T-Dose 2016

LibreOffice Online
the missing link!

Eindhoven
2016-11-13

Cor Nouws
cno@nouenoff.nl

Collabora & LibreOffice & Online

- Collabora Productivity is a large contributor to LibreOffice code

- Contributes to TDF, many certified developers

- Driving force behind LibreOffice Online (95%+ code)

- Offering services, support contracts, etc.

- All work open source, in LibreOffice repository

- Thanks also to the great work of the whole LibreOffice community

Advantages LibreOffice Online

- Freedom & Control
  - By choice: own server or hosted
  - Open source, …
- The same office-software online and local
- All LibreOffice advantages
  - File format support, ODF and 100+ more
  - Rendering
  - Fast development, feature rich
  - Integrated, ..
- LTS and SAAS available
- Affordable

LibreOffice Online Installation

- Linux server
  - LibreOffice / LibreOfficeKit
  - Web services deamon
  - JavaScript / NodeJS build on leaflet
  - FSS Integration
    (OwnCloud, Nextcloud, Seafile, Pydio)
- Developers took care for stuff such as automatic scaling depending on usage

LibreOffice Online in the browser

- Of course the integration with the file sharing service

- Document published on canvas in tiles

- User interaction (typing, selecting) with transparent overlayer

- UI elements in JavaScript

LibreOffice Online Integration with file server

- Already offered for OwnCloud, NexCloud, Seafile, Pydio

- File transfer between Collabora Online Server and cloud file storage 'xCloud'

- Authentication on xCloud side only

- Integration to xCloud interface

  (Details on next slides)

WOPI protocol

- Collabora Online implements (part of) the WOPI (Web Application Open Platform Interface) protocol

- Collabora Online is a WOPI client that can be integrated with a WOPI host (that means xCloud here)

- WOPI: a well documented open protocol (https://wopi.readthelatestdocs.org/en/latest/

Where is the code

- https://github.com/owncloud/richdocuments

- Consists of PHP parts and JavaScript
    - PHP: REST endpoints that allow the transfer of data
    - JavaScript: the actual integration that triggers document loading & showing inside xCloud

PHP - REST endpoints

- To download the file:
  - GET https://<WOPI host URL>/<...>/wopi*/files/<id>/contents?access_token=<token>

- Upload back:
  - POST https://<WOPI host URL>/<...>/wopi*/files/<id>/contents?access_token=<token>

- Check file info (file name, size, user name, version)
  - https://<WOPI host URL>/<...>/wopi*/files/<id>?access_token=<token>

Security token

- To be able to access files securely, an authentication token has to be passed to LibreOffice Online

- From the LibreOffice Online point of view it can be any random number / string that will be passed as part of the URL when accessing the document storage

- Generated by the "Collabora Online Connector" according to the user who is logged in

Discovery service

- To get information about how to initiate the iframe, the 1st thing has to be an access to a "discovery" xml

    - Different document types can be served by different servers

    - Edit vs view

JavaScript part - embedding the iframe

- The connector connects to the discovery service

- Creates an iframe that contains the LibreOffice Online

  - Has to be provided with the access token via a POST request

  - And then only gets called back when the document is closed again

Conclusion

- LibreOffice Online works beautifully with xCloud

- Lots of work done and much more to come

- Please get involved, and lets take it even further!

Interested.. here you are!

- Collabora Online Demo

  – https://www.collaboraoffice.com

- Collabora Online Development Edition

  – Tech details, test: https://www.collaboraoffice.com/code/

- Participate in the project

  – Code http://cgit.freedesktop.org/libreoffice/online/

  – Integration https://github.com/owncloud/richdocuments

  – API https://www.collaboraoffice.com/collabora-online-editor-api-reference/

CODE

Collabora **O**nline

Development **E**dition