Areas

A MigraDoc chart has a total of seven areas, which consist of one plot area and six text areas which can be used to write text in the chart.

Chart

The chart is defined with the keyword **\chart**. The layout and text formatting can be controlled from here. The text formatting defined here will be derived to every TextArea of the chart.

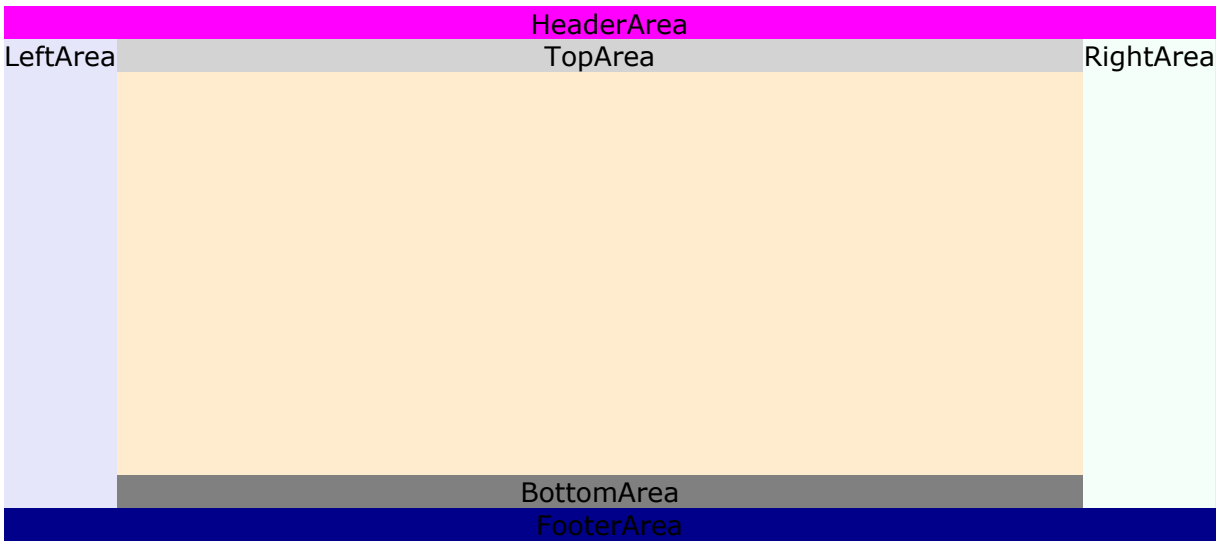
Plot Area

The PlotArea is the area in which the actual chart will be drawn. It is located in the center of the Chart, surrounded by the TextAreas if they exist. Otherwise, it will fill the whole Chart.

Text Area

The six TextAreas are defined with the keywords \headerarea, \footerarea, \toparea, \bottomarea, \leftarea, and \rightarea.

```
\chart(Pie2D)
[
  Height = 200
  Width = 454
  FillFormat.Color = BlanchedAlmond
  Format.Alignment = Center
]
{
  \rightarea [FillFormat.Color = MintCream]
  {RightArea}
  \leftarea [FillFormat.Color = Lavender]
  {LeftArea}
  \toparea [FillFormat.Color = LigtGray]
  {TopArea}
  \bottomarea [FillFormat.Color = Gray]
  {BottomArea}
  \headerarea [FillFormat.Color = Magenta]
  {HeaderArea}
  \footerarea [FillFormat.Color = DarkBlue]
  {FooterArea}
}
```



Axes

With the \xaxis and \yaxis keywords, you can define the formatting of the x-axis and y-axis, respectively.

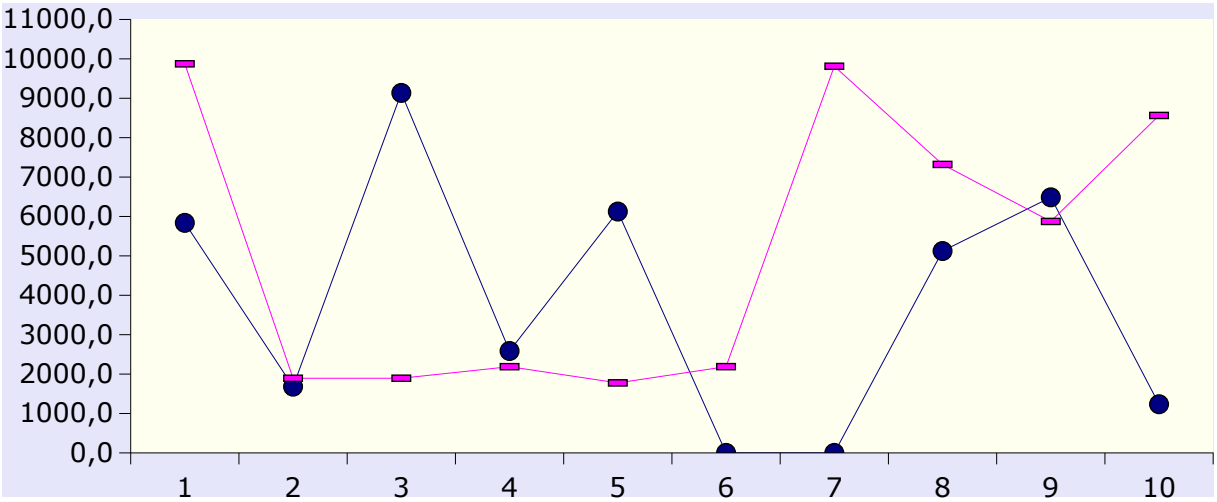
```
\chart(Line)
[…]
{
  \xaxis
  [
    LineFormat.Width = 0.25
    Title.Caption = "X-Axis"
    Title.Alignment = Center
  ]
  \yaxis
  [
    LineFormat.Width = 0.25
    Title.Caption = "Y-Axis"
    Title.VerticalAlignment = Center
  ]
}
```

Data

Data Series

To draw a chart, you will need at least one series of data which is defined using the keyword \series. If any of the data in the data series doesn't exist, 'null' can be inserted, in result, the data will not be displayed.

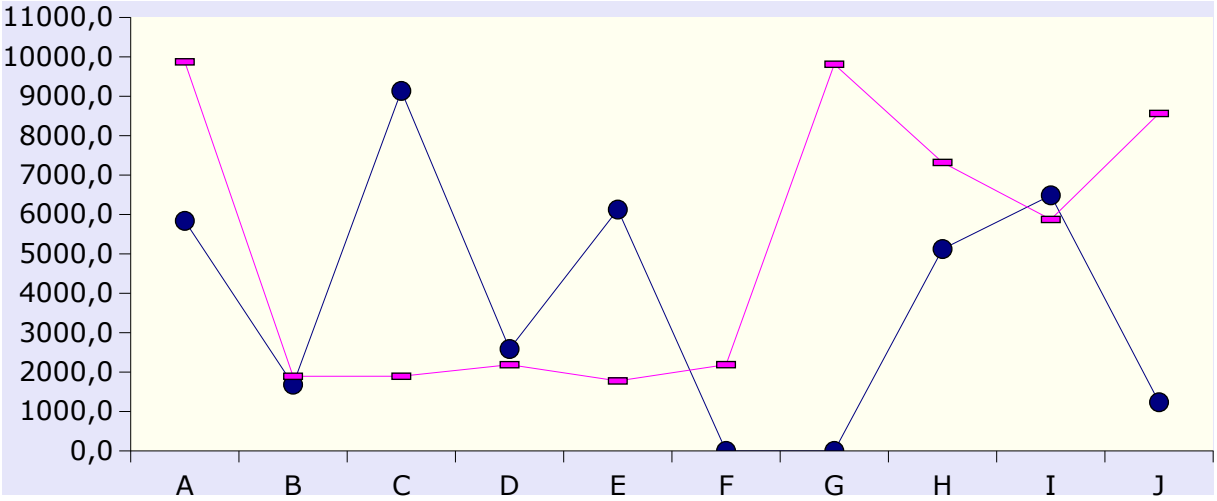
```
\chart(Line)
[…]
{
  …
  \series {5838, 1681, 9136, 2586, 6125, null, null, 5123, 6486, 1235}
  \series {9874, 1894, 1895, 2188, 1776, 2189, 9813, 7321, 5874, 8564}
}
```



X-Values

While the y-axis can only be filled with values, you can write text on the x-axis. This can be done using the keyword \xvalues. MigraDoc allows more than one x-value to be written on the x-axis. An empty string or 'null' can be used if an empty x-value is needed.

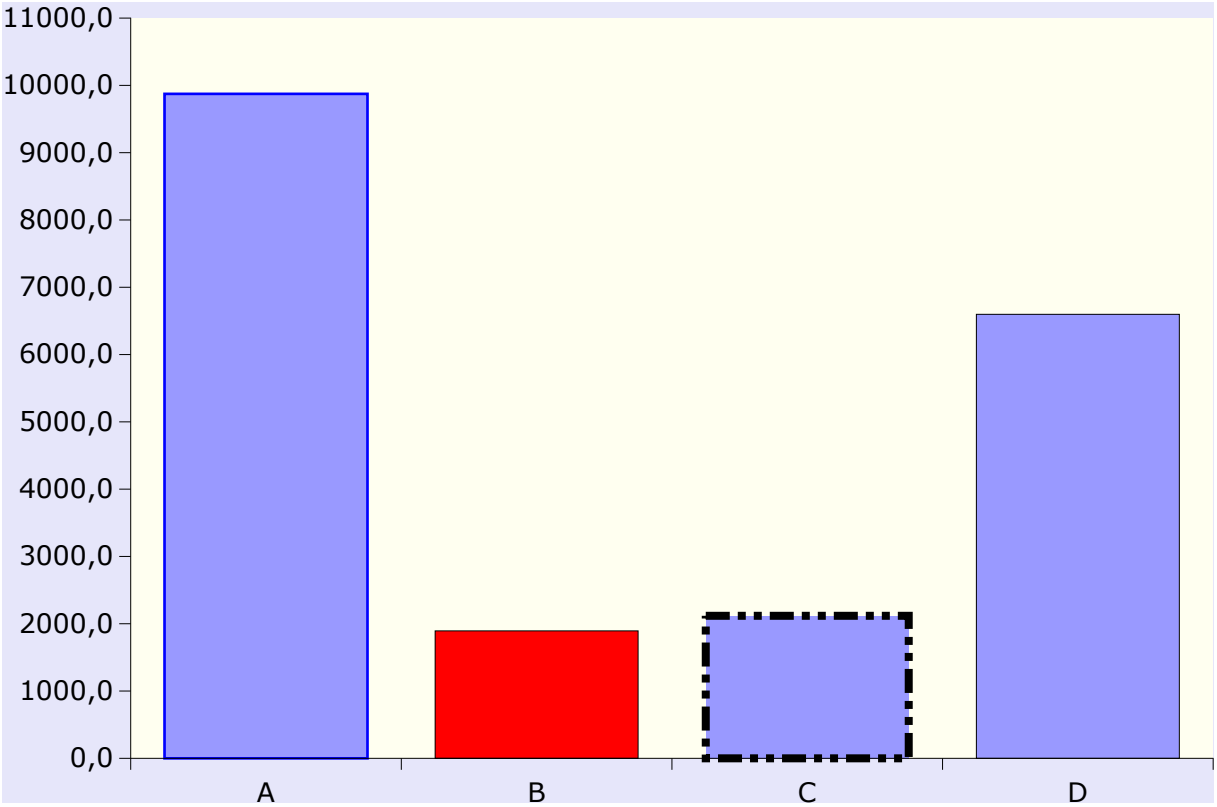
```
\chart(Line)
[…]
{
  …
  \xvalues {"A", "B", "C", "D", "E", "F", "G", "H", "I", "J"}
  \xvalues {"1999", "", "2000", "", "2001", null, "2002", null, "2003"}
}
```



Point

You can customize each data in a Bar, Column or Pie chart individually using the keyword \point.

```
\chart(Bar2D)
[…]
{
  …
  \series
  {
    \point
    [
      LineFormat.Color = Blue
      LineFormat.Width = 1
    ]
    {9874},
    \point
    [
      FillFormat.Color = Red
    ]
    {1894},
    \point
    [
      LineFormat.Width = 3
      LineFormat.DashStyle = DashDotDot
    ]
    {2118},
    6598
  }
  …
}
```



Legend

A legend can be placed in any of the text areas with the \legend keyword. The entry used in the legend is the name of each of the data series. If no name is given for a data series, then an entry with no text will be made.

```
\chart(Line)
[…]
{
  …
  \rightarea {\legend}
  \series [Name = "Part 1"]
  {…}
  \series
  {…}
}
```