

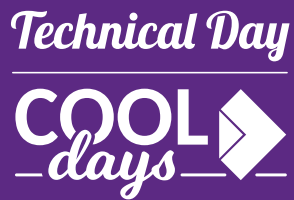
# Document Themes

Tomaž Vajngerl

tomaz.vajngerl@collabora.com



Collabora  
Online





# What are Document Themes?

- Makes colors, fonts, effects independent to styles
- Allows to quickly change the document design

**Title**  
Subtitle

---

1. Heading 1 - 1 / Paragraph Color  
Podcasting operational change management inside of workflows to establish a framework. Taking seamless key performance indicators offline to maximise the long tail. Keeping your eye on the ball while performing a deep dive on the start-up mentality to derive convergence on cross-platform integration.

1.1 Heading 2 - 1  
Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

1.1.1 Heading 3  
Bring to the table win-win survival strategies to ensure proactive domination. At the end of the day, going forward, a new normal that has evolved from generation X is on the runway heading towards a streamlined cloud solution. User generated content in real-time will have multiple touchpoints for offshoring.

1.2 Heading 2 - 2  
Capitalize on low hanging fruit to identify a ballpark value-added activity to beta test. Override the digital divide with additional clickthrough from DevOps. Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.

What?

Globally incubate standards compliant channels before scalable benefits. Quickly disseminate superior deliverables whereas web-enabled applications. Quickly drive clicks-and-mortar catalysts for change before vertical architectures.

2. Heading 1 - 2  
Completely synergize resource taxing relationships via premier niche markets. Professionally cultivate one-to-one customer service with robust ideas. Dynamically innovate resource-leveling customer service for state-of-the-art customer service.

Just a rectangle

**Title**  
Subtitle

---

1. Heading 1 - 1 / Paragraph Color  
Podcasting operational change management inside of workflows to establish a framework. Taking seamless key performance indicators offline to maximise the long tail. Keeping your eye on the ball while performing a deep dive on the start-up mentality to derive convergence on cross-platform integration.

1.1 Heading 2 - 1  
Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

1.1.1 Heading 3  
Bring to the table win-win survival strategies to ensure proactive domination. At the end of the day, going forward, a new normal that has evolved from generation X is on the runway heading towards a streamlined cloud solution. User generated content in real-time will have multiple touchpoints for offshoring.

1.2 Heading 2 - 2  
Capitalize on low hanging fruit to identify a ballpark value-added activity to beta test. Override the digital divide with additional clickthrough from DevOps. Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.

What?

Globally incubate standards compliant channels before scalable benefits. Quickly disseminate superior deliverables whereas web-enabled applications. Quickly drive clicks-and-mortar catalysts for change before vertical architectures.

2. Heading 1 - 2  
Completely synergize resource taxing relationships via premier niche markets. Professionally cultivate one-to-one customer service with robust ideas. Dynamically innovate resource-leveling customer service for state-of-the-art customer service.

Just a rectangle

**Title**  
Subtitle

---

1. Heading 1 - 1 / Paragraph Color  
Podcasting operational change management inside of workflows to establish a framework. Taking seamless key performance indicators offline to maximise the long tail. Keeping your eye on the ball while performing a deep dive on the start-up mentality to derive convergence on cross-platform integration.

1.1 Heading 2 - 1  
Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

1.1.1 Heading 3  
Bring to the table win-win survival strategies to ensure proactive domination. At the end of the day, going forward, a new normal that has evolved from generation X is on the runway heading towards a streamlined cloud solution. User generated content in real-time will have multiple touchpoints for offshoring.

1.2 Heading 2 - 2  
Capitalize on low hanging fruit to identify a ballpark value-added activity to beta test. Override the digital divide with additional clickthrough from DevOps. Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.

What?

Globally incubate standards compliant channels before scalable benefits. Quickly disseminate superior deliverables whereas web-enabled applications. Quickly drive clicks-and-mortar catalysts for change before vertical architectures.

2. Heading 1 - 2  
Completely synergize resource taxing relationships via premier niche markets. Professionally cultivate one-to-one customer service with robust ideas. Dynamically innovate resource-leveling customer service for state-of-the-art customer service.

Just a rectangle



# Document Themes

- Theme colors
- Theme fonts
  - Headings (Major)
  - Body (Minor)
  - For Latin, CJK, Complex scripts
  - Also allows to define a major / minor for a specific language
- Theme format scheme
  - Applicable for shapes (Similar to shape styles)
  - Defines:
    - Line properties
    - Fill properties
    - Background fill properties
    - Effects
      - i.e. Shadow, Blur



# Theme Colors

- Dark color 1-2
- Light color 1-2
- Accent color 1-6
- Hyperlink color, Followed hyperlink color
- Additional color modification with color transformations



# Color Transformations

- Tint, Shade
- Luminance modulation
- Luminance offset
- Saturation modulation
- Saturation offset
- Many more
  - 28 in total
  - Others usually not used



# Adding theme support to LibreOffice (Writer, Calc)



# Work That Was Previously Done

- Prototyping and POC in 2015
  - Theme sidebar – mock theme implementation
  - See my talk at LibreOffice Conference in 2015
  - 8 years ago!
- Theme colors implemented for Impress
  - By Miklos Vajna
  - One theme per master page
  - Some groundwork done



# Groundwork





# Groundwork

- OOXML Import / Export support for themes
  - Previously themes put into a “grab bag”
    - To transport them from import to export
    - and preserve the formatting of documents.
- Need to support everything in themes
  - Document model for all elements
  - Quite some work
  - Existing structures that are similar, but specific to oox module
  - Theme export written from scratch
    - Grab bag can be discarded



# Groundwork

- Document model for Theme
- Collection to hold and manage the themes
  - Themes which can be selected on the UI
  - Should be user extendible
- Way to extend the Color properties with additional theme information (ThemeColor)



# Refactoring - UNO

- For each \*Color property add a \*ColorTheme property
  - Using type XThemeColor
- UnoThemeColor – implements XThemeColor and wraps ThemeColor class
- ThemeColor class
  - Theme color type (dark1-2, light1-2, accent1-6,...)
  - List of transformations (if any)



# Themes in Writer

- Writer has one Sdr Page for the whole document
  - We store the current used theme on the page
  - Similar to Impress – stores the current theme master page
- When a theme is changed:
  - Traverses the document model to search for colors
  - If a color has theme color information...
  - ... calculate the new color from theme information:
    - current theme color for the type (i.e. accent)
    - + apply the color transformations (i.e. shade 10%)



The screenshot displays the LibreOffice Writer application window. The document contains the following content:

# Title

## Subtitle

---

### 1. Heading 1 - 1 / Paragraph Color

Exceeding operational change management inside of *your* *days* to establish a framework. Taking seamless key performance indicators *off* to maximise the long tail. Keeping your eye on the ball while performing a deep dive on the start-up mentality to derive convergence on cross-platform integration.

#### 1.1 Heading 2 - 1

Leverage agile frameworks to provide a robust synopsis for high level overviews. Iterative approaches to corporate strategy foster collaborative thinking to further the overall value proposition. Organically grow the holistic world view of disruptive innovation via workplace diversity and empowerment.

##### 1.1.1 Heading 3

Bring to the table win-win survival strategies to ensure proactive domination. At the end of the day, going forward, a new normal that has evolved from generation X is on the runway heading towards a streamlined cloud solution. User generated content in real-time will have multiple touchpoints for *offshoring*.

#### 1.2 Heading 2 - 2

Capitalize on low hanging fruit to identify a ballpark value-added activity to beta test. Override the digital divide with additional *clickthrough* from DevOps. Nanotechnology immersion along the information highway will close the loop on focusing solely on the bottom line.

*What?*

Globally incubate standards compliant channels before scalable benefits. Quickly disseminate superior deliverables whereas web-enabled applications. Quickly drive clicks-and-mortar catalysts for change before vertical architectures.

### 2. Heading 1 - 2

Completely *synergize* resource taxing relationships via premier niche markets. Professionally cultivate one-to-one customer service with robust ideas. Dynamically innovate resource-levelling customer service for state-of-the-art customer service.

Collaboratively administer turnkey channels where virtual *e-tailers*. Objectively seize scalable metrics with proactive e-services. Seamlessly empower fully researched growth strategies and interoperable internal or "organic" sources.

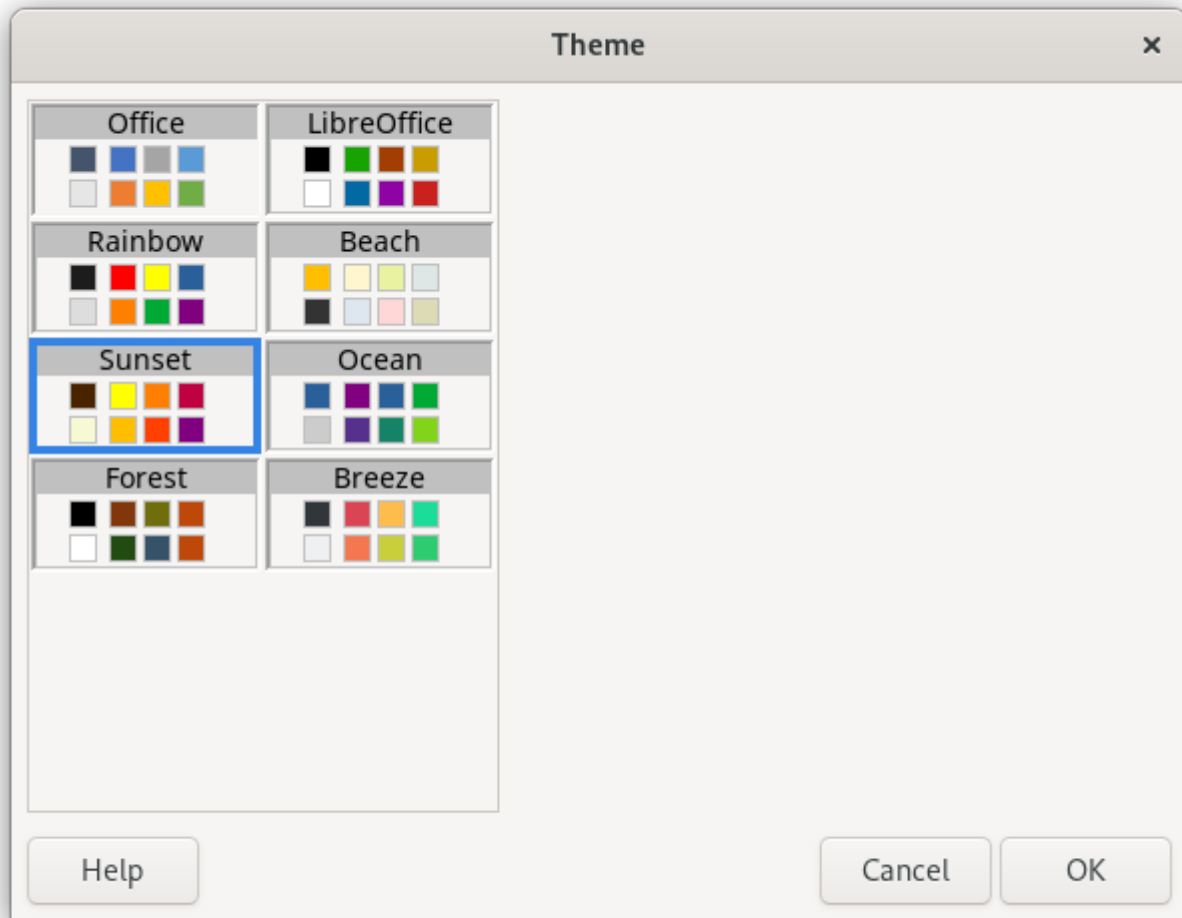
Just a rectangle

The 'Design' sidebar on the right shows the 'Themes' section with various color schemes: LibreOffice, Rainbow, Beach, Sunset, Ocean, and Forest. A 'Theme' dialog box is open, displaying a grid of theme options including Office, LibreOffice, Rainbow, Beach, Sunset, Ocean, Forest, and Breeze. The 'Office' theme is selected.

Page 1 of 2 | 399 words, 3,068 characters | Default Page Style | English (UK) | 99%

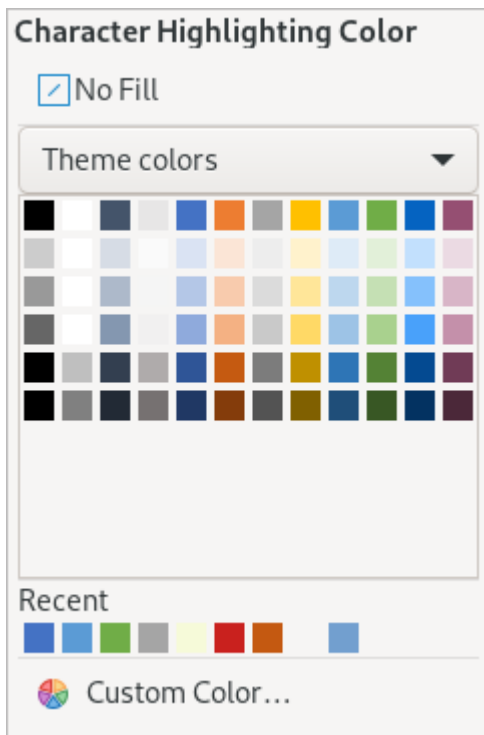


# Theme Dialog





# Theme Color Picker





# TODO



# Thank you!

*By Tomaž Vajngerl*

@CollaboraOffice  
hello@collaboraoffice.com  
www.collaboraoffice.com

