



Nextcloud

Ein kompromisslos freies Geschäftsmodell

Frank Karlitschek

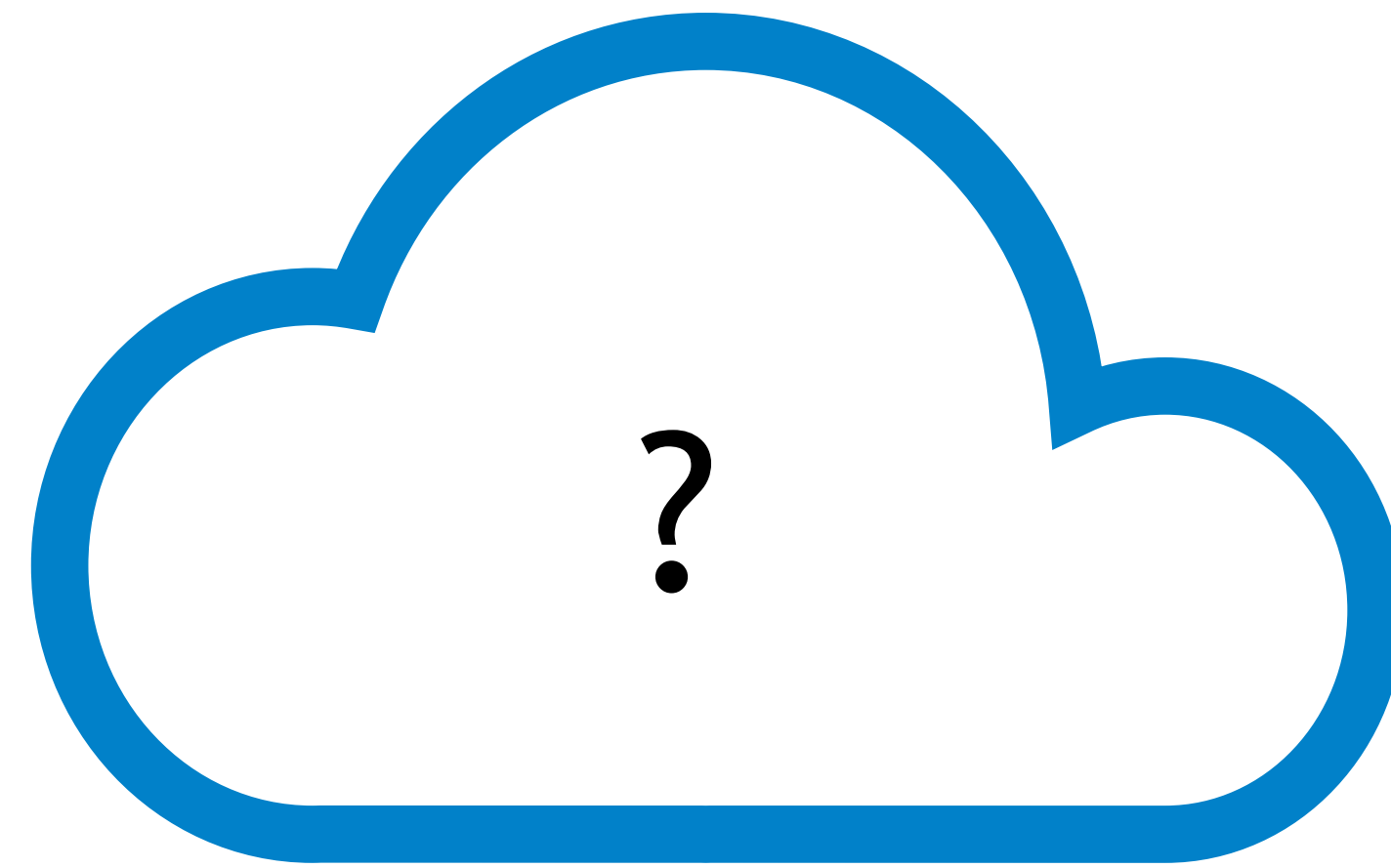
Frank Karlitschek



- Born in Reutlingen, Germany
- Studied Computer Science in Tübingen
- Unit Manager and VP Engineering in different Internet companies
- Founded several startups
- W3C invited expert
- Fellow at Open Forum Europe
- Founded ownCloud
- Founded Nextcloud

Agenda

- Cloud
- Nextcloud Overview
- The ownCloud -> Nextcloud Fork
- Open Source Business Models
- The Nextcloud Company
- Questions



2017 State of the Cloud Report: Security Concerns Come Out on Top

Interop ITX Research

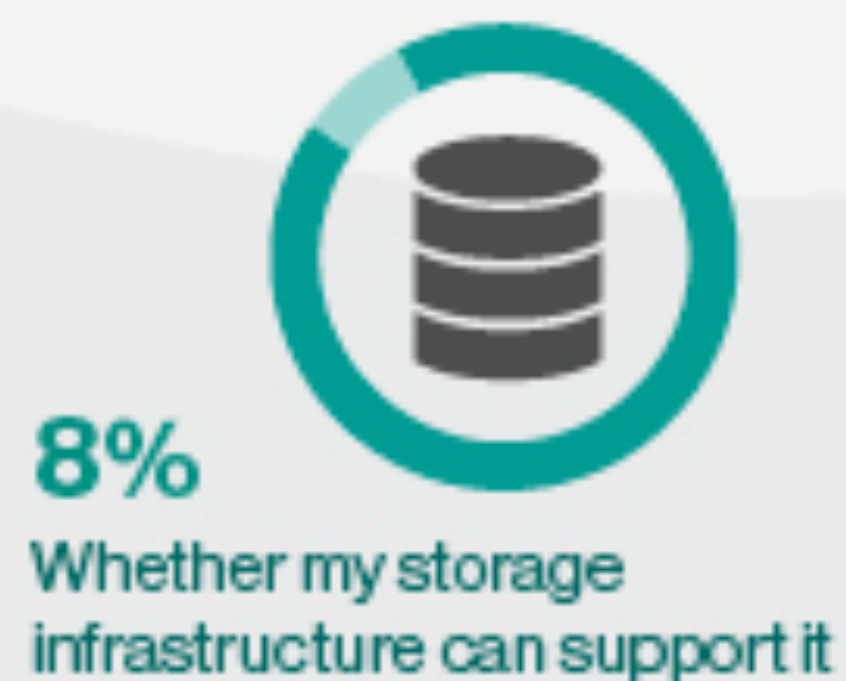
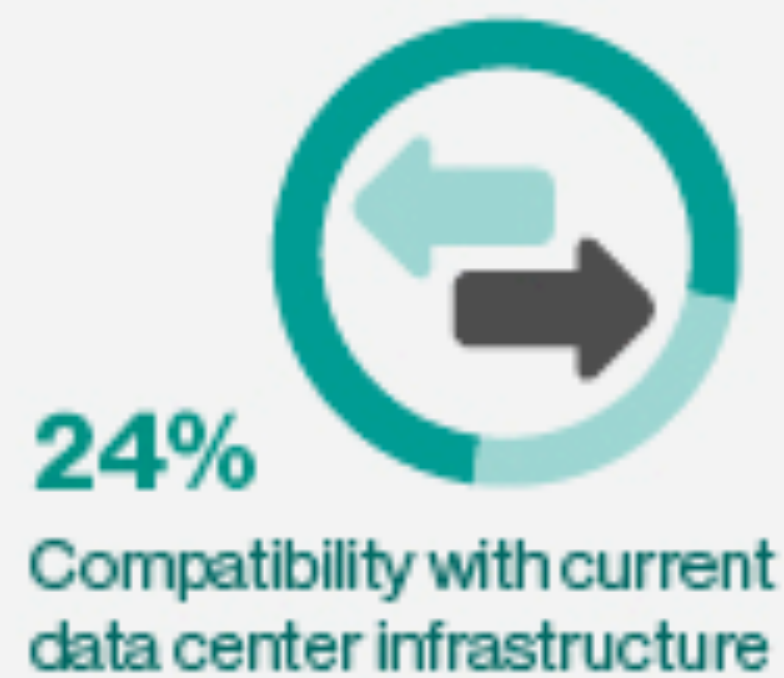
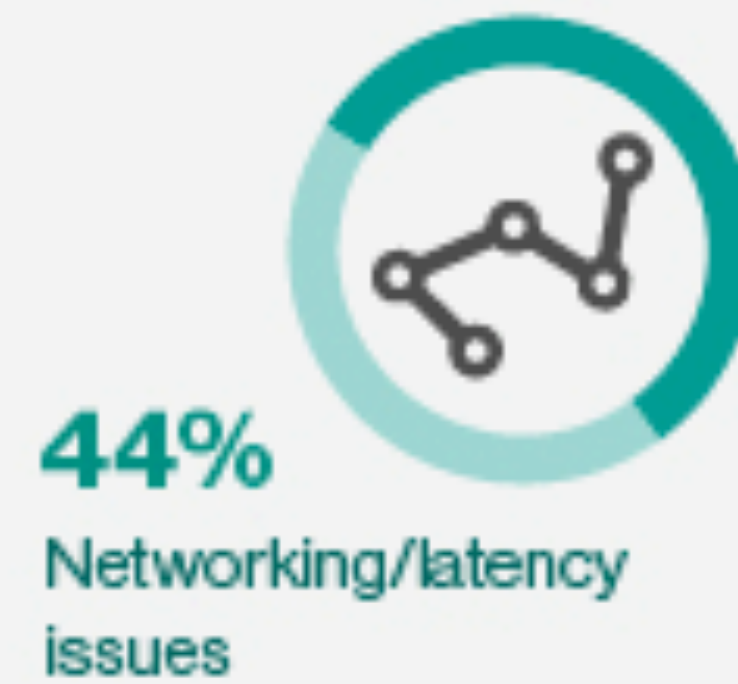
<https://www.datapipe.com/blog/2017/01/23/2017-state-of-the-cloud-report-security-concerns-come-out-on-top/>

Security, Vendor Lock-In Top Public Cloud Concerns

Stratoscale 07/2017

(<https://awsinsider.net/articles/2017/07/28/stratoscale-public-cloud-concerns.aspx>)

What are your three most important public cloud concerns?



N = 391

European datacenter is no solution, recent developments show



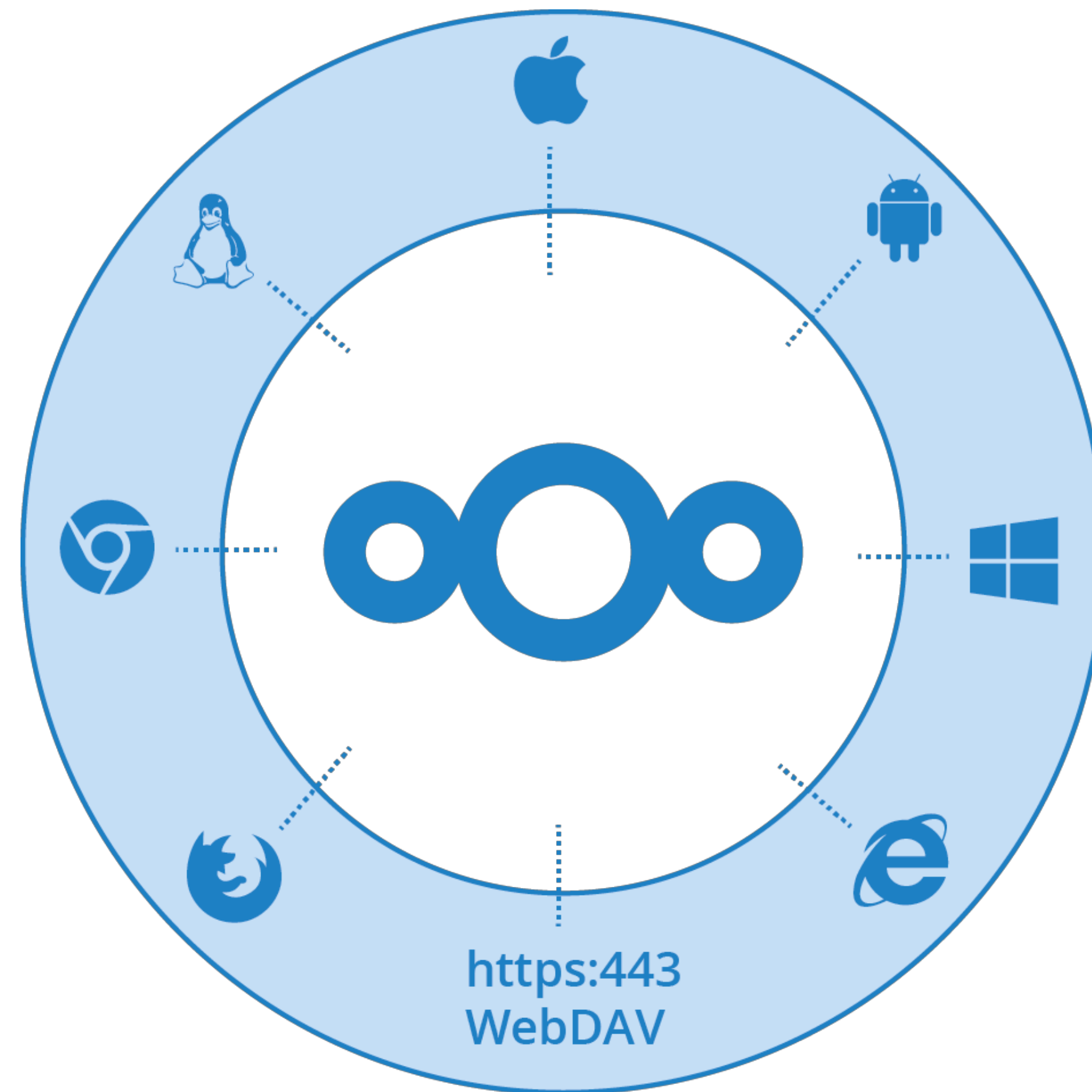
<https://nextcloud.com/blog/european-datacenter-is-no-solution/>

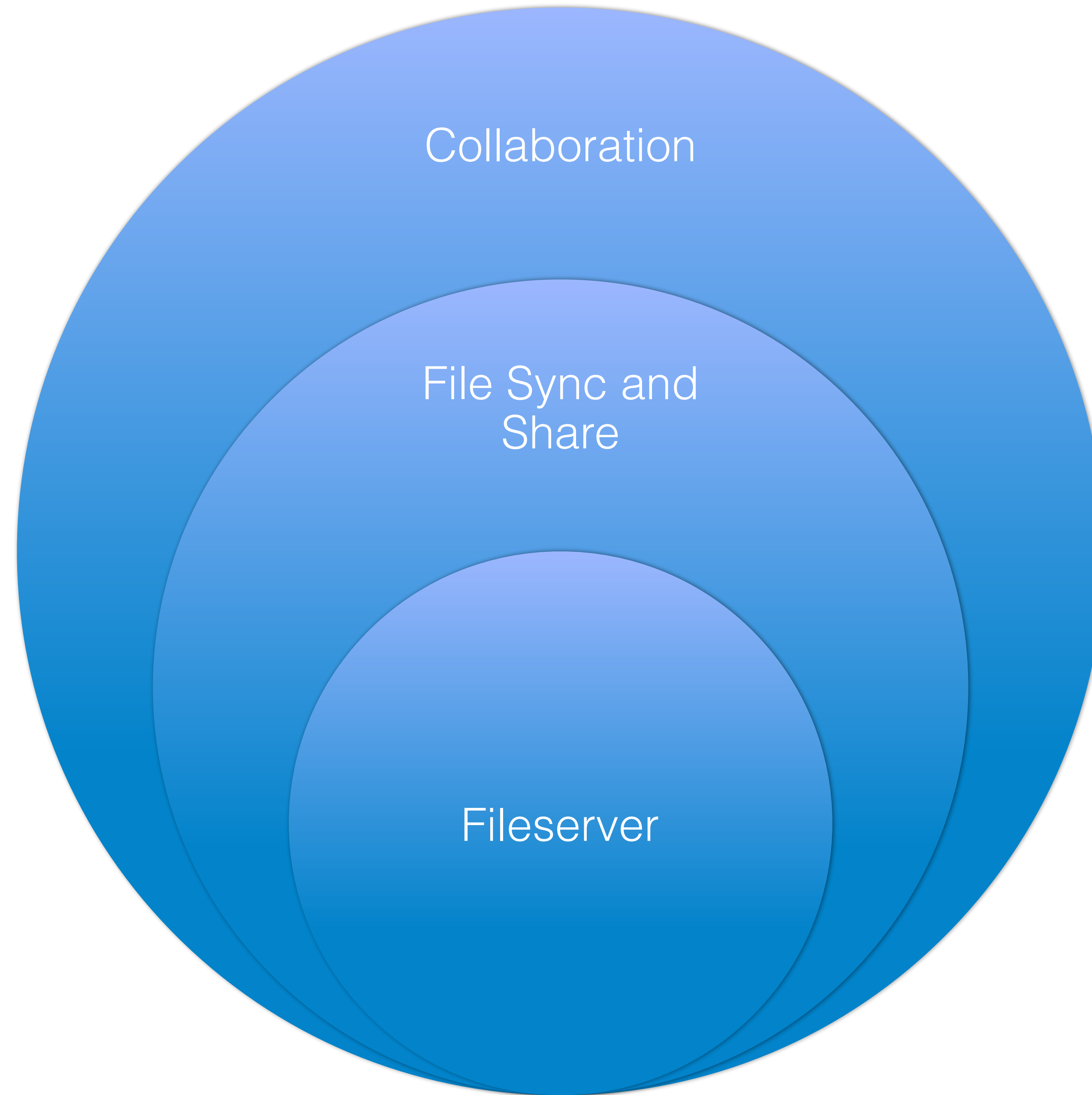
Is there a way to combine the benefits of
Cloud Software and On-Prem Software?



What is Nextcloud?

Enterprise File Sync and Share





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

	hamburg sides QR5A3826 - Version 2.jpg	Photos	+	6.2 MB	2 years ago
	QR5A4335.jpg			7.1 MB	4 years ago
	QR5A4412.jpg			8.1 MB	4 years ago
	QR5A4428 - Version 2.jpg			5 MB	3 years ago
	QR5A4525 - Version 2.jpg			11.6 MB	3 years ago
	QR5A4784 - Version 2.jpg			6.3 MB	2 years ago
	QR5A4923 - Version 2.jpg			6.3 MB	2 years ago
	QR5A5151 (1).jpg			6.1 MB	3 years ago
	QR5A5298 (1).jpg			4.2 MB	3 years ago
	QR5A5999.jpg			3.8 MB	3 years ago
	QR5A6169 - Version 2.jpg			5.8 MB	3 years ago
14 files				75.4 MB	



QR5A4784 - Version 2.jpg

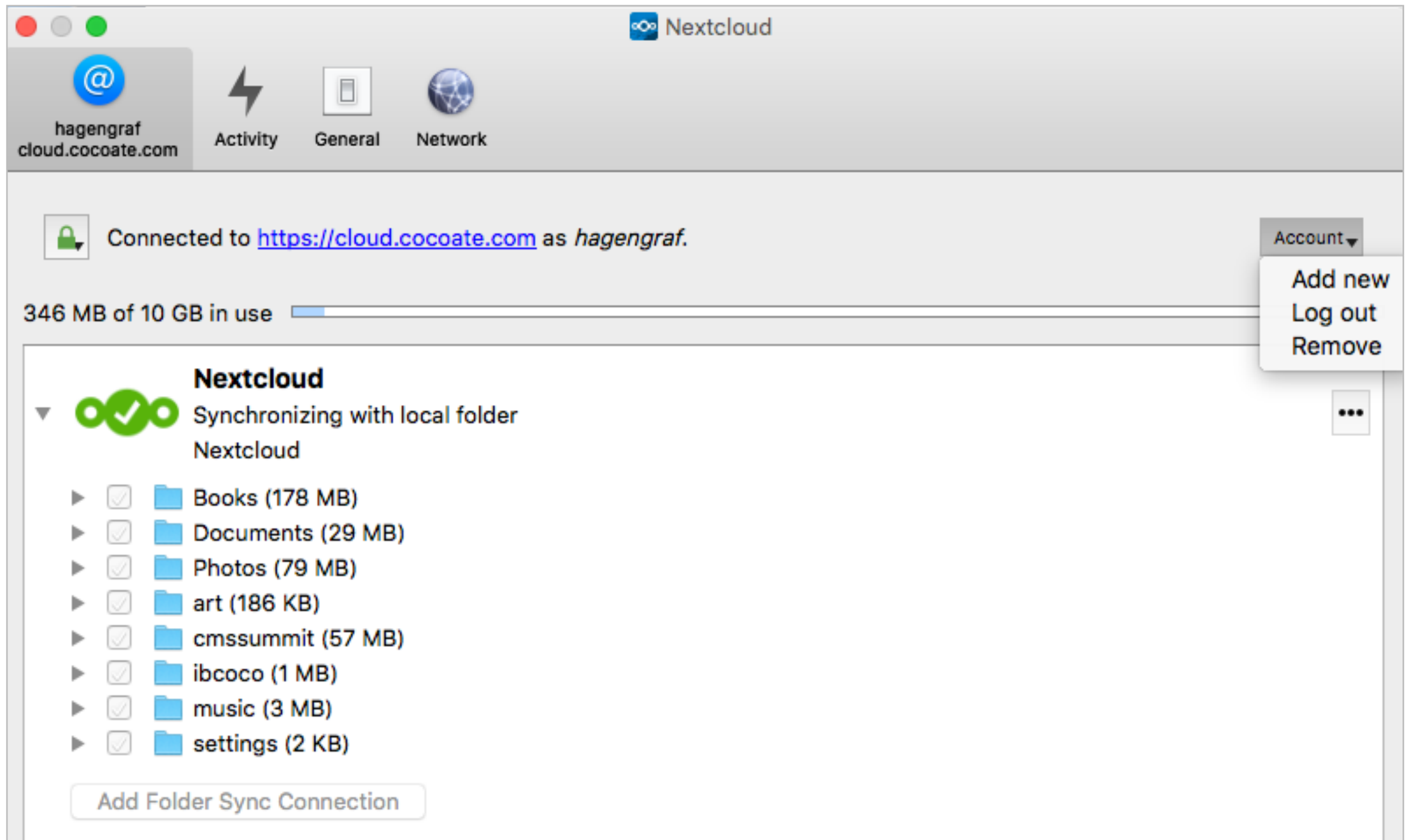
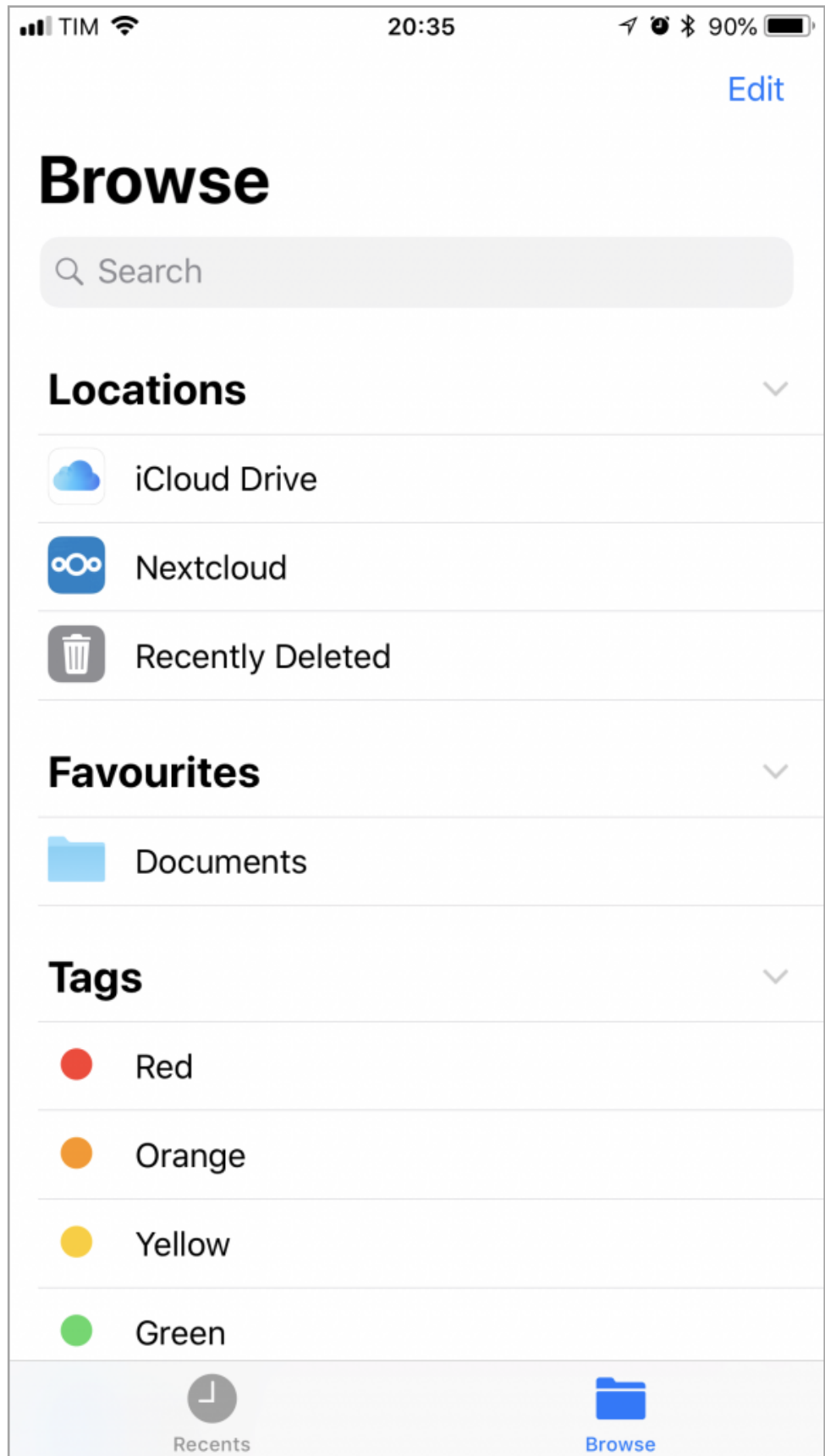
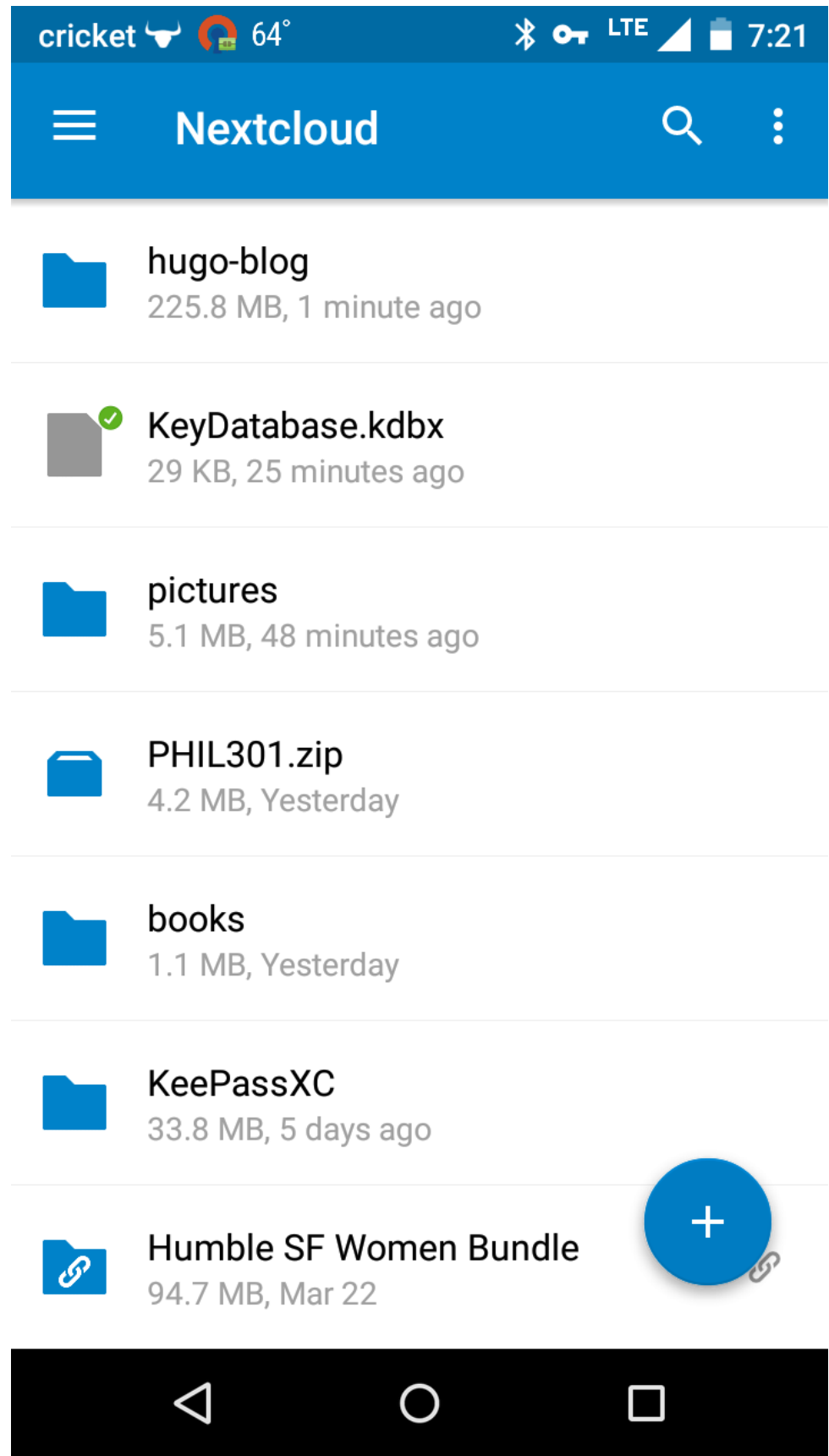
★ 6.3 MB, 2 years ago Tags

Activities Comm

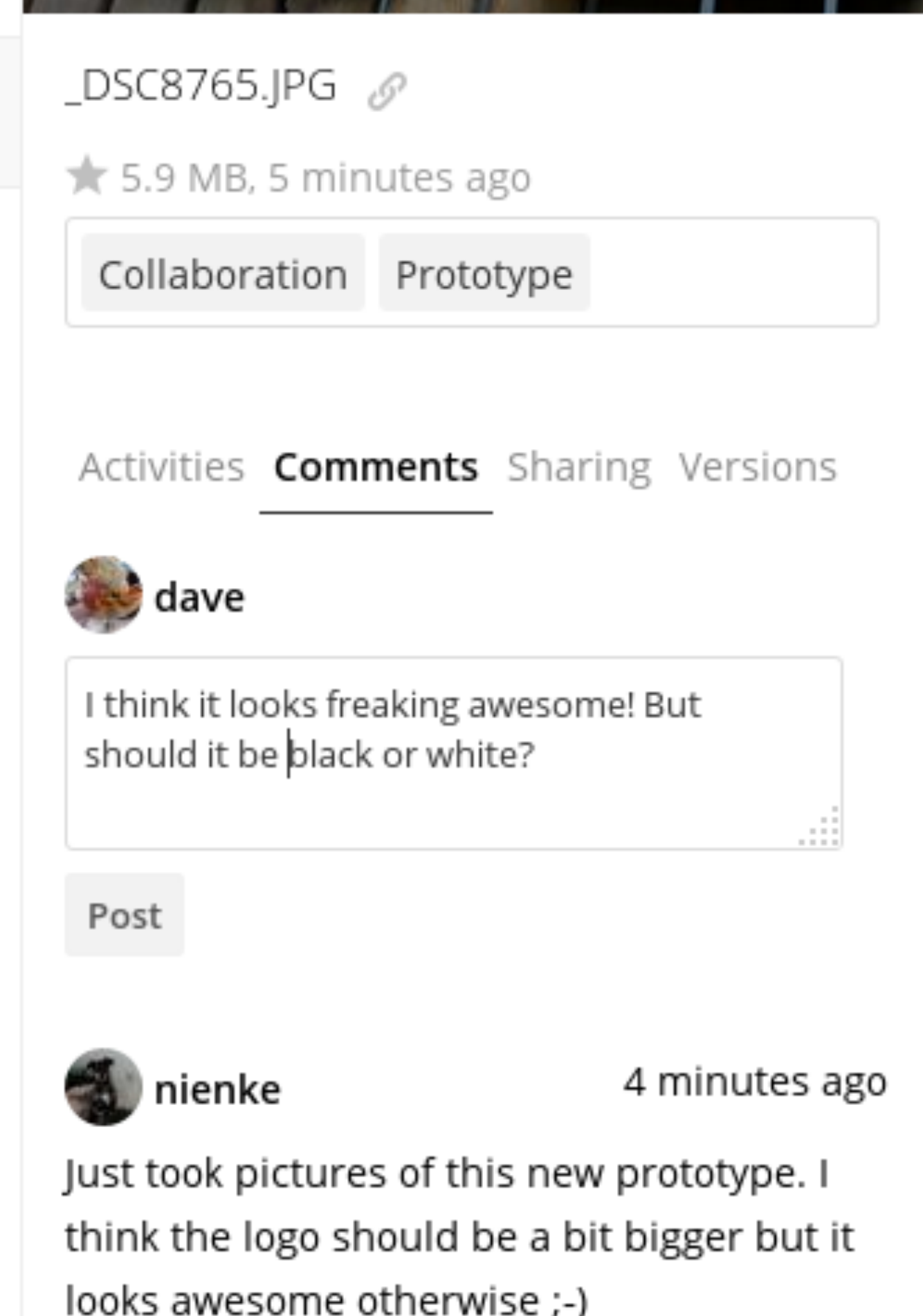
Activities Comments **using their Federated Cloud ID**
username@example.com/nextcloud

Share with users, groups, remote users o...

☐ Share link



- Deleted files
- Settings





 Search contacts ...



Björn Schießle

let's call it GNU/Nextcloud ...







Frank Karlitschek

great, see you in Stuttgart!







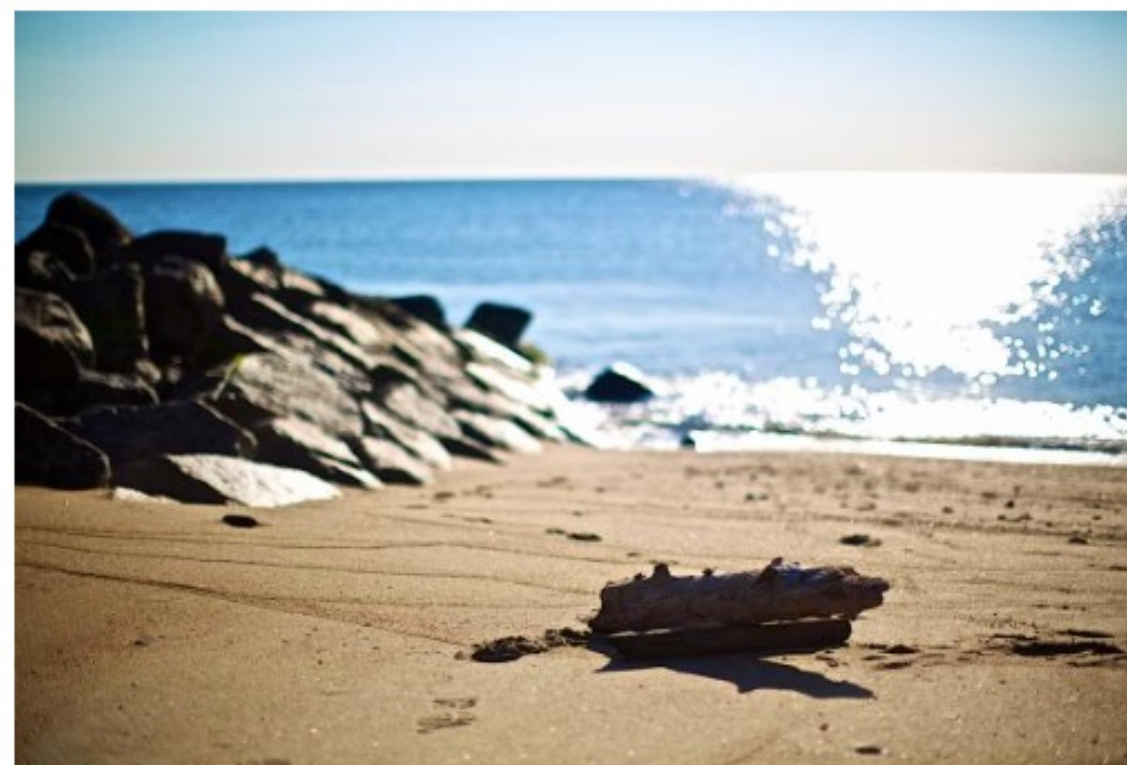
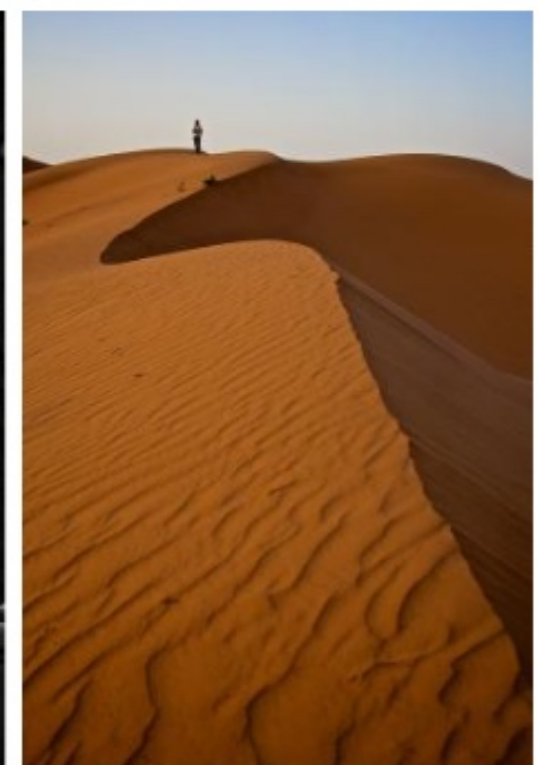
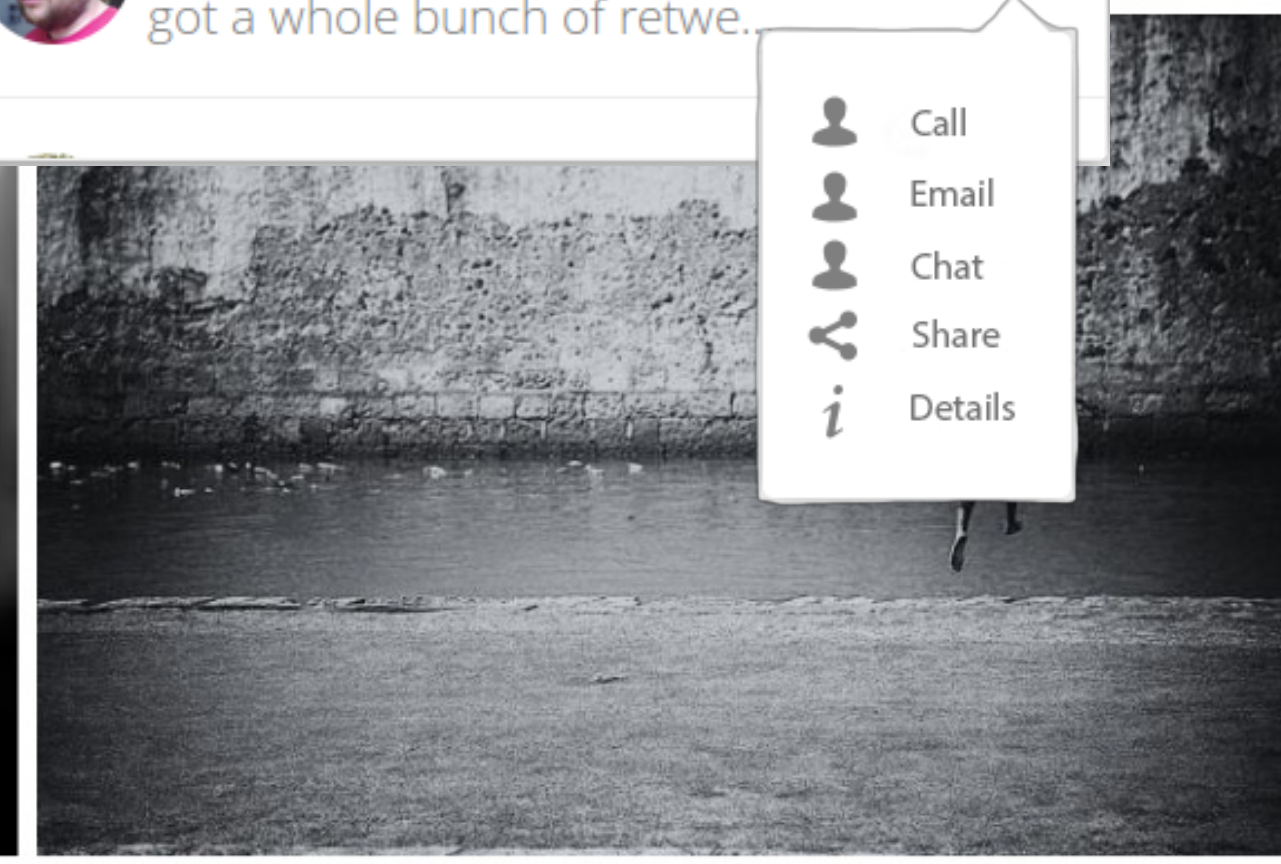
Jos Poortvliet

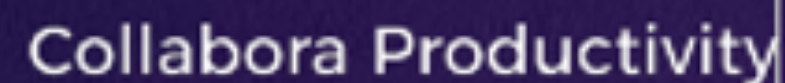
got a whole bunch of retwe...





-  Call
-  Email
-  Chat
-  Share
-  Details





Collabora Online v 2.1



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...

THOMAS editing...

john

Thu Apr 27 2017

Insert ' v 2.1'

Good to add the version nu



jane

Thu Apr 27 2017

Can we add the version number here 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



GuitarShopExample.com 1/1/2016 - 12/31/2016

Top Keywords

- Guitar Straps
- Bass Guitar Pick
- Gibson Acoustic
- Marshall Amp
- Les Paul Guitar
- Gibson Acoustic
- Peavey Amp
- Fender Black amp
- Hollowbody guitar
- Mesa Boogie amp

SERP Rank

01/01/16 01/04/16 01/07/16 01/10/16

Our top product ranks number 1

Non-Paid Search Traffic

18000
16000
14000
12000
10000
8000
6000
4000
2000
0

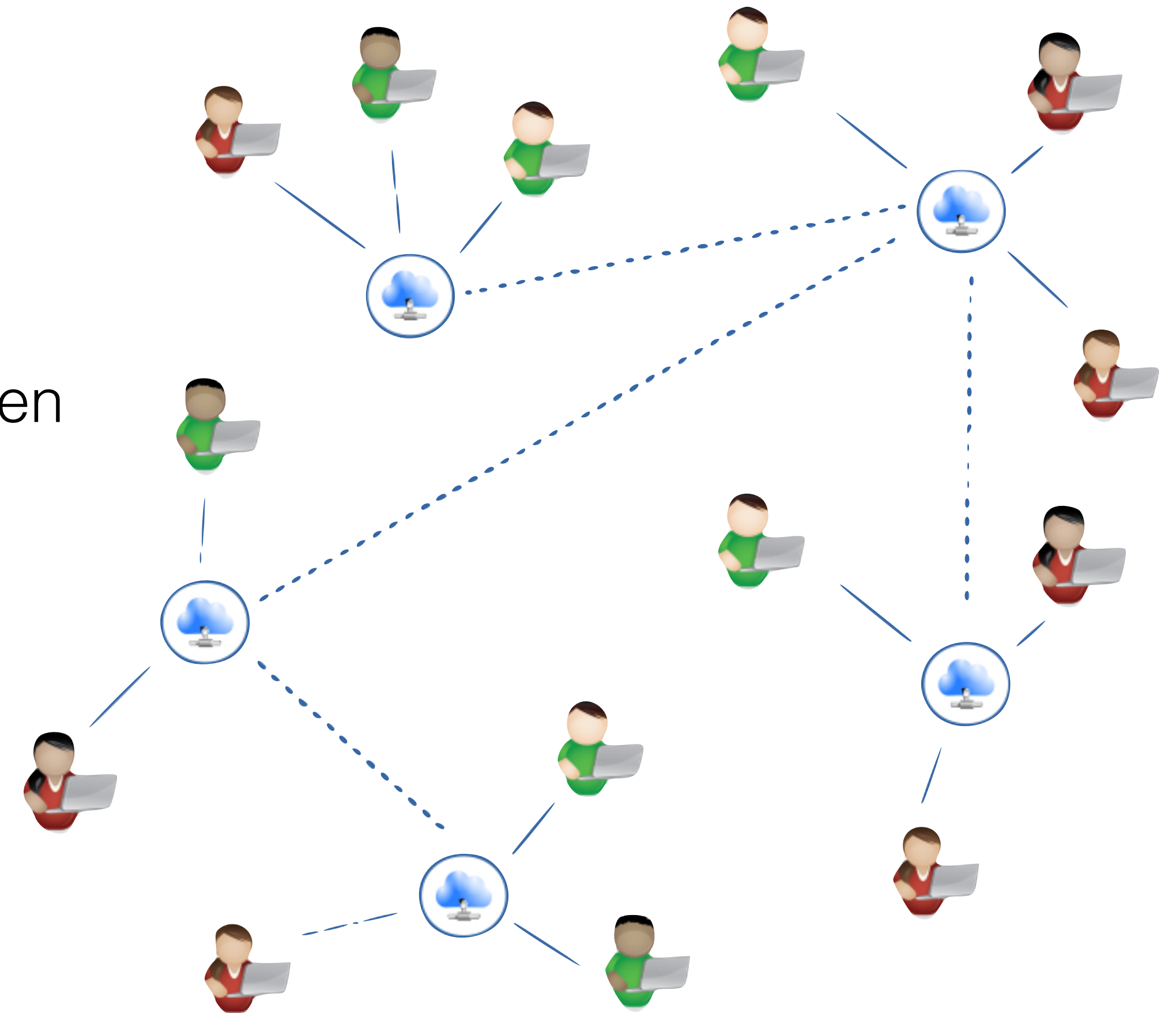
01/01/16 01/03/16 01/05/16 01/07/16 01/09/16 01/11/16

Page	Backlinks	Indexed URLs	URLs
	953		637
page-1/	30		
page-2/	79		
page-3/	97		
page-4/	285		
page-5/	18		

Search	Conversions	Signups
	19,155	7,984
Guitar Straps	38	10
Bass Guitar Pick	236	197
Gibson Acoustic	143	90
Marshall Amp	550	391
Les Paul Guitar	90	37

Federation

- Server 2 Server sharing
- Folder / Files
- Behaves as one service
- Open Collaboration Services Standard / Open Cloud Mesh
- Trusted servers
- Autocompletion with Lookup Server
- Access control via File Firewall



Data Access Engine

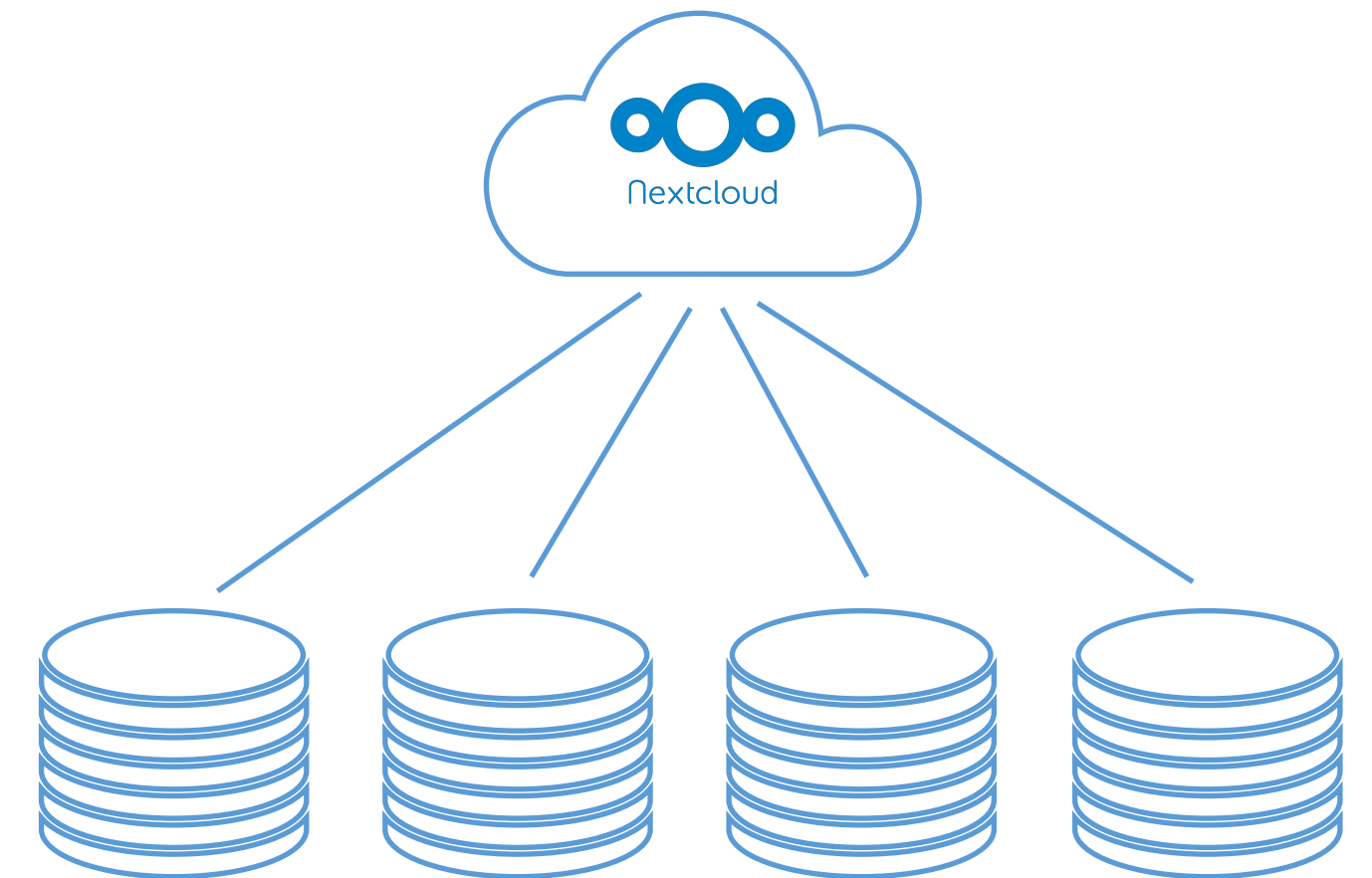
Nextcloud as central access point for all enterprise data

- SMB/CIFS
- Sharepoint
- S3
- Swift
- FTP
- Dropbox
- Google Drive
- Local
- WebDAV
- Nextcloud

Mount by: user, group, global

Authentication: per user, global, cached

Central auditing, access control, authentication, clients



- Personal
- i* Personal info
-  Security
-  External storages
-  Sharing
-  Pico CMS
-  Additional settings

Administration

-  Basic settings
-  Sharing
-  Security
-  External storages
-  Theming
-  Encryption
-  Activity
-  Full Next Search

Please check the [wiki](#) for documentation related to the installation and the configuration of the Full Text Search within your Nextcloud

Full Next Search

Search Platform :

Select the app that will be used to index content and answer search queries.

ElasticSearch

Indexing Chunk Size :

Lower the value if the server is short on memory.

20

Elastic Search

Address of the Servlet:

Include your credential in case authentication is required.

http://localhost:9200/

Index :

Name of your index.

my_in

Files

External Files:

Index the content of external files.



All apps

Authentication & authorization

Customization

Files

Integration

Monitoring

Multimedia

Office & text

Organization

Social & communication

Tools

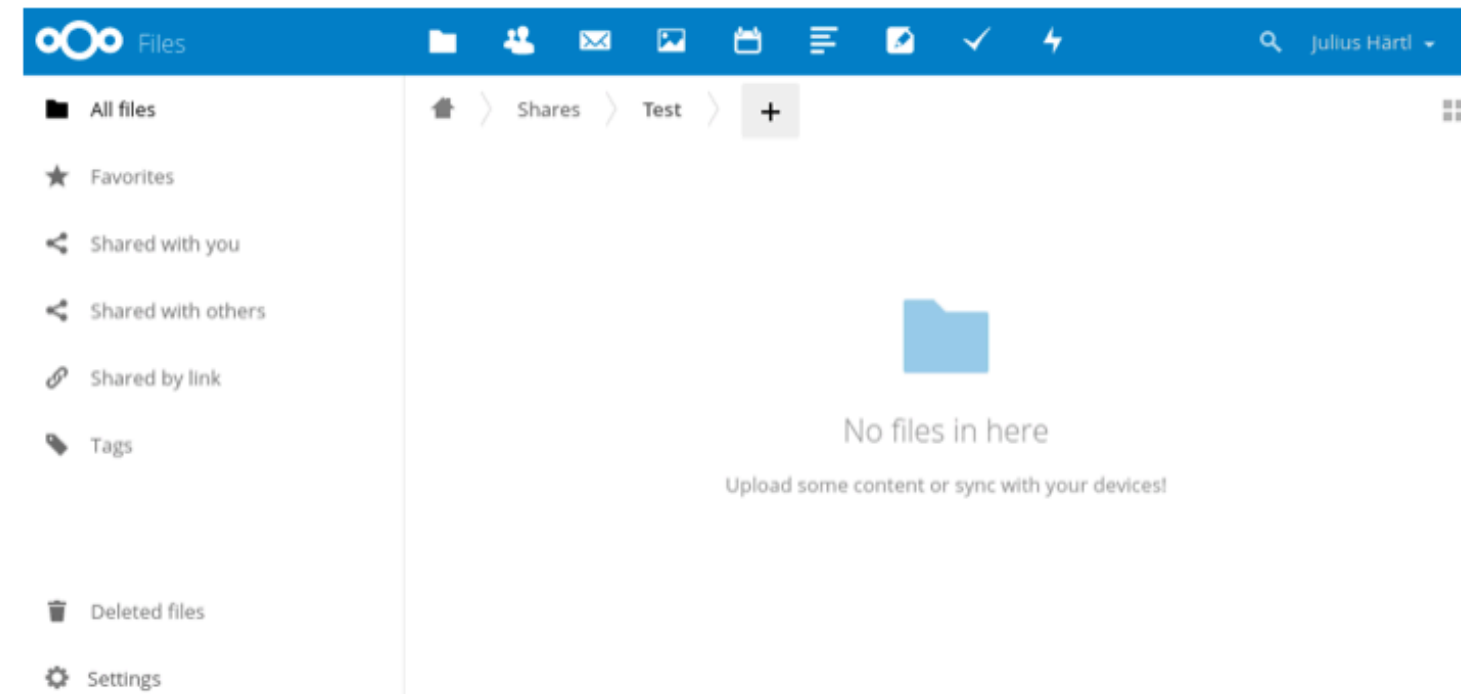
Rating

Rating (recent)

Latest

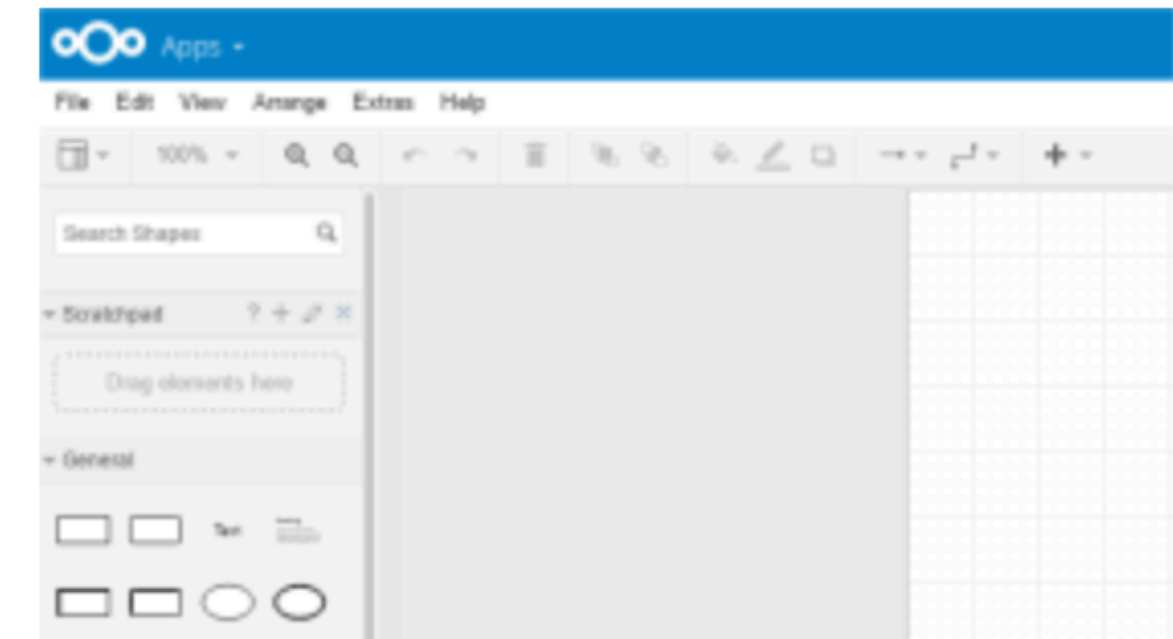
▼ Alphabetical

☐ Featured



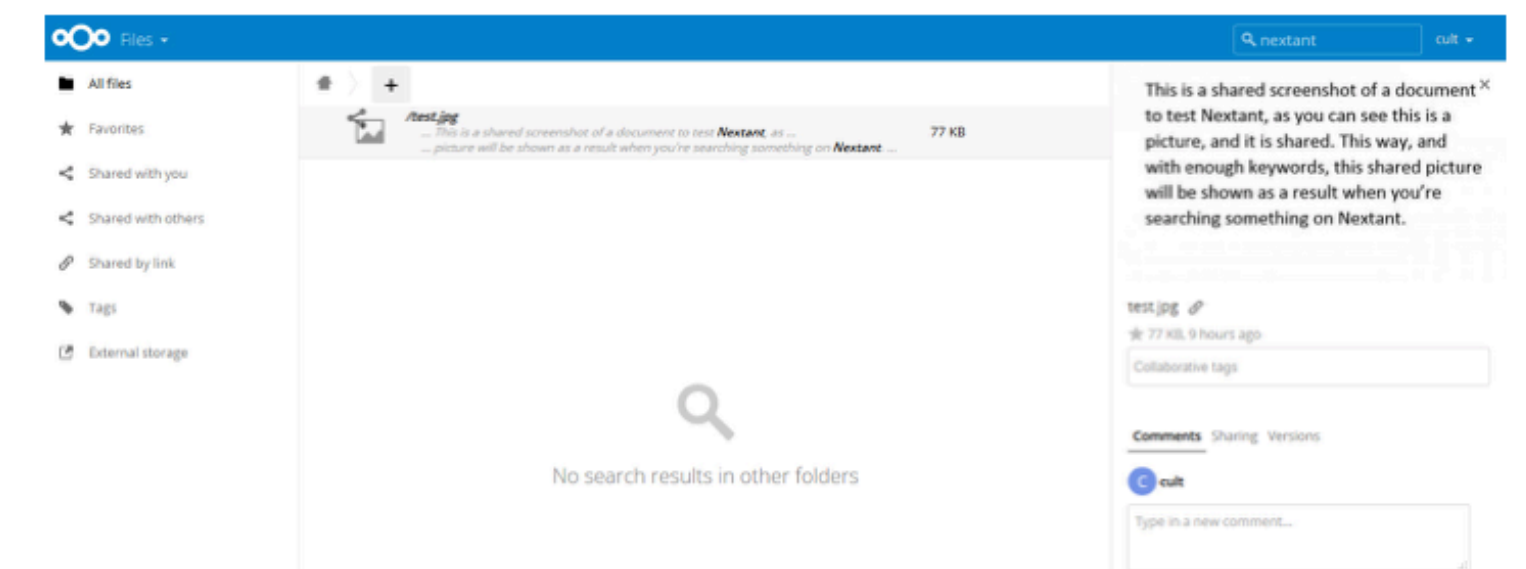
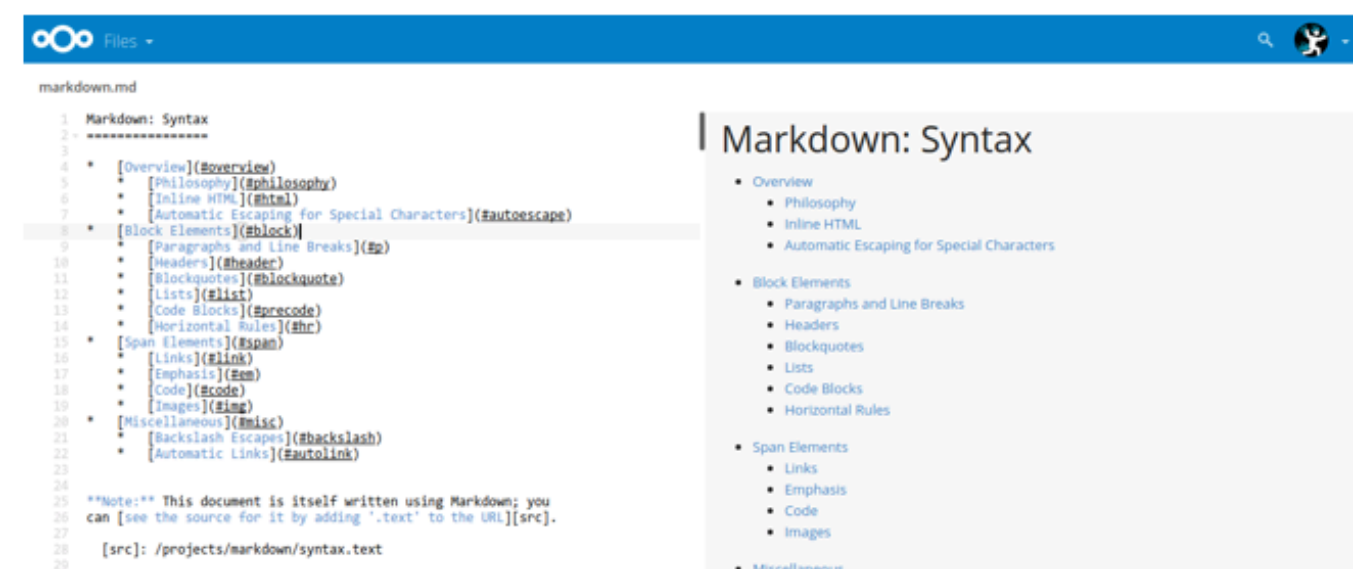
Direct Menu

Provide easy access to all apps in the header.



Draw.io

Draw.io intergration app





Server settings

Sharing

Security

Theming

Encryption

Workflow

SSO & SAML authentication

Logging

Additional settings

Tips & tricks

SSO & SAML authentication *i*

Make sure to configure an administrative user that can access the instance via SSO. Logging-in with your regular Nextcloud account won't be possible anymore.

General

Attribute to map the UID to.

- ☐ Only allow authentication if an account is existent on some other backend. (e.g. LDAP)
- ☐ Use SAML auth for the Nextcloud desktop clients (requires user re-authentication)

Service Provider Data

If your Service Provider should use certificates you can optionally specify them here. [Show Service Provider settings ...](#)

Identity Provider Data

Configure your IdP settings here.

Identifier of the IdP entity (must be a URI)

URL Target of the IdP where the SP will send the Authentication Request Message

[Show optional Identity Provider settings ...](#)

Attribute mapping

If you want to optionally map SAML attributes to the user you can configure these here. [Show attribute mapping settings ...](#)

Security settings

For increased security we recommend enabling the following settings if supported by your environment. [Show security settings ...](#)

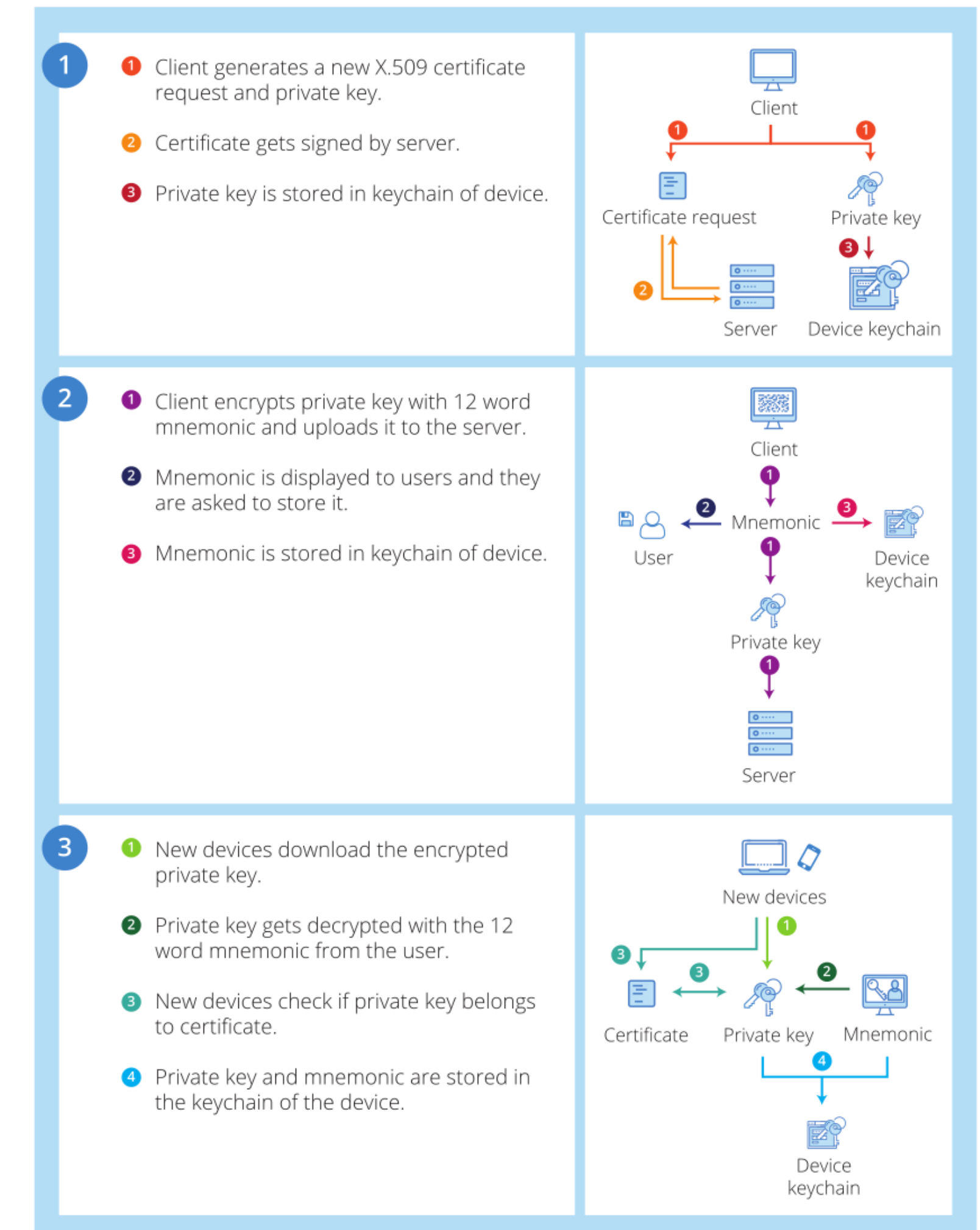
[Download metadata XML](#)

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

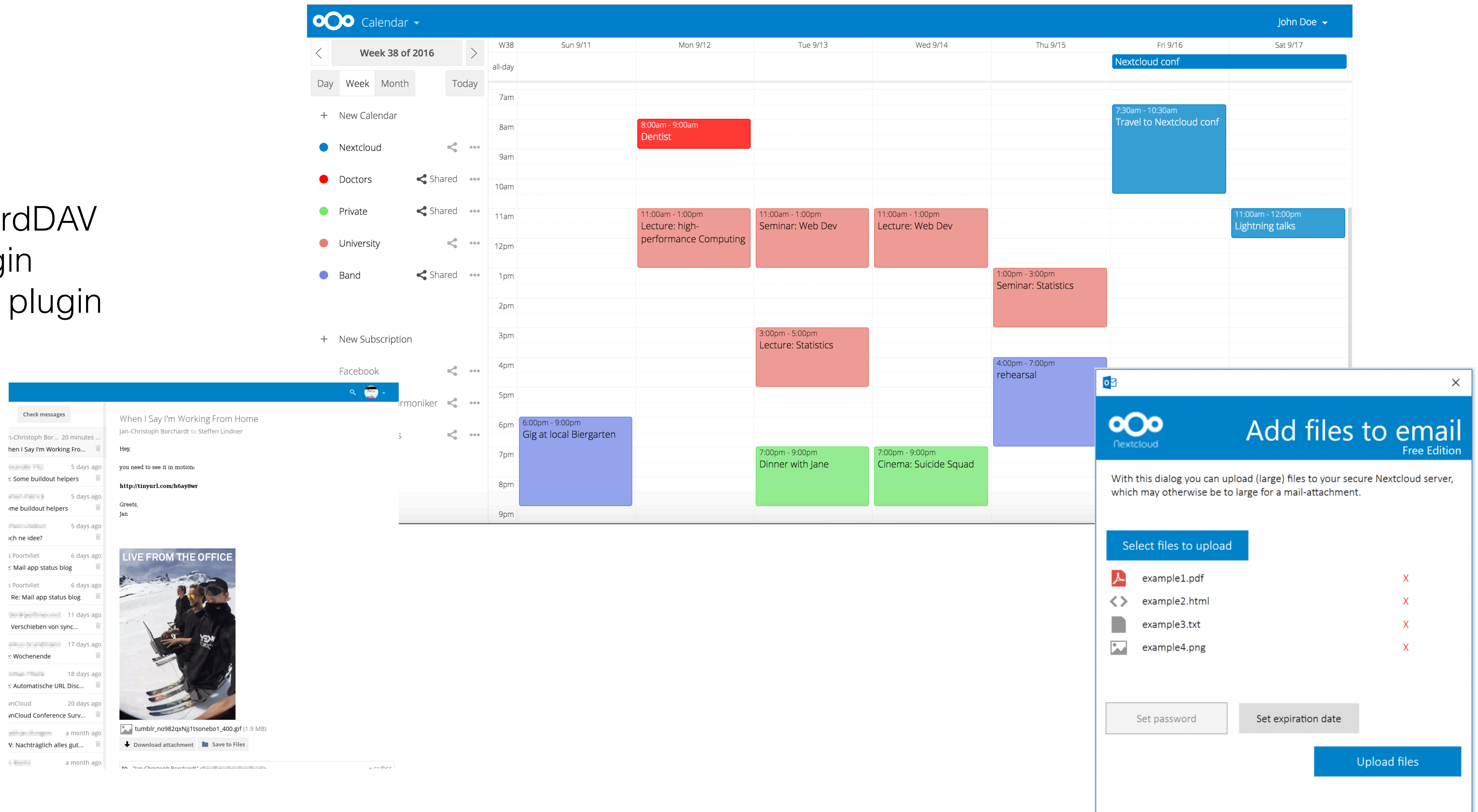
Nextcloud end-to-end encryption

Create and sync identity



Groupware

- Calendar
 - Contacts
 - Email
-
- CalDAV / CardDAV
 - Outlook plugin
 - Thunderbird plugin



The screenshot displays the Nextcloud Groupware interface. At the top, a blue header bar contains the Nextcloud logo, the word "Calendar", and a user profile "John Doe". Below the header, the interface is divided into three main sections:

- Calendar:** A weekly view for "Week 38 of 2016". The left sidebar shows a list of calendars: "Nextcloud" (blue dot), "Doctors" (red dot), "Private" (green dot), "University" (orange dot), and "Band" (purple dot). The main calendar grid shows events for the week of September 11-17, 2016. Events include "Dentist" (8:00am-9:00am), "Travel to Nextcloud conf" (7:30am-10:30am), "Lecture: high-performance Computing" (11:00am-1:00pm), "Seminar: Web Dev" (11:00am-1:00pm), "Lecture: Web Dev" (11:00am-1:00pm), "Lightning talks" (11:00am-12:00pm), "Seminar: Statistics" (1:00pm-3:00pm), "Lecture: Statistics" (3:00pm-5:00pm), "rehearsal" (4:00pm-7:00pm), "Gig at local Biergarten" (6:00pm-9:00pm), "Dinner with Jane" (7:00pm-9:00pm), and "Cinema: Suicide Squad" (7:00pm-9:00pm).
- Email:** A list of messages on the left and a detailed view of a message on the right. The message is from "Jan-Christoph Borchardt" to "Steffen Lindner" with the subject "When I Say I'm Working From Home". It includes a link to "http://tinyurl.com/h6ay8wr" and an attachment "tumblr_no982qxNjj1tsonebo1_400.gif (1.9 MB)".
- File Upload Dialog:** A modal window titled "Add files to email" (Free Edition). It explains that this dialog is used to upload large files to the Nextcloud server. It features a "Select files to upload" button, a list of files to be uploaded (example1.pdf, example2.html, example3.txt, example4.png), and buttons for "Set password", "Set expiration date", and "Upload files".

- App Development

Neuen Stapel hinzu +

ToDo

Documentation

 in 11 Tagen

Public API Specification

Documentation

Geändert: vor 5 Minuten Erstellt: vor 9 Minuten von djoma

Später ✕

2017-06-30

22:20

Beschreibung

What is Markdown

The [wikipedia markdown entry](#) introduced markdown as :

Markdown is a lightweight markup language with plain text formatting syntax. It is designed so that it can be converted to HTML and many other formats using a tool by the same name. Markdown is often used to format readme files, for writing messages in online discussion forums, and to create rich text using a plain text editor. As the initial description of Markdown contained ambiguities and unanswered questions, many implementations and extensions of Markdown appeared over the years to answer these issues.

Markdown in Deck

The Deck application plugin uses the [markdown-it](#) script to offer support for markdown in the cards description field.

Supported Markdown

Markdown comes in many flavors. The best way to learn markdown and understand how to use it, is simply to [try it](#) on the original script official playground.

That same link offers also a comprehensive list of what is supported, and what is not - rendering it unnecessary to duplicate that content in here.

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

- Choose person ...
-  Discuss Nextcloud...

 Press informatio...

 Mario Danic



 Nina Cercy



 Sales Weekly call



 Mathias Conradt,...



 Sales



 Collabora plans



 Company Call



 Frank Karlitschek



 Ivan Sein Santiago



 I have renamed t...



 You



 tomaz



 F-Droid



 Lukas Reschke



 Mathias Conradt

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

19 minutes ago

 Ok

 Jos Poortvliet

Find notes here: <https://cloud.nextcloud.com/apps/files/?dir=/shared&fileid=48728>

14 minutes ago

 Guest

I have joined too

12 minutes ago

 Mathias Conradt

Great

12 minutes ago

 Vanessa Steeg

Cool!

12 minutes ago

 Guest

I am Caspar.

12 minutes ago

 Jos Poortvliet

I have to join by phone...

5 minutes ago

 Jos Poortvliet

New message...

Discuss Nextcloud Talk

Join call

☒ Share link



Set password

→

 Participants

Add participant

 Jos Poortvliet (moderator)

 Mathias Conradt (moderator)

 Vanessa Steeg (moderator)



 Guest



 Patrick Walther



- Choose person...
- 

Discuss Nextcloud...

...
- 

Press informatio...

...
- 

Mario Danic

...
- 

Nina Cercy

...
- 

Sales Weekly call

...
- 

Mathias Conradt,...

...
- 

Sales

...
- 

Collabora plans

...
- 

Company Call

...
- 

Frank Karlitschek

...
- 

Ivan Sein Santiago

...
- 

I have renamed t...

...
- 

You

...
- 

tomaz

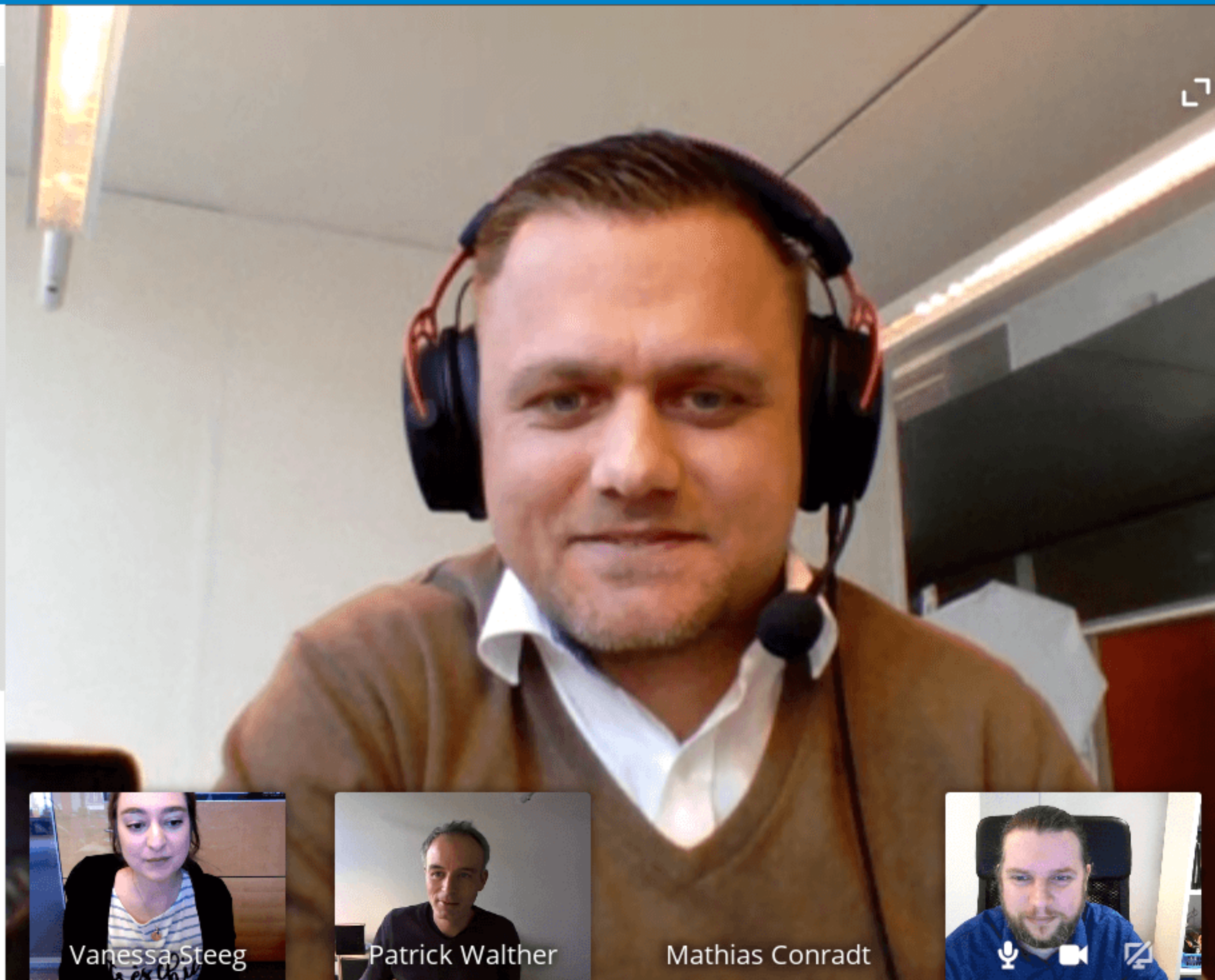
...
- 

F-Droid

...
- 

Lukas Reschke

...



Discuss Nextcloud Talk

Leave call

☐ Share link

Chat

Participants



Jos Poortvliet

9 minutes ago

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



Mathias Conradt

4 minutes ago

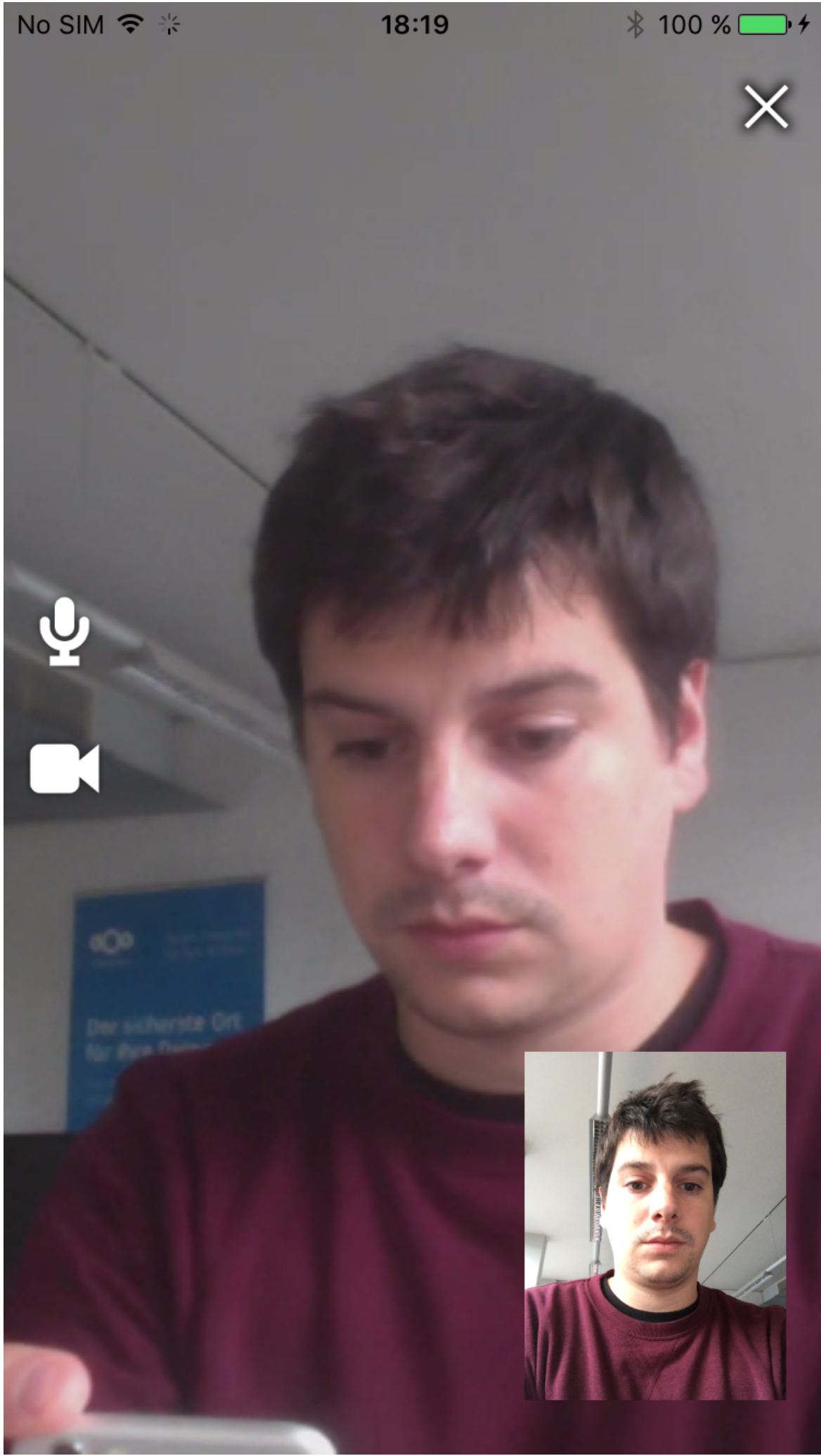
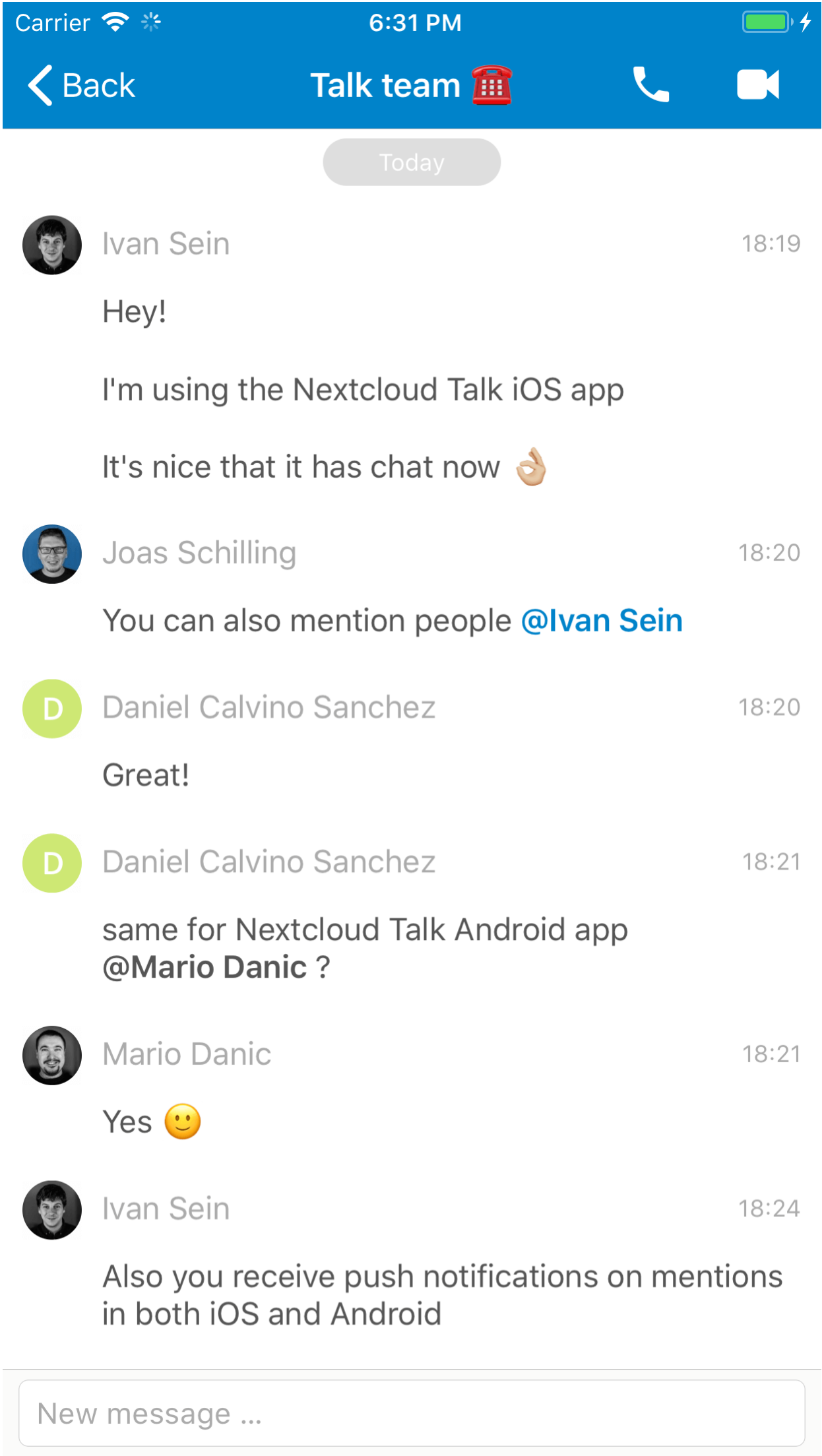
Ok



Jos Poortvliet

New message...

→



FileEditViewInsertFormatTablesToolsHelp

Default Style

Calibri

10



Test Document

Lorem Ipsum

Lorem Ipsum
Lorem Ipsum
Lorem Ipsum

This is a good starting point.



Test Conversation

Leave call

☐ Share link

Chat

2 participants



Frank Karlitschek

5 minutes ago

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,

I think the document is already a good starting point



Matthias Wobben

a minute ago

Hi Frank, I agree, let's start with it.



Frank Karlitschek

seconds ago

cloud.nextcloud.com/s/PXsz2S5mKcYnq8Z



Frank Karlitschek



Nextcloud

- Same User-Experience and features as Office 365 and Google Suite
- Hosted wherever wanted
- Compliant
- No foreign laws involved
- 100% open source and free software
- No vendor lock-in
- Optional support subscription available

Nextcloud

Alternative to

- Dropbox
- Google Suite
- Office 365

but

- Self hosted
- 100% open source
- Distributed / Federated



The ownCloud - Nextcloud fork

KDE

- Got involved in the late 90s
- Completely community driven
- Everyone can contribute and commit
- 100% Free Software
- Community decided about features and strategy
- Going Strong
- Dream of the year of the Linux Desktop
- Problems: Rotating Team Members
- Dream of hiring people to work full time on free software

ownCloud

- Founded in January 2010 by Frank Karlitschek
 - AGPL licensed
 - Open development process and community
 - Growing community of contributors
 - Growing community of users
 - Releases of 1.0, 1.1, 1.2 and 2.0
 - Quickly became the most popular open source FSS software
 - First developer meetups
 - First good press coverage
 - First interest from bigger customers
-
- Maybe we can do pay people to work full time on Free Software?

Opportunity to found a company?

End of 2011

Got in contact with 2 people

- CEO
- Sales / Marketing
- CTO

ownCloud Inc.

- Founded end of 2011
- Based in Boston, USA
- Venture capital funded from day one
- Optimised for aggressive growth and exit
- Win fast / fail fast
- Key management and VCs unfamiliar with open source
- Some friends from KDE were sceptical



Issues

Issues 2015 and 2016

- Bad alignment between management / investors and community
- Sustainability and open vs. Quick money
- Tension between management and open source developers
- Contributors unhappy and leaving the project
- Mismanagement

Business model

- Dual Licensing
- Open Core / Enterprise edition
- Contributor License Agreement with transfer of code ownership to company

Conflict between community interests and company interests

Open core is inherently unstable

Product management

- Company required control over roadmap/feature planing
- Predictability
- Reject community features if enterprise feature exist

Investors

- VC mind set
- EFSS market defined by Gartner

Issues 2015 and 2016

- No happy community
- Not happy employees
- Not happy customers

I tried to fix it but failed

Bad alignment with Open Source Principles

Financial trouble

Issues 2015 and 2016

- Closed source software companies would have died
- Customers and users lose their product

Opportunity to fork and fix mistakes



The Nextcloud fork

The Nextcloud fork

- May 2016
- 12 core people left ownCloud
- Founded Nextcloud





The Nextcloud Principles

1. Sustainable / No external investment

2. 100 % open source / free software

3. No Contributor License Agreement

4. Open Standards

5. Federation / Decentralisation

6. Open Community processes

7. Diversity



Today and Tomorrow

Today and Tomorrow

- No contributor agreement
- 100% free software / open source
- All PRs have the same priority
- Remove Community PR roadblock
- Even website is in git with community contributions



● nextcloud
Search term

● owncloud
Search term

+ Add comparison

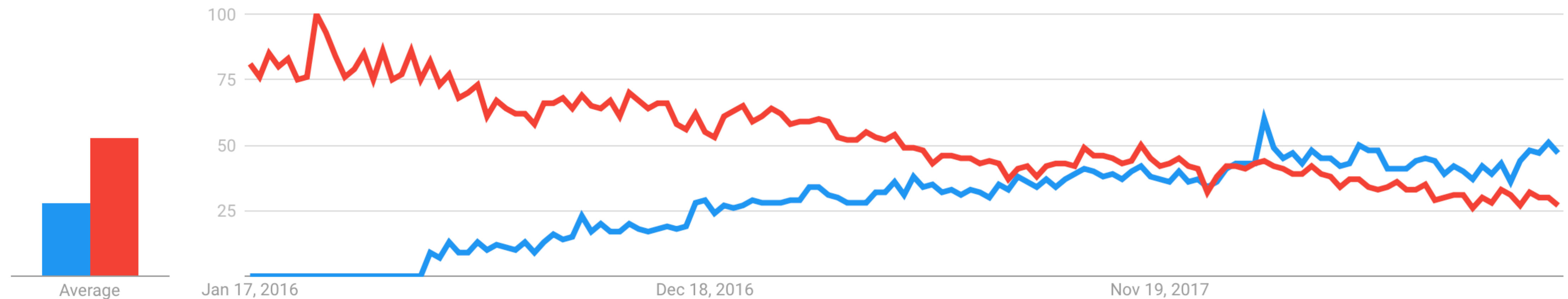
Worldwide ▼

1/13/16 - 9/13/18 ▼

All categories ▼

Web Search ▼

Interest over time (?)





The Nextcloud Company

Nextcloud GmbH

- Founded June 2016
- > 40 employees
- Self funded
- Profitable since Dec. 2016
- Distributed Team
- Headquarter in Stuttgart
- Work in alignment with the Open Source Community
- Community / ecosystem momentum
- Technology leader
- Fast growing customer base

Customers

> 150 customers

DEGES



ARD 



WIKIPEDIA
The Free Encyclopedia



MAX-PLANCK-GESELLSCHAFT

MAHLE



Informations
Technik
Zentrum Bund



Deutsches
Rotes
Kreuz

Raiffeisen Informatik Center
Steiermark



Germania

SIEMENS

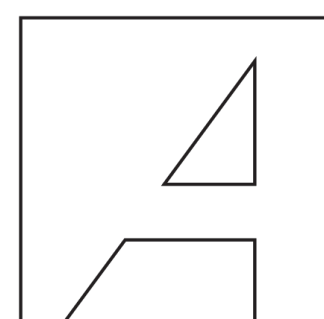


BETRIEBSKRANKENKASSE

Miele



Technische
Universität
Berlin



Konrad
Adenauer
Stiftung

MMEC **MANNESMANN**

BUNDESNOTARKAMMER
KÖRPERSCHAFT DES ÖFFENTLICHEN RECHTS



What is Open Source ?

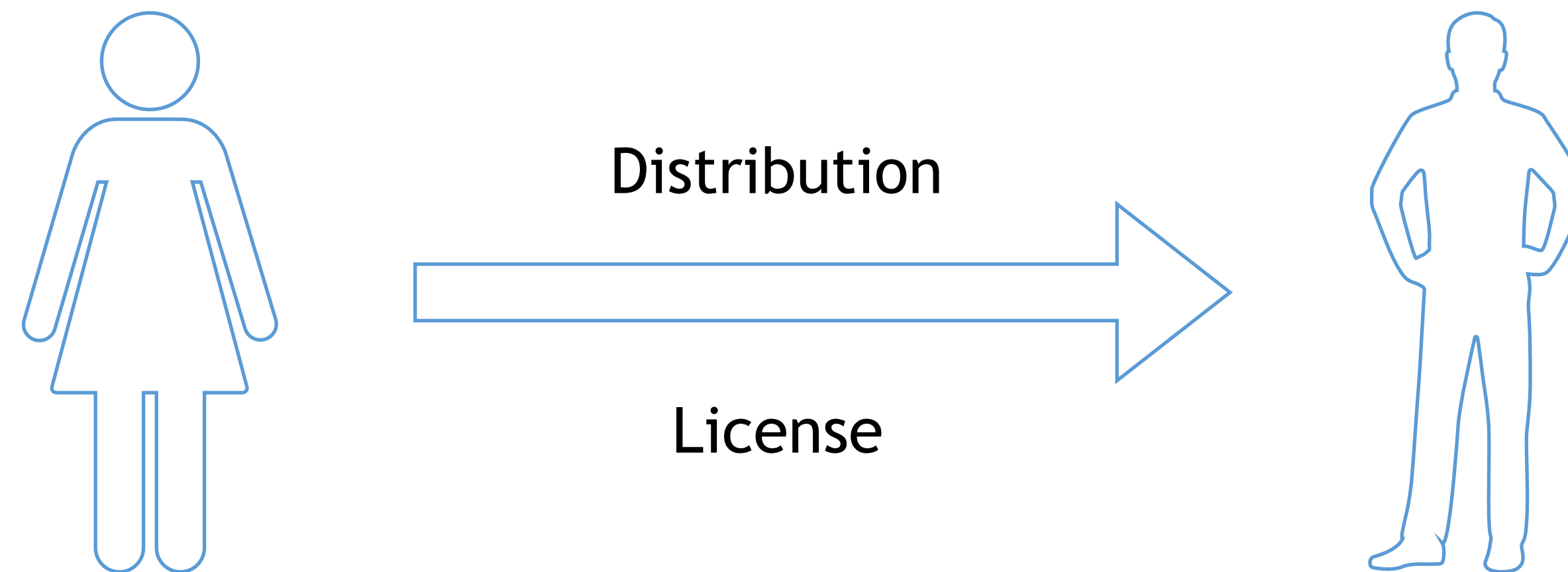
What is Open Source ?

What is Open Source ?

The Open Source Definition

- Free Redistribution
- Source Code
- Derived Works
- Integrity of The Author's Source Code
- No Discrimination Against Persons or Groups
- No Discrimination Against Fields of Endeavor
- Distribution of License
- License Must Not Be Specific to a Product
- License Must Not Restrict Other Software
- License Must Be Technology-Neutral

What is Open Source ?

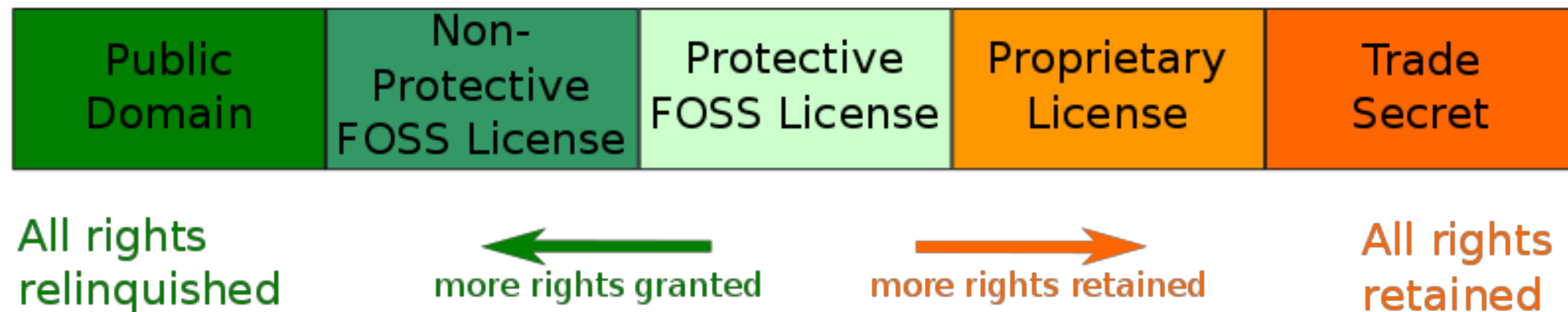


What is Open Source ?

Public domain

- Give up ownership and any rights of software
- Common in Academia
- 60s, 70s, 80s
- Legally difficult in Germany

Rights in Copyright

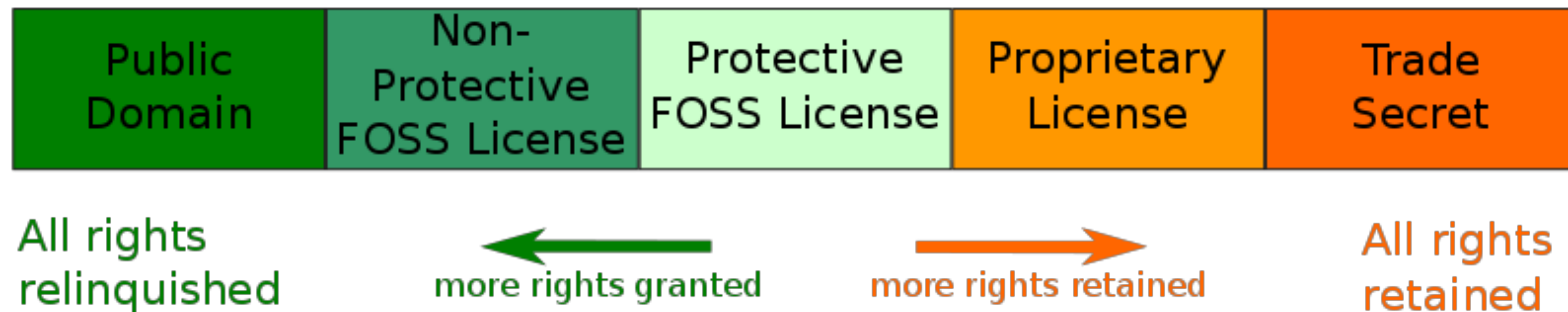


What is Open Source ?

Permissive Licenses

- Keep ownership of software
- BSD, MIT, Apache
- ‘Do whatever you want with this, just don’t sue me.’
- Common in Academia
- 70s, 80s
- Very common

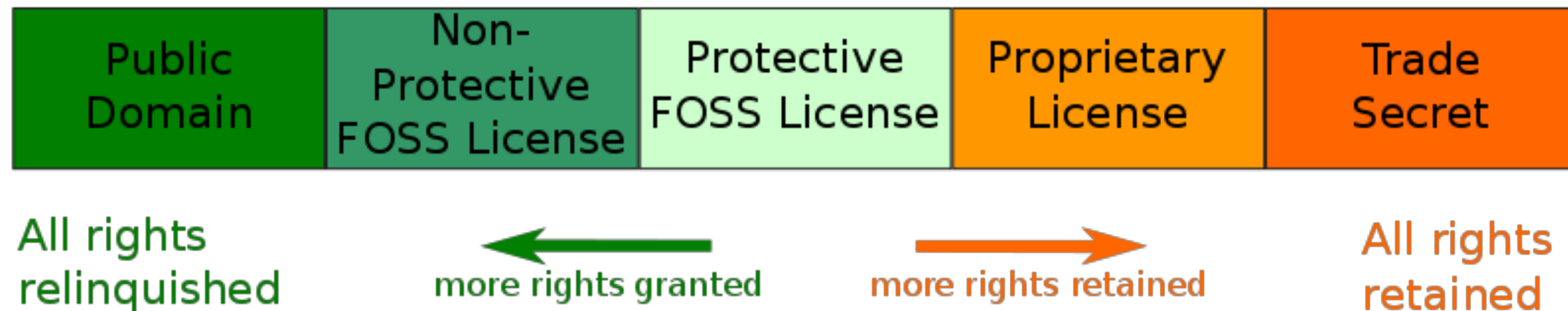
Rights in Copyright



What is Open Source ?

- Copyleft licenses
- ‘If you make a derivative work of this, and distribute it to others under certain circumstances, then you have to provide the source code under this license.’
- GPL, AGPL
- 80s, 90s
- Free Software Foundation
- Open Source Initiative - Open Source Software

Rights in Copyright





Open Source Business Models

What are customers paying for?

Selling Branded Merchandise

Selling software as a service

Partnerships with funding organisations

Selling certificates and trademark use

Voluntary donations

Bounty driven development
Crowed sourcing

Advertising

Delayed open source

Open Source at end of life

Selling Professional Services

Scalable:

- Support
- Long term support
- Packaging
- ownCloud, Nextcloud, RedHat, SUSE

Non Scalable:

- Payed feature development
- Bugfixing
- Workshops
- Training

Optional proprietary extensions

- Open core
- Freemium model
- Open Source used for Marketing
- Community Edition / Enterprise Edition
- Not really Open Source
- Not popular in the Open Source Community
- Used by ownCloud

Dual-Licensing

- Sell Option to ignore Copyleft requirements
- Works in combination with GPL, AGPL
- Requires complete code ownership
- Requires Contributor License Agreement
- Controversial
- Used by ownCloud



The Nextcloud Business Model

The 6 Nextcloud Subscription benefits

Expertise

- A full PoC package where our experts help you integrate Nextcloud in your infrastructure
- Migration assistance: we ensure your upgrades go smooth: advise when to upgrade, stand-by help.
- Support delivered directly by the Nextcloud engineers who wrote the software.
- Dedicated Support Account Manager
- Enterprise grade SLA up to 24/7.
- Long term support for stable Nextcloud releases up to 5/10 years

Influence

- Influence on roadmap
- Seat at the product advisory board

Security

- Early notification about critical security issues
- Early access to security patches

The 6 Nextcloud Subscription benefits

Stability

- Early access to critical bugfixes and hotfixes, special hardened software releases
- Access to enterprise documentation and the knowledge base
- Access to expertise around scaling, security and best practices.
- Access to optional workshops and trainings

Customisation

- Access to Professional Services for customisations and feature development.
- Access to branding
- Access to addons from partner companies like:
 - Outlook Plugin
 - Collabora / ONLYOFFICE
 - High performance Talk backend

Compliance

- Guarantee that all code is secure, proved and certified for GDPR and HIPAA compliance.
- Access to enterprise GDPR documentation and compliance expertise needed to provide on data requests.

Open Source for Enterprises

- No vendor lock-in
- The right to change and distribute inside or outside the enterprise
- Security
- Participating in the big contributor community
- Clear licenses



Why Open Source ?

Open Source for Enterprises

- Fair relations to customers and users -> Happy customers
- Contributions from outside the company
- Marketing and awareness generation
- Legal security



Questions?

Frank Karlitschek

 @fkarlitschek