

Catmandu Documentation

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Documentation?

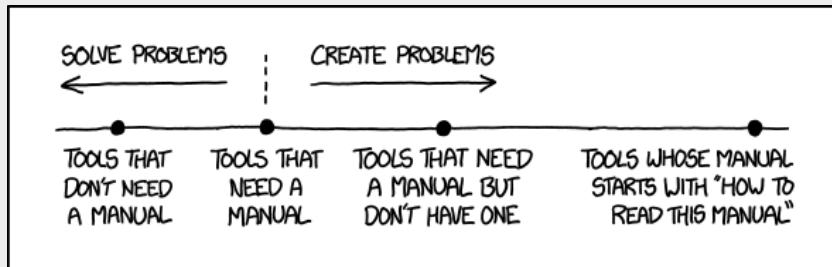
Documentation matters

Usability or people will not try or give up the tools

Quality writing good documentation is part of testing

If it's difficult to explain easy, the design is flawed!

Need a manual?



<https://xkcd.com/1343/>

Where's the Catmandu documentation?

- ▶ Module POD $\Rightarrow$ MetaCPAN, perldoc...
- ▶ Help and error messages (`catmandu help`)
- ▶ Project homepage <http://librecat.org/>
- ▶ Presentation slides, articles, handouts...
- ▶ Answers at mailing list, StackOverflow, Twitter...
- ▶ Projects that make use of Catmandu

Audience

Who reads our documentation?

- ▶ There is not “the user” but different user groups
- ▶ “**Personas**” help focus writing for user groups
- ▶ Good personas are based on research (surveys etc.)
- ▶ Good personas have a detailed description each

Some possible personas

- ▶ Just another Perl hacker
- ▶ perl-agnostic programmer
- ▶ IT admin with basic copy-and-paste scripting skills
- ▶ data conversion specialist with preference for GUIs
- ▶ non-technical interested in data science & research data
- ▶ ...

Avoid assumptions about the audience!

- ▶ general programming skills
- ▶ knowledge of Perl and/or command line fu
- ▶ English language
- ▶ cultural background
- ▶ patience and short-term memory
- ▶ ...

Managing Catmandu documentation

Current documentation

document	sources
MetaCPAN	POD
catmandu help	source code & POD
error messages	source code
http://librecat.org/Catmandu/	GitHub Wiki
http://librecat.org/distributions.html	MetaCPAN & APIs
...	...

POD conversions

- ▶ MetaCPAN (→ specific HTML)
- ▶ Catmandu::Util::pod_section (→ CLI)
catmandu info
catmandu help \$COMMAND
catmandu import|export|store|copy|fix \$NAME
 - ▶ NAME
 - ▶ DESCRIPTION
 - ▶ EXAMPLES
 - ▶ CONFIGURATION (list of options)
- ▶ Pod::Simple::Pandoc (→ any HTML, PDF...)

Introducing the Pandoc Abstract Syntax Tree (AST)

- ▶ Pandoc (1.16 or at least 1.12)
- ▶ Pandoc::Elements (see its POD for details)
- ▶ `pandoc -t json < $(MARKDOWNFILE).md1 → AST`
- ▶ `pod2pandoc $(MODULE).pm → AST`
- ▶ `pandoc -f json ... < $(AST).json → HTML`

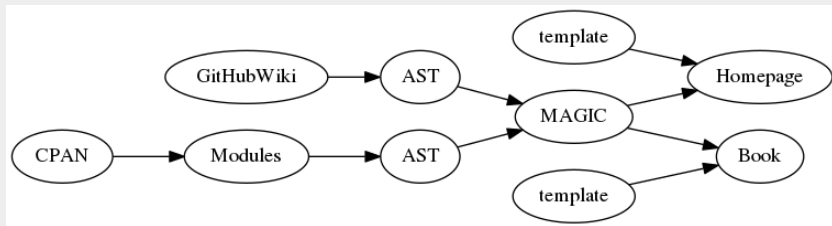
Example: `=head1 Foo`

⇒ `Header 1, [ Str "Foo" ]`

⇒ `BulletList [ Plain [ Str "Foo" ] ]`

⇒ `<li>Foo</li>` (or list item in LaTeX/PDF)

Documentation content flow



MAGIC Mix & modify content from multiple documents

Outlook

Summary

- ▶ Writing great documentation for fun and profit
- ▶ Mind the audience
- ▶ POD content can be reused
- ▶ Combine documents with Pandoc::Elements

Suggestions to improve Catmandu documentation

- ▶ Redesign homepage <http://librecat.org/>
- ▶ Include `catmandu help` alike for all commands?
- ▶ Collect publications (slides, papers..) in a repository: ([Zenodo](#)) with “Catmandu” group $\Rightarrow$ DOI, OAI-PMH
- ▶ `Catmandu::Test::Documentation` to check POD of modules
- ▶ Create Catmandu glossary with explanation of basic concepts² (item, fix, format, importer. . .)
- ▶ Improve `Catmandu::Cmd::help`
- ▶ Create Fix language syntax highlighting rules for common editors/frameworks (vim, emacs, **Kate**, CodeMirror. . .)
- ▶ Get familiar with Pandoc
- ▶ Catmandu, the book!

This slides as an example

- ▶ Written in Pandoc Markdown
- ▶ Source: <https://github.com/jakobib/catmanducon2016>
- ▶ Full conversion command:

```
pandoc --smart --standalone  
-t beamer --slide-level 2  
--template vzg-slides.tex  
-o slides.pdf slides.md
```

- ▶ Archived at Zenodo:

<http://dx.doi.org/10.5281/zenodo.49439>

<https://zenodo.org/collection/user-catmandu>

```
catmandu convert OAI --url https://zenodo.org/oai2d  
--set user-catmandu --metadataPrefix oai_datacite3
```