Vorlage:Graph:Chart

Vorlage:Lua Vorlage:Uses TemplateStyles

Parameters

chart

Creates a JSON object for <graph> to display charts. In the article namespace the template Vorlage:Tl should be used instead. See its page for use cases.

Parameters:

- **width:** width of the chart
- **height:** height of the chart
- **type:** type of the chart: line for line charts, area for area charts, and rect for (column) bar charts, and pie for pie charts. Multiple series can stacked using the stacked prefix, e.g. stackedarea.
- **interpolate:** interpolation method for line and area charts. It is recommended to use monotone for a monotone cubic interpolation – further supported values are listed at https://github.com/vega/vega/wiki/Marks#area.
- **colors:** color palette of the chart as a comma-separated list of colors. The color values must be given either as #rgb/#rrggbb/#aarrggbb or by a CSS color name. For #aarrggbb the aa component denotes the alpha channel, i.e. FF=100% opacity, 80=50% opacity/transparency, etc. (The default color palette is category10).
- **xAxisTitle** and **yAxisTitle:** captions of the x and y axes
- **xAxisMin, xAxisMax, yAxisMin,** and **yAxisMax:** minimum and maximum values of the x and y axes
- **xAxisFormat** and **yAxisFormat:** changes the formatting of the axis labels. Supported values are listed at https://github.com/d3/d3-3.x-api-reference/blob/master/Formatting.md#numbers for numbers and https://github.com/d3/d3-3.x-api-reference/blob/master/Time-Formatting.md for date/time. For example, the format % can be used to output percentages.
- **xAxisAngle:** rotates the x axis labels by the specified angle. Recommended values are: -45, +45, -90, +90
- **xType** and **yType:** Data types of the values, e.g. integer for integers, number for real numbers, date for dates (e.g. YYYY/MM/DD), and string for ordinal values.
- **x**: the x-values as a comma-separated list (if a value itself contains a comma it must be escaped with a backslash, i.e. it needs to be written as \,)
- **y** or **y1, y2,** ...: the y-values for one or several data series, respectively. For pie charts y2 denotes the radiuses of the corresponding sectors.
- **legend:** show legend (only works in case of multiple data series)
- **y1Title, y2Title,** ...: defines the label of the respective data series in the legend
- **linewidth:** line width for line charts or distance between the pie segments for pie charts

- **showValues:** Additionally, output the y values as text. (Currently, only (non-stacked) bar and pie charts are supported.) The output can be configured used the following parameters provided as `name1:value1, name2:value2`:
  - **format:** Format the output according to https://github.com/d3/d3-3.x-api-reference/blob/master/Formatting.md#numbers for numbers and https://github.com/d3/d3-3.x-api-reference/blob/master/Time-Formatting.md for date/time.
  - **fontcolor:** text color
  - **fontsize:** text size
  - **offset:** move text by the given offset. For bar charts and pie charts with `midangle` this also defines if the text is inside or outside the chart.
  - **angle** (pie charts only): text angle in degrees or `midangle` (default) for dynamic angles based on the mid-angle of the pie sector.
- **innerRadius:** For pie charts: defines the inner radius to create a *doughnut chart.*
- **formatjson:** format JSON object for better legibility

Examples

Line Chart:

```
{{Graph:Chart|width=400|height=100|type=line|x=1,2,3,4,5,6,7,8|y=10, 12, 6, 14, 2, 10, 7, 9}}
```

Note: The y-axis starts from the smallest y value, though this can be overridden with the `yAxisMin` parameter.

Area chart:

```
{{Graph:Chart|width=400|height=100|type=area|x=1,2,3,4,5,6,7,8|y=10, 12, 6, 14, 2, 10, 7, 9}}
```

Note: The y-axis starts from zero

Bar chart:

```
{{Graph:Chart|width=400|height=100|xAxisTitle=X|yAxisTitle=Y|type=rect|x=1,
2,3,4,5,6,7,8|y=10, 12, 6, 14, 2, 10, 7, 9}}
```

Line chart with more than one data series, using colors:

```
{{Graph:
Chart|width=400|height=100|xAxisTitle=X|yAxisTitle=Y|legend=Legend|type=line|x=1,
2,3,4,5,6,7,8|y1=10, 12, 6, 14, 2, 10, 7, 9 |y2=2,4,6,8,13,11,9,2|colors=#0000aa,
#ff8000}}
```

Area chart with more than one data series showing blended overlap:

```
{{Graph:
Chart|width=400|height=100|xAxisTitle=X|yAxisTitle=Y|legend=Legend|type=area|x=1,
2,3,4,5,6,7,8|y1=10, 12, 6, 14, 2, 10, 7, 9 |y2=2,4,6,8,13,11,9,2
|colors=#800000aa,#80ff8000}}
```

Bar chart with multiple data series:

```
{{Graph:
Chart|width=400|height=100|xAxisTitle=X|yAxisTitle=Y|legend=Legend|type=rect|x=1,
2,3,4,5,6,7,8|y1=10, 12, 6, 14, 2, 10, 7, 9 |y2=2,4,6,8,13,11,9,2
|colors=#800000aa,#80ff8000}}
```

Area chart with smoothed data values:

```
{{Graph:
Chart|width=400|height=100|xAxisTitle=X|yAxisTitle=Y|legend=Legend|type=stackedarea
2,3,4,5,6,7,8|y1=10, 12, 6, 14, 2, 10, 7, 9 |y2=2,4,6,8,13,11,9,2
|interpolate=monotone|colors=seagreen, orchid}}
```

Bar chart with stacked data series:

```
{{Graph:
Chart|width=400|height=100|xAxisTitle=X|yAxisTitle=Y|legend=Legend|type=stackedrect
2,3,4,5,6,7,8|y1=10, 12, 6, 14, 2, 10, 7, 9 |y2=2,4,6,8,13,11,9,2|y1Title=Data
A|y2Title=Data B|colors=seagreen, orchid}}
```

Note that the order of the stacking is governed by the alphabetic value of the y-Titles used for the legend. You can always prepend a number 1, 2, 3 to establish whatever stacking order you want.