Interoperability Improvements

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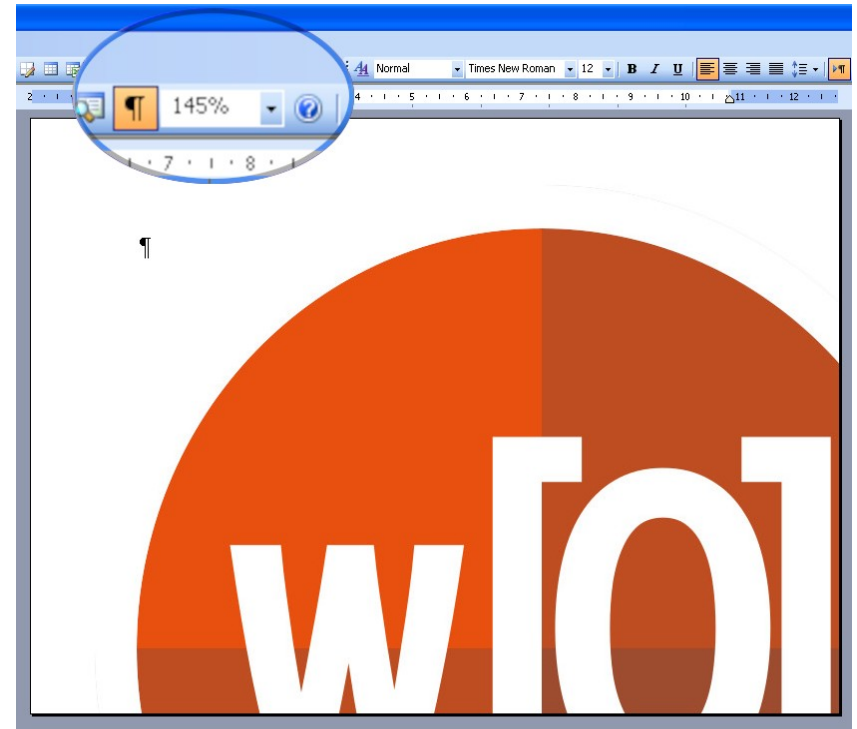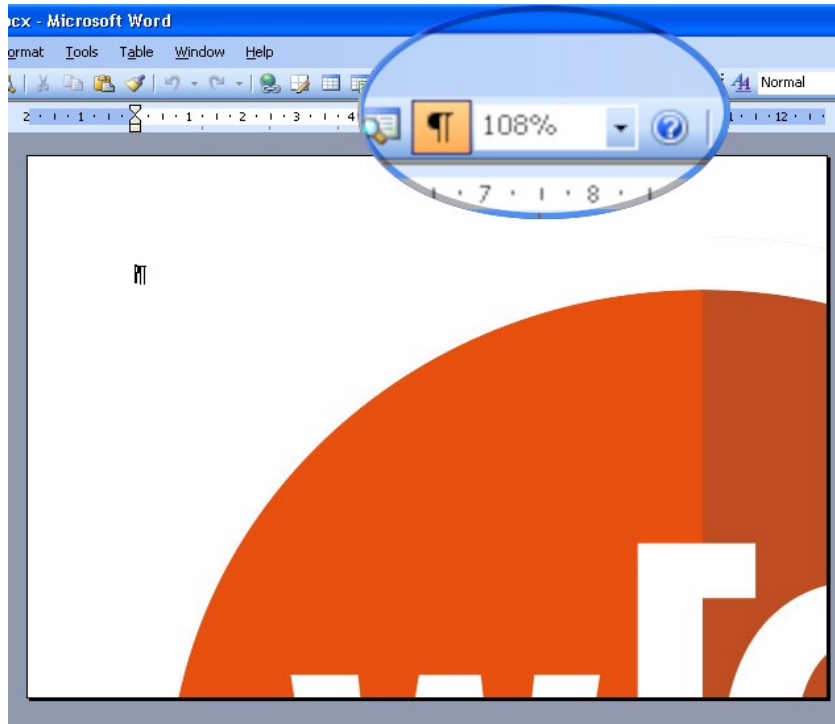
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Page backgrounds for DOCX

Both ODF and DOC formats had working document backgrounds, but not DOCX (only solid colours)

- now DOCX can import and export into the default page style
  - images/textures (tiled images)
  - patterns (exported as textures)
  - gradients

- also fixed tiled export for DOC

Caveat: MSO is pixel based
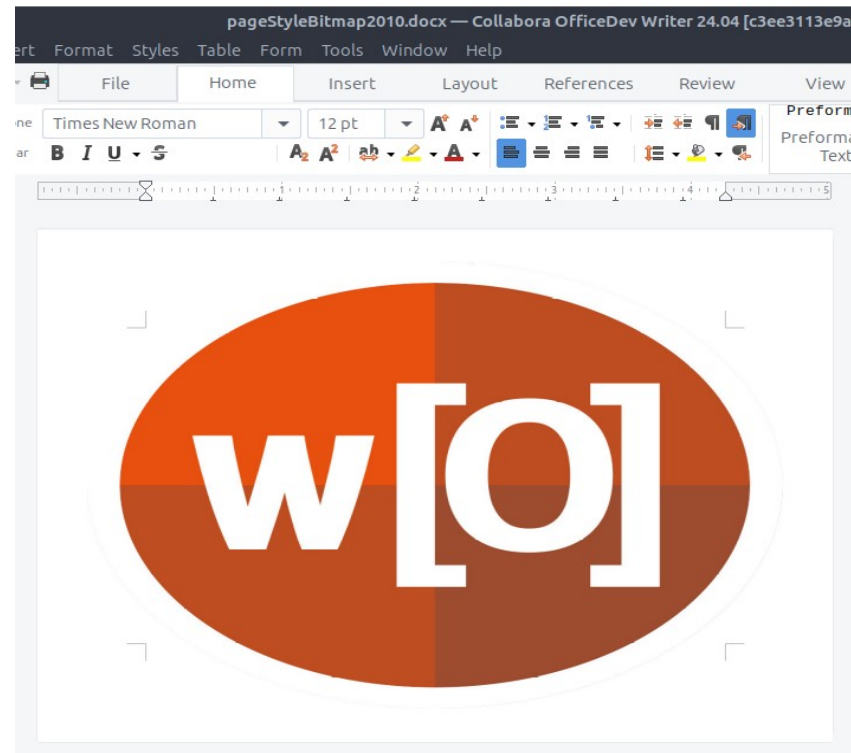
Caveat: MSO print/PDF output

Caveat: MSO always tiles/ignores "frame"

Collabora Office 24.04 is consistent

- How it looks at 108%

- How it looks at 145%

- How it looks exported to PDF

- How it looks when printed

- Primary image use case: ODF → DOCX

- Tiled content is highly interoperable

Difficulty: described by VML, not DML

VML generally was only used in Word 2007

- import/export code was buggy since alternative DML always overrides

- hatching is not supported by VML (not possible for DOCX)

Page Style: Default Page Style

Organizer   Page   **Area**   Transparency   Header   Footer   Borders
Columns   Footnote

None   Color   Gradient   Image   Pattern   Hatch

framePr

Frame wrapping and placement

Multiple ways to describe frames

Many documents that originated as DOC format use the older framePr markup to describe the frame's location and wrapping style

- VML/DML describe a frame, and include paragraphs inside

- framePr frames comes from consecutive paragraphs whose properties include identical frame descriptions

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Many framePr fixes landed in 23.05

- Get framePr settings from **inherited parent styles**

- Fixed lost relative positioning / wrong absolute positioning

- Fixed missing frames, combined frames that should be separate, split frames that should be combined

- Prevented overlapping frames

- Fixed lost rotation

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Thank you!

By Justin Luth

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