Charting.aspx

```
1 <%@ Page Language="VB" Src="Charting.aspx.vb" Inherits="Web_VB.GeneratorExamples.Charting" %>
```

Charting.aspx.vb

```
Imports System
Imports ceTe.DynamicPDF.PageElements
Imports ceTe.DynamicPDF
Imports ceTe.DynamicPDF.PageElements.Charting
Imports ceTe.DynamicPDF.PageElements.Charting.Axes
Imports ceTe.DynamicPDF.PageElements.Charting.Series

Namespace Web_VB.GeneratorExamples
    Public Class Charting
        Inherits System.Web.UI.Page

        Private Sub Page_Load(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles MyBase.Load

            ' Create a PDF Document and Add a Page
            Dim MyDocument As Document = New Document()
            MyDocument.Creator = "Charting.aspx"
            MyDocument.Author = "ceTe Software"
            MyDocument.Title = "All Types Of Charts"
            AddCharts(MyDocument)

            'Output the PDF
            MyDocument.DrawToWeb("MyDocument.pdf")
        End Sub
#Region "Private Methods"
        Private Sub AddCharts(ByVal MyDocument As Document)

            ' Create a Template and assign it to the document
            Dim MYDocumentTemplate As Template = New Template()
            MyDocument.Template = MYDocumentTemplate
            MYDocumentTemplate.Elements.Add(New ceTe.DynamicPDF.PageElements.PageNumberingLabel("Page %%CP%% of %%TP%%", 100,
525, 512, 12, Font.Helvetica, 12, TextAlign.Center))

            ' Create a Page
            Dim MyPage1 As Page = New Page(PageSize.Letter, PageOrientation.Landscape, 35)
            Dim MyPage2 As Page = New Page(PageSize.Letter, PageOrientation.Landscape)

            ' Add charts to the page
            AddAreaChart(MyPage1.Elements, 0, 40)
            AddPieChart(MyPage1.Elements, 0, 280)
            AddLineChart(MyPage1.Elements, 250, 40)
            AddBarChart(MyPage1.Elements, 250, 280)
            AddColumnChart(MyPage1.Elements, 500, 40)
```

Charting.aspx.vb

```
42              AddXYScatterChart(MyPage1.Elements, 500, 280)
43              AddMultiTypeSeriesChart(MyPage2.Elements, 20, 50)
44
45              ' Add page to the Document
46              MyDocument.Pages.Add(MyPage2)
47              MyDocument.Pages.Add(MyPage1)
48          End Sub
49          Private Sub AddAreaChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
50              AddCaptionAndRectangle(Elements, "Stacked Area Chart", X, Y, 225, 225)
51
52              ' Create a MyChart
53              Dim MyChart As New Chart(X + 10, Y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black)
54
55              ' Create a plot area
56              Dim MyPlotArea As PlotArea = MyChart.PrimaryPlotArea
57
58              ' Create header title and add it to the MyChart
59              Dim MyTitle1 As New Title("Website Visitors")
60              MyChart.HeaderTitles.Add(MyTitle1)
61
62              'Create indexed stacked are series elements and add values to it
63              Dim MySeriesElement1 As New IndexedStackedAreaSeriesElement("Website A")
64              MySeriesElement1.Values.Add(New Single() {5, 7, 9, 6})
65              Dim MySeriesElement2 As New IndexedStackedAreaSeriesElement("Website B")
66              MySeriesElement2.Values.Add(New Single() {4, 2, 5, 8})
67              Dim MySeriesElement3 As New IndexedStackedAreaSeriesElement("Website C")
68              MySeriesElement3.Values.Add(New Single() {2, 4, 6, 9})
69
70              ' Add autogradient colors to series
71              Dim MyAutogradient1 As AutoGradient = New AutoGradient(90.0F, CmykColor.Red, CmykColor.IndianRed)
72              MySeriesElement1.Color = MyAutogradient1
73              Dim MyAutogradient2 As AutoGradient = New AutoGradient(90.0F, CmykColor.Green, CmykColor.YellowGreen)
74              MySeriesElement2.Color = MyAutogradient2
75              Dim MyAutogradient3 As AutoGradient = New AutoGradient(120.0F, CmykColor.Blue, CmykColor.LightBlue)
76              MySeriesElement3.Color = MyAutogradient3
77
78              ' Create a Indexed Stacked Area Series
79              Dim MyAreaSeries1 As New IndexedStackedAreaSeries()
80
81              ' Add indexed stacked area series elements to the Indexed Stacked Area Series
82              MyAreaSeries1.Add(MySeriesElement1)
83              MyAreaSeries1.Add(MySeriesElement2)
```

Charting.aspx.vb

```
84              MyAreaSeries1.Add(MySeriesElement3)
85
86              ' Add series to the plot area
87              MyPlotArea.Series.Add(MyAreaSeries1)
88
89              ' Create a title and add it to the YAxis
90              Dim MylTitle As New Title("Visitors (in millions)")
91              MyAreaSeries1.YAxis.Titles.Add(MylTitle)
92
93              'Adding AxisLabels to the XAxis
94              MyAreaSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q1", 0))
95              MyAreaSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q2", 1))
96              MyAreaSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q3", 2))
97              MyAreaSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q4", 3))
98              MyChart.Legends(0).Visible = False
99              Elements.Add(MyChart)
100         End Sub
101         Private Sub AddLineChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
102             AddCaptionAndRectangle(Elements, "Line Chart", X, Y, 225, 225)
103
104             ' Create a MyChart
105             Dim MyChart As New Chart(X + 10, Y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black)
106
107             ' Create a plot area
108             Dim MyPlotArea As PlotArea = MyChart.PrimaryPlotArea
109
110             ' Create header title and add it to the MyChart
111             Dim MyTitle1 As New Title("Website Visitors")
112             MyChart.HeaderTitles.Add(MyTitle1)
113
114             ' Create a indexed line series and add values to it
115             Dim MyLineSeries1 As New IndexedLineSeries("Website A")
116             MyLineSeries1.Values.Add(New Single() {5, 7, 9, 6})
117             Dim MyLineSeries2 As New IndexedLineSeries("Website B")
118             MyLineSeries2.Values.Add(New Single() {4, 2, 5, 8})
119             Dim MyLineSeries3 As New IndexedLineSeries("Website C")
120             MyLineSeries3.Values.Add(New Single() {2, 4, 6, 9})
121
122             ' Add indexed line series to the plot area
123             MyPlotArea.Series.Add(MyLineSeries1)
124             MyPlotArea.Series.Add(MyLineSeries2)
125             MyPlotArea.Series.Add(MyLineSeries3)
```

```
126
127             ' Create a title and add it to the yaxis
128             Dim MylTitle As New Title("Visitors (in millions)")
129             MyLineSeries1.YAxis.Titles.Add(MylTitle)
130
131             'Adding AxisLabels to the XAxis
132             MyLineSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q1", 0))
133             MyLineSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q2", 1))
134             MyLineSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q3", 2))
135             MyLineSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q4", 3))
136             MyChart.Legends(0).Visible = False
137             Elements.Add(MyChart)
138         End Sub
139         Private Sub AddPieChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
140             AddCaptionAndRectangle(Elements, "Pie Chart", X, Y, 225, 225)
141
142             ' Create a MyChart
143             Dim MyChart As New Chart(X + 10, Y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black)
144
145             ' Add a plot area to the MyChart
146             Dim MyPlotArea As PlotArea = MyChart.PlotAreas.Add(50, 50, 300, 300)
147
148             ' Create the Header title and add it to the MyChart
149             Dim MytTitle As New Title("Website Visitors (in millions)")
150             MyChart.HeaderTitles.Add(MytTitle)
151
152             ' Create a scalar datalabel
153             Dim Myda As ScalarDataLabel = New ScalarDataLabel(True, False, False)
154
155             ' Create autogradient colors
156             Dim MyAutogradient1 As AutoGradient = New AutoGradient(90.0F, CmykColor.Red, CmykColor.IndianRed)
157             Dim MyAutogradient2 As AutoGradient = New AutoGradient(90.0F, CmykColor.Green, CmykColor.YellowGreen)
158             Dim MyAutogradient3 As AutoGradient = New AutoGradient(120.0F, CmykColor.Blue, CmykColor.LightBlue)
159
160             ' Create a pie series
161             Dim MyPieSeries As New PieSeries()
162
163             ' Set scalar datalabel to the pie series
164             MyPieSeries.DataLabel = Myda
165
166             ' Add series to the plot area
167             MyPlotArea.Series.Add(MyPieSeries)
```

```
168
169             'Add pie series elements to the pie series
170             MyPieSeries.Elements.Add(27, "Website A")
171             MyPieSeries.Elements.Add(19, "Website B")
172             MyPieSeries.Elements.Add(21, "Website C")
173
174             ' Assign autogradient colors to series elements
175             MyPieSeries.Elements(0).Color = MyAutogradient1
176             MyPieSeries.Elements(1).Color = MyAutogradient2
177             MyPieSeries.Elements(2).Color = MyAutogradient3
178             MyChart.Legends(0).Visible = False
179             Elements.Add(MyChart)
180         End Sub
181         Private Sub AddBarChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
182             AddCaptionAndRectangle(Elements, "Bar Chart", X, Y, 225, 225)
183
184             ' Create a MyChart
185             Dim MyChart As New Chart(X + 10, Y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black)
186
187             ' Create a plot area
188             Dim MyPlotArea As PlotArea = MyChart.PrimaryPlotArea
189
190             ' Create header title and add it to the MyChart
191             Dim MyTitle1 As New Title("Website Visitors")
192             MyChart.HeaderTitles.Add(MyTitle1)
193
194             ' Create a indexed bar series and add values to it
195             Dim MyBarSeries1 As New IndexedBarSeries("Website A")
196             MyBarSeries1.Values.Add(New Single() {5, 7, 9, 6})
197             Dim MyBarSeries2 As New IndexedBarSeries("Website B")
198             MyBarSeries2.Values.Add(New Single() {4, 2, 5, 8})
199             Dim MyBarSeries3 As New IndexedBarSeries("Website C")
200             MyBarSeries3.Values.Add(New Single() {2, 4, 6, 9})
201
202             Dim MyAutogradient1 As AutoGradient = New AutoGradient(180.0F, CmykColor.Red, CmykColor.IndianRed)
203             MyBarSeries1.Color = MyAutogradient1
204             Dim MyAutogradient2 As AutoGradient = New AutoGradient(180.0F, CmykColor.Green, CmykColor.YellowGreen)
205             MyBarSeries2.Color = MyAutogradient2
206             Dim MyAutogradient3 As AutoGradient = New AutoGradient(180.0F, CmykColor.Blue, CmykColor.LightBlue)
207             MyBarSeries3.Color = MyAutogradient3
208
209             ' Add indexed bar series to the plot area
```

Charting.aspx.vb

```
210             MyPlotArea.Series.Add(MyBarSeries1)
211             MyPlotArea.Series.Add(MyBarSeries2)
212             MyPlotArea.Series.Add(MyBarSeries3)
213
214             ' Create a title and add it to the xaxis
215             Dim MylTitle As New Title("Visitors (in millions)")
216             MyBarSeries1.XAxis.Titles.Add(MylTitle)
217
218             'Adding AxisLabels to the yAxis
219             MyBarSeries1.YAxis.Labels.Add(New IndexedYAxisLabel("Q1", 0))
220             MyBarSeries1.YAxis.Labels.Add(New IndexedYAxisLabel("Q2", 1))
221             MyBarSeries1.YAxis.Labels.Add(New IndexedYAxisLabel("Q3", 2))
222             MyBarSeries1.YAxis.Labels.Add(New IndexedYAxisLabel("Q4", 3))
223             MyChart.Legends(0).Visible = False
224             Elements.Add(MyChart)
225         End Sub
226         Private Sub AddColumnChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
227             AddCaptionAndRectangle(Elements, "100% Stacked Column Chart", X, Y, 225, 225)
228
229             ' Create a MyChart
230             Dim MyChart As New Chart(X + 10, Y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black)
231
232             ' Create a plot area
233             Dim MyPlotArea As PlotArea = MyChart.PrimaryPlotArea
234
235             ' Create header title and add it to the MyChart
236             Dim MyTitle1 As New Title("Website Visitors")
237             MyChart.HeaderTitles.Add(MyTitle1)
238
239             ' Create a indexed 100% column series elements and add values to it
240             Dim MySeriesElement1 As New Indexed100PercentStackedColumnSeriesElement("Website A")
241             MySeriesElement1.Values.Add(New Single() {5, 7, 9, 6})
242             Dim MySeriesElement2 As New Indexed100PercentStackedColumnSeriesElement("Website B")
243             MySeriesElement2.Values.Add(New Single() {4, 2, 5, 8})
244             Dim MySeriesElement3 As New Indexed100PercentStackedColumnSeriesElement("Website C")
245             MySeriesElement3.Values.Add(New Single() {2, 4, 6, 9})
246
247             ' Create a Indexed 100% Stacked Column Series
248             Dim MyColumnSeries As New Indexed100PercentStackedColumnSeries()
249
250             'Add indexed 100% column series elements to the Indexed 100% Stacked Column Series
251             MyColumnSeries.Add(MySeriesElement1)
```

```
            MyColumnSeries.Add(MySeriesElement2)
            MyColumnSeries.Add(MySeriesElement3)

            ' Add series to the plot area
            MyPlotArea.Series.Add(MyColumnSeries)

            ' Create a title and add it to the yaxis
            Dim MylTitle As New Title("Visitors (in millions)")
            MyColumnSeries.YAxis.Titles.Add(MylTitle)

            'Adding AxisLabels to the XAxis
            MyColumnSeries.XAxis.Labels.Add(New IndexedXAxisLabel("Q1", 0))
            MyColumnSeries.XAxis.Labels.Add(New IndexedXAxisLabel("Q2", 1))
            MyColumnSeries.XAxis.Labels.Add(New IndexedXAxisLabel("Q3", 2))
            MyColumnSeries.XAxis.Labels.Add(New IndexedXAxisLabel("Q4", 3))
            MyChart.Legends(0).Visible = False
            Elements.Add(MyChart)
        End Sub
        Private Sub AddXYScatterChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
            AddCaptionAndRectangle(Elements, "XYScatter Chart", X, Y, 225, 225)

            ' Create a chart
            Dim MyChart As New Chart(X + 10, Y + 25, 200, 200, Font.Helvetica, 10, RgbColor.Black)

            ' Add a plot Area to the chart
            Dim MyPlotArea As PlotArea = MyChart.PrimaryPlotArea

            ' Create a Header title and add it to the chart
            Dim MytTitle As New Title("Player Height and Weight")
            MyChart.HeaderTitles.Add(MytTitle)

            ' Create a xyScatter series and add values to it
            Dim MyXYScatterSeries1 As New XYScatterSeries("Team A")
            MyXYScatterSeries1.Values.Add(112, 55)
            MyXYScatterSeries1.Values.Add(125, 60)
            MyXYScatterSeries1.Values.Add(138, 68)
            MyXYScatterSeries1.Values.Add(150, 73)
            MyXYScatterSeries1.Values.Add(172, 80)
            Dim MyXYScatterSeries2 As New XYScatterSeries("Team B")
            MyXYScatterSeries2.Values.Add(110, 54)
            MyXYScatterSeries2.Values.Add(128, 62)
            MyXYScatterSeries2.Values.Add(140, 70)
```

```
294             MyXYScatterSeries2.Values.Add(155, 75)
295             MyXYScatterSeries2.Values.Add(170, 80)
296
297             ' Add xyScatter series to the plot Area
298             MyPlotArea.Series.Add(MyXYScatterSeries1)
299             MyPlotArea.Series.Add(MyXYScatterSeries2)
300
301             ' Create axis titles and add it to the axis
302             Dim Mytitle1 As New Title("Height (inches)")
303             Dim Mytitle2 As New Title("Weight (pounds)")
304             MyXYScatterSeries1.YAxis.Titles.Add(Mytitle1)
305             MyXYScatterSeries1.XAxis.Titles.Add(Mytitle2)
306
307             ' Set XAxis min  value
308             MyXYScatterSeries1.XAxis.Min = 50
309
310             ' Set YAxis min value
311             MyXYScatterSeries1.YAxis.Min = 100
312             MyChart.Legends(0).Visible = False
313             Elements.Add(MyChart)
314         End Sub
315
316         Private Sub AddMultiTypeSeriesChart(ByVal Elements As Group, ByVal X As Single, ByVal Y As Single)
317             AddCaptionAndRectangle(Elements, "Plot Area With Different Kinds of Series and Multiple Axis ", X, Y, 650, 410)
318
319             ' Create a chart
320             Dim MyChart As New Chart(X + 25, Y + 37, 600, 350)
321
322             ' Create Autogradient color and assign it to chart background color
323             Dim MyAutogradient As AutoGradient = New AutoGradient(90f, CmykColor.LightYellow, CmykColor.LightSkyBlue)
324             MyChart.BackgroundColor = MyAutogradient
325
326             ' Add a plot Area to the chart
327             Dim MyPlotArea As PlotArea = MyChart.PrimaryPlotArea
328
329             ' Create a Header title and add it to the chart
330             Dim MytTitle As New Title("Company Sales and Website Visitors ")
331             MytTitle.Align = Align.Left
332             MyChart.HeaderTitles.Add(MytTitle)
333
334             ' Create a indexed line series and add values to it
335             Dim MyLineSeries1 As New IndexedLineSeries("Website A Visitors")
```

```
            MyLineSeries1.Values.Add(New Single() {1.5F, 8, 7.5F, 5.5F})
            MyLineSeries1.Color = RgbColor.DarkBlue
            Dim MyLineSeries2 As New IndexedLineSeries("Website B Visitors")
            MyLineSeries2.Values.Add(New Single() {4, 3, 7, 7.5F})
            MyLineSeries2.Color = RgbColor.LimeGreen

            ' Create markers and assign it to the series
            Dim MyMarker1 As Marker = Marker.GetTriangle(7)
            MyLineSeries1.Marker = MyMarker1
            Dim MyMarker2 As Marker = Marker.GetCircle(7)
            MyLineSeries2.Marker = MyMarker2

            ' Add indexed line series to the plot area
            MyPlotArea.Series.Add(MyLineSeries1)
            MyPlotArea.Series.Add(MyLineSeries2)

            ' Create a NumericYAxis and a title to it
            Dim MyNumericyaxis1 As NumericYAxis = New NumericYAxis()
            MyNumericyaxis1.AnchorType = YAxisAnchorType.Right
            MyNumericyaxis1.Titles.Add(New Title("Sales (in $ millions)"))
            MyNumericyaxis1.Interval = 1

            ' Create a indexed column series and add values to it
            Dim MyColumnSeries1 As New IndexedColumnSeries("Company A Sales", MyNumericyaxis1)
            MyColumnSeries1.Values.Add(New Single() {2, 10, 14, 17})
            MyColumnSeries1.Color = RgbColor.Blue
            Dim MyColumnSeries2 As New IndexedColumnSeries("Company B Sales", MyNumericyaxis1)
            MyColumnSeries2.Values.Add(New Single() {7, 4, 10, 15})
            MyColumnSeries2.Color = RgbColor.Lime

            ' Create a bar column value position data label
            Dim MyBarcolumnvaluepositiondatalabel As BarColumnValuePositionDataLabel = New BarColumnValuePositionDataLabel(True,
True, False)
            MyColumnSeries1.DataLabel = MyBarcolumnvaluepositiondatalabel
            MyBarcolumnvaluepositiondatalabel.FontSize = 7
            MyColumnSeries1.DataLabel.Prefix = "("
            MyColumnSeries1.DataLabel.Suffix = ")"
            MyColumnSeries2.DataLabel = MyBarcolumnvaluepositiondatalabel

            ' Add indexed column series to the plot area
            MyPlotArea.Series.Add(MyColumnSeries1)
            MyPlotArea.Series.Add(MyColumnSeries2)
```

```
377             Dim MyMinorGridLines As YAxisGridLines = New YAxisGridLines()
378             MyMinorGridLines.LineStyle = LineStyle.Dots
379
380             ' Create Yaxis Grid lines
381             MyPlotArea.YAxes.DefaultNumericAxis.MajorGridLines = New YAxisGridLines()
382             MyPlotArea.YAxes.DefaultNumericAxis.MinorGridLines = MyMinorGridLines
383             MyPlotArea.XAxes.DefaultIndexedAxis.MajorGridLines = New XAxisGridLines()
384             MyPlotArea.YAxes.DefaultNumericAxis.MinorTickMarks = New YAxisTickMarks()
385             MyPlotArea.YAxes.DefaultNumericAxis.MajorTickMarks = New YAxisTickMarks()
386
387             ' Add title to Yaxis
388             MyLineSeries1.YAxis.Titles.Add(New Title("Visitors (in millions)"))
389
390             ' Adding AxisLabels to the XAxis
391             MyColumnSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q1", 0))
392             MyColumnSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q2", 1))
393             MyColumnSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q3", 2))
394             MyColumnSeries1.XAxis.Labels.Add(New IndexedXAxisLabel("Q4", 3))
395             MyChart.Legends(0).BorderStyle = LineStyle.Dots
396             MyChart.Legends(0).BorderColor = RgbColor.Black
397             MyChart.Legends(0).BackgroundColor = CmykColor.Lavender
398             Elements.Add(MyChart)
399         End Sub
400
401         Private Sub AddCaptionAndRectangle(ByVal PageElements As Group, ByVal Caption As String, ByVal X As Single, ByVal Y As
    Single, ByVal Width As Single, ByVal Height As Single)
402
403             ' Adds a rectangle and caption to the pageElements
404             Dim MyRectangle As Rectangle = New Rectangle(X, Y + 15, Width, Height - 15)
405             Dim CaptionLabel As Label = New Label(Caption, X, Y, 300, 10, Font.HelveticaBold, 10)
406             PageElements.Add(MyRectangle)
407             PageElements.Add(CaptionLabel)
408         End Sub
409 #End Region
410
411     End Class
412 End Namespace
```