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KURVE

Kurve Admin User Guide Version 1.25



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INTRODUCTION

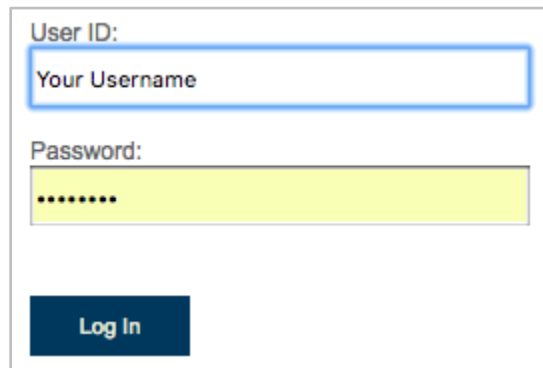
Welcome to the Kurve User Guide!

This document will guide you through the functions of Kurve and its data reporting features.

INTRODUCTION TO THE KURVE DASHBOARD

1. Navigating to the Kurve Dashboard

- a. Log in to TRIRIGA. Type in your username and password on the login page and click “Log In.”



Note: Your TRIRIGA admin will give you a Kurve URL to access the Kurve Dashboard. Generally, Kurve can be accessed through the following URL:

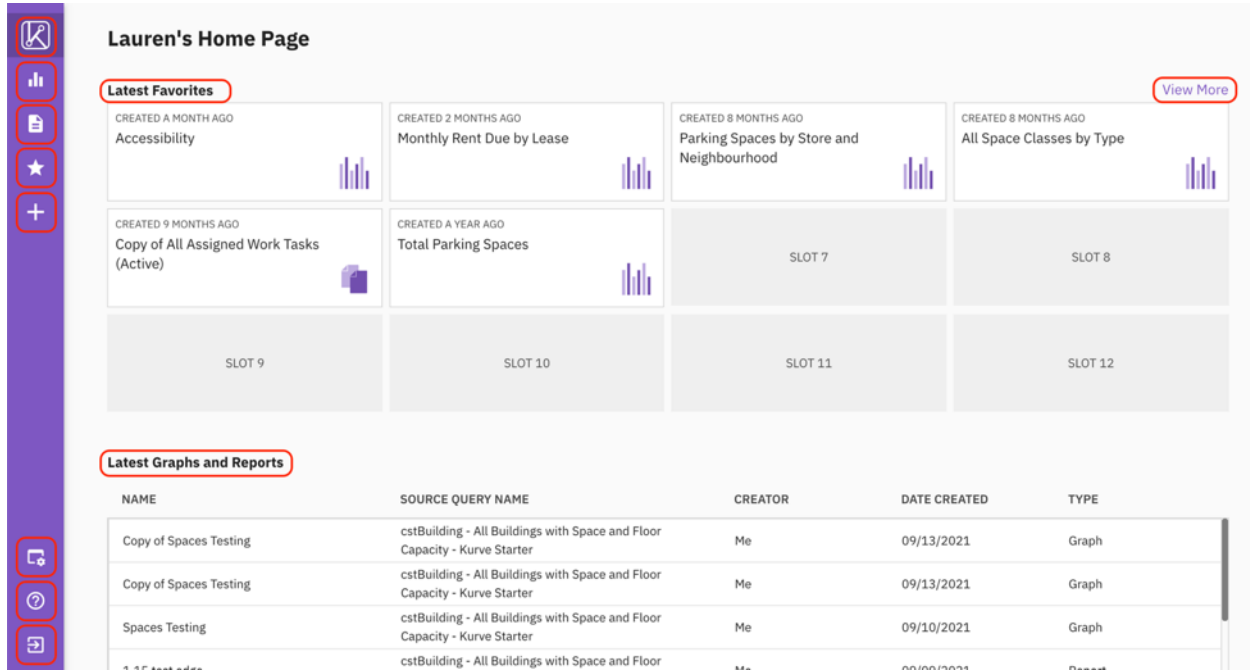
[YOUR TRIRIGA URL]/p/web/Kurve

For example, if you log in to TRIRIGA at <https://example.tririga.com>, your Kurve URL would be:






<https://example.tririga.com/p/web/Kurve>




2. Getting to know the Kurve Home Page

- a. This is your Kurve Home Page. You should see something similar upon opening the application.



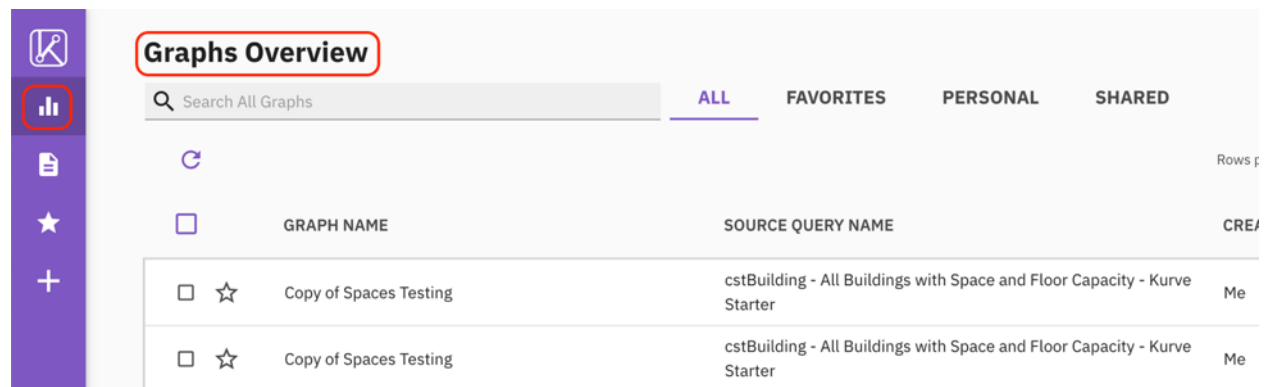
- b. Features and functions of the Kurve Dashboard:

	Home Page	Click on this icon to access your Kurve Home Page. Here you can view your latest 12 favoured graphs and reports, and the latest graphs and reports created by you or shared with you.
	Graphs Overview	Click on this icon to access your Graphs Overview - all graphs that have been created or shared with you will be stored here.
	Reports Overview	Click on this icon to access your Reports Overview - all reports that have been created or shared with you will be stored here.
	My Favourites	Click on this icon to view a list of all your favoured Kurve Graphs and Reports in list format.
	Create	Click on this icon to create a new record - decide between a graph or report and <i>let your data tell the story!</i>

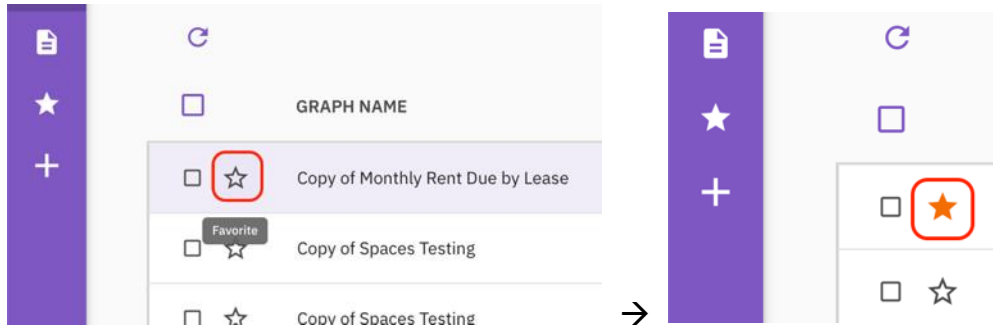
-	Favorites	Pin your favorite reports and graphs for easy access.
-	Latest Graphs and Reports	The most recent graphs and reports you have created.
-	View More	Click to view a list of all of your favourites.
	Admin Portal	Easily access the admin portal by clicking here.
	Help/Support	Easily access support resources.
	Logout	Logout of TRIRIGA and Kurve

3. Adding and Removing Favorites from your Favorites Menu

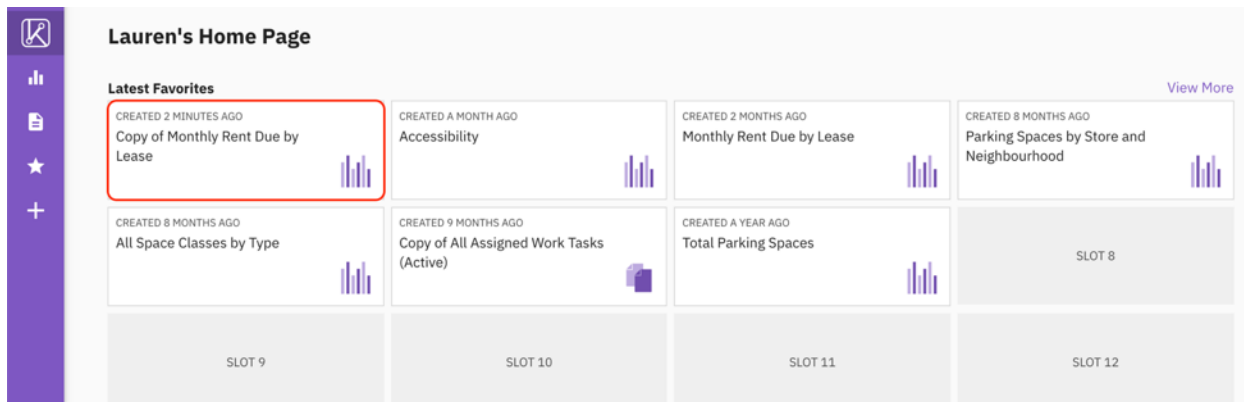
- a. You can **favorite** graphs/reports for easy access on the Kurve dashboard. Please note, only the 12 latest created will appear on the home page. There are two methods for favouriting:
 - i. From the Overview Page:
 - Navigate to the Graphs or Reports Overview Page



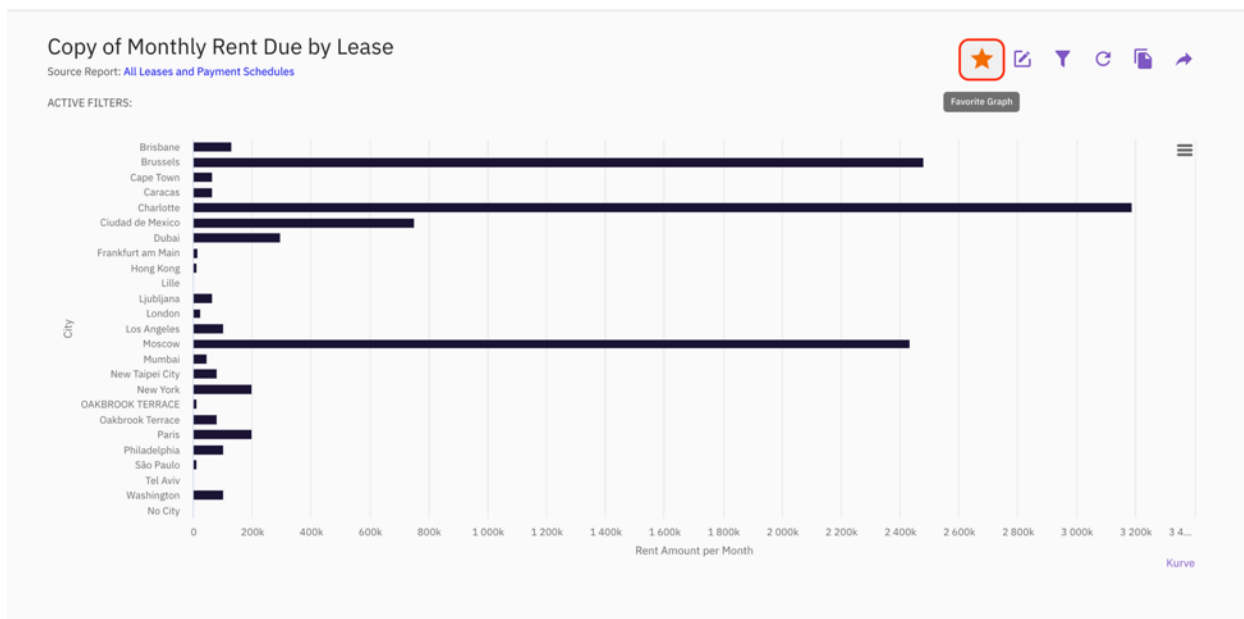
- Search for the graph you would like to favourite. Then find the graph row and click the Star icon. The icon will turn yellow indicating it has been favorited.



- Navigate back to your home page to view it in your list of favourites.



- Favorite from within a Graph or Report: Open the graph or report you would like to favourite.
 - Within the action items, select the star icon.




- b. View Favourites: Your Home Page will only display 12 favourites based on the latest created date.
- If you are on the home page you can click View More on the top right hand corner of the Favourites cards.

Lauren's Home Page

Latest Favorites


CREATED AN HOUR AGO

Copy of Our Spaces




CREATED 2 MONTHS AGO

G&A PO by Vendor - Per Project - Line Items




CREATED 3 MONTHS AGO

Parking Spaces by Store and Neighbourhood



CREATED 3 MONTHS AGO


All Space Classes by Type



[View More](#)


CREATED 3 MONTHS AGO

Copy of All Assigned Work Tasks (Active)




CREATED A YEAR AGO

All Preventive Work Tasks - High and Urgent Priority



CREATED 2 YEARS AGO

test unescaped query 2



SLOT 8

SLOT 9

SLOT 10

SLOT 11

SLOT 12

Latest Graphs and Reports

NAME	SOURCE QUERY NAME	CREATOR	DATE CREATED	TYPE
Copy of [Active Leases by Payment Schedules	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Me	03/19/2021	Report
Copy of Parking Spaces by Store and Neighbourhood	Copy Of Store Directory	Me	03/19/2021	Graph

- You can also use the Favourites icon on the side navigation bar to open the list of your favourites

My Favorites

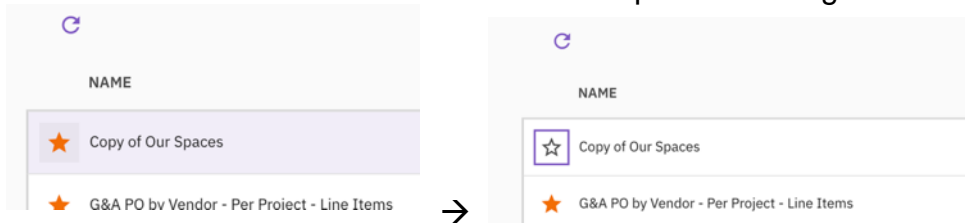
Search by Record Name, Source Query Name, or Owner

Rows per page: 10 | 1-7 of 7

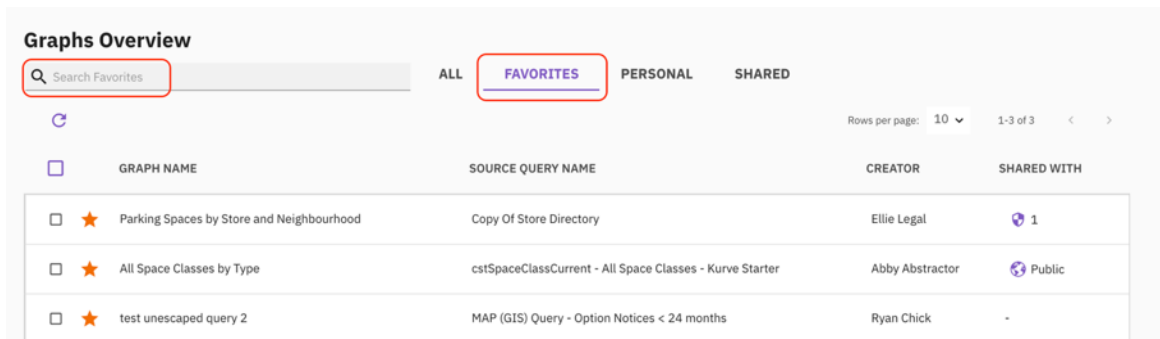
NAME	SOURCE QUERY NAME	CREATOR	TYPE
★ Copy of Monthly Rent Due by Lease	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Me	Graph
★ Accessibility	cstRealEstateContract - All Active Lease Data - Reporting Starter	Me	Graph
★ Monthly Rent Due by Lease	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Me	Graph
★ Parking Spaces by Store and Neighbourhood	Copy Of Store Directory	Ellie Legal	Graph
★ All Space Classes by Type	cstSpaceClassCurrent - All Space Classes - Kurve Starter	Abby Abstractor	Graph
★ Copy of All Assigned Work Tasks (Active)	triTask - Display - triMaintenanceManager - Assigned Active Tasks	Me	Report
★ Total Parking Spaces	cstBuilding - All Buildings with Space and Floor Capacity	Me	Graph

- c. Removing favorites: There are a few ways to remove a favourite

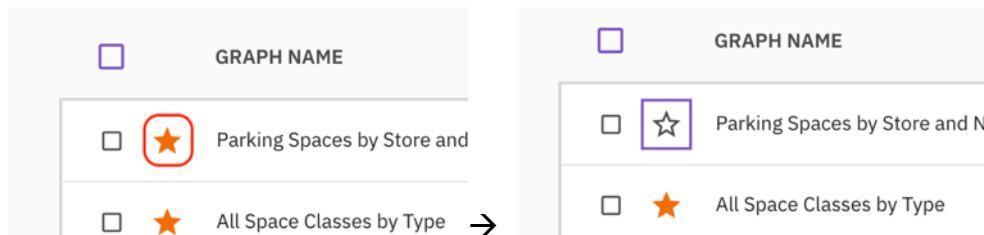
- i. My Favourites Page: find the record you wish to unfavourite and click in the star. It will be removed from the list upon refreshing



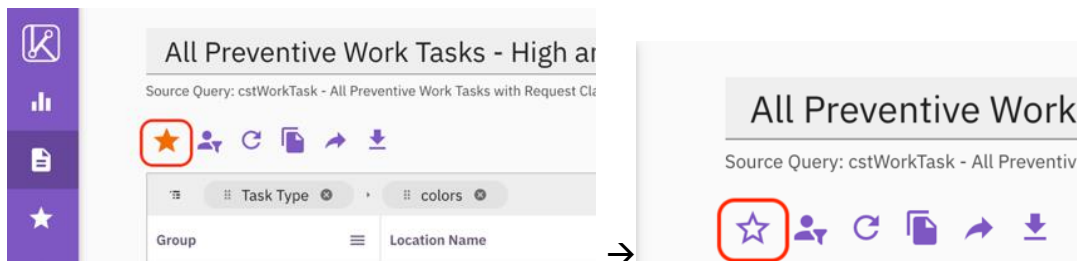
- ii. Overview Pages: search or navigate to the favourites tab to find the record you wish to unfavourite.




- Click the star. It will be removed from the list upon refreshing.



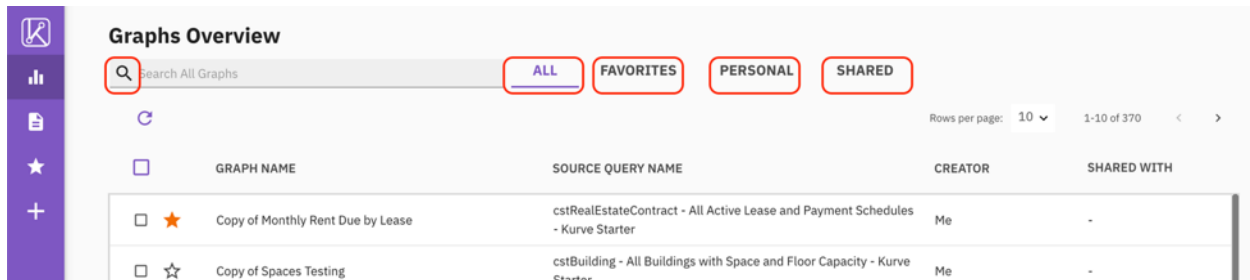
- iii. Within a graph or report: Open the record you would like to unfavourite




GRAPHS OVERVIEW

From the Kurve Dashboard, click on the Graph Icon () to access the Graphs Overview. This is where all graphs that have been created or shared with you are stored.


1. Navigating the Graphs Overview Portal

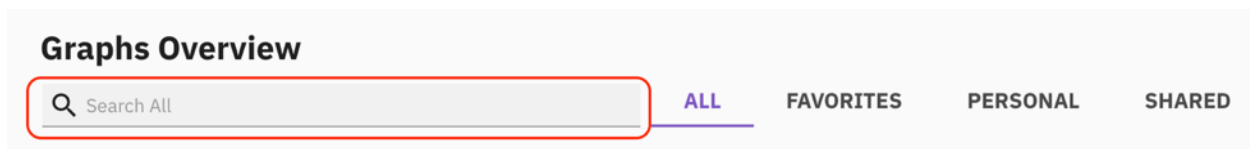


a. Features of the Graphs' menu bar:

	Search	The search function.
-	ALL	All graphs created or shared.
-	FAVORITES	All graphs you have favoured.
-	PERSONAL	Graphs personally created by you.
-	SHARED	Graphs shared to you by others.

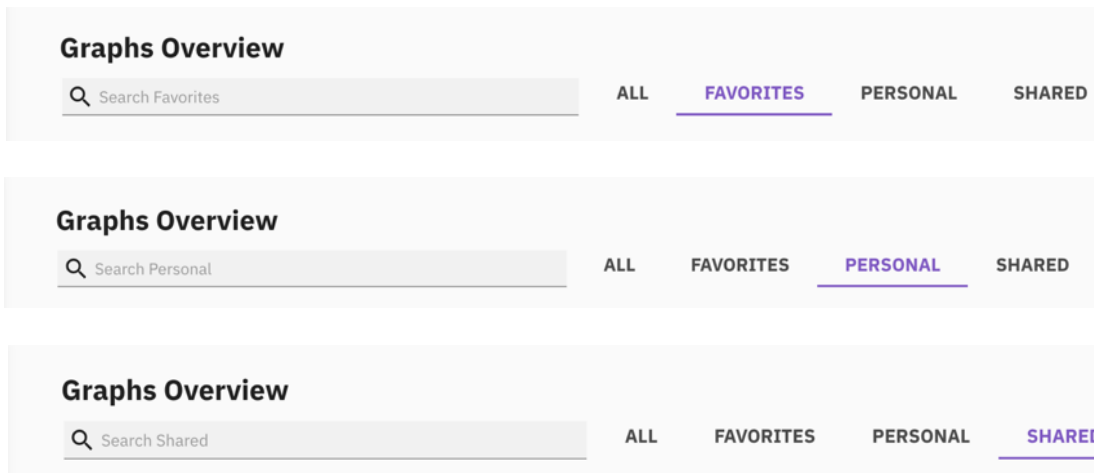
b. Functions of the Graphs' menu bar:

- i. **Search** (): This is your search function. Click on the magnifying glass symbol to expand the search bar and type to filter through the current list of graphs.

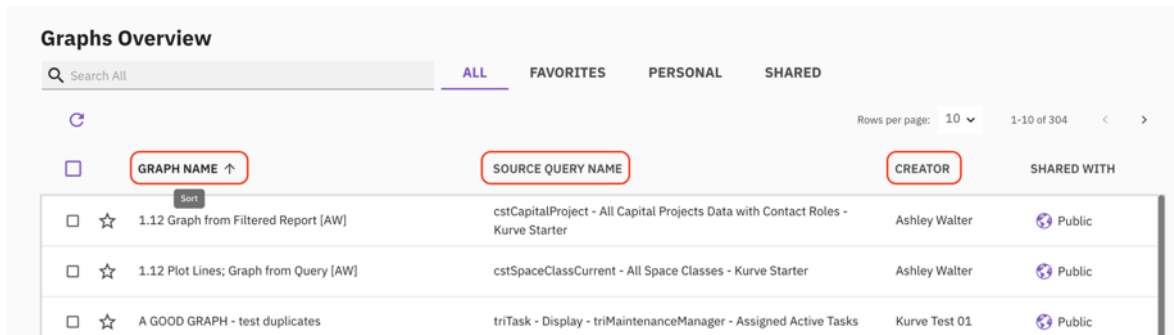


Note: By default, the list of graphs is sorted by created date, in descending order. The default search will filter through *All* Graphs in the portal.

- If you want to search within the *Personal*, *Favorites*, or *Shared* tabs, simply click on the tab and then search in the search bar.



- ii. Sort function: sort the graph results by clicking on any of the column headers. There are two sort options:
- Arrow facing up (↑) will sort your results in alphabetical order starting from “A.”
 - Arrow facing down (↓) will sort your results in reverse alphabetical order starting from “Z.”

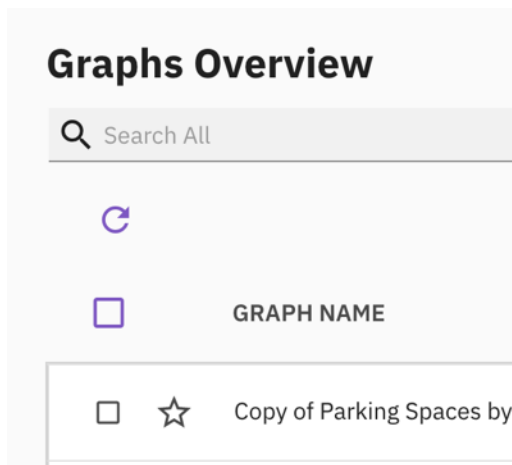


2. Using Graph Action Buttons

Personal and Shared Graphs

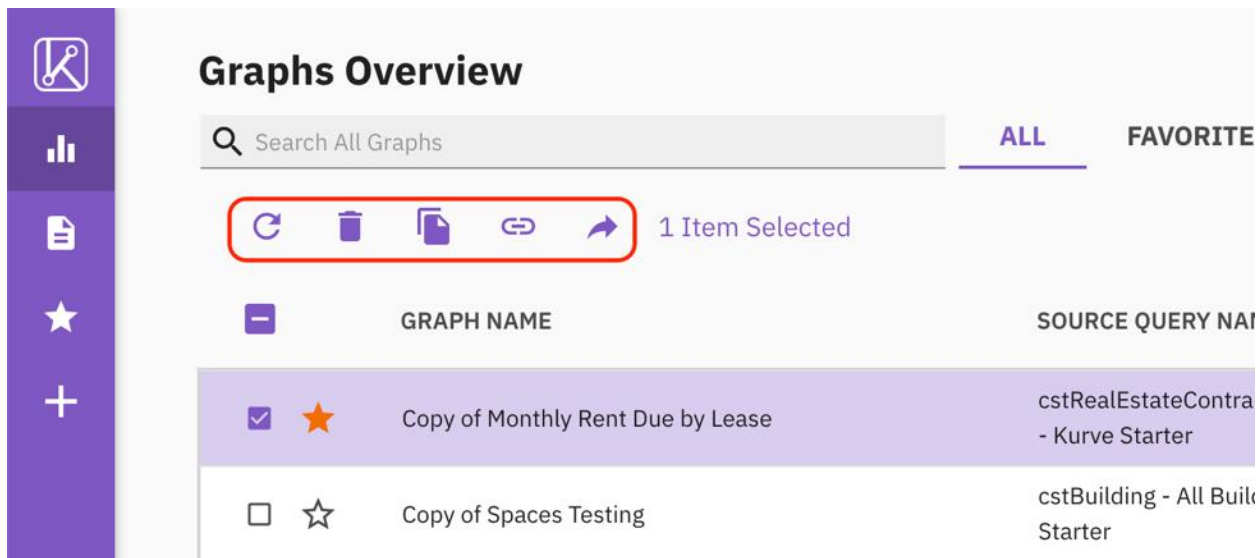
Kurve Admins have the same capabilities for their own graphs and shared graphs. Your batch action icons will change according to your current graph selections.

- a. If you have no graphs selected, your actions are as follows:






	Select All	Select all graphs on the page.
	Refresh	Refresh the page.

b. If you have selected ONE graph, your options are:

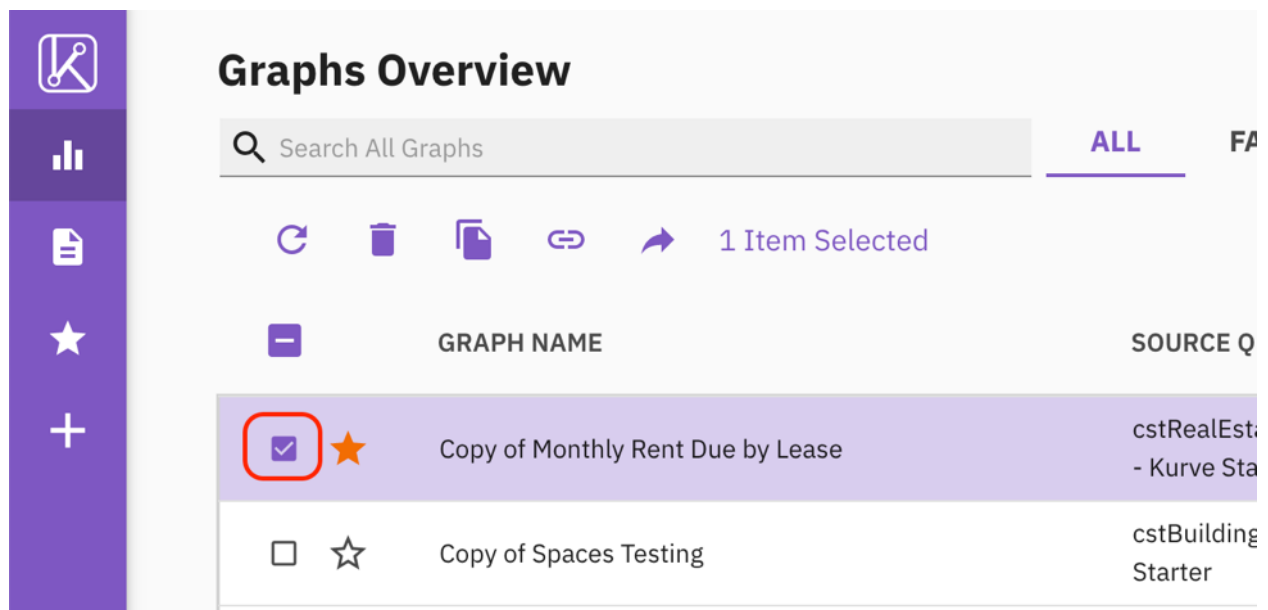


Features of the Graphs Action Toolbar:

	Refresh	Refresh the page.
	Delete Graph	Delete a graph.

	Duplicate	Copy an existing graph.
	Get Portal/Form URL	Get a Portal or Form URL to embed the graph into a portal section or form tab.
	Change Shared Settings	Make changes to whom the graph is shared with (public, private, or specific individuals).

- i. **Select Graph Function:** Select the graph by clicking the white square (it will turn purple once selected).




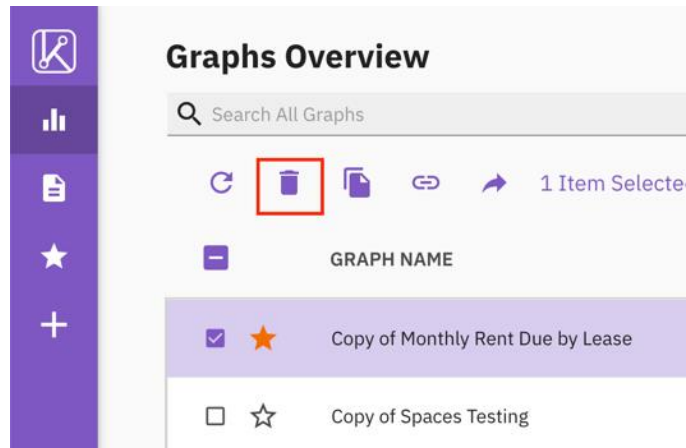
Graphs Overview

Search All Graphs ALL FA

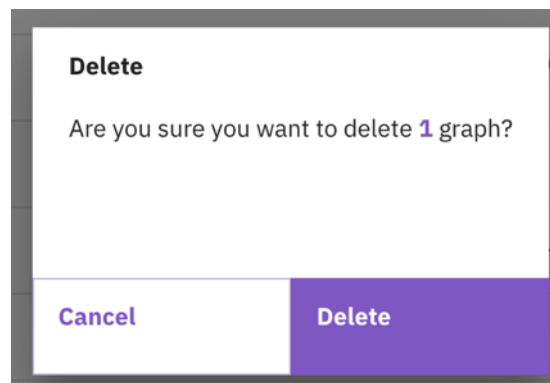
Refresh Delete Duplicate Share Share Settings 1 Item Selected

	GRAPH NAME	SOURCE Q
<input checked="" type="checkbox"/> ★	Copy of Monthly Rent Due by Lease	cstRealEst: - Kurve Sta
<input type="checkbox"/> ☆	Copy of Spaces Testing	cstBuilding Starter

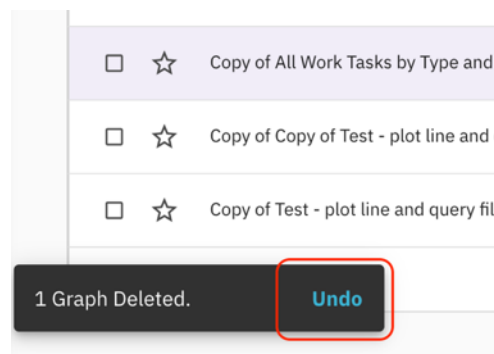
- ii. Once selected, the toolbar will update with all options.
- c. **Delete Function:** Delete any graph that has been *created*. As an admin, you can delete graphs made by you or others.
 - i. Navigate to the Graph Menu Bar and find the graph you want to delete under the Personal tab. Click the trashcan icon ().



- ii. A prompt will appear: “Are you sure you want to delete 1 graph”. Select “Delete” to delete or “Cancel” to get out of the pop up.

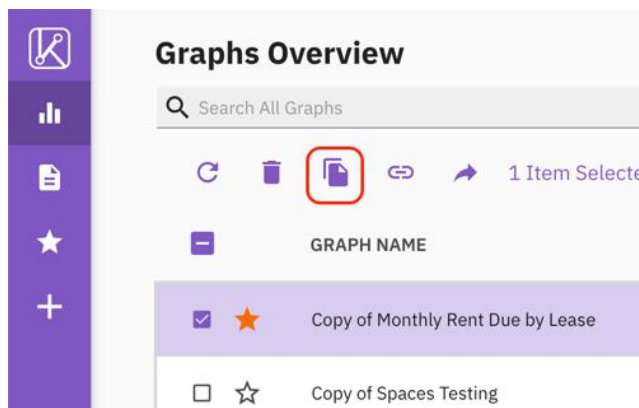


- iii. If you accidentally deleted a graph you did not mean to, you can Undo the delete and restore your graph. Once you click Delete, a pop up will appear at the bottom left of the page. To restore the graph that you deleted, click Undo.

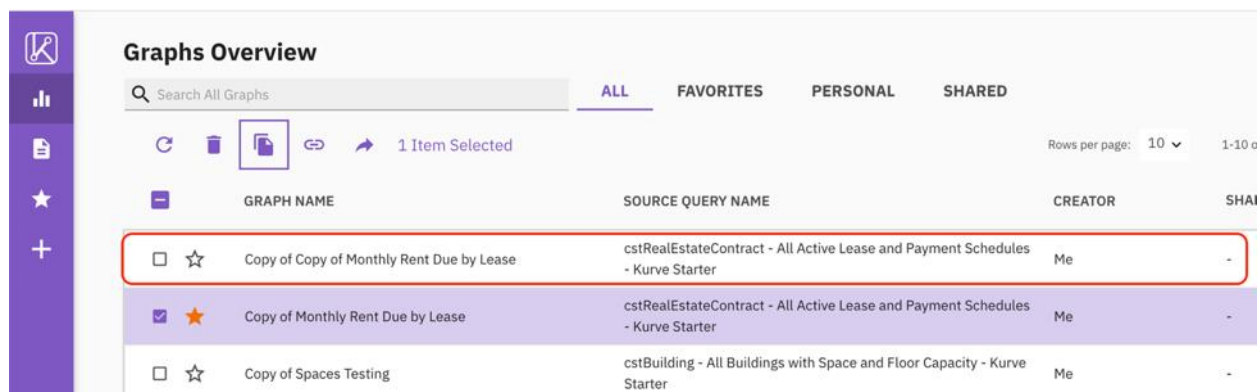



Note: The pop up will only appear for a few seconds. If it disappears and you wish to restore the graph, please go to the admin portal.

- d. **Duplicate** Function: Click on the Duplicate icon () beside the graph you want to copy.

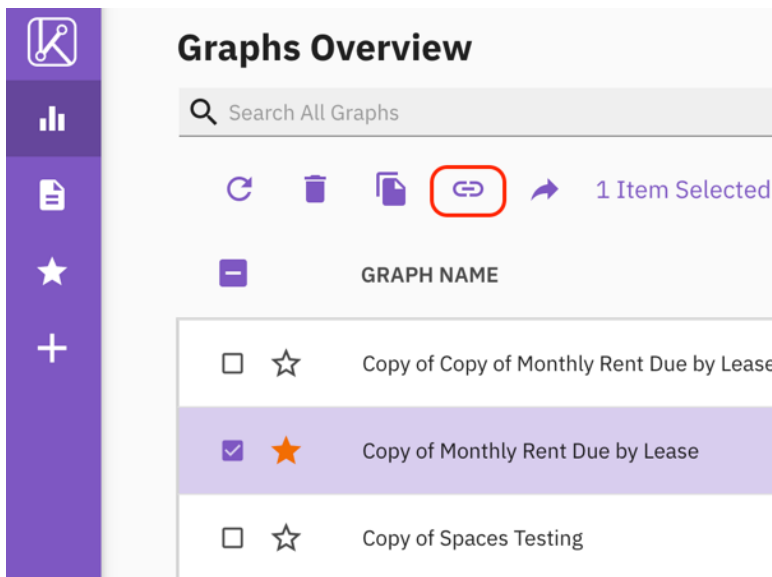


- i. A copy of the selected graph will appear in the list of graphs.

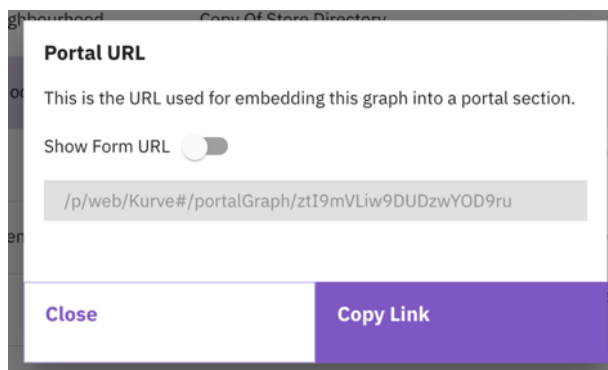


- e. **Get Portal/Form URL** Function: Click on the Get Portal URL icon () next to the graph you would like to get a portal URL for.

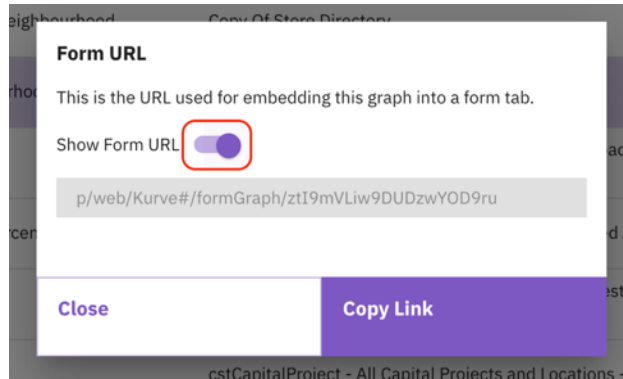
Note: this tool is only used by TRIRIGA Admins to embed graphs and reports into TRIRIGA Portals.



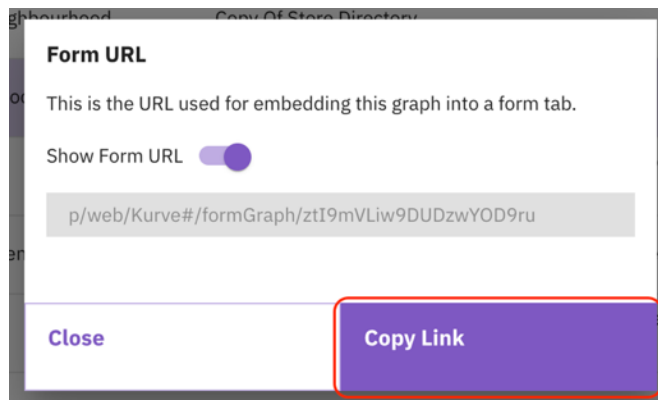
- i. A window will pop-up with the URL for the Portal section. You may use the URL to embed the graph into a portal section by clicking on the Copy Link button.



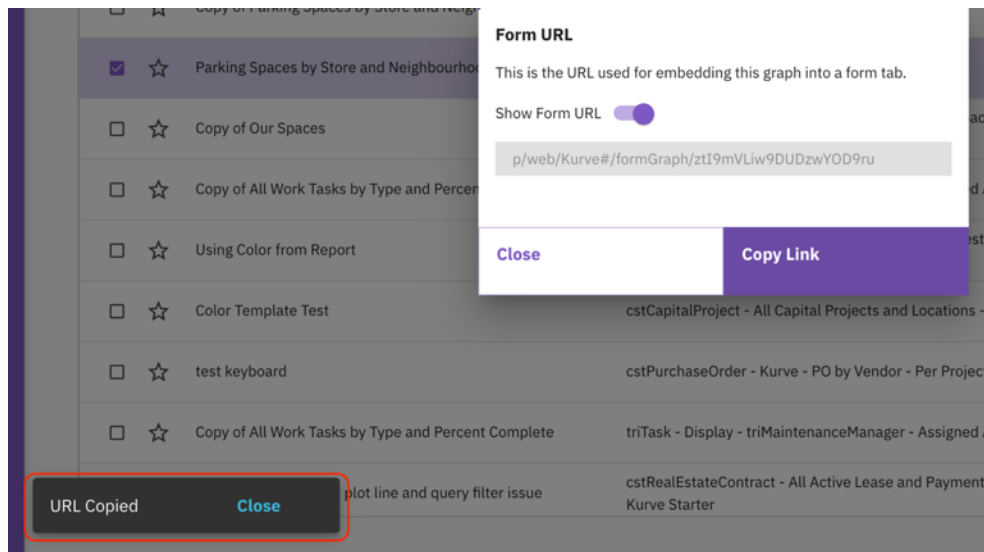
- ii. To get the link for embedding your graph or report into a form, click the Show Form URL toggle. The URL will change, and the heading will say Form URL.



- iii. Click Copy Link to copy the Form URL link to your clipboard. Paste it into any form tab using an External Tab.



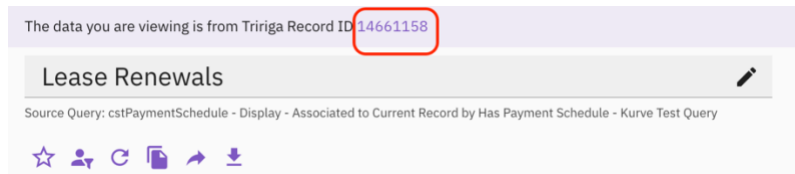
- iv. Once copied, a pop-up will appear at the bottom left indicating the URL has been copied.



- v. **Form Context:** If a query is set up to take the form context when embedded into a form, Kurve records created from that query will also take the context when the Kurve records are embedded.
 - When you click “View in Kurve” from a TRIRIGA form, Kurve will carry over the form context from TRIRIGA.
 - You will be able to view the form context in Kurve.

Group	Description	Frequency	Start Date	End Date	Average(Cost per Unit)	Sum(Contract Rentabl
Operating Expenses (1)	CAM	Monthly	01/01/2017	12/31/2026	1.03	5800
Rent (12)	Base Rent	Monthly	01/01/2017	12/31/2017	23.12	69600
					\$20.69	5800

- You can link back to the TRIRIGA record by clicking on the number link in purple text.





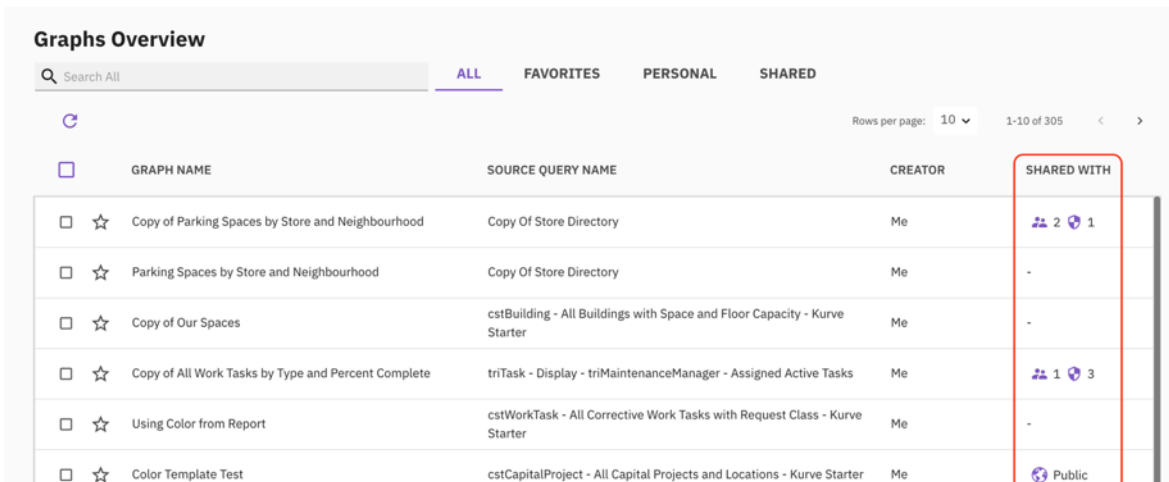
- If you want to remove the form context and view all the data from the query, click “View Full Dataset”.

Group	Description	Frequency	Start Date	End Date	Average(Cost per Unit)	Sum(Contract Rentabl
Operating Expenses (1)	CAM	Monthly	01/01/2017	12/31/2026	1.03	5800
Rent (12)	Base Rent	Monthly	01/01/2017	12/31/2017	23.12	69600
					\$20.69	5800






- f. **Change Share Settings** Function: You may identify each graph’s share settings on the last column of the Graphs Overview labeled “Shared With.”


- In the Graphs Overview, under the “Shared With” column, if “Individual” is selected for the share setting, it will appear with the symbol (👤) and the number of people the graph is shared with.

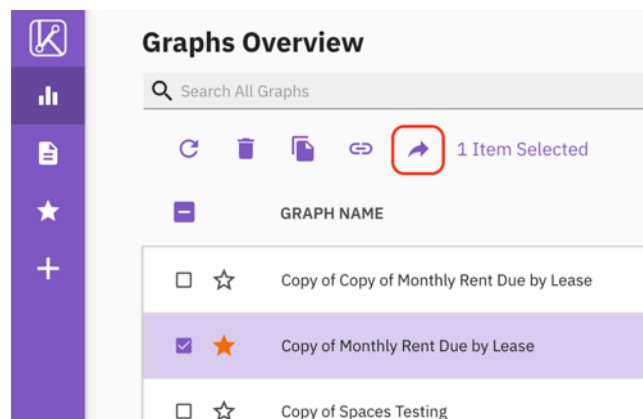
- If “Public” is selected for the share setting, it will appear with the symbol () and “Public.”
- If “Private” is selected for the share setting, it will appear with a “-“ symbol.
- If “Group” is selected for the share setting, it will appear with the symbol () and the number of security groups the graph is shared with.
- Note: you can share with multiple people and groups at the same time.



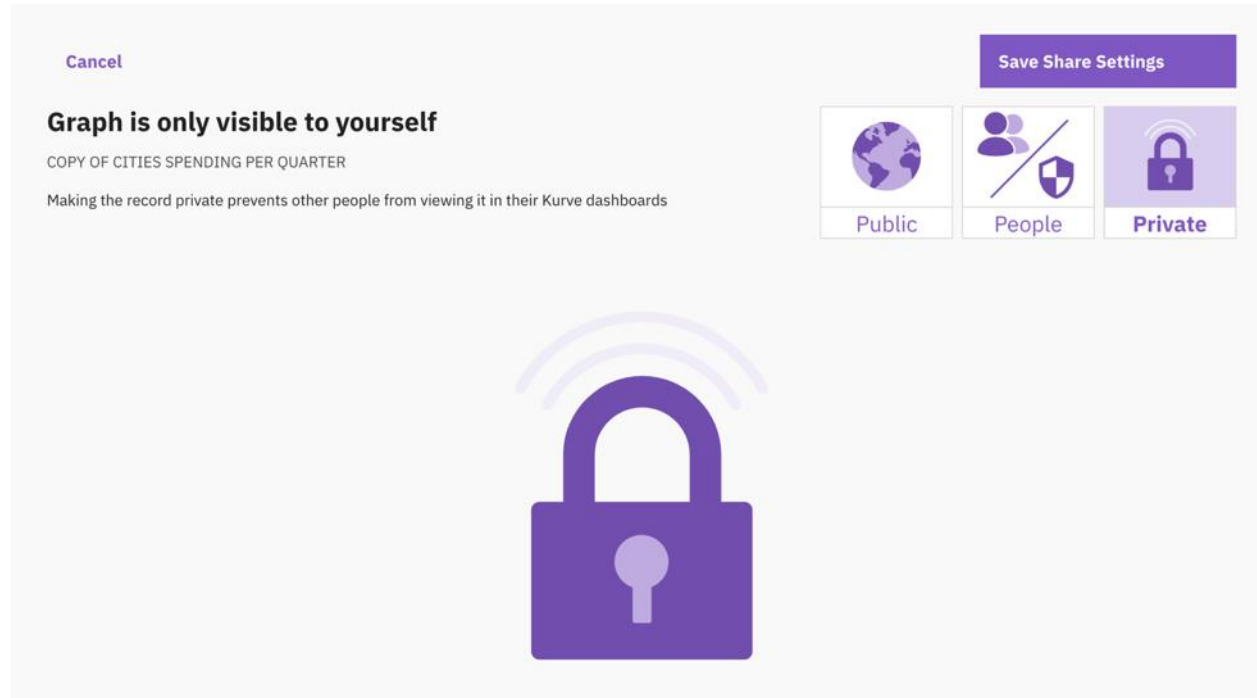
The screenshot shows the 'Graphs Overview' page with a table of graphs. The 'SHARED WITH' column is highlighted with a red box. The table contains the following data:

GRAPH NAME	SOURCE QUERY NAME	CREATOR	SHARED WITH
Copy of Parking Spaces by Store and Neighbourhood	Copy Of Store Directory	Me	 2  1
Parking Spaces by Store and Neighbourhood	Copy Of Store Directory	Me	-
Copy of Our Spaces	cstBuilding - All Buildings with Space and Floor Capacity - Kurve Starter	Me	-
Copy of All Work Tasks by Type and Percent Complete	triTask - Display - triMaintenanceManager - Assigned Active Tasks	Me	 1  3
Using Color from Report	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Me	-
Color Template Test	cstCapitalProject - All Capital Projects and Locations - Kurve Starter	Me	 Public

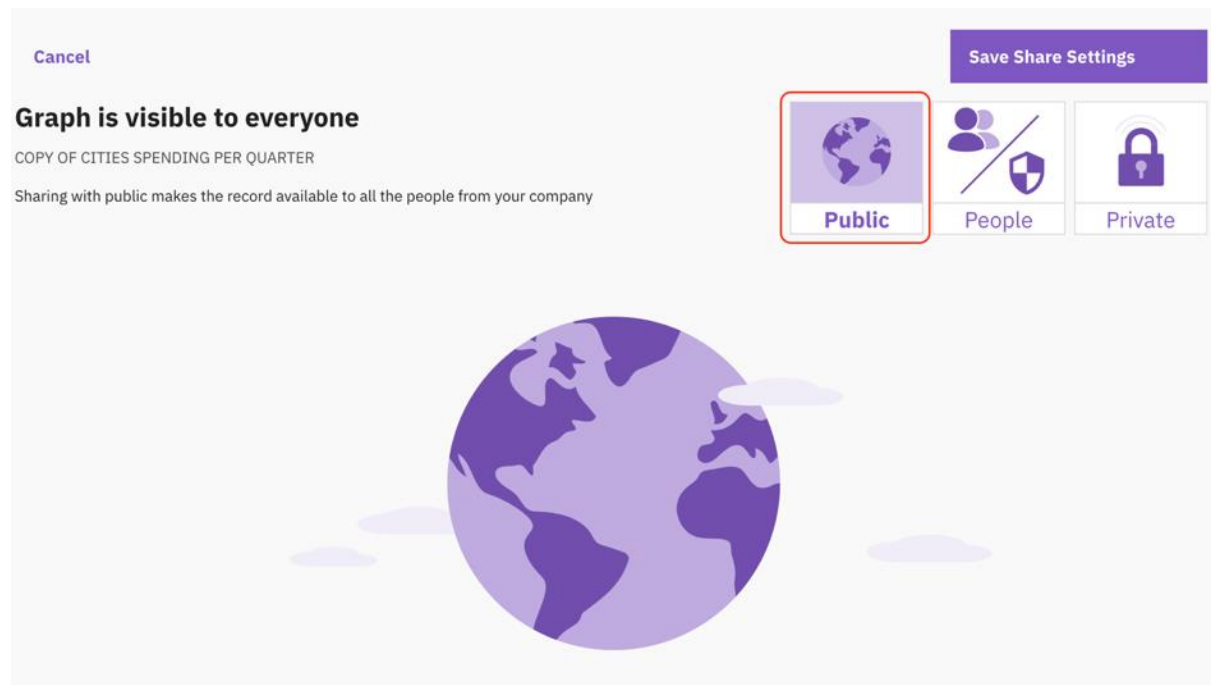
- Click on the Change Share Settings icon () next to the graph you would like to change the share settings for.



- A new window will appear. Please note that all graphs will have a default share setting of “Private.”



- iii. Click on "Public" if you would want the graph to be accessible for all users in the system.



- iv. Click on “People,” if there are specific individuals or security groups to share the graph with. You will be brought to the page where you may search for the individuals.
 - Type in the name
 - Select the check mark next to the name(s) of people you would like to share
 - Click “Save Share Settings”

Cancel 3 Save Share Settings

Graph is shared with specific individuals or groups

COPY OF CITIES SPENDING PER QUARTER

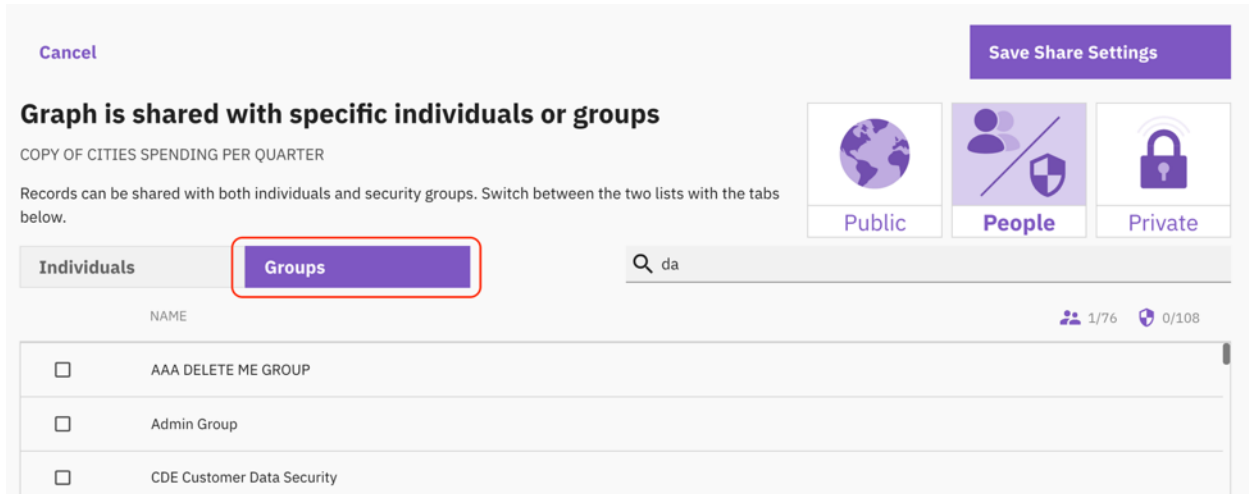
Records can be shared with both individuals and security groups. Switch between the two lists with the tabs below.

Public **People** Private

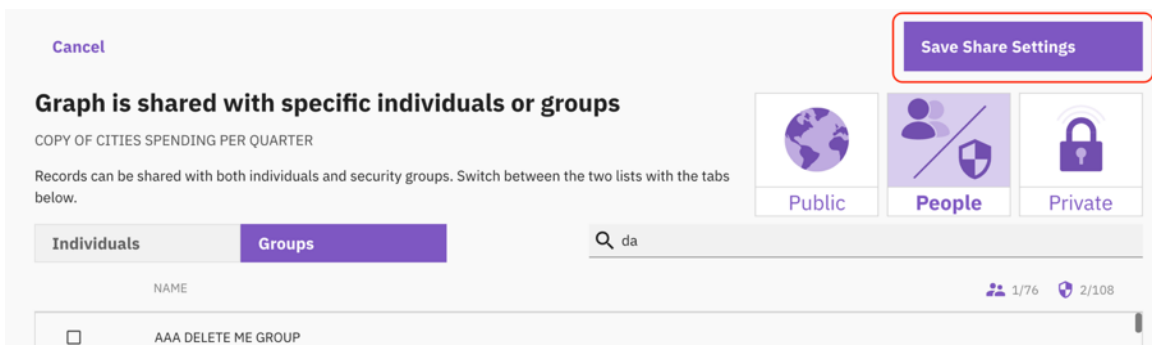
1

<input type="checkbox"/>	NAME	ORGANIZATION	USER TYPE	1/76	0/108
<input type="checkbox"/>	Daniel Kalutkiewicz	GreenPoint	Employee		
<input type="checkbox"/>	Daniel Test		Employee		
<input type="checkbox"/>	Daniel Wu		Employee		
<input checked="" type="checkbox"/> 2	David Yew		Employee		
<input type="checkbox"/>	Kurve Date Format		Employee		

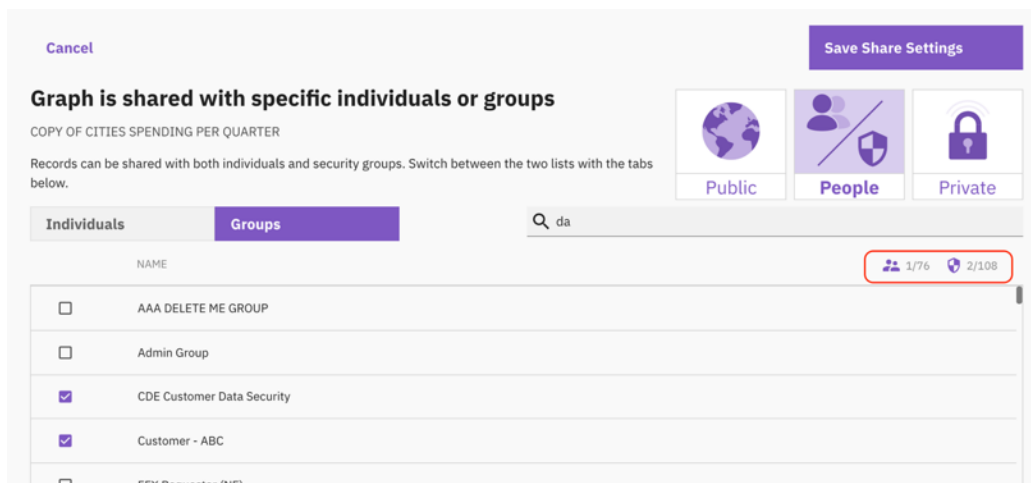
- v. To share with one or multiple security groups, click on “People” and then click on Groups This will change the list to show security groups instead of individuals.



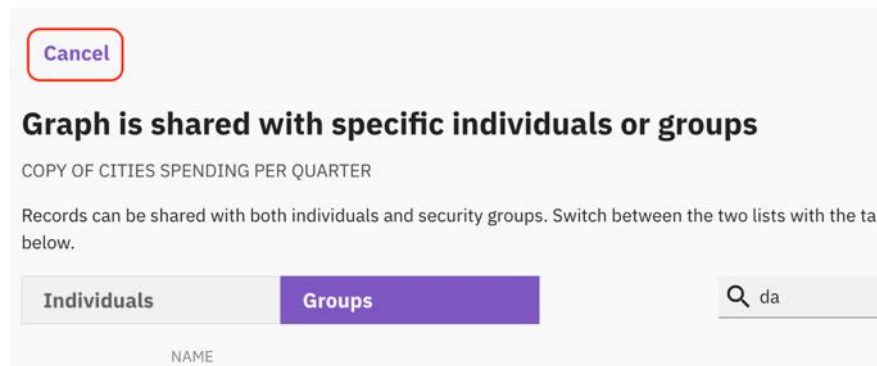
- vi. You can share with groups and/or individuals.
 - Simply search for the group you would like to share, click on the box next to it, and click Save Share Settings.



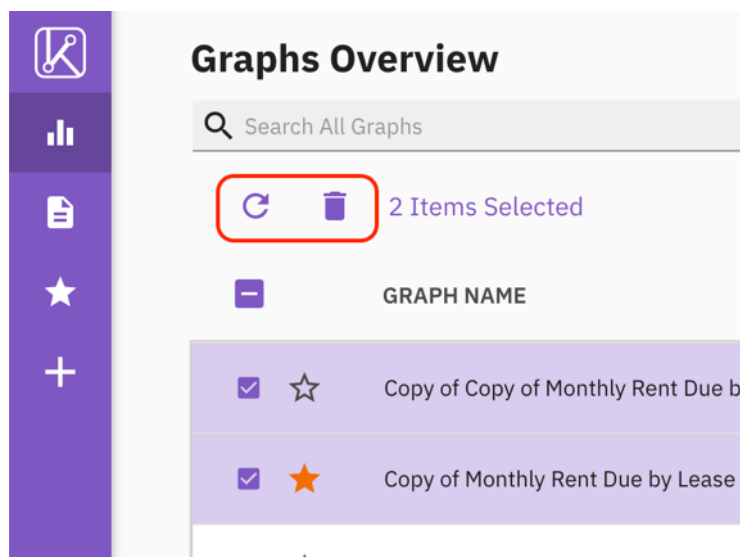
- You can keep track of who you have shared with






- vii. If you would like to exit out of the Change Share Settings page, click the Cancel button. This will not save any of your changes made.



- g. If you have selected more than one graph, your options are:



	Select	Unselect the graphs that are currently selected.
	Refresh	Refresh the list of graphs.
	Delete	Delete the selected graphs.

3. Using a Specific Graph's Toolbar

- a. Open a graph by clicking anywhere on the graph's text link.

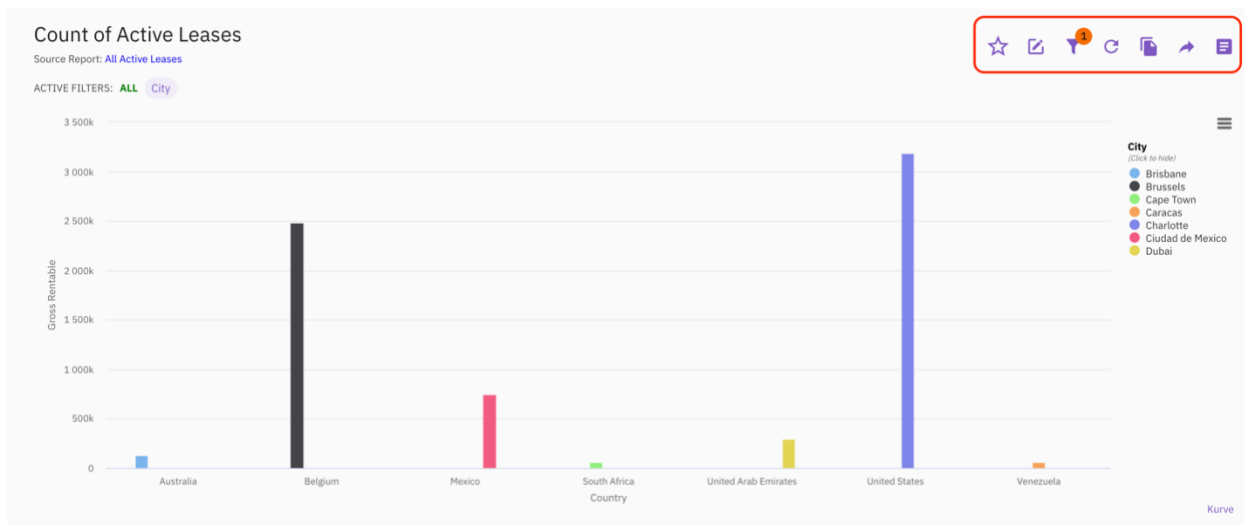
Graphs Overview





count of ALL FAVORITES PERSONAL SHARED




Rows per page: 10 1-4 of 4

GRAPH NAME	SOURCE QUERY NAME	CREATOR	SHARED WITH
Count of Records by Date and Form	cstLocation - Kurve Test - All Locations	Me	-
Copy of Count of All Active Leases	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Me	-
Count of All Active Leases	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Me	-
Count of All Active Leases	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Me	-

b. Features of the graph's toolbar:



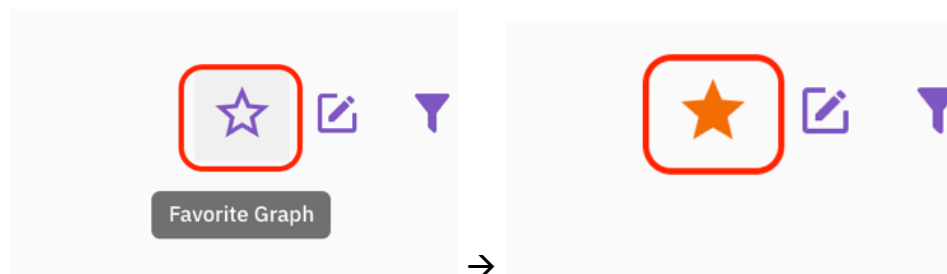
	Favourite Graph	Pin a graph to your home page or favourites page for easier access.
	Edit Graph	Make edits to the opened graph.
	Filters	Filter your graph to show specific results. All filters created and applied by the owner will be saved here.
	Refresh	Refresh the data in your graph without having to refresh the page. Also use this to refresh your query filters and apply new values. The query filters themselves can be edited in the edit graph window.

	Duplicate Graph	Copy the opened graph.
	Change Share Settings	Make changes to whom the graph is shared with (public, private, or specific individuals).
	Description	Edit and view descriptions about your graphs.

Below the title of the graph and query, there is an Active Filters section. This section will populate with filters once they are created and applied.



- c. **Favourite Graph** function: you can easily favourite a graph by clicking on the star icon. When a graph is favourited, the star will be colored orange.




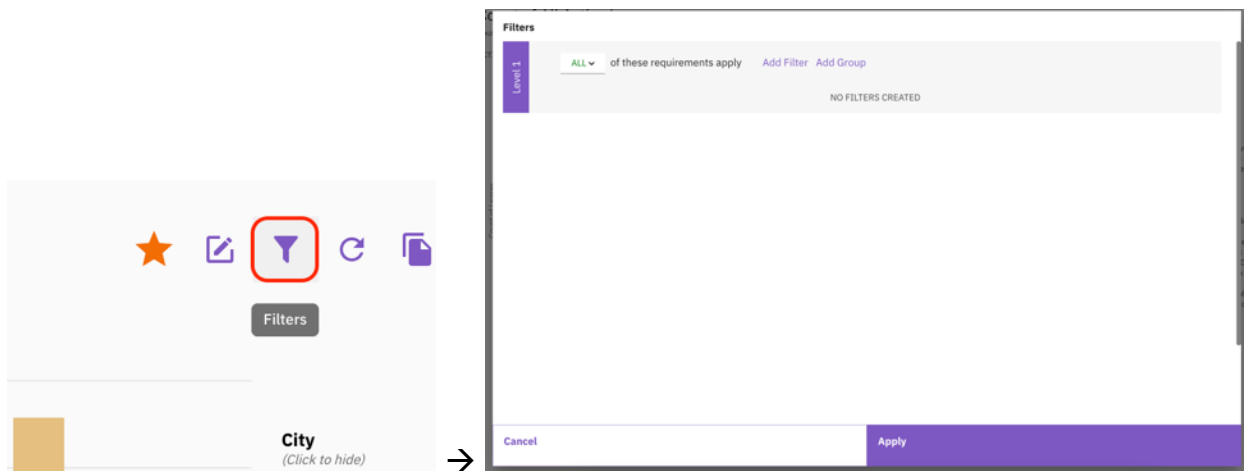
- d. **Filters** Function: graph filters will be covered in [Section 4](#).
- e. **Duplicate Graph / Edit Graph / Change Share Settings** Function: The icons have the same functions as described in [Section 2](#).
- f. Create and View Graph Descriptions: this will be covered in [Section 6](#).

4. Advanced Graph Filtering

Graph filtering in Kurve has AND/OR logic and allows for multiple levels of filtering. The following section will outline some different scenarios on how to use graph filtering.

All filters created and applied by either a Kurve Admin and/or the owner of the graph will be saved.

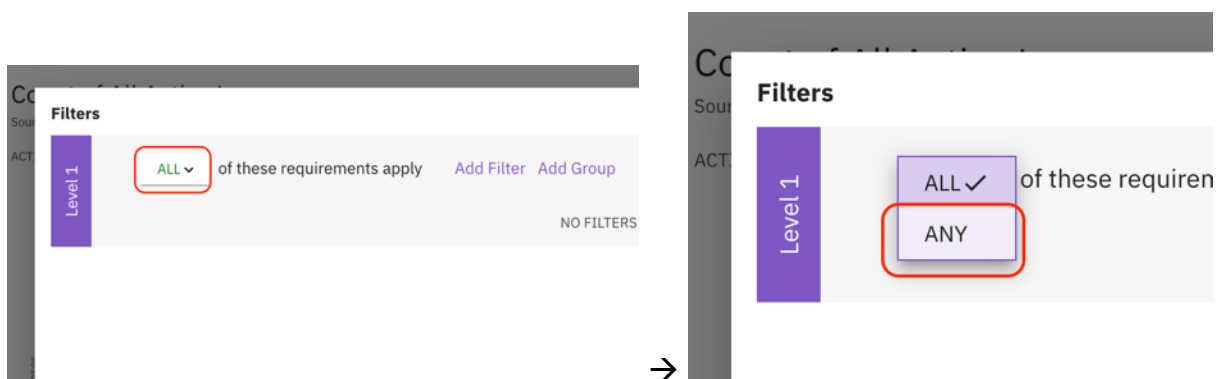
- a. To add a filter to your graph, open a graph and then select the Filter icon () in the graph toolbar.



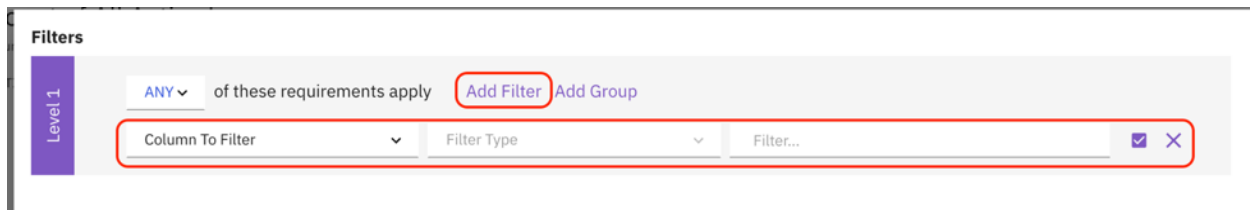
- b. When the Filter window is open, decide whether you want AND or OR logic to be applied.


NOTE: Default filtering behaviour is selected as ALL. This will automatically implement AND logic to the graph and all active filters will be applied.

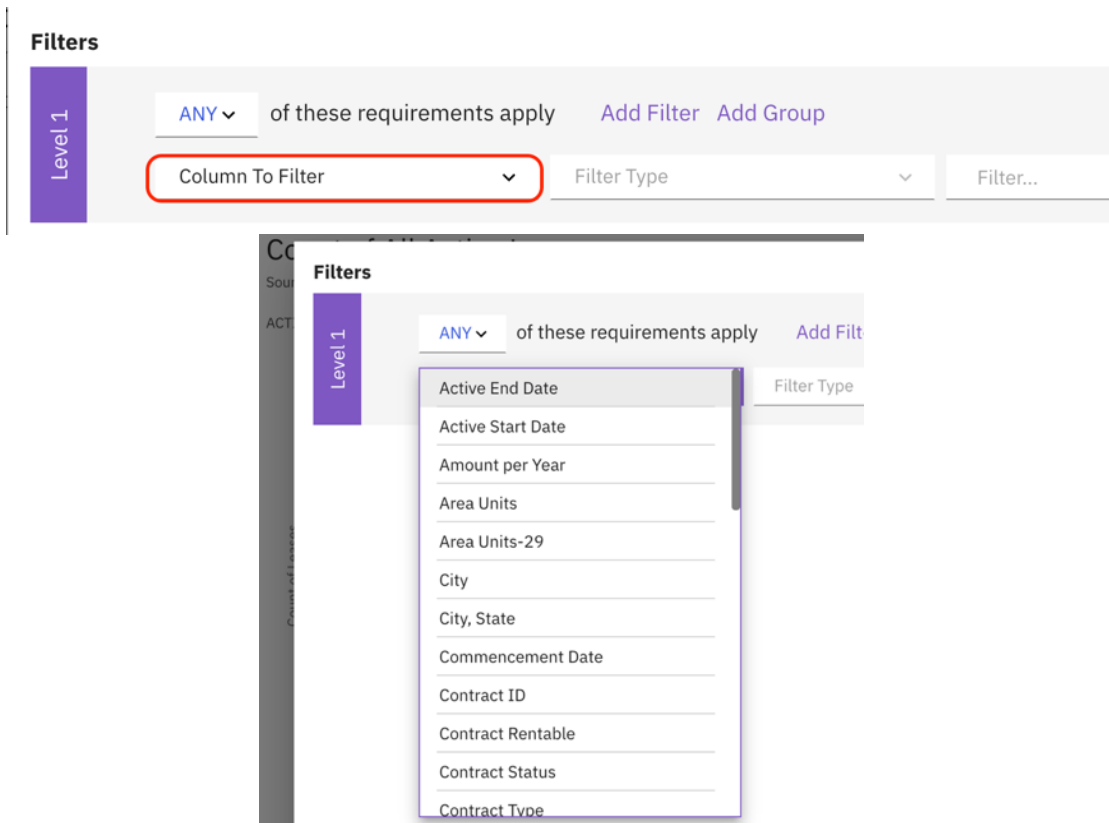
- c. If you would like to change the logic to OR, click the dropdown and select ANY. This means if a field meets ANY of the active filters it will be applied to the graph.



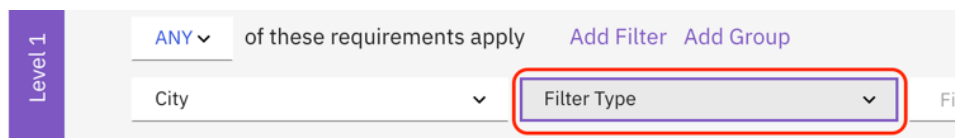
- d. Now that you have identified the logic, add a filter by clicking on the Add Filter button. A row will appear below for you to select your column to filter, filter type, and filter value(s).

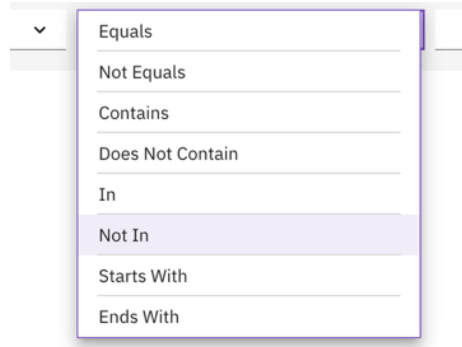


- e. Select the column you would like to filter by clicking on the drop-down arrow icon next to “Column To Filter” ().

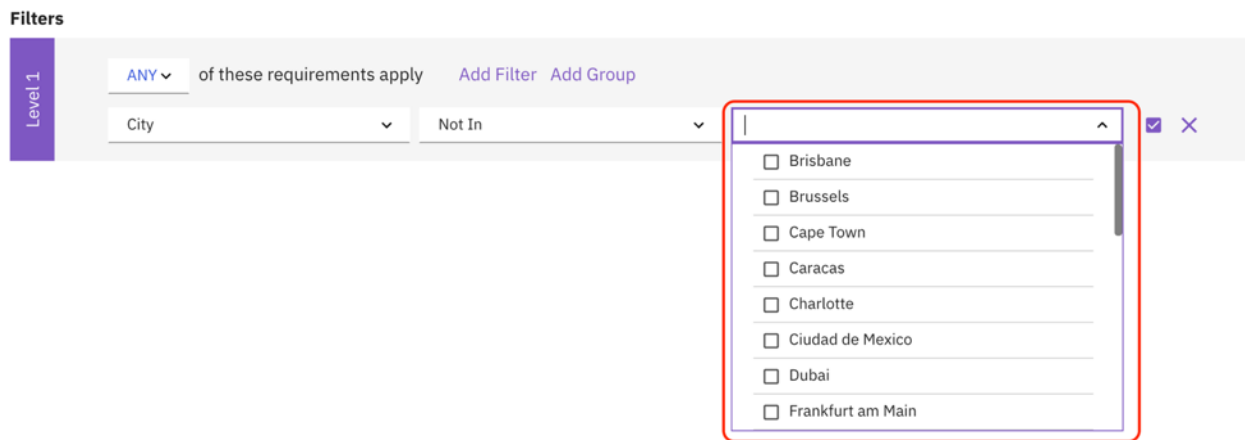


- f. Select the Filter Type by clicking on the drop-down arrow next to “Filter Type”. The filter type will change depending on the field type (i.e. number, date, datetime, text).

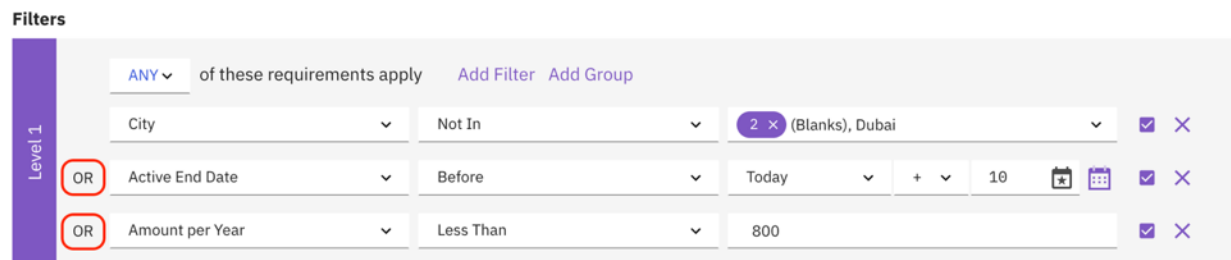




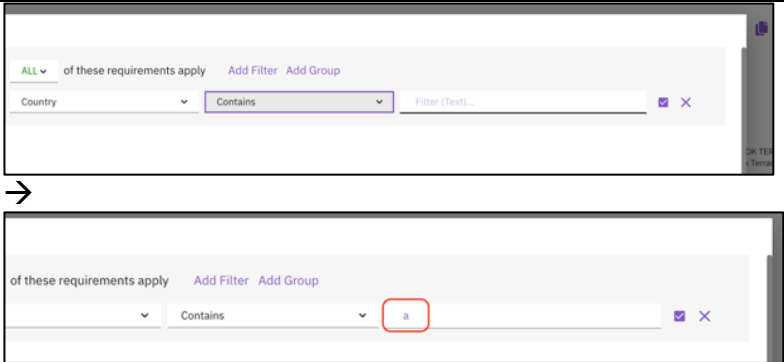
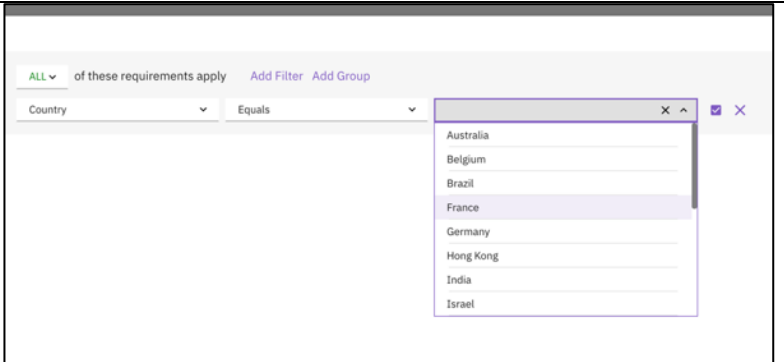
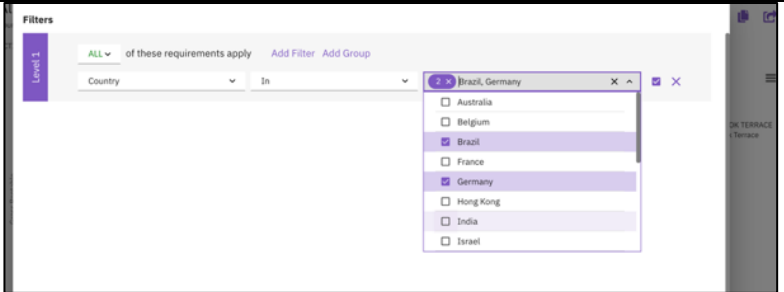
g. Input the value that you would like to filter for in the last box “Filter...”.



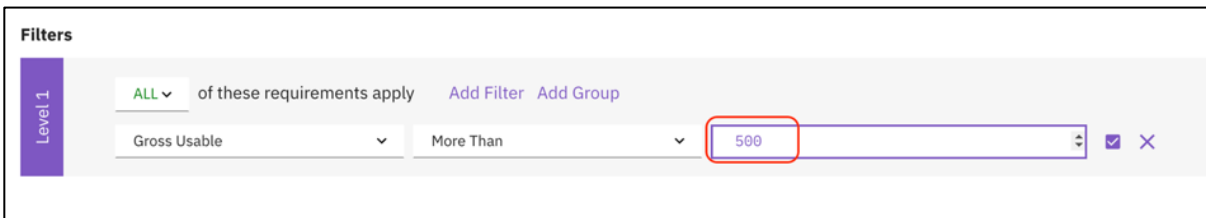
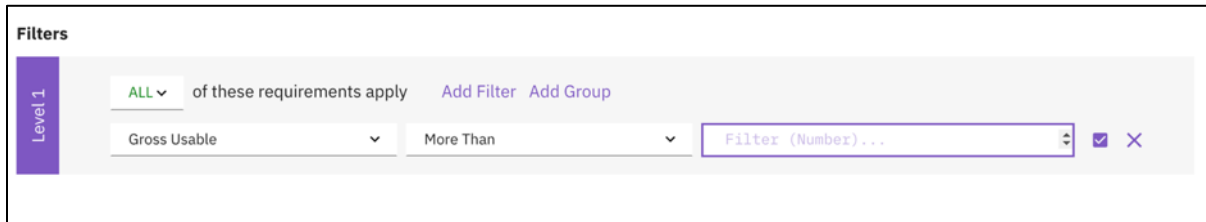
h. As you add additional filters, you will see “AND” or “OR” depending on your selection of ANY/ALL between each filter. This indicates how the filters are being applied to your graph.



- i. **Text Fields:** The following table indicates what the input value will be for each filter type option that is available.

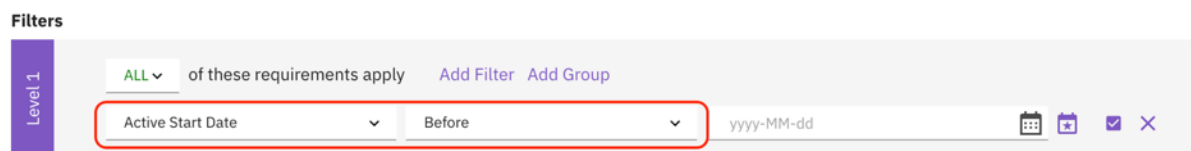
Filter Type	Input Value	Example
Contains Does Not Contain Starts With Ends With	Text Input	
Equals Not Equals	Single-select dropdown list of all unique text values available in that column	
In Not In	Multi-select dropdown list of all unique text values in that column	

- j. **Number Fields:** All fields that are set as number fields will require numerical inputs. Select: Field, Filter Type, and input the numerical value in “Filter (Number)...”

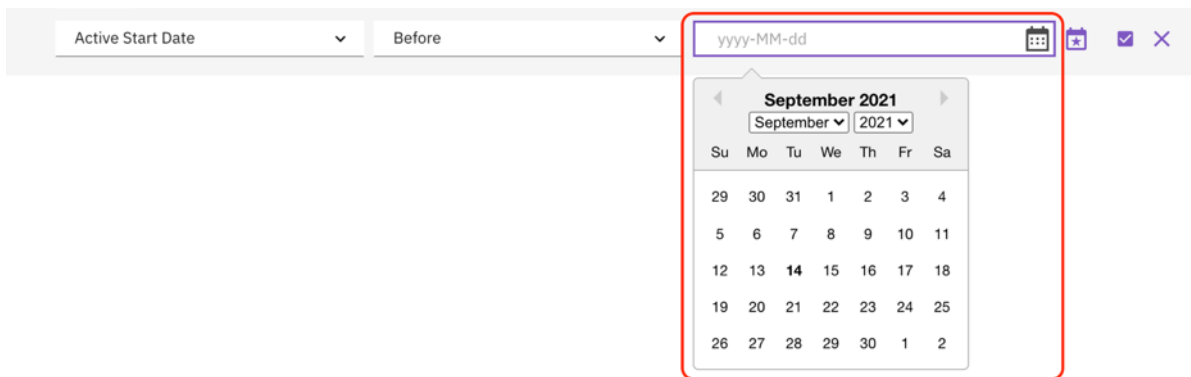


k. **Date Fields:** There are two options when filtering on date fields:

- i. **Static** (Standard Date Filters are used to filter on a specific date)
 - Select a date field and then a filter type

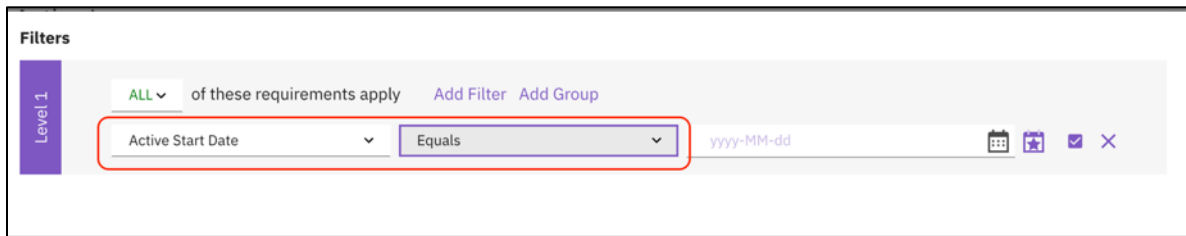


- Input the date you would like to filter, click into the box to either type the date or pick from the calendar display.

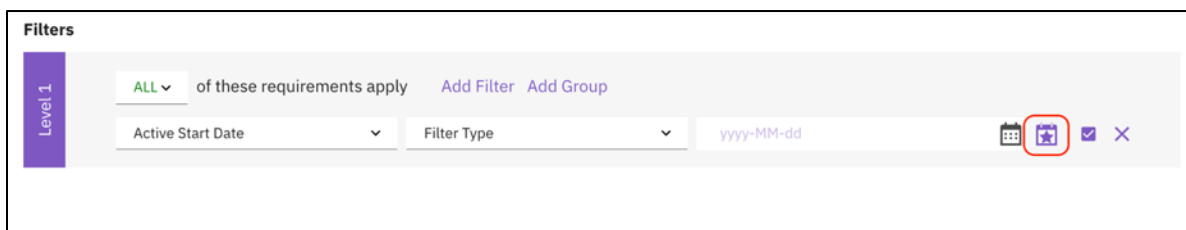


- ii. **Dynamic** (Token Date Filters are used to dynamically filter dates; compare the date you choose to a date that automatically adjusts according to the current date. This means you do not have to identify a specific date to use the filter. For example, you can filter for the Token Date “yesterday” to display only the previous day's data.)

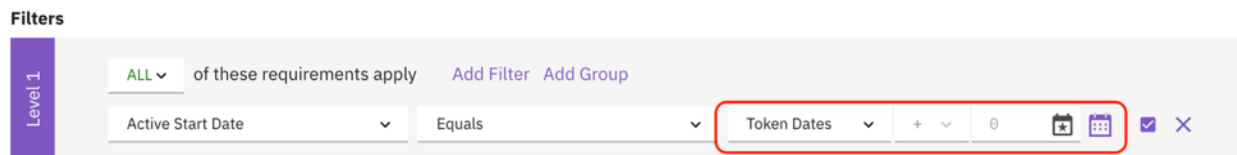
- Select a field and a filter type.



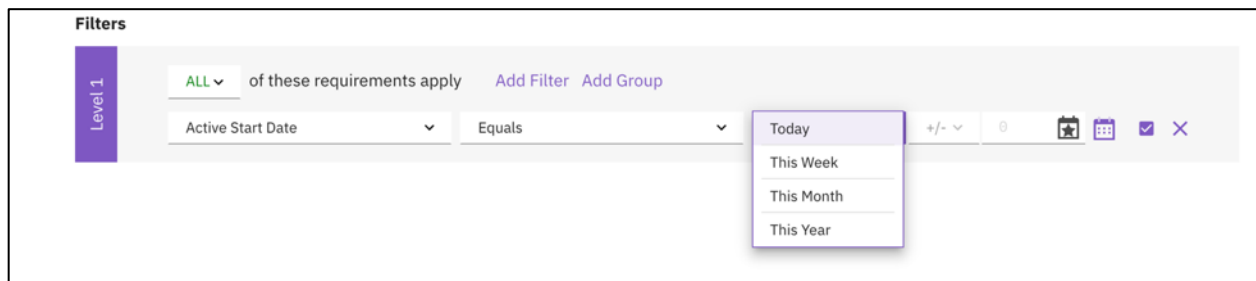
- Click the Token View icon (📅) located at the end of the filter row.

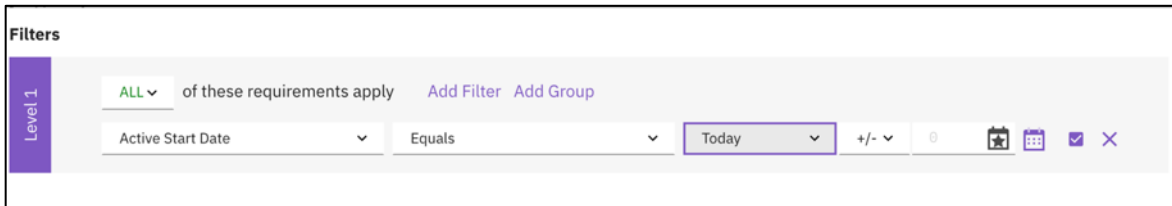


- The row will change to show three new inputs.



- Select a token by clicking into the Token Date dropdown. Your options include 'Today', 'This Week', 'This Month', and 'This Year.'



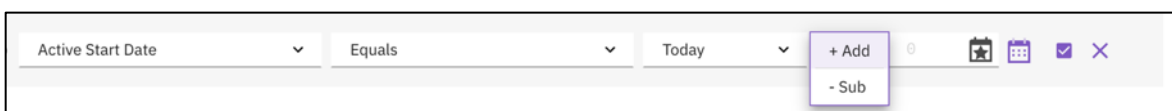


- iii. [Optional] Offsetting the Token Date: You have the option to offset the time (+/-) of your current token selection by days (Today), *weeks (This week), months (This month), or years (This year).

***NOTE:** Offsetting the Token Date by **weeks** follows calendar weeks (with the start of the week being a Sunday).

NOTE: Be careful of your Filter Type and Date Token selections as your outcome will change (see the two tables below for examples).

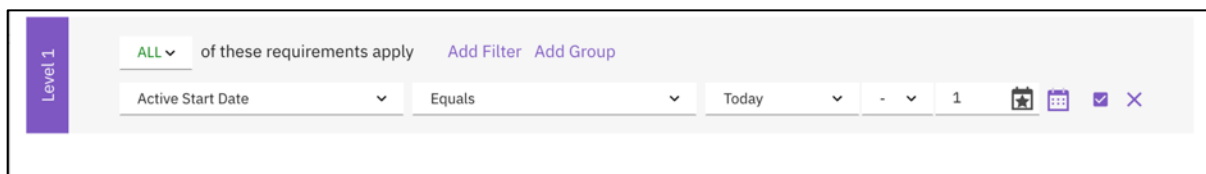
- Select Plus or Minus from the dropdown.



- Type the offset value in the last box.



For example, if you want to filter the graph for an Active Start equal to Yesterday, select Today sub (-) 1:



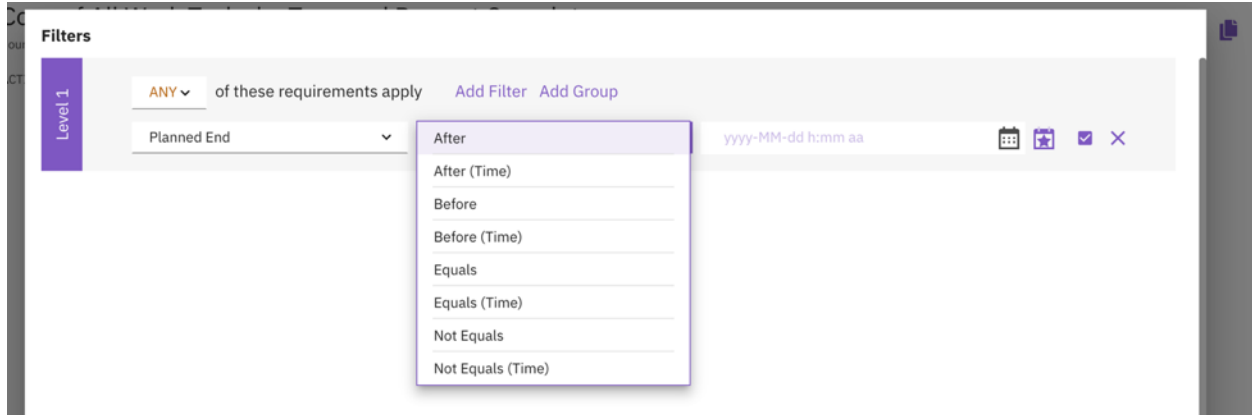
In the table below, we will use a real-life example of how to apply different token filters using Today's date. In this example, we are filtering on the Active Start Date and assuming "today's date" is January 1, 2021:

Filter Type	Token Date	Time Offset	Example	Outcome
Equals	Today	By Day(s)	Today + 5	Shows all data with an Active Start Date OF January 6, 2021.
Before	Today	By Days(s)	Today + 5	Shows all data with an Active Start Date BEFORE January 6, 2021.
After	Today	By Day(s)	Today + 5	Shows all data with an Active Start Date AFTER January 6, 2021.

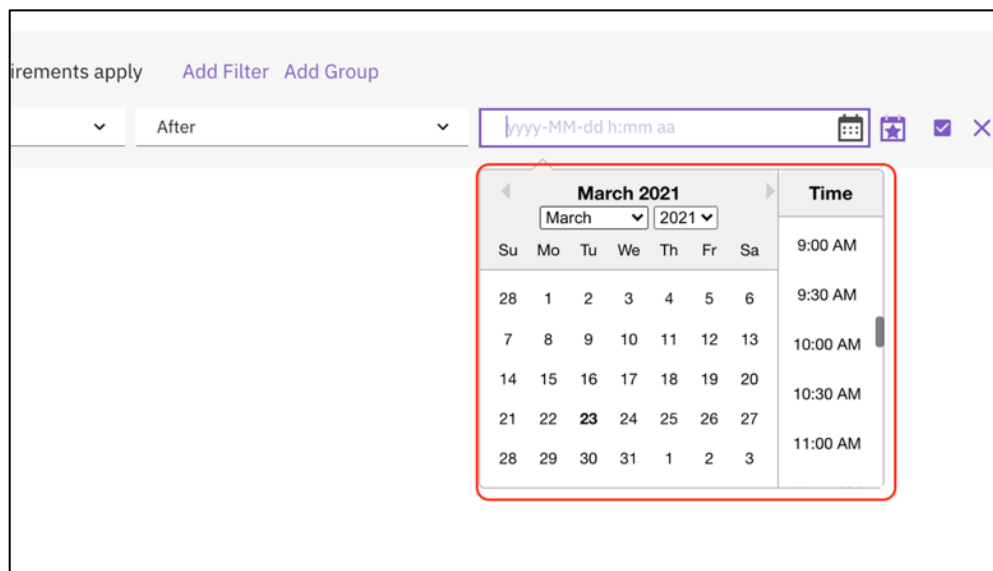
In the table below, we will use a real-life example of how to apply different token filters using This Month. In this example, we are filtering on the Active Start Date and assuming "today's date" is January 1, 2021:

Filter Type	Token Date	Time Offset	Example	Outcome
Equals	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date BETWEEN February 1-28, 2021.
Before	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date BEFORE February 1, 2021.
After	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date AFTER February 28, 2021.

- I. **Date/Time Fields:** There are filters for the Date AND Time portion of the field (e.g., After) and there are filters just for the Time portion of the field (e.g., After (Time)):
 - i. Select a 'Column to Filter'
 - ii. Select the 'Filter Type'



- iii. Click into the input box 'Filter...' to select a date and/or time from the calendar pop-up.

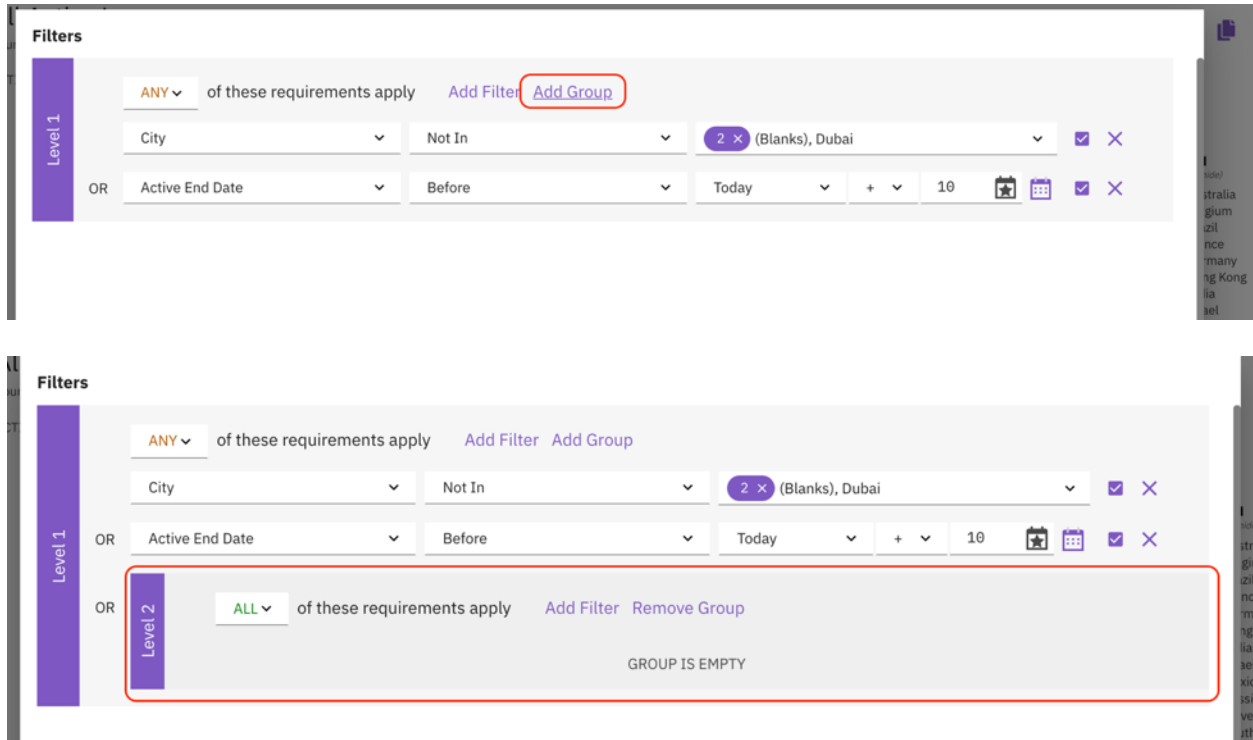


- m. **Adding Group Filters:** Groups lets you combine different types of logic in the filters, so you can have multiple sets of ANY filters, or look for ANY of several sets of more complex conditions.

NOTE: Many people are familiar with AND/OR logic. The same principals apply here with Kurve, but to make the context easier to understand, please note that:

- **ALL** is associated with **AND**
- **ANY** is associated with **OR**

- i. Click 'Add Group' in your filter window to add another level to your filter.



- ii. Add filters to your newly established Level 2 Group. Filters are added in the same way as described above.

Let's walk through an example of when and how to use multi-group filtering. Suppose you wanted to apply the following filters to a graph dedicated to Work Tasks:

- WHERE {Priority Level} is High
- OR {Work Task Type} is Corrective
- AND {Due Date} is Today

In this case, it's unclear whether you want to see:

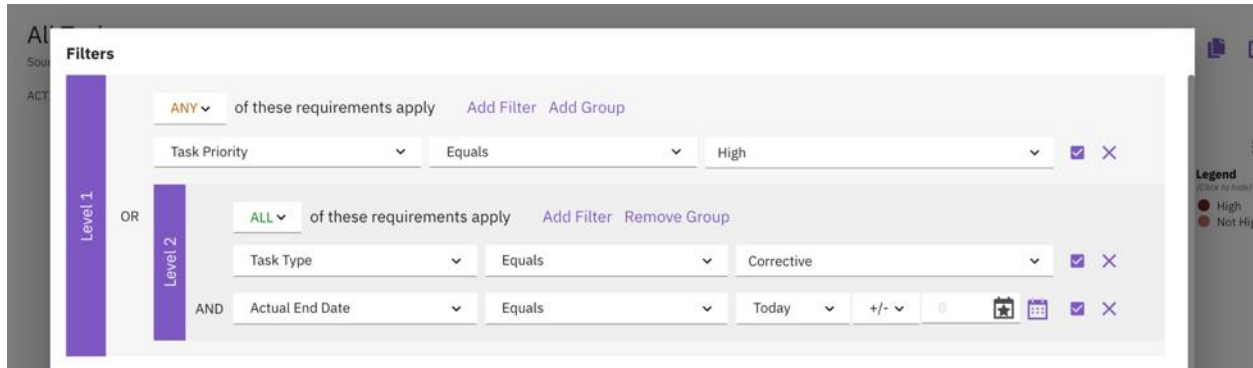
- (High OR Corrective) AND Today
- High OR (Corrective AND Today)

These have different meanings but we want to filter for the second scenario—let's use groups to make this more clear.

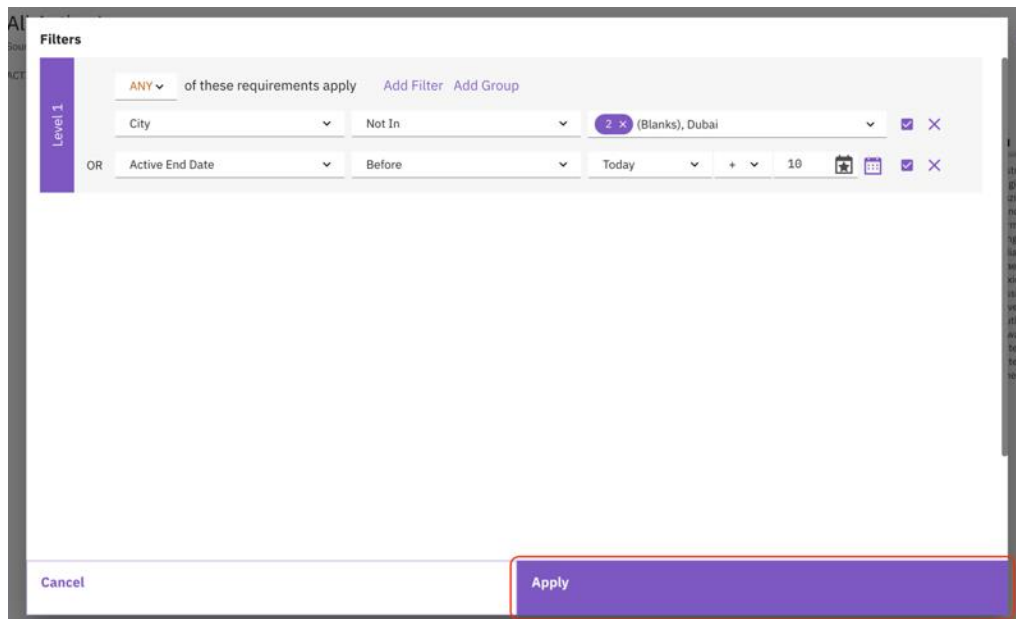
- Level 1: ANY
Priority Level Equals High
- Level 2: ALL
Task Type Equals Corrective

AND
Due Date (Token Date) Equals TODAY

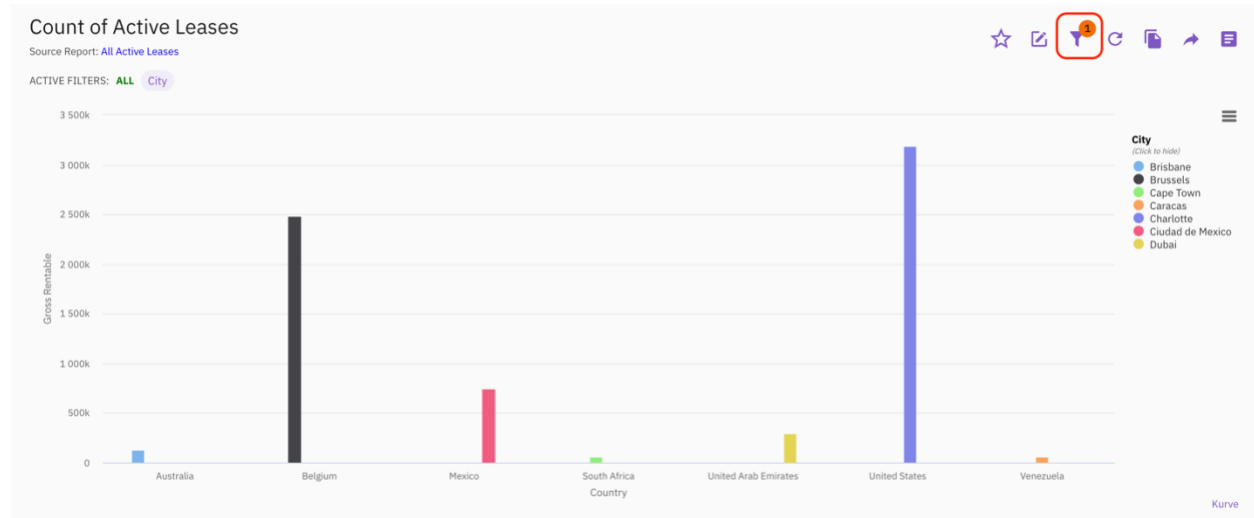
In a Kurve graph the filters would look like this:



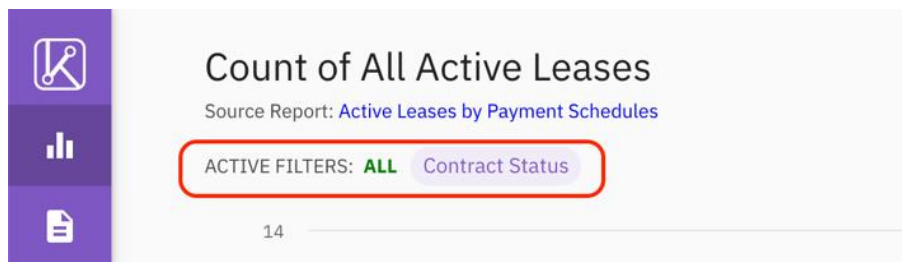
- n. When ready to apply your filter selections to your graph, click 'Apply' at the bottom right of the pop-up window.



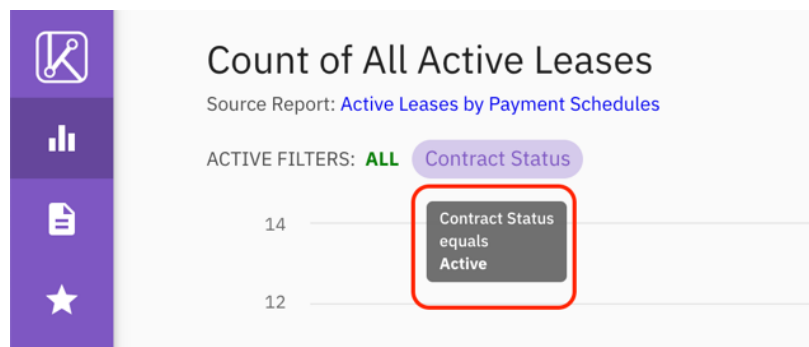
- o. When a new filter is added, the filter icon will display an orange circle with a number inside of it. This identifies the number of created filters (not necessarily all the active/applied filters).



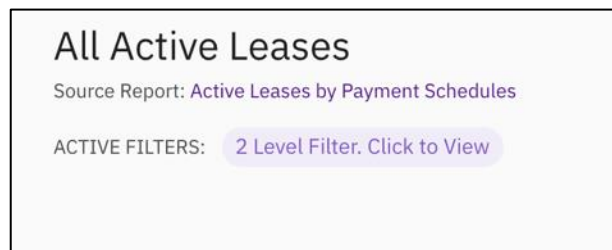
- p. Below the title of the graph, the 'Active Filters' ribbon will display the applied filters to that graph. For example, see the screenshot below to see the 'Contract Status' filter in the ribbon.



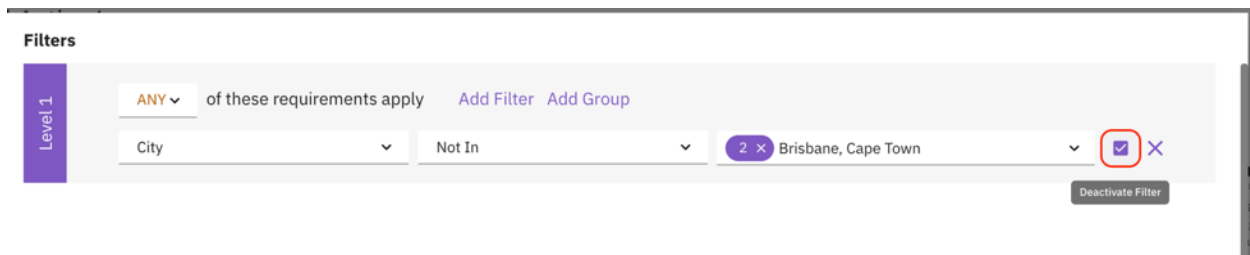
- q. Take your mouse and hover over the active filters to view details about that specific filter, including the filter type and value(s) being filtered for.



- r. If you have added a Group to your Filters, the 'Active Filters' ribbon will display as "2 Level Group - Click to View". Click to open the Filter window and view the details about the filters.

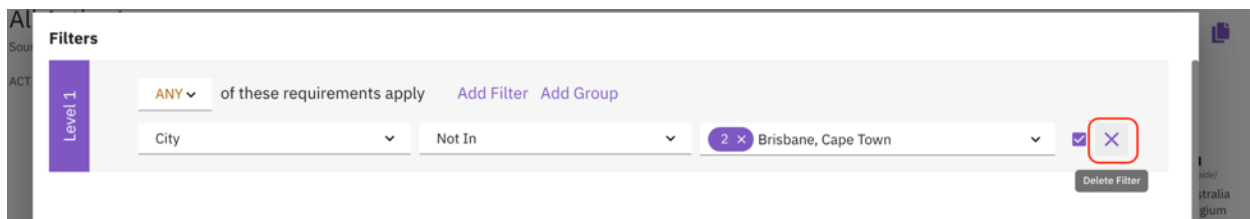


- s. If you would like to change what is being filtered, re-open the filter page by clicking the filter icon (⌵) and make your adjustments. You can add more filters by clicking on the New Filter button.
- t. Activate/Deactivate Filters: By default, any newly created filter is assumed to be activated. Click the purple checkbox next to any filter to “deactivate” it from the graph without deleting the filter altogether.



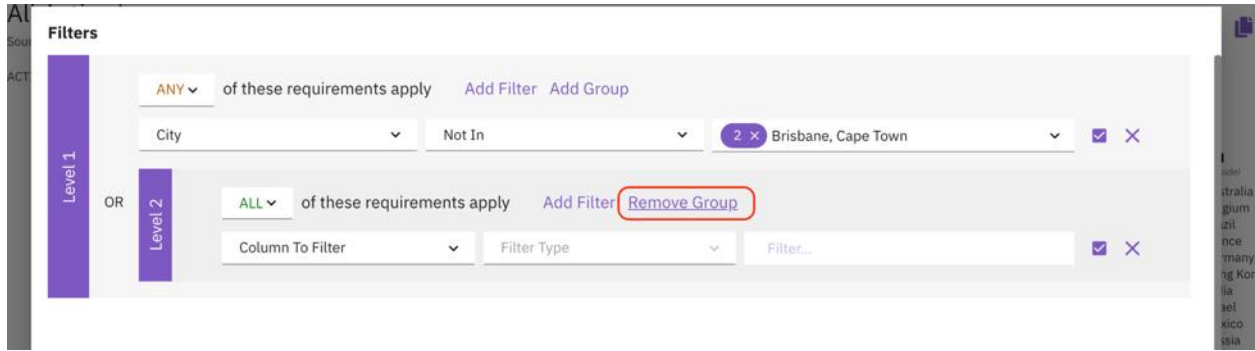
- u. Delete Filter: Click the delete icon (✕) at the end of the filter row to delete a filter.

NOTE: Once a filter is deleted, there is no way to recover the filter.



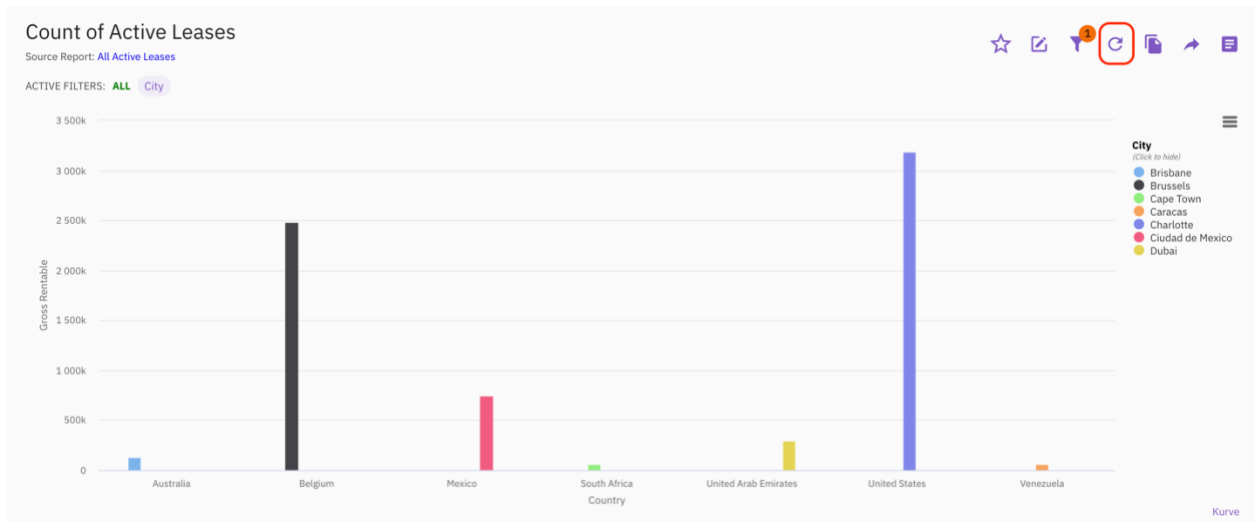
- v. Remove Group: Click 'Remove Group' if you would like to delete your Level 2 filter group.

NOTE: This will remove the group AND any filters within that group.




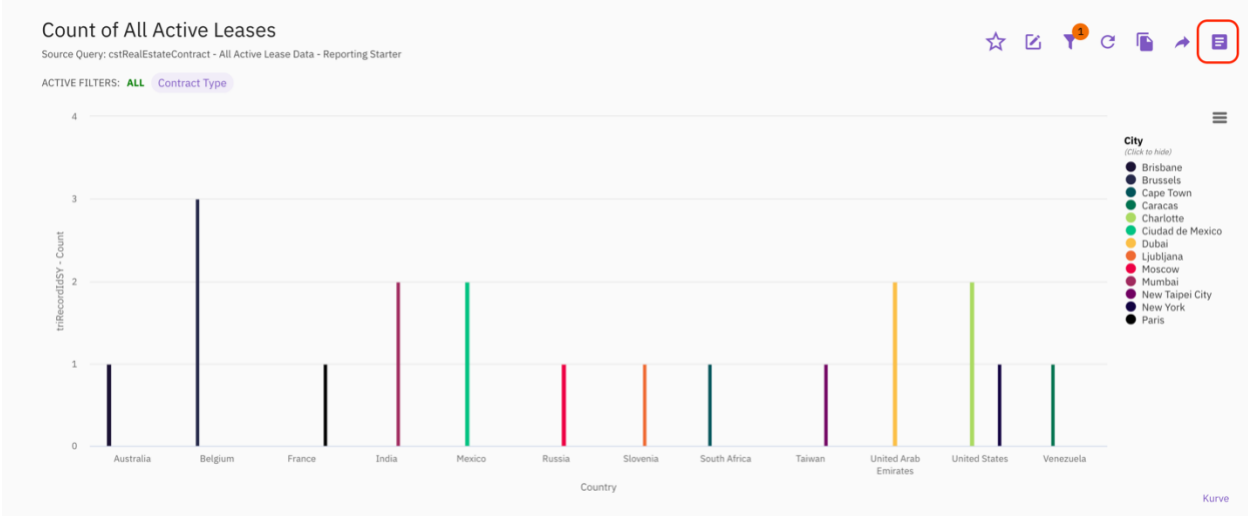
5. Refresh Data

Refreshing your data allows you to refresh to pull in the most up to date information without reloading the whole page. Or if you have filtered for a value with query filters, it allows you to change these values.

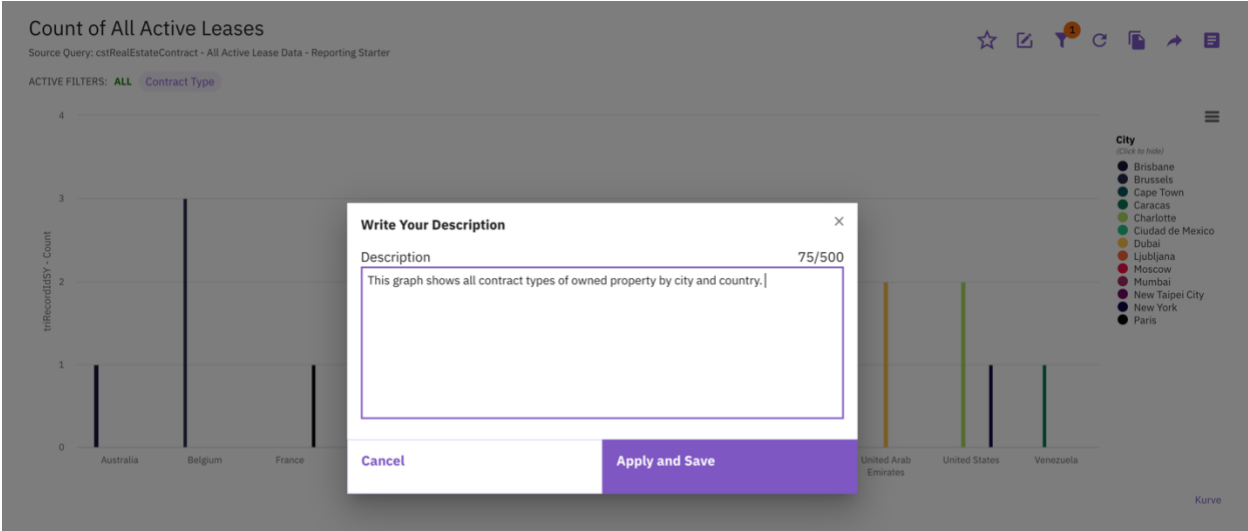


6. Edit and View Graph Descriptions

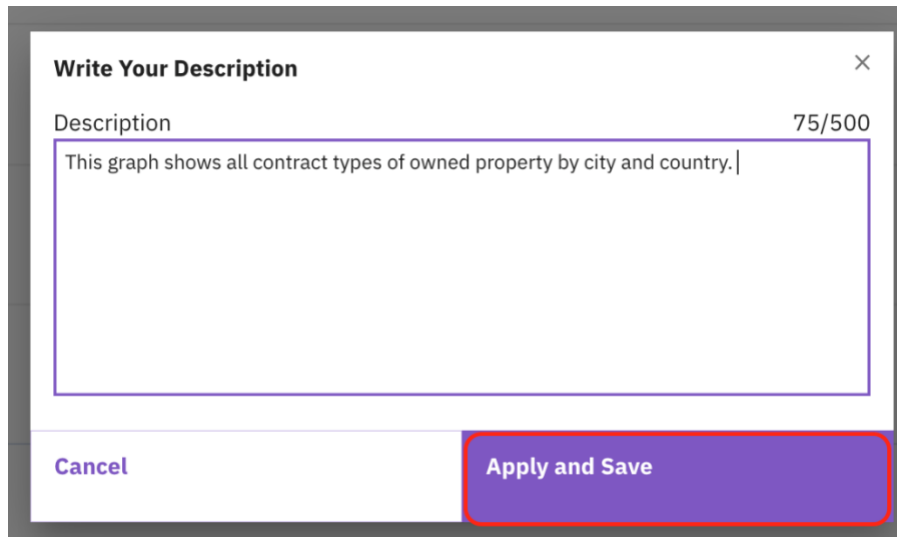
- To edit and view descriptions on your graph or another user's graph, click on the Descriptions icon () in the toolbar.



b. To Edit: A pop-up box will show which will allow you to create your descriptions by typing into the box.



i. Once you're done writing your description, click "Apply and Save".



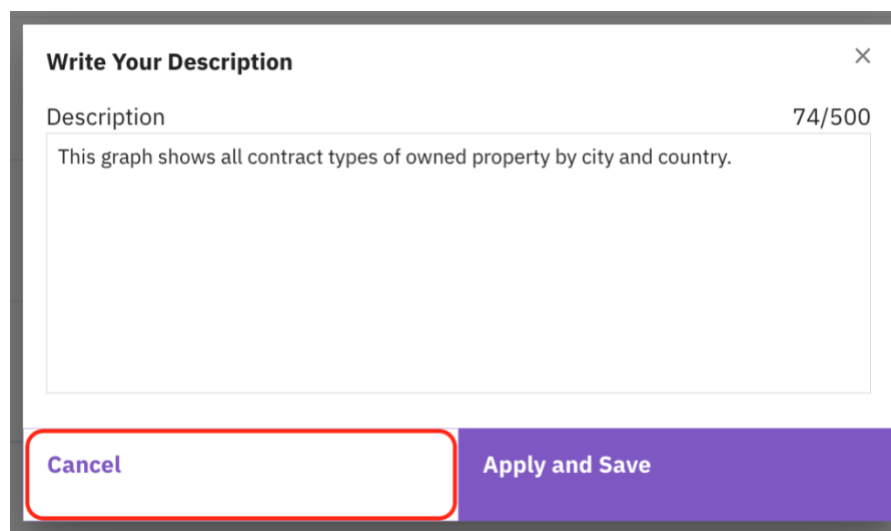
Write Your Description ×

Description 75/500

This graph shows all contract types of owned property by city and country. |

Cancel Apply and Save

- ii. Click “Cancel” to exit out of the description box without saving changes and return to your graph.




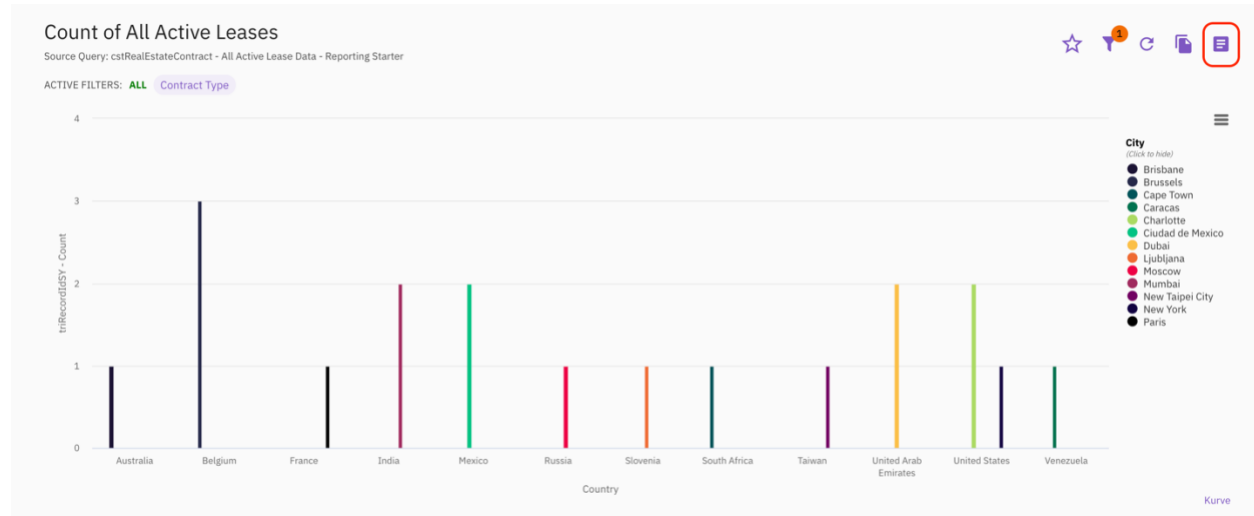
Write Your Description ×

Description 74/500

This graph shows all contract types of owned property by city and country.

Cancel Apply and Save

- c. To View Descriptions: You can view another user’s description by clicking on the Description icon () in the toolbar.



d. You will see the owner of the graph's description. Click "Close" to exit and return back to the graph.

Description ✕

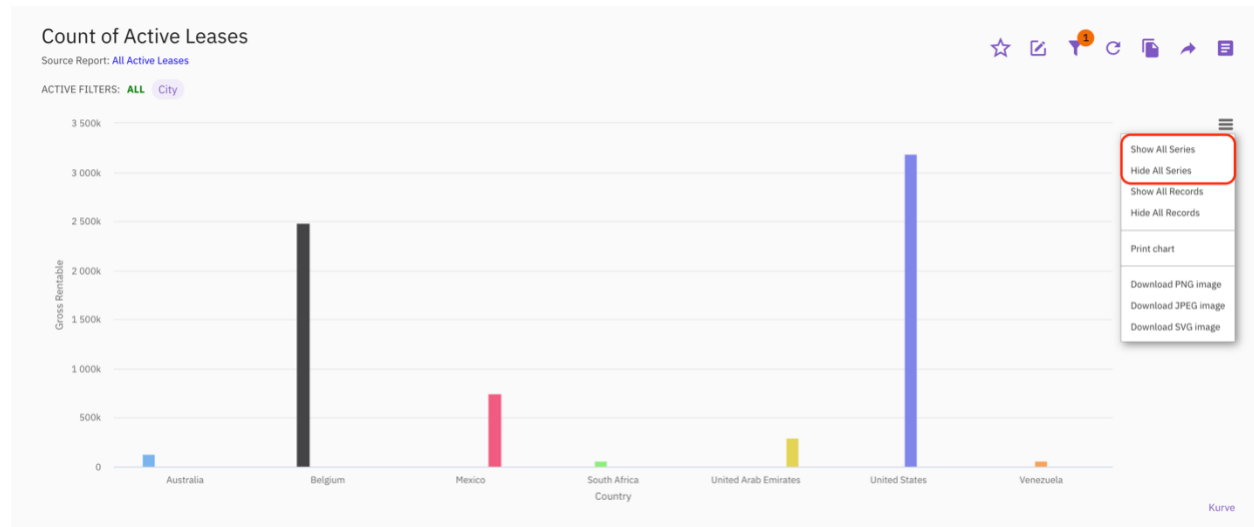
This graph shows all contract types of owned property by city and country.

Close

Country

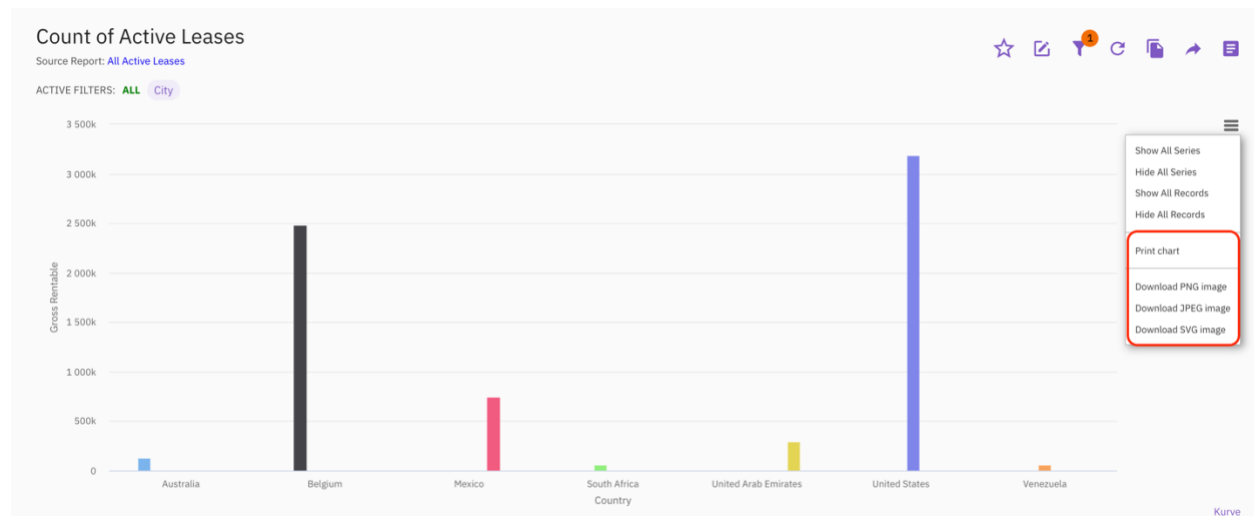
7. Showing/Hiding Series

To Show or Hide All Series on a graph, click on the menu icon (☰) located on the right side of the webpage. A list will pop-up, select "Show All Series" to show all the data in the graph, select "Hide All Series" to hide all of the data.



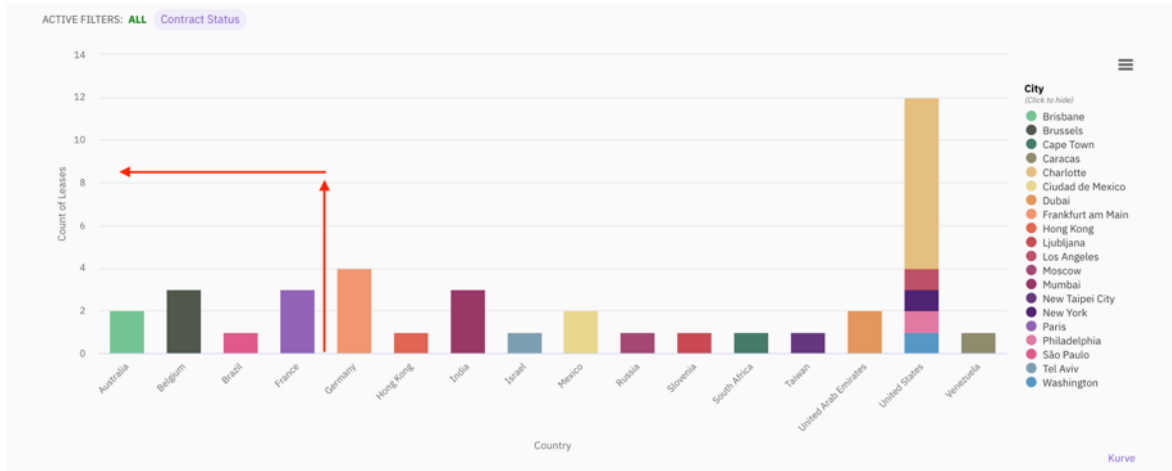
8. Printing and Downloading Graphs

Print / Download Graph Function: Click on the menu icon (☰) located on the right side of the webpage. A list will pop-up for your choice to print or download the graph in various formats.

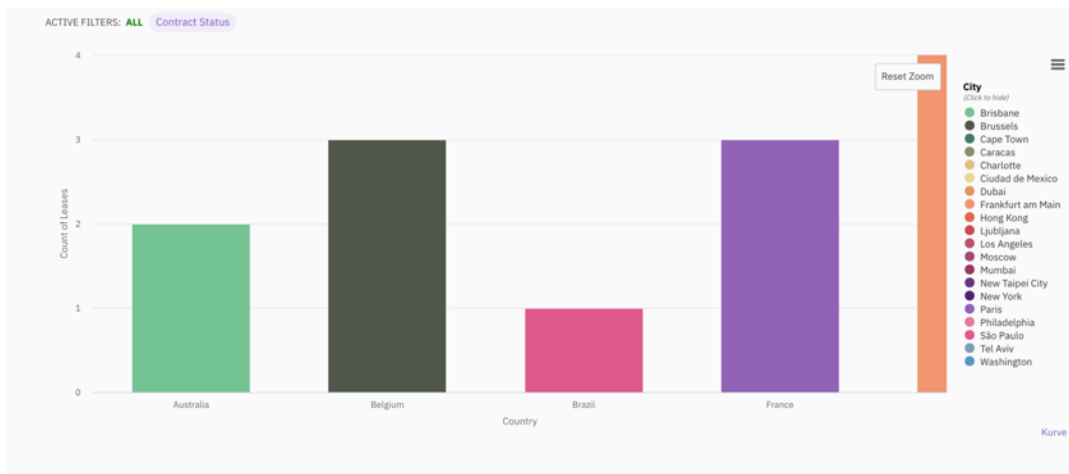


9. Clicking and Highlighting on Graphs to Zoom

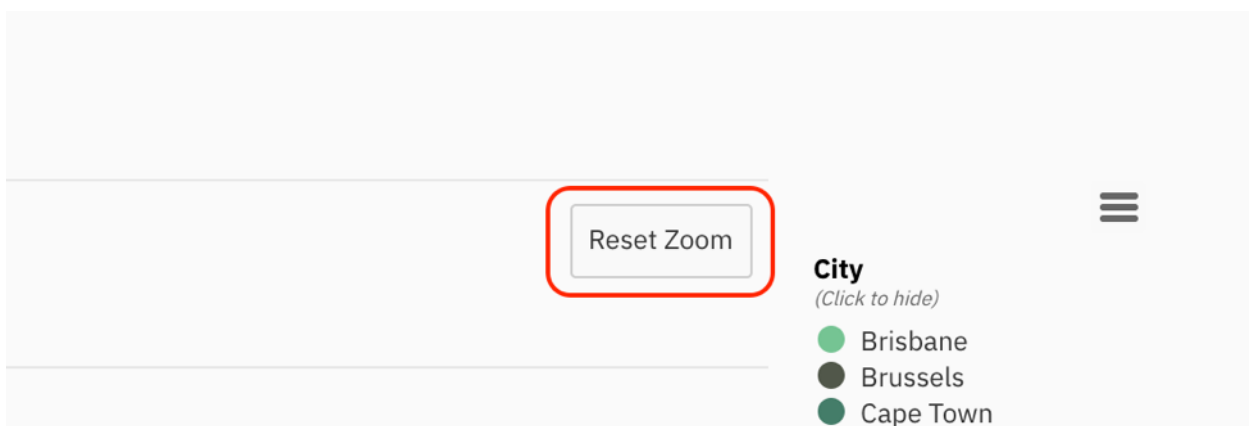
- Click and Highlight Function:** hover over the graph, then click and drag to highlight the part of the graph you would like to zoom into. You may highlight vertically or horizontally to click and drag on the graph to zoom.



b. The graph will zoom to what you highlighted:

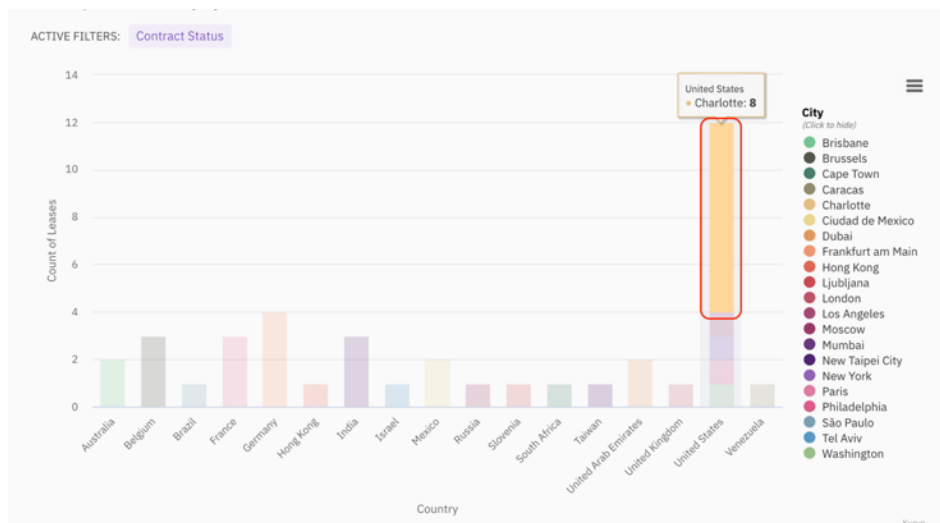


c. **Reset Zoom** Function: when you want the graph to reset to view all results of the graph, click "Reset Zoom."

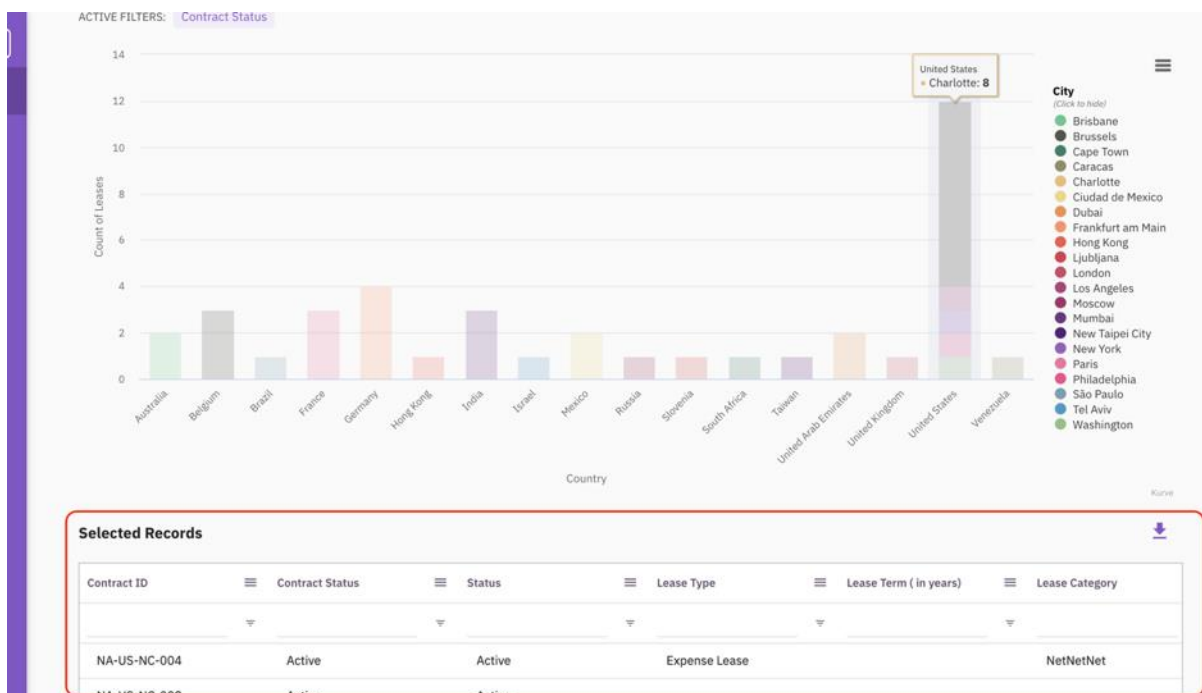


10. Navigating Through Graph Data

- a. A **tooltip** will appear as your mouse hovers over a column or point on the graph; information regarding the record will appear in the tooltip. It will also highlight that segment and any others that may have the same Color By value.



- b. **Click on the column** or segment on the graph to open the graph table associated with that record.



c. **Scroll** left or right to view the columns associated with the graph table.

Selected Records

Contract ID	Payment Schedule ID	Amount per Year	Contract Rentable	Cost per Unit	Payment Name	Payment Type
GPNA-US-IL-OP-001f	1007916	\$ 0.00	5800	\$ 0.00	Rent	Rent
GPNA-US-IL-OP-001f	1007906	\$120,000.00	5800	\$20.69	Rent	Rent
GPNA-US-IL-OP-001f	1007915	\$143,411.16	5800	\$24.73	Rent	Rent
GPNA-US-IL-OP-001f	1007914	\$140,599.13	5800	\$24.24	Rent	Rent
GPNA-US-IL-OP-001f	1007913	\$137,842.28	5800	\$23.77	Rent	Rent
GPNA-US-IL-OP-001f	1007912	\$135,139.49	5800	\$23.30	Rent	Rent
GPNA-US-IL-OP-001f	1007911	\$132,489.70	5800	\$22.84	Rent	Rent
GPNA-US-IL-OP-001f	1007910	\$129,891.86	5800	\$22.40	Rent	Rent
GPNA-US-IL-OP-001f	1007909	\$127,344.96	5800	\$21.96	Rent	Rent
GPNA-US-IL-OP-001f	1007908	\$124,848.00	5800	\$21.53	Rent	Rent
GPNA-US-IL-OP-001f	1007907	\$122,400.00	5800	\$21.10	Rent	Rent
GPNA-US-IL-OP-001e	1007938	\$ 0.00	5800	\$ 0.00	Rent	Rent
GPNA-US-IL-OP-001e	1007936	\$140,599.13	5800	\$24.24	Rent	Rent
GPNA-US-IL-OP-001e	1007935	\$137,842.28	5800	\$23.77	Rent	Rent

1 to 100 of 149 Page 1 of 2

d. **Reorganize the columns** - click and drag the Column headers to where you would like to place the column on the table.


Selected Records

Name	Contract Status	Contract Type	Active Start Date	Active End Date	sq ft	City
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace
Oakbrook Terrace Office B...		Real Estate Lease	01/01/2017	03/31/2027	3,741	Oakbrook Terrace

1 to 100 of 149 Page 1 of 2

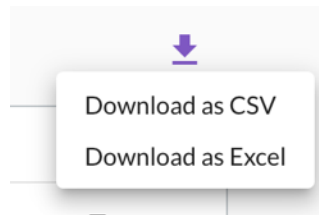
Selected Records

Name	Active Start Date	Contract Status	Contract Type	Active End Date	tb	City
Oakbrook Terrace Office B...	01/01/2017		Real Estate Lease	03/31/2027		Oakbrook Terrace
Oakbrook Terrace Office B...	01/01/2017		Real Estate Lease	03/31/2027		Oakbrook Terrace
Oakbrook Terrace Office B...	01/01/2017		Real Estate Lease	03/31/2027		Oakbrook Terrace
Oakbrook Terrace Office B...	01/01/2017		Real Estate Lease	03/31/2027		Oakbrook Terrace
Oakbrook Terrace Office B...	01/01/2017		Real Estate Lease	03/31/2027		Oakbrook Terrace

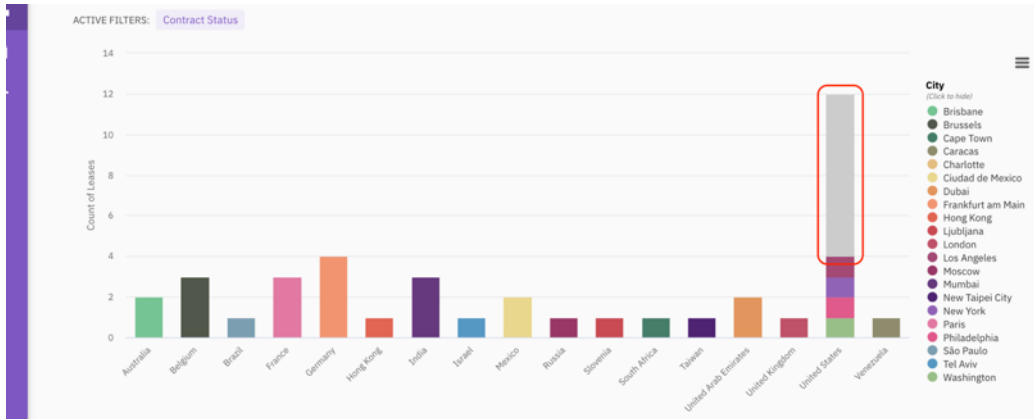
- e. **Download Table of Records:** at the top right-hand corner above the table of records, there is a download icon (). Click to download as Excel or CSV.

Selected Records

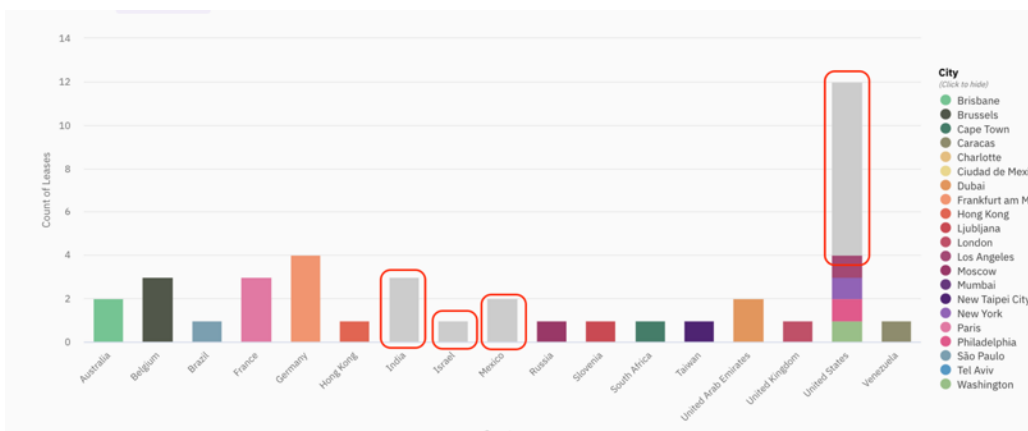
Name	Contract ID	Payment Schedule ID	Contract Status	Contract Type	Active End Date	Active S
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007796		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007814		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007813		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007812		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007811		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007810		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007809		Real Estate Lease	12/31/2026	01/0
Oakbrook Terrace Office B...	GPNA-US-IL-OP-001	1007808		Real Estate Lease	12/31/2026	01/0



- f. **Multi-select** graph segments – select multiple sections of the graph to display in the table of records below the graph.
- i. Navigate to your graph
 - ii. Select one segment of the graph



- iii. Hold *shift* on your keyboard and continue to select the segments you want to display. In the example below, I have selected Mumbai, Tel Aviv, Ciudad de Mexico, and Charlotte.



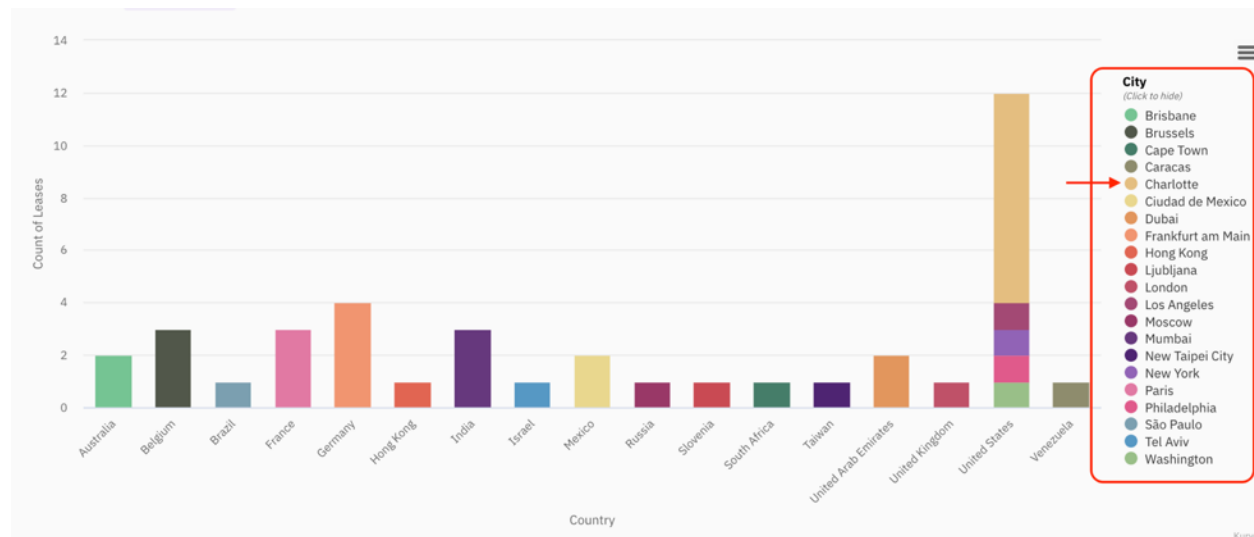
- iv. Now when I scroll to see my table of records, it will display all three cities rather than just one.

Selected Records

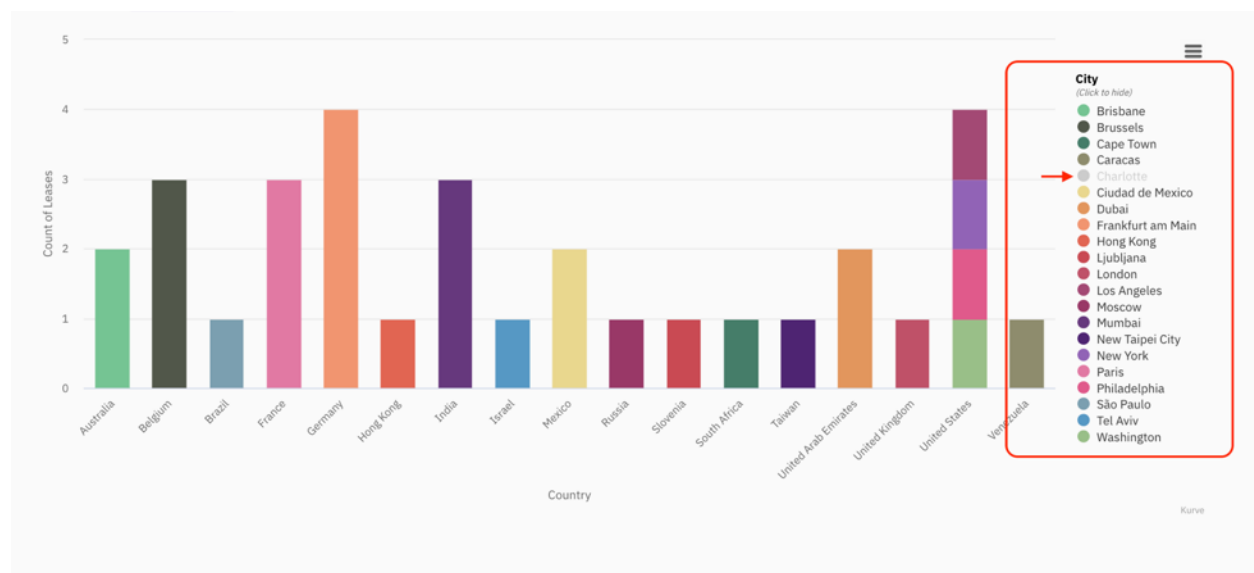
City	Contract ID	Contract Status
Charlotte		Active
Charlotte		Active
Charlotte		Active
Charlotte		Active
Charlotte		Active
Charlotte		Active

- g. **Hide variables from the graph** - from the colour legend located at the top right corner, click on the coloured dot of the property you would like to temporarily hide from the graph to view specific data.

Example: In this graph, if I click on the dot next to Charlotte, it will temporarily hide it from the graph.



Now the graph will only show all other lease data.



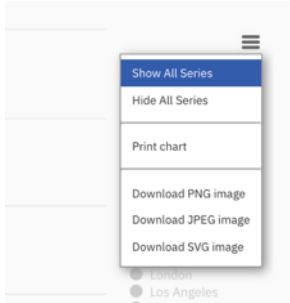
Note: The selected dot will turn light grey.

- h. **Unhide variables** from the graph - Click the same coloured dot to unhide the property.
- i. **Isolate one variable** from the graph – hold down shift on your keyboard and then select the variable you would like to isolate. For example, in the example

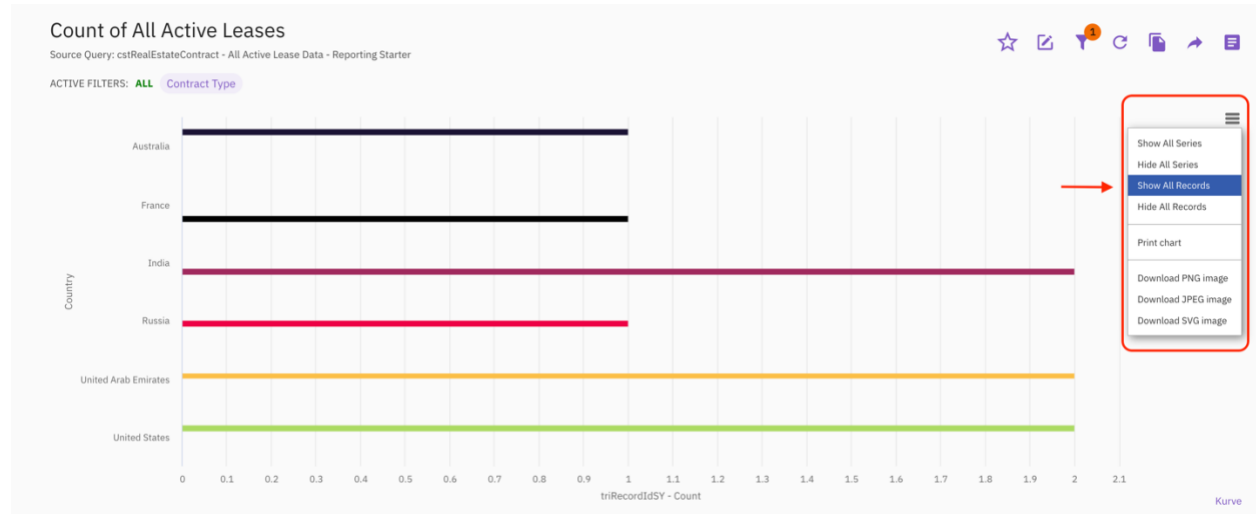
below, I selected “Charlotte” which will isolate only that in my graph.



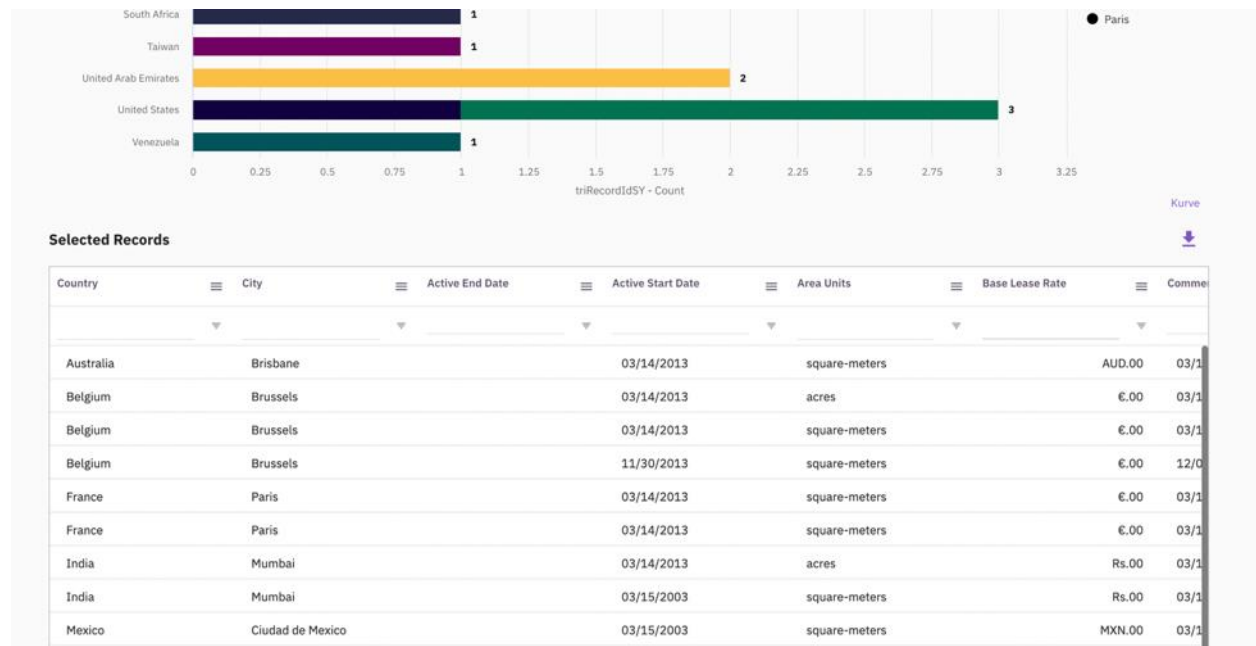
- To show all variables you can either re-click the circles or use the Show All Series button located in the menu (☰).




- Show/Hide All Records:** Show all records is a new button to easily select and show all the graph data in the table of records below the graph.
 - To show all the data in your graph, click the hamburger menu and then click Show All Records.



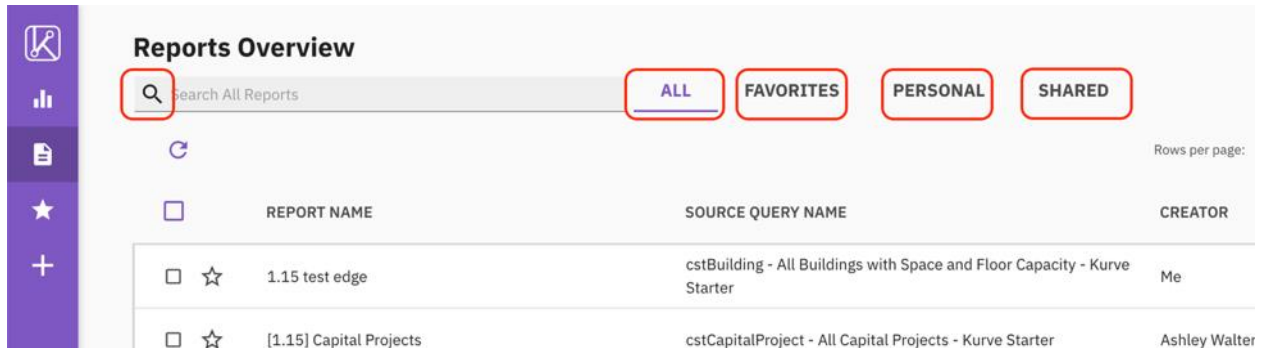
ii. The table of records will then appear below the graph.




REPORTS OVERVIEW

From the Kurve Dashboard, click on the Reports Icon () to access the Reports Portal. This is where all created or shared reports can be accessed.


1. Navigating the Reports Overview



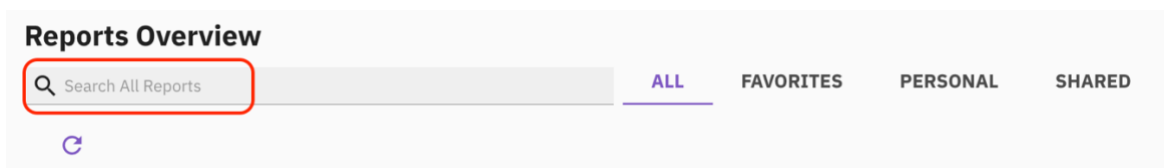
a. **Features** of the Reports' menu bar:

	Search	The search function.
-	ALL	All reports created or shared.
-	FAVOURITE	All of your favourited reports.
-	PERSONAL	Reports personally created by you.
-	SHARED	Reports shared to you by others.

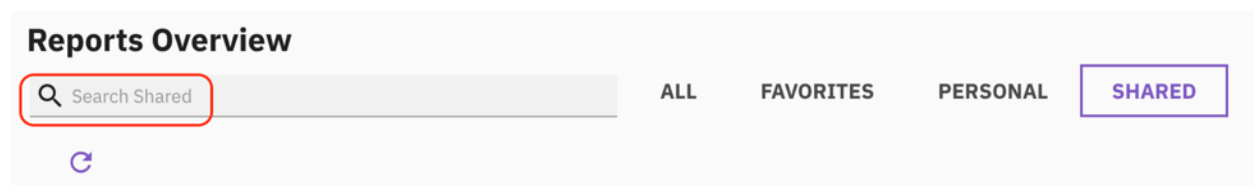
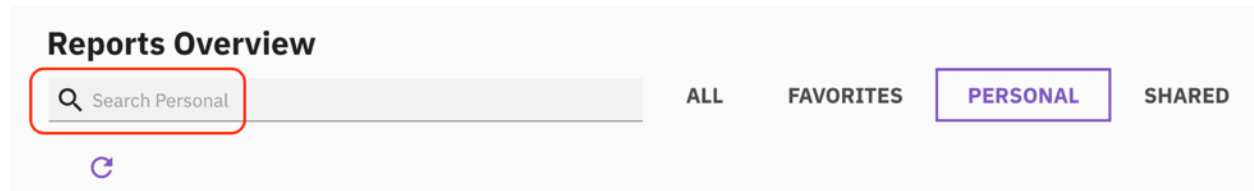
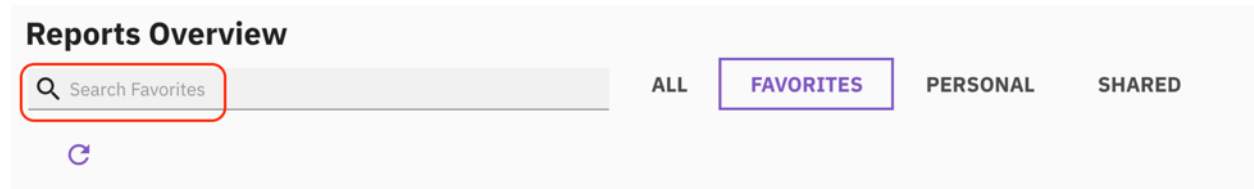
b. **Functions** of the Reports' menu bar:

- i. **Search** (): This is your search function. Click on the magnifying glass symbol to expand the search bar and type to filter through the current list of reports.

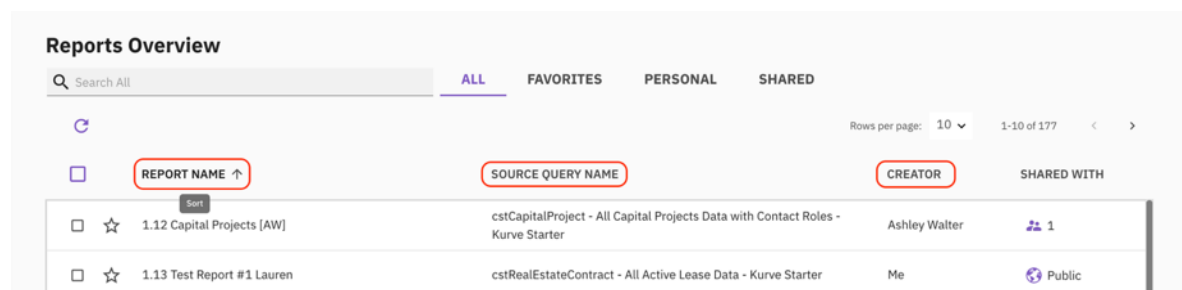
Note: By default, the list of reports is sorted by created date, in descending order. The default search will filter through *All Reports* in the portal.



- If you want to search within the *Personal*, *Favorites*, or *Shared* tabs, simply click on either tab and click on the magnifying glass.



- c. **Sort** function: sort the graph results by clicking on one of the column headers. There are two sort options:
- Arrow facing up (↑) will sort your results in alphabetical order starting from “A.”
 - Arrow facing down (↓) will sort your results in reverse alphabetical order starting from “Z.”



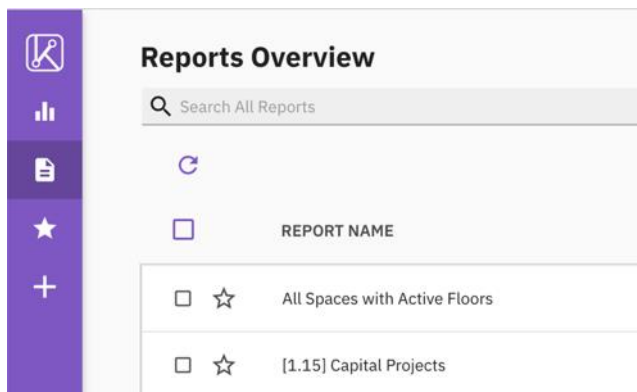
2. Using Report Action Buttons



Personal and Shared Reports

Kurve Admins have the same capabilities for their own reports and shared reports.

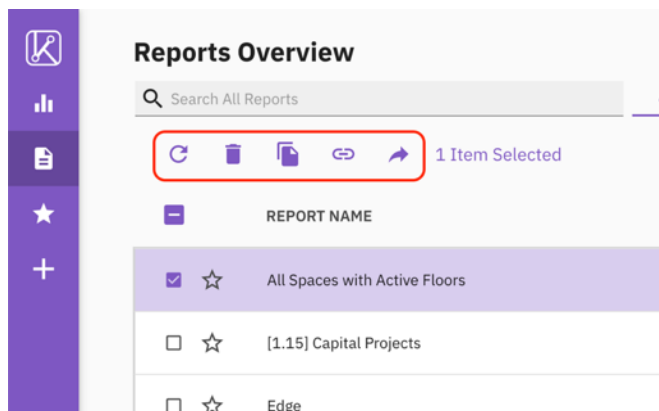
Your batch action icons will change according to your current graph selections.

a. If you have no reports selected, your actions are as follows:








	Select All	Select all reports on the page.
	Refresh	Refresh the page.

b. If you have selected ONE report, your options are:



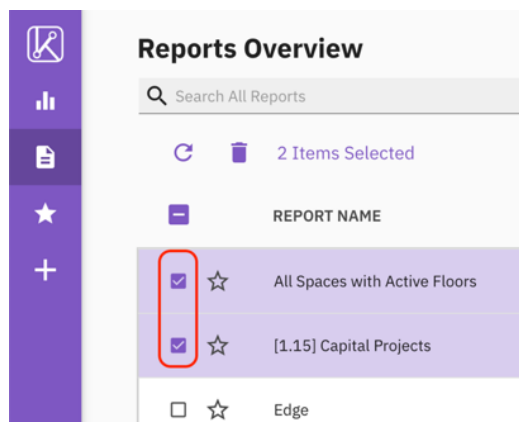
Features of the Report Actions Toolbar:

	Refresh	Refresh the page.
	Delete Report	Delete a report.
	Copy Report	Copy an existing report.

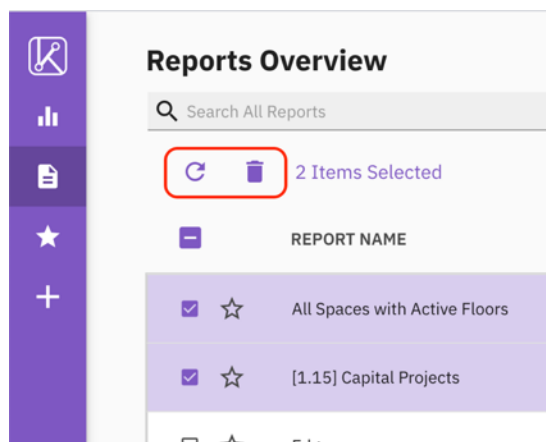
	Get Portal/Form URL	Get a Portal or Form URL to embed the report into a portal section or form tab.
	Change Shared Settings	Make changes to whom the report is shared with (public, private, or specific individuals).




c. More than one selected:

- i. **Select Report** Function: Select the report by clicking the white square (the selected square will be highlighted in purple as seen below). You are able to select one report or multiple reports.



d. Once selected, the toolbar will update with new icons.

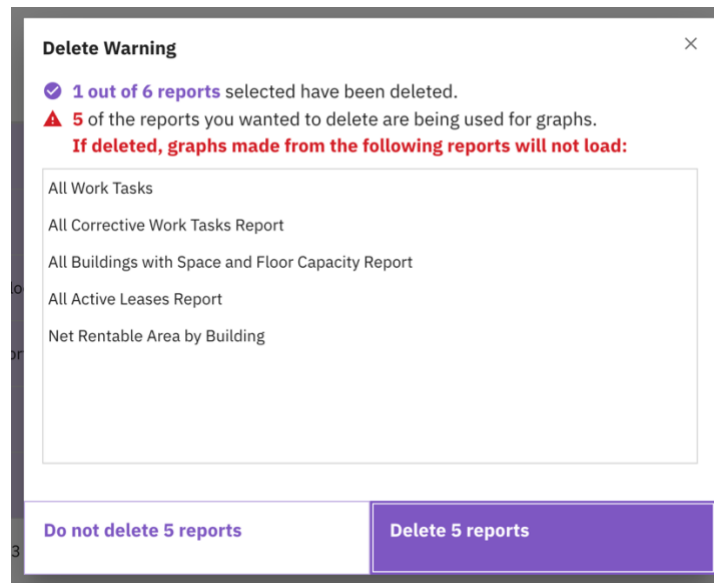


	Refresh	Refresh the page.
	Select	Unselect the reports that are currently selected.
	Delete	Delete the selected reports.

Note: When deleting reports with one or more graphs made from it, a Delete Warning prompt will appear for you to confirm if you want to proceed to delete the selected reports, including the reports made into graphs.

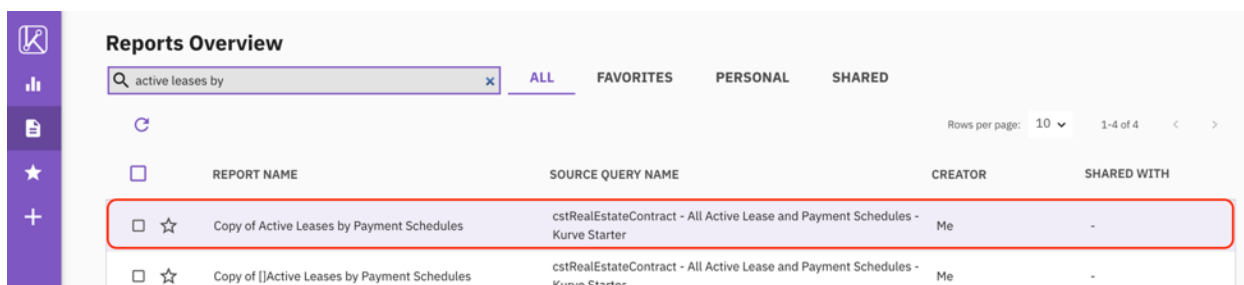
Options:

1. Do not delete x reports: Click to only delete the reports that don't have graphs made from it.
2. Delete x reports: Click to delete all reports including ones that were used to make graphs.

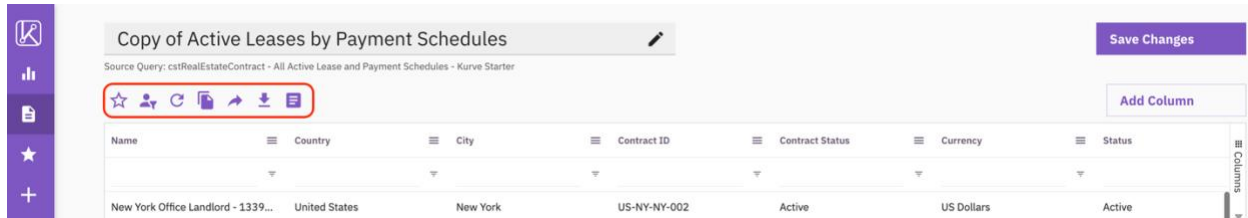


3. Using a Specific Report's Toolbar








- a. Open a report by clicking on the text link of the report.




- b. The Report will open with column headings and data.



c. Features of the Report's toolbar:

	Favorite Report	Favorite a report for easy access on your home page or the favorites page.
	Edit Query Filters	Create and apply filters before loading your report.
	Refresh Data	Refresh the data in your report without having to refresh and reload the whole page. Or refresh the query filter values currently being applied.
	Duplicate Report	Click to copy the opened report. If you have unsaved changes, you will have a few options.
	Change Share Settings	Click to edit who the report is shared with (public, private, or specific individuals or security groups).
	Download as CSV	Click to download a CSV or Excel copy of the opened report.
	Descriptions	Edit and view descriptions about your reports.

4. Edit Query Filters

You will see in Section 3 how to create query filters upon creating the initial graph. After the graph has been created, you can click the query filter button () to edit them.

- a. Click the Edit Query Filters button from the toolbar

Copy of Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

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Currency	Name	Contract Status
----------	------	-----------------

b. Create or edit your query filters and press Save.

Edit Query Filters

Only columns from the Primary Business Object can be selected for Query Filters. Some columns on the query may not be available.
Filter Created: 0/12

Back Save

CREATE FILTER

FILTER 2 FILTER 3 FILTER 4 FILTER 5

FILTER 6 FILTER 7 FILTER 8 FILTER 9 FILTER 10

FILTER 11 FILTER 12

c. To save changes made in the Edit Query Filter page, you must click Save Changes in your report.

Copy of Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

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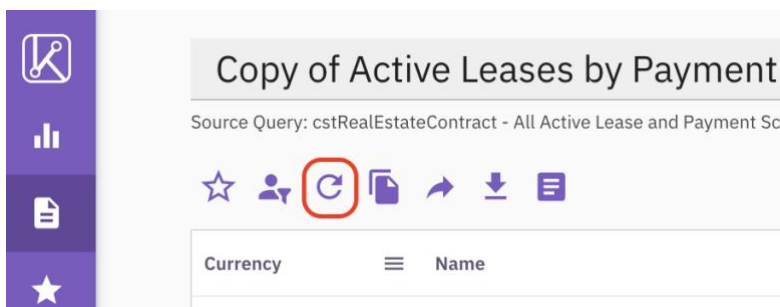
Save Changes

Add Column

Currency	Name	Contract Status	Contract ID	Contract Type	Active End Date	Active Start Date
US Dollars	New York Office Landlord - 1339 E 42nd ...	Active	US-NY-NY-002	Owned Property	February 28, 2018	March 14, 2013
Euro	Paris Lease (Finance Lease Treatment)	Active	EU-FR-PR-006	Real Estate Lease	December 31, 2018	January 01, 2014

5. Refresh Data

You can click this button to refresh all data in your report without losing any filters applied and/or change the query filter value being applied to the report.



- If you do not have query filters created: the report will refresh with the most up-to-date information
- If you have report filters created: you can edit the values or click Skip if you simply want to refresh the data

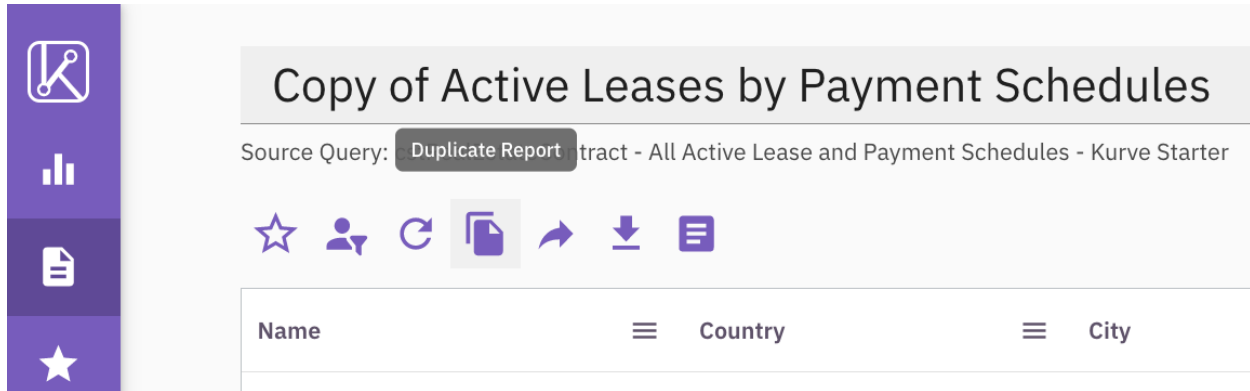
Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Country
Equals

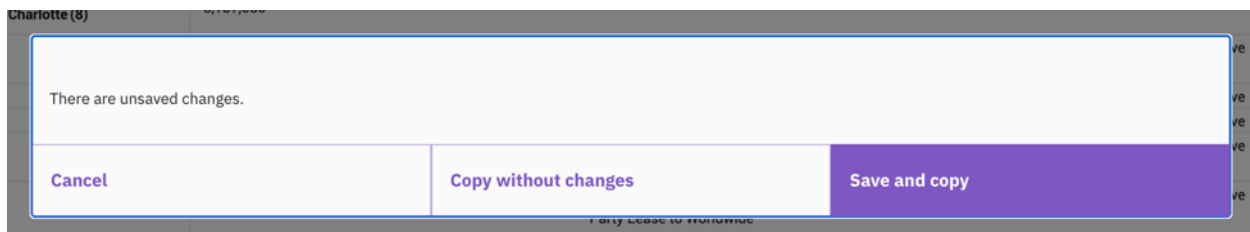
Cancel Skip

6. Duplicate Report

- Click Duplicate Report to make a copy in the report overview page.




b. If you have unsaved changes, you will have three options:

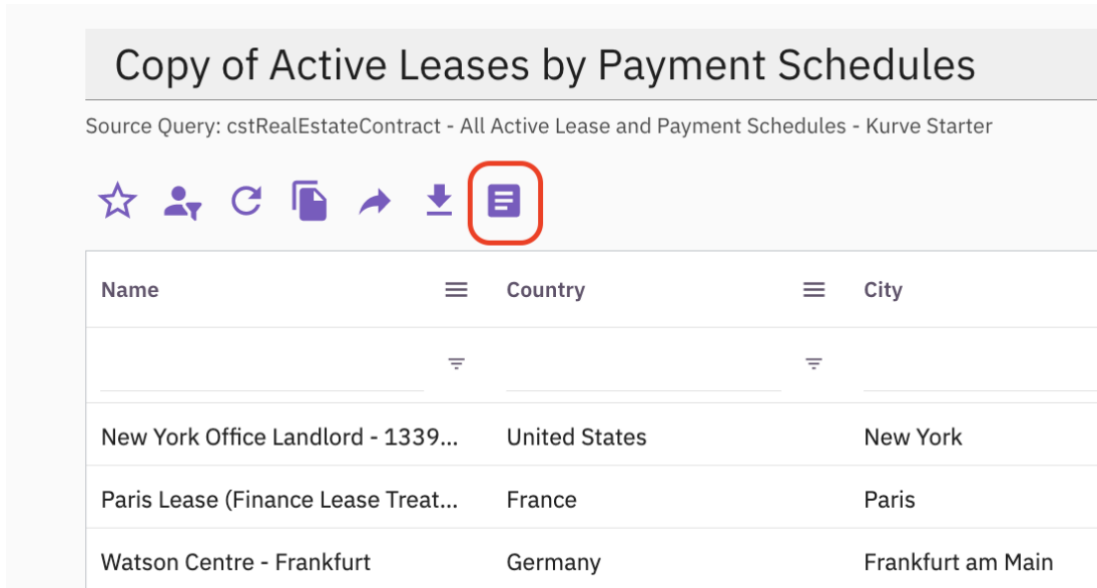


- i. Cancel – select this to return to your report.
- ii. Copy without changes – select this to make a copy of the original report without the unsaved changes.
- iii. Save and copy – select this to save your current report and make a copy with those changes.

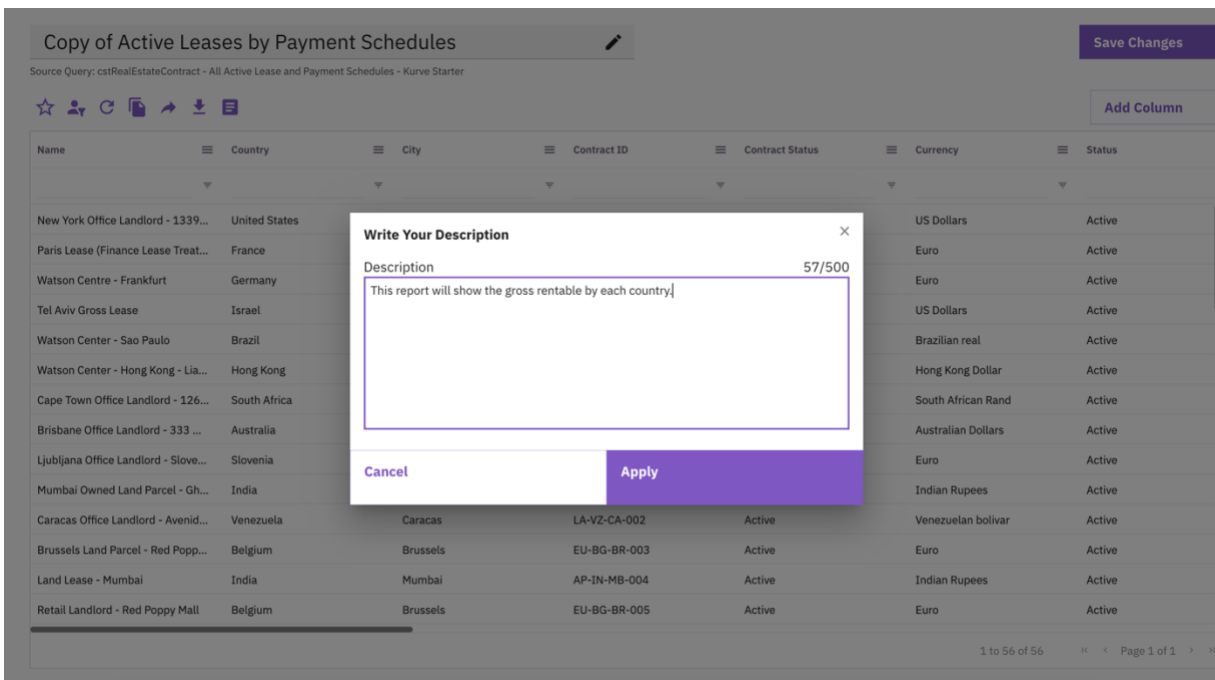
c. Your copied report will appear in the Report Overview page.

7. Edit and View Descriptions in Reports

- a. To edit and view descriptions on your report or another user's report, click on the Descriptions icon () in the toolbar.



- b. To Edit: A pop-up box will show which will allow you to create your descriptions by typing into the box.



- i. Once you're done writing your description, click "Apply".

Write Your Description [X]

Description 57/500

This report will show the gross rentable by each country.

Cancel Apply

ii. Click “Cancel” to exit out of the description box and return to your report.

Write Your Description [X]

Description 57/500

This report will show the gross rentable by each country.

Cancel Apply

iii. Once you return back to your report, click “Save Changes” on the top right corner to ensure you save your description.

Copy of Active Leases by Payment Schedules [X]

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter


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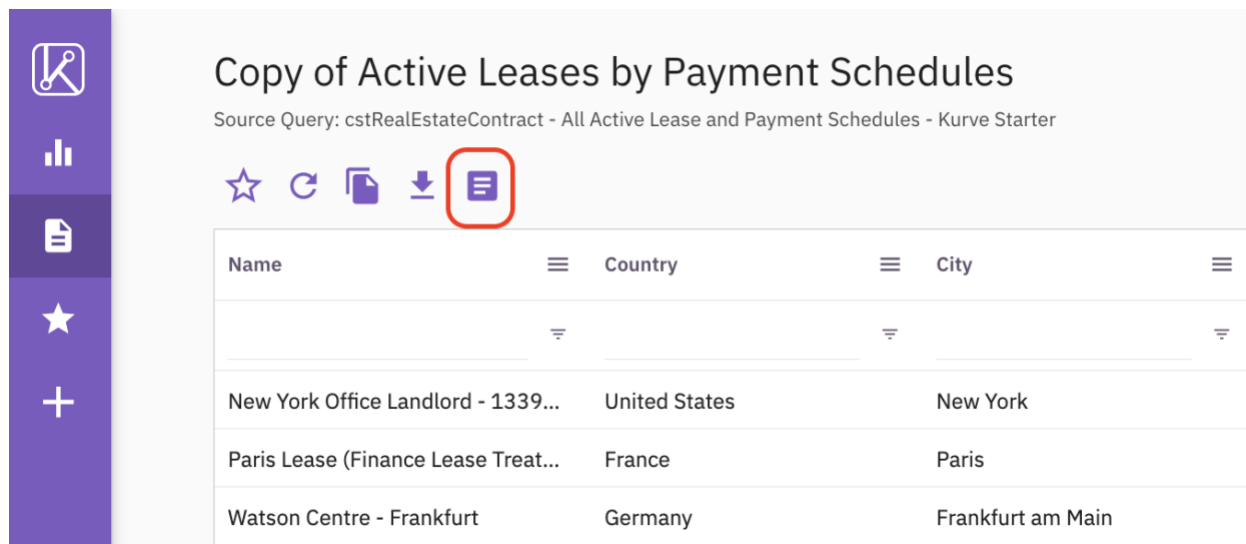
Add Column

Name	Country	City	Contract ID	Contract Status	Currency	Status
New York Office Landlord - 1339...	United States	New York	US-NY-NY-002	Active	US Dollars	Active
Paris Lease (Finance Lease Treat...	France	Paris	EU-FR-PR-006	Active	Euro	Active
Watson Centre - Frankfurt	Germany	Frankfurt am Main	EU-DE-FR-001	Active	Euro	Active

Columns 9 Filters 1

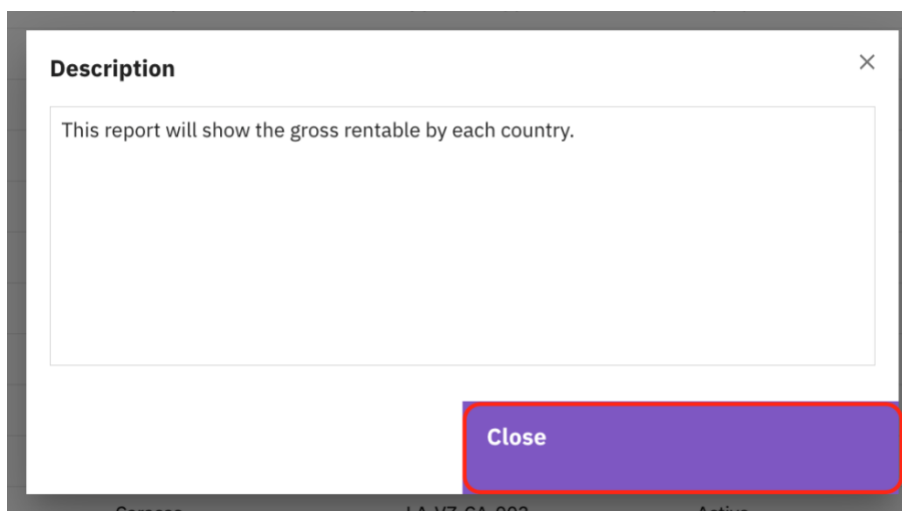
Save Changes

- c. To View Descriptions: You can view another user's description by clicking on the Description icon () in the toolbar.



Name	Country	City
New York Office Landlord - 1339...	United States	New York
Paris Lease (Finance Lease Treat...	France	Paris
Watson Centre - Frankfurt	Germany	Frankfurt am Main

- d. You will see the owner of the report's description. Click "Close" to exit and return back to the report.



Description [X]

This report will show the gross rentable by each country.

Close

8. Personalize Report Table Size View

- a. To adjust the table size for your report, navigate to the settings. Adjusting this setting will change the font size and line height in your report.

Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

Save Changes

Add Column

Group	Sum(Gross Rentable)	City	Name	Country	Contract ID	Contract Status
New York (2)	200,000					
	200,000	New York	New York Office Landlord - 1339...	United States	US-NY-NY-002	Active
	0	New York	FTC - 2-100 Apartment Lease	United States	1003026	Active
Rio de Janeiro (1)	2,000					
	2,000	Rio de Janeiro	Rio de Janeiro Retail Lease - Sal...	Brazil	LA-BR-RI-005	Active
Paris (2)	68,010					
	3,010	Paris	Paris Lease (Finance Lease Treat...	France	EU-FR-PR-006	Active
	65,000	Paris	Paris Plaza Landlord - 17 avenue...	France	EU-FR-PA-005	Active
Frankfurt am Main (4)	16,978.6					
	13,650.65	Frankfurt am Main	Watson Centre - Frankfurt	Germany	EU-DE-FR-001	Active
	1,175.14	Frankfurt am Main	Watson Centre - Frankfurt - Thir...	Germany	EU-DE-FR-001-02	Active
	1,175.14	Frankfurt am Main	Watson Centre - Frankfurt - Thir...	Germany	EU-DE-FR-001-04	Active
	977.67	Frankfurt am Main	Watson Centre - Frankfurt - Thir...	Germany	EU-DE-FR-001-03	Active
Tel Aviv (1)	2,208.58					
	2,208.58	Tel Aviv	Tel Aviv Gross Lease	Israel	ME-IS-TA-007	Active
São Paulo (1)	13,650.65					
	13,650.65	São Paulo	Watson Center - Sao Paulo	Brazil	LA-BR-SP-001	Active
Hong Kong (1)	13,650.65					

1 to 27 of 27 Page 1 of 1

b. The default setting under Table Size is set to Large.

Settings

Rows per Page
100

Levels to Auto-Expand
1

Show Aggregation Name in Header

Show Aggregation Summary Row

Table Size

Large (Default)

Medium

Small

Reset Columns

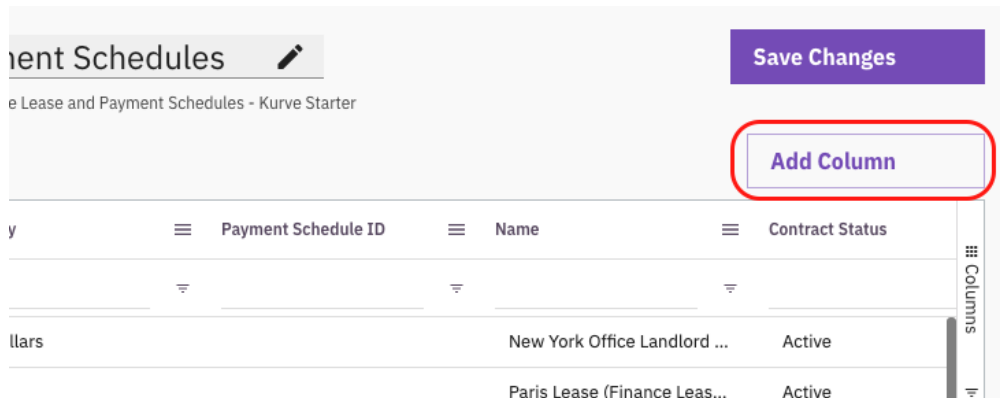
1 to 27 of 27 Page 1 of 1

c. To change the size, click on the radio button next to the size you would like. Options include Large (Default), Medium, or Small. By doing so, your grid size will adjust accordingly.

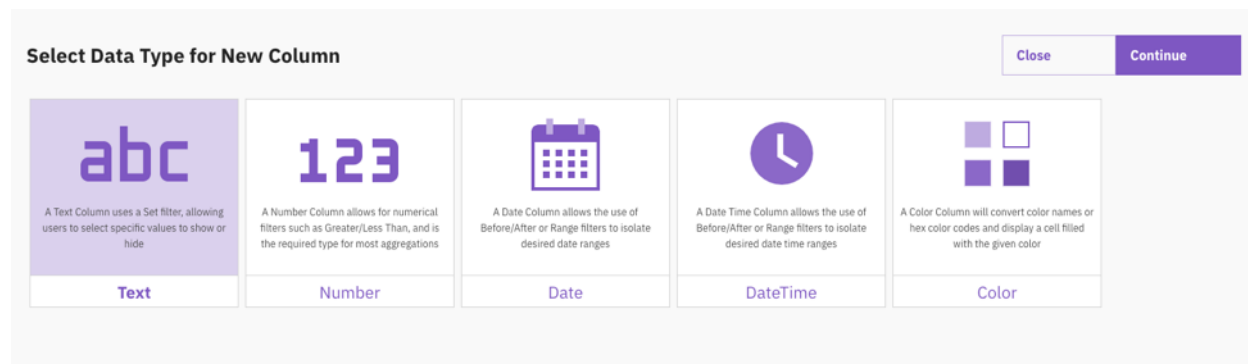
<p>Large</p>	
<p>Medium</p>	
<p>Small</p>	

9. Adding Columns on Report

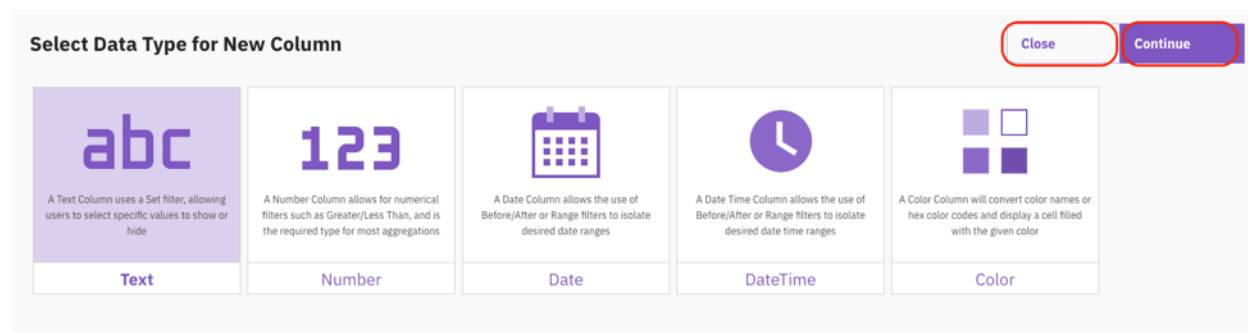
- a. Click “Add Columns” to add a custom column with the existing data to the report.



- b. The first window that will open will ask you to select a data type for the new column. This selection will set the filter type for this column and how the values are presented.



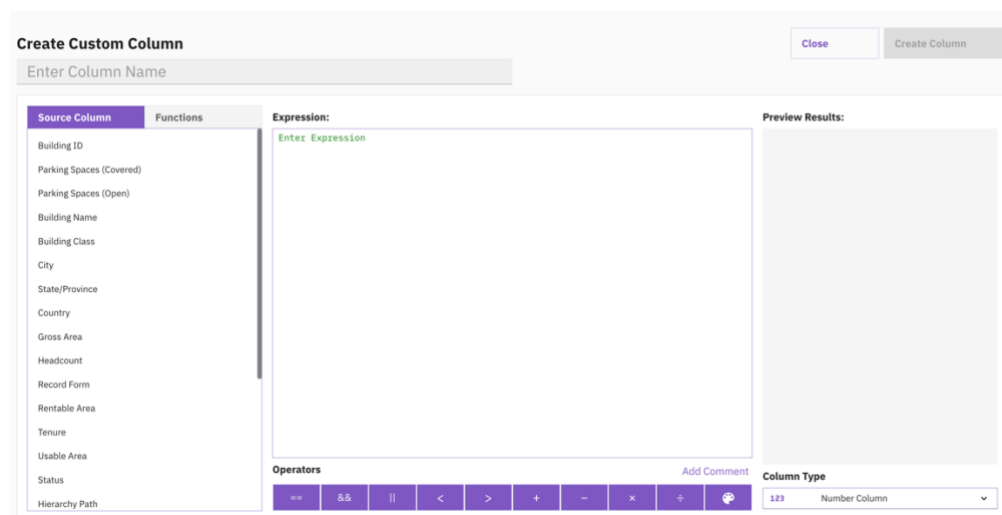
- c. Once selected, press Continue. Or if you would like to exit out of the window, click Close.



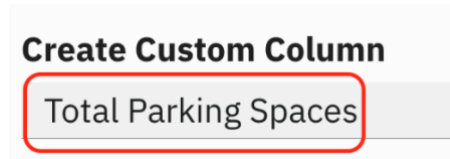
Note: Kurve will automatically change the display type and filters for the column according to the data type selected.

Column Type	Description
Text Column	Text columns should be used for alphabetic characters. For example, if you are creating a column to display months, it would be a text column displaying months January through December based on the source column. A text column will filter for unique values.
Number Column	A number column would be used for columns that will result in numeric characters. For example, if you are calculating a percentage you would use a number column. Using a number column will allow you to filter by greater than, less than, equal to, not equal to, etc.
Date Column	A date column will be used for all custom columns involving dates. For example, if you are adding a column to show Today's Date, the column type would be Date. A date column filter will provide a calendar for you to choose what you would like to filter for.
Date/Time Column	A date/time column will be used for all custom columns involving dates in which the source column has the time of day as well. For example, 10/09/2018 12:01:47. A date/time column filter will provide a calendar and time selection for you to choose what you would like to filter for.
Colour Column	Colour columns are used for colour coding specific columns. Any new column can be colored. For guidance on Custom Colours please view Appendix B.

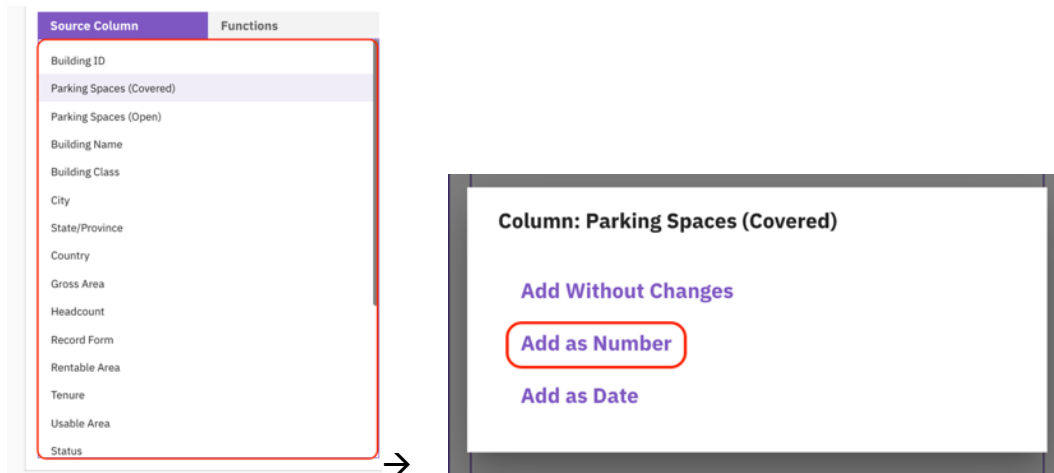
d. Once you press Continue, the Create Custom Column window will open.



- e. Type the name of the custom column under “Enter Column Name.” Once the column is created this column name cannot be changed. In this example, we will calculate the number of parking spaces.



- f. Under the Source Column section, select the column(s) you would like to use for the custom column. A pop-up will open to select how you would like the item to appear (Add without changes, Add as number, Add as date). Select the column type. In our example, we select Add as Number.



- g. The data in the selected column will now show in the “Preview Results” .

Edit Custom Column Close Save Column

Total Parking Spaces

Source Column	Functions
Building ID	
Parking Spaces (Covered)	
Parking Spaces (Open)	
Building Name	
Building Class	
City	
State/Province	
Country	
Gross Area	
Headcount	
Record Form	
Rentable Area	
Tenure	
Usable Area	
Status	
Hierarchy Path	

Expression:

```
numCol("Parking Spaces (Covered)") + numCol("Parking Spaces (Open)")
```

Operators Add Comment

== && || < > + - x ÷

Preview Results:

202
202
202
202
202
202
202
202
202
202

Column Type

123 Number Column

h. The selected column will appear as an expression under the “Expression” section. You can then continue your expression.

Source Column	Functions
Building ID	
Parking Spaces (Covered)	
Parking Spaces (Open)	
Building Name	
Building Class	
City	
State/Province	
Country	
Gross Area	
Headcount	
Record Form	
Rentable Area	
Tenure	
Usable Area	
Status	
Hierarchy Path	

Expression:

```
numCol("Parking Spaces (Covered)") + numCol("Parking Spaces (Open)") |
```

Operators Add Comment

== && || < > + - x ÷

Preview Results:


202
202
202
202
202
202
202
202
202
202










Column Type

123 Number Column

Example: In this case, the “Parking Spaces (Open)” column is being added to the “Parking Spaces (Closed)” column, therefore the “Expression” is “*numCol('Parking Spaces (Open)')+numCol('Parking Spaces (Covered)')*”. This adds our two columns together thus calculating total parking spaces.

Note: We have helper **Operators** to assist with any calculations you would like to do. Click any to add it into the expression in the correct format for the custom column.

	Equals
---	--------

	And
	Or
	Less Than
	Greater Than
	Add
	Subtract
	Multiply
	Divide
	Color Picker: helpful tool to choose colors when doing color columns

- i. Click “Add Comment” on top of the operators if you want to provide information about the expression. The comment will be inserted in the Expression box in green text.

Create Custom Column
Close Create Column

Total Parking Spaces

Source Column

- Building ID
- Parking Spaces (Covered)
- Parking Spaces (Open)
- Building Name
- Building Class
- City
- State/Province
- Country
- Gross Area
- Headcount
- Record Form
- Rentable Area
- Tenure
- Usable Area
- Status
- Hierarchy Path


Expression:

```

//Comment: We want to find out the total amount of parking spaces.
numCol("Parking Spaces (Covered)") + numCol("Parking Spaces (Open)")

```

Operators
Add Comment

==
&&
||
<
>
+
-
x
÷


Preview Results:

202
202
202
202
202
202
202
202
202
202

Column Type
123 Number Column

- j. Once you are happy with your expression, click “Create Column”. The window will close and your custom column will appear as a new column on the report.

Create Custom Column Close Create Column

Total Parking Spaces

Source Column	Functions	Expression:	Preview Results:
Building ID		<code>//Comment: We want to find out the total amount of parking spaces.</code>	202
Parking Spaces (Covered)		<code>numCol("Parking Spaces (Covered)") + numCol("Parking Spaces (Open)")</code>	202
Parking Spaces (Open)			202
Building Name			202
Building Class			202
City			202
State/Province			202
Country			202
Gross Area			202
Headcount			202
Record Form			202
Rentable Area			202
Tenure			202
Usable Area			202
Status			202
Hierarchy Path			202

Operators Add Comment

Column Type
123 Number Column

- k. At any time, you may also exit out of the “Create Custom Column” page by clicking on the Close icon.

Create Custom Column Close Create Column

Total Parking Spaces

Source Column	Functions	Expression:	Preview Results:
Building ID		<code>//Comment: We want to find out the total amount of parking spaces.</code>	202
Parking Spaces (Covered)		<code>numCol("Parking Spaces (Covered)") + numCol("Parking Spaces (Open)")</code>	202

Column Type
123 Number Column

- i. Once you click Create Column, the column will appear at the very end of your report (scroll to the right). Custom columns will be coloured purple to indicate that it's custom.

Buildings with Space and Floor Capacity

Save Changes

Add Column

	System Full Path	Area Units	Total Parking Spaces
0	\Locations\Offices\Asia ...	square-meters	32
1	\Locations\Offices\Asia ...	square-meters	32
1	\Locations\Offices\Asia ...	square-meters	32
0	\Locations\Offices\Middl...	square-meters	32
1	\Locations\Offices\Middl...	square-meters	32
1	\Locations\Offices\Middl...	square-meters	32
0	\Locations\Offices\North...	square-feet	28
0	\Locations\Offices\North...	square-feet	28
0	\Locations\Offices\North...	square-feet	28
1	\Locations\Offices\Centr...	square-meters	50

1 to 47 of 47 Page 1 of 1

Changes to the report (including new custom columns) will not be saved until you have clicked “Save Changes.”

Buildings with Space and Floor Capacity

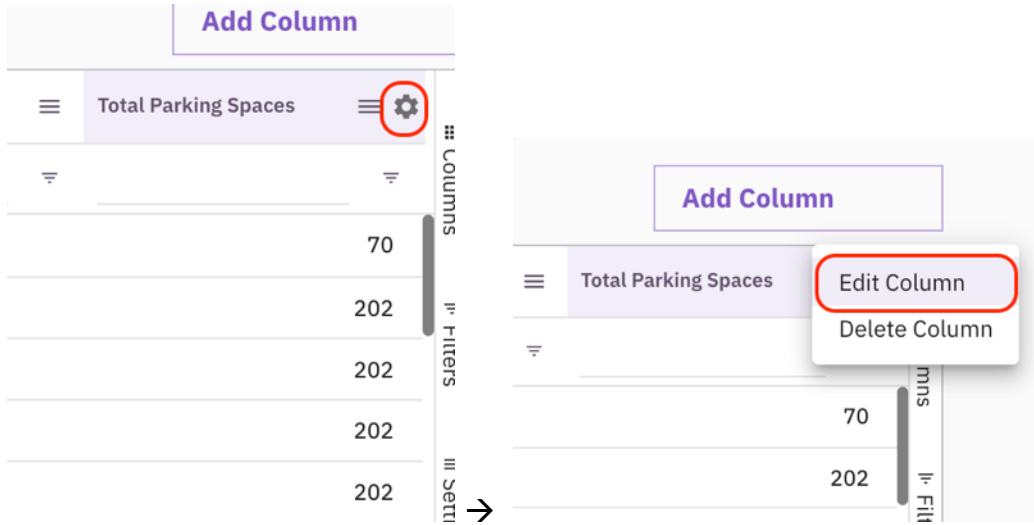
Save Changes

Add Column

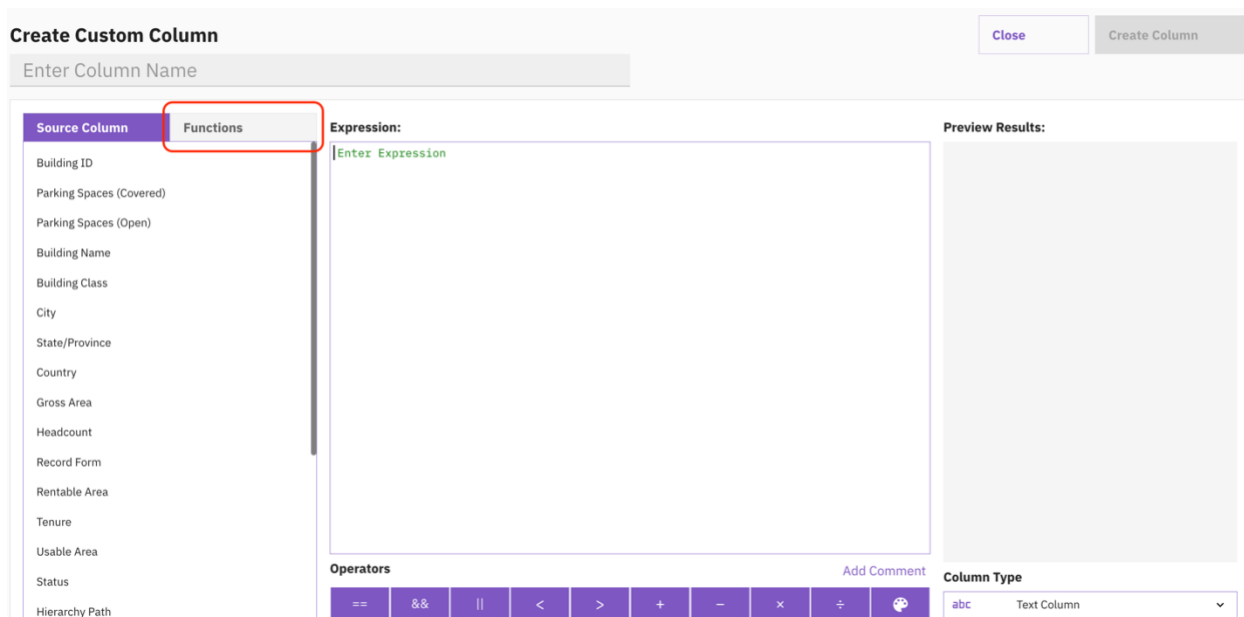
	System Full Path	Area Units	Total Parking Spaces
0	\Locations\Offices\Asia ...	square-meters	32
1	\Locations\Offices\Asia ...	square-meters	32
1	\Locations\Offices\Asia ...	square-meters	32
0	\Locations\Offices\Middl...	square-meters	32
1	\Locations\Offices\Middl...	square-meters	32

Columns
Filters
Settings

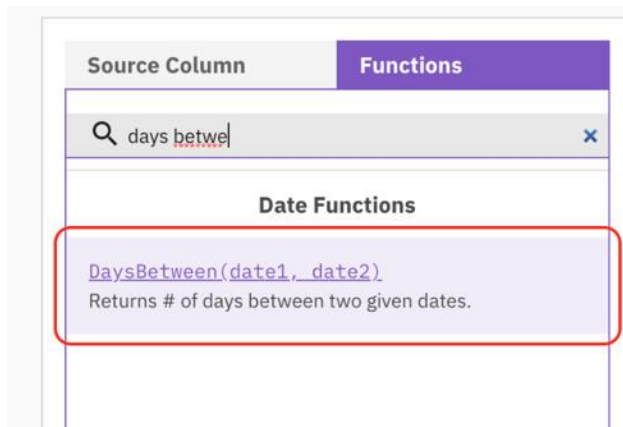
m. To edit the custom column, click the gear icon next to the hamburger menu of the custom column. A secondary menu will appear, click Edit Column.



- n. For more complex expressions, Kurve comes with many helper functions that can be viewed by clicking on the “Functions” tab. A detailed list of functions can also be found in the Appendix.



Example: To calculate the number of days between two dates use the DaysBetween function. To select the function, hover over the title and click it.



The expression will be added to the Expression tab.

Expression:

```
DaysBetween(date1, date2)
```

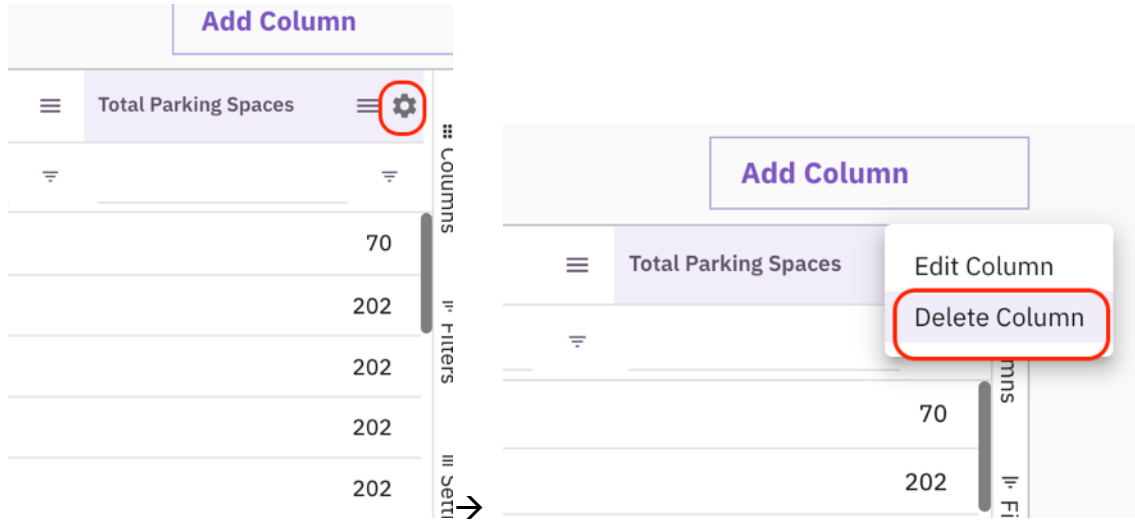
Now you can select your variables. When selecting them from the source column, ensure you add the field as a date.

Replace the “date 1” with the first date field. For Date 2, select the other date. You could use functions within functions. For example, if we choose Today() as Date 1, this will calculate the days between Today and the project end date.

Expression:

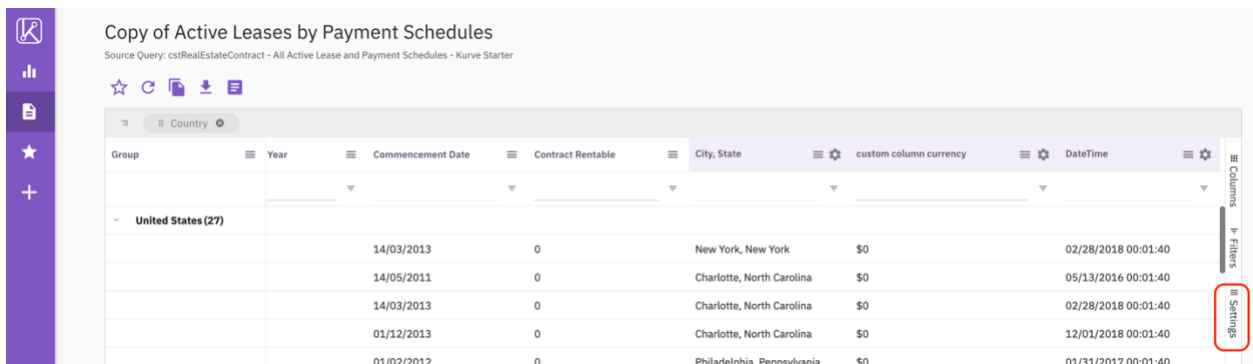
```
DaysBetween(Today(), dateCol("Project Plan End"))
```

- o. Delete Custom Column
 - i. To delete a custom column, click the gear icon and then click Delete Column.

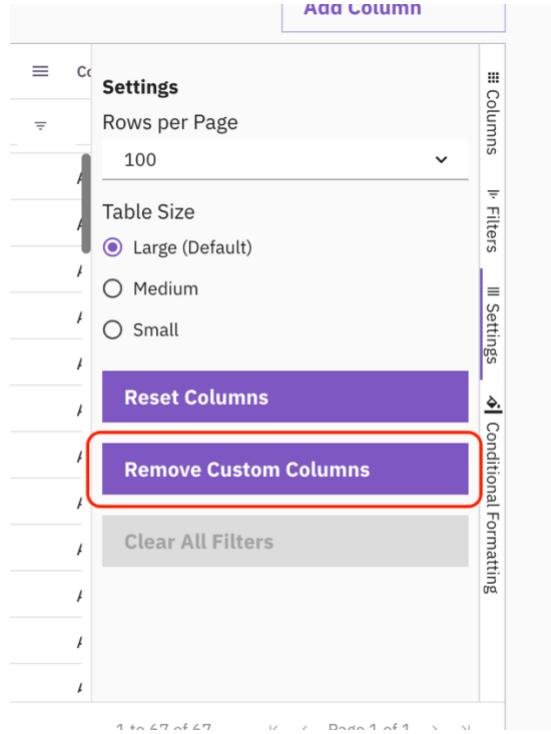


p. Bulk Delete All Custom Columns

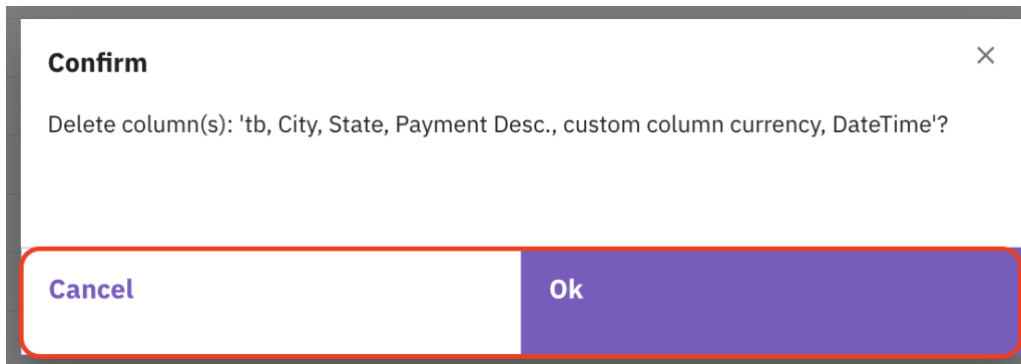
- i. Within your report, navigate to the settings tab on the right side of the report



- ii. Click Remove Custom Columns



- iii. A warning will pop up to confirm what columns you are deleting. Click Cancel if do not want to remove the columns. Click OK to delete.



- q. Save: Click Save Changes to ensure anything you have done to the report gets saved.

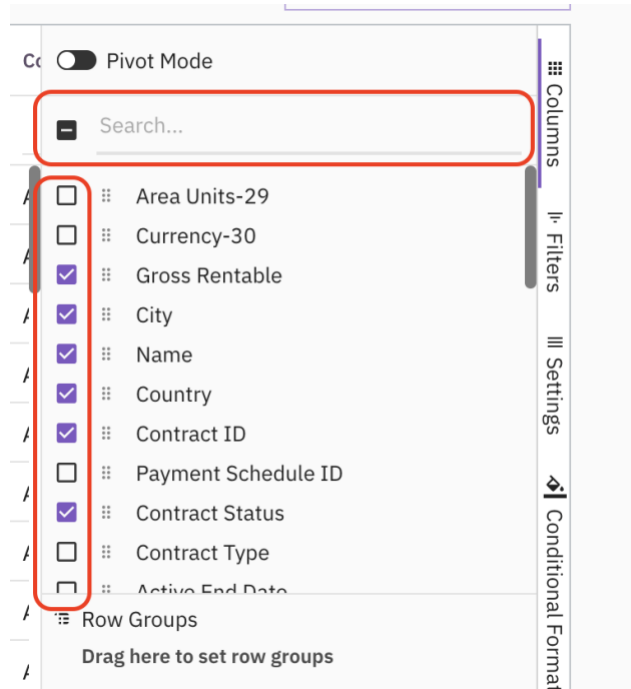
Space Capacity	System Full Path	Area Units	Total Parking Spaces
0		square-feet	70
33	\Locations\Offices\North ...	square-feet	202
0	\Locations\Offices\North ...	square-feet	202
146	\Locations\Offices\North ...	square-feet	202
27	\Locations\Offices\North ...	square-feet	202
183	\Locations\Offices\North ...	square-feet	202

10. Personalizing Columns on the Report

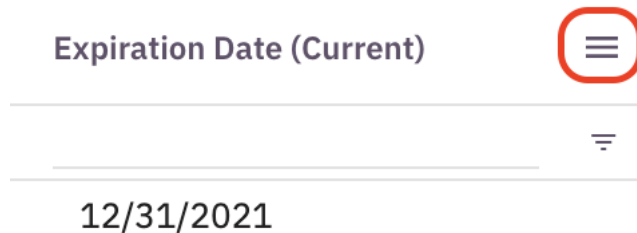
- On the right side of the webpage, click on the “Columns” bar. Here you can select what columns to show on the report.

Currency	Payment Schedule ID	Name	Contract Status	Contract Type	Active
US Dollars		New York Office Landlord ...	Active	Owned Property	
Euro		Paris Lease (Finance Leas...	Active	Real Estate Lease	12
Euro		Watson Centre - Frankfurt	Active	Real Estate Lease	01
US Dollars		Tel Aviv Gross Lease	Active	Real Estate Lease	05
Brazilian real		Watson Center - Sao Paulo	Active	Real Estate Lease	01
Hong Kong Dollar		Watson Center - Hong Ko	Active	Real Estate Lease	01

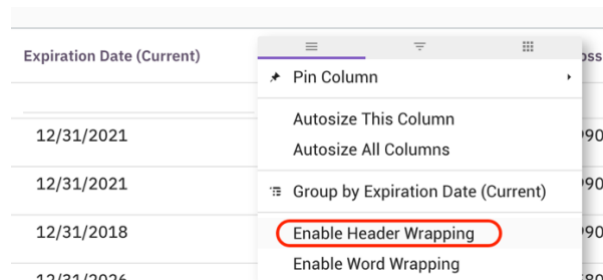
- A side panel will open beside the “Columns” bar. Type into “Search...” text box or select/deselect columns to keep/hide from the report.



- c. Enable Header Word Wrap: break your header row text into multiple lines. Header wrapping is enabled per column and will wrap at the end of a word onto the next line
 - i. Click on the hamburger menu of the column header you want to word wrap



- ii. Select Enable Header Wrapping



- iii. Adjust the column size to your liking

Expiration Date (Current)	Gross
12/31/2021	10
12/31/2021	10

- iv. To disable: click back into the hamburger menu and select Disable Header Word Wrap

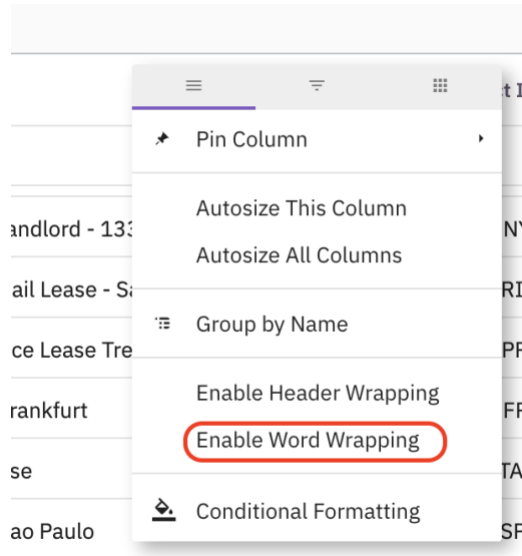
Expiration Date (Current)		Ass Usable
12/31/2021		900
12/31/2021		900
12/31/2018		900
12/31/2021		900

- d. Enable Word Wrap: break a section of text into lines so that you can fit more into the width of the report. Word wrapping can be enabled per column and will automatically wrap at the end of a word onto the next line.

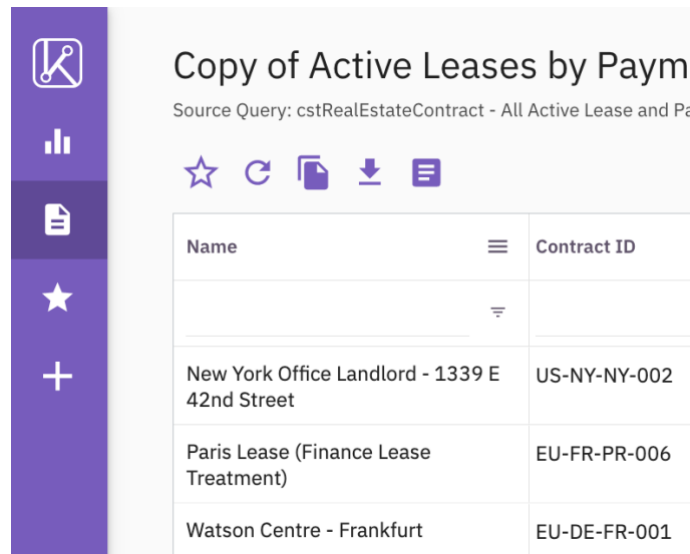
- i. Click into the menu of the column you want to word wrap

Name	Country
New York Office Landlord - 1339...	United States
Paris Lease (Finance Lease Treat...	France
Watson Centre - Frankfurt	Germany

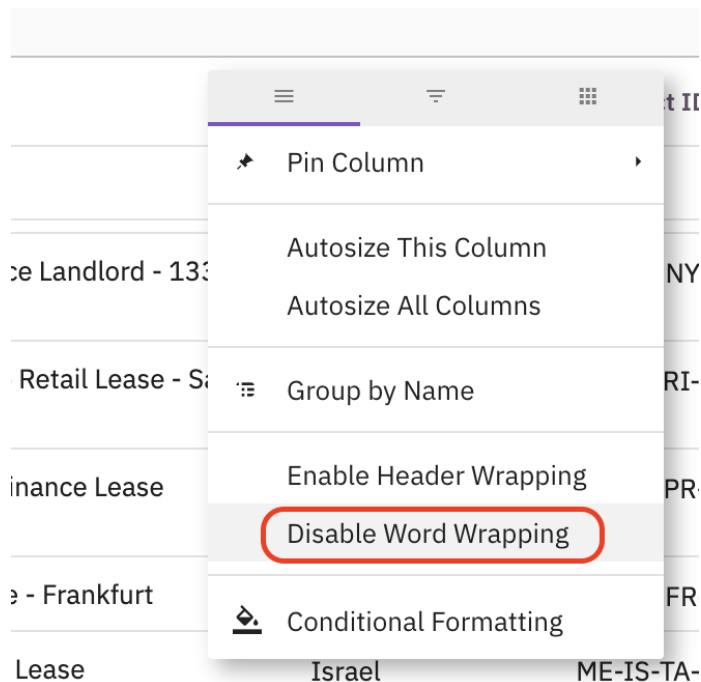
- ii. Select Enable Word Wrapping



- iii. Adjust your column size to your liking. The line will automatically break at the end of the word where you set your column width.

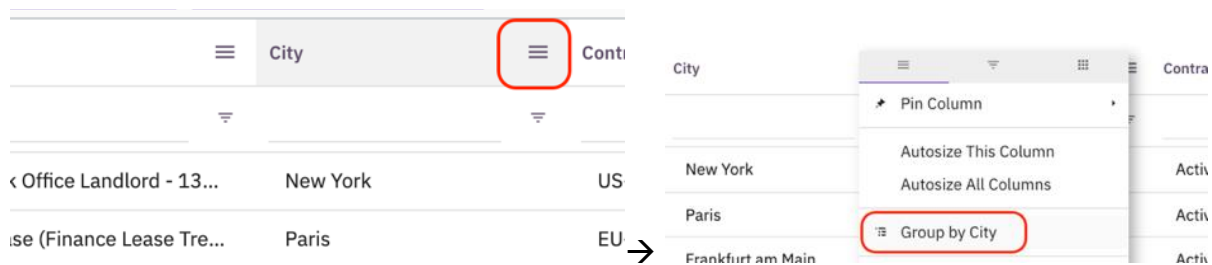


- iv. To disable, click back into the menu and select Disable Word Wrapping



e. **Row Groups** function: There are two methods of grouping data.


- i. **Option 1:** Click on the menu icon located next to the column you would like to group. Click on the “Group by City” button.



- The report will group by the column you have selected and automatically pin that column left.

Group	Active End Date	Active Start Date	City
▼ New York (1)		03/14/2013	New York
▼ Paris (3)	12/31/2018	01/01/2014	Paris
		03/14/2013	Paris
		03/14/2013	Paris
▼ Frankfurt am Main (4)	01/31/2021	02/01/2012	Frankfurt am Main

Note: In this example, each item from “City” is grouped and beside each item, there is a number to show how many items are in that one group. (Example: for “New Work (1)” this shows that there is 1 record with the city New York.

- ii. **Option 2:** Click and drag the column header into the “Row Groups” section on the side panel. There are two options to drag the column header from:
 - Option 1: From the report (see image below)
 - Option 2: From the Columns side panel, click and drag the icon () from the Columns section (see image below).

Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

Option 1

Gross Rentable	City	Name	Country	Contract ID
200,000	New York	New York Office Landlord - 1339 E 42nd Street	United States	US-NY-NY-002
2,000	Rio de Janeiro	Rio de Janeiro Retail Lease - Sales Reporting	Brazil	LA-BR-RI-005
3,010	Paris	Paris Lease (Finance Lease Treatment)	France	EU-FR-PR-006
13,650.65	Frankfurt am Main	Watson Centre - Frankfurt	Germany	EU-DE-FR-001
2,208.58	Tel Aviv	Tel Aviv Gross Lease	Israel	ME-IS-IA-007
13,650.65	São Paulo	Watson Center - Sao Paulo	Brazil	LA-BR-SP-001
13,650.65	Hong Kong	Watson Center - Hong Kong - Liability Carryover	Hong Kong	AP-CH-HK-001
65,000	Cape Town	Cape Town Office Landlord - 126 Buitengracht Street	South Africa	EM-SA-CT-002
130,000	Brisbane	Brisbane Office Landlord - 333 Wickham Terrace	Australia	AP-AU-BR-002

Option 2

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Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

City

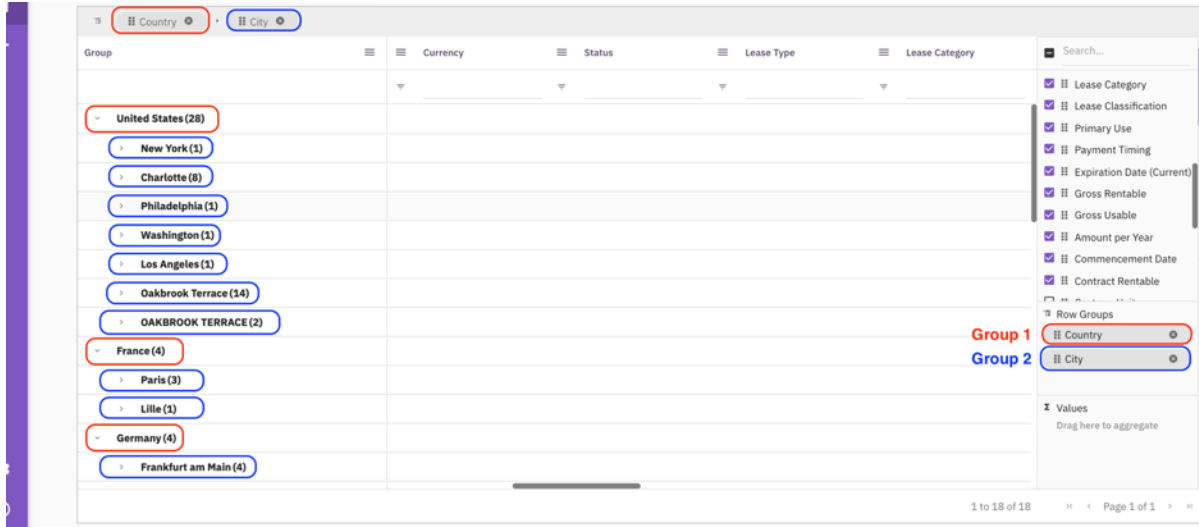
Group	Gross Rentable	Name	Country	Contract ID
New York (2)				
	200,000	New York Office Landlord - 1339 E 42nd Street	United States	US-NY-NY-002
	0	FTC - 2-100 Apartment Lease	United States	1003026
Rio de Janeiro (1)				
	2,000	Rio de Janeiro Retail Lease - Sales Reporting	Brazil	LA-BR-RI-005
Paris (2)				
	3,010	Paris Lease (Finance Lease Treatment)	France	EU-FR-PR-006
	65,000	Paris Plaza Landlord - 17 avenue de l'Europe	France	EU-FR-PA-005
Frankfurt am Main (4)				


City

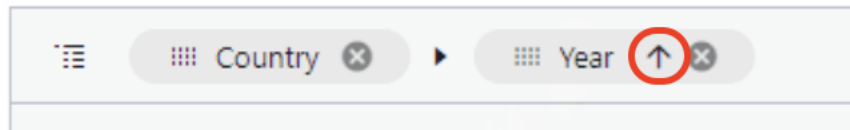
1 to 27 of 27 Page 1 of 1


- iii. **Row Groups Hierarchy** function: When you have more than one column in the “Row Groups” section, the order of columns in the section determines the order in which the rows are grouped.

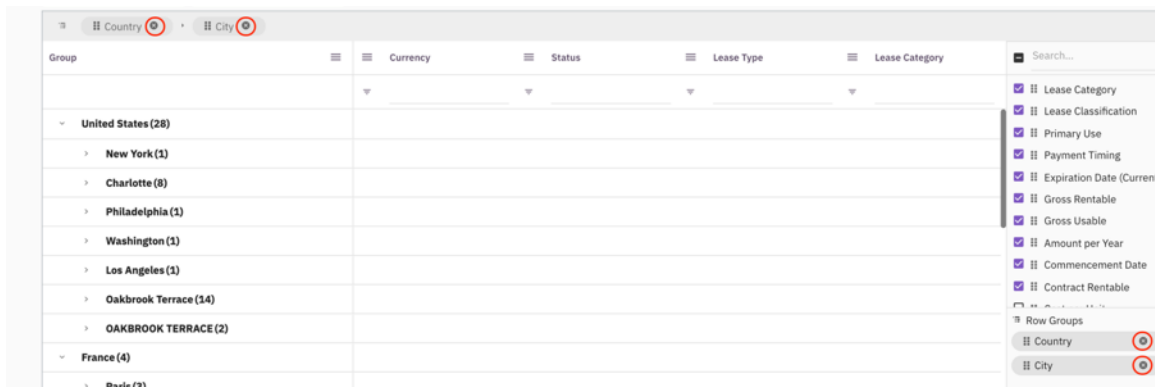
Example: In this case, “Country” is the first column in the section, and “City” is next. In the report, items will first be grouped by the “Country” and then within each name, it will group by the “City.”



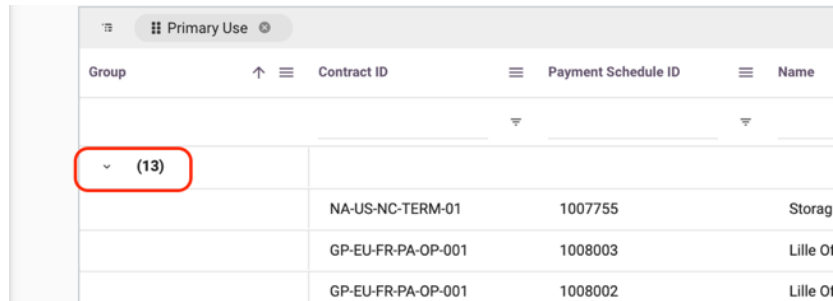
- iv. **Reorder Hierarchy of Row Groups** function: Click on the reorder icon () and drag the column header up or down to change the order of the hierarchy for the grouping on the report.
- v. **Sort Individual Group Rows**: click on any group in the grey group panel row to individually sort the group. You can click once for Ascending, a second time for descending, and a third time to clear the sort.



- vi. **Delete Row Groups** function: Click on one of the exit icon () to delete the row group from the section.



Note about Blanks: When you group by a column, for example “Primary Use”, some records do not have a Primary Use, those records will group together.



The screenshot shows a report interface with a header bar containing a filter icon, a dropdown menu set to 'Primary Use', and a close icon. Below the header, there are columns for 'Group', 'Contract ID', 'Payment Schedule ID', and 'Name'. A red box highlights a dropdown menu in the 'Group' column showing '(13)' records. The table below shows three rows of data:

Group	Contract ID	Payment Schedule ID	Name
(13)	NA-US-NC-TERM-01	1007755	Storag
	GP-EU-FR-PA-OP-001	1008003	Lille OI
	GP-EU-FR-PA-OP-001	1008002	Lille OI

If your blanks do not get grouped together like the above, you may need to use a custom column to ensure the blanks can be grouped together. Use the Function “GroupNulls” and then group your report by this column.

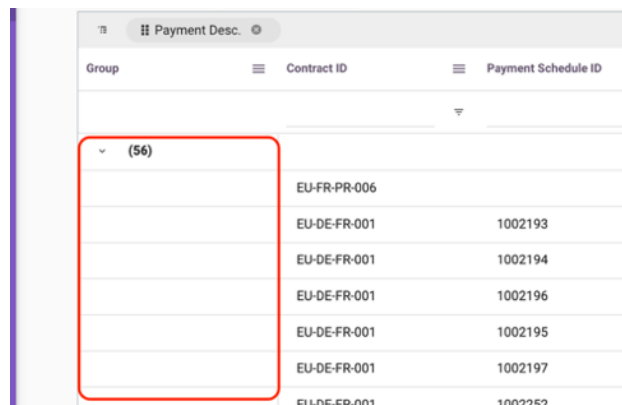
For example, when I group my report by Payment Description, my top rows don’t have any grouping, this may be because the records are being treated as null rather than empty strings. I will create a custom column with the function GroupNulls(col(“Payment Description”)) as the expression.

EDIT CUSTOM COLUMN

Payment Desc.

Expression: Preview

Now the report can be grouped by the custom column and all blanks will be grouped together.

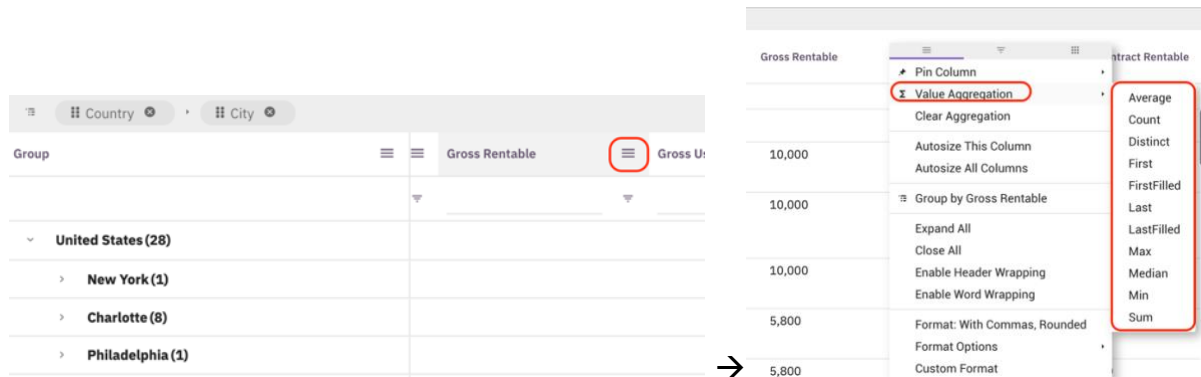


The screenshot shows a report interface with a header bar containing a filter icon, a dropdown menu set to 'Payment Desc.', and a close icon. Below the header, there are columns for 'Group', 'Contract ID', and 'Payment Schedule ID'. A red box highlights a dropdown menu in the 'Group' column showing '(56)' records. The table below shows several rows of data:

Group	Contract ID	Payment Schedule ID
(56)	EU-FR-PR-006	
	EU-DE-FR-001	1002193
	EU-DE-FR-001	1002194
	EU-DE-FR-001	1002196
	EU-DE-FR-001	1002195
	EU-DE-FR-001	1002197
	EU-DE-FR-001	1002195

f. **Value Aggregation function:** There are two options to aggregate your data. You can aggregate your data based on what you have grouped your data by:

- i. Option 1: click the hamburger menu of the column you would like aggregate. Hover over Value Aggregation, then click to select which aggregation you would like to use.

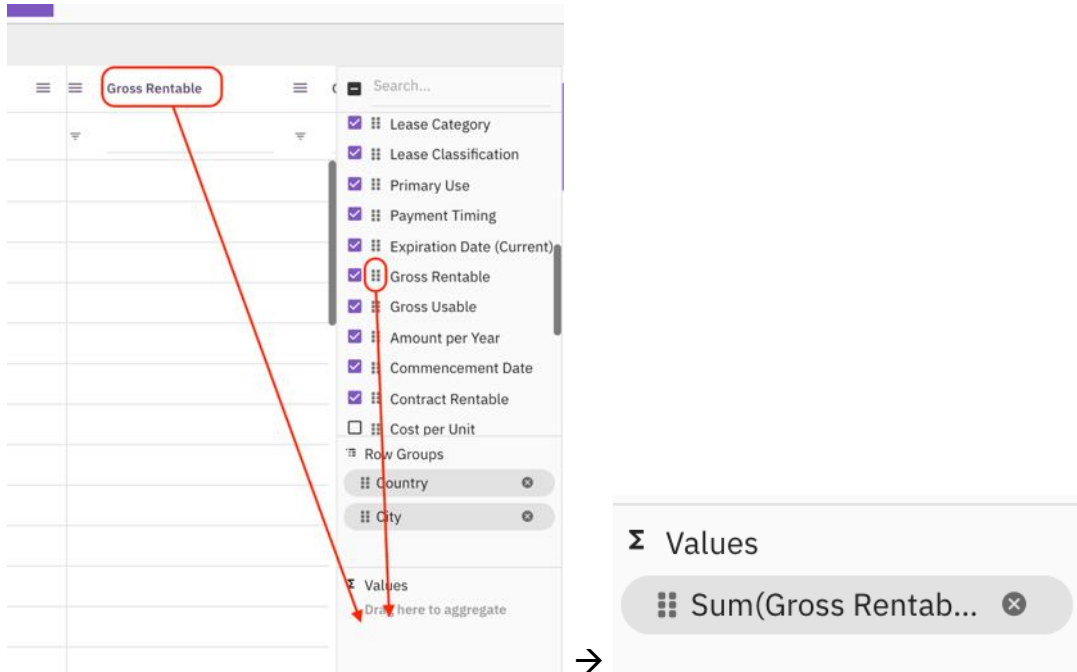


Your column will change according to your selection.

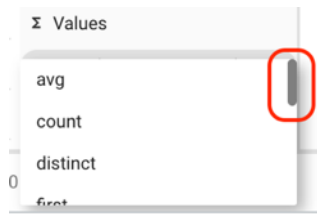
The table now shows the 'Sum(Gross Rentable)' column, which is circled in red. The data is as follows:

Group	Sum(Gross Rentable)
United States (28)	3786806.2
New York (1)	200000
Charlotte (8)	3187030
Philadelphia (1)	102325.4
Washington (1)	102325.4
Los Angeles (1)	102325.4
Oakbrook Terrace (14)	81200
OAKBROOK TERRACE (2)	11600
France (4)	198550
Paris (3)	198010

- ii. Option 2: Open up the Columns tab along the side. Click and drag on any of the Column Headers that you would like to aggregate.



- Click anywhere in the bubble to select what type of aggregation you would like to perform on the selected column, scroll for all options (see below for the options).



g. Color Grouped Rows

Recolor your grouped rows to distinguish them more easily from the report data.

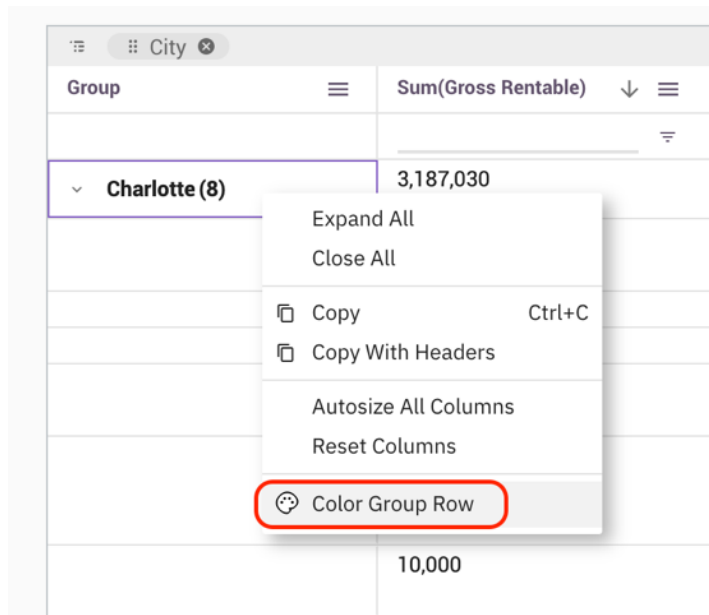
- i. Navigate to your groups in the report

Group	Sum(Gross Rentable)
United States (28)	3,786,806.2
Charlotte (8)	3,187,030
	2,670,000
	470,000
	12,000
	10,000
	10,000
	10,000
	5,000
	30
New York (1)	200,000

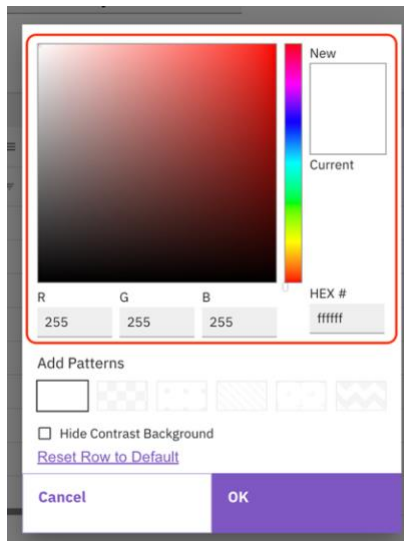
- ii. Under the group column, right click on a value to open the additional actions pop-up

Group	Sum(Gross Rentable)
Charlotte (8)	3,187,030
	10.000

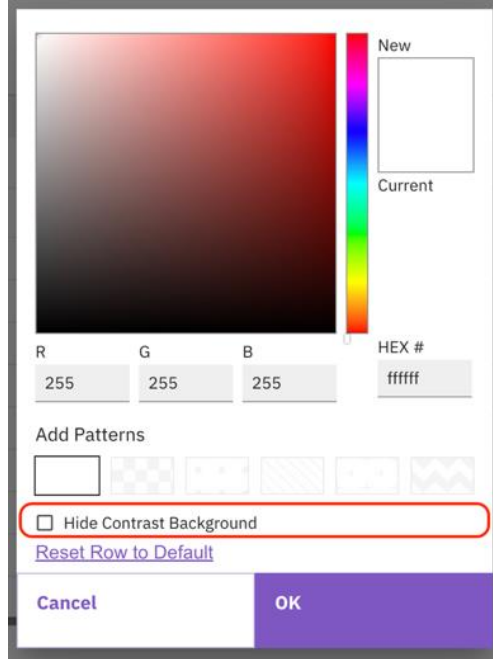
- iii. Select 'Color Group row' to open the color picker



- iv. A color picker will open. You'll have the ability to use a solid color or a pattern. Select a color by either inputting an RGB or Hex code, or use the color picker.



- You may also show or hide contrast background by checking the "Hide Contrast Background" Box.



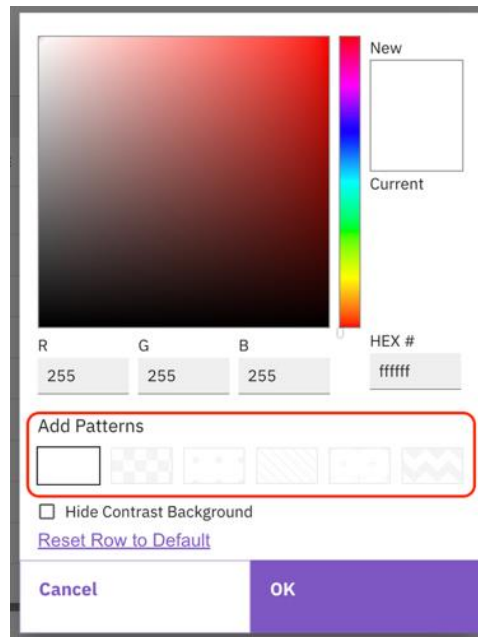
- Without checking the box, your grouped and aggregated text will have a white background

Group	Contract ID	Country	Name	Last Update	Planned End	Appr
US Dollars (371)	NA-CA-CA-001					\$.
	NA-CA-CA-001					\$.
	NA-CA-CA-001					\$.
	NA-CA-CA-001					\$.
	CE-RU-MC-001					\$.
	CE-RU-MC-001					\$.
	CE-RU-MC-001					\$.
	CE-RU-MC-001					\$.

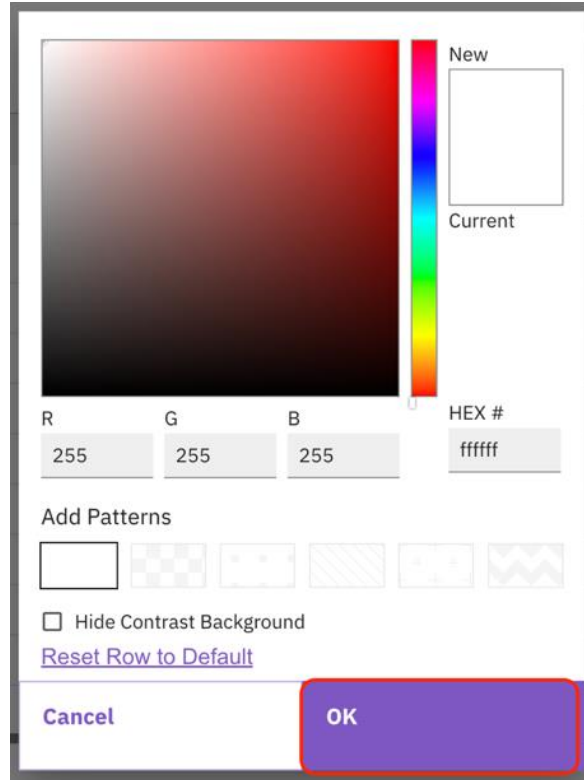
- The 'Hide Contrast Background' box will unify the color of your column

Group	Contract ID	Country	Name	Last Update	Planned End	Approver
US Dollars (371)						
	NA-CA-CA-001					\$.
	NA-CA-CA-001					\$.
	NA-CA-CA-001					\$.
	NA-CA-CA-001					\$.
	CE-RU-MC-001					\$.
	CE-RU-MC-001					\$.
	CE-RU-MC-001					\$.
	CE-RU-MC-001					\$.

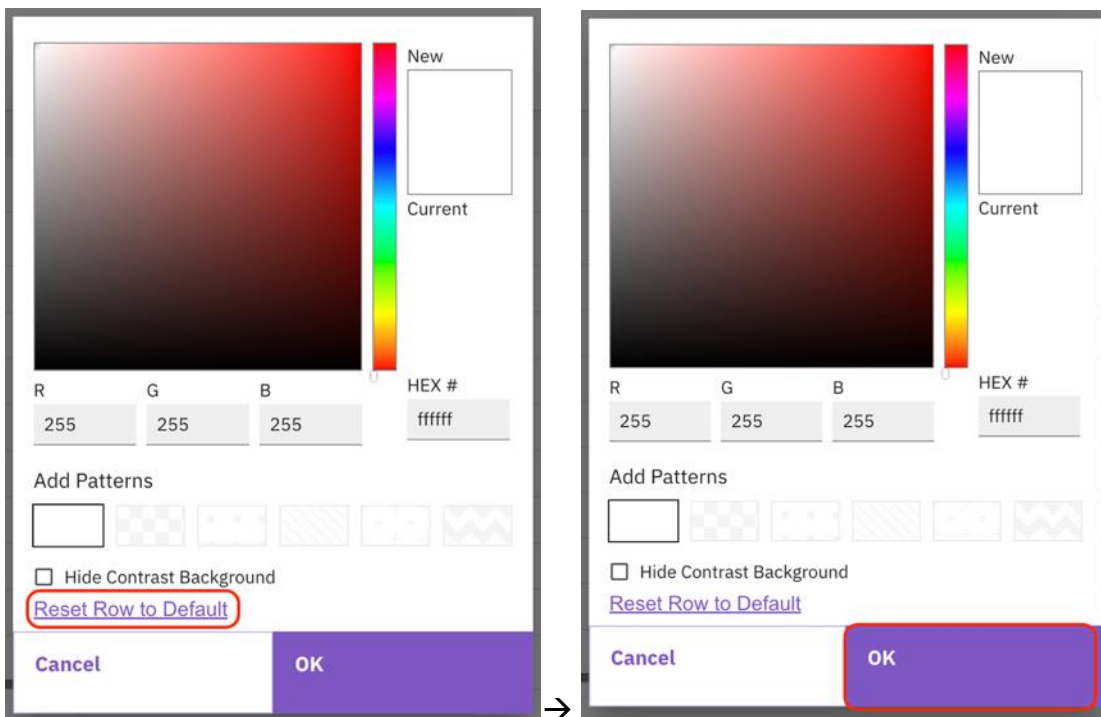
- v. Optional: select a pattern. Your pattern will use the color chosen with grey.



- vi. Click OK to apply the color selections or Cancel to close the window.

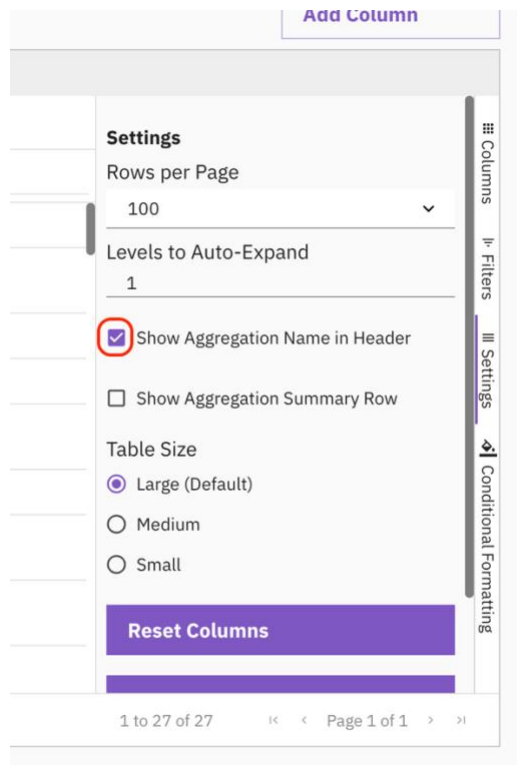


- vii. To restore the group back to default, re-open the color picker for the group and select “Reset Row to Default” and then OK.



h. Report Settings: Manage headers for aggregated columns

- Navigate to the “Settings” tab
- If you would like to remove the aggregation name in the header of your columns:
- Click the box beside “Show Aggregation Name in Header”



For example, if we've aggregated Gross Rentable by Sum, the header will change to Sum(Gross Rentable). You can keep the aggregation, but remove the header for easy reading.

Sum(Gross Rentable)	Gross Rentable
3786806.2	3786806.2
200000	200000
3187030	3187030

→

- i. Report Settings: Add a summary row of your first group to your report.
- Navigate to the “Settings” tab

Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

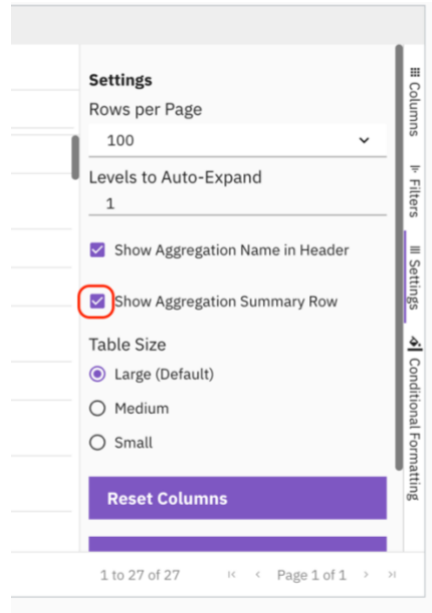
Save Changes

Add Column

Group	Gross Rentable	Name	Country	Contract ID	Contract Status	Currency
New York (2)						
	200,000	New York Office Landlord - 1339 E 42nd Street	United States	US-NY-NY-002	Active	US Dollar
	0	FTC - 2-100 Apartment Lease	United States	1003026	Active	US Dollar
Rio de Janeiro (1)						
	2,000	Rio de Janeiro Retail Lease - Sales Reporting	Brazil	LA-BR-RI-005	Active	Brazilian
Paris (2)						
	3,010	Paris Lease (Finance Lease Treatment)	France	EU-FR-FR-006	Active	Euro
	65,000	Paris Plaza Landlord - 17 avenue de l'Europe	France	EU-FR-PA-005	Active	Euro
Frankfurt am Main (4)						

1 to 27 of 27 Page 1 of 1

- If you would like to show the summary of the aggregated values and grouped rows:
- Click the box beside “Show Aggregation Summary Row”

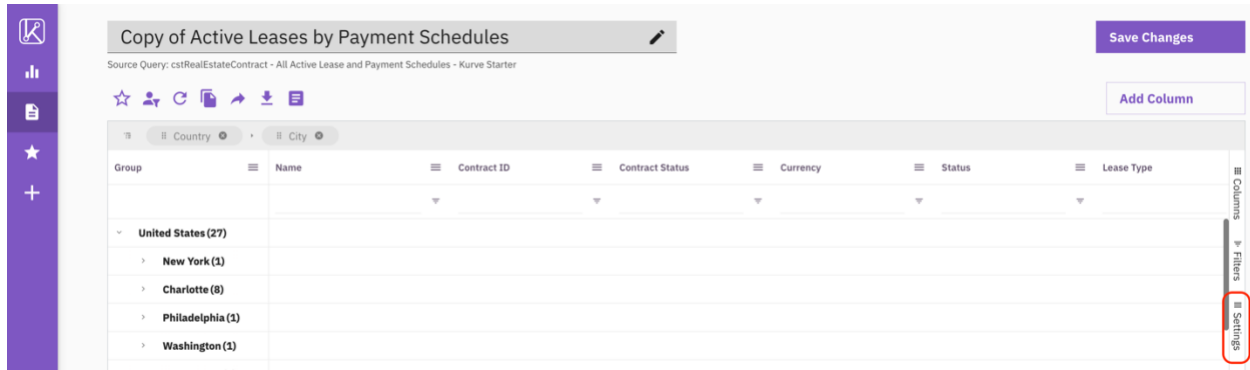


- The summary row will always appear on the last row of the report.

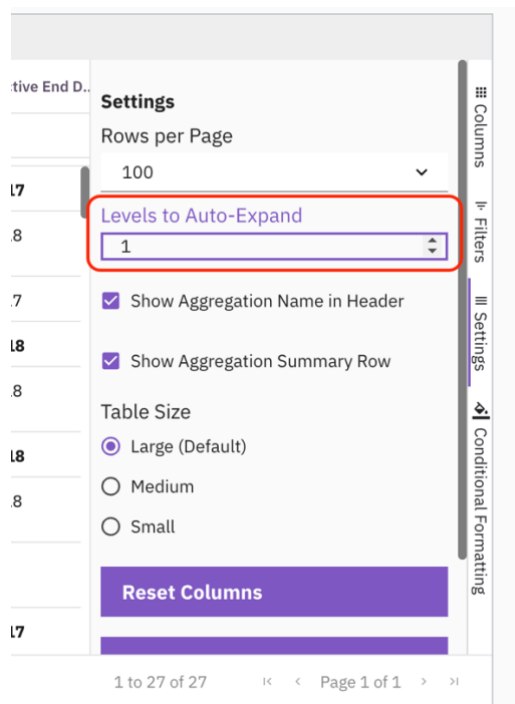
Group	Sum(Gross Rentable)	Count(Name)	Distinct(Country)	MinDate(Active End D...	Contract ID	Cont
Moscow (1)	2,435,000	1	1			
Philadelphia (1)	102,325.4	1	1	01/31/2017		
Washington (1)	102,325.4	1	1	01/31/2017		
Los Angeles (1)	102,325.4	1	1	01/31/2017		
London (1)	25,000	1	1	02/28/2018		
Oakbrook Terrace (13)	75,400	13	1	12/31/2026		
Lille (1)	540	1	1	12/31/2026		
OAKBROOK TERR... (2)	11,600	2	1	12/31/2026		
Oshawa (6)	0	6	1	05/31/2027		
(Blanks) (3)	800	3	1	08/31/2017		
Summary Row (67)	10,342,207.62	67	19	05/13/2016		

- j. Report Settings: Manage levels of grouping to display upon loading your report.

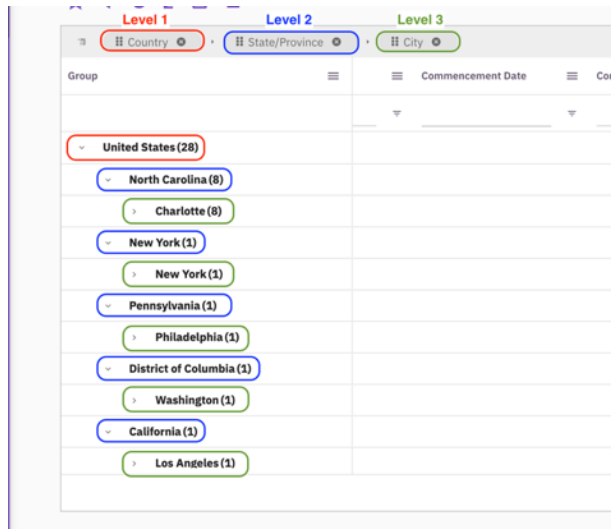
- Navigate to the "Settings" tab



- Navigate to Levels to Auto-Expand, either use the error to increase/decrease the number or input the number.



For example, if I have 3 levels of grouping in my report and only want to expand the first two groupings, I would set my levels to auto-expand to 2. This would result in level 1 and 2 to be expanded but level 3 will be closed.



k. Value Aggregation Options

avg	Returns the average value for the group
count	Count the number of items in the group
distinct	Counts the number unique values in the group
first	Returns the first value in the group
firstFilled	Returns the first non-empty value in the group
last	Returns the last value in the group
lastFilled	Returns the last non-empty value in the group
max	Returns the maximum value
median	Returns the middle number when sorted from min to max
maxDate	Returns the last date
min	Returns the minimum value
minDate	Returns the earliest date
sum	Returns the sum of values for the group

11. Conditional Formatting

Highlight text, number, or date/datetime cells with certain colors depending on the cell's value without needing to use a Custom Column Function.

- a. There are two methods to open the conditional formatting panel:
 - i. Hamburger Menu:
 - Open the hamburger menu of your desired column
 - Click Conditional Formatting

The screenshot shows the 'All Active Leases' table in the Kurve Admin interface. The table has columns for ID, Name, Contract Status, Contract Type, Active Start Date, and City. A context menu is open over the 'Contract Type' column header, showing options like 'Pin Column', 'Autosize This Column', 'Autosize All Columns', 'Group by Contract Type', 'Enable Header Wrapping', 'Enable Word Wrapping', and 'Conditional Formatting'. The 'Conditional Formatting' option is highlighted with a red box. The table contains 16 rows of lease data.

ID	Name	Contract Status	Contract Type	Active Start Date	City
US-NY-NY-002	New York Office Landlord - ...	Active	Owned Property	03/14/2013	New York
LA-BR-RI-005	Rio de Janeiro Retail Lease ...	Active	Real Estate Lease	08/01/2013	Rio de Jan
EU-FR-PR-006	Paris Lease (Finance Lease ...	Active	Real Estate Lease	01/01/2014	Paris
EU-DE-FR-001	Watson Centre - Frankfurt	Active	Real Estate Lease	02/01/2012	Frankfurt a
ME-IS-TA-007	Tel Aviv Gross Lease	Active	Real Estate Lease	05/14/2011	Tel Aviv
LA-BR-SP-001	Watson Center - Sao Paulo	Active	Real Estate Lease	02/01/2012	São Paulo
AP-CH-HK-001	Watson Center - Hong Kong...	Active	Real Estate Lease	01/31/2017	Hong Kong
EM-SA-CT-002	Cape Town Office Landlord ...	Active	Owned Property	03/14/2013	Cape Town
AP-AU-BR-002	Brisbane Office Landlord - 3...	Active	Owned Property	03/14/2013	Brisbane
CE-SL-LJ-002	Ljubljana Office Landlord - S...	Active	Owned Property	03/14/2013	Ljubljana
AP-IN-MB-003	Mumbai Owned Land Parcel...	Active	Owned Property	03/14/2013	Mumbai
LA-VZ-CA-002	Caracas Office Landlord - A...	Active	Owned Property	03/14/2013	Caracas
EU-BG-BR-003	Brussels Land Parcel - Red ...	Active	Owned Property	03/14/2013	Brussels
AP-IN-MB-004	Land Lease - Mumbai	Active	Real Estate Lease	05/12/2018	Mumbai

- The column will pre-populate in the selected Column dropdown.

Reporting Starter

Contract Status	Contract Type	Active End Date
Active	Owned Property	02/28/2018
Active	Real Estate Lease	07/31/2018
Active	Real Estate Lease	12/31/2018
Active	Real Estate Lease	01/31/2021
Active	Real Estate Lease	05/13/2016
Active	Real Estate Lease	01/31/2017
Active	Real Estate Lease	01/31/2017
Active	Owned Property	
Active	Owned Property	
Active	Owned Property	

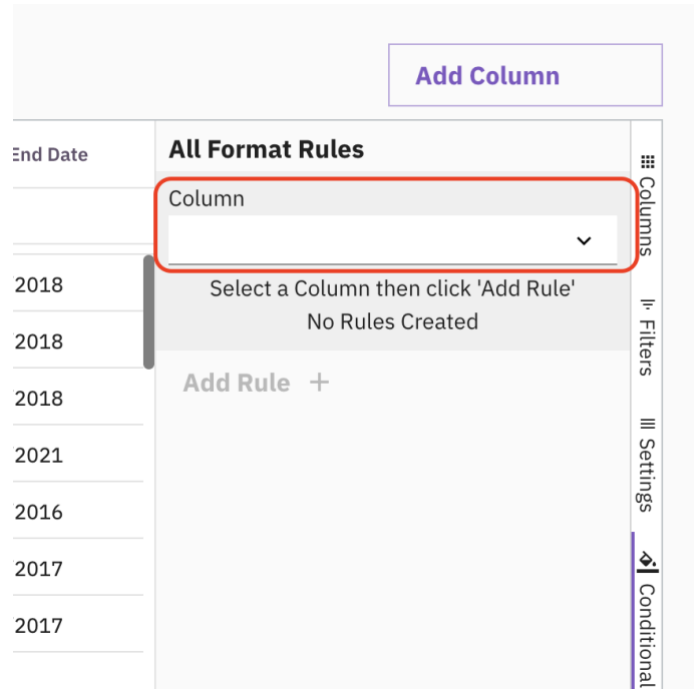
- Continue to Step B below to learn how to add a rule

ii. Conditional Formatting button

- Navigate to the Conditional Formatting tab along the right of your report

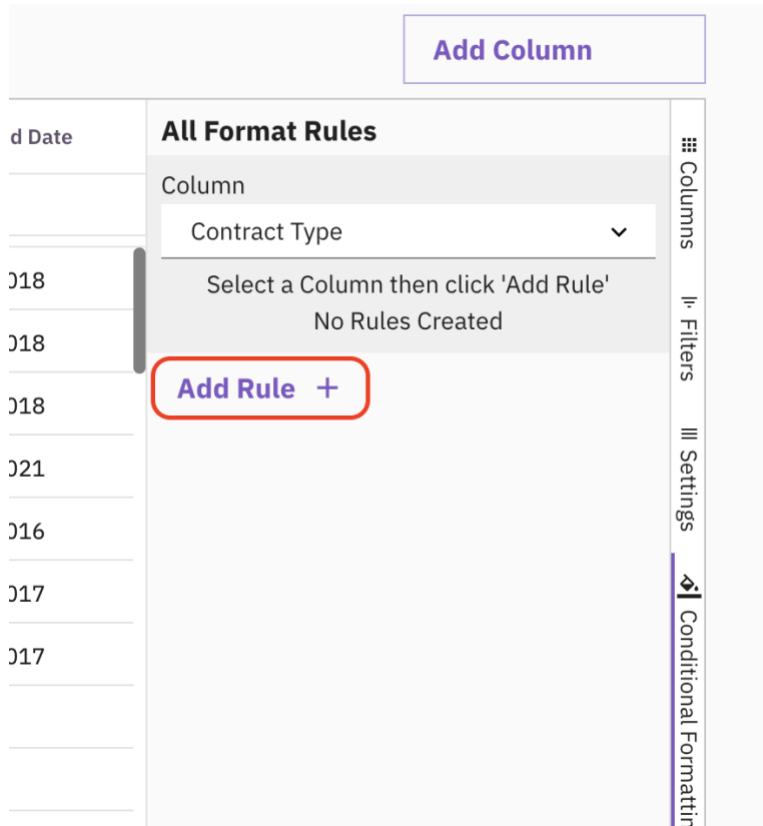
ID	Name	Contract Status	Contract Type	Active End Date	Active Start Date	City
US-NY-NY-002	New York Office Landlord - ...	Active	Owned Property	02/28/2018	03/14/2013	New York
LA-BR-RI-005	Rio de Janeiro Retail Lease ...	Active	Real Estate Lease	07/31/2018	08/01/2013	Rio de Jan
EU-FR-PR-006	Paris Lease (Finance Lease ...	Active	Real Estate Lease	12/31/2018	01/01/2014	Paris
EU-DE-FR-001	Watson Centre - Frankfurt	Active	Real Estate Lease	01/31/2021	02/01/2012	Frankfurt a
ME-IS-TA-007	Tel Aviv Gross Lease	Active	Real Estate Lease	05/13/2016	05/14/2011	Tel Aviv
LA-BR-SP-001	Watson Center - Sao Paulo	Active	Real Estate Lease	01/31/2017	02/01/2012	São Paulo
AP-CH-HK-001	Watson Center - Hong Kong...	Active	Real Estate Lease	01/31/2017	02/01/2012	Hong Kong
EM-SA-CT-002	Cape Town Office Landlord ...	Active	Owned Property		03/14/2013	Cape Town
AP-AU-BR-002	Brisbane Office Landlord - 3...	Active	Owned Property		03/14/2013	Brisbane
CE-SL-LJ-002	Ljubljana Office Landlord - S...	Active	Owned Property		03/14/2013	Ljubljana
AP-IN-MB-003	Mumbai Owned Land Parcel...	Active	Owned Property		03/14/2013	Mumbai
LA-VZ-CA-002	Caracas Office Landlord - A...	Active	Owned Property		03/14/2013	Caracas
EU-BG-BR-003	Brussels Land Parcel - Red ...	Active	Owned Property		03/14/2013	Brussels
AP-IN-MB-004	Land Lease - Mumbai	Active	Real Estate Lease	05/12/2018	05/13/2013	Mumbai

- Select the column you would like to color using the drop down

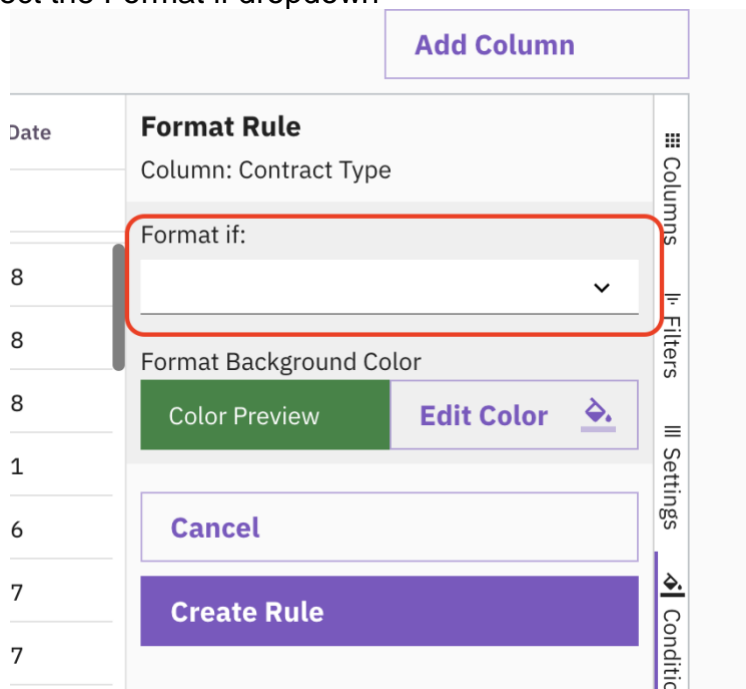


- Continue to step b

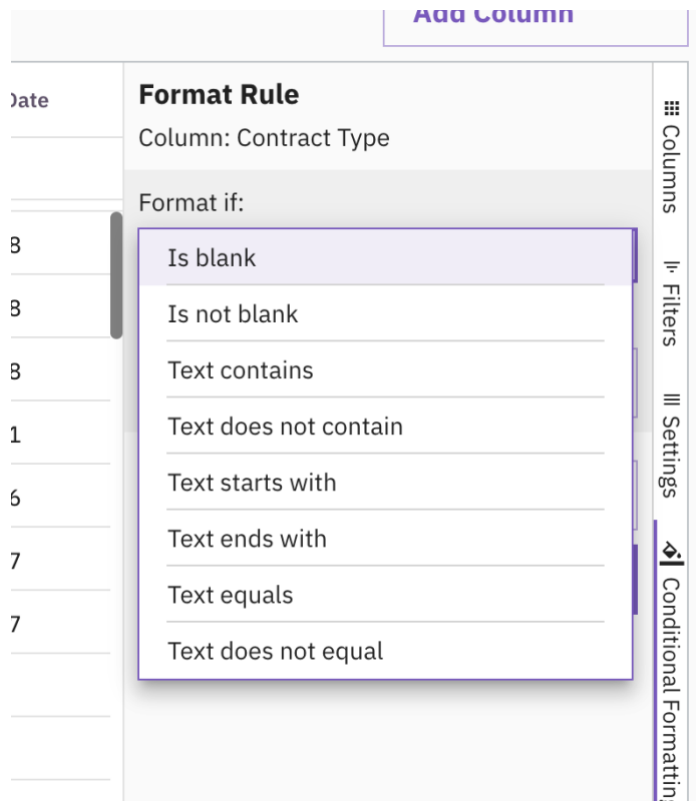
b. Click **Add Rule**



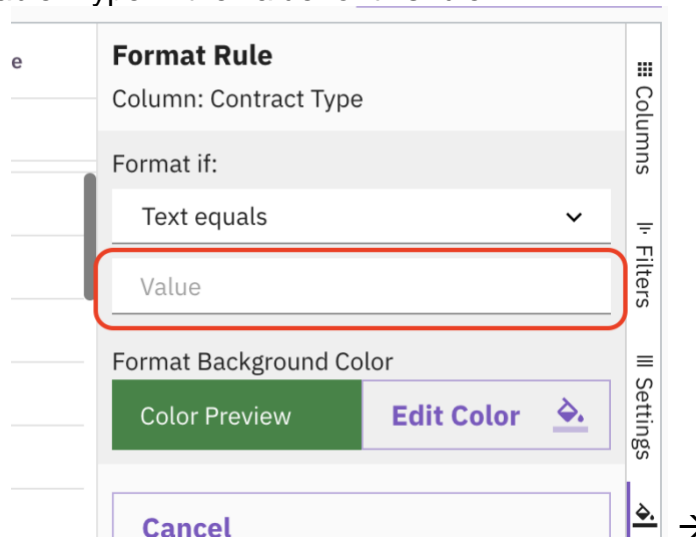
- c. Fill in your rule parameters:
 - i. Select the Format if dropdown

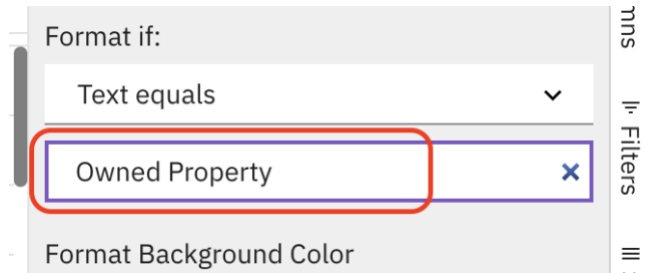


- ii. Select the filter type. These will change according to the column's data type (i.e. Text, Number, Date, DateTime). Please see below for an explanation of each data and filter type available.

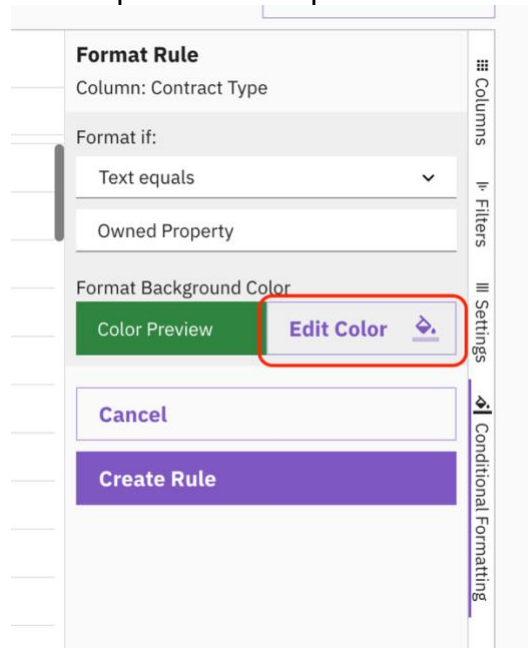


- iii. Input value: if the selected filter type requires a value, an input will become available. Type in the value for this rule.

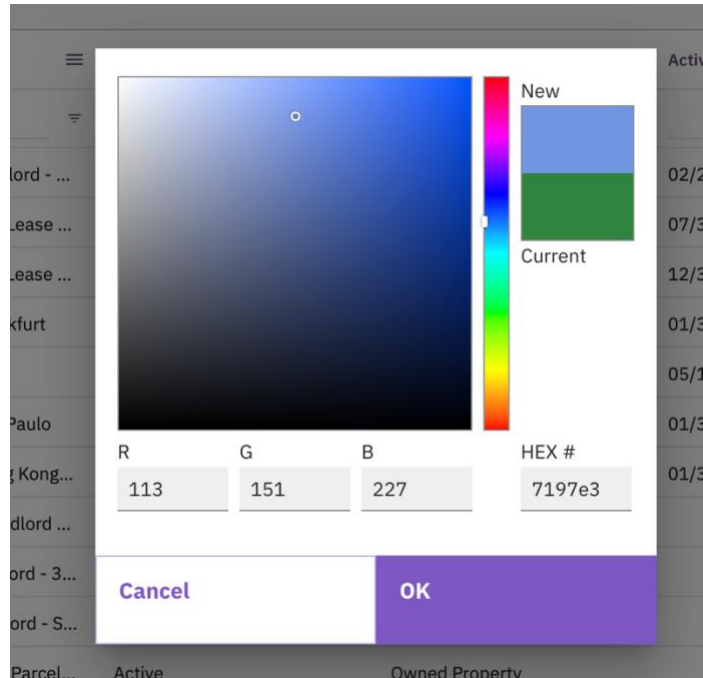




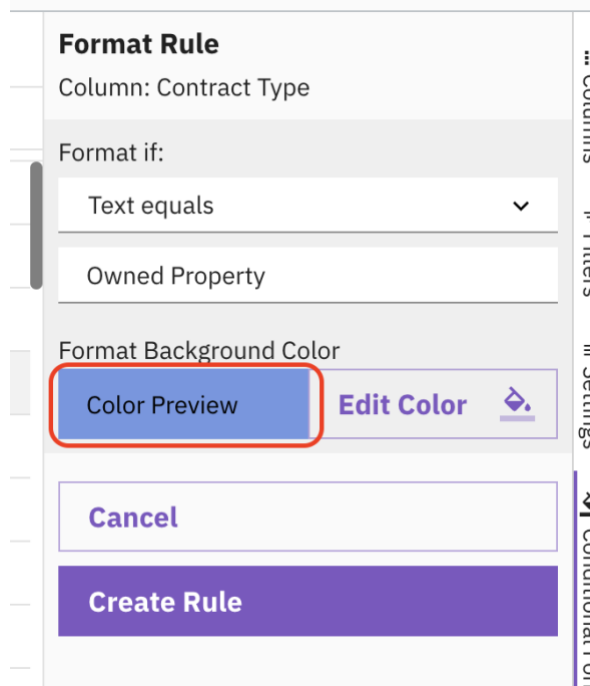
- iv. **Format Background Color:** the default color is green. To pick a new color click **Edit Color** to open the color picker



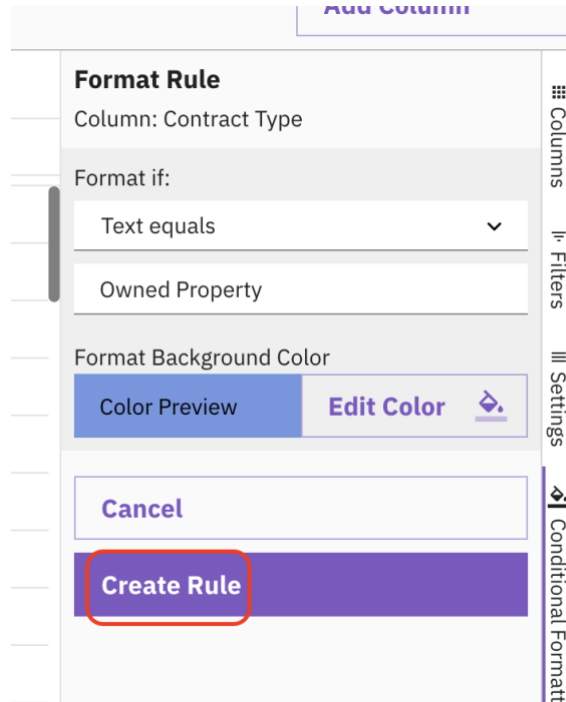
- v. Input an RGB, hex code, or select a color.



- vi. Click OK.
- vii. The Color Preview will change to the selected color.



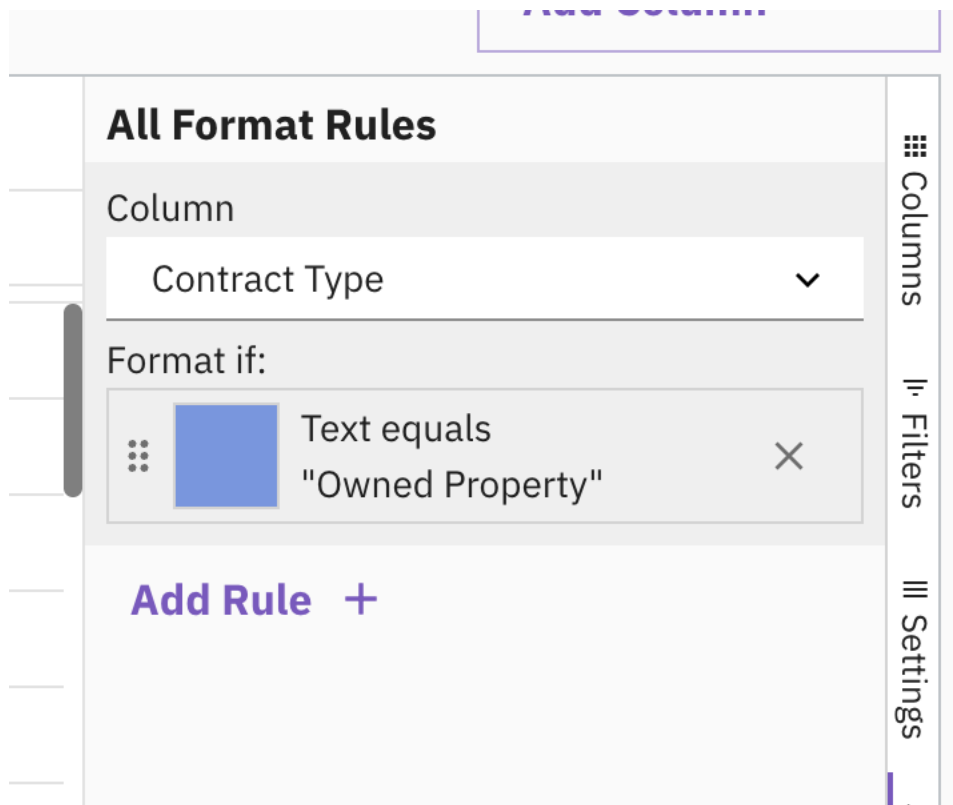
- viii. Click Create Rule



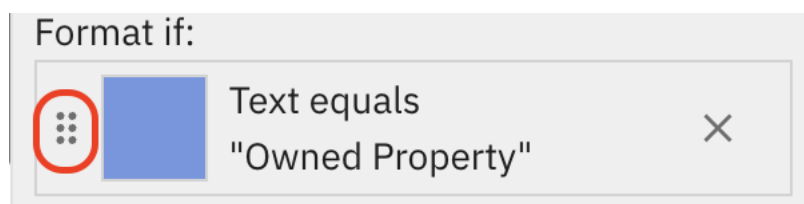
d. The color will now be applied in the column

Contract Type	Active E
Owned Property	02/28/:
Real Estate Lease	07/31/:
Real Estate Lease	12/31/:
Real Estate Lease	01/31/:
Real Estate Lease	05/13/:
Real Estate Lease	01/31/:
Real Estate Lease	01/31/:
Owned Property	
Owned Property	
Owned Property	
Owned Property	
Owned Property	

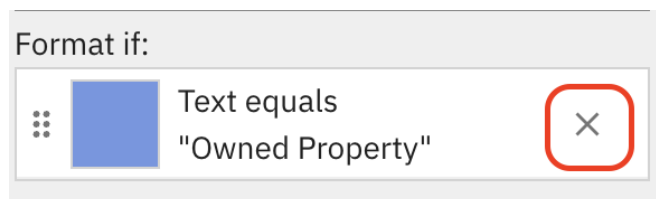
e. The rules created for each column will be listed in the conditional formatting tab



- f. Continue to create as many rules as desired by clicking Add Rule.
- g. Rules will be applied in the order they are listed.
 - i. To change the order, click the drag and drop icon and drag the rule to the desired spot.



- h. To delete a rule, click the X



- i. Data & Filter Types

i. Text

Type	How the rule applies
Is blank	Applies to cells that are empty or do not contain any data.
Is not blank	Applies to cells that have some data and are not empty.
Text contains	Applies to cells that contain the specified text string anywhere within the cell.
Text does not contain	Applies to cells that do not contain the specified text string anywhere within the cell.
Text starts with	Applies to cells where the text begins with the specified string.
Text ends with	Applies to cells where the text ends with the specified string.
Text equals	Applies to cells where the entire text exactly matches the specified string.
Text does not equal	Applies to cells where the entire text does not exactly match the specified string.

ii. Number

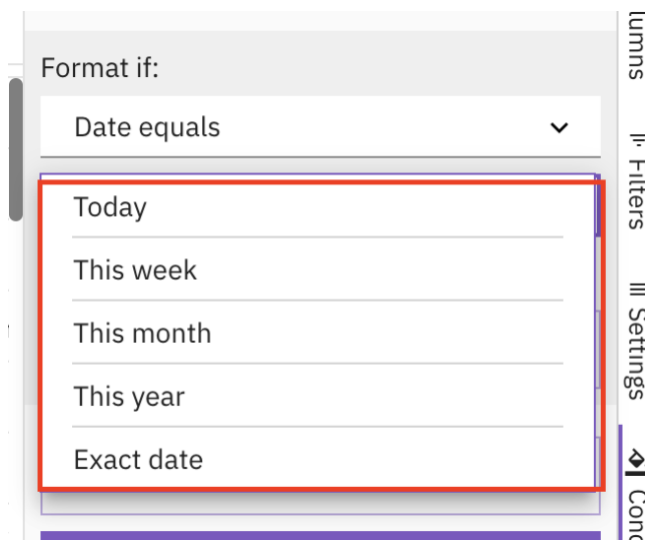
Type	How the rule applies
Is blank	Applies to cells in a number column that are empty or do not contain any numeric data.
Is not blank	Applies to cells in a number column that have some numeric data and are not empty.
Greater than	Applies to cells in a number column where the value is greater than the specified number.
Greater than or equals	Applies to cells in a number column where the value is greater than or equal to the specified number.
Less than	Applies to cells in a number column where the value is less than the specified number.
Less than or equals	Applies to cells in a number column where the value is less than or equal to the specified number.
Is equal to	Applies to cells in a number column where the value exactly matches the specified number.
Is not equal to	Applies to cells in a number column where the value does not exactly match the specified number.
Is between	Applies to cells in a number column where the value falls within the specified range (inclusive).
Is not between	Applies to cells in a number column where the value does not fall within the specified range (exclusive).

iii. Date

Type	How the rule applies
Is blank	Applies to cells in a date column that are empty or do not contain any date information.

Is not blank	Applies to cells in a date column that have some date information and are not empty.
Date equals	Applies to cells in a date column where the date exactly matches the specified date.
Date does not equal	Applies to cells in a date column where the date does not exactly match the specified date.
Date is before	Applies to cells in a date column where the date is earlier than the specified date.
Date is after	Applies to cells in a date column where the date is later than the specified date.

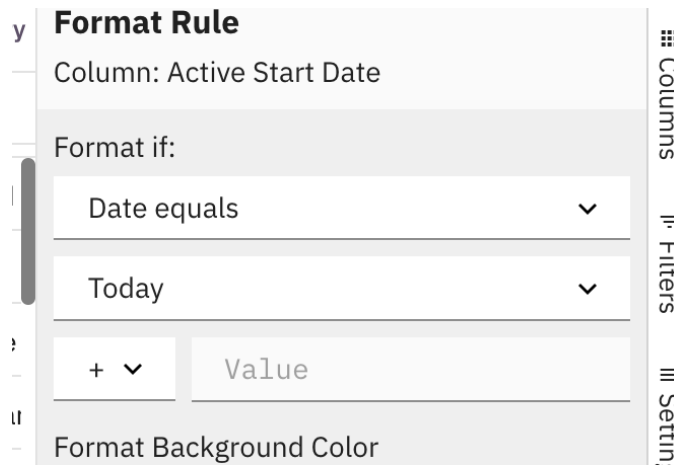
- Once a date format type is selected, an additional dropdown will appear before the input will be available. Please see the table below to learn about each option.



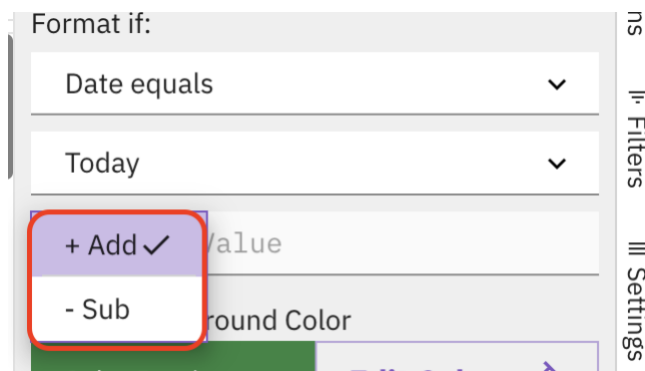
Date Selector	Description
Today	Formats cells based on whether the date in the cell is the current date (today). It is useful for highlighting or styling cells that represent today's date.
This week	Formats cells based on whether the date falls within the current week. It's a dynamic condition that changes as the weeks progress.
This month	Formats cells based on whether the date falls within the current month. It's a dynamic condition that adjusts to the current month.
This year	Formats cells based on whether the date falls within the current year. It dynamically adjusts to the ongoing year.

Exact Date	This option allows you to specify a particular date, and cells with that exact date will be formatted accordingly. It is useful when you want to highlight or emphasize a specific date.
------------	--

- The dynamic date options above can also be offset:
Offsetting a dynamic date involves adjusting a date value by a certain number of days, months, or years, either forward or backward, to derive a new date.

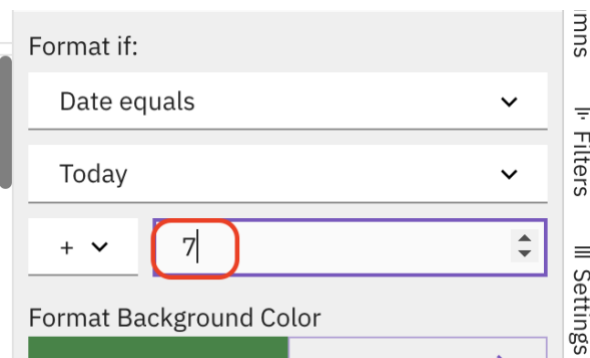


- To offset, select the + drop down and then choose to Add or Sub.



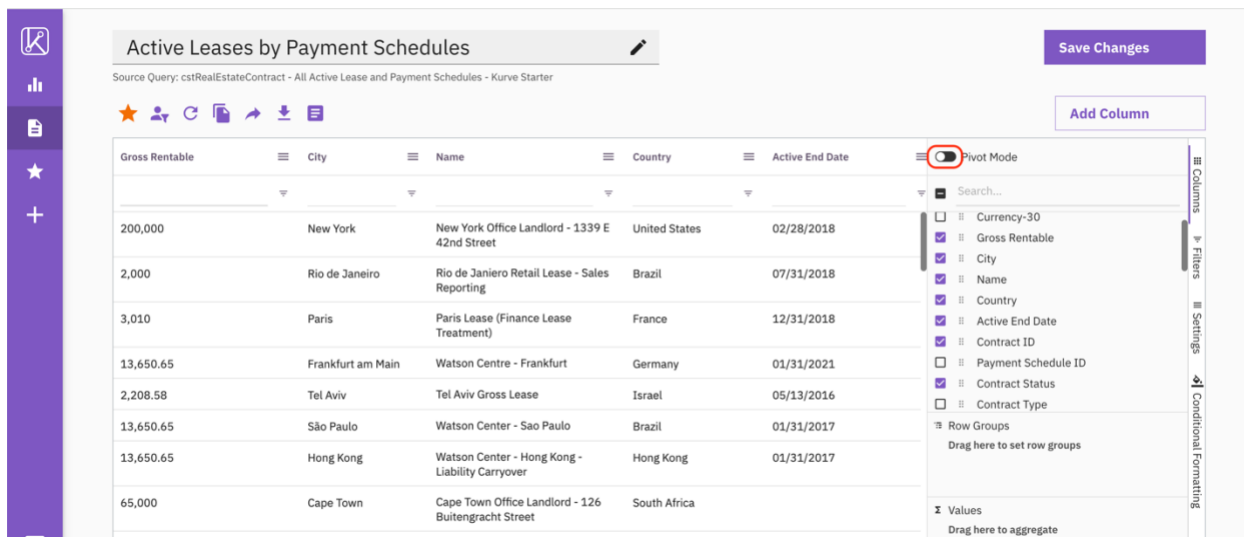
- Add: Forward Offset
Increasing the date value by a specified number of days, months, or years. For example, adding 7 days to the current date results in a date one week in the future.
- Sub: Backward Offset
Decreasing the date value by a specified number of days, months, or years. For instance, subtracting 30 days from the current date yields a date one month in the past.

- Input the value to offset by:

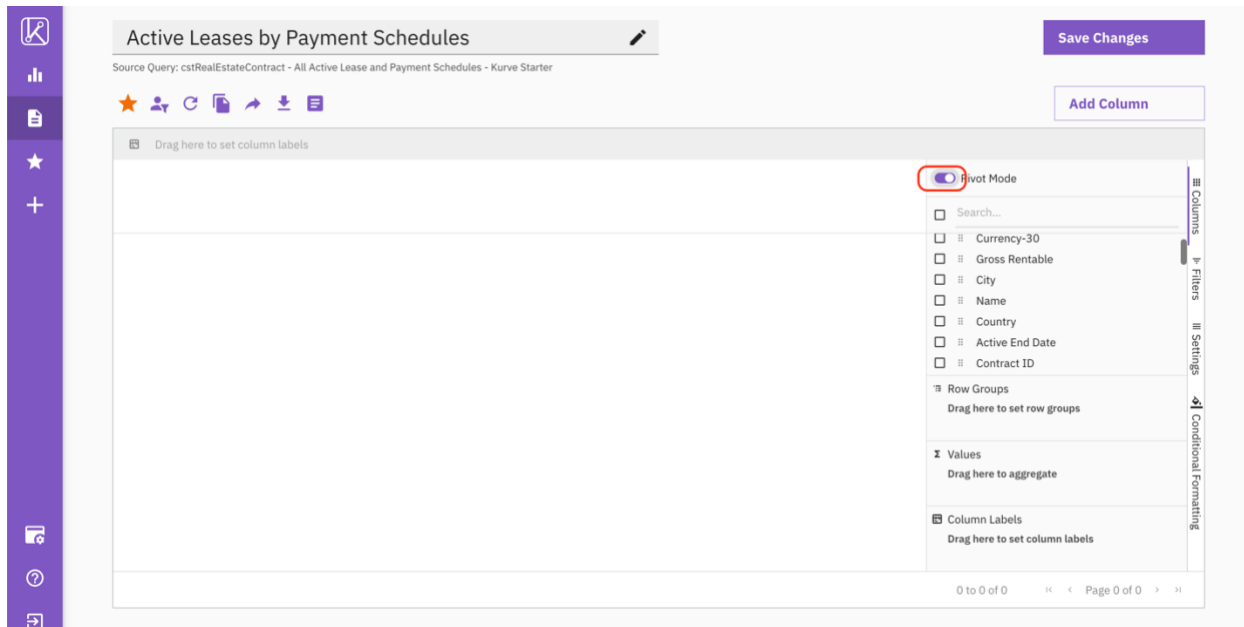


12. Pivot Mode

- Pivot mode allows you to take columns values and turn it into a column. To enable Pivot Mode, click into Columns bar and slide the toggle button to the right.

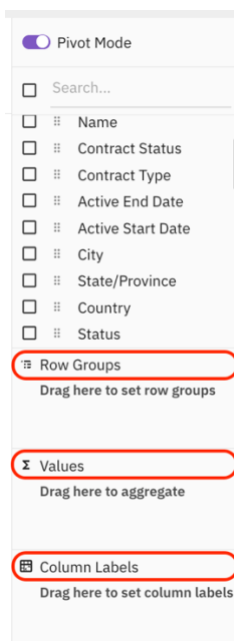


- When pivot mode is turned on, you will see the toggle switch to purple and the report will reset to a blank canvas. If you have any groups and aggregations already created, these will carry over to pivot mode.

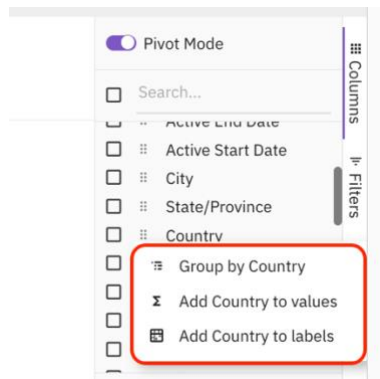


- c. For pivoting to work, you will need to use Row Groups, Values and Column Labels.

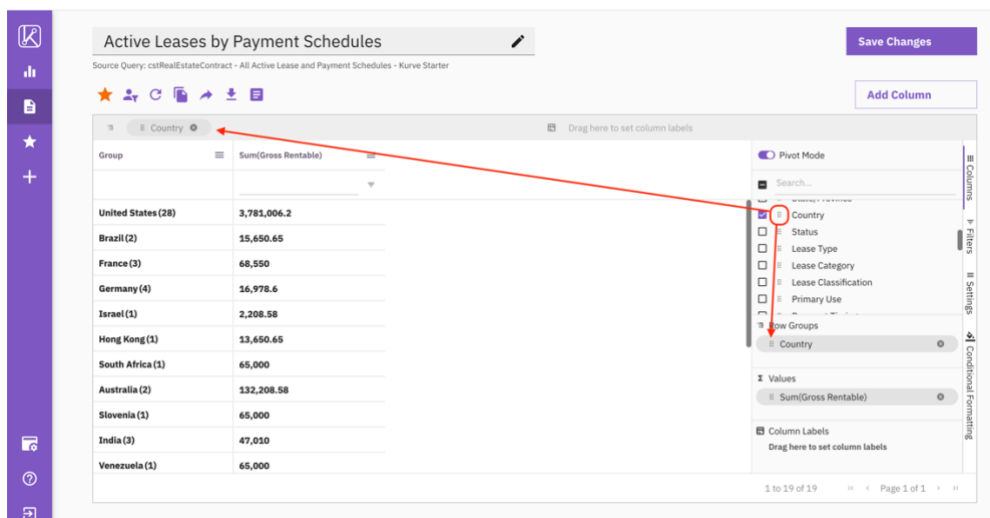
Note: the same hierarchy rules in each section from normal report mode apply in pivot mode.



- d. You can move the columns into each section using two methods:
 - i. Option 1: Right click on a column (for example: Country) and select the three options.



ii. Option 2: You can drag and drop into the desired section.



e. Column Labels Section:

This will only appear when Pivot Mode is enabled. You can add columns to the Column Labels by dragging into the grey header at the top of the report or directly into the section in the Columns Bar.

Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

Country	Owned Property	Real Estate Lease
Sum(Gross Rentable)	Sum(Gross Rentable)	
United States (28)	3,340,000	441,006.2
Brazil (2)		15,650.65
France (3)	65,000	3,550
Germany (4)		16,978.6
Israel (1)		2,208.58
Hong Kong (1)		13,650.65
South Africa (1)	65,000	
Australia (2)	130,000	2,208.58
Slovenia (1)	65,000	
India (3)	47,005	5

- f. Multiple columns that are added to the Column Labels will appear beside each other in the grey header in the order of how it's grouped and it will show in order in the Columns bar.

Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

Country	Owned Property	Real Estate Lease	Contract Type	Status	Contract Status
Active	Active	(Blanks)	Active	Active - Rolling Lease	
Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)	
United States (28)	3,340,000	87,000	354,006.2		
Brazil (2)			15,650.65		
France (3)	65,000	540	3,010		
Germany (4)			16,978.6		
Israel (1)			2,208.58		
Hong Kong (1)			13,650.65		
South Africa (1)	65,000				

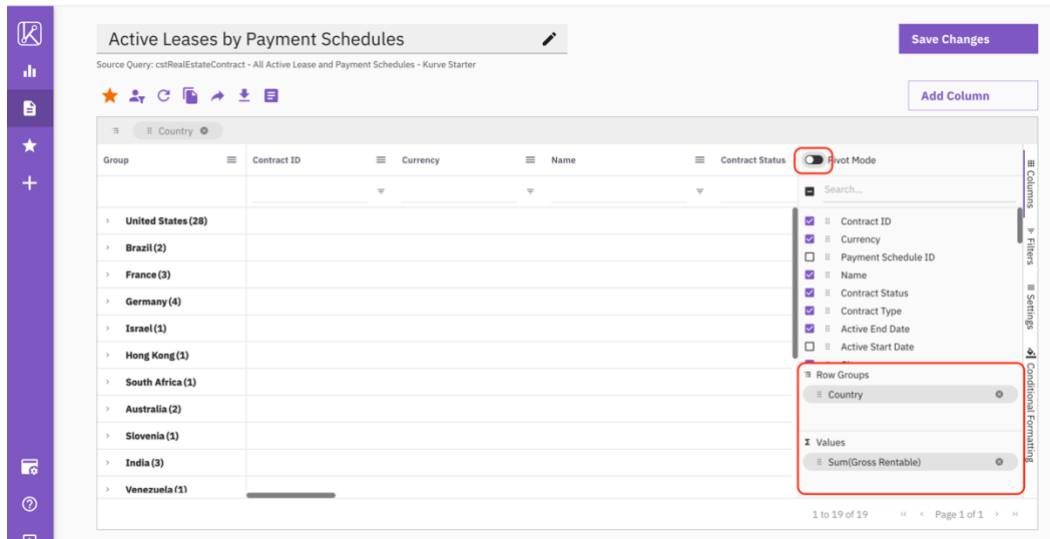
- g. If you have multiple column labels, they will be nested under the first column label according to your order. They will be auto opened according to the level.

Group	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)
United States (27)					3140000
France (3)					
South Africa (1)			65000		
Australia (2)	130000				
Slovenia (1)					
India (3)					
Venezuela (1)				65000	
Belgium (3)		2482005			
Taiwan (1)					

h. Ensure you click “Save Changes” to save your report.

Group	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)	Sum(Gross Rentable)
United States (28)	3,340,000	87,000	354,006.2	
Brazil (2)			15,650.65	
France (3)	65,000	540	3,010	
Germany (4)			16,978.6	
Israel (1)			2,208.58	
Hong Kong (1)			13,650.65	
South Africa (1)	65,000			

i. To turn off Pivot Mode, switch the toggle to the left. The rest of your report columns will reappear, and you will see the Row Groups and Values carry over. The Column Label section will be removed.



13. Reorganizing Columns on the Report

a. **Sort List Alphabetically** function: Reorder the report list by clicking on the column headers. The list will reorder by alphabetical order:

- Arrow facing up (↑) will sort your results in alphabetical order starting from “A.”
- Arrow facing down (↓) will sort your results in reverse alphabetical order starting from “Z.”

Name	Country	City	Contract ID
Brisbane Office Landlord - 333...	Australia	Brisbane	AP-AU-BR-002
Brisbane Gross Lease	Australia	Brisbane	AP-AU-BB-001
Brussels Land Parcel - Red Po...	Belgium	Brussels	EU-BG-BR-003
Retail Landlord - Red Poppy Mall	Belgium	Brussels	EU-BG-BR-005
Airport Landlord - Brussels Ke...	Belgium	Brussels	EU-BG-BR-009
Watson Center - Sao Paulo	Brazil	São Paulo	LA-BR-SP-001
Paris Lease (Finance Lease Tre...	France	Paris	EU-FR-PR-006

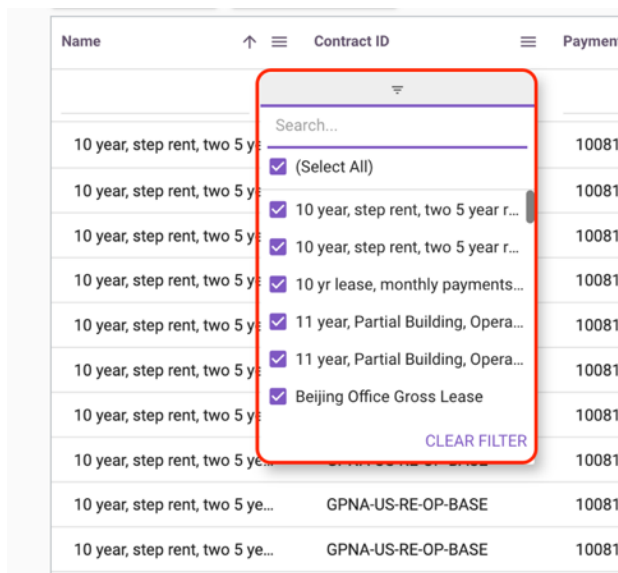
b. **Filter List** function: Click on the filter icon (≡) and a pop up will open to select what you would to filter out. You can also use the Filters tab that is located along the side.

Name	Country	City	Contract ID	Contract Status	Currency	Status
Brisbane Office Landlord - 333...	Australia	Brisbane	AP-AU-BR-002	Active	Australian Dollars	Active
Brisbane Gross Lease	Australia	Brisbane	AP-AU-BB-001	Active	Australian Dollars	Active
Brussels Land Parcel - Red Po...	Belgium	Brussels	EU-BG-BR-003	Active	Euro	Active
Retail Landlord - Red Poppy Mall	Belgium	Brussels	EU-BG-BR-005	Active	Euro	Active
Airport Landlord - Brussels Ke...	Belgium	Brussels	EU-BG-BR-009	Active	Euro	Active
Watson Center - Sao Paulo	Brazil	São Paulo	LA-BR-SP-001	Active	Brazilian real	Active

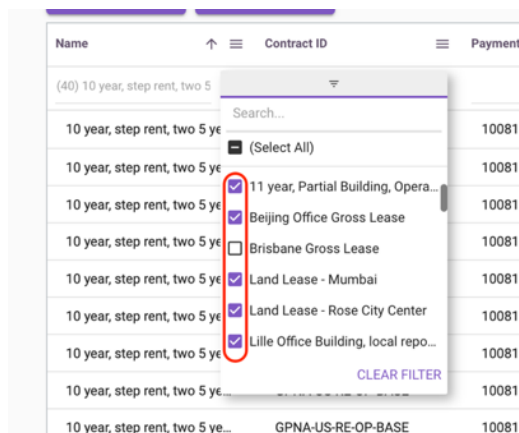
Note: Dependent on the column you filter, there are three different filter options:

Text Filters	Number Filters	Date Filters	Date/Time Filters

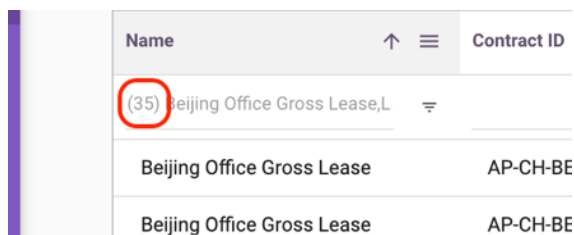
- i. **Text Filters** Function: Select or deselect what you would like to filter. You may also type into the “Search...” box to quickly find specific items to filter.



Example: In this case, we want to filter the “Name” column. We deselected “Brisbane Gross Lease” to filter for all other request classes.

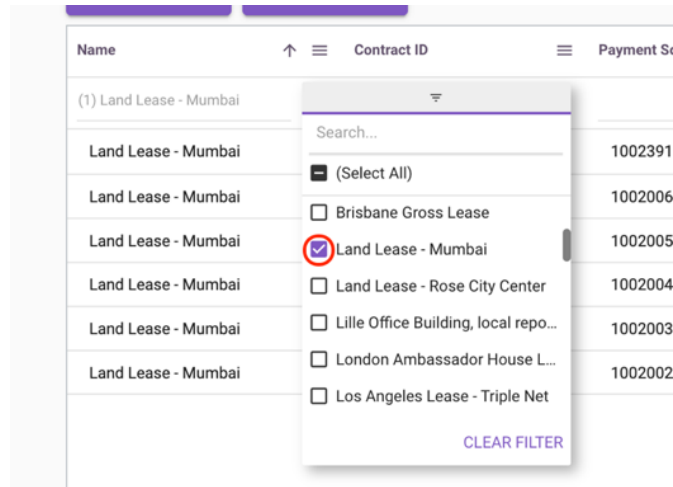


- After selecting items to filter, the number of records filtered will show under the column header along with the item names.

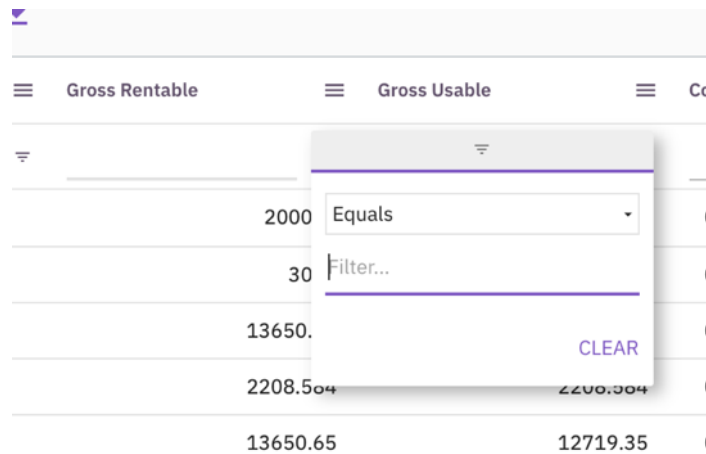


- We can also filter for only one or a few options. To do this we deselect “Select All” and then select which options you would like to

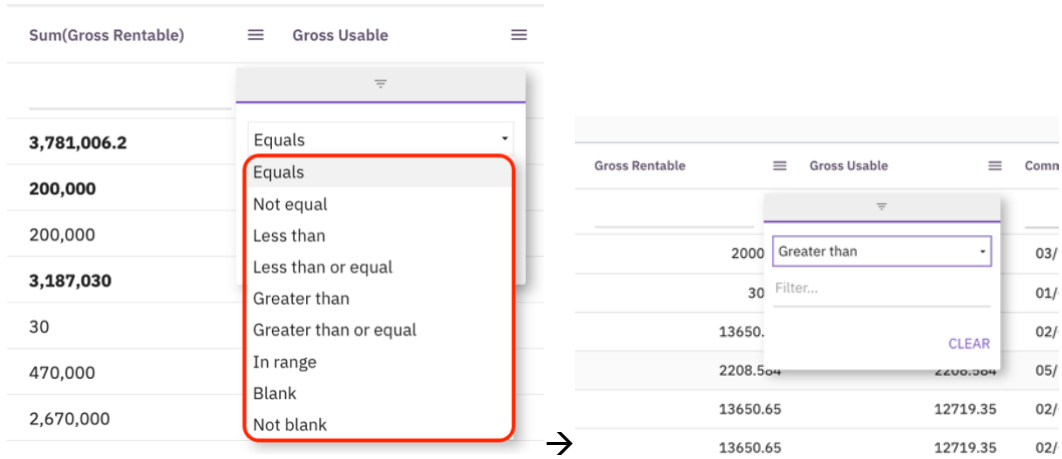
see. In this example we selected “Land Lease – Mumbai”. You can select as many options as you would like to display.



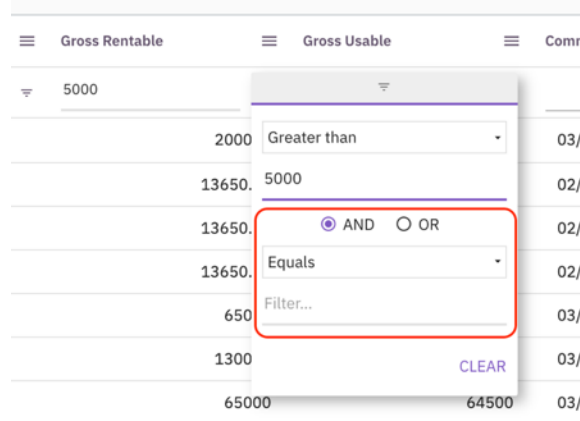
- c. **Number Filters** Function: Click on the drop-down icon (·) to select the range you would like to filter.



- i. Select the filter option from the drop down list and then fill in the number you would like to set the range under the “Filter...” text box.

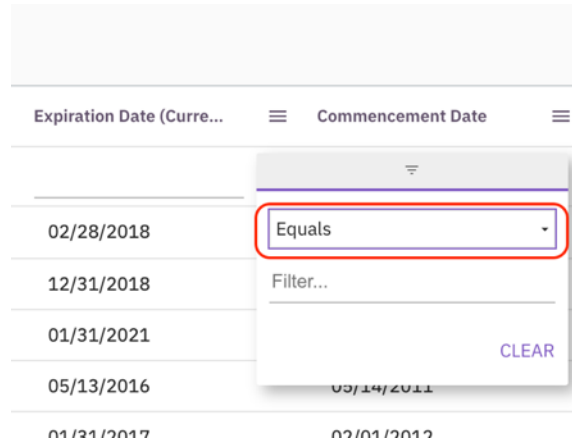


d. To create a range or set a criteria for the filter, fill in the secondary filter.

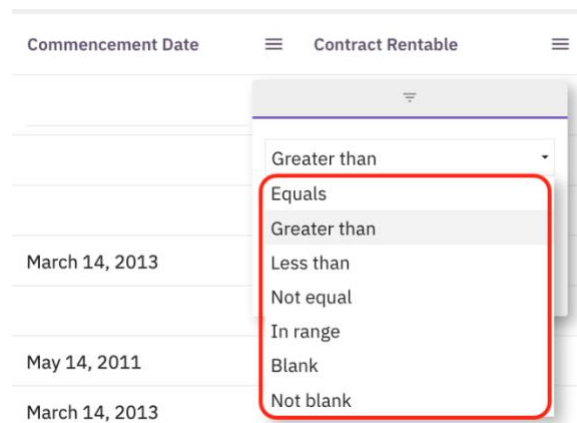


e. To easily exit the filter window and keep the filter applied, select the filter bar

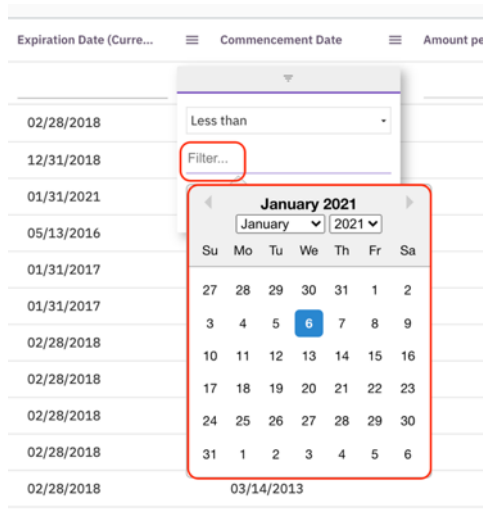
f. **Date Filters** Function: Click on the drop down icon (▾) to select the date range you would like to filter.



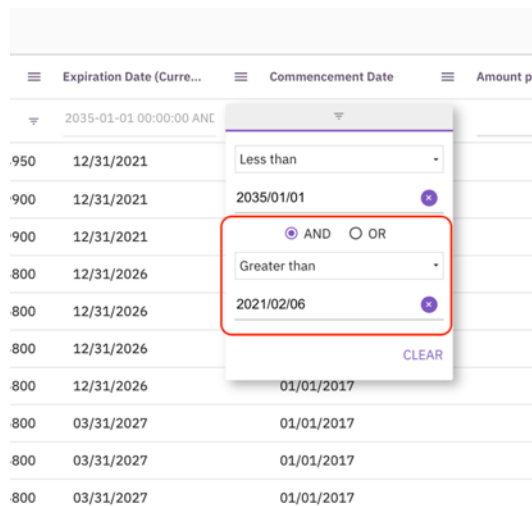
- i. Select the filter option.



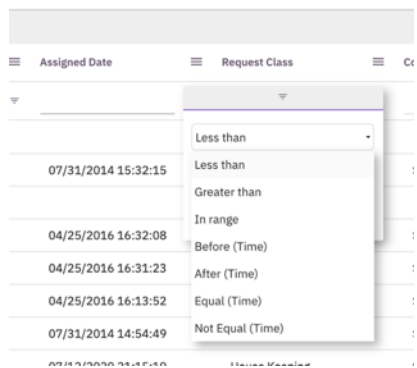
- g. Select the date with the date picker:
 - i. Click into the Filter... text box and a calendar will pop up.



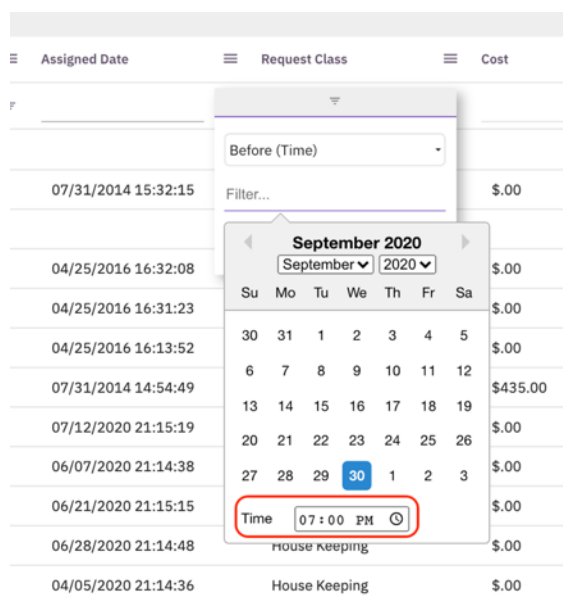
h. To create a date range or set a criterion for the filter, fill in the secondary filter.



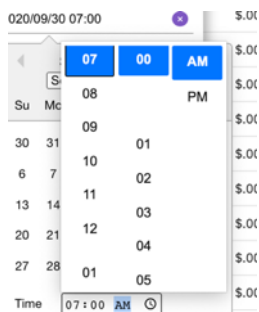
- i. **Date/Time Filters:** With Date Time fields, all the filters for Date fields are available. Additionally, there are also a set of filter options that filter on the time portion of the field.
 - i. Click on the drop down icon (▾) to select the date range you would like to filter.
 - ii. Select the filter option. The Time specific filter types are available at the bottom of the list.



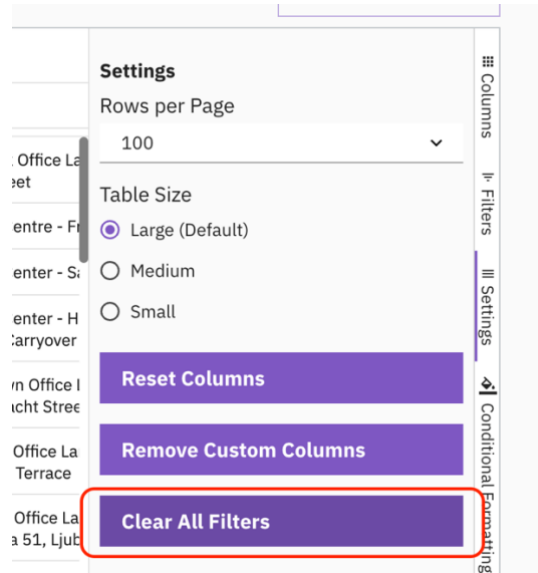
iii. To filter for a time, click into the Time section at the bottom.



iv. Select the time you want to filter on – please note, when you choose a filter type with Time in it, it will ignore the date selected.

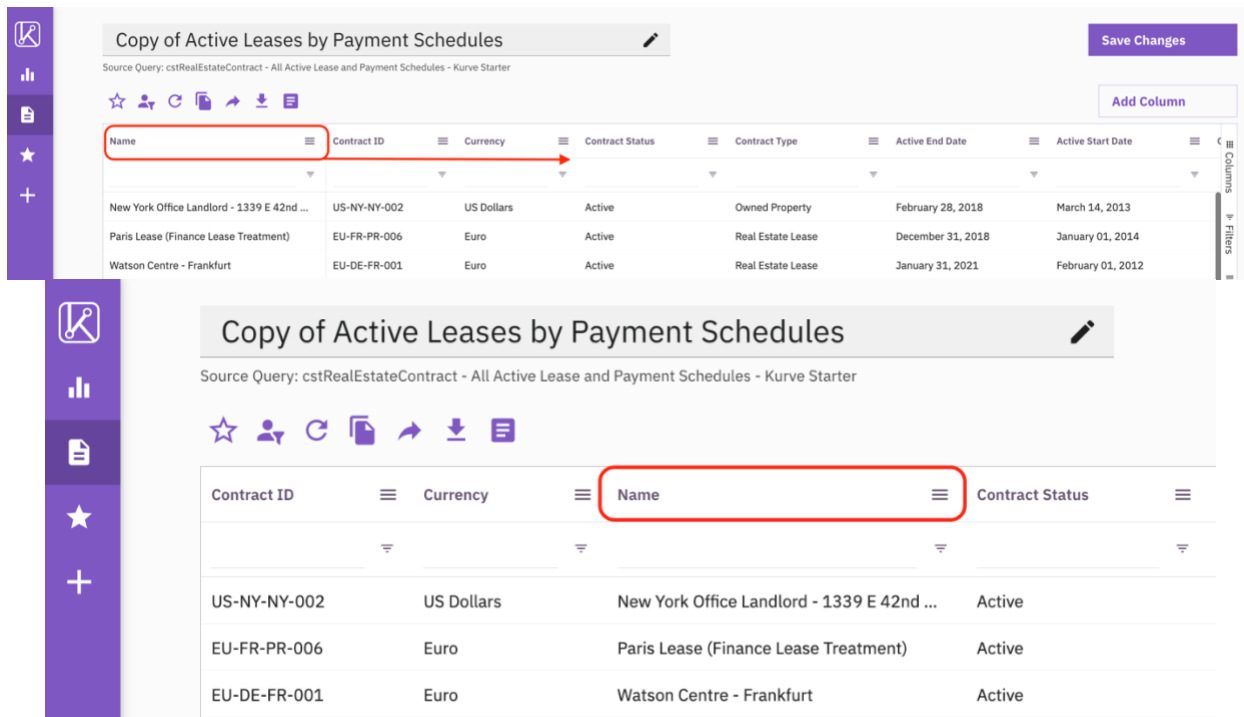


j. **Clear Filters:** you can easily clear the filter for one column or all columns:



k. **Reorder Columns** function:

- i. In personalizing a report, you can click any column header to drag and drop it to the right or left to reorder what columns you would like to be seen beside each other.



- ii. You may also re-order columns from the column panel on the right side of the report.

- Drag and drop it to change the column order.

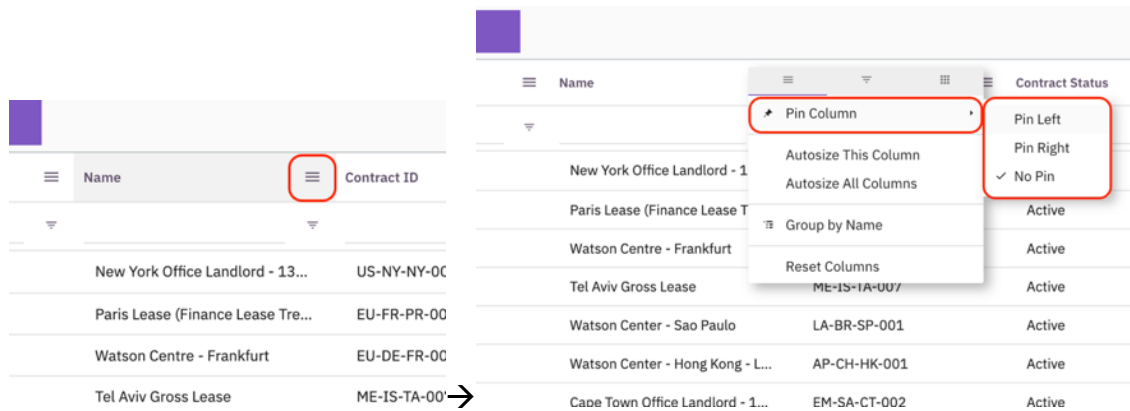
Name	Contract ID	Currency	Contract Status	Contract Type	Active End Date
New York Office Landlord - 1339 E 42nd ...	US-NY-NY-002	US Dollars	Active	Owned Property	February 28, 2018
Paris Lease (Finance Lease Treatment)	EU-FR-PR-006	Euro	Active	Real Estate Lease	December 31, 2018
Watson Centre - Frankfurt	EU-DE-FR-001	Euro	Active	Real Estate Lease	January 31, 2021
Tel Aviv Gross Lease	ME-IS-TA-007	US Dollars	Active	Real Estate Lease	May 13, 2016
Watson Center - Sao Paulo	LA-BR-SP-001	Brazilian real	Active	Real Estate Lease	January 31, 2017

- The column order will then be changed instantly.

Name	Currency	Contract Status	Contract ID	Contract Type	Active End Date
New York Office Landlord - 1339 E 42nd ...	US Dollars	Active	US-NY-NY-002	Owned Property	February 28, 2018
Paris Lease (Finance Lease Treatment)	Euro	Active	EU-FR-PR-006	Real Estate Lease	December 31, 2018
Watson Centre - Frankfurt	Euro	Active	EU-DE-FR-001	Real Estate Lease	January 31, 2021
Tel Aviv Gross Lease	US Dollars	Active	ME-IS-TA-007	Real Estate Lease	May 13, 2016
Watson Center - Sao Paulo	Brazilian real	Active	LA-BR-SP-001	Real Estate Lease	January 31, 2017

I. **Pin Columns** function: There are two ways to pin a column.

- i. **Option 1:** Click on the menu icon (☰) located next to the column you would like to pin. Click on the Pin Column icon. Choose if you would like to pin the column to the left or the right.



- ii. **Option 2:** Click on the column header you wish to pin and drag the column all the way left side of all columns until the pin icon appears on the left side of the column. The pin icon will only appear when you click and

drag the column header. Once you drop the column header the pin icon will disappear

Country	City	Name	Contract ID
United States	New York	New York Office Landlord - 13...	US-NY-NY-002
France	Paris	Paris Lease (Finance Lease Tre...	EU-FR-FR-006
Germany	Frankfurt am Main	Watson Centre - Frankfurt	EU-DE-FR-001
Israel	Tel Aviv	Tel Aviv Gross Lease	ME-IS-TA-007
Brazil	São Paulo	Watson Center - Sao Paulo	LA-BR-SP-001

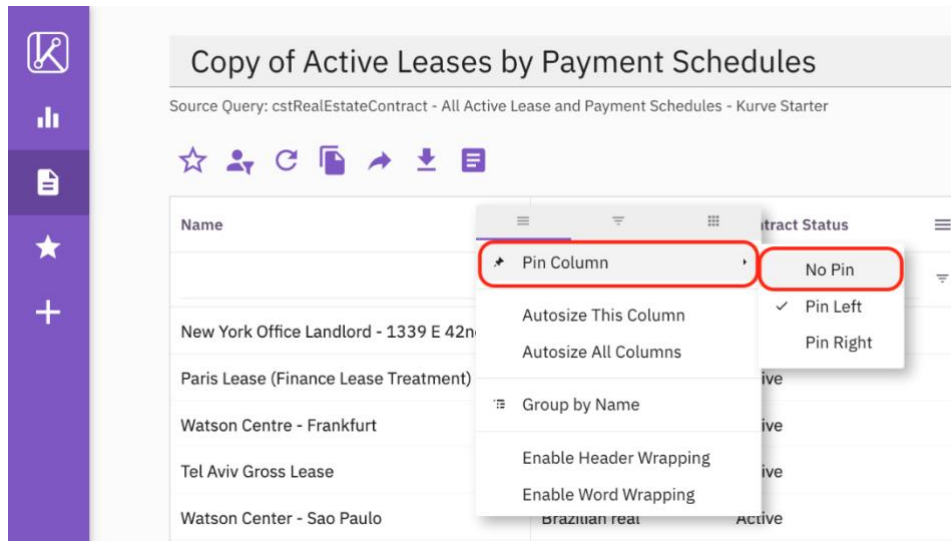
Name	Country
New York Office Landlord - 13...	United S...
Paris Lease (Finance Lease Tre...	France

Copy of Active Leases by Payment Schedules

Source Query: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter

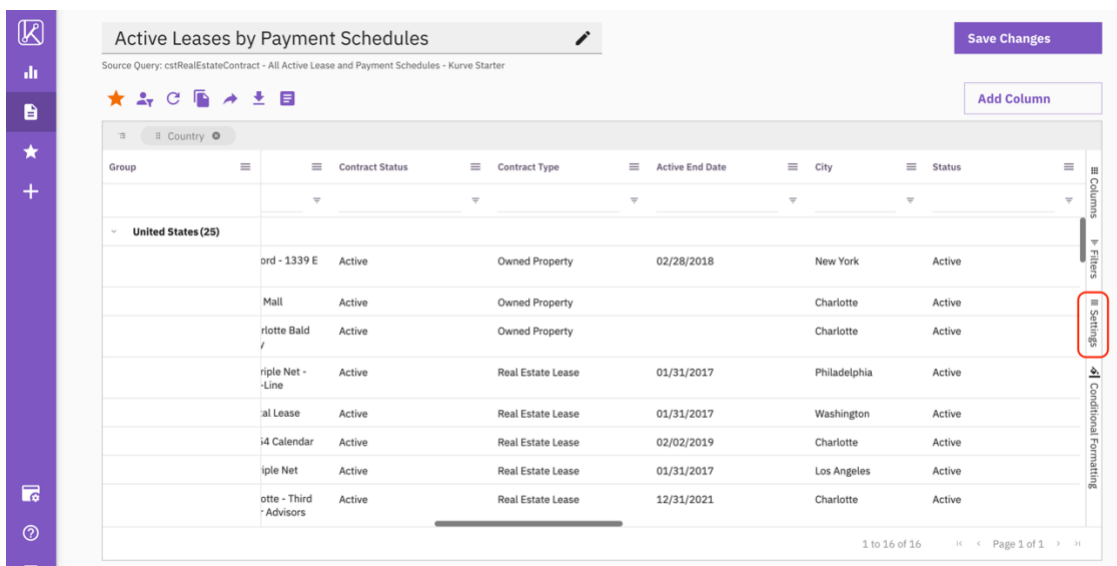
Name	Currency	Contract Status
New York Office Landlord - 1339 E 42nd ...	US Dollars	Active
Paris Lease (Finance Lease Treatment)	Euro	Active
Watson Centre - Frankfurt	Euro	Active
Tel Aviv Gross Lease	US Dollars	Active

- m. **Removing a pin.** To remove the pin click on the menu icon (☰), click on the Pin Column icon and select No Pin.

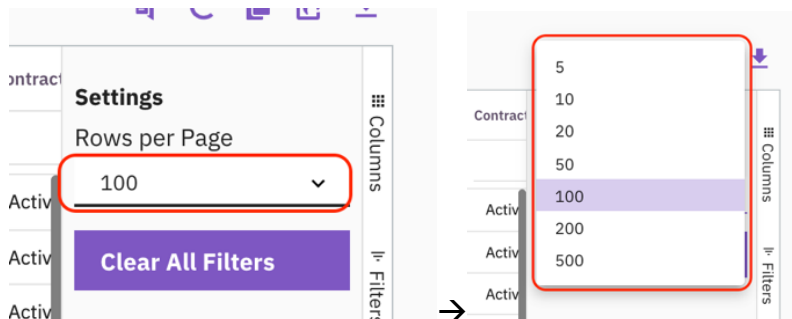


n. Report Settings: Manage the number of **Rows per Page**.

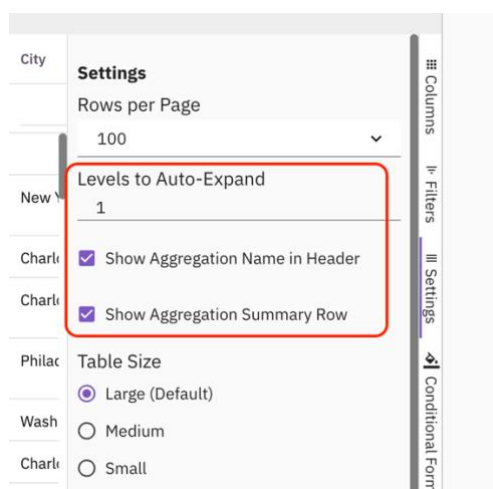
- You can easily control how many rows displayed in one page of the report. Navigate to the Settings window along the left side of the report.



- Click into the drop-down and select the number of rows you want to display. Your report will update automatically once you have selected.



- o. Formatting Grouping and Aggregations: Upon grouping and aggregating your report, three more setting configurations will appear



- Manage number of levels to show in report: Increase or decrease the number of grouping levels to load

Levels to Auto-Expand
1

- Remove aggregation title in the name: Click the checkbox beside “Show Aggregation Name in Header”

Show Aggregation Name in Header

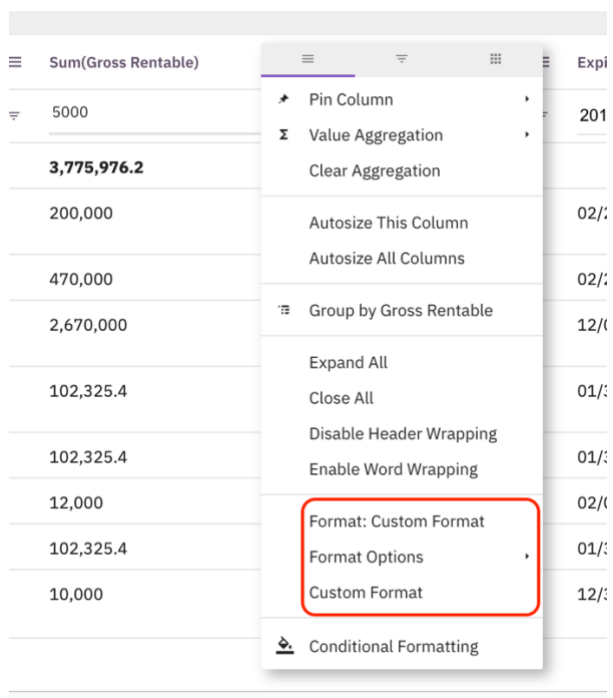
- Show/Hide Aggregation Summary Row: click the checkbox to show or hide it

Show Aggregation Summary Row

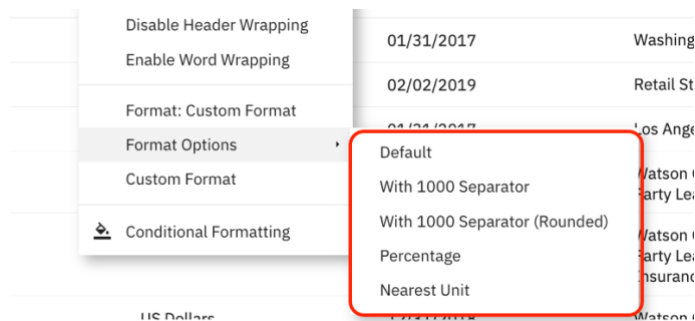
14. Formatting Number Columns

There are multiple types of formats you can use for number columns. These formats can be used on existing number columns or custom columns.

- a. To change the format of the column, navigate to the column and click the menu icon (☰). The formatting options appear at the bottom of the list.



- b. You can either use a pre-set format or create a custom format.
- c. **Pre-set Format Options:** Hover over “Format Options” to view the format options. Click a format to change the column.

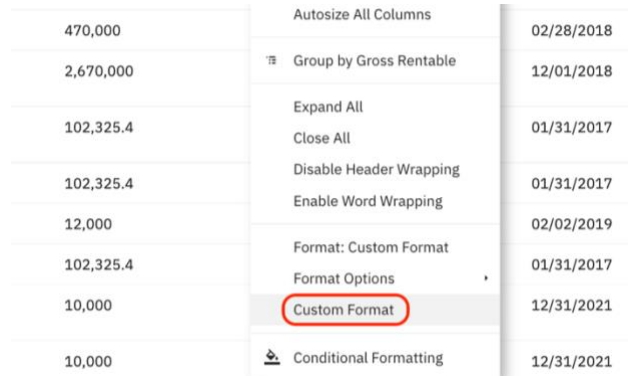


Format	Input	Output
Default	10000.56	10000.56

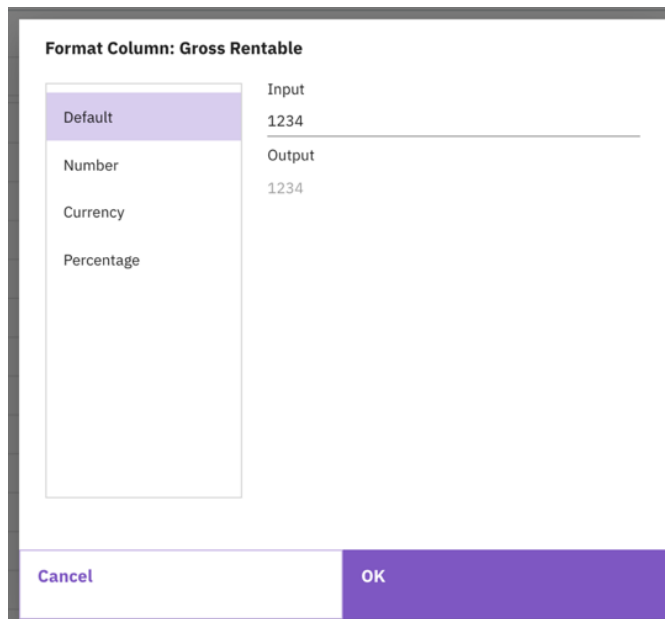
With 1000 Separator	10000.56	10,000.56
With 1000 Separator (Rounded)	10000.56	10,001
Percentage	1	100%
Nearest Unit	10000.56	10k

d. Custom Format:

i. Select "Custom Format"

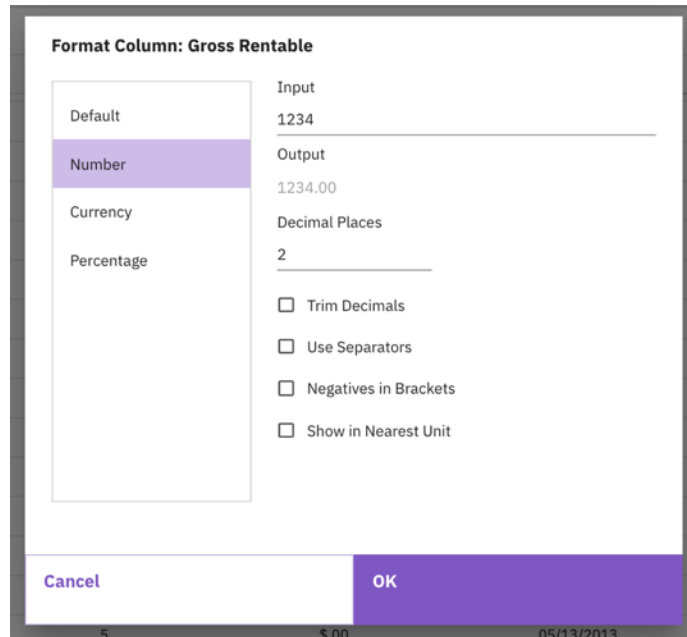


- ii. A pop-up will appear showing what the current format is. At any time you can click Cancel to get out of the custom format window, or OK to save your format selection.



- iii. The first step is to decide whether you want to reformat the column as a Number, Currency, or Percentage. Select either Number, Currency or

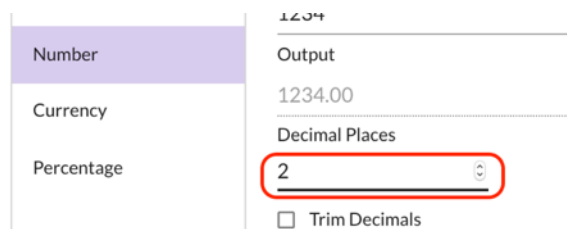
Percentage along the left-hand side. The formats outlined below work the same for each of them.



- **Input:** Sample Number
- **Output:** Formatted Number

Input
1234
Output
1,234

- **Decimal Places:** Specify how many decimal places you would like shown on each of the rows. To do this you can either type the number of decimals you want shown or use the arrows at the end of the row



- **Trim Decimals:** removes unnecessary decimals, i.e. removes trailing 0s.

To add it into your format, click the check box beside.

Default	Input 1234
Number	Output 1234
Currency	Decimal Places 2
Percentage	<input checked="" type="checkbox"/> Trim Decimals <input type="checkbox"/> Use Separators

Next, specify the number of decimals you want to trim down to in the “Decimal Places” section above. By selecting 2 decimals, the maximum number of decimal places that will remain is 2. If any of the numbers have less than 2 decimals, they will remain the same.

For example:
Input: 10,000.22000
Output: 10,000.22

Input: 10,000.2
Output: 10,000.2

- **Use Separators:** add commas to segment numbers
Select the box beside this if you would like to segment large numbers with commas.

For example:
Input: 100000
Output: 100,000

Default	Input 1234
Number	Output 1,234.00
Currency	Decimal Places 2
Percentage	<input type="checkbox"/> Trim Decimals
	<input checked="" type="checkbox"/> Use Separators
	<input type="checkbox"/> Negatives in Brackets

- **Negative in brackets:** Adds brackets to any negative number. Select the check box beside this option to apply it.

For example:
Input: -10,000
Output: (10,000)

Number	Output 1234.00
Currency	Decimal Places 2
Percentage	<input type="checkbox"/> Trim Decimals
	<input type="checkbox"/> Use Separators
	<input checked="" type="checkbox"/> Negatives in Brackets

- **Show in Nearest Unit:** trims the number to its nearest unit. Select the checkbox beside this option to apply it in the format.

For example:
Input: 1230
Output: 1.23k

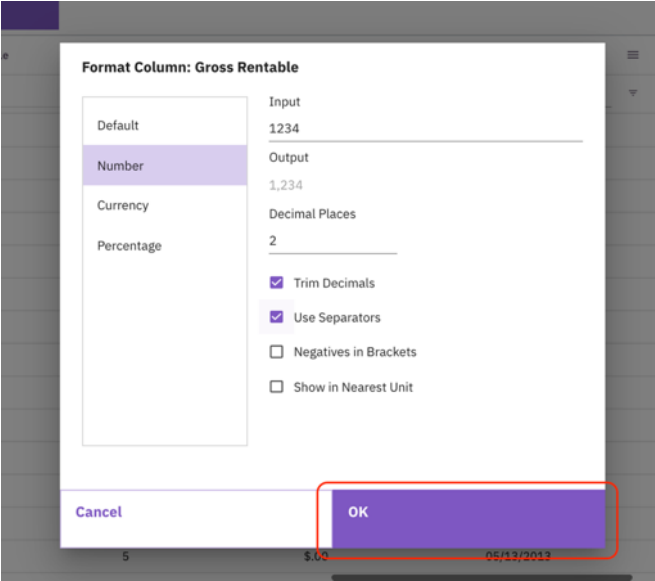
Default	1234
Number	Output 1.23k
Currency	Decimal Places 2
Percentage	<input type="checkbox"/> Trim Decimals
	<input type="checkbox"/> Use Separators
	<input type="checkbox"/> Negatives in Brackets
	<input checked="" type="checkbox"/> Show in Nearest Unit

e. You can combine any of the formatting options together to get your desired output. For example, my selections below:

Format Column: Contract Rentable

Default	Input 1234
Number	Output 1,234
Currency	Decimal Places 2
Percentage	<input checked="" type="checkbox"/> Trim Decimals
	<input checked="" type="checkbox"/> Use Separators
	<input type="checkbox"/> Negatives in Brackets
	<input type="checkbox"/> Show in Nearest Unit

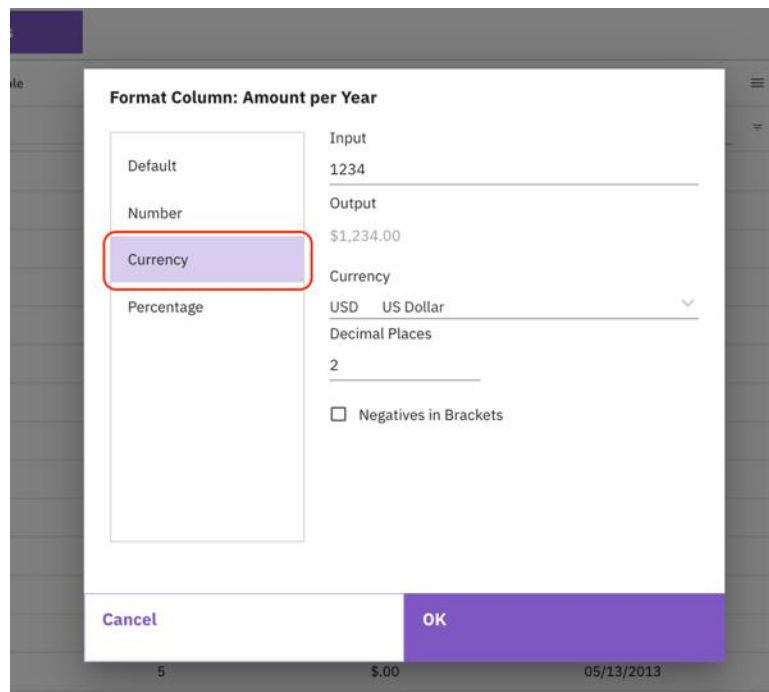
f. Once you're happy with your format selection, click OK.



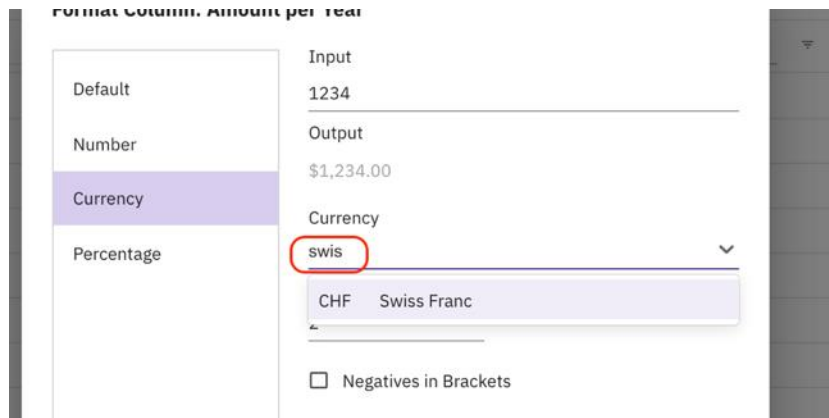
g. Your column will format accordingly (see below).

Gross Rentable		Gross Rentable	
200000		200,000	
3010		3,010	
13650.65		13,650.65	
2208.584		2,208.58	
13650.65		13,650.65	
13650.65		13,650.65	
65000		65,000	
	→	130,000	

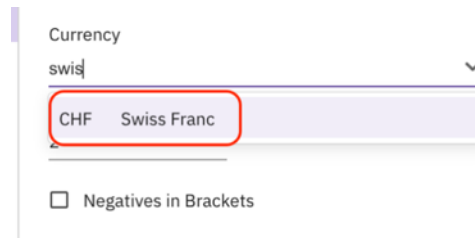
- h. Custom Currency Format: You can re-format your numbers to a specific currency (please note, this function does not auto calculate the currency conversion). If you want to convert the currency you should use a custom column.
 - i. Select Currency



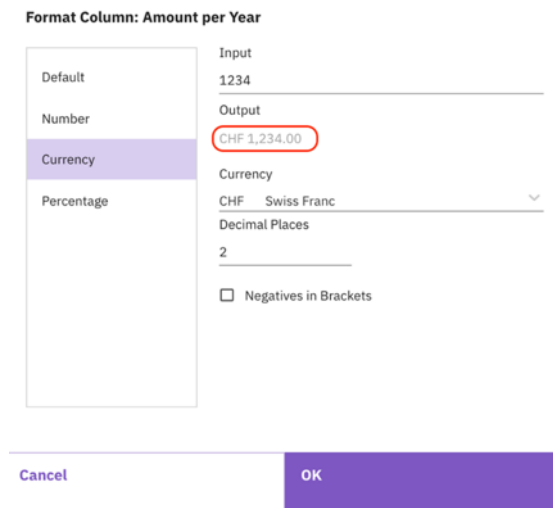
- ii. Using the drop down, either scroll to select the currency or type the currency/country you are looking for



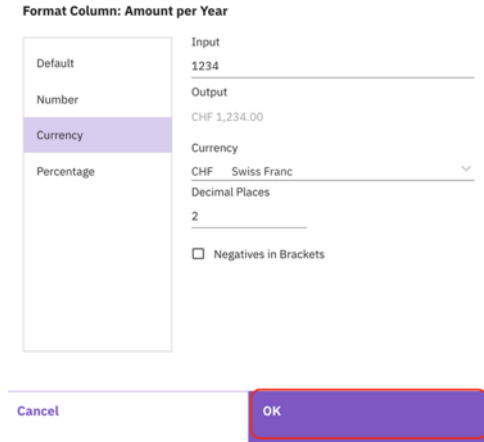
- iii. Select the currency to re-format the number to



- iv. The Output will update

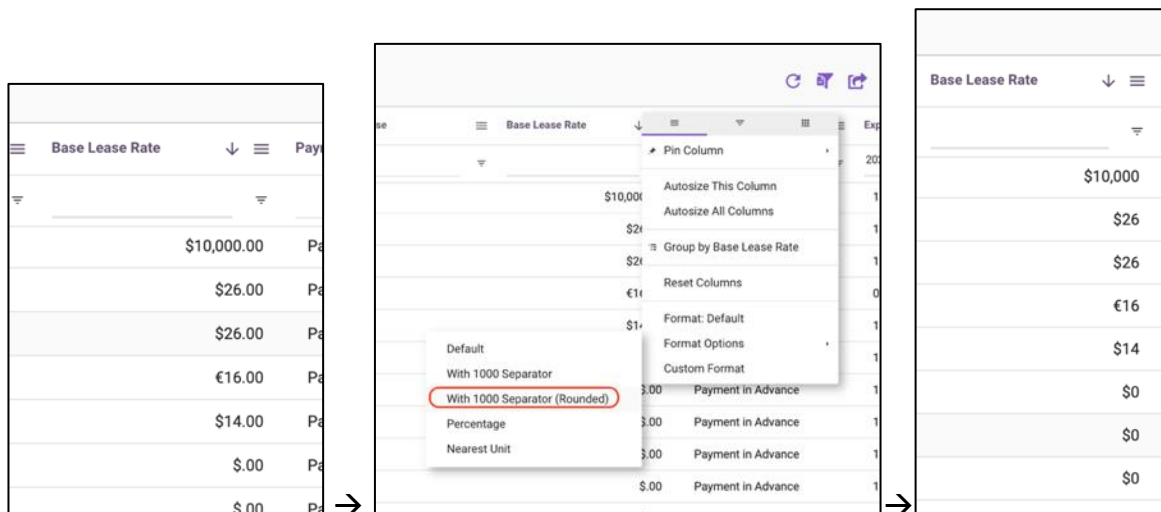


- v. Click OK to apply to re-formatted number

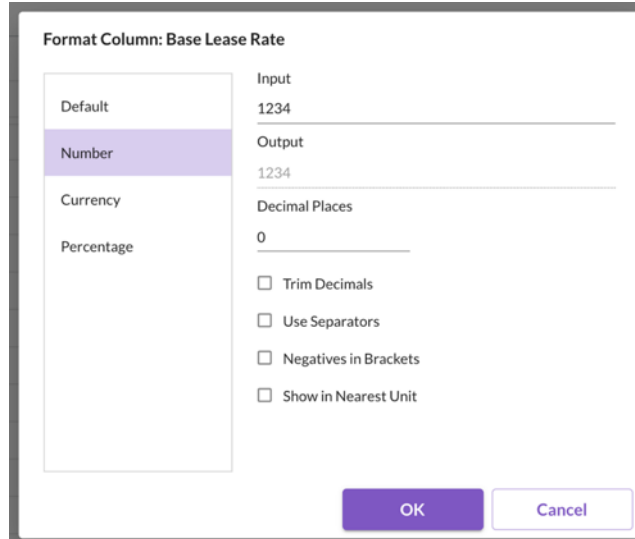


i. Formatting for TRIRIGA Currency Fields

- i. If you would like to keep the currency symbol specified in TRIRIGA, reformat your column with the “Number” option. You can use default or custom formatting
- ii. For example, for the Base Lease Rate column (below), we have currency symbols dollars and euros. If we want to keep those currency symbols but remove the decimals:



- iii. OR: you can custom format as you wish using the Number window



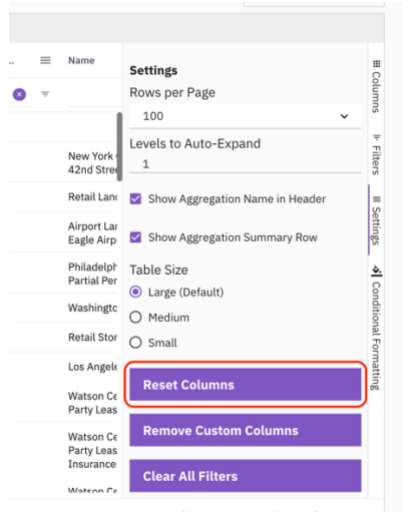
15. Reset Columns

Resetting columns will Easily return the report formatting back to the original

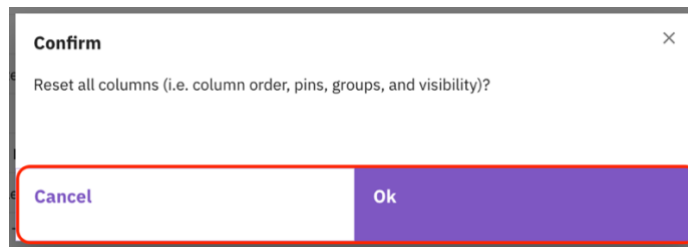
a. Navigate to Settings

Group	Contract Status	Contract Type	Active End Date	City	Status
United States (25)					
ord - 1339 E	Active	Owned Property	02/28/2018	New York	Active
Mall	Active	Owned Property		Charlotte	Active
riotte Bald	Active	Owned Property		Charlotte	Active
riple Net - -Line	Active	Real Estate Lease	01/31/2017	Philadelphia	Active
al Lease	Active	Real Estate Lease	01/31/2017	Washington	Active
i4 Calendar	Active	Real Estate Lease	02/02/2019	Charlotte	Active
riple Net	Active	Real Estate Lease	01/31/2017	Los Angeles	Active
otte - Third -Advisors	Active	Real Estate Lease	12/31/2021	Charlotte	Active

b. Click Reset Columns



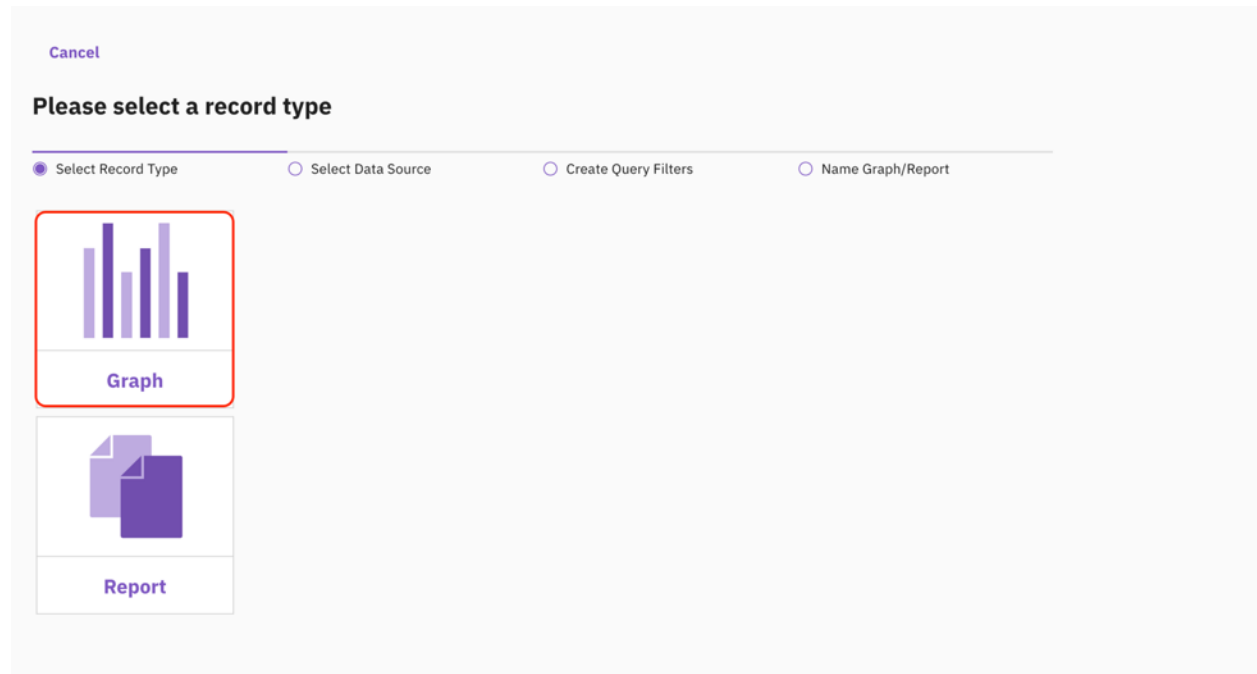
- c. Click OK to reset the columns. Or Cancel if you do not wish to reset the columns.



CREATE A GRAPH

1. *Selecting a Graph Source*

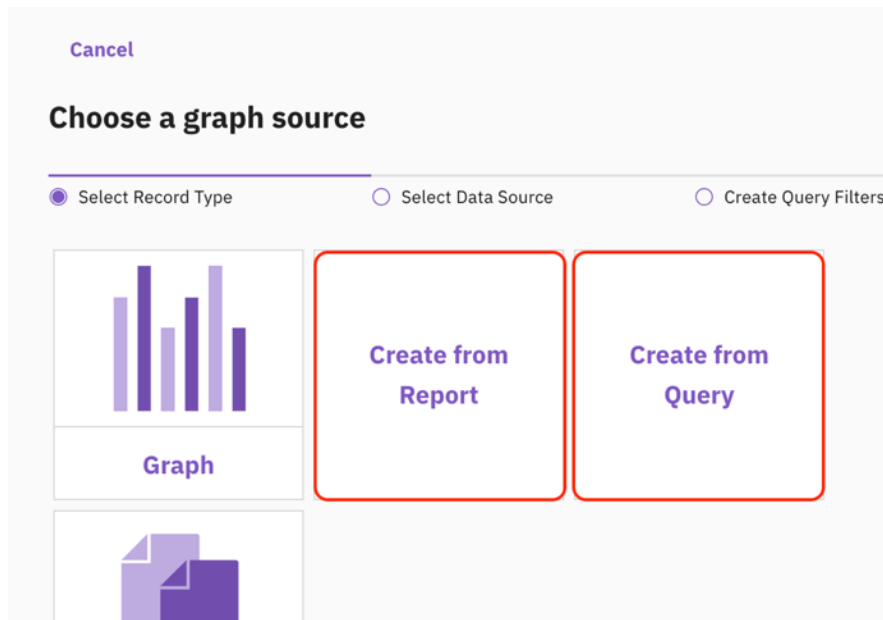
- a. From the Kurve Dashboard, click on the Create Icon (+) to create a new record;
- b. Select 'Graph' as your record type (options being Graph or Report);



2. *Creating a Graph from a Query or Report*

Select the source of your graph data. There are two options to select from:

- a. Query (Section 2.a.)
- b. An Existing Report (Section 2.b.)



2.A. Creating a Graph from a Query

- a. Click “Create from Query,” and a new page will open. The list will show 10 of Kurve’s pre-set starter queries to choose from.

Cancel Back a step

Select a source query

Select Record Type Select Data Source Create Query Filters Name Graph/Report

Rows per page: 10 1-10 of 10 < >

QUERY TITLE	QUERY NAME	MODULE	BO	TAGS	TYPE
Contains	Contains	Contains	Contains	Contains	
All Active Leases	cstRealEstateContract - All Active Lease Data - Kurve Starter	triContract	triRealEstateContract	Kurve Starter Queries	Query
All Active Leases and Payment Schedules	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	triContract	triRealEstateContract	Kurve Starter Queries	Query
All Buildings with Space and Floor Capacity	cstBuilding - All Buildings with Space and Floor Capacity - Kurve Starter	Location	triBuilding	Kurve Starter Queries	Query
All Capital Projects	cstCapitalProject - All Capital Projects - Kurve Starter	triProject	triCapitalProject	Kurve Starter Queries	Query
All Capital Projects and Locations	cstCapitalProject - All Capital Projects and Locations - Kurve Starter	triProject	triCapitalProject	Kurve Starter Queries	Query
All Capital Projects with Contact Roles	cstCapitalProject - All Capital Projects Data with Contact Roles - Kurve Starter	triProject	triCapitalProject	Kurve Starter Queries	Query
All Corrective Work Tasks with Request Class	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	triTask	triWorkTask	Kurve Starter Queries	Query
All Preventive Work Tasks with Request Class	cstWorkTask - All Preventive Work Tasks with Request Class - Kurve Starter	triTask	triWorkTask	Kurve Starter Queries	Query
All Space Classes	cstSpaceClassCurrent - All Space Classes - Kurve Starter	Classification	triSpaceClassCurrent	Kurve Starter Queries	Query

- b. Select the query you would like to use as your graph’s data source:
 - i. Columns are organized in a table by *Query Title*, *Query Name*, *Module*, *BO* and *Tags*.

Cancel Back a step

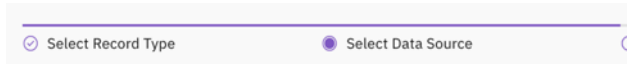
Select a source query

Select Record Type Select Data Source Create Query Filters Name Graph/Report

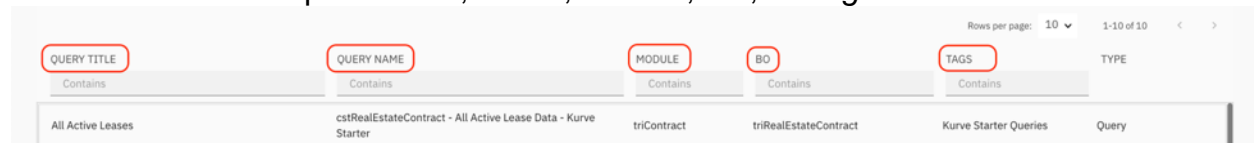
Rows per page: 10 1-10 of 10 < >

QUERY TITLE	QUERY NAME	MODULE	BO	TAGS	TYPE
Contains	Contains	Contains	Contains	Contains	
All Active Leases	cstRealEstateContract - All Active Lease Data - Kurve Starter	triContract	triRealEstateContract	Kurve Starter Queries	Query
All Active Leases and Payment Schedules	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	triContract	triRealEstateContract	Kurve Starter Queries	Query

Back a step	(Top right of screen) Click to back to the previous page to choose a graph source
Cancel	(Top left of screen) Click to cancel making a graph and go back to the Kurve Dashboard

Stepper	 <p>The Stepper is also clickable if you need to go back a step once you've completed it</p>
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c. If you want to use another query in the system, you can search using one or more of the options *Title, Name, Module, BO, or Tag*:



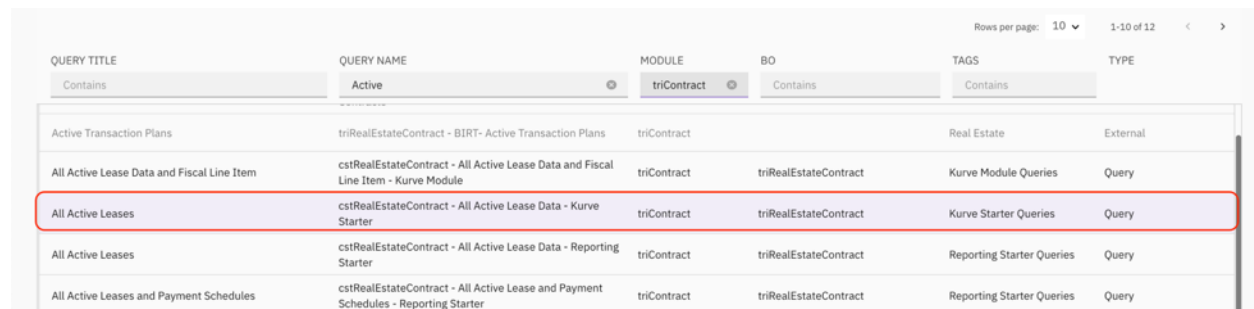
QUERY TITLE	QUERY NAME	MODULE	BO	TAGS	TYPE
Contains	Contains	Contains	Contains	Contains	
All Active Leases	cstRealEstateContract - All Active Lease Data - Kurve Starter	triContract	triRealEstateContract	Kurve Starter Queries	Query

d. Click into the search field and type the word or phrase. Click the enter on your keyboard to initiate the search. In the below example, we are searching “Active” under the Query Name and “triContract” as the Module.



QUERY TITLE	QUERY NAME	MODULE	BO
Contains	Active	triContract	Contains
All Active Leases	cstRealEstateContract - All Active Lease Data - Kurve Starter	triContract	triRealEstateContract

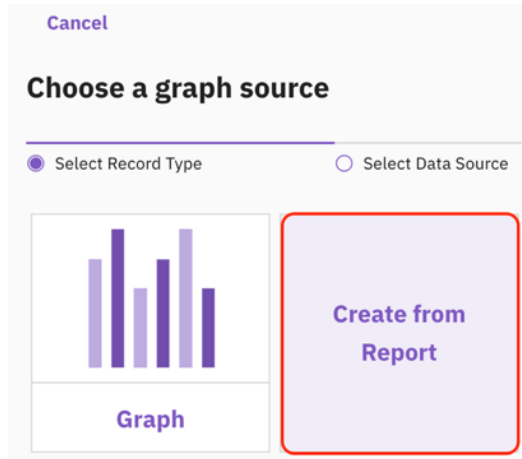
e. Scroll through the list (scroll bar on the righthand side of the table) and click on the query you would like to use to make a graph;



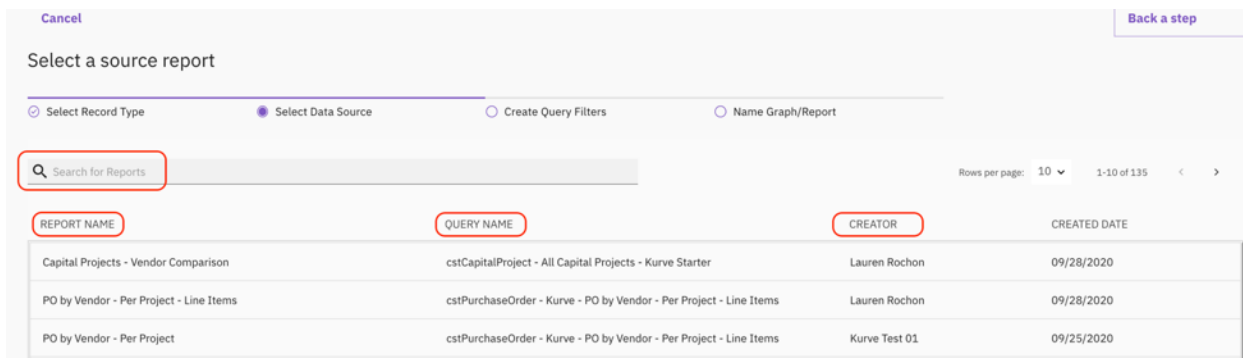
QUERY TITLE	QUERY NAME	MODULE	BO	TAGS	TYPE
Contains	Active	triContract	Contains	Contains	
Active Transaction Plans	triRealEstateContract - BIRT - Active Transaction Plans	triContract		Real Estate	External
All Active Lease Data and Fiscal Line Item	cstRealEstateContract - All Active Lease Data and Fiscal Line Item - Kurve Module	triContract	triRealEstateContract	Kurve Module Queries	Query
All Active Leases	cstRealEstateContract - All Active Lease Data - Kurve Starter	triContract	triRealEstateContract	Kurve Starter Queries	Query
All Active Leases	cstRealEstateContract - All Active Lease Data - Reporting Starter	triContract	triRealEstateContract	Reporting Starter Queries	Query
All Active Leases and Payment Schedules	cstRealEstateContract - All Active Lease and Payment Schedules - Reporting Starter	triContract	triRealEstateContract	Reporting Starter Queries	Query

2.B. Creating a Graph from a Kurve Report

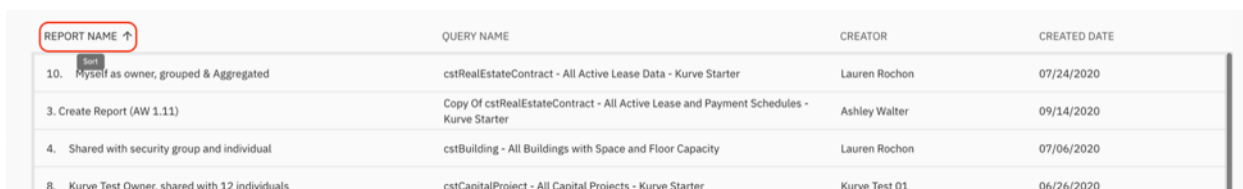
a. Select Create from Report



- b. Search for the Report you would like to use as your graph's data source. Columns are organized in a table by *Report Name*, *Query Title* and *Creator*.



- c. Click on any of the headers to sort them. Click once for ascending, twice for descending, and a third time to clear the sort.



- d. Select the Kurve Report you would like to use as your data source.

REPORT NAME	QUERY NAME	CREATOR	CREATED DATE
Capital Projects - Vendor Comparison	cstCapitalProject - All Capital Projects - Kurve Starter	Lauren Rochon	09/28/2020
PO by Vendor - Per Project - Line Items	cstPurchaseOrder - Kurve - PO by Vendor - Per Project - Line Items	Lauren Rochon	09/28/2020
PO by Vendor - Per Project	cstPurchaseOrder - Kurve - PO by Vendor - Per Project - Line Items	Kurve Test 01	09/25/2020
David's Test Report	cstPurchaseOrder - Kurve - PO by Vendor - Per Project - Line Items	David Yew	09/24/2020

3. Create Query Filters

With Kurve Query Filters you can create and apply filters before loading your graph. This will help to improve load times and see only the data that is relevant to you. Query Filters can be added to any column from the Primary Business Object.

Cancel Back a step Skip

Create query filters

Select Record Type Select Data Source **Create Query Filters** Name Graph/Report

Only columns from the Primary Business Object can be selected for Query Filters. Some columns on the query may not be available.
Filter Created: 0/12

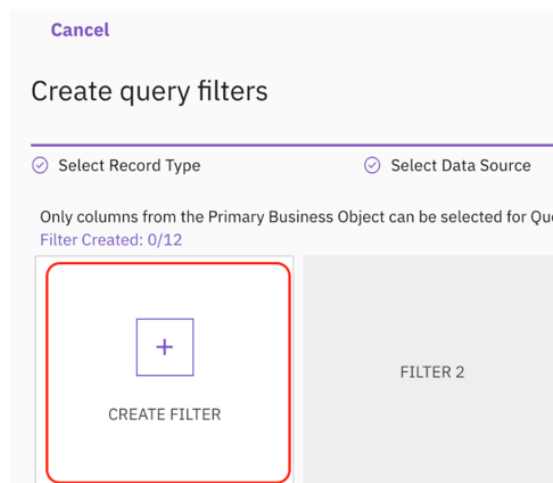
+	FILTER 2	FILTER 3	FILTER 4	FILTER 5	FILTER 6
CREATE FILTER					
FILTER 7	FILTER 8	FILTER 9	FILTER 10	FILTER 11	FILTER 12

Below is the list of column types and filter types available:

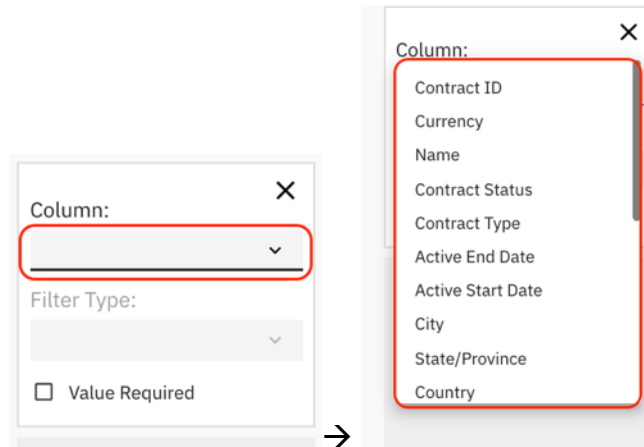
Column Type	Filter Types	“Add/View Values” list applicable?
-------------	--------------	------------------------------------

Text Column	Equals Not Equals Contains Does Not Contain Starts With Ends With In Not In	Yes: Equals Not Equals In Not In
Number Column	Equals Not Equals More Than or Equals More Than Less Than or Equals Less Than	No
Date Column	Before After Equals Not Equals More Than or Equals Less Than or Equals	No
DateTime Column	Before After Equals Not Equals More Than or Equals Less Than or Equals	No

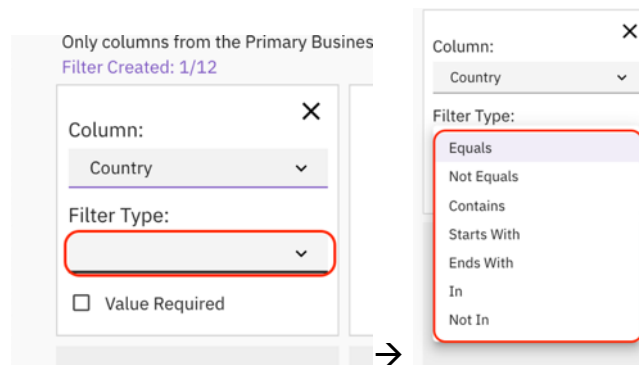
- a. Create a new filter by clicking on the first open box “Create Filter”



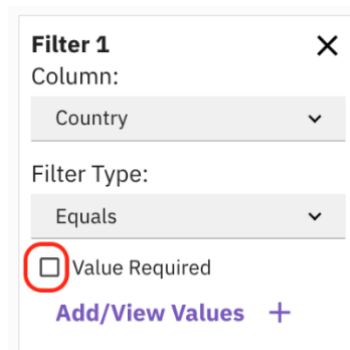
b. Next, select the column from the query that you would like to have a filter



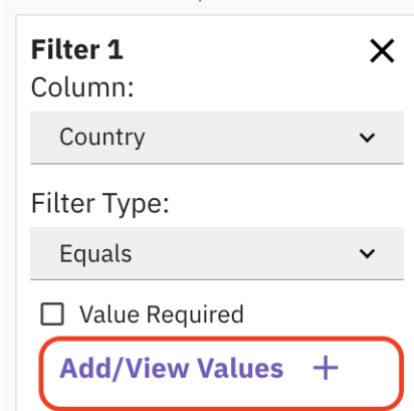
c. Now, select the filter type:



d. Select whether the filter will be required or not upon loading the graph by selecting the check box next to “Value Required”. By making the filter required, the user will not be able to load the graph unless they provide a value.



- e. Creating “Add/View Values” for text columns with Filter Types Equals, Not Equals, In and Not In:
- In this example we will use the filter type Equals. Click “Add/View Values” button under “Value Required”



Filter 1 ✕

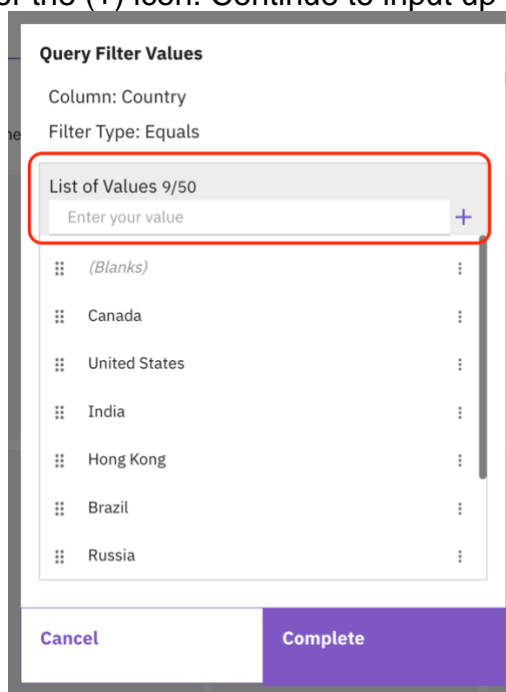
Column:
Country ▼

Filter Type:
Equals ▼

Value Required

Add/View Values +

- Type in the desired list of value in the List of Values box then press enter or the (+) icon. Continue to input up to 50 values.



Query Filter Values

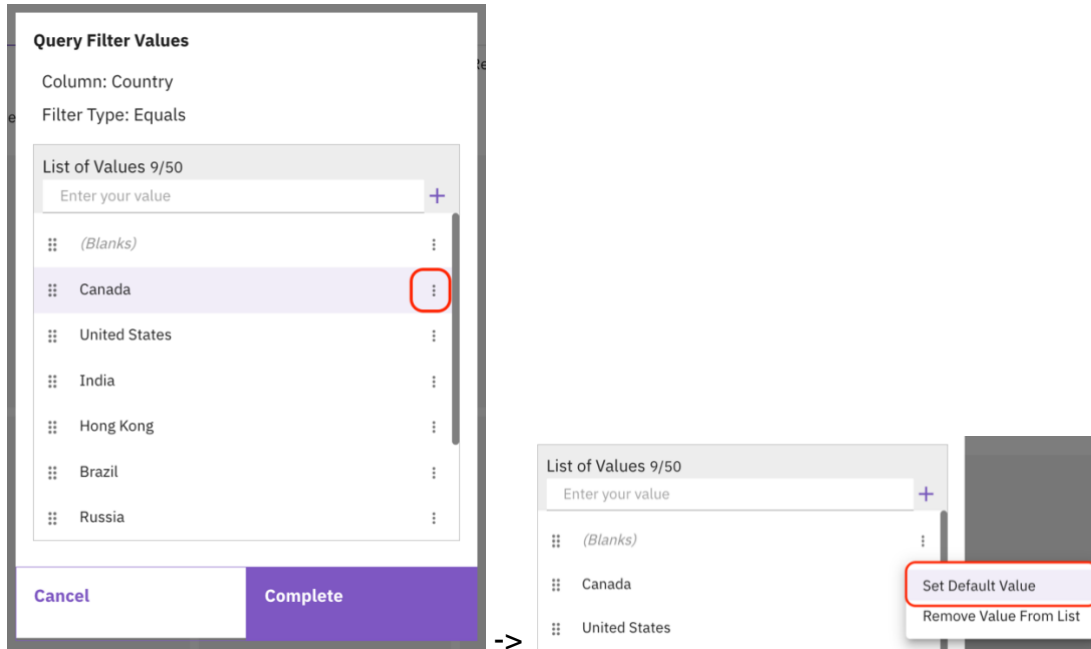
Column: Country
Filter Type: Equals

List of Values 9/50
Enter your value +

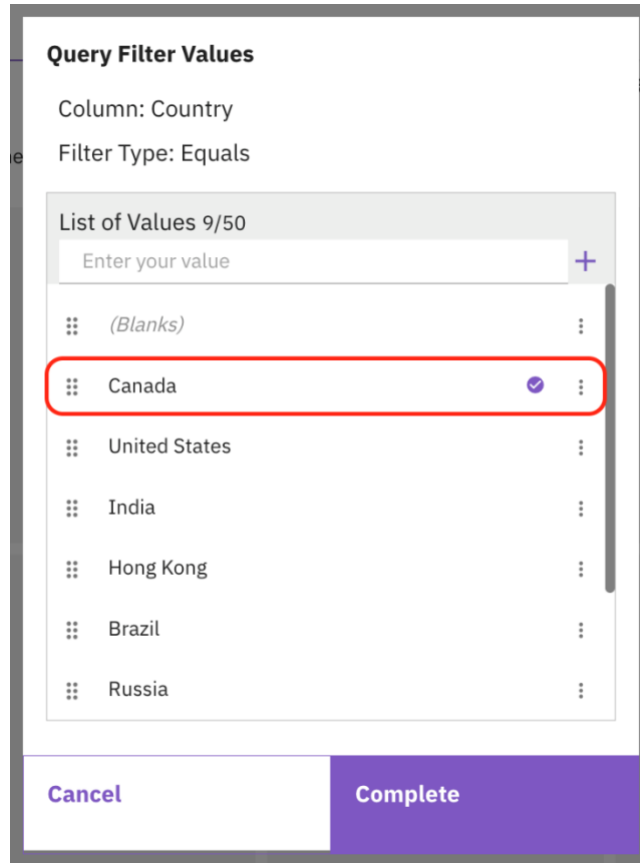
- ⋮ (Blanks) ⋮
- ⋮ Canada ⋮
- ⋮ United States ⋮
- ⋮ India ⋮
- ⋮ Hong Kong ⋮
- ⋮ Brazil ⋮
- ⋮ Russia ⋮

Cancel **Complete**

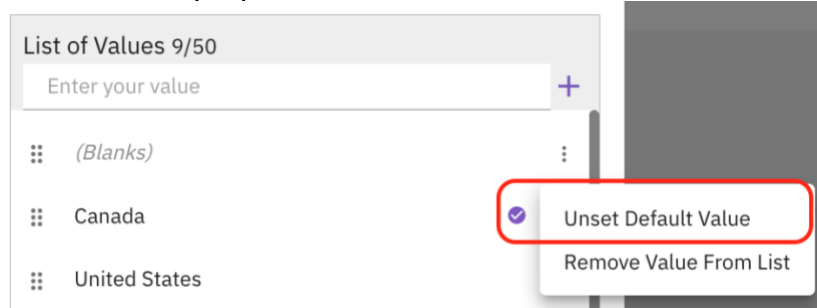
- Once you are finished your list, click “Complete” to save.
- If you would like to set one of your values as a default value click the icon to the right of the value. Default values will pre-populate in the query filter when loading a graph/report.



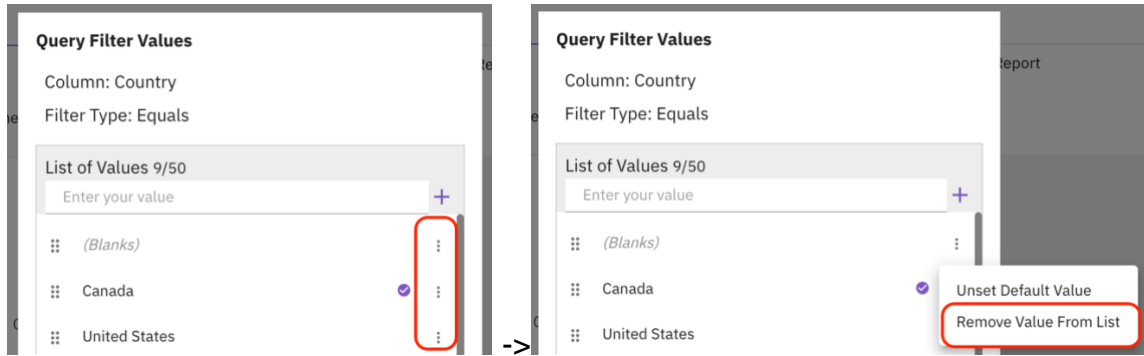
- Once the default value is set, a purple checkmark will indicate the chosen value. Note: Only one default value can be set for Filter Type: Equals/Not Equals. Multiple default values can be set for Filter Type: In/Not In.



- To unset a default value, click “Unset Default Value” in the icon beside the purple checkmark.

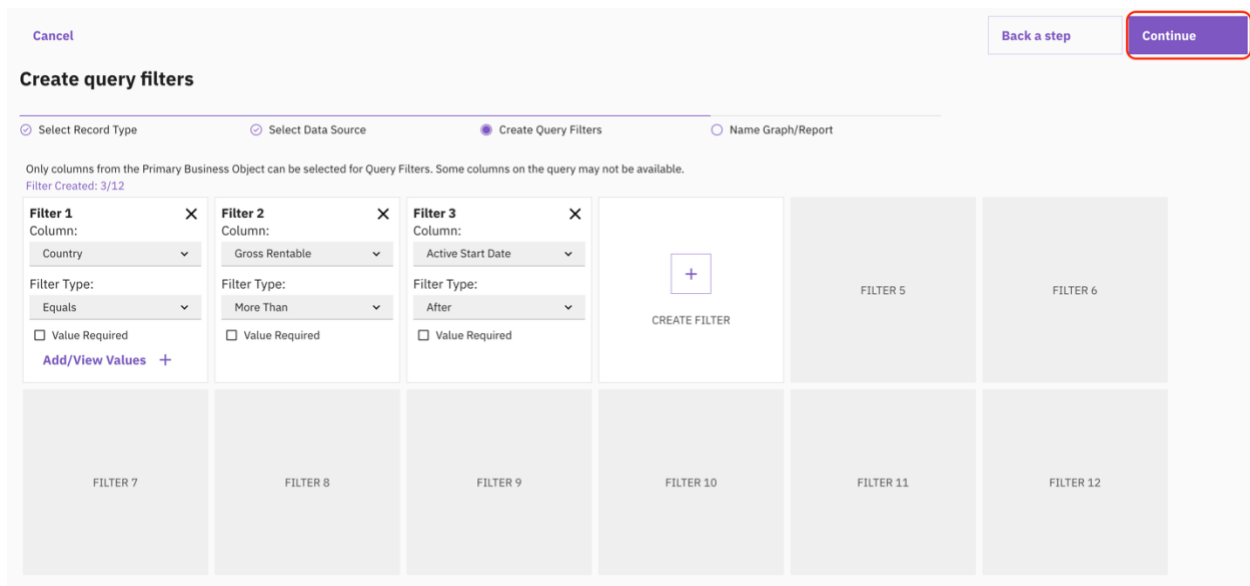


- To remove a value from your list, click “Remove Value From List” in the icon beside your value.



- Once you are satisfied with your list, click “Complete”.

f. You can continue making more filters using the same process. Once done creating them, click Continue.



4. Naming the Graph and selecting the Graph Type

a. The next step will let you name your graph and select the graph type you'd like to portray your data.

Cancel Back a step Create Graph

Name and select a graph type







○ Select Record Type ○ Select Data Source ○ Create Query Filters ● Name Graph/Report

Review your selections and create your graph

Record Type: Graph
Data Source: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter
Query Filters: No Filters Created

Graph Name

Select Graph Type:

 Column	 Stacked Column	 Bar	 Stacked Bar	 Line	 Pie
---	---	--	--	---	--






b. Input your graph name

Graph Name

All Active Leases

c. Select your Graph Type. Your selected graph type will be highlighted in purple.

Select Graph Type:

 Column	 Stacked Column	 Bar	 Stacked Bar	 Li
---	---	--	---	---

d. Select “Create Graph” to make your graph selections.

Cancel Back a step Create Graph

Name and select a graph type

○ Select Record Type ○ Select Data Source ○ Create Query Filters ● Name Graph/Report










Review your selections and create your graph

Record Type: Graph
Data Source: cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter
Query Filters: No Filters Created

Graph Name










All Active Leases

Select Graph Type:

 Column	 Stacked Column	 Bar	 Stacked Bar	 Line	 Pie	 Scatter	 Area	 Combo Chart
---	---	--	--	---	--	---	---	--

The types of graphs are described below:

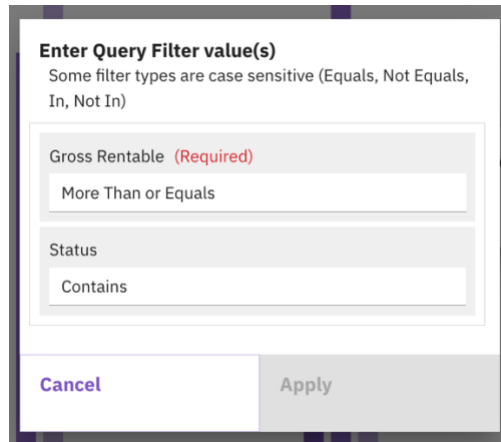
150

	Column	Used to compare different groups and their quantitative values (e.g Total Cost of Rent by Building). Each column can be colored by a different dimension. You could also use count of records as your quantitative value or measure.
	Stacked Column	Used to compare different groups and their quantitative values (e.g Total Cost of Rent by Building). Each column can be split by a selected “Color By” property. You could also use count of records as your quantitative value or measure.
	Bar	Same as Column Graph, except the columns are horizontal.
	Stacked Bar	Same as Stacked Column Graph, except the columns are horizontal.
	Line	Used to show trends of values over a numerical dimension, such as Cost over Time, Cost per Sq-Ft over Total Square Footage etc.
	Pie	Used when you are trying to compare parts of a whole. They do not show changes over time. Convert any pie chart to a donut within Graph Settings.
	Scatter	Used to show correlations between two properties. In scatter graphs, look for trends and clusters of occurrences.
	Area	Used to show trends of values over a numerical dimension, such as Cost over Time, Cost per Sq-Ft over Total Square Footage etc. Area graphs are good to use when comparing the changes in two or more related groups that make up one whole category.
	Combo Chart	A combination chart (Combo Chart) allows you to visualize multiple series in a single graph. For example, a graph can include a set of column series, overlaid by a line and a pie series.

5. Enter Query Filter value(s)

a. Required Filters:

- i. Before creating the graph, if you have selected Required on any of your query filters on the graph, you will need to input values. The Apply button will be greyed out until providing a value for the required field.



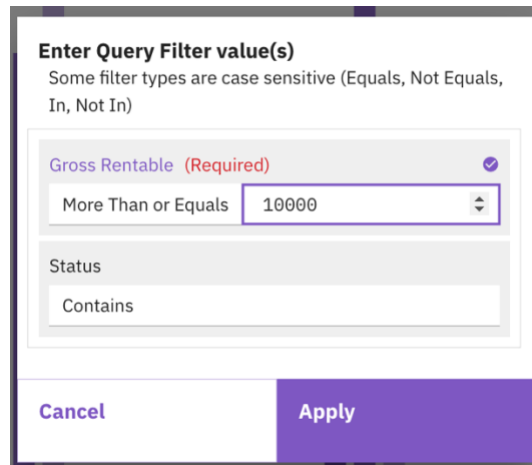
Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Gross Rentable (Required)
More Than or Equals

Status
Contains

Cancel Apply

- ii. Input a value in the white box next to the filter type. Below we have inputted 10,000. You will notice the apply button turns purple upon providing a value. (Please note, some text values are case sensitive)



Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Gross Rentable (Required) ✓
More Than or Equals 10000

Status
Contains

Cancel Apply

- iii. Click Apply.

- b. For your filters with lists created, for Equals/Not Equals you can select 1 value, for In/Not In you can select multiple. Either select a value from the list or enter a temporary value in the box.
 - i. To enter a temporary value, input the text, and click 'Add'
 - ii. Click Apply to load the report with the query filter results. Query filters act as And filters. Therefore, in our example below, if we inputted a value into Task Priority as well, it would load results that satisfy both conditions.

- c. Non-required filters: you are not required to input a value for filters that aren't specified as required. Either enter a value and click Apply, or simply click "Skip" to load all query results.

Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

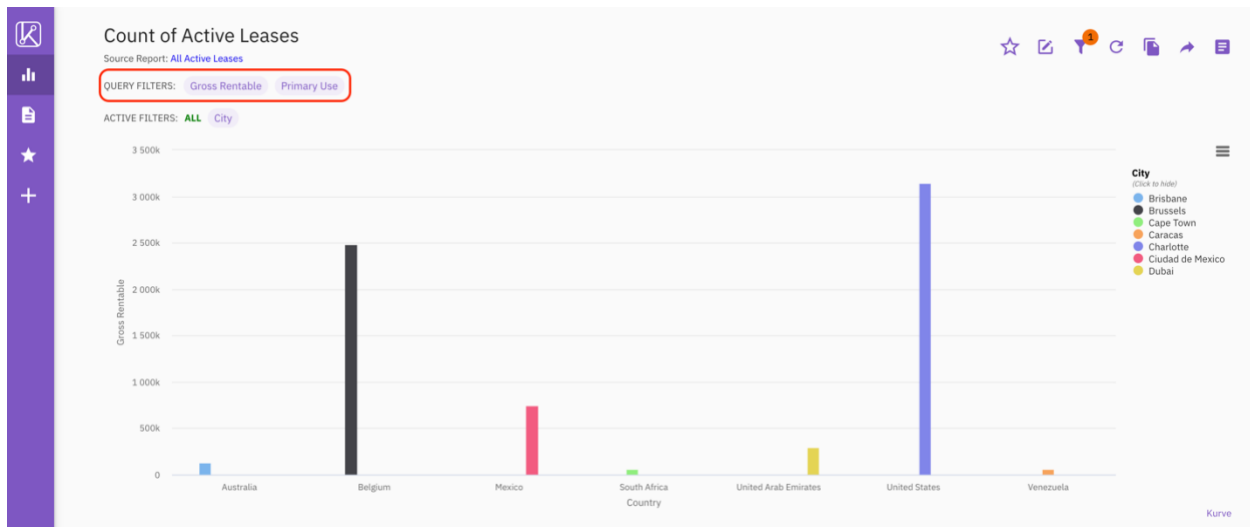
Status
Contains

Country
Equals

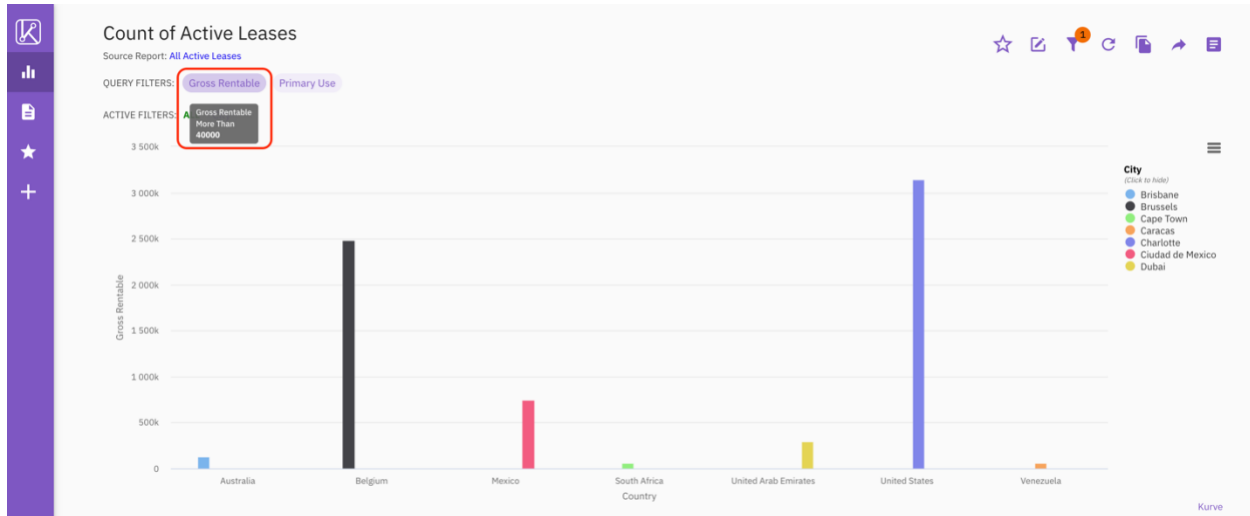
Primary Use
Starts With

Cancel Skip

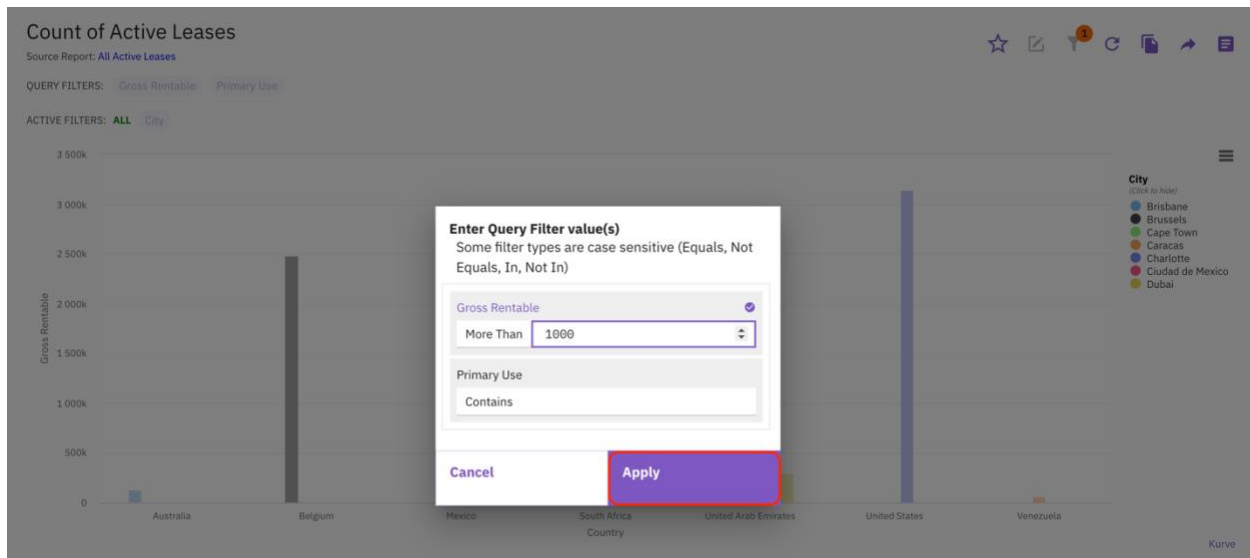
- i. Cancel: clicking cancel will return you back to the list of graphs and lose any of your selections from previous pages.
- d. View Query Filters Applied to Graph:
- i. Under the graph title, you can view all query filter values currently applied to the graph.



- ii. Hover over the filter to see the value.



- iii. Click on the token to edit your value. Don't forget to click apply to update your graph.



6. Selecting the Graph Settings

Once the graph has been created, you will be navigated to edit your graph. The following section is divided according to the four drawers visible in the graph customization panel (Graph Details, Graph Styles, Advanced Settings, Query Filters).

Open a drawer by clicking on the header.

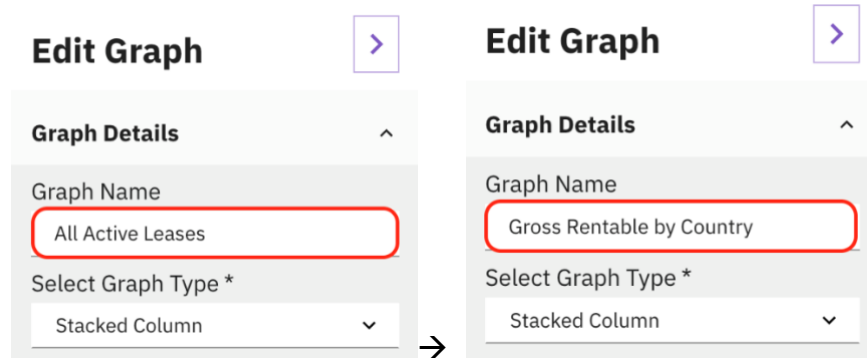


a. **Graph Details**

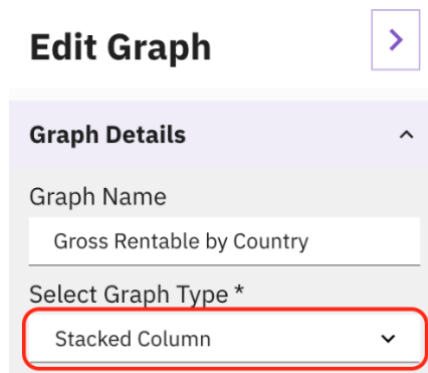
Note: The Graph Name and Graph Type have been pre-populated based on your earlier selections, but they can still be changed. When creating a graph, the Graph Details drawer will auto open.

This close-up shows the 'Edit Graph' sidebar with the 'Graph Details' section expanded. The fields are: 'Graph Name' (text input with 'All Active Leases'), 'Select Graph Type *' (dropdown menu with 'Stacked Column'), 'Select Dimension *' (dropdown menu), 'Select Measure *' (dropdown menu), and 'Select Color By' (dropdown menu). Below these is a note: 'Data series will be colored based on this property'.

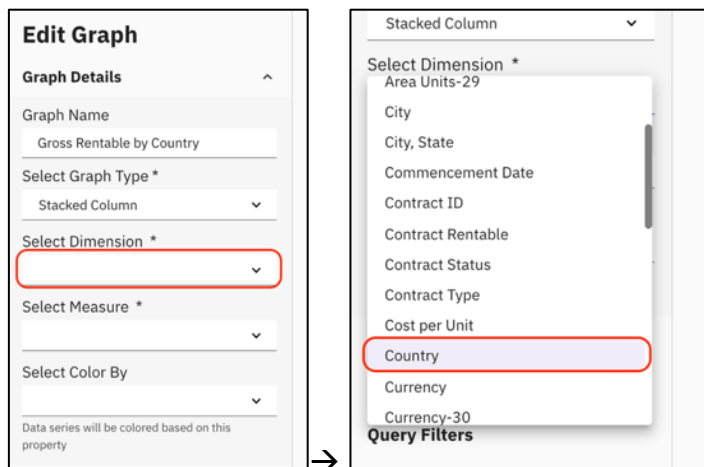
- i. **Graph Name:** to rename your graph, click into the white box under Graph Name and type your desired name.



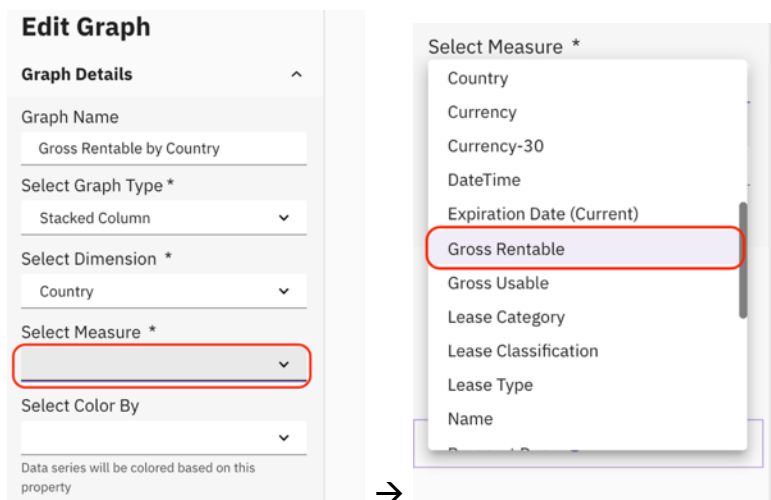
- ii. **Select Graph Type:** Click the drop-down menu (▼) to change the type of graph being used to portray the data



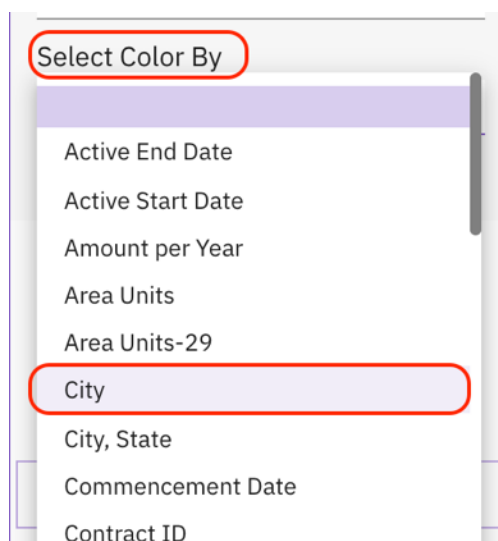
- iii. **Select Dimension:** Click the drop-down menu (▼) to select the Dimension field from the fields within the query/report



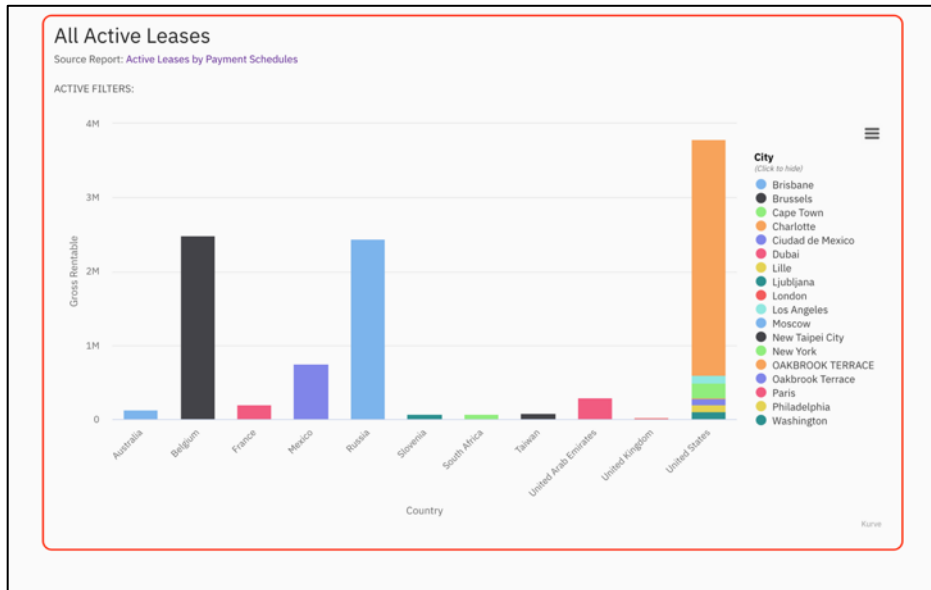
- iv. **Select Measure:** Click the drop-down menu (▼) to select the Measure field from the fields within the query/report



- v. **Select Color By:** Click the drop-down menu (▼) to select a field that will colour the data set

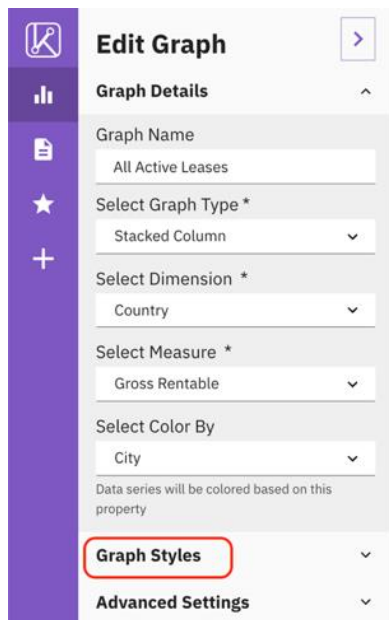


- vi. **Graph Preview:** As you make your selections, you can see the preview of the graph to the right

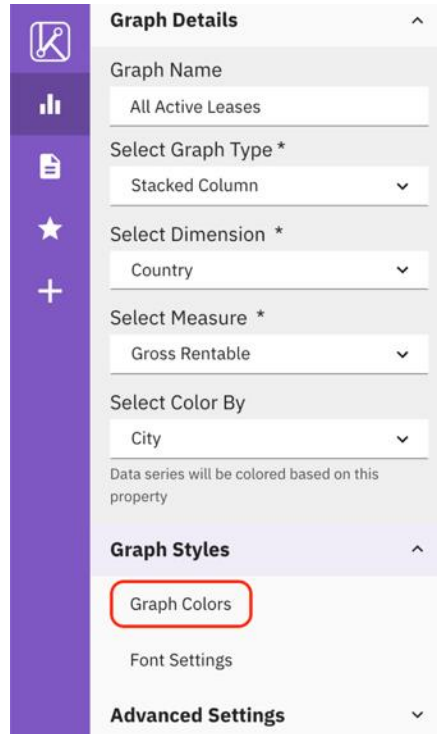


b. Graph Styles: Graph Colors

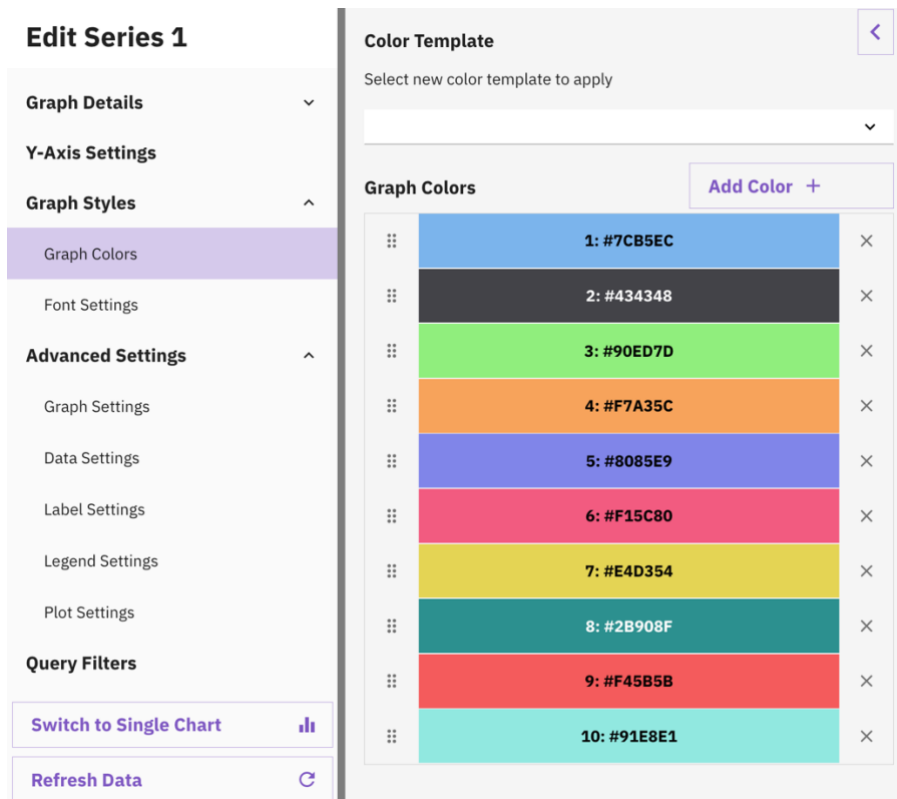
You can easily adjust the colors used in your graph and font settings.



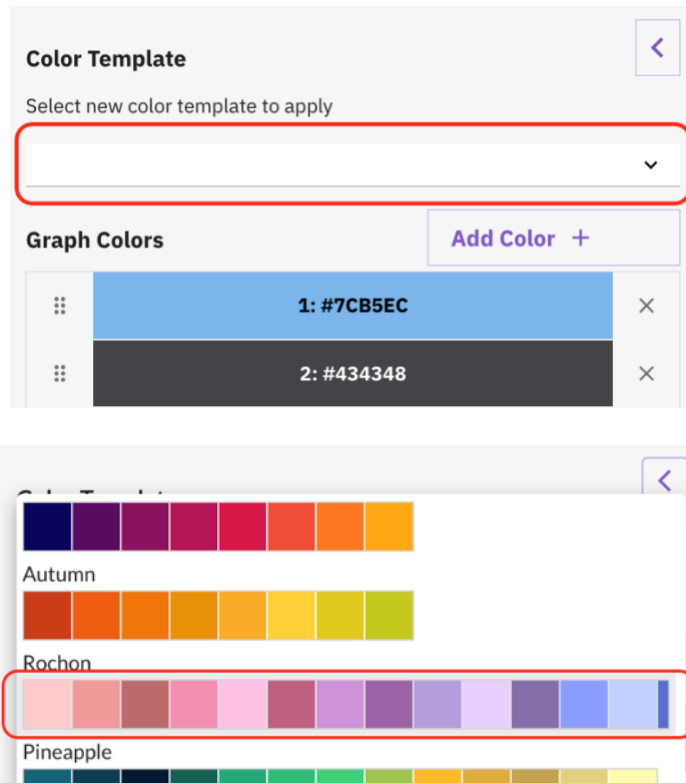
i. Graph Colors: Select the Graph Colors drawer.



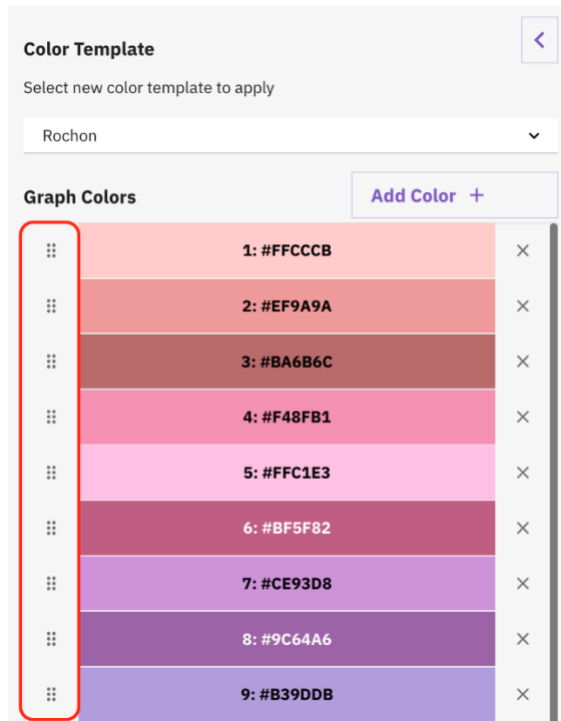
ii. A panel will pop up to the right.



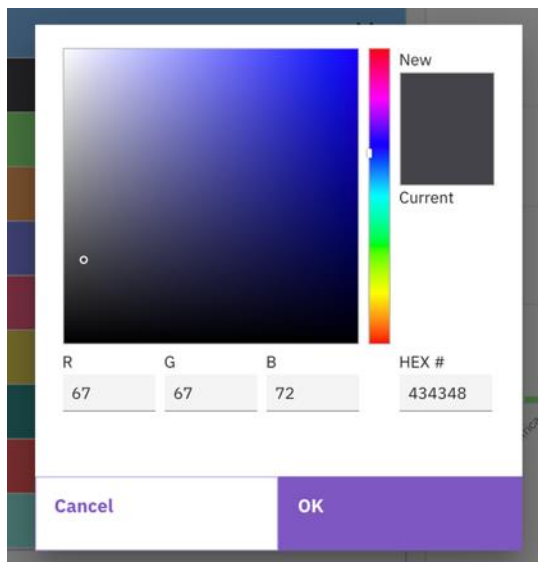
- iii. Select a color template by clicking the drop-down menu (▼) under Color Template. Then select a color template from a the list of color templates.



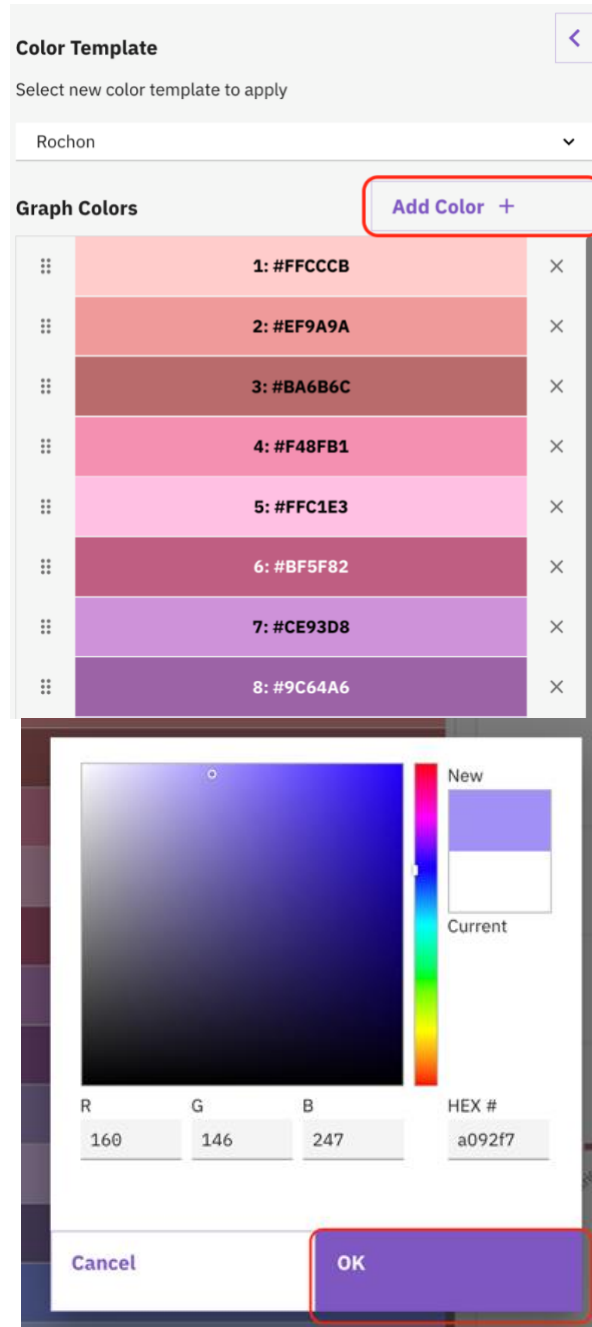
- iv. Drag and drop colors to change the order of the colors




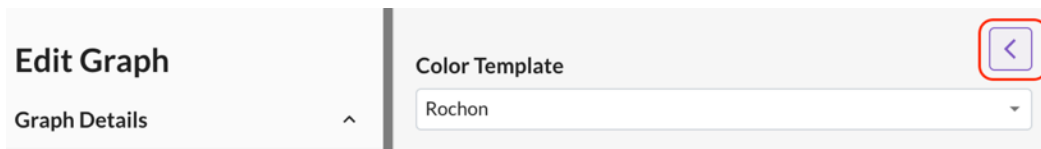
- v. Select a color to change the color using the Color Picker, or input an RGB or Hex Code (#) in the appropriate boxes



- vi. Add a color by clicking the Add Color button, choose your color, and then click 'OK'.

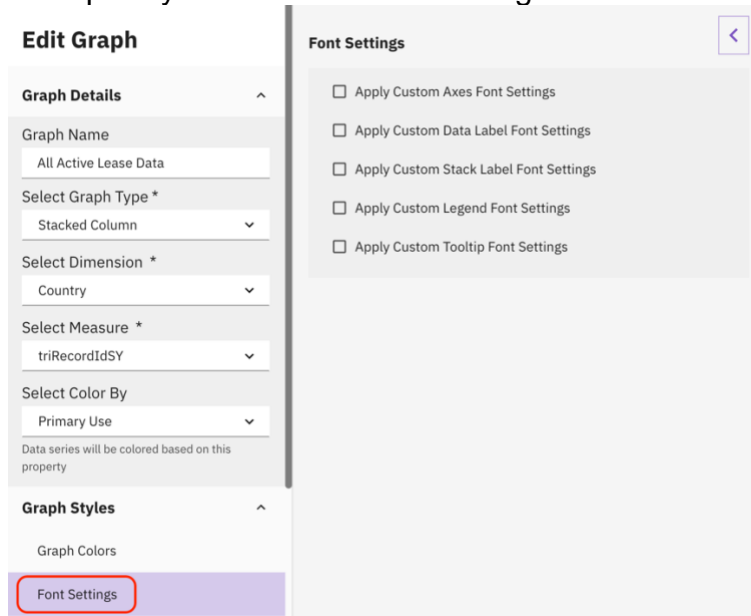


- vii. To close the Graph Colors side panel, click on the back icon (). It will auto close if you select other drawers



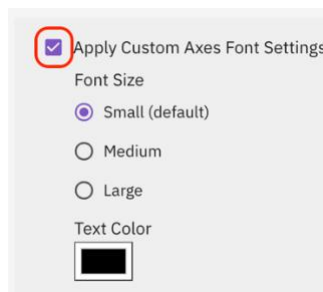
c. Graph Styles: Font Settings

i. Click Graph Styles and then Font Settings

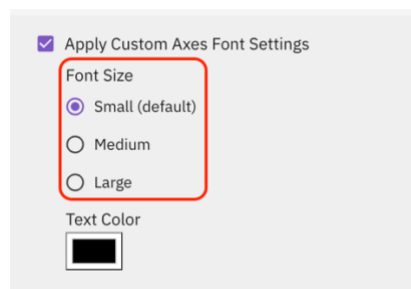


ii. Customize Axes Font Settings

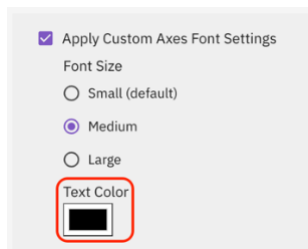
- Select the checkbox to enable changes to be made



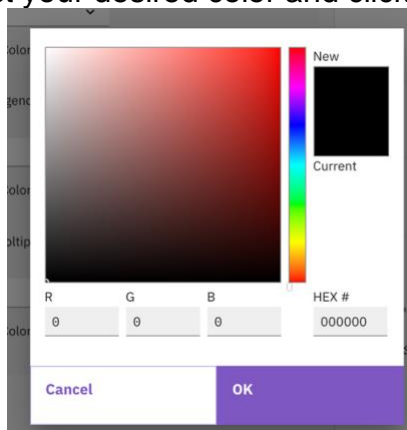
- Under Font Size, select your desired font size



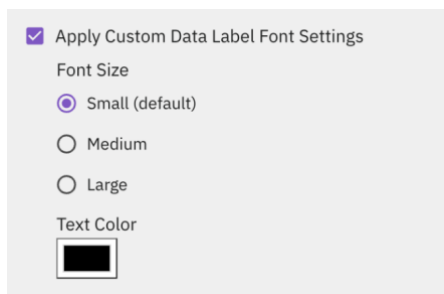
- To adjust the text color, select the color box to open the color picker



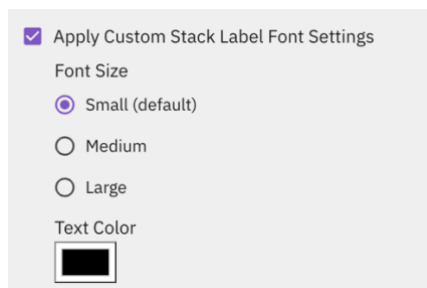
- Select your desired color and click OK



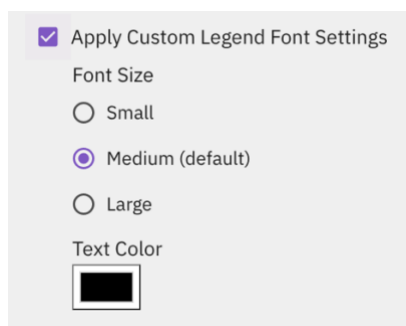
- iii. Customize Data Label Font Settings: repeat the process above under the Data Label Font Settings checkbox



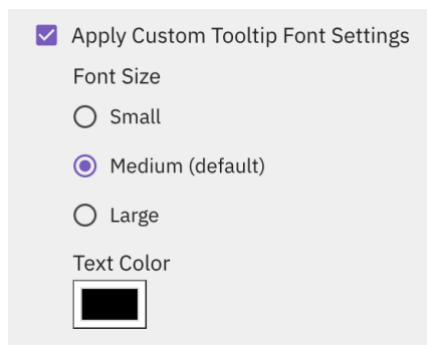
- iv. Customize Stack Label Font Settings: repeat the process above under the Stack Label Font Settings checkbox



- v. **Customize Legend Font Settings:** repeat the process above under the Legend Font Settings checkbox

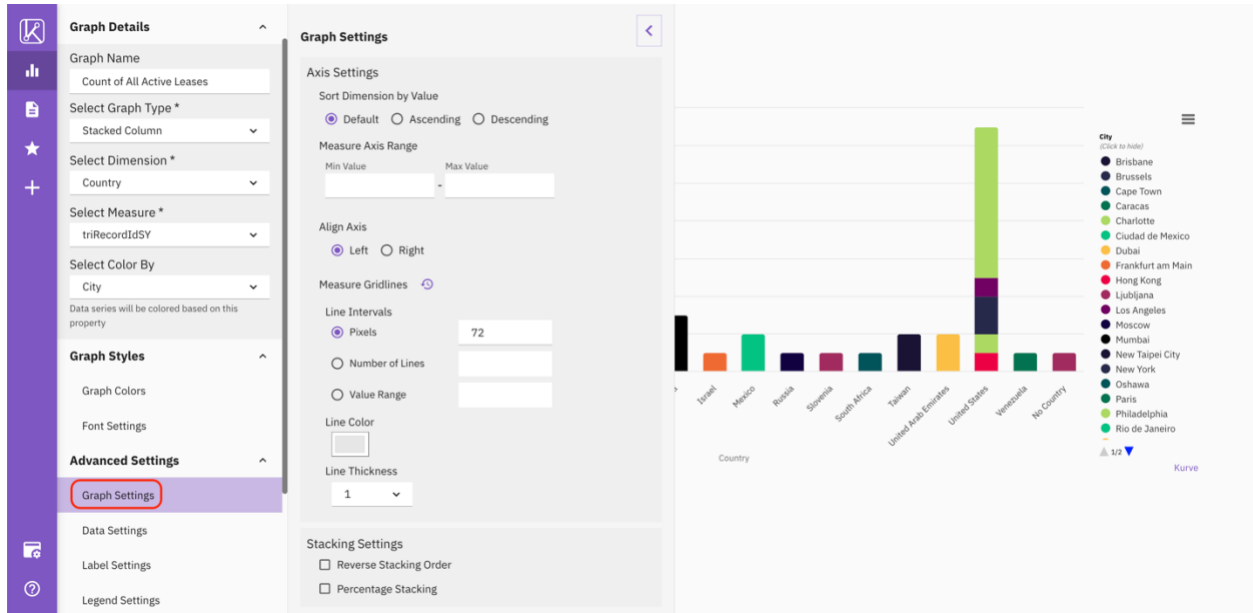


- vi. **Custom Tooltip Font Settings:** repeat the process above under the Tooltip Settings checkbox

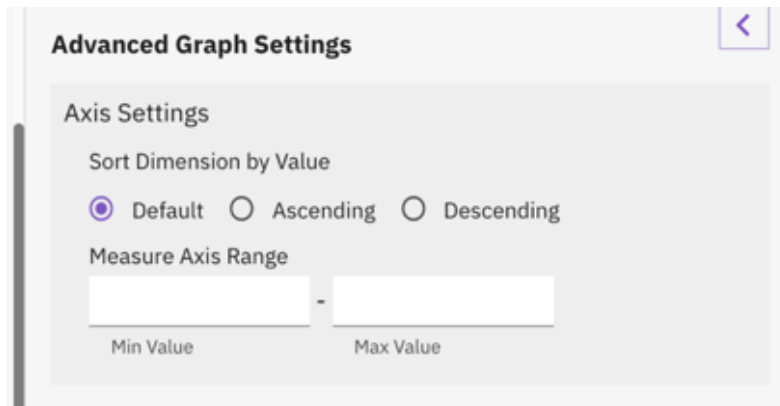


d. Advanced Settings: Graph Settings

- i. Click 'Advanced Settings' to open the drawer, and then click 'Graph Settings' to open the panel to the right

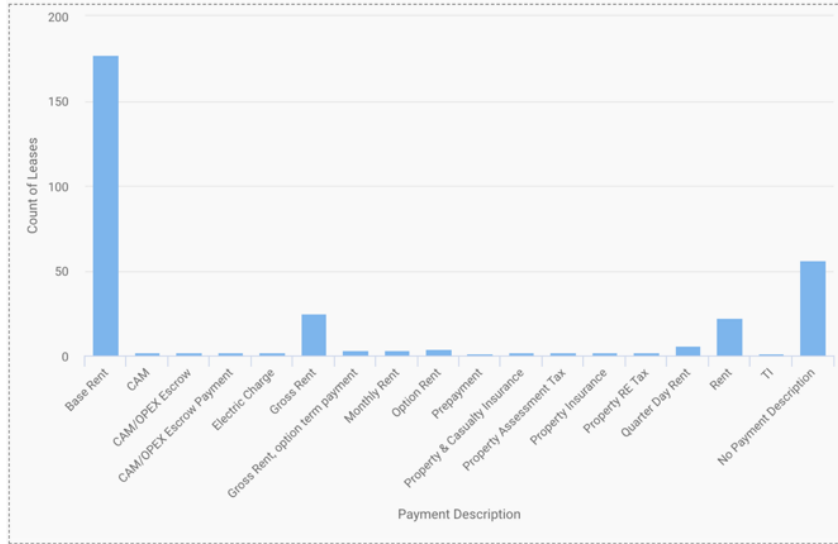


ii. Axis Settings

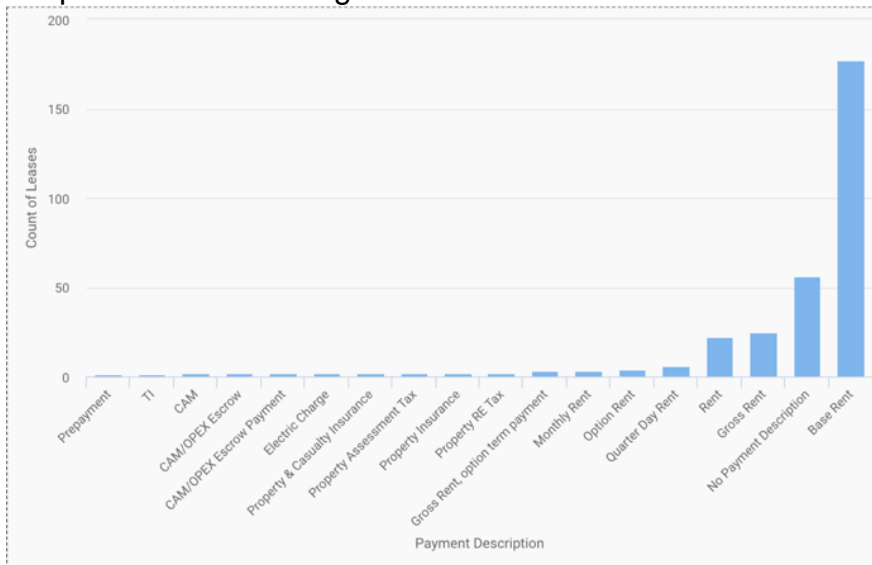


- *Sort Dimension by Value:* sort your graph according to the total measure value of each Dimension. You can sort by ascending or descending.

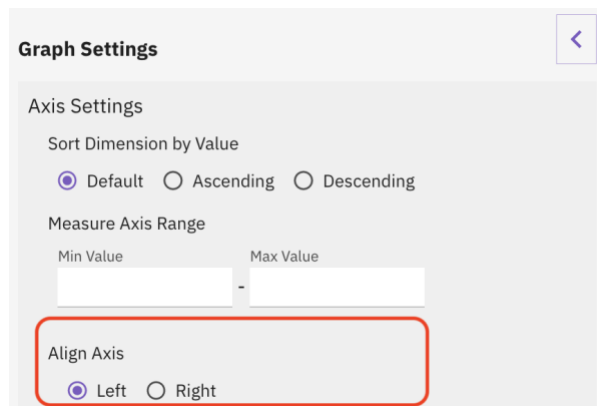
Unsorted Graph:



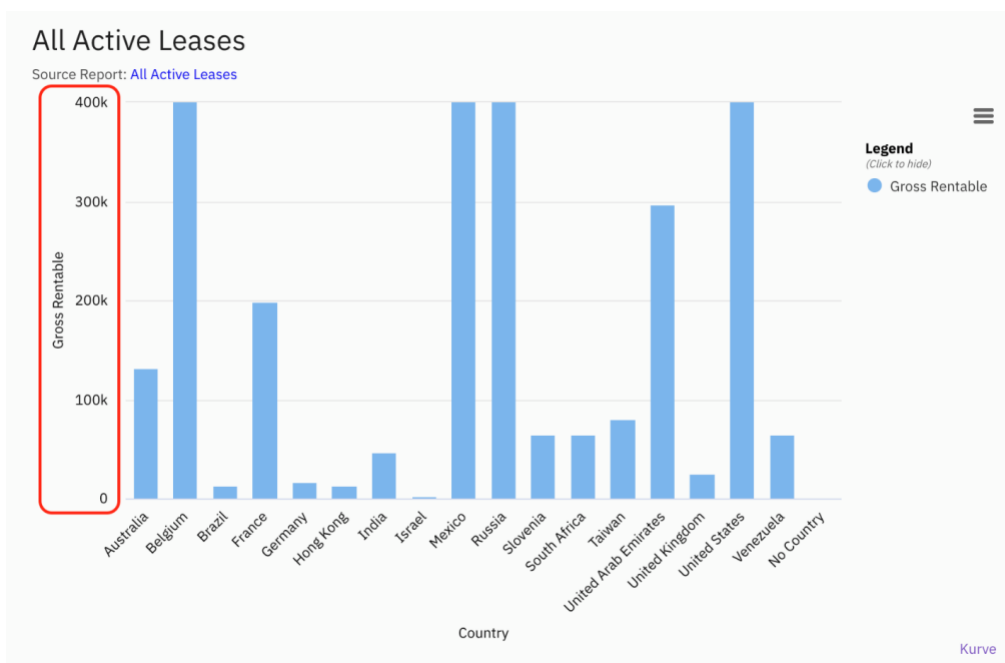
Graph sorted Ascending:



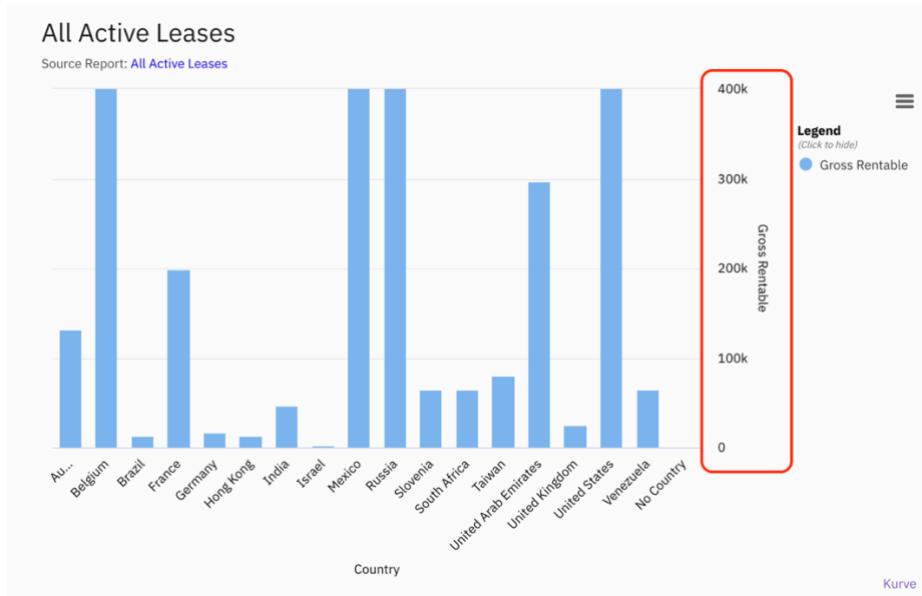
- **Measure Axis Range:** Set the minimum and maximum of the measure's axis.
- **Align Axis:** Set the measure axis to the left/right or bottom/top of the graph.



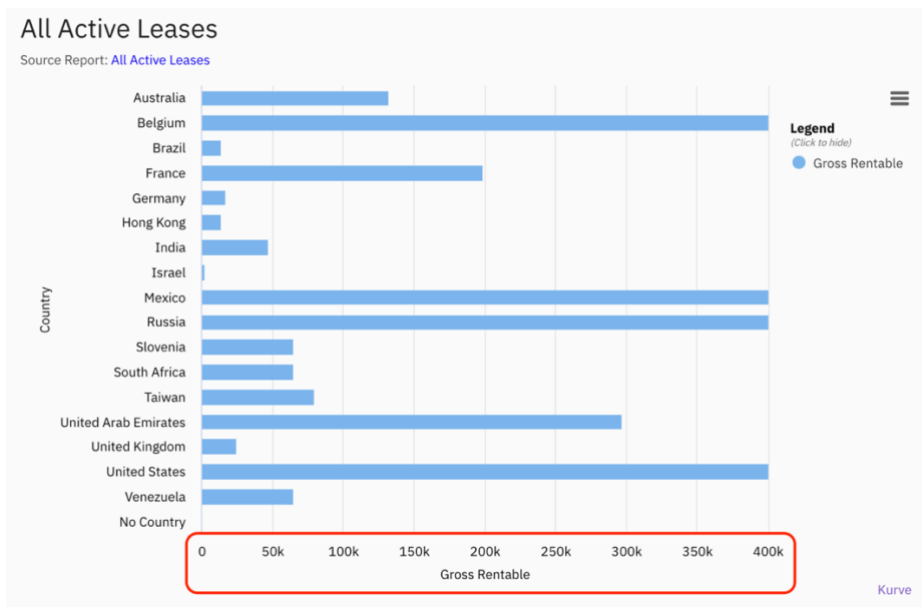
- Click Left to align the axis to the left of the graph. Column, Stacked Column, Line, Scatter, Area graph will align to the left.



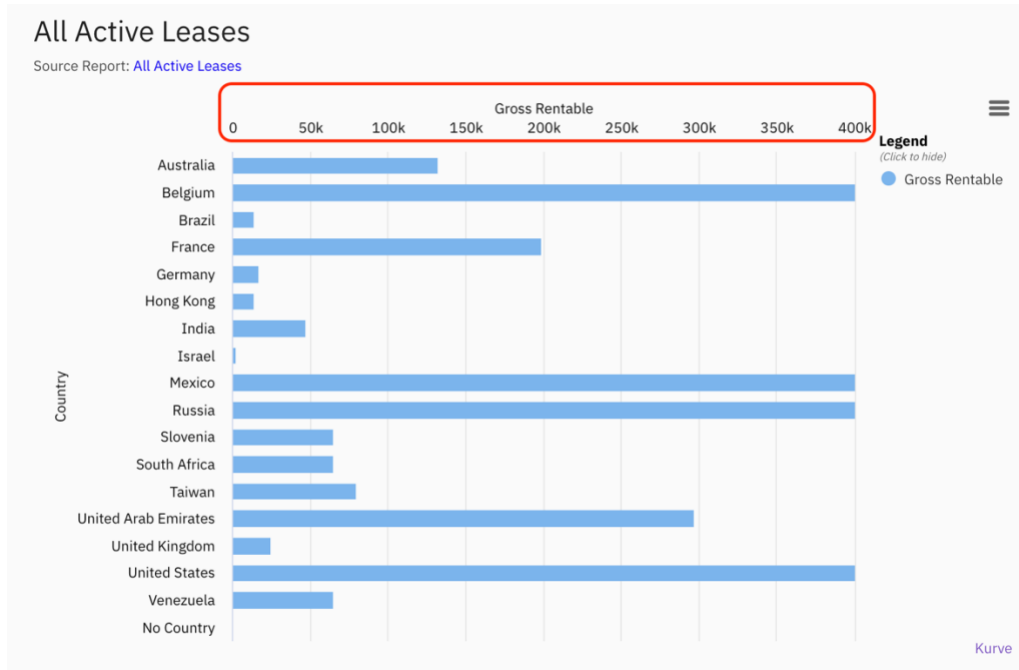
- Click Right to align the axis to the right of the graph. Column, Stacked Column, Line, Scatter, Area graph will align to the right.



- For Stacked Bar and Bar graph the axis will align to the bottom.



- For Stacked Bar and Bar graph the axis will align to the top.



- e. **Customize Measure Gridline Settings:** adjust the gridlines that appear on the measure axis.

Edit Graph

- Graph Details
- Graph Styles
 - Graph Colors
 - Font Settings
- Advanced Settings
 - Graph Settings**
 - Data Settings
 - Label Settings
 - Legend Settings
 - Plot Settings
- Query Filters

Graph Settings

Axis Settings

Sort Dimension by Value

Default Ascending Descending

Measure Axis Range

Min Value: [] Max Value: []

Align Axis

Left Right

Measure Gridlines

Line Intervals

Pixels [72]

Number of Lines []

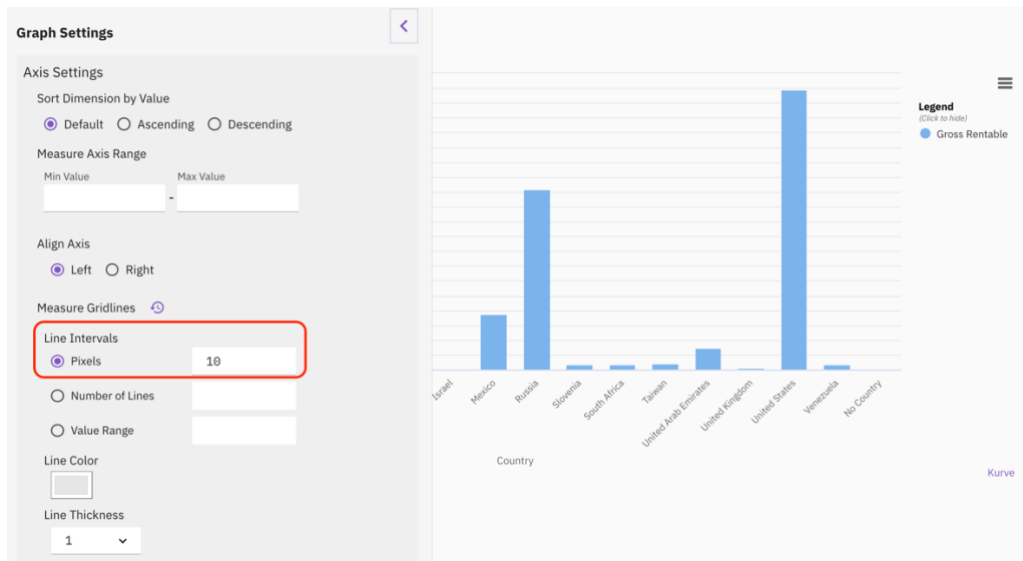
Value Range []

Line Color []

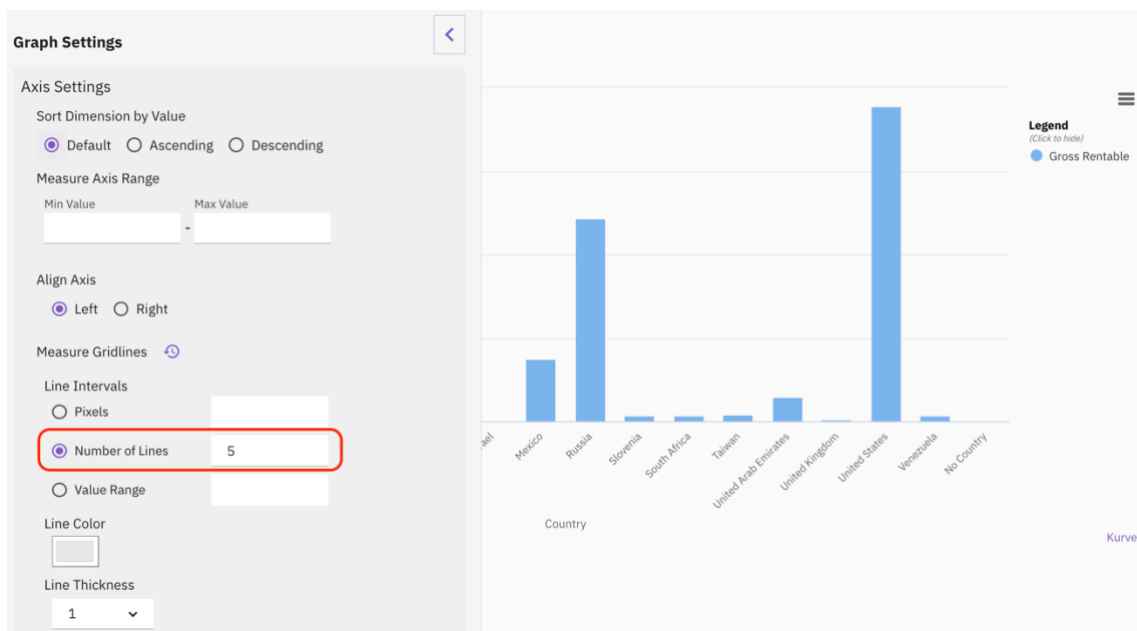
Line Thickness [1]

- i. **Line Intervals:** There are three types of intervals you can choose between to edit your gridline display:

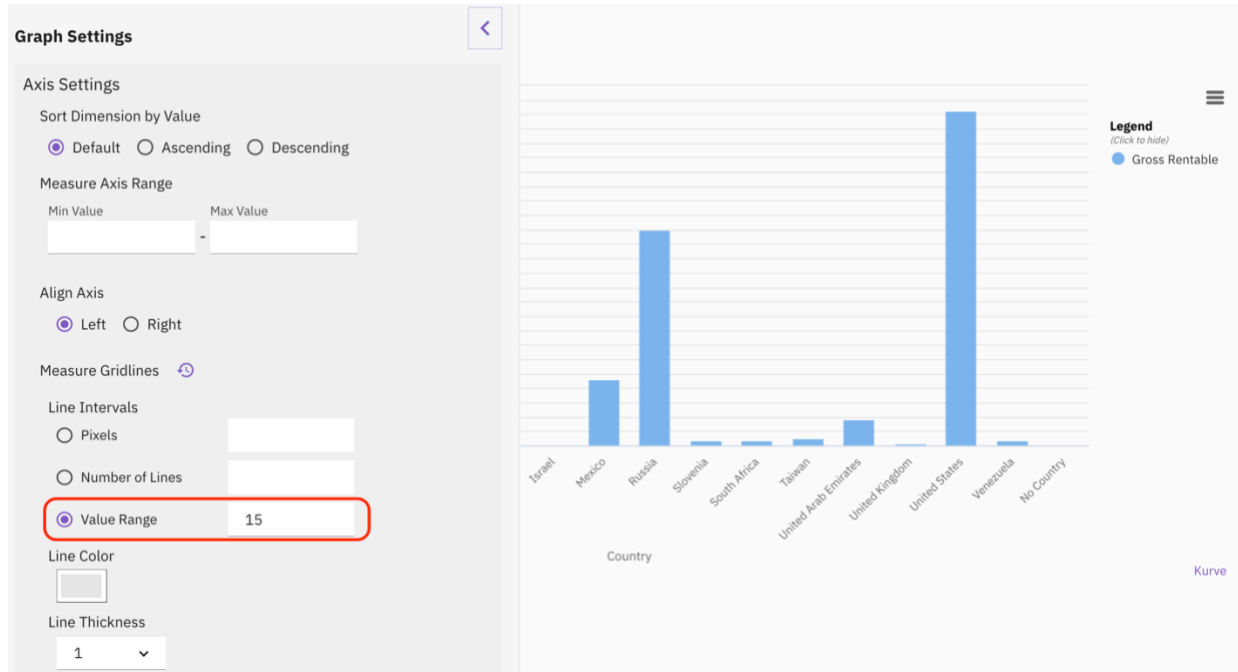
- **Pixels:** defines the gridline interval or gap between each gridline by pixels. The default setting is 72 for the measure gridline.



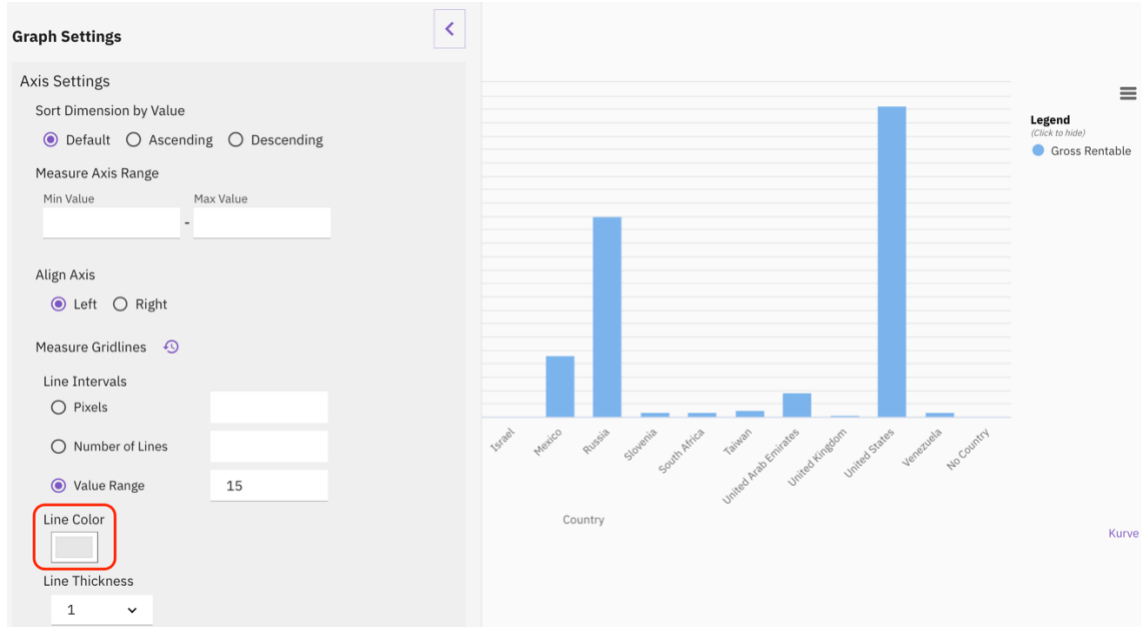
- **Number of Lines:** defines the number of gridlines added. The maximum number of lines that can be added is 99.



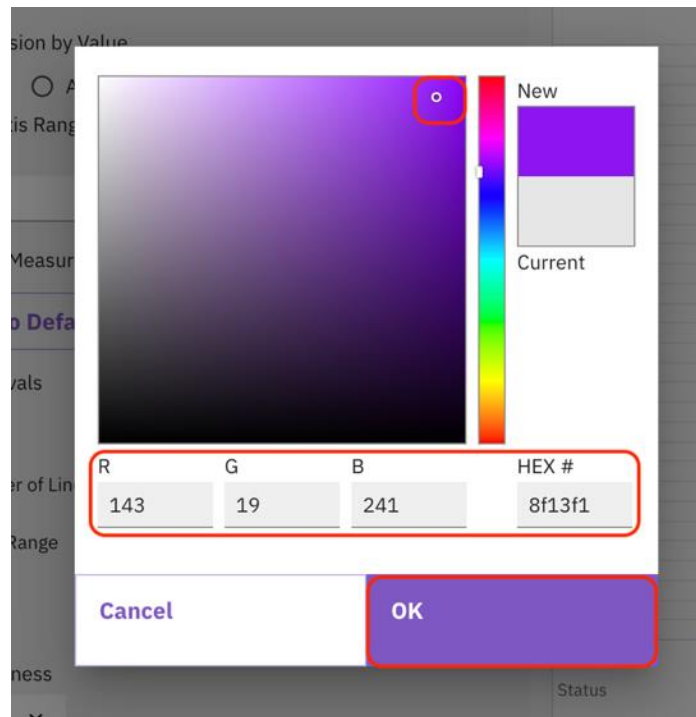
- **Value Range:** defines the gridline interval or gap between each gridline by number.



- ii. Line Color: you can adjust the color of the gridlines applied to the graph
- Select the colored box.

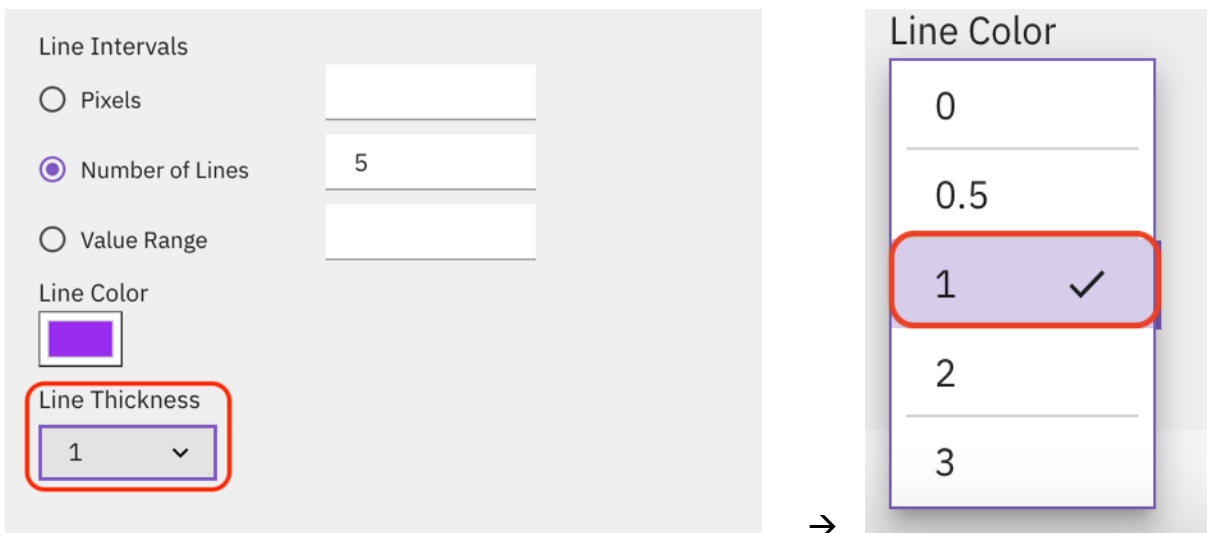


- Choose the desired color using the color picker, or enter the RGB/HEX code, and click OK.




iii. Line Thickness

- Select the thickness in the dropdown menu.



iv. Reset to Default

- To reset your gridline settings, click the reset icon (🔄).

Measure Gridlines 


Line Intervals

Pixels


Number of Lines

Value Range

Line Color

Line Thickness 

- v. Customize Dimension Gridlines for scatter graphs. You can just adjust the line interval, line color and line thickness using the same method as outlined above.

Measure Gridlines 


Line Intervals

Pixels

Number of Lines

Value Range

Line Color

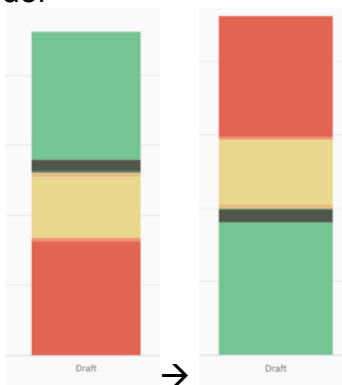
Line Thickness 

- Example: a graph with both gridline settings adjusted will look like this:



vi. **Stacking Settings**

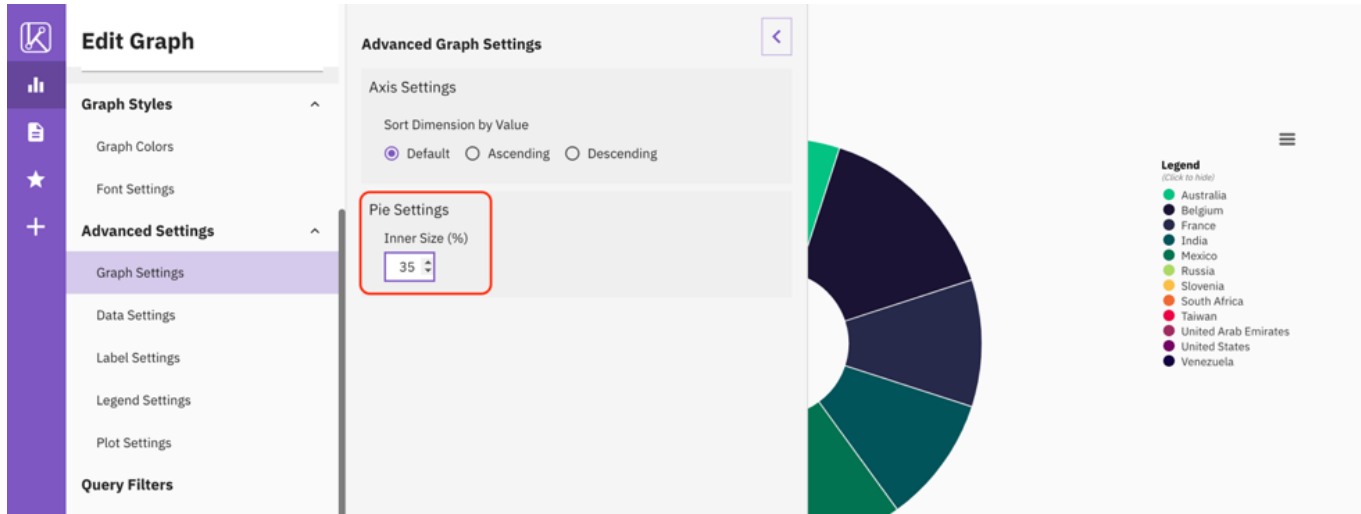
- *Reverse Stacking Order*: click this setting to stack your graph in the opposite order



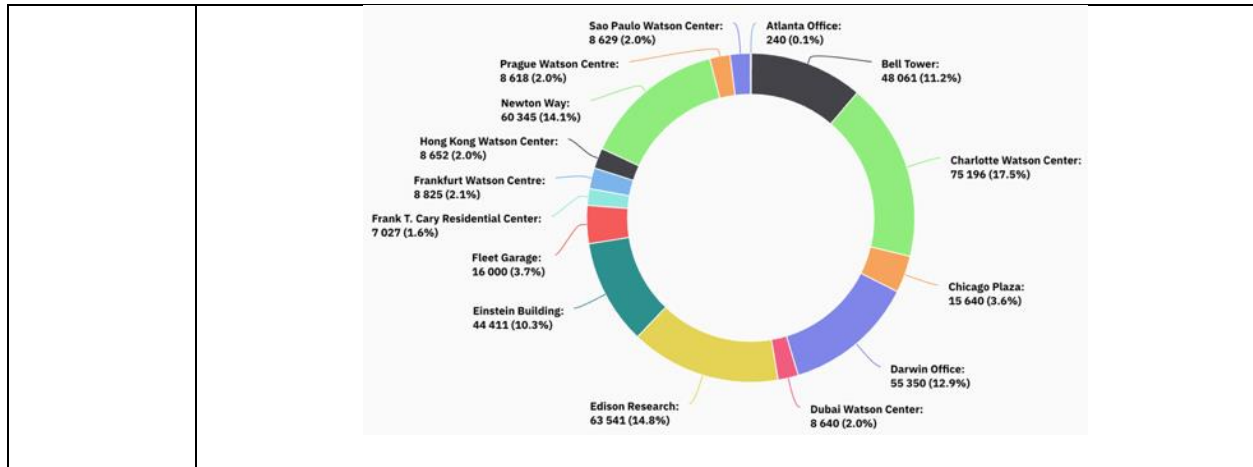
- *Percentage Stacking*: expands each bar/column to fill the entire range of the graph. This type of graph shows the relative contribution of each part to the whole, rather than the raw numerical values.

vii. **Pie Settings**: Adjust the inner size of your pie chart convert it to a donut like graph with a hole in the middle

- Input a number to define the size of the inner hole:

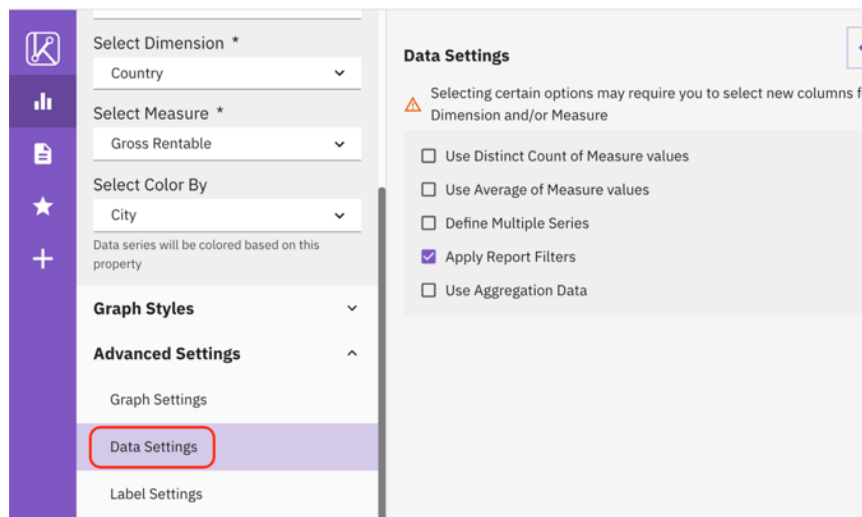


Inner Size	Example Graph
0	
35	
75	



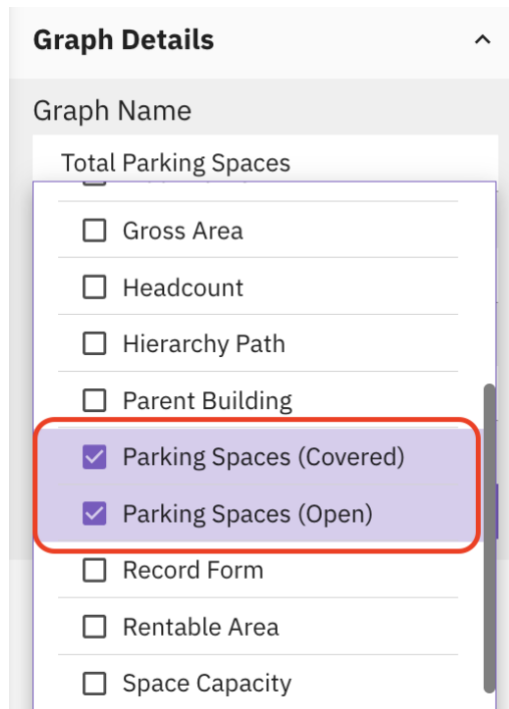
f. Advanced Settings: Data Settings

- i. Click Advanced Settings and then Data Settings:

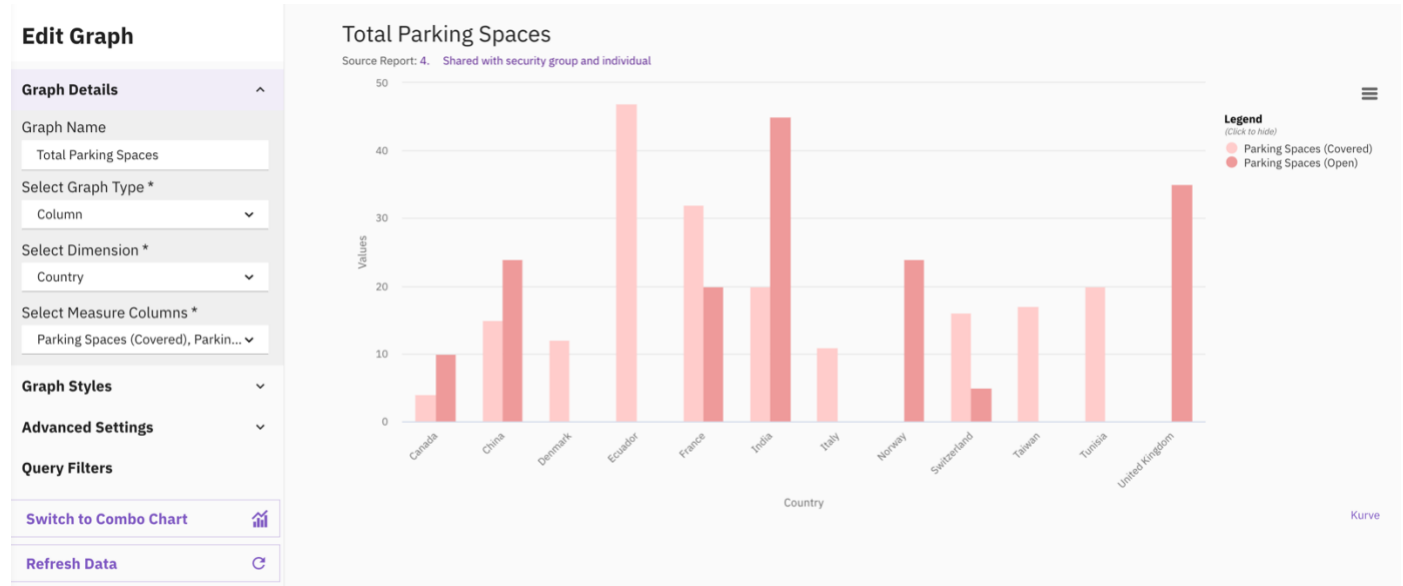


- ii. Use Distinct Count of Measure values: use a distinct count of measure values. This will change the values to count the measure value rather than show a sum.
- iii. Use Average of Measure values: calculate the average of the measure value. This will change the values graphed to the average measure value rather than a sum or count.
- iv. Define Multiple Series: create a graph with multiple measure values from the same record.

- I. Select “Define Multiple Series”. This will auto option Graph Details, if it does not, simply click Graph Details to open it up. (Note: You will need to reselect your measure values!)
- II. Select your Dimension (x-axis).
- III. Select your Measure Columns – you can select up to 10. In this example I have selected Parking Spaces (Covered) and Parking Spaces (Open).



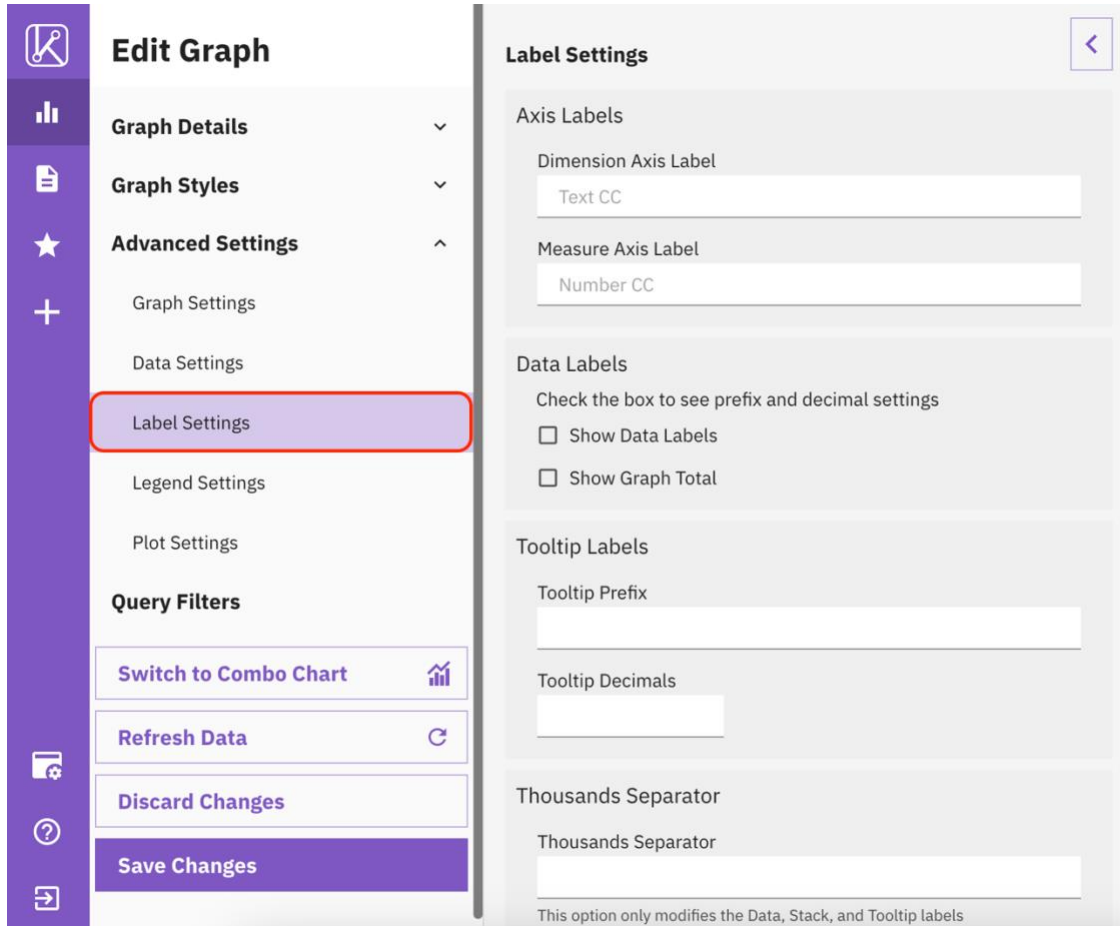
- IV. Preview the graph results. Click ‘Save Changes’ once you are ready to publish the graph.



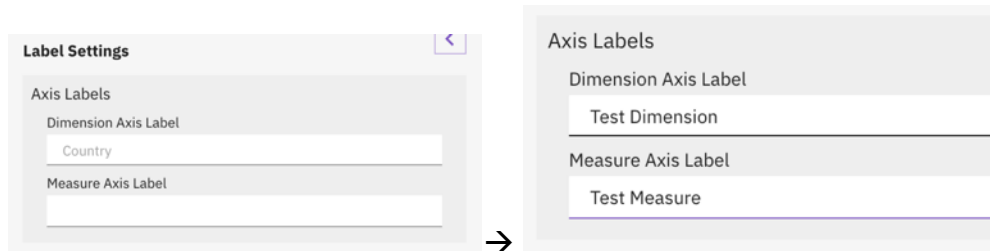
- v. Apply Report Filters (Report Graphs Only): Checked by default, uncheck to ignore the filters on the source report
- vi. Use Aggregation Data (Aggregation Report Graphs Only): Checked by default, uncheck to use non-aggregated data from the source report

g. Advanced Settings: Label Settings

- i. Click Advanced Settings and then Label Settings:



- ii. **Axis Labels:** Adjust your Dimension and/or Measure labels displayed on the graph.





iii. Data Labels: enable a label option by clicking on the box next to it.

Data Labels

Show Data Labels

Show Stack Labels

Show Graph Total

- **Show Data Labels:** Select if you want to show the value of each segment overlaid onto the graph.

Data Labels

Show Data Labels

Data Label Prefix

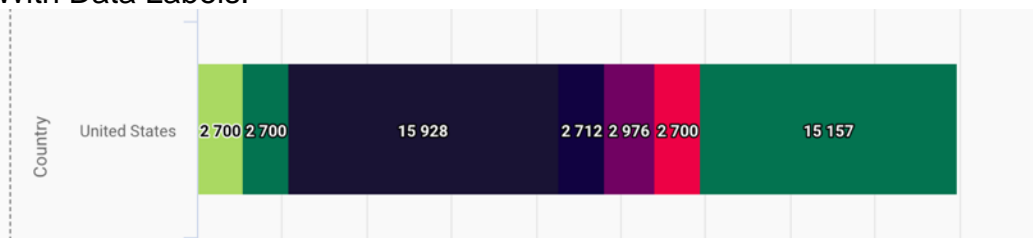
Data Label Decimals

Show Stack Labels

Without Data Labels:



With Data Labels:



Data Label Prefix: input a symbol to add it to the beginning of your data label (e.g. \$)

Data Label Decimals: input the number of decimals you want displayed in your data label (e.g. 2)

A screenshot of the 'Data Labels' configuration panel. It includes a checked checkbox for 'Show Data Labels', a text input field for 'Data Label Prefix' containing '\$', and a spinner input field for 'Data Label Decimals' set to '0'.

- *Show Stack Labels:* Select to show the sum of the entire segment at the end of each bar.

A screenshot of the 'Data Labels' configuration panel. The 'Show Data Labels' checkbox is unchecked, while the 'Show Stack Labels' checkbox is checked. There are empty text input fields for 'Stack Label Prefix' and 'Stack Label Decimals', and an unchecked 'Show Graph Total' checkbox at the bottom.

Without Stack Labels:



With Stack Labels:

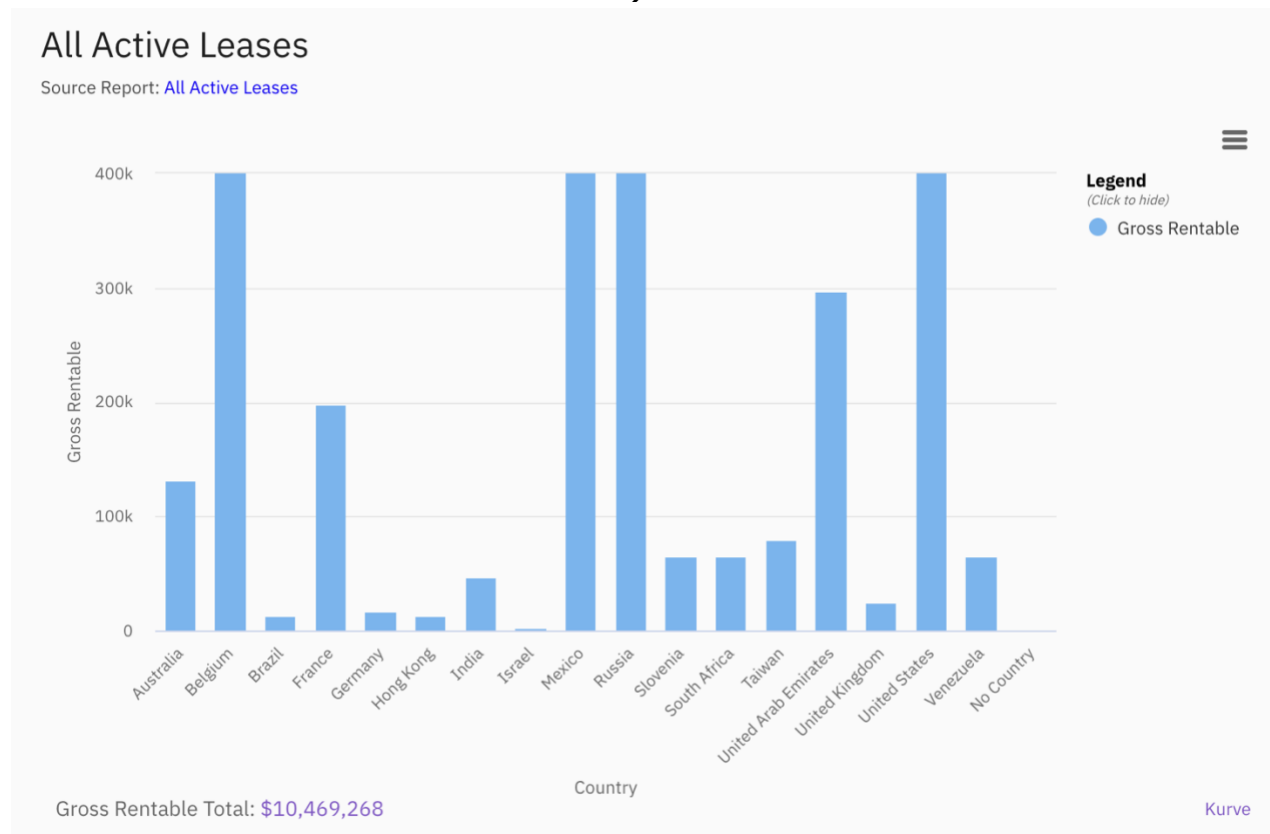


Stack Label Prefix: input a symbol to add it to the beginning of your stack label (e.g. \$)

Stack Label Decimals: input the number of decimals you want displayed in your stack label (e.g. 2)

- *Show Graph Total:* enable this option to display the total of all of your measure values.
Example:

A screenshot of a configuration panel for 'Show Graph Total'. It includes a checked checkbox, a text input for 'Graph Total Prefix' containing '\$', and a numeric input for 'Graph Total Decimals' containing '0'.



iv. **Tooltip Labels:** Format your tooltip labels here:

- **Tooltip Prefix:** input a symbol to add it to the beginning of your tooltip label
- **Tooltip Decimal:** this will round your number according to how many decimals you input

v. **Thousands Separator:** if you would like to use a symbol other than a space to format your larger numbers, you can input any symbol in this box to add it. This will format both data, stack, and tooltip labels.

For example, let's add a comma as the Thousand Separator:

Thousands Separator

This changes the label format.

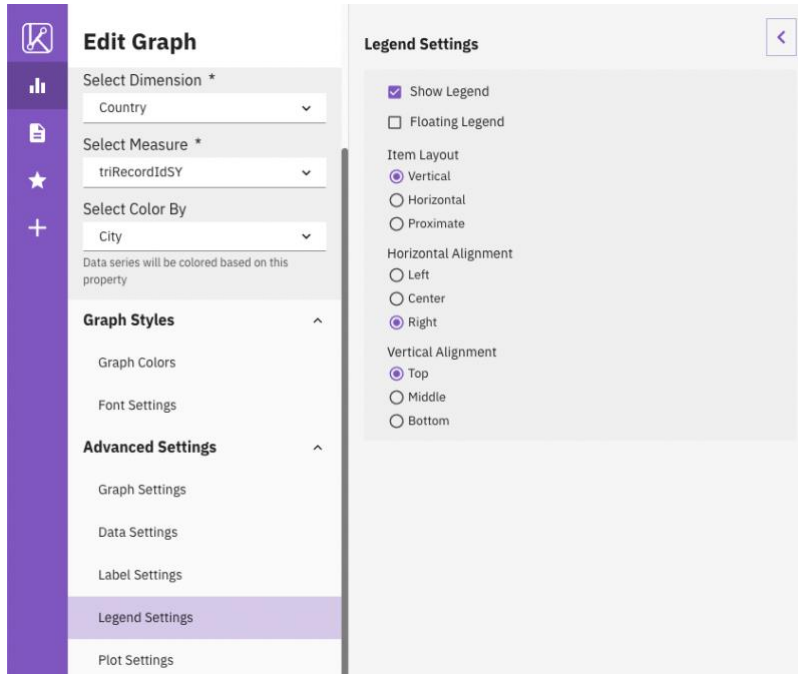
Without Thousand Separator:



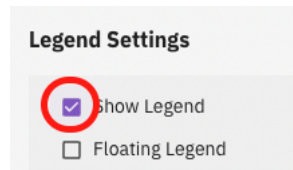
With Thousand Separator:



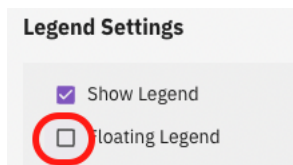
h. Legend Settings



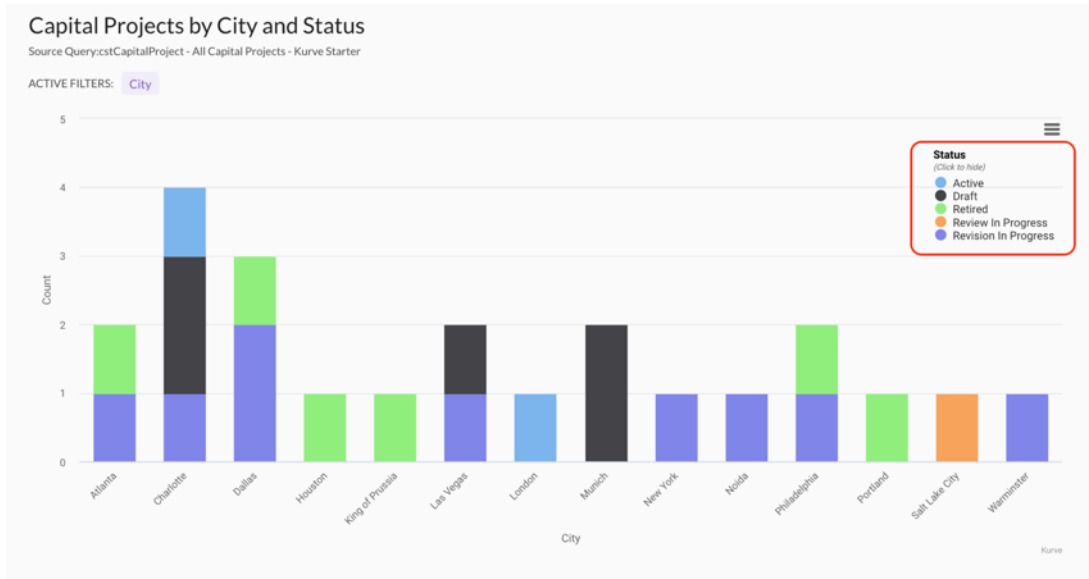
- i. *Show Legend*: Checked by default, uncheck to hide legend



- ii. *Floating Legend*: Check to put the legend location within the confines of the graph.

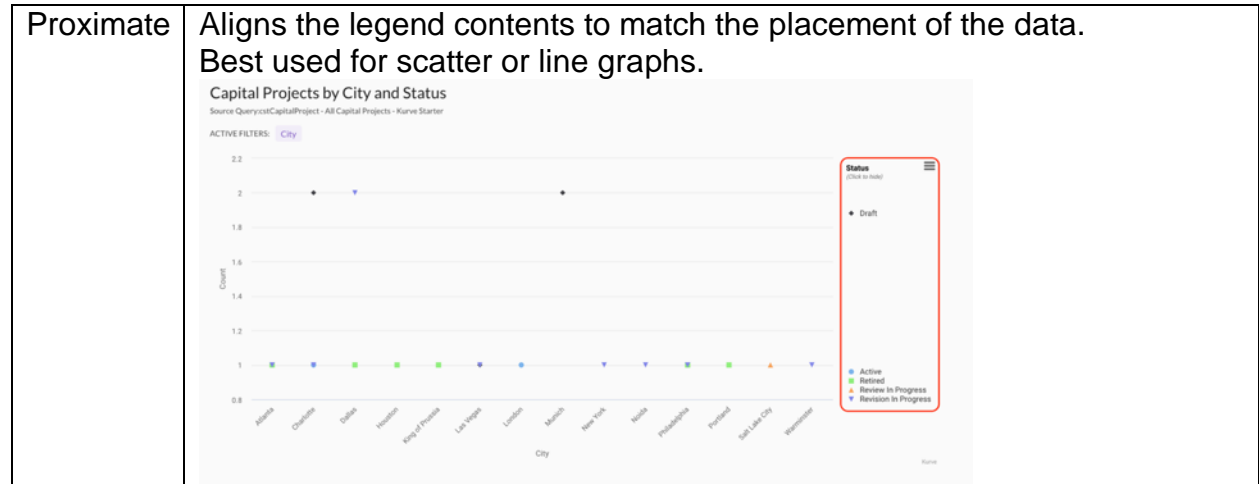


- Note: this option could cause your legend to overlay on top of graph segments

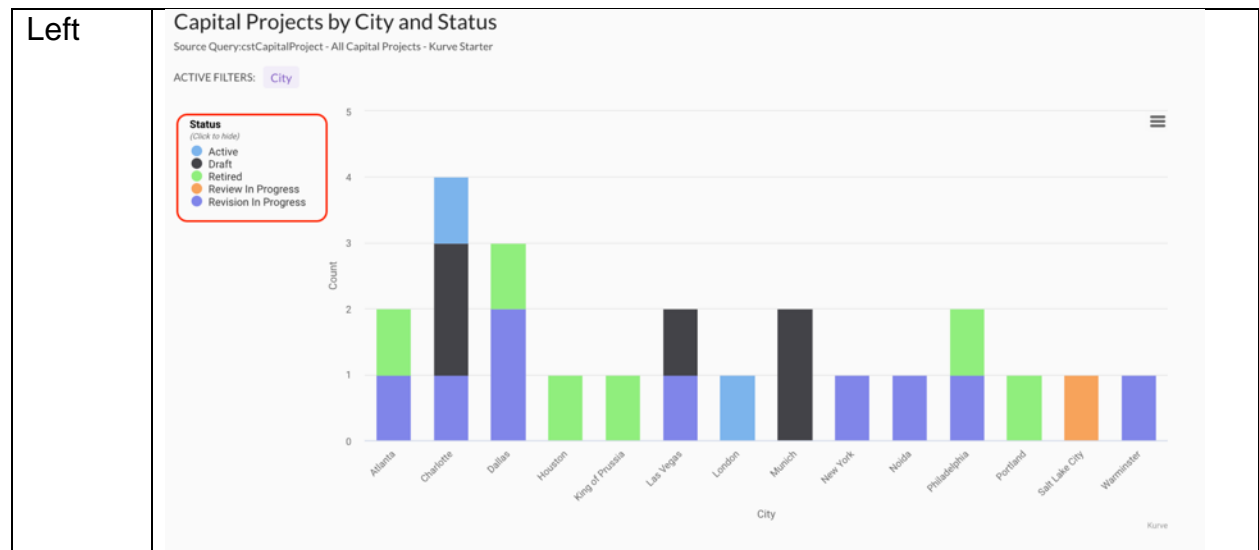


iii. *Item Layout:* the following shows adjusting the item layout placement while keeping the other legend options default (Right, Top)

<p>Vertical</p>	<p>Aligns the contents of the legend vertically.</p>
<p>Horizontal</p>	<p>Aligns the contents of the legend horizontally.</p>

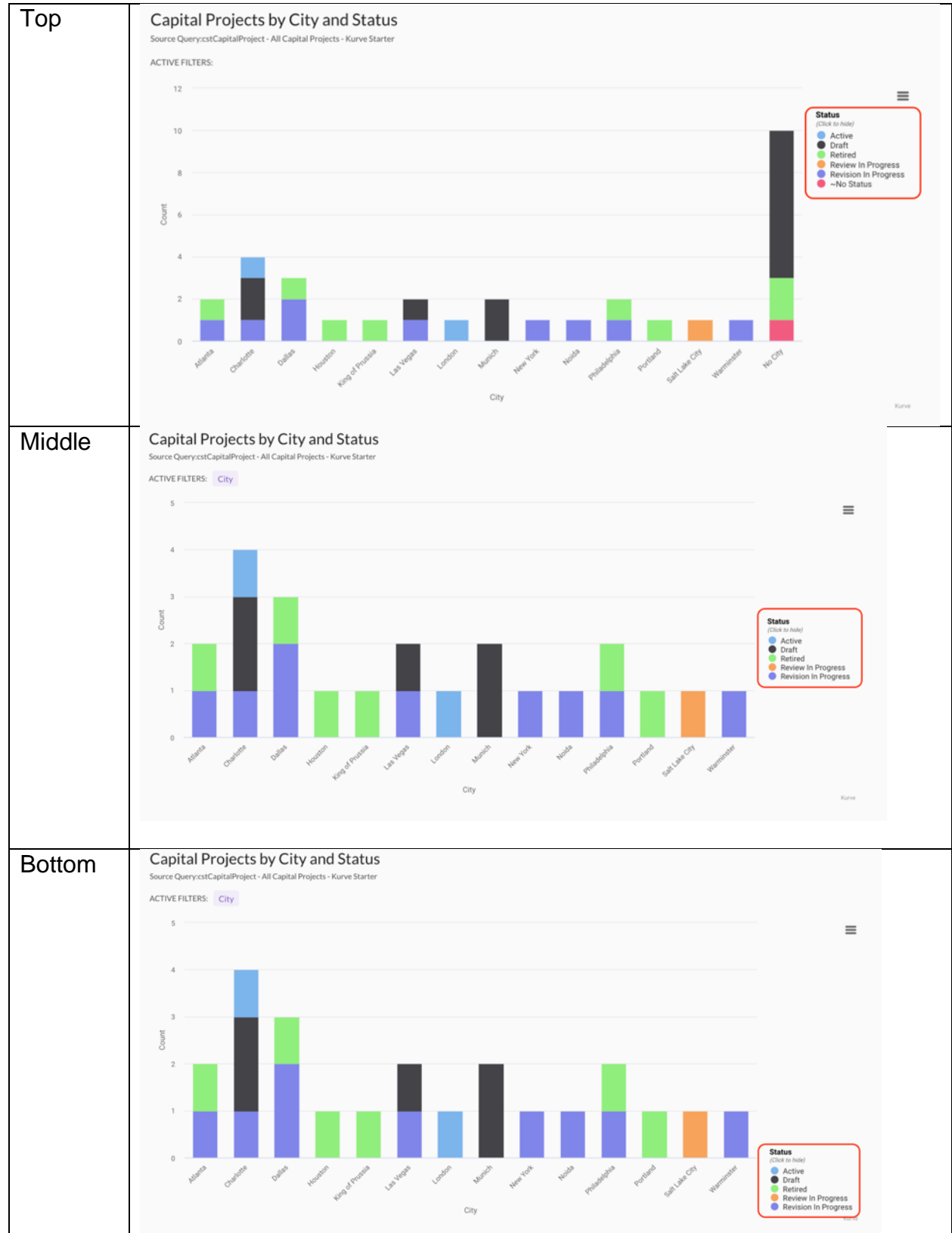


iv. *Horizontal Alignment:* the following shows what the legend placement will look like adjusting horizontally while keeping the other options default (Vertical, Top)

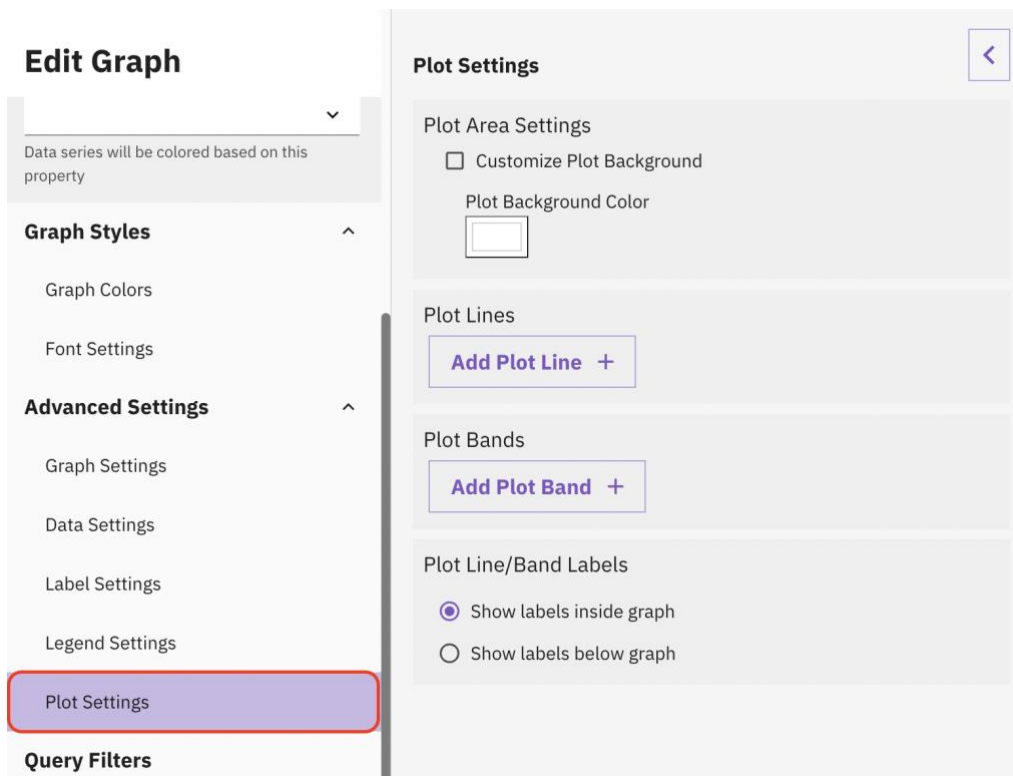




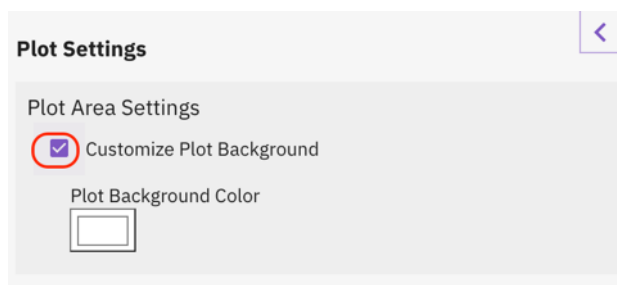
- v. *Vertical Alignment*: the following show what the legend placement will look like adjusting vertically while keeping the other options default (Vertical, Right)



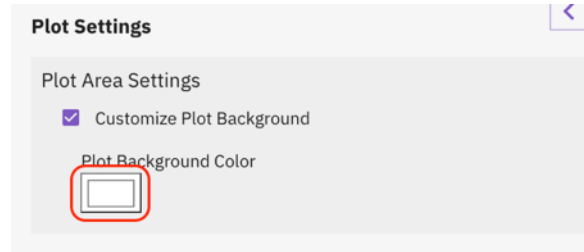
- i. **Plot Settings:** Adjust Plot Background Color and Add Plot Lines/Bands
 - i. Select Plot Settings under Advanced Settings to open the drawer.



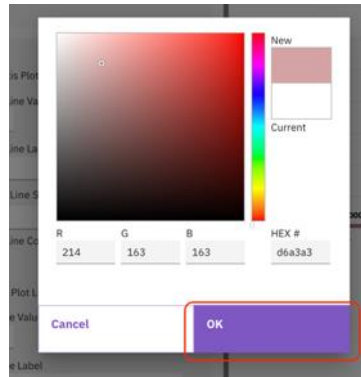
- ii. **Plot Area Settings: Plot Background Color**
 - To customize the plot background, select the “Customize Plot Background” box.



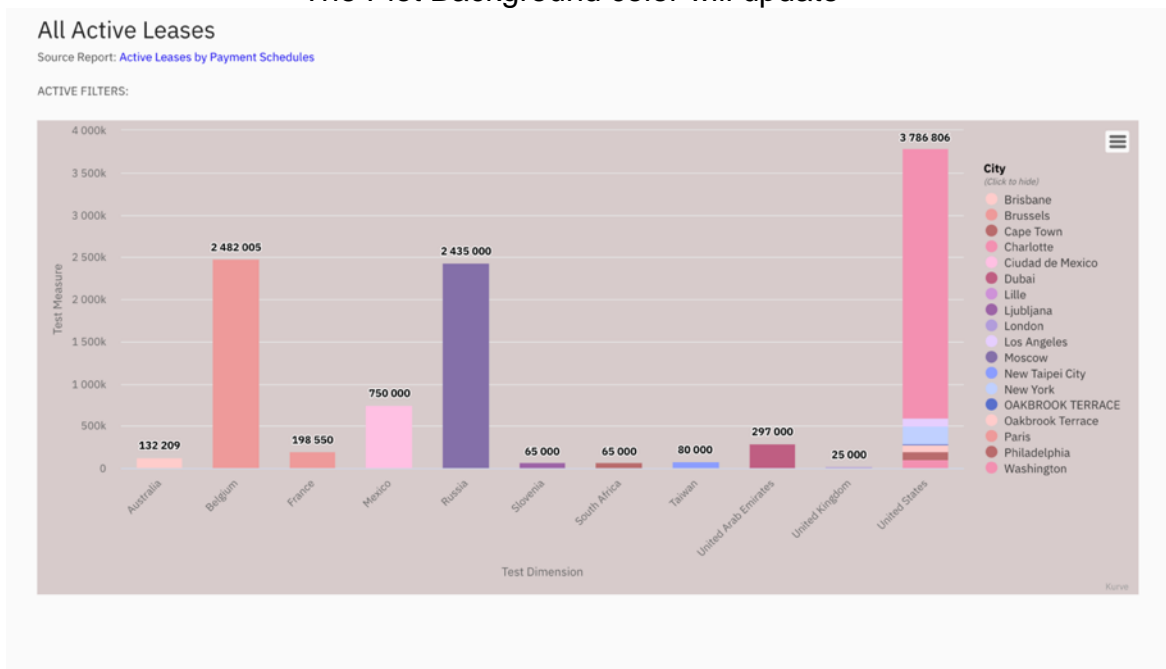
- Under Plot Background Color, select the color box to open the color picker.



- Edit the color then click Ok.



- The Plot Background color will update



- To reset the background to default, deselect Customize Plot Background checkbox.

- Select whether you want to add a plot line along your dimension axis or your measure axis. The Dimension plot line refers to the number of data points on the dimension.

Add Plot Line

Plot Axis

Measure Dimension

Label

New Line

Show Label

Value

0

Style

Solid

Color

Opacity

Cancel Ok

- Label: title the plot line within the graph

Plot Axis

Dimension Measure

Label

Plot Line 1

Show Label

Value

Style

- Define whether you want to show the label on your graph – default will add it to the graph

Plot Axis

Dimension Measure

Label

Plot Line 1

Show Label

Value

Style

- Value: this controls where the line is placed. Enter a numerical value.

Add Plot Line

Plot Axis

Measure Dimension

Label

Plot Line 1

Show Label

Value

2500000

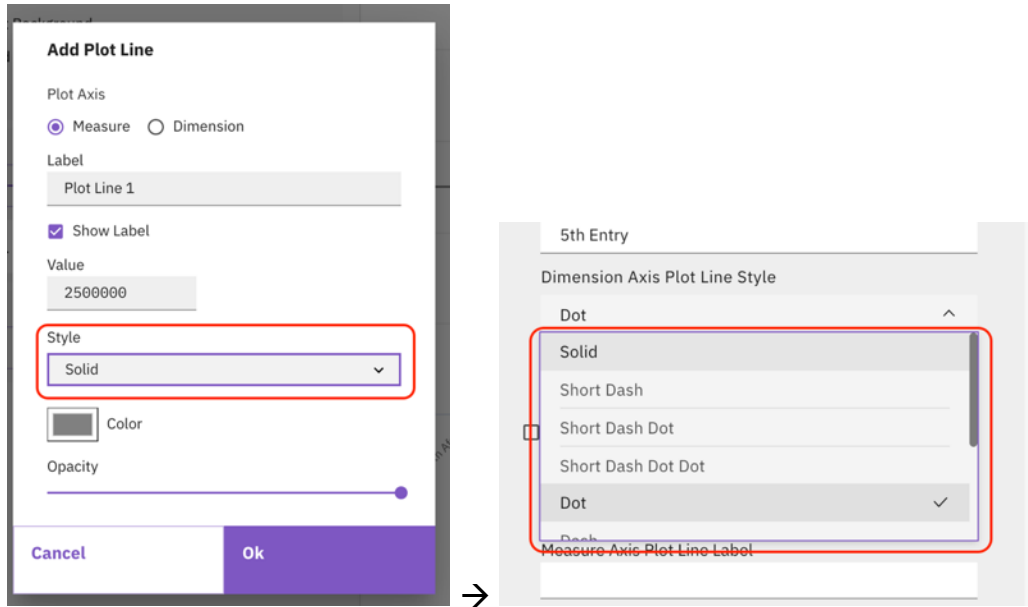
Style

Solid

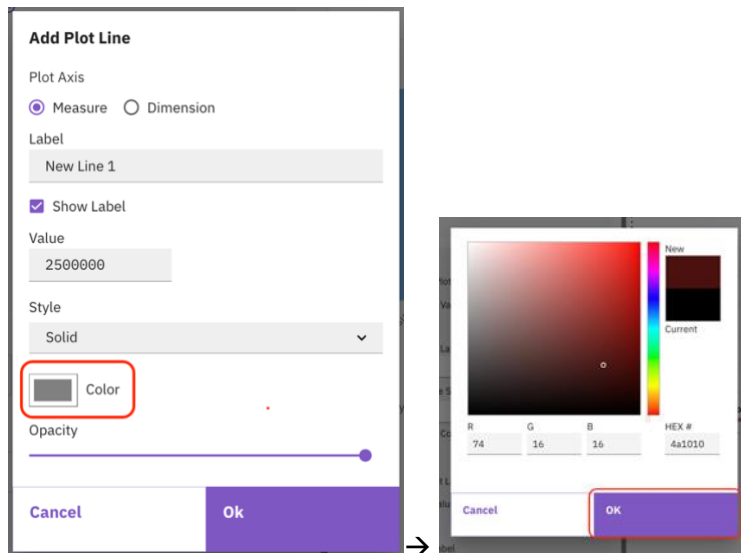
Color

Opacity

- Style: control the type of line used in the plot area



- Dimension Axis Plot Line Color: adjust the color of the plot line. Click into the color box to open the color picker. Click Ok once you have your desired color.



- Opacity: Define the level of transparency of the line using the slider. Default is set to max opacity.

Add Plot Line

Plot Axis
 Measure Dimension

Label
New Line 1

Show Label

Value
2500000

Style
Solid

Color

Opacity 100%

Cancel Ok

- Click OK once you are ready to add your plot line to your graph.

Add Plot Line

Plot Axis
 Measure Dimension

Label
Plot Line 1

Show Label

Value
2500000

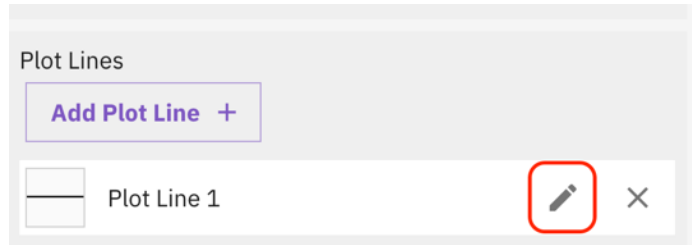
Style
Solid

Color

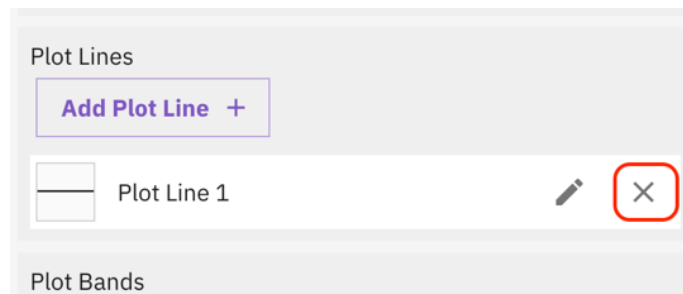
Opacity

Cancel Ok

- To edit your plot line, click on the edit symbol of the plot line you would like to edit



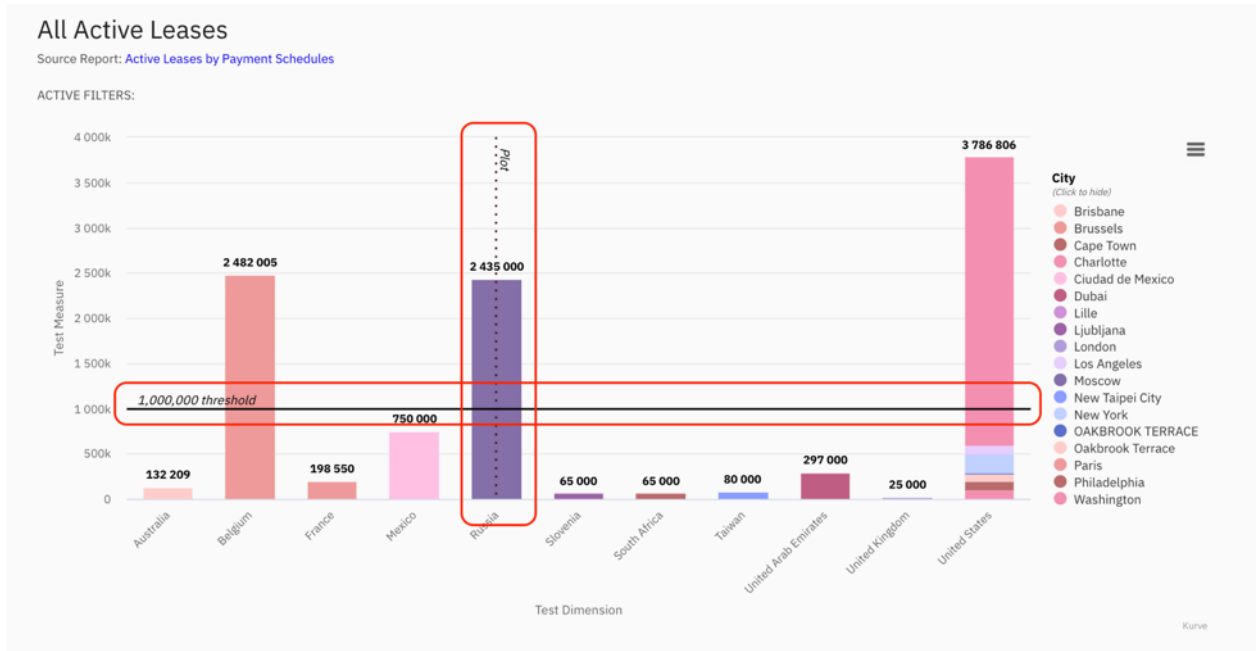
- To delete a plot line from your graph, select the X icon for the plot line you would like to delete.



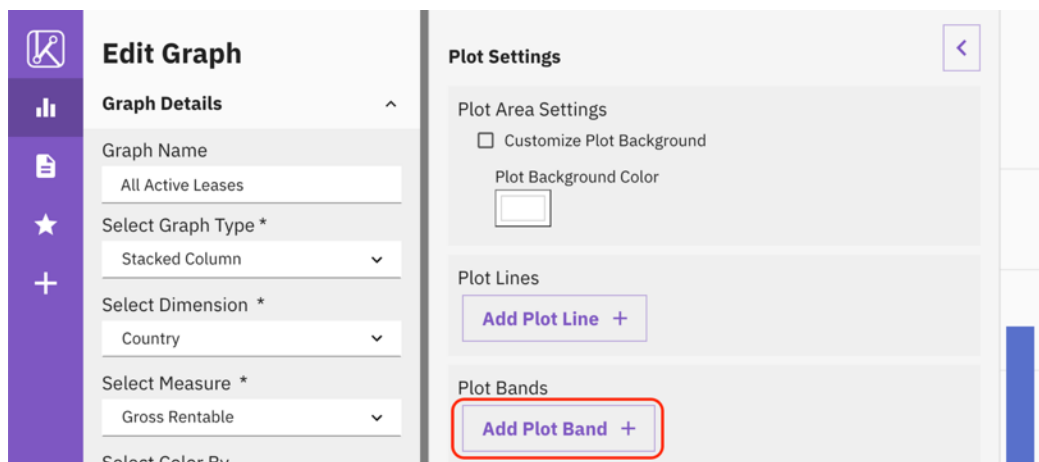
Note 1: Plot lines on the dimension axis will be most useful for Scatter graphs, or graphs where the dimension is numerical. For graphs where the dimension is separated into categories, the plot line will be placed at the n -th category on the axis, starting at 0. For example, a dimension plot line with a value of 3 will appear on the 4th category on the axis.

Note 2: plot lines on the measure axis will be useful to indicate easy to read thresholds.

- View your plot lines in the graph preview



- iv. Plot Bands: The Chart plot bands allow you to highlight a specific range of an axis.
 - Click Add Plot Band



- Define whether you want to add your plot band along the Dimension Axis or Measure Axis by selecting the radio button of the desired axis.

Add Plot Band

Plot Axis

Measure Dimension

Label

New Band

Show Label

Value Range

0 To 10

Color

Opacity

Cancel Ok

- Label your Plot Band

Add Plot Band

Plot Axis

Measure Dimension

Label

Plot Band 1

Show Label

Value Range

0 To 10

- Default your label will show in the graph. If you would like to disable it, deselect the Show Label checkbox

Add Plot Band

Plot Axis

Dimension Measure

Label

Plot Band 1

Show Label

Value Range

_____ To _____

- Define your plot band range. Put the lower number (where the band starts) in the first box and the maximum number (where the band ends) on the right box.

Add Plot Band

Plot Axis

Dimension Measure

Label

Plot Band 1

Show Label

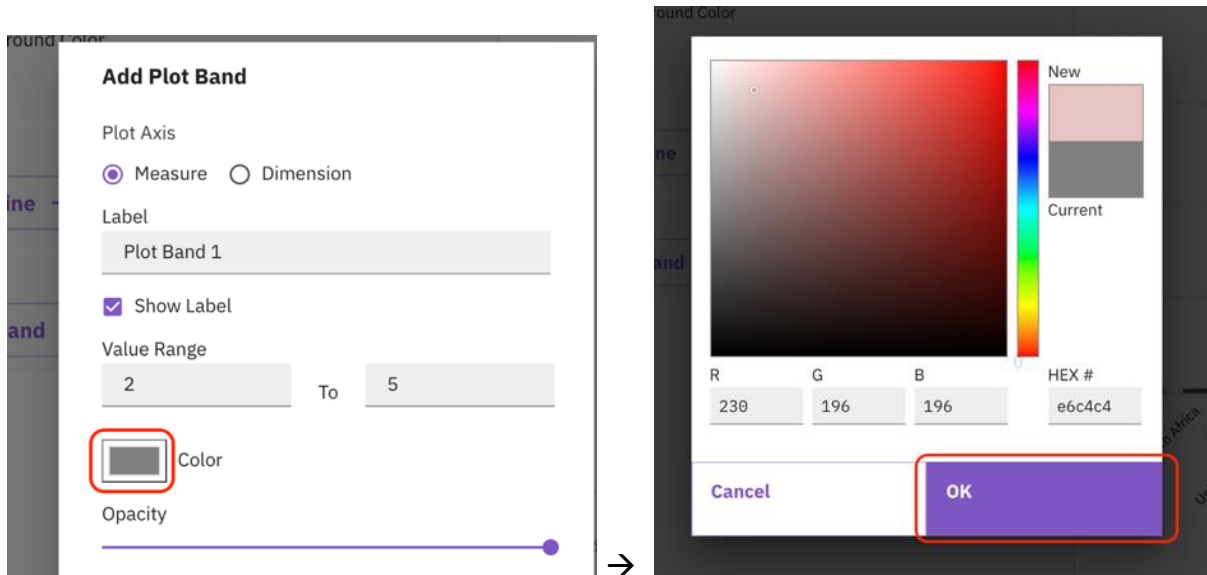
Value Range

2 To 5

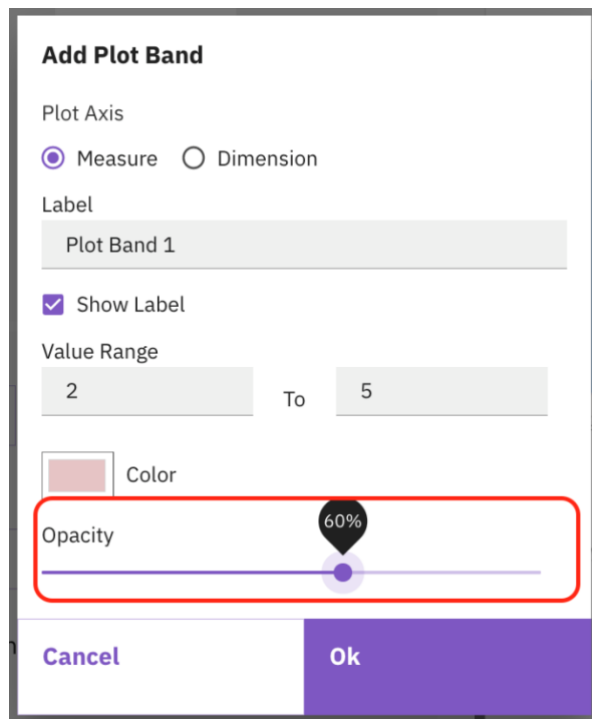
Start of Band End of Band

Color

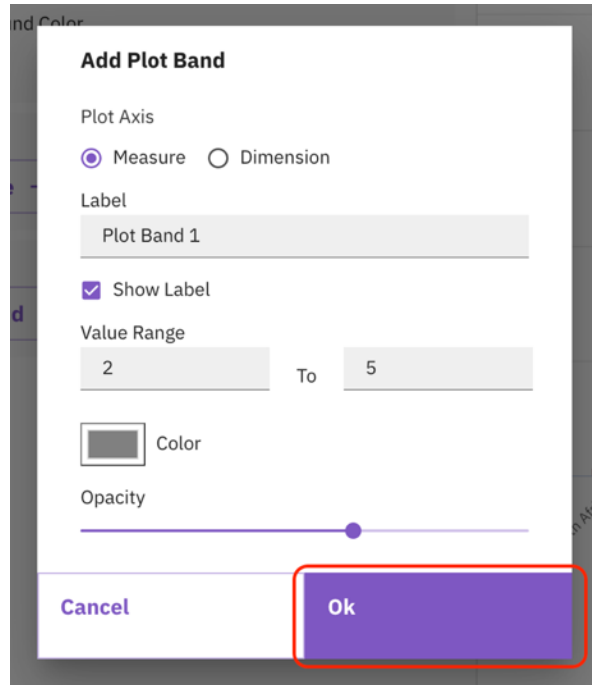
- Adjust the color: select the color box to open up a color picker. Select your color and then click OK



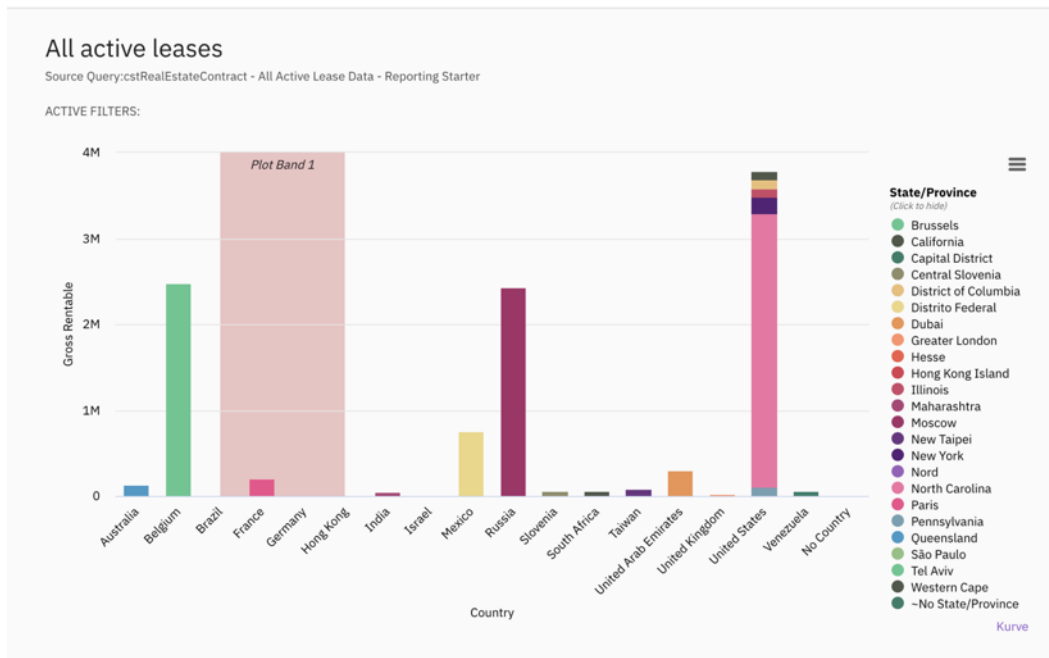
- **Opacity:** Define the level of transparency of the band using the slider. This features allows you to overlap plot bands easily.



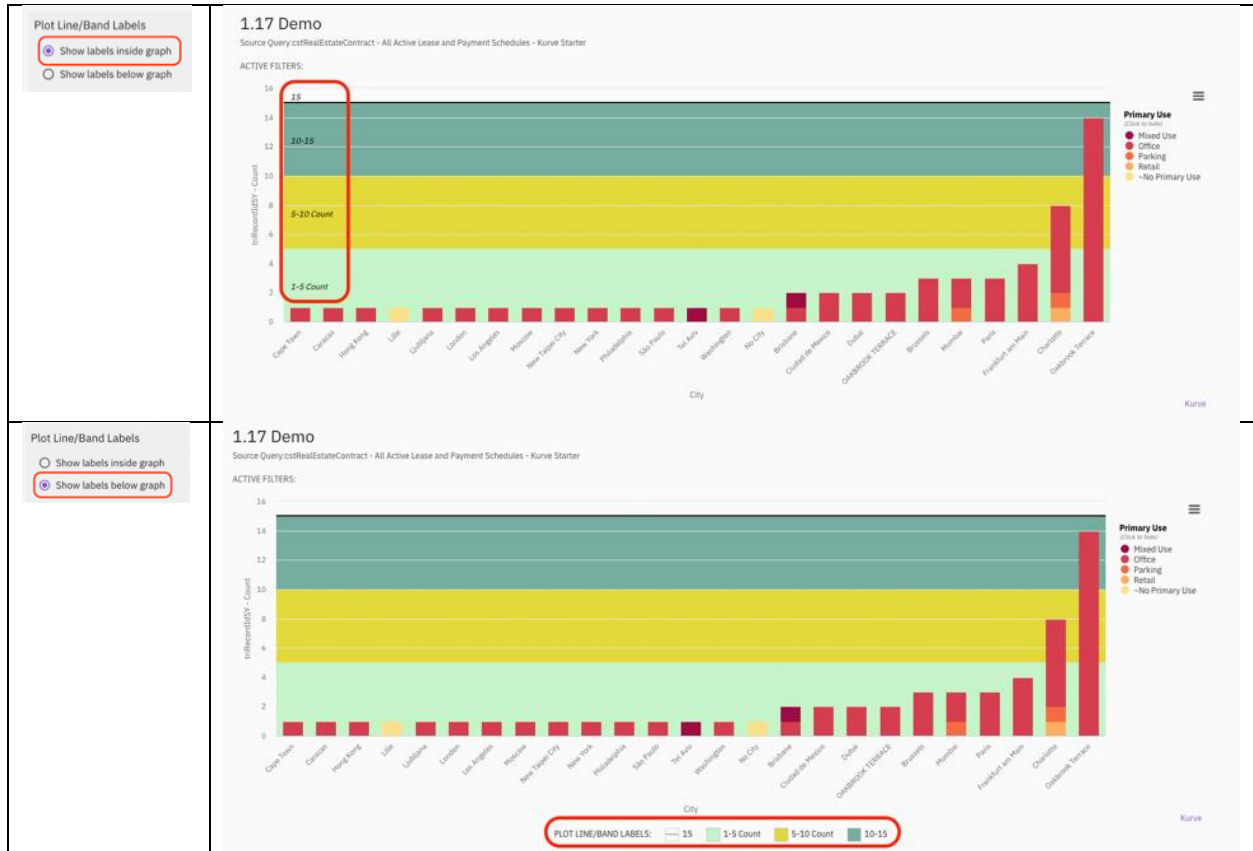
- Click OK to add the plot band to your graph



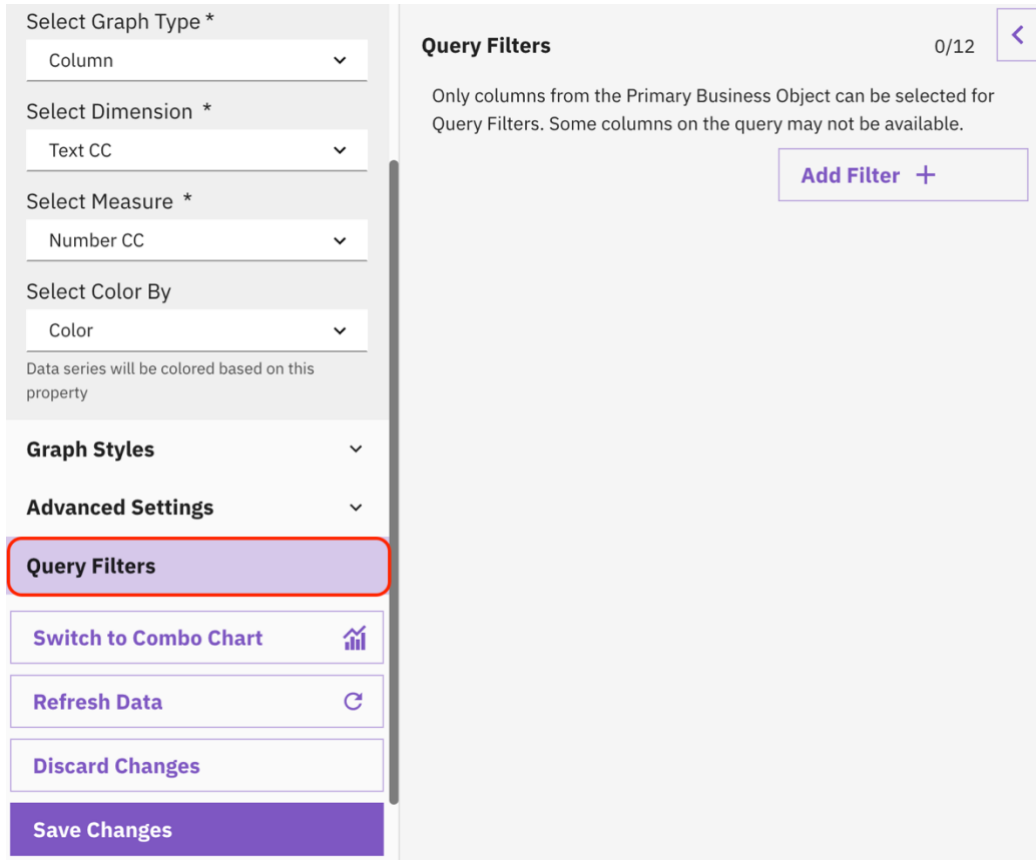
- View your plot band



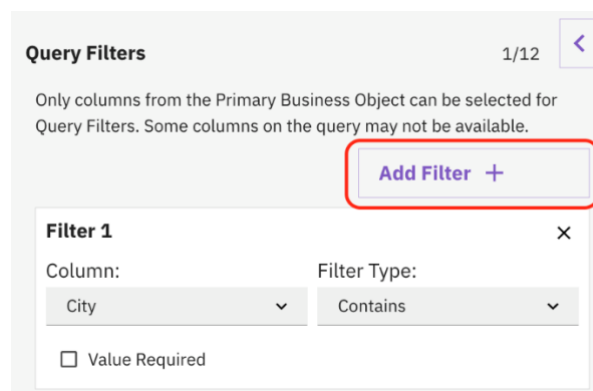
- v. **Plot Line/Band Labels:** Show the label name inside or below the graph
 - The default setting displays the labels inside the graph



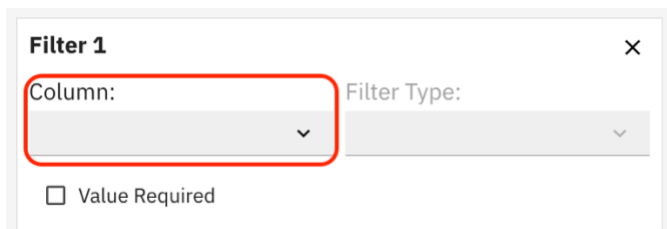
- j. **Query Filters:** Easily add or edit query filters by clicking on the Query Filter button. Query Filters can be added to any field on the Primary BO. Query Filters will prompt before loading the report to reduce the results you would like to load from the query.



- i. A panel will appear to the right. It will be pre-populated with any you made during the creation of your graph. To add a new one, click 'Create Filter.'

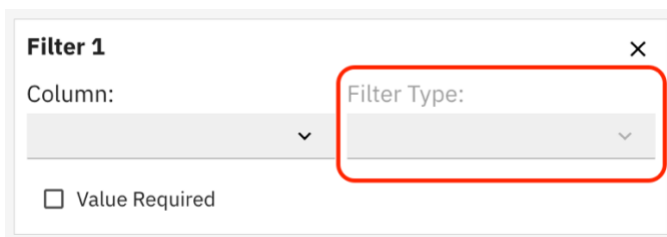


- ii. Select the source column



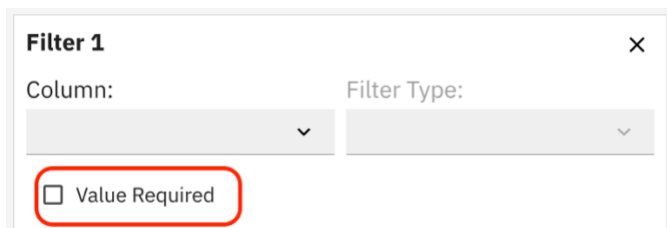
The screenshot shows a configuration box titled "Filter 1" with a close button (X) in the top right corner. It contains two dropdown menus: "Column:" and "Filter Type:". The "Column:" dropdown is highlighted with a red rectangular box. Below the dropdowns is a checkbox labeled "Value Required".

- iii. Select your Filter Type. The options will change depending on the field type (i.e. Text, Number or Date)



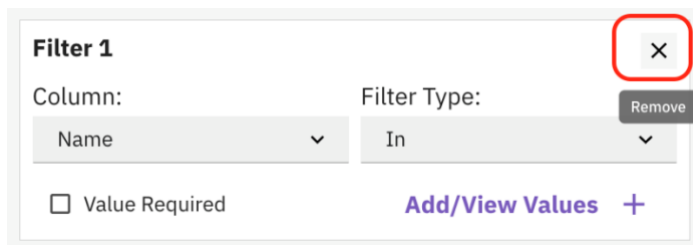
The screenshot shows the same "Filter 1" configuration box. The "Filter Type:" dropdown menu is now highlighted with a red rectangular box. The "Column:" dropdown is no longer highlighted.

- iv. Select whether you would like to make this value required before loading the graph. This means the user will need to input a filter value before they can load the graph. If it is not required, they have the choice to fill it in or skip it.



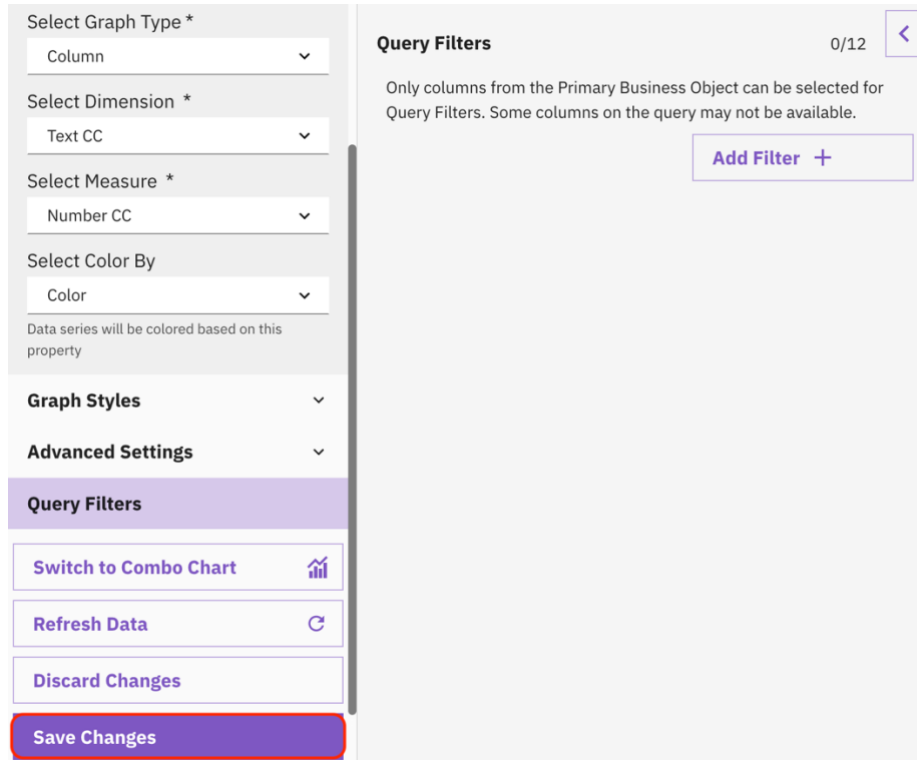
The screenshot shows the "Filter 1" configuration box. The "Value Required" checkbox is highlighted with a red rectangular box. The "Column:" and "Filter Type:" dropdowns are no longer highlighted.

- v. To remove a query filter, click on the "x" on the top right of the box.

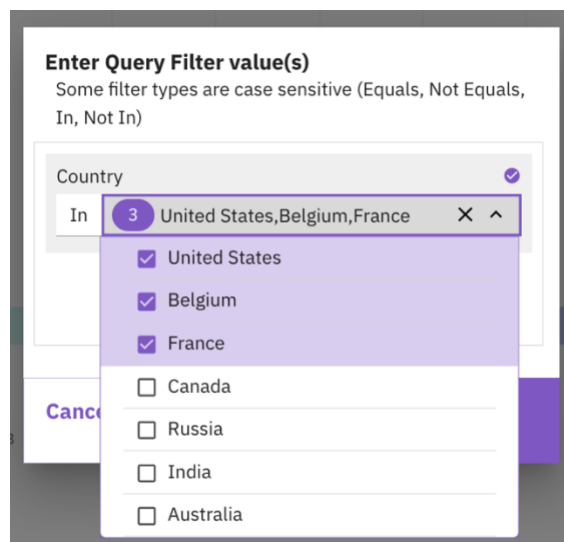


The screenshot shows the "Filter 1" configuration box. The "Remove" button, which is a small grey button with an "X" icon, is highlighted with a red rectangular box. The "Column:" dropdown is set to "Name" and the "Filter Type:" dropdown is set to "In". Below the dropdowns is a checkbox labeled "Value Required" and a link labeled "Add/View Values +" with a plus sign icon.

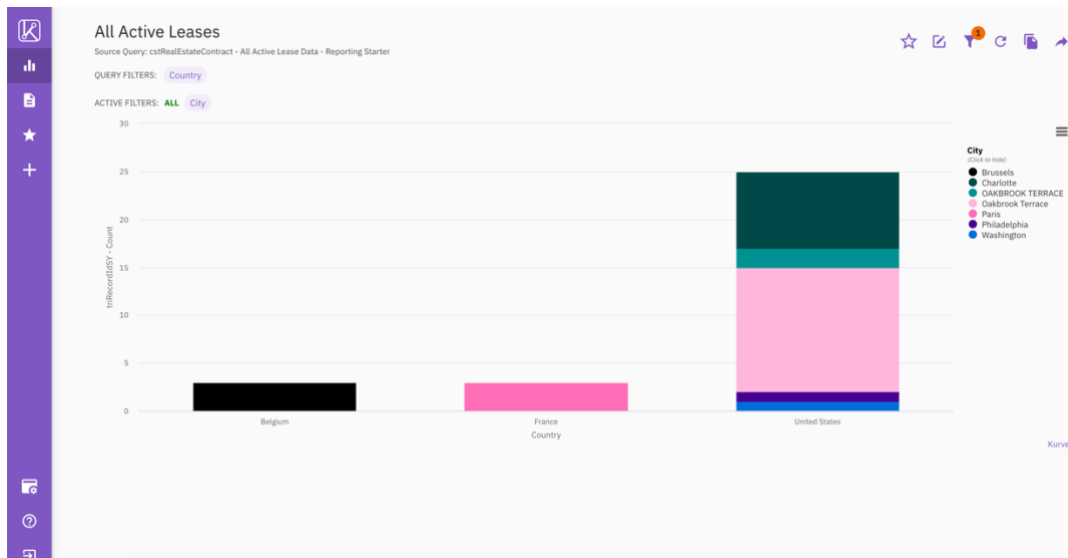
- vi. You can add up to 12 query filters by clicking 'Create Filter'. Once you are happy with your selections you can 'Save Changes' or continue editing your graph.



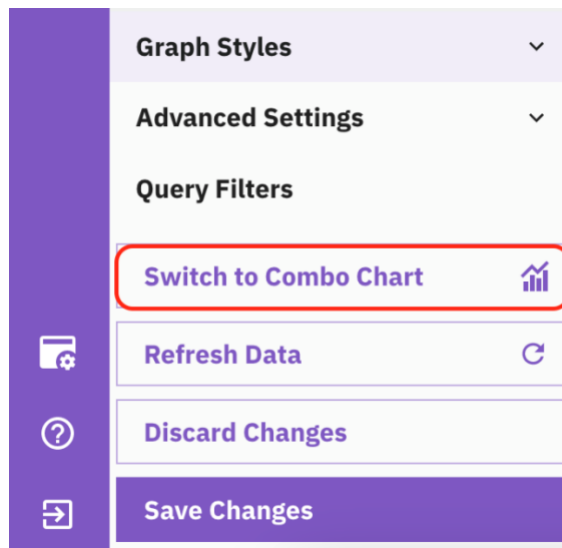
- vii. Upon clicking 'Save and Close', your query filter will prompt before viewing the graph. The 'In' filter allows you to filter and select multiple text values. For example, let's load this graph for United States, Belgium, and France.



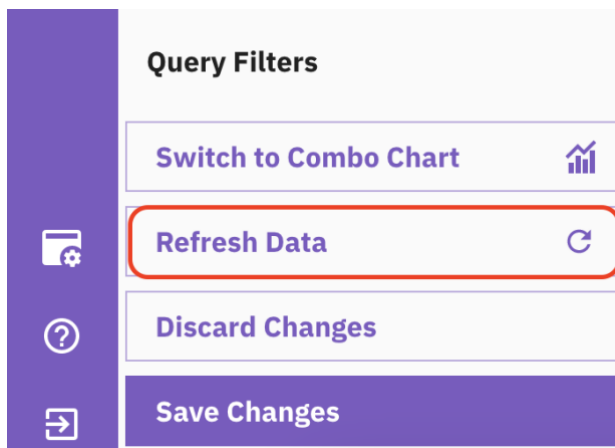
viii. Click 'Apply' and view your graph results.



k. **Switch to Combo Chart:** This allows you to visualize multiple measure values/series in one single graph. Refer to [Section 7: How to create and customize a Combo Chart Graph](#).



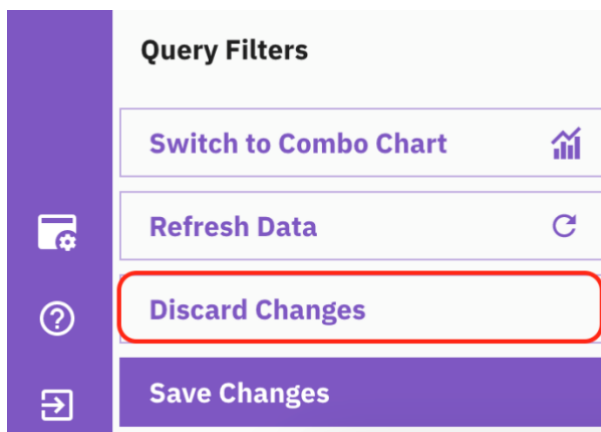
- I. **Refresh Data:** This allows you to edit the values you are filtering or view the most update to date version of your data.
 - i. Click the Refresh Data button (↻)



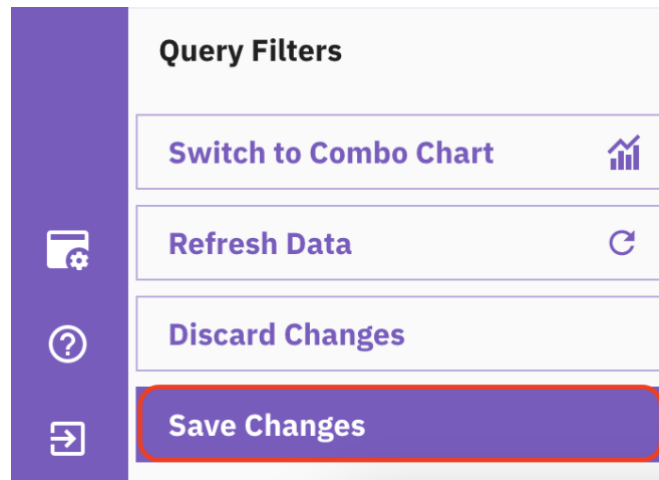
- ii. Input new values for your query filters.

Note: You can do this from this window to see how your graph will change or in the graph view page.

- m. **Discard Changes:** If you do not wish to Save any change you have made while in the edit graph panel, click Discard Changes. This will revert your graph back to what it was before opening the edit graph panel.



- n. **Save Changes:** When you are satisfied with your graph, click ‘Save Changes.’ The final, publishable graph will be displayed.

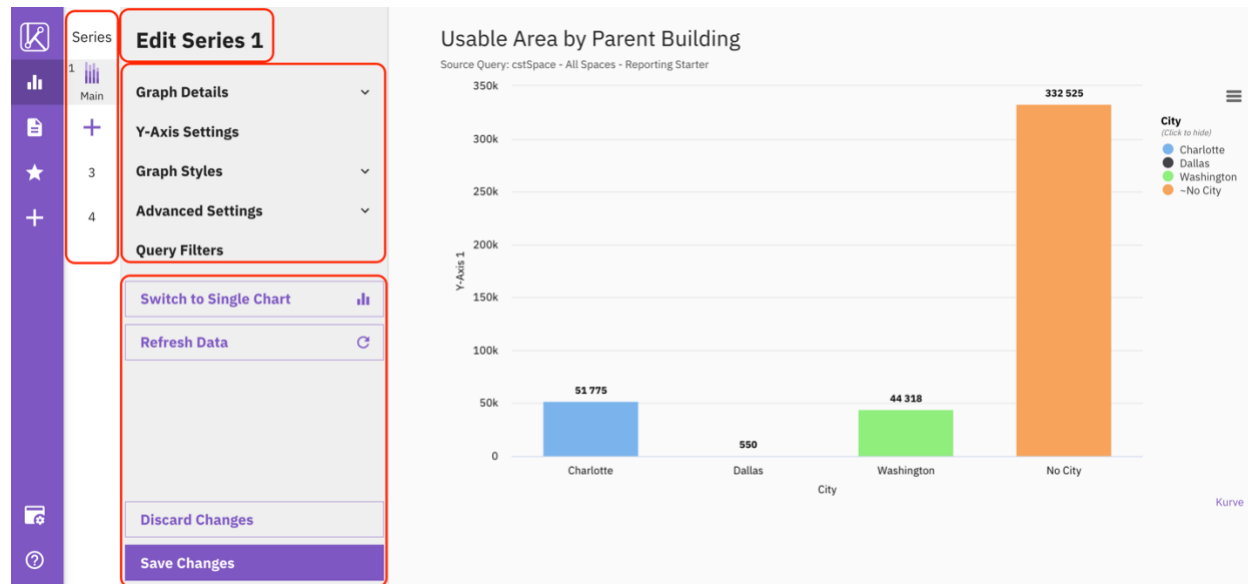


Note: For further information regarding a published graph's toolbar (i.e. using Graph Filters, Copy, Edit, etc.) please refer to the **Graphs Portal, *Using a Specific Graph's Toolbar.***


For further information regarding the navigating through the graph, please refer to **Graphs Portal, [Section 6. Navigating Through Graph Data.](#)**

7. How to Create and Customize a Combo Chart Graph

a. Navigating the Combo Chart edit page




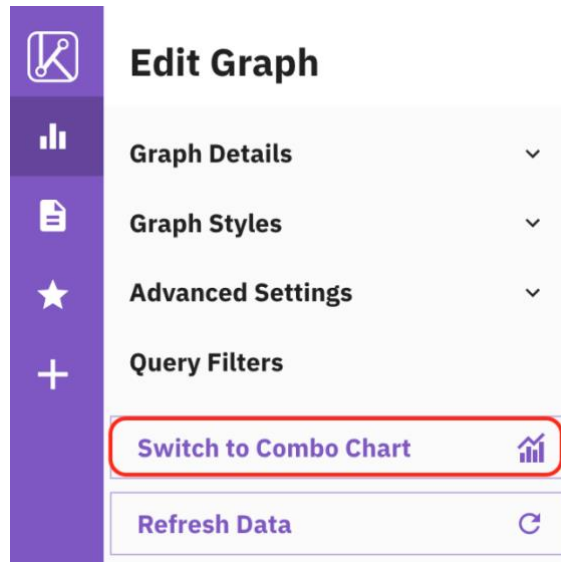
Combo Chart	A combination chart (Combo Chart) allows you to visualize multiple series in a single graph. For example, a graph can include a set of column series, overlaid by a line and a pie series.
Series	Series is a set of data. Different series types can be combined in a single graph.
Main	Click on Main under the Series section or any of the Series created below it to edit that specific series. In the example above, Edit Series 1 indicates Main is being edited.
Add Series	Click on the (+) icon to create up to four series (measure values) using the data that exists in your source Kurve report or Tririga Query.
Graph Details	Click to edit Graph Name, Select Graph Type, Select Dimension, Select Measure, Select Color By, Select Y-Axis.

Select Y- Axis / Y- Axis Settings	Create New/Edit multiple Y-Axis.
Graph Styles	Click to edit Graph Colors and Font Settings.
Advanced Settings	Click to edit Graph, Data, Label, Legend and Plot Settings.
Query Filters	Click to add/edit Query Filters.
Delete Series #	Click to delete up to four series.
Switch to Single Chart	Click to switch to Single Chart mode.
Refresh Data	Refresh the data in your graph without having to refresh and reload the whole page.
Discard Changes	If you do not wish to Save any change you have made while in the edit graph panel, click Discard Changes. This will revert your graph back to what it was before opening the edit graph panel.
Save Changes	When you are satisfied with your graph, click 'Save Changes.' The final, publishable graph will be displayed.
All Series	The All Series () icon indicates that some of the settings on the page will apply to all series. The settings that apply to all graphs are indicated by (All Series).

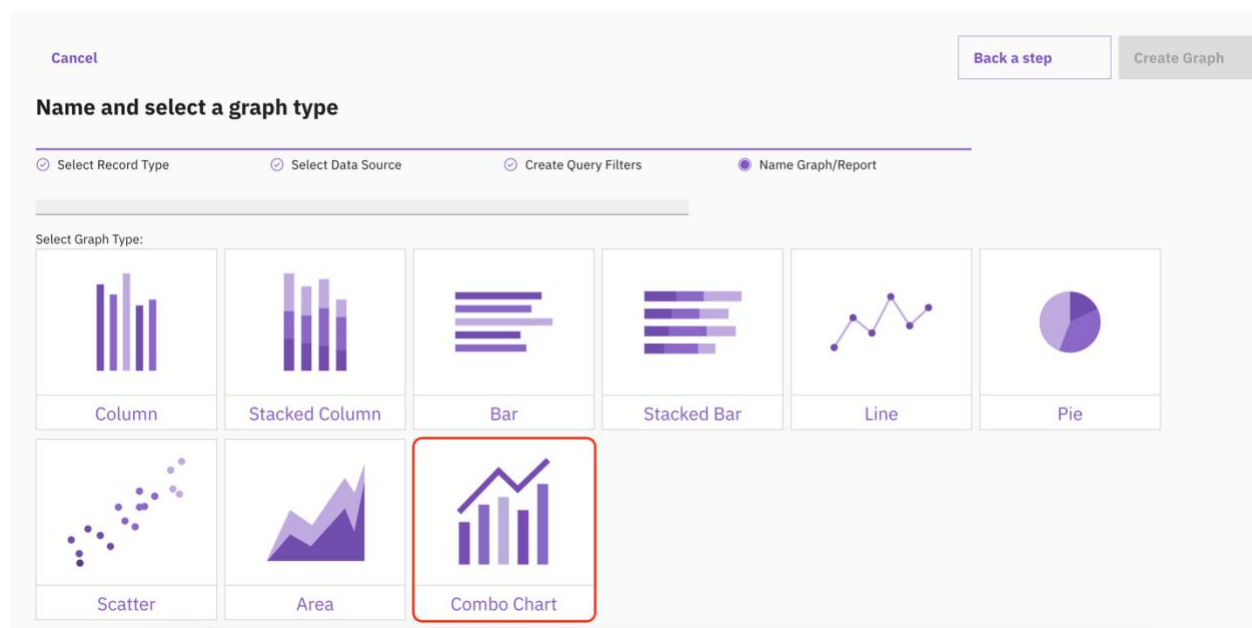
b. Create from an existing or new graph:

i. Existing Graph:

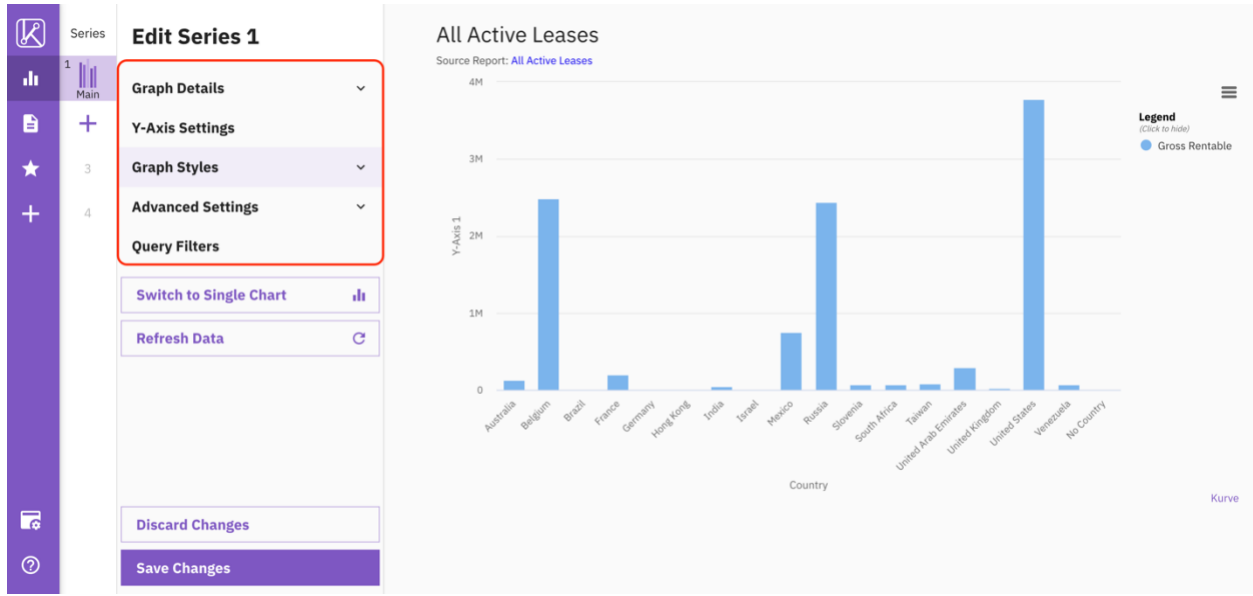
- Select a graph from the Graphs Overview portal.
- Click on the Edit Graph icon ()
- In the graph edit panel click the 'Switch to Combo Chart' button.



- ii. **New Graph:** Create a new graph and select 'Combo Chart' as the graph type.



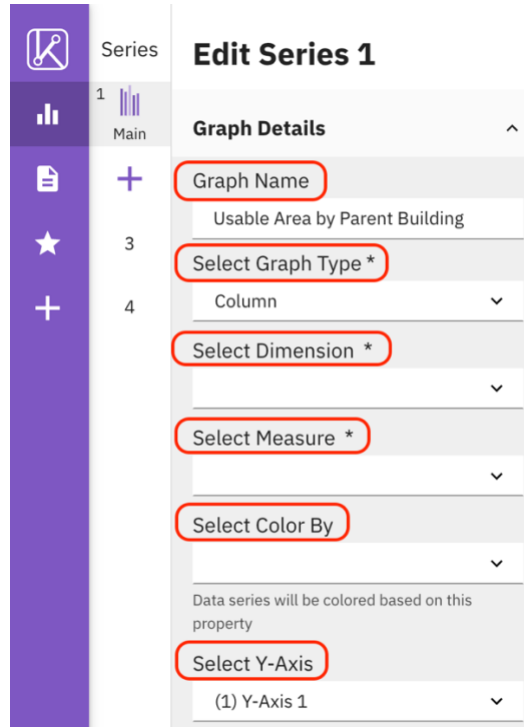
- c. **Edit graph panel:** Once the graph has been created, you will be navigated to edit your graph starting with Series 1 as your main graph.
 - The following section is divided according to the five drawers visible in the graph customization panel (Graph Details, Y Axis Settings, Graph Styles, Advanced Settings, Query Filters).



d. **Graph Details section:**

i. **Notes:**

- Each graph created will be a different Series. The main graph will default to the Edit Series 1 panel.
- The Graph Name and Select Dimension field will be a fixed field that is standard across multiple series.
- If you are creating a combo chart graph from an existing graph, the selections for customizing the graph remain the same as in the single chart mode except for a new addition, called Select Y-Axis.



- ii. **Graph Name:** Refer to [Section 6a.i.](#) under Graph Details.

Note: Your graph name is set on Series 1 (Main) which will be fixed across all series.

- iii. **Select Graph Type:** Refer to [Section 6a.ii.](#) under Graph Details.

- iv. **Select Dimension:** Refer to [Section 6a.iii.](#) under Graph Details.

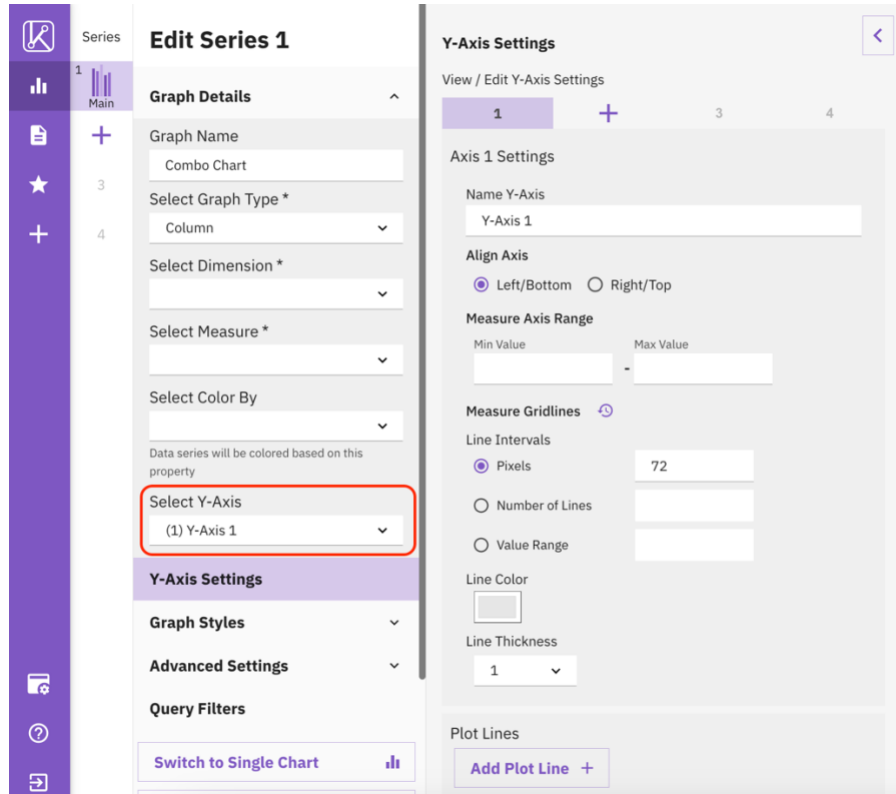
Note: Your dimension field is set on Series 1 (Main) which will be fixed across all series.

- v. **Select Measure:** Refer to [Section 6a.iv.](#) under Graph Details.

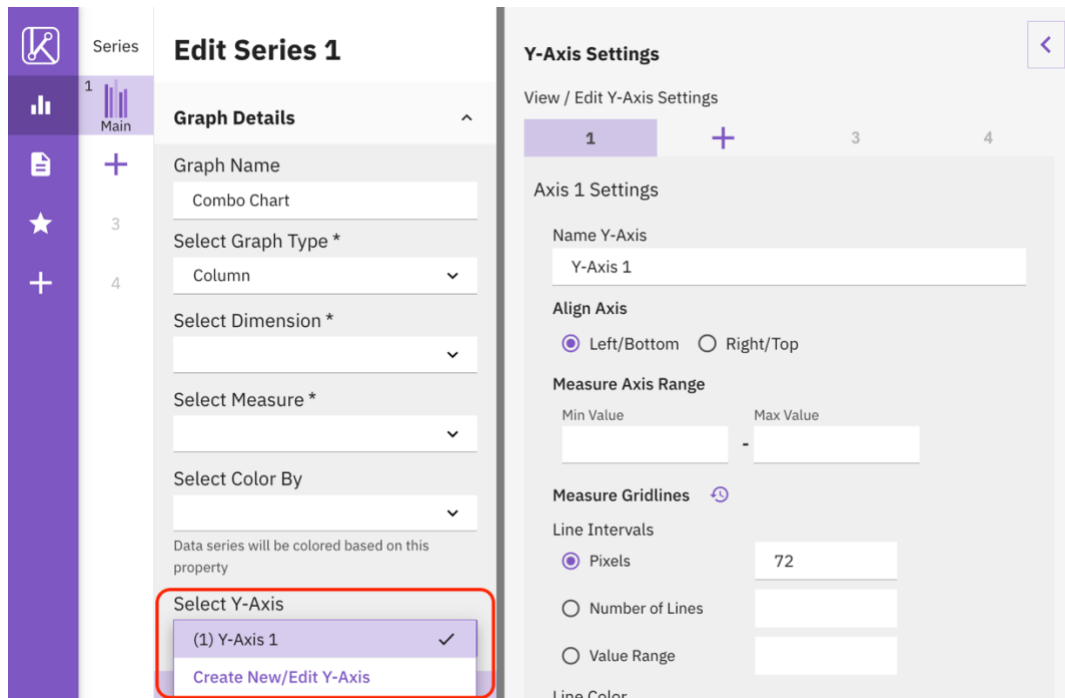
- vi. **Select Color By:** Refer to [Section 6a.v.](#) under Graph Details.

- vii. **Select Y-Axis:** This is where you assign a Y-Axis to each series, and it is also a shortcut to create a new or edit an existing Y-Axis.

- Click the drop-down menu (▼) to assign your Y-Axis for the series you have selected

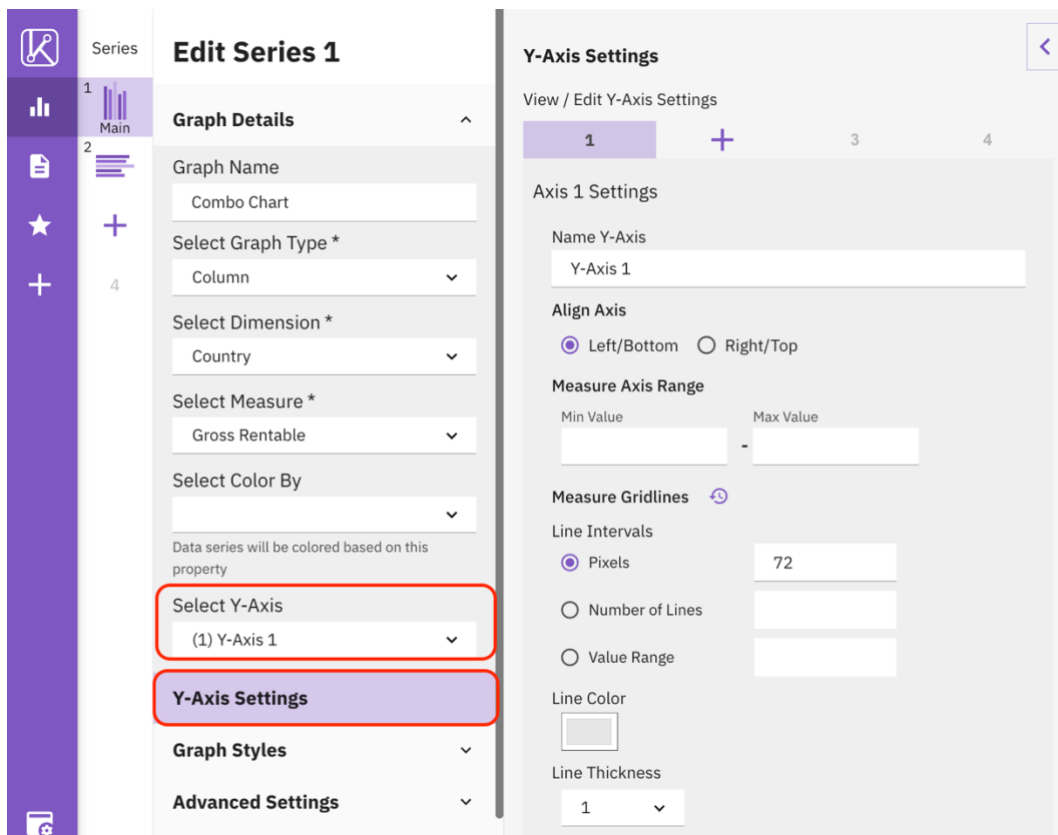


- Click the drop-down menu (▼) to create or edit up to four Y Axes.



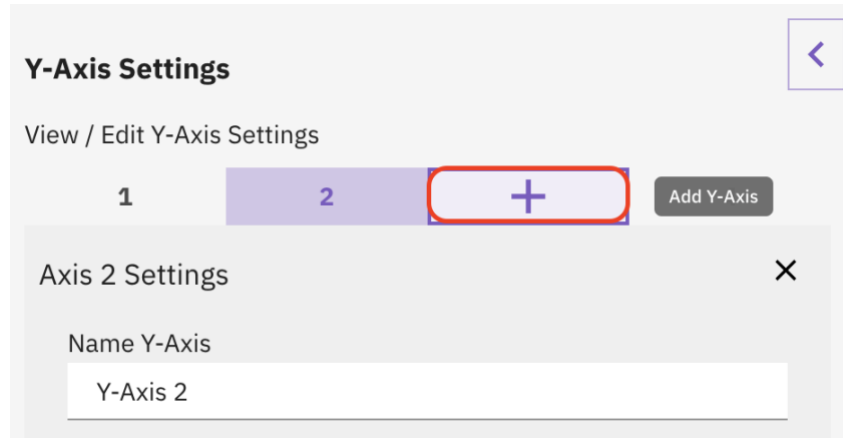
e. Y – Axis Settings

- Creating and editing Y- Axes can also be done by selecting the Y-Axis Settings drawer. The Y-Axis Settings drawer will open on the right.
- Once the Y-Axis is created it will be visible in the Select Y-Axis drop-down menu. Switch between the Axes options to assign it to a series.



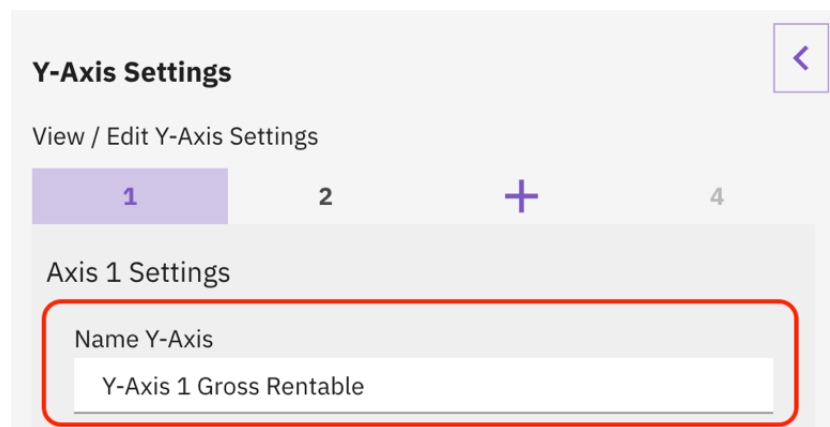
i. View/Edit Y-Axis Settings

- Another way of adding multiple axes is by selecting the (+) icon in the Y-Axis Settings drawer.



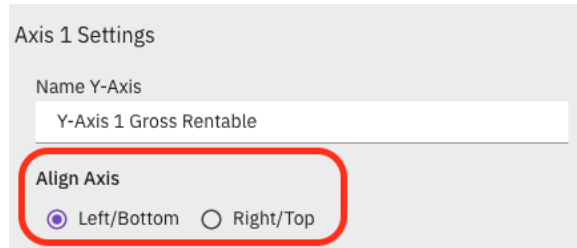
ii. **Name Y-Axis**

- To assign a name to your Y-Axis 1, type your desired name in the white box. This name will appear in your graph for the selected axis.

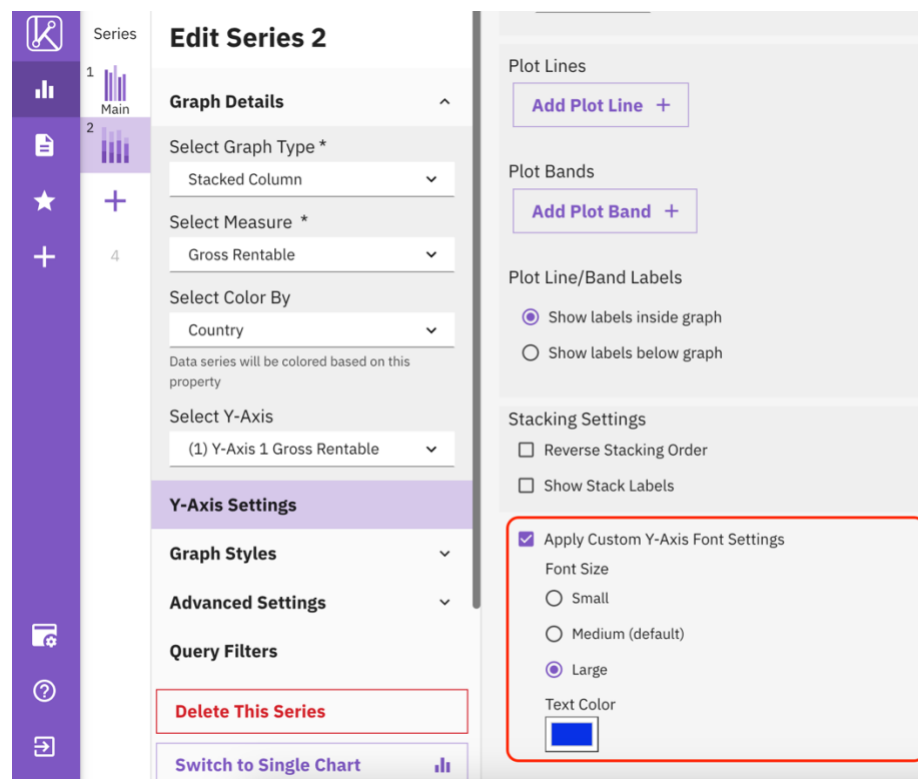


iii. **Align Axis:** Set the measure axis to the left/bottom or right/top of the graph.

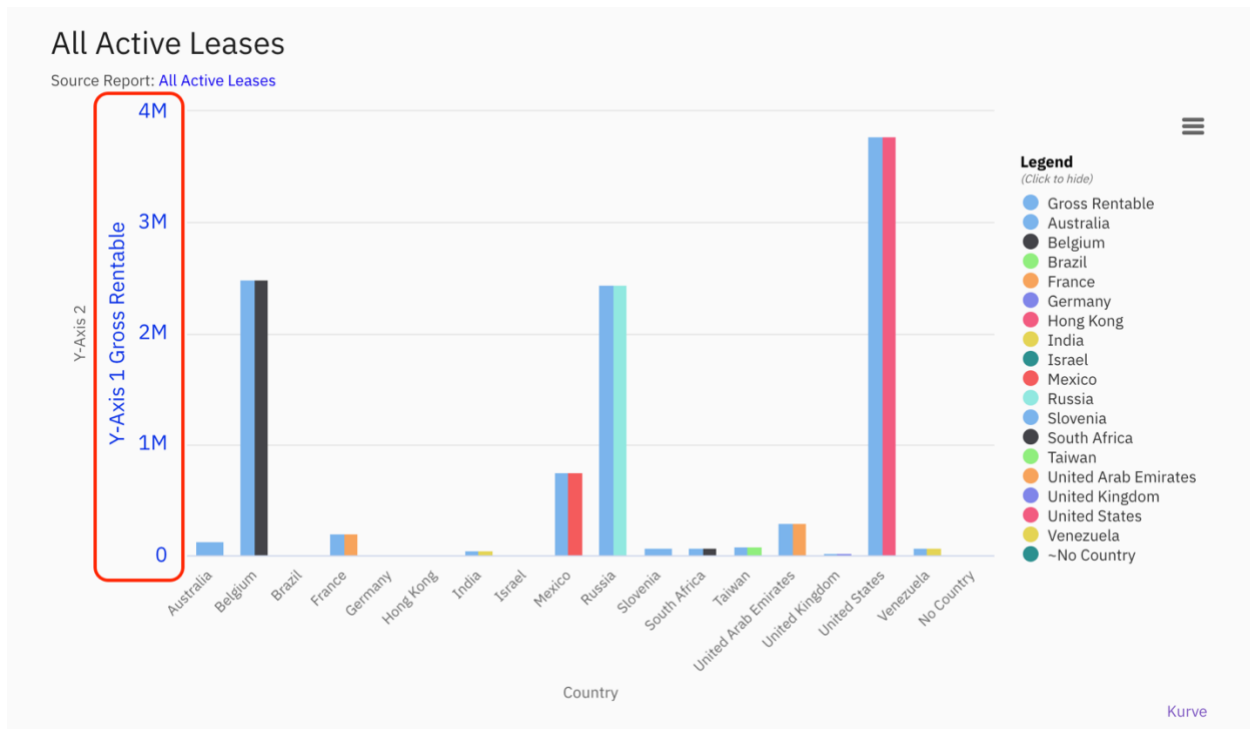
- *Column, Stacked Column, Line, Scatter, and Area graphs will align the axis to the left or right.*
- *Stacked Bar and Bar graphs will align the axis to the bottom or top.*
- Refer to [Section 6d.ii.](#) for Axis Settings: Align Axis.



- iv. **Measure Axis Range:** Refer to [Section 6d.ii.](#) Measure Axis Range.
- v. **Customize Measure Gridlines:** Refer to [Section 6e](#) Customize Measure Gridline Settings.
- vi. **Plot Settings:** Refer to [Section 6i](#) Plot Settings.
- vii. **Apply Custom Y- Axis Font Settings**
 - To customize the font size and text color, select the Apply Custom Y- Axis Font Settings box.
 - All font settings here will be specific to the selected Y-Axis and will override, if any, the axis font setting that is set under Graph Styles → Font Settings.

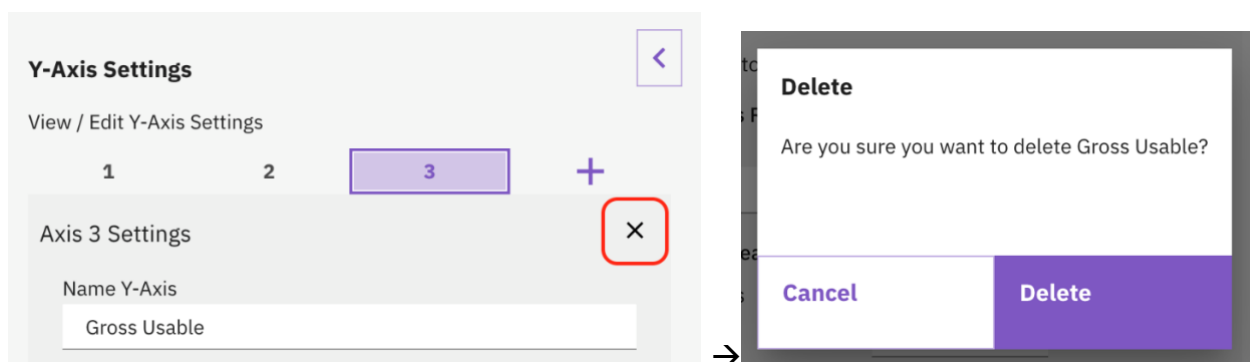


- In this example, for Series 2, the font size for the Y- Axis 1 Gross Rentable is large and the text color is blue.



viii. Delete Y-Axis

To delete a Y-Axis, navigate to the Y-Axis you would like to delete. On the top right-hand corner, click the X icon. You will be prompted with a pop-up, click Delete to remove the axis, or Cancel to undo your action.



f. Graph Styles

Note: This will be applied to all series in your graph.

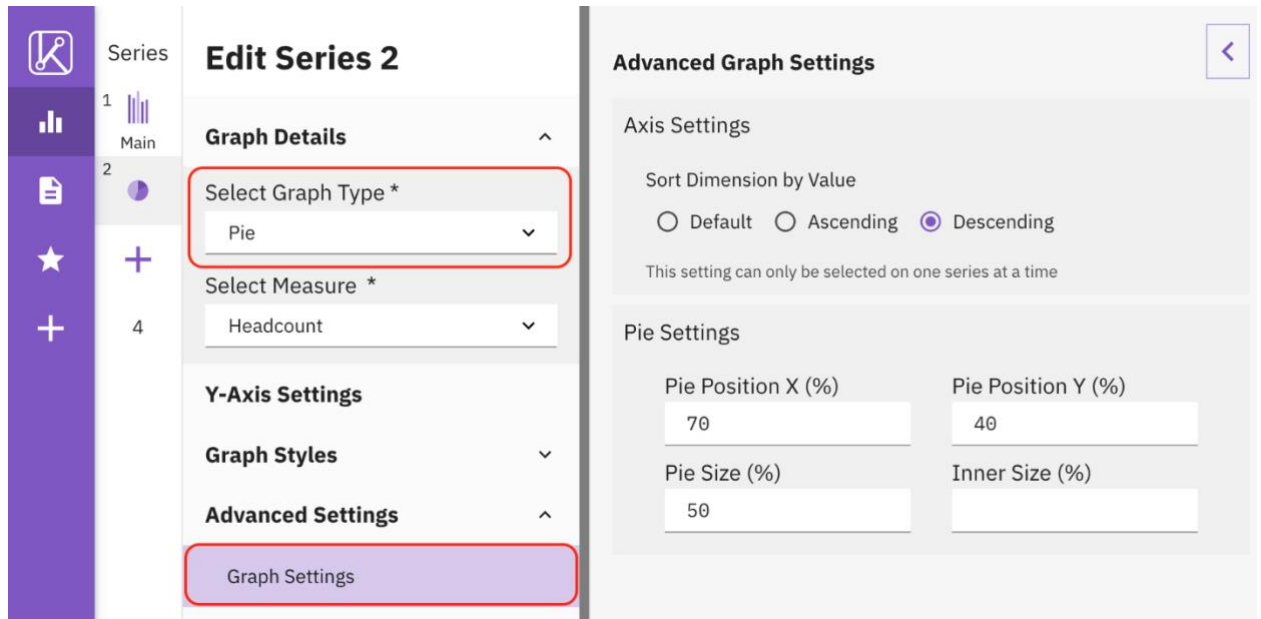
- Graph Color: To assign a graph color refer to [Section 6.b.](#) Graph Styles: Graph Colors.
- Font Settings: To apply custom font settings refer to [Section 6.c.](#) Graph Styles: Font Settings.

g. Advanced Settings

Note: Some settings will be hidden for certain graph types in which they aren't applicable. The table below displays the graph types and the specific settings that are available.

Graph Type	Are Graph Settings Applicable?	If Yes, the settings to customize
Column	Yes	Axis Settings
Stacked Column	Yes	Axis Settings and Stacking Settings
Bar	Yes	Axis Settings
Stacked Bar	Yes	Axis Settings and Stacking Settings
Line	Yes	Axis Settings
Pie	Yes	Axis Settings and Pie Settings
Scatter	Yes	Axis Settings
Area	No	Axis Settings

- Graph Settings:** In the following example this setting will be specific to the pie chart type.



- **Axis Settings:** Sort your pie graph according to the total measure value of each Dimension. You can sort by ascending or descending. If you have multiple series created, this setting can only be selected and applied on one series at a time.
- **Pie Settings:** To set the position of your pie chart in the graph, type a numerical value to adjust position X, position Y, Pie Size, and Inner Size.

Setting	Description
Pie Position X	Changes the horizontal alignment of where the pie graph sits in the chart area. Input values between 0% (left) and 100% (right).
Pie Position Y	Changes the vertical alignment of where the pie graph sits in the chart area. Input values between 0% (top) and 100% (bottom).
Pie Size	Specifies the absolute pie size within the chart area.
Inner Size	Adjusts the inner diameter of the pie, i.e. converting it to a donut like chart.

Advanced Graph Settings

Axis Settings

Sort Dimension by Value

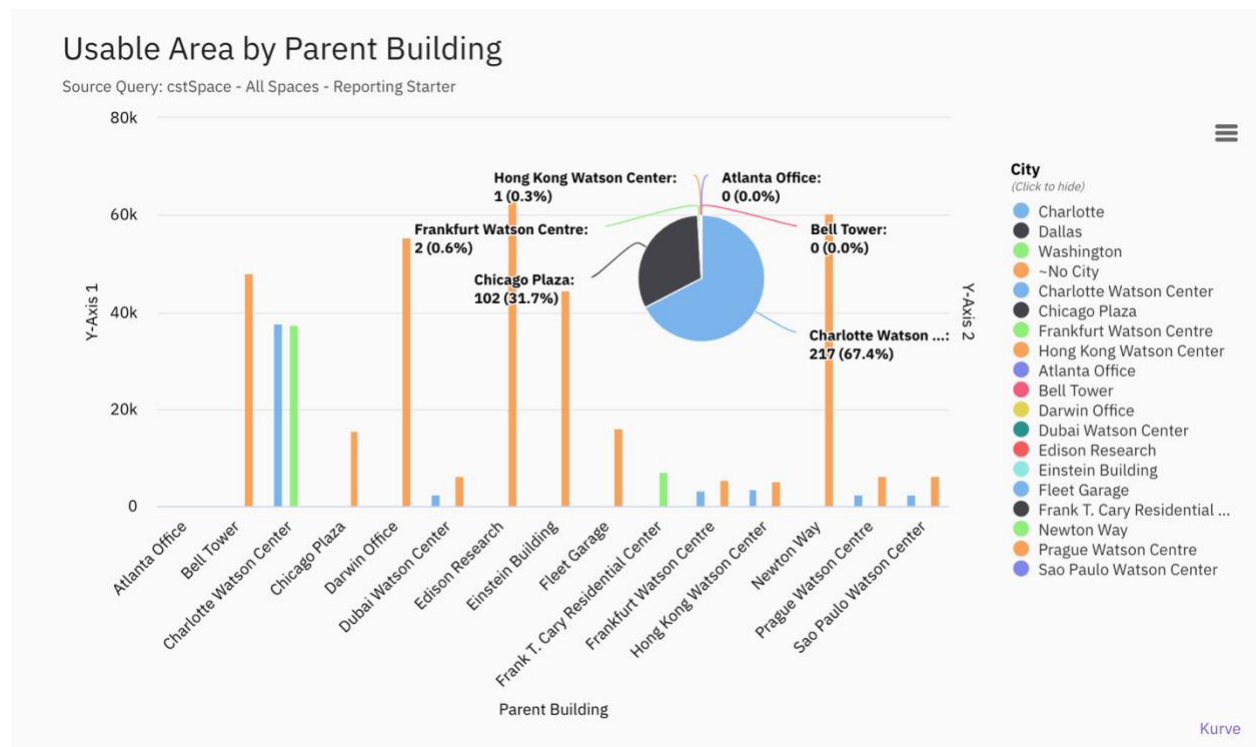
Default
 Ascending
 Descending

This setting can only be selected on one series at a time

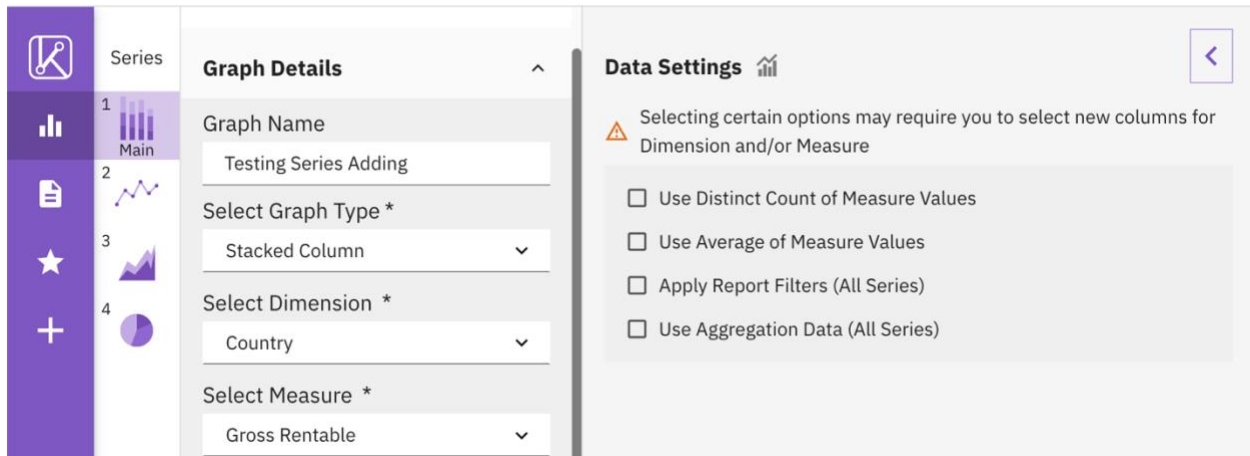
Pie Settings

Pie Position X (%)	Pie Position Y (%)
<input type="text" value="70"/>	<input type="text" value="40"/>
Pie Size (%)	Inner Size (%)
<input type="text" value="30"/>	<input type="text"/>

- In this example below, the pie graph is shown with the column graph in the combo chart graph based on the axis and pie settings selection.

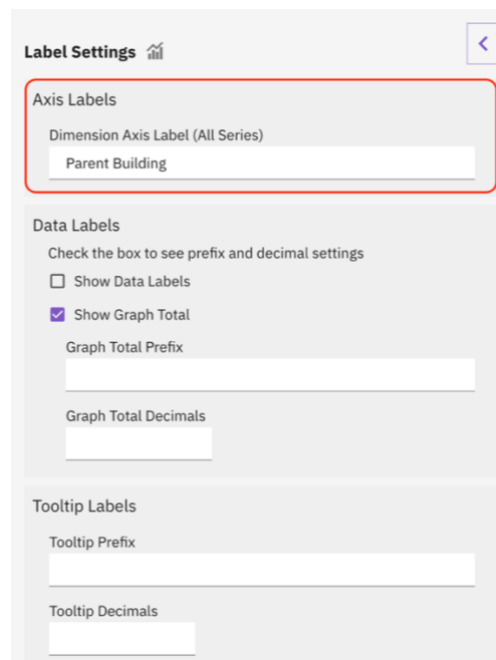


- ii. **Data Settings:** Refer to Create a Graph [Section 6h](#) which covers how to apply measure values.
- Use “Distinct Count of Measure Values” and “Use Average of Measure Values” settings can be applied per series
 - “Apply Report Filters” and “Use Aggregation Data” settings will apply to all series.

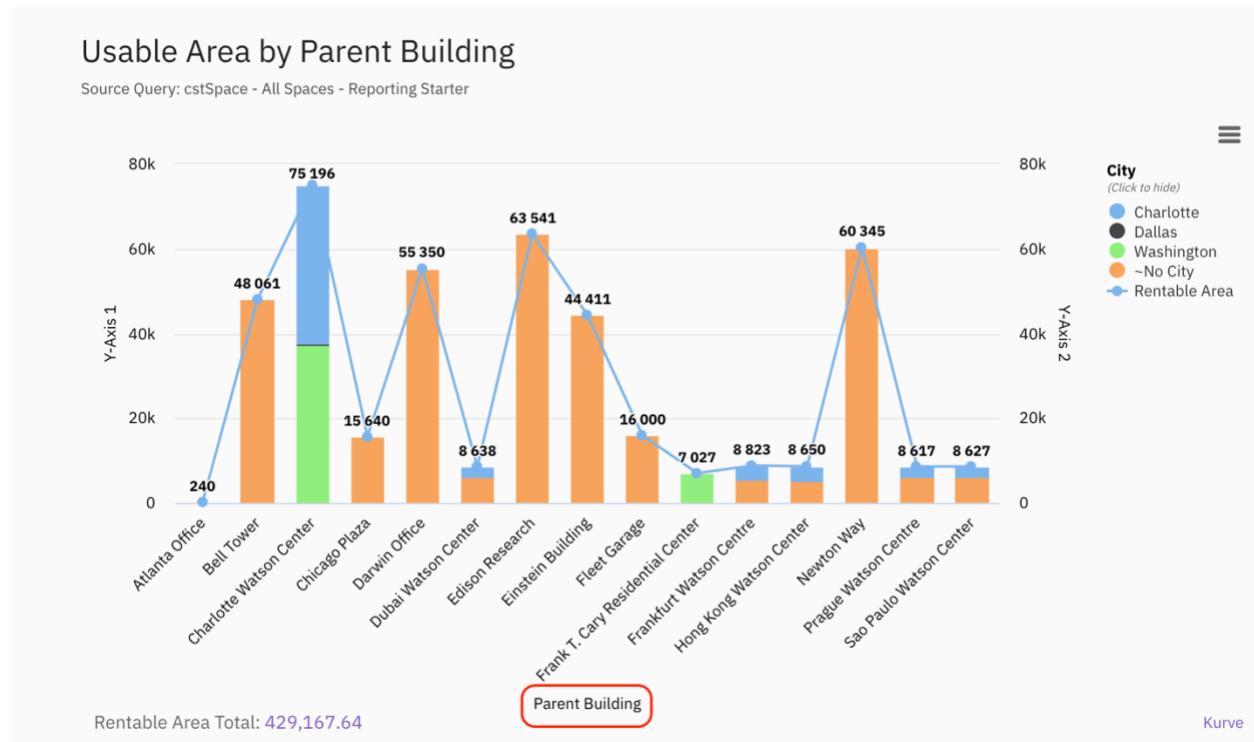


- iii. **Label Settings:** Refer to Create a Graph [Section 6f](#) which covers Data Labels, Tooltip Labels and Thousands Separator.

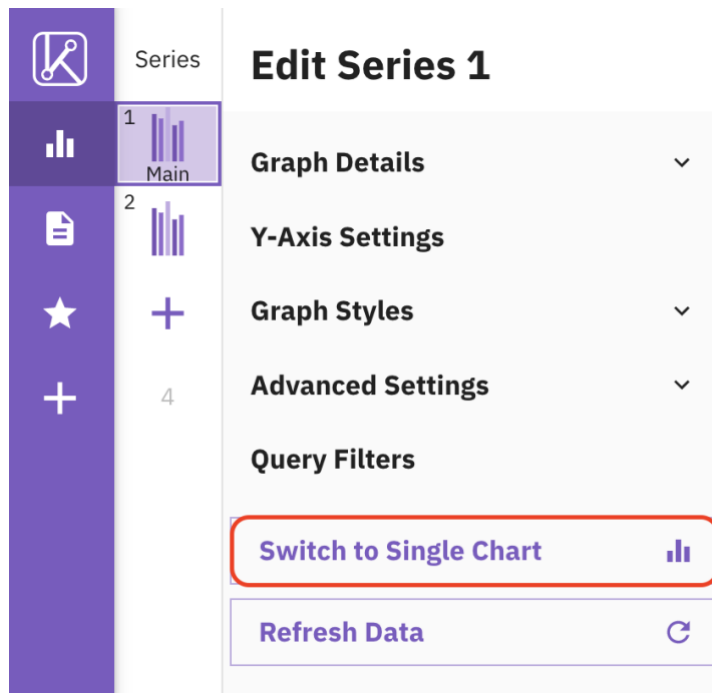
Axis Labels: The All Series indicates this setting will be applied graph wide based off the dimension.



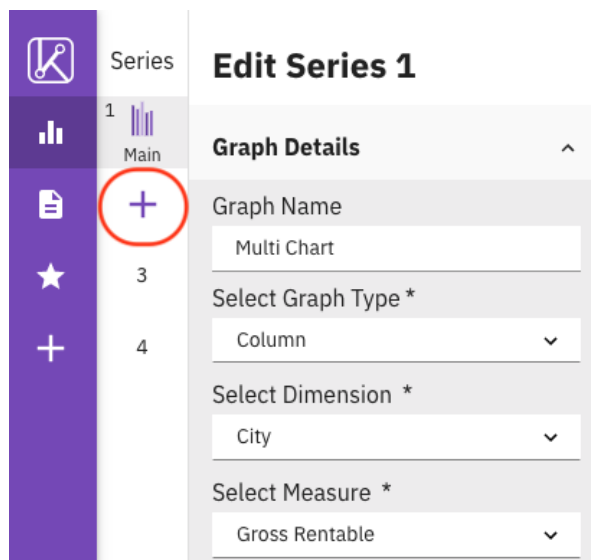
- To adjust your measure label, navigate to the Y-Axis settings and adjust the label.



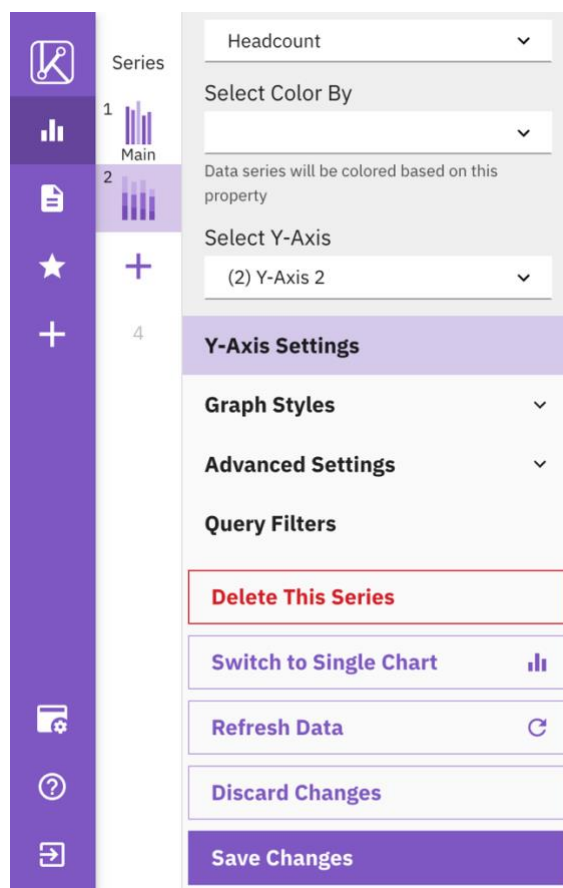
- iv. **Legend Settings:** The All Series indicates this setting will be applied graph wide. Refer to Create a Graph [Section 6g](#) which covers how to use the legend feature.
- v. **Plot Settings:** The plot area settings will be applied graph wide. Refer to Create a Graph [Section 6j](#) which covers how to customize the plot background.
- h. **Query Filters:** Refer to Create a Graph [Section 6j](#) on how to create query filters.
- i. **Switch to Single Chart**
 - To change your Combo Chart to a single chart, select “Switch to Single Chart” under Query Filters.



- After switching to a single chart your graph will revert to your selections from the main graph.
- j. **Refresh Data:** Refer to Create a Graph [Section 6k](#) which covers how to use the refresh data feature.
- k. **Discard Changes:** Refer to Create a Graph [section 6l](#) which covers how to discard changes.
- l. **Save Changes:** Refer to Create a Graph [section 6m](#) which covers how to save changes.
- m. **How to add multiple Series:**
- Select the (+) button to add another graph to display multiple series in your main graph.



- ii. Repeat the process from Series 1 for each added Series in the Edit Series panel, starting with Graph Details.
Note: To delete a series after the main series, simply select Delete Series button after the Query Filters section.



CREATE A REPORT


1. *Selecting the Report Record Type*

- a. From the Kurve Dashboard, click on the Create Icon (+) to create a new record;
- b. Select 'Report' as your record type (options being Graph or Report);


Cancel

Please select a record type

Select Record Type Select Data Source Create Query Filters Name Graph/Report



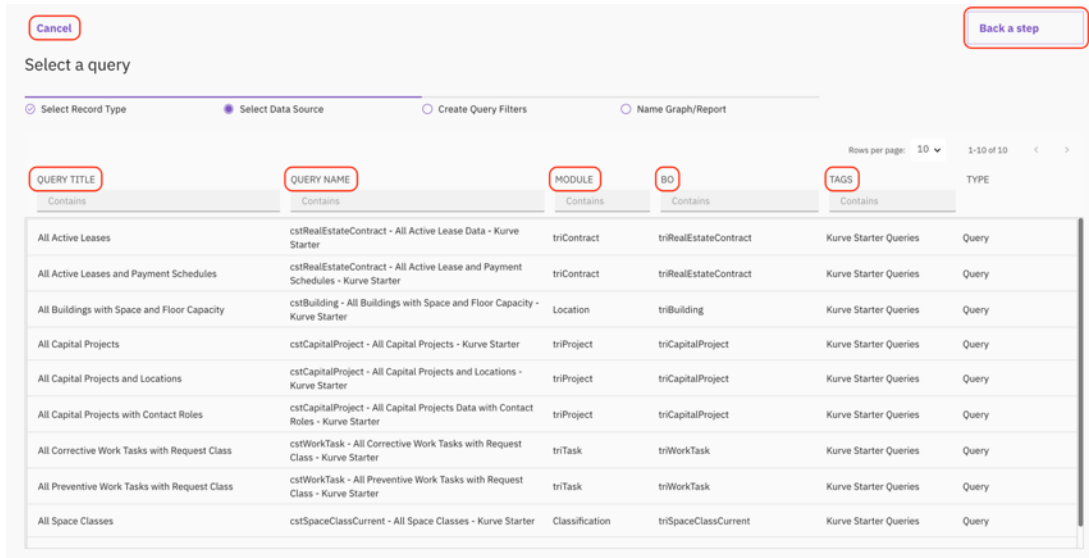
Graph



Report

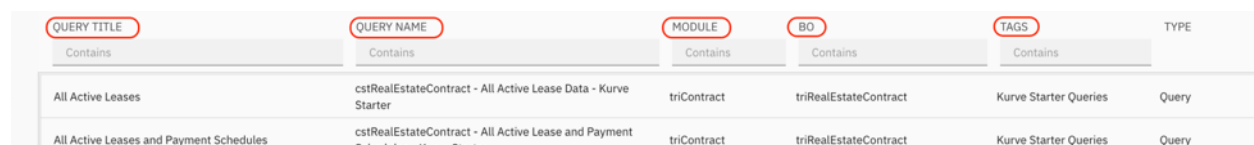
2. *Creating the Report from a Query*

- a. Select the query you would like to use to make your graph:
Columns are organized in a table by Query Title, Query Name, Module, BO and Tags.



Back a step	(Top right of screen) Click to back to the previous step to choose a report source
Cancel	(Top left of screen) Click to cancel making a report and go back to the Kurve Dashboard
Search	Click enter in any of the “Contains” boxes to search for your query once filling in your search criteria.

b. You can search for the query by one or more of the following options: Query Title, Query Name, Module, BO, Tags;

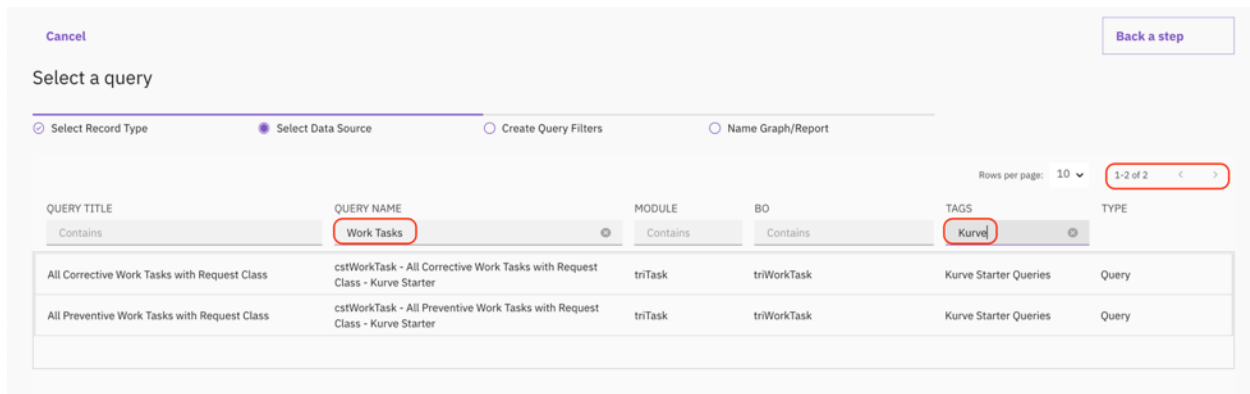


c. Input your search parameters underneath any of the search options, for example, let’s search “Active” under Query Name and “Maintenance” under Tags;

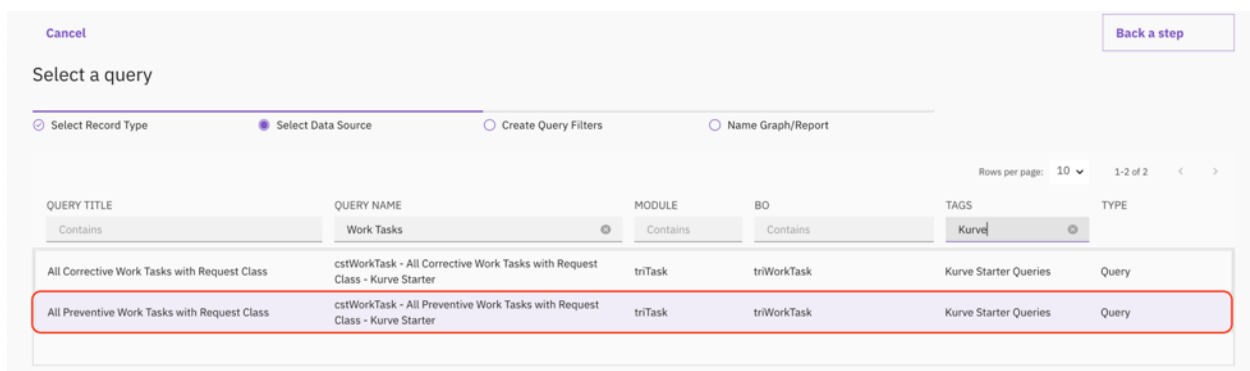


d. Click enter or return on your keyboard to initiate the search. Your Results will update with the number of queries matching your search criteria. If the query is

greyed out, you cannot use it in a Kurve Report. Only queries with Type “Query” or “Report” can be pulled into Kurve.



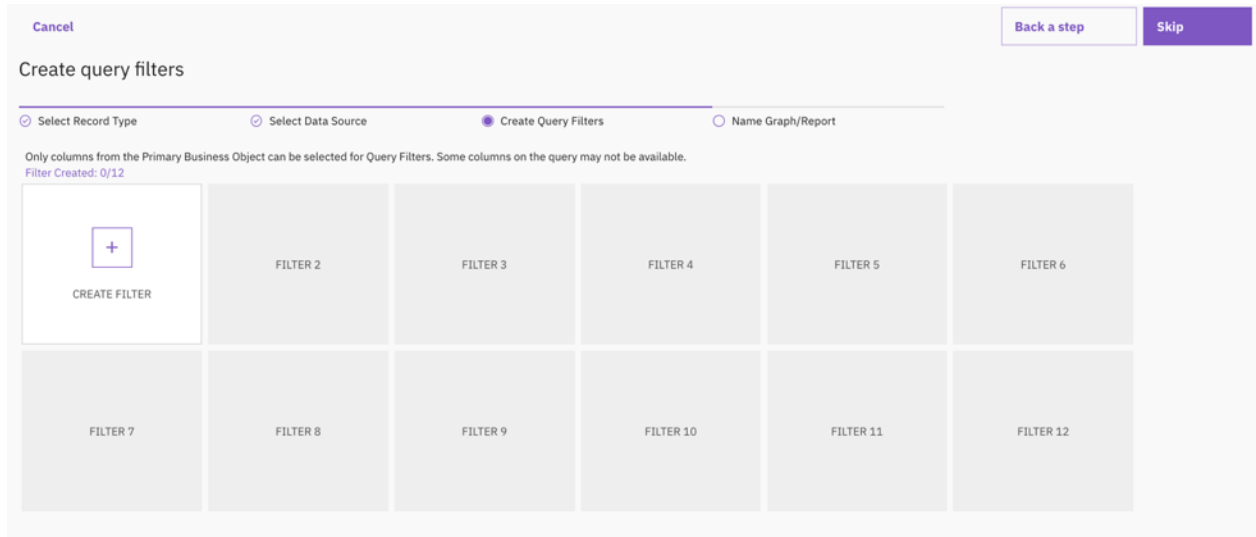
- e. Scroll through the list (scroll bar on the right-hand side of the table) and click on the query you would like to use to make a graph;



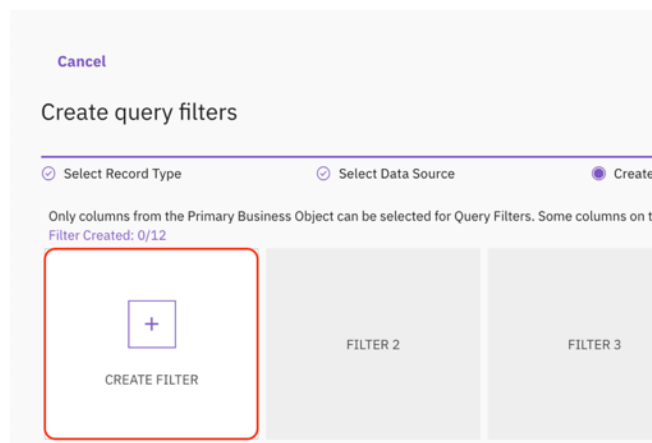
3. Create Query Filters

With Kurve Query Filters you can create and apply filters before loading your report. This will help to improve load times and see only the data that is relevant to you.

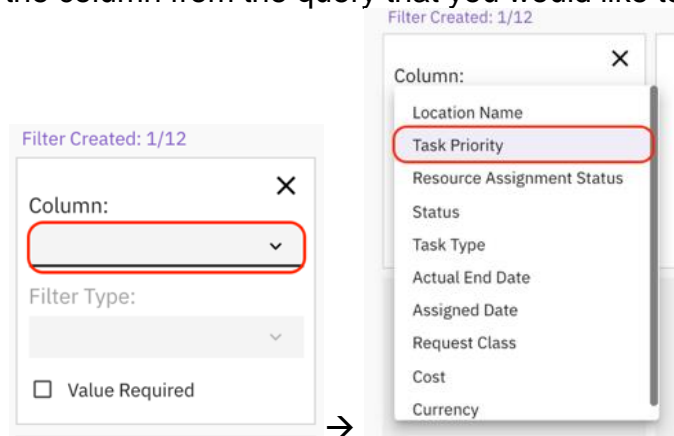
- a. A new screen will open allowing you to create up to 12 query filters on your report. You can either create them here, or skip to continue to your report.



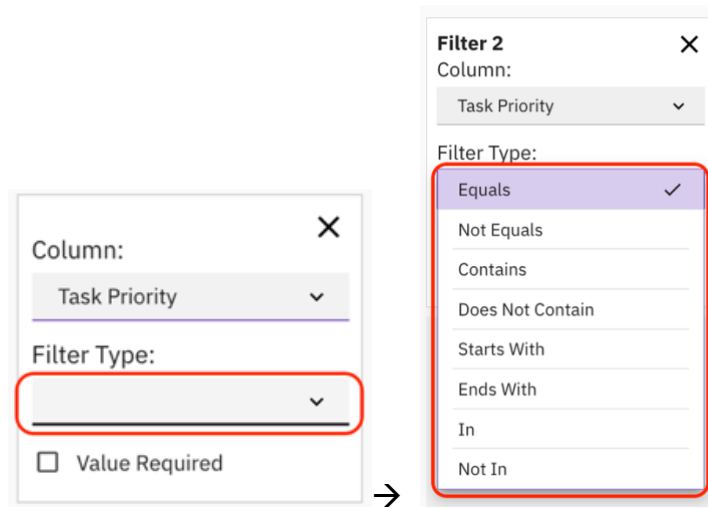
b. Create a new filter by clicking on the first open box “Create Filter”



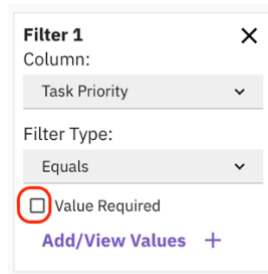
c. Next, select the column from the query that you would like to have a filter



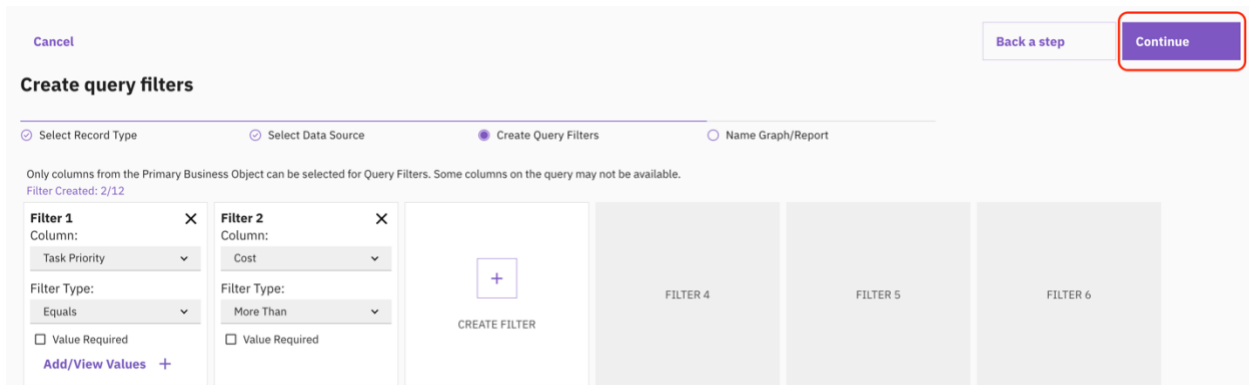
d. Now, select the filter type:



e. Select whether the filter will be required or not upon loading the report by selecting the check box next to “Value Required”. By making the filter required, the user will not be able to load the report unless they provide a value.



f. You can continue making more filters using the same process. Once done creating them, click Continue.



4. Naming the Report

- a. Once a query is selected, a new page will open. Click on “Name Report” and type in the name of the report you would like to create.

Note: Once the name of the report is typed into the space, the “Create Report” button will be enabled and will turn purple.

The screenshot shows the 'Name Report' step of a multi-step process. At the top right, there are buttons for 'Cancel', 'Back a step', and 'Create Report'. The 'Create Report' button is currently greyed out. Below the title 'Name Report', a progress bar shows four steps: 'Select Record Type', 'Select Data Source', 'Create Query Filters', and 'Name Graph/Report'. The 'Name Graph/Report' step is the active one, indicated by a purple dot. Below the progress bar, the text reads 'Review your selections and name your report'. The selected record type is 'Report', the data source is 'cstWorkTask - All Preventive Work Tasks with Request Class - Kurve Starter', and the query filters are '[Column: Task Priority, Filter Type: Equals] [Column: Cost, Filter Type: More Than]'. At the bottom, there is a text input field labeled 'Report Name' which is currently empty and highlighted with a red border.

5. Click “Create Report.”

This screenshot is identical to the previous one, but the 'Create Report' button at the top right is now highlighted with a red border and has turned purple, indicating it is now enabled and ready to be clicked. The 'Report Name' field at the bottom now contains the text 'All Preventive Work Tasks'.

6. Enter Query Filter value(s)

If you have created query filters, you can now enter the values you would like the report to load.

- a. Required Filters: you will be required to input a value before you can load your report. In the case below, Task Priority is required (as indicated by the red Required mark beside the field name), therefore, the “Apply” field is greyed out.

Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Task Priority (Required)
Equals

Cost
More Than

Cancel Apply

- b. For your filters with lists created, for Equals/Not Equals you can select 1 value, for In/Not In you can select multiple. Either select a value from the list or enter a temporary value in the box.
 - i. To enter a temporary value, input the text, and click 'Add'
 - ii. Click Apply to load the report with the query filter results. Query filters act as And filters. Therefore, in our example below, if we inputted a value into cost as well, it would load results that satisfy both conditions.

Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Task Priority (Required)
Equals Medium
Add - Medium

Cost
More Than

Cancel Apply

Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Task Priority (Required) ✓
Equals Medium

Cost
More Than

Cancel Apply

- c. Non-required query filters: for filters that you have not checked the Required box for, you have the option to enter a value or skip it to load all results.

Enter Query Filter value(s)
Some filter types are case sensitive (Equals, Not Equals, In, Not In)

Task Priority (Required)

Equals Medium

Cost

More Than

Actual End Date

After MM/dd/yyyy

Request Class

Contains

Cancel Apply

d. View Query Filters Applied

- i. You may view your query filters at the top of your report. Hover your mouse over it to see the value applied.

All Preventive Work Tasks with Request Class

Source Query: cstWorkTask - All Preventive Work Tasks with Request Class - Reporting Starter

QUERY FILTERS: Status Task Priority

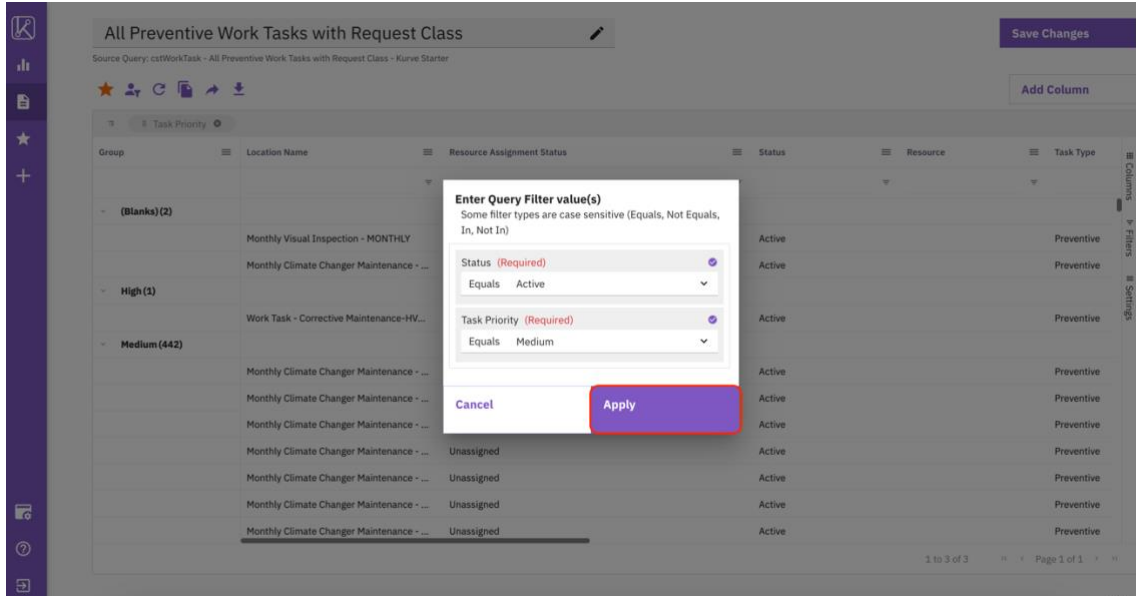
☆ 👤 ↻ Status Equals Active

Add Column

Location Name	Task Priority	Resource Assignme...	Status	Resource
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Assigned	Active	
Monthly Climate Changer Maintenance - MONTHLY	Medium	Unassigned	Active	

1 to 100 of 380 Page 1 of 4

- ii. Click on the filter to edit. Don't forget to click apply to update your query filters.



7. Personalizing / Re-organizing the Columns on the Report

- a. The created report will now open in a page where you can personalize and reorganize the report.

Note: Please refer to the Reports Portal, [Section 3 to 6](#).

ADMIN PORTAL

1. Getting to know the Kurve Admin Dashboard

Admin Portal - Graphs


Search Graphs

GRAPHS REPORTS

Rows per page: 10 1-10 of 1633

GRAPH NAME	SOURCE QUERY NAME	OWNER	DATE CREATED	SHARED WITH
All Corrective Work Tasks	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Ben Rigler	June 26, 2023	-
Copy of auto open Multi	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Ignacio Diaz	June 26, 2023	-
Copy of auto open Multi	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Ignacio Diaz	June 26, 2023	-
copy of bens	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Me	June 23, 2023	Public
test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Kurve Test 01	June 23, 2023	-
Copy of Test Combo Chart	cstRealEstateContract - All Active Lease Data - Kurve Starter	Lauren Rochon	June 23, 2023	-
Test Combo Chart	cstRealEstateContract - All Active Lease Data - Kurve Starter	Lauren Rochon	June 23, 2023	-
combooo	cstRealEstateContract - All Active Lease Data - Kurve Starter	Ben Rigler	June 22, 2023	-
cmbo	cstRealEstateContract - All Active Lease Data - Kurve Starter	Ben Rigler	June 22, 2023	-
Copy of 1.22 Area	cstWorkTask - All Preventive Work Tasks with Request Class - Kurve Starter	Me	June 22, 2023	-

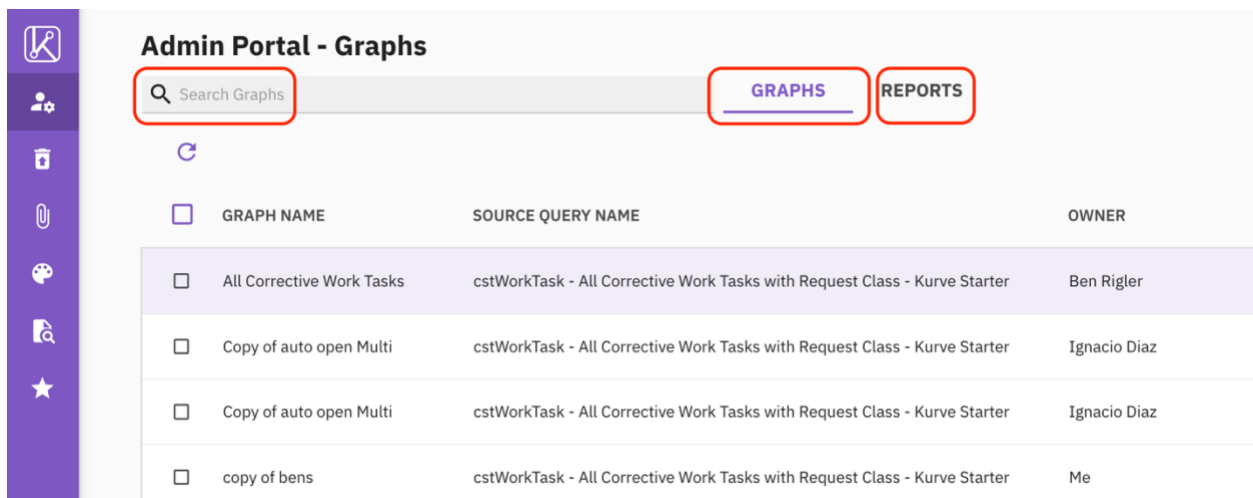
	Kurve Dashboard	Click here to return to the Kurve dashboard.
	Admin Portal	Click here to see all graphs and reports with no restrictions. You can reassign graphs/reports to different users, change the share settings, delete, copy or get the portal URL.
	Restore/Permanent Delete Graphs and Reports	Click here to view all deleted graphs and reports by all users. You can easily restore them in this view or permanently delete records from Kurve.
	Reattach Graphs to Reports	View graphs here that are not linked to a report. For any graphs that do not have a link, use this page to relink them.
	Manage Color Templates for Kurve Users	Click here to add, delete, modify, or copy color templates for all Kurve users.
	Find Duplicates	Easily find and delete records that have duplicate IDs post om-ing.
	Manage Users Favorites	Click here to manage your users favorites, including setting and deleting favourites on behalf of any user.
	Help	Click here to easily access resources for Kurve.

	Log Out	Click here to log out of Kurve Ma
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2. Admin Portal

The admin portal hosts all graphs and reports created by Kurve users in your company. You will have complete control of all graphs and reports in this portal.

- a. **Search** for graph/report.
- b. To search for a Kurve creation, select whether you would like to search for a graph or report by clicking either Graph or Report along the top. To search, click into the Search icon and start typing. Your results will update as you search. Note: You can search by the graph/report name, query name, or the owner.

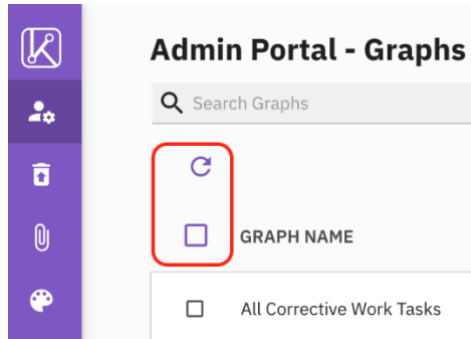




<input type="checkbox"/>	GRAPH NAME	SOURCE QUERY NAME	OWNER
<input type="checkbox"/>	All Corrective Work Tasks	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Ben Rigler
<input type="checkbox"/>	Copy of auto open Multi	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Ignacio Diaz
<input type="checkbox"/>	Copy of auto open Multi	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Ignacio Diaz
<input type="checkbox"/>	copy of bens	cstWorkTask - All Corrective Work Tasks with Request Class - Kurve Starter	Me

3. Using Graph Actions

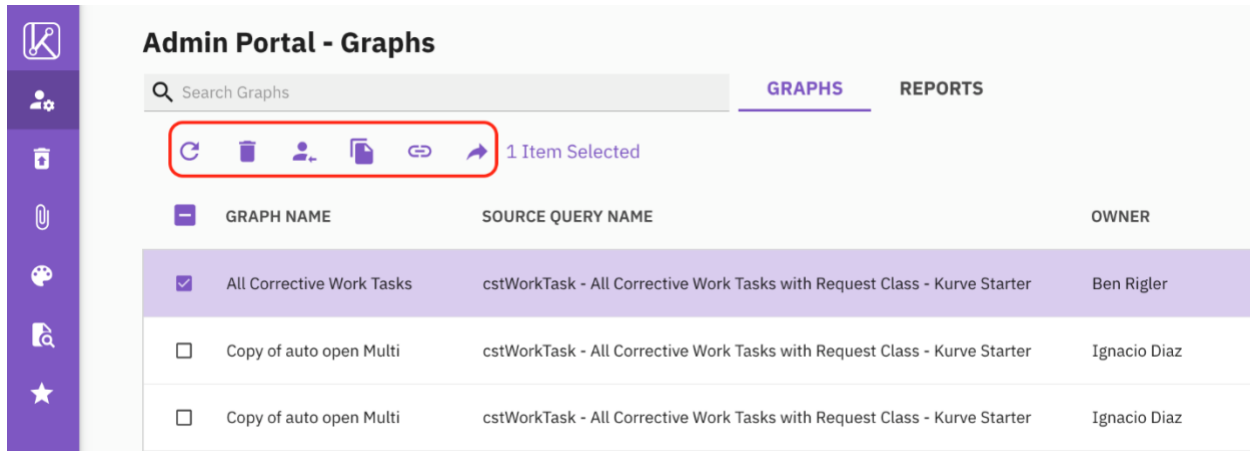
As an admin, you have unrestricted access to graphs and reports. Note: Each feature listed below for the Admin Portal will function the same way as described under the Graphs Portal Section 2.








- i. No rows selected:



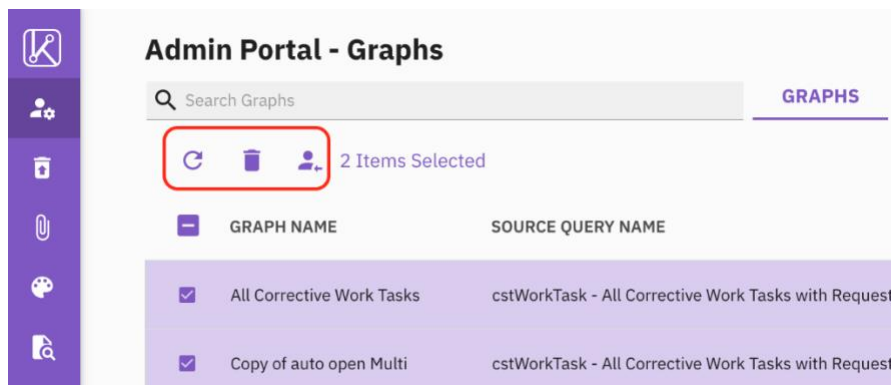
	Select All	Select all graphs on the page.
	Refresh	Refresh the page.

ii. One row selected:




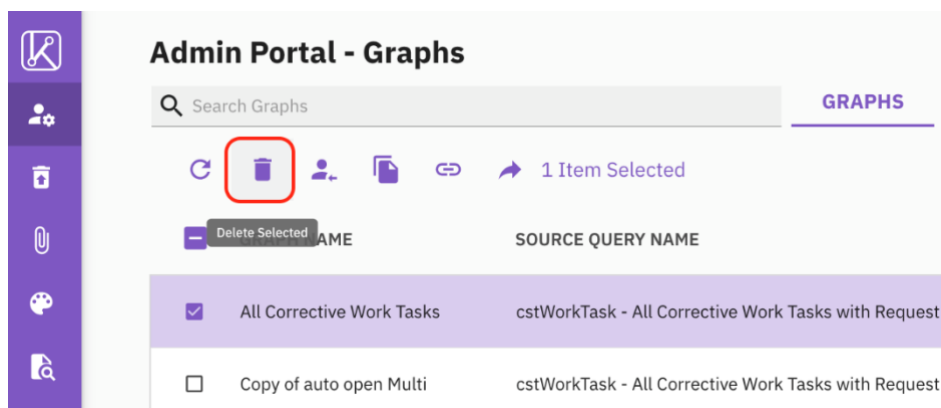
	Select	Unselect the graph/report(s) that are currently selected.
	Refresh	Refresh the page.
	Delete	Delete the selected graph/report(s).
	Reassign	Change the owner of any report or graph – see below
	Duplicate	Copy an existing graph.
	Get Portal/Form URL	Get a portal URL or form URL to embed the graph into a portal section or form tab.
	Change Share Settings	Make changes to whom the graph is shared with (public, private, or specific individuals).

- iii. Two or more selected: the options differ but function the same as above.



4. Delete Records

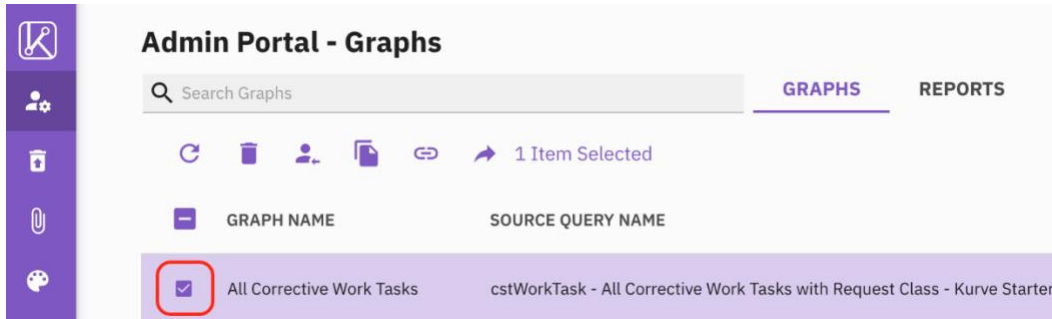
As an admin you can delete records on behalf of other users. Once a row is selected a delete icon () will appear along the top. Click it to delete it for the user.



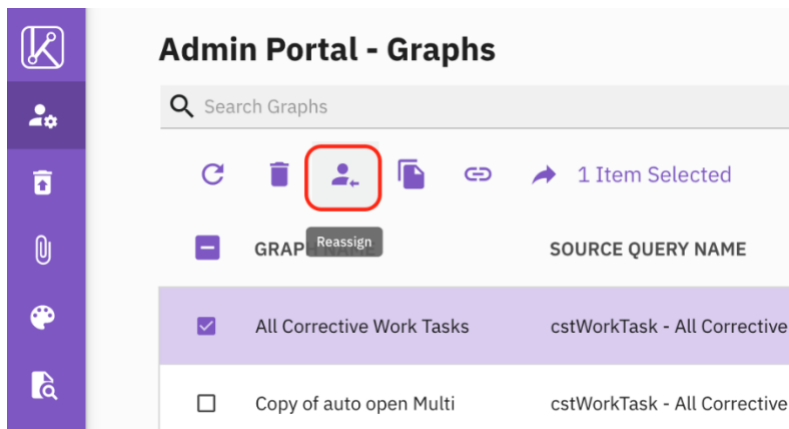
5. Re-assign Records to New Owner

Kurve Admins can change the owner of any report or graph (functionality works the same for both).

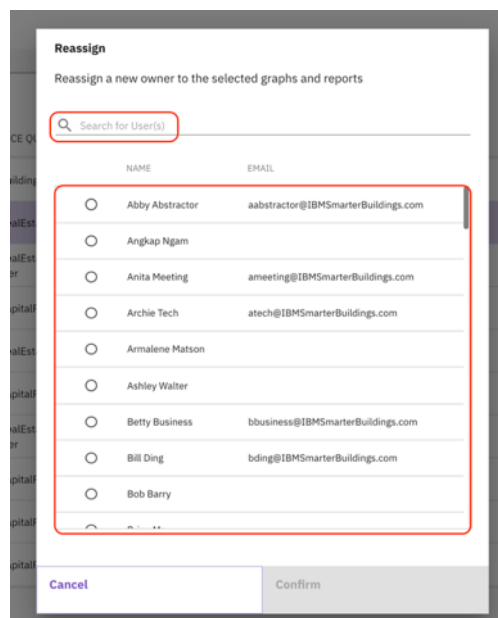
- a. Select the record(s) you would like to re-assign by checking the box on the left of the row. You can select one or multiple records to re-assign.



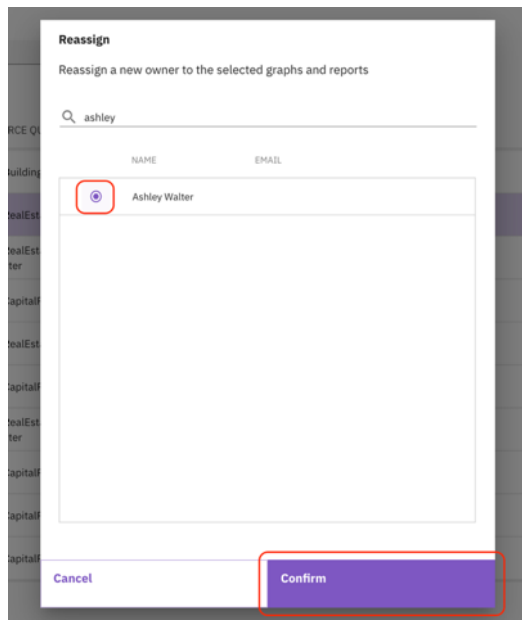
b. Click on the reassign icon



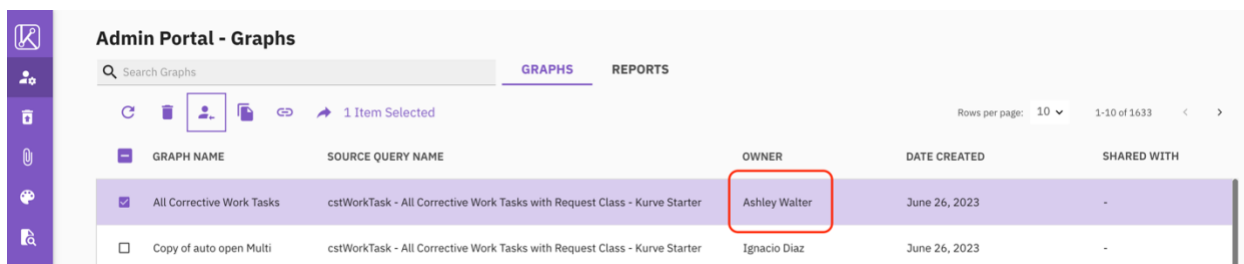
c. A pop-up will appear. Search or scroll to find the user you would like to re-assign the record to.



- d. Select the circle beside the user you are re-assigning the record to and then click Confirm




- e. The owner of the record will update accordingly.



6. Restore Deleted Graphs and Reports

Admins can restore deleted records for other users. They can also permanently delete records from the system.

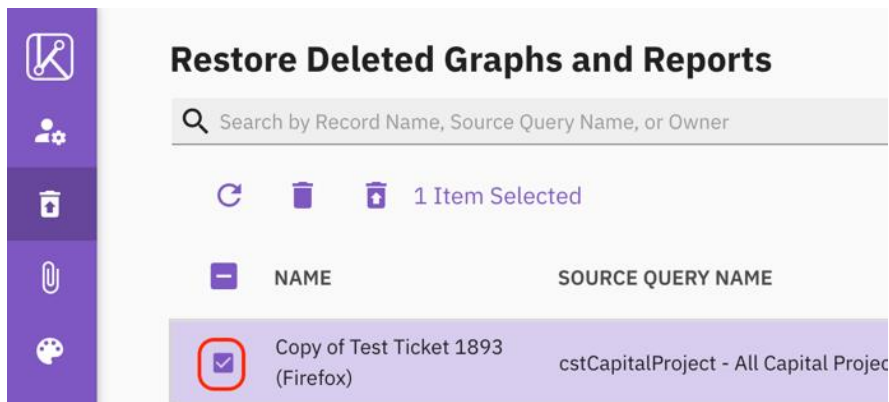
- a. Navigate to this page by clicking on the bin icon ()



<input type="checkbox"/>	NAME	SOURCE QUERY NAME	OWNER	DATE CREATED	TYPE
<input type="checkbox"/>	1.20 equals not equals test ben	cstRealEstateContract - All Active Lease Data - Kurve Starter	Ben Rigler	March 22, 2023	Graph
<input type="checkbox"/>	1.20 ben test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Ben Rigler	March 22, 2023	Report
<input type="checkbox"/>	Levels to Auto Expand Glitching 1.21 PC Test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Me	March 22, 2023	Report
<input type="checkbox"/>	Copy of Copy of 1.21 PC Test Custom Columns	cstRealEstateContract - All Active Lease Data - Kurve Starter	Me	March 21, 2023	Report
<input type="checkbox"/>	Copy of 1.21 PC Test Custom Columns	cstRealEstateContract - All Active Lease Data - Kurve Starter	Me	March 21, 2023	Report
<input type="checkbox"/>	Copy of tk-2591 test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Yujiao Jiang	March 21, 2023	Report
<input type="checkbox"/>	Copy of tk-2591 test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Yujiao Jiang	March 21, 2023	Report
<input type="checkbox"/>	Copy of Copy of Copy of Query Filter Test	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Yujiao Jiang	March 21, 2023	Graph

b. To restore/delete a graph or report, search for the record or find the record in the list

<input type="checkbox"/>	NAME	SOURCE QUERY NAME	OWNER	DATE CREATED	TYPE
<input type="checkbox"/>	1.20 equals not equals test ben	cstRealEstateContract - All Active Lease Data - Kurve Starter	Ben Rigler	March 22, 2023	Graph
<input type="checkbox"/>	1.20 ben test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Ben Rigler	March 22, 2023	Report
<input type="checkbox"/>	Levels to Auto Expand Glitching 1.21 PC Test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Me	March 22, 2023	Report
<input type="checkbox"/>	Copy of Copy of 1.21 PC Test Custom Columns	cstRealEstateContract - All Active Lease Data - Kurve Starter	Me	March 21, 2023	Report
<input type="checkbox"/>	Copy of 1.21 PC Test Custom Columns	cstRealEstateContract - All Active Lease Data - Kurve Starter	Me	March 21, 2023	Report
<input type="checkbox"/>	Copy of tk-2591 test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Yujiao Jiang	March 21, 2023	Report
<input type="checkbox"/>	Copy of tk-2591 test	cstRealEstateContract - All Active Lease Data - Kurve Starter	Yujiao Jiang	March 21, 2023	Report
<input type="checkbox"/>	Copy of Copy of Copy of Query Filter Test	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Yujiao Jiang	March 21, 2023	Graph
<input type="checkbox"/>	Copy of Copy of Query Filter Test	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Yujiao Jiang	March 21, 2023	Graph
<input type="checkbox"/>	Copy of Query Filter Test	cstRealEstateContract - All Active Lease and Payment Schedules - Kurve Starter	Yujiao Jiang	March 21, 2023	Graph

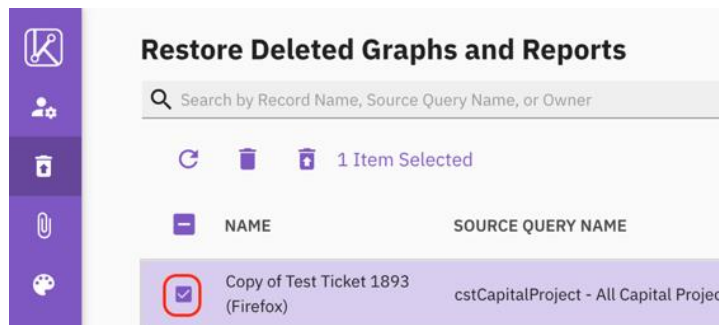
c. Select the record you would like to restore/permanently delete by clicking the square icon of the row.



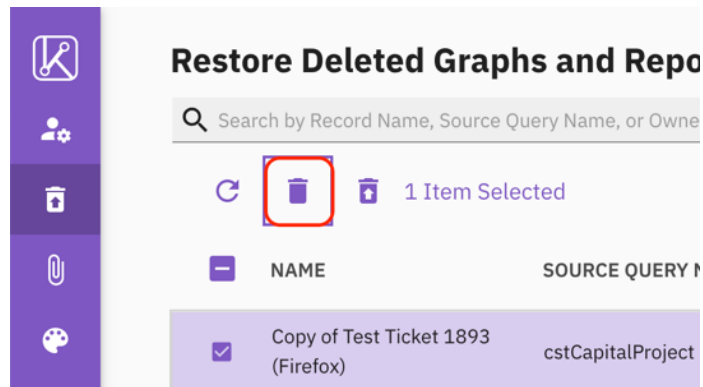
	Permanent Delete	By deleting on this page, the report or graph will be permanently deleted
	Restore Records	Restore records for any user

d. Permanently Delete Records:

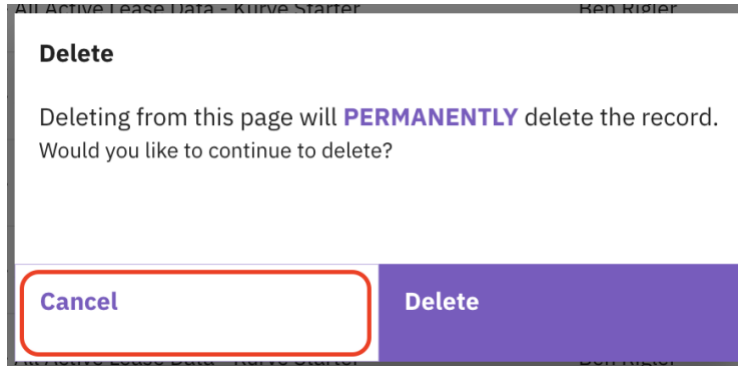
- i. Select the record(s) you would like to remove.



- i. Select the trash can icon at the top of the page




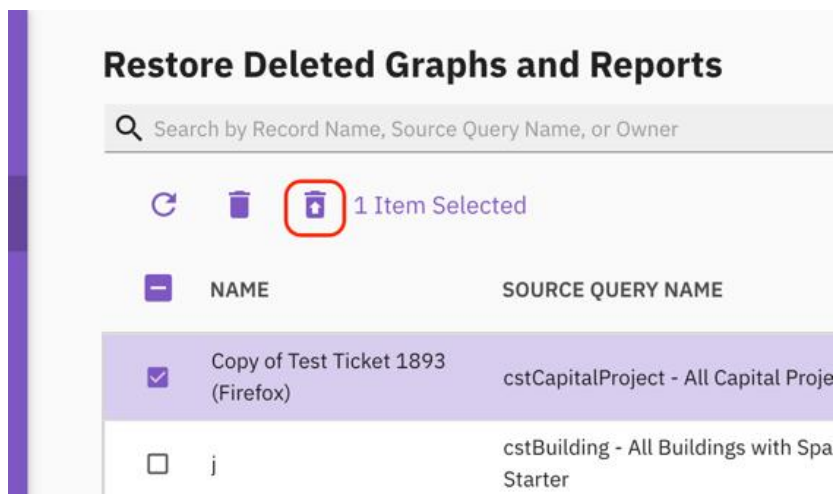
- ii. A pop up will appear warning you that the deletion will be **permanent**. If you would like to continue with deleting the record, click Delete. If you would like to keep the record in the restore page, click Close.



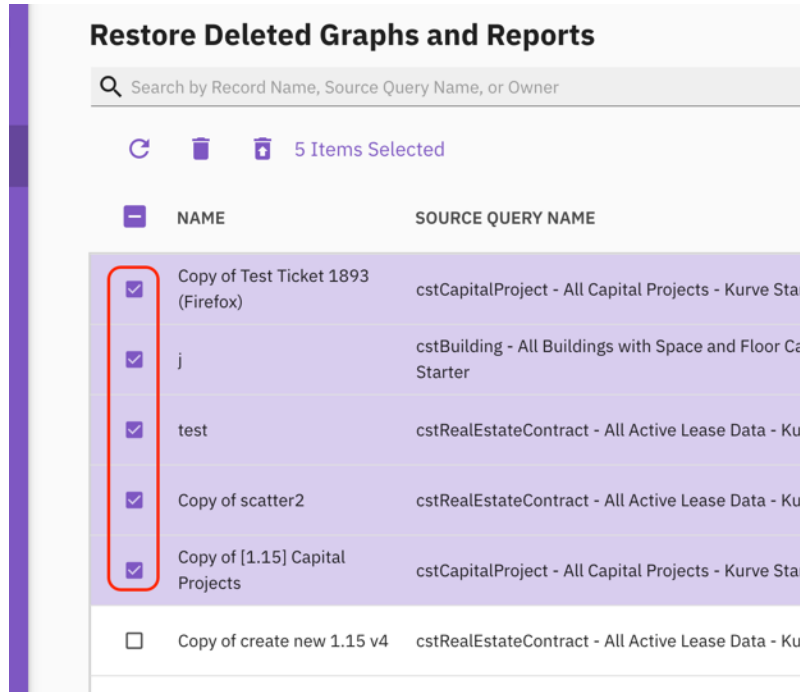
Note: If you delete a record from this page, the record cannot be restored.

e. **Restore Records:**

- i. Click the box icon () at the top. The record will be immediately restore upon clicking the button.




- ii. Multi-select to restore multiple records at once



8. Reattach Graphs to Reports

Upon migrating graphs made from reports between environments, the link between the graph and report will break. Instead of going through the process of recreating the graph, the admin can relink your graph to the respective report.

- a. Navigate to this portal section by clicking on the clip icon ()

Reattach Graphs to Report

Graph
Search ID, Graph Name, Report Name, or Owner

Reattach Graph is not linked to a Report

ID	GRAPH NAME	REPORT NAME	OWNER	
<input type="checkbox"/>	15515220	combo	BO---////	Ignacio Diaz
<input type="checkbox"/>	15504952	testing 19 graph from report	Copy of report testing 1.19	Catherine Tao
<input type="checkbox"/>	14940140	Building Capacity by Space C...	Space count per Building by ...	Engy Hussein
<input type="checkbox"/>	15495401	Graph from lauren's report b...	BO bug - created by admin	Abby Abstractor
<input type="checkbox"/>	15489072	m	Copy of cp edge	Justin Lee
<input type="checkbox"/>	15488967	m	Report with CC, copy it and s...	Justin Lee
<input type="checkbox"/>	15486224	Copy of New Test Graph	Test Report CB	Ryan Chick
<input type="checkbox"/>	15486224	Copy of New Test Graph	Test Report CB	Colin Bingham
<input type="checkbox"/>	15486224	New Test Graph	Test Report CB	Colin Bingham
<input type="checkbox"/>	15486224	Test Delete	Test Report CB	Colin Bingham
<input type="checkbox"/>	15486224	Test Graph CB	Test Report CB	Colin Bingham

Report
Search ID, Report Name, or Owner

ID	REPORT NAME	OWNER	
<input type="radio"/>	15515544	Copy of Copy of filtered	Tina Wang
<input type="radio"/>	15515475	Copy of Copy of Copy of All CC 1.22 Tina P...	Kurve Test 01
<input type="radio"/>	15515466	Copy of filtered	Tina Wang
<input type="radio"/>	15515460	Copy of Copy of All CC 1.22 Tina PC [Chro...	Tina Wang
<input type="radio"/>	15515390	Copy of 1.22 Testing	Lauren Rochon
<input type="radio"/>	15515389	1.22 Testing	Lauren Rochon
<input type="radio"/>	15515373	Color & Text CC	Tina Wang
<input type="radio"/>	15515350	1.22 crashing col	Ben Rigler
<input type="radio"/>	15515349	1.22 test for crashing custom col	Ben Rigler
<input type="radio"/>	15515321	1.22 embed	Tina Wang
<input type="radio"/>	15515279	date test	Tina Wang

- b. In this view, the left side of the page shows all graphs in the system. The right side shows all reports in the system. The crossed-out clip () icon identifies graphs that are not linked to a report. In the image below, we can see here that all these graphs are not linked to a report.

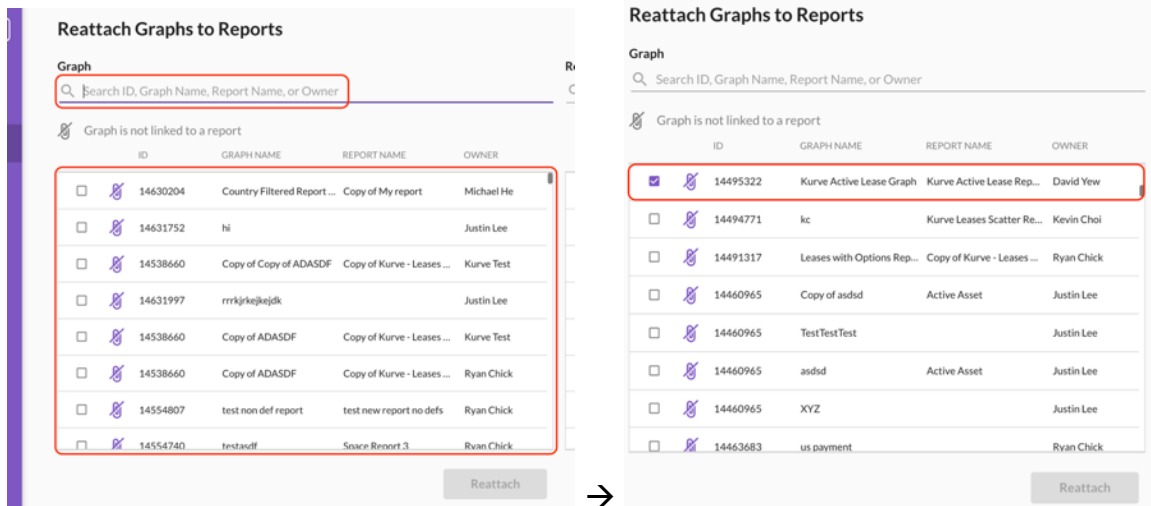
Reattach Graphs to Report

Graph
Search ID, Graph Name, Report Name, or Owner

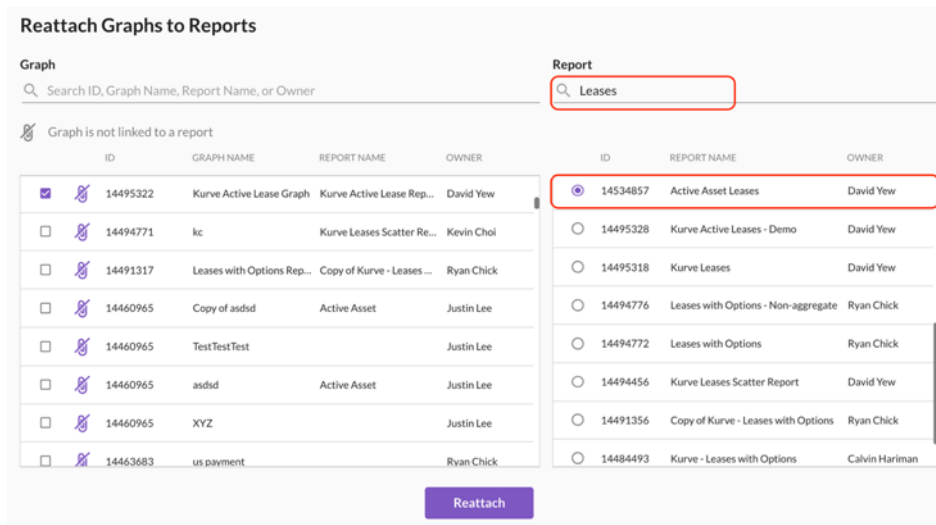
Reattach Graph is not linked to a Report

ID	GRAPH NAME	
<input type="checkbox"/>	15504952	testing 19 graph from report
<input type="checkbox"/>	14940140	Building Capacity by Space C...
<input type="checkbox"/>	15495401	Graph from lauren's report b...

- c. Select the graph you would like to relink by clicking the checkbox next to the record. You can find it by either searching for it or scrolling through the records











- d. Find the report you would like to relink the graph to. Select it by clicking the circle icon next to the report you would like to relink. You can find it by either searching for it or scrolling through the records.



- e. Once you have selected the graph and the report, the Reattach icon at the bottom of the page will turn purple. Click Reattach. Upon selecting reattach they will be linked and the user will be able to load the graph in their Kurve dashboard.

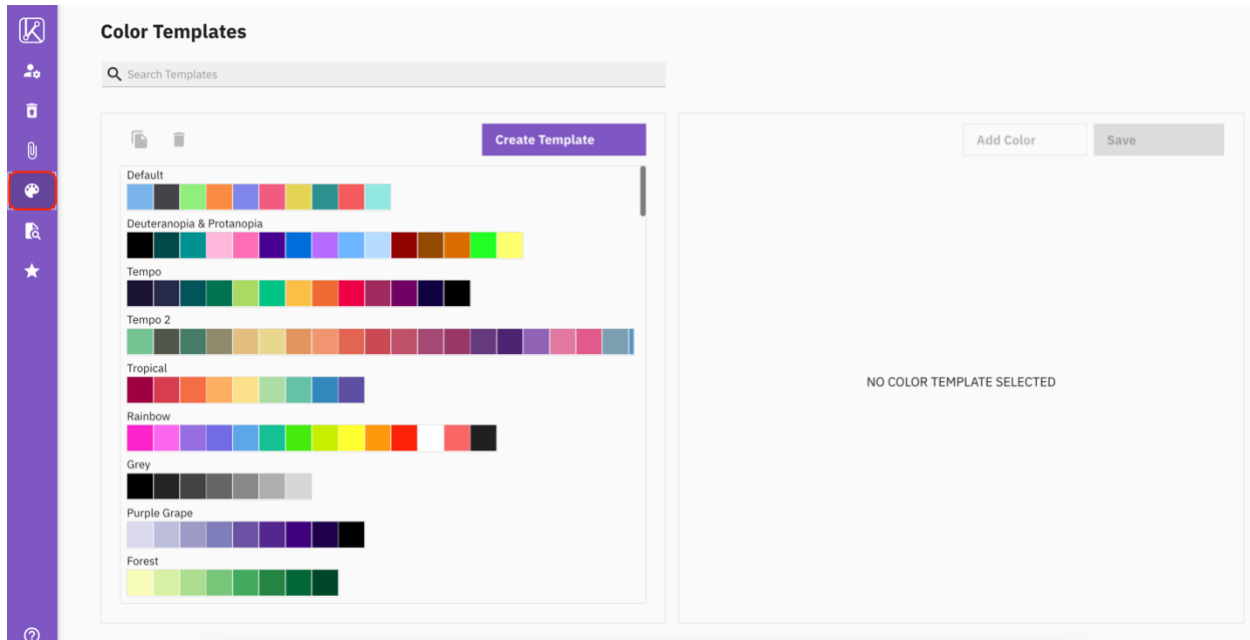
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<input checked="" type="checkbox"/>		14495322	Kurve Active Lease Graph	Kurve Active Lease Rep...	David Yew
<input type="checkbox"/>		14494771	kc	Kurve Leases Scatter Re...	Kevin Choi
<input type="checkbox"/>		14491317	Leases with Options Rep...	Copy of Kurve - Leases ...	Ryan Chick
<input type="checkbox"/>		14460965	Copy of asdsd	Active Asset	Justin Lee
<input type="checkbox"/>		14460965	TestTestTest		Justin Lee
<input type="checkbox"/>		14460965	asdsd	Active Asset	Justin Lee
<input type="checkbox"/>		14460965	XYZ		Justin Lee
<input type="checkbox"/>		14463683	us payment		Ryan Chick

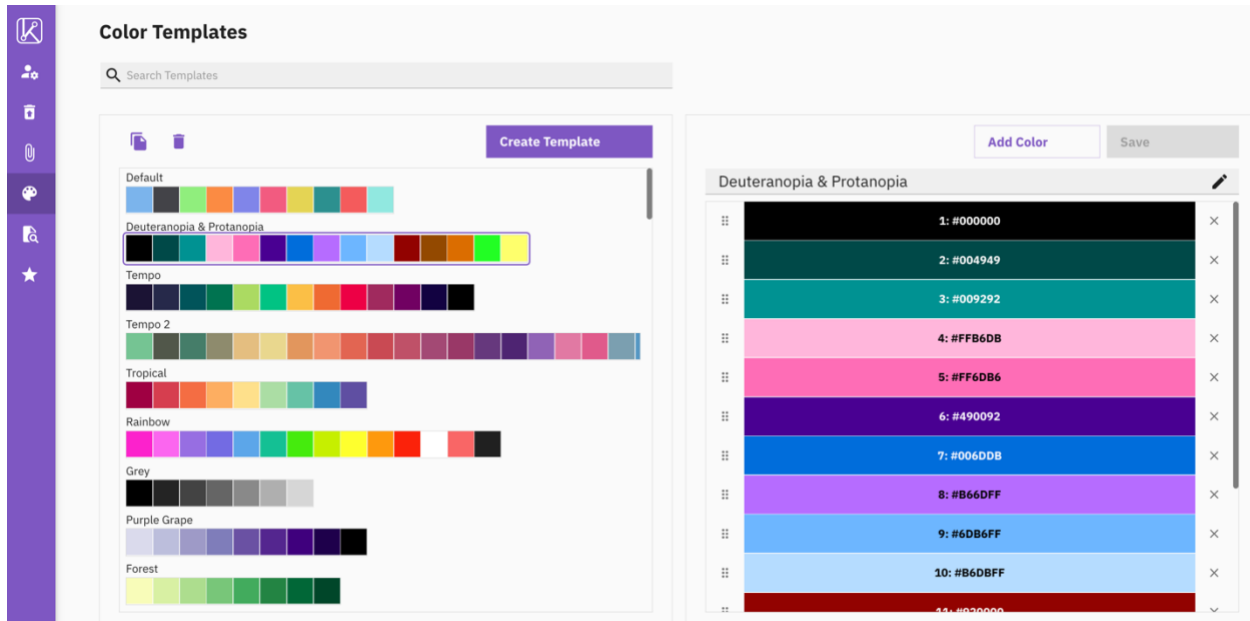
<input checked="" type="radio"/>	14534857	Active Asset Leases	David Yew
<input type="radio"/>	14495328	Kurve Active Leases - Demo	David Yew
<input type="radio"/>	14495318	Kurve Leases	David Yew
<input type="radio"/>	14494776	Leases with Options - Non-aggregate	Ryan Chick
<input type="radio"/>	14494772	Leases with Options	Ryan Chick
<input type="radio"/>	14494456	Kurve Leases Scatter Report	David Yew
<input type="radio"/>	14491356	Copy of Kurve - Leases with Options	Ryan Chick
<input type="radio"/>	14484493	Kurve - Leases with Options	Calvin Hariman

[Reattach](#)

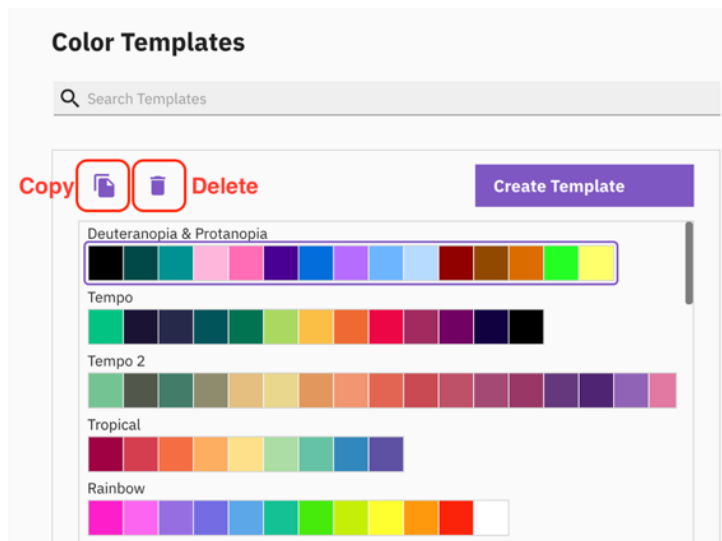
9. Manage Color Templates



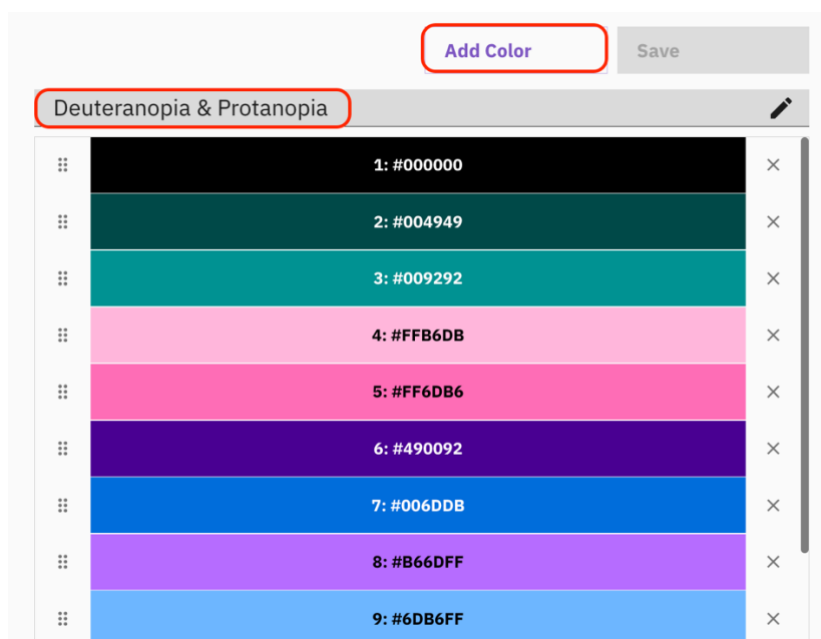
- a. To edit a color template, select it by clicking on any of the colors within the template.



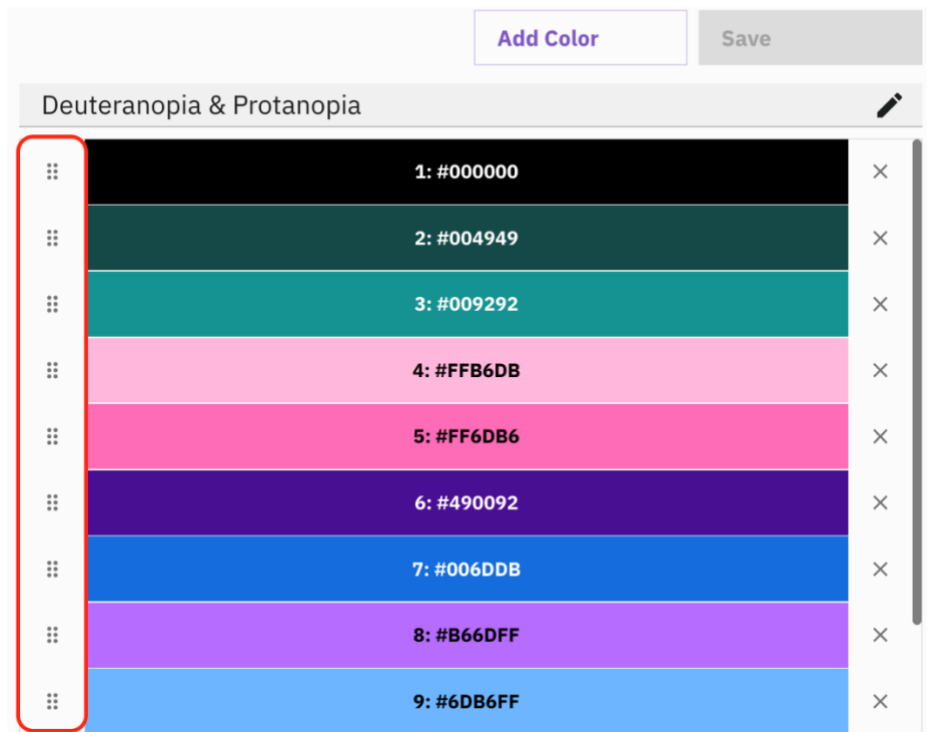
- b. Copy or delete the color template by clicking on the copy icon or trash can.



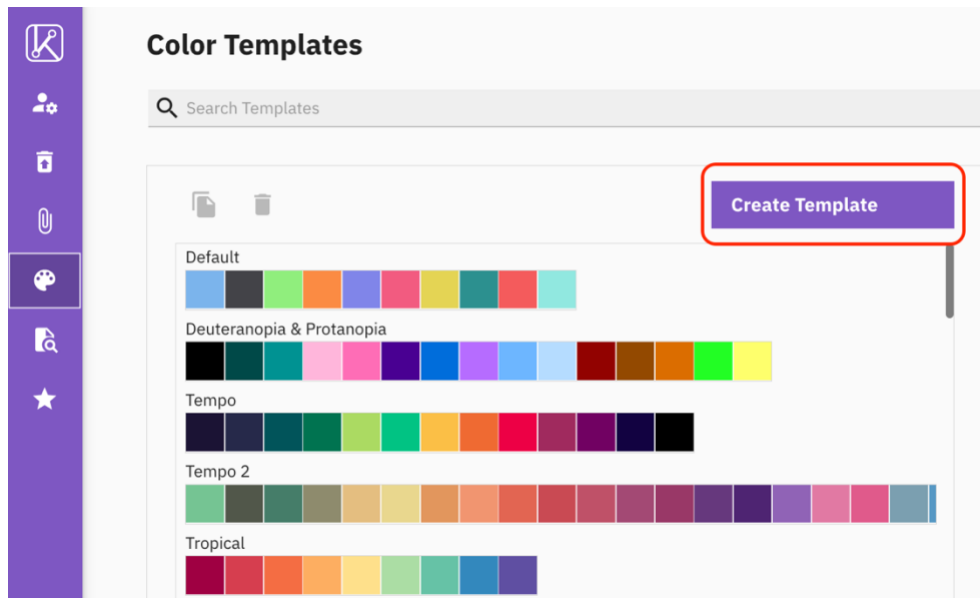
- c. Change the title of the color template by editing along the top. Or Add a new color by clicking the add color button.



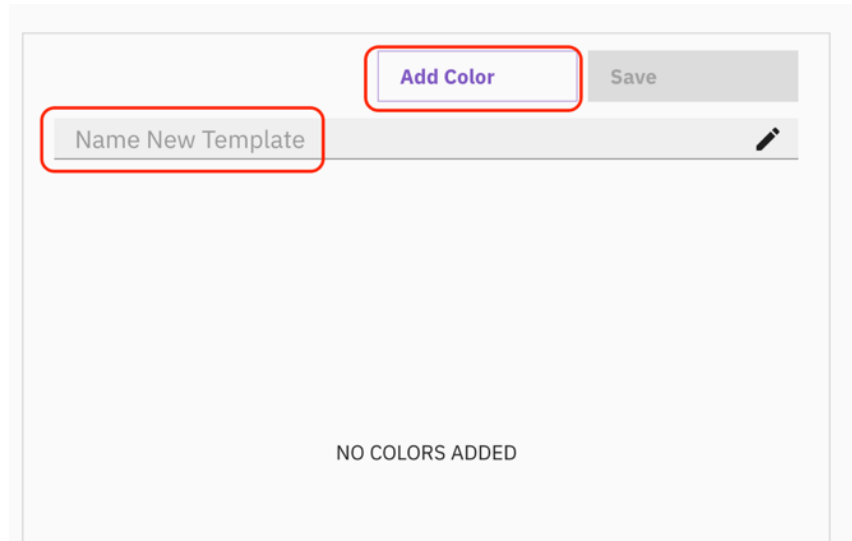
- d. You can re-arrange the colors, change existing colors or remove a color from any template. This works the same as customizing in the color settings of the graph. Any changes you make to a template can be saved by clicking on the Save button.



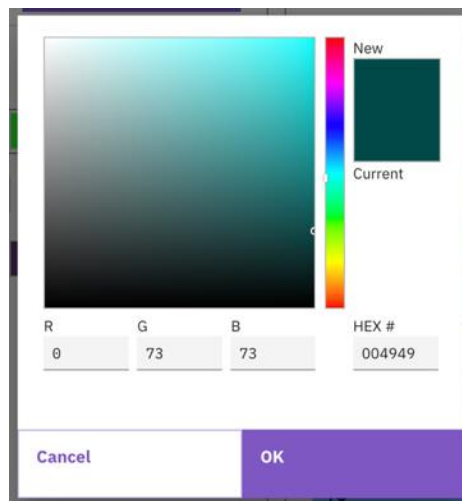
e. To create a new template, click Create Template.



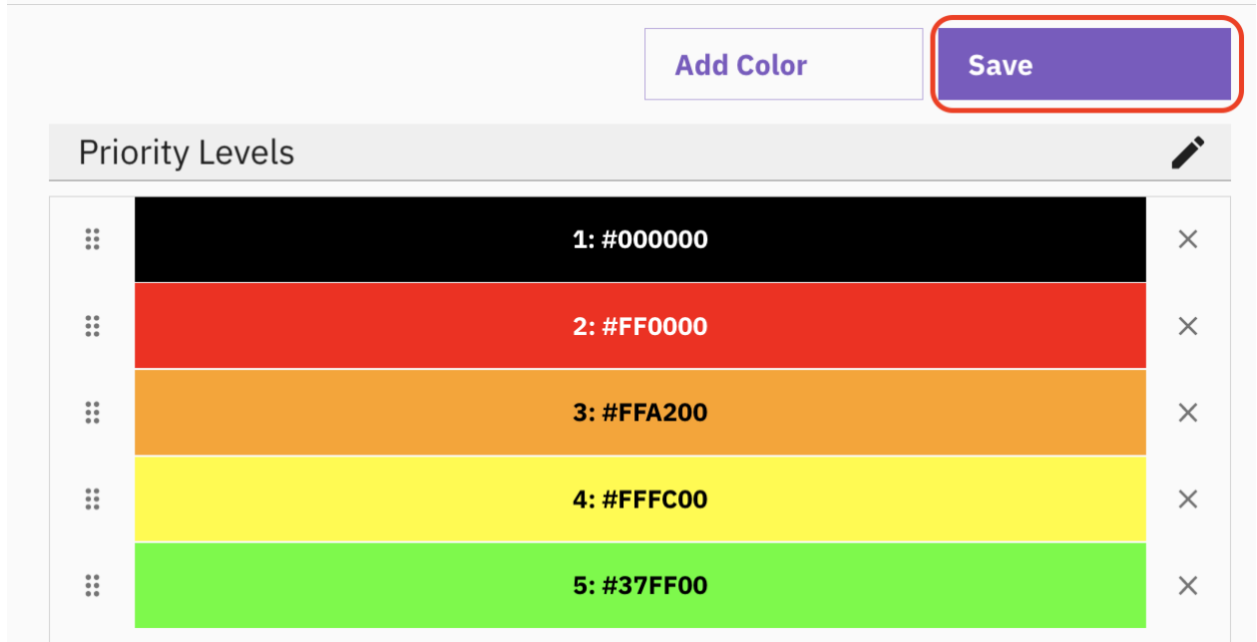
f. Name the template and then select your colors by clicking Add Color.



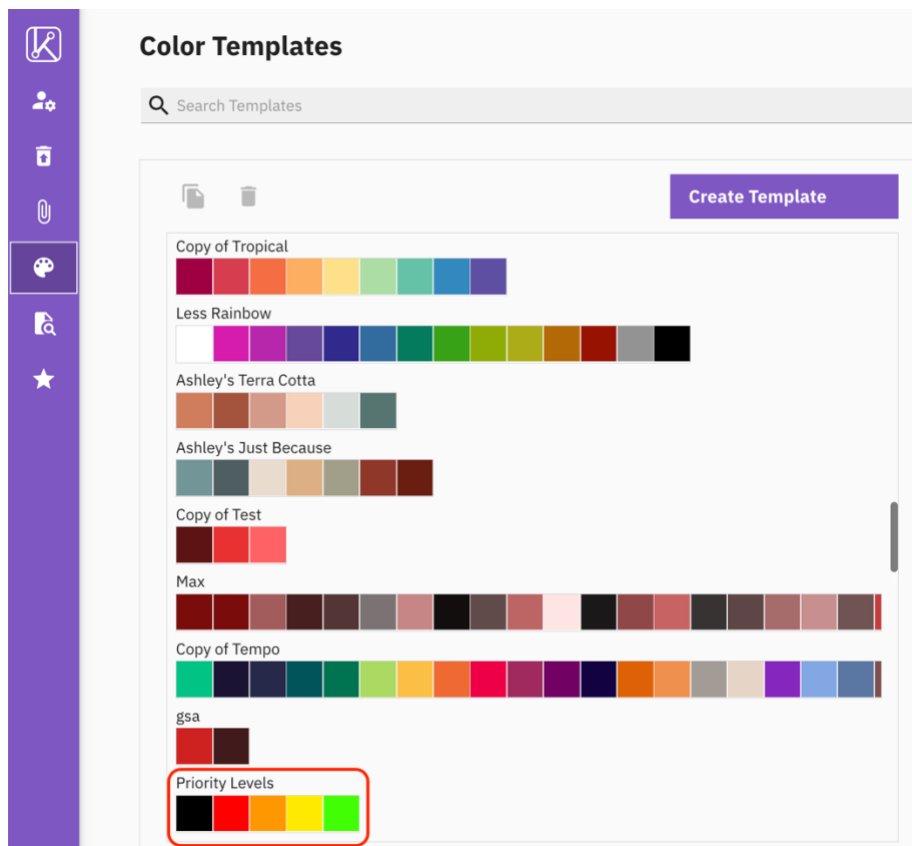
g. Select your colors using the color picker and click OK.



h. Once you've added all the colors you want, click Save.

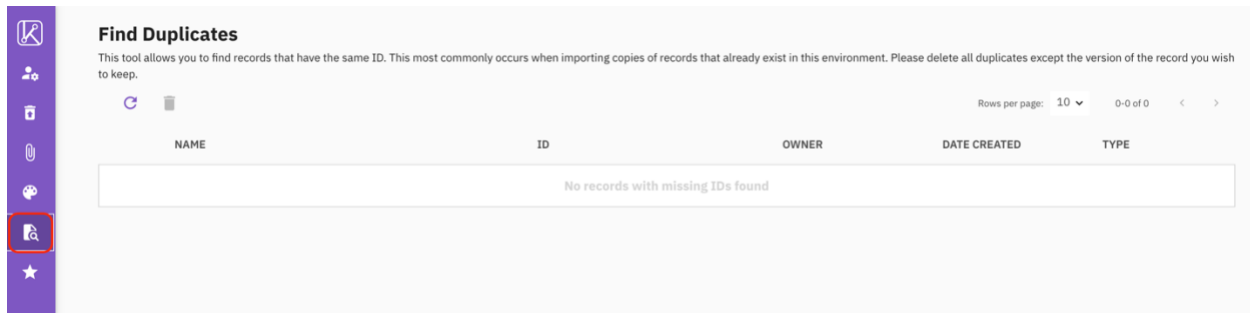


- i. Your new template will appear at the bottom of the list of templates



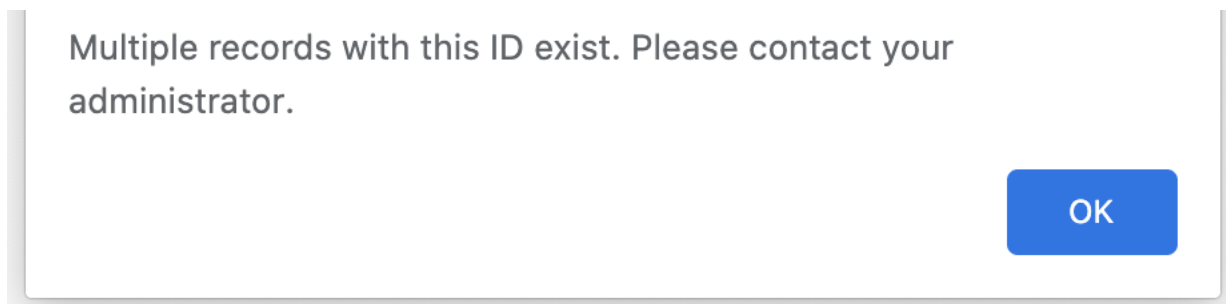
10. Find Duplicates

This tool allows you to find records that have the same ID. This most commonly occurs when importing copies of records that already exist in this environment. Please delete all duplicates except the version of the record you wish to keep.



- a. After you have OM'd your graphs or reports to a new environment, you can easily check if the record already exists. If two IDs exist for the same record, you will be unable to open either of them.
- b. If you try to access a graph or report and the following error pops up, you will need to use the Find Duplicates.

Error: "Multiple records with this ID exist. Please contact your administrator"



- c. Navigate to the Find Duplicates Page
- d. Look for your graph name or report name that you are trying to access. The records are organized by Name, ID, Owner, Date Created, and Type. Please note, this page is sorted according to the ID of each record.

Find Duplicates

This tool allows you to find records that have the same ID. This most commonly occurs when importing copies of records that already exist in this environment. Please delete all duplicates except the version of the record you wish to keep.

Rows per page: 10 1-8 of 8

	NAME	ID	OWNER	DATE CREATED	TYPE
<input type="checkbox"/>	Test Report #2 LR	Reqaj5qGa8ynYH6nrZ8BC	Lauren Rochon	03/05/2021	Report
<input type="checkbox"/>	Test Report #2 LR	Reqaj5qGa8ynYH6nrZ8BC	Lauren Rochon	03/31/2021	Report
<input type="checkbox"/>	A GOOD GRAPH - test duplicates	Vo_nCE0cn76V6dmYfNnj0	Kurve Test 01	12/17/2020	Graph
<input type="checkbox"/>	A GOOD GRAPH - test duplicates	Vo_nCE0cn76V6dmYfNnj0	Kurve Test 01	12/16/2020	Graph
<input type="checkbox"/>	bar - 1.14 test om	XRwDmD_jSJOwZKdxcj0ep	Lauren Rochon	06/07/2021	Graph

- e. Once you have found the graph or report that is causing an error, compare the ID of the records around. If they match up, you will need to delete all duplicates except the version of the record you wish to keep.

Find Duplicates

This tool allows you to find records that have the same ID. This most commonly occurs when importing copies of records that already exist in this environment. Please delete all duplicates except the version of the record you wish to keep.

Rows per page: 10 1-8 of 8

	NAME	ID	OWNER	DATE CREATED	TYPE
<input type="checkbox"/>	Test Report #2 LR	Reqaj5qGa8ynYH6nrZ8BC	Lauren Rochon	03/05/2021	Report
<input type="checkbox"/>	Test Report #2 LR	Reqaj5qGa8ynYH6nrZ8BC	Lauren Rochon	03/31/2021	Report
<input type="checkbox"/>	A GOOD GRAPH - test duplicates	Vo_nCE0cn76V6dmYfNnj0	Kurve Test 01	12/17/2020	Graph
<input type="checkbox"/>	A GOOD GRAPH - test duplicates	Vo_nCE0cn76V6dmYfNnj0	Kurve Test 01	12/16/2020	Graph

- f. In this example, I have two records with the same ID. Choose the one you wish to keep and delete the other. To delete, select the record and then click the trash icon.

Find Duplicates

This tool allows you to find records that have the same ID. This most commonly occurs when importing copies of records that already exist in this environment. Please delete all duplicates version of the record you wish to keep.

Rows per page: 10 1-8 of 8

	NAME	ID	OWNER	DATE CREATED	TYPE
<input checked="" type="checkbox"/>	Test Report #2 LR	Reqaj5qGa8ynYH6nrZ8BC	Lauren Rochon	03/05/2021	Report
<input type="checkbox"/>	Test Report #2 LR	Reqaj5qGa8ynYH6nrZ8BC	Lauren Rochon	03/31/2021	Report
<input type="checkbox"/>	A GOOD GRAPH - test duplicates	Vo_nCE0cn76V6dmYfNnj0	Kurve Test 01	12/17/2020	Graph
<input type="checkbox"/>	A GOOD GRAPH - test duplicates	Vo_nCE0cn76V6dmYfNnj0	Kurve Test 01	12/16/2020	Graph

- g. After deleting the duplicate, the other record will no longer appear on this list. The user will be able to access it as normal.

11. Manage Favorites

This tool allows Kurve Admins to manage their Kurve users' favorites.

- a. In the admin portal, click on the Star icon to access this page

Manage Favorites
Select a user to manage their favorites

User
Search by Name, Email

NAME	EMAIL
<input type="radio"/> Abby Abstractor	aabstractor@IBMSmarterBuildings...
<input type="radio"/> Abby Abstractor ...	aabstractor@IBMSmarterBuildings...
<input type="radio"/> Angkap Ngam	
<input type="radio"/> Anita Meeting	ameeting@IBMSmarterBuildings.c...
<input type="radio"/> Archie Tech	atech@IBMSmarterBuildings.com
<input type="radio"/> Armalene Matson	
<input type="radio"/> Ashley Walter	
<input type="radio"/> Ben Rigler	
<input type="radio"/> Betty Business	bbusiness@IBMSmarterBuildings....
<input type="radio"/> Bill Ding	bding@IBMSmarterBuildings.com
<input type="radio"/> Bob Barry	
<input type="radio"/> Brian Ma	

Record
Search by Record Name, Source Query Name, or Owner

NAME	SOURCE QUERY NAME	CREATOR	CREATED	TYPE
☆ Copy of Count of All Active Leases	cstRealEstateContract - All Active Lease and P...	Lauren Rochon	April 27, 20...	Graph
☆ Plot deletion broken	cstRealEstateContract - All Active Lease and P...	Lauren Rochon	April 27, 20...	Graph
☆ Copy of All Work Tasks by Type and Per...	triTask - Display - triMaintenanceManager - As...	Lauren Rochon	April 27, 20...	Graph
☆ Copy of Count of All Spaces	cstSpace - All Spaces - Reporting Starter	Lauren Rochon	April 27, 20...	Graph
☆ All Work Tasks by Type and Percent Co...	triTask - Display - triMaintenanceManager - As...	Lauren Rochon	April 27, 20...	Graph
☆ Copy of Lease by FASB Lease Typ3	cstContract - Accounting Classification Assum...	Lauren Rochon	April 27, 20...	Graph
☆ Usable Area by Parent Building	cstSpace - All Spaces - Reporting Starter	Lauren Rochon	April 27, 20...	Graph
☆ Count of All Spaces	cstSpace - All Spaces - Reporting Starter	Lauren Rochon	April 27, 20...	Graph
☆ Copy of All Capital Projects	cstCapitalProject - All Capital Projects - Repor...	Lauren Rochon	April 27, 20...	Graph
☆ Copy of All active leases	cstRealEstateContract - All Active Lease Data ...	Lauren Rochon	April 27, 20...	Graph
☆ Copy of All Corrective Work Tasks with ...	cstWorkTask - All Corrective Work Tasks with ...	Lauren Rochon	April 27, 20...	Rep...
☆ All Preventive Work Tasks with Request ...	cstWorkTask - All Preventive Work Tasks with ...	Lauren Rochon	April 27, 20...	Rep...

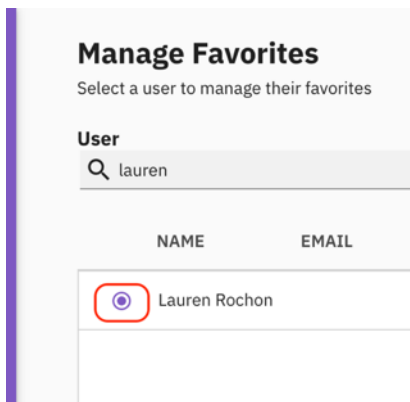
- b. Search for a user by Name or Email.

Manage Favorites
Select a user to manage their favorites

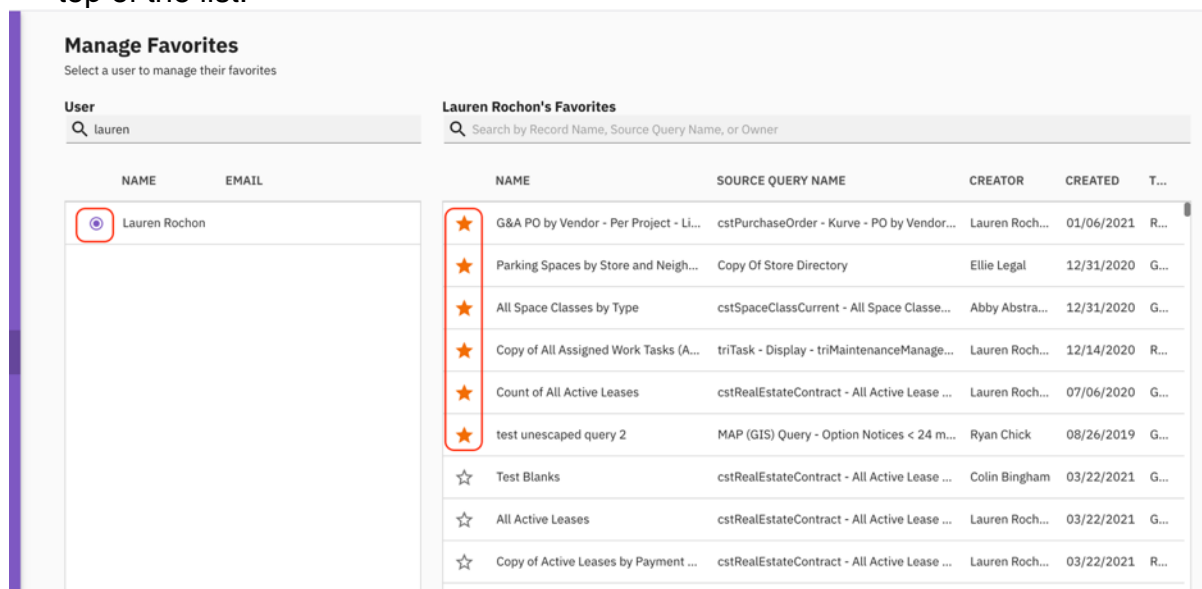
User
Search by Name, Email

NAME	EMAIL
<input type="radio"/> Abby Abstrac...	aabstractor@IBMSmarterBuil...
<input type="radio"/> Angkap Ngam	
<input type="radio"/> Archie Tech	atech@IBMSmarterBuildings....
<input type="radio"/> Armalene Mat...	
<input type="radio"/> Ashley Walter	

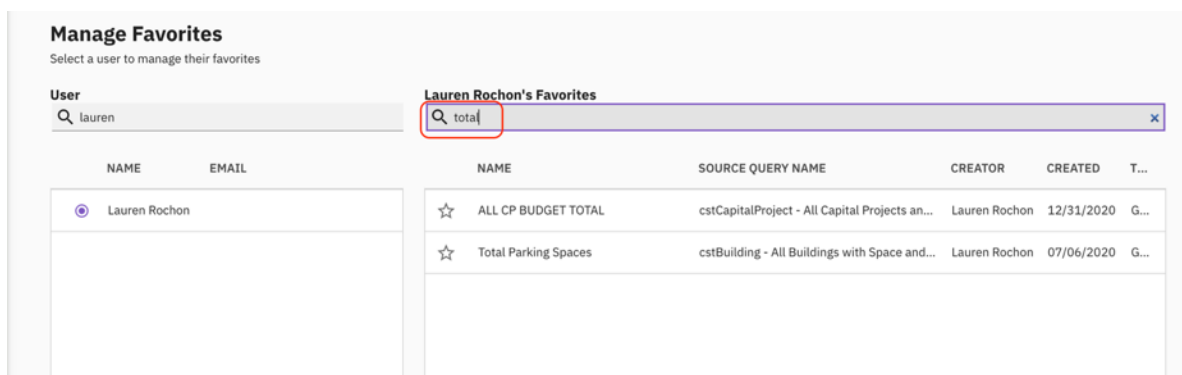
- c. Select the user by clicking the radio button next to their name.

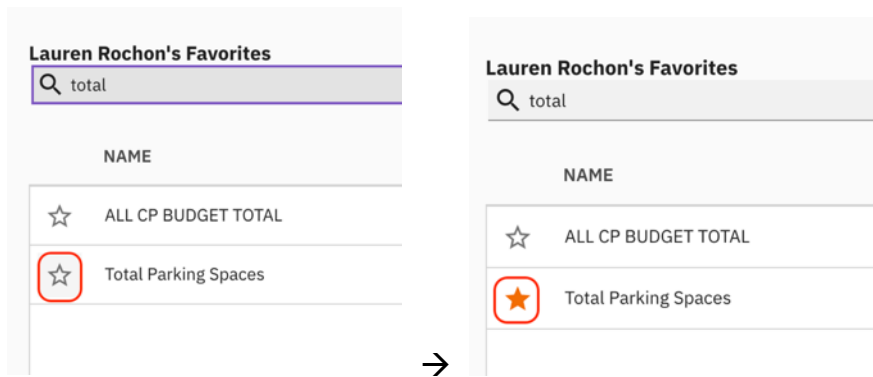


- d. Once you select a user, you will be able to manage their favorites in the table on the right. If the user has any records already favorited, they will show up at the top of the list.



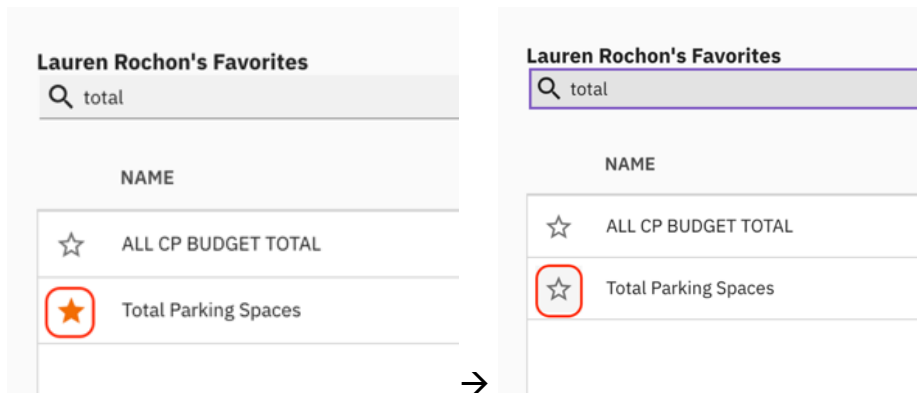
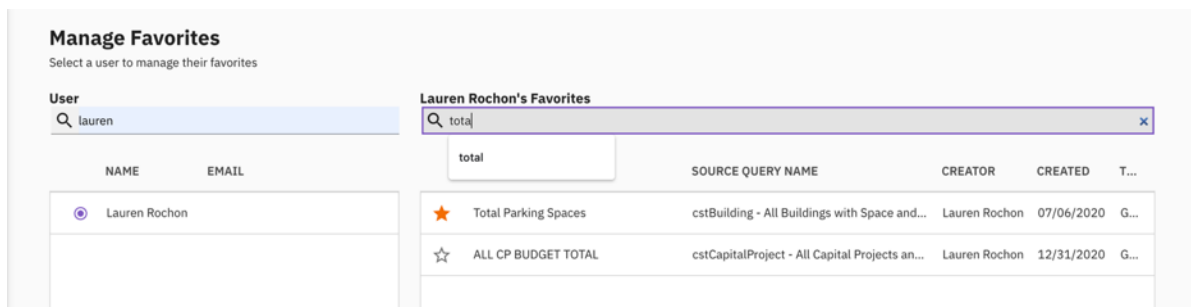
- e. To favorite new: search for the record by name, query name or owner and then click the star next to the record to favorite it.





The user will now see this in their list of favorites.

- f. To delete a favorite: find the record you would like to unfavorite and deselect the star icon so that it is no longer filled in.



APPENDIX

1. Appendix A: Kurve Custom Column Functions

For custom columns, Kurve allows the use of all standard JavaScript functions and objects, such as Math and Date. Additionally, a set of Kurve custom functions is provided:

Function Name	Description	Result Type
TRIRIGA Functions		
GetPathLevel(path,level)	Retrieves a specific level from a TRIRIGA hierarchy path field.	String
IsBlank(value)	Returns true if the given value is either null or an empty space, otherwise returns false.	Boolean
Date Functions		
AddDays(date, numberToAdd)	Adds a specified number of days to the given date. Can also be used to subtract days.	Date
AddTime(date, numberToAdd, unit)	Adds a specified number of a given unit of time to the given date. Supports milliseconds, seconds, minutes, hours, days, weeks, months, and years.	Date
AddTRIDuration(date, duration)	Adds a TRIRIGA duration to a given date and returns the resulting date.	Date
AddWorkdays(date, numberToAdd)	Adds a specified number of work days to the given date. Can also be used to subtract workdays.	Date
ConvertDuration(duration, input, output)	Converts a given duration from one unit of time to another. Supports milliseconds, seconds, minutes, hours, days, weeks, months, and years.	Number
ConvertMilliseconds(duration, output)	Converts a given duration in milliseconds into another specified unit of time. Supports milliseconds, seconds, minutes, hours, days, weeks, months, and years.	Number
ConvertTRIDuration(duration)	Converts a duration from TRIRIGA into a duration in milliseconds.	Number

DaysBetween(date1, date2, showNegative)	Returns the number of calendar days between two given dates. The showNegative option will control whether or not negative days will be displayed or shown as a 0. The default is true, which will show the negative numbers.	Number
FilterDay(date, range)	Returns true if the date entered is within the range of days in relation to the current date. If not specified, default range is 30 days.	Boolean
FilterMonth(date, range)	Returns true if the date entered is within the range of months in relation to the current date. If not specified, default range is 3 months.	Boolean
FilterYear(date, range)	Returns true if the date entered is within the range of year(s) in relation to the current date. If not specified, default range is 1 year.	Boolean
FormatDate(date,format)	Returns a date String in the specified format. Example formats: "MM/DD/YYYY", "YYYY-MM-DD hh:mm:ss" For a list of supported date formats see here .	String
GetDay(date, addZeroes)	Returns the day number of the given date. Can optionally return days as a 2 digit number (e.g. 01, 02) if addZeroes is true.	Number
GetDayOfWeek(date)	Returns the day name (e.g. "Monday") of a given date	String
GetDayOfYear(date, addZeroes)	Returns the day of year number of the given date. Can optionally return days as a 3 digit number (e.g. 001, 002) if addZeroes is true.	Number
GetEndOfMonth(date)	Returns the date at the last day of the given date's month. The time is set to 1 millisecond before midnight. This can be used to group dates on a monthly basis.	Date
GetEndOfYear(date)	Returns the date at the last day of the given date's year. The time is set to 1 millisecond before midnight. This can	Date

	be used to group dates on a yearly basis.	
GetFirstOfMonth(date)	Returns the date at the first day of the given date's month. This can be used to group dates on a monthly basis.	Date
GetFirstOfYear(date)	Returns the date at the first day of the given date's year. This can be used to group dates on a yearly basis.	Date
GetMonth(date), addZeroes)	Returns the month number of the given date. Can optionally return months as a 2 digit number (e.g. 01, 02) if addZeroes is true.	Number
GetMonthName(date)	Returns the full month name (e.g. "January") of a given date	String
GetQuarter(date)	Returns the year quarter of the given date.	Number
GetWeek(date, addZeroes)	Returns the week number of the given date. Can optionally return weeks as a 2 digit number (e.g. 01, 02) if addZeroes is true.	Number
GetWeeksInMonth(date, weekStartDate)	Returns the number of calendar weeks in the given date's month. The first day of the week can be optionally specified with a number from 0-6, the default is 0, for Sunday.	Number
GetYear(date)	Returns the year number of the given date.	Number
IsDateAfter(date, dateToCompare)	Returns true if the given date occurs after the date to compare. Returns N/A if dates are missing or invalid.	Boolean
IsDateBefore(date, dateToCompare)	Returns true if the given date occurs before the date to compare. Returns N/A if dates are missing or invalid.	Boolean
IsDateBetween(date, start, end)	Returns true if the given date occurs between the start and end dates. Returns N/A if dates are missing or invalid.	Boolean
Now()	Returns the current time	Date
StartofWeek(date, startDay)	Returns the start of a week for the given date. The first day of the week can be optionally specified with a number from 0-6, the default is 0, for Sunday.	Date

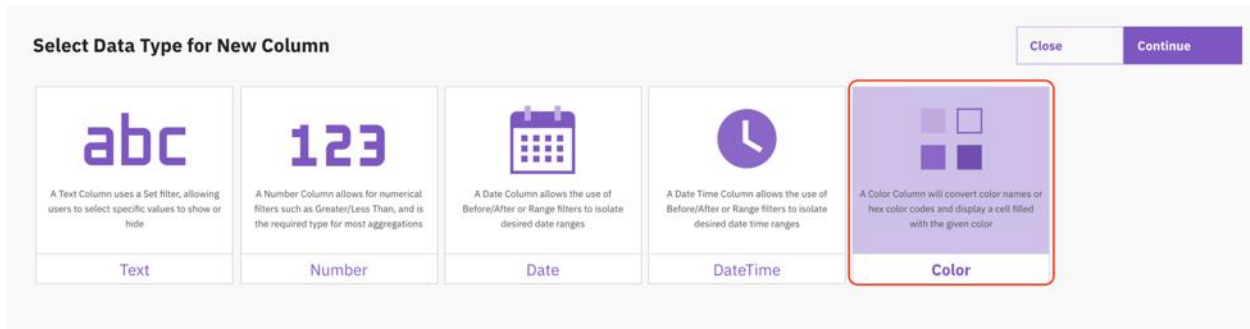
SubtractTRIDuration(date, duration)	Subtracts a TRIRIGA duration from a given date and returns the resulting date.	Date
TimeBetween(date1,date2, units)	Returns the amount of time between two given dates in the specified unit of measure. Supports years, months, weeks, days, hours, minutes, and seconds.	Number
Today()	Returns the current date at 00:00	Date
WorkdaysBetween	Returns the number of workdays between two given dates.	Number
Number Functions		
FormatCurrency(number, symbol, thousandSeparator, decimalSeparator, precision)	Formatting numbers as money values rounded to the specified level of precision. If not specified, default precision is 2.	Number
Math.max(num1, num2, ...)	Returns the maximum of 2 or more numbers.	Number
Math.min(num1, num2, ...)	Returns the minimum of 2 or more numbers.	Number
RoundNumber(number, precision)	Returns a number rounded to the specified level of precision. If not specified, the default level of precision is 0.	Number
Text Functions		
Delimiter(input, inputSplit, outputSplit)	Converts a string delimited by a specified input character and replaces the input delimiter with the chosen output character.	Any
GroupNulls(column)	Converts null values to empty strings. Can be used to force blank values to be grouped together.	String
PadEnd(input, length, fill)	Pads an input string up to the specified length with the given fill character. Fill characters are inserted at the end of the input string.	Any
PadStart(input, length, fill)	Pads an input string up to the specified length with the given fill character. Fill characters are inserted at the start of the input string.	Any
Truncate(input, start, length)	Extracts a given number of characters from a text input, starting	Any

	at the specified character. The first character is counted as 0. If length is not provided, will extract from start to the end.	
Helper/JS Functions		
Color Column Snippet	An example of a conditional color column with text. Replace content in [] with your own conditions, text, colors.	Color & Text
IF(condition, valueIfTrue, valueIfFalse)	Excel style IF function. Evaluates a condition, and returns a value depending on if the condition is true or false. JavaScript IF conditions also supported.	Any

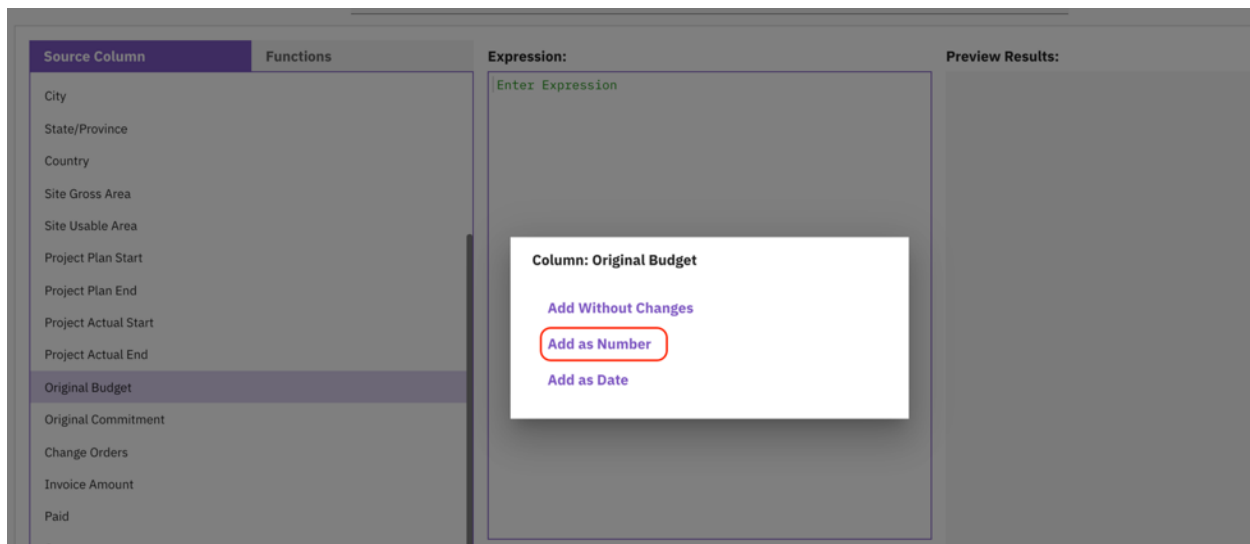
2. Appendix B: Custom Column Types – Color & Text

When creating a color column, the name of the color or the hex code can be used to define the colors you want to display.

- a. Select Column Type: Color Column



- b. Select the column you would like to use as your Source Column. If you need to do calculations or numerical comparisons with this column's data, it should be added as a number; otherwise you can add it without changes.



- c. In the expression you can:
 - i. Input one colour or hex code that you would like the column to be. Ensure you put it in quotations. You can also use the color picker in the operators!

Expression:

```
"pink"
```

Expression:

```
"#00b4f5"
```

OR

- ii. Use a formula. For example, to color all projects that have a Budget Original greater than 10,000 red and all others blue, use the following formula:

```
if(numCol('Budget Original') > 100000){ "red" } else { "blue" }
```

If you would like the words to display your parameters, before the color (within the quotes), input the word and &&.:

```
if(numCol('Budget Original') > 100000){ ">100,000 && red" } else { "<100,000 && blue" }
```

Expression:

```
if(numCol('Budget Original') > 100000){  
  ">100,000 && red" } else { "  
  && blue" }
```

If you use a Hex Code, it would look something like this:

```
if(numCol('Budget Original') > 10000){ "#D32C09" } else { "#0962D3" }
```

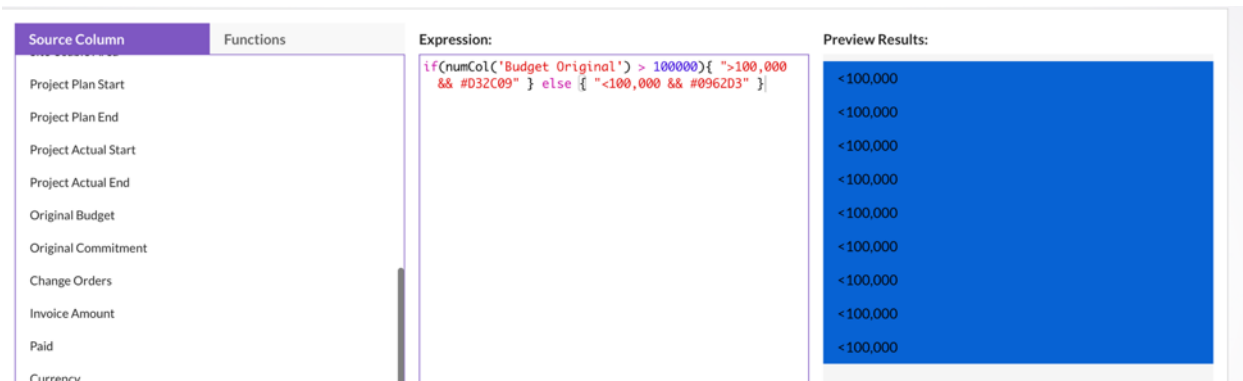
If you want to add text within the color column, it would look like this:

```
if(numCol('Budget Original') > 100000){ ">100,000 && #D32C09" } else { "<100,000 && #0962D3" }
```

Expression:

```
if(numCol('Budget Original') > 100000){  
  ">100,000 && #D32C09" } else { "<100  
,000 && #0962D3" }
```

d. The column preview will show as the color chosen.



The screenshot displays the 'Expression' configuration screen. On the left, a 'Source Column' dropdown menu lists various data points: Project Plan Start, Project Plan End, Project Actual Start, Project Actual End, Original Budget, Original Commitment, Change Orders, Invoice Amount, Paid, and Currency. The 'Functions' tab is active, showing the expression editor with the following code: `if(numCol('Budget Original') > 100000){ ">100,000 && #D32C09" } else { "<100,000 && #0962D3" }`. To the right, the 'Preview Results' section shows a vertical list of ten entries, each displaying '<100,000' in white text on a solid blue background.

e. Click Create Column at the bottom center of the screen.






f. View the colour results

Original Budget	Budget Parameters
\$.00	<100,000
\$41,000.00	<100,000
\$63,000.00	<100,000
\$47,600.00	<100,000
\$.00	<100,000
\$.00	<100,000
\$.00	<100,000
\$1,185,922.53	>100,000
\$1,554,285.47	>100,000
\$.00	<100,000
\$.00	<100,000
\$234,819.13	>100,000

Another way to use a color column is to show a different color depending on if it matches a specific value. For this, I would follow the same steps as above but instead of adding the source column as a number, I would leave it unchanged. Then for the expression, if I want all the records that are in the Development Phase to show as pink and all others to appear blue I would input:

```
if(col('Country') == "United States"){ "blue" } else { "yellow" }
```

Country 	Country Color Code  
Canada	Yellow
Russia	Yellow
United States	Blue
United States	Blue
Belgium	Yellow
United States	Blue
United States	Blue
Belgium	Yellow
Brazil	Yellow