RML Example 33: Images

RML (Report Markup Language) is ReportLab's own language for specifying the appearan printed page, which is converted into PDF by the utility rml2pdf.
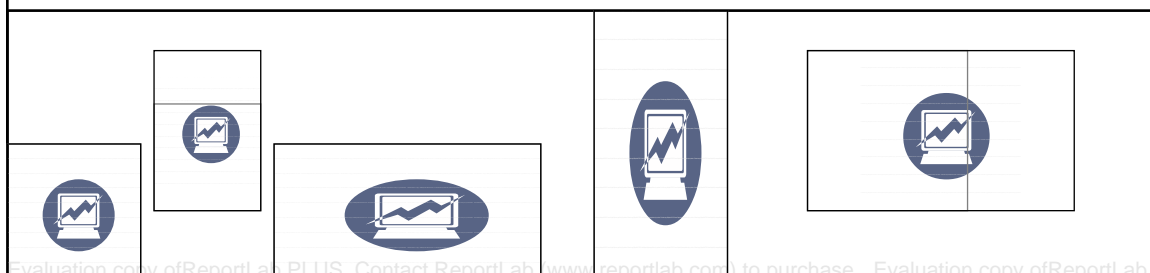
These RML samples showcase techniques and features for generating various types of ouput and are distributed within our commercial package as test cases. Each should be self explanatory and stand alone.

Image Functionality

This tries out some new features of images.

PDF files as images

PDF files (or their pagecatcherised pals, .data files) can be used just like images. Below you should see a few little internet access icons; zoom in and you'll see they are vector. The original PDF is 1296x1296, so the rubbish at top right of the page is the unscaled one being drawn in the illustration below at (0,0).

The **preserveAspectRatio** flag lets you place your image in a box and it will be centered intelligently, touching either the sides or the top depending on its own aspect ratio.
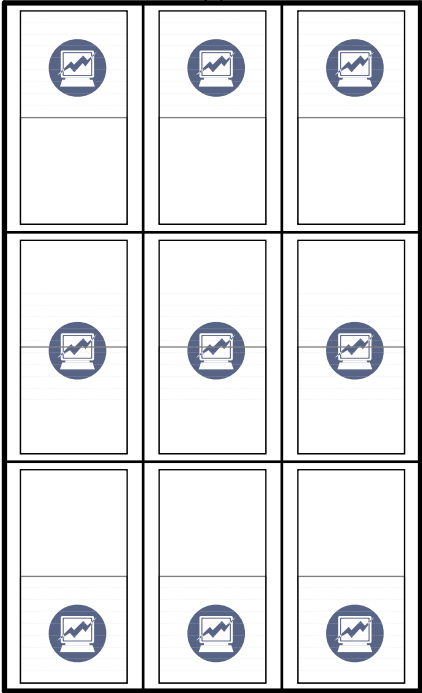
RML Example 33: Images

ReportLab

The anchor attribute lets you determine which part of the image corresponds to the given x and y. You can choose an anchor from the standard compass points.

The test below draws the 'square-ish' image in an 80x40 (wide-ish) box, with each anchor point.
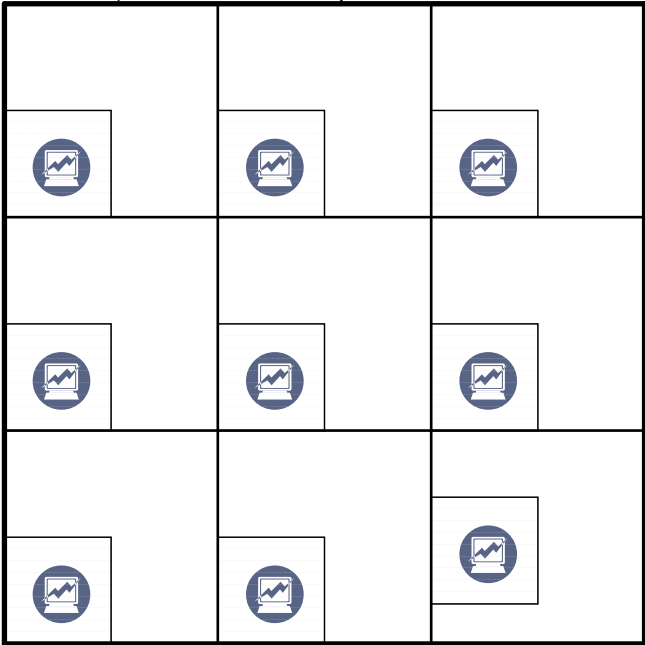
Now we repeat in a tall-ish box. Top row should be flush top, middle row should be in the middle, bottom row at bottom
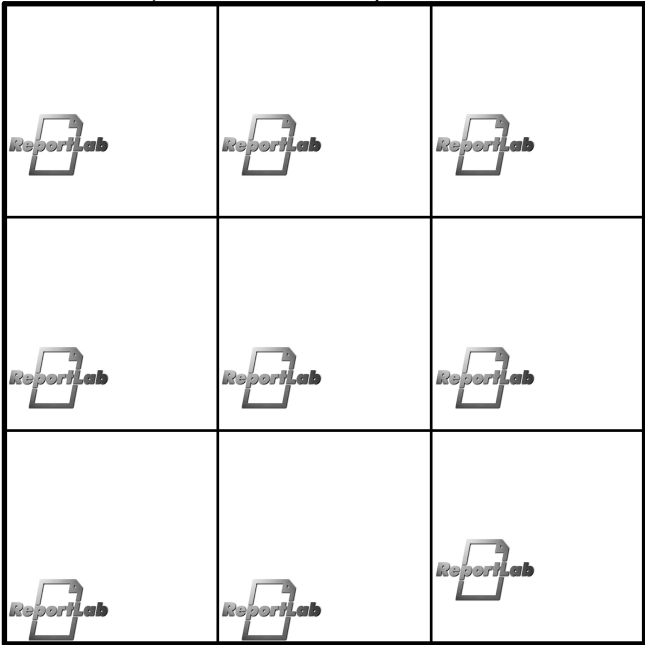
RML Example 33: Images

Draws the 40 x 40 image in an 80x80 box, with each anchor point.
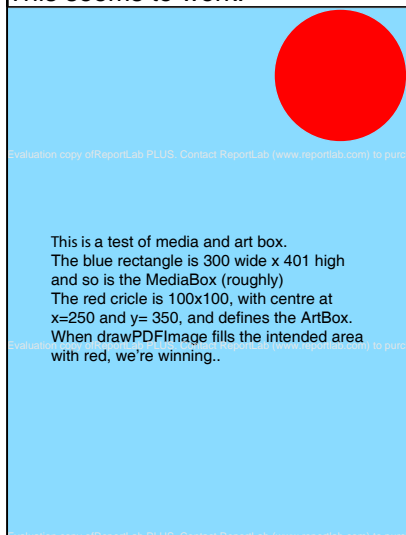
RML Example 33: Images

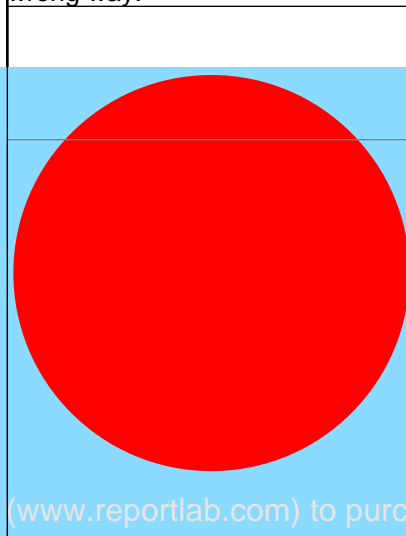Draws the 40 x 40 gif image in an 80x80 box, with each anchor point.

RML Example 33: Images

First attempt to place an image which has an artbox. We have created a PDF with MediaBox (the usual size measure) approx 300x400 points, and a 100x100 circle in top right corner, and instructed RML to draw it in a box of half size. This seems to work.

This is a test of media and art box.
The blue rectangle is 300 wide x 401 high
and so is the MediaBox (roughly)
The red cricle is 100x100, with centre at
x=250 and y= 350, and defines the ArtBox.
When drawPDFImage fills the intended area
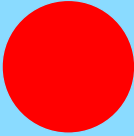with red, we're winning..

Now we try to place it with the art box. The blue should leak out horribly to left and below, but the red circle should end up elliptical within the box. (In real life, the art box defines the 'area of interest' and there would be no stuff outside it). This isn't working yet. Also, we get an extraneous boundary box from drawPdfImage appearing at top right - shifted the wrong way.

rt box.

vide x 401 high

ughly)

with centre at

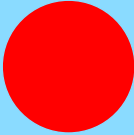ines the ArtBox.

the intended area

RML Example 33: Images

This is a test of media and art box.
The blue rectangle is 300 wide x 401 high
and so is the MediaBox (roughly)
The red cricle is 100x100, with centre at
x=250 and y= 350, and defines the ArtBox.
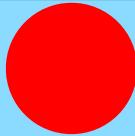When drawPDFImage fills the intended area
with red, we're winning..

Align Left

This is a test of media and art box.
The blue rectangle is 300 wide x 401 high
and so is the MediaBox (roughly)
The red cricle is 100x100, with centre at
x=250 and y= 350, and defines the ArtBox.
When drawPDFImage fills the intended area
with red, we're winning..

Align Right

This is a test of media and art box.
The blue rectangle is 300 wide x 401 high
and so is the MediaBox (roughly)
The red cricle is 100x100, with centre at
x=250 and y= 350, and defines the ArtBox.
When drawPDFImage fills the intended area
with red, we're winning..

Align Center

RML Example 33: Images

Align Left

Align Right

Align Center

Now I will try and clip the silly image to something strange.

Evaluation copy ofReportLab PLUS. Contact ReportLab (www.reportlab.com) to purchase.

An inline image

Images within text

You can now add images between words within text. This works with bitmaps, but not with PDF images.

ImageFigures with various strange parameters

Aligned Left

a left bottom para

a right bottom para

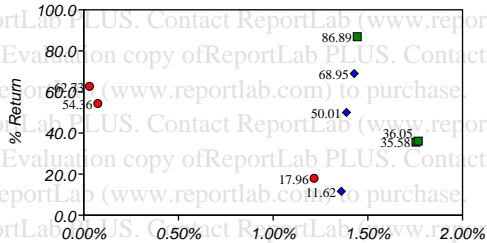a centred top para

a centred top para

RML Example 33: Images

Figures with various strange parameters

scatterPlot

Figures with various strange parameters

a para caption