

# OpenHtmlToPdf Feature Documentation

This documentation tries to show the advanced features of OpenHtmlToPdf. To generate the documentation a [FreeMarker](#) template is used to finally generate the HTML to render with OpenHtmlToPdf. FreeMarker allows to do conditionals and calculation within the template. This is not pure MVC but very useful to generate a report HTML. In combination with the excellent FreeMarker support in the (expensive) IntelliJ IDEA IDE this is a very productive environment to build reports. Please lookup the source of this document if you want to know some tricks not explicit mentioned in this documentation.

## Pagebreak Tuning

In a perfect world `style="page-break-inside: avoid"` would just work and all reports would look beautiful. OpenHtmlToPdf tries its best to avoid a page break inside. But this is not always possible and also rather complex. If you know or can calculate how much space a block will take you can use the special `-fs-page-break-min-height` CSS property on the block. You can specify the minimum height needed on the page any not relativ CSS unit (e.g. in cm but not in %). If that amount of space is not remaining on the page, a pagebreak happens before the block is drawn.

Example:

```
<div style="-fs-page-break-min-height:5cm">
  My nice content, which should not break... But should
  also not be higher than 5cm.
</div>
```

## Objects

OpenHtmlToPdf comes with some builtin objects, which you can use to quickly create diagrams, add background PDF images and so on. To use them include the `openhhtmltopdf-objects` dependency in your pom:

```
<dependency>
  <groupId>com.openhtmltopdf</groupId>
  <artifactId>openhhtmltopdf-objects</artifactId>
  <version>...</version>
</dependency>
```

## Merge Background PDF

You can add a watermark / background to your document. To do so you should place

```
<object type="pdf/background" pdfsrc="background.pdf" style="width:1px;height:1px">
```

into the top-left corner of the document. This must be the first element drawn, as otherwise it would override the already drawn content. Look at the source of this document for more details.

## JFreeGraph

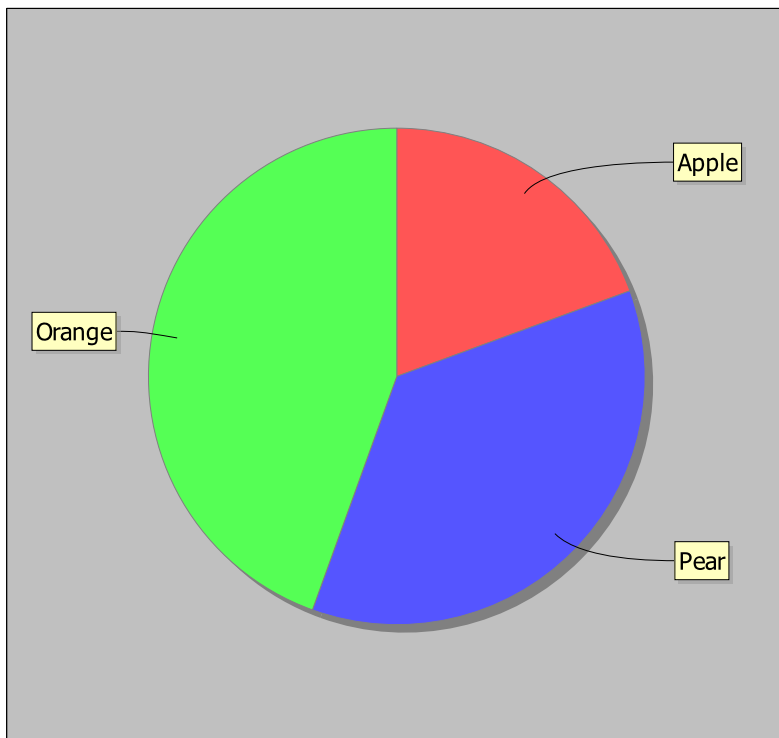
For simple charts you can use the builtin objects for JFreeGraph. Note: You must specify the dependency to JFreeMarker in your POM, because it is declared an optional dependency on `openhhtmltopdf-objects`.

```
<dependency>
  <groupId>org.jfree</groupId>
  <artifactId>jfreechart</artifactId>
  <version>1.5.0</version>
</dependency>
```

If you specify a URL for a data point then the segment in the diagram used for that datapoint is a link to that URL. Note: This only works in Acrobat Reader, all other PDF Viewer ignore this feature.

### The Pie Diagram

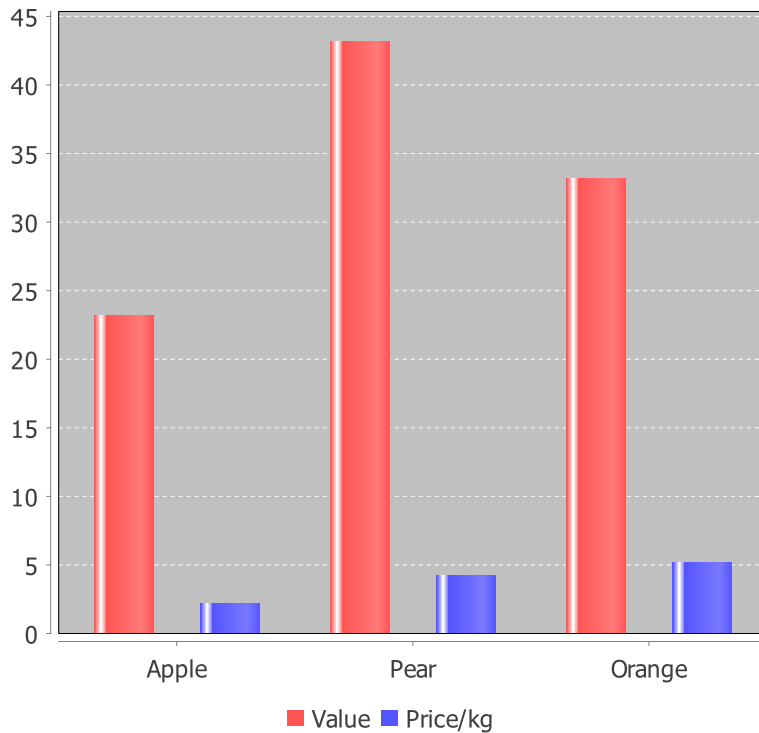
**Fruit Pie Chart**



```
<object type="jfreechart/pie"
  style="width:400px;height:400px;-fs-page-break-min-height:400px"
  title="Fruit Pie Chart">
  <data name="Apple" value="23.2" url="https://www.google.de?q=apple-pie"/>
  <data name="Pear" value="43.2" url="https://www.google.de?q=pear-pie"/>
  <data name="Orange" value="53.2" url="#start"/>
</object>
```

## The Bar Diagram

### Fruit Bar Chart



```
<object type="jfreechart/bar"
  style="width:400px;height:400px; -fs-page-break-min-height:400px"
  title="Fruit Bar Chart"
  categories-title="Category" series-title="Series">
  <data series="Value" category="Apple" value="23.2" url="#apple"/>
  <data series="Value" category="Pear" value="43.2" url="#pear"/>
  <data series="Value" category="Orange" value="33.2" url="#orange"/>
  <data series="Price/kg" category="Apple" value="2.2"/>
  <data series="Price/kg" category="Pear" value="4.2"/>
  <data series="Price/kg" category="Orange" value="5.2"/>
</object>
```