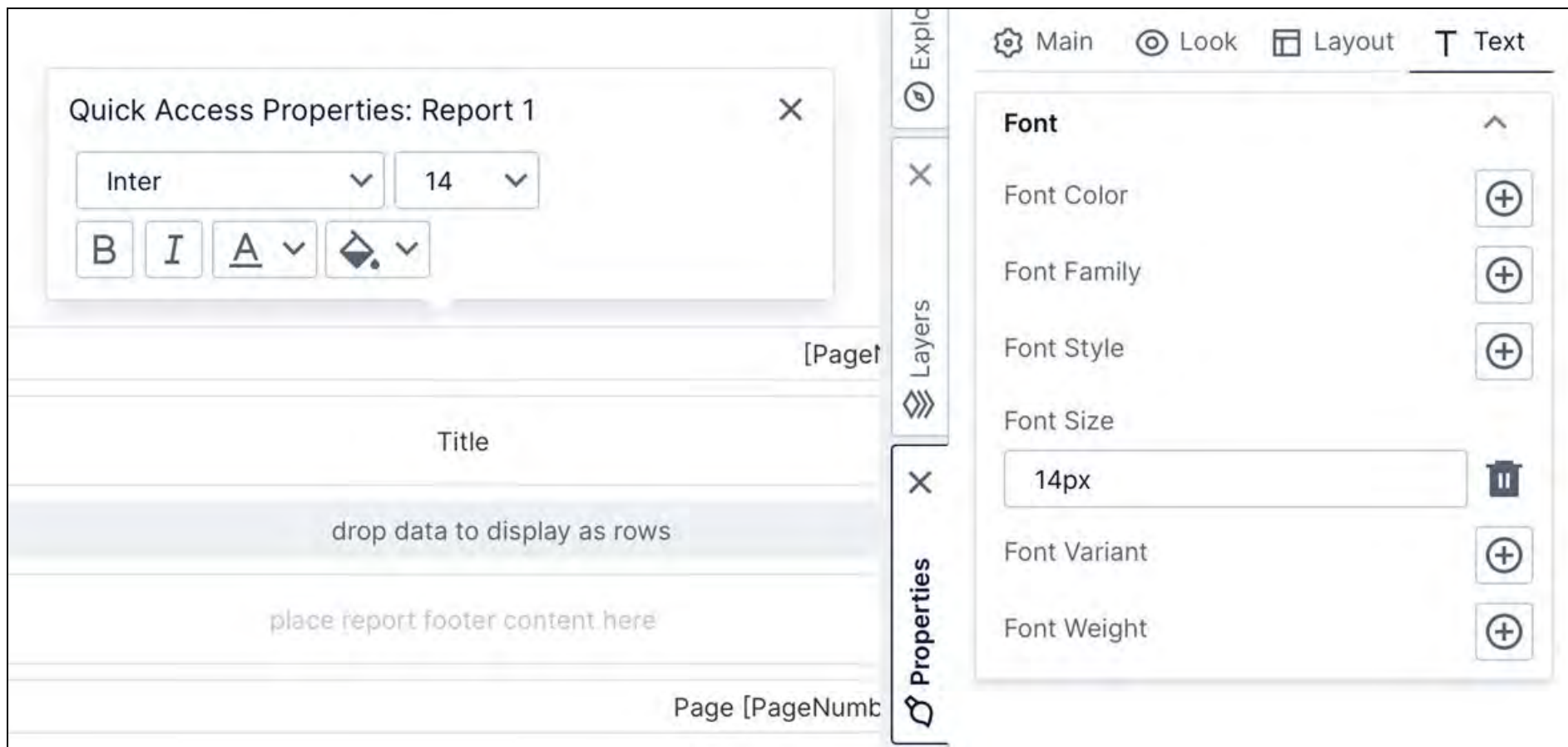
Select Views in the [Managed Dashboards and Reports work area main menu](#) while working in Managed Dashboards and Reports, select **Report** at the top, then **Create** to open a new report in edit mode.

The default paper size for the report is set according to your locale - for example, letter-sized pages (8.5 × 11 inches) are used by default for [cultures](#) including en-US and en-CA.

To set the paper size, open the **Properties** window then switch to the **Layout** tab along the top. (If any elements are selected, de-select them first by selecting an empty area of the canvas.)

You can set up font properties to take effect for most of the content of the report at once in the **Text** tab, or by selecting an empty area of the report to bring up **Quick Access Properties**.

For this example, set the `Font Size` to 14px.



Title

A label component is added automatically to the Report Header region as a title when you create a report.

Select the label and open the **Properties** window, then **Font & Text**, so you can set the following properties:

- Set Label Text to Inventory Stock List (or double-click the label to set its text).
- Set Text Alignment to Left.



- Set Font Size to 20px.
- Set Font Weight to 500 (or Bold).

Select the area labeled **RH** on the left to select the Report Header region to add new items to it directly, otherwise you can drag items into it from outside. Select **Components** in the toolbar to add a **Label** to display an address, for example.

Select **Components** and then **Line** to add a line as a separator below the title. In the Properties window, under **Layout & Spacing** and **Lines & Fills** define the following properties:

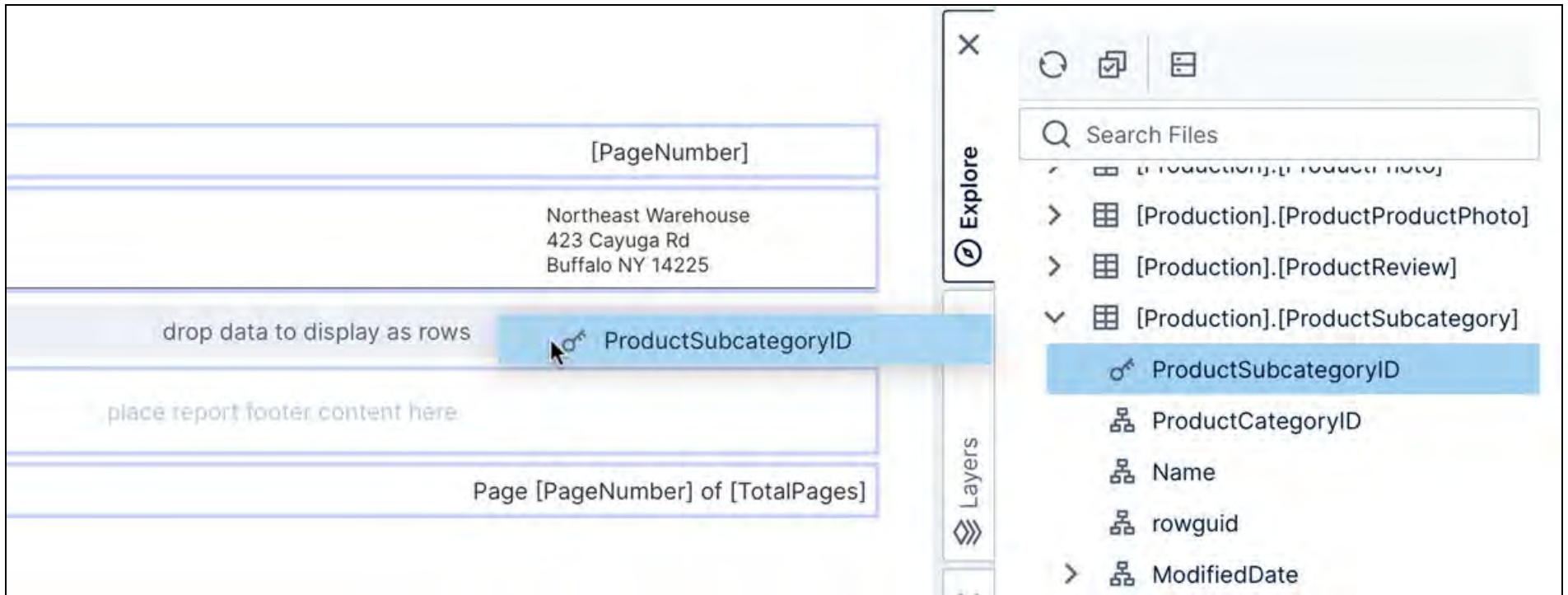
- Set Stroke Color to Black.
- Under Dock Location, select the bottom-center square to dock to the bottom.
- Set Bottom to 0, and set Height to 2 to match the width of the line.

You can switch to **View** mode in the toolbar to see how your report looks so far, then return to **Edit** to continue editing this report.

Add Subcategory Rows

Navigate to the **Explore** window and drag the data that will make up the rows of the report onto the grouping hierarchy region, labeled drop data to display as rows.

In this example, using the Adventure Works sample database, find and expand the table `[Production.ProductSubcategory]`, then drag the `ProductSubcategoryID` column in order to uniquely identify each product subcategory and display a row for it.



The screenshot shows the Logi Symphony v24 interface. On the left, a report design is visible with several regions: a header region containing '[PageNumber]', a body region containing 'Northeast Warehouse', '423 Cayuga Rd', and 'Buffalo NY 14225', a footer region containing 'drop data to display as rows' and 'ProductSubcategoryID', and a page footer region containing 'place report footer content here' and 'Page [PageNumber] of [TotalPages]'. On the right, the 'Explore' window is open, displaying a search bar and a list of tables and columns. The table '[Production].[ProductSubcategory]' is selected, and the column 'ProductSubcategoryID' is highlighted. The 'Layers' panel on the right shows the report structure with 'ProductSubcategoryID' as the primary key.

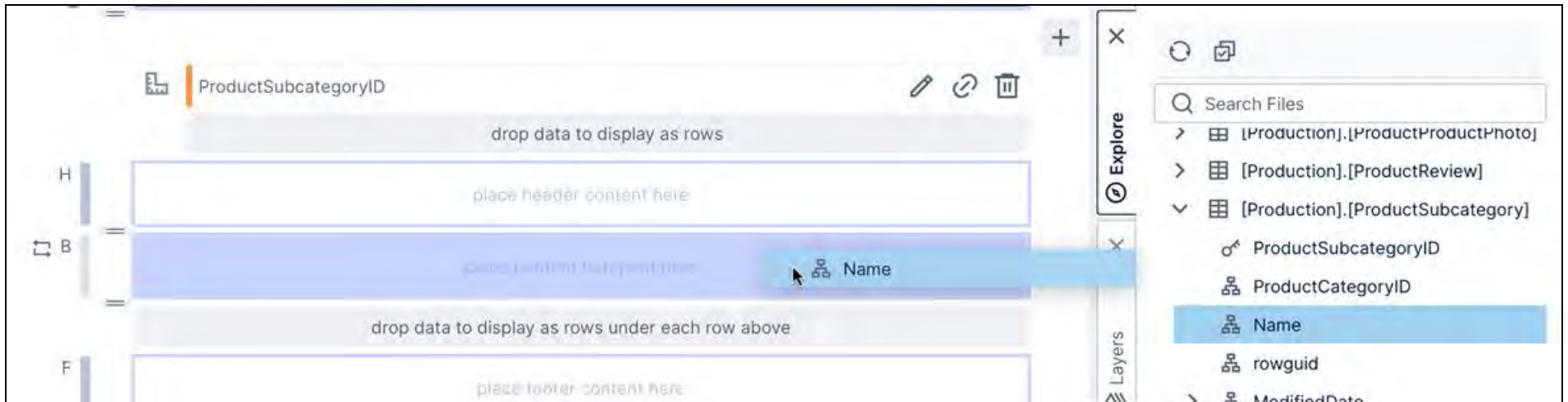
This inserts **Group Header**, **Group Body**, and **Group Footer** regions for the subcategories, and automatically add a header and corresponding data label to display the subcategory IDs.

For this example, select the header and data label and select **Delete** in the toolbar, because the design of this particular report does not display these IDs directly.

Add Subcategory Names

For our example, we want to display the name of the subcategory in each of the repeated rows.

In the Explore window, drag the Name column from the same [Production.ProductSubcategory] table to the Group Body region (labeled place content to repeat here).

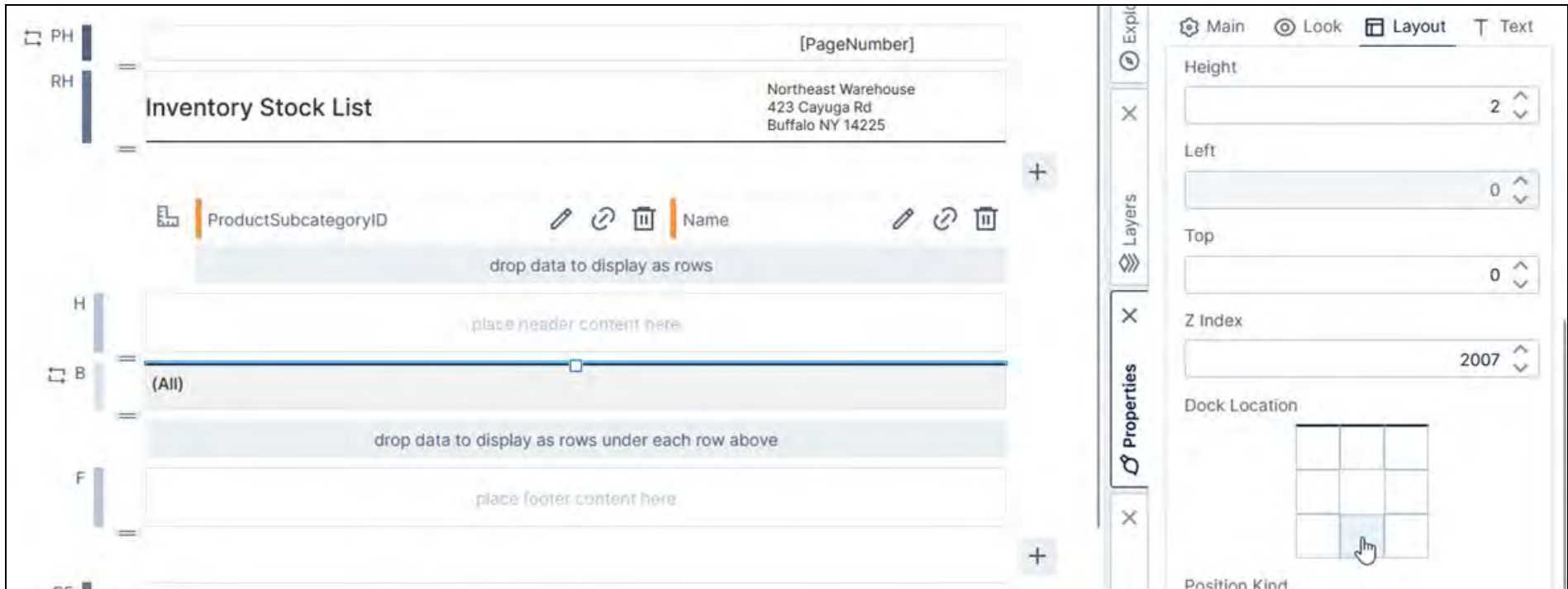


This automatically adds a header and corresponding data label for the names. For this example, select and Delete the unneeded header, and resize the width of the data label to fit longer names. (In Edit mode, the data label displays **(All)**, but it will display the subcategory name when you switch to view mode.)

Set the **Font Weight** property for the data label to 500 (or Bold).

Select an empty part of the group body region. Under **Lines & Fills**, set its **Background** property to #F2F2F2. Use **Layout & Spacing** to set the **Height** to 40 pixels for this example. (You can also drag the resizer on the left of the group body to change its height).

Next, select **Components** and add another Line, this time in this group body region, to separate each subcategory.



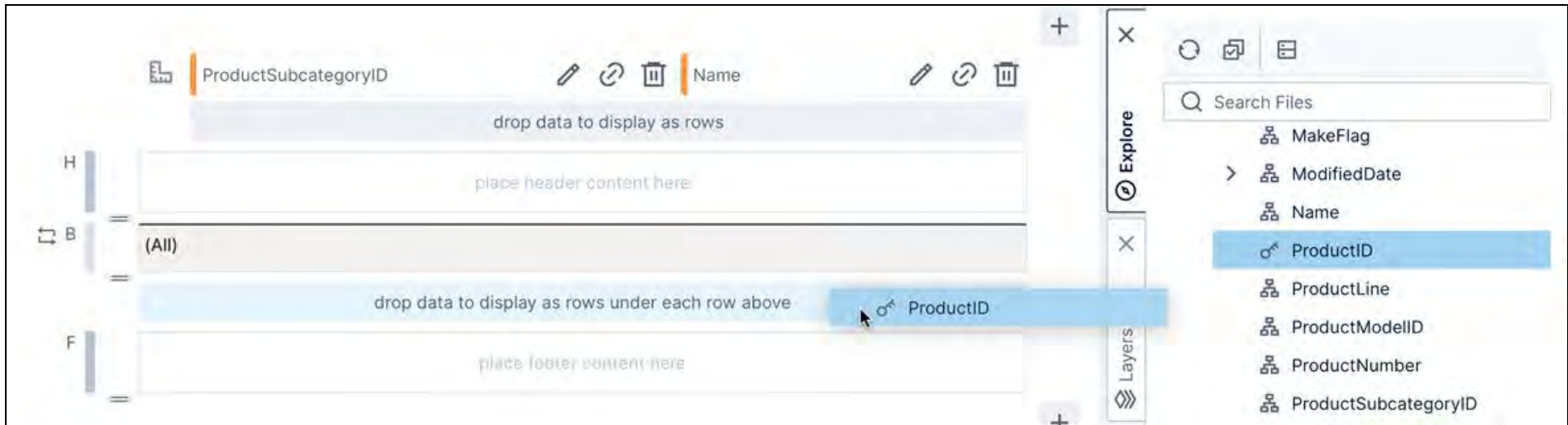
Note: For many report designs, you can also select the group body region and use `Row Separator Lines` under the **Lines & Fills** in the Properties window instead of adding your own line components.

Set it up like the previous line, except dock it to the top, with the `Top` property set to 0.

Add Product Rows

For this example, we want to show a list of products within each subcategory along with the quantity and list price information. We can do this by adding a child (or nested) group inside our existing subcategory grouping.

In the **Explore** window, find and expand the `[Production].[Product]` table, and drag the `ProductID` column onto the child grouping hierarchy region (drop data here to repeat content for each value within every value above).



This will automatically insert a Group Header, Group Body, and Group Footer region for the products.



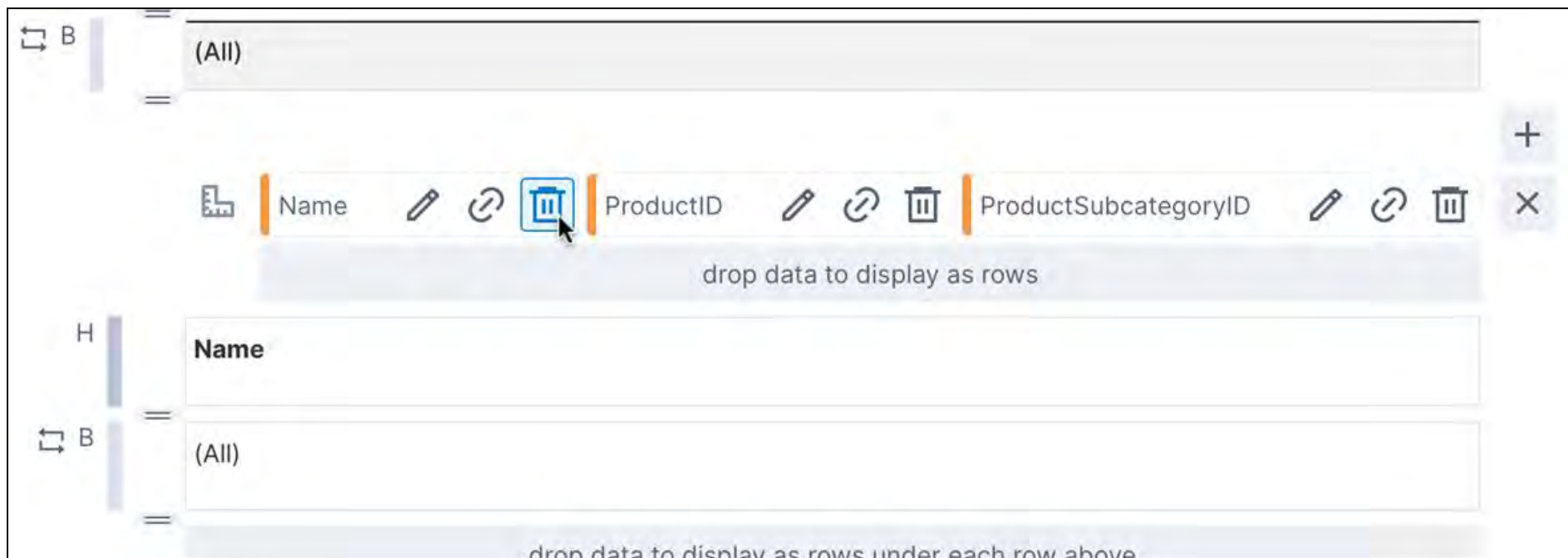
Note: In this example, the data from the product subcategory table is automatically joined with the product table for you. You can also prepare a data cube that combines all needed data ahead of time.

The subcategory ID and name hierarchies are automatically added from the parent group, along with headers and data labels to display the data. Since we don't want to display subcategories or product IDs in the product rows, we can delete these headers and data labels from the child group header and body.

Link the Parent Group and Child Group

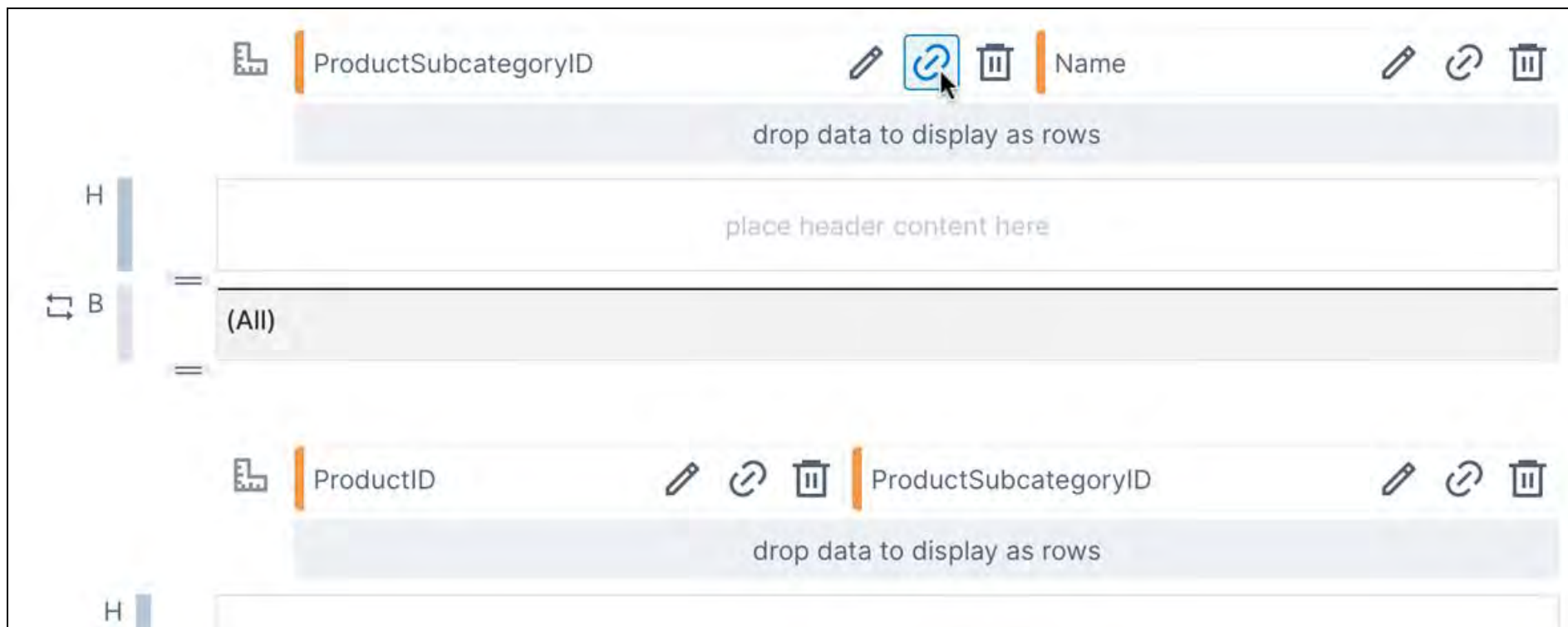
The parent group and child group each have their own data: the parent has the product subcategory data and the other has products, and they are related in this case by common `ProductSubcategoryID` values.

In our example, the product rows don't need the subcategory's **Name** column and we can remove this from the child group we just added in the previous section.



The screenshot shows the Logi Symphony interface with a hierarchy setup. The parent group is labeled "(All)". Below it, the child group is labeled "Name". The child group is currently set to display as rows. The interface includes icons for adding, editing, linking, and deleting fields. The fields shown are "Name", "ProductID", and "ProductSubcategoryID". The "ProductSubcategoryID" field is highlighted with a blue box and a mouse cursor, indicating it is being selected for linking.

In many cases the child group will be linked correctly automatically, but you can confirm or change this by clicking the link icon next to each hierarchy in the parent group. For our example, click the link button for `ProductSubcategoryID`.



In the **Grouping Hierarchy Linking** dialog, select the matching `ProductSubcategoryID` data in the child group.

Grouping Hierarchy Linking

Choose the hierarchy on related visualizations and child groups that the grouping hierarchy member is passed to for filtering.

Normally this is automatically selected but may not be detected for some mixed data sources. You may wish to deselect this for data that should not change based on the grouping hierarchy member, such as global targets.

Name

- ▼ —  **Report 1**
 - ▼ —  **Group 2**
 - ▼ —  **Metric Set 2**
 - > ☐  ProductID
 - > ☒  ProductSubcategoryID

Close

Save

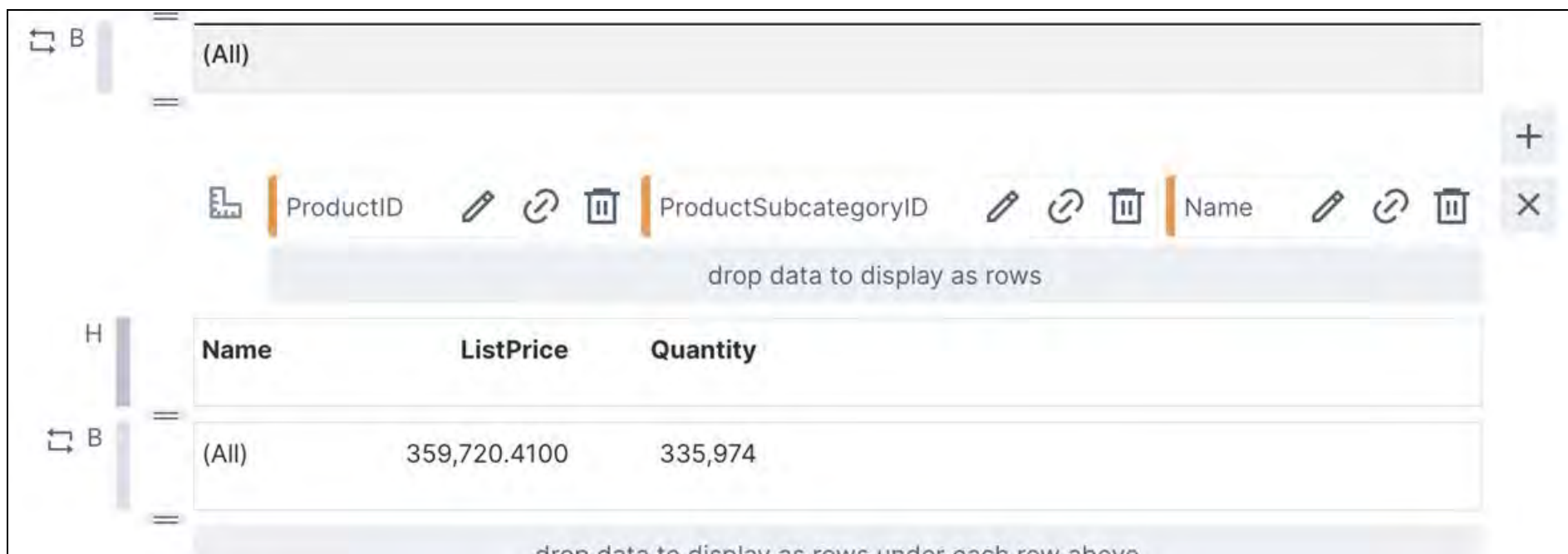


Important: The values you link must be identical.

Add Product Data

Now drag the data you want to see in the child group body region: from the `[Production].[Product]` table, drag `Name` and `ListPrice`, and from `[Production].[ProductInventory]`, drag `Quantity`.

Headers for this data are added automatically to the child group header, which will display them above the product data within each subcategory group, repeating them for each subcategory.



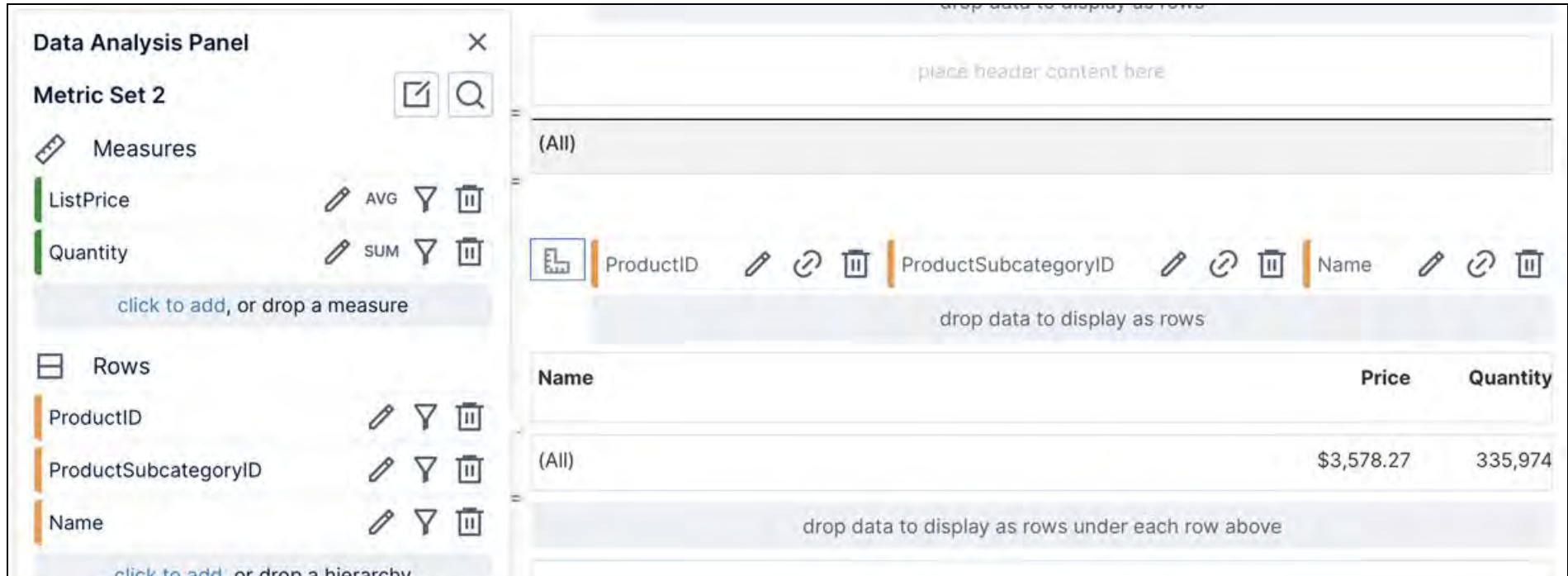
(All)								
ProductID	ProductSubcategoryID	Name						
drop data to display as rows								
<table border="1"> <thead> <tr> <th>Name</th><th>ListPrice</th><th>Quantity</th></tr> </thead> <tbody> <tr> <td>(All)</td><td>359,720.4100</td><td>335,974</td></tr> </tbody> </table>			Name	ListPrice	Quantity	(All)	359,720.4100	335,974
Name	ListPrice	Quantity						
(All)	359,720.4100	335,974						
drop data to display as rows under each row above								

This would be helpful for many report designs, but to produce the design in this example report, **Delete** the header for product **Name** and drag the `ListPrice` header to the right edge of the parent group header instead, followed by `Quantity`. Reposition the corresponding data labels if needed to the right so they line up with their headers.

To complete the rest of the design for the product rows and headers:

1. You can double-click the `ListPrice` header or select it and choose the toolbar option to change its text to `Price`. In the Properties window, uncheck **Show Sort & Filter Menu**.

2. The product name data label should be resized to be as wide as possible to fit longer names.
3. Click to select the group body region for products (select the area labeled **B** to the left). In the properties window under **Layout & Spacing**, set **Height** to 40 like the subcategory rows.
4. Choose **Components** and then **Line** in the toolbar to add another separator line, this time between products. Set it up similar to the previous ones: **Black** except with only a 1px width, with height set to 1 to match, and docked to the top.



The screenshot shows the Logi Symphony Data Analysis Panel. On the left, the 'Metric Set 2' sidebar contains 'Measures' (ListPrice, Quantity) and 'Rows' (ProductID, ProductSubcategoryID, Name). The main area displays a table with the following structure:

Name	Price	Quantity
(All)	\$3,578.27	335,974

The table is part of a larger layout with placeholder text like 'place header content here' and 'drop data to display as rows'.

These data labels display data from the [group metric](#) set by default, so to make changes to it, click the metric set icon to the left of ProductID to open its Data Analysis Panel.

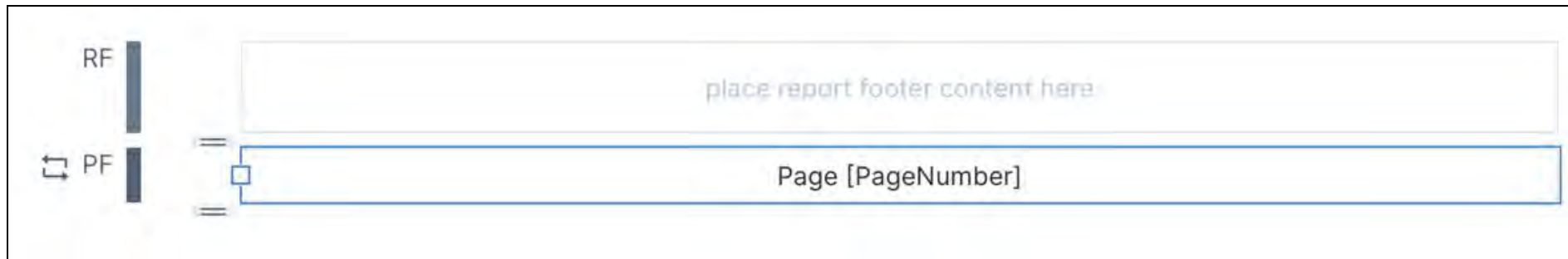
For example, you can change the [aggregator](#) for ListPrice to Average. Select to edit ListPrice and then **Define text formatting** to set up [currency formatting](#).

Placeholder Label in the Page Footer

Reports are automatically given labels in the page header and footer displaying the page numbers, but you can optionally customize these. You can also drag predefined placeholder labels like these from the **Labels** window, normally docked to the right side of the screen.

To recreate the example report design, **Delete** the label from the page header.

Double-click the label in the page footer or select it and choose the toolbar option to change its text, and set it to `Page [PageNumber]`. Resize the label's width so that the text is centered on the page.



View the Report

Switch to **View** mode in the toolbar to see the report produced by this design, and scroll down through subcategories to find the products listed for each.

To view the report as a [PDF](#) that you can save, share, or print, click **Share** in the toolbar and choose PDF. You can also set up a **Notification** to schedule a one-time or recurring [email](#) to the recipients of your choice with the PDF attached.

While you can obtain a similar result with a single [table visualization](#) on a dashboard, reports provide complete flexibility with the layout, as well as a paginated, printable result.

This particular example only used data labels, but you can add or re-visualize to any type of visualization and use the same set of properties and metric set options to customize them as on dashboards. For example, the report shown in [Symphony Managed Reports](#) added bar charts to the report footer, or you could re-visualize the `Quantity` or `Price` data labels. For more report options such as page breaks and displaying headers on each page, see [Design Tips for Reports and Scorecards](#).

Working With Projects

This applies to: *Managed Dashboards, Managed Reports*

All of the work that you do in Symphony occurs within the context of a current or **active** project, which allows users to collaborate on all of its files including dashboards, data cubes, and more.



- Archive of documentation for Logi Symphony v24

As soon as you [check in](#) a new file or an updated version, other users with access to the project can see and use it. You can use separate projects for different users, teams, tenants, or staging vs. production environments.

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Search Files

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Sci-Fi Sales

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Data Connectors

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Data Cubes

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Hierarchies

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Time Dimensions

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Metric Sets

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Dashboards

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Reports

📁

Scorecards

ⓧ Explore



Note: You can also create subfolders to organize files within a single project: right-click or long-tap a folder and choose **New Folder**.

You typically work within one project at a time. The [main menu](#) creates or open files from the current active project, and the [Explore window](#) lists all of its files for you to work with while you edit an item.

Built-in Projects

Global Project

Symphony includes a built-in project named *<GLOBAL>*. You can use this project to store any items that are common to your other projects and reusable.

You can work with content from the global project by switching projects, but an easier way is to expand the Shared folders that appear under various folders in other projects, including *Data Connectors*, *Metric Sets*, *Time Dimensions*, *Dashboards*, and *Themes*. These act as shortcuts to the global project.

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Time Dimensions

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Company Fiscal

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Time Dimension

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Metric Sets

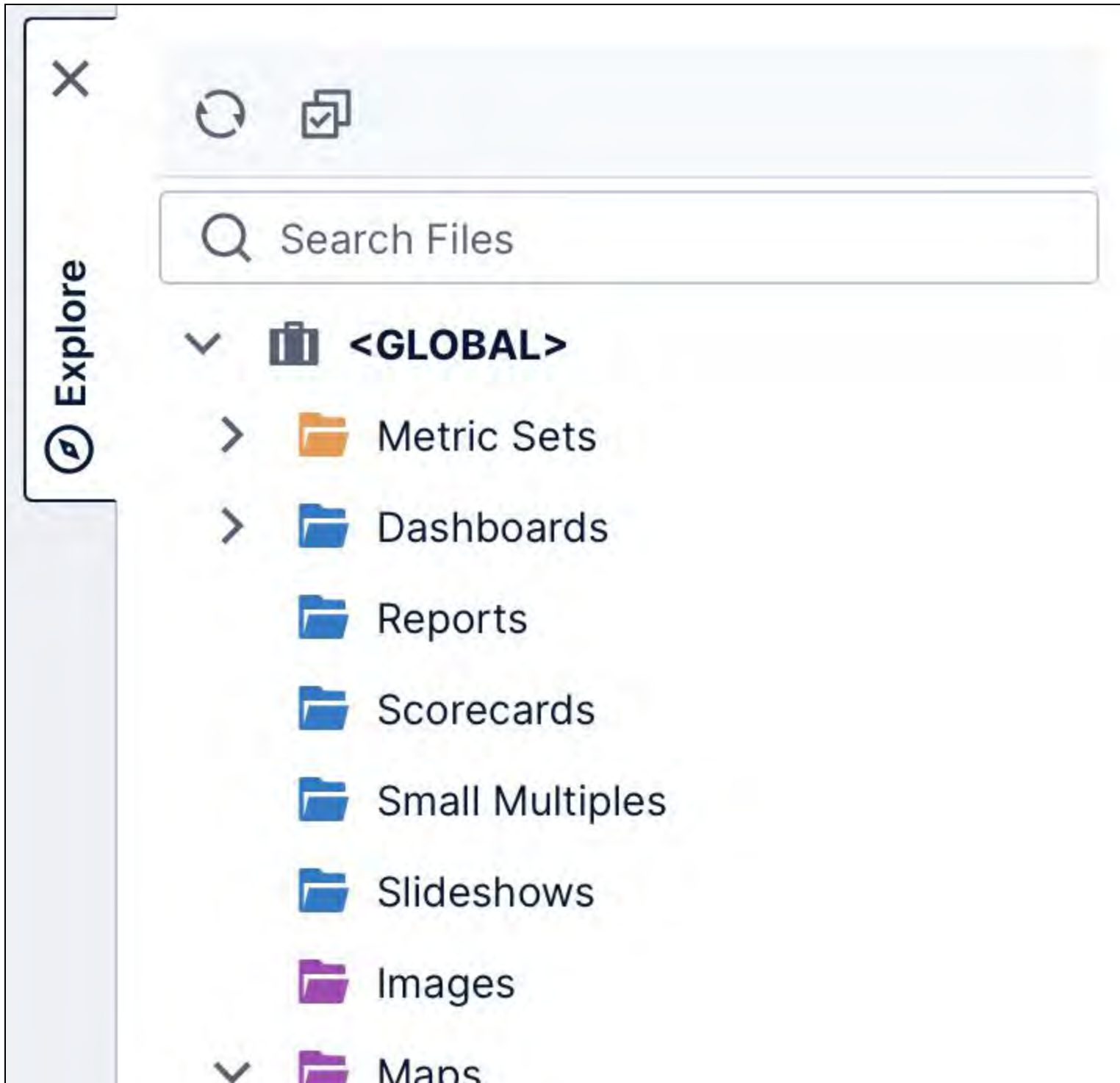
📘

Global project



- Archive of documentation for Logi Symphony v24

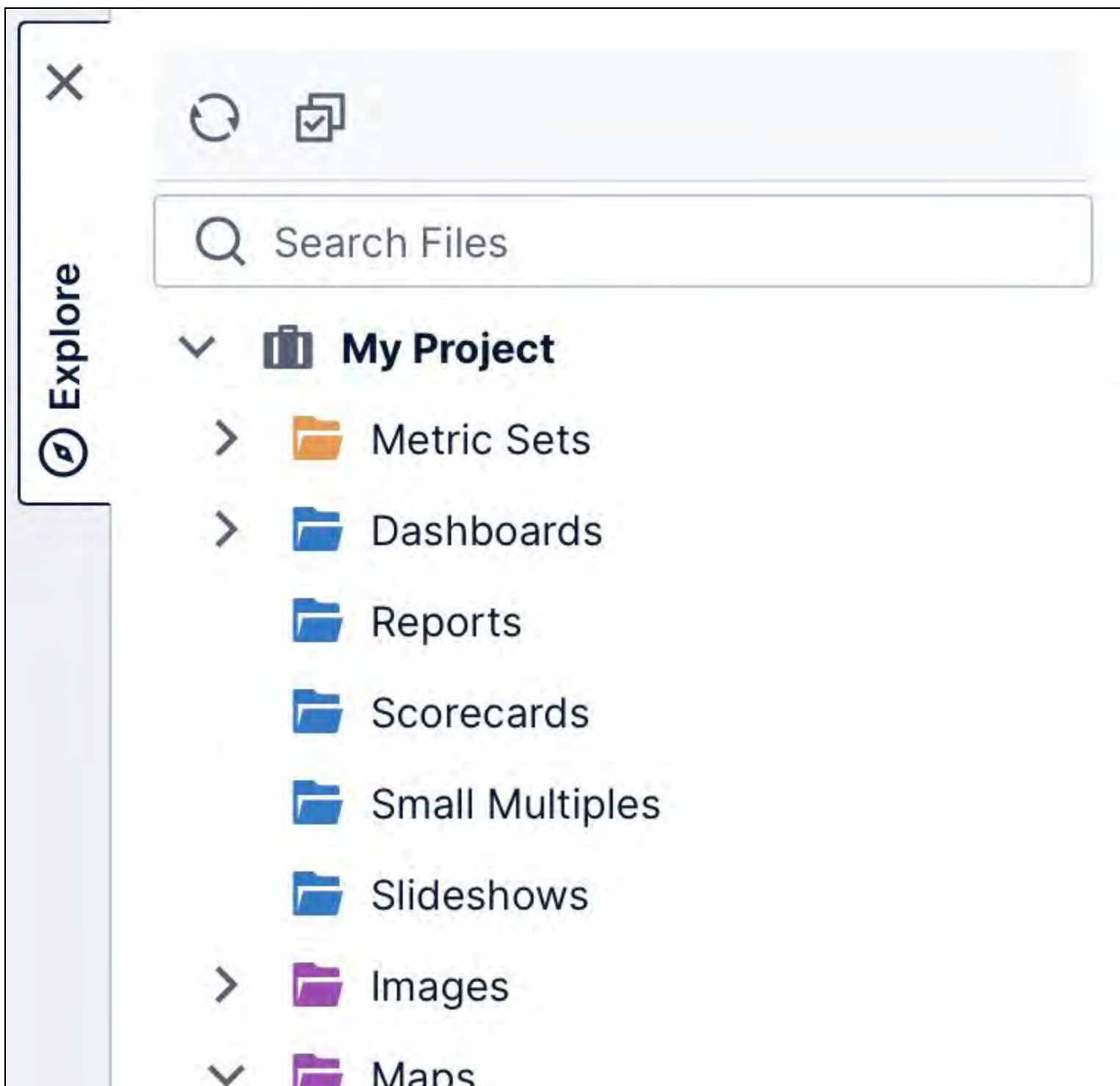
For example, when you install Symphony, a set of built-in maps, styles, and themes are included as part of the global project.





- Archive of documentation for Logi Symphony v24

You can expand the *Shared* folder under *Maps* in any other project to access the built-in [map resources](#) from the global project.





Similarly, you can expand the *Shared* themes or styles folder from the Explore window or from dialogs when applying a [theme or style](#).

My project

Every user in Symphony typically also gets a personal project automatically, named *My Project*. This is the current project when you first log in to Symphony. You are free to use *My Project* as your own workspace to create dashboards and other items for prototyping or quick analysis. But for actual production work, you'll probably want to use other projects that have been created specifically for that purpose.

By default, no one else has access to your personal project. However, you can use the **Share** option in the Symphony toolbar to give other users the ability to view a dashboard or report from your personal project. The [permissions](#) on the project can also be changed to grant other users or groups access.

Switch to another project

You can switch the current project in Symphony at any time from the [main menu](#).

Click **Projects**, and then select a project from the list. The main menu now creates and opens items in this project, and the Explore window will update to list its items.

Create new projects

Symphony administrators have the ability to create new projects and configure which users or groups have access to them. For example, you can have a project that is internal to the Human Resources department only.

In general, you will want to set up new projects for collaboration or production efforts rather than use the global or personal projects.

For details on creating new projects, and on the option to duplicate existing projects, see [Manage projects and the file system](#).

Publish a project or files

Publishing lets you copy the contents of a source project or files (such as dashboards or data cubes) to a target project, with the option to also copy referenced files so that any dependencies are also part of the target project. Unlike when simply [copying and pasting](#), the new copies will reference each other within the target project: for example, the published dashboard will reference and use the published data cubes and data connectors instead of the ones from the original project.

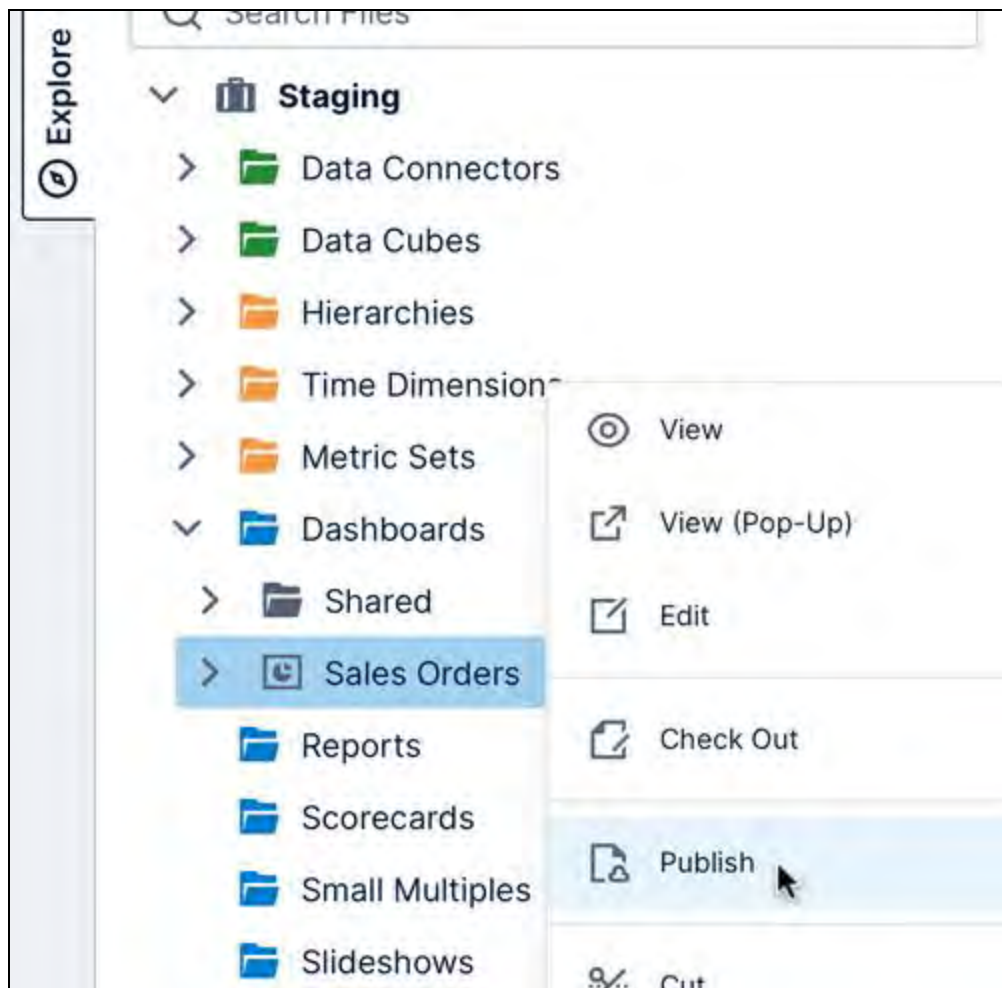
As an example of using the publishing feature, you can set up a project for testing, staging, or development work. Once you are happy with the resulting dashboards, you can publish them to a production project - using a single Symphony instance for both testing/development and production purposes.



Note: Publishing may cause the database indexes to become fragmented. See [Monitoring system health](#) for information for administrators on the Rebuild Indexes job.

To publish a project or a file, find it in the [Explore window](#) or the [main menu](#).

Right-click (or long-tap) on the project, folder, or file. From the context menu, select **Publish** where available (files must be checked in to see this option).



If you have multiple individual files to select rather than publishing the entire project or folder, use the Explore window or another file explorer with a toolbar where you can click to enable checkboxes, then click to publish the files that you checked off.

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⌕ Explore

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Data Connectors

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Data Cubes

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Time Dimensions

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Metric Sets

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Dashboards

➤

☐

📁

Shared

☐

📁

General



In the *Publish* dialog, click to select a project where the files should be published.

To access any of the following options, expand the *Options* section and enable them:

- Ignore/suppress warning messages.
- Copy any referenced/dependent items from the source project.
- Copy the data from Data Input transforms.
- Copy the data from contextual measures.
- Copy any data files, such as Excel or CSV, which have been uploaded as a data connector.
- Copy the data cube's storage type (you will be asked whether to build the cube after publishing).

Click **Save** at the bottom of the dialog to begin publishing.

[Help](#)

Publish

Publish the selected project or files to another project with some available options. If you are publishing a file, its folder structure will be retained in the destination project when published.

Source

[Staging] Dashboards Root Folder/Marketing

[Staging] Dashboards Root Folder/Sales Orders

Destination Project



Publish an item to a project that contains an item with the same name

When you are publishing an item to another project for the first time, the item is copied with the same name. If a file with the same name already exists, the published file will get a name with the suffix 1, or will increment by one if the name ends in a number.

Publishing creates a relationship between the source and published files. When you publish the same file to the same project more than once, the previously published file will be overwritten by the new version.



Note: Check **Ignore Warnings** if you want to proceed when publishing an item to another project that already includes an item with the same name.

Check In, Check Out and Auto Saving

This applies to: *Managed Dashboards, Managed Reports*

To facilitate collaboration on projects, every item you can open for editing in Symphony uses a check in / check out model, including data connectors, data cubes, dashboards and more. This allows multiple people to make changes to these items without risk of overwriting or losing any changes. The change history is also saved and can be rolled back if needed.

The workflow is generally as follows:

- Check out or create an item
- Edit the item and apply your changes
- Check in the item so others can see your changes

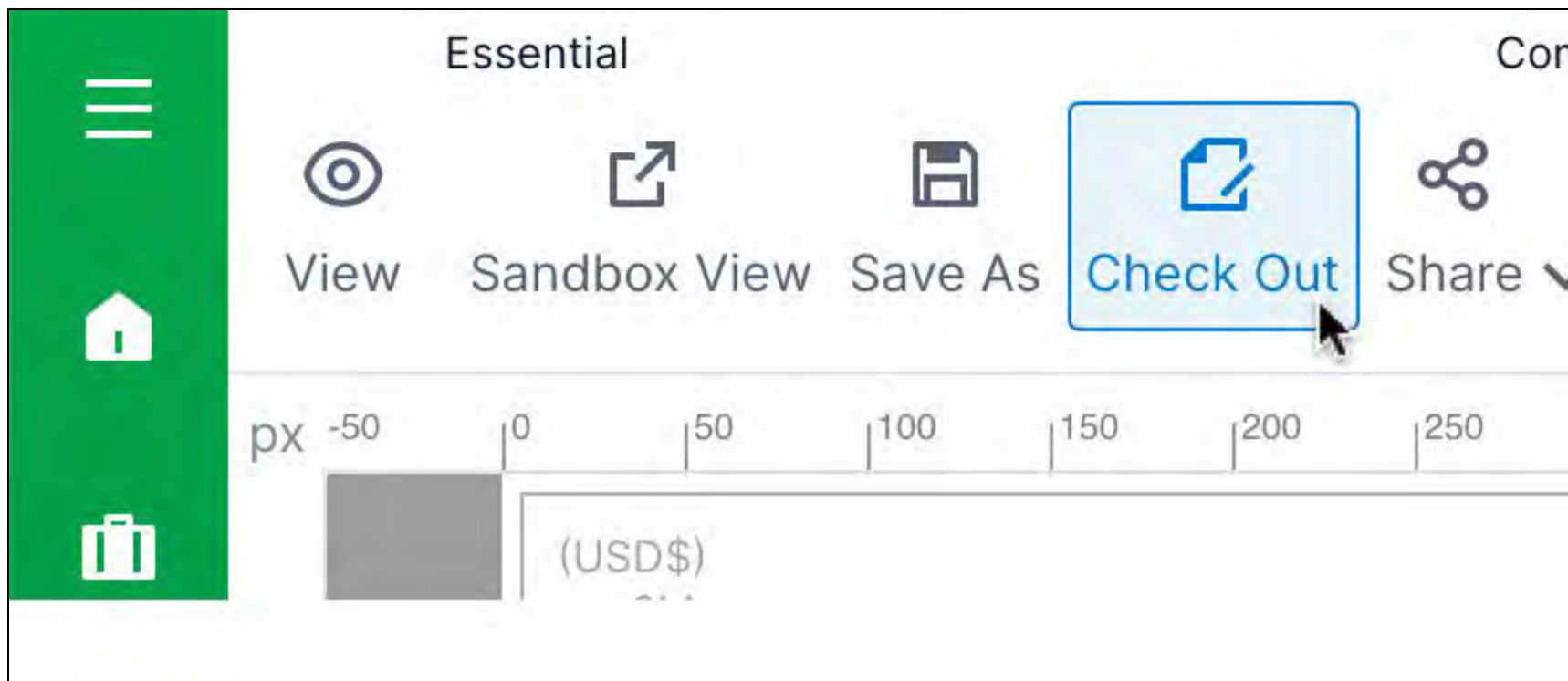
You might have noticed there is no *Save* button in the Symphony toolbar. That's because Symphony saves your work automatically so you don't need to be worried about losing your changes. You still need to check in your work though so others can see it too.

Related video: [Auto Save and Version Control](#)

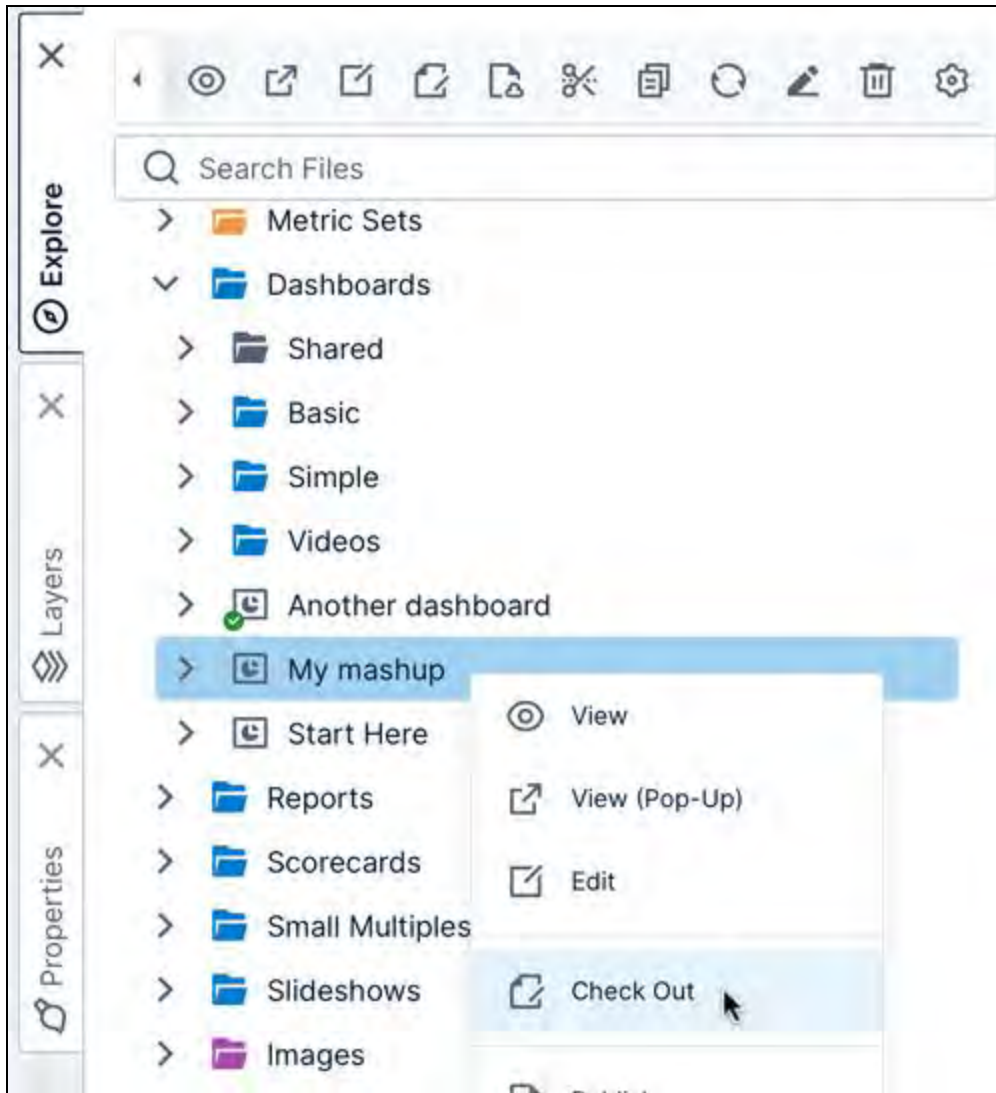
Check Out an Item

Once an item has been checked in, it needs to be checked out to you before you can edit it.

If you open an item from the main menu or elsewhere for editing and most of the screen is disabled or whited out, it has not been checked out to you yet. Click **Check Out** in the toolbar, or just click with a mouse on the whited out content.



You can also check out an item before opening it from the [main menu](#), or using the [Explore window](#) if you have a different item open: right-click (or long-tap) an item and choose **Check Out**.



When you check out an item, you are reserving the item for editing for yourself. When others view the item, they will see only the last checked-in version.

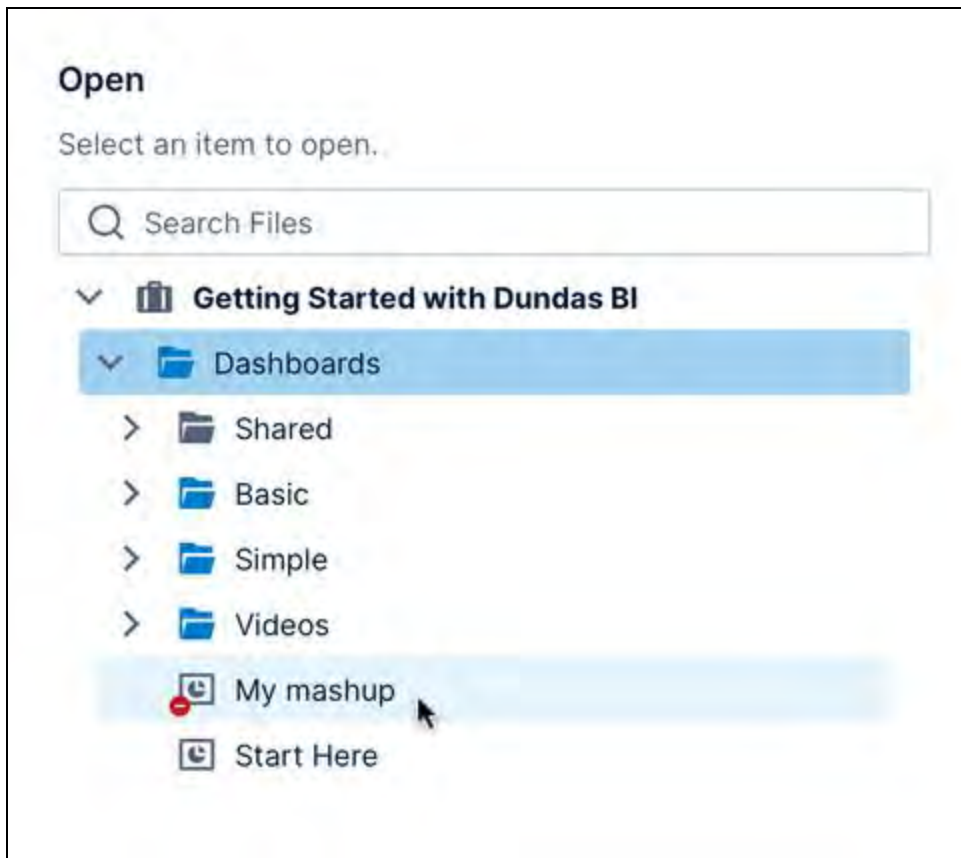
Items checked out to you appear with a green checkmark icon like for *Another dashboard* in the figure above. You can now right-click the item again and choose **Edit**, or click to open the item from the main menu.



Note: You can edit items that open in a dialog on the side of a screen directly without checking out first because they have simpler settings, but it's a good idea to check out first if a team member could be editing at the same time so neither of your changes are overwritten.

Item Is Already Checked Out

If an item is already checked out by another user, the item will appear with a red 'minus' icon.



You'll need to wait for the other user to check the item back in or undo their check out.

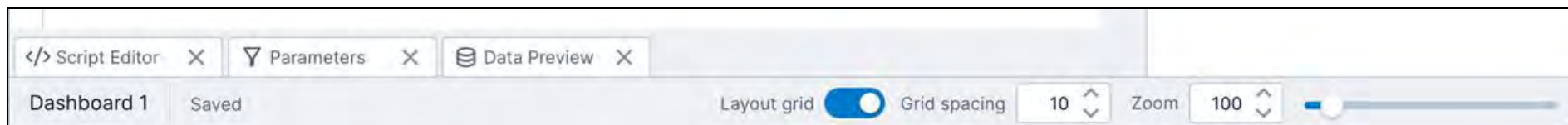
To find out who the other user is, see **Checked Out To** in the [file's read-only properties](#).



Note: If the other user is unavailable, administrators have a Transfer Check Out option in the file's context menu if needed.

Auto Saving

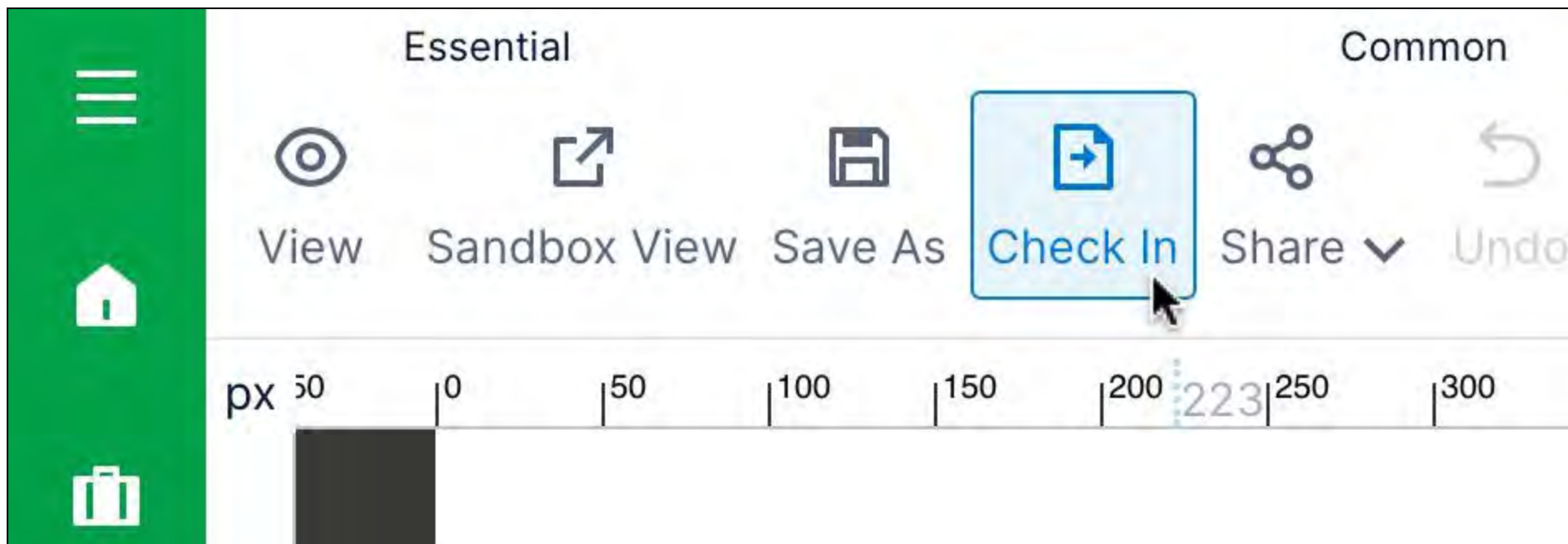
While editing a dashboard or other full screen item in Symphony, your changes are automatically saved as needed. The status bar at the bottom displays a message whenever Symphony has performed an auto-save operation.



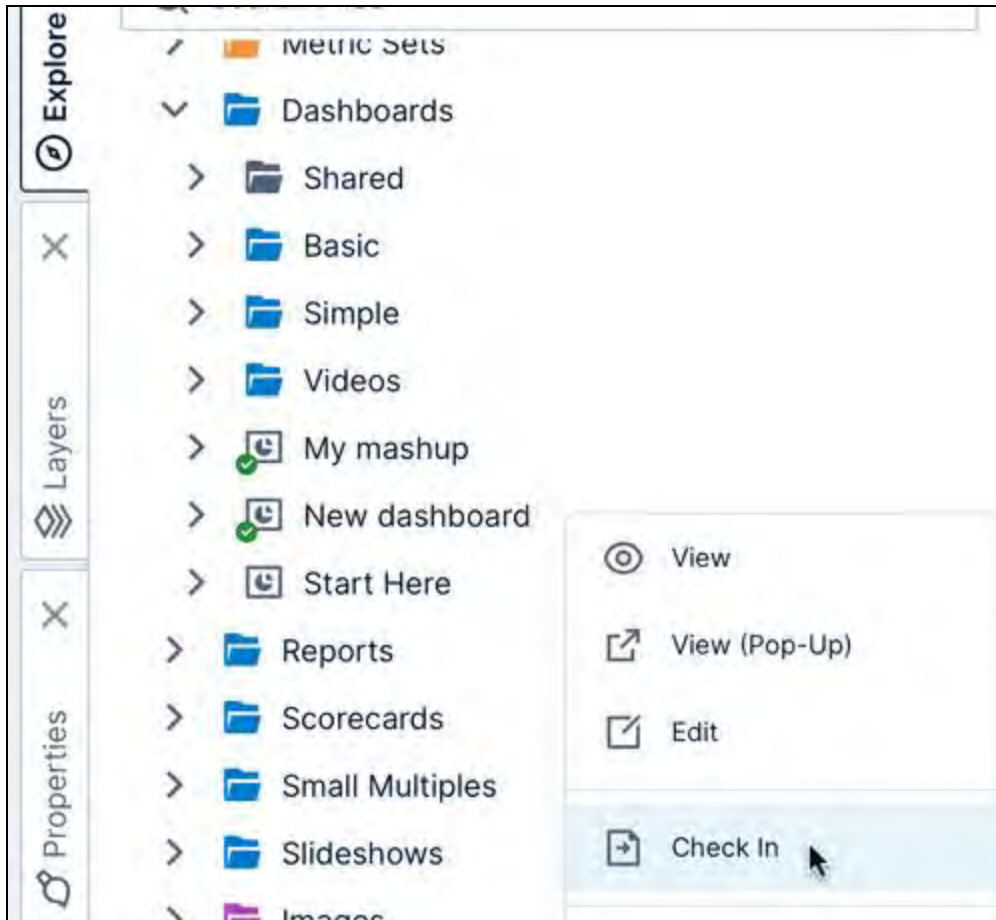
Check In an Item

Check in your changes so that others can see them or check out the item themselves. Newly created items are also not visible to other users before it's checked in the first time.

Click **Check In** in the toolbar while you have the item open for editing. Sometimes this is located under **Share**.



Like when checking out, you can also check in later when the item is no longer open: go to the [main menu](#) or an [Explore window](#), right-click (or long-tap) the item, and then choose **Check In**.



In the *Check In* dialog, optionally enter a comment and then click **Check In** at the bottom.

Check In

If you want to start editing this item again, you'll have to check it out again.

Comments

Close

Check in

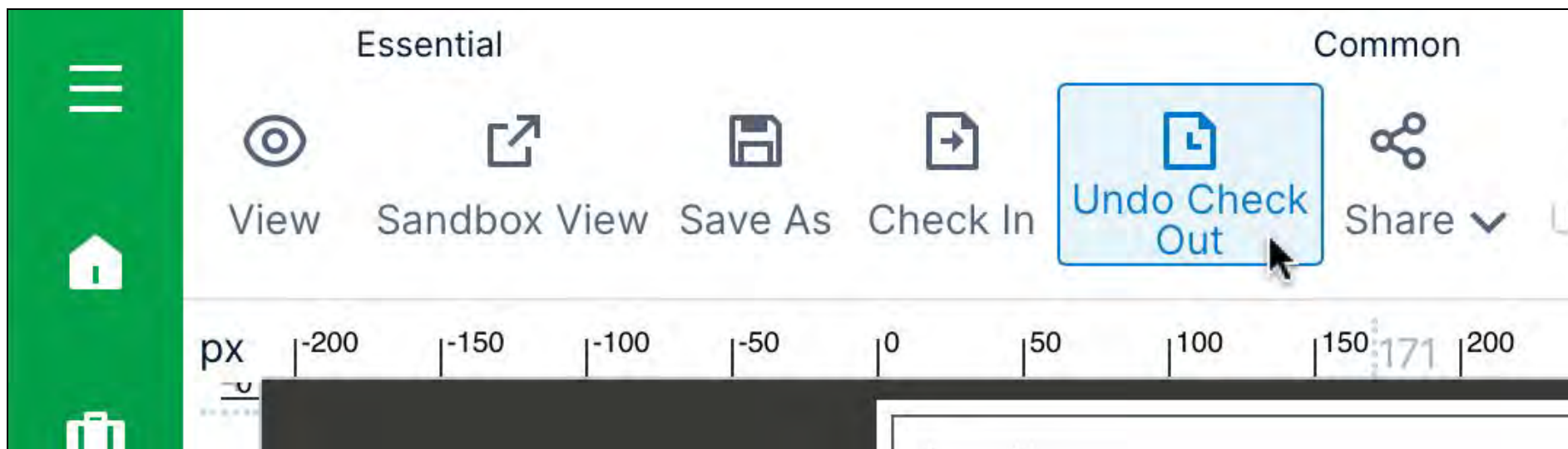
Each time an item is checked in a new entry is recorded in the item's revision history (with your comment) and a new version of the item is created. You can restore a previous version of an item from the *Revision History* dialog. See [File and Folder Properties](#).

Undo a Check Out

If you aren't happy with the changes you made to an item, you can undo the check out.

This will discard all of your changes since the last time it was checked in, and the item won't be checked out to you anymore.

You can undo a check out from the toolbar or the right-click menu.



For more information, see:

- Video: [Auto Save and Version Control](#)
- [Working With Projects](#)
- [Connect to Data and View it on a Dashboard](#)
- [File and Folder Properties](#)

File and Folder Properties



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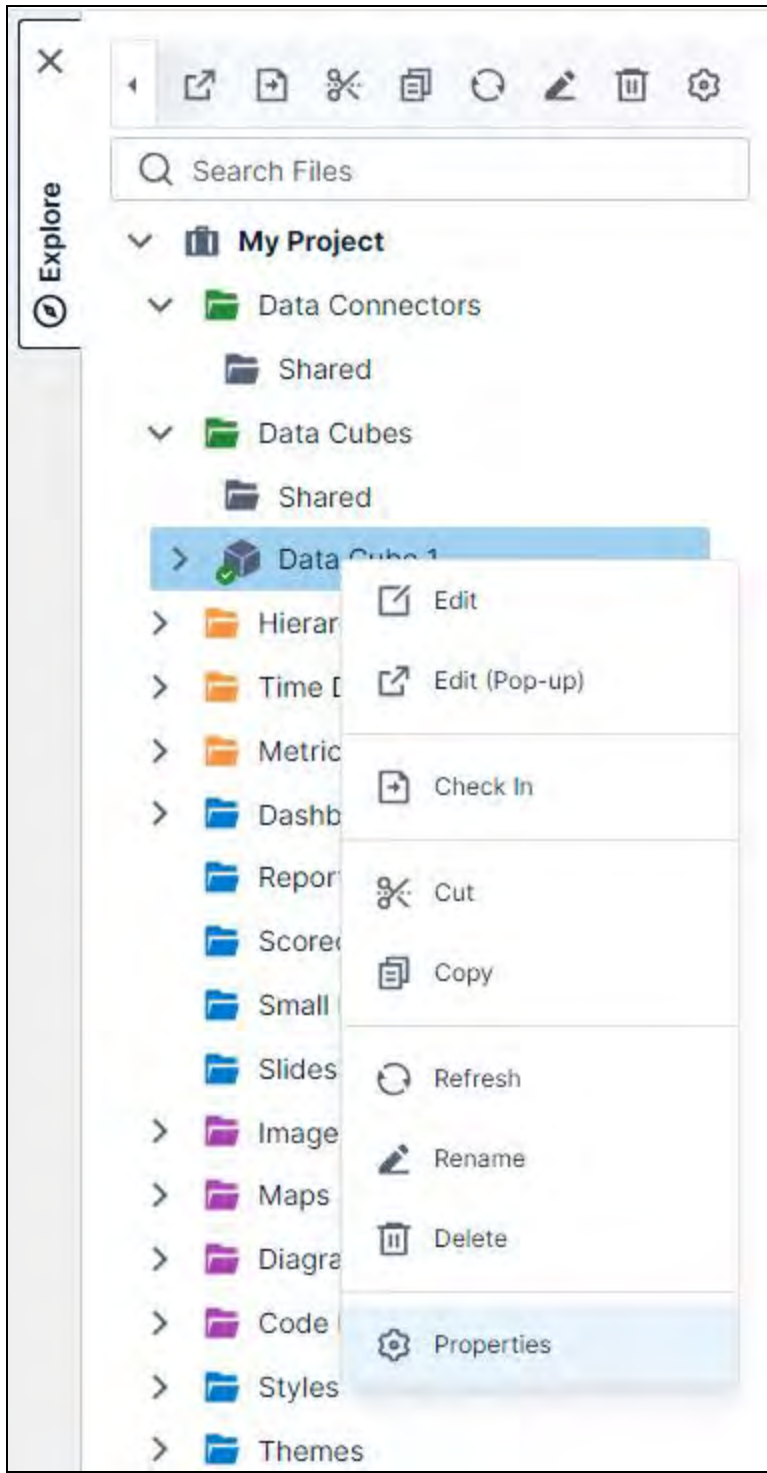
This applies to: *Managed Dashboards, Managed Reports*

Each item you create in Managed Dashboards and Reports is treated as a file, including data connectors, metric sets, and dashboards, as organized into folders and projects.

The **Properties** dialog lets you view and edit the properties associated with a selected file, folder, or project. You can view the references to and from a file, modify security settings, and roll back to a previous version in the revision history.

Launch the Properties Dialog

To launch the Properties dialog, select a file, folder, or project when opening a file from the **Explore** window or another file explorer. Right-click (or long-tap) and select **Properties** from the context menu that appears.





Properties You Can View and Edit

The Properties dialog lets you view and edit the following properties:

- Name - Rename the item.
- Description - Add your own descriptive text, displayed in the item's tooltip.
- Tags - Add tag words to help categorize your files and find them when searching.

Add or Remove Tags

To add a tag to the file or folder, just type a word in the **Tags** box and press the Enter or Space key. You can also use the auto-complete menu that appears as you type to select an existing tag in the system.

You can remove a tag by clicking the **x** button beside the tag (unless the tag is inherited for a file from one of its containing folders).








Properties

View and edit the properties associated with the file or folder selected.

Name

Description

Tags

sales X
2025 X
summary X

Once you've added tags, you can search by them in the **Explore** window on many screens or in other file explorers such as in Open dialogs. Files can be found by the tags set either on the file, or one of its containing folders.

Read-Only Properties

Further down are various read-only properties:

- ID
- Location



- Archive of documentation for Logi Symphony v24

- Type
- Subtype
- Created By
- Created Time
- Last Modified Time
- Checked Out To - (if applicable)

The ID property is needed when writing scripts that reference items such as a metric set or dashboard.

ID

6d2a0a2f-0334-4b3b-a3e4-4f1e1f1f1f1f

Location

[My Project] Data Cubes

Type

DataCube

Subtype

0

Created By

Linda Admin (linda.tenant.admin)

Created Time

Wednesday, February 12, 2025 12:45:26 PM

Last Modified Time

Wednesday, February 12, 2025 12:45:26 PM

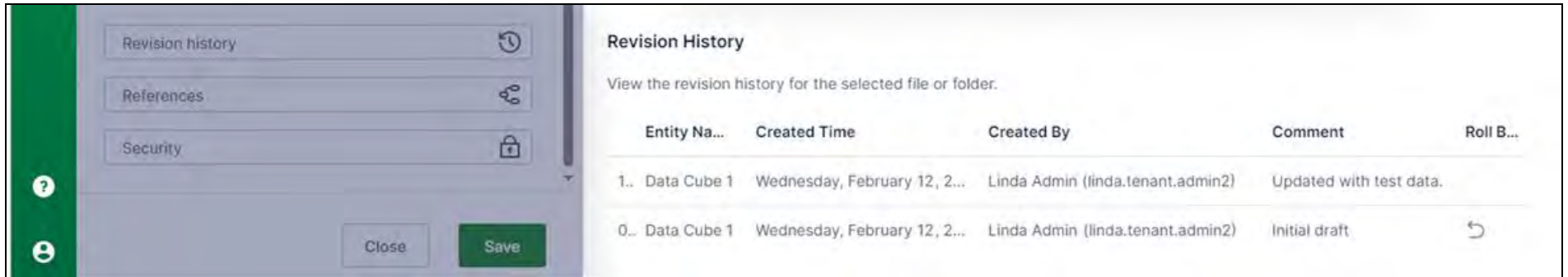
Checked Out To

Linda Admin (linda.tenant.admin)

Revision History

Revision history is the version control mechanism built-in to Symphony. Scroll all the way down in the Properties dialog, and then select **Revision history**.

The **Revision History** dialog lists all of the revisions or changes that happened to this item. Each revision corresponds to a check in by a specific user, or an event such as the initial file creation. For more information about checking in items, see [Check In, Check Out and Auto Saving](#).



Roll Back To a Previous Revision

From the **Revision History** dialog, you can roll back the file to a previous revision by clicking the corresponding button in the **Roll Back** column. This is useful if, for example, you are not happy with recent changes made to a dashboard and you want to revert it to an earlier state.

In the revision history, select the **Roll Back** button that corresponds to the revision you want to go back to.

The current file will be checked out if necessary, updated with the contents of the chosen revision, and then **checked in** automatically. This will create a new revision for the file.

References To and From the File

Scroll all the way down in the Properties dialog, and then click **References** to see a list of other items that reference (i.e., have a dependency on) the current file, and items that the current file itself references (i.e., references by this file).

Tags

Start typing and press enter or space to add a tag

ID

5ce5dfd6-2f9f-441f-88fa-

Location

[Getting Started Tutorial] Data Cubes/Dimension Data

Type

DataCube

Subtype

0

Created By

System Administrator (admin)

Created Time

Friday, February 12, 2016 7:16:55 PM

Last Modified Time

Thursday, February 27, 2025 12:31:18 AM

Revision history

References

View the references to and from this file. To see more than the direct references, select the recursive option to also include the entire chain of references to or from each referenced file.

Show Recursive References

☒

References by this file

Projects Root

Getting Started Tutorial

Data Connectors

Rich data

Product sales by region over years

['table 1\$']

References to this file from other files

Projects Root

Getting Started Tutorial

Data Cubes

Product Sales

Hierarchies

Geography

Metric Sets



- Archive of documentation for Logi Symphony v24

This can show the data lineage, tracing the data displayed in a dashboard back through each item to its source, or vice versa.

Show Recursive References

By default, only direct references to and from the current file (e.g., data cube) are shown. If you want to see all references (including references to references), select the **Show Recursive References** option. For example, use this option to find out what data connectors are ultimately being used by a dashboard where a data cube and metric set are also used.

Security Privileges

To set security privileges on the file, folder, or project, click **Security** at the bottom of the **Properties** dialog.

The **Security** dialog presents a list of tenants and groups. For each tenant or group, you can allow or deny various privileges (e.g., Read, Write, Delete).

Security

Review and set the security for this file or folder. The security settings for each listed user or group determine what they are allowed to do.

Inherit Privileges

☒

Replace Explicitly Set Privileges On Children

☐

Groups and Accounts

Add... +

- Global Users
- Everyone
- System Administrator (admin)

Delete		Not Set	
Execute	✓	Allow (In...)	i
Full Control		Not Set	
List Folder Contents	✓	Allow (In...)	i
Modify Folder	✓	Allow (In...)	i
Read	✓	Allow (In...)	i
Write		Not Set	



Note: The *Full Control* privilege is required on an item to change its security privileges unless you are an administrator. Full Control is automatically granted to the account that created it but can be removed afterward if needed.

Inheritance

Security privileges set on a folder or [project](#) are inherited by default by the files contained within it, allowing you to configure security for all of its contained files at once. To create new subfolders, right-click a folder and choose **New Folder**, then right-click files to **Cut** and right-click a folder to **Paste**, or drag selected files while holding the Shift key on the keyboard.

The check boxes in the **Security** dialog determine whether files inherit privileges from their parent or not:

- The **Inherit Privileges** check box determines whether this file or folder inherits privileges from the file or folder containing it. When a privilege is inherited, a blue information icon appears that you can click to find out where it was set.
- Select **Replace Explicitly Set Privileges On Children** to make all files and folders contained within this one inherit the privileges you are setting. This check box takes effect when the dialog is submitted and will not remain checked if you return later, instead it clears any explicitly set privileges on contained files or folders so that they inherit from their parent.

List of Security Privileges

Privilege	Description	Remarks
Delete	The privilege to delete a file.	
Execute	The privilege to execute a file.	This privilege has to be granted on anything that acts as a data source: ■ The data cube used in a metric set or dashboard/view. ■ The data connector used in a data cube, metric set, or dashboard/view. ■ The database table, view, etc. composing the data connector. For example: to use a metric set, the underlying data cube, data connector, and tables must have at least an Execute privilege.  Note: A manual select ignores the privileges on the native structure of a data connector (tables, views, etc.).
Full Control	The privilege to fully control a file, folder, or project.	Full Control implies everything, including changing security privileges - meaning when this privilege is inherited from the containing folder or project, it implies that Full Control is granted regardless of other settings. For example, granting this privilege on a project automatically implies that the assignee of the privilege is a "project administrator" who implicitly has the Full Control privilege granted on anything contained in it.
List Folder Contents	The privilege to list all items in a folder.	Read is implied by List Folder Contents .
Modify Folder	The privilege to modify a folder's properties and create child items.	Read is implied by Modify Folder .



Privilege	Description	Remarks
Read	The privilege to see a file and its contents.	Execute is implied by Read .
Write	The privilege to update the contents of a file.	Read is implied by Write .

Add a User, Group, or Tenant to the List

To give privileges to a user, group, or tenant, you need to add it to the **Groups and Accounts** list.

Select **Add...** if needed to add them to the list. A **Select Accounts or Groups** dialog opens, allowing you to filter all user accounts and groups by selecting a tenant. Search or scroll to select groups and user accounts. Select **Save** to return to the Security dialog and assign privileges.

Select Accounts or Groups

Select one or more accounts or groups.

Note: Tenant Administrator and Tenant Member groups will not appear in searches.



	Name
☐	 Developers
☒	 Everyone
☐	 Global Users
☐	 Power Users
☐	 Standard Users
☒	 System Administrators

Click the delete icon to the right of a user account or group in the list if you want to stop setting privileges for it directly on this file or folder.



Important: You must give file privileges for each group when you return to the list.

Give File Privileges To a User Account or Group

Select a user account or group under **Groups and Accounts** on the left, and then set **Allow** or **Deny** for each type of privilege listed on the right. When you have completed your selections, select **Save**.

Security

Review and set the security for this file or folder. The security settings for each listed user or group determine what they are allowed to do.

Inherit Privileges

☒

Replace Explicitly Set Privileges On Children

☐

Groups and Accounts

Add...
+

Global Users

Everyone

System Administrator (admin)

Delete

Not Set

Execute

✓

Allow (In...)

Full Control

Not Set

List Folder Contents

✓

Allow (In...)

Modify Folder

Not Set

Read

Not Set

Not Set

Allow

Deny

Write

Not Set

If you assign **Deny** to a privilege for a user, a user's group, or a tenant to which a user belongs, it will always take precedence over any other **Allow** assignment for that user for that privilege. You must remove the **Deny** assignment on that privilege for the user, then add an explicit Allow for that user, group, or tenant.



Note: Administrators, [system administrators](#) and users with [full control](#) of the containing project or folder have all privileges and are not effectively denied any privilege.



Note: Privileges set on a user account, group, or tenant may remain listed even after the user, group, or tenant is deleted from Symphony: deletion does not automatically remove privileges assigned to them.

For more information, see:

- [Application Privileges](#)
- [Symphony Managed Dashboard and Managed Report Security](#)
- [Check In, Check Out and Auto Saving](#)
- [Working With Projects](#)
- [Rename an Item](#)

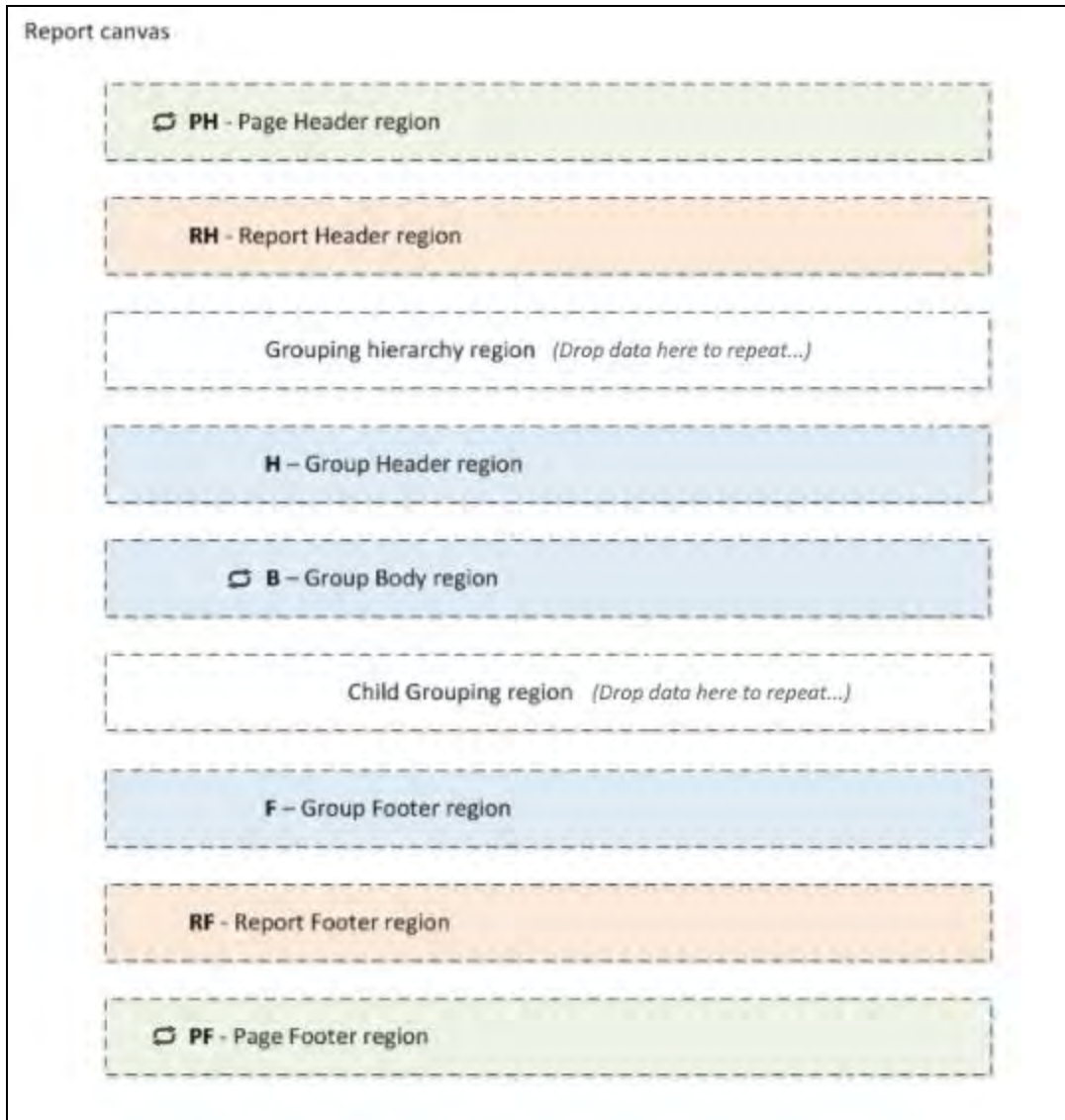


Managed Report Layout Regions

This applies to: *Managed Reports*

You can choose any Symphony visualization or any available component and arrange it anywhere on the canvas. In a report, the canvas contains several specialized regions, many of which repeat the content that you lay out within it like a template. For example, the inventory report shown above includes a row for each product category (e.g., *Accessories*), and you are able to design the contents of each row to include whatever you like.

The diagram below illustrates the initial regions available in a report that repeats by one set of data. You can drop items onto these regions when editing, then switch to **View** in the toolbar to see the actual report consisting of repeated elements.



You can add more of any template region to better organize your reports. Simply select one and choose **Add Template Area Before** or **Add Template Area After** in the toolbar. Unused template areas will not be visible in the report unless you uncheck the **Hidden If Empty** property.

For more information about the regions of managed reports, see the following articles:



- Archive of documentation for Logi Symphony v24

- [Report Headers and Footers](#)
- [Page Headers and Footers](#)
- [Add a Table of Contents](#)
- [Grouping Hierarchy Region](#)
- [Group Headers and Footers](#)
- [Group Body](#)
- [Child Groups](#)
- [Sibling Groups](#)



Report Headers and Footers

This applies to: *Managed Reports*

The **Report Header** region lets you place elements that appear just once per report. For example, you can show a title for the overall report here. When you create a new report from the main menu, Symphony automatically adds a Label component with the text Title and places it in the Report Header region, which you can edit by double-clicking or by using the toolbar or Properties window. You can resize this region and add any other content you like.

Similarly, in the **Report Footer** region, you can add content to close off your report.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Page Headers and Footers

This applies to: *Managed Reports*

Since reports are laid out onto pages, the **Page Header** and **Page Footer** regions let you add content to be repeated once per page. Symphony automatically adds a Label component with the text *[PageNumber]* in the Page Header region and another Label component with the text Page *[PageNumber]* of *[TotalPages]* in the Page Footer region. These are examples of placeholder labels that you can add yourself from the [Labels window](#).

You can add other content to this header and footer such as a smaller title, a logo, or a separator line.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
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- [Design Tips](#)



Grouping Hierarchy Region

This applies to: *Managed Reports*

The grouping hierarchy region (*drop data here to repeat...*) or drop zone, is the key to repeating the **Group Body** region template. This region is equivalent to the **Rows** of the [Data Analysis Panel](#) for a regular metric set, where you also drag data from the **Explore** window to display a row for each value. For example, *Product Category* values were dragged here to achieve the repetition of the gray rows for each category in the inventory report shown earlier. You can drag a hierarchy, hierarchy level, column of data, or a complete metric set here to determine which rows to display.

This region makes up the Rows of the group metric set, which has its own Data Analysis Panel accessible from the cube icon displayed to its left. This Data Analysis Panel allows you to optionally further customize how the Group Body rows are repeated. For example, you can filter the hierarchy values to remove *Accessories*, or add a measure such as *Qty Left* and sort the categories by its values.

Data Analysis Panel



Metric Set 1



Measures

[click to add](#), or drop a measure



Rows

Category



[click to add](#), or drop a hierarchy



Slicers

[click to add](#), or drop a hierarchy



Columns

[click to add](#), or drop a hierarchy

Inventory Stock List



Category

(All)

drop da



Note: Reports are made up only of rows that repeat content vertically. Adding data under Columns in the Data Analysis Panel will produce an error when viewing.

Like Rows in a regular metric set, adding multiple grouping hierarchies to the same region will repeat the group body for each combination of hierarchy values occurring in your data.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Group Headers and Footers

This applies to: *Managed Reports*

The **Group Header** and **Group Footer** regions let you place content that appears once per group, either above or below its rows. For example, for the inventory report example shown in [Symphony Managed Reports](#), *Header* or *Label* components are added to the Group Header region in order to display the *Qty Left* and *Unit Price* column headings. You can also drag data or add visualizations here to display aggregated data in the header or footer summarizing the group items above or below.

Group headers and footers are not repeated unless this group is a 'child' or inner group placed inside another repeating group.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Group Body

This applies to: *Managed Reports*

When viewing a report, the **Group Body** region is repeated once for each grouping hierarchy value. For example, if *Product Category* values are added to the grouping hierarchy region, and there are 20 such categories in your data, the Group Body region will be repeated 20 times and will display data specific to each category.

Within this region, *data labels* are added automatically to display values as text like a column in a table. You can re-visualize to or add any visualization and display any additional data you like detailing or describing each grouping hierarchy value, such as a line chart displaying the historical stock quantities for each product category over time, or a map visualizing its geographic distribution.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Child Groups

This applies to: *Managed Reports*

Child grouping regions let you add an inner or nested level of repetition in order to create a report that breaks down details further. For example, the inventory report example shown in [Symphony Managed Reports](#) displayed rows for individual products after the row for each product category, which was done by adding *Product* as a child group within the *Product Category* group.

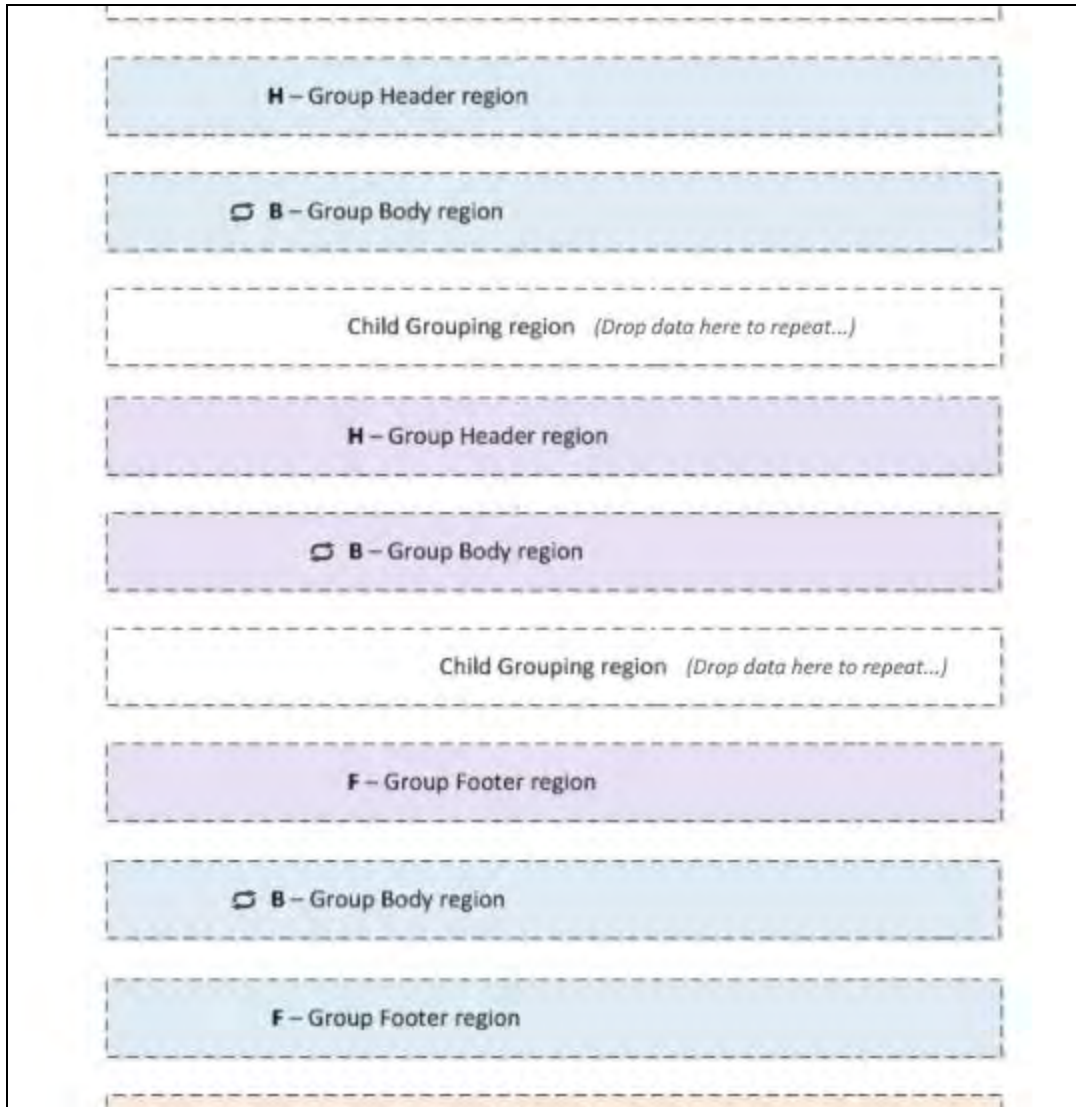
When you drag a hierarchy or level to this region, four new regions are automatically inserted into the report, forming a child group consisting of:

- a child group header region - (optional)
- a child group body region - this is the part that repeats
- a child grouping region - lets you insert another nested/child group
- a child group footer region - (optional)

In fact, you can keep on inserting child groups to create deeper and deeper levels of repetition. This allows you to design complex reports that break down details on multiple levels.

The child group has its own **Group Body** that you can design separately from the outer or parent grouping. In our inventory report example, the product category rows have a light gray background and bold fonts, while the product rows have normal fonts and display measure values toward the right.

Because they are displayed inside another group that is already repeating, child groups can appear multiple times - for example, there is a separate list of products inside each product category in our inventory report. You can choose to add content to the child **Group Header** or child **Group Footer**, and these will appear above and below each set of child group body rows.



When there is a child group, the parent group has a second group body available for displaying content after the child group. The parent group's body regions and the child group's header and footer are similar, but child group regions do not appear if there are no child grouping hierarchy values. For example, if the parent group is displaying product categories and there is an empty category that contains no products, the parent group body will be displayed for this category but the child group header, body, and footer will not display.



Note: Indented rectangles to the left of each region are used to distinguish the child regions from the parent regions. You can also click one and the other regions from the same group will be highlighted to make them easier to identify.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Sibling Groups

This applies to: *Managed Reports*

In addition to displaying groups inside other groups, you also have the option of adding **sibling groups**. These are independent from the neighboring groups and may contain data unrelated to the rest. Sibling groups are positioned at the top level of the report like the initial group, and their repetitions are generated independently, either before or after all of the data from neighboring sibling groups.

Sibling groups can be added using the + buttons to the right of the report canvas.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Add a Table of Contents

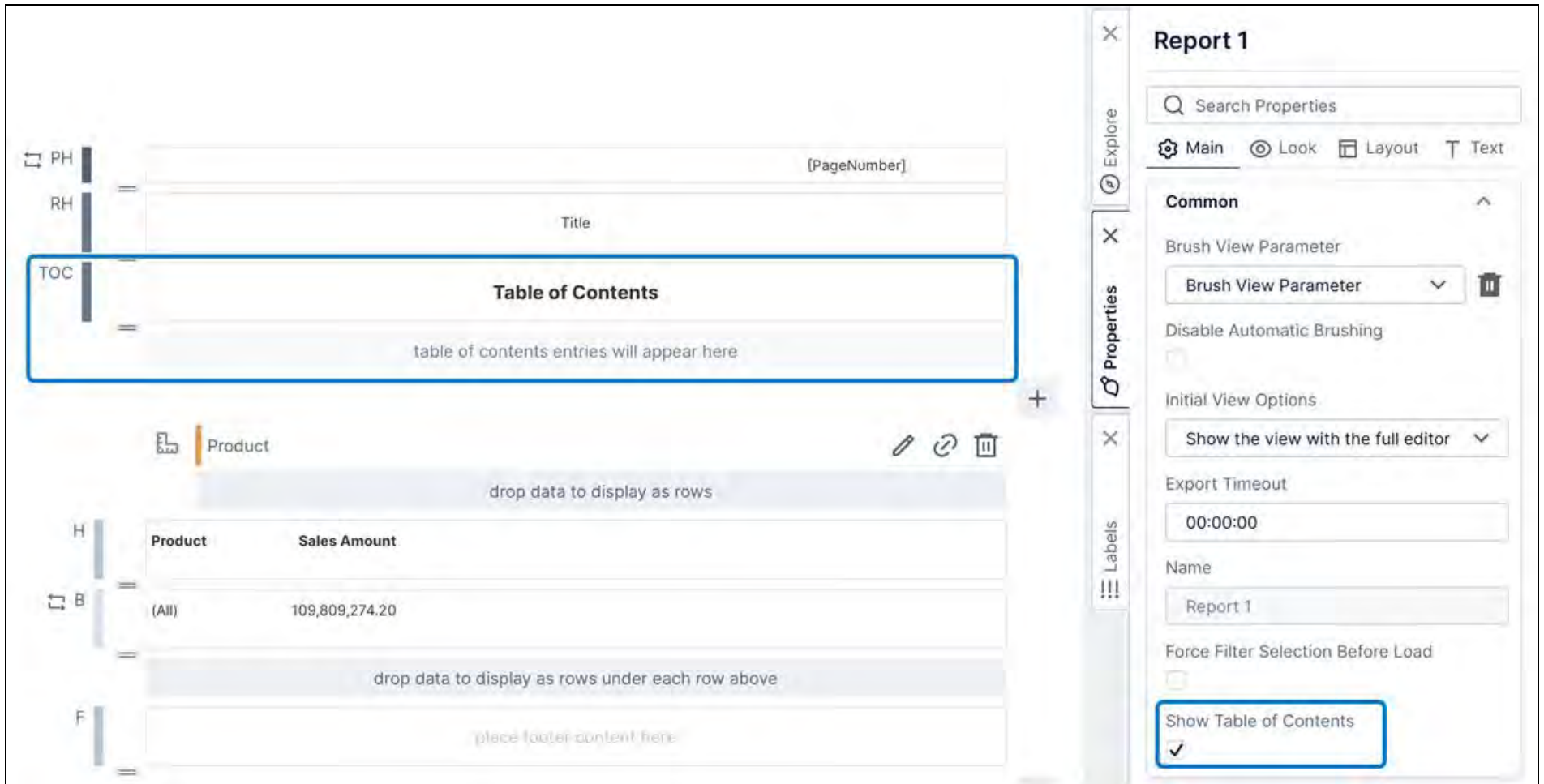
This applies to: *Managed Dashboards, Managed Reports*

Add a table of contents to reports. Reports are automatically populated with entries you select when the report is viewed. Each entry includes a corresponding page number for the content.

Show a Table of Contents

If you want to include a table of contents directly in the report whenever it's viewed, open the **Properties** window with nothing selected in your report to access the overall report property settings. To de-select an item, select on empty space outside of any template areas.

Select the option `Show Table of Contents`, and the new template area labeled **TOC** appears below the report header.



The screenshot displays the Logi Symphony v24 interface. On the left, a report template is shown with various sections: PH, RH, TOC, Product, H, B, and F. The TOC section is highlighted with a blue border and contains the text 'Table of Contents' and 'table of contents entries will appear here'. The right sidebar shows the 'Report 1' properties panel. Under the 'Common' tab, the 'Table of Contents' checkbox is checked, indicating that the table of contents is enabled for this report.

Use this new template area to customize the appearance of the area at the top of the table of contents. It initially contains a label as a title you can customize, add to, or remove.

After enabling the table of contents, new properties are added in the overall report properties: in the **Look**, **Layout**, and **Text** tabs, the **Table of Contents** category contains properties `Background`, `Indent`, `Size`, and font settings for text.

Add Entries

Set up table of contents entries in the properties for any template area other than page headers & footers. When you add the table of contents, you can optionally include them only in [exported PDF files](#) for use with PDF viewer navigation options.

Select an empty area inside of a template area/region, or the labeled area to its left (e.g., where body is labeled B). You can also select any element inside, then click **Select Template Cell** in the toolbar.



In the **Properties** window, select **Show in Table of Contents**. A **Text** tab appears above that contains a set of properties you can adjust to determine the table of contents entry text:

- Set the **Text** property to identify this template area in the table contents. If this template area repeats based on data when viewing the report, a popup will open when you select this setting and list the available data that you can select to insert as a placeholder keyword, such as **[Product]** to list actual product values in the table of contents.
- The **Text Source** property dropdown determines which placeholder keywords are available for the **Text** property. If you're using a visualization that displays its own data separately from the **group metric set**, you can use this dropdown to select the visualization data instead.
- Select the **Show Numbering** option if you want to number each entry. This inserts the **[TableOfContents]** placeholder keyword for the numbering at the beginning of the template area. Combine with other text or keywords to display for each entry.

X

Group 1 Body 1 - Product (Pr...)

Search Properties

MainLookLayoutText

Table of Contents Entry

Text Source
Group 1

Show Numbering☒

Text

[TableOfContents] [Product]



Set up the text in this way for every template area you want listed in the table of contents.

Numbering

If you selected the numbering option for a template area, numbering is added to the table of contents, but you still need to add corresponding numbers to the content.

To do so, use the **[TableOfContents]** placeholder keyword in labels or data labels in your report:

- Drag **Table of Contents** from the **Labels** window onto your report to quickly create a new placeholder label with this numbering.
- For an existing label or data label in your report: open the **Properties** window to the **Text** tab, and insert **[TableOfContents]** into the **Label Text** property setting. This is similar to the Text property for a template area you set above. It may be listed in a popup you select, or you can type or paste it.

View the Table of Contents

Select **View** in the toolbar to switch the report to view mode and see the table of contents entries. If the Report Header contains any content such as a report title, the table of contents will be on the following page (usually the second page).

The following image shows a table of contents listing the template areas for product categories as well as product subcategories (a nested/child group), with numbering enabled.

2

Table of Contents

1. Accessories	3
1.1. Bike Racks	3
1.2. Bike Stands	3
1.3. Bottles and Cages	3
1.4. Cleaners	3
1.5. Fenders	3
1.6. Helmets	3
1.7. Hydration Packs	4
1.8. Locks	4
1.9. Pumps	4
1.10. Tires and Tubes	4
2. Bikes	4

The table of contents may be incomplete until all content is fully loaded.



Important: If you want a report to immediately load fully with a complete table of contents, [export the report to PDF](#) or another format.

When you view a report directly in a browser, only the first few pages are loaded initially in order to reduce waiting time, with additional pages loaded as you scroll. If your report includes page headers or footers with **[TotalPages]** contained in a label, this is indicated with a plus symbol (+). For example: **Page 1 of 4+**.

In this case, the table of contents will also end with a message stating that it is incomplete. Once you have scrolled toward the end of the report, the page numbering will indicate the final page total and the table of contents will be complete if you scroll to it.

Select a table of contents entry to scroll directly to the corresponding page.

Export

[Export a report to PDF](#) or another format to prepare a report in its entirety all at once, including the final page total and a complete table of contents.

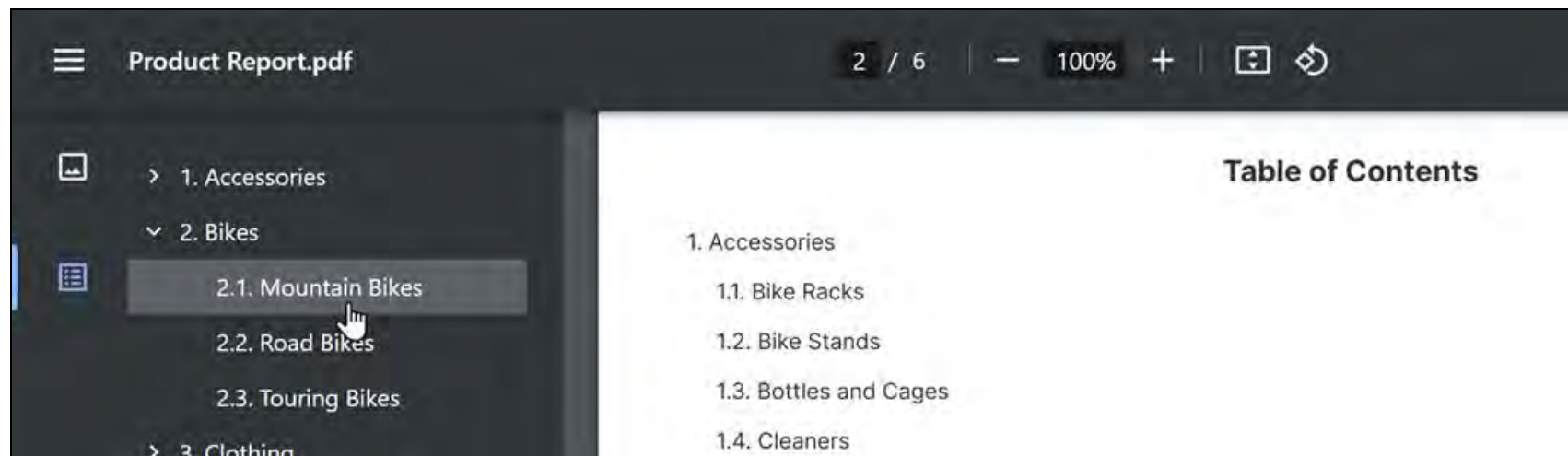
2

Table of Contents

1. Accessories	4
1.1. Bike Racks	4
1.2. Bike Stands	4
1.3. Bottles and Cages	4
1.4. Cleaners	4
1.5. Fenders	4
1.6. Helmets	4
1.7. Hydration Packs	5
1.8. Locks	5
1.9. Pumps	5
1.10. Tires and Tubes	5
2. Bikes	5
2.1. Mountain Bikes	5
2.2. Road Bikes	5
2.3. Touring Bikes	6
3. Clothing	6

Select a table of contents entry to scroll directly to the corresponding page.

Many PDF viewers also have a sidebar that you can open for accessing the table of contents. Use it to navigate between report sections from any page.





Report Layout Example

This applies to: *Managed Reports*

The following diagram illustrates a simplified design for the inventory report example shown in [Symphony Managed Reports](#) (unused regions are omitted and are hidden when viewing). This report repeats visualizations on two levels: an initial group that displays each *Product Category* and a child group displaying each category's *Product*.

Inventory Stock List
(Label) RH - Report Header region

<ProductCategory hierarchy level> Grouping hierarchy region

H - Group Header region

Qty Left (Label)	Unit Price (Label)
---------------------	-----------------------

<ProductCategory Name>
(Data Label) B - Group Body region

<Product hierarchy level> Child Grouping hierarchy region

B - Child Group Body region

<Product Name> (Data Label)	<QtyLeft> (Data Label)	<UnitPrice> (Data Label)
--------------------------------	---------------------------	-----------------------------

RF - Report Footer region

<ProductCategory Name> <QtyLeft> (Bar Chart)	<ProductCategory Name> <TotalValue> (Bar Chart)
--	---

PF - Page Footer region

<PAGE #> (Label)	
---------------------	--



- Archive of documentation for Logi Symphony v24

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Share and Export Symphony Dashboards and Reports

This applies to: *Managed Dashboards, Managed Reports*

Managed Dashboards, Reports, and Views

You can share and export a managed dashboard, report, or other view: share as a link to send or save, or export it to file formats such as CSV, Excel, an image, PDF, or PowerPoint.

When viewing or editing the view you want to share, find the **Share** option in the toolbar if displayed. You can also right-click or long-tap an empty section of the view and find it in the context menu.



Note: If you are editing a file in a project that other people can access, you can also just [check it in](#) for them to see it when they next look at the project contents.

For more information on sharing managed dashboards, reports, views, and slideshows, see:

- [Share Options for Managed Dashboards and Reports](#)
- [Dashboard Editing Export Options](#)

Export Notes

Legends are separate from visualizations in Symphony, but can be included in exported images for individual visualizations if they are placed within the boundaries of the visualization (including its padding).

Exporting of images, PDFs, and PowerPoint is performed on the server where Symphony is installed, so only fonts that have been installed on that server or are included via [CSS or HTML](#) can be used to render. If you specify a Font Family not available on the server or use the default font, a different font may be used than the one in your own browser. (The **Source Sans Pro** and **Inter** fonts are included by default.)

If you choose the **Append Date To Filename** option when exporting, the [configuration setting](#) **File Name Date Time Format** is available for administrators to customize the date's format.

You can modify the **Company** and **Creator** that appear in exported Excel and PowerPoint files with the **Company Meta Data Text** and **Creator Meta Data Text** settings in the [configuration settings](#) in the **Export** category.

Visual Data Discovery Dashboards

This applies to: *Visual Data Discovery*



- Archive of documentation for Logi Symphony v24

Your users can share Data Discovery dashboards easily among themselves in a user-friendly manner. Allow them to grant and [revoke](#) VIEWER, COMMENTER, or EDITOR access level to a dashboard and share it. When a dashboard is shared, the receiving users can access the underlying visuals and sources used in the dashboard. See [Share And Export Symphony Dashboards And Reports](#).

Share dashboards with:

- Existing users, groups, or users and groups in a tenant.
- As an administrator, you can filter users who can receive a dashboard using the recipient rules API. See [Configure Recipient Rules](#).

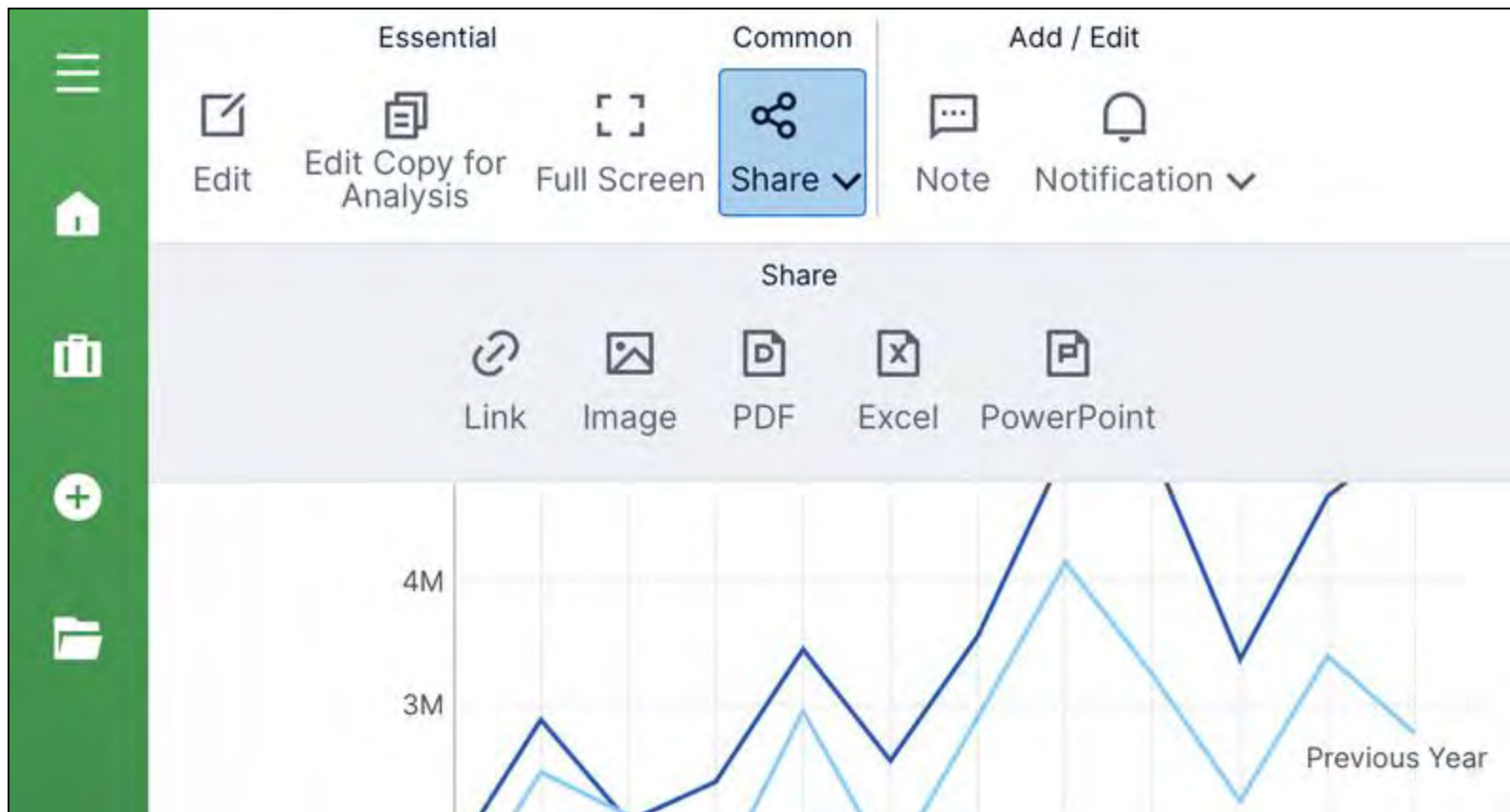
For more information, see:

- [Share a Dashboard with Users Inside Your Tenant](#)
- [Export Visuals](#)
- [Export Dashboards](#)
- [Import or Export Sources](#)

Share Options for Managed Dashboards and Reports

This applies to: *Managed Dashboards, Managed Reports*

You can share and export a managed dashboard, report, or other view: share as a link to send or save, or export it to file formats such as CSV, Excel, an image, PDF, or PowerPoint. You can manage what a user can see in exports while editing as well. See [Dashboard Editing Export Options](#).



Export Notes

Legends are separate from visualizations in Symphony, but can be included in exported images for individual visualizations if they are placed within the boundaries of the visualization (including its padding).



Exporting of images, PDFs, and PowerPoint is performed on the server where Symphony is installed, so only fonts that have been installed on that server or are included via [CSS or HTML](#) can be used to render. If you specify a Font Family not available on the server or use the default font, a different font may be used than the one in your own browser. (The **Source Sans Pro** and **Inter** fonts are included by default.)

If you choose the **Append Date To Filename** option when exporting, the [configuration setting](#) **File Name Date Time Format** is available for administrators to customize the date's format.

You can modify the **Company** and **Creator** that appear in exported Excel and PowerPoint files with the **Company Meta Data Text** and **Creator Meta Data Text** settings in the [configuration settings](#) in the **Export** category.

Share a Link (URL)

The **Link** option gives you a URL to view your current dashboard, report, or other view. You can bookmark it in your browser, or send it to someone else. Changes you make while viewing, such as filtering and sorting, are also included in this link (also known as a **short link**).

1. Open or edit the view you want to share. Select **Share**, then **Link** in the toolbar. The **Share** work area opens.



Note: Alternatively, right click or long tap an empty section of your view to open the context menu and select **Share**, then **Link**.

2. Symphony generates a URL in the Link field.



Note: You can select the **Copy** button to copy the link to your clipboard. Paste the link, as needed, in other applications.

3. By default, **Show only a simple viewer** is selected of the **View Options**. Use this selection, or pick another.
 - i. **Show the view with the full editor** - Opens the view in the editor with menu, toolbar, and task bar visible.
 - ii. **Show only a simple viewer** - The default selection. Opens the view full screen, without the menu, toolbar, or taskbar. These items may be available from the context menu.
 - iii. **Show only the toolbar** - Opens the view with toolbar visible.
 - iv. **Show the menu and toolbar** - Opens the view with menu and toolbar visible.
 - v. **Show the menu and taskbar** - Opens the view with menu and taskbar visible.
 - vi. **Show the menu, toolbar and taskbar** - Opens the view with menu, toolbar, and task bar visible.

4. To share this view with others who don't already have access to this view, select **Give others access**, then select their names from the list.
- i. You can only share access to this view with others if you created the view or have the **Full Control** [privilege](#).
- ii. Any files you create in **My Project** are accessible only to you by default.

 **Important:** If this is a new item, you must [check it in](#) to allow others to access it.

5. You can optionally share your link directly by email. Select **Email** or **Delivery Options**, add recipients and a message, or set other options. Sharing this information is similar to sharing notifications, but this is a one time delivery. See [Set Up Delivery Options](#).

Share an Image

The **Image** option exports the entire view, such as a dashboard, scorecard, or specific visualization, in PNG format.

1. Open or edit the view you want to share. Select **Share**, then **Image** in the toolbar. The **Export** work area opens.

 **Note:** Alternatively, right click or long tap an empty section of your view to open the context menu and select **Share**, then **Export**.

2. The **Format** option **Image** is selected by default. Change the selection to export in a different format.

3. The **Selection** option **Entire View** is selected by default and exports the entire view to an image.

 **Note:** If you're exporting a dashboard, you can select **Single Item**, then pick an available visualization from the dashboard to share.

4. If you share the **Entire View**, the view is exported as you currently see it, taking into account content that can be shown and hidden. Reports are exported as a .zip file that includes an image for each page.
5. Optionally, select **Append Date to File Name** to add the date to the file name.
6. Optionally, share your exported file directly by email. Select **Delivery Settings**, add recipients and a message, or set other options. Sharing this information is similar to sharing notifications, but this is a one time delivery. See [Set Up Delivery Options](#).

- Note:** To export to a file immediately from the Export work area, select **Export** after defining your options. Symphony begins the export process. Once complete, Symphony displays a **Download the created export** option: select to download your export.
- Click the **Close** button before the export completes, for example when waiting for a long report to export. From [your profile](#), you can then manage the export process or download the file once it finishes, as well as download other recent exports from the last 7 days or the length of time set by your administrator (using the **Export Result File Lifetime** [configuration setting](#)).

The view will be exported as you currently see it, taking into account content that can be shown and hidden, for example. Reports export a ZIP file containing an image for each page, and slideshows do the same for each slide.

Share an Excel File

You can export the all the view's data or data from selected visualizations (including those in embedded views) to the Microsoft Excel format (.XLSX) by selecting the **Excel** share option.

1. Open or edit the view you want to share. Select **Share**, then **Excel** in the toolbar. The **Export** work area opens.

Note: Alternatively, right click or long tap an empty section of your view to open the context menu and select **Share**, then **Export**.

2. Select **Excel** as the **Format** option. The Export work area changes to offer appropriate export options.
3. The **Selection** option **Entire View** is selected by default. Use this option or select another available option. Options vary depending on the export type and the
 - i. **Entire View:** the default selection. Exports data from all visualizations, one per sheet or tab. Reports, scorecards, and small multiples may include multiple visualizations that share data from a single metric set. These visualizations are combined together in one sheet.
 - ii. **All Visible:** takes into account visualizations that can be shown and hidden while viewing.
 - iii. **Selected Items:** click to select one or more individual visualizations to export their data. Hold down the Ctrl, Shift, or ⌘ command key to make multiple selections.
4. Select the **Settings** options for your export. Enable an option by selecting the checkbox, disable by clearing the checkbox. Options include:
 - i. **Export Sortable Dates:** sort date and time columns in the exported Excel file. Clear this checkbox to disable this options and ensure the display format remains the same.



- ii. **Include Parameter Values:** enable this option to include filter/parameter settings in Excel export file.
- iii. **Include Images:** enable this option to include an image of each visualization in the Excel export file.
- iv. **Include Dashboard as Image:** enable this option to include an image of the entire dashboard on a separate sheet in the Excel export file.
- 5. By default, your exported Excel file includes customizations and styling (colors, content order, custom header text) applied to cells in table visualizations, and includes only data displayed by data points in charts. Select **Advanced** to change these defaults.
- 6. Optionally, select **Advanced**, then **Exclude Styles** to remove default formatting. Enable **Add Data Images To File** to include images from the table in the export (if eligible data is available).
- 7. Optionally, share your exported file directly by email. Select **Email** or **Delivery Settings**, add recipients and a message, or set other options. Sharing this information is similar to sharing notifications, but this is a one time delivery. See [Set Up Delivery Options](#).



Important: Table visualizations are exported with values represented as text (or images), with most styling preserved but without border styling and with other limitations that may be related to technical limitations in Excel.



Note: To export to a file immediately from the Export work area, select **Export** after defining your options. Symphony begins the export process. Once complete, Symphony displays a **Download the created export** option: select to download your export.

Click the **Close** button before the export completes, for example when waiting for a long report to export. From [your profile](#), you can then manage the export process or download the file once it finishes, as well as download other recent exports from the last 7 days or the length of time set by your administrator (using the **Export Result File Lifetime** [configuration setting](#)).

Share a CSV File

After choosing **Excel** or another option from the **Share** menu, you can change the **Format** setting to **CSV** if available. This exports the data displayed by a visualization to a CSV (comma separated values) file.

Only a single visualization within a view can be exported to CSV. Select an available visualization in **Selection**. You can include more than one visualizations in reports, scorecards or small multiples, combined if they share a metric set.

Optionally, share your exported file directly by email. Select **Email** or **Delivery Settings**, add recipients and a message, or set other options. Sharing this information is similar to sharing notifications, but this is a one time delivery. See [Set Up Delivery Options](#).

Note: To export to a file immediately from the Export work area, select **Export** after defining your options. Symphony begins the export process. Once complete, Symphony displays a **Download the created export** option: select to download your export.

Click the **Close** button before the export completes, for example when waiting for a long report to export. From [your profile](#), you can then manage the export process or download the file once it finishes, as well as download other recent exports from the last 7 days or the length of time set by your administrator (using the **Export Result File Lifetime** [configuration setting](#)).

Share a PDF

The PDF option can be useful for sharing, saving for offline reading, or for printing. Reports are also specially designed to be exported to PDF and can include page headers and footers.

1. Open or edit the view you want to share. Select **Share**, then **PDF** in the toolbar. The **Export** work area opens.

Note: Alternatively, right click or long tap an empty section of your view to open the context menu and select **Share**, then **PDF**.

2. Select **PDF** as the **Format** option. The Export work area changes to offer appropriate export options.
3. In the **Settings** work area, change the **Paper Size** and **Orientation** from the defaults, if needed. Optionally, add a **Password** for password protection.

The view is exported as you currently see it, taking into account content that can be shown and hidden. Dashboards designed in Responsive mode are exported in Scale mode to fit the selected paper size.

4. Optionally, share your exported file directly by email. Select **Email** or **Delivery Settings**, add recipients and a message, or set other options. Sharing this information is similar to sharing notifications, but this is a one time delivery. See [Set Up Delivery Options](#).

Note: To export to a file immediately from the Export work area, select **Export** after defining your options. Symphony begins the export process. Once complete, Symphony displays a **Download the created export** option: select to download your export.

Click the **Close** button before the export completes, for example when waiting for a long report to export. From [your profile](#), you can then manage the export process or download the file once it finishes, as well as download other recent exports from the last 7 days or the length of time set by your administrator (using the **Export Result File Lifetime** [configuration setting](#)).

Share a PowerPoint File

The PowerPoint option exports the current view as one or more image slides in a PowerPoint file (.PPTX). Present this file as is, or combine these slides with others.



1. Open or edit the view you want to share. Select **Share**, then **PowerPoint** in the toolbar. The **PowerPoint** work area opens.



Note: Alternatively, right click or long tap an empty section of your view to open the context menu and select **Share**, then **PowerPoint**.

2. Select **PowerPoint** as the **Format** option. The Export work area changes to offer appropriate export options.

3. In the **Settings** work area, change the **Slide Size** from the default, if needed.

Most view types export a single slide. Reports are exported as one slide per page. A [slideshow](#) exports a slide for each of its own slides.

4. Optionally, share your exported file directly by email. Select **Email** or **Delivery Settings**, add recipients and a message, or set other options. Sharing this information is similar to sharing notifications, but this is a one time delivery. See [Set Up Delivery Options](#).



Note: To export to a file immediately from the Export work area, select **Export** after defining your options. Symphony begins the export process. Once complete, Symphony displays a **Download the created export** option: select to download your export.

Click the **Close** button before the export completes, for example when waiting for a long report to export. From [your profile](#), you can then manage the export process or download the file once it finishes, as well as download other recent exports from the last 7 days or the length of time set by your administrator (using the **Export Result File Lifetime** [configuration setting](#)).

The slide size in the resulting file is based on the size of the view you are exporting by default, but this can be changed using the **Slide Size** setting.

Dashboard Editing Export Options

This applies to: *Managed Dashboards, Managed Reports*

When editing a view such as a dashboard, there are options available to determine what's exported when it's viewed by others.

Prevent Data Export



Important: These options should not be relied on for data security, since all metric set data other than for **Hidden** measures is downloaded by client browsers and can be accessed when viewing.

- If you do not want viewers to be able to export certain data to Excel or CSV formats, there are options on each metric set and each of its elements. (These do not affect exporting to image, PDF or PowerPoint.)
- To prevent the data export for the whole metric set, select the **Edit** icon in the **Data Analysis Panel**, then select the **Prevent Data Export** checkbox in the dialog that appears.
- Similarly, you can prevent data export for each measure or hierarchy listed for the metric set. Select the **Edit** icon in the **Data Analysis Panel**, then check the **Exclude From Data Export** checkbox.

Export Timeout

If you expect or find that a particular dashboard, report, or other view will take significantly longer to export to a file than is currently allowed, you can adjust its `Export Timeout` property.

When editing the view, open the [Properties window](#) with nothing selected (click an empty area if you have selected an element), and find this property in the Main tab. Set this in the `hh:mm:ss` format (where `hh` is hours, `mm` is minutes, and `ss` is seconds), or set to `00:00:00` to use the **Export Render Timeout** setting in [administration](#).

Before Export Events

Add actions such as a [Show/Hide action](#) or script that will run only when a user exports to PDF, image or PowerPoint, without affecting general viewing. (Data export to Excel or CSV is not affected.)

To add one of these actions, open the **Properties** window with nothing selected on the canvas, and find the **Before Export** actions.

You can exclude certain content such as buttons when exporting by adding a **Change Layer** action from the menu. See [Add a Change Layer Action on Ready Event](#).



Or, use a script similar to this to change a dashboard's [background](#) color only when exporting:

```
this.background = new dundas.controls.SolidColorBrush(dundas.controls.Color.fromString("AliceBlue"));
```

If you write script that performs asynchronous operations such as a data retrieval call during this event, you should make the export process wait for it to finish before it produces its image:

```
e.isAsync = true;
//...
asynchronousMethod.done(function (result) {
    //...
    // resolve the deferred
    e.deferred.resolve();
});
```

Export Notes

Legends are separate from visualizations in Symphony, but can be included in exported images for individual visualizations if they are placed within the boundaries of the visualization (including its padding).

Exporting of images, PDFs, and PowerPoint is performed on the server where Symphony is installed, so only fonts that have been installed on that server or are included via [CSS or HTML](#) can be used to render. If you specify a Font Family not available on the server or use the default font, a different font may be used than the one in your own browser. (The **Source Sans Pro** and **Inter** fonts are included by default.)

If you choose the **Append Date To Filename** option when exporting, the [configuration setting](#) **File Name Date Time Format** is available for administrators to customize the date's format.

You can modify the **Company** and **Creator** that appear in exported Excel and PowerPoint files with the **Company Meta Data Text** and **Creator Meta Data Text** settings in the [configuration settings](#) in the **Export** category.

For more information, see:

- Video: [Sharing and Exporting](#)
- [Check In, Check Out and Auto Saving](#)
- [Symphony Metric Sets](#)



- Archive of documentation for Logi Symphony v24

- [Symphony Managed Reports](#)
- [Symphony Notifications \(Alerts\)](#)



Add a Change Layer Action on Ready Event

This applies to: *Managed Dashboards, Managed Reports*

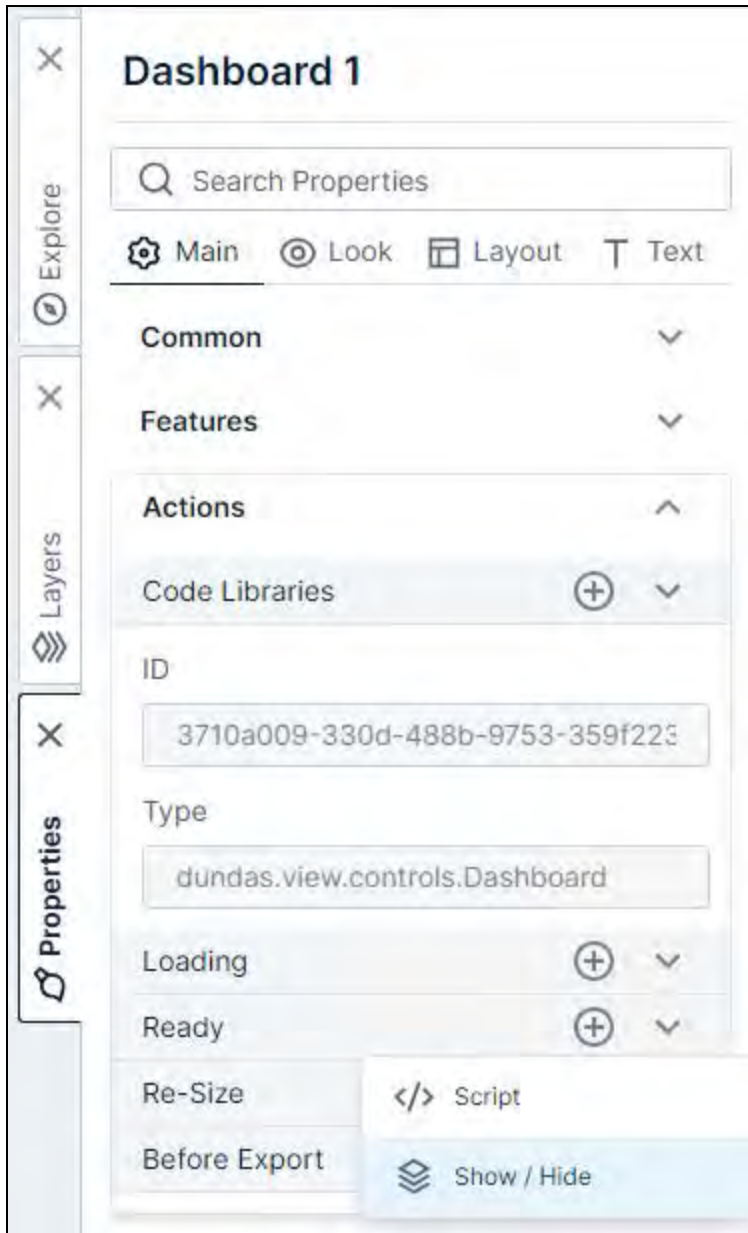
You can [set up an interaction to show/hide](#) some content on your dashboard or other view when any element is clicked, for example a button or image. This common interaction type (previously called **Change Layer**) is available from the toolbar and context menu.

To perform this same action but when a different event occurs, you can set it up from the **Properties** window. The view itself has its own events such as **Ready**, allowing you to show or hide elements once a dashboard has completely finished loading, for example. Similarly, you can add the action to **Before Export** to hide content that should not appear when exporting as an image or PDF.

Adding a Show/Hide Action

Open the **Properties** window while editing your dashboard or other view. If you have selected an element and its properties appear instead of the view's, click an empty area of the canvas to de-select the element.

Under **Actions** in the **Main** tab, expand the **Ready** event, then click the menu button to choose the type of action you want to add.



Select **Show/Hide**.

The show/hide action is added. Select the action to configure it.

Set up a show / hide action

This action will hide and show layers and controls when it runs. The visibility can also be toggled each time instead of only showing or only hiding.

Name

Script Name

Toggle

☐



- Archive of documentation for Logi Symphony v24

If you added elements to show or hide to a separate [layer](#), you can select to show or hide the entire layer.

Alternatively, select to expand **Controls** and select individual elements to show or hide.

For more information, see:

- [Create a Help Overlay Using Layers](#)
- [Using Interactions](#)
- [Layers and Groups](#)

Add a Script to Set the Dashboard Title

This applies to: *Managed Dashboards, Managed Reports*

This article shows you how to add a Label component to a dashboard in order to display a title that changes dynamically.

Specifically, you will see how to add a script that changes the label text based on the current name of the dashboard. So if the dashboard is ever renamed by a designer, the title will still be correct when the dashboard is viewed.

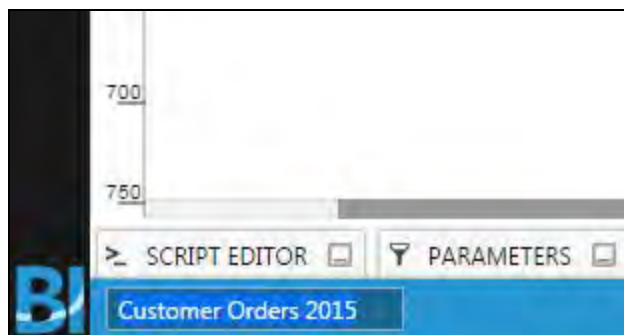
Script is added to the dashboard's **Ready** actions, which are triggered whenever the dashboard is viewed and loaded.

Create a Dashboard

For this example, create a new dashboard from the main menu.

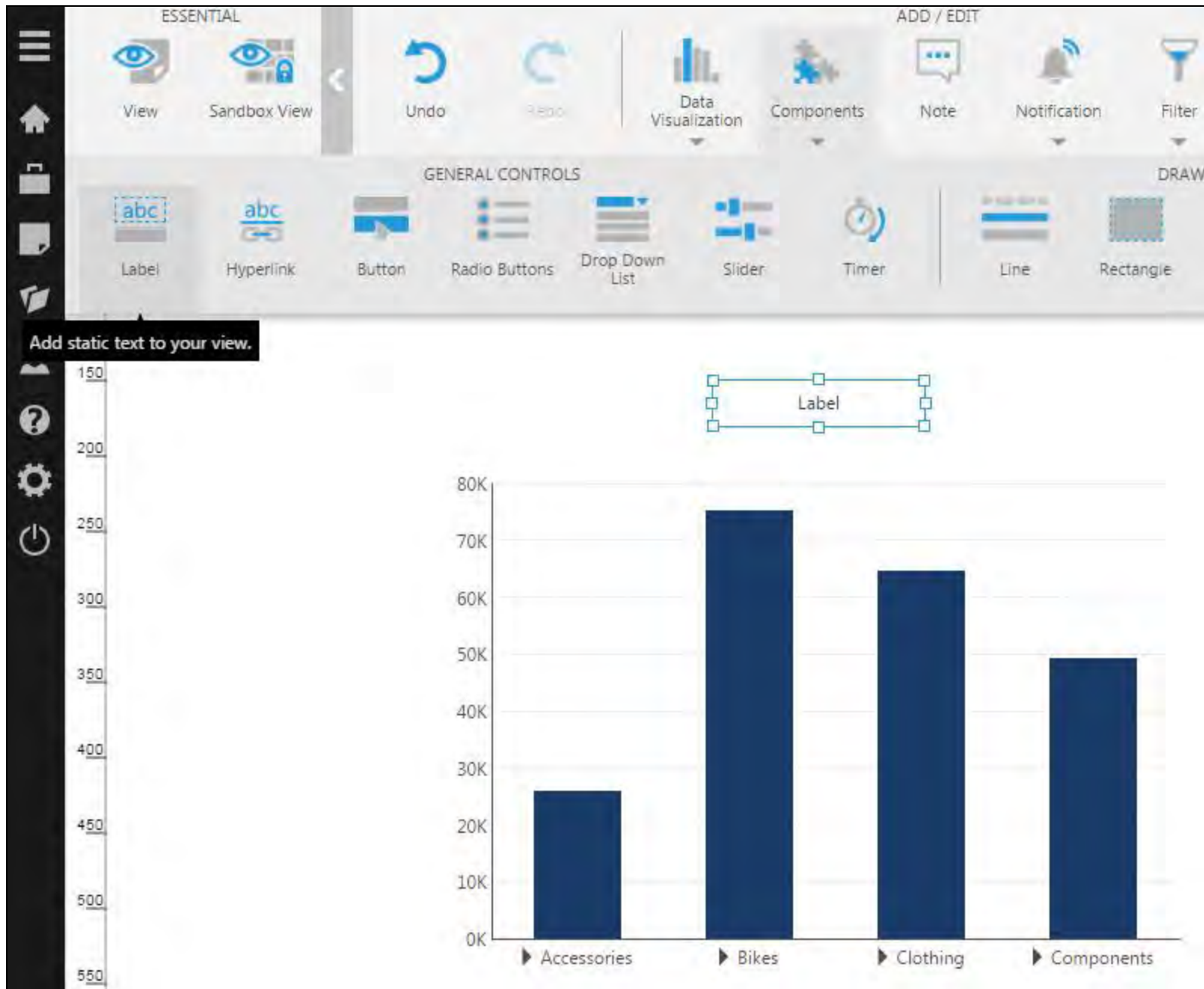
Go to the status bar at the bottom and double click the name of the dashboard to edit it.

Type a new name **Customer Orders 2015** and press **Enter**.



Add a Label Component

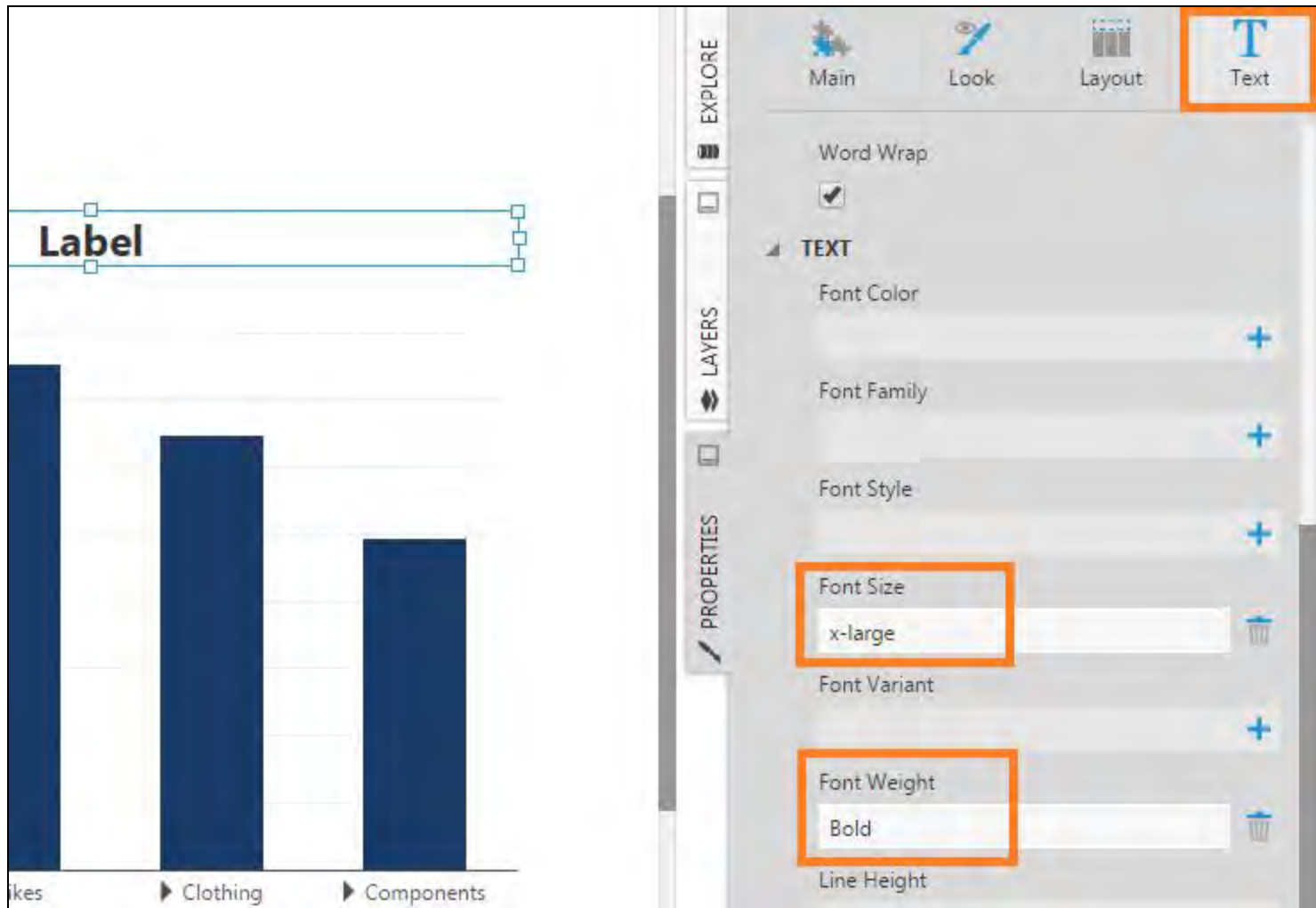
Go to the toolbar, select **Components**, and then click **Label** to add a label component to the canvas.



With the label on the canvas selected, select the **Properties** window.

In the text properties, make the following changes:

- Set the Font Size to **x-large**.
- Set the Font Weight to **Bold**.





Add a Script

Add script to the dashboard's **Ready** event using the Properties window.

1. Select the dashboard canvas, outside of any visualizations or components and open the **Properties** window to see the properties of the dashboard.
2. In the **Main** tab under **Actions**, look for the dashboard's **Ready** actions. Select the **+** button to add script to run when the dashboard is **Ready**
3. Select to edit the new script action, which opens in the **Script Editor**.

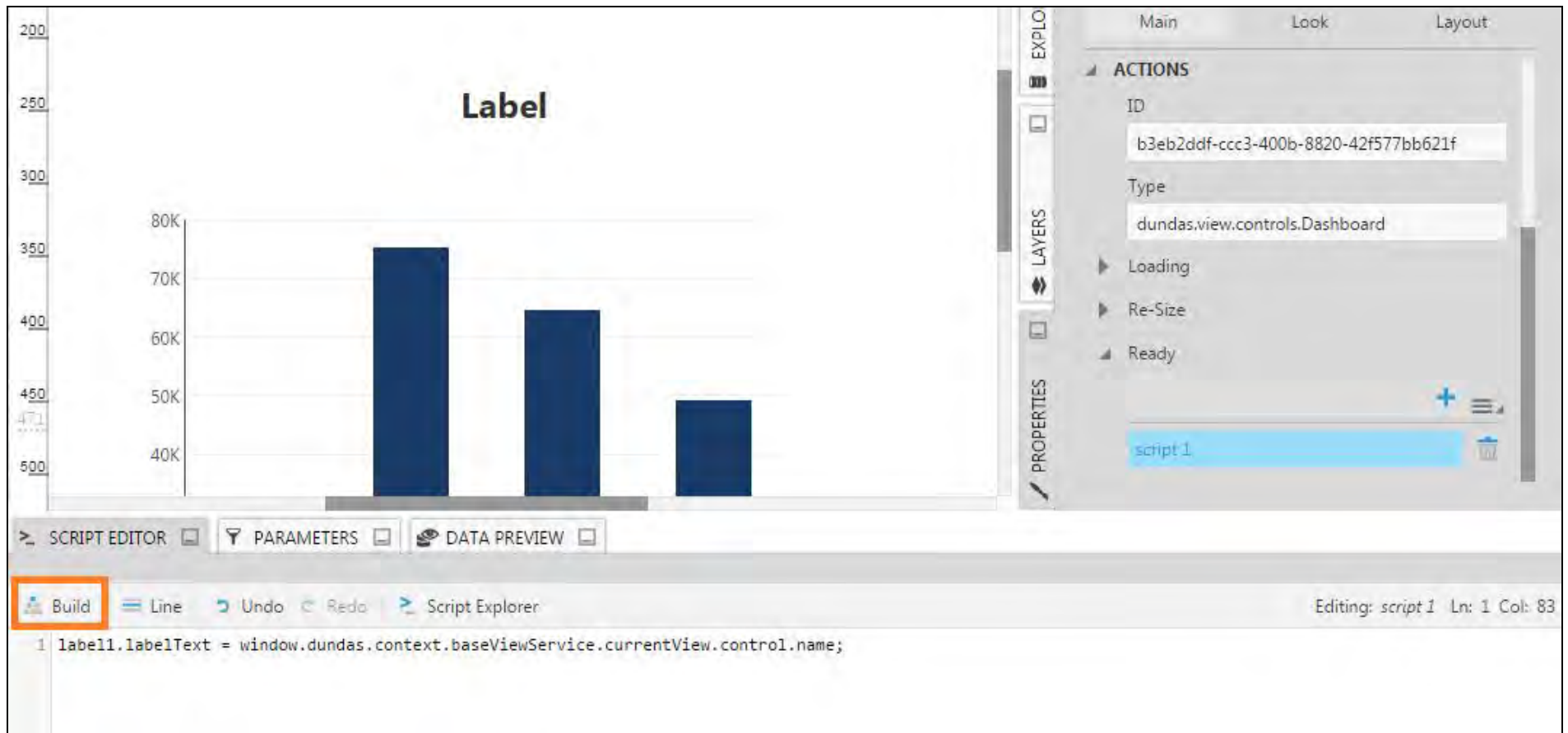
In the editor, use JavaScript like the following:

```
l1label1.labelText = this.baseViewService.currentView.control.name;
```

This refers Add script to the Ready actions to the following API properties:

- [Label.labelText Property](#)
- [Dashboard.baseViewService Property](#)
- [DashboardViewService.currentView Property](#)

Click **Build** to check for any script errors. (There's no need to save because the Script Editor auto-saves as you type.)



Test the Script

The **Ready** action is triggered when the dashboard is opened for viewing directly or when the page is reloaded, but not when switching between Edit and View mode.

Select **Sandbox View** to test the script in a new browser tab.



For more information, see:

- [JavaScript API](#)
- [Using the Script Editor](#)
- [Edit Versus View Mode and Sandbox View](#)



Build a Symphony Scorecard

This applies to: *Managed Dashboards, Managed Reports*

Use scorecards in Symphony to create a customized table with complete control over layout and support for any visualization in its rows. This example displays a row for each product with a different visualization used for each measure.

A scorecard in Symphony is another type of **view** and is similar to a [report](#). While both scorecards and reports allow you to customize the layout and contents of each row and repeat the design for different data, reports are laid out into pages including page headers and footers and are ideal for PDFs or printing, while scorecards are focused on the design of a table. You can also add it to a dashboard just like you would display a table visualization.



Note: [Column Type](#) can display data bars, bullet graphs and state indicators, and can be used instead of a scorecard view if it supports the type of scorecard you want to create.

Related video: [Scorecards and Reports](#)

Design a Scorecard

Here's a scorecard example that uses a data connector pointing to the [Adventure Works sample database](#) for Microsoft SQL Server Analysis Services (SSAS). You can follow similar steps with any data source to design your scorecard.

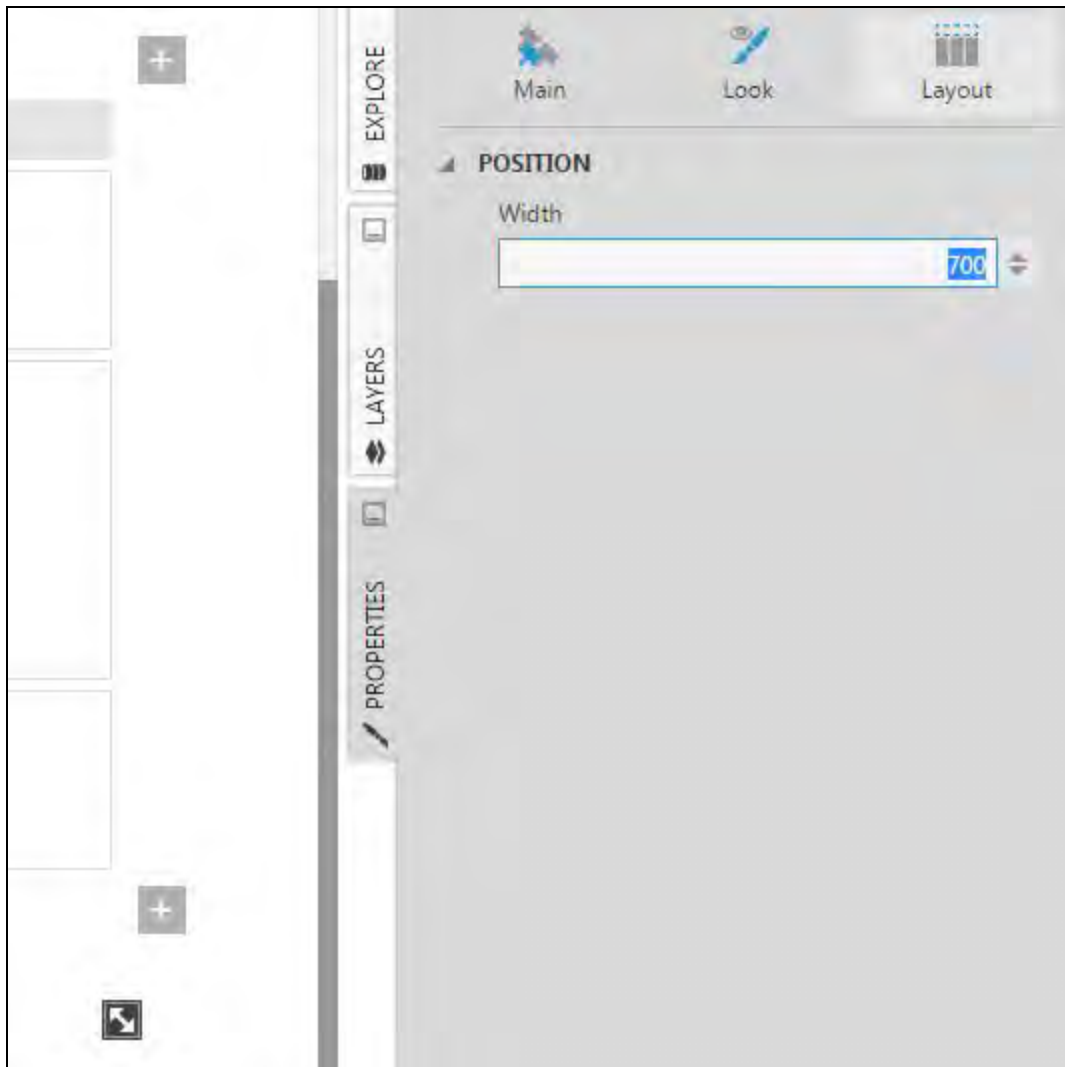
Create a New Scorecard

In the [main menu](#), select **Views**, choose **Scorecard** along the top, then **Create**. This opens a new scorecard in edit mode.

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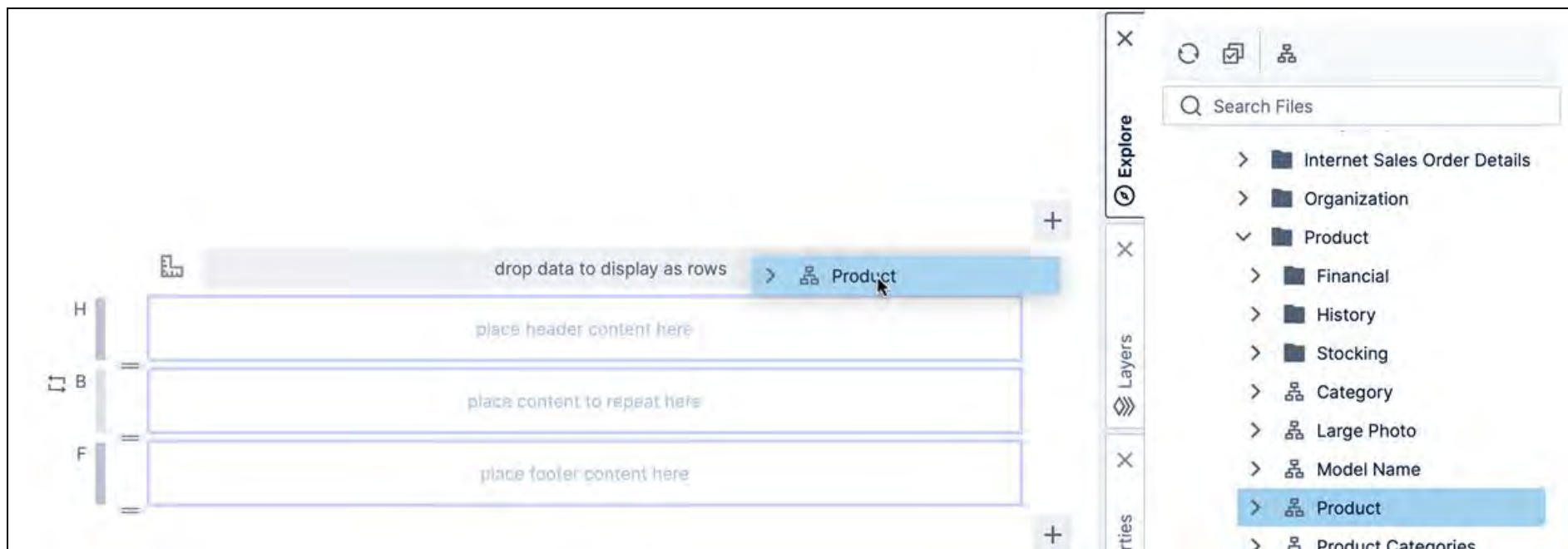
To change the width of the scorecard, select and drag the diagonal arrow icon to the bottom-right of the editor.

You can also set a precise width by selecting an empty area of the editor to select the scorecard canvas, opening the **Properties** window, and finding the **Width** property in the **Layout** tab.



Add a Row Grouping

Drag data that contains a value for each row you want the scorecard to display. For our example, go to the **Explore** window, locate and expand the **Adventure Works** cube. Drag the **Product** dimension and drop it onto the row grouping area (*Drag data here...*). This will cause the body region we are designing to be repeated for each product.



For convenience, a pair of items are automatically added to the scorecard: a data label in the body region, which will display the product name, and a header in the header region.



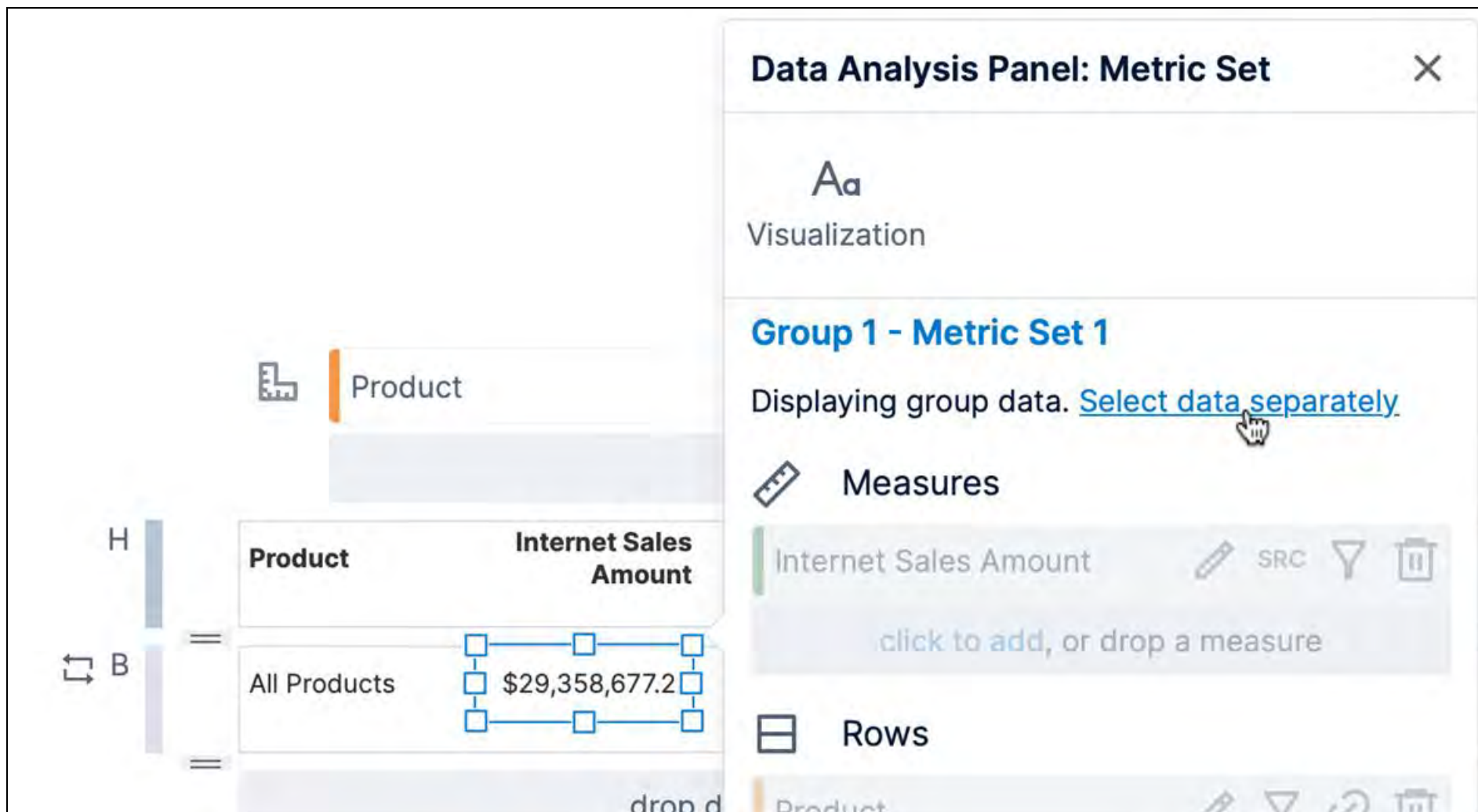
Note: When the data label and header elements are added, their position is [linked](#), which means moving the header control will also move the body control.

Select **View** in the toolbar to see the scorecard with product names displayed in each row.

Add Sales by Date

In the **Explore** window, expand the measures in the **Adventure Works** cube and drag the **Internet Sales Amount** measure to the body region. The corresponding data label and header are created automatically.

The **Data Analysis Panel** for this data label opened automatically, showing that it currently displays the [data from the scorecard group itself](#), e.g., data grouped only by each product. Select **Select data separately** if you want to create a separate metric set for this visualization that can display data grouped by additional hierarchies, such as by date in this example.



The screenshot shows the Logi Symphony interface. On the left, there is a data visualization with a table. The table has two columns: 'Product' and 'Internet Sales Amount'. The first row is 'All Products' with a value of '\$29,358,677.2'. To the right of the table, there is a 'Data Analysis Panel: Metric Set' window. The panel has a title bar with a close button. Below the title bar, there is a section for 'Visualization' with a text input field containing 'Aa'. Below that, there is a section for 'Group 1 - Metric Set 1' with the text 'Displaying group data. [Select data separately](#)'. Below that, there is a section for 'Measures' with a list of measures including 'Internet Sales Amount'. Below that, there is a section for 'Rows' with a list of rows including 'Product'. A hand cursor is pointing at the 'Select data separately' link.

We have done so, and then dragged the **Date.Calendar** hierarchy from the **Explore** window to **Rows** in the **Data Analysis Panel**.

The data label would now normally [automatically re-visualize](#) to a sparkline, or you can choose **Re-Visualize** in the toolbar and then **Sparkline**.

Product

H

B

F

Product

Internet Sales Amount

All Products

drop d

Visualization

Metric Set 1 - Copy

Measures

Internet Sales Amount

click to add, or drop a measure

Rows (Data Points)

Product

Date.Calendar

click to add, or drop a hierarchy



Note: A sparkline is a variation of a line chart meant to indicate just the historical trend while using a small amount of space. The visualization toolbars for scorecards include other visualizations configured for a small space, including Horizontal Plot, Data Bar, and Bullet Graph.

Add Order Count

From the **Explore** window, drag the **Order Count** measure to the body region.

The corresponding data label and header label are created automatically.

Add Sales by Territory

In the toolbar, select **Data Visualization** and select **Data Bar**. This is another way to start a blank visualization instead of dragging data directly to the canvas.

Drag the **Internet Sales Amount** measure onto the empty visualization. Symphony automatically adds the **Product** grouping hierarchy, but keeps it as a separate metric set.

Drag the **Sales Territory Group** hierarchy from the **Adventure Works** cube to **Columns**.

Data Analysis Panel: Metric Set ×



Visualization

Metric Set 2



Measures



Internet Sales Amount



SRC



[click to add](#), or drop a measure



Rows (Data Points)



Product



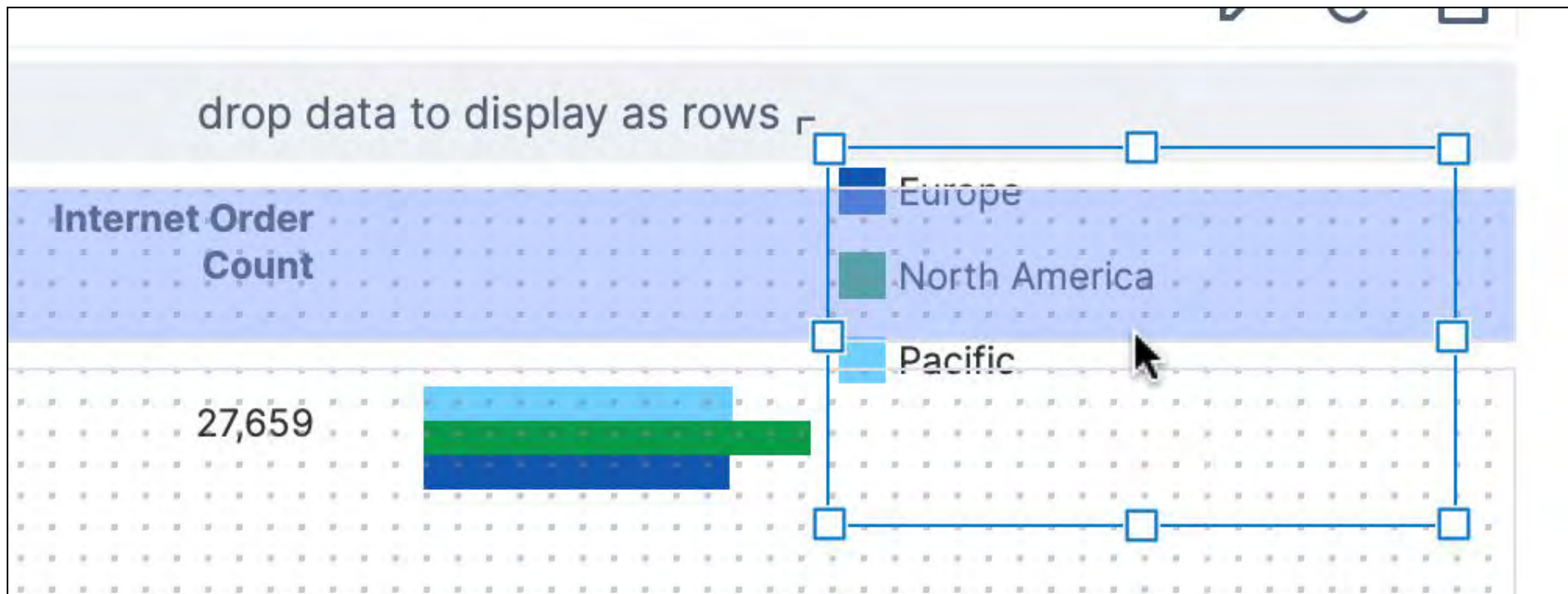
[click to add](#), or drop a hierarchy



Slicers

You can connect a legend to this data bar just like adding a legend to a chart on a dashboard: with your visualization selected, select **Data Visualization** in the toolbar, then **Legend**.

To display the legend just once at the top, we can drag to move it to the header region above.



Add an Axis

An axis can be added to the header or footer of a scorecard to use as a reference for visualizations such as data bars in the rows, just like you would use an axis in a regular bar chart.

1. In the toolbar, select **Data Visualization**, then select **Axis**.
2. Drag the axis visualization to the header area, above the data bar, and resize it to match the visualization.
3. In the toolbar, select **Connect Axis** and select **DataBar 1: Bottom Axis 1** from the dropdown in the **Properties** window.

Contextual

Notification Filter Connect Axis Set Up Interactions Styles Arrange Select Template Cell

Top Axis 1

Shared Axis Scales

Search Properties

Minimum & Maximum

Shared Axis Scales:

- ✓ (Select axis)
- DataBar 1: Bottom Axis 1
- DataBar 1: Left Axis 1
- Sparkline 1: Bottom Axis 1
- Sparkline 1: Left Axis 1

Order count

7,659

Europe

North America



Adjust the Group Header Area

The group header area appears only once for the list of products.

- Set the background color of this area by clicking an empty spot inside it, opening the **Properties** window, and choosing the **Look** tab. In our example, we change **Background** to **Gainsboro**.
- You can double-click the headers or use options in the toolbar or Properties window to customize their text.

View and Edit Your Scorecard

- Select **View** in the toolbar to see the completed scorecard. For our example, we added an [additional state indicator](#) to comparing recent sales figures against the previous period.



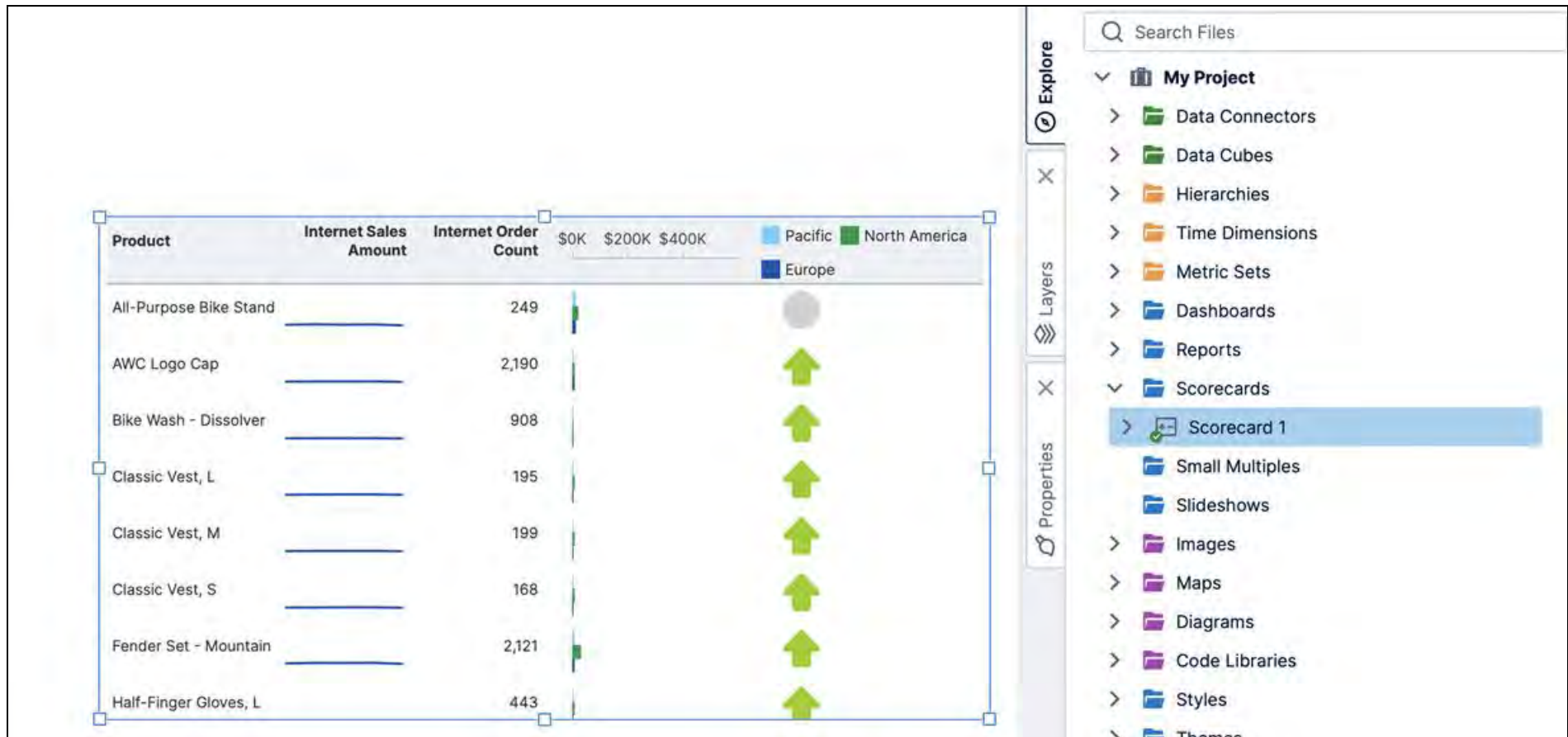
- Archive of documentation for Logi Symphony v24

- Hover a header such as **Internet Order Count** and select the icon to open the sort and filter popup, and sort by **Descending** order, for example.



Use a Scorecard in a Managed Dashboard

While editing a dashboard, drag the scorecard from the **Explore** window to your canvas. Then reposition and resize the scorecard as you would with any other visualization.

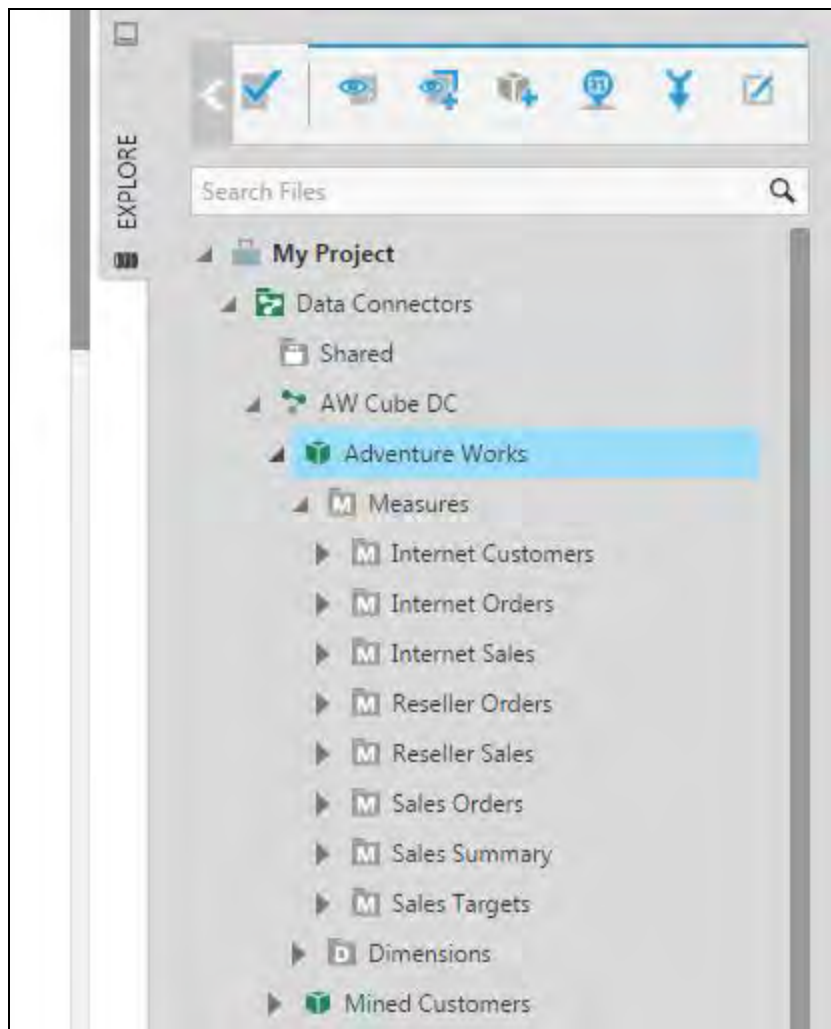


Note: You can also drag separate elements from the scorecard, such as metric sets or visualizations.

Design a Scorecard

This applies to: *Managed Dashboards, Managed Reports*

Here's a scorecard example that uses a data connector pointing to the [Adventure Works sample database](#) for Microsoft SQL Server Analysis Services (SSAS). You can follow similar steps with any data source to design your scorecard.



The next set of articles take you through building a sample scorecard that displays data in a variety of ways to show the spectrum of options:



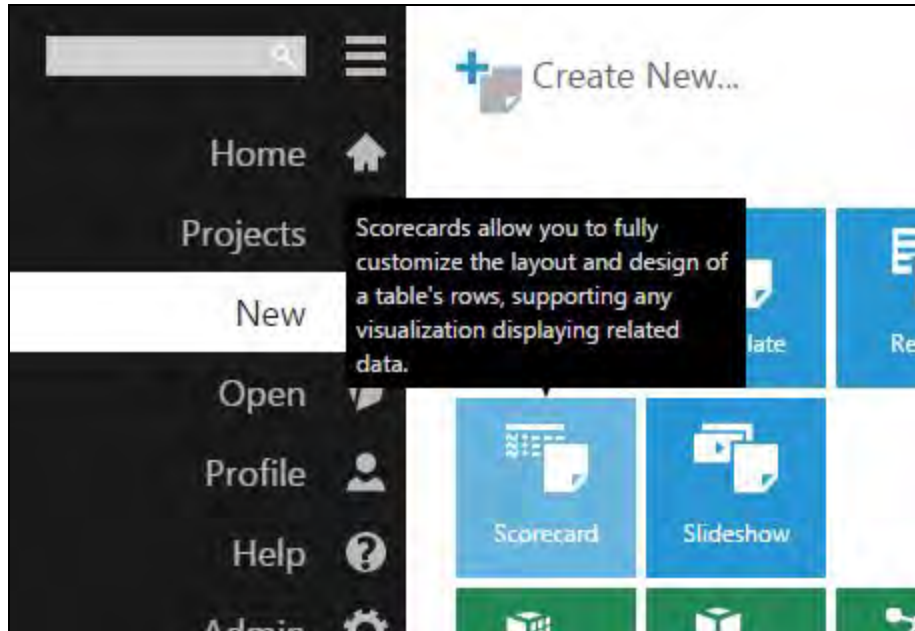
- Archive of documentation for Logi Symphony v24

- [Create a New Scorecard](#)
- [Add a Row Grouping](#)
- [Add Sales by Date](#)
- [Add Order Count](#)
- [Add Sales by Territory](#)
- [Adjust the Group Header](#)
- [Add an Axis](#)
- [Add a Line Separator](#)
- [View and Edit Your Scorecard](#)

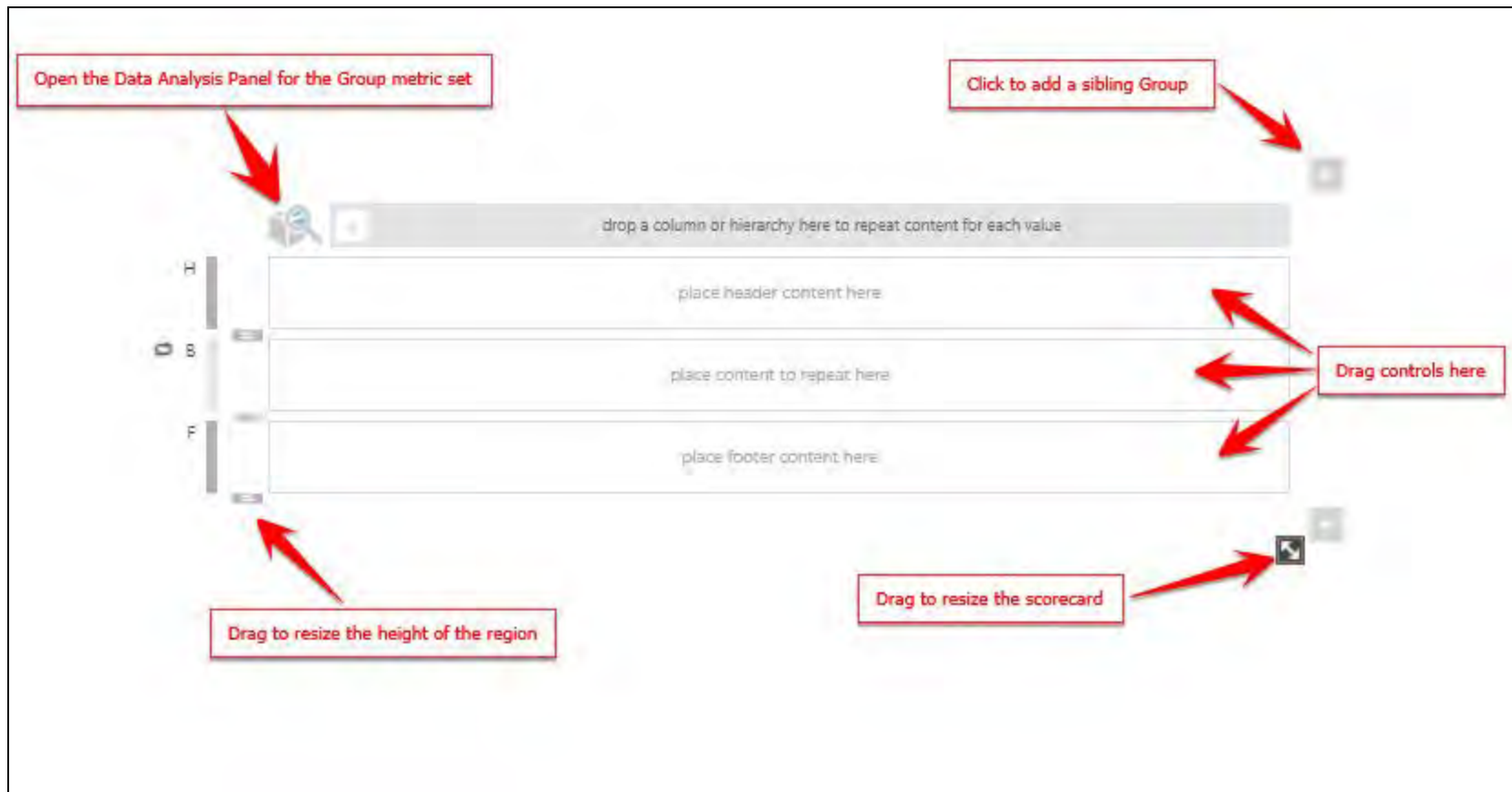
Create a New Scorecard

This applies to: *Managed Dashboards, Managed Reports*

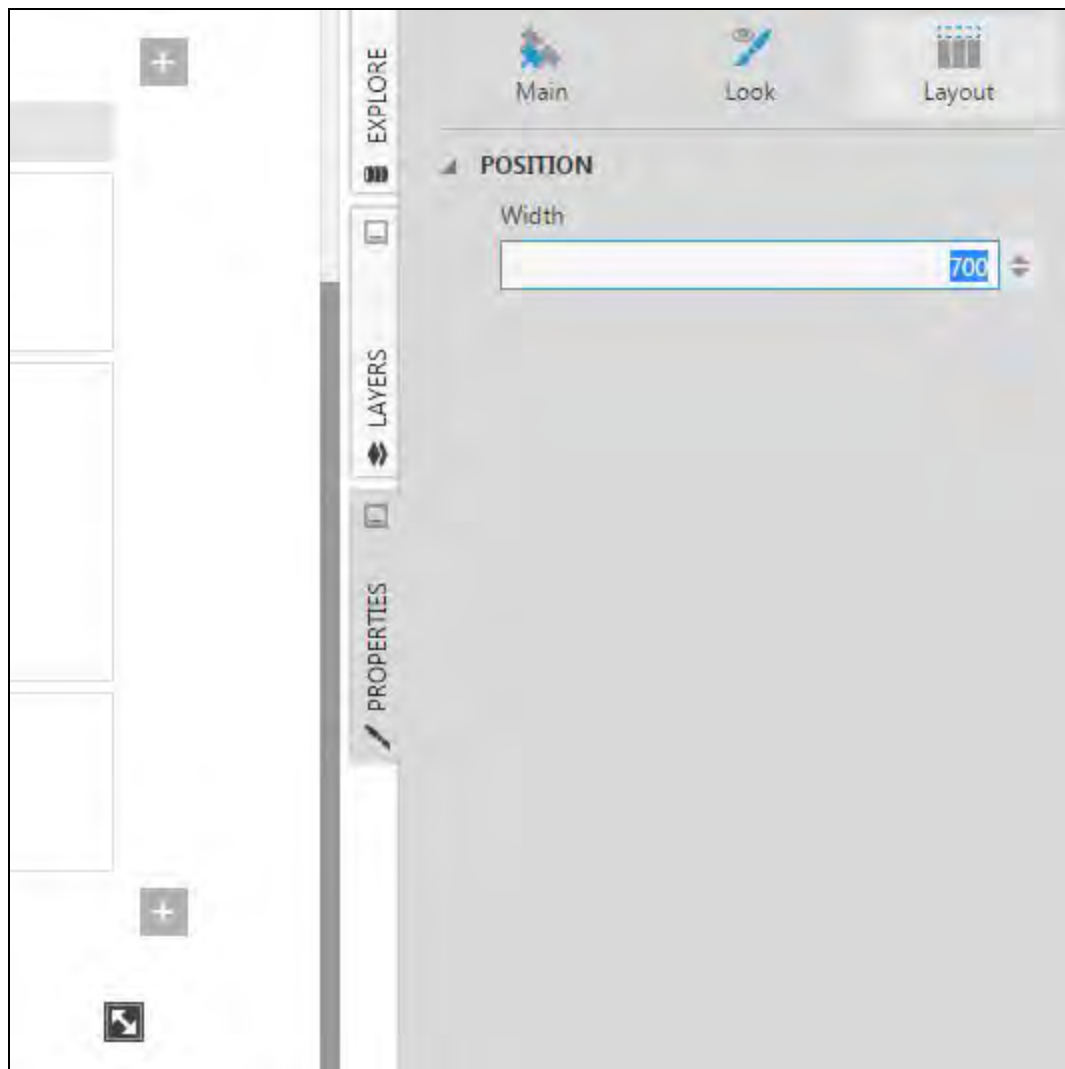
1. Go to the main menu, click **New**, and then click **Scorecard**.



2. The scorecard editor is displayed.



3. To change the width of the scorecard, click and drag the diagonal arrow icon to the bottom-right of the editor.
4. You can also set a precise width by clicking an empty area of the editor to select the scorecard canvas, opening the **Properties** window, and finding the **Width** property in the **Layout** tab.



For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)



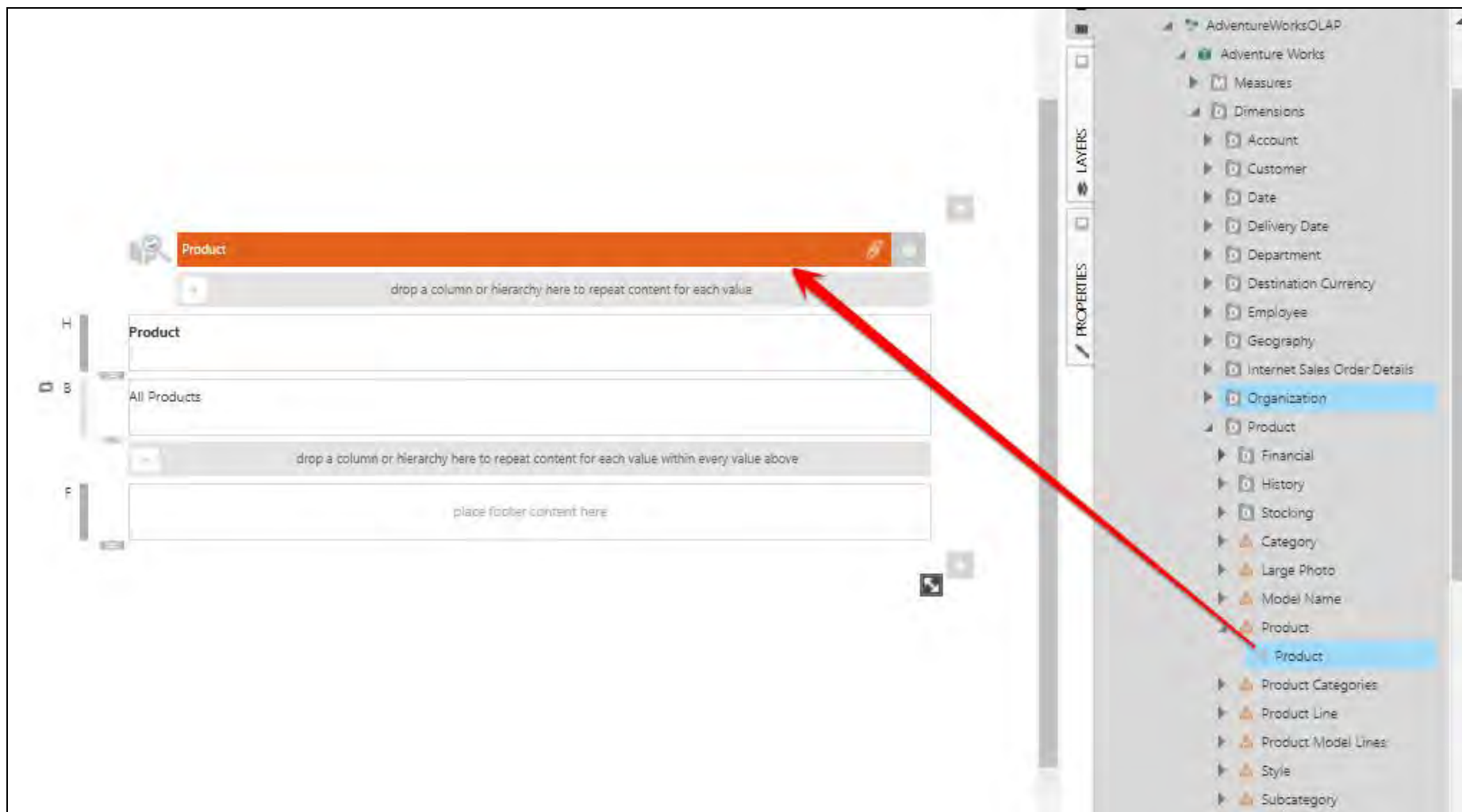
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- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Add a Row Grouping

This applies to: *Managed Dashboards, Managed Reports*

1. Drag data that contains a value for each row you want the scorecard to display. For our example, go to the **Explore** window, locate and expand the **Adventure Works** cube. Drag the **Product** dimension and drop it onto the row grouping area (*Drag data here...*). This will cause the body region we are designing to be repeated for each product.





- Archive of documentation for Logi Symphony v24

2. For convenience, a pair of items are automatically added to the scorecard: a data label in the body region, which will display the product name, and a header in the header region.

 **Note:** When the data label and header elements are added, their position is [linked](#), which means moving the header control will also move the body control.

3. Click **View** in the toolbar to see the scorecard with product names displayed in each row.

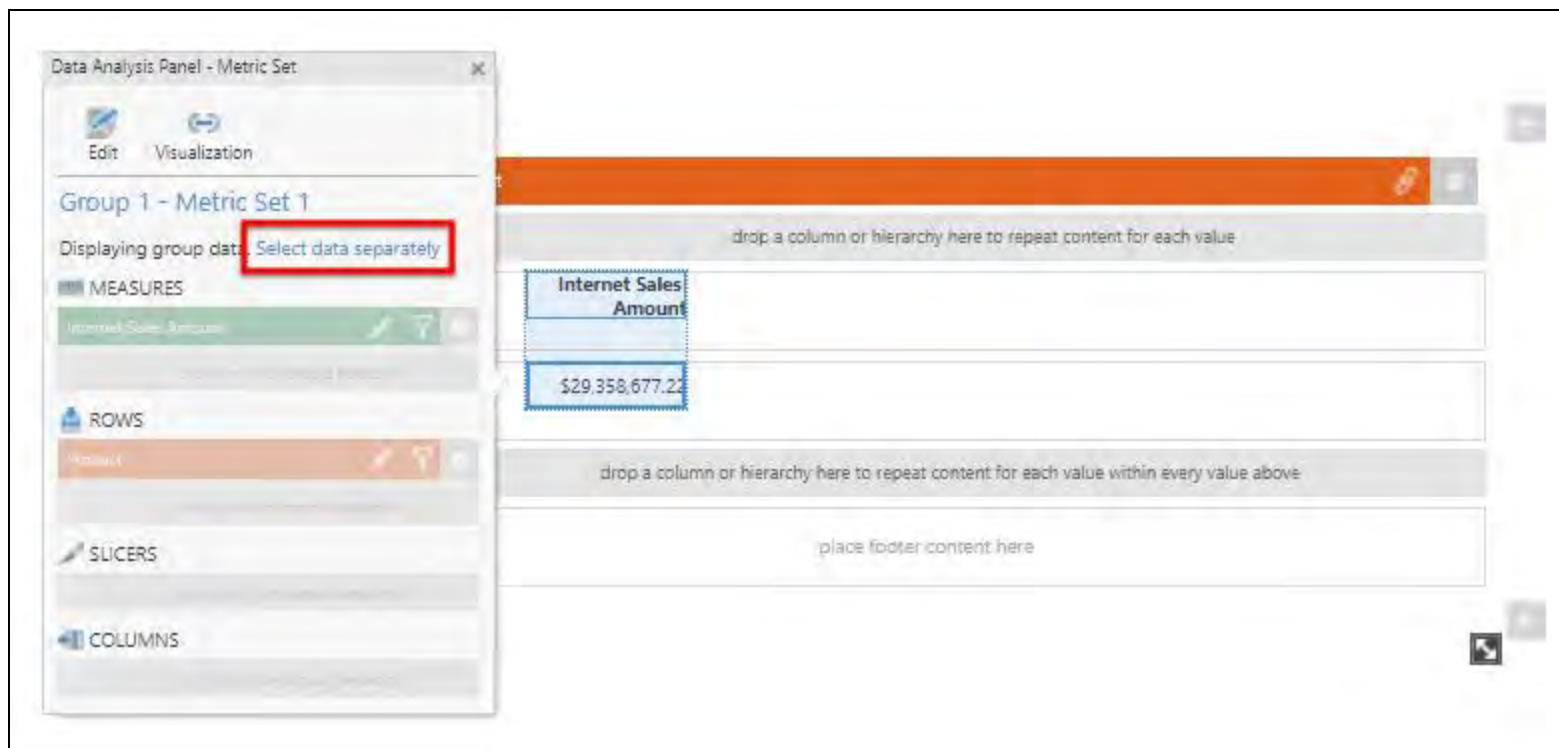
For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

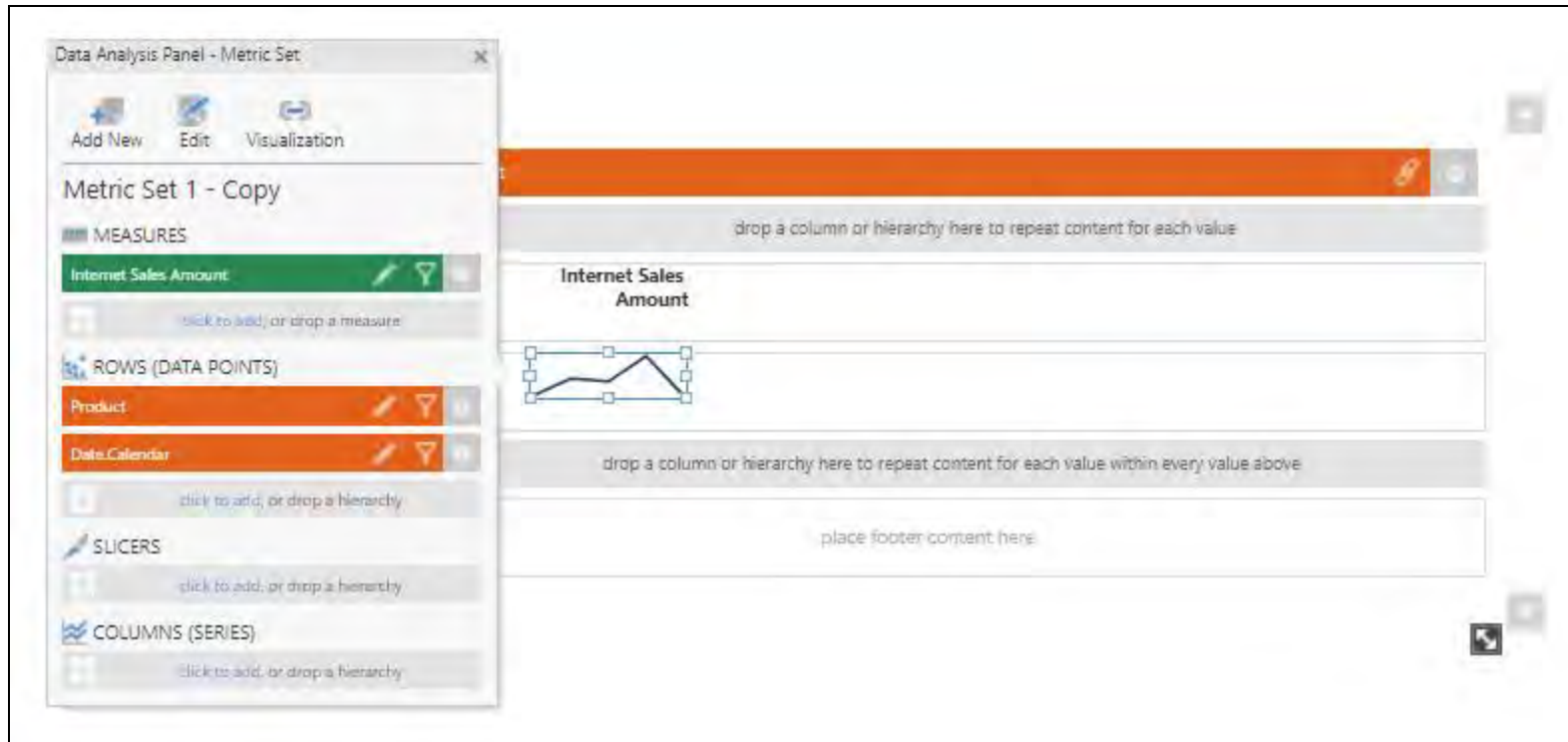
Add Sales by Date

This applies to: *Managed Dashboards, Managed Reports*

1. In the **Explore** window, expand the measures in the **Adventure Works** cube and drag the **Internet Sales Amount** measure to the body region. The corresponding data label and header are created automatically.
2. The **Data Analysis Panel** for this data label opened automatically, showing that it currently displays the [data from the scorecard group itself](#), e.g., data grouped only by each product. Click **Select data separately** if you want to create a separate metric set for this visualization that can display data grouped by additional hierarchies, such as by date in this example.



3. Now we can drag the **Date.Calendar** hierarchy from the Adventure Works cube to **Rows** in the Data Analysis Panel.
4. The data label would now normally [automatically re-visualize](#) to a sparkline, or you can choose **Re-Visualize** in the toolbar and then **Sparkline**.



Note: A sparkline is a variation of a line chart meant to indicate just the historical trend while using a small amount of space. The visualization toolbars for scorecards include other visualizations configured for a small space, including Horizontal Plot, Data Bar, and Bullet Graph.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)



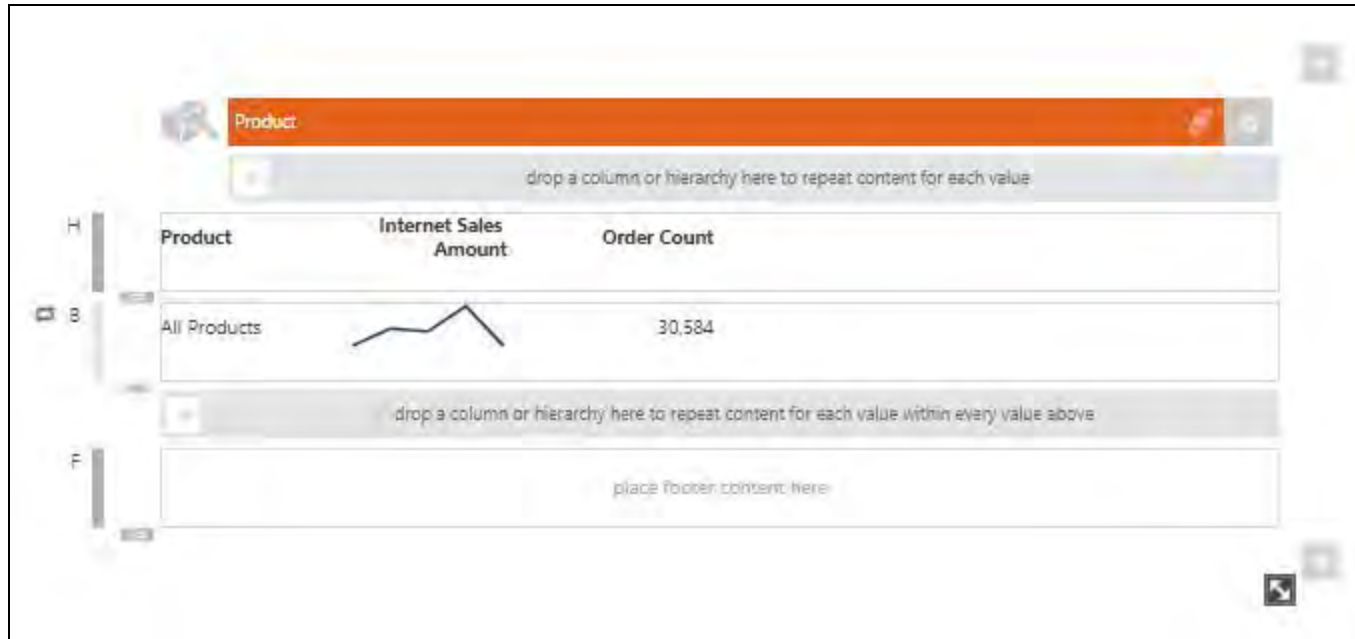
- Archive of documentation for Logi Symphony v24

- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Add Order Count

This applies to: *Managed Dashboards, Managed Reports*

1. From the **Explore** window, drag the **Order Count** measure to the body region.
2. The corresponding data label and header label are created automatically.



For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)



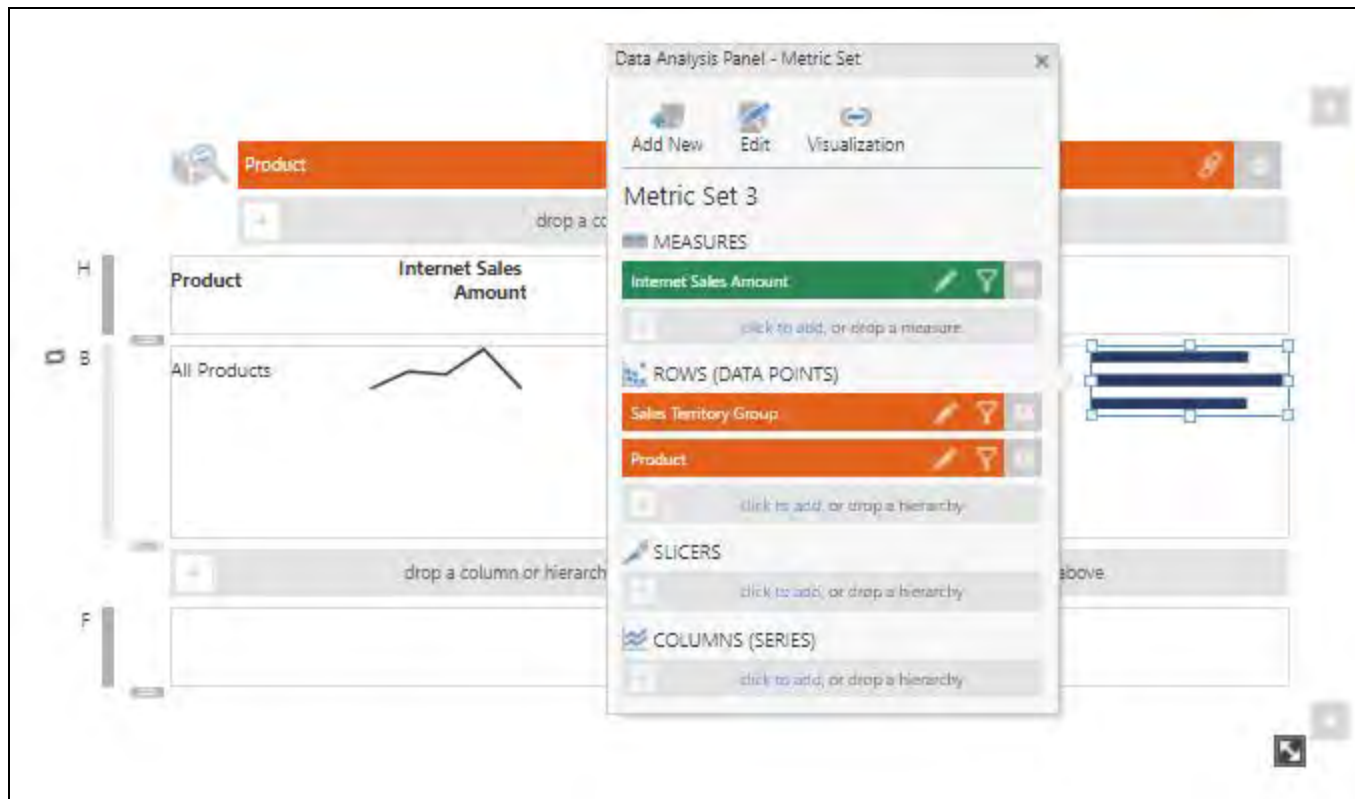
- Archive of documentation for Logi Symphony v24

- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Add Sales by Territory

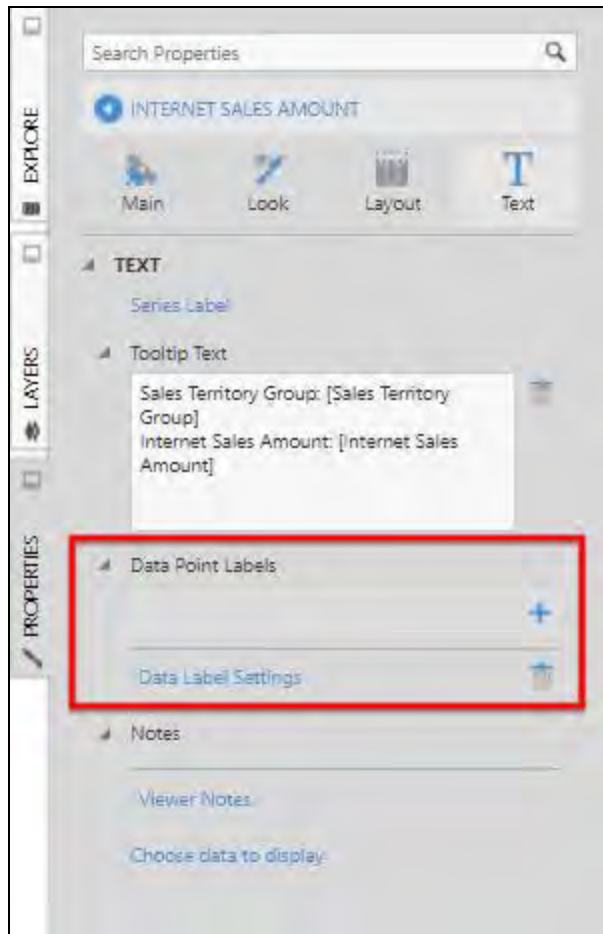
This applies to: *Managed Dashboards, Managed Reports*

1. In the toolbar, click **Data Visualization** and select **Data Bar**.
2. Drag the **Internet Sales Amount** measure onto the empty visualization. Notice that Symphony automatically added the Product grouping hierarchy, but kept this as a separate metric set.
3. Drag the **Sales Territory Group** hierarchy from the **Adventure Works** cube to **Rows**.

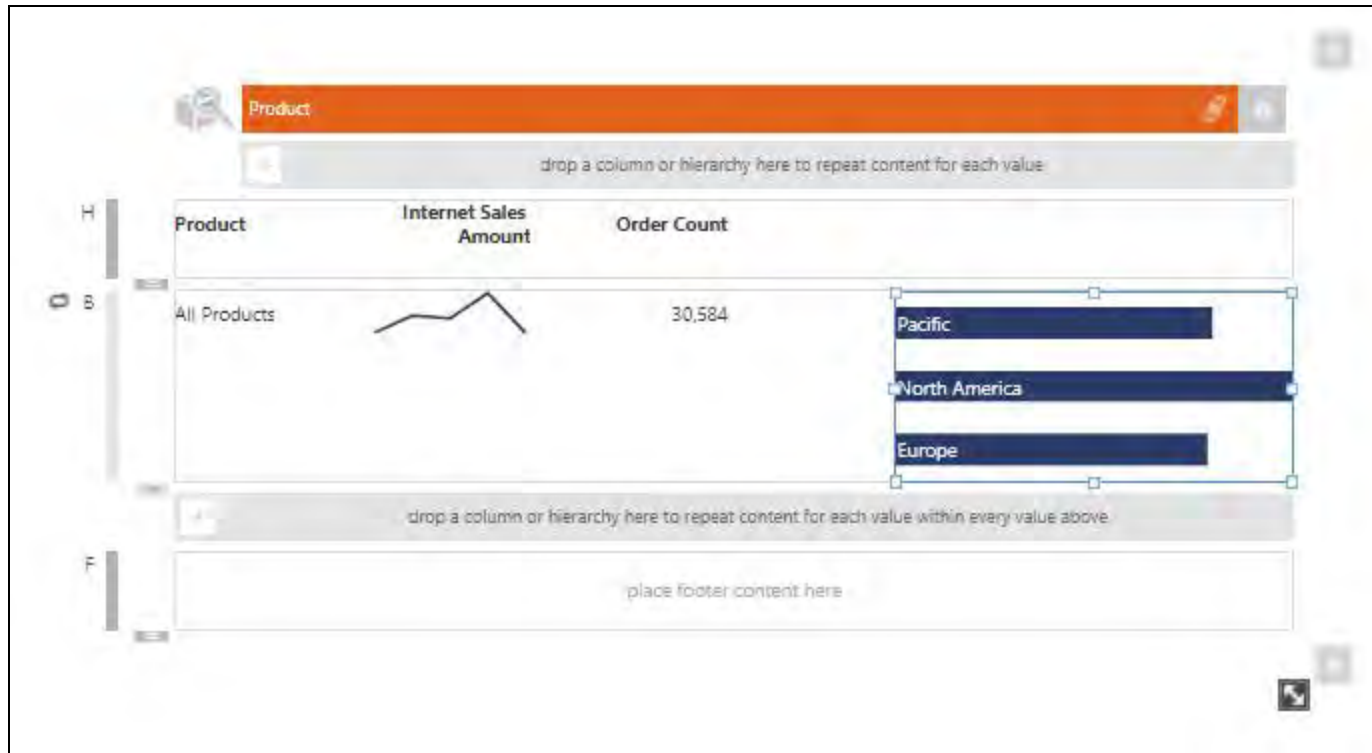


4. Select the **Visualization** button in the **Data Analysis Panel**, and click **More...** to expand the options.
5. Select to add Sales Territory Group under **Data Point Label**, or drag it there from elsewhere in the Data Analysis Panel or the Explore window.

6. To customize the data point label settings, click the paintbrush icon to the right of the Data Point Label heading to open the **Properties** window to the relevant section.



7. Set **Placement** to **Inside** and **Inside Alignment** to **Toward Start**.
8. Resize the visualization to be able to see the labels.



For more on Scorecard and Report design, see:

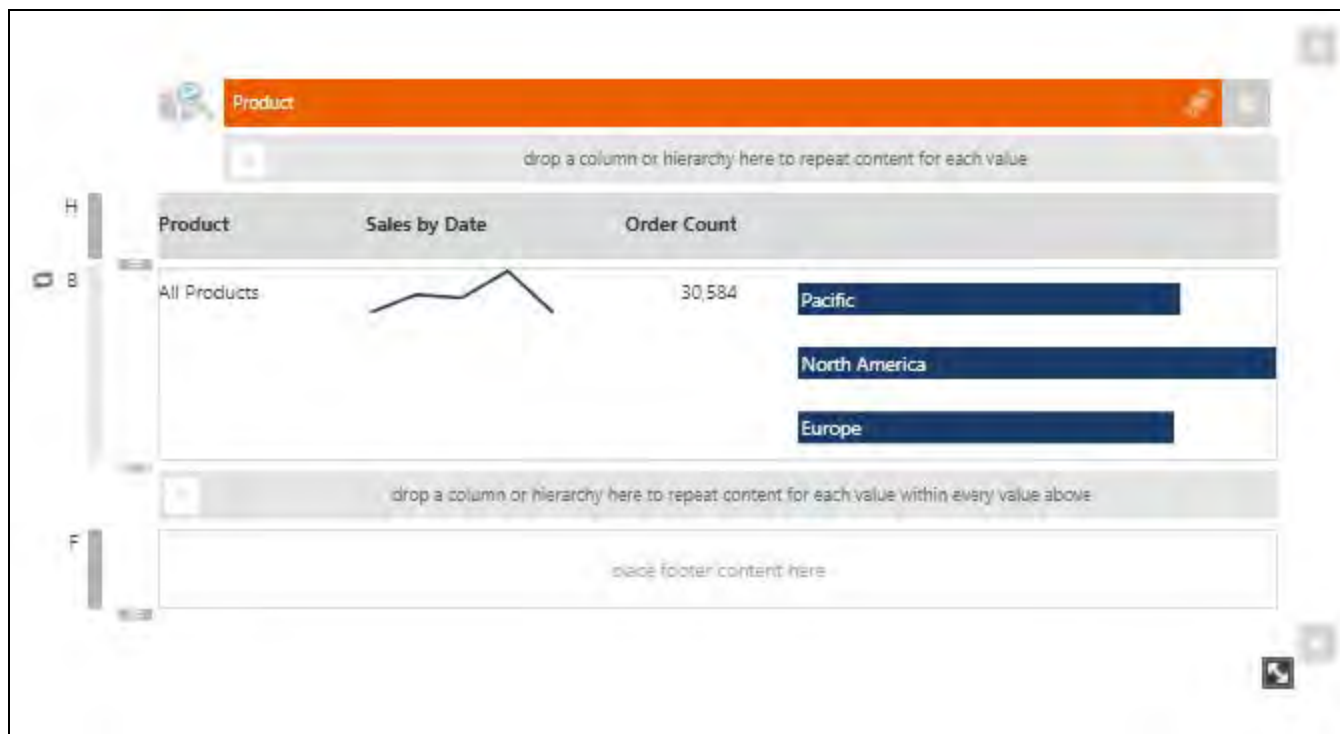
- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Adjust the Group Header

This applies to: *Managed Dashboards, Managed Reports*

The group header area appears only once for the list of products.

1. Set the background color of this area by clicking an empty spot inside it, opening the **Properties** window, and choosing the **Look** tab. In our example, we change **Background** to **Gainsboro**.
2. You can double-click the headers or use options in the toolbar or Properties window to customize their text.



For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)



- Archive of documentation for Logi Symphony v24

- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



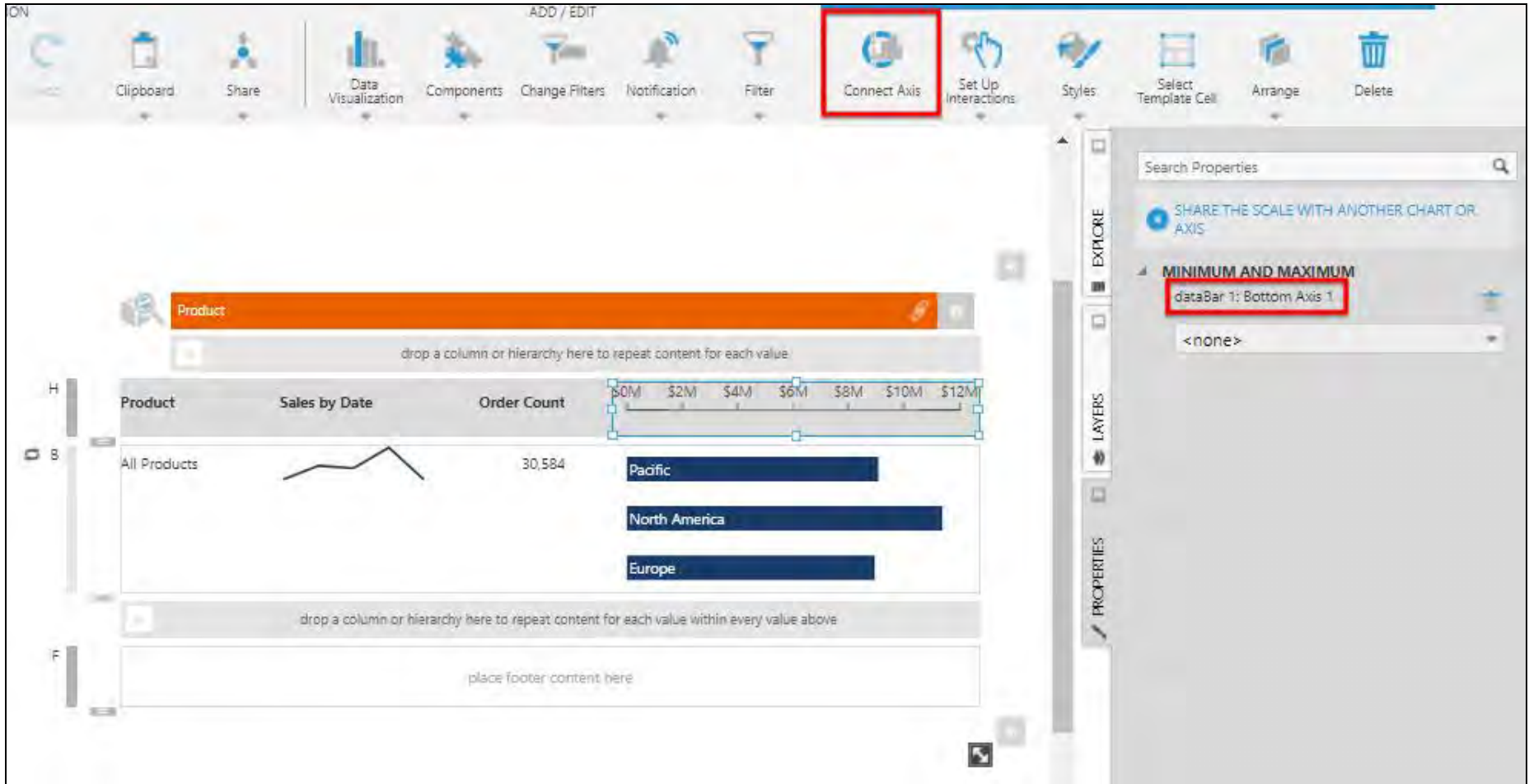
Add an Axis

This applies to: *Managed Dashboards, Managed Reports*

An axis can be added to the header or footer of a scorecard to use as a reference for visualizations such as data bars in the rows, just like you would use an axis in a regular bar chart.

1. In the toolbar, click **Data Visualization** and select **Axis**.
2. Drag the axis visualization to the header area, above the data bar, and resize it to match the visualization.

3. In the toolbar, select **Connect Axis** and select **dataBar 1: Bottom Axis 1** from the drop-down in the **Properties** window.



The screenshot displays the Logi Symphony v24 interface. The top toolbar contains various icons for editing and visualization. The 'Connect Axis' icon, which shows two overlapping axes, is highlighted with a red rectangle. Below the toolbar, a dashboard is visible with a 'Product' section. The dashboard includes a line chart for 'Sales by Date' and a bar chart for 'Order Count'. The 'Order Count' bar chart has a scale from \$0M to \$12M. The 'Properties' window on the right side of the interface shows the 'MINIMUM AND MAXIMUM' section, where 'dataBar 1: Bottom Axis 1' is selected from a dropdown menu, also highlighted with a red rectangle.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)



- Archive of documentation for Logi Symphony v24

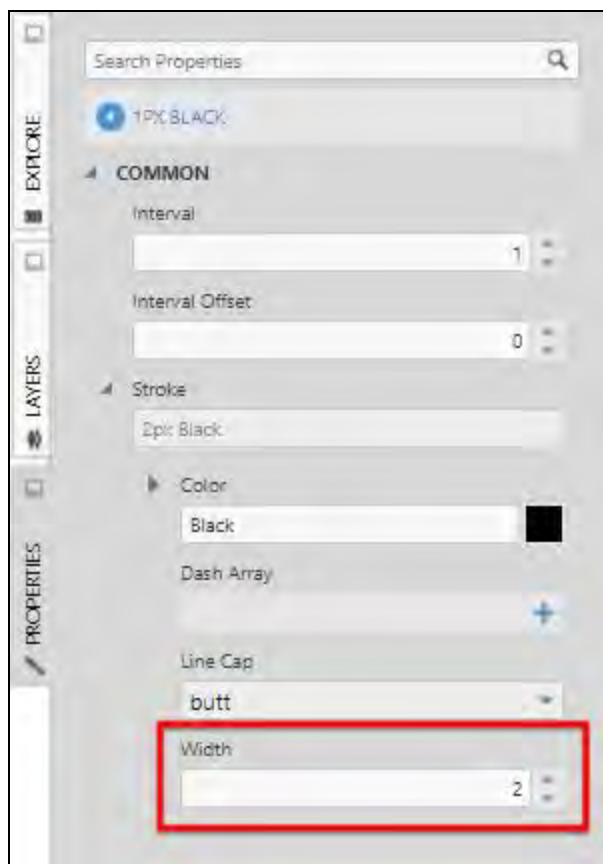
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Add a Line Separator

This applies to: *Managed Dashboards, Managed Reports*

To add a separator between each row (product) of the scorecard:

1. Select the body area and open the **Properties** window to the **Look** tab.
2. Click the **+** button under **Row Separator Line** to add one.
3. Click the new item labeled **1px Black** to customize those settings, expanding **Stroke** and setting **Width** to 2 pixels (2px).



For more on Scorecard and Report design, see:



- Archive of documentation for Logi Symphony v24

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

List of Keyboard Shortcuts

This applies to: *Managed Dashboards, Managed Reports*

A number of keyboard shortcuts are available in dashboards and other views, for basic design tasks such as cut/copy/paste, undo/redo, and more.

Cut, Copy and Paste

Shortcut keys	What it does	Undoable	Associated API / script function
Ctrl + X	Cut the selected controls or groups.	Yes	canvasService.cut()
Ctrl + C	Copy the selected controls or groups.	Yes	canvasService.copy()
Ctrl + V	Paste the selected controls or groups.	Yes	canvasService.paste()
Delete Key	Delete the selected controls or groups.	Yes	canvasService.removeCanvasObject()
Shift + Drag	Move a file to another folder (quick cut and paste) instead of copying.	No	fileSystemService.moveEntry()

Undo/Redo

Shortcut keys	What it does	Undoable	Associated API / script function
Ctrl + Z	Undo the last action.	N/A	canvasService.undo()
Ctrl + Y	Redo the last undone action.	N/A	canvasService.redo()

Zooming

Shortcut keys	What it does	Undoable	Associated API / script function
Alt + Keypad (+)	Increase zoom (i.e., zoom in).	No	N/A
Alt + Keypad (-)	Decrease zoom (i.e., zoom out).	No	N/A
Shift + Mouse Wheel	Increase or decrease zoom.	No	N/A

Positioning Controls

Shortcut keys	What it does	Undoable	Associated API / script function
Arrow Keys	Nudge the selected controls or groups by 1 px.	Yes	canvasService.nudge()
Ctrl + Arrow Keys	Nudge the selected controls or groups by 10 px.	Yes	canvasService.nudge()
Ctrl + Drag	Disable the snap grid while dragging.	Yes	N/A
Alt + Drag	Disable snapping to other controls on the canvas.	Yes	N/A
Shift + Drag	Ignore drop zones and template cells when dragging from the Explore window.	Yes	N/A
Shift + Resize	Resize both width and height proportionally, maintaining aspect ratio.	Yes	N/A

Multi-Select Controls and Group Them

Shortcut keys	What it does	Undoable	Associated API / script function
Shift + Click	Multi-select controls, groups, or template grid cells.	No	N/A
Ctrl + Click			
⌘ + Click			
G	Group selected controls or groups.	Yes	canvasService.group()
Shift + G	Ungroup selected groups.	Yes	canvasService.ungroup()
Ctrl + A	Select all. If something is selected in a template cell, select all in that template cell.	No	canvasService.selectAll()

Open or Close Dockable Windows

Shortcut keys	What it does	Undoable	Associated API / script function
Shift + E	Open Explore.	No	N/A
Shift + L	Open Layers.	No	N/A
Shift + P	Open Properties.	No	N/A
Shift + C	Open Script Editor.	No	N/A

Shortcut keys	What it does	Undoable	Associated API / script function
Shift + R	Open Parameters.	No	N/A
Shift + D	Open Data Preview.	No	N/A
Shift + A	Open Labels.	No	N/A

Script Editor Shortcuts

See [Using the Script Editor](#).

Other Shortcuts

Shortcut keys	What it does	Undoable	Associated API / script function
Ctrl + `	Toggle between View and Edit mode.	No	canvasService.isEditMode
Shift + Drag	Moves data assigned from one place to another instead of copying it in the Data Analysis Panel Visualization tab	No	N/A

Data Visualization Shortcuts

Shortcut keys	DV	What it does
Ctrl + C ⌘ + C	Table	Copy selected text in a table cell to the clipboard in View mode .
Shift + Click	Table	Select the range of rows or columns between the clicked one and the original selection (inclusive).
Ctrl + Click ⌘ + Click	Table	Select or de-select individual rows or columns while maintaining the rest of the current selection.
Ctrl + Shift + Click ⌘ + Shift + Click	Table	Select the range of rows or columns between the clicked one and the previous selection (inclusive) while maintaining the rest of the current selection.
Shift + Drag Ctrl + Drag ⌘ + Drag	Chart	Select the data points within the area between where you pressed and where you released the mouse button while maintaining the previous selection.

For more information, see:



- Archive of documentation for Logi Symphony v24

- [Design Overview](#)
- [Using the Status Bar](#)
- [Layers and Groups](#)
- [Using Dockable Windows](#)
- [Using the Script Editor](#)

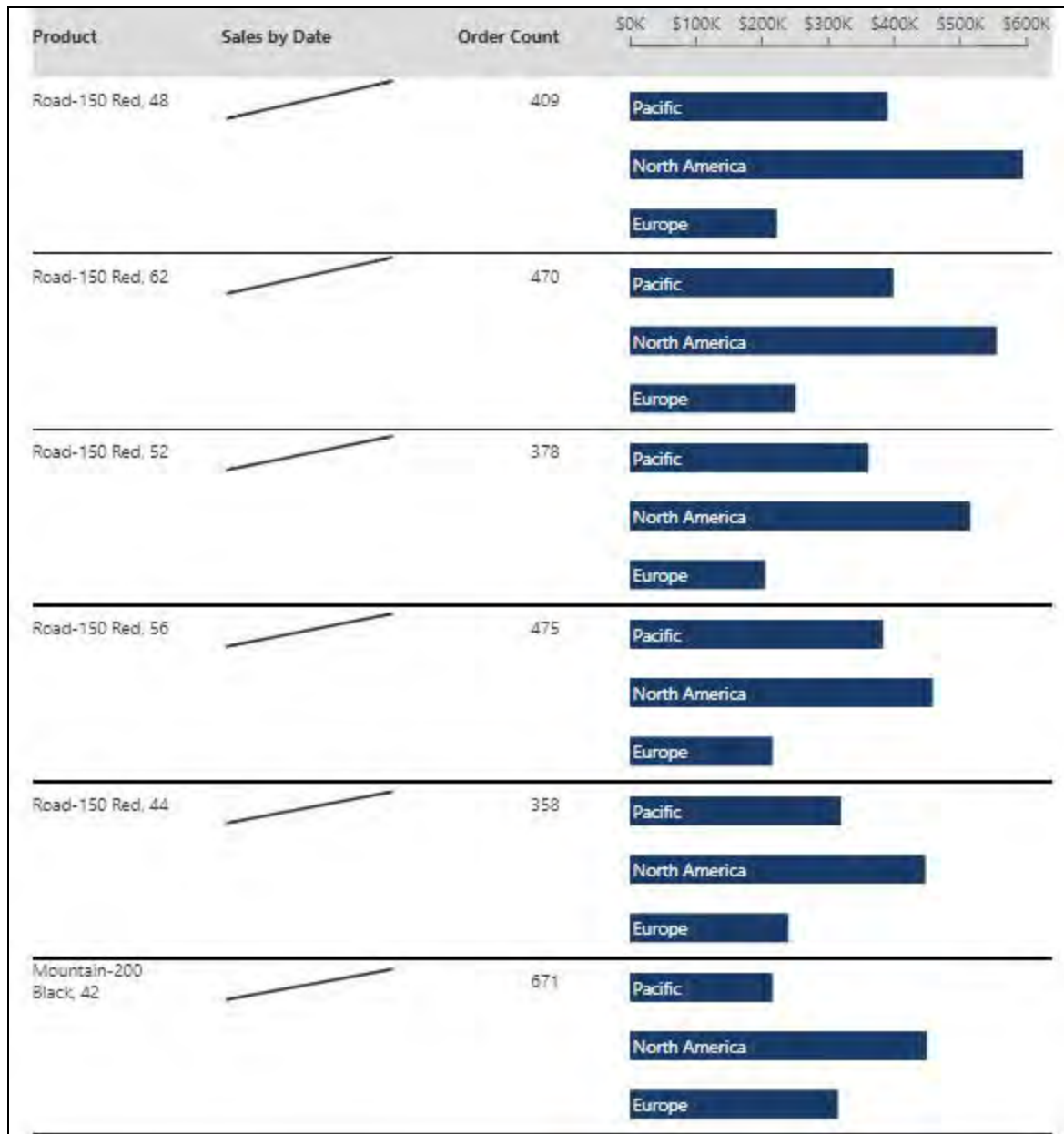


- Archive of documentation for Logi Symphony v24

View and Edit Your Scorecard

This applies to: *Managed Dashboards, Managed Reports*

1. Click **View** in the toolbar to see the completed scorecard.
2. Hover a header such as **Sales by Date** and click the **AZ** icon to open the sort and filter popup, and sort by **Descending** order, for example.



For more on Scorecard and Report design, see:



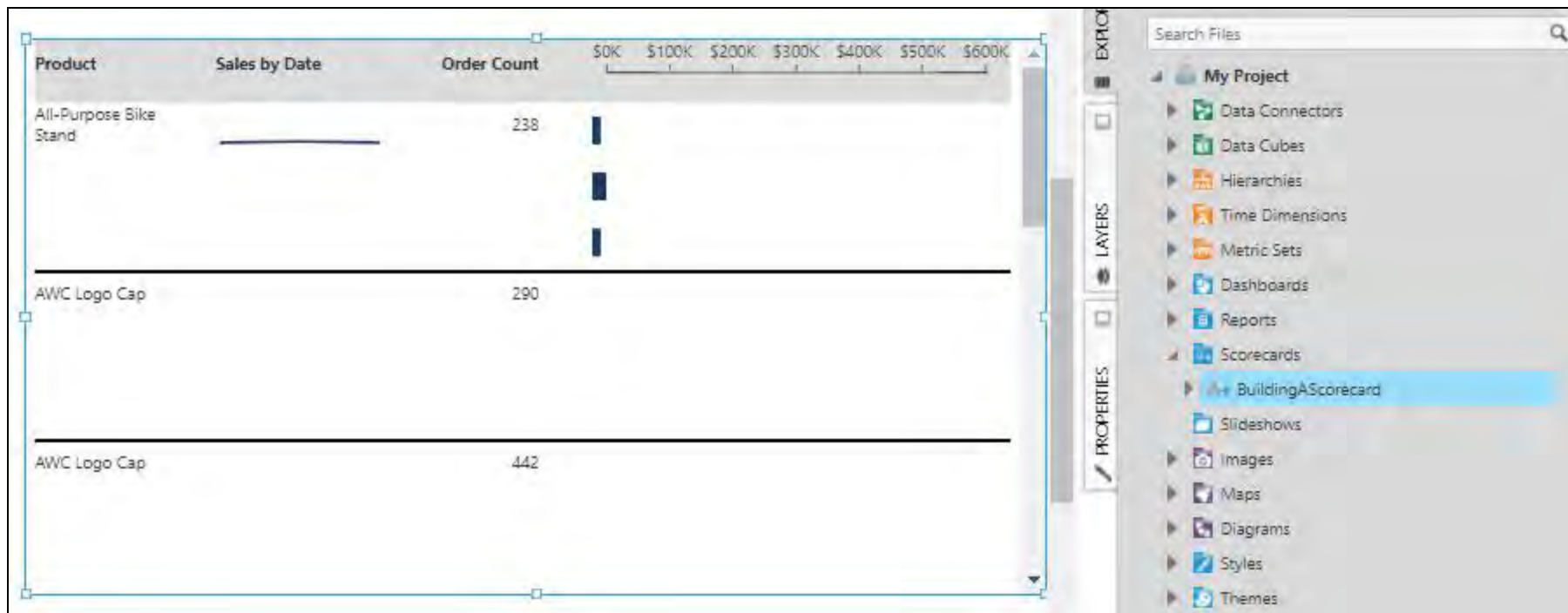
- Archive of documentation for Logi Symphony v24

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Use a Scorecard in a Managed Dashboard

This applies to: *Managed Dashboards, Managed Reports*

While editing a dashboard, drag the scorecard from the **Explore** window to your canvas. Then reposition and resize the scorecard as you would with any other visualization.



Note: You can also drag separate elements from the scorecard, such as metric sets or visualizations.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)



- Archive of documentation for Logi Symphony v24

- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Use a Dashboard in a Report

This applies to: *Managed Dashboards, Managed Reports*

You can use an existing view such as a dashboard in your report, scorecard, or small multiple.

Reports, scorecards, and small multiples are able to repeat the same view multiple times, each for a different parameter value. You might also use a report to format multiple dashboards into pages that can be exported to PDF.

Example Dashboard

In this example, we will use *My First Dashboard* from the *Getting Started project*.

Open your instance and switch to the *Getting Started* project.



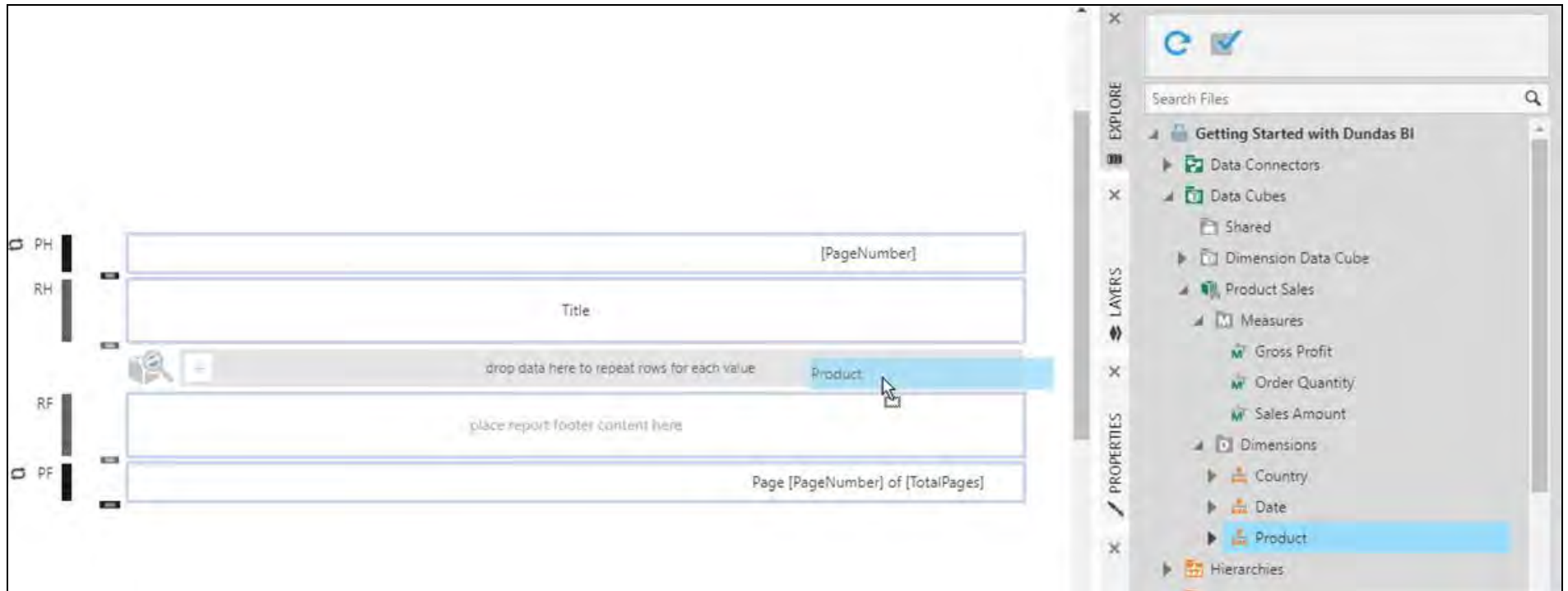
My first dashboard is found in this project.

Repeating a Dashboard

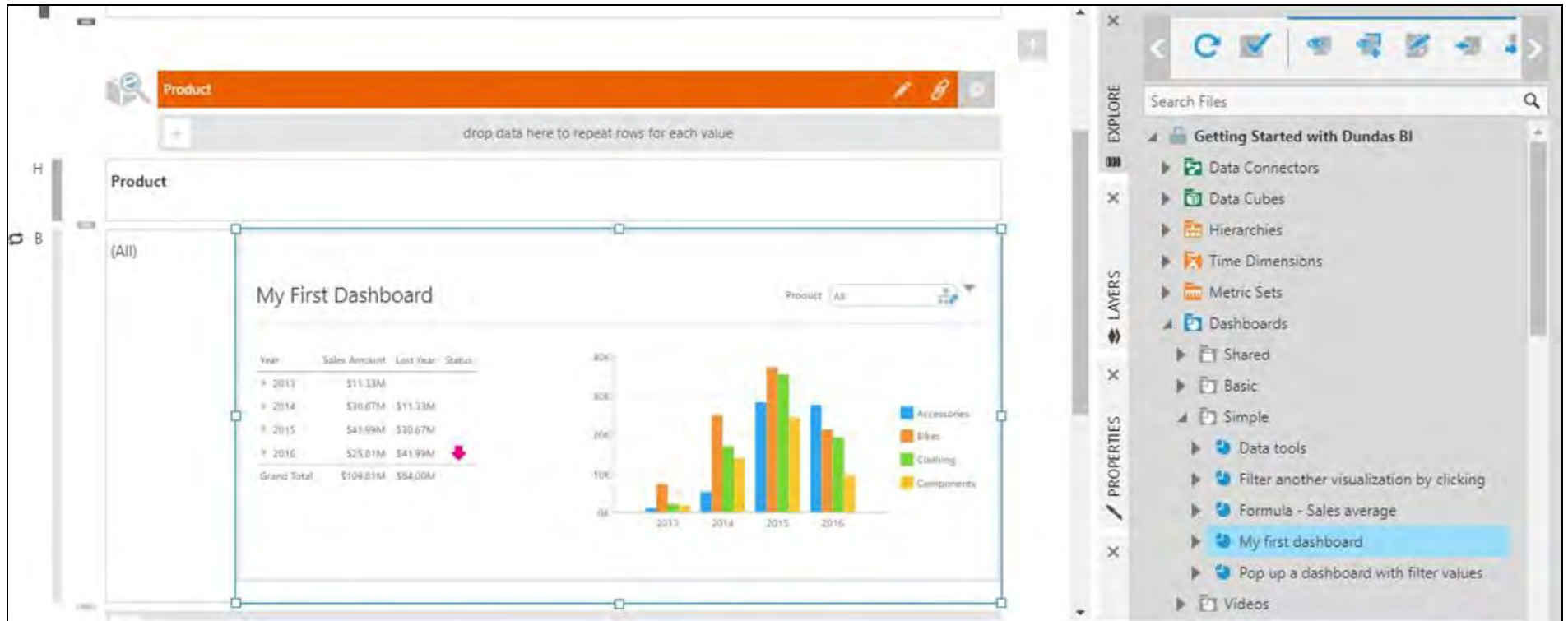
From the main menu, click **New** and select **Report**, for example, to create a new report. The steps are similar for scorecards and small multiples.

In the **Explore** window, locate the *Product Sales data* cube and drag *Product* onto the grouping drop area (drop data here...).

Symphony automatically creates a data label and header for the grouping hierarchy, which are optional and you can delete them if preferred.

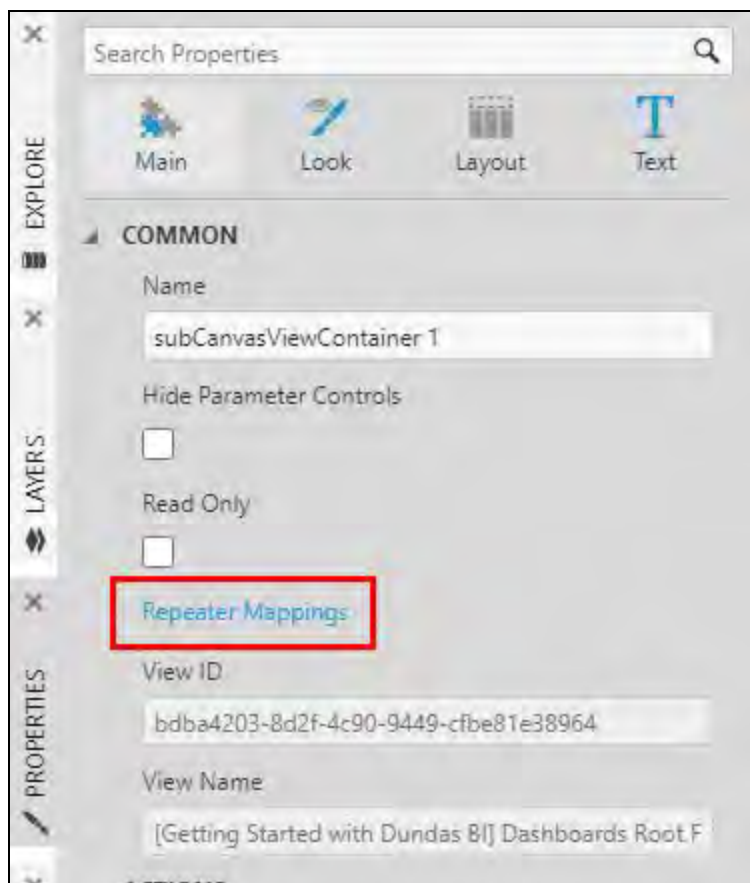


Locate *My first dashboard* and drag it onto the Group Body region. Resize it as needed to fit the dashboard.



With the dashboard selected, open the **Properties** window.

Click **Repeater Mappings**.



In the *Set Up Parameter Mappings* dialog, click **Add new mapping**.

Select **Product (Filter Value)** under Repeater Group and **Product** under *My First Dashboard*.



Set Up Parameter Mappings

This allows you to set up how source information is passed to the target when the action is run.

CURRENT PARAMETER MAPPINGS

Product (filter value) to Product




Add new mapping

+

Select one source from the left to map to one target view parameter on the right. If a URL is being used as the target, specify the placeholder text from your URL so it can be replaced with the mapped source data.

SOURCE

TARGET

▼ Repeater Group

☒ Product (Filter Value)

☐ Product (Level Value)

My First Dashboard

☐ Brush View Parameter

☒ Product

Click the **Submit** button at the bottom of the dialog, and switch to [View mode](#).

Sales by Product

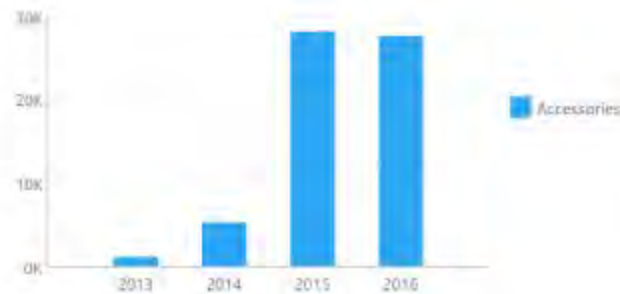
Product

Accessories

My First Dashboard

Product Accessories

Year	Sales Amount	Last Year	Status
2013	\$20.24K		
2014	\$92.74K	\$20.24K	
2015	\$590.24K	\$92.74K	
2016	\$568.84K	\$590.24K	↓
Grand Total	\$1,272.06K	\$703.21K	

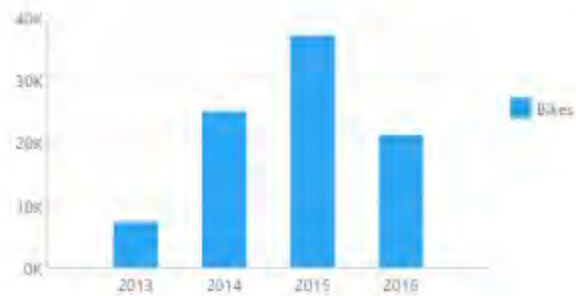


Bikes

My First Dashboard

Product Bikes

Year	Sales Amount	Last Year	Status
2013	\$10.66M		
2014	\$26.49M	\$10.66M	
2015	\$34.91M	\$26.49M	
2016	\$22.56M	\$34.91M	↓
Grand Total	\$94.62M	\$72.06M	



With the repeater mappings set up, each copy of the dashboard is filtered to a single product category in our example: each bar chart has only a single series, and the filter above it shows the corresponding product category.

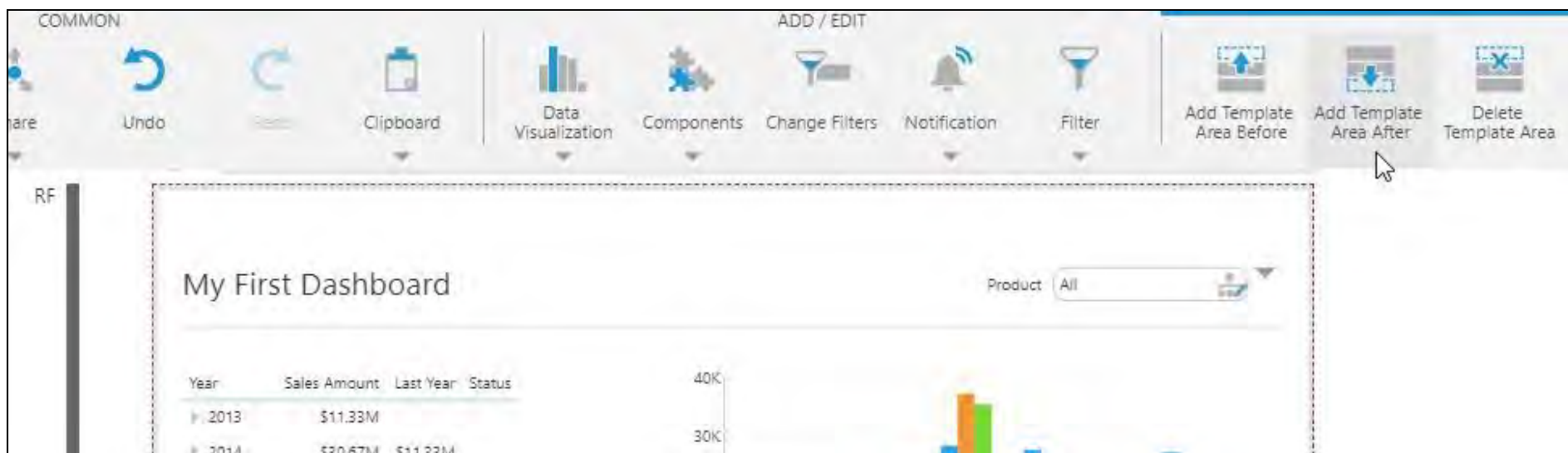
When the view contains filters that you don't want displayed while embedded inside of another view, you can go to the **Properties** window with the view selected in edit mode, and enable the **Hide Parameter Controls** option.

Exporting Dashboards

Rather than repeat a dashboard or view multiple times, you can also use a report to format dashboards or other views into pages to be exported into a single PDF, which can then be [shared or saved](#), [delivered by e-mail](#), or printed.

You don't necessarily need to drag data to repeat any content in your report, and can simply drag views such as dashboards to the Report Footer region, for example.

To add additional template regions, select a region such as the Report Footer. If the region already contains content, you can click the area labeled RF or similar on the left, or select content inside the region and click **Select Template Cell**.



Click **Add Template Area After** or **Add Template Area Before** in the toolbar, then drag another view into the new region.

For more information, see:

- [Symphony Managed Reports](#)
- [Build a Symphony Scorecard](#)



- Archive of documentation for Logi Symphony v24

- [Create Small Multiples](#)
- [Using a View Container](#)
- [Filter Child Dashboards From a Parent Dashboard](#)
- [Design Tips for Reports and Scorecards](#)



Share Axis Scales in a Scorecard

This applies to: *Managed Dashboards, Managed Reports*

By default, copies of a chart that are generated in a report, scorecard, or small multiple share the same numeric and date/time axis scales. However, there may be cases where you want to change this behavior. For example,

if you have a line chart where it is more important to see the shape of the curve than to compare Y-values. You can also share scales between copies of bullet graphs and other gauges.

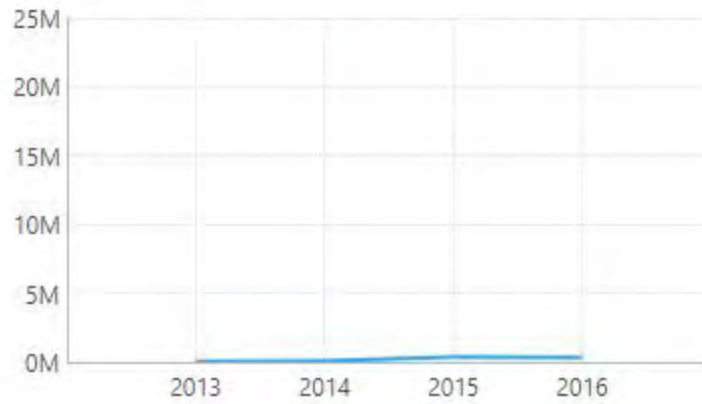
If you want to share axis scales between two different charts in edit mode, use the Share the **scale with another chart or axis** option as described in described in [Using Chart Properties](#). Gauges have a similar option for sharing their scales.

Stop Sharing Scales With Copies

The left (Y) axes in each chart normally all share the same range by default when repeated in a report, scorecard, or small multiple, as in the following report example:

North America

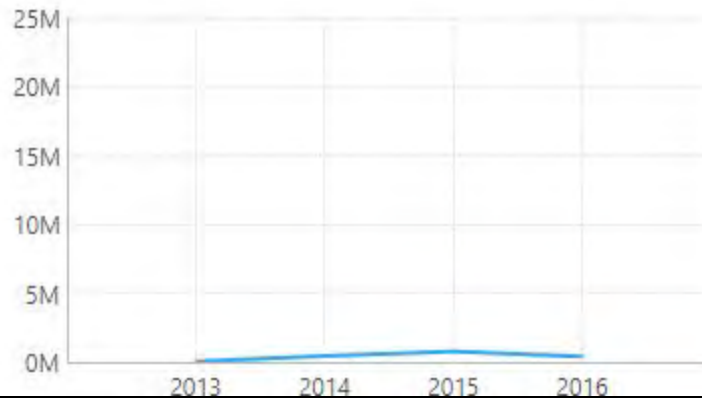
Accessories



Bikes



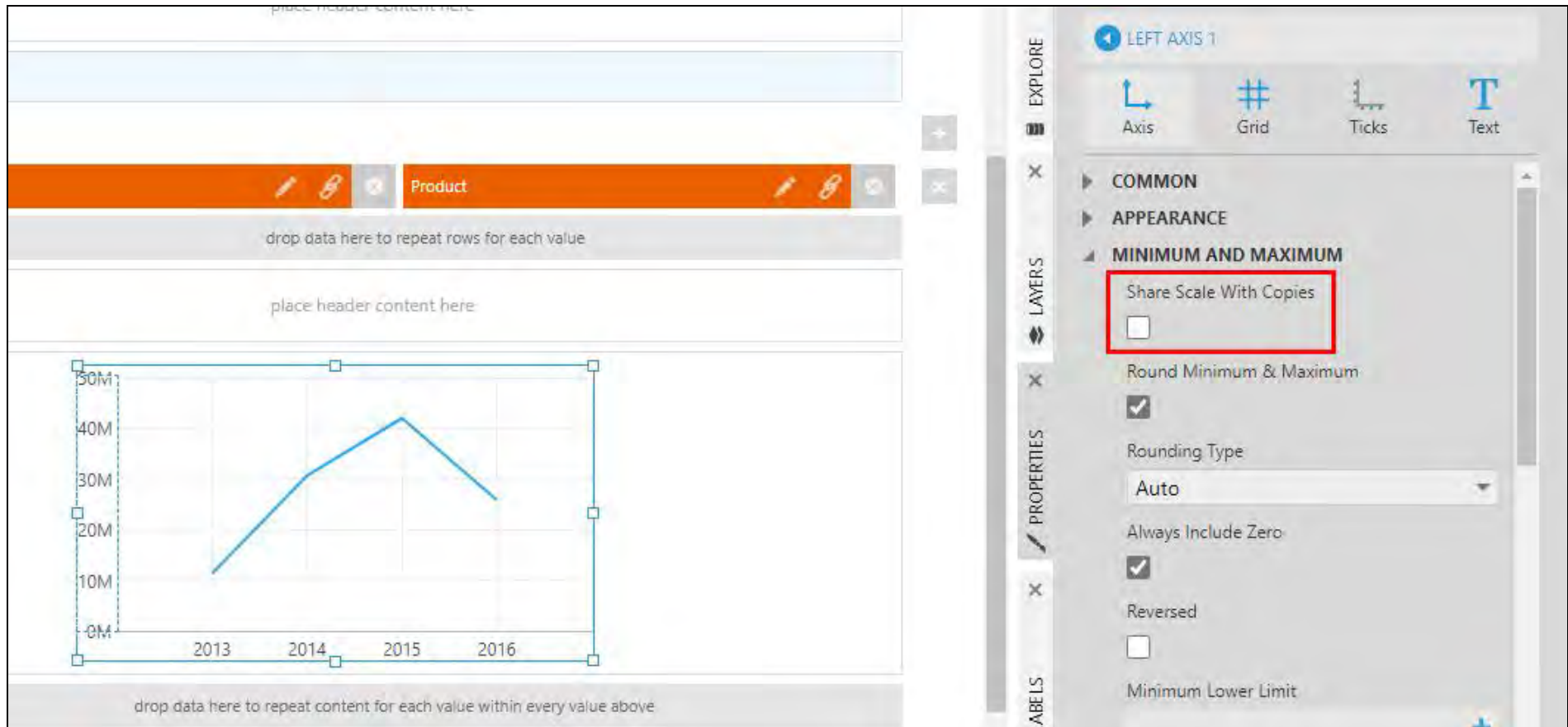
Clothing



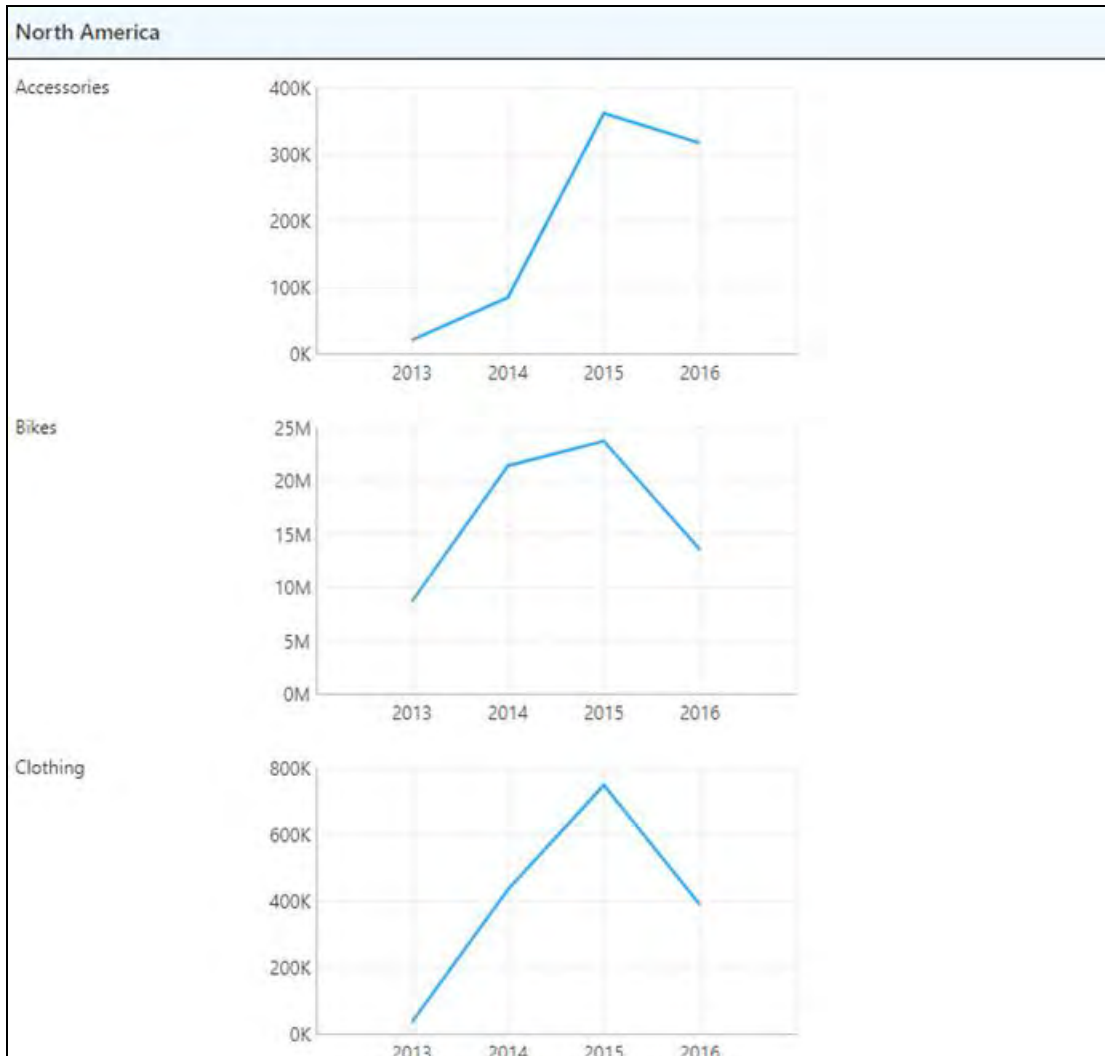
In this example, the values vary significantly between each chart, leading to more unused space and possible difficulties interpreting the trends of each line.

To prioritize viewing the data in each chart over comparing the magnitudes between them, you can choose not to share the same range of values in each axis.

When editing, select the chart and click its left axis to select it, and open the **Properties** window (or right-click the left axis and choose **Axis Properties**). Uncheck the **Share Scale With Copies** property.



When viewing our example with this property unchecked, each chart can now have a separate range of values along its left axis.



This property works the same way for date/time scales. For category scales, this option is normally disabled by default but you can enable it if the same categorical data (such as text) should be in the same place along the axis in each chart to make them comparable.

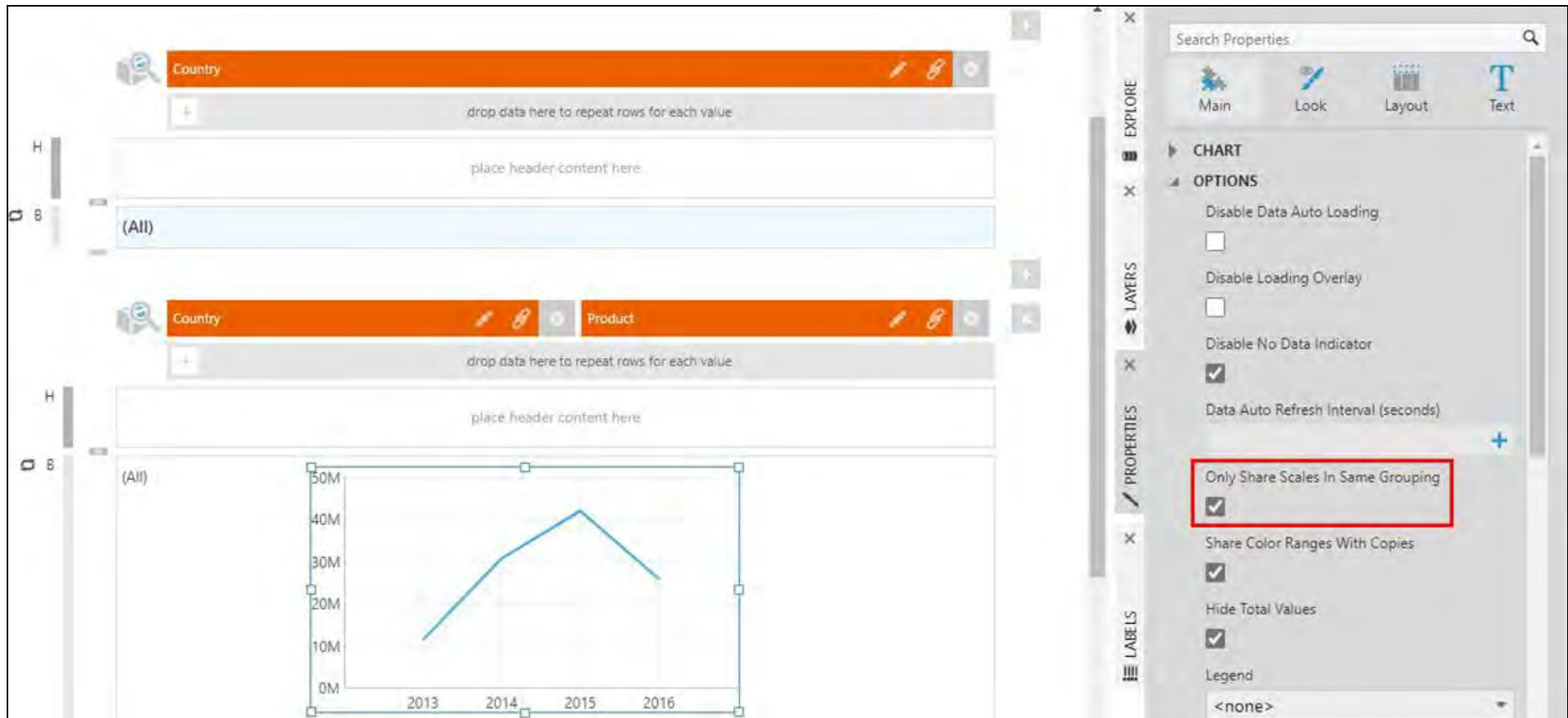
Gauges have a similar option in their [scale properties](#) that you can enable.

Only Share Scales in the Same Grouping

Rather than giving every chart or gauge its own range of values along the axis, you can enable the **Share Scale With Copies** property but share scales only within each grouping.

In this report example, there is a parent or outer grouping for each continent, and a child or inner grouping displaying a chart for each product category within each continent.

Selecting the chart or gauge, open the **Properties** window and select the **Only Share Scales In Same Grouping** property option.



The screenshot displays a Logi Symphony report interface. The report is structured with two main sections, each representing a continent (indicated by the 'Country' header). Each section contains a chart for a specific product category (indicated by the 'Product' header). The charts show data for the years 2013, 2014, 2015, and 2016. The y-axis represents values in millions (M), ranging from 0M to 50M. The x-axis represents the years. The Properties window on the right is open, showing the 'CHART' section. The 'Only Share Scales In Same Grouping' property is checked, indicating that the charts share the same scale within each continent grouping.

Properties Window - CHART OPTIONS:

- Disable Data Auto Loading: ☐
- Disable Loading Overlay: ☐
- Disable No Data Indicator: ☒
- Data Auto Refresh Interval (seconds):
- Only Share Scales In Same Grouping: ☒**
- Share Color Ranges With Copies: ☒
- Hide Total Values: ☒
- Legend:

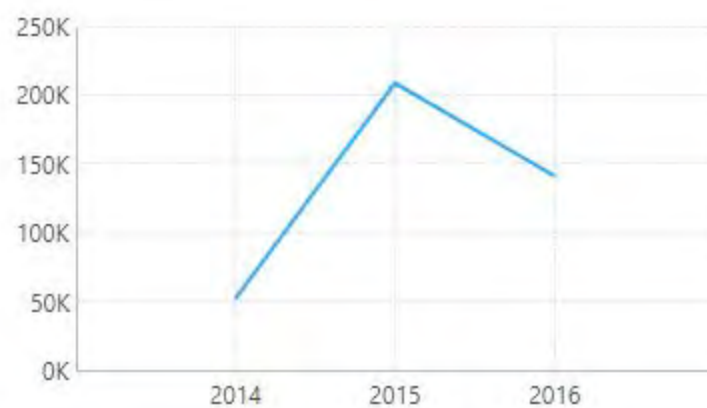
When viewing this example, the charts share the same range of values in their left axes but only within each continent's values.

Europe

Accessories



Clothing



North America

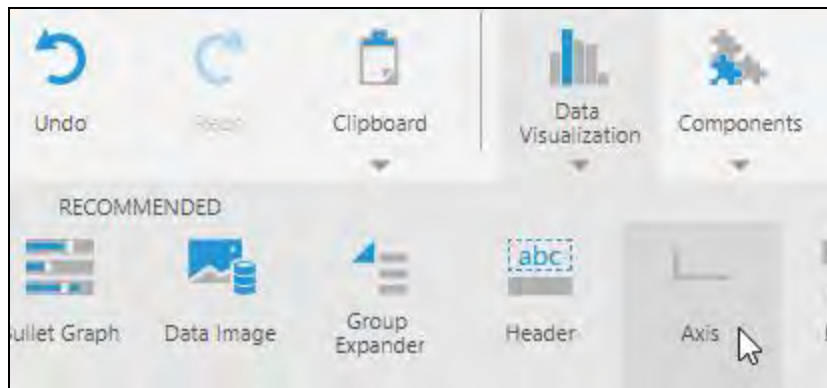
Accessories



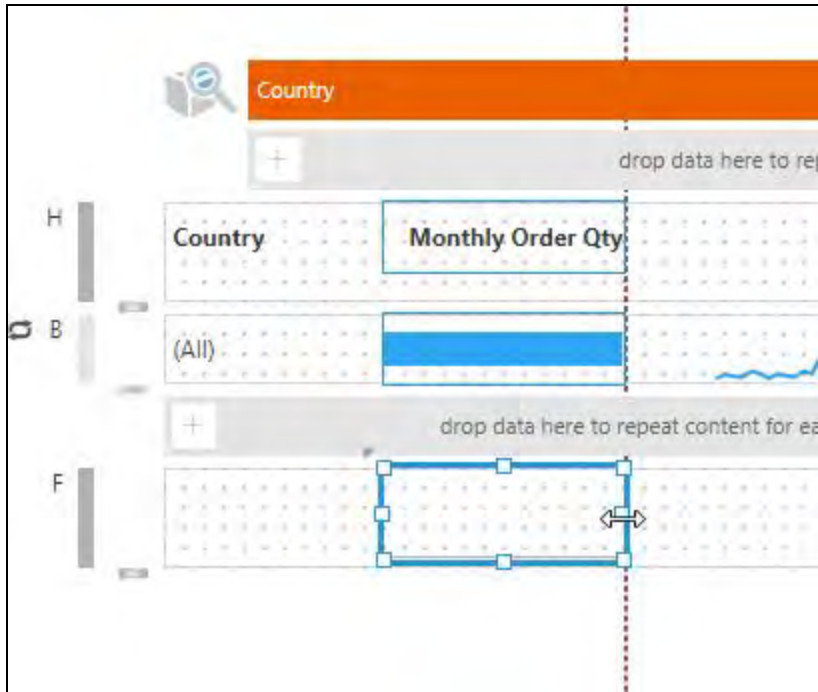
Connecting a Separate Axis

Another way for charts, bullet graphs, and linear gauges to share an axis scale is to display the axis separately in a header or footer and connect it to the chart or gauge.

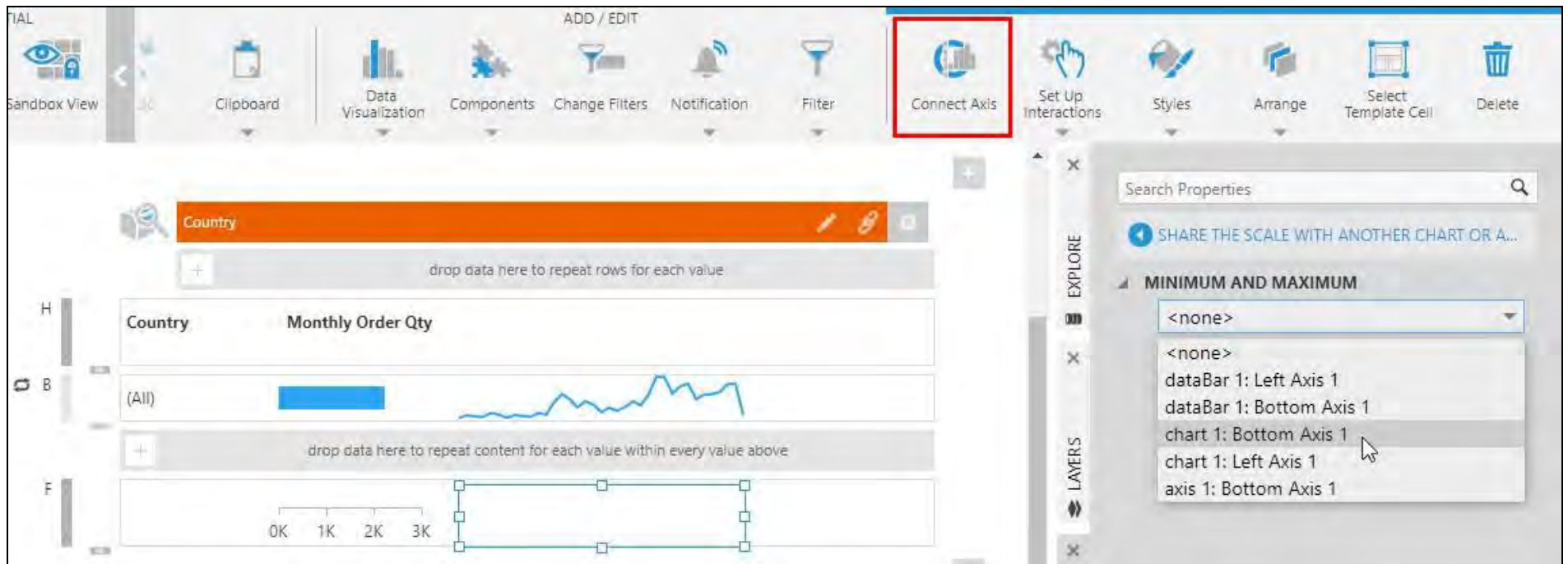
When editing a report, scorecard, or small multiple, click **Data Visualization** in the toolbar and you can find **Axis** located under *Recommended*.



Position it in a header or footer and ensure its outer boundaries are positioned to [line up](#) with the chart or gauge, as in the following scorecard example:



In the toolbar, click **Connect Axis**. In the **Properties** window, select the chart or gauge in the drop-down.



The screenshot shows the Logi Symphony v24 interface. The top toolbar includes buttons for 'Sandbox View', 'Clipboard', 'Data Visualization', 'Components', 'Change Filters', 'Notification', 'Filter', 'Connect Axis' (highlighted with a red box), 'Set Up Interactions', 'Styles', 'Arrange', 'Select Template Cell', and 'Delete'. The main workspace displays a dashboard with a 'Country' header, a 'Monthly Order Qty' chart, and a gauge. The right sidebar shows the 'EXPLORE' panel with a search bar and a list of axes to connect to.

Note: If you are connecting axes with a category scale type, the axis will initially display keys until you drag the original data again onto the separate axis.

When viewing, the data points in the charts and the gauge pointers will line themselves up accurately against the axis scale in the header or footer, which also means they are sharing the same axis range.



For more information, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design Tips for Reports and Scorecards](#)
- [Create Small Multiples](#)
- [Using Chart Properties](#)
- [Working With Gauges](#)



Sorting and Filtering a Report or Scorecard

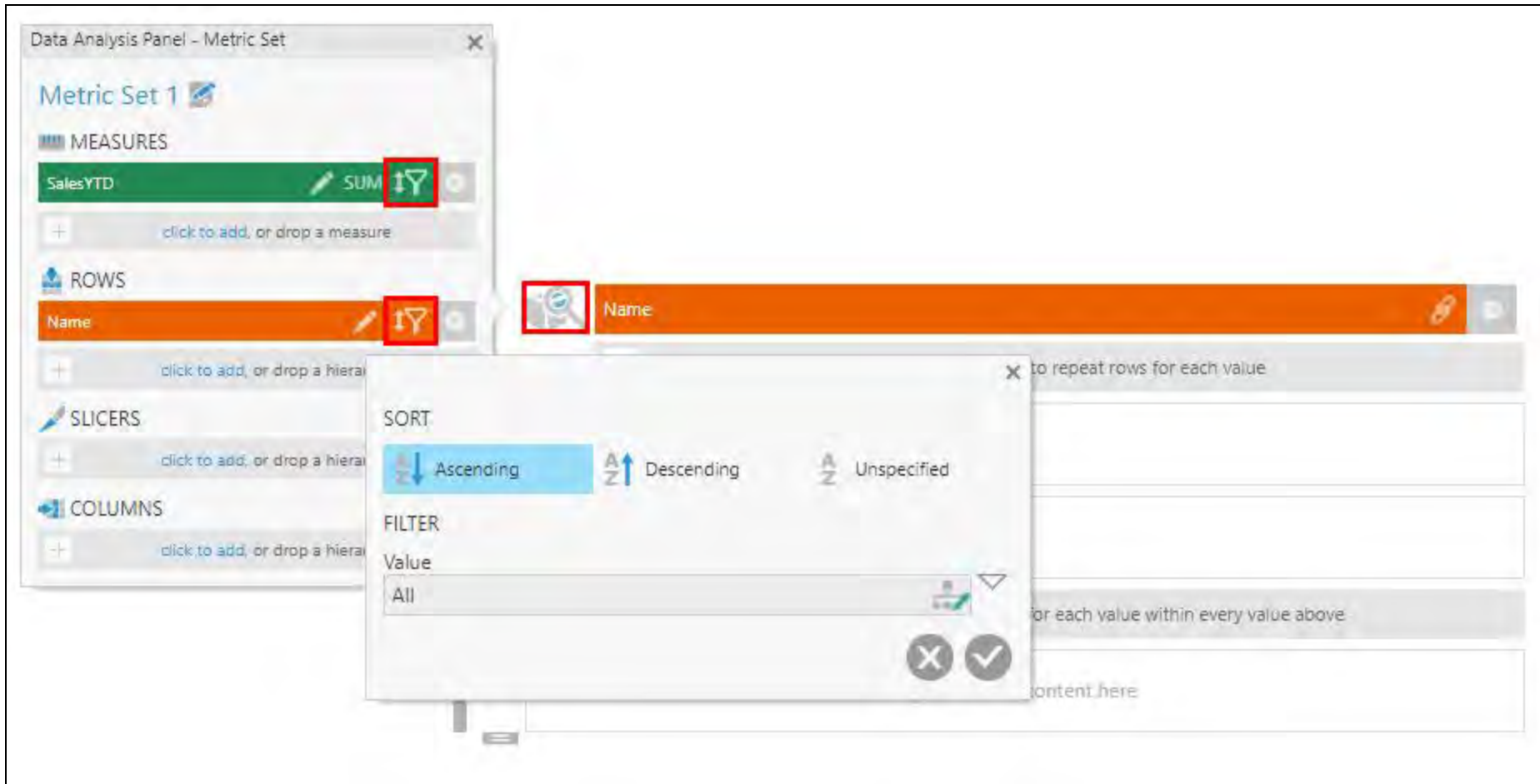
This applies to: *Managed Dashboards, Managed Reports*

There are various ways to sort and filter rows in a report or scorecard. These options are also similar for [small multiples](#).

Reports and scorecards use their own metric set to determine the rows they display and their order, which you can sort and filter like you can a normal metric set.

Sort & Filter While Editing

When editing a report or scorecard, you can change the sorting and filtering to determine the settings that take effect when first viewed. Click the Data Analysis Panel icon to the left of the grouping area to open this panel for that group's metric set.



You can then click the sort & filter icon for any measure or hierarchy to sort or filter the report or scorecard by its values.

If the measure or hierarchy you want to sort or filter by is not already selected, you can add it here. For example, you can **click to add data** from the same data source or a new formula, or drag data from the **Explore** window.

Add a hierarchy to Slicers if it's meant only for filtering. If you add a measure, a data label will initially be added to display its values, but you can edit the measure and select its **Hidden** option or delete the data label if you intend only to sort or filter by its values.

After opening the group's Data Analysis Panel, the group metric set becomes selected as indicated by the blue outline around the clicked icon. When selected, you can preview the report/scorecard data and its sorting by opening the **Data Preview** window at the bottom of the screen.

Data Analysis Panel - Metric Set

Metric Set 1

MEASURES

- SalesYTD Expression   SUM  
- SalesYTD  SUM  
- SalesLastYear  SUM  

click to add, or drop a measure

ROWS

- Name   

click to add, or drop a hierarchy

SLICERS

click to add, or drop a hierarchy

COLUMNS

click to add, or drop a hierarchy

Name

drop data here to repeat rows for each value

Name	SalesYTD
(All)	52,751,209.9534

drop data here to repeat content for each value within every value above

SCRIPT EDITOR  PARAMETERS  DATA PREVIEW 

Group 1

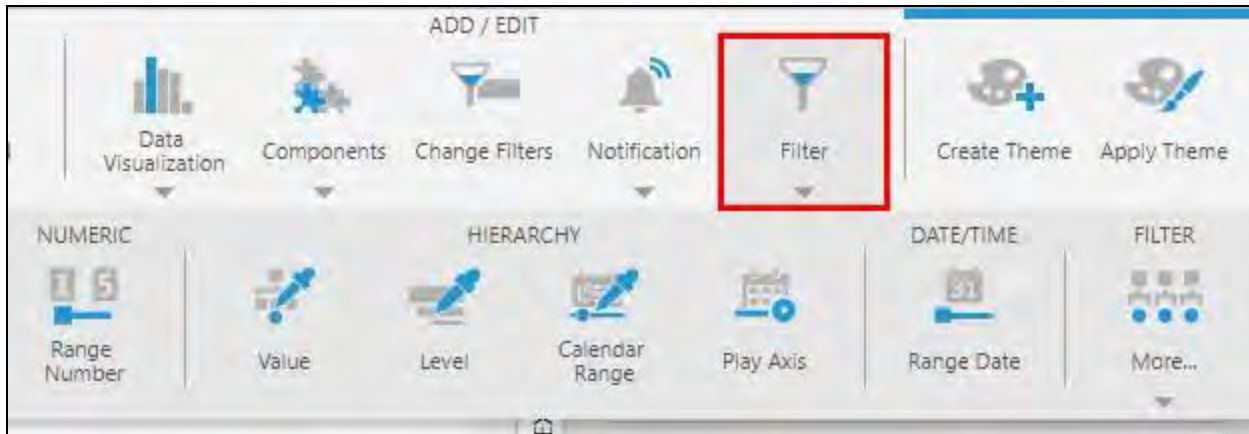
Performance Measurements (3) Warnings (0)

Name	SalesYTD Expression	SalesYTD	SalesLastYear
Grand Total	20,035,854.5181	52,751,209.9534	32,715,355.4353
Southeast	-1,386,404.1803	2,538,667.2515	3,925,071.4318
Northeast	-1,204,972.0895	2,402,176.8476	3,607,148.9371
Central	-132,838.9587	3,072,175.1180	3,205,014.0767

Using this Data Analysis Panel, you can also use other [metric set tools](#), including [top/bottom N filtering](#), [custom measure sorting](#) and [custom hierarchy sorting](#).

Add a Filter

To allow the filtering to be changed while viewing, you can add filters to the parameters bar by clicking **Filter** in the toolbar, then choosing a filter type.



In a similar way to a dashboard, a [Parameters](#) is created together with the filter and is automatically connected to some compatible data, but your filters will be displayed in the parameter bar at the top of the screen. The **Parameters** window opens below with the view parameter's details, which you can review.



Note: By dragging a scorecard or report onto a dashboard, you can place filters on the dashboard canvas instead of using the parameter bar. For more information, see [Filter child dashboards from a parent dashboard](#).

Change the **Name** to determine the label that appears above the filter in the parameter bar, then scroll down to confirm which hierarchies or measures are connected to this filter.

PARAMETERS:

close

Name

All

H

B

F

Name

SalesYTD

+

drop data here to repeat rows for each value

+

drop data here to repeat content for each value within every value above

place footer content here

SCRIPT EDITOR

PARAMETERS

DATA PREVIEW

Parameters

Dependent Filters

Default Value

All

Scorecard 3

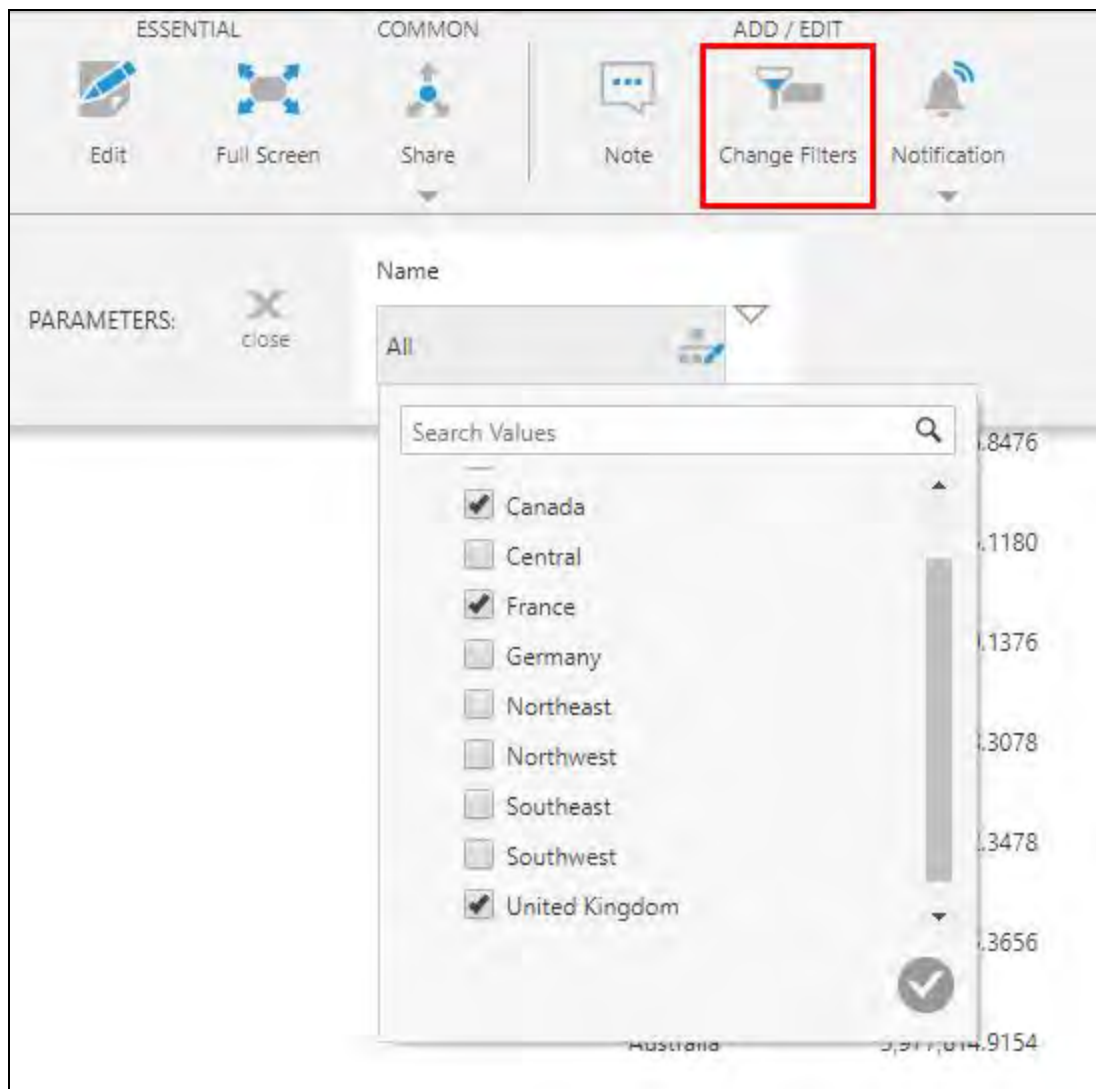
Group 1

Metric Set 1

1031

To filter the rows of the report or scorecard itself, the group metric set's hierarchy should be selected as in the image above (i.e., under Group 1).

Switch to **View** mode. In the toolbar (or using the right-click context menu), click **Change Filters** to open the parameter bar and use the filter.



Note: If viewers should set the filters first before the report loads, click an empty area of the canvas when editing and select **Force Filter Selection Before Load** in the Properties window.



See [Adding filters](#) for more information on the types of filters available.

Filtering Visualizations

Data visualizations may select data separately from the report or scorecard grouping, especially when they display multiple rows or data points within each visualization (e.g., a line chart). In this case, they appear separately in the Parameters window from the report or scorecard groupings. (Visualizations that [display data from the group](#) metric set will indicate this in their Data Analysis Panel.)

Your filter must be connected to each visualization's metric set in order to filter its data. To edit the connections, re-open the parameter bar by choosing **Change Filters** in the toolbar, then click the **Edit** icon next to your filter.

Scroll down the **Parameters** window to your data and connect the filter to whichever visualizations should be affected.

PARAMETERS:

close

Name

All

Name

+

drop data here to repeat rows for each value

H

Name

SalesYTD

B

(All)

+

drop data here to repeat content for each value within every value above

F

place footer content here

SCRIPT EDITOR

PARAMETERS

DATA PREVIEW

Parameters

Dependent Filters

Scorecard 3

Group 1

Metric Set 1

Name

sparkline 1

Metric Set 1 - Copy

Name

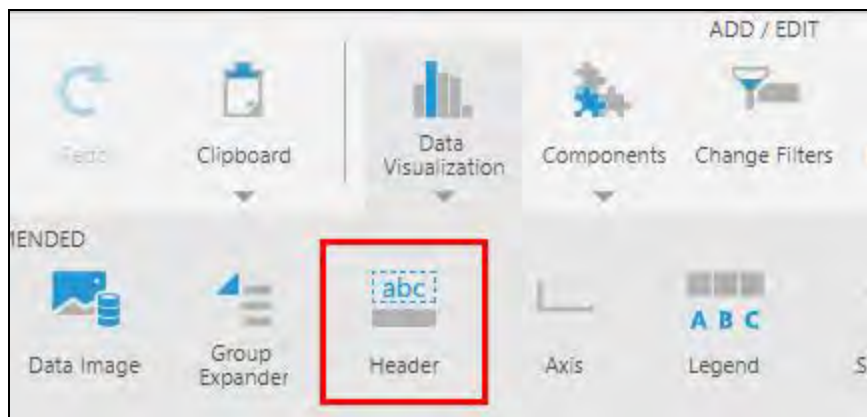
Header Controls

You can *add header* controls to your report or scorecard to allow users to sort and filter the rows in [View mode](#). This functionality is similar to using column headers for [sorting and filtering a table visualization](#).

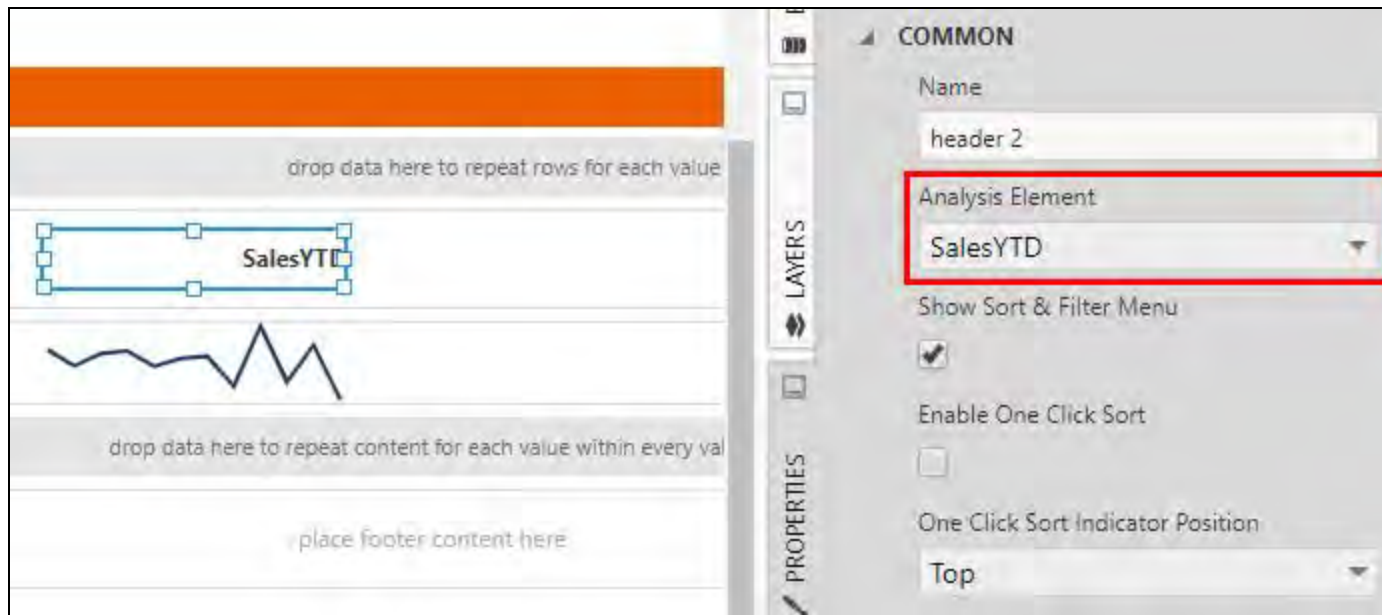


Note: A header control can filter only data present in the group metric set.

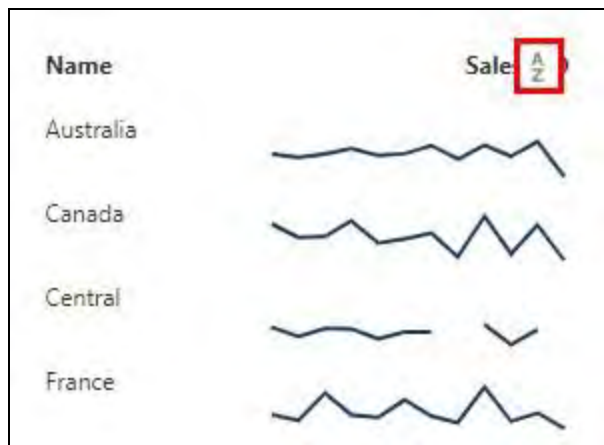
Headers are often created for you automatically when you first add data to the report or scorecard. You can also add one yourself by clicking **Data Visualization** in the toolbar and choosing **Header**.



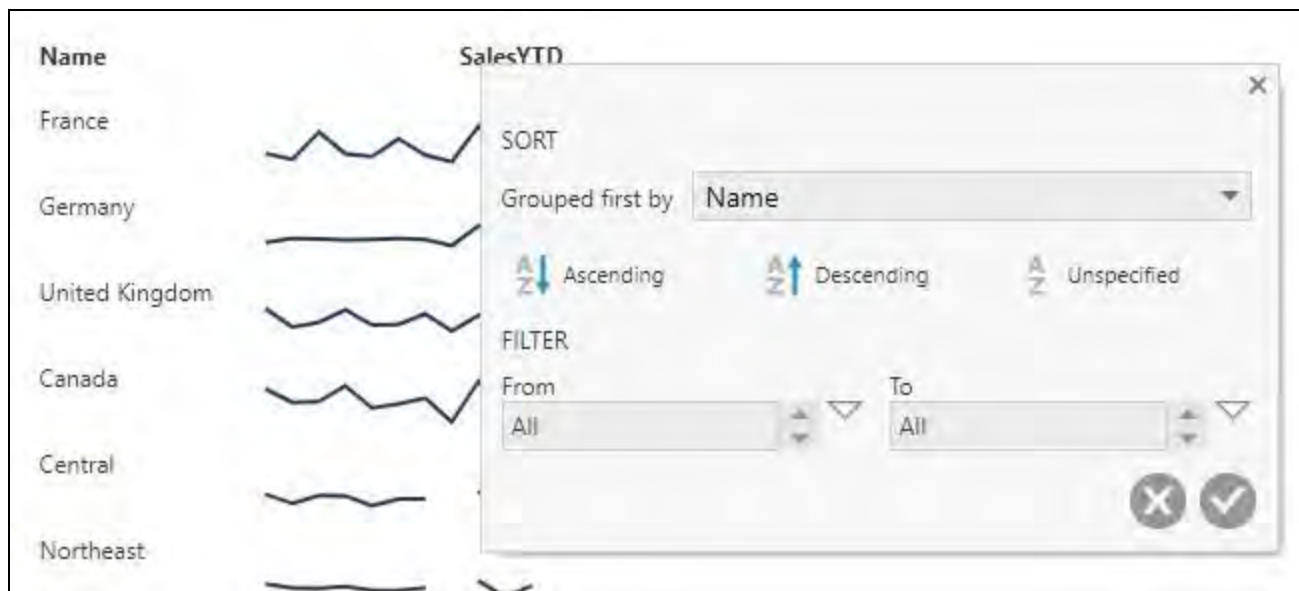
Once added, open the Properties window and set its **Analysis Element**. The text of the header will automatically update to reflect the name of the chosen element.



When viewing, hover over a header and click the **A-Z** icon to access its sort & filter pop-up.



A sort & filter popup appears, which works the same as for a table visualization's headers.

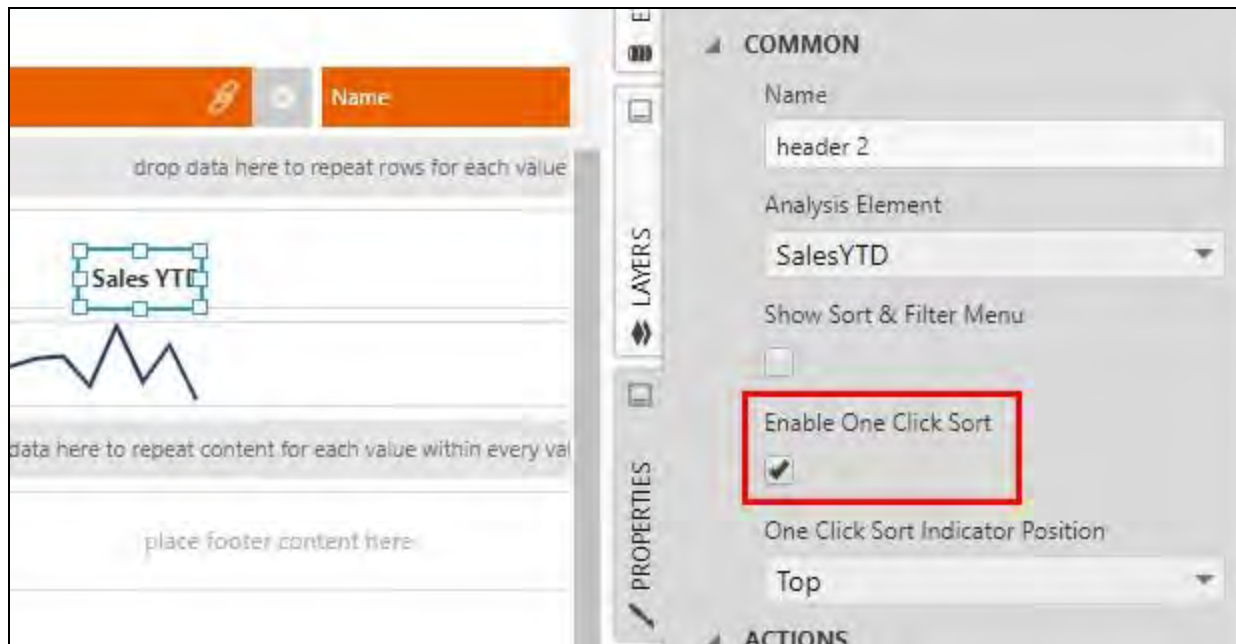


You can find more details and examples about how sorting works with hierarchies, measures, and grouping in the article [Sorting a table visualization](#).

One Click Sorting

The header control also supports one-click sorting, which allows you to click the header to immediately sort the rows in ascending, descending, or unspecified order.

To use this option, go to **Properties** for the header control and select **Enable One Click Sort**.



A triangle icon above the header text tells you the current sort direction. If you do not see the icon, it means the sort direction is unspecified.

Name	Sales YTD ▼
Southwest	
Northwest	
Canada	
Southeast	

For more information, see:

- [Design Tips](#)
- [Create Small Multiples](#)



- Archive of documentation for Logi Symphony v24

- [Sorting a Table Visualization](#)
- [Symphony Metric Sets](#)



Design Tips for Reports and Scorecards

This applies to: *Managed Dashboards, Managed Reports*

There are a number of flexible options available when you design a managed report or scorecard. See the following articles for tips and resources on creating and editing your reports and scorecards.

- [Autocreate Reports and Scorecards](#)
- [Position Elements of Reports and Scorecards](#)
 - [Align Elements](#)
 - [Arrange Multiple Elements](#)
 - [Resize Elements](#)
 - [Resize Regions](#)
 - [Auto Expand to Fit](#)
- [Customize Region Cells](#)
 - [Display Alternating Row Colors](#)
 - [Display Separator Lines](#)
- [Report Options](#)
 - [Placeholder Labels](#)
 - [Page Breaks](#)
 - [Show Headers](#)
 - [Reset Page Numbering](#)
- [Sticky Headers for Scorecards](#)
- [Recommended Data Visualizations](#)



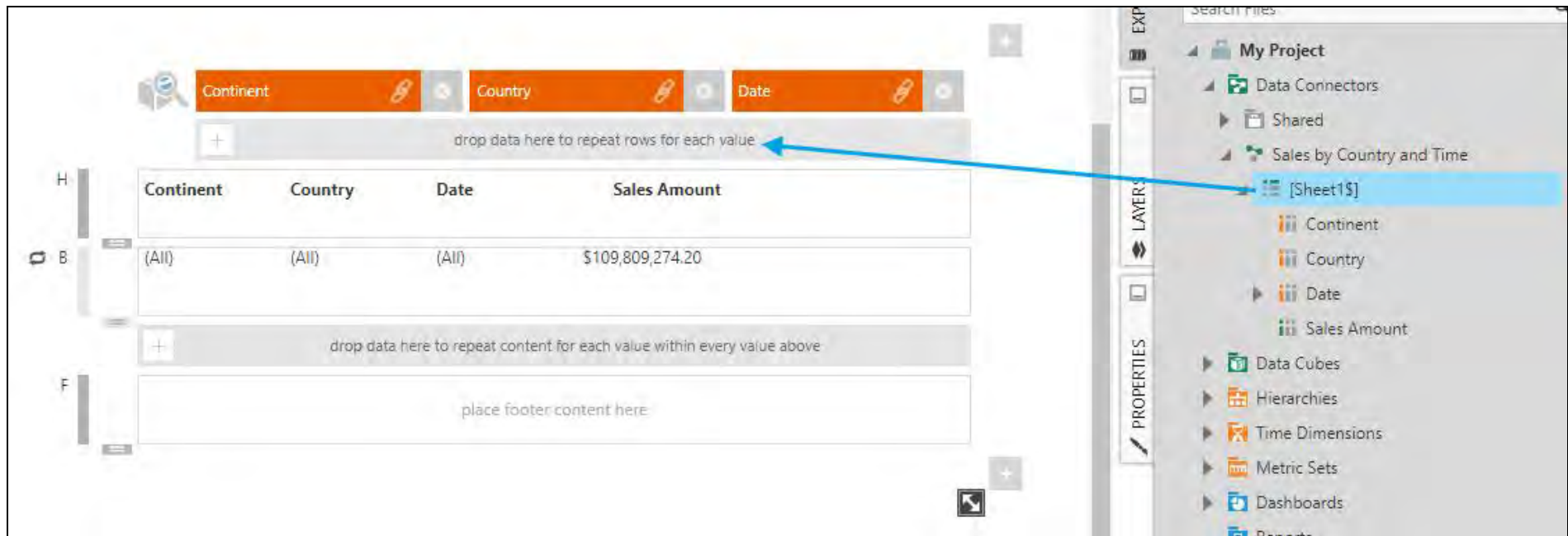
- Archive of documentation for Logi Symphony v24

- [Display Group Data](#)
- [Convert Scorecards and Reports](#)

Autocreate Reports and Scorecards

This applies to: *Managed Dashboards, Managed Reports*

You can quickly create a report or scorecard for a whole table from a data connector or metric set by dragging it from the **Explore** window onto the grouping drop area (labeled *drop data here to repeat rows for each value...*)



Symphony automatically populates the grouping, and creates header and data label pairs for the columns in the table.

Alternatively, you can drag individual columns, measures, or hierarchies directly to the body region (labeled *B* to its left) to auto-create a table-like layout in a similar way.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)



- Archive of documentation for Logi Symphony v24

- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Position Elements of Reports and Scorecards

This applies to: *Managed Dashboards, Managed Reports*

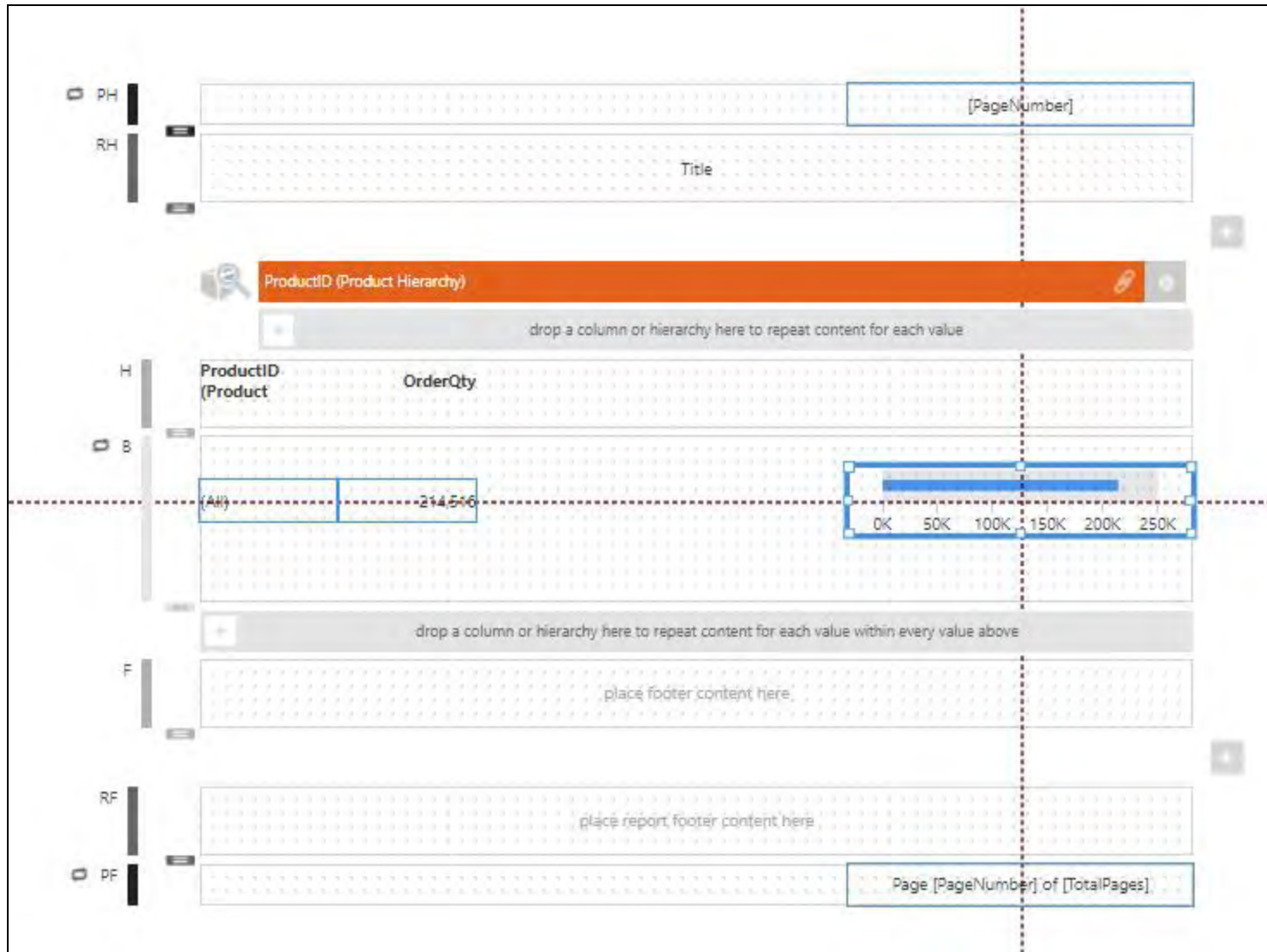
You can align and resize multiple elements in your reports and scorecards to achieve the look and feel your organization needs. See the following articles for more information:

- [Align Elements](#)
- [Arrange Multiple Elements](#)
- [Resize Elements](#)
- [Resize Regions](#)
- [Auto Expand to Fit](#)

Align Elements

This applies to: *Managed Dashboards, Managed Reports*

As you drag or resize an element, contextual guidelines (dotted lines) appear to help you align with other elements. When your element snaps into alignment with another, the line turns red and the relevant boundaries appear.





When an element in a body region snaps into alignment with an element in the header region, the contextual guidelines will include magnet icons and the elements become bound to one another. Afterward, moving the element in the header region will also move the element in the body region. Moving the element in the body region will break the bond.



Note: Headers that were added automatically to a header region when adding data are automatically bound to their body region counterpart.

If you want to temporarily disable this snapping, press and hold the ALT key while dragging or resizing your control.

If the snap grid is enabled, your element will also be snapped to the grid while dragging or resizing. If you want to turn off or customize the snap grid, go to the [status bar](#) and click the grid & magnet icon with the description **Disable snap grid** or customize its size.

For more on Scorecard and Report design, see:

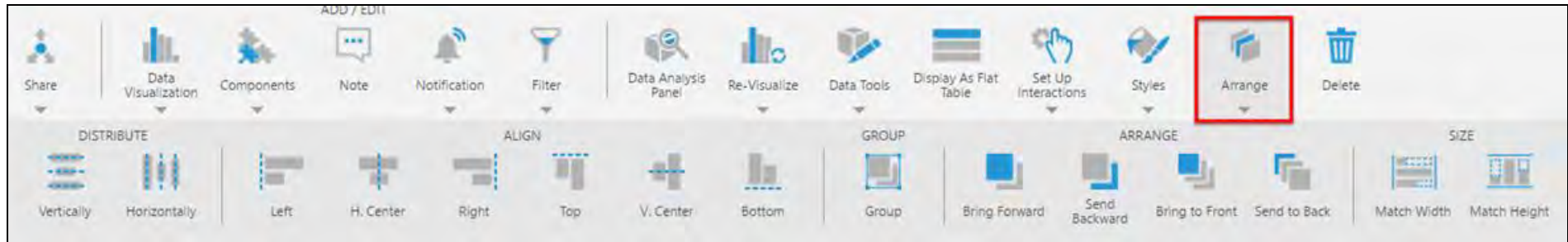
- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Arrange Multiple Elements

This applies to: *Managed Dashboards, Managed Reports*

When multiple elements are selected, you can adjust their alignment using the **Arrange** option on the toolbar.

You can use these options to quickly distribute, align, or resize the positioning for multiple elements.



Note: The options **Match Width** and **Match Height** will match the last-selected control, which will be indicated by bold borders.

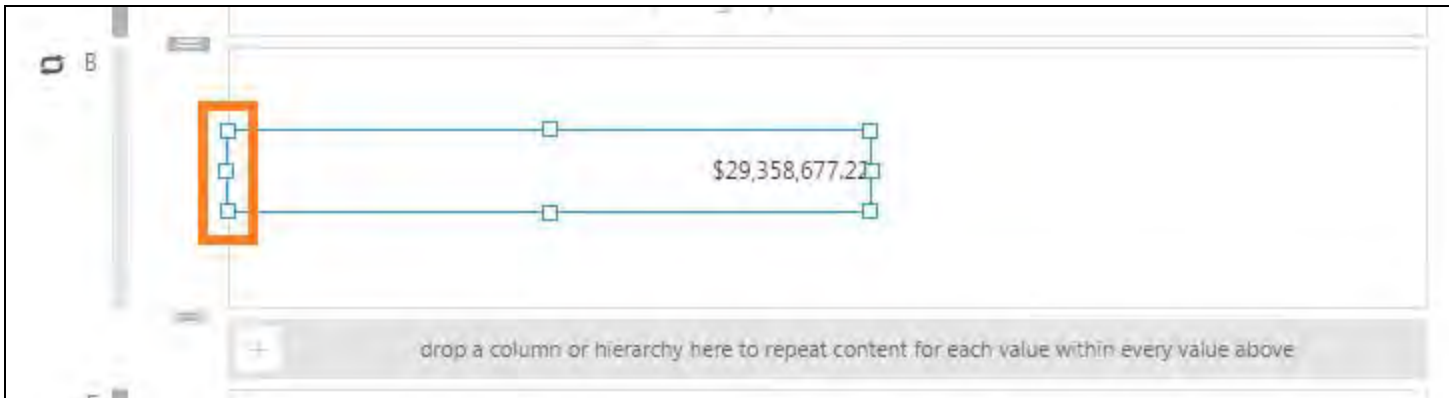
For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Resize Elements

This applies to: *Managed Dashboards, Managed Reports*

Double-click the resize handle of an element to expand/contract the corresponding side or corner of the element to the outer edge or corner of the template cell containing that element.



For more on Scorecard and Report design, see:



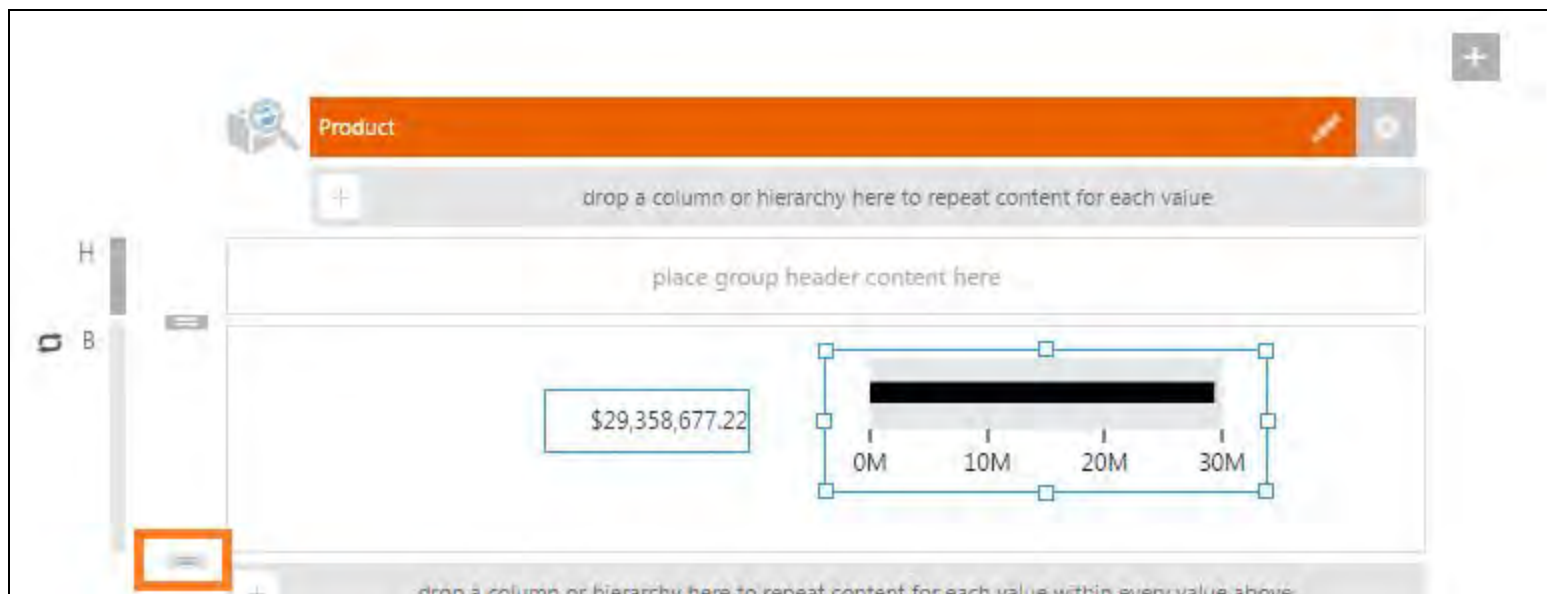
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- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

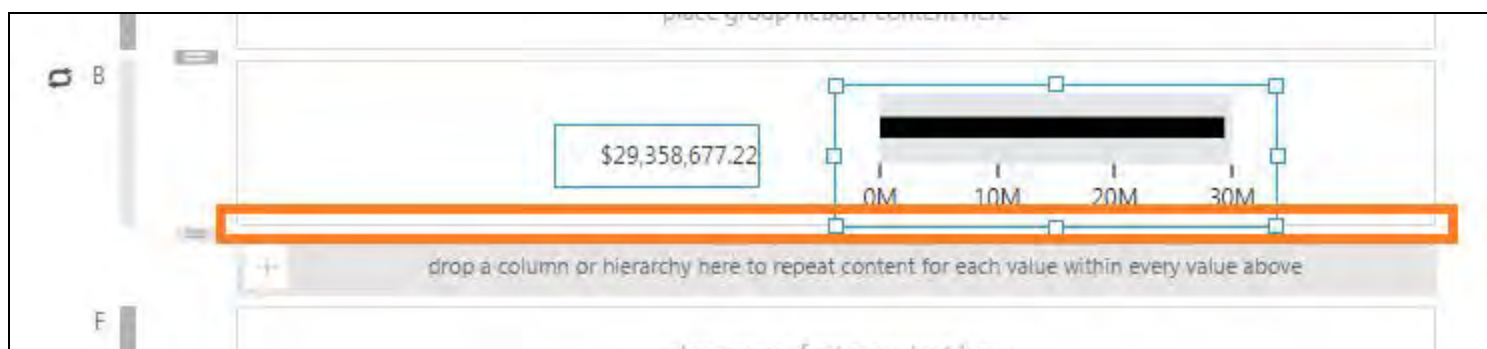
Resize Regions

This applies to: *Managed Dashboards, Managed Reports*

Double-click the bottom resize handle of a region's template cell to resize it to fit its contents.



The cell will be resized up to eliminate any empty space below the contents of the cell.



For more on Scorecard and Report design, see:



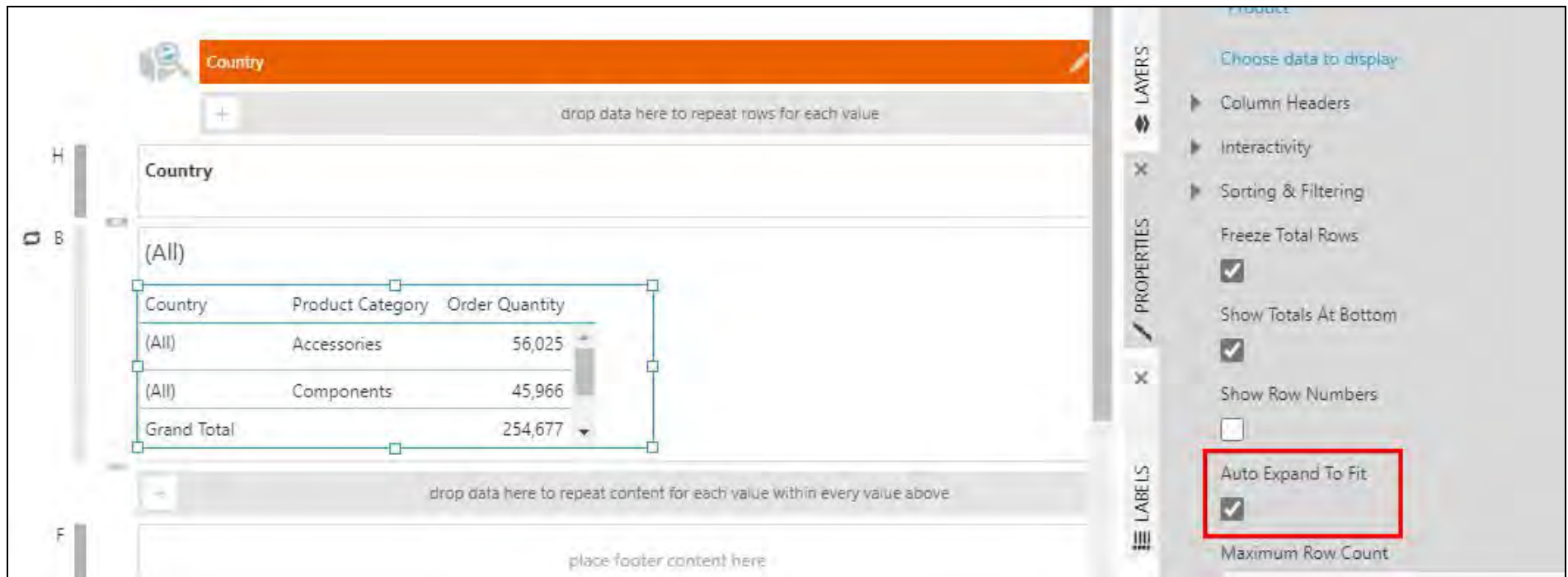
- Archive of documentation for Logi Symphony v24

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Auto Expand to Fit

This applies to: *Managed Dashboards, Managed Reports*

You have access to the same set of visualizations in reports, scorecards, and small multiples as you do in dashboards, but the [table](#) and [data label](#) visualizations have an additional option **Auto Expand To Fit** in the **Main** tab in the **Properties** window.



The screenshot shows the Logi Symphony interface. On the left, a table visualization is displayed with the following data:

Country	Product Category	Order Quantity
(All)	Accessories	56,025
(All)	Components	45,966
Grand Total		254,677

On the right, the **PROPERTIES** window is open, showing the **Auto Expand To Fit** option checked under the **LABELS** tab. The option is highlighted with a red box.

When enabled, if the rows of a table do not fit within the height that was set for it in edit mode, it will automatically expand as needed to fit the additional rows rather than show a scrollbar. A data label will similarly expand in height as needed to fit additional lines of text rather than cut it off if this option is enabled.

Europe		
Country	Product Category	Order Quantity
France	Accessories	5,390
	Bikes	5,738
	Clothing	5,153
	Components	3,625
	(All)	19,906
Germany	Accessories	4,809
	Bikes	3,462
	Clothing	3,452
	Components	1,282
	(All)	13,005
North America		
Country	Product Category	Order Quantity
Canada	Accessories	10,763
	Bikes	14,434

Content that was placed below this table or data label when editing will be pushed downward to fit the expanded content.



Note: Table visualizations in reports should normally have a small number of rows. For a table-like result that works together with features like page headers, footers, and repeating table headers, use the data labels and headers [created automatically](#) when adding data.

For more on Scorecard and Report design, see:



- Archive of documentation for Logi Symphony v24

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Customize Region Cells

This applies to: *Managed Dashboards, Managed Reports*

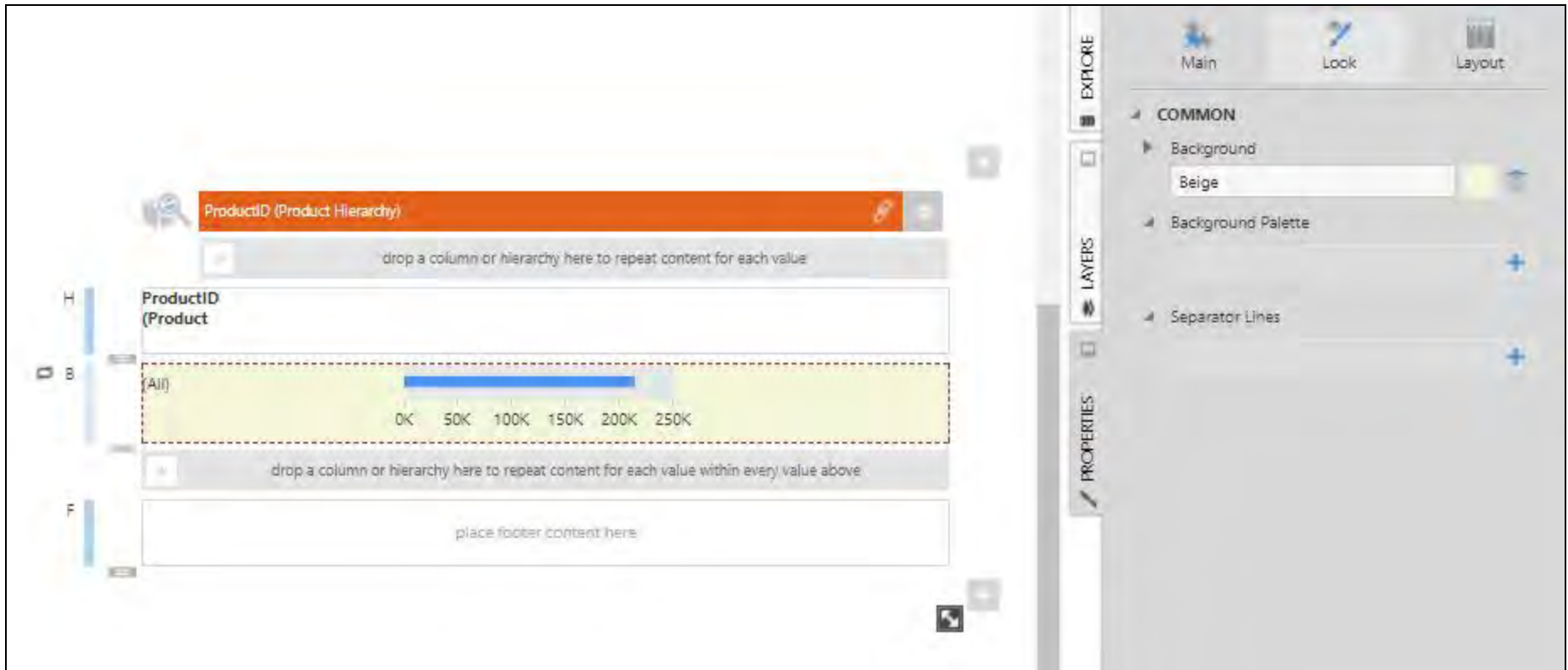
Template cells (or regions) in reports, scorecards, and small multiples have properties available related to appearance and sizing.

Click within a body cell, for example, and it will be highlighted with a dashed, red border. Then go to **Properties** to set any of the following:

- **Background** - The background brush for the cell.
- **Background Palette** - Backgrounds to apply in sequence to the repeating rows (or columns). Applies to body cells only.
- **Row Separator Lines** - Display a separator line between each row or every Nth row. For body cells only.
- **Height** - Set the precise height of the cell in pixels.



Note: If it's difficult to click the cell itself, select something inside it and choose **Select Template Cell** in the toolbar, or click the labeled area left of the cell (e.g., B).



See the following articles for more information about setting these properties to customize your region cells:

- [Display Alternating Row Colors](#)
- [Display Separator Lines](#)

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)



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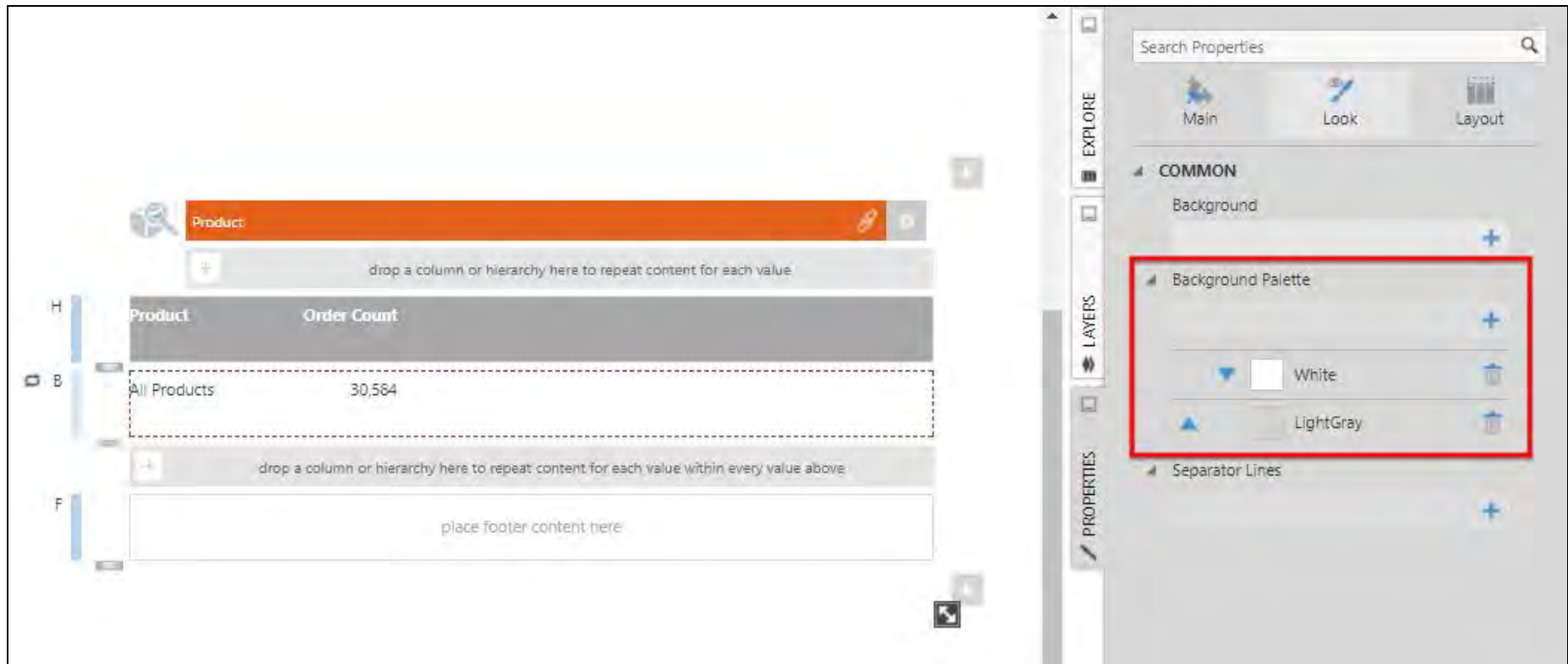
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Display Alternating Row Colors

This applies to: *Managed Dashboards, Managed Reports*

You can use the **Background Palette** property to display alternating row colors.

1. With the body cell selected, go to **Properties** and click **Look**.
2. Click the plus sign button for the palette twice, for example, if you want the rows to alternate between two colors.



3. Switch to **View** mode to see the alternating backgrounds.

Product	Order Count
All-Purpose Bike Stand	238
AWC Logo Cap	290
AWC Logo Cap	442
AWC Logo Cap	2,567
Bike Wash - Dissolver	1,288
Cable Lock	259
Chain	250
Classic Vest, L	193

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)



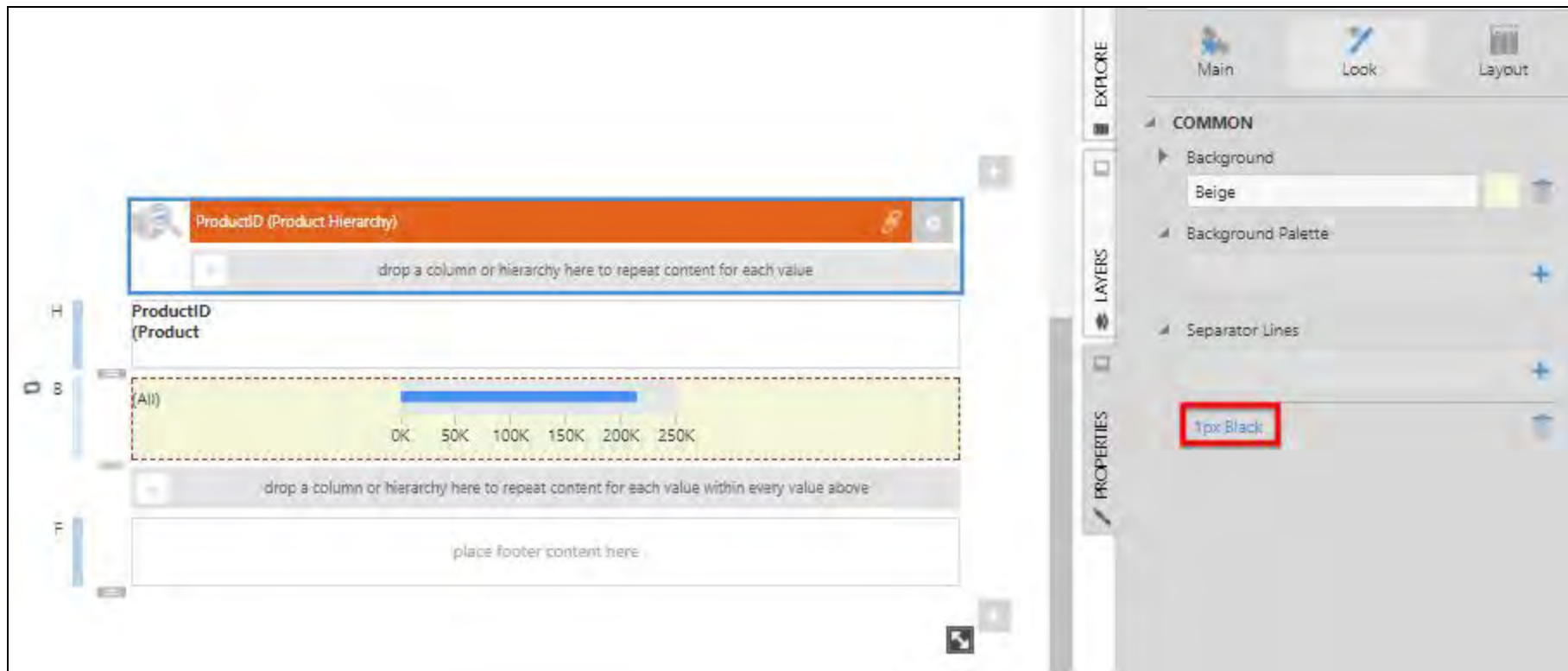
- Archive of documentation for Logi Symphony v24

- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

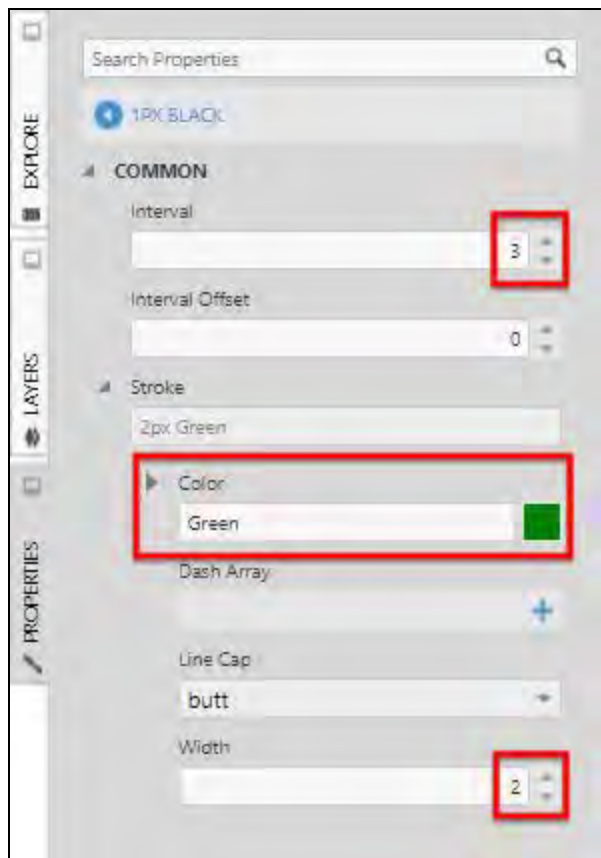
Display Separator Lines

This applies to: *Managed Dashboards, Managed Reports*

1. With the body cell selected, go to **Properties** and click **Look**.
2. Select the **Row Separator Lines** plus sign and select the new item (e.g., **1px Black**).



3. Set the **Interval** to 3, for example, to separate every three rows. You can expand **Stroke** to change the **Color** and **Width**.



4. Switch to **View** mode to see the separator lines.



For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)



- Archive of documentation for Logi Symphony v24

- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)



Report Options

You can customize your reports by moving placeholders for labels, setting page breaks, and managing numbering and headings information.

See the following articles for more information:

- [Placeholder Labels](#)
- [Page Breaks](#)
- [Show Headers](#)
- [Reset Page Numbering](#)
- [Add a Table of Contents](#)

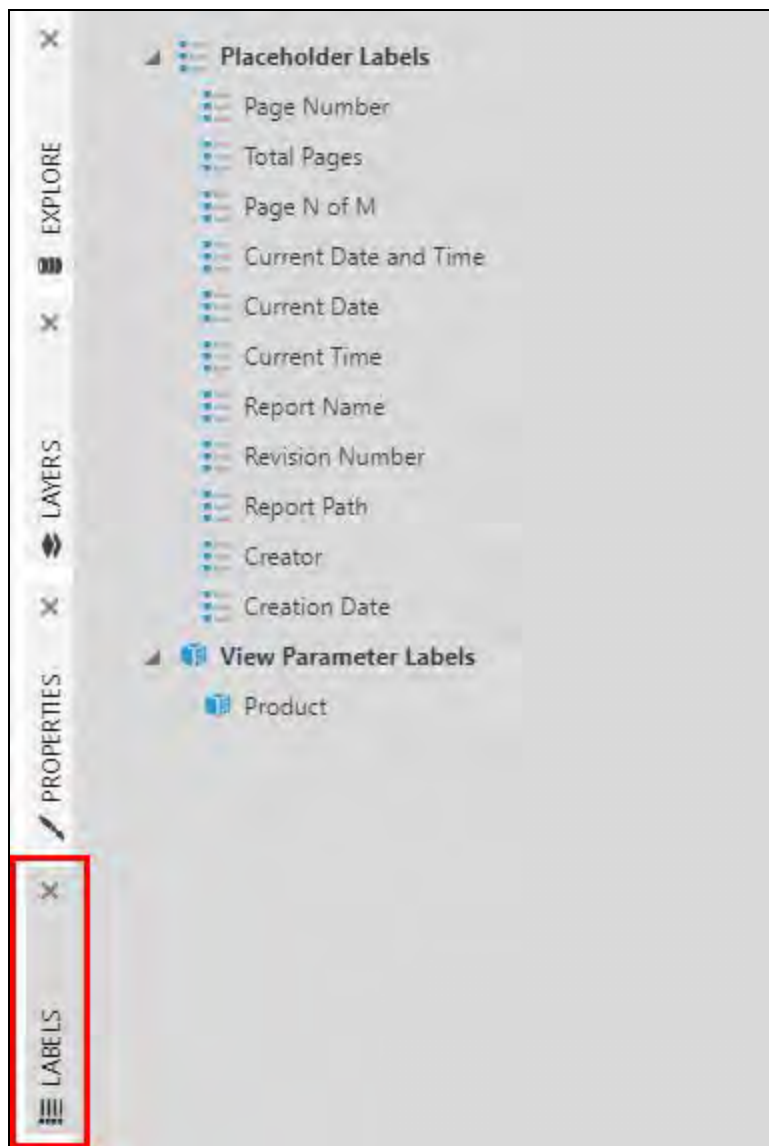


Placeholder Labels

This applies to: *Managed Dashboards, Managed Reports*

New reports are automatically populated with placeholder labels for the page number and number of pages, but you can drag these and other metadata labels from the **Labels** window.

Each view parameter is also listed here so that you can display its value as a label on the report.



After you drag a label from the Labels window you can customize the text and combine it with your own, or you can add your own label component and set its text to include one of the placeholders:



Label Name	Placeholder	Displayed Text
Page Number	[PageNumber]	The number of the current page.
Total Pages	[TotalPages]	The total number of pages in the report.
Page N of M	Page [PageNumber] of [TotalPages]	The number of the current page out of the total number of pages in the report.
Current Date	[CurrentDate]	The date when the report was generated.
Current Time	[CurrentTime]	The time when the report was generated.
Current Date and Time	[CurrentDate][CurrentTime]	The date and time when the report was generated.
Report Name	[ReportName]	The name of the report.
Revision Number	[RevisionNumber]	The revision number of the report. This number will be changed every time the report is checked in, and will be set to -1 while the report is checked out.
Report Path	[ReportPath]	The full path of the report, including the project, folders, and name of the report.
Creator	[Creator]	The name of the user who created the report.
Creation Date	[CreationDate]	The date the report was created.
View Parameter Labels	[viewParameterScriptName]	The current value of one of report's view parameters. The placeholder contains the Script Name set in the Parameters window.

For more on Scorecard and Report design, see:

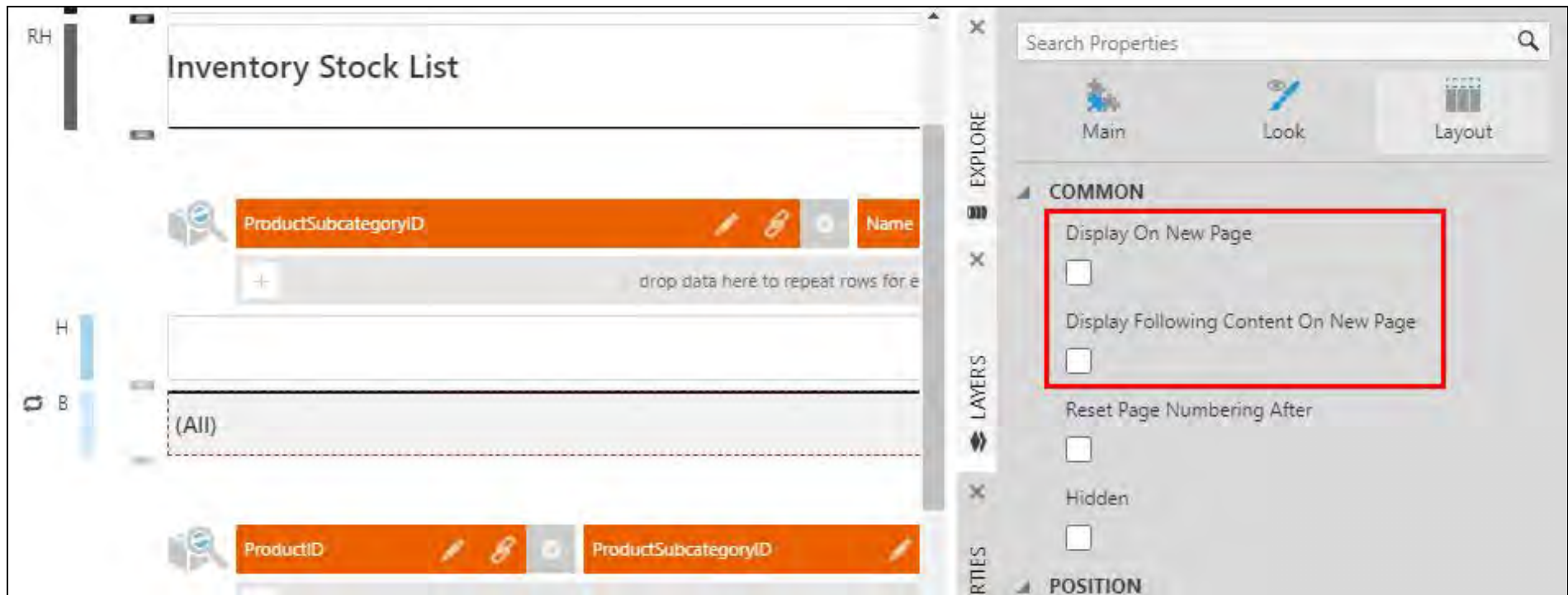
- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Page Breaks

Report regions have options for displaying each of its rows on a new page or to display the content after it a new page, also called a 'page break'. For example, you may want the report to skip to a new page each time an outer or parent grouping is displayed, such as for each subcategory of products.

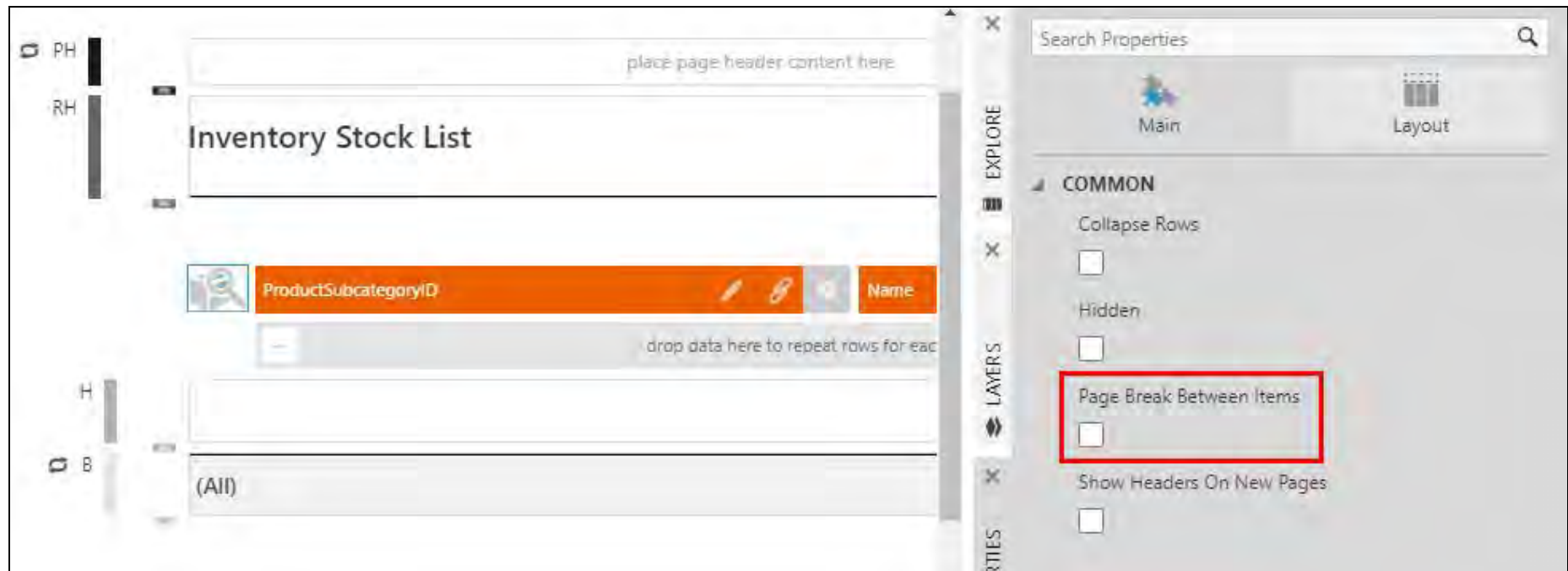
To insert page breaks in a report:

1. Select any region other than a page header or footer.
2. Go to the **Properties** window in the **Layout** tab to find properties **Display On New Page** and **Display Following Content On New Page**.



There is another property available to insert page breaks slightly differently depending on the behavior that you want.

1. After selecting a region, click **Configure Group** in the toolbar, or you can click the cube and magnifying glass icon next to one of the grouping hierarchy regions to select the group directly.
2. In the **Properties** window, go to the **Layout** tab to find the **Page Break Between Items** property.



This property is different because it only inserts page breaks between body rows within each grouping, and not before the first or after the last row.

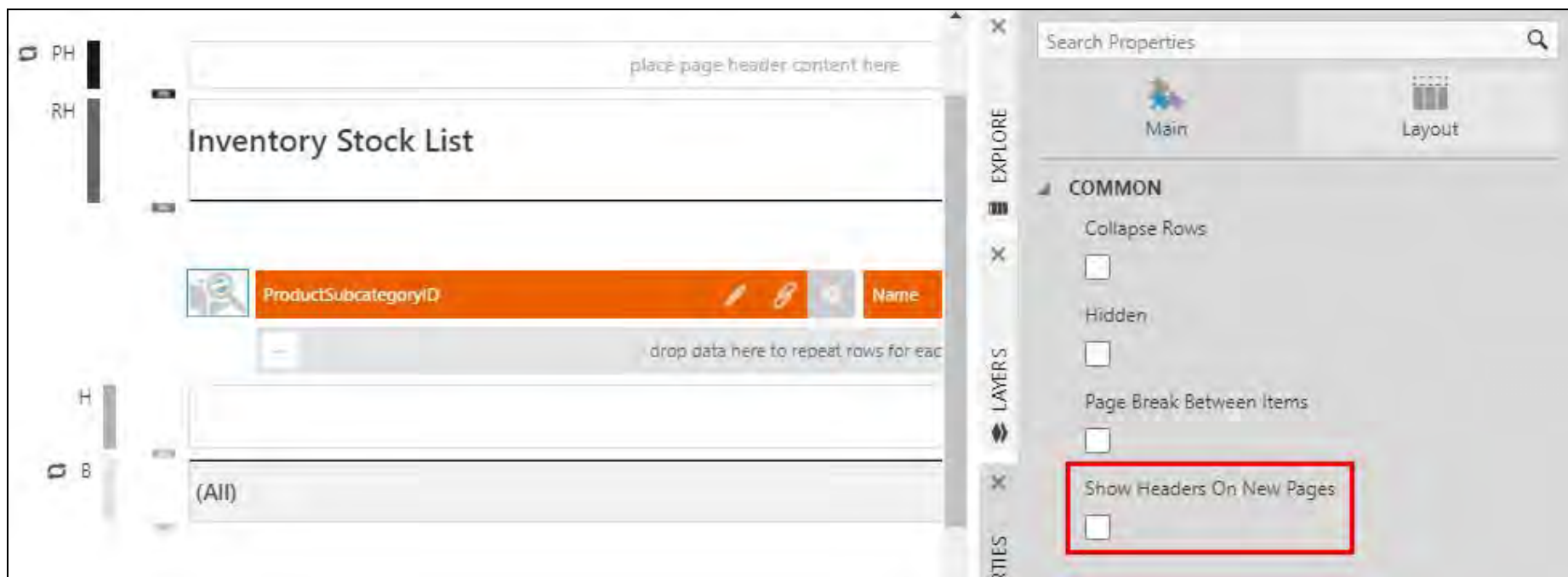
For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Show Headers

In large reports, the content of a group of rows may span more than a single page. You have the option of repeating the group headers on every page to help readers identify the columns.

1. Select a report region and click **Configure Group**, or click the cube and magnifying glass icon next to one of the grouping hierarchy regions to select it directly.
2. In the **Properties** window, go to the **Layout** tab and select **Show Headers On New Pages**.



For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)



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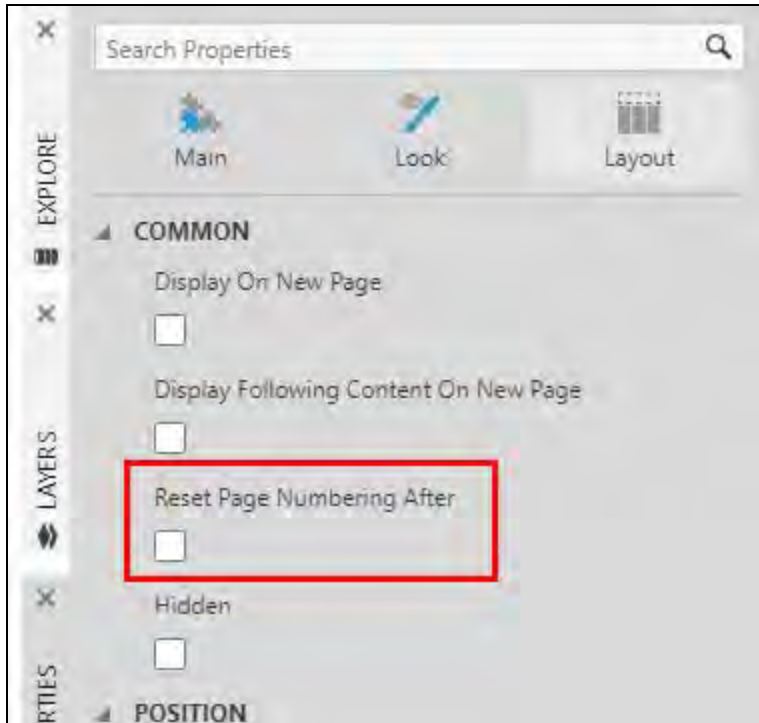
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Reset Page Numbering

The property **Reset Page Numbering After** is available on any template cell except page headers and page footers. If enabled, it causes the effective page number to return to 1, and separates the pages that follow into a separate group with its own total page count.

(If the next item directly after this region is a page footer, it will instead display the original page numbers, and then be reset.)

Click to select a template region, then find the option in the **Properties** window in the **Layout** tab.



For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)

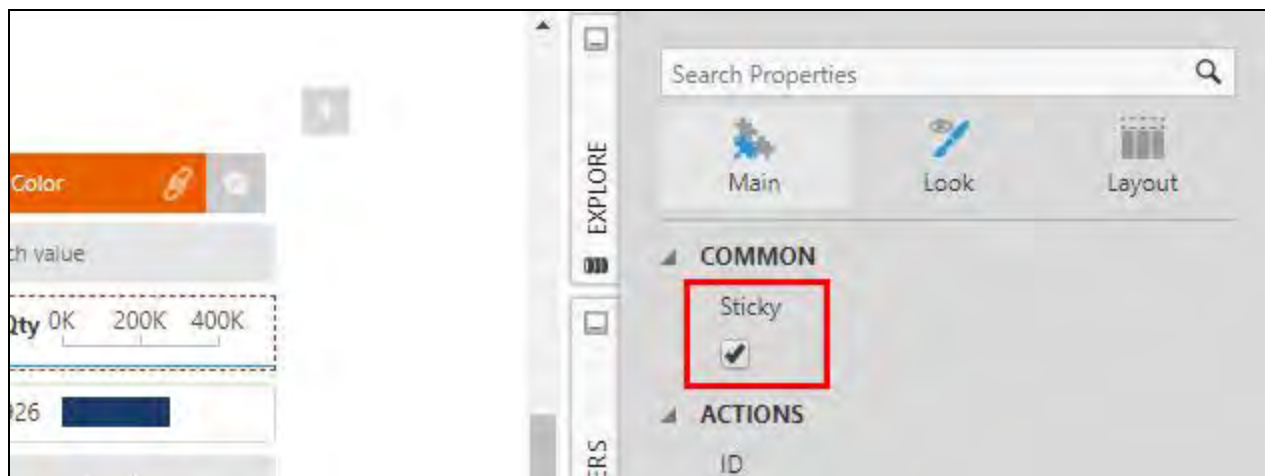


- Archive of documentation for Logi Symphony v24

- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Sticky Headers for Scorecards

If you want the header to always remain visible while scrolling through the rows, select the header cell, and in the **Properties** window enable the **Sticky** option.



You may also want to set up a **Background** in the **Look** tab, or make other considerations for when other content has been scrolled below the header.

When viewing, the header always remains visible when any of its rows below are still visible. This is also called a 'frozen' header.

Name	Color	OrderQty	0K	5K	10K
Sport-100 Helmet, Blue	Blue	6,743			
AWC Logo Cap	Multi	8,311			
Long-Sleeve Logo Jersey, S	Multi	429			
Long-Sleeve Logo Jersey, M	Multi	3,636			
Long-Sleeve Logo Jersey, L	Multi	6,592			
Long-Sleeve Logo Jersey, XL	Multi	2,980			
HL Road Frame - Red, 62	Red	485			
HL Road Frame - Red, 44	Red	486			
HL Road Frame - Red, 48	Red	109			
LL Road Frame - Black, 58	Black	940			
LL Road Frame - Black, 60	Black	129			
LL Road Frame - Red, 44	Red	991			

When using nested groups, you can make multiple headers sticky, and each header will remain visible when its rows are visible.

Name	Color	Qty
Offer		Qty
No Discount		3,368
Reseller		1,164
Mountain Bike Socks, M	White	1,107
Offer		Qty
No Discount		743
Reseller		364

For more on Scorecard and Report design, see:

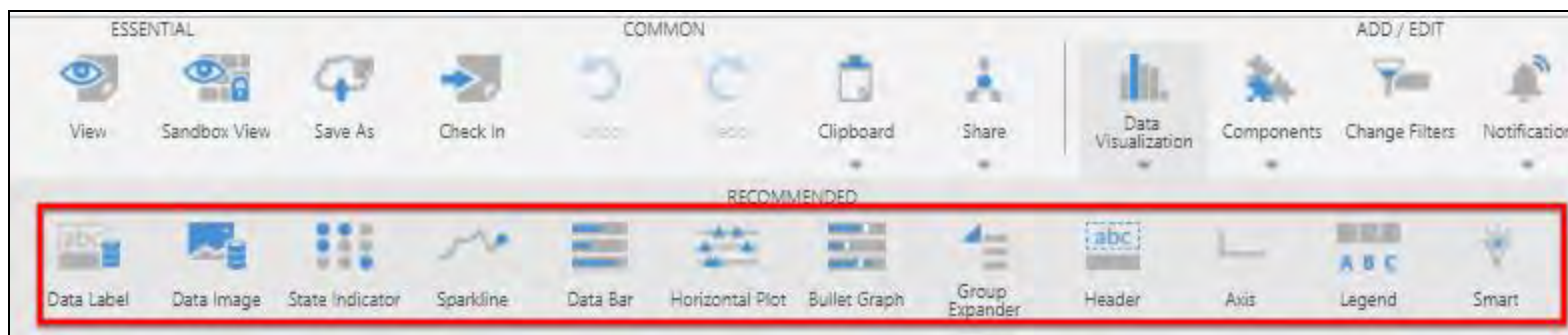
- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Recommended Data Visualizations

Click **Data Visualization** in the toolbar to see the recommended data visualizations you can add, in addition to all of the data visualizations available in other views such as dashboards.

The options found under **Recommended** include special versions of charts and gauges with predefined options that can work well when repeated in small sizes:

- **Sparkline** is a line chart with both horizontal and vertical axes hidden to emphasize the historical trend of the data.
- **Data Bar** is a bar chart that normally displays one horizontal bar per row, with both horizontal and vertical axes hidden.
- **Horizontal Plot** is a version of a scatter plot along one axis, also called a strip plot, allowing you to see patterns in the distribution of points over time or by magnitude.
- **Bullet Graph** is a best practice version of a gauge designed for comparing metrics against their targets and other contextual values.
- **Axis** lets you display a [single axis for charts or gauges separately](#) in a header or footer.
- **Group Expander** lets you interactively collapse or expand the rows in the group when viewing.



The options above that directly visualize data will also be available later in the **Re-Visualize** menu of an existing visualization.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)



- Archive of documentation for Logi Symphony v24

- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Modify the Context Menu Using Script

This applies to: *Managed Dashboards, Managed Reports*

Symphony offers a built-in context menu (or right-click menu) for all visualizations. This menu is mostly used for built-in interactions such as drill down/up, filter, re-visualize etc.

While in most use cases, there is no need to modify the default context menu, there are cases where adding or limiting options can improve the user experience. For example, you may want to add your own custom command to add special navigation, or prevent users from drilling-down on flat data with no hierarchies.



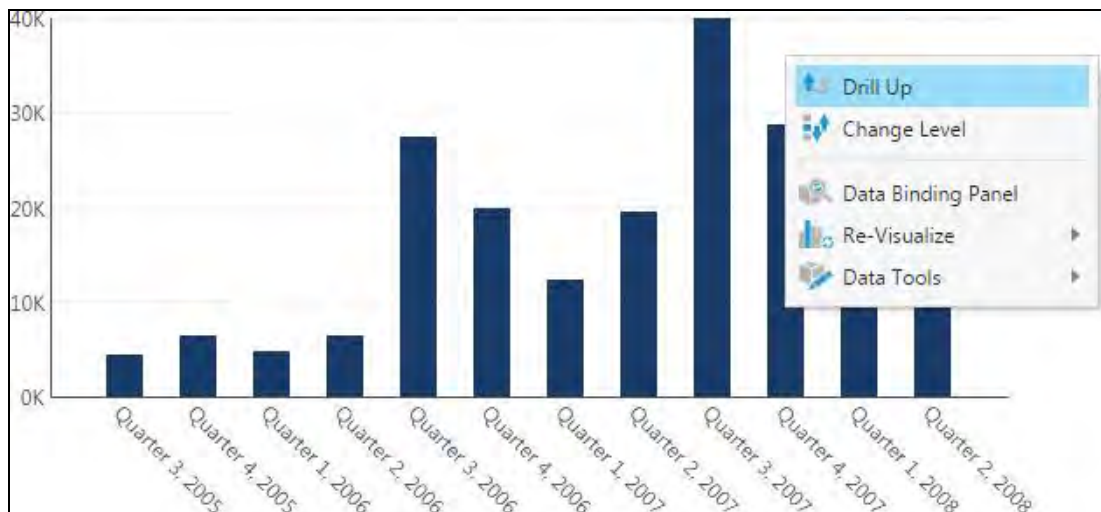
Note: Context menu options can also be removed by [disabling view functionality](#).

Script Library sample: [Customize the context menu](#)

Setup

For this example, create a new dashboard and add a chart to it.

Switch to **View** mode and right-click on the chart to see its original context menu. Observe that it has a menu item with the caption *Drill Up*.



Add the Script Action

Go back to **Edit** mode and select the chart. Open the **Properties** window. Scroll down to the Actions section and expand the **Context Menu Showing** item. Select the **+** button to add a script action. Enter script like the following into the **Script Editor**.

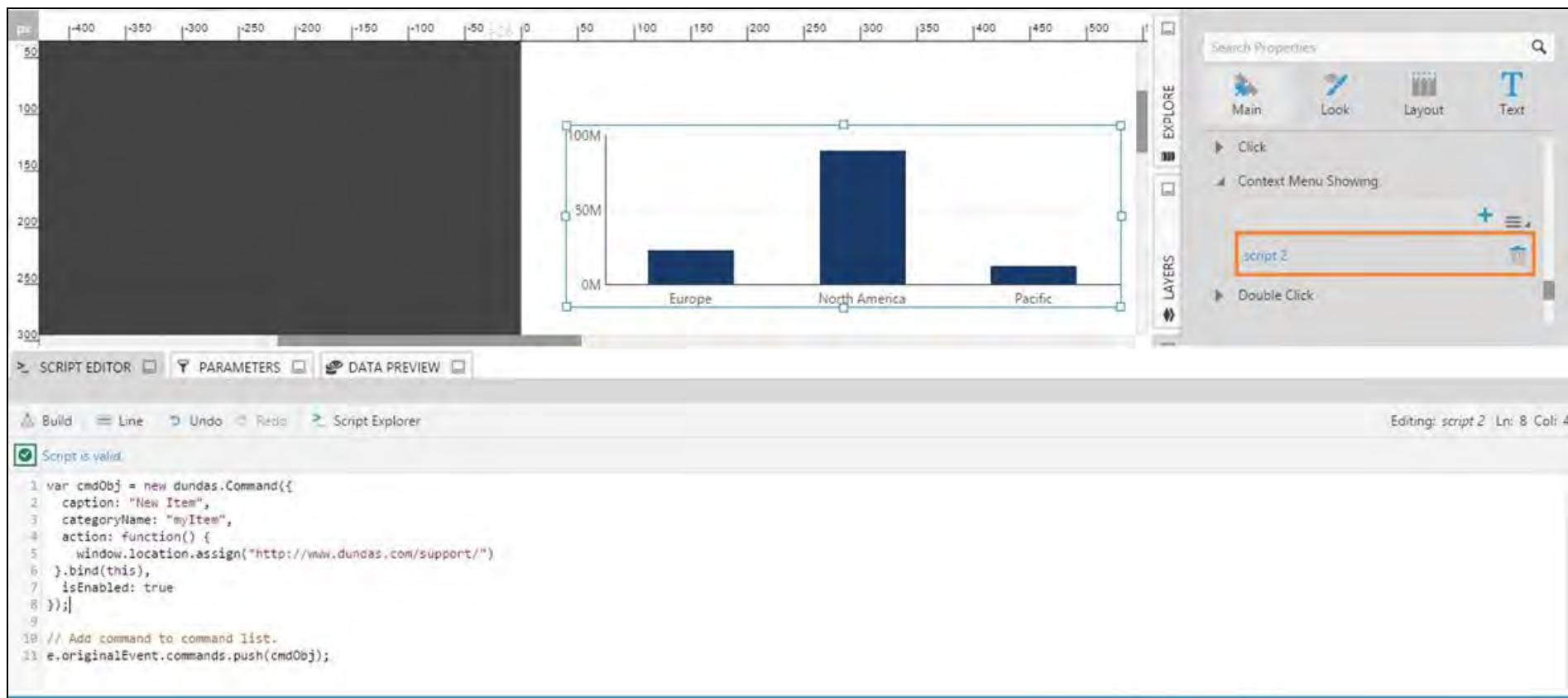


Add an Item to the Context Menu

This script adds a menu item with the caption *New Item*.

```
var cmdObj = new dundas.Command({
  caption: "New Item",
  categoryName: "myItem",
  action: function() {
    //handle click event
    window.location.assign("http://www.dundas.com/support/")
  }.bind(this),
  isEnabled: true
});

// Add command to command list.
e.originalEvent.commands.push(cmdObj);
```



This script creates a new [dundas.Command](#) object.

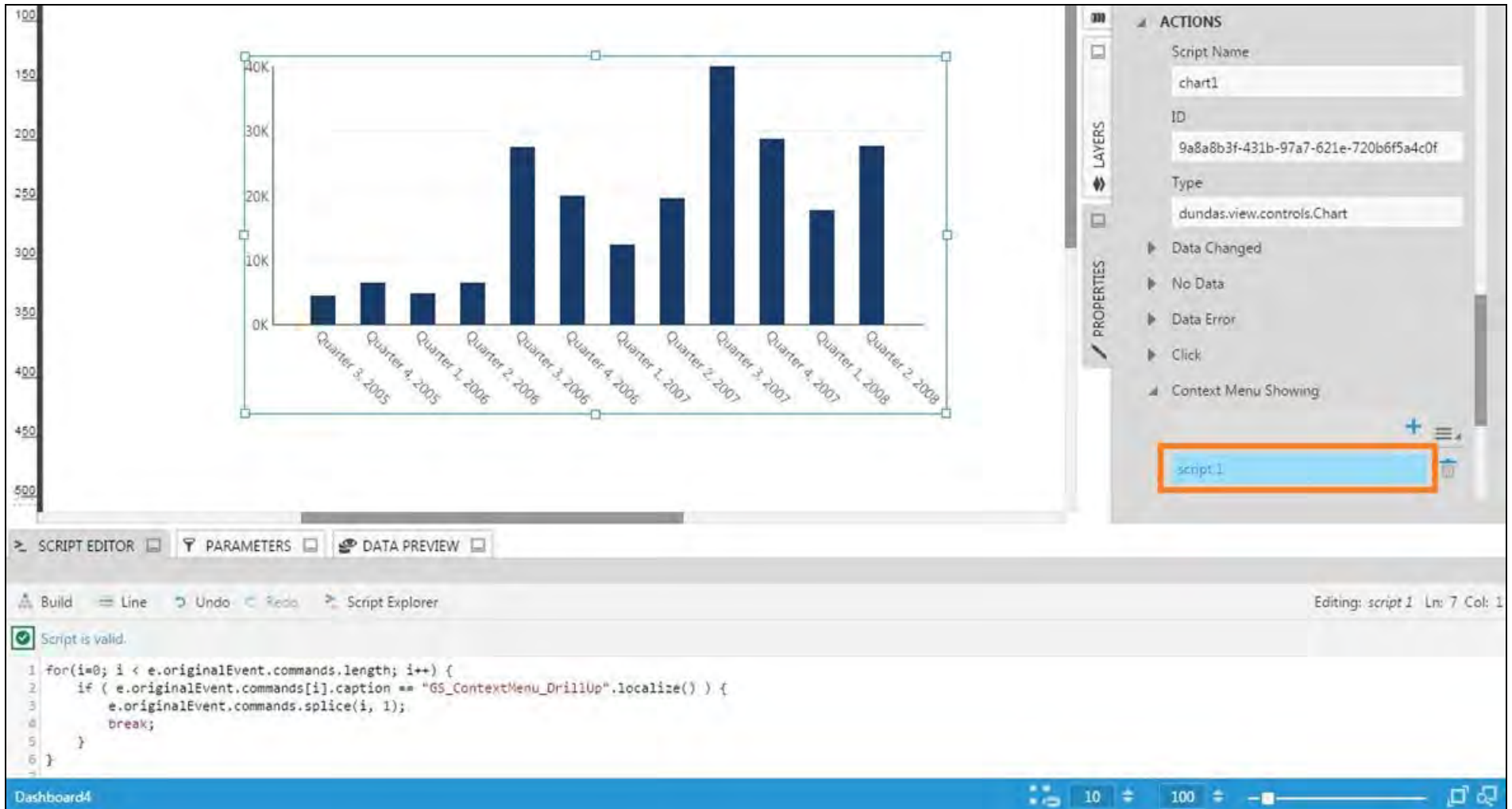
Remove an Item From the Context Menu

This script removes the menu item with the caption **Drill Up**.

```

for (var i = 0; i < e.originalEvent.commands.length; i++) {
  if (e.originalEvent.commands[i].caption == "GS_ContextMenu_DrillUp".localize()) {
    e.originalEvent.commands.splice(i, 1);
    break;
  }
}

```

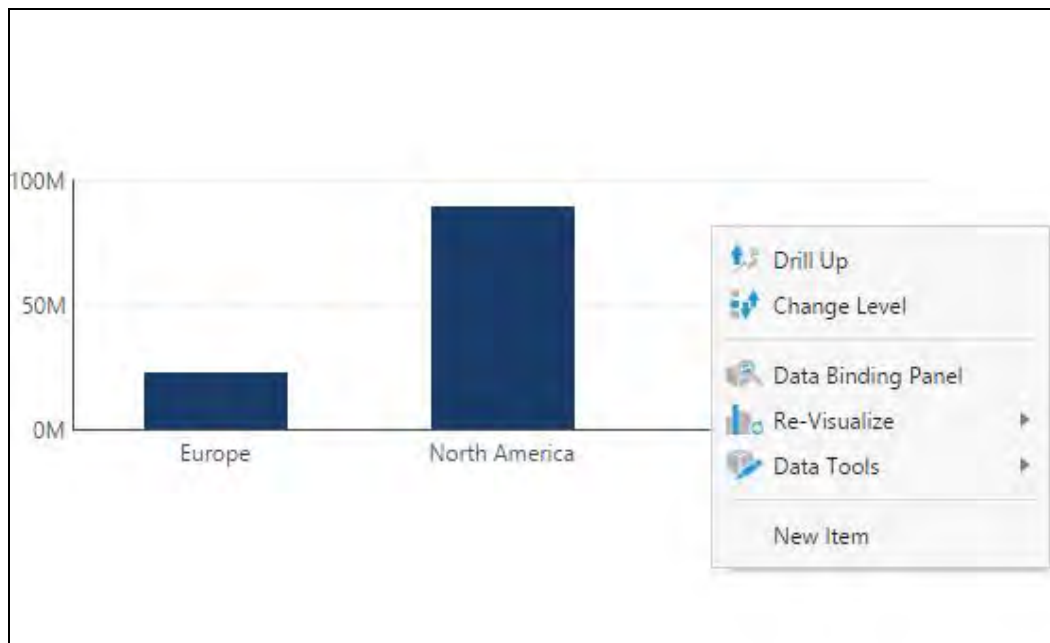
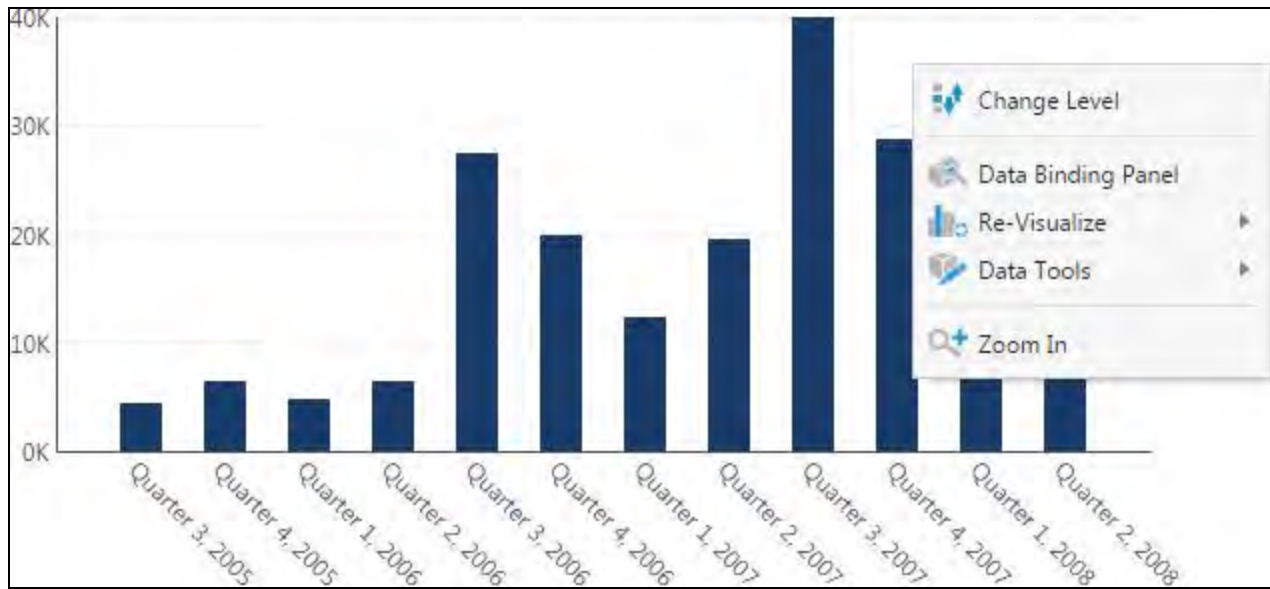


The text **GS_ContextMenu_DrillUp** is a localized string key, which could be replaced by different text depending on the language of the user viewing the dashboard.

For details on finding other localized string keys, see [Localization and Multi-Language Support](#).

View the Dashboard

Test the script by switching to **View** mode. Observe the modified menu by right-clicking on the chart to see its context menu.



For more information, see:



- Archive of documentation for Logi Symphony v24

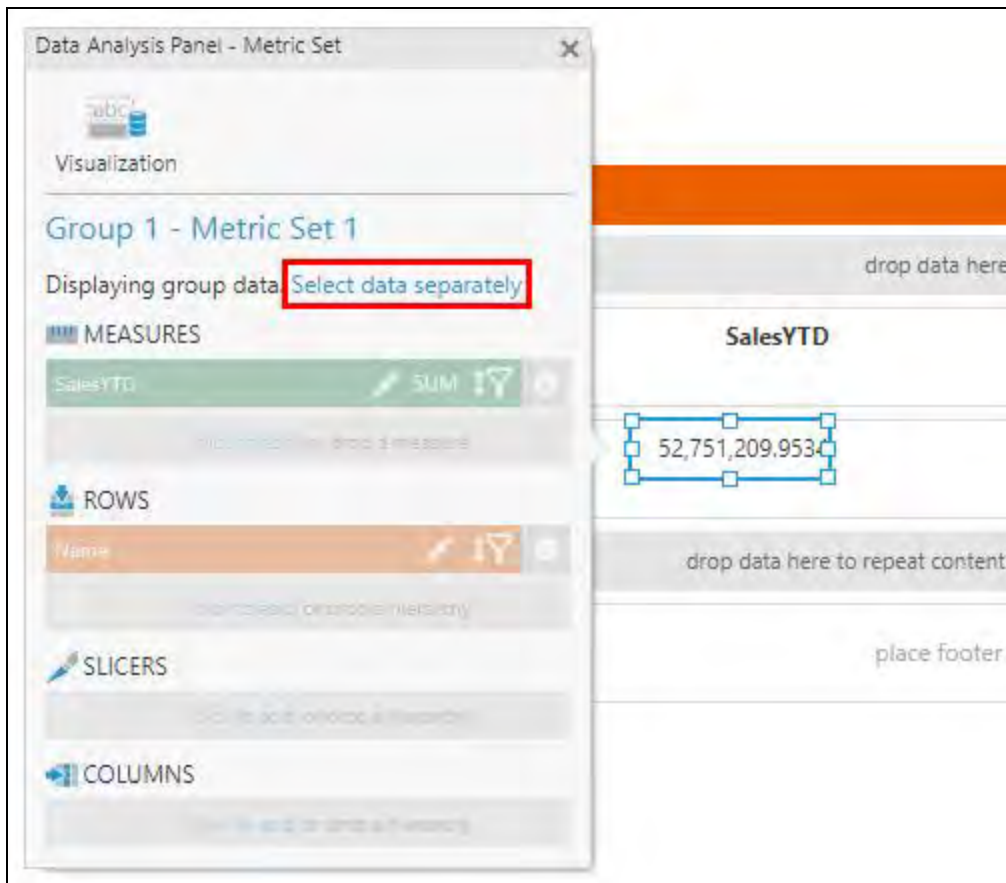
- Script Library: [Customize the context menu](#)
- [JavaScript API](#)
- [Using the Script Editor](#)

Display Group Data

When dragging data directly onto a report, scorecard, or small multiple, a data label is normally created automatically to display that data, which you can then customize, remove, or re-visualize. This visualization initially displays data directly from the same group metric set used to produce the rows (or columns) of your view using the data you dragged onto the [grouping hierarchy region](#). This can help with performance when viewing or exporting, especially when there are many data labels.

Data visualizations can also select data separately from the group, especially when they need to display multiple rows or data points within each individual visualization (e.g., a line chart that needs to connect multiple data points).

If a visualization currently displays the group metric set's data, the text *Displaying group data* is shown in their Data Analysis Panel and options are disabled unless you open the group's Data Analysis Panel directly. You can click **Select data separately** if you want to create a separate metric set for the visualization.

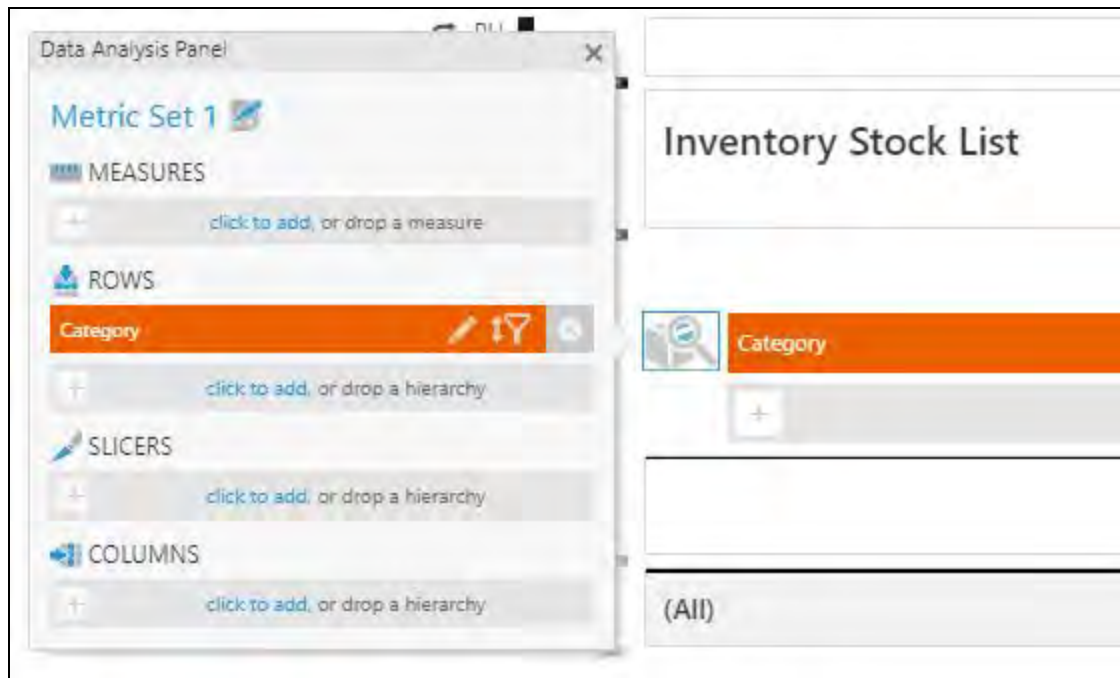




Note: If you are using any [filters](#) or [view parameters](#), you should connect them to the new metric set.

Afterward, you can select more data or make other changes just for this visualization. New visualizations added using **Data Visualization** in the toolbar already start out with their own separate metric set.

If you want to make changes to the group metric set when your visualizations are displaying group data, you can open the group metric set's Data Analysis Panel by clicking the cube and magnifying glass icon next to the grouping hierarchies.



In the visualization's Data Analysis Panel, you can also click the hyperlink to the group metric set (e.g., *Group 1 - Metric Set 1*) as a shortcut to switch to its Data Analysis Panel.

Here you can add more data, [filter](#) or [sort](#) it, or access other [metric set](#) options such as measure [formatting](#).

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)



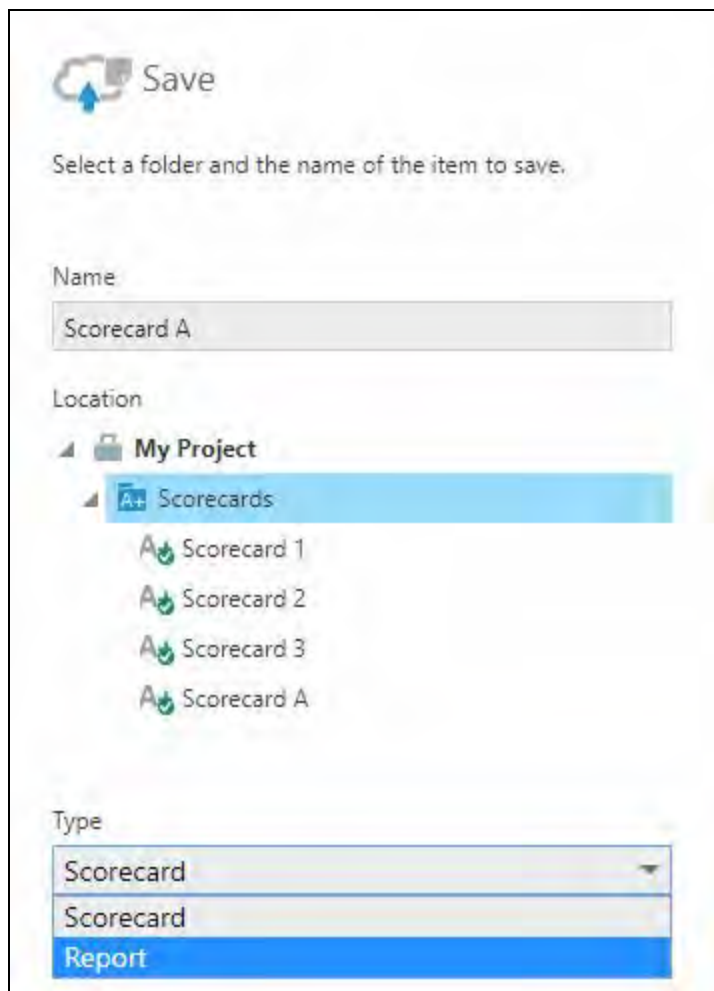
- Archive of documentation for Logi Symphony v24

- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Convert Scorecards and Reports

You can create a report from an existing scorecard or vice versa by using the **Save As** option in the toolbar.

In the **Save** dialog, select the new **Type**. You can also optionally edit the **Name** and **Location**.



The image shows a 'Save' dialog box with the following fields and options:

- Save**: Title bar with a cloud icon and an upward arrow.
- Select a folder and the name of the item to save.**: Instructional text.
- Name**: A text input field containing 'Scorecard A'.
- Location**: A tree view showing a folder structure:
 - My Project** (expanded)
 - Scorecards** (expanded)
 - Scorecard 1
 - Scorecard 2
 - Scorecard 3
 - Scorecard A
- Type**: A dropdown menu with 'Scorecard' selected. The dropdown list is open, showing 'Scorecard' and 'Report' as options, with 'Report' highlighted in blue.

Reports and scorecards can produce similar results but you may decide that the other type is more appropriate. For example, only reports are designed to be formatted into pages according to a paper size with page headers and footers. Scorecards are usually viewed directly in the browser or added to a dashboard, and they can include optional sticky headers for scrolling.

 **Important:** When you convert a report to a scorecard, the page header and footer and the report header and footer are removed.

For more on Scorecard and Report design, see:

- [Build a Symphony Scorecard](#)
- [Symphony Managed Reports](#)
- [Design a Scorecard](#)
- [Report Options](#)
- [Design Tips for Reports and Scorecards](#)
- [Design Tips](#)

Create Small Multiples

This applies to: *Managed Dashboards, Managed Reports*

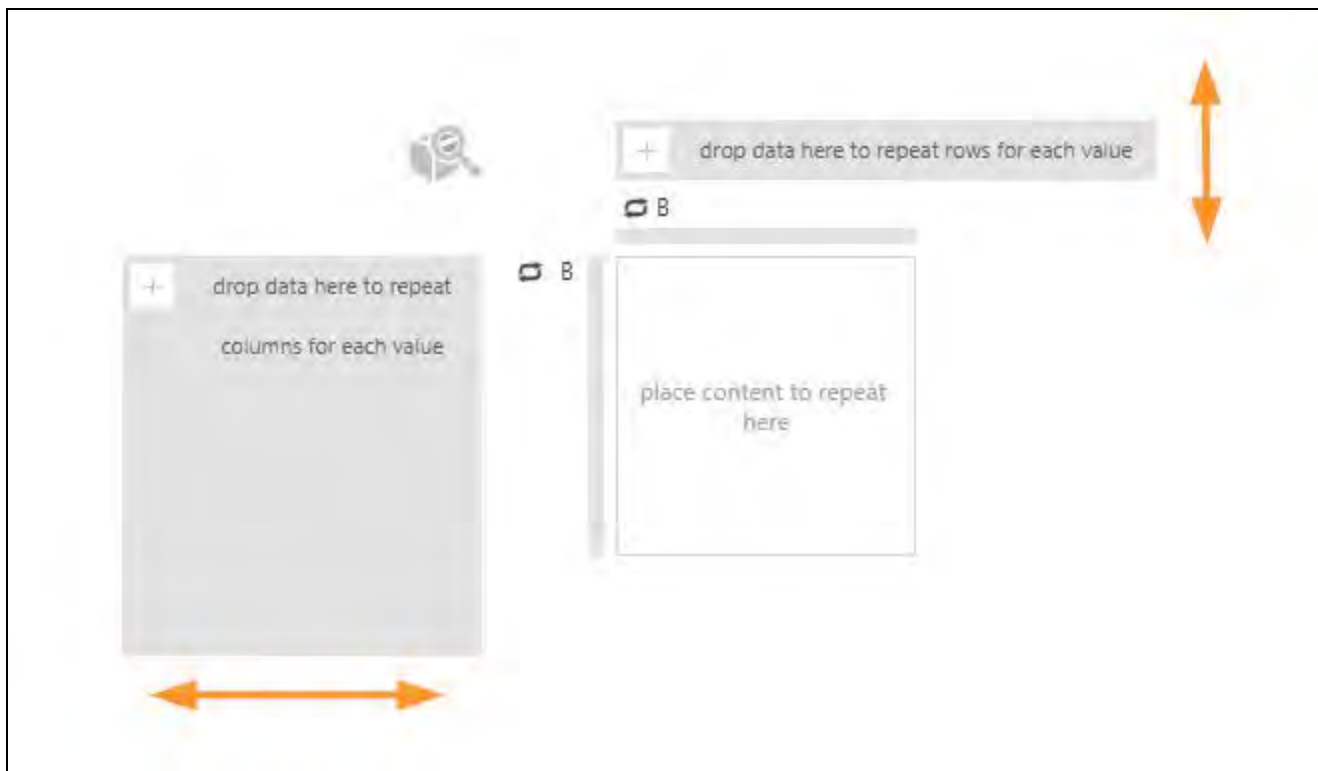
Small multiples (also called trellis charts) produce a series of some visualization displaying the same data but with one variable changed each time. They can arrange the series horizontally, vertically, or in a matrix, and allow you to easily compare multiple sets of data that wouldn't fit well in a single visualization.

A small multiple is another type of view in Symphony, in addition to dashboards, reports, etc. You can view small multiples on their own or drag one onto another view to combine it with other content.

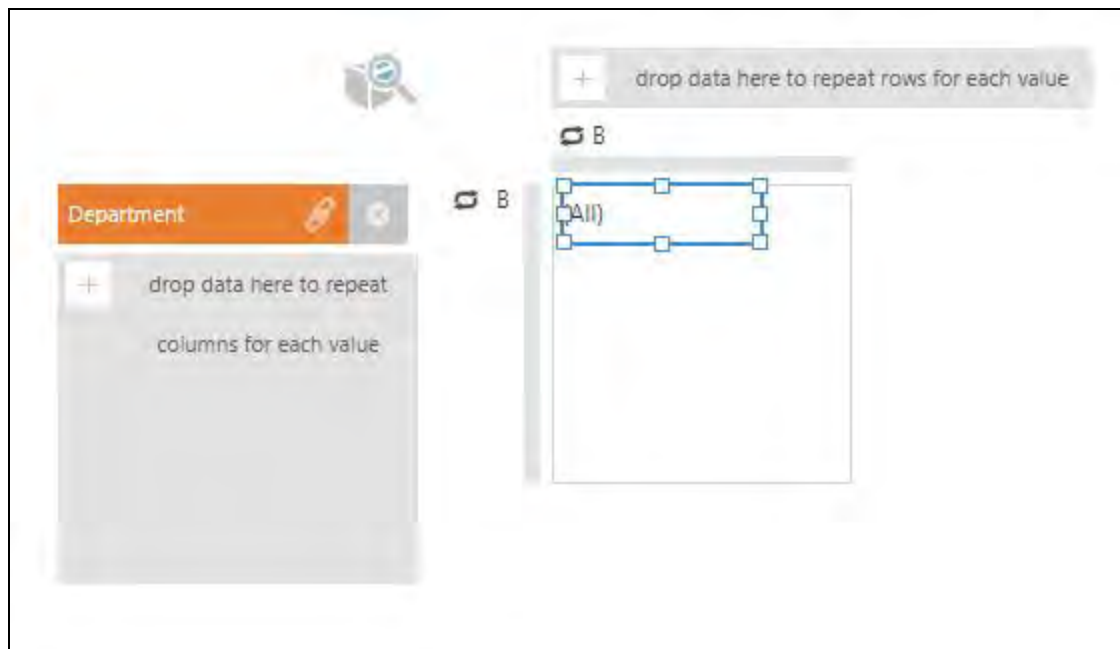
Select a Repeating Hierarchy

Every small multiple repeats content for each value of some hierarchy, similar to [reports](#) and [scorecards](#).

After creating a new small multiple from the main menu, you can drop a hierarchy or a column of categorical data such as **Department** from the **Explore** window onto either of the two drop zones that appear.



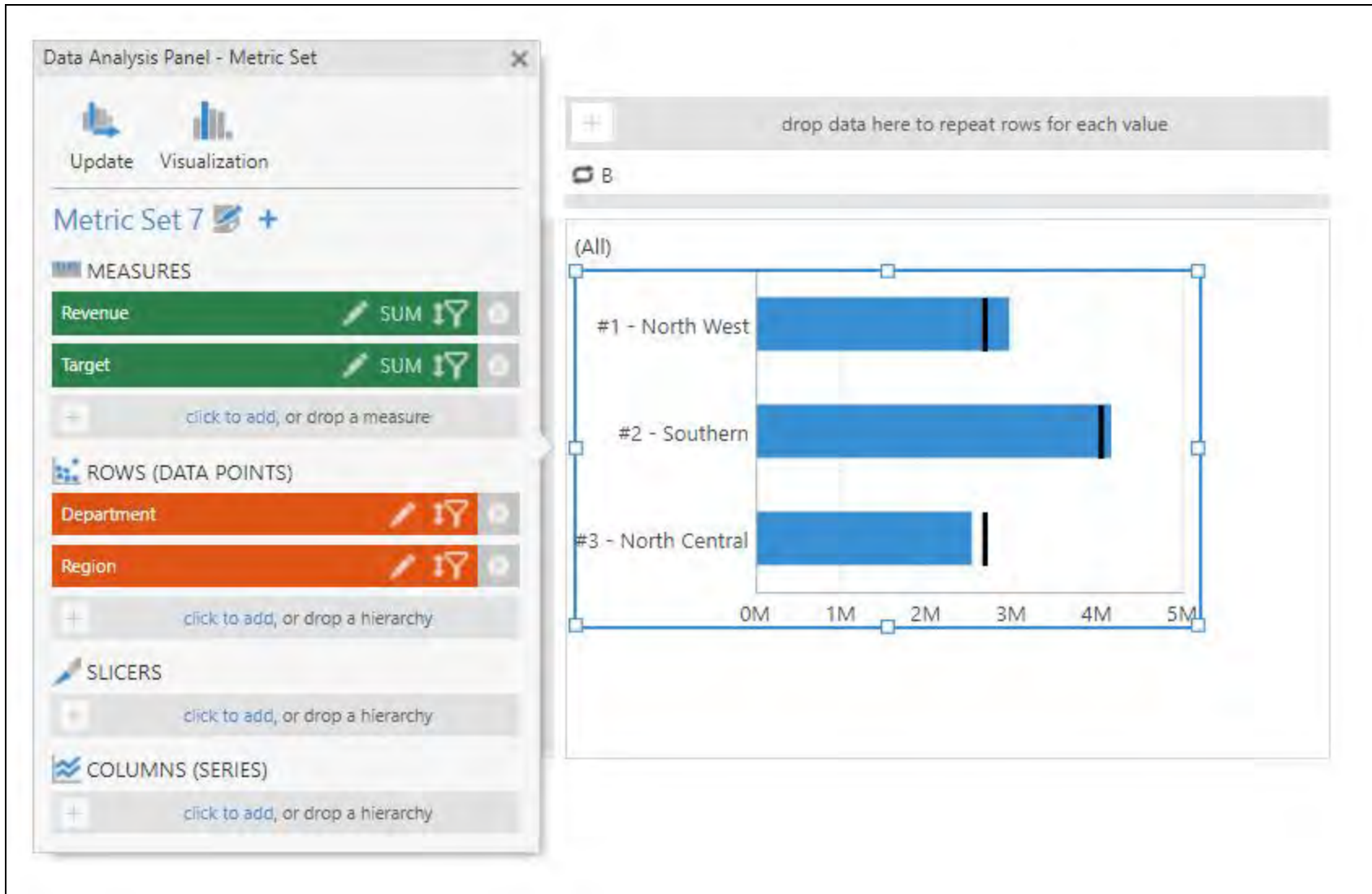
Drop data to repeat **columns** on the left to arrange visualizations horizontally, or **rows** on the top to arrange them vertically.



A data label is added automatically that will identify the hierarchy value in each cell. You can change or re-position this label.

Add a Visualization

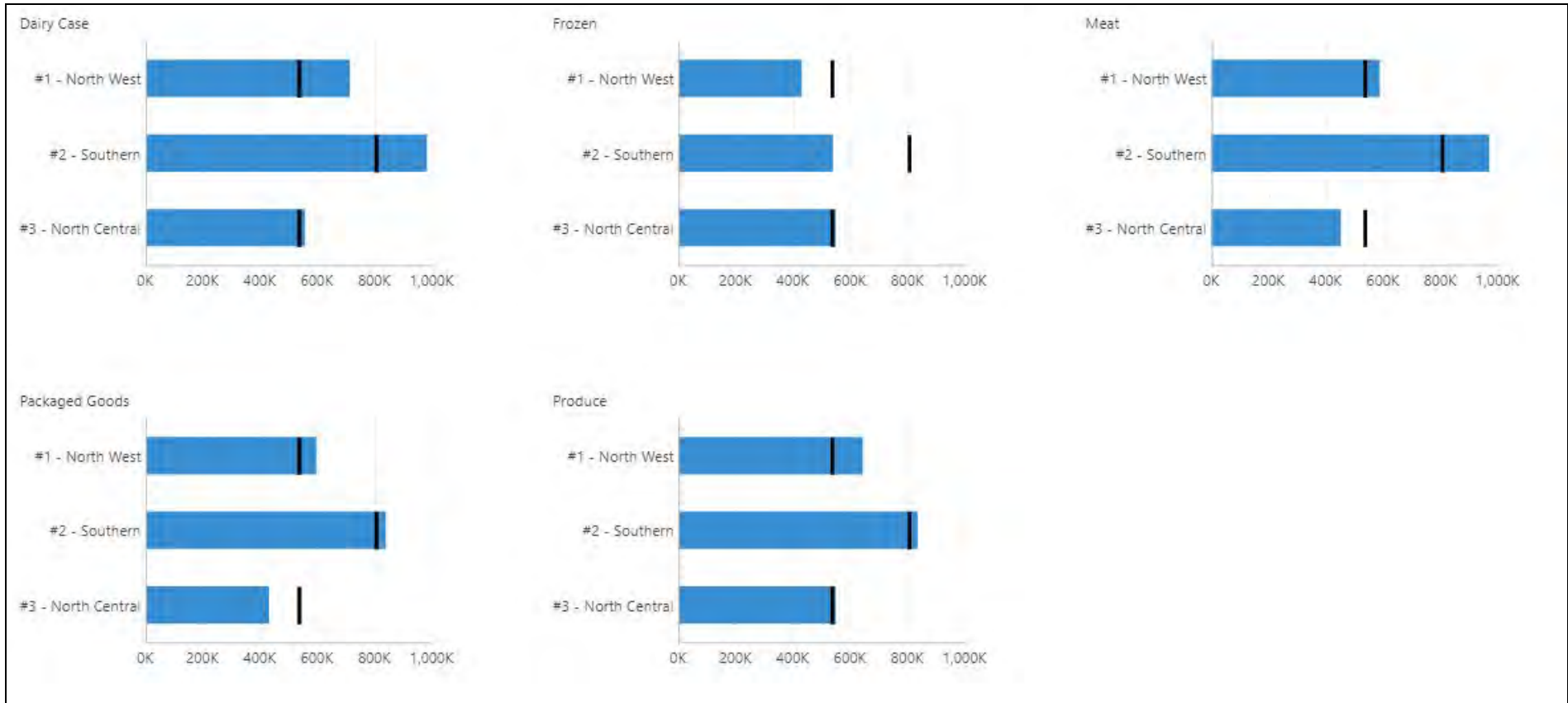
Add your main visualization to repeat as a series by choosing one from **Data Visualization** in the toolbar. To allow Symphony to visualize for you as you add data based on its recommendations, choose **Smart**.



Note: If you already have a visualization you want repeated in a series, go to the **Explore** window and find the metric set or the visualization under a dashboard and drag it onto the canvas.

This visualization can contain as much data and details as you need it to, and it will be reproduced in a series for each value of the hierarchy you chose to repeat by. You can also add any other components or visualizations that you like, and re-arrange the contents of the cell.

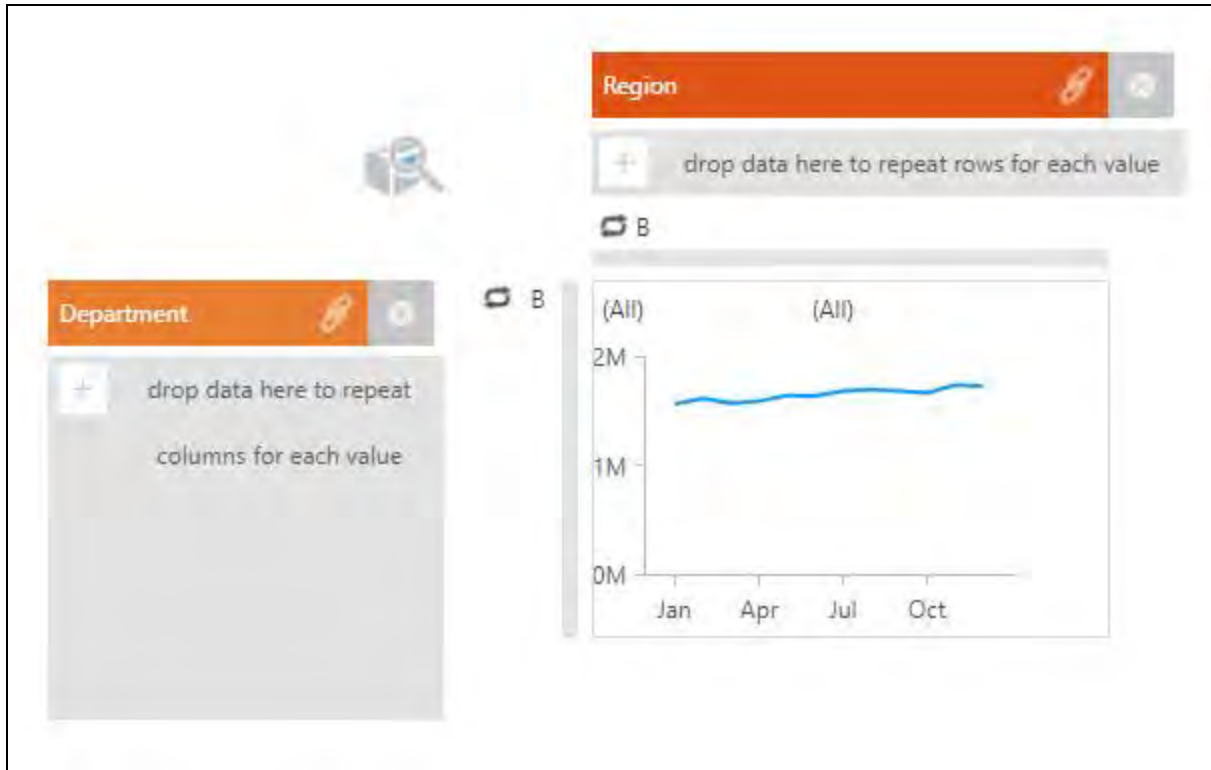
Select **View** in the toolbar at any time to see the rows or columns produced by your data, and the visualization you set up repeated in series.



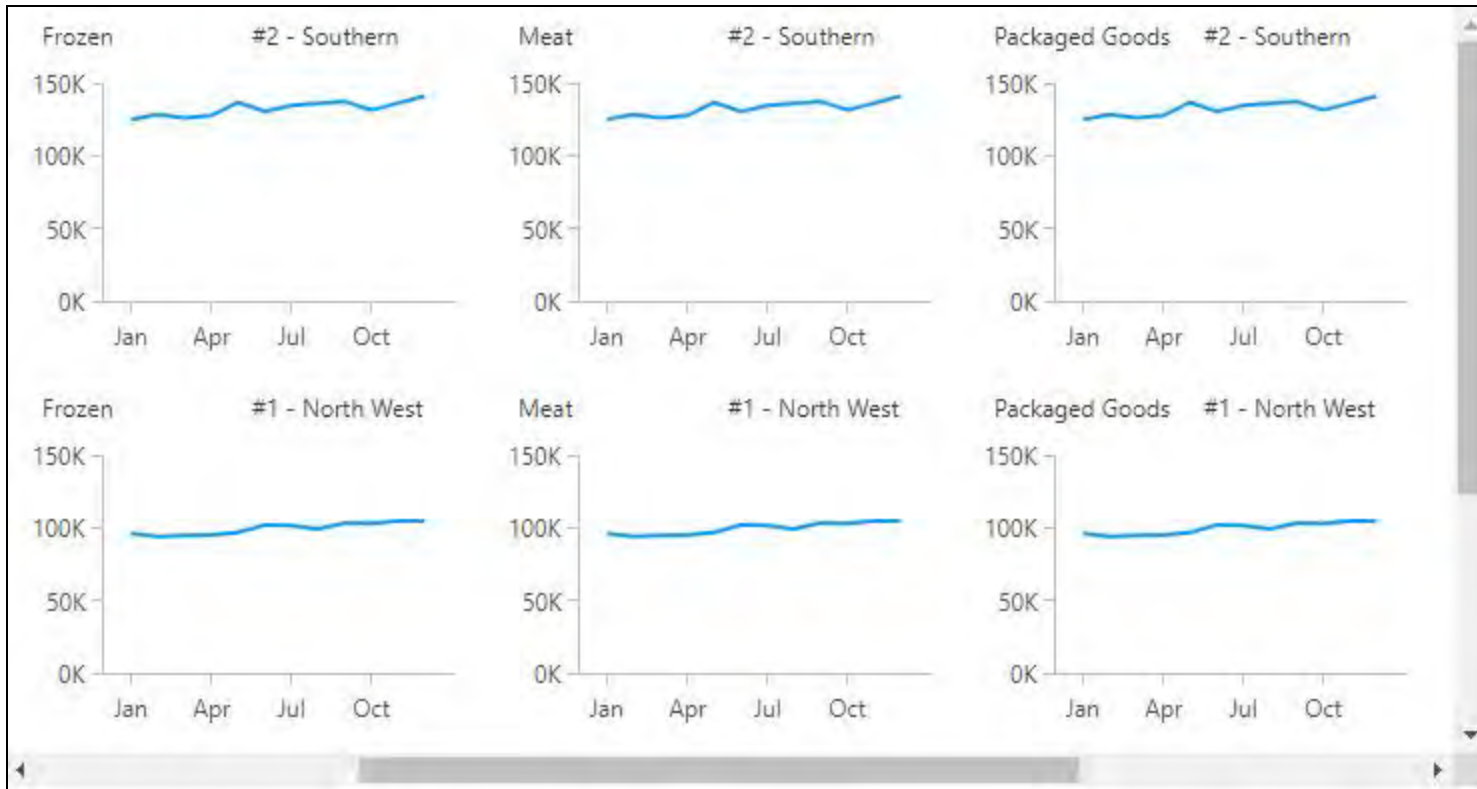
When data is added only along rows or only along columns, the series of visualizations will wrap onto additional columns or rows once the available space is filled to avoid the need to scroll to see the entire series.

Display a Crosstab

You can also drop data onto both drop zones, to produce a matrix with a row for each value of one hierarchy and a column for each value of another.



When grouping the small multiples into both rows and columns, the rows and columns will not wrap and will instead extend to fit however many values are currently selected from your data. One or both scrollbars may appear if all of the columns or rows do not fit.



You can use headers to label each row and column only once along the outside of the small multiple series. See the section below about headers for details.

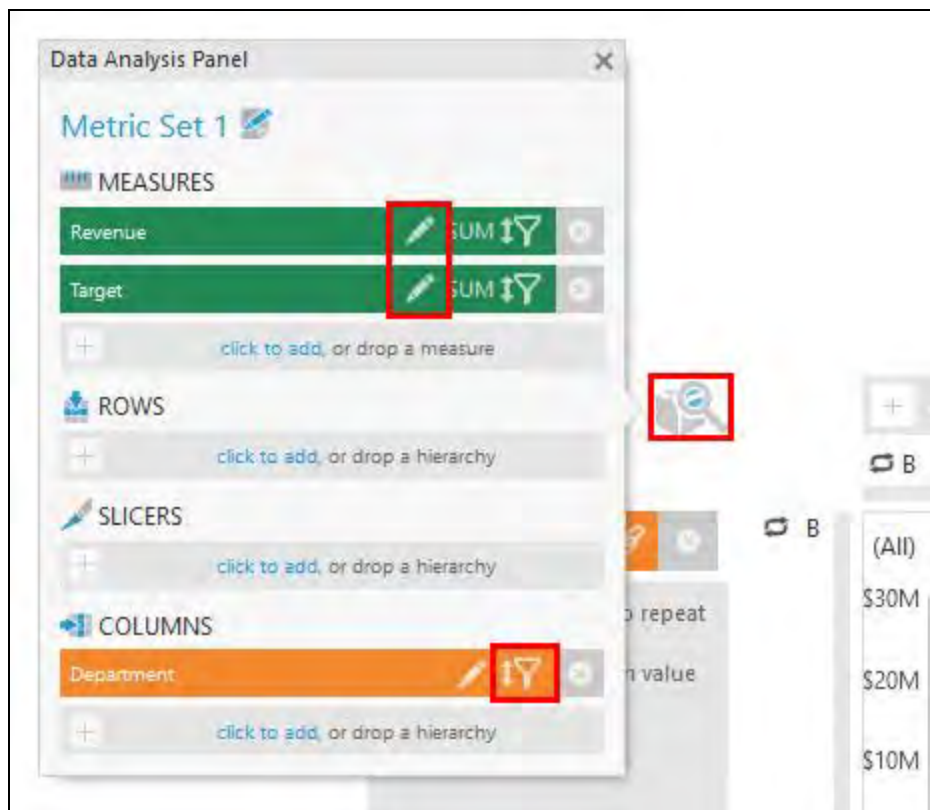


If your crosstab consists vertically of a row for each value of a hierarchy, and horizontally a series of visualizations for different measures (or vice versa), you only need to repeat your small multiples by the hierarchy. When editing, you can set up a row or column of visualizations for each measure, and then repeat it vertically or horizontally.

Sort and Filter Small Multiples

To sort and filter the rows and/or columns of your small multiple series when editing, access its Data Analysis Panel by clicking the cube and magnifying glass icon on the editor.

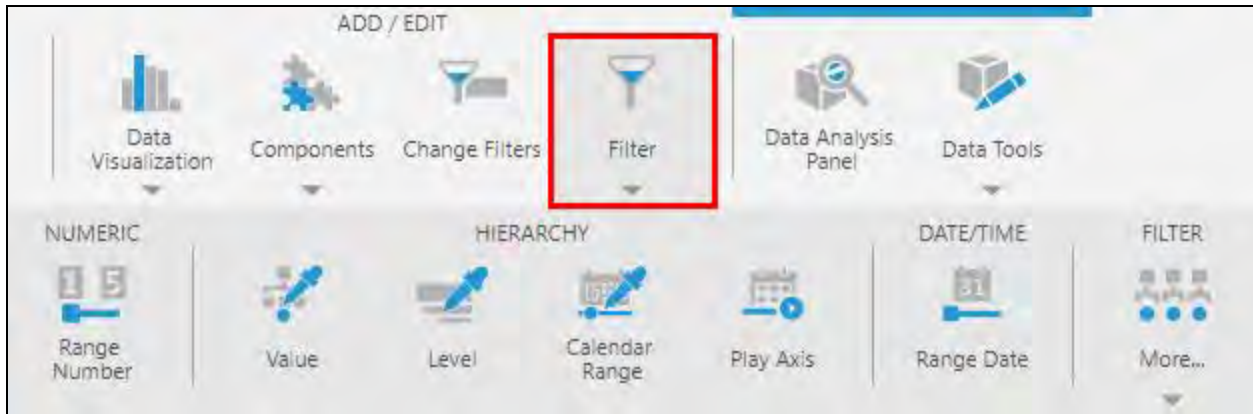
You can select the sort & filter icon for a hierarchy, or you can select to edit a measure or hierarchy's settings and set up custom measure or custom hierarchy sorting.



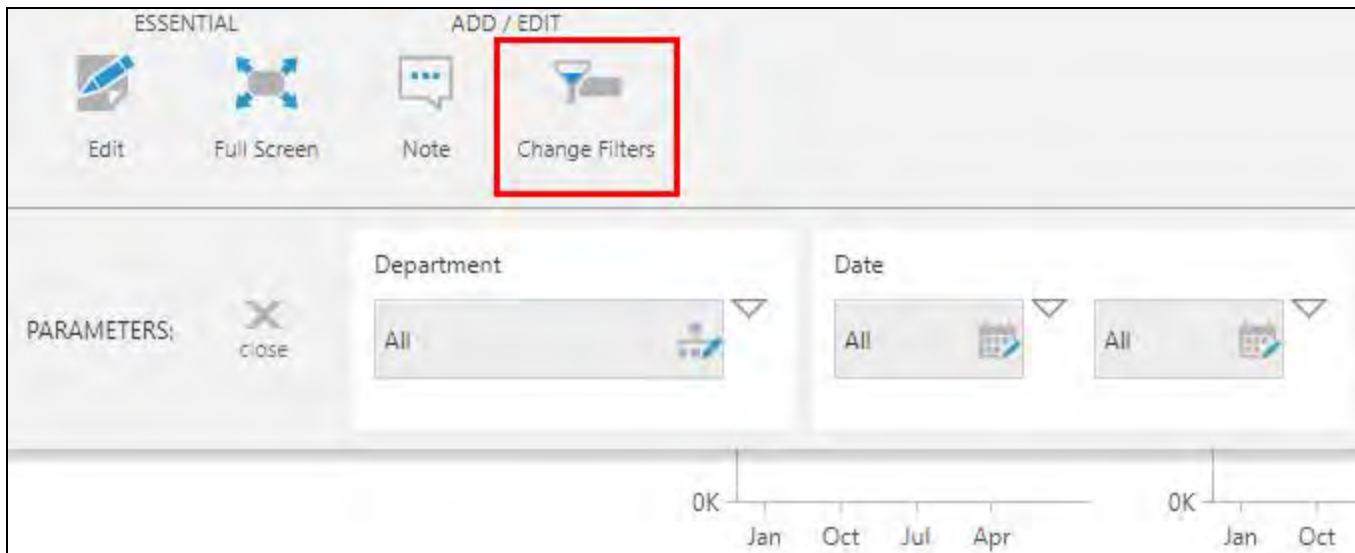
Important: The sort & filter popup for a measure sorts the rows of your data by measure. If you want to sort the small multiple's columns when editing, set up custom measure sorting.

For example, small multiples are often more readable when sorted by a measure.

When viewing, you can filter by adding filters to the parameter bar that is accessible from the toolbar, similar to reports and scorecards. To add a filter to the parameter bar, choose **Filter** in the toolbar when editing, and choose a filter type.



The **Parameters** window will open to show the new filter's connections, with some connections already selected. Review or change these selections, select **View** and then **Change Filters** in the toolbar to try the filter.



You can also sort and filter when viewing by adding a **Header** control to a header or corner area. See the next section below for details.

Finally, simple visualizations such as data labels that are displaying data from the [group metric set](#) can also be right-clicked (or long-tapped) when viewing to sort and filter the rows of small multiples and columns using the same context menu options as other metric sets.



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Headers and Footers

You can add content displayed along the outer edges of the series of visualizations, in areas called headers, footers, and corners.

To set up headers and footers, click an empty area of the editor if necessary to de-select an element, then switch to **Advanced Mode** in the toolbar.

 Undo
  Clipboard
  Data Visualization
  Components
  Change Filters
  Filter
  Resize Cells
  Create Theme
  Apply Theme
  Advanced Mode



Department

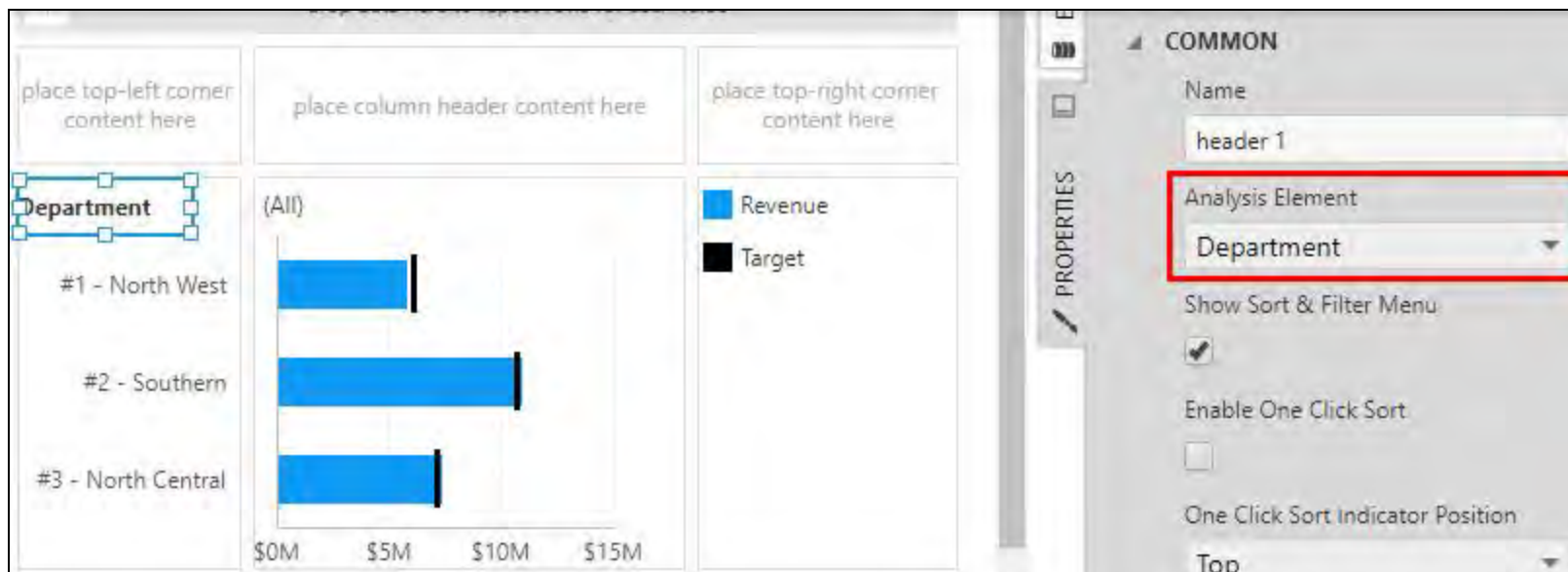
drop data here to repeat columns for each value

+

drop data here to repeat rows for each value

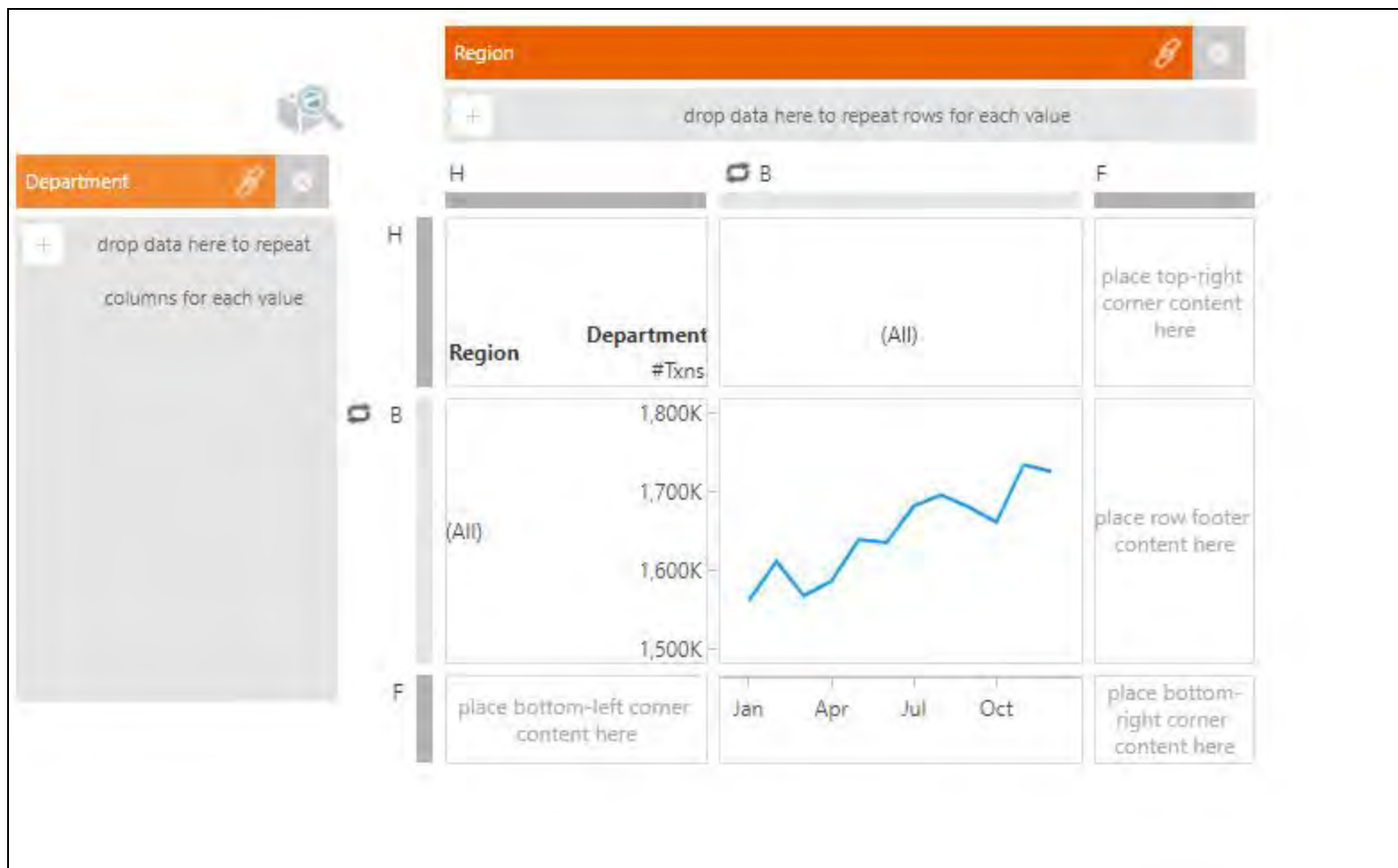
	H	B	F
H	place top-left corner content here	place column header content here	place top-right corner content here
B	place row header content here	(All) #1 - North West  #2 - Southern  #3 - North Central  \$0M \$10M \$20M	place row footer content here
F	place bottom-left corner content here	place column footer content here	place bottom-right corner content here

A header, footer, or corner can be a good place to add a legend to be used as a reference for your small multiple series. **Row headers** and **row footers** are displayed once per row, and **column headers** and **column footers** once per column.



You may want to add a Header control, found in the Data Visualization toolbar, which can allow you to sort and filter the rows or columns when viewing. Set its **Analysis Element** property to your hierarchy in the Properties window to connect it.

When displaying a 'crosstab' with your small multiple series grouped into both rows and columns, you can label each row along the left by dragging or adding the corresponding data label into the **row header** cell, and each column along the top by doing the same into the **column header** cell.



Each 'corner' area is displayed only once, above or below the row headers and before or after the column headers. These areas make the most sense, for example, to add a **Header** for each series grouping hierarchy when displaying a crosstab.

Another use for headers and footers is explained below, for displaying axes with labels only along the outer edges.

Resize and Customize Cells

A cell will automatically expand in size to fit your content when you resize or re-position it.

For more control over the size of the canvas used to produce a small multiple series or any of its headers, footers, or corners, choose **Resize Cells** in the toolbar when there is nothing selected in the editor. If something is selected, first select an empty area of the editor.

Logi Symphony v24 interface showing a dashboard layout with a table and a line chart. The interface includes a top navigation bar with various icons and a right sidebar with a 'Resize Cells' button highlighted in orange.

Top Navigation Bar:

- ENTIAL
- COMMON
- ADD / EDIT
- Sandbox View
- Undo
- Redo
- Clipboard
- Data Visualization
- Components
- Change Filters
- Filter
- Resize Cells** (highlighted)
- Create

Dashboard Layout:

The dashboard is divided into three main sections:

- Left Sidebar:** Contains a 'Department' header and a list of departments (H, B, F) with corresponding counts. The height of this section is 149px.
- Top Section:** Contains a 'Region' header and a list of regions (H, B, F) with corresponding counts. The height of this section is 95px.
- Main Content Area:** Contains a table with columns 'Region', 'Department', and '#Txns'. The table is filtered by '(All)'. The table has 4 rows and 3 columns. The width of the table is 147px, 204px, and 90px.

Table Data:

Region	Department	#Txns
(All)	(All)	1,800K
(All)	(All)	1,700K
(All)	(All)	1,600K
(All)	(All)	1,500K

Line Chart:

The line chart shows the trend of transactions over time. The x-axis represents months (Jan, Apr, Jul, Oct) and the y-axis represents the number of transactions (1,500K to 1,800K). The chart shows a general upward trend with some fluctuations.

Right Sidebar:

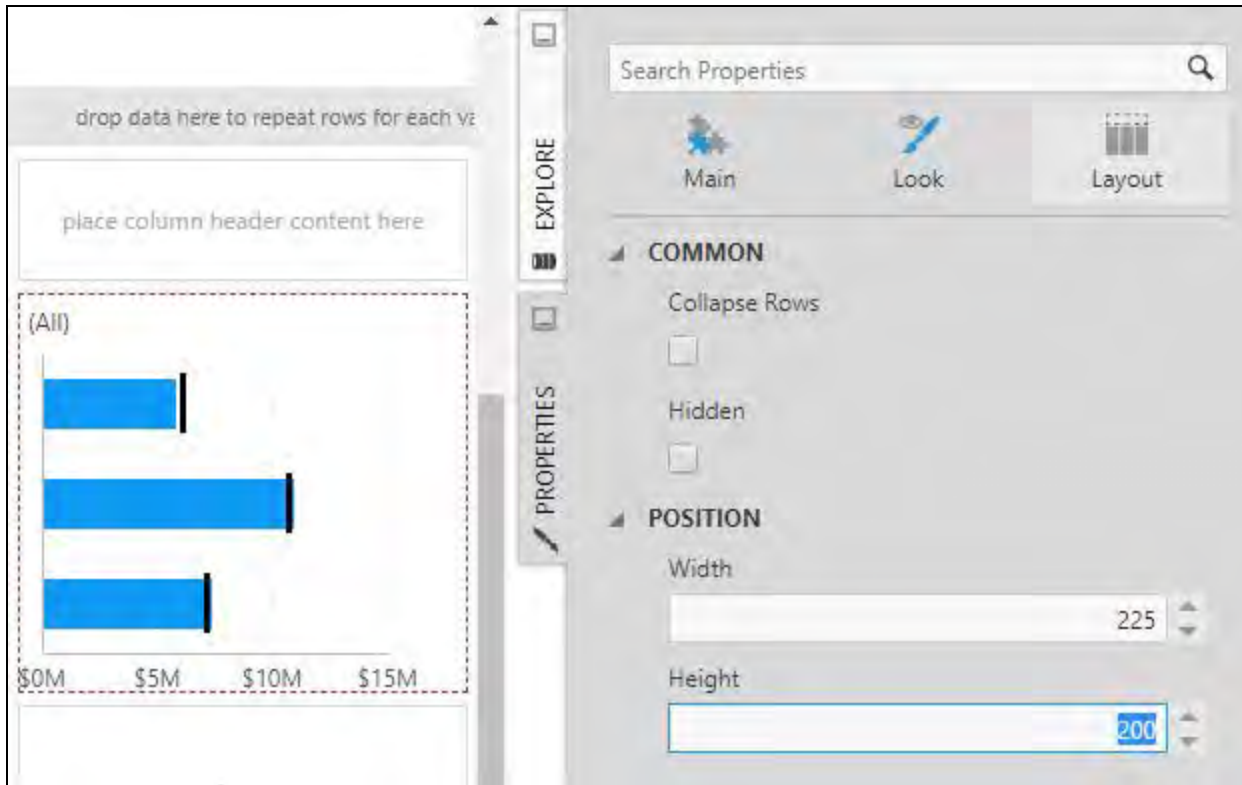
- place top-right corner content here
- place row footer content here
- place bottom-left corner content here
- place bottom-right corner content here

This toggles blue draggable resize borders with each size labeled in pixels along the edges. If you are in advanced mode, you can resize each of the widths and heights between the various regions at once.

When finished, select **Resize Cells** in the toolbar again to return to normal editing.

You can also open the **Properties** window when there is no cell or element selected to set up a background or font that takes effect for the entire view, including all headers, footers, and corner areas.

If you select a cell, you can also set its width and height in pixels in the **Layout** tab in the **Properties** window, or set up a background for that cell in the **Look** tab. If the cell is difficult to select, select something in the cell, then choose **Select Template Cell** in the toolbar.



For the main (or 'body') cell that contains your visualization, you can also set up a background palette for alternating colors, or separator lines between each visualization, similar to [reports and scorecards](#).

Chart and Gauge Axes

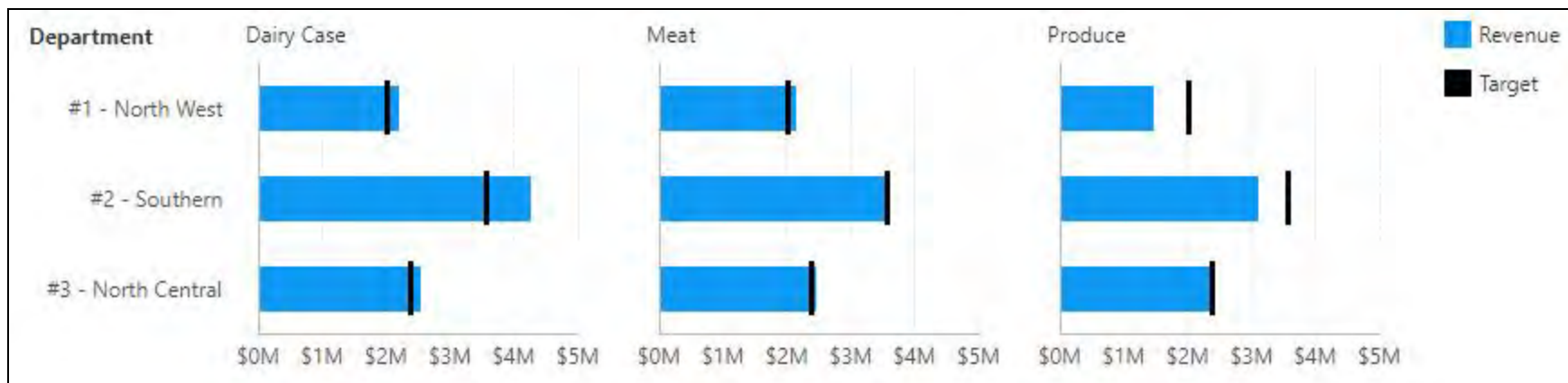
Sharing Axis Scales

Charts are a common visualization to use in small multiples, and they support reproducing the same range of values along each chart axis to ensure meaningful comparisons between each chart in the series.

In small multiples, all chart axes share their ranges of values by default. You can enable or disable this behavior for chart axes or gauge scales using their `Share Scale With Copies` property. See [Share Axis Scales in a Scorecard](#).

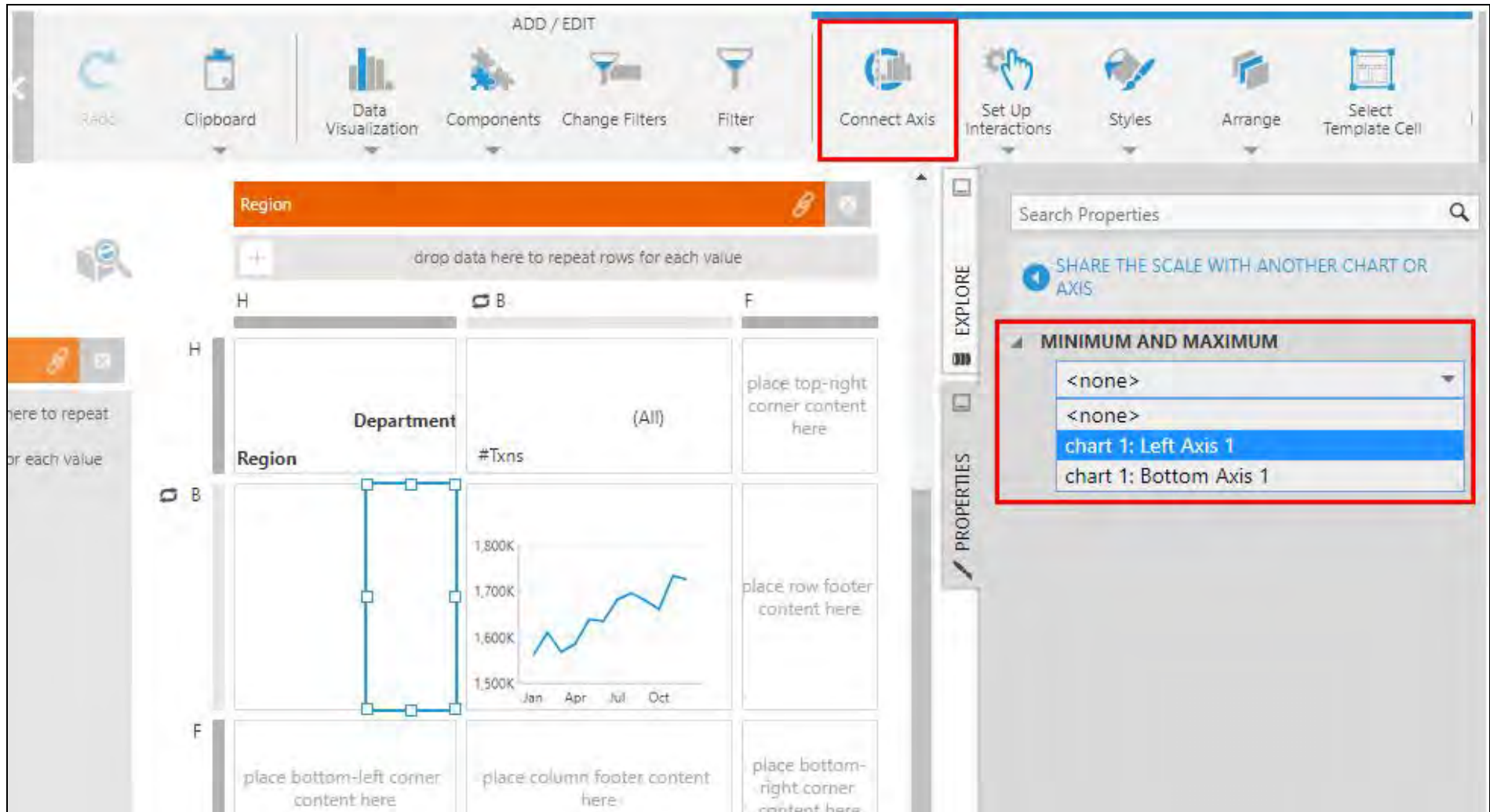
Labeling Only Along the Edges

When all the axes or scales label the same values, showing the labels in every chart or gauge can be redundant. If you prefer, you can label a scale only along the outer edges of the series to reduce the amount of text and the potential distractions when viewing.



To do this, first switch to **Advanced Mode** in the toolbar to make headers and footers available.

Select a header or footer, such as the **row header** cell, then choose **Data Visualization** in the toolbar and under **Recommended** select **Axis** to insert it. Resize the control if more vertical space is needed.

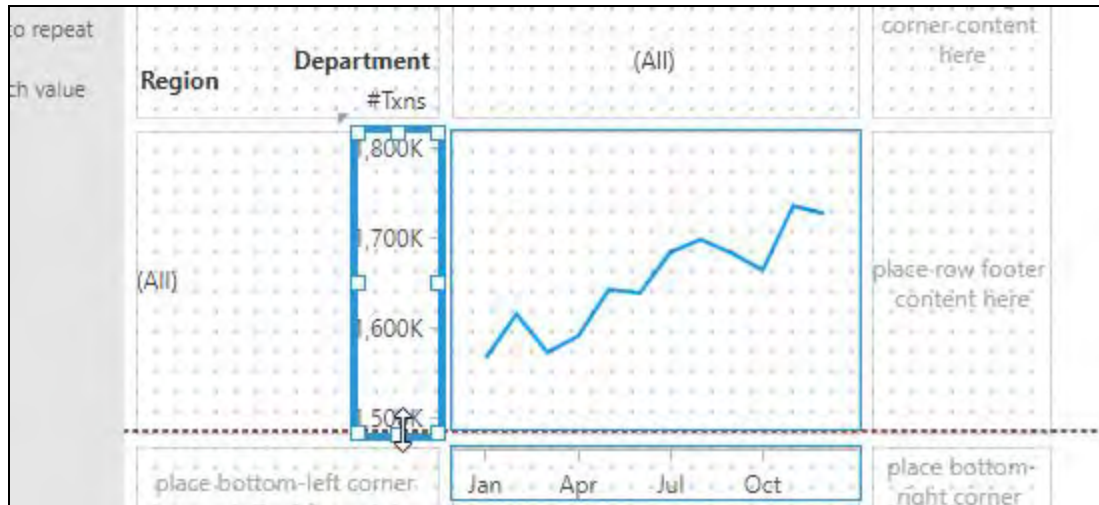


The screenshot displays the Logi Symphony v24 interface. In the top toolbar, the 'Connect Axis' button is highlighted with a red box. Below the toolbar, a dashboard is visible with a line chart showing '#Txns' over time. The 'Properties' window on the right is open, and the 'MINIMUM AND MAXIMUM' dropdown menu is highlighted with a red box. The dropdown menu shows the following options:

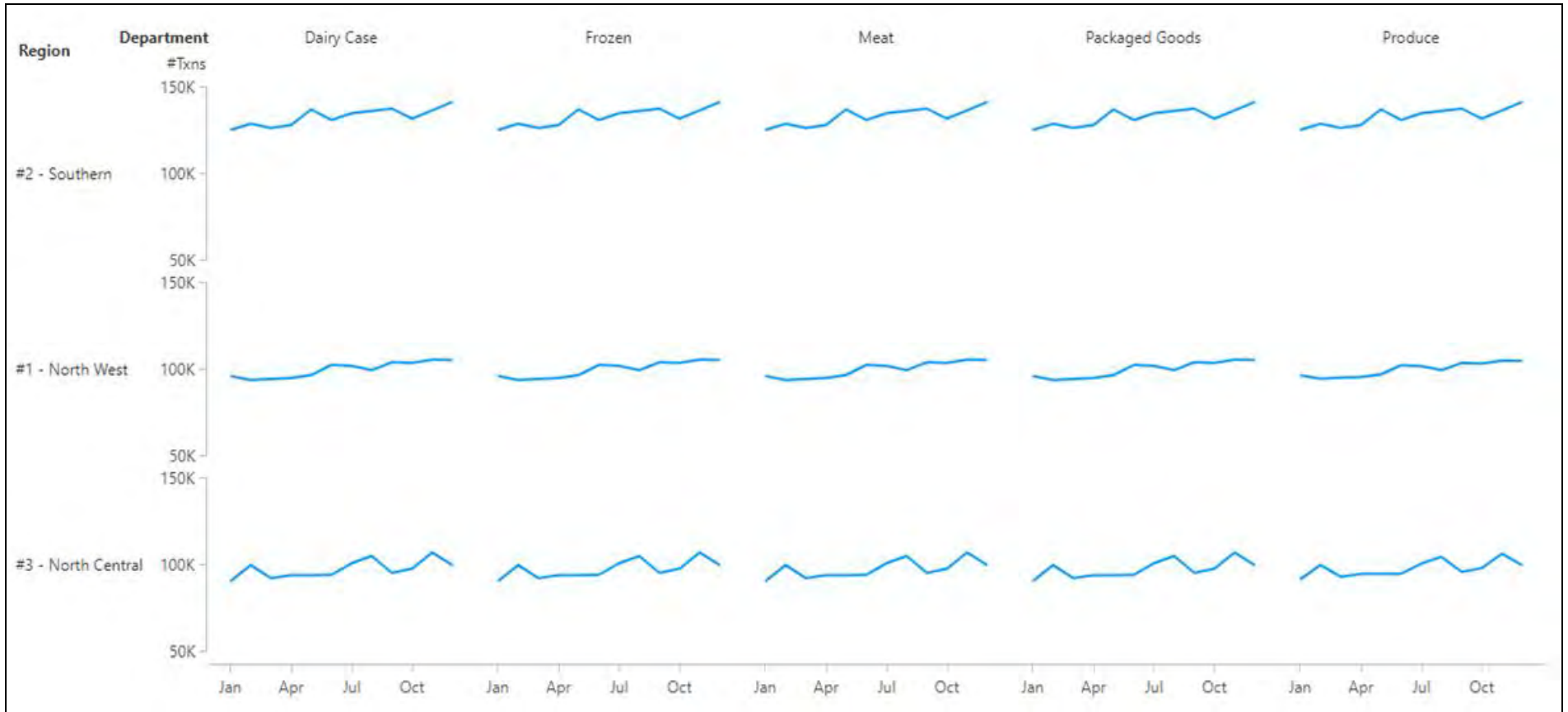
- <none>
- <none>
- chart 1: Left Axis 1
- chart 1: Bottom Axis 1

In the toolbar, select **Connect Axis**. In the **Properties** window that opens to the shared scale properties, choose the axis or scale from the drop-down that should be replaced by this axis in the header.

The outer axis updates to display the values of the chart or gauge. Ensure their positions and sizes line up, and the axis will align itself with the data points so that the labels and tick marks correspond correctly. You can use the red dashed guidelines that appear when dragging or resizing.



If the axis is displaying categorical data, the hierarchy member keys will initially be displayed. The axis will need a copy of this data in order to display its captions, which you can drag to add after opening the **Data Analysis Panel** for the axis from the toolbar.





Symphony Notifications (Alerts)

This applies to: *Managed Dashboards, Managed Reports*

Managed Dashboard and Managed Reports Alerts

Notifications offer a way to send reminders, alerts, or the latest data using a managed dashboard, managed report, or other view in Symphony, based on a schedule or under certain conditions. The related view is exported and attached as an image, PDF, Excel, or another format.

For more information on managed dashboard alerts and notifications, see:

- [Set Up A Notification](#)
- [Notification Types](#)
- [Notification Options](#)
- [View Or Update Notifications](#)

Scheduled Data Discovery Dashboard Reports

This applies to: *Visual Data Discovery*

You can generate scheduled data discovery dashboard reports and send them to your users who use Symphony, or external users to their email address. Send reports in PDF, PNG, Data (XLSX) > Raw Data or Data (XLSX) > Visual Data formats.

Log messages related to dashboard report scheduling are stored in the `zoomdata.log` [log file](#).

Specific prerequisites must be met to schedule dashboard reports. For more information, see:

- [Scheduled Dashboard Report Prerequisites](#)
- [Schedule A Dashboard Report](#)
- [Configure Recipient Rules](#)
- [Update A Scheduled Dashboard Report](#)



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- [Delete A Scheduled Dashboard Report](#)
- [Scheduled Dashboard Report Permissions and Behavior](#)
- [Scheduled Dashboard Report Properties](#)[Scheduled Data Discovery Dashboard Report Properties](#)
- [Disable Sending Scheduled Dashboard Reports To External Users](#)



Set Up a Notification

This applies to: *Managed Dashboards, Managed Reports*

Use notifications to send reminders, alerts, or the latest data using a managed dashboard, managed report, or other view in Symphony, based on a schedule or under certain conditions. The related view is exported and attached as an image, PDF, Excel, or another format.

For example, you can set up a notification that emails your dashboard to your group once a week, or when the latest hourly data indicates a problem. You can also be notified of events such as when someone replies to your [note](#).

To create a notification for yourself or others, select **Notification** in the toolbar of any dashboard, report, scorecard, or small multiple, then choose the type of notification you want to create.



Note: You can set up scheduled notifications only for reports, scorecards, and small multiples, or for metric sets displaying raw data. For dashboards, remove *<Row Number>* from **Rows in the Data Analysis Panel** to add other notification types.

After you select your notification type, define notification options. See [Notification Types](#).



Notification Types

This applies to: *Managed Dashboards, Managed Reports*

Symphony offers a number of managed dashboard, managed report, and other notification types. Select an option that suits your needs.

Depending on the type of notification you've selected, there are a number of options for delivery. See [Notification Options](#).

After you've created a notification, you can view or update it as well. See [View or Update Notifications](#).

Scheduled Notifications

A scheduled notification occurs on a periodic schedule which you define by selecting recurrence and other scheduling options.

1. Select **Notification** in the toolbar of any dashboard, report, scorecard, or small multiple. The notification work area opens.
2. Select the **Scheduled** notification option. A **Notification** work area opens.
3. Enter a **Name**, an optional **Description**, then select **Define schedule** to configure scheduling options.
To run the scheduled event now, select **Run Immediately**.
4. Select **Add export content** and select a format for exported content to send.
5. Optionally change the delivery option from the default, **Email**, which sends the alert and content in an email and as an attachment.

Note

A note-based notification lets you know when a user has added a [note \(annotation\)](#) to data in a visualization.

1. Select **Notification** in the toolbar of any dashboard, report, scorecard, or small multiple. The notification work area opens.
2. Select the **Note** notification option. A **Notification** work area opens.
3. Enter a **Name**, an optional **Description**, then select **Define schedule** to configure scheduling options.
To run the scheduled event now, select **Run Immediately**.
4. Select **Add export content** and select a format for exported content to send.
5. Optionally change the delivery option from the default, **Email**, which sends the alert and content in an email and as an attachment.

Data Driven

A data driven notification occurs when a change in data is detected on a scheduled basis, for example, polling.

Choose from a variety of options to determining what conditions occur in the data to trigger your notification.

1. Select **Notification** in the toolbar of any dashboard, report, scorecard, or small multiple. The notification work area opens.
2. Select the **Data Driven** notification option. A **Notification** work area opens.
3. Enter a **Name**, and an optional **Description**.
4. Select **Add condition** to select the data changes to monitor, for example, a value increasing over the past three days.
5. Select **Define schedule** to configure scheduling options.
To run the scheduled event now, select **Run Immediately**.
6. Select **Add export content** and select a format for exported content to send.
7. Optionally change the delivery option from the default, **Email**, which sends the alert and content in an email and as an attachment.



Note: See [Notification Options](#) for more information about applicable [Data Driven Conditions](#).

Data Correction

A data correction-based notification lets you know when a user has added a measure correction ([data annotation](#)) to a metric set.

1. Select **Notification** in the toolbar of any dashboard, report, scorecard, or small multiple. The notification work area opens.
2. Select the **Data Driven** notification option. A **Notification** work area opens.
3. Enter a **Name**, and an optional **Description**.
4. Select from the available options in the **Metric Set** drop-down to select the visualization and metric set you want to monitor for data corrections.
5. Select **Add export content** and select a format for exported content to send.
6. Optionally change the delivery option from the default, **Email**, which sends the alert and content in an email and as an attachment.



Notification Options

This applies to: *Managed Dashboards, Managed Reports*

Symphony offers a number of managed dashboard, managed report, and other notification types. After you've selected your [notification type](#), define your notification options to suit your organizational needs. Options may vary depending on the type of notification you're creating.

Define a Schedule

Select **Define Schedule** when creating your notification to set up a schedule rule. Use to define scheduled notifications, and to determine when data driven notifications poll for data.

1. Select **Define Schedule** when setting up a notification. The **Schedule Rule** work area opens.
2. Select or clear the **Enabled** checkbox to enable or disable this rule.
 - i. When enabled, the rule runs based on the options you define.
 - ii. When disabled, the rule does not run until you enable it again.
3. Optionally, select a time zone and enable or disable the **Daylight Saving Time** checkbox. If you do not use this option, your rule is run at a constant interval between notifications (defined below).
4. Enter a **Start Date** and time to start the schedule.
5. Select a **Repetition Pattern** from the drop-down to define a scheduled day to run the rule.
 - i. **Daily** - Select to run the rule every day or every *n*th day.
 - ii. **Weekly** - Select to run the rule every week or every *n*th week.
 - iii. **Monthly** - Select to run the rule once a month. Select months to include, and days of the month in multiple ways, including by use of a comma separated list of days.
6. To run a the rule multiple times a day, enable the **Intra-Day Recurrence** checkbox.



- i. Change the drop-down from **Not Set** to **Minutes** or **Hours** to set up a regular **Recurrence Interval** .
 - ii. Alternatively, select **Add Occurrence** to set specific times of day to run the rule. Delete an occurrence by selecting the trash can icon.
7. Optionally, set an **End Date** to stop the rule from running after a specific number of occurrences, or by a specific date.

Select Your Export Content

Notifications export the current view you have open to the formats of your choice and deliver it along with the notification.

1. Select **Add export content** when setting up a notification. The **Notification Content** work area opens.
2. Select a **Format** to pick an available file format option, which may include Excel, PDF, Image (PNG), CSV, or PowerPoint.
3. Optionally edit the **Name** for your content. This name is shown in the notification work area, but you can select to enable **Use Name for File Name** checkbox to deliver your content using the defined **Name**.
4. Depending on the format, you can choose to export the entire view (e.g., dashboard) or a selected data visualization. For more details about export options for each format in **Selection**, see [Share or export your work](#).



Note: Dashboards designed in Responsive mode will be exported to PDF in Scale mode to better fit the selected page size.

5. Optionally, select **Preserve Current Parameter Values** to store the current parameter (filter) settings and use when this content is exported.
6. After you've defined an export content option, you can add more export content options if needed, for example, in a different format, for this notification.

Set Up Delivery Options

You have several delivery options to choose from for notifications and content.

- The default option is **Email**: your content is sent as one or more attachments to defined recipients.
- Optionally, select **File** to place the content in one or more file locations.



Email Notifications

1. Select **Delivery options** when setting up a notification. The **Delivery Options** work area opens.
2. The default, **Email**, is selected, and you are the first of the included **Recipients**. Select **Add recipient** to add users, groups, or email addresses to the email.
 **Note:** You can give your recipients an option to unsubscribe from the email notifications.
3. Add **Message Subject** and **Message Body** content. Optionally, select **Edit template in advanced editor** to apply formatting or add placeholders for generated content. See [Email Notification - Advanced Editor](#).
4. Optionally, customize the export for each recipient (report bursting) as needed. See [Report Bursting](#).

Email Notification - Advanced Editor

You can apply formatting and add placeholders to the message subject and body as needed.

1. Select the plus sign next to the **Message Subject** and **Message Body** fields, or right-click in the fields to select a placeholder to insert. Options include:
 - i. **Recipient name:** inserts the user name of the email recipient.
 - ii. **Creation date:** inserts the date the notification was generated.
 - iii. **User name:** inserts the user name of the notification creator.
 - iv. **View name:** inserts the name of the view (such as dashboard or report).
 - v. **View link:** inserts a link to the view directly in your environment.
 - vi. **Embedded image:** inserts the exported image. Only available if the export format is **Image**.
2. Add any other information you need into the provided fields.

Report Bursting

To customize the export for each user (also known as report bursting), you can use either of the following:



- When adding or editing a recipient, select **Customize parameters** to set specific filter settings for each. These parameter values will override any set on the dashboard or view.
- Or, to preserve row-level or other [security](#) already set up, select the option **Export Using Recipient Account**, which will use each recipient's account to access the view and its data when exporting.



Note: Exporting different versions for each user will require generating reports separately, which may affect performance.

Create File

1. Select **Delivery options** when setting up a notification. The **Delivery Options** work area opens.
2. Select **File** to define the file delivery options as needed.
3. Enter a path where you want to deliver the file in the **Folder** field. This must be a location accessible to the server, such as a shared folder in your network.
4. Optionally, enter a prefix to add to the start of the file name in the **File Name Template** field.
5. Optionally, define a File Lifespan in hours. If a notification occurs before the file lifespan expired for the previous one, a new file is generated with a different name.

Notified on Failure

The option to set up a user to be **Notified on Failure** by email may appear if the notification runs on a schedule. This is in the main notification dialog below the delivery options button.

This option is available according to the [Job Failure Email Policy](#) set up by your administrator.



Note: To cancel a notification and notify of failure if some of the data does not load, select **Abort On Data Errors** in the export content options.

Data Driven Conditions

The **Data Driven Condition** dialog is displayed when you add a new condition to a data driven notification. A data condition specifies the criteria for detecting or evaluating changes in data.

Select a **Condition Category** to determine when to notify the recipients:



- **Increases** - An increase is detected in the target data.
- **Continuously Increases** - Regular increases are detected in the target data over a specified period.
- **Decreases** - A decrease is detected in the target data.
- **Continuously Decreases** - Regular decreases are detected in the target data over a specified period.
- **Enters State** - The target data has entered a specified state.
- **Exits State** - The target data has left a specified state.
- **Stays in State** - The target data remains in a specified state for the specified period.
- **In State(s)** - The data is in the specified state.

The state of the data is determined by checking the values against some conditions of your choice.

When monitoring for a value that **Continuously Increases** or **Continuously Decreases**, you can either set the **Previous Number of Polls** that should show a value increasing/decreasing, or set the **Hourly Interval** to the number of hours during which the value should increase/decrease.

Choose Data to Monitor

Choose the **Visualization** and the **Metric Set** you want to monitor out of the list of visualizations that are currently displayed.

Under **Target Cells**, select one of the two buttons to choose which numeric data to monitor for changes.

If you select **Add target cell**, the current data is displayed in a table and you can directly select the values to monitor. You can add target cells multiple times, or for some conditions select a column header to monitor an entire column of values when adding a target cell.

Select **Add target cell manually** to instead select numeric data to monitor according to the filters you set. Select which **Measure values** to monitor from the drop-down.

A filter will appear for each hierarchy currently displayed by the metric set & visualization, allowing you to choose filter values. For date/time data, you can click the token menu button to the right to choose relative time options that will automatically change over time, such as **Today**.

State Conditions

If you chose a **state** condition category, expand the **States** section below to choose the conditions to check the numeric data against.

You can drag states that were already defined as part of the metric set, or select **Add custom state** to define your own conditions.



Note: Use [metric set states](#) for any advanced condition of your choice such as when a value is lower than [at this time last year](#), or when a value is detected as an [outlier](#).

Multiple Data Conditions

Select the **Submit** button at the bottom of the **Data Driven Condition** dialog when finished.

You can add multiple data conditions for the same notification. With multiple conditions, use the **Multiple Condition Operator** to indicate whether all conditions (And) or just any condition (Or) must be met for the notification to occur.



View or Update Notifications

This applies to: *Managed Dashboards, Managed Reports*

Existing notifications in managed dashboards and reports in Symphony can be viewed and updated by you or your administrator.

Personal Notifications

You can access your notifications from [your profile](#), which you can access from the [main menu](#).

In the **My Profile** dialog, scroll down and select **Notifications** to view a list of your notifications.

You can enable, disable, or run multiple notifications at a time by selecting the notifications and selecting one of these options at the top of the dialog.

Select the **Edit** icon for a notification to make updates to it.

When you edit certain types of notifications or one of their options such as **Select export content**, it may be necessary to open the dashboard or other view that the notification was created from. If not open already, you'll see a prompt telling you this along with its name - select **Ok** to open the required view and continue.



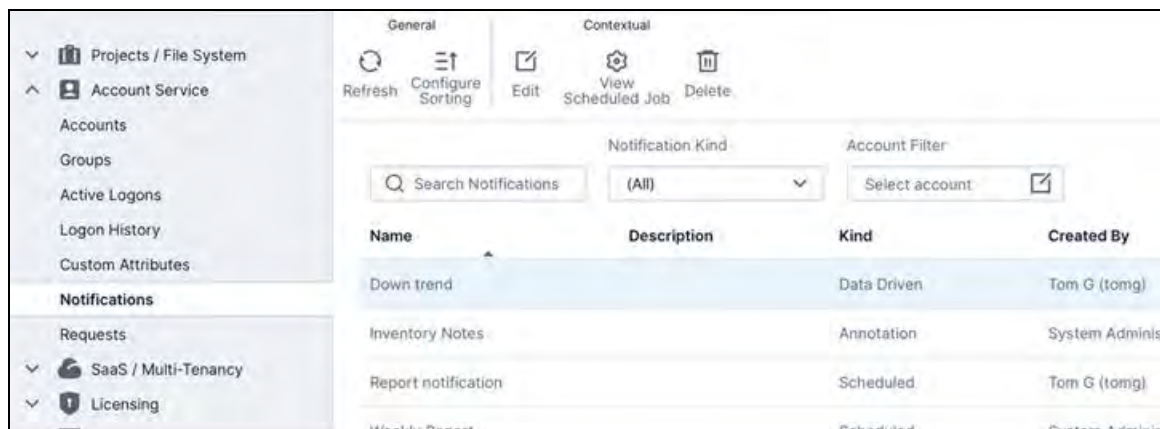
Note: When you have a different dashboard or another view open than the one used to create a scheduled notification, when you edit that notification you can click to add the view as additional export content.

Manage Notifications

Administrators can view all of the existing user-defined notifications for this instance. You may also want to configure options that determine how and which users can share their content with other users.

In the [administration area](#), expand **Account Service** on the left and select **Notifications**. You can search, sort, and filter the list of notifications by tenant (if applicable), account, or the kind of notification.

With a notification selected, you can edit it from the toolbar or view the related notification [job details](#), if applicable.



Name	Description	Kind	Created By
Down trend		Data Driven	Tom G (tomg)
Inventory Notes		Annotation	System Adminis
Report notification		Scheduled	Tom G (tomg)
Weekly Report		Scheduled	System Adminis

Alternatively, an administrator can also view the notifications for an individual user when editing their account.

For more information, see: [Symphony Notifications \(Alerts\)](#).



Troubleshooting Notifications

This applies to: *Managed Dashboards, Managed Reports*

[Notifications \(alerts\)](#) offer a way to send email reminders or alerts on a periodic schedule or under certain data conditions. This article shows you how to troubleshoot problems such as missing email notifications.



Note: Notifications include exported content as an attachment. See [Troubleshooting export providers](#).

Service & configuration

The Symphony Scheduler Service needs to be running and various configuration settings must be applied for notifications to work.

See [.Configuring Notifications and Other Scheduling Features](#)

Application Logs

View Symphony's [application logs](#) and look for any errors related to scheduling or notifications.

For scheduled or data-driven notifications, you can also view the notification's [job and its run history](#).

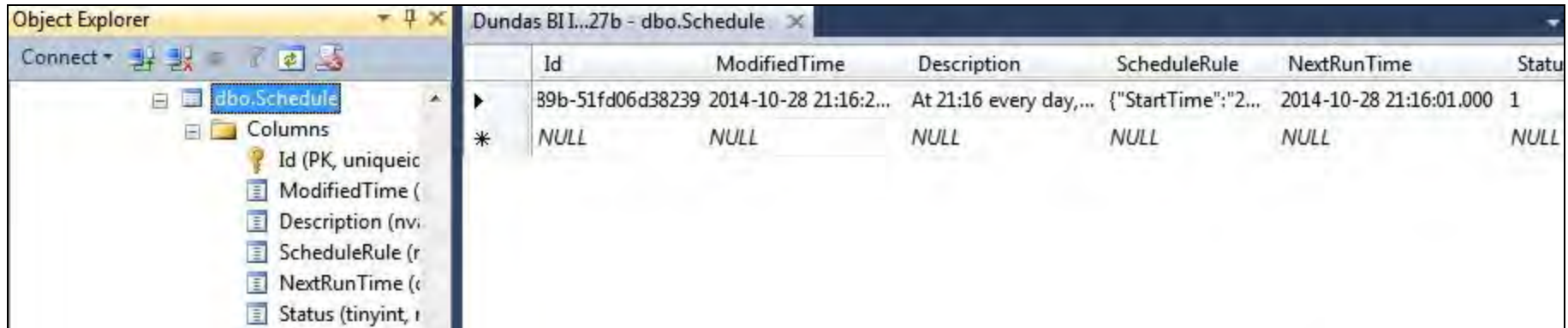
Next Run Time

If you have access to the Symphony server and its application database, locate the database (e.g., Symphony Instance1 in SQL Server Management Studio or pgAdmin).

View the records for the *dbo.Schedule* table and look for your notification entry.

Check the *NextRunTime* value and verify that the time hasn't already passed.

Note that the NextRunTime value uses UTC time (Coordinated Universal Time).



The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Object Explorer' pane displays the 'dbo.Schedule' table under the 'Columns' folder. The table has the following columns: Id (PK, uniqueid), ModifiedTime (datetime), Description (nvarchar), ScheduleRule (nvarchar), NextRunTime (datetime), and Status (tinyint). The main pane shows the table's data, which includes a single row with the following values: Id: 89b-51fd06d38239, ModifiedTime: 2014-10-28 21:16:2..., Description: At 21:16 every day,..., ScheduleRule: {"StartTime": "2..., NextRunTime: 2014-10-28 21:16:01.000, and Status: 1. Below this row, there is a row with all NULL values, indicating a new record being added.

	Id	ModifiedTime	Description	ScheduleRule	NextRunTime	Status
▶	89b-51fd06d38239	2014-10-28 21:16:2...	At 21:16 every day,...	{"StartTime": "2...	2014-10-28 21:16:01.000	1
*	NULL	NULL	NULL	NULL	NULL	NULL

For more information, see:

- [Configuring Notifications and Other Scheduling Features](#)
- [Application Logs](#)
- [Troubleshooting Export Providers](#)



Create Tenant Projects

When you create a new tenant in Symphony, you're creating an work area for specific clients, departments, or lines of business. Content you work with in Symphony that uses Managed Dashboards or Reports content are organized inside of projects you can use to structure your content as needed.

When you create a tenant, Symphony generates several projects for your users to work in:

- **My Project** - A personal project, unique to each user. Everyone can use their My Project work area to create dashboards for prototyping or quick analysis.
- **<GLOBAL>** - A global project, shared across all users inside and outside of your tenants in your environment. Use this project to store any items common to your other projects for reuse. If you prefer to remove access to the <GLOBAL> project from tenant users, see [Remove access to the GLOBAL project for all tenants](#).
- **<tenant name>** - A tenant-based project, shared across all users inside of your tenant. Use this project to store any items common to your other tenant projects for reuse.

If you have the appropriate permissions, you can add more projects for your use, or as a tenant administrator for all tenant members to use.

As a system administrator or tenant administrator, you can create new projects for tenants in your environment in addition to the default project for each tenant created automatically when you created .

For more information, see:

- [Add And Edit Tenant Users](#)

Create Additional Projects for A Tenant

1. Log in as a system admin and open the Managed Dashboards work area. Your main dashboards work area opens.
2. Select **Projects** from the main menu. The Projects work area opens.
3. Select **Create new project**. A **Create a new project** window opens.
4. Give the project a name, then select the appropriate **Tenant** name from the list of tenants.

 **Note:** If you do not select a tenant, it is made available to all global users.

5. Optionally select (check) **Set As Active Project**.



6. Change the **Initial Project Privileges** to **Custom**. You can adjust the specific settings after the project is created.
7. Select **Save** to create this project. Symphony returns a success message, and a Security work area opens.

Define the Security Settings for This Project

1. After you create a new project, the **Security** work area opens so you can define the privileges for users of this project.



Note: If you navigate away from this area, select the Project in the Project work area, **Edit** it, then scroll down in the Properties modal to select **Security** and reopen this work area.

2. Set the Security options as follows with the group **Everyone** selected:

Field	Set To
Delete	Not Set
Execute	Allow
Full Control	Not Set
List Folder Contents	Allow
Modify Folder	Allow
Read	Allow
Write	Allow

3. Select **Save** to save your custom security settings. Symphony returns a success message, and you are returned to the Projects work area.

Create a New Project for Multiple Tenants

1. Log in as a tenant admin of multiple tenants. If you are an admin for only one tenant, only the tenant you are an admin for can use this Project.
2. Select **Projects** from the main menu. The Projects work area opens.
3. Select **Create new project**. A **Create a new project** modal opens.
4. Give the project a name, then select (check) **Set As Active Project**.



5. Change the **Initial Project Privileges** to **Custom**. You can adjust the specific settings after the project is created.
6. Select **Save** to create this project for all of your tenants. Symphony returns a success message, and a Security work area opens.

Define the Security Settings for This Project

1. After you create a new project, the **Security** work area opens so you can define the privileges for users of this project.



Note: If you navigate away from this area, select the Project in the Project work area, **Edit** it, then scroll down in the Properties modal to select **Security** and reopen this work area.

2. Set the Security options as follows with the group **Everyone** selected:

Field	Set To
Delete	Not Set
Execute	Allow
Full Control	Not Set
List Folder Contents	Allow
Modify Folder	Allow
Read	Allow
Write	Allow

3. Select **Save** to save your custom security settings. Symphony returns a success message, and you are returned to the Projects work area.

Next, you'll add any needed Data Discovery connectors for your users or tenants users. See [Connect to Data and View it on a Dashboard](#).

For more information, see:

- [Add And Edit Tenant Users](#)

Collaboration Using Notes (Annotations)

This applies to: *Managed Dashboards, Managed Reports*

A note (or annotation) is a comment that is attached to a data point and displayed on a data visualization. You can use notes to provide more context, or to communicate with other users viewing the same data, including replies.

Since a note is associated with data, the same note will automatically appear on other visualizations or views that are displaying the same data point.

- The data point a note is attached to is identified by all of its hierarchy and filter/parameter values, including parameters in the underlying data cube.
- Filtering a data cube parameter by [account attribute](#) or [custom attribute](#) can prevent the same note from being seen by different users even when they seem to be viewing the same data point. To allow these notes to be shared when appropriate, use [a security hierarchy](#) for row-level security instead.
- Dynamic measures do not support the displaying or adding of annotations.
- Annotations cannot be added to metric sets where the hierarchy values come from a function, such as a histogram formula.



Note: You can be notified when someone adds a note to a metric set if you're expecting someone to add one or reply to one of yours. See [Symphony Notifications \(Alerts\)](#).

For more information about notes (annotations) see:

- [Add A Note To A Data Point](#)
- [Delete A Note](#)
- [Reply To A Note](#)
- [Edit Security Permissions For A Note](#)

Add a Note to a Data Point

This applies to: *Managed Dashboards, Managed Reports*

All users with the [Note privilege](#) can add and reply to notes on a dashboard or on any other view that they have access to.

Add a note to a data point

1. Select **Note** on the toolbar if the toolbar is visible, or right-click (or long-tap) a data point and choose **Add Note**. The note bar opens below the main toolbar.
2. Enter your note in the note bar.

 **Note:** If you used the toolbar to add a note, the entry field is red. Select a data point in the visualization to attach the note to that data point. You can select any data in the visualization that represents a measure value (number).

3. After you've entered your note, select the padlock icon to change who can see the note. Cycle through the options to select the one you need, then select **Apply** to confirm your selection.
 - i. Select **public** to make viewable to all users
 - ii. Select **private** to make viewable only to you
 - iii. Select **custom** to define custom permissions
4. Optionally, define custom permissions in the **Security** work area if you selected **custom**. See [Edit Security Permissions for a Note](#).

The note appears next to the data point and can be viewed, edited or deleted based on the security permissions specified. Hover over the note to see its details in a popup.

Notes are attached to this particular data in the data cube source itself, and will follow it when the data point moves when filtering or sorting, when a different visualization is used, or when another metric set using the same data cube displays this data point.

View note details in a different visualization

1. Open the data in another visualization, or right-click the chart then select **Re-Visualize**, and **Table**. The data appears in table format.
2. Scroll through the table until you see the annotated data point cell with a small red triangle in the upper-right corner of the cell.
3. Hover your pointer over the triangle to view the note you just created.



Note: You can be notified when someone adds a note to a metric set if you're expecting someone to add one or reply to one of yours. See [Symphony Notifications \(Alerts\)](#).

Notes are attached to this particular data in the data cube source itself, and will follow it when the data point moves when filtering or sorting, when a different visualization is used, or when another metric set using the same data cube displays this data point.

For more information, see:

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)
- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)



Delete a Note

This applies to: *Managed Dashboards, Managed Reports*

All users with the [Note privilege](#) can add and reply to notes on a dashboard or on any other view that they have access to.

Delete a note from a data point

1. Open a visualization that contains the note you want to delete.
2. Hover over the note to open its popup with note details, then select the menu icon in the bottom right corner. A note menu opens.
3. Select **Delete** from the available options. The note is deleted.

Reply to a Note

This applies to: *Managed Dashboards, Managed Reports*

All users with the [Note privilege](#) can add and reply to notes on a dashboard or on any other view that they have access to.

Reply to a note on a data point

1. Open a visualization that contains the note you want to reply to.
2. Hover over the note to open its popup with note details, then select the menu icon in the bottom right corner. A note menu opens.
3. Select **Reply** from the available options. The note bar opens below the main toolbar.
4. Enter your reply text, then select **Apply**. The note is updated to include your reply.
5. Hover over the note to open its note popup and view all notes and replies, from newest to oldest.



Note: You can be notified when someone adds a note to a metric set if you're expecting someone to add one or reply to one of yours. See [Symphony Notifications \(Alerts\)](#).

For more information, see:

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)
- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)

Edit Security Permissions for a Note

This applies to: *Managed Dashboards, Managed Reports*

All users with the [Note privilege](#) can add and reply to notes on a dashboard or on any other view that they have access to.

If you select the [custom permissions](#) option when adding a note, or decide to update security permissions later, you can use the Security work area to define who can see the note.

Edit the security permissions of a new note

1. Select the [custom permissions](#) option while creating a new note.
2. Select **Apply** to apply your selection. The **Security** work area opens.
3. The work area displays a list of accounts and groups you can edit. Select each account or group, as needed, to edit its permissions.
4. Select **Submit** to apply your changes to this note.

Edit the security permissions of an existing note

1. Open a visualization that contains the note you want to edit security permissions for.
2. Hover over the note to open its popup with note details, then select the menu icon in the bottom right corner. A note menu opens.
3. Select **Properties**, then select the **Security** option. The Security work area opens.
4. The work area displays a list of accounts and groups you can edit. Select each account or group, as needed, to edit its permissions.
5. Select **Submit** to apply your changes to this note.

For more information about assigning security permissions, see the [File and Folder properties](#) article.



Note: You can be notified when someone adds a note to a metric set if you're expecting someone to add one or reply to one of yours. See [Symphony Notifications \(Alerts\)](#).

For more information, see:



- Archive of documentation for Logi Symphony v24

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)
- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)



Collaboration Using Data Annotations

This applies to: *Managed Dashboards, Managed Reports*

A data annotation (measure correction) is a change to a measure value in a metric set, which is then also marked with a comment in visualizations like a [regular note or annotation](#). The measure correction can be made public if the original value was incorrect, or it can be kept private for your own use for analysis or what-if scenarios and then removed.

Since annotations are associated with data, the same correction will automatically apply to other data visualizations or views that are displaying the same data point from the same metric set.

- Unlike regular notes, data annotations apply only to the current metric set, and not other metric sets based on the same data cube.
- Dynamic measures, hierarchies generated by formula functions, and metric sets with dynamic hierarchies do not support data annotations.
- Data annotations are not applied to measure values displayed using the Collapse All option or when expanding hierarchy members.
- The check in/check out state of the metric set does not apply to data annotations. Undo Check Out does not change or remove the applied corrections.
- Contextual measures that are checked out to you are changed directly, rather than a data annotation created on top of it.
- When working with OLAP data, the values for totals and the grand total are taken directly from the OLAP source and will not be affected by data annotations.
- Data annotations cannot be attached to a measure value when filtering it using a slicer or data cube parameter by a range of hierarchy member values.

For more information about data annotations, see:

- [Data Annotation Privileges](#)
- [Correct A Value](#)
- [Change A Corrected Value](#)
- [Delete A Correction](#)
- [Prevent Corrections](#)



Data Annotation Privileges

This applies to: *Managed Dashboards, Managed Reports*

All users with the [power user seat type](#) or higher can correct measure values for their own personal use (indicated as private in the measure value bar). For making measure value corrections that are public for other users to see, users require certain privileges:

- The **Correct Measure Values** [application privilege](#) must be allowed. By default, this is allowed for [power users and above](#), but not for standard users. You can allow or deny privileges for [groups](#) of users or individual [users](#).
- The user must have **Write** [privileges](#) for the metric set displaying the measure values. This is included when granting **Full Control** to a user or group for a project, for example, or you can customize permissions on individual files.

You can also prevent data corrections from being applied to certain measures regardless of user privileges. See [Prevent Corrections](#).

For more information, see:

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)
- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)

Correct a Value

This applies to: *Managed Dashboards, Managed Reports*

You can correct measure values where they are visualized in a dashboard or another view, or if you have the metric set checked out to you.

Correct a value

1. If you're editing a dashboard or other type of view, select **View** mode in the toolbar. The **View** mode opens.
2. Right click the measure value you want to correct. The context menu opens.

 **Note:** You can select the position on a chart where you want the data point to move to insert the corresponding value into the measure value bar.
3. Select **Correct Value**. The measure value bar opens below the main toolbar.
4. Enter the new value for the selected measure value.
5. After you've entered your value correction, select the padlock icon to change who can see the correction. Cycle through the options to select the one you need.
 - i. Select **public** to make viewable to all users.
 - ii. Select **private** to make viewable only to you. Useful for private analysis and what-if scenarios.
6. Optionally, select **advanced** to include your own comment for this correction.
7. Select **Apply** to add the correction.

The value correction is applied to the actual data and visualized, but also marked with a note. Any user that sees this value correction can hover over the note to see its details in a popup, including the user that made the change and what the original value was.

View corrections in a different visualization for this metric set

1. Open the metric set in another visualization, or right-click the visualization then select **Re-Visualize**.
2. Select a different visualization from the available options.
3. Hover your pointer over the correction (and note, if applicable) to view the correction (and note, if applicable) you just created.

For more information, see:



- Archive of documentation for Logi Symphony v24

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)
- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)

Change a Corrected Value

This applies to: *Managed Dashboards, Managed Reports*

You can and other users with [appropriate privileges](#) can change existing corrections.

Change a corrected value

1. Hover over an existing correction note to open its popup, then select the menu icon in the bottom right corner. A note menu opens.
2. Select **Change Value**. The measure value bar opens below the main toolbar.
3. Enter the revised value, then select **Apply**. The note is updated to include your correction.
4. Hover over the note to open its note popup and view the details.



Note: You can also create a new data annotation on the same value. The most recent correction will be shown in the visualization, but the note will show all of the changes.

View corrections and changes in a different visualization for this metric set

1. Open the metric set in another visualization, or right-click the visualization then select **Re-Visualize**.
2. Select a different visualization from the available options.
3. Hover your pointer over the correction (and note, if applicable) to view the correction (and note, if applicable) you just created.

For more information, see:

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)



- Archive of documentation for Logi Symphony v24

- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)



Delete a Correction

This applies to: *Managed Dashboards, Managed Reports*

Delete a correction:

1. Open a visualization that contains the correction you want to delete.
2. Hover over the correction to open its popup, then select the menu icon in the bottom right corner. An options menu opens.
3. Select **Delete** from the available options. The correction is deleted.

For more information, see:

- Video: [Notes](#)
- [Collaboration Using Data Annotations](#)
- [Symphony Notifications \(Alerts\)](#)
- [Application Privileges](#)
- [Disable View Functionality](#)
- [Connect to Data and View it on a Dashboard](#)



Prevent Corrections

This applies to: *Managed Dashboards, Managed Reports*

You can and other users with [appropriate privileges](#) can [correct measure values](#). If you don't want to allow all users to correct a specific measure, disable their ability to make data corrections for that measure.

Prevent data corrections

1. With a metric set open, select a measure in the **Data Analysis Panel**. The **Configure Metric Set** work area opens.
2. Deselect (uncheck) the **Allow Data Corrections** checkbox.
3. Repeat for any measures you want to prevent users from correcting.