



Collabora Productivity

# EPUB export in LibreOffice Writer

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ePUB



# About Miklos

- From Hungary
  - More blurb: <https://vmiklos.hu/>
- Google Summer of Code 2010/2011
  - Rewrite of the Writer RTF import/export
- Then full-time LibreOffice hacker, SUSE
- Now a contractor at Collabora



# EPUB export in LibreOffice



# Motivation

- EPUB is kind of the new PDF
  - PDF is still nice on larger screens
    - Not going away
  - Reflowable text is a hard requirement
    - E-readers and similar devices
- LibreOffice has great PDF support
  - Native EPUB support would be nice
- LibreOffice 6.0 brings basic support

PDF



# Hyperlinks

- Clickable hyperlinks are now supported:

A <http://libreoffice.org> b –  
red via character style

- To get there:
  - Basic text support
  - Set of character formatting attributes
  - Same for paragraphs



# Table support

- Custom cell widths
- Custom row height
- Row span

Before

A1, this is wider	B1, than this	C1, or this
-------------------	---------------	-------------

After

Before

This row has a larger height
------------------------------

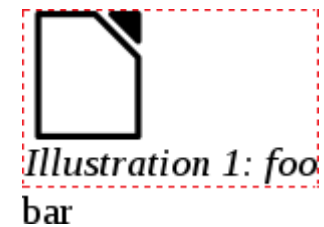
Than this one.

After

Row spanning	B1
	B2

# Image support

- Image borders
- Image captions
- To have this:
  - Support various wrap types
  - Multiple anchor types



# Font embedding

- File → Properties → Font → Embed to turn this on
- E.g. Calibre supports it nicely

*Sketchflow*

- No font data manipulation
  - Same format as ODF





# Cover images

- How Radium renders it:



Unknown Title

Miklos Vajna

[Details](#)



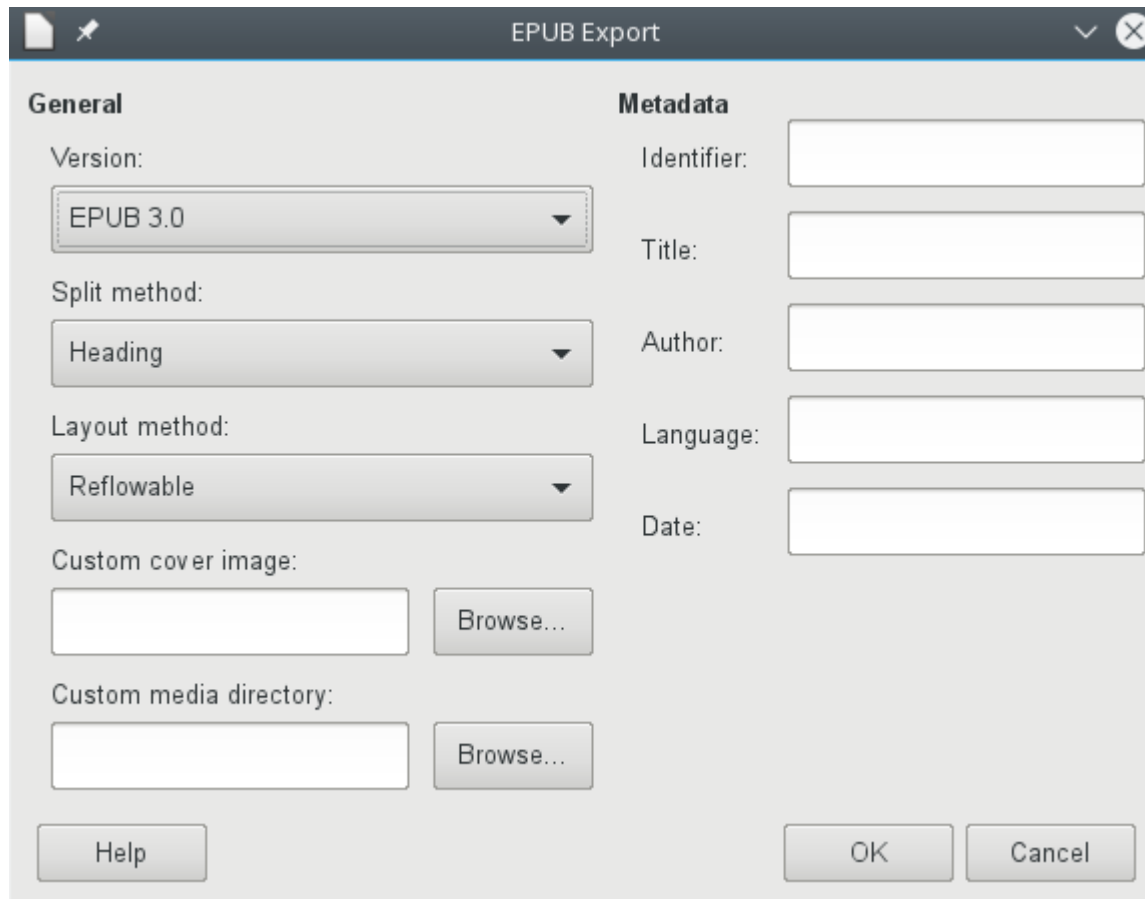
Unknown Title

Miklos Vajna

[Details](#)

# Export options

- Metadata and other tweaks:



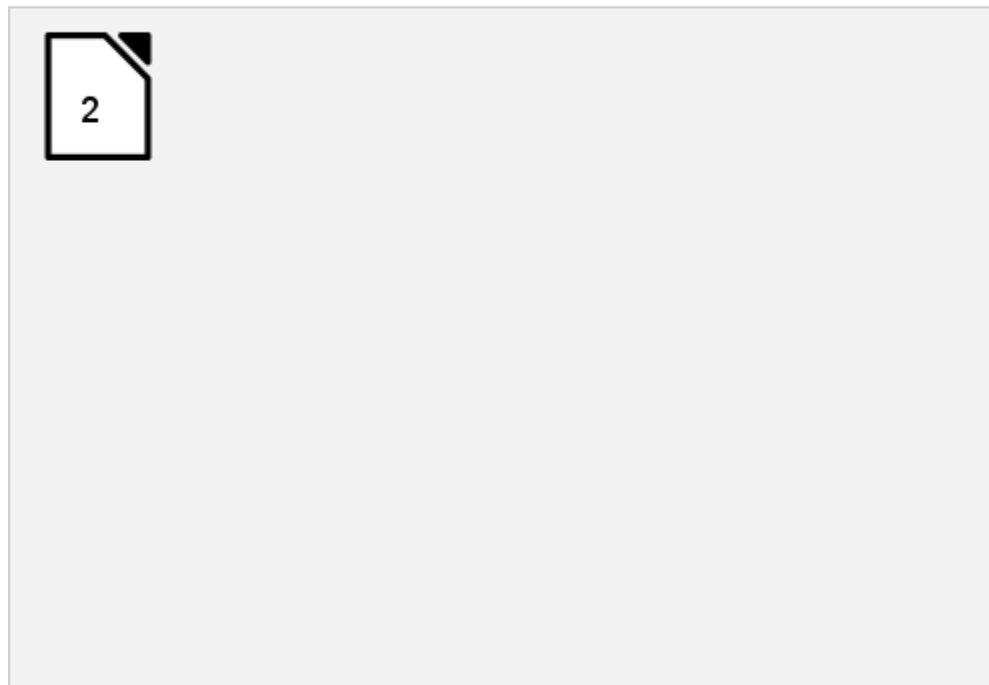
The screenshot shows the 'EPUB Export' dialog box with two main sections: 'General' and 'Metadata'. The 'General' section includes dropdown menus for 'Version' (set to EPUB 3.0), 'Split method' (set to Heading), and 'Layout method' (set to Reflowable). It also features text input fields for 'Custom cover image' and 'Custom media directory', each with a 'Browse...' button. The 'Metadata' section contains text input fields for 'Identifier', 'Title', 'Author', 'Language', and 'Date'. At the bottom, there are buttons for 'Help', 'OK', and 'Cancel'.

# Footnotes

- And their special form: image popups



this is the second para, before [link](#) after.



# Fixed layout

- Quite similar to PDF, just on top of XHTML and SVG:

Right page header

## Tables

### Table of Contents

Table of Contents.....	1
Chapter 1.....	1
Chapter 2.....	2

## Chapter 1

First page. This page has an A4 format, so the height is 29.7 cm, the width is 21 cm.

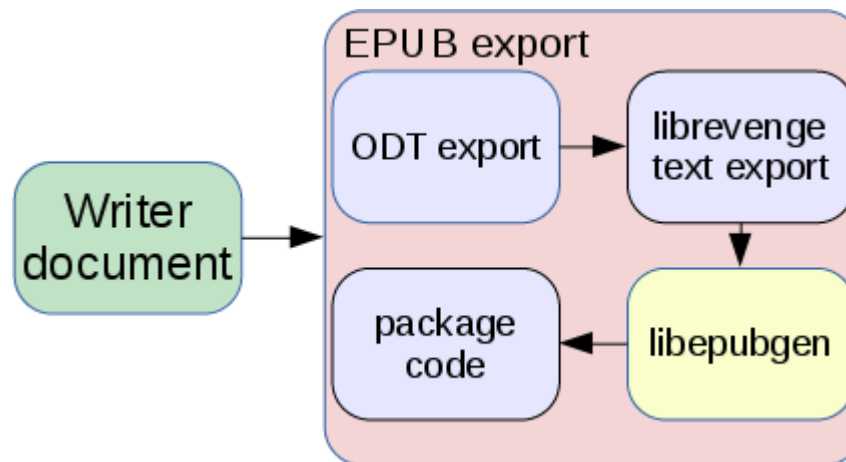
Right page footer on page 1.

How is this  
implemented?



# Building boxes

- Reusing existing libepubgen:



# New features in libepubgen

- Fixed various validation problems, pointed out by epubcheck
- Added EPUB3 support
- Split on headings
  - added user-friendly section names
- Support various image wrap types
- Support embedded fonts
- Support cover images
- Support footnotes
- EPUB3 fixed layout



# Media directory

- Some content doesn't belong to the document itself
  - Author of the file ↔ of the book
  - Large photos
  - Cover images
    - not part of the Writer doc model
  - The media directory can contain all these
  - Foo.odt: foo/ is the default, can be customized





# Fixed layout details

- Libepubgen works with the doc model in general
- Fixed layout requires layout info
- Solution:
  - Reuse SVG export for the individual pages
  - Reuse PDF code
    - To still generate a nice navigation document

# Testing

- Integration tests:
  - (F)ODT input
  - At the end parse the output package
  - Assert XHTML with XPath
  - CSS testing:
    - `aCssDoc = parseCss("foo.css");`
    - `CPPUNIT_ASSERT_EQUAL(  
    "Liberation Mono",  
    getCss(aCssDoc, "heading1", "font-family"));`



# Thanks

- Collabora is an open source consulting company
  - What we do and share with the community has to be paid by someone
- Nou&Off in cooperation with a customer sponsored this work



# Summary

- EPUB is kind of the new PDF
  - Writer export ships in LibreOffice 6.0
  - Converts Writer documents to ebooks
  - First librevenge-based export filter in LibreOffice
- Thanks for listening! :-)
- Slides: <https://vmiklos.hu/odp/>

