Chart Macro

The Chart Macro allows you to display a chart based on tabular data. When entering the macro code, you will supply the data and choose the format of the chart.

The chart macro appears as shown in the following screenshot.

Screenshot: The Chart Macro in Confluence

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Usage with the Macro Browser

To insert the chart macro into a page using the Macro Browser,

1. Open the Confluence page or blog post that you want to edit, then click the 'Edit' button.
2. Click the Macro Browser icon on the toolbar. The macro browser window will open.
3. Scroll through the list of macros to find the one you want. Alternatively, start typing the macro name into the search box at the top right of the macro browser. Macros with a matching name will appear in the main pane.
4. Click the desired macro.
5. Set the macro parameters to your requirements. If desired, you can preview these changes by clicking 'Refresh'.
6. Click 'Insert' to add the macro onto the page.

You can also insert macros via autocomplete. For more information, see Using Autocomplete in the Rich Text Editor.

4. Once you’ve found the chart macro, select a type of chart from the parameter settings (listed below).
5. You will also need to manually enter your chart data as a Wiki markup table into the 'body text' field, like so:

<table>
<thead>
<tr>
<th>produce</th>
<th>orange</th>
<th>lemon</th>
<th>grape</th>
<th>pear</th>
</tr>
</thead>
<tbody>
<tr>
<td>week 1</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>week 2</td>
<td>100</td>
<td>200</td>
<td>300</td>
<td>300</td>
</tr>
</tbody>
</table>

6. Click 'Preview' to check that your settings and data are correct.
7. Finally, click 'insert' to add the chart to your page.
Usage with the Wiki Markup Editor.

Here is a simple example of a pie chart.

<table>
<thead>
<tr>
<th>What you need to type</th>
<th>What you will get</th>
</tr>
</thead>
<tbody>
<tr>
<td>`{chart:type=pie</td>
<td>title=Fish Sold}`</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><code>{chart}</code></td>
<td></td>
</tr>
</tbody>
</table>

Here is a simple example of a bar chart.

<table>
<thead>
<tr>
<th>What you need to type</th>
<th>What you will get</th>
</tr>
</thead>
<tbody>
<tr>
<td>`{chart:type=bar</td>
<td>title=Fish Sold}`</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><code>{chart}</code></td>
<td></td>
</tr>
</tbody>
</table>

Parameters

Chart Type Parameters | Display Control Parameters | Title and Label Customisation Parameters | Data Specification Parameters | Colour Customisation Parameters | Axis Customisation Parameters | Pie Chart Customisation Parameters | Attachment Parameters

Chart Type Parameters

These parameters determine what type of chart to display and the way the chart looks.

- **type** - The type of chart to display. Both standard charts and XY charts are supported. XY charts have numerical x and y axes. The x values may optionally be time based (see the timeSeries parameter). The following chart types are available:
Standard charts

- pie (default)
- bar
- line
- area

XY plots

- xyArea
- xyBar
- xyLine
- xyStep
- xyStepArea
- scatter
- timeSeries

Other charts

- gantt – beta

Display Control Parameters

- width — The width of the chart in pixels (default is '300').
- height — The height of the chart in pixels (default is '300').
- dataDisplay — Default is false to not display the rendered body of the macro (usually the data tables). When dataDisplay=true or dataDisplay=after, the data will be displayed after the chart. When dataDisplay=before, the data will be displayed before the chart.
- imageFormat — Default is png. Format of generated image. Valid formats are png and jpg. Other formats may be also be valid if installed on your server.

Title and Label Customisation Parameters

- title — The title of the chart.
- subTitle — A subtitle for the chart using a smaller font.
- xLabel — The label to use for the x (domain) axis.
- yLabel — The label to use for the y (range) axis.
- legend — A legend will be displayed unless 'legend=false' is specified.

Data Specification Parameters

The data for the chart is taken from tables found when the macro body is rendered. These options control how this data is interpreted. By default, numeric and date values are interpreted according to the Confluence global default language (locale) formats. If conversion fails, other languages defined to Confluence will be tried. Additional conversion options can be specified using the parameters below.

- tables — Comma separated list of table ids and/or table numbers (starting at 1) contained within the body of the macro that will be used as the data for the chart. Defaults to all first level tables. If data tables are embedded in other tables, then table selection will be required. This occurs when more complex formatting is done (for example using section and column macros).

- columns — Comma separated list of column labels and/or column titles and/or column numbers for tables used for chart data. This applies to all tables processed. Defaults to all columns. Columns are enumerated starting at 1. Column title is the text for the column in the header row. Column title is the (html) title attribute for the column in the header row.

- dataOrientation — The data tables will be interpreted as columns (horizontally) representing domain and x values unless 'dataOrientation=vertical'.

- timeSeries — If 'true', the x values in an XY plot will be treated as time series data and so will be converted according date formats.

- dateFormat — For time series data, the date format allows for additional customization of the conversion of data to date values. By default, the Confluence language defined date formats will be used. If a dateFormat is specified, it will be the first format used to interpret date values. Specify a format that matches the format of the time series data. See simple date format.

- language — If provided, the language and country specification will be used to create additional number and date formats to be used for data conversion. This specification will be used before the default languages automatically used. Valid values are 2 character ISO 639-1 alpha-2 codes.

- country — Used in combination with the language parameter. Valid values are 2 character ISO 3166 codes.
• forgive — Default is true to try to convert numeric and date values that do not totally match any of the default or user specified formats. Specify forgive=false to enforce strict data format. Data format errors will cause the chart to not be produced.

Colour Customisation Parameters

See the notation guide for details on how to specify colours.

• bgColor — Colour (default is 'white') to use as the background of the chart.
• borderColor — Colour of a border around the chart. Default is to not show a border.
• colors — Comma separated list of colours used to customise category, sections, and series colours.

Axis Customisation Parameters

Depending on the chart type, the range and domain axis may be customised. These values are automatically generated based on the data but can be overidden by specifying one or more more of these parameters.

• rangeAxisLowerBound — range axis lower bound.
• rangeAxisUpperBound — range axis upper bound
• rangeAxisTickUnit — range axis units between axis tick marks
• rangeAxisLabelAngle — angle for the range axis label in degrees
• domainAxisLowerBound — domain axis lower bound. For a date axis, this value must be expressed in the date format specified by the dateFormat parameter. (Only used in XY Plots, standard charts will have no effect)
• domainAxisUpperBound — domain axis upper bound. For a date axis, this value must be expressed in the date format specified by the dateFormat parameter. (Only used in XY Plots, standard charts will have no effect)
• domainAxisTickUnit — domain axis units between axis tick marks. For a date axis, this value represents a count of the units specified in the timePeriod parameter. The time period unit can be overidden by specifying a trailing character: y for years, M for months, d for days, h for hours, m for minutes, s for seconds, u - milliseconds. (Only used in XY Plots, standard charts will have no effect)
• domainAxisLabelAngle — angle for the domain axis label in degrees. (Only used in XY Plots, standard charts will have no effect)
• categoryLabelPosition — allows axis label text position for categories to be customised.
  • up45 - 45 degrees going upward
  • up90 - 90 degrees going upward
  • down45 - 45 degrees going downward
  • down90 - 90 degrees going downward
• dateTickMarkPosition — placement of the date tick mark.
  • start (default) — tick mark is at the start of the date period.
  • middle — tick mark is in the middle of the date period.
  • end — tick mark is at the end of the date period.

Pie Chart Customisation Parameters

• pieSectionLabel — Format for how pie section labels are displayed. The default is to show only the pie section key value. The format is a string with special replacement variables:
  • %0% is replaced by the pie section key.
  • %1% is replaced by the pie section numeric value.
  • %2% is replaced by the pie section percent value.
  Example 1: "%0% = %1%" would display something like "Independent = 20"
  Example 2: "%0% (%2%)" would display something like "Independent (20%)"
• pieSectionExplode — Comma separated list of pie keys that are to be shown exploded. Defaults to no exploded sections. Note: requires jFreeChart version 1.0.3 or higher.

Attachment Parameters

These are advanced options that can be used for chart versioning, to enable automation and to improve performance. Use these options carefully! Normally, the chart image is regenerated each time the page is displayed. These options allow for the generated image to be saved as an attachment and have subsequent access re-use the attachment. This can be useful especially when combined with the [Cache Plugin] to improve performance. Depending on the options chosen, chart images can be versioned for historical purposes.

• attachment — Chart image will be saved in a attachment. This advanced capability is for automation or use in combination with the cache macro. For attachment to be used, the user must be authorised to add attachments to the page specified.
  • attachmentName.png — The chart is saved as an attachment to the current page.
  • page<attachmentName>.png — The chart is saved as an attachment to the page name provided.
  • space:page<attachmentName>.png — The chart is saved as an attachment to the page name provided in the space indicated.
• attachmentVersion — Defines the the versioning mechanism for saved charts.
  • new (default) Creates new version of the attachment.
  • replace — Replaces all previous versions of the chart. To replace an existing attachment, the user must be authorized to remove attachments for the page specified.
  • keep — Only saves a new attachment if an existing export of the same name does not exist. An existing attachment will not be changed or updated.
• attachmentComment — Comment used for a saved chart attachment.
• thumbnail — Default is false. If true, the chart image attachment will be shown as a thumbnail.
Examples

Time Series Chart

*What you need to type*

```plaintext
{chart:type=timeSeries|dateFormat=MM/yyyy|timePeriod=Month|
dataOrientation=vertical|rangeAxisLowerBound=0|domainaxisrotateticklabel=true}

<table>
<thead>
<tr>
<th>Month</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2005</td>
<td>31.8</td>
</tr>
<tr>
<td>2/2005</td>
<td>41.8</td>
</tr>
<tr>
<td>3/2005</td>
<td>51.3</td>
</tr>
<tr>
<td>4/2005</td>
<td>33.8</td>
</tr>
<tr>
<td>5/2005</td>
<td>27.6</td>
</tr>
<tr>
<td>6/2005</td>
<td>49.8</td>
</tr>
<tr>
<td>7/2005</td>
<td>51.8</td>
</tr>
<tr>
<td>8/2005</td>
<td>77.3</td>
</tr>
<tr>
<td>9/2005</td>
<td>73.8</td>
</tr>
<tr>
<td>10/2005</td>
<td>97.6</td>
</tr>
<tr>
<td>11/2005</td>
<td>101.2</td>
</tr>
<tr>
<td>12/2005</td>
<td>113.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Month</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2005</td>
<td>41.1</td>
</tr>
<tr>
<td>2/2005</td>
<td>43.8</td>
</tr>
<tr>
<td>3/2005</td>
<td>45.3</td>
</tr>
<tr>
<td>4/2005</td>
<td>45.0</td>
</tr>
<tr>
<td>5/2005</td>
<td>44.6</td>
</tr>
<tr>
<td>6/2005</td>
<td>43.8</td>
</tr>
<tr>
<td>7/2005</td>
<td>51.8</td>
</tr>
<tr>
<td>8/2005</td>
<td>52.3</td>
</tr>
<tr>
<td>9/2005</td>
<td>53.8</td>
</tr>
<tr>
<td>10/2005</td>
<td>55.6</td>
</tr>
<tr>
<td>11/2005</td>
<td>61.2</td>
</tr>
<tr>
<td>12/2005</td>
<td>63.7</td>
</tr>
</tbody>
</table>
```

*What you will get*
XY Line Chart

What you need to type

```markdown
(chart: type=xyline)
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>12</th>
<th>14</th>
<th>23</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>41.1</td>
<td>31.8</td>
<td>12.4</td>
<td></td>
</tr>
<tr>
<td>Expense</td>
<td>31.1</td>
<td>41.8</td>
<td>43.6</td>
<td></td>
</tr>
</tbody>
</table>
(chart)
```

What you will get

XY Bar Chart

What you need to type
What you will get

 XY Area Chart

What you need to type

What you will get
Area Charts

What you need to type

```javascript
{chart:
  type=area,
  dataDisplay=true,
  legend=true,
  width=300,
  height=300,
  opacity=50}

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>20</td>
<td>23</td>
<td>34</td>
</tr>
<tr>
<td>Satisfied</td>
<td>40</td>
<td>34</td>
<td>23</td>
</tr>
<tr>
<td>Disatisfied</td>
<td>25</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>15</td>
<td>17</td>
<td>18</td>
</tr>
</tbody>
</table>
```

What you will get

```
Satisfaction 2002 2003 2004
Very satisfied 20 23 34
Satisfied 40 34 23
Disatisfied 25 26 25
Very dissatisfied 15 17 18
```
**What you need to type**

```plaintext
{chart: type=area|dataDisplay=true|legend=true|width=300|height=300|stacked=true}
| Satisfaction || 2002 || 2003 || 2004 |
| Very satisfied | 12 | 23 | 31 |
| Satisfied | 1 | 34 | 36 |
| Dissatisfied | 4 | 6 | 22 |
| Very dissatisfied | 2 | 7 | 12 |
{chart}
```

**What you will get**

![Chart showing satisfaction levels over years]

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very satisfied</td>
<td>12</td>
<td>23</td>
<td>31</td>
</tr>
<tr>
<td>Satisfied</td>
<td>1</td>
<td>34</td>
<td>36</td>
</tr>
<tr>
<td>Dissatisfied</td>
<td>4</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Very dissatisfied</td>
<td>2</td>
<td>7</td>
<td>12</td>
</tr>
</tbody>
</table>

**RELATED TOPICS**

- Flowchart Macro
- [Working with Macros]

Take me back to the Wikis Help Guide.