



# Amusewiki: a year of development

Marco Pessotto (melmothX)

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August 24-26, 2016, Cluj-Napoca

[amusewiki.org](http://amusewiki.org)

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# Questions?

Thanks!

## Debian packages pros

- Installation is straightforward
- Maintenance for the administrator is integrated in the regular apt-get routine
- Much smaller installation footprint (mostly because the texlive installation is optimized and shared)
- Improved security
  - code is installed and owned by root, not by the user running the application
  - debian is taking care of the security updates of the dependencies (not only the perl dependencies, but also the libraries used by LaTeX, cgit and other utilities)
- 0 downtime upgrades out of the box
- Predictability of locations and module versions (so gets more live testing)

## About me: Marco Pessotto

**PAUSE id** MELMOTHX

**IRC** melmothX on Freenode and irc.perl.org

**E-mail** melmothx@gmail.com

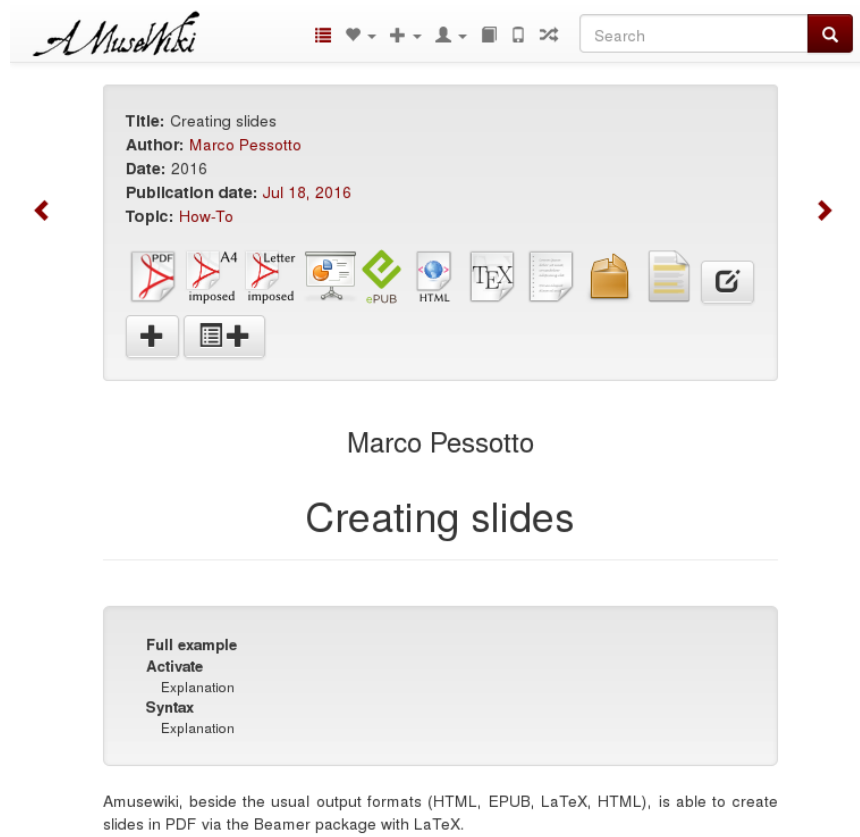
**Homepage and documentation** <https://amusewiki.org>

**IRC channel** <irc://chat.freenode.net/#amusewiki>

**GitHub** <https://github.com/melmothx>

**Background** Humanities (history and translations)

# Appearance



The screenshot shows the Amusewiki interface. At the top left is the logo 'Amusewiki'. To its right is a navigation bar with icons for home, heart, plus, user, document, mobile, and search. A search box is located to the right of these icons. Below the navigation bar is a main content area with a grey background. It contains the following information: Title: Creating slides, Author: Marco Pessotto, Date: 2016, Publication date: Jul 18, 2016, Topic: How-To. Below this information is a row of icons representing different output formats: PDF, A4 imposed, Letter imposed, ePUB, HTML, TeX, and a folder icon. There are also two plus signs in a box below the icons. Below the main content area is the author's name 'Marco Pessotto' and the title 'Creating slides'. Below that is a section titled 'Full example' with sub-sections 'Activate' and 'Syntax', each with an 'Explanation' link. At the bottom of the page, there is a paragraph of text: 'Amusewiki, beside the usual output formats (HTML, EPUB, LaTeX, HTML), is able to create slides in PDF via the Beamer package with LaTeX.'

# Debian packages cons

- More burden on the developer
- Trivial changes require a package rebuild
- Needs to ship about 25 new packages (fonts and perl modules)
- Can't use fresh code from the module used (e.g., newer Catalyst) without being too invasive.
- Debian people usually don't like private repositories

## Debian packages

Instead of running the app from the git tree on a dedicated home, with a `local::lib` tree or with a `perl` installed in the home, now you can visit <http://packages.amusewiki.org/> and follow the instructions there (import the key, add the repository, and install the package).

Minimum requirement: Debian Jessie and Ubuntu 16.04 LTS.

<https://github.com/melmothx/amusewiki-debian-packages>

## Why would you want to use Amusewiki

- built around texts, which are fully decoupled from the web application
- support for typesetting whole books (off-line editing and expressive markup)
- high-quality output (PDF with LaTeX quality and EPUB)
- flat file storage with Git
- create collections and reformat the PDF files for printing
- OPDS server for mobile users to deliver the texts straight into the apps
- Localized for English, German, Spanish, Finnish, French, Croatian, Italian, Macedonian, Russian, Albanian, Swedish
- production ready and comes with an extensive test suite

## Source file (Emacs Muse markup)

```
#title Amusewiki: a year of development
#author Marco Pessotto (melmothX)
#slides on
#lang en
#date August 24-26, 2016, Cluj-Napoca
#pubdate 2016-08-27

Here the the text start.

** About me: Marco Pessotto

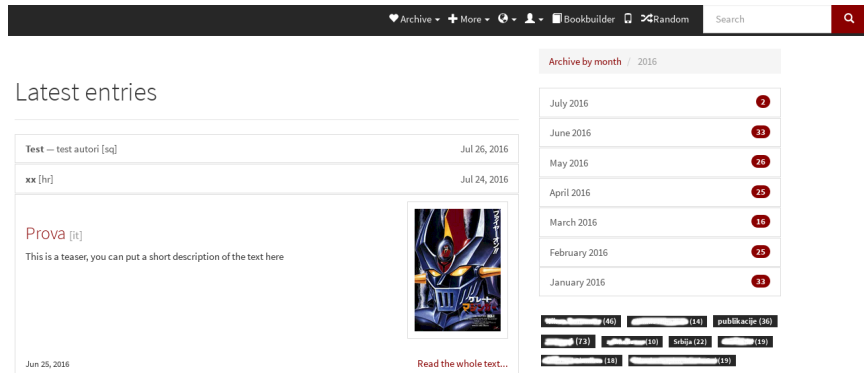
PAUSE id :: =MELMOTHX=
IRC :: =melmothX= on Freenode and =irc.perl.org=
```

## Other notable improvements

- SSL made free and automatic with Let's Encrypt and Protocol::ACME
- Code highlight with highlight.js
- Automatic DB upgrades with DBIx::Class::DeploymentHandler
- Fine tune logging with Log::Log4perl and Log::Contextual
- Documentation on <https://amusewiki.org>



# Blog example



# Architecture

- Muse parser: `Text::Amuse`
- HTML import and cleanup: `Text::Amuse::Preprocessor` (with CLI)
- Compiler: `Text::Amuse::Compile` (with CLI)
- PDF cropmarks: `PDF::Cropmarks` (with CLI)
- PDF imposition: `PDF::Imposition` (with CLI)
- `DBIx::Class` and `Xapian` for archive indexing
- Background daemon for indexing and compilation
- Catalyst application on the frontend

## Bookbuilder partial selection

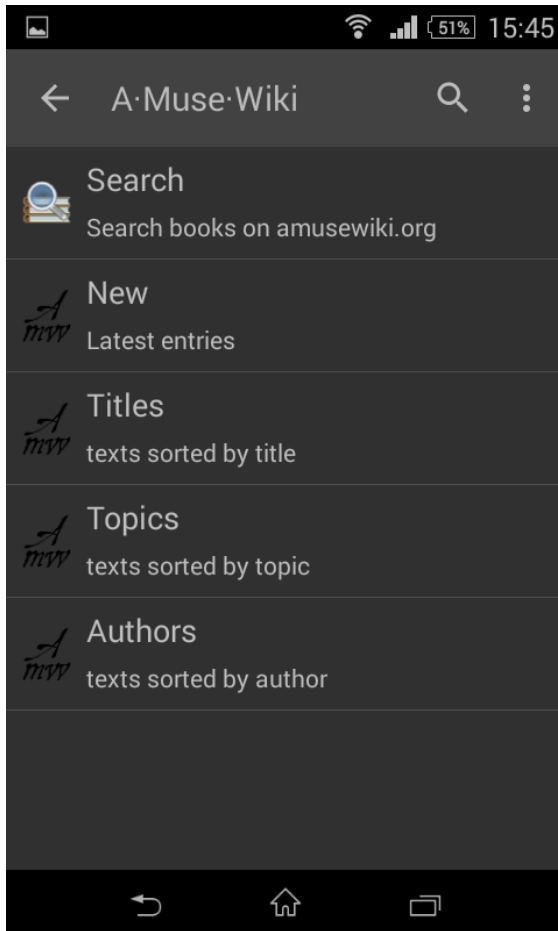
Add the selected parts to the bookbuilder

Section	Select
<b>Title, author, date...</b>	<input checked="" type="checkbox"/>
Creating slides	<input type="checkbox"/>
<b>Full example</b>	<input type="checkbox"/>
<b>Activate</b>	<input type="checkbox"/>
Explanation	<input type="checkbox"/>
<b>Syntax</b>	<input type="checkbox"/>
Explanation	<input type="checkbox"/>

## Blog mode

- Optional feature which can be activated in the admin console
- time-based sorting
- teasers
- decorative images
- tag cloud (accessible via ajax)
- monthly archives (accessible via ajax)
- form free layout elements (gives a chance to the admin to fully customize the site, in addition to local JS and CSS)
- bootswatch theme selection <https://bootswatch.com/>

# OPDS example



# Prepare books for printing with the bookbuilder

Pg 0004 | 6677.pdf Thu Aug 11 11:11:10 2016 page 4 #1/4 | 6677.pdf Thu Aug 11 11:11:10 2016 page 9 #1/9 | Pg 0009

Amusewiki, beside the usual output formats (HTML, EPUB, LaTeX, HTML), is able to create slides in PDF via the Beamer package with LaTeX.

The slides feature is off by default, but you can easily activate it in the admin console with the checkbox under "Formats".

Now, given that you generally don't want slides for all your texts, you have to flag it accordingly. You can do so with the provided checkbox in the text creation page, or simply adding the header

```
#slides yes
```

in the editing screen (i.e., in the .muse file).

It's important to note that the slide material must be placed inside a section, no matter how deep.

Material at the beginning of the text, not belonging to any section, is just ignored.

You can exclude sections of the documents from the slides by placing a comment cookie in the excluded sections.

```
*** this section will be excluded
```

; no slides

Here goes the lengthy explanation...

This is useful if you want to create slides and handout from the same source (as you should).

Finally, when you have the document ready, you can change the theme, the colors and the fonts adding it to the bookbuilder (using the button in the text's infobox) and asking for slides.

4 | 9

Pg 0004 | 6677.pdf Thu Aug 11 11:11:10 2016 page 4 #1/4 | 6677.pdf Thu Aug 11 11:11:10 2016 page 9 #1/9 | Pg 0009

## Activate

- Amusewiki can produce slides
- Activate it in the admin to enable them
- Flag the text accordingly with #slides yes

## Explanation

See above, I won't repeat it here

## Slides and theme selections

PDF Slides EPUB

**Please select the desired fonts**

Keep in mind that some character may be missing in the required font. Missing character will be reported.

**Please choose the sans font**

Computer Modern Sans Serif

**Please choose the mono font**

Computer Modern Typewriter Text

**Please choose the font size**

10 pt

**Please setup the Beamer layout**

**Here you can find a preview of the Beamer themes and color themes**

**Please choose the Beamer theme**

Boadilla

**Please choose the Beamer color theme**

wolverine

Build it

Update

## OPDS

- Open Publication Distribution System <http://opds-spec.org/>
- Atom feed with navigation and acquisition entries
- Supported by most EPUB Android readers (FBReader, Aldiko, Moon+ reader)
- Deliver the texts straight into the applications
- Module XML : :OPDS
- Example and help: <https://amusewiki.org/help/opds>
- Transparent pagination to save bandwidth
- HTTP authorization supported for private sites
- Full text-search supported