

Kurve Access User Guide Version 1.24



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INTRODUCTION

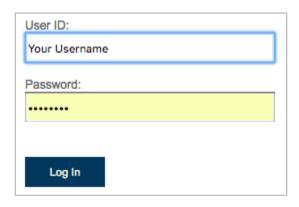
Welcome to the Kurve User Guide!

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

INTRODUCTION TO THE KURVE DASHBOARD

1. Navigating to the Kurve Dashboard

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



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

[YOUR TRIRIGA URL]/p/web/Kurve

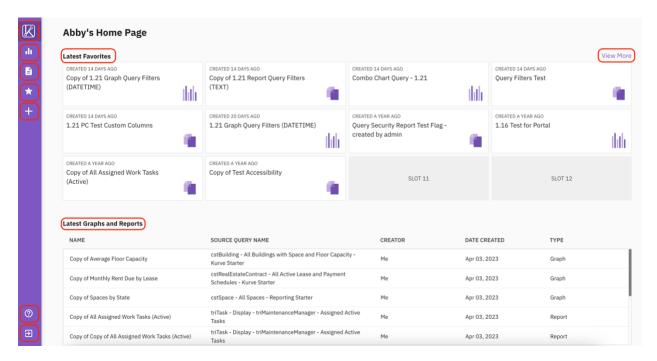
For example, if you log in to TRIRIGA at https://example.tririga.com, your Kurve URL would be:

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



2. Getting to know the Kurve Home Page

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



b. Features and functions of the Kurve Dashboard:

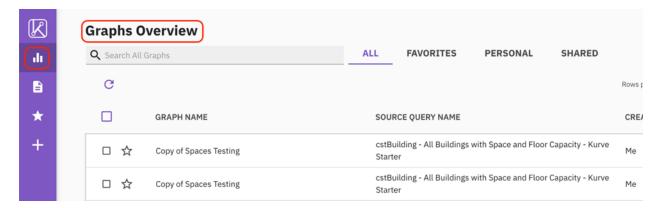
	Home Page	Click on this icon to access your Kurve Home Page. Here you can view your latest 12 favourited graphs and reports, and the latest graphs and reports created by you or shared with you.
di	Graphs Overview	Click on this icon to access your Graphs Overview - all graphs that have been created or 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.	
?	Help/Support	Easily access support resources.	
€	Logout	Logout of TRIRIGA and Kurve	

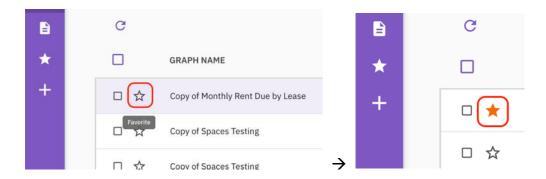
3. Adding and Removing Favorites from your Favorites Menu

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

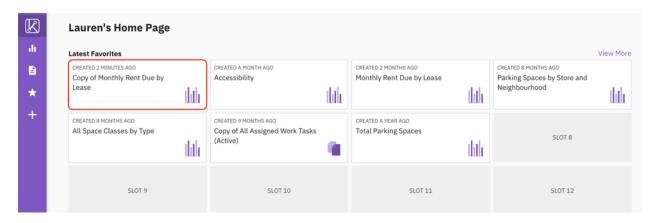


 Search for the graph you would like to favourite. Then find the graph row and click the Star icon. The icon will turn yellow indicating it has been favorited.

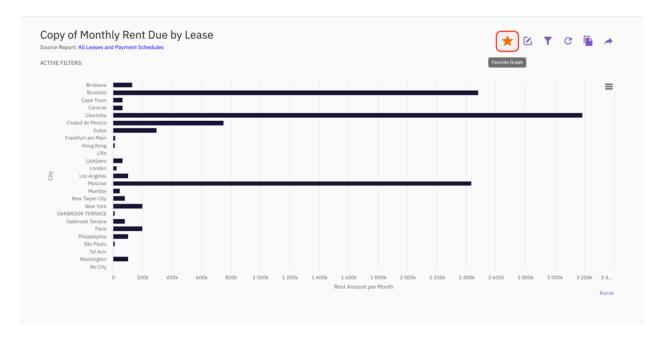




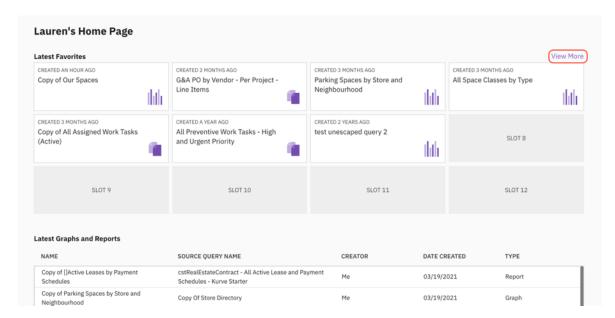
Navigate back to your home page to view it in your list of favourites.



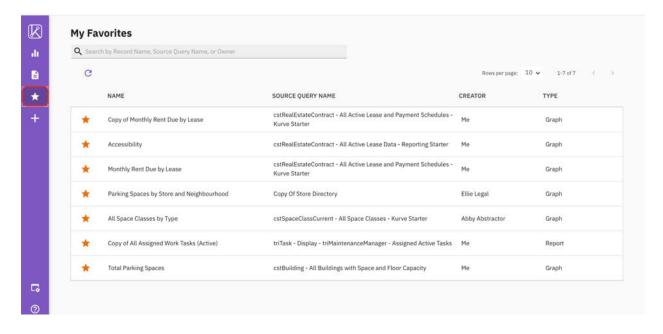
- ii. Favorite from within a Graph or Report: Open the graph or report you would like to favourite.
 - Within the action items, select the star icon.



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



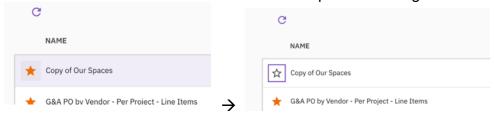
 You can also use the Favourites icon on the side navigation bar to open the list of your favourites



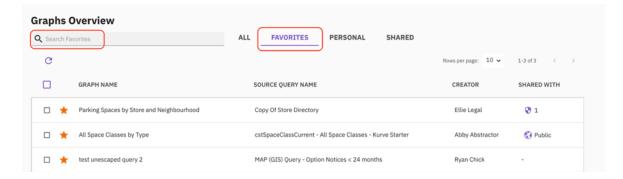
c. Removing favorites: There are a few ways to remove a favourite



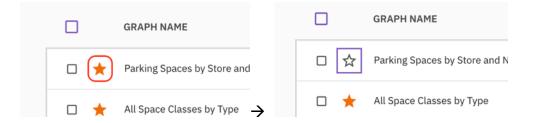
. My Favourites Page: find the record you wish to unfavourite and click in the star. It will be removed from the list upon refreshing



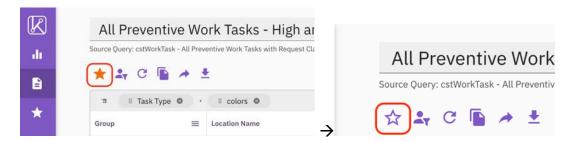
ii. Overview Pages: search or navigate to the favourites tab to find the record you wish to unfavourite.



• 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

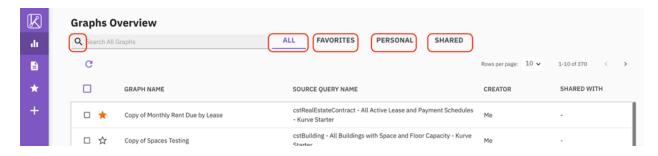




GRAPHS OVERVIEW

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** ($^{\circ}$): 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.

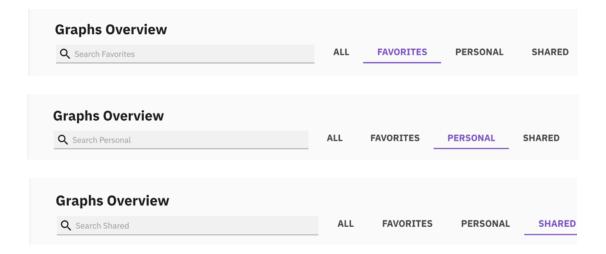


Note: By default, the list of graphs is sorted by created date, in descending order. The default search will filter through *All* Graphs in the portal.

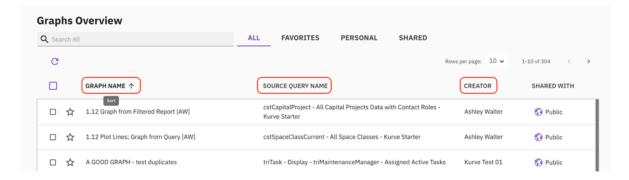
• If you want to search within the *Personal*, *Favorites*, or *Shared* tabs, simply click on the tab and then search in the search bar.



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

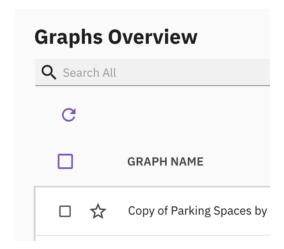


2. Using Graph Action Buttons

Personal Graphs

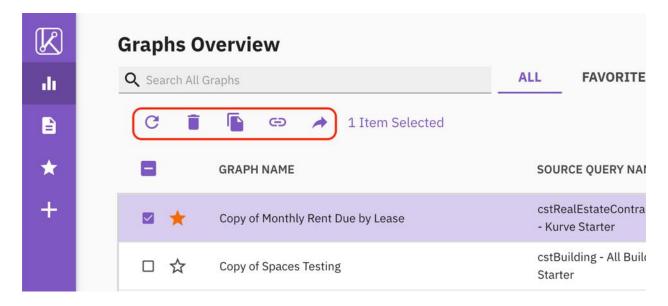
a. If you have no graphs selected, your actions are as follows:





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

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

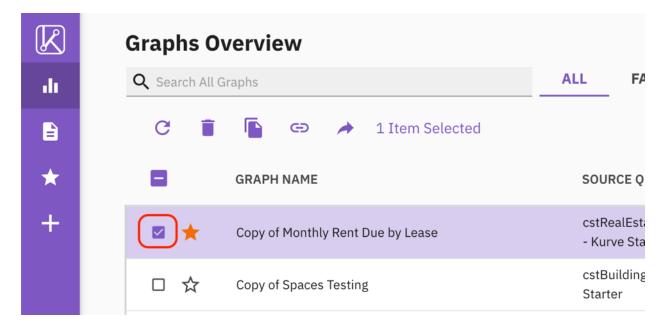


Features of the Graphs Action Toolbar:

G	Refresh	Refresh the page.
Î	Delete Graph	Delete a graph.

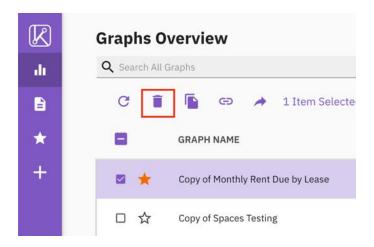
	Duplicate	Copy an existing graph.	
9	Get Portal/Form URL	Get a Portal or Form URL to embed the graph into a portal section or form tab.	
*	Change Shared Settings	Make changes to whom the graph is shared with (public, private, or specific individuals).	

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

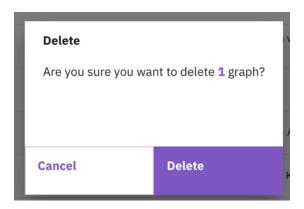


- ii. Once selected, the toolbar will update with all options.
- c. **Delete** Function: Delete graphs that you have *created*.
 - i. Navigate to the Graph Menu Bar and find the graph you want to delete under the Personal tab. Click the trashcan icon ().

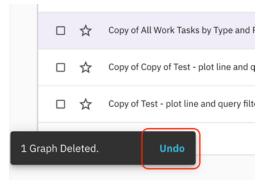




ii. A prompt will appear: "Are you sure you want to delete 1 graph". Select "Delete" to delete or "Cancel" to get out of the pop up.



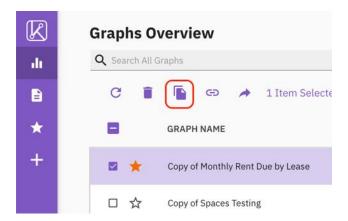
iii. If you accidentally deleted a graph you did not mean to, you can Undo the delete and restore your graph. Once you click Delete, a pop up will appear at the bottom left of the page. To restore the graph that you deleted, click Undo.



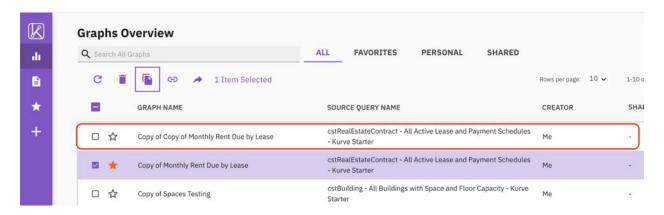
Note: The pop up will only appear for a few seconds. If it disappears and you wish to restore the graph, please contact your Kurve Administrator.



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



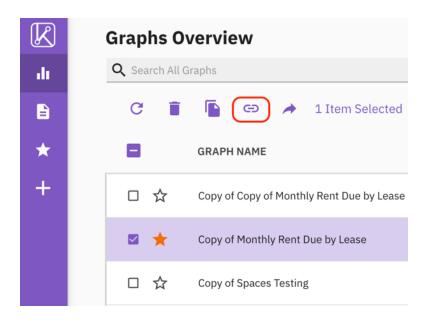
i. A copy of the selected graph will appear in the list of graphs.



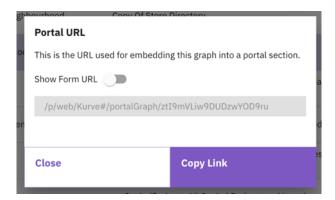
e. **Get Portal/Form URL** Function: Click on the Get Portal URL icon () next to the graph you would like to get a portal URL for.

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

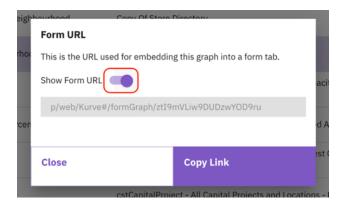




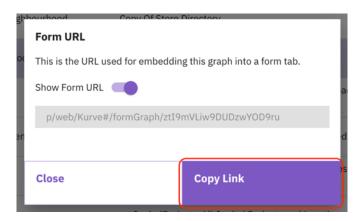
i. A window will pop-up with the URL for the Portal section. You may use the URL to embed the graph into a portal section by clicking on the Copy Link button.



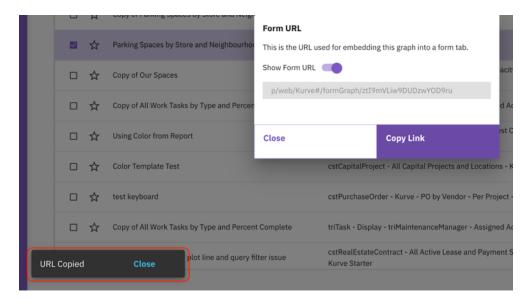
ii. To get the link for embedding your graph or report into a form, click the Show Form URL toggle. The URL will change, and the heading will say Form URL.



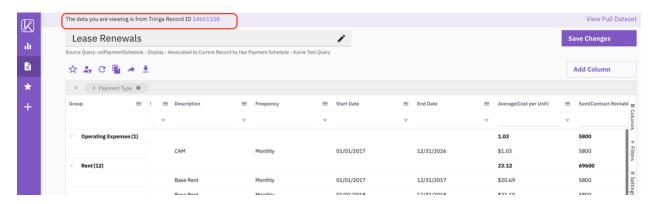
iii. Click Copy Link to copy the Form URL link to your clipboard. Paste it into any form tab using an External Tab.



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



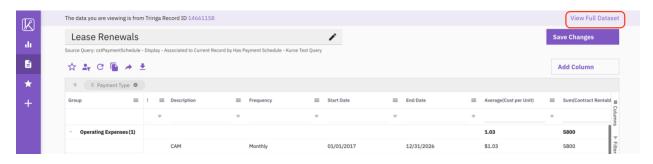
- v. Form Context: When you click "View in Kurve" from a TRIRIGA form, Kurve will carry over the form context from TRIRIGA.
 - You will be able to view the form context in Kurve.



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



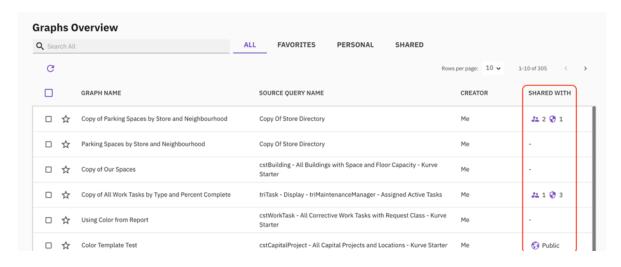
 If you want to remove the form context and view all the data from the query, click "View Full Dataset".



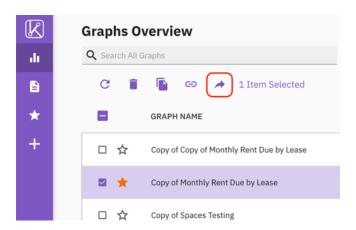
- f. **Change Share Settings** Function: You may identify each graph's share settings on the last column of the Graphs Overview labeled "Shared With."
 - In the Graphs Overview, under the "Shared With" column, if "Individual" is selected for the share setting, it will appear with the symbol (and the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

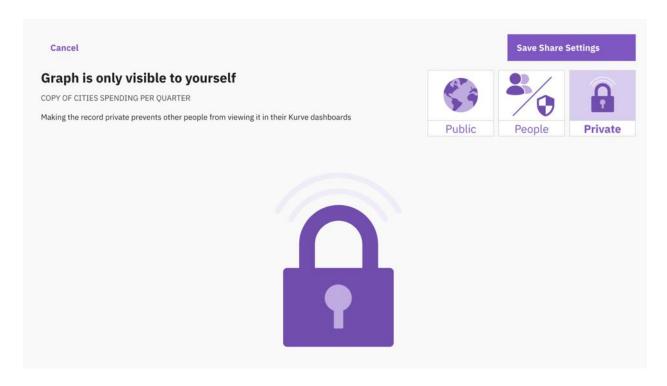


i. Click on the Change Share Settings icon () next to the graph you would like to change the share settings for.

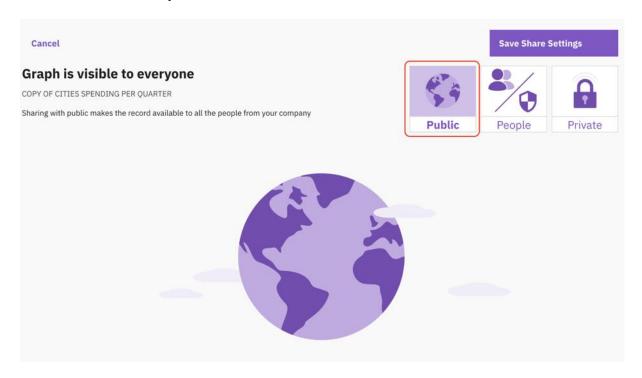


ii. A new window will appear. Please note that all graphs will have a default share setting of "Private."

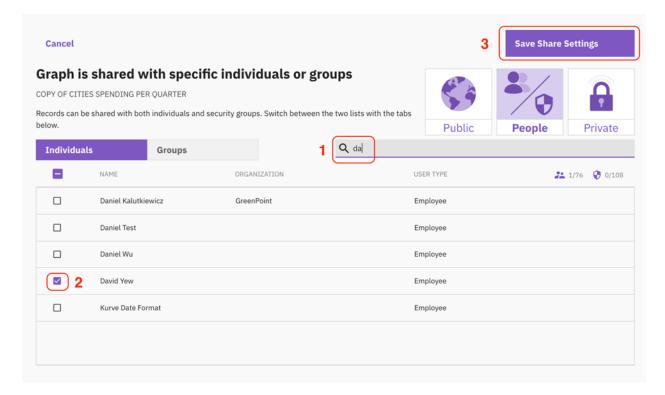




iii. Click on "Public" if you would want the graph to be accessible for all users in the system.

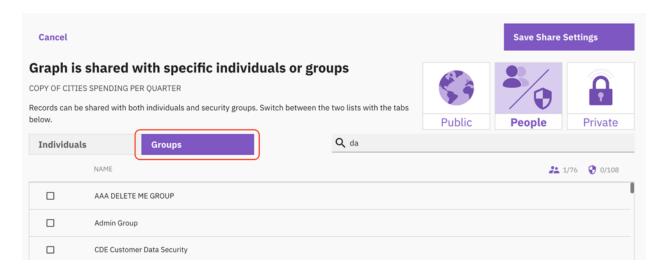


- iv. Click on "People," if there are specific individuals or security groups to share the graph with. You will be brought to the page where you may search for the individuals.
 - Type in the name
 - Select the check mark next to the name(s) of people you would like to share
 - Click "Save Share Settings"

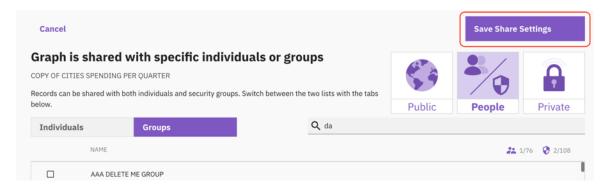


v. To share with one or multiple security groups, click on "People" and then click on Groups This will change the list to show security groups instead of individuals.

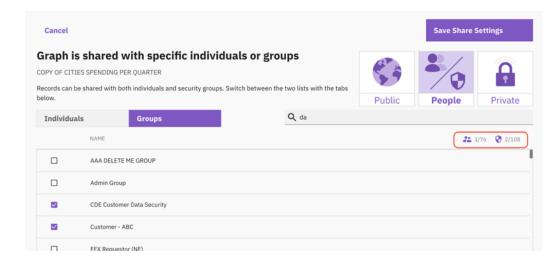




- vi. You can share with groups and/or individuals.
 - Simply search for the group you would like to share, click on the box next to it, and click Save Share Settings.

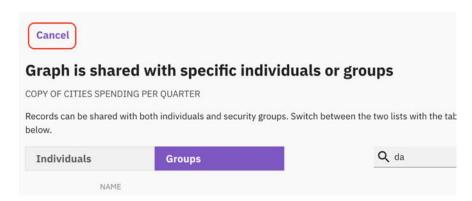


You can keep track of who you have shared with

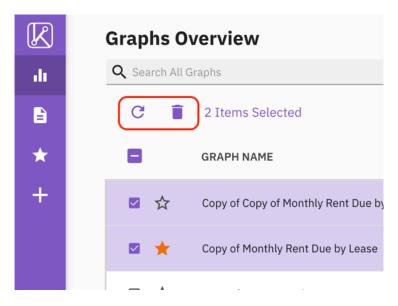




vii. If you would like to exit out of the Change Share Settings page, click the Cancel button. This will not save any of your changes made.



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

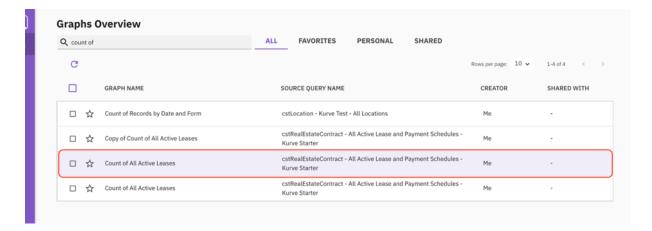


	Select	Unselect the graphs that are currently selected.
G	Refresh	Refresh the list of graphs.
Î	Delete	Delete the selected graphs.

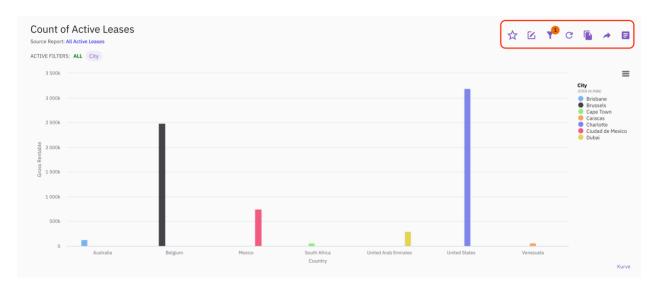
3. Using a Specific Graph's Toolbar

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





b. Features of the graph's toolbar:



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

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

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



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



- d. **Filters** Function: graph filters will be covered in Section 4.
- e. **Duplicate Graph / Edit Graph / Change Share Settings** Function: The icons have the same functions as described in *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.

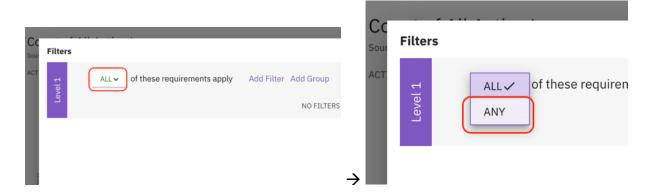
24



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

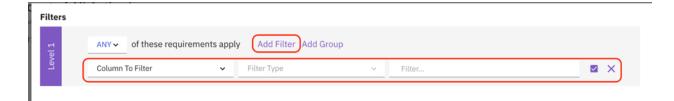


- b. When the Filter window is open, decide whether you want AND or OR logic to be applied.
 - NOTE: Default filtering behaviour is selected as ALL. This will automatically implement AND logic to the graph and all active filters will be applied.
- c. If you would like to change the logic to OR, click the dropdown and select ANY. This means if a field meets ANY of the active filters it will be applied to the graph.

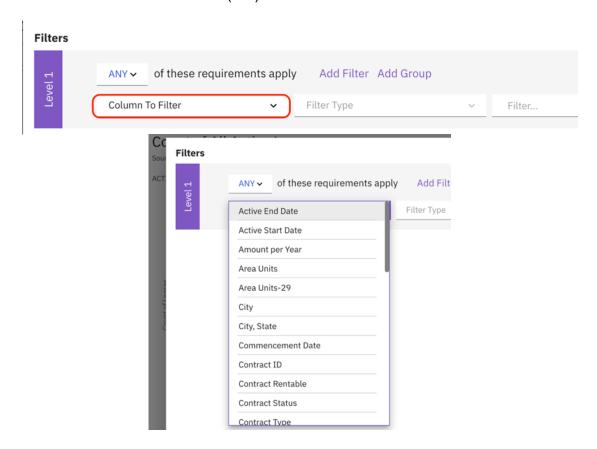


d. Now that you have identified the logic, add a filter by clicking on the Add Filter button. A row will appear below for you to select your column to filter, filter type, and filter value(s).

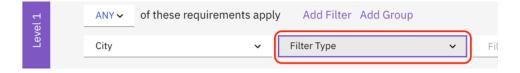




e. Select the column you would like to filter by clicking on the drop-down arrow icon next to "Column To Filter" ().

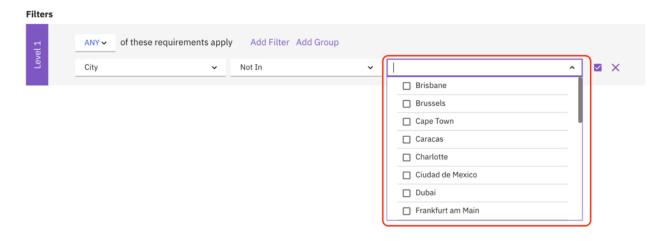


f. Select the Filter Type by clicking on the drop-down arrow next to "Filter Type". The filter type will change depending on the field type (i.e. number, date, datetime, text).

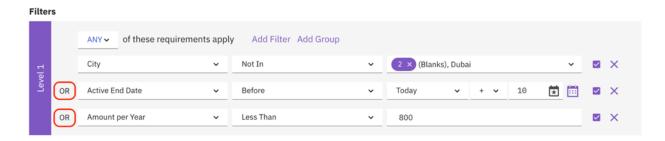




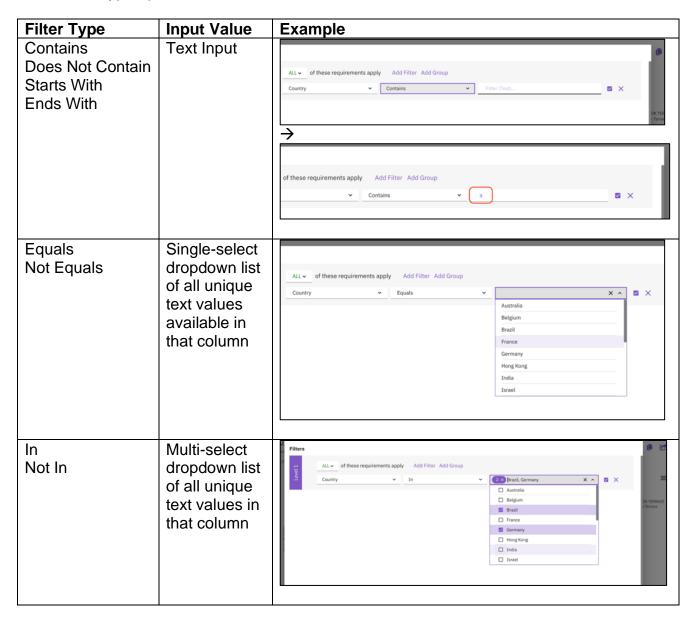
g. Input the value that you would like to filter for in the last box "Filter...".



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

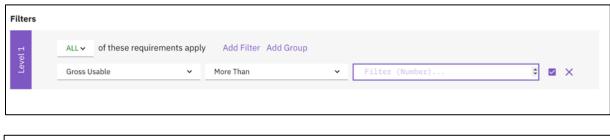


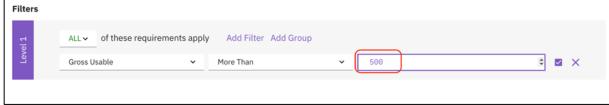
i. **Text Fields:** The following table indicates what the input value will be for each filter type option that is available.



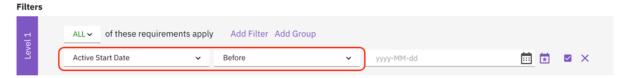
j. Number Fields: All fields that are set as number fields will require numerical inputs. Select: Field, Filter Type, and input the numerical value in "Filter (Number)..."



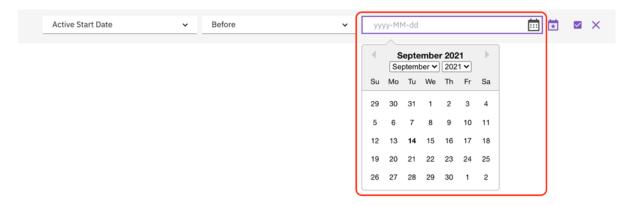




- k. **Date Fields:** There are two options when filtering on date fields:
 - i. **Static** (Standard Date Filters are used to filter on a specific date)
 - Select a date field and then a filter type



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



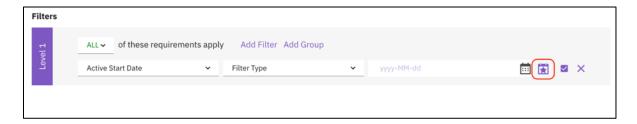
ii. **Dynamic** (Token Date Filters are used to dynamically filter dates; compare the date you choose to a date that automatically adjusts according to the current date. This means you do not have to identify a specific date to use the filter. For example, you can filter for the Token Date "yesterday"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



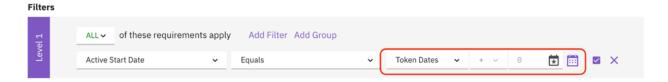
Select a field and a filter type.



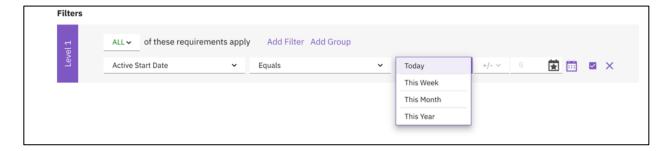
 Click the Token View icon ([™]) located at the end of the filter row.



• The row will change to show three new inputs.



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





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

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

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

Select Plus or Minus from the dropdown.



Type the offset value in the last box.



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



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

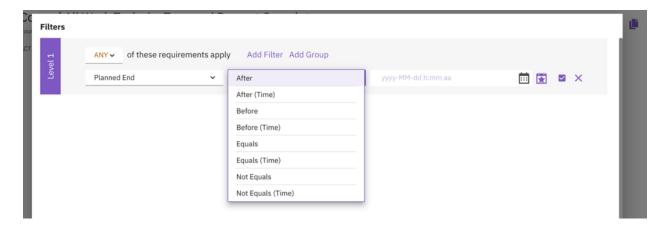
Filter Type	Token Date	Time Offset	Example	Outcome
Equals	Today	By Day(s)	Today + 5	Shows all data with an Active Start Date
				OF January 6, 2021.
Before	Today	By Days(s)	Today + 5	Shows all data with an Active Start Date BEFORE January 6, 2021.
After	Today	By Day(s)	Today + 5	Shows all data with an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

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

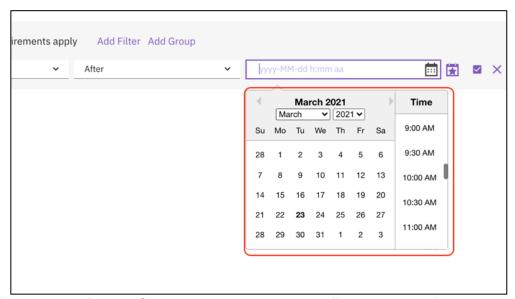
Filter Type	Token Date	Time Offset	Example	Outcome
Equals	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date BETWEEN February 1-28, 2021.
Before	This Month	By Month(s)	This Month + 1	Shows all data with an Active Start Date BEFORE February 1, 2021.
After	This Month	By Month(s)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

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





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

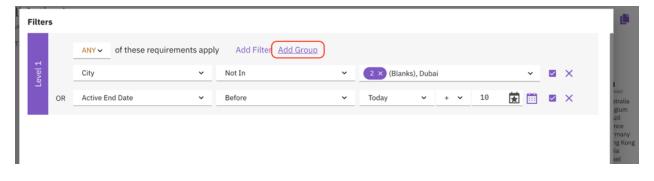


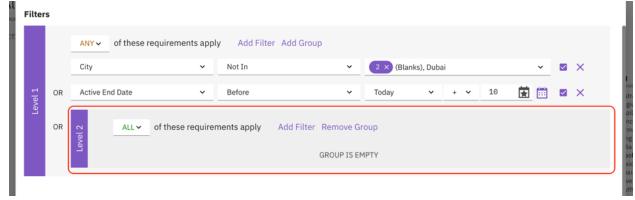
m. **Adding Group Filters:** Groups lets you combine different types of logic in the filters, so you can have multiple sets of ANY filters, or look for ANY of several sets of more complex conditions.

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

- ALL is associated with AND
- ANY is associated with OR
- i. Click 'Add Group' in your filter window to add another level to your filter.







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

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

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

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

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

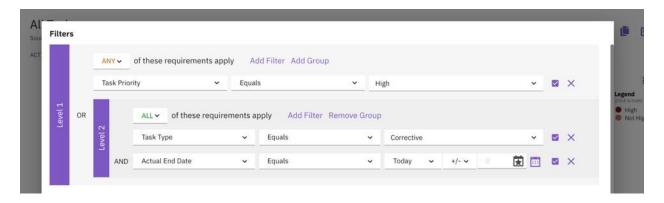
These have different meanings but we want to filter for the second scenario—let's use groups to make this more clear.

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

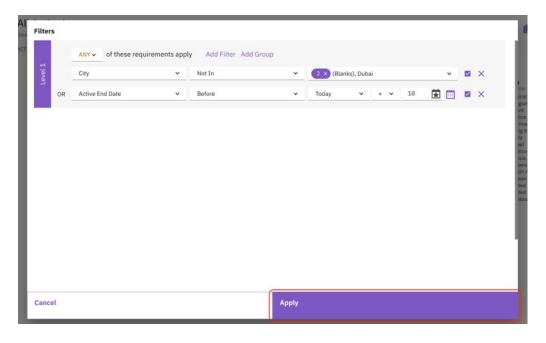


AND
Due Date (Token Date) Equals TODAY

In a Kurve graph the filters would look like this:

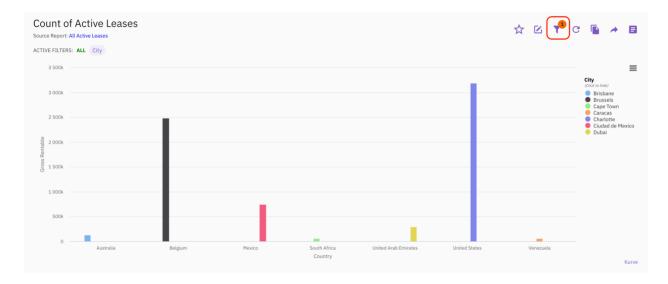


n. When ready to apply your filter selections to your graph, click 'Apply' at the bottom right of the pop-up window.



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





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

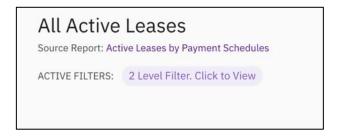


q. Take your mouse and hover over the active filters to view details about that specific filter, including the filter type and value(s) being filtered for.

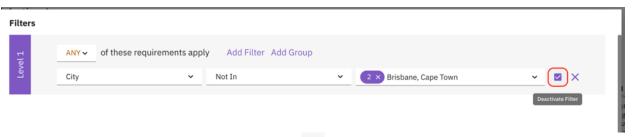


r. If you have added a Group to your Filters, the 'Active Filters' ribbon will display as "2 Level Group - Click to View". Click to open the Filter window and view the details about the filters.



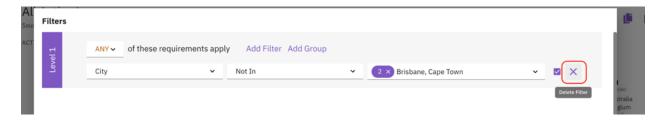


- s. If you would like to change what is being filtered, re-open the filter page by clicking the filter icon (T) and make your adjustments. You can add more filters by clicking on the New Filter button.
- t. Activate/Deactivate Filters: By default, any newly created filter is assumed to be activated.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

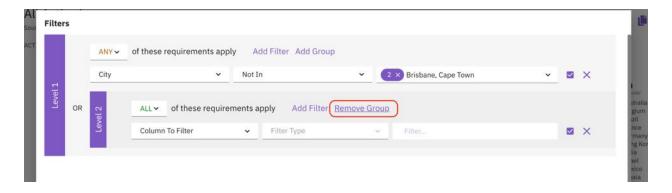
NOTE: Once a filter is deleted, there is no way to recover the filter.



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

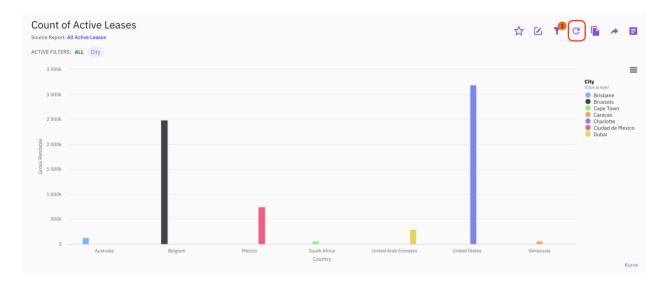
NOTE: This will remove the group AND any filters within that group.





5. Refresh Data

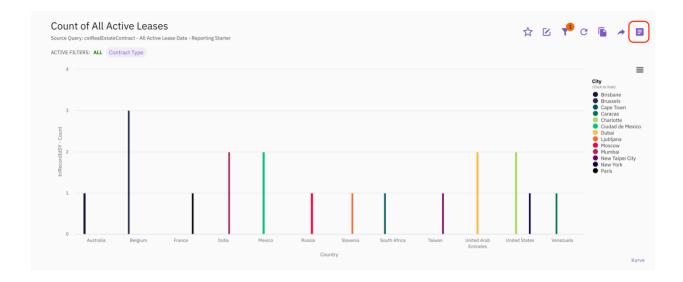
Refreshing your data allows you to refresh to pull in the most up to date information without reloading the whole page. Or if you have filtered for a value with query filters, it allows you to change these values.



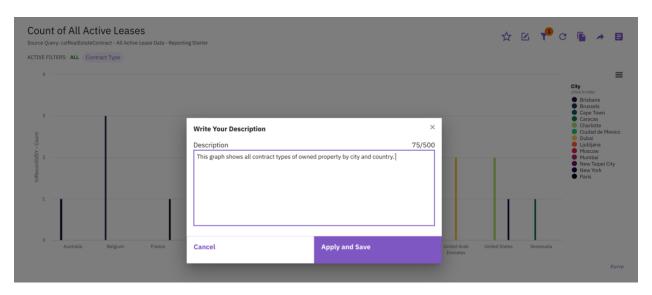
6. Edit and View Graph Descriptions

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

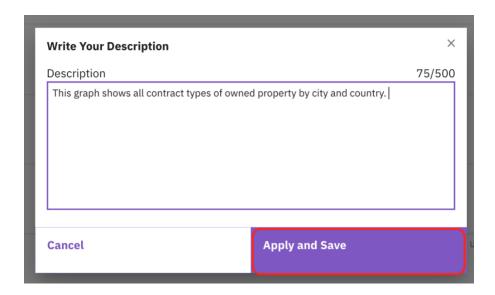




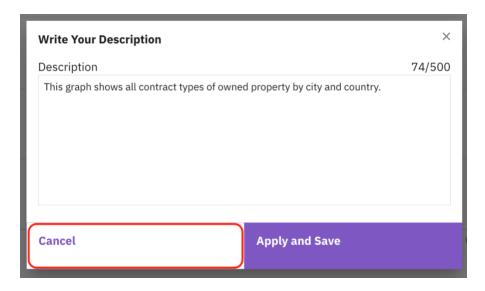
b. To Edit: A pop-up box will show which will allow you to create your descriptions by typing into the box.



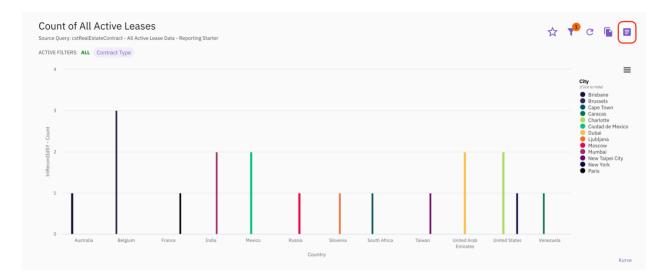
i. Once you're done writing your description, click "Apply and Save".



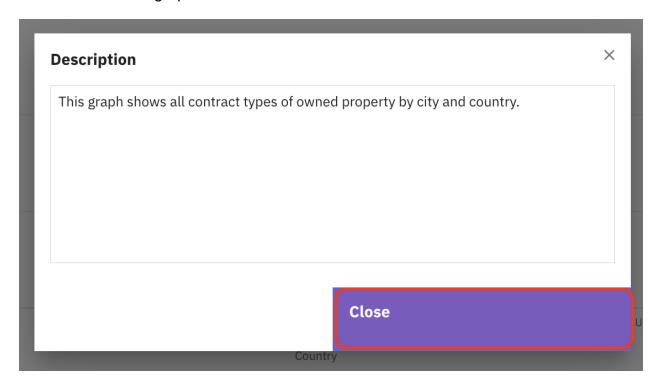
ii. Click "Cancel" to exit out of the description box without saving changes and return to your graph.



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



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

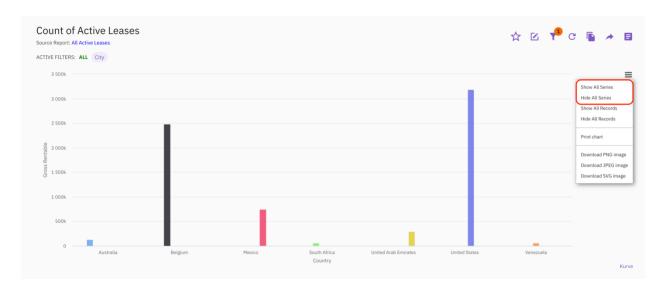


7. Showing/Hiding Series

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

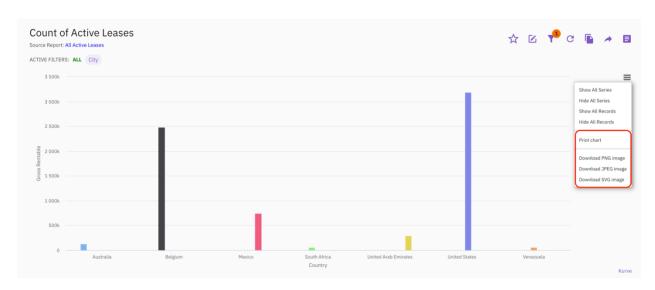


the graph, select "Hide All Series" to hide all of the data.



8. Printing and Downloading Graphs

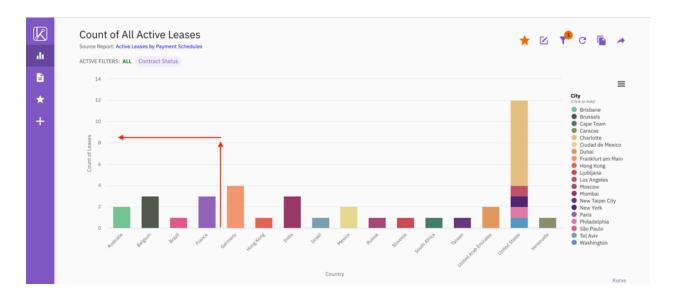
Print / Download Graph Function: Click on the menu icon (■) located on the right side of the webpage. A list will pop-up for your choice to print or download the graph in various formats.



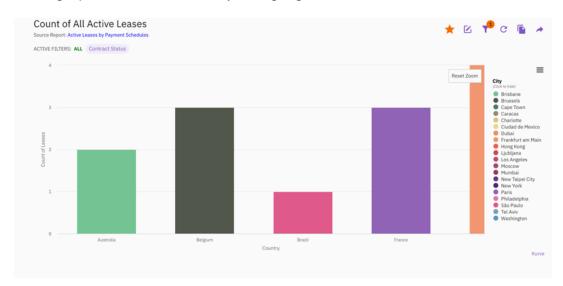
9. Clicking and Highlighting on Graphs to Zoom

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.



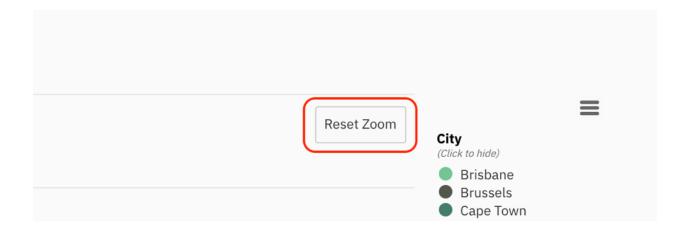


b. The graph will zoom to what you highlighted:



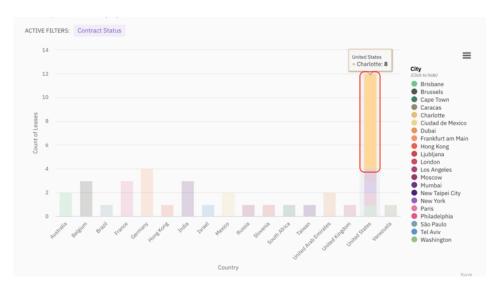
c. **Reset Zoom** Function: when you want the graph to reset to view all results of the graph, click "Reset Zoom."



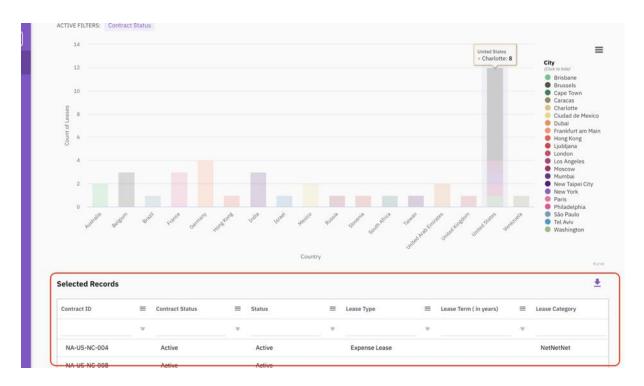


10. Navigating Through Graph Data

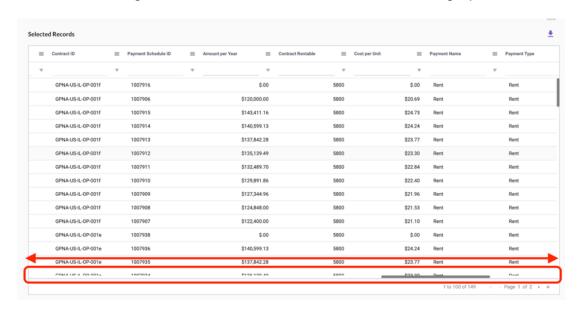
a. A **tooltip** will appear as your mouse hovers over a column or point on the graph; information regarding the record will appear in the tooltip. It will also highlight that segment and any others that may have the same Color By value.



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

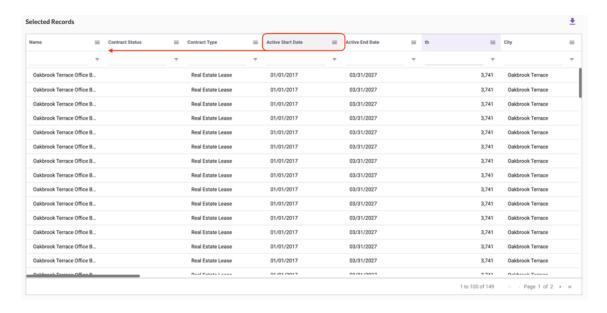


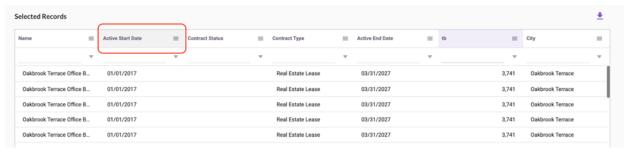
c. Scroll left or right to view the columns associated with the graph table.



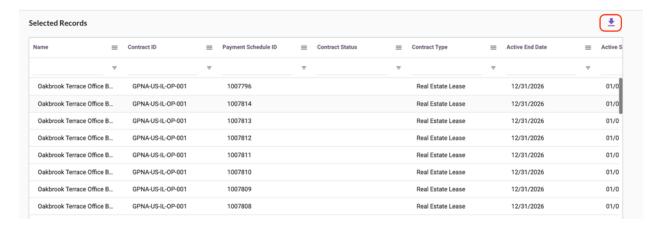
d. **Reorganize the columns** - click and drag the Column headers to where you would like to place the column on the table.





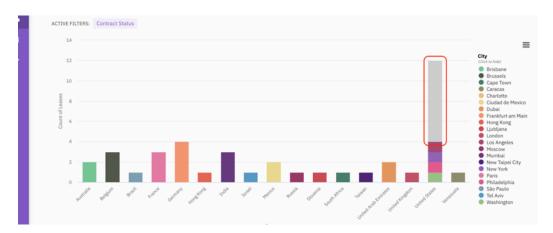


e. **Download Table of Records:** at the top right-hand corner above the table of records, there is a download icon ([▶]). Click to download as Excel or CSV.

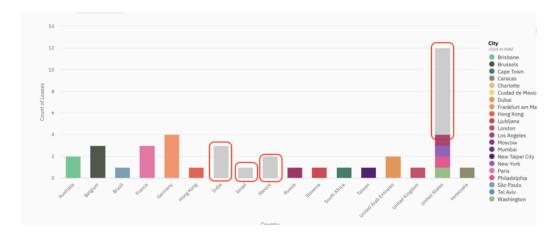




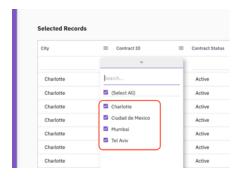
- f. **Multi-select** graph segments select multiple sections of the graph to display in the table of records below the graph.
 - i. Navigate to your graph
 - ii. Select one segment of the graph



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.

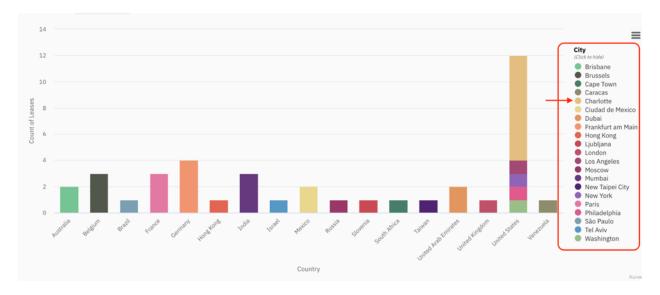


iv. Now when I scroll to see my table of records, it will display all three cities rather than just one.

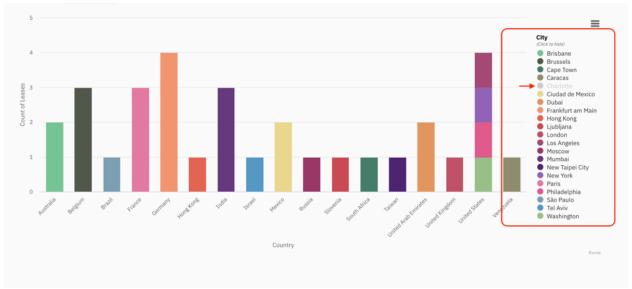


g. **Hide variables from the graph** - from the colour legend located at the top right corner, click on the coloured dot of the property you would like to temporarily hide from the graph to view specific data.

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.

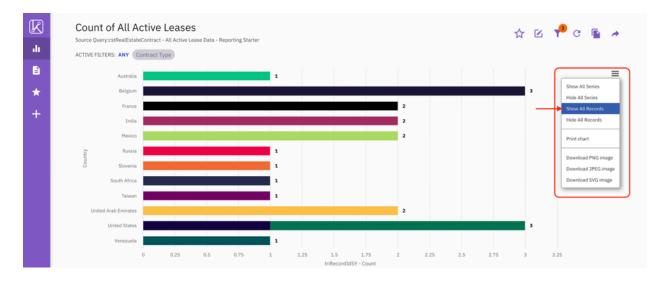


 To show all variables you can either re-click the circles or use the Show All Series button located in the menu (≡).





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

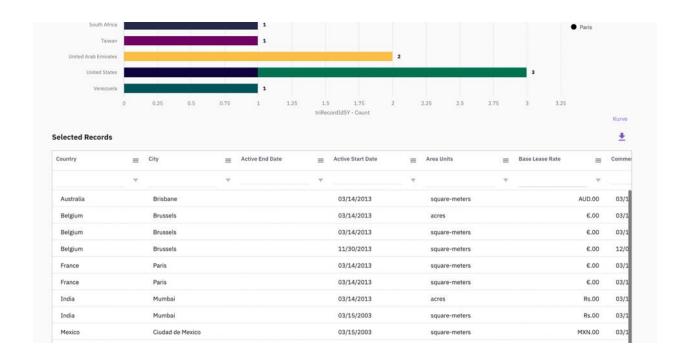


ii. The table of records will then appear below the graph.





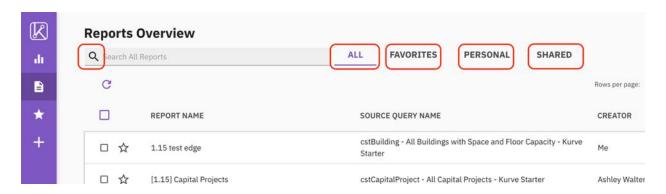
Kurve Access User Guide



REPORTS OVERVIEW

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

1. Navigating the Reports Overview



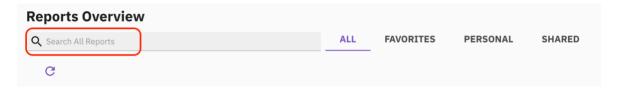
a. **Features** of the Reports' menu bar:

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:

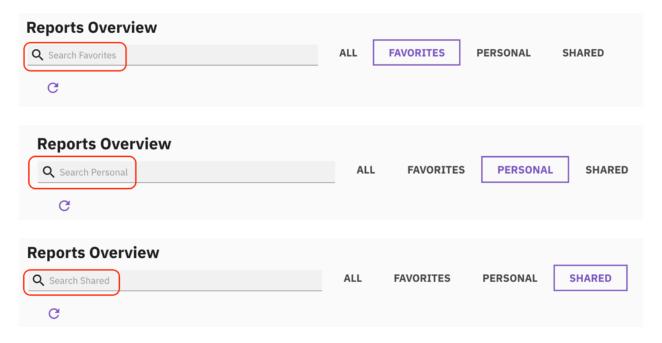
i. **Search** ($^{\circ}$): This is your search function. Click on the magnifying glass symbol to expand the search bar and type to filter through the current list of reports.

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

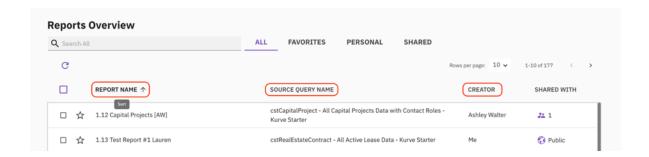




• If you want to search within the *Personal*, *Favorites*, or *Shared* tabs, simply click on either tab and click on the magnifying glass.



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

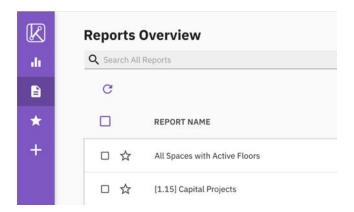


2. Using Report Action Buttons

Personal Reports

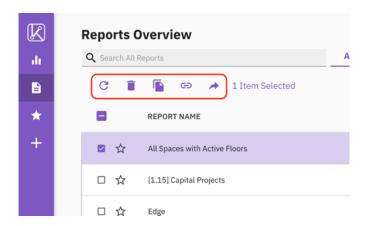


a. If you have no reports selected, your actions are as follows:



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

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



Features of the Report Actions Toolbar:

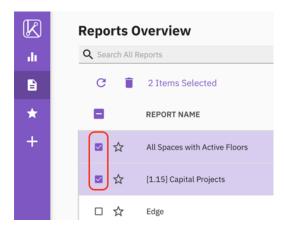
G	Refresh	Refresh the page.
Î	Delete Report	Delete a report.
	Copy Report	Copy an existing report.
(3)	Get Portal/Form URL	Get a Portal or Form URL to embed the report into a portal section or form tab.



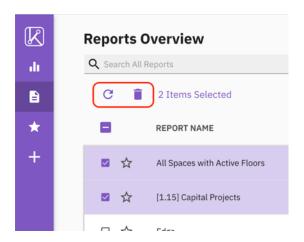
Change Shared Settings

Make changes to whom the report is shared with (public, private, or specific individuals).

- c. More than one selected:
 - 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.



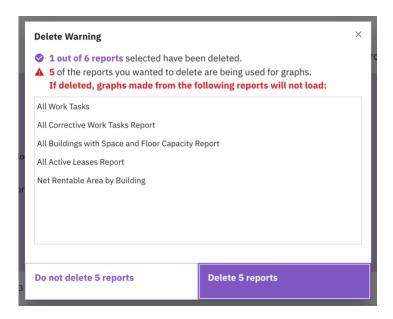
G	Refresh	Refresh the page.
	Select	Unselect the reports that are currently selected.
	Delete	Delete the selected reports.

55

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

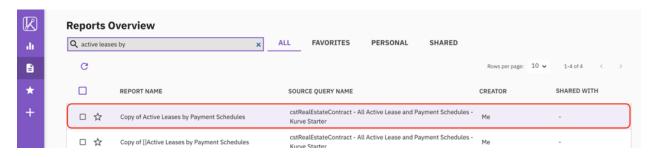
Options:

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



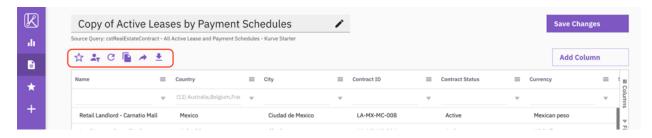
3. Using a Specific Report's Toolbar

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



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





c. Features of the Report's toolbar:

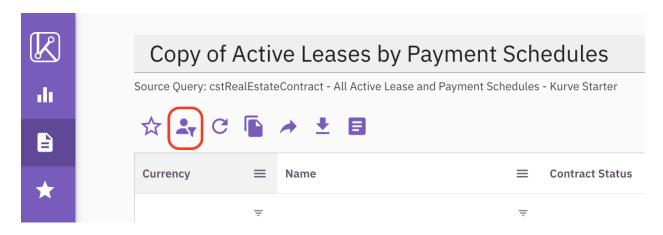
Δ	Favorite Report	Favorite a report for easy access on your home page or the favorites page.
2 T	Edit Query Filters	Create and apply filters before loading your report.
G	Refresh Data	Refresh the data in your report without having to refresh and reload the whole page. Or refresh the query filter values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

4. Edit Query Filters

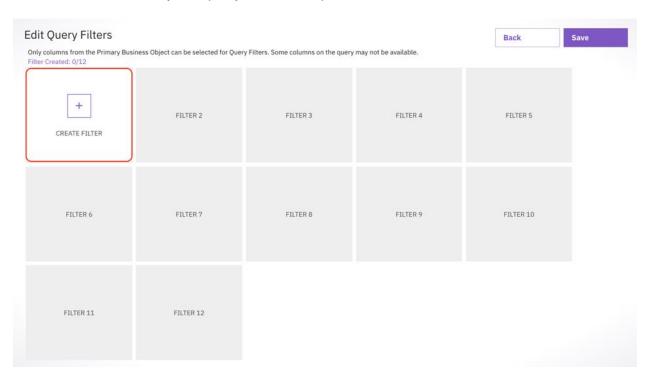
You will see in Section 3 how to create query filters upon creating the initial graph. After the graph has been created, you can click the query filter button () to edit them.

a. Click the Edit Query Filters button from the toolbar





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

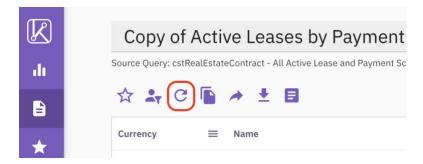


c. To save changes made in the Edit Query Filter page, you must click Save Changes in your report.

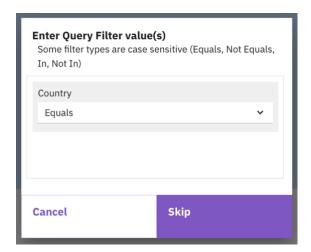


5. Refresh Data

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. Duplicate Report

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





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

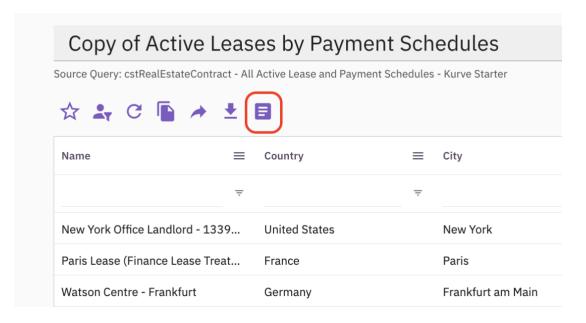


- i. Cancel select this to return to your report.
- ii. Copy without changes select this to make a copy of the original report without the unsaved changes.
- iii. Save and copy select this to save your current report and make a copy with those changes.
- c. Your copied report will appear in the Report Overview page.

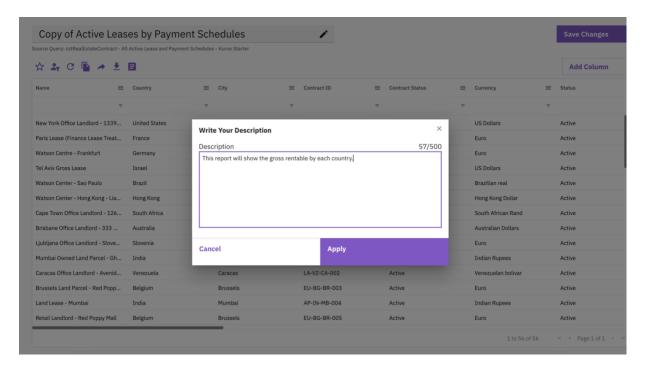
7. Edit and View Descriptions in Reports

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



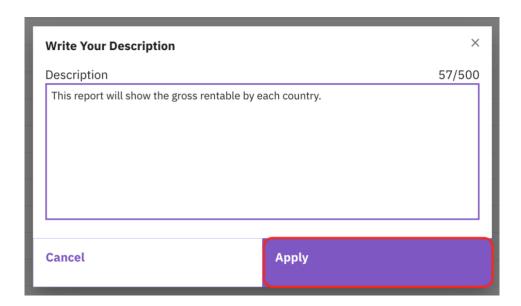


b. To Edit: A pop-up box will show which will allow you to create your descriptions by typing into the box.

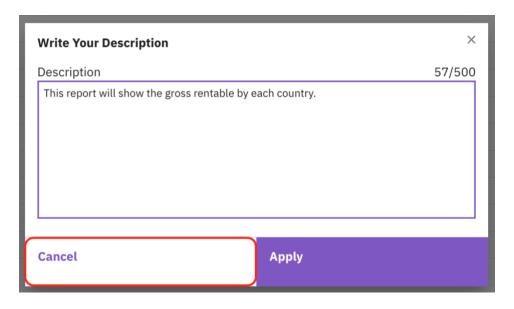


i. Once you're done writing your description, click "Apply".

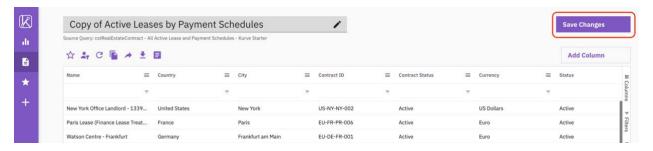




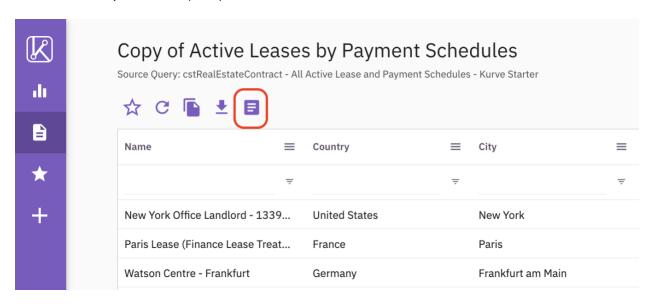
ii. Click "Cancel" to exit out of the description box and return to your report.



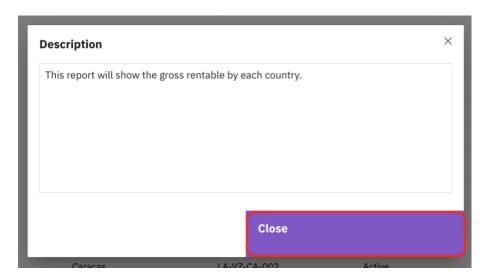
iii. Once you return back to your report, click "Save Changes" on the top right corner to ensure you save your description.



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



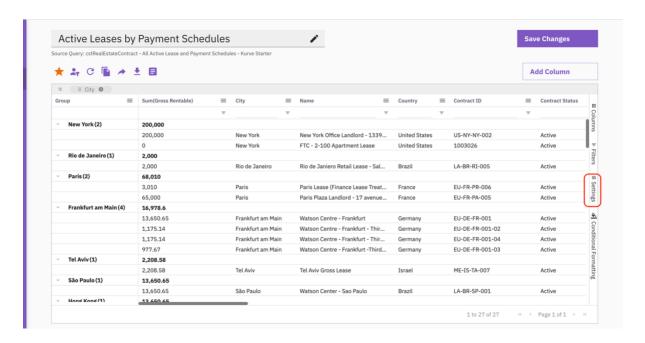
d. You will see the owner of the report's description. Click "Close" to exit and return back to the report.



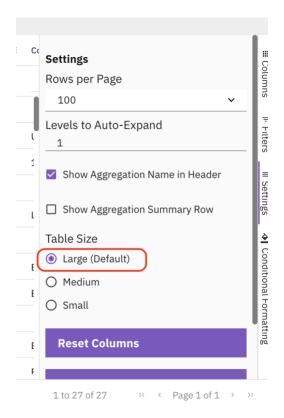
8. Personalize Report Table Size View

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



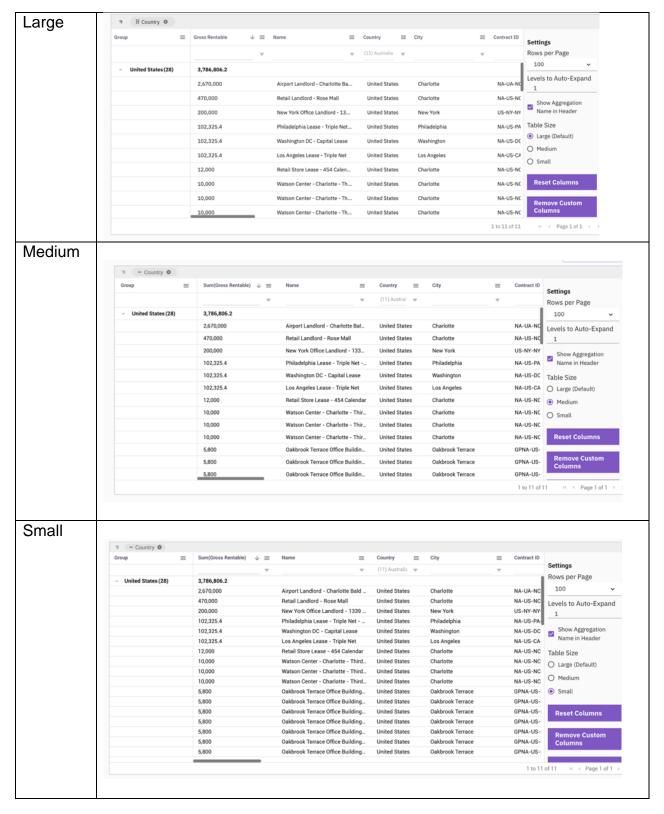


b. The default setting under Table Size is set to Large.



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

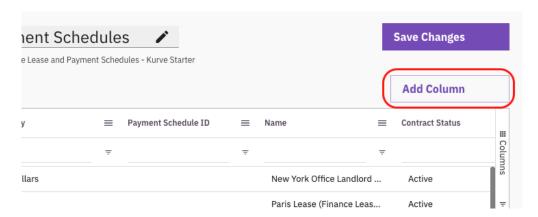




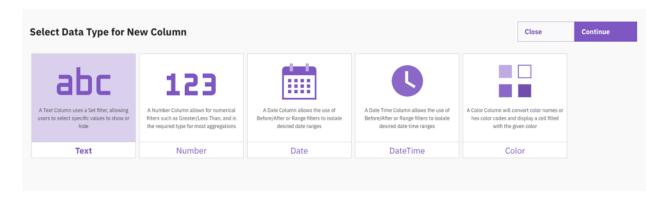


9. Adding Columns on Report

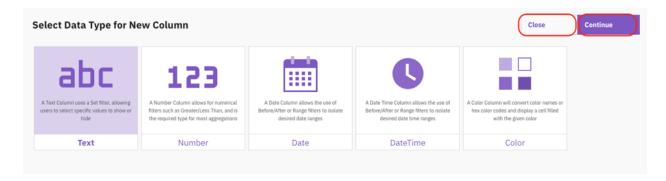
a. Click "Add Columns" to add a custom column with the existing data to the report.



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



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



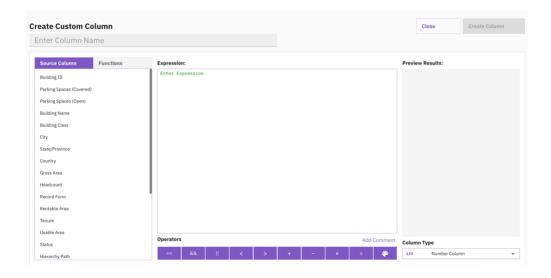




Note: Kurve will automatically change the display type and filters for the column according to the data type selected.

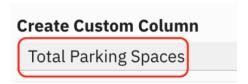
Column Type	Description
Text Column	Text columns should be used for alphabetic characters. For example, if you are creating a column to display months, it would be a text column displaying months January through December based on the source column. A text column will filter for unique values.
Number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

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

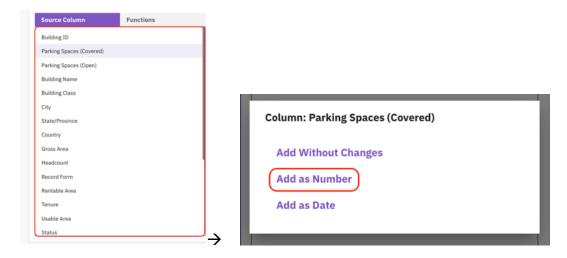




e. Type the name of the custom column under "Enter Column Name." Once the column is created this column name cannot be changed. In this example, we will calculate the number of parking spaces.

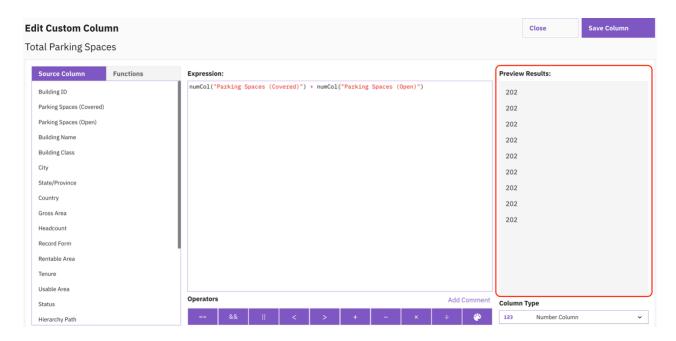


f. Under the Source Column section, select the column(s) you would like to use for the custom column. A pop-up will open to select how you would like the item to appear (Add without changes, Add as number, Add as date). Select the column type. In our example, we select Add as Number.



g. The data in the selected column will now show in the "Preview Results" .





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

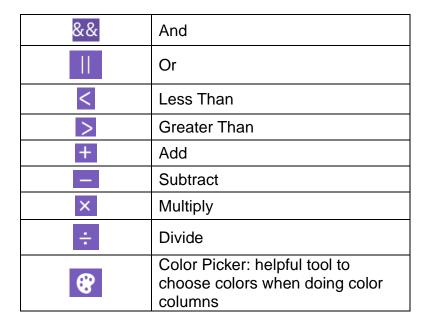


Example: In this case, the "Parking Spaces (Open)" column is being added to the "Parking Spaces (Closed)" column, therefore the "Expression" is "numCol('Parking Spaces (Open)')+numCol('Parking Spaces (Covered)')". This adds our two columns together thus calculating total parking spaces.

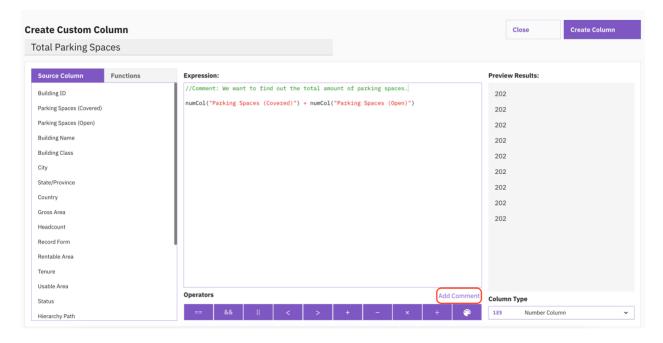
Note: We have helper **Operators** to assist with any calculations you would like to do. Click any to add it into the expression in the correct format for the custom column.





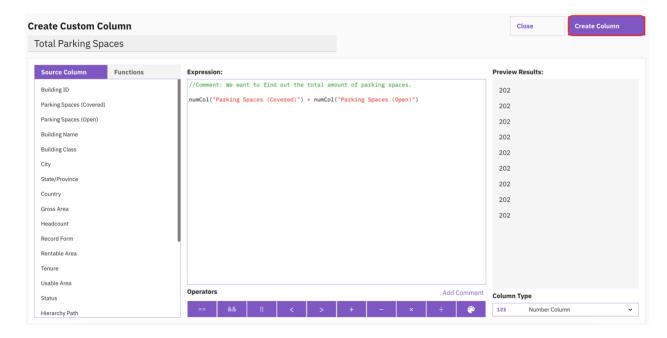


 Click "Add Comment" on top of the operators if you want to provide information about the expression. The comment will be inserted in the Expression box in green text.



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



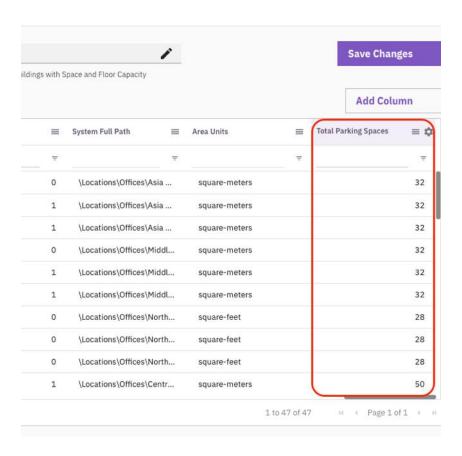


k. At any time, you may also exit out of the "Create Custom Column" page by clicking on the Close icon.

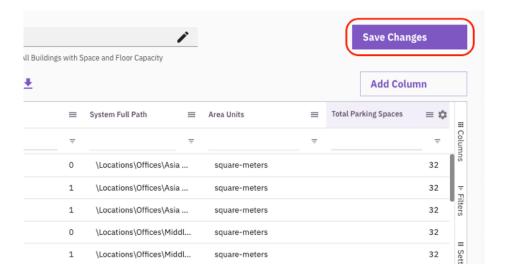


 Once you click Create Column, the column will appear at the very end of your report (scroll to the right). Custom columns will be coloured purple to indicate that it's custom.



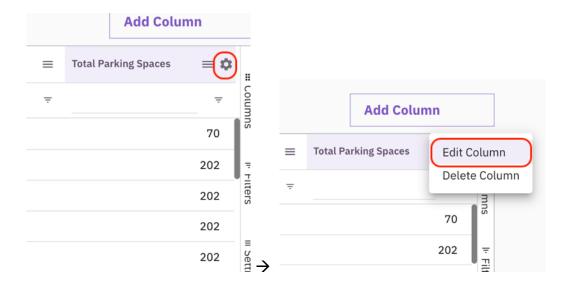


Changes to the report (including new custom columns) will not be saved until you have clicked "Save Changes."

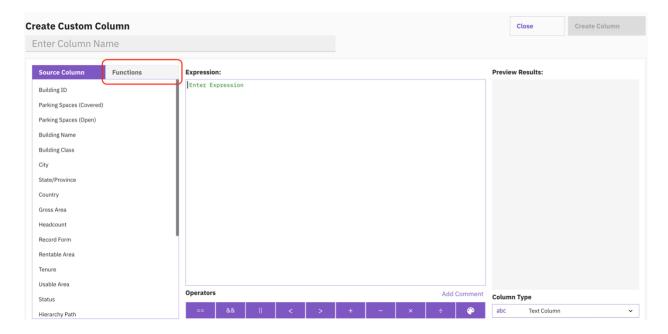


m. To edit the custom column, click the gear icon next to the hamburger menu of the custom column. A secondary menu will appear, click Edit Column.

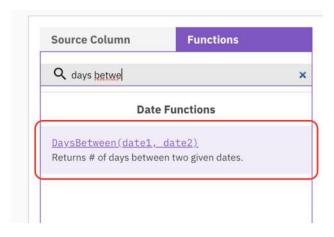




n. For more complex expressions, Kurve comes with many helper functions that can be viewed by clicking on the "Functions" tab. A detailed list of functions can also be found in the Appendix.



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



The expression will be added to the Expression tab.

DaysBetween(date1, date2)

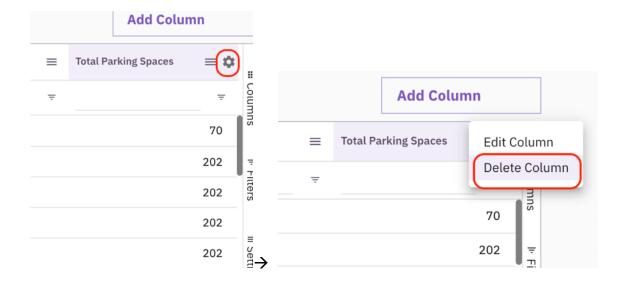
Now you can select your variables. When selecting them from the source column, ensure you add the field as a date.

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:

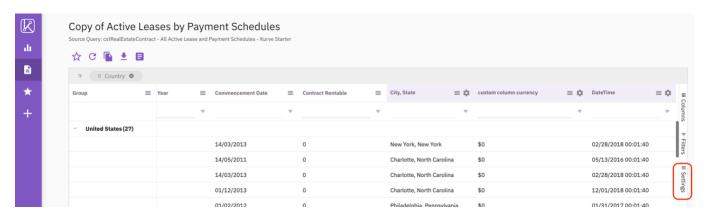
- o. Delete Custom Column
 - i. To delete a custom column, click the gear icon and then click Delete Column.



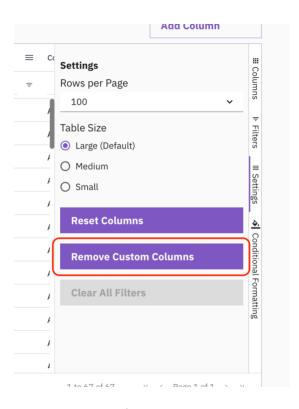


p. Bulk Delete All Custom Columns

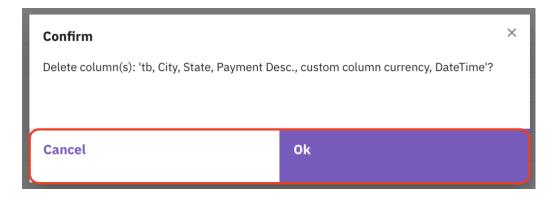
i. Within your report, navigate to the settings tab on the right side of the report



ii. Click Remove Custom Columns

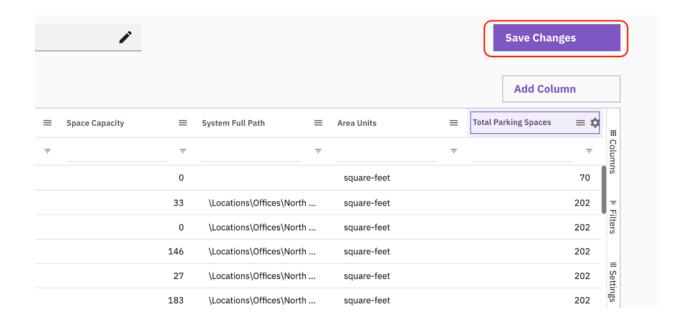


iii. A warning will pop up to confirm what columns you are deleting. Click Cancel if do not want to remove the columns. Click OK to delete.



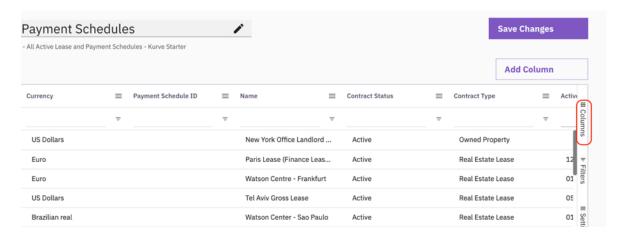
q. Save: Click Save Changes to ensure anything you have done to the report gets saved.





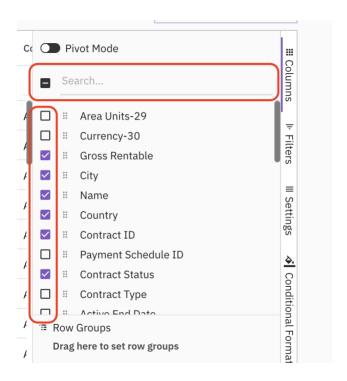
10. Personalizing Columns on the Report

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.

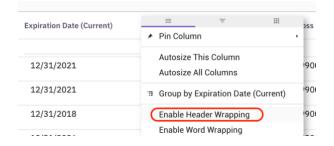




- c. Enable Header Word Wrap: break your header row text into multiple lines. Header wrapping is enabled per column and will wrap at the end of a word onto the next line
 - Click on the hamburger menu of the column header you want to word wrap



ii. Select Enable Header Wrapping

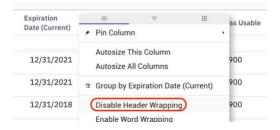


iii. Adjust the column size to your liking

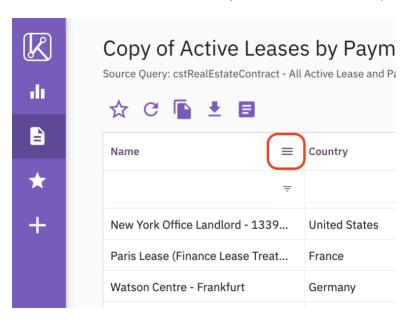




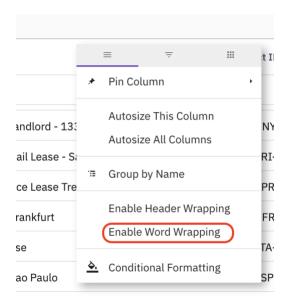
iv. To disable: click back into the hamburger menu and select Disable Header Word Wrap



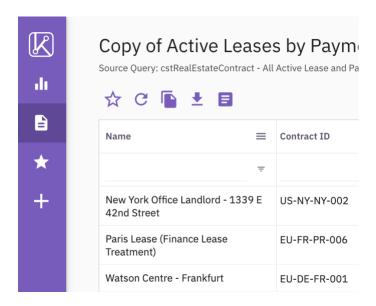
- d. Enable Word Wrap: break a section of text into lines so that you can fit more into the width of the report. Word wrapping can be enabled per column and will automatically wrap at the end of a word onto the next line.
 - i. Click into the menu of the column you want to word wrap



ii. Select Enable Word Wrapping

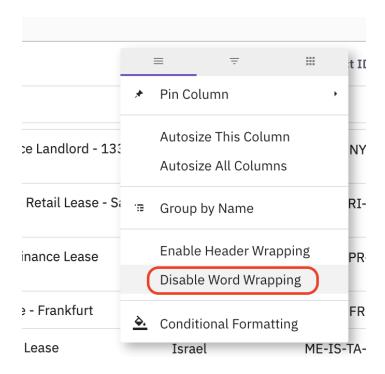


iii. Adjust your column size to your liking. The line will automatically break at the end of the word where you set your column width.

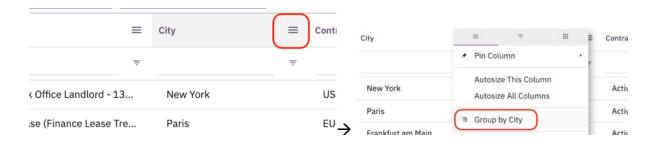


iv. To disable, click back into the menu and select Disable Word Wrapping

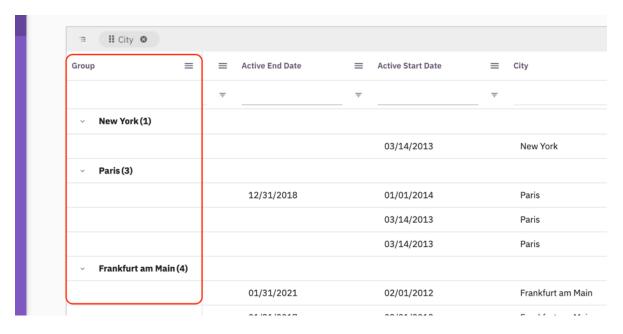




- e. Row Groups function: There are two methods of grouping data.
 - i. **Option 1**: Click on the menu icon located next to the column you would like to group. Click on the "Group by City" button.



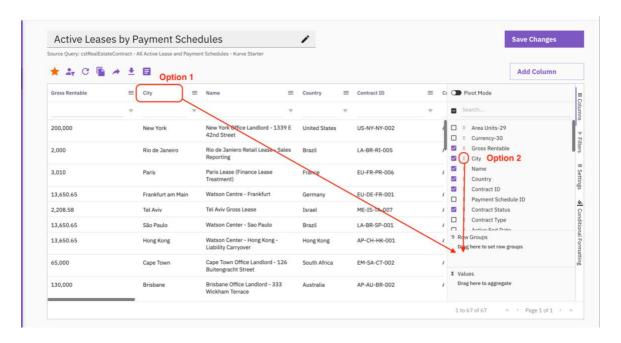
 The report will group by the column you have selected and automatically pin that column left.

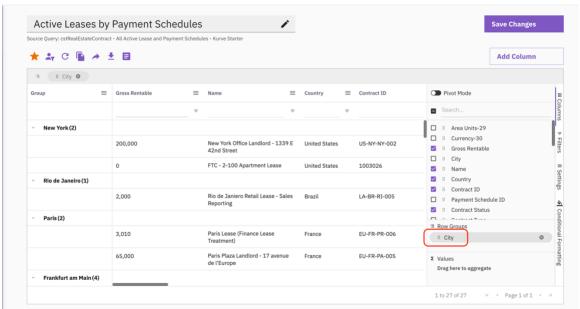


Note: In this example, each item from "City" is grouped and beside each item, there is a number to show how many items are in that one group. (Example: for "New Work (1)" this shows that there is 1 record with the city New York.

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



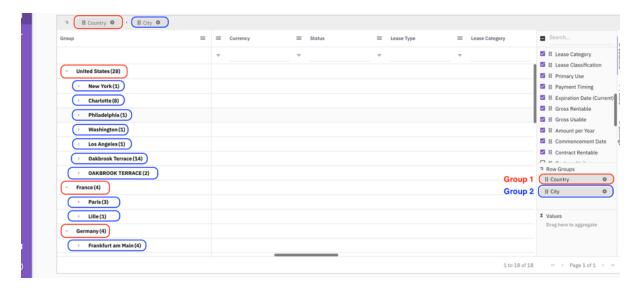




iii. **Row Groups Hierarchy** function: When you have more than one column in the "Row Groups" section, the order of columns in the section determines the order in which the rows are grouped.

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

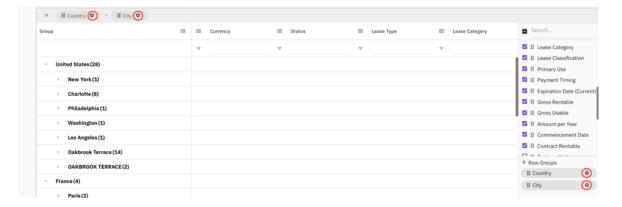




- iv. Reorder Hierarchy of Row Groups function: Click on the reorder icon (
) and drag the column header up or down to change the order of the hierarchy for the grouping on the report.
- v. **Sort Individual Group Rows**: click on any group in the grey group panel row to individually sort the group.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

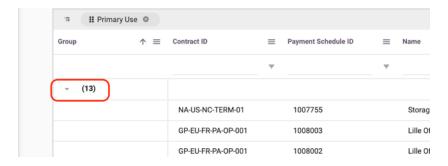


vi. **Delete Row Groups** function: Click on one of the exit icon (^{S)} to delete the row group from the section.



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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.

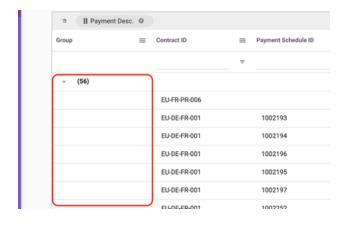


If your blanks do not get grouped together like the above, you may need to use a custom column to ensure the blanks can be grouped together. Use the Function "GroupNulls" and then group your report by this column.

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.

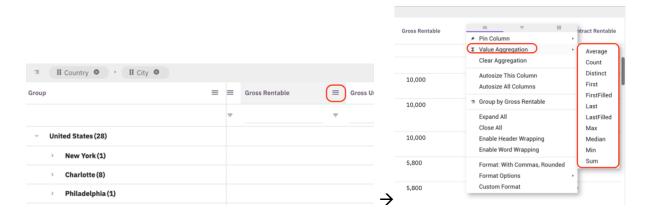


Now the report can be grouped by the custom column and all blanks will be grouped together.

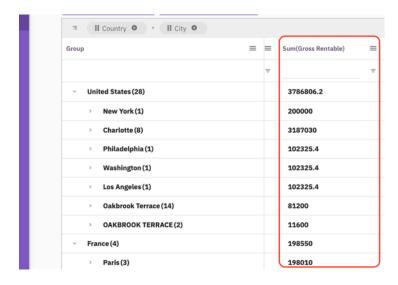




- f. Value Aggregation function: There are two options to aggregate your data. You can aggregate your data based on what you have grouped your data by:
 - i. Option 1: click the hamburger menu of the column you would like aggregate. Hover over Value Aggregation, then click to select which aggregation you would like to use.

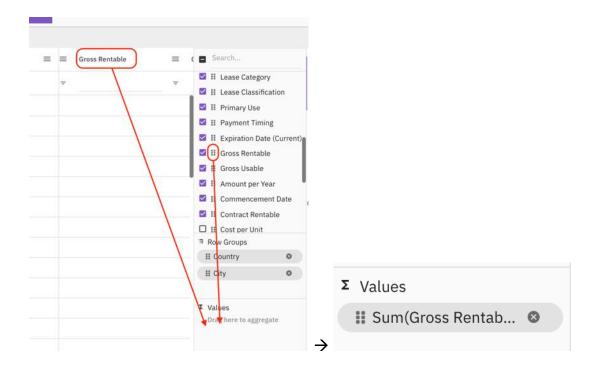


Your column will change according to your selection.



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





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

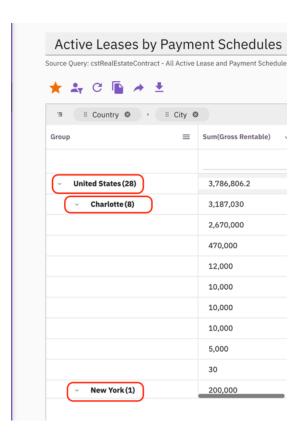


g. Color Grouped Rows

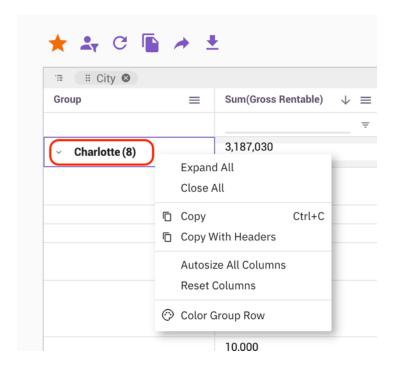
Recolor your grouped rows to distinguish them more easily from the report data.

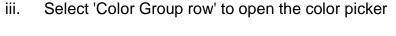
i. Navigate to your groups in the report

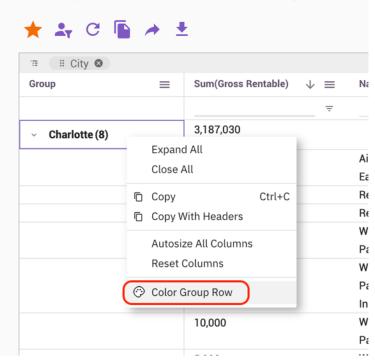




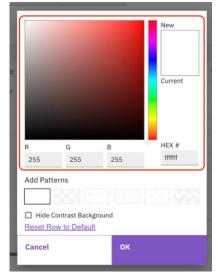
ii. Under the group column, right click on a value to open the additional actions pop-up





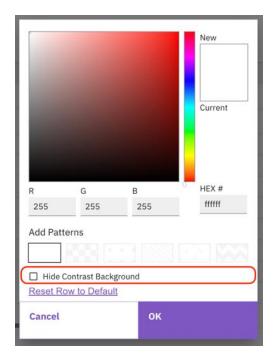


iv. A color picker will open. You'll have the ability to use a solid color or a pattern. Select a color by either inputting an RGB or Hex code, or use the color picker.

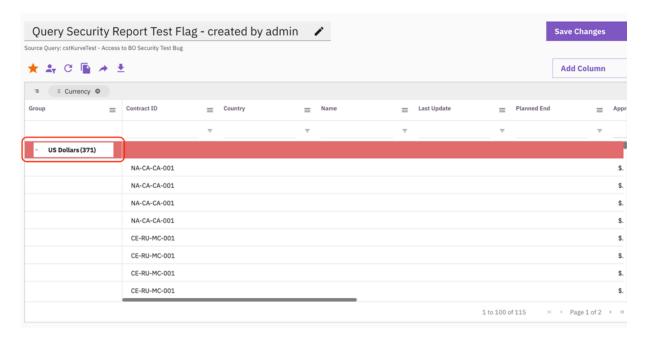


• You may also show or hide contrast background by checking the "Hide Contrast Background' Box.



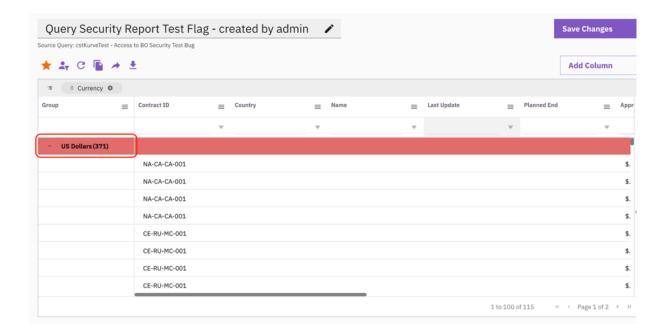


 Without checking the box, your grouped and aggregated text will have a white background

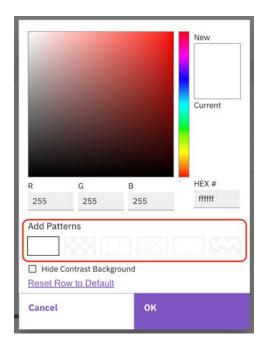


• The 'Hide Contrast Background' box will unify the color of your column



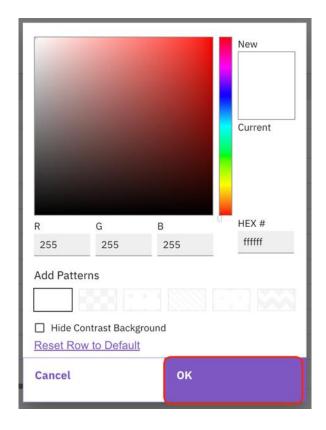


v. Optional: select a pattern. Your pattern will use the color chosen with grey.



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

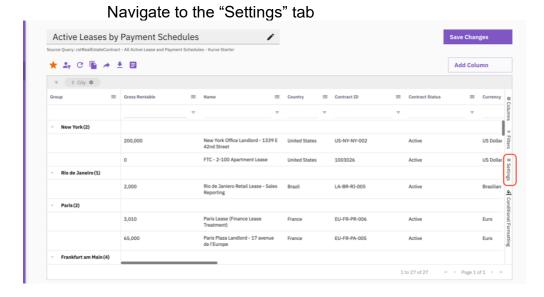




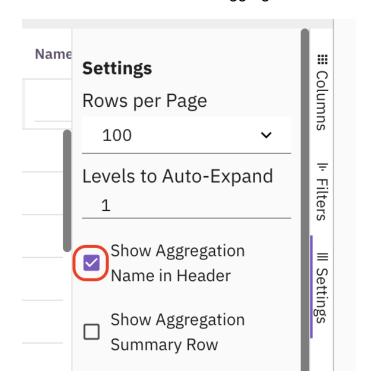
vii. To restore the group back to default, re-open the color picker for the group and select "Reset Row to Default" and then OK.



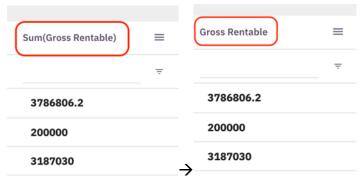
h. Report Settings: Manage headers for aggregated columns



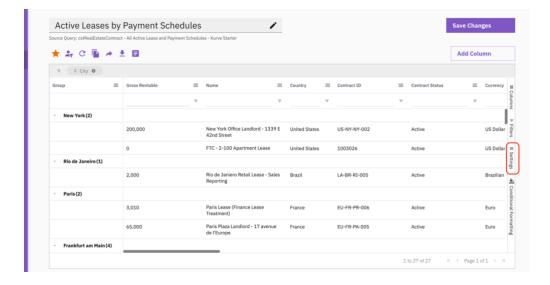
- If you would like to remove the aggregation name in the header of your columns:
- Click the box beside "Show Aggregation Name in Header"



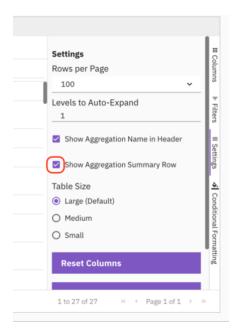
For example, if we've aggregated Gross Rentable by Sum, the header will change to Sum(Gross Rentable). You can keep the aggregation, but remove the header for easy reading.



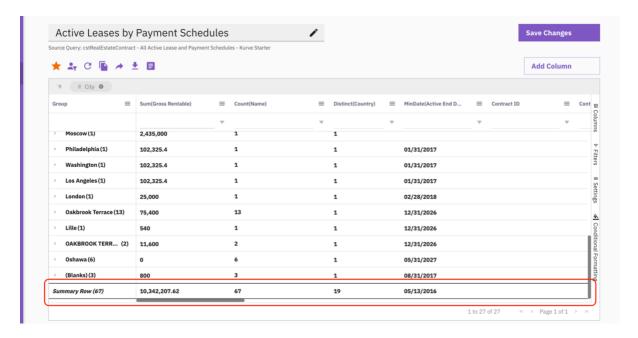
- i. Report Settings: Add a summary row of your first group to your report.
 - Navigate to the "Settings" tab



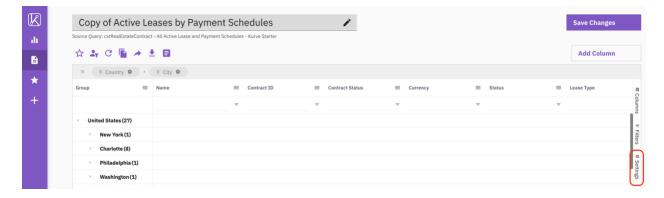
- If you would like to show the summary of the aggregated values and grouped rows:
- Click the box beside "Show Aggregation Summary Row"



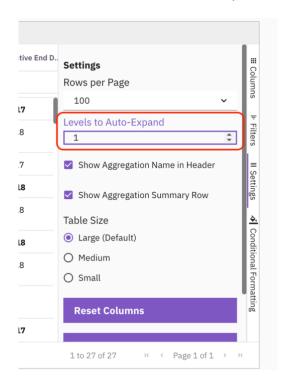
The summary row will always appear on the last row of the report.



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

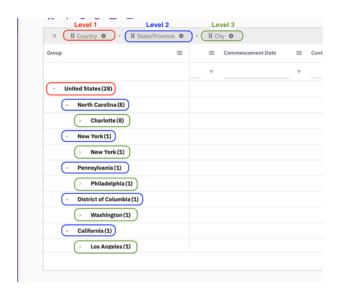


 Navigate to Levels to Auto-Expand, either use the error to increase/decrease the number or input the number.



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





k. Value Aggregation Options

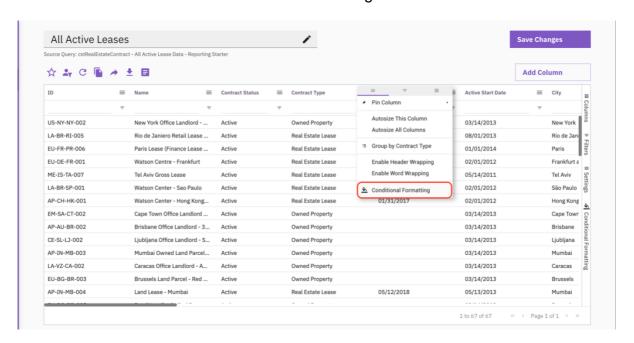
avg	Returns the average value for the group
count	Count the number of items in the group
distinct	Counts the number unique values in the group
first	Returns the first value in the group
firstFilled	Returns the first non-empty value in the group
last	Returns the last value in the group
lastFilled	Returns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

11. Conditional Formatting

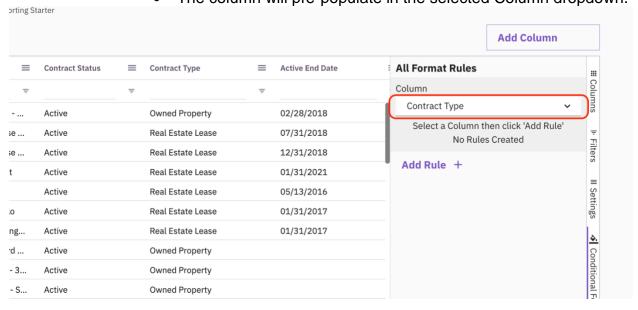


Highlight text, number, or date/datetime cells with certain colors depending on the cell's value without needing to use a Custom Column Function.

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

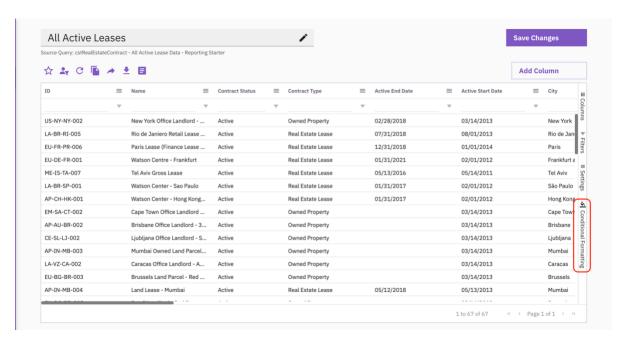


• The column will pre-populate in the selected Column dropdown.

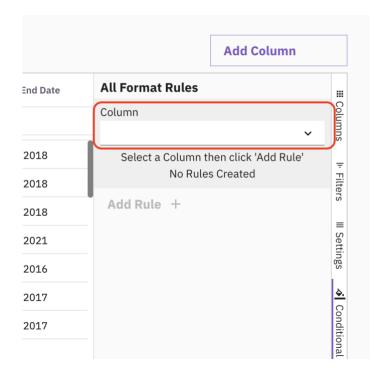




- Continue to Step B below to learn how to add a rule
- ii. Conditional Formatting button
 - Navigate to the Conditional Formatting tab along the right of your report



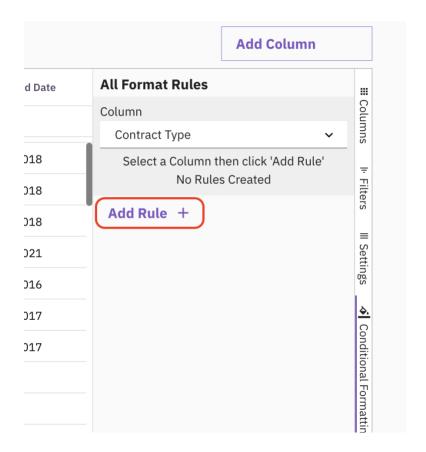
Select the column you would like to color using the drop down



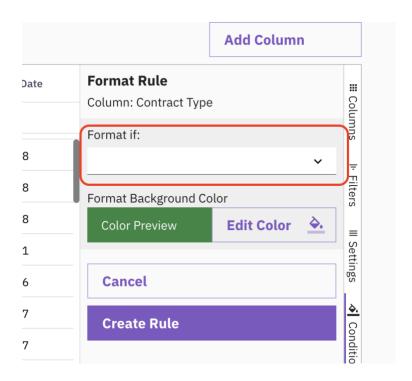


Continue to step b

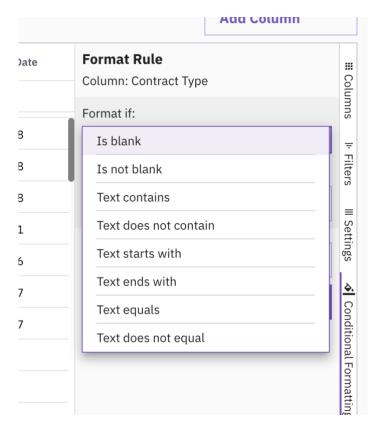
b. Click Add Rule



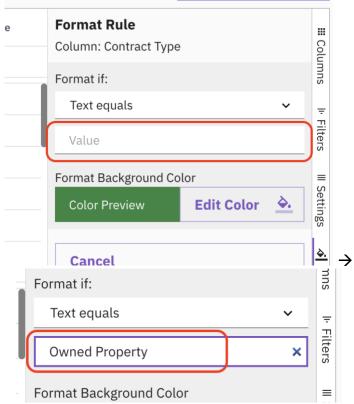
- c. Fill in your rule parameters:i. Select the Format if dropdown



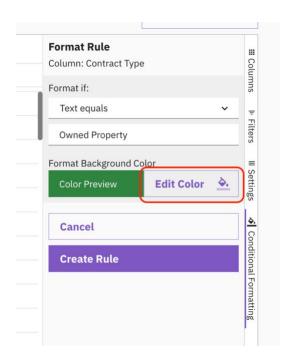
ii. Select the filter type. These will change according to the column's data type (i.e. Text, Number, Date, DateTime). Please see below for an explanation of each data and filter type available.



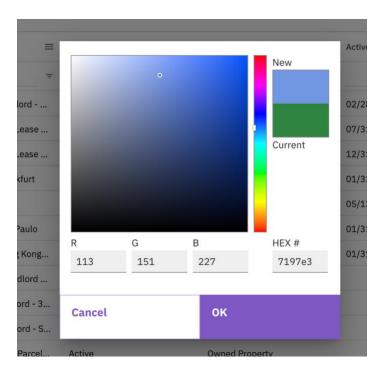
iii. Input value: if the selected filter type requires a value, an input will become available. Type in the value for this rule.



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

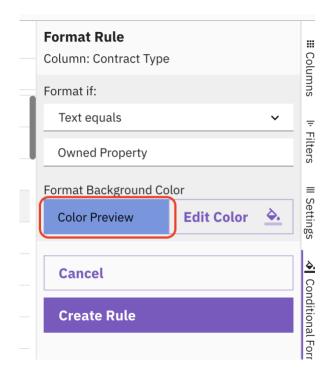


v. Input an RGB, hex code, or select a color.

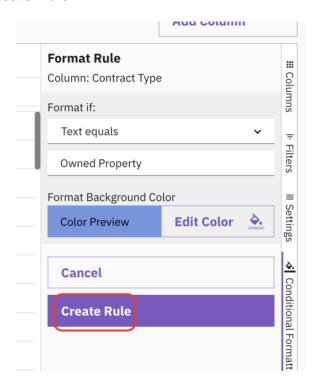


- vi. Click OK.
- vii. The Color Preview will change to the selected color.





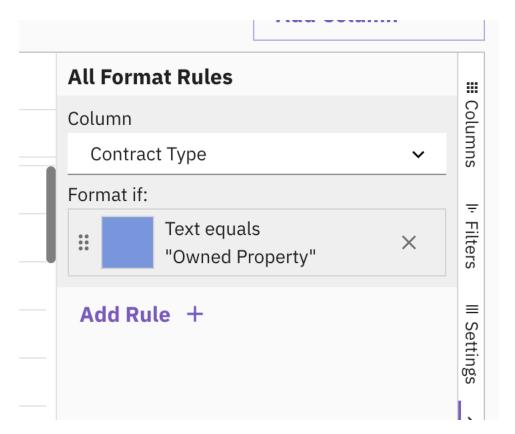
viii. Click Create Rule



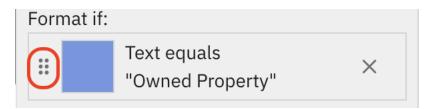
d. The color will now be applied in the column



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



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



h. To delete a rule, click the X



- i. Data & Filter Types
 - i. Text

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

ii. Number

Туре	How the rule applies
Is blank	Applies to cells in a number column that are empty or do not
	contain any numeric data.



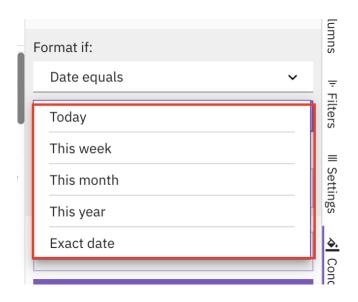
Is not blank	Applies to cells in a number column that have some numeric
	data and are not empty.
Greater than	Applies to cells in a number column where the value is
	greater than the specified number.
Greater than or equals	Applies to cells in a number column where the value is
	greater than or equal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

iii. Date

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

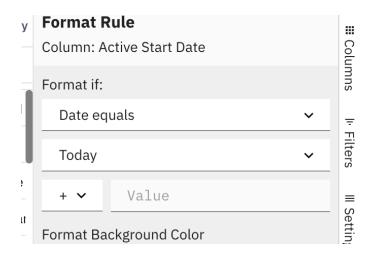
 Once a date format type is selected, an additional dropdown will appear before the input will be available. Please see the table below to learn about each option.





Date Selector	Description
Today	Formats cells based on whether the date in the cell is the current date (today). It is useful for highlighting or styling cells that represent today's date.
This week	Formats cells based on whether the date falls within the
	current week. It's a dynamic condition that changes as the
	weeks progress.
This month	Formats cells based on whether the date falls within the
	current month. It's a dynamic condition that adjusts to the current month.
This year	Formats cells based on whether the date falls within the
	current year. It dynamically adjusts to the ongoing year.
Exact Date	This option allows you to specify a particular date, and cells
	with that exact date will be formatted accordingly. It is useful
	when you want to highlight or emphasize a specific date.

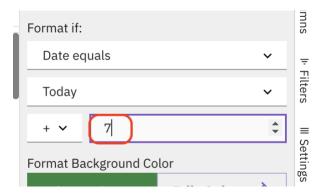
The dynamic date options above can also be offset:
 Offsetting a dynamic date involves adjusting a date value by a certain
 number of days, months, or years, either forward or backward, to
 derive a new date.



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

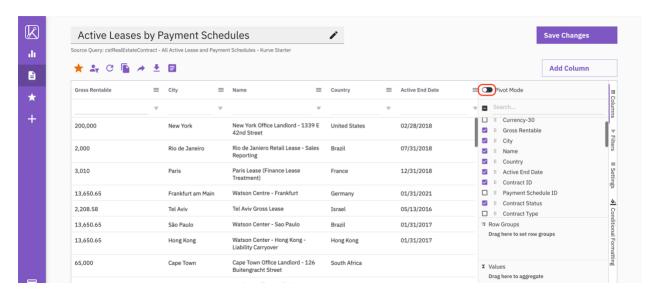


- Add: Forward Offset Increasing the date value by a specified number of days, months, or years. For example, adding 7 days to the current date results in a date one week in the future.
- Sub: Backward Offset
 Decreasing the date value by a specified number of days,
 months, or years. For instance, subtracting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

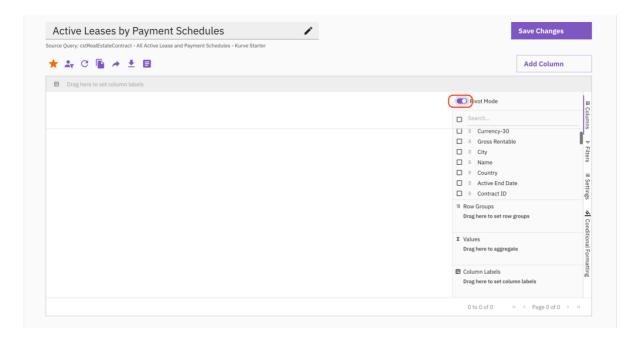


12. Pivot Mode

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

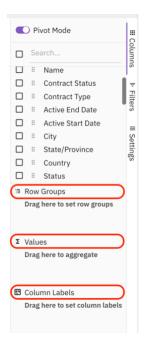


b. When pivot mode is turned on, you will see the toggle switch to purple and the report will reset to a blank canvas. If you have any groups and aggregations already created, these will carry over to pivot mode.



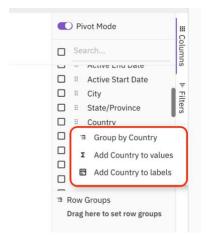
c. For pivoting to work, you will need to use Row Groups, Values and Column Labels.

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

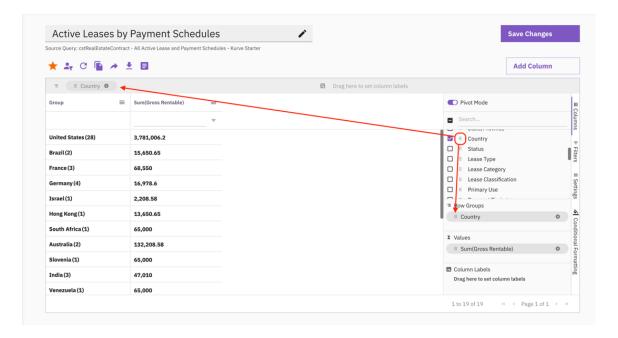


- d. You can move the columns into each section using two methods:
 - i. Option 1: Right click on a column (for example: Country) and select the three options.



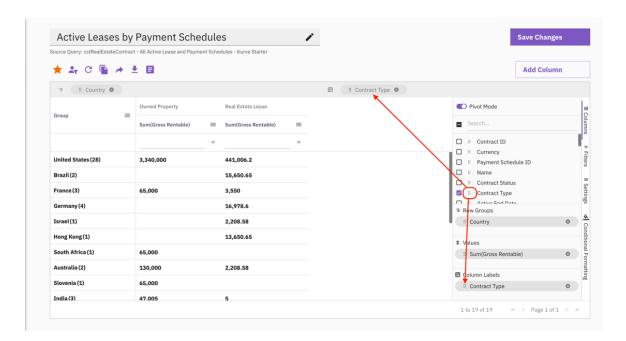


ii. Option 2: You can drag and drop into the desired section.

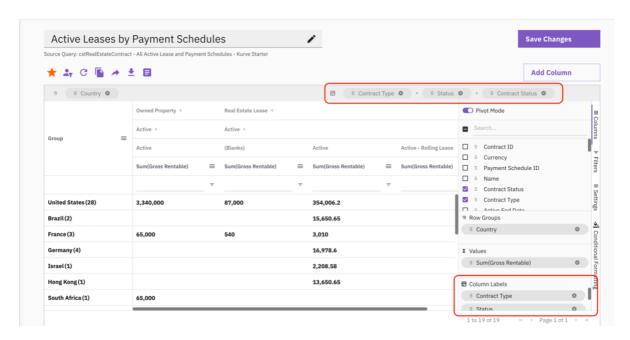


e. Column Labels Section:

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

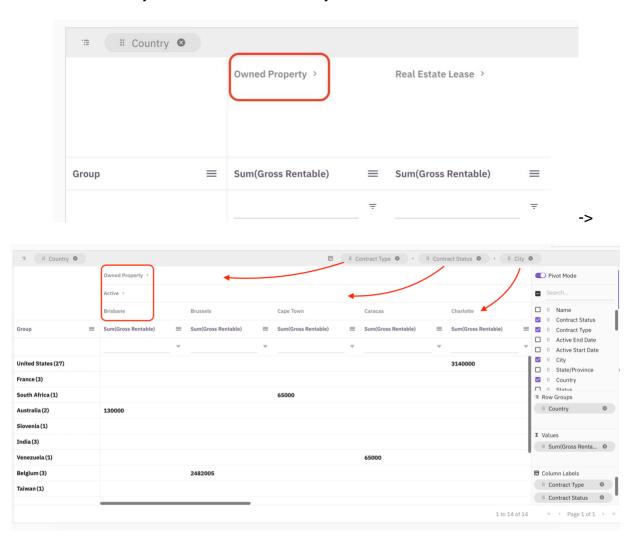


f. Multiple columns that are added to the Column Labels will appear beside each other in the grey header in the order of how it's grouped and it will show in order in the Columns bar.



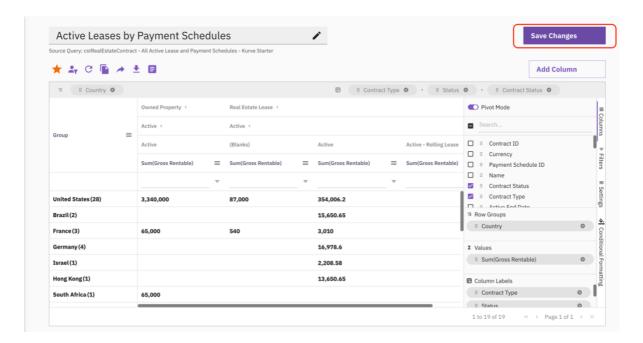
g. If you have multiple column labels, they will be nested under the first column label according to your order. To view the columns, select the arrow icon beside the column name.

For example: Owned Property is the first column label. Once I select the arrow beside it, the second column label of Active will show. If I select the arrow beside Active, the third column label of City which will show each city in the third row.

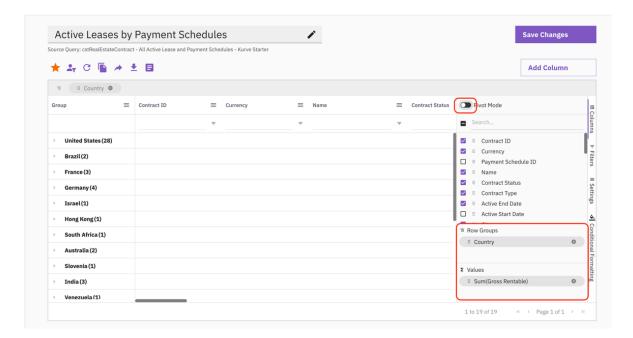


h. Ensure you click "Save Changes" to save your report.





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

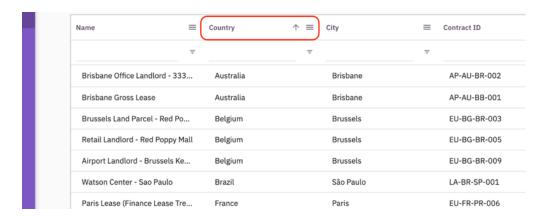


13. Reorganizing Columns on the Report

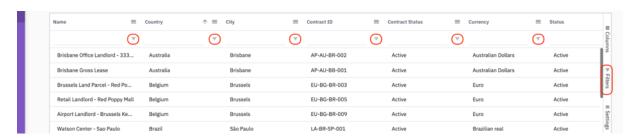
a. Sort List Alphabetically function: Reorder the report list by clicking on the column headers. The list will reorder by alphabetical order:



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

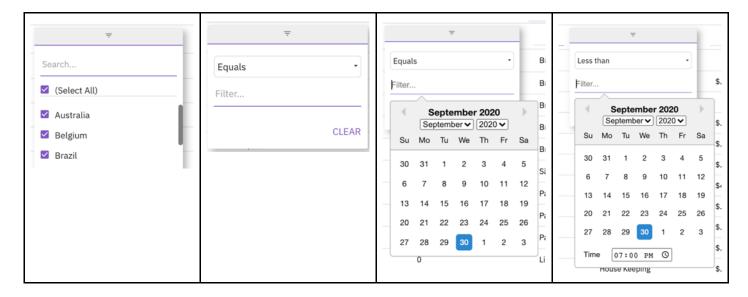


b. **Filter List** function: Click on the filter icon (=) and a pop up will open to select what you would to filter out. You can also use the Filters tab that is located along the side.

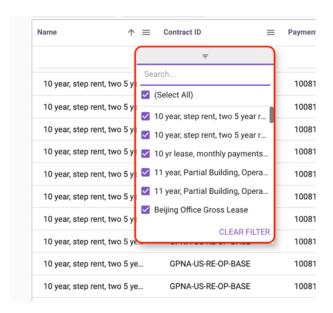


Note: Dependent on the column you filter, there are three different filter options:

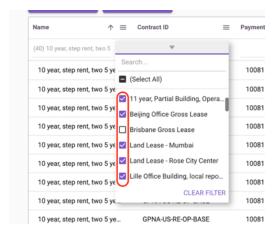
Text Filters	Number Filters	Date Filters	Date/Time Filters
		2 6.10 1 11.1010	



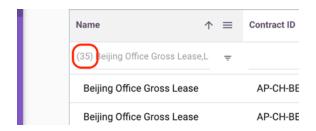
i. **Text Filters** Function: Select or deselect what you would like to filter. You may also type into the "Search..." box to quickly find specific items to filter.



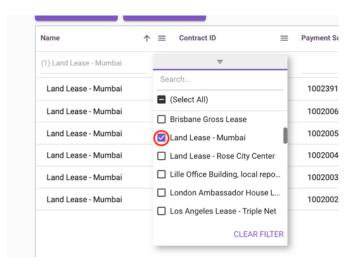
Example: In this case, we want to filter the "Name" column. We deselected "Brisbane Gross Lease" to filter for all other request classes.



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

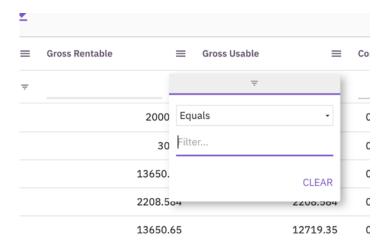


 We can also filter for only one or a few options. To do this we deselect "Select All" and then select which options you would like to see. In this example we selected "Land Lease – Mumbai". You can select as many options as you would like to display.

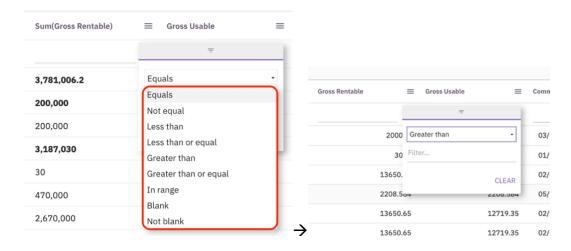


c. **Number Filters** Function: Click on the drop-down icon (-) to select the range you would like to filter.

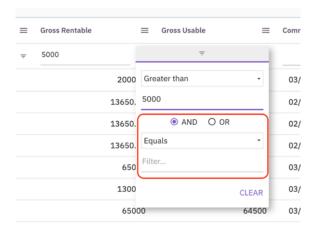




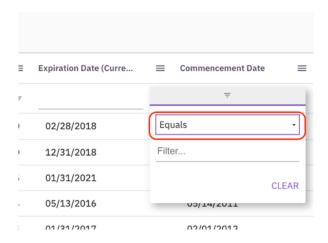
i. Select the filter option from the drop down list and then fill in the number you would like to set the range under the "Filter..." text box.



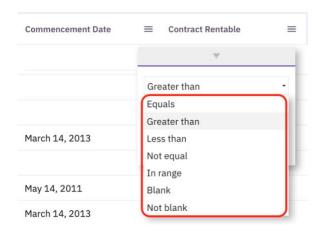
d. To create a range or set a criteria for the filter, fill in the secondary filter.



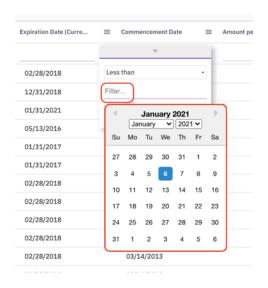
- e. To easily exit the filter window and keep the filter applied, select the filter bar
- f. **Date Filters** Function: Click on the drop down icon () to select the date range you would like to filter.



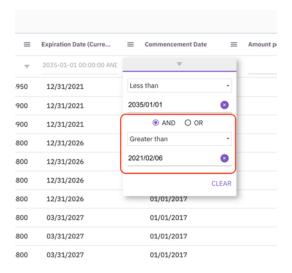
i. Select the filter option.



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

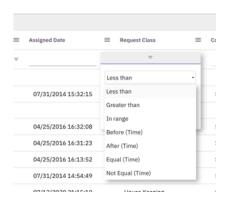


h. To create a date range or set a criterion for the filter, fill in the secondary filter.

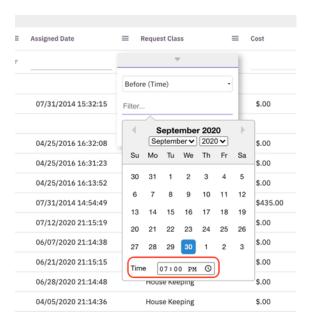


- Date/Time Filters: With Date Time fields, all the filters for Date fields are available. Additionally, there are also a set of filter options that filter on the time portion of the field.
 - i. Click on the drop down icon (*) to select the date range you would like to filter.
 - ii. Select the filter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



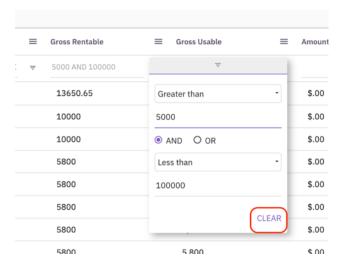
iv. Select the time you want to filter on – please note, when you choose a filter type with Time in it, it will ignore the date selected.



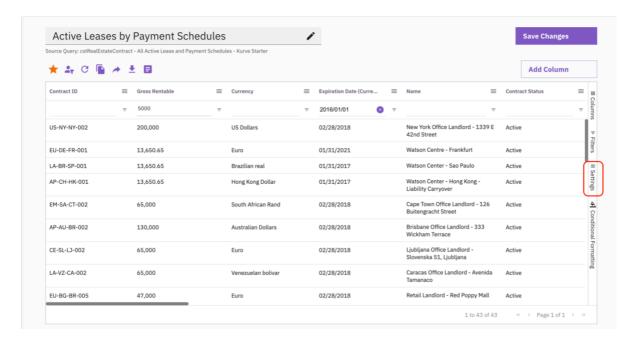
j. Clear Filters: you can easily clear the filter for one column or all columns:



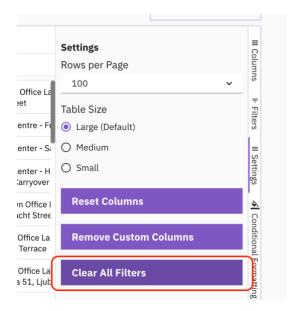
i. One Column: Navigate to the column you would like to clear the filter for. Select the filter icon and then select Clear.



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

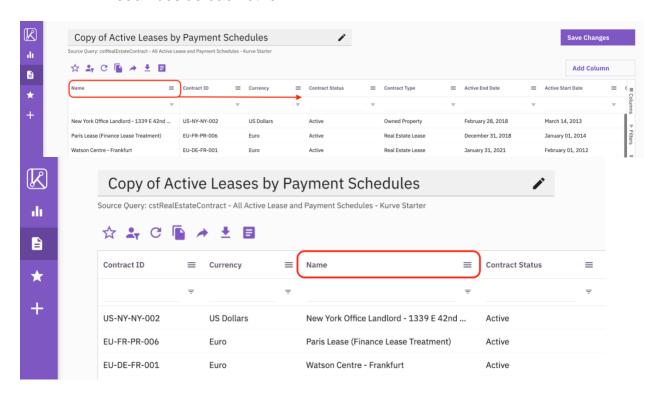


iii. Click Clear All Filters to remove all filters currently applied in the report.



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.



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



Copy of Active Leases by Payment Schedules

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

Add Column

Name

Contract ID

Corrency

Contract Status

Contract Type

Active End Date

Paris Lease (Finance Lease Treatment)

Watson Centre - Frankfurt

EU-E-FR-001

Euro

Active

Real Estate Lease

December 31, 2018

Watson Centre - Frankfurt

EU-E-FR-001

Euro

Active

Real Estate Lease

May 13, 2016

In Name

Save Changes

Add Column

Add Column

Add Column

Add Column

Add Column

Department Schedules - Kurve Starter

Contract Type

Active End Date

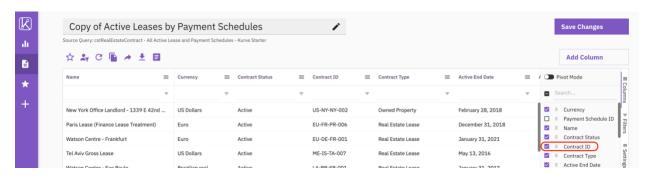
Contract ID

In Payment Schedule ID

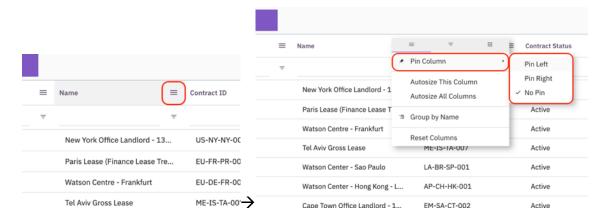
In Payment Schedu

Drag and drop it to change the column order.

The column order will then be changed instantly.

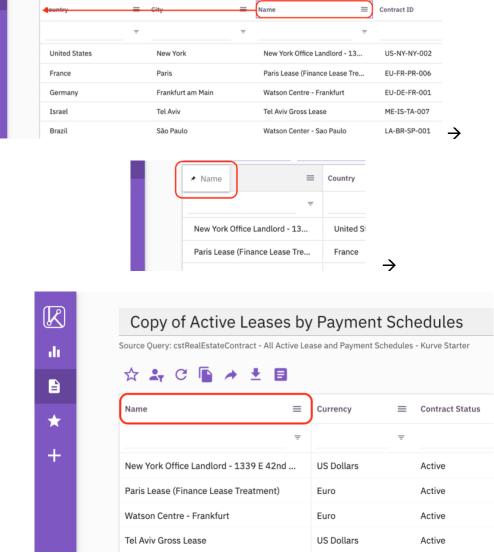


- I. Pin Columns function: There are two ways to pin a column.
 - i. **Option 1:** Click on the menu icon ([≡]) located next to the column you would like to pin. Click on the Pin Column icon. Choose if you would like to pin the column to the left or the right.

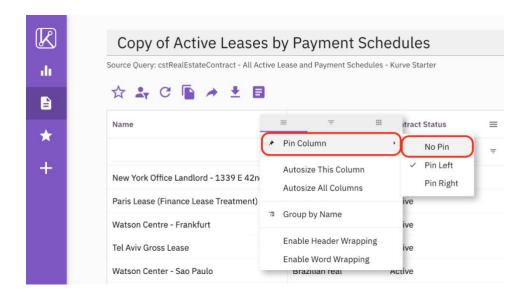


ii. **Option 2:** Click on the column header you wish to pin and drag the column all the way left side of all columns until the pin icon appears on the left side of the column. The pin icon will only appear when you click and

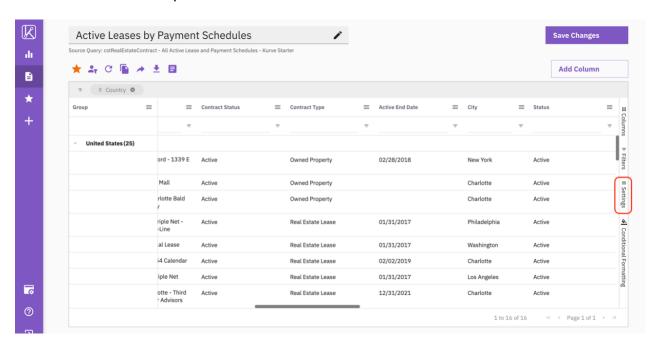




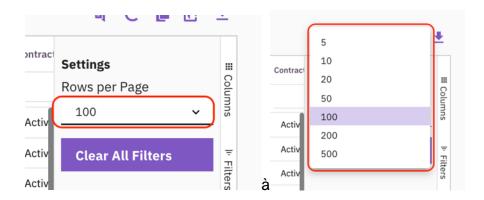
m. Removing a pin. To remove the pin click on the menu icon (\equiv), click on the Pin Column icon and select No Pin.



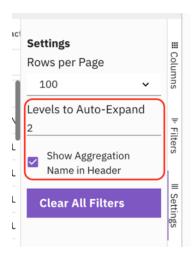
- n. Report Settings: Manage the number of Rows per Page.
 - You can easily control how many rows displayed in one page of the report. Navigate to the Settings window along the left side of the report.



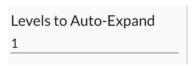
 Click into the drop-down and select the number of rows you want to display. Your report will update automatically once you have selected.



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



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



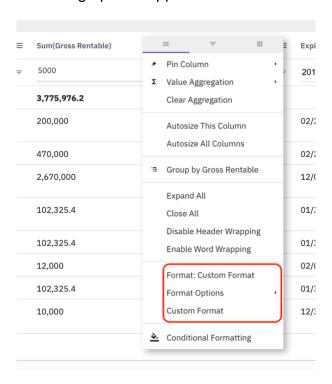
• Remove aggregation title in the name: Click the checkbox beside "Show Aggregation Name in Header"



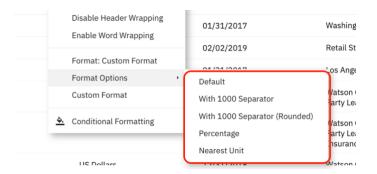
14. Formatting Number Columns

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

a. To change the format of the column, navigate to the column and click the menu icon ($^{\equiv}$). 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.



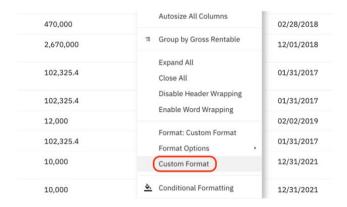
Format	Input	Output
Default	10000.56	10000.56



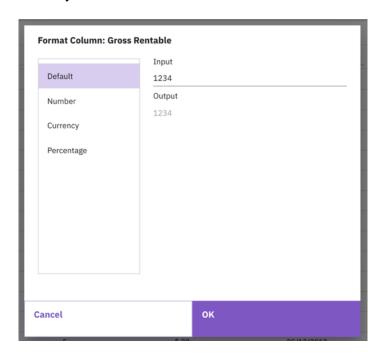
With 1000 Separator	10000.56	10,000.56
With 1000 Separator	10000.56	10,001
(Rounded)		
Percentage	1	100%
Nearest Unit	10000.56	10k

d. Custom Format:

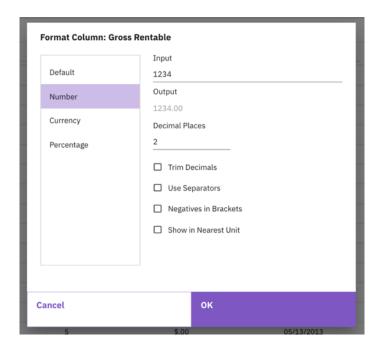
i. Select "Custom Format"



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.

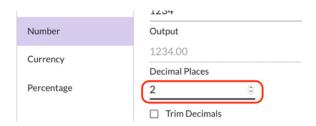


• Input: Sample Number

Output: Formatted Number

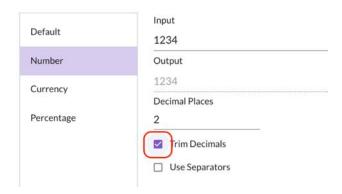
Input
1234
Output
1,234
D t I DI

 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:

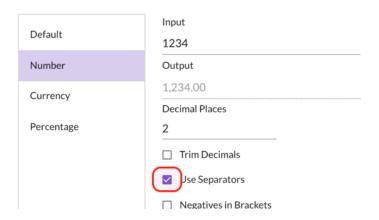
Input: 10,000.22000 Output: 10,000.22

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.

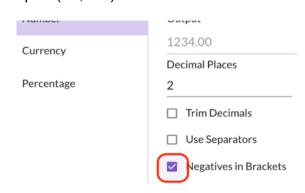
For example: Input: 100000 Output: 100,000





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

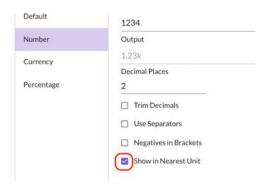
For example: Input: -10,000 Output: (10,000)



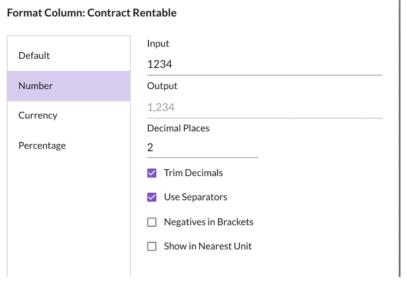
• Show in Nearest Unit: trims the number to its nearest unit.

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

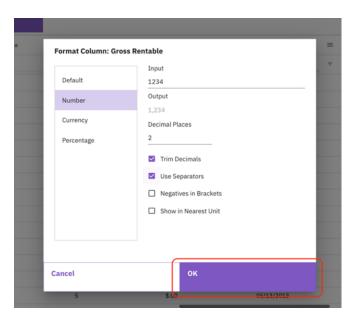
For example: Input: 1230 Output: 1.23k



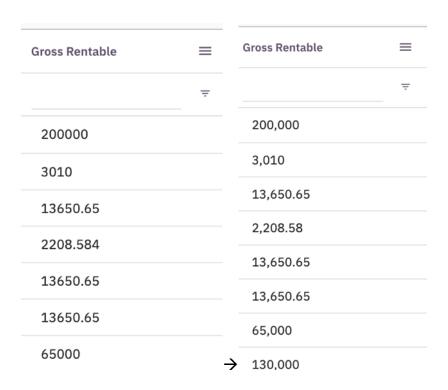
e. You can combine any of the formatting options together to get your desired output. For example, my selections below:



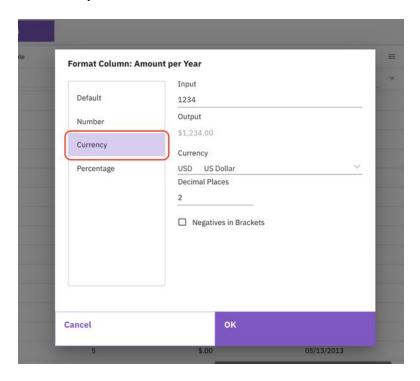
f. Once you're happy with your format selection, click OK.



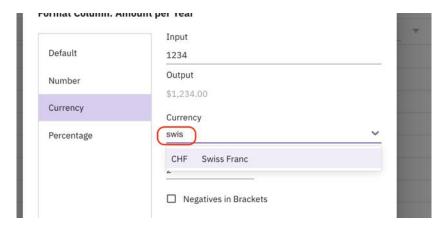
g. Your column will format accordingly (see below).



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



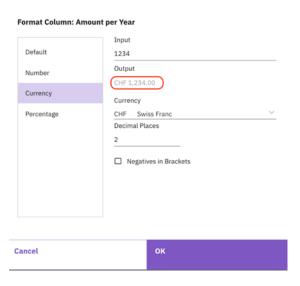
ii. Using the drop down, either scroll to select the currency or type the currency/country you are looking for



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

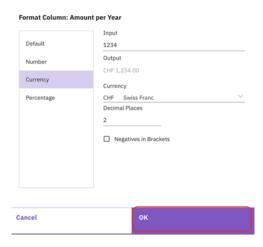


iv. The Output will update

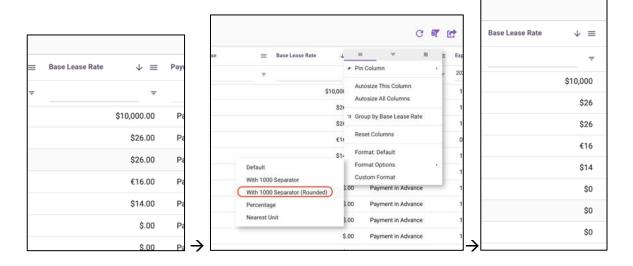


v. Click OK to apply to re-formatted number

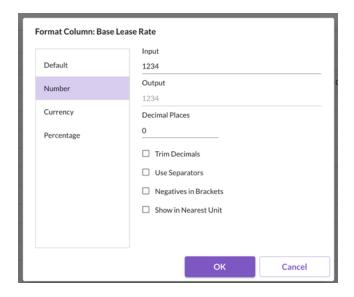




- i. Formatting for TRIRIGA Currency Fields
 - If you would like to keep the currency symbol specified in TRIRIGA, reformat your column with the "Number" option. You can use default or custom formatting
 - ii. For example, for the Base Lease Rate column (below), we have currency symbols dollars and euros.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



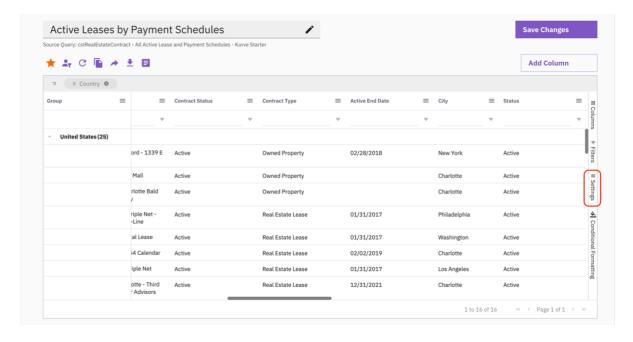
iii. OR: you can custom format as you wish using the Number window



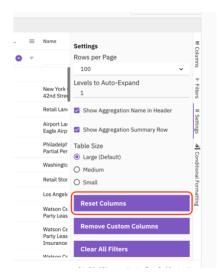
15. Reset Columns

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

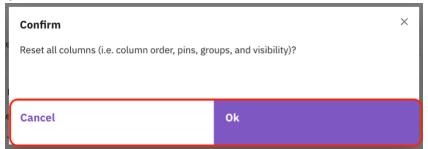
a. Navigate to Settings



b. Click Reset Columns



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

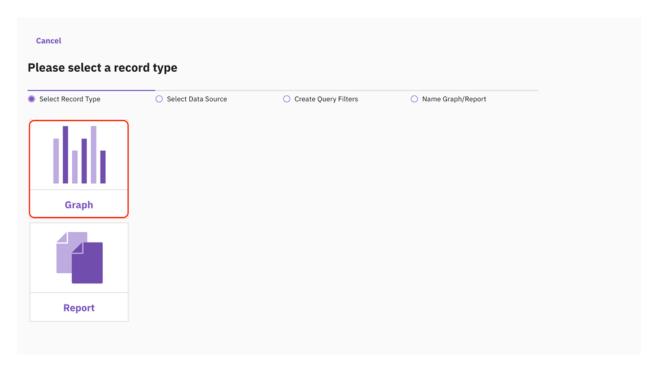


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CREATE A GRAPH

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);

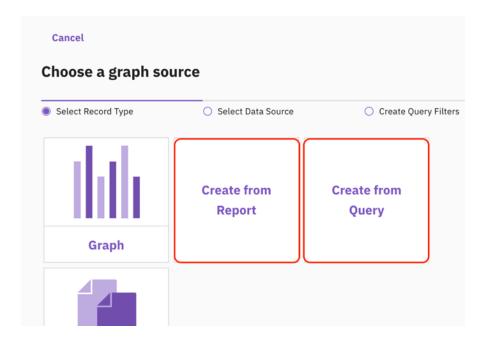


2. Creating a Graph from a Query or Report

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

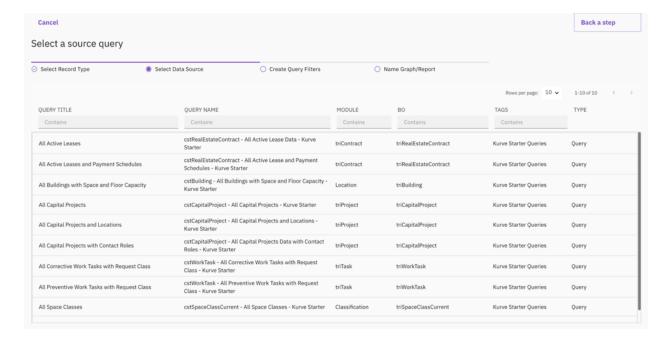
- a. Query (Section 2.a.)
- b. An Existing Report (Section 2.b.)





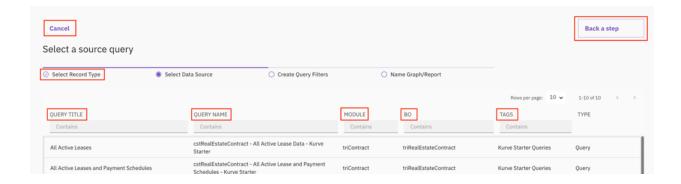
2.A. Creating a Graph from a Query

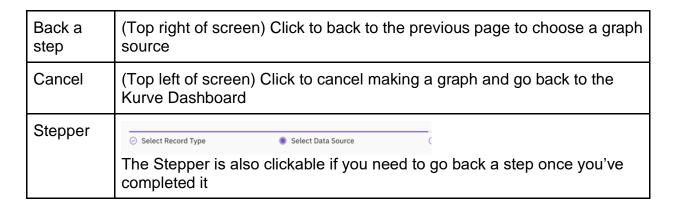
a. Click "Create from Query," and a new page will open. The list will show 10 of Kurve's pre-set starter queries to choose from.



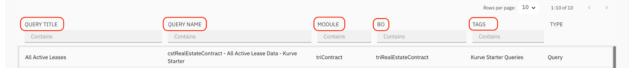
- b. Select the query you would like to use as your graph's data source:
 - i. Columns are organized in a table by *Query Title*, *Query Name*, *Module*, *BO* and *Tags*.







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*:

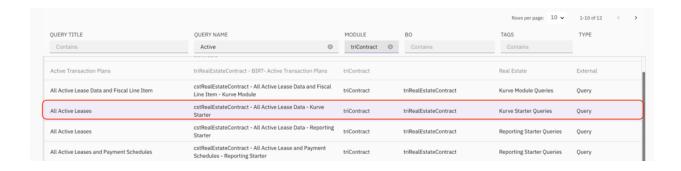


d. Click into the search field and type the word of phrase. Click the enter on your keyboard to initiate the search. In the below example, we are searching "Active" under the Query Name and "triContract" as the Module.



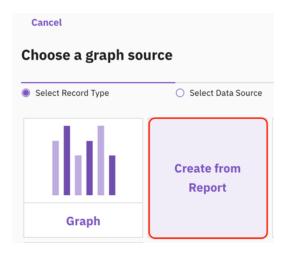
e. Scroll through the list (scroll bar on the righthand side of the table) and click on the query you would like to use to make a graph;



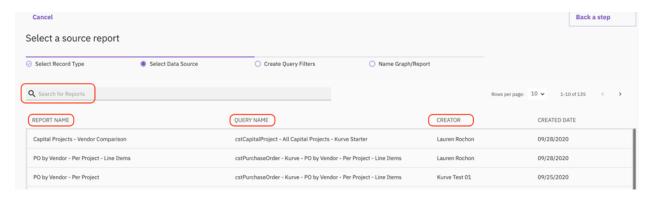


2.B. Creating a Graph from a Kurve Report

a. Select Create from Report

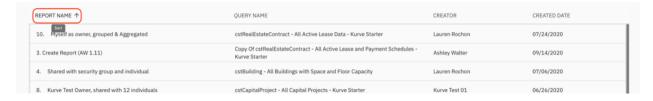


b. Search for the Report you would like to use as your graph's data source. Columns are organized in a table by *Report Name*, *Query Title* and *Creator*.

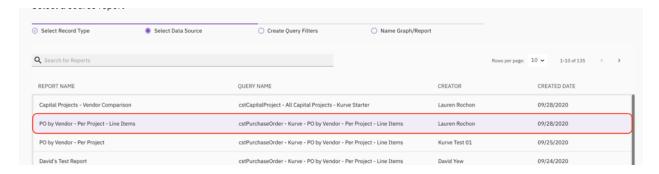


c. Click on any of the headers to sort them. Click once for ascending, twice for descending, and a third time to clear the sort.



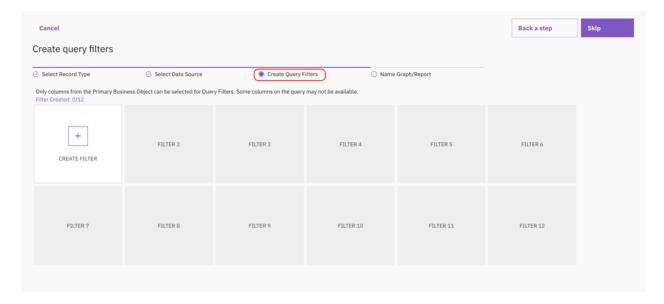


d. Select the Kurve Report you would like to use as your data source.



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

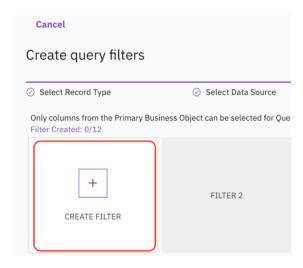


Below is the list of column types and filter types available:

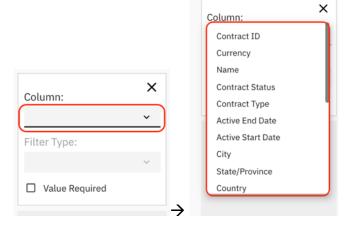
Column Type	Filter Type	"Add/View Values" list applicable?
Text Column	Equals	Yes:
	Not Equals	
	Contains	Equals
	Does Not Contain	Not Equals
	Starts With	ln North
	Ends With	Not In
	In Note to	
NII	Not In	NI.
Number	Equals	No
Column	Not Equals	
	More Than or Equals	
	More Than	
	Less Than or Equals Less Than	
Date Column	Before	No
Date Column	After	INO
	Equals	
	Not Equals	
	More Than or Equals	
	Less Than or Equals	
DateTime	Before	No
Column	After	
Column	Equals	
	Not Equals	
	More Than or Equals	
	Less Than or Equals	

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

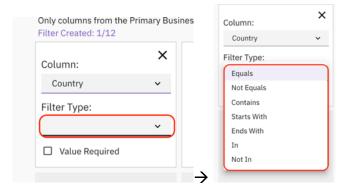




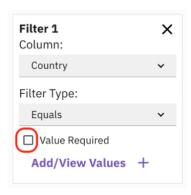
b. Next, select the column from the query that you would like to have a filter



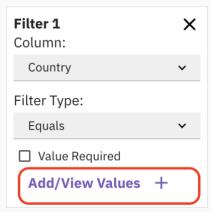
c. Now, select the filter type:



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

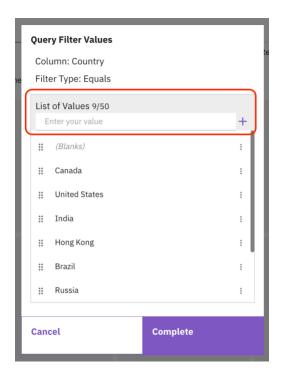


- e. Creating "Add/View Values" for text columns with Filter Types Equals, Not Equals, In and Not In:
 - In this example we will use the filter type Equals. Click "Add/View Values" button under "Value Required"

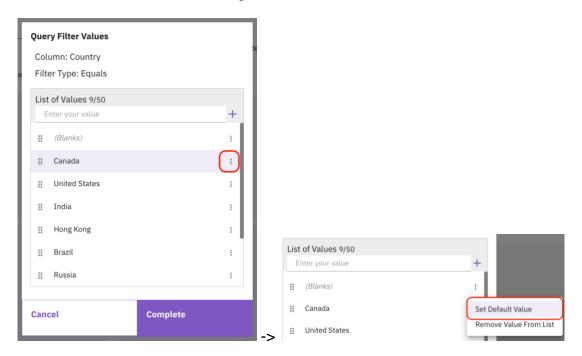


• Type in the desired list of values in the List of Values box then press enter or the (+) icon.

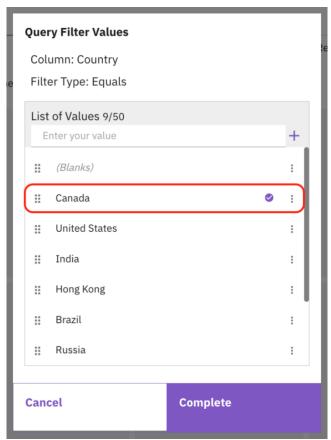
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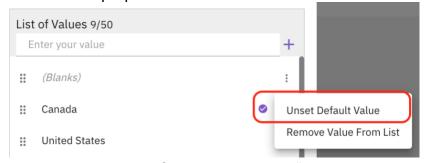
- Once you are finished your list, click "Complete" to save.
- If you would like to set one of your values as a default value click the icon to the right of the value.



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

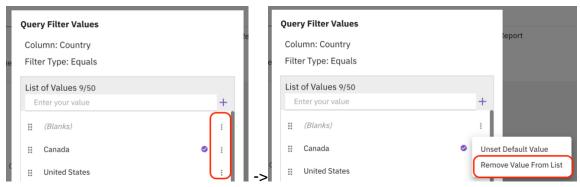


• To unset a default value, click "Unset Default Value" in the icon beside the purple checkmark.

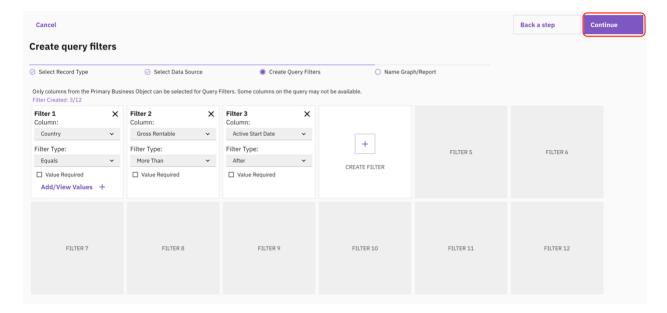


 To remove a value from your list, click "Remove Value From List" in the icon beside your value.



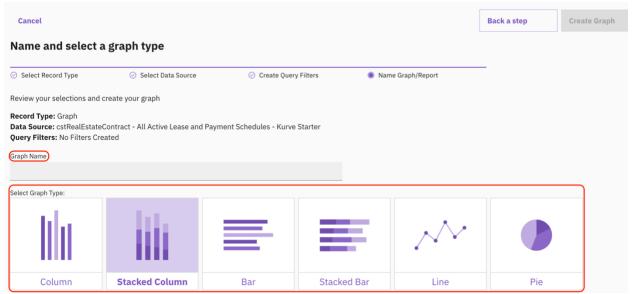


- Once you are satisfied with your list, click "Complete".
- f. You can continue making more filters using the same process. Once done creating them, click Continue.



4. Naming the Graph and selecting the Graph Type

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



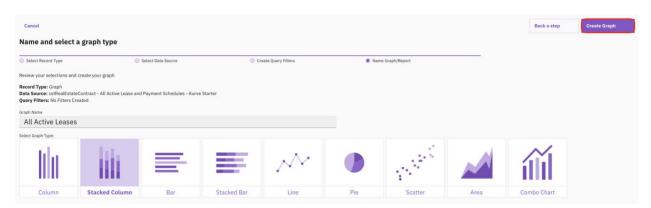
b. Input your graph name



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:

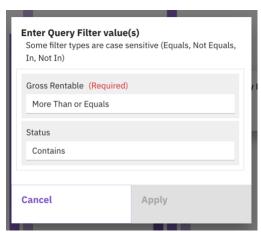
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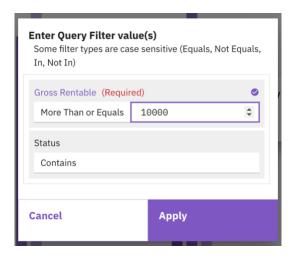
	Column	Used to compare different groups and their quantitative values (e.g Total Cost of Rent by Building). Each column can be colored by a different dimension. You could also use count of records as your quantitative value or measure.
	Stacked Column	Used to compare different groups and their quantitative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

5. Enter Query Filter value(s)

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

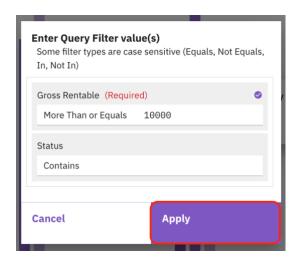


ii. Input a value in the white box next to the filter type. Below we have inputted 10,000. You will notice the apply button turns purple upon providing a value. (Please note, some text values are case sensitive)

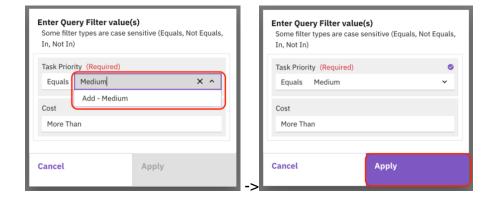


iii. Click Apply.

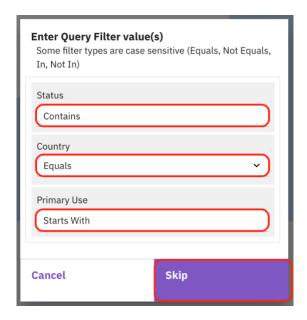




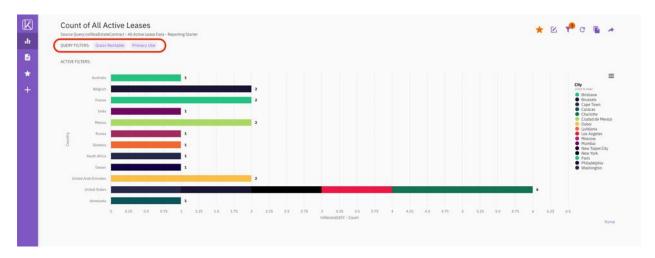
- b. For your filters with lists created, for Equals/Not Equals you can select 1 value, for In/Not In you can select multiple. Either select a value from the list or enter a temporary value in the box.
 - i. To enter a temporary value, input the text, and click 'Add'
 - ii. Click Apply to load the report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



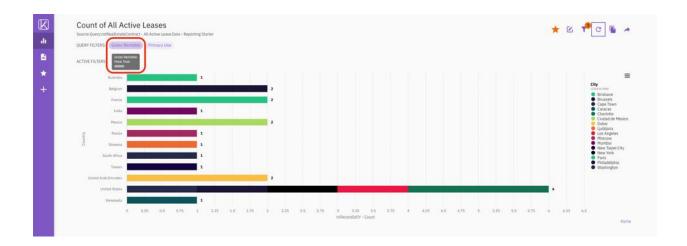
c. Non-required filters: you are not required to input a value for filters that aren't specified as required. Either enter a value and click Apply, or simply click "Skip" to load all query results.



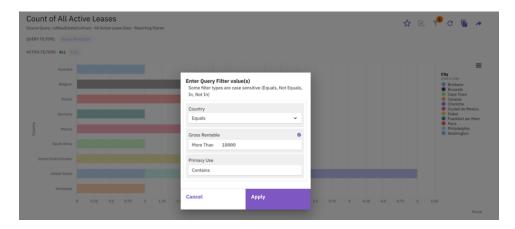
- i. Cancel: clicking cancel will return you back to the list of graphs and lose any of your selections from previous pages.
- d. View Query Filters Applied to Graph:
 - . Under the graph title, you can view all query filter values currently applied to the graph.



ii. Hover over the filter to see the value.



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



6. Selecting the Graph Settings

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

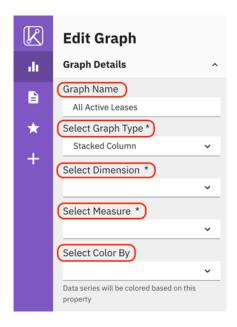
Open a drawer by clicking on the header.



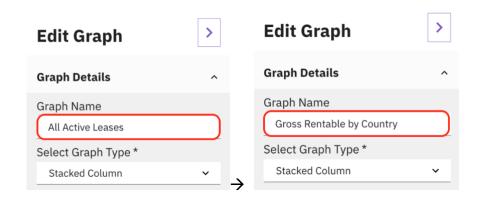


a. Graph Details

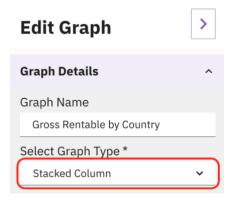
Note: The Graph Name and Graph Type have been pre-populated based on your earlier selections, but they can still be changed. When creating a graph, the Graph Details drawer will auto open.



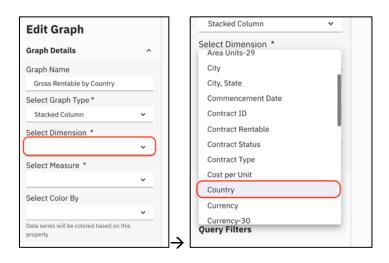
i. **Graph Name:** to rename your graph, click into the white box under Graph Name and type your desired name.



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

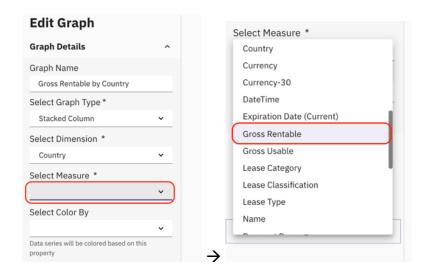


iii. **Select Dimension:** Click the drop-down menu (▼) to select the Dimension field from the fields within the query/report

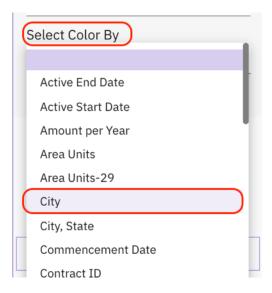


iv. **Select Measure:** Click the drop-down menu (▼) to select the Measure field from the fields within the query/report

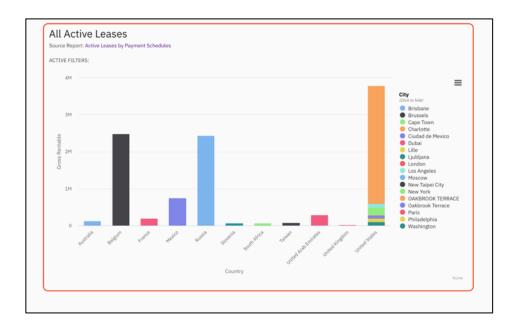




v. **Select Color By:** Click the drop-down menu (▼) to select a field that will colour the data set

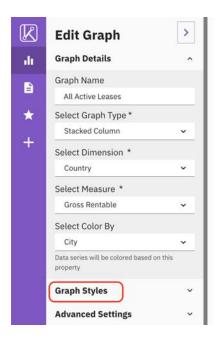


vi. **Graph Preview:** As you make your selections, you can see the preview of the graph to the right

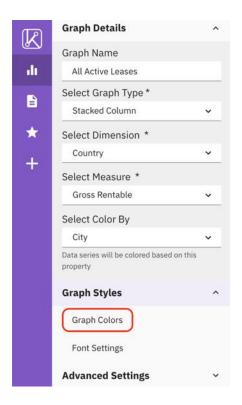


b. Graph Styles: Graph Colors

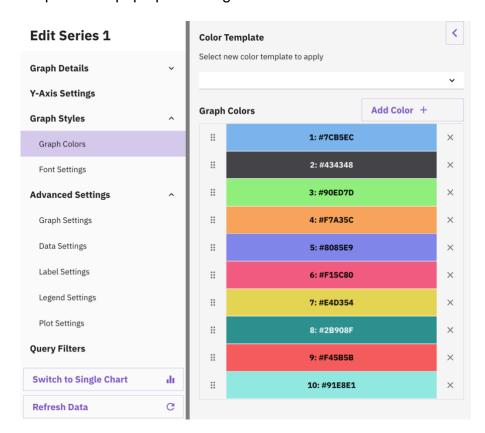
You can easily adjust the colors used in your graph and font settings.



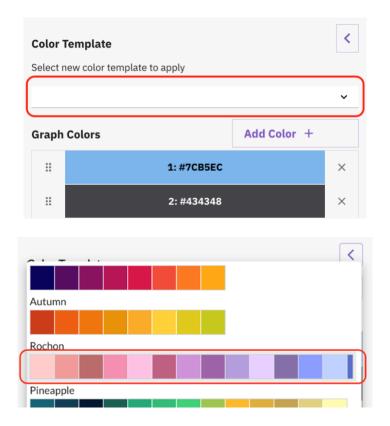
i. Graph Colors: Select the Graph Colors drawer.



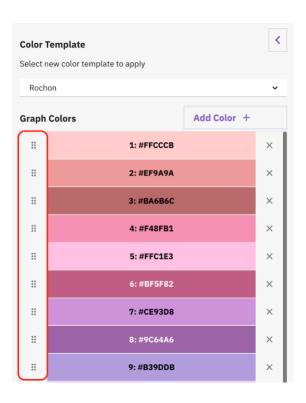
ii. A panel will pop up to the right.



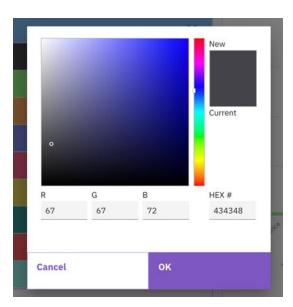
iii. Select a color template by clicking the drop-down menu (▼) under Color Template. Then select a color template from a the list of color templates.



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



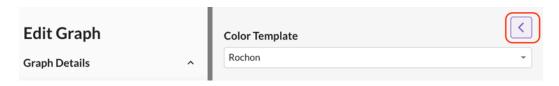
v. Select a color to change the color using the Color Picker, or input an RGB or Hex Code (#) in the appropriate boxes



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

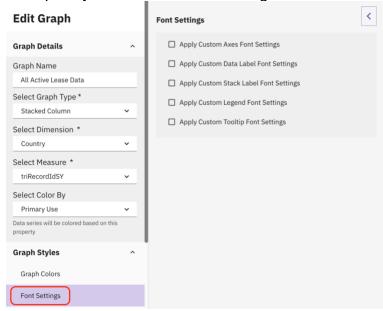


vii. To close the Graph Colors side panel, click on the back icon (). It will auto close if you select other drawers

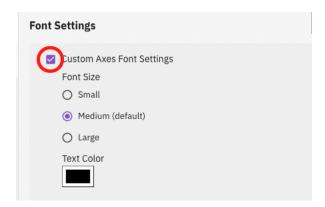


c. Graph Styles: Font Settings

i. Click Graph Styles and then Font Settings



- ii. Customize Axes Font Settings
 - Select the checkbox to enable changes to be made



• Under Font Size, select your desired font size

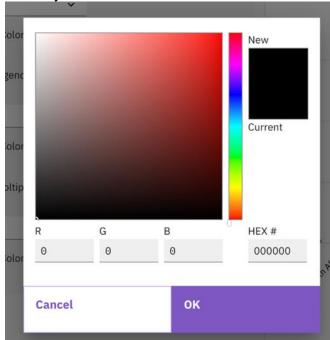




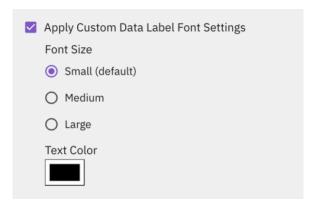
 To adjust the text color, select the color box to open the color picker



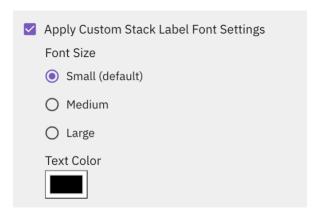
Select your desired color and click OK



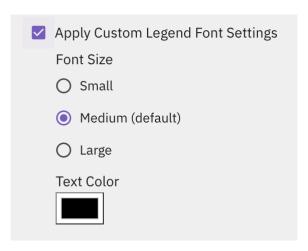
iii. Customize Data Label Font Settings: repeat the process above under the Data Label Font Settings checkbox



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

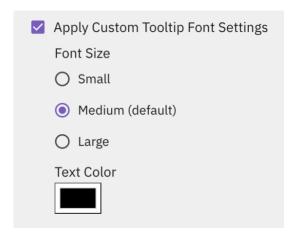


v. Customize Legend Font Settings: repeat the process above under the Legend Font Settings checkbox



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

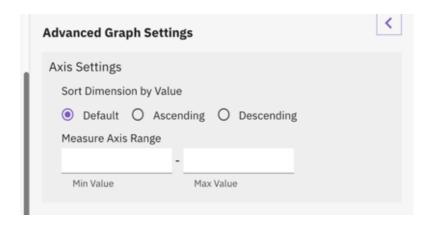


d. Advanced Settings: Graph Settings

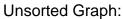
i. Click 'Advanced Settings' to open the drawer, and then click 'Graph Settings' to open the panel to the right

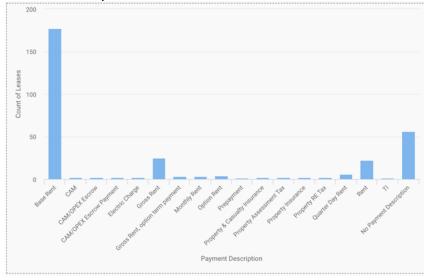


ii. Axis Settings



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

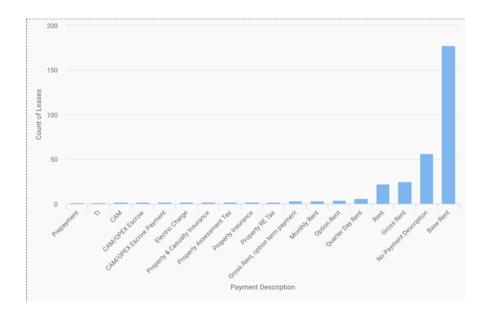




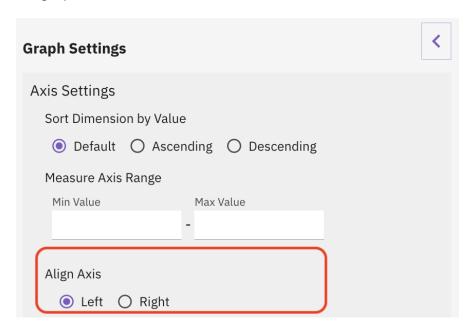
Graph sorted Ascending:

169

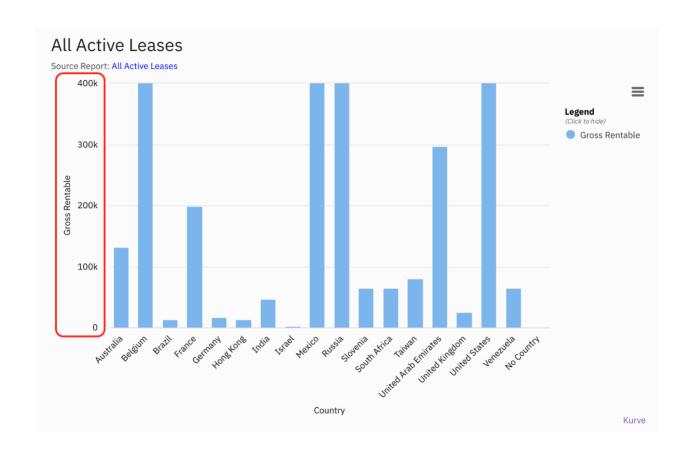




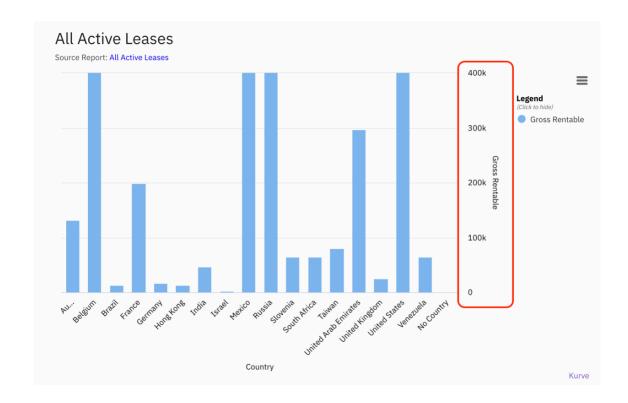
- *Measure Axis Range:* Set the minimum and maximum of the measure's axis.
- Align Axis: Set the measure axis to the left/right or bottom/top of the graph.



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



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



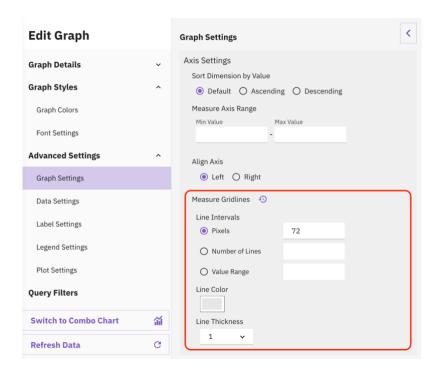
For Stacked Bar and Bar graph the axis will align to the bottom.



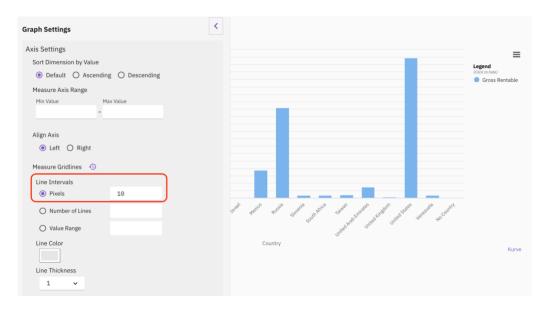
• For Stacked Bar and Bar graph the axis will align to the top.



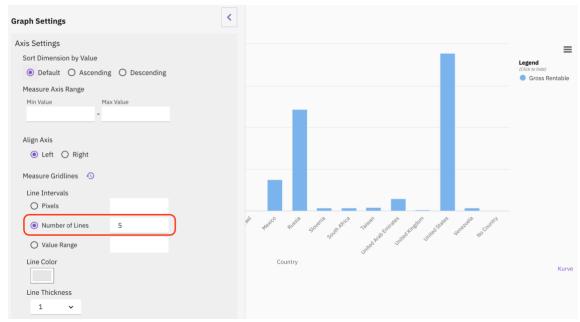
e. **Customize Measure Gridline Settings:** adjust the gridlines that appear on the measure axis.



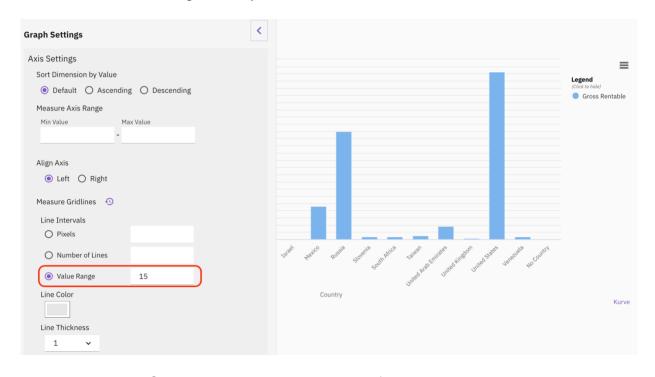
- Line Intervals: There are three types of intervals you can choose between to edit your gridline display:
 - Pixels: defines the gridline interval or gap between each gridline by pixels. The default setting is 72 for the measure gridline.



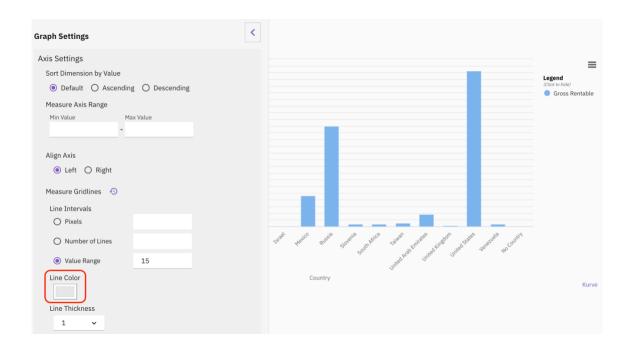
 Number of Lines: defines the number of gridlines added. The maximum number of lines that can be added is 99.



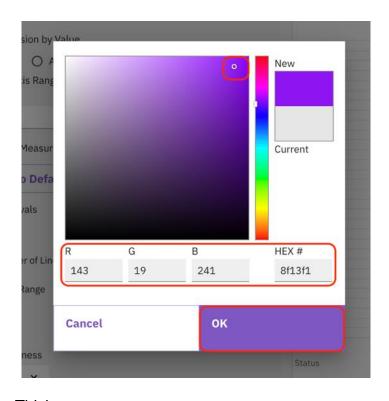
 Value Range: defines the gridline interval or gap between each gridline by number.



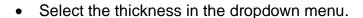
- ii. Line Color: you can adjust the color of the gridlines applied to the graph
 - Select the colored box.

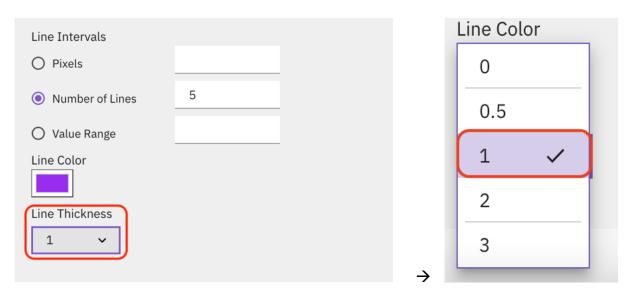


 Choose the desired color using the color picker, or enter the RGB/HEX code, and click OK.

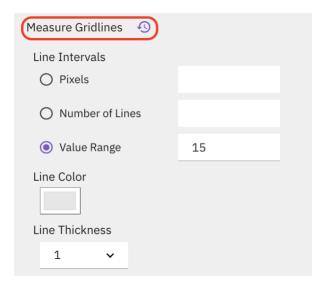


iii. Line Thickness

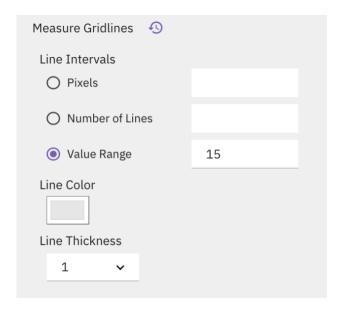




- iv. Reset to Default
 - To reset your gridline settings, click the reset icon ($^{\odot}$).



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



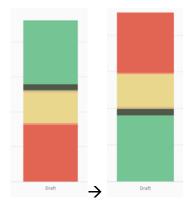
 Example: a graph with both gridline settings adjusted will look like this:



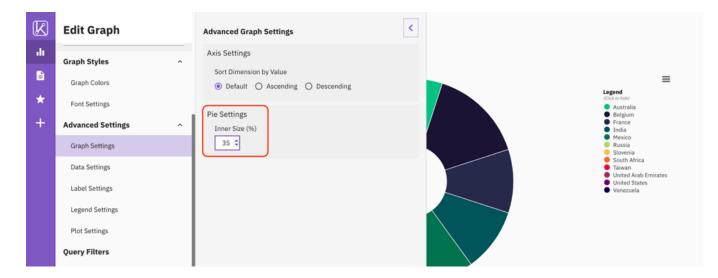
vi. Stacking Settings

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

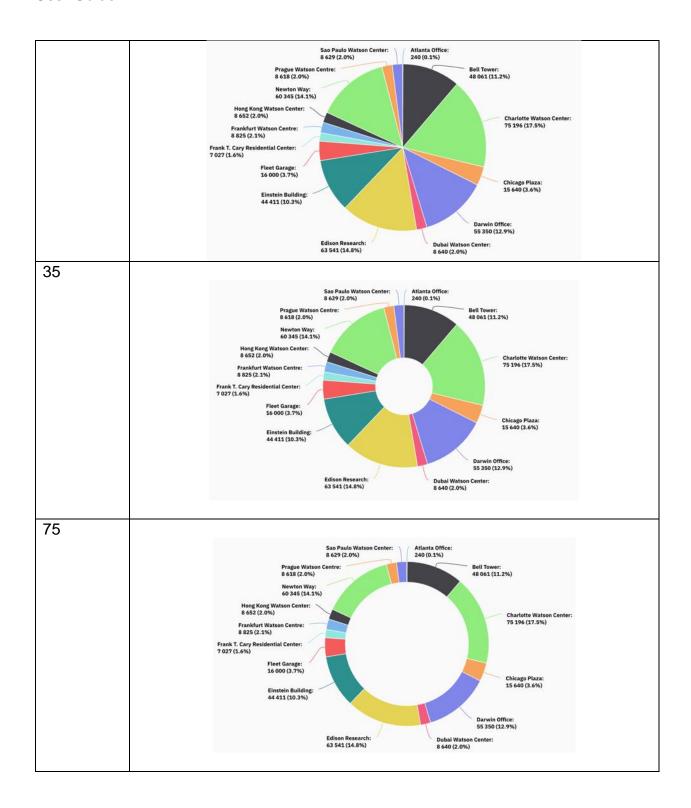




- Percentage Stacking: expands each bar/column to fill the entire range of the graph. This type of graph shows the relative contribution of each part to the whole, rather than the raw numerical values.
- vii. **Pie Settings**: Adjust the inner size of your pie chart convert it to a donut like graph with a hole in the middle
 - Input a number to define the size of the inner hole:



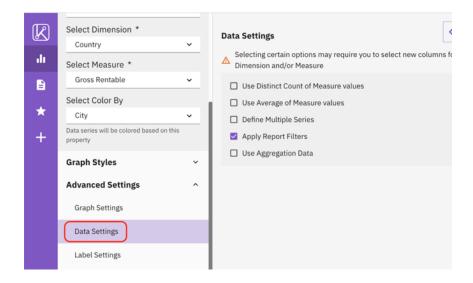
Inner Size	Example Graph
0	



f. Advanced Settings: Data Settings

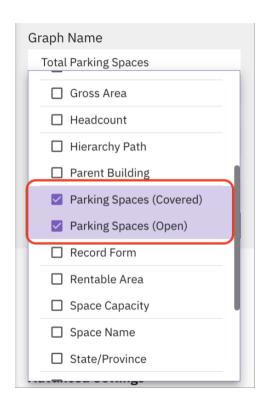
i. Click Advanced Settings and then Data Settings:





- ii. Use Distinct Count of Measure values: use a distinct count of measure values. This will change the values to count the measure value rather than show a sum.
- iii. Use Average of Measure values: calculate the average of the measure value. This will change the values graphed to the average measure value rather than a sum or count.
- iv. Define Multiple Series: create a graph with multiple measure values from the same record.
 - I. Select "Define Multiple Series". This will auto option Graph Details, if it does not, simply click Graph Details to open it up. (Note: You will need to reselect your measure values!)
 - II. Select your Dimension (x-axis).
 - III. Select your Measure Columns you can select up to 10. In this example I have selected Parking Spaces (Covered) and Parking Spaces (Open).





IV. Preview the graph results. Click 'Save Changes' once you are ready to publish the graph.

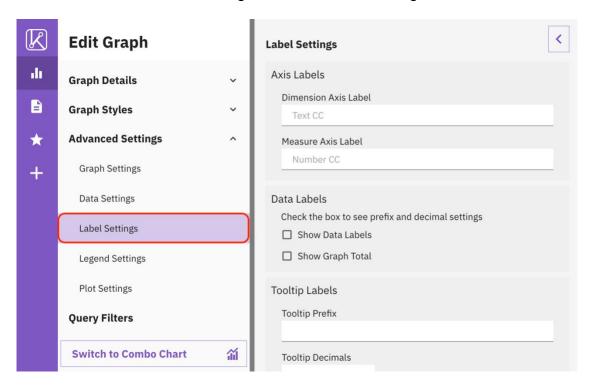


- v. Apply Report Filters (Report Graphs Only): Checked by default, uncheck to ignore the filters on the source report
- vi. Use Aggregation Data (Aggregation Report Graphs Only): Checked by default, uncheck to use non-aggregated data from the source report

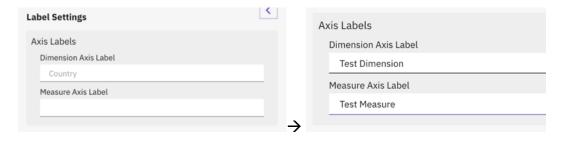


g. Advanced Settings: Label Settings

i. Click Advanced Settings and then Label Settings:



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

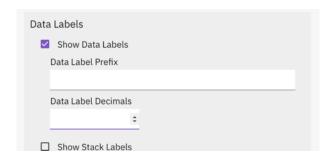




iii. Data Labels: enable a label option by clicking on the box next to it.

Data Labels		
	Show Data Labels	
	Show Stack Labels	
	Show Graph Total	

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



Without Data Labels:



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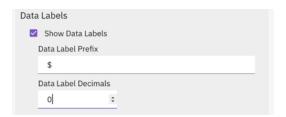


With Data Labels:

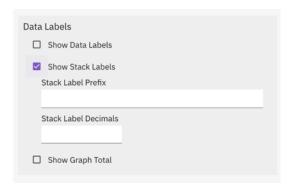


Data Label Prefix: input a symbol to add it to the beginning of your data label (e.g. \$)

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:

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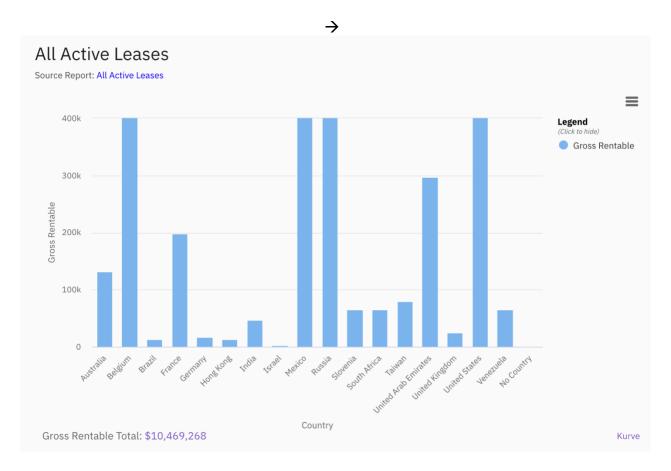


Stack Label Prefix: input a symbol to add it to the beginning of your stack label (e.g. \$)

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

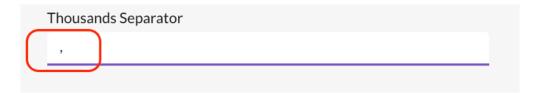
 Show Graph Total: enable this option to display the total of all of your measure values.
 Example:





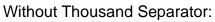
- iv. Tooltip Labels: Format your tooltip labels here:
 - Tooltip Prefix: input a symbol to add it to the beginning of your tooltip label
 - Tooltip Decimal: this will round your number according to how many decimals you input
- v. Thousands Separator: if you would like to use a symbol other than a space 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:



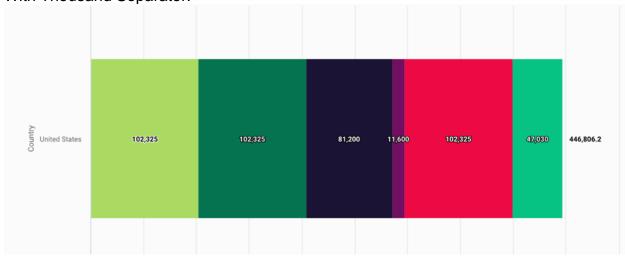
This changes the label format.



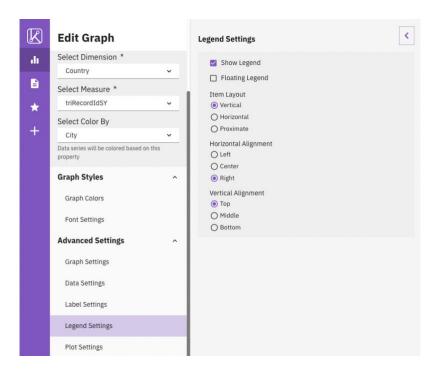




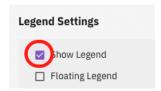
With Thousand Separator:



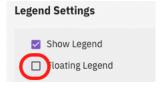
h. Legend Settings



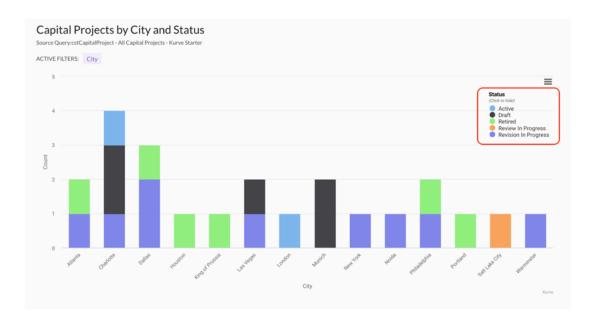
i. Show Legend: Checked by default, uncheck to hide legend



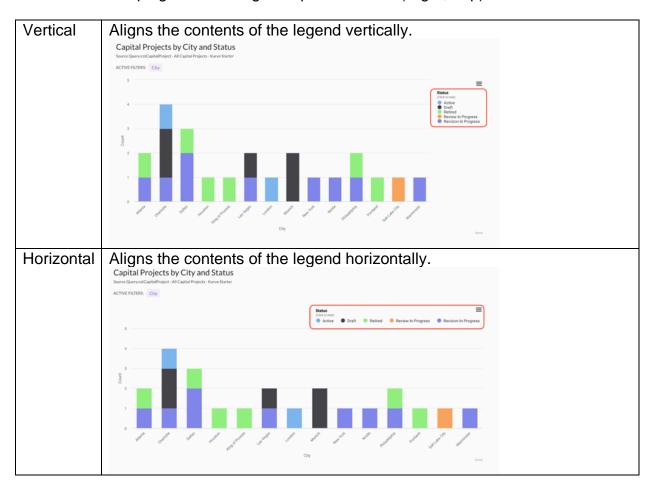
ii. Floating Legend: Check to put the legend location within the confines of the graph.

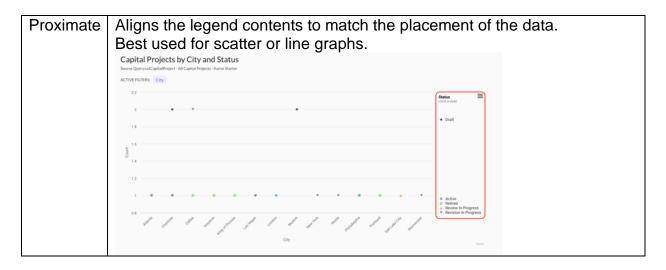


 Note: this option could cause your legend to overlay on top of graph segments

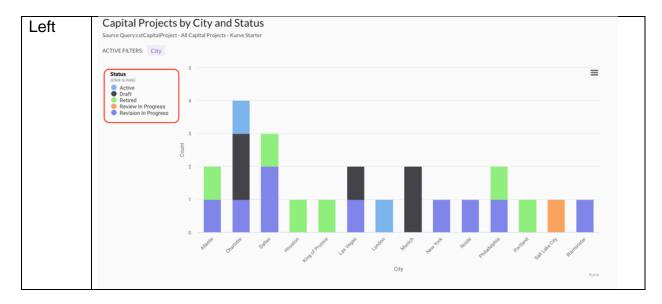


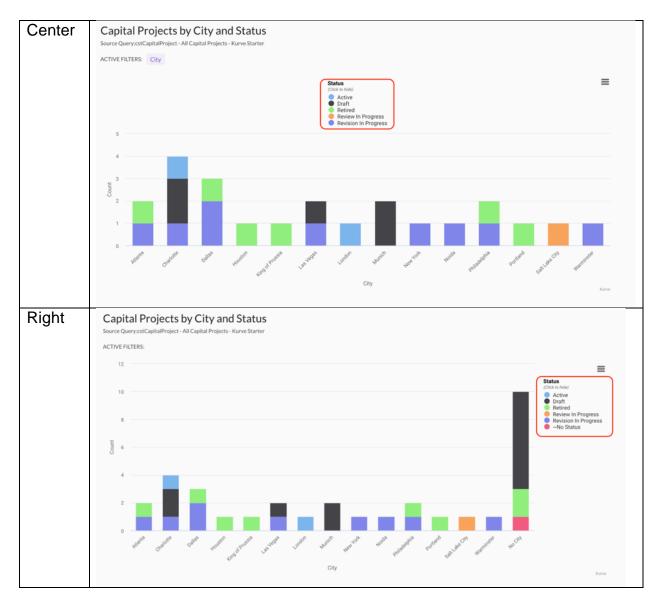
iii. Item Layout: the following shows adjusting the item layout placement while keeping the other legend options default (Right, Top)





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

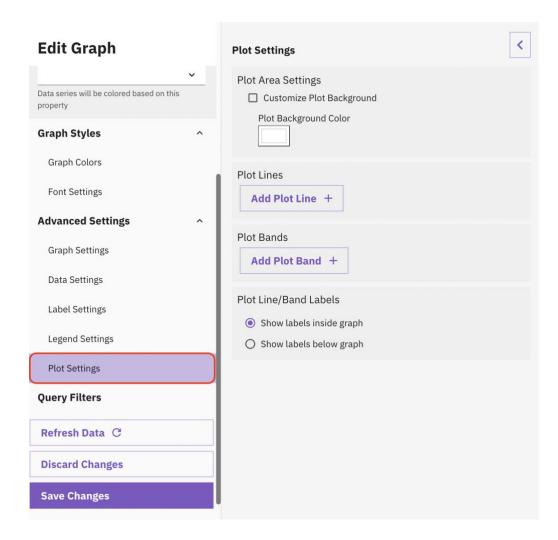




v. Vertical Alignment: the following show what the legend placement will look like adjusting vertically while keeping the other options default (Vertical, Right)

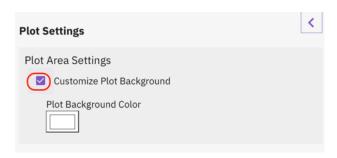


- i. Plot Settings: Adjust Plot Background Color and Add Plot Lines/Bands
 - Select Plot Settings under Advanced Settings to open the drawer.



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

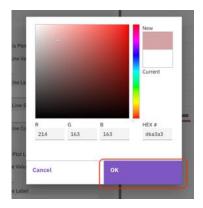




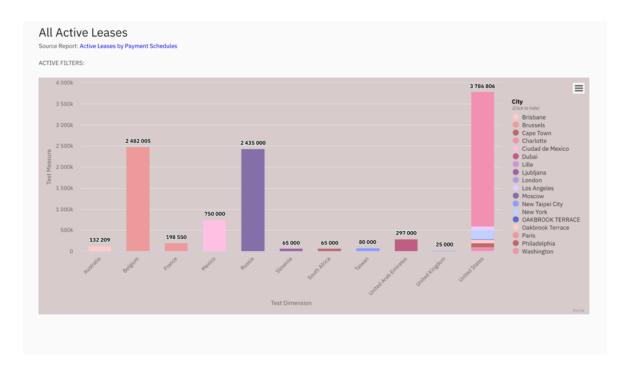
 Under Plot Background Color, select the color box to open the color picker.



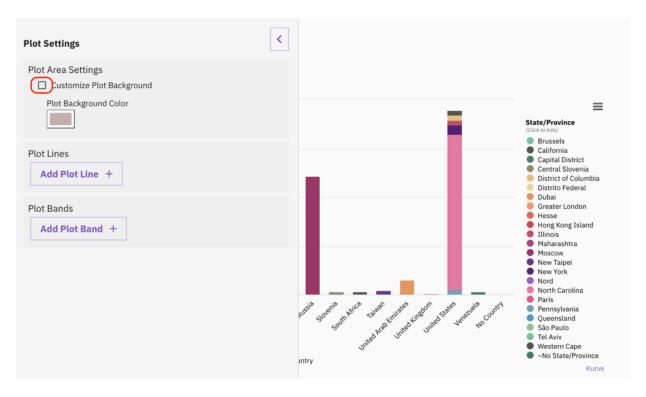
• Edit the color then click Ok.



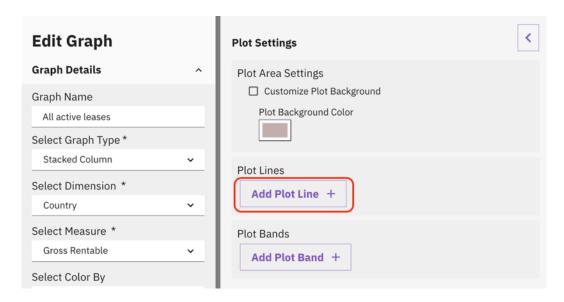
• The Plot Background color will update



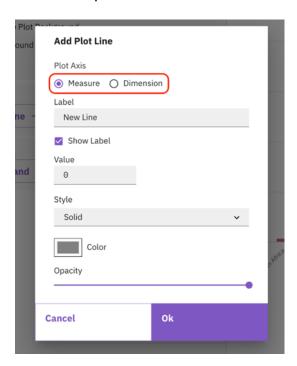
 To reset the background to default, deselect Customize Plot Background checkbox.



- iii. Plot Lines: Add static plots lines along the x- and y-axis to mark a threshold on a graph.
 - Select "Add Plot Lines"

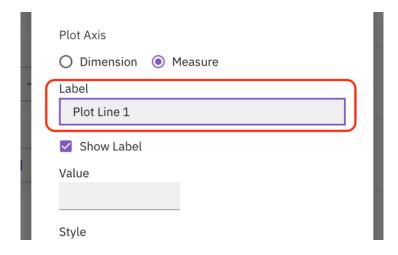


 Select whether you want to add a plot line along your dimension axis or your measure axis. The Dimension plot line refers to the number of data points on the dimension.

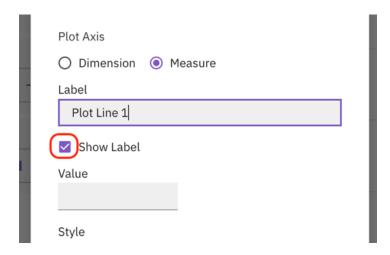


· Label: title the plot line within the graph

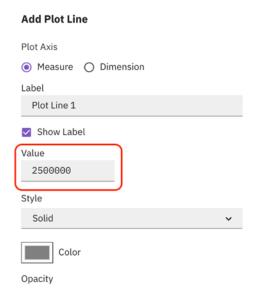




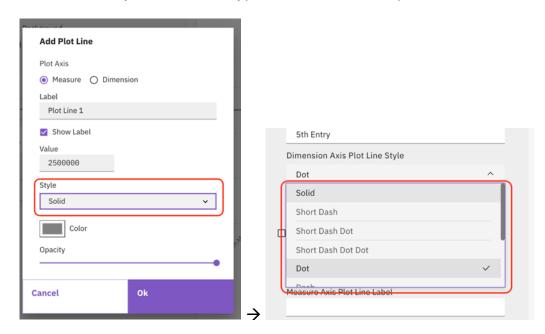
 Define whether you want to show the label on your graph – default will add it to the graph



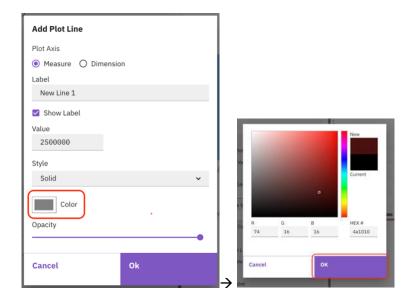
 Value: this controls where the line is placed. Enter a numerical value.



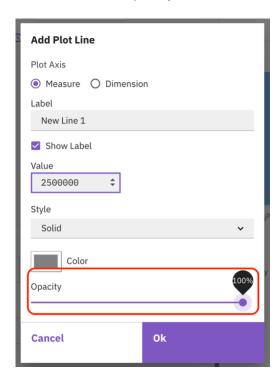
Style: control the type of line used in the plot area



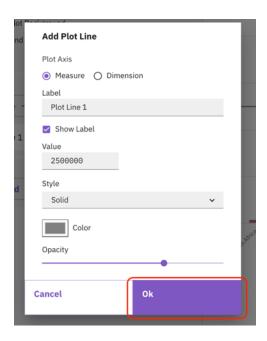
Dimension Axis Plot Line Color: adjust the color of the plot line.
 Click into the color box to open the color picker. Click Ok once you have your desired color.



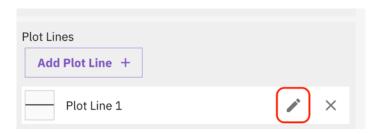
• Opacity: Define the level of transparency of the line using the slider. Default is set to max opacity.



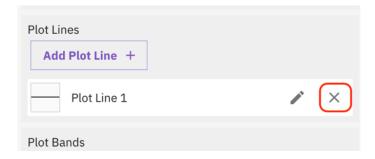
Click OK once you are ready to add your plot line to your graph.



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



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

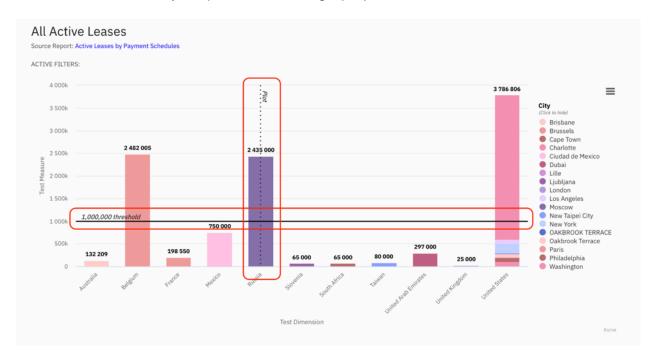


Note 1: Plot lines on the dimension axis will be most useful for Scatter graphs, or graphs where the dimension is numerical. For graphs where the dimension is separated into categories, the plot line will be placed at the *n*-th category on the axis, starting at 0. For

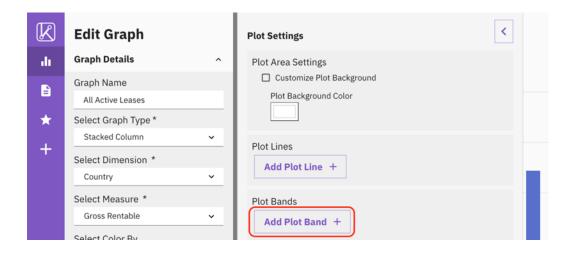
example, a dimension plot line with a value of 3 will appear on the 4th category on the axis.

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

View your plot lines in the graph preview



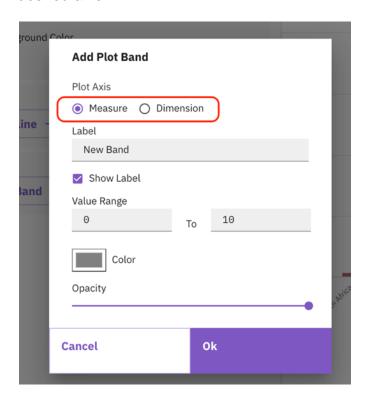
- iv. Plot Bands: The Chart plot bands allow you to highlight a specific range of an axis.
 - Click Add Plot Band



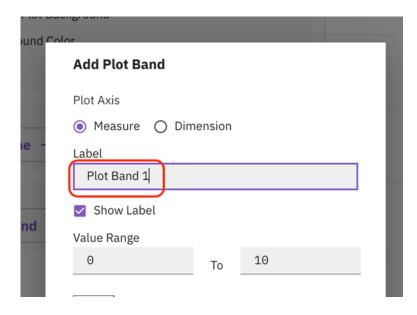




 Define whether you want to add your plot band along the Dimension Axis or Measure Axis by selecting the radio button of the desired axis.

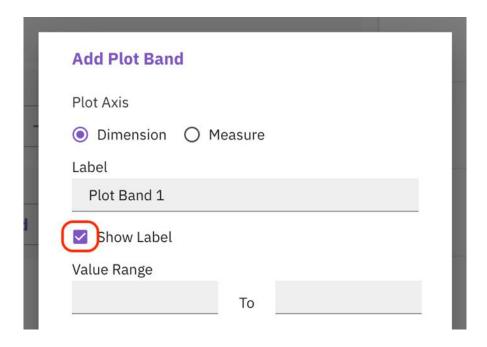


Label your Plot Band

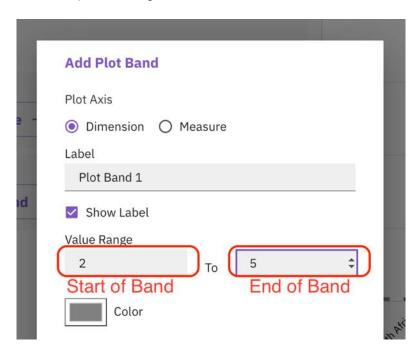


 Default your label will show in the graph. If you would like to disable it, deselect the Show Label checkbox

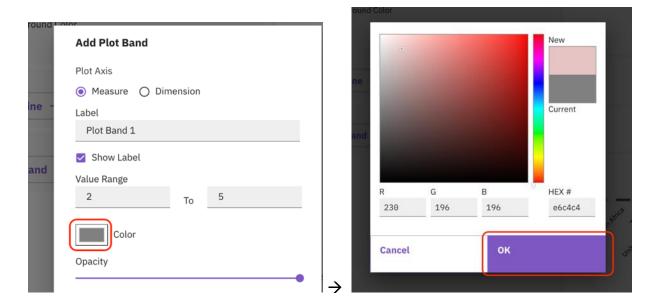




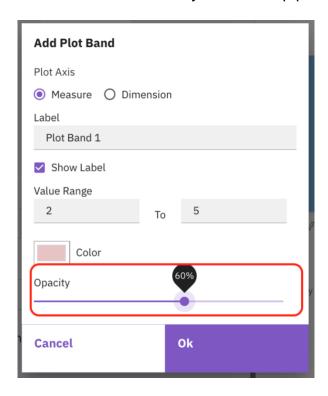
 Define your plot band range. Put the lower number (where the band starts) in the first box and the maximum number (where the band ends) on the right box.



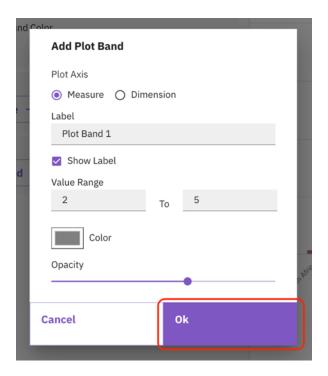
Adjust the color: select the color box to open up a color picker.
 Select your color and then click OK



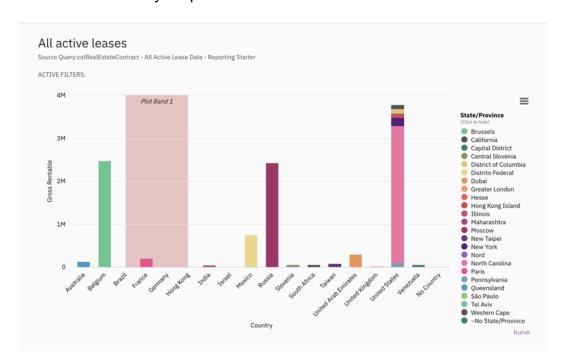
 Opacity: Define the level of transparency of the band using the slider. This features allows you to overlap plot bands easily.



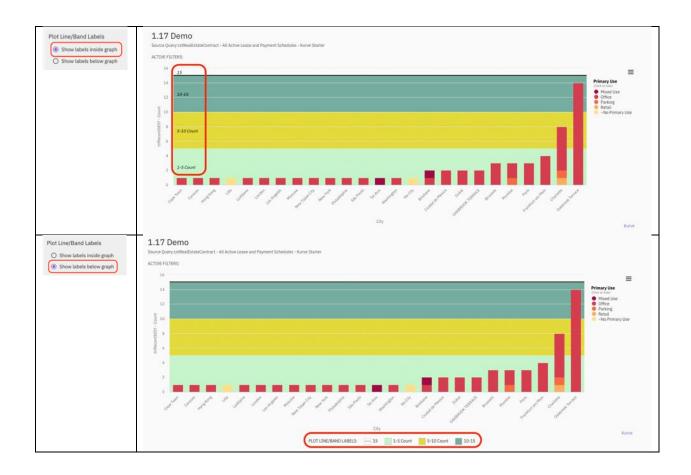
• Click OK to add the plot band to your graph



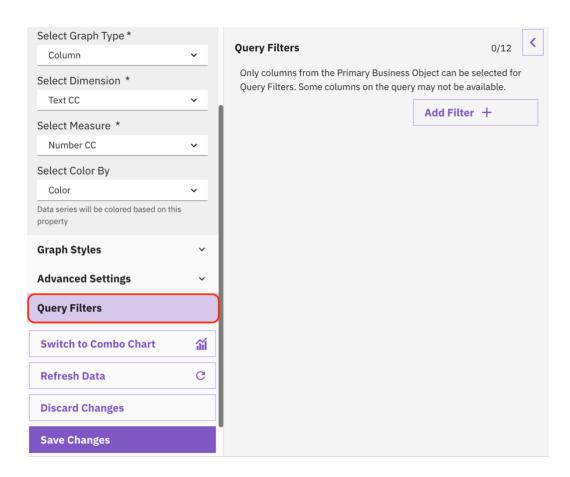
View your plot band



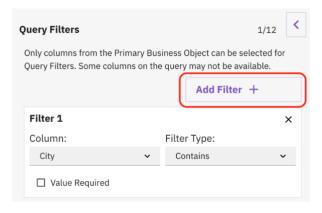
- v. Plot Line/Band Labels: Show the label name inside or below the graph
 - The default setting displays the labels inside the graph



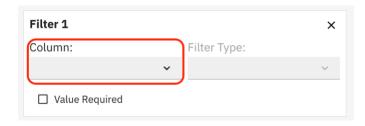
j. Query Filters: Easily add or edit query filters by clicking on the Query Filter button. Query Filters can be added to any field on the Primary BO. Query Filters will prompt before loading the report to reduce the results you would like to load from the query.



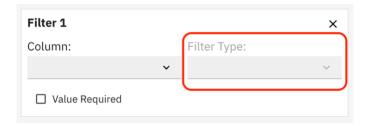
 A panel will appear to the right. It will be pre-populated with any you made during the creation of your graph. To add a new one, click 'Create Filter.'



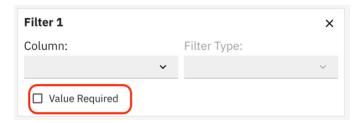
ii. Select the source column



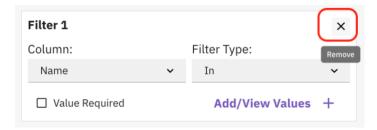
iii. Select your Filter Type. The options will change depending on the field type (i.e. Text, Number or Date)



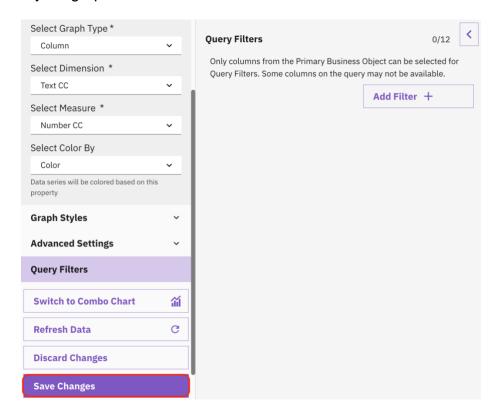
iv. Select whether you would like to make this value required before loading the graph. This means the user will need to input a filter value before they can load the graph. If it is not required, they have the choice to fill it in or skip it.



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



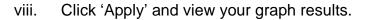
vi. You can add up to 12 query filters by clicking 'Create Filter'. Once you are happy with your selections you can 'Save Changes' or continue editing your graph.

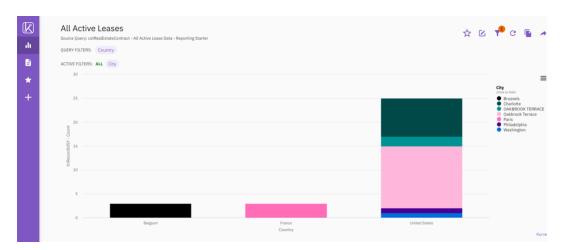


vii. Upon clicking 'Save and Close', your query filter will prompt before viewing the graph. The 'In' filter allows you to filter and select multiple text values. For example, let's load this graph for United States, Belgium, and France.

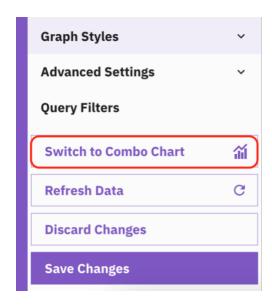


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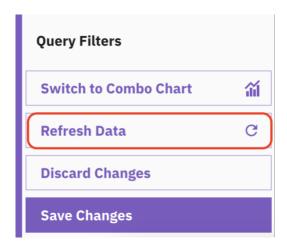




k. **Switch to Combo Chart:** This allows you to visualize multiple measure values/series in one single graph. Refer to <u>Section 7:</u> How to create and customize a Combo Chart Graph.



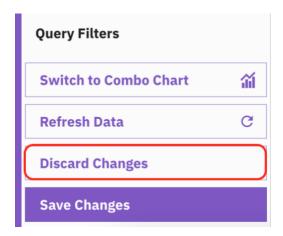
- I. **Refresh Data**: This allows you to edit the values you are filtering or view the most update to date version of your data.
 - i. Click the Refresh Data button (C)



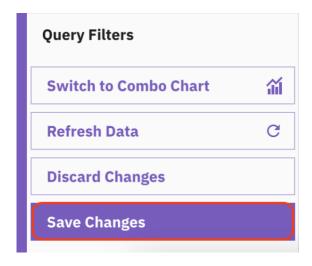
ii. Input new values for your query filters.

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

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



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

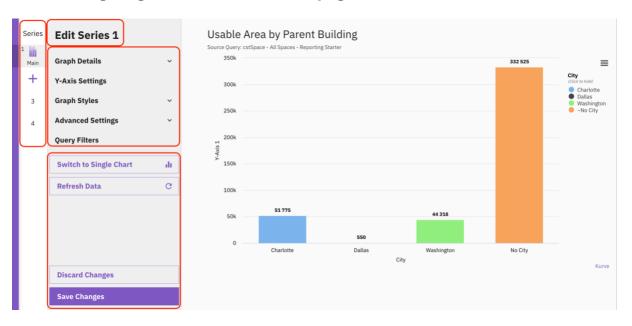


Note: For further information regarding a published graph's toolbar (i.e. using Graph Filters, Copy, Edit, etc.) please refer to the **Graphs Portal**, <u>Section 3</u>. **Using a Specific Graph's Toolbar**.

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

7. How to Create and Customize a Combo Chart Graph

a. Navigating the Combo Chart edit page



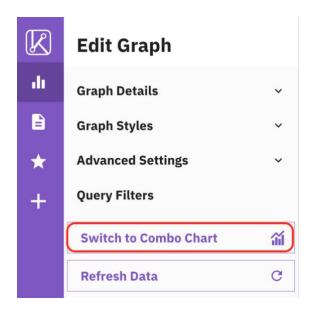
Combo Chart	A combination chart (Combo Chart) allows you to visualize multiple series in a single graph. For example, a graph can include a set of column series, overlaid by a line and a pie series.
Series	Series is a set of data. Different series types can be combined in a single graph.
Main	Click on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

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

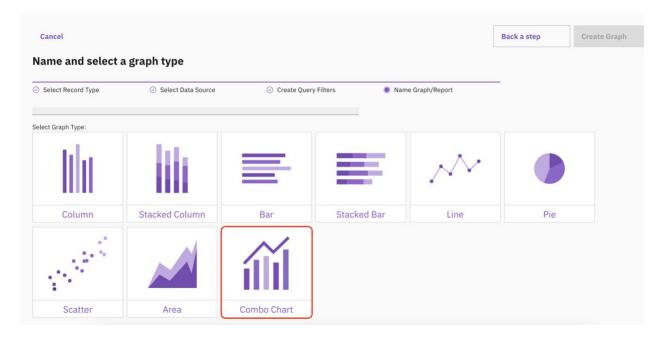
b. Create from an existing or new graph:

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





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



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

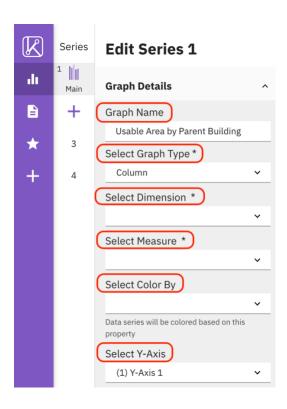


d. Graph Details section:

i. Notes:

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





ii. **Graph Name:** Refer to <u>Section 6a.i.</u> under Graph Details.

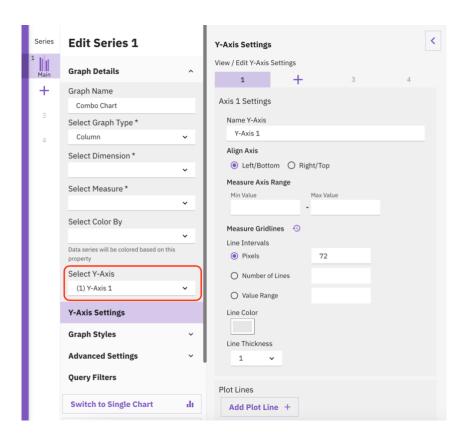
Note: Your graph name is set on Series 1 (Main) which will be fixed across all series.

- iii. Select Graph Type: Refer to Section 6a.ii. under Graph Details.
- iv. Select Dimension: Refer to Section 6a.iii. under Graph Details.

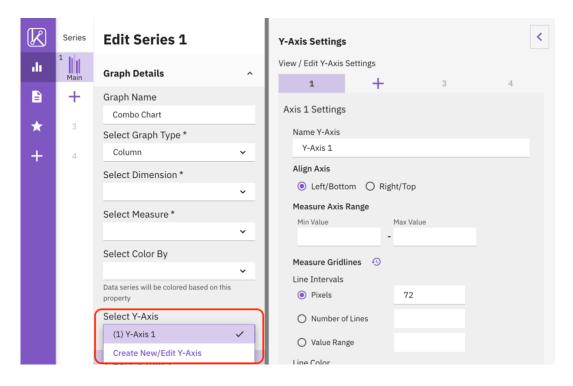
Note: Your dimension field is set on Series 1 (Main) which will be fixed across all series.

- v. **Select Measure:** Refer to Section 6a.iv. under Graph Details.
- vi. **Select Color By:** Refer to <u>Section 6a.v.</u> under Graph Details.
- vii. **Select Y-Axis:** This is where you assign a Y-Axis to each series, and it is also a shortcut to create a new or edit an existing Y-Axis.
 - Click the drop-down menu (▼) to assign your Y-Axis for the series you have selected



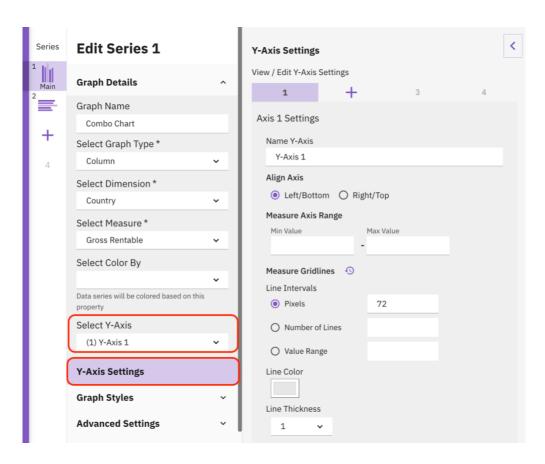


Click the drop-down menu (▼) to create or edit up to four Y Axes.



e. Y - Axis Settings

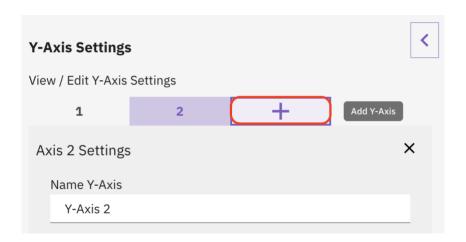
- Creating and editing Y- Axes can also be done by selecting the Y-Axis Settings drawer. The Y-Axis Settings drawer will open on the right.
- Once the Y-Axis is created it will be visible in the Select Y-Axis drop-down menu. Switch between the Axes options to assign it to a series.



View/Edit Y-Axis Settings

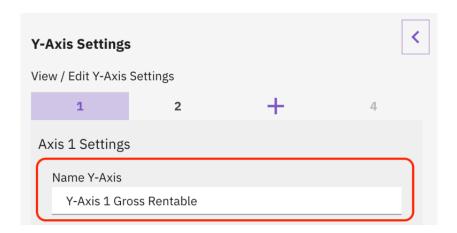
 Another way of adding multiple axes is by selecting the (+) icon in the Y-Axis Settings drawer.





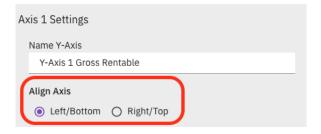
ii. Name Y-Axis

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

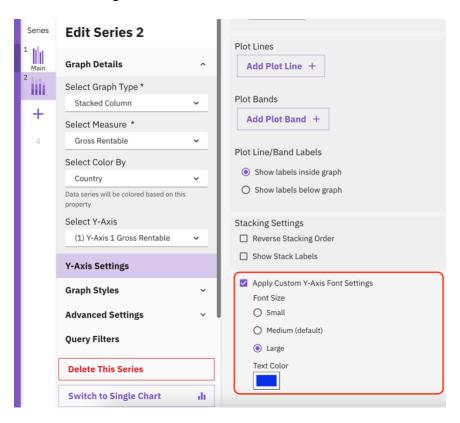


- iii. **Align Axis:** Set the measure axis to the left/bottom or right/top of the graph.
 - Column, Stacked Column, Line, Scatter, and Area graphs will align the axis to the left or right.
 - Stacked Bar and Bar graphs will align the axis to the bottom or top.
 - Refer to <u>Section 6d.ii.</u> for Axis Settings: Align Axis.

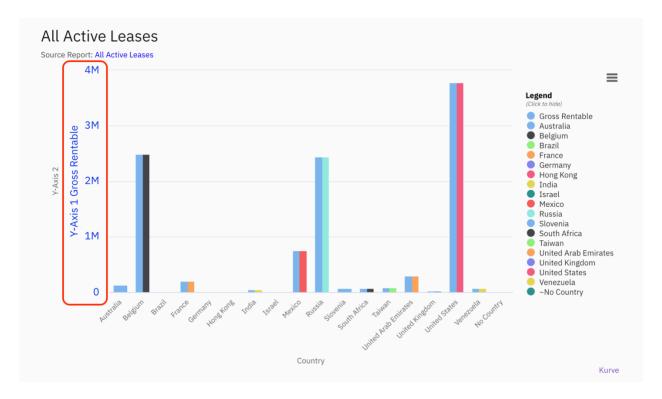




- iv. **Measure Axis Range:** Refer to <u>Section 6d.ii.</u> Measure Axis Range.
- v. **Customize Measure Gridlines:** Refer to <u>Section 6e</u> Customize Measure Gridline Settings.
- vi. Plot Settings: Refer to Section 6i Plot Settings.
- vii. Apply Custom Y- Axis Font Settings
 - To customize the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

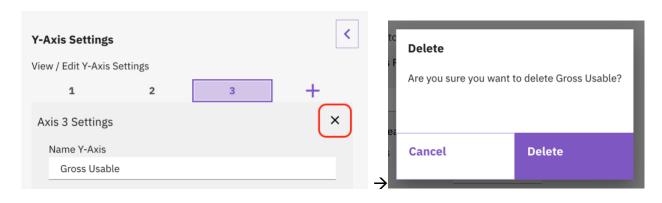


• In this example, for Series 2, the font size for the Y- Axis 1 Gross Rentable is large and the text color is blue.



viii. Delete Y-Axis

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



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f. Graph Styles

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

 Graph Color: To assign a graph color refer to <u>Section 6.b.</u> Graph Styles: Graph Colors.

• Font Settings: To apply custom font settings refer to <u>Section 6.c.</u> Graph Styles: Font Settings.

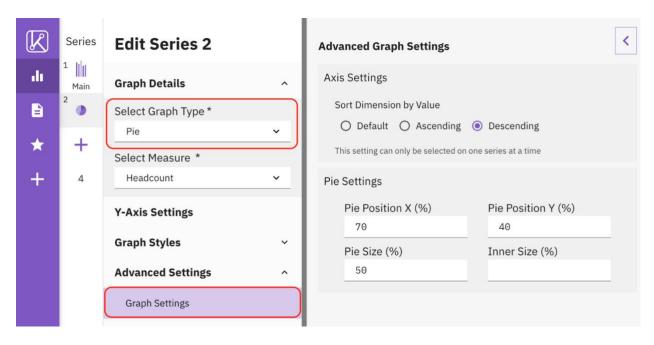
g. Advanced Settings

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

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

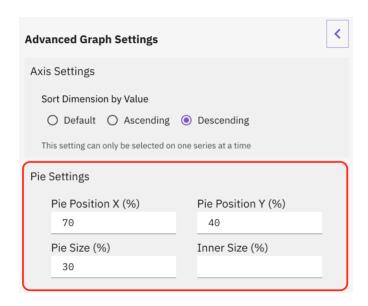
i. **Graph Settings:** In the following example this setting will be specific to the pie chart type.



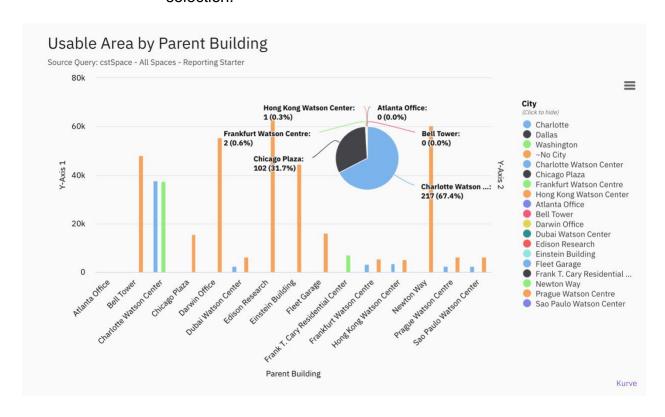


- Axis Settings: Sort your pie graph according to the total measure value of each Dimension. You can sort by ascending or descending. If you have multiple series created, this setting can only be selected and applied on one series at a time.
- Pie Settings: To set the position of your pie chart in the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

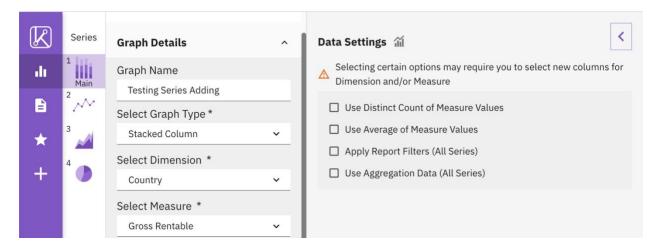
Setting	Description
Pie Position X	Changes the horizontal alignment of where the pie graph sits in the chart area. Input values between 0% (left) and 100% (right).
Pie Position Y	Changes the vertical alignment of where the pie graph sits in the chart area. Input values between 0% (top) and 100% (bottom).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



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

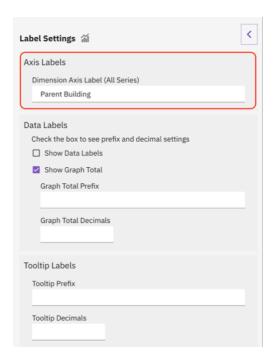


- ii. **Data Settings:** Refer to Create a Graph <u>Section 6h</u> which covers how to apply measure values.
 - Use "Distinct Count of Measure Values" and "Use Average of Measure Values" settings can be applied per series
 - "Apply Report Filters" and "Use Aggregation Data" settings will apply to all series.



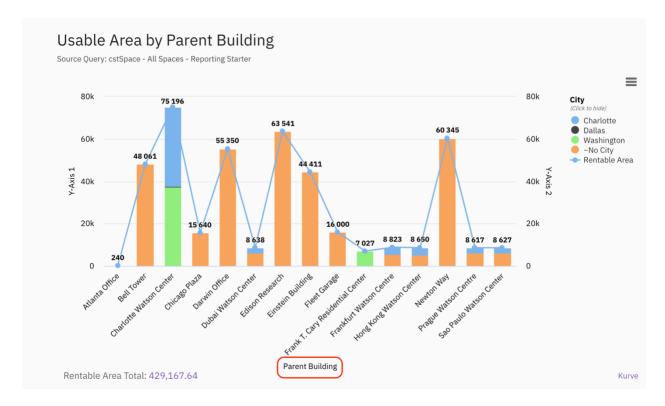
iii. **Label Settings:** Refer to Create a Graph <u>Section 6f</u> which covers Data Labels, Tooltip Labels and Thousands Separator.

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



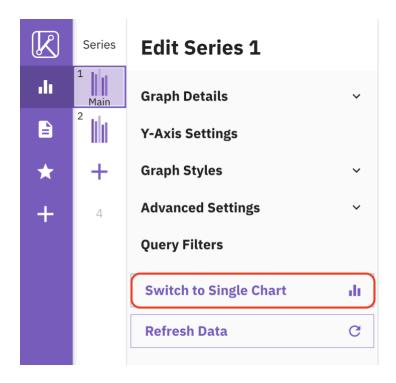
227

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



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

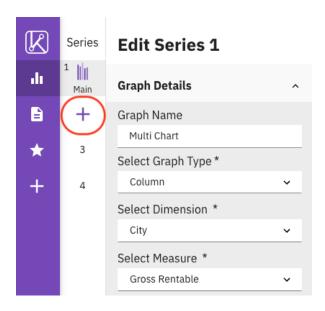




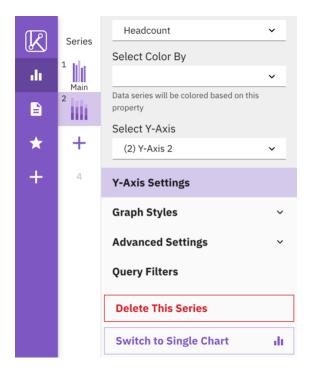
- After switching to a single chart your graph will revert to your selections from the main graph.
- j. **Refresh Data:** Refer to Create a Graph <u>Section 6k</u> which covers how to use the refresh data feature.
- k. **Discard Changes:** Refer to Create a Graph <u>section 6l</u> which covers how to discard changes.
- I. **Save Changes:** Refer to Create a Graph <u>section 6m</u> which covers how to save changes.

m. How to add multiple Series:

 Select the (+) button to add another graph to display multiple series in your main graph.



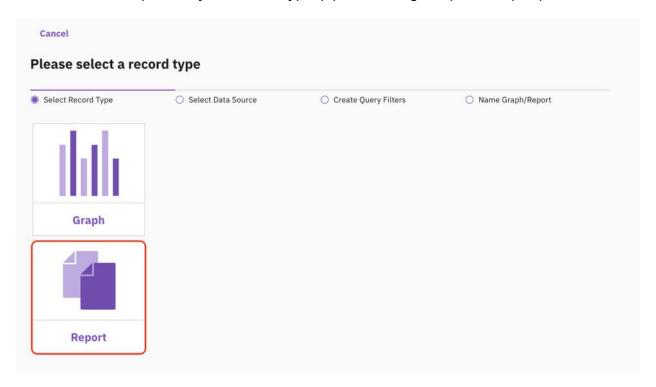
Repeat the process from Series 1 for each added Series in the Edit Series panel, starting with Graph Details.
 Note: To delete a series after the main series, simply select Delete Series button after the Query Filters section.



CREATE A REPORT

1. Selecting the Report Record Type

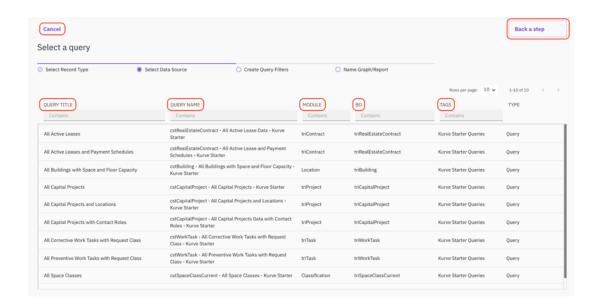
- a. From the Kurve Dashboard, click on the Create Icon () to create a new record;
- b. Select 'Report' as your record type (options being Graph or Report);



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.

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



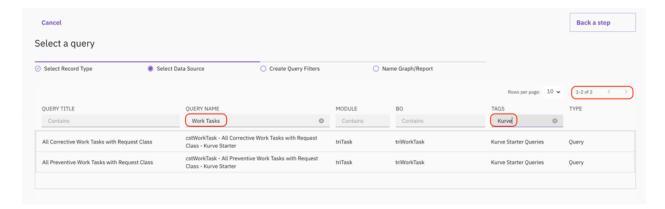
 Input your search parameters underneath any of the search options, for example, let's search "Active" under Query Name and "Maintenance" under Tags;



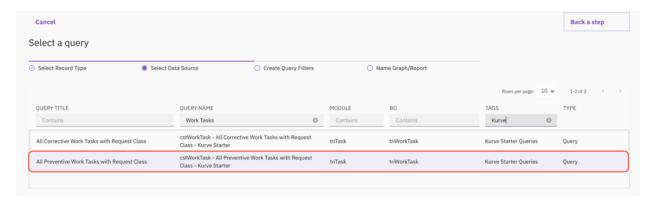
d. Click enter or return on your keyboard to initiate the search. Your Results will update with the number of queries matching your search criteria. If the query is



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;

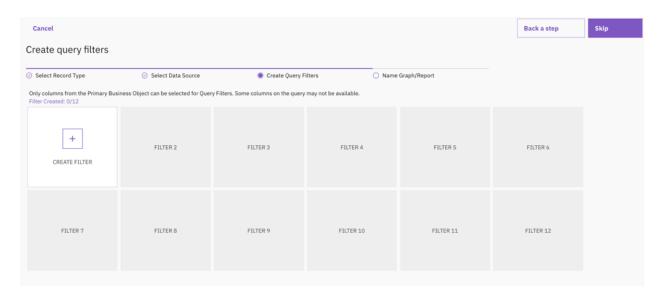


3. Create Query Filters

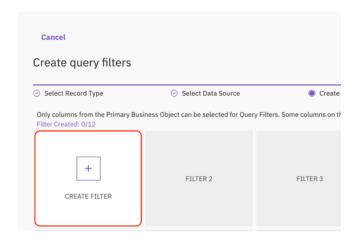
With Kurve Query Filters you can create and apply filters before loading your report. This will help to improve load times and see only the data that is relevant to you.

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

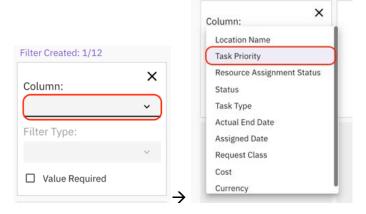




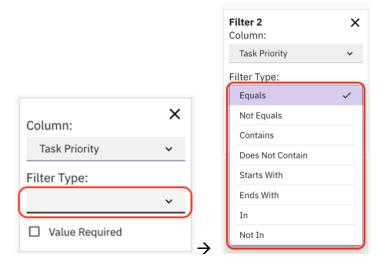
b. Create a new filter by clicking on the first open box "Create Filter"



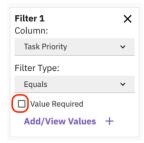
c. Next, select the column from the query that you would like to have a filter



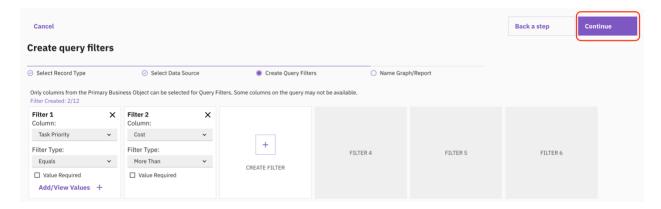
d. Now, select the filter type:



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



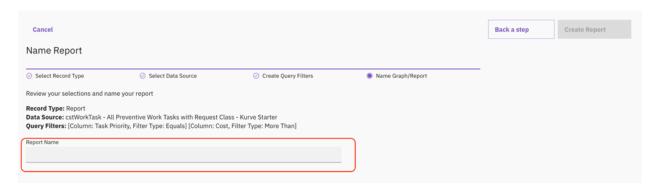
f. You can continue making more filters using the same process. Once done creating them, click Continue.



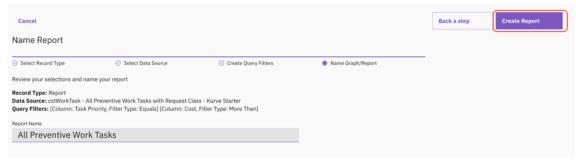
4. Naming the Report

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

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



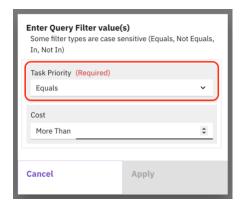
5. Click "Create Report."



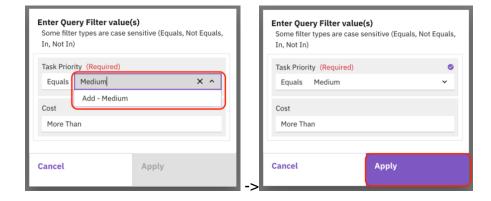
6. Enter Query Filter value(s)

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

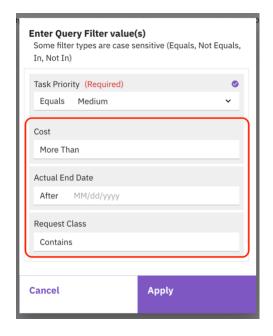
a. Required Filters: you will be required to input a value before you can load your report. In the case below, Task Priority is required (as indicated by the red Required mark beside the field name), therefore, the "Apply" field is greyed out.



b. Enter a value in the box, click Add then 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.

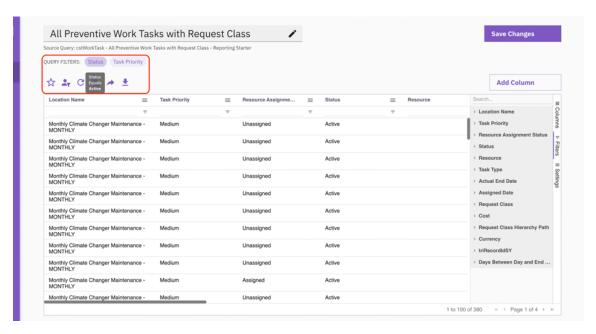


c. Non-required query filters: for filters that you have not checked the Required box for, you have the option to enter a value or skip it to load all results.



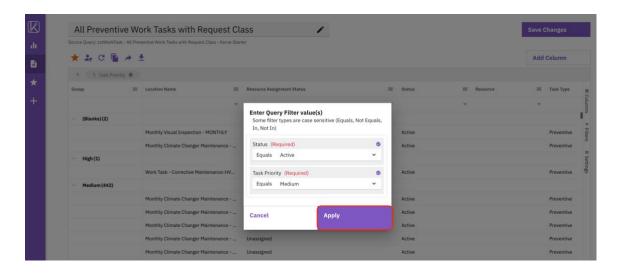
d. View Query Filters Applied

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



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





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

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

Note: Please refer to the Reports Portal, <u>Section 3 to 6.</u>

APPENDIX

1. Appendix A: Kurve Custom Column Functions

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

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

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

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

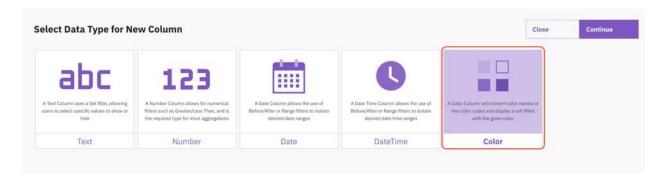
SubtractTRIDuration(date, duration)	Subtracts a TRIRIGA duration from a given date and returns the resulting date.	Date
TimeBetween(date1,date2, units)	Returns the amount of time between two given dates in the specified unit of measure. Supports years, months, weeks, days, hours, minutes, and seconds.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

	at the specified character. The first character is counted as 0. If length is not provided, will extract from start to the end.	
Helper/JS Functions		
Color Column Snippet	An example of a conditional color column with text. Replace content in [] with your own conditions, text, colors.	Color & Text
IF(condition, 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

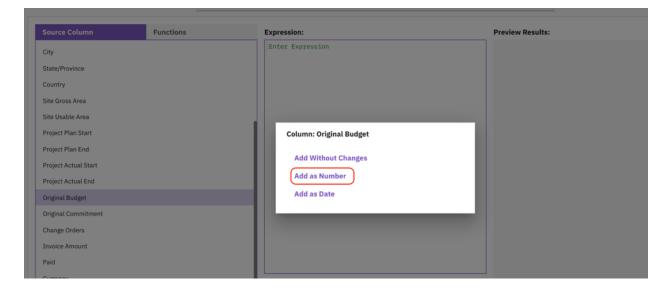
2. Appendix B: Custom Column Types - Color & Text

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" }

