

Java PDF generator showcase

Example Clause

Instructions

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Headlines

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Figures

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It is important that you use the same syntax for all images, otherwise the automatic numbering is corrupted!

Tables

Tables are easy to deal with as long as you keep them simple! To add a table, please use the following syntax.

GDP of selected countries in trillions

Country	2018	2019	2020	2021	2022
<i>Germany</i>	<i>3.95 USD</i>	<i>3.86 USD</i>	<i>3.80 USD</i>	<i>4.22 USD</i>	<i>4.26 USD</i>
<i>France</i>	<i>2.78 USD</i>	<i>2.72 USD</i>	<i>2.60 USD</i>	<i>2.94 USD</i>	<i>2.96 USD</i>
<i>United Kingdom</i>	<i>2.86 USD</i>	<i>2.83 USD</i>	<i>2.71 USD</i>	<i>3.13 USD</i>	<i>3.19 USD</i>
<i>Italy</i>	<i>2.07 USD</i>	<i>2.00 USD</i>	<i>1.89 USD</i>	<i>2.10 USD</i>	<i>2.12 USD</i>
<i>Spain</i>	<i>1.43 USD</i>	<i>1.39 USD</i>	<i>1.28 USD</i>	<i>1.43 USD</i>	<i>1.45 USD</i>

Countries in Europe

Country	Population	Size
<i>Monaco</i>	<i>36371</i>	<i>1.98</i>
<i>Gibraltar</i>	<i>29431</i>	<i>6.8</i>

The first line is used for referencing. You can reference <<table_countries>> in your text. The only thing you should change in that line is the table id, which is "table_countries" in this case. Please do not remove the "#", please do not change anything else in that line.

You can define the style and width of each column. In our example, the first column takes 50% of the entire width, the second and third column take 25% each. The total width of the table is 75% of the text width. The letters after the width percentage indicate if the column is e=emphasis, m=monospaced, a=asciidoc, s=strong. The d=default does not need to be set.

Cell alignment: If you need to align a column, you may indicate this by setting ^,<, or >. Examples:

- ^25m = centered, 25% width, monospaced.
- >25e = aligned right, 25% width, emphasised
- <25 = aligned left, 25% width, asciidoc

In any case, please make sure that your table fit on a piece of A4 or letter-size paper!!

Recommended Asciidoc Environment

We recommend to use <http://asciidoctor.org> and <http://asciidoctor.org/docs/convert-asciidoc-to-pdf/> in combination with the <https://atom.io> editor.

Installation on MacOS and Linux

- Please follow the steps on <https://asciidoctor.org/#installation>.
- Install the bibtex extension: **gem install asciidoctor-bibtex**

Installation on Windows

We have made best experiences with the following steps:

- Install ruby for windows: <https://rubyinstaller.org/downloads/>. If you experience any issues, the following link may help: <https://stackoverflow.com/questions/18908708/installing-ruby-gem-in-windows>
- Open command prompt and install two gems:

- Execute: "gem install asciidoctor"
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- Text your installation
- Open a folder that contains your Engineering Report asciidoc source files, including the **er.adoc** file.
- Execute the following command: **asciidoctor -r asciidoctor-bibtex er.adoc**

Using Asciidoctor with Atom

In Atom, you should install the following packages:

- asciidoc-preview
- autocomplete-asciidoc
- language-asciidoc
- markdown-writer: requires changing of key-map to allow for keyboard shortcuts such as e.g. **bold**
- platformio-IDE-terminal

This environment allows you to use keyboard shortcuts, autocomplete, syntax highlighting and a rendered preview for asciidoc; and provides you an terminal window within the editor to convert your asciidoc to html and pdf.

Asciidoc Conversion

In order to achieve a uniform look-and-feel of all ERs in both HTML and PDF, we have provided a css and theme file. The following commands can be used to convert the ER:

Command for PDF output: `asciidoctor-pdf -r asciidoctor-bibtex -a pdf-stylesdir=resources -a pdf-style=ogc -a pdf-fontsdir=resources/fonts er.adoc`

Command for HTML output: `asciidoctor -r asciidoctor-bibtex -a linkcss -a stylesheet=rocket-panda.css -a stylesdir=./stylesheets er.adoc`

Source Code

You can add code snippets using the following syntax:

Code Example XML

```
<section>
  <title>Section Title</title> <!--1-->
</section>
```

<1> This notation allows to reference particular sections within the code.

You can alternatively use line numbers to reference a specific section in your code.

Code Example JSON

```
{ "menu": {  
  "id": "file",  
  "value": "File",  
  "popup": {  
    "menuitem": [  
      { "value": "New", "onclick": "CreateNewDoc()" },  
      { "value": "Open", "onclick": "OpenDoc()" },  
      { "value": "Close", "onclick": "CloseDoc()" }  
    ]  
  }  
}}
```

As shown in line 2, the value of "id" is "File".

Asciidoc(tor) Syntax Help

Is available e.g. here: <http://asciidoctor.org/docs/>

Use of Citations

For citations that also have an associated URL, the URL should be inserted inline as in <https://www.ogc.org/>. An endnote citation should still also be included (just in case the link stops working in the future).

Please use the following syntax to insert citations anywhere in the text:

The hail-and-rainbow protocol can be initiated at five levels:

-
- tertiary
- supernumerary
- supermassive
- apocalyptic

```
cite:[VanZyl2009]
```

or, if it is more than one citation that should be added at the same location, use

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cite:[Pross2018,OGCTechTrends2018]
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which will create links in the compiled HTML/PDF that look as follows: , of for the second example given above, it results in

Then you need to provide all citation information in the file `resources/bibtex-file.bib`. This file uses the bibtex file format, which is defined in full detail <http://www.bibtex.org/Format/>. The bibtex-style file shall remain untouched.

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- The definition of the **bibtex-file** and the **bibtex-style** attributes. This is done in this template in file `<<bibtexAttributes,er.adoc>>`. Please make sure that both files are available at their defined locations.

Examples of bibtex attributes as set in file `er.adoc`

```
:bibtex-file: resources/bibtex-file.bib
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```

- Adding a flag to the asciidoctor conversion command

```
asciidoctor -r asciidoctor-bibtex er.adoc
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A full conversion command could look as in the following example:

```
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