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Kurve Admin User Guide Version 1.13



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## **INTRODUCTION**

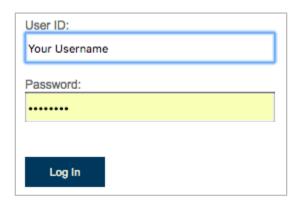
Welcome to the Kurve User Guide!

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

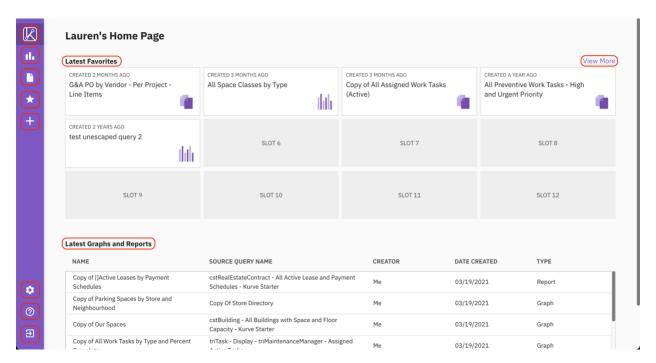
For example, if you log in to TRIRIGA at <a href="https://example.tririga.com">https://example.tririga.com</a>, your Kurve URL would be:

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:

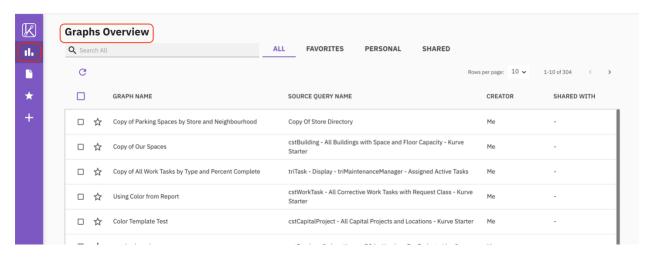
	Home Page	Click on this icon to access your Kurve Home Page. Here you can view your latest 12 favourited graphs and reports, and the latest graphs and reports created by you or shared with you.
ıl.	Graphs Overview	Click on this icon to access your Graphs Overview - all graphs that have been created or 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 favourited Kurve Graphs and Reports in list format.
+	Create	Click on this icon to create a new record - decide between a graph or report and let your data tell the story!



-	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	

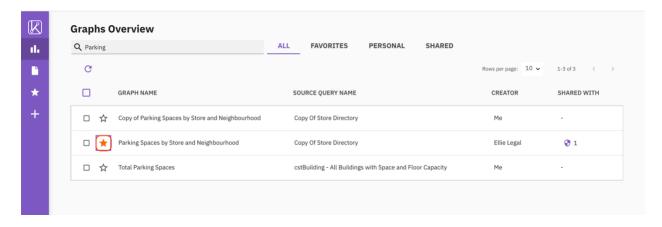
#### 3. Adding and Removing Favorites from your Favorites Menu

- a. You are able to **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 are favouriting:
  - i. From the Overview Page:
    - Navigate to the Graphs or Reports Overview Page

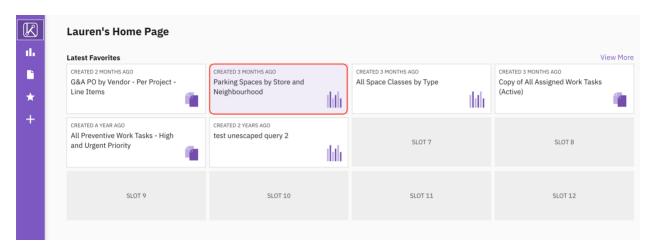


 Search for the graph you would like to favourite. Then find the graph row and click the Star icon. The icon will turn yellow indicating it has been starred.



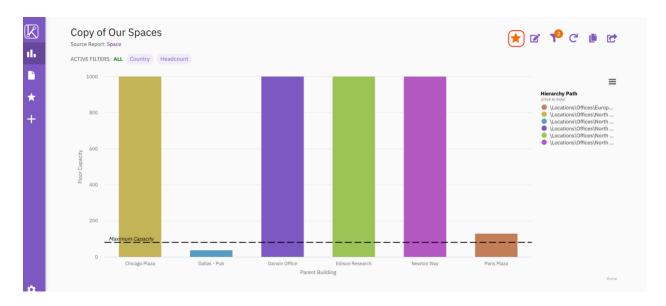


Navigate back to your home page to view it in your list of favourites.

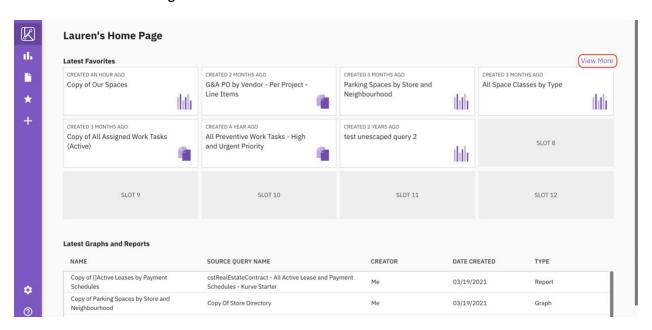


- ii. From within a Graph or Report: Open the graph or report you would want to favourite.
  - Within the action items, select the star icon.



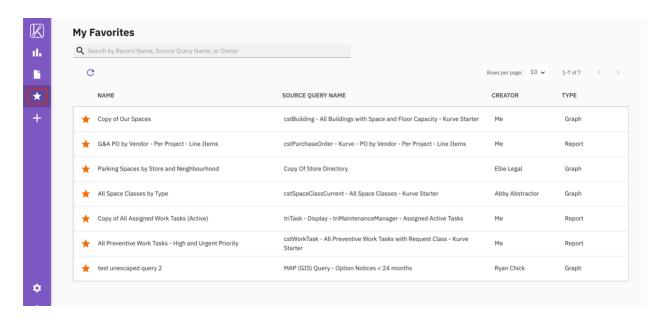


- b. View Favourites: Your Home Page will only display 12 favourites based on the latest created date.
  - If you are on the home page you can click View More on the top right hand corner of the Favourites cards.

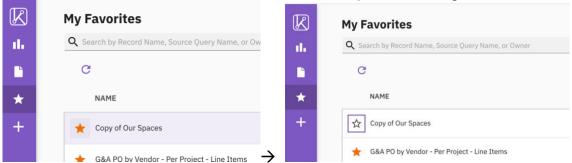


 You can also use the Favourites icon on the side navigation bar to open the list of your favourites

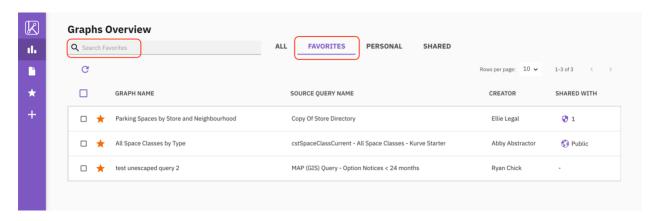




- c. Removing favorites: There are a few ways to remove a favourite
  - i. My Favourites Page: find the record you wish to unfavourite and click in the star. It will be removed from the list upon refreshing



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

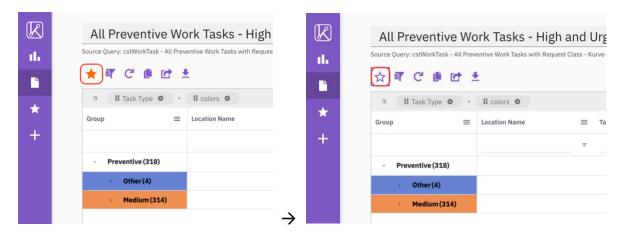




• Click the star. It will be removed from the list upon refreshing.



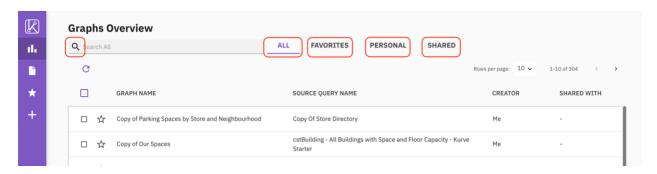
iii. Within a graph or report: Open the record you would like to unfavourite



## **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:

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

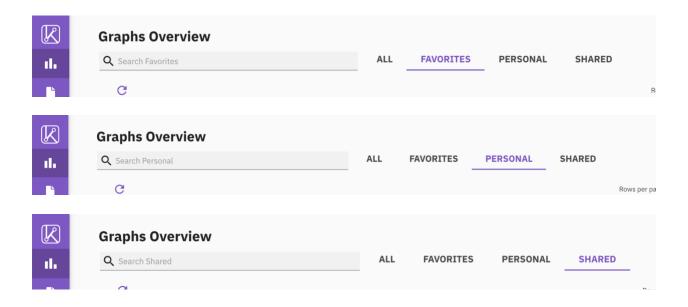
- b. Functions of the Graphs' menu bar:
  - i. **Search** ( $^{\bigcirc}$ ): This is your search function. Click on the magnifying glass symbol to expand the search bar and type to filter through the current list of graphs.



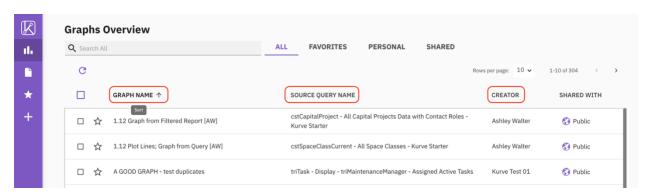
**Note:** By default, the list of graphs is sorted by created date, in descending order. The default search will filter through *All* Graphs in the portal.



• 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 (1) will sort your results in alphabetical order starting from "A."
  - Arrow facing down (♥) will sort your results in reverse alphabetical order starting from "Z."



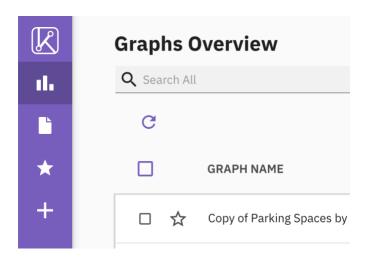
## 2. Using Graph Action Buttons

#### 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.

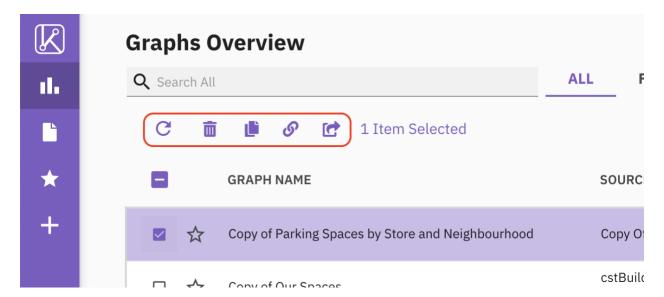


a. If you have no graphs selected, your actions are as follows:



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

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



Features of the Graphs Action Toolbar:

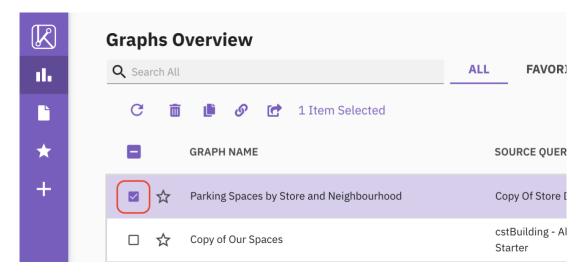
C	Refresh	Refresh the page.	
	Delete Graph	Delete a graph.	

12



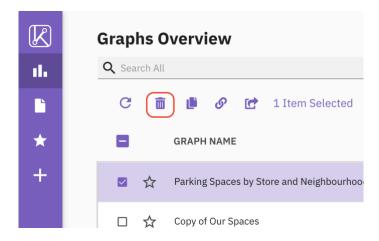
	Copy Graph	Copy an existing graph.		
6	Get Portal/Form URL	Get a Portal or Form URL to embed the graph into a portal section or form tab.		
	Change Shared Settings	Make changes to whom the graph is shared with (public, private, or specific individuals).		

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

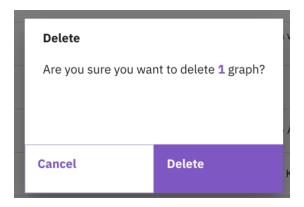


- ii. Once selected, the toolbar will update with all options.
- c. **Delete** Function: Delete any graph that has been *created*. As an admin, you can delete graphs made by you or others.
  - i. Navigate to the Graph Menu Bar and find the graph you want to delete under the Personal tab. Click the trashcan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

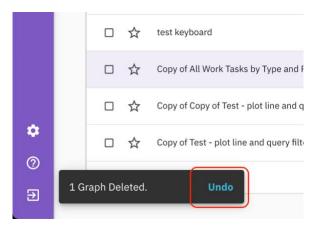




ii. A prompt will appear: "Are you sure you want to delete 1 graph". Select "Delete" to delete or "Cancel" to get out of the pop up.

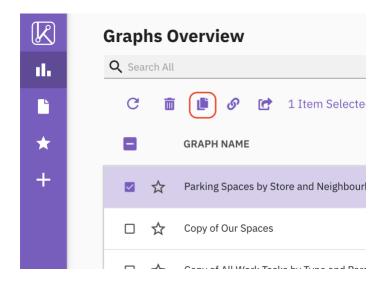


iii. If you accidentally deleted a graph you did not mean to, you can Undo the delete and restore your graph. Once you click Delete, a pop up will appear at the bottom left of the page. To restore the graph that you deleted, click Undo.

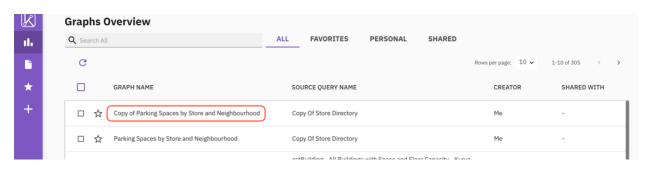


Note: The pop up will only appear for a few seconds. If it disappears and you wish to restore the graph, please go to the admin portal.

d. **Copy Graph** Function: Click on the copy graph icon ( beside the graph you want to copy.



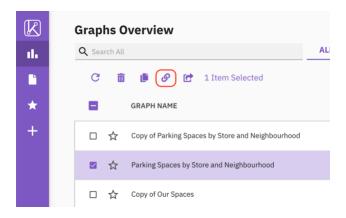
i. A copy of the selected graph will appear in the list of graphs.



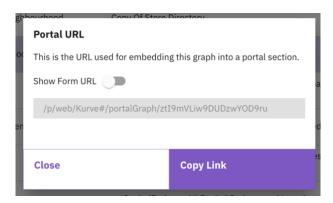
e. **Get Portal/Form URL** Function: Click on the Get Portal URL icon ( ) next to the graph you would like to get a portal URL for.

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

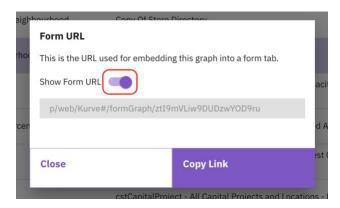




 A window will pop-up with the URL for the Portal section. You may use the URL to embed the graph into a portal section by clicking on the Copy Link button.

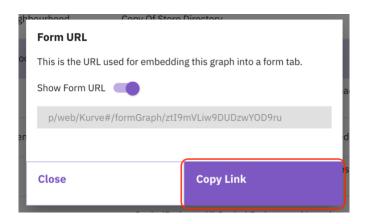


ii. To get the link for embedding your graph or report into a form, click the Show Form URL toggle. The URL will change, and the heading will say Form URL.

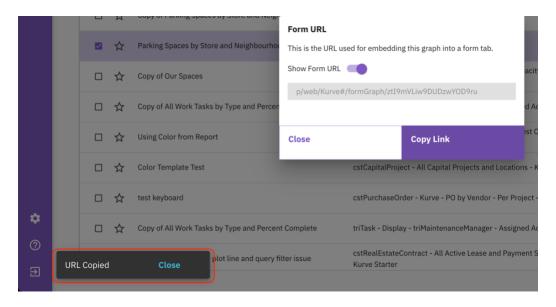


iii. Click Copy Link to copy the Form URL link to your clipboard. Paste it into any form tab using an External Tab.



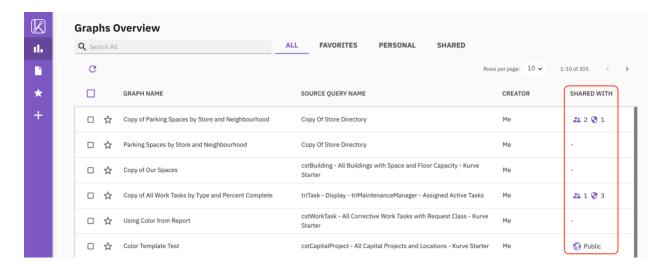


iv. Once copied, a pop-up will appear at the bottom left indicating the URL has been copied.

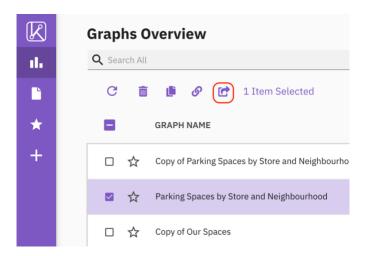


- f. **Change Share Settings** Function: You may identify each graph's share settings on the last column of the Graphs Overview labeled "Shared With."
  - In the Graphs Overview, under the "Shared With" column, if "Individual" is selected for the share setting, it will appear with the symbol ( and the 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.



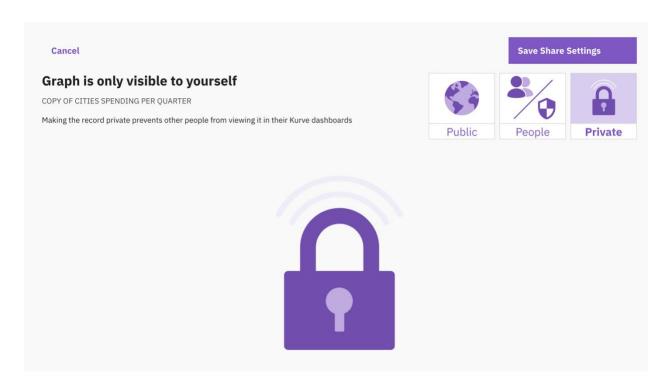


i. Click on the Change Share Settings icon ( ) next to the graph you would like to change the share settings for.

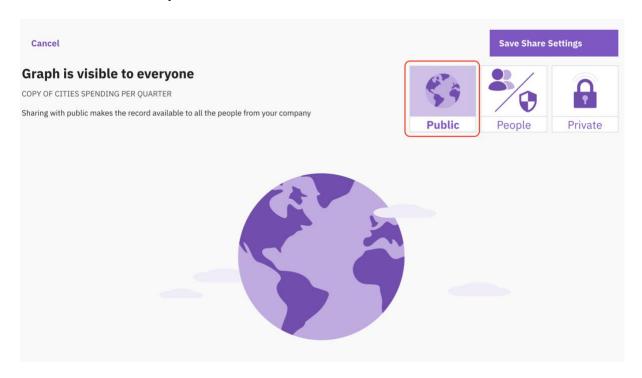


ii. A new window will appear. Please note that all graphs will have a default share setting of "Private."

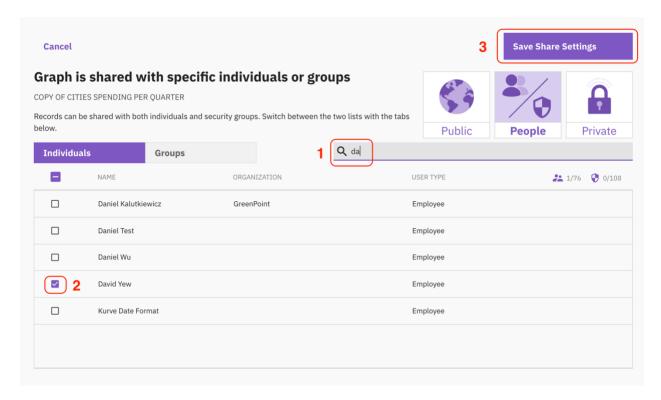




iii. Click on "Public" if you would want the graph to be accessible for all users in the system.

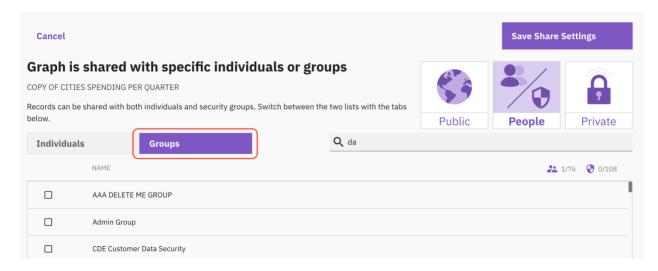


- iv. Click on "People," if there are specific individuals or security groups to share the graph with. You will be brought to the page where you may search for the individuals.
  - Type in the name
  - Select the check mark next to the name(s) of people you would like to share
  - Click "Save Share Settings"

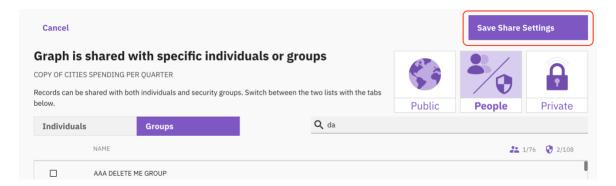


v. To share with one or multiple security groups, click on "People" and then click on Groups This will change the list to show security groups instead of individuals.

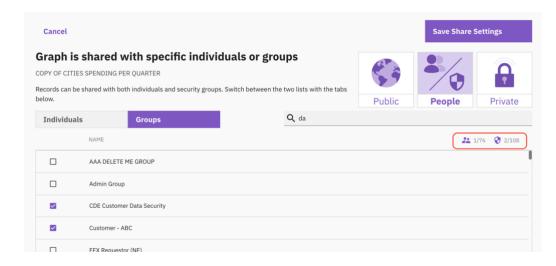




- vi. You can share with groups and/or individuals.
  - Simply search for the group you would like to share, click on the box next to it, and click Save Share Settings.

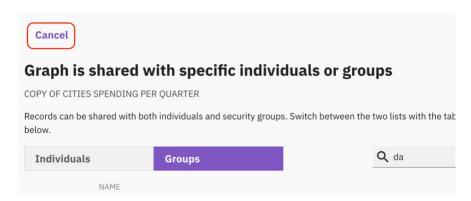


· You can keep track of who you have shared with

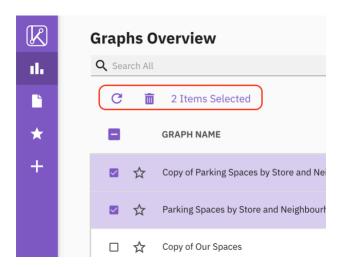




vii. If you would like to exit out of the Change Share Settings page, click the Cancel button. This will not save any of your changes made.



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

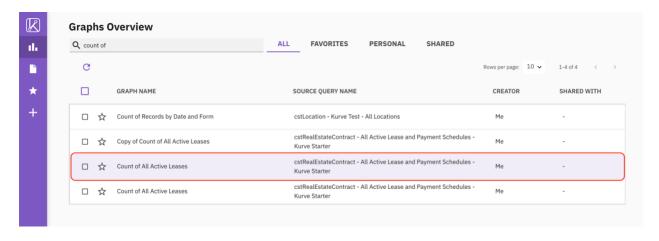


	Select	Unselect the graphs that are currently selected.	
G	Refresh	Refresh the list of graphs.	
	Delete	Delete the selected graphs.	

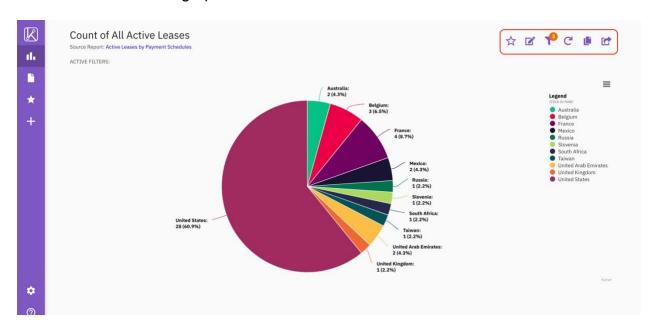
## 3. Using a Specific Graph's Toolbar

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





#### b. Features of the graph's toolbar:



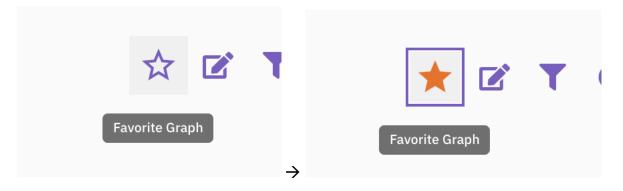
$\triangle$	Favourite Graph	Pin a graph to your home page or favourites page for easier access.
	Edit Graph	Make edits to the opened graph.
T	Create/ Apply Filters	Filter your graph to show specific results. Filters created will be saved here. All filters created and applied by the owner will be saved.
G	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.
Copy Graph	Copy the opened graph.
Change Share Settings	Make changes to whom the graph is shared with (public, private, or specific individuals).

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. Create/ Apply Filters Function: graph filters will be covered in Section 4.
- e. **Copy / Edit / Change Share Settings** Function: The icons have the same functions as described in *Graphs Portal Section 2*.

#### 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.

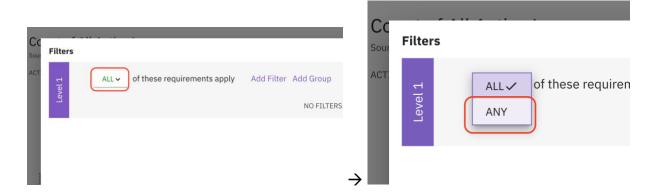
a. To add a filter to your graph, open a graph and then select the Filter icon ( ) in the graph toolbar.



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

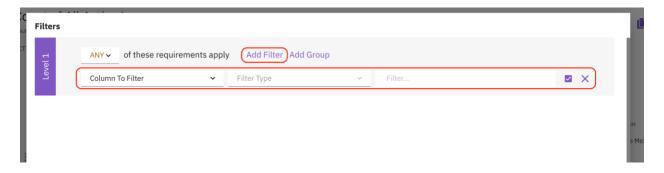
NOTE: Default filtering behaviour is selected as ALL. This will automatically implement AND logic to the graph and all active filters will be applied.

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 be applied to the graph.

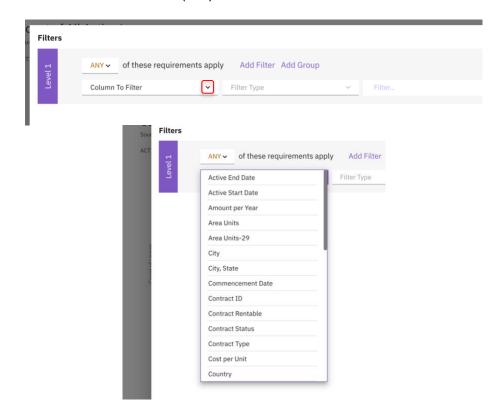




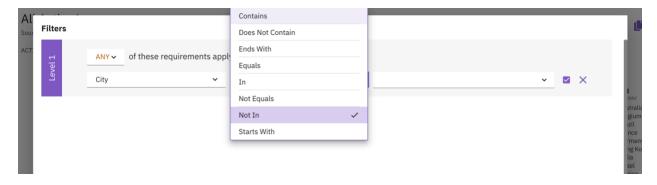
d. Now that you have identified the logic, add a filter by clicking on the Add Filter button. A row will appear below for you to select your column to filter, filter type, and filter value(s).



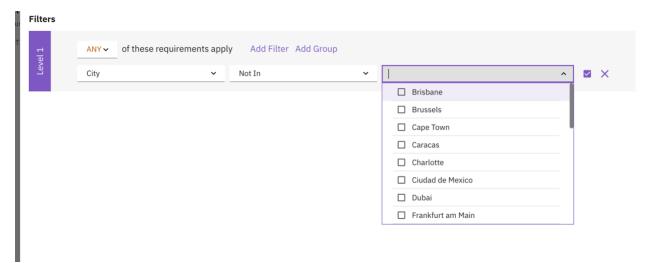
e. Select the column you would like to filter by clicking on the drop-down arrow icon next to "Column To Filter" ( ).



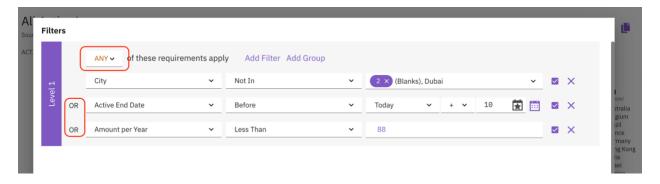
f. Select the Filter Type by clicking on the drop-down arrow next to "Filter Type". The filter type will change depending on the field type (i.e. number, date, datetime, text).



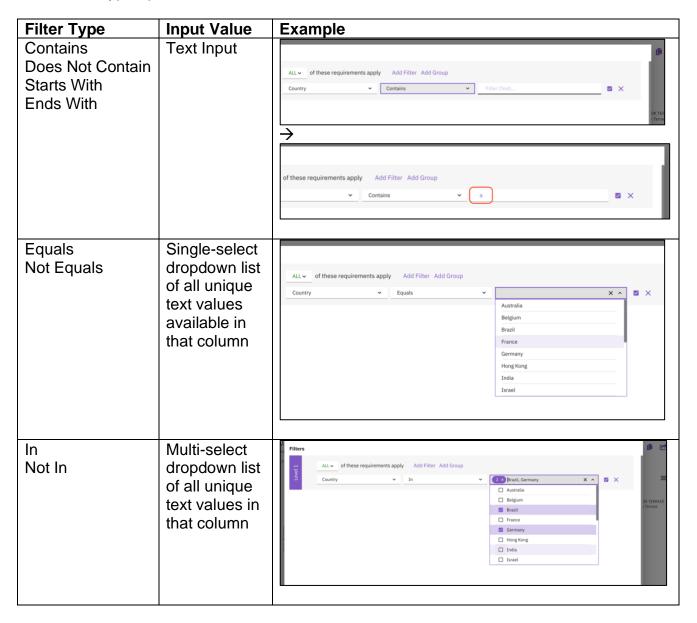
g. Input the value that you would like to filter for in the last box "Filter...".



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.

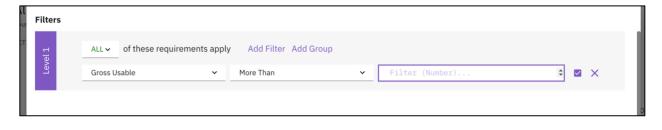


i. **Text Fields:** The following table indicates what the input value will be for each filter type option that is available.



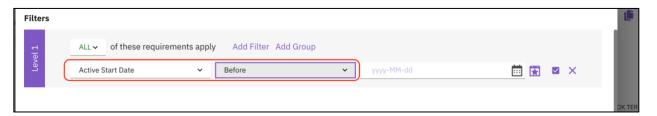
j. Number Fields: All fields that are set as number fields will require numerical inputs. Select: Field, Filter Type, and input the numerical value in "Filter (Number)..."



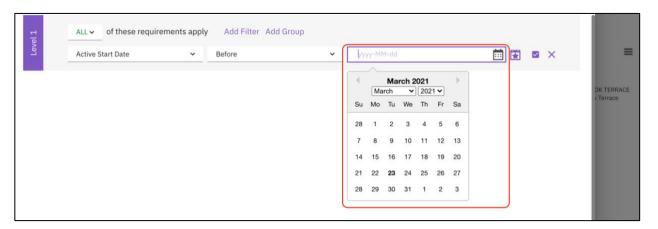




- k. **Date Fields:** There are two options when filtering on date fields:
  - i. **Static** (Standard Date Filters are used to filter on a specific date)
    - Select a date field and then a filter type



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

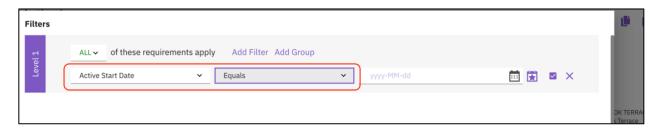


ii. **Dynamic** (Token Date Filters are used to dynamically filter dates; compare the date you choose to a date that automatically adjusts according to the current date. This means you do not have to identify a

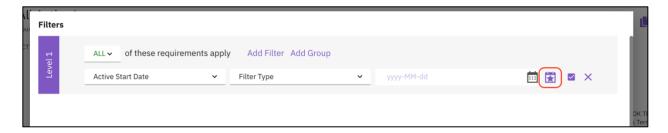


specific date to use the filter. For example, you can filter for the Token Date "yesterday" to display only the previous day's data.)

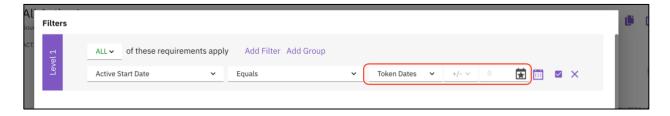
Select a field and a filter type.



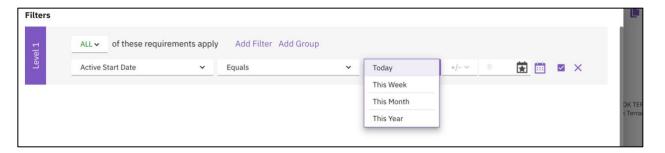
 Click the Token View icon (<sup>™</sup>) located at the end of the filter row.

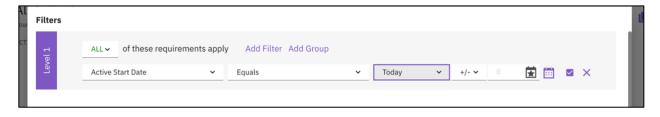


• The row will change to show three new inputs.



 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).

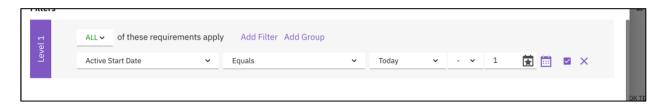
Select Plus or Minus from the dropdown.



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:

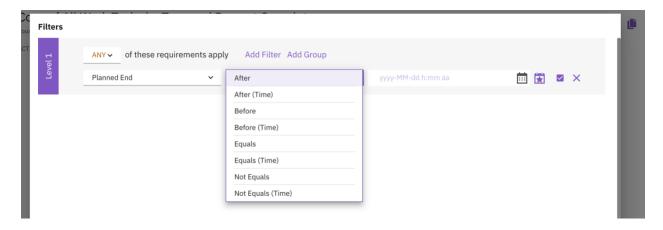
Filter Type	Token Date	Time Offset	Example	Outcome
Equals	Today	By Day(s)	Today + 5	Shows all data with an Active Start Date OF January 6, 2021.
Before	Today	By Days(s)	Today + 5	Shows all data with an Active Start Date BEFORE January 6, 2021.
After	Today	By Day(s)	Today + 5	Shows all data with an Active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

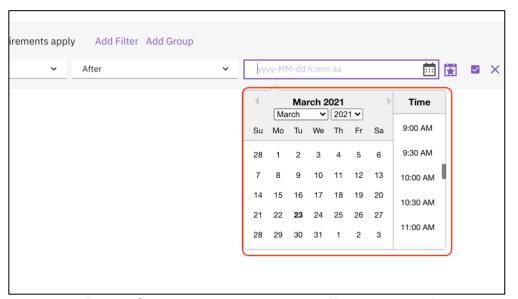
Filter Type	Token Date	Time Offset	Example	Outcome
Equals	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date BETWEEN February 1-28, 2021.
Before	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date BEFORE February 1, 2021.
After	This Month	By Month(s)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

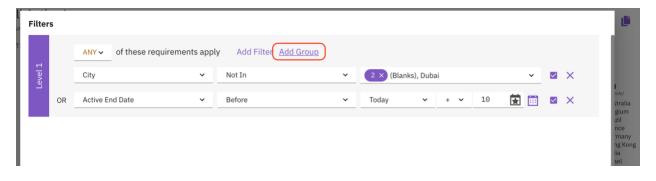


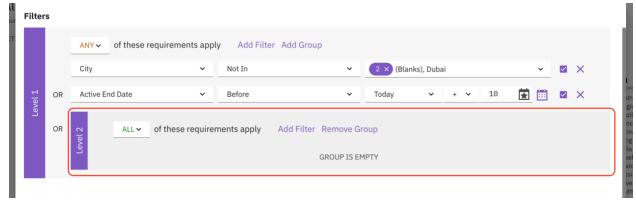
m. **Adding Group Filters:** Groups lets you combine different types of logic in the filters, so you can have multiple sets of ANY filters, or look for ANY of several sets of more complex conditions.

**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
- 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)

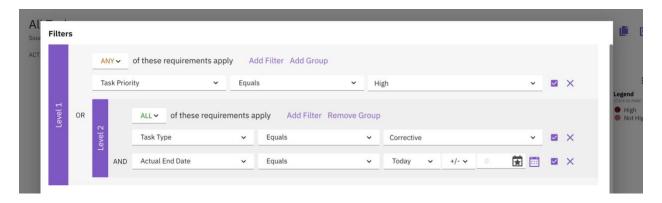
These have different meanings but we want to filter for the second scenario—let's use groups to make this more clear.

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

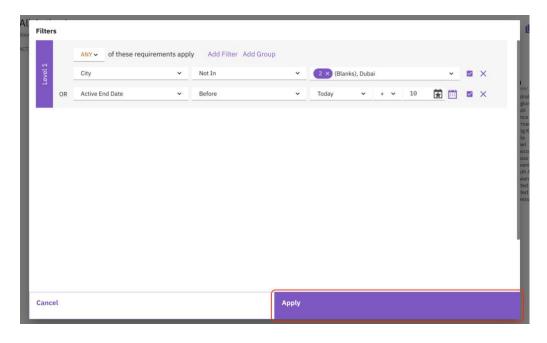


# AND Due Date (Token Date) Equals TODAY

In a Kurve graph the filters would look like this:

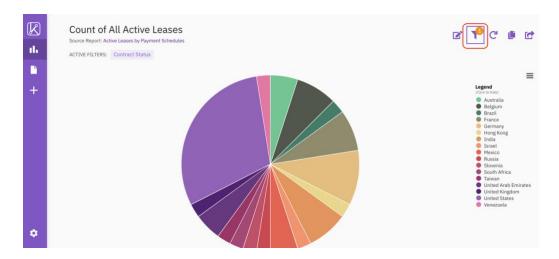


n. When ready to apply your filter selections to your graph, click 'Apply' at the bottom right of the pop-up window.

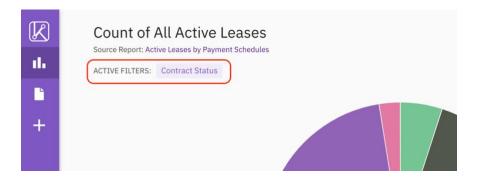


o. When a new filter is added, the filter icon will display an orange circle with a number inside of it. This identifies the number of created filters (not necessarily all the active/applied filters).

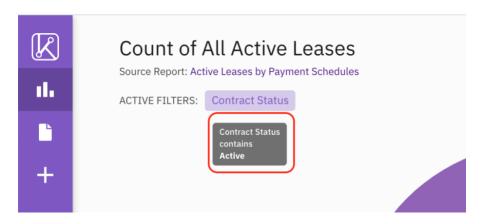




p. Below the title of the graph, the 'Active Filters' ribbon will display the applied filters to that graph. For example, see the screenshot below to see the 'Contract Status' filter in the ribbon.

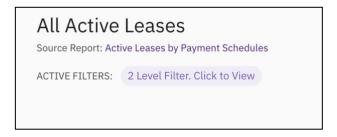


q. Take your mouse and hover over the active filters to view details about that specific filter, including the filter type and value(s) being filtered for.

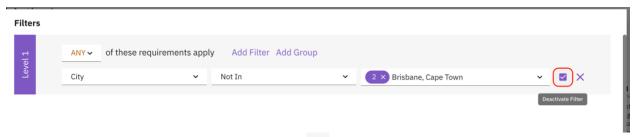


r. If you have added a Group to your Filters, the 'Active Filters' ribbon will display as "2 Level Group - Click to View". Click to open the Filter window and view the details about the filters.



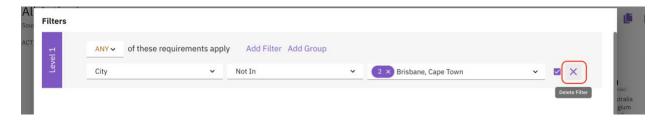


- s. If you would like to change what is being filtered, re-open the filter page by clicking the filter icon (\neq \)) and make your adjustments. You can add more filters by clicking on the New Filter button.
- t. Activate/Deactivate Filters: By default, any newly created filter is assumed to be activated. 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 (X)at the end of the filter row to delete a filter.

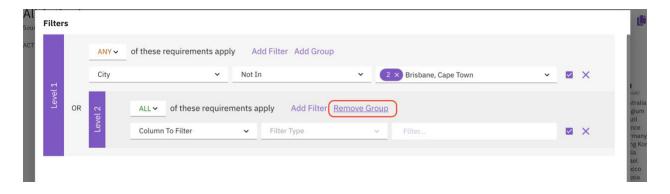
NOTE: Once a filter is deleted, there is no way to recover the filter.



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.



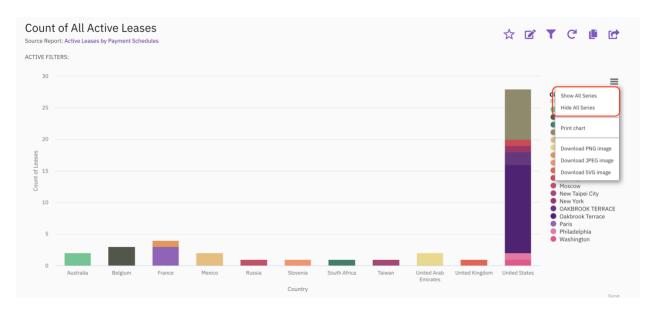


#### 5. Refresh Data

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. Showing/Hiding Series

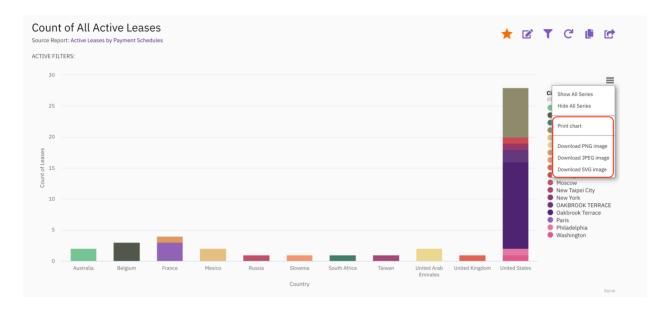
To Show or Hide All Series on a graph, click on the menu icon (■) located on the right side of the webpage. A list will pop-up, select "Show All Series" to show all the data in the graph, select "Hide All Series" to hide all of the data.



# 7. Printing and Downloading Graphs



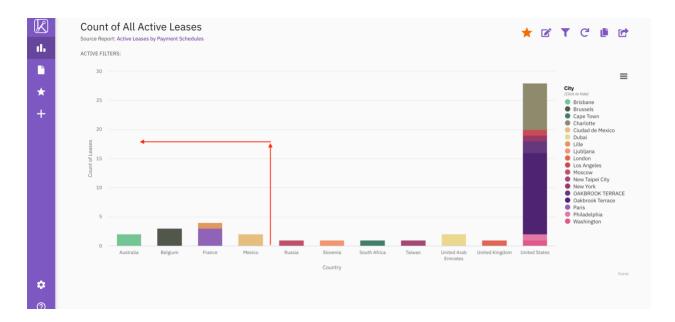
**Print / Download Graph** Function: Click on the menu icon (≡) located on the right side of the webpage. A list will pop-up for your choice to print or download the graph in various formats.



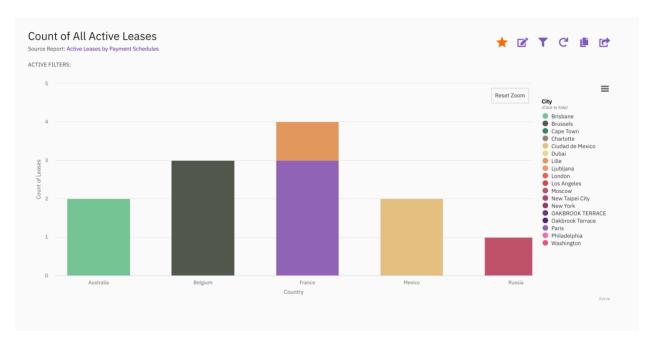
### 8. Clicking and Highlighting on Graphs to Zoom

a. **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.



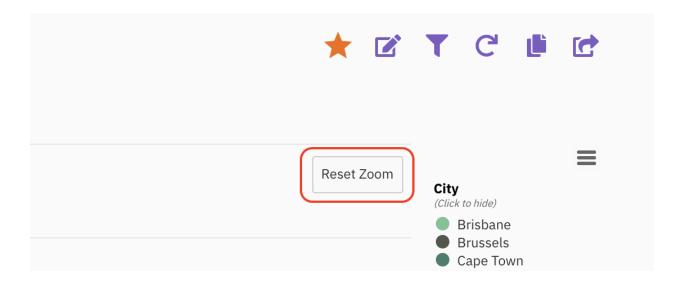


b. The graph will zoom to what you highlighted:



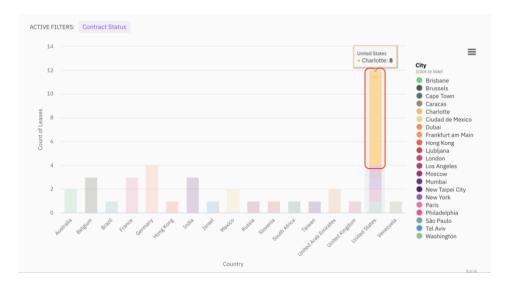
c. **Reset Zoom** Function: when you want the graph to reset to view all results of the graph, click "Reset Zoom."





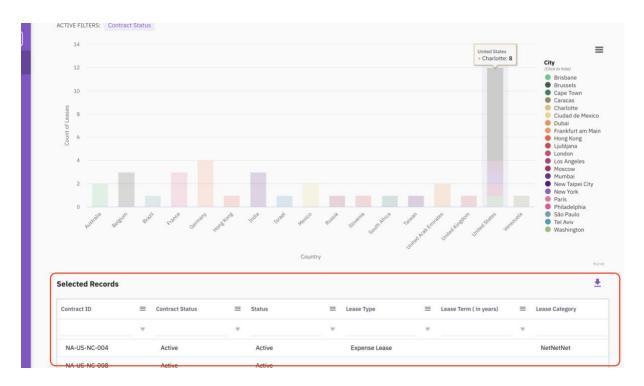
## 9. Navigating Through Graph Data

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.

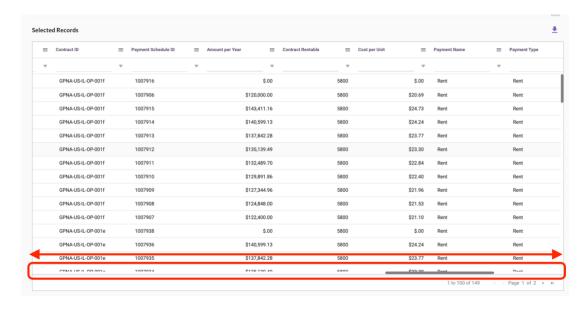


b. **Click on the column** or segment on the graph to open the graph table associated with that record.



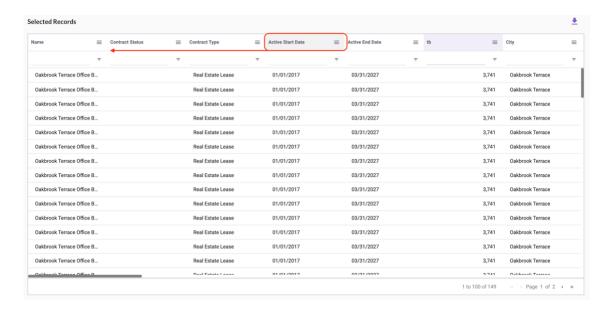


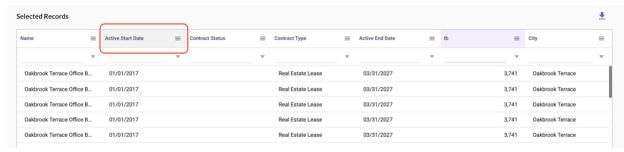
c. Scroll left or right to view the columns associated with the graph table.



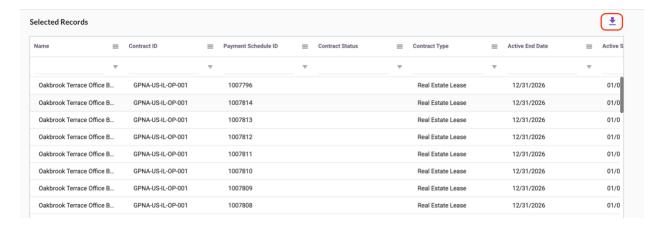
d. **Reorganize the columns** - click and drag the Column headers to where you would like to place the column on the table.





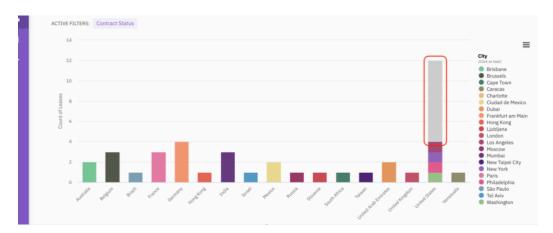


e. **Download Table of Records:** at the top right-hand corner above the table of records, there is a download icon (≛). Click to download as Excel or CSV.

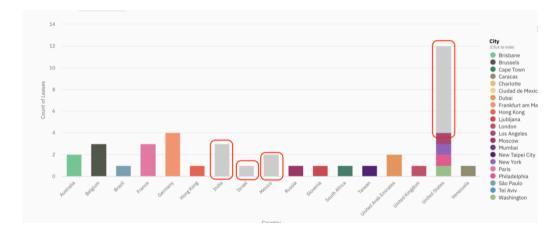




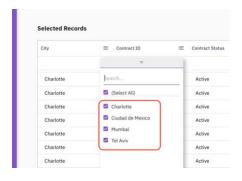
- f. **Multi-select** graph segments select multiple sections of the graph to display in the table of records below the graph.
  - i. Navigate to your graph
  - ii. Select one segment of the graph



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.

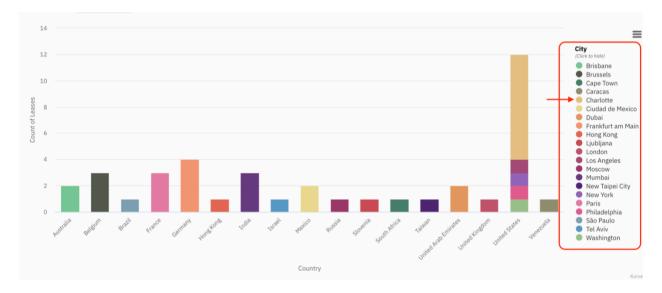


iv. Now when I scroll to see my table of records, it will display all three cities rather than just one.

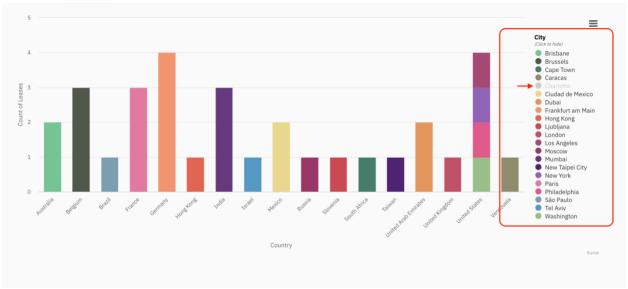


g. **Hide variables from the graph** - from the colour legend located at the top right corner, click on the coloured dot of the property you would like to temporarily hide from the graph to view specific data.

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

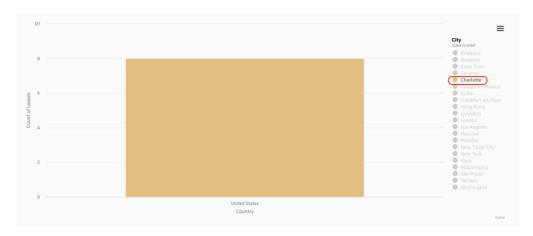


Now the graph will only show all other lease data.



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 (≡).

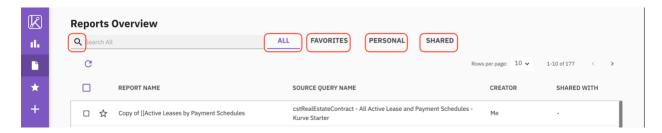




# **REPORTS PORTAL**

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 Portal



a. Features of the Reports' menu bar:

Q	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:

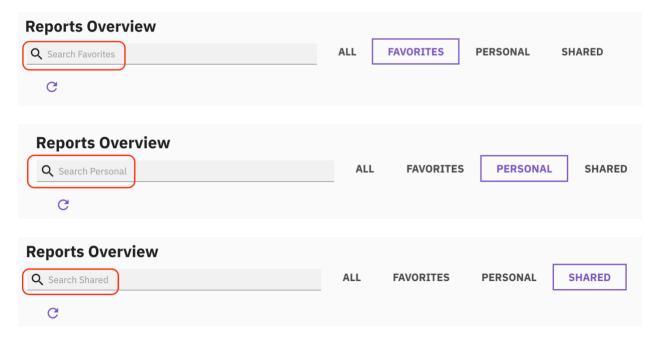
i. **Search** ( $^{\mathbb{Q}}$ ): This is your search function. Click on the magnifying glass symbol to expand the search bar and type to filter through the current list of reports.

**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.

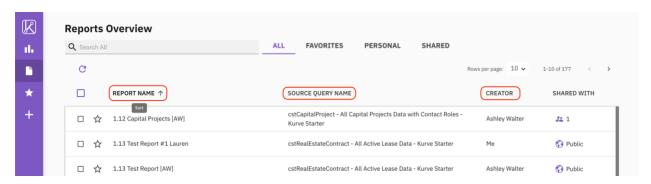


• If you want to search within the *Personal*, *Favorites*, or *Shared* tabs, simply click on either tab and click on the magnifying glass.





- c. **Sort** function: sort the graph results by clicking on one of the column headers. There are two sort options:
  - Arrow facing up (1) will sort your results in alphabetical order starting from "A."
  - Arrow facing down (♥) will sort your results in reverse alphabetical order starting from "Z."



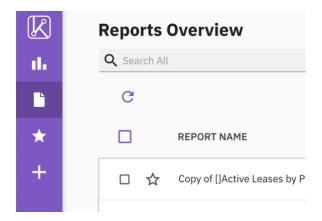
## 2. Using Report Action Buttons

#### 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.

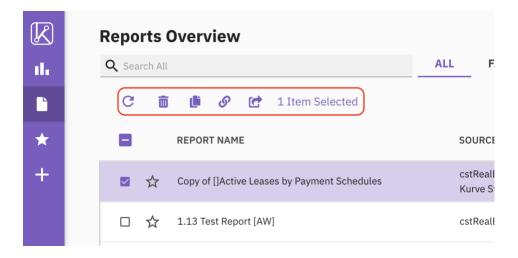


a. If you have no reports selected, your actions are as follows:



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

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

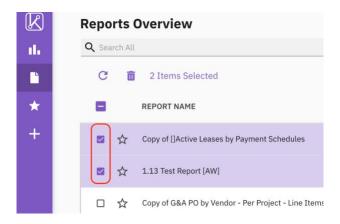


Features of the Report Actions Toolbar:

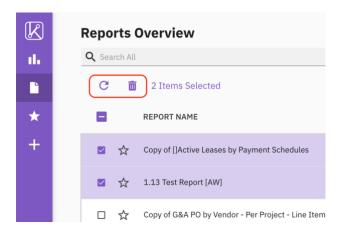
C	Refresh	Refresh the page.
	Delete Report	Delete a report.
	Copy Report	Copy an existing report.

9	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.



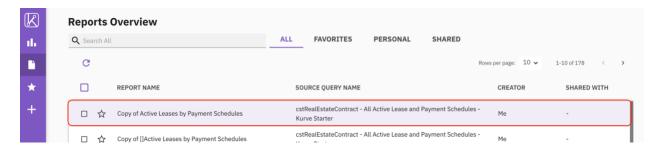
G	Refresh	Refresh the page.
	Select	Unselect the reports that are currently selected.
	Delete	Delete the selected reports.



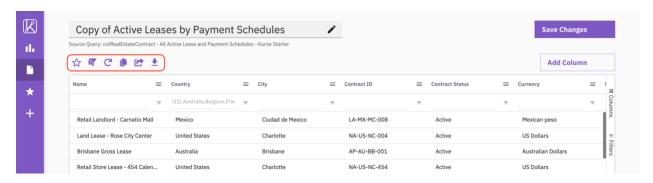
**Note:** Each feature listed above for the Reports Portal will function the same way as described under the Graphs Portal Section 2.

## 3. Using a Specific Report's Toolbar

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



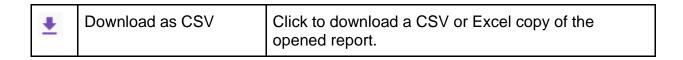
b. The Report will open with column headings and data.



#### 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.
C	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.
	Copy Report	Click to copy the opened report.
	Change Share Settings	Click to edit who the report is shared with (public, private, or specific individuals or security groups).

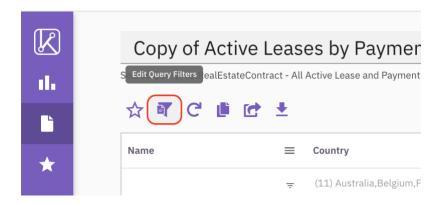




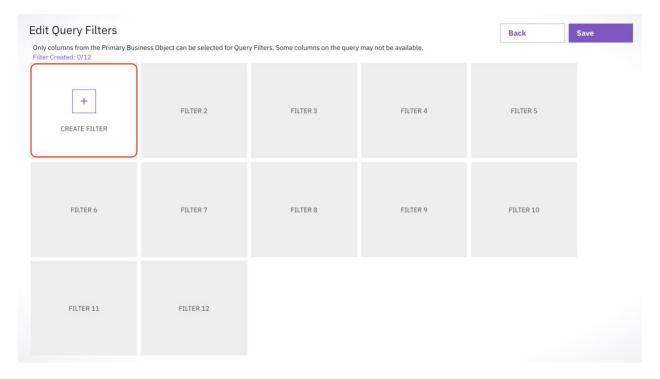
## 4. Edit Query Filters

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 edit query filter button () to edit them.

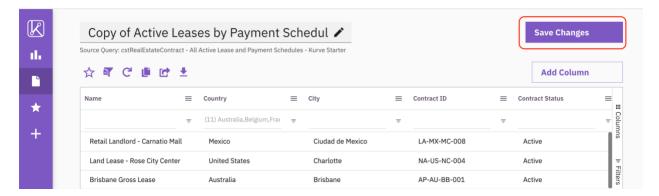
a. Click the Edit Query Filters button from the toolbar



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

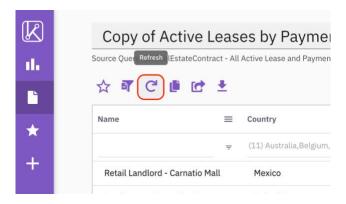


c. To save changes made in the Edit Query Filter page, you must click Save Changes in your report.



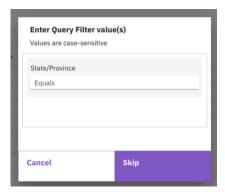
#### 5. Refresh Data

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.



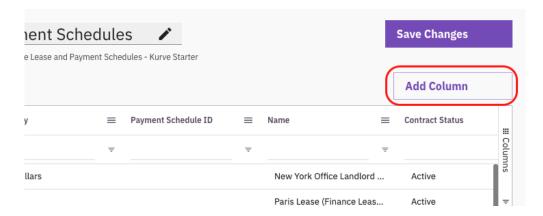
- a. If you do not have query filters created: the report will refresh with the most upto-date information
- b. If you have report filters created: you can edit the values or click Skip if you simply want to refresh the data



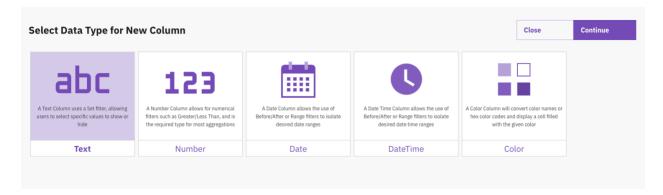


## 6. Adding Columns on Report

a. Click "Add Columns" to add a custom column with the existing data to the report.

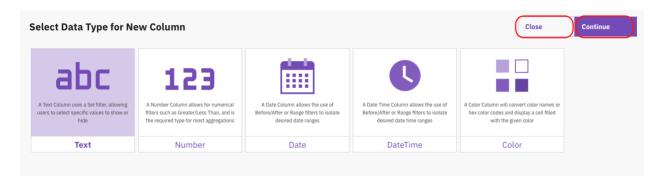


b. The first window that will open will ask you to select a data type for the new column. This selection will set the filter type for this column and how the values are presented.





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

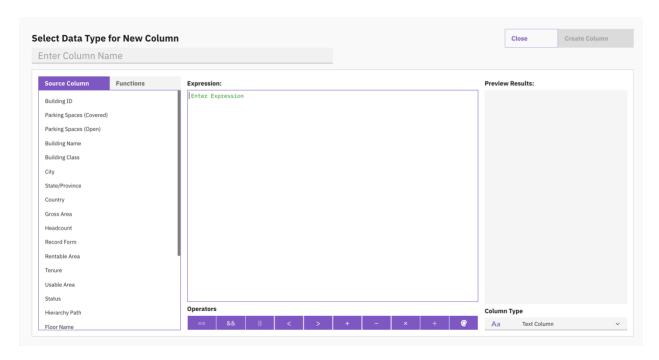


Note: Kurve will automatically change the display type and filters for the column according to the data type selected.

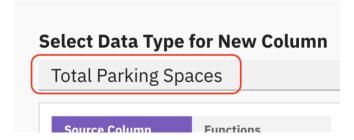
Column Type	Description
Text Column	Text columns should be used for alphabetic characters. For
	example, if you are creating a column to display months, it would
	be a text column displaying months January through December
	based on the source column.
	A text column will filter for unique values.
Number 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	A date/time column will be used for all custom columns involving
Column	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.

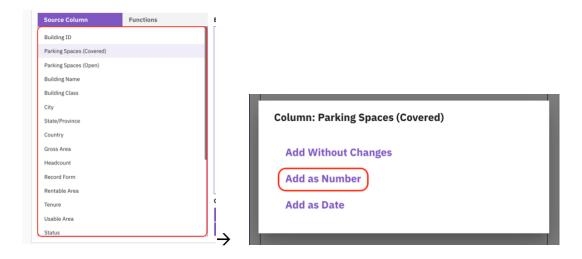




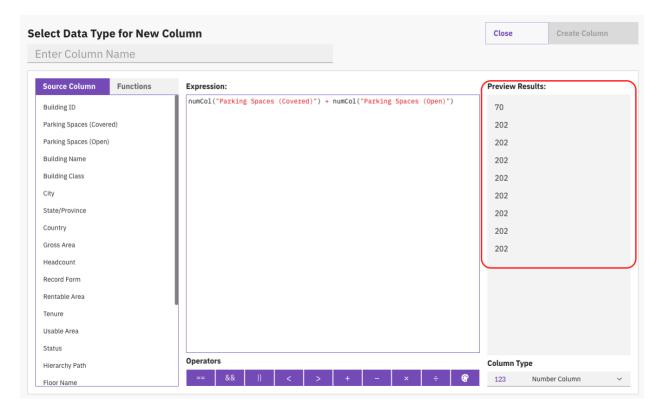
e. Type the name of the custom column under "Enter Column Name." Once the column is created this column name cannot be changed. In this example, we will calculate the number of parking spaces.



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" .



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



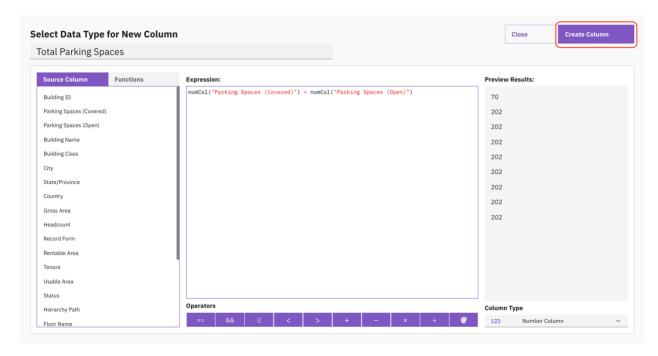
**Example:** In this case, the "Parking Spaces (Open)" column is being added to the "Parking Spaces (Closed)" column, therefore the "Expression" is "numCol('Parking Spaces (Open)')+numCol('Parking Spaces (Covered)')". This adds our two columns together thus calculating total parking spaces.

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
П	Or
<	Less Than
>	Greater Than
+	Add
_	Subtract
×	Multiply
÷	Divide
<b>€</b>	Color Picker: helpful tool to choose colors when doing color columns



i. 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.

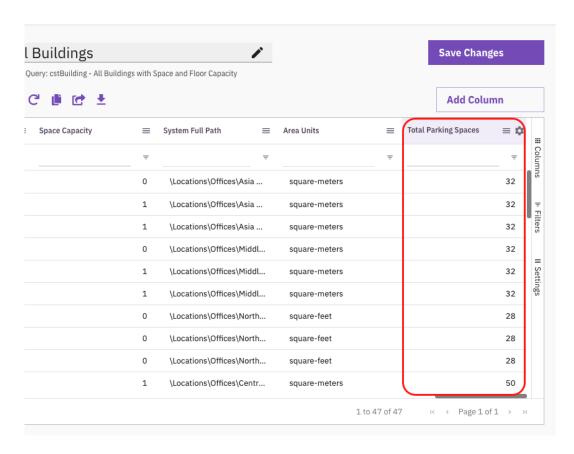


 At any time, you may also exit out of the "Create Custom Column" page by clicking on the Close icon.

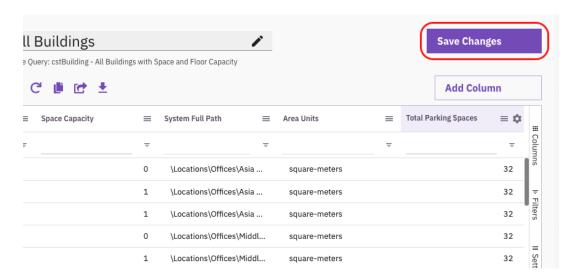


k. Once you click Create Column, the column will appear at the very end of your report (scroll to the right). Custom columns will be coloured purple to indicate that it's custom.



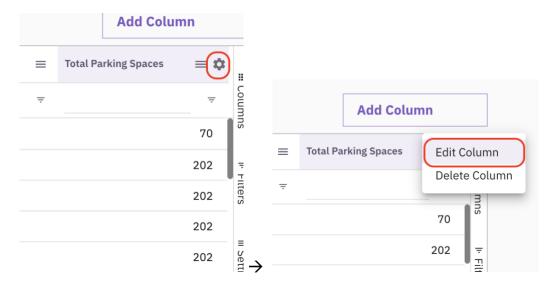


Changes to the report (including new custom columns) will not be saved until you have clicked "Save Changes."

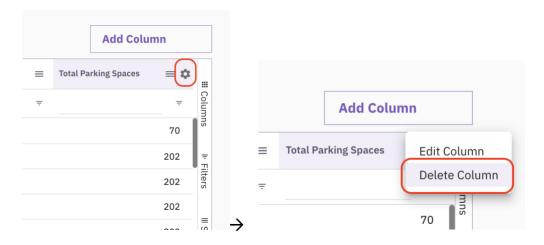


I. To edit the custom column, click the gear icon next to the hamburger menu of the custom column. A secondary menu will appear, click Edit Column.

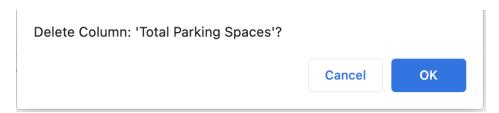




m. Delete Custom Column: To delete a custom column, click into the gear icon in the custom column you would like to delete. Then select Delete Column.

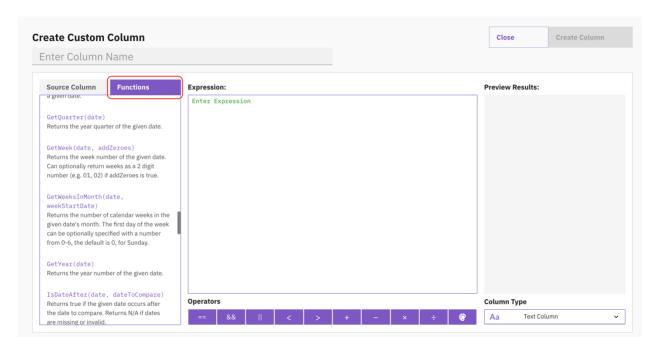


i. A pop-up will appear to confirm you would like to delete the column. Click OK to delete, or cancel to keep.

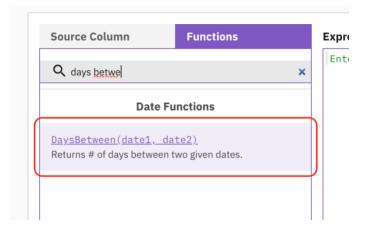


ii. Save Changes to save any adjustments that were made.

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.

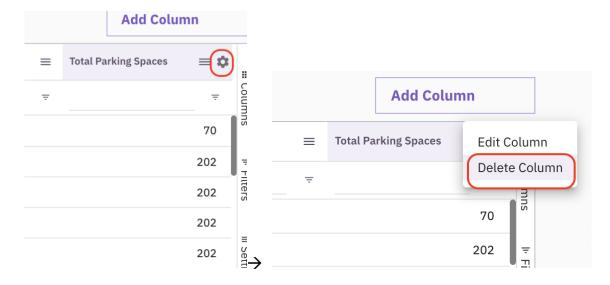
Replace the "date 1" with the first date field. For Date 2, select the other date. You could use functions within functions. For example, if we choose Today() as Date 1, this will calculate the days between Today and the project end date.

# **Expression:**

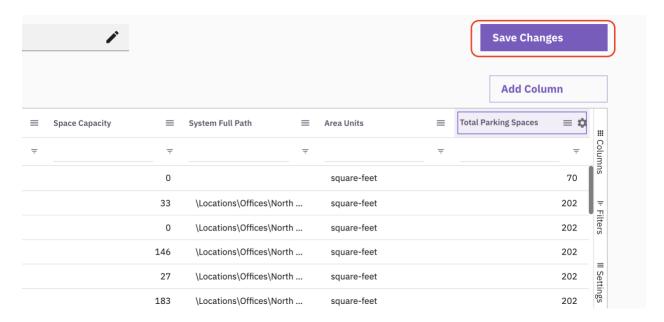
DaysBetween(Today(), dateCol("Project Plan End") )

#### o. Delete Custom Column

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



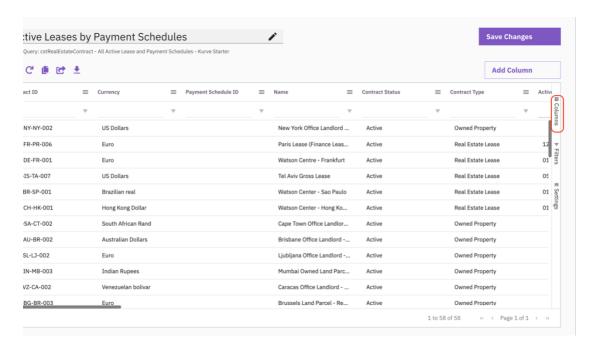
p. Save: Click Save Changes to ensure anything you have done to the report gets saved.



# 7. Personalizing Columns on the Report

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

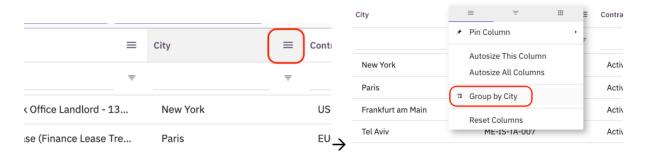




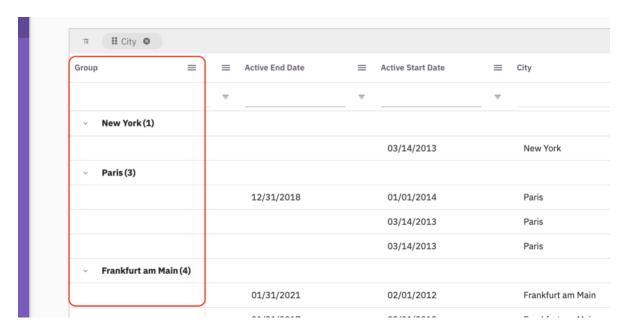
b. A side panel will open beside the "Columns" bar. Type into "Search..." text box or select/deselect columns to keep/hide from the report.



- c. **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.



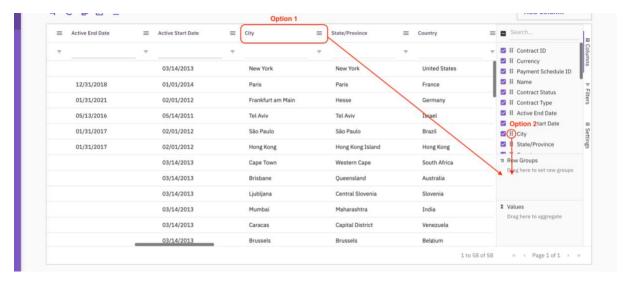
d. The report will group by the column you have selected and automatically pin that column left.

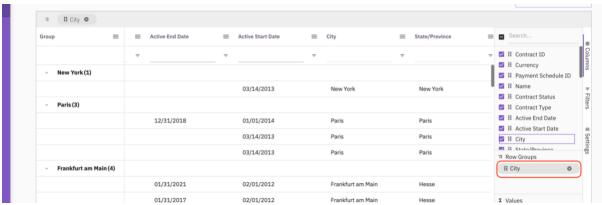


**Note:** In this example, each item from "City" is grouped and beside each item, there is a number to show how many items are in that one group. (Example: for "New Work (1)" this shows that there is 1 record with the city New York.

- e. **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 (iii) from the Columns section (see image below).



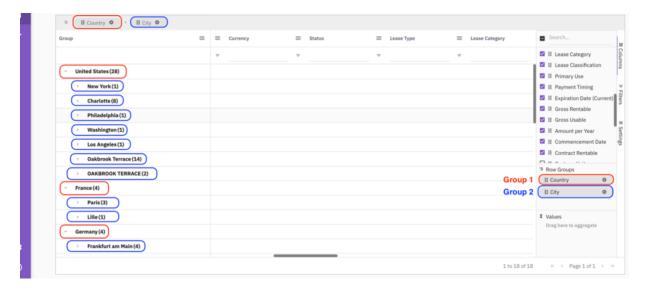




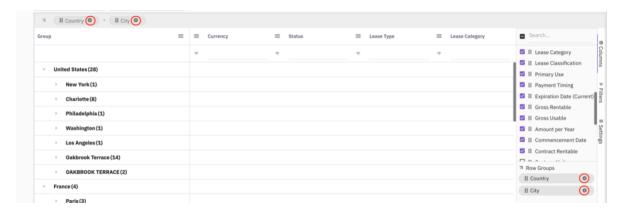
f. **Row Groups Hierarchy** function: When you have more than one column in the "Row Groups" section, the order of columns in the section determines the order in which the rows are grouped.

**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."

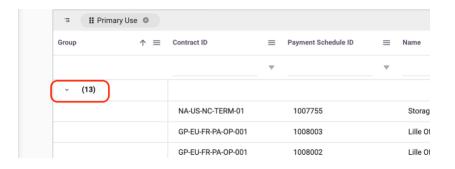




- i. Reorder Hierarchy of Row Groups function: Click on the reorder icon (
   ii) and drag the column header up or down to change the order of the hierarchy for the grouping on the report.
- g. **Delete Row Groups** function: Click on one of the exit icon (<sup>S)</sup>) to delete the row group from 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.

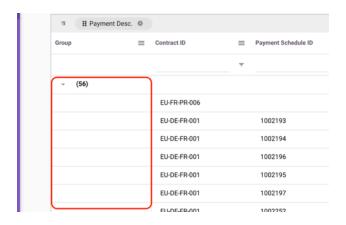


If your blanks do not get grouped together like the above, you may need to use a custom column to ensure the blanks can be grouped together. Use the Function "GroupNulls" and then group your report by this column.

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.



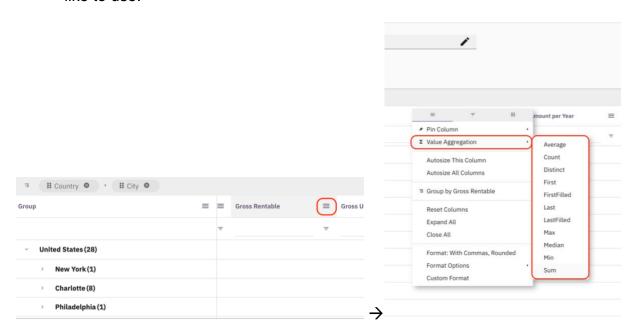
Now the report can be grouped by the custom column and all blanks will be grouped together.



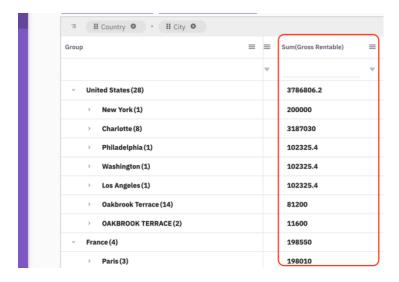
**h. Value Aggregation** function: There are two options to aggregate your data. You can aggregate your data based on what you have grouped your data by:



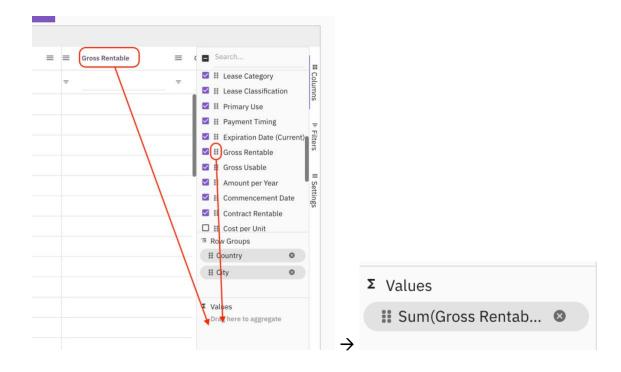
Option 1: click the hamburger menu of the column you would like aggregate.
 Hover over Value Aggregation, then click to select which aggregation you would like to use.



Your column will change according to your selection.



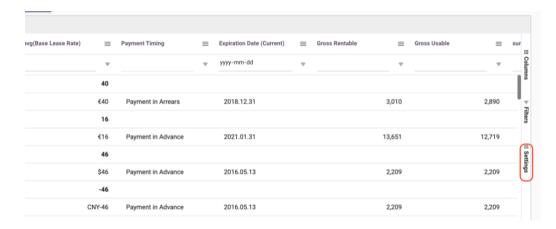
j. Option 2: Open up the Columns tab along the side. Click and drag on any of the Column Headers that you would like to aggregate.



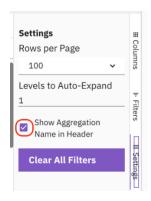
 Click anywhere in the bubble to select what type of aggregation you would like to perform on the selected column, scroll for all options (see below for the options).



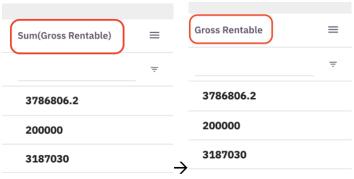
- k. Manage headers for aggregated columns
  - i. Navigate to the "Settings" Window



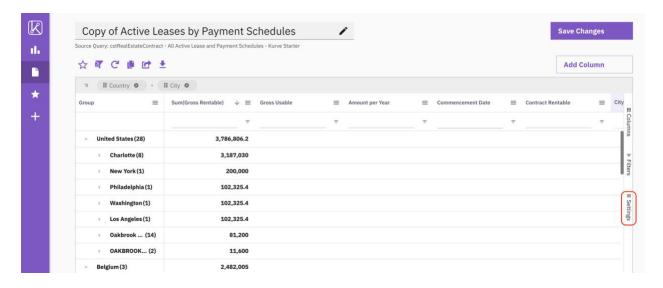
- ii. If you would like to remove the aggregation name in the header of your columns:
- iii. Click the box beside "Show Aggregation Name in Header"



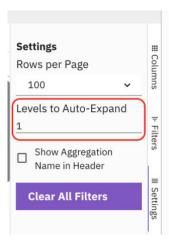
For example, if we've aggregated Gross Rentable by Sum, the header will change to Sum(Gross Rentable). You can keep the aggregation, but remove the header for easy reading.



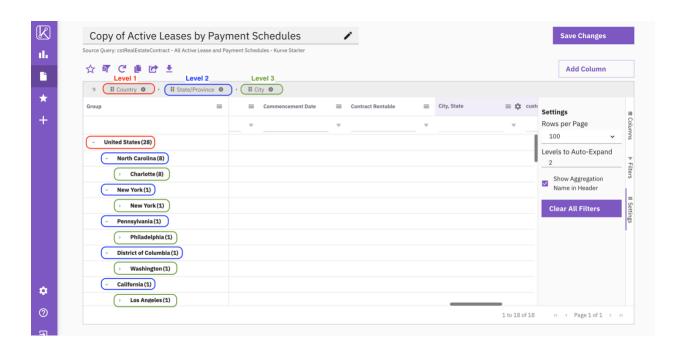
- I. Manage levels of grouping to display upon loading your report.
  - i. Click into Settings



ii. 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:



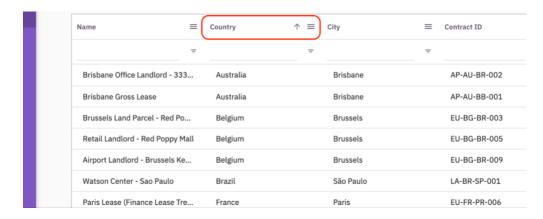
# m. Value Aggregation Options

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	

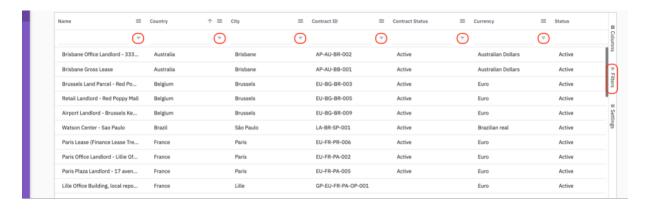


### 8. Reorganizing Columns on the Report

- 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 (1) will sort your results in alphabetical order starting from "A."
  - Arrow facing down (♥) will sort your results in reverse alphabetical order starting from "Z."

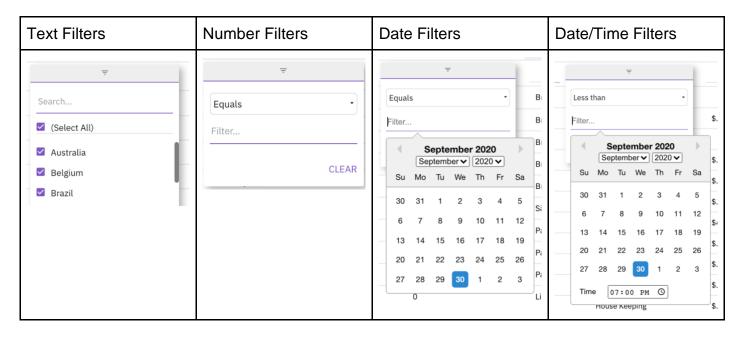


b. **Filter List** function: Click on the filter icon ( = ) and a pop up will open to select what you would to filter out. You can also use the Filters tab that is located along the side.

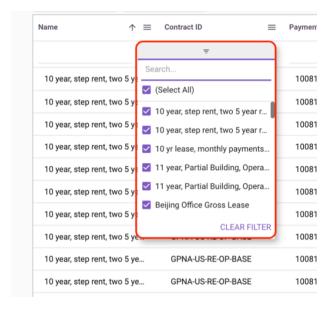


**Note:** Dependent on the column you filter, there are three different filter options:

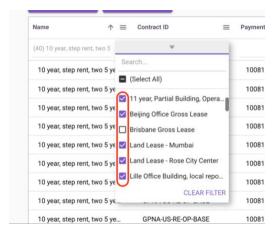




. **Text Filters** Function: Select or deselect what you would like to filter. You may also type into the "Search..." box to quickly find specific items to filter.



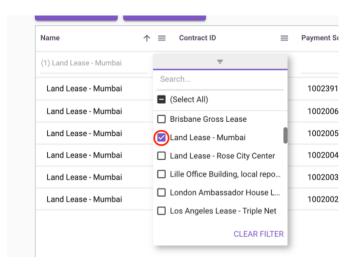
**Example:** In this case, we want to filter the "Name" column. We deselected "Brisbane Gross Lease" to filter for all other request classes.



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

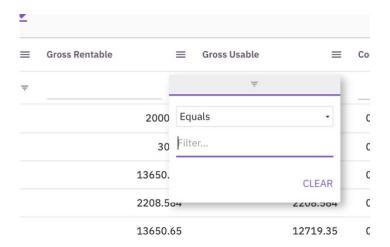


 We can also filter for only one or a few options. To do this we deselect "Select All" and then select which options you would like to see. In this example we selected "Land Lease – Mumbai". You can select as many options as you would like to display.

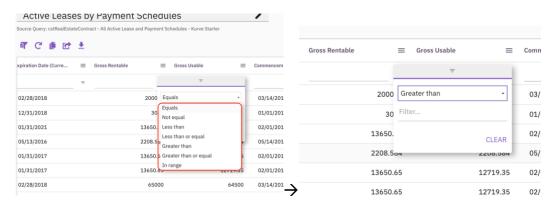


c. **Number Filters** Function: Click on the drop-down icon (-1) to select the range you would like to filter.

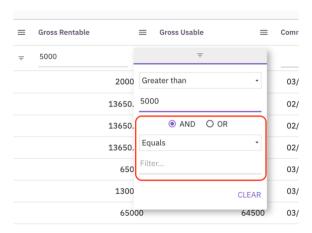




 Select the filter option from the drop down list and then fill in the number you would like to set the range under the "Filter..." text box.



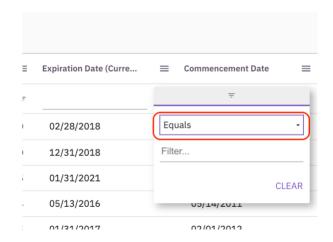
d. To create a range or set a criteria for the filter, fill in the secondary filter.



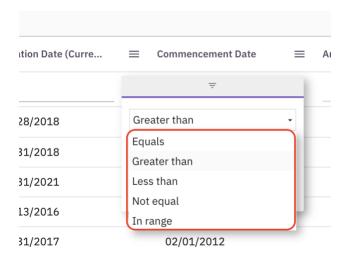
e. To easily exit the filter window and keep the filter applied, select the filter bar



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

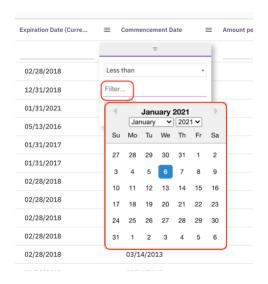


i. Select the filter option.

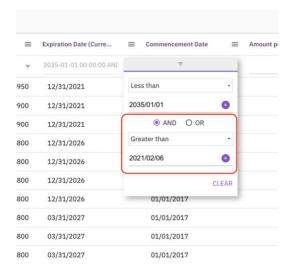


- g. Select the date with the date picker:
  - i. Click into the Filter... text box and a calendar will pop up.



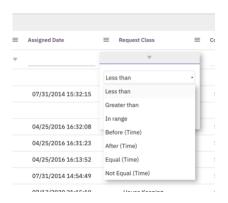


h. To create a date range or set a criterion for the filter, fill in the secondary filter.

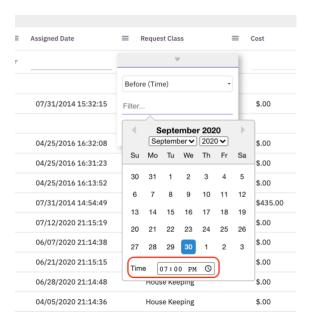


- Date/Time Filters: With Date Time fields, all the filters for Date fields are available. Additionally, there are also a set of filter options that filter on the time portion of the field.
  - i. Click on the drop down icon ( ) to select the date range you would like to filter.
  - ii. Select the filter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



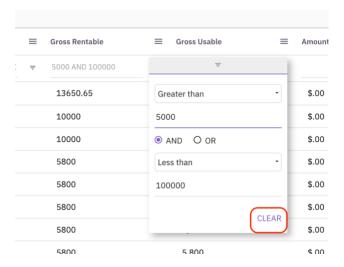
iv. Select the time you want to filter on – please note, when you choose a filter type with Time in it, it will ignore the date selected.



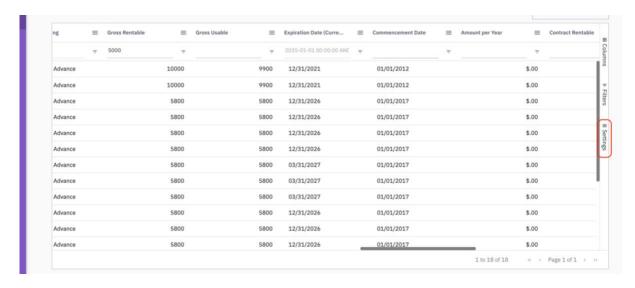
j. Clear Filters: you can easily clear the filter for one column or all columns:



i. One Column: Navigate to the column you would like to clear the filter for. Select the filter icon and then select Clear.

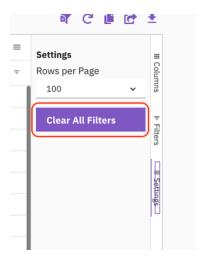


ii. All Filters: Navigate to the Settings window along the left side of the screen.

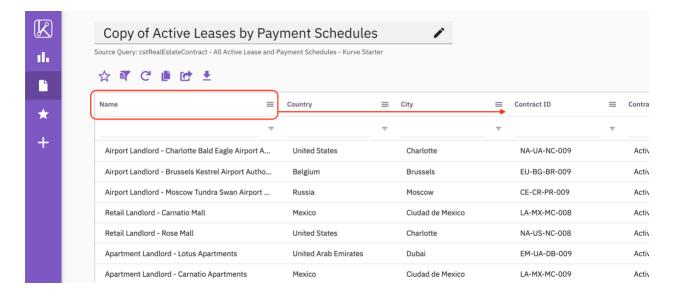


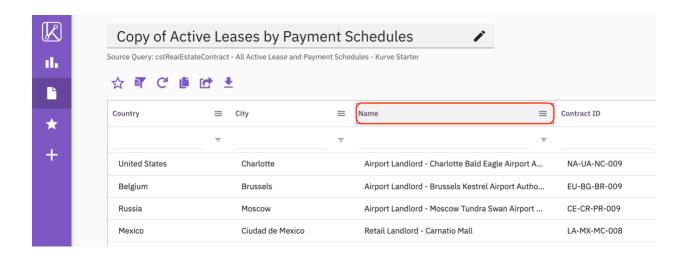
iii. Click Clear All Filters to remove all filters currently applied in the report.



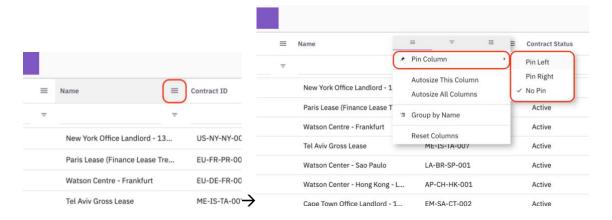


k. **Reorder Columns** function: In personalizing a report, you can click any column header to drag and drop it to the right or left to reorder what columns you would like to be seen beside each other.



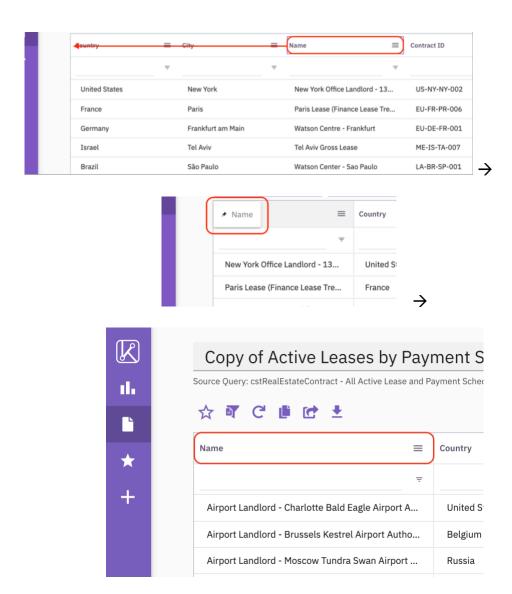


- I. **Pin Columns** function: There are two ways to pin a column.
  - i. **Option 1:** Click on the menu icon ( $^{\equiv}$ ) located next to the column you would like to pin. Click on the Pin Column icon. Choose if you would like to pin the column to the left or the right.

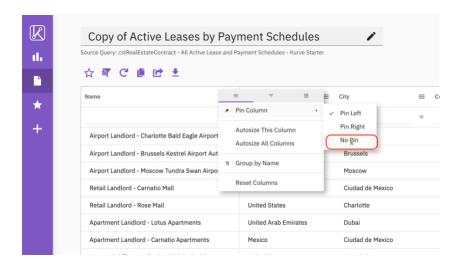


m. **Option 2:** Click on the column header you wish to pin and drag the column all the way left side of all columns until the pin icon appears on the left side of the column. The pin icon will only appear when you click and drag the column header. Once you drop the column header the pin icon will disappear

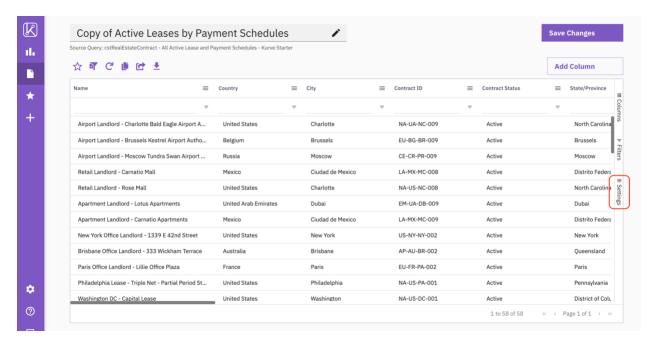




n. **Removing a pin.** To remove the pin click on the menu icon ( $^{\equiv}$ ), click on the Pin Column icon and select No Pin.

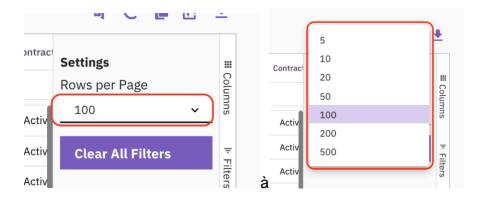


 Manage the number of Rows per Page. You can easily control how many rows displayed in one page of the report. Navigate to the Settings window along the left side of the report.

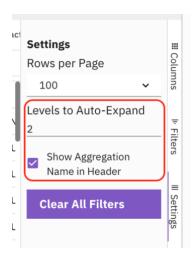


 Click into the drop-down and select the number of rows you want to display. Your report will update automatically once you have selected.

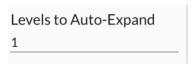




p. Formatting Grouping and Aggregations: Upon grouping and aggregating your report, two more setting configurations will appear



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



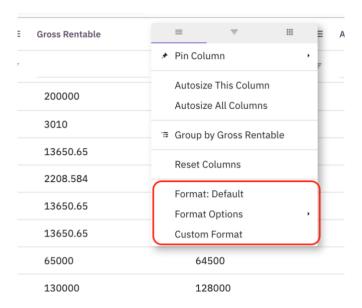
ii. Remove aggregation title in the name: Click the checkbox beside "Show Aggregation Name in Header"



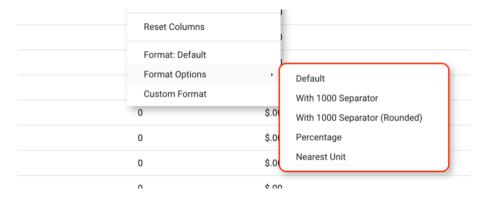
## 9. Formatting Number Columns

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 ( $\equiv$ ). 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



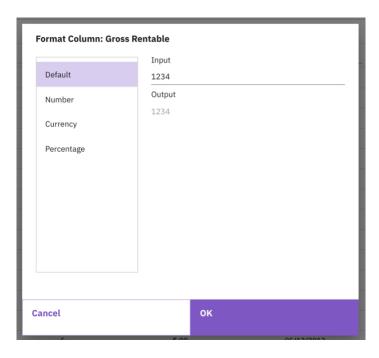
With 1000 Separator	10000.56	10,001
(Rounded)		
Percentage	1	100%
Nearest Unit	10000.56	10k

#### d. Custom Format:

i. Select "Custom Format"

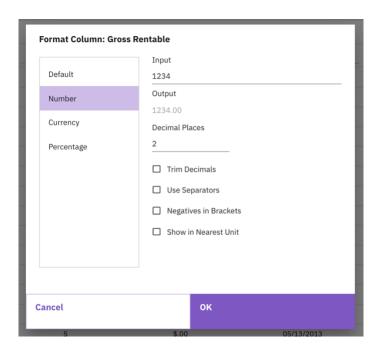


ii. A pop-up will appear showing what the current format is.
 At any time you can click Cancel to get out of the custom format window, or OK to save your format selection.



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.



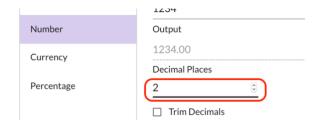


• Input: Sample Number

Output: Formatted Number



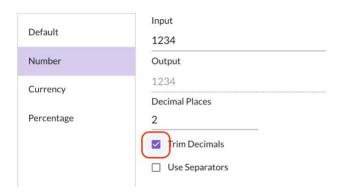
 Decimal Places: Specify how many decimal places you would like shown on each of the rows. To do this you can either type the number of decimals you want shown or use the arrows at the end of the row



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

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





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.

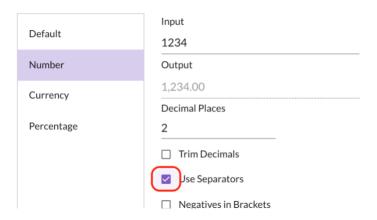
For example:

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.

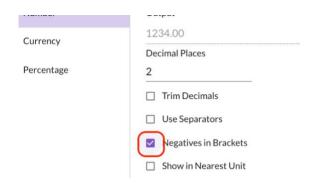
For example: Input: 100000 Output: 100,000





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

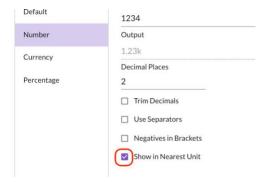
For example: Input: -10,000 Output: (10,000)



• Show in Nearest Unit: trims the number to its nearest unit.

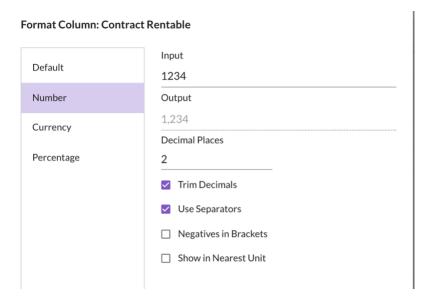
Select the checkbox beside this option to apply it in the format.

For example: Input: 1230 Output: 1.23k

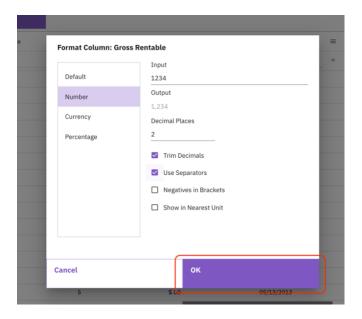


e. You can combine any of the formatting options together to get your desired output. For example, my selections below:



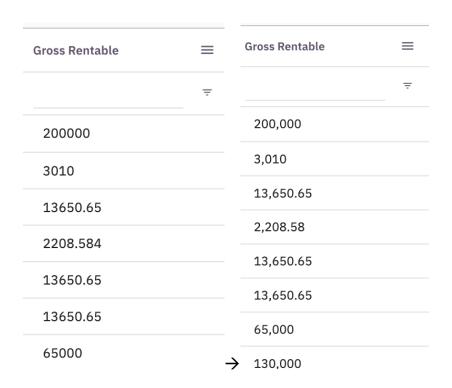


f. Once you're happy with your format selection, click OK.

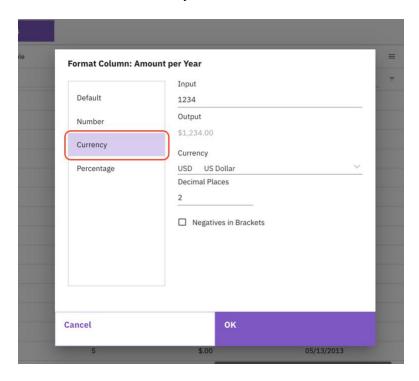


g. Your column will format accordingly (see below).

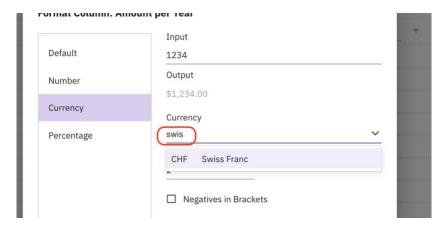




- Custom Currency Format: You can re-format your numbers to a specific currency (please note, this function does not auto calculate the currency conversion). If you want to convert the currency you should use a custom column.
  - Select Currency



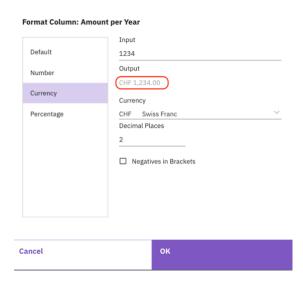
h. Using the drop down, either scroll to select the currency or type the currency/country you are looking for



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



The Output will update



o Click OK to apply to re-formatted number

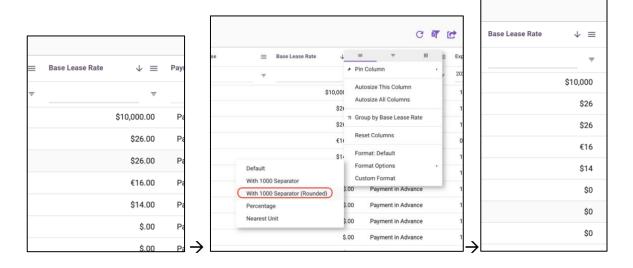




- j. Formatting for TRIRIGA Currency Fields
  - If you would like to keep the currency symbol specified in TRIRIGA, reformat your column with the "Number" option. You can use default or custom formatting

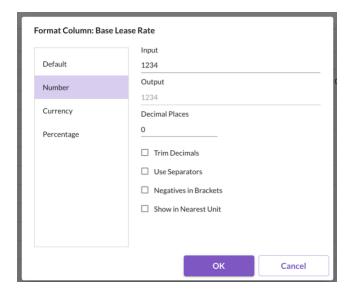
ii.

iii. 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:



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

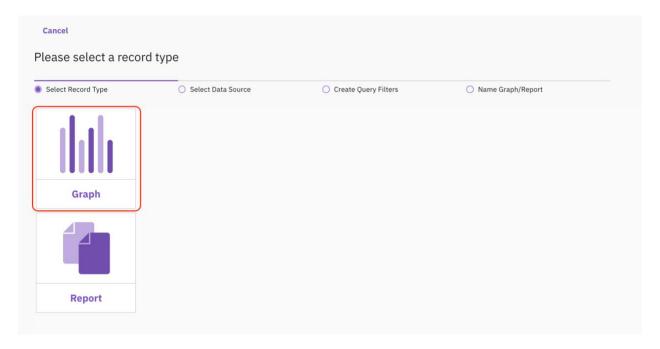




# **CREATE A GRAPH**

# 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);

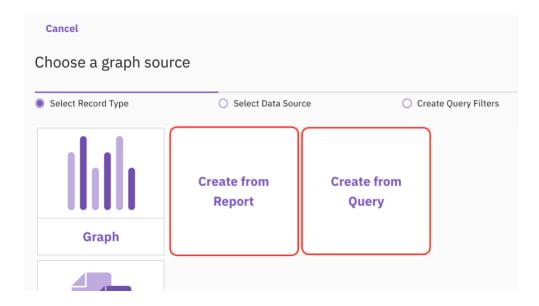


# 2. Creating a Graph from a Query or Report

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

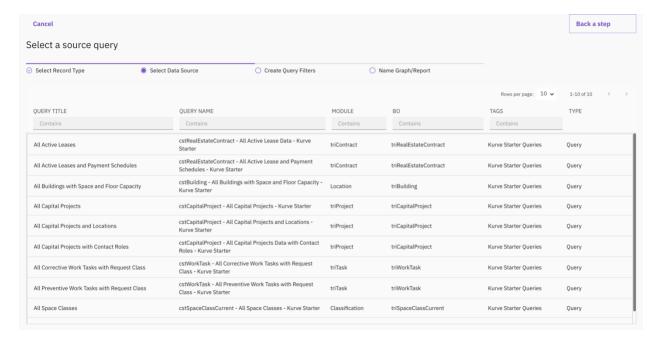
- a. Query (Section 2.a.)
- b. An Existing Report (Section 2.b.)





#### 2.A. Creating a Graph from a Query

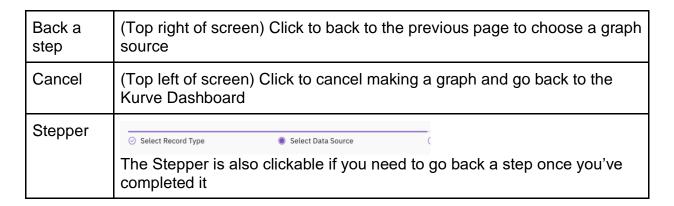
a. Click "Create from Query," and a new page will open. The list will show 10 of Kurve's pre-set starter queries to choose from.



- 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*.







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*:

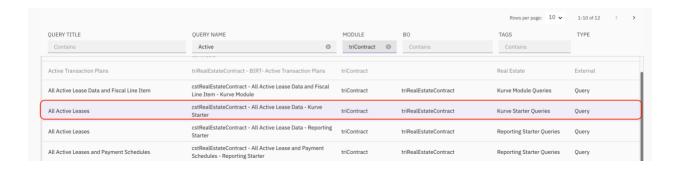


- d.
- e. Click into the search field and type the word of phrase. Click the enter on y9our keyboard to initiate the search. In the below example, we are searching "Active" under the Query Name and "triContract" as the Module.



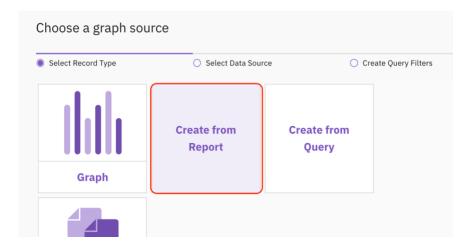
f. Scroll through the list (scroll bar on the righthand side of the table) and click on the query you would like to use to make a graph;



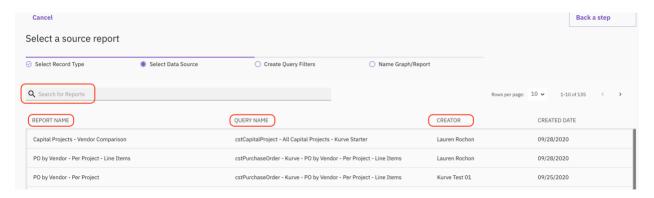


### 2.B. Creating a Graph from a Kurve Report

a. Select Create from Report

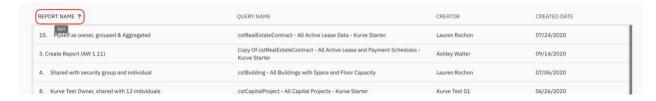


b. Search for the Report you would like to use as your graph's data source. Columns are organized in a table by *Report Name*, *Query Title* and *Creator*.

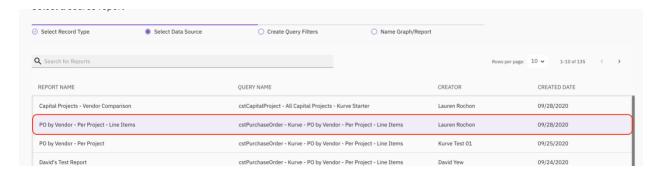


c. Click on any of the headers to sort them. Click once for ascending, twice for descending, and a third time to clear the sort.



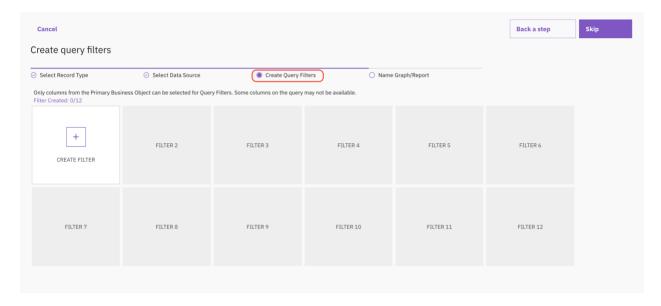


d. Select the Kurve Report you would like to use as your data source.



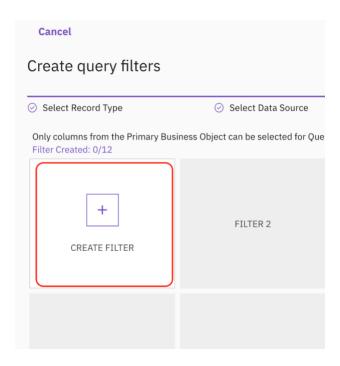
## 3. Create Query Filters

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. Querry Filters can be added to any column from the Primary Business Object.

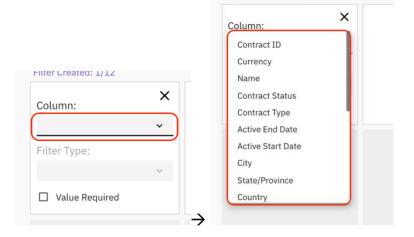


a. Create a new filter by clicking on the first open box "Create Filter"

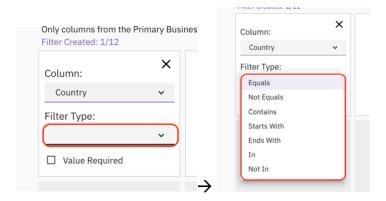




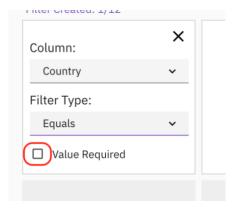
b. Next, select the column from the query that you would like to have a filter



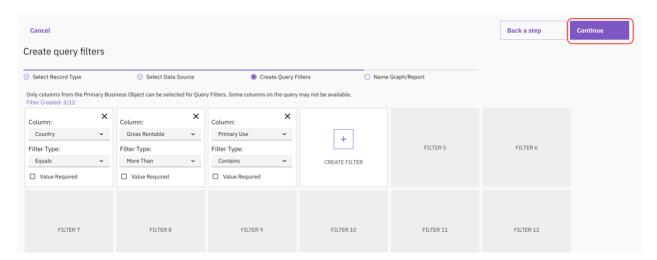
c. Now, select the filter type:



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.

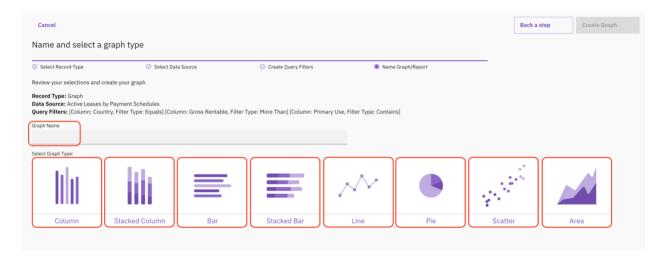


e. You can continue making more filters using the same process. Once done creating them, click Continue.



## 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.



b. Input your graph name

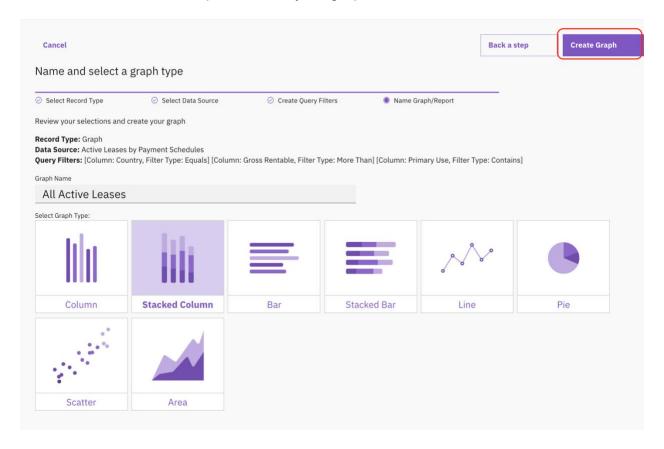


c. Select your Graph Type. Your selected graph type will be highlighted in purple.





d. Select "Create Graph" to make your graph selections.



## The types of graphs are described below:

	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.
lili	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.

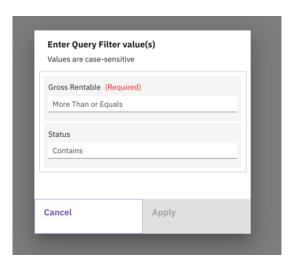




<b>~</b>	Line	Used to show trends of values over a numerical dimension, such as Cost over Time, Cost per Sq-Ft over Total Square Footage etc.
	Pie	Used when you are trying to compare parts of a whole. They do not show changes over time.
	Scatter	Used to show correlations between two properties. In scatter 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.

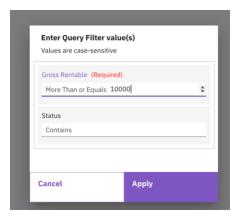
## 5. Filling in Query Filters

- 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.

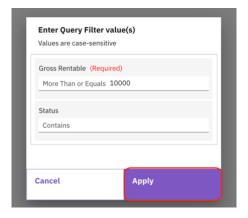


ii. Input a value in the white box next to the filter type. Below we have inputted 10,000. You will notice the apply button turns purple upon providing a value. (Please note, text values are case sensitive)

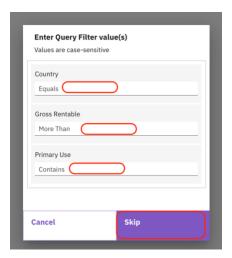




iii. Click Apply.



iv. 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.



b. Cancel: clicking cancel will return you back to the list of graphs and lose any of your selections from previous pages.

# 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 Colors, Advanced Settings, Query Filters).

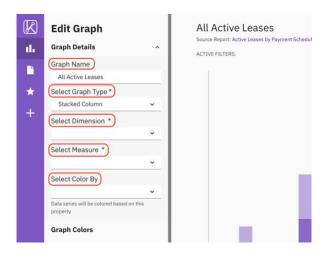
Open a drawer by clicking on the header.



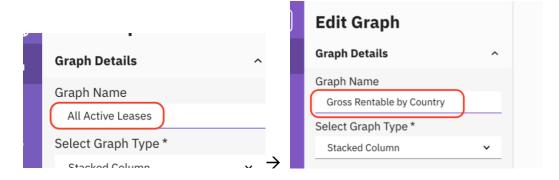
## a. Graph Details

**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.

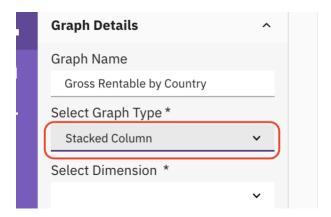




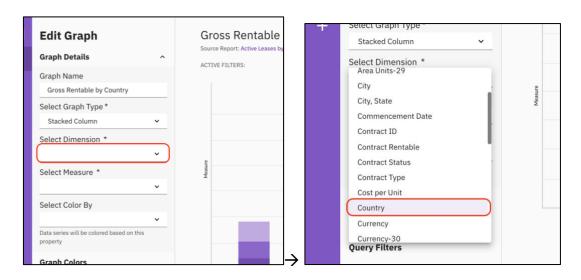
i. **Graph Name**: to rename your graph, click into the white box under Graph Name and type your desired name.



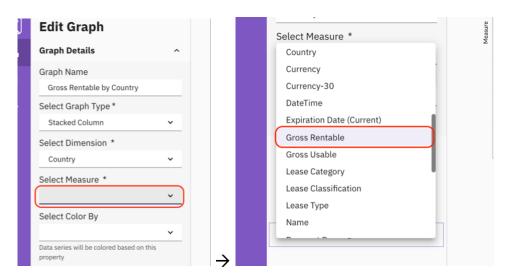
ii. **Select Graph Type**: Click the drop-down menu ( ▼ ) to change the type of graph being used to portray the data



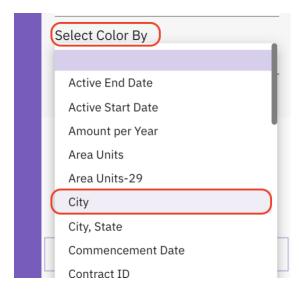
iii. **Select Dimension**: Click the drop-down menu ( ▼ ) to select the Dimension field from the fields within the query/report



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



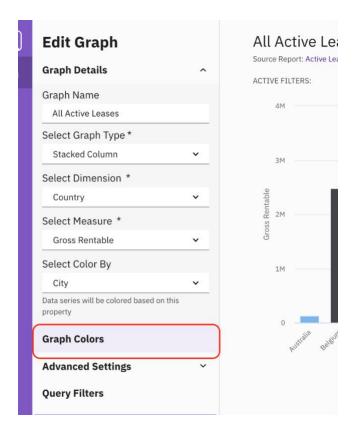
v. **Select Color By:** Click the drop-down menu (▼) to select a field that will colour the data set



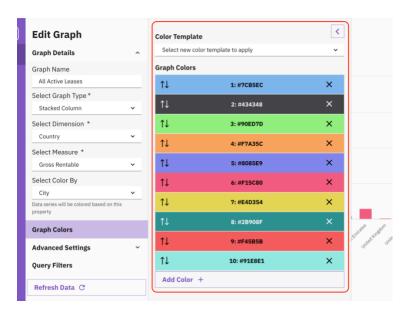
vi. **Graph Preview:** As you make your selections, you can see the preview of the graph to the right



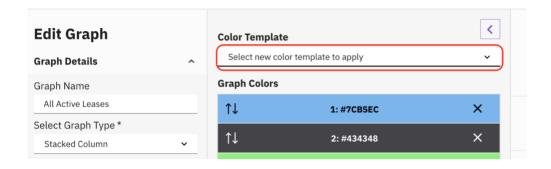
- b. Graph Colors: You can easily adjust the colors used in your graph.
  - i. Select the Graph Colors drawer.



ii. A panel will pop up to the right.

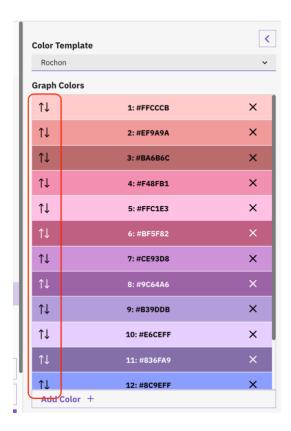


iii. Select a color template by clicking the drop-down menu ( ▼ ) under Color Template. Then select a color template from a the list of color templates.

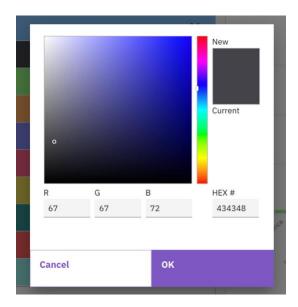




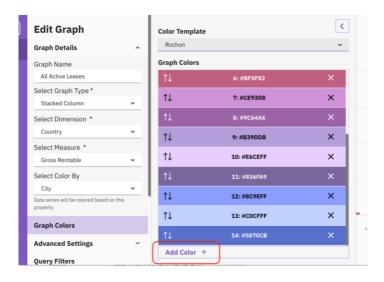
i. Drag and drop colors to change the order of the colors



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

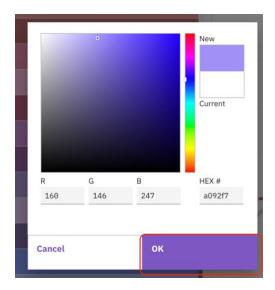


c. Add a color by clicking the Add Color button, choose your color, and then click 'OK'.

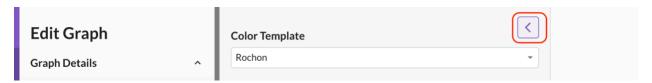




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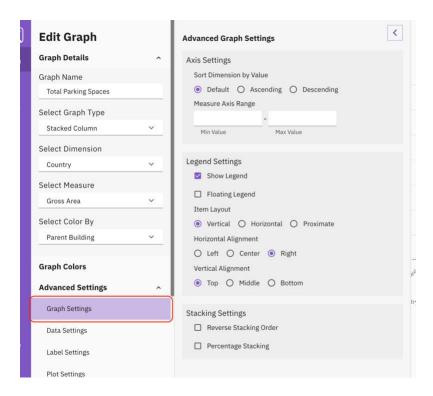


d. To close the Graph Colors side panel, click on the back icon ( ). It will auto close if you select other drawers

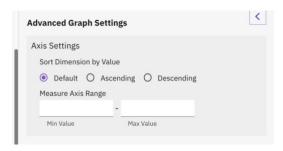


# e. Advanced Settings: Graph Settings

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



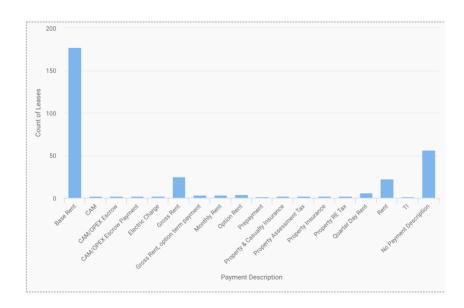
ii. Axis Settings



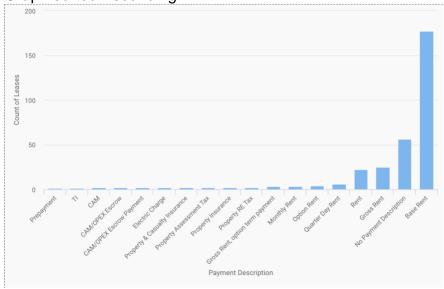
 Sort Dimension by Value: sort your graph according to the total measure value of each Dimension. You can sort by ascending or descending.

## **Unsorted Graph:**





Graph sorted Ascending:



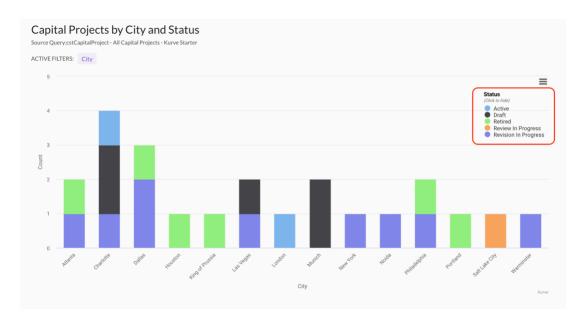
• *Measure Axis Range:* Set the minimum and maximum of the measure's axis.

# iii. Legend Settings

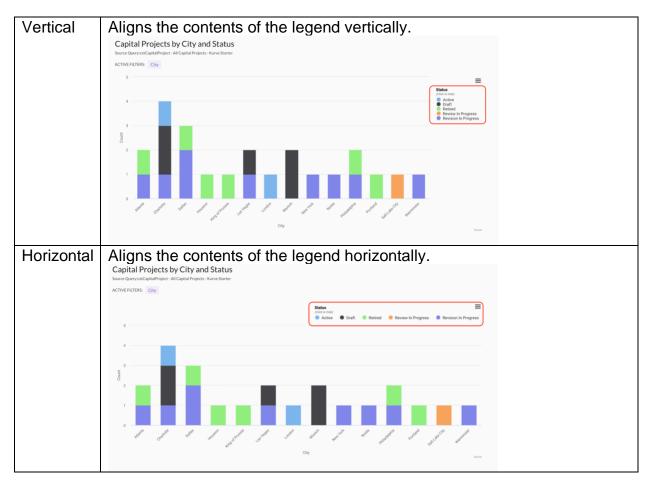
• Show Legend: Checked by default, uncheck to hide legend

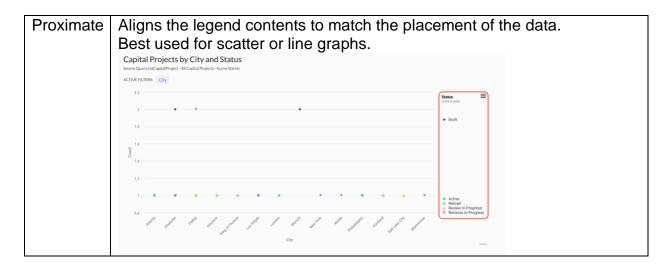
Floating Legend: Check to put the legend location within the confines of the graph. Note: this option could cause your legend to overlay on top of graph segments



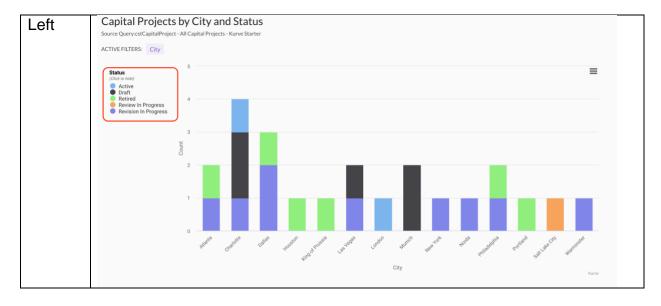


*Item Layout:* the following shows adjusting the item layout placement while keeping the other legend options default (Right, Top)

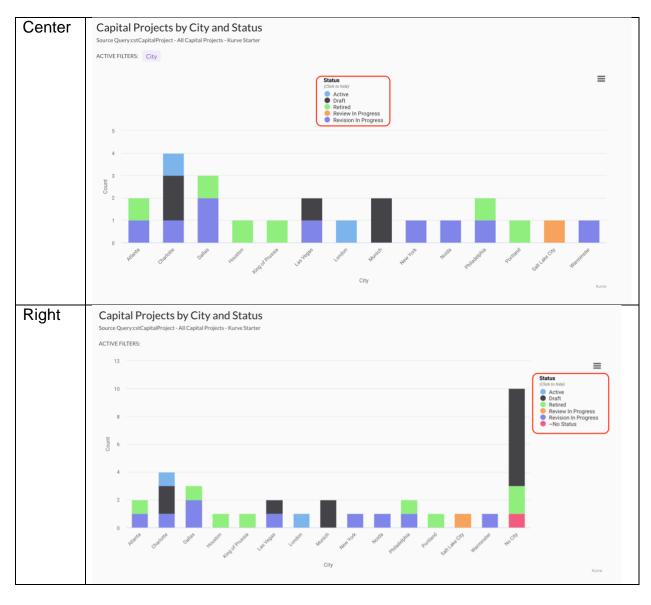




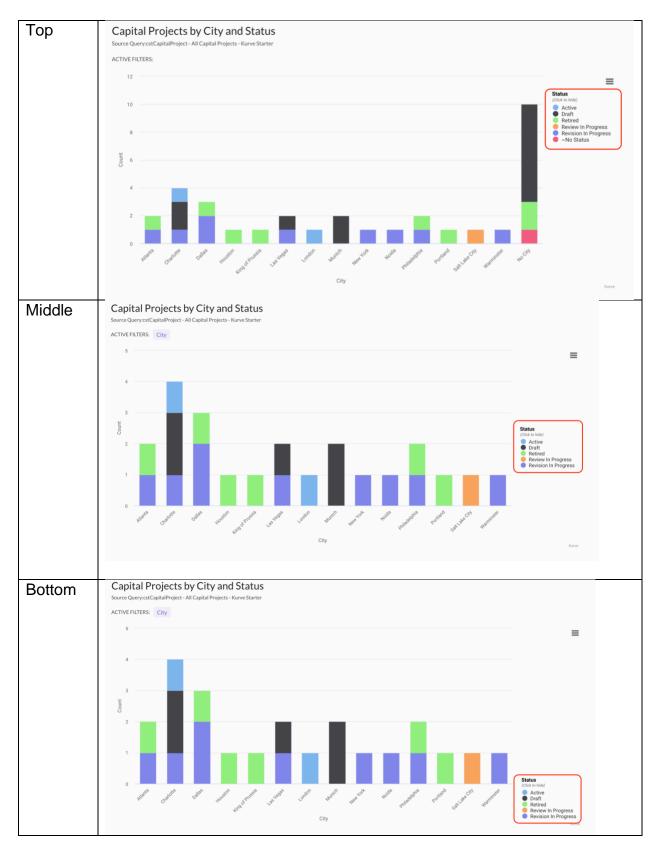
Horizonal Alignment: the following shows what the legend placement will look like adjusting horizontally while keeping the other options default (Vertical, Top)



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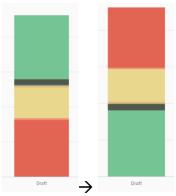


Vertical Alignment: the following show what the legend placement will look like adjusting vertically while keeping the other options default (Vertical, Right)



## iv. Stacking Settings

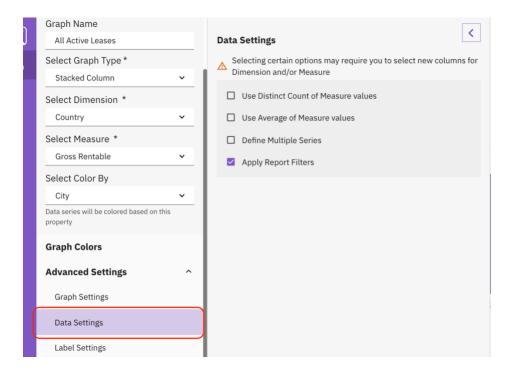
• Reverse Stacking Order: click this setting to stack your graph in the opposite order



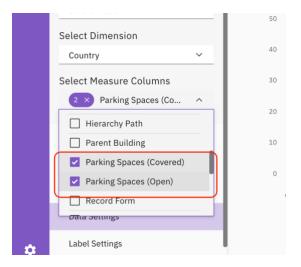
 Percentage Stacking: expands each bar/column to fill the entire range of the graph. This type of graph shows the relative contribution of each part to the whole, rather than the raw numerical values.

## f. Advanced Settings: Data Settings

i. Click Advanced Settings and then Data Settings:



- 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.
- 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.
- 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.

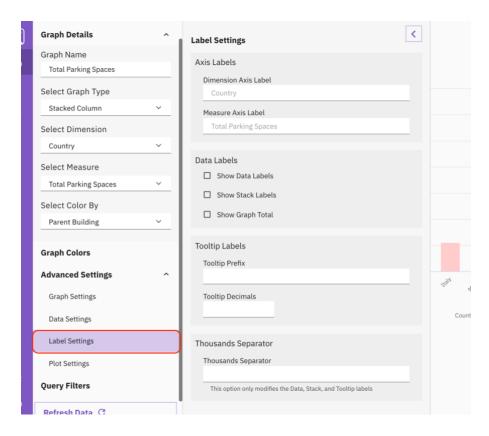




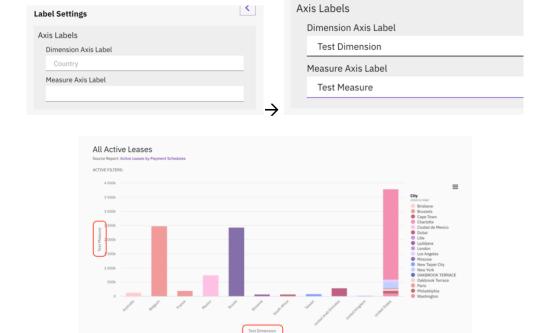
- Apply Report Filters (Report Graphs Only): Checked by default, uncheck to ignore the filters on the source report
- Use Aggregation Data (Aggregation Report Graphs Only):
   Checked by default, uncheck to use non-aggregated data from the source report

# g. Advanced Settings: Label Settings

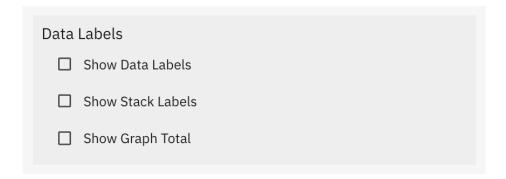
i. Click Advanced Settings and then Label Settings:



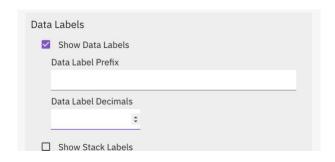
ii. **Axis Labels**: Adjust your Dimension and/or Measure labels displayed on the graph.



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



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





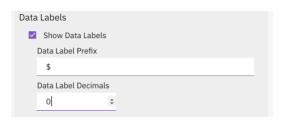


With Data Labels:

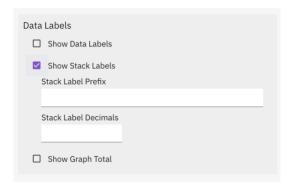


Data Label Prefix: input a symbol to add it to the beginning of your data label (e.g. \$)

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



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



## Without Stack Labels:



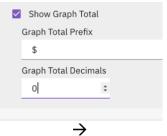
## With Stack Labels:

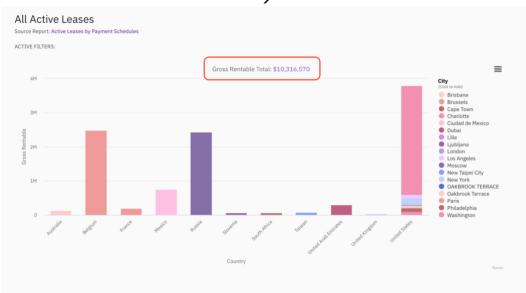


Stack Label Prefix: input a symbol to add it to the beginning of your stack label (e.g. \$)

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:





- 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:



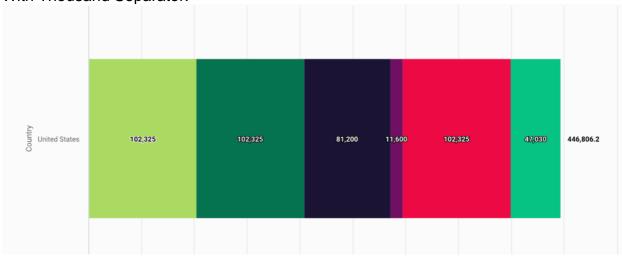
Thousa	nds Separator			
,				

This changes the label format.

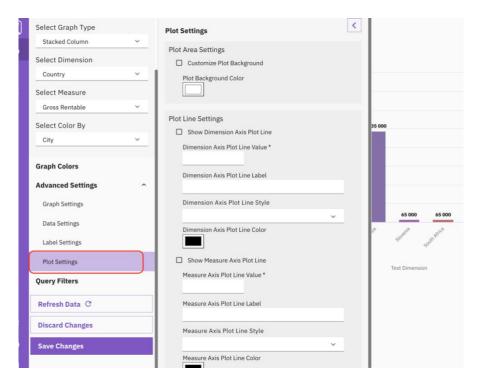
Without Thousand Separator:



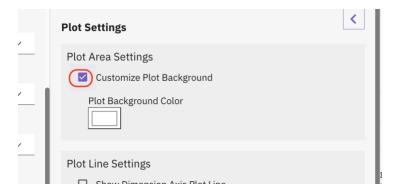
With Thousand Separator:



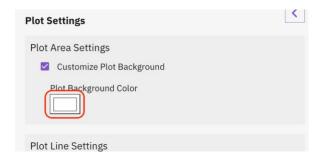
h. Plot Settings: Adjust Plot Background Color and Add Plot Lines
Select Plot Settings under Advanced Settings to open the drawer.



- i. Plot Area Settings: Plot Background Color
  - To customize the plot background, select the "Customize Plot Background" box.

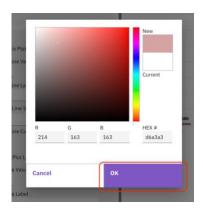


 Under Plot Background Color, select the color box to open the color picker.

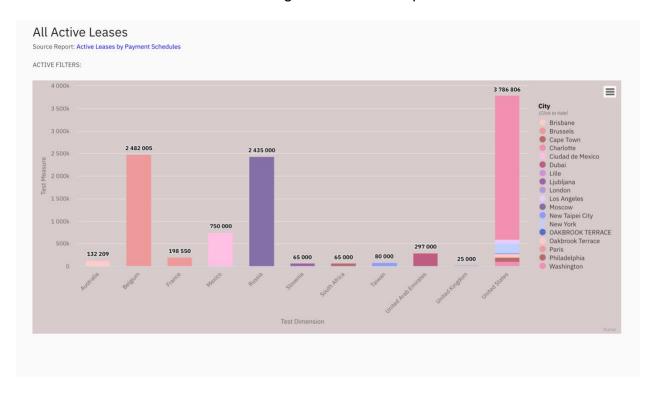




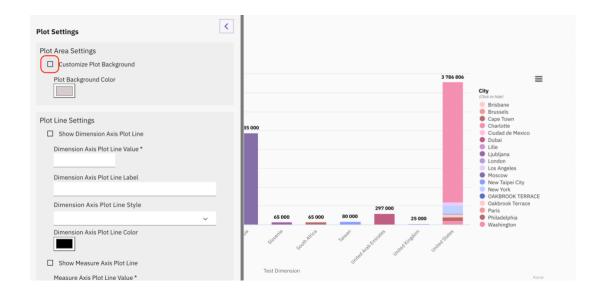
Edit the color then click Ok.



• The Plot Background color will update



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



- ii. Plot Line Settings: Add static plots lines along the x- and y-axis to mark a threshold on a graph.
  - Select "Show Dimension Axis Plot Line" to enable the line. The Dimension plot line refers to the number of data points on the dimension.



 Dimension Axis Plot Line Value: this controls where the line is placed. Enter a numerical value.

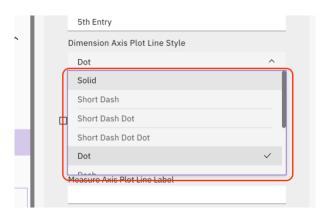




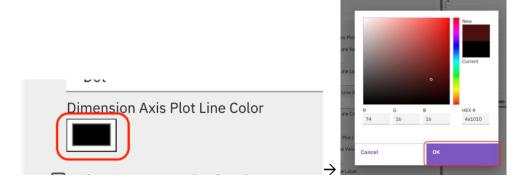
Dimension Axis Plot Line Label: title the plot line within the graph



 Dimension Axis Plot Line 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.



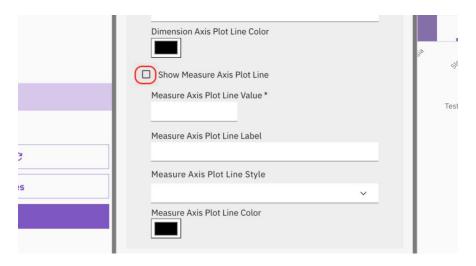
 Disable the plot line at any point by de-selecting the "Show Dimension Axis Plot Line" check box.





Note: 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.

• Select "Show Measure Axis Plot Line" to enable the plot line along the measure axis.



• Measure Axis Plot Line Value: this controls where the line is placed. Enter a numerical value.



Measure Axis Plot Line Label: title the plot line within the graph





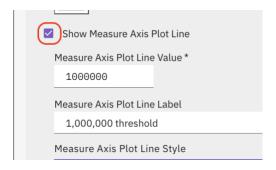
 Measure Axis Plot Line Style: control the type of line used in the plot area



 Measure 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.



 Disable the plot line at any point by de-selecting the "Show Measure Axis Plot Line" check box.

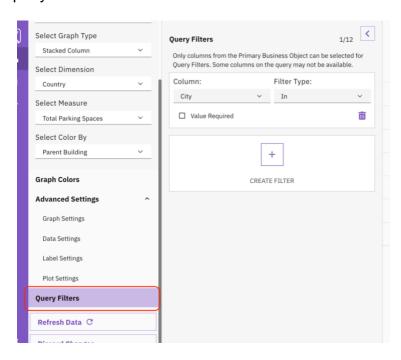


Note: plot lines on the measure axis will be useful to indicate easy to read thresholds.

View your plot lines in the graph preview

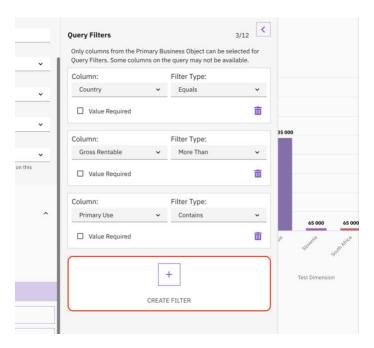


 Query Filters: Easily add or edit query filters by clicking on the Query Filter button. Query Filters can be added to any field on the Primary BO. Query Filters will prompt before loading the report to reduce the results you would like to load from the query.

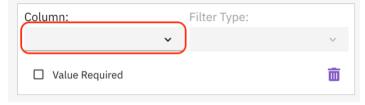




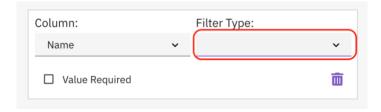
i. A panel will appear to the right. It will be pre-populated with any you made during the creation of your graph. To add a new one, click 'Create Filter.'



ii. Select the source column

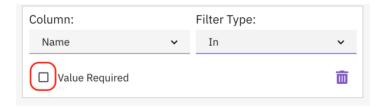


iii. Select your Filter Type. The options will change depending on the field type (i.e. Text, Number or Date)

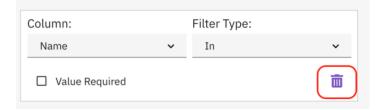


iv. Select whether you would like to make this value required before loading the graph. This means the user will need to input a filter value before they can load the graph. If it is not required, they have the choice to fill it in or skip it.

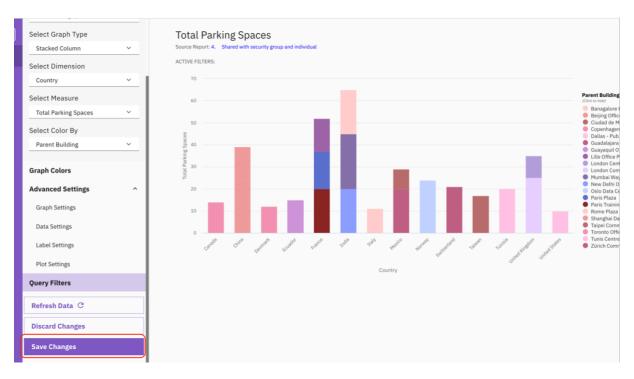




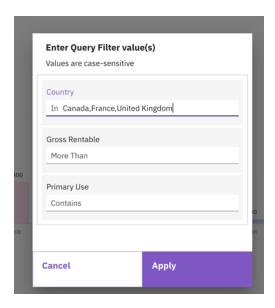
v. To remove a query filter, click on the trash icon on the bottom left of the box.



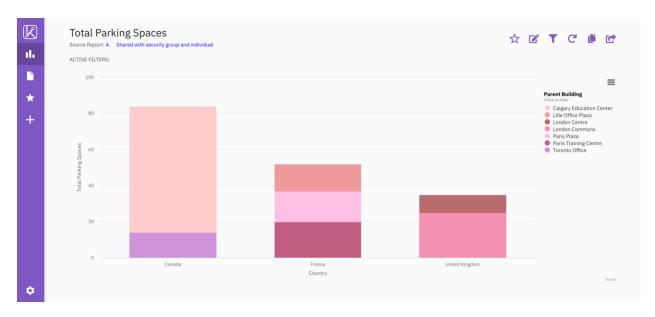
vi. You can add up to 12 query filters by clicking 'Create Filter'. Once you are happy with your selections you can 'Save Changes' or continue editing your graph.



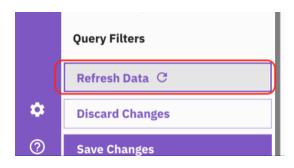
vii. Upon clicking 'Save and Close', your query filter will prompt before viewing the graph. The 'In' filter allows you to filter for multiple text values. For example, let's load this graph for United Kingdom, Canada, and France.



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



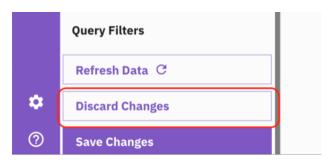
- j. **Refresh Data**: This allows you to edit the values you are filtering or view the most update to date version of your data.
  - Click the Refresh Data button (<sup>C</sup>)



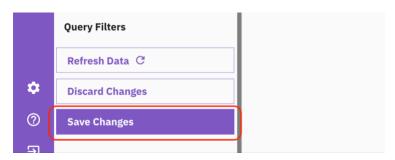
ii. Input new values for your query filters.

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

k. **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.



I. Save: 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**, **Section 3. Using a Specific Graph's Toolbar**.



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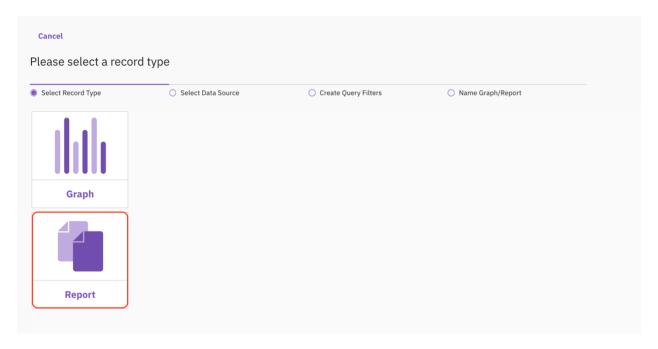
For further information regarding the navigating through the graph, please refer to **Graphs Portal**, **Section 6**. **Navigating Through Graph Data**.



# **CREATE A REPORT**

## 1. Selecting the Report Record Type

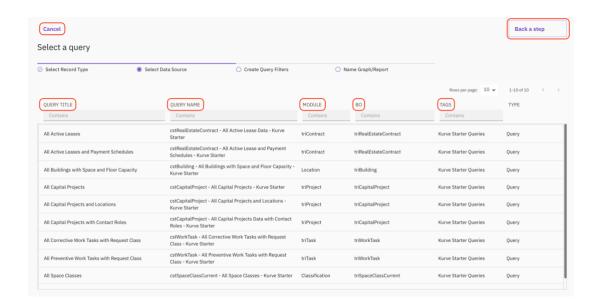
- a. From the Kurve Dashboard, click on the Create Icon ( ) to create a new record;
- b. Select 'Report' as your record type (options being Graph or Report);



## 2. Creating the Report from a Query

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 reporrt 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.

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



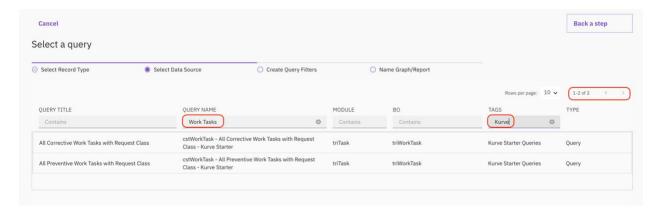
 Input your search parameters underneath any of the search options, for example, let's search "Active" under Query Name and "Maintenance" under Tags;



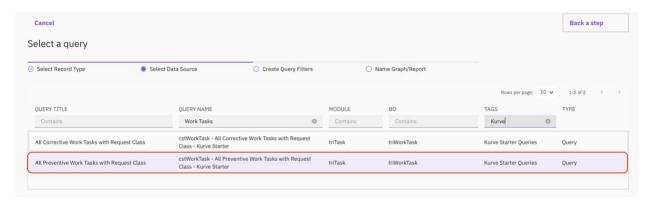
d. Click enter or return on your keyboard to initiate the search. Your Results will update with the number of queries matching your search criteria. If the query is



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;

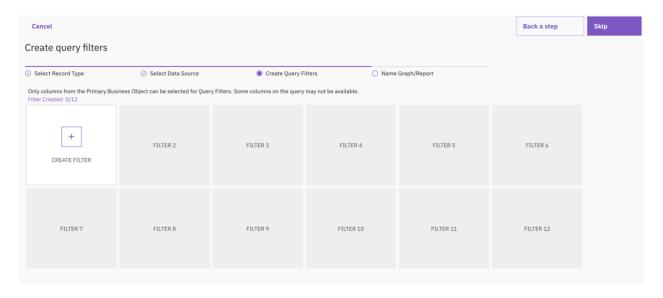


#### 3. Create Query Filters

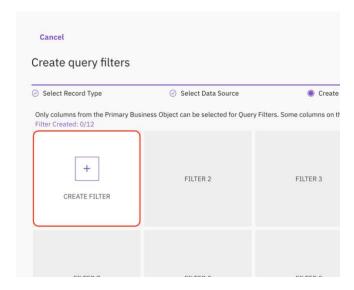
With Kurve Query Filters you can create an apply filters before loading your report. This will help to improve load times and see only the data that is relevant to you.

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.

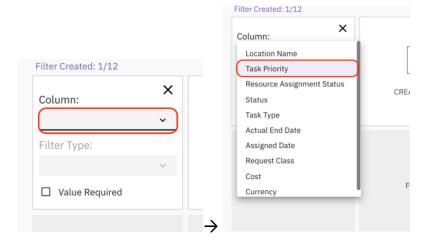




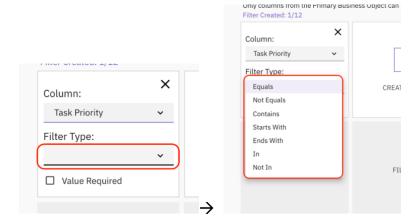
b. Create a new filter by clicking on the first open box "Create Filter"



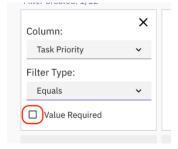
c. Next, select the column from the query that you would like to have a filter



d. Now, select the filter type:

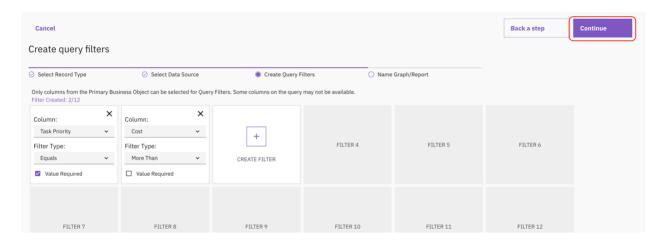


e. Select whether the filter will be required or not upon loading the report by selecting the check box next to "Value Required". By making the filter required, the user will not be able to load the report unless they provide a value.



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

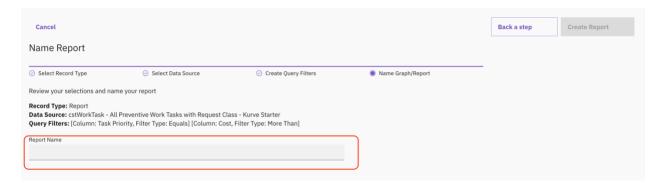




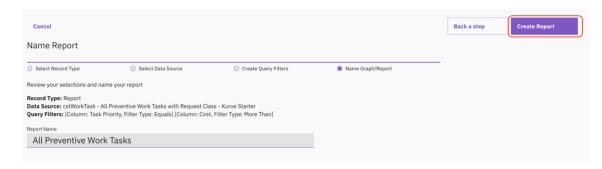
#### 4. Naming the Report

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.



# 5. Click "Create Report."

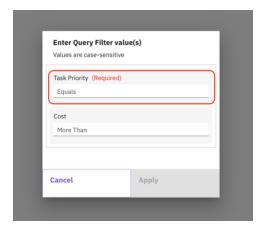




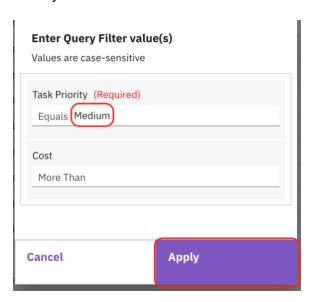
#### 6. Enter Query Filter value(s)

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.

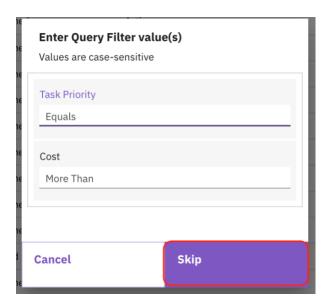


b. Enter a value in the box, and then click Apply. Query filters act as And filters. Therefore, in our example below, if we inputted a value into cost as well, it would load results that satisfy both conditions.



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.





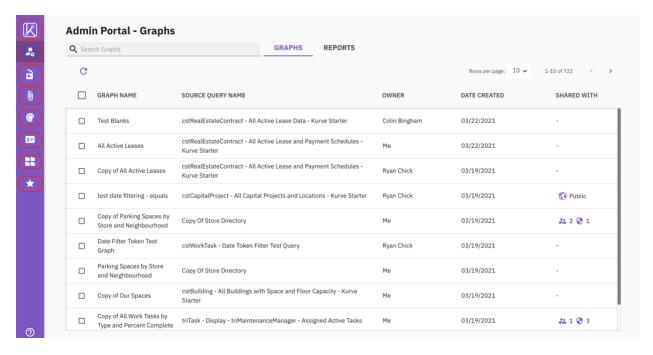
# 7. Personalizing / Re-organizing the Columns on the Report

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.

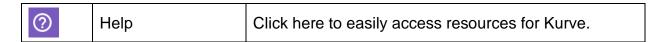
# **Admin Portal**

# 1. Getting to know the Kurve Admin Dashboard



K	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.
7	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.
0	Reattach Graphs to Reports	Legacy tools for versions pre 1.7.0.
<b>₩</b>	Manage Color Templates for Kurve Users	Click here to add, delete, modify, or copy color templates for all Kurve users.
2=	Generate IDs	Legacy tool for generating IDs pre 1.7.0.
**	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.

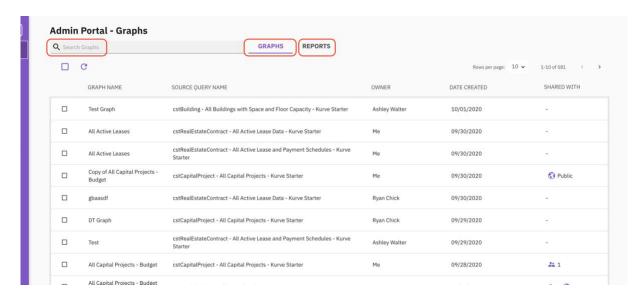




#### 2. Admin Portal

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.

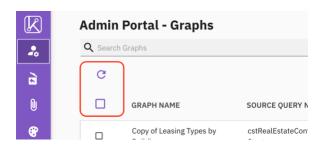


# 3. Using Graph Actions

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.

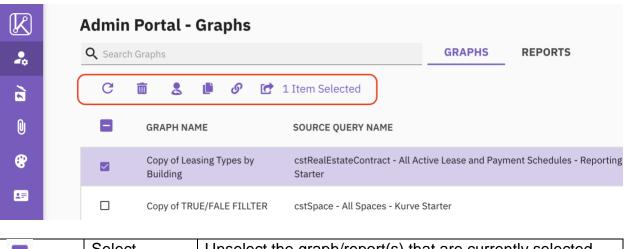
i. No rows selected:





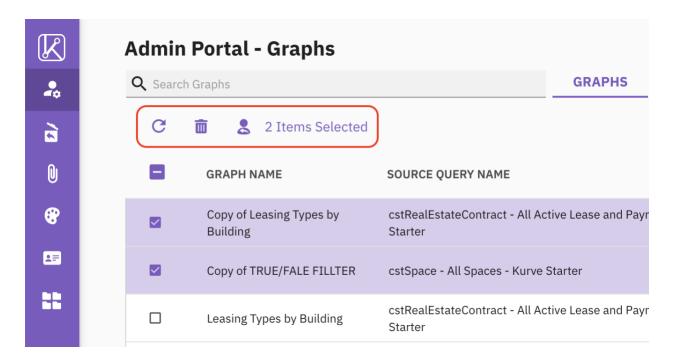
	Select All	Select all graphs on the page.
C	Refresh	Refresh the page.

ii. One row selected:



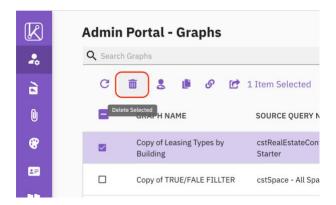
	Select	Unselect the graph/report(s) that are currently selected.
C	Refresh	Refresh the page.
	Delete	Delete the selected graph/report(s).
8	Reassign	Change the owner of any report or graph – see below

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



#### 4. Delete Records:

As an admin you have the ability to 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.

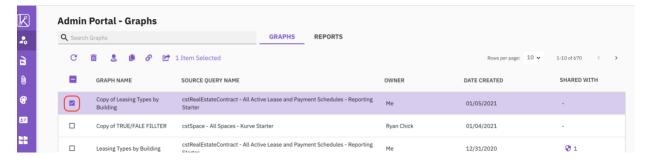


#### 5. Re-assign Records:

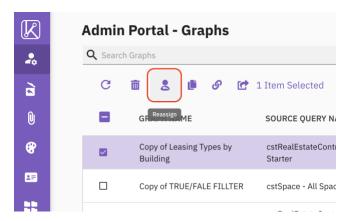
Kurve Admins can change the owner of any report or graph (functionality works the same for both).

c. 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.

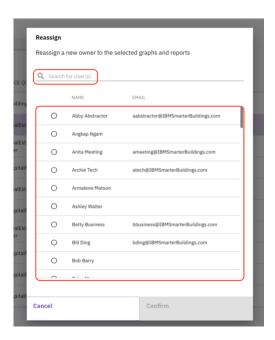




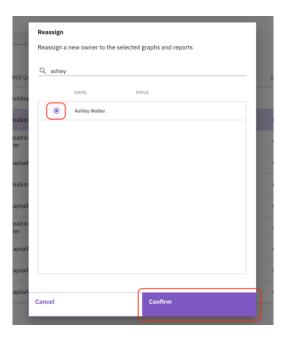
d. Click on the reassign icon



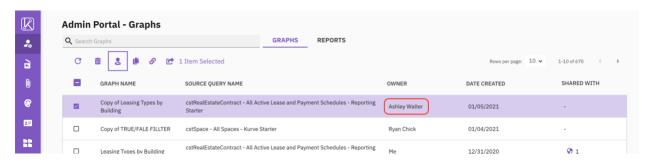
e. A pop-up will appear. Search or scroll to find the user you would like to re-assign the record to.



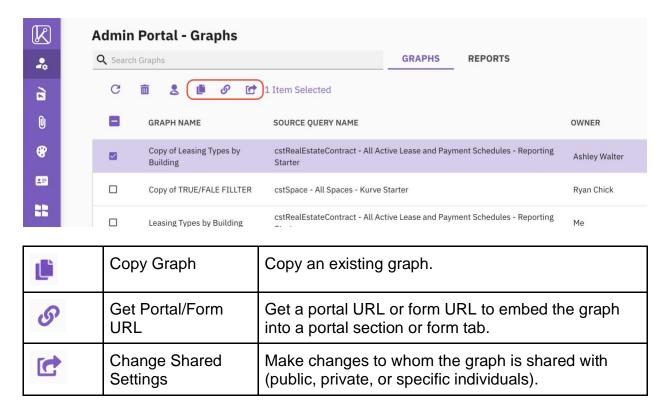
Select the circle beside the user you are re-assigning the record to and then click Confirm



g. The owner of the record will update accordingly.



#### 6. Copy, Get Portal URL, Share

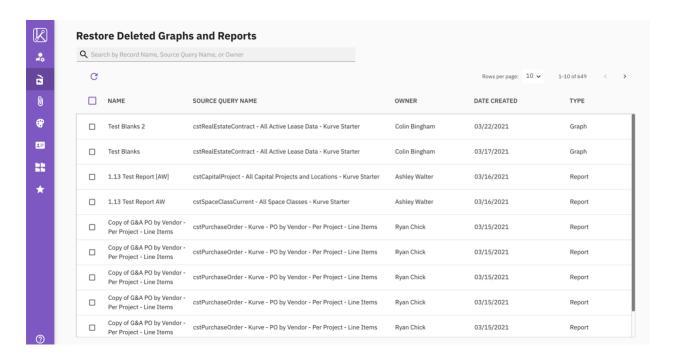


#### 7. Restore Deleted Graphs and Reports

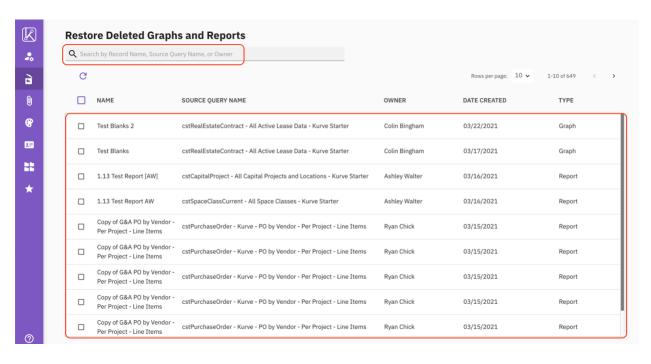
Admins have the ability to restore deleted records for other users. They can also permanently delete records from the system.

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



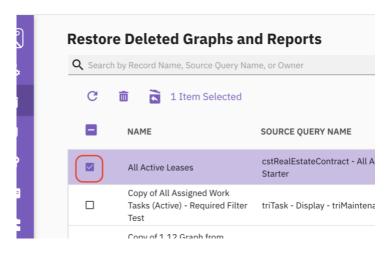


 To restore/delete a graph or report, search for the record or find the record in the list



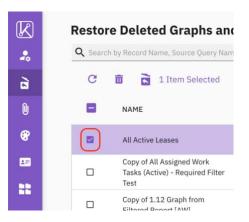
 Select the record you would like to restore/permanently delete by clicking the square icon of the row.





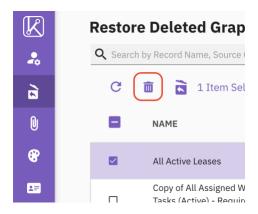
	Permanent Delete	By deleting on this page, the report or graph will be permanently deleted
1	Restore Records	Restore records for any user

- d. Permanently Delete Records:
  - i. Select the record(s) you would like to remove.

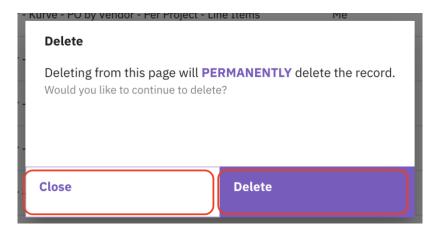


i. Select the trash can icon at the top of the page





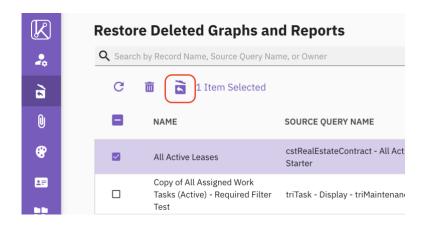
ii. A pop up will appear warning you that the deletion will be **permanent**. If you would like to continue with deleting the record, click Delete. If you would like to keep the record in the restore page, click Close.



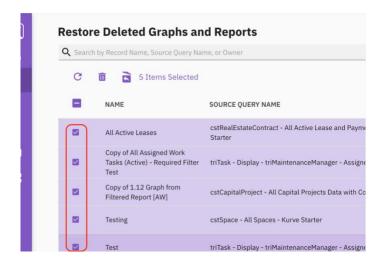
Note: If you delete a record from this page, the record cannot be restored.

#### e. Restore Records:

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



Multi-select to restore multiple records at once ίV.



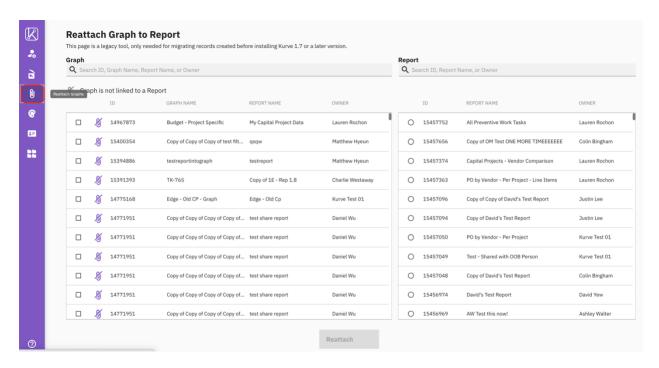
## 8. Reattach Graphs to Reports

This tool is only used for versions 1.6.0 and earlier. Please disregard if you are on Versions 1.7.0 or 1.8.0.

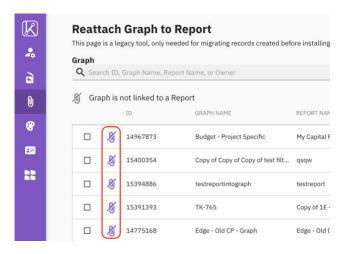
Upon migrating graphs made from reports between environments, the link between the graph and report will break. Instead of going through the process of recreating the graph, the admin can relink your graph to the respective report.

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

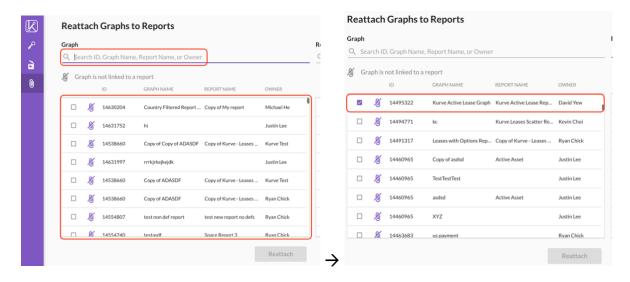




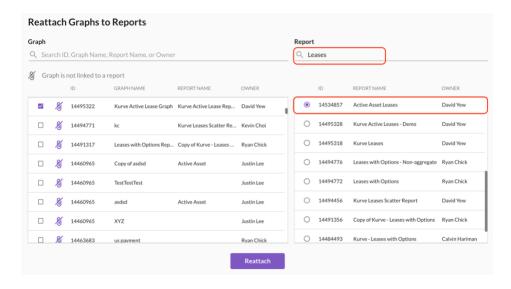
b. In this view, the left side of the page shows all graphs in the system. The right side shows all reports in the system. The crossed-out clip ( ) icon identifies graphs that are not linked to a report. In the image below, we can see here that all of these graphs are not linked to a report.



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

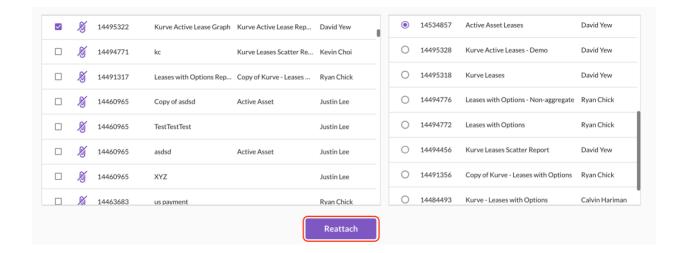


d. Find the report you would like to relink the graph to. Select it by clicking the circle icon next to the report you would like to relink. You can find it by either searching for it or scrolling through the records.

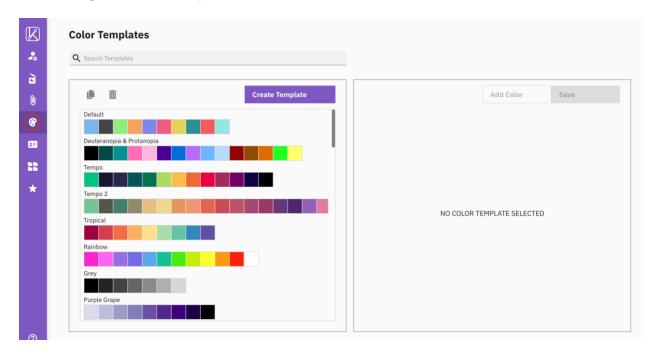


e. Once you have selected the graph and the report, the Reattach icon at the bottom of the page will turn purple. Click Reattach. Upon selecting reattach they will be linked and the user will be able to load the graph in their Kurve dashboard.

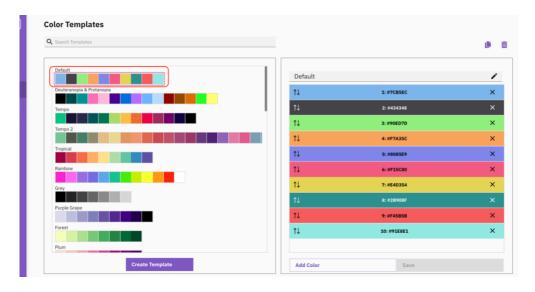
#### Kurve Admin User Guide



#### 9. Manage Color Templates

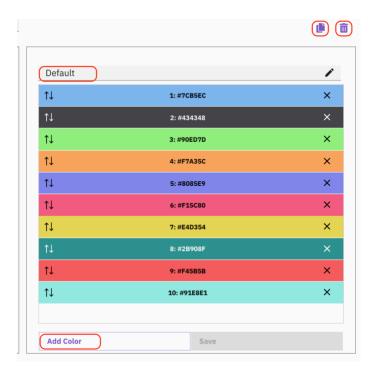


a. To edit a color template, select it by clicking on any of the colors within the template.



b. Copy or delete the color template by clicking on the copy icon or trash can. Change the title of the color template by editing along the top. Or Add a new color by clicking the add color button.

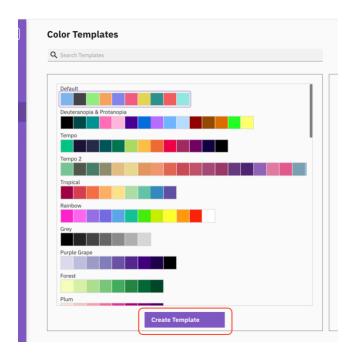




c. You can re-arrange the colors, change existing colors or remove a color from any template. This works the same as customizing in the color settings of the graph. Any changes you make to a template can be saved by clicking on the Save button.



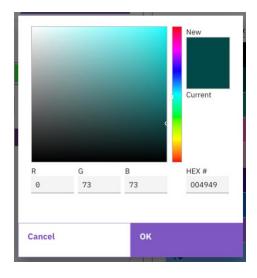
d. To create a new template, click Create Template.



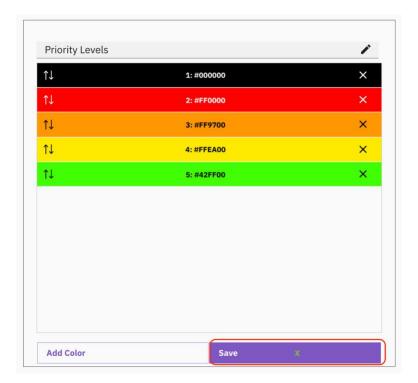
e. Name the template and then select your colors by clicking Add Color.



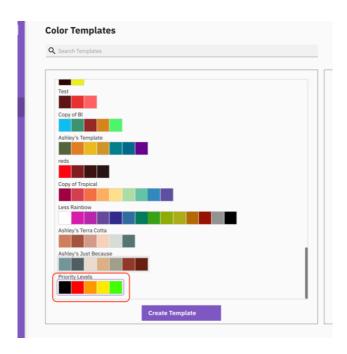
f. Select your colors using the color picker and click OK.



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



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



#### 10. Generate IDs

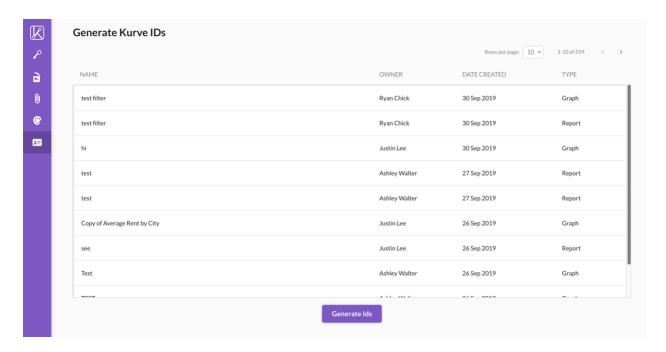
This tool was made to make pre 1.7.0 versions of Kurve compatible with Version 1.7.0. If you are on Version 1.8.0 and later, please disregard.

This page should appear blank, if it isn't, please contact Support immediately.

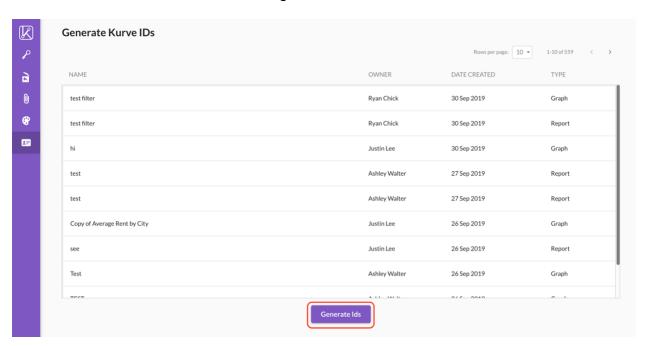
In version 1.7.0 of Kurve Core, we changed the way Kurve graphs and reports are stored within TRIRIGA. This will ease the process of OMing between enviornments. In order to ensure all graphs and reports made in previous versions of Kurve are compatible with 1.7.0, the Kurve Admin must navigate to this page and generate IDs for all records in the system.

a. Navigate to the Generate Kurve IDs portal on the Kurve Admin site.





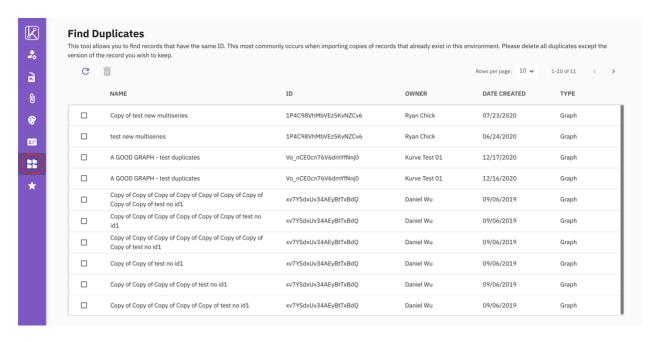
b. Press Generate IDs - this will generate for all records in Kurve



This page should now be blank.

#### 11. 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.

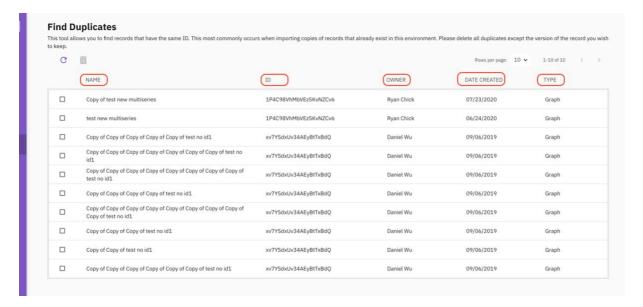
Error: "Multiple records with this ID exist. Please contact your administrator"

Multiple records with this ID exist. Please contact your administrator.

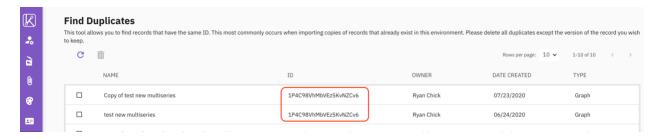
OK



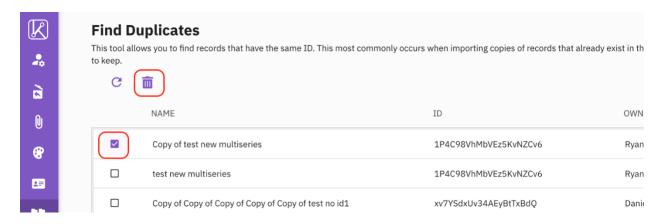
- c. Navigate to the Find Duplicates Page
- d. Look for your graph name or report name that you are trying to access. The records are organized by Name, ID, Owner, Date Created, and Type. Please note, this page is sorted according to the ID of each record.



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.



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.

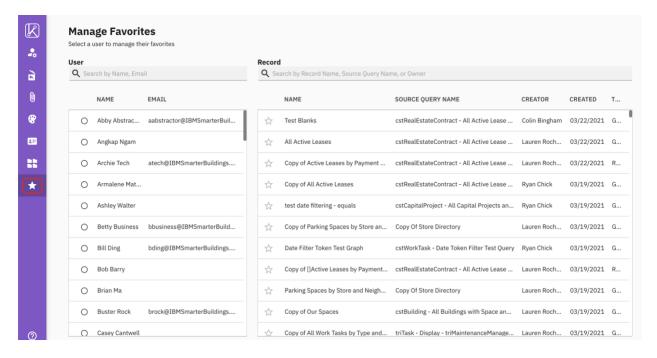


g. After deleting the duplicate, the other record will no longer appear on this list. The user will be able to access it as normal.

#### 12. Manage Favorites

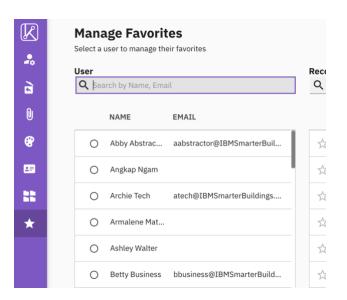
This tool allows Kurve Admins to manage their Kurve users' favorites.

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

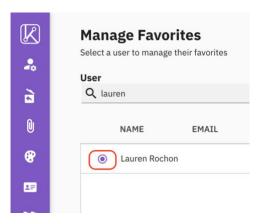


b. Search for a user by Name or Email.

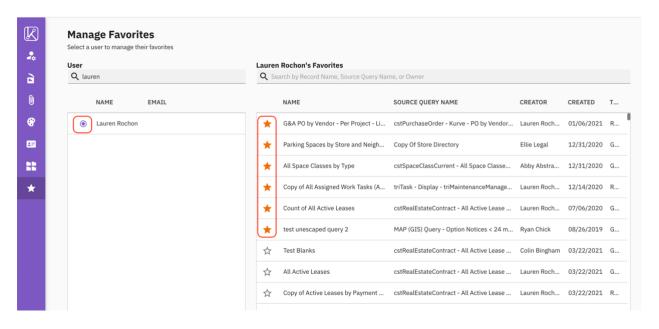




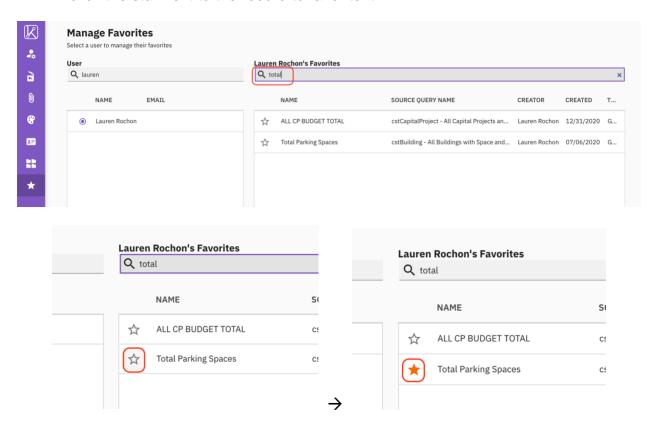
c. Select the user by clicking the radio button next to their name.



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.



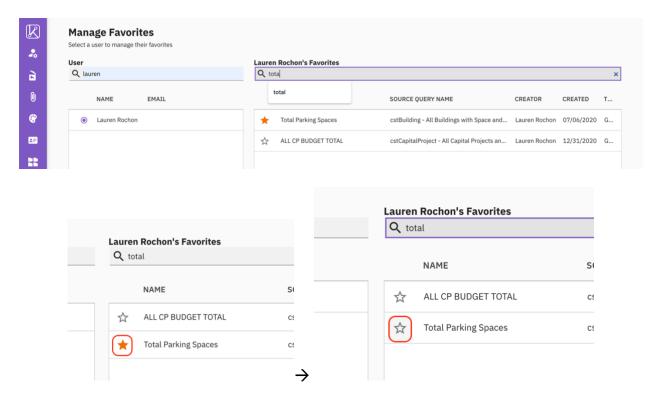
e. To favorite new: search for the record by name, query name or owner and then click the star next to the record to favorite it.



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
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.	String



	Example formats: "MM/DD/YYYY", "YYYY-MM-DD hh:mm:ss"  For a list of supported date formats see here.	
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 be used to group dates on a yearly basis.	Date
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,	Returns the number of calendar	Number
weekStartDate)	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.	
GetYear(date)	Returns the year number of the given date.	Number
IsDateAfter(date,	Returns true if the given date occurs	Boolean
dateToCompare)	after the date to compare. Returns	
	N/A if dates are missing or invalid.	
IsDateBefore(date,	Returns true if the given date occurs	Boolean
dateToCompare)	before the date to compare. Returns	
• •	N/A if dates are missing or invalid.	
IsDateBetween(date, start, end)	Returns true if the given date occurs	Boolean
,	between the start and end dates.	
	Returns N/A if dates are missing or	
	invalid.	
Now()	Returns the current time	Date
SubtractTRIDuration(date,	Subtracts a TRIRIGA duration from a	Date
duration)	given date and returns the resulting	
	date.	
TimeBetween(date1,date2, units)	Returns the amount of time between	Number
, , , , ,	two given dates in the specified unit	
	of measure. Supports years, months,	
	weeks, days, hours, minutes, and	
	seconds.	
Today()	Returns the current date at 00:00	Date
Number Functions		
FormatCurrency(number, symbol,	Formatting numbers as money values	Number
thousandSeparator,	rounded to the specified level of	
decimalSeparator, precision)	precision. If not specified, default	
	precision is 2.	
Math.max(num1, num2,)	Returns the maximum of 2 or more	Number
	numbers.	
Math.min(num1, num2,)	Returns the minimum of 2 or more	Number
, , , ,	numbers.	
RoundNumber(number,	Returns a number rounded to the	Number
precision)	specified level of precision. If not	
· · /	specified, the default level of	
		I .
Text Functions	precision is 0.	

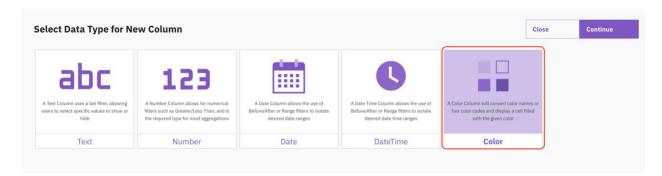
Delimiter(input, inputSplit, outputSplit)	Converts a string delimited by a specified input character and replaces the input delimiter with the chosen output character.	Any
GroupNulls(column)	Converts null values to empty strings. Can be used to force blank values to be grouped together.	String
PadEnd(input, 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 at the specified character. The first character is counted as 0. If length is not provided, will extract from start to the end.	Any
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, valuelfTrue, valuelfFalse)	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



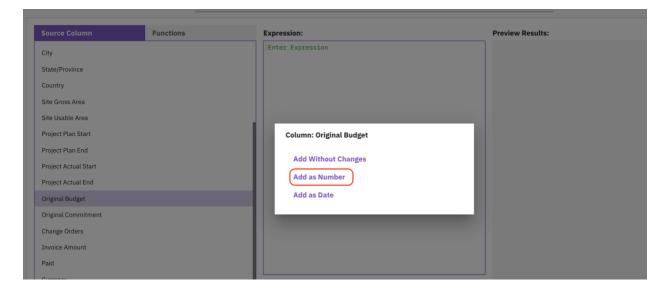
#### 2. Appendix B: Custom Column Types - Color & Text

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: 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 { "<100,000
    && blue" }</pre>
```

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" }</pre>
```

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



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

Create Column

f. View the colour results



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" }

