

Collabora Online & Nextcloud

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*"Stand at the crossroads and look; ask for the
ancient paths, ask where the good way is, and
walk in it, and you will find rest for your souls..." -
Jeremiah 6:16*

What is Collabora Online ?

Documents + Spreadsheets + Slides

- Viewing and Collaborative editing

Excellent interoperability with Microsoft formats

- DOCX, DOC, RTF, XLSX, XLS, PPTX, PPT

Many other Import filters / Viewing for

- PDF, Visio, Publisher ...

Powerful WYSIWYG rendering

On-premise Integration with Nextcloud.

Architecture – a bet on CPU threads & network ...





Collabora Productivity

Free your business

The driving force behind putting
#LibreOffice in the #Cloud.

Collabora

- >100 staff, Cambridge & Montreal
- Parent company – 14 years old

Collabora Productivity – Office Productivity

- ~30 staff – 6 years old (last week)
- 50% C'bra, 50% me

Shared mission / raison d'être:

- Make Open Source rock: simple goal of the shareholders
- We re-invest your support into FLOSS software

Leaders in the LibreOffice Community

- ~300 developers/year, ~1000 contributors
- Collabora Online (DE) – 20+ million docker images

Collabora Productivity: examples



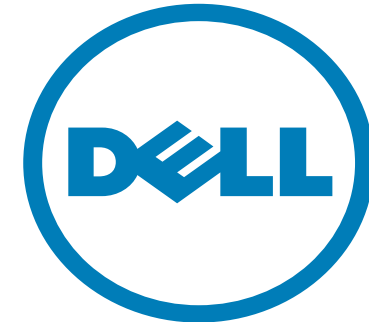
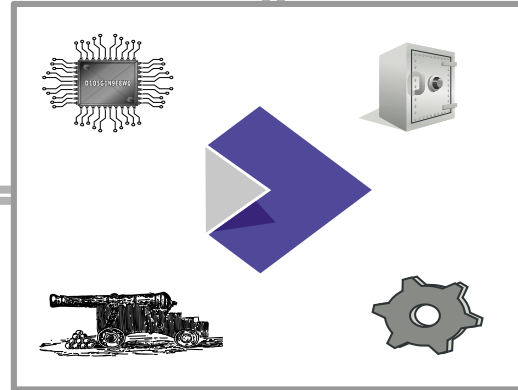
One of the top three Italian banks
20,000 seats deployed in all their
branch offices. Visionary cost
savings.

Partner:
STUDIOSTORTI
SOLUZIONI OPEN SOURCE



Partner:
NOV & CFF

Powerful document
classification – eg. “top
secret”. Digital signatures and
classification of paragraphs.



140 partners and growing ...



A seamless Nextcloud partnership

Nextcloud - an awesome partner

- working together seamlessly and regularly

Product support & Professional Services.

- A single support partner with experts in Collabora Online
- No blame-game nightmares:

Bank: 5 people & 5 companies in the room.

- It is exactly not like that ... with us
- Single point of contact, and relationship.

We provide Service Level Agreement & place to file tickets

1 {

2 {

3 {

4.1 {

4.2 {

Collabora Productivity | Partner Portal

OVERVIEW TICKETS PREFERENCES LOGOUT USER

WELCOME PARTNER

Latest news

- 2022/03/09 - Recordings LibreOffice talks from Collabora at FOSDEM available
- 2022/03/09 - First African partner to offer Collabora Online
- 2022/03/02 - Nextcloud first ever event in the USA to offer Collabora Online
- 2022/03/02 - Collabora Online in LibreOffice solution for enterprises
- 2022/03/02 - Collabora Online available in rural Australia
- All news (3)

Upcoming events

- asLAN - March 15-16, 2022 - Madrid, Spain
- Cloud Expo Europe London - March 15-16, 2022 - London, United Kingdom
- WITG Summit - March 23-24, 2022 - Basel, Germany
- Nextcloud Summit - April 18-19, 2022 - Los Angeles, USA
- OverheidSG - May 17, 2022 - Utrecht, Netherlands
- All events (4)

Your Customers

Name	Number of seats	1.0 high priority	1.0 medium priority	Subscription started	Switch to this customer	1.0.1 this customer	Add a user to this customer company
Customer 1	10000	0	0	2019-01-01	Switch to customer	1.0.1 customer	Add customer user
Customer 2	10000	0	0	2019-01-01	Switch to customer	1.0.1 customer	Add customer user

[Add customer company](#)

Collabora Online

Linux update repositories (544-545)

Your secret URL, part is: [REDACTED]

We at Collabora are happy to help you through installation and configuration issues. Before asking a technical question by email think in the "think before" tab, we recommend to check out the Collabora Online installation guide that you can find in the Technical Documentation tab below. Your feedback is welcome. We try to keep documentation up-to-date and accurate.

Technical documentation | Marketing materials | Sales materials | Slide decks | Release notes | Quick links

File type	Title	Size	Date
PDF	Collabora Online Technical Documentation.pdf	5.57 KB	24/10/2017
PDF	Collabora Online installation guide.pdf	14 KB	12/07/2016
PDF	Integration of Collabora Online using the WebRTC protocol.pdf	14 KB	11/06/2016

Collabora Office

Linux update repositories

Your secret URL, part is: [REDACTED]

For details, please read the installation guide, which you can find in the Technical Documentation tab below.

Technical documentation | Marketing materials | Sales materials | Release notes | Quick links

File type	Title	Size	Date
PDF	Collabora Office FSG.pdf	20 KB	02/11/2015
PDF	Collabora Office - Choosing Support 1007-2015.pdf	1.1 MB	25/10/2015
PDF	Collabora Office - Choosing Support 1007-2015.pdf	40 KB	05/10/2016
PDF	Collabora Office Desktop.pdf	1.1 MB	07/06/2016
PDF	Collabora Office Desktop.pdf	1.8 MB	07/06/2016

Your Downloads

Product	Version	Platform	Release Date	Size	Package format
Collabora Office Patch	5.1.0	Windows	2016-10-13	32 MB	MSI
Collabora Office	5.1.0	Mac OS X	2016-10-13	28 MB	DMG
Collabora Office	5.1.0	Linux 64-bit	2016-10-13	22 MB	DEB
Collabora Office	5.1.0	Linux 64-bit	2016-10-13	22 MB	RPM

Collabora GeoOffice

Your Downloads

Product	Version	Platform	Release Date	Size	Package format
Collabora GeoOffice Patch	5.1.0	Windows	2017-03-02	4 MB	MSI
Collabora GeoOffice	5.1.0	Windows	2016-08-24	33 MB	MSI
Collabora GeoOffice Web Packs	5.1.0	Windows	2016-08-24	-	MSI



The Collabora Online Vision

Full-feature, Open Source,

On-premise / hosted – control your data & apps ...

No compromises & flexible

Complements

Nextcloud's vision

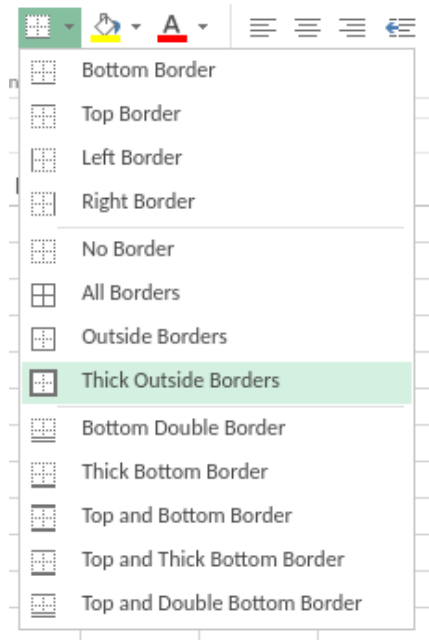


collaboraonline.com

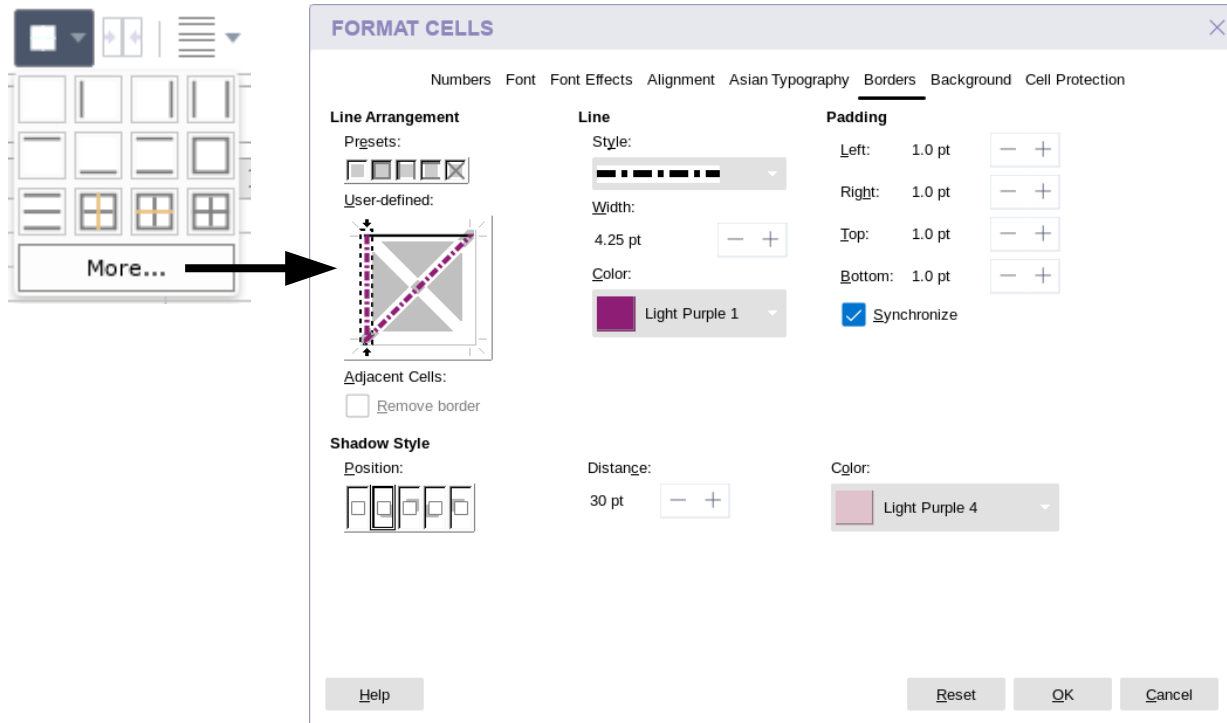


Full Feature → the things the feature matrix hides

The complete set of pre-canned border functionality in MS Online



The rich border UI in Collabora Online





Interoperability & Collaboration

We have very powerful document interoperability

- Collabora Office → ~8 million LOC, MS Office ~30 million LOC
- Most mature Office code-base outside of Microsoft

“100% interoperability” - not a credible claim

- I was on the ECMA Technical Committee standardizing MS' XML formats.
- Interoperability – a mix of: import, rendering, feature-set, export
- To edit you **have to** understand the format – no reliable short-cuts.

Expectation here – we can win !

- Doing better than Google Docs, and Microsoft Online
- **Collaboration** is the key driver ...



Example: writer Rich Fields support ...

Fill out DOC / DOCX forms

- tab through editable fields; skip protected sections



INWARD (SHIPS AND BOATS OTHER)

Microsoft Word Online



Sorry, Word Online can't open this document for editing because it has document protection enabled for one or more sections. To edit this document, please open it in Microsoft Word.

Tell us about this problem to help us fix it.

[Give feedback to Microsoft](#)

Session ID: 18d4953e-e7ae-45f8-9080-c62b6dc6f9f2

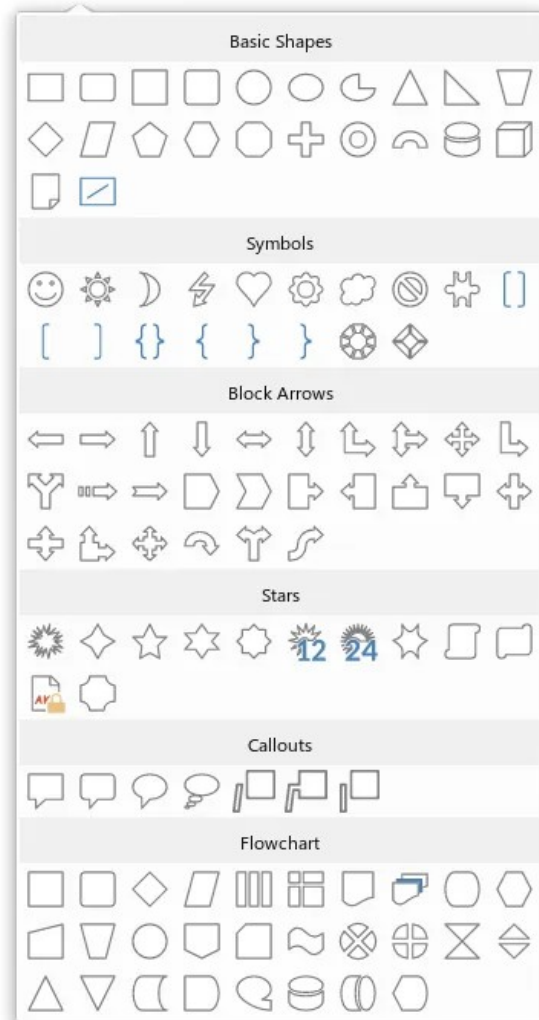
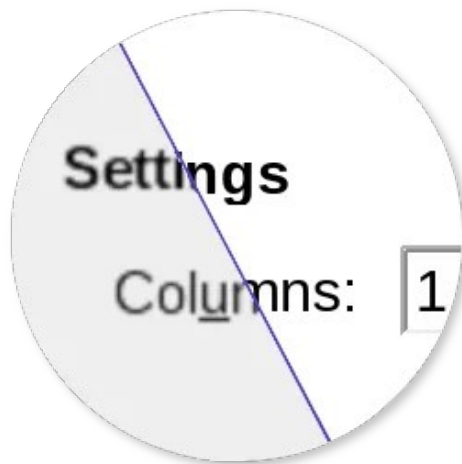
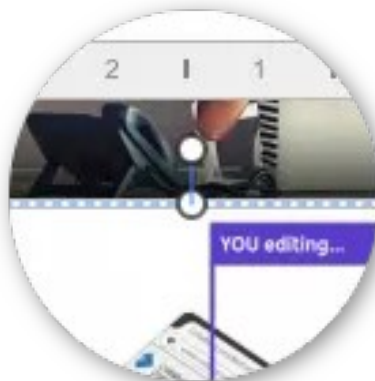
Edit in Word

Open in Reading View

PART A: ARRIVAL	
Name of ship	The Honorable Ship Goodwin
Date of arrival	Time of arrival
Name of person in charge	
IMO number	

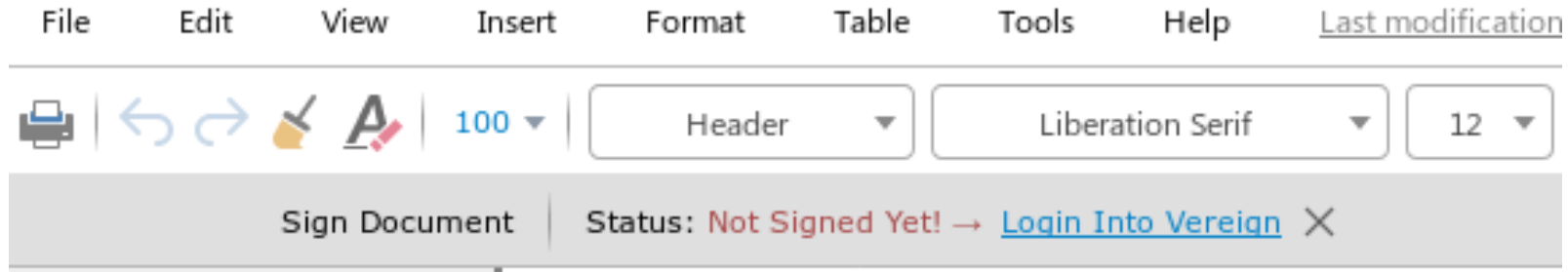
Recent Improvements

Significant Mobile & UX improvements



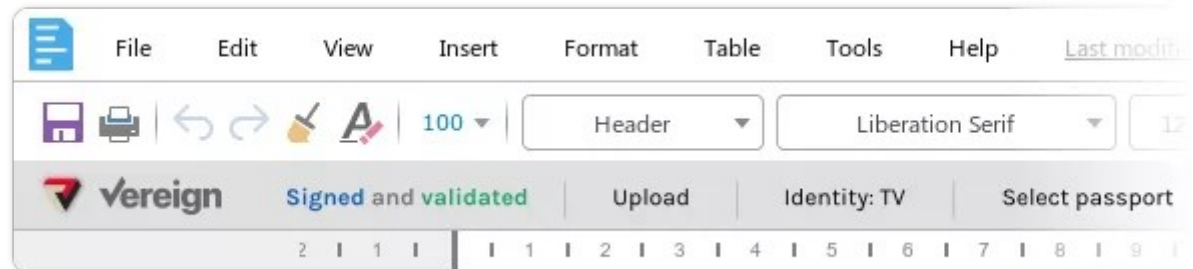


Blockchain / Vereign Integration



In co-operation with Vereign a Swiss open source company building a blockchain based self-sovereign identity and personal data store.

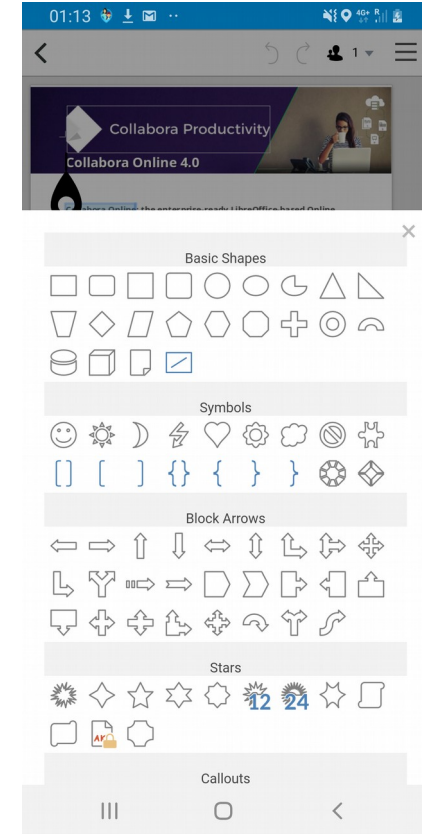
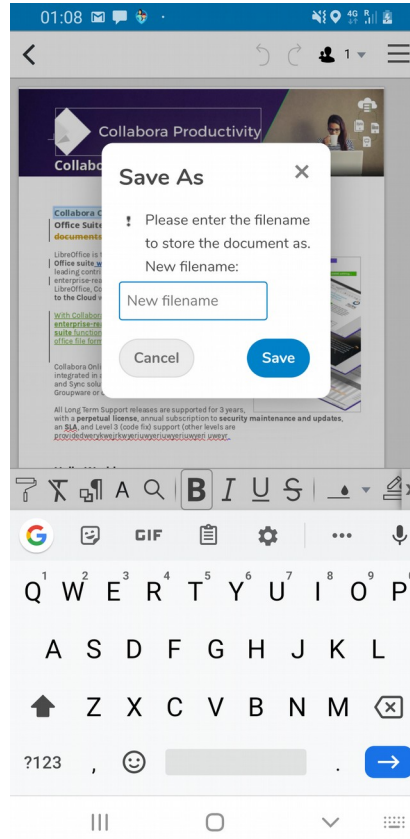
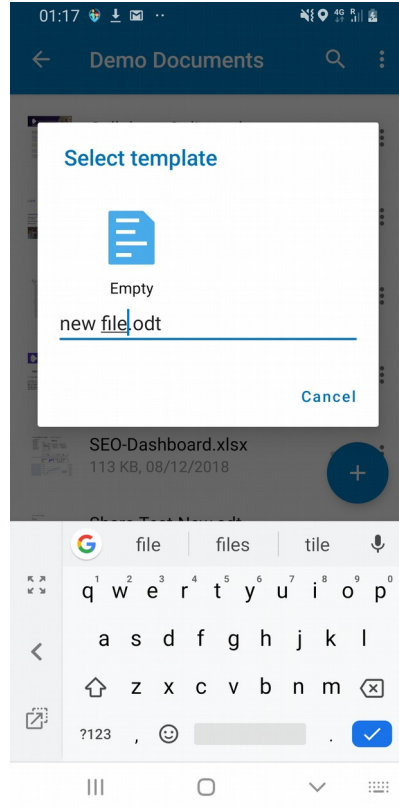
Thanks to *Tomaž Vajngerl*



Nextcloud Mobile App



Better integration in your hands



Collabora Office Mobile - Q4



- A great Collabora & Nextcloud partner !

Beta in TestFlight





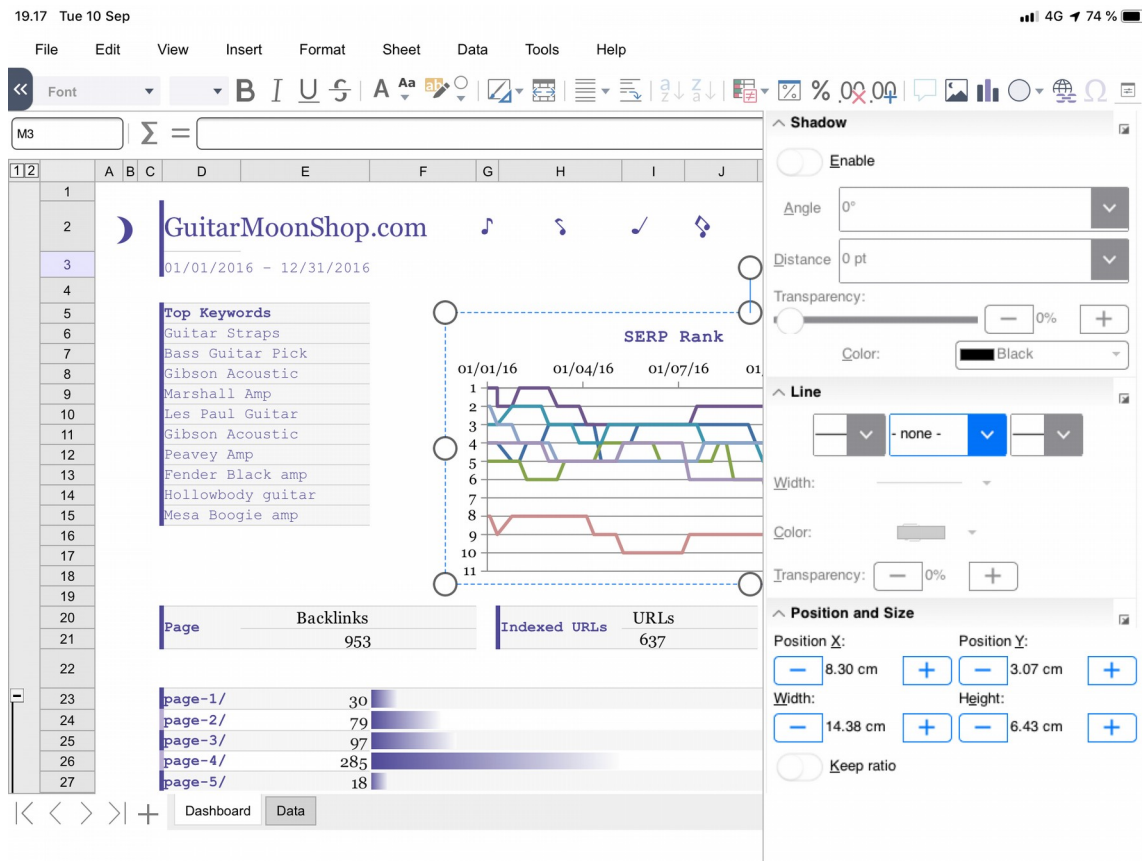
Native iOS version for tablets ... with Adfinis

Co-Developed with Adfinis

- A great Collabora & Nextcloud partner

Quite a story:

Buy Collabora Online,
get a free iPad version
thrown in free !



Collabora Online: the enterprise-ready LibreOffice-based Online Office Suite that allows you to stay in **control of your own documents. full control of your office files.**

LibreOffice is the world's most popular Open Source Office suite **with over 120 million users**. Collabora, a leading contributor to the project, and developer of the enterprise-ready Long Term Supported edition of LibreOffice, Collabora Office, has now brought LibreOffice to the Cloud with Collabora Online.

With Collabora Online you now have access to a powerful, enterprise-ready and 100% Open Source Online Office suite functionality, with excellent support for all popular office file formats and collaborative editing features.

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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 SLA, and Level 3 (code fix) support (other levels are provided by our partners). And there are more benefits:

Benefits

- Stable - QA'd and tested
- Long Term Support - 3 years from release
- Signed security updates
- SLA - Guaranteed response times
- Roadmap - Product management interaction and input into roadmap

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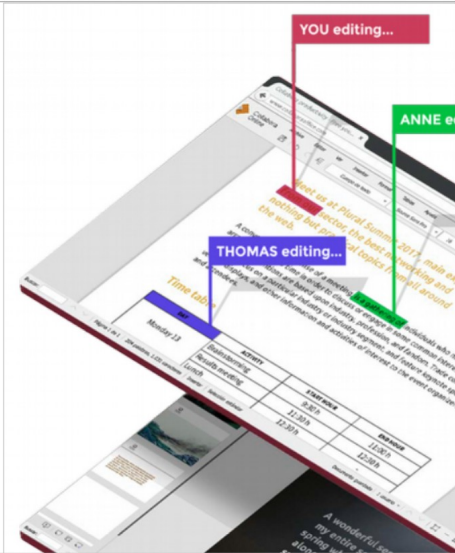
[www.collaboraoffice.com](#) | hello@collaboraoffice.com

The bottom of the screen shows a standard Android navigation bar with icons for back, home, and recent apps, along with a floating action button.

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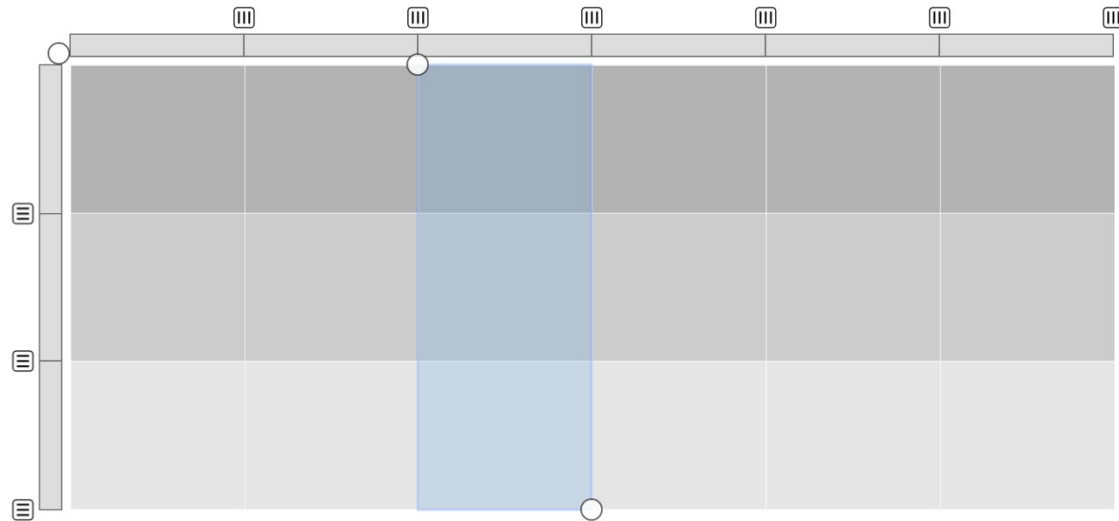
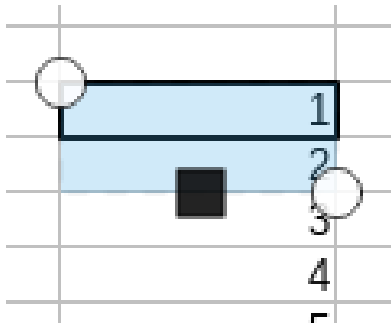
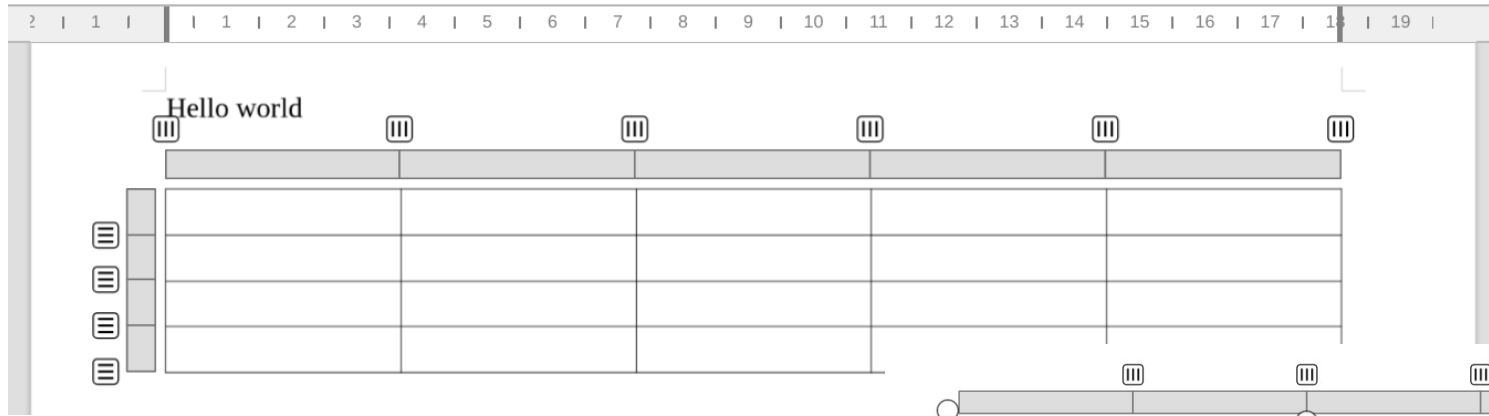
With Collabora Online you now have access to a powerful, enterprise-ready and 100% Open Source Online Office suite functionality, with excellent support



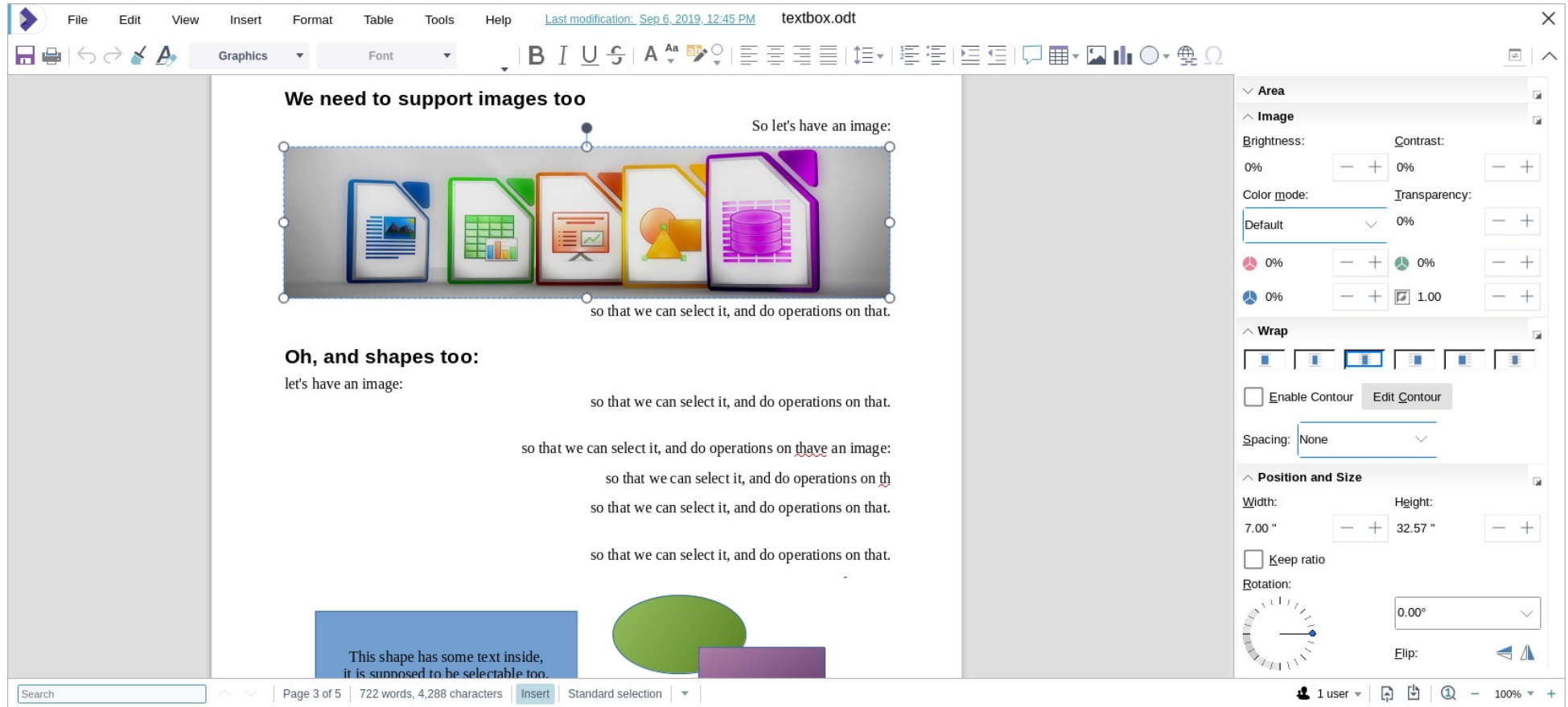
**Implemented for
Collabora Online 4.2
(*due Q4*)**



Many mobile wins: eg. touch resizing handles



Sidebar in Writer, Calc and Impress

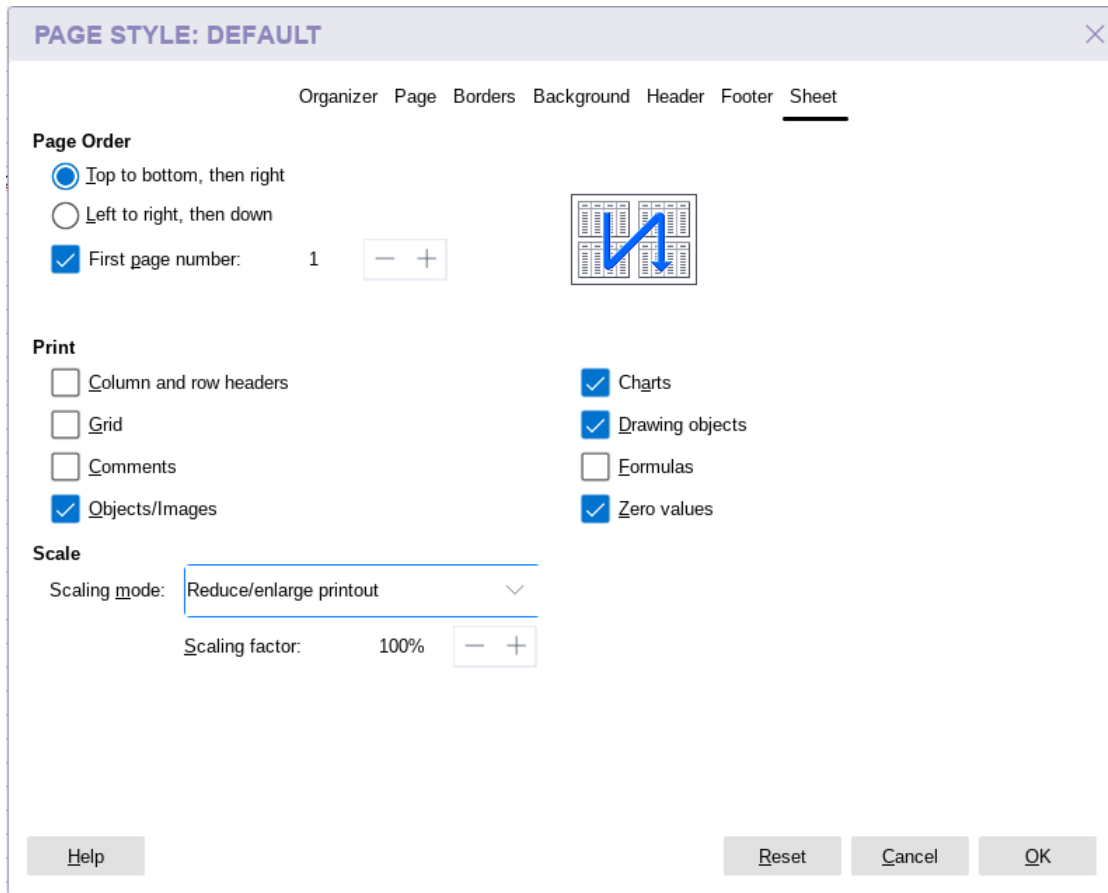




Online / Widget theming implementation ...

Custom look & feel

- Custom SVG branding of individual widgets
- Building on native widget framework.
- ~easy to re-use for other platforms (volunteer?)





The pieces you can't see

Integration improvements

- Masses of new extensible API to embed Online into your application

Performance

- Loading time, dialog rendering time
- Improved PDF rendering
- Unipoll – code simplification.
- Profiling infrastructure

UX / infra changes

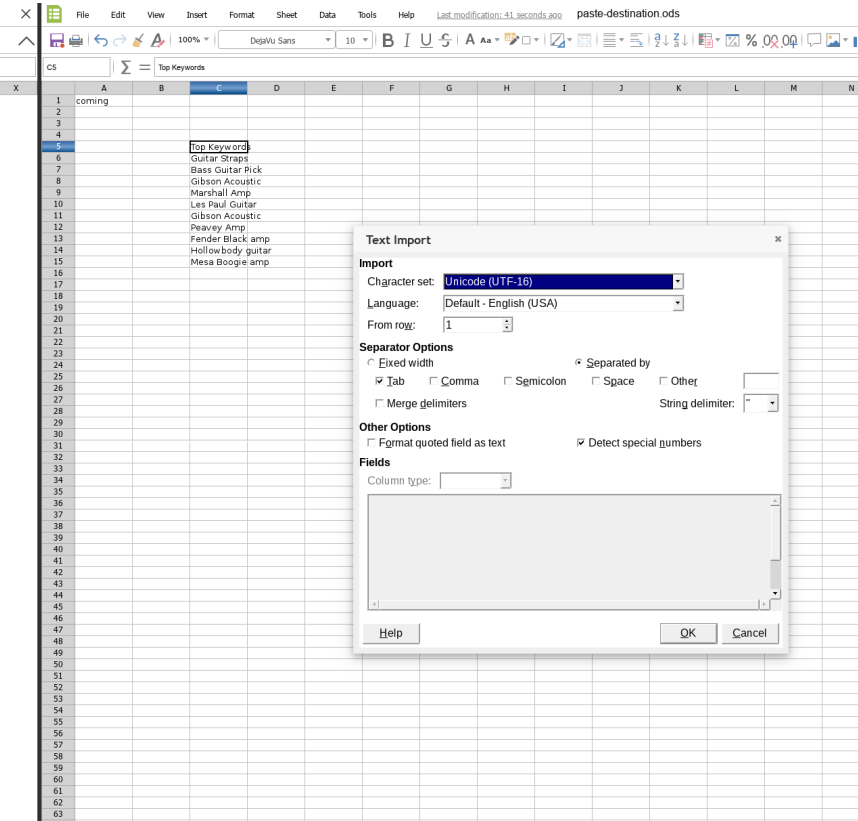
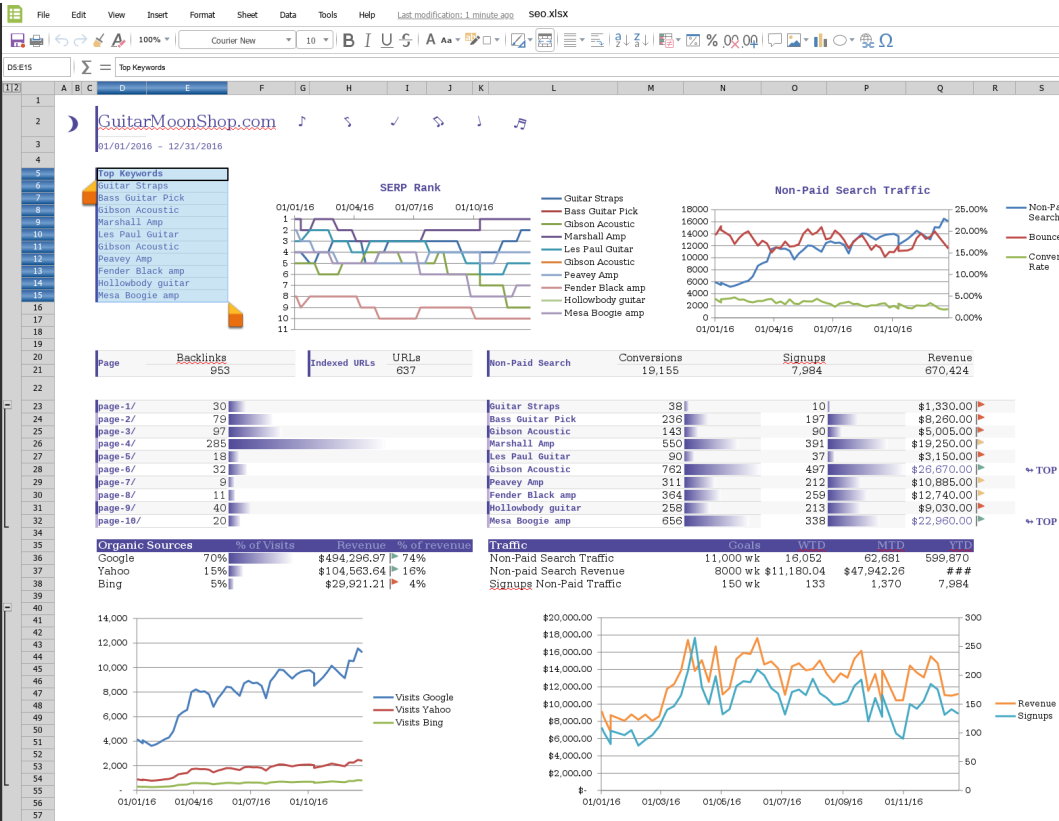
- Many new dialogs converted to async
- Multi-window focus re-work.

Security & Anonymization

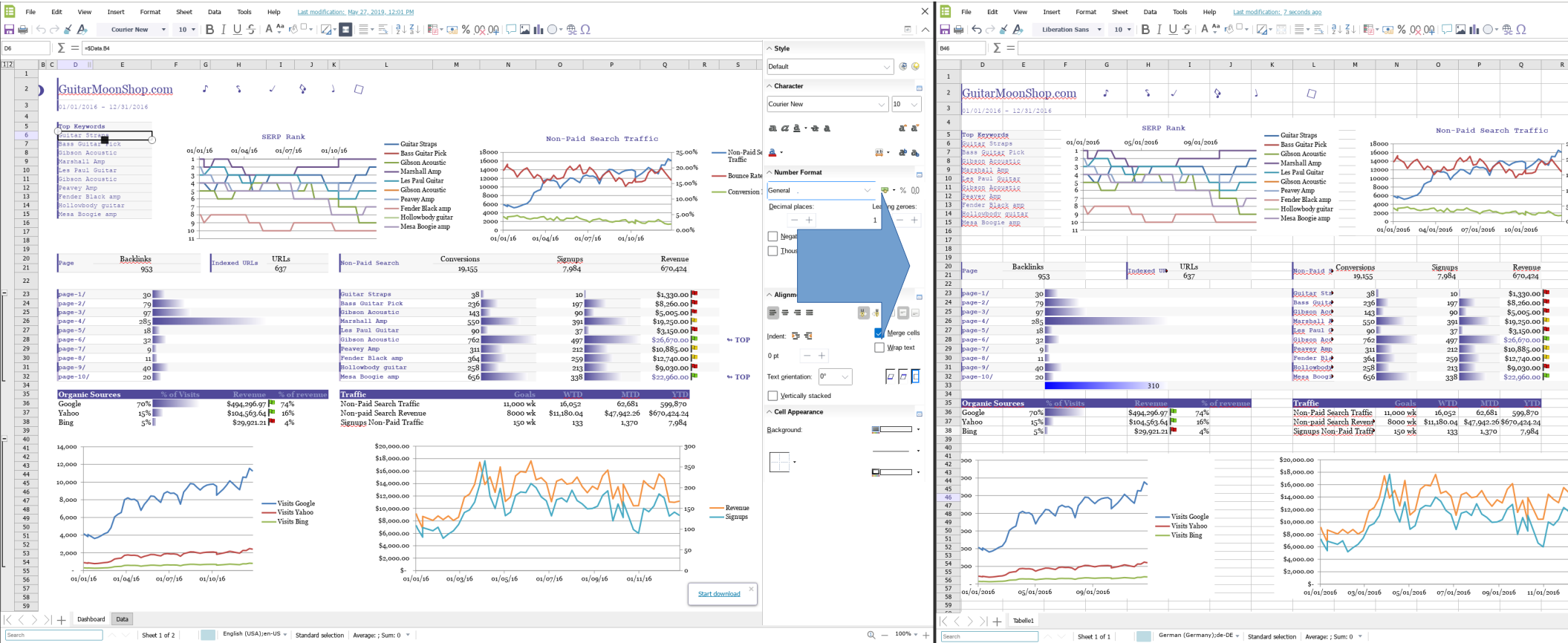
- Anonymized logging
- 3rd party penetration testing

And much much more ...

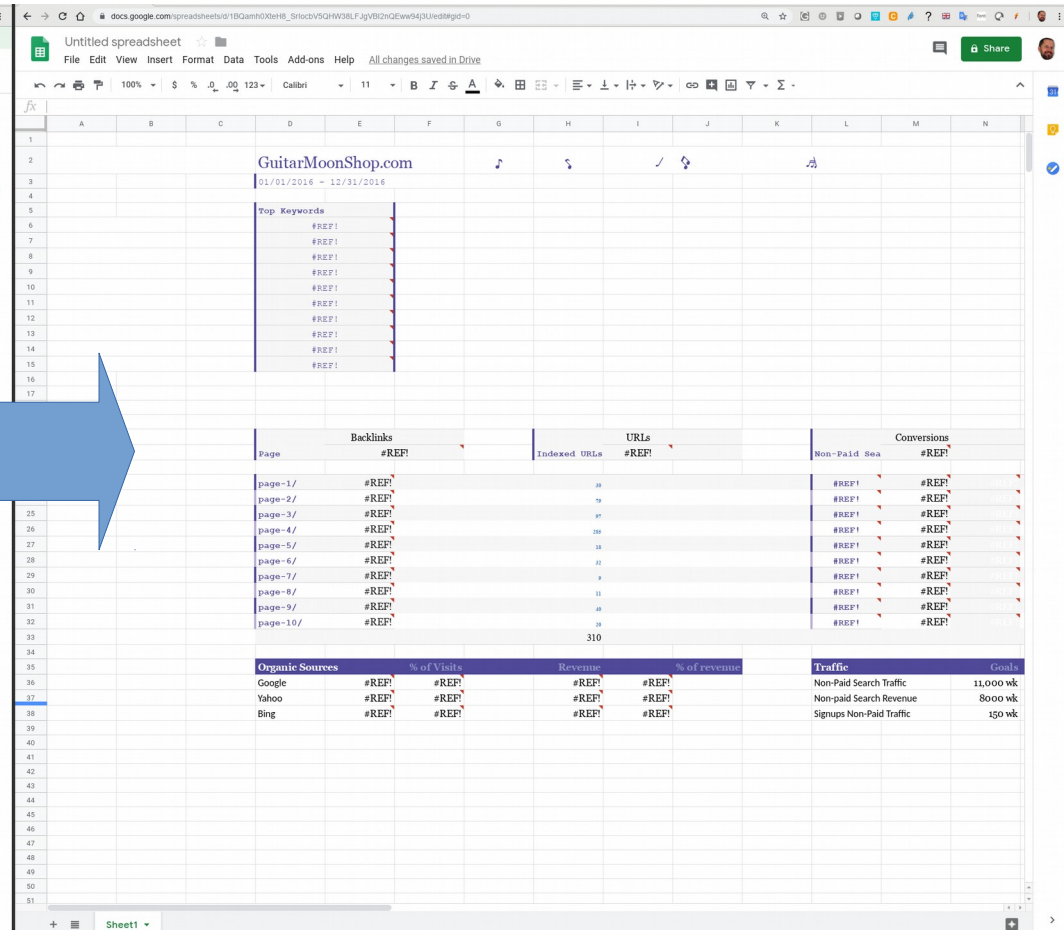
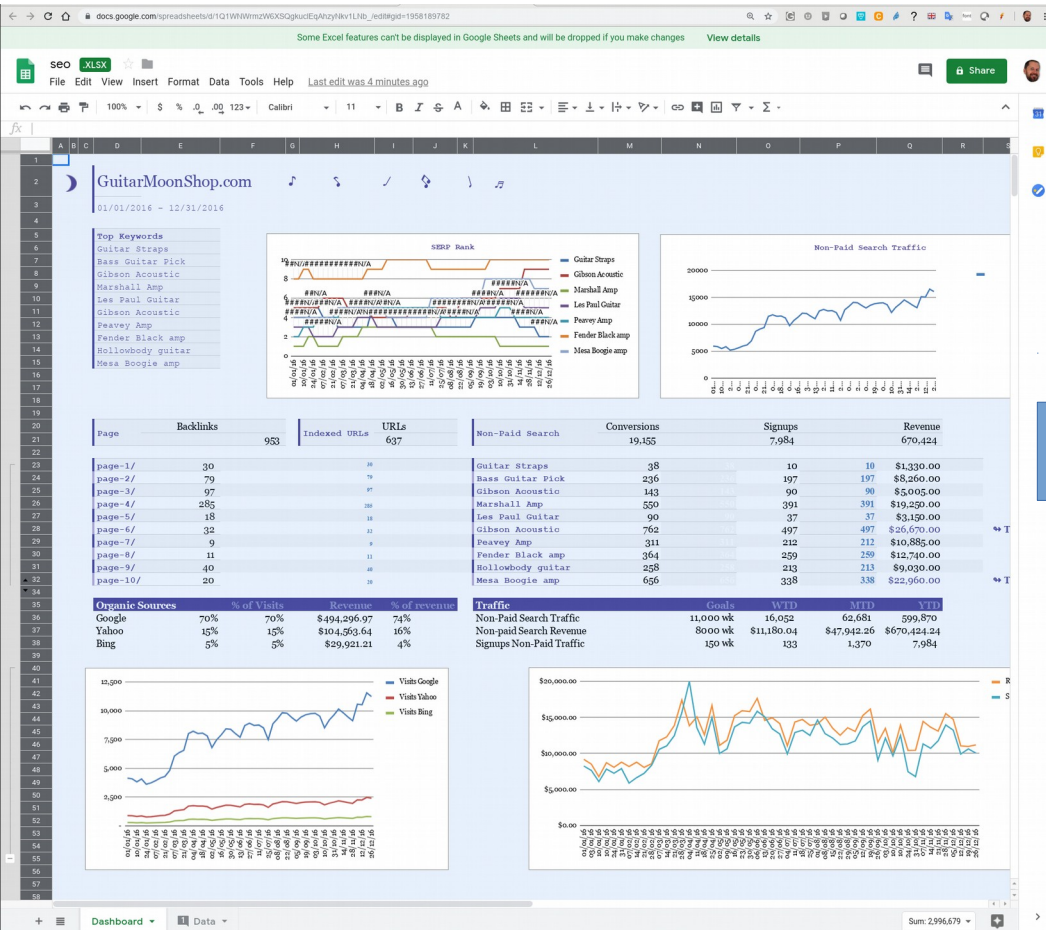
Online – old-style copy/paste: text → CSV import dlg.

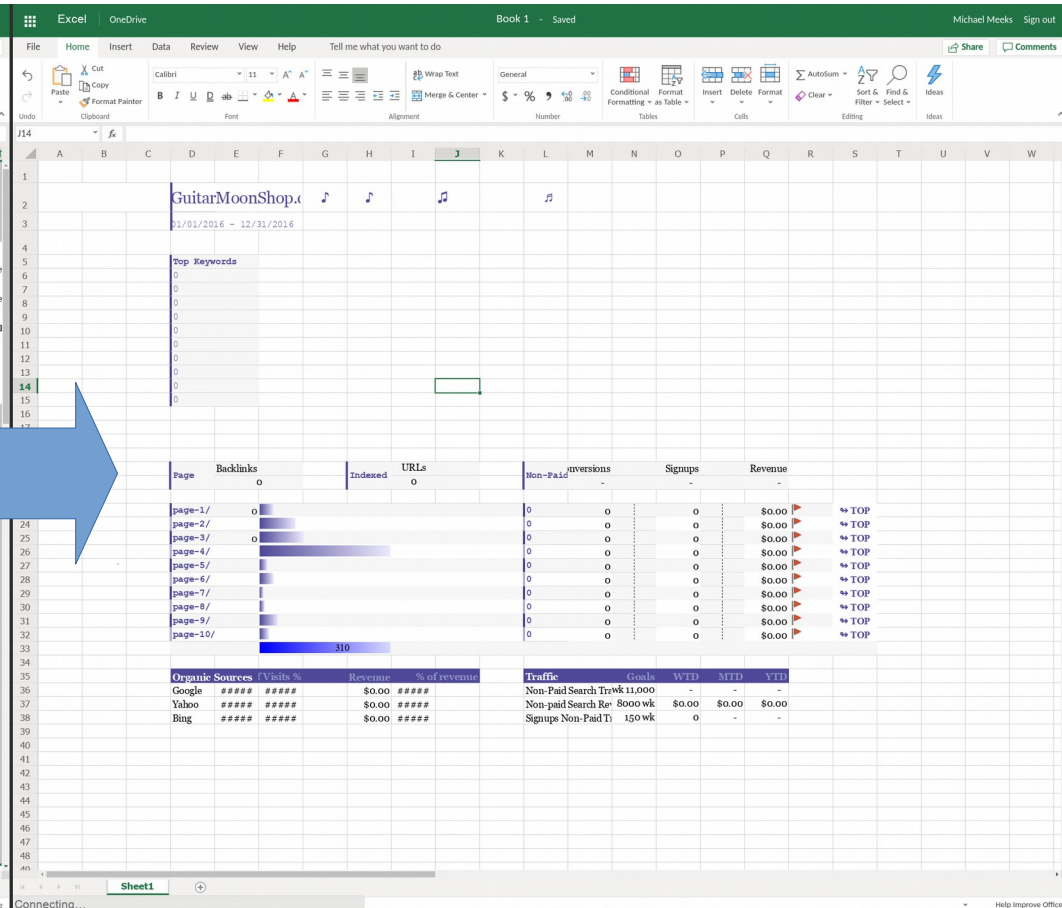
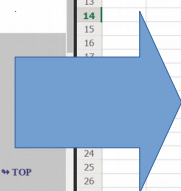


Afterwards (plus explicit chart copy)



Just the basics ? Gdocs / Chrome comparison





Interop: the best all-round implementation and constantly improving ...



A random feature: eg. bottom to top / left to right layout ...

Collabora Online is a powerful LibreOffice-based online office that supports all major document, spreadsheet and presentation file formats, which you can integrate in your own infrastructure. Key features are collaborative editing and excellent office file format support.

Collabora Office is the enterprise office suite of LibreOffice, the world's most widely used Open Source office suite. We provide installation and administration utilities together with long term maintenance and contracted support to deliver successful deployments with expertise.

**Integration with Nextcloud
wins – in last year**



Lots of lovely new things ...

RichDocuments goodness

- Federation & Global Scale [!]
- Secure View + Watermarking UI
- Template selector
- Integrated preview support
- File Renaming support
- Improved UI: Avatars outside
- Version integration with NC sidebar
- Insert image from Nextcloud
- Improved admin / options
- Performance improvements

Mobile / iOS & Android – direct editing

- Embedding Collabora *Online*
- Native print & Save As support
- Rich copy/paste integration
- Hide fullscreen, improved idle

Thanks to

- Julius Härtl, Roeland Jago Douma, Marino Faggiana, Tobias Kaminsky



Easy sharing – close at hand ...

The screenshot displays the Collabora Online web interface within a Google Chrome browser. The browser's address bar shows the URL `share.collabora.com/index.php/apps/files/?dir=/ADemo&fileid=...`. The interface features a purple header bar with navigation icons and a menu bar with options like File, Edit, View, Insert, Format, Table, Tools, and Help. Below the menu is a rich text editor toolbar with icons for undo, redo, bold, italic, underline, and text color, along with font settings (Montserrat, size 22). The main content area shows a document titled 'Collabora Online v 4.0' with a background image of a woman working on a laptop. The document text describes Collabora Online 4.0 as an enterprise-ready LibreOffice-based Online Office Suite. A sharing sidebar is open on the right, showing the document name 'Collabora Online.docx', its size (627 KB), and the time it was shared (6 months ago). The sidebar includes a search bar and a list of sharing options: 'Share link', 'Add to a project', and 'Connect items to a project to make them easier to find'. A light blue circle highlights the sharing options section.

Collabora Online.docx - Files - Nextcloud - Google Chrome (on dell.home)

Collabora Online.docx

File Edit View Insert Format Table Tools Help Collabora Online.docx

100% Default Style Montserrat 22 B I U A Aa

Collabora Productivity

Collabora Online v 4.0

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LibreOffice is the world's **most popular Open Source Office suite with over 120 million users.** Collabora, a leading contributor to the project, and developer of the enterprise-ready, Long Term Supported edition of LibreOffice.

YOU editing... ANNE editing... THOMAS editing...

Collabora Online.docx

★ 627 KB, 6 months ago Tags

C... Acti... Comm... Shar... Versi...

Name, federated cloud ID or email address...

Share link

Add to a project

Connect items to a project to make them easier to find

Search: Page 1 of 2 281 words, 1,915 characters Standard selection English (USA)



Collabora Online for thumbnailing

Files - Nextcloud - Google Chrome (on dell.home)

share.collabora.com/index.php/apps/files/?dir=/ADemo&fileid=68859

Files - Nextcloud

ADemo

CharTest.ods	11 KB	3 months ago
Collabora Online.docx	627 KB	6 months ago
Collabora Online.odt	653 KB	3 months ago
collabora-online.docx	411 KB	7 months ago
cs3-2019-with-animation.odp	8.5 MB	4 months ago
demo-embedded-content-showcase.docx	36 KB	9 months ago
demo-timeline.xlsx	11 KB	3 months ago
designer-cv.odt	1.1 MB	6 months ago
designer-cv-lool.odt	1.1 MB	9 months ago
embedding.odt	15 KB	a year ago

41 files 25.6 MB

Collabora Online .docx

627 KB, 6 months ago

Chat Activity Comments **Sharing** Versions

Name, federated cloud ID or email address...

Share link

Add to a project
Connect items to
easier to find

- ☒ Allow editing
- ☒ Hide download
- ☐ Password protect
- ☐ Set expiration date
- ☐ Note to recipient



Directly insert images easily

Collabora Online.docx - Files - Nextcloud - Google Chrome (on dell.home)

Collabora Online

share.collabora.com/index.php/apps/files/?dir=/ADemo&fileid=...

File Edit View Insert

and collaborative editing

Collabora Online comes with **Support**, and can be integrated with various solutions, Document Management Systems, Groupware or customer portals.

All Long Term Support is included in the **license**, annual subscription, SLA, and Level 3 (code changes) support. And there are more benefits:

- Stable - QA'd and tested
- Long Term Support

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Insert from Nextcloud

Photos

a.jpeg 948 KB

a.png 11 KB

a... sident.png 392 KB

captive.jpeg 29 KB

Ch... south.jpg 2.4 MB

gre...atch.jpeg 652 KB

Paris.jpg 223 KB

San ... isco.jpg 211 KB

Choose

Collabora Online.docx

627 KB, 6 months ago Tags

Acti... Comm... Shar... Versi...

Share link

Add to a project

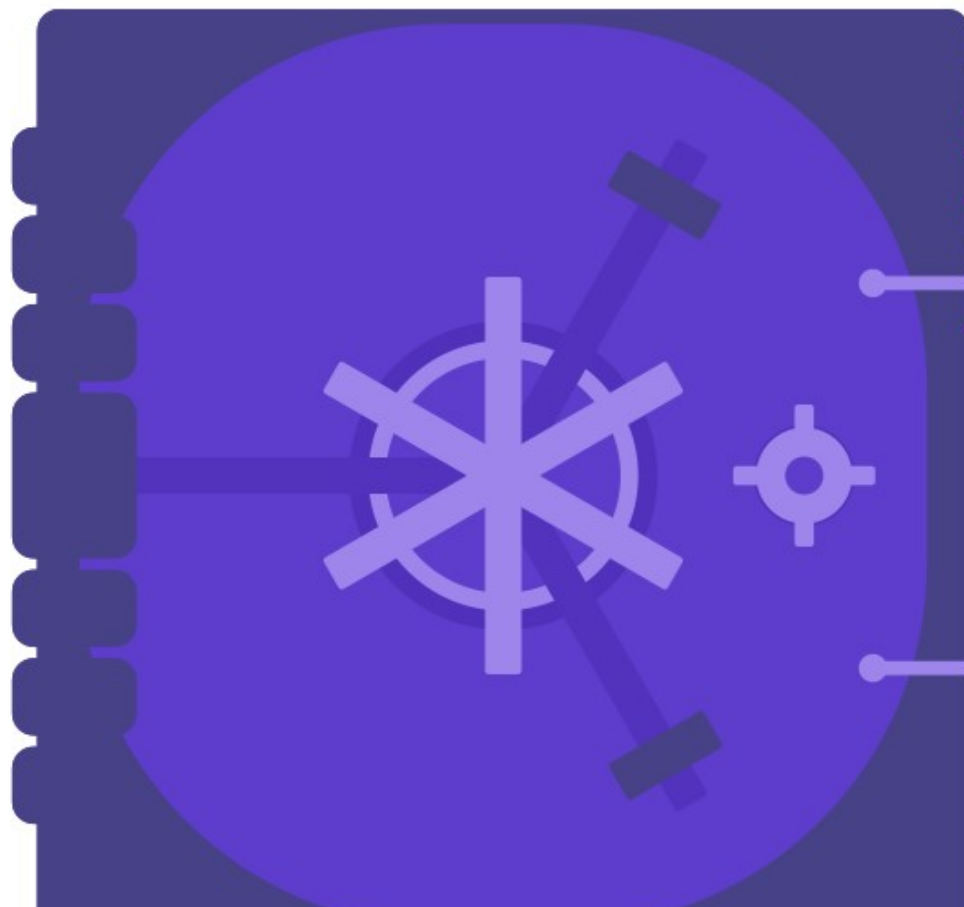
Connect items to a project to make them easier to find

Search: Page 1 of 2 281 words, 1,915 characters Standard selection English (USA)

Distinctives



Don't let your document data out of your site [sic]



on your premise / Private network

Virtual machine / Docker container

Seccomp-bpf ~no sys-calls

Extremely sparse filesystem

Chroot per document

Systematic load crash testing

Industry beating coverity score

LibreOfficeKit

rendering instance

Document data is held in your server room.

Not sent to every single device to be controlled by the browser + JS + local debugger.

C'bra sends pixels to clients.



Secure View: [No] Download + watermarks

The image shows a Nextcloud interface with a sidebar on the left containing navigation links: Accessibility, Sharing, Administration, Overview, Basic settings, Support, Sharing, Security, Theming, Groupware, Activity, Tag management, Collabora Online, Logging, and System.

The main content area displays the "Secure view settings" for "embedded-content-showcase.docx". The settings include:

- Secure view settings**
 - Secure view enables you to secure documents by embedding a watermark
 - ☒ Enable watermarking
 - Watermark text**
 - Confidential: Accessed by {userId} at {date}
 - Supported placeholders: {userId}, {date}
 - ☒ Show watermark on tagged files
 - confidential (restricted)
 - ☒ Show watermark for users of groups
 - externals
 - ☐ Show watermark for all shares
 - ☐ Show watermark for read only shares
- Link shares**
 - ☐ Show watermark for all link shares
 - ☒ Show watermark for download hidden shares
 - ☐ Show watermark for read only link shares
 - ☒ Show watermark on link shares with specific system tags
 - confidential (restricted)

Overlaid on the settings are three document thumbnails, each with a watermark:

- Collabora Office** (embedded-content-showcase.docx) - "Embedded editable chart" - "Charts imported from spreadsheet applications remain connected to their original data set and can be easily updated. Settings such as labels, >, and layout are configurable from within the document in which the chart is embedded."
- Collabora Productivity** (Nextcloud_Server_Administration_Manual.pdf) - "Advanced graphics"
- Nextcloud Server Administration Manual** (Nextcloud_Server_Administration_Manual.pdf) - "Release 13"

Each document has a watermark: "Confidential: Accessed by [userId] at 2019-09-10 11:30:57".

At the bottom, the text "collaboraonline.com" is visible on the left, and "The Nextcloud developers" is visible on the right.

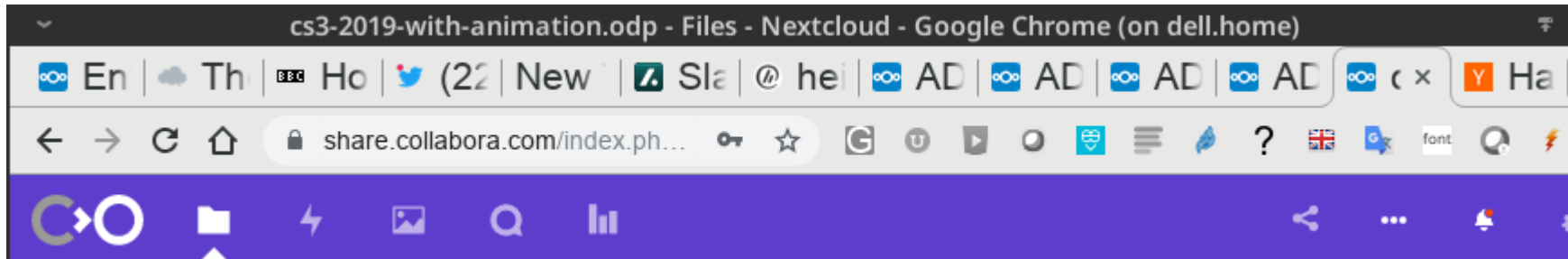


Simple, per-user pricing

Run as many servers / VMs as you need

Dynamically scale your workloads with Kubernetes

Beware of the Window + Tabpocalypse:



Simplicity & Scalability

Large deployments / HA pieces

- Scales with the network.

Simple architecture:

- No new HA Database
- No new message-bus
- No shared data storage

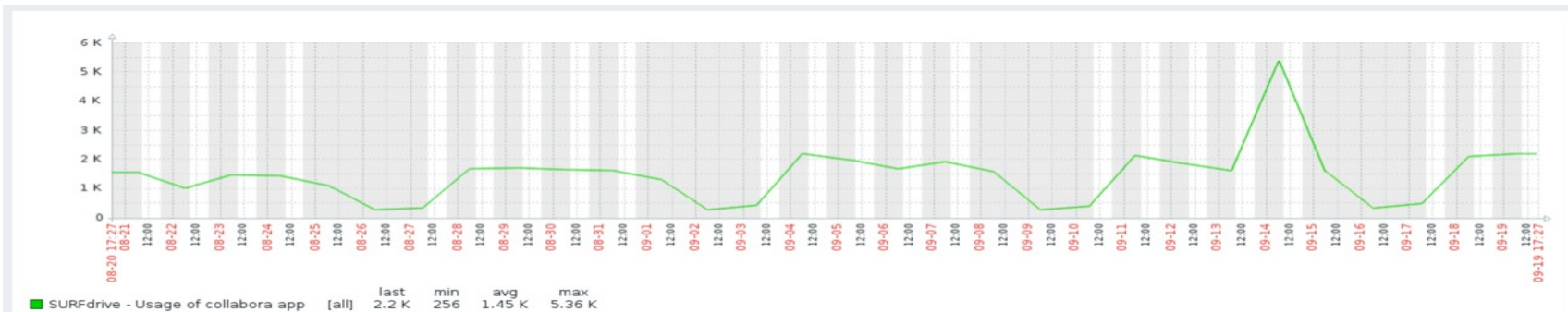
eg. 1&1 / GMX

- ~millions of users with access

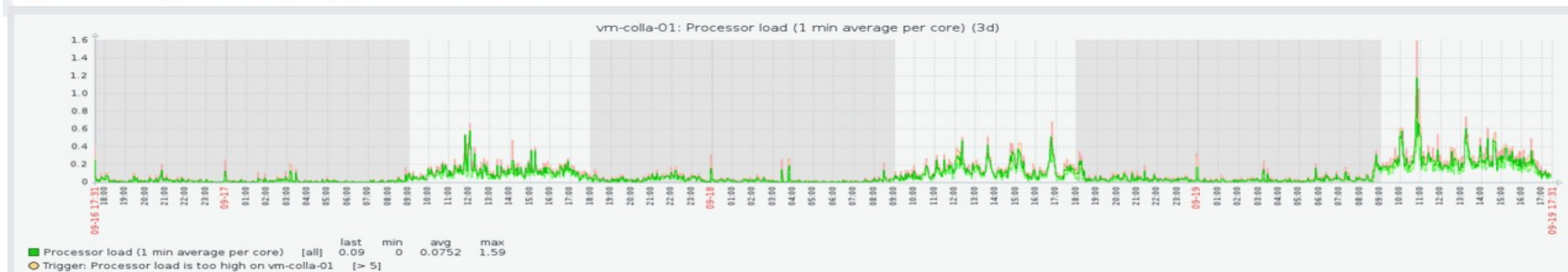
The image is a composite of two parts. The top part is a diagram titled "Kubernetes – Horizontal Pod Autoscaler" with the Kubernetes logo. It shows a flow: a "Horizontal Pod Autoscaler" box has two arrows pointing to it: one from a "DEPLOYMENT" box labeled "2. If threshold not Change number of replicas" and another from a "Metrics Server" box labeled "1. Check for CPU and Memory metrics". An arrow points from the "Horizontal Pod Autoscaler" box to a sequence of "POD 1", "POD 2", and "POD N" boxes, labeled "3. Scale number of pods". Below the diagram, a "Metrics:" box shows "resource memory on pods (as a percentage of request): 40% (1294229504) / 70%". The bottom part is a screenshot of a web browser showing the GMX web interface. The browser tabs include "Eduard Andrei Ardelean", "TLS 1.3", "Sept. 12th: Thursday", "Free Email Addresses", and "Helm". The GMX interface has a purple header with navigation icons and a "Format" dialog box open in the center, prompting the user to "Specify the basic settings, such as line spacing, or choose the page size and orientation." The background shows a LibreOffice Online document editor with a sidebar for "Open File" and "Recently used" items.

Real world: 40k users – Collabora Online

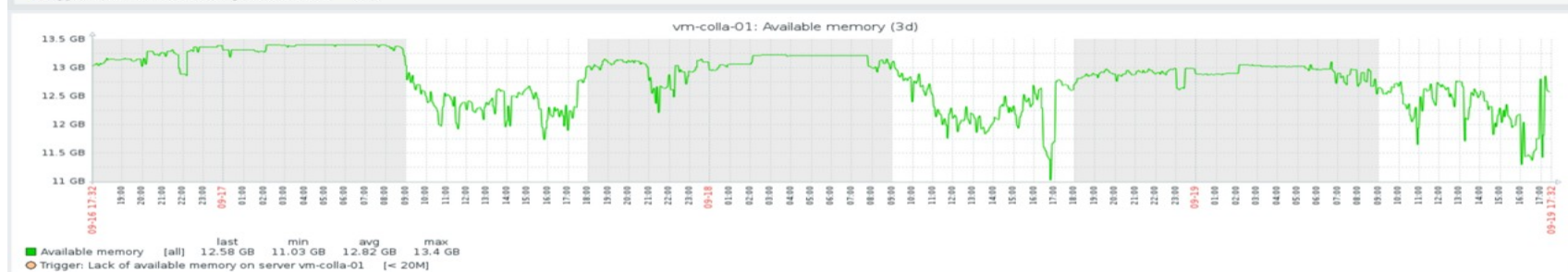
Usage



CPU



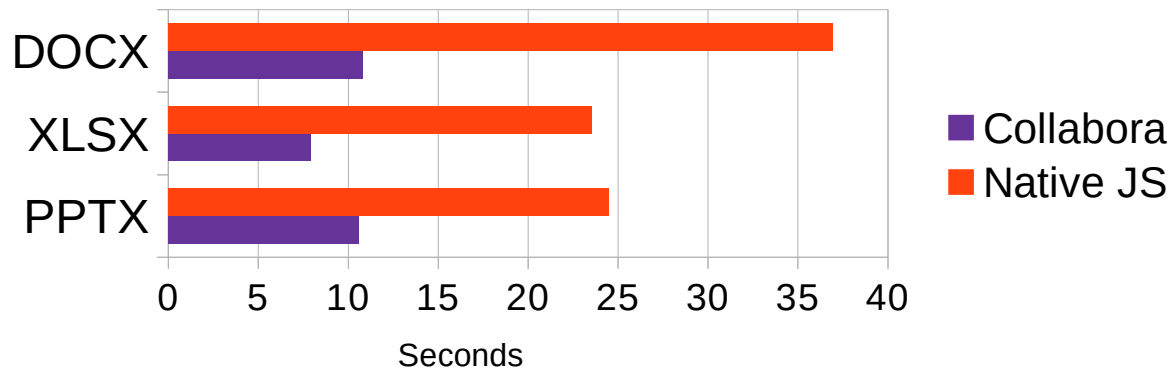
Free
RAM:
13.5Gb
→
11Gb





Do the work on battery, or in the data-center ?

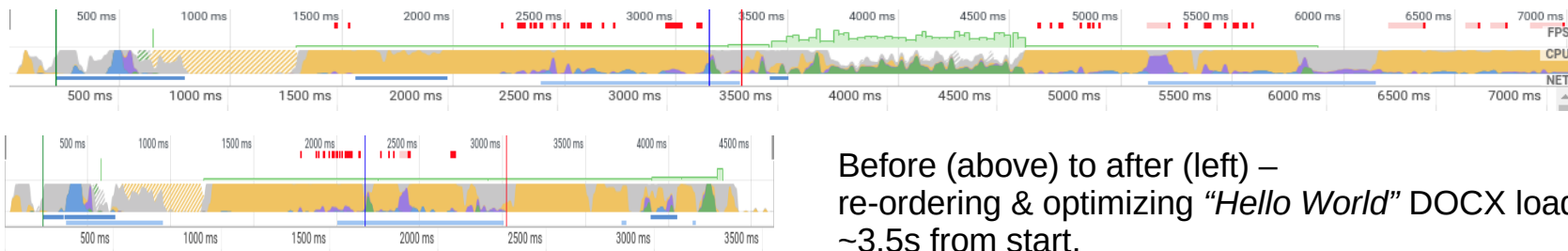
Time to load & render blank files - Galaxy S4



First cut pre-optimized numbers

With data: larger spreadsheets
10x faster → 1000X faster.

Threaded, GPU accelerated
spreadsheet core



Before (above) to after (left) –
re-ordering & optimizing “Hello World” DOCX load –
~3.5s from start.

Open First + Community

Deep pool of volunteers & companies

- Berlin based Stiftung
- 100% open code.

Federal Ministry
of Economics and
Technology





Conclusions

- Our mission applied
- Rich partnership with Nextcloud
- Gorgeous, interoperable Document collaboration
- Seamless support with SLA
- Rapid improvement
- Long term support
- Scalable & easy to deploy
- Backed by large, diverse community & Berlin based Stiftung.
- Product Management today