



Collabora Productivity

# Improving interoperability of Writer's features

By Szymon Kłos

Software Engineer at Collabora Productivity

[szymon.klos@collabora.com](mailto:szymon.klos@collabora.com)

+SzymonKłos

# Agenda

- DOCX / DOTM support for AutoText
- Documents embedding in DOC / DOCX
- Watermark

**AutoText**

# What is AutoText?

- Content generator based on saved patterns
- Useful to insert often used parts of the document
- Content may be complex, not only plain text (tables, images, ...)
- Shortcuts can be used eg. type “dt” (dummy text) and press F3

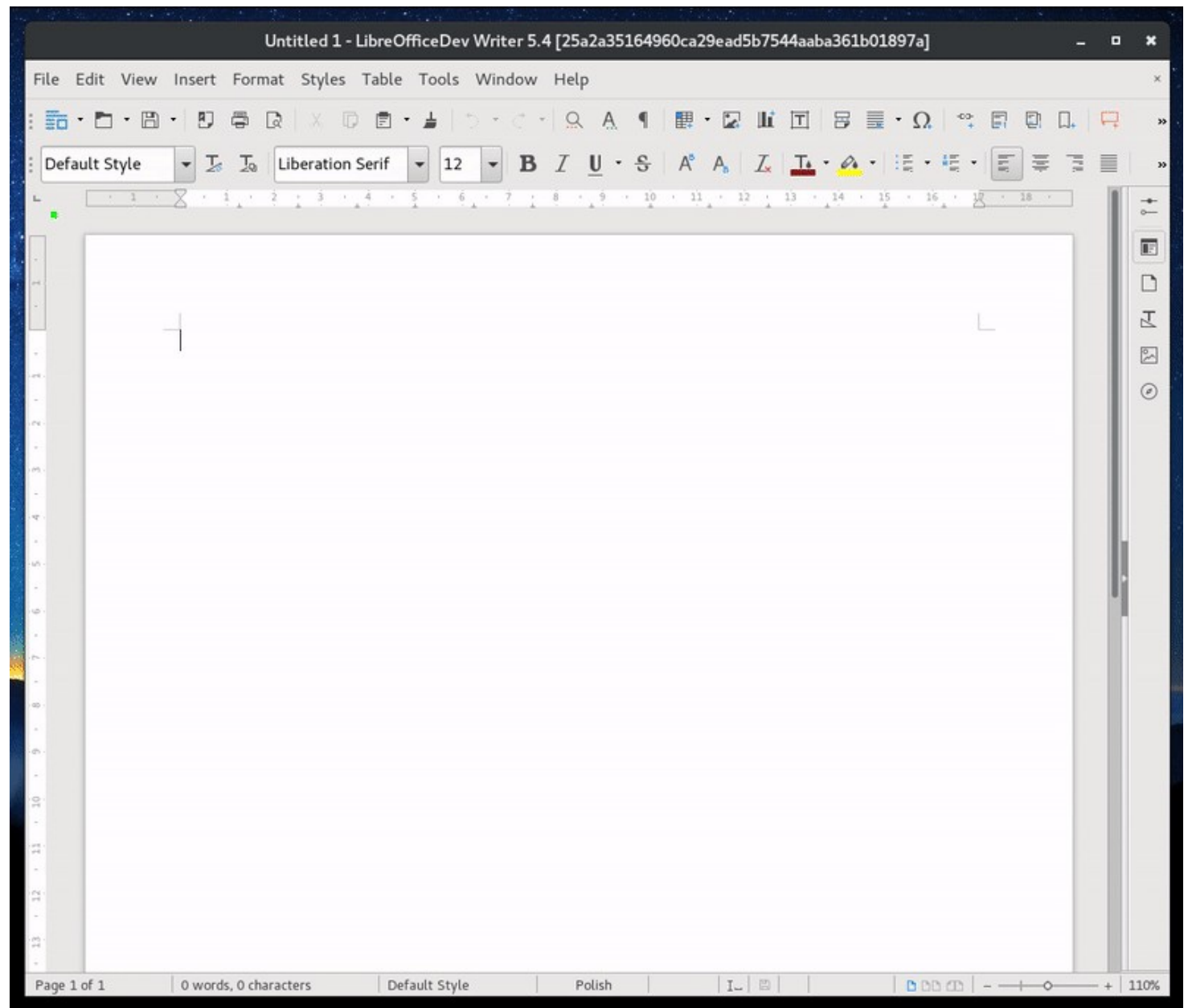
# How AutoText patterns are imported?

- New by example from selection
- Loaded from file
  - Not every normal document
  - Special storage inside (glossary in case of DOCX)
  - One file can contain multiple entries
- Import was possible from DOC
- DOCX support was missing

# What has been done?

- Support for importing patterns from DOCX and DOTM
- Reading glossary.xml using writerfilter
- Each glossary entry added to new section
- One difference in DOTM - additional empty line on the beginning of each section → removed

# Demo

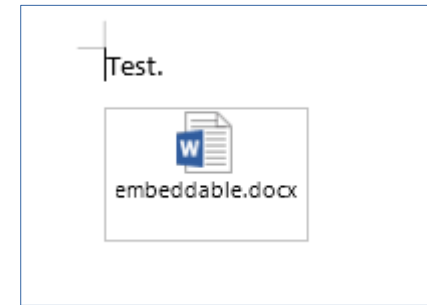


# Documents embedding in DOC/DOCX



# Embedding documents

- Two modes:
  - Icon – opens new window with embedded file
  - Content – opens “in-place”
- Before we had many issues:
  - error dialogs
  - missing content
  - non editable embeddings
  - Embeddings opened in very small windows
- Problems depending on file formats (DOC in DOCX, DOCX in DOCX, etc.)
- Implementation depending on platform



# Many different cases

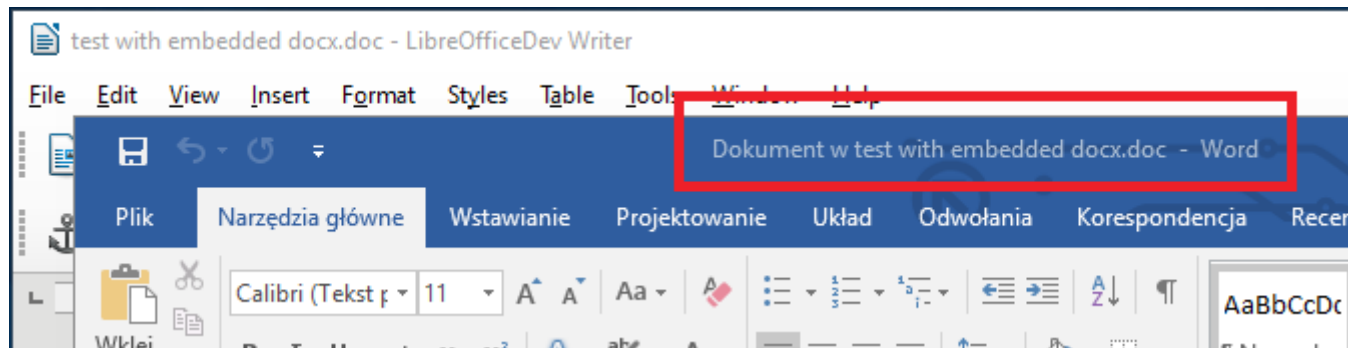
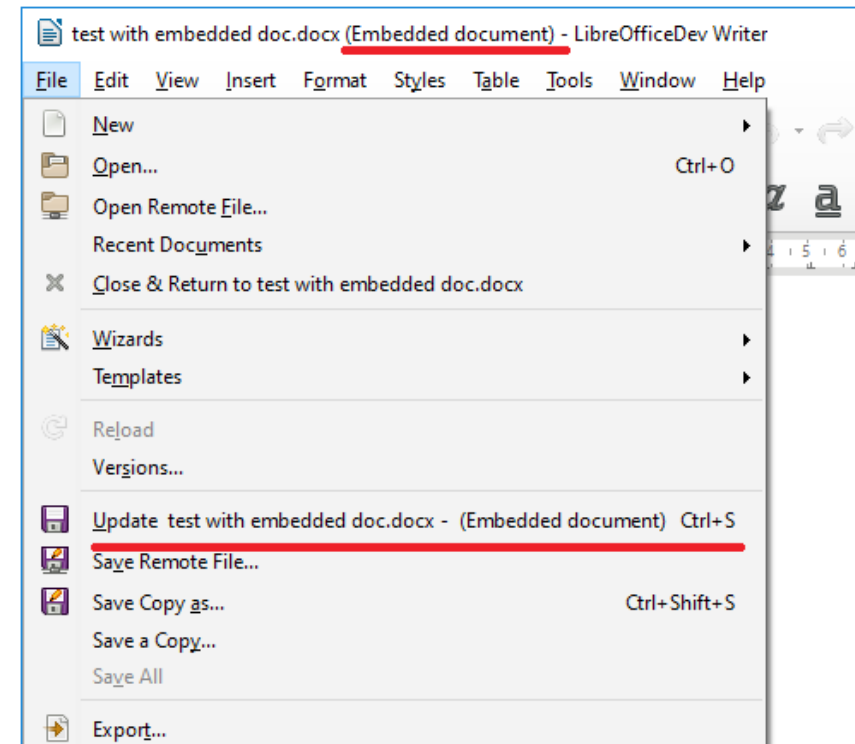
Embedded	DOC	DOCX	XLS	XLSX
Main				
DOC	opens web view	Word if installed / small window		Excel if installed / error
DOCX		Missing icon, in-place	small window	In-place

# Causes

- Only basic functionality was supported
- All over the code “TODO” annotations
- Assumption that document is inserted in content mode (ignored icon mode) – caused incorrect size of windows
- Missing support for Windows when MS Office wasn't installed (some linux-only code to extract OLE storages)

# Slightly improved UX

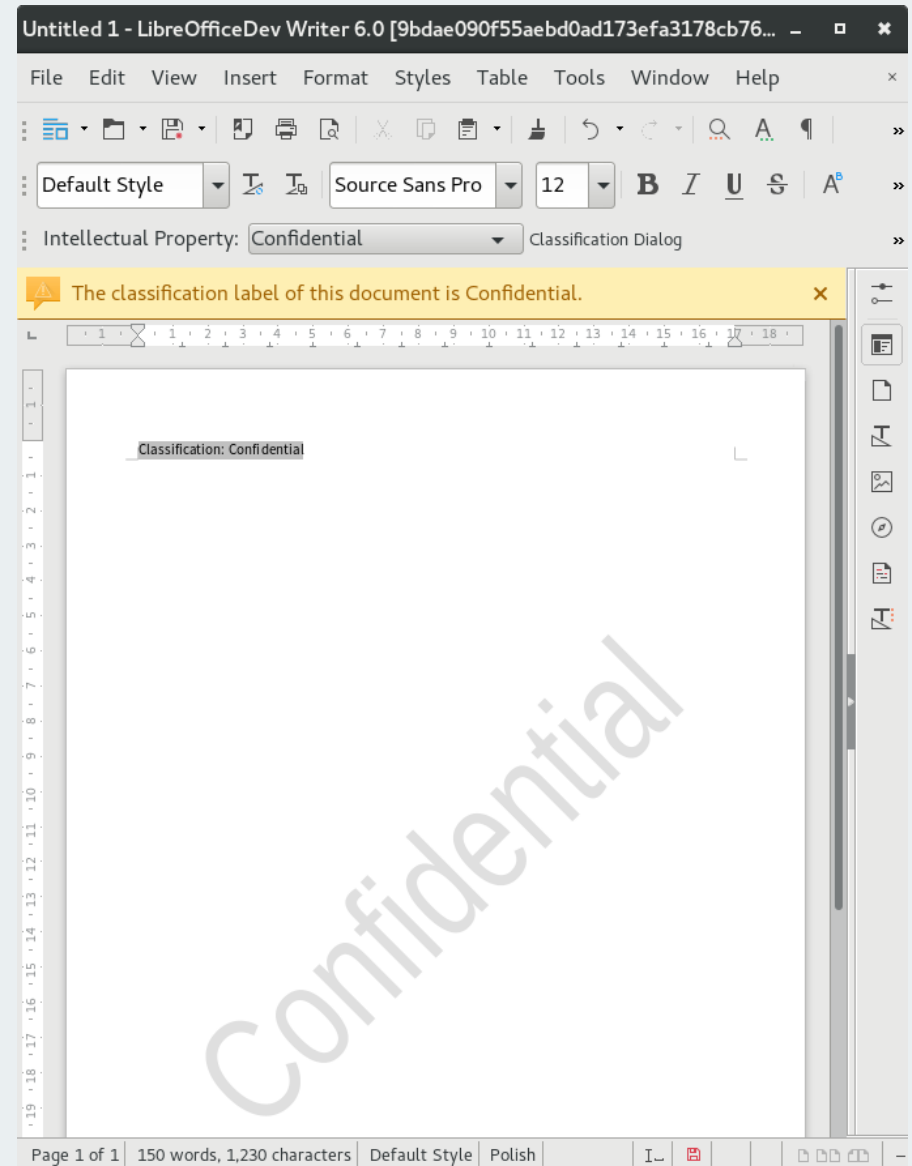
- Passing document title to MS Office when used (before was “Untitled”)
- Inform user on the window’s title bar which document is embedded
- Updated menu entry “Update”



**Watermark**

# Evolution

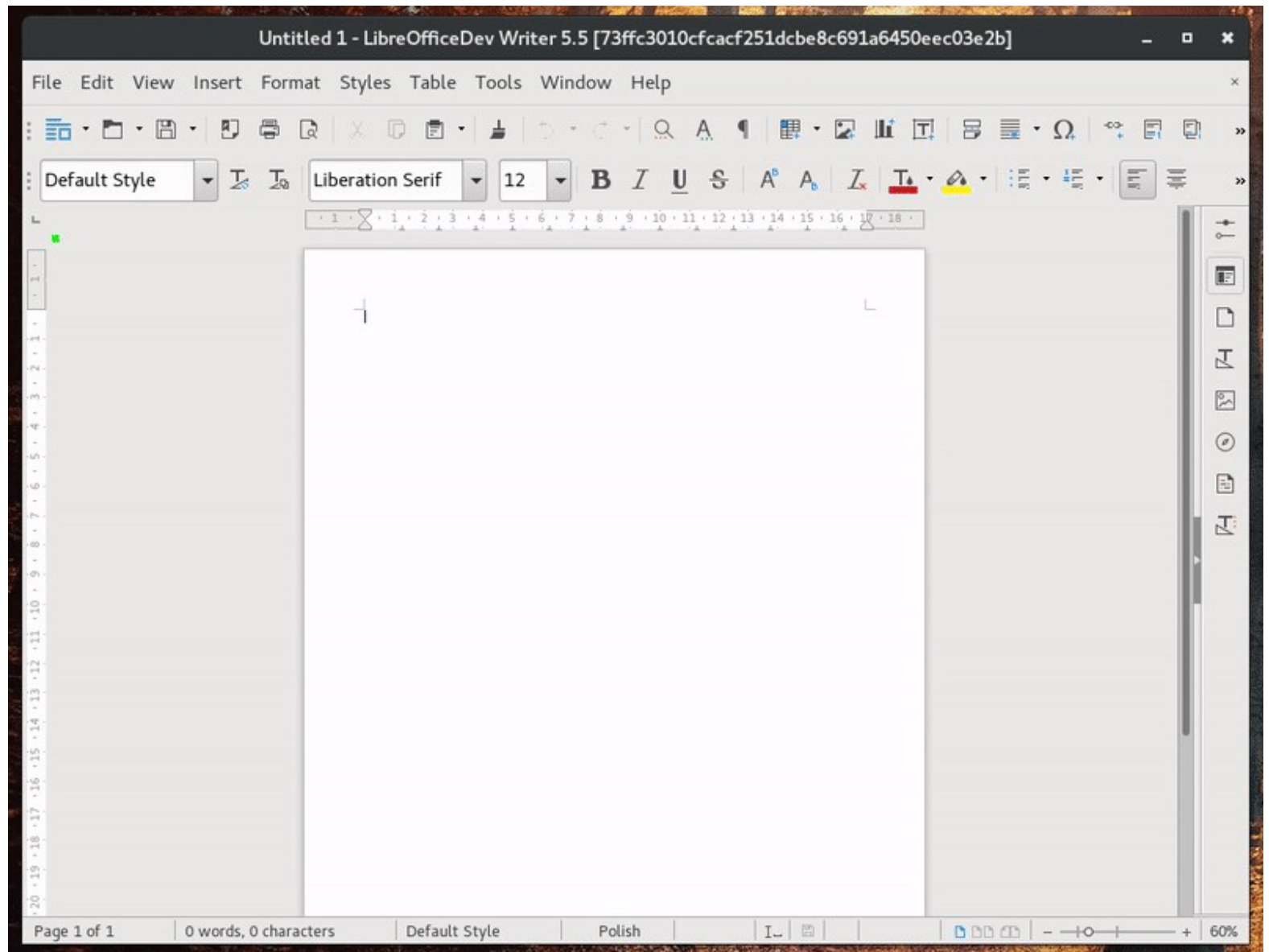
- Extend watermark from the TSCP classification with possibility to change text, font, color, angle and transparency
- Add some simple UI to insert & edit watermarks
- Should be a quick task...



# How watermark works?

- Shape inserted into header → enables header
- Thanks to that appears on each page
- Placed in the background to not cover text
- Have to be applied to all page styles

# Demo





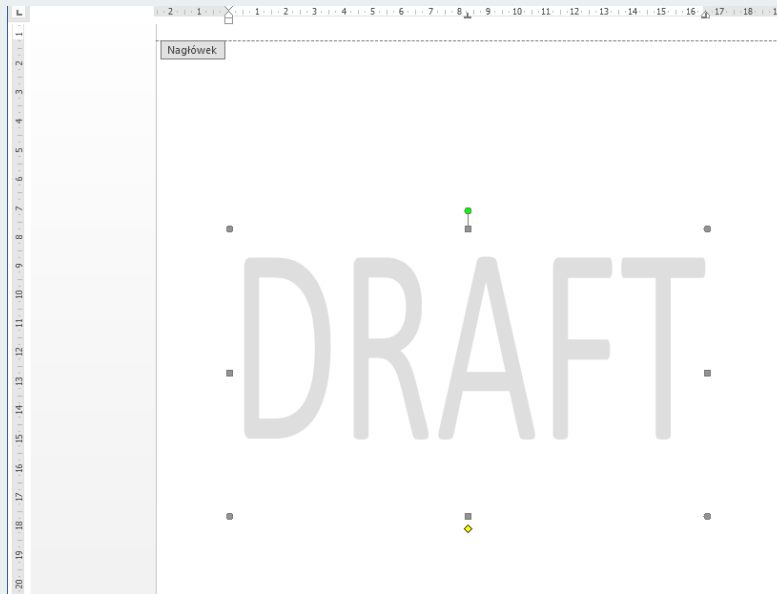
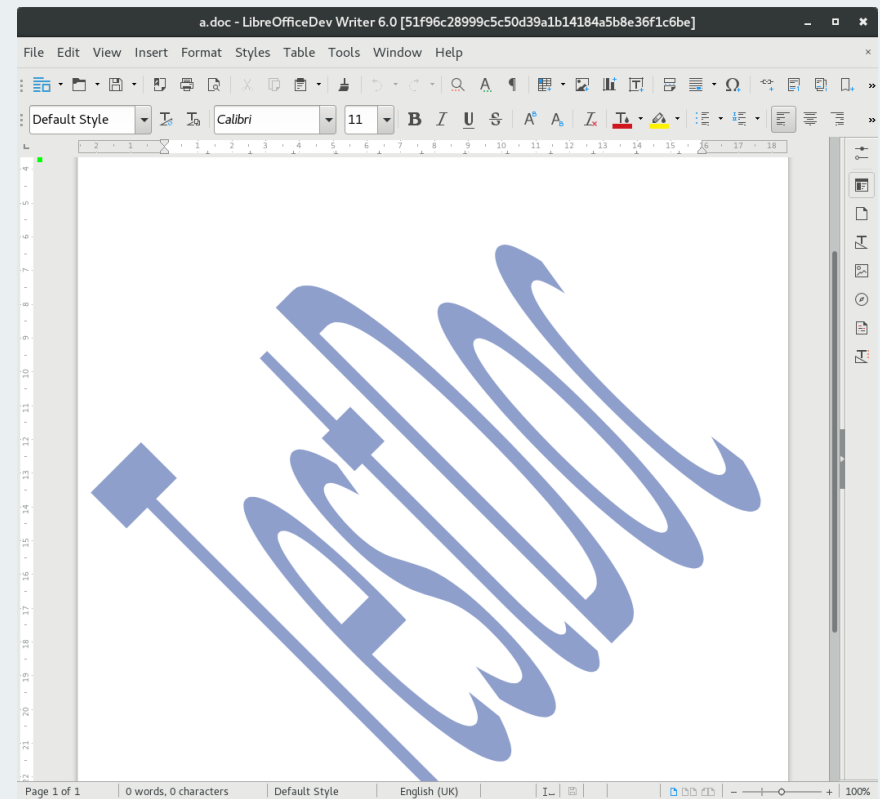
# Interoperability problems

- Saved watermark wasn't detected by other office suits
- Old export bugs:
  - Resized text on each save in DOC
- Missing import/export of properties
  - DOCX: font
  - RTF: font, size, color, transparency (was visible as plain text)

# Broken DOC export

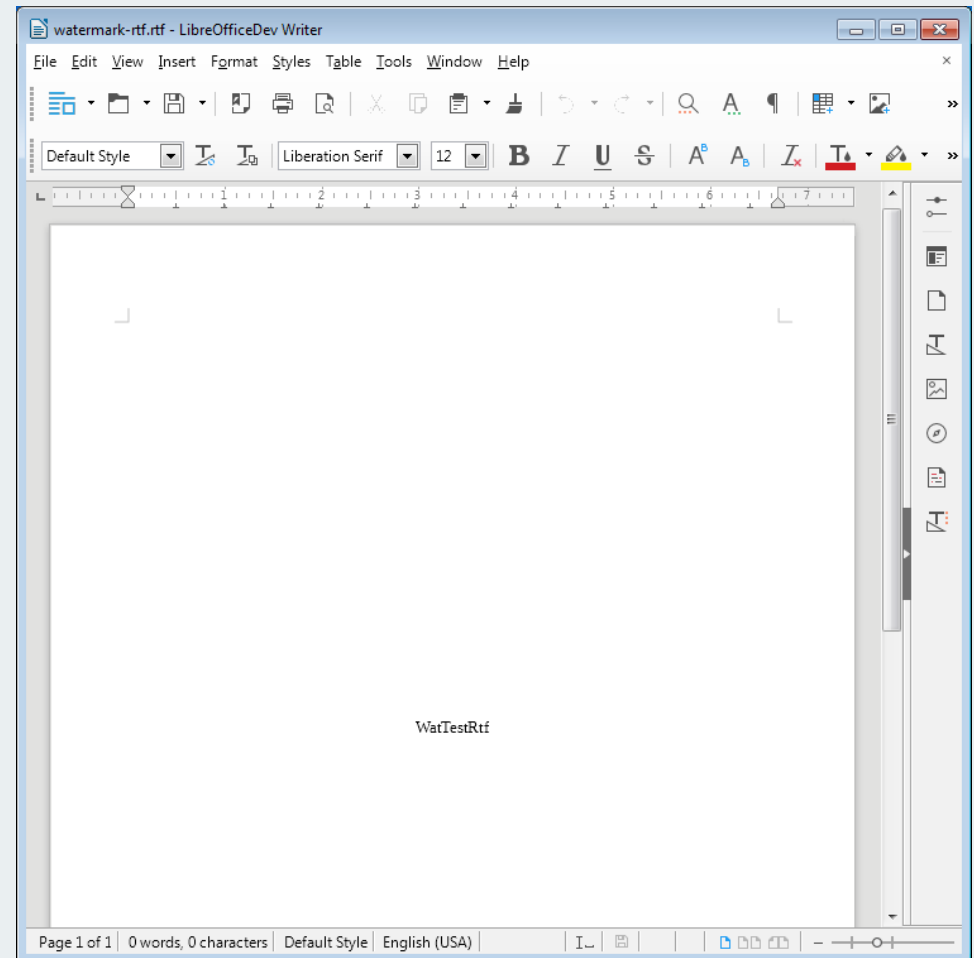
Watermark should have some padding.

“best fit” not “fill the frame”



# Poor RTF support for text shapes

Watermark was imported as a plain text. Font, color, size and transparency properties weren't loaded or saved.





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# Thank you!

**By Szymon Kłos**

szymon.klos@collabora.com

+SzymonKłos