Educate and collaborate with Collabora Online and Moodle

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@mmeeks @CollaboraOffice

“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
Collabora Online

Built with awesome LibreOffice Technology

Rich, secure, interoperable collaborative documents
What is Collabora Online?

Built on top of LibreOffice Technology:

→ Excellent interop with Microsoft

→ cf. Office 365 / Google Docs ...

On-premise Integration with your EFSS:
ownCloud, Nextcloud, Seafile, EGroupware
or LMS: Moodle, or chat: Mattermost

Freedom applied → FLOSS giving Digital Sovereignty

Pragmatism: “The best line of code, is the one we didn’t have to write” x 10^7 lines

Architecture – a bet on CPU threads & network … getting cheaper.
Collabora Online key features:

Easy collaboration

- Real time editing
- Commenting
- Change tracking
Collabora Online key features:

Easy handling of images & drawings
Collabora Online key features:

Rich formatting of pages and more

collaboraonline.com
Collabora Online key features:

full WYSIWYG experience
### Non-Paid Search

#### SERP Rank

<table>
<thead>
<tr>
<th>Date</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/10</td>
<td>6</td>
</tr>
<tr>
<td>01/02/10</td>
<td>4</td>
</tr>
<tr>
<td>01/03/10</td>
<td>3</td>
</tr>
<tr>
<td>01/04/10</td>
<td>5</td>
</tr>
<tr>
<td>01/05/10</td>
<td>8</td>
</tr>
<tr>
<td>01/06/10</td>
<td>10</td>
</tr>
<tr>
<td>01/07/10</td>
<td>12</td>
</tr>
<tr>
<td>01/08/10</td>
<td>15</td>
</tr>
<tr>
<td>01/09/10</td>
<td>18</td>
</tr>
<tr>
<td>01/10/10</td>
<td>21</td>
</tr>
<tr>
<td>01/11/10</td>
<td>24</td>
</tr>
</tbody>
</table>

#### Non-Paid Search Traffic

- **Non-Paid Search Traffic**: 19,155
- **Signups**: 7,364
- **Revenue**: $670,424

#### Conversion Analysis

- **Conversion Rate**: 0.04%
- **Bounce Rate**: 40%

#### Organic Sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Visits</th>
<th>Revenue</th>
<th>% of Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guitar Straps</td>
<td>45</td>
<td>$1,300</td>
<td>0.20%</td>
</tr>
<tr>
<td>Bass Guitar Pick</td>
<td>38</td>
<td>$260</td>
<td>0.04%</td>
</tr>
<tr>
<td>Gibson Acoustic</td>
<td>89</td>
<td>$6,000</td>
<td>0.09%</td>
</tr>
<tr>
<td>Marshall Amp</td>
<td>21</td>
<td>$1,200</td>
<td>0.02%</td>
</tr>
<tr>
<td>Gibson Acoustic</td>
<td>79</td>
<td>$3,150</td>
<td>0.05%</td>
</tr>
<tr>
<td>Fender Black amp</td>
<td>31</td>
<td>$10,450</td>
<td>0.16%</td>
</tr>
<tr>
<td>Electric Guitar</td>
<td>26</td>
<td>$18,740</td>
<td>0.30%</td>
</tr>
<tr>
<td>Deluxe Amp</td>
<td>12</td>
<td>$9,020</td>
<td>0.14%</td>
</tr>
<tr>
<td>Bass Guitar Pick</td>
<td>10</td>
<td>$280</td>
<td>0.04%</td>
</tr>
</tbody>
</table>

#### Backlinks and Indexed URLs

- **Backlinks**: 953
- **Indexed URLs**: 637

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**Collabora Productivity**

**FOSSASIA 2021**
Click-to-rename
The document

Revision history at 1st glance
Digital Sovereignty

*or: don’t let your document data out of your site [sic]*

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.
Collabora Online & Moodle plug-in
Collaborative editing on text documents, presentations & spreadsheets in Moodle
Two plug-ins integrating collaborative documents to Moodle...

Plug-in 1: mod_collabora

Activity module providing a document editor for real-time collaboration.

Plug-in 2: assignsubmission_collabora

Use live document collaboration within assignments, powered by Collabora Online.
CODE-Install and Test

CODE is a continuously updated, rolling release where we try out our latest feature work. So it allows you to work with the latest and greatest features in online collaboration earlier than the supported version Collabora Online. Of course, we love to hear about your experiences. Please leave your feedback on CODE in the community forum or report any possible issues on GitHub.

Find details on the latest update in the release notes.

Getting Collabora Online Development Edition set up

Get it at the Uninvention App Center

The easiest way to install CODE for a quick tryout is to download it as a virtual appliance from the Uninvention App Center. This appliance contains the Collabora Online Development Edition, and the additional software you need to get you up and running in minutes. You can choose between two types of Integration, CODE + Nextcloud or CODE + ownCloud. Each appliance is available in four formats: KVM, VirtualBox, VMware Workstation and VMware ESXi.

Grab CODE docker image from Docker Hub

The collabora/code Docker image can be installed to any x86-64 or arm64 host (e.g. on Linux and Windows 10), and it is fully configurable. For more information about setup and configuration for deployment, please read the CODE Docker page. If you want to try it out quickly, you can set up CODE docker image with file sharing integration in less than 5 minutes in a very basic way, following these instructions: quick tryout with ownCloud or quick tryout with Nextcloud.

Packages for Linux

As an alternative to Docker image, Collabora provide native Linux packages for selected Linux distributions. If you have Debian 9, Debian 10, Ubuntu 16.04, Ubuntu 18.04, Ubuntu 20.04, CentOS 7, CentOS 8, SUSE Leap 15.x or ARM64 – Ubuntu 18.04, please read the CODE Linux packages page.

Source code ... get involved

Grab the source and get involved with CODE Development.
Easy to configure: one mandatory setting.
Thank you for the **work:**

The source code is available on GitHub

https://github.com/learnweb/moodle-mod_collabora  
https://github.com/learnweb/moodle-assignsubmission_collabora

The heroic team of visionaries:
  - Michael Wuttke of the University of Applied Sciences Berlin,
  - Jan Dageförde of University of Münster,
  - Davo Smith from Synergy Learning and
  - Andreas Grabs from Grabs EDV-Beratung.
mod_collabora: Add collaborative document as activity...

Add collaborative documents as easy as you would add any other activity to your course.
mod_collabora: Add restrictions to collaborative documents

Restrictions for activity completion, date, grades or fields of the students profile can be added to collaborative documents.
mod_collabora: Locking collaborative documents

Collaborative documents can also be locked by admins & teachers to prevent editing.
assignsubmission_collabora: Adding collaborative documents to assignments

Enable submissions of collaborative documents in assignments.

Define accepted file types and much more.
COOL: a state-less drop-in ~micro-service

Document data is loaded / stored directly back to Moodle

Authentication is managed by Moodle; trivial to install
Collabora Online Development Edition 6.4

Get your own online Office Suite up and running at home with CODE!

The development edition is aimed at home users and contains many of the latest and greatest developments. We want as many people as possible to try it out and get back control of their own online documents. We’d love to get people involved in our efforts to make Online even better. So download Collabora Online Development Edition, enjoy using it at home.

CODE v6.4 – A leap in usability & Numbering

CODE v4.2.7 → CODE v6.4
Eclectic Notebookbar UX choices: to taste

Can collapse to just a menu ...

Or just menu/toolbar
PDF Search, Collaboration & Annotation

Online commits
By affiliation (last year)

Collabora

3218
97%

5 | Others
15 | QB
21 | 1&1
28 | Volunteers
Gutter Margins:
Explicit specification of margin types for printed publications
Writer, Calc, Impress: Fontwork (graphical text art)

Fontwork: Add graphical text art to text documents, presentations or spreadsheets
Calc: Freeze Panes

Freeze columns or rows to navigate more easily through large spreadsheets.
Collabora Online.

**Calc: Run Macros**

Macros can be enabled online (disabled by default). Once enabled, the administrator can decide which security level should be used for the macro execution.
Calc: Improved sheet movement:

MOVE/COPY SHEET

Action
- Move
- Copy

Location
- Insert before
- Counting Totals
- Details, People
- Move to end position

New name
- Counting Totals

Help | Cancel | OK
Calc: customize & create Pivot Tables
Calc: define & manage range names & print ranges

**DEFINE NAME**

- **NAME:** _Countries_ _Orchard_
- **RANGE OR FORMULA EXPRESSION:** $'Sorted Data'.SB$3:SFS27
- **SCOPE:** Document (Global)

**MANAGE NAMES**

- **Apples**
  - **Range or formula expression:** $'Sorted Data'.$E$4:$E$19
  - **Scope:** Document (Global)

- **Orchards**
  - **Range or formula expression:** $'Sorted Data'.$B$39
  - **Scope:** Document (Global)

- **Peaches**
  - **Range or formula expression:** $'Sorted Data'.$F$4:$F$22
  - **Scope:** Document (Global)
Calc: Statistical tools for data analysis

Sampling
Descriptive Statistics
Analysis of Variance (ANOVA)
Correlation
Covariance
Exponential Smoothing
Moving Average
Regression
Paired t-test
F-test
Z-test
Chi-square Test
New module: Draw

Draw:
Flowcharts, technical drawings, posters or brochures... create vector graphic drawings online!

collaboraonline.com
Bringing Draw to Online: Fontwork

Wavy & complex 3D text:
VBA / StarBasic – just an option (!)

Thoughts:

- Defaults → hard disabled by default (assumed)
- Sysadmin / distributor can configure trusted macros, or allow for the user

Coming in 6.4.x in a week or two.
Crisper rendering ... not just crispness

Better zoom handling

- With some devices, non-100% zoom, poor ‘crispness’
  - Browser is interpolating; on Linux – Chrome → 97.7% device scale (1000/1024)
- Pure Canvas (still tile) rendering – at pixel-grid scale
  - Dropping ‘leaflet’; major code & dependency simplifications / shrink.
- Split panes on mobile / tablet devices
- Re-written in TypeScript → easier to maintain & scale

Enabling more future smarts:

- Rendering calc grid, page outlines, re-ordering pages etc. on the client
The pieces you can’t see

**Performance**

- 20%+ faster rendering time
- Faster interactive editing of cells
- Bind-mounting of document jails (instead of hard-linking)
- Improved watermark caching
- Slide content pre-fetching
- On-demand slide thumbnail fetching.
- Significant PDF rendering improvements
- Significant thumbnail / download speedups

**Misc**

- iOS multi-document support
- Substantial cypress automated test coverage.
- Cluster debugging / warnings ... check matching ServerIds

And much much more ...

- 3600+ commits.
- Innumerable bug-fixes & improvements
Android, iOS & Chrome OS
bring your own device
4 week project timeline

<table>
<thead>
<tr>
<th>week 1</th>
<th>week 2</th>
<th>week 3</th>
<th>week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>nov</td>
<td>nov</td>
<td>nov</td>
<td>dec</td>
</tr>
<tr>
<td>kai</td>
<td>collect supplies for presentation</td>
<td>complete sketches</td>
<td>draft presentation</td>
</tr>
<tr>
<td>luka</td>
<td></td>
<td></td>
<td>finalize presentation</td>
</tr>
<tr>
<td>jenny</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ari</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>luka</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Re-use the online responsive UI for apps:

750k installs
Available for iOS, Android & Chrome OS
ChromeBooks:
It’s fun to get involved:

LibreOffice features:

http://www.libreoffice.org/

Code

https://git.libreoffice.org/core

Get involved:

- https://www.libreoffice.org/community/get-involved/
- C++, python, l10n and more
- https://translations.documentfoundation.org/

Collabora Online

https://collaboraonline.github.io/

Easy Hacks:

https://github.com/CollaboraOnline/online

- C++, Javascript, CSS, Design ...

Forum:

https://hosted.weblate.org/projects/collabora-online/

https://forum.collaboraonline.com/

Weekly dev. meetings
Making Open Source ROCK
Checkout more related talks:

Egroupware - *News in version 21.1* – next in this room ...
*Stefan Unverricht*

LibreOffice 7.1 – *What’s new & how can you help with 7.2*
next door: *Mike Saunders*
Oh, that my words were recorded, that they were written on a scroll, that they were inscribed with an iron tool on lead, or engraved in rock for ever! I know that my Redeemer lives, and that in the end he will stand upon the earth. And though this body has been destroyed yet in my flesh I will see God, I myself will see him, with my own eyes - I and not another. How my heart yearns within me. - Job 19: 23-27