



**LibreOffice**  
The Document Foundation



# **Integrating LibreOffice Online in Alfresco**

**Philippe Hemmel**

`phemmel@arawa.fr`

**ALMERIA | 12 Sept. 2019**



# Agenda

- Use case: why did we integrate LibreOffice Online in Alfresco ?
- Problems to solve
- Difficulties we had
- Our answers
  - Zoom: the LibreOffice Online monitoring capabilities
- Feedback
- Future steps



# Short introduction

**arawa** 

- Provides collaborative tools that users need
- Helps organizations to keep control of the data
- Develop collaboration and access to information



# Open Source software



Collabora Online



Nextcloud



LibreOffice®



nayego



elastic



# Use case: context

- Alfresco: ECM, mainly used to store and classify documents, and follow their life cycle
- Organizations use it as:
  - As a document collaboration and workflow tool
  - As a basis for specific software (electronic signature, administrative acts management...)



# Use case: the problem (1)

- Alfresco editing process: a little complicated
  - Many steps: check-out, download, local editing, upload, check-in
    - Sometimes even more: phone call to the person who locks the document 2 months ago, waiting for check-in done, check-out, and so on
- People prefer to edit files directly in LibreOffice
  - Sometimes using a old [LibreOffice extension](#):
    - check out a document, Webdav editing, check in



# Use case: the problem (2)

- Problems:
  - teleworking: no extension to install
  - File locking: only one person can edit the document at the same time




# Specification

- Online and collaborative editing of MSO / ODF documents
- Everybody should be able to edit a document when he wants
- Nothing to install on the desktop





# Solution

-  **Collabora Online** integrated in Alfresco
- Complete the (pending) prototype connector developed by Magenta (Danish company)
- We analyzed:
  - What is to be done to release a first version ?
  - Costs ?



# Partners



Collabora Productivity



Jeci



**atol** Conseils & Développements

**arawa** 



# Main tasks

- File locking management
- Versions management
- Better UI (integration into Alfresco)
- Features to add: download, print
- Fix the display of the list of the editing users



# Main difficulties

- Prevent others from deleting a document currently edited by Collabora Online ?
  - Alfresco uses a locking mechanism (check out/in)
    - Do we need to use it during an online editing session ?
- Do we need to keep all versions sent by Collabora Online ?



# Our answers

- Focus on one of them
  - Based on the interesting monitoring capability of LibreOffice Online
  - Allowing our connector to know when users enter and leave a editing session

# Locking management (1)

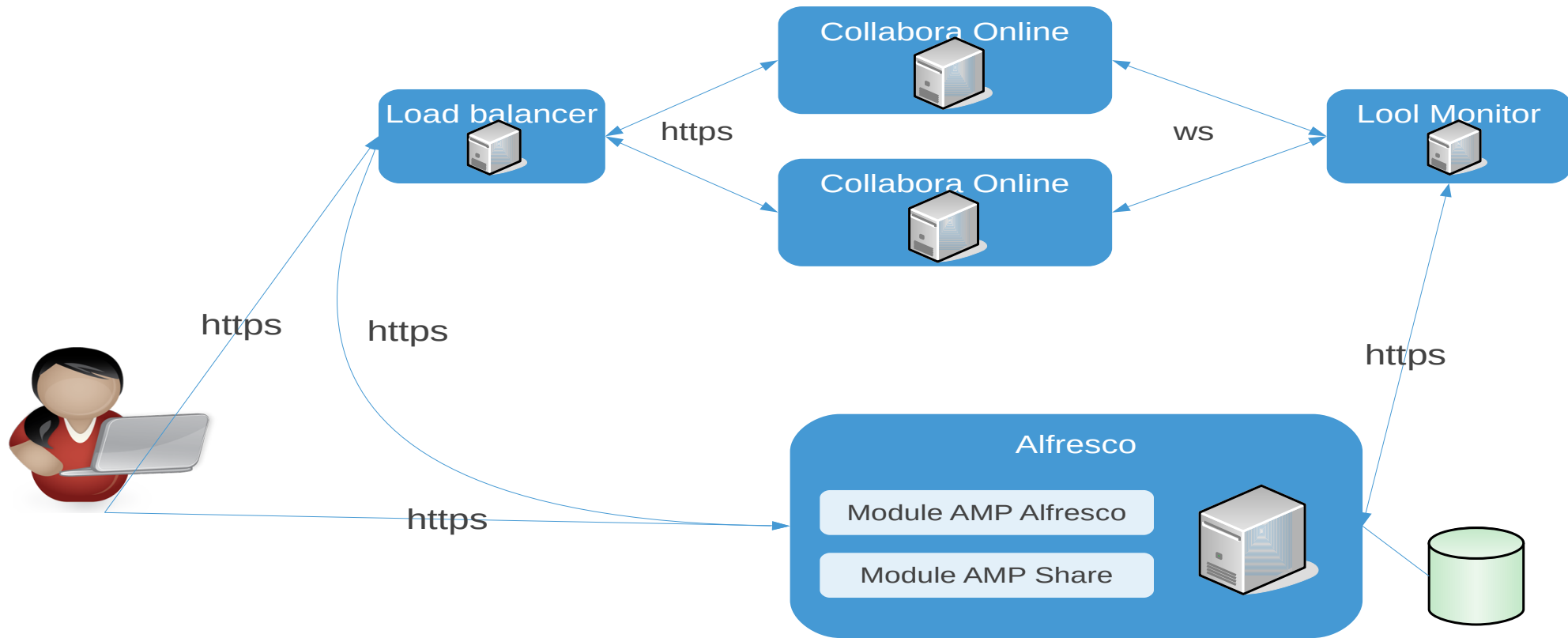
- What we chose to do:
  - No check out because of difficulties to edit such a file by different users
  - During a session, removing UI choices allowing users to delete, move, upload a new version, check out

# Locking management (2)

- By monitoring the session
  - A metadata is set on the edited file to indicate a current session
- An Alfresco plugin
  - Removes some UI choices when this metadata is set
  - Displays a message: “ongoing session”
- The metadata is removed when the last user leaves the online session



# Architecture







# Details

- Loolmonitor: python, systemd service
- Alfresco modules: Java
- <https://github.com/ArawaFr>



# LOOL monitoring

- Great collaboration with Collabora
- Collabora made some changes on the monitoring capabilities for our project
- One patch on LibreOffice Online from Arawa :-)



# Feedback

- Many tests done by users
- Good feedback
- First step: limited deployment (200 users)



# Future steps

- Display of the revision history
- Save As implementation
- Alfresco previews based on Collabora Online
- Widget: list of the current online sessions
- Display of the number of editing users on the Alfresco detail page

# Questions ?

09/12/19