Collabora Online & Nextcloud

Collabora Productivity

Michael Meeks *<michael.meeks@collabora.com>*

General Manager at Collabora Productivity

@michael_meeks, mmeeks #libreoffice-dev irc.freenode.net

"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 WYSIWG rendering

On-premise Integration with Nextcloud.

Architecture – a bet on CPU threads & network …

collabora online .com

Collabora

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'etre:

- 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:

Partner:

Powerful document classification – eg. "top secret". Digital signatures and classification of paragraphs.
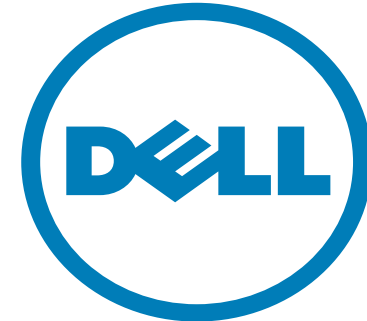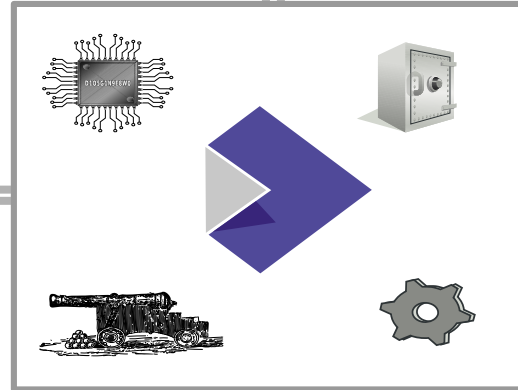
140 partners and growing ...

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

collaboraonline.com

The Collabora Online Vision

Full-feature, Open Source,

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

No compromises & flexible

Complements
Nextcloud's vision

MS Office Online browser a stop-gap ...
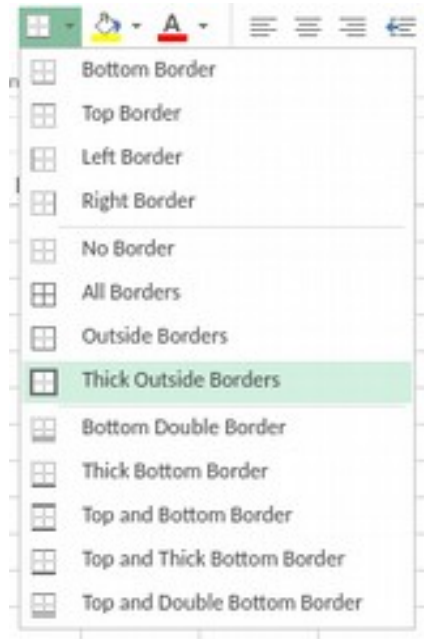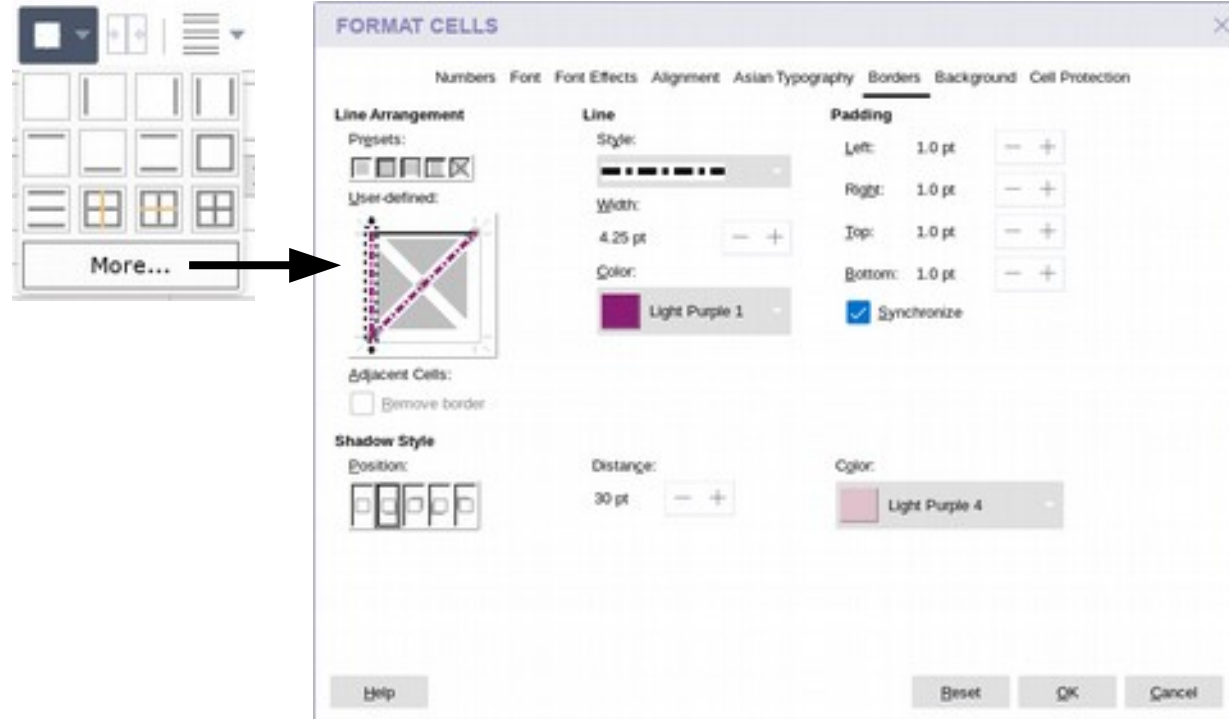
Full Feature → the things the feature matrix hides

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

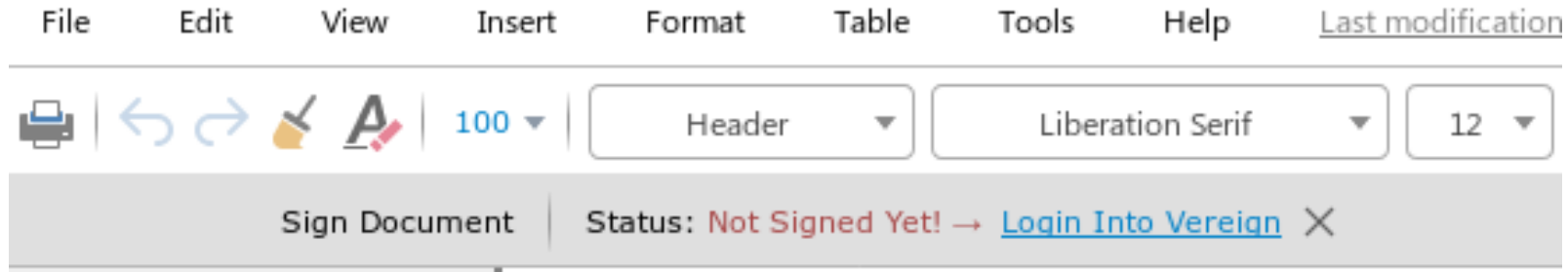- tab through editable fields; skip protected sections
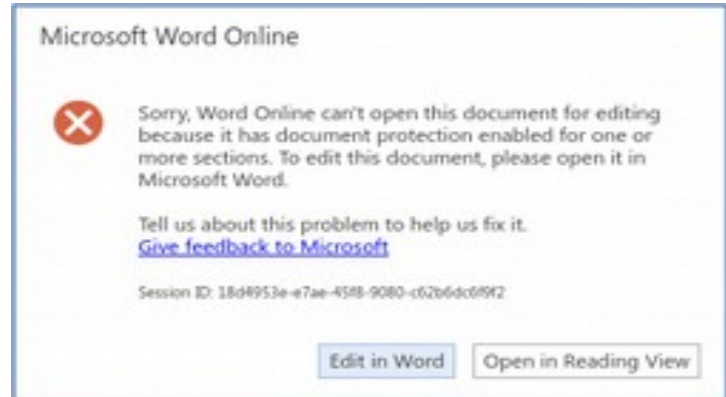
Recent Improvements

Significant Mobile & UX improvements
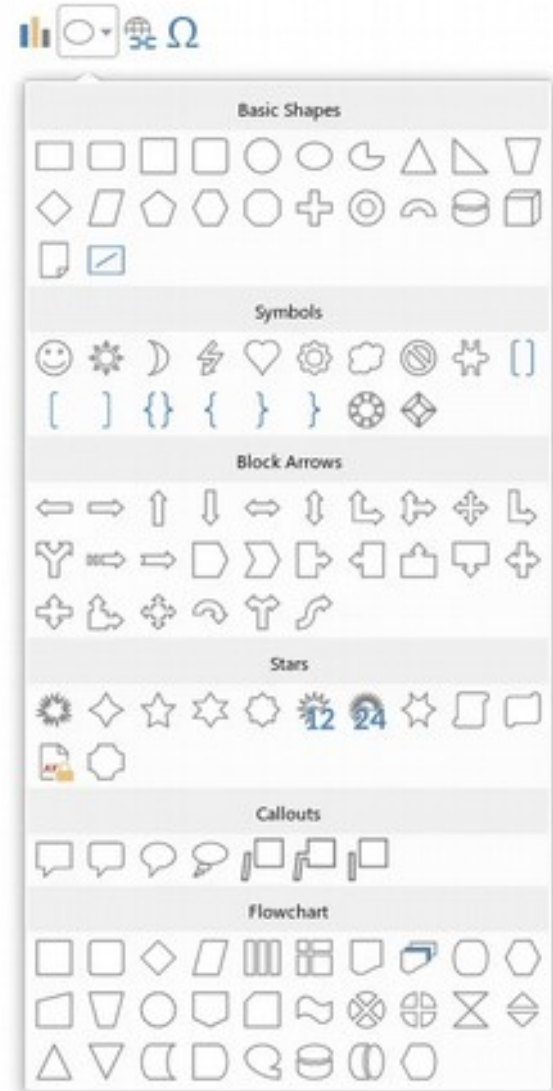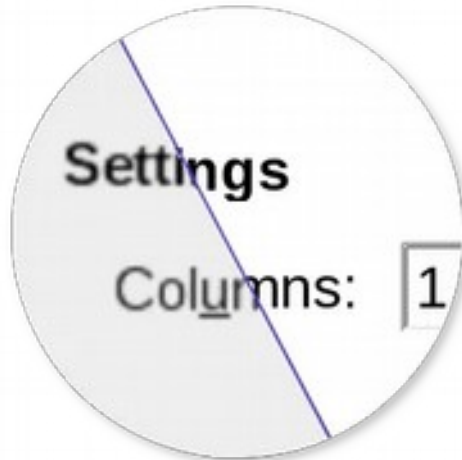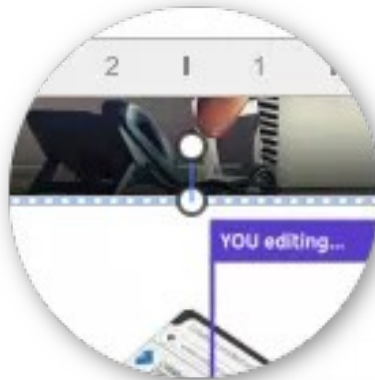
Blockchain / Vereign Integration

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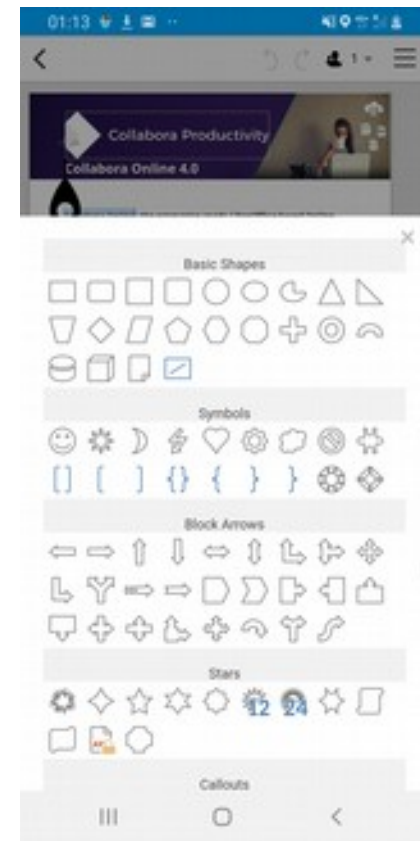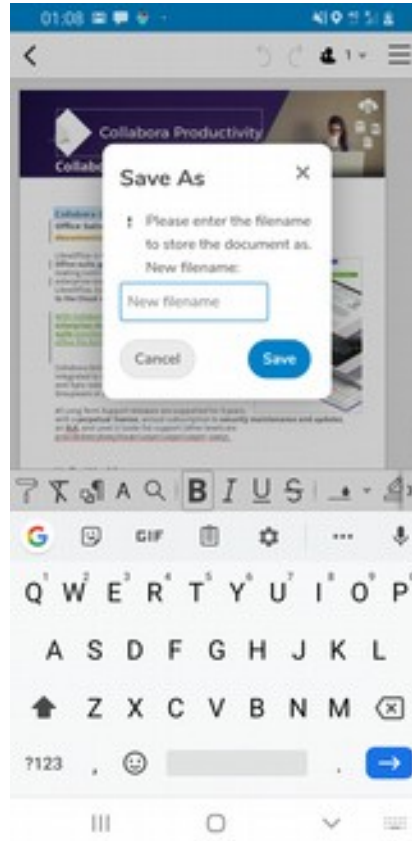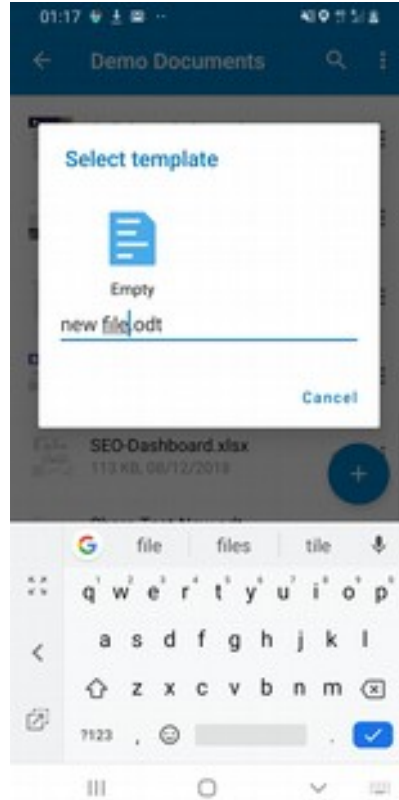
Thanks to *Tomaž Vajngerl*

Nextcloud Mobile App

Better integration in your hands

Collabora Office Mobile - Q4

Native iOS version for tablets - with Adfinis

Co-Developed with Adfinis

- A great Collabora & Nextcloud partner !

Beta in TestFlight
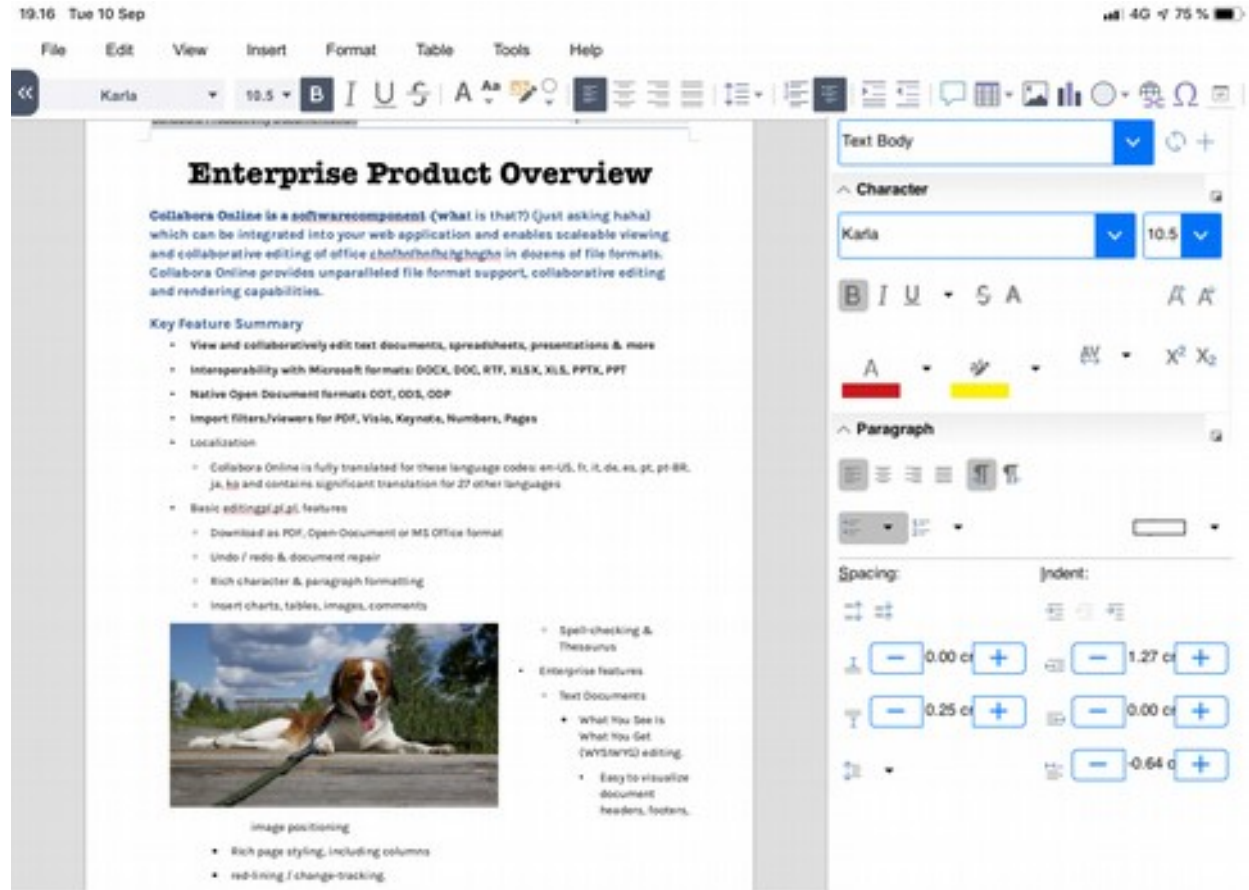
Native iOS version for tablets ... with Adfinis

Co-Developed with Adfinis

- A great Collabora & Nextcloud partner

Quite a story:

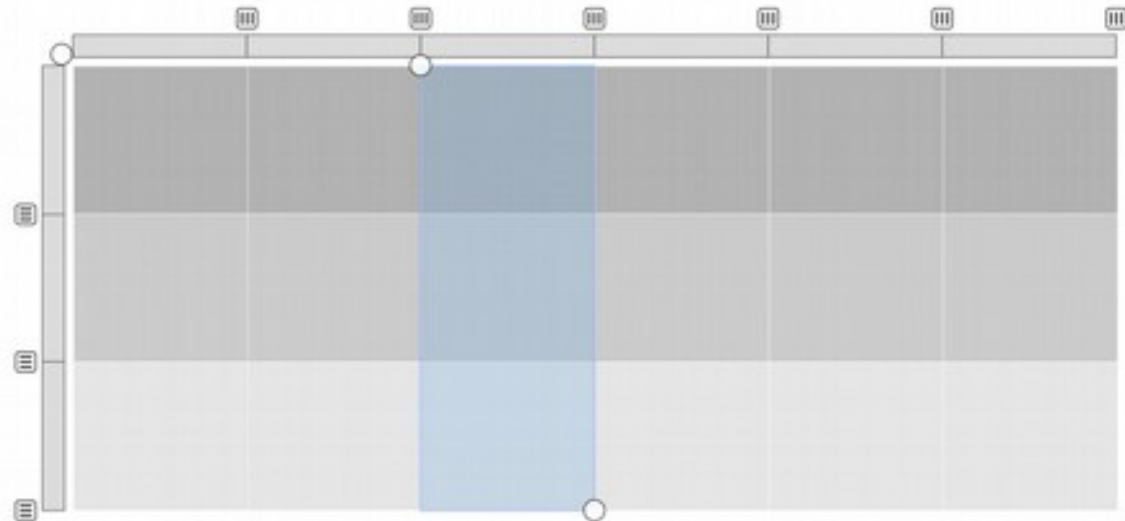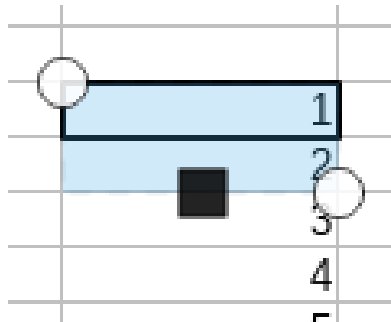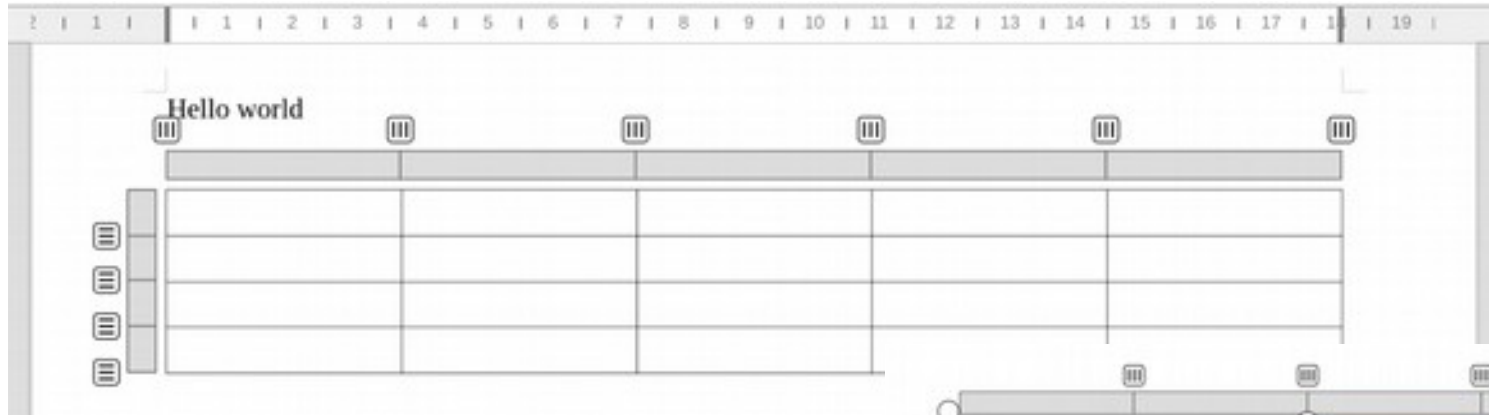Buy Collabora Online, get a free iPad version thrown in free !
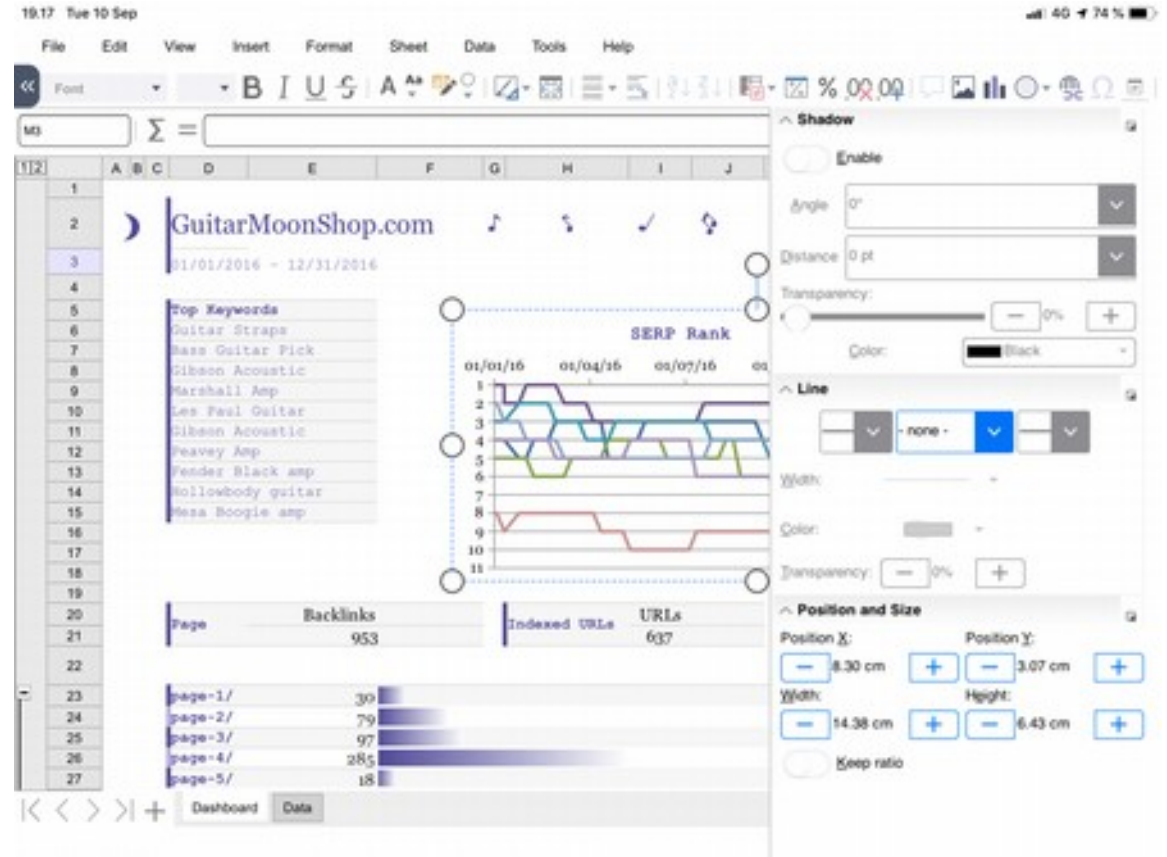
Online based Android app – in progress
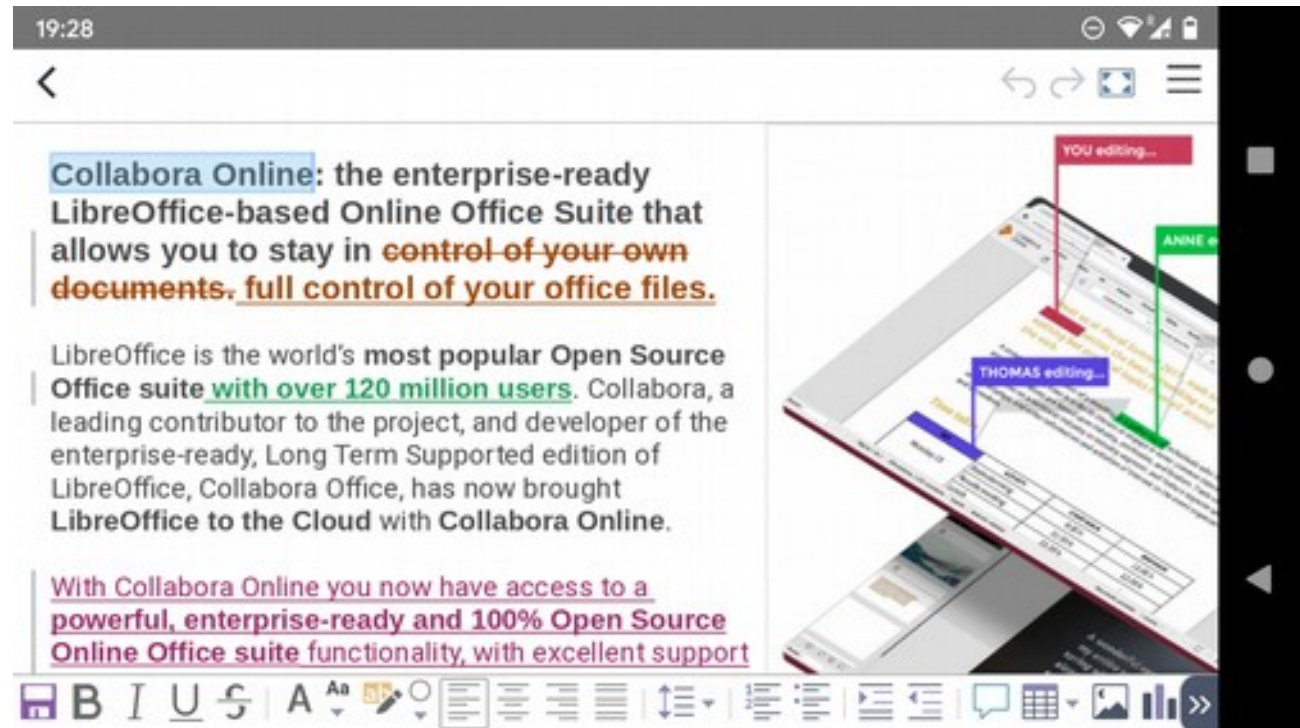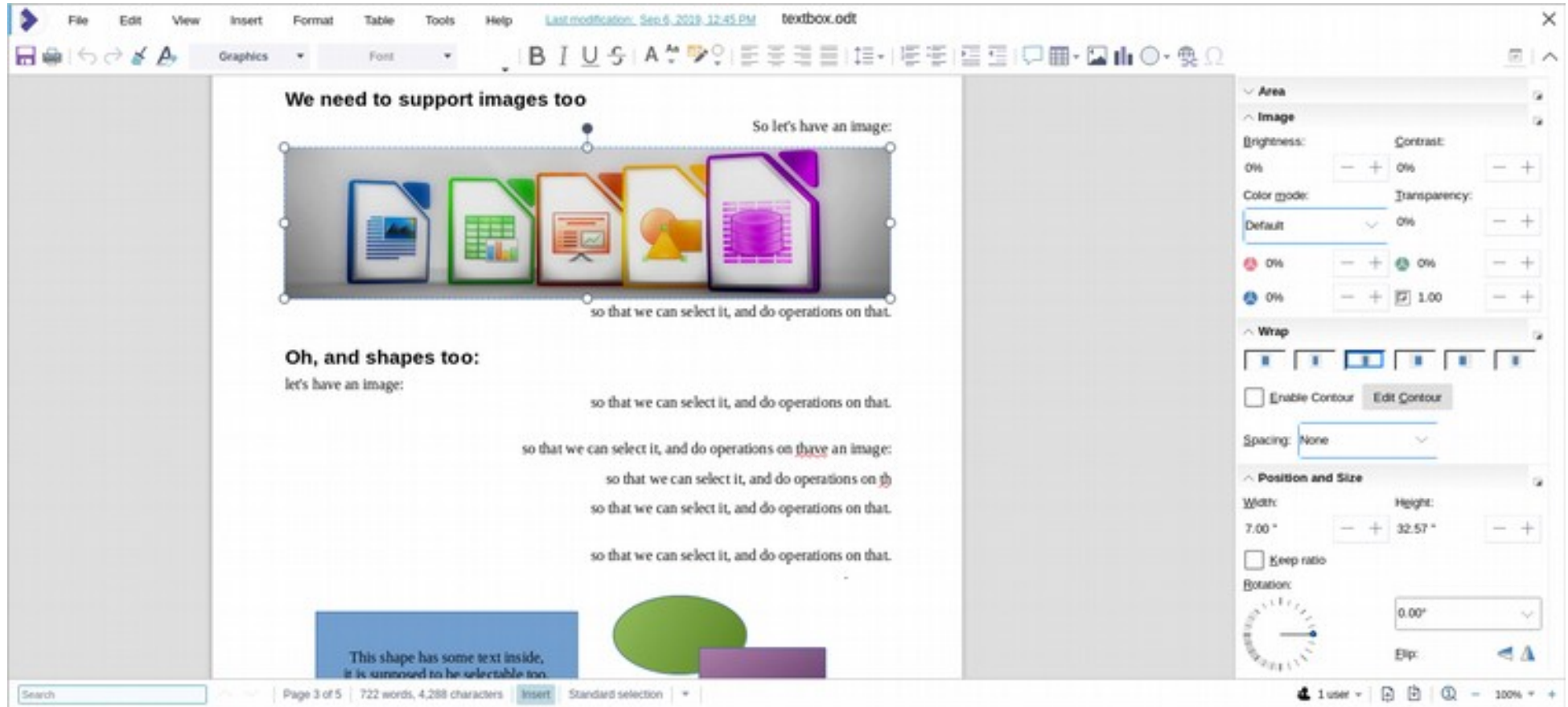
Implemented for Collabora Online 4.2 *(due Q4)*

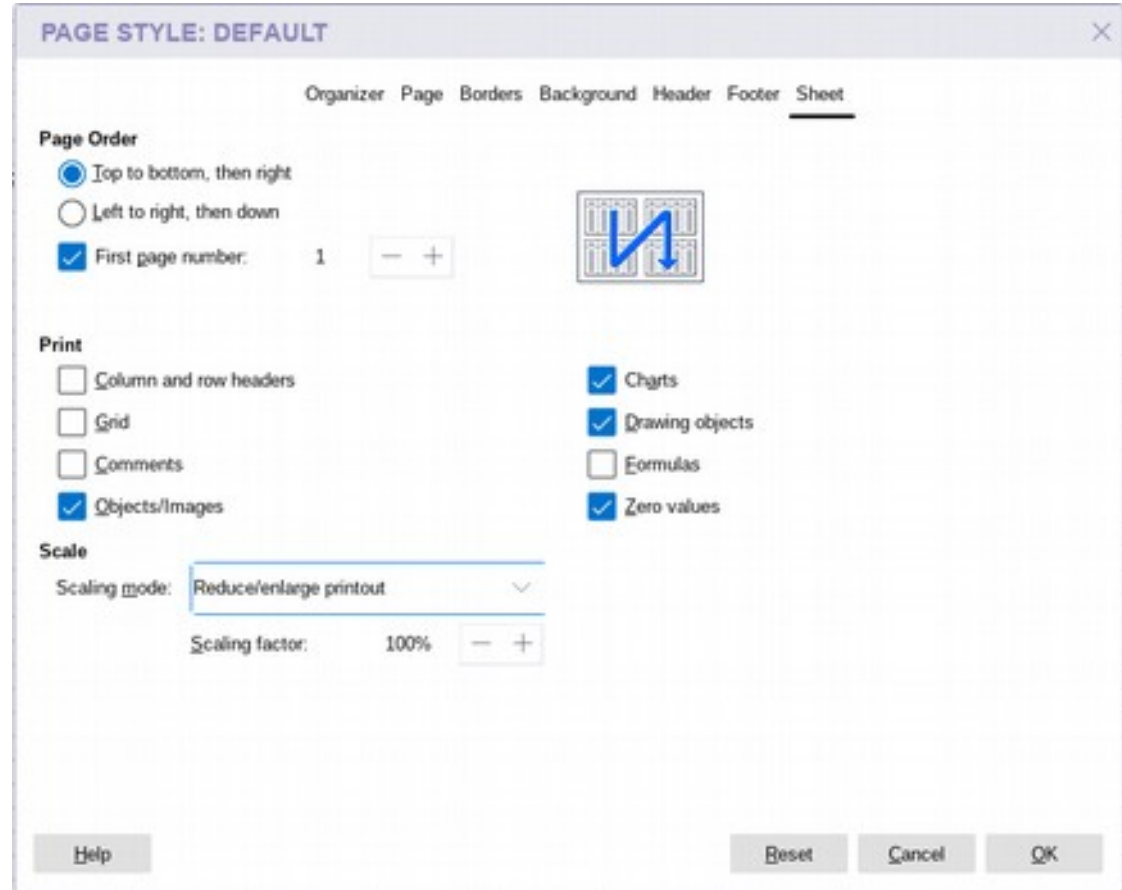# Many mobile wins: eg. touch resizing handles

Hello world

collaboraonline.com

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.
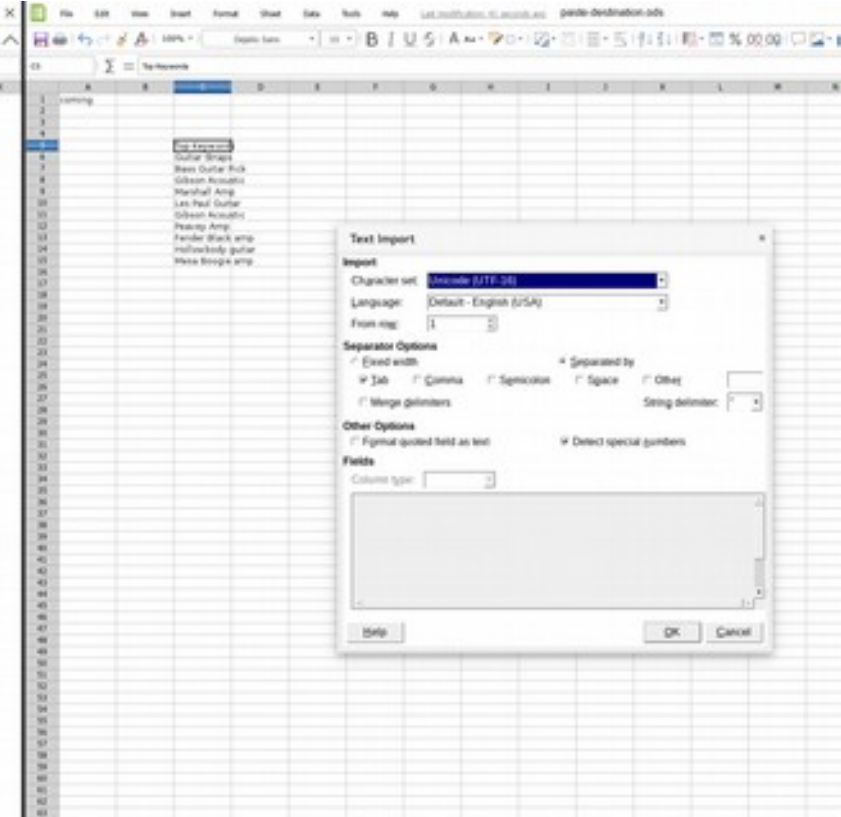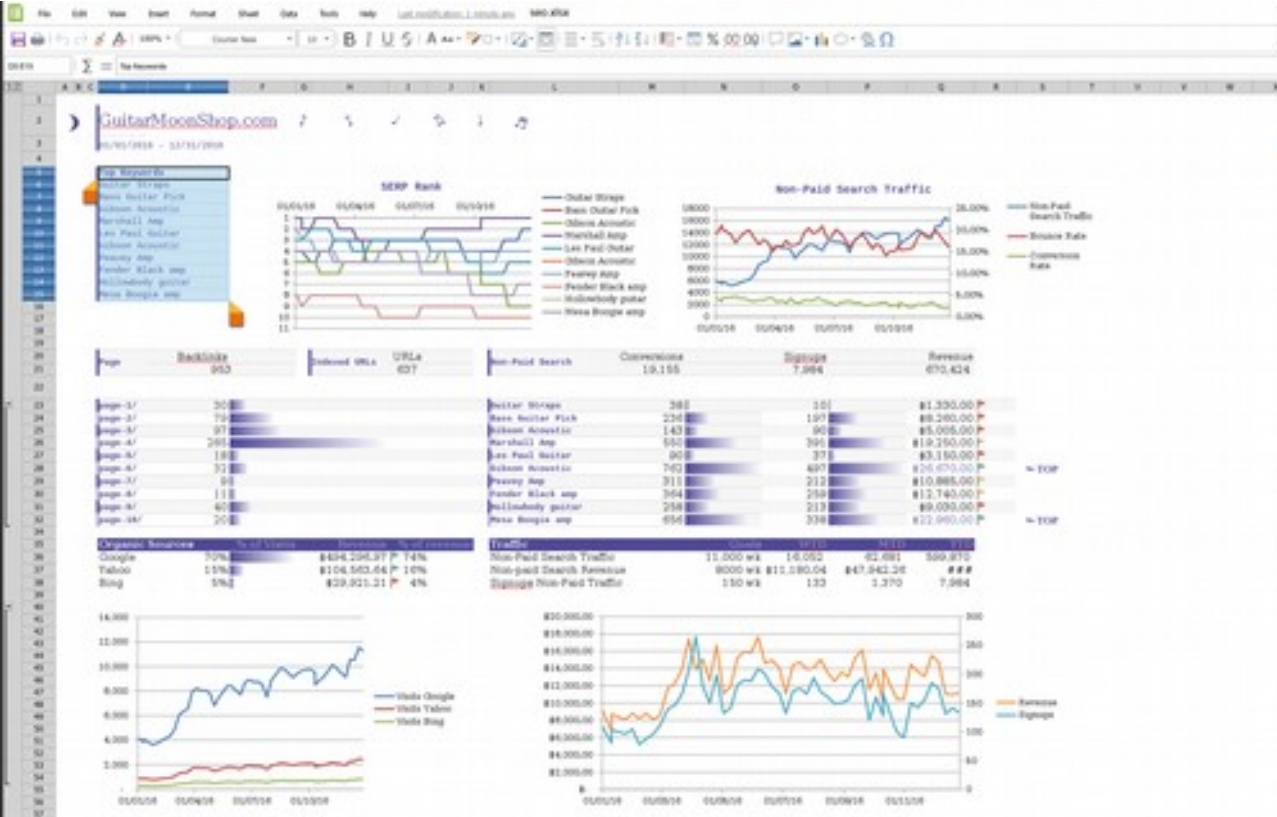
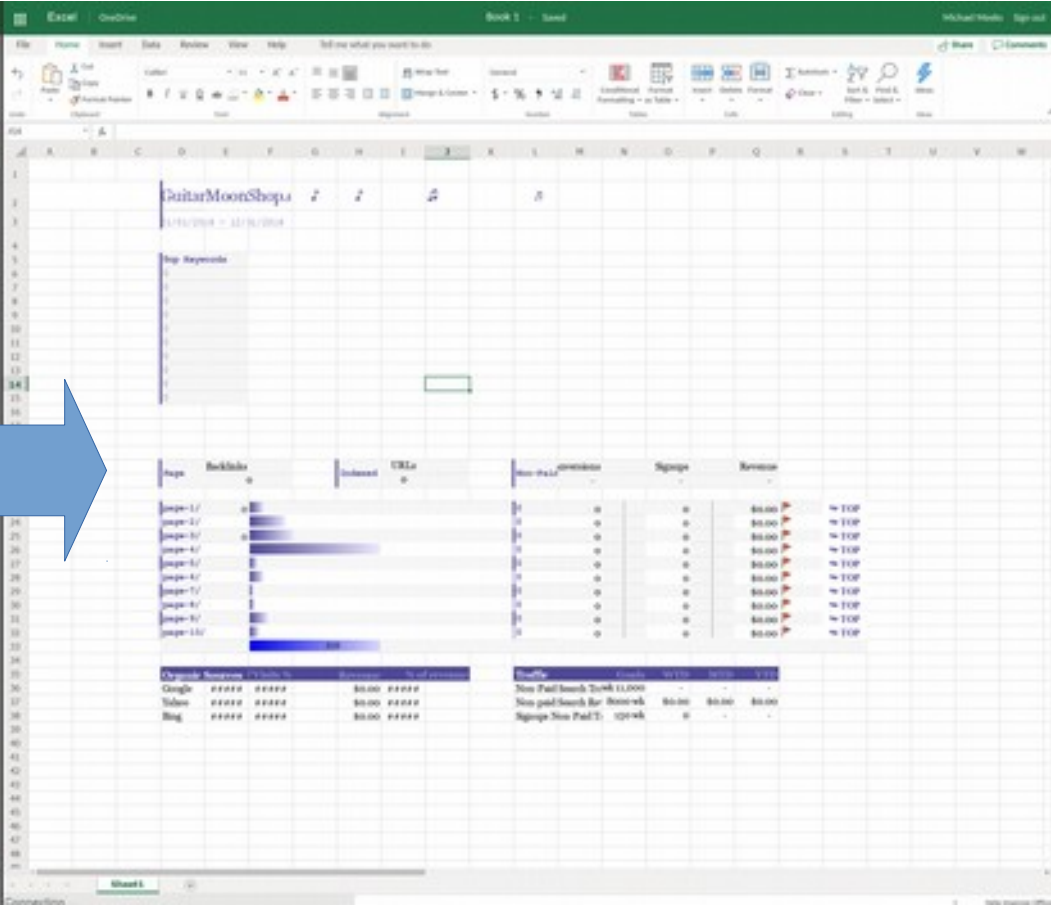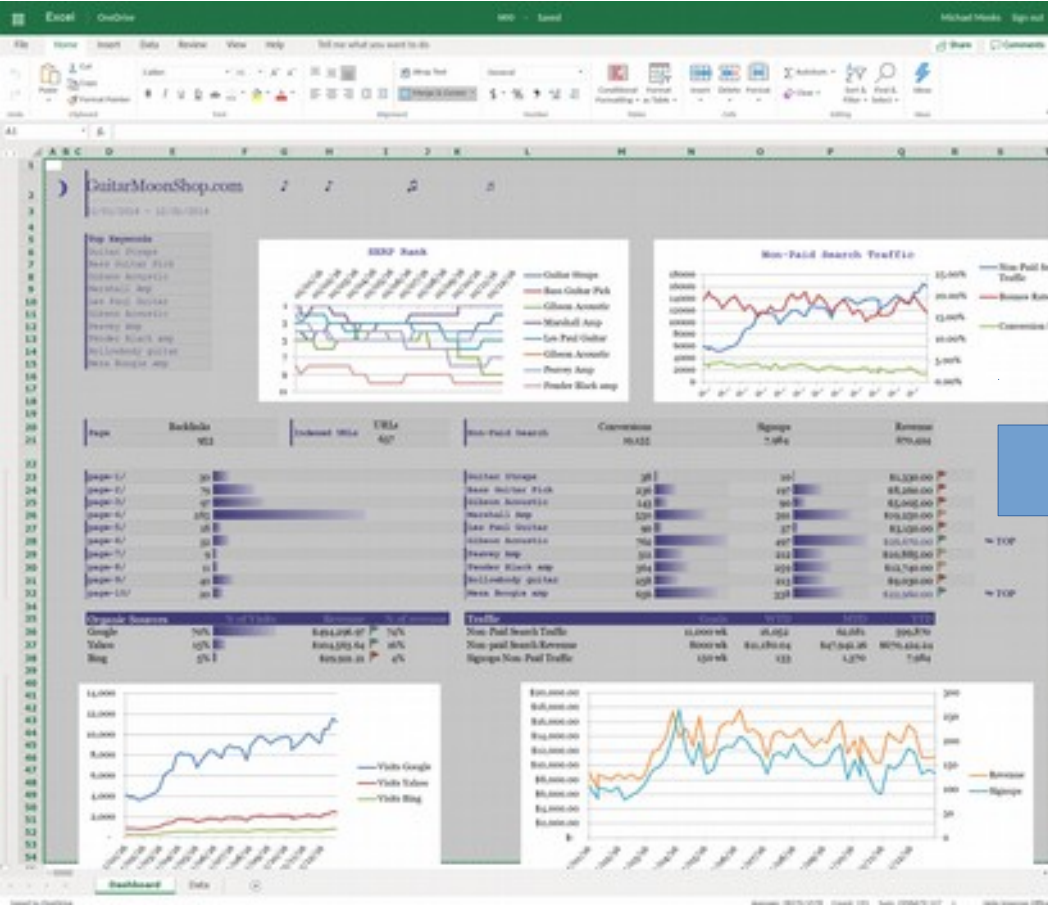# Afterwards (plus explicit chart copy)
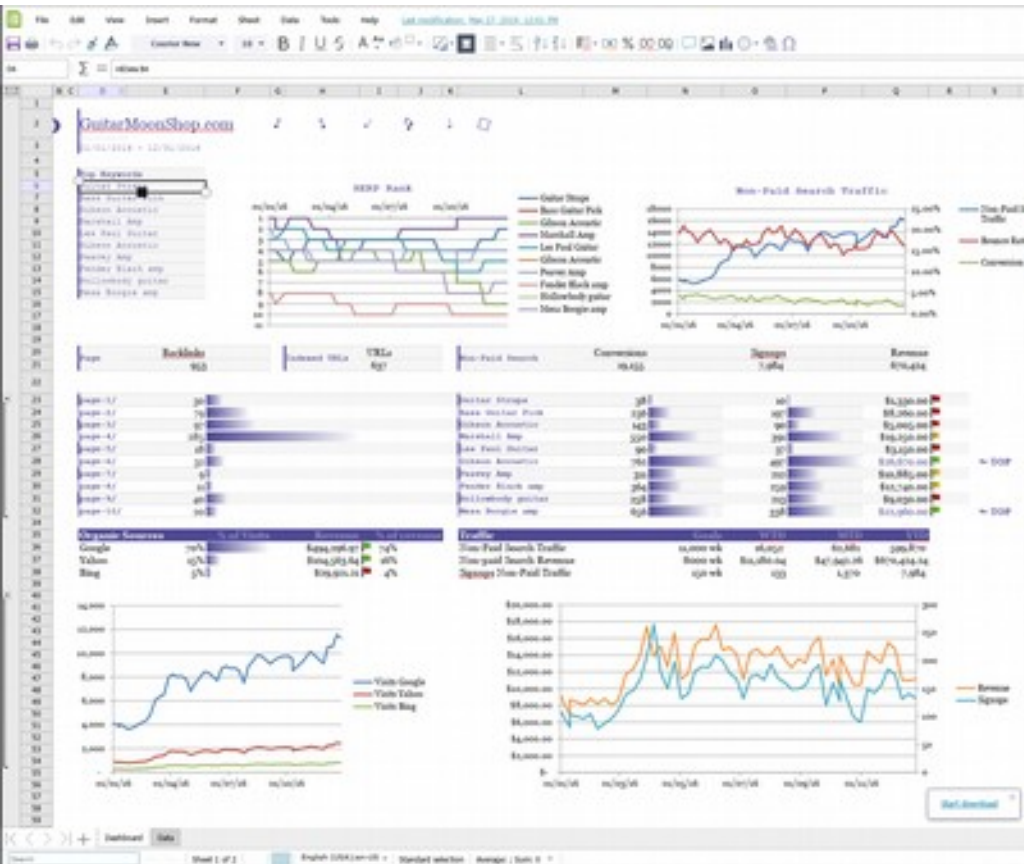
Just the basics ? Gdocs / Chrome comparison
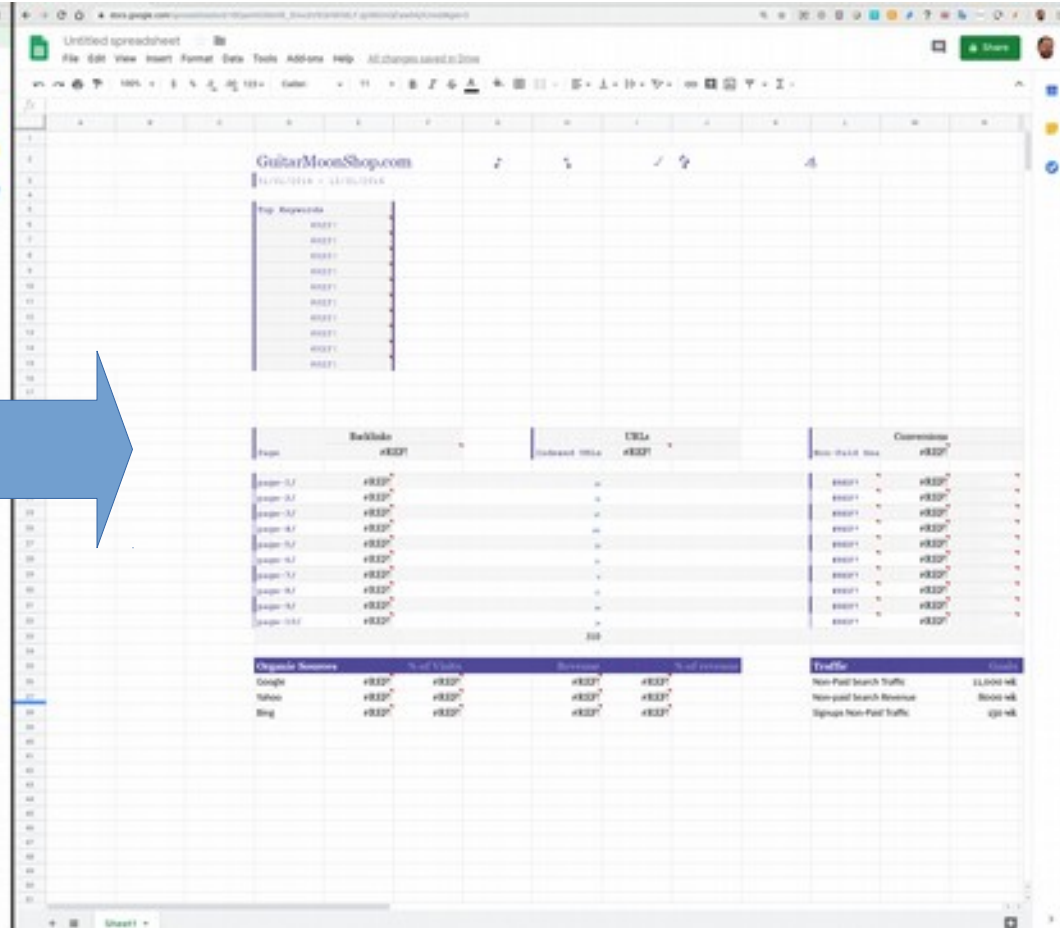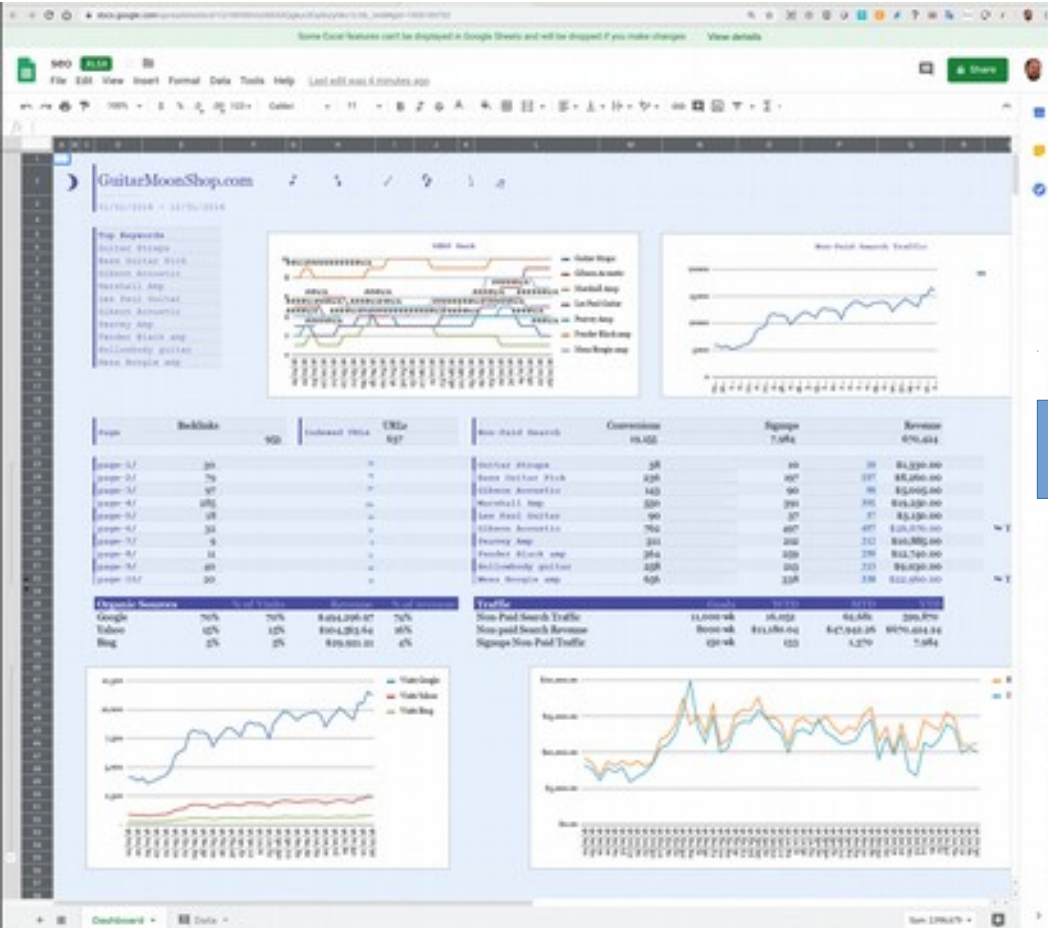
Or: Office.com / Excel copy / paste ...

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 …

Collabora Online for thumbnailing

Directly insert images easily

Distinctives

Don't let your document data out of your site [sic]
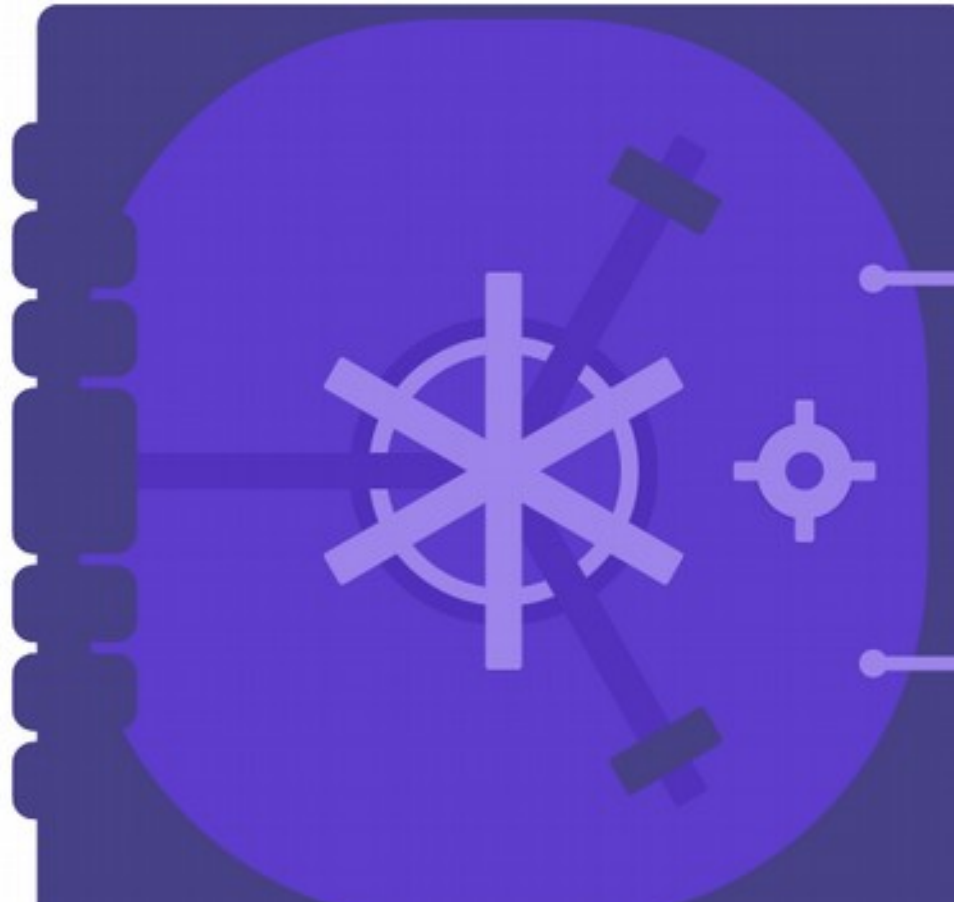
on your premise / Private network

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

Watermarked Editing

Watermarked PDFs (if allowed)

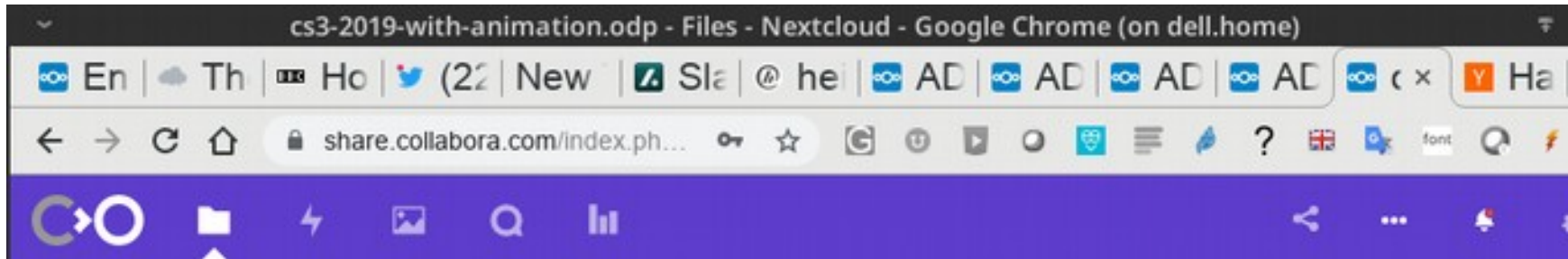# Simple, per-user pricing

Run as many servers / VMs as you need

Dynamically scale your workloads with Kubernetes

Beware of the Window + Tabpocalypse:

Simplicity & Scalability

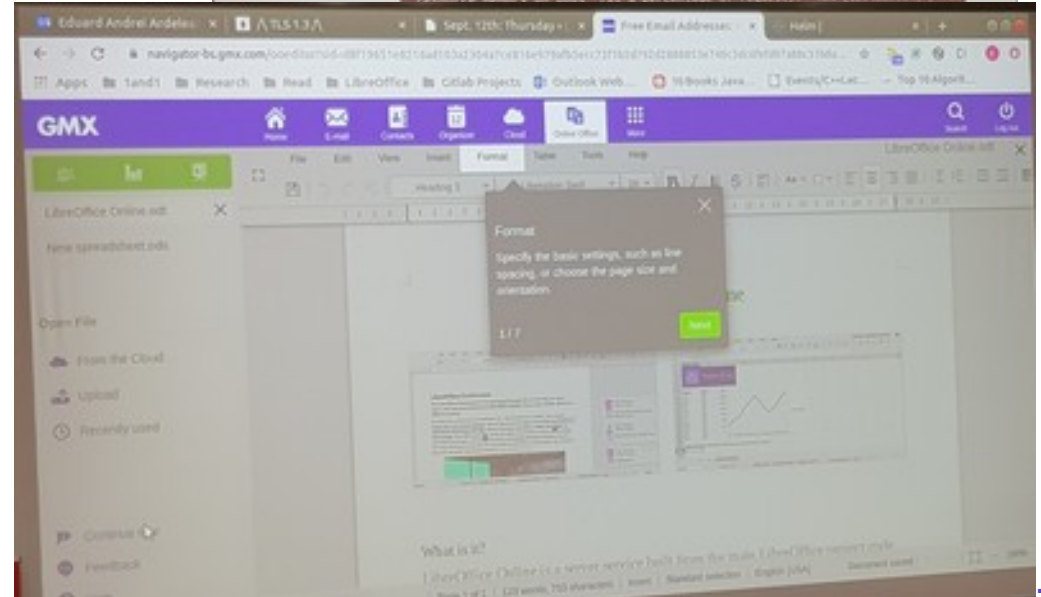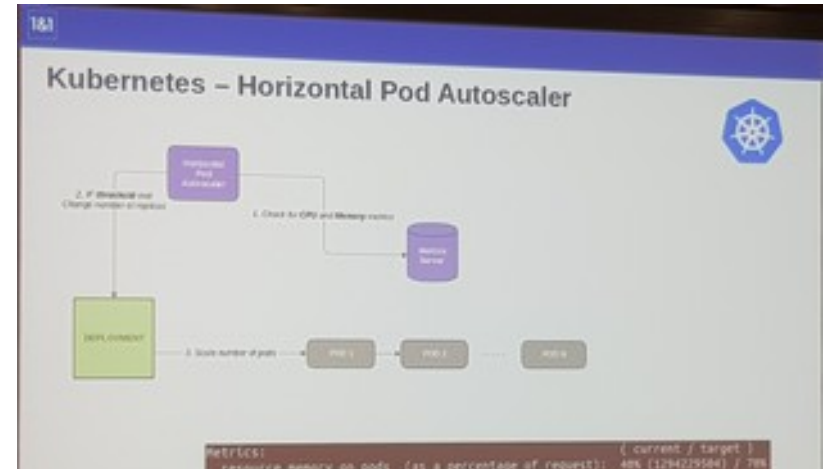**Large deployments / HA pieces**

- Scales with the network.

Simple architecture:

- No new HA Database

- No new message-bus
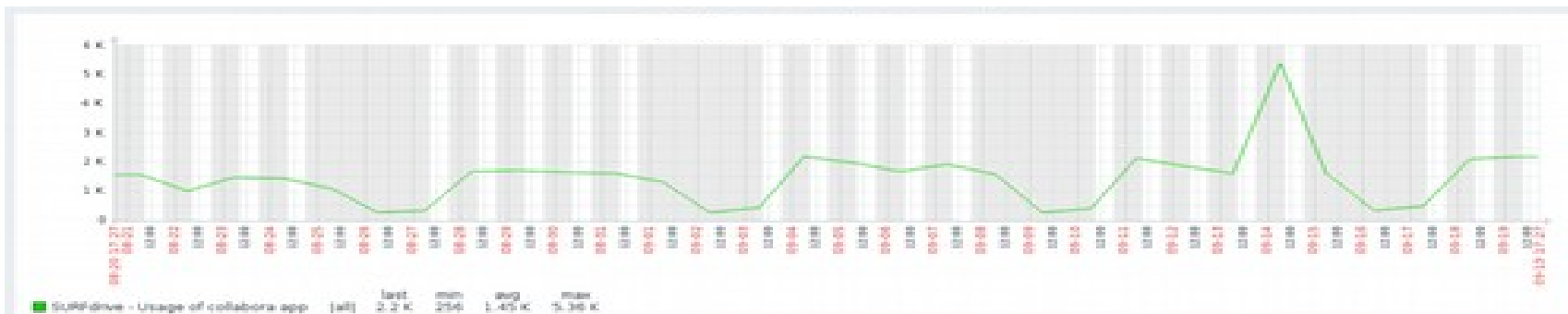
- No shared data storage
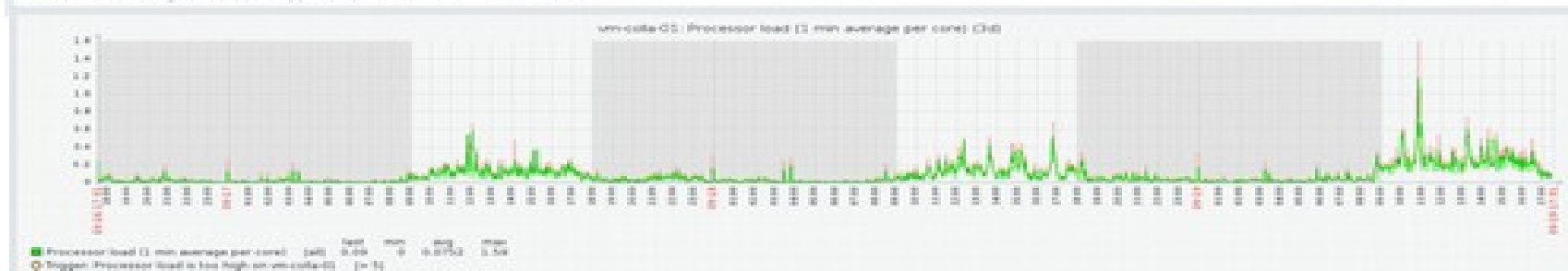
eg. 1&1 / GMX

- ~millions of users with access

Real world: 40k users – Collabora Online

Usage

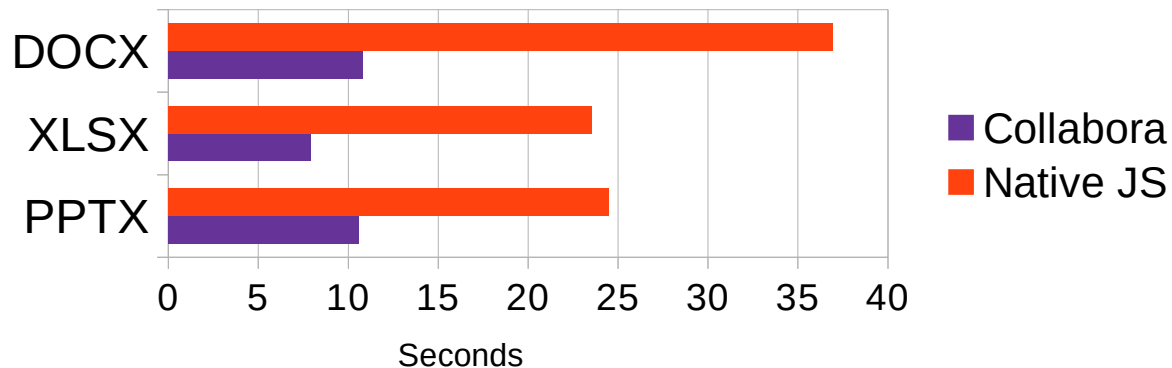CPU

Free
RAM:
13.5Gb
→
11Gb

www.collaboraoffice.co

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.
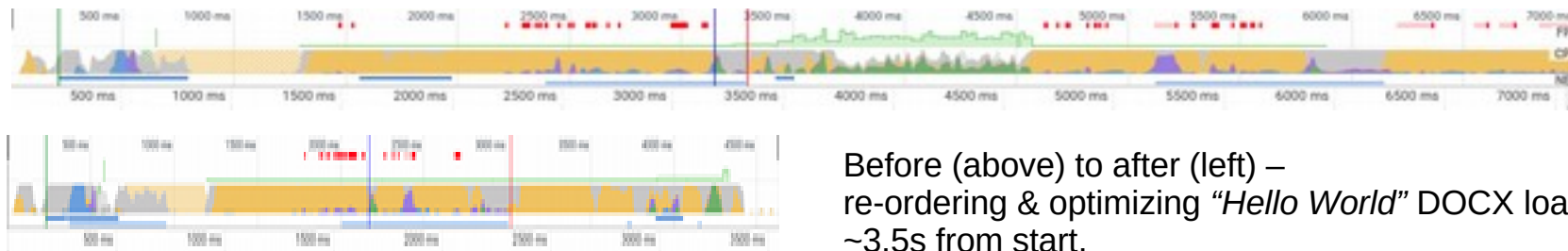
Open First + Community

Deep pool of volunteers & companies

- Berlin based Stiftung

- 100% open code.

Federal Ministry of Economics and Technology

collabora online .

Conclusions

Collabora Productivity

- Our mission applied

- Rich partnership with Nextcloud

- Georgeous, 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