

# NewgenONE OmniOMS

# Charts in Composition Designer

User Guide

Version: 12.0

newgensoft.com

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# Preface

This section provides information about this guide, revision history, details on the intended audience, related documentation and documentation feedback for this guide.

## About this guide

This guide provides information on designing charts in NewgenONE OmniOMS Composition Designer.

To ensure you are referring to the latest and most recent revision of this guide, download it from one of the following locations:

- Newgen Internal Doc Portal, if you are a Newgen employee.
- Newgen Partner Portal, if you are a Newgen partner.

## **Revision history**

Revision date	Description
October 2024	Initial publication

### **Intended** audience

This guide is intended for system administrators, developers, and all the other users who are seeking information on the functioning of the charts in NewgenONE OmniOMS Composition Designer and to aid them in configuration, maintenance, and development. The reader must be comfortable in understanding the computer terminology.

### **Related documents**

Following documents provide additional information about NewgenONE OmniOMS Charts in Composition Designer::

- NewgenONE OmniOMS Release Notes
- NewgenONE OmniOMS Composition Designer Installation and Configuration Guide
- NewgenONE OmniOMS Composition Designer User Guide
- NewgenONE OmniOMS Highcharts Server Setup Guide
- NewgenONE OmniOMS Developer Guide

### **Documentation feedback**

To provide feedback or any improvement suggestions on technical documentation, write an email to docs.feedback@newgensoft.com.

To help capture your feedback effectively, share the following information in your email:

- Document name
- Version
- Chapter, topic, or section
- Feedback or suggestions

# **Working with charts**

The Charts feature in OmniOMS Composition Designer provides a user-friendly interface to draw various types of charts on the canvas. You must configure necessary chart properties like Chart Type, Title, Axis, Legends, Labels, Colors, and so on, to get the required chart output.

A preview option is available to get a sample preview of the chart. This helps in verifying the proper configuration of charts.

### **Inserting a chart**

Click the chart icon in the toolbar to draw a chart on the canvas. This invokes the Chart Properties dialog, where you can configure all the chart properties to get the required output.

To insert a chart on the canvas, follow the below steps:

- 1. Open the default layer of the report.
- 2. Click the chart icon 🛃 in the toolbar.



- 3. Navigate to the canvas where you want to draw the chart.
- 4. Hold the clicked button and stretch it as per your estimated requirement. Then, free the clicked mouse button.

The Chart Properties dialog appears. It contains the following tabs:

- Axis
- Series
- Chart Area
- Legends
- Title
- Plot Options
- Others

art Properties: is feature facilitates the users to get a chart image by provid er should provide necessary chart properties like Chart Typ	ing a few chart properties. e, Axis, Legends, Labels, Colors, etc., to get the desired output.
art Type  Column Range is  Series   Chart Area   Legends   Title   Plot Options	Others
X-Axis Label Source* Root. Line. Values. Y1	Y-Axis Label Axis Type Primary
Title Name X-Axia	Title Name Y-Axis Title
Lower Bound Upper Bound	Lower Bound Upper Bound Title Marrie 10
Format Value Tick Position Disable	Format Value Tick Position Disable
Interval Type None Tick Interval	Label Style Font Style Calibri V 10 V B /
Rotation 0 Color -	Rotation 0 Color •
Date Format - Not Selected	

- 5. Select a **Chart Type**. Composition Designer supports the following chart types:
  - Line
  - Bar
  - Column
  - Area
  - Pie
  - Donut
  - Semi-Donut
  - Cylinder Chart
  - Column Range
  - Scatter
  - Line and Column

You must select a chart type from the list to configure the necessary chart properties under the tabs available in the Chart Properties dialog.

The options under different tabs of the chart properties get enabled according to the selected chart type.

is feature facilitates the users to get a chart image by providing	a few chart properties.
ser should provide necessary chart properties like Chart Type.	Axis, Legends, Labels, Colors, etc., to get the desired output
art Type ColumnRange ds Sen Bar Column X-Avis Lat Pie Source Semi-Donut Title Nam Title Font Style Calibri Title Rotation Title Rotation Title Rotation Title Rotation Column Title Rotation Title Rotation Title Rotation Title Rotation Column Title Rotation Title Rotation Column Title Rotation Title Rotation Column Title Rotation Title Rotation Column Title Rotation Column Column Title Rotation Column Column Column Title Plot Options Column Title Plot Options Column Colum	Y-Axis Label Axis Type Primary Title Name Y-Axis Title Title Font Style Callon V 10 V B / Lower Bound Upper Bound Title Rotation -90 V Title Margin 10 Format Value Tick Position Disable V Tick Interval Label Style Callon V 10 V B / Rotation 0 V Color V Color V Color V V Color V V Color V V V V V V V V V V V V V V V V V V V

6. Under the Axis Tab, select the **Source** from the available list of data fields under the X-Axis Label section.

er should provide necessary chart properties like Chart Ty	ype, Axis, Legends, Labels, Colors, etc., to get the desired output
art Type ColumnRange	
Series   Chart Area   Legends   Title   Plot Options	Others
X-Axis Label	Y-Axis Label
Source* Root.Line.Values.Y1 -	Axis Type Primary
Title Name X-Axis	Title Name Y-Axis Title
Title Font Style Calibri 💌 10 💌 B /	Title Font Style Calbri 💌 10 💌 B /
Lower Bound Upper Bound	Lower Bound Upper Bound
Title Rotation 0 Title Margin 10	Title Rotation -90  Title Margin 10
Format Value Tick Position Disable -	Format Value Tick Position Disable
Interval Type None - Tick Interval	Tick Interval
Label Style	Label Style
Font Style Calibri 💌 10 💌 B /	Font Style Calbri 💌 10 💌 B /
Rotation 0  Color	Rotation 0  Color
	1

- 7. Click **Series** to open the related tab. Then, define the series source:
  - a. Click **Add** to add a series in the Series List section.
  - The Series Details section gets enabled, allowing you to define the details of the series.
  - b. Specify the Series Name and select Source Name using the dropdown
  - c. Select the required **Series Color**.

d. Click **Save** to add the configured series to the Series List.

🙀 Chart Properties			×
Chart Properties: This feature allows users to get a User should provide necessary ch	chart image by pr art properties like	oviding a few chart properties. Chart Type, Title, Axis, Legends, Labels, etc., to get the desired output.	
Chart Type : Line	•		
Axis Series Chart Area Legr Chart Type Line v	ends   Title   Pl	ot Options   Others	1
Set as primary	Series Name	New Series 1	1
Series List	Source Name	employees id	
	Series Color	•	
Add Remove		Save	
		Preview OK Cancel	

The enable Marker property is available for Line type charts only. You can enable Data Labels with their properties if required. But, if you configure data labels under the Series tab, these settings supersede those configured under the Plot Options tab.

- 8. Similarly, define the other properties under the **Chart Area**, **Legends**, **Title**, and **Plot Options** tab.
- 9. After defining the properties, click **OK** to save the properties. The created chart appears in the space selected on the canvas.
  - Use the Preview option to view the chart before saving the changes made to configurations. This allows you to ensure that the chart properties are set as expected.
  - Use the Cancel option to exit the chart properties dialog without saving the changes made to configurations.

### Axis

The Axis tab allows you to configure the chart's X-Axis and Y-Axis properties. Both axis contain the title and label fonts and color settings.

X-Axis source is mandatory for all types of charts. It acts as the source for the X-Axis data.

While, Y-Axis consists of the primary (left-side) and secondary (right-side), axis settings. The primary and secondary axis options are available in the Line and Column Chart case.

his feature facil	, itates the users to get a chart image by providin vide necessary chart properties like Chart Type,	g a few chart properties. , Axis, Legends, Labels, Colors, etc., to get the desired output.
Chart Name On Chart Type Cyl wis Series	art_2 inder Chart Area   Legends   Title   Plot Options   C	Xhers
X-Axis Label		Y-Axis Label
Group	poiuytrewq	Axis Type Primary -
Source*	DATA3D.DATATYPE.XAXIS	Title Name Y-Axis Title -
Title Name	X-Axis Title	Title Font Style Calibri 💌 10 💌 B /
Title Font Styl	e Calibri 💌 10 💌 🖪 🖊	Lower Bound Upper Bound
Lower Bound	Upper Bound	Title Rotation 90 Title Margin 10
Title Rotation	0 Title Margin 10	Format Value Tick Position Disable 💌
Format Value	Tick Position Disable 💌	Tick Interval
Interval Type	None v Tick Interval	Label Style Font Style Calibri   I 10  B /
Font Style	Calibri • 10 • B /	Rotation 0  Color  ·
Rotation	0 Color	Shift Y-Axis to Right
Date Format	v -Not Selected-v	

The following table lists the properties to configure under the Axis tab:

Fields	Description	
X-Axis label		
Group	Select the group created for the charts to dynamically merge the data. It applies only to cylindrical chart types. When grouping is applied, the Y-axis data is grouped to stack the cylinder based on the provided Group Key, and dynamic series are created.	
Source	Select a data field containing X-Axis data for the chart. This field appears disabled for the Scatter type of charts.	
Date Format	This field appears enabled when you select Date and Time as X-Axis source. Select the required Date and Time format for chart output.	
Interval Type	This field appears enabled when you select Date and Time as X-Axis source. Select the type of intervals you want to display in the X-Axis.	
	Y-Axis label	
Axis Type	Configure both the Primary (left side) and Secondary (right side) axis of the Dual axes chart from the list. Once selected, all the properties under the selection are applicable as defined. This field gets enabled in the case of Line and Column type of charts only.	
Shift Y-Axis to Right	Select the checkbox to change the position of the y- axis from left to right. It is useful for languages that have writing styles from right to left.	
Common for X-Axis label and Y-Axis label		
Title Name	Enter the title name. It appears as the label of the X- Axis.	
Title Font Style	Select the font from the available list using the Title Font Style dropdown. Also, you can modify the size and color of the font. Use B to Bold and I to Italic the font of the title name.	
Lower Bound	Enter the lower boundary value of the respective axis, that is X or Y axis label.	

Fields	Description
Upper Bound	Enter the upper boundary value of the respective axis, that is X or Y axis label.
Title Rotation	Select the rotation angle (For example, -45, -30, 0, 30, 45, and so on) of the axis label title.
Title Margin	Specify the margin between the title and the plot area. In case a subtitle is present, specify the margin between the subtitle and the plot area.
Format Value	Specify the format string for the axis label. It concatenates with the end of the axis labels.
Tick Position	Select the tick positions (Disable, Inside, Outside) of the chart area for the axis labels.
Tick Interval	Specify the total amount of gap between two ticks in the axis labels.
Font Style (Label Style)	Select the font from the available list using the Font Style dropdown. Also, you can modify the size and color of the font. Use B to Bold and I to Italic the font of the title name.
Rotation (Label Style)	Select the rotation angle (For example, -45, -30, 0, 30, 45, and so on.) of the axis labels.

• These properties appear disabled for Pie, Donut, and Semi-Donut type of charts.

- Source fetches the list of data fields from the report fields defined under the Report Properties section.
- Some chart properties contain default values. This ensures faster configuration of charts.
- For DB datasets, the source is automatically retrieved from the declared Group Key. For XSD or JSON datasets, the user must provide the X-axis source.

#### Series

The Series tab allows you to configure properties related to the series data of the charts. For example, Line, Bar, Column, Column Range, and Scatter series for respective charts and categories for Pie, Donut, and Semi-Donut charts.

s feature facilitates the users to er should provide necessary ch	get a chart image by providing a few chart properties. art properties like Chart Type, Axis, Legends, Labels, Colors, etc., to get the desired out	put
art Name Chart_2		
art Type Cylinder	•	
s Series Chart Area Lege	ends Title Plot Options Others	
hart Type Cylinder -	Series Details	
E coloridad	Series Name New Series 1 Series Color	
Series List	Source Name DATA3D.DATATYPE.DATA.AMNT	
New Series 1	Label Name DATA3D.DATATYPE. Label Color -Not Selected-	•
New Jenes 1	Enable Marker	
	Symbol Type circle 👻 Fill Color 🔛 - Line Color	
	Line Width 2 Px	
	Data Labels	
	Border Width 0 Px Border Color 🖉 - Label Color 🖉 -	
	Border Radius 0 Px Use Back Color -	
		×
	Font Style Calibri - 10 - B / Y Position 10 F	X
Add Remove	Save	I.
		4

- For Line, Bar, Column, Area, Line, and Column charts, to provide the Y-Axis data, you must create the number of series under the Series tab. Depending on the chart type, you can specify the Series Color, Dash Style, Marker settings, Data Label settings, and so on.
- For Pie, Donut, and Semi-Donut charts, to provide category data, you must create a series for each category under the Series tab. Specify the Series Name (Category Name) and Series Color (Category Color) for representation on the chart.
- For Line and Column charts, you must declare either Bar or Line as the Primary or Secondary Axis first and then create a series under it.
- Enable Marker section appears enabled for Line and Scatter type of charts only.
- You can enable Data Labels with their properties if required.



- If you configure data labels under the Series tab, these settings supersede the settings configured in the plotting options.
- When grouping is applied, only one series is created in the Series tab.

- For the Column Range chart, you must specify the minimum and maximum values of the column.
- For the Scatter chart, you must specify the value of the X and Y Axis.

The following table lists the properties available to configure under the Series tab:

Field	Description	
Chart Type	Select the chart type from the available list. This file appears enabled for Line and Column type of charts.	
Set as primary	Select a chart type and then select the Set as primary checkbox to mark the selected chart as a primary axis chart. This selection of primary chart is related to the Axis Type as present under the Axis tab (Y-Axis Label).	
	Series List	
Up and Down Arrow	Click the up arrow to move the selected series one level above in the current order of series. Similarly, click the down arrow to move the selected series one level above in the current order of series.	
Add	Click the Add option to add a series to the list.	
Remove	Click the Remove option to remove the selected series from the list.	
Series Details		
Series Name	Specify the name of the series. It gets displayed as chart legends.	
Series Color	Specify a color to apply to the series data using the palette.	
Source Name	Select a data field from the available list as a series of data sources.	
Label Name	Specify the name of the data present in the chart. It displays each data present in the chart. It is only applicable to cylindrical charts.	
Label Colour	Specify a color for each data label present in charts. It is not mandatory to apply label colors. It is only applicable to cylindrical charts.	
Min and Max Value	This option appears for the Column Range type of charts. Specify: • Min Value — Minimum value of the column • Max Value — Maximum value of the column	
X-Axis and Y- Axis Value	This option appears for Scatter type of charts. Specify: • X-Axis Value — Value of the X-axis • Y Axis Value — Value of the Y-axis	

Field	Description			
	Marker (Applicable only for Line and Scatter type of charts)			
Enable Marker	Select the Enable Marker checkbox to enable markers for the Line and Scatter type of charts. You can specify the following properties after enabling marker:			
	Symbol Type	Select the symbol type from the list of available shapes. It appears as a marker for Line or Scatter type of charts.		
	Fill Color	Specify a color to fill the marker shape using the palette.		
	Line Color	Specify a color for the marker outline using the palette.		
	Line Width	Enter a whole number value (in pixels) to set width of the marker outline.		
Data Labels (Not Applicable for Pie, Donut, Semi-Donut Charts)				
Data Labels	Select the Data Labels checkbox to enable data labels for all the type of charts except Pie, Donut, and Semi-Donut. You can specify the following properties after enabling data labels:			
	Border Width	Enter a whole number value (in pixels) to set the width of data label border.		
	Border Color	Specify a color for the border of the data label using the palette.		
	Label Color	Specify a color for the data label using the palette.		
	Border Radius	Enter an integer value (in pixels) to set the radius of the data label border.		
	Use Back Color	Select the checkbox to enable the back color for the data label. After enabling, specify a color for the background of the data label using the palette.		
	Alignment	Specify the alignment of the data labels using the horizontal or vertical alignment options, that is, Left, Center, and Right horizontally and Top, Center, and Bottom vertically.		
	Font Style	Select the font from the available list using the Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font.		
	X Position	Enter an integer value (in pixels) to set the x offset of the data label relative to its horizontal alignment. Negative x moves it to the left and positive x moves it to the right.		

Field		Description	
	Y Position	Enter an integer value (in pixels) to set the vertical offset of the data label relative to its vertical alignment. Negative y moves it up and positive y moves it down.	

- Source Name fetches the list of data fields from the report fields defined under the Report Properties section.
- Some chart properties contain default values. This ensures faster configuration of charts.
- Some chart properties appear enabled and disabled depending upon the selected chart type.
- Specify Data labels for Pie, Donut, Semi-Donut charts under the Plot Options tab.

#### **Chart area**

The Chart Area tab allows you to configure properties related to the chart area and chart border along with 3-D options.

X Chart Properties	×
Chart Properties: This feature facilitates the users to get a chart image by providing a few chart properties. User should provide necessary chart properties like Chart Type, Axis, Legends, Labels, Colors, etc., to get the	desired output.
Chart Type Column	1
Plot Border Width 0 Px Plot Border Color Area Color -	☐ Invert Axis
Border Width 0 Px Border Radius 0 Px Border Color	·
Image: 3D Options     Image: 3D Options       Alpha Angle     15     The Chart Depth       70     Px       Left     0       Px     Top	Px
Beta Angle 30 View Distance Px Right 0 Px Bottom 0	Px
Preview OK	Cancel

The following table lists the properties available to configure under the Chart Area tab:

Field	Description		
Plot Border Width	Enter a whole number value (in pixels) to set the plot border width.		
Plot Border Color	Specify a co	olor for the plot border using the palette.	
Area Color	Specify a co This color g	olor for the chart area using the palette. gets applied to the whole chart area.	
Invert Axis	Select the object the	checkbox to invert the axis. Thus, the x-axis ertical, and the y-axis becomes horizontal.	
C	hart Border		
Border Width	Enter a wh chart borde	ole number value (in pixels) to set the er width.	
Border Radius	Enter an integer value (in pixels) to set the chart border radius.		
Border Color	Specify a color for the chart border using the palet		
3D Options (Applicable f	or Column,	Pie, Donut Charts Only)	
3D Options	Select the 3D Options checkbox to enable defining 3D properties for the Column, Pie, and Donut type o charts. You can specify the following properties after enabling 3D options:		
	Alpha Angle	One of the two rotation angles for the chart.	
	Beta Angle	One of the two rotation angles for the chart.	
	Chart Depth	Enter an integer value (in pixels) to set the total depth of the chart.	
	View Distance	Enter an integer value (in pixels) to specify at what distance the chart must appear look from the viewers eyes.	

Field		Description	
Chart Padding			
Chart Padding	Select the 3D Options checkbox to enable defining 3D properties for Column, Pie, and Donut type of charts. You can specify the following properties after enabling padding:		
	Left	Enter an integer value (in pixels) to set space between the left edge of the chart and the content (plot area, axis title and labels, title, subtitle, or legend in top position).	
	Right	Enter an integer value (in pixels) to set space between the right edge of the chart and the content (plot area, axis title and labels, title, subtitle, or legend in top position).	
	Тор	Enter an integer value (in pixels) to set space between the top edge of the chart and the content (plot area, axis title and labels, title, subtitle, or legend in top position).	
	Bottom	Enter an integer value (in pixels) to set space between the bottom edge of the chart and the content (plot area, axis title and labels, title, subtitle, or legend in top position).	



• Some chart properties contain default values. This ensures faster configuration of charts.

• Some chart properties appear enabled and disabled depending upon the selected chart type.

#### Legends

The Legends tab allows you to configure the appearance of legends of various series specified for the chart. Use this tab to specify the Legend title and other settings, such as font, color, alignment, and more.

🔏 Chart Properties	×
Chart Properties: This feature facilitates the users to get a chart image by providir User should provide necessary chart properties like Chart Type	g a few chart properties. , Axis, Legends, Labels, Colors, etc., to get the desired output.
Chart Type Column	
Axis Series Chart Area Legends Title Plot Options C	Xhers
☐ Legends	
Title Name	Legend Border
Fore Color Use BackColor	Width 0 Px Radius 0 Px
Title Font Style Calibri 💌 10 💌 🖪 /	
Alignment 📰 🗃 📰 📰	Top 5 Px Bottom 5 Px
X Position 0 Px Y Position 0 Px	Legend Symbol
Layout Horizontal 💌 🗆 Use Floating	Use Square Symbol
Item Fore Color Item Padding 10	Height 10 Px Radius 3 Px
Item Font Style Calibri 💌 10 💌 B /	Width 10 Px Padding 15 Px
	Preview OK Cancel

The following table lists the properties available to configure under the Legends tab:

Field	Description		
Legends	Select the Leo following pro	gends checkbox to display legends in the chart. You can specify the perties after enabling legends:	
	Title Name	Enter the legend title.	
	Fore Color	Select a color to set the color of the legend title using the palette.	
	User Back Color	Select the checkbox to enable the back color for the legend title. After enabling, specify a color for the background of the title using the palette.	

Field		Description	
	Title Font Style	Select the font from the available list using the Title Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font of the title name.	
	Alignment	Specify the alignment of the legend title using the horizontal or vertical alignment options, that is, Left, Center, and Right horizontally and Top, Center, and Bottom vertically	
	X Position	Enter an integer value (in pixels) to set the x offset of the legend relative to its horizontal alignment. Negative x moves it to the left and positive x moves it to the right.	
	Y Position	Enter an integer value (in pixels) to set the vertical offset of the legend relative to its vertical alignment. Negative y moves it up and positive y moves it down.	
	Layout	Select the layout of the legend items as horizontal, vertical, or proximate. NOTE: With proximate, legend items appear extremely close to their respective graphs. Inverted charts or legend positions that prohibit it are	
		exceptions.	
	Use Floating	Select the checkbox to allow the placing of the plot area below the legend title.	
	Item Fore Color	Select a color to set the color of the legend item using the palette.	
	ltem Padding	Specify the pixel distance between each item in a legend with a horizontal layout.	
	Item Font Style	Select the font from the available list using the Item Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font of the item.	
		Legend Border	
Width	Enter a whole legend.	e number value (in pixels) to set the width of the border drawn around the	
Radius	Select a color	to set the color of the border drawn around the legend using the palette.	
Color	Enter an integ the legend.	ger value (in pixels) to set the corner radius of the border drawn around	

Field	Description			
	Item Margin			
Тор	Enter an integer value (in pixels) to specify the top margin for each legend item.			
Bottom	Enter an integer value (in pixels) to specify the bottom margin for each legend item.			
	Legend Symbol			
Use Square Symbol	Select the checkbox to enable use of as symbol of each legend item.			
Height	Enter an integer value (in pixels) to specify the height of the symbol (used for type of series) that use a rectangle in the legend.			
Radius	Enter an integer value (in pixels) to specify the border-radius of the symbol (used for type of series) that use a rectangle in the legend.			
Width	Enter an integer value (in pixels) to specify the width of symbol of each legend item symbol.			
Padding	Enter an integer value (in pixels) to specify the padding between the symbol and text of the legend item.			

### Title

The Title tab allows you to configure the properties of the title and subtitle of the charts.

Chart Properties		>
Chart Properties: This feature facilitates the users to get a chart image by providin User should provide necessary chart properties like Chart Type,	a few chart properties. xis, Legends, Labels, Colors, etc., t	o get the desired output.
Chart Type Column	-1	
Title Details	Subtitle Details	
Title Name	Subtitle Name	
Fore Color	Fore Color	
Font Style Calibri 💌 10 💌 🖪 /	Font Style Calibri 💌	10 <b>- B</b> /
X Position 0 Px Y Position 0 Px	X Position 0 Px Y	Position 0 Px
☐ Use Floating	Use Floating	
Margin 0 Px		
	Preview	OK Cancel

The following table lists the properties available to configure under the Title tab:

Field	Description			
Title				
Title Details	Select the Title Details checkbox to enable titles for the chart. You can specify the following properties after enabling titles.:			
	Title Name	Enter the title of the chart.		
	Fore Color	Select a color for the title of the chart using the palette.		
	Font Style	Select the font from the available list using the Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font of the title name.		

Field		Description	
	X Position	Enter an integer value (in pixels) to set the x offset of the chart title respective to its horizontal alignment. Negative x moves it to the left, positive x moves it to the right.	
	Y Position	Enter an integer value (in pixels) to set the vertical offset of the chart title respective to its vertical alignment. Negative y moves it up, positive y moves it down.	
	Use Floating	Select the checkbox to enable floating of the title while restricting movement of the plot area.	
	Margin	Enter an integer value (in pixels) to specify the margin between the title and the plot area.	
		Subtitle	
Subtitle Details	Select the Subtitle Details checkbox to enable subtitles for the chart. You can specify the following properties after enabling subtitles.:		
	Subtitle Name	Enter the subtitle of the chart.	
	Fore Color	Select a color for the subtitle of the chart using the palette.	
	Font Style	Select the font from the available list using the Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font of the title name.	
	X Position	Enter an integer value (in pixels) to set the x offset of the chart subtitle respective to its horizontal alignment. Negative x moves it to the left, positive x moves it to the right.	
	Y Position	Enter an integer value (in pixels) to set the vertical offset of the chart subtitle respective to its vertical alignment. Negative y moves it up, positive y moves it down.	
	Use Floating	Select the checkbox to enable floating of the subtitle while restricting movement of the plot area.	

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• Some chart properties contain default values. This ensures faster configuration of charts.

• Some chart properties appear enabled and disabled depending on the selected chart type.

### **Plot options**

The Plot Options tab allows you to configure plot options, zones, and data labels.

are properties: is feature facilitates the users to get a chart image by provide er should provide necessary chart properties like Chart Typ	ding a few chart pr pe, Axis, Legends,	operties. Labels, Colors, etc., to get the desired output.
art Type Bar		
is Series Chart Area Legends Title Plot Options	Others	
Plot Options		
Show Legends Stacking Smooth Line Curve	Center Start	% Center End %
Border Width 0 Px Chart Size Px	Inner Size	0 % Depth Px
Border Color	Data Labels	
	Border Width	0 Px Border Color
Bar Width 20 Px	Border Radius	0 Px Label Color
		Use Back Color
Zone Axis X - Add Remove	Alignment	
Value Colour Dash Style	X Position	0 Px Y Position 10 Px
	Font Style	Calibri 💌 10 💌 B /
	Distance	20 % 🗖 Use Straight Connector

The following table lists the properties available to configure under the Plot Options tab:

Field	Description	
Plot Options	Select the Plot Options checkbox to enab You can specify the following properties a	ble the plotting options for the chart. After enabling plotting options.:
	Show Legends	Select the Show Legends checkbox to display legends on the chart. This option supersedes the enablement of legends under the Legends tab.

Field	Description	
	Stacking	Select the Stacking checkbox to enable creation of a stacked chart illustrating the change in data series over time in the case of Bar and Column type charts.
	Smooth Line Curve	Select the Smooth Line Curve checkbox to set smooth lines (instead of sharp edges) in the case of the Line type chart.
	Center Start	The center of the pie chart is related to the plot area. Specify Centre Start (in %) of the chart area in the horizontal direction. This option is available for Pie, Donut and Semi-Donut type of charts.
	Center End	The end of the pie chart is related to the plot area. Specify Center End (in %) of the chart area in the vertical direction. This option is available for Pie, Donut, and Semi- Donut type of charts.
	Border Width	Enter a whole number (in pixels) to set the width of the border surrounding each Column and Bar, and borders of Pie, Donut, or Semi- Donut type of charts.
	Chart Size	Enter an integer value (in pixels) to specify the area the chart must occupy. This is applicable for Pie, Donut, and Semi-Donut type of charts.
	Inner Size	Enter an integer value (in pixels) to specify the size of the inner diameter of the Donut and Semi- Donut type of charts.

Field	Description			
	Depth	Enter an integer value (in pixels) to specify the thickness of a 3D pie and 3D Donut type of chart.		
	Border Color	Specify a color to set the border color of the Column, Bar, Pie, Donut, Semi-Donut, Column Range, or Scatter, type of charts.		
	Line Width	Enter a whole number (in pixels) to set the width of the graph line. It is applicable for Line type of charts only.		
	Bar Width	Enter an integer value (in pixel) to set the width of each bar or column. It is applicable for Bar and Column type of charts only.		
	Point Start	Enter the starting value of the X- Axis. In case no x values is available for the points in a series, it defines what value to start.		
	Point Interval	Enter the point intervals for the X- Axis labels. In the absence of x values, it defines the interval between the x values. For example, if a series has one value every decade starting from 0, set the point interval to 10.		
		Point interval is set in milliseconds on true Date Time axes.		
Zones				
Zone Axis	Select one Axis from the list (X or Y axis) to enable adding or removing the zones.			
Add	Click on the Add button to add a zone for the selected axis. Users should provide the zone value, zone color, and the dash style under that zone.			
Remove	Select any defined zone from the zones list and click on the Delete button to delete that particular zone.			

Field	Description	
Data Labels		
Border Width	Enter a whole number (in pixels) to set the data label border width.	
Border Color	Select a color to set the data label border color using the palette.	
Border Radius	Enter an integer value (in pixels) to set the data label border-radius.	
Label Color	Select a color to set the color of the data label for color using the palette.	
Use Back Color	Select the checkbox to enable the back color for the data label. After enabling, specify a color for the background of the data label using the palette	
Alignment	Specify the alignment of the data labels using the horizontal or vertical alignment options, that is, Left, Center, and Right horizontally and Top, Center, and Bottom vertically.	
X Position	Specify the alignment of the data labels using the horizontal or vertical alignment options, that is, Left, Center, and Right horizontally and Top, Center, and Bottom vertically.	
Y Position	Select the font from the available list using the Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font.	
Font Style	Select the font from the available list using the Font Style dropdown. Also, you can modify the size of the font. Use B to Bold and I to Italic the font.	
Distance	Enter an integer value (in pixels) to specify the distance from point to tooltip. This is applicable for Pie, Donut, and Semi-Donut type of charts.	
Use Straight Connector	Select the checkbox to use a straight connector (instead of a curved line) from the pie slices to the data labels. This is applicable for Pie, Donut, and Semi-Donut type of charts.	

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• Some chart properties contain default values. This ensures faster configuration of charts.

• Some chart properties appear enabled and disabled depending on the selected chart type.

### Others

The Others tab allows you to choose a format for the image embedded in the PDF. You can select either SVG or PNG to preview the charts in reports. By default, the SVG image type is selected.

Chart Properties			
Chart Properties: This feature facilitates the use User should provide necessar	rs to get a chart image by providing y chart properties like Chart Type,	g a few chart properties. Axis, Legends, Labels, Colors, etc.,	to get the desired output.
Chart Name Chart_2			
Chart Type Line	•		
Axis Series Chart Area	Legends Title   Plot Options O	thers	
Image Type			
• SVG	PNG		
		Preview	OK Cancel

For right-to-left (RTL) languages, the PNG format provides better chart printing in PDFs compared to SVG.

### **Preview**

The Preview option appears at the bottom of the Chart Properties dialog. It allows you to preview a sample chart with the configured properties.

To generate a sample preview of the chart, follow the below steps:

- 1. Configure all the mandatory chart properties (X-Axis Source, Series Data) for the selected **Chart Type**.
- 2. Click the **Preview** option present at the bottom of the Chart Properties dialog. The chart preview appears in the default image viewer set in the system. This image consists of a chart generated using sample data.

When generated with original data (Default Preview), the preview image displays a picture similar to the actual chart. Therefore, the Preview option allows you to adjust chart properties whenever necessary.

his feature facilitates the us ser should provide necessa	ers to get a chart image ary chart properties like	by providing a few chart properties. Chart Type, Axis, Legends, Labels, Colors	s, etc., to get the desired output	
hart Type Pie	•			
xis Series Chart Area	Legends   Title   Plot	Options Others		
Chart Type Pie	- Series Details			٦
	Series Name	Private Credit	Series Color 📃 🗸	
Set as prim	Source Name	Root.PiePerformance.AssetAllocatior -		
Series List	Enable Mar	ker		1L
Bonds	Symbol Type	circle 👻 Fill Color 🔳 👻	Line Color 🔳 👻	
Real Estate Private Credit	Line Width	2 Px		
	Data Labels			
	Border Width	0 Px Border Color	Label Color 🔳 👻	
	Border Radius	0 Px 🗖 Use Back	Color 🛛 🗸	
	Alignment		X Position 0 Px	
	Font Style	Calbri 💌 10 💌 B /	Y Position 10 Px	
Add Remove			Save	



# **Charts use case**

For the demonstration of the charts in designer, we have used the cylinder chart. Cylinder charts represent the 3D effect in the cylindrical shape to showcase the data.

The procedure of adding a cylinder chart on the canvas includes the following steps:

- Step 1: Initializing the chart
- Step 2: Specifying chart elements
- Step 3: Assigning data
- Step 4: Previewing chart

## Initializing the chart

From the Chart Type dropdown, select the Cylinder chart. Refer to the Inserting a chart section to insert and initialize a chart.

## **Specifying chart elements**

To enhance the visual experience of the cylinder charts you must define the following properties:

- Axis
- Series
- Chart area
- Legends
- Title
- Plot options

You can implement cylindrical charts in the 3D mode only. To enable 3D mode, click the **Chart Area** tab and select the **3D Options**.

Ensure selecting the **3D Options** checkbox while creating a cylindrical chart.

a Chart Properties	×
Chart Properties: This feature facilitates the users to get a chart image by providing a few chart properties. User should provide necessary chart properties like Chart Type, Axis, Legends, Labels, Colors, etc., to get	the desired output.
Chart Type Column	
Plot Border Width 0 Px Plot Border Color Area Color -	☐ Invert Axis
Chart Border Border Width 0 Px Border Radius 0 Px Border Color	•
Image: 3D Options     Image: Chart Depth     Top       Alpha Angle     15     Chart Depth     70     Px	0 Px
Beta Angle 30 View Distance Px Right 0 Px Bottom	0 Px
Preview O	K Cancel

To enable stacking, follow the below steps:

- 1. Click the **Plot Options** tab
- 2. Select the **Plot options** checkbox. Then, select the **Stacking** checkbox to enable the stacking of columns of the same row.

# Assigning data

A stacked cylindrical column chart illustrates the change in data series over time. The horizontal arrangement of "Types of items" and the vertical arrangement of "data values" emphasizes variation in data over a period of time. Using chart control, you can easily point the chart to your custom data.

The data set contains one or more numeric columns (interpreted as numbers). The columns must contain values that are either all positive or all negative. The columns of the same row appear stacked vertically.

## **Previewing chart**

Refer to the Preview section to view the designed cylinder chart.

#### **Cylinder Chart**



#### **Stacked Cylinder Chart**

