SmartArt Support for LibreOffice

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The Document Foundation (TDF)

FOSDEM 2023
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Introduction

• SmartArt was introduced in MS Office 2007
• Nice way to create complex diagrams with little effort
  – Modifiable, customizable
  – The same content can be presented in different layouts
• LibreOffice had basic support for SmartArt from the beginning
• Since then, SmartArt import received many improvements
  – Thanks to Miklos Vajna and Regina Henschel!
  – See FOSDEM 2019 presentation from Miklos
• I will discuss the detailed status
Import / Display

• The import is very good

• Works nearly perfect
  – The compatibility has been tested with MS Office Online
  – Tested with all the possible layouts
  – Few bugs with ~200 different layout and configuration
Saving / Editing

- Saving back to OOXML
  - OK when no modification is done
  - Converting to shape is a one-way road

- Editing is very limited
  - Considered experimental only
  - Not stable at all
  - Saving back is not possible
  - Not usable for production

- An effort to improve that in progress
  - Armin Le Grand

Click here while experimental features are enabled in LO
ODF Compatibility

- ODF compatibility is nonexistent
- It is not possible to save SmartArt to ODF
  - Saving will do a conversion to shapes
  - There is no going back!
- Development path
  - Define similar constructs in ODF
  - Create routines for loading, saving and conversion
Application Support

- Writer ✔
- Impress ✔
- Calc ✗
Remaining Bugs

- Remaining issues: ~25 bugs in metabug tdf#106547
  - Minor problems
    - Text rendering (positioning / spacing / font / color / rotation)
    - Rendering defects
    - Not always happening
  - Old MS Office support (versions prior to MSO 2016)
  - 3d layouts
Text Rendering

- Text rendering is sometimes different
  - Paragraph spacing
  - Character spacing
  - Exact font metrics
  - Text Color
  - Rotation
Minor Rendering Problems

Funnel

PowerPoint

LibreOffice 7.6 Dev
3D Layouts

- 3d layouts are not supported ❌
  - The output is still meaningful
LibreOffice sometimes does better!

- Internationalization
  - Bidirectional text

MS Office

LibreOffice 7.6 Dev
Questions?

- Any questions?