RML (Report Markup Language) is ReportLab's own language for specifying the appearance of a 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.

Barcode support in RML

This shows a few different barcodes and the techniques for using them. There are two tags which can be used and the source for this test file shows both. The first is a graphics tag which can be used in an <illustration> tag, and thus positioned at the precise location of your choice...

```
<barcode x="1cm" y="1cm" code="Code128">AB-123456</barcode>
```

The second technique is a 'flowable' tag which can be used within the story, and thus placed between two paragraphs with ease.

```
<barCodeFlowable code="Standard39" value="PFWZF" barWidth="0.01in" quiet="no"/>
```

Currently we support these attributes for the 'code' attribute in both tags: (I2of5 | Code128 | Standard93 | Extended93 | Standard39 | Extended39 | MSI | Codabar | Code11 | FIM | POSTNET | USPS_4State | EAN8 | EAN13 | QR)

There are many other attributes defined in the rml.dtd file, but in general barcodes know how to draw themselves at the correct size, and if you are using a specific code you will know which ones apply to you.

Code11

Code128

Code128 with some custom settings

A bar chart flowable tag should appear after this paragraph in "Standard39" code. It works out its height so if you need space before and after, use the "spacer" tag.
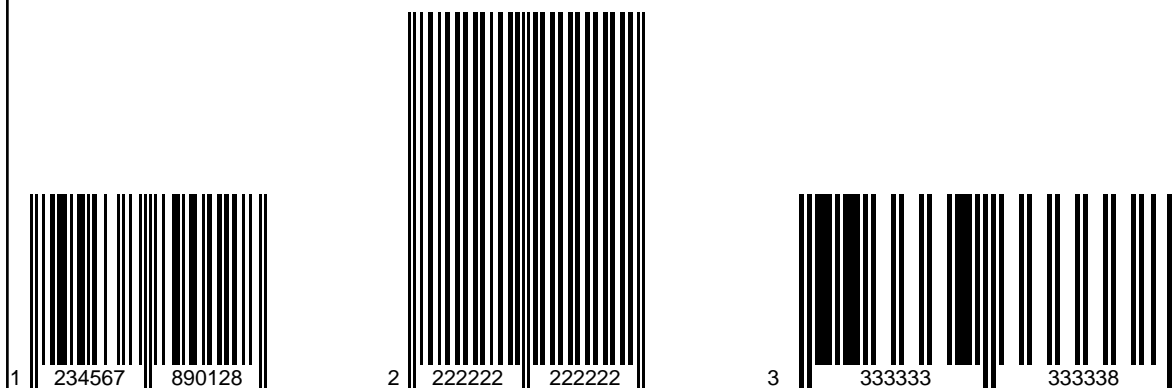
More on the next page

EAN13 - European Article Number with 13 digits

These have a natural size of approx 3.8cm x 2.8cm, which is the one on the left. Since these are graphical tags, if you need it a bit bigger or smaller then the safest approach is to use the RML 'scale' tag to uniformly scale up or down the widget. You may also tweak the size by adjusting the barWidth, barHeight and spaceWidth properties but ensure you do test scans if using any 'unnatural' size; the two cases on the right have been tweaked in this way.

1 234567 890128

2 222222 222222

3 333333 333338

Here's the 'flowable' version of the same code...it should look like the one on the left above

1 234567 890128

And here's one in the shorter EAN8...

1234 5670

QR 2d barcode contributed by Germán M. Bravo <german.mb@gmail.com>

RML Example 11: Barcodes

<barCodeFlowable code="USPS_4State" value="01234567094987654321"/>

<barCodeFlowable code="USPS_4State" value="01234567094987654321" humanReadable="1" barFillColor="blue" textColor="red"/>

01 234 567094 987654321 01234567891

<barCodeFlowable code="USPS_4State" value="01234567094987654321" pitch="0"/>

<barCodeFlowable code="USPS_4State" value="01234567094987654321" pitch="20"/>

<barCodeFlowable code="USPS_4State" value="01234567094987654321" barWidth="0.8" barHeight="1"/>

<barCodeFlowable code="USPS_4State" value="01234567094987654321" widthSize="0.5" heightSize="0.5"/>

<barCodeFlowable code="USPS_4State" value="01234567094987654321" widthSize="0" heightSize="0"/>

<barCodeFlowable code="USPS_4State" value="01234567094987654321" widthSize="0.5" heightSize="0.5" humanReadable="1" fontSize="10"/>

01 234 567094 987654321 01234567891

<barCodeFlowable code="USPS_4State" value="01234567094987654321" routing="12345"/>

<barCodeFlowable code="USPS_4State" value="11235328334847649652" routing="57492682302" humanReadable="1"/>

11 235 328334 847649652 57492682302

<barCodeFlowable code="USPS_4State" tracking="11235328334847649652" routing="57492682302" humanReadable="1"/>

11 235 328334 847649652 57492682302

<barCodeFlowable code="USPS_4State" tracking="01234567094987654321" routing="01234567891" humanReadable="1"/>

01 234 567094 987654321 01234567891

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<barCodeFlowable code="DataMatrix" value="Happy Corona Virus Year 2020!" size="SquareAuto" color="black" bgColor="paleyellow"/>

DataMatrix barcode not found perhaps you need to install pylibdmtx python package and the libdmtx library

<barCodeFlowable code="I2of5" value="00012345678905" checksum="0"/>

<barCodeFlowable code="I2of5" value="00012345678905" checksum="0" bearerBox="1"/>

<barCodeFlowable code="I2of5" value="0001234567890" checksum="1"/>

<barCodeFlowable code="I2of5" value="0001234567890" checksum="1" bearerBox="1"/>