

# Unleash the Power of COOL

## Seamless Integration, Cutting-Edge Features and Empowered Collaboration

Michael Meeks  
General Manager  
michael.meeks@collabora.com



Collabora  
Online



Find us at booth H30



# Meet Michael Meeks

- General Manager, Collabora Productivity
- Founder, The Document Foundation
- 25+ years of Open Source contribution



Michael Meeks  
General Manager  
Collabora Productivity  
@michael\_meeks

# Collabora Productivity

100% Focused on Office  
Making Open Source Rock

**OPEN  
SOURCE  
EXPERIENCE**

# LibreOffice: Our Base

- Collabora is powered by the largest team of certified LibreOffice engineers in the world
- One of the leading contributors to the LibreOffice codebase
- The driving force behind putting LibreOffice in the Cloud
- Collabora Office is our business-hardened, maintained & supported product
- We let a few million customers use LibreOffice before branching and hardening each year

commits to  
**Collabora Online**



commits to  
**LibreOffice base**



LibreOffice Technology

# A shared code-base for apps:



**Collabora  
Online Dev.**

**Collabora Online Development Edition – CODE**

- Perfect for home use or small teams.



**Collabora  
Online**

**Collabora Online - COOL**

- Powerful collaborative online office suite.  
Enterprise version.



**Collabora  
Office** for iOS  
& Android

**Collabora Office for iOS & Android**

- Mobile office suite for tablet and mobile.

# **Collabora Online**

Powerful Online Collaboration

# What is Collabora Online?

## Documents + Spreadsheets + Slides + Drawings

- Viewing and collaborative editing
- Feature rich

## Interoperability with Microsoft formats

- docx, doc, rtf, xlsx, xls, pptx, ppt

## Import filters and viewing for

- PDF, Visio, Publisher and many more

## Powerful WYSIWYG rendering

## On-premise integration

## Architecture – a bet on CPU threads and network



# Collaborative Writer

The screenshot displays the Collaborative Writer application interface. At the top, a menu bar includes options like File, Home, Insert, Layout, References, Review, Format, Form, View, and Help. Below the menu is a toolbar with various editing tools and a style selection area showing 'Heading 3' and 'Title' options. The main workspace contains a document titled 'Sailing Yacht.odt' with the following content:

## Sailing yacht

A **sailing yacht** (US ship prefixes SY or S/Y), is a leisure craft that uses sails as its primary means of propulsion. A **yacht** may be a sail or power vessel used for pleasure, cruising, or racing.[1][2][3] There is no standard definition, so the term applies here to sailing vessels that have a cabin with amenities that accommodate overnight use. To be termed a "yacht", as opposed to a "boat", such a vessel is likely to be at least 33 feet (10 m) in length and have been judged to have good aesthetic qualities.[4] **Sailboats** that do not accommodate overnight use or are smaller than 30 feet (9.1 m) are not universally called yachts. Sailing yachts in excess of 130 feet (40 m) are generally considered to be **superyachts**.<sup>[5]</sup>

Sailing **yachts** are actively used in sport and are among categories recognized by the governing body of sailing sports, [World Sailing](#).<sup>[6]</sup>

### Etymology

Sailing yachts are actively used in sport and are among categories recognized by the governing body of sailing sports, [World Sailing](#).<sup>[6]</sup>

The term, *yacht*, originates from the [Dutch](#) word *yacht* (pl. *jachten*, which means "hunt"),

and originally referred to light, fast sailing vessels that the [Dutch Republic](#) navy used to pursue [pirates](#) and other transgressors around and into the shallow waters of the [Low Countries](#).<sup>[7]</sup>

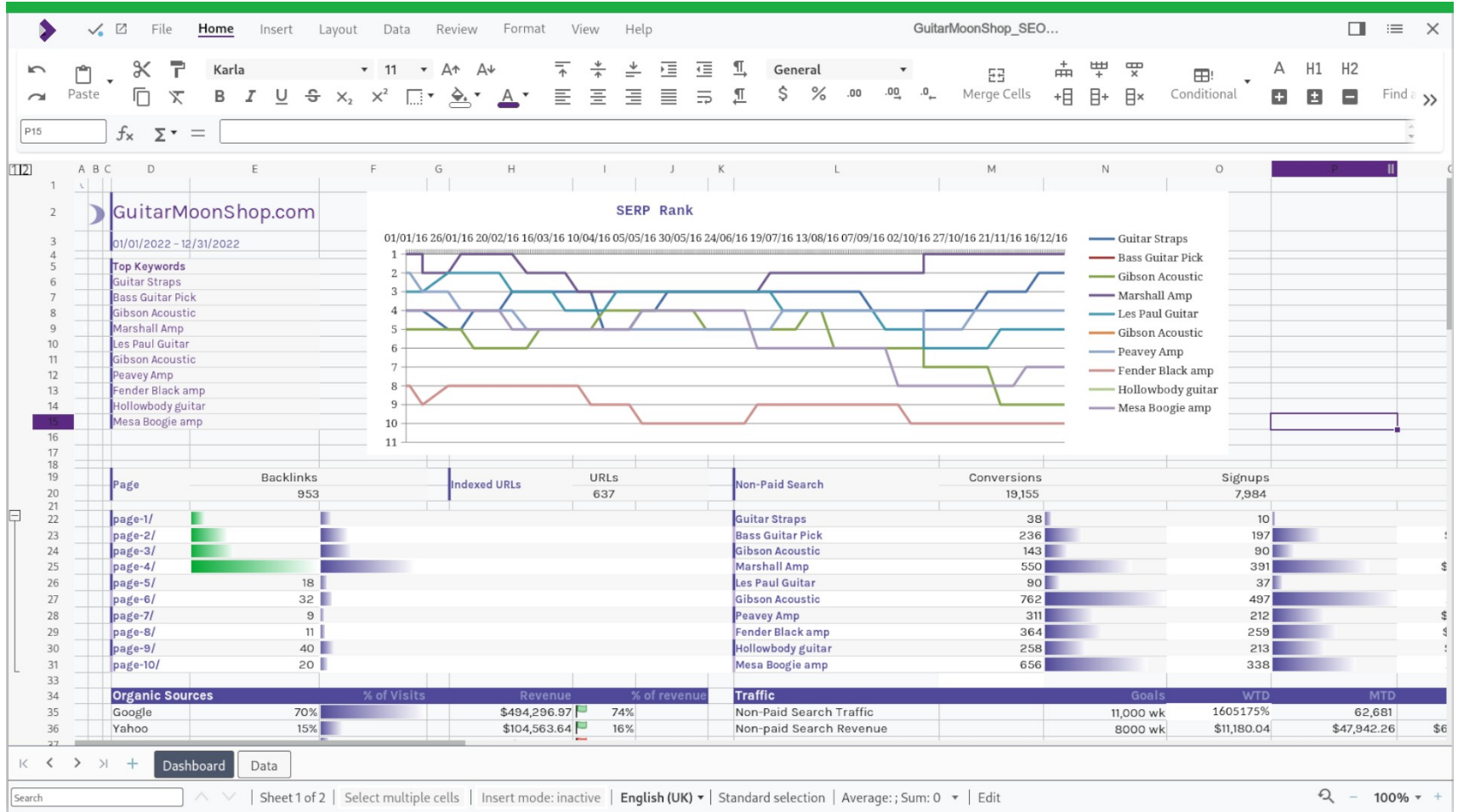
### History

The history of pleasure boats begins with rowed craft in Pharaonic Egyptian times. The history of sailing yachts begins in Europe in the beginning of the 1600s with the building of a pleasure vessel for the son of [King James I of England](#). Pleasure vessels acquired the name *yacht* after the time of [Charles II](#), who spent time exiled in Europe and visited the Netherlands, where a variety of *jachten* were already well developed as pleasure boats for the elite classes since the beginning of the 17th century. Upon his restoration to the English crown, Charles commissioned a [series of naval yachts](#), which included at least one experimental <https://en.wikipedia.org/wiki/...> between two vessels occurred in 1661, followed by the first open sailing competition in 1663 in English waters.<sup>[8]</sup>

The interface also features a sidebar on the right with a 'Headings' list (Sailing yacht, Etymology, History, Evolution of design, Cruising yachts, Racing yachts, Source and photo's), an 'Images' list (Image3, Image2, Image1, Image4), and a 'Bookmarks' list (firstHeading, cite\_ref-Webster\_1-0, cite\_ref-2, cite\_ref-3, cite\_ref--3\_4-0, cite\_ref-Perry\_5-0, cite\_ref-6, Etymology, cite\_ref--1\_7-0). The status bar at the bottom shows 'Page 1 of 3 | 1,050 words, 6,614 characters | Insert | Standard selection | English (UK) | Edit' and a zoom level of 100%.



# Collaborative Spreadsheets



# Collaborative Drawing

Why-collabora-online-s...

File Home Insert Layout Review Format View Help

Why the Collabora Online Subscription?

**Collabora Online**

## Why the Collabora Online Subscription?

Focused on providing high quality software, thoroughly tested and ready for business

Collabora Online is a powerful online office suite, which you can integrate into your own infrastructure. We take digital sovereignty seriously and provide you with all the tools to keep your data secure, without compromising on features. With our supported subscription you get:

- Assured Digital Sovereignty & Security**
  - On-premise / self hosted - control your data, app & network
  - No ties to any storage or authentication system
  - Documents are not broadcasted to all clients, but shared as pixels
  - Each document session gets its own private jail - with no local copy between document editing sessions
  - Simple integration based on a WOPI API providing storage & authentication
- No Limitations for Your Productivity**
  - All code is Open Source
  - Full featured, rapid improvement
  - Available for all major PC and mobile platforms
  - Flexible - many different integrations into 3<sup>rd</sup> party solutions
  - Excellent interoperability with DOCX, XLSX, PPTX and other Microsoft files
- A Cost Effective & Flexible Plan**
  - Simple pricing plan
  - High Availability as standard

Product Management Relationship

Page

Format: User

Orientation: Portrait

Background: None

Margin: Normal (1.90 cm)

Master Page: master-page3

Search

Page 1 of 1 | English (UK) | Edit

120%

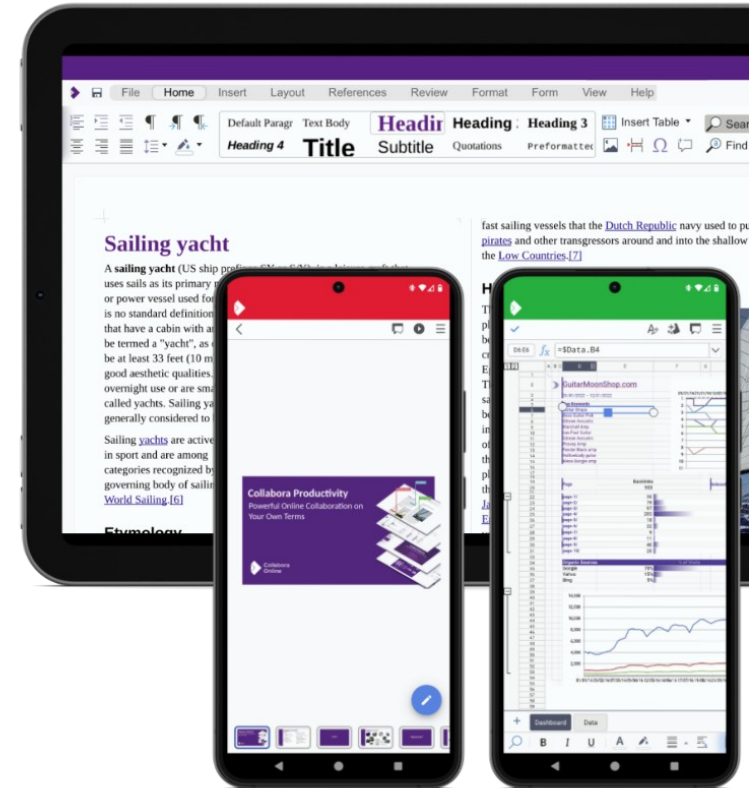
# Collaborative Presentations

The screenshot displays the Collabora Online presentation editor interface. At the top, there is a menu bar with options: File, Home, Insert, Layout, Review, Format, View, and Help. Below the menu is a toolbar with various editing tools such as Paste, Undo, Redo, Bold, Italic, Underline, Text, Text Box, Shapes, Image, Connectors, and Presentation. The main slide area shows a slide with the title "Collabora Productivity" and the subtitle "Powerful Online Collaboration on Your Own Terms". The slide features a purple background with a white envelope icon and the text "Collabora Online". To the right of the slide, there is a "Slide" panel with settings for Format (Screen 16:9), Orientation (Landscape), Background (None), and Master Slide (Title\_or\_Ending). Below the slide panel, there is a "Layouts" panel showing various slide layout templates. The slide content includes a stack of overlapping presentation slides, with callouts indicating "THOMAS editing" and "ANNE editing".

# Collabora for Android and iOS

## Collabora Office for tablet and mobile

- Supported and enterprise-ready – part of our Collabora Office subscription
- Fully open source
- Native integration in Android and iOS user interface
- Privacy by default – no external storage needed
- Excellent interoperability with Microsoft Office



# Full Online Office Functionality

## Most mature Office code-base outside Microsoft

- Based on LibreOffice Technology from the world's most widely used Open Source office suite

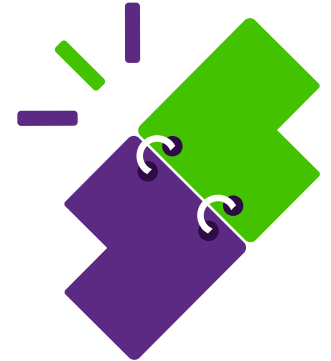


## Leading developer of online office capabilities

- Full-featured, rapid improvement, fully Open Source

## Available on all major platforms and many different integrations

- No compromises; flexible – lots of different integrations available
- On-premise / hosted – control your data, app and network



# Assured Digital Sovereignty & Security

## Digital Sovereignty

- **You control** where your data is stored
- On premise or with known provider
- **Not tied** to any storage or authentication system



## Digital Security

- Documents are **not shared** – just the pixels
  - enforce policy on the server – not in the JS client...
- Integration based on an **extended subset**; “WOPI-like”
- Each document gets its **own private jail** and a document is **only stored locally** during its own editing session

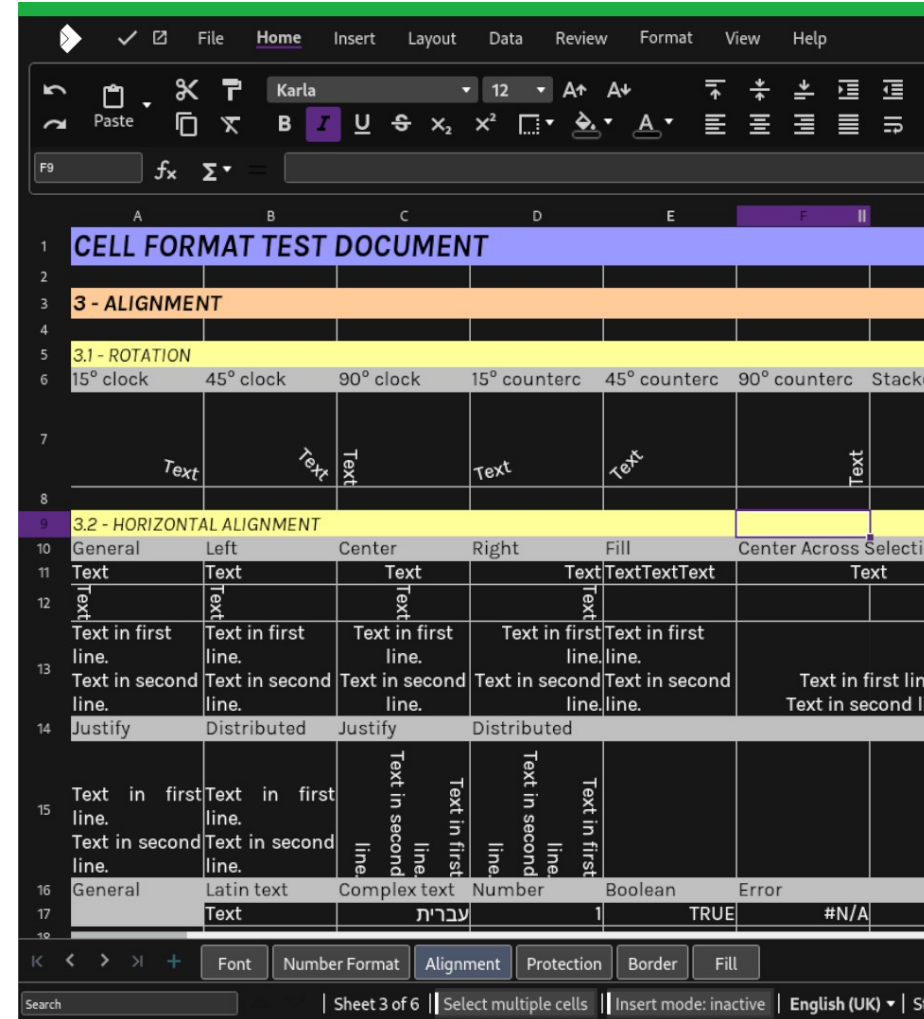
# Recent Features

## Accessibility

# Accessibility

## Dark mode + view settings

- Per view settings, allows us to render views differently – including various options such as showing non-printing characters or spell checking underlines in different views, in addition to Dark Mode.

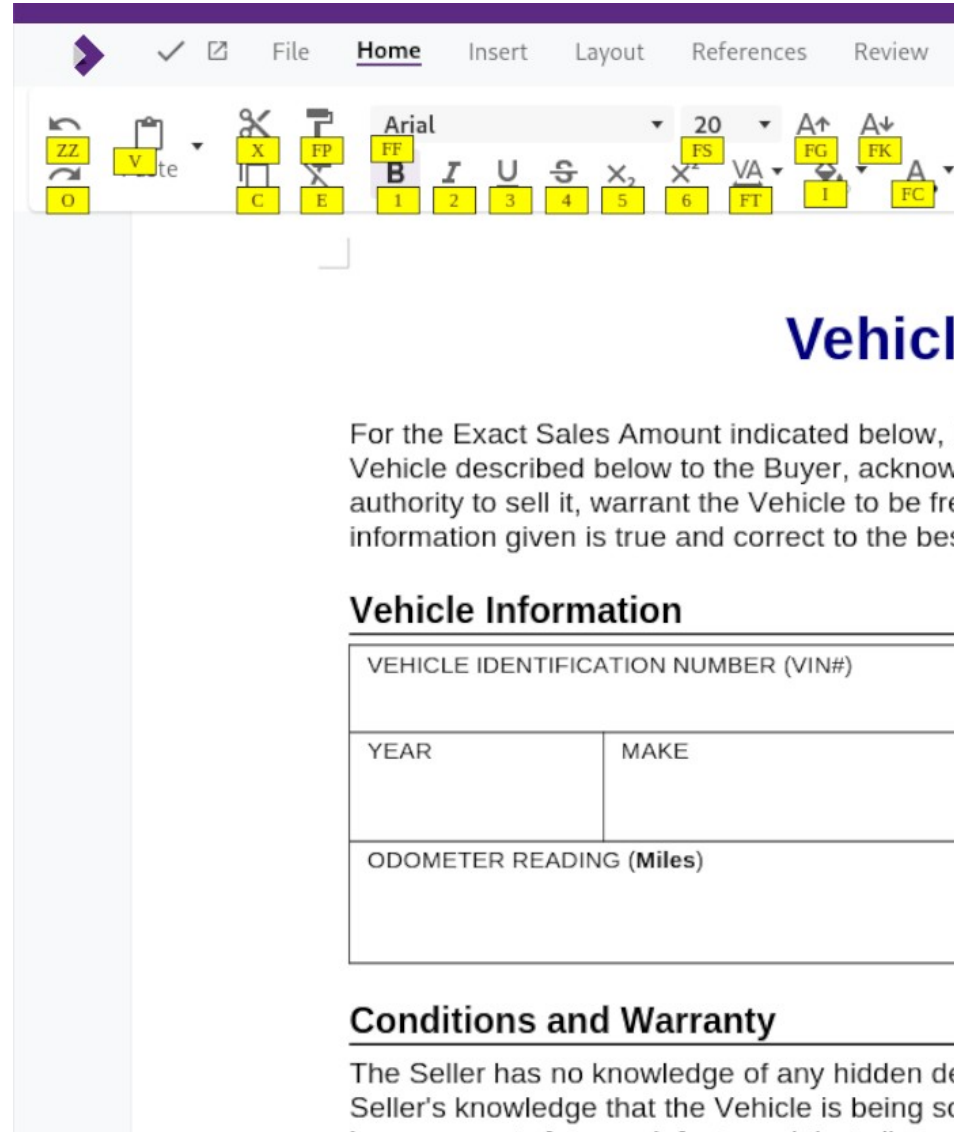




# Accessibility

## Keyboard accelerators

- Expansion for languages
  - Keyboard shortcuts have been expanded to allow all users to be able to use their own language's keyboard shortcuts when editing a file collaboratively.
  - Holding down the 'Alt' key will also highlight options for learnability.



## Vehicle

For the Exact Sales Amount indicated below, Vehicle described below to the Buyer, acknowledge authority to sell it, warrant the Vehicle to be free from all liens, and warrant that the information given is true and correct to the best of the Seller's knowledge.

### Vehicle Information

VEHICLE IDENTIFICATION NUMBER (VIN#)	
YEAR	MAKE
ODOMETER READING (Miles)	

### Conditions and Warranty

The Seller has no knowledge of any hidden defects. The Seller warrants that the Vehicle is being sold as-is, with all known and unknown defects.

title formats and collaborative editing features.

Collabora Online comes with **Long Term Support**, and can be integrated in any web-based solution, such as File Share and Sync solutions, Document Management Systems, Groupware or custom build software.

All Long Term Support releases are supported for 3 years, with a **perpetual license**, annual subscription to **security maintenance and updates**, an **SIA**, and Level 3 (code fix) support (other levels are provided by our partners). And there are more benefits:

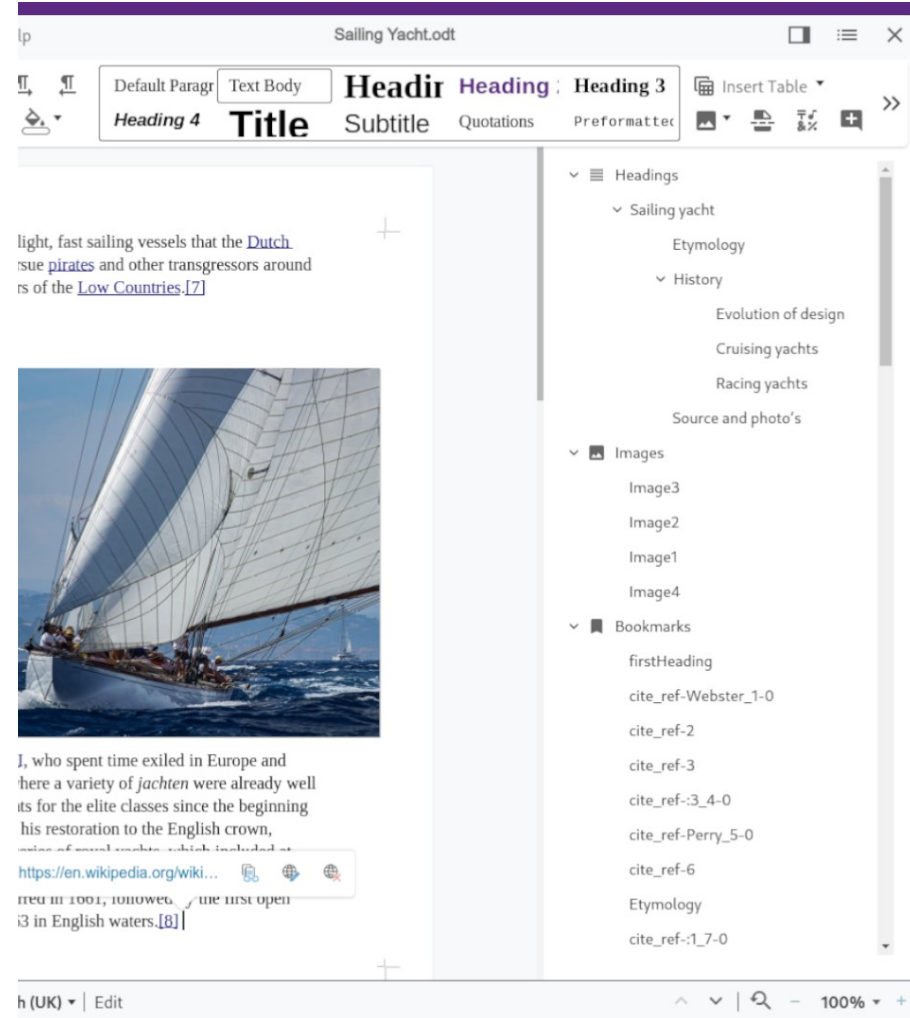
## Excellent Interoperability

- Collabora Office Mobile allows editing of the following formats:
- Word/Writer documents: .doc, .docx, .dot, .dotx, .odt, .ott,
- Excel/Calc spreadsheets: .xls, .xlsx, .xlt, .xltx, .ods, .ots,
- Powerpoint/Impress presentations: .ppt, .pptx, .pps, .ppsx, .odp, .otp
- /Draw image creation:

# Accessibility

## Page Navigation

- Navigator functionality is viewable in the sidebar, allowing you to jump to each section by simply clicking the headings.

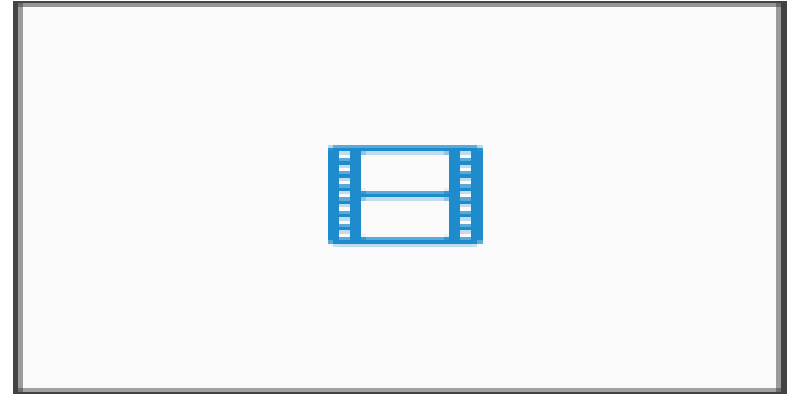


# Accessibility

## Initial screen reader support

- Designed to assist users with visual impairments, this feature will unlock a world of possibilities, ensuring everyone can participate fully in online collaboration.

Document content...

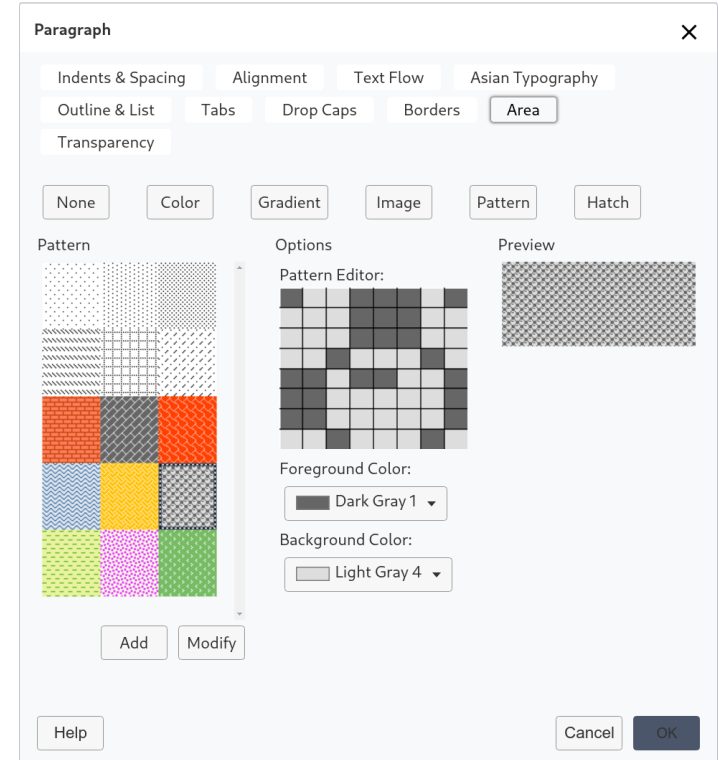


Collabora Online

# Accessibility

## JS-Dialogs for screen reader functionality

- Screen readers can now access menus, toolbars and dialogs. Many more of our ~thousand dialogs are rendered on the client side using Javascript, HTML widgets with WebARIA annotation.

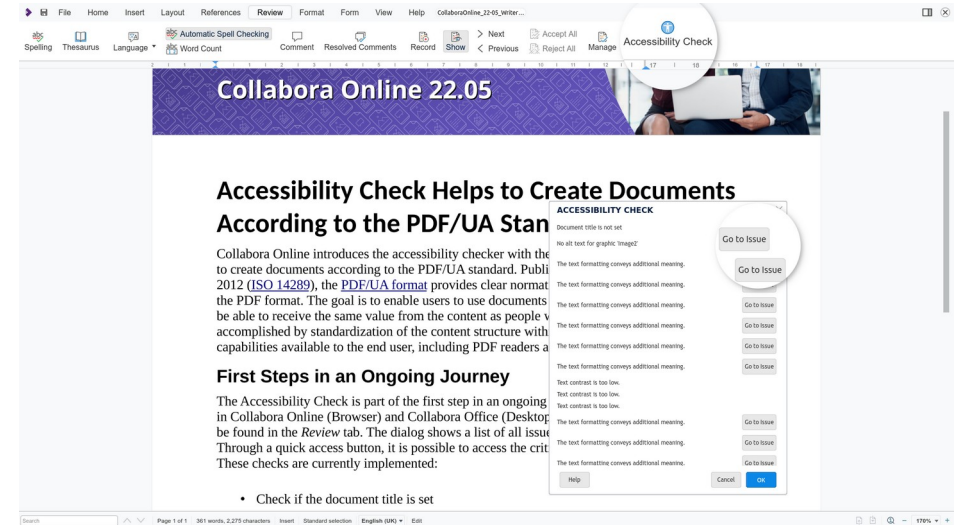


*A complex example Javascript dialog*

# Accessibility

## Built in accessibility checker

- Discover and fix accessibility problems in your documents before publishing them, and before your users suffer them.



# Accessibility

## Generating accessible PDFs with PDF/UA export

- Tagged PDF, PDF forms, Universal Accessibility for PDFs, and many more options when exporting available in last year.

**PDF Options** ✕

General Initial View User Interface Links Security

General

Hybrid PDF (embed ODF file)

Archive (PDF/A, ISO 19005)

PDF/A version: PDF/A-3b ▾

Universal Accessibility (PDF/UA)

Tagged PDF (add document structure)

Create PDF form

Submit format: FDF ▾

Allow duplicate field names

Structure

Export outlines

Export placeholders

Comments as PDF annotations

Comments in margin

Export automatically inserted blank pages

Use reference XObjects

Range

All

Pages:

Selection

Images

Lossless compression

JPEG compression Quality: 90 % ▾

Reduce image resolution to: 300 DPI ▾

Watermark

Sign with watermark

Help Cancel Export



# Accessibility

## Generating electronic books with EPUB export

- Ideal for accessible book readers, as well as many other use-cases.

### EPUB Export ✕

General

Version:

Split method:

Layout method:

Metadata

Identifier:

Title:

Author:

Language:

Date:



# Recent Features

## Performance

# Performance

## A faster, slicker experience

- Memory trimming on idle: cleans caches & frees up memory
- Swap out compressed image data as well as uncompressed
- Faster load of large spreadsheets
- Significantly reduced re-rendering (even more pending)
- Style re-thumbnailing redux
- Improved tile pre-loading (with more caching work queued)
- Clamp over-sizing of threads
- Accelerated transparent text rendering
- Avoid background whole document renders
- RLE tile encoding (pending)

# Performance

## Memory optimization

- Less memory; used effectively
- Run-length encoding delta cache makes it far smaller and faster to use. Compressed image data swapping to reduce footprint. Trimming caches & allocators on idle. Larger compressed browser-side tile cache. Monotonic timestamp cache synchronization & expiry.

## CPU optimization

- Saving power, and going faster.
- Reduced invalidation & re-rendering. Improved user prediction & pre-loading for better latency. Accelerated style previewing & thumbnailing. Optimized pixel manipulation & un-pre-multiplication. Accelerated scrolling & Javascript rendering.

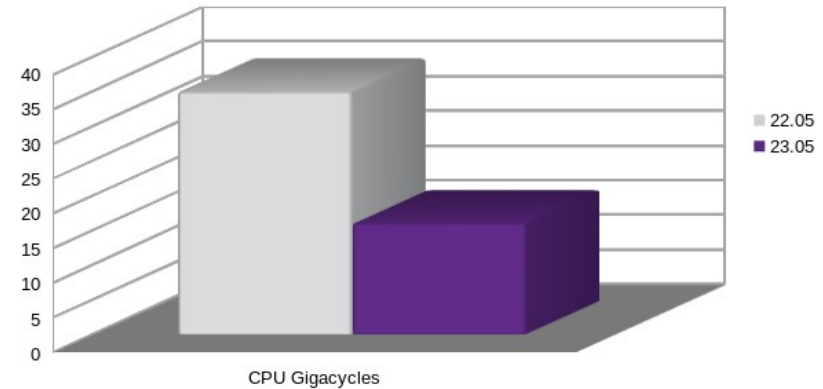
# Performance

## Performance tuning

- Much faster for many operations
  - for example – multiple users to join a shared Writer document and scroll through a long, heavy Writer document.
- Improved threading of tile compression
- AVX2 optimized RLE compression
- Long term profiling of demo servers & targetted optimization ...

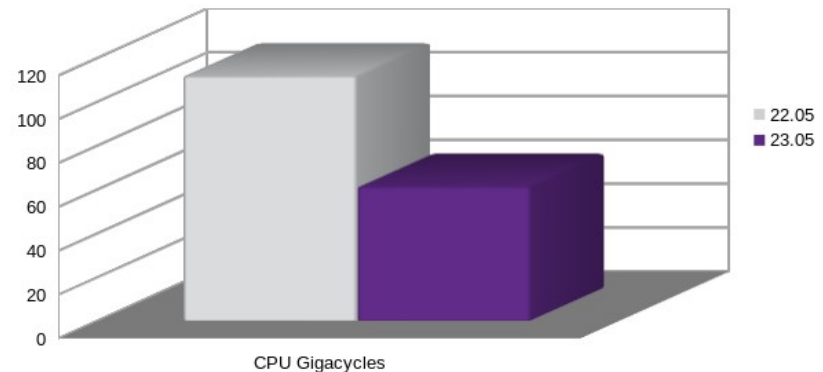
Joining Writer Shared Document

Writer document with 5 pages. 20 users joining simultaneously, until all clients rendered. perf stat -e cycles



Writer Scrolling

Writer document with 157 pages, 164 shapes, 32 comments, 13 images, 115 tables. Wheel scrolled from start to end. perf stat -e cycles



*Smaller is better!*

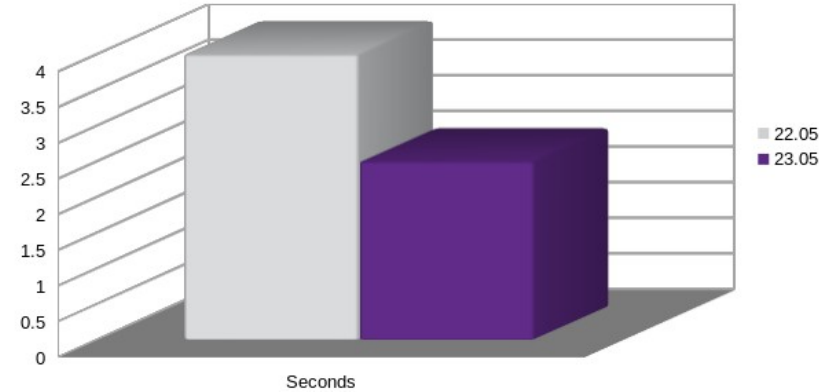
# Performance

## Performance tuning

- Reduced time to load graphic heavy Impress slide decks, and comment heavy Calc spreadsheets.

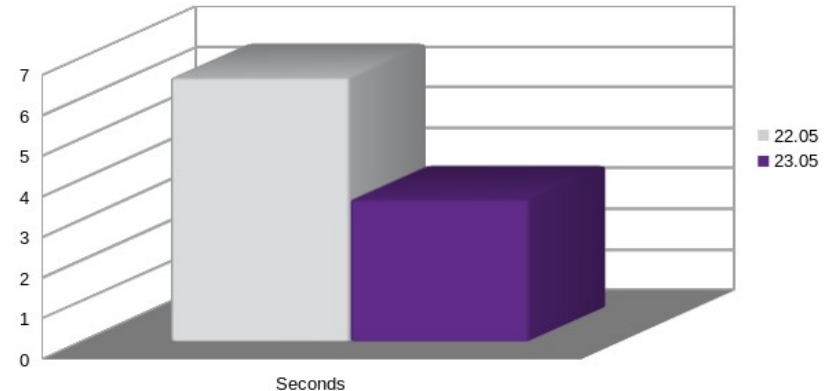
Impress Full Screen Presentation Generation

60 graphics heavy slides. Wall clock time.



Calc XLSX Comments Load

1000 Rows, 30 Columns, 2500 Comments. Wall clock time.



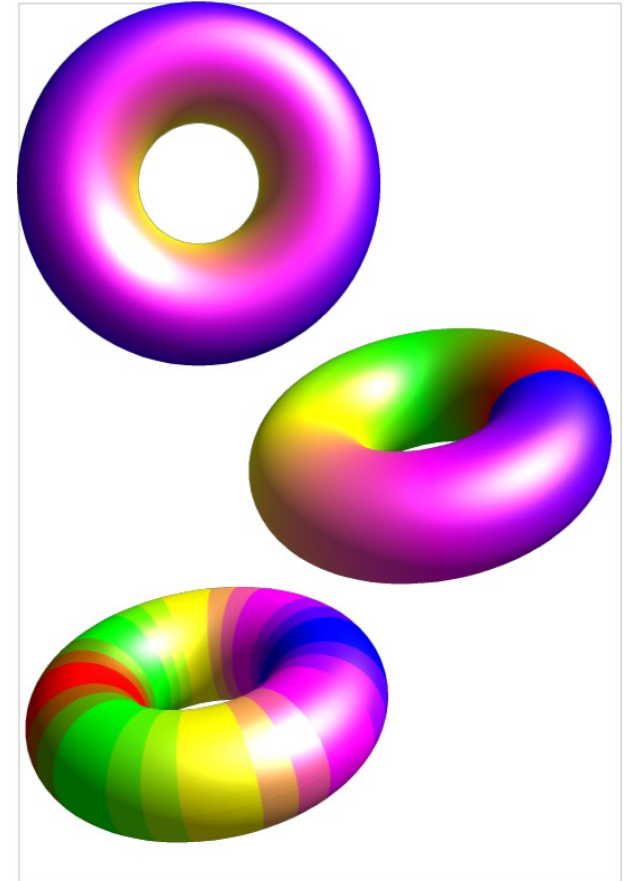
# Recent Features

## Interoperability

# Interoperability

## Multi-stop gradients - improved rendering

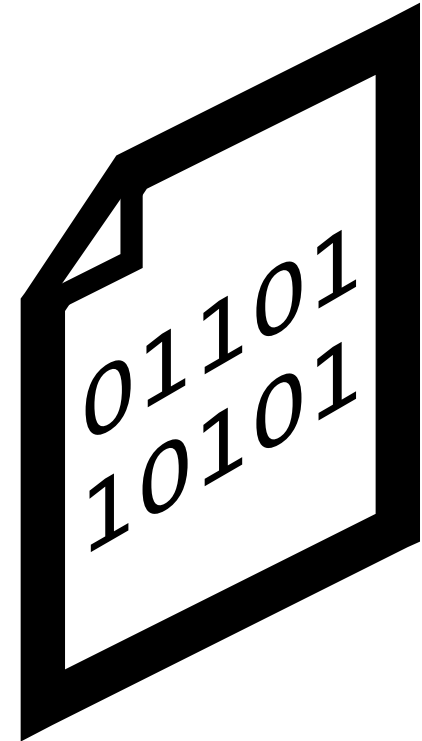
- The renderer has been enhanced and can now handle even more complex gradients. You can now turn up the visual appeal of your document by incorporating multi-stop gradients into shapes, borders, and other elements.



# Interoperability

## 64 bit Zip support – handling huge data sets

- The Zip64 standard extends numerous internal limitations in the XLSX and ODS formats used to compress documents. Editing and working with huge spreadsheets is now possible.





# Interoperability

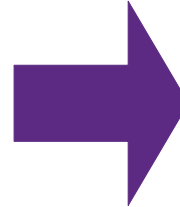
## Compact Pivot Tables for Calc Spreadsheets

- Preserve the compact view and layout of Pivot Tables created in Excel with a more compact layout avoiding the possibility of incorrect cell references.

K	L	M	N
Sum of Val	D		
Row Labels	ddd	ddx	Total Result
aaa	13	18	31
bbb	10		10
ccc	10		10
bbx	3	9	12
ccc	3		3
ccx		9	9
bxx		9	9
ccx		9	9
aax	15	11	26
bbb	10	4	14
ccc	8	4	12
ccx	2		2
bbx	5		5
ccc	5		5
bxx		7	7
ccx		7	7
axx	12	12	24
bbb		5	5
ccx		5	5
bbx	9	7	16
ccx	9	7	16
bxx	3		3
ccc	3		3
<b>Total Result</b>	<b>40</b>	<b>41</b>	<b>81</b>

# Interoperability

K	L	M	N	O	P
Sum of Val			D		
A	B	C	ddd	ddx	Total Result
aaa			13	18	31
	bbb		10		10
		ccc	10		10
	bbx		3	9	12
		ccc	3		3
		ccx		9	9
	bxx			9	9
		ccx		9	9
aax			15	11	26
	bbb		10	4	14
		ccc	8	4	12
		ccx	2		2
	bbx		5		5
		ccc	5		5
	bxx			7	7
		ccx		7	7
axx			12	12	24
	bbb			5	5
		ccx		5	5
	bbx		9	7	16
		ccx	9	7	16
	bxx		3		3
		ccc	3		3
<b>Total Result</b>			<b>40</b>	<b>41</b>	<b>81</b>

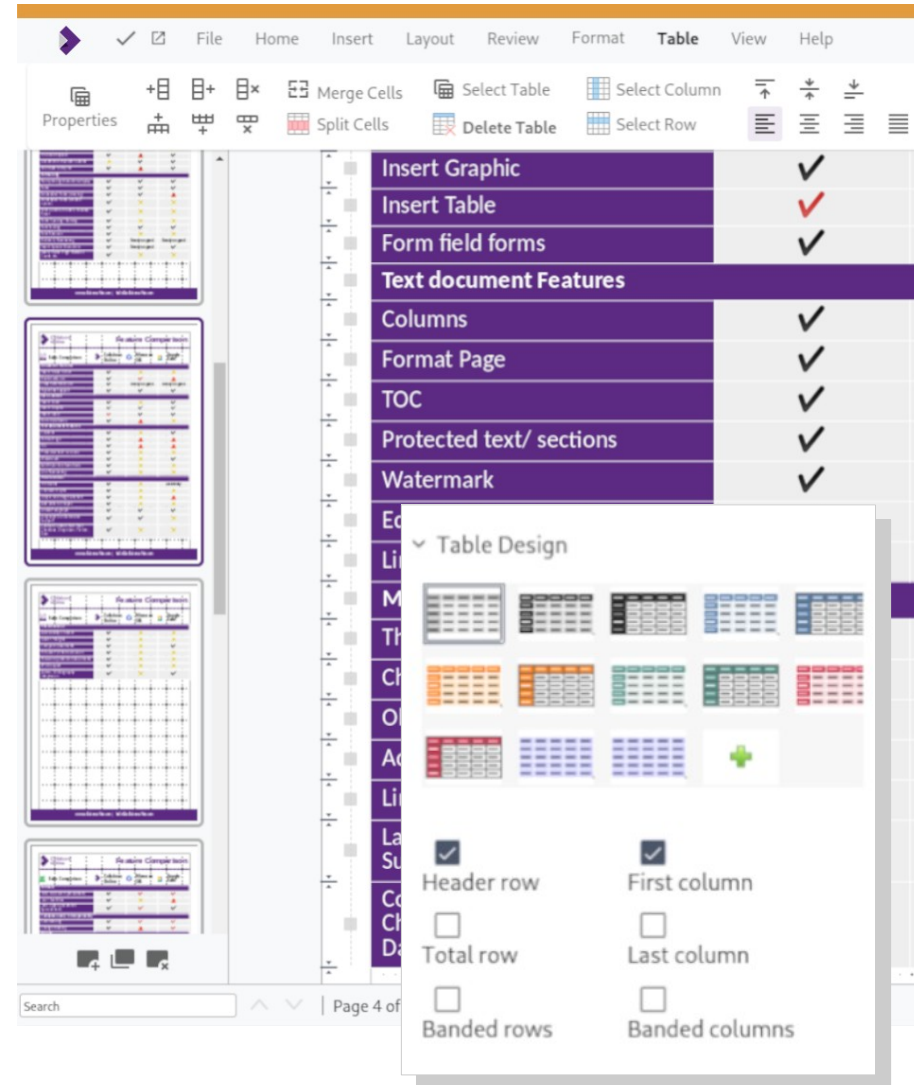


K	L	M	N
Sum of Val		D	
Row Label	ddd	ddx	Total Result
aaa	13	18	31
bbb	10		10
ccc	10		10
bbx	3	9	12
ccc	3		3
ccx		9	9
bxx		9	9
ccx		9	9
aax	15	11	26
bbb	10	4	14
ccc	8	4	12
ccx	2		2
bbx	5		5
ccc	5		5
bxx		7	7
ccx		7	7
axx	12	12	24
bbb		5	5
ccx		5	5
bbx	9	7	16
ccx	9	7	16
bxx	3		3
ccc	3		3
<b>Total Result</b>		<b>40</b>	<b>41</b>

# Interoperability

## Table style design

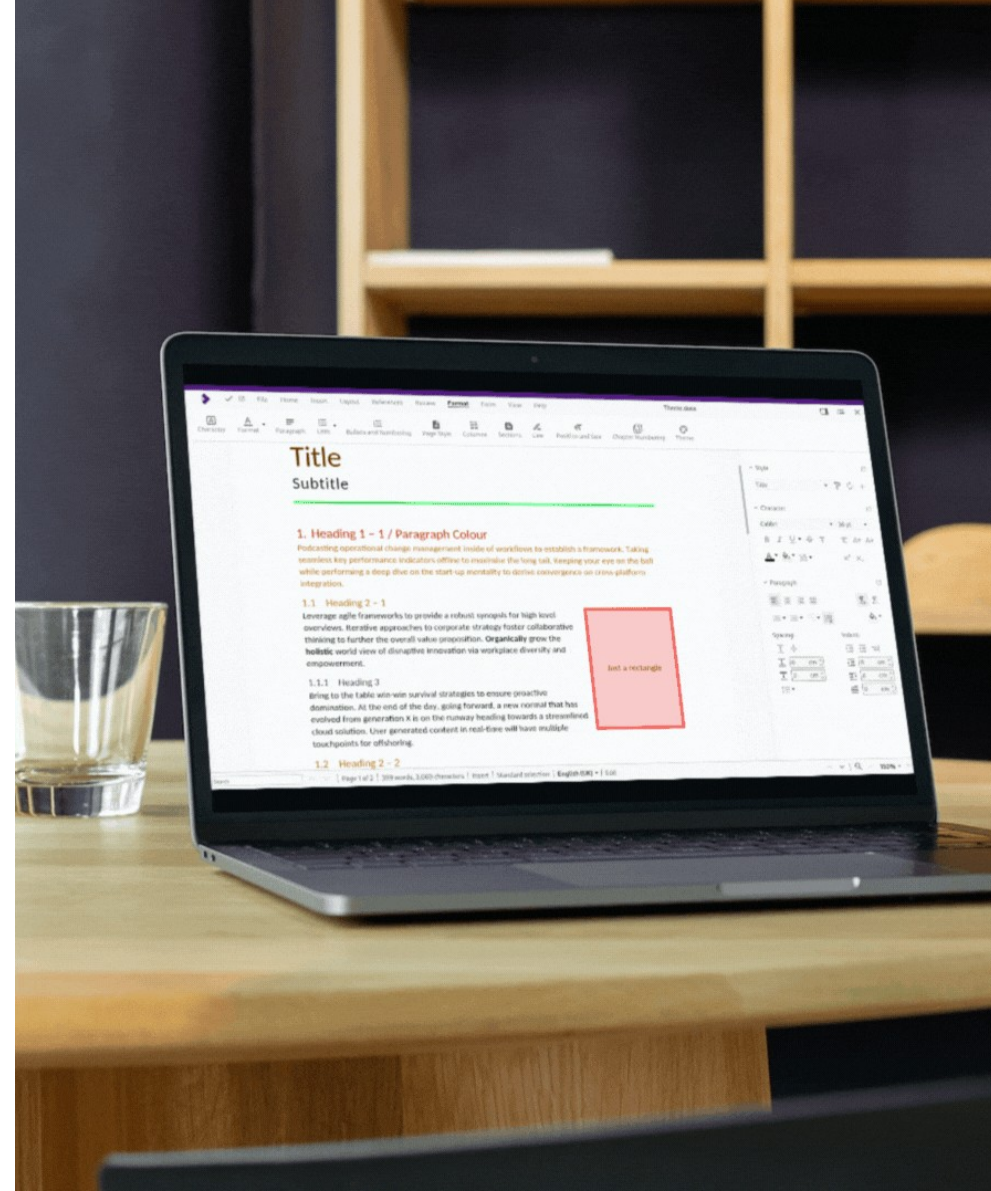
- You can now modify table styles and create new ones in Impress and Draw. Modified styles are saved into documents, and can be shared via templates. You can access this function by right-clicking on a design in the Table Design Sidebar panel.



# Interoperability

## Document themes – controlling branding

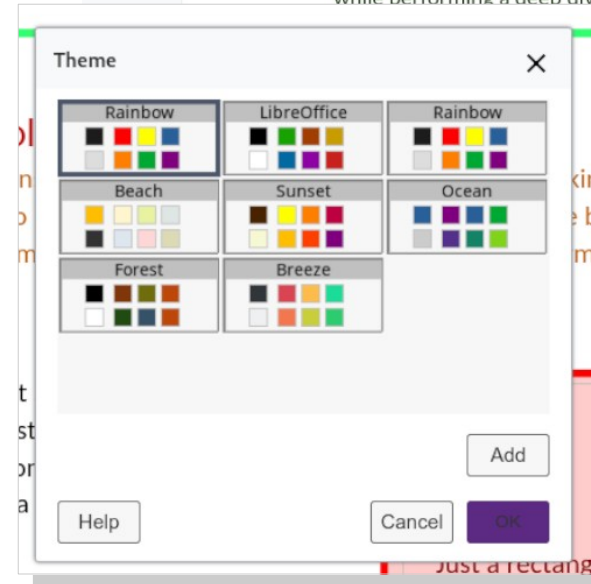
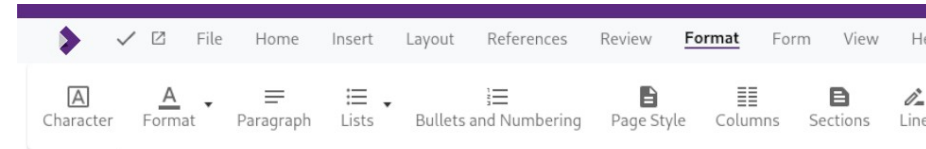
- Document themes can be configured and applied to a whole document to easily change and re-purpose the appearance, giving it a consistent style and branding.



# Interoperability

## Document themes – controlling branding

- Document themes can be configured and applied to a whole document to easily change and re-purpose the appearance, giving it a consistent style and branding.



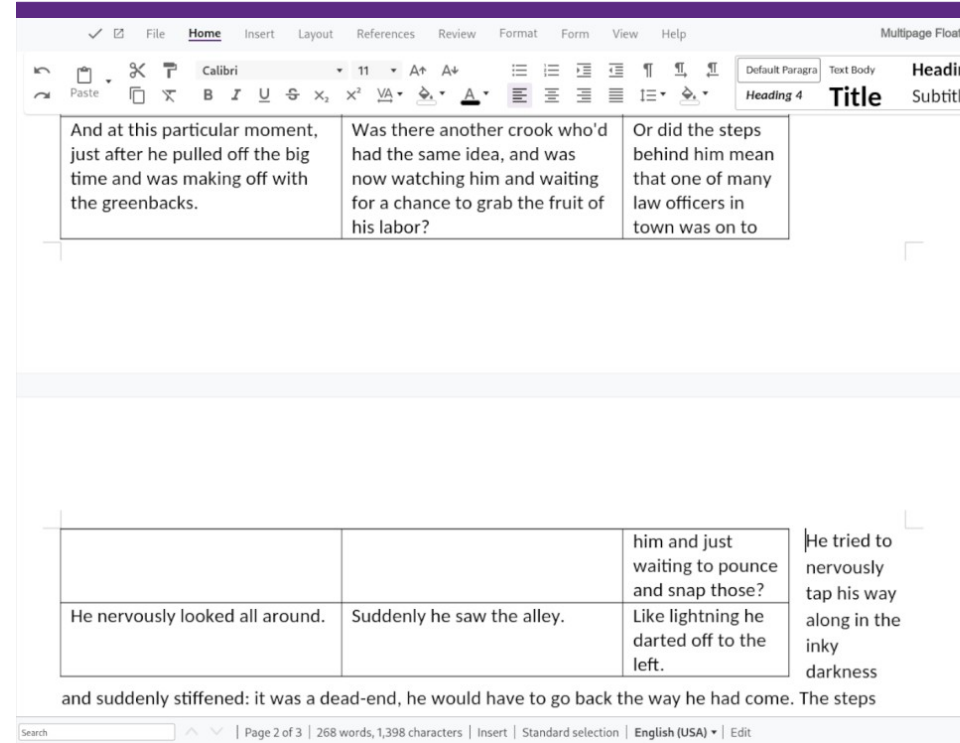
provide a robust synopsis for high level  
es to corporate strategy foster collaborat  
value proposition. **Organically** grow the  
ve innovation via workplace diversity and

vival strategies to ensure proactive  
day, going forward, a new normal that h  
on the runway heading towards a streaml  
d content in real-time will have multiple

# Interoperability

## Multi-page floating tables

- Significantly improves interoperability with tables that have been accidentally floated by users, and that span multiple pages.
- Lots of mis-designed Government forms – where tables are used for rendering borders are improved, and rendered better.



The screenshot shows a Microsoft Word document with a purple ribbon. The document contains two tables. The first table is a 3x3 grid of text. The second table is a 2x3 grid with text on the right side of the page.

And at this particular moment, just after he pulled off the big time and was making off with the greenbacks.	Was there another crook who'd had the same idea, and was now watching him and waiting for a chance to grab the fruit of his labor?	Or did the steps behind him mean that one of many law officers in town was on to
--	--	--

		him and just waiting to pounce and snap those?
He nervously looked all around.	Suddenly he saw the alley.	Like lightning he darted off to the left.

and suddenly stiffened: it was a dead-end, he would have to go back the way he had come. The steps

He tried to nervously tap his way along in the inky darkness

Search | Page 2 of 3 | 268 words, 1,398 characters | Insert | Standard selection | English (USA) | Edit

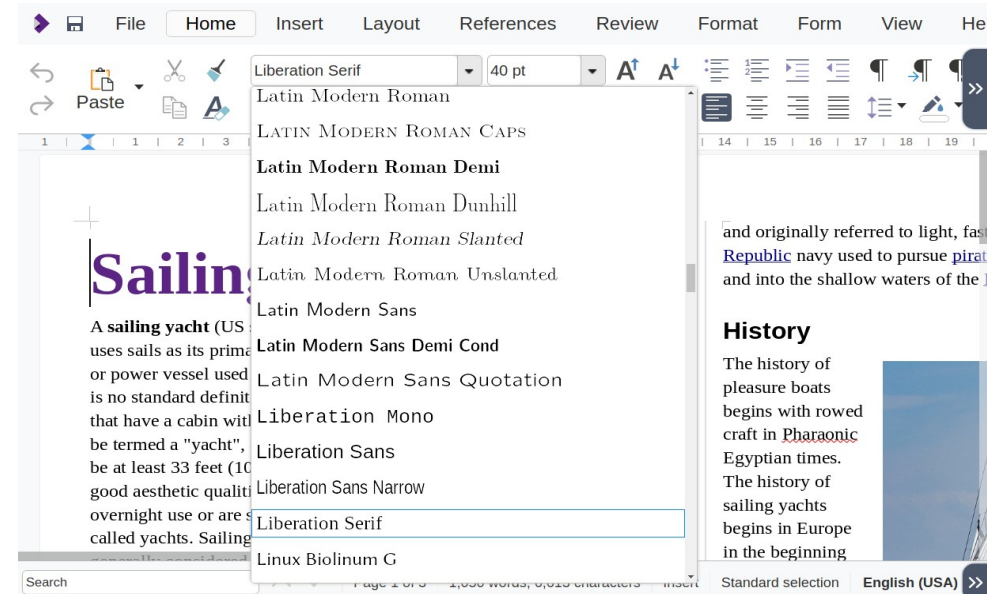
# Recent Features

## Usability

# Usability

## Font previews

- You can now see a preview of fonts to see what they look like before selecting it in the drop down box.

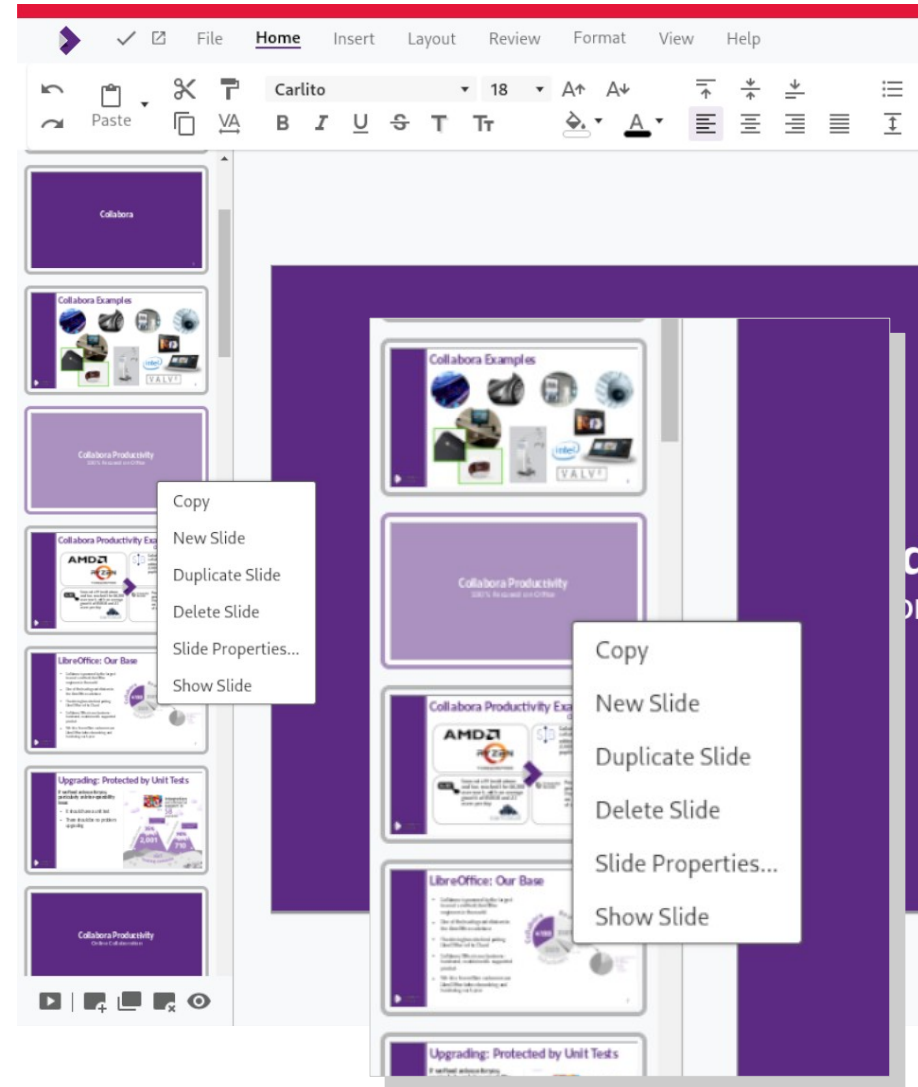




# Usability

## Hide/show slides in Impress

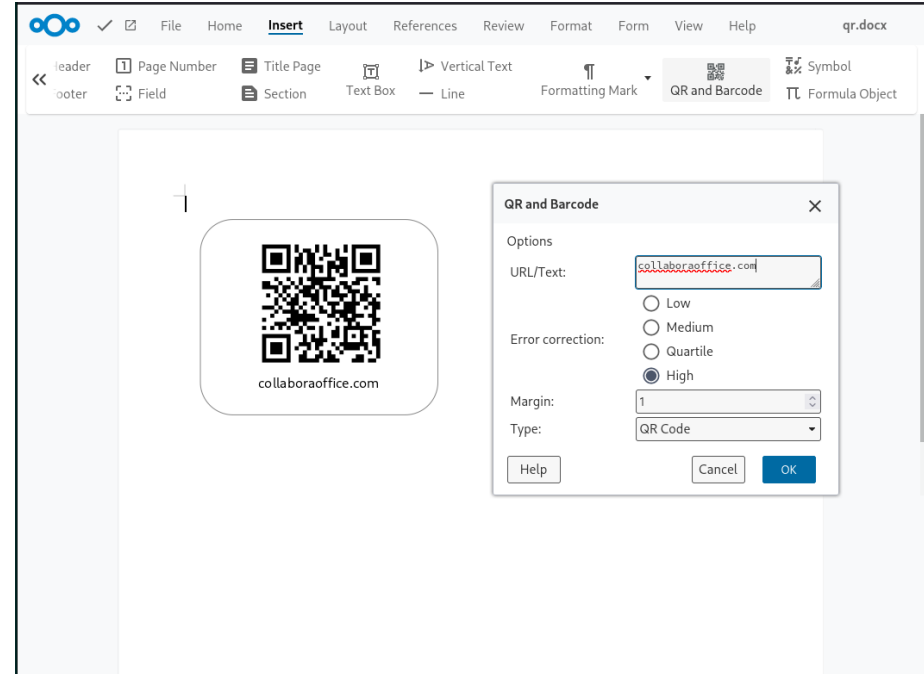
- Impress supports hiding and showing slides on the Slide Pane by right clicking and choosing 'Hide Slide' or 'Show Slide'. They will then shown or hidden throughout the full screen presentation.



# Usability

## Easy Barcode and QR code input

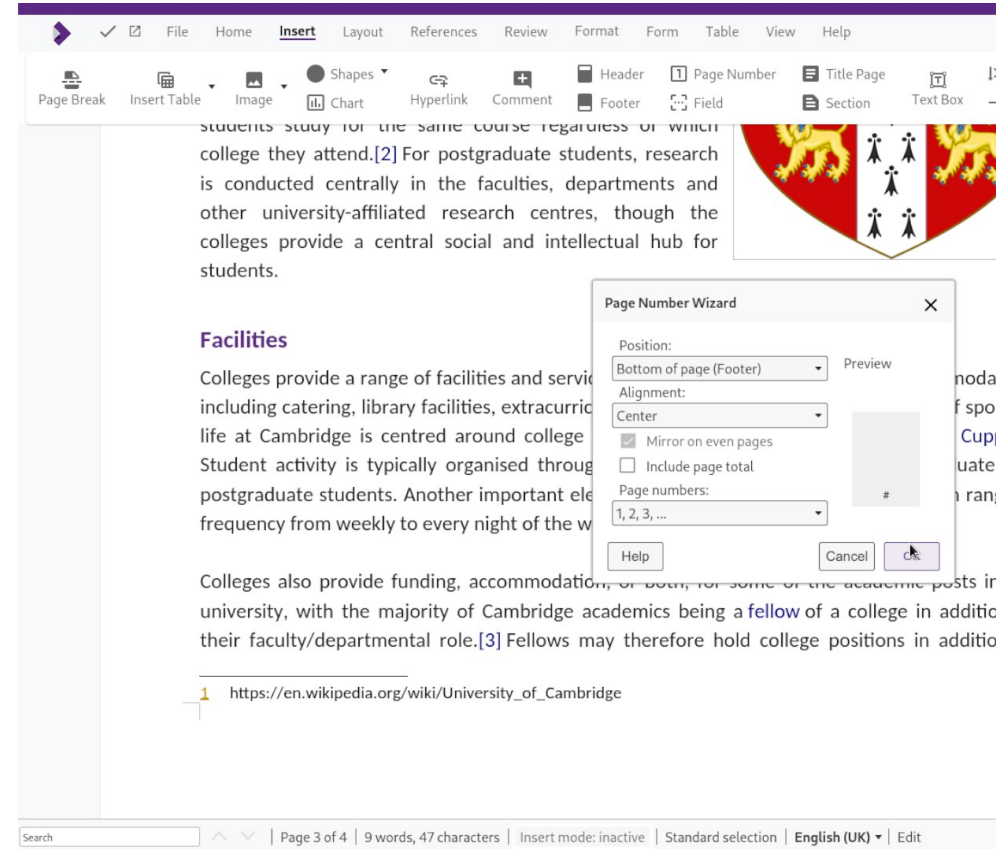
- Bringing the existing LibreOffice technology's QR code functionality to your browser:
  - *Thanks to Shubham Goyal and Google Summer of Code*



# Usability

## Page number insertion – familiar, simplified pop up

- Combining inserting the required headers, footers, and page number fields into a single, easy to use, familiar dialog for users.
- Featuring all the common alignment options, support for a variety of languages, and a preview.



# Usability

## Change tracking in numbered lists

- When making changes within numbered lists, the numbering has now been fixed to show actual and original numbers within the document.

The screenshot displays the Microsoft Word interface with the 'Review' tab active. The ribbon includes options for Spelling, Thesaurus, Language, Automatic Spell Checking, Word Count, Comment, and Resolved Comments. The main document area shows a numbered list with the following items:

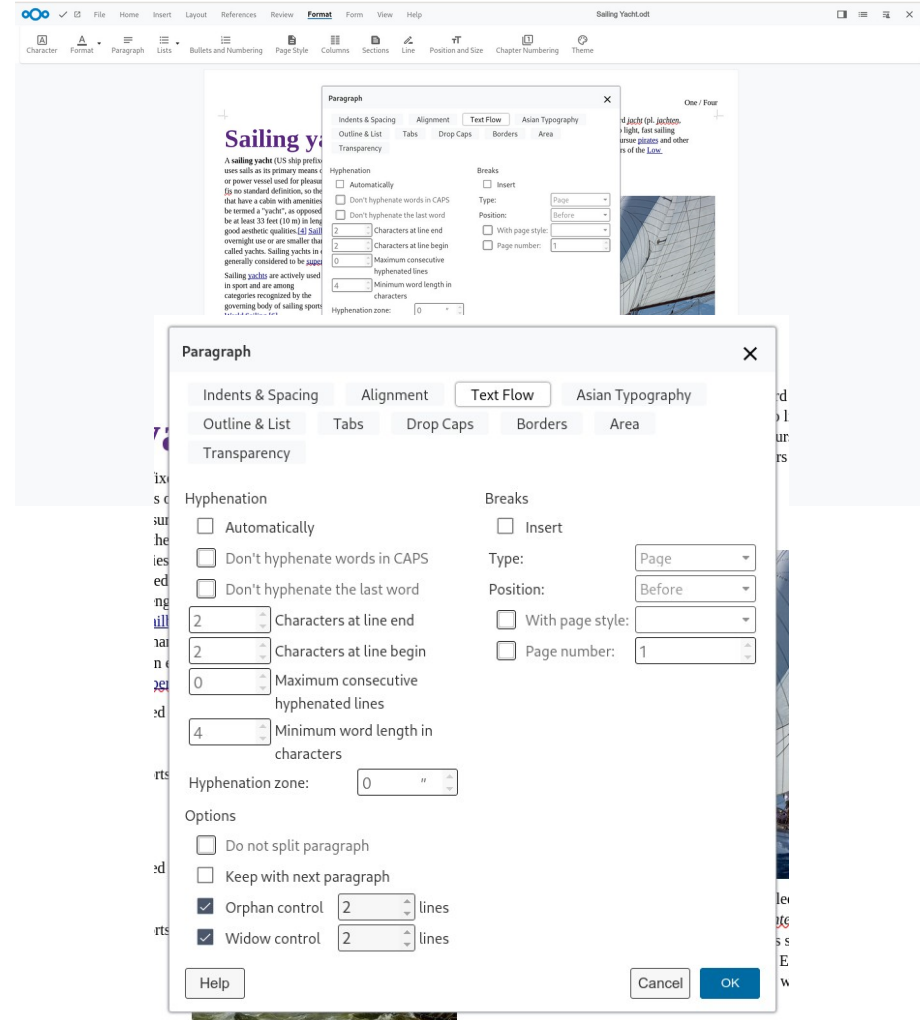
1. List item one
2. ~~List item two~~
- 3.[2.] New list item two
- 4.[3.] List item three
  1. Sub list item one
  2. Sub list item two
- 5.[4.] List item four
- 6.[5.] List item five
  1. ~~Sub list item one~~
  - 2.[1.] New list item one
  - 3.[2.] Sub list item two
  - 4.[3.] Sub list item three

The status bar at the bottom indicates 'Page 1 of 1 | 48 words, 184 characters | Insert mode: inactive | Standard selection'.

# Usability

## Typographical editing

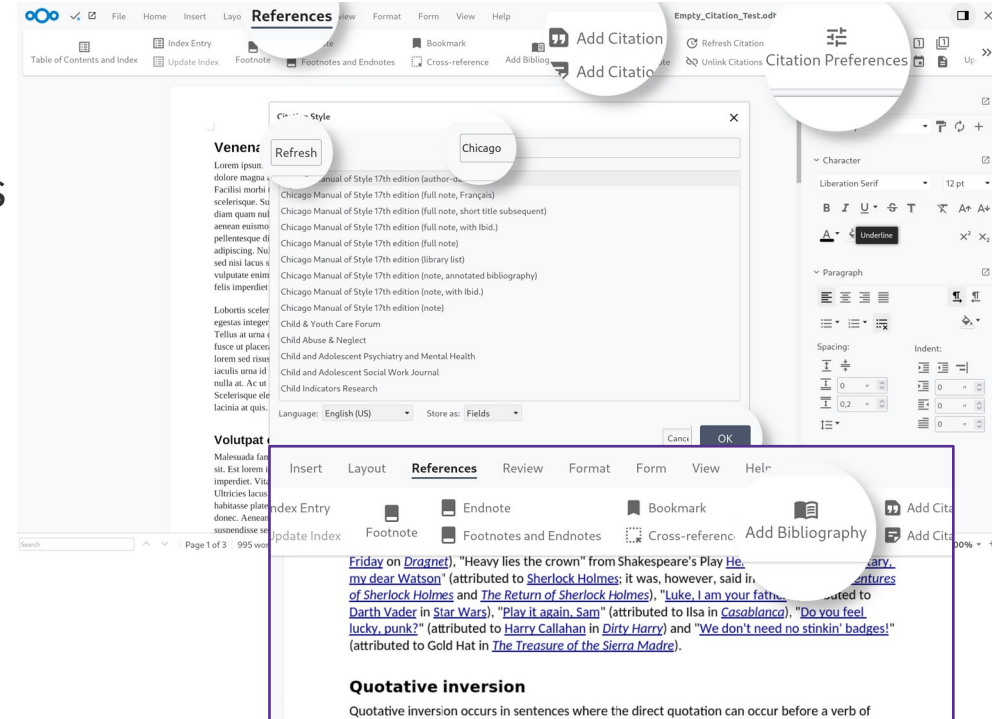
- New optional hyphenation settings are available to give rules for adjusting text flow. You can now limit hyphenation within paragraphs, set a minimum word length for hyphenation and opt to not hyphenate the last word of a paragraph.



# Usability

## Reference management and bibliographic data with Zotero

- Browse all the existing records of your Zotero library - insert, remove, and refresh references, citations, and notes, or automatically generate bibliographies.



From Wikipedia, the free encyclopedia

A **quotation** is the repetition of a sentence, phrase, or passage from speech or text that someone

**MY LIBRARY** ✕

Refresh Search

	Title	Creator(s)	Date
<input type="checkbox"/>	List of Misquotations	undefined undefined	
<input type="checkbox"/>	English Grammar Lesson – Using Quotes	undefined undefined	16.11.2016
<input type="checkbox"/>	Alignment in Syntax: Quotative Inversion in English	Benjamin Bruening	15.04.2016
<input type="checkbox"/>	The secret life of slurs from the perspective of reported speech	M. A. Salmani Nodoushan	2015
<input type="checkbox"/>	On the Syntax of Direct Quotation in French	Olivier Bonami, Danièle Godard	2008
<input type="checkbox"/>	On indirect reports and language games: Evidence from Persian	A. Capone, M. A. Salmani Nodoushan	2014
<input type="checkbox"/>	The Oxford Companion to the English Language	Tom McArthur, undefined undefined, Lisa Fontaine	
<input type="checkbox"/>	A Book of Misquotations	Elizabeth Knowles	2006

Cancel OK

- Headings
  - Quotation
    - As a literary device
      - Reasons for using
      - Common sources
      - Misquotations**
- Bookmarks
  - firstHeading
  - As\_a\_literary\_device
  - Reasons\_for\_using
  - cite\_ref-3
  - Common\_sources
  - Misquotations
- Hyperlinks
- Footnotes

structure of society

### Common sources

Famous quotations are frequently collected in books that are sometimes called quotation dictionaries or treasuries. Of these, [Bartlett's Familiar Quotations](#), [The Oxford Dictionary of Quotations](#), [The Columbia Dictionary of Quotations](#), [The Yale Book of Quotations](#) and [The Macmillan Book of Proverbs, Maxims, and Famous Phrases](#) are considered among the most

# Usability

## AI grammar checking with LanguageTool & DUDEN

- Connect LanguageTool and DUDEN for multilingual spelling, style, and grammar checking that helps correct or paraphrase texts.

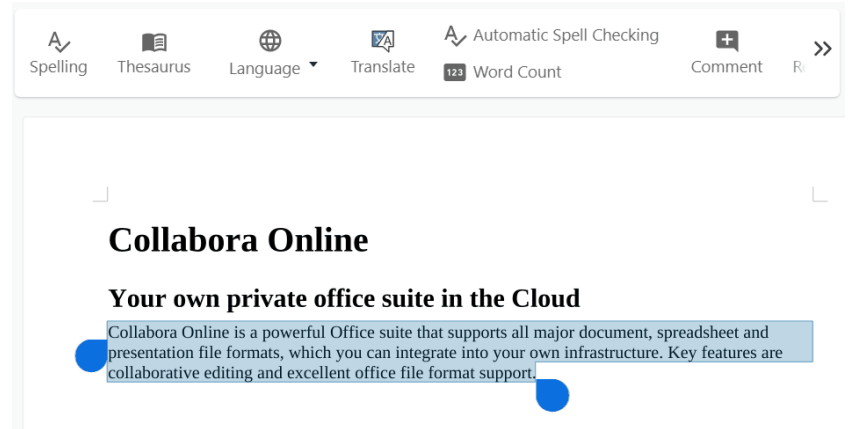




# Usability

## AI based translations with DeepL

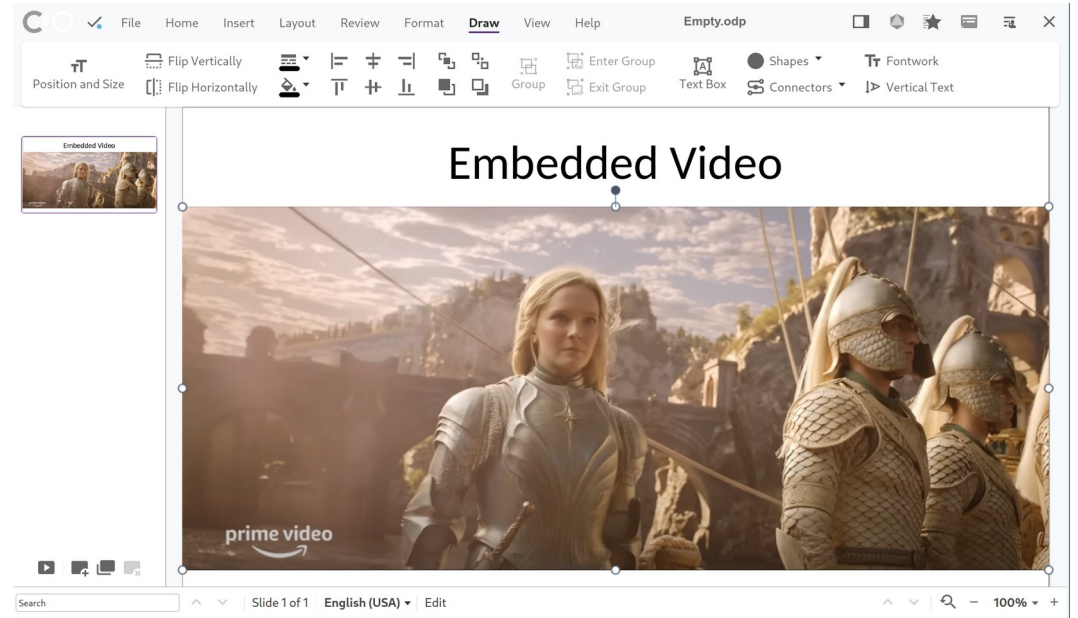
- Translating text with DeepL inside a Writer document is as easy as selecting it, clicking the “Translate” button and choosing the target language from dialog.



# Usability

## Play videos Embedded into your documents

- Embedding the content of your videos, ensures a smooth, advert-free presentation at the right time.



**With thanks to our Partners,  
Customers & Community !**

**OPEN  
SOURCE  
EXPERIENCE**

# Some of Our Clients and Partners



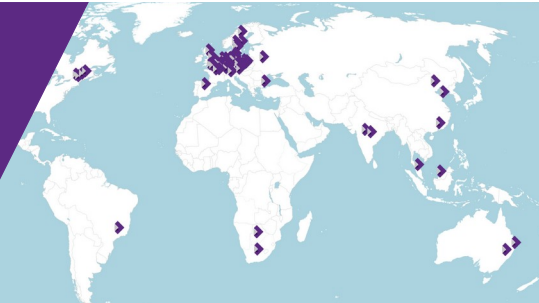
Adfinis



Find your local partner:  
[www.col.la/partners](http://www.col.la/partners)

Visit us at  
Booth H30

Over 230 partners  
offering professional support  
in over 60 countries  
Find your partner today!



# Conclusions

## Collabora Online combines

- Leading seamless and efficient online sharing and collaboration
- Digital Sovereignty & security
- Excellent interoperability
- 100% Open Source code – the real deal.

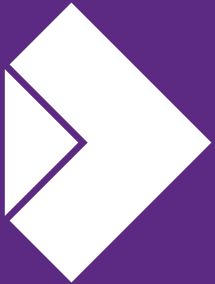
## Collabora Online delivers

- Comprehensive paths for migration and support
- A wide range of partners, platforms and integrations
- Excellent support and product relationship with our customers
- Document Freedom for the Free World ... at pace ...

The logo for 'Open Source Experience' is a square with a light blue top half and a red bottom half. A black rectangle is centered over the square, containing the text 'OPEN SOURCE EXPERIENCE' in white, bold, sans-serif font.

**OPEN  
SOURCE  
EXPERIENCE**

Find us at  
booth H30



**Collabora  
Online**

**Thank you!**



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