

```
+++ title = "Bar chart" description = "Bar chart visualization" keywords = ["grafana", "docs", "bar chart", "panel", "barchart"] weight = 170 aliases = ["/docs/grafana/latest/panels/visualizations/bar-chart/"] +++
```

Bar chart

This panel visualization allows you to graph categorical data.

```
{{< figure src="/static/img/docs/bar-chart-panel/barchart_small_example.png" max-width="1000px" caption="Bar chart" >}}
```

Supported data formats

Only one data frame is supported and it needs to have at least one string field that will be used as the category for an X or Y axis and one or more numerical fields.

Example:

Browser	Market share
Chrome	50
IE	17.5

If you have more than one numerical field the panel will show grouped bars.

Visualizing time series or multiple result sets

If you have multiple time series or tables you first need to join them using a join or reduce transform. For example if you have multiple time series and you want to compare their last and max value add the **Reduce** transform and specify **Max** and **Last** as options under **Calculations**.

```
{{< figure src="/static/img/docs/bar-chart-panel/bar-chart-time-series-v8-0.png" max-width="1025px" caption="Bar chart time series example" >}}
```

Bar chart options

Use these options to refine your visualization.

Orientation

- **Auto** - Grafana decides the bar orientation based on what the panel dimensions.
- **Horizontal** - Will make the X axis the category axis.
- **Vertical** - Will make the Y axis the category axis.

Rotate bar labels

When the graph is in vertical orientation you can use this setting to rotate the labels under the bars. Useful if the labels are long and overlap.

Bar label max length

Sets the max length of the bar label. Labels longer than the max length will be truncated and `...` will be appended to the end.

Show values

This controls whether values are shown on top or to the left of bars.

- **Auto** Values will be shown if there is space
- **Always** Always show values.
- **Never** Never show values.

Group width

Controls the width of groups. 1 = max with, 0 = min width.

Bar width

Controls the width of bars. 1 = Max width, 0 = Min width.

Line width

Controls line width of the bars.

Fill opacity

Controls the fill opacity bars.

Gradient mode

Set the mode of the gradient fill. Fill gradient is based on the line color. To change the color, use the standard color scheme field option.

Gradient appearance is influenced by the **Fill opacity** setting.

None

No gradient fill. This is the default setting.

Opacity

Transparency of the gradient is calculated based on the values on the y-axis. Opacity of the fill is increasing with the values on the Y-axis.

Hue

Gradient color is generated based on the hue of the line color.

```
{{< docs/shared "visualizations/tooltip-mode.md" >}}
```

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{{< docs/shared "visualizations/legend-mode.md" >}}
```

Legend calculations

Choose which of the [standard calculations]({{< relref "../panels/reference-calculation-types.md" >}}) to show in the legend. You can have more than one.

Text size

Enter a **Value** to change the size of the text on your bar chart.

Axis

Use the following field settings to refine how your axes display.

Some field options will not affect the visualization until you click outside of the field option box you are editing or press Enter.

Placement

Select the placement of the Y-axis.

Auto

Grafana automatically assigns Y-axis to the series. When there are two or more series with different units, then Grafana assigns the left axis to the first unit and right to the following units.

Left

Display all Y-axes on the left side.

Right

Display all Y-axes on the right side.

Hidden

Hide the Y-axes.

Label

Set a Y-axis text label.

If you have more than one Y-axis, then you can give assign different labels with an override.

Width

Set a fixed width of the axis. By default, Grafana dynamically calculates the width of an axis.

By setting the width of the axis, data whose axes types are different can share the same display proportions. This makes it easier to compare more than one graph's worth of data because the axes are not shifted or stretched within visual proximity of each other.

Soft min and soft max

Set a **Soft min** or **soft max** option for better control of Y-axis limits. By default, Grafana sets the range for the Y-axis automatically based on the dataset.

Soft min and **soft max** settings can prevent blips from turning into mountains when the data is mostly flat, and hard min or max derived from standard min and max field options can prevent intermittent spikes from flattening useful detail by clipping the spikes past a defined point.

You can set standard min/max options to define hard limits of the Y-axis. For more information, refer to [Standard field options]({{< relref "../panels/reference-standard-field-definitions.md#max" >}}).