

What's next in Nextcloud

Frank Karlitschek



Frank Karlitschek



- Born in Reutlingen, Germany
- Studied Computer Science in Tübingen
- Unit Manager and VP Engineering in different Internet companies
- Founded several startups
- Involved in open source and social networks for 20 years
- W3C invited expert
- Fellow at Open Forum Europe
- Founded ownCloud
- Founded Nextcloud



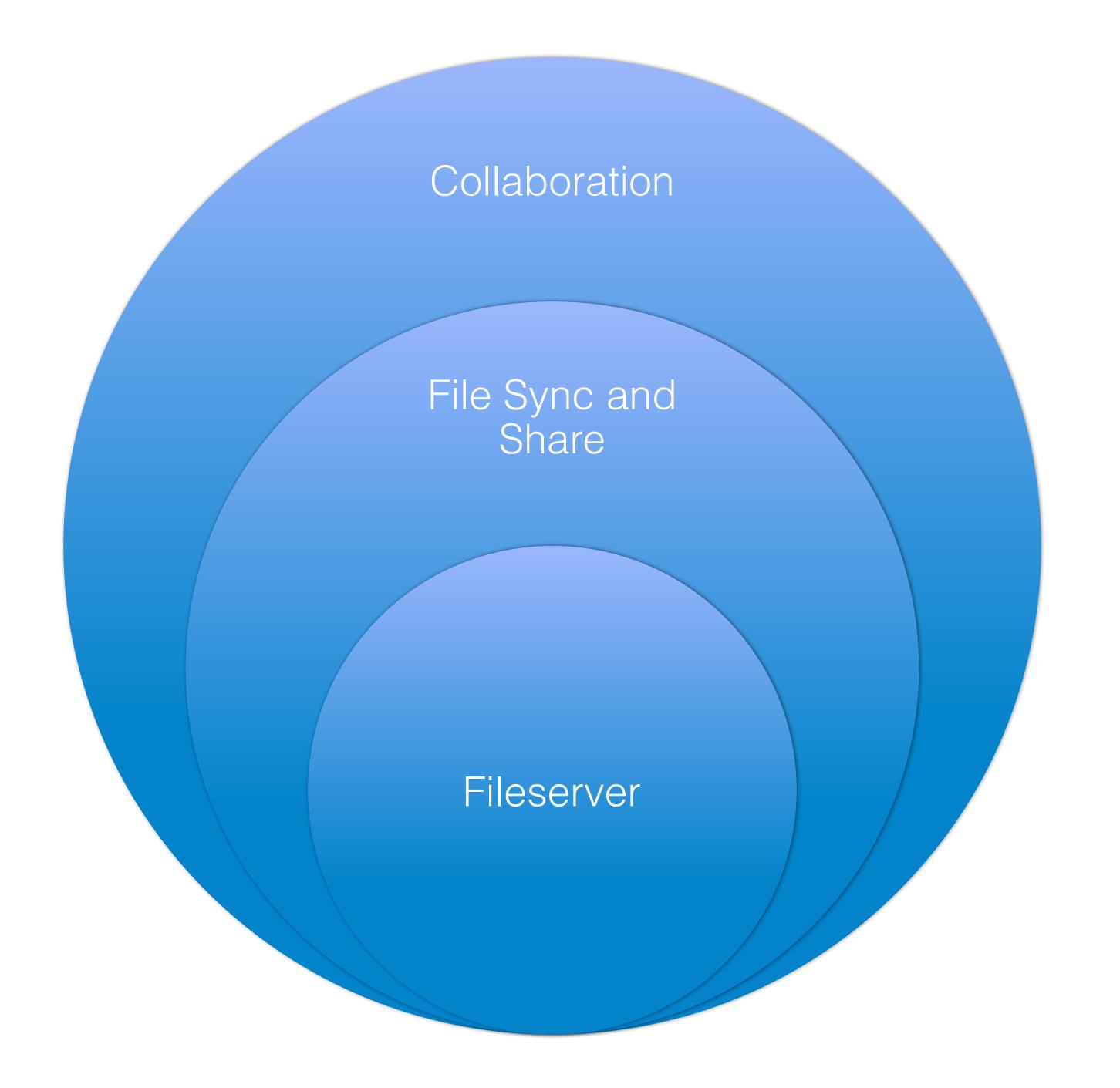
Agenda

- The Nextcloud product strategy
- What we did in 2017/2018
- Use Cases
- Diskussion



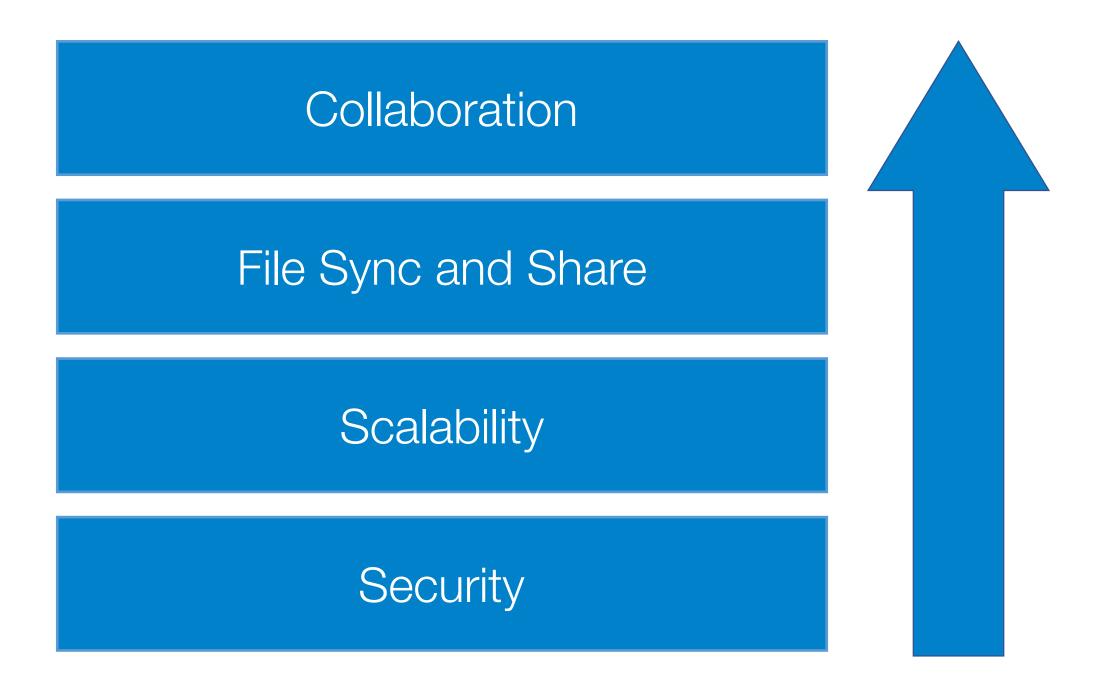
The Nextcloud product strategy







Focus Areas





What we did in 2017 / 2018



Security

- Support for cutting edge browser security features CSP 3.0 and Same-site Cookies
- Support for Kerberos authentication and Two-factor Authentication providers based on Universal 2nd Factor and Time-based One-Time Password
- Brute force protection to all API access points
- More secure Federation through use of SSL/TLS
- New app store automatically checks apps and enforces signatures
- Password confirmation
- NCC group audit
- Restrict login to a certain IP space.
- Easy to use and working updater

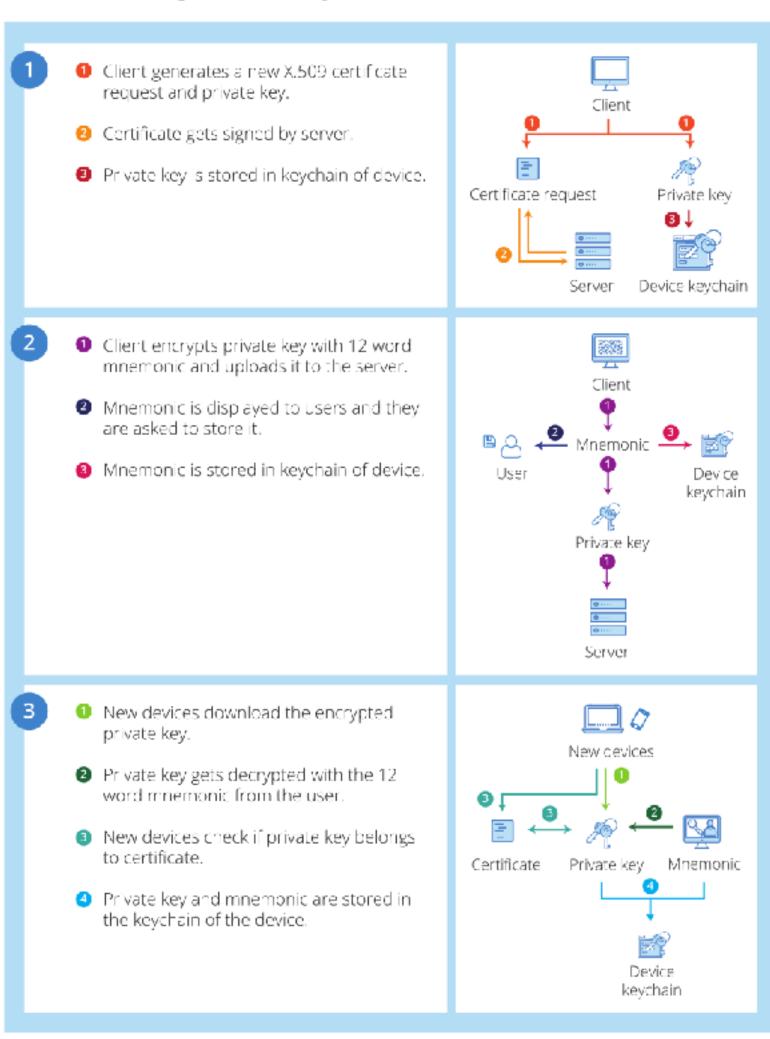
End 2 End Encryption

- Most requested feature
- Final in Nextcloud 13
- Supported in
 - iOS
 - Android
 - Mac
 - Windows
 - Linux
- Enterprise grade key management
- Optional Key Recovery



Nextcloud end-to-end encryption

Create and sync identity





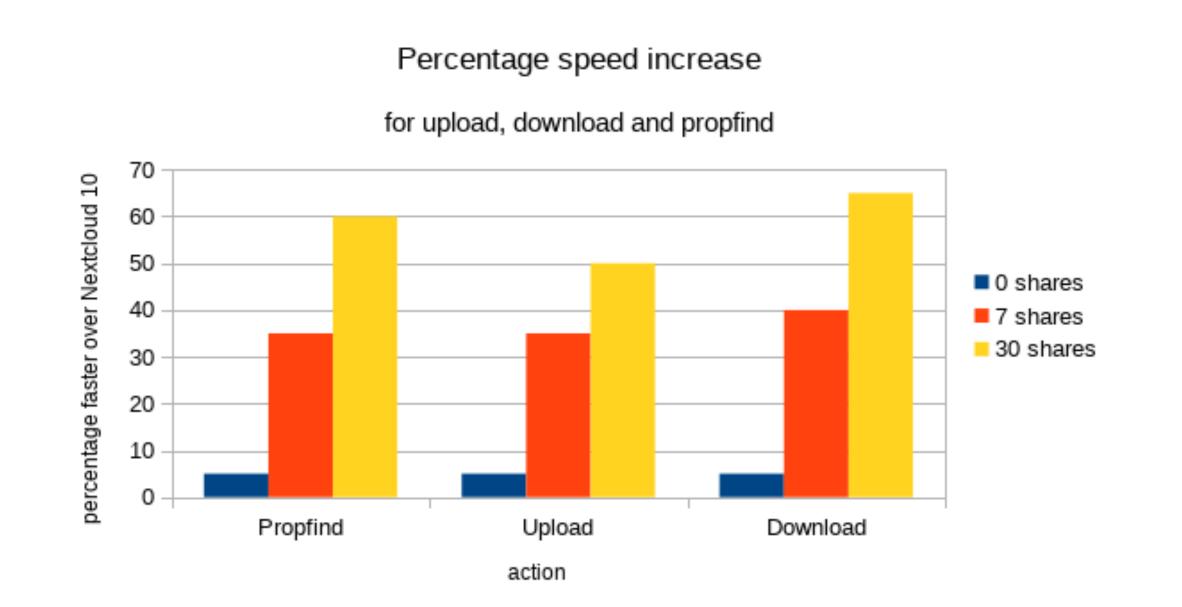
Scalability

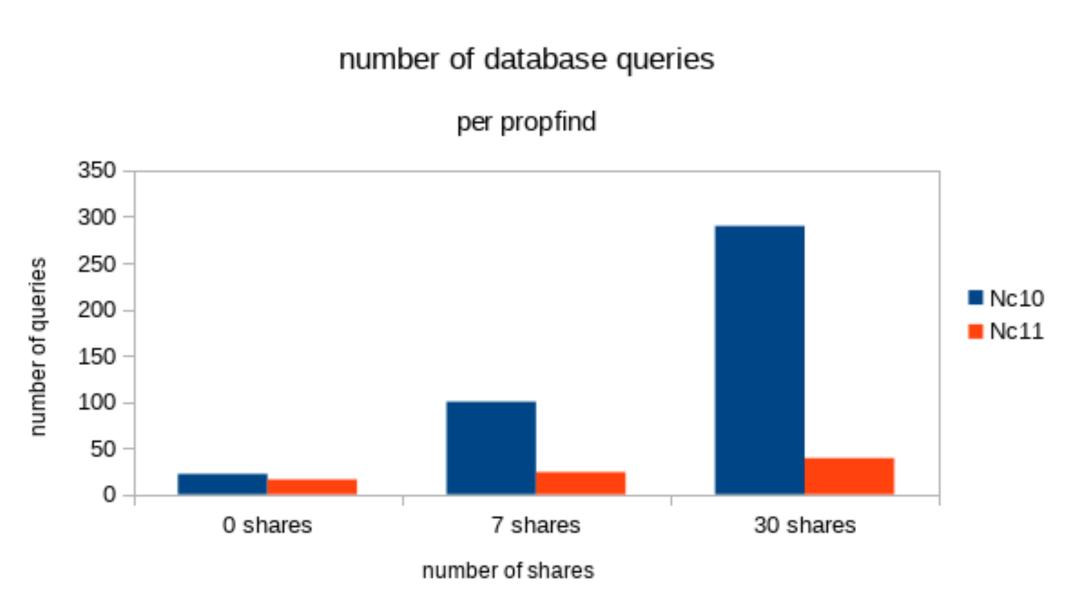
- Reduce DB load by 80%.
- Response time improvements by 60%
- 50% in real world test. (TU Berlin)
- Multi backet object store support
- Big LDAP performance improvements. Up to 85% faster.
- Significant performance improvements in external storage handling



Nextcloud 11 performance improvements

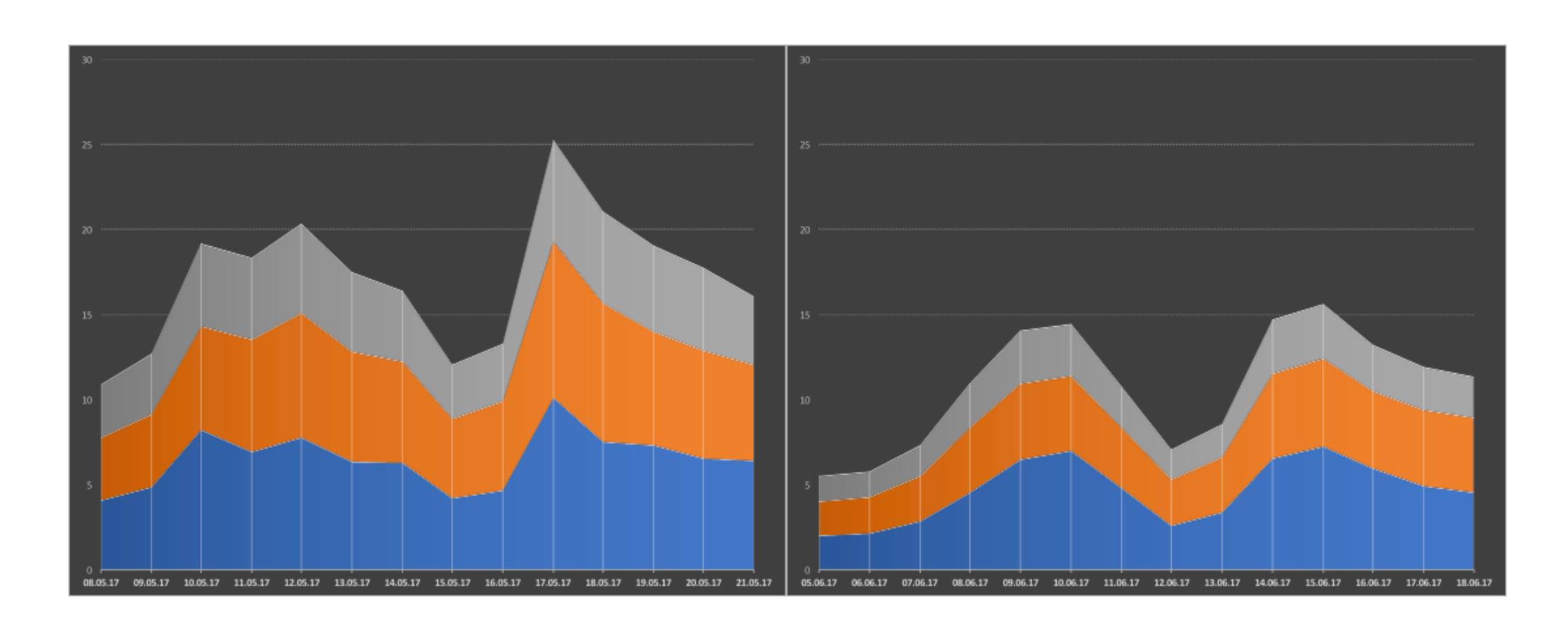
- 80% less database load
- 60% faster propfinds
- 60% faster transfer of small files







Real world test by TU-Berlin



https://nextcloud.com/blog/tu-berlin-halves-database-load-by-migrating-22k-users-to-nextcloud/



Global Scale

- Scalability > 500k users
- Global distribution
- Cost efficiency
- Independent nodes
- Federated sharing between nodes
- Lookup Server
- Global Site Selector
- Balancer
- First release in Nextcloud 12
- Refined user distribution logic in 13
- In production since 6 month for 10M users





File Sync and Share

- Organisation shares
- Chunked file upload in Web
- Impersonate App
- Share by Email
- Quota in Sidebar
- Low Quota Email Warning
- Activities for Files/ Folders
- Guest app
- Copy action in web UI



Collaboration

- Full text search (Apache Solr)
- Lookup Server for Collaboration across instances
- New app menu to make switching easier
- Push Notification
- Circles App for User defined groups
- Contacts menu
- Avatar popup menu
- Show avatars in Collabora Online
- Show avatars in Shared files overview
- Calendar with free Outlook/Thunderbird plugins. Free/Busy Support, Invitations
- Mail/Contacts
- Files from Mail
- Deck app
- User comments autocompletion
- External sites improvements. Also show on mobile Apps



Nextcloud Talk



- Audio / Video calling
- Chat
- Screensharing / Presentations
- Webinar use-case
- Phone use-case
- Web-UI
- Android App
- iOS App
- Federated Calls with OCM API
- Optional high scalability backend
- Signaling Server
- STUN, TURN, MCU
- SIP Bridge

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Choose person...

Discuss Nextclou...

Press informatio...

Mario Danic

Nina Cercy

Sales Weekly call

Mathias Conradt,...

𝑉 Sales

Collabora plans

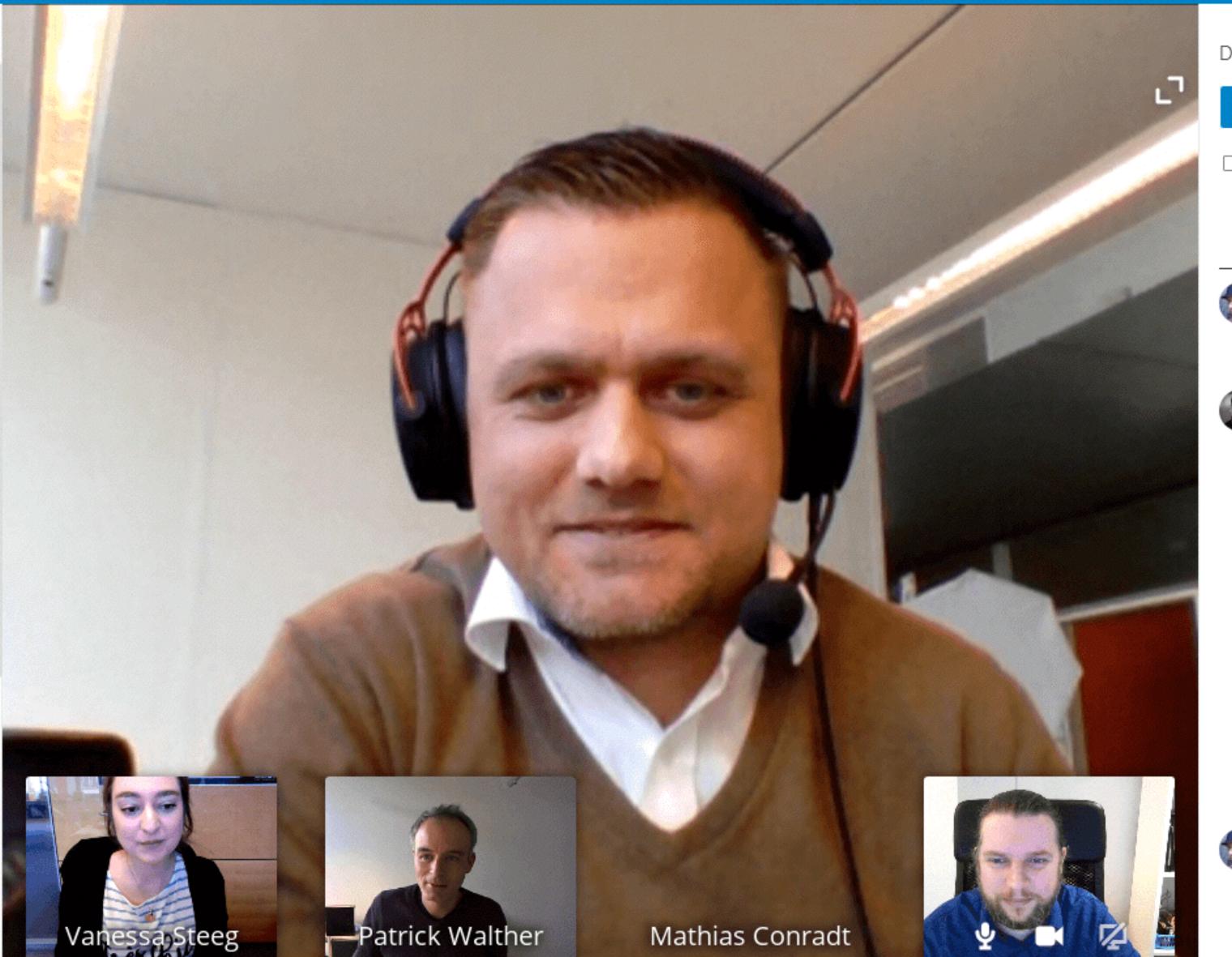
Company Call

Frank Karlitschek

Ivan Sein Santiago

I have renamed t...

Lukas Reschke



Discuss Nextcloud Talk

Leave call

☐ Share link

🗬 Chat

upple Participants

Jos Poortvliet

9 minutes ago

4 minutes ago

Hi team, I'd like to go over Nextcloud Talk features today.



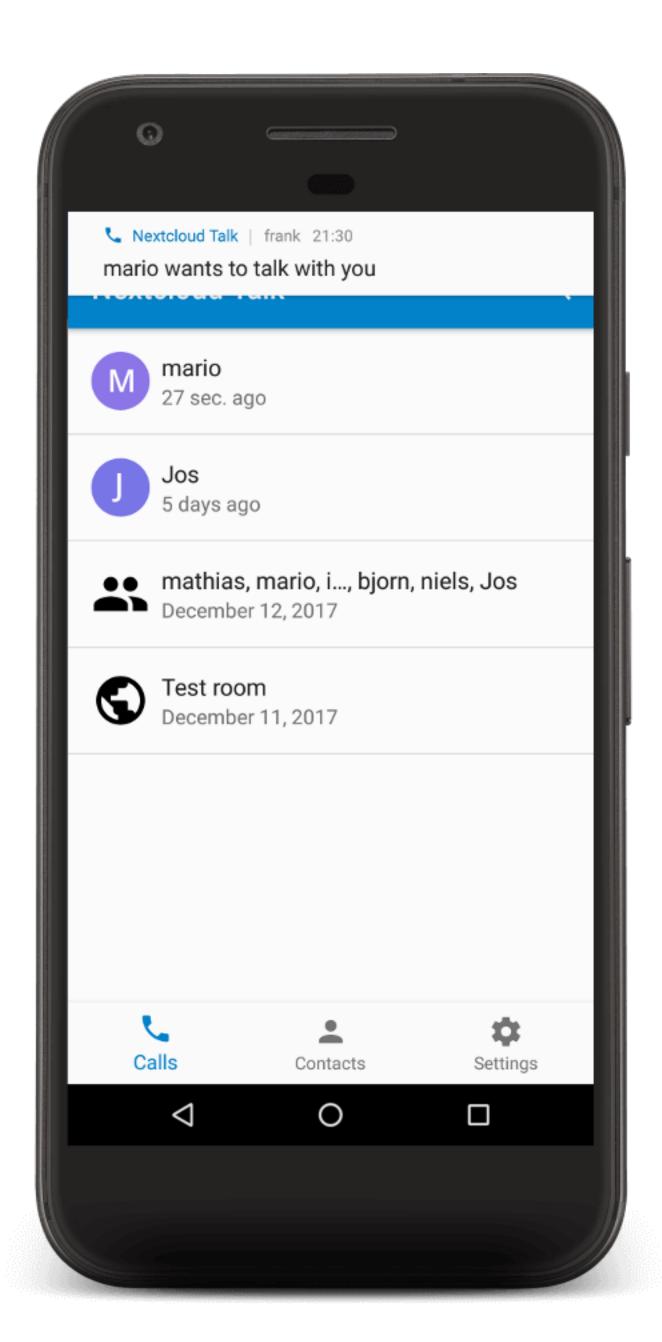
Mathias Conradt

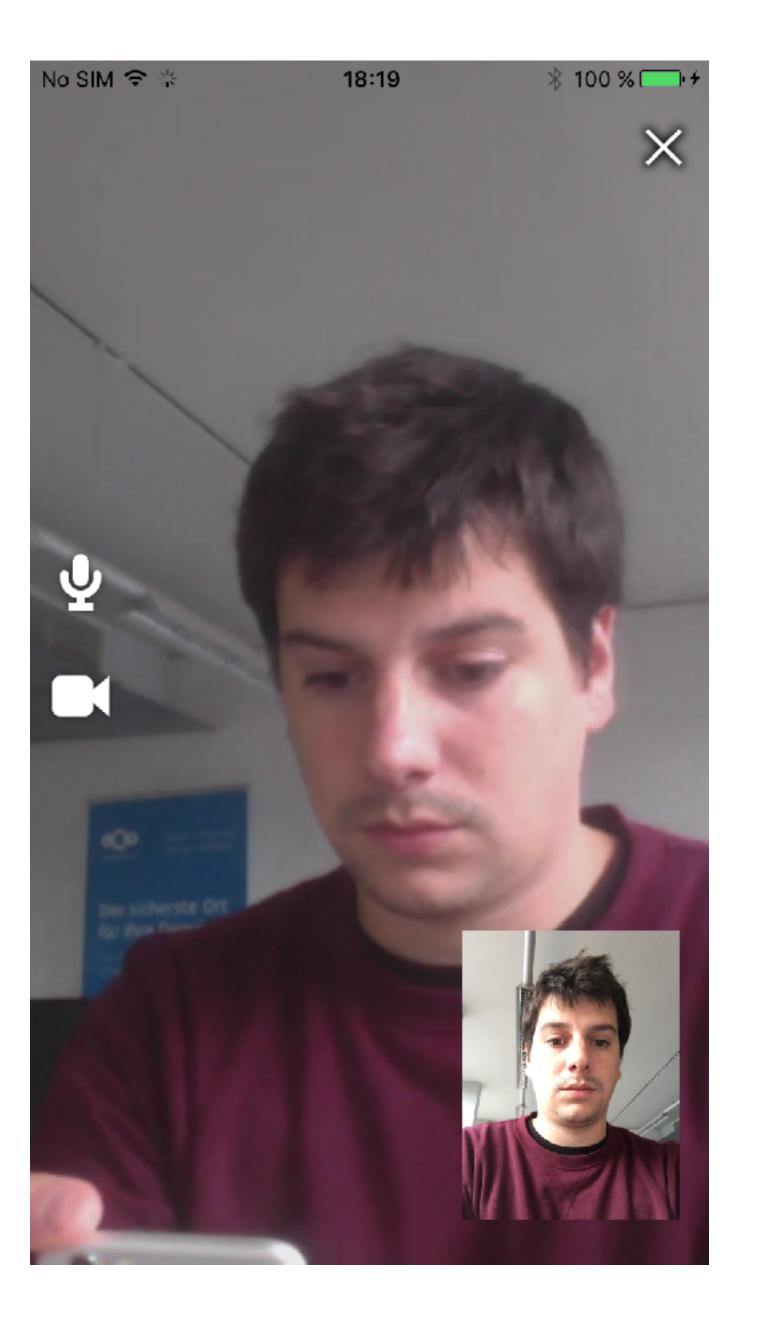
Ok

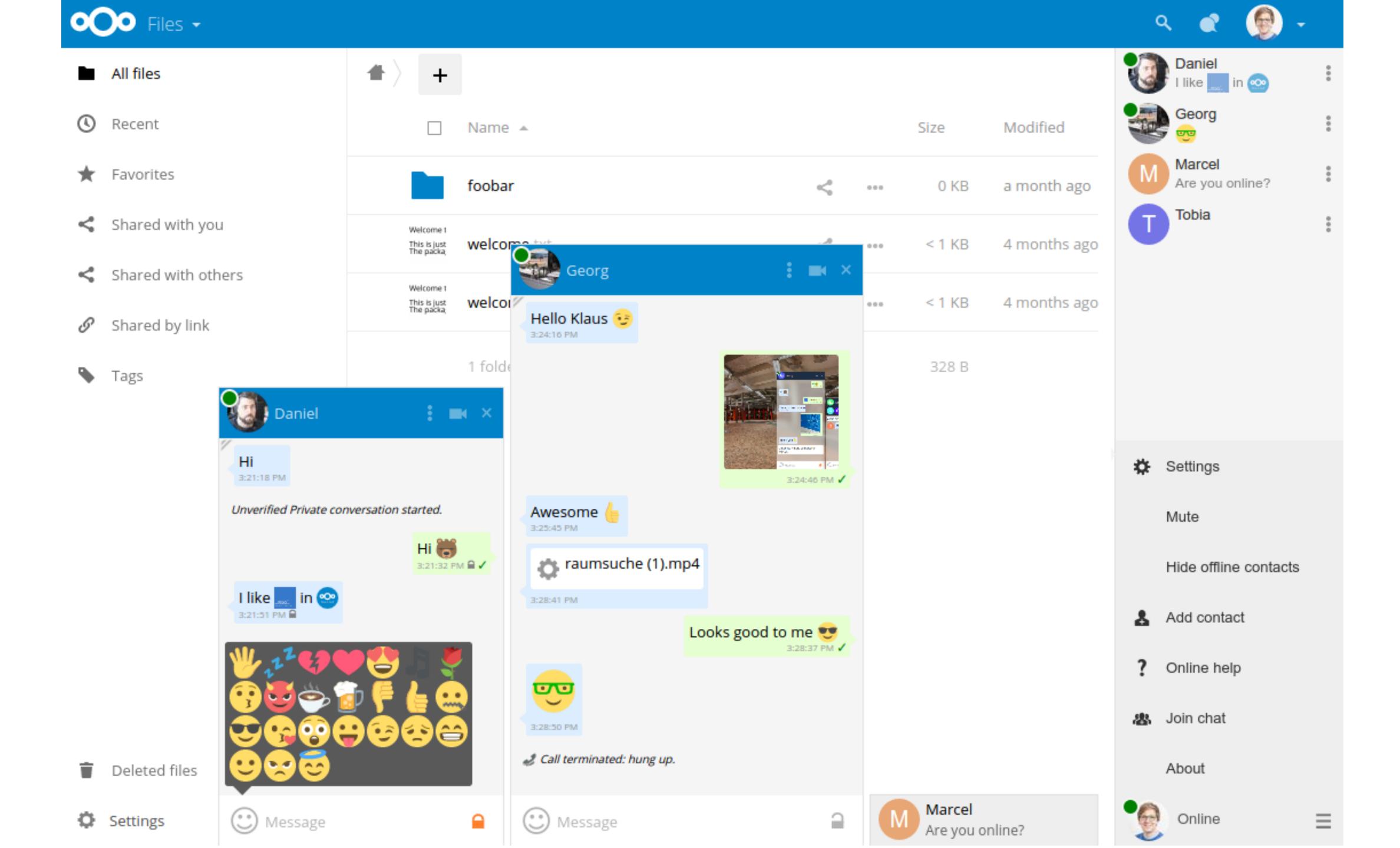


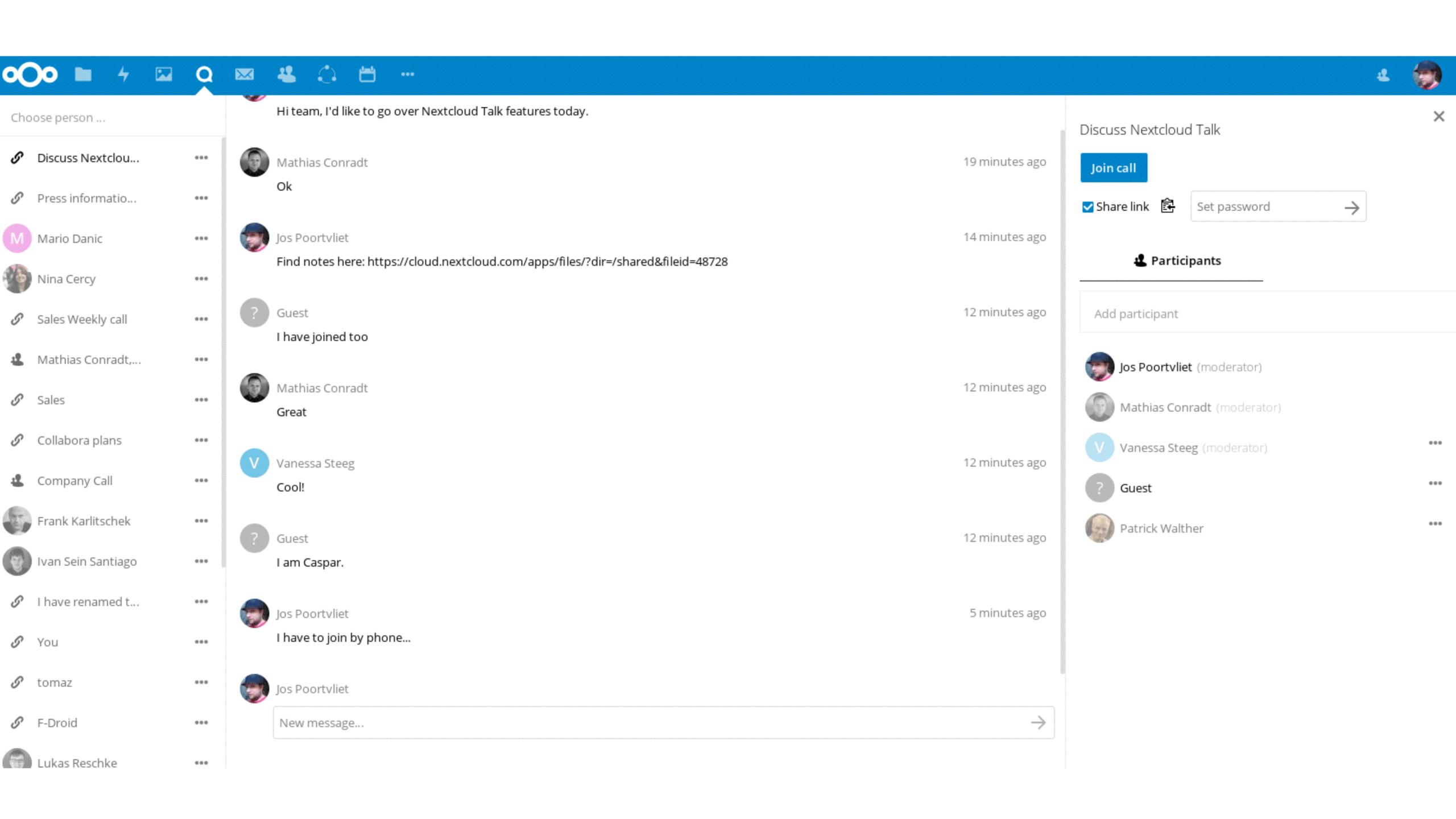
Jos Poortvliet

New message...

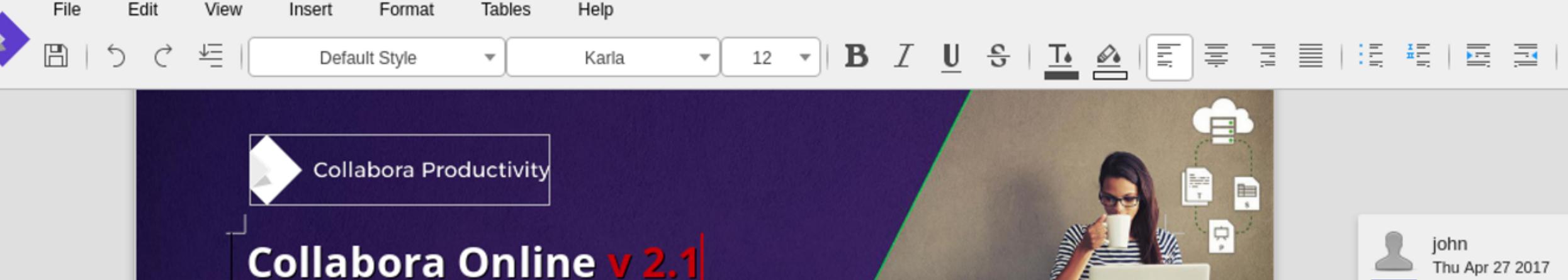














john Thu Apr 27 2017

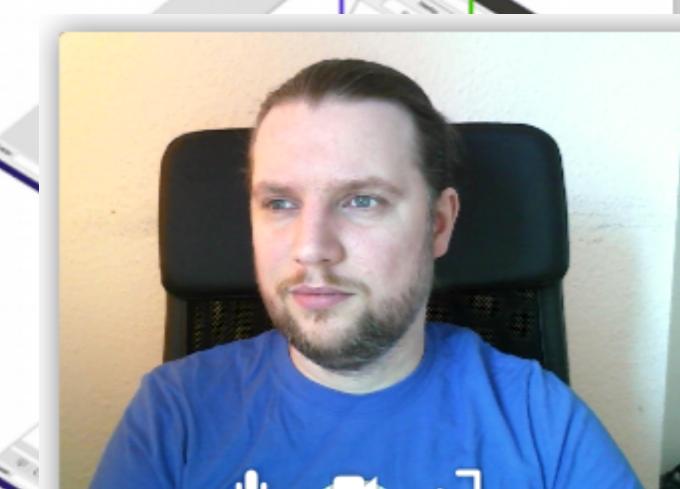
Insert ' v 2.1'

Good to add the version nu

Collabora Online: the enterprise-ready LibreOffice-based Online Office Suite that allows you to stay in control of your own documents. full control of your office files.

LibreOffice is the world's most popular Open Source Office suite with over 120 million users. Collabora, a leading contributor to the project, and developer of the enterprise-ready, Long Term Supported edition of LibreOffice, Collabora Office, has now brought LibreOffice to the Cloud with Collabora Online.

With Collabora Online you now have access to a powerful, enterprise-ready and 100% Open Source Online Office suite functionality, with excellent



YOU editing.

ANNE editing...



jane Thu Apr 27 2017

Can we add the version number h too?



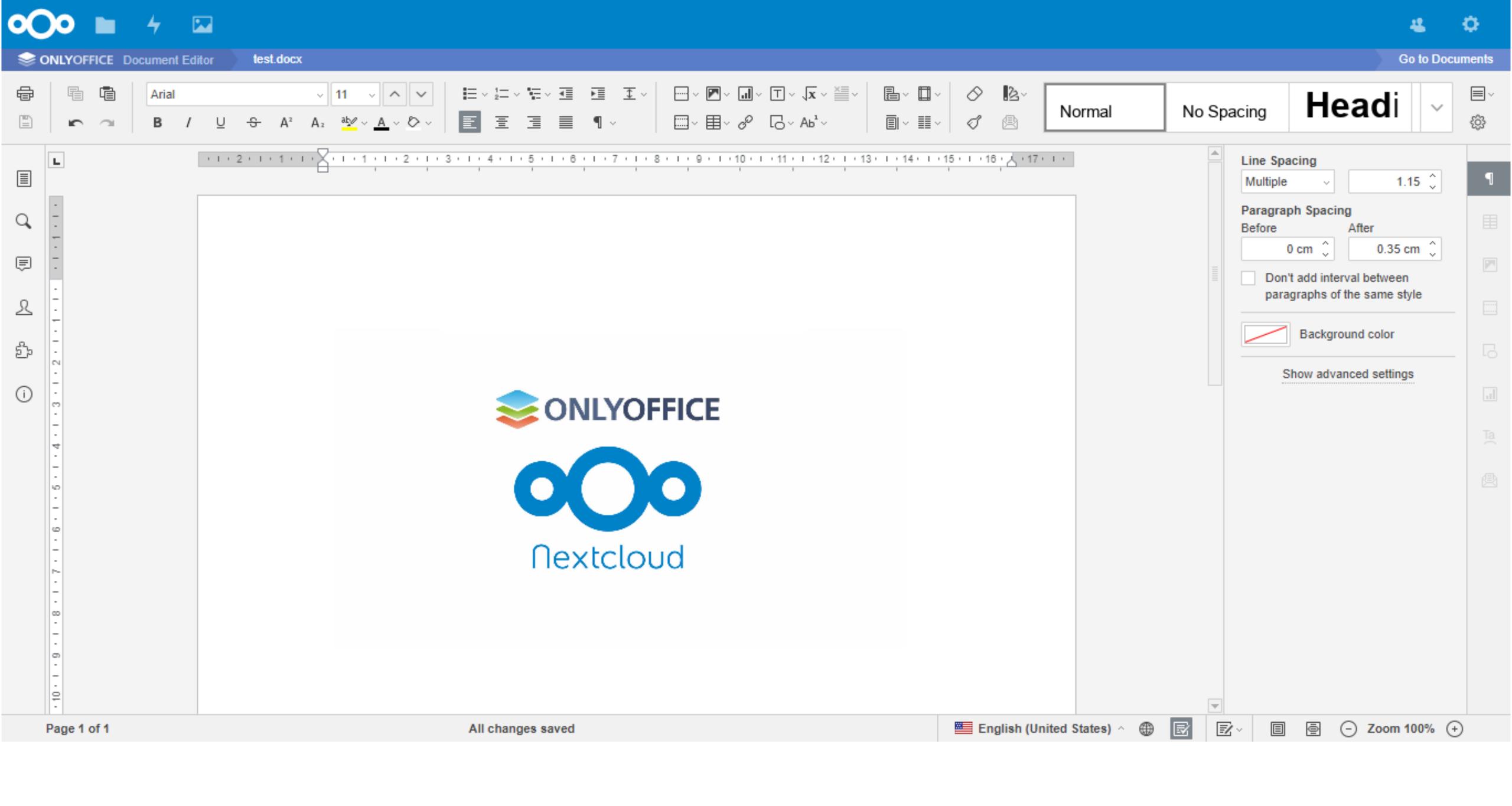
Emily Thu Apr 27 2017

Great idea! Let's check the rest of document too, and let's add a link: www.collaboraoffice.com



Alan Thu Apr 27 2017

Delete 'control o...cument





App Ecosystem

- New App Store with > 100 Apps
- Not contributor license agreement
- No enterprise apps
- Real 100% open source
- 'Contributions at eye level'



Nextcloud Education Edition

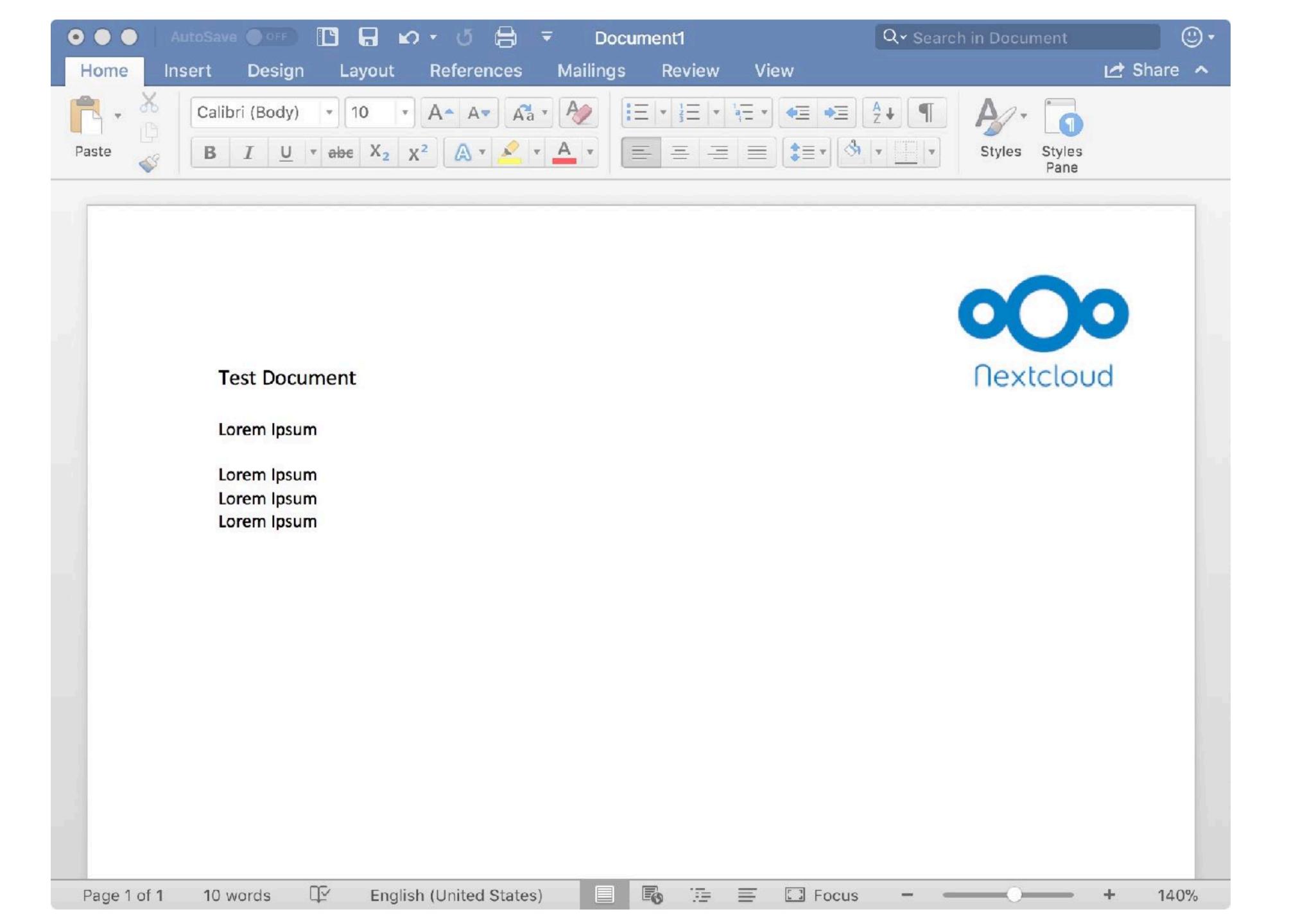
- Moodle integration
- Zenodo publishing
- Dashboard
- Circles
- ORCID
- Pico CMS



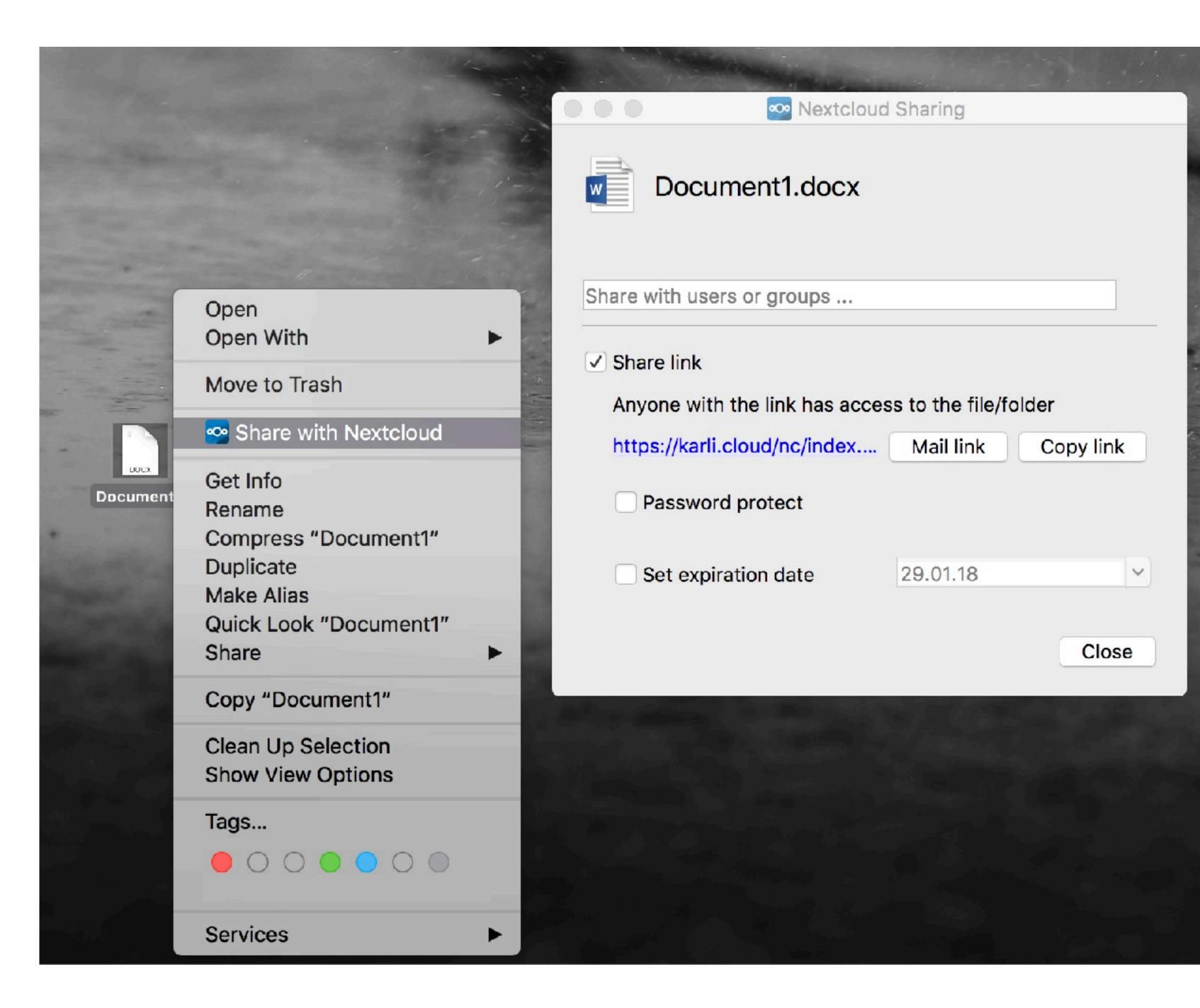
Use Cases



Document Sharing

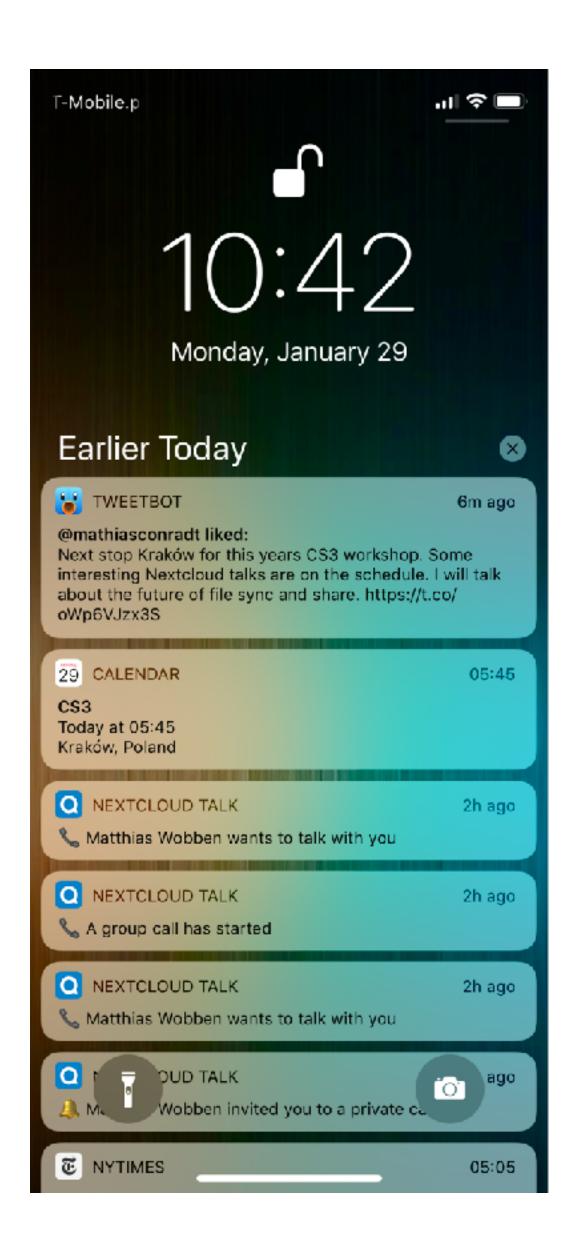


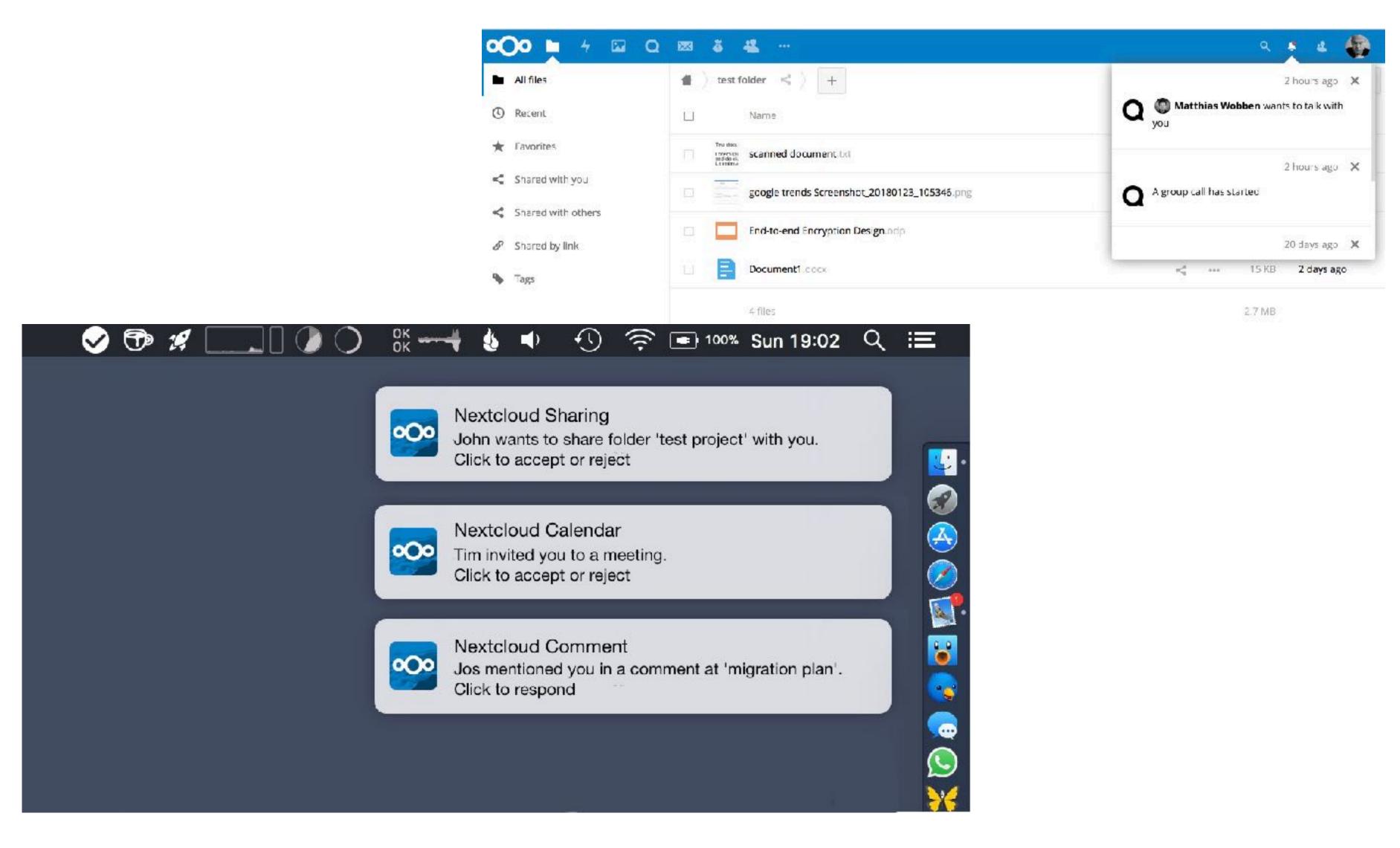
Nextcloud

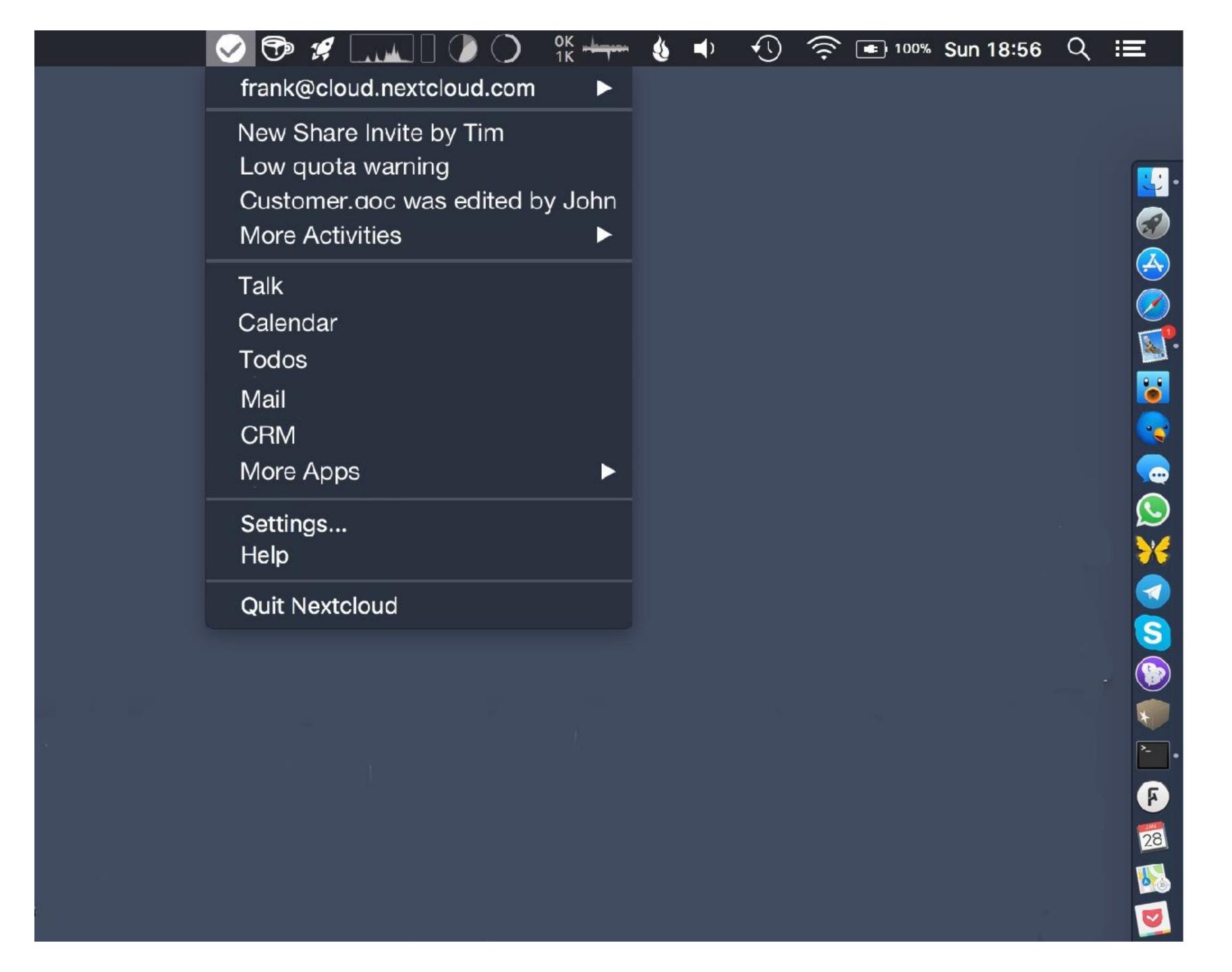




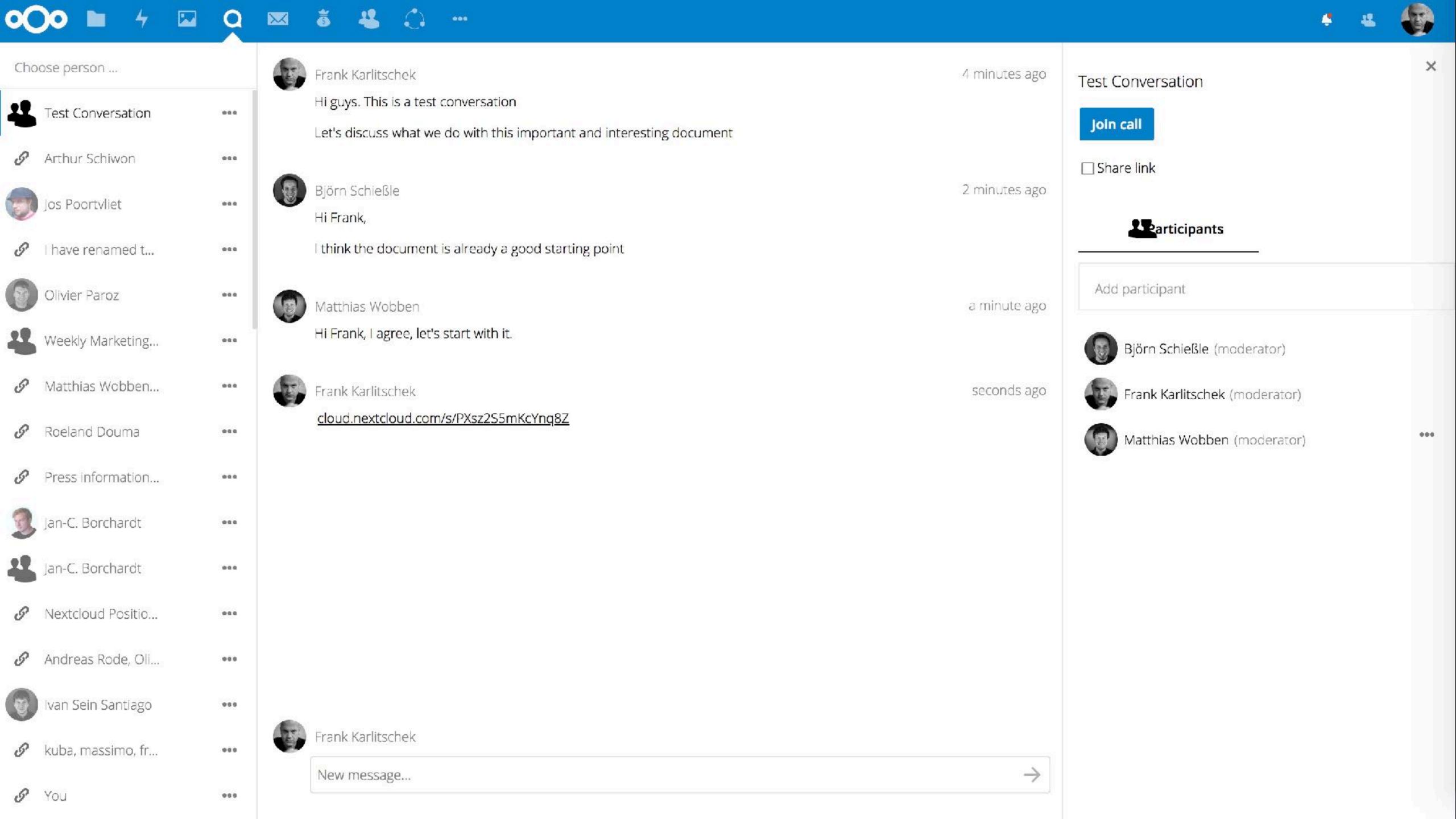


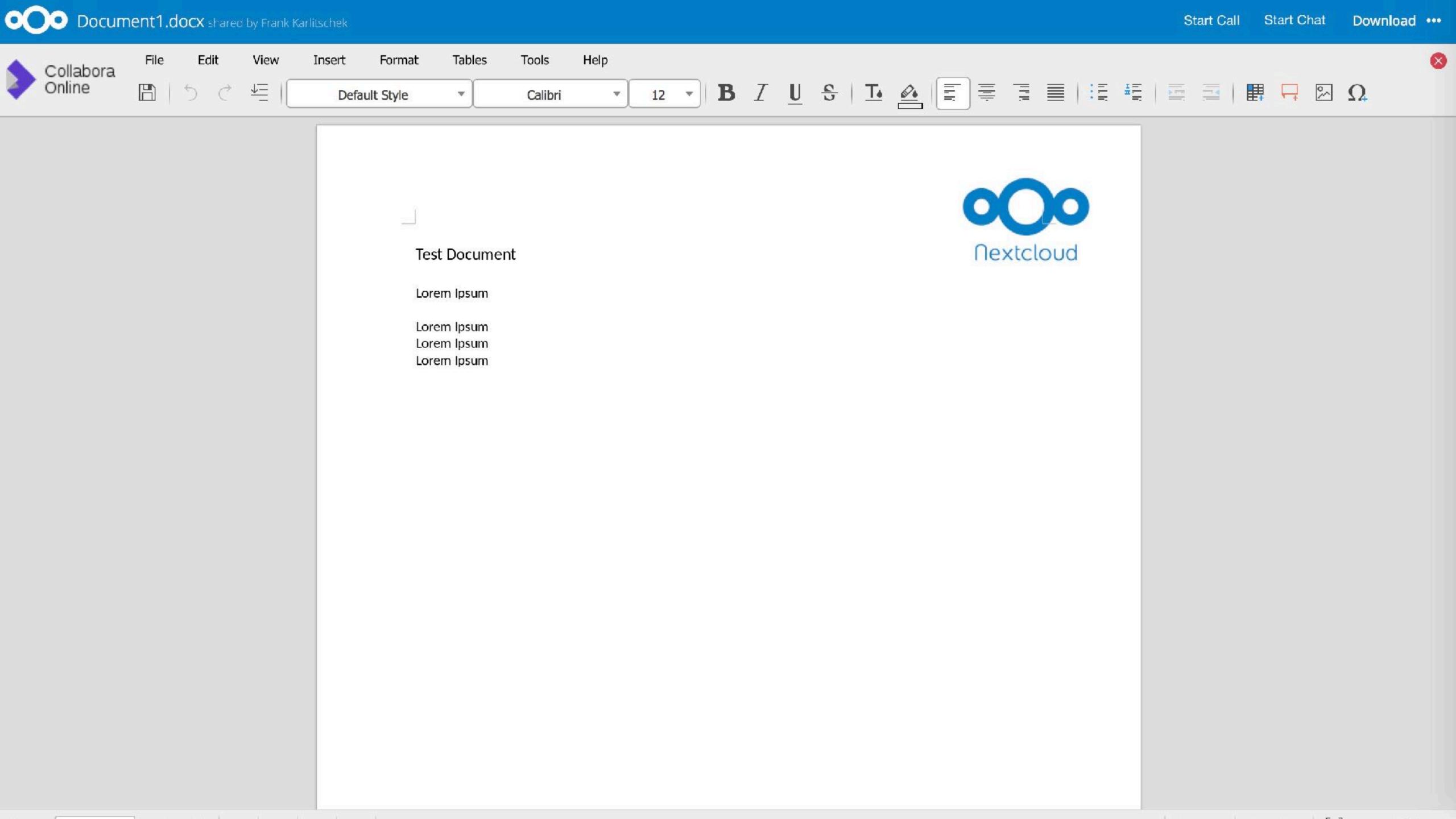


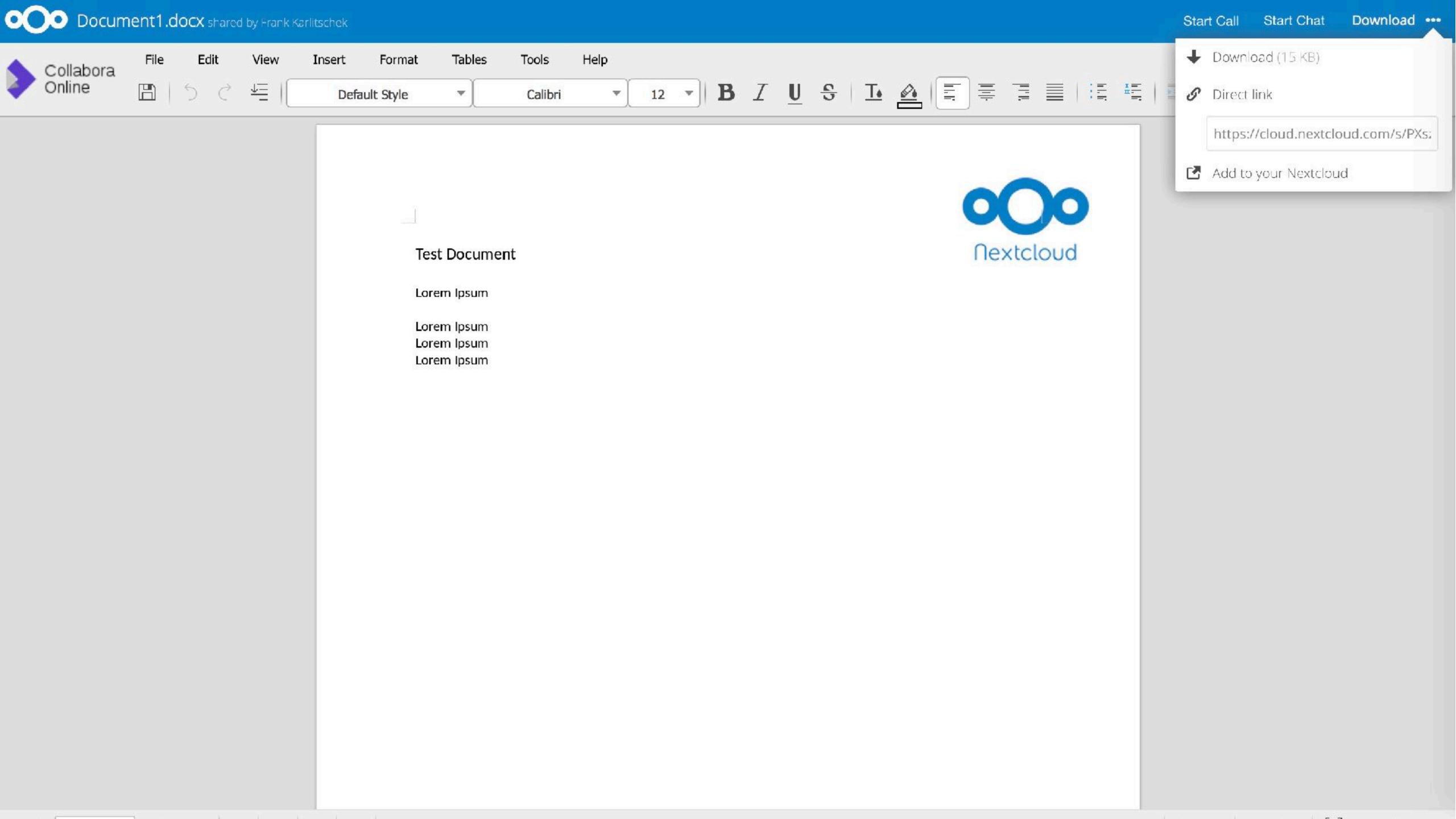


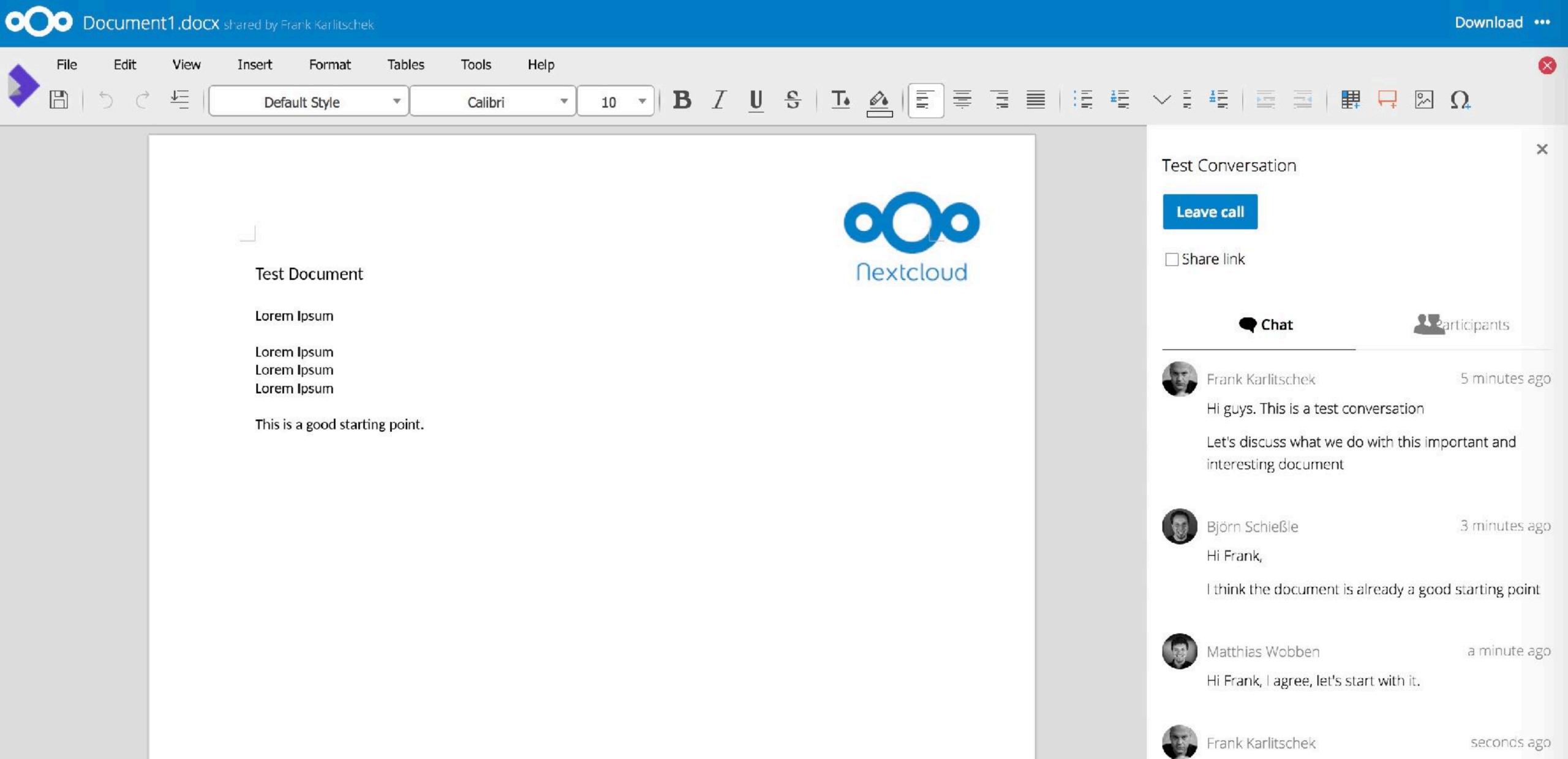








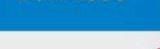




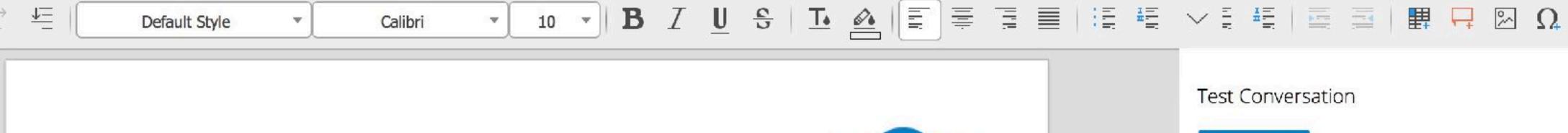
Frank Ka

Frank Karlitschek

cloud.nextcloud.com/s/PXsz2S5mKcYng8Z



×



Help

Tools





☐ Share link



Frank Karlitschek

Chat

5 minutes ago

2 Participants

Hi guys. This is a test conversation

Let's discuss what we do with this important and interesting document



Björn Schießle

3 minutes ago

Hi Frank,

Test Conversation

Leave call

I think the document is already a good starting point



Matthias Wobben

a minute ago

Hi Frank, Lagree, let's start with it.



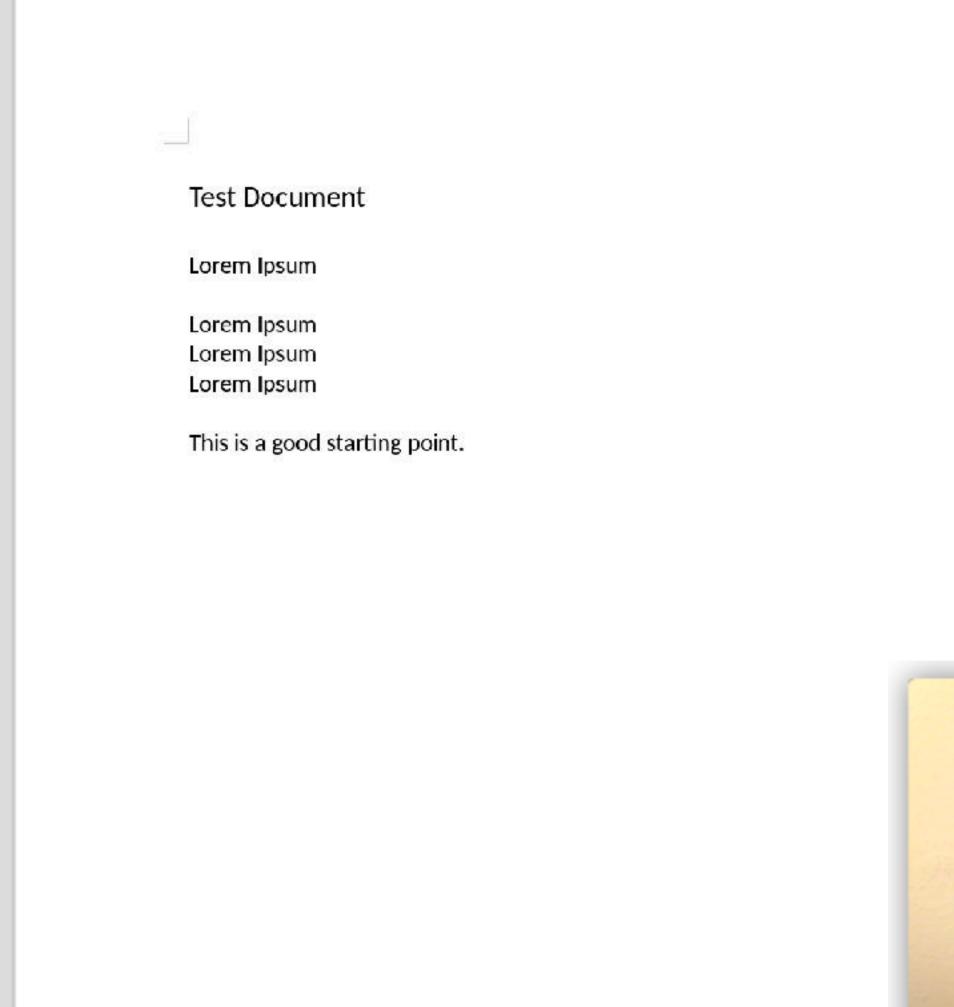
Frank Karlitschek

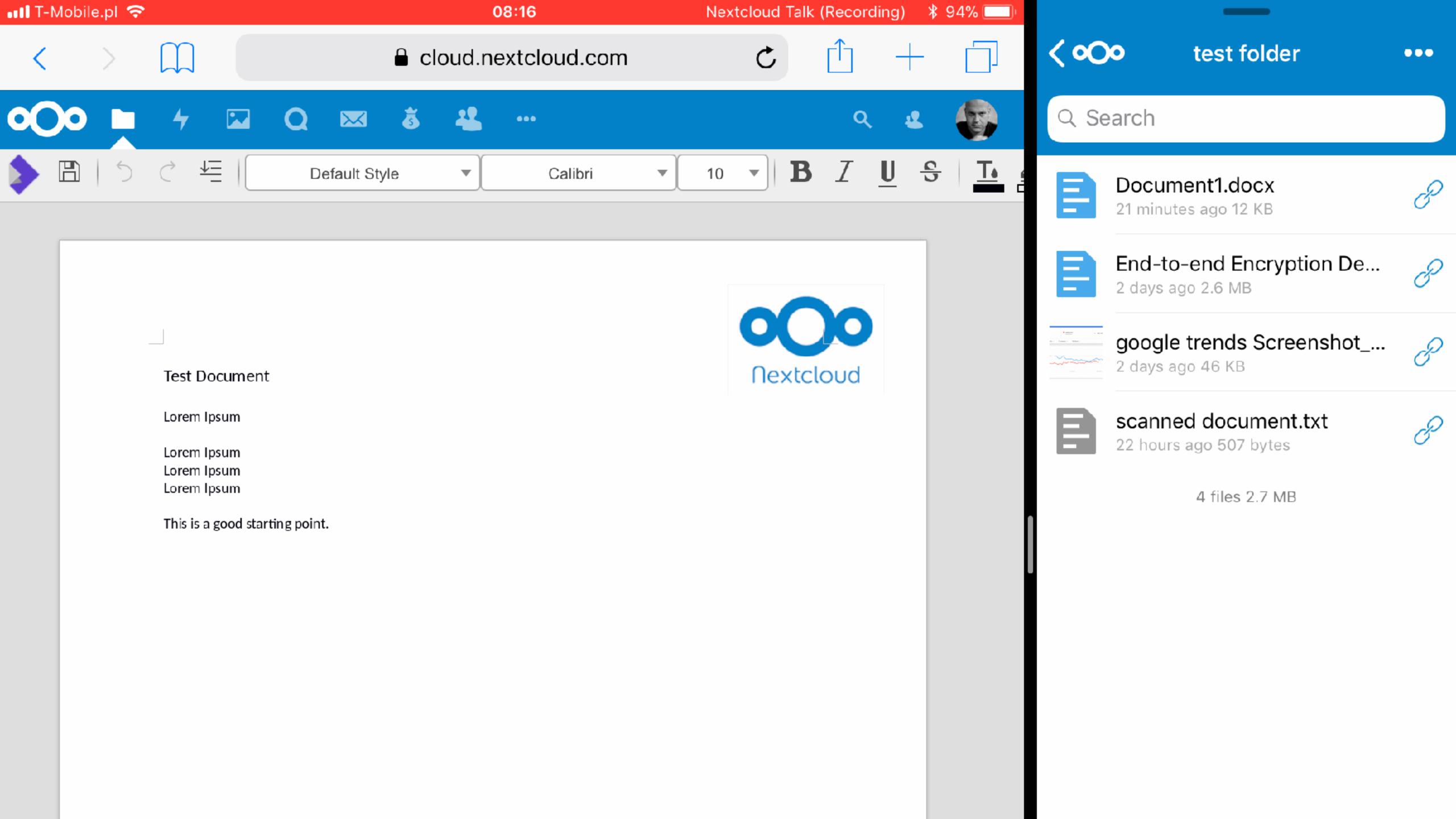
seconds ago

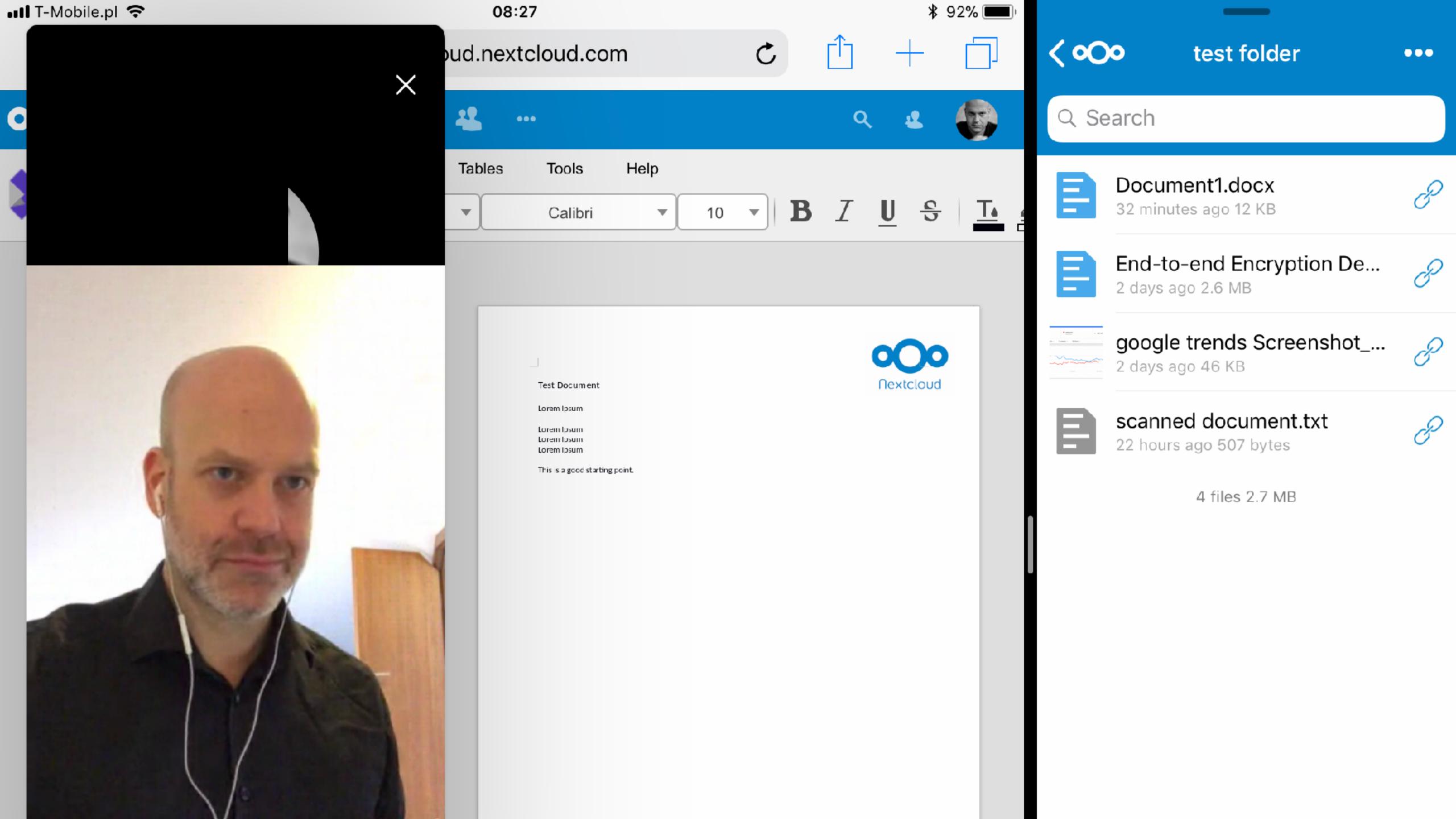
cloud.nextcloud.com/s/PXsz2S5mKcYng8Z

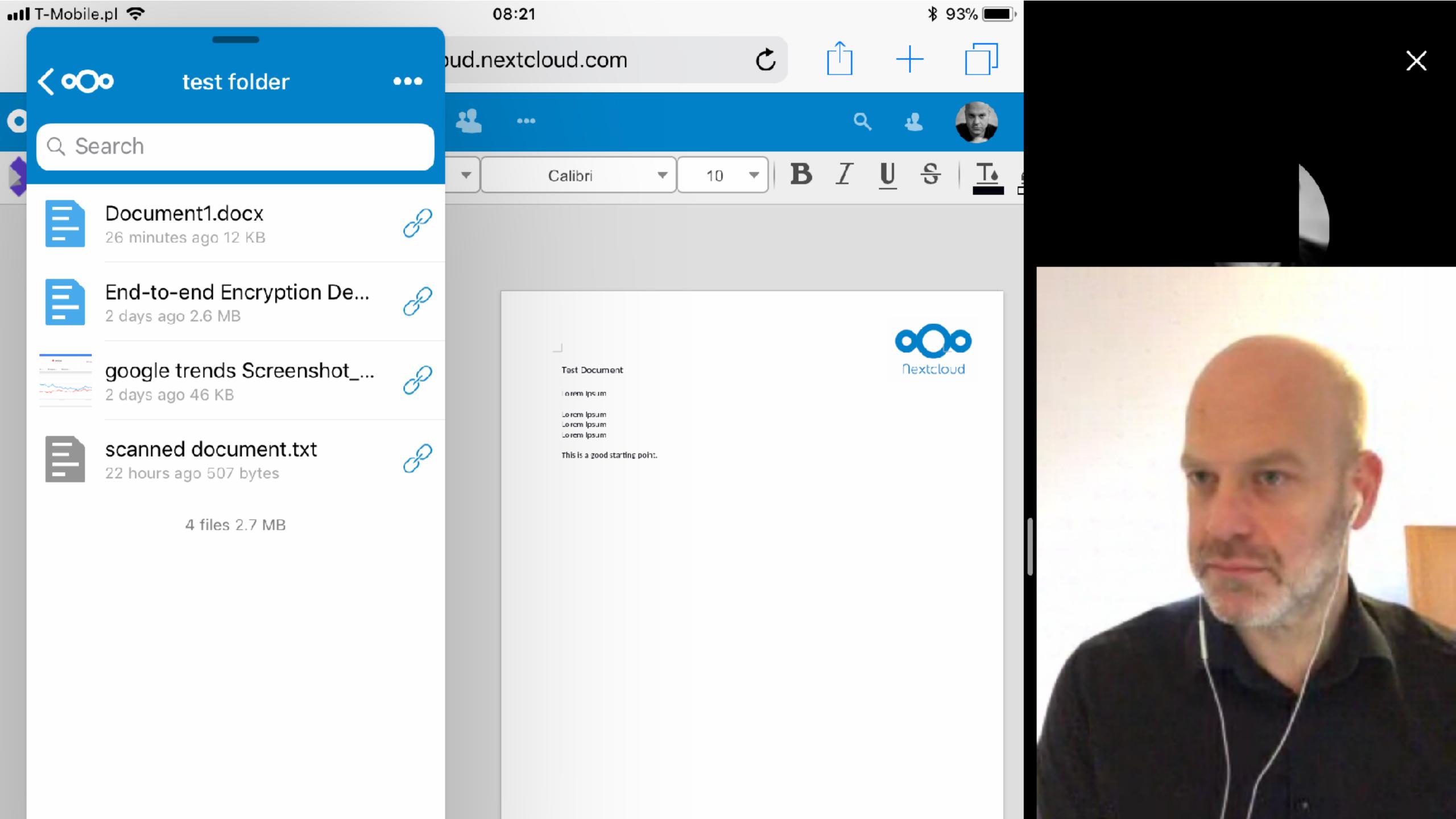


Frank Karlitschek













Sync Activity

test folder/Document1.docx has been updated.





















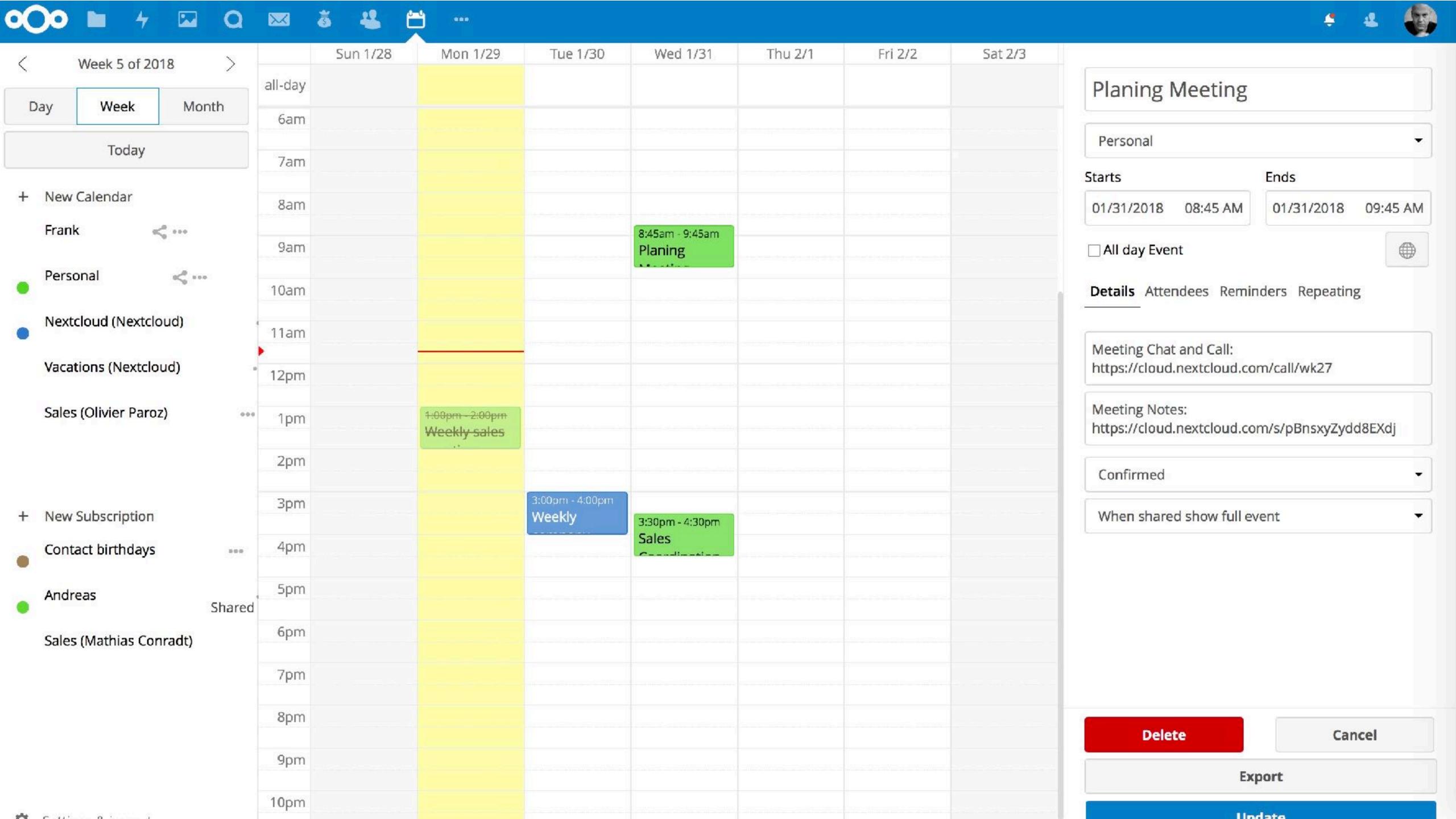


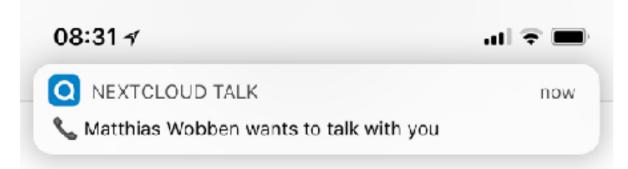


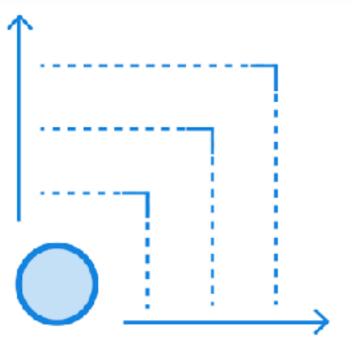




Meeting







Productivity

Make data available on any platform to your teams. Let them share, collaborate and communicate within and across organizational boundaries.



Community



Nextcloud

Monday, January 29, 2018 at 10:39:04



You changed scanned document.txt

Monday, January 29, 2018 at 10:37:20



Upload 18-01-29 10-35-45 0674.png

https://karli.cloud/nc/remote.php/webdav/ Photos/2018/01 Selector: uploadAutoUpload



Monday, January 29, 2018 at 10:37:18



Activity

You created scanned document.txt and Photos/ 2018/01/18-01-29 10-35-45 0674.png

Monday, January 29, 2018 at 10:37:14



Auto Upload

Add Auto Upload, add new asset Selector: uploadAutoUpload

Monday, January 29, 2018 at 10:33:29



Activity

You changed Nextcloud - Future of EFSS 2.key

Monday, January 29, 2018 at 10:33:26



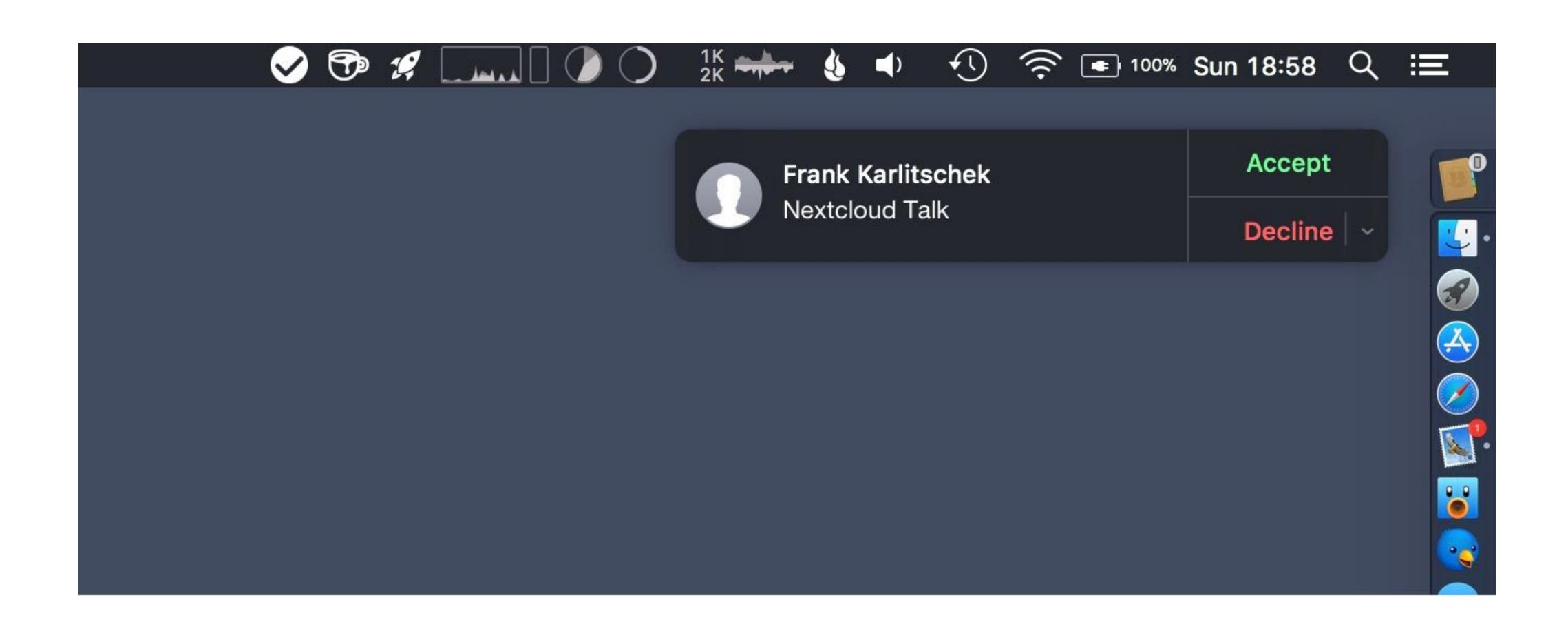


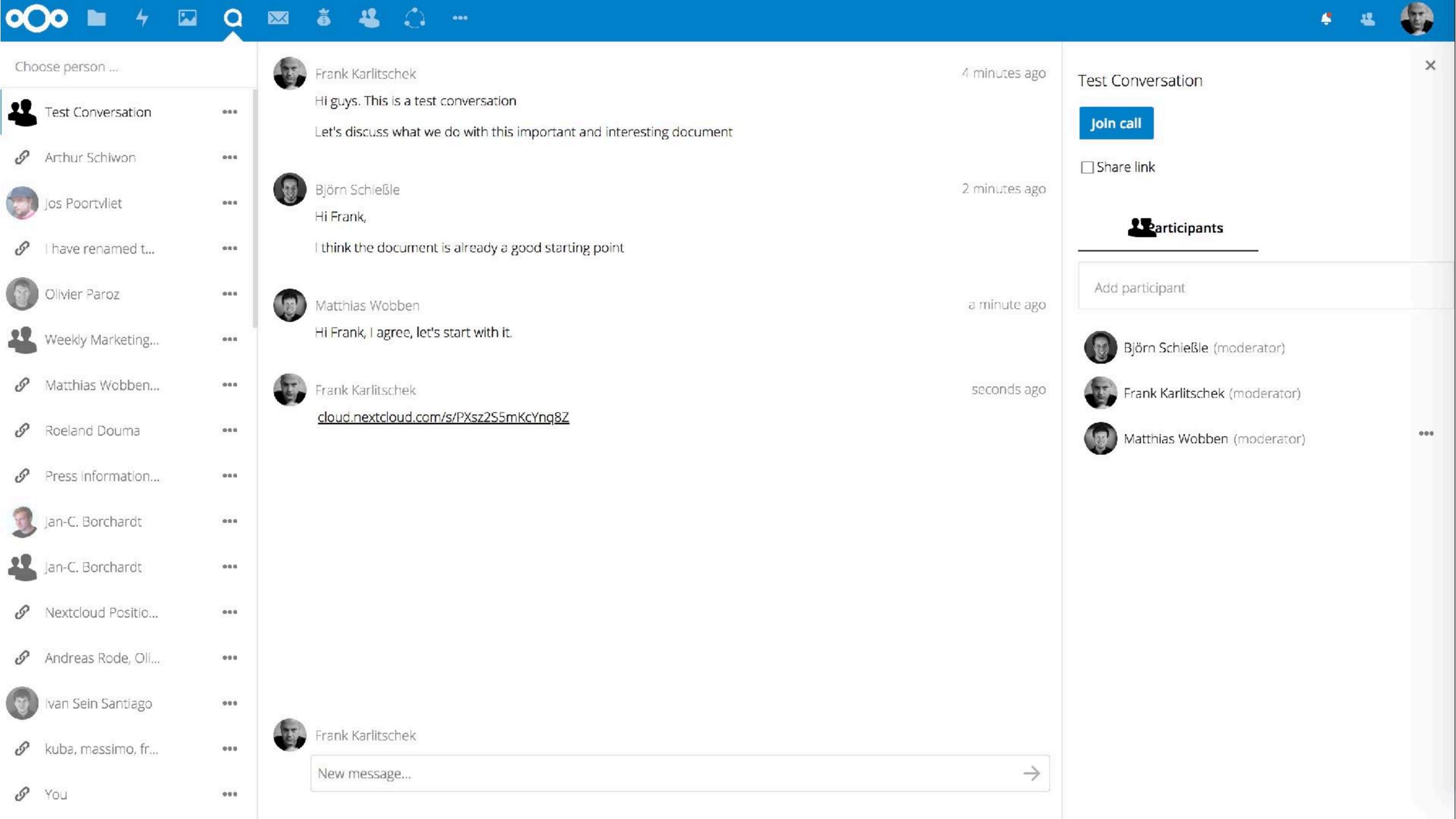






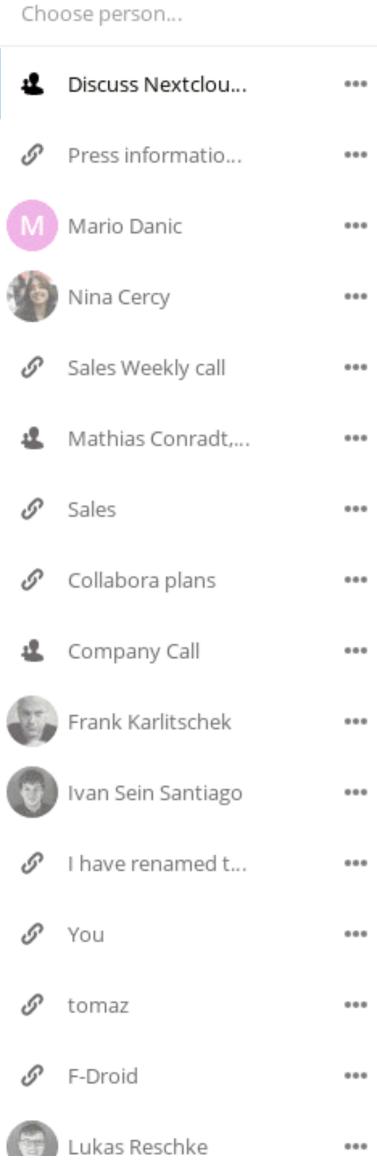


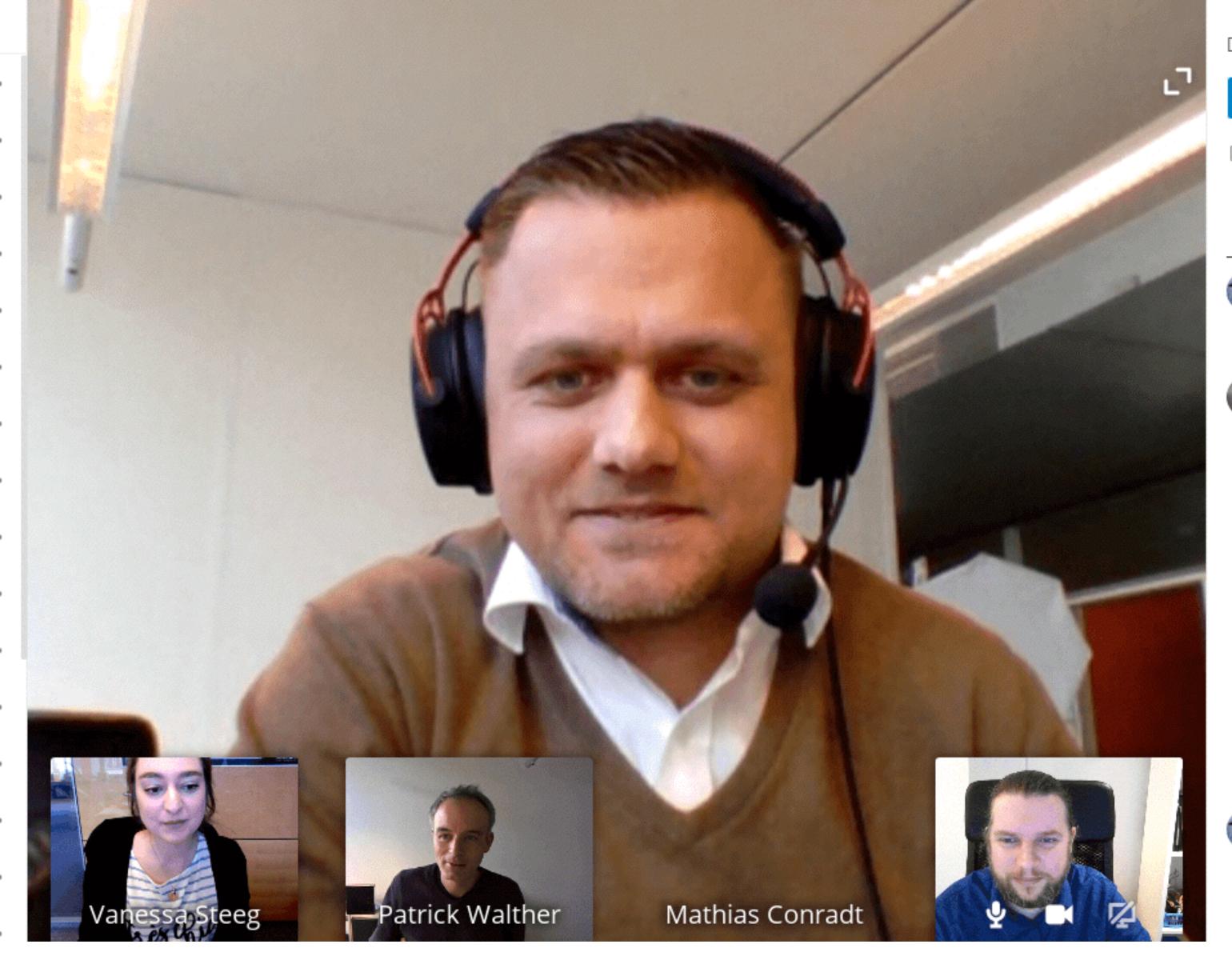












Discuss Nextcloud Talk

Leave call

☐ Share link

🗬 Chat

Participants

Jos Poortvliet

9 minutes ago

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Mathias Conradt

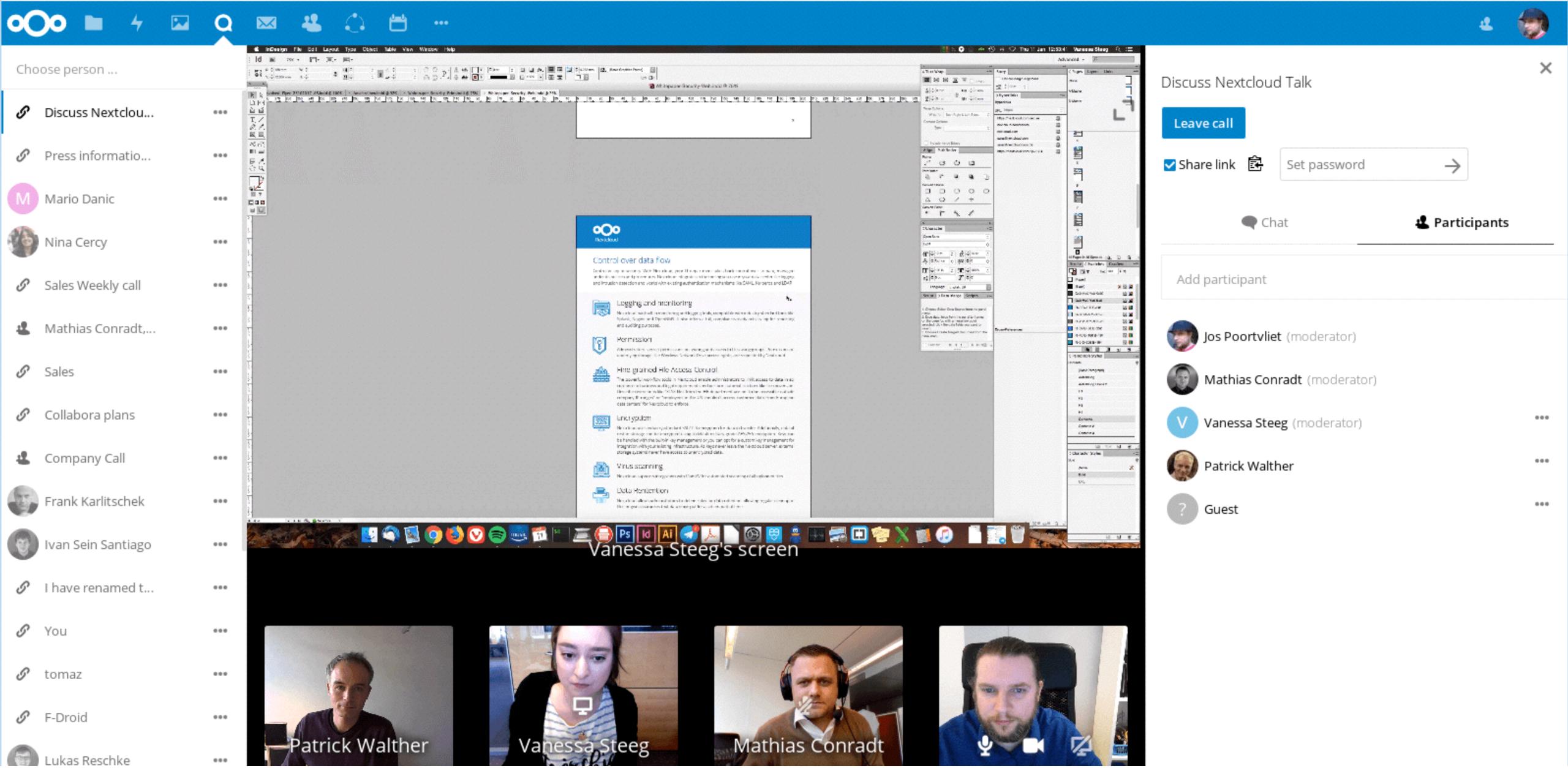
4 minutes ago

Ok

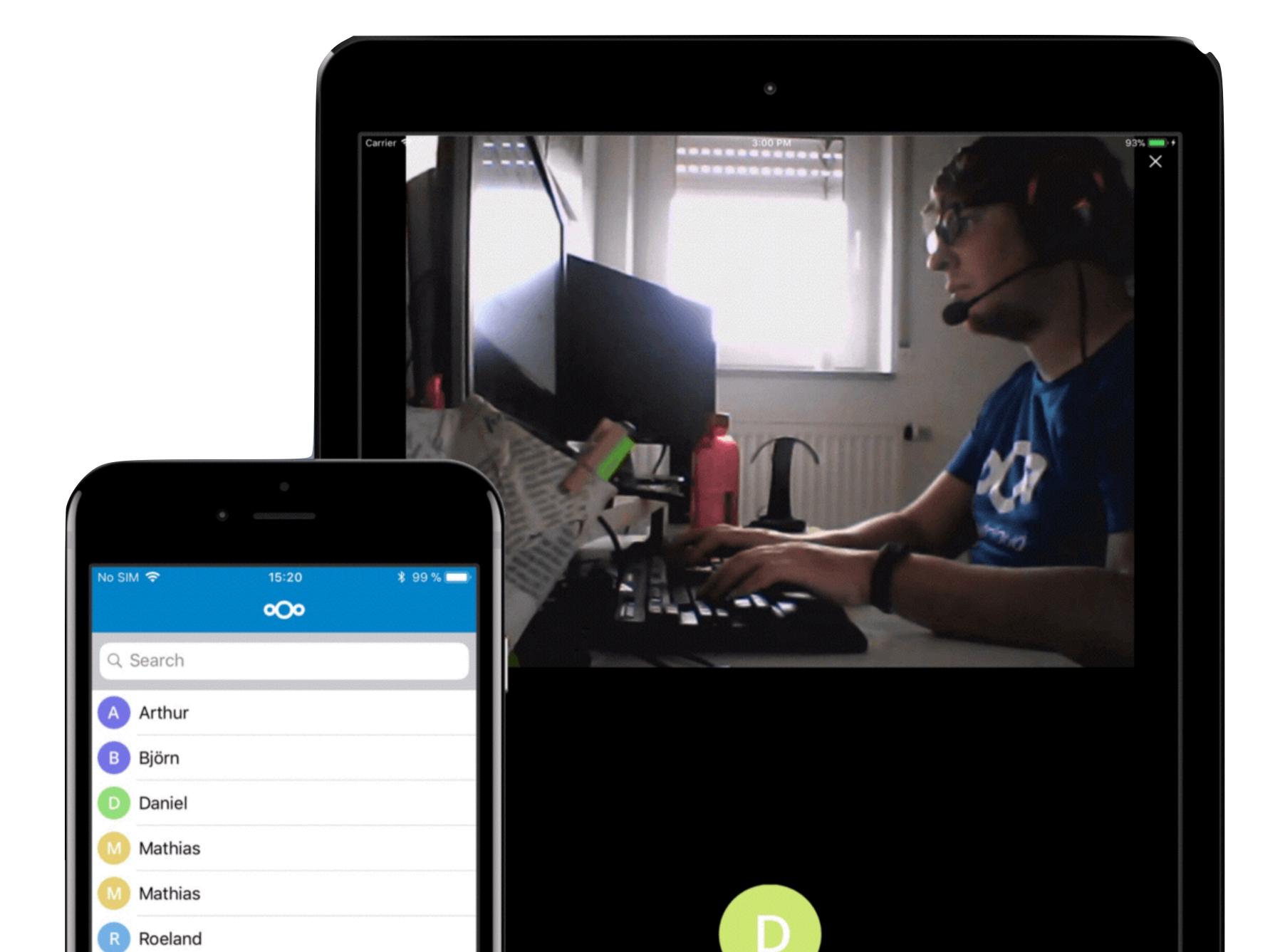


Jos Poortvliet

New message...









Document Workflow

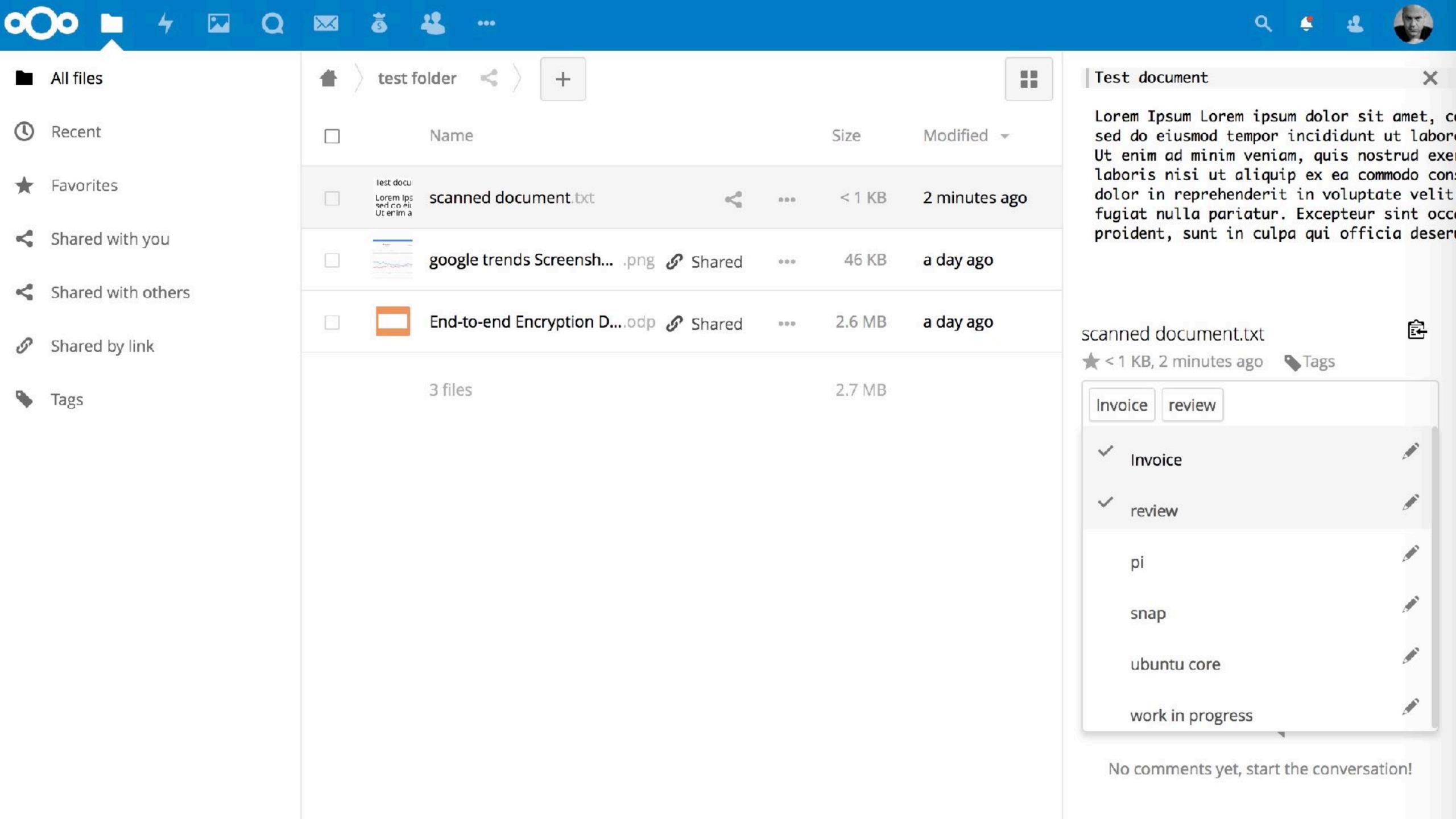


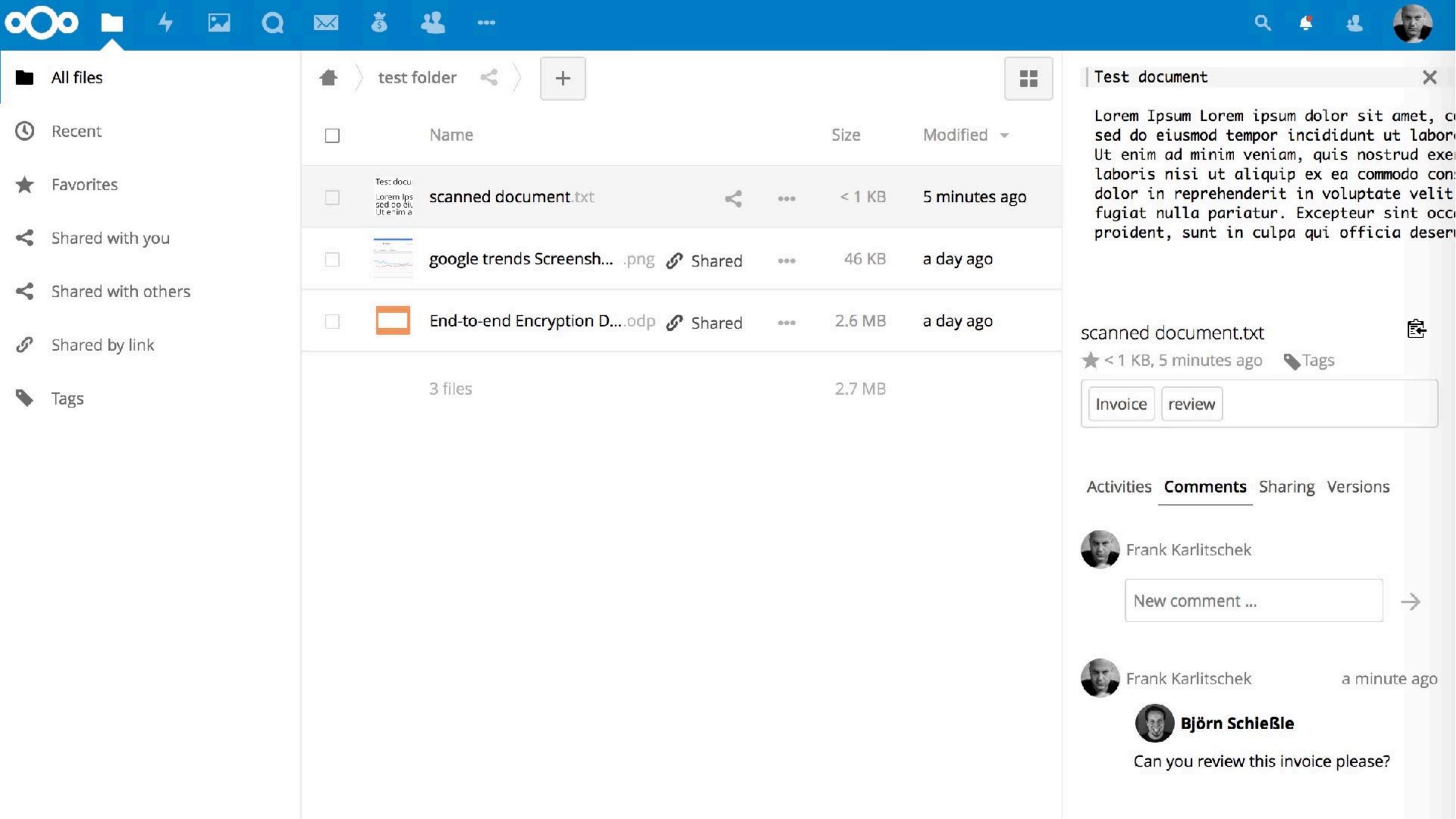


- Recent
- ★ Favorites
- Shared with you
- Shared with others
- Tags

# > +				
□ Name ▲			Size	Modified
peter .pdf	<	***	101 KB	6 days ago
peter_OCR.pxli	<		47 KB	seconds ago
the state of the s	<	***	132 KB	6 days ago
The DOM, cannot all namespac tax, but th XHTML sw	<	***	< 1 KB	6 days ago
This is just The packs; welcome.txt	<	***	< 1 KB	6 days ago
5 files			281 KB	

281 KB









Nextcloud Sharing

John wants to share folder 'test project' with you. Click to accept or reject



Nextcloud Calendar

Tim invited you to a meeting. Click to accept or reject



Nextcloud Comment

Jos mentioned you in a comment at 'migration plan'. Click to respond













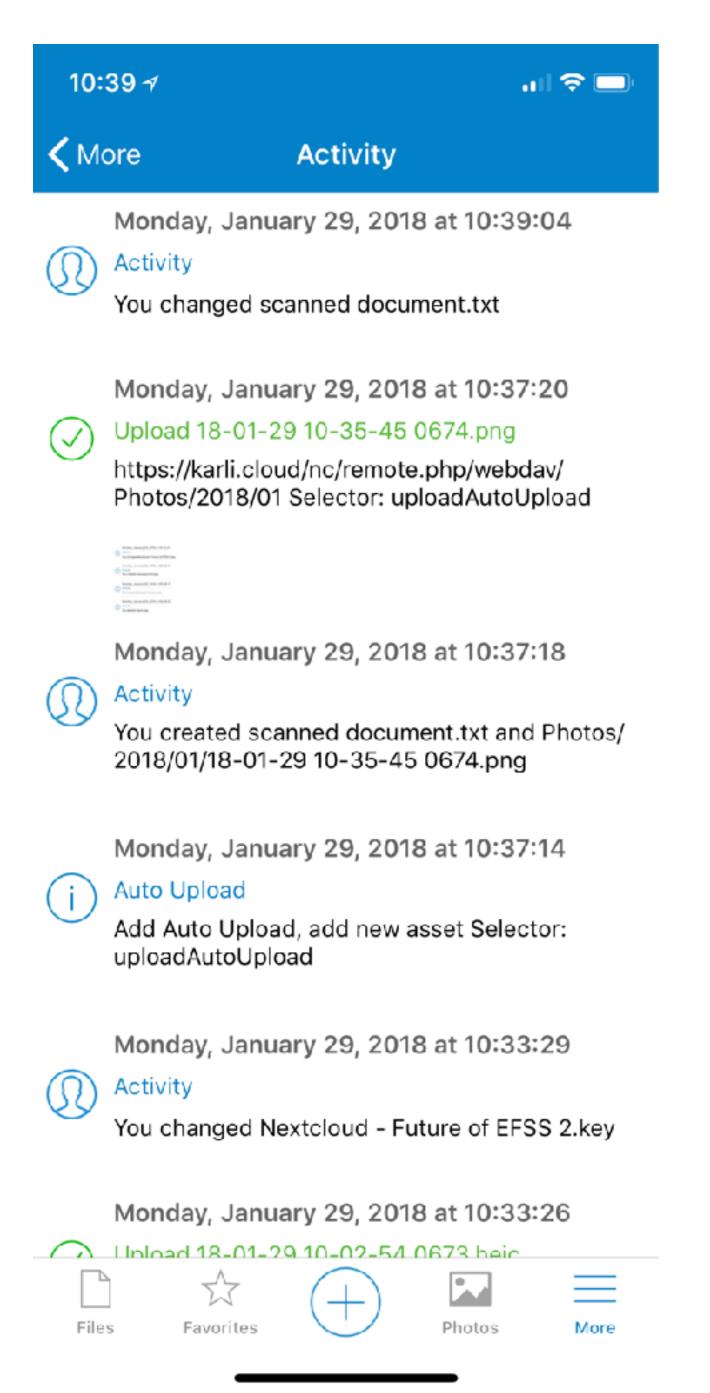


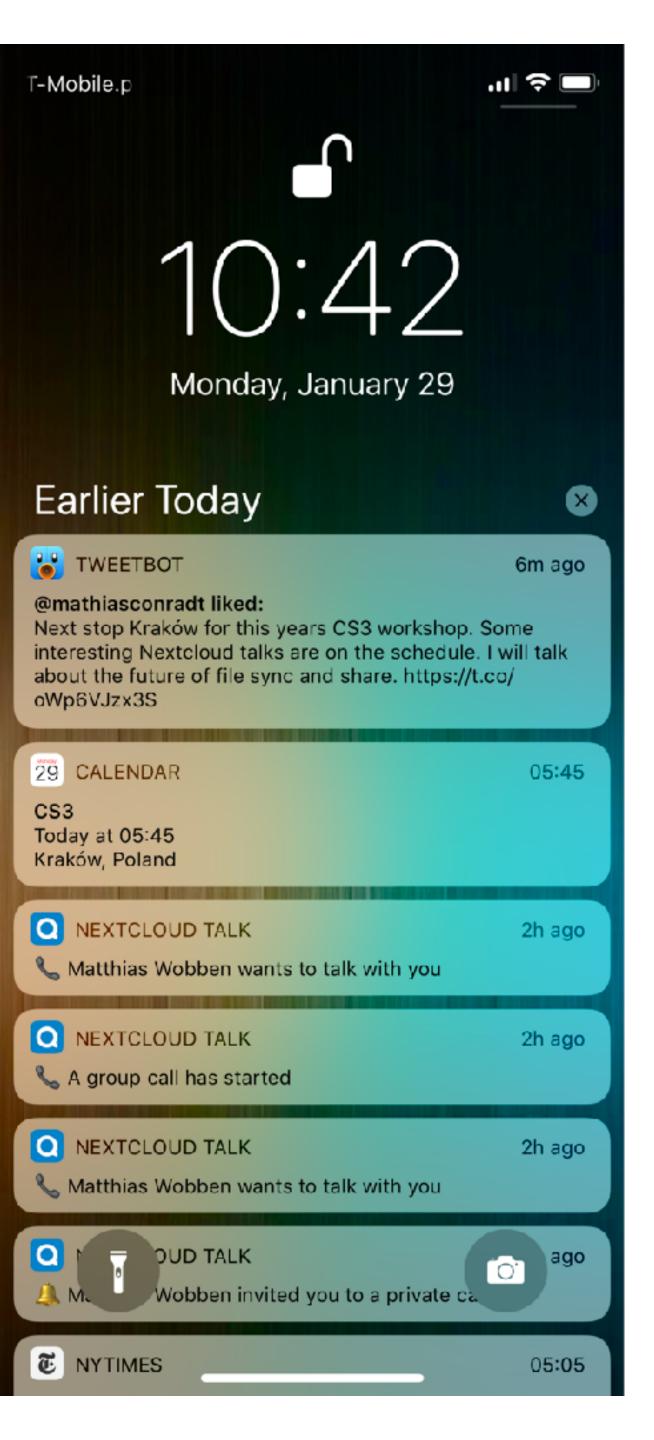
















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Server	settings
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Server info

Sharing

External storages

Theming

Encryption

File access control

Usage report

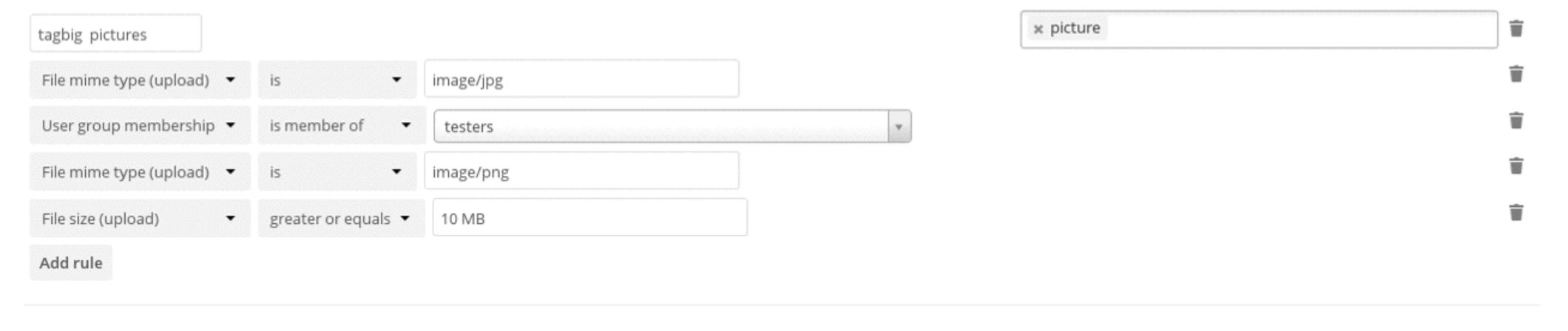
Logging

Additional settings

Tips & tricks

Files automated tagging

Each rule group consists of one or more rules. A request matches a group if all rules evaluate to true. On uploading a file all defined groups are evaluated and when matching, the given collaborative tags are assigned to the file.



Add rule group

File retention

Tag	Retention Time	
picture	10 days	ŵ
Select tag	•	
10	Days ▼ Create	





Server settings

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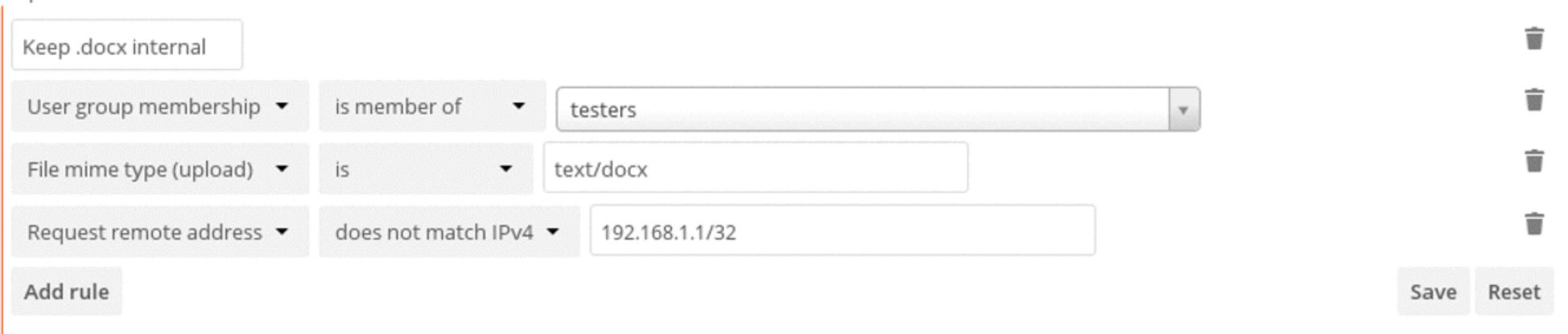
Logging

Additional settings

Tips & tricks

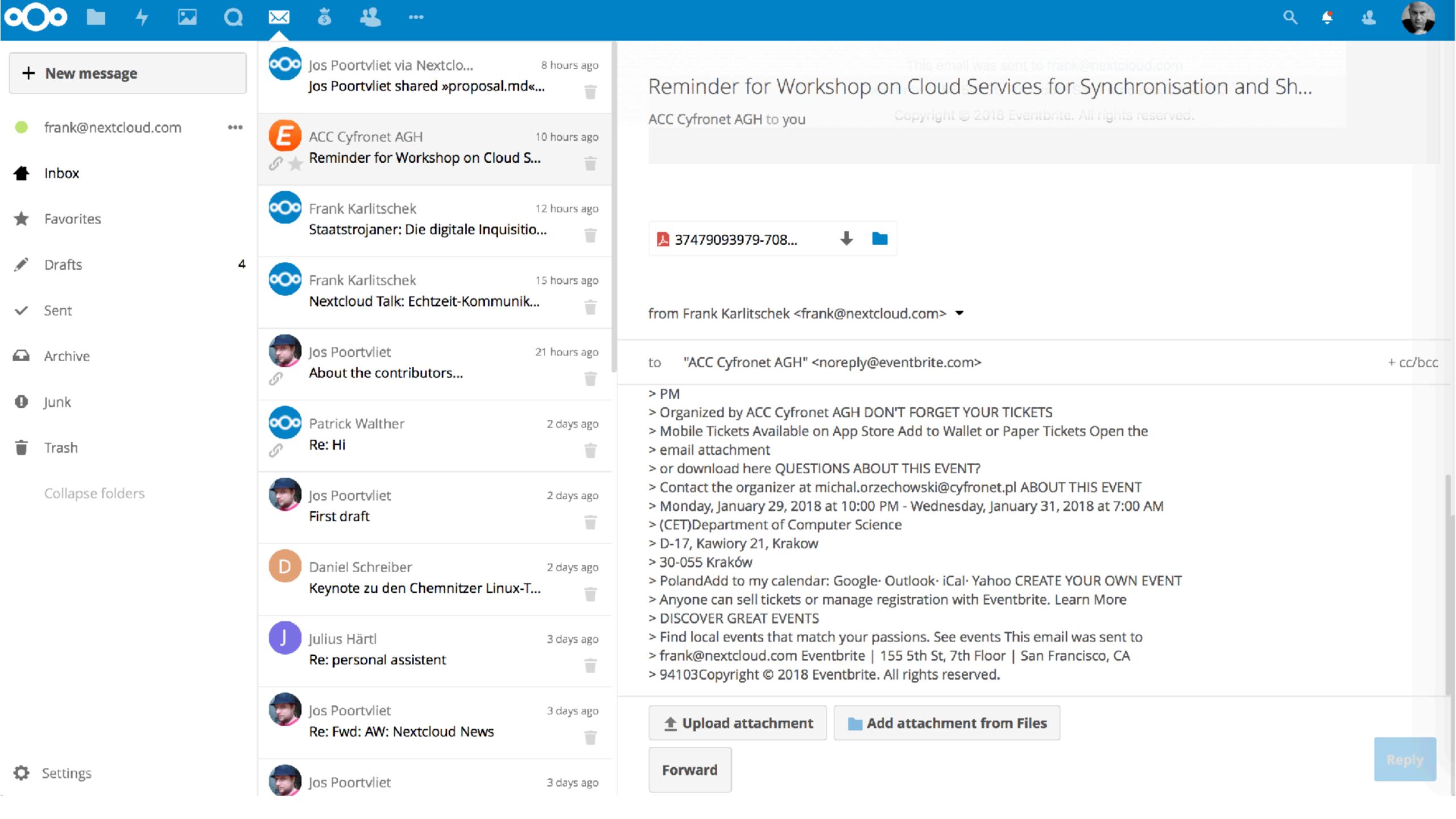
File access control

Each rule group consists of one or more rules. A request matches a group if all rules evaluate to true. If a request matches at least one of the defined groups, the request is blocked and the file content can not be read or written.



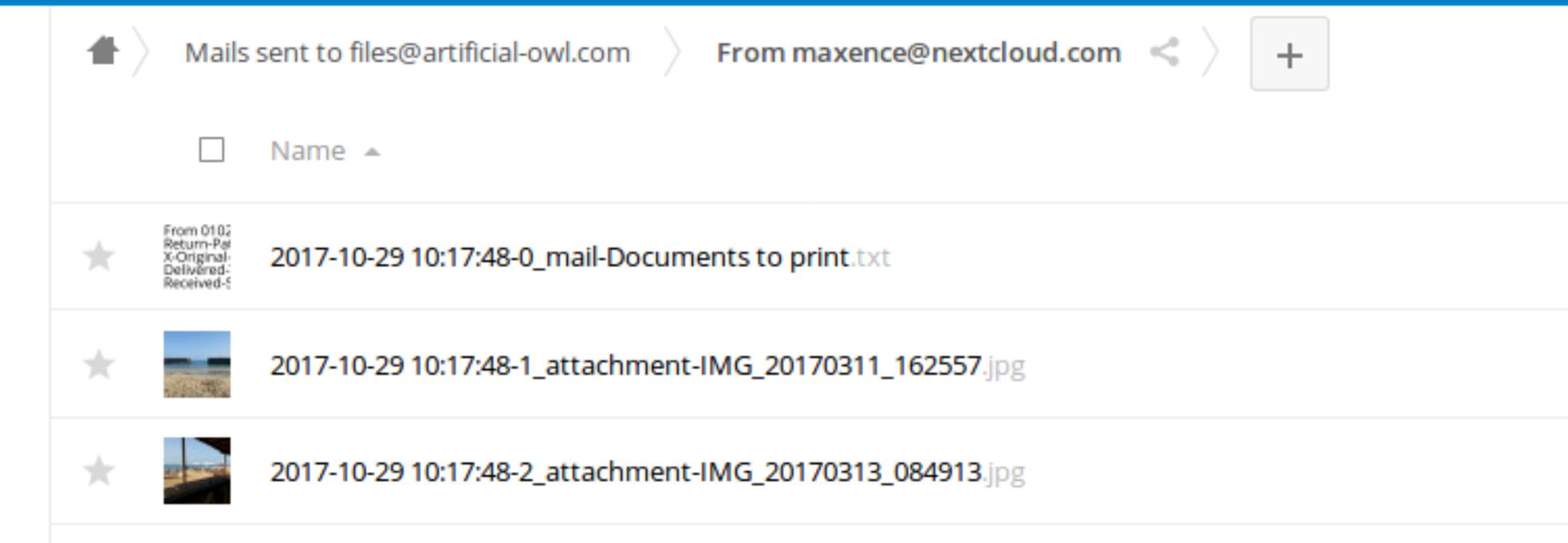
Add rule group







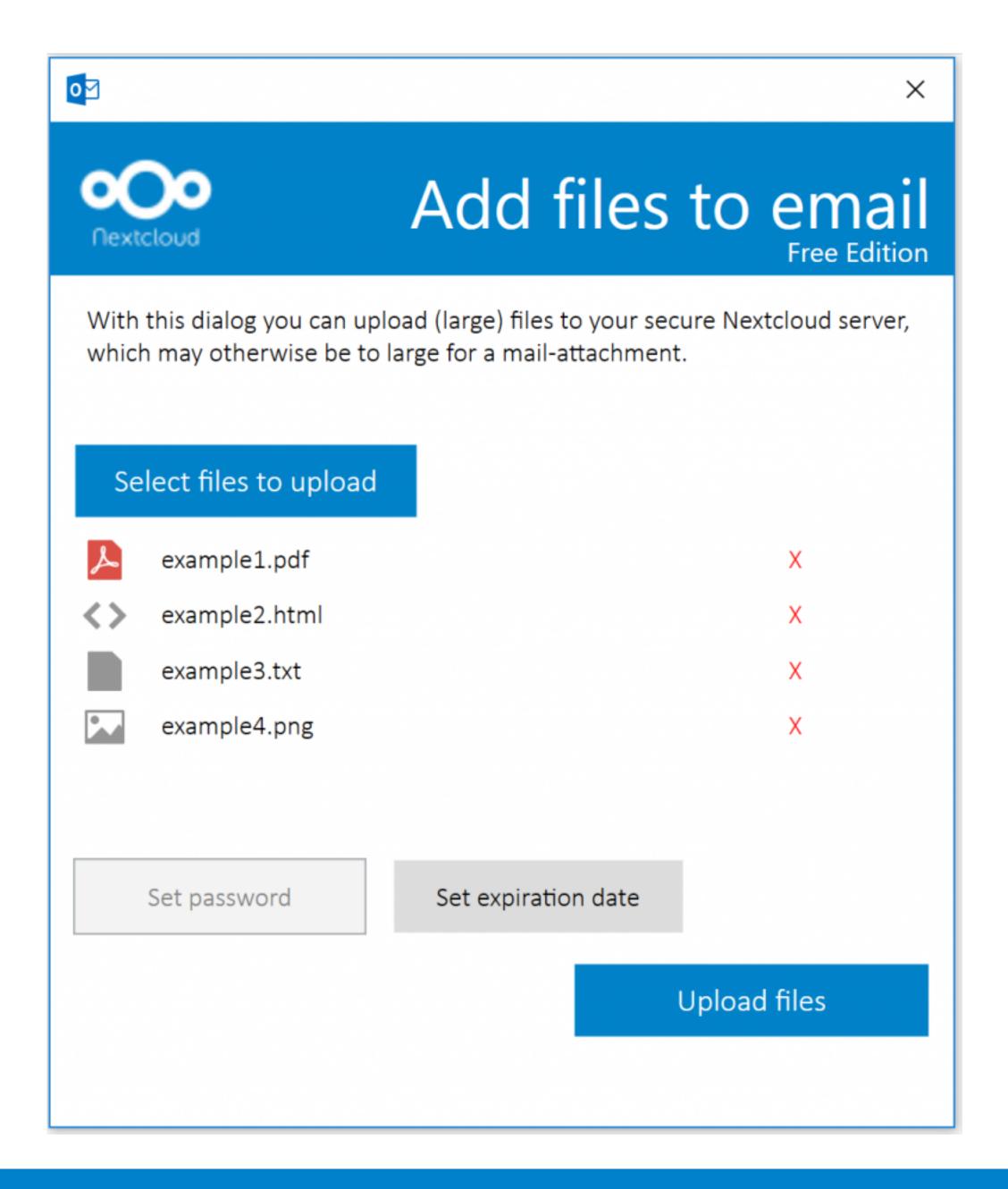
- All files
- Recent
- ★ Favorites
- Shared with you
- Shared with others
- Shared by link
- Tags

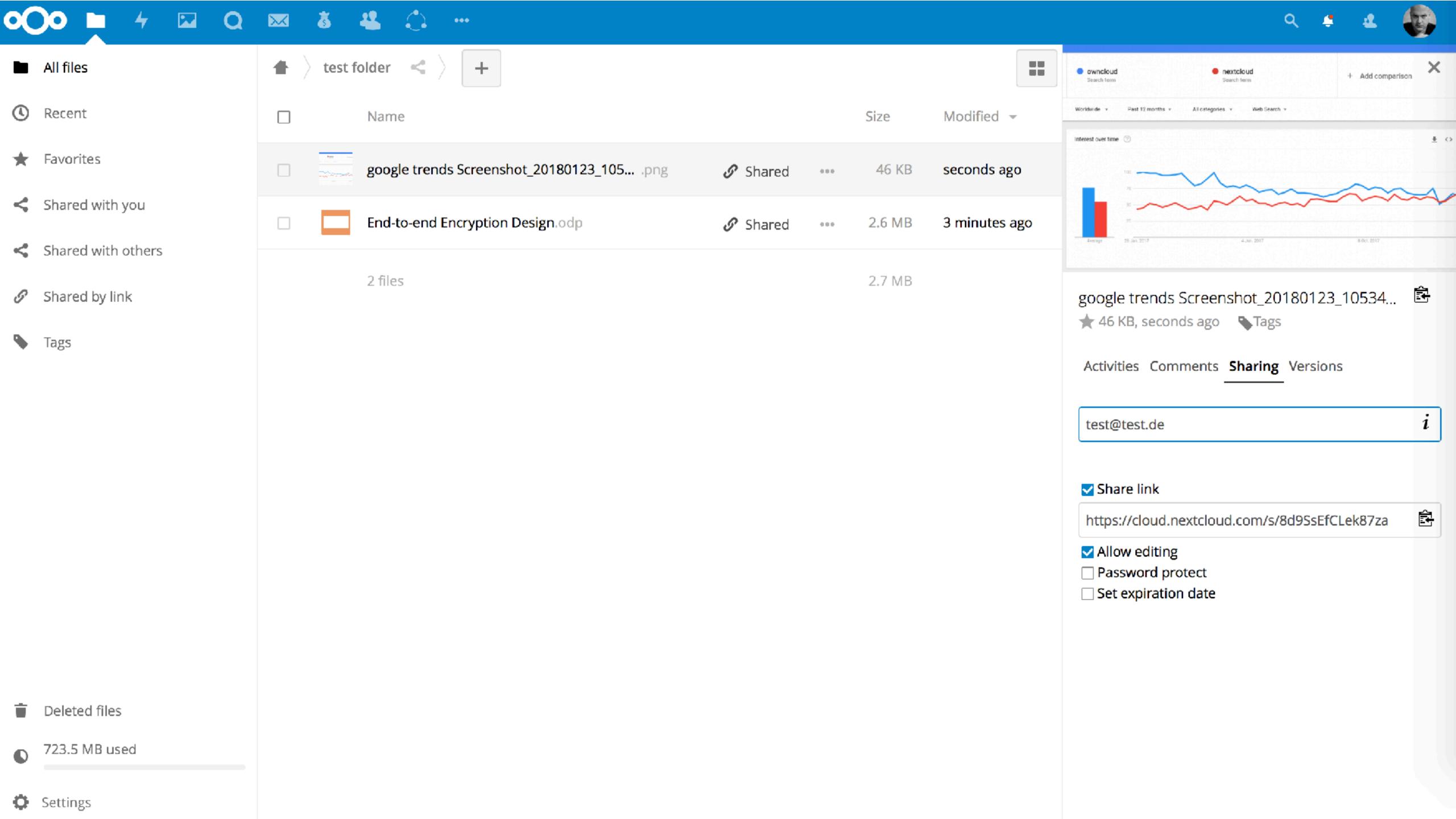


3 files

- Outlook plugin
- Thunderbird plugin

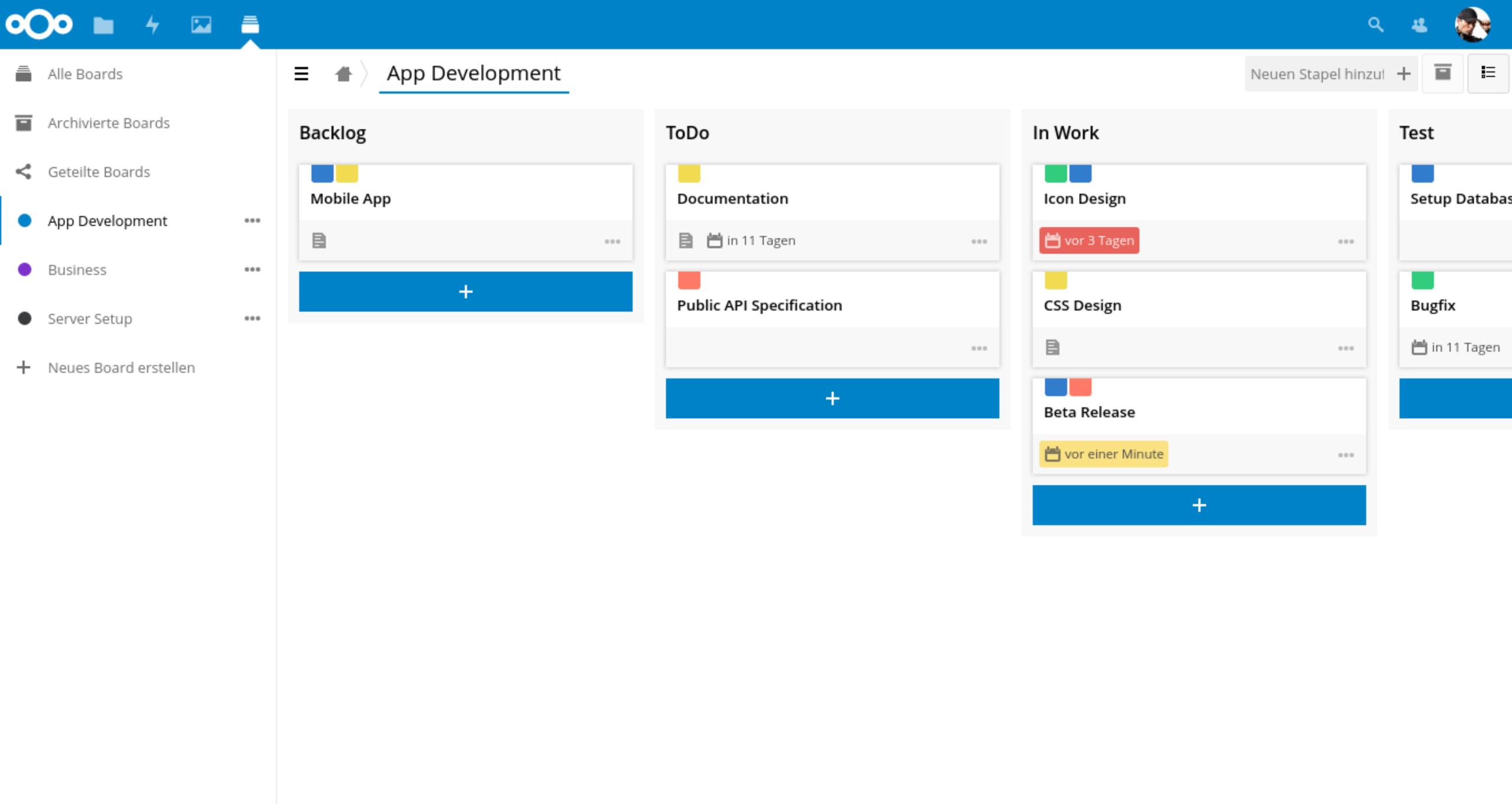
- Attachment handling
- Automatic uploading
- Automatic generation of sharing links
- Calendar / Contacts

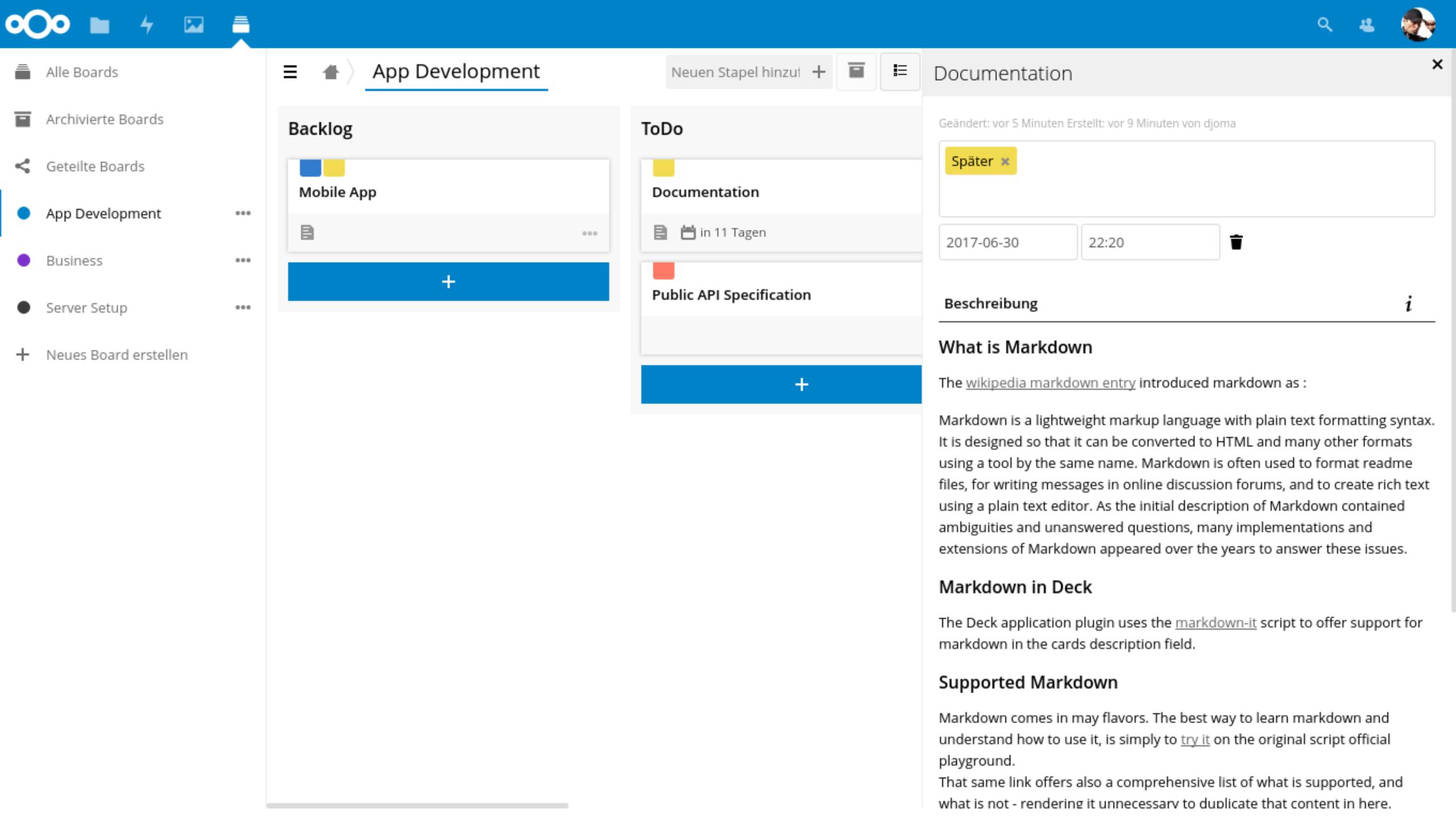


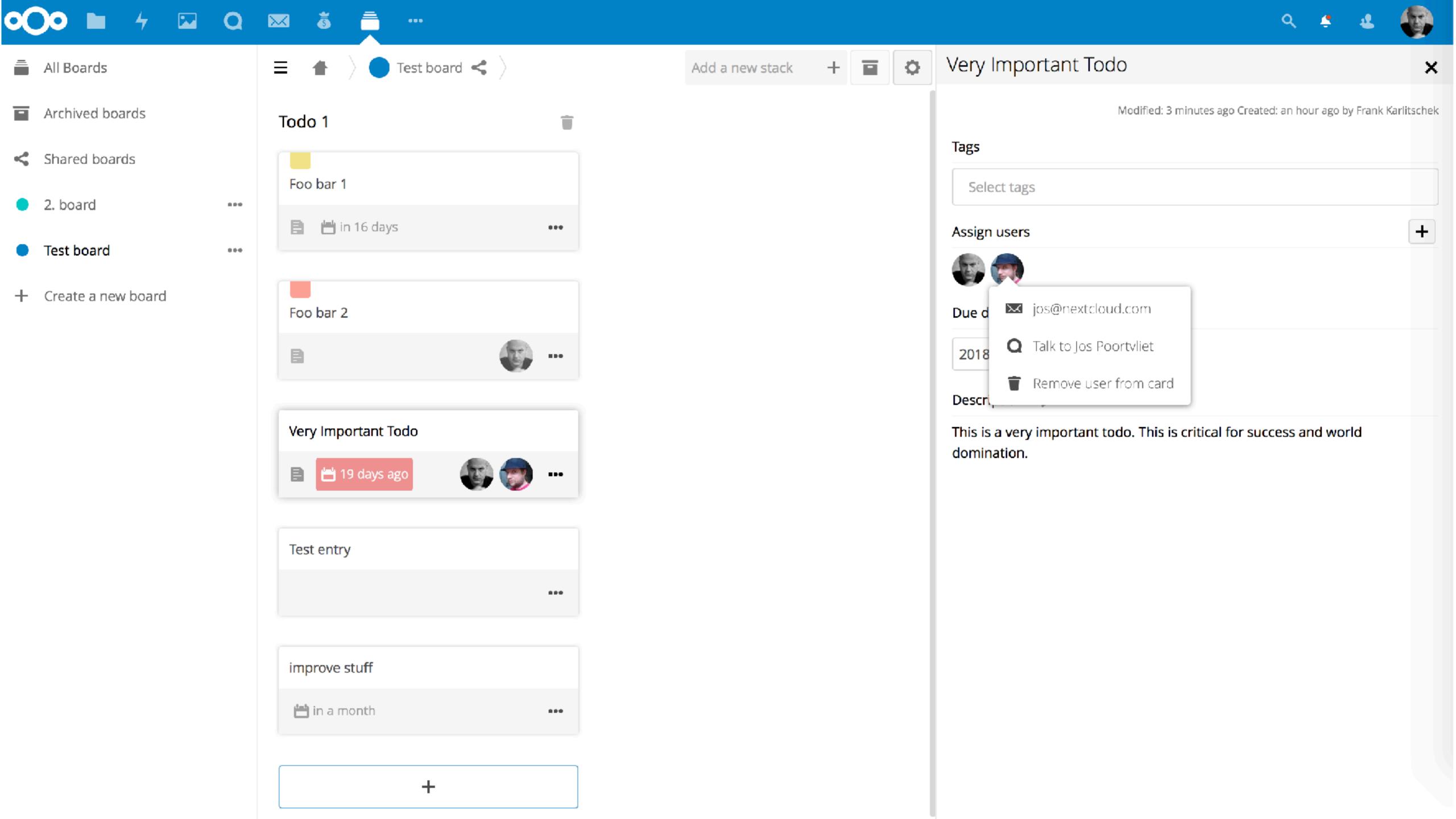




Projekt Management









Summary

Federated Collaboration is the next challenge



Nextcloud

Alternative to

Dropbox
Google Suite
Office 365

but

Self hosted 100% open source Distributed / Federated



Questions