



**Collabora
Productivity**
Free your business

The driving force behind putting
#LibreOffice in the #Cloud.



Nextcloud

Nextcloud and Collabora Online workshop.

Michael Meeks

General Manager at Collabora Productivity

michael.meeks@collabora.com

Skype - mmeeks,

G+ - mejmeeks@gmail.com



Current Version 1.0.5

- High fidelity, WYSIWYG rendering
- Document Support:
 - DOC, DOCX, PPT, PPTX, XLS, XLSX + ODF.
 - Import/View Visio, Publisher, + 100 more
- Document Collaboration:
 - Shared Editing, Collaborative edit on the way.





Collabora Productivity

Free your business

The driving force behind putting
#LibreOffice in the #Cloud.

Why online ?

- On-premise – control of your data
- On-premise – control of your CPU & network

Bonus features

- A reduced feature-set sphere – can win.
 - light editing use-cases to match competition
- Document Formats – less relevant:
 - “in the cloud”
- Server / Certification / Revenue model ...



CODE ...

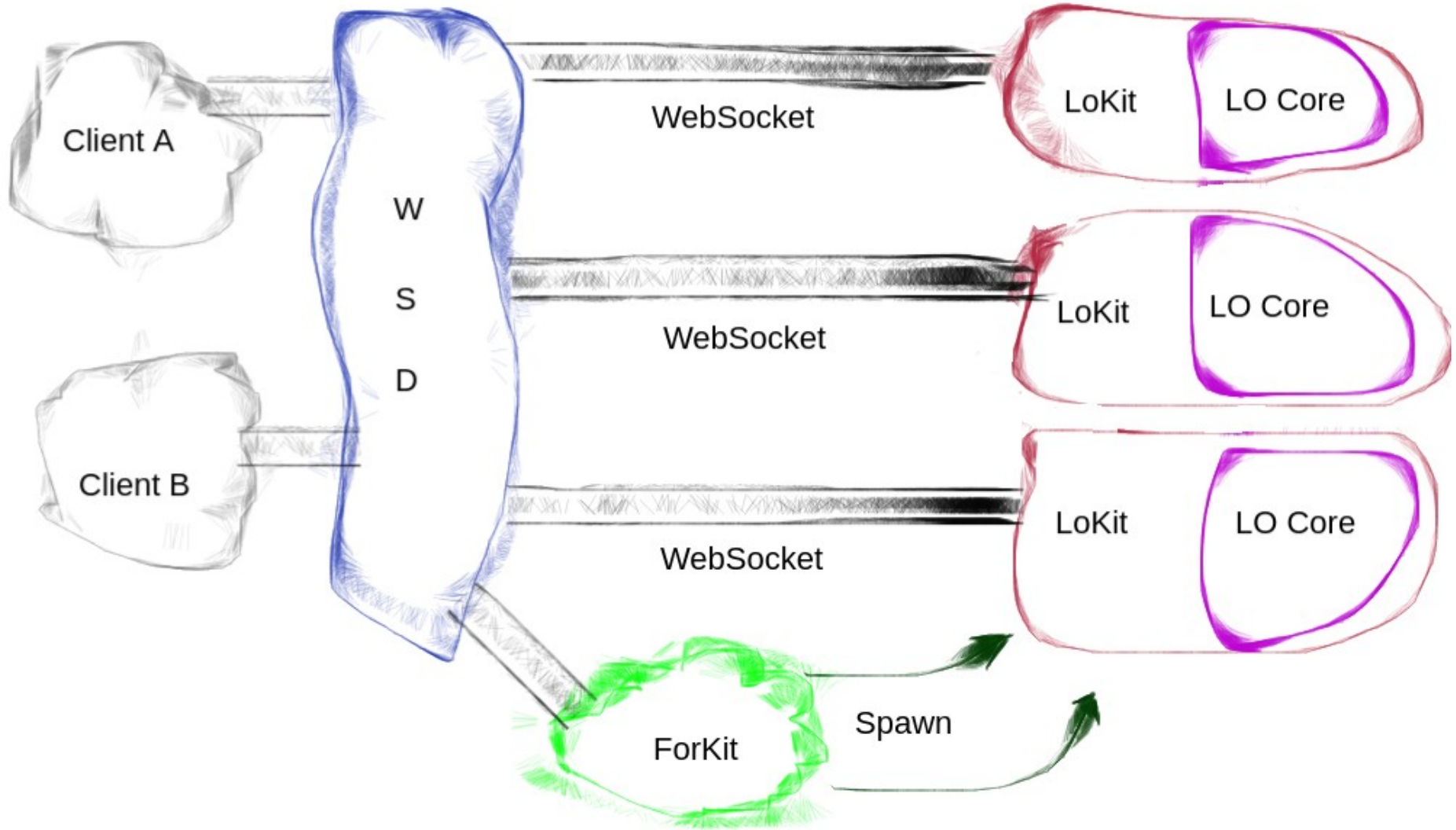
- CODE – grab the latest Docker image and/or Virtual Machine pieces.
 - <http://collaboraoffice.com/code>
- A simple Nextcloud extension
 - No core changes required, easy to deploy
- Extension implements the WOPI protocol
 - Unifies authentication and file-access
 - Re-use awesome Nextcloud authentication and storage options – effortlessly.

Demo / what it looks like

The screenshot displays the Collabora Online interface within a Mozilla Firefox browser. The main window shows a spreadsheet titled "basic-spreadsheet.ods" with a grid of data and a line chart. A context menu is open over cell C3, showing options like "Comment on Cell" and "Insert". Below the spreadsheet, a presentation slide titled "Collabora Online" is visible, featuring a welcome message and a logo. Another context menu is open over the slide, showing options like "Cut", "Copy", "Paste", and "Arrange". The interface includes a top menu bar with "File", "Edit", "Insert", "View", and "Cells" options, and a bottom status bar indicating "Document saved".

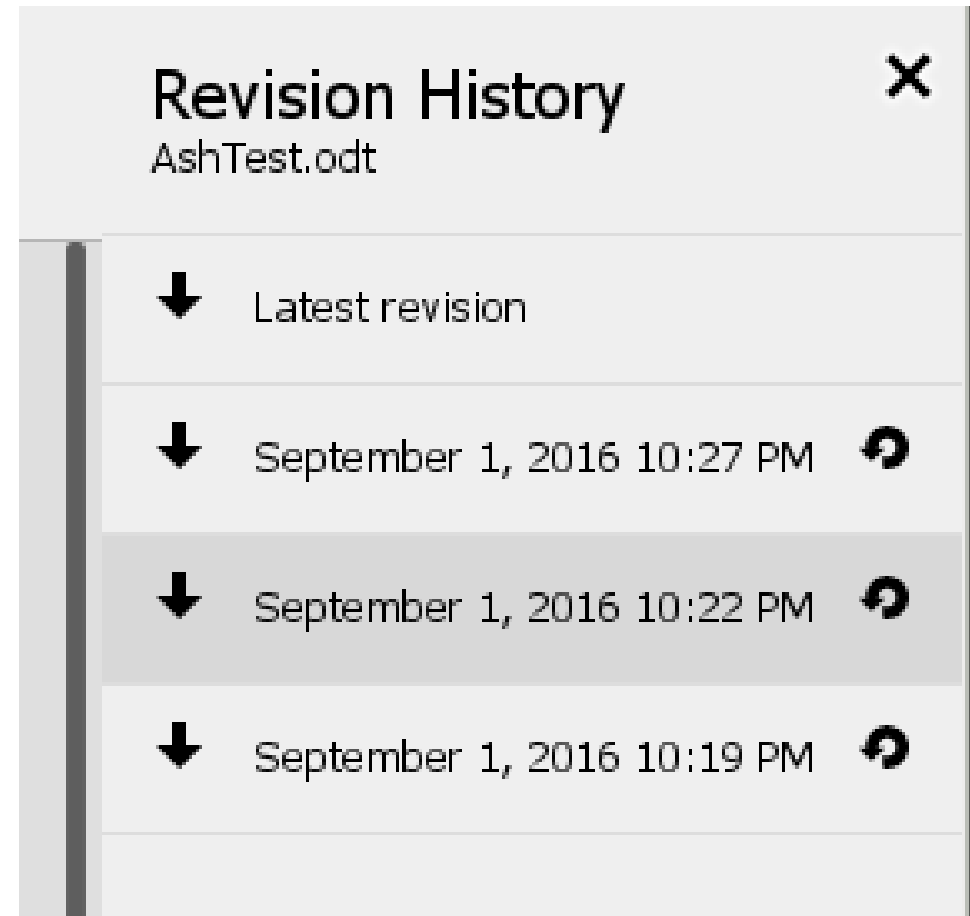
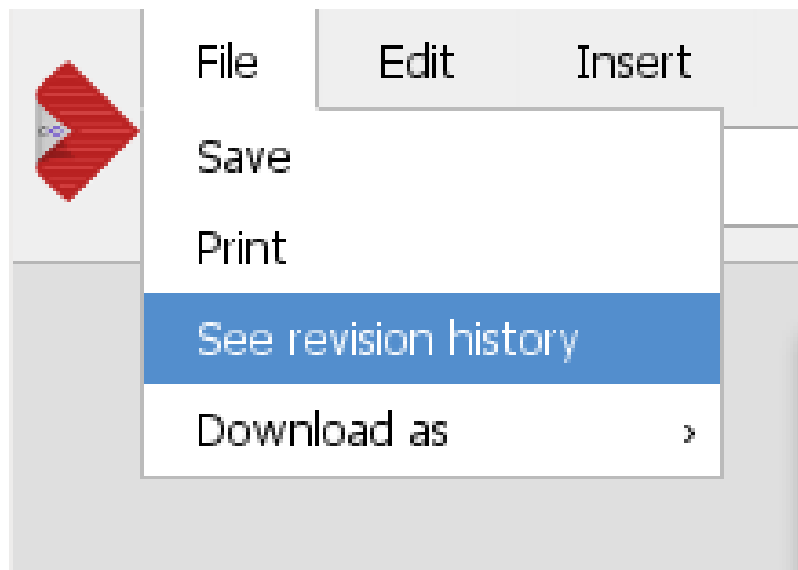
X	Y
0	0.0000
15	0.2588
30	0.5000
45	0.7071
60	0.8660
75	0.9659
90	1.0000
105	0.9659
120	0.8660
135	0.7071
150	0.5000
165	0.2588
180	0.0000
195	-0.2588
210	-0.5000
225	-0.7071
240	-0.8660
255	-0.9659
270	-1.0000
285	-0.9659
300	-0.8660
315	-0.7071
330	-0.5000
345	-0.2588
360	0.0000

Architecture



Nextcloud plugin

View and restore previous versions:



In-development:
coming soon ...

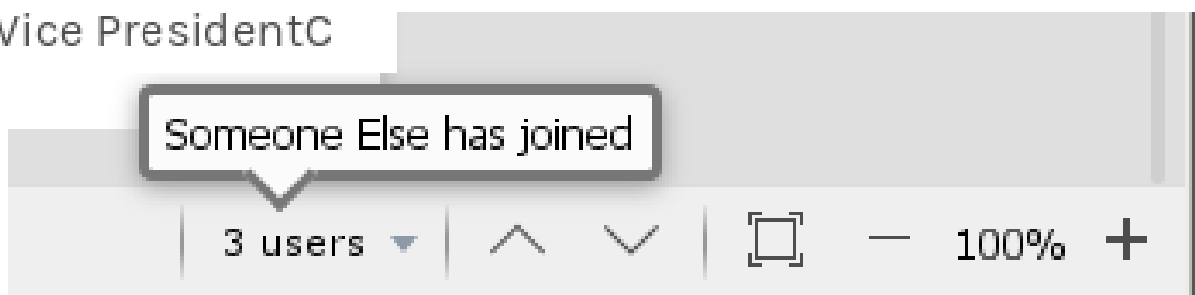
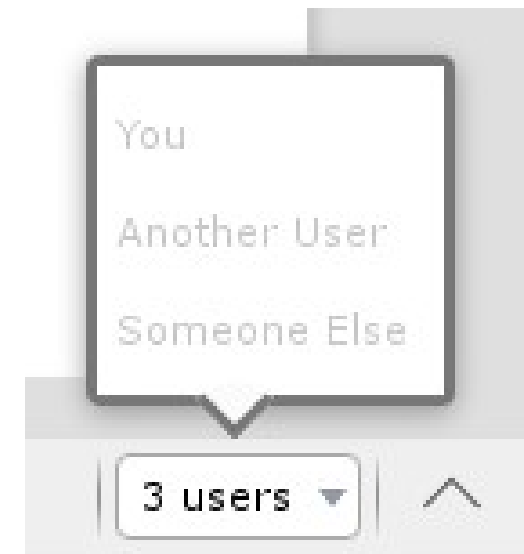


Next: Collaborative Editing

- Lots of fun new interactions under development:

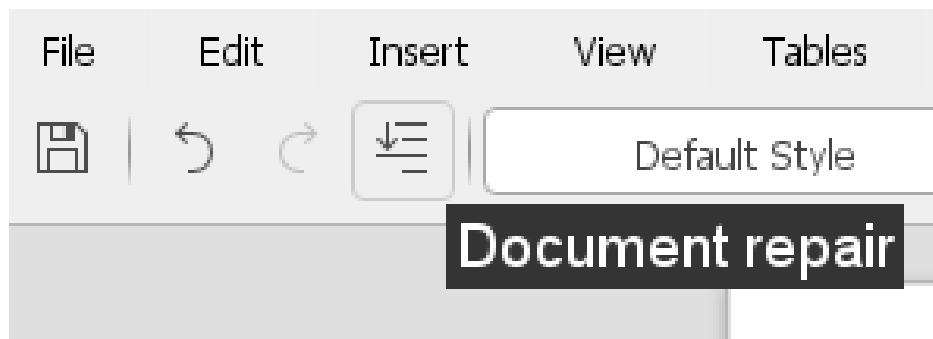
*“**LibreOffice** is the world's premier Open source office suite. Collabora is proud to be part of the LibreOffice community, and to build our supported product targeted at the enterprise on top of the freely available LibreOffice code.”*

— Michael Meeks, Vice President



Editing / Undo collisions etc.

Repair Document:
conventional
undo/redo simply
solves editing
conflicts.



Repair Document

Type	Index	Comment	View ID	Timestamp
Undo 0		Insert Image	2	2016-09-01T21:52:18,628396048
Undo 1		Insert table: 'Table1'	2	2016-09-01T21:52:11,777609331
Undo 2		Typing: 'Enter'	2	2016-09-01T21:52:05,103527646
Undo 3		Delete paragraph	2	2016-09-01T21:52:04,737246817
Undo 4		New Paragraph	2	2016-09-01T21:52:04,240850664
Undo 5		Delete 'l'	2	2016-09-01T21:52:04,010198873
Undo 6		Replace: "-> '/'	2	2016-09-01T21:52:03,047257372
...	

Jump to state

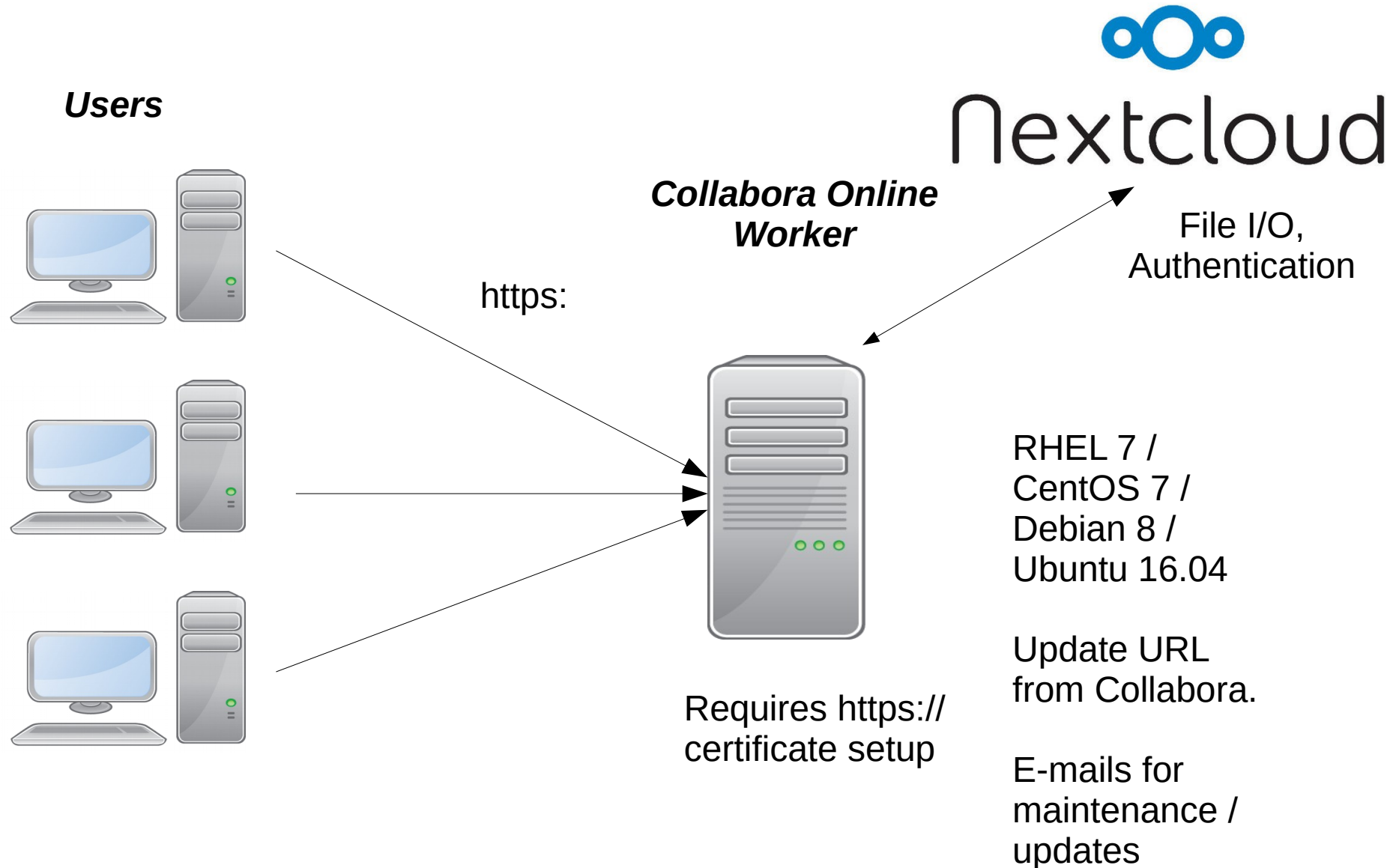
Deployment bits



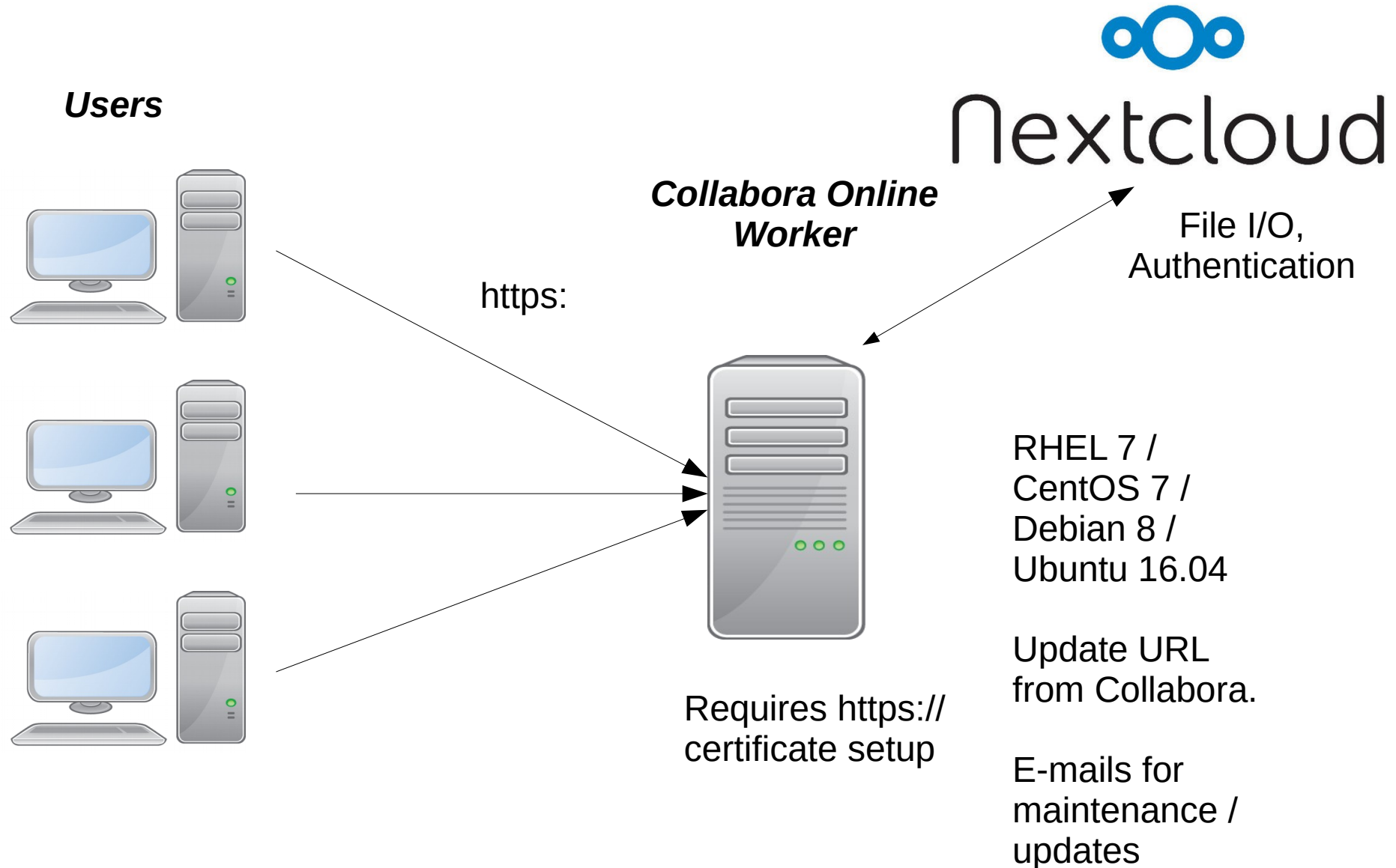
Hardware Sizing

- Guidelines:
 - 10 users / CPU thread
 - 100Mb RAM / user
 - 100kbit/s / user
- Capacity factor → not a hooster ...
- 200 users gives:
 - 20 CPU threads
 - 20 Gb of RAM
 - 20 Mbit of bandwidth
- Can setup today on a single largeish machine.

Suggested Initial Pilot setup



Suggested Initial Pilot setup



HA / setup ...



Nextcloud

- HA setup more fun
 - Split into 3x 8 CPU machines, 8GB each

Users



HA balancer of choice eg. ha-proxy.

https://

http://

Collabora Online Workers

*Key attribute is to ensure that all traffic related to the same document goes to the same worker – all collaborators end up in the same address space.
eg. “balance uri”*

Questions ?

