



OnlyOffice and Collabora Online Experience at CERN

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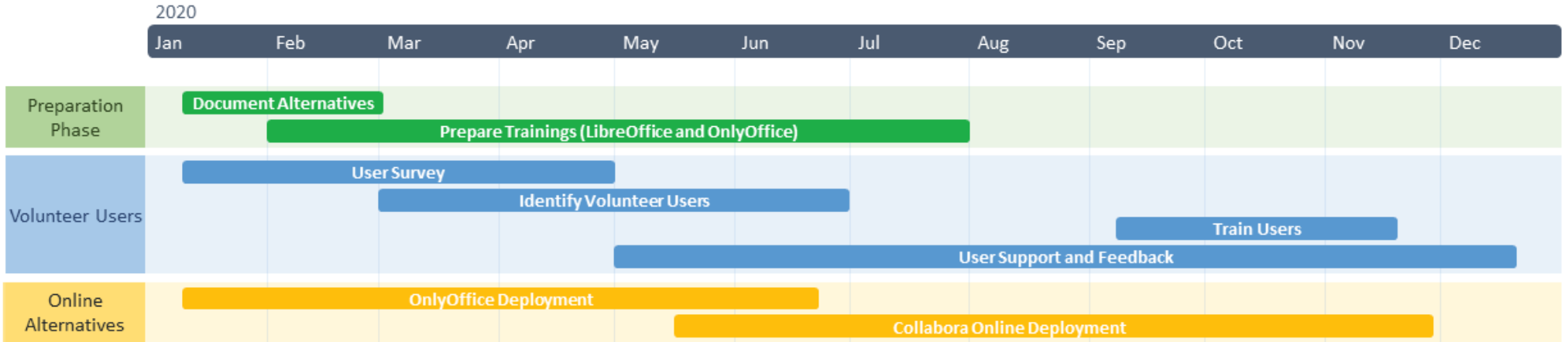
Background

The MALT Project



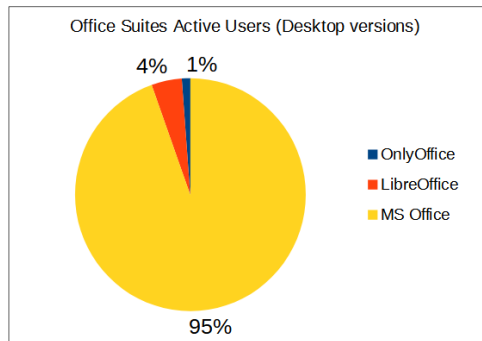
More details in: <https://malt.web.cern.ch>

MALT Productivity Tools in 2020

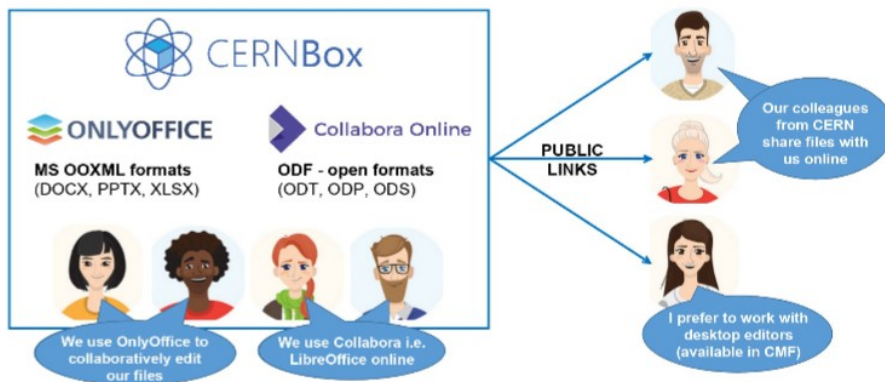
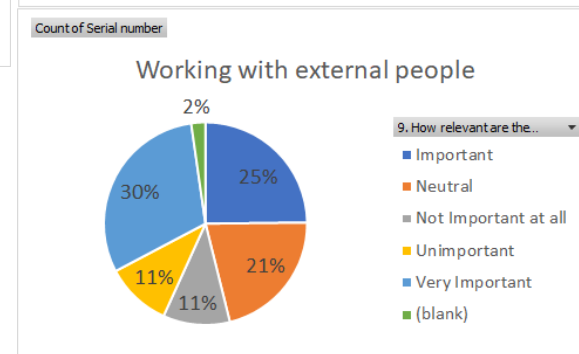
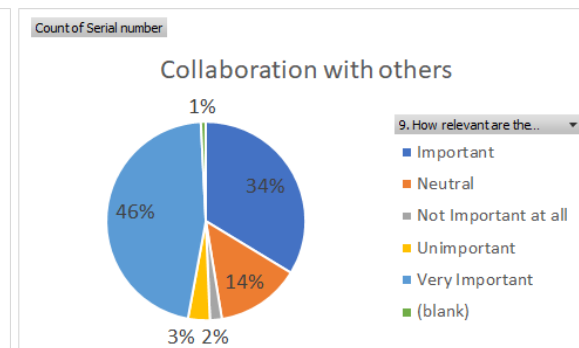
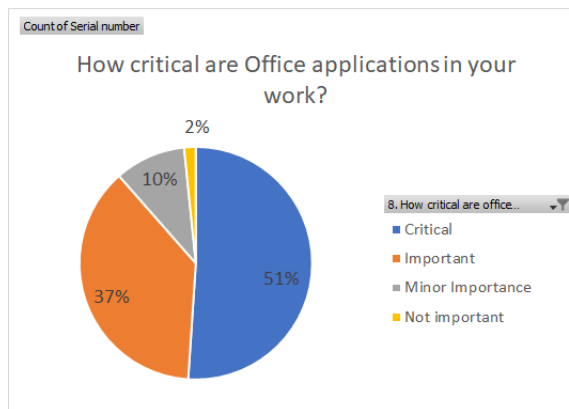


CERN Office Users

Replies from CERN User Survey on the use of Office Applications



- MS Office installed by default in all Windows desktops since ~2000
- LibreOffice and OnlyOffice included for new desktops in 2020
- Office Online has been default in CERNBox from 2017 to 2020



General feedback from the Users (both OnlyOffice and Collabora Online)

Interoperability

- The big problem: better support for OOXML

Features (some examples)

- Support for video: codec distribution + embedded videos
- Better understanding of Font conversion

Training

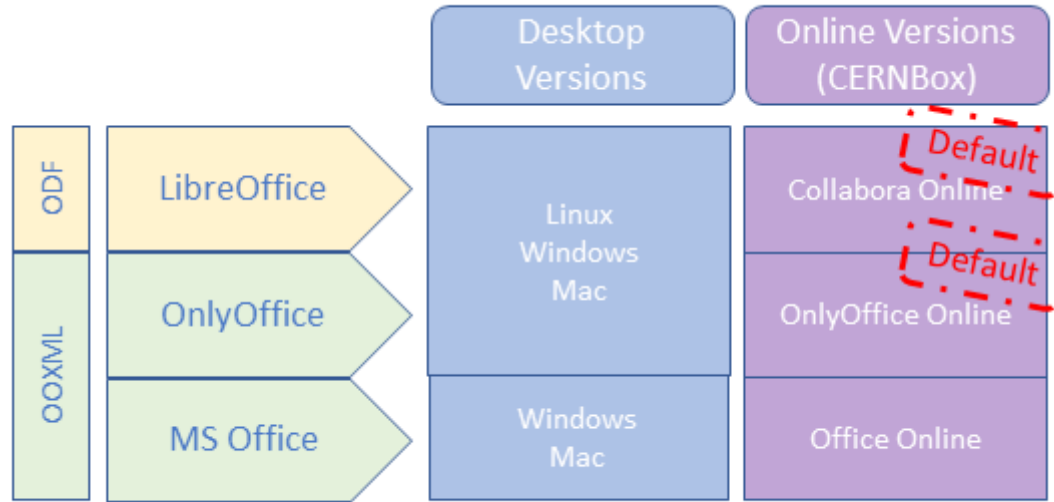
- Face to Face training is always welcome by some users
- However, Online tutorials and Quick Start Guides very welcome too for busy people

Online Office Suites Usage

- **OnlyOffice**: up to ~**2K** daily sessions, peaked **75** simultaneous users
- **Collabora Online**: up to **100** daily sessions
- Reflecting the Office file types distribution in CERNBox
 - **3.6M** Office documents
 - 51% MS Legacy, **44% OOXML**, **5% ODF**

CERNBox Integration

Office Suites available



CERNBox integration

- **Our WOPI server as a generic backend**

- CS3 APIs compatible, supports Collabora and MS Office
- Interoperable (automatic) locking across all Office applications, both web *and Desktop* (when on mounted storage)

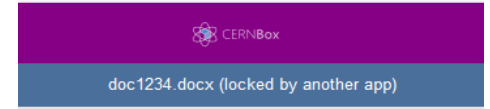
- **OnlyOffice backend in Go**

- Interaction with WOPI for locking

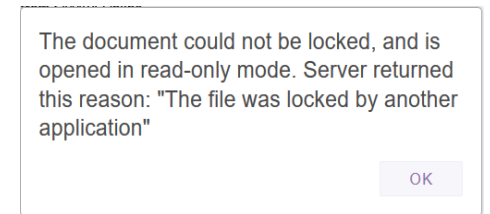
- **“Just an iFrame”**

- The backend returns the server URL, the frontend just embeds it (do we need more?)

OnlyOffice

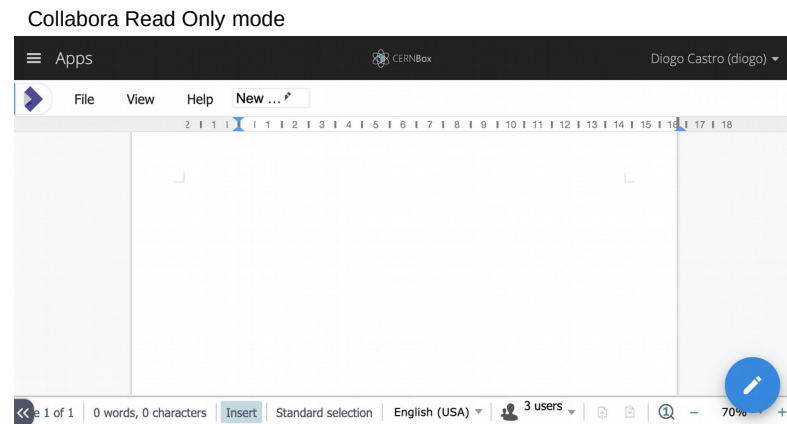


Collabora

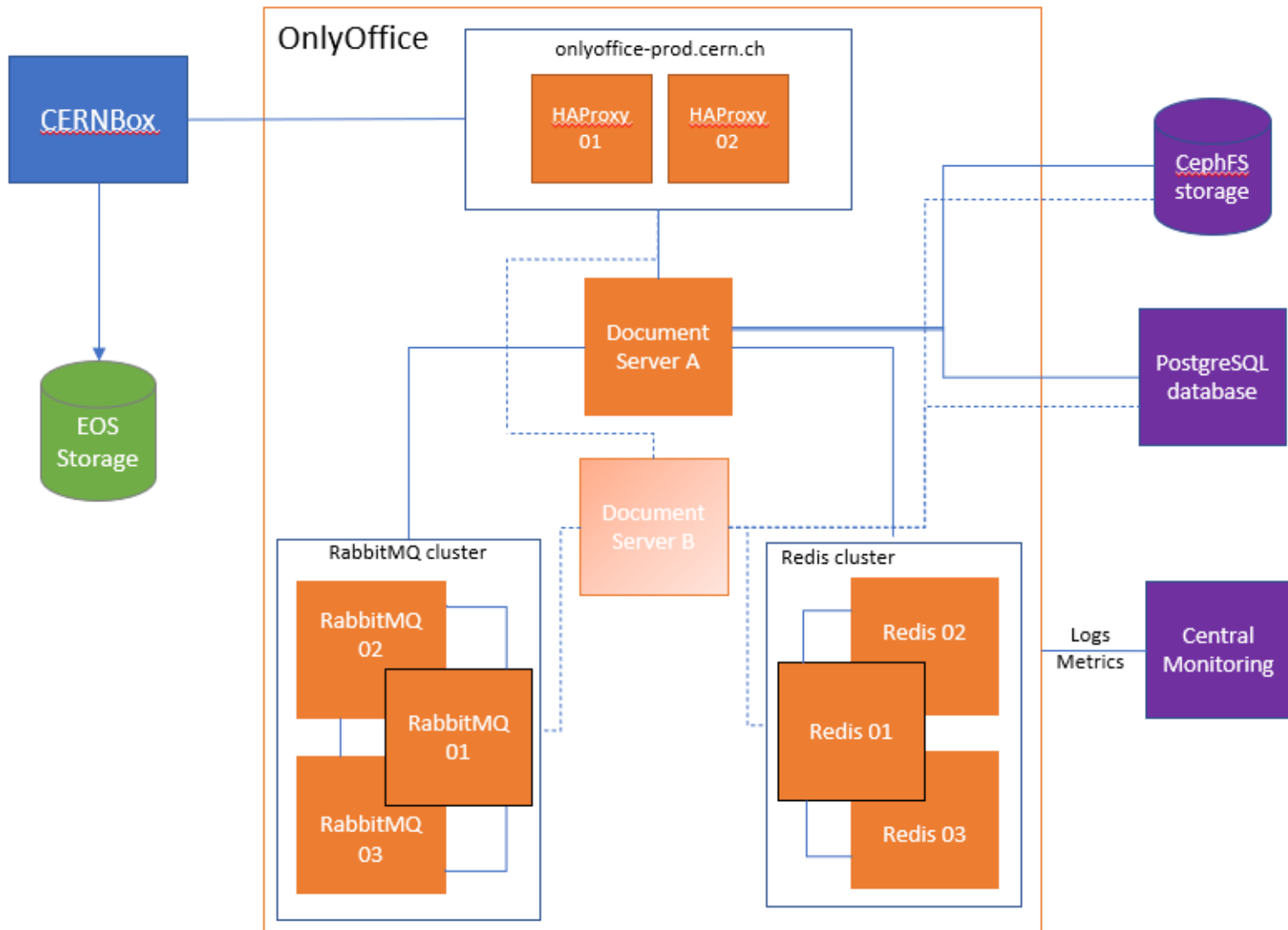


How to improve?

- **Global locking**
 - Not only for “our” office applications, but provided by the sync&share platform
- **Locking aware, intuitive UIs**
 - Preview mode, with switch to editing mode
- **Integration with desktop applications**
 - Further integration between sync&share + apps
 - Concurrent editing



OnlyOffice



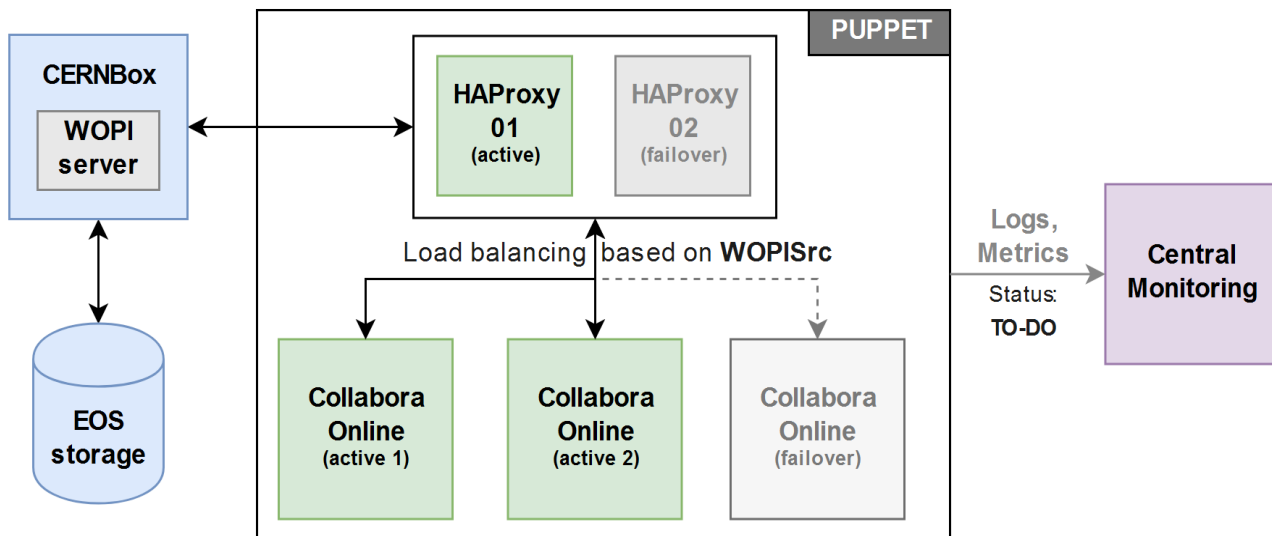
- **Version 6.1, latest**
- **Puppet as a config management tool:**
 - 2 HAProxy + 2 docservers + 3 Redis + 3 RabbitMQ in production
 - High availability setup
- **Monitoring:**
 - Simple bash script for usage statistics
 - Next step: integration with Central Monitoring

Issues along the way

- **Storage quota → be generous, clean up frequently**
- **Storage unavailability → have a backup plan**
- **Load balancing issues → stick to a main HAProxy**
- **File download limit \neq file decompression limit → know your documents**
- **More clear documentation structure, although very complete**

Collabora Online

Deployment



- **Puppet as a configuration management tool:**

- 2 HAProxy + 3 Collabora Online servers in production
- High availability setup

- **Load balancing based on WOPIsrc parameter**

- **Monitoring:**

- Simple bash script for usage statistics
- Next step: integration with Central Monitoring

Issues along the way

- **Deployment**

- Started with a single container, then a single server to reach HA setup
- No issues - very good documentation
- Place for some configuration improvements

- **Applications' features**

- Several issues and bugs reported to the vendor's support:
 - most of them already fixed
 - continuous minor releases
- Scheduled major upgrade from version 4.2 to 6.4

Next steps for OnlyOffice and Collabora

- **Gain more experience running these applications in production**
 - Encourage more users to adopt these applications and learn from their use cases
 - Test scalability
- **Following up on issues with vendors' support**
 - Very good response from both OnlyOffice and Collabora so far!
- **Monitoring: Metrics in Grafana and logs in Kibana for filtering**
 - Logs not structured (for OnlyOffice)
 - The aim is to make it easier to debug specific interactions on files

Thanks for listening!
Time for your questions