PDF Document

Overview

To create a PDF document, you need to specify `pdf_document` output format in the front-matter of your document:

```yaml
---
title: "Habits"
author: John Doe
date: March 22, 2005
output: pdf_document
---
```

Export Path

You can define the document export path by specifying `path` option. For example:

```yaml
---
```

```
  title: "Habits"
  output:
    pdf_document:
      path: /Exports/Habits.pdf
  ---
```

If `path` is not defined, then document will be generated under the same directory.

Table of Contents

You can add a table of contents using the `toc` option and specify the depth of headers that it applies to using the `toc_depth` option. For example:

```yaml
---
title: "Habits"
output:
  pdf_document:
    toc: true
    toc_depth: 2
---
```

If the table of contents depth isn't explicitly specified then it defaults to 3 (meaning that all level 1, 2, and 3 headers will be included in the table of contents).

Attention: this TOC is different from the `<!-- toc -->` generated by **Markdown Preview Enhanced**.

You can add section numbering to headers using the `number_sections` option:

```yaml
---
title: "Habits"
output:
  pdf_document:
    toc: true
    number_sections: true
---
```

Syntax Highlighting

The `highlight` option specifies the syntax highlighting style. Supported styles include “default”, “tango”, “pygments”, “kate”, “monochrome”, “espresso”, “zenburn”, and “haddock” (specify null to prevent syntax highlighting):

For example:

```yaml
---
title: "Habits"
```

```
output:
  pdf_document:
    highlight: tango
---
```

LaTeX Options

Many aspects of the LaTeX template used to create PDF documents can be customized using top-level YAML metadata (note that these options do not appear underneath the `output` section but rather appear at the top level along with title, author, etc.). For example:

```yaml
---
title: "Crop Analysis Q3 2013"
output: pdf_document
fontsize: 11pt
geometry: margin=1in
---
```

Available metadata variables include:

Variable	Description
papersize	paper size, e.g. `letter` , `A4`
lang	Document language code

Variable	Description
fontsize	Font size (e.g. 10pt, 11pt, 12pt)
documentclass	LaTeX document class (e.g. article)
classoption	Option for documentclass (e.g. oneside); may be repeated
geometry	Options for geometry class (e.g. margin=1in); may be repeated
linkcolor, urlcolor, citecolor	Color for internal, external, and citation links (red, green, magenta, cyan, blue, black)
thanks	specifies contents of acknowledgments footnote after document title.

More available variables can be found here.

LaTeX Packages for Citations

By default, citations are processed through `pandoc-citeproc`, which works for all output formats. For PDF output, sometimes it is better to use LaTeX packages to process citations, such as `natbib` or `biblatex`. To use one of these packages, just set the option `citation_package` to be `natbib` or `biblatex`, e.g.

```yaml
---
output:
  pdf_document:
    citation_package: natbib
```

```
---
```

Advanced Customization

LaTeX Engine

By default PDF documents are rendered using `pdflatex`. You can specify an alternate engine using the `latex_engine` option. Available engines are "pdflatex", "xelatex", and "lualatex". For example:

```yaml
---
title: "Habits"
output:
  pdf_document:
    latex_engine: xelatex
---
```

Include

You can do more advanced customization of PDF output by including additional LaTeX directives and/or content or by replacing the core pandoc template entirely. To include content in the document header or before/after the document body you use the `includes` option as follows:

```yaml
---
title: "Habits"
output:
  pdf_document:
    includes:
      in_header: header.tex
      before_body: doc_prefix.tex
      after_body: doc_suffix.tex
---
```

Custom Templates

You can also replace the underlying pandoc template using the `template` option:

```yaml
---
title: "Habits"
output:
  pdf_document:
    template: quarterly_report.tex
---
```

Consult the documentation on pandoc templates for additional details on templates. You can also study the default LaTeX template as an example.

Pandoc Arguments

If there are pandoc features you want to use that lack equivalents in the YAML options described above you can still use them by passing custom `pandoc_args`. For example:

```yaml
---
title: "Habits"
output:
  pdf_document:
    pandoc_args: ["--no-tex-ligatures"]
---
```

Shared Options

If you want to specify a set of default options to be shared by multiple documents within a directory you can include a file named `_output.yaml` within the directory. Note that no YAML delimiters or enclosing output object are used in this file. For example:

_output.yaml

```yaml
pdf_document:
  toc: true
  highlight: zenburn
```

All documents located in the same directory as `_output.yaml` will inherit it's options. Options defined explicitly within documents will override those specified in the shared options file.