

# LibreOffice

The Document Foundation

## libvisio - an open source library for reading Visio documents

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# Import filters and ODF adoption

## Do import filters prevent ODF adoption

- ▶ ODF is the future of the humanity
  - humanity does not know about it as of now
- ▶ Other *de facto* standards
  - Different people use different applications

## Interoperability good for ODF

- ▶ Legacy documents have to be read
  - Leave legacy applications
  - Support legacy file-formats





# Agenda

## How we did it

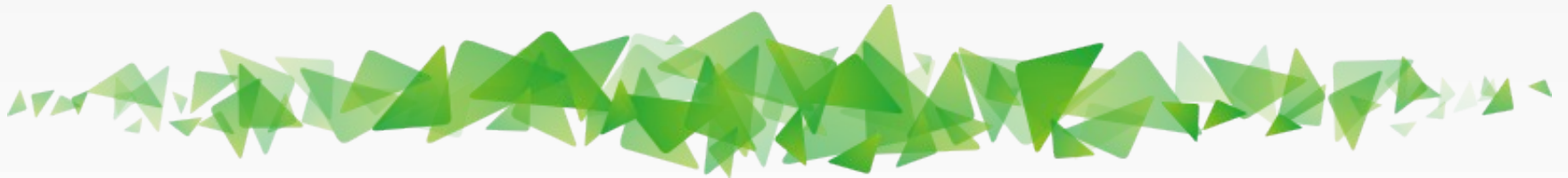
- ▀ Framework used
- ▀ Missing file-format documentation
- ▀ Collaboration patterns

## What we support

- ▀ Supported features
- ▀ Missing features



# How we did it





# No wheel reinvented

## Reuse, embrace and extend

- ▀ ODF as interchange format
  - Way import filters communicate with LibreOffice
- ▀ Libwpng's application programming interface
  - Reusing OdfGenerator class implementing this interface

## Speedy development

- ▀ No need to write any boilerplate code
- ▀ The core written as a standalone library
  - Faster testing





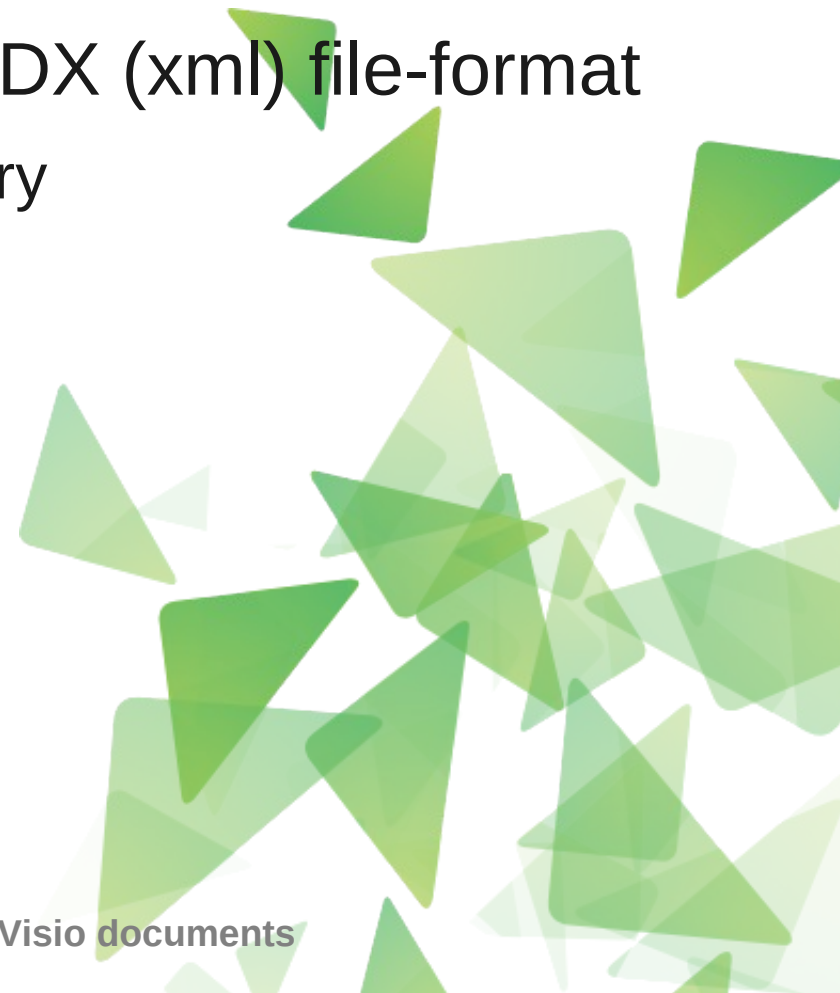
# File-format documentation

## None :)

- Marginally useful user and developer documentation of MSDN
- Possibility to save using the VDX (xml) file-format
  - Basically XML dump of the binary
  - The same concepts

## Reverse engineering

- Based on *re-lab*'s work
  - oletoy







# The team



libvisio - an opensource library to parse Visio documents



# Opensource collaboration I

## Focus on getting “some” result early

- ▼ First embedded raster images
  - Libreoffice is able to render them without further processing
- ▼ Next graphic primitives
  - “Everything is just a **path**”

## Develop tools along the implementation

- ▼ Introspection tool improved constantly
  - Driven by the need of the implementation
  - Reflecting growing understanding of file-format
  - Don't solve problems that don't exist





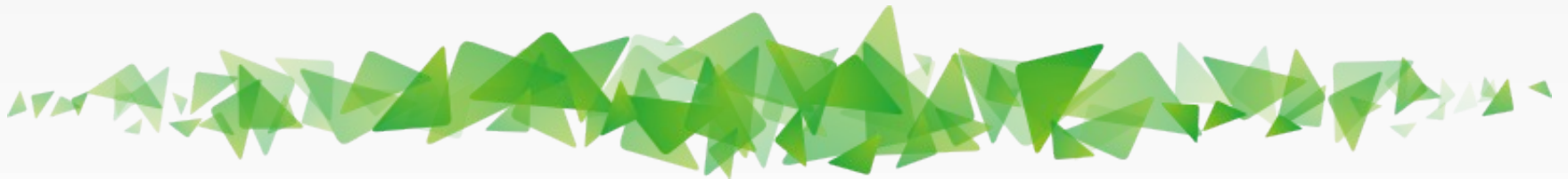
# Opensource collaboration II

## Design the software as you go

- ▶ Some code is better than abstract design
  - Project financed by Google as part of Summer of code
  - Possibility to find and fix real bugs
  - Little communication overhead
    - Communication by code
  - Learning by doing mistakes and fixing
- ▶ Release soon, release often
  - A release every 2-3 weeks
  - Good to have intermediary targets



# Level of completion





# Supported features

- Graphic primitives
  - Converted or emulated
  - Uniform and non-uniform rational splines, Infinite lines
- Stencils
  - Linked objects
- Styles
  - Fill
    - Colour, opacity, colour and opacity gradients (within the limits of ODF)
  - Line
    - Colour, opacity, dash-array (within the limits of ODF)
  - Text formatting
    - Paragraph, Character and Text block properties (within ...:-)



# Missing features

## Text objects

- Rotations and flips
- Enhanced support of fields

## Line and fill

- Custom line and fill patterns
- Enhanced line start and end markers support

## Embedded raster

- Flips and rotations

## One picture better then 100 words

- A demo





# When can I try it?

For the braves, immediately!

- ▼ <http://dev-builds.libreoffice.org/daily/>
  - Builds produced by tinderboxes

## LibreOffice 3.5

- ▼ One of the flag features of the upcoming release
  - Possibility to view Visio diagrams on Unix, Linux, Mac

## Patches welcome

- ▼ Anybody can contribute
  - A missing pet feature
  - An annoying bug





# LibreOffice in short

## Contacting us

- ▶ Development: [libreoffice@lists.freedesktop.org](mailto:libreoffice@lists.freedesktop.org)
- ▶ Localization: [l10n@documentfoundation.org](mailto:l10n@documentfoundation.org)
- ▶ IRC: #libreoffice on freenode.net

## Useful links

- ▶ Planet: <http://planet.documentfoundation.org>
- ▶ Wiki: <http://wiki.documentfoundation.org>



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