



# 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`

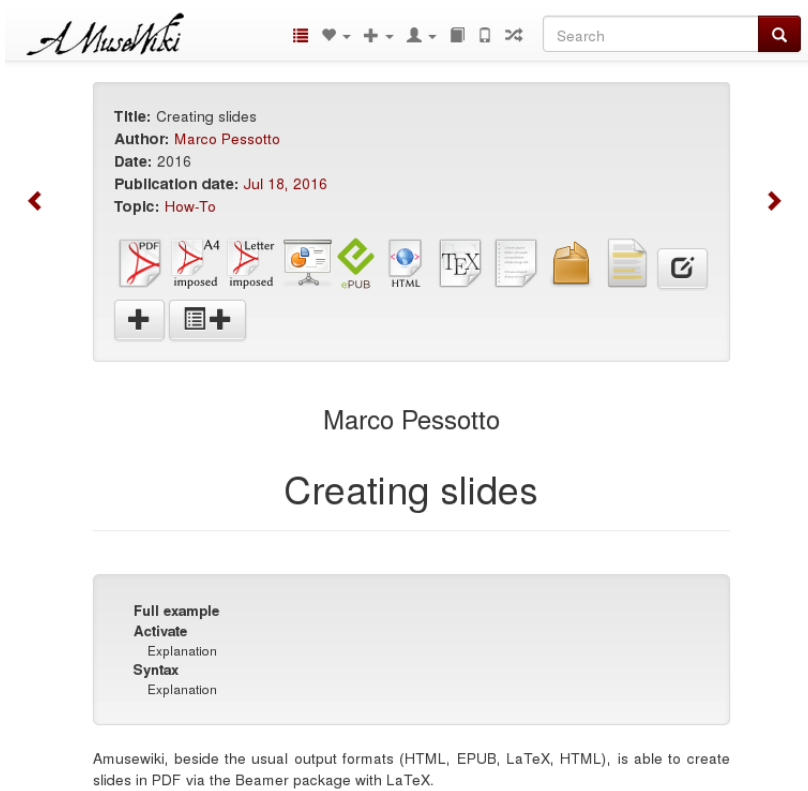
**Homepage and documentation** <https://amusewiki.org>

**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 are navigation icons (home, heart, plus, user, document, mobile, refresh) and a search bar. The main content area displays a post with the following metadata: Title: Creating slides, Author: Marco Pessotto, Date: 2016, Publication date: Jul 18, 2016, and Topic: How-To. Below the metadata is a row of icons for different output formats: PDF, A4, Letter, EPUB, HTML, and TeX. There are also two plus signs in a box. The author's name 'Marco Pessotto' and the title 'Creating slides' are displayed below the icons. At the bottom, there is a section for 'Full example' with sub-sections for 'Activate' and 'Syntax', each followed by 'Explanation'.

**Title:** Creating slides  
**Author:** Marco Pessotto  
**Date:** 2016  
**Publication date:** Jul 18, 2016  
**Topic:** How-To

PDF A4 Letter EPUB HTML TeX

Marco Pessotto

## Creating slides

**Full example**  
**Activate**  
Explanation  
**Syntax**  
Explanation

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
```

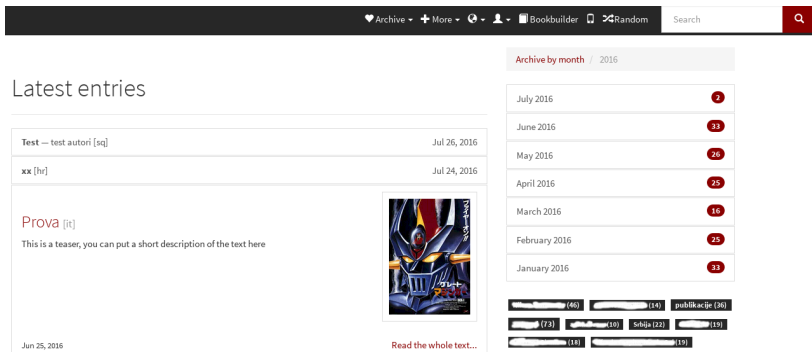
```
PAUSE id :: =MELMOTHX=
IRC :: =melmothX= on Freenode and =irc.perl.org=
```

## 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

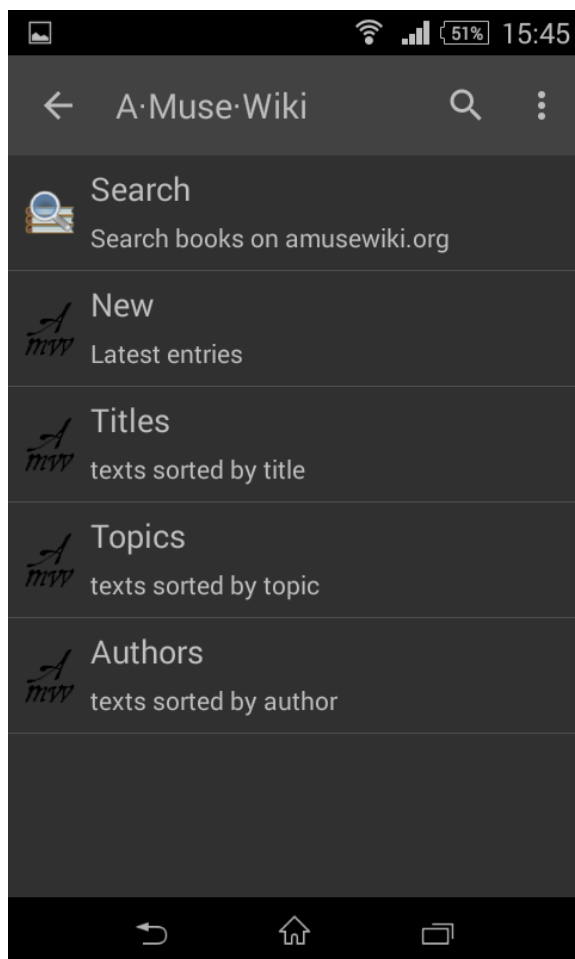
Add the selected parts to the bookbuilder

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

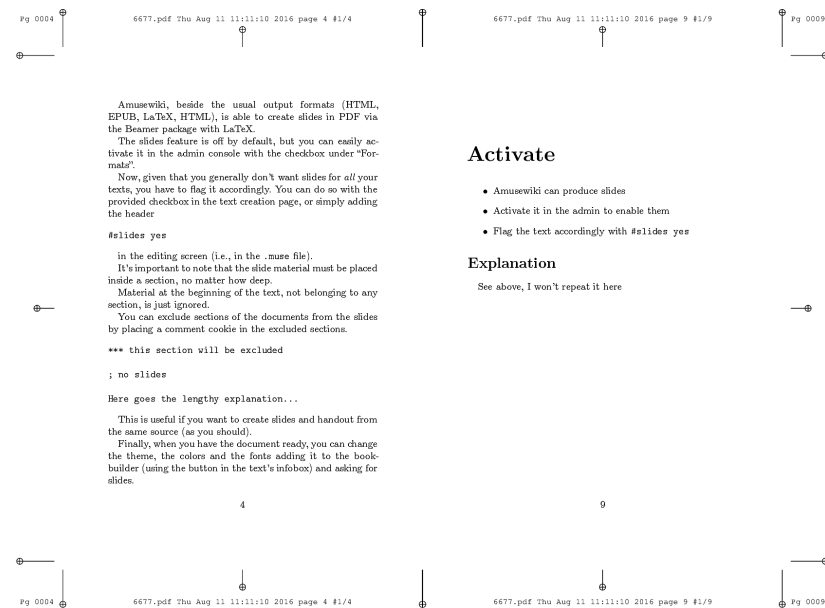
## Blog mode

- 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



## 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