# Customizing chart properties

After you create a chart, you can customize it by changing its properties.

You select the chart object in IBM® Cognos® Analytics - Reporting to view its properties.

Some properties are dependent on the existence of other properties.

If you are familiar with using conditional variables, you can customize the chart to change its appearance or provide information in response to expressions or conditions.

As you edit the chart properties, Reporting provides you with a preview of your chart, using simulated data. This allows you to view your style changes without running the report. You can disable the chart preview in the options.

The following table shows some of the properties you can change in charts. These properties are available when you select the chart object unless specified otherwise in the **Action to perform in the Properties pane** column.

Goal	Action to perform in the Properties pane
Hide or show the title, subtitle, or footer	Select the chart. Under <b>Chart Titles</b> , set the <b>Title</b> , <b>Subtitle</b> , or <b>Footer</b> property.
Hide or show the legend	Select the chart. Under <b>Chart Annotations</b> , set the <b>Legend</b> property.  For more information, see Customize the Legend in a Current Default Chart.
Hide or show baselines	Select the chart. Under <b>Chart Annotations</b> , set the <b>Baselines</b> property.  For more information, see Add a Baseline to a Current Default Chart.
Increase the contrast of the labels	Select the chart. In the <b>Properties</b> pane, under <b>Label</b> , select <b>Contrast label color</b> .

Goal	Action to perform in the Properties pane
Add a shadow to the labels to increase the visibility.	Select the chart. In the <b>Properties</b> pane, under <b>Label</b> , select <b>Label shadow</b> .
Hide or show trendlines or regression lines 12.8	Select the chart. Under <b>Chart Annotations</b> , set the <b>Trendlines</b> or <b>Regression Line</b> property.
	For more information, see Display Trendlines in Current Default Charts or Display Regression Lines in Legacy Scatter or Bubble Charts.
Hide or show markers	Select the chart. Under <b>Chart Annotations</b> , set the <b>Markers</b> property.
	For more information, see Add a Marker to a Current Default Chart.
Hide or show notes	Select the chart. Under <b>Chart Annotations</b> , set the <b>Notes</b> property.  For more information, see Add a Note to a Current Default
	Chart.
Hide or show the axes	Select the chart. Under <b>Axes</b> , set the <b>Y1 Axis</b> , <b>Y2 Axis</b> , or <b>Category Axis</b> property.
	For more information, see Customize the Axes of a Current Default Chart.
Hide or show the axis title or axis line	Select the axis. Under <b>General</b> , set the <b>Axis Line</b> or <b>Axis Title</b> property.
	For more information, see Customize the Axes of a Current Default Chart.
Change an axis title	Select the axis title. Under <b>General</b> , set the <b>Default Title</b> property to <b>No</b> , and then double-click the axis title and type a new title.

Goal	Action to perform in the Properties pane
	<b>Tip:</b> You can use the <b>Properties</b> pane to change the axis title properties, such as font, positioning, color, and so on.  For more information, see Customize the Axes of a Current Default Chart.
Change axis properties, such as range, scale interval, and so on	Select the numeric axis. Under <b>General</b> , set the <b>Minimum Value</b> , <b>Maximum Value</b> , <b>Scale Interval</b> , or <b>Scale</b> property.  For more information, see Change the axis scale of a current default chart.
Hide or show the tooltips	Select the chart. Under <b>Chart Labels</b> , set the <b>Tooltips</b> property.  When you pause your pointer over a data marker in the report output, the corresponding absolute or cumulative value appears in a tooltip.  Tooltips are not supported in PDF output.
Change the data format	Select the numeric axis. Under <b>Data</b> , set the <b>Data Format</b> property.
Change the white space around the chart	Select the chart. Under <b>Box</b> , set the <b>Padding</b> or <b>Margin</b> property.  For more information, see Apply Padding to an Object and Set Margins for an Object.
Change the color or pattern in the palette for columns, lines, and areas	Select the chart object. Under <b>Color &amp; Background</b> , set the <b>Palette</b> or <b>Conditional Palette</b> property.  For more information, see Customizing the Color Palette of a Chart and Create a Simple Conditional Palette for a Current Default Chart.

Goal	Action to perform in the Properties pane
Change the chart orientation	Select the chart. In the <b>Properties</b> pane, under <b>Chart Orientation</b> , select <b>Vertical</b> or <b>Horizontal</b> .
Change the default color or font for all chart objects	Select the chart. Under Color & Background, set the Background Color, Foreground Color, or Fill Effects property.
	For more information, see Change a Chart Background in a Legacy Chart.
	Under <b>Font &amp; Text</b> , set the <b>Font</b> or <b>Relative Alignment</b> property.
	Tip
	The 2011 Quarterly Sales Forecast sample report in the GO Sales (analysis) package includes text alignment.
Override the default font or color for axes and chart values	Click the More icon , click the Locked icon to unlock the chart object, select the chart body by clicking between the axes, and set the Font, Background Color, Foreground Color, or Fill Effects property.
Change the three- dimensional appearance of a chart	Select the chart. Under <b>General</b> , set the <b>Depth</b> or <b>Visual Angle</b> property.  For example, for a pie chart, a <b>Depth</b> value of <b>0</b> (zero) leaves the pie flat, or two-dimensional. A value of <b>100</b> raises the pie almost to a sphere.
	Tip

Goal	Action to perform in the Properties pane
	You can select a value from the <b>Depth</b> list or type a value that is not listed.
Insert a background image or watermark in the chart body.	Click the lock button in the toolbar to unlock the chart object, select the chart body by clicking between the axes.  Under Color & Background, set the Background Image property.  For more information, see Change a Chart Background in a Legacy Chart.
Go to another report	Select the chart. Under <b>Data</b> , set the <b>Drill-Through Definitions</b> property.  For more information, see Using drill-through access.
Specify which labels and values to use when generating the text shown on the chart	Select the chart. Under <b>Chart Labels</b> , set the <b>Values</b> property.  Note
	When you show all the labels and values on some chart types, such as scatter charts, bubble charts, and polar charts, the text shown might be too long.

# • Resize a Current Default Chart

You can change the size of a current default chart by dragging the resize handle in the lower right corner of the chart.

# • Resize a Legacy Chart

You can resize a legacy chart by defining the height and width in the **Size & Overflow** property.

# Customizing the Color Palette of a Chart

You can use the chart palette to control the colors or patterns used in the columns, lines, data markers or areas in a chart. For example, if "Telephone" is the first in a data series of order methods, and you want it to appear in blue, use the palette to make the first item in the series blue.

# Creating a Conditional Color Palette in a Chart

You can create a conditional palette to color data items in your chart in different ways depending on a condition. For example, in a column chart that shows revenue per month, you want to make the columns for the months that have a revenue greater than \$1000000 green.

# Change a Chart Background in a Current Default Chart

You can use a gradient, pattern, color, or image to customize the chart background.

# Change a Chart Background in a Legacy Chart

You can use a solid color, a pattern, or a gradient fill effect to customize the chart background.

# Add background effects to a chart object in a legacy chart

You can change the look of certain charts and chart objects by applying visual effects such as drop shadows, borders, and fills.

# Add Colored Regions in a Current Default Chart

You can define colored regions in the body of a chart. For example, you can divide the background of a scatter chart into quadrants and color each quadrant.

# Specify Custom Label Text

By default, chart labels use the name of the underlying data item label. You can change the label text to make it more meaningful. For example, you can rename a chart item labeled **ISO\_3\_Letter\_Code** to **Country or Region**.

# Customizing the Axes of a Chart

Chart axes are lines that border the chart area and provide a reference for measurements. They act as a vehicle for tick marks and scales and form a frame around the chart. The Y-axis is usually the vertical axis and contains data. The X-axis is usually the horizontal axis and contains categories.

# Showing Gridlines in a Chart

To make the data in a chart that includes axes easier to read, you can show horizontal and vertical gridlines. You can show gridlines for the major or minor intervals on the axes.

# **Customize the Legend in a Current Default Chart**

You can hide or show the legend and change its position relative to the chart area, chart body, or a data item. For example, in a bar chart showing revenue for each product line by country or region, you could use the expression [Country or Region] = 'Canada' to position the legend relative to the Canada bar.

# Customize the Items in the Legend of a Legacy Chart

If your legend includes items that are too long, you can truncate long legend items at a specific number of characters. For example, if you want an ellipsis to appear at the end of each truncated legend item, type . . . in the **Truncation text** box.

# Adding a note to a chart

Add a note to a chart to provide additional detail. Notes appear as text in a chart.

# Adding a baseline to a chart

Baselines are horizontal or vertical lines that cut through the chart to indicate major divisions in the data. For example, you can add a baseline to show a sales quota or break-even point.

# Adding markers to charts

Markers are symbols that you add to a chart to designate points of significance that can help you analyze or understand the data.

# Display Trendlines in Current Default Charts

You can display or hide trendlines in the current default bar, line, area, bubble, or scatter charts.

# • Display Regression Lines in Legacy Scatter or Bubble Charts

When using legacy charts, you can display or hide regression lines on scatter charts and bubble charts. Regression lines, also known as lines of best fit or trend lines, graphically illustrate trends in data series. Regression lines are commonly used when charting predictions. A regression line is typically a line or curve that connects or passes through two or more points in the series, showing a trend. Legacy scatter and bubble regression lines are calculated using a numerical algorithm that isn't guaranteed to be optimal. Regressions may or may not match current default chart regressions.

# • Showing data labels or values in current default charts

You can show the data labels or data values within the chart so that the data values are clearer.

# Showing data values in current default pie and donut charts

You can show the data labels or data values within the chart so that the data values are more clear.

# Define Query Context When Customizing Legend Entries, Legend Titles, or Axis Labels

You want to use a revenue expression as a chart legend title. If you get an error message saying that the query context of a layout object cannot be determined, you must define the property list for the item to which it refers. You must first add the desired data item to the query before you can define its property list.

# • Summarize Small Slices, Bars, or Columns in Current Default Charts

You can summarize the smaller slices or bars in charts to avoid having many tiny slices or bars. For example, if your pie chart shows revenue by product and 10 of your products have less than 1% of the pie, you can summarize these 10 slices into one larger slice and name that slice Other.

# Customizing lines and data points in a line chart

You can customize the lines in a line chart to show only lines, only data points, or both. Data points represent series values for each category on the Y-axis. You can show special data markers that represent statistically significant values, such as open, high, low, and close values.

# Customize a Current Default Combination Chart

Combination charts show data series using two or more types of charts - area, bar, and line. The different charts are overlaid on top of each other. You can customize the order in which the charts appear along with the type of charts and their configurations.

#### Create a Matrix of Current Default Charts

You can view a complex chart that includes nested series or categories into a matrix, or crosstab, that shows multiple small charts arranged in rows and columns.

# Customize a Current Default Gauge Chart

When you create a gauge chart, you can choose from a variety of chart templates, which offer different shape, axis, and border options.

## Customize a Legacy Gauge Chart

You can customize the colors and threshold boundaries of the gauge axis areas and whether they use numbers instead of percentages. You can also change the colors of the gauge face and outline and hide gauge labels. By default, the legacy gauge chart uses a band divided into thirds that runs from green to red.

# Defining color by value in current default scatter or bubble charts

In a scatter or bubble chart you can specify that data points or bubbles appear in different colors that are based on an additional measure or fact. The color of the points or bubbles helps you to see relationships in large amounts of data.

# Specify the Bubble Size in a Current Default Bubble Chart

In a bubble chart, you use a measure or fact to determine the size of the bubbles.

## Set the Position of the First Slice in a Current Default Pie Chart

You can specify the angle in a pie chart where the first pie slice starts. You can also change the direction of the slices so they appear clockwise or counter-clockwise.

# Creating a Donut Chart from a Current Default Pie Chart

You can add a hole to the middle of your pie chart to create a donut chart.

### Pull Out Pie Slices in a Current Default Pie Chart

You can highlight pie slices by pulling them out from the rest of the pie. For example, the following chart shows revenue by product line with slices of less than 1,000,000,000 in revenue pulled out by 25%.

## Define the Cumulation Line in a Current Default Pareto Chart

The cumulation line on a Pareto chart displays the percentage of the accumulated total of all the columns or bars. For example, if your chart displays revenue by product line by year, the cumulation line at the second year's column would be the total revenue of the first and second years.

## Define the Cumulation Line in a Legacy Pareto Chart

The cumulation line on a Pareto chart displays the percentage of the accumulated total of all the columns or bars. For example, if your chart displays revenue by product line by year, the cumulation line at the second year's column would be the total revenue of the first and second years.

#### Insert a Microchart into a Crosstab

You can use microcharts to improve the visualization of data in crosstabs.

## Customize a Current Default Bullet Chart

After you create a bullet chart, you can customize the shape, color, and size of the bullet and target indicators.

## **Parent topic:**

→ Charts