

Chart Menu

- [Introduction](#)
- [Chart Menu Properties](#)
 - [Configure Chart Menu](#)
 - [Configure Datasource](#)
 - [Data Binder & Chart Data Mapping](#)
 - [Chart Options Properties](#)
 - [Advanced Properties](#)
 - [Performance & Offline](#)
 - [PWA Offline Settings](#)
- [Additional Notes & Modifications](#)
 - [Display Labels Outside the Pie Chart](#)
 - [Hide Gridlines from Chart Plot](#)
 - [Interactive Chart](#)
- [Download Demo Apps](#)

Introduction

Chart menu allows you to select a form binder or define your own SQL query to display the chart data for the most common graph types. You can also include charts in your UI [Dashboard Menu](#).

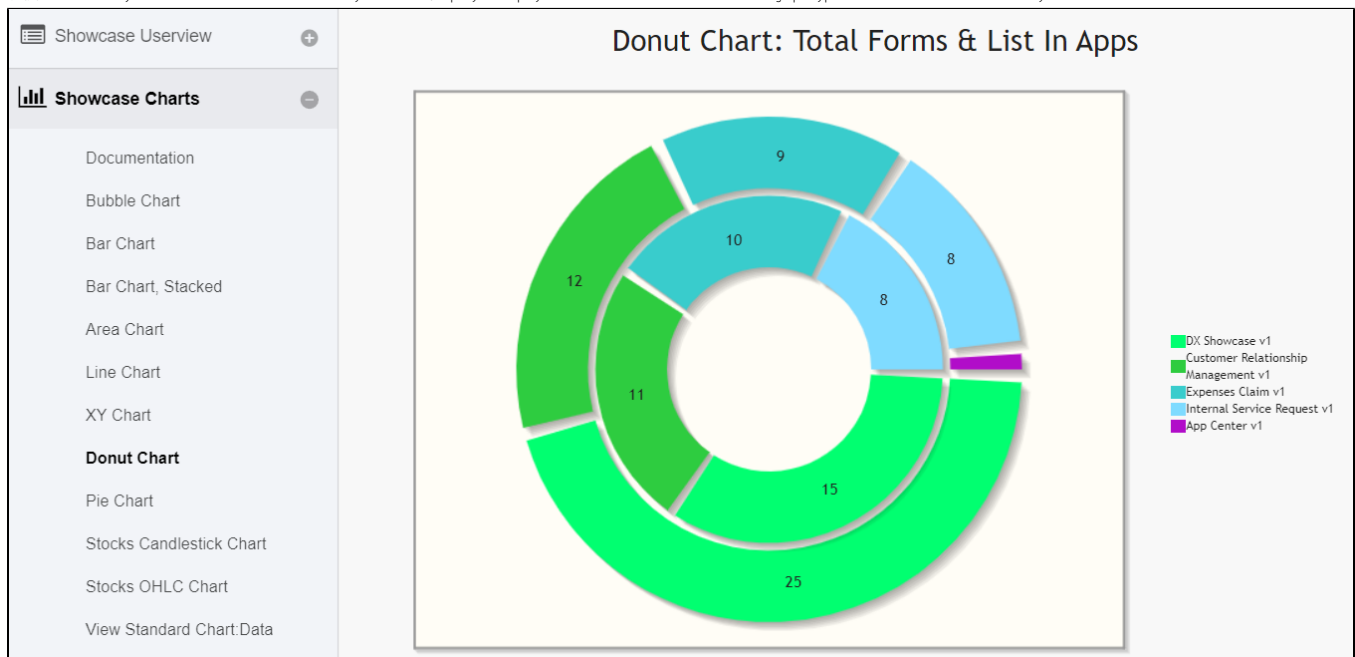


Chart Menu Properties

Configure Chart Menu

Configure Chart ?

Label *

Chart

Menu ID

Chart Type *

Area Chart

Chart Title

Chart Title

Chart Library

Apache ECharts

Figure 1: Edit Chart Properties

Name	Description
Label	Menu label. Mandatory field.
Menu ID	Item link slug. Optional field. Value defined here must be unique to the rest of the UI Menus as the first matching name will be called upon.
Chart Type	<ul style="list-style-type: none">Area ChartBar ChartBubble ChartCandlestick ChartDonut ChartLine ChartOpen High Low Close Chart (OHLC Chart)Pie ChartXY Chart
Chart Title	Chart Title to be displayed as part of the generated graph.
Chart Library	<ul style="list-style-type: none">Apache ECharts For a comprehensive guide on creating and customizing charts using Apache ECharts, refer to the official ECharts documentation https://echarts.apache.org/en/api.html#echarts. It provides instructions on implementing various chart types, data sets, and options for personalizing the visual appeal and interactivity of your chartsjqPlot Charts Explore the jqPlot documentation http://www.jqplot.com/docs/index/Hooks.html for detailed instructions on utilizing this plotting and charting plugin

Configure Datasource

Datasource

Datasource ?

Default Datasource

SQL

SQL Query *

1

Figure 2a: SQL Chart Properties - Default Datasource

Name	Description
Datasource	<div>Select the datasource for the chart.</div> <div><div>Default Datasource</div></div>

- Custom Datasource

Datasource

Datasource ?
Custom Datasource

CONFIGURE DATABASE

Database Type * ?

Target DB URL *

Username *

Password *

SQL

SQL Query *

1	
---	--

Figure 2b: SQL Chart Properties - Custom Datasource

- Load Data From

Datasource

Datasource ?
Load Data From

Data Store *
BeanShell

Configure BeanShell

Figure 2c: SQL Chart Properties - Load Data From

- Using List

Datasource

Datasource ?

Using List

List *

Expense All

Chart Dataset

Entire Dataset

Show Tabular Data

No

Figure 2d: SQL Chart Properties - Using List

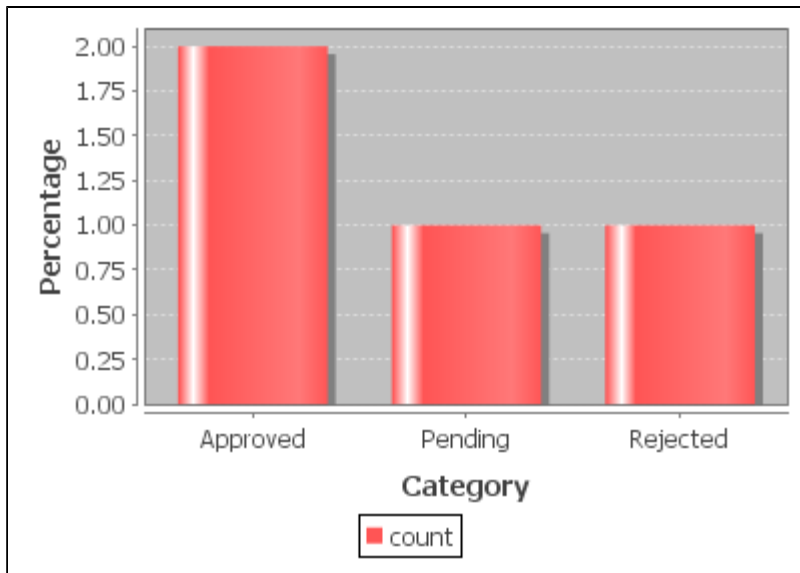
SQL
Query

When Datasource is set to "Default Datasource" or "Custom Datasource", this option will show up. You use an SQL Query to produce the dataset required for the graph type. The first column in the dataset will be

Example 1: The first column to be returned from the query must be a label (X-axis), followed by value columns for the Y-axis.

Example

```
SELECT
    c_status AS 'status',
    COUNT(c_status) AS 'count'
FROM
    app_fd_tix_tickets
WHERE
    c_status IS NOT NULL
GROUP BY
    c_status
```

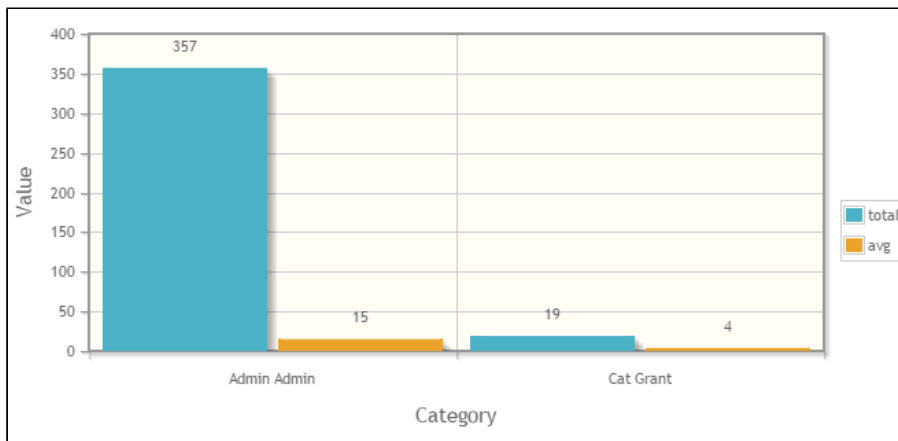


Example 2:

SQL


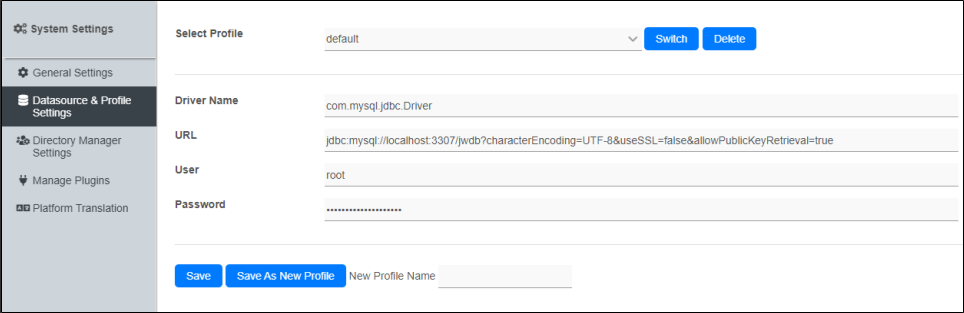
```
SELECT
    c.c_claimant,
    SUM( CAST( replace(c.c_total, '$', '') AS DECIMAL(10, 2)) ) AS 'total',
    AVG( CAST( replace(c.c_total, '$', '') AS DECIMAL(10, 2)) ) AS 'avg'
FROM
    app_fd_j_expense_claim c
GROUP BY
    c.c_claimant
```

app_fd_hr_expense_claim (3×2)		
c_claimant	total	avg
Admin Admin	357.00	14.875000
Cat Grant	19.00	3.800000



Data
Store

When Datasource is set to "Load Data From", this option will show up. Advance Form Data Binder has more flexible ways to build chart datasets using join, group, and aggregate functions. Please see [List Data Store](#)

<div>Configure Database</div>	<p>This option is available when the Datasource is set to "Custom Datasource" (Figure 2a).</p> <table border="1"> <thead> <tr> <th>Name</th><th>Description</th></tr> </thead> <tbody> <tr> <td>Database Type</td><td>Enter the database type. (example: com.mysql.jdbc.Driver) Please ensure that the database type entered here is compatible with Joget DX 8. For reference, check this Link.</td></tr> <tr> <td>Target DB URL</td><td>Enter the Database's URL</td></tr> <tr> <td>Username</td><td>Enter your DB username credential.</td></tr> <tr> <td>Password</td><td>Enter your DB password credential.</td></tr> </tbody> </table> <div>  Tip For a reference of what the parameters entered into "Configure Database" should look like, check the default Joget Datasource settings, Expand the admin bar then go to Settings>System Settings>Data </div> 	Name	Description	Database Type	Enter the database type. (example: com.mysql.jdbc.Driver) Please ensure that the database type entered here is compatible with Joget DX 8. For reference, check this Link .	Target DB URL	Enter the Database's URL	Username	Enter your DB username credential.	Password	Enter your DB password credential.		
Name	Description												
Database Type	Enter the database type. (example: com.mysql.jdbc.Driver) Please ensure that the database type entered here is compatible with Joget DX 8. For reference, check this Link .												
Target DB URL	Enter the Database's URL												
Username	Enter your DB username credential.												
Password	Enter your DB password credential.												
<div>Using List</div>	<table border="1"> <thead> <tr> <th>Name</th><th>Description</th></tr> </thead> <tbody> <tr> <td>List</td><td>Select the List that the chart will use to plot data.</td></tr> <tr> <td>Chart Dataset</td><td> Select the size of the chart's dataset. <ul style="list-style-type: none"> Current Page Dataset Entire Dataset </td></tr> <tr> <td>Show Tabular Data</td><td> This option allows you to view the data used to plot the chart in tabular form. <ul style="list-style-type: none"> No - Do not show the tabular data Top - Show tabular data on top of the chart Bottom - Show tabular data at the bottom of the chart </td></tr> <tr> <td>Show Export Links</td><td> Available when Show tabular data is set to either "Top" or "Bottom". When set to "Yes", this option allows you to export the chart into CSV, Excel, XML or PDF directly from the UI page. <ul style="list-style-type: none"> Yes No </td></tr> <tr> <td>Show Filters</td><td> Available when Show tabular data is set to either "Top" or "Bottom". When set to "Yes", this option allows you to filter the tabular data used to plot the chart directly from the UI page. <ul style="list-style-type: none"> Yes No </td></tr> </tbody> </table>	Name	Description	List	Select the List that the chart will use to plot data.	Chart Dataset	Select the size of the chart's dataset. <ul style="list-style-type: none"> Current Page Dataset Entire Dataset 	Show Tabular Data	This option allows you to view the data used to plot the chart in tabular form. <ul style="list-style-type: none"> No - Do not show the tabular data Top - Show tabular data on top of the chart Bottom - Show tabular data at the bottom of the chart 	Show Export Links	Available when Show tabular data is set to either "Top" or "Bottom". When set to "Yes", this option allows you to export the chart into CSV, Excel, XML or PDF directly from the UI page. <ul style="list-style-type: none"> Yes No 	Show Filters	Available when Show tabular data is set to either "Top" or "Bottom". When set to "Yes", this option allows you to filter the tabular data used to plot the chart directly from the UI page. <ul style="list-style-type: none"> Yes No
Name	Description												
List	Select the List that the chart will use to plot data.												
Chart Dataset	Select the size of the chart's dataset. <ul style="list-style-type: none"> Current Page Dataset Entire Dataset 												
Show Tabular Data	This option allows you to view the data used to plot the chart in tabular form. <ul style="list-style-type: none"> No - Do not show the tabular data Top - Show tabular data on top of the chart Bottom - Show tabular data at the bottom of the chart 												
Show Export Links	Available when Show tabular data is set to either "Top" or "Bottom". When set to "Yes", this option allows you to export the chart into CSV, Excel, XML or PDF directly from the UI page. <ul style="list-style-type: none"> Yes No 												
Show Filters	Available when Show tabular data is set to either "Top" or "Bottom". When set to "Yes", this option allows you to filter the tabular data used to plot the chart directly from the UI page. <ul style="list-style-type: none"> Yes No 												

Data Store & Chart Data Mapping

Order By

Order

ASC

X-axis Value *

Y-axis Values *

Number Value *

Series Name

Series Customization

1	
---	--

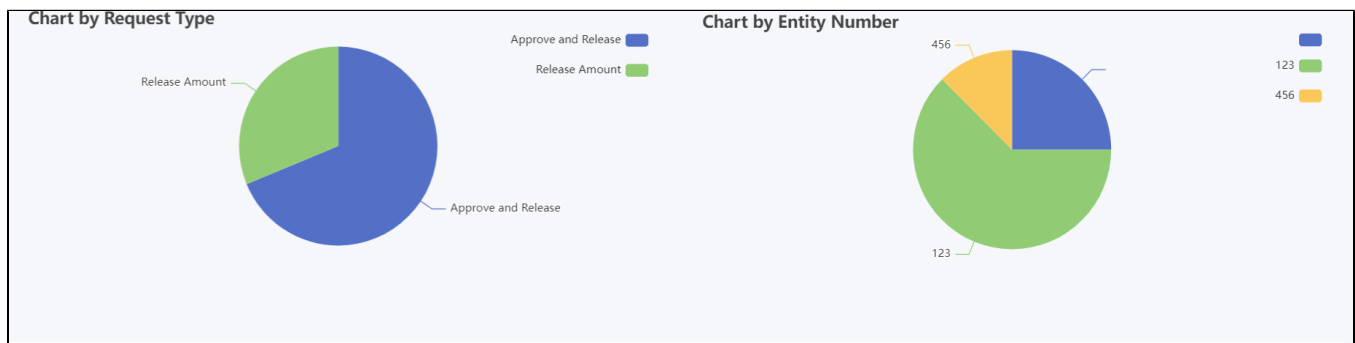
+ Add Row

Collapse All Rows

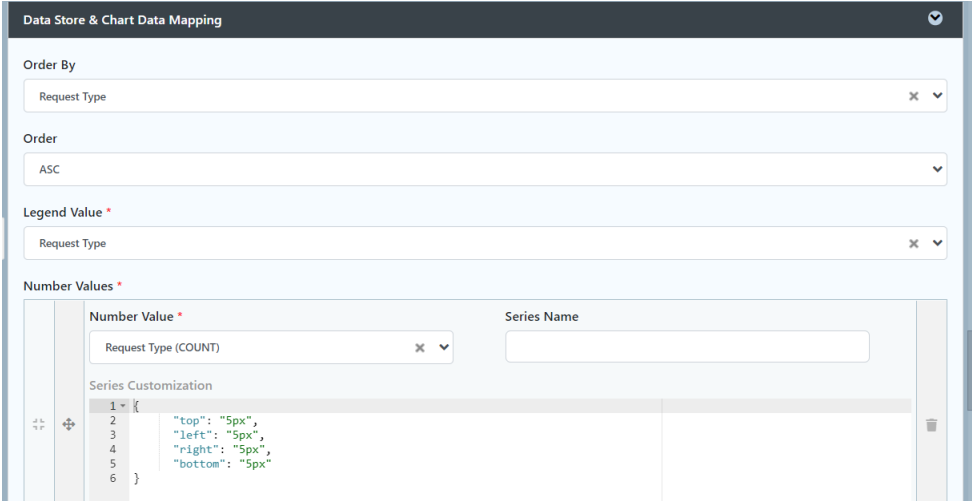
Remove Padding and Whitespaces from Charts

To hide the padding and utilizing the spacing around the chart, below code can be helpful.

Output of the code



Code to remove padding and spacing



```
{
  "top": "5px",
  "left": "5px",
  "right": "5px",
  "bottom": "5px"
}
```

Figure 3: Data Binder & Chart Data Mapping Properties

Name	Description										
Order By	Column to be sorted in the graph dataset. This would affect how the graph is plotted.										
Order	<ul style="list-style-type: none">• ASC• DESC										
X-axis Value	X-axis label.										
Y-axis Values	Y-axis dataset. <table><tr><th>Name</th><th>Description</th></tr><tr><td>Number Value</td><td>Select a numeric parameter to be plotted on the Y-axis. This field supports hash variables, app variables and List columns.</td></tr><tr><td>Series Name</td><td>Custom name for the series of values.</td></tr><tr><td>Series Customization</td><td>This field allows you to insert a script that can modify the graph's visualization. (e.g: modify legend position)</td></tr><tr><td>Add Row</td><td>Add another dataset to be plotted on the Y-axis.</td></tr></table>	Name	Description	Number Value	Select a numeric parameter to be plotted on the Y-axis. This field supports hash variables, app variables and List columns.	Series Name	Custom name for the series of values.	Series Customization	This field allows you to insert a script that can modify the graph's visualization. (e.g: modify legend position)	Add Row	Add another dataset to be plotted on the Y-axis.
Name	Description										
Number Value	Select a numeric parameter to be plotted on the Y-axis. This field supports hash variables, app variables and List columns.										
Series Name	Custom name for the series of values.										
Series Customization	This field allows you to insert a script that can modify the graph's visualization. (e.g: modify legend position)										
Add Row	Add another dataset to be plotted on the Y-axis.										

Chart Options Properties

Chart Options

ECharts Theme

Default

X-axis Label *

App Name

X-Axis Display as

Category

Y-axis Label *

Total

Y-axis Prefix

☒ Show Legend

☐ Show Value Label in Chart

☒ Stack Series

☒ Display as Horizontal Chart

☐ No Boundary Gap

Width *

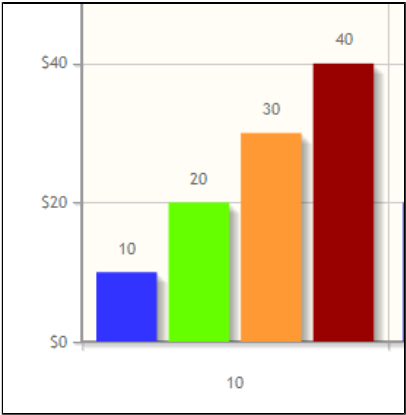
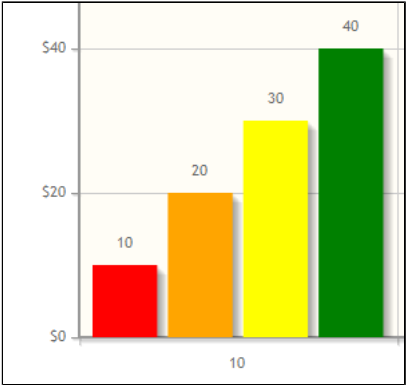

100%

Height *

400px

Figure 4: Chart Options

Name	Description
Echart Theme	This option appears when Echart Library is selected in Configure Chart (Fig 1).
X-axis Label	X-axis Label

X-axis display as	<ul style="list-style-type: none">• Category• Number• Date
Y-axis Label	Y-axis Label
Y-axis Prefix	Y-axis Prefix
Show Legend?	If checked, the legend will be shown in the generated graph.
Show Value Label in Chart?	If checked, the value label will be shown in the generated graph.
Stack Series?	If checked, this will affect the generated graph.
Display as Horizontal Chart?	If checked, the Chart will be displayed horizontally.
No Boundary Gap	If checked, there will be no gap between the axes label and the chart.
Width	Width in character, for example 100%.
Height	Height in character, example 300px.
Colours	<p>Series colour. Optional field. This option only appears when jqPlots Library is selected in Configure Chart.</p> <p>Comma-separated values (CSV) of color codes.</p> <p>Example 1: #3333FF,#66FF00,#FF9933,#990000</p>  <p>Example 2: red,orange,yellow,green,blue,indigo</p>  <div><p> What are the default colors?</p><p>http://stackoverflow.com/questions/18332440/what-are-the-jqplot-default-series-colors</p></div>



Series Customization

Series Name	
<input type="text"/>	

Series Customization	
1	

Add Row

Collapse All Rows

Additional Customization

1	
---	--

UI KEY DATA FILTER

UI Key Name

UI

Custom Header



1	
---	--

Custom Footer

1	
---	--



Figure 5: Advanced Properties

Name	Description								
Series Customization	<table><tr><th>Name</th><th>Description</th></tr><tr><td>Series Name</td><td>Custom name for the series of values.</td></tr><tr><td>Series Customization</td><td>This field allows you to insert a script that can modify the graph's visualization. e.g: tooltip : { "trigger" : "item" , "formatter" : {a} {b} : {c} {(d)%} }</td></tr><tr><td>Add Row</td><td>Add another dataset to be plotted on the Y-axis.</td></tr></table>	Name	Description	Series Name	Custom name for the series of values.	Series Customization	This field allows you to insert a script that can modify the graph's visualization. e.g: tooltip : { "trigger" : "item" , "formatter" : {a} {b} : {c} {(d)%} }	Add Row	Add another dataset to be plotted on the Y-axis.
	Name	Description							
	Series Name	Custom name for the series of values.							
	Series Customization	This field allows you to insert a script that can modify the graph's visualization. e.g: tooltip : { "trigger" : "item" , "formatter" : {a} {b} : {c} {(d)%} }							
Add Row	Add another dataset to be plotted on the Y-axis.								
Additional Customization	This field allows you to insert an additional script that can modify the graph's visualization. (e.g: modify legend position)								
UI Key Name	<div><p>When defined, the additional conditions will be appended using the value defined here as the parameter and the UI key value as the value.</p><div><div></div><div><p>Example</p><p>SQL: <code>SELECT category, count(category) FROM table1</code></p><p>UI Key Name: type</p><p>UI Key Value: val</p><p>Resultant SQL: <code>SELECT category, count(category) FROM table1 WHERE type = 'val'</code></p></div></div></div> <p>When UI key value is defined, you may define #userviewKey# in your SQL query to have it replaced with the UI key value.</p> <div><div></div><div><p>Example</p><p>SQL: <code>SELECT category, count(category) FROM table1 WHERE type = '#userviewKey#'</code></p><p>UI Key Value: val</p><p>Resultant SQL: <code>SELECT category, count(category) FROM table1 WHERE type = 'val'</code></p></div></div>								
Custom Header	Custom Header in HTML.								
Custom Footer	Custom Footer in HTML.								

Performance & Offline

Performance & Offline

CACHE SETTINGS

Scope ?

None

Duration (s) ?

20

PWA OFFLINE SETTINGS

PWA Offline support is dependent on the theme used.

☐ Enable Cache for Offline Support

Figure 6: Performance & Offline Settings

Name	Description
Scope	Caching options are: <ul style="list-style-type: none">• None: No caching.• Application: Cache content by application where all users will see the same content.• User: Cache by username
Duration (s)	Duration in seconds to cache content defaults to 20 seconds if applicable.

Read more at [Performance Improvement with UI Caching](#).

PWA Offline Settings

Note: PWA Offline support is dependent on the theme used.

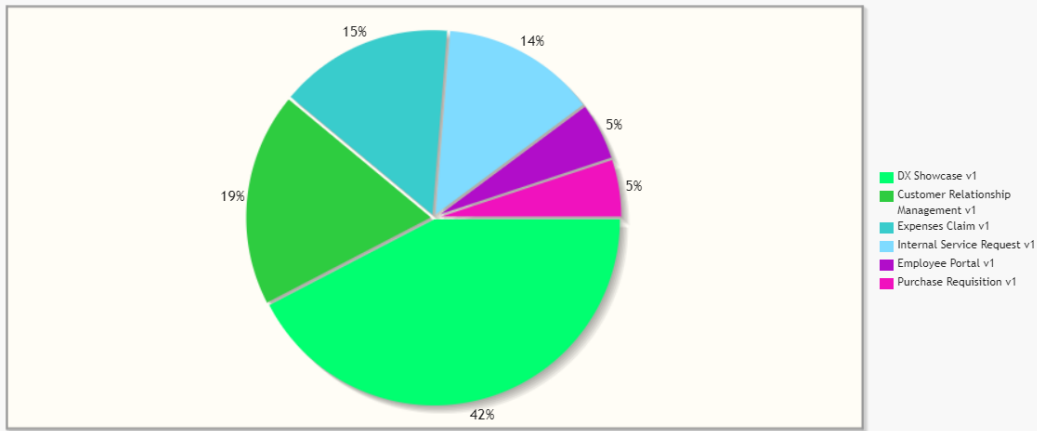
Name	Description
Enable cache for offline support	Check this to enable caching for offline support, usually set for use on mobile browsers.

Read [Progressive Web Application \(PWA\)](#) for more information.

Additional Notes & Modifications

Display Labels Outside the Pie Chart

Pie Chart: Total Forms in App



The following code can be modified and put in "Custom Header" for displaying the labels outside of the pie chart.

```
<script>
  $(function(){
    $.jqplot.preParseOptionsHooks.push(function(args){
      args.seriesDefaults.rendererOptions.dataLabelPositionFactor = 1.05;
    });
  });
</script>
```



The charts are plotted using jqPlot. Head over to their website [here](#) to see the full list of available hooks for customization.

Hide Gridlines from Chart Plot

The following code can be modified and put in "Custom Header" property, to hide gridlines from the chart plot.

```
<script>
  $(function(){
    $.jqplot.preParseOptionsHooks.push(function(args){
      args.axesDefaults.drawMajorGridlines = false;
    });
  });
</script>
```

Interactive Chart

The following code can be modified and put in "Custom Footer" for interactive Charts.


```

<script>
$(document).ready(function(){

    //replace both #jq_plot_chart id with the correct id. can be found by right-clicking the chart and
    pressing "Inspect"
    $('#jq_plot_chart').bind('jqplotDataClick',
        function (event, seriesIndex, pointIndex, data) {
            console.log(event);
            console.log(seriesIndex);
            console.log(pointIndex);
            console.log(data);

            //for chart which used legend and x-axis,
            var xaxis = $(".jqplot-xaxis-tick:eq("+pointIndex+")");
            var series = $(".jqplot-table-legend-label:eq("+seriesIndex+")");

            console.log("x-axis : " + xaxis.text());
            console.log("series : " + series.text());
        }
    );

    //for double click event. Please note the arguments are different.
    $('#jq_plot_chart').bind('jqplotDbClick',
        function (event, coordinate, points, data) {
            console.log(event);
            console.log(coordinate);
            console.log(points);
            console.log(data);

            if (data) {
                var xaxis = $(".jqplot-xaxis-tick:eq("+data.pointIndex+")");
                var series = $(".jqplot-table-legend-label:eq("+data.seriesIndex+")");

                console.log("values : " + data.data);
                console.log("x-axis : " + xaxis.text());
                console.log("series : " + series.text());
            }
        }
    );
});
</script>

```



This code does not work with OHLC and candlestick charts.



The code above only works for charts made with **JqPlot**

The following code is for interactive charts made with **eChart** and should also be put in the "Custom Footer". You can find more about interactive ECharts [here](#).

```

<script>
$(document).ready(function() {
    //ID of one's eChart can be found in html elements of the chart when launching the app
    //which can be found by right-clicking the chart and pressing "Inspect"
    var aChart = echarts.init(document.getElementById('some_id'));

    aChart.on('click', function(params) {
        console.log("Click!");
        console.log("Data name: " + params.name);
        console.log("Data value: " + params.data);
    });
});
</script>

```

Download Demo Apps

Available in Joget Marketplace

- [Candlestick Charting](#)
- [Tutorial App: Joget Workflow Charts](#) (using jqPlots)
- Joget DX Showcase [APP_Joget_DX8_Showcase.jwa](#) (using Apache Echarts)