



The growth of the Nextcloud apps ecosystem

CS3 2020

Agenda

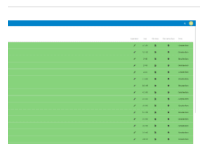
- Nextcloud app store
- New developer program
- Questions

Presented by Olivier Paroz
Head of Professional Services at Nextcloud
GmbH

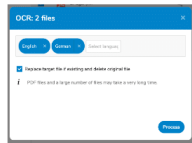


Nextcloud apps store

<https://apps.nextcloud.com>



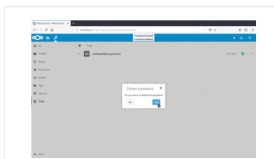
ware recovery
ers synchronization monitoring a...



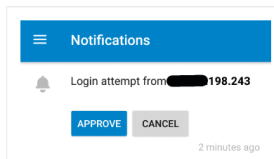
Optical character recognition
Text recognition for your images and pdf files



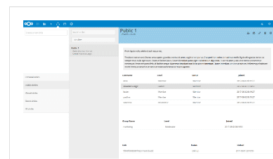
Full text search
Core of the full-text search framework for Ne...



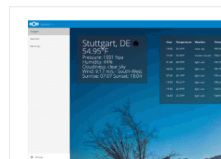
Passwords
Store, manage and access all your passwords...



Two-Factor Authentication via ...
Allows using any of your logged in devices as ...



Circles
Bring cloud-users closer together.



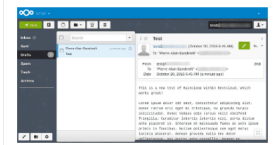
Weather
Watch the weather directly on your N...



lyse, compare and share GPS tra...



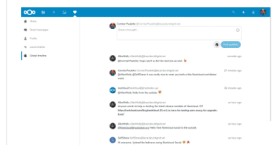
Music
Music player, library viewer, and server



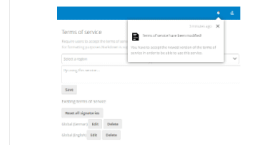
RainLoop
RainLoop Webmail



Write support for LDAP
Adds support for creating, manipulating and ...



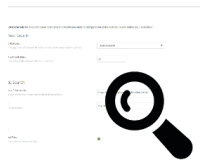
Social
Nextcloud becomes part of the federated ...



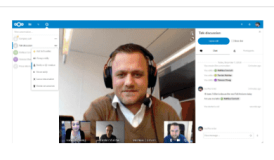
Terms of service
Requires users to accept the terms of service...



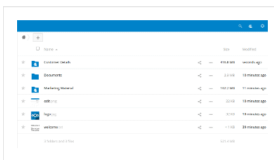
Audio Player
play / stream / organize



search - Elasticsearch ...
ElasticSearch



Talk
Chat, video & audio-conferencing using WebR...



Group folders
Admin configured folders shared by everyon...

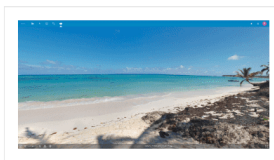
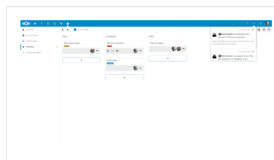
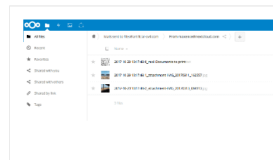


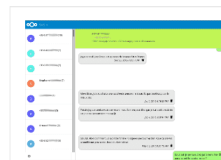
Photo Sphere Viewer
Enables viewing of google photosphere images



Deck
A kanban style project and personal manage...



Files From Mail
Recover your email attachments from your cl...



Phone Sync
An app to sync SMS with your cloud



Nextcloud apps store

- About 250 applications
- Double-digit growth
- Nextcloud first
- Can be supported via subscription



Last year's selection

Collaboration

- Calendar
- Talk
- Polls
- Social
- Contacts
- Mail
- Circles
- Deck
- Dashboard
- Tasks
- Notes / Carnet

Productivity

- Full Text Search with OCR
- Mind map
- Draw.io
- End-to-End encryption
- Collabora Online
- ONLYOFFICE
- Bookmarks
- Files clipboard
- Passman / Passwords
- Antivirus (external appliances)
- Automated PDF conversion
- Workflow external scripts
- Files from Mail
- Scanner

Authentication

- 2FA TOTP
- 2FA OpenOTP
- 2FA U2F
- 2FA mobile devices
- 2FA Gateway (Telegram, etc.)

Connectors

- Zimbra
- Moodle
- Zenodo
- OrCID
- picoCMS

Healthcare

- DICOM Viewer

Reporting

- User usage report
- Issue template
- Download activities
- Share listing

Multimedia

- Audio player
- Preview Generator
- Files 3D

Other

- GpxPod / PhoneTrack
- Quota warning
- Markdown editor
- Mood
- Polls
- Reader (ebook)
- Can I update



New Nextcloud developer program

<https://nextcloud.com/developer/>

- Developer documentation
- Help forum
- Contribution guidelines
- App store publishing



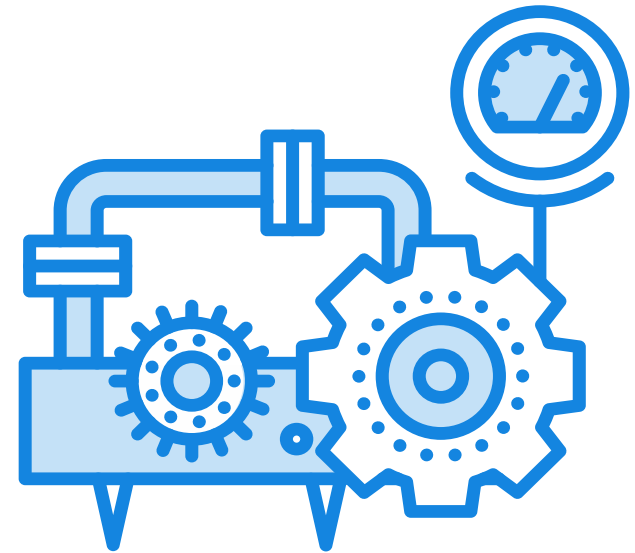
NNDP – Why participate

- **Big audience**
200k-300k installations
- **Free promotion**
Blog posts, conference
- **Business opportunity**
Reaching customers



NNDP - Build an application

- Developer setup
- App skeleton generator
- App Developer intro
- API documentation
- App design guidelines
- Nextcloud Vue guidelines
- Publishing apps



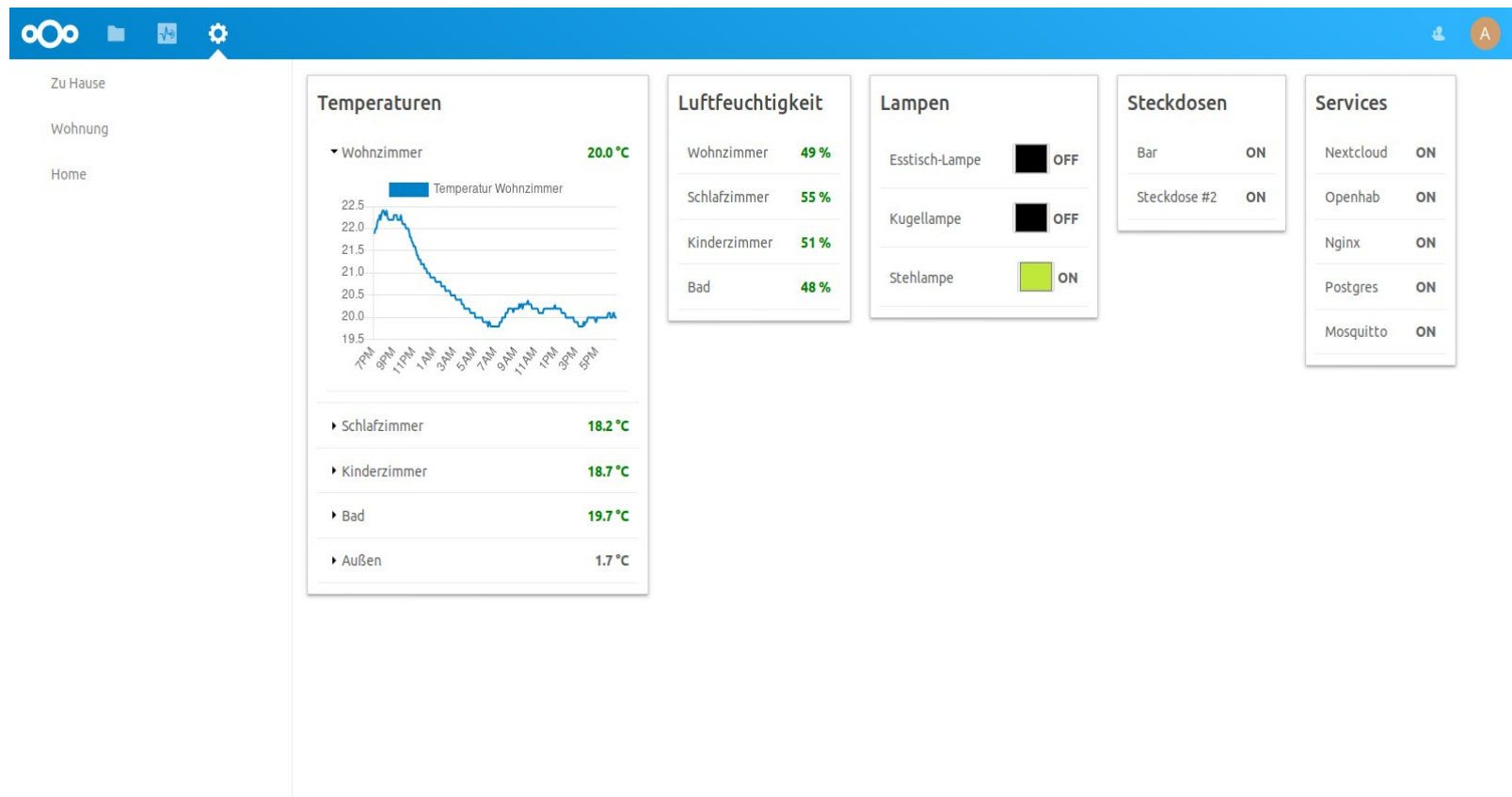
NNDP - Build an application

Data analytics



NNDP - Build an application

Openhab Viewer



NNDP - Build an application

Forms

The screenshot displays the Nextcloud Forms application interface. The top navigation bar includes a 'Help' button and a 'Done' button with a settings icon. The main workspace is divided into three sections:

- Form description:** Contains fields for 'Title' (Customer Satisfaction Survey) and 'Description' (We appreciate your feedback!).
- Make a Form:** Features an 'Answer Type' dropdown menu with options: Select, Radio Buttons, Checkboxes, Short Response, Long Response (highlighted), and Drop Down. Below this is a list of questions with 'Add Question' buttons and trash icons:
 - What was your favorite part of your experience? (The atmosphere)
 - What was your favorite part of your experience? (The prices)
 - What was your favorite part of your experience? (The customer service)
 - Tell us what we can change to better improve your experience
- Owner:** Shows the user 'forms' and a 'Configuration' section with settings for 'Form configurations' (Anonymous form, Expires) and 'Access' (Registered users only, Public access, Only shared).

NNDP - Build an application

OCC Web

```
Mon Jan 21 2019 18:11:30
Press Enter for more information on occ commands.
occ $
The current PHP memory limit is below the recommended value of 512MB.
Nextcloud 14.0.6

Usage:
  command [options] [arguments]

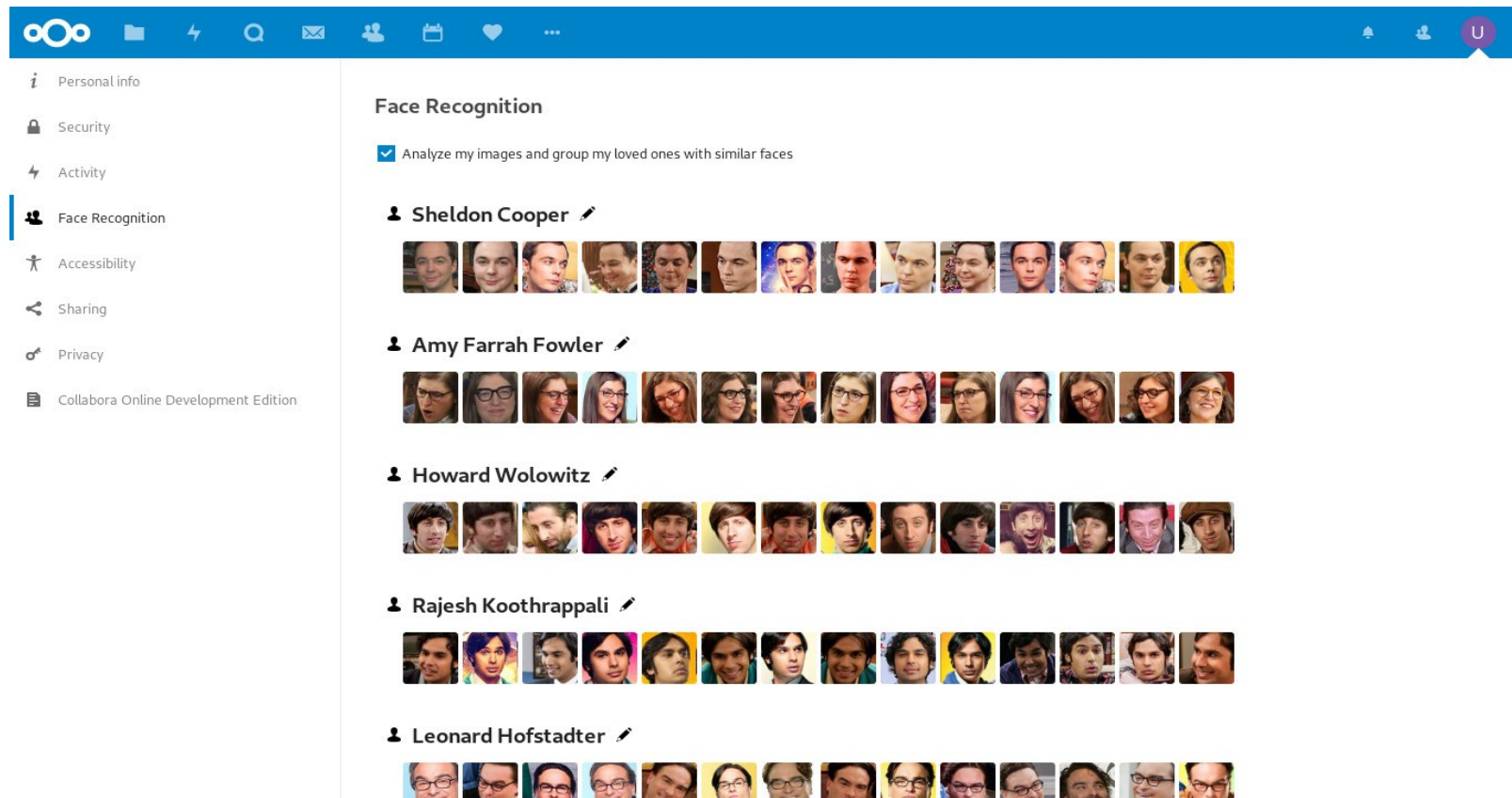
]Options:
  -h, --help            Display this help message
  -q, --quiet           Do not output any message
  -V, --version         Display this application version
  --ansi               Force ANSI output
  --no-ansi            Disable ANSI output
  -n, --no-interaction Do not ask any interactive question
  --no-warnings        Skip global warnings, show command output only
  -v|vv|vvv, --verbose Increase the verbosity of messages: 1 for normal output, 2 for more verbose output and 3 for debug

Available commands:
  _completion          BASH completion hook.
  check                check dependencies of the server environment
  help                 Displays help for a command
  list                 Lists commands
  status               show some status information
  upgrade              run upgrade routines after installation of a new release. The release has to be installed before.
  app
  app:check-code      check code to be compliant
  app:disable         disable an app
  app:enable          enable an app
  app:getpath         Get an absolute path to the app directory
  app:install         install an app
  app:list            List all available apps
  background
  background:ajax     Use ajax to run background jobs
  background:cron     Use cron to run background jobs
  background:webcron  Use webcron to run background jobs
  config
  config:app:delete   Delete an app config value
  config:app:get      Get an app config value
  config:app:set      Set an app config value
  config:import       Import a list of configs
  config:list         List all configs
  config:system:delete
```



NNDP - Build an application

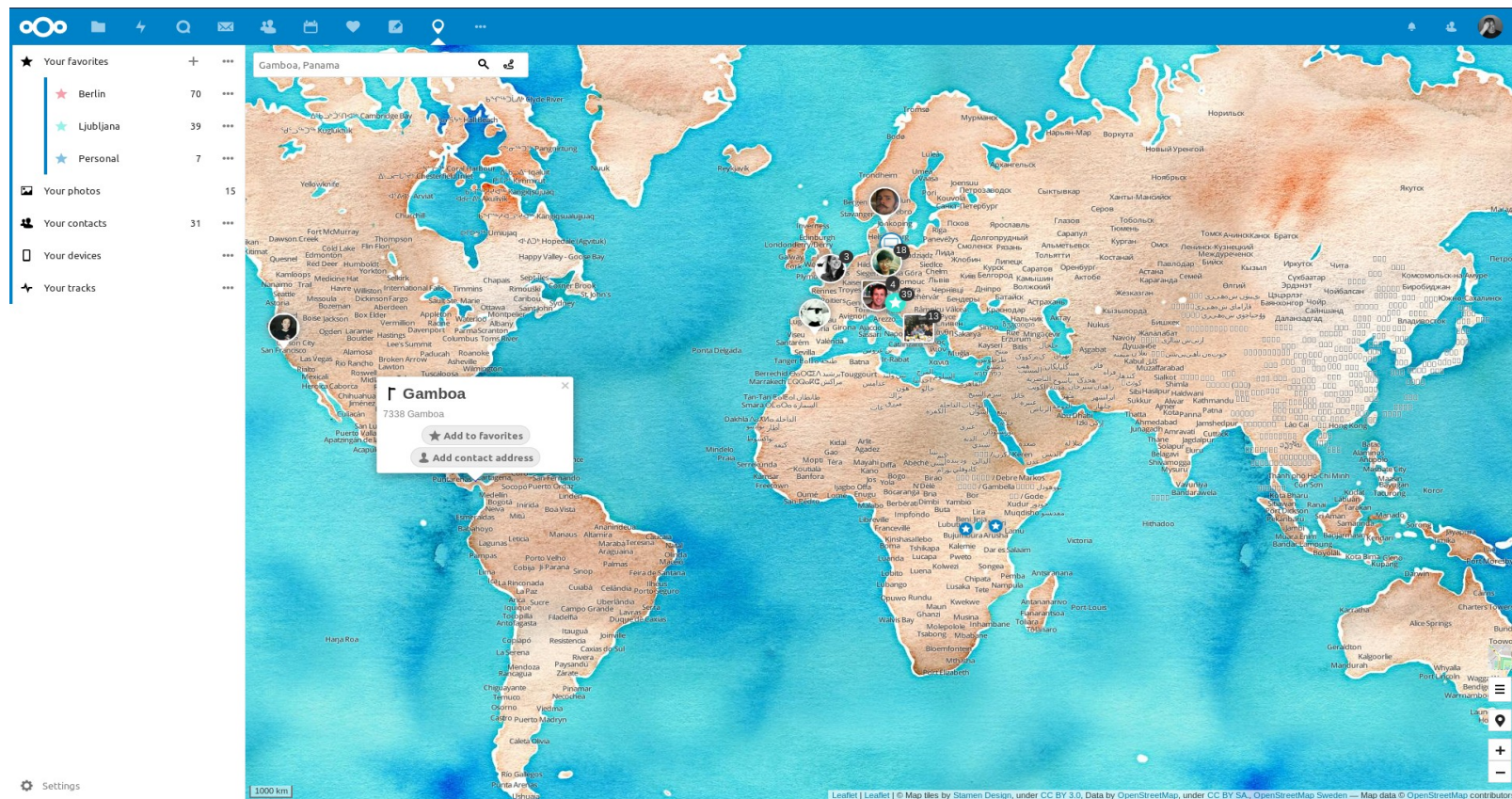
Face recognition



The screenshot displays the Nextcloud user interface with the 'Face Recognition' feature enabled. The left sidebar contains navigation options: Personal info, Security, Activity, Face Recognition (selected), Accessibility, Sharing, Privacy, and Collabora Online Development Edition. The main content area is titled 'Face Recognition' and includes a checked checkbox for 'Analyze my images and group my loved ones with similar faces'. Below this, five groups of faces are shown, each with a name and a pencil icon for editing: Sheldon Cooper, Amy Farrah Fowler, Howard Wolowitz, Rajesh Koothrappali, and Leonard Hofstadter. Each group consists of a horizontal row of 12 small face images.

NNDP - Build an application

Maps



NNDP - Build an application

Cospend

The screenshot displays the Cospend application interface. On the left, a sidebar shows a list of projects and bills. The 'White House mates' project is selected, showing a total of 5 bills. Below it, a list of bills is shown with their respective amounts and status (e.g., Bill C. (x1) -980.00, Hillary C. (x1) +370.00, Barack O. (x1) -596.67, Donald T. (x1) +203.33, George B. (x1) +1003.33). The 'Family holidays' project has 3 bills.

The main area shows a detailed view of a bill titled "white carpet" of project "White House mates". The bill details include:

- Item: white carpet
- Amount: 800.00
- Date: 2019-02-07
- Description: 800.00 (George B. -> Bill C., Hillary C., Donald T., ...)

The bill details are shown in a form with the following fields:

- What? (press enter to validate): white carpet
- How much? (press enter to validate): 800
- Who payed?: George B.
- When?: 07 / 02 / 2019

On the right, the "For whom?" section shows a list of people with checkboxes:

- All (selected)
- None
- Bill C. (checked)
- Hillary C. (checked)
- Barack O. (unchecked)
- Donald T. (checked)
- George B. (checked)

NNDP - Build an application

Cookbook


+ Create recipe

Recipe URL ↓

Search 🔍

- Alfredo Sauce 2.0 with ... ✎ 🗑️
- Baked Beans and Barley ✎ 🗑️
- Basil Hummus ✎ 🗑️
- Berries and nuts over ri... ✎ 🗑️
- Cabbage onion rice ✎ 🗑️
- Easy Vegan Red Lentil ... ✎ 🗑️
- Korean BBQ Tofu Bowl... ✎ 🗑️
- Lentil & Sweet Potato S... ✎ 🗑️
- Maple-Miso Tempeh Cu... ✎ 🗑️
- Meaty Lentil & Caulifo...** ✎ 🗑️

⚙️ Settings



Meaty Lentil & Cauliflower Lettuce Wraps

1 serving

Ingredients

- 2 cups riced cauliflower
- 2 cups cooked lentils
- 1/2 cup walnut pieces
- 1 yellow onion
- 3 cloves of garlic
- 1 tablespoon fresh ginger
- 3+ tablespoons soy sauce
- 2 tablespoons rice vinegar
- 1 tablespoon maple syrup

Instructions

Lettuce wraps are amazing – they're like tacos but healthier and fresher and you don't feel so bad about eating 14 of them at once...

or your local bookstore if it still exists.

Her lettuce wraps are an asian-inspired mixture of lentils and walnuts with sesame oil and lots of other wonderful things. But since I'm physically incapable of actually following a recipe as written (how do you think I got this job?), I added a few extra things like riced cauliflower and chili powder to give it a kind of Asian-fusion vibe with the balance sesame/soy on one side and taco seasonings on the other. Spoon them into some romaine leaves and they are a super delicious meal that only

NNDP - Build an application

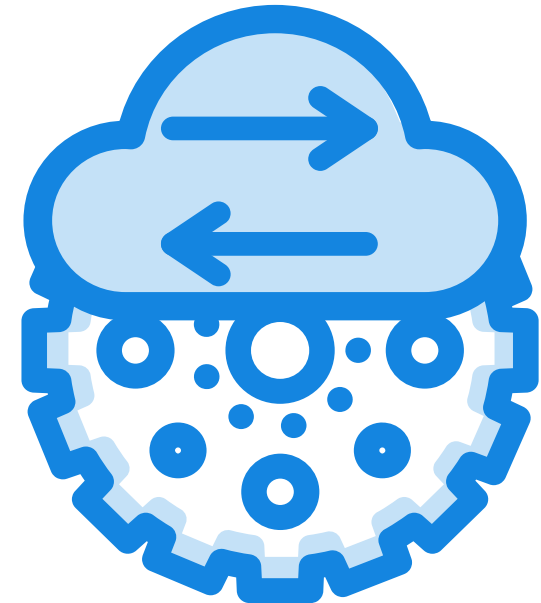
Other apps

- Time tracker



NNDP - Extend Nextcloud

- Write a dashboard plugin
- Interact with Workflows
- Write a theme to change the look and feel of Nextcloud
- Write a Nextcloud Talk Command
- Write a new 2factor authentication plugin



NNDP - Extend Nextcloud

DashboardsCharts

The dashboard displays several widgets:

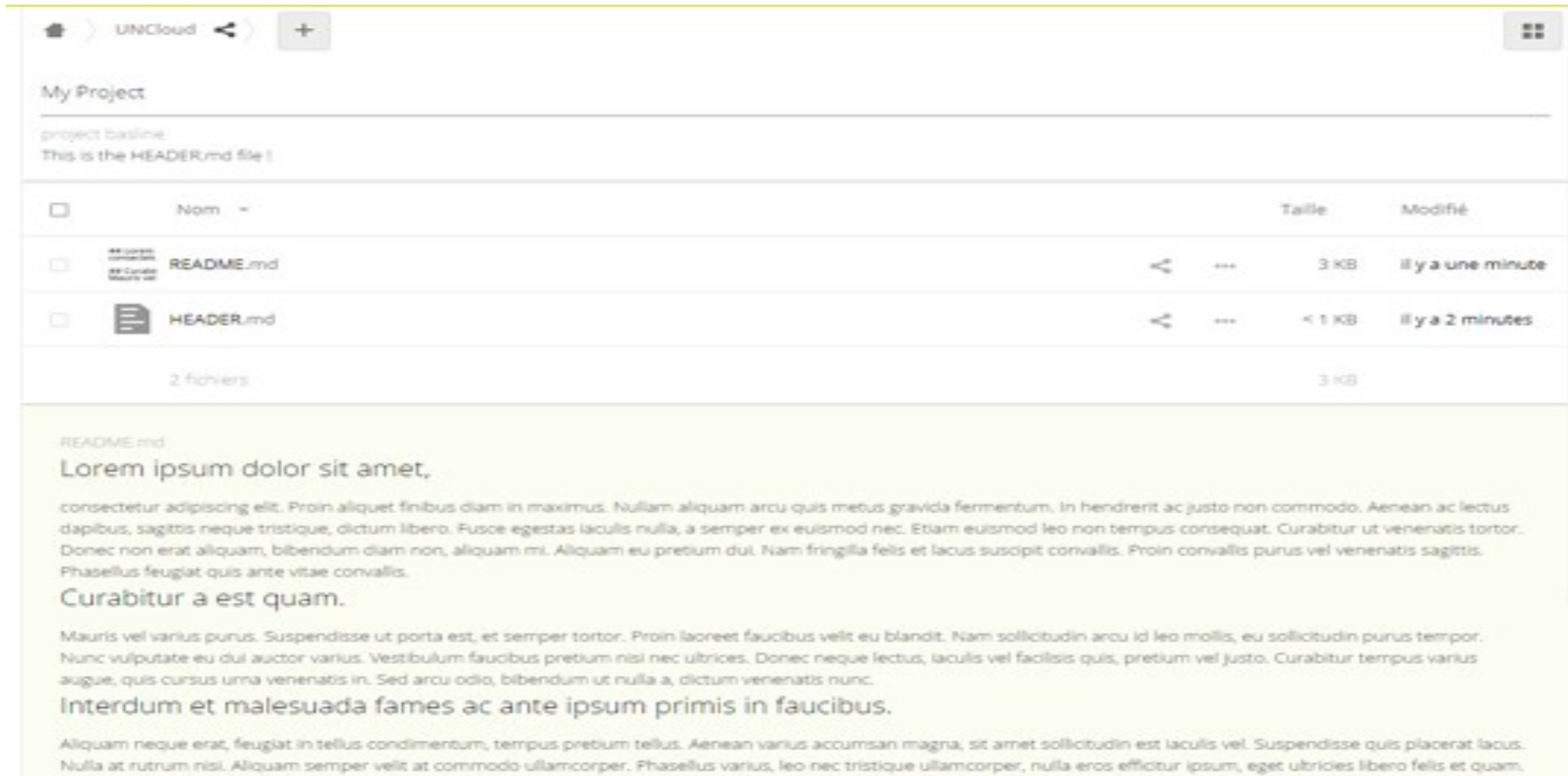
- HighChart 1:** A bubble chart titled "Carbon emissions around the world (2014)" showing emissions by continent. The legend includes Europe, Africa, Oceania, North America, South America, and Asia.
- Form.io 1:** A "Form.io Example Form" with fields for First Name, Last Name, Email, and Phone Number. It also includes a survey section with a 5-point scale for "How would you rate the Form.io platform?", "How was Customer Support?", and "Overall Experience?".
- Gauge 1 and Gauge 2:** Two gauge charts showing progress or levels.
- Chart 1:** A bar chart titled "Population growth (millions)" comparing Africa and Europe from 1900 to 2050.
- Counter 1:** A counter widget displaying the number 11.
- Grid 1:** A table with 10 entries, showing employee details. The table has columns for Name, Position, Office, Extn., Start date, and Salary.

Name	Position	Office	Extn.	Start date	Salary
Airi Satou	Accountant	Tokyo	5407	2008/11/28	\$162,700
Angelica Ramos	Chief Executive Officer (CEO)	London	5797	2009/10/09	\$1,200,000
Ashton Cox	Junior Technical Author	San Francisco	1562	2009/01/12	\$86,000
Bradley Greer	Software Engineer	London	2558	2012/10/13	\$132,000
Brenden Wagner	Software Engineer	San Francisco	1314	2011/06/07	\$206,850
Brielle Williamson	Integration Specialist	New York	4804	2012/12/02	\$372,000
Caesar Vance	Pre-Sales Support	New York	8330	2011/12/12	\$106,450
Cedric Kelly	Senior Javascript Developer	Edinburgh	6224	2012/03/29	\$433,060
Charde Marshall	Regional Director	San Francisco	6741	2008/10/16	\$470,600
Colleen Hurst	Javascript Developer	San Francisco	2380	2009/09/15	\$205,500





NNDP - Extend Nextcloud

Readme.md



The screenshot shows the Nextcloud file manager interface for a project named "My Project". The breadcrumb path is "UNCloud > My Project". Below the project name, there is a sub-header "project baseline" and a description "This is the HEADER.md file!".

<input type="checkbox"/>	Nom	Taille	Modifié
<input type="checkbox"/>	 README.md	3 KB	il y a une minute
<input type="checkbox"/>	 HEADER.md	< 1 KB	il y a 2 minutes

2 fichiers 3 KB

README.md

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Proin aliquet finibus diam in maximus. Nullam aliquam arcu quis metus gravida fermentum. In hendrerit ac justo non commodo. Aenean ac lectus dapibus, sagittis neque tristique, dictum libero. Fusce egestas laculis nulla, a semper ex euismod nec. Etiam euismod leo non tempus consequat. Curabitur ut veneratis tortor. Donec non erat aliquam, bibendum diam non, aliquam mi. Aliquam eu pretium dui. Nam fringilla felis et lacus suscipit convallis. Proin convallis purus vel veneratis sagittis. Phasellus feugiat quis ante vitae convallis.

Curabitur a est quam.

Mauris vel varius purus. Suspendisse ut porta est, et semper tortor. Proin laoreet faucibus velit eu blandit. Nam sollicitudin arcu id leo mollis, eu sollicitudin purus tempor. Nunc vulputate eu dui auctor varius. Vestibulum faucibus pretium nisi nec ultrices. Donec neque lectus, laculis vel facilisis quis, pretium vel justo. Curabitur tempus varius augue, quis cursus urna veneratis in. Sed arcu odio, bibendum ut nulla a, dictum veneratis nunc.

Interdum et malesuada fames ac ante ipsum primis in faucibus.

Aliquam neque erat, feugiat in tellus condimentum, tempus pretium tellus. Aenean varius accumsan magna, sit amet sollicitudin est laculis vel. Suspendisse quis placerat lacus. Nulla at rutrum nisi. Aliquam semper velit at commodo ullamcorper. Phasellus varius, leo nec tristique ullamcorper, nulla eros efficitur ipsum, eget ultricies libero felis et quam.

NNDP - Extend Nextcloud

OCR

OCR: 2 files ×

English × German ×

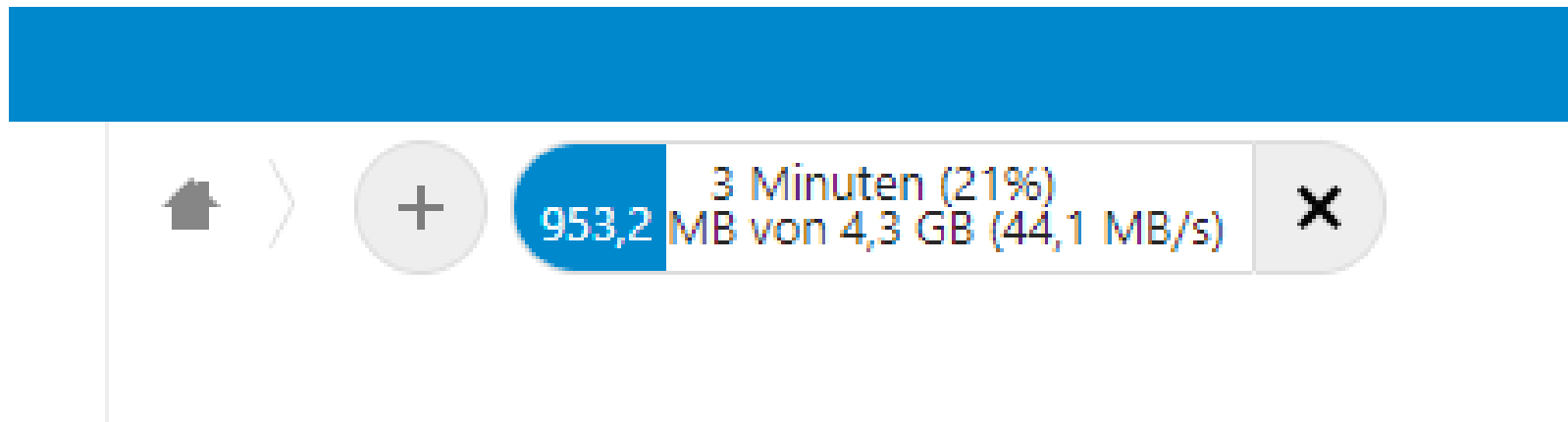
Replace target file if existing and delete original file

i PDF files and a large number of files may take a very long time.

Process

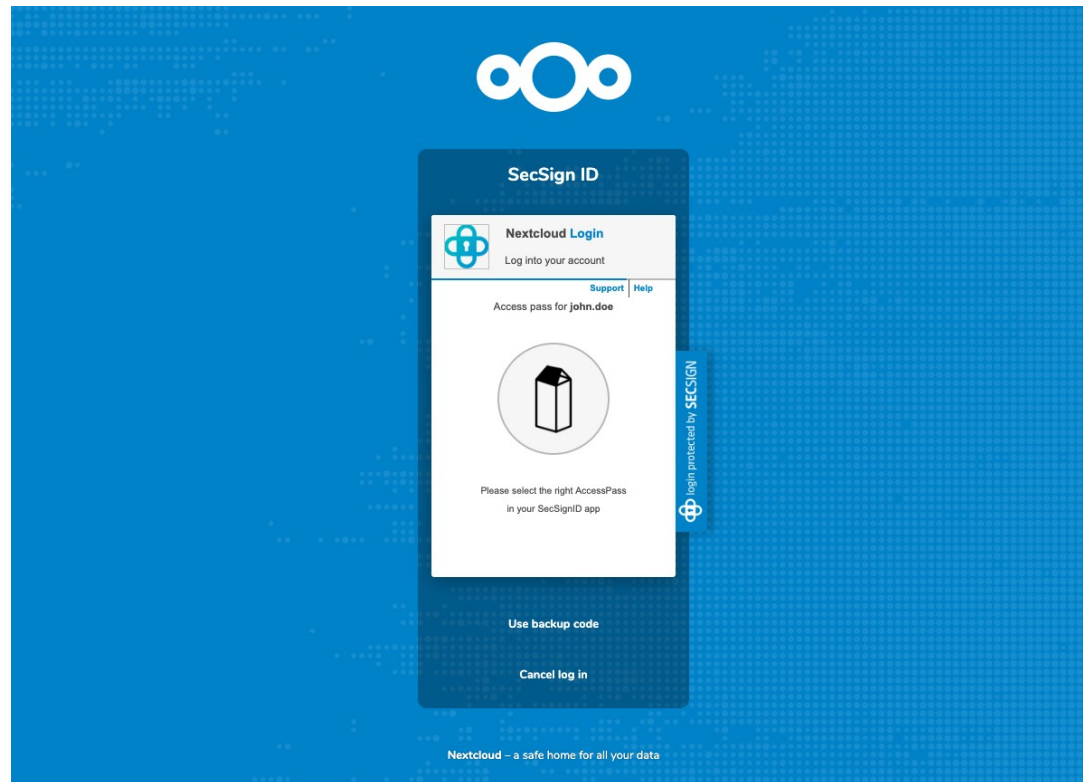
NNDP - Extend Nextcloud

Upload details



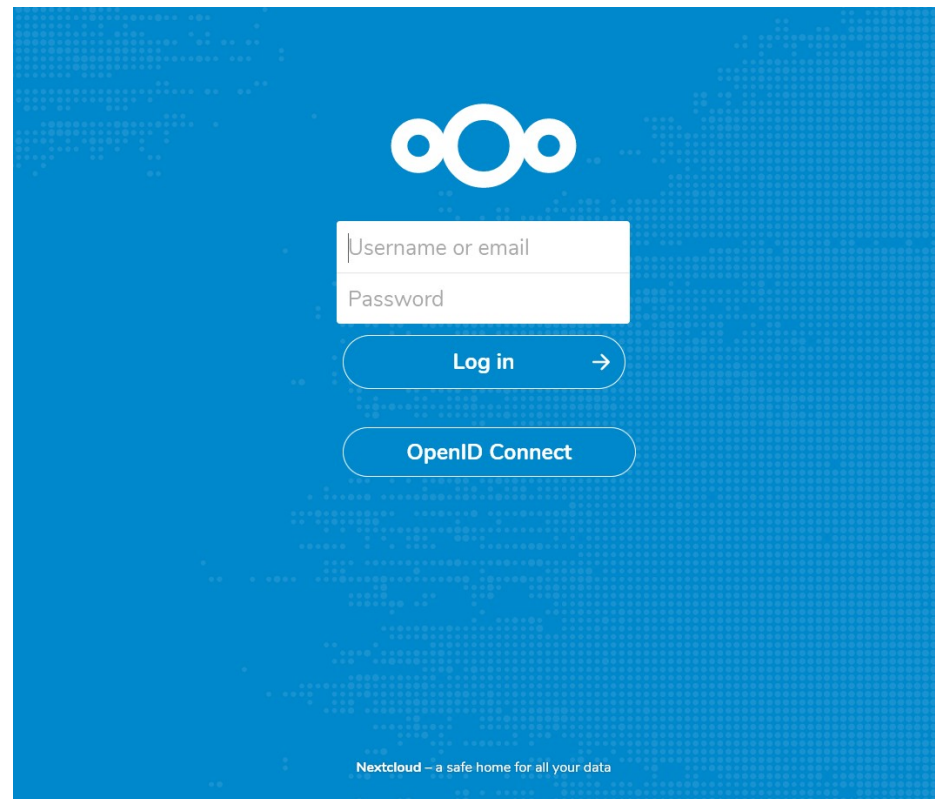
NNDP - Extend Nextcloud

SecSign ID



NNDP - Extend Nextcloud

OpenID Connect



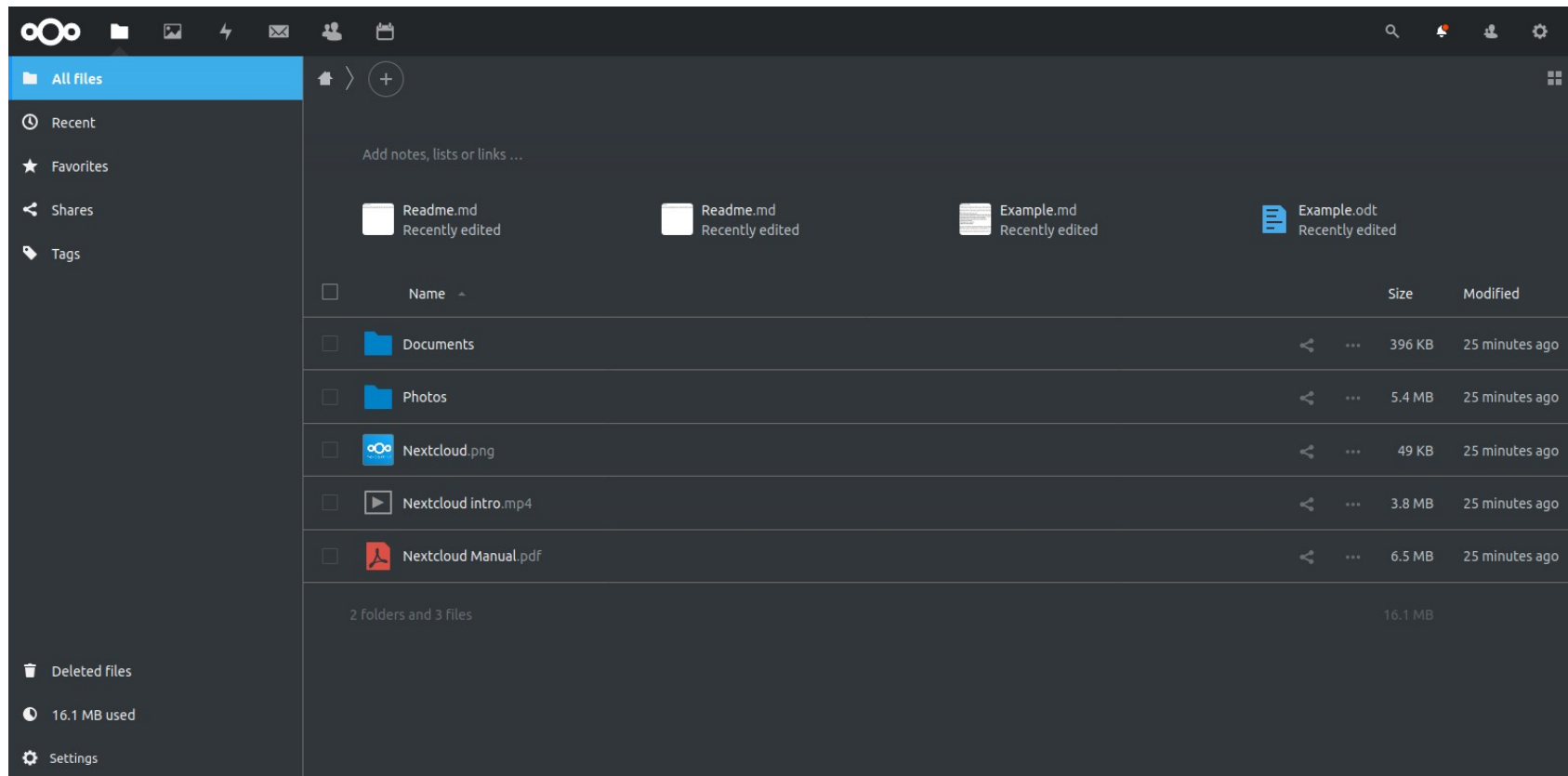
NNDP - Extend Nextcloud

Photo Sphere Viewer



NNDP - Extend Nextcloud

Breeze Dark



NNDP - Extend Nextcloud

Other apps

- Eml Viewer
- Simple poll for Nextcloud Talk
- Wopi
- External Storage backend for Dropbox
- External Storage: OneDrive
- Video converter



NNDP - Extend Nextcloud

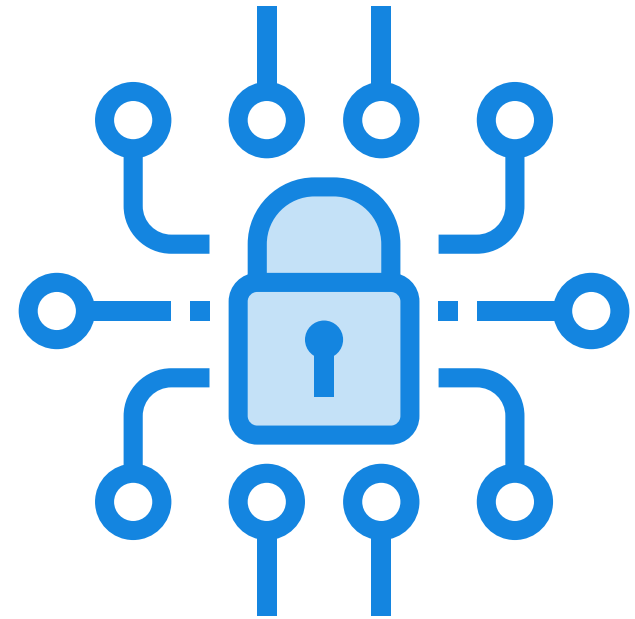
Other apps

- ShareRenamer
- GeoBlocker



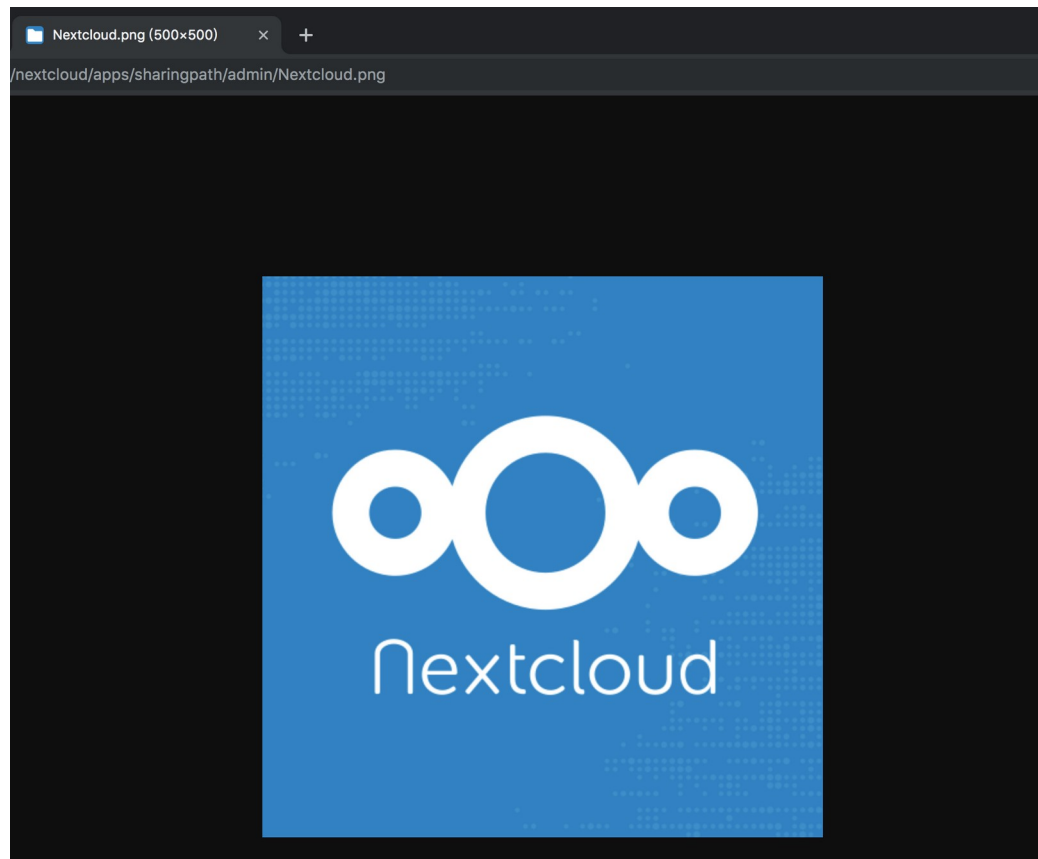
NNDP - Connect to Nextcloud

- Login Flow
- Client APIs
- User provisioning via REST
- Write a new user-management backend
- Nextcloud Talk REST API
- Third party node.js connector



NNDP – Connect to Nextcloud

Sharing Path



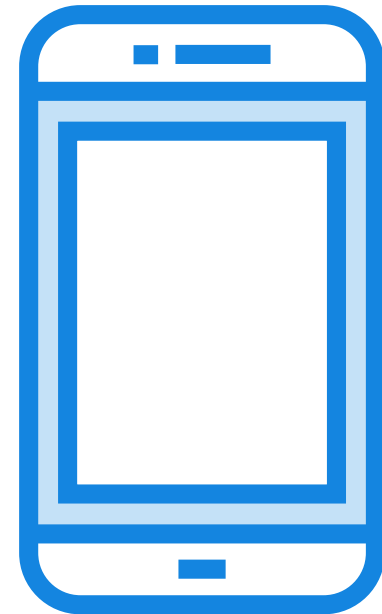
NNDP – Connect to Nextcloud

- Zimbra
- Moodle



NNDP - Write new clients

- Login Flow
- Client APIs
- Access Nextcloud through our Android library
- Connect your Android app to Nextcloud with Single Sign On



Questions

- I welcome any question you may have
- Get more information at our booth





Keep your data secure and under
your control

Nextcloud GmbH
Hauptmannsreute 44A
70192 Stuttgart
Germany

 +49.711-252-4280
 hello@nextcloud.com
 <https://nextcloud.com>