

How to Create a Pivot Widget

This article shows how to create a pivot table widget.

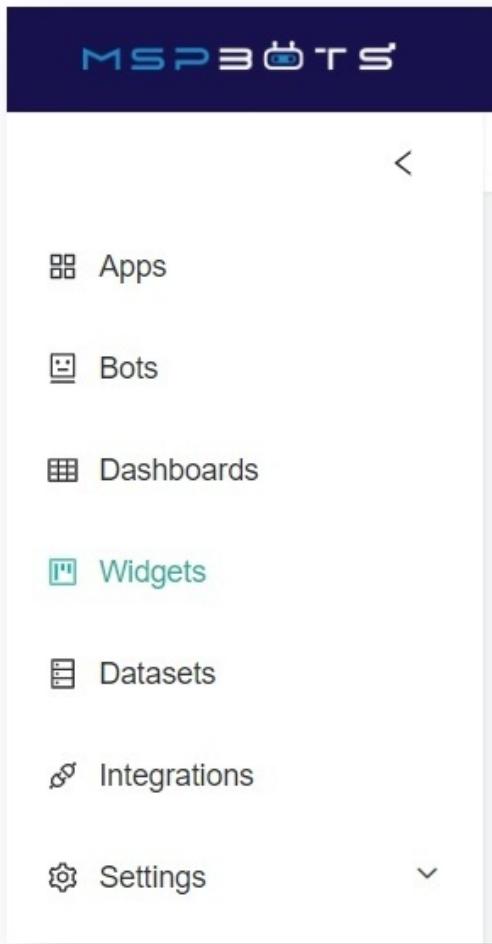
A pivot table is a data analysis tool that allows for flexible and quick summarization and visualization of large amounts of data. Its advantages include flexibility, quick summarization, data visualization, and interactivity. However, pivot tables also have some drawbacks, such as the inability to directly edit data, complexity, and limitations on data size. Pivot tables are commonly used when there is a need to analyze sales, financial, or economic data, explore correlations and trends, make comparisons and contrasts, and generate reports quickly. In summary, a pivot table is a powerful tool that supports decision-making and strategic planning.

An example of a pivot table widget:

Autotest_PivotTable									
Sum of Issue Id		Create Time (All)							
Count of Summary		Type Name							
Qa Owner		Bug			Defect		Story		
Sprint Name		Issue Id	Summary	Issue Id	Summary	↑	Issue Id	Summary	
+ Carl		929119		10	6538003		72	5939447	
	Sprint 81	88221		1	4492975		50	2129083	
	Sprint 82	183829		2	1668188		18	1801049	
	Sprint 83	657069		7	376840		4	2009315	
- Kelvin		5066630		56	1664063		18	2284098	
	Sprint 81	2035460		23	910701		10	1038774	
	Sprint 82	2189599		24	467236		5	361516	
	Sprint 83	841571		9	286126		3	883808	
- Maeve		3352280		37	0		0	975584	
	Sprint 81	1504526		17	0		0	88632	
	Sprint 82	1380659		15	0		0	632480	
	Sprint 83	467095		5	0		0	254472	
- Pan		361762		4	449538		5	707673	
								8	1518973
									17

How to Create a Pivot Widget

1. Navigate to **Widgets** on the MSPbots app menu.



2. On the Widgets tab, click **My Widgets**.

A screenshot of the 'Widgets' tab in the MSPbots application. The top navigation bar includes 'Widgets', 'My Favorites (0)', 'My Widgets (1475)' (which is highlighted with a red box), 'Template Widgets (2880)', and 'Quick Filter'. Below this is a 'Quick Filter' section with 'Sort' (set to 'Last Modified'), 'Filter' (with one filter applied), and a 'New Widget' button. The main area displays two widget cards: 'Services Team Metrics' and 'Current Week Metrics'. Each card shows details like creation date, update date, owner, and linked resources. At the bottom, there are pagination controls for 'Total 1475' and '100/page'.

3. Next, click the **New Widget** button.

The screenshot shows the 'Widgets' page interface. At the top, there's a search bar and navigation links for 'My Favorites' (0), 'My Widgets' (1475), 'Template Widgets' (2880), and 'Quick Filter'. Below this is a 'Quick Filter' section with 'Sort' (Last Modified), 'Filter' (1 Filters), and an 'Integration Group' dropdown set to 'Jira Data Center' and 'Dropbox'. A prominent green button labeled 'New Widget' is highlighted with a red box. The main area displays three widget cards: 'Services Team Metrics' (Technical Services Team Metrics Individual Metrics of Technical Services Members Wiki Page...), 'Current Week Metrics' (Weekly Metrics of Technical Services Department. Wiki Page...), and another unnamed card. At the bottom, there are pagination controls (Total 1475, 100/page, Go to 1).

4. Select the **Pivot Table** widget type on the New Widget window.

The screenshot shows the 'New Widget' window. On the left, under the 'Published' tab, there are several widget icons: Line Chart, Column Chart, Radar Chart, Table, Pie Chart, Heatmap, Tree Grid, User TimeZone, and Pivot Table. The 'Pivot Table' icon is highlighted with a red box. On the right, there's a 'Create your widget' section with the text 'Create your own custom widget using our new, intuitive widgets.' and 'Select widget type to start creating your widget or view tutorial to learn more.'

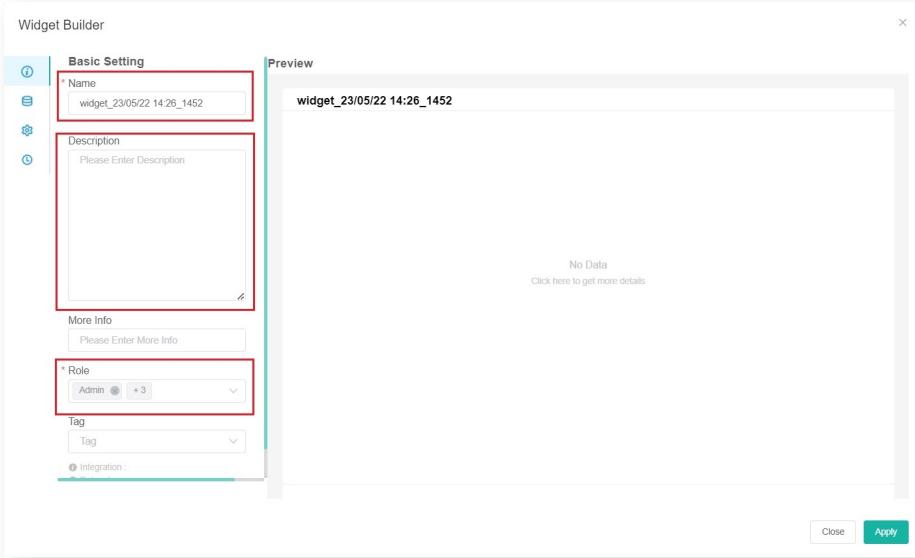
5. When the **Widget Builder** window opens, click **Info** on the menu.

The screenshot shows the 'Widget Builder' window. On the left, there's a vertical menu with icons for 'Info' (highlighted with a blue box), 'Basic Setting', 'Advanced Setting', 'Preview', and 'Publish'. The 'Basic Setting' section contains fields for 'Name' (set to 'widget_23/05/22 14:26_1452') and 'Description' (with placeholder text 'Please Enter Description').

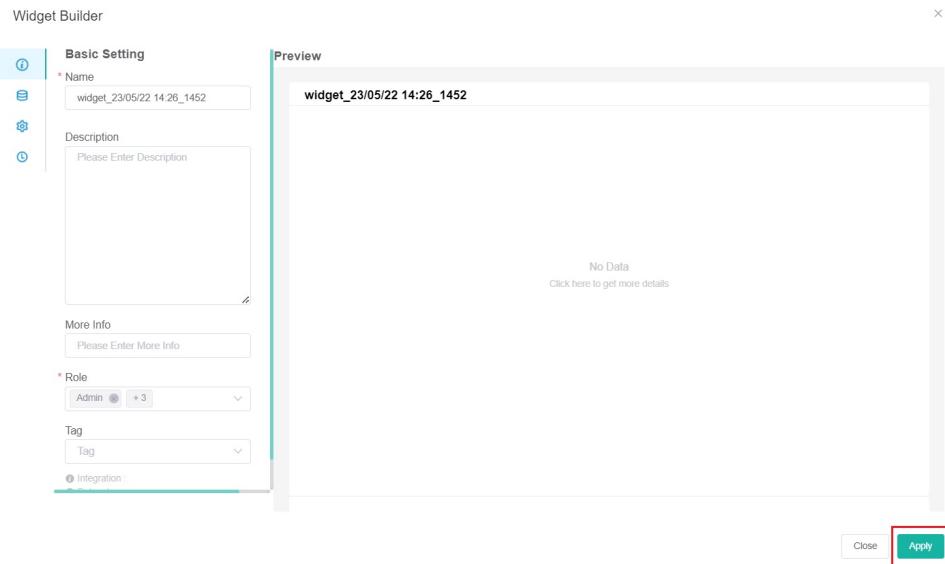
6. Provide the following under Basic Setting.

- **Name** - Give the widget a name.
- **Description** - Give the widget a short description.

- **Role** - Select or edit the roles that will have access to the widget. The roles selected by default are Admin, User, and Dashboard Only.



7. Click **Apply** when done.



8. Next, go to **Dataset** on the menu.

Widget Builder

Basic Setting

* Name
Dataset Widget_23/05/22 14:26_1452

Description
Please Enter Description



9. Under Data Source, click the  button.

Widget Builder

Data Source

 +

Please add a new dataset for other settings!

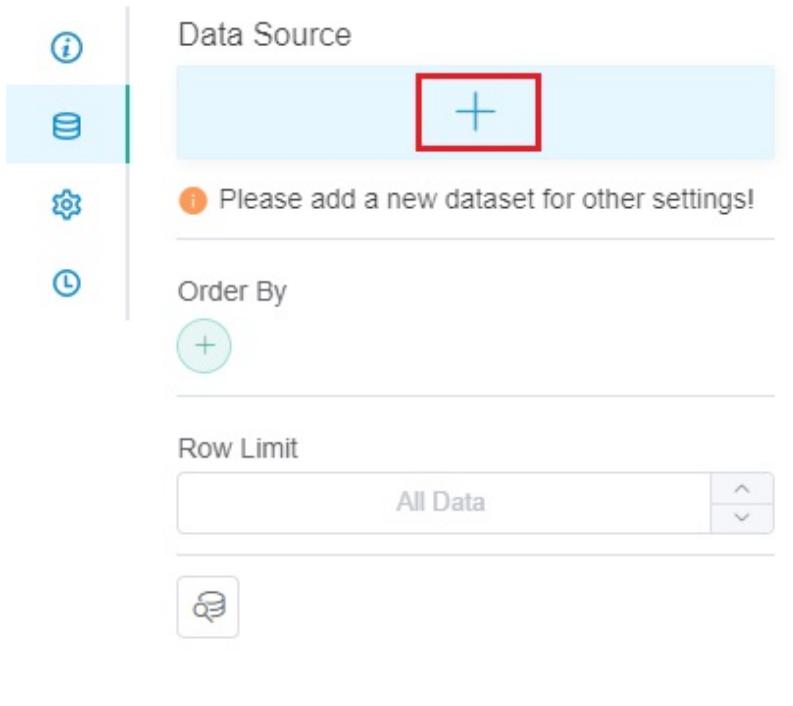
Order By



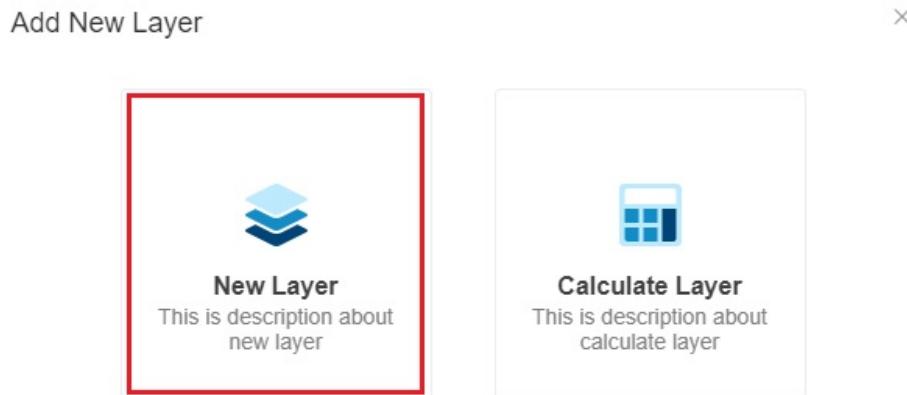
Row Limit

All Data 





10. Select **New Layer** when the Add New Layer window opens. This action will bring up the Dataset window.



11. On the **Dataset** window,

- a. Select the **Dataset** containing the information you want to use. You can also give a name for the Datasource (optional).

The screenshot shows the "Dataset" configuration window. It includes fields for selecting a dataset, defining a datasource name, displaying columns, applying filters, setting measures and dimensions, and configuring drill-through and order by options. At the bottom, there are buttons for canceling or saving changes.

Column Name	Alias	Business Type
Select Column Name	Enter Alias	Select Business Type

Measure +
Dimension +
DrillThrough Order By +
Order By +
Row Limit
All Data
Remove duplicate data
Materialized
Not Materialized
Cancel Save

- b. For **Columns Display**,

- i. Go to the **Column Name** dropdown and select the field you want to show in the drill-through.

Dataset

Dataset:
Jira Data Center / Jira Issue Details - Support

Show datasource name as
Dataset name

Columns Display:
[Select All](#) [Clear All](#)

Column Name	Alias	Business Type
Select Column Name ^ fx	Enter Alias	Select Business Type ^ fx + -
# issue_id		Q W
Aa jira_ticket_id		+
Aa is_blocked_by		+
Aa status_name		
M create_time		+
D update_time		+
D due_date		
Aa priority_name		

Order By [+](#)

Row Limit
All Data [^](#) [▼](#)

Remove duplicate data

Materialized
Not Materialized [▼](#)

[Cancel](#) [Save](#)

Click  to add more rows.

Dataset

X

Dataset:

Jira Data Center / Jira Issue Details - Support

Show datasource name as

Dataset name

Columns Display:

Select All Clear All

Column Name	Alias	Business Type	
Select Column Name <input type="button" value="fx"/>	Enter Alias <input type="button" value="fx"/>	Select Business Typ <input type="button" value="fx"/>	<input style="border: 2px solid red; padding: 2px; margin-right: 10px;" type="button" value="+"/> <input type="button" value="Delete"/>

File	# issue_id	<input type="button" value="Delete"/>
Aa	jira_ticket_id	
Aa	is_blocked_by	
Aa	status_name	
M	create_time	<input type="button" value="+"/>
D	update_time	<input type="button" value="+"/>
D	due_date	
	priority_name	

Order By



Row Limit

All Data

Remove duplicate data

Materialized

Not Materialized

- ii. Give the column an **Alias** and select a **Business Type** for it. Do this for every row that you create.

The screenshot shows the 'Dataset' configuration screen. At the top, there's a 'Dataset:' dropdown set to 'Jira Data Center / Jira Issue Details - Support' and a 'Show datasource name as' input field containing 'Dataset name'. Below this is a 'Columns Display' section with 'Select All' and 'Clear All' buttons. A table lists columns with their aliases and business types:

Column Name	Alias	Business Type
status_name	Status Name	Text

A red box highlights the first row of the table. Below the table is a 'Filter:' section with 'AND', 'OR', and a plus sign button. Further down are sections for 'Measure' (with a plus sign), 'Dimension' (with a plus sign), 'DrillThrough Order By' (with a plus sign), 'Order By' (with a plus sign), 'Row Limit' (set to 'All Data'), and a 'Remove duplicate data' checkbox. At the bottom right are 'Cancel' and 'Save' buttons.

- iii. If the selected Business Type is **Number**, read the article [Options for Custom Formatting in Your Widgets and Dashboards](#) for help with formatting numbers in your widgets.

c. For **Filter**,

- i. Click the  button and choose between **Add Condition** and **Add Group**.

Dataset

x

Dataset:

Jira Data Center / Jira Issue Details - Support



Show datasource name as

Dataset name

Columns Display:

Select All Clear All

Column Name	Alias	Business Type	
status_name	Status Name	Text	

Filter:

AND OR 

Measure + Add Group + Add Condition Dimension +

DrillThrough Order By



Order By



Row Limit

All Data

Remove duplicate data

Materialized

Not Materialized

Cancel

Save

- ii. Select a filter from the first dropdown list.

Dataset

Dataset: Jira Data Center / Jira Issue Details - Support

Show datasource name as
Dataset name

Columns Display:
Select All Clear All

Column Name	Alias	Business Type
status_name	Status Name	Text

Filter:

AND OR +

create_time

Value Slicer

Measure: create_time

Dimension: update_time

DrillThrough: due_date

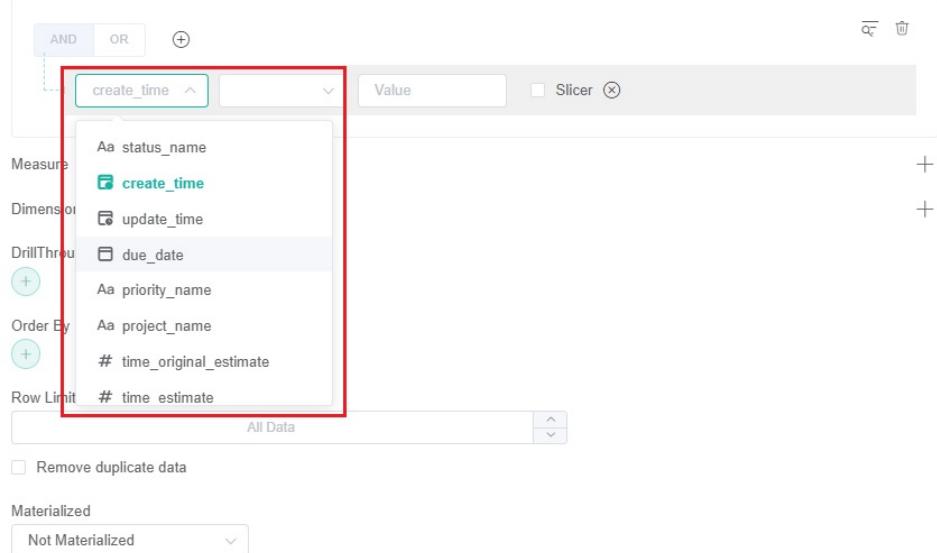
Order By: project_name

Row Limit: time_original_estimate

All Data

Remove duplicate data

Materialized: Not Materialized



- iii. Next, set a condition or logic for each field using the next two dropdowns. Refer to the article [What Filter Conditions and Formats are Available for Creating Widgets](#) for the descriptions of each condition.

Dataset:

Dataset:

Show datasource name as _____
Dataset name _____

Columns Display:
Select All Clear All

Column Name	Alias	Business Type
create_time	Create Time	Date Time

Filter:

Measure
Dimension
DrillThrough Order By
Order By

- iv. Repeat Steps c.i to c.iii to add more conditions.
v. When you have added all the conditions you need, select the logical operator AND or OR for the filter group.

Dataset

Dataset:

Show datasource name as _____
Dataset name _____

Columns Display:
Select All Clear All

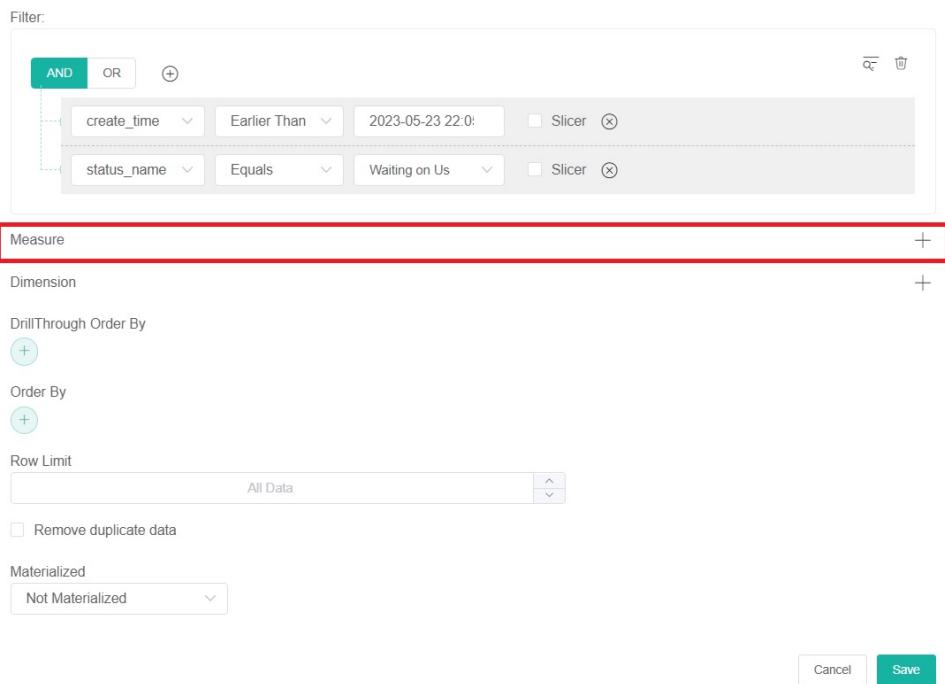
Column Name	Alias	Business Type
create_time	Create Time	Date Time

Filter:

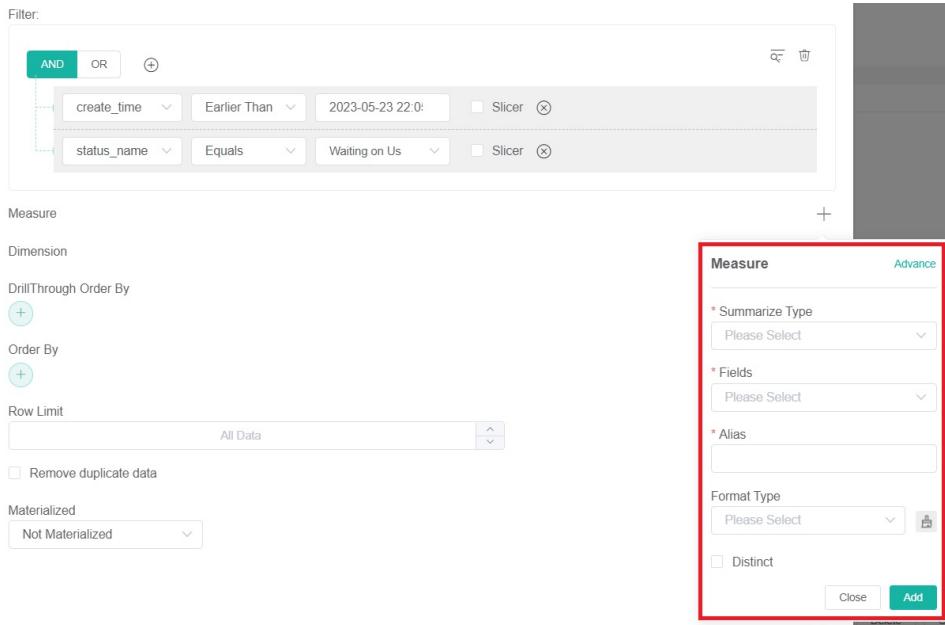
Measure
Dimension
DrillThrough Order By

d. (Optional)For Measure,

- i. Click the  button to show the Measure window.

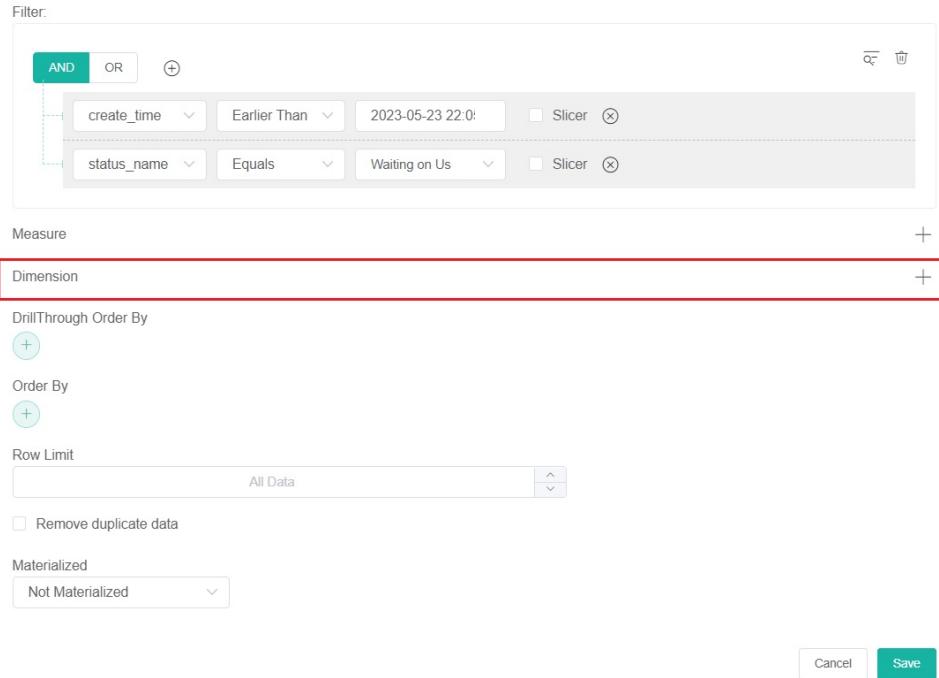


- ii. On the Measure window, select a **Summary Type**.
 iii. Select a **Field** to use in the computation.
 iv. Enter an **Alias** for the measure.
 v. Select a **Format Type**.
 vi. Then click **Add**.



- e. (Optional)For **Dimensions**,

- i. Click the  button.



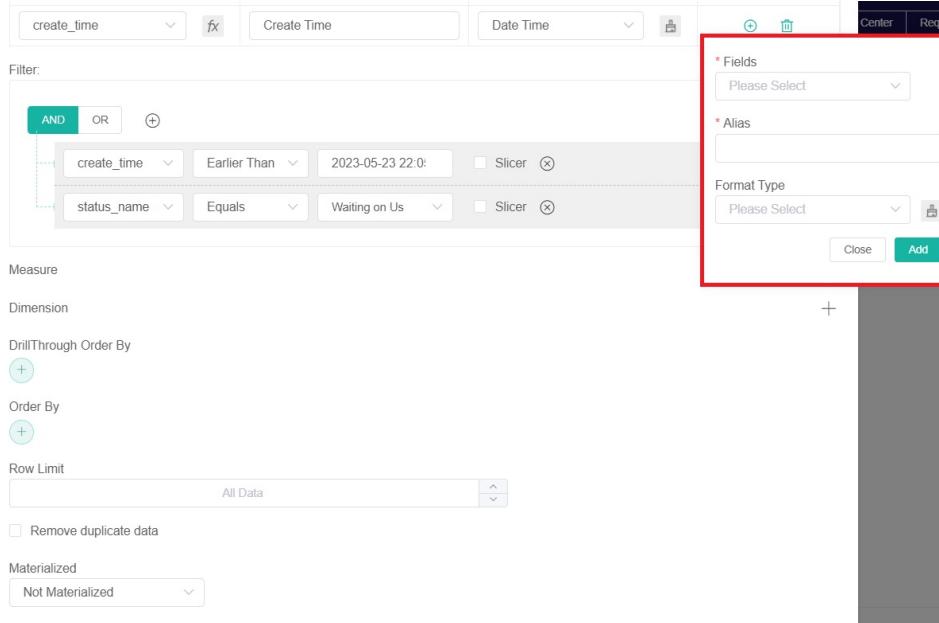
The screenshot shows a data filtering interface. At the top, there's a 'Filter' section with 'AND' selected. It contains two conditions: 'create_time' is earlier than '2023-05-23 22:00' and 'status_name' equals 'Waiting on Us'. Below the filter is a 'Dimension' section, which is highlighted with a red border. This section includes 'DrillThrough Order By' and 'Order By' buttons, both with '+' icons. There's also a 'Row Limit' dropdown set to 'All Data', a 'Remove duplicate data' checkbox, and a 'Materialized' dropdown set to 'Not Materialized'. At the bottom right are 'Cancel' and 'Save' buttons.

- ii. Click on **Fields** and select an option for grouping the data.

- iii. Next, enter an **Alias** for the measure.

- iv. Select a **Format Type**.

- v. Then click **Add**.

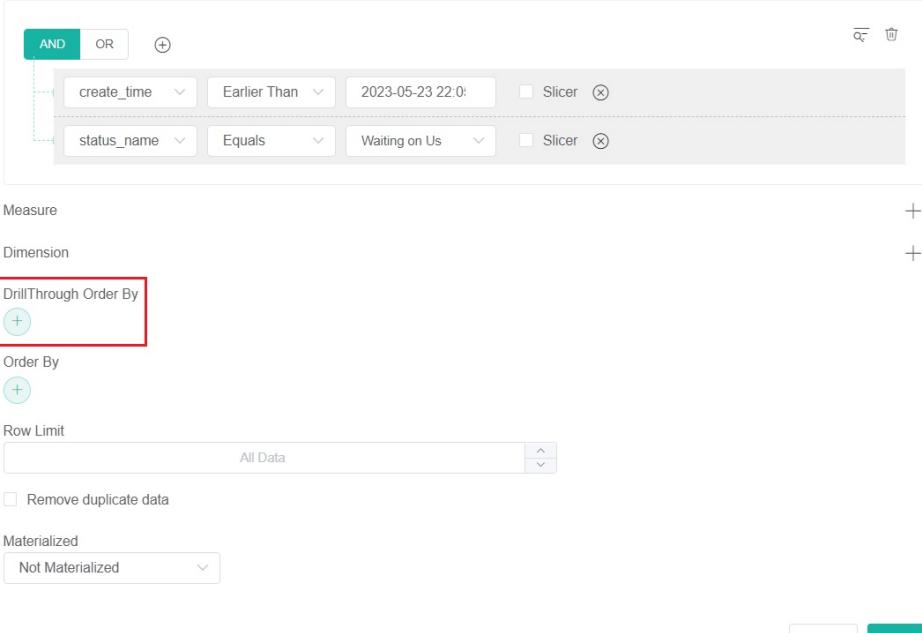


The screenshot shows the same data filtering interface as before, but with a modal dialog box overlaid. The dialog has three sections: 'Fields' (with a dropdown labeled 'Please Select'), 'Alias' (with an empty input field), and 'Format Type' (with a dropdown labeled 'Please Select'). At the bottom right of the dialog are 'Close' and 'Add' buttons, with 'Add' being highlighted with a red border. The rest of the interface below the dialog remains visible.

- f. (Optional)For **DrillThrough Order By**,

- i. Click the  button.

Filter:



AND OR +

create_time Earlier Than 2023-05-23 22:00 Slicer

status_name Equals Waiting on Us Slicer

Measure +

Dimension +

DrillThrough Order By +

Order By +

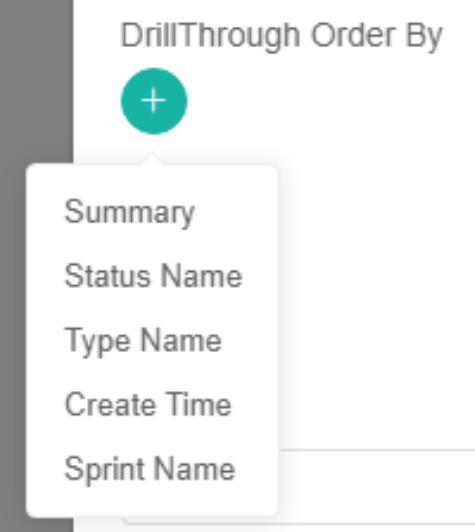
Row Limit All Data

Remove duplicate data

Materialized Not Materialized

Cancel Save

- ii. Select a parameter to automatically sort data according to your selection.



g. (Optional)For Order By,

i. Click the  button.

Dimension

DrillThrough Order By



Order By



Row Limit

Remove duplicate data

Materialized

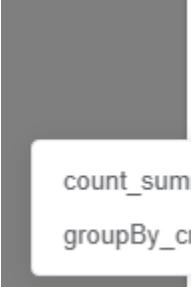
Not Materialized



Cancel

Save

ii. Select a parameter to sort the data based on your selected field.



Order By



count_summary

groupBy_create_time_date_days

h. (Optional) Next, select a **Row Limit** to set a limit to the number of rows on your widget.

Dimension



DrillThrough Order By



Order By



Row Limit

Remove duplicate data

Materialized

Not Materialized

Cancel

Save

i. (Optional) Tick the checkbox for **Remove duplicate data** to delete duplicate data based on your set conditions.

Dimension +

DrillThrough Order By +

Order By +

Row Limit
All Data ^
v

Remove duplicate data

Materialized
Not Materialized ▼

Cancel Save

j. (Optional) Then select an option from the **Materialized** dropdown to materialize data based on the actual conditions.

DrillThrough Order By +

Order By +

Row Limit
All Data ^
v

Remove duplicate data

Materialized
Not Materialized ^

Not Materialized

Materialized

None

Cancel Save

Delete

k. Click **Save** to keep the configuration.

12. Other optional settings:

The following options are also available on the Dataset tab. When applied, these two settings reflect on the pivot table instead of the drill-down.

- **Order By** - Sorts the data based on the selected field.
- **Row Limit** - Sets a limit to the number of rows that appear on the widget.

Data Source

Autotask Ticket Statistics ...

+

Order By

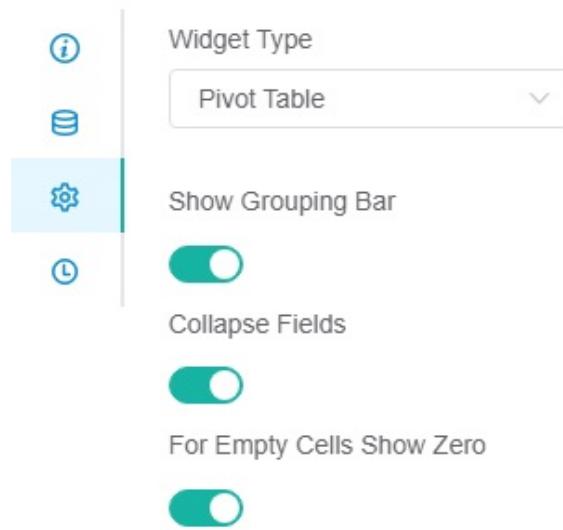
↑ Ticket Count X +

Row Limit
All Data ^
v

After adjusting the settings for these, click **Apply** to save the setup.

Move on to **Config** on the menu.

Widget Builder



Do the following:

- Widget Type** - You can switch this widget to different widget types. If you want to learn more, please refer to [How to Switch Widget Types](#).
- Show Grouping Bar** - This is the toggle for hiding or showing the row fields, column fields, value fields, and filter fields in the pivot table.
 - When turned on, it will display the row fields, column fields, value fields, and filter fields.
 - When turned off, it will not display them.

The screenshot shows the Widget Preview window displaying a Pivot Table titled "Autotest_PivotTable". The table has the following structure:

	Bug	Defect	Story	Grand Total		
	Issue Id	Summary	Issue Id	Summary	Issue Id	Summary
Maeve	3352280	37	0	0	975584	11
Sprint 81	1504526	17	0	0	86632	1
Sprint 82	1306959	15	0	0	632480	7
Sprint 83	467095	5	0	0	254472	3
Pantene	361782	4	449538	5	707673	8
Sprint 83	88539	1	0	0	0	0
Sprint 82	184913	2	92232	1	176599	2
Sprint 81	88310	1	357306	4	531074	6
Tom	714156	8	1202145	13	3132547	35
Sprint 83	0	0	189435	2	924516	10
Sprint 81	430197	5	453916	5	1392788	16
Sprint 82	275959	3	558794	6	815243	9
Kelvin	5066630	56	1664063	18	2284098	26
Sprint 83	841571	9	286126	3	883808	10
Sprint 82	2189599	24	467236	5	361516	4

- Collapse Fields**

- When this toggle is turned on, all column fields in the table will be expanded when you open the widget.

- When it is turned off, collapsible column fields will be collapsed when you open the widget, and only non-collapsible column fields will be displayed.

The screenshot shows the Widget Builder interface with a 'Pivot Table' selected. On the left, there's a sidebar with various configuration options. One of them, 'For Empty Cells Show Zero', is turned on (indicated by a green circle). The main area is a preview of the widget, showing a PivotTable titled 'Autotest_PivotTable'. The table has columns for Bug, Defect, Story, and Grand Total. It includes filters for Qa Owner, Sprint Name, Issue Id, and Summary. The data shows various issue counts across different sprints and owners, with some cells containing zero values due to the setting being enabled.

d. For Empty Cells Show Zero

- When this toggle is turned on, empty values will be displayed as 0.
- When it is turned off, empty values will be displayed as blank.

This screenshot is similar to the previous one but with a key difference: the 'For Empty Cells Show Zero' toggle is turned off (indicated by a grey circle). As a result, the preview shows the same PivotTable data, but now empty cells are represented by blank spaces instead of zeros.

e. Click on the located at the top right corner of the Preview page to access the Field List pop-up.

The screenshot shows the 'Autotest_PivotTable' preview with the 'Field List' pop-up window open. This window allows users to manage the fields displayed in the pivot table, including filters, columns, rows, and values. It lists fields like 'Sum of Issue Id', 'Create Time (All)', 'Type Name', 'Qa Owner', 'Sprint Name', 'Bug', 'Defect', 'Story', and 'Grand Total', each with its current status (e.g., 'Visible' or 'Collapsed').

- The fields listed under "All Fields" are sourced from the fields set in the Data Source. Please check the fields you want to display in the pivot table under "All Fields". These fields will be automatically displayed in the Filters, Columns, Rows, or Values section respectively.
- If you want to adjust the position of each field, drag the in front of each field. Place the mouse cursor over it until the cursor icon changes to Drag, then drag the field to the area where you want it to be displayed.

iii. Click **Apply**.

The screenshot shows the 'Calculated Field' configuration screen. At the top, there's a 'Field List' tab and a 'Calculated Field' tab (which is selected). Below the tabs are four main sections: 'All Fields' (containing 'Type Name', 'Issue Id', 'Summary', 'Create Time', 'Qa Owner', and 'Sprint Name'), 'Filters' (with a placeholder 'Drop filter here'), 'Columns' (with a placeholder 'Drop column here'), and 'Rows' (listing 'Type Name', 'Summary', 'Create Time', and 'Qa Owner' with sorting arrows). To the right of the rows section is a 'Values' section containing 'Sum of Issue Id'. At the bottom right are 'Apply' and 'Cancel' buttons.

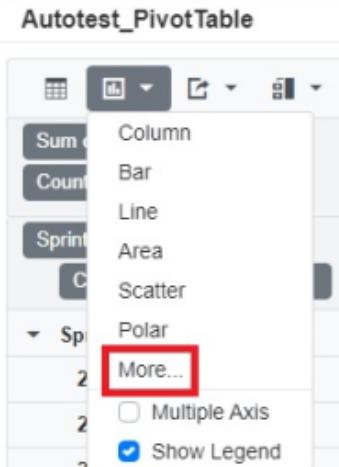
f. In the action column above the pivot table, you can edit the format of the table.

i. Clicking on the **Show table** button displays the pivot table in table style.

ii. Clicking on to switch the widget to another type.

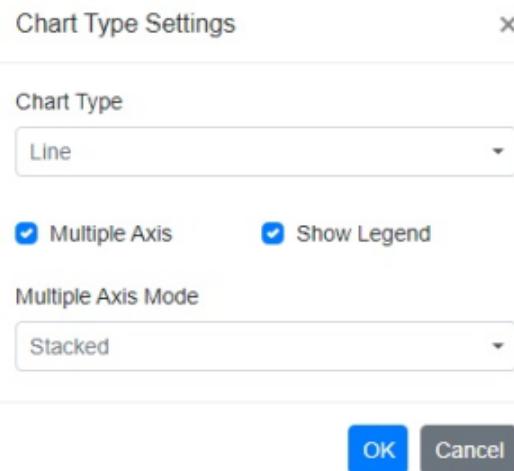
1. Column
2. Bar
3. Line
4. Area
5. Scatter
6. Polar
7. If none of the above chart types meet your needs, please click "More" and set the chart type you need in the "Chart Type" within the Chart Type Settings.

Preview



8. Multiple Axis: If selected, you can configure the "Multiple Axis Mode" with options such as "Stacked" or "Single".

9. Show Legend: If checked, the pivot table is displayed as a line chart. Clicking on "Show table" button allows you to return to table style.



- iii. Click on to export the table as PDF, Excel or CSV format.

Preview

The screenshot shows the 'Autotest_PivotTable' preview window. The ribbon has a red box around the 'Sub Totals' icon. A dropdown menu is open, showing 'PDF', 'Excel', and 'CSV' options.

- iv. Click on to set sub totals.
1. Show sub totals
2. Do not show sub totals
3. Show sub totals rows only
4. Show sub totals columns only

Preview

The screenshot shows the 'Autotest_PivotTable' preview window. The ribbon has a red box around the 'Grand Totals' icon. A dropdown menu is open, showing four options: 'Show sub totals' (checked), 'Do not show sub totals', 'Show sub totals rows only', and 'Show sub totals columns only'.

- v. Click on to set grand totals.
1. Show grand totals
2. Do not show grand totals
3. Show grand totals rows only

4. Show grand totals columns only

Preview

The screenshot shows a 'PivotTable' configuration window titled 'Autotest_PivotTable'. At the top right, there is a dropdown menu with four options: 'Show grand totals' (selected), 'Do not show grand totals', 'Show grand totals rows only', and 'Show grand totals columns only'. The 'Show grand totals' option is checked.

vi. Click on to set formatting.

1. Number Formatting
2. Conditional Formatting

Preview

The screenshot shows the same 'PivotTable' configuration window. The 'Format' button (represented by a pencil icon) is highlighted with a red box. A dropdown menu has opened, showing two options: 'Number Formatting...' and 'Conditional Formatting...'.

13. Finally, click **Apply**. This will show a preview of the pivot table.



The screenshot shows the final preview of the 'Autotest_PivotTable'. The table has a complex structure with multiple levels of grouping and filtering. The columns include Issue Id, Summary, Defect, Story, and Grand Total. The data is grouped by Qa Owner (Carl, Kelvin, Maeve, Pan) and Sprint (Sprint 81, Sprint 82, Sprint 83). The preview includes various summary and detail rows for each group.