

z3c.RML Reference

Version 2.1

Introduction

RML is a XML dialect for generating PDF files. Like HTML produces a page within the browser, RML produces a PDF file. The RML processor uses the ReportLab library to convert the RML text into a full PDF template.

The original version of RML was developed by ReportLab, Inc. as a commercial extension to the free ReportLab library. This original version of RML is still available and supported by ReportLab, Inc. This version of RML, z3c.RML, is a free implementation of the XML dialect based on the available documentation. While it tries to keep some level of compatibility with the original version of RML, it is intended to provide as clean and feature-rich API as possible.

The contents of this document is auto-generated from the code itself and should thus be very accurate and complete.

Attribute Types

This section list the types of attributes used for the attributes within the RML elements.

Boolean

A boolean value. For true the values "true", "yes", and "1" are allowed. For false, the values "false", "no", "1" are allowed.

BooleanWithDefault

This is a boolean field that can also receive the value "default".

Choice

A choice of several values. The values are always case-insensitive.

Color

Requires the input of a color. There are several supported formats. Three values in a row are interpreted as RGB value ranging from 0-255. A string is interpreted as a name to a pre-defined color. The 'CMYK()' wrapper around four values represents a CMYK color specification.

Combination

A combination of several other attribute types.

File

This field will return a file object. The value itself can either be a relative or absolute path. Additionally the following syntax is supported: [path.to.python.mpackage]/path/to/file

FirstLevelTextNode

Gets all the text content of an element without traversing into any child-elements.

Float

An floating point. A minimum and maximum value can be specified.

Image

Similar to the file File attribute, except that an image is internally expected.

Integer

An integer. A minimum and maximum value can be specified.

IntegerSequence

A sequence of integers.

Measurement

This field represents a length value. The units "in" (inch), "cm", "mm", and "pt" are allowed. If no units are specified, the value is given in points/pixels.

Padding

This attribute is specific for padding and will produce the proper length of the padding sequence.

PageSize

A simple measurement pair that specifies the page size. Optionally you can also specify a the name of a page size, such as A4, letter, or legal.

RawXMLContent

Retrieve the raw content of an element. Only some special element substitution will be made.

Sequence

A list of values of a specified type.

String

A simple Bytes string.

StringOrInt

A (bytes) string or an integer.

Style

Requires a valid style to be entered. Whether the style is a paragraph, table or box style is irrelevant, except that it has to fit the tag.

Symbol

This attribute should contain the text representation of a symbol to be used.

Text

A simple unicode string.

TextBoolean

A boolean value as text. ReportLab sometimes exposes low-level APIs, so we have to provide values that are directly inserted into the PDF. For "true" the values "true", "yes", and "1" are allowed. For "false", the values "false", "no", "1" are allowed.

TextNode

Return the text content of an element.

TextNodeGrid

A grid/matrix of values retrieved from the element's content. The number of columns is specified for every case, but the number of rows is dynamic.

TextNodeSequence

A sequence of values retrieved from the element's content.

XMLContent

Same as 'RawXMLContent', except that the whitespace is normalized.

Directives

addMapping

Map various styles(bold, italic) of a font name to the actual ps fonts used.

Attributes

faceName (*required*) - String

Name: The name of the font to be mapped

bold (*required*) - Integer

Bold: Bold

italic (*required*) - Integer

Italic: Italic

psName (*required*) - String

psName: Actual font name mapped

Examples

```
<addMapping faceName="times" bold="1" italic="0" psName="Vera"/>
```

(Extracted from file *tag-addMapping.rml*, line 11) [\[PDF\]](#)

alias

Defines an alias for a given style.

Attributes

id (*required*) - String

Id: The id as which the style will be known.

value (*required*) - Style

Value: The style that is represented.

Examples

```
<alias id="h1" value="style.Heading1"/>
```

(Extracted from file *tag-alias.rml*, line 15) [\[PDF\]](#)

bar

Define the look of a bar.

Attributes

strokeColor - Color

Stroke Color: The color in which the bar border is drawn.

strokeWidth - Measurement

Stroke Width: The width of the bar border line.

fillColor - Color

Fill Color: The color with which the bar is filled.

Examples

```
<bar fillColor="blue" strokeColor="red" strokeWidth="0.5"/>
```

(Extracted from file *tag-barChart.rml*, line 22) [\[PDF\]](#)

barChart

Creates a two-dimensional bar chart.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

direction - Choice of ('horizontal', 'vertical')

Direction: The direction of the bars within the chart.

useAbsolute - Boolean

Use Absolute Spacing: Flag to use absolute spacing values.

barWidth - Measurement

Bar Width: The width of an individual bar.

groupSpacing - Measurement

Group Spacing: Width between groups of bars.

barSpacing - Measurement

Bar Spacing: Width between individual bars.

barLabelFormat - String

Bar Label Text Format: Formatting string for bar labels.

Sub-Directives

data (One)

bars (ZeroOrOne)

categoryAxis (ZeroOrOne)

valueAxis (ZeroOrOne)

barLabels (ZeroOrOne)

texts (ZeroOrOne)

Examples

```
<barChart dx="2in" dy="7in" dwidth="6in" dheight="4in" x="0" y="0" width="5in"
  height="3in" barSpacing="7" groupSpacing="15">
  <bars>
```

```

    <bar fillColor="blue" strokeColor="red" strokeWidth="0.5"/>
    <bar fillColor="yellow" strokeColor="green" strokeWidth="1"/>
</bars>
<categoryAxis strokeColor="black" strokeWidth="1">
  <labels fontName="Helvetica" fontSize="20"/>
  <categoryNames>
    <name>Category 1</name>
    <name>Category 2</name>
    <name>Category 3</name>
    <name>Category 4</name>
  </categoryNames>
</categoryAxis>
<valueAxis valueMin="0" valueMax="150" valueStep="30" visibleTicks="true"
  visibleLabels="true">
  <labels fontName="Helvetica"/>
</valueAxis>
<data>
  <series>100 110 120 130</series>
  <series> 70  80  85  90</series>
</data>
</barChart>

```

(Extracted from file *tag-barChart.rml*, line 19)

[\[PDF\]](#)

barChart3D

Creates a three-dimensional bar chart.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

direction - Choice of ('horizontal', 'vertical')

Direction: The direction of the bars within the chart.

useAbsolute - Boolean

Use Absolute Spacing: Flag to use absolute spacing values.

barWidth - Measurement

Bar Width: The width of an individual bar.

groupSpacing - Measurement

Group Spacing: Width between groups of bars.

barSpacing - Measurement

Bar Spacing: Width between individual bars.

barLabelFormat - String

Bar Label Text Format: Formatting string for bar labels.

thetaX - Float

Theta-X: Fraction of dx/dz.

thetaY - Float

Theta-Y: Fraction of dy/dz.

zDepth - Measurement

Z-Depth: Depth of an individual series/bar.

zSpace - Measurement

Z-Space: Z-Gap around a series/bar.

Sub-Directives

data (One)

bars (ZeroOrOne)

categoryAxis (ZeroOrOne)

valueAxis (ZeroOrOne)

barLabels (ZeroOrOne)

texts (ZeroOrOne)

Examples

```
<barChart3D dx="2in" dy="4in" dwidth="6in" dheight="4in" x="0" y="0"
    width="5in" height="2in" thetaX="0.3" thetaY="0.3" zDepth="5"
    zSpace="10" direction="vertical">
  <categoryAxis strokeColor="black" strokeWidth="1" visibleGrid="true">
    <labels fontName="Helvetica"/>
    <categoryNames>
      <name>Category 1</name>
      <name>Category 2</name>
      <name>Category 3</name>
      <name>Category 4</name>
    </categoryNames>
  </categoryAxis>
  <valueAxis valueMin="0" valueMax="150" valueStep="30" visibleTicks="true"
    visibleLabels="true" visibleGrid="true">
    <labels fontName="Helvetica"/>
  </valueAxis>
  <data>
    <series>100 110 120 130</series>
    <series> 70  80  85  90</series>
  </data>
</barChart3D>
```

(Extracted from file *tag-barChart3d.rml*, line 48)

[\[PDF\]](#)

barCode

A barcode graphic.

Attributes

code (required) - Choice of ('ean13', 'qr', 'extended39', 'standard39', 'upca', 'ean8', 'extended93', 'usps_4state', 'codabar', 'msi', 'postnet', 'fim', 'code11', 'standard93', 'i2of5', 'code128')

Code: The name of the type of code to use.

width - Measurement

Width: The width of the barcode.

height - Measurement

Height: The height of the barcode.

barStrokeColor - Color

Bar Stroke Color: The color of the line strokes in the barcode.

barStrokeWidth - Measurement

Bar Stroke Width: The width of the line strokes in the barcode.

barFillColor - Color

Bar Fill Color: The color of the filled shapes in the barcode.

gap - Measurement

Gap: The width of the inter-character gaps.

barWidth - Measurement

Bar Width: The width of the smallest bar within the barcode

barHeight - Measurement

Bar Height: The height of the symbol.

ratio - Float

Ratio: The ratio of wide elements to narrow elements. Must be between 2.0 and 3.0 (or 2.2 and 3.0 if the barWidth is greater than 20 mils (.02 inch)).

checksum - Integer

Ratio: A flag that enables the computation and inclusion of the check digit.

bearers - Float

Bearers: Height of bearer bars (horizontal bars along the top and bottom of the barcode). Default is 3 x-dimensions. Set to zero for no bearer bars.(Bearer bars help detect misscans, so it is suggested to leave them on).

quiet - Boolean

Quiet Zone: A flag to include quiet zones in the symbol.

lquiet - Measurement

Left Quiet Zone: Quiet zone size to the left of code, if quiet is true. Default is the greater of .25 inch or .15 times the symbol's length.

rquiet - Measurement

Right Quiet Zone: Quiet zone size to the right of code, if quiet is true. Default is the greater of .25 inch or .15 times the symbol's length.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

humanReadable - Boolean

Human Readable: A flag when set causes the value to be printed below the bar code.

stop - Boolean

Show Start/Stop: A flag to specify whether the start/stop symbols are to be shown.

spaceWidth - Measurement

Space Width: The space of the inter-character gaps.

shortHeight - Measurement

Short Height: The height of the short bar.

textColor - Color

Text Color: The color of human readable text.

routing - String

Routing: The routing information string.

x - Measurement

X-Position: The x-position of the lower-left corner of the barcode.

y - Measurement

Y-Position: The y-position of the lower-left corner of the barcode.

isoScale - Boolean

Isometric Scaling: When set, the aspect ratio of the barcode is enforced.

Content

TextNode (*required*)

Value: The value represented by the code.

Examples

```
<barCode x="5cm" y="24cm" code="MSI">
  23465092892
</barCode>
```

(Extracted from file *tag-barcode.rml*, line 14) [\[PDF\]](#)

```
<barCode x="5cm" y="17cm" height="2cm" width="5cm" code="Ean13"
  humanReadable="true" fontName="Helvetica" fontSize="7"
  barStrokeColor="blue" barFillColor="blue" textColor="blue"
  quiet="false" barHeight="0.4in" barWidth="0.009in">
  123456789012
</barCode>
```

(Extracted from file *tag-barcode.rml*, line 28) [\[PDF\]](#)

barCodeFlowable

Creates a bar code as a flowable.

Attributes

code (*required*) - Choice of ('ean13', 'qr', 'extended39', 'standard39', 'upca', 'ean8', 'extended93', 'usps_4state', 'codabar', 'msi', 'postnet', 'fim', 'code11', 'standard93', 'i2of5', 'code128')

Code: The name of the type of code to use.

width - Measurement

Width: The width of the barcode.

height - Measurement

Height: The height of the barcode.

barStrokeColor - Color

Bar Stroke Color: The color of the line strokes in the barcode.

barStrokeWidth - Measurement

Bar Stroke Width: The width of the line strokes in the barcode.

barFillColor - Color

Bar Fill Color: The color of the filled shapes in the barcode.

gap - Measurement

Gap: The width of the inter-character gaps.

barWidth - Measurement

Bar Width: The width of the smallest bar within the barcode

barHeight - Measurement

Bar Height: The height of the symbol.

ratio - Float

Ratio: The ratio of wide elements to narrow elements. Must be between 2.0 and 3.0 (or 2.2 and 3.0 if the barWidth is greater than 20 mils (.02 inch)).

checksum - Integer

Ratio: A flag that enables the computation and inclusion of the check digit.

bearers - Float

Bearers: Height of bearer bars (horizontal bars along the top and bottom of the barcode). Default is 3 x-dimensions. Set to zero for no bearer bars. (Bearer bars help detect misscans, so it is suggested to leave them on).

quiet - Boolean

Quiet Zone: A flag to include quiet zones in the symbol.

lquiet - Measurement

Left Quiet Zone: Quiet zone size to the left of code, if quiet is true. Default is the greater of .25 inch or .15 times the symbol's length.

rquiet - Measurement

Right Quiet Zone: Quiet zone size to the right of code, if quiet is true. Default is the greater of .25 inch or .15 times the symbol's length.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

humanReadable - Boolean

Human Readable: A flag when set causes the value to be printed below the bar code.

stop - Boolean

Show Start/Stop: A flag to specify whether the start/stop symbols are to be shown.

spaceWidth - Measurement

Space Width: The space of the inter-character gaps.

shortHeight - Measurement

Short Height: The height of the short bar.

textColor - Color

Text Color: The color of human readable text.

routing - String

Routing: The routing information string.

value (*required*) - String

Value: The value represented by the code.

Examples

```
<barCodeFlowable code="Code128" value="PFWZF" />
```

(Extracted from file *tag-barCodeFlowable.rml*, line 26)

[\[PDF\]](#)

```
<barCodeFlowable code="Code128" value="PFWZF" humanReadable="true"
    fontName="Helvetica" fontSize="10" barFillColor="red"
    barStrokeColor="red" quiet="false" barHeight="0.4in"
    barWidth="0.009in" />
```

(Extracted from file *tag-barCodeFlowable.rml*, line 35)

[\[PDF\]](#)

barLabels

A set of labels for a bar chart

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

Sub-Directives

label (*ZeroOrMore*)

bars

Collection of bar subscriptions.

Attributes

strokeColor - Color

Stroke Color: The color in which the bar border is drawn.

strokeWidth - Measurement

Stroke Width: The width of the bar border line.

fillColor - Color

Fill Color: The color with which the bar is filled.

Sub-Directives

bar (*ZeroOrMore*)

blockAlignment

Set the text alignment.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

value (*required*) - Choice of ('left', 'decimal', 'right', 'center', 'centre')

Text Alignment: The text alignment within the cell.

Examples

```
<blockAlignment start="0,0" stop="-1,1" value="center"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 16) [\[PDF\]](#)

blockBackground

Define the background color of the cells. It also supports alternating colors.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

colorName - Color

Color Name: The color to use as the background for every cell.

colorsByRow - Sequence of Color

Colors By Row: A list of colors to be used circularly for rows.

colorsByCol - Sequence of Color

Colors By Column: A list of colors to be used circularly for columns.

Examples

```
<blockBackground start="1,1" stop="-2,-2" colorName="green"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 18) [\[PDF\]](#)

blockBottomPadding

Set the bottom padding of the cells.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

length (*required*) - Measurement

Length: The size of the padding.

Examples

```
<blockBottomPadding start="0,0" stop="-1,1" length="5mm"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 24) [\[PDF\]](#)

blockColBackground

Define the background colors for columns.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

colorNames (*required*) - Sequence of Color

Colors By Row: A list of colors to be used circularly for rows.

Examples

```
<blockColBackground start="0,0" stop="2,-1" colorNames="red green"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 37) [\[PDF\]](#)

blockFont

Set the font properties for the texts.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

name - String

Font Name: The name of the font for the cell.

size - Measurement

Font Size: The font size for the text of the cell.

leading - Measurement

Leading: The height of a single text line. It includes character height.

Examples

```
<blockFont start="0,0" stop="1,-1" name="Courier" size="14" leading="18"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 29) [\[PDF\]](#)

blockLeading

Set the text leading.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

length (*required*) - Measurement

Length: The height of a single text line. It includes character height.

Examples

```
<blockLeading start="0,0" stop="-1,1" length="18"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 43) [\[PDF\]](#)

blockLeftPadding

Set the left padding of the cells.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

length (*required*) - Measurement

Length: The size of the padding.

Examples

```
<blockLeftPadding start="0,0" stop="-1,1" length="5mm"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 26) [\[PDF\]](#)

blockRightPadding

Set the right padding of the cells.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

length (*required*) - Measurement

Length: The size of the padding.

Examples

```
<blockRightPadding start="0,0" stop="-1,1" length="5mm"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 22) [\[PDF\]](#)

blockRowBackground

Define the background colors for rows.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

colorNames (*required*) - Sequence of Color

Colors By Row: A list of colors to be used circularly for rows.

Examples

```
<blockRowBackground start="3,0" stop="-1,-1" colorNames="blue yellow"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 40) [\[PDF\]](#)

blockSpan

Define a span over multiple cells (rows and columns).

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

Examples

```
<blockSpan start="0,0" stop="2,2"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 48) [\[PDF\]](#)

blockTable

A typical block table.

Attributes

style - Style

Style: The table style that is applied to the table.

rowHeights - Sequence of Measurement

Row Heights: A list of row heights in the table.

colWidths - Sequence of Measurement

Column Widths: A list of column widths in the table.

repeatRows - Integer

Repeat Rows: A flag to repeat rows upon table splits.

alignment - Choice of ('left', 'decimal', 'right', 'center', 'centre')

Alignment: The alignment of whole table.

Sub-Directives

tr (*ZeroOrMore*)

bulkData (*ZeroOrOne*)

blockTableStyle (*ZeroOrMore*)

Examples

```
<blockTable colWidths="50% 50%" rowHeights="1cm 1cm">
  <tr>
    <td>This</td>
    <td>is</td>
  </tr>
  <tr>
    <td>a</td>
    <td>blockTable.</td>
  </tr>
</blockTable>
```

(Extracted from file *tag-blockTable-1.rml*, line 17) [\[PDF\]](#)

blockTableStyle

A style defining the look of a table.

Attributes

id (*required*) - String

Id: The name/id of the style.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

Sub-Directives

blockFont (*ZeroOrMore*)

blockLeading (*ZeroOrMore*)

blockTextColor (*ZeroOrMore*)

blockAlignment (*ZeroOrMore*)

blockLeftPadding (*ZeroOrMore*)

blockRightPadding (*ZeroOrMore*)

blockBottomPadding (*ZeroOrMore*)

blockTopPadding (*ZeroOrMore*)

blockBackground (*ZeroOrMore*)
blockRowBackground (*ZeroOrMore*)
blockColBackground (*ZeroOrMore*)
blockValign (*ZeroOrMore*)
blockSpan (*ZeroOrMore*)
lineStyle (*ZeroOrMore*)

Examples

```
<blockTableStyle id="custom-table">  
  <blockFont start="0,0" stop="-1,-1" name="Courier-Bold" size="10"/>  
</blockTableStyle>
```

(Extracted from file *tag-blockTableStyle.rml*, line 56) [\[PDF\]](#)

blockTextColor

Set the text color.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')
Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')
End Coordinates: The end table coordinates for the style instruction

colorName (*required*) - Color
Color Name: The color in which the text will appear.

Examples

```
<blockTextColor start="0,0" stop="1,-1" colorName="red"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 31) [\[PDF\]](#)

blockTopPadding

Set the top padding of the cells.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')
Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')
End Coordinates: The end table coordinates for the style instruction

length (*required*) - Measurement
Length: The size of the padding.

Examples

```
<blockTopPadding start="0,0" stop="-1,1" length="5mm"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 20) [\[PDF\]](#)

blockValign

Define the vertical alignment of the cells.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')
Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')
End Coordinates: The end table coordinates for the style instruction

value (*required*) - Choice of ('middle', 'top', 'bottom')
Vertical Alignment: The vertical alignment of the text with the cells.

Examples

```
<blockValign start="0,0" stop="2,2" value="middle"/>
```

(Extracted from file *tag-blockTableStyle.rml*, line 53) [\[PDF\]](#)

bookmark

This creates a bookmark to the current page which can be referred to with the given key elsewhere. (Used inside a page drawing.)

Attributes

name (*required*) - Text

Name: The name of the bookmark.

fit - Choice of ('fitr', 'xyz', 'fith', 'fitv', 'fit')

Fit: The Fit Type.

zoom - Float

Zoom: The zoom level when clicking on the bookmark.

x - Measurement

X-Position: The x-position.

y - Measurement

Y-Position: The y-position.

bookmark

This creates a bookmark to the current page which can be referred to with the given key elsewhere. (Used inside a story.)

Attributes

name (*required*) - Text

Name: The name of the bookmark.

x - Measurement

X Coordinate: The x-position of the bookmark.

y - Measurement

Y Coordinate: The y-position of the bookmark.

bookmarkPage

This creates a bookmark to the current page which can be referred to with the given key elsewhere. PDF offers very fine grained control over how Acrobat reader is zoomed when people link to this. The default is to keep the user's current zoom settings. the last arguments may or may not be needed depending on the choice of 'fitType'.

Attributes

name (*required*) - Text

Name: The name of the bookmark.

fit - Choice of ('fitr', 'xyz', 'fith', 'fitv', 'fit')

Fit: The Fit Type.

top - Measurement

Top: The top position.

bottom - Measurement

Bottom: The bottom position.

left - Measurement

Left: The left position.

right - Measurement

Right: The right position.

zoom - Float

Zoom: The zoom level when clicking on the bookmark.

Examples

```
<bookmarkPage name="TITLE" />
```

(Extracted from file *tag-bookmark.rml*, line 20) [\[PDF\]](#)

```
<bookmarkPage name="PAGE_1" fitType="fitv" zoom="2" left="2cm" right="10cm"
top="20cm" />
```

(Extracted from file *tag-bookmark.rml*, line 31) [\[PDF\]](#)

bulkData

Bulk Data allows one to quickly create a table.

Content

TextNodeSequence of Sequence of Text (*required*)

Content: The bulk data.

Examples

```
<bulkData>
```

Product, Profit

Sprockets, 26

Widgets, 34

Thingummies, 217

Bits & Bobs, 23

Total, 277

```
</bulkData>
```

(Extracted from file *tag-blockTable-bulkData.rml*, line 16)

[\[PDF\]](#)

buttonField

A button field within the PDF

Attributes

title (*required*) - Text

Title: The title of the field.

x (*required*) - Measurement

X-Position: The x-position of the lower-left corner of the field.

y (*required*) - Measurement

Y-Position: The y-position of the lower-left corner of the field.

value (*required*) - Choice of ('yes', 'off')

Value: The value of the button.

categoryAxis

An axis displaying categories (instead of numerical values).

Attributes

visible - Boolean

Visible: When true, draw the entire axis with all details.

visibleAxis - Boolean

Visible Axis: When true, draw the axis line.

visibleTicks - Boolean

Visible Ticks: When true, draw the axis ticks on the line.

visibleLabels - Boolean

Visible Labels: When true, draw the axis labels.

visibleGrid - Boolean

Visible Grid: When true, draw the grid lines for the axis.

strokeWidth - Measurement

Stroke Width: The width of axis line and ticks.

strokeColor - Color

Stroke Color: The color in which the axis line and ticks are drawn.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array that is used for the axis line and ticks.

gridStrokeWidth - Measurement

Grid Stroke Width: The width of the grid lines.

gridStrokeColor - Color

Grid Stroke Color: The color in which the grid lines are drawn.

gridStrokeDashArray - Sequence of Float

Grid Stroke Dash Array: The dash array that is used for the grid lines.

gridStart - Measurement

Grid Start: The start of the grid lines with respect to the axis origin.

gridEnd - Measurement

Grid End: The end of the grid lines with respect to the axis origin.

style - Choice of ('stacked', 'parallel', 'parallel_3d')

Style: The plot style of the common categories.

categoryNames - Sequence of Text

Category Names: A simple list of category names.

joinAxis - Boolean

Join Axis: When true, both axes join together.

joinAxisPos - Measurement

Join Axis Position: The position at which the axes should join together.

reverseDirection - Boolean

Reverse Direction: A flag to reverse the direction of category names.

labelAxisMode - Choice of ('high', 'low', 'axis')

Label Axis Mode: Defines the relative position of the axis labels.

tickShift - Boolean

Tick Shift: When true, place the ticks in the center of a category instead the beginning and end.

Sub-Directives

categoryNames (*ZeroOrOne*)

labels (*ZeroOrMore*)

Examples

```

<categoryAxis strokeColor="black" strokeWidth="1">
  <labels fontName="Helvetica" fontSize="20"/>
  <categoryNames>
    <name>Category 1</name>
    <name>Category 2</name>
    <name>Category 3</name>
    <name>Category 4</name>
  </categoryNames>
</categoryAxis>

```

(Extracted from file *tag-barChart.rml*, line 26)

[\[PDF\]](#)

categoryNames

A list of category names.

Sub-Directives

name (*OneOrMore*)

Examples

```
<categoryNames>
  <name>Category 1</name>
  <name>Category 2</name>
  <name>Category 3</name>
  <name>Category 4</name>
</categoryNames>
```

(Extracted from file *tag-barChart.rml*, line 29)

[\[PDF\]](#)

circle

Draws a circle on the canvas.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the shape.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the shape.

fill - Boolean

Fill: A flag to specify whether the shape should be filled.

stroke - Boolean

Stroke: A flag to specify whether the shape's outline should be drawn.

radius (*required*) - Measurement

Radius: The radius of the circle.

Examples

```
<circle x="10cm" y="25cm" radius="2cm" fill="false" stroke="false"/>
```

(Extracted from file *tag-circle.rml*, line 10)

[\[PDF\]](#)

codesnippet

A code snippet with text highlighting.

Attributes

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

language - String

Language: The language the code snippet is written in.

Content

RawXMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<codesnippet language="python" style="boxed-code">
  class HelloWorld(object):

      def render(self):
          print 'Hello World!'

  HelloWorld().render()
</codesnippet>
```

(Extracted from file *tag-codesnippet.rml*, line 28) [\[PDF\]](#)

```
<codesnippet language="xml" style="boxed-code">
  &lt;tag attr="value"&gt;
    &lt;content&gt;Hello World!&lt;/content&gt;
  &lt;/tag&gt;
</codesnippet>
```

(Extracted from file *tag-codesnippet.rml*, line 39) [\[PDF\]](#)

color

Define a new color and give it a name to be known under.

Attributes

id (*required*) - String

Id: The id/name the color will be available under.

RGB - Color

RGB Color: The color value that is represented.

CMYK - Color

CMYK Color: The color value that is represented.

value - Color

Color: The color value that is represented.

spotName - String

Spot Name: The Spot Name of the CMYK color.

density - Float

Density: The color density of the CMYK color.

knockout - String

Knockout: The knockout of the CMYK color.

alpha - Float

Alpha: The alpha channel of the color.

Examples

```
<color id="favorite-color" value="yellow"/>
```

(Extracted from file *tag-color.rml*, line 9) [\[PDF\]](#)

condPageBreak

Switch to the next page if not enough vertical space is available.

Attributes

height (*required*) - Measurement

height: The minimal height that must be remaining on the page.

Examples

```
<condPageBreak height="8cm"/>
```

(Extracted from file *tag-condPageBreak.rml*, line 16) [\[PDF\]](#)

critical

Log message at CRITICAL level.

Content

RawXMLContent (*required*)

Message: The message to be logged.

Examples

```
<critical>A CRITICAL message</critical>
```

cropMarks

Crop Marks specification

Attributes

name (*required*) - String

Name: The name of the index.

borderWidth - Measurement

Border Width: The width of the crop mark border.

markColor - Color

Mark Color: The color of the crop marks.

markWidth - Measurement

Mark Width: The line width of the actual crop marks.

markLength - Measurement

Mark Length: The length of the actual crop marks.

markLast - Boolean

Mark Last: If set, marks are drawn after the content is rendered.

bleedWidth - Measurement

Bleed Width: The width of the page bleed.

Examples

```
<cropMarks borderWidth="30" markWidth="2" markColor="red" markLength="20"
markLast="0" bleedWidth="0"/>
```

(Extracted from file *tag-cropMarks.rml*, line 10)

[\[PDF\]](#)

curves

A path of connected bezier curves drawn on the canvas.

Content

TextNodeGrid with 8 cols of Measurement (*required*)

Curve List: A list of curve coordinates to draw.

Examples

```
<curves>
  1in 1in 2in 2in 2in 3in 1in 3in
  1in 2in 2in 3in 2in 4in 1in 4in
  1in 3in 2in 4in 2in 5in 1in 5in
</curves>
```

(Extracted from file *tag-curves.rml*, line 9)

[\[PDF\]](#)

curvesto

Deprecated: Available for ReportLab RML compatibility. Please use the "curveto" directive instead.

Content

TextNodeGrid with 6 cols of Measurement (*required*)

Curve Specification: Describes the end position and the curve properties.

curveto

Create a bezier curve from the current location to the specified one.

Content

TextNodeGrid with 6 cols of Measurement (*required*)

Curve Specification: Describes the end position and the curve properties.

Examples

```
<curveto>
  10cm 12cm 10cm 9cm 8cm 9cm
</curveto>
```

(Extracted from file *tag-path.rml*, line 51)

[\[PDF\]](#)

data

A 1-D data set.

Sub-Directives

series (*OneOrMore*)

Examples

```
<data>
  <series>100 110 120 130</series>
  <series> 70  80  85  90</series>
</data>
```

(Extracted from file *tag-barChart.rml*, line 41)

[\[PDF\]](#)

data

A 2-D data set.

Sub-Directives

series (*OneOrMore*)

Examples

```
<data>
  <series>
    1  1
    2  2
    2.5 1
    3  3
    4  5
  </series>
  <series>
    1  2
    2  3
    2.5 2
    3.5 5
    4  6
  </series>
</data>
```

(Extracted from file *tag-linePlot.rml*, line 32)

[\[PDF\]](#)

data

A 1-D data set.

Sub-Directives

series (*One*)

Examples

```
<data>
  <series>10 20 30 40 50 60</series>
</data>
```


(Extracted from file *tag-pieChart.rml*, line 38)

[\[PDF\]](#)

debug

Log message at DEBUG level.

Content

RawXMLContent (*required*)

Message: The message to be logged.

Examples

```
<debug>A DEBUG message</debug>
```

(Extracted from file *tag-log.rml*, line 33)

[\[PDF\]](#)

docAssign

Assign a value to the namespace.

Attributes

var (*required*) - String

Variable Name: The name under which the value is stored.

expr (*required*) - String

Expression: The expression that creates the value when evaluated.

Examples

```
<docAssign var="currentFrame" expr="doc.frame.id"/>
```

(Extracted from file *tag-doc.rml*, line 17)

[\[PDF\]](#)

```
<docAssign var="i" expr="3"/>
```

(Extracted from file *tag-doc.rml*, line 19)

[\[PDF\]](#)

docElse

Starts 'else' block.

Examples

```
<docElse/>
```

(Extracted from file *tag-doc.rml*, line 22)

[\[PDF\]](#)

docExec

Execute a statement.

Attributes

stmt (*required*) - String

Statement: The statement to be executed.

Examples

```
<docExec stmt="i -= 1"/>
```

(Extracted from file *tag-doc.rml*, line 36)

[\[PDF\]](#)

docIf

Display story flow based on the value of the condition.

Attributes

cond (*required*) - String

Condition: The condition to be tested.

Examples

```
<docIf cond="i &gt; 3">
  <para>The value of i is larger than 3</para>
<docElse/>
  <para>The value of i is not larger than to 3</para>
</docIf>
```

(Extracted from file *tag-doc.rml*, line 20)

[\[PDF\]](#)

docPara

Create a paragraph with the value returned from the expression.

Attributes

expr (*required*) - String

Expression: The expression to be executed.

format - String

Format: The format used to render the expression value.

style - Style

Style: The style of the paragraph.

escape - Boolean

Escape Text: When set (default) the expression value is escaped.

Examples

```
<docPara expr="i" format="The value of i is %(__expr__)d"/>
```

(Extracted from file *tag-doc.rml*, line 35)

[\[PDF\]](#)

docWhile

Repeat the included directives as long as the condition is true.

Attributes

cond (*required*) - String

Condition: The condition to be tested.

Examples

```
<docWhile cond="i">
  <docPara expr="i" format="The value of i is %(__expr__)d"/>
  <docExec stmt="i -= 1"/>
</docWhile>
```

(Extracted from file *tag-doc.rml*, line 33)

[\[PDF\]](#)

docinit

Attributes

pageMode - Choice of ('usenone', 'fullscreen', 'usethumbs', 'useoutlines')

Page Mode: The page mode in which the document is opened in the viewer.

pageLayout - Choice of ('twocolumnright', 'onecolumn', 'twocolumnleft', 'singlepage')

Page Layout: The layout in which the pages are displayed in the viewer.

useCropMarks - Boolean

Use Crop Marks: A flag when set shows crop marks on the page.

hideToolbar - TextBoolean

Hide Toolbar: A flag indicating that the toolbar is hidden in the viewer.

hideMenubar - TextBoolean

Hide Menubar: A flag indicating that the menubar is hidden in the viewer.

hideWindowUI - TextBoolean

Hide Window UI: A flag indicating that the window UI is hidden in the viewer.

fitWindow - TextBoolean

Fit Window: A flag indicating that the page fits in the viewer.

centerWindow - TextBoolean

Center Window: A flag indicating that the page fits is centered in the viewer.

displayDocTitle - TextBoolean

Display Doc Title: A flag indicating that the document title is displayed in the viewer.

nonFullScreenPageMode - Choice of ('usenone', 'useoc', 'usethumbs', 'useoutlines')

Non-Full-Screen Page Mode: Non-Full-Screen page mode in the viewer.

direction - Choice of ('l2r', 'r2l')

Text Direction: The text direction of the PDF.

viewArea - Choice of ('trimbox', 'artbox', 'bleedbox', 'cropbox', 'mediabox')

View Area: View Area setting used in the viewer.

viewClip - Choice of ('trimbox', 'artbox', 'bleedbox', 'cropbox', 'mediabox')

View Clip: View Clip setting used in the viewer.

printArea - Choice of ('trimbox', 'artbox', 'bleedbox', 'cropbox', 'mediabox')

Print Area: Print Area setting used in the viewer.

printClip - Choice of ('trimbox', 'artbox', 'bleedbox', 'cropbox', 'mediabox')

Print Clip: Print Clip setting used in the viewer.

printScaling - Choice of ('none', 'appdefault')

Print Scaling: The print scaling mode in which the document is opened in the viewer.

Sub-Directives

color (ZeroOrMore)

name (ZeroOrMore)

registerType1Face (ZeroOrMore)

registerFont (ZeroOrMore)

registerCidFont (ZeroOrMore)

registerTTFont (ZeroOrMore)

registerFontFamily (ZeroOrMore)

addMapping (ZeroOrMore)

logConfig (ZeroOrMore)

cropMarks (ZeroOrMore)

startIndex (ZeroOrMore)

Examples

```
<docinit>
  <registerTTFont faceName="Vera" fileName="Vera.ttf"/>
  <addMapping faceName="times" bold="1" italic="0" psName="Vera"/>
</docinit>
```

(Extracted from file *tag-addMapping.rml*, line 8) [\[PDF\]](#)

```
<docinit hideToolbar="true" hideMenubar="true" hideWindowUI="true"
  fitWindow="true" centerWindow="true" displayDocTitle="true"
  nonFullScreenPageMode="UseOutlines" direction="L2R"
  viewArea="MediaBox" viewClip="MediaBox" printArea="MediaBox"
  printClip="MediaBox" printScaling="None">
</docinit>
```

(Extracted from file *tag-docinit-viewer-options.rml*, line 22)

[\[PDF\]](#)

```
<docinit>
  <registerTTFont faceName="Vera" fileName="Vera.ttf"/>
  <registerTTFont faceName="VeraMono"
    fileName="[z3c.rml]/tests/input/VeraMono.ttf"/>
</docinit>
```

(Extracted from file *tag-registerTTFont.rml*, line 8) [\[PDF\]](#)

document

Attributes

filename (*required*) - String

File Name: The default name of the output file, if no output file was provided.

debug - Boolean

Debug: A flag to activate the debug output.

compression - BooleanWithDefault

Compression: A flag determining whether page compression should be used.

invariant - BooleanWithDefault

Invariant: A flag that determines whether the produced PDF should be invariant with respect to the date and the exact contents.

Sub-Directives

docinit (*ZeroOrOne*)

stylesheet (*ZeroOrOne*)

template (*ZeroOrOne*)

story (*ZeroOrOne*)

pageInfo (*ZeroOrOne*)

pageDrawing (*ZeroOrMore*)

Examples

```
<document filename="tag-document.pdf">
  <template>
    <pageTemplate id="main">
      <frame id="first" x1="1cm" y1="1cm" width="19cm" height="26cm"/>
    </pageTemplate>
  </template>
  <story>
    <title>Hello World!</title>
  </story>
</document>
```

(Extracted from file *tag-document-story.rml*, line 7) [\[PDF\]](#)

```
<document filename="tag-document-pageDrawing.pdf">
  <pageDrawing>
    <drawString x="4.1in" y="8in">Hello World!</drawString>
  </pageDrawing>
</document>
```

(Extracted from file *tag-document-pageDrawing.rml*, line 7) [\[PDF\]](#)

drawAlignedString

Draws a simple string (aligned to the pivot character) onto the canvas at the specified location.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the string.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the string.

pivotChar (*required*) - Text

Text: The string/text that is put onto the canvas.

Content

RawXMLContent (*required*)

Text: The string/text that is put onto the canvas.

Examples

```
<drawAlignedString x="4.1in" y="9.8in">$ 13.63</drawAlignedString>
```

(Extracted from file *tag-drawAlignedString.rml*, line 11)

[\[PDF\]](#)

drawCenteredString

Draws a simple string (centered aligned) onto the canvas at the specified location.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the string.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the string.

Content

RawXMLContent (*required*)

Text: The string/text that is put onto the canvas.

Examples

```
<drawCenteredString x="4.1in" y="5.8in">Hello World.</drawCenteredString>
```

(Extracted from file *tag-drawCenteredString.rml*, line 11)

[\[PDF\]](#)

drawRightString

Draws a simple string (right aligned) onto the canvas at the specified location.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the string.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the string.

Content

RawXMLContent (*required*)

Text: The string/text that is put onto the canvas.

Examples

```
<drawRightString x="4.1in" y="5.8in">Hello World.</drawRightString>
```

(Extracted from file *tag-drawRightString.rml*, line 12) [\[PDF\]](#)

drawString

Draws a simple string (left aligned) onto the canvas at the specified location.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the string.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the string.

Content

RawXMLContent (*required*)

Text: The string/text that is put onto the canvas.

Examples

```
<drawString x="4.1in" y="5.8in">Hello World.</drawString>
```

(Extracted from file *tag-drawString.rml*, line 9)

[\[PDF\]](#)

ellipse

Draws an ellipse on the canvas.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the shape.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the shape.

fill - Boolean

Fill: A flag to specify whether the shape should be filled.

stroke - Boolean

Stroke: A flag to specify whether the shape's outline should be drawn.

width (*required*) - Measurement

Width: The width of the ellipse.

height (*required*) - Measurement

Height: The height of the ellipse.

Examples

```
<ellipse x="10cm" y="25cm" width="5cm" height="3cm" fill="false"
stroke="false"/>
```

(Extracted from file *tag-ellipse.rml*, line 10)

[\[PDF\]](#)

error

Log message at ERROR level.

Content

RawXMLContent (*required*)

Message: The message to be logged.

Examples

```
<error>A ERROR message</error>
```

(Extracted from file *tag-log.rml*, line 36)

[\[PDF\]](#)

fill

Set the fill color.

Attributes

color (*required*) - Color

Color: The color value to be set.

Examples

```
<fill color="red"/>
```

(Extracted from file *tag-fill.rml*, line 8)

[\[PDF\]](#)

fixedSize

Create a container flowable of a fixed size.

Attributes

width (*required*) - Measurement

Width: The width the flowables are allotted.

height (*required*) - Measurement

Height: The height the flowables are allotted.

Examples

```
<fixedSize width="3cm" height="2cm">
  <title><font face="Courier">&lt;fixedSize&gt;</font> Tag Demo</title>
  <para>
    This tag allows keeping a set of flowables in a confined space.
  </para>
  <para>
    Lot's of text goes here. Lot's of text goes here. Lot's of text goes
    here. Lot's of text goes here. Lot's of text goes here. Lot's of text
    goes here. Lot's of text goes here. Lot's of text goes here. Lot's of
    text goes here. Lot's of text goes here. Lot's of text goes here. Lot's
    of text goes here.
  </para>
</fixedSize>
```

(Extracted from file *tag-fixedSize.rml*, line 34)

[\[PDF\]](#)

frame

A frame on a page.

Attributes

x1 (*required*) - Measurement

X-Position: The X-Position of the lower-left corner of the frame.

y1 (*required*) - Measurement

Y-Position: The Y-Position of the lower-left corner of the frame.

width (*required*) - Measurement

Width: The width of the frame.

height (*required*) - Measurement

Height: The height of the frame.

id - Text

Id: The id of the frame.

leftPadding - Measurement

Left Padding: The left padding of the frame.

rightPadding - Measurement

Right Padding: The right padding of the frame.

topPadding - Measurement

Top Padding: The top padding of the frame.

bottomPadding - Measurement

Bottom Padding: The bottom padding of the frame.

showBoundary - Boolean

Show Boundary: A flag to show the boundary of the frame.

Examples

```
<frame id="first" x1="1cm" y1="1cm" width="19cm" height="26cm"/>
```

(Extracted from file *tag-document-story.rml*, line 11)

[\[PDF\]](#)

grid

A shape to be drawn on the canvas.

Attributes

xs (*required*) - Sequence of Measurement

X-Coordinates: A sequence x-coordinates that represent the vertical line positions.

ys (*required*) - Sequence of Measurement

Y-Coordinates: A sequence y-coordinates that represent the horizontal line positions.

Examples

```
<grid xs="1in 2in 3in 4in 5in 6in" ys="7in 7.2in 7.4in 7.6in 7.8in 8.0in"/>
```

(Extracted from file *tag-grid.rml*, line 13)

[\[PDF\]](#)

h1

Heading 1 is a simple paragraph with a special heading 1 style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backgroundColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<h1>Header 1</h1>
```

(Extracted from file *tag-para.rml*, line 21)

[\[PDF\]](#)

h2

Heading 2 is a simple paragraph with a special heading 2 style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

<h2>Header 2</h2>

(Extracted from file *tag-para.rml*, line 22)

[\[PDF\]](#)

h3

Heading 3 is a simple paragraph with a special heading 3 style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backgroundColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<h3>Header 3</h3>
```

(Extracted from file *tag-para.rml*, line 23)

[\[PDF\]](#)

h4

Heading 4 is a simple paragraph with a special heading 4 style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<h4>Header 4</h4>
```

(Extracted from file *tag-para.rml*, line 24)

[\[PDF\]](#)

h5

Heading 5 is a simple paragraph with a special heading 5 style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<h5>Header 5</h5>
```

(Extracted from file *tag-para.rml*, line 25)

[\[PDF\]](#)

h6

Heading 6 is a simple paragraph with a special heading 6 style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

`<h6>Header 6</h6>`

(Extracted from file *tag-para.rml*, line 26)

[\[PDF\]](#)

hr

Create a horizontal line on the page.

Attributes

width - Measurement

Width: The width of the line on the page.

thickness - Measurement

Thickness: Line Thickness

color - Color

Color: The color of the line.

lineCap - Choice of ('default', 'square', 'round', 'butt')

Cap: The cap at the end of the line.

spaceBefore - Measurement

Space Before: The vertical space before the line.

spaceAfter - Measurement

Space After: The vertical space after the line.

align - Choice of ('left', 'decimal', 'right', 'center', 'centre')

Alignment: The alignment of the line within the frame.

valign - Choice of ('middle', 'top', 'bottom')

Vertical Alignment: The vertical alignment of the line.

dash - Sequence of Measurement

Dash-Pattern: The dash-pattern of a line.

Examples


```
<hr width="80%" thickness="2" color="blue" dash="1 3" spaceAfter="5"
    spaceBefore="5" align="center"/>
```

(Extracted from file *tag-hr.rml*, line 16)

[\[PDF\]](#)

illustration

Inserts an illustration with graphics elements.

Attributes

width (*required*) - Measurement

Width: The width of the illustration.

height (*required*) - Measurement

Height: The height of the illustration.

Examples

```
<illustration height="3cm" width="5cm">
  <lines>
    0    0    0    3cm
    0    3cm 5cm 3cm
    5cm 3cm 5cm 0
    5cm 0    0    0
  </lines>
</illustration>
```

(Extracted from file *tag-illustration.rml*, line 19)

[\[PDF\]](#)

image

Draws an external image on the canvas.

Attributes

file (*required*) - Image

File: Reference to the external file of the image.

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the shape.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the shape.

width - Measurement

Width: The width of the image.

height - Measurement

Height: The height of the image.

showBoundary - Boolean

Show Boundary: A flag determining whether a border should be drawn around the image.

preserveAspectRatio - Boolean

Preserve Aspect Ratio: A flag determining whether the image's aspect ratio should be conserved under any circumstances.

Examples

```
<image file="[z3c.rml.tests]/input/zope3logo.gif" x="2in" y="2in" width="0.5in"
    height="3in"/>
```

(Extracted from file *tag-image.rml*, line 20)

[\[PDF\]](#)

imageAndFlowables

An image with flowables around it.

Attributes

imageName (*required*) - Image

Image: The file that is used to extract the image data.

imageWidth - Measurement

Image Width: The width of the image.

imageHeight - Measurement

Image Height: The height the image.

imageMask - Color

Mask: The height the image.

imageLeftPadding - Measurement

Image Left Padding: The padding on the left side of the image.

imageRightPadding - Measurement

Image Right Padding: The padding on the right side of the image.

imageTopPadding - Measurement

Image Top Padding: The padding on the top of the image.

imageBottomPadding - Measurement

Image Bottom Padding: The padding on the bottom of the image.

imageSide - Choice of ('right', 'left')

Image Side: The side at which the image will be placed.

Examples

```
<imageAndFlowables imageName="images/cylinder.svg" imageWidth="200"
                      imageMask="white" imageSide="left">
  <h1>Wrap around</h1>
  <para>This text should wrap around the image.</para>
</imageAndFlowables>
```

(Extracted from file *tag-imageAndFlowables-svg.rml*,
line 53)

[\[PDF\]](#)

```
<imageAndFlowables imageName="images/replologo.gif" imageWidth="200"
                      imageMask="white" imageSide="left">
  <h1>Wrap around</h1>
  <para>This text should wrap around the image.</para>
</imageAndFlowables>
```

(Extracted from file *tag-imageAndFlowables.rml*, line
52)

[\[PDF\]](#)

img

An image.

Attributes

src (*required*) - Image

Image Source: The file that is used to extract the image data.

width - Measurement

Image Width: The width of the image.

height - Measurement

Image Height: The height the image.

mask - Color

Mask: The color mask used to render the image.

vAlign - Choice of ('middle', 'top', 'bottom')

Vertical Alignment: The vertical alignment of the image.

Examples

```

```

(Extracted from file *tag-img.rml*, line 19)

[\[PDF\]](#)

includePdfPages

Inserts a set of pages from a given PDF.

Attributes

filename (*required*) - File
Path to file: The pdf file to include.

pages - IntegerSequence
Pages: A list of pages to insert.

Examples

```
<includePdfPages filename="[z3c.rml.tests]/input/data/include2.pdf"
                 pages="2-3" />
```

(Extracted from file *tag-includePdfPages.rml*, line 26) [\[PDF\]](#)

indent

Indent the contained flowables.

Attributes

left - Measurement
Left: The indentation to the left.

right - Measurement
Right: The indentation to the right.

Examples

```
<indent left="2cm">
  <para>Item 1-1</para>
  <indent left="2cm">
    <para>Item 2-1</para>
    <indent left="2cm">
      <para>Item 3-1</para>
      <para>Item 3-2</para>
    </indent>
    <para>Item 2-2</para>
    <para>Item 2-3</para>
  </indent>
  <para>Item 1-2</para>
</indent>
```

(Extracted from file *tag-indent.rml*, line 40) [\[PDF\]](#)

info

Log message at INFO level.

Content

RawXMLContent (*required*)
Message: The message to be logged.

Examples

```
<info>A INFO message</info>
```

(Extracted from file *tag-log.rml*, line 34) [\[PDF\]](#)

initialize

Do some RML processing initialization.

Sub-Directives

name (*ZeroOrMore*)

alias (*ZeroOrMore*)

color (*ZeroOrMore*)

Examples

```
<initialize>
  <alias id="h1" value="style.Heading1"/>
</initialize>
```

(Extracted from file *tag-alias.rml*, line 13)

[\[PDF\]](#)

keepInFrame

Ask a flowable to stay within the frame.

Attributes

maxWidth - Measurement

Maximum Width: The maximum width the flowables are allotted.

maxHeight - Measurement

Maximum Height: The maximum height the flowables are allotted.

mergeSpace - Boolean

Merge Space: A flag to set whether the space should be merged.

onOverflow - Choice of ('overflow', 'shrink', 'truncate', 'error')

On Overflow: Defines what has to be done, if an overflow is detected.

id - Text

Name/Id: The name/id of the flowable.

frame - StringOrInt

Frame: The frame to which the flowable should be fitted.

Examples

```
<keepInFrame maxWidth="3cm" maxHeight="2cm" onOverflow="shrink" name="second">
  <para>
    This tag allows keeping a set of flowables in a confined space.
  </para>
</keepInFrame>
```

(Extracted from file *tag-keepInFrame.rml*, line 48)

[\[PDF\]](#)

keepTogether

Keep the child flowables in the same frame. Add frame break when necessary.

Attributes

maxHeight - Measurement

Maximum Height: The maximum height the flowables are allotted.

Examples

```
<keepTogether>
  <para style="normal">
    This is the 1st paragraph of 3 that we wish to keep together. <br/>
    Some nonsense text to fill up the space.
    Some nonsense text to fill up the space.
    Some nonsense text to fill up the space.
    Some nonsense text to fill up the space.
    Some nonsense text to fill up the space.
    Some nonsense text to fill up the space.
  </para>
  <spacer length="1cm"/>
  <para style="normal">
    This is the 2nd paragraph of 3 that we wish to keep together. <br/>
```

```

        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
    </para>
    <spacer length="1cm" />
    <para style="normal">
        This is the 3rd paragraph of 3 that we wish to keep together. <br/>
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
        Some nonsense text to fill up the space.
    </para>

</keepTogether>

```

(Extracted from file *tag-keepTogether.rml*, line 34) [\[PDF\]](#)

label

A label for a strand.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

row - Integer

Row: The row of the strand label

col - Integer

Column: The column of the strand label.

format - String

Format: The format string for the label.

dR - Float

Radial Shift: The radial shift of the label.

Content

TextNode

Text: The label text of the strand.

Examples

```
<label row="0" col="3" dx="-10">special</label>
```

(Extracted from file *tag-spiderChart.rml*, line 61) [\[PDF\]](#)

label

The label of a slice within a bar chart.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

Content

TextNode (*required*)

Text: The label text to be displayed.

Examples

```
<label dx="10" dy="10" visible="true">Age 1-10</label>
```

(Extracted from file *tag-pieChart.rml*, line 51)

[\[PDF\]](#)

label

A label for a spoke.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

Content

TextNode

Text: The text of the spoke (label).

Examples

```
<label>U</label>
```

(Extracted from file *tag-spiderChart.rml*, line 45)

[\[PDF\]](#)

label

A simple label

Content

TextNode (*required*)

Text: The text value that is the name.

Examples

```
<label>Age 1-10</label>
```

(Extracted from file *tag-pieChart3d.rml*, line 49)

[\[PDF\]](#)

label

A label for the chart on an axis.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

x - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the label.

y - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the label.

Content

TextNode (*required*)

Text: The label text to be displayed.

labels

A set of labels of an axis.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

x - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the label.

y - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the label.

Sub-Directives

label (*ZeroOrMore*)

Examples

```
<labels fontName="Helvetica" fontSize="20"/>
```

(Extracted from file *tag-barChart.rml*, line 28)

[\[PDF\]](#)

labels

A set of simple labels for a chart.

Sub-Directives

label (*OneOrMore*)

Examples

```
<labels>
  <label>Age  1-10</label>
  <label>Age  11-20</label>
  <label>Age  21-30</label>
  <label>Age  31-40</label>
  <label>Age  41-50</label>
  <label>Age  51-60</label>
</labels>
```

(Extracted from file *tag-pieChart3d.rml*, line 48)

[\[PDF\]](#)

li

An ordered list item.

Attributes

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

bulletColor - Color

Bullet Color: The color in which the bullet will appear.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletOffsetY - Measurement

Bullet Y-Offset: The vertical offset of the bullet.

bulletDedent - StringOrInt

Bullet Dedent: Either pixels of dedent or auto (default).

bulletDir - Choice of ('ltr', 'rtl')

Bullet Layout Direction: The layout direction of the bullet.

bulletFormat - String

Bullet Format: A formatting expression for the bullet text.

style - Style

Style: The list style that is applied to the list.

value - Choice of ('disc', 'arrowhead', 'circle', 'square', 'diamond')

Bullet Value: The type of bullet character.

Examples

```
<li value="disc" bulletFontName="Helvetica">
  <para>unordered 1</para>
</li>
```

(Extracted from file *tag-ul-ol-li.rml*, line 34)

[\[PDF\]](#)

li

An ordered list item.

Attributes**leftIndent** - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

bulletColor - Color

Bullet Color: The color in which the bullet will appear.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletOffsetY - Measurement

Bullet Y-Offset: The vertical offset of the bullet.

bulletDedent - StringOrInt

Bullet Dedent: Either pixels of dedent or auto (default).

bulletDir - Choice of ('ltr', 'rtl')

Bullet Layout Direction: The layout direction of the bullet.

bulletFormat - String

Bullet Format: A formatting expression for the bullet text.

style - Style

Style: The list style that is applied to the list.

value - Integer

Bullet Value: The counter value.

Examples

```
<li bulletColor="gray" bulletFontName="Helvetica">
  <para>Item 1</para>
</li>
```

(Extracted from file *tag-ul-ol-li.rml*, line 54)

[\[PDF\]](#)

line

A line description of a series of a line plot.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the plot line.

strokeColor - Color

Stroke Color: The color of the plot line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the plot line.

symbol - Symbol

Symbol: The symbol to be used for every data point in the plot.

name - Text

Name: The name of the line.

Examples

```
<line strokeColor="red" symbol="FilledCircle"/>
```

(Extracted from file *tag-linePlot.rml*, line 22)

[\[PDF\]](#)

lineLabels

A set of labels of an axis.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

x - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the label.

y - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the label.

Sub-Directives

label (*ZeroOrMore*)

Examples

```
<lineLabels font="Roman-Bold" fontSize="10"/>
```

(Extracted from file *tag-linePlot.rml*, line 31)

[\[PDF\]](#)

lineMode

Set the line mode for the following graphics elements.

Attributes**width** - Measurement

Width: The line width.

dash - Sequence of Measurement

Dash-Pattern: The dash-pattern of a line.

miterLimit - Measurement

Miter Limit: The ???.

join - Choice of ('mitered', 'bevelled', 'round')

Join: The way lines are joined together.

cap - Choice of ('default', 'square', 'round', 'butt')

Cap: The cap is the description of how the line-endings look.

Examples

```
<lineMode width="4" dash="3 2"/>
```

(Extracted from file *tag-lineMode.rml*, line 8)

[\[PDF\]](#)

linePlot

A line plot.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

reversePlotOrder - Boolean

Reverse Plot Order: When true, the coordinate system is reversed.

lineLabelNudge - Measurement

Line Label Nudge: The distance between the data point and its label.

lineLabelFormat - String

Line Label Format: Formatting string for data point labels.

joinedLines - Boolean

Joined Lines: When true, connect all data points with lines.

Sub-Directives

data (*One*)

lines (*ZeroOrOne*)

xValueAxis (*ZeroOrOne*)

yValueAxis (*ZeroOrOne*)

lineLabels (*ZeroOrOne*)

texts (*ZeroOrOne*)

Examples

```
<linePlot dx="2in" dy="7in" dwidth="6in" dheight="4in" x="0" y="0" width="5in"
          height="3in" joinedLines="true" lineLabelFormat="%2.0f">
  <lines>
    <line strokeColor="red" symbol="FilledCircle"/>
    <line strokeColor="blue" symbol="FilledDiamond"/>
  </lines>
  <xValueAxis valueMin="0" valueMax="5" valueStep="1">
    <labels fontName="Helvetica"/>
  </xValueAxis>
  <yValueAxis valueMin="0" valueMax="7" valueStep="1">
    <labels fontName="Helvetica"/>
  </yValueAxis>
  <lineLabels font="Roman-Bold" fontSize="10"/>
  <data>
    <series>
      1 1
      2 2
      2.5 1
      3 3
      4 5
    </series>
    <series>
      1 2
      2 3
      2.5 2
      3.5 5
      4 6
    </series>
  </data>
</linePlot>
```

(Extracted from file *tag-linePlot.rml*, line 19)

[\[PDF\]](#)

linePlot3D

Creates a three-dimensional line plot.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

reversePlotOrder - Boolean

Reverse Plot Order: When true, the coordinate system is reversed.

lineLabelNudge - Measurement

Line Label Nudge: The distance between the data point and its label.

lineLabelFormat - String

Line Label Format: Formatting string for data point labels.

joinedLines - Boolean

Joined Lines: When true, connect all data points with lines.

thetaX - Float

Theta-X: Fraction of dx/dz.

thetaY - Float

Theta-Y: Fraction of dy/dz.

zDepth - Measurement

Z-Depth: Depth of an individual series/bar.

zSpace - Measurement

Z-Space: Z-Gap around a series/bar.

Sub-Directives

data (One)

lines (ZeroOrOne)

xValueAxis (ZeroOrOne)

yValueAxis (ZeroOrOne)

lineLabels (ZeroOrOne)

texts (ZeroOrOne)

Examples

```
<linePlot3D dx="2in" dy="7in" dwidth="6in" dheight="4in" x="0" y="0"
width="5in" height="3in" joinedLines="true" lineLabelFormat="%2.0f"
zDepth="0.3in" zSpace="0.3in">

<lines>
  <line strokeColor="red" symbol="FilledCircle"/>
  <line strokeColor="blue" symbol="FilledDiamond"/>
</lines>
<xValueAxis valueMin="0" valueMax="5" valueStep="1">
  <labels fontName="Helvetica"/>
</xValueAxis>
<yValueAxis valueMin="0" valueMax="7" valueStep="1">
  <labels fontName="Helvetica"/>
</yValueAxis>
<lineLabels font="Roman-Bold" fontSize="10"/>
<data>
  <series>
    1 1
    2 2
    2.5 1
    3 3
    4 5
```

```

    </series>
    <series>
      1    2
      2    3
      2.5  2
      3.5  5
      4    6
    </series>
  </data>
</linePlot3D>

```

(Extracted from file *tag-linePlot3D.rml*, line 20)

[\[PDF\]](#)

lineStyle

Define the border line style of each cell.

Attributes

start (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

Start Coordinates: The start table coordinates for the style instruction

stop (*required*) - Sequence of Combination of Integer, Choice of ('splitfirst', 'splitlast')

End Coordinates: The end table coordinates for the style instruction

kind (*required*) - Choice of ('box', 'outline', 'innergrid', 'linebefore', 'lineabove', 'linebelow', 'lineafter', 'grid')

Kind: The kind of line actions to be taken.

thickness (*required*) - Measurement

Thickness: Line Thickness

colorName (*required*) - Color

Color: The color of the border line.

cap (*required*) - Choice of ('default', 'square', 'round', 'butt')

Cap: The cap at the end of a border line.

dash - Sequence of Measurement

Dash-Pattern: The dash-pattern of a line.

join - Choice of ('mitered', 'bevelled', 'round')

Join: The way lines are joined together.

count - Integer

Count: Describes whether the line is a single (1) or double (2) line.

Examples

```

<lineStyle start="0,0" stop="-1,-1" kind="BOX" thickness="0.25"
           colorName="black"/>

```

(Extracted from file *tag-blockTable-5.rml*, line 27)

[\[PDF\]](#)

lines

A path of connected lines drawn on the canvas.

Content

TextNodeGrid with 4 cols of Measurement (*required*)

Line List: A list of lines coordinates to draw.

Examples

```

<lines>
  1in 7in 6in 7in
  1in 5in 6in 4in
  1in 3in 1in 1in
</lines>

```

(Extracted from file *tag-lines.rml*, line 9)

[\[PDF\]](#)

lines

The set of all line descriptions in the line plot.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the plot line.

strokeColor - Color

Stroke Color: The color of the plot line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the plot line.

symbol - Symbol

Symbol: The symbol to be used for every data point in the plot.

Sub-Directives

line (*OneOrMore*)

Examples

```
<lines>
  <line strokeColor="red" symbol="FilledCircle"/>
  <line strokeColor="blue" symbol="FilledDiamond"/>
</lines>
```

(Extracted from file *tag-linePlot.rml*, line 20)

[\[PDF\]](#)

link

Place an internal link around a set of flowables.

Attributes

destination - Text

Destination: The name of the destination to link to.

url - Text

URL: The URL to link to.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxStrokeDashArray - Sequence of Float

Box Stroke Dash Array: The dash array of the box border line.

boxStrokeColor - Color

Box Stroke Color: The color in which the box border is drawn.

Examples

```
<link destination="PAGE_1" boxStrokeColor="red" boxStrokeWidth="1"
  boxStrokeDashArray="1 2">
  <para>Go to page 1 now!</para>
</link>
```

(Extracted from file *tag-bookmark.rml*, line 23)

[\[PDF\]](#)

```
<link url="http://www.reportlab.org">
  <para>Link to ReporLab Web Site.</para>
</link>
```

(Extracted from file *tag-bookmark.rml*, line 45)

[\[PDF\]](#)

listStyle

Defines a list style and gives it a name.

Attributes

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

bulletColor - Color

Bullet Color: The color in which the bullet will appear.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletOffsetY - Measurement

Bullet Y-Offset: The vertical offset of the bullet.

bulletDedent - StringOrInt

Bullet Dedent: Either pixels of dedent or auto (default).

bulletDir - Choice of ('ltr', 'rtl')

Bullet Layout Direction: The layout direction of the bullet.

bulletFormat - String

Bullet Format: A formatting expression for the bullet text.

start - Combination of Integer, Choice of ('disc', 'arrowhead', 'circle', 'square', 'diamond')

Start Value: The counter start value.

name (*required*) - String

Name: The name of the style.

parent - Style

Parent: The list style that will be used as a base for this one.

Examples

```
<listStyle name="MyList" bulletFontName="Helvetica-Bold" bulletFontSize="8"
bulletColor="green" start="diamond"/>
```

(Extracted from file *tag-ul-ol-li.rml*, line 22)

[\[PDF\]](#)

log

Log message at DEBUG level.

Attributes

level (*required*) - Choice of ('DEBUG', 'INFO', 'WARNING', 'CRITICAL', 'ERROR')

Level: The default log level.

Content

RawXMLContent (*required*)

Message: The message to be logged.

Examples

```
<log level="WARNING">Log message with level WARNING.</log>
```

(Extracted from file *tag-log.rml*, line 32)

[\[PDF\]](#)

logConfig

Configure the render logger.

Attributes

level - Choice of ('DEBUG', 'INFO', 'WARNING', 'CRITICAL', 'ERROR')

Level: The default log level.

format - String

Format: The format of the log messages.

filename (*required*) - File

File Name: The path to the file that is being logged.

filemode - Choice of ('write', 'append')

File Mode: The mode to open the file in.

datefmt - String

Date Format: The format of the log message date.

Examples

```
<logConfig level="DEBUG" format="% (asctime)s %(levelname)s - %(message)s"
datefmt="%Y-%m-%dT%H:%M:%S" filename="[z3c.rml.tests]/render.log"
filemode="APPEND" />
```

(Extracted from file *tag-log.rml*, line 15)

[\[PDF\]](#)

moveto

Move the path cursor to the specified location.

Content

TextNodeSequence of Measurement (*required*)

Position: Position to which the path pointer is moved to.

Examples

```
<moveto>
  2cm 15cm
</moveto>
```

(Extracted from file *tag-path.rml*, line 44)

[\[PDF\]](#)

name

A category name

Content

TextNode (*required*)

Text: The text value that is the name.

Examples

```
<name>Category 1</name>
```

(Extracted from file *tag-barChart.rml*, line 30)

[\[PDF\]](#)

name

Defines a name for a string.

Attributes

id (*required*) - String

Id: The id under which the value will be known.

value (*required*) - Text

Value: The text that is displayed if the id is called.

Examples

```
<name id="DocTitle" value="The Document Title" />
```

(Extracted from file *tag-name.rml*, line 16)

[\[PDF\]](#)

namedString

Defines a name for a string.

Attributes

id (*required*) - String

Id: The id under which the value will be known.

Content

XMLContent (*required*)

Value: The text that is displayed if the id is called.

nextFrame

Switch to the next frame.

Attributes

name - StringOrInt

Name: The name or index of the next frame.

Examples

```
<nextFrame/>
```

(Extracted from file *tag-nextFrame.rml*, line 16)

[\[PDF\]](#)

nextPage

Switch to the next page.

Examples

```
<nextPage/>
```

(Extracted from file *tag-nextPage.rml*, line 16)

[\[PDF\]](#)

ol

An ordered list.

Attributes

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

bulletColor - Color

Bullet Color: The color in which the bullet will appear.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletOffsetY - Measurement

Bullet Y-Offset: The vertical offset of the bullet.

bulletDedent - StringOrInt

Bullet Dedent: Either pixels of dedent or auto (default).

bulletDir - Choice of ('ltr', 'rtl')

Bullet Layout Direction: The layout direction of the bullet.

bulletFormat - String

Bullet Format: A formatting expression for the bullet text.

start - Combination of Integer, Choice of ('disc', 'arrowhead', 'circle', 'square', 'diamond')

Start Value: The counter start value.

style - Style

Style: The list style that is applied to the list.

bulletType - Choice of ('I', 'i', '1', 'A', 'a')

Bullet Type: The type of bullet formatting.

Sub-Directives

li (*ZeroOrMore*)

Examples

```
<ol bulletColor="orange" bulletFontName="Times-Roman">
  <li bulletColor="gray" bulletFontName="Helvetica">
    <para>Item 1</para>
  </li>
  <li>
    <para>Item 2</para>
  </li>
</ol>
```

(Extracted from file *tag-ul-ol-li.rml*, line 52)

[\[PDF\]](#)

option

An option in the select field.

Content

TextNode (*required*)

Value: The value of the option.

Examples

```
<option>Option 1</option>
```

(Extracted from file *tag-selectField.rml*, line 20)

[\[PDF\]](#)

outlineAdd

Add a new entry to the outline of the PDF.

Attributes

key - String

Key: The unique key of the item.

level - Integer

Level: The level in the outline tree.

closed - Boolean

Closed: A flag to determine whether the sub-tree is closed by default.

Content

TextNode (*required*)

Title: The text displayed for this item.

Examples

```
<outlineAdd>Top Level</outlineAdd>
```

(Extracted from file *tag-outlineAdd.rml*, line 14)

[\[PDF\]](#)

```
<outlineAdd level="1" closed="no">Item 1-1</outlineAdd>
```

(Extracted from file *tag-outlineAdd.rml*, line 15)

[\[PDF\]](#)

pageDrawing

Draws directly on the content of one page's canvas. Every call of this directive creates a new page.

Sub-Directives

saveState (*ZeroOrMore*)

restoreState (*ZeroOrMore*)

drawString (ZeroOrMore)
drawRightString (ZeroOrMore)
drawCenteredString (ZeroOrMore)
drawCentredString (ZeroOrMore)
drawAlignedString (ZeroOrMore)
ellipse (ZeroOrMore)
circle (ZeroOrMore)
rect (ZeroOrMore)
grid (ZeroOrMore)
lines (ZeroOrMore)
curves (ZeroOrMore)
image (ZeroOrMore)
place (ZeroOrMore)
textAnnotation (ZeroOrMore)
path (ZeroOrMore)
fill (ZeroOrMore)
stroke (ZeroOrMore)
setFont (ZeroOrMore)
setFontSize (ZeroOrMore)
scale (ZeroOrMore)
translate (ZeroOrMore)
rotate (ZeroOrMore)
skew (ZeroOrMore)
transform (ZeroOrMore)
lineMode (ZeroOrMore)
barCode (ZeroOrMore)
textField (ZeroOrMore)
buttonField (ZeroOrMore)
selectField (ZeroOrMore)
barChart (ZeroOrMore)
barChart3D (ZeroOrMore)
linePlot (ZeroOrMore)
linePlot3D (ZeroOrMore)
pieChart (ZeroOrMore)
pieChart3D (ZeroOrMore)
spiderChart (ZeroOrMore)
bookmark (ZeroOrMore)
plugInGraphic (ZeroOrMore)

Examples

```
<pageDrawing>  
  <drawString x="4.1in" y="5.8in">Hello World.</drawString>  
</pageDrawing>
```

(Extracted from file *tag-drawString.rml*, line 8) [\[PDF\]](#)

pageGraphics

Define the page graphics for the page template.

Examples

```
<pageGraphics>  
  <setFont name="Helvetica-BoldOblique" size="18"/>  
  <drawString x="1cm" y="28cm">Graphic Line</drawString>  
</pageGraphics>
```

(Extracted from file *tag-pageGraphics.rml*, line 9) [\[PDF\]](#)

pageInfo

Set's up page-global settings.

Attributes

pageSize (*required*) - PageSize

Page Size: The page size of all pages within this document.

Examples

```
<pageInfo pageSize="LEGAL" />
```

(Extracted from file *tag-pageInfo-2.rml*, line 7) [\[PDF\]](#)

```
<pageInfo pageSize="(4in, 6in)" />
```

(Extracted from file *tag-pageInfo.rml*, line 7) [\[PDF\]](#)

pageTemplate

Define a page template.

Attributes

id (*required*) - Text

Id: The id of the template.

pagesize - PageSize

Page Size: The Page Size.

autoNextTemplate - String

Auto Next Page Template: The page template to use automatically for the next page.

Sub-Directives

frame (*OneOrMore*)

pageGraphics (*ZeroOrOne*)

Examples

```
<pageTemplate id="main">
  <frame id="first" x1="1cm" y1="1cm" width="19cm" height="26cm" />
</pageTemplate>
```

(Extracted from file *tag-document-story.rml*, line 9) [\[PDF\]](#)

para

Lays out an entire paragraph.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<para>Paragraph</para>
```

(Extracted from file *tag-para.rml*, line 27)

[\[PDF\]](#)

paraStyle

Defines a paragraph style and gives it a name.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backgroundColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

name (*required*) - String

Name: The name of the style.

alias - String

Alias: An alias under which the style will also be known as.

parent - Style

Parent: The paragraph style that will be used as a base for this one.

Examples

```
<paraStyle name="large" fontSize="3cm" textColor="red"/>
```

(Extracted from file *simple-layout.rml*, line 14)

[\[PDF\]](#)

param

Sets one paramter for the text annotation.

Attributes

name (*required*) - String

Name: The name of the paramter.

Content

TextNode (*required*)

Value: The parameter value.

Examples

```
<param name="Rect">0,0,1,1</param>
```

(Extracted from file *tag-textAnnotation.rml*, line 9)

[\[PDF\]](#)

path

Create a line path.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the shape.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the shape.

fill - Boolean

Fill: A flag to specify whether the shape should be filled.

stroke - Boolean

Stroke: A flag to specify whether the shape's outline should be drawn.

close - Boolean

Close Path: A flag specifying whether the path should be closed.

clip - Boolean

Clip Path: A flag specifying whether the path should clip overlapping elements.

Content

TextNodeGrid with 2 cols of Measurement (*required*)

Points: A list of coordinate points that define th path.

Sub-Directives

moveto (ZeroOrMore)
curveto (ZeroOrMore)
curvesto (ZeroOrMore) (*Deprecated*)

Examples

```
<path x="2cm" y="15cm" fill="true">
  8cm 15cm
  <curvesto>
    10cm 15cm 10cm 12cm 8cm 12cm
  </curvesto>
  2cm 12cm
  <moveto>
    2cm 15cm
  </moveto>
</path>
```

(Extracted from file *tag-path.rml*, line 38)

[\[PDF\]](#)

```
<path x="8cm" y="12cm" fill="true">
  <curveto>
    10cm 12cm 10cm 9cm 8cm 9cm
  </curveto>
</path>
```

(Extracted from file *tag-path.rml*, line 50)

[\[PDF\]](#)

pieChart

A pie chart.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

startAngle - Integer

Start Angle: The start angle in the chart of the first slice in degrees.

direction - Choice of ('clockwise', 'anticlockwise')

Direction: The direction in which the pie chart will be built.

checkLabelOverlap - Boolean

Check Label Overlap: When true, check and attempt to fix standard label overlaps

pointerLabelMode - Choice of ('none', 'leftandright', 'leftright')

Pointer Label Mode: The location relative to the slace the label should be placed.

sameRadii - Boolean

Same Radii: When true, make x/y radii the same.

orderMode - Choice of ('alternate', 'fixed')

Order Mode:

xradius - Measurement

X-Radius: The radius of the X-directions

yradius - Measurement

Y-Radius: The radius of the Y-directions

Sub-Directives

data (One)

slices (ZeroOrOne)

labels (ZeroOrOne)

texts (ZeroOrOne)

Examples

```
<pieChart dx="2in" dy="7in" dwidth="6in" dheight="4in" x="0" y="0" width="3in"
  height="3in">
  <labels>
    <label>a</label>
    <label>b</label>
    <label>c</label>
    <label>d</label>
    <label>e</label>
    <label>f</label>
  </labels>
  <slices strokeWidth="0.5">
    <slice fillColor="darkcyan"/>
    <slice fillColor="blueviolet"/>
    <slice fillColor="blue"/>
    <slice fillColor="cyan" popout="10" strokeWidth="2" strokeDashArray="2 2"/>
    <slice fillColor="aquamarine"/>
    <slice fillColor="cadetblue"/>
    <slice fillColor="lightcoral"/>
  </slices>
  <data>
    <series>10 20 30 40 50 60</series>
  </data>
</pieChart>
```

(Extracted from file *tag-pieChart.rml*, line 18)

[\[PDF\]](#)

pieChart3D

A 3-D pie chart.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

startAngle - Integer

Start Angle: The start angle in the chart of the first slice in degrees.

direction - Choice of ('clockwise', 'anticlockwise')

Direction: The direction in which the pie chart will be built.

checkLabelOverlap - Boolean

Check Label Overlap: When true, check and attempt to fix standard label overlaps

pointerLabelMode - Choice of ('none', 'leftandright', 'leftright')

Pointer Label Mode: The location relative to the slice the label should be placed.

sameRadii - Boolean

Same Radii: When true, make x/y radii the same.

orderMode - Choice of ('alternate', 'fixed')

Order Mode:

xradius - Measurement

X-Radius: The radius of the X-directions

yradius - Measurement

Y-Radius: The radius of the Y-directions

perspective - Float

Perspsective: The flattening parameter.

depth_3d - Measurement

3-D Depth: The depth of the pie.

angle_3d - Float

3-D Angle: The view angle in the Z-coordinate.

Sub-Directives

slices (*One*)

texts (*ZeroOrOne*)

Examples

```
<pieChart3D dx="2in" dy="7in" dwidth="6in" dheight="4in" x="0" y="0"
            width="3in" height="3in">
  <labels>
    <label>a</label>
    <label>b</label>
    <label>c</label>
    <label>d</label>
    <label>e</label>
    <label>f</label>
  </labels>
  <slices strokeWidth="0.5">
    <slice fillColor="darkcyan"/>
    <slice fillColor="blueviolet"/>
    <slice fillColor="blue"/>
    <slice fillColor="cyan" popout="10" strokeWidth="2" strokeDashArray="2 2"/>
    <slice fillColor="aquamarine"/>
    <slice fillColor="cadetblue"/>
    <slice fillColor="lightcoral"/>
  </slices>
  <data>
    <series>10 20 30 40 50 60</series>
  </data>
</pieChart3D>
```

(Extracted from file *tag-pieChart3d.rml*, line 18)

[\[PDF\]](#)

place

Draws a set of flowables on the canvas within a given region.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the place.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the place.

width - Measurement

Width: The width of the place.

height - Measurement

Height: The height of the place.

Examples

```
<place x="1cm" y="10cm" width="13cm" height="4cm">
  <para>A paragraph within the place.</para>
</place>
```

(Extracted from file *tag-place.rml*, line 52)

[\[PDF\]](#)

plugInFlowable

Inserts a custom flowable developed in Python.

Attributes

module (*required*) - String

Module: The Python module in which the flowable is located.

function (*required*) - String

Function: The name of the factory function within the module that returns the custom flowable.

Content

TextNode

Parameters: A list of parameters encoded as a long string.

Examples

```
<plugInFlowable module="z3c.rml.tests.flowable" function="TestFlowable">
    Some text.
</plugInFlowable>
```

(Extracted from file *tag-plugInFlowable.rml*, line 22) [\[PDF\]](#)

plugInGraphic

Inserts a custom graphic developed in Python.

Attributes

module (*required*) - String

Module: The Python module in which the flowable is located.

function (*required*) - String

Function: The name of the factory function within the module that returns the custom flowable.

Content

TextNode

Parameters: A list of parameters encoded as a long string.

Examples

```
<plugInGraphic module="z3c.rml.tests.module" function="symbols">
    n=4,x="1in",y="7in",name="StarFive",dx="15pt",dy="0",
    size="10pt",fillColor="red",strokeColor="blue",
    strokeWidth="1.5pt"
</plugInGraphic>
```

(Extracted from file *tag-plugInGraphic.rml*, line 8) [\[PDF\]](#)

pointer

A pointer to a slice in a pie chart.

Attributes

strokeColor - Color

Stroke Color: The color of the pointer line.

strokeWidth - Measurement

Stroke Width: The width of the pointer line.

elbowLength - Measurement

Elbow Length: The length of the final segment of the pointer.

edgePad - Measurement

Edge Padding: The padding between between the pointer label and box.

piePad - Measurement

Pie Padding: The padding between between the pointer label and chart.

Examples

```
<pointer strokeColor="darkred"/>
```

(Extracted from file *tag-pieChart.rml*, line 52) [\[PDF\]](#)

pre

A preformatted text, similar to the `<pre>` tag in HTML.

Attributes

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

maxLineLength - Integer

Max Line Length: The maximum number of characters on one line.

newLineChars - Text

New Line Characters: The characters placed at the beginning of a wrapped line

Content

RawXMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<pre>Preformatted <b>text</b> only.</pre>
```

(Extracted from file *tag-para.rml*, line 28)

[\[PDF\]](#)

pto

A container for flowables decorated with trailer & header lists. If the split operation would be called then the trailer and header lists are injected before and after the split. This allows specialist "please turn over" and "continued from previous" like behaviours.

Examples

```
<pto>
  <pto_header>
    <spacer length="1cm" />
    <para><b>... let's go on</b></para>
  </pto_header>
  <pto_trailer>
    <spacer length="1cm" />
    <para><b>... please continue on the next page.</b></para>
  </pto_trailer>
  <para>
    Main text. Main text. Main text. Main text. Main text. Main text. Main
    text. Main text. Main text. Main text. Main text. Main text. Main
    text. Main text. Main text. Main text.
  </para>
</pto>
```

(Extracted from file *tag-ptp.rml*, line 70)

[\[PDF\]](#)

rect

Draws an ellipse on the canvas.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the shape.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the shape.

fill - Boolean

Fill: A flag to specify whether the shape should be filled.

stroke - Boolean

Stroke: A flag to specify whether the shape's outline should be drawn.

width (*required*) - Measurement

Width: The width of the rectangle.

height (*required*) - Measurement
Height: The height of the rectangle.

round - Measurement
Corner Radius: The radius of the rounded corners.

href - Text
Link URL: When specified, the rectangle becomes a link to that URL.

destination - Text
Link Destination: When specified, the rectangle becomes a link to that destination.

Examples

```
<rect x="8cm" y="20cm" width="5cm" height="3cm" />
```

(Extracted from file *tag-rectangle.rml*, line 9) [\[PDF\]](#)

registerCidFont

Register a new CID font given the face name.

Attributes

faceName (*required*) - String
Face Name: The name of the face the font uses. The face has to be previously registered.

encName - String
Encoding Name: The name of the encoding to use for the font.

Examples

```
<registerCidFont faceName="HeiseiMin-W3" />
```

(Extracted from file *tag-registerCidFont.rml*, line 8) [\[PDF\]](#)

```
<registerCidFont faceName="HeiseiMin-W3" encName="90ms-RKSJ-H" />
```

(Extracted from file *tag-registerCidFont.rml*, line 10) [\[PDF\]](#)

registerFont

Register a new font based on a face and encoding.

Attributes

name (*required*) - String
Name: The name under which the font can be used in style declarations or other parameters that lookup a font.

faceName (*required*) - String
Face Name: The name of the face the font uses. The face has to be previously registered.

encName (*required*) - String
Encoding Name: The name of the encoding to be used.

Examples

```
<registerFont name="DarkGardenMK" faceName="DarkGardenMK"
encName="WinAnsiEncoding" />
```

(Extracted from file *tag-registerType1Face.rml*, line 14) [\[PDF\]](#)

registerFontFamily

Register a new font family.

Attributes

name (*required*) - String
Name: The name of the font family.

normal - String
Normal Font Name: The name of the normal font variant.

bold - String

Bold Font Name: The name of the bold font variant.

italic - String

Italic Font Name: The name of the italic font variant.

boldItalic (*required*) - String

Bold/Italic Font Name: The name of the bold/italic font variant.

registerTTFont

Register a new TrueType font given the TT file and face name.

Attributes

faceName (*required*) - String

Face Name: The name of the face the font uses. The face has to be previously registered.

fileName (*required*) - File

File Name: File path of the of the TrueType font.

Examples

```
<registerTTFont faceName="Vera" fileName="Vera.ttf"/>
```

(Extracted from file *tag-registerTTFont.rml*, line 10) [\[PDF\]](#)

```
<registerTTFont faceName="VeraMono"
                fileName="[z3c.rml]/tests/input/VeraMono.ttf"/>
```

(Extracted from file *tag-registerTTFont.rml*, line 13) [\[PDF\]](#)

registerType1Face

Register a new Type 1 font face.

Attributes

afmFile (*required*) - File

AFM File: Path to AFM file used to register the Type 1 face.

pfbFile (*required*) - File

PFB File: Path to PFB file used to register the Type 1 face.

Examples

```
<registerType1Face afmFile="DarkGardenMK.afm" pfbFile="DarkGardenMK.pfb"/>
```

(Extracted from file *tag-registerType1Face.rml*, line 9) [\[PDF\]](#)

restoreState

Saves the current canvas state.

Examples

```
<restoreState/>
```

(Extracted from file *tag-saveState-restoreState.rml*, line 14) [\[PDF\]](#)

rotate

Rotate the drawing counterclockwise.

Attributes

degrees (*required*) - Measurement

Angle: The angle in degrees.

Examples

```
<rotate degrees="15"/>
```

(Extracted from file *tag-rotate.rml*, line 13)

[\[PDF\]](#)

saveState

Saves the current canvas state.

Examples

```
<pageDrawing>
  <setFont name="Helvetica" size="9"/>
  <drawString x="1in" y="10in">Text in Helvetica 9</drawString>
  <saveState/>
  <setFont name="Courier" size="12"/>
  <drawString x="1in" y="9in">Text in Courier 12</drawString>
  <restoreState/>
  <drawString x="1in" y="8in">Text in Helvetica 9</drawString>
</pageDrawing>
```

(Extracted from file *tag-saveState-restoreState.rml*,
line 8)

[\[PDF\]](#)

scale

Scale the drawing using x and y scaling factors.

Attributes

sx - Float

X-Scaling-Factor: The scaling factor applied on x-coordinates.

sy - Float

Y-Scaling-Factor: The scaling factor applied on y-coordinates.

Examples

```
<scale sx="1" sy="1.5"/>
```

(Extracted from file *tag-scale.rml*, line 13)

[\[PDF\]](#)

selectField

A selection field within the PDF

Attributes

title (*required*) - Text

Title: The title of the field.

x (*required*) - Measurement

X-Position: The x-position of the lower-left corner of the field.

y (*required*) - Measurement

Y-Position: The y-position of the lower-left corner of the field.

width (*required*) - Measurement

Width: The width of the select field.

height (*required*) - Measurement

Height: The height of the select field.

value - Text

Value: The default value of the field.

Sub-Directives

option (*ZeroOrMore*)

Examples

```
<selectField title="select1" value="Option 2" x="4cm" y="22.9cm" width="5cm"
  height="15">
```

```
<option>Option 1</option>
<option>Option 2</option>
<option>Option 3</option>
</selectField>
```

(Extracted from file *tag-selectField.rml*, line 19)

[\[PDF\]](#)

series

A one-dimensional series.

Content

TextNodeSequence of Float (*required*)

Values: Numerical values representing the series' data.

Examples

```
<series>100 110 120 130</series>
```

(Extracted from file *tag-barChart.rml*, line 43)

[\[PDF\]](#)

series

A two-dimensional series.

Content

TextNodeGrid with 2 cols of Float (*required*)

Values: Numerical values representing the series' data.

Examples

```
<series>
  1    1
  2    2
  2.5  1
  3    3
  4    5
</series>
```

(Extracted from file *tag-linePlot.rml*, line 33)

[\[PDF\]](#)

setFont

Set the font name and/or size.

Attributes

name (*required*) - String

Font Name: The name of the font as it was registered.

size (*required*) - Measurement

Size: The font size.

leading - Measurement

Leading: The font leading.

Examples

```
<setFont name="Helvetica-BoldOblique" size="18"/>
```

(Extracted from file *tag-pageGraphics.rml*, line 10)

[\[PDF\]](#)

```
<setFont name="Helvetica" size="9"/>
```

(Extracted from file *tag-setFont.rml*, line 9)

[\[PDF\]](#)

setFontSize

Set the font size.

Attributes

size (*required*) - Measurement

Size: The font size.

leading - Measurement

Leading: The font leading.

Examples

```
<setFontSize size="12"/>
```

(Extracted from file *tag-setFontSize.rml*, line 11)

[\[PDF\]](#)

setNextFrame

Define the next frame to switch to.

Attributes

name (*required*) - StringOrInt

Name: The name or index of the next frame.

Examples

```
<setNextFrame name="three"/>
```

(Extracted from file *tag-setNextFrame.rml*, line 21)

[\[PDF\]](#)

setNextTemplate

Define the next page template to use.

Attributes

name (*required*) - StringOrInt

Name: The name or index of the next page template.

Examples

```
<setNextTemplate name="first"/>
```

(Extracted from file *tag-setNextTemplate.rml*, line 25)

[\[PDF\]](#)

showIndex

Creates an index in the document.

Attributes

name - String

Name: The name of the index.

dot - String

Dot: The character to use as a dot.

style - Style

Style: The paragraph style that is applied to the index.

tableStyle - Style

Table Style: The table style that is applied to the index layout.

Examples

```
<showIndex dot="." />
```

(Extracted from file *tag-index.rml*, line 40)

[\[PDF\]](#)

skew

Skew the drawing.

Attributes

alpha (*required*) - Measurement

Alpha: The amount to skew the drawing in the horizontal.

beta (*required*) - Measurement

Beta: The amount to skew the drawing in the vertical.

Examples

```
<skew alpha="15" beta="5" />
```

(Extracted from file *tag-skew.rml*, line 13)

[\[PDF\]](#)

slice

A slice in a pie chart.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the slice line.

fillColor - Color

Fill Color: The fill color of the slice.

strokeColor - Color

Stroke Color: The color of the pointer line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the slice borderline.

popout - Measurement

Popout: The distance of how much the slice should be popped out.

fontName - String

Font Name: The font name of the label.

fontSize - Measurement

Font Size: The font size of the label.

labelRadius - Measurement

Label Radius: The radius at which the label should be placed around the pie.

swatchMarker - Symbol

Sub-Directives

label (*ZeroOrOne*)

pointer (*ZeroOrOne*)

Examples

```
<slice fillColor="cyan" popout="10" strokeWidth="2" strokeDashArray="2 2" />
```

(Extracted from file *tag-pieChart.rml*, line 33)

[\[PDF\]](#)

slice

A 3-D slice of a 3-D pie chart.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the slice line.

fillColor - Color

Fill Color: The fill color of the slice.

strokeColor - Color

Stroke Color: The color of the pointer line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the slice borderline.

popout - Measurement

Popout: The distance of how much the slice should be popped out.

fontName - String

Font Name: The font name of the label.

fontSize - Measurement

Font Size: The font size of the label.

labelRadius - Measurement

Label Radius: The radius at which the label should be placed around the pie.

swatchMarker - Symbol

fillColorShaded - Color

Fill Color Shade: The shade used for the fill color.

Examples

```
<slice fillColor="cyan" popout="10" strokeWidth="2" strokeDashArray="2 2"/>
```

(Extracted from file *tag-pieChart3d.rml*, line 33)

[\[PDF\]](#)

slices

The collection of all 3-D slice descriptions.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the slice line.

fillColor - Color

Fill Color: The fill color of the slice.

strokeColor - Color

Stroke Color: The color of the pointer line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the slice borderline.

popout - Measurement

Popout: The distance of how much the slice should be popped out.

fontName - String

Font Name: The font name of the label.

fontSize - Measurement

Font Size: The font size of the label.

labelRadius - Measurement

Label Radius: The radius at which the label should be placed around the pie.

fillColorShaded - Color

Sub-Directives

slice (*OneOrMore*)

Examples

```
<slices strokeWidth="0.5">
  <slice fillColor="darkcyan"/>
  <slice fillColor="blueviolet"/>
  <slice fillColor="blue"/>
  <slice fillColor="cyan" popout="10" strokeWidth="2" strokeDashArray="2 2"/>
  <slice fillColor="aquamarine"/>
  <slice fillColor="cadetblue"/>
  <slice fillColor="lightcoral"/>
</slices>
```

(Extracted from file *tag-pieChart3d.rml*, line 27)

[\[PDF\]](#)

slices

The collection of all 2-D slice descriptions.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the slice line.

fillColor - Color

Fill Color: The fill color of the slice.

strokeColor - Color

Stroke Color: The color of the pointer line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the slice borderline.

popout - Measurement

Popout: The distance of how much the slice should be popped out.

fontName - String

Font Name: The font name of the label.

fontSize - Measurement

Font Size: The font size of the label.

labelRadius - Measurement

Label Radius: The radius at which the label should be placed around the pie.

Sub-Directives

slice (*OneOrMore*)

Examples

```
<slices strokeWidth="0.5">
  <slice fillColor="darkcyan"/>
  <slice fillColor="blueviolet"/>
  <slice fillColor="blue"/>
  <slice fillColor="cyan" popout="10" strokeWidth="2" strokeDashArray="2 2"/>
  <slice fillColor="aquamarine"/>
  <slice fillColor="cadetblue"/>
  <slice fillColor="lightcoral"/>
</slices>
```

(Extracted from file *tag-pieChart.rml*, line 27)

[\[PDF\]](#)

spacer

Creates a vertical space in the flow.

Attributes

width - Measurement

Width: The width of the spacer. Currently not implemented.

length (*required*) - Measurement

Length: The height of the spacer.

Examples

```
<spacer length="0.5in" width="3in"/>
```

(Extracted from file *tag-spacer.rml*, line 26)

[\[PDF\]](#)

spiderChart

A spider chart.

Attributes

dx - Measurement

Drawing X-Position: The x-position of the entire drawing on the canvas.

dy - Measurement

Drawing Y-Position: The y-position of the entire drawing on the canvas.

dwidth - Measurement

Drawing Width: The width of the entire drawing

dheight - Measurement

Drawing Height: The height of the entire drawing

angle - Float

Angle: The orientation of the drawing as an angle in degrees.

x - Measurement

Chart X-Position: The x-position of the chart within the drawing.

y - Measurement

Chart Y-Position: The y-position of the chart within the drawing.

width - Measurement

Chart Width: The width of the chart.

height - Measurement

Chart Height: The height of the chart.

strokeColor - Color

Stroke Color: Color of the chart border.

strokeWidth - Measurement

Stroke Width: Width of the chart border.

fillColor - Color

Fill Color: Color of the chart interior.

debug - Boolean

Debugging: A flag that when set to True turns on debug messages.

startAngle - Integer

Start Angle: The start angle in the chart of the first strand in degrees.

direction - Choice of ('clockwise', 'anticlockwise')

Direction: The direction in which the spider chart will be built.

Sub-Directives

data (One)

strands (ZeroOrOne)

strandLabels (ZeroOrOne)

spokes (ZeroOrOne)

spokeLabels (ZeroOrOne)

labels (ZeroOrOne)

texts (ZeroOrOne)

Examples

```
<spiderChart dx="2in" dy="7in" dwidth="6in" dheight="4in" x="0" y="0"
              width="3in" height="3in">
  <labels>
    <label>a</label>
    <label>b</label>
    <label>c</label>
    <label>d</label>
    <label>e</label>
    <label>f</label>
  </labels>
  <strands>
    <strand strokeColor="cornsilk" fillColor="cornsilk"/>
    <strand strokeColor="cyan" fillColor="cyan"/>
    <strand strokeColor="palegreen" fillColor="palegreen"/>
  </strands>
  <spokes strokeDashArray="2 2"/>
```

```
<data>
  <series>12 14 16 14 12</series>
  <series>6 8 10 12 9 15</series>
  <series>7 8 17 4 12 8</series>
</data>
</spiderChart>
```

(Extracted from file *tag-spiderChart.rml*, line 18)

[\[PDF\]](#)

spoke

A spoke in the spider diagram.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the spoke's line.

fillColor - Color

Fill Color: The fill color of the spoke's area.

strokeColor - Color

Stroke Color: The color of the spoke line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the spoke line.

labelRadius - Measurement

Label Radius: The radius of the label arounds the spoke.

visible - Boolean

Visible: When true, the spoke line is drawn.

spokeLabels

A set of spoke labels.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

Sub-Directives

label (*OneOrMore*)

Examples

```
<spokeLabels fontName="Helvetica-Bold">
  <label>U</label>
  <label>V</label>
  <label>W</label>
  <label>X</label>
  <label>Y</label>
  <label>Z</label>
</spokeLabels>
```

(Extracted from file *tag-spiderChart.rml*, line 44)

[\[PDF\]](#)

spokes

A collection of spokes.

Attributes

strokeWidth - Measurement

Stroke Width: The width of the spoke's line.

fillColor - Color

Fill Color: The fill color of the spoke's area.

strokeColor - Color

Stroke Color: The color of the spoke line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the spoke line.

labelRadius - Measurement

Label Radius: The radius of the label arounds the spoke.

visible - Boolean

Visible: When true, the spoke line is drawn.

Sub-Directives

spoke (*OneOrMore*)

Examples

```
<spokes strokeDashArray="2 2" />
```

(Extracted from file *tag-spiderChart.rml*, line 32)

[\[PDF\]](#)

startIndex

Start a new index.

Attributes

name (*required*) - String

Name: The name of the index.

offset - Integer

Offset: The counting offset.

format - Choice of ('i', '123', 'abc')

Format: The format the index is going to use.

Examples

```
<startIndex/>
```

(Extracted from file *tag-index.rml*, line 8)

[\[PDF\]](#)

story

The story of the PDF file.

Attributes

firstPageTemplate - Text

First Page Template: The first page template to be used.

Sub-Directives

spacer (*ZeroOrMore*)

illustration (*ZeroOrMore*)

pre (*ZeroOrMore*)

xpre (*ZeroOrMore*)

codesnippet (*ZeroOrMore*)

plugInFlowable (*ZeroOrMore*)

barCodeFlowable (*ZeroOrMore*)

outlineAdd (*ZeroOrMore*)

title (*ZeroOrMore*)

h1 (*ZeroOrMore*)

h2 (*ZeroOrMore*)

h3 (*ZeroOrMore*)

h4 (*ZeroOrMore*)

h5 (*ZeroOrMore*)

h6 (*ZeroOrMore*)

para (*ZeroOrMore*)

blockTable (*ZeroOrMore*)

nextFrame (*ZeroOrMore*)

setNextFrame (*ZeroOrMore*)

nextPage (*ZeroOrMore*)

setNextTemplate (*ZeroOrMore*)

condPageBreak (*ZeroOrMore*)

keepInFrame (*ZeroOrMore*)

keepTogether (ZeroOrMore)
img (ZeroOrMore)
imageAndFlowables (ZeroOrMore)
pto (ZeroOrMore)
indent (ZeroOrMore)
fixedSize (ZeroOrMore)
bookmarkPage (ZeroOrMore)
bookmark (ZeroOrMore)
link (ZeroOrMore)
hr (ZeroOrMore)
showIndex (ZeroOrMore)
name (ZeroOrMore)
namedString (ZeroOrMore)
log (ZeroOrMore)
debug (ZeroOrMore)
info (ZeroOrMore)
warning (ZeroOrMore)
error (ZeroOrMore)
critical (ZeroOrMore)
docAssign (ZeroOrMore)
docExec (ZeroOrMore)
docPara (ZeroOrMore)
docIf (ZeroOrMore)
docElse (ZeroOrMore)
docWhile (ZeroOrMore)
ol (ZeroOrMore)
ul (ZeroOrMore)
includePdfPages (ZeroOrMore)
storyPlace (ZeroOrMore)

Examples

```
<story>
  <para style="large">Hello <b>World</b>!</para>
</story>
```

(Extracted from file *simple-layout.rml*, line 35)

[\[PDF\]](#)

storyPlace

Draws a set of flowables on the canvas within a given region.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the place.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the place.

width - Measurement

Width: The width of the place.

height - Measurement

Height: The height of the place.

origin - Choice of ('frame', 'local', 'page')

Origin: The origin of the coordinate system for the story.

Examples

```
<storyPlace x="1cm" y="0cm" width="10cm" height="1cm" origin="page">
  <para>This is at the bottom of the page</para>
</storyPlace>
```

(Extracted from file *tag-storyPlace.rml*, line 16)

[\[PDF\]](#)

strand

A strand in the spider diagram

Attributes

strokeWidth - Measurement

Stroke Width: The line width of the strand.

fillColor - Color

Fill Color: The fill color of the strand area.

strokeColor - Color

Stroke Color: The color of the strand line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the strand line.

symbol - Symbol

Symbol: The symbol to use to mark the strand.

symbolSize - Measurement

Symbol Size: The size of the strand symbol.

name - Text

Name: The name of the strand.

Examples

```
<strand strokeColor="cornsilk" fillColor="cornsilk"/>
```

(Extracted from file *tag-spiderChart.rml*, line 28) [\[PDF\]](#)

strandLabels

A set of strand labels.

Attributes

dx - Measurement

Horizontal Extension: The width of the label.

dy - Measurement

Vertical Extension: The height of the label.

angle - Float

Angle: The angle to rotate the label.

boxAnchor - Choice of ('c', 'e', 'sw', 'ne', 'n', 's', 'w', 'autox', 'autoy', 'se', 'nw')

Box Anchor: The position relative to the label.

boxStrokeColor - Color

Box Stroke Color: The color of the box border line.

boxStrokeWidth - Measurement

Box Stroke Width: The width of the box border line.

boxFillColor - Color

Box Fill Color: The color in which the box is filled.

boxTarget - Text

Box Target: The box target.

fillColor - Color

Fill Color: The color in which the label is filled.

strokeColor - Color

Stroke Color: The color of the label.

strokeWidth - Measurement

Stroke Width: The width of the label line.

fontName - String

Font Name: The font used to print the value.

fontSize - Measurement

Font Size: The size of the value text.

leading - Measurement

Leading: The height of a single text line. It includes character height.

width - Measurement

Width: The width the label.

maxWidth - Measurement

Maximum Width: The maximum width the label.

height - Measurement

Height: The height the label.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

visible - Boolean

Visible: A flag making the label text visible.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

row - Integer

Row: The row of the strand label

col - Integer

Column: The column of the strand label.

format - String

Format: The format string for the label.

Content**TextNode**

Text: The label text of the strand.

Sub-Directives

label (*OneOrMore*)

Examples

```
<strandLabels dR="-5" format="values">
  <label row="0" col="3" dx="-10">special</label>
  <label row="0" col="1" dy="5">one</label>
  <label row="0" col="0" dy="5">zero</label>
  <label row="1" col="0" dy="10">Earth</label>
  <label row="2" col="2" dx="10">Mars</label>
</strandLabels>
```

(Extracted from file *tag-spiderChart.rml*, line 59)

[\[PDF\]](#)

strands

A collection of strands.

Attributes**strokeWidth** - Measurement

Stroke Width: The line width of the strand.

fillColor - Color

Fill Color: The fill color of the strand area.

strokeColor - Color

Stroke Color: The color of the strand line.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array of the strand line.

symbol - Symbol

Symbol: The symbol to use to mark the strand.

symbolSize - Measurement

Symbol Size: The size of the strand symbol.

name - Text

Name: The name of the strand.

Sub-Directives

strand (*OneOrMore*)

Examples

```
<strands>
  <strand strokeColor="cornsilk" fillColor="cornsilk"/>
  <strand strokeColor="cyan" fillColor="cyan"/>
  <strand strokeColor="palegreen" fillColor="palegreen"/>
</strands>
```

(Extracted from file *tag-spiderChart.rml*, line 27)

[\[PDF\]](#)

stroke

Set the stroke/line color.

Attributes

color (*required*) - Color

Color: The color value to be set.

Examples

```
<stroke color="red"/>
```

(Extracted from file *tag-stroke.rml*, line 8)

[\[PDF\]](#)

stylesheet

A stylesheet defines the styles that can be used in the document.

Sub-Directives

initialize (*ZeroOrOne*)

paraStyle (*ZeroOrMore*)

blockTableStyle (*ZeroOrMore*)

listStyle (*ZeroOrMore*)

Examples

```
<stylesheet>
  <paraStyle name="large" fontSize="3cm" textColor="red"/>
</stylesheet>
```

(Extracted from file *simple-layout.rml*, line 8)

[\[PDF\]](#)

td

A table cell within a table.

Attributes

fontName - String

Font Name: The name of the font for the cell.

fontSize - Measurement

Font Size: The font size for the text of the cell.

leading - Measurement

Leading: The height of a single text line. It includes character height.

fontColor - Color

Font Color: The color in which the text will appear.

leftPadding - Measurement

Left Padding: The size of the padding on the left side.

rightPadding - Measurement

Right Padding: The size of the padding on the right side.

topPadding - Measurement

Top Padding: The size of the padding on the top.

bottomPadding - Measurement

Bottom Padding: The size of the padding on the bottom.

background - Color

Background Color: The color to use as the background for the cell.

align - Choice of ('left', 'decimal', 'right', 'center', 'centre')

Text Alignment: The text alignment within the cell.

vAlign - Choice of ('middle', 'top', 'bottom')

Vertical Alignment: The vertical alignment of the text within the cell.

lineBelowThickness - Measurement

Line Below Thickness: The thickness of the line below the cell.

lineBelowColor - Color

Line Below Color: The color of the line below the cell.

lineBelowCap - Choice of ('default', 'square', 'round', 'butt')

Line Below Cap: The cap at the end of the line below the cell.

lineBelowCount - Integer

Line Below Count: Describes whether the line below is a single (1) or double (2) line.

lineBelowSpace - Measurement

Line Below Space: The space of the line below the cell.

lineAboveThickness - Measurement

Line Above Thickness: The thickness of the line above the cell.

lineAboveColor - Color

Line Above Color: The color of the line above the cell.

lineAboveCap - Choice of ('default', 'square', 'round', 'butt')

Line Above Cap: The cap at the end of the line above the cell.

lineAboveCount - Integer

Line Above Count: Describes whether the line above is a single (1) or double (2) line.

lineAboveSpace - Measurement

Line Above Space: The space of the line above the cell.

lineLeftThickness - Measurement

Left Line Thickness: The thickness of the line left of the cell.

lineLeftColor - Color

Left Line Color: The color of the line left of the cell.

lineLeftCap - Choice of ('default', 'square', 'round', 'butt')

Line Left Cap: The cap at the end of the line left of the cell.

lineLeftCount - Integer

Line Left Count: Describes whether the left line is a single (1) or double (2) line.

lineLeftSpace - Measurement

Line Left Space: The space of the line left of the cell.

lineRightThickness - Measurement

Right Line Thickness: The thickness of the line right of the cell.

lineRightColor - Color

Right Line Color: The color of the line right of the cell.

lineRightCap - Choice of ('default', 'square', 'round', 'butt')

Line Right Cap: The cap at the end of the line right of the cell.

lineRightCount - Integer

Line Right Count: Describes whether the right line is a single (1) or double (2) line.

lineRightSpace - Measurement

Line Right Space: The space of the line right of the cell.

href - Text

Link URL: When specified, the cell becomes a link to that URL.

destination - Text

Link Destination: When specified, the cell becomes a link to that destination.

Content

RawXMLContent (*required*)

Content: The content of the cell; can be text or any flowable.

Examples

```
<td>This</td>
```

(Extracted from file *tag-blockTable-1.rml*, line 19) [\[PDF\]](#)

template

Define a page template.

Attributes

pagesize - PageSize

Page Size: The Page Size.

rotation - Integer

Rotation: The rotation of the page in multiples of 90 degrees.

leftMargin - Measurement

Left Margin: The left margin of the template.

rightMargin - Measurement

Right Margin: The right margin of the template.

topMargin - Measurement

Top Margin: The top margin of the template.

bottomMargin - Measurement

Bottom Margin: The bottom margin of the template.

showBoundary - Boolean

Show Boundary: A flag to show the boundary of the template.

allowSplitting - Boolean

Allow Splitting: A flag to allow splitting over multiple templates.

title - Text

Title: The title of the PDF document.

author - Text

Author: The author of the PDF document.

Sub-Directives

pageTemplate (*OneOrMore*)

Examples

```
<template>
  <pageTemplate id="main">
    <frame id="first" x1="1cm" y1="1cm" width="19cm" height="26cm"/>
  </pageTemplate>
</template>
```

(Extracted from file *tag-document-story.rml*, line 8) [\[PDF\]](#)

text

Draw a text on the chart.

Attributes

x (*required*) - Measurement

X-Coordinate: The X-coordinate of the lower-left position of the text.

y (*required*) - Measurement

Y-Coordinate: The Y-coordinate of the lower-left position of the text.

angle - Float

Rotation Angle: The angle about which the text will be rotated.

fontName - String

Font Name: The name of the font.

fontSize - Measurement

Font Size: The font size for the text.

fillColor - Color

Fill Color: The color in which the text will appear.

textAnchor - Choice of ('start', 'boxauto', 'end', 'middle')

Text Anchor: The position in the text to which the coordinates refer.

Content

TextNode (*required*)

Text: The text to be printed.

Examples

```
<text x="2.5in" y="-0.5in" textAnchor="middle" fontName="Helvetica-Bold"
      fontSize="13" fillColor="black">
  X-Axis Label
</text>
```

(Extracted from file *tag-linePlot.rml*, line 67) [\[PDF\]](#)

textAnnotation

Writes a low-level text annotation into the PDF.

Attributes

contents (*required*) - FirstLevelTextNode

Contents: The PDF commands that are inserted as annotation.

Sub-Directives

param (*ZeroOrMore*)

Examples

```
<textAnnotation>
  <param name="Rect">0,0,1,1</param>
  <param name="F">3</param>
  <param name="escape">6</param>
```

X::PDF

```
PX(S)
MT(PINK)
</textAnnotation>
```

(Extracted from file *tag-textAnnotation.rml*, line 8) [\[PDF\]](#)

textField

A text field within the PDF

Attributes

title (*required*) - Text

Title: The title of the field.

x (*required*) - Measurement

X-Position: The x-position of the lower-left corner of the field.

y (*required*) - Measurement

Y-Position: The y-position of the lower-left corner of the field.

width (*required*) - Measurement

Width: The width of the text field.

height (*required*) - Measurement

Height: The height of the text field.

value - Text

Value: The default text value of the field.

maxLength - Integer

Maximum Length: The maximum amount of characters allowed in the field.

multiline - Boolean

Multiline: A flag when set allows multiple lines within the field.

Examples

```
<textField title="input1" x="3.5cm" y="22.9cm" width="5cm" height="14"/>
```

(Extracted from file *tag-textField.rml*, line 19) [\[PDF\]](#)

```
<textField title="input2" value="Default Value" x="3.5cm" y="18.4cm"
width="5cm" height="3cm" multiline="yes" maxLength="30"/>
```

(Extracted from file *tag-textField.rml*, line 28) [\[PDF\]](#)

texts

A set of texts drawn on the chart.

Sub-Directives

text (*ZeroOrMore*)

Examples

```
<texts>
  <text x="2.5in" y="-0.5in" textAnchor="middle" fontName="Helvetica-Bold"
fontSize="13" fillColor="black">
    X-Axis Label
  </text>
  <text x="1.5in" y="0.3in" angle="90" textAnchor="middle"
fontName="Helvetica-Bold" fontSize="13" fillColor="red">
    Y-Axis Label
  </text>
</texts>
```

(Extracted from file *tag-linePlot.rml*, line 64) [\[PDF\]](#)

title

The title is a simple paragraph with a special title style.

Attributes

fontName - String

Font Name: The name of the font for the paragraph.

fontSize - Measurement

Font Size: The font size for the text of the paragraph.

leading - Measurement

Leading: The height of a single paragraph line. It includes character height.

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

firstLineIndent - Measurement

First Line Indentation: The indentation of the first line in the paragraph.

alignment - Choice of ('left', 'right', 'center', 'centre', 'justify')

Alignment: The text alignment.

spaceBefore - Measurement

Space Before: The vertical space before the paragraph.

spaceAfter - Measurement

Space After: The vertical space after the paragraph.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletIndent - Measurement

Bullet Indentation: The indentation that is kept for a bullet point.

textColor - Color

Text Color: The color in which the text will appear.

backColor - Color

Background Color: The background color of the paragraph.

wordWrap - String

Word Wrap Method: When set to "CJK", invoke CJK word wrapping

borderWidth - Measurement

Paragraph Border Width: The width of the paragraph border.

borderPadding - Padding

Paragraph Border Padding: Padding of the paragraph.

borderColor - Color

Border Color: The color in which the paragraph border will appear.

borderRadius - Measurement

Paragraph Border Radius: The radius of the paragraph border.

allowWidows - Boolean

Allow Widows: Allow widows.

allowOrphans - Boolean

Allow Orphans: Allow orphans.

textTransforms - Choice of ('uppercase', 'lowercase')

Text Transforms: Text transformations.

endDots - String

End Dots: Characters/Dots at the end of a paragraph.

keepWithNext - Boolean

Keep with Next: When set, this paragraph will always be in the same frame as the following flowable.

pageBreakBefore - Boolean

Page Break Before: Specifies whether a page break should be inserted before the directive.

frameBreakBefore - Boolean

Frame Break Before: Specifies whether a frame break should be inserted before the directive.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

Content

XMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<title>Title</title>
```

(Extracted from file *tag-para.rml*, line 20)

[\[PDF\]](#)

```
<title>Crop Marks Demo</title>
```

(Extracted from file *tag-cropMarks.rml*, line 20)

[\[PDF\]](#)

tr

A table row in the block table.

Sub-Directives

td (*OneOrMore*)

Examples

```
<tr>
  <td>This</td>
  <td>is</td>
</tr>
```

(Extracted from file *tag-blockTable-1.rml*, line 18)

[\[PDF\]](#)

transform

A full 2-D matrix transformation

Content

TextNodeSequence of Float (*required*)

Matrix: The transformation matrix.

Examples

```
<transform>
  1.0  0.3
 -0.2  1.1
 10.1 15.0
</transform>
```

(Extracted from file *tag-transform.rml*, line 13)

[\[PDF\]](#)

translate

Translate the drawing coordinates by the specified x and y offset.

Attributes

dx (*required*) - Measurement

X-Offset: The amount to move the drawing to the right.

dy (*required*) - Measurement

Y-Offset: The amount to move the drawing upward.

Examples

```
<translate dx="1in" dy="0"/>
```

(Extracted from file *tag-translate.rml*, line 13)

[\[PDF\]](#)

ul

And unordered list.

Attributes

leftIndent - Measurement

Left Indentation: General indentation on the left side.

rightIndent - Measurement

Right Indentation: General indentation on the right side.

bulletColor - Color

Bullet Color: The color in which the bullet will appear.

bulletFontName - String

Bullet Font Name: The font in which the bullet character will be rendered.

bulletFontSize - Measurement

Bullet Font Size: The font size of the bullet character.

bulletOffsetY - Measurement

Bullet Y-Offset: The vertical offset of the bullet.

bulletDedent - StringOrInt

Bullet Dedent: Either pixels of dedent or auto (default).

bulletDir - Choice of ('ltr', 'rtl')

Bullet Layout Direction: The layout direction of the bullet.

bulletFormat - String

Bullet Format: A formatting expression for the bullet text.

start - Combination of Integer, Choice of ('disc', 'arrowhead', 'circle', 'square', 'diamond')

Start Value: The counter start value.

style - Style

Style: The list style that is applied to the list.

value - Choice of ('disc', 'arrowhead', 'circle', 'square', 'diamond')

Bullet Value: The type of bullet character.

Sub-Directives

li (*ZeroOrMore*)

Examples

```
<ul bulletColor="red" bulletFontName="Times-Roman" bulletFontSize="8"
  rightIndent="10" bulletOffsetY="-1">
  <li value="disc" bulletFontName="Helvetica">
    <para>unordered 1</para>
  </li>
  <li value="square" bulletColor="blue">
    <para>unordered 2</para>
  </li>
  <li value="diamond" bulletColor="green">
    <para>unordered 3</para>
  </li>
  <li value="arrowhead" bulletColor="yellow">
    <para>unordered 4</para>
  </li>
```


(Extracted from file *tag-ul-ol-li.rml*, line 32)

[\[PDF\]](#)

valueAxis

Attributes

visible - Boolean

Visible: When true, draw the entire axis with all details.

visibleAxis - Boolean

Visible Axis: When true, draw the axis line.

visibleTicks - Boolean

Visible Ticks: When true, draw the axis ticks on the line.

visibleLabels - Boolean

Visible Labels: When true, draw the axis labels.

visibleGrid - Boolean

Visible Grid: When true, draw the grid lines for the axis.

strokeWidth - Measurement

Stroke Width: The width of axis line and ticks.

strokeColor - Color

Stroke Color: The color in which the axis line and ticks are drawn.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array that is used for the axis line and ticks.

gridStrokeWidth - Measurement

Grid Stroke Width: The width of the grid lines.

gridStrokeColor - Color

Grid Stroke Color: The color in which the grid lines are drawn.

gridStrokeDashArray - Sequence of Float

Grid Stroke Dash Array: The dash array that is used for the grid lines.

gridStart - Measurement

Grid Start: The start of the grid lines with respect to the axis origin.

gridEnd - Measurement

Grid End: The end of the grid lines with respect to the axis origin.

style - Choice of ('stacked', 'parallel', 'parallel_3d')

Style: The plot style of the common categories.

forceZero - Boolean

Force Zero: When set, the range will contain the origin.

minimumTickSpacing - Measurement

Minimum Tick Spacing: The minimum distance between ticks.

maximumTicks - Integer

Maximum Ticks: The maximum number of ticks to be shown.

labelTextFormat - String

Label Text Format: Formatting string for axis labels.

labelTextPostFormat - Text

Label Text Post Format: An additional formatting string.

labelTextScale - Float

Label Text Scale: The scaling factor for the label tick values.

valueMin - Float

Minimum Value: The smallest value on the axis.

valueMax - Float

Maximum Value: The largest value on the axis.

valueStep - Float

Value Step: The step size between ticks

valueSteps - Sequence of Float

Step Sizes: List of step sizes between ticks.

rangeRound - Choice of ('both', 'none', 'ceiling', 'floor')

Range Round: Method to be used to round the range values.

zrangePref - Float

Zero Range Preference: Zero range axis limit preference.

Examples

```
<valueAxis valueMin="0" valueMax="150" valueStep="30" visibleTicks="true"
           visibleLabels="true">
  <labels fontName="Helvetica"/>
</valueAxis>
```

(Extracted from file *tag-barChart.rml*, line 38)

[\[PDF\]](#)

warning

Log message at WARNING level.

Content

RawXMLContent (*required*)

Message: The message to be logged.

Examples

```
<warning>A WARNING message</warning>
```

(Extracted from file *tag-log.rml*, line 35)

[\[PDF\]](#)

xValueAxis

X-Value Axis

Attributes

visible - Boolean

Visible: When true, draw the entire axis with all details.

visibleAxis - Boolean

Visible Axis: When true, draw the axis line.

visibleTicks - Boolean

Visible Ticks: When true, draw the axis ticks on the line.

visibleLabels - Boolean

Visible Labels: When true, draw the axis labels.

visibleGrid - Boolean

Visible Grid: When true, draw the grid lines for the axis.

strokeWidth - Measurement

Stroke Width: The width of axis line and ticks.

strokeColor - Color

Stroke Color: The color in which the axis line and ticks are drawn.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array that is used for the axis line and ticks.

gridStrokeWidth - Measurement

Grid Stroke Width: The width of the grid lines.

gridStrokeColor - Color

Grid Stroke Color: The color in which the grid lines are drawn.

gridStrokeDashArray - Sequence of Float

Grid Stroke Dash Array: The dash array that is used for the grid lines.

gridStart - Measurement

Grid Start: The start of the grid lines with respect to the axis origin.

gridEnd - Measurement

Grid End: The end of the grid lines with respect to the axis origin.

style - Choice of ('stacked', 'parallel', 'parallel_3d')

Style: The plot style of the common categories.

forceZero - Boolean

Force Zero: When set, the range will contain the origin.

minimumTickSpacing - Measurement

Minimum Tick Spacing: The minimum distance between ticks.

maximumTicks - Integer

Maximum Ticks: The maximum number of ticks to be shown.

labelTextFormat - String

Label Text Format: Formatting string for axis labels.

labelTextPostFormat - Text

Label Text Post Format: An additional formatting string.

labelTextScale - Float

Label Text Scale: The scaling factor for the label tick values.

valueMin - Float

Minimum Value: The smallest value on the axis.

valueMax - Float

Maximum Value: The largest value on the axis.

valueStep - Float

Value Step: The step size between ticks

valueSteps - Sequence of Float

Step Sizes: List of step sizes between ticks.

rangeRound - Choice of ('both', 'none', 'ceiling', 'floor')

Range Round: Method to be used to round the range values.

zrangePref - Float

Zero Range Preference: Zero range axis limit preference.

tickUp - Measurement

Tick Up: Length of tick above the axis line.

tickDown - Measurement

Tick Down: Length of tick below the axis line.

joinAxis - Boolean

Join Axis: Whether to join the axes.

joinAxisMode - Choice of ('top', 'points', 'none', 'value', 'bottom')

Join Axis Mode: Mode for connecting axes.

joinAxisPos - Measurement

Join Axis Position: The position in the plot at which to join the axes.

Examples

```
<xValueAxis valueMin="0" valueMax="5" valueStep="1">  
  <labels fontName="Helvetica"/>  
</xValueAxis>
```

(Extracted from file *tag-linePlot.rml*, line 25)

[\[PDF\]](#)

xpre

A preformatted text that allows paragraph markup.

Attributes

bulletText - String

Bullet Character: The bullet character is the ASCII representation of the symbol making up the bullet in a listing.

dedent - Integer

Dedent: Number of characters to be removed in front of every line of the text.

style - Style

Style: The paragraph style that is applied to the paragraph. See the ``paraStyle`` tag for creating a paragraph style.

Content

RawXMLContent (*required*)

Text: The text that will be layed out.

Examples

```
<xpre>Preformatted with <i>markup</i>.</xpre>
```

(Extracted from file *tag-para.rml*, line 29)

[\[PDF\]](#)

yValueAxis

Y-Value Axis

Attributes

visible - Boolean

Visible: When true, draw the entire axis with all details.

visibleAxis - Boolean

Visible Axis: When true, draw the axis line.

visibleTicks - Boolean

Visible Ticks: When true, draw the axis ticks on the line.

visibleLabels - Boolean

Visible Labels: When true, draw the axis labels.

visibleGrid - Boolean

Visible Grid: When true, draw the grid lines for the axis.

strokeWidth - Measurement

Stroke Width: The width of axis line and ticks.

strokeColor - Color

Stroke Color: The color in which the axis line and ticks are drawn.

strokeDashArray - Sequence of Float

Stroke Dash Array: The dash array that is used for the axis line and ticks.

gridStrokeWidth - Measurement

Grid Stroke Width: The width of the grid lines.

gridStrokeColor - Color

Grid Stroke Color: The color in which the grid lines are drawn.

gridStrokeDashArray - Sequence of Float

Grid Stroke Dash Array: The dash array that is used for the grid lines.

gridStart - Measurement

Grid Start: The start of the grid lines with respect to the axis origin.

gridEnd - Measurement

Grid End: The end of the grid lines with respect to the axis origin.

style - Choice of ('stacked', 'parallel', 'parallel_3d')

Style: The plot style of the common categories.

forceZero - Boolean

Force Zero: When set, the range will contain the origin.

minimumTickSpacing - Measurement

Minimum Tick Spacing: The minimum distance between ticks.

maximumTicks - Integer

Maximum Ticks: The maximum number of ticks to be shown.

labelTextFormat - String

Label Text Format: Formatting string for axis labels.

labelTextPostFormat - Text

Label Text Post Format: An additional formatting string.

labelTextScale - Float

Label Text Scale: The scaling factor for the label tick values.

valueMin - Float

Minimum Value: The smallest value on the axis.

valueMax - Float

Maximum Value: The largest value on the axis.

valueStep - Float

Value Step: The step size between ticks

valueSteps - Sequence of Float

Step Sizes: List of step sizes between ticks.

rangeRound - Choice of ('both', 'none', 'ceiling', 'floor')

Range Round: Method to be used to round the range values.

zrangePref - Float

Zero Range Preference: Zero range axis limit preference.

tickLeft - Measurement

Tick Left: Length of tick left to the axis line.

tickRight - Measurement

Tick Right: Length of tick right to the axis line.

joinAxis - Boolean

Join Axis: Whether to join the axes.

joinAxisMode - Choice of ('top', 'points', 'none', 'value', 'bottom')

Join Axis Mode: Mode for connecting axes.

joinAxisPos - Measurement

Join Axis Position: The position in the plot at which to join the axes.

Examples

```
<yValueAxis valueMin="0" valueMax="7" valueStep="1">  
  <labels fontName="Helvetica"/>  
</yValueAxis>
```

(Extracted from file *tag-linePlot.rml*, line 28)

[\[PDF\]](#)