Latest improvements in PPTX support

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Agenda

- Export of group shapes
- Export of embedded videos
- Preservation of custom XML and VBA stream on export
- Broken files
- Issues around animations
- Compatibility of animation time
- Text layout – linespacing, auto size
- Theming
- Charts labels
- Text effects – text on arc
Broken files

- META Bug: tdf#104787 (25 in total)
- Issues found mostly by: Aron Budea and Xisco Faulí
- Solved by: Szymon Kłos, Mark Hung, Jan Holesovsky, Tamás Zolnai
- MSO error after export using LibreOffice
- Mainly missing required elements in the xml structure
- Sometimes incomplete elements
- Big number of bugs related to animation

```c
OpenParentElement()
.
WriteContent() ← nothing here
.
CloseParentElement()
```
Issues around animations

Root cause:

- Lack of different value type support (string, floating-point)
- Universal element `<p:to>` (color, position, time, etc. ...)

Improved animation or slide transition types:

- Zoom
- Color transform
- Grow-shrink
- Motion
- And more ...
Compatibility of animation time

- Custom transition time import & export (tdf#115394)
- Changed imported standard values to match with MSO:
  - Fast – 0.5s
  - Medium – 0.75s
  - Slow – 1s
- 0s -> 0.01s
Text layout – linespacing

- Tdf#114628 – incorrect linespacing in text boxes

Correct:

Before fix:

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Text layout – fit text size to match frame

- Automatic size of text depending on text box size
- On export save the “fontScale” value as preferred scaling factor for compatibility (MSO recalculates this value itself but after first edit)
- LO doesn’t use that value – layouting is always performed
Theming

- tdf#84205 – Document color themes were implemented
- Surprise in the code: very big chunk of PPTX document was hardcoded and placed in every document on export
- Added code to import & preserve color themes in the output file
- We don’t have any UI to define color themes in the document

```c
#define SYS_COLOR_SCHEMES "      <a:dk1>
      <a:sysClr val="windowText" lastClr="000000"/>
    </a:dk1>
    <a:lt1>
      <a:sysClr val="window" lastClr="FFFFFF"/>
    </a:lt1>
  ...```

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Before

Several PPTX Issues Fixed by Collabora

This text was vertically shifted before the issue was fixed.

See the wrong colors previously...

Now fixed!
Several PPTX Issues Fixed by Collabora

This text was vertically shifted before the issue was fixed.

See the wrong colors previously...

Now fixed!
Charts labels

Few issues here:

- Wrong position (enum)
- Shorting wasn’t supported
- Labels were unformatted
- Fields were not supported:
  - Row, Column, Value, etc. ...
Complex chart labels

- Text is now formatted
- Multiple lines are supported
- Fields
  - Value
  - Column
Text effects – text on arc

- There is a font transformation option which may be applied for a text box
- It was shown as a plain text – not curved as you can see below:
- Complex adjustment
- Fontwork
- tdf#116350
Preset text transformations
Thank you!

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