


# Nextcloud User Manual

***Release 36***

**The Nextcloud developers**

**Nov 09, 2026**

# CONTENTS


**1 Nextcloud 36 user manual introduction** **1**

**2 The Nextcloud web interface** **3**
- 2.1 Web browser requirements . . . 3
- 2.2 The Dashboard . . . 4
- 2.3 Navigating the interface . . . 4
- 2.4 Settings and profile . . . 5
- 2.5 Unified search . . . 5

**3 Using the Activity app** **7**
- 3.1 Viewing your activity stream . . . 7
- 3.2 Activity in the Files sidebar . . . 8
- 3.3 RSS feed . . . 8
- 3.4 Notification settings . . . 10

**4 AI assistant** **13**
- 4.1 Personal settings . . . 13
- 4.2 Where generated content is saved . . . 13
- 4.3 Running a task . . . 13
- 4.4 Notifications . . . 15
- 4.5 Task history . . . 15
- 4.6 Chat with AI . . . 15
- 4.7 Smart pickers . . . 19
- 4.8 Context Agent . . . 19

**5 Files & synchronization** **29**
- 5.1 Accessing your files . . . 29
- 5.2 Managing your files . . . 52
- 5.3 Sharing & collaboration . . . 60
- 5.4 Security & encryption . . . 70

**6 Groupware** **93**
- 6.1 Using the Contacts app . . . 93
- 6.2 Using the Calendar app . . . 105
- 6.3 Using the Mail app . . . 141
- 6.4 Setting out-of-office messages . . . 162
- 6.5 Synchronizing with Android . . . 162
- 6.6 Synchronizing with iOS . . . 164
- 6.7 Synchronizing with macOS . . . 166
- 6.8 Synchronizing with Thunderbird . . . 173
- 6.9 Synchronizing with KDE Kontact . . . 176

6.10 Synchronizing with the GNOME desktop . . . 189
6.11 Synchronizing with Windows 10 . . . 191
6.12 Migrate data between instances . . . 192

**7 Talk** **195**
7.1 Chat . . . 195
7.2 Conversations . . . 215
7.3 Calls . . . 236
7.4 Federation . . . 250
7.5 Integrations . . . 252
7.6 For moderators . . . 257
7.7 Join a call or chat as guest . . . 263

**8 Collectives** **269**
8.1 Getting started . . . 269
8.2 How to onboard your team . . . 271
8.3 Access Markdown files . . . 271

**9 Desktop Client** **273**
9.1 Installation . . . 273
9.2 Using the Client . . . 274
9.3 Using the macOS File Provider . . . 281
9.4 Client features . . . 285
9.5 Advanced configuration . . . 287
9.6 The Automatic Updater . . . 297
9.7 Update channels . . . 299
9.8 Conflicts . . . 299
9.9 Command-line client . . . 300
9.10 Uninstallation . . . 303
9.11 FAQ . . . 304

**10 Setting your preferences** **309**
10.1 Sharing your data in the global address book . . . 311
10.2 Restrict who can see your profile data . . . 311

**11 Universal access** **315**
11.1 Zoom and responsiveness . . . 315
11.2 Navigating via keyboard . . . 315
11.3 Included themes . . . 316

**12 Using two-factor authentication** **317**
12.1 Configuring two-factor authentication . . . 317
12.2 Recovery codes if you lose your second factor . . . 317
12.3 Logging in with two-factor authentication . . . 317
12.4 Using two-factor authentication with hardware tokens . . . 321
12.5 Using client applications with two-factor authentication . . . 321
12.6 Considerations . . . 321

**13 Manage connected browsers and devices** **323**
13.1 Managing connected browsers and devices . . . 323
13.2 Device-specific passwords and password changes . . . 325

CHAPTER

ONE

# NEXTCLOUD 36 USER MANUAL INTRODUCTION

**Welcome to Nextcloud: A safe home for all your data.**

Nextcloud is open source file sync and share software for everyone from individuals operating the free Nextcloud Server in the privacy of their own home, to large enterprises and service providers supported by the Nextcloud Enterprise Subscription. Nextcloud provides a safe, secure, and compliant file synchronization and sharing solution on servers that you control.

You can share one or more files and folders on your computer, and synchronize them with your Nextcloud server. Place files in your local shared directories, and those files are immediately synchronized to the server and to other devices using the Nextcloud Desktop Sync Client, Android app, or iOS app.

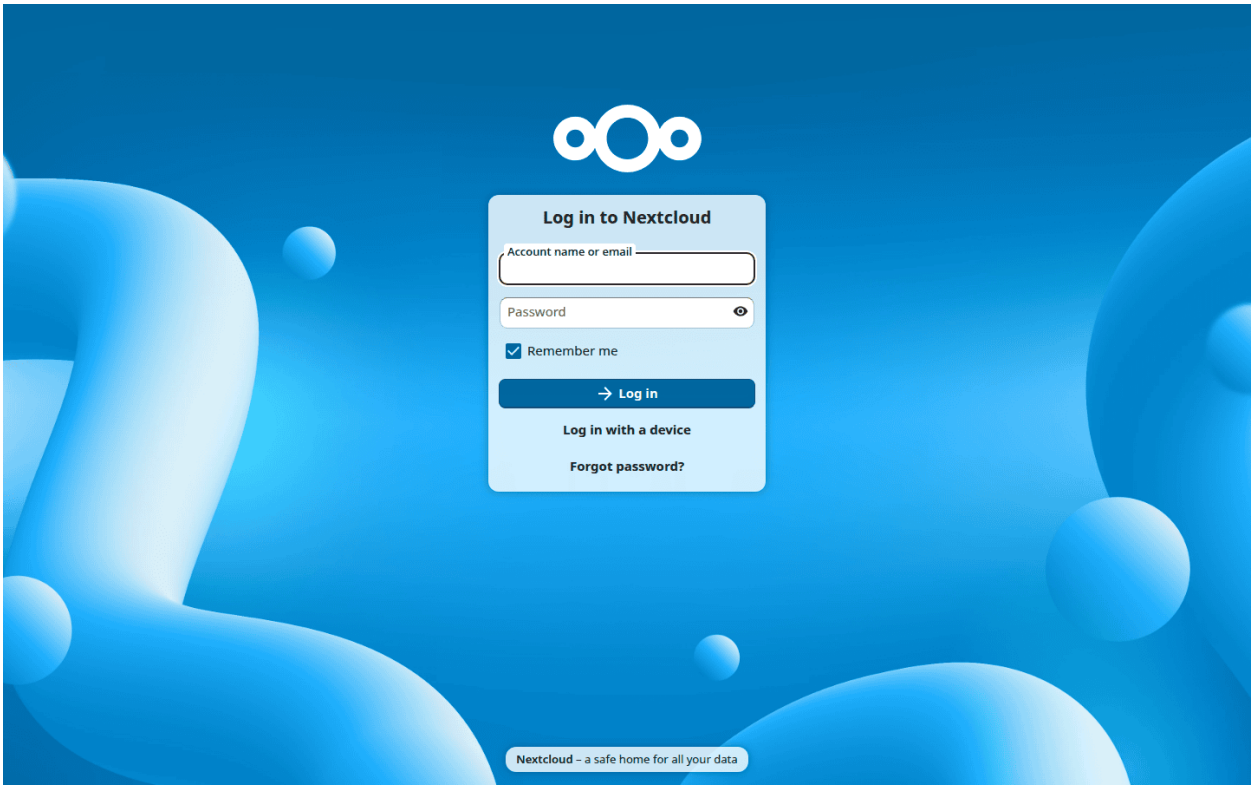
Help translate.

CHAPTER

TWO

# THE NEXTCLOUD WEB INTERFACE

Open your Nextcloud server's URL in any web browser and log in with your account name (or email address) and password:




You can also log in using a passkey or hardware security key by clicking **Log in with a device**.

## 2.1 Web browser requirements

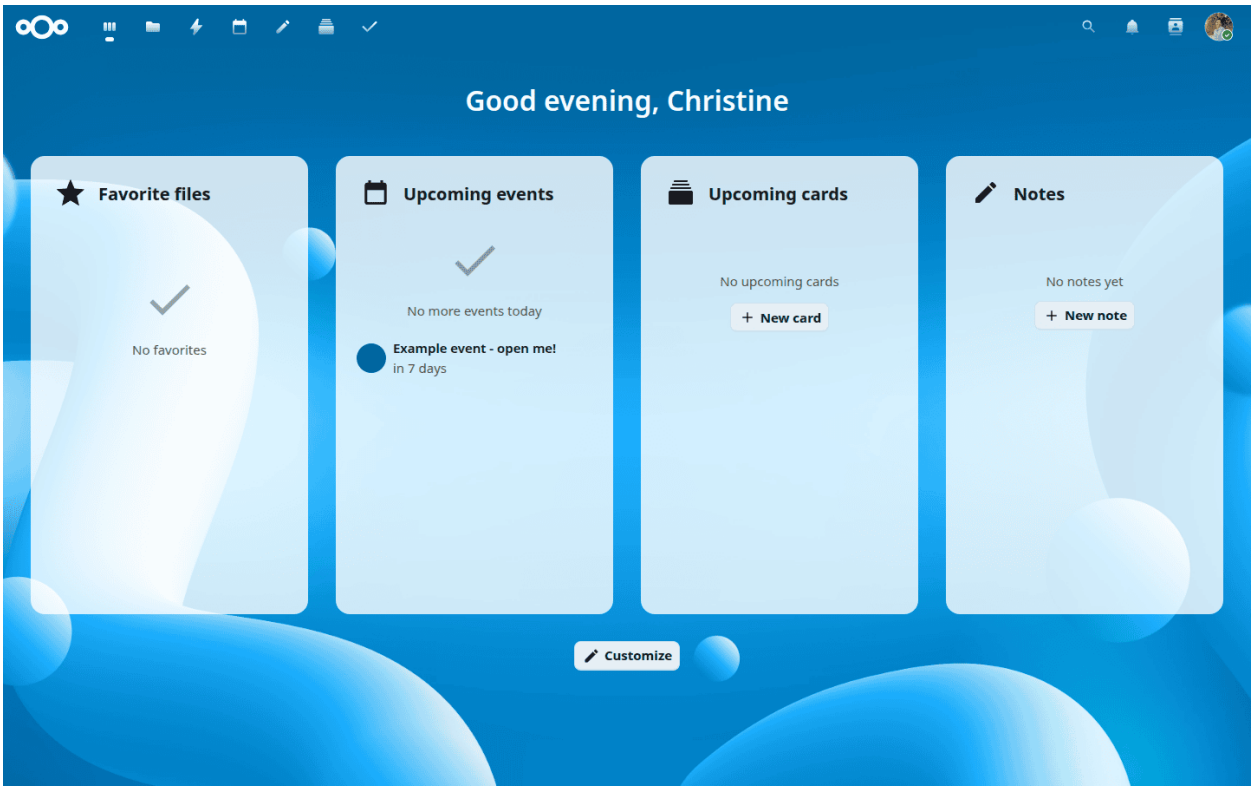
For the best experience, use the latest version of one of these browsers:

- Google **Chrome** / Chromium
- Mozilla **Firefox**
- Apple **Safari**
- Microsoft **Edge**

> **Note**
>
> Not all versions are supported. Nextcloud targets browsers meeting the minimum usage threshold.

## 2.2 The Dashboard

After logging in, Nextcloud opens the **Dashboard** — a customisable overview of your most important activity: upcoming calendar events, unread messages, recent files, and more.




Use the **Customise** button at the bottom of the page to add, remove, or rearrange widgets to suit your workflow.

## 2.3 Navigating the interface

The navigation bar at the top of every page is your main access point:

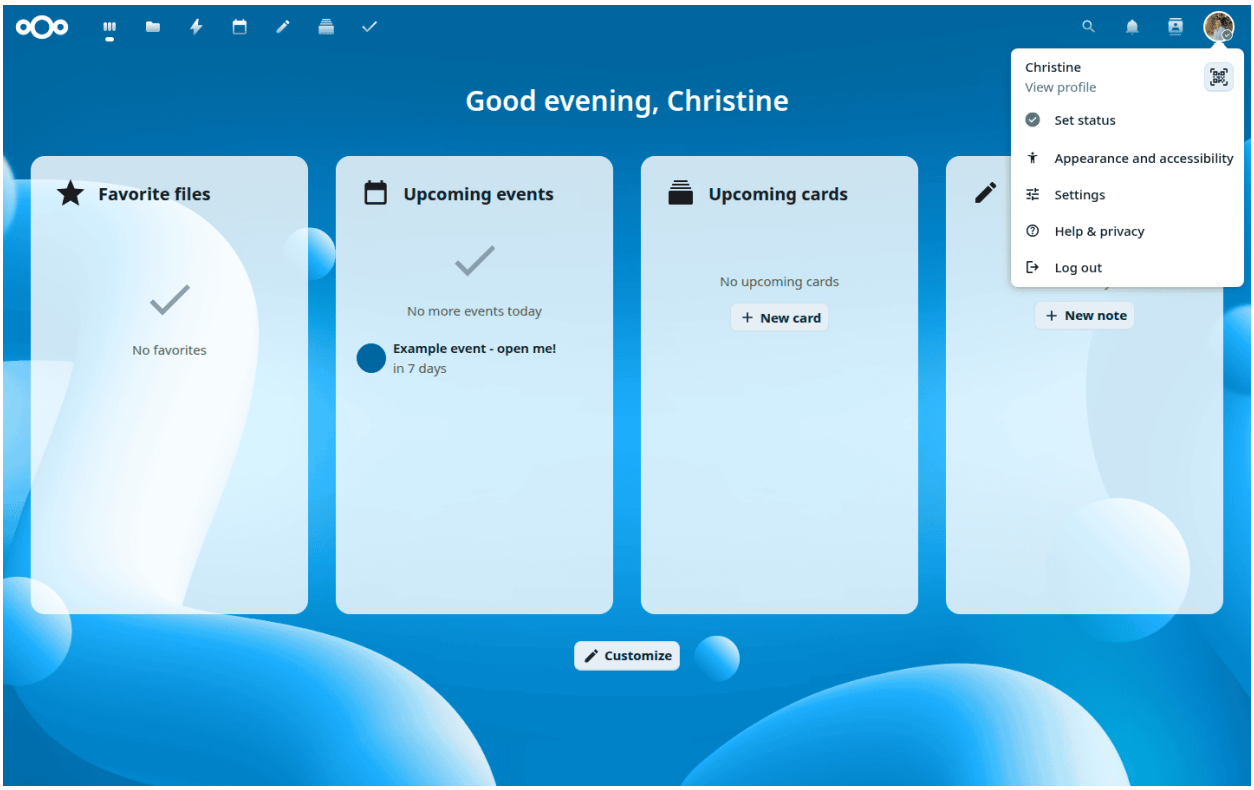


- The **Nextcloud logo** (top left) takes you back to the Dashboard.
- **App shortcuts** are shown next to the logo — click any icon to switch to that app (Files, Calendar, Talk, and so on).
- The **search icon** on the right opens *unified search*, which searches across all your apps at once.
- The **bell icon** shows your notifications.
- The **contacts icon** lets you quickly look up and contact other users on your server.
- Your **profile picture** (far right) opens the settings menu.

Each app also has its own **left sidebar** with filters and actions specific to that app.

## 2.4 Settings and profile

Click your profile picture to access your account options:




From this menu you can:

- View and edit your profile
- Set your online status
- Change appearance and accessibility settings
- Open your personal *Settings* page
- Access help and privacy information
- Log out

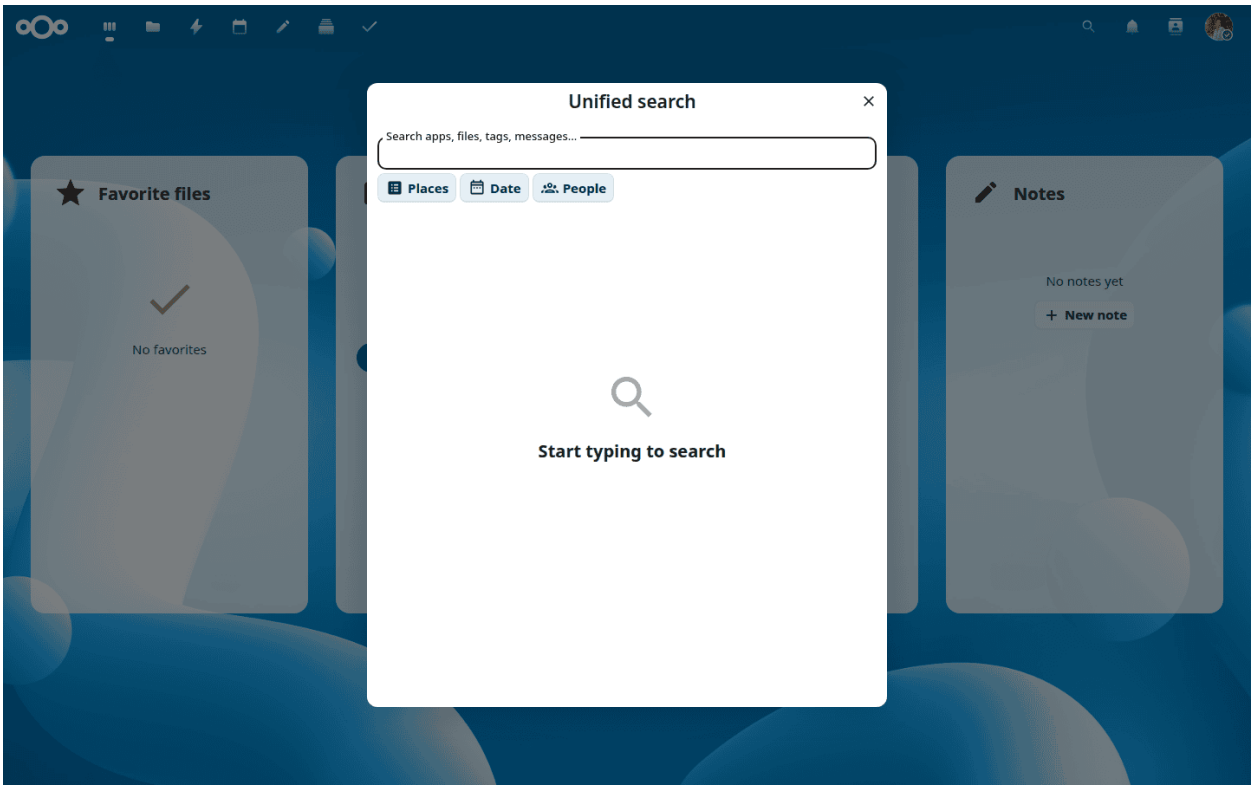
## 2.5 Unified search

Click the search icon in the navigation bar (or press `Ctrl+F`) to open the unified search modal:

Unified search looks across all your installed apps — files, calendar events, messages, contacts, and more — at once. Results are grouped by app so you can quickly see where a match was found.

Use the filter chips to narrow results:

- **Places** — limit the search to a specific app, such as Files or Calendar.
- **Date** — filter by time period (today, last 7 days, last 30 days, this year, or a custom range).




- **People** — show only results related to a specific person.

CHAPTER

THREE

# USING THE ACTIVITY APP

The Activity app keeps track of everything happening in your Nextcloud. It records events such as file changes, shares, calendar updates, and more, giving you a chronological overview of what happened and when.

The Activity app is enabled by default.

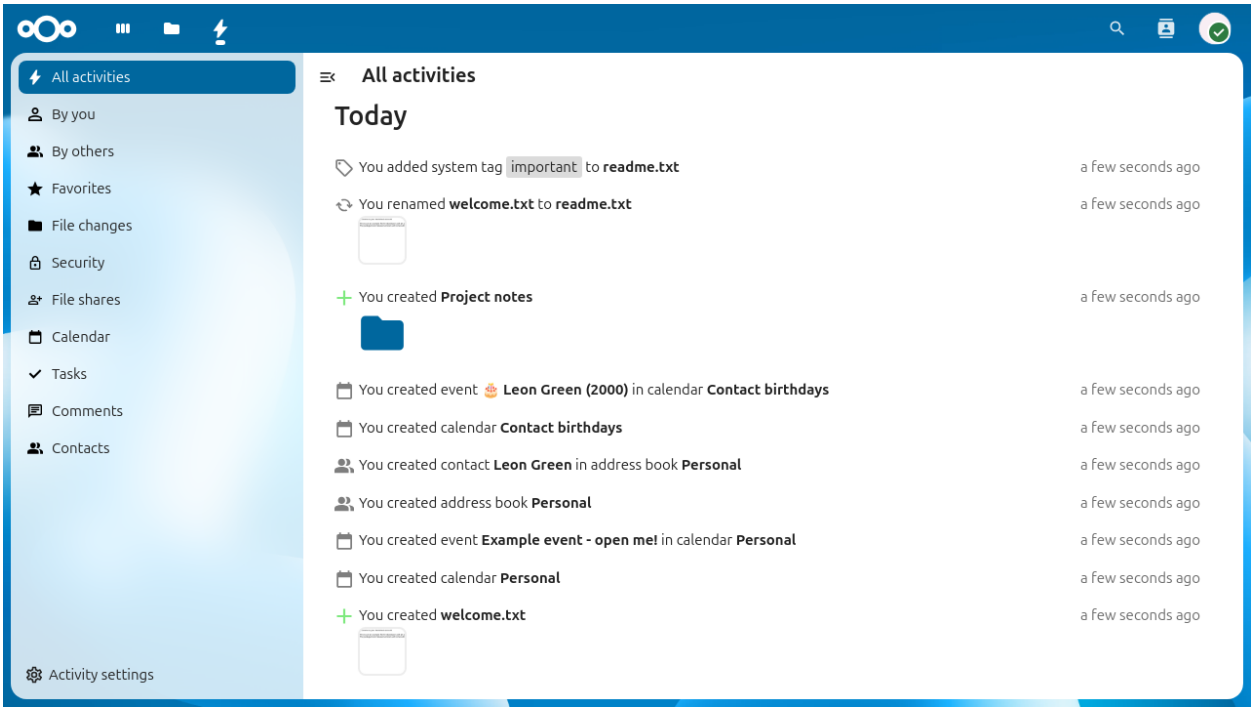



Fig. 1: *The Activity stream showing all recent activities.*

## 3.1 Viewing your activity stream

To view your activity stream, click on the **Activity** icon in the top navigation bar or navigate to `/apps/activity` in your browser.

The stream shows all events grouped by day. Each entry shows what happened, which file or object was affected, and how long ago the event occurred. Entries from other apps such as Calendar, Contacts, or Talk also appear in the stream if those apps are installed.

### 3.1.1 Filtering activities

The left sidebar provides filters to narrow down the activity stream:

- **All activities** shows everything.
- **By you** shows only activities that you triggered yourself.
- **By others** shows only activities triggered by other users.
- **File changes** shows only file and folder events (create, modify, delete, rename, move).

Additional filters may appear depending on which apps are installed on your Nextcloud instance (e.g. **Favorites**, **Calendar**, **Contacts**).

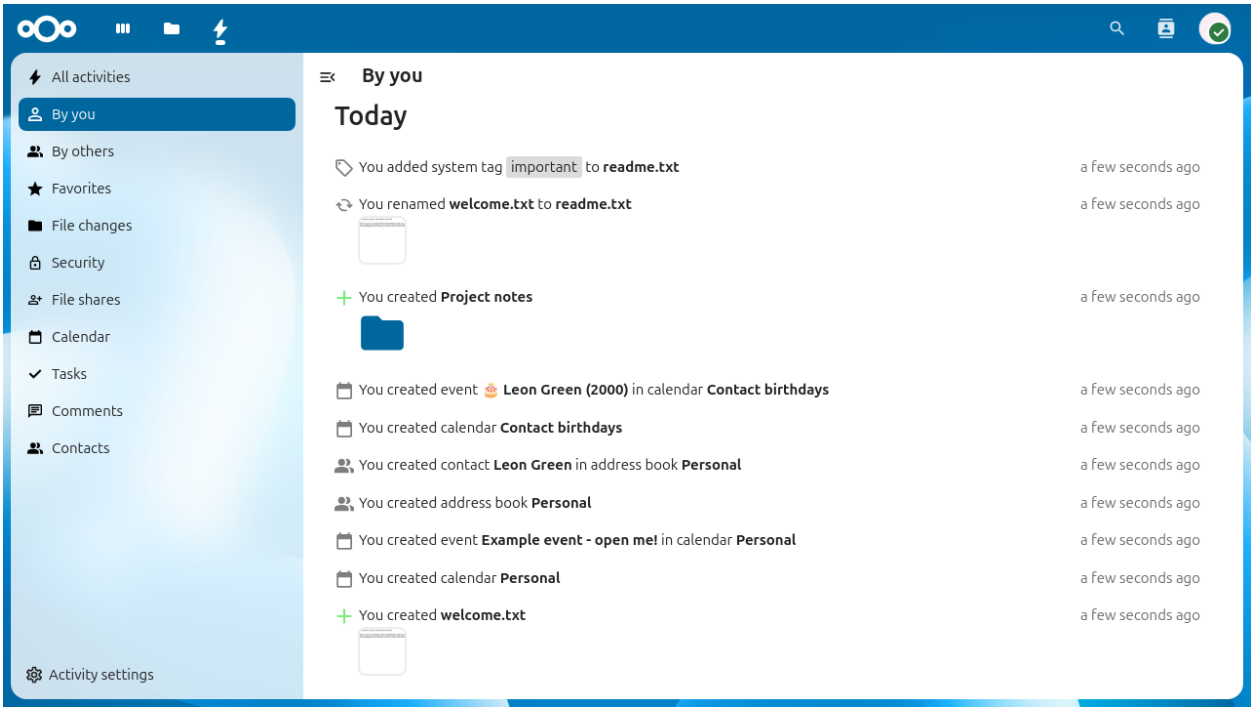



Fig. 2: *The activity stream filtered to show only your own activities.*

## 3.2 Activity in the Files sidebar

You can also view activities for a specific file or folder directly from the Files app. Select a file, open the sidebar and click on the **Activity** tab. This shows only the events related to that particular file, such as when it was created, modified, shared, or tagged.

## 3.3 RSS feed

The Activity app can provide your activity stream as an RSS feed, allowing you to follow your Nextcloud activity from any feed reader.

To enable the RSS feed:

1. Open the Activity app.
2. Click **Activity settings** at the bottom of the left sidebar.

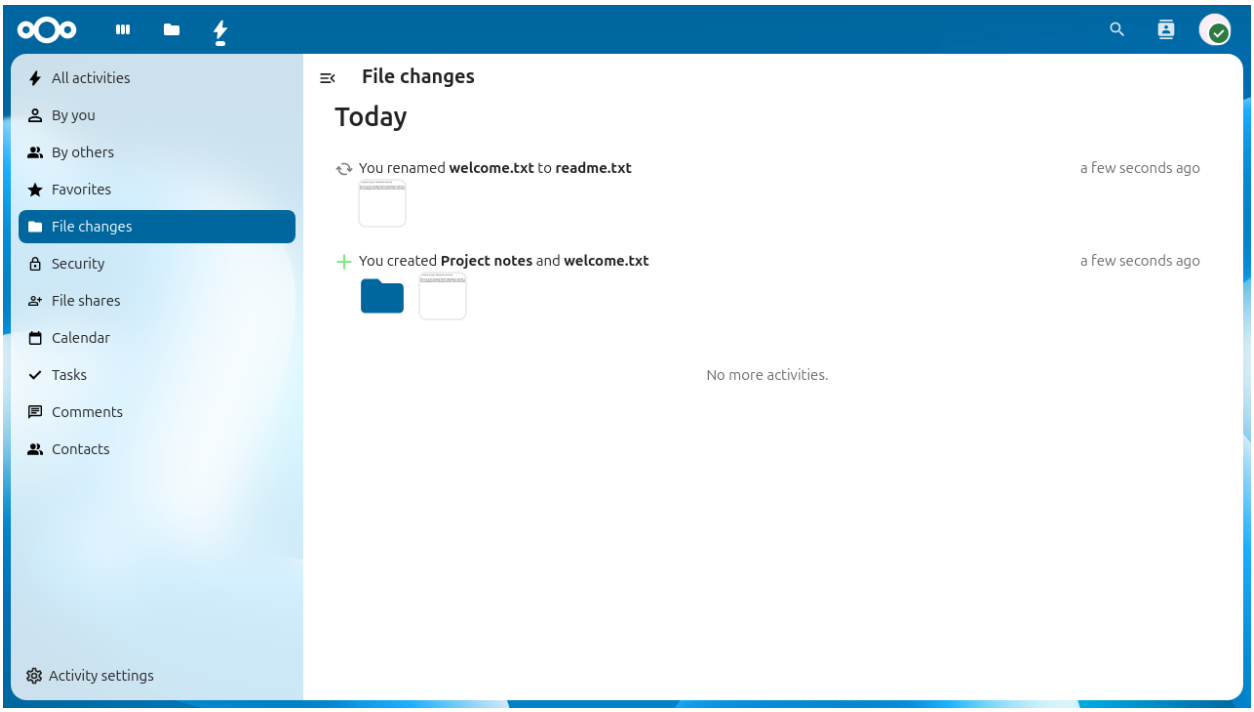



Fig. 3: *The activity stream filtered to file changes only.*

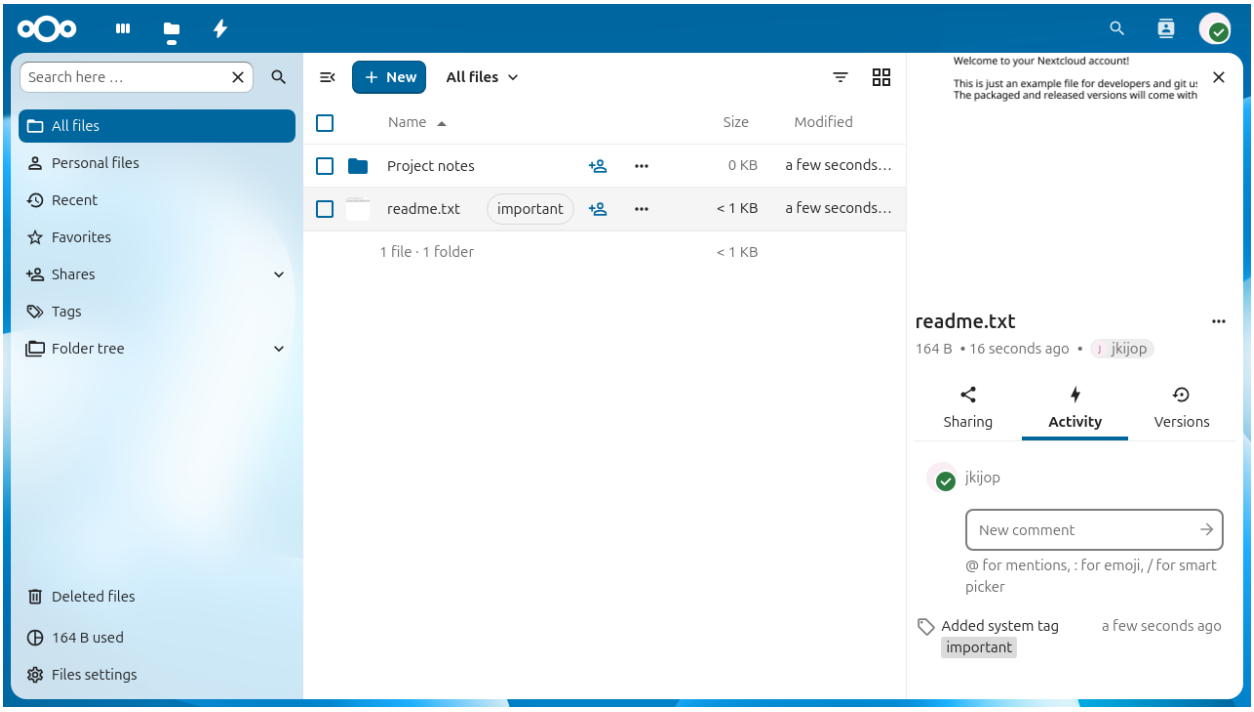



Fig. 4: *The Activity tab in the Files sidebar showing per-file events.*

3. Enable the **Enable RSS feed** toggle.
4. Copy the RSS feed link that appears.

> **Note**
>
> The RSS feed link contains a secret token. Do not share it with others, as it provides unauthenticated access to your activity stream.

## 3.4 Notification settings

You can choose how you want to be notified about different types of activities. Go to **Settings > Personal > Notifications** to configure your preferences.

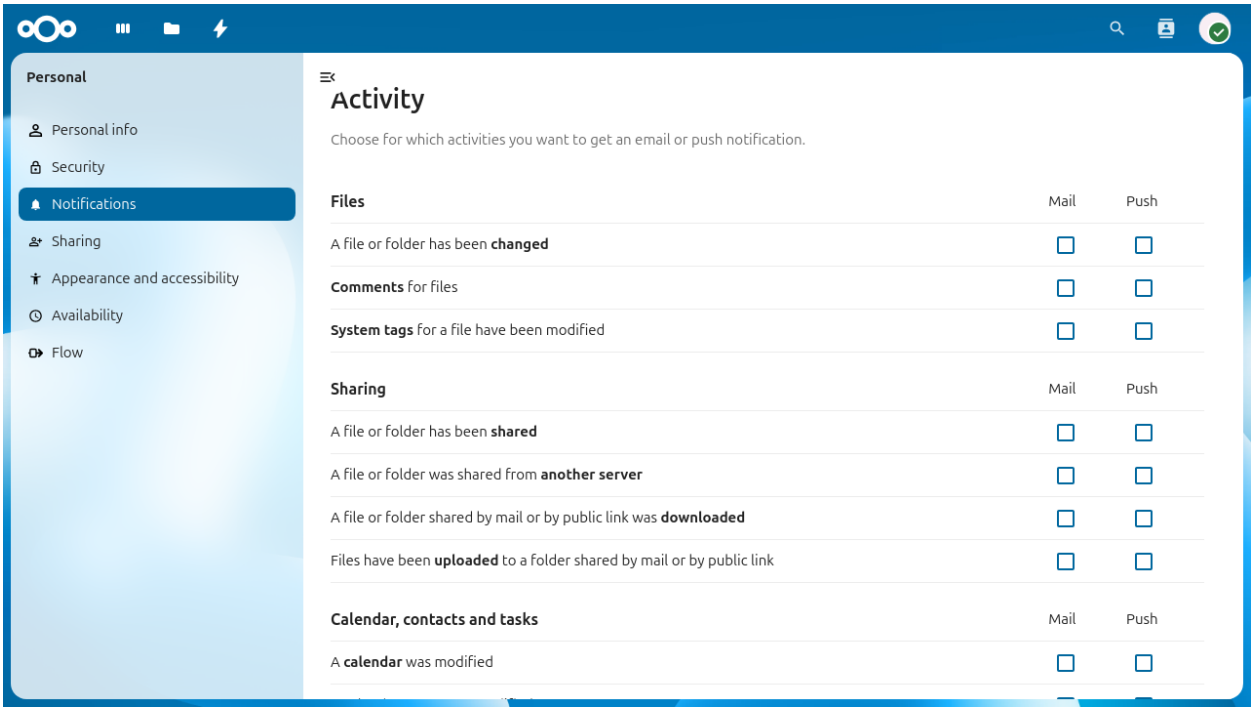



Fig. 5: *Personal notification settings for the Activity app.*

The settings are organized by category (e.g. **Files**, **Sharing**, **Calendar, contacts and tasks**). For each activity type you can choose to receive:

- **Mail** notifications (email)
- **Push** notifications (mobile and desktop)

Check or uncheck the corresponding boxes to enable or disable notifications for each activity type.

### 3.4.1 Email notification frequency

Below the notification matrix you can choose how often email notifications are sent:

- **As soon as possible** sends an email shortly after each event.
- **Hourly** batches notifications and sends them once per hour.

- **Daily** sends a single email per day.
- **Weekly** sends a single email per week.

### 3.4.2 Daily activity summary

You can enable a daily summary email that is sent every morning with an overview of the previous day's activities. This option is available as a separate toggle below the notification frequency setting:

- Check **Send daily activity summary in the morning** to enable it.

The daily summary is independent of the per-event notifications above and provides a convenient digest of all activity.

CHAPTER

# FOUR

# AI ASSISTANT

The Nextcloud AI assistant gives you access to AI-powered tools directly from the web interface. You can run tasks such as text summarization, image generation, and speech transcription, have back-and-forth conversations with a connected language model, and insert AI-generated content into documents and messages using smart pickers.

> **Note**
>
> The AI assistant requires at least one AI backend app to be installed and configured by your administrator. See the AI assistant administration documentation for details.

## 4.1 Personal settings

The assistant personal settings are in **Personal settings** under the **Artificial intelligence** section. You can disable the assistant top menu entry there, enable or disable the AI-related smart pickers, and change the name of the folder the assistant saves its output to.

## 4.2 Where generated content is saved

Content the assistant generates for you, such as generated images and speech-to-text output, is saved to a folder in your Files. It is called `Assistant` unless your administrator has chosen a different name for the instance.

You can pick your own name for it under **Data folder** in the assistant personal settings. Leave the field empty to keep the name your administrator has set; the placeholder shows what that is.

> **Note**
>
> Changing the name does not rename or move the folder you already have. It applies the next time a folder has to be created, so anything generated before the change stays where it is.

## 4.3 Running a task

To open the assistant, click the assistant icon in the top-right navigation bar.

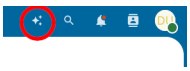


Fig. 1: *Figure 1: The assistant icon in the top-right navigation bar.*

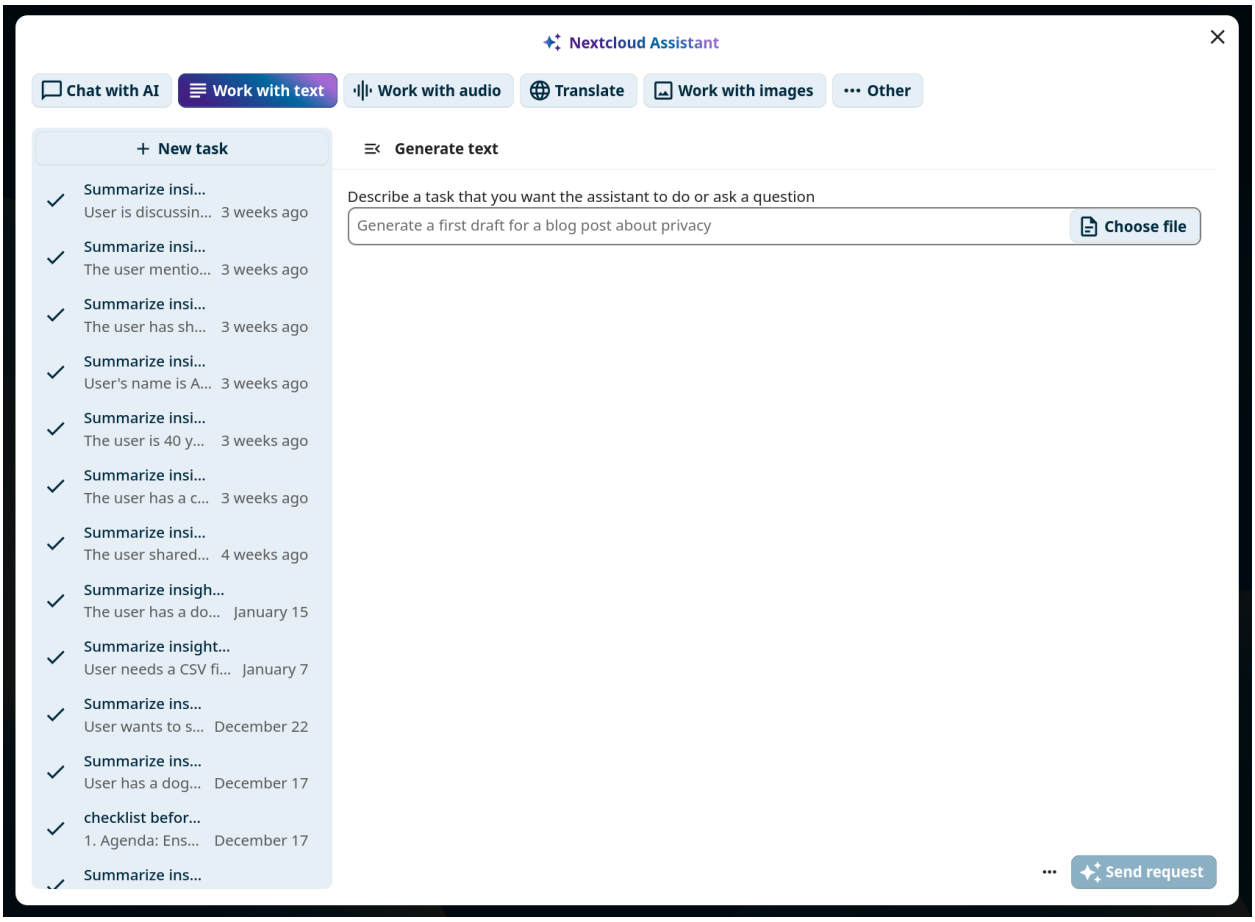



Fig. 2: *Figure 2: The assistant task form.*

Choose a task type at the top of the assistant panel, fill in the input form, and click the submit button at the bottom right.

Your task will run immediately if possible, or be scheduled for later execution.

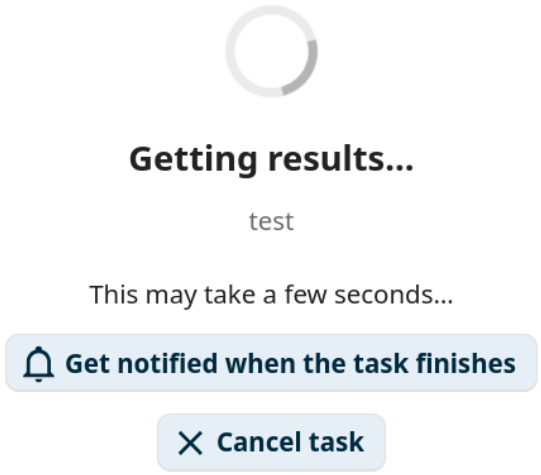



Fig. 3: *Figure 3: Waiting for task results.*

## 4.4 Notifications

If a task was scheduled, you can request to receive a notification when it finishes. Click the **View results** button in the notification to display the task output.

## 4.5 Task history

The left panel of the assistant shows a task history list filtered to the currently selected task type. You can relaunch, delete, or cancel previous tasks from this list.

## 4.6 Chat with AI

The **Chat with AI** tab in the assistant lets you have a back-and-forth conversation with the connected AI. Type a message into the text field at the bottom and press `Enter` to send. Click **New conversation** to start a separate conversation thread.

Each conversation has its own context. Toggle **Remember this** on a conversation to add it to the AI's long-term memory so that its context is available in any future conversation. Toggle it off again to remove the conversation from memory.

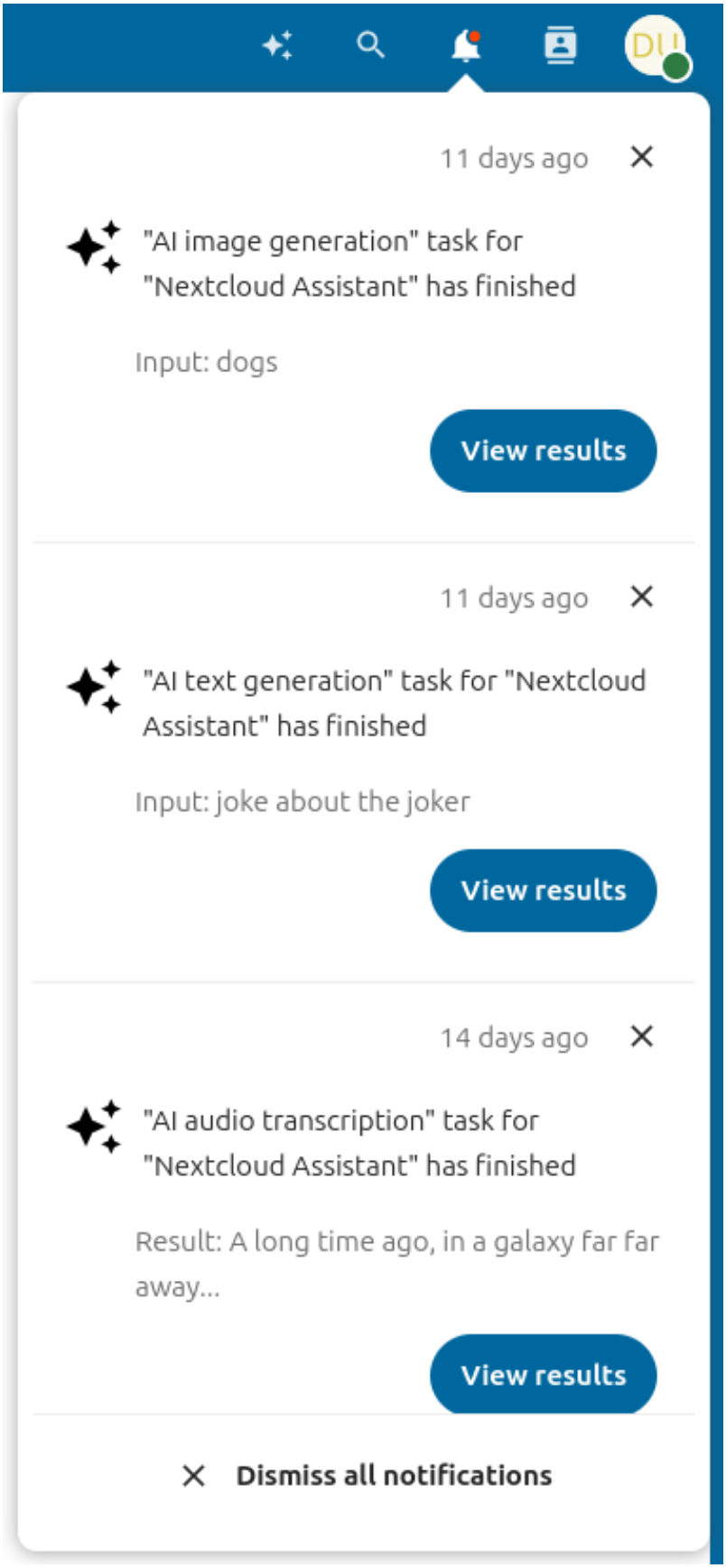



Fig. 4: *Figure 4: Task completion notification.*

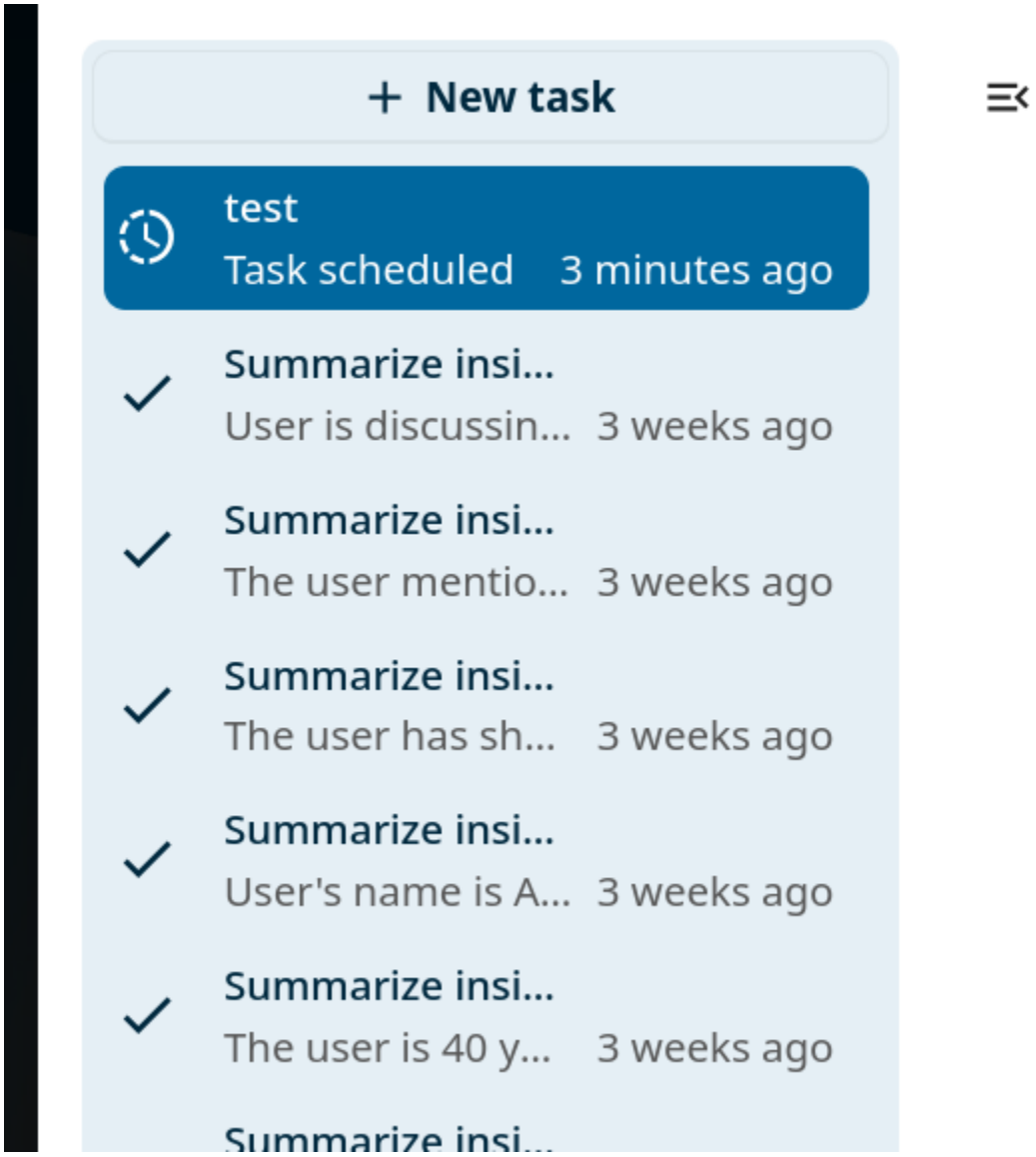



Fig. 5: *Figure 5: Task history in the left panel.*

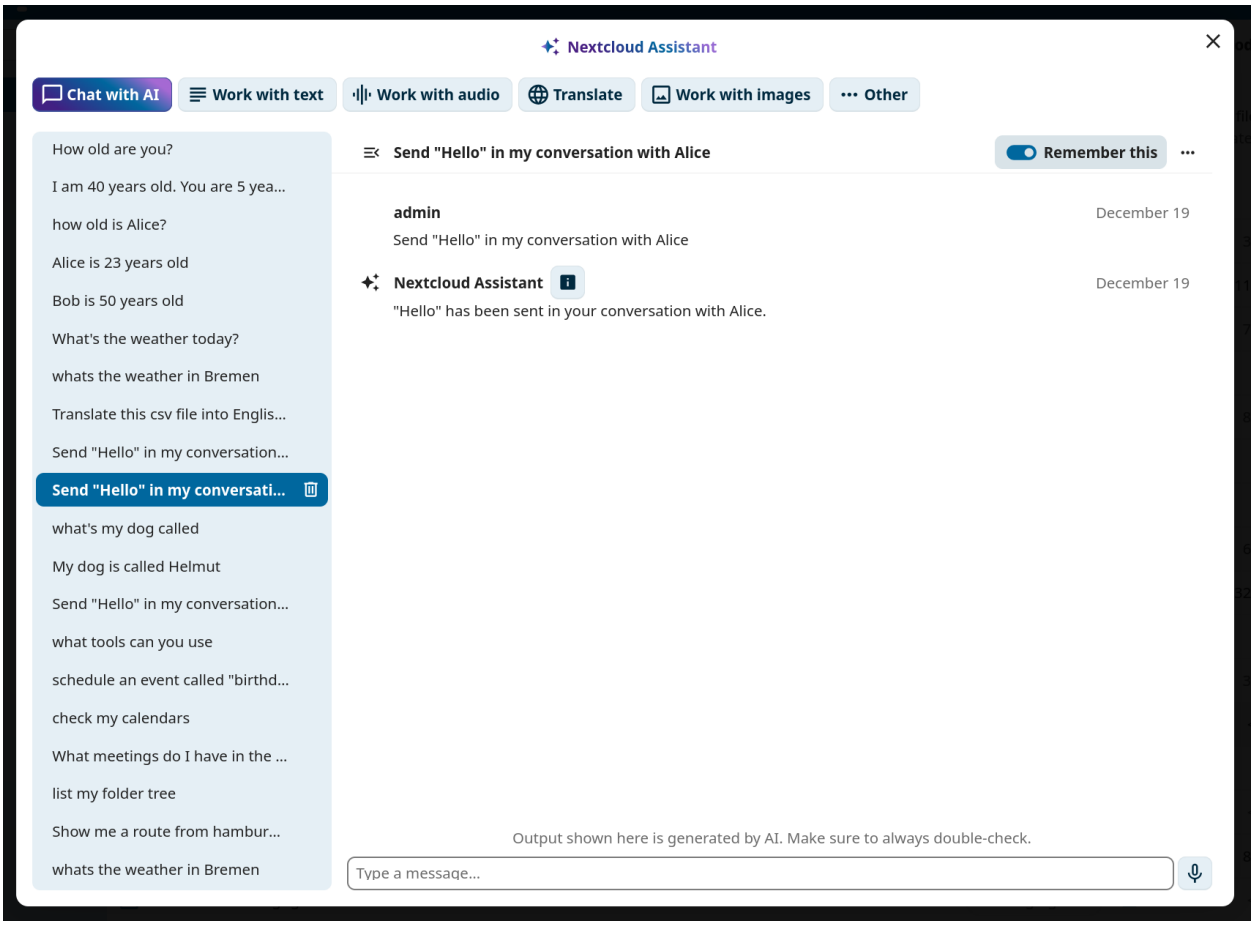



Fig. 6: *Figure 6: Chat with AI interface.*

In the **AI assistant** section of your Personal settings, you can review all your remembered conversations.

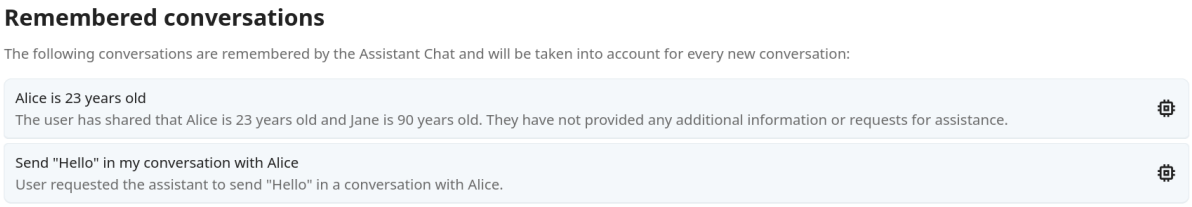



Fig. 7: *Figure 7: Remembered conversations listed in personal settings.*

## 4.7 Smart pickers

The assistant app provides three smart pickers accessible in Talk, Text editor, and any other place where rich text editing is available. Type `/` followed by `ai` to see the filtered provider list.

In Talk:

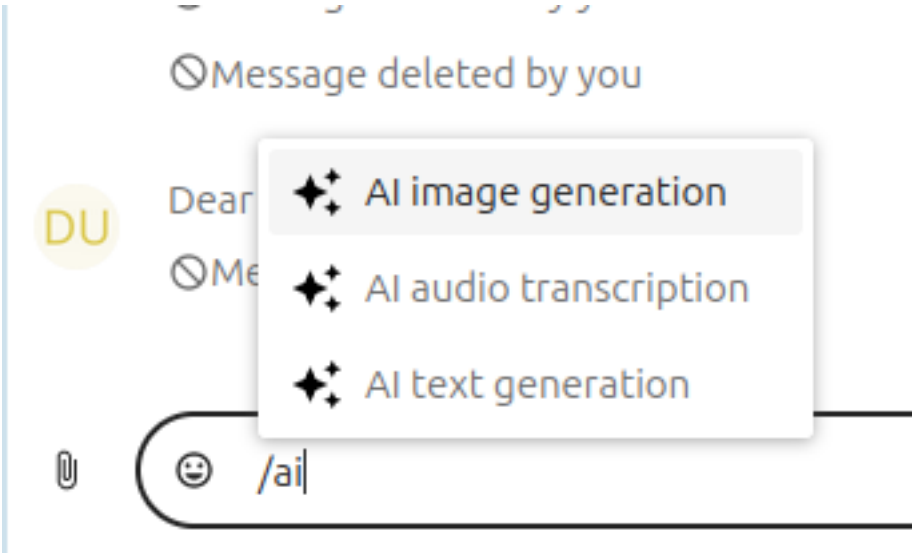



Fig. 8: *Figure 8: AI smart picker in Talk.*

In Text editor:

Any result generated through the smart picker can be inserted directly into the current context.

## 4.8 Context Agent

When the administrator installs the Context Agent app, the AI assistant automatically gains the ability to interact with your Nextcloud apps. No additional setup is needed on your end, the agent tools become available in the same **Chat with AI** interface described above.

With Context Agent enabled, you can ask the assistant to perform actions across Nextcloud by typing natural-language instructions in the chat. The assistant uses “tools” behind the scenes to carry out your requests.

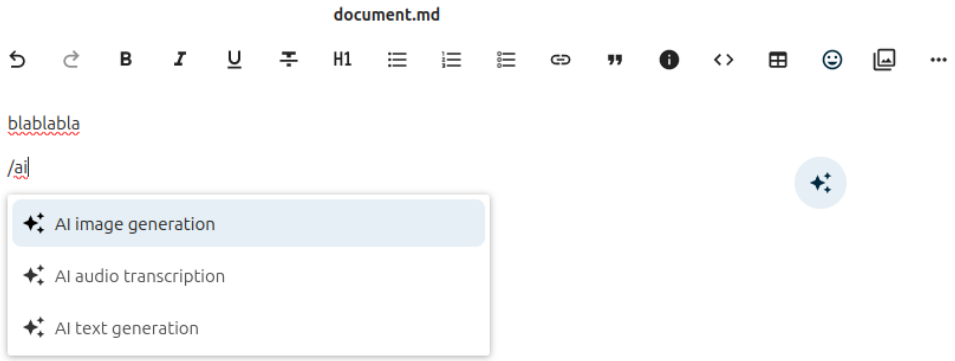



Fig. 9: *Figure 9: AI smart picker in the Text editor.*

**Note**

Available tools depend on which apps are installed on your Nextcloud instance and which tool groups your administrator has enabled. Some examples below require specific apps such as Deck, Talk, or Mail.

### 4.8.1 Example prompts

Below are examples of what you can ask the assistant to do. Combine multiple instructions in a single message and the agent will chain the necessary tools automatically.

#### Artificial intelligence tools

- Ask a question to context chat (requires Context Chat)
  - Example prompt: *"What is the company's sick leave process?"*
- Transcribe a media file (requires Transcribe audio task type enabled)
  - Example prompt: *"Can you transcribe the following file? https://mycloud.com/f/9825679"* (Can be selected via smart picker.)
- Generate documents (requires Nextcloud Office)
  - Example prompt: *"Can you generate me a slide deck for my presentation about cats?"*
  - Example prompt: *"Can you generate me a spreadsheet with some plausible numbers for countries and their population count?"*
  - Example prompt: *"Can you generate me a pdf with an outline about what to see in Berlin?"*
- Generate images (requires Image generation task type enabled)
  - Example prompt: *"Can you generate me an image of a cartoon drawing of a roman soldier typing something on a laptop?"*

#### Calendar tools

- List the user's calendars
  - Example prompt: *"List my calendars"*
- Schedule an event in the user's calendar

  - Example prompt: *"Schedule an event with Andrew tomorrow at noon."*
- Find free times in users' calendar
  - Example prompt: *"Find a free 1-hour slot for a meeting with me and Marco next week."*

### Tasks tools

- Create a task
  - Example prompt: *"Create a task for grocery shopping with due date tomorrow."*
- List tasks
  - Example prompt: *"List my outstanding tasks"*
- Complete a task
  - Example prompt: *"Mark the grocery shopping task as completed."*
- Update a task's details
  - Example prompt: *"Change the priority of the grocery shopping task to the highest possible priority."*
  - Example prompt: *"Change the due date of my work report task to the beginning of next week."*
- Delete a task
  - Example prompt: *"Delete the grocery shopping task in my tasks."*

### Circles/teams tools

- List circles
  - Example prompt: *"List all my teams."*
- List circle members
  - Example prompt: *"List all members of my Content Marketing team."*
- Create new circle
  - Example prompt: *"Create a new team called 'Hiking group'."*
- Add members to circles
  - Example prompt: *"Add Ralph to the Hiking group team."*
- Remove members from circles
  - Example prompt: *"Remove ralph from the Hiking group team."*
- Change circle details
  - Example prompt: *"Change the name of the Hiking group team to 'Outdoor group'."*
  - Example prompt: *"Add the following description to the Hiking group team: We go hiking together once a month. Come join us."*
- Delete a circle
  - Example prompt: *"Delete the Hiking group team."*
- Share a file with a circle
  - Example prompt: *"Share my Hiking plans.md file with the Hiking group team."*

### Contacts tools

- Find a contact
  - Example prompt: *"What is Anna's email address?"*
- Find a user's ID
  - Example prompt: *"What is Ralph's userID?"*
- Find the current user's details
  - Example prompt: *"Where do I live?"*

### Cookbook tools

- List recipes
  - Example prompt: *"List my recipes."*
- Search for recipes
  - Example prompt: *"Do I have any Spaghetti recipes?"*
- Get recipe details
  - Example prompt: *"Can you give me the details of my Spaghetti Carbonara recipe?"*
- Create a new recipe
  - Example prompt: *"Create a recipe for Guacamole in my cookbook."*
- Delete a recipe
  - Example prompt: *"Remove the Guacamole recipe from my cookbook."*
- List recipe categories
  - Example prompt: *"Which recipe categories do I have in my cookbook?"*

### Deck tools (require Deck)

- List deck boards
  - Example prompt: *"List the deck boards I have access to."*
- List the cards on a deck board
  - Example prompt: *"List the cards on my Personal deck board."*
- Add a new card
  - Example prompt: *"Can you add a card with title 'Repair kitchen sink' to my Personal deck board?"*
- Add a label to a card
  - Example prompt: *"Can you add the label 'Urgent' to the 'repair kitchen sink' card in my personal deck board?"*
- Assign a card to a user
  - Example prompt: *"Can you assign the 'Repair kitchen sink' card in my Personal deck board to Andrew?"*
- Delete a card
  - Example prompt: *"Delete the 'Repair kitchen sink' card in my Personal deck board."*
- List the comments on a deck card
  - Example prompt: *"Show the comments on the 'Repair kitchen sink' card in my Personal deck board."*

- Add a comment to a deck card
  - Example prompt: *"Add a comment 'I'll handle this Friday' to 'Repair kitchen sink' in my Personal deck board."*
- Edit a comment on a deck card
  - Example prompt: *"Update my last comment on the 'Repair kitchen sink' card to say 'Moved to Saturday'."*
- Delete a comment on a deck card
  - Example prompt: *"Delete my last comment on the 'Repair kitchen sink' card in my Personal deck board."*

### Files tools

- Get contents of a file
  - Example prompt: *"Can you fetch the following file in my documents? Design/Planning.md"*
  - Example prompt: *"Can you fetch the following file in my documents? https://mycloud.com/f/98543234"*
- Retrieve folder tree
  - Example prompt: *"List my files."*
- Create a public link for a file or folder
  - Example prompt: *"Create a public link for the following file: Design/Planning.md"*
- Create a new file
  - Example prompt: *"Create a new file Ideas.md in my files and fill it with ideas for hiking destinations in the black forest."*
- Create a new folder
  - Example prompt: *"Create a new folder 'Hiking plans' in my files."*
- Move a file
  - Example prompt: *"Move the Ideas.md file into the Hiking plans folder."*
- Copy a file
  - Example prompt: *"Copy the Ideas.md file into my Notes folder."*
- Delete a file
  - Example prompt: *"Delete the Ideas.md file."*

### Forms tools

- List all forms
  - Example prompt: *"List all the forms I have access to."*
- Get details of a form
  - Example prompt: *"Can you give me all details about the Retreat signup form?"*
- Add a question to a form
  - Example prompt: *"Add the following question to the retreat signup form: 'Number of days attending'."*
- Retrieve all responses of a form
  - Example prompt: *"List all responses to the Retreat signup form."*
- Update form settings

  - Example prompt: *"Make the Retreat signup form expire end of next week."*
- Delete a form
  - Example prompt: *"Delete the Retreat signup form."*

### Bookmarks tools

- List all bookmarks
  - Example prompt: *"List all my bookmarks."*
- Add a bookmark
  - Example prompt: *"Add a bookmark for https://nextcloud.com with title 'Nextcloud homepage'."*
- Delete a bookmark
  - Example prompt: *"Delete the bookmark for https://nextcloud.com."*
- Update a bookmark
  - Example prompt: *"Change the title of the bookmark for https://nextcloud.com to 'Nextcloud official homepage'."*
  - Example prompt: *"Add the tag 'cloud' to the bookmark for https://nextcloud.com."*
  - Example prompt: *"Remove the tag 'cloud' from the bookmark for https://nextcloud.com."*
  - Example prompt: *"Put the bookmark for https://nextcloud.com into the 'work' folder."*
- List bookmark folders
  - Example prompt: *"Which bookmark folders do I have?"*
- Create a bookmark folder
  - Example prompt: *"Create a bookmark folder called 'work'."*
- List bookmark tags
  - Example prompt: *"Which bookmark tags do I have?"*

### Search tools

All search providers in Nextcloud are also automatically available as tools.

- Search for files
  - Example prompt: *"List all the powerpoint presentations in my files with file ending pptx."*

### Share tools

- List shares
  - Example prompt: *"List all files that were shared with me."*
  - Example prompt: *"List the shares of the Design/Ideas.md file."*
- Share a file or folder with a user
  - Example prompt: *"Share the Design/Ideas.md file with the user martin."*
- Share a file or folder with a group
  - Example prompt: *"Share the Design/Ideas.md file with the group Designers."*
- Update a share's permissions
  - Example prompt: *"Only allow martin read only access on the share of the Design/Ideas.md file."*

- Delete a share
  - Example prompt: *"Remove the share of the Design/Ideas.md file with martin."*
- List user groups
  - Example prompt: *"Which user groups are there?"*
- Retrieve share details
  - Example prompt: *"Does martin have write access to the Design/Ideas.md file I shared with him?"*

### Talk tools (require Talk)

- List the user's talk conversations
  - Example prompt: *"List my talk conversations"*
- List messages in a talk conversation
  - Example prompt: *"List the latest messages in my conversation with Andrew"*
- Send a message to a talk conversation
  - Example prompt: *"Can you send a joke to Andrew in talk?"*
- Create a public talk conversation
  - Example prompt: *"Can you create a new public talk conversation titled 'Press conference'?"*
- Reply to a specific message in a talk conversation
  - Example prompt: *"Reply to Andrew's last message in our talk conversation with 'Got it, thanks!'"*
- Add an emoji reaction to a message in a talk conversation
  - Example prompt: *"React with 👍 to Andrew's last message in our talk conversation"*
- Remove an emoji reaction from a message in a talk conversation
  - Example prompt: *"Remove my 👍 reaction from Andrew's last message"*
- List the reactions on a message in a talk conversation
  - Example prompt: *"Who reacted to Andrew's last message in our talk conversation?"*
- Create a poll in a talk conversation
  - Example prompt: *"Create a poll in the 'Team standup' conversation asking 'Which day works for the offsite?' with options Monday, Tuesday, Wednesday"*
- Get the question, options, and current results of a poll in a talk conversation
  - Example prompt: *"Show the current results of the offsite poll in the 'Team standup' conversation"*
- Cast a vote on a poll in a talk conversation
  - Example prompt: *"Vote for Tuesday on the offsite poll in the 'Team standup' conversation"*
- Close a poll in a talk conversation
  - Example prompt: *"Close the offsite poll in the 'Team standup' conversation"*
- Share a Nextcloud Files item to a talk conversation
  - Example prompt: *"Share the file 'Q3 plan.pdf' to my conversation with Andrew"*
- List items of a given type (e.g. file, location, poll) that were shared in a talk conversation
  - Example prompt: *"List the files shared in my conversation with Andrew"*

- Get an overview of items shared in a talk conversation across all types
  - Example prompt: *"Give me an overview of what's been shared in my conversation with Andrew"*

#### Mail tools (require Mail)

- Send an email via Nextcloud Mail
  - Example prompt: *"Send a test email from my carry@company.com account to Andrew@company.com"*
- List all connected mail accounts
  - Example prompt: *"List my mail accounts"*
- List all mail folders of an email account
  - Example prompt: *"List the folders of my carry@company.com account"*
- List the mails in a mail folder
  - Example prompt: *"List the last 5 mails in the inbox of my carry@company.com account"*

#### Miscellaneous tools

- Get coordinates for an Address from Open Street Maps Nomatim
  - Example prompt: *"What are the coordinates for Berlin, Germany?"*
- Get the URL for a map of a location using Open Street Maps
  - Example prompt: *"Can you show me a map of New York, please"*
- Get the current weather at a location
  - Example prompt: *"How is the weather in Berlin?"*
- Search for youtube videos
  - Example prompt: *"Show me the youtube video of the Nextcloud hub 10 launch."*
- Search Duckduckgo
  - Example prompt: *"Show me search results for quick pasta recipes, please."*
- Determine public transport routes
  - Example prompt: *"How can I get from Würzburg Hauptbahnhof to Berlin Hauptbahnhof?"*
- List all projects in OpenProject (requires the OpenProject integration)
  - Example prompt: *"List all my projects in OpenProject, please"*
- List all available assignees of a project in OpenProject (requires the OpenProject integration)
  - Example prompt: *"List all available assignees for the 'Product launch' project in OpenProject"*
- Create a new work package in a given project in OpenProject (requires the OpenProject integration)
  - Example prompt: *"Create a work package called 'Publish release video' in the 'Product launch' project in OpenProject"*

### 4.8.2 Combining tools

These tools can also be combined by the agent to fulfil tasks like the following:

- *"How is the weather where Andrew lives?"*
  - Uses contacts to look up Andrew's address and then checks the weather

- *"How is the weather where I live?"*
  - Look up the current user's address and then checks the weather
- *"Send an email from carry@company.com to Andrew"*
  - Uses contacts to look up Andrew's email and then sends an email
- *"Which of my files are from Anna?"*
  - Looks up Anna's userID and searches for files that belong to her
- *"Send the content of my draft.md file to Andrew in Talk"*
  - Gets the content of the file and sends it in a 1-1 Talk conversation with Andrew

### 4.8.3 Skills

Skills let you teach the Context Agent reusable instructions that it can follow whenever they are relevant. A skill is a small markdown file that describes a procedure, a set of rules, or domain-specific knowledge. Once a skill is saved, the agent automatically picks it up and applies it in future conversations without you having to repeat yourself.

**Note**

Skills require the Context Agent app version 2.8.0 or later and the Assistant app version 3.5.0 or later.
You can ask your administrator if these requirements are met or the agent directly if it has the ability to use skills.

#### Where skills are stored

Your personal skills live in your Nextcloud Files under `Context Agent/Skills/` inside the assistant data folder, so with the default folder name that is `Assistant/Context Agent/Skills/`.

Each skill is a subfolder containing a file called `SKILL.md`. The `SKILL.md` file starts with a YAML frontmatter block that defines the skill's name and description, followed by the skill content in Markdown:

```
---
name: weekly-report-format
description: Formatting rules for my weekly status reports
---

When I ask you to write a weekly report, use the following structure:
1. Summary (2-3 sentences)
2. Completed tasks (bullet list)
3. Blockers
4. Plan for next week
```

For example, a skill named "weekly-report-format" would be stored at `Assistant/Context Agent/Skills/weekly-report-format/SKILL.md`.

A typical skills folder structure looks like this:

```
Assistant/
└── Context Agent/
    └── Skills/
        ├── email-tone/
        │   └── SKILL.md
```

(continues on next page)

(continued from previous page)

```
        ├── weekly-report-format/
        │   └── SKILL.md
        └── meeting-notes/
            └── SKILL.md
```

### Creating a skill

You can create a skill in two ways:

- Manually: create a subfolder under `Assistant/Context Agent/Skills/` in your Files, then add a `SKILL.md` file with the frontmatter and content shown above.
- Through the chat: ask the agent to create a skill for you. For example:
  - "Create a skill called 'email-tone' that reminds you to always write emails in a friendly and professional tone."
  - "Save a skill for summarizing meeting notes with action items and owners."

  The agent will create the folder and `SKILL.md` file for you automatically.

### Listing and using skills

To see which skills are available, ask the agent:

- "List my skills."

You do not need to explicitly invoke a skill. The agent reads all available skill descriptions and applies the relevant ones based on the context of your conversation.

### Admin-provided skills

Your administrator can configure a global skills folder that provides skills to all users on the instance. These global skills appear alongside your personal skills.

If a global skill has the same name as one of your personal skills, your personal version takes precedence.

## 4.8.4 Using Nextcloud as an MCP server

The Context Agent app exposes your Nextcloud as a Model Context Protocol (MCP) server. This means you can connect your Nextcloud instance to external AI tools and agents such as Pi Agent, Claude Code, Hermes, OpenCode or any other MCP-compatible client and let them use the same tools that are available in the Assistant chat.

The MCP server endpoint is:

```
https://your-nextcloud-domain.com/index.php/apps/app_api/proxy/context_agent/mcp/
```

Authentication is done with an app password. You can create one in "Personal settings -> Security -> Devices & sessions".

## 4.8.5 Connecting MCP clients

Any MCP-compatible client that supports the `streamable_http` transport can connect to the Nextcloud MCP server. Point the client to the endpoint URL shown above and pass the app password in the `Authorization: Bearer <app-password>` header.

Once connected, the external client can use all the same Context Agent tools, managing files, calendars, tasks, contacts, Talk conversations, and more directly from outside Nextcloud.

CHAPTER

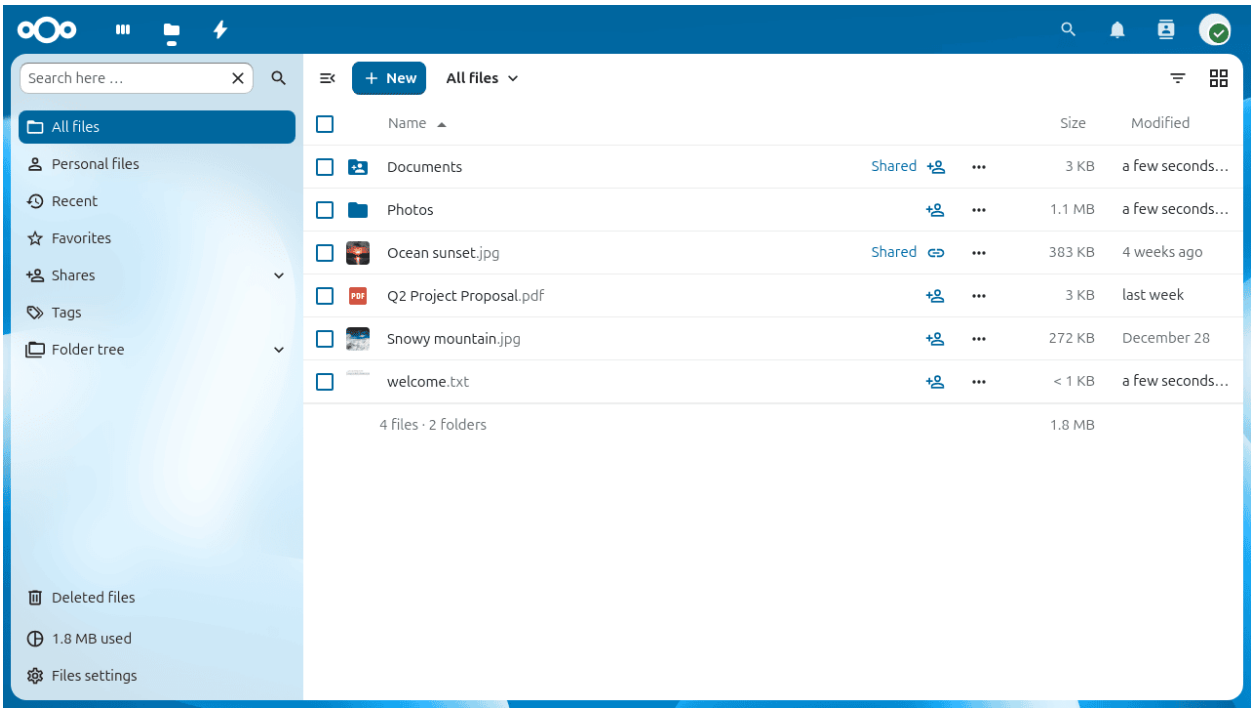
FIVE

# FILES & SYNCHRONIZATION

## 5.1 Accessing your files

### 5.1.1 Accessing your files using the Nextcloud web interface

You can access your Nextcloud files with the Nextcloud Web interface and create, preview, edit, delete, share, and re-share files. Your Nextcloud administrator has the option to disable these features, so if any of them are missing on your system ask your server administrator.

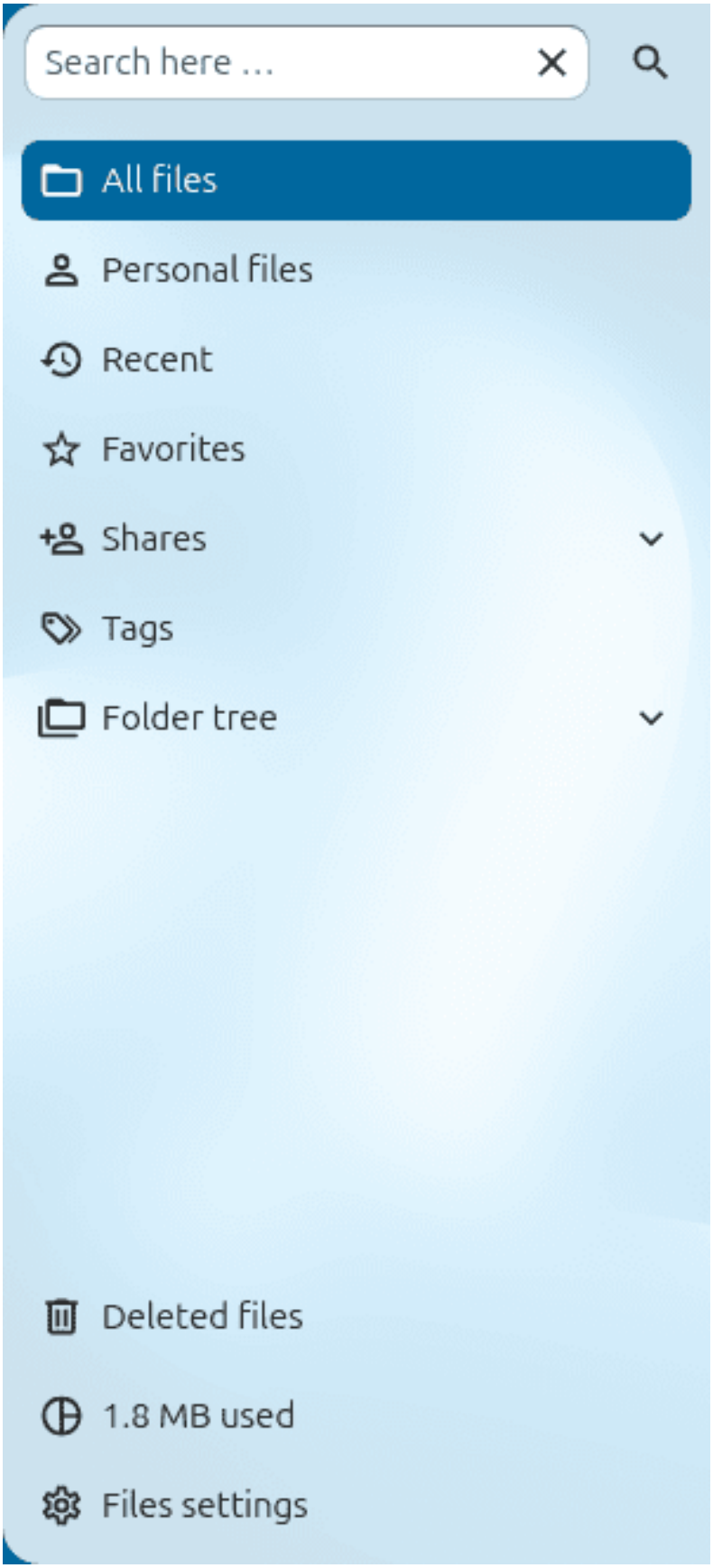



#### Navigating your files

The left sidebar lets you switch between different views of your files. Click a folder name in the file list to open it, and use your browser's back button or the breadcrumb bar at the top of the file list to return to a previous level.

The sidebar contains the following entries:

**All files**
: The default view, showing every file and folder you have access to.


Search here …
All files
Personal files
Recent
Favorites
Shares
Tags
Folder tree
Deleted files
1.8 MB used
Files settings

**Recent**
: Files you have viewed or modified recently.

**Favorites**
: Files and folders you have starred.

**Shares**
: Files shared with you, by you, or via a public link — all in one view.

**Tags**
: Browse files by system tag. See *System tags* for details on assigning tags and filtering your files.

**Deleted files**
: Files you have deleted that are still recoverable from the trash bin.

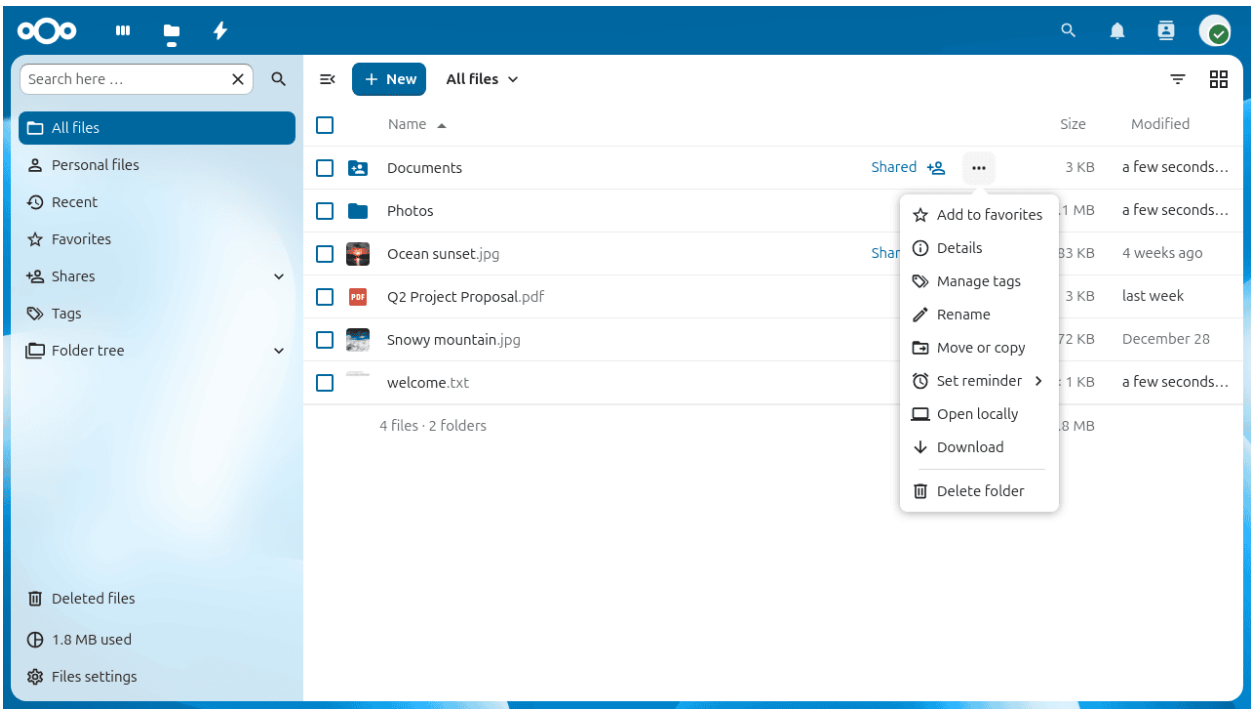
When you navigate into a folder, a breadcrumb trail appears at the top of the file list so you can jump back to any parent folder with a single click:




## File controls

Nextcloud displays thumbnail previews for images, text files, and other supported types — the exact list depends on your server configuration.

Each file and folder row has a three-dot action menu button. Click it to rename, move, copy, download, delete, or mark the item as a favorite. Files that have been marked as a favorite display a star icon:

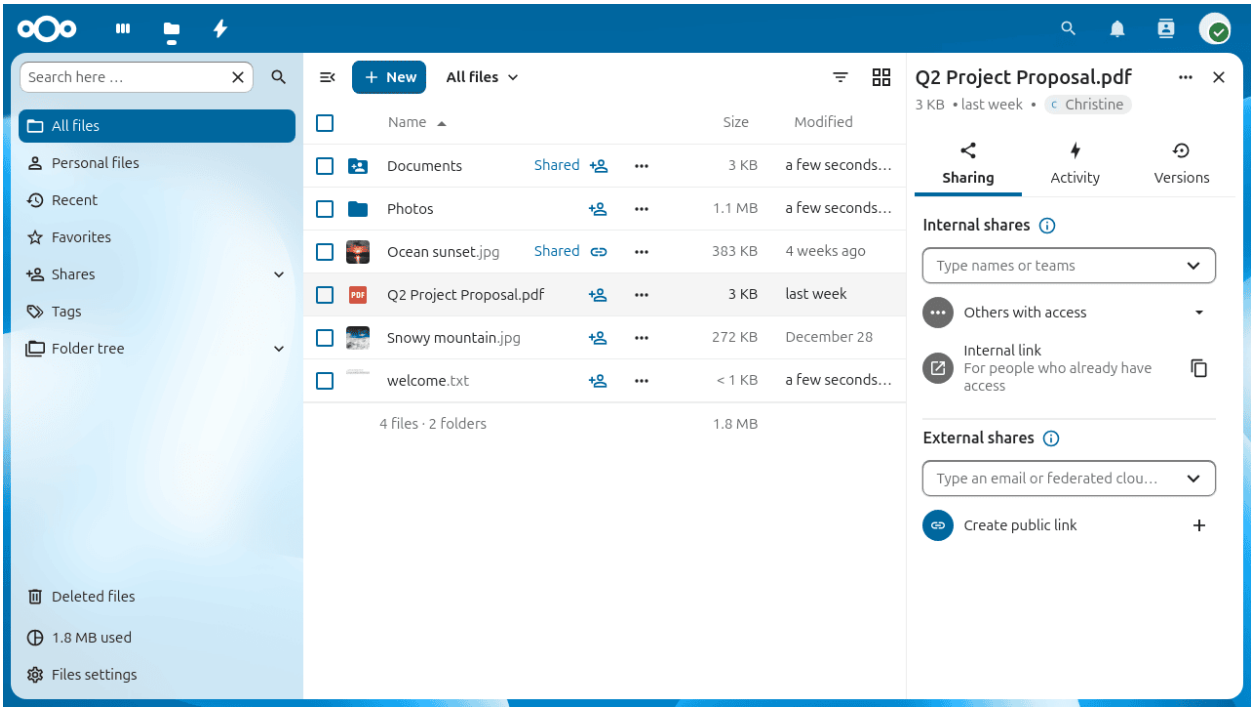



**Note**

You can quickly find all your favorites using the **Favorites** entry in the left sidebar.

### Details sidebar

Select **Details** from the three-dot action menu to open the details sidebar. The sidebar shows information about the selected file and provides tabbed access to its activity history, sharing options, and version history:




### Activity and comments

The **Activity** tab in the details sidebar shows a chronological log of changes to the file — uploads, edits, shares, and comments. You can leave a comment directly in this tab; comments are visible to everyone who has access to the file:

### Searching and filtering

Use the search bar at the top of the page to find files by name across all your files, or type in the search field inside the left sidebar to filter the current view:

### Grid view

The Files app defaults to a list view. Click the grid toggle button above the file list to switch to a thumbnail grid, which is useful for browsing image folders:

Click the button again to return to the list view.

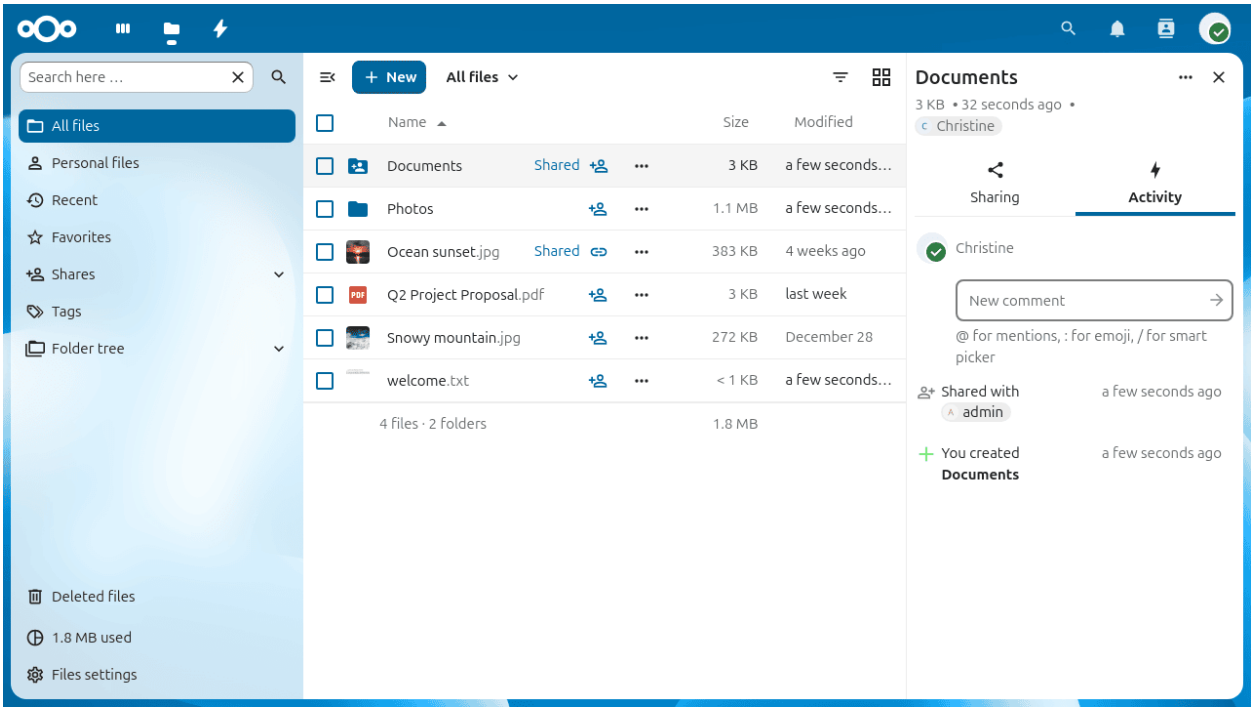
### Uploading and creating files

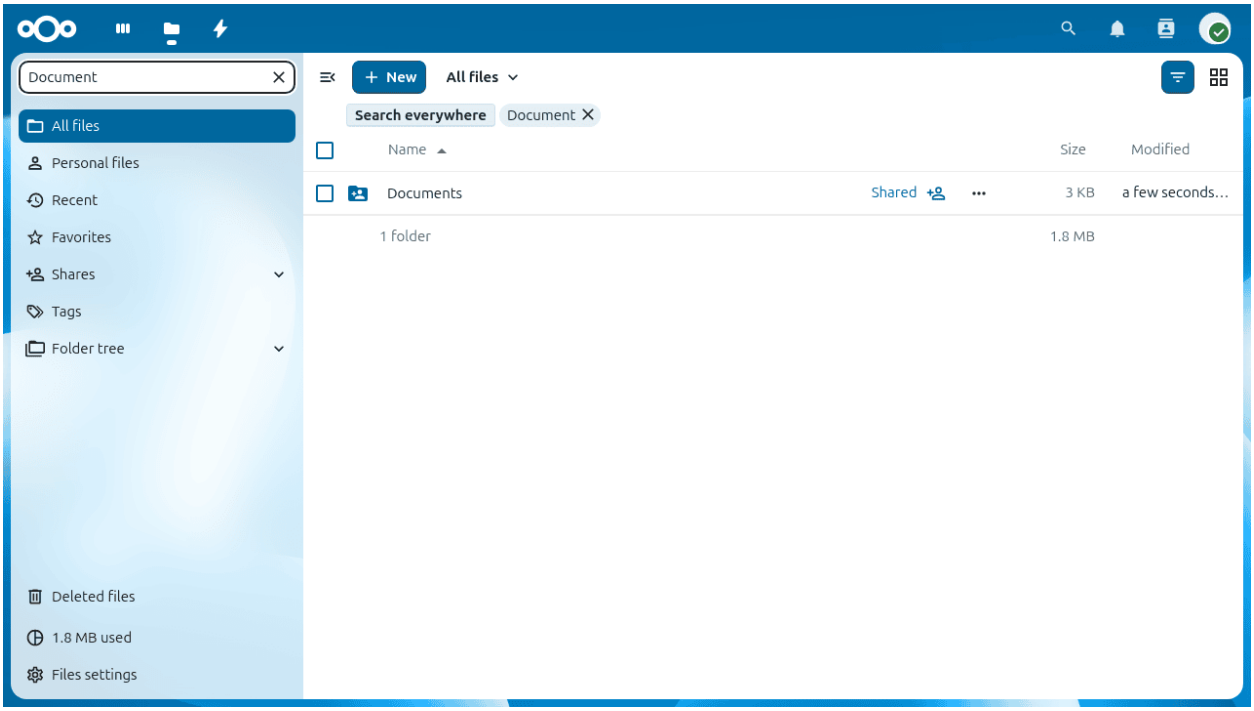
Click the **+** button near the top of the file list to upload files from your computer or create new items in the current folder:

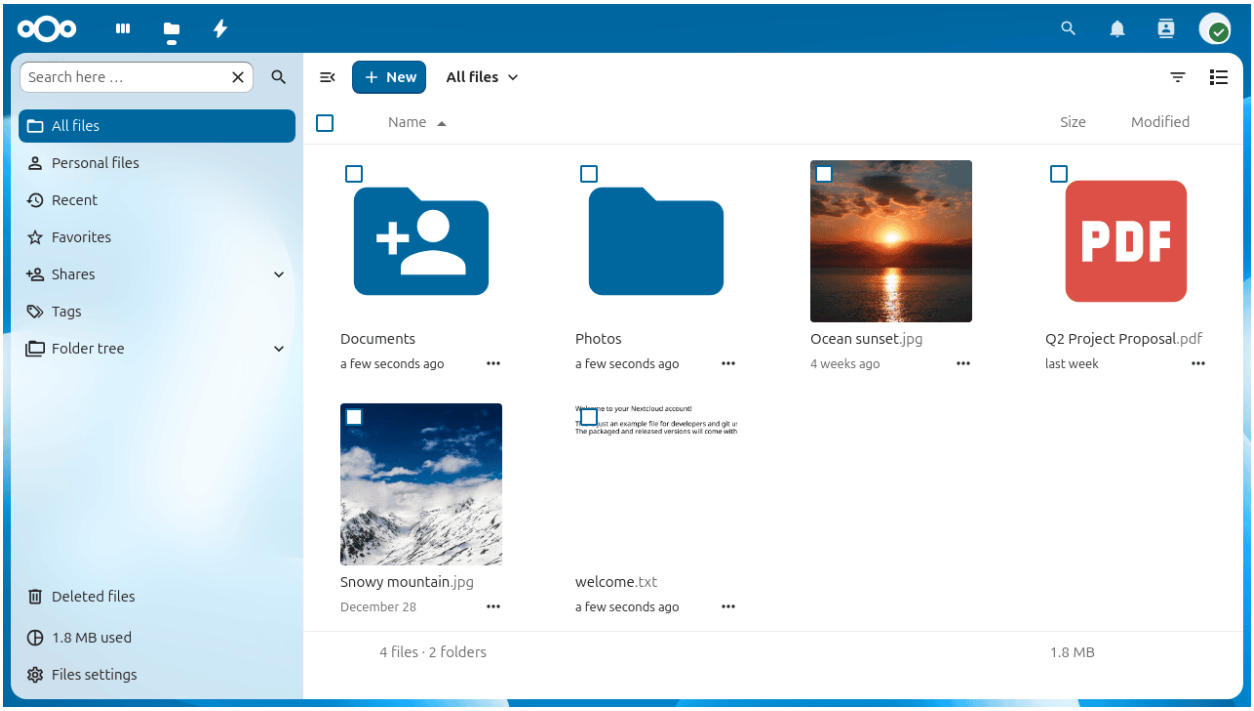
The menu offers the following options:

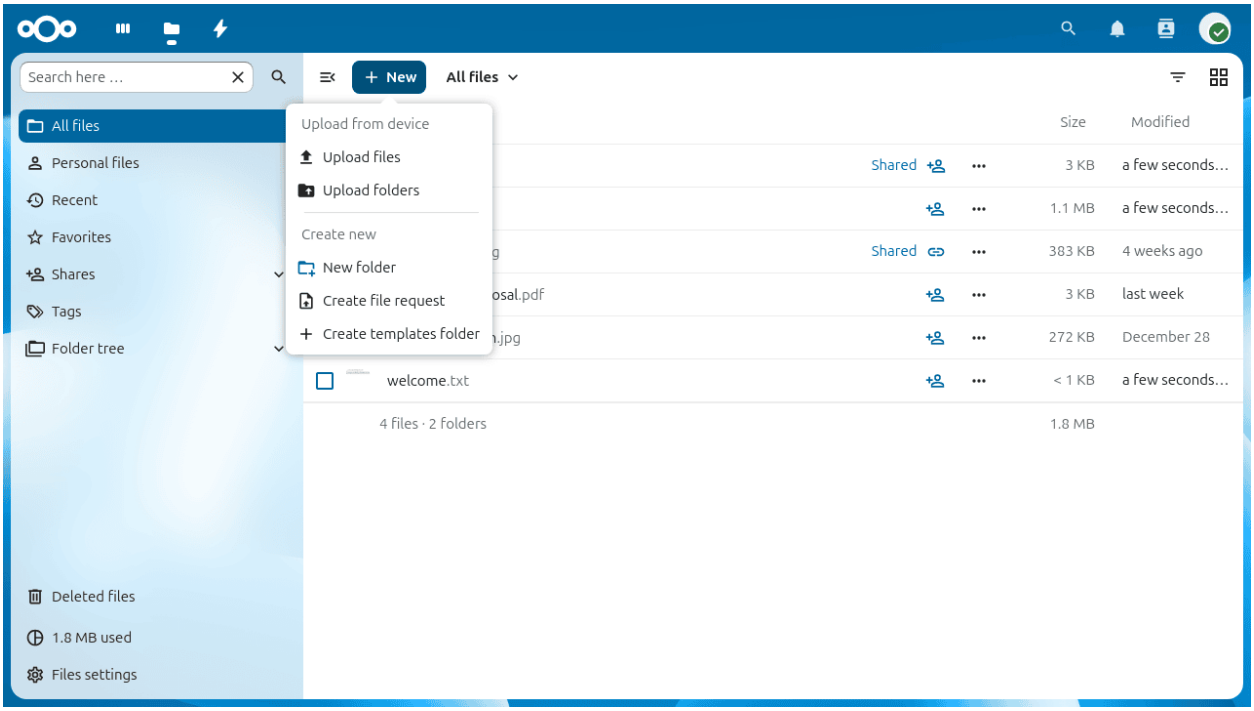
**Upload file**
: Opens a file picker to upload one or more files from your computer. You can also drag and drop files directly from your file manager onto the file list.

**Upload folder**
: Uploads an entire folder, preserving its structure.


Search here …
All files
Personal files
Recent
Favorites
Shares
Tags
Folder tree
Deleted files
1.8 MB used
Files settings
New
All files
Name
Size
Modified
Documents
Shared
3 KB
a few seconds…
Photos
1.1 MB
a few seconds…
Ocean sunset.jpg
Shared
383 KB
4 weeks ago
Q2 Project Proposal.pdf
3 KB
last week
Snowy mountain.jpg
272 KB
December 28
welcome.txt
< 1 KB
a few seconds…
4 files · 2 folders
1.8 MB
Documents
3 KB • 32 seconds ago •
Christine
Sharing
Activity
Christine
New comment
@ for mentions, : for emoji, / for smart picker
Shared with
admin
a few seconds ago
You created
Documents
a few seconds ago


Document
All files
Personal files
Recent
Favorites
Shares
Tags
Folder tree
Deleted files
1.8 MB used
Files settings
New
All files
Search everywhere
Document
Name
Size
Modified
Documents
Shared
3 KB
a few seconds…
1 folder
1.8 MB


Search here …
+ New
All files
Name
Size
Modified
All files
Personal files
Recent
Favorites
Shares
Tags
Folder tree
Deleted files
1.8 MB used
Files settings
Documents
a few seconds ago
Photos
a few seconds ago
Ocean sunset.jpg
4 weeks ago
Q2 Project Proposal.pdf
last week
Snowy mountain.jpg
December 28
welcome.txt
a few seconds ago
4 files · 2 folders
1.8 MB


Search here …
+ New
All files
Upload from device
Upload files
Upload folders
Create new
New folder
Create file request
Create templates folder
Size
Modified
Shared
3 KB
a few seconds…
1.1 MB
a few seconds…
Shared
383 KB
4 weeks ago
3 KB
last week
272 KB
December 28
welcome.txt
< 1 KB
a few seconds…
4 files · 2 folders
1.8 MB
Deleted files
1.8 MB used
Files settings

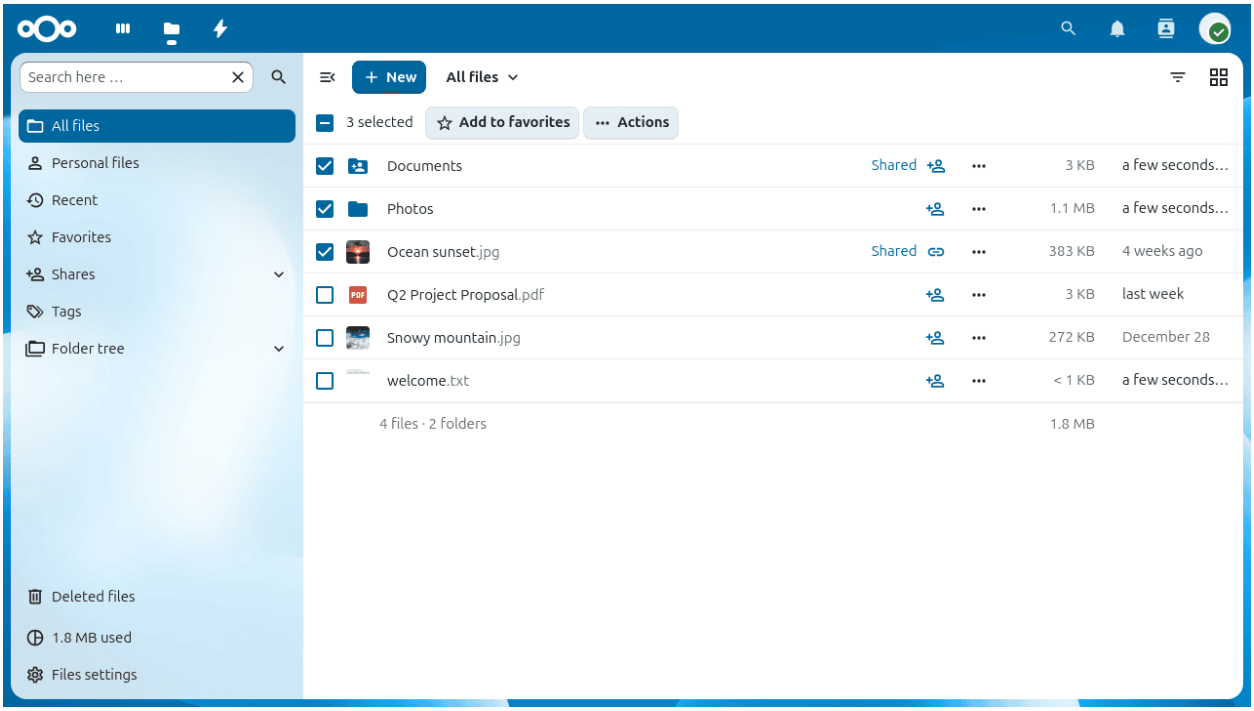
**New folder**
: Creates a new empty folder in the current location.

**New document / New spreadsheet / New presentation**
: Creates a new file using the built-in Nextcloud Text or Office editor, if enabled by your administrator.

### Selecting files or folders

Click the checkbox to the left of a file or folder to select it. To select all items in the current folder, click the checkbox in the column header.

With one or more items selected, action buttons appear at the top of the list. You can delete or download all selected items at once. Downloading multiple items produces a ZIP archive.




> **Note**
>
> If the **Download** button is not visible, your administrator has disabled this feature.

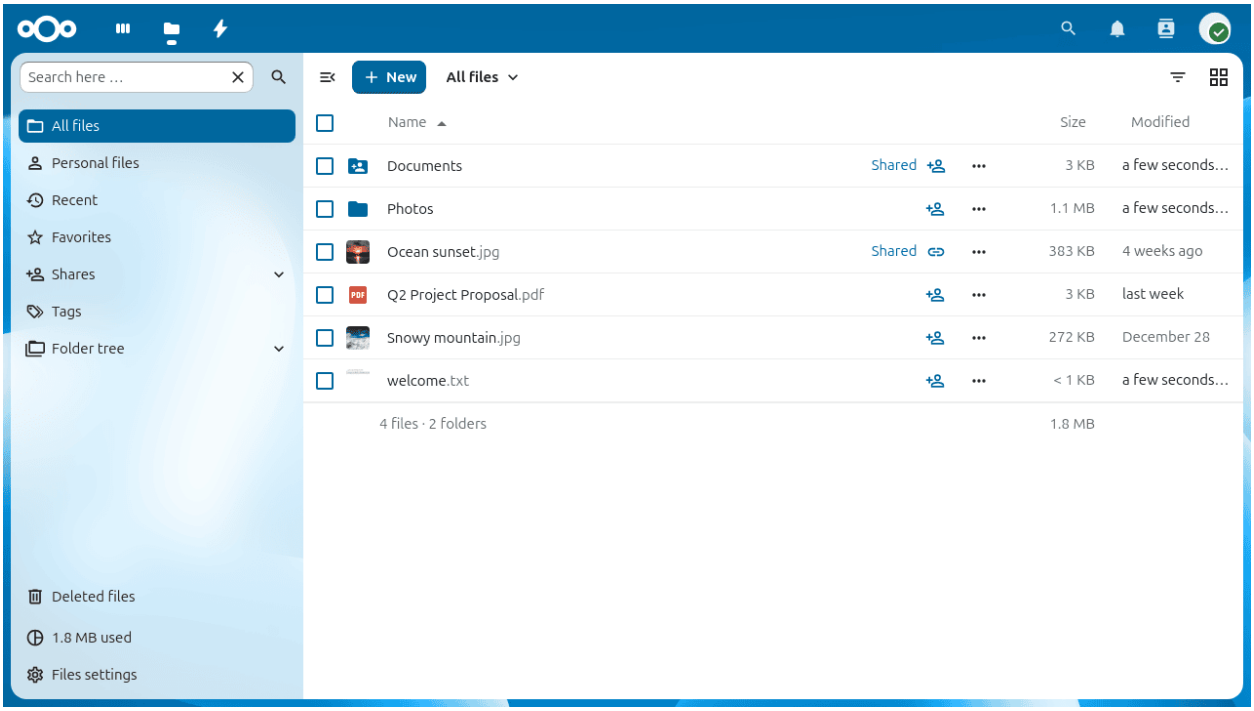
### Sharing status icons

Folders and files that have been shared display a **Shared** badge on their thumbnail or icon. Items shared via a public link also show a chain-link icon. Items that are not shared have no additional indicator.

See *File sharing* for instructions on creating and managing shares.

### Moving files

Drag any file or folder and drop it onto a destination folder to move it. You can also use **Move or copy** from the three-dot action menu to move or copy items to a folder you choose from a picker dialog.




### Previewing files

Click a file name to open a preview directly in Nextcloud. Supported formats include images, plain text, PDF, and — depending on your server — office documents and audio files. If Nextcloud cannot preview a file format, it downloads the file to your computer instead.

### Video player

You can play videos directly in Nextcloud by clicking the file. Playback depends on your browser and the video codec. See MDN: Supported media formats for a compatibility reference.

### Connecting to a Federation Share

Federated Cloud Sharing lets you mount file shares from remote Nextcloud servers and manage them just like local shares. See *Using federation shares* to learn how to create and connect to Federated Cloud shares.

## 5.1.2 Accessing Nextcloud files using WebDAV

Nextcloud fully supports the WebDAV protocol, and you can connect to and synchronize with Nextcloud Files over WebDAV. This chapter explains how to connect Linux, macOS, Windows, and mobile devices to your Nextcloud server.

WebDAV stands for Distributed Authoring and Versioning. It is an HTTP extension that makes it easy to create, read, and edit files hosted on remote Web servers. With a WebDAV client, you can access your Nextcloud Files (including shares) on Linux, macOS and Windows in a similar way as any remote network share, and stay synchronized.

Before you configure WebDAV, review the recommended way to connect client devices to Nextcloud.

### Official Nextcloud desktop and mobile clients

The recommended way to synchronize a computer with a Nextcloud server is by using the official Nextcloud sync clients. You can configure the client to save files in any local directory and you can choose which directories on the Nextcloud server to sync with. The client displays the current connection status and logs all activity, so you always know which

remote files have been downloaded to your PC and you can verify that files created and updated on your local PC are properly synchronized with the server.

The recommended way to synchronize Android and Apple iOS devices is by using the official Nextcloud mobile apps.

To connect the official Nextcloud apps to a Nextcloud server use the same URL you use to access Nextcloud from your web browser - e.g.:

```
https://cloud.example.com
```

If Nextcloud is installed in a subdirectory called "nextcloud":

```
https://example.com/nextcloud
```

### Third-party WebDAV clients

If you prefer, you may also connect your computer to your Nextcloud server by using any third-party client that supports the WebDAV protocol (including what may be built into your operating system).

You can also use third-party WebDAV capable apps to connect your mobile device to Nextcloud.

When using third-party clients, keep in mind that they may not be optimized for use with Nextcloud or implement capabilities you consider important to your use case.

Mobile clients that Nextcloud community members have reported using include:

- FolderSync (Android)
- WebDAV Navigator (iPhone)

The URL to use when configuring third-party apps to connect to Nextcloud is a bit lengthier than the one for official clients:

```
https://cloud.example.com/remote.php/dav/files/USERNAME/
```

If Nextcloud is installed in a subdirectory called "nextcloud":

```
https://example.com/nextcloud/remote.php/dav/files/USERNAME/
```

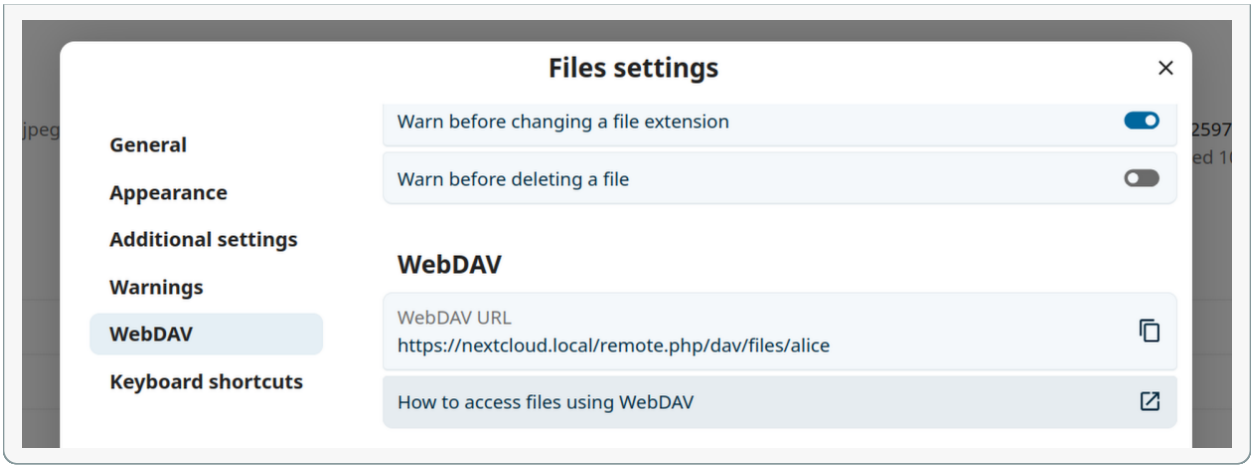
**Note**

When using a third-party WebDAV client (including your operating system's built-in client), you should use an application password for login rather than your regular password. In addition to improved security, this increases performance significantly. To configure an application password, log in to the Nextcloud Web interface, click your avatar, and choose *Personal settings*. Then choose *Security* in the left sidebar and scroll to the very bottom. There you can create an app password (which can also be revoked in the future without changing your main user password).

**Note**

In the following examples, you should replace **example.com/nextcloud** with the URL of your Nextcloud server (omit the directory part if the installation is in the root of your domain), and **USERNAME** with the username of the connecting user.

You can find the WebDAV URL in **Files settings** under **WebDAV** in your Nextcloud account.




### Accessing files using Linux

You can access files in Linux operating systems using the following methods.

### Nautilus file manager

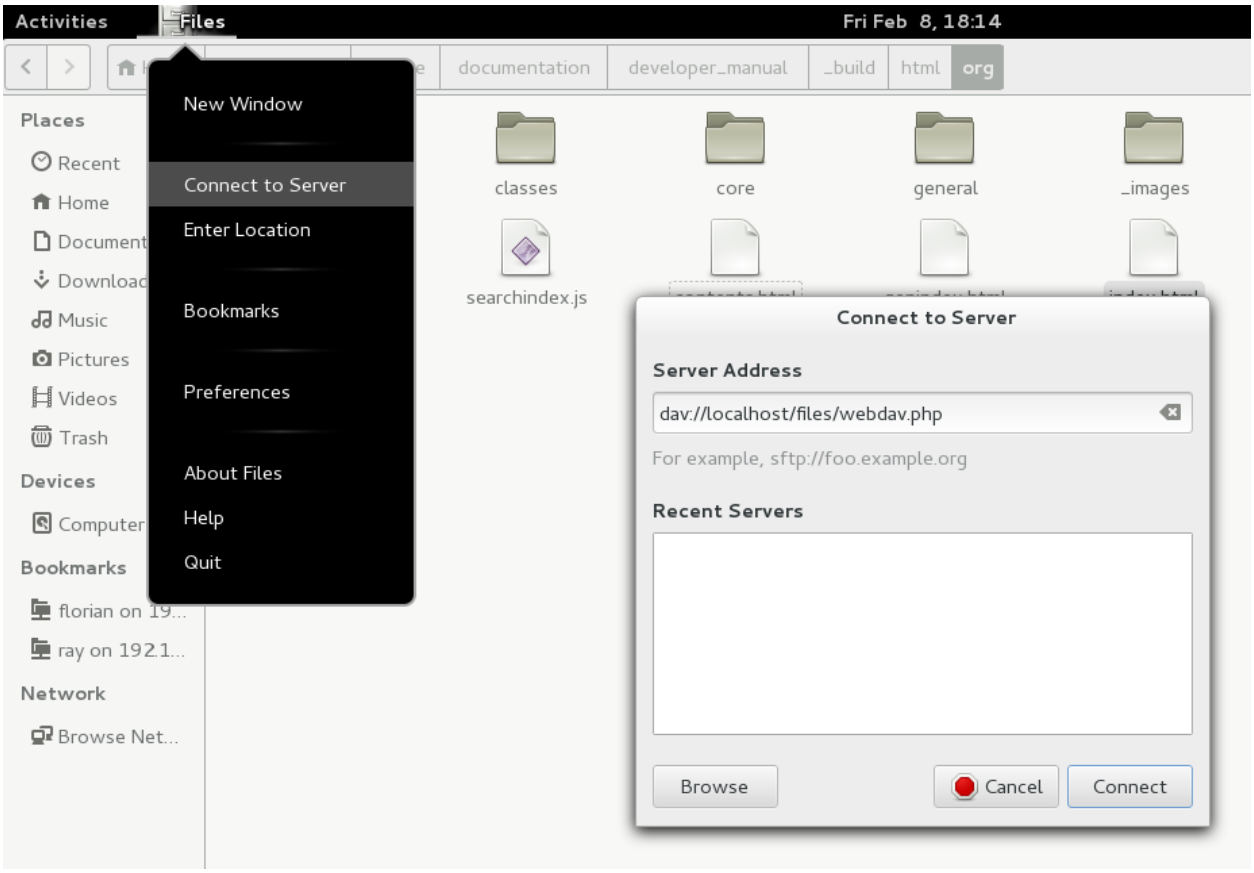
**When you configure your Nextcloud account in the *GNOME Control Center*, your files will automatically be mounted by Nautilus as a WebDAV share, unless you deselect file access.**

You can also mount your Nextcloud files manually. Use the `davs://` protocol to connect the Nautilus file manager to your Nextcloud share:

```
davs://example.com/nextcloud/remote.php/dav/files/USERNAME/
```

**Note**

If your server connection is not HTTPS-secured, use `dav://` instead of `davs://`:




**Note**

The same method works for other file managers that use GVFS, such as MATE's Caja and Cinnamon's Nemo.

### Accessing files with KDE and Dolphin

1. Navigate to System Settings -> Networking -> Online Accounts
2. Click "Add Account…"
3. Click Nextcloud
4. Enter your server address
5. Follow the on-screen instructions to log in
6. After logging in, ensure you enable "Storage" in the "Use This Account For" section
7. You can now access your files in Dolphin under "Network" in the sidebar
8. (Optional) To add this location as a shortcut in the sidebar, right-click "Nextcloud Storage", then click "Add to Places"

9. (Optional) To customize the shortcut, right-click it in the sidebar, then click “Edit…” and customize the icon and label

### Creating WebDAV mounts on the Linux command line

You can create WebDAV mounts from the Linux command line. This is useful if you prefer to access Nextcloud the same way as any other remote filesystem mount. The following example shows how to create a personal mount and have it mounted automatically every time you log in to your Linux computer.

1. Install the `davfs2` WebDAV filesystem driver, which allows you to mount WebDAV shares just like any other remote filesystem. Use this command to install it on Debian/Ubuntu:

```
apt-get install davfs2
```

2. Use this command to install it on CentOS, Fedora, and openSUSE:

```
yum install davfs2
```

3. Add yourself to the `davfs2` group:

```
usermod -aG davfs2 <username>
```

**Note**

If the davfs2 group doesn’t exist after installing the package, you may need to create it yourself and, possibly, adjust the davfs config file to use the group after you’ve created it.

1. Then create a `nextcloud` directory in your home directory for the mount point, and `.davfs2/` for your personal configuration file:

```
mkdir ~/nextcloud
mkdir ~/.davfs2
```

2. Copy `/etc/davfs2/secrets` to `~/.davfs2`:

```
cp  /etc/davfs2/secrets ~/.davfs2/secrets
```

3. Set yourself as the owner and make the permissions read-write owner only:

```
chown <linux_username>:<linux_username> ~/.davfs2/secrets
chmod 600 ~/.davfs2/secrets
```

4. Add your Nextcloud login credentials to the end of the `secrets` file, using your Nextcloud server URL and your Nextcloud username and password:

```
https://example.com/nextcloud/remote.php/dav/files/USERNAME/ <username> <password>
or
$PathToMountPoint $USERNAME $PASSWORD
for example
/home/user/nextcloud john 1234
```

5. Add the mount information to `/etc/fstab`:

```
https://example.com/nextcloud/remote.php/dav/files/USERNAME/ /home/
↪<linux_username>/nextcloud davfs user,rw,auto 0 0
```

6. Then test that it mounts and authenticates by running the following command. If you set it up correctly you won't need root permissions:

```
mount ~/nextcloud
```

7. You should also be able to unmount it:

```
umount ~/nextcloud
```

Now every time you login to your Linux system your Nextcloud share should automatically mount via WebDAV in your `~/nextcloud` directory. If you prefer to mount it manually, change `auto` to `noauto` in `/etc/fstab`.

### Known issues

#### Problem

Resource temporarily unavailable

#### Solution

If you experience trouble when you create a file in the directory, edit `/etc/davfs2/davfs2.conf` and add:

```
use_locks 0
```

#### Problem

Certificate warnings

#### Solution

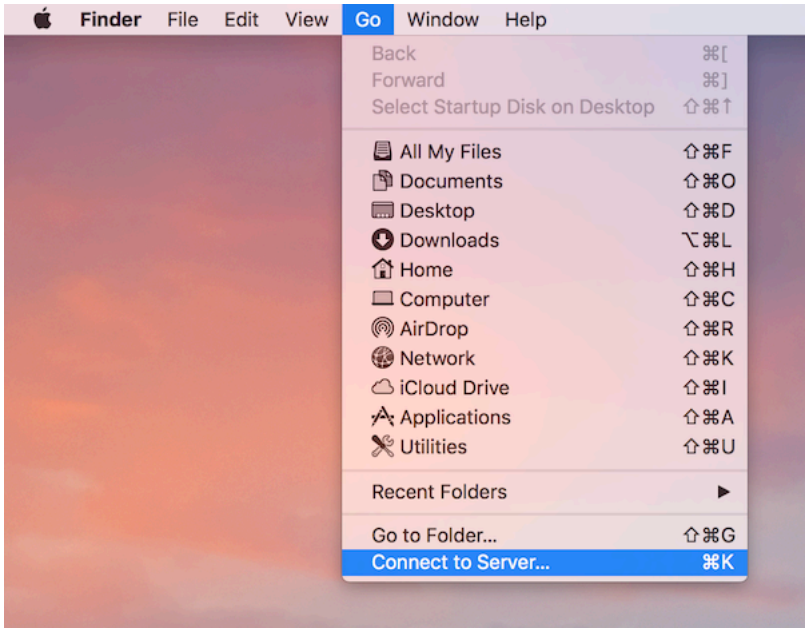
If you use a self-signed certificate, you will get a warning. To change this, you need to configure `davfs2` to recognize your certificate. Copy `mycertificate.pem` to `/etc/davfs2/certs/`. Then edit `/etc/davfs2/davfs2.conf` and uncomment the line `servercert`. Now add the path of your certificate as in this example:

```
servercert /etc/davfs2/certs/mycertificate.pem
```

### Accessing files using macOS

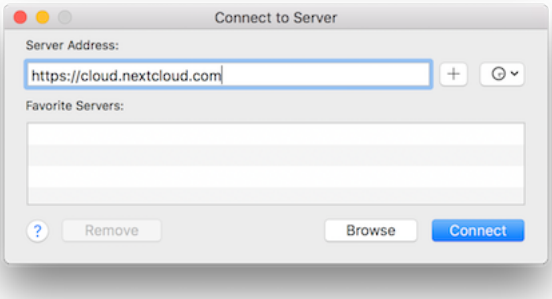
To access files through the macOS Finder:

1. From the Finder's top menu bar, choose **Go > Connect to Server…**:




2. When the **Connect to Server…** window opens, enter your Nextcloud server's WebDAV address in the **Server Address:** field, i.e.:

```
https://cloud.YOURDOMAIN.com/remote.php/dav/files/USERNAME/
```




3. Click **Connect**. Your WebDAV server should appear on the Desktop as a shared disk drive.

### Accessing files using Microsoft Windows

If you use the native Windows implementation of WebDAV, you can map Nextcloud to a new drive using Windows Explorer. Mapping to a drive enables you to browse files stored on a Nextcloud server the way you would browse files stored in a mapped network drive.

Using this feature requires network connectivity. If you want to store your files offline, use the Desktop Client to sync all files on your Nextcloud to one or more directories of your local hard drive.

> **Note**
>
> In Windows 10, Basic Authentication is allowed by default when HTTPS is enabled before mapping your drive.
>
> On older versions of Windows, you must permit the use of Basic Authentication in the Windows Registry:

- launch `regedit` and navigate to `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\WebClient\Parameters`.
- Create or edit the `BasicAuthLevel` (Windows Vista, 7 and 8), or `UseBasicAuth` (Windows XP and Windows Server 2003), `DWORD` value and set its value data to `1` for SSL connections. A value of `0` means that Basic Authentication is disabled, and a value of `2` allows both SSL and non-SSL connections (not recommended).
- Then exit Registry Editor, and restart the computer.

### Mapping drives with the command line

The following example shows how to map a drive using the command line. To map the drive:

1. Open a command prompt in Windows.
2. Enter the following line in the command prompt to map to the computer Z drive:

```
net use Z: https://<drive_path>/remote.php/dav/files/USERNAME/ /user:youruser␣
↪yourpassword
```

with <drive_path> as the URL to your Nextcloud server. For example:

```
net use Z: https://example.com/nextcloud/remote.php/dav/files/USERNAME/ /
↪user:youruser yourpassword
```

The computer maps the files of your Nextcloud account to the drive letter Z.

**Error**

If you get the following error `System error 67 has occurred. The network name cannot be found.`, or frequent disconnections, open the **Services** app and make sure that the `WebClient` service is running and started automatically at startup.

**Note**

Though not recommended, you can also mount the Nextcloud server using HTTP, leaving the connection unencrypted.

> If you plan to use HTTP connections on devices while in a public place, we strongly recommend using a VPN tunnel to provide the necessary security.

An alternative command syntax is:

```
net use Z: \\example.com@ssl\nextcloud\remote.php\dav /user:youruser
yourpassword
```

### Mapping drives with Windows Explorer

To map a drive using Microsoft Windows Explorer:

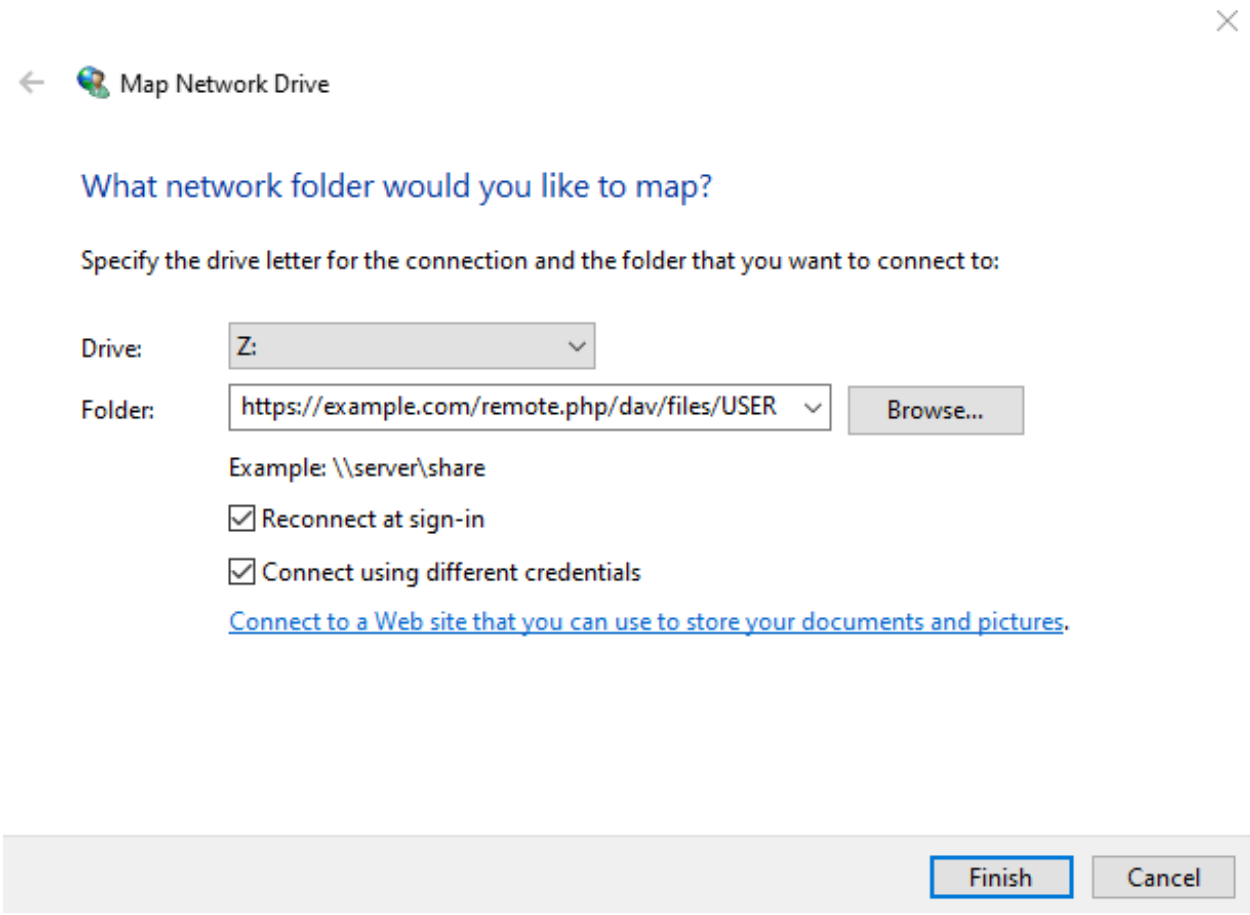
1. Open Windows Explorer on your MS Windows computer.
2. Right-click on **Computer** entry and select **Map network drive…** from the drop-down menu.
3. Choose a local network drive to which you want to map Nextcloud.

4. Specify the address to your Nextcloud instance, followed by **/remote.php/dav/files/USERNAME/**.

   For example:

```
https://example.com/nextcloud/remote.php/dav/files/USERNAME/
```

> **Note**
>
> For SSL-protected servers, check **Reconnect at sign-in** to ensure that the mapping is persistent upon subsequent reboots. If you want to connect to the Nextcloud server as a different user, check **Connect using different credentials**.




5. Click the `Finish` button.

Windows Explorer maps the network drive, making your Nextcloud instance available.

### Accessing files using Cyberduck

Cyberduck is an open source FTP, SFTP, WebDAV, OpenStack Swift, and Amazon S3 browser designed for file transfers on macOS and Windows.

> **Note**
>
> This example uses Cyberduck version 4.2.1.

To use Cyberduck:

1. Specify a server without any leading protocol information.

   For example: `example.com`

2. Specify the appropriate port.

   The port you choose depends on whether or not your Nextcloud server supports SSL. Cyberduck requires that you select a different connection type if you plan to use SSL.

   **For example:**

   - `80` for unencrypted WebDAV
   - `443` for secure WebDAV (HTTPS/SSL)

3. Use the 'More Options' drop-down menu to add the rest of your WebDAV URL into the 'Path' field.

   For example: `remote.php/dav/files/USERNAME/`

Now Cyberduck enables file access to the Nextcloud server.

### Accessing public shares over WebDAV

Nextcloud provides the possibility to access public shares anonymously over WebDAV.

To access the public share, open:

```
https://example.com/nextcloud/public.php/dav/files/USERNAME
```

in a WebDAV client, use the share token as username and the (optional) share password as the password. For example, with a share link https://example.com/s/kFy9Lek5sm928xP, `kFy9Lek5sm928xP` will be the username.

> **Note**
>
> **Settings → Administration → Sharing → Allow users on this server to send shares to other servers**. This option also allows WebDAV access to public shares and needs to be enabled to make this feature work, except if cURL is being used (see below).

### Known problems

#### Problem

WebDAV access is very slow or times out.

#### Solution

When using a third-party WebDAV client (including your operating system's built-in client), you should authenticate with an **application password** rather than your regular account password. Using a regular password carries a significant performance penalty because Nextcloud must perform additional work to verify it on every request. Using an application password removes this overhead and can improve transfer speeds substantially.

To create an application password, log in to the Nextcloud web interface, click your avatar, choose **Personal settings**, then open the **Security** section in the left sidebar and scroll to the bottom. Create an app password there and use it in your WebDAV client instead of your main password.

### Problem

Windows does not connect using HTTPS.

### Solution 1

The Windows WebDAV Client might not support Server Name Indication (SNI) on encrypted connections. If you encounter an error mounting an SSL-encrypted Nextcloud instance, contact your provider about assigning a dedicated IP address for your SSL-based server.

### Solution 2

The Windows WebDAV Client might not support TLSv1.1 and TLSv1.2 connections. If you have restricted your server config to only provide TLSv1.1 and above the connection to your server might fail. Please refer to the WinHTTP documentation for further information.

### Problem

You receive the following error message: **Error 0x800700DF: The file size exceeds the limit allowed and cannot be saved.**

### Solution

Windows limits the maximum size a file transferred from or to a WebDAV share may have. You can increase the value `FileSizeLimitInBytes` in `HKEY_LOCAL_MACHINE\\SYSTEM\\CurrentControlSet\\Services\\WebClient\\Parameters` by clicking on **Modify**.

To increase the limit to the maximum value of 4GB, select **Decimal**, enter a value of `4294967295`, and reboot Windows or restart the **WebClient** service.

### Problem

Adding a WebDAV drive on Windows with the steps above does not display the correct available Nextcloud space and instead shows the size and free space of the C: drive.

### Answer

Unfortunately, this is a limitation of WebDAV itself, because it does not provide a way for the client to retrieve available free space from the server. Windows automatically falls back to the size and free space of the C: drive. There is no direct solution for this limitation.

### Problem

Accessing your files from Microsoft Office via WebDAV fails.

### Solution

Known problems and their solutions are documented in the KB2123563 article.

### Problem

Cannot map Nextcloud as a WebDAV drive in Windows using a self-signed certificate.

### Solution

1. Access your Nextcloud instance in your preferred Web browser.
2. Click through until you get to the certificate error in the browser status line.
3. View the certificate, then from the Details tab, select 'Copy to File'.
4. Save the file to your desktop with an arbitrary name, for example `myNextcloud.pem`.
5. Go to Start menu > Run, type MMC, and click 'OK' to open Microsoft Management Console.
6. Go to File > Add/Remove Snap-In.
7. Select Certificates, Click 'Add', choose 'My User Account', then 'Finish', and finally 'OK'.
8. Dig down to Trust Root Certification Authorities, Certificates.
9. Right-Click Certificate, Select All Tasks, and Import.
10. Select the saved certificate from the Desktop.
11. Select Place all Certificates in the following Store, and click Browse.
12. Check the Box that says Show Physical Stores, expand out Trusted Root Certification Authorities, select Local Computer there, click 'OK', and Complete the Import.
13. Check the list to make sure the certificate shows up. You will probably need to Refresh before you see it.
14. Exit MMC.

For Firefox users:

1. Launch your browser, go to Application menu > History > Clear recent history…
2. Select 'Everything' in the 'Time range to clear' dropdown menu
3. Select the 'Active Logins' check box
4. Click the 'Clear now' button
5. Close the browser, then re-open and test.

For Chrome-based browsers (Chrome, Chromium, Microsoft Edge) users:

1. Open Windows Control Panel, navigate down to Internet Options
2. In the Content tab, click the Clear SSL State button.
3. Close the browser, then re-open and test.

### Accessing files using cURL

Since WebDAV is an extension of HTTP, cURL can be used to script file operations.

> **Note**
>
> **Settings → Administration → Sharing → Allow users on this server to send shares to other servers**. If this option is disabled, the option `--header "X-Requested-With: XMLHttpRequest"` needs to be passed to cURL.

To create a folder with the current date as name:

```
$ curl -u user:pass -X MKCOL
↪"https://example.com/nextcloud/remote.php/dav/files/USERNAME/$(date '+%d-%b-%Y')"
```

To upload a file `error.log` into that directory:

```
$ curl -u user:pass -T error.log
↪"https://example.com/nextcloud/remote.php/dav/files/USERNAME/$(date '+%d-%b-%Y')/
↪error.log"
```

To move a file:

```
$ curl -u user:pass -X MOVE --header 'Destination:␣
↪https://example.com/nextcloud/remote.php/dav/files/USERNAME/target.jpg'␣
↪https://example.com/nextcloud/remote.php/dav/files/USERNAME/source.jpg
```

To get the properties of files in the root folder:

```
$ curl -X PROPFIND -H "Depth: 1" -u user:pass␣
↪https://example.com/nextcloud/remote.php/dav/files/USERNAME/ | xml_pp
<?xml version="1.0" encoding="utf-8"?>
<d:multistatus xmlns:d="DAV:" xmlns:oc="http://nextcloud.org/ns" xmlns:s=
↪"http://sabredav.org/ns">
  <d:response>
    <d:href>/nextcloud/remote.php/dav/files/USERNAME/</d:href>
    <d:propstat>
      <d:prop>
        <d:getlastmodified>Tue, 13 Oct 2015 17:07:45 GMT</d:getlastmodified>
        <d:resourcetype>
          <d:collection/>
        </d:resourcetype>
        <d:quota-used-bytes>163</d:quota-used-bytes>
        <d:quota-available-bytes>11802275840</d:quota-available-bytes>
        <d:getetag>"561d3a6139d05"</d:getetag>
      </d:prop>
      <d:status>HTTP/1.1 200 OK</d:status>
    </d:propstat>
  </d:response>
  <d:response>
    <d:href>/nextcloud/remote.php/dav/files/USERNAME/welcome.txt</d:href>
    <d:propstat>
      <d:prop>
        <d:getlastmodified>Tue, 13 Oct 2015 17:07:35 GMT</d:getlastmodified>
        <d:getcontentlength>163</d:getcontentlength>
        <d:resourcetype/>
        <d:getetag>"47465fae667b2d0fee154f5e17d1f0f1"</d:getetag>
        <d:getcontenttype>text/plain</d:getcontenttype>
      </d:prop>
      <d:status>HTTP/1.1 200 OK</d:status>
    </d:propstat>
  </d:response>
</d:multistatus>
```

#### Accessing files using WinSCP

WinSCP is a free, open-source SFTP, FTP, WebDAV, S3, and SCP client for Windows. Its main function is file transfer between a local and a remote computer. WinSCP also offers scripting and basic file management functionality.

You can download the portable version of WinSCP and run it on Linux through Wine.

To run WinSCP on Linux, install Wine through your distribution's package manager, then run: `wine WinSCP.exe`.

To connect to Nextcloud:

- Start WinSCP
- Press 'Session' in the menu
- Press the 'New Session' menu option
- Set the 'File protocol' dropdown to WebDAV
- Set the 'Encryption' dropdown to TLS/SSL Implicit encryption
- Fill in the hostname field: `example.com`
- Fill in the username field: `NEXTCLOUDUSERNAME`
- Fill in the password field: `NEXTCLOUDPASSWORD`
- Press the 'Advanced…' button
- Navigate to 'Environment', 'Directories' on the left side
- Fill in the 'Remote directory' field with the following: `/nextcloud/remote.php/dav/files/NEXTCLOUDUSERNAME/`
- Press the 'OK' button
- Press the 'Save' button
- Select the desired options and press the 'OK' button
- Press the 'Login' button to connect to Nextcloud

> **Note**
>
> If you use TOTP, use an app password. At the time of writing (2022-11-07), WinSCP does not support TOTP with Nextcloud.

### 5.1.3 Desktop and mobile synchronization

For synchronizing files with your desktop computer, we recommend using the Nextcloud Sync Client for Windows, macOS and Linux.

The Nextcloud Desktop Sync Client enables you to connect to your Nextcloud Server. You can create folders in your home directory, and keep the contents of those folders synced with your Nextcloud server. Simply copy a file into the directory and the Nextcloud desktop client does the rest. Make a change on one computer and it flows across the others using these desktop sync clients. You will always have your latest files with you wherever you are.

Its usage is documented separately in the Nextcloud Desktop Client Manual.

#### Mobile clients

Visit your Personal page in your Nextcloud web interface to find download links for Android and iOS mobile sync clients. Or, visit the Nextcloud download page.

Bidirectional sync (two-way sync) has not yet been fully implemented in the Android client. See this issue on GitHub for the current status.

### 5.1.4 Large file uploads

When uploading files through the web client, Nextcloud is limited by PHP and Apache configurations. By default, PHP is configured for only 2 megabyte uploads. As this default upload limit is not entirely useful, we recommend that your Nextcloud administrator increase the Nextcloud variables to sizes appropriate for users.

Modifying certain Nextcloud variables requires administrative access. If you require larger upload limits than have been provided by the default (or already set by your administrator):

- Contact your administrator to request an increase in these variables
- Refer to the Administration Documentation for guidance on managing file upload size limits.

### 5.1.5 Using external storage

The External Storage application lets your Nextcloud server connect to remote file systems — such as Amazon S3, SFTP servers, SMB/CIFS shares, or WebDAV servers — and present them as folders inside your Files view. Your administration team configures which backends are available and which mounts are shared with you.

If your administrator has enabled user-managed external storage, you can also add your own connections under Personal Settings.

#### Accessing external storage

External storage mounts appear as regular folders in your Files view. You can browse, upload, download, and delete files in them just as you would any other folder. Whether sharing is available depends on whether your administrator has enabled it for each individual mount.

A colored indicator next to the folder name shows the connection status:

- Green — the storage is connected and ready to use.
- Yellow — the storage could not be reached; Nextcloud will retry automatically.
- Red — the storage is unavailable. Contact your administrator if this persists.

When a mount is unavailable, Nextcloud marks it as offline for ten minutes before retrying. You can trigger a manual recheck by clicking the status indicator.

> **Note**
>
> Some external storage mounts may be read-only. You will not be able to upload or delete files on a read-only mount.

#### Sharing files from external storage

Sharing from an external storage mount works the same as sharing any other file or folder — use the share icon in the Files view. Sharing must be explicitly enabled on each mount by your administrator, so the share icon may not be available on all mounts.

> **Note**
>
> Server-side encryption is not available for external mounts pointing to other Nextcloud instances.

### Adding your own external storage

If your administrator has enabled user-managed external storage, you can connect your own storage services under **Personal Settings → External Storage**.

To add a new mount:

1. Click your profile icon and select **Personal Settings**.
2. Select **External Storage** from the left sidebar.
3. Choose a backend from the **Add storage** dropdown.
4. Fill in the required fields for the backend (server address, path, credentials, etc.).
5. Select an authentication method from the **Authentication** dropdown.

Required fields are marked with a red border. Once all required fields are filled, the mount is saved automatically.

A green dot next to the mount confirms a successful connection. A red or yellow icon means Nextcloud could not connect — check your credentials and network settings.

To remove a mount, open the three-dot overflow menu next to it and select **Delete**.

> **Note**
>
> Mounts you add under Personal Settings are visible only to your account.

### Supported backends

The following backends may be available, depending on what your administrator has enabled:

- **Amazon S3** — Amazon Simple Storage Service buckets and S3-compatible storage.
- **FTP** — FTP and FTPS servers.
- **Nextcloud / ownCloud** — Another Nextcloud or ownCloud instance over WebDAV.
- **OpenStack Object Storage** — OpenStack Swift buckets.
- **SFTP** — SSH File Transfer Protocol servers.
- **SMB / CIFS** — Windows file shares and Samba servers.
- **WebDAV** — Any WebDAV-compatible server.

For backend-specific configuration details, see Configuring External Storage (GUI) in the Administrator's manual.

### File change detection

Files you add or change through Nextcloud are reflected immediately. Files added or changed directly on the external storage — without going through Nextcloud — may not appear until the next background scan.

If externally added files are not appearing, ask your administrator to run `occ files:scan` or to configure a periodic background scan for the mount.

## 5.2 Managing your files

### 5.2.1 Deleted files

When you delete a file or folder in Nextcloud, it is normally moved to the trash bin instead of being deleted immediately. This allows you to restore it later.

Items in the trash bin are permanently deleted when one of the following occurs:

- You manually select *Delete permanently*.
- The Deleted Files app removes the item according to the configured retention policy.
- The effective trash-bin size limit is exceeded and the item is eligible for removal to free space.

Find your deleted files by selecting **Deleted files** in the Files area of the Nextcloud Web interface. From there, you can restore items, download them to your device, or delete them permanently.

When you restore an item, Nextcloud normally attempts to return it to its original location. If that location no longer exists or is not writable, the item is restored to the root of your Files area. If an item with the same name already exists, Nextcloud gives the restored item a unique name.

> **Note**
>
> If the Versions app is enabled, versions associated with a deleted file are moved to the trash bin and are restored when the file is restored.

#### Quotas

Files and folders in your trash bin do not count against your normal storage quota.

See *Storage quota* for more information about how storage quotas are calculated.

#### What happens when shared files are deleted

The behavior of deleted shared files depends on who deletes the item and who owns it.

For example, User1 shares a folder named `TheProject/` with User2 and User3:

1. User2, a share recipient (sharee), deletes a folder or file named `Phase2` inside `TheProject/`.

   `TheProject/Phase2` is moved to the trash bin of User1, the owner, and a copy is placed in User2's trash bin when possible. The item is removed from the shared folder for User3, but User3 does not receive a copy in their trash bin.

2. User1, the owner, deletes `TheProject/Phase2`.

   The item is moved to User1's trash bin and removed from the shared folder for User2 and User3. It is not placed in their trash bins.

The exact behavior can depend on the type of share and the permissions granted by the share. Depending on those permissions, other users may be able to copy, rename, move, or re-share shared files. These operations can affect which account owns the resulting files and which trash bin receives a deleted item.

> **Note**
>
> When a sharee deletes an item owned by another user, Nextcloud moves the item to the owner's trash bin. A copy in the deleting user's trash bin is also created (in most cases; the copy is on a best-effort basis and is not guaranteed).

#### How the Deleted Files app manages storage space

The Deleted Files app manages trash-bin contents using two related rules:

- A storage limit determines how much space the trash bin may use.
- A retention policy determines when deleted items become eligible for permanent deletion.

#### Trash-bin storage limit

For accounts with a storage quota, the default trash-bin limit is up to 50% of the account's remaining quota space. This is calculated after the account's active files have been taken into account; it is not 50% of the account's total quota.

For example, if your quota is 10 GB and your active files use 8 GB, the default trash-bin allowance is calculated from the remaining 2 GB.

For accounts without a storage quota, the default limit is calculated using available filesystem space instead. Your administrator can override either default by configuring a global or per-account trash-bin size.

When the effective trash-bin limit is exceeded, Nextcloud removes eligible deleted items, starting with the oldest items, until the limit is satisfied again.

#### Retention and permanent deletion

By default, deleted files are retained for at least 30 days. After that, eligible items may be permanently deleted when space is needed; they are not necessarily deleted immediately after 30 days.

Your administrator can configure different minimum and maximum retention periods. Depending on the configuration, items may be permanently deleted after a maximum age even when storage space is not currently needed. Automatic expiration can also be disabled.

For policies with a configured minimum retention period, an item is eligible for space-based cleanup only after that period has elapsed. Policies without a minimum retention period may allow space-based cleanup regardless of the item's age. Items that have exceeded a configured maximum retention period can be permanently deleted regardless of whether space is currently needed.

The relevant configuration setting is `trashbin_retention_obligation`. For details about the available values and their interaction with quotas and trash-bin sizes, see the Deleted Files section of the Administrator Manual.

> **Note**
>
> The Deleted Files app may permanently delete an item before its maximum retention period when the effective trash-bin limit is exceeded and the item's minimum retention period has elapsed.

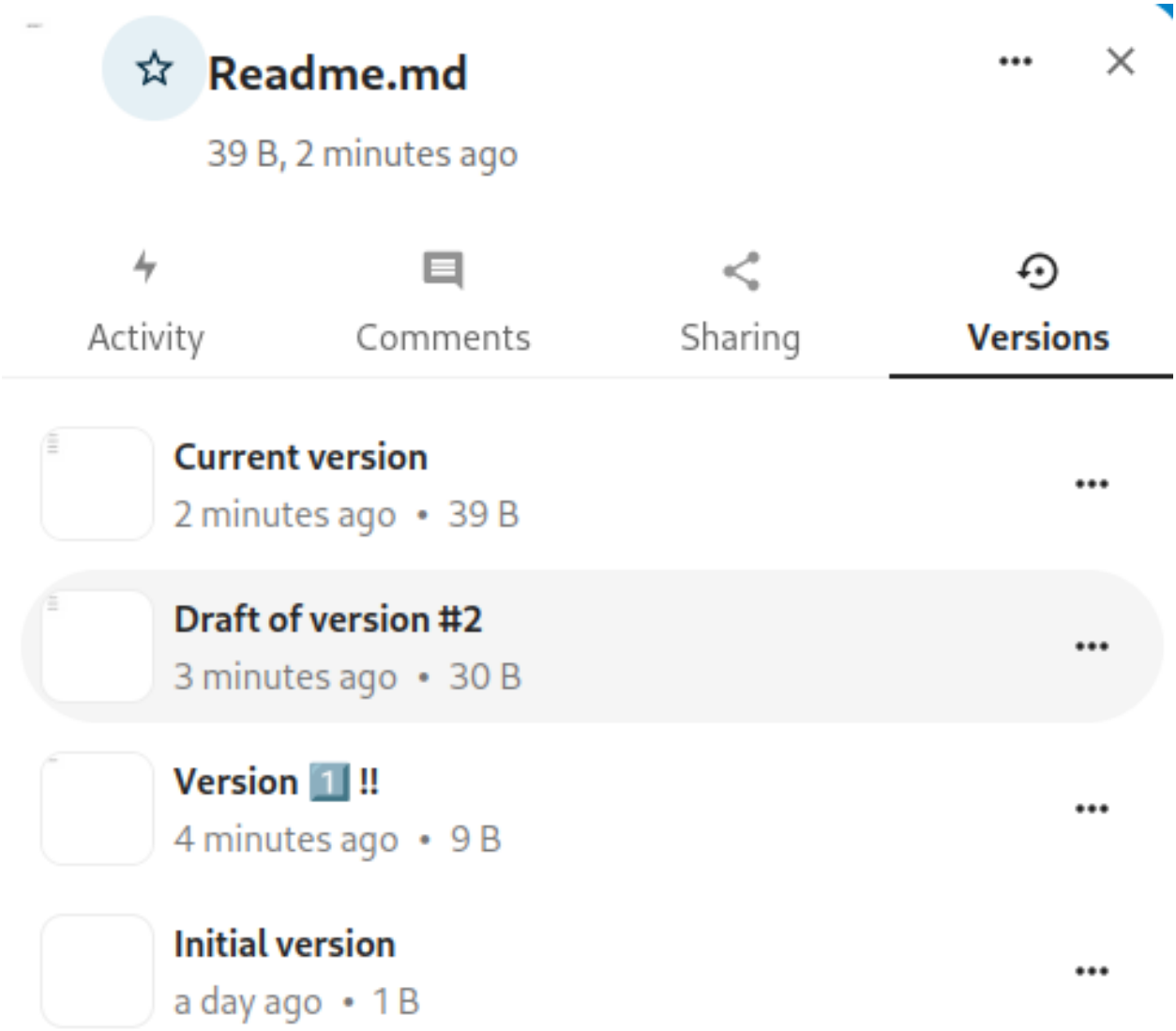
### 5.2.2 Version control

Nextcloud supports a simple version control system for files. Versioning creates backups of files which are accessible via the Versions tab on the Details sidebar. This tab contains the history of the file where you can roll back a file to any previous version. A new version is saved only if at least two minutes have passed since the last version was created. Versions are stored in `data/[user]/files_versions`.

To restore a specific version of a file, click the circular arrow to the right. Click on the timestamp to download it.

The versioning app expires old versions automatically to make sure that you don't run out of space. This pattern is used to delete old versions:

- For the first second we keep one version
- For the first 10 seconds Nextcloud keeps one version every 2 seconds


Readme.md
39 B, 2 minutes ago
Activity
Comments
Sharing
Versions
Current version
2 minutes ago • 39 B
Draft of version #2
3 minutes ago • 30 B
Version 1 !!
4 minutes ago • 9 B
Initial version
a day ago • 1 B

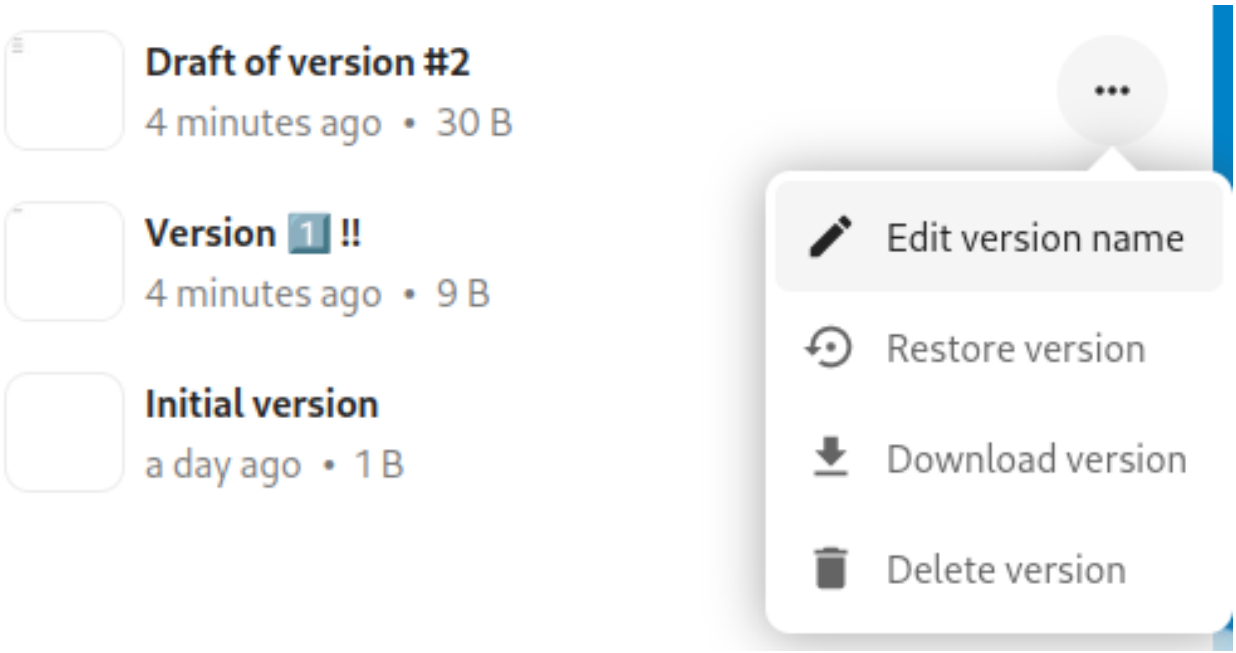
- For the first minute Nextcloud keeps one version every 10 seconds
- For the first hour Nextcloud keeps one version every minute
- For the first 24 hours Nextcloud keeps one version every hour
- For the first 30 days Nextcloud keeps one version every day
- After the first 30 days Nextcloud keeps one version every week

The versions are adjusted along this pattern every time a new version gets created.

The version app never uses more than 50% of the user's currently available free space. If the stored versions exceed this limit, Nextcloud deletes the oldest versions until it meets the disk space limit again.

#### Naming a version

You can give a name to a version.




When a version has a name, it will be excluded from the automatic expiration process.

#### Deleting a version

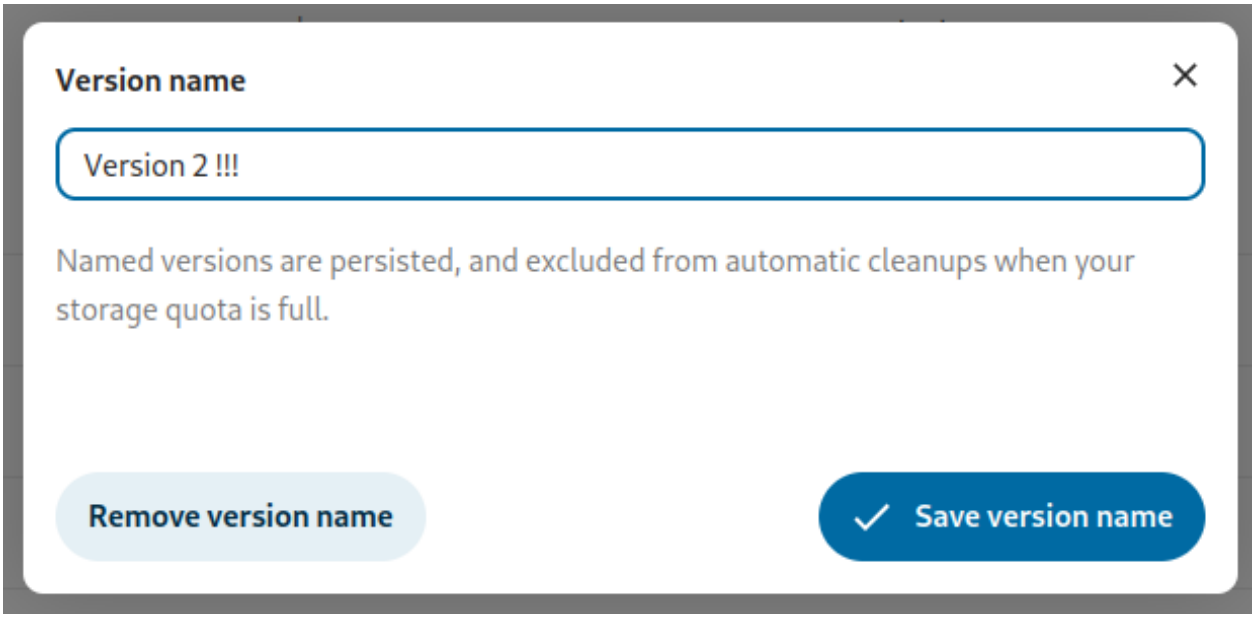
You can also manually delete a version without waiting for the automatic expiration process.

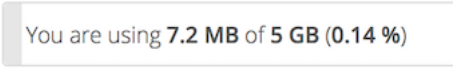
### 5.2.3 Storage quota

Your Nextcloud administrator can set a storage quota for your account. Open your Personal settings page to see your quota and how much storage you have used.

It may be helpful to understand how your quota is calculated.

Metadata such as thumbnails, temporary files, caches, and encryption keys can use disk space without counting against your user quota. Some apps store data in the database, such as the Calendar and Contacts apps. This data is not included in the file-storage quota.




When other users share files with you, the shared files normally count against the original owner's quota. When you share a folder and allow other users or groups to upload or edit files in it, those files count against your quota. When you re-share files shared with you, the re-share normally continues to count against the original owner's quota.

Encrypted files can use more physical storage than unencrypted files. The quota calculation uses the file size reported by Nextcloud's storage layer.

When the Versions app is enabled, older file versions are managed separately from the normal storage quota according to the app's retention and storage rules.

If you create a public share through a URL and allow uploads, uploaded files count against your quota.

### Deleted files and the trash bin

Files and folders in your trash bin do not count against your normal storage quota. The trash bin nevertheless has its own storage limit.

For accounts with a quota, the default amount of space available to the trash bin is calculated as 50% of the account's remaining quota space. This is calculated after the account's active files have been taken into account; it is not 50% of the total quota.

For accounts without a quota, the default trash-bin limit is calculated using available filesystem space instead. An administrator can configure a global or per-account trash-bin size that overrides the calculated default.

Your administrator can also configure minimum and maximum trash-bin retention periods, or disable automatic expiration. See the Deleted Files section of the Administrator Manual for details.

### 5.2.4 System tags

System tags are server-wide labels you can attach to files and folders to organise them, filter your file list, and drive automated workflows such as retention rules and access control.

Tags appear directly on file and folder rows in the **Files** app so you can see at a glance which labels are assigned:

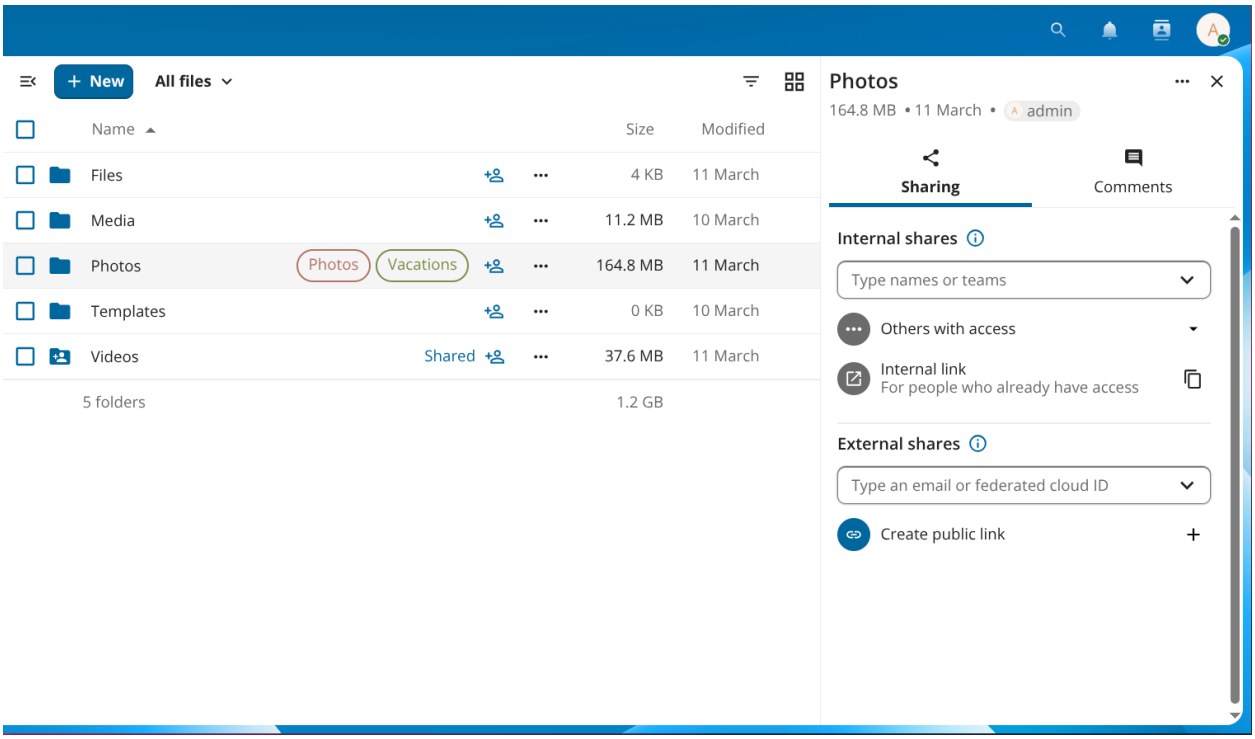



Fig. 1: *Figure 1: Tags are shown inline on files and folders.*

Tags are created by administrators in the server settings. Depending on your server configuration, regular users may also be able to create tags — your administrator can restrict tag creation to admins only.

#### Tag access levels

Every tag has one of three access levels that control what regular users can see and do:

| Level | Visible to users | Users can assign / remove |
|---|---|---|
| Public | Yes | Yes |
| Restricted | Yes | No |
| Invisible | No | No |

Restricted and invisible tags are used by administrators for automated workflows. You cannot work around them by removing the tag yourself.

#### Browsing files by tag

Click the navigation icon (≡) at the top left of the **Files** app to open the navigation panel, then click **Tags**. The view lists all tags visible to you. Click a tag name to see every file and folder that has that tag assigned.

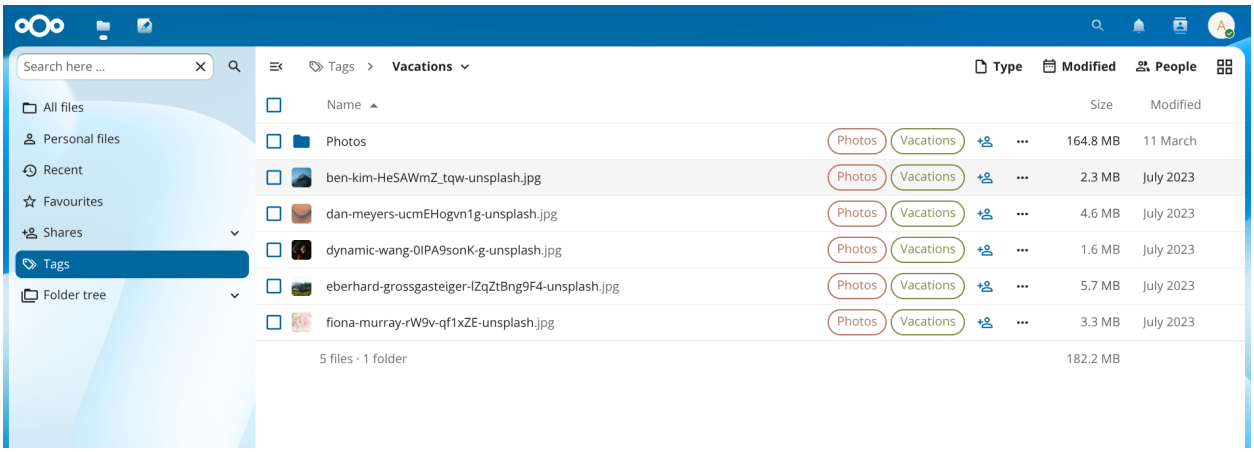



Fig. 2: *Figure 2: Clicking a tag in the navigation panel filters the file list to files with that tag.*

## Assigning tags to files

You can assign or remove tags on one file at a time or across a selection of files in one step.

**Single file**

1. Click the three-dot action menu (**…**) next to a file or folder and select **Details** to open the details sidebar.
2. In the details sidebar, click **Add tags**.
3. Type a tag name in the search field and select the tag from the list.
4. Click outside the picker to close it. Changes are saved immediately.

To remove a tag, open the same picker and click the **×** next to the tag name.

> **Note**
>
> Only public tags appear in the picker for regular users. Restricted and invisible tags can only be assigned by administrators.

**Multiple files**

1. Select two or more files by clicking the checkbox to the left of each row.
2. Click **··· Actions** in the toolbar above the file list, then select **Manage tags**.
3. Check or uncheck tags in the dialog that appears. An info line shows how the change will be applied across the selected files.
4. Click **Apply**.

## Creating and managing tags

If your administrator has not restricted tag creation, you can create a new tag directly from the **Manage tags** dialog or the single-file tag picker: type a new name in the **Search or create tag** field and select the **Create tag** option that appears.

Administrators create, rename, and delete tags under *Administration settings ▸ Server*. For details on tag management and command-line tools, see the Automated tagging section of the administration manual.

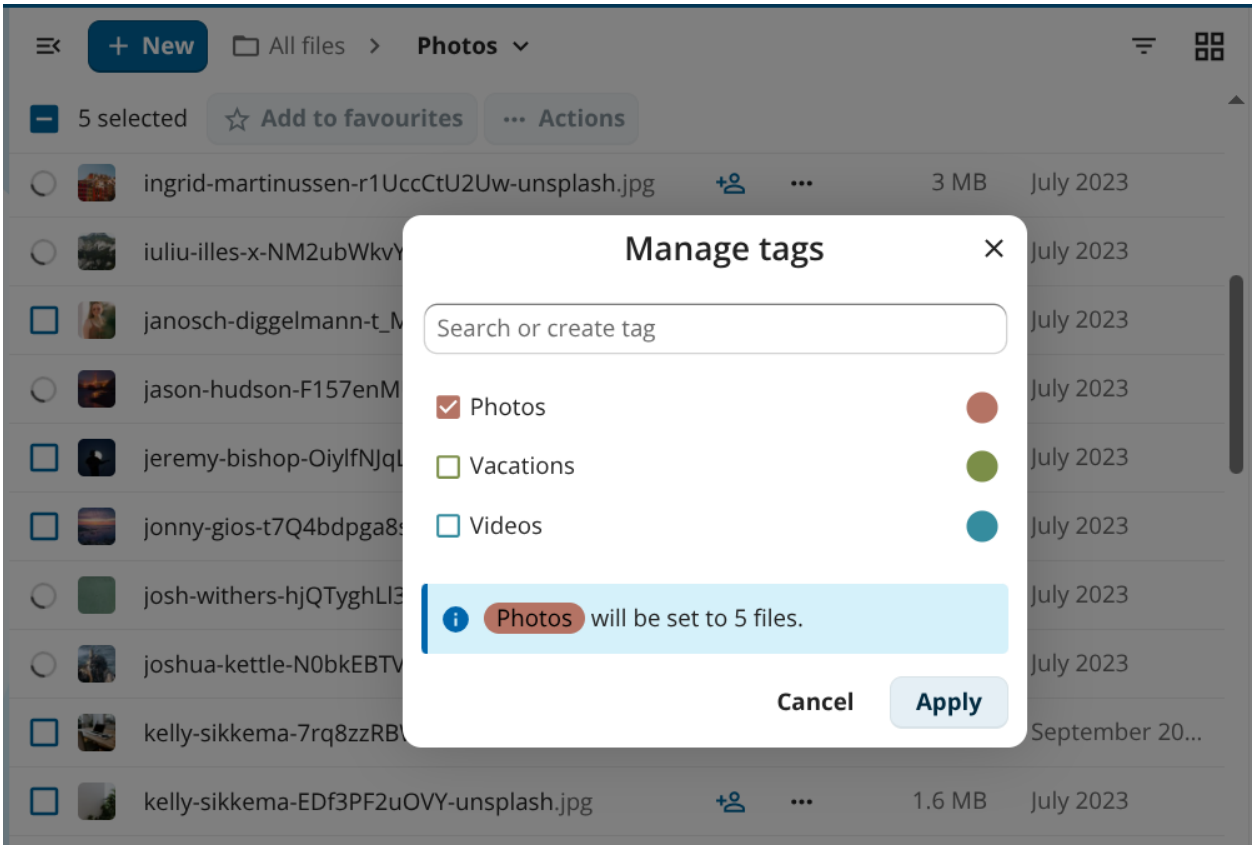



Fig. 3: *Figure 3: Manage tags lets you apply or remove tags across multiple files at once.*

## 5.3 Sharing & collaboration

### 5.3.1 File sharing

Nextcloud users can share files and folders. Possible targets are:

- public links
- users
- groups
- circles
- talk conversations
- users or groups on federated Nextcloud servers

> **Note**
>
> Some options may not be available due to administrative configuration. See administrator documentation for details.

#### Public link shares

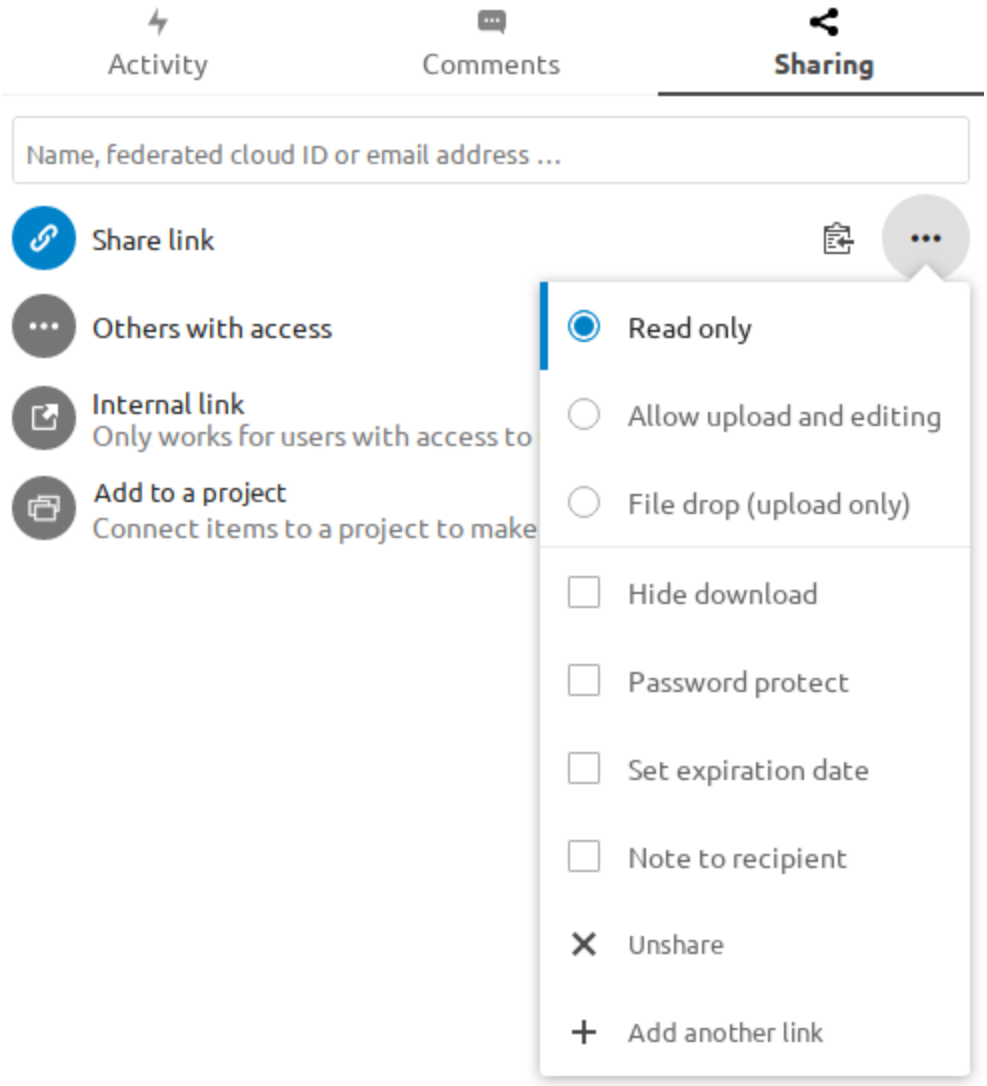
You can share files and folders via public links.

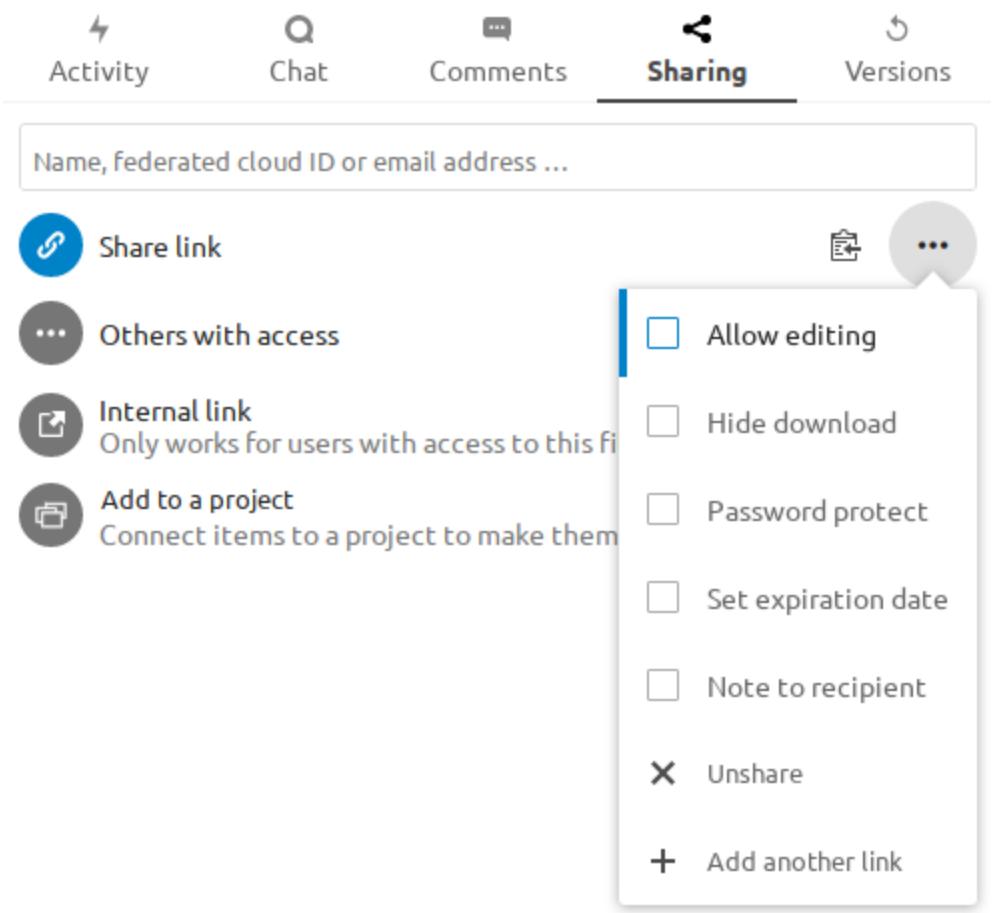
A random 15-digit token will be created. The link will look like `https://cloud.example.com/s/yxcFKRWBJqYYzp4`.

A number of options are available for public *folder* shares:

- **Read only** to allow viewing and downloading
- **Allow upload and editing**
- With **File drop**, the sharee can only upload files to a folder without seeing the files that are already in that folder.
- **Hide download** hides the download buttons and the default browser right-click options in order to make downloading for the sharee harder
- **Password protect**
- **Set expiration date** will automatically disable the share
- **Note to recipient**
- **Unshare** to revert the share
- **Add another link** to create multiple public links with different rights

For public *file* shares, you may allow editing the file with one of Nextcloud's collaborative editing solutions:


Activity
Comments
Sharing
Name, federated cloud ID or email address ...
Share link
Others with access
Internal link
Only works for users with access to
Add to a project
Connect items to a project to make
Read only
Allow upload and editing
File drop (upload only)
Hide download
Password protect
Set expiration date
Note to recipient
Unshare
Add another link

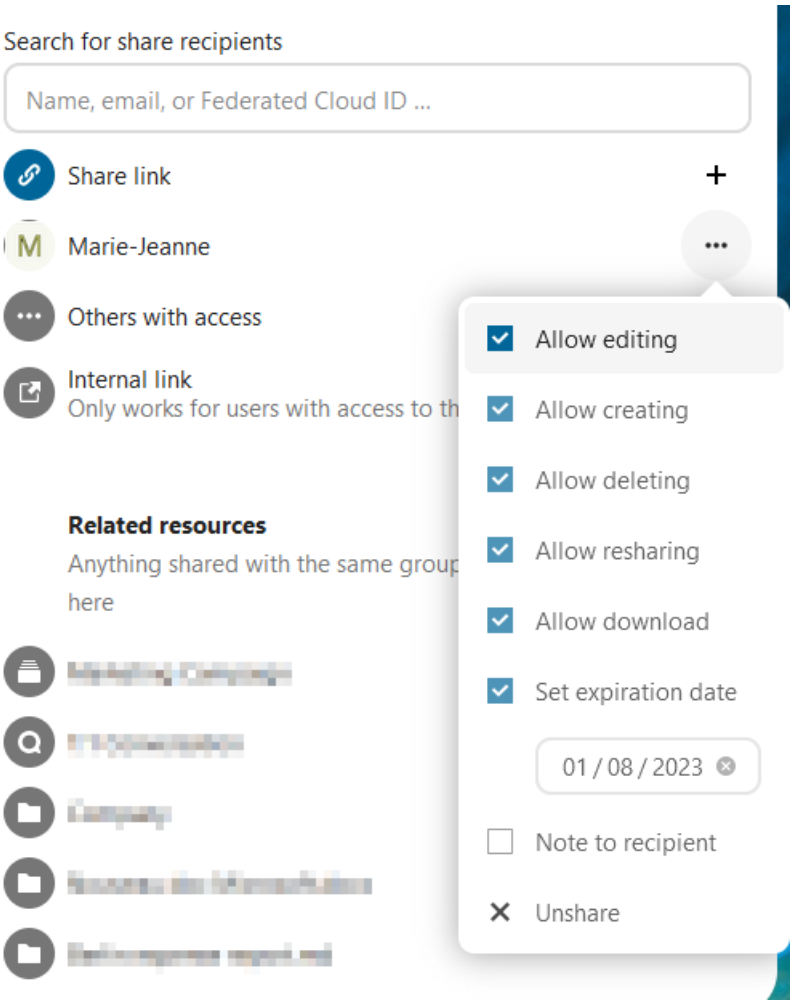

Activity
Chat
Comments
Sharing
Versions
Name, federated cloud ID or email address …
Share link
Others with access
Internal link
Only works for users with access to this fi
Add to a project
Connect items to a project to make them
Allow editing
Hide download
Password protect
Set expiration date
Note to recipient
Unshare
Add another link

**Note**

Password protection and file expiration are also propagated using Federated File Sharing since Nextcloud 22.

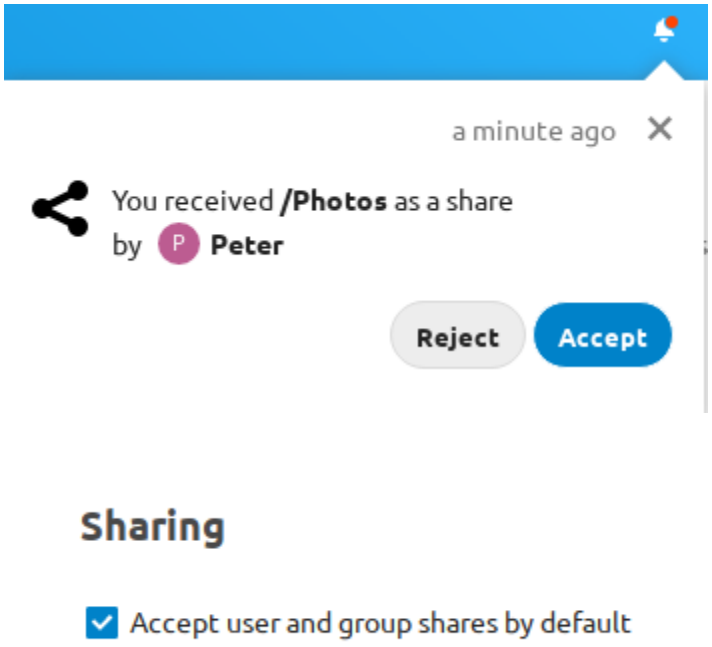
### Internal shares with users and groups

When sharing with users, groups, circles or members of a Talk conversation, rights for the files or folder contents are adjustable:




As a sharee, you can configure if you automatically want to accept all incoming shares and have them added to your root folder, or if you want to be asked each time if you want to accept or decline the share.

For adjusting the acceptance setting, go to **Settings > Personal > Sharing**:







**Warning**

If the owner renames a shared file or folder, the new name will not be reflected on the recipient's side. This is needed to prevent overwriting existing files or folders on the recipient's end.

#### Others with access

In order to find out if a file or folder is accessible to others through sharing of a superior folder hierarchy level, click on **Others with access** in the sharing tab:

The list shows all users, groups, chats etc. that the current object has been given access to through sharing of a superior folder in the hierarchy:

Click on the three dots to:

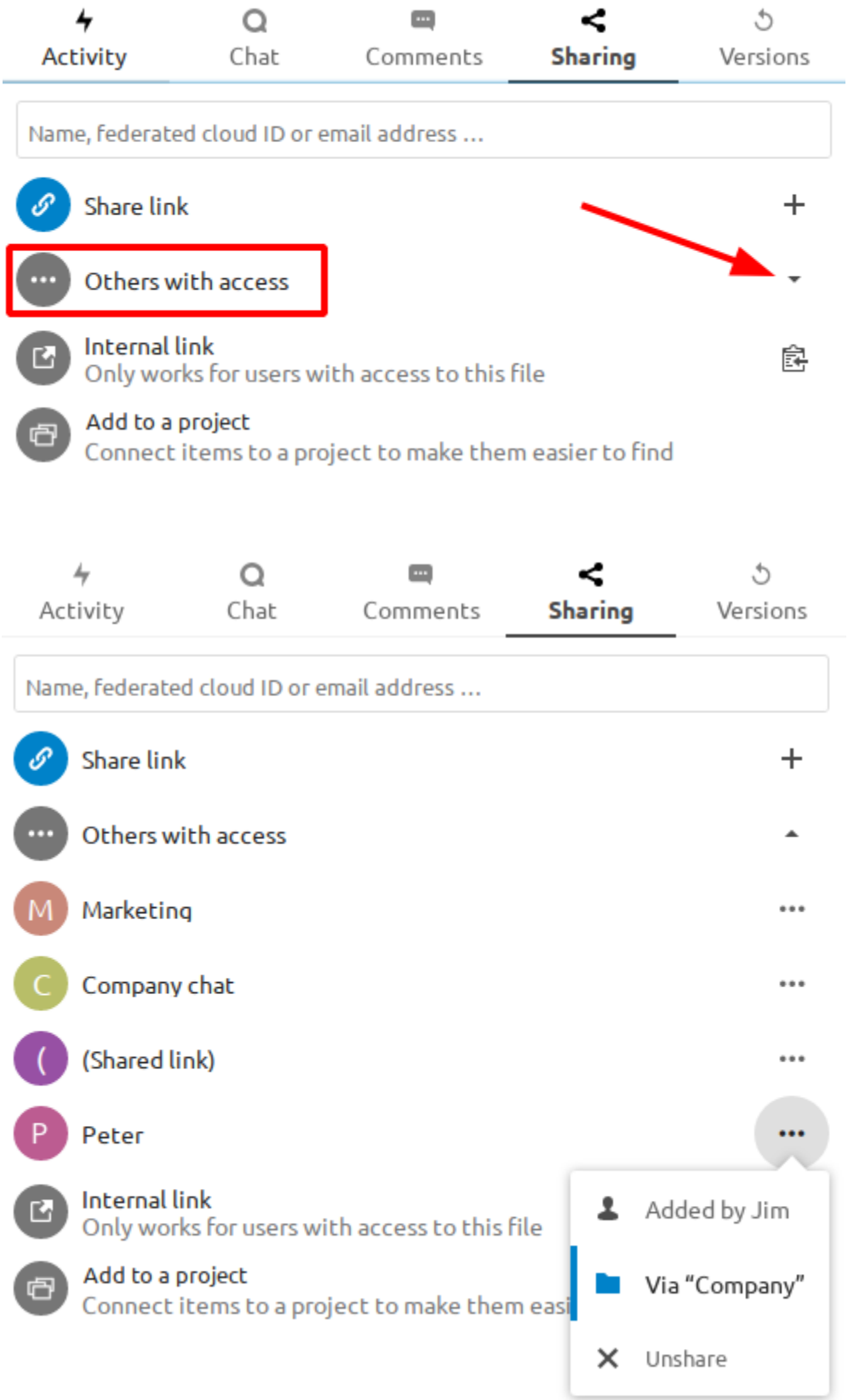
- see who initiated the share
- see where the share was initiated (click to navigate to the folder, as far as you have access there)
- unshare the initial share (only accessible for the share owner)

**Note**

This information is only visible to the owner of a file/folder or sharees with resharing rights.

### 5.3.2 Federated shares

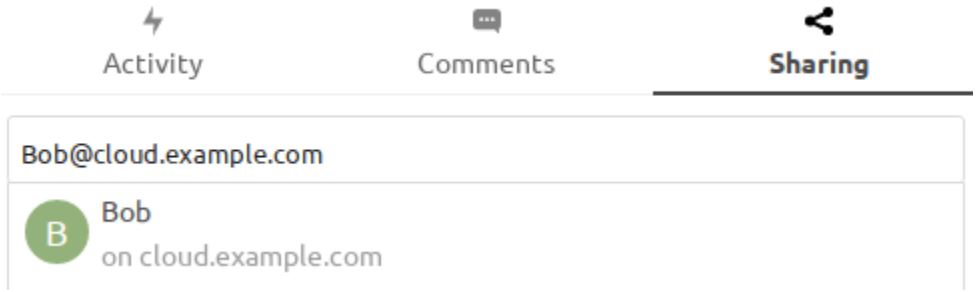
Federation Sharing allows you to mount file shares from remote Nextcloud servers, in effect creating your own cloud of Nextclouds. You can create direct share links with users on other Nextcloud servers.


Activity
Chat
Comments
Sharing
Versions
Name, federated cloud ID or email address …
Share link
Others with access
Internal link
Only works for users with access to this file
Add to a project
Connect items to a project to make them easier to find
Activity
Chat
Comments
Sharing
Versions
Name, federated cloud ID or email address …
Share link
Others with access
Marketing
Company chat
(Shared link)
Peter
Internal link
Only works for users with access to this file
Add to a project
Connect items to a project to make them easi
Added by Jim
Via “Company”
Unshare

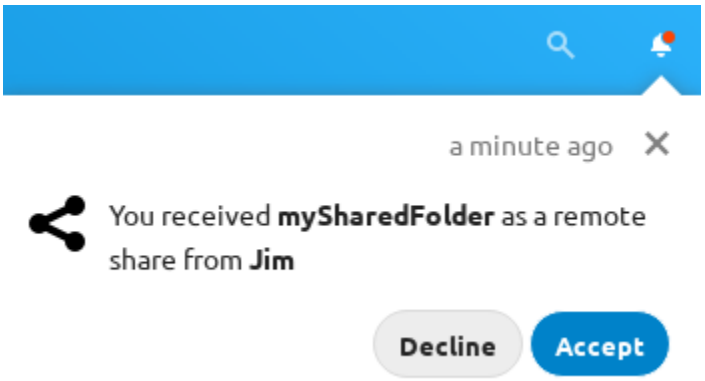
### Creating a new federation share

Federation sharing is enabled by default. Follow these steps to create a new share with other Nextcloud or ownCloud servers:

Go to your `Files` page and click the Share icon on the file or directory you want to share. In the sidebar enter the username and URL of the remote user in this form: `<username>@<nc-server-url>`. In this example, that is `bob@cloud.example.com`:

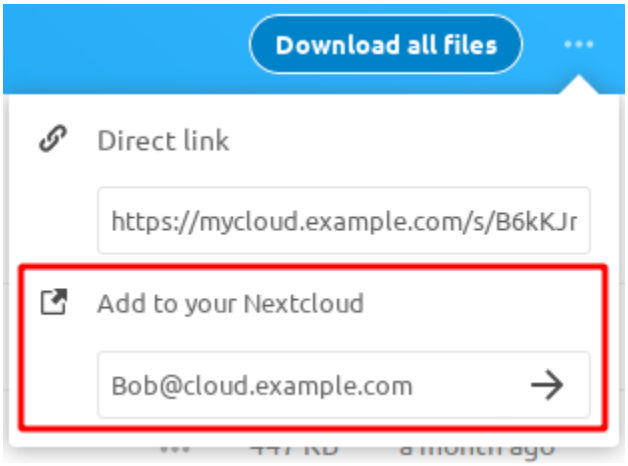



The sharee is receiving a notification in their Nextcloud, allowing them to either accept or decline the incoming share:




### Adding a public share to your Nextcloud

Nextcloud public link share pages offer an option to add that file or folder as a federated share into your own Nextcloud instance. Enter your `<username>@<nc-server-url>` as shown for outbound shares above:

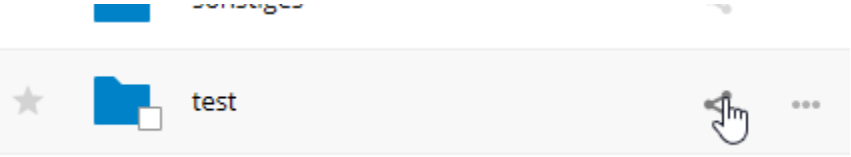


### 5.3.3 Making anonymous uploads

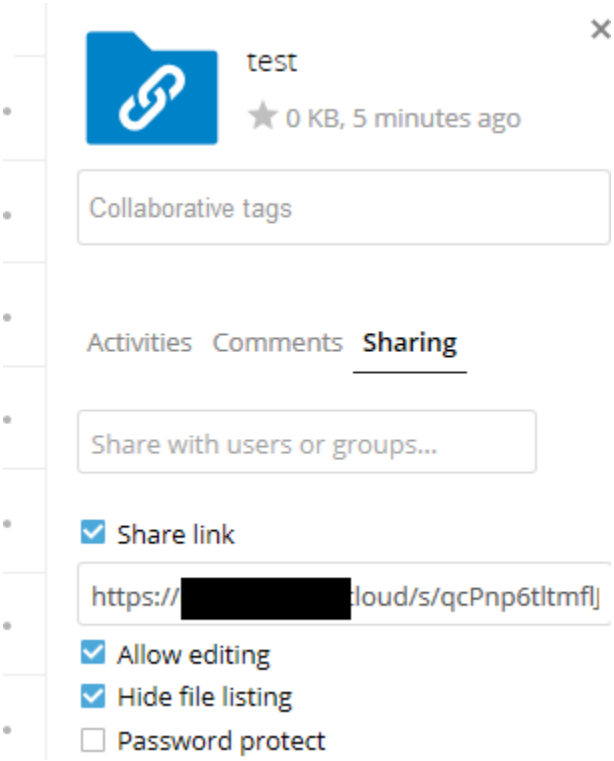
You may create your own special upload directories so that other people can upload files to you without logging in to the server or having a Nextcloud account. Uploaders cannot see the contents of the directory or make any changes. This is an excellent alternative to sending large attachments via email, using an FTP server, or using commercial file-sharing services.

#### Setting up your own file drop

In the Files app, create or choose the folder to receive anonymous uploads:



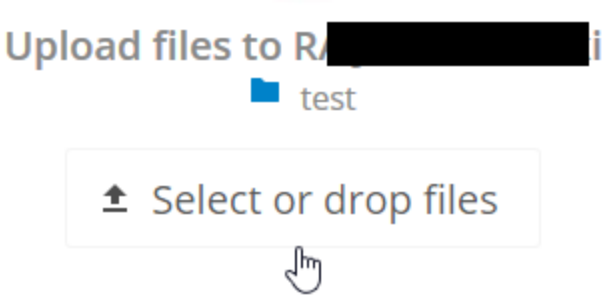

Enable **Share Link**, **Allow editing**, and **Hide file listing**:




Now you can send the link to the upload folder manually or by using the Nextcloud send function, if your administrator has enabled it.

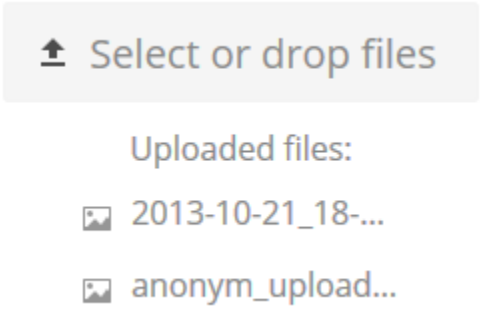
#### Uploading files

Using the anonymous upload function is simple. You receive a link to the upload folder, click the link, and then you'll see a Nextcloud page with a "**Click to upload**" button:




This opens a file picker, and you select the file or directory you want to upload. You can also drop files into the window.

When your upload is completed, the filenames are listed:



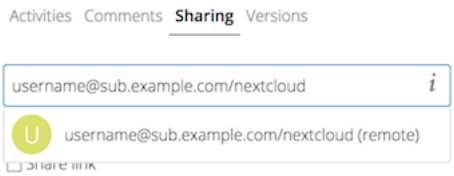

### 5.3.4 Using federation shares

Federation Sharing allows you to mount file shares from remote Nextcloud servers, in effect creating your own cloud of Nextclouds. You can create direct share links with users on other Nextcloud servers.

#### Creating a new federation share

Federation sharing is enabled on new or upgraded Nextcloud installations by default. Follow these steps to create a new share with other Nextcloud or ownCloud 9+ servers:

1. Go to your `Files` page and click the **Share** icon on the file or directory you want to share. In the sidebar enter the username and URL of the remote user in this form: `<username>@<oc-server-url>`. The form automatically confirms the address that you type and labels it as "remote". Click on the label.



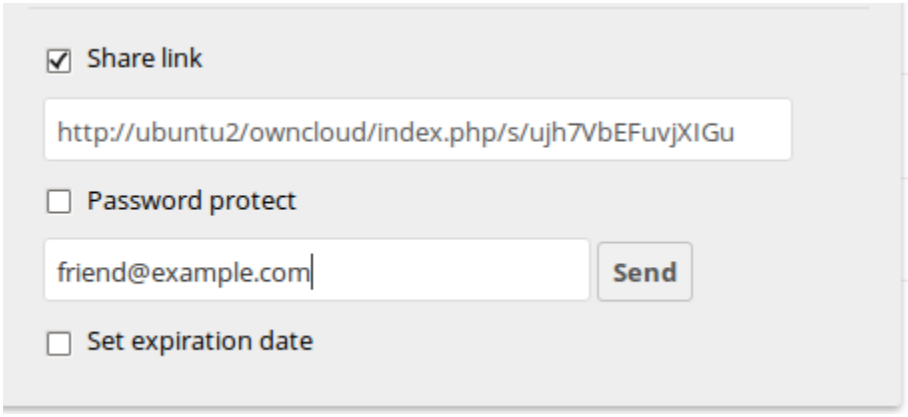

2. When your local Nextcloud server makes a successful connection with the remote Nextcloud server you will see a confirmation. Your only share option is **Can edit**.

Click the **Share** button anytime to see who you have shared your file with. Remove your linked share anytime by clicking the trash can icon. This only unlinks the share, and does not delete any files.

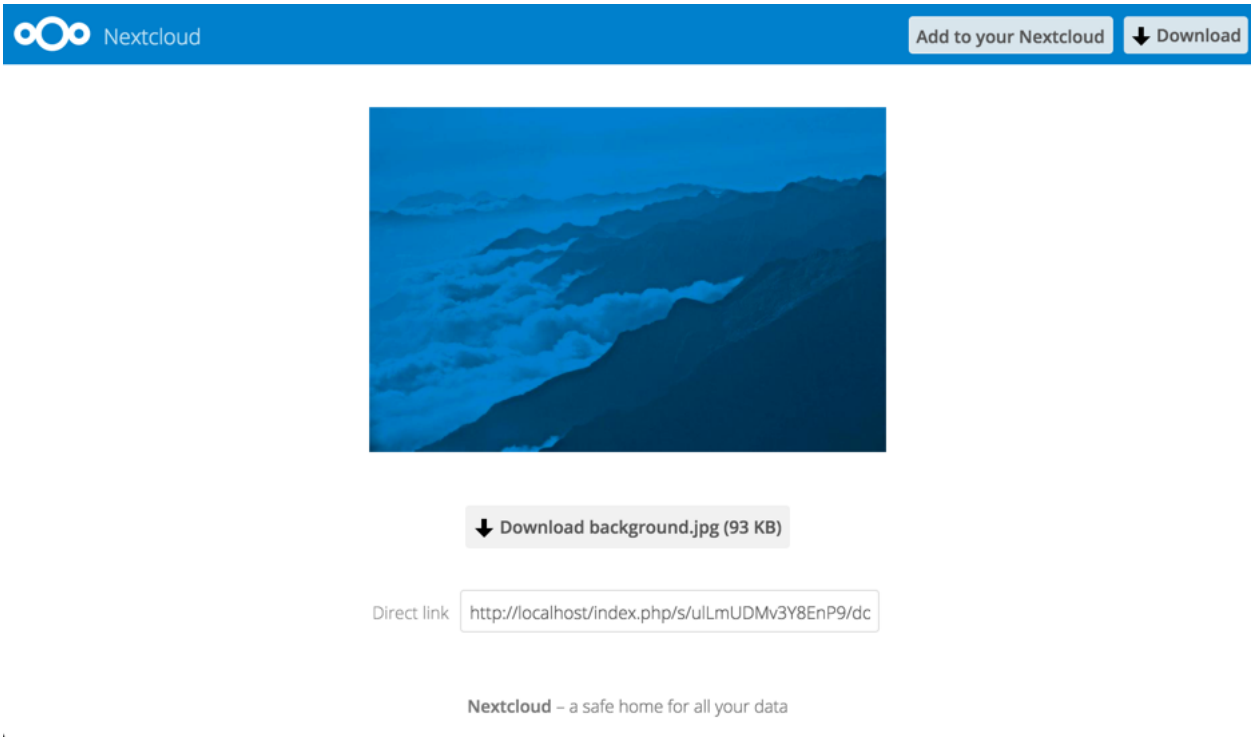
### Creating a new federated cloud share via email

Use this method when you are sharing with users on ownCloud 8.x and older.

If you do not know the username or URL, you can have Nextcloud create the link for you and email it to your recipient.



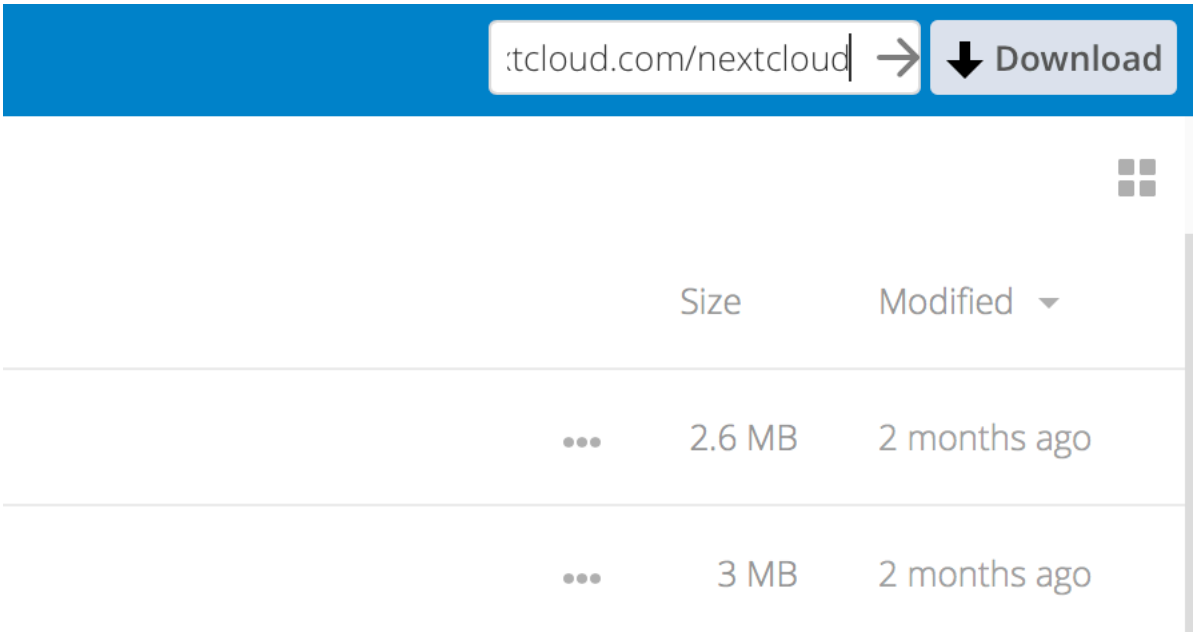

When your recipient receives your email they will have to take a number of steps to complete the share link. First they must open the link you sent them in a web browser, and then click the **Add to your Nextcloud** button.




The **Add to your Nextcloud** button changes to a form field, and your recipient needs to enter the URL of their Nextcloud or ownCloud server in this field and press the return key, or click the arrow.

Next, they will see a dialog asking to confirm. All they have to do is click the **Add remote share** button and they're finished.

Remove your linked share anytime by clicking the trash can icon. This only unlinks the share, and does not delete any files.




### 5.3.5 Transfer ownership

Users can transfer the ownership of files and folders to other users. Sharing settings and permissions for transferred files and folders will also be transferred to the new owner.

1. Navigate to *Settings* > *Sharing*.
2. In the *Files* section, click on *Choose file or folder to transfer*. A file picker opens, showing all files and folders in the user's account.
3. Pick a file or folder and click on *Choose*. The chosen file or folder name gets displayed.
4. Click on *Change* to change the choice if necessary.
5. Pick a new owner by typing their name into the search field next to *New owner*.
6. Click on *Transfer*.

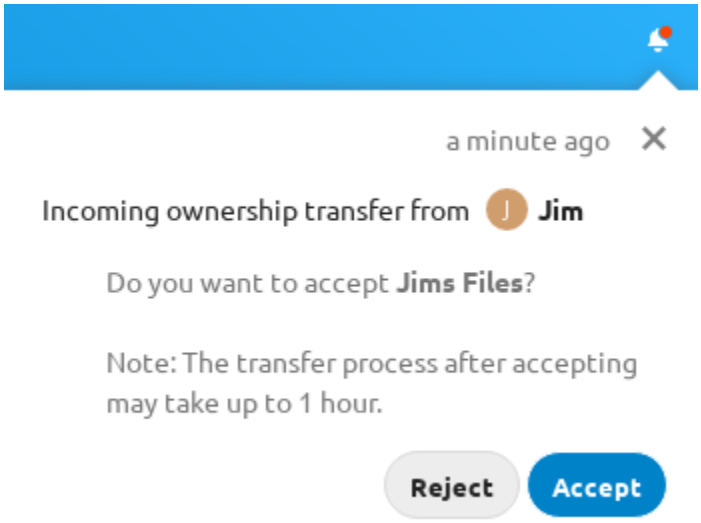
> **Note**
>
> The username autocompletion or listing may be limited due to administrative visibility configuration. See administrator documentation for details.

7. The target user receives a notification where they are being asked whether to accept or reject the incoming transfer.
8. If accepted, the target user finds the transferred files and folders in their root under a folder *Transferred from [user] on [timestamp]*.
9. The source user gets informed about the acceptance or rejection by a notification.

## 5.4 Security & encryption

### 5.4.1 Using server-side encryption

Nextcloud includes a server-side encryption app, and when it is enabled by your Nextcloud administrator all of your Nextcloud data files are automatically encrypted on the server. Encryption is server-wide, so when it is enabled you




cannot choose to keep your files unencrypted. You don't have to do anything special, as it uses your Nextcloud login as the password for your unique private encryption key. Just log out and in and manage and share your files as you normally do, and you can still change your password whenever you want.

Its main purpose is to encrypt files on remote storage services that are connected to your Nextcloud server. This is an easy and seamless way to protect your files on remote storage. You can share your remote files through Nextcloud in the usual way, however you cannot share your encrypted files directly from the remote service you are using, because the encryption keys are stored on your Nextcloud server, and are never exposed to outside service providers.

If your Nextcloud server is not connected to any remote storage services, then it is better to use some other form of encryption such as file-level or whole disk encryption. Because the keys are kept on your Nextcloud server, it is possible for your Nextcloud administrator to access your unencrypted files, and if the server is compromised the intruder may get access to your files. (Read Encryption in Nextcloud to learn more.)

### Encryption FAQ

#### How can encryption be disabled?

The only way to disable encryption is to run the "decrypt all" script, which decrypts all files and disables encryption.

#### Is it possible to disable encryption with the recovery key?

Yes, *if* every user uses the file recovery key, "decrypt all" will use it to decrypt all files.

#### Can encryption be disabled without the user's password?

If you don't have the users password or file recovery key, then there is no way to decrypt all files. What's more, running it on login would be dangerous, because you would most likely run into timeouts.

#### Is it planned to move this to the next user login or a background job?

If we did that, then we would need to store your login password in the database. This could be seen as a security issue, so nothing like that is planned.

### Is group sharing possible with the recovery key?

If you mean adding users to groups and make it magically work? No. This only works with the master key.

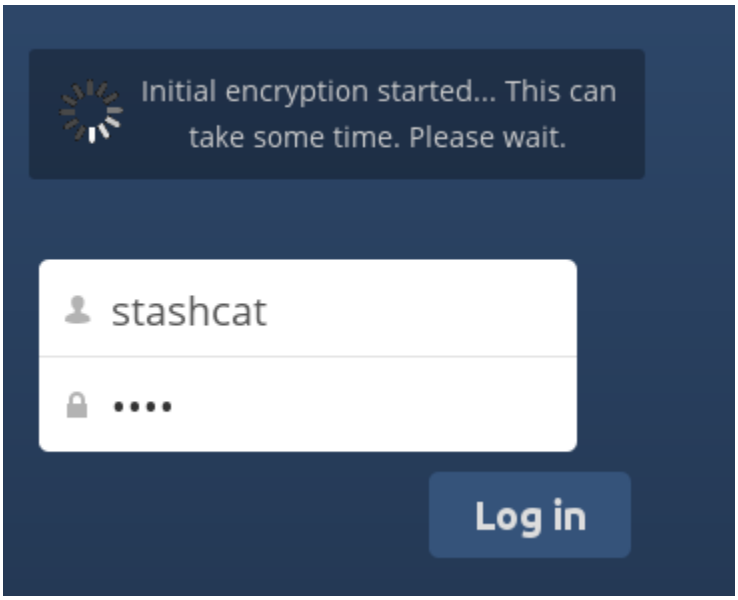
### Using encryption

Nextcloud encryption is pretty much set it and forget it, but you have a few options you can use.

When your Nextcloud administrator enables encryption for the first time, you must log out and then log back in to create your encryption keys and encrypt your files. When encryption has been enabled on your Nextcloud server you will see a yellow banner on your Files page warning you to log out and then log back in:




When you log back in it takes a few minutes to work, depending on how many files you have, and then you are returned to your default Nextcloud page.




**Note**

You must never lose your Nextcloud password, because you will lose access to your files. Though there is an optional recovery option that your Nextcloud administrator may enable; see the Recovery Key Password section (below) to learn about this.

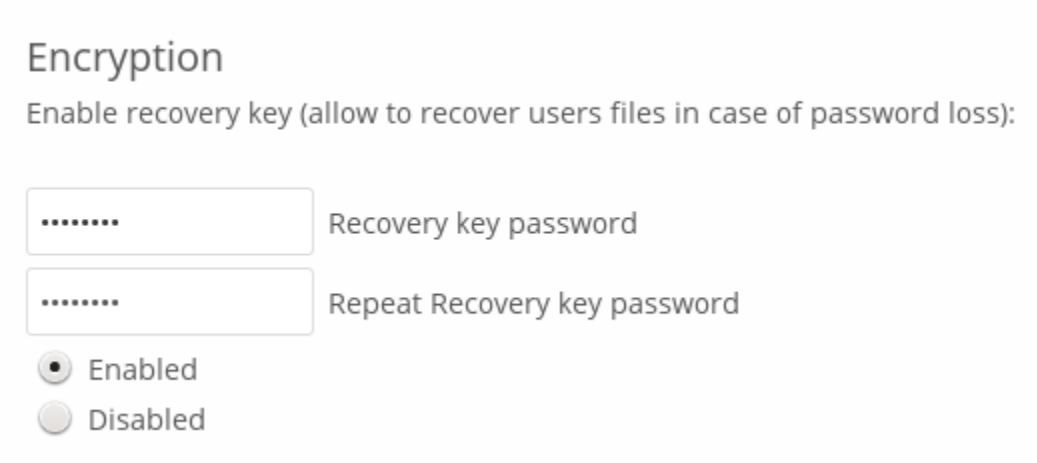
### Sharing encrypted files

Only users who have private encryption keys have access to shared encrypted files and folders. Users who have not yet created their private encryption keys will not have access to encrypted shared files; they will see folders and filenames, but will not be able to open or download the files. They will see a yellow warning banner that says "Your encryption keys are not initialized for this session. Please sign out and sign back in."

Share owners may need to re-share files after encryption is enabled; users trying to access the share will see a message advising them to ask the share owner to re-share the file with them. For individual shares, un-share and re-share the file. For group shares, share with any individuals who can't access the share. This updates the encryption, and then the share owner can remove the individual shares.

#### Recovery key password

If your Nextcloud administrator has enabled the recovery key feature, you can choose to use this feature for your account. If you enable "Password recovery" the administrator can read your data with a special password. This feature enables the administrator to recover your files in the event you lose your Nextcloud password. If the recovery key is not enabled, then there is no way to restore your files if you lose your login password.




#### Files not encrypted

Only the data in your files is encrypted, and not the filenames or folder structures. These files are never encrypted:

- Old files in the trash bin.
- Image thumbnails from the Gallery app.
- Previews from the Files app.
- The search index from the full text search app.
- Third-party app data

#### Change private key password

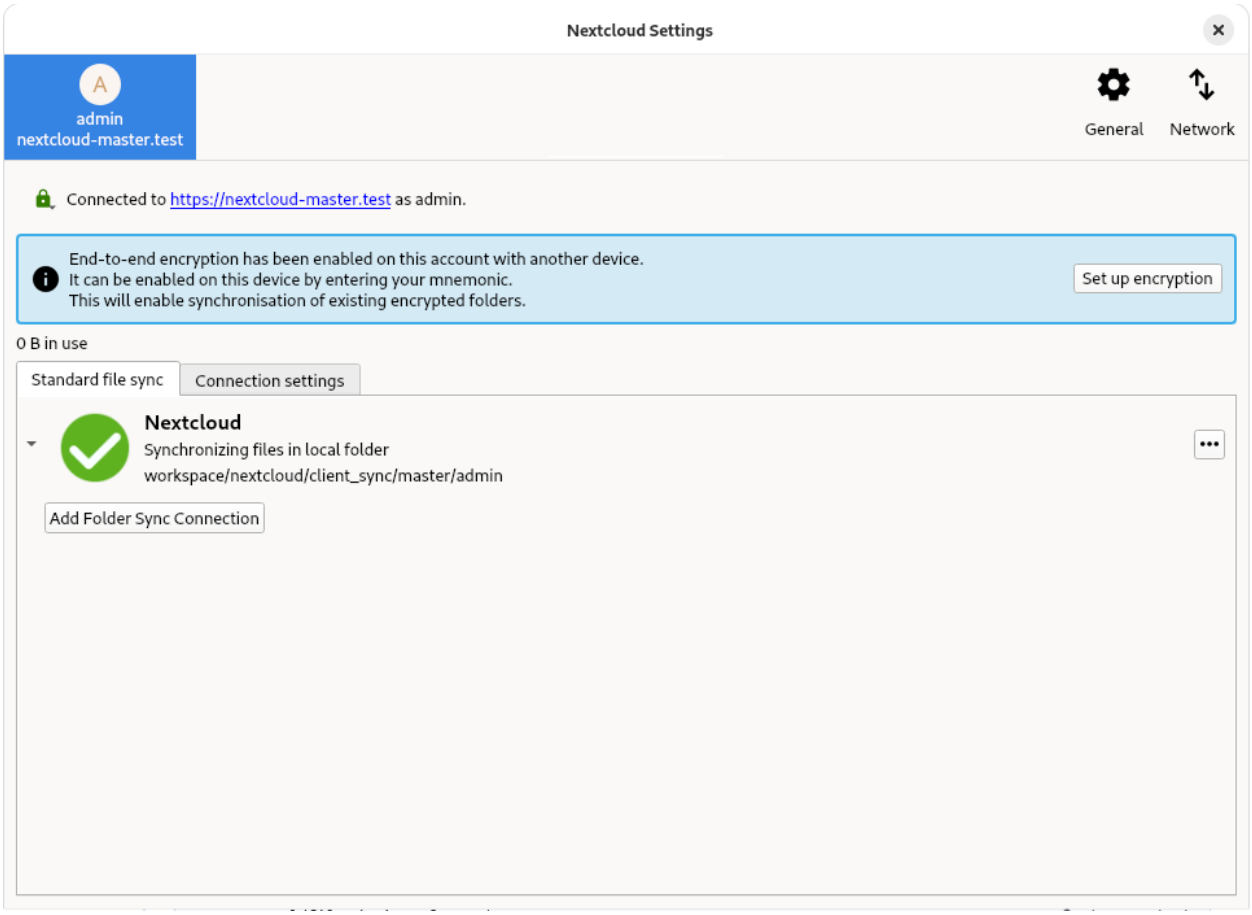
This option is only available if the encryption password has not been changed by the administrator, but only the log-in password. This can occur if your Nextcloud provider uses an external user back-end (for example, LDAP) and changed your login password using that back-end configuration. In this case, you can set your encryption password to your new login password by providing your old and new login password. The Encryption app works only if your login password and your encryption password are identical.

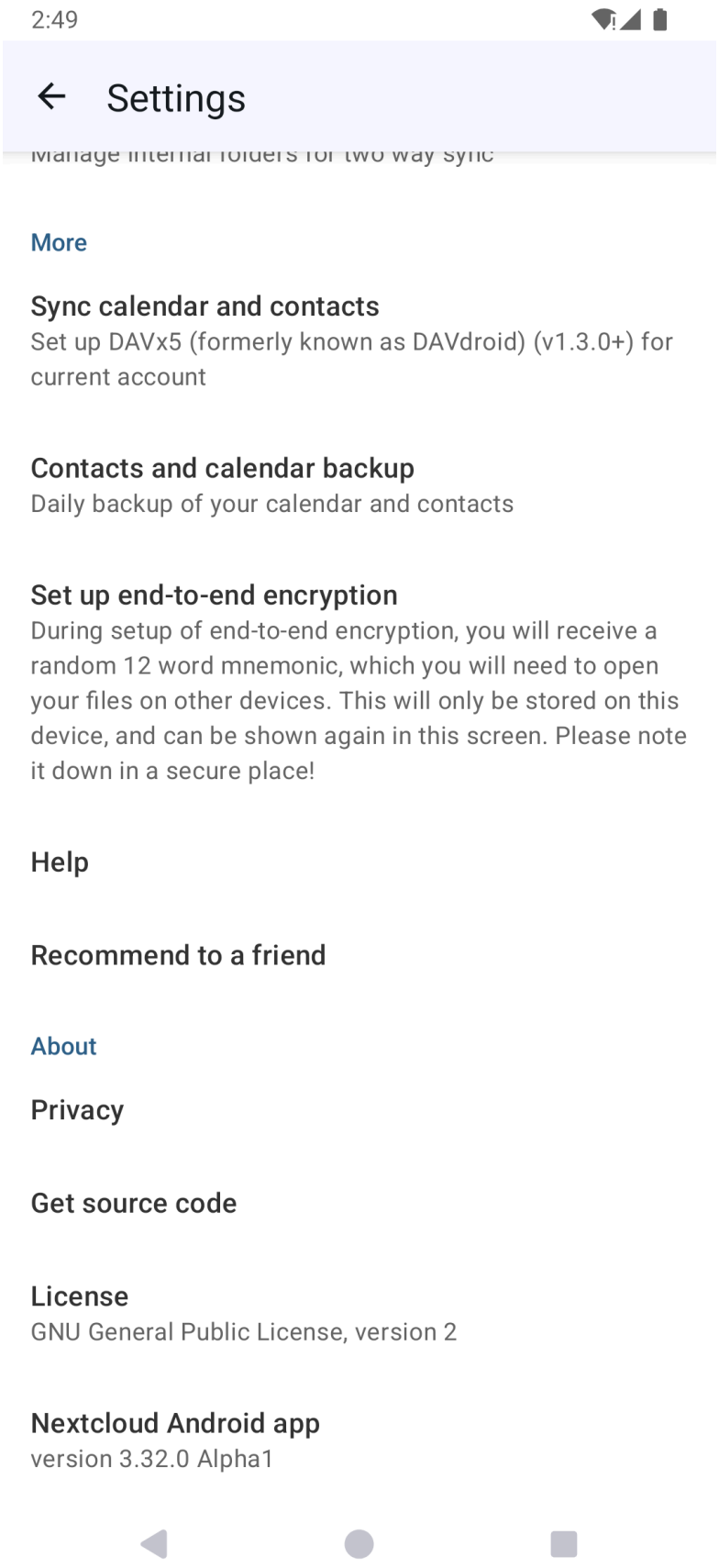
### 5.4.2 Using end-to-end encryption

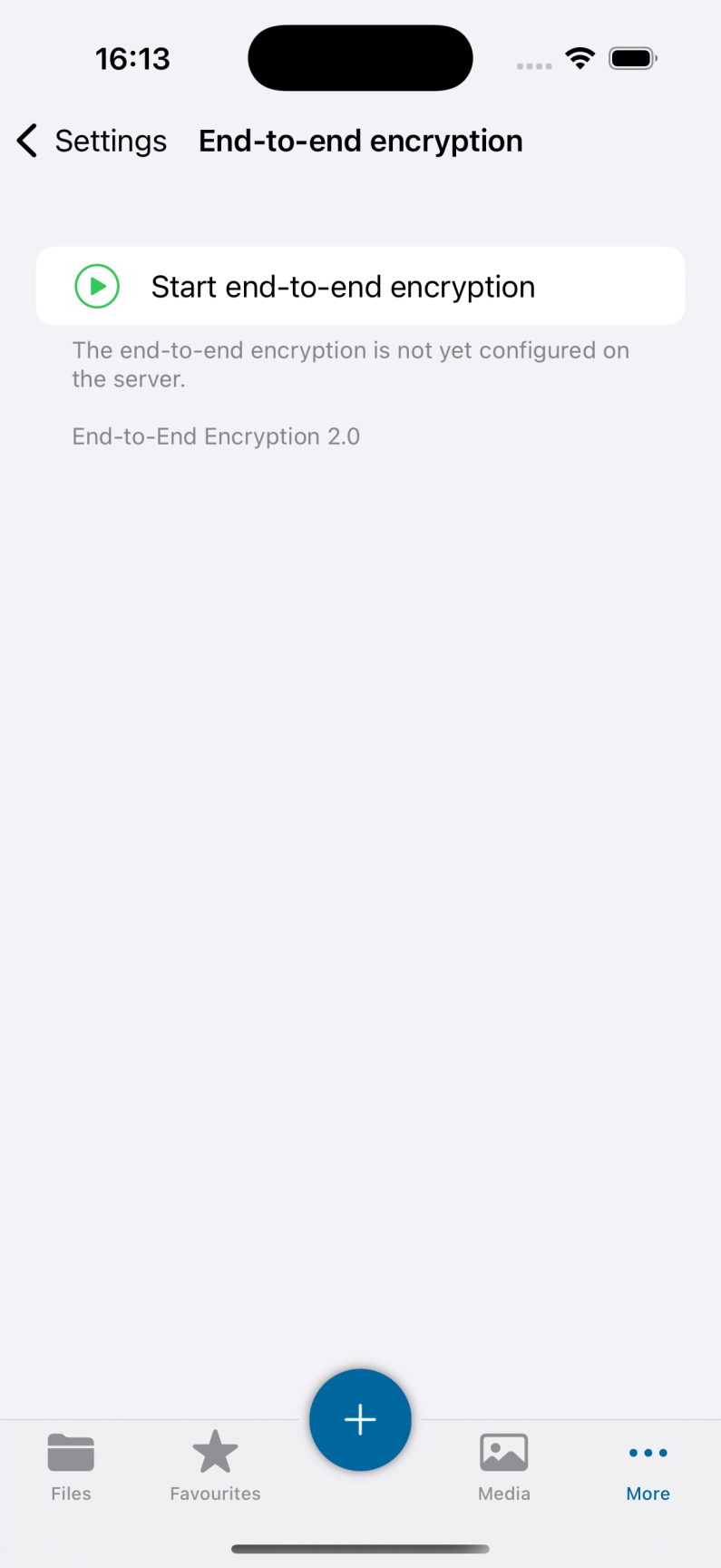
If enabled server side, Nextcloud provides the possibility to encrypt your files on your devices. This is called end-to-end encryption, or E2EE, because the files are encrypted on your device and only decrypted on your device. The server never sees the unencrypted files, further protecting user privacy and data security.

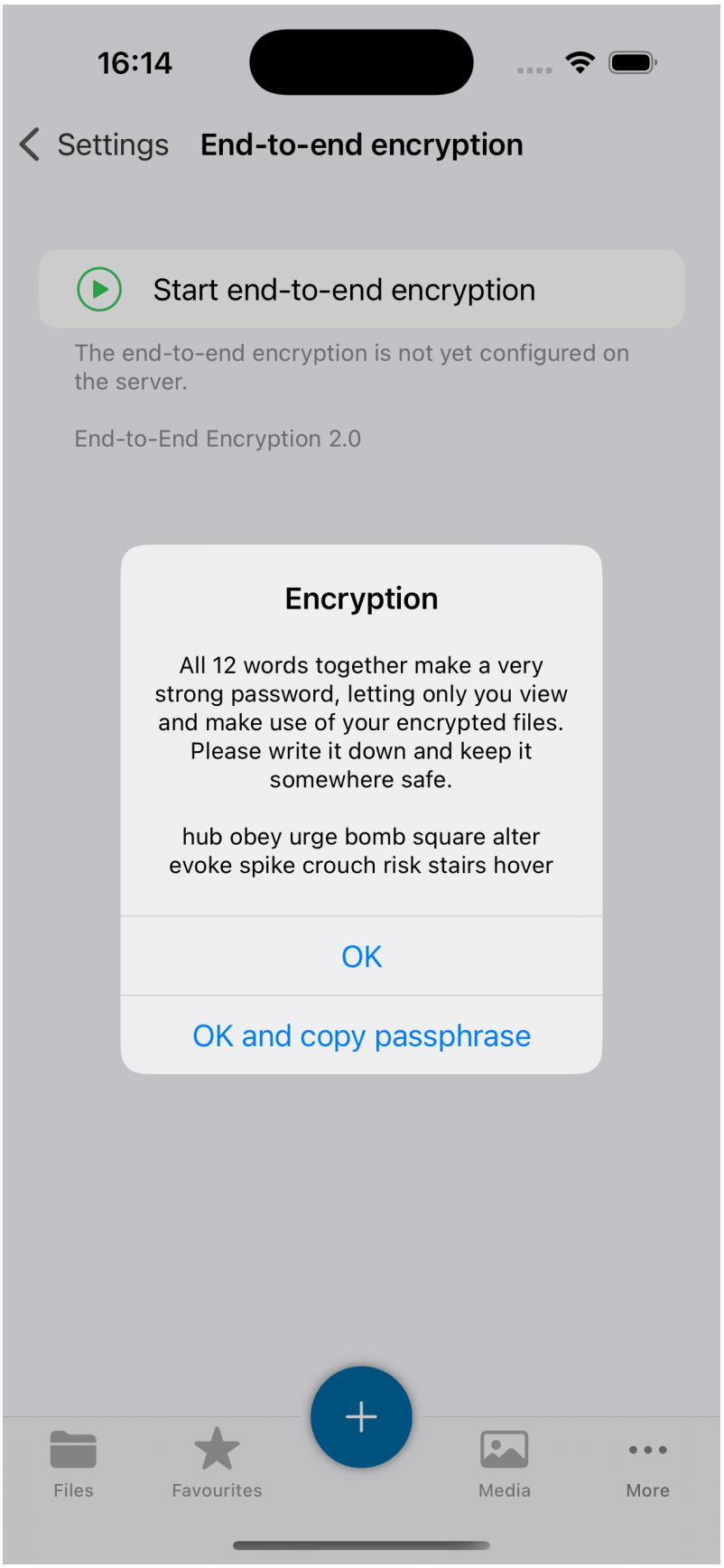
#### Enabling E2EE

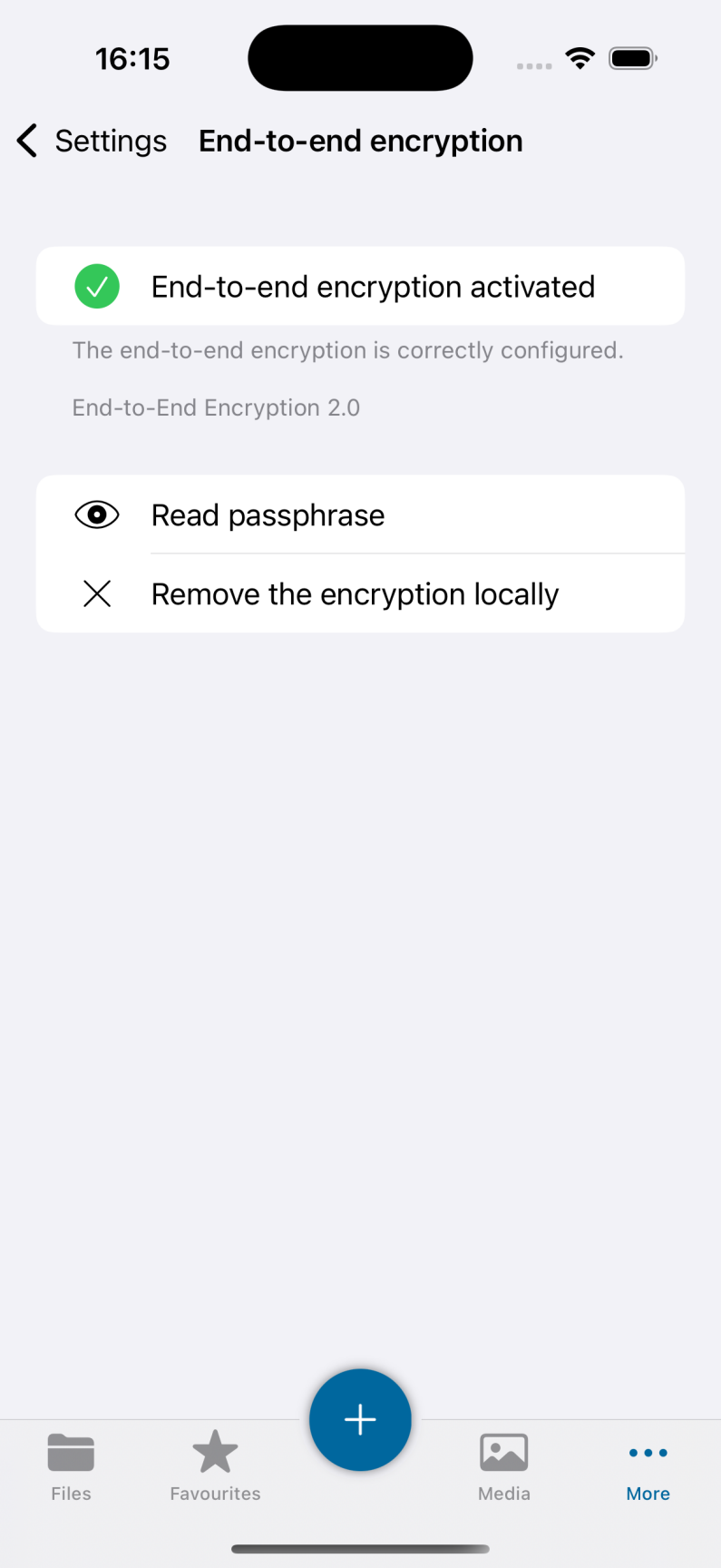
If your administrator has enabled the End-to-End Encryption app, you can start using it from one of your devices. Open the settings of the Nextcloud client and look for the E2EE encryption settings.


Nextcloud Settings
A
admin
nextcloud-master.test
General
Network
Connected to https://nextcloud-master.test as admin.
End-to-end encryption has been enabled on this account with another device.
It can be enabled on this device by entering your mnemonic.
This will enable synchronisation of existing encrypted folders.
Set up encryption
0 B in use
Standard file sync
Connection settings
Nextcloud
Synchronizing files in local folder
workspace/nextcloud/client_sync/master/admin
Add Folder Sync Connection


2:49
Settings
Manage internal folders for two way sync
More
Sync calendar and contacts
Set up DAVx5 (formerly known as DAVdroid) (v1.3.0+) for current account
Contacts and calendar backup
Daily backup of your calendar and contacts
Set up end-to-end encryption
During setup of end-to-end encryption, you will receive a random 12 word mnemonic, which you will need to open your files on other devices. This will only be stored on this device, and can be shown again in this screen. Please note it down in a secure place!
Help
Recommend to a friend
About
Privacy
Get source code
License
GNU General Public License, version 2
Nextcloud Android app
version 3.32.0 Alpha1


16:13
Settings
End-to-end encryption
Start end-to-end encryption
The end-to-end encryption is not yet configured on the server.
End-to-End Encryption 2.0
Files
Favourites
Media
More


16:14
Settings
End-to-end encryption
Start end-to-end encryption
The end-to-end encryption is not yet configured on the server.
End-to-End Encryption 2.0
Encryption
All 12 words together make a very strong password, letting only you view and make use of your encrypted files. Please write it down and keep it somewhere safe.
hub obey urge bomb square alter evoke spike crouch risk stairs hover
OK
OK and copy passphrase
Files
Favourites
Media
More


16:15
Settings
End-to-end encryption
End-to-end encryption activated
The end-to-end encryption is correctly configured.
End-to-End Encryption 2.0
Read passphrase
Remove the encryption locally
Files
Favourites
Media
More

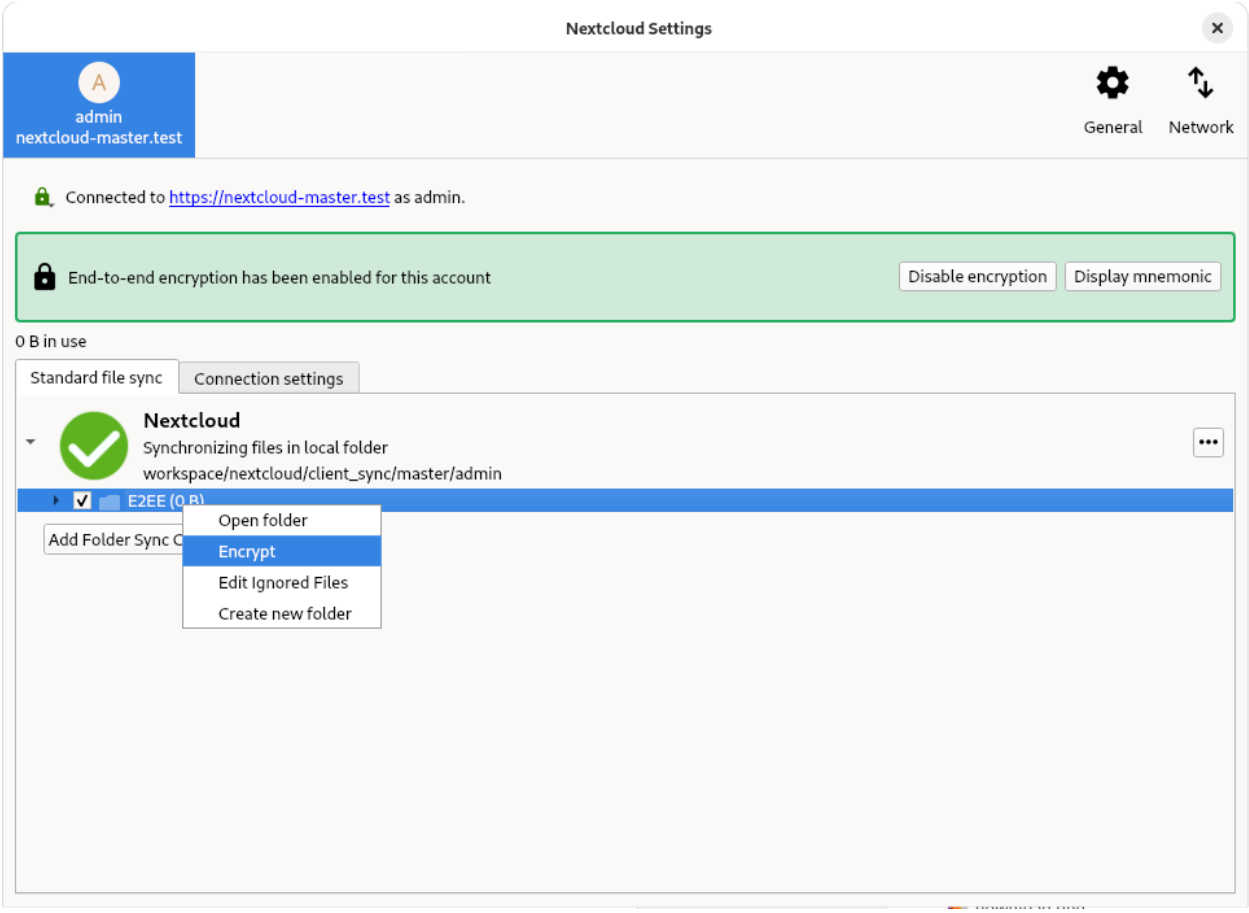
**Warning**

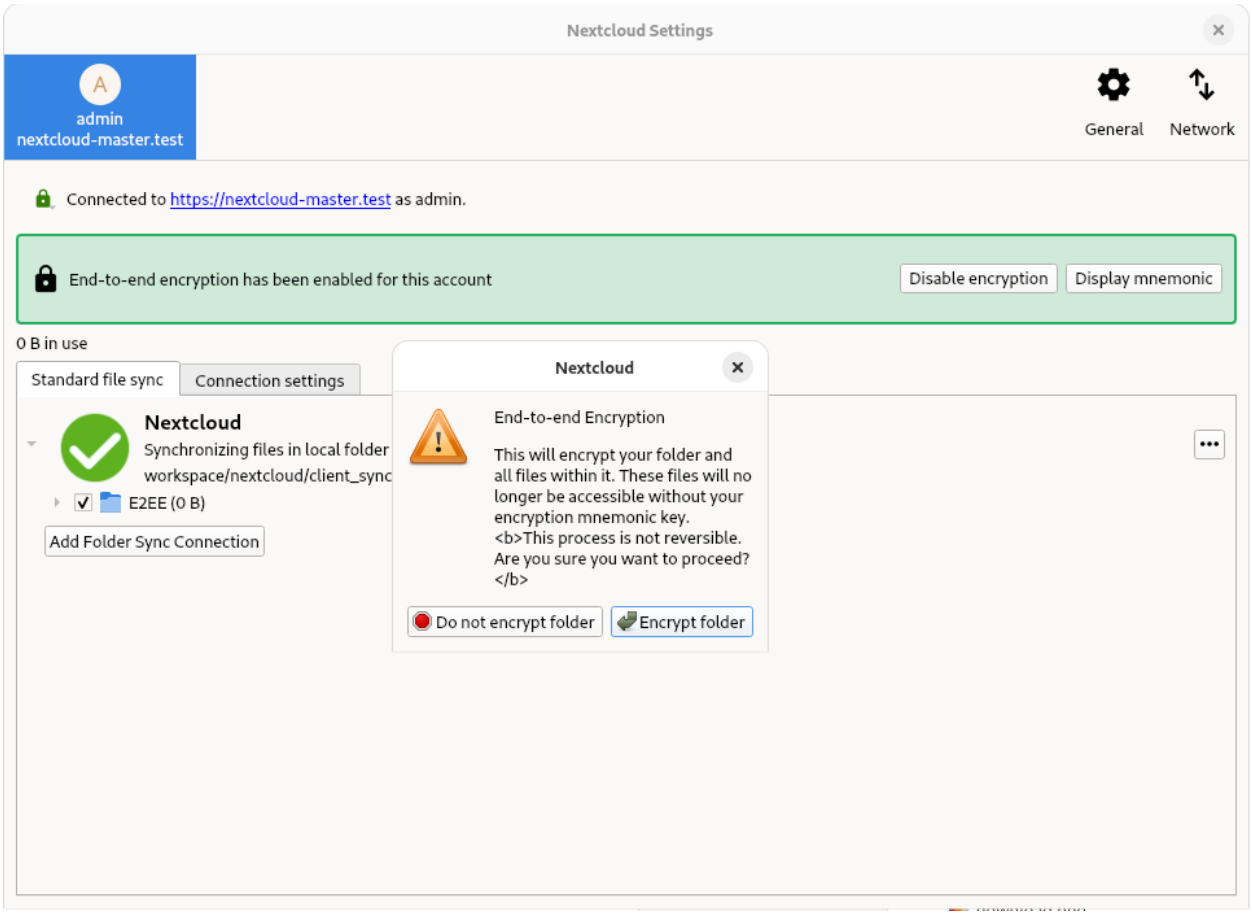
It is not possible to enable encryption on a folder in the browser. This must be done on a client app, either a desktop or mobile client.

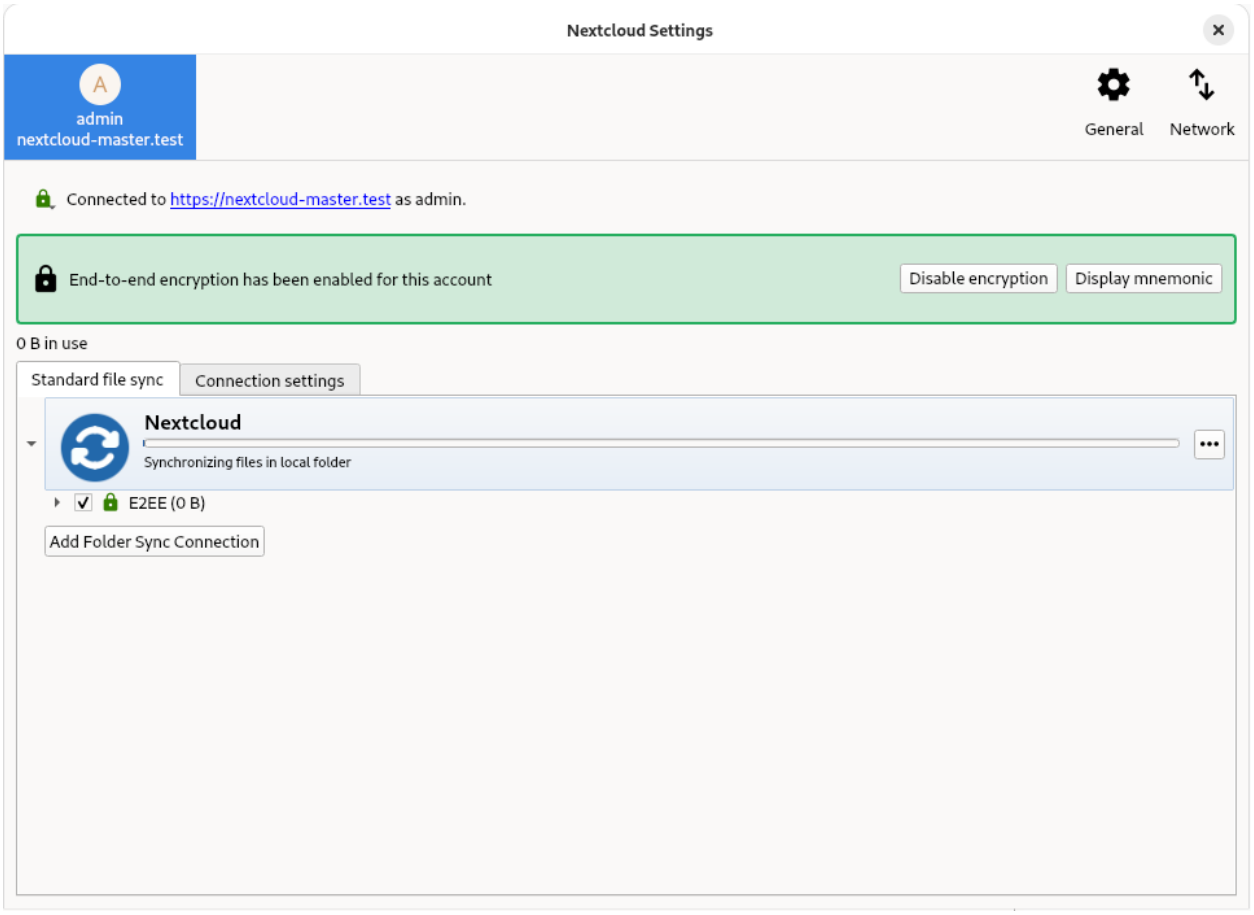
### Encrypting a folder

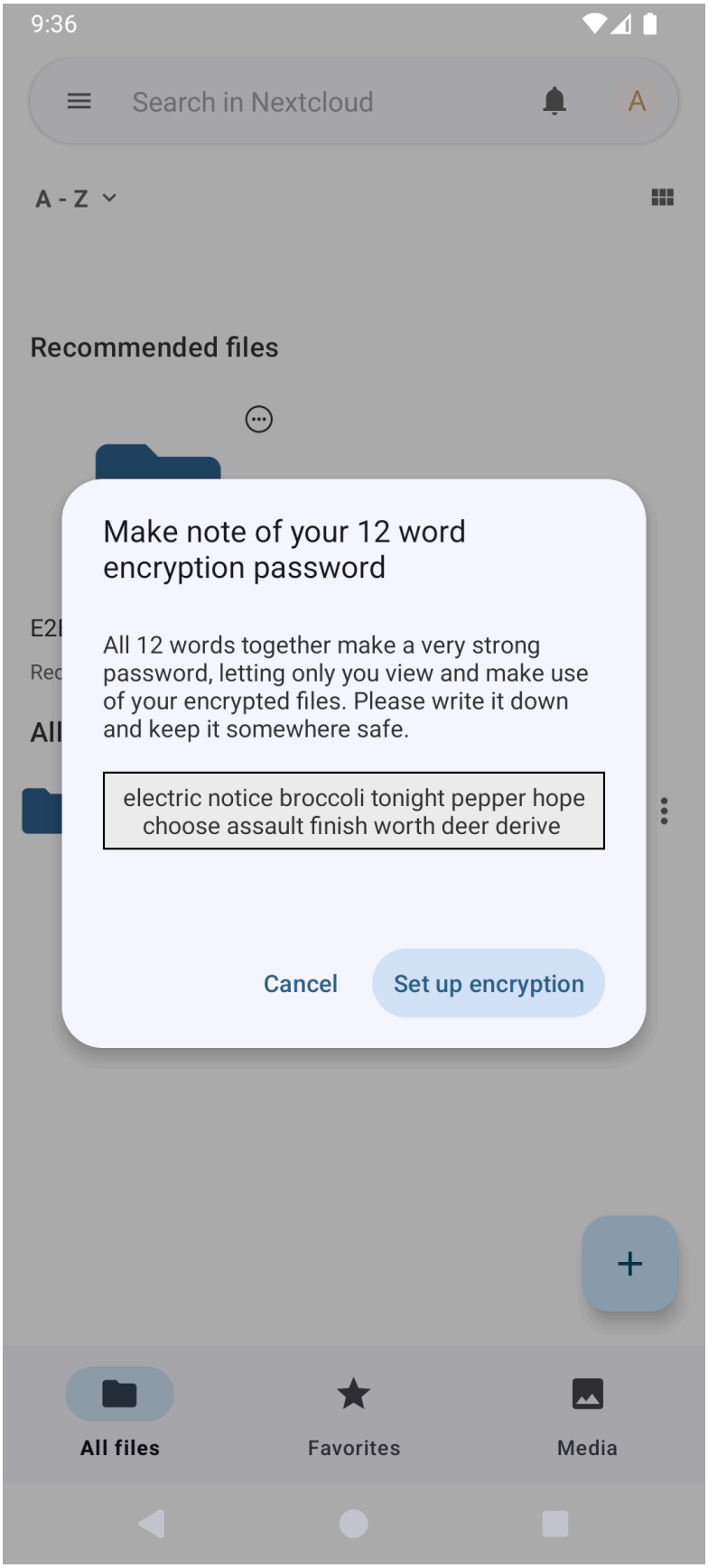
**Warning**

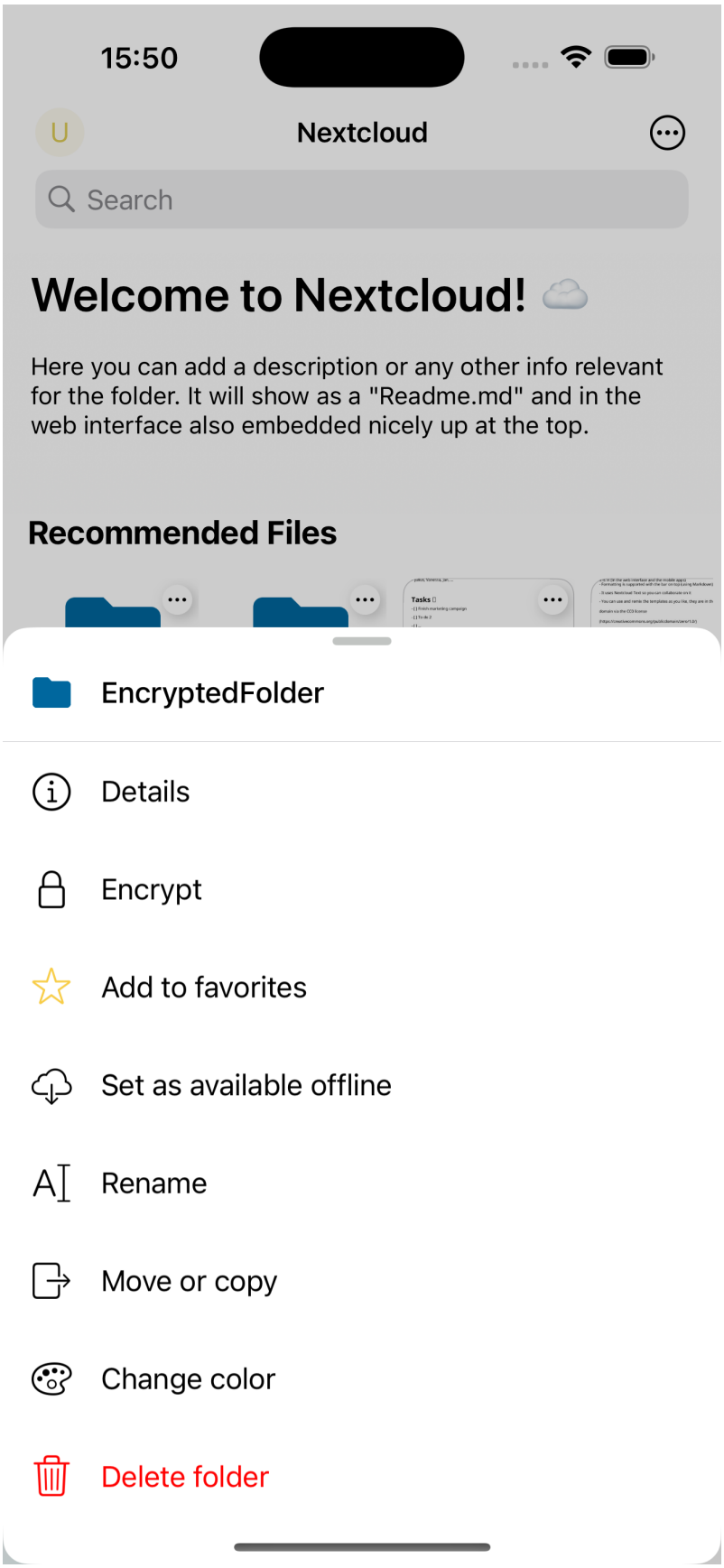
You can only enable encryption on empty folders.




Nextcloud Settings
admin
nextcloud-master.test
General
Network
Connected to https://nextcloud-master.test as admin.
End-to-end encryption has been enabled for this account
Disable encryption
Display mnemonic
0 B in use
Standard file sync
Connection settings
Nextcloud
Synchronizing files in local folder
workspace/nextcloud/client_sync
E2EE (0 B)
Add Folder Sync Connection
Nextcloud
End-to-end Encryption
This will encrypt your folder and all files within it. These files will no longer be accessible without your encryption mnemonic key.
This process is not reversible. Are you sure you want to proceed? 
Do not encrypt folder
Encrypt folder

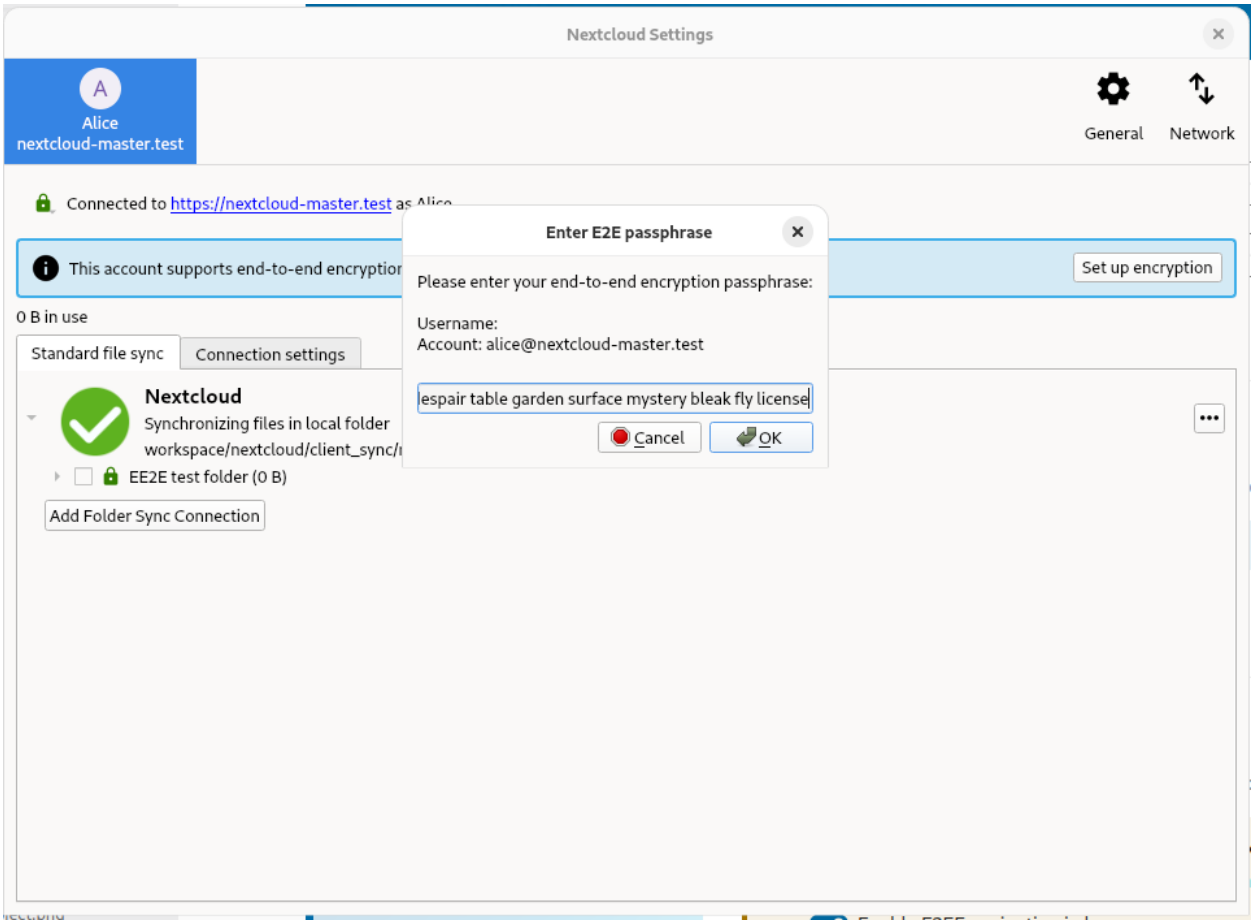

Nextcloud Settings
admin
nextcloud-master.test
General
Network
Connected to https://nextcloud-master.test as admin.
End-to-end encryption has been enabled for this account
Disable encryption
Display mnemonic
0 B in use
Standard file sync
Connection settings
Nextcloud
Synchronizing files in local folder
E2EE (0 B)
Add Folder Sync Connection

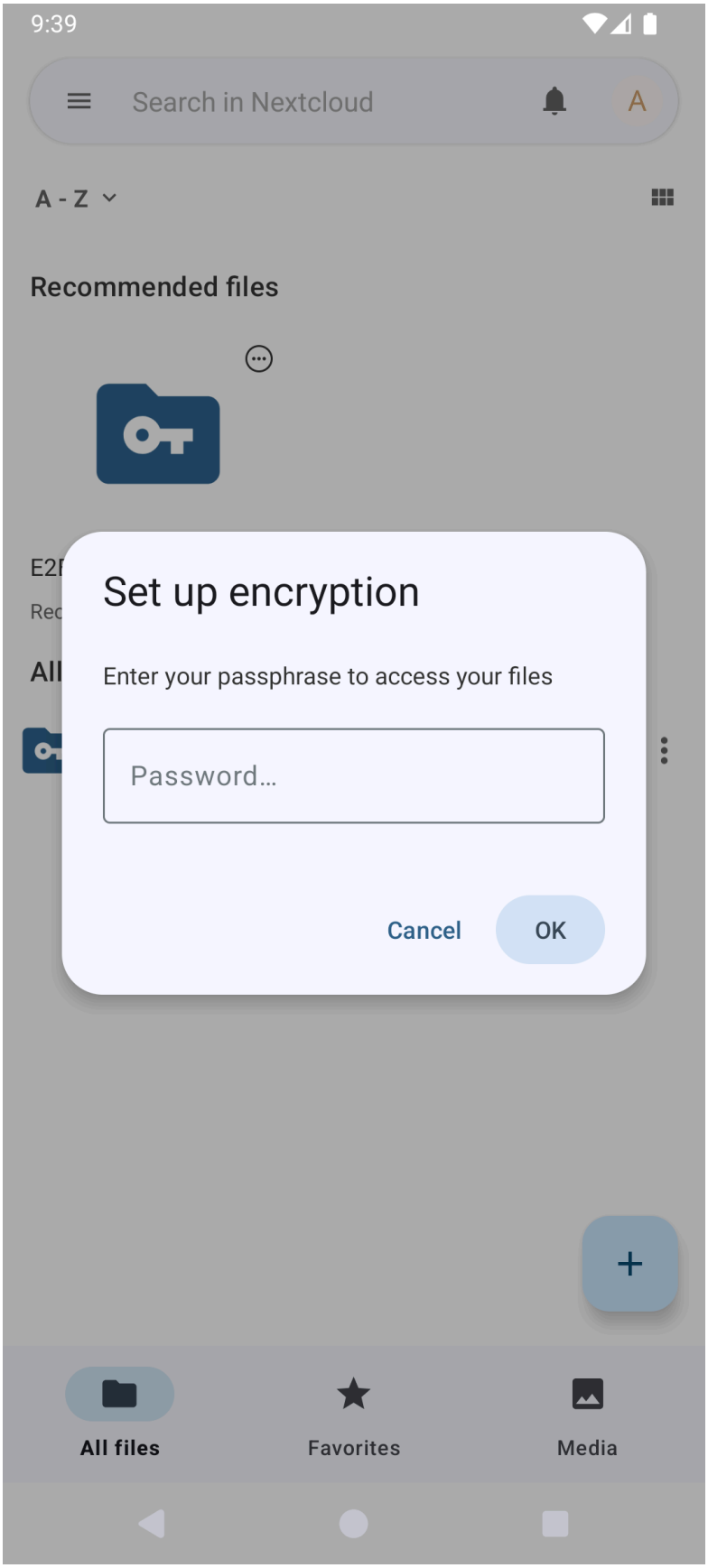

9:36
Search in Nextcloud
A
A - Z
Recommended files
Make note of your 12 word encryption password
All 12 words together make a very strong password, letting only you view and make use of your encrypted files. Please write it down and keep it somewhere safe.
electric notice broccoli tonight pepper hope choose assault finish worth deer derive
Cancel
Set up encryption
All files
Favorites
Media

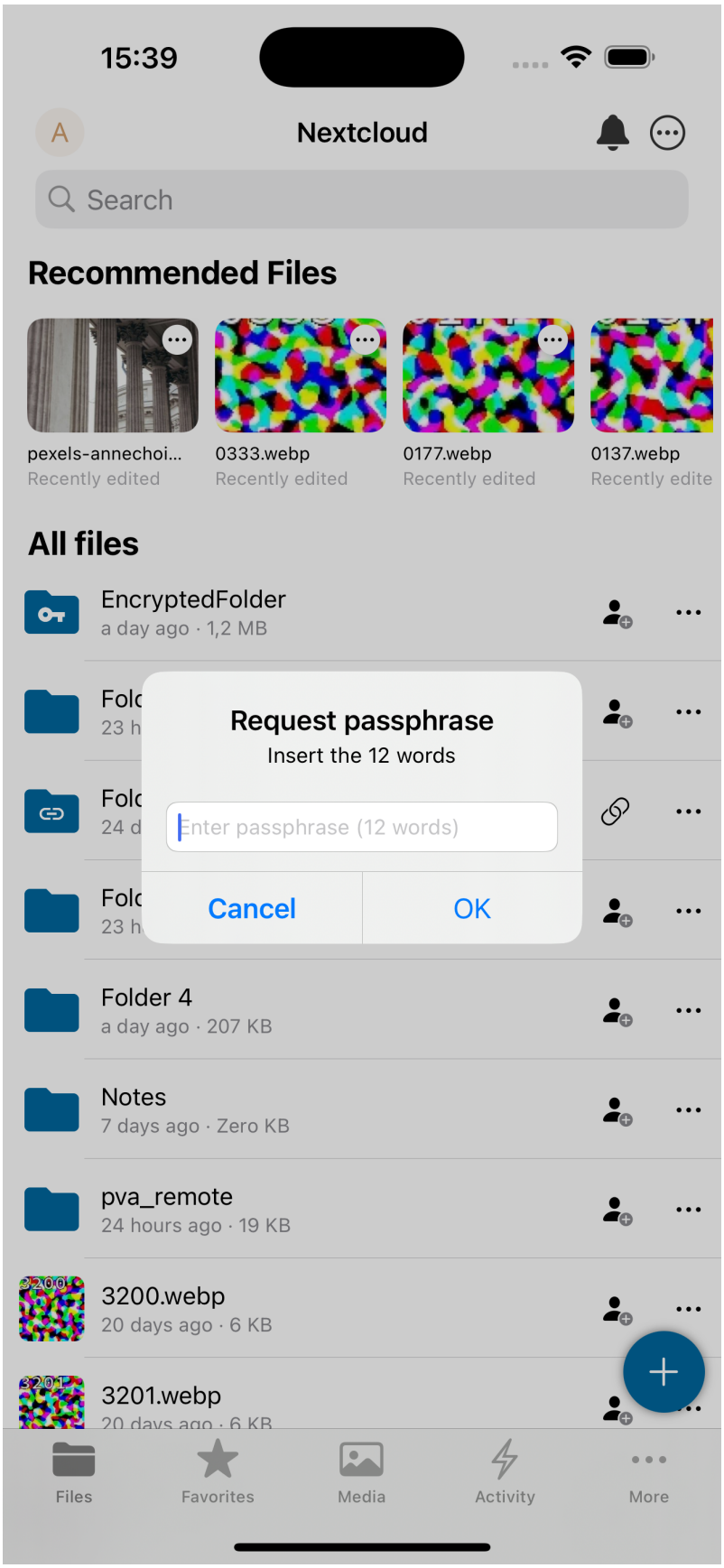

15:50
Nextcloud
Search
Welcome to Nextcloud!
Here you can add a description or any other info relevant for the folder. It will show as a "Readme.md" and in the web interface also embedded nicely up at the top.
Recommended Files
EncryptedFolder
Details
Encrypt
Add to favorites
Set as available offline
Rename
Move or copy
Change color
Delete folder

> **Warning**
>
> It is not possible to enable encryption on a folder in the browser. This must be done on a client app, either a desktop or mobile client.

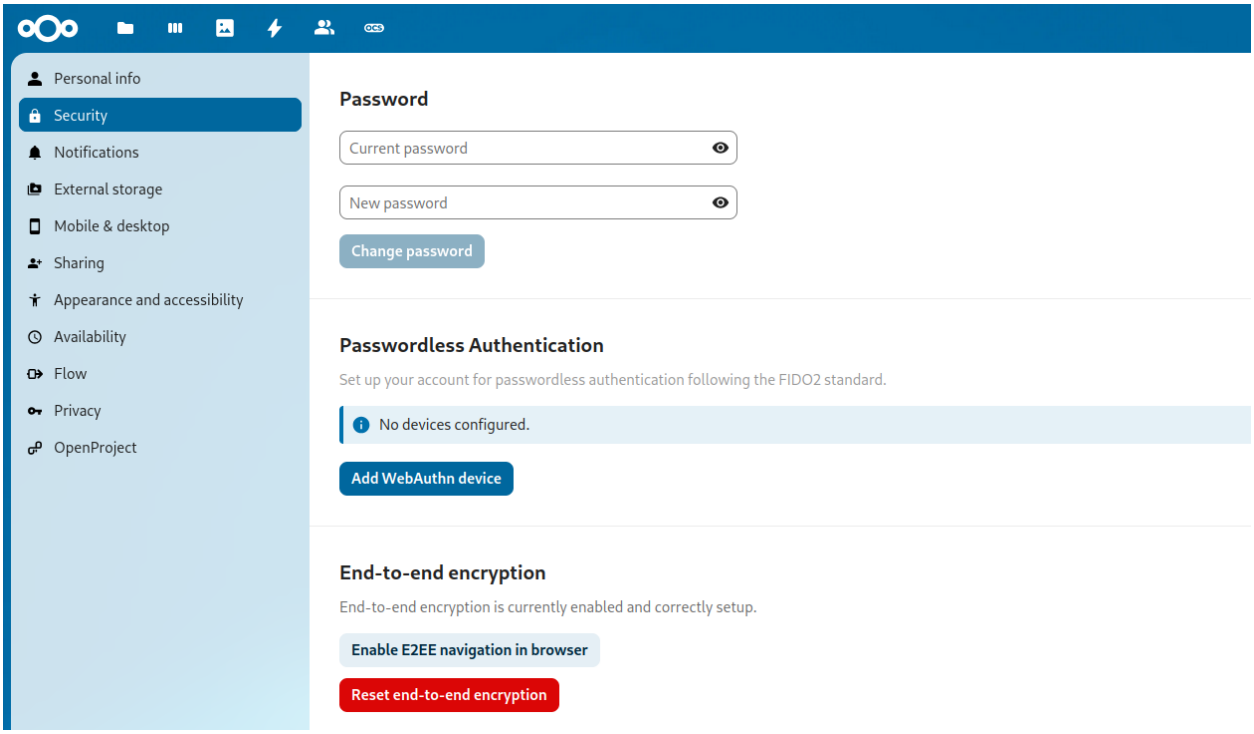
### Adding an E2EE device

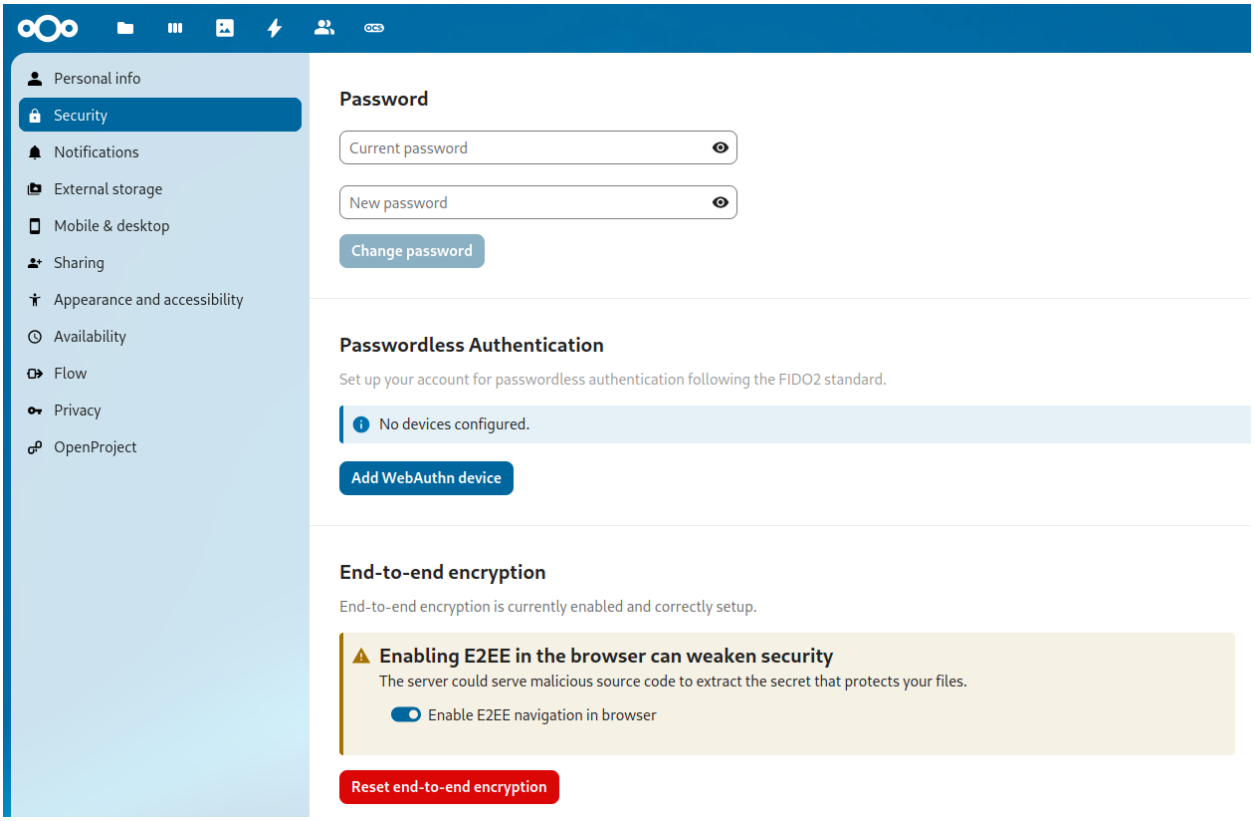


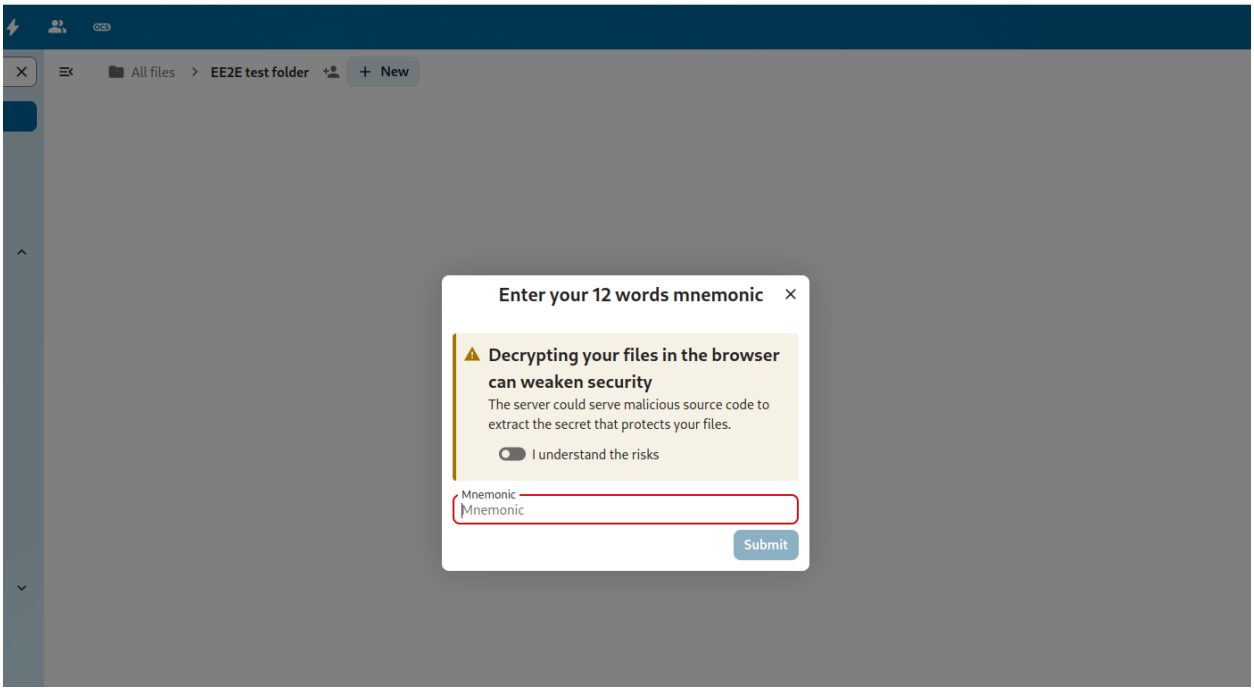

9:39
Search in Nextcloud
A
A - Z
Recommended files
Set up encryption
Enter your passphrase to access your files
Password…
Cancel
OK
All files
Favorites
Media


15:39
Nextcloud
Search
Recommended Files
pexels-annechoi...
Recently edited
0333.webp
Recently edited
0177.webp
Recently edited
0137.webp
Recently edite
All files
EncryptedFolder
a day ago · 1,2 MB
Request passphrase
Insert the 12 words
Enter passphrase (12 words)
Cancel
OK
Folder 4
a day ago · 207 KB
Notes
7 days ago · Zero KB
pva_remote
24 hours ago · 19 KB
3200.webp
20 days ago · 6 KB
3201.webp
Files
Favorites
Media
Activity
More

In the browser, first enable E2EE in the personal settings. This is needed, as E2EE is less secure in the browser, requiring you to fully trust the administrator to not alter the source code the browser will execute. E2EE folders are currently read-only. Therefore, it is not possible to add, remove, edit, or share an E2EE file from the browser.

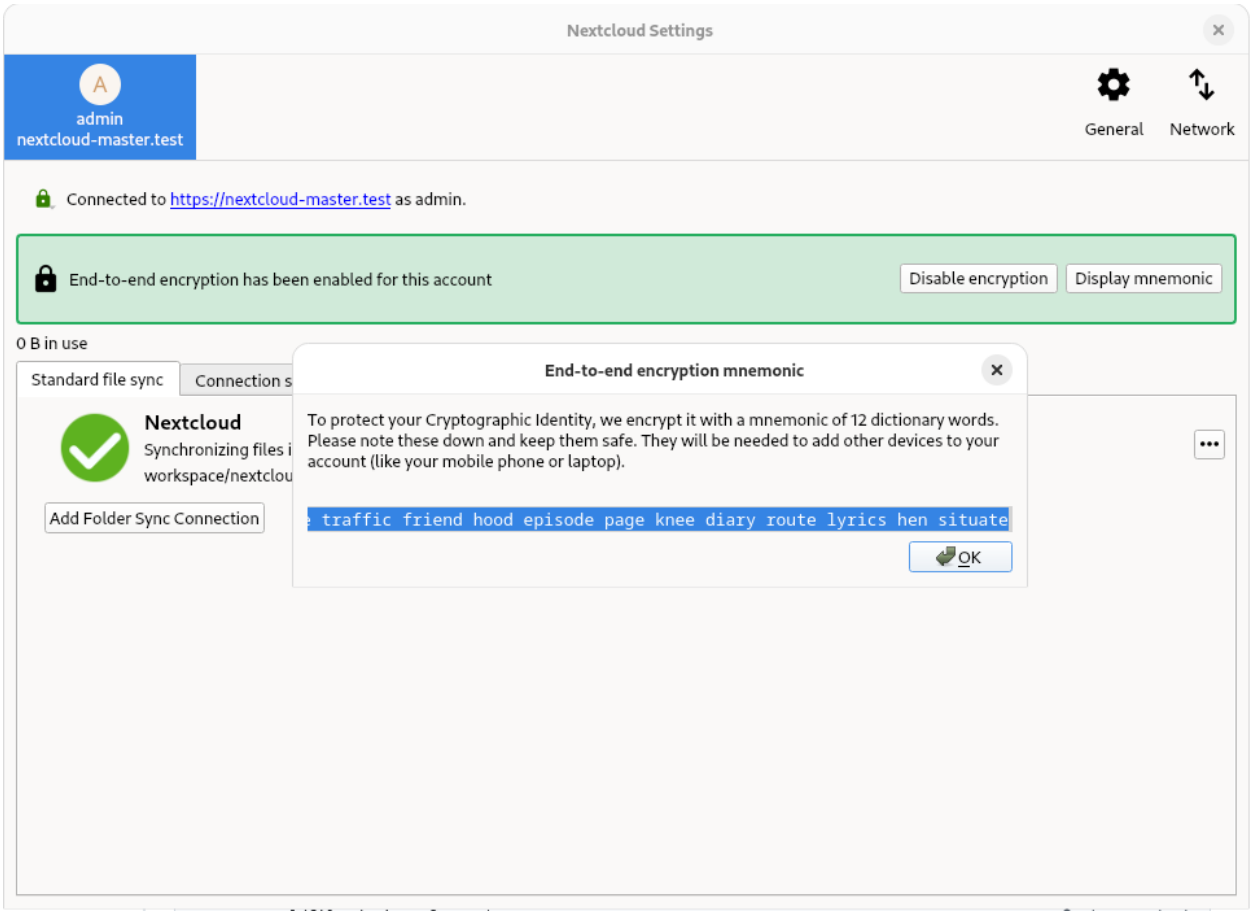


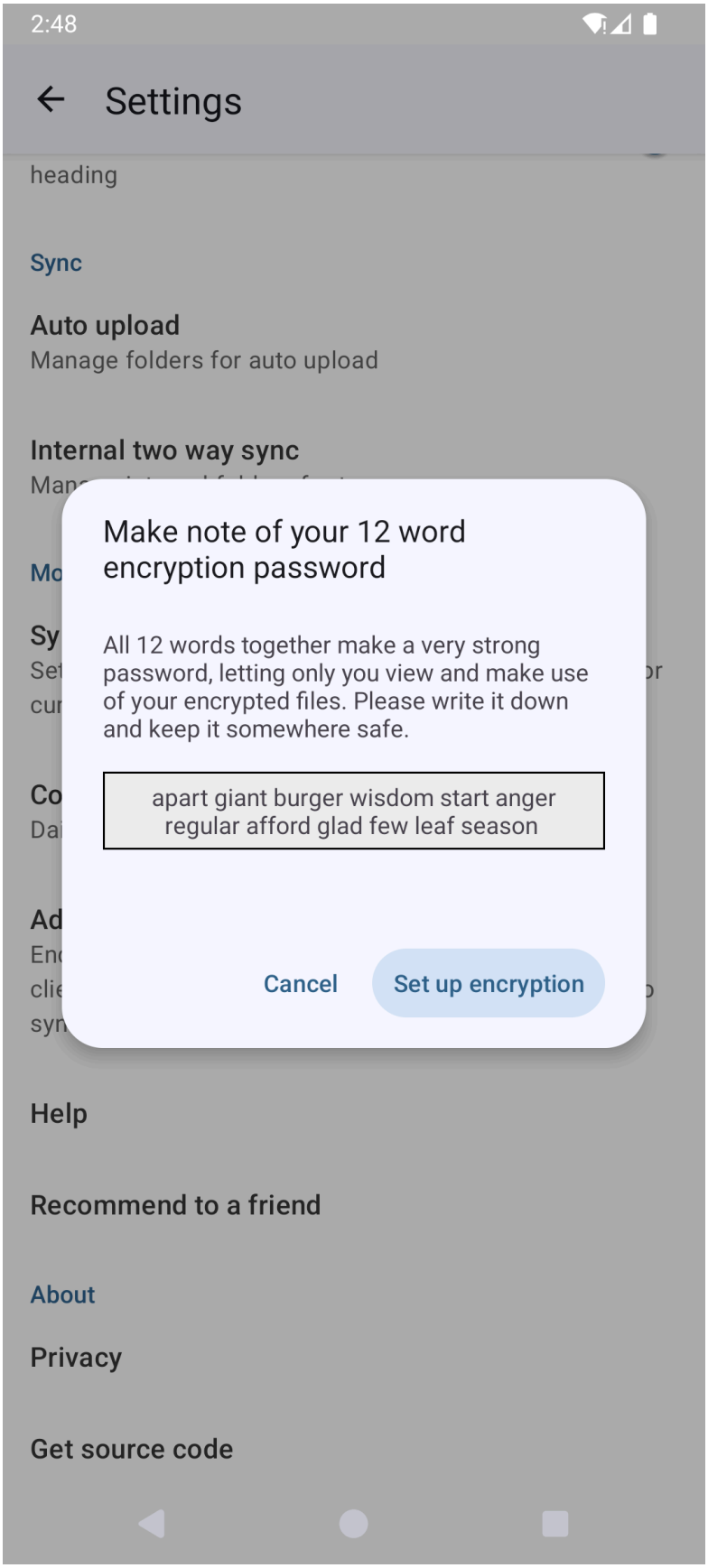



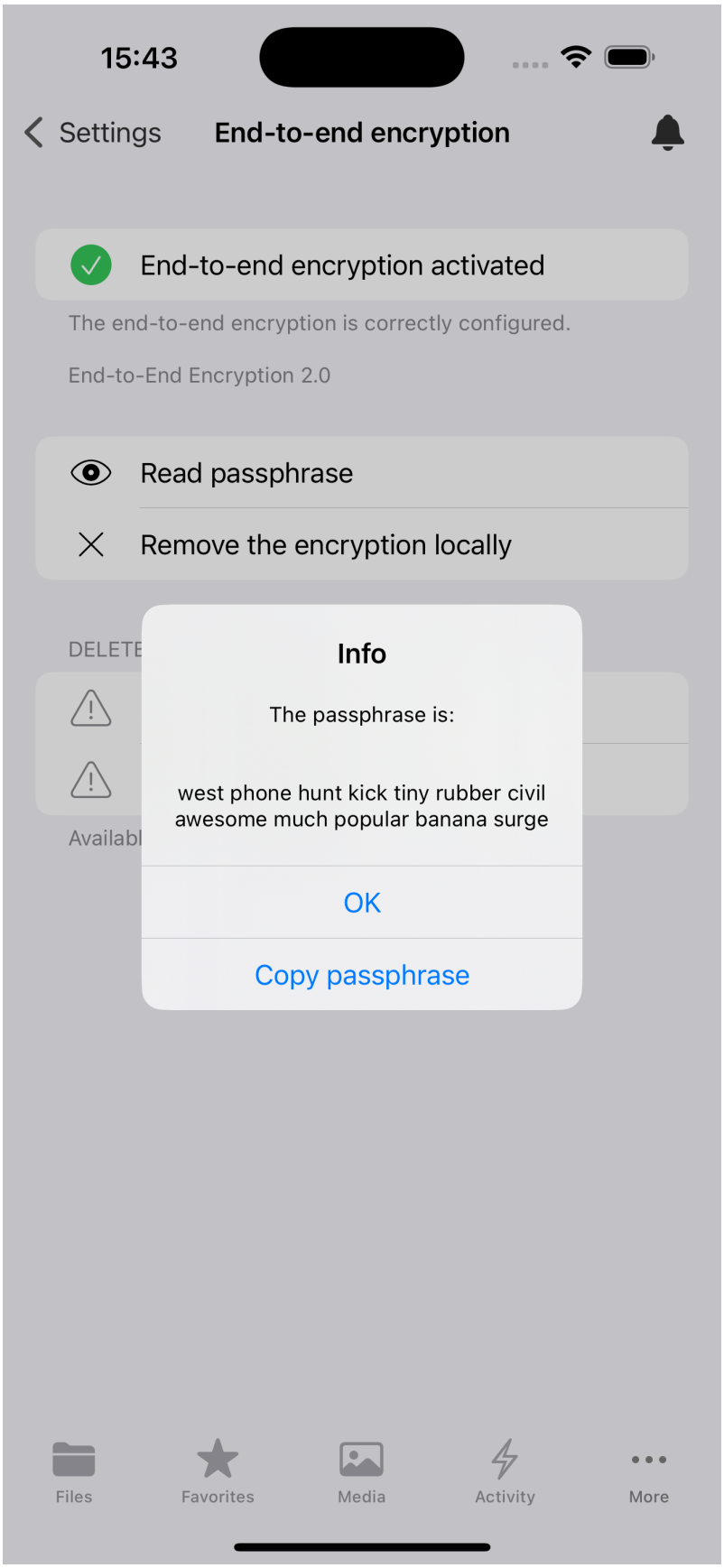



### Displaying the mnemonic

The mnemonic is a list of words that is used to encrypt and decrypt your files. It is important to keep this mnemonic safe, as it is the only way to access your files if you lose access to your device. If you lose access to your mnemonic, you will lose access to your files.


Nextcloud Settings
admin
nextcloud-master.test
General
Network
Connected to https://nextcloud-master.test as admin.
End-to-end encryption has been enabled for this account
Disable encryption
Display mnemonic
0 B in use
Standard file sync
Connection s
Nextcloud
Synchronizing files i
workspace/nextclou
Add Folder Sync Connection
End-to-end encryption mnemonic
To protect your Cryptographic Identity, we encrypt it with a mnemonic of 12 dictionary words. Please note these down and keep them safe. They will be needed to add other devices to your account (like your mobile phone or laptop).
traffic friend hood episode page knee diary route lyrics hen situate
OK


2:48
Settings
heading
Sync
Auto upload
Manage folders for auto upload
Internal two way sync
Make note of your 12 word encryption password
All 12 words together make a very strong password, letting only you view and make use of your encrypted files. Please write it down and keep it somewhere safe.
apart giant burger wisdom start anger regular afford glad few leaf season
Cancel
Set up encryption
Help
Recommend to a friend
About
Privacy
Get source code


15:43
Settings
End-to-end encryption
End-to-end encryption activated
The end-to-end encryption is correctly configured.
End-to-End Encryption 2.0
Read passphrase
Remove the encryption locally
DELETE
Availabl
Info
The passphrase is:
west phone hunt kick tiny rubber civil awesome much popular banana surge
OK
Copy passphrase
Files
Favorites
Media
Activity
More

**Warning**

It is not possible to display the mnemonic in the browser.

CHAPTER

SIX

# GROUPWARE

Nextcloud Groupware is a bundle of apps which is consisting of an **Mail**-client (IMAP/POP3) and a **Calendar** and **Contacts** server (CalDAV/CardDAV) with the respective web interfaces.

We complete those productivity tools with **Deck**, a project management tool which allows you to create Kanban-style task boards and share them with your team.

You can find out more about Nextcloud Groupware on our website.

## 6.1 Using the Contacts app

The Contacts app is not enabled by default in Nextcloud 36 and needs to be installed separately from our App Store.

The Nextcloud Contacts app is similar to other mobile contact applications, but with more functionality. This section covers the basic features that will help you maintain your address book in the application.

Below, you will learn how to add contacts, edit or remove contacts, upload a contact picture and manage your address books.

### 6.1.1 Adding Contacts

When you first access the Contacts app, the system address book containing all users on the instance you are allowed to see, plus an empty default address book becomes available:

To add contacts into your address book, you can use one of the following methods:

- Import contacts using a Virtual Contact File (VCF/vCard) file
- Add contacts manually

The fastest way to add a contact is to use a Virtual Contact File (VCF/vCard) file.

#### Importing Virtual Contacts

To Import Contacts Using a VCF/vCard File:

1. An **Import contacts** button is shown when you have no contacts yet.
2. Find “Settings” at the bottom of the left sidebar, next to the gear button:

3. Click the gear button. The Contacts app “Import” button will appear:

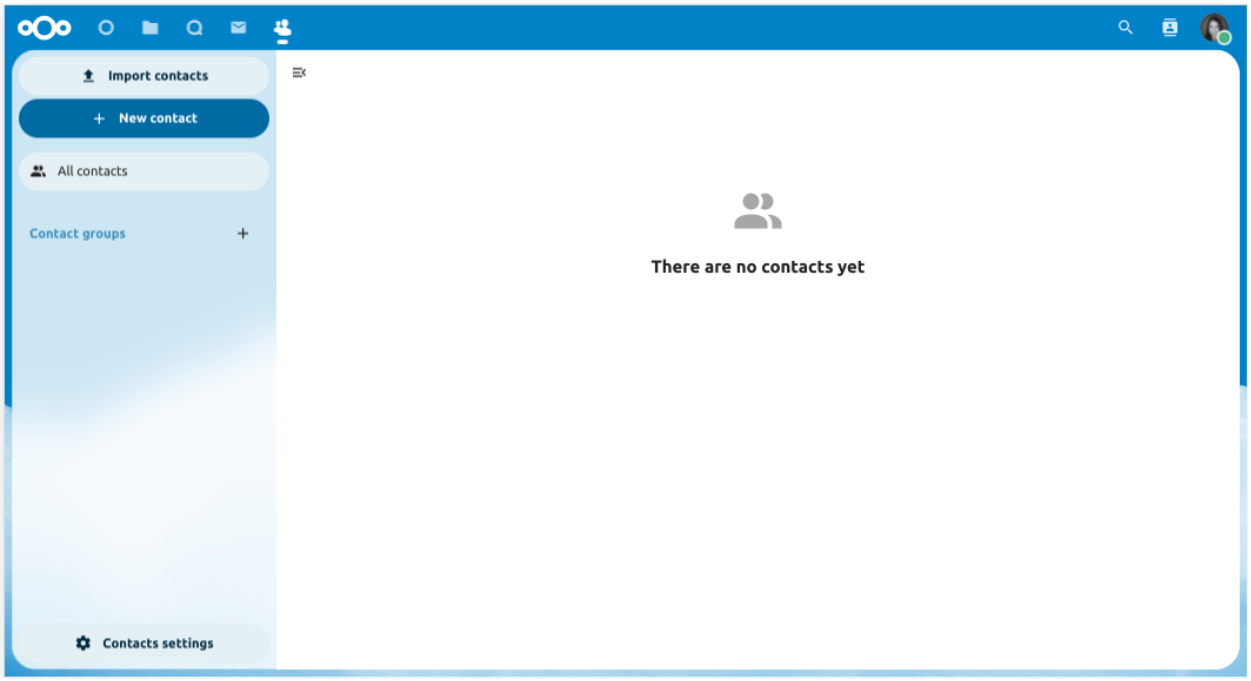
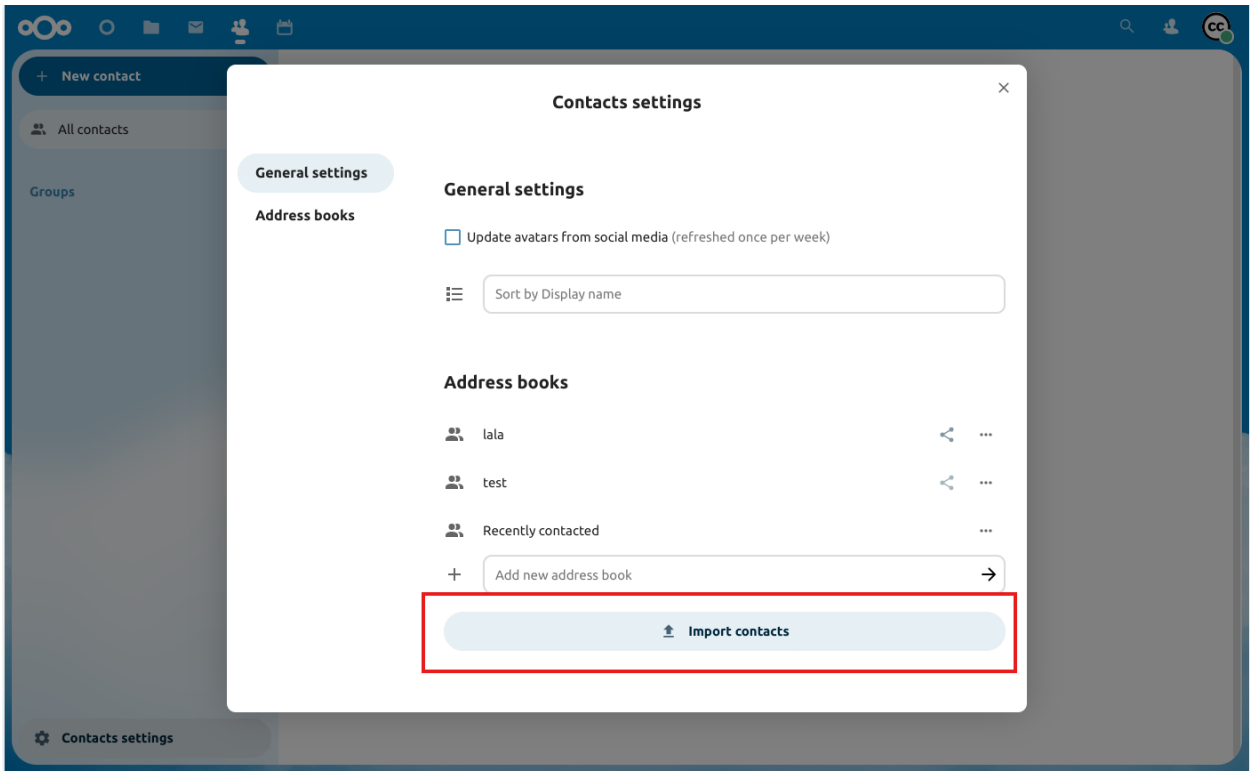



Fig. 1: *Default Address Book (empty)*






**Note**

The Contacts app only supports import of vCards version 3.0 and 4.0.

4. Click the “Import” button and upload your VCF/vCard file.

After the import is complete, you will see your new contact in your address book.

### Adding Contacts Manually

If you can’t import virtual contacts, the Contacts app enables you to **add contacts** manually.

To Create a New Contact:

1. Click the `+ New contact` button.

   The Edit View configuration opens in the Application View field:

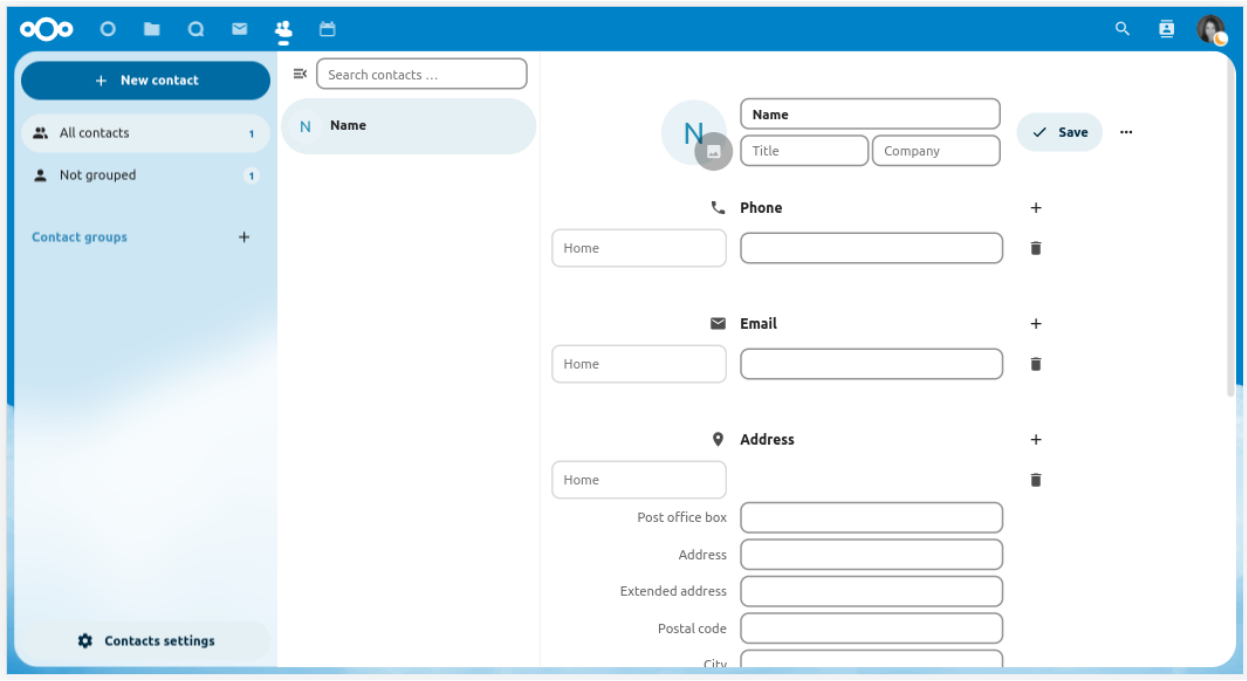
2. Specify the new contact information then click Save.
3. The View mode will be shown with the data you added

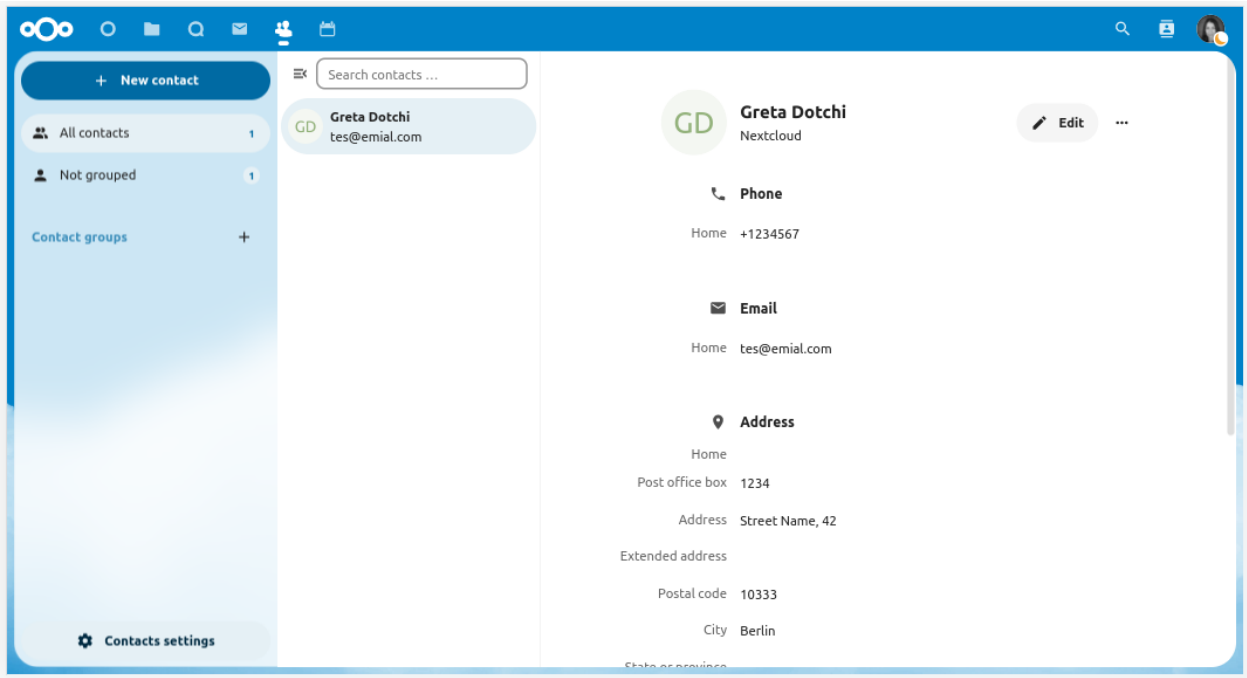
### Edit or Remove Contact Information

The Contacts app enables you to edit or remove contact information.

To edit or remove contact information:

1. Navigate to the specific contact that you want to modify.


New contact
Search contacts …
All contacts
Not grouped
Contact groups
Contacts settings
N
Name
Title
Company
Save
Phone
Home
Email
Home
Address
Home
Post office box
Address
Extended address
Postal code
City


New contact
Search contacts …
All contacts
Not grouped
Contact groups
Contacts settings
GD
Greta Dotchi
tes@emial.com
Greta Dotchi
Nextcloud
Edit
Phone
Home
+1234567
Email
Home
tes@emial.com
Address
Home
Post office box
1234
Address
Street Name, 42
Extended address
Postal code
10333
City
Berlin

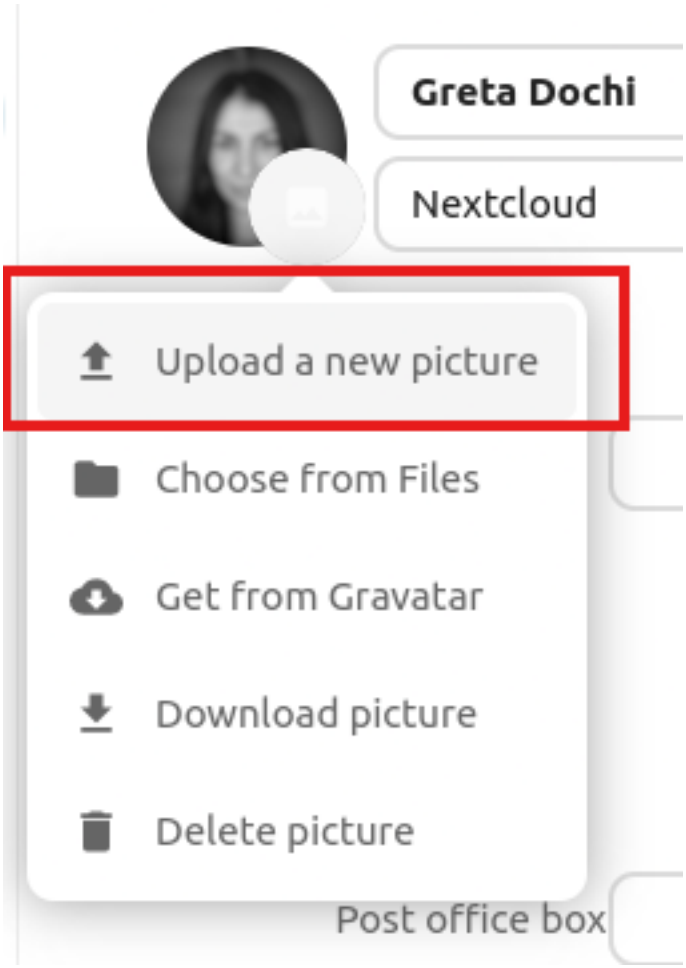
2. Select the information in the field that you want to edit or remove.
3. Make your modifications or click on the trash bin.

Changes or removals that you made to any contact information are implemented immediately.

Not all contacts will be editable for you. The system address book does not allow you to modify someone elses data, only your own. Your own data can also be modified in the *user settings*.

### Contact Picture

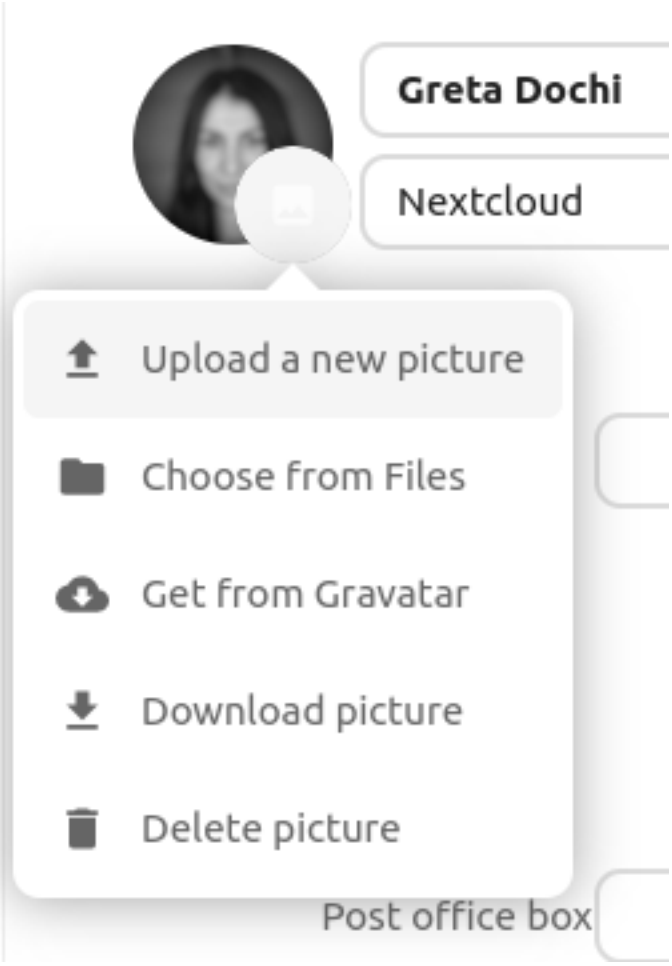
To add a picture for your new contacts, click on the upload button:




After you have set a contact picture, it will look like this:



If you want to upload a new one, remove it, view it in full size or download it, click on the contacts picture for the following options to appear:


Greta Dochi
Nextcloud
Upload a new picture
Choose from Files
Get from Gravatar
Download picture
Delete picture
Post office box

If the administrator allows updates from social media in the admin groupware settings, users can also retrieve contact pictures directly from social networks. In that case the contact needs to have stored a user name in the social media section. Each entry of a supported social network adds a download entry for the respective network. Currently, the following social networks are supported:

- Instagram
- Mastodon
- Tumblr
- Diaspora
- Xing
- Telegram
- Gravatar

Social avatars are only retrieved if publicly available without login to the respective social network. In the contact user settings on the contacts page, you can activate auto-updates from social media. This will update avatars with social profile data on a weekly basis. Social networks are checked in the order listed above.

### 6.1.2 Managing multiple Contacts at a time

The Contacts app enables you to select multiple contacts and to perform batch actions on them. To select multiple contacts, either click on each contacts profile picture individually, or click on the profile picture on the first contact then while holding the shift key click on another contact in the list to select all contacts in between the first and second one.

This will bring up a menu at the top of the contacts list with various actions you can perform on the selected contacts:

In batch mode, the cross icon button will unselect all selected contacts, while the trash bin icon button will delete all selected contacts.

> **Note**
>
> You might not be able to modify or delete certain contacts, for example if they are in a read-only address book. In that case, relevant actions will be disabled.

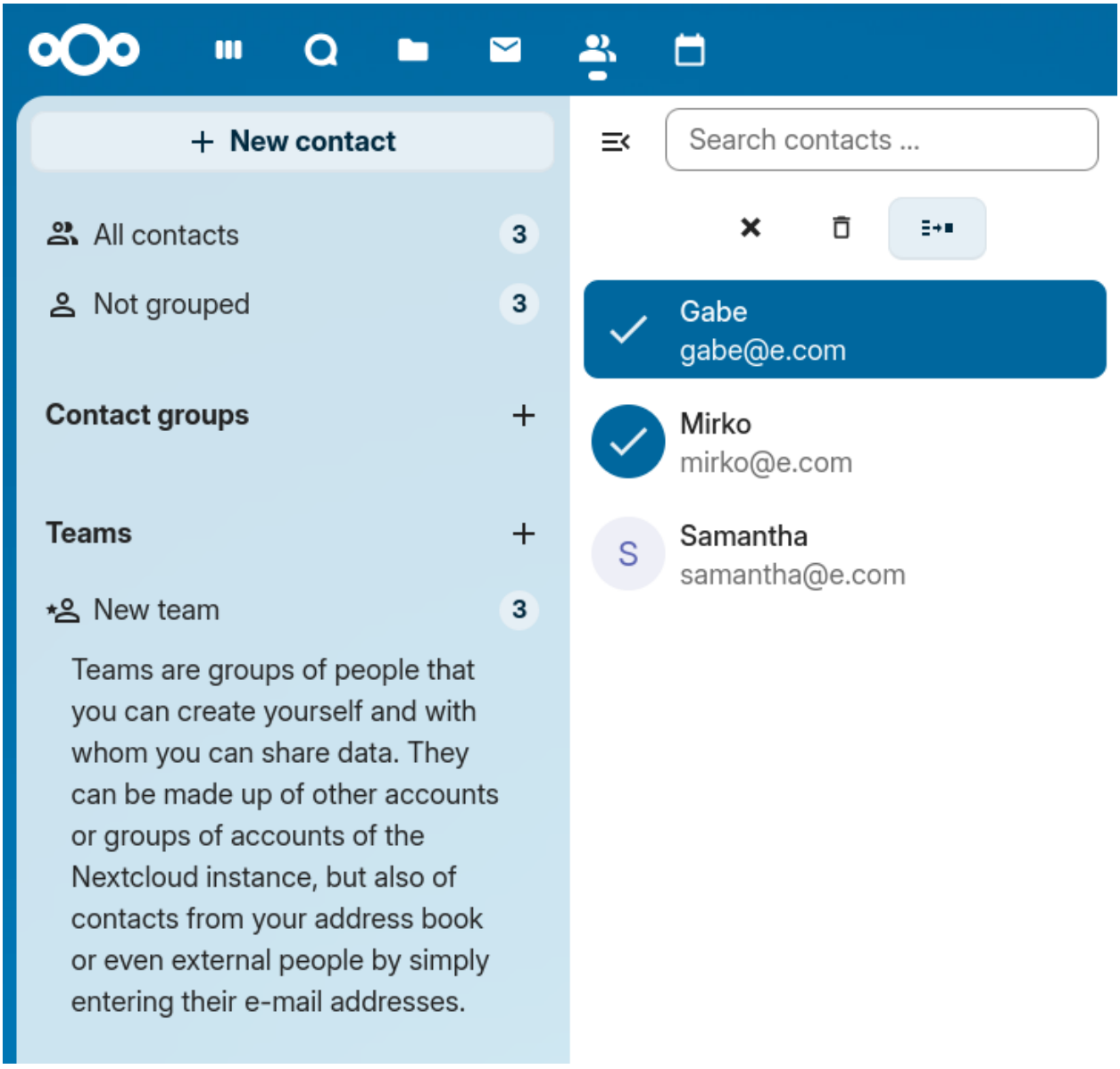
#### Merging duplicate Contacts

To merge contacts, select two contacts then click the “Merge contacts” icon button at the top of the contacts list, this will open a dialog that helps you merge duplicate contacts. The merging dialog will show the details of both contacts side by side, and you can choose which details to keep in the merged contact.

Any properties with a Radio (circular) button can only have one value, so one of the two values must be selected (like the name of the contact, which can only have one value), meanwhile checkboxes (square buttons) allow you to keep both values if desired (like phone numbers or email addresses, which can have multiple values).

If either of the contacts are part of a group(s), by default the merged contact will be part of all groups that the two contacts were part of. You can uncheck any groups while merging if you don’t want the merged contact to be part of them.

> **Note**
>
> Currently you are only able to merge two contacts at a time, and you are naturally only able to merge contacts that can be modified by you. If the merging action is disabled, check that you selected contacts that match those conditions.


+ New contact
All contacts 3
Not grouped 3
Contact groups
Teams
New team 3
Teams are groups of people that you can create yourself and with whom you can share data. They can be made up of other accounts or groups of accounts of the Nextcloud instance, but also of contacts from your address book or even external people by simply entering their e-mail addresses.
Search contacts ...
Gabe
gabe@e.com
Mirko
mirko@e.com
S
Samantha
samantha@e.com

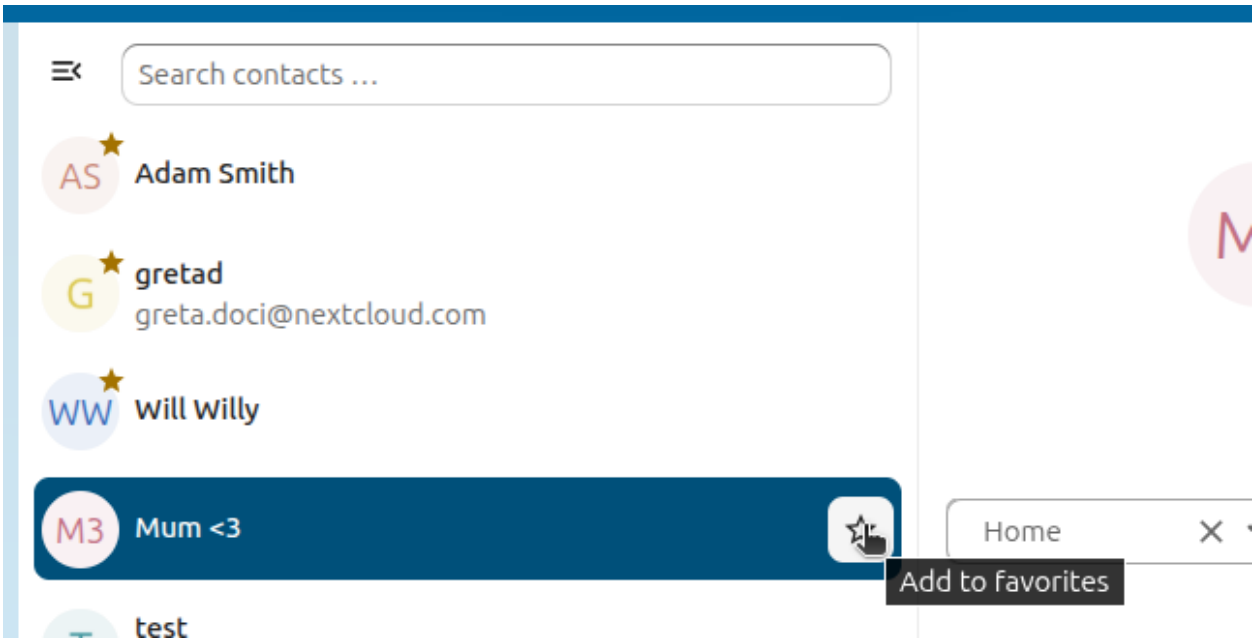
### 6.1.3 Mark contacts as favorite

Added in version 8.4.

Now you can mark contacts as favorites to always find them at the top of your contacts list, without needing to search or filter.

To mark a contacts as favorite, hover over a contact, a star will show on the right. Click the star and a yellow star will appear on the contact's avatar to confirm it's been marked as a favorite.

To remove it form the favorite list - Hover over a favorited contact, and click the star on the right. The star will disappear and the contact will return to its alphabetical position in the list.




### 6.1.4 Organize your Contacts with Contact Groups

Contact Groups help you to organize your contacts into groups.

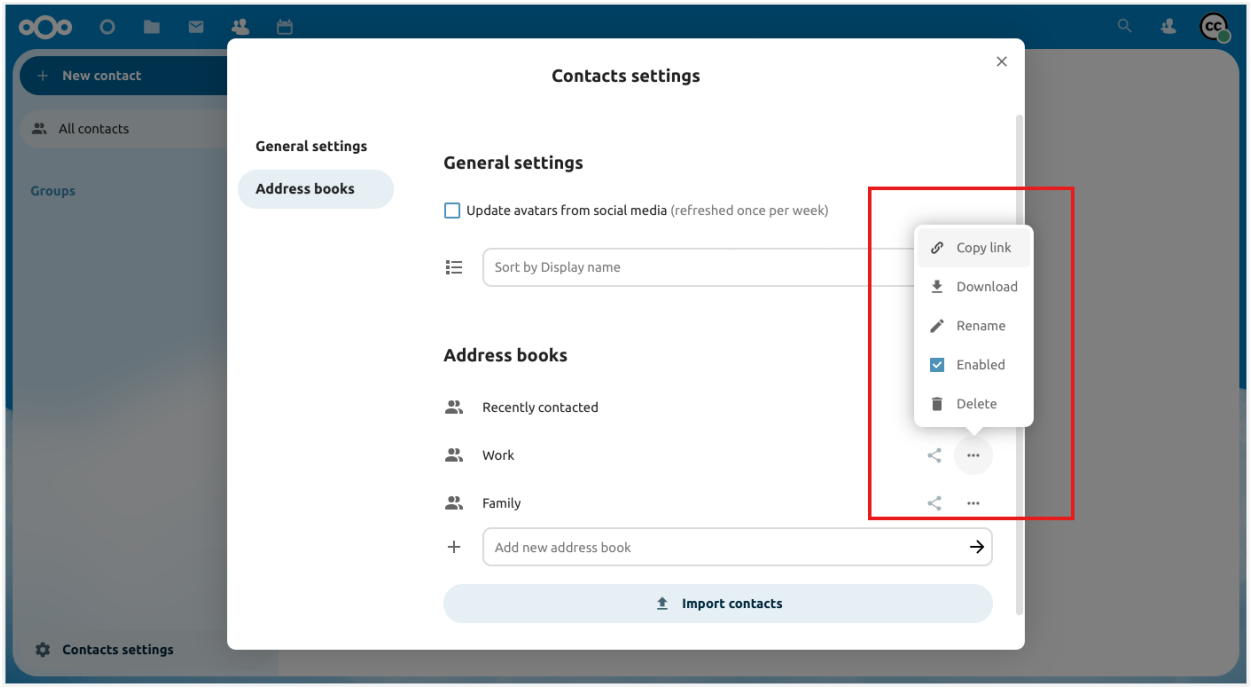
To create a new contact group, click on the plus sign next to "Contact groups" in the left sidebar.

> **Note**
>
> Contact groups need to have at least one member to be saved. Please note that you can only add contacts from writable address books to contact groups. Contacts from read-only address books, such as the system address book, cannot be added.

### 6.1.5 Adding and Managing Address Books

Clicking on the "Settings" (gear) button at the bottom of the left sidebar provides access to Contacts app settings. This field shows all available address books, certain options for each address book, and enables you to create new address books, simply by specifying an address books name:

The Contacts settings is also where you can share, export and delete addressbooks. You will find the CardDAV URLs there.




**Note**

Contacts in disabled address books are not shown in the Contacts app and the Contact menu.

See *Groupware* for more details about syncing your address books with iOS, macOS, Thunderbird and other CardDAV clients.

### 6.1.6 Teams

Informal collaboration takes place within organizations: an event to organize for a few weeks, a short ideation session between members from different entities, workshops, a place to joke around and support team building, or simply in very organic organizations where formal structure is kept to a minimum.

For all these reasons, Nextcloud supports Teams, where every user is able to create its own team, a user-defined aggregate of accounts. Teams can be used later on to share files and folders, added to Talk conversations, like a regular group.

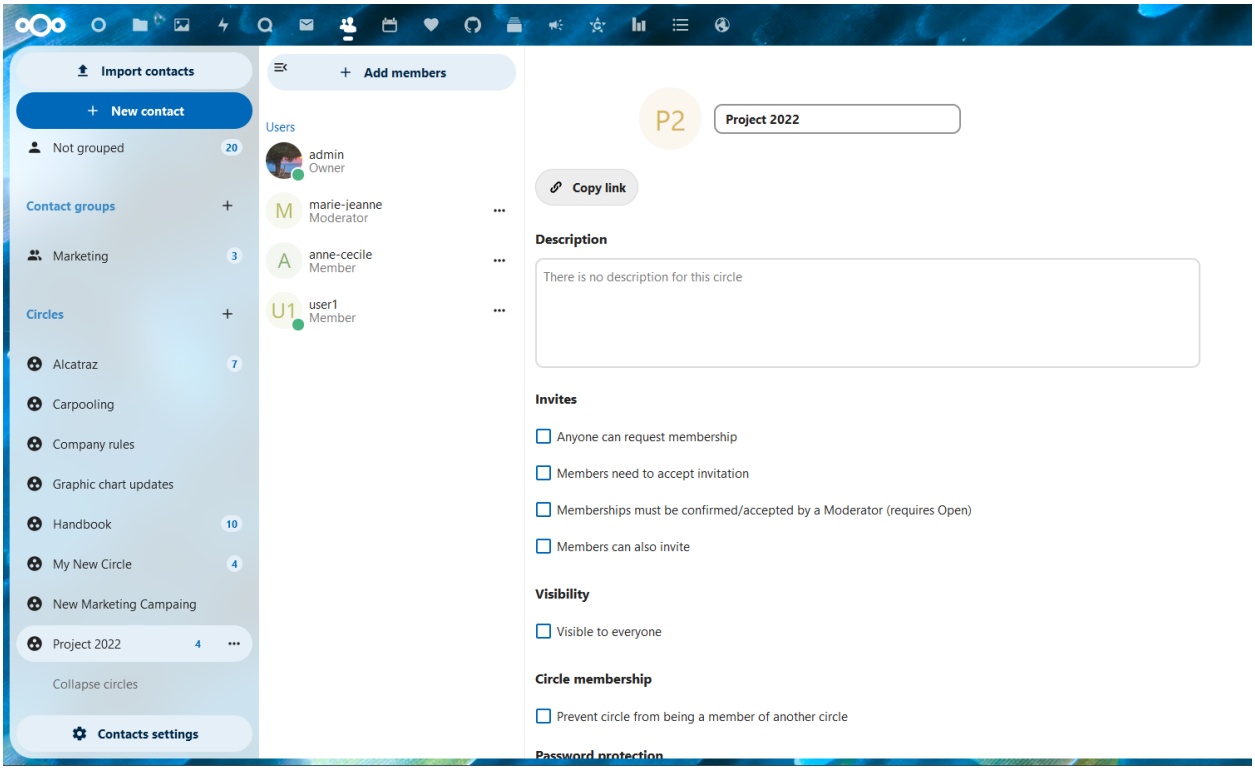
**Note**

Teams are managed in the **Teams** app, which has its own entry in the app navigation. The Contacts app manages teams only on servers where the Teams app's own interface has been disabled, in which case the team views described below appear in Contacts instead.

#### Create a team

In the left menu, click on the + next to Teams. Set a team name. Landing on the team configuration screen, you can:

- add members to your team
- clicking on the three dot menu next to a user allow you to modify its role within the team.




### Team roles

Teams support 4 types of roles:

- Member
- Moderator
- Admin can configure team options (+moderator permissions)
- Owner

**Member**

Member is the role with the lowest permissions. A member can only access the resources shared with the team, and view the members of the team.

**Moderator**

In addition to member permissions, a moderator can invite, confirm invitations and manage members of the team.

**Admin**

In addition to moderator permissions, an admin can configure team options.

**Owner**

In addition to admin permissions, an owner can transfer the team ownership to another member of the team. There can be only one single owner per team.

### Add members to a team

Local accounts, groups, email addresses or other teams can be added as members to a team. For a group or a team, the role applies to all members of the group or team.

### Team options

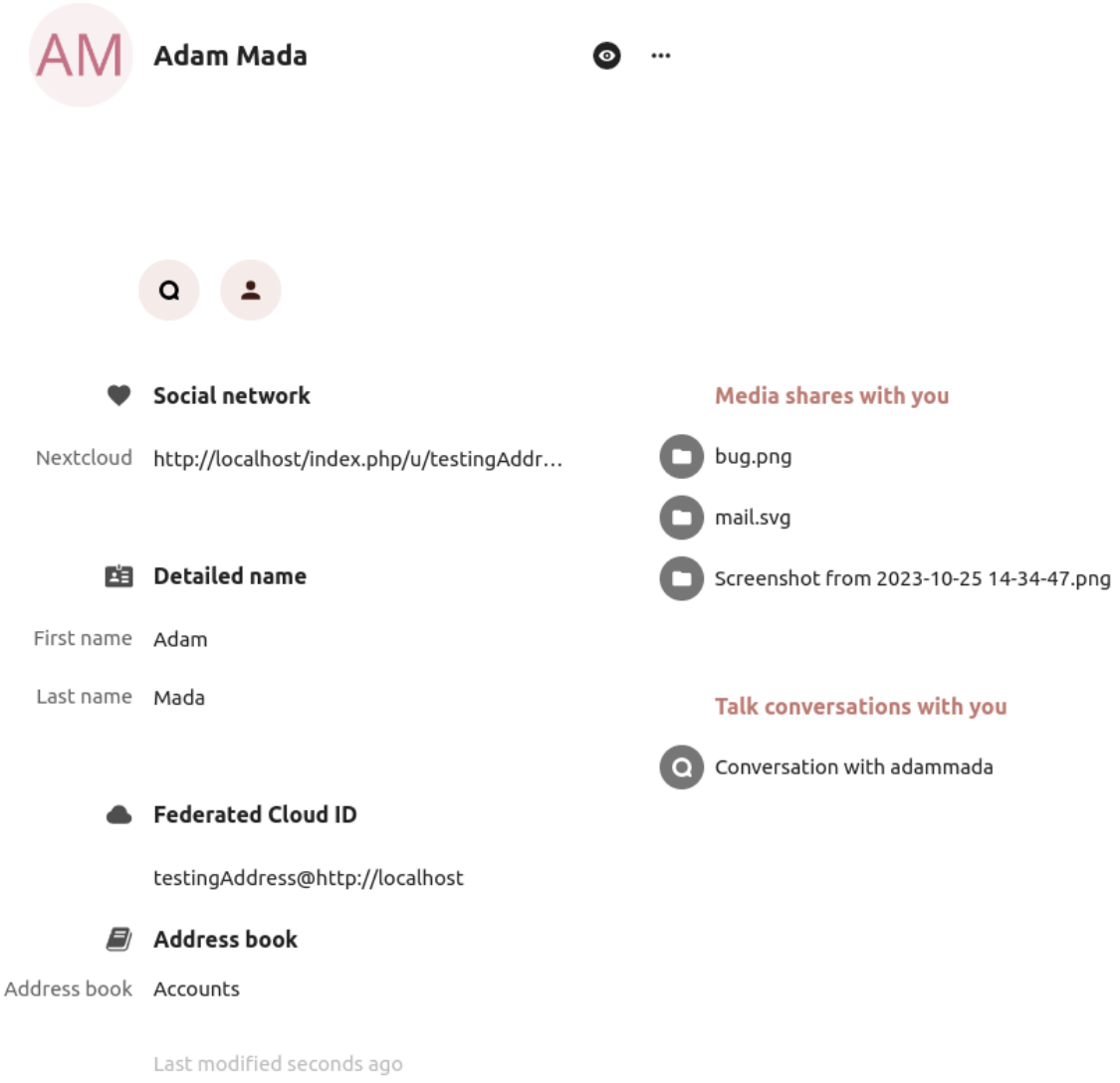
Various self-explanatory options are available to configure a team, to manage invites and membership, visibility of the team, allowance of other team membership and password protection.

**Prevent teams from being a member of another team**

When this option is enabled, the team can no longer be directly added as a member of another team. However, this restriction only applies to new direct additions. Existing memberships are kept, and inherited memberships are still possible if this team belongs to a parent team that gets added elsewhere.

### Shared items

Added in version 5.5: Nextcloud 25 or newer



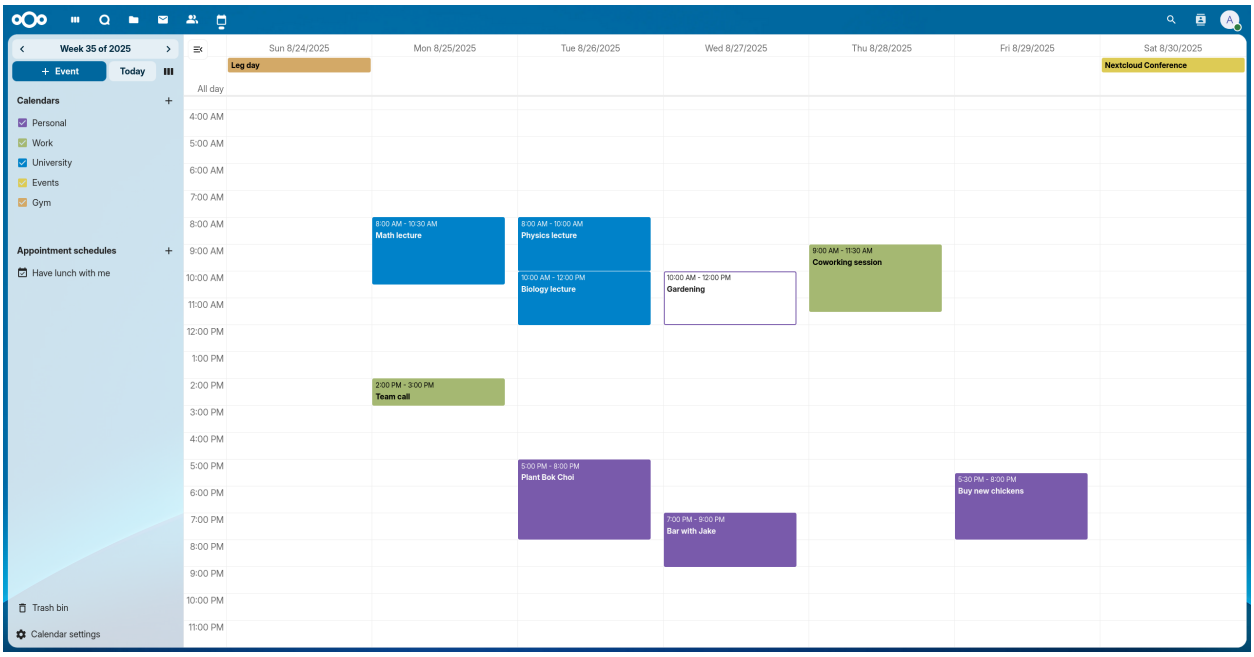
Items that are shared between two contacts will be displayed in the contact app. This includes media, calendar events, chat rooms, and shared deck cards, all of which will be visible in the contact details. This functionality is limited to contacts listed in the system address book. Currently, our system only supports shared items between two contacts.

## 6.2 Using the Calendar app

> **Note**
>
> The Calendar app comes installed with Nextcloud Hub by default, but can be disabled. Please ask your Administrator for it.

The Nextcloud Calendar app works similar to other calendar applications you can sync your Nextcloud calendars and events with.

When you first access the Calendar app, a default first calendar will be created for you.

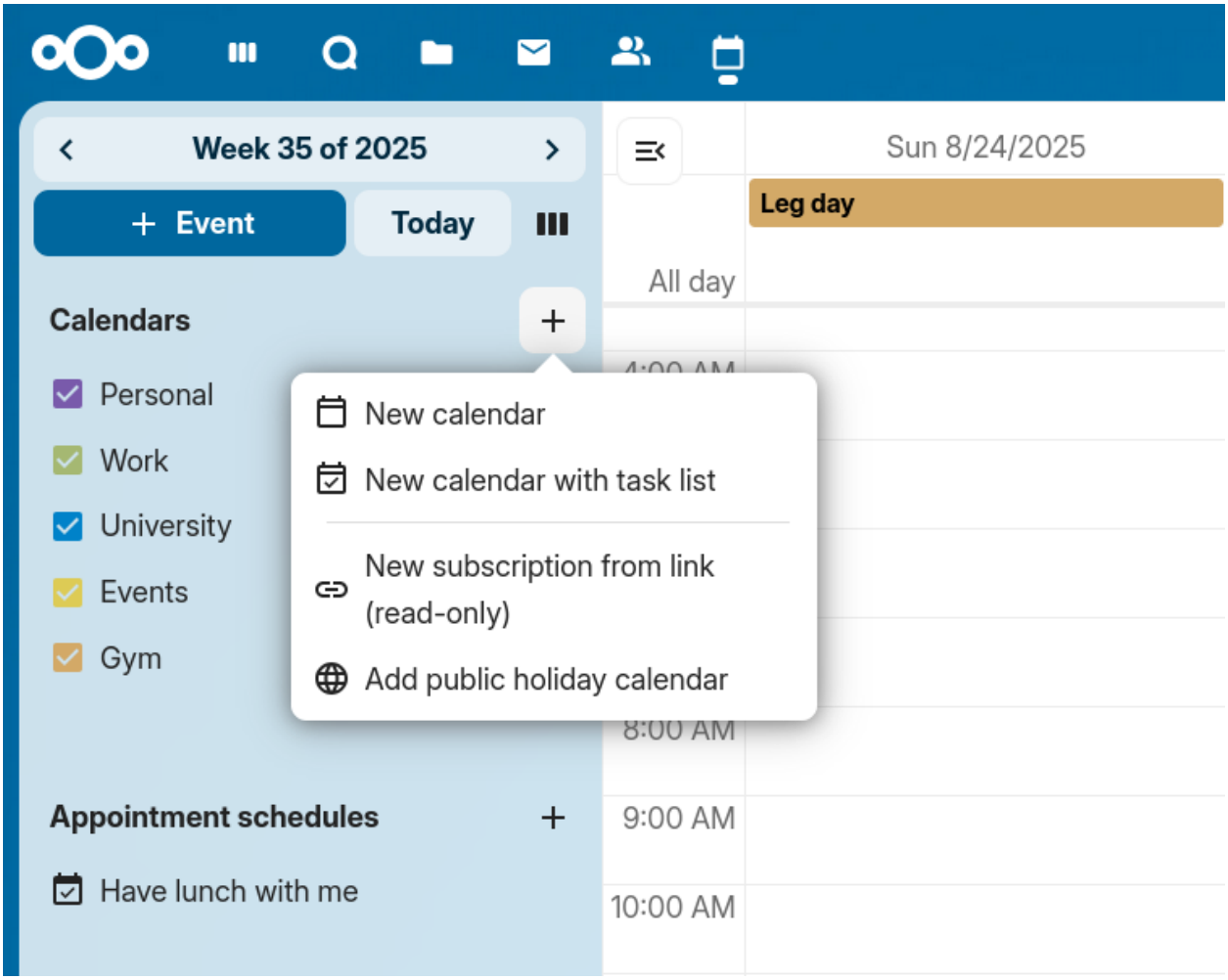


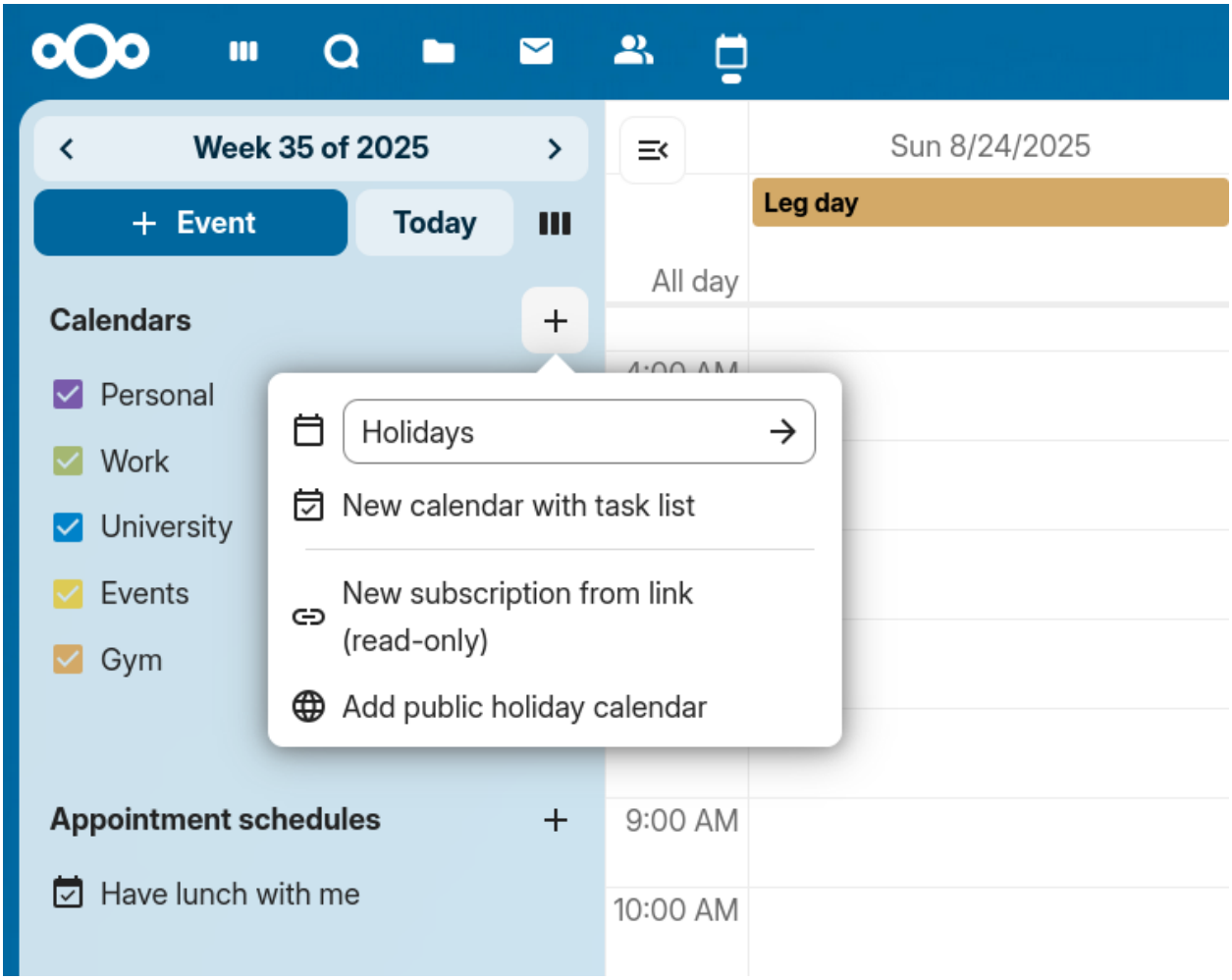

### 6.2.1 Managing your calendars

#### Create a new Calendar

If you plan on setting up a new calendar without transferring any old data from your previous calendar, creating a new calendar is the way you should go.

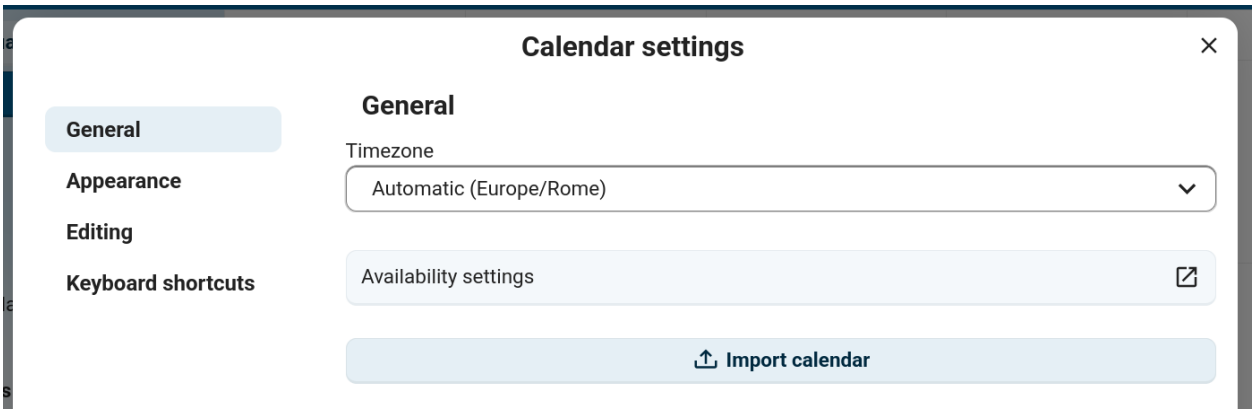
1. Click on `+ New Calendar` in the left sidebar.
2. Type in a name for your new calendar, e.g. “Work”, “Home” or “Marketing planning”.
3. After clicking on the checkmark, your new calendar is created and can be synced across your devices, filled with new events and shared with your friends and colleagues.


Week 35 of 2025
+ Event
Today
Calendars
Personal
Work
University
Events
Gym
New calendar
New calendar with task list
New subscription from link (read-only)
Add public holiday calendar
Appointment schedules
Have lunch with me
Sun 8/24/2025
Leg day
All day
8:00 AM
9:00 AM
10:00 AM


Week 35 of 2025
+ Event
Today
Calendars
Personal
Work
University
Events
Gym
Holidays
New calendar with task list
New subscription from link (read-only)
Add public holiday calendar
Appointment schedules
Have lunch with me
Sun 8/24/2025
Leg day
All day
9:00 AM
10:00 AM

### Import a Calendar

If you want to transfer your calendar and their respective events to your Nextcloud instance, importing is the best way to do so.




1. Click on the **Calendar settings** icon.
2. After clicking on `Import Calendar`, found in the `General` section, you can select one or more calendar files from your local device to upload.
3. Select a `Calendar to import into`.
4. The upload can take some time and depends on how big the calendar you import is. A blue progress bar will appear below "Calendar Settings".

> **Note**
>
> The Nextcloud Calendar application only supports iCalendar-compatible `.ics`-files, defined in RFC 5545.

### Import an Event/Add .ics Event

Individual events are often distributed as `.ics` files (sometimes via a button labelled "iCal", "Apple Calendar" or "Outlook"). You can import them into Nextcloud Calendar using the same import flow as a full calendar.

1. Click on the **Calendar settings** icon.
2. After clicking on `Import calendar` you can select one or more `.ics` files from your local device to upload. Single-event files are added to the calendar you select.
3. Select a `Calendar to import into`.
4. The upload can take some time and depends on how big the calendar/event you import is. A blue progress bar will appear below "Calendar Settings".

**Note**

The Nextcloud Calendar application only supports iCalendar-compatible `.ics`-files, defined in RFC 5545.

### Edit, Export or Delete a Calendar

Sometimes you may want to change the color or the entire name of a previous imported or created calendar. You may also want to export it to your local hard drive or delete it forever.

**Note**

Please keep in mind that deleting a calendar is an irreversible action. After deletion, there is no way of restoring the calendar unless you have a local backup.

Click on the "pen" icon of the respective calendar. You will see a new popup that will allow you to change the calendar name and color, and buttons to delete or export the calendar.

### Calendar Transparency

You can toggle the checkbox "Never show me as busy (set calendar to transparent)" to influence if this calendars' events are taken into account in Free/Busy calculations. If checked, no events in this calendar will be taken into account, your schedule will always be free, regardless of an events' settings.

### Sharing calendars

You may share your calendar with local users, groups or with remote users on federated servers.

Calendars may be shared with write access or read-only. When sharing a calendar with write access, users with whom the calendar is shared will be able to create new events into the calendar as well as edit and delete existing ones.

**Note**

Calendar shares currently cannot be accepted or rejected. If you want to stop having a calendar that someone shared with you, you can click on the 3-dot menu next to the calendar in the calendar list and click on "Unshare from me". To restore a share, the calendar can be reshared again, either for the whole group, resetting all unshares, or for a single user.

### Calendar delegation

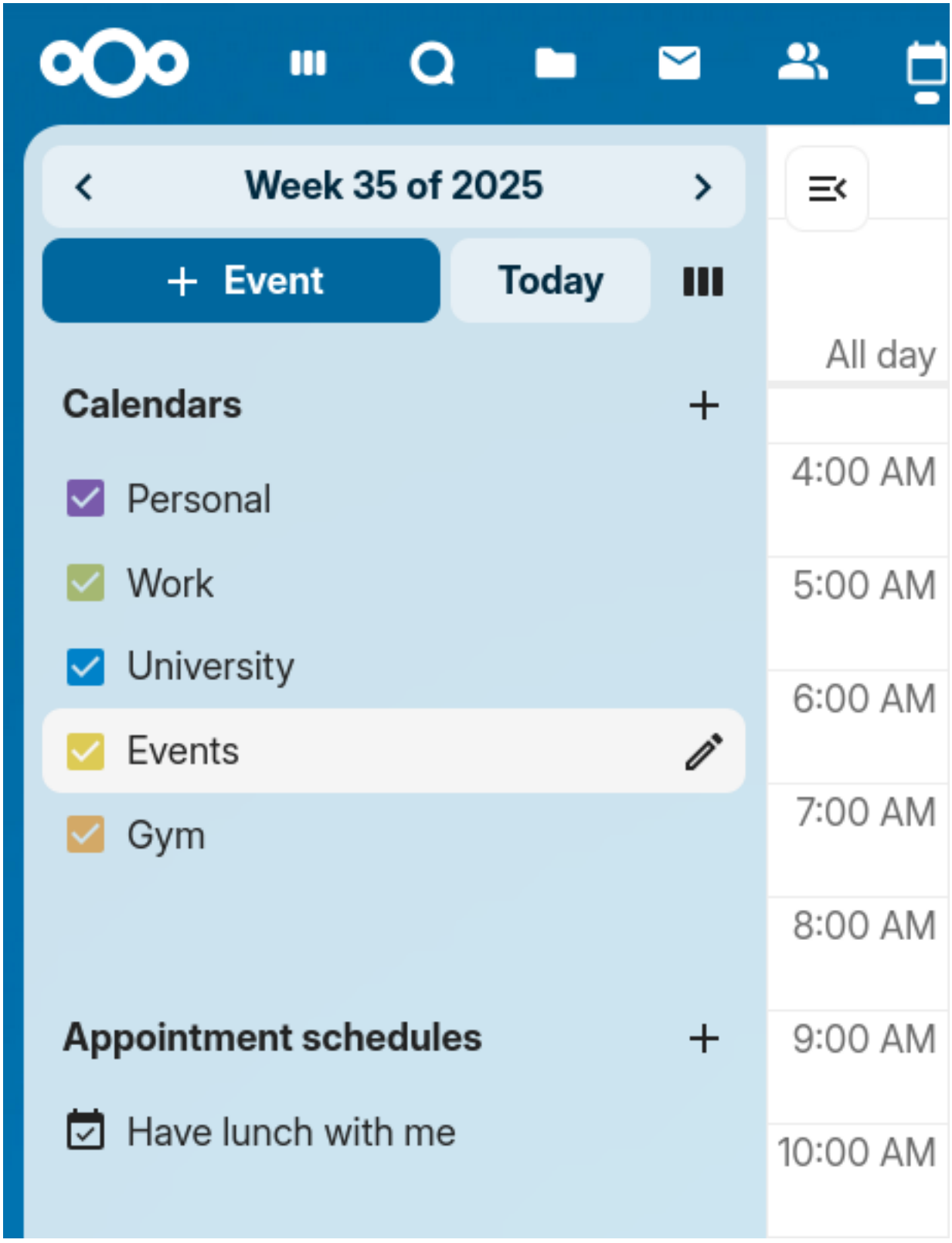
Added in version 34.0.0.

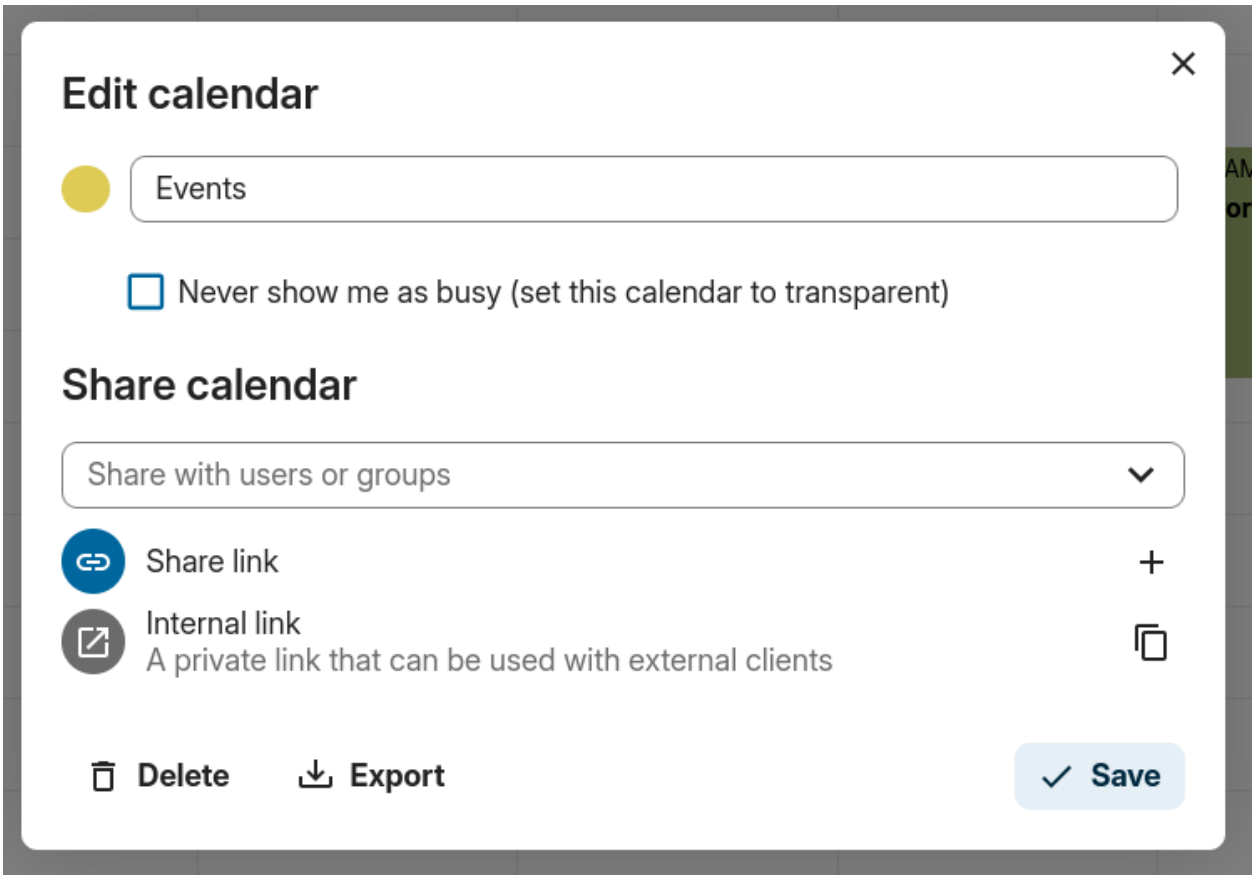
In the app settings, you can delegate your calendars to other users so they can manage them for you. You can grant read access if they should only view the calendar, or write access if they should create, edit and delete events.

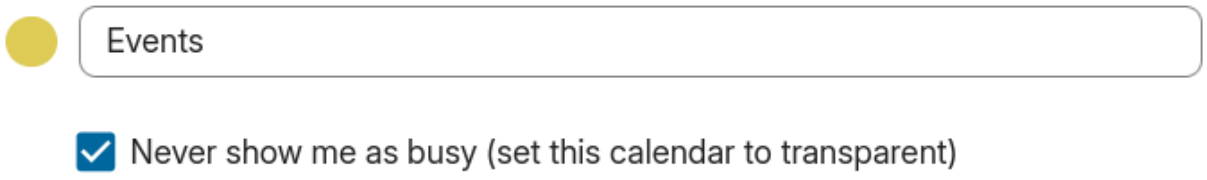
Calendar delegation also works with other clients that support calendar delegation.

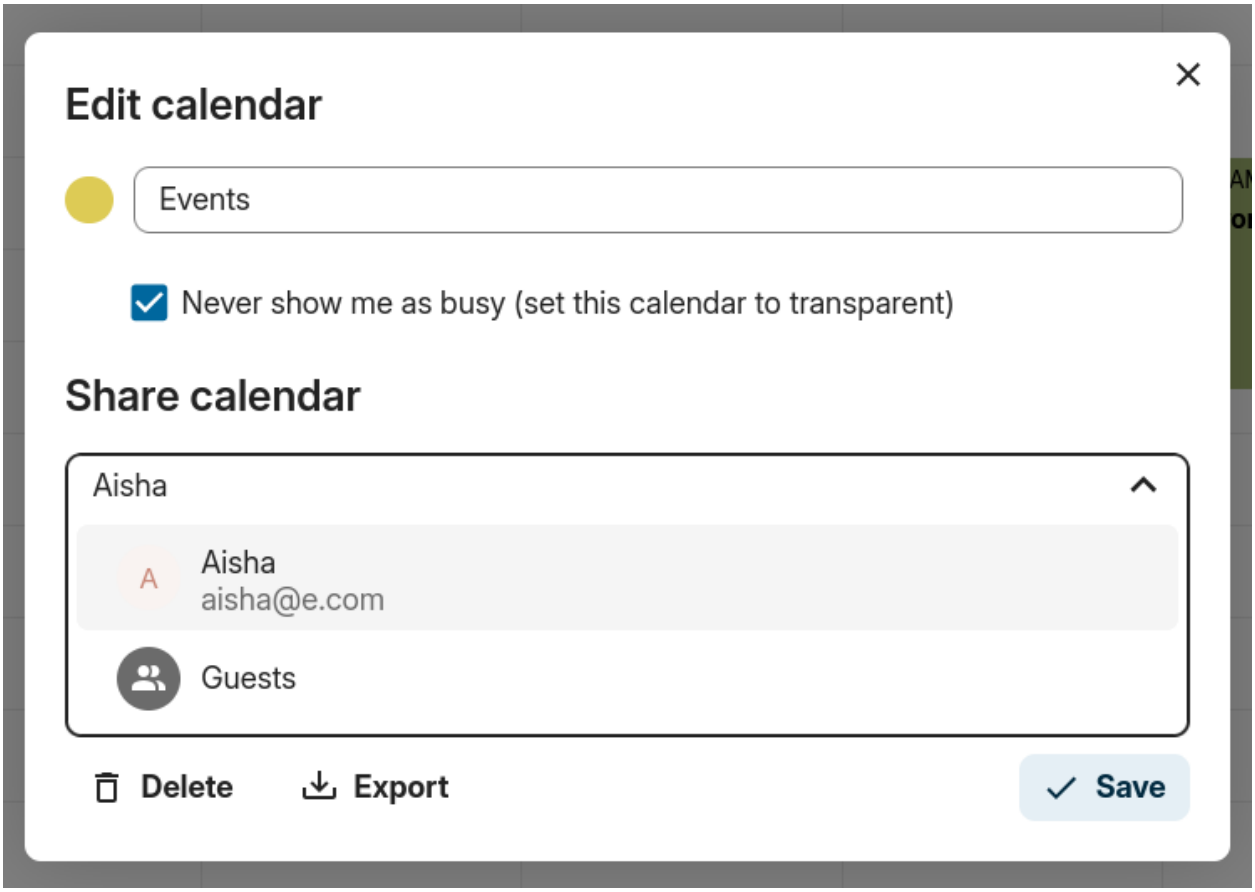
By default, delegatees are not added as attendees of events that they create for a delegator, the delegator remains the organizer of the event. If the event has a Talk conversation attached, both the delegator and the delegatee are moderators of that conversation.

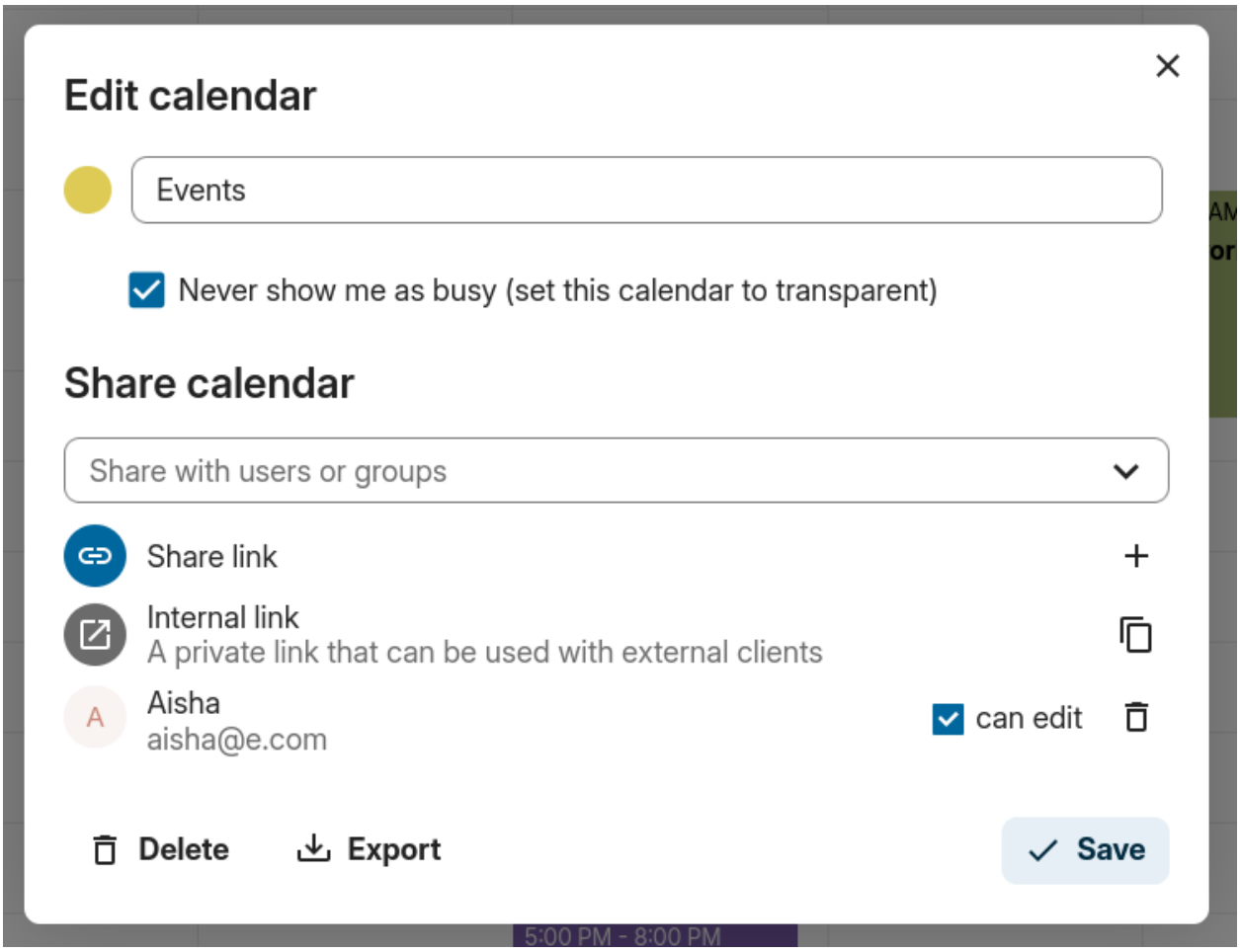
**Note**


Week 35 of 2025
+ Event
Today
All day
Calendars
Personal
Work
University
Events
Gym
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
Appointment schedules
9:00 AM
Have lunch with me
10:00 AM


Edit calendar
Events
Never show me as busy (set this calendar to transparent)
Share calendar
Share with users or groups
Share link
Internal link
A private link that can be used with external clients
Delete
Export
Save


Events
Never show me as busy (set this calendar to transparent)


Edit calendar
Events
Never show me as busy (set this calendar to transparent)
Share calendar
Aisha
A
Aisha
aisha@e.com
Guests
Delete
Export
Save


Edit calendar
Events
Never show me as busy (set this calendar to transparent)
Share calendar
Share with users or groups
Share link
Internal link
A private link that can be used with external clients
A
Aisha
aisha@e.com
can edit
Delete
Export
Save
5:00 PM - 8:00 PM

Currently, delegating your account delegates all of your calendars. Delegating individual calendars is not yet supported.

### Federated calendar sharing

Added in version 32.0.0.

Changed in version 33.0.0: Federated calendar shares support read/write access.

Sharing a calendar with a user on another Nextcloud instance works just like sharing with a local user. The difference is that you need to use the federated user identifier as the recipient, which has the format `<username>@<instance>` (e.g. `alice@cloud.example.com`).

Starting with Nextcloud 33, federated shares support full read/write access, allowing remote users to create, edit, and delete events in the shared calendar. In Nextcloud 32, federated shares were read-only.

### Publishing a calendar

Calendars can be published through a public link to make them viewable (read-only) to external users. You may create a public link by opening the share menu for a calendar and clicking on « + » next to « Share link ». Once created you can copy the public link to your clipboard or send it through email.

There's also an « embedding code » that provides an HTML iframe to embed your calendar into public pages.

Multiple calendars can be shared together by adding their unique tokens to the end of an embed link. Individual tokens can be found at the end of each calendar's public link. The full address will look like `https://cloud.example.com/index.php/apps/calendar/embed/<token1>-<token2>-<token3>`

To change the default view or date of an embedded calendar, you need to provide a URL that looks like `https://cloud.example.com/index.php/apps/calendar/embed/<token>/<view>/<date>`. In this URL you need to replace the following variables:

- `<token>` with the calendar's token,
- `<view>` with one of `dayGridMonth`, `timeGridWeek`, `timeGridDay`, `listMonth`, `listWeek`, `listDay`. The default view is `dayGridMonth` and the normally used list is `listMonth`,
- `<date>` with `now` or any date with the following format `<year>-<month>-<day>` (e.g. `2019-12-28`).

On the public page, users are able to get the subscription link for the calendar and export the whole calendar directly.

### Calendar Widget

You can embed your calendars into supported apps like `Talk`, `Notes`, etc… by either sharing the public link to make the embed viewable (read-only) to all users or by using the internal link to make it private.

### Subscribe to a Calendar

You can subscribe to iCal calendars directly inside of your Nextcloud. By supporting this interoperable standard (RFC 5545) we made Nextcloud calendar compatible to Google Calendar, Apple iCloud and many other calendar-servers you can exchange your calendars with, including subscription links from calendar published on other Nextcloud instances, as described above.

1. Click on `+ New calendar` in the left sidebar
2. Click on `+ New subscription from link (read-only)`
3. Type in or paste the link of the shared calendar you want to subscribe to.

Finished. Your calendar subscriptions will be updated regularly.

> **Note**
>
> Subscriptions are refreshed every week by default. Your administrator may have changed this setting.

#### Subscribe to a Holiday Calendar

Added in version 4.4: Nextcloud 25 or newer

You can subscribe to a read-only holiday calendar provided by Thunderbird.

1. Click on `+ New calendar` in the left sidebar
2. Click on `+ Add holiday calendar`
3. Find your country or region and click `Subscribe`

### 6.2.2 Managing Events

#### Create a new event

Events can be created by clicking in the area when the event is scheduled. In the day- and week-view of the calendar you just click, pull and release your cursor over the area when the event is taking place.

Clicking on the globe button brings up the timezone selector. You are able to choose different timezones for the start and end of your event. This is useful when travelling.

The month-view only requires a single click into the area of the target day.

After that, you can type in the event's name (e.g. **Meeting with Linus**), choose the calendar in which you want to save the event to (e.g. **Personal**, **Community Events**), check and concretize the time span or set the event as an all-day event. Optionally you can specify a location and a description.

If you want to edit advanced details such as the **Attendees** or **Reminders**, or if you want to set the event as a repeating event, click on the `More` button to open the advanced editor.

#### Add Talk conversation

You can include an existing Talk conversation in your event by clicking "Add Talk conversation". To view the list of existing Talk conversations, ensure the Talk app is enabled. If you'd like to create a new Talk conversation, you can do so directly from the same modal.

> **Note**
>
> If you always want to open the advanced editor instead of the simple event editor popup, you uncheck the option `Enable simplified editor` in the `Settings` section of the app.

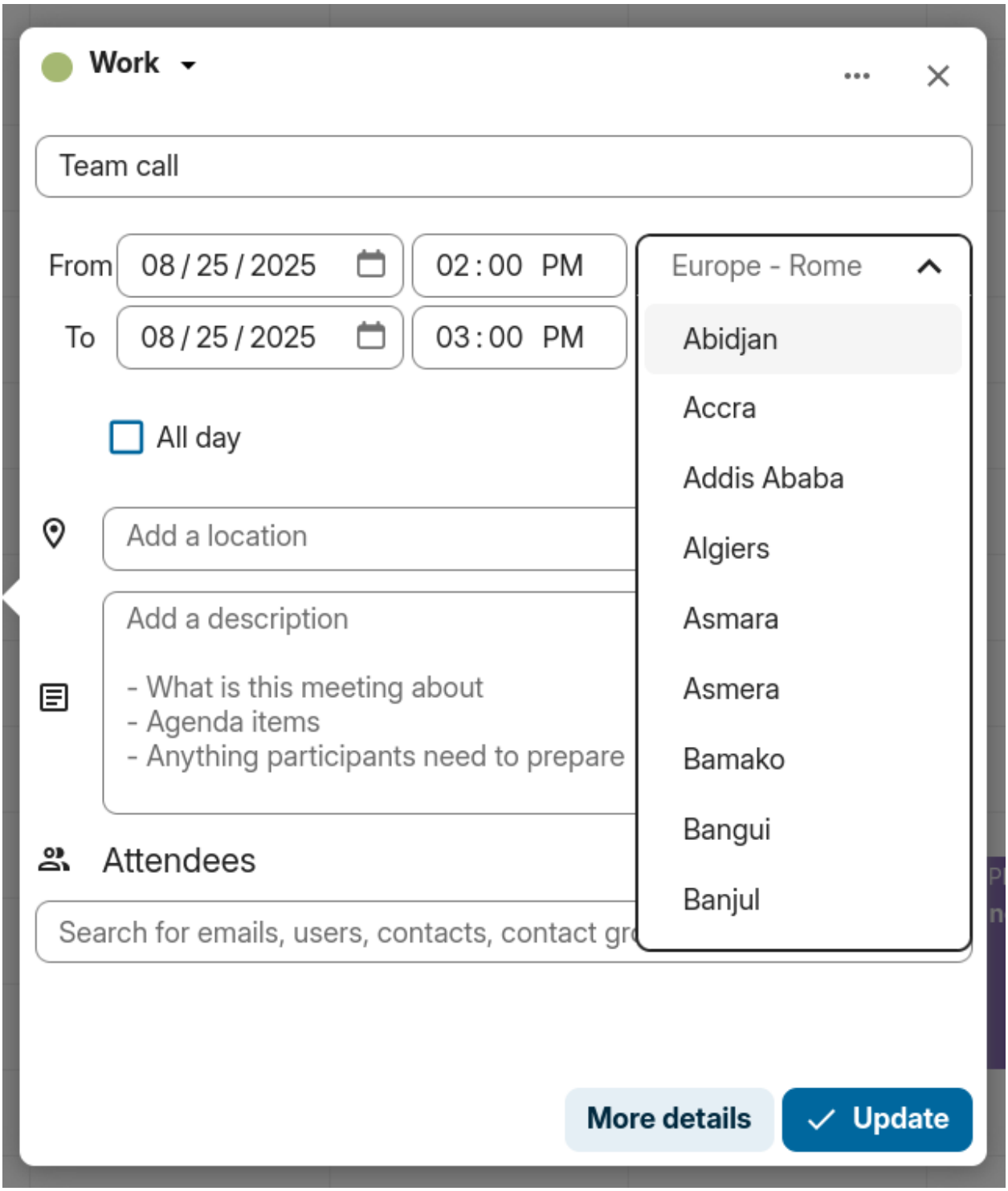
Clicking on the blue `Create` button will finally create the event.

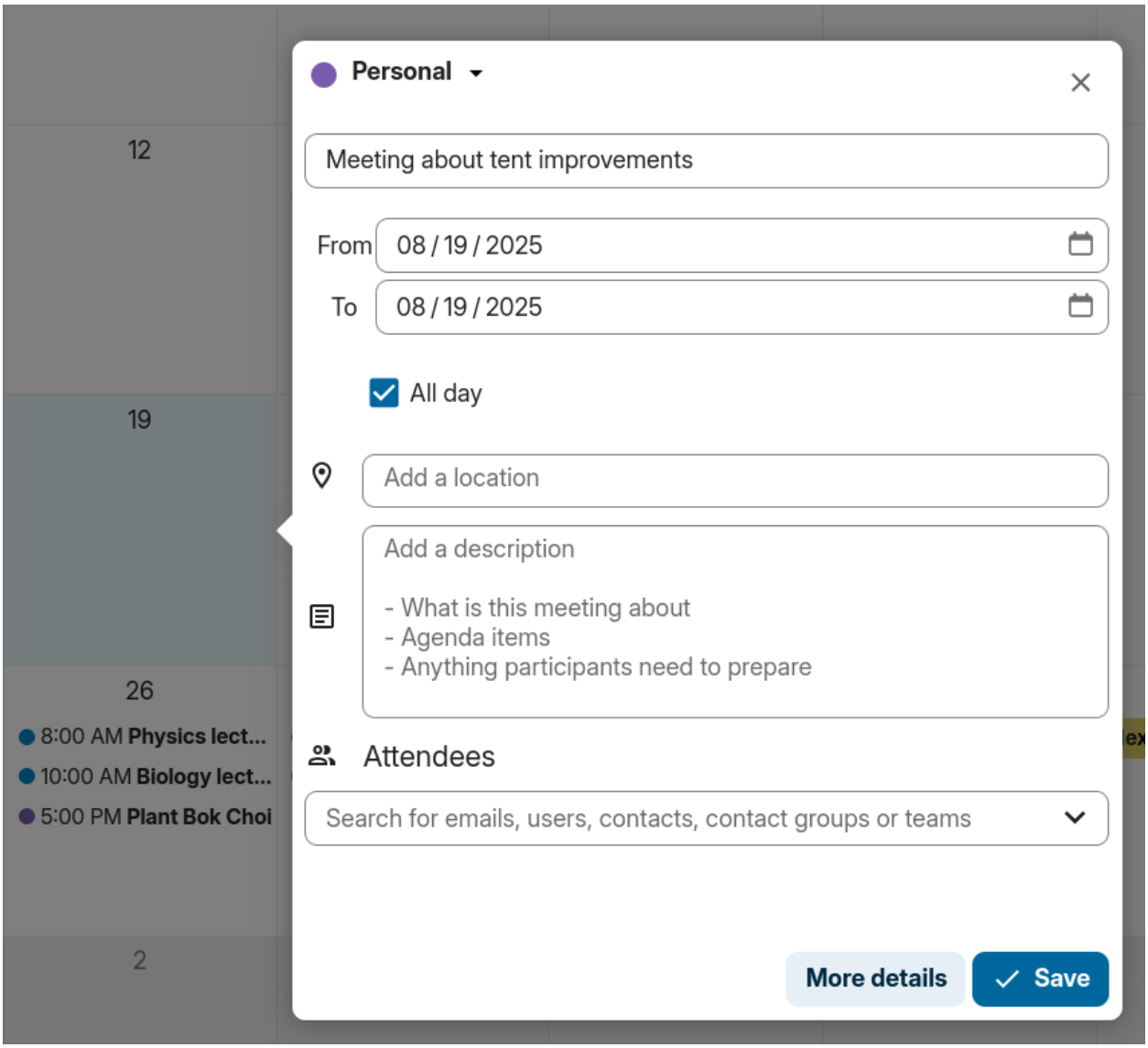
#### Edit, duplicate or delete an event

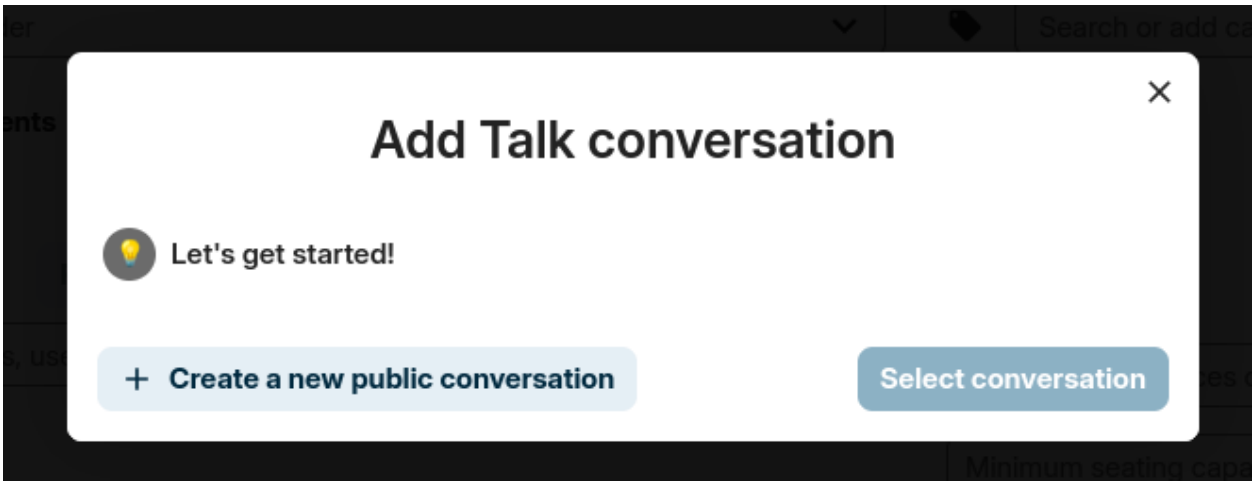
If you want to edit, duplicate or delete a specific event, you first need to click on the event.

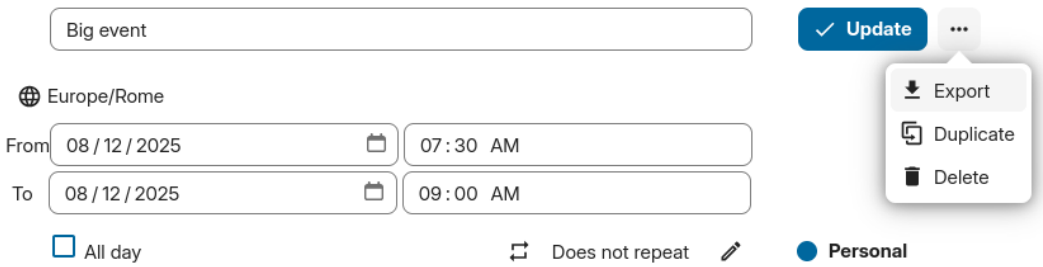
After that you will be able to re-set all event details and open the advanced editor by clicking on `More`.

Clicking on the `Update` button will update the event. To cancel your changes, click the **Close** button of the popup or advanced editor.


Work
Team call
From
08 / 25 / 2025
02 : 00 PM
To
08 / 25 / 2025
03 : 00 PM
Europe - Rome
Abidjan
Accra
Addis Ababa
Algiers
Asmara
Asmera
Bamako
Bangui
Banjul
All day
Add a location
Add a description
- What is this meeting about
- Agenda items
- Anything participants need to prepare
Attendees
Search for emails, users, contacts, contact gr
More details
Update


Personal
Meeting about tent improvements
From 08 / 19 / 2025
To 08 / 19 / 2025
All day
Add a location
Add a description
- What is this meeting about
- Agenda items
- Anything participants need to prepare
Attendees
Search for emails, users, contacts, contact groups or teams
More details
Save
12
19
26
8:00 AM Physics lect...
10:00 AM Biology lect...
5:00 PM Plant Bok Choi
2

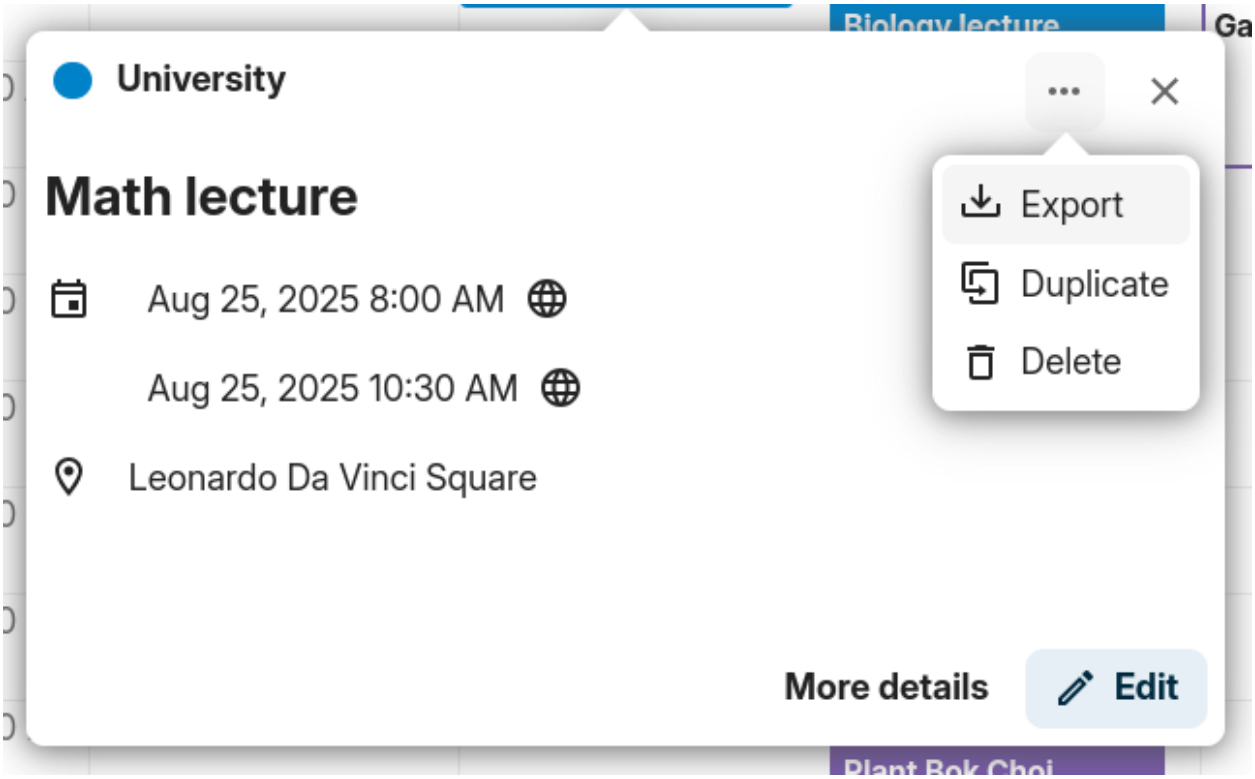

Add Talk conversation
Let's get started!
Create a new public conversation
Select conversation




If you open the advanced view and click the three dot menu next to the event name, you have an option to export the event as an `.ics` file or remove the event from your calendar.

> **Tip**
>
> If you delete events they will go into your *trash bin*. You can restore accidentally deleted events there.

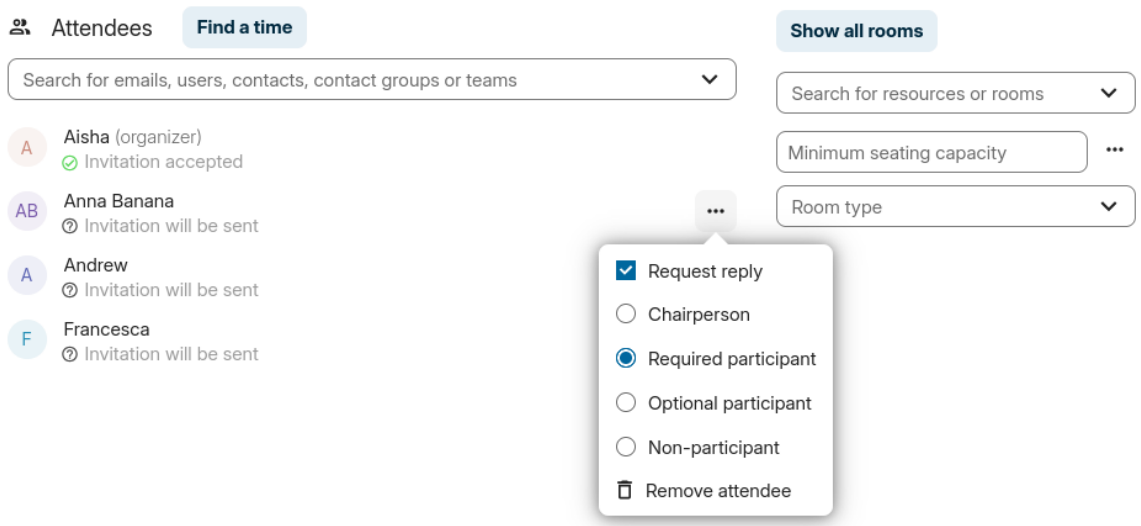
You can also export, duplicate or delete an event from the basic editor.




### Invite attendees to an event

You may add attendees to an event to let them know they're invited. They will receive an email invitation and will be able to confirm or cancel their participation to the event. Attendees may be other users on your Nextcloud instances, contacts in your address books and direct email addresses. You may also change the level of participation per attendees, or disable the email information for a specific attendee.

Changed in version 25.0.0: Attendee email response links no longer offer inputs to add a comment or invite additional




guests to the event.

**Tip**

When adding other Nextcloud users as attendees to an event, you may access their free-busy information if available, helping you determine when the best time slot for your event is. Set your *working hours* to let others know when you are available. Free-busy information is only available for other users on the same Nextcloud instance.

**Attention**

The server administration needs to setup the e-mail server in the `Basic settings` tab, as this mail will be used to send invitations.

Invitation status legend (as an attendee):

- **Filled in event**: You accepted
- **Strikethrough**: You declined
- **Stripes**: Tentative
- **Empty event**: You haven't responded yet

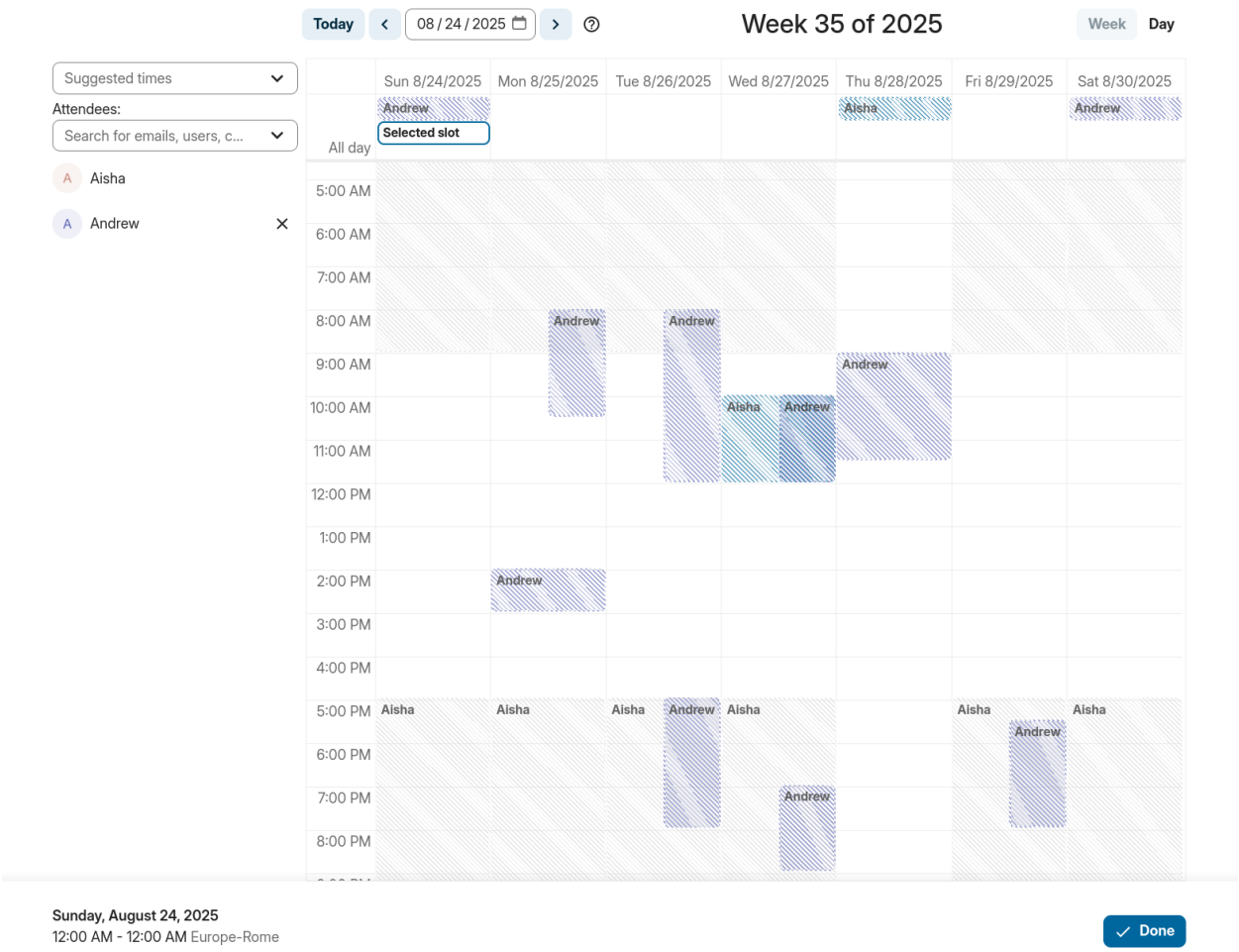
If you are the organizer and all your attendees declined, the event will be empty with a warning symbol.

### Checking attendees' busy times

After adding attendees to an event you can click on `Find a time` to bring up the "Free / Busy" modal. It allows you to see when each attendee has other events, and can help you decide on a time when everyone is free.

Your own busy blocks will be shown in the same color as your personal calendar, your out of office times will be shown in gray, and other attendees' busy times will have the same color as their avatar shown in the advanced editor.

You can select a time slot for the event directly on the calendar.


Today
08 / 24 / 2025
Week 35 of 2025
Week
Day
Suggested times
Attendees:
Search for emails, users, c...
Aisha
Andrew
Sun 8/24/2025
Mon 8/25/2025
Tue 8/26/2025
Wed 8/27/2025
Thu 8/28/2025
Fri 8/29/2025
Sat 8/30/2025
All day
Selected slot
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
Sunday, August 24, 2025
12:00 AM - 12:00 AM Europe-Rome
Done

### Assign rooms and resources to an event

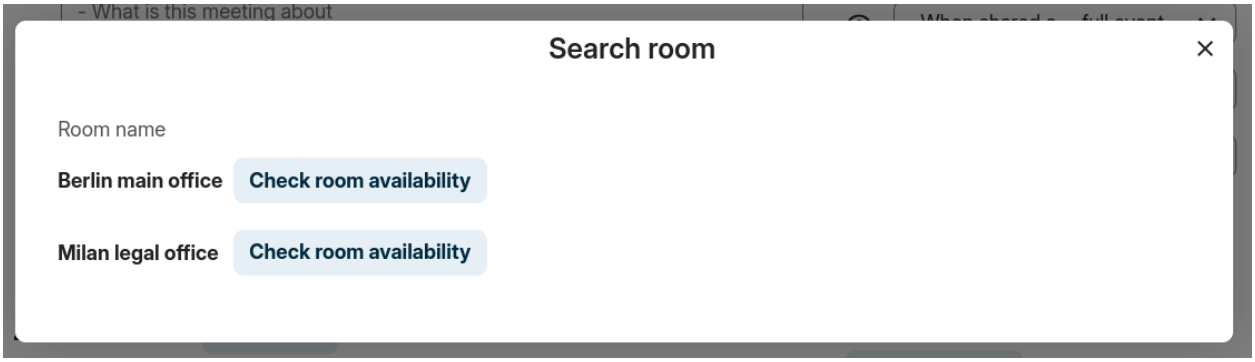
Similar to attendees you can add rooms and resources to your events. The system will make sure that each room and resource is booked without conflict. The first time a user adds the room or resource to an event, it will show as accepted. Any further events at overlapping times will show the room or resource as rejected.

> **Note**
>
> Rooms and resources are not managed by Nextcloud itself and the Calendar app will not allow you to add or change a resource. Your Administrator has to install and possibly configure resource back ends before you can use them as a user.

### Room availability

Added in version 5.0: Nextcloud 30 or newer

If the "Calendar Rooms and Resources" app is installed on your instance, you can now find `Room availability` the `Resources` section. It lists all the existing rooms. You can check the availability of each room in a manner similar to checking the free/busy status of event attendees.




### Add attachments to events

You can import attachments to your events either by uploading them or adding them from files

> **Note**
>
> Attachments can be added while creating new events or editing existent ones. Newly uploaded files will be saved in files by default in the calendar folder in the root directory.

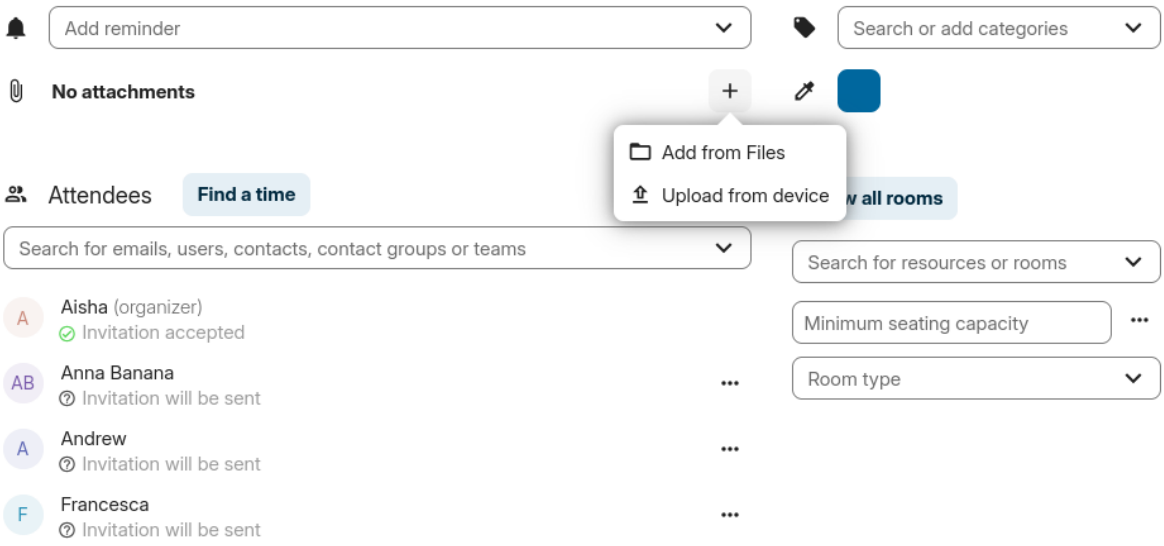
You can change the attachment folder by going to **Calendar settings** and changing `default attachments location`.

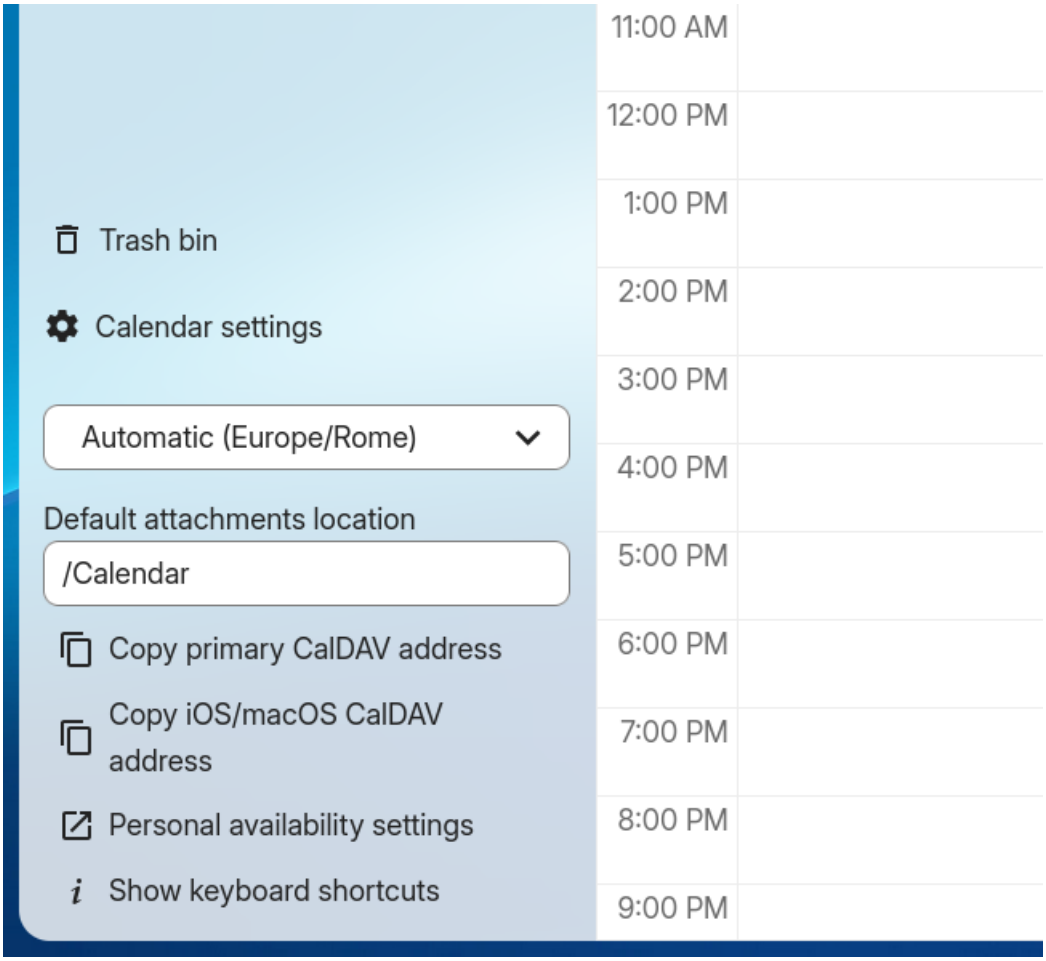
### Set up reminders

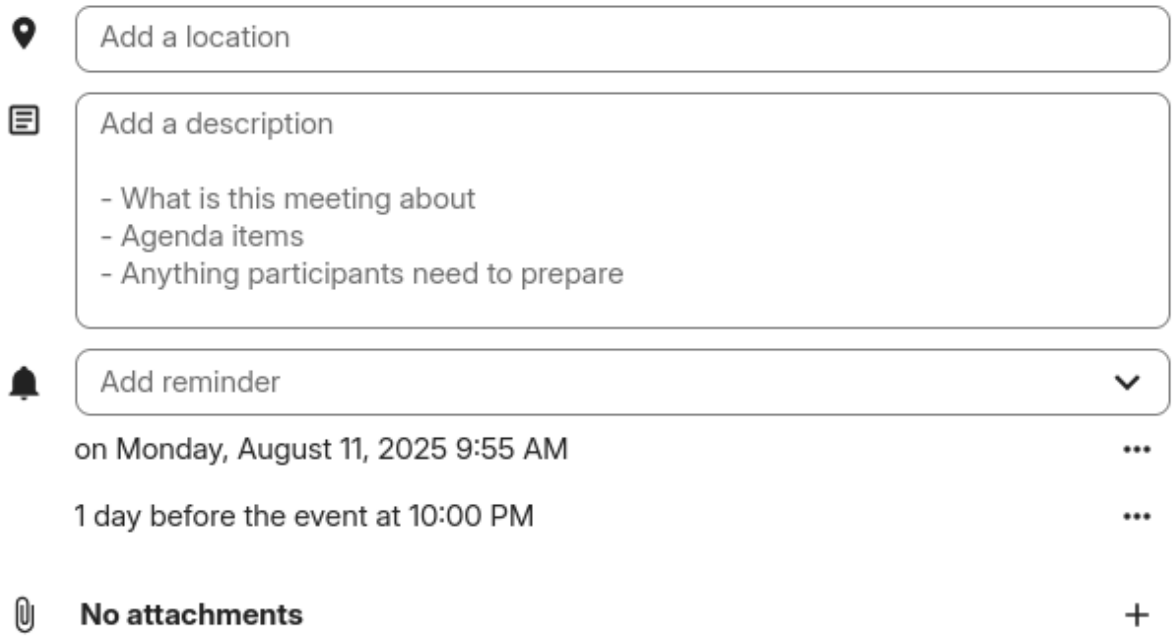
You can set up reminders to be notified before an event occurs. Currently supported notification methods are:

- Email notifications
- Nextcloud notifications

You may set reminders at a time relative to the event or at a specific date. If you would like all the events in a calendar to have a default reminder, you can configure that in the settings of that calendar.


Add reminder
Search or add categories
No attachments
Add from Files
Upload from device
Attendees
Find a time
all rooms
Search for emails, users, contacts, contact groups or teams
Search for resources or rooms
Aisha (organizer)
Invitation accepted
Minimum seating capacity
Anna Banana
Invitation will be sent
Room type
Andrew
Invitation will be sent
Francesca
Invitation will be sent


Trash bin
Calendar settings
Automatic (Europe/Rome)
Default attachments location
/Calendar
Copy primary CalDAV address
Copy iOS/macOS CalDAV address
Personal availability settings
Show keyboard shortcuts
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM




**Note**

Only the calendar owner and people or groups with whom the calendar is shared with write access will get notifications. If you don't get any notifications but think you should, your Administrator could also have disabled this for your server.

**Note**

If you synchronize your calendar with mobile devices or other 3rd-party clients, notifications may also show up there.

### Add recurring options

An event may be set as "recurring", so that it can happen every day, week, month or year. Specific rules can be added to set which day of the week the event happens or more complex rules, such as every fourth Wednesday of each month.

You can also tell when the recurrence ends.

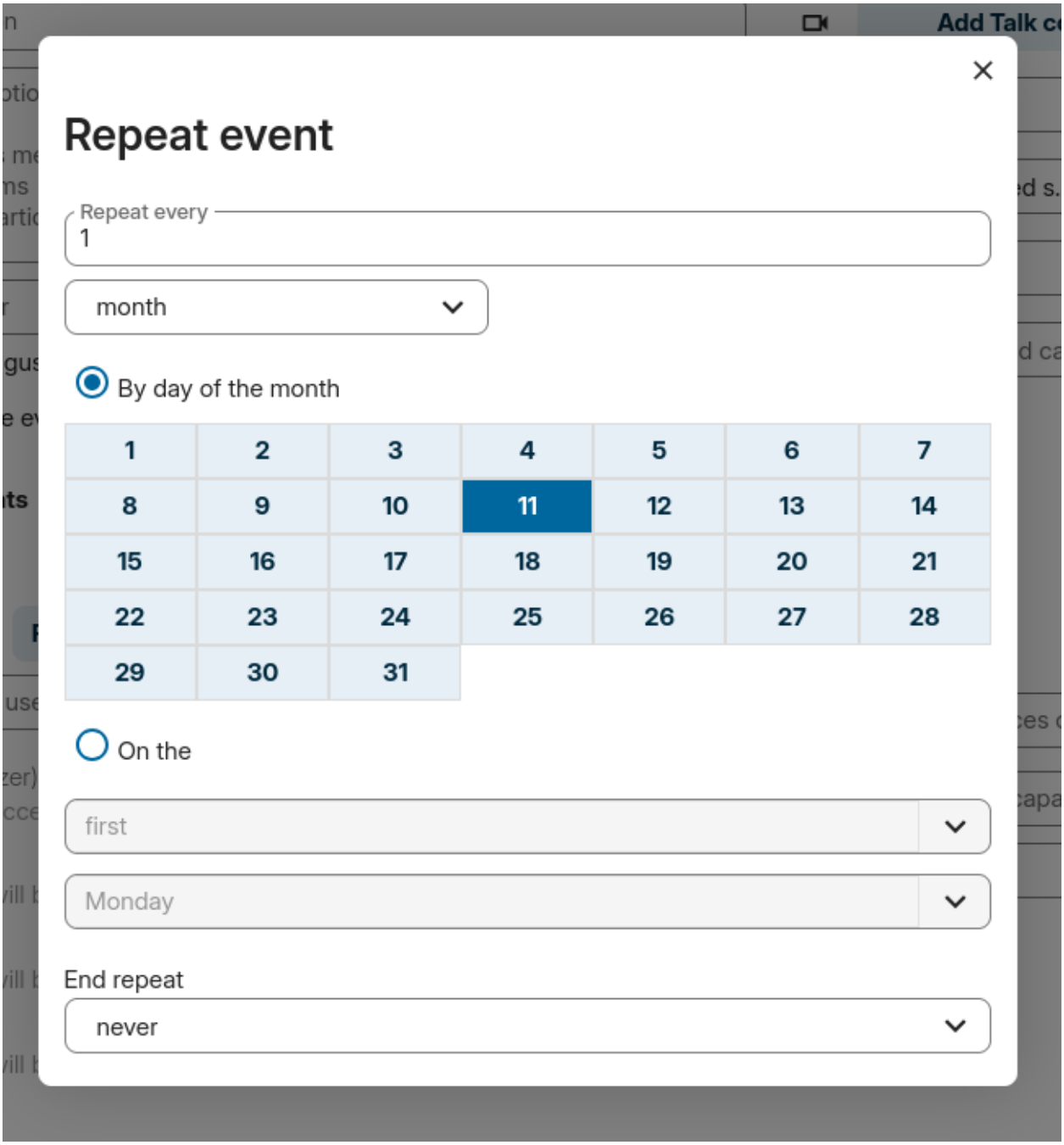
### Trash bin

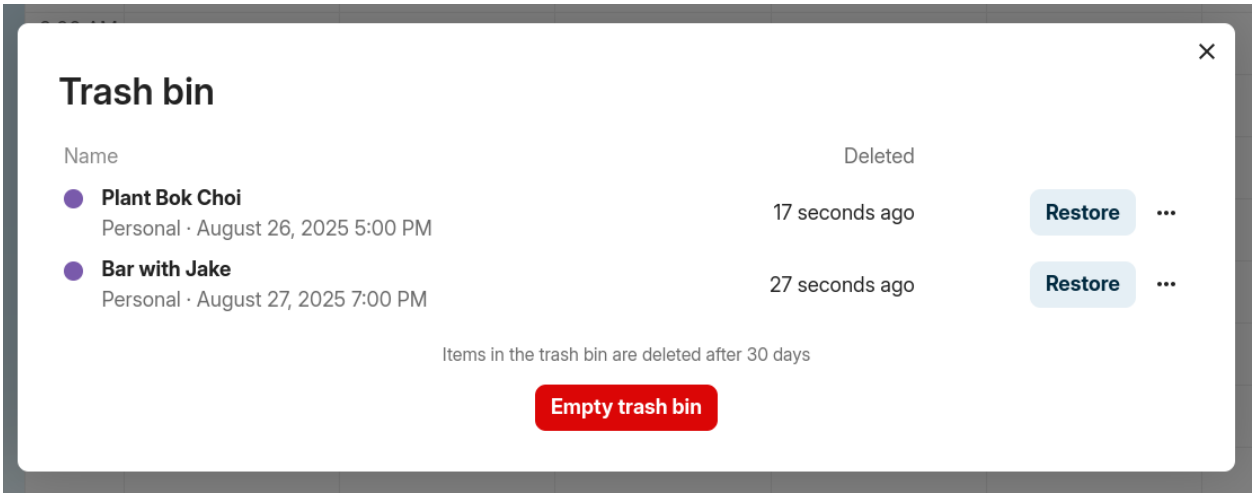
If you delete events, tasks or a calendar in Calendar, your data is not gone yet. Instead, those items will be collected in a *trash bin*. This offers you to undo a deletion. After a period which defaults to 30 days (your administration may have changed this setting), those items will be deleted permanently. You can also permanently delete items earlier if you wish.

The `Empty trash bin` buttons will wipe all trash bin contents in one step.

**Tip**

The trash bin is only accessible from the Calendar app. Any connected application or app won't be able to display its contents. However, events, tasks and calendars deleted in connected applications or app will also end up in the trash


Add Talk c
Repeat event
Repeat every
1
month
By day of the month
1 2 3 4 5 6 7
8 9 10 11 12 13 14
15 16 17 18 19 20 21
22 23 24 25 26 27 28
29 30 31
On the
first
Monday
End repeat
never




bin.

#### Automated User Status

When you have a calendar event scheduled that has a “BUSY” status, your user status will be automatically set to “In a meeting” unless you have set yourself to “Do Not Disturb” or “Invisible”. You can overwrite the status with a custom message any time, or set your calendar events to “FREE”. Calendars that are transparent will be ignored.

### 6.2.3 Responding to invitations

You can directly respond to invitations inside the app. Click on the event and select your participation status. You can respond to an invitation by accepting, declining or accepting tentatively.

You can respond to an invitation from the advanced editor too.

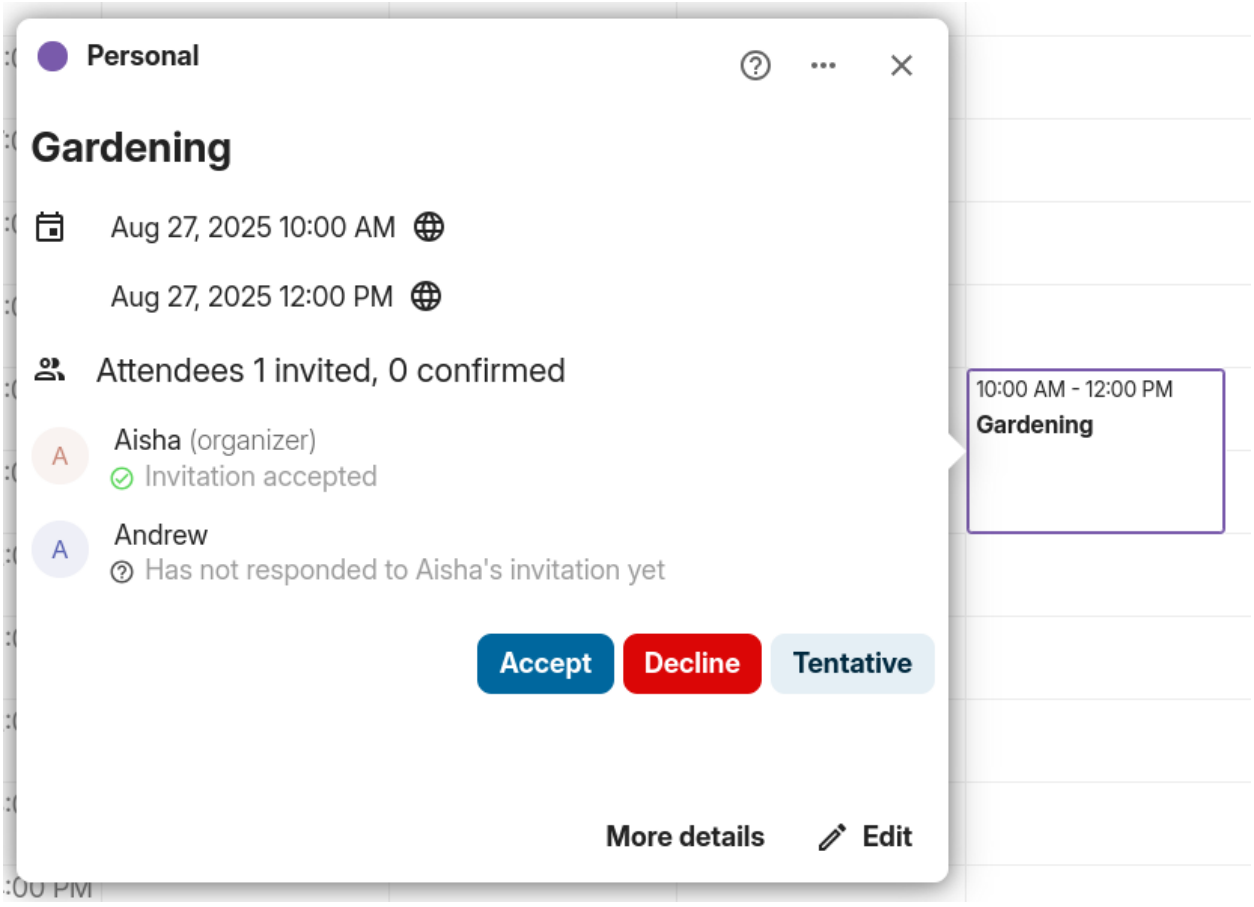
### 6.2.4 Availability (Working Hours)

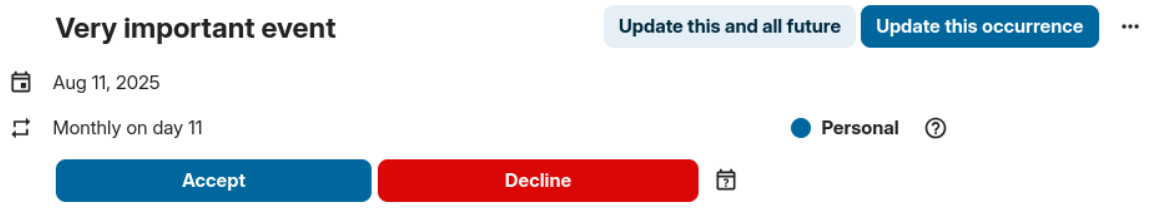
The general availability independent of scheduled events can be set in the groupware settings of Nextcloud. These settings will be reflected in the free-busy view when you *schedule a meeting with other people* in Calendar. Some connected clients like Thunderbird will show this data as well.

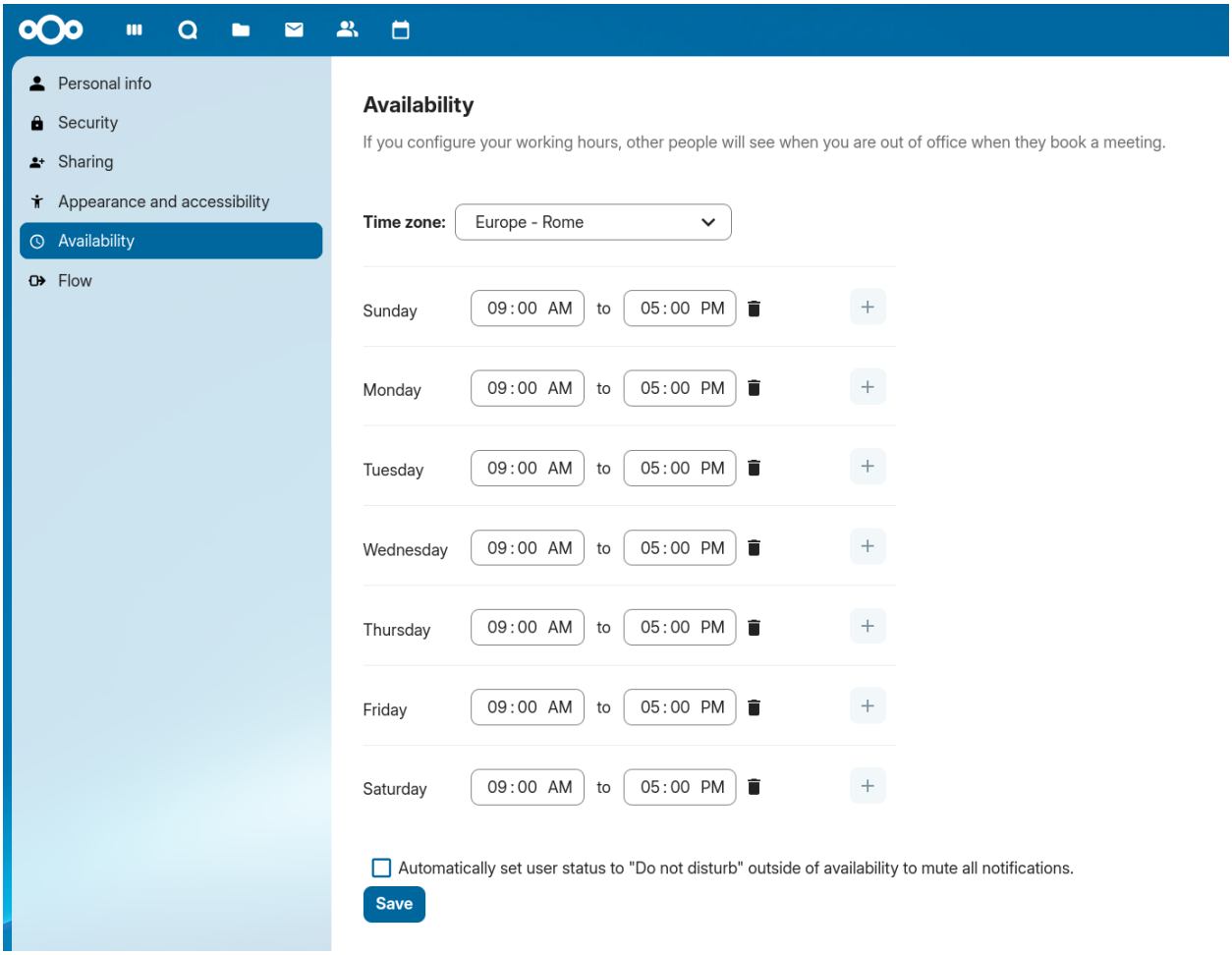
You can configure one-time absences on top of your regular availability in the *Absence settings section*.

### 6.2.5 Birthday calendar

The birthday calendar is a auto-generated calendar which will automatically fetch the birthdays from your contacts. The only way to edit this calendar is by filing your contacts with birthday dates. You can not directly edit this calendar from the calendar-app.


Personal
Gardening
Aug 27, 2025 10:00 AM
Aug 27, 2025 12:00 PM
Attendees 1 invited, 0 confirmed
Aisha (organizer)
Invitation accepted
Andrew
Has not responded to Aisha's invitation yet
Accept
Decline
Tentative
More details
Edit
10:00 AM - 12:00 PM
Gardening


Very important event
Update this and all future
Update this occurrence
Aug 11, 2025
Monthly on day 11
Personal
Accept
Decline


Personal info
Security
Sharing
Appearance and accessibility
Availability
Flow
Availability
If you configure your working hours, other people will see when you are out of office when they book a meeting.
Time zone:
Europe - Rome
Sunday 09:00 AM to 05:00 PM
Monday 09:00 AM to 05:00 PM
Tuesday 09:00 AM to 05:00 PM
Wednesday 09:00 AM to 05:00 PM
Thursday 09:00 AM to 05:00 PM
Friday 09:00 AM to 05:00 PM
Saturday 09:00 AM to 05:00 PM
Automatically set user status to "Do not disturb" outside of availability to mute all notifications.
Save

> **Note**
>
> If you do not see the birthday calendar, your Administrator may have disabled this for your server.

### 6.2.6 Appointments

As of Calendar v3 the app can generate appointment slots which other Nextcloud users but also people without an account on the instance can book. Appointments offer fine-granular control over when you are possibly free to meet up. This can eliminate the need to send emails back and forth to settle on a date and time.

In this section we'll use the term *organizer* for the person who owns the calendar and sets up appointment slots. The *attendee* is the person who books one of the slots.

#### Creating an appointment configuration

As an organizer of appointments you open the main Calendar web UI. In the left sidebar you'll find a section for appointments, were you can open the dialogue to create a new one.

One of the basic infos of every appointment is a title describing what the appointment is about (e.g. "One-on-one" when an organizer wants to offer colleagues a personal call), where an appointment will take place and a more detailed description of what this appointment is about.

The duration of the appointment can be picked from a predefined list. Next, you can set the desired increment. The increment is the rate at which possible slots are available. For example, you could have one hour long slots, but you give them away at 30 minute increments so an attendee can book at 9:00AM but also at 9:30AM. Optional infos about location and a description give the attendees some more context.Every booked appointment will be written into one of your calendars, so you can chose which one that should be. Appointments can be *public* or *private*. Public appointments can be discovered through the profile page of a Nextcloud user. Private appointments are only accessible to the people who receive the secret URL.

> **Note**
>
> Only slots that do not conflict with existing events in your calendars will be shown to attendees.

The organizer of an appointment can specify at which times of the week it's generally possible to book a slot. This could be the working hours but also any other customized schedule.

Some appointments require time to prepare, e.g. when you meet at a venue and you have to drive there. The organizer can chose to select a time duration that must be free. Only slots that do not conflict with other events during the preparation time will be available. Moreover there is the option to specify a time after each appointment that has to be free. To prevent an attendee from booking too short notice it's possible to configure how soon the next possible appointment might take place. Setting a maximum number of slots per day can limit how many appointments are possibly booked by attendees.

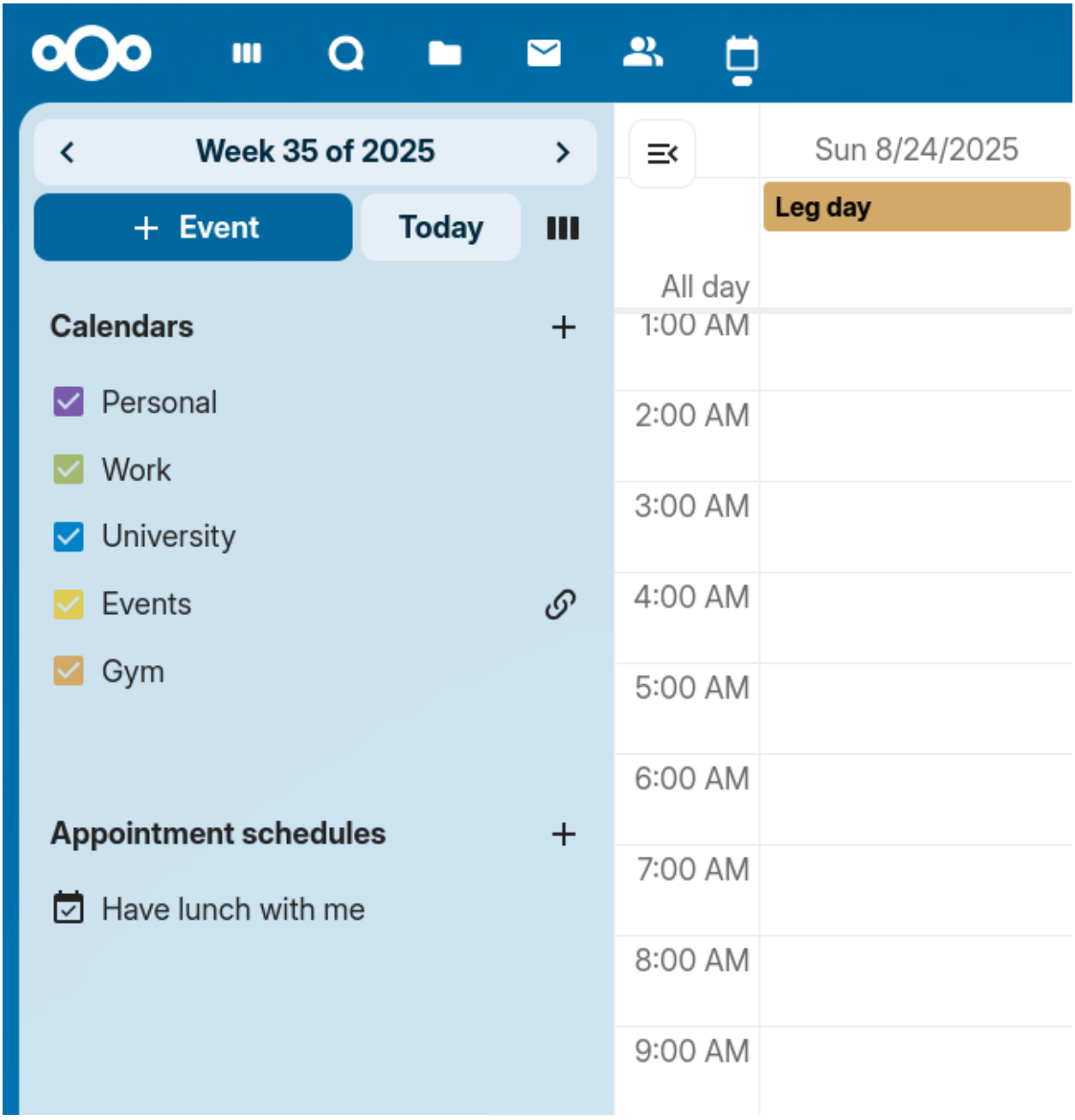
The configured appointment will then be listed in the left sidebar. Via the three dot menu, you can preview the appointment. You can copy the link to the appointment and share it with your target attendees, or let them discover your public appointment via the profile page. You can also edit or delete the appointment configuration.

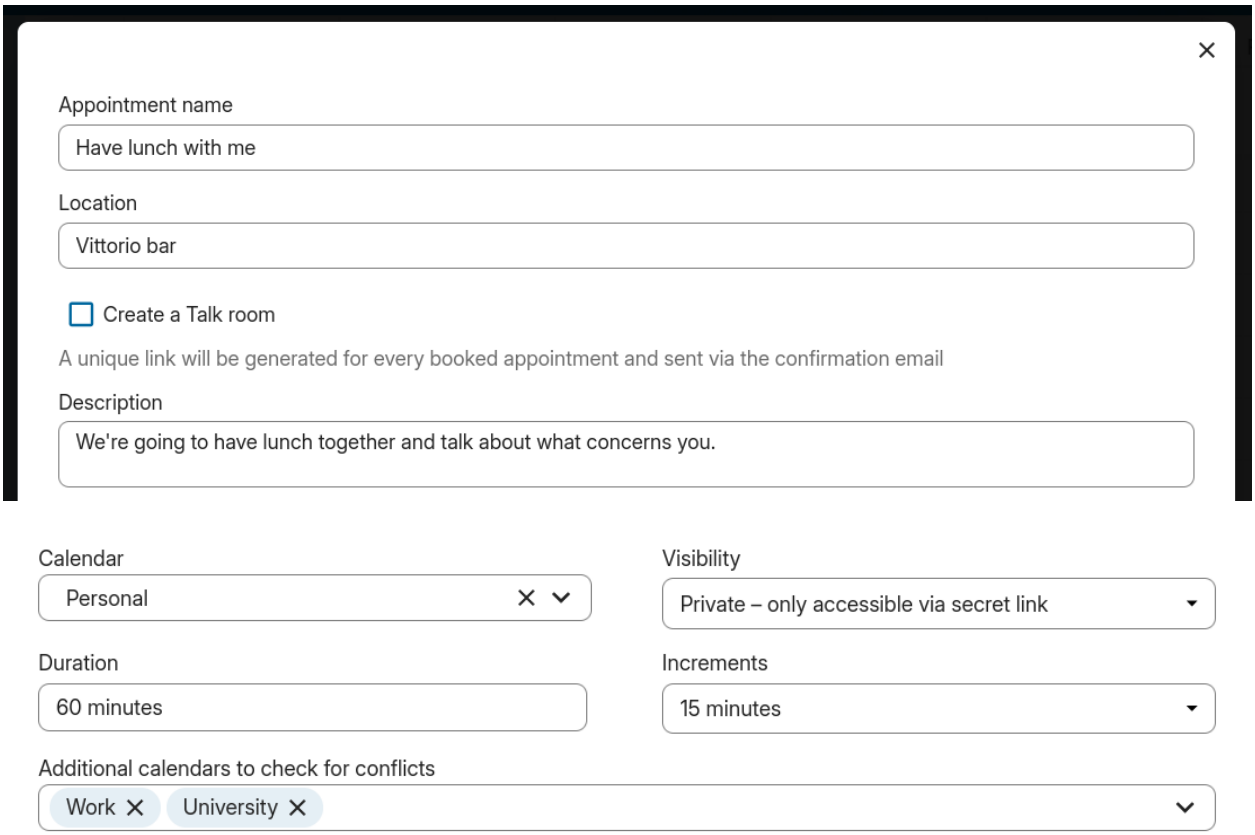
#### Booking an appointment

The booking page shows an attendee the title, location, description and length of an appointment. For a selected day there will be a list with all the possible time slots. On days with no available slots, too many conflicts or a reached daily maximum limit of already booked appointments, the list might be empty.

For the booking, attendees have to enter a name and an email address. Optionally they can also add a comment.

When the booking was successful, a confirmation dialogue will be shown to the attendee.


Week 35 of 2025
+ Event
Today
Calendars
Personal
Work
University
Events
Gym
Appointment schedules
Have lunch with me
Sun 8/24/2025
Leg day
All day
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM




To verify that the attendee email address is valid, a confirmation email will be sent to them.

Only after the attendee clicks the confirmation link from the email the appointment booking will be accepted and forwarded to the organizer.

The attendee will receive another email confirming the details of their appointment.

**Note**

If a slot has not been confirmed, it will still show up as bookable. Until then the time slot might also be booked by another user who confirms their booking earlier. The system will detect the conflict and offer to pick a new time slot.

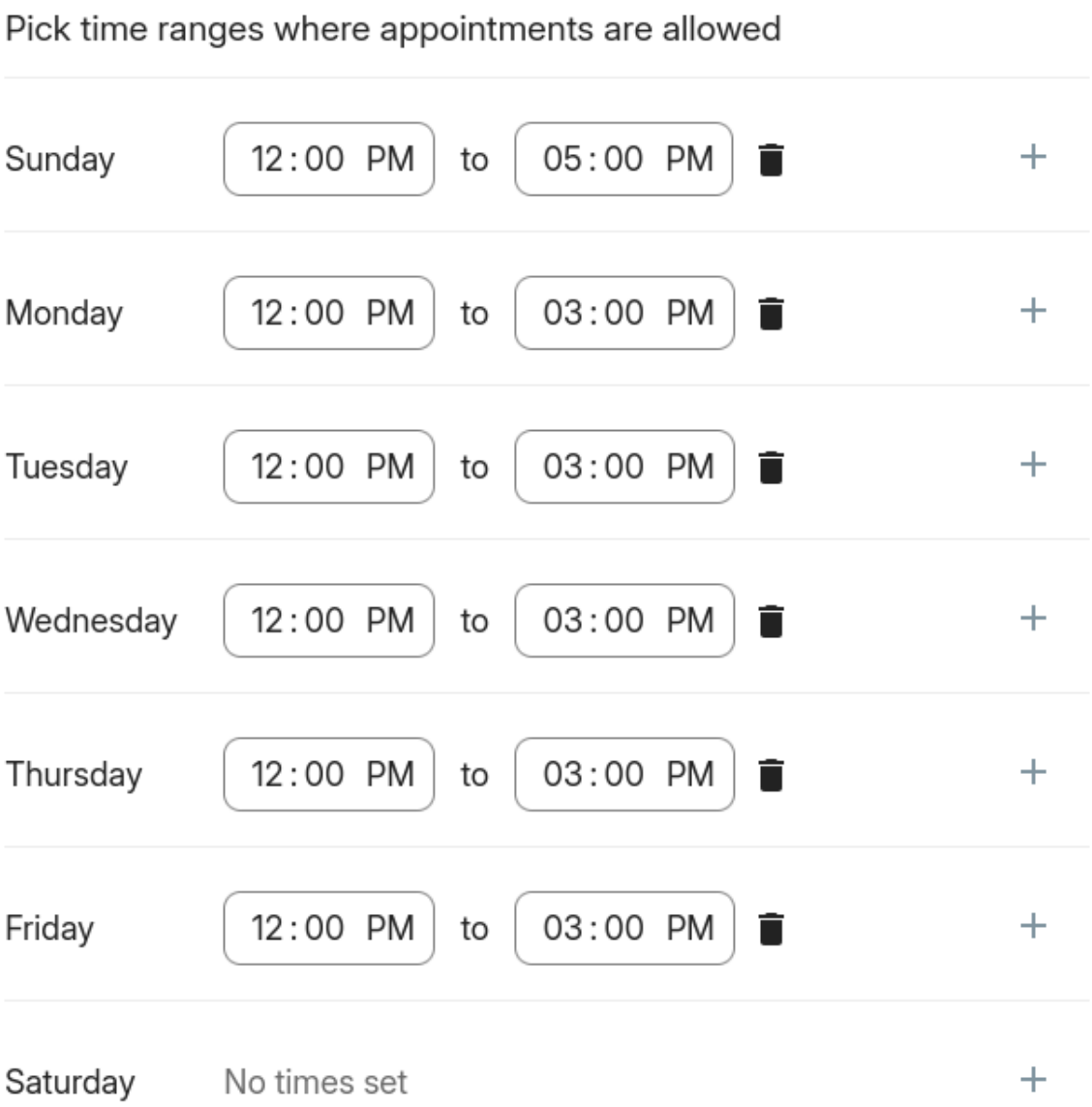
### Working with the booked appointment

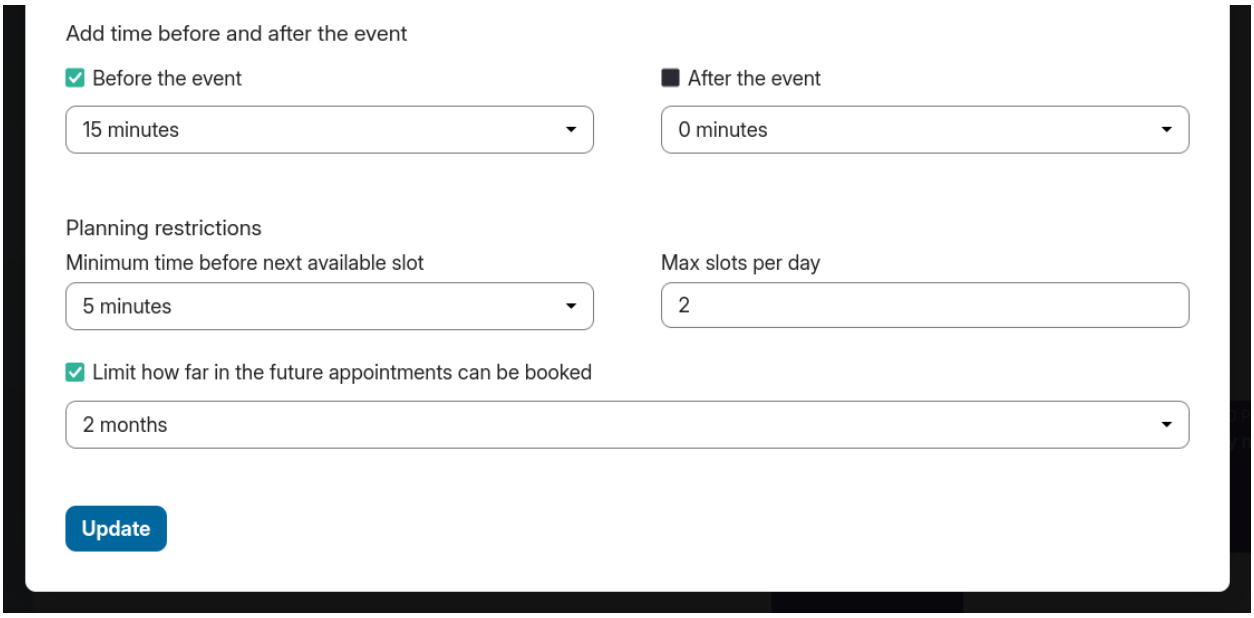
Once the booking is done, the organizer will find an event in their calendar with the appointment details and the *attendee*.

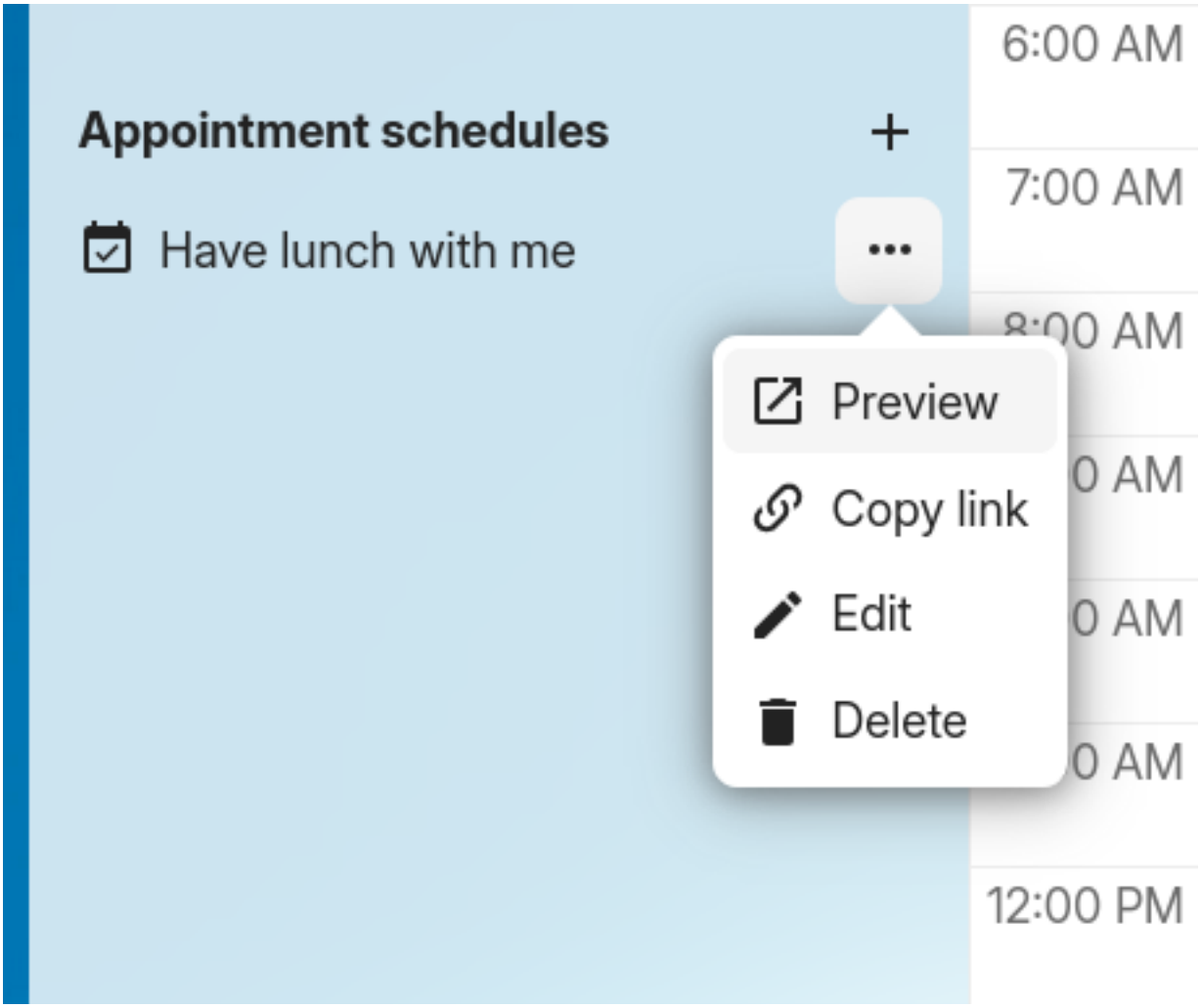
If the appointment has the setting “Add time before event” or “Add time after the event” enabled, they will show up as separate events in the calendar for the organizer.

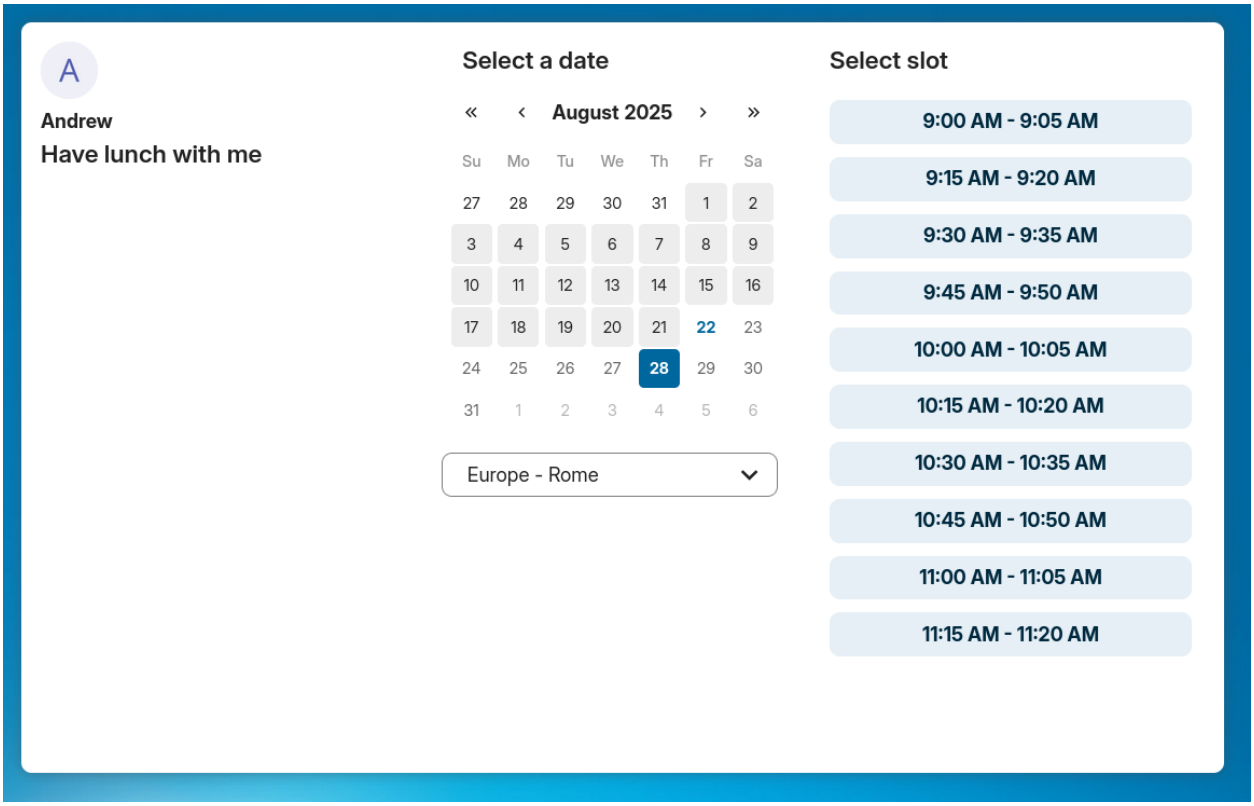
As with any other event that has attendees, changes and cancellations will trigger a notification to the attendee’s email.

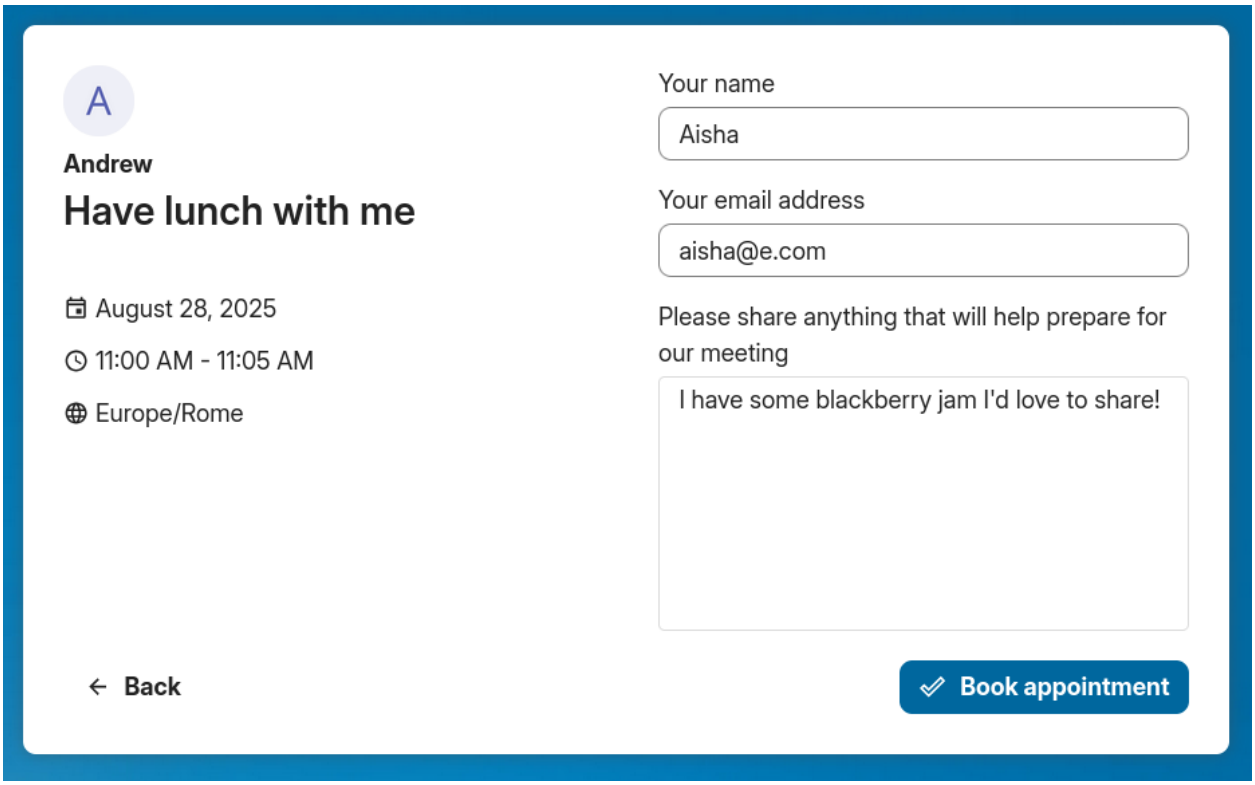
If attendees wish to cancel the appointment they have to get in contact with the organizer, so that the organizer can cancel or even delete the event.

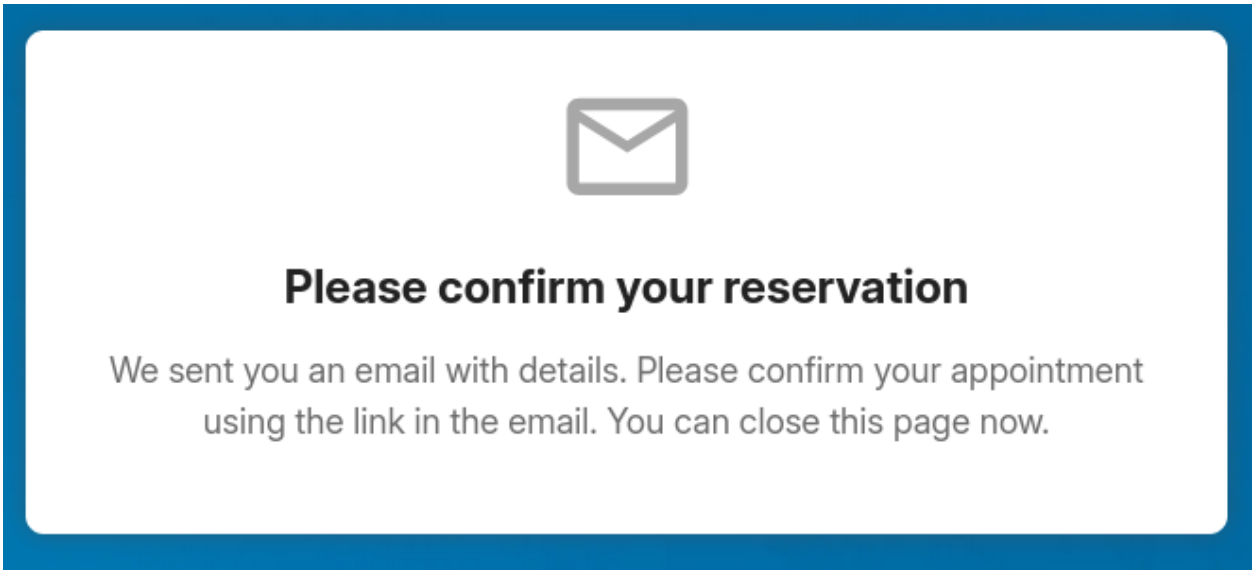

Pick time ranges where appointments are allowed
Sunday
12 : 00 PM
to
05 : 00 PM
Monday
12 : 00 PM
to
03 : 00 PM
Tuesday
12 : 00 PM
to
03 : 00 PM
Wednesday
12 : 00 PM
to
03 : 00 PM
Thursday
12 : 00 PM
to
03 : 00 PM
Friday
12 : 00 PM
to
03 : 00 PM
Saturday
No times set


Add time before and after the event
Before the event
15 minutes
After the event
0 minutes
Planning restrictions
Minimum time before next available slot
5 minutes
Max slots per day
2
Limit how far in the future appointments can be booked
2 months
Update


Appointment schedules
Have lunch with me
Preview
Copy link
Edit
Delete
6:00 AM
7:00 AM
12:00 PM


A
Andrew
Have lunch with me
Select a date
August 2025
Su Mo Tu We Th Fr Sa
27 28 29 30 31 1 2
3 4 5 6 7 8 9
10 11 12 13 14 15 16
17 18 19 20 21 22 23
24 25 26 27 28 29 30
31 1 2 3 4 5 6
Europe - Rome
Select slot
9:00 AM - 9:05 AM
9:15 AM - 9:20 AM
9:30 AM - 9:35 AM
9:45 AM - 9:50 AM
10:00 AM - 10:05 AM
10:15 AM - 10:20 AM
10:30 AM - 10:35 AM
10:45 AM - 10:50 AM
11:00 AM - 11:05 AM
11:15 AM - 11:20 AM


A
Andrew
Have lunch with me
August 28, 2025
11:00 AM - 11:05 AM
Europe/Rome
Your name
Aisha
Your email address
aisha@e.com
Please share anything that will help prepare for our meeting
I have some blackberry jam I'd love to share!
Back
Book appointment




#### Create Talk room for booked appointments

You can create a Talk room directly from the calendar app for a booked appointment. The option can be found on the 'Create appointment' modal. A unique link will be generated for every booked appointment and sent via the confirmation email when you check this option.

### 6.2.7 Proposals

Added in version 6.0: Nextcloud 32 or newer

Finding a meeting time for a group of participants can be challenging. As of Calendar v6, a new feature was introduced that allows users to create proposals for meeting times. This means that instead of just booking a time, or searching for a available time in the free busy view, participants can vote on a set of proposed times for a meeting. The organizer can then review the participants' preferences and choose the most suitable time for the meeting.

#### Managing proposals

The proposal list in the left sidebar shows all the proposals that the user has created. The list shows the title of the proposal, the number of responded participants and a status of whether all participants have responded.

The user can click on the three dot menu next to a proposal item to edit, delete or view an existing proposal.

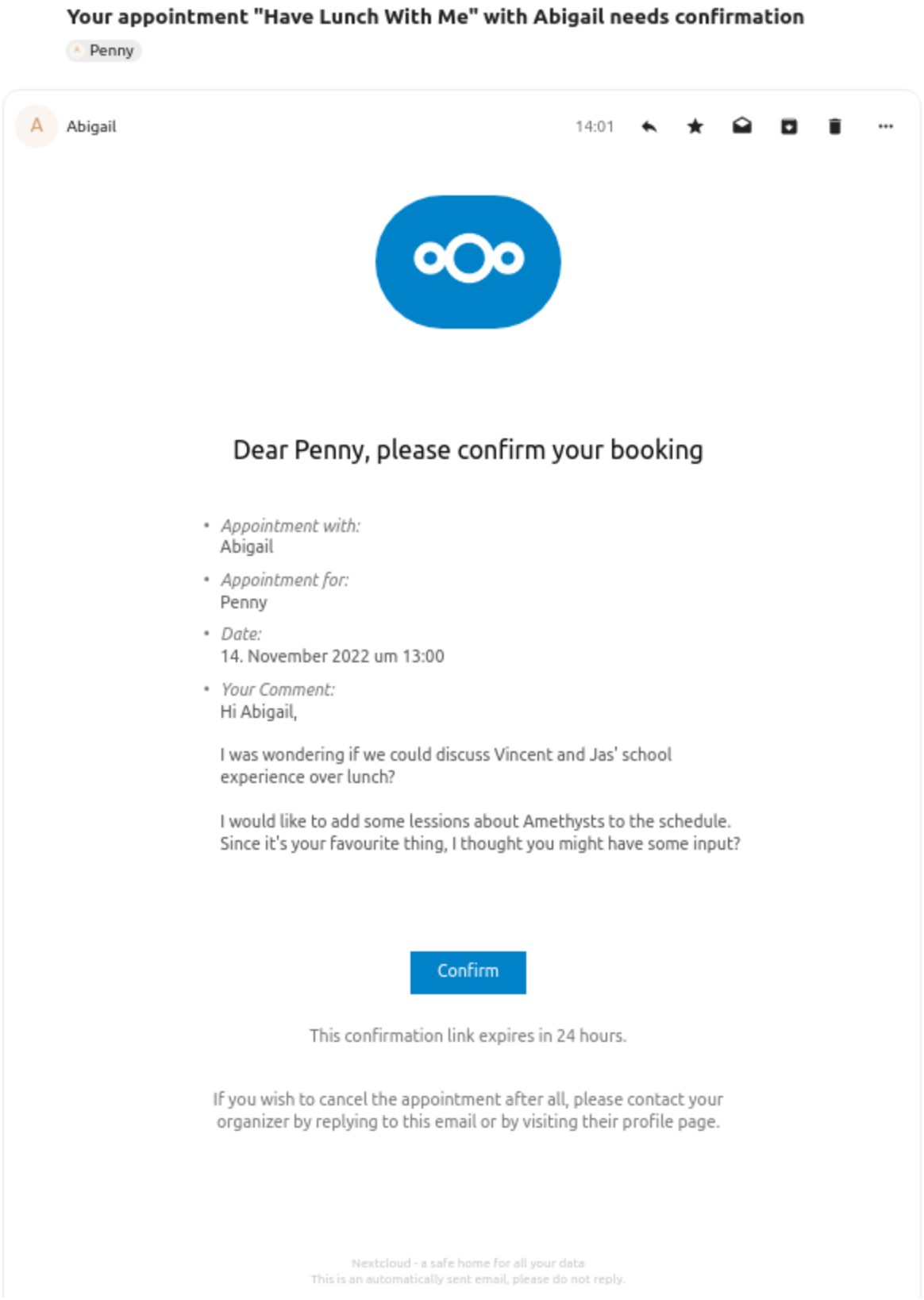
#### Creating a proposal

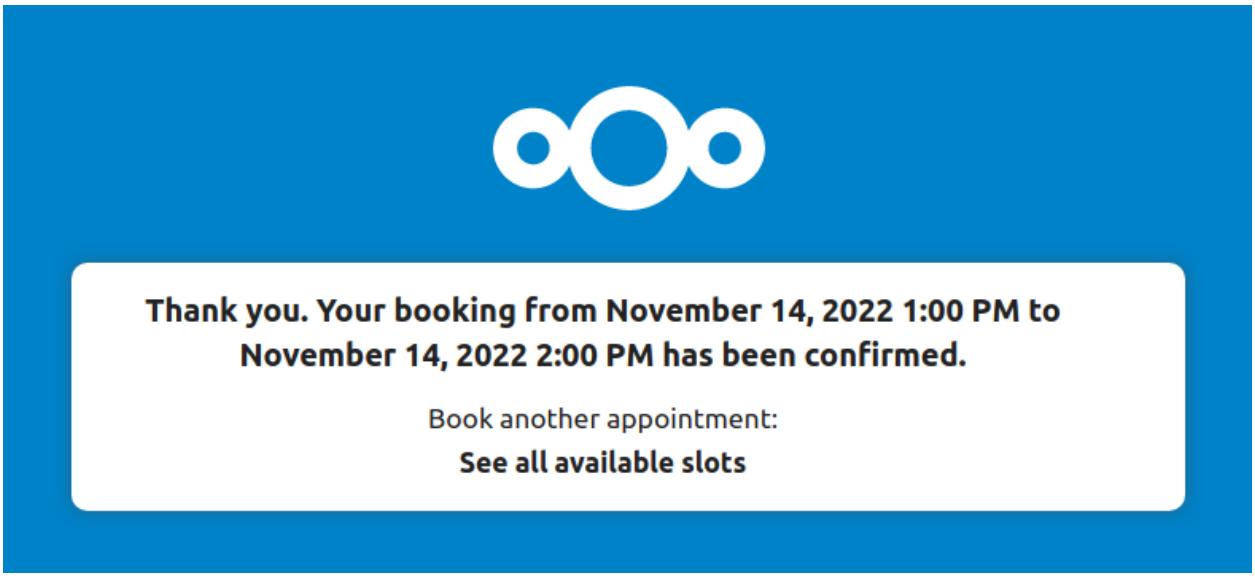
To create a new proposal a user can click on the plus icon next to the "Meeting Proposals" header at the top of the proposal list. This will open a modal where the user can enter all the relevant details for the proposed meeting.

The proposal editor has some basic fields that are similar to the event editor, such as title, description, location, duration and participants selection, that the user can fill out. These details are then used to inform the participants about the proposed meeting and times.

The key difference is the "Proposed times" selection, where the user can select multiple time slots for a meeting. The user can add as many time slots as they want, and each time slot can be edited or removed as needed.

Once the user has filled out all the required details, title, duration, participants and selected the proposed times, they can click the "Create" button to create the proposal. This will save the proposal and send notifications to all the selected participants.


Your appointment "Have Lunch With Me" with Abigail needs confirmation
Penny
A
Abigail
14:01
Dear Penny, please confirm your booking
Appointment with:
Abigail
Appointment for:
Penny
Date:
14. November 2022 um 13:00
Your Comment:
Hi Abigail,
I was wondering if we could discuss Vincent and Jas' school experience over lunch?
I would like to add some lessions about Amethysts to the schedule. Since it's your favourite thing, I thought you might have some input?
Confirm
This confirmation link expires in 24 hours.
If you wish to cancel the appointment after all, please contact your organizer by replying to this email or by visiting their profile page.
Nextcloud - a safe home for all your data
This is an automatically sent email, please do not reply.




### Editing a proposal

A user can edit an existing proposal by clicking on the three dot menu next to a proposal item in the proposal list and selecting “Edit”. This will open the same modal as when creating a new proposal, but with all the existing details filled out.

After making any necessary changes, the user can click the “Update” button to save the changes. This will also send notifications to all the participants about the updated proposal.

### Viewing a proposal progress

Users can view the progress of a proposal by clicking on the proposal item in the proposal list or clicking “View” in the three dot menu. This will open a detailed view of the proposal, with all details and a times and participants matrix, showing all the proposed times and participants’ responses.

In this view, the user can see which participants have responded to the proposal and their preferences for each proposed time. The user can also see the total number of votes for each proposed time, which can help them decide on the best time for the meeting.

Once the user has reviewed the participants’ responses, they can select the most popular time for the meeting by clicking on the “Create” button at the end of the date/participant matrix. This will create a new event in the user’s calendar and send notifications to all participants about the confirmed meeting time.

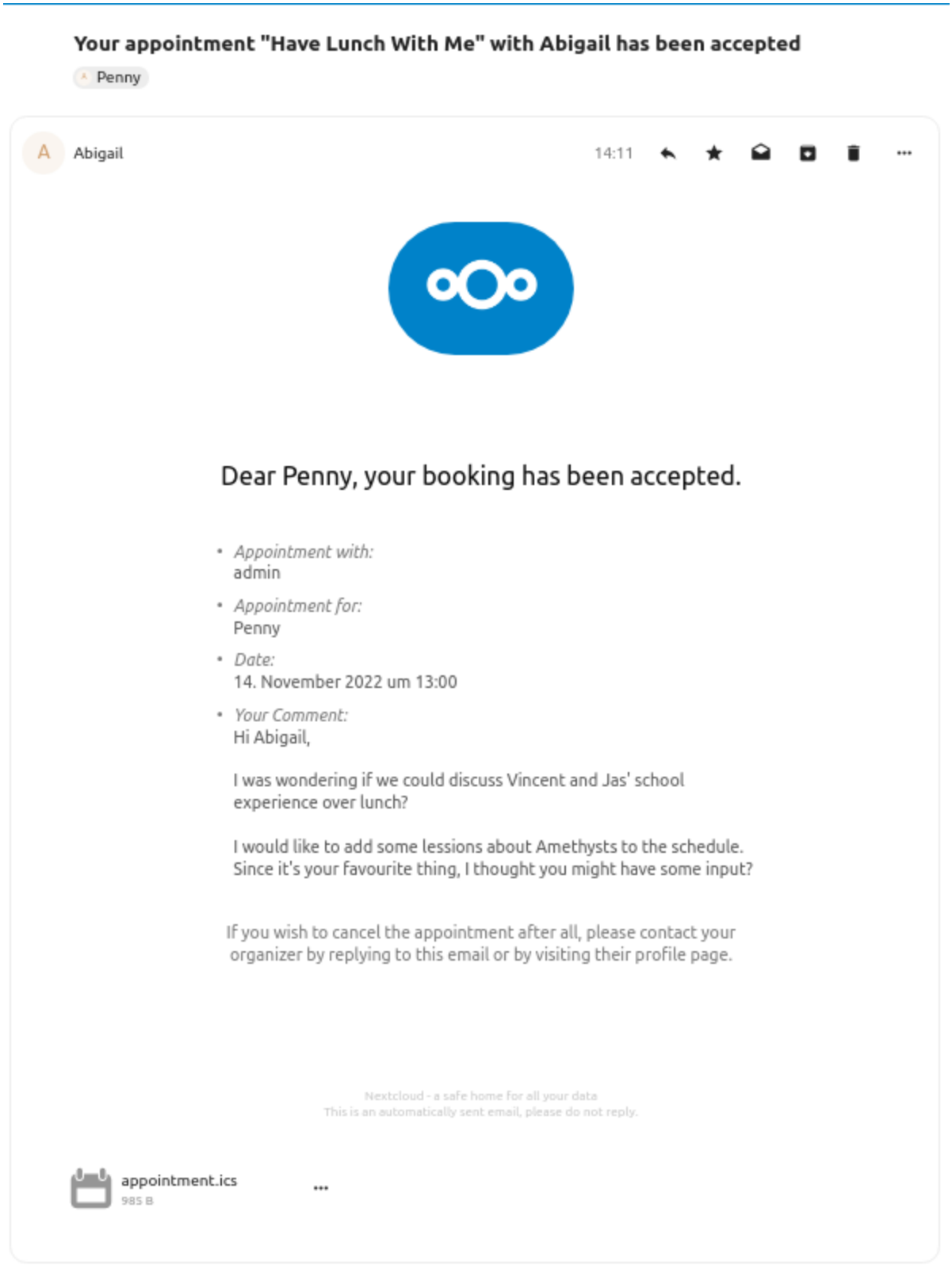
### Notifications for a proposed meeting

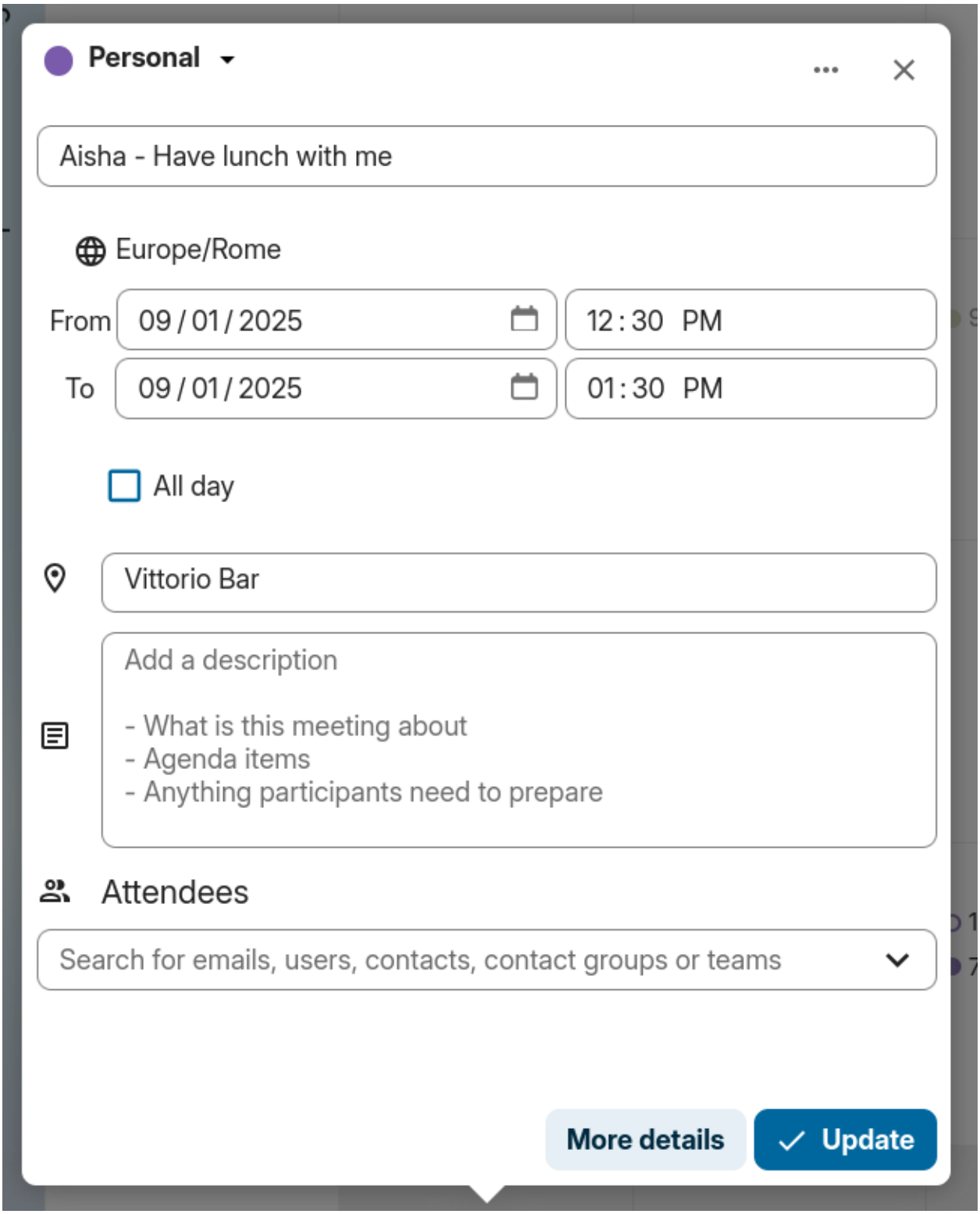
Users will receive email notifications for various events related to a proposed meeting, including:

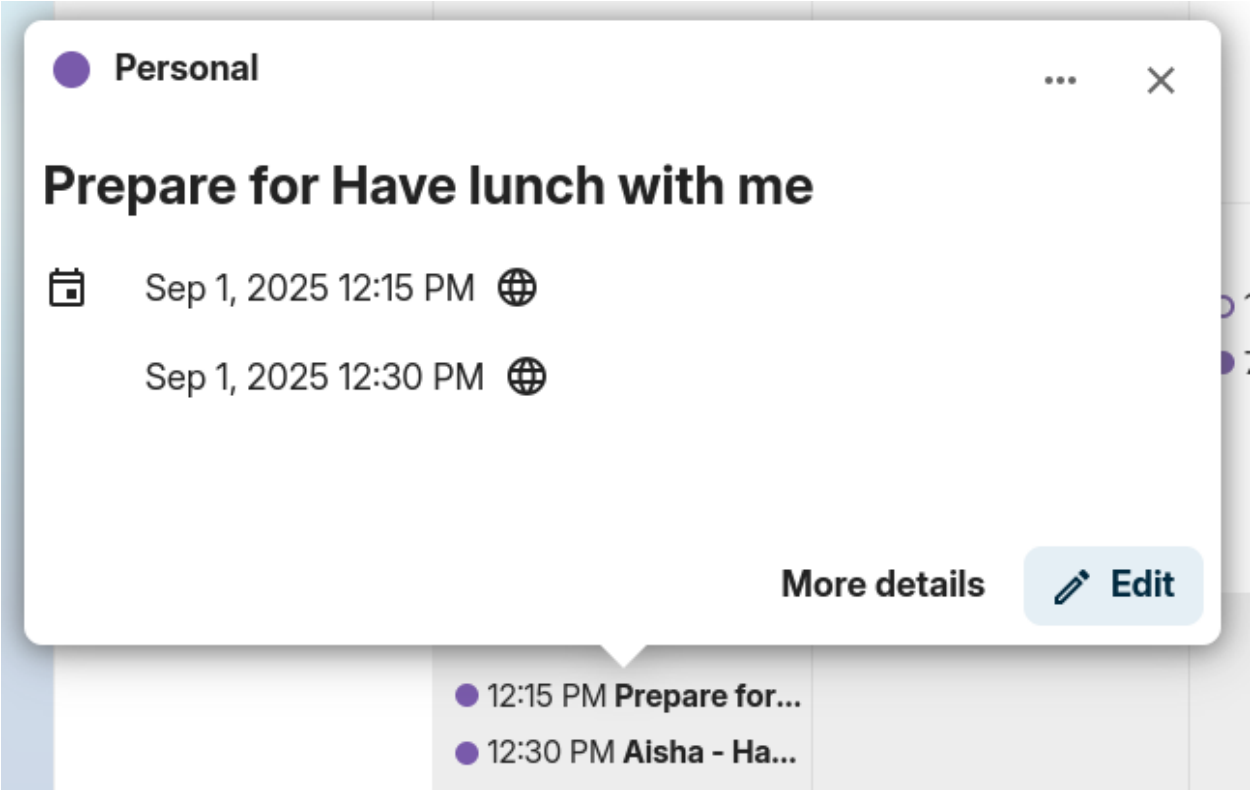
- When a new proposal is created
- When a proposal is updated
- When a proposal is deleted
- When the final meeting time is confirmed

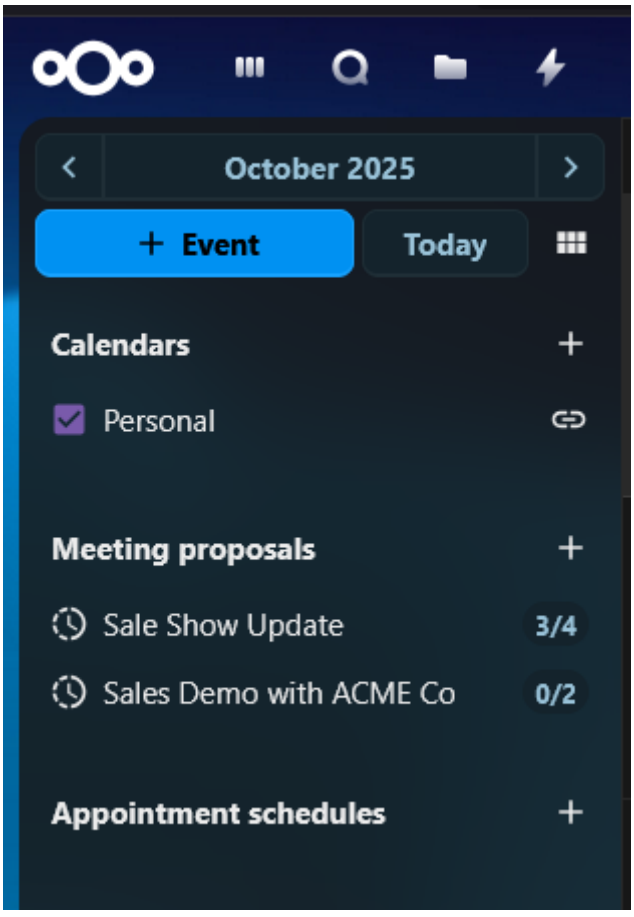
These notifications help all participants stay informed and engaged throughout the proposal process.

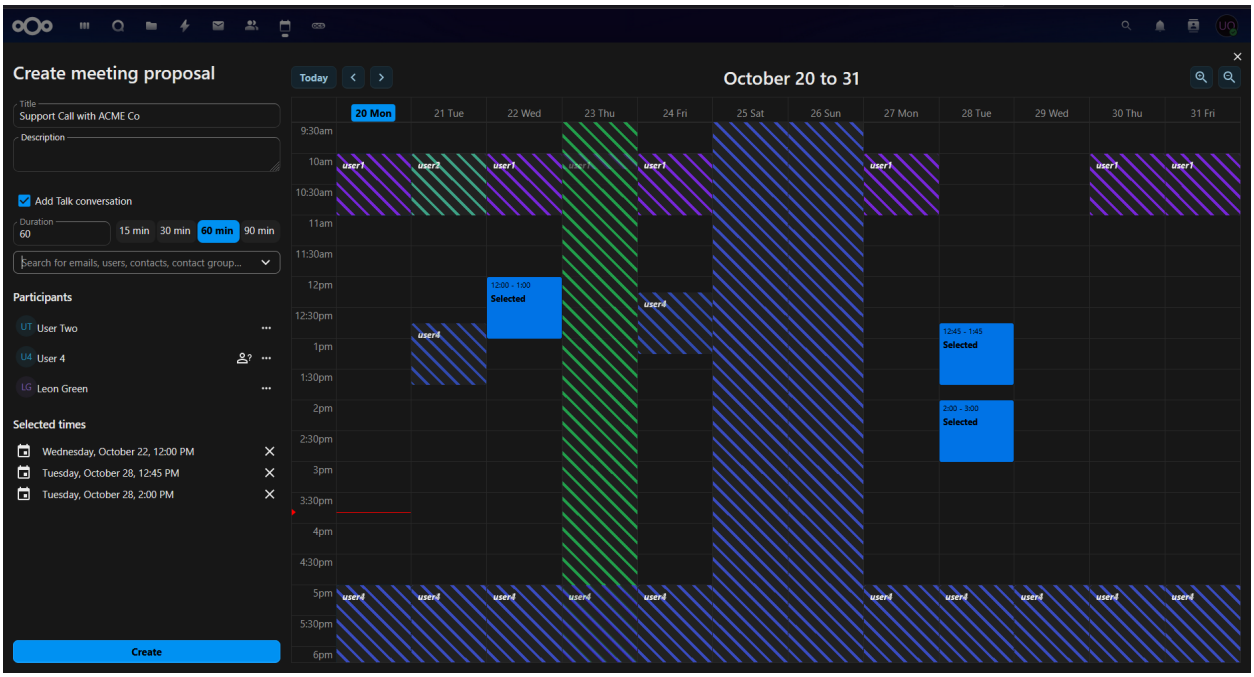
The notification emails contain the basic details for the proposed meeting, like title, description, location, duration, and proposed times. They also include a link to the response page, where participants can see all the details and respond to the proposed times.

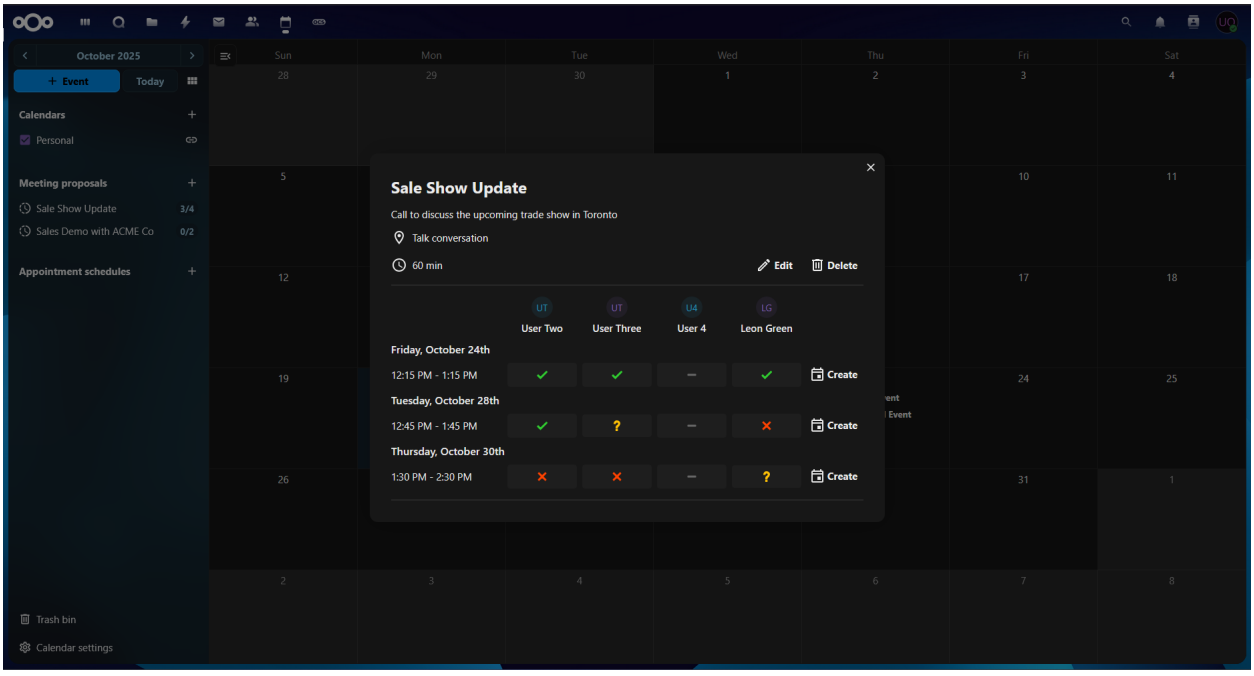

Your appointment "Have Lunch With Me" with Abigail has been accepted
Penny
A
Abigail
14:11
Dear Penny, your booking has been accepted.
Appointment with:
admin
Appointment for:
Penny
Date:
14. November 2022 um 13:00
Your Comment:
Hi Abigail,
I was wondering if we could discuss Vincent and Jas' school experience over lunch?
I would like to add some lessions about Amethysts to the schedule. Since it's your favourite thing, I thought you might have some input?
If you wish to cancel the appointment after all, please contact your organizer by replying to this email or by visiting their profile page.
Nextcloud - a safe home for all your data
This is an automatically sent email, please do not reply.
appointment.ics
985 B


Personal
Aisha - Have lunch with me
Europe/Rome
From
09 / 01 / 2025
12 : 30 PM
To
09 / 01 / 2025
01 : 30 PM
All day
Vittorio Bar
Add a description
- What is this meeting about
- Agenda items
- Anything participants need to prepare
Attendees
Search for emails, users, contacts, contact groups or teams
More details
Update


Personal
Prepare for Have lunch with me
Sep 1, 2025 12:15 PM
Sep 1, 2025 12:30 PM
More details
Edit
12:15 PM Prepare for...
12:30 PM Aisha - Ha...

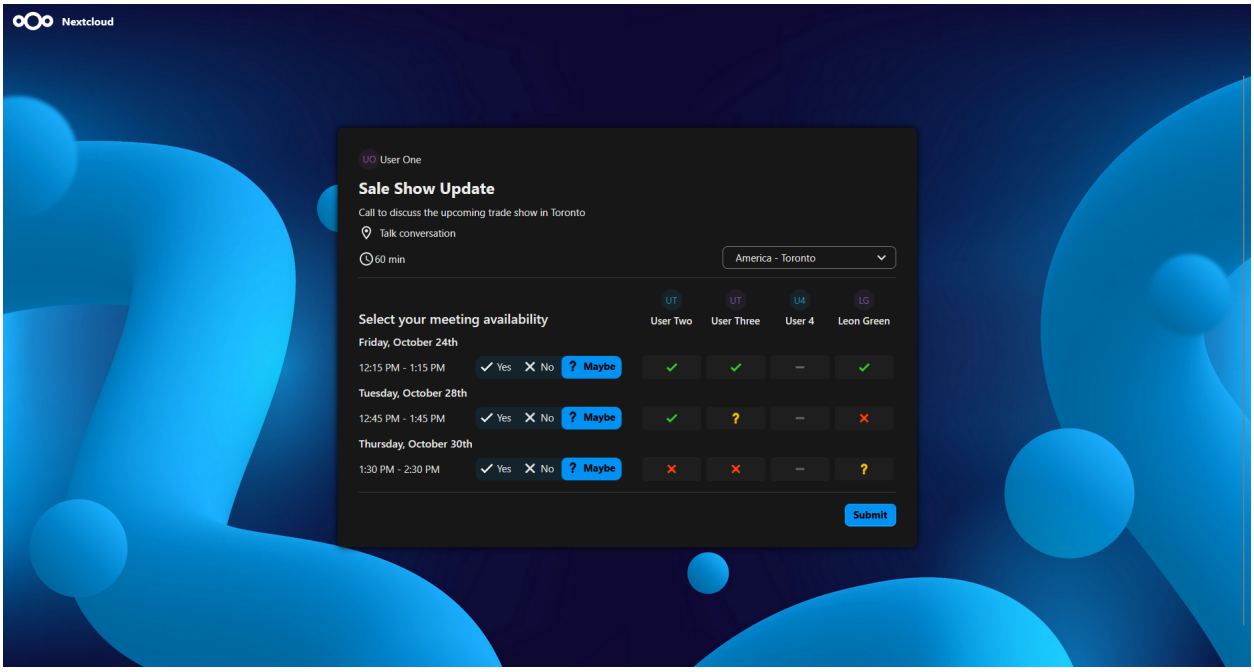

October 2025
+ Event
Today
Calendars
Personal
Meeting proposals
Sale Show Update
3/4
Sales Demo with ACME Co
0/2
Appointment schedules


Create meeting proposal
Title
Support Call with ACME Co
Description
Add Talk conversation
Duration
60
15 min
30 min
60 min
90 min
Search for emails, users, contacts, contact group...
Participants
User Two
User 4
Leon Green
Selected times
Wednesday, October 22, 12:00 PM
Tuesday, October 28, 12:45 PM
Tuesday, October 28, 2:00 PM
Create
Today
October 20 to 31
20 Mon
21 Tue
22 Wed
23 Thu
24 Fri
25 Sat
26 Sun
27 Mon
28 Tue
29 Wed
30 Thu
31 Fri
9:30am
10am
10:30am
11am
11:30am
12pm
12:30pm
1pm
1:30pm
2pm
2:30pm
3pm
3:30pm
4pm
4:30pm
5pm
5:30pm
6pm
12:00 - 1:00
Selected
12:45 - 1:45
Selected
2:00 - 3:00
Selected


October 2025
+ Event
Today
Calendars
Personal
Meeting proposals
Sale Show Update
3/4
Sales Demo with ACME Co
0/2
Appointment schedules
Trash bin
Calendar settings
Sale Show Update
Call to discuss the upcoming trade show in Toronto
Talk conversation
60 min
Edit
Delete
User Two
User Three
User 4
Leon Green
Friday, October 24th
12:15 PM - 1:15 PM
Create
Tuesday, October 28th
12:45 PM - 1:45 PM
Create
Thursday, October 30th
1:30 PM - 2:30 PM
Create

### Responding to a proposed meeting

Participants can respond to a proposed meeting by clicking on the link in the notification email. This will open the detailed view of the proposed meeting, where they can see all the proposed times, other participants' and their responses, and select their availability/preferences for each proposed time.




Participants can select their availability for each proposed time by selecting their preference on the corresponding line in the times and participants matrix. They can choose from three options: "Yes", "No", or "Maybe". Once they have made their selections, they can click the "Submit" button to save their responses.

## 6.3 Using the Mail app

> **Note**
>
> The Mail app comes installed with Nextcloud Hub by default, but can be disabled. Please ask your Administrator for it.

### 6.3.1 Managing your mail account

#### Switch layout

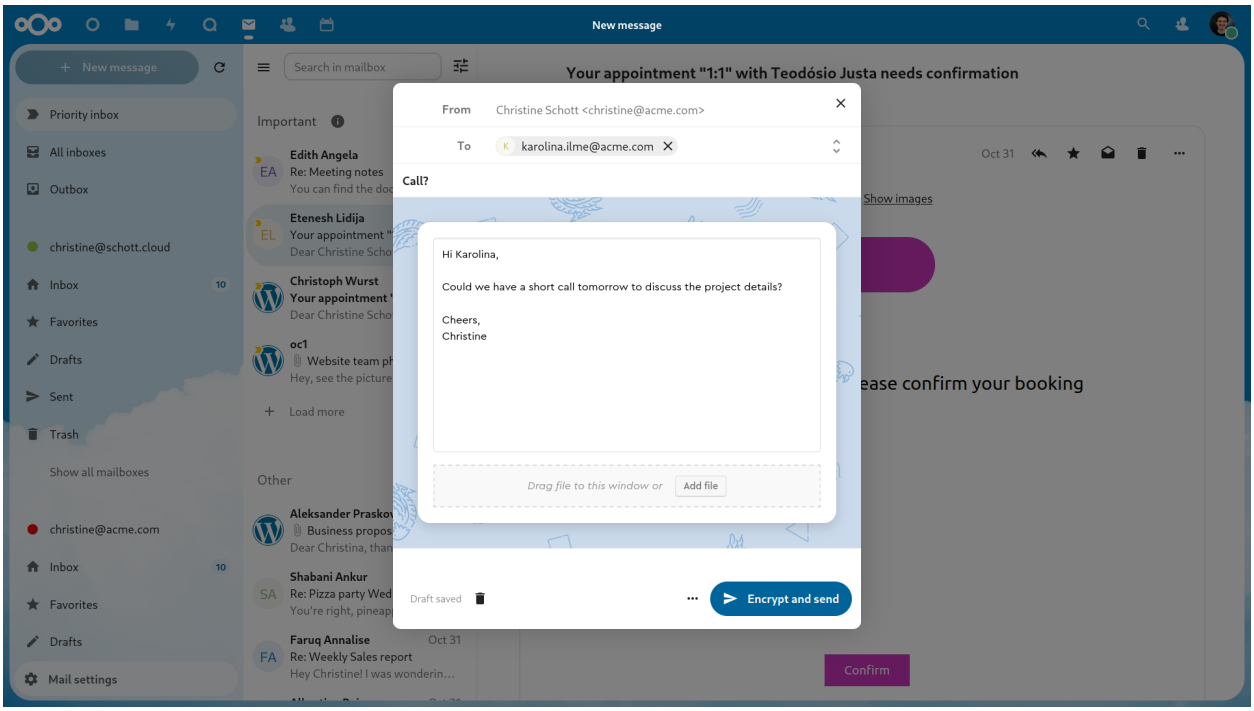
Added in version 3.6: Nextcloud 26 or newer

1. Visit mail settings
2. Choose between *List*, *Vertical split* and *Horizontal split*

#### Use Compact Mode

Added in version 5.7: Nextcloud 32 or newer

Compact mode offers a cleaner and more efficient way to view your messages. Avatars are hidden, selection checkboxes are always visible, and the preview of messages is removed. It saves space allowing you to see more emails at once.




1. Visit the mail settings
2. Go to **Appearance**
3. Toggle the Compact Mode

### Message Display / Operation Mode

Added in version 5.2: Nextcloud 30 or newer

Mail has the ability to switch between two different message view and operation modes: *Threaded* and *Singleton*.

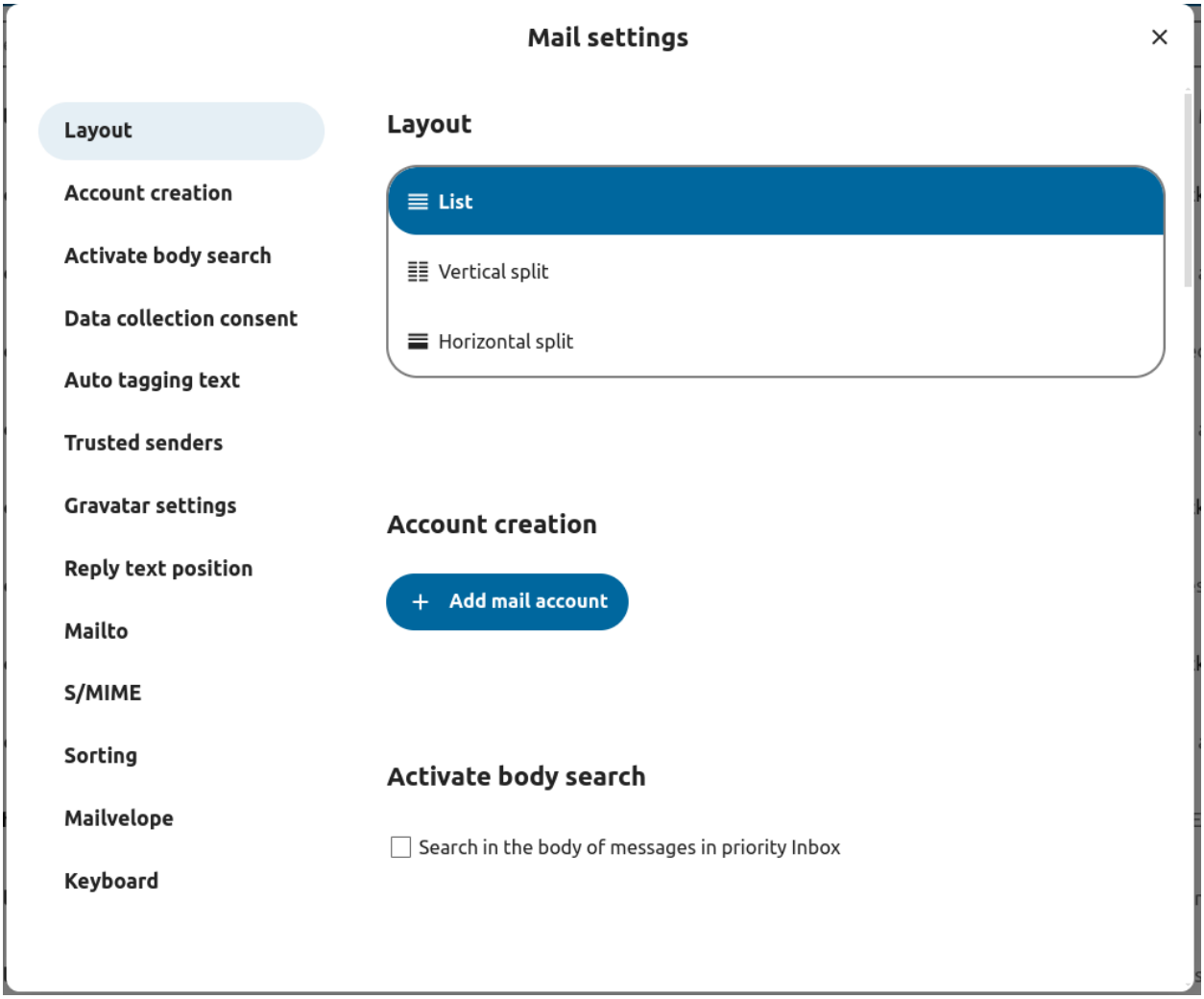
In *Threaded* mode, messages are grouped by conversation. In the folder message list, related messages are stacked so only the most recent message is shown, and all relates messages are shown in message display panel after the stacked message is selected. This is useful for following discussions and understanding the context of replies. In this mode, message operation like move and delete apply to the entire thread, meaning that when you move or delete a thread, all messages within that thread are affected.

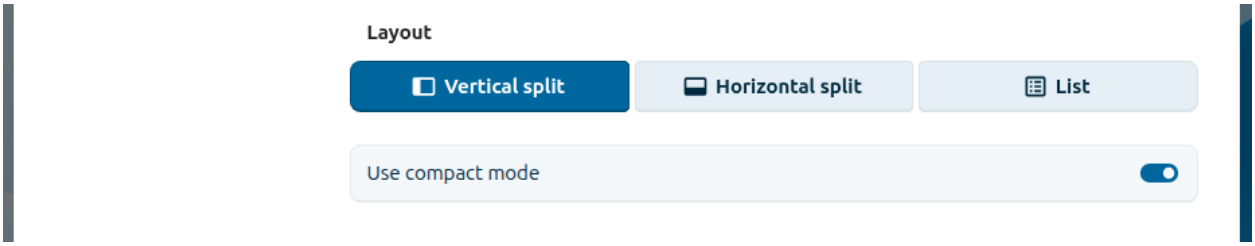
In *Singleton* mode, messages are displayed individually, in both the folder message list and message display panel and operation like move and delete apply to only the selected message. This mode is useful when you want to manage messages separately without affecting the entire conversation.

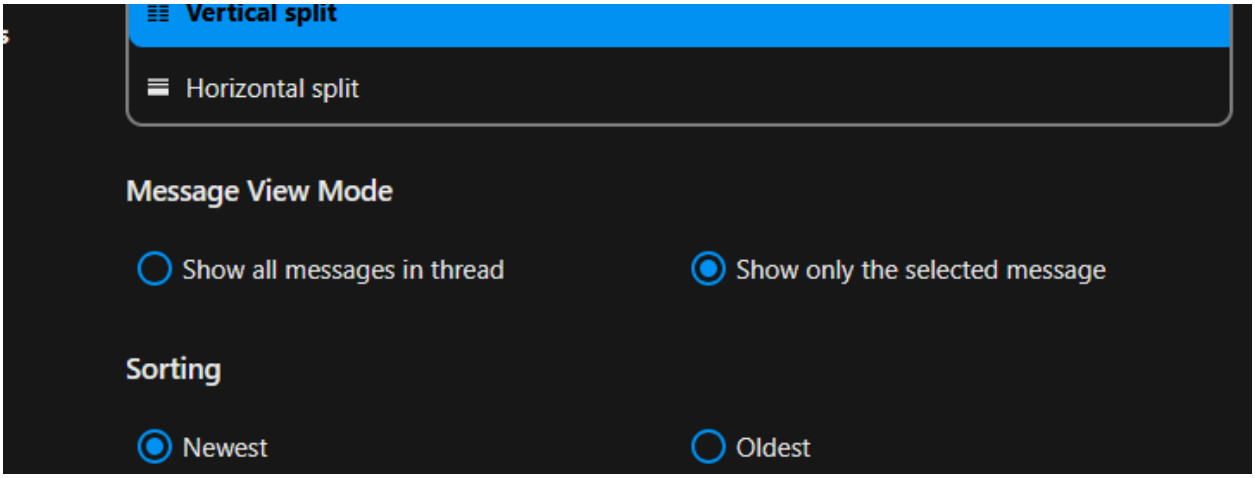
1. Visit mail settings
2. Choose between *Threaded*, *Singleton*

### Add a new mail account

1. Enable mail app from the apps
2. Click the mail icon on the header
3. Fill up the login form (auto or manual)


Mail settings
Layout
Account creation
Activate body search
Data collection consent
Auto tagging text
Trusted senders
Gravatar settings
Reply text position
Mailto
S/MIME
Sorting
Mailvelope
Keyboard
Layout
List
Vertical split
Horizontal split
Account creation
Add mail account
Activate body search
Search in the body of messages in priority Inbox


Layout
Vertical split
Horizontal split
List
Use compact mode




### Change sort order

Added in version 3.5: Nextcloud 26 or newer

1. Visit mail settings
2. Go to *Sorting*
3. You can choose *Oldest* or *Newest* mail first

> **Note**
>
> This change will apply across all your accounts and folders

### Sort favorites up

Added in version 5.7: Nextcloud 31 or newer

This setting allows you to show messages set as favorite in a separate section on top of the message list.

1. Visit mail settings
2. Go to *Appearance*
3. Enable sorting favorites up

### Scheduled messages

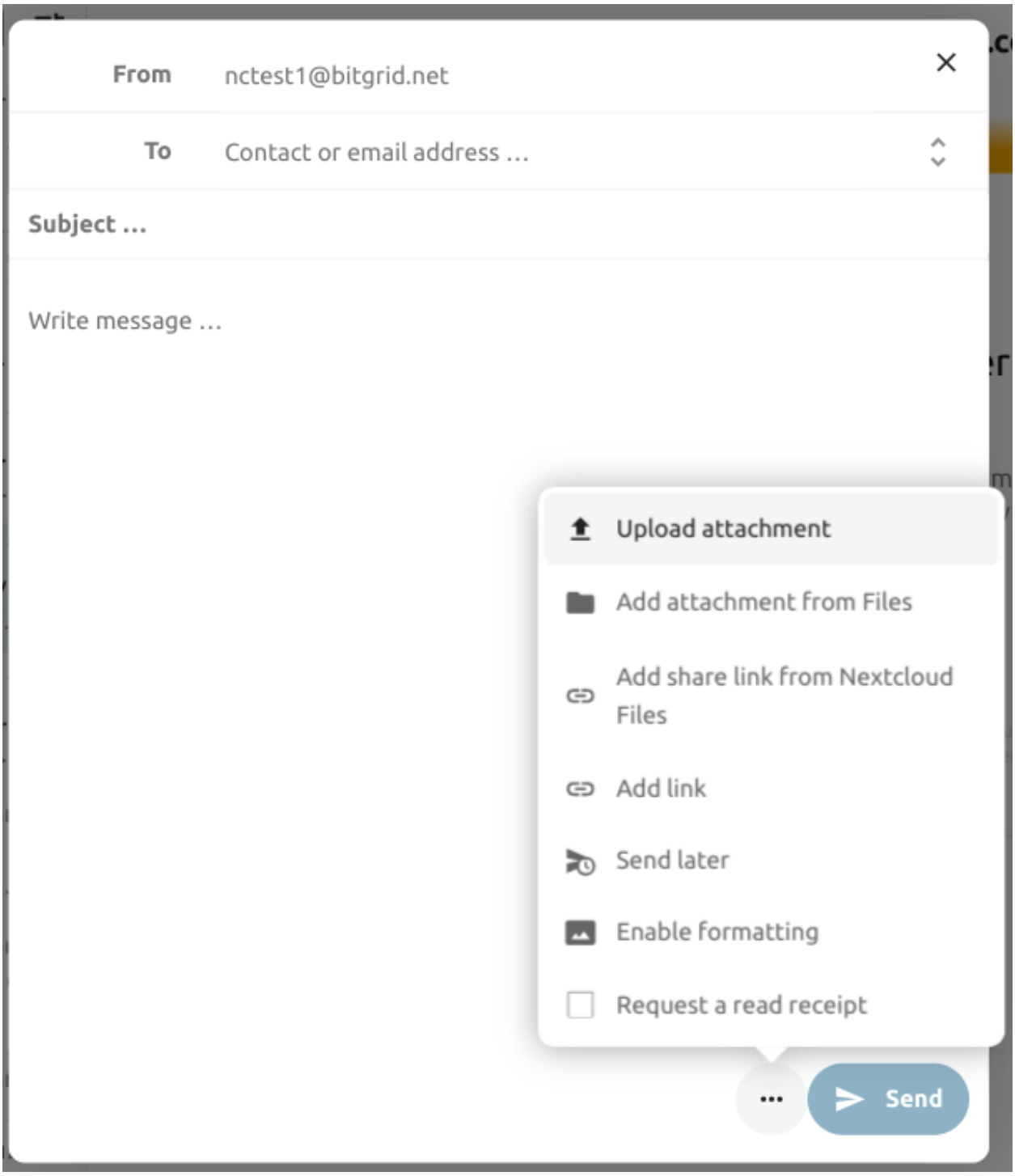
1. Click the **New message** button
2. Click the (…) action menu on the modal composer
3. Click *send later*

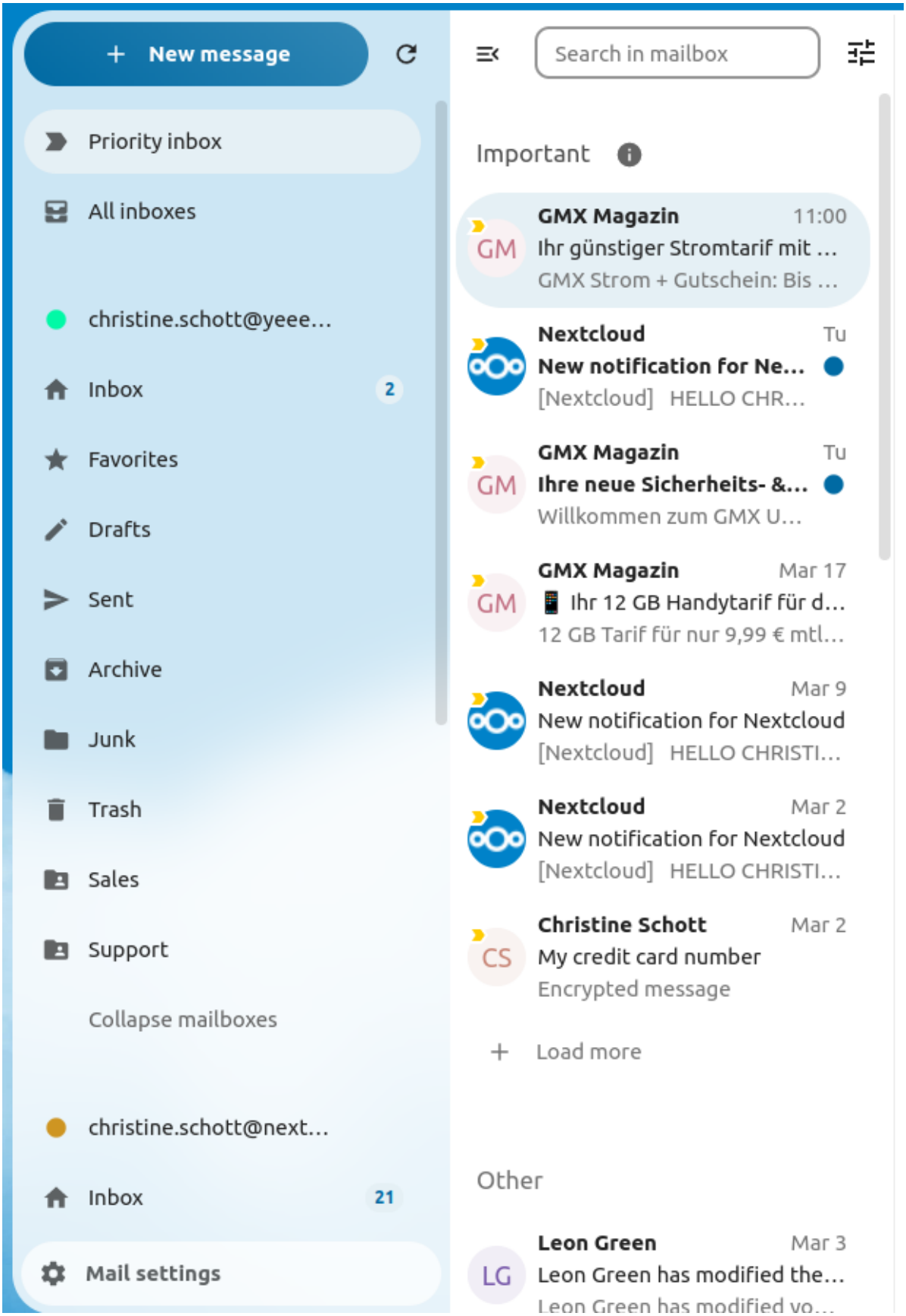
### Priority inbox

Priority inbox has 2 section *Important* and *Others*. Messages will automatically be marked as important based on which messages you interacted with or marked as important. In the beginning you might have to manually change the importance to teach the system, but it will improve over time.

The automatic classification is optional. You can opt-out when setting up an account. The classification can also be turned on and off in the account settings at any time.


Connect your mail account
Auto
Manual
Name
User
Mail address *
user@mail.com
Password *
Connect


From
nctest1@bitgrid.net
To
Contact or email address …
Subject …
Write message …
Upload attachment
Add attachment from Files
Add share link from Nextcloud Files
Add link
Send later
Enable formatting
Request a read receipt
Send


New message
Search in mailbox
Priority inbox
All inboxes
christine.schott@yeee...
Inbox 2
Favorites
Drafts
Sent
Archive
Junk
Trash
Sales
Support
Collapse mailboxes
christine.schott@next...
Inbox 21
Mail settings
Important
GMX Magazin 11:00
Ihr günstiger Stromtarif mit ...
GMX Strom + Gutschein: Bis ...
Nextcloud Tu
New notification for Ne...
[Nextcloud] HELLO CHR...
GMX Magazin Tu
Ihre neue Sicherheits- &...
Willkommen zum GMX U...
GMX Magazin Mar 17
Ihr 12 GB Handytarif für d...
12 GB Tarif für nur 9,99 € mtl...
Nextcloud Mar 9
New notification for Nextcloud
[Nextcloud] HELLO CHRISTI...
Nextcloud Mar 2
New notification for Nextcloud
[Nextcloud] HELLO CHRISTI...
Christine Schott Mar 2
My credit card number
Encrypted message
Load more
Other
Leon Green Mar 3
Leon Green has modified the...
Leon Green has modified yo...

### All inboxes

All messages from all the accounts you have logged in, will be shown here chronologically.

### Account settings

Your account settings such as:

1. Aliases
2. Signature
3. Default Folders
4. Autoresponder
5. Trusted senders
6. ..and more

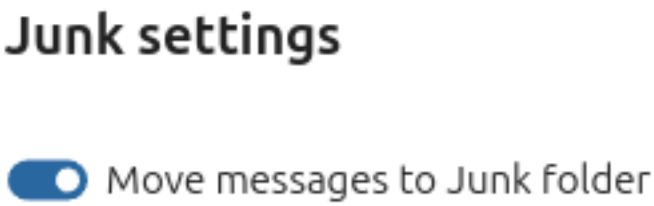
Can be found in the action menu of a mail account. There you can edit, add or remove settings depending on your need.

### Move messages to Junk folder

Added in version 3.4: Nextcloud 26 or newer

Mail can move a message to a different folder when it is marked as junk.

1) Visit Account settings
2) Go to Default folders
3) Check that a folder is selected for the junk messages
4) Go to Junk settings
5) Click Move messages to Junk folder




### Refresh folder

You can manually trigger a sync of your folder by clicking the refresh button located at the top of the folder list. Starting from `version 5.7` triggering the sync will also refresh the list of folders for the selected account.

### Unified search

The Mail app integrates with Nextcloud's *unified search* feature (see *The Nextcloud web interface* for details). You can search for emails across all your accounts using the search bar in the Nextcloud header.

Mail searches email subjects and sender/recipient fields. To search email bodies, use the folder search feature in the app.

### Search in folder

Added in version 2.1: Nextcloud 25 or newer

At the top of the envelope list in any mail layout, there is a search field shortcut for searching email subjects. Starting from `version 3.7`, this shortcut allows you to search by subject, recipient (to), or sender (from) by default.

### Advanced search in folder

Added in version 3.4: Nextcloud 26 or newer

You can access our advanced search feature through a modal located at the end of the search shortcut.

### Enable mail body search

Added in version 3.5: Nextcloud 26 or newer

Mail bodies can now be searched, this feature is opt-in because of potential performance issues.

To enable it:

1) Visit Account settings
2) Go to Folder search
3) Enable mail body search

> **Warning**
>
> If you want to also enable it for unified folders you have to do so in Mail settings

By enabling it the main search box will now search in both subjects and mail bodies, and a separate *Body* option will appear in advanced search.

### Account delegation

The app supports two ways of letting one user act on behalf of another's mail account.

### Sending as another address (server alias)

This lets you send emails from the address of another account.

1) The delegation has to be configured on the mail server by an admin
2) Add the other email address as an alias for your own email account
3) When sending an email, select the alias as sender

> **Warning**
>
> The sent email might not be visible to the original account if it's stored in your personal *Sent* folder.

### Native account delegation

Added in version 5.9: Nextcloud Mail

Native account delegation lets you grant other Nextcloud users access to one of your mail accounts directly from the app, without any server-side alias configuration. A delegate can do everything the account owner can — send, receive, and delete mail on your behalf — except deleting the account or updating its authentication information.

To delegate one of your accounts:

1) Open the account's three-dot menu and select **Delegate account**
2) In the **Delegation** dialog, click **Add delegate**
3) Use the **Select a user** field to choose the Nextcloud user you want to grant access to
4) Confirm with **Delegate access**

The shared account then appears in the delegate's account list, marked as delegated.

To remove access:

1) Open the **Delegate account** dialog again
2) Click **Revoke** next to the delegate you want to remove
3) Confirm with **Revoke access**

> **Note**
>
> Provisioned accounts cannot be delegated.

### Automatic trash deletion

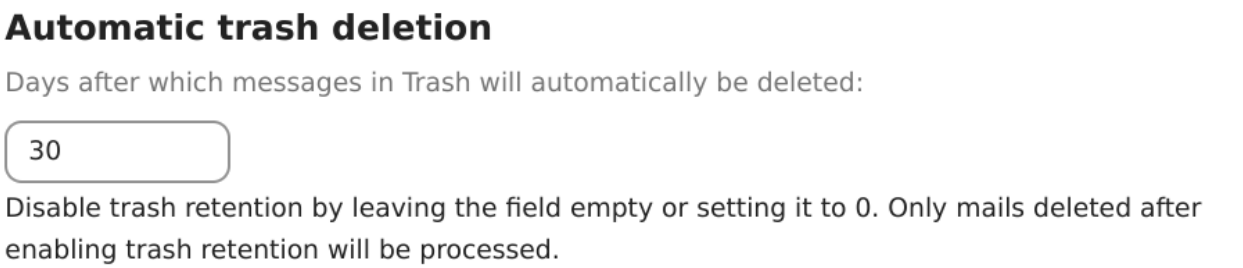
Added in version 3.4: Nextcloud 26 or newer

The Mail app can automatically delete messages in the trash folder after a certain number of days.

1) Visit Account settings
2) Go to Automatic trash deletion
3) Enter the number of days after which messages should be deleted

Disable trash retention by leaving the field empty or setting it to 0.

> **Note**
>
> Only mails deleted after enabling trash retention will be processed.



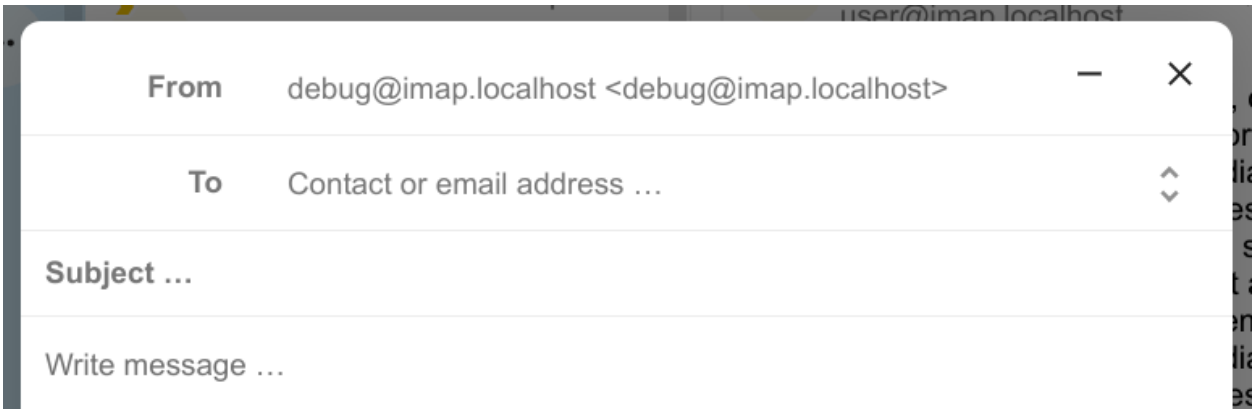
### 6.3.2 Compose messages

1. Click the **New message** button
2. Start writing your message

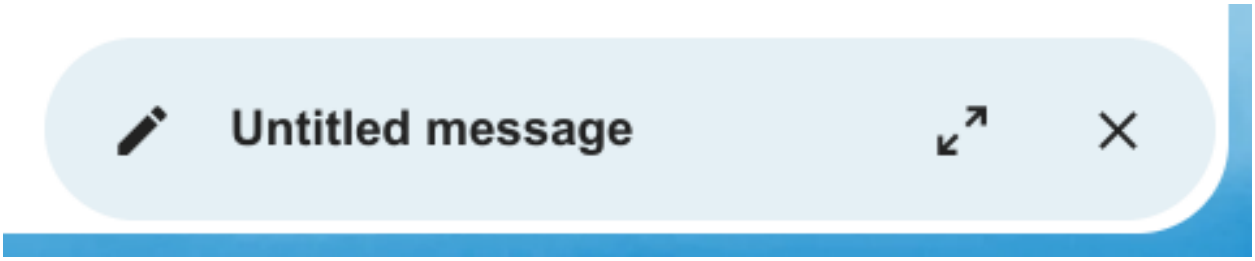
#### Minimize the composer modal

Added in version 3.2: Nextcloud 26 or newer

The composer modal can be minimized while writing a new message, editing an existing draft or a message from the outbox. Simply click the **Minimize** button on the modal or click anywhere outside the modal.




You can resume your minimized message by clicking anywhere on the minimized composer indicator.




Press the **Close** button on the modal or on the minimized composer indicator to stop editing a message. A draft will be saved automatically into your draft folder.

### 6.3.3 Recipient info on composer

Added in version 4.2: Nextcloud 30 or newer

When you add your first recipient or contact in the "To" field, a right pane will appear displaying the saved profile details of that contact. Adding a second contact will collapse the list, allowing you to select and expand any contact you added to view their details. If you prefer to focus solely on writing in the composer, you can hide the right pane by clicking the **Expand** icon in the composer toolbar. To show the right pane again, simply click the **Minimize** icon in the same toolbar.

### 6.3.4 Mention contacts

Added in version 4.2: Nextcloud 30 or newer

You can mention contacts in your message by typing `@` and then selecting the contact from the list. By doing so the contact will be automatically added as a recipient.

**Note**

Only contacts with a valid email address will be suggested.

### 6.3.5 Text blocks

Added in version 5.2: Nextcloud 30 or newer

Text blocks are predefined snippets of text that can be inserted into your email. They can be created and managed in the mail settings. They can be inserted into the composer by typing `!` and then selecting the block from the list or from the composer actions. Text blocks can be shared with users and user groups.

### 6.3.6 Outbox

When a message has been composed and the "Send" button was clicked, the message is added to the **Outbox**, which appears at the bottom of the left sidebar.

You can also set the date and time for the send operation to a point in the future (see *Scheduled messages*)- the message will be kept in the outbox until your chosen date and time arrives, then it will be sent automatically.

The outbox is only visible when there is a message waiting to be handled by the outbox.

You can reopen the composer for a message in the outbox any time before the send operation is triggered.

**Note**

When an error occurs during sending, three error messages are possible:

**Could not copy to "Sent" folder**
: The mail was sent but couldn't be copied to the "Sent" folder. This error will be handled by the outbox and the copy operation will be tried again.

**Mail server error**
: Sending was unsuccessful with a state that can be retried (ex: the SMTP server couldn't be reached). The outbox will retry sending the message.

**Message could not be sent**
: Sending might or might not have failed. The mail server can't tell us the state of the message. Since the Mail app has no way to determine the state of the message (sent or unsent) the message will stay in the outbox and the account user has to decide how to proceed.

### 6.3.7 Folder actions

#### Add a folder

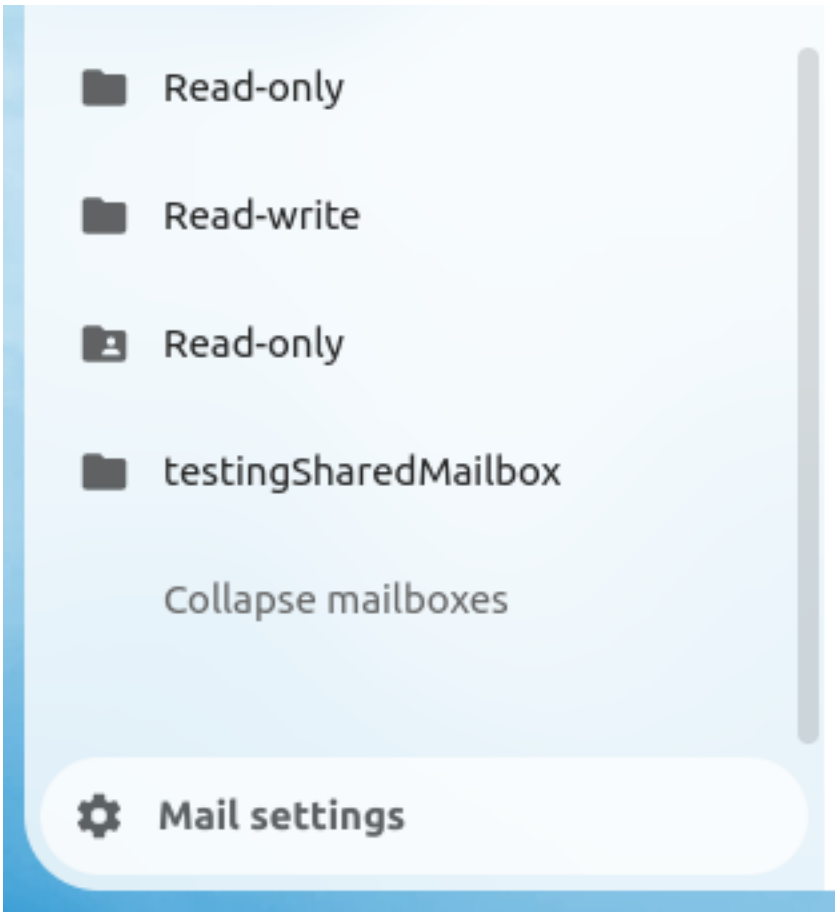
1. Open the action menu of an account
2. Click add folder

#### Add a subfolder

1. Open the action menu of a folder
2. Click add subfolder

#### Shared folder

If a folder was shared with you with some specific rights, that folder will show as a new folder with a shared icon as below:




### 6.3.8 Envelope actions

#### Create an event

Create an event for a certain message/thread directly via mail app

1. Open action menu of an envelope
2. Click *More actions*
3. Click *Create event*

> **Note**
>
> An event title and agenda are created for you if the administrator has enabled it.

#### Create a task

Added in version 3.2: Nextcloud 26 or newer

Create an task for a certain message/thread directly via mail app

1. Open action menu of an envelope

2. Click *more actions*
3. Click *create task*

> **Note**
>
> Tasks are stored in supported calendars. If there is no compatible calendar you can create a new one with the *calendar app*.

### Edit tags

1. Open action menu of an envelope
2. Click *Edit tags*
3. On the tags modal, set/unset tags

### Change color for tags

Added in version 3.5: Nextcloud 26 or newer

Upon creating a tag, a randomly assigned color is automatically chosen. Once the tag is saved, you have the flexibility to customize its color according to your preferences. This feature can be found on the Tag modal action menu.

### Delete tags

Added in version 3.5: Nextcloud 26 or newer

You now have the ability to delete tags that you have previously created. To access this feature:

1. Open the action menu of an envelope/thread.
2. Select Edit tags.
3. Within the tags modal, open the action menu for the specific tag you wish to delete.

> **Note**
>
> Please note that default tags such as Work, To do, Personal, and Later cannot be deleted, they can only be renamed.

### AI summary

Added in version 4.2: Nextcloud 30 or newer

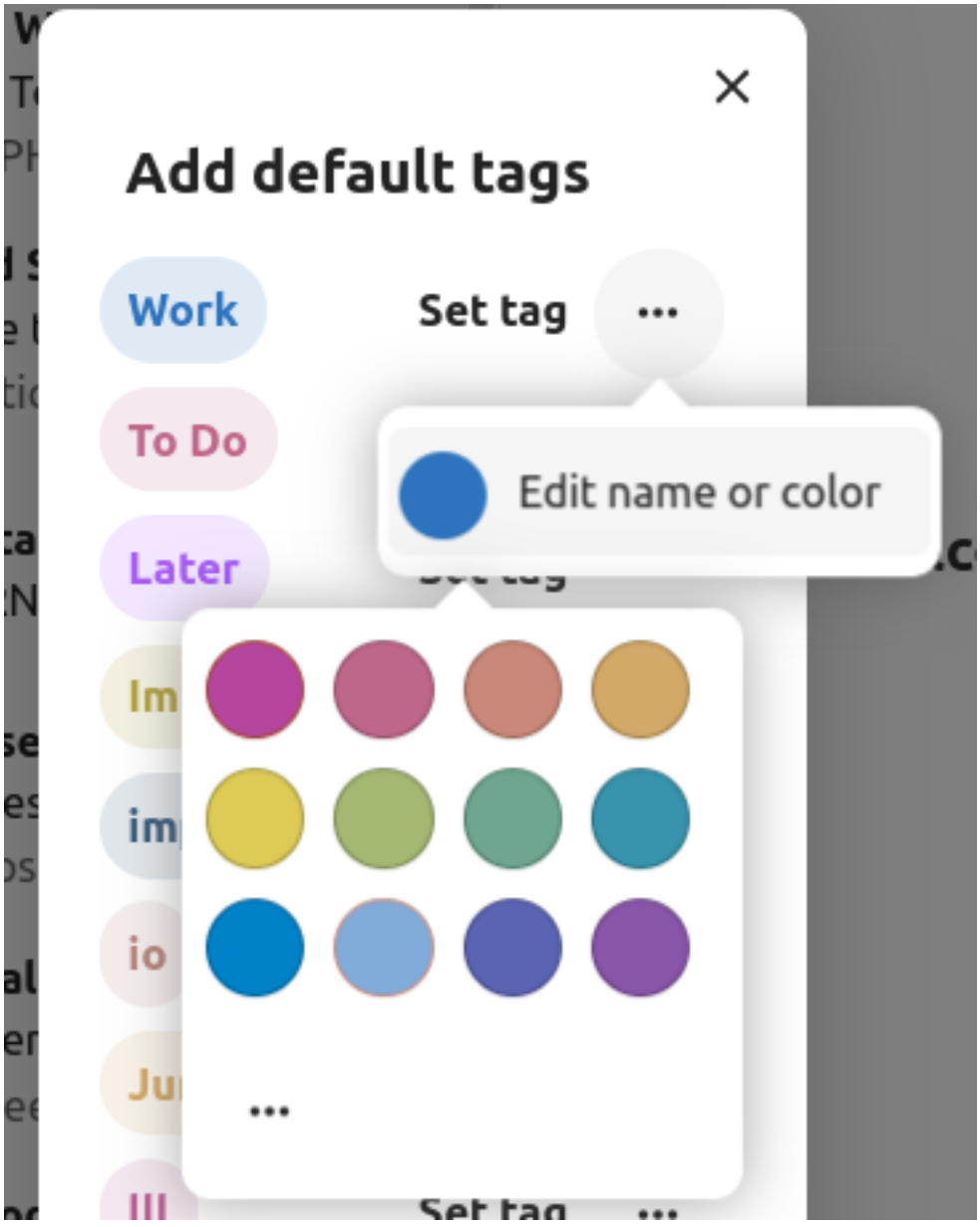
When looking through your folder you will see a short AI generated summary of your emails as a preview.

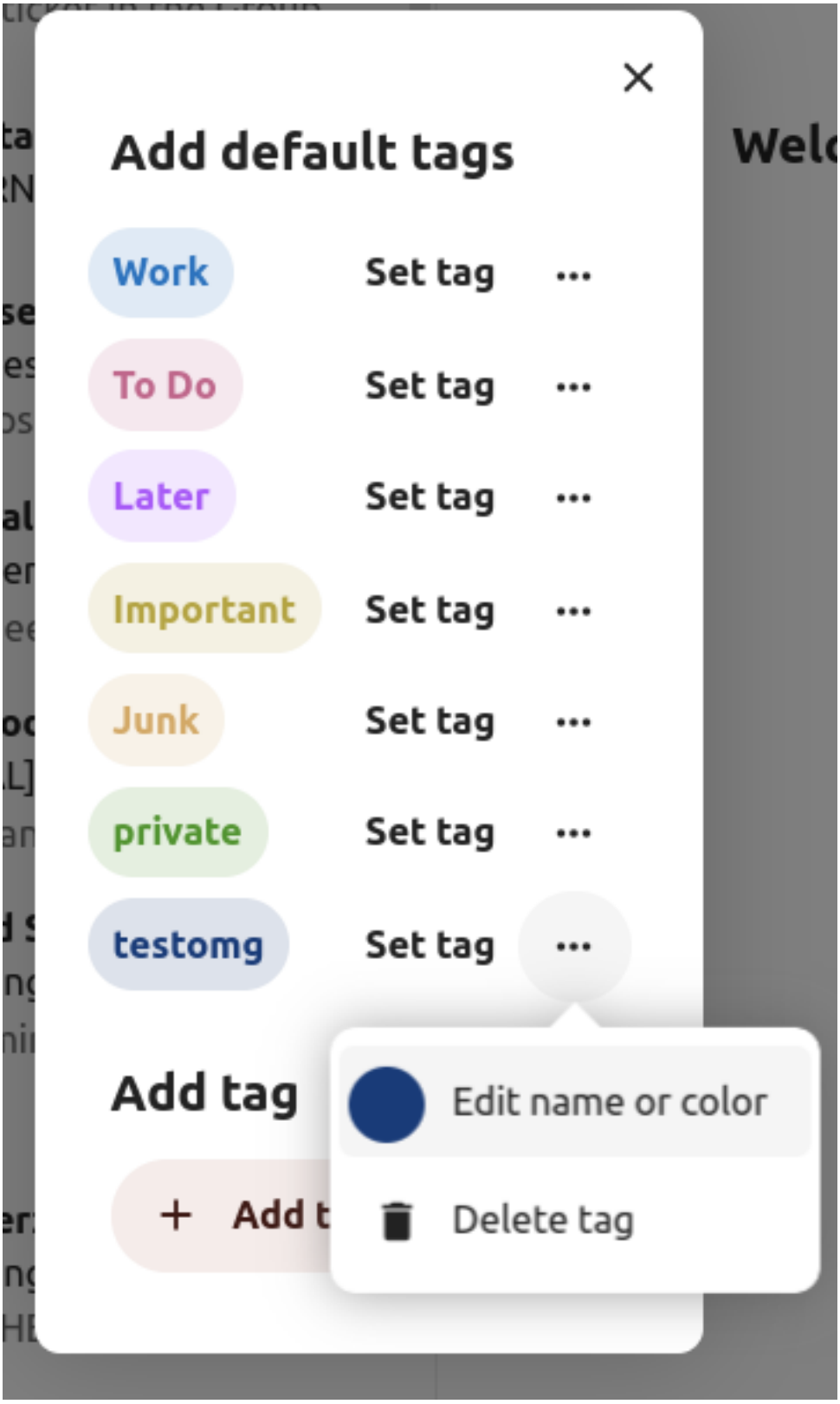
> **Note**
>
> Please note that the feature has to be enabled by the administrator

## 6.3.9 Quick actions

Added in version 5.5: Nextcloud 30 or newer

Allows you to group action steps that you would normally perform on envelopes such as tagging, moving, marking as read … into quick actions that can be executed with a single click. Quick actions are scoped to one mail account and can be created and managed in the mail settings under “Quick actions” or directly from the envelope action menu.


Add default tags
Work
Set tag
To Do
Edit name or color
Later


Add default tags
Work
Set tag
To Do
Set tag
Later
Set tag
Important
Set tag
Junk
Set tag
private
Set tag
testomg
Set tag
Add tag
Edit name or color
Delete tag

**Note**

Some action steps such as *Mark as spam*, *Move thread* and *Delete thread* are mutually exclusive and cannot be part of the same quick action, they also can't be re-ordered and will always be executed last.

**Note**

Please note that quick actions will be performed on all messages in a thread when executed on one.

### 6.3.10 Message actions

#### Unsubscribe from a mailing list

Added in version 3.1: Nextcloud 26 or newer

Some mailing lists and newsletters allow to be unsubscribed easily. If the Mail app detects messages from such a sender, it will show an *Unsubscribe* button next to the sender information. Click and confirm to unsubscribe from the list.

#### Snooze

Added in version 3.4: Nextcloud 26 or newer

Snoozing a message or thread moves it into a dedicated folder until the selected snooze date is reached and the message or thread is moved back to the original folder.

1. Open action menu of an envelope or thread
2. Click *Snooze*
3. Select how long the message or thread should be snoozed

#### Smart replies

Added in version 3.6: Nextcloud 26 or newer

When you open a message in the Mail app, it proposes AI-generated replies. By simply clicking on a suggested reply, the composer opens with the response pre-filled.

**Note**

Please note that the feature has to be enabled by the administrator

**Note**

Supported languages depend on the used large language model

#### Mail translation

Added in version 4.2: Nextcloud 30 or newer

You are able to translate messages to your configured languages similarly to Talk.

**Note**

Please note that translation features have to be enabled on the server

**Note**

Since version 5.3, if LLM is enabled by admin, translations will be suggested

### 6.3.11 Thread summary

The mail app supports summarizing message threads that contain 3 or more messages.

Added in version 3.4: Nextcloud 26 or newer

**Note**

Please note that the feature has to be enabled by the administrator

**Note**

Please note that this feature only works well with integration_openai. Local LLMs take too long to respond and the summary request is likely to time out and still create significant system load.

### 6.3.12 Filtering and autoresponder

The Mail app has a editor for Sieve scripts, an interface to configure autoresponders and an interface to configure filters. Sieve has to be enabled in the *account settings*.

#### Autoresponders

Added in version 3.5: Nextcloud 26 or newer

The autoresponder is off by default. It can be set manually, or follow the system settings. Following system settings means that the long absence message entered on the *Absence settings section* is applied automatically.

#### Filter

Added in version 4.1: Nextcloud 30 or newer

Mail 4.1 includes a simple editor to configure filter rules.

**Note**

Importing existing filters is not supported. However, all existing filters will remain active and unchanged. We recommend backing up your current script through the Sieve script editor as a precaution.

### How to Add a New Filter

1. Open your account settings.
2. Verify that Sieve is enabled for your account (see Sieve server settings).
3. Click on Filters.
4. Select New Filter to create a new rule.

### How to Delete a Filter

1. Open your account settings.
2. Ensure that Sieve is enabled for your account (see Sieve server settings).
3. Click on Filters.
4. Hover over the filter you wish to delete, then click the trash icon.

### Conditions

Conditions are applied to incoming emails on your mail server, targeting fields such as Subject, Sender, and Recipient. You can use the following operators to define conditions for these fields:

- **is exactly**: An exact match. The field must be identical to the provided value.
- **contains**: A substring match. The field matches if the provided value is contained within it. For example, "report" would match "port".
- **matches**: A pattern match using wildcards. The "*" symbol represents any number of characters (including none), while "?" represents exactly one character. For example, "*report*" would match "Business report 2024".

### Actions

Actions are triggered when the specified tests are true. The following actions are available:

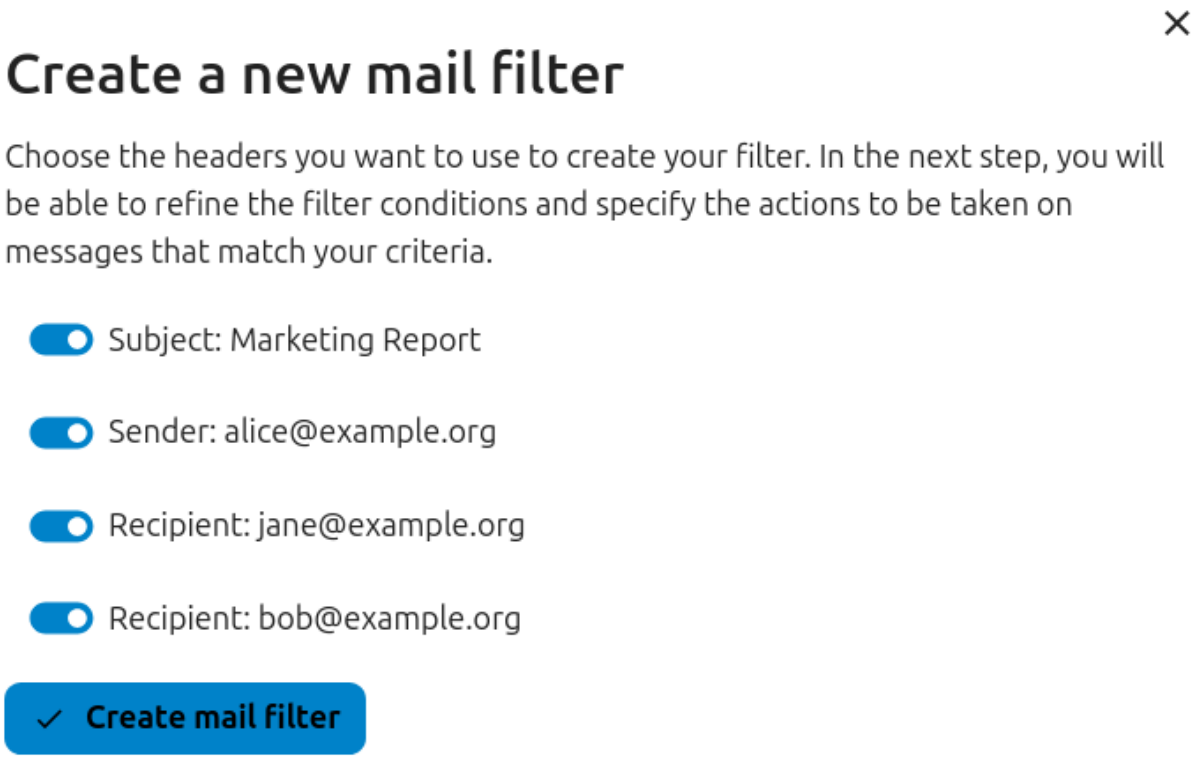
- **fileinto**: Moves the message into a specified folder.
- **addflag**: Adds a flag to the message.
- **stop**: Halts the execution of the filter script. No further filters with will be processed after this action.

### Create a filter from a message

Added in version 5.2: Nextcloud 30 or newer

To create a filter from a given message, open the message and then open the menu by clicking on the three dots. Next, click on "More actions" followed by "Create mail filter."

In the dialog, please select the conditions to match incoming messages and continue by clicking on "Create mail filter."




### 6.3.13 Follow-up reminders

Added in version 4.0: Nextcloud 30 or newer

The Mail app will automatically remind you when an outgoing email did not receive a response. Each sent email will be analyzed by an AI to check whether a reply is expected. After four days all relevant emails will be shown in your priority inbox.

When clicking on such an email a button will be shown to quickly follow up with all recipients. It is also possible to disable follow-up reminders for a sent email.

> **Note**
>
> Please note that the feature has to be enabled by the administrator.

### 6.3.14 Security

#### Phishing detection

Added in version 4.0: Nextcloud 30 or newer

The Mail app will check for potential phishing attempts and will display a warning to the user.

The checks are the following:

- The sender address saved in the addressbook is not the same as the one in the mail account
- The sender is using a custom email address that doesn't match the from address
- The sent date is set in the future

- Links in the message body are not pointing to the displayed text
- The reply-to address is not the same as the sender address

> **Note**
>
> Please note that the warning does not mean that the message is a phishing attempt. It only means that the Mail app detected a potential phishing attempt.

#### Internal addresses

Added in version 4.0: Nextcloud 30 or newer

The Mail app allows adding internal addresses and domains, and will warn the user if the address is not in the list, when sending and upon receiving a message.

To add an internal address:

1. Open the mail settings
2. Navigate to Privacy and security section
3. Enable the internal addresses by clicking on the checkbox
4. Click the Add internal address button
5. Enter the address or domain and click Add

### 6.3.15 Dashboard integration

Added in version 1.8: Nextcloud 20 or newer

The mail app offers two widgets designed for integration with Nextcloud's dashboard:

- Unread mails: This widget displays unread emails.
- Important mails: This widget shows emails that have been flagged as important.

These widgets utilize the emails from the email accounts that are set up for your account.

### 6.3.16 Calendar integration

The Mail app integrates with the Calendar app to help you manage meeting invitations and keep your calendar up to date.

#### Meeting invitations

When you receive a message containing a meeting invitation, the Mail app automatically detects the attached calendar file and displays a formatted action section to help you respond.

You can:

- **Accept** the invitation
- **Decline** the invitation
- **Tentatively accept** the invitation

Your response is sent directly from the Mail app, and the event is added to your primary calendar accordingly.

You can also manually add a meeting invitation to a specific calendar:

1. Open the message with the meeting invitation

2. Scroll to the bottom of the message to the attachments section
3. Select the calendar file (usually with a .ics extension), then click the three dots menu.
4. Click “Import in to calendar” and choose the desired calendar.

#### Meeting invitation automation

When a meeting organizer sends updates to an existing event (such as time changes or location updates), the Mail app processes these automatically and updates the corresponding event in your calendar.

Added in version 5.7: Nextcloud 32 or newer

You can also configure Mail to automatically add all new meeting invitations to your calendar without requiring manual acceptance. The invitations will be added to the calendar as tentative.

To enable this feature:

1. Visit account settings of a specific mail account
2. Navigate to Calendar settings section
3. Enable *Automatically create tentative appointments in calendar*

**Note**

With this setting enabled, invitations will still appear in your mail list, but they will be automatically added to your calendar.

### 6.3.17 Keyboard shortcuts

The Mail app implements several keyboard shortcuts to speed up your experience.

For a full list of the supported shortcuts, check out the Mail settings in your instance.

## 6.4 Setting out-of-office messages

If you are absent for vacation, sick leave or similar, you can add an out-of-office message in the **Absence** section of the **Availability** settings.

The interface asks for the time of absence, a short and a long message and an optional replacement user. This data is used for the following purposes:

1) Your user status will change to the short message when your absence starts and reset when it ends.
2) An event with status *busy* will be created in your personal calendar. This allows others to see that you are not available when they use the free/busy feature.
3) If enabled, the Mail app will apply an autoresponder using the long message.
4) The Talk app will show the long out-of-office message to others when they try to reach you in a 1:1 chat during your absence as well as the replacement user if set.

## 6.5 Synchronizing with Android

### 6.5.1 Files and notifications

1. Install the Nextcloud Android client from Google Play Store or from F-Droid.

2. Start the app. There are two ways of setting it up:

   *Either*: enter your server URL, continue, enter your user name and password and confirm to grant access.

   *Or*: In Nextcloud's web GUI, go to the *user preferences*, go to **Security**. Generate an App password, click "Generate QR code" and tap the QR scanner icon in the Nextcloud app, point your phone's camera towards the screen.

### 6.5.2 Contacts and Calendar

#### With the Nextcloud mobile app

1. Install DAVx$^5$ (formerly known as DAVDroid) on your Android device, from Google Play Store or from F-Droid.
2. In the Nextcloud mobile, go to **Settings/More**, tap on "**Sync calendars & contacts**".
3. Now, DAVx$^5$ will open Nextcloud's Webflow login window, where you will have to enter your credentials and grant access.
4. DAVx$^5$ will open and ask you to create an account. Set the account name to one of your choosing, and set **Contact group method** to **Groups are per-contact categories**.
5. After this, DAVx$^5$ will close and the Nextcloud app reappears. In order to finish setup, you have to manually launch DAVx$^5$ again.
6. Tap on the icon for the account DAVx$^5$ has just created, when requested grant DAVx$^5$ access to your calendars and contacts.
7. When you tap the icon for the account DAVx$^5$ has set up, it will discover the available address books and calendars. Choose which ones you want to synchronize and finish.

#### Without the Nextcloud mobile app

If you do not want to install the Nextcloud mobile app, the following steps are required:

1. Install DAVx$^5$ (formerly known as DAVDroid) on your Android device, from Google Play Store or from F-Droid.
2. Optionally install OpenTasks (Google Play Store or F-Droid).
3. Create a new account ("+" button).
4. Select **Connection with URL and username** and complete the form. **Base URL** is the URL of your Nextcloud instance (e.g. `https://sub.example.com/remote.php/dav`), **Username** is your Nextcloud username, and for **Password** use a *dedicated App password* instead of your account password.
5. Click **Register**.
6. In **Contact group method**, choose the option `Groups are per-contact categories`; then select **Create Account**.
7. Select the data you want to sync.
8. When requested, grant access permissions to DAVx$^5$ for your contacts, calendars and optionally tasks.

> **Note**
>
> Enter your email address as DAVx$^5$ account name (mandatory if you want to be able to send calendar invitation). If your email address is registered in your Nextcloud preferences and you have set up your account using the Nextcloud mobile app, this all should be already the case.

**Note**

Using user name and password will not work if 2-Factor-Authentication is enabled and will throw a generic "Unknown resource" error. Use a *dedicated App password* instead. If you enabled 2FA after already configuring DAVx$^5$, update your DAVx$^5$ account to replace your login password with an app password.

**Tip**

DAVx$^5$ lists the calendar subscriptions made through the Nextcloud Calendar app, but you need to install the ICSx$^5$ (formerly known as ICSDroid) app on your Android device, from the Google Play Store or from F-Droid to sync them.

## 6.6 Synchronizing with iOS

### 6.6.1 Prerequisites

Generate an App password:

1. In Nextcloud, go to Settings
2. Go to Security
3. Scroll down to Devices & sessions
4. In 'App name' fill in for example 'iPhone'
5. Keep the displayed App login and password for the next steps

### 6.6.2 Calendar

Open the settings application on iOS:

1. Select Apps.
2. Select Calendar.
3. Select Calendar Accounts.
4. Select Add Account.
5. Select Other as account type.
6. Select Add **CalDAV** account.
7. For server, type the domain name of your server i.e. `example.com`.
8. Enter your App login as username.
9. Enter your App password.
10. Select Next.
11. Open Advanced Settings
12. For server, type the domain name of your server and path, i.e., `example.com/remote.php/dav/principals/users/username/` (replace **example.com** and **username**).
13. Toggle 'SSL' on
14. For port, fill in 443

15. Close Advanced Settings

Your calendar will now be visible in the Calendar application.

> **Note**
>
> It may take a few minutes to synchronise all the events.

> **Note**
>
> If you get an error message related to SSL, you can try the following: Make sure that you either specify both the protocol (`https://`) and the port (usually `443`) in the `Server` field, i.e., `https://example.com:443/remote.php/dav/principals/users/username/`, or none, like in the step-by-step guide above. Either way, the application automatically tries to use SSL, which you can confirm in "Advanced Settings" of the account after saving.

> **Note**
>
> Beginning with iOS 12 an SSL encryption is necessary. Therefore do **not** disable **SSL** (For this reason a certificate is required at your domain, https://letsencrypt.org/ will do).

> **Note**
>
> If you select **CardDAV** only contact syncing will be made available.

### 6.6.3 Contacts

Open the settings application on iOS:

1. Select Apps.
2. Select Contacts.
3. Select Contacts Accounts.
4. Select Add Account.
5. Select Other as account type.
6. Select Add **CardDAV** account.
7. For server, type the domain name of your server i.e. `example.com`.
8. Enter your App login as username.
9. Enter your App password.
10. Select Next.
11. Open Advanced Settings
12. For server, type the domain name of your server and path, i.e., `example.com/remote.php/dav/principals/users/username/` (replace **example.com** and **username**).
13. Toggle 'SSL' on
14. For port, fill in 443

15. Close Advanced Settings

You should now find your contacts in the address book of your iPhone.

> **Note**
>
> Beginning with iOS 12 an SSL encryption is necessary. Therefore do **not** disable **SSL** (For this reason a certificate is required at your domain, https://letsencrypt.org/ will do).

> **Note**
>
> If you select **CalDAV** only calendar syncing will be made available.

If it's still not working, have a look at Troubleshooting Contacts & Calendar or Troubleshooting Service Discovery.

## 6.7 Synchronizing with macOS

### 6.7.1 Setup your Accounts

In the following steps you will add **CalDAV** (Calendar) and **CardDAV** (Contacts) to your macOS integrated Calendar and Contacts applications. At the time of writing this guide, macOS is at version 26.3.1.

1. Click on the **Apple** menu and select **System Settings…** from the dropdown menu.
2. Navigate to **Internet Accounts**:
3. Click on the small blue **choose from a list.**
4. Click on **add Other Account…**
5. Select **CalDAV Account** for calendar and **CardDAV Account** for contacts.

> **Note**
>
> You can not setup Calendar/Contacts together. You need to setup them **separately**.

6. Select **Manual** as Account Type and type in your respective credentials:

   **Username**: Your Nextcloud username or email

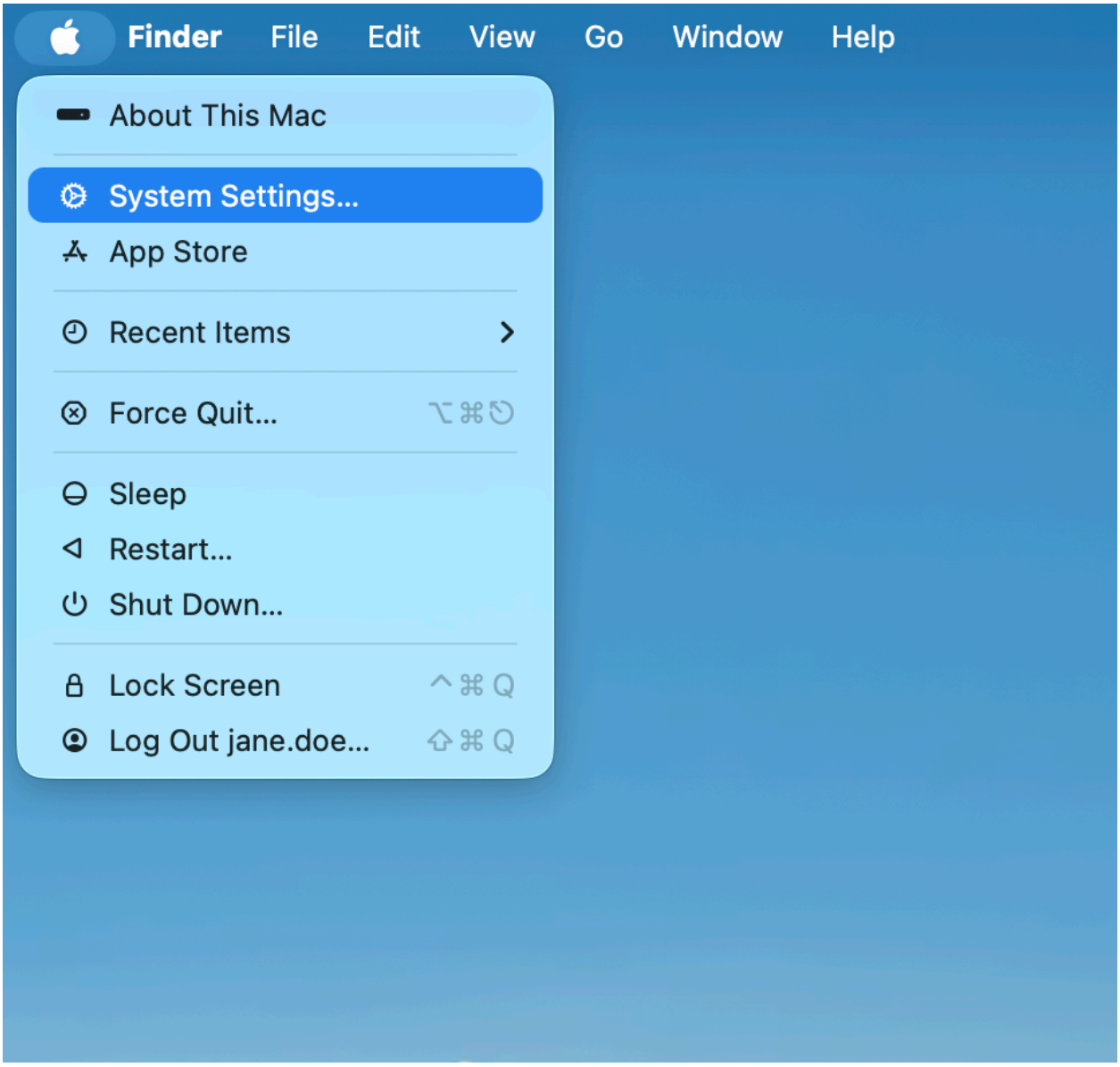
   **Password**: Either your password or if you use 2FA your generated app-password/token (*Learn more*).

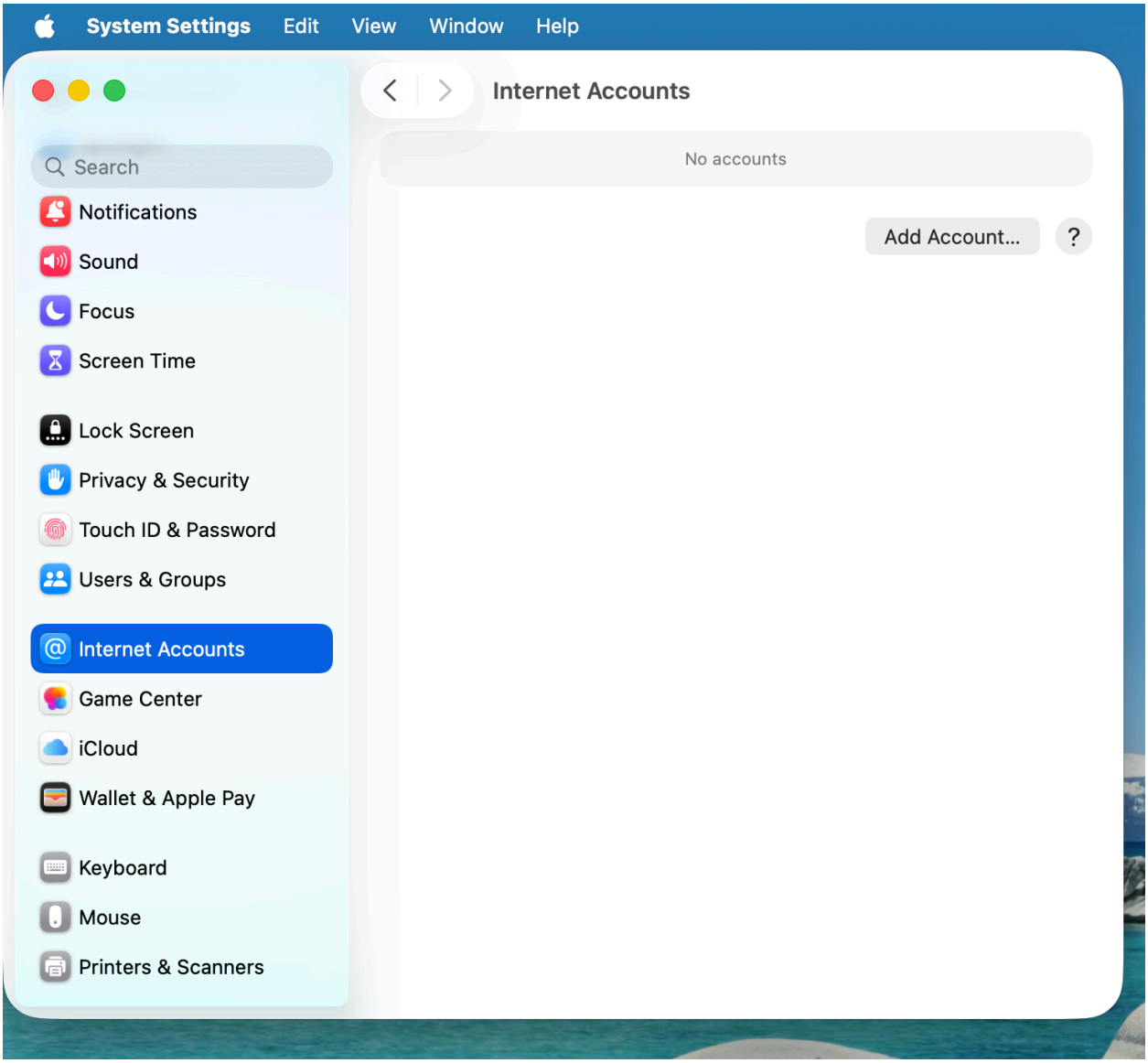
   **Server Address**: URL of your Nextcloud server (e.g. `https://nextcloud.yourdomain.com`)

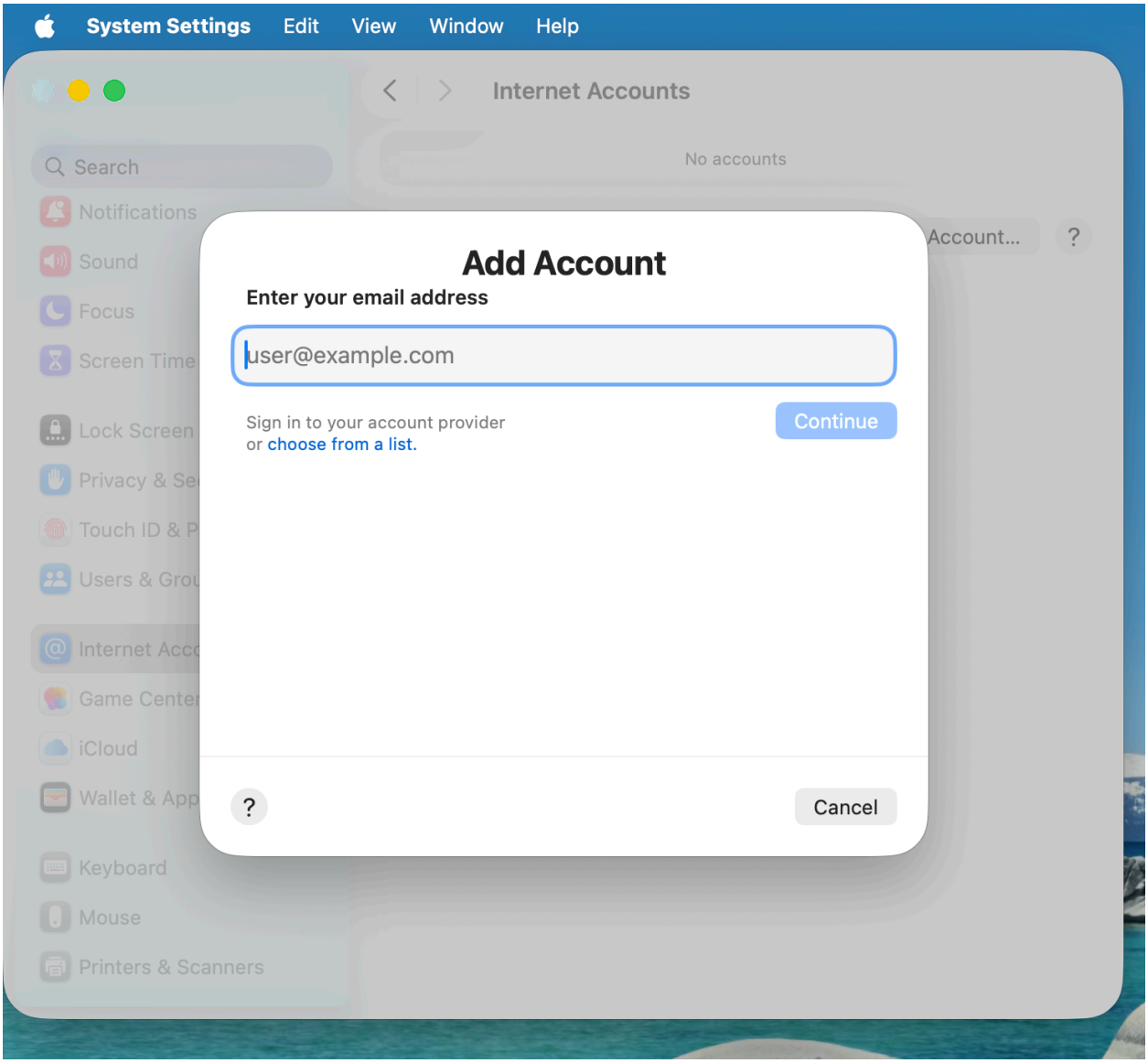
7. Click on **Sign In**.

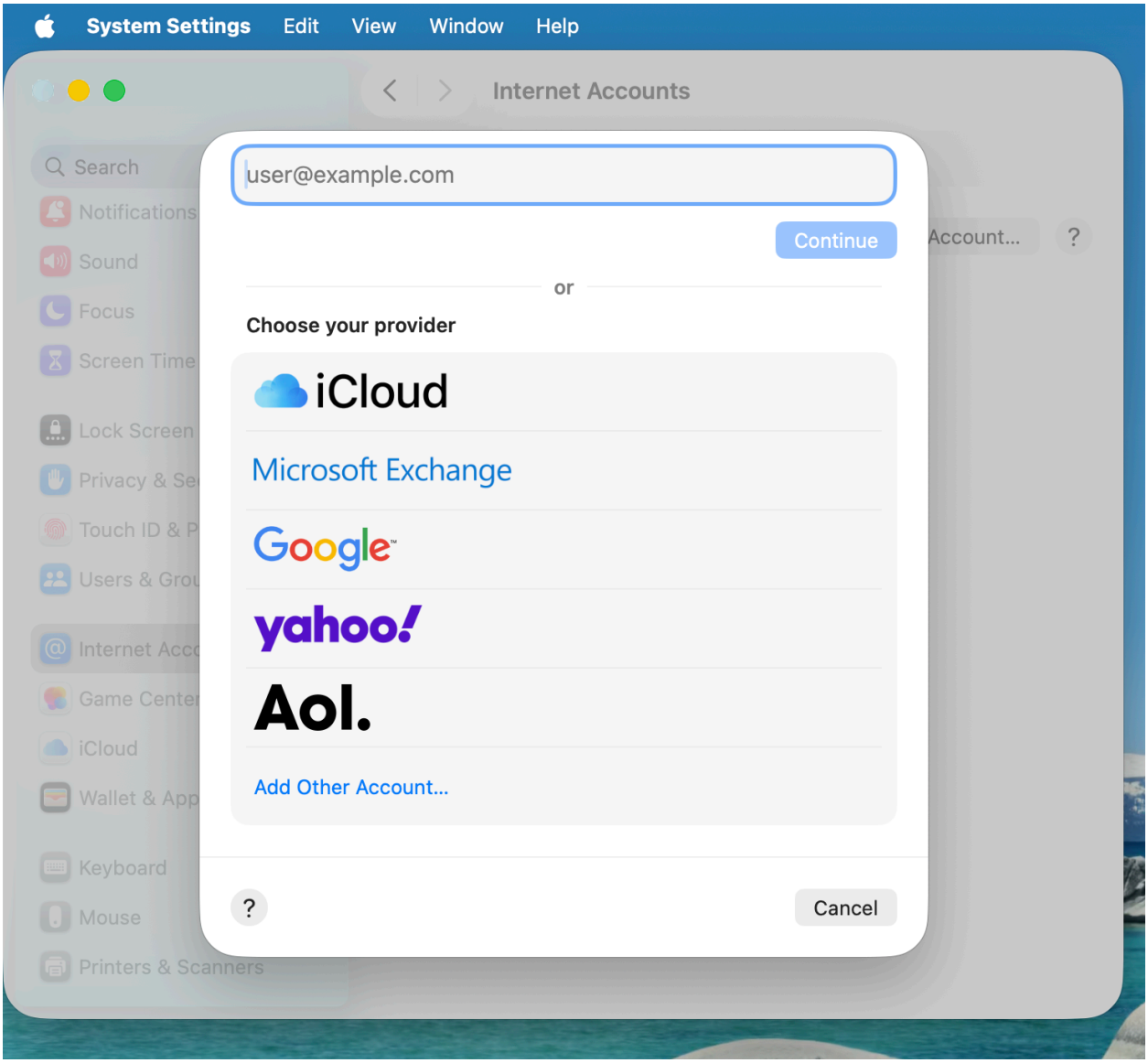
### 6.7.2 Troubleshooting

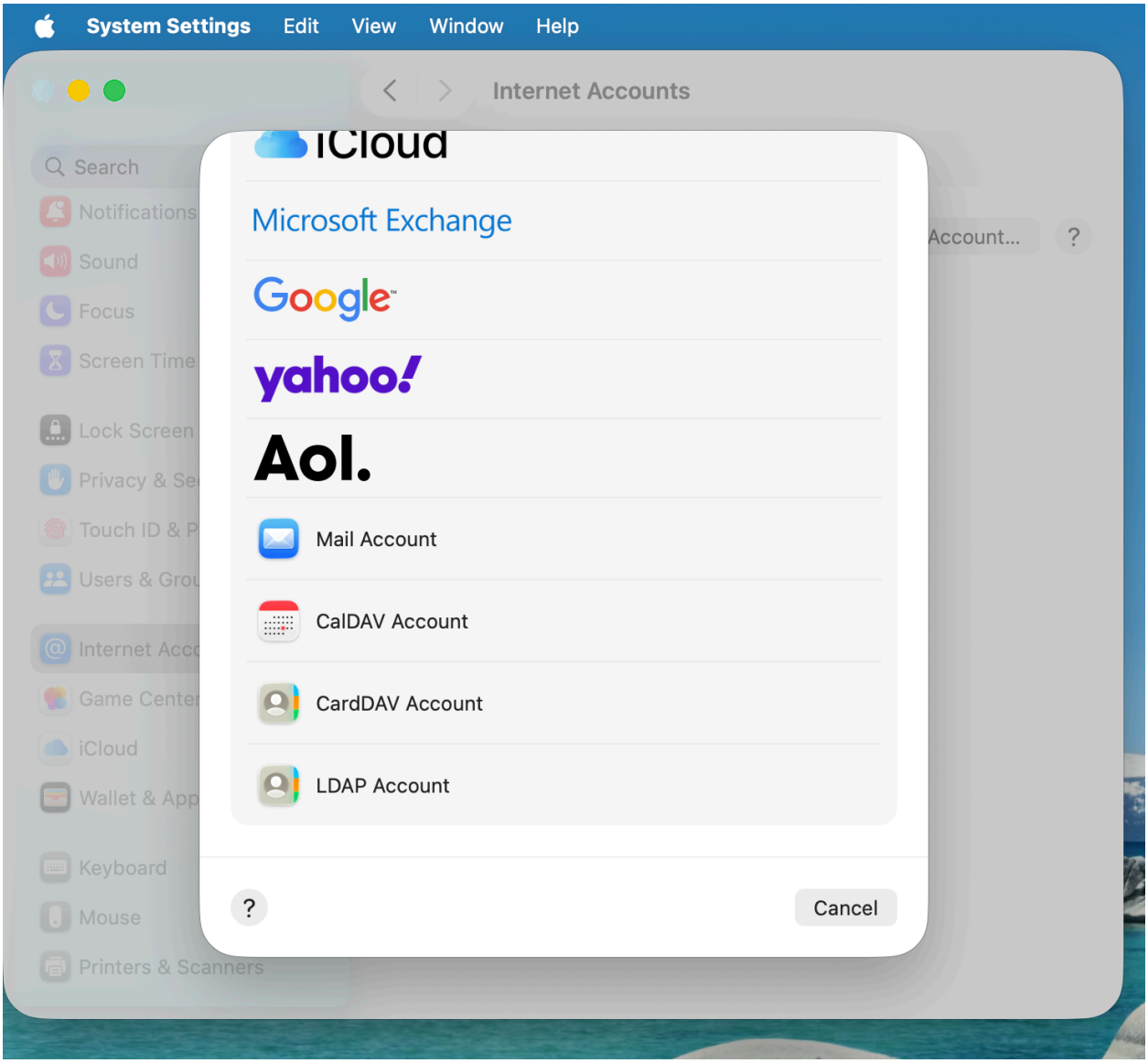
- macOS does **not** support syncing CalDAV/CardDAV over non-encrypted `http://` connections. Make sure you have `https://` enabled and configured on server- and client-side.
- **Self-signed certificates** need to be properly set up in the macOS keychain.

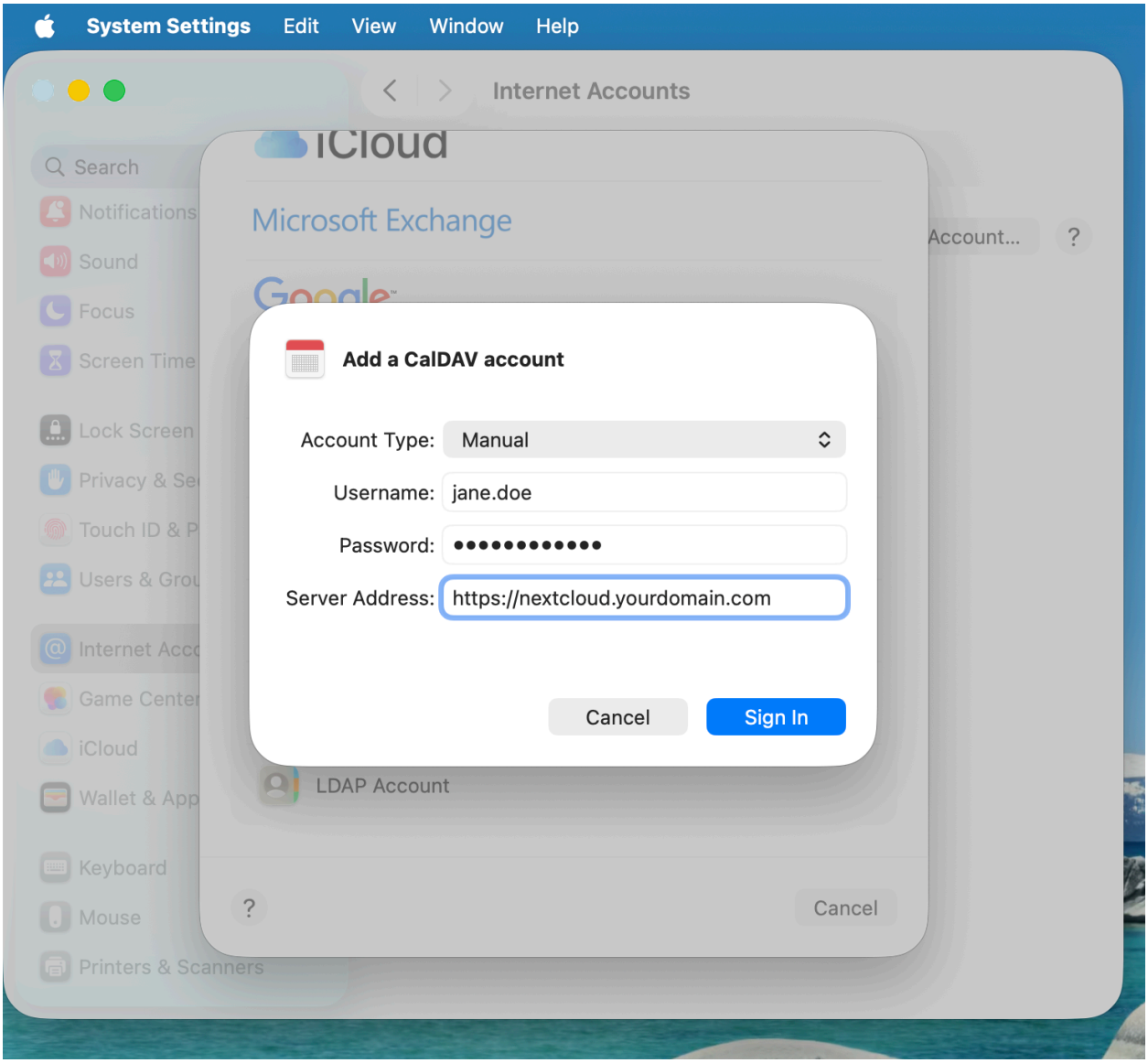

Finder
File
Edit
View
Go
Window
Help
About This Mac
System Settings...
App Store
Recent Items
Force Quit...
Sleep
Restart...
Shut Down...
Lock Screen
Log Out jane.doe...


System Settings
Edit
View
Window
Help
Search
Notifications
Sound
Focus
Screen Time
Lock Screen
Privacy & Security
Touch ID & Password
Users & Groups
Internet Accounts
Game Center
iCloud
Wallet & Apple Pay
Keyboard
Mouse
Printers & Scanners
Internet Accounts
No accounts
Add Account...
?


System Settings
Edit
View
Window
Help
Internet Accounts
No accounts
Search
Notifications
Sound
Focus
Screen Time
Lock Screen
Privacy & Se
Touch ID & P
Users & Grou
Internet Acc
Game Center
iCloud
Wallet & App
Keyboard
Mouse
Printers & Scanners
Account...
?
Add Account
Enter your email address
user@example.com
Sign in to your account provider
or choose from a list.
Continue
?
Cancel


System Settings
Edit
View
Window
Help
Internet Accounts
Search
Notifications
Sound
Focus
Screen Time
Lock Screen
Privacy & Se
Touch ID & P
Users & Grou
Internet Acc
Game Center
iCloud
Wallet & App
Keyboard
Mouse
Printers & Scanners
user@example.com
Continue
Account...
or
Choose your provider
iCloud
Microsoft Exchange
Google
yahoo!
Aol.
Add Other Account...
?
Cancel


System Settings
Edit
View
Window
Help
Internet Accounts
Search
Notifications
Sound
Focus
Screen Time
Lock Screen
Privacy & Se
Touch ID & P
Users & Grou
Internet Acc
Game Center
iCloud
Wallet & App
Keyboard
Mouse
Printers & Scanners
Account...
?
iCloud
Microsoft Exchange
Google
yahoo!
Aol.
Mail Account
CalDAV Account
CardDAV Account
LDAP Account
?
Cancel


System Settings
Edit
View
Window
Help
Internet Accounts
Search
Notifications
Sound
Focus
Screen Time
Lock Screen
Privacy & Se
Touch ID & P
Users & Grou
Internet Acc
Game Center
iCloud
Wallet & App
Keyboard
Mouse
Printers & Scanners
iCloud
Microsoft Exchange
Google
Account...
?
Add a CalDAV account
Account Type:
Manual
Username:
jane.doe
Password:
Server Address:
https://nextcloud.yourdomain.com
Cancel
Sign In
LDAP Account
?
Cancel

## 6.8 Synchronizing with Thunderbird

Thunderbird is a feature-rich and mature mail client that can be turned into a full-fledged Personal Information Manager (PIM). Since version 102, it supports address book synchronization via CardDAV and automatic discovery of calendars and address books available on the server.

### 6.8.1 Recommended method

Since Thunderbird 102, the CardDAV & CalDAV protocols are natively supported.

#### Contacts

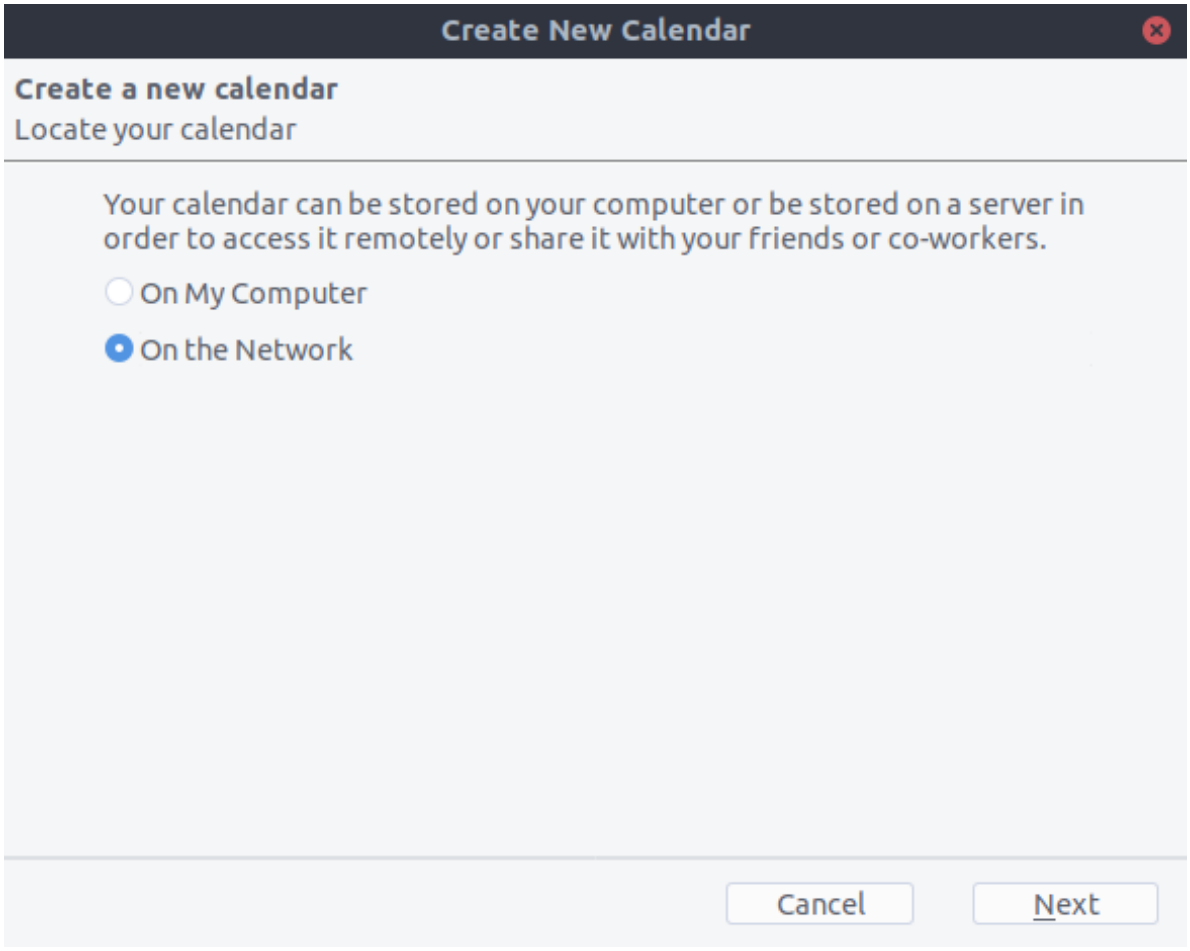
1. On the address book view, click the down arrow near **New Address Book** and choose **Add CardDAV Address Book**.
2. In the next window, type your **Username** and **Location** (Server URL).
3. The next window will ask for your username and password for this account.
4. The previous window will be refreshed and ask you which address books you wish to sync.
5. Choose and then click **Continue**.

If you later want to add a new address book, you can redo all of those steps and only the books not already synchronized will be suggested.

> **Note**
>
> If your account uses two-factor authentication, you need a *dedicated app password* for login rather than your regular password.

#### Calendars

1. Go to the calendar view in Thunderbird and select the **New Calendar…** button at the bottom of the left side panel.
2. Choose **On the network**:



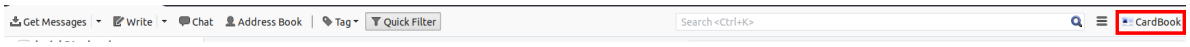

3. Type your **Username** and **Location** (Server URL), then click on **Find Calendars**.
4. Choose which calendars you want to add and click **Subscribe**

Same thing here, if you later want to add more calendars, just redo the procedure.

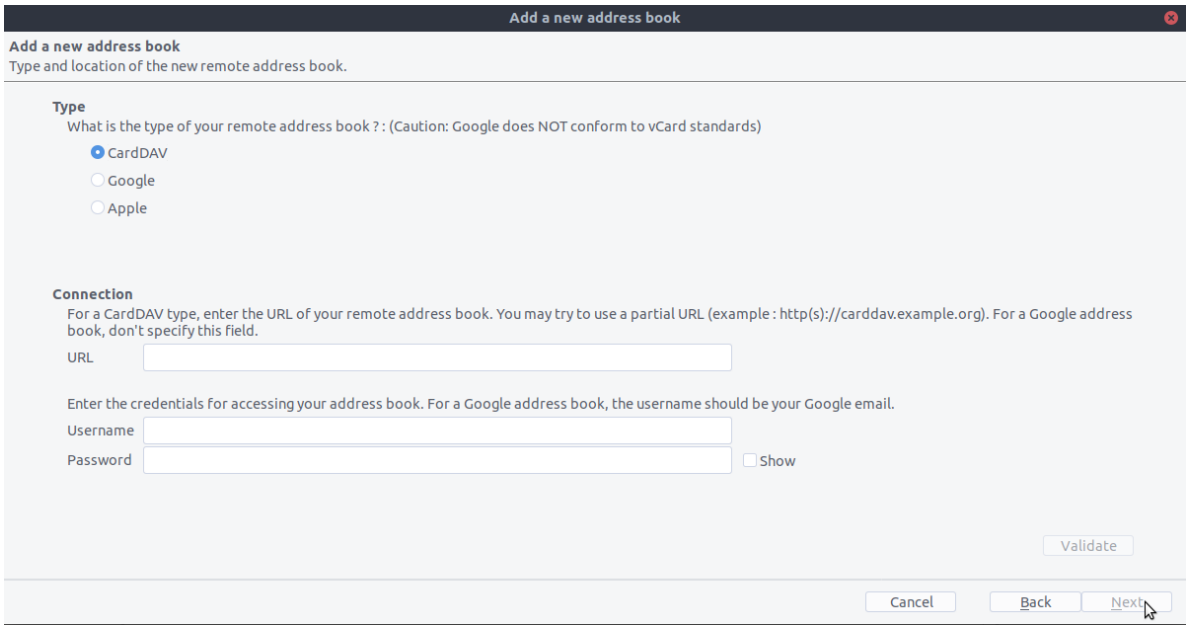
### 6.8.2 Alternative: Using the CardBook add-on (Contacts only)

CardBook is an advanced alternative to Thunderbird's address book, which supports CardDAV.

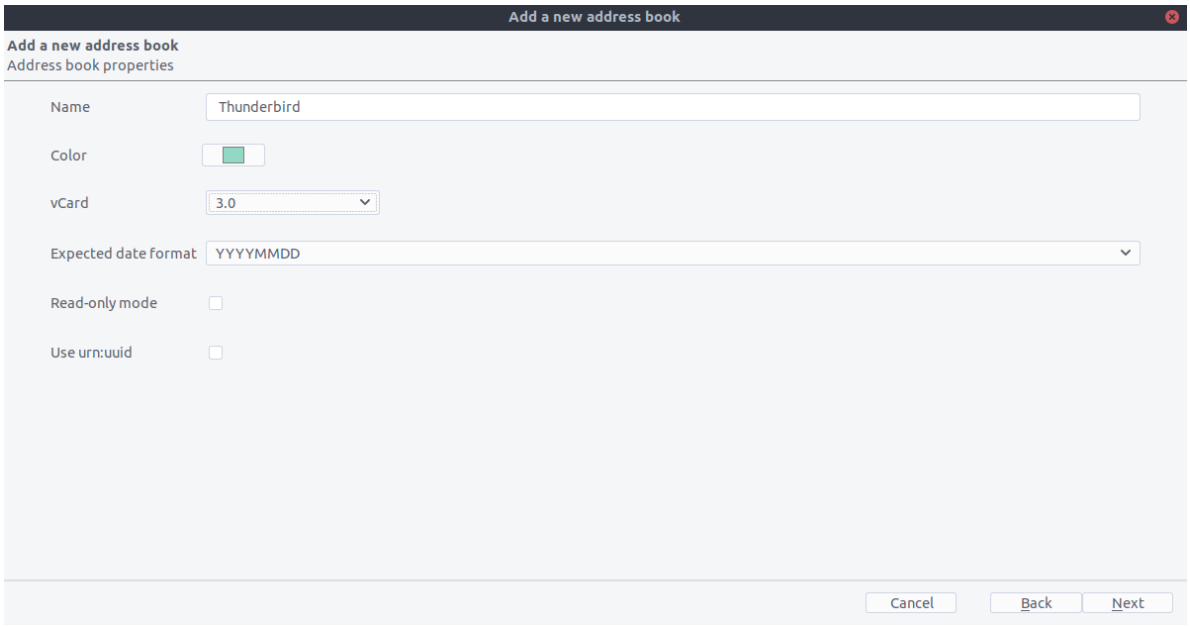
1. Click the CardBook icon in the upper right corner of Thunderbird:



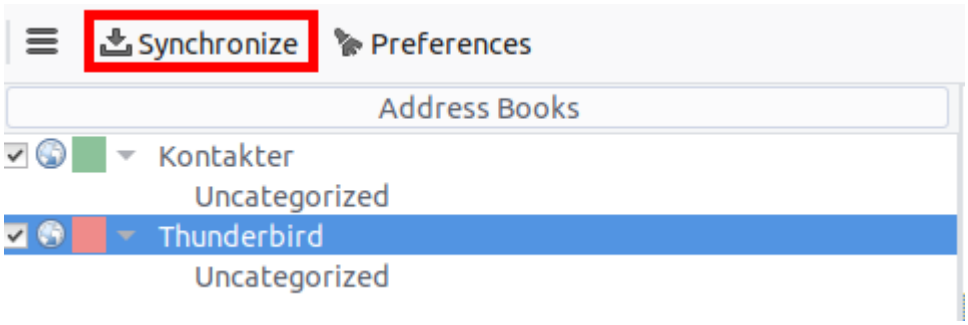

2. In CardBook:
   - Go to Address book > New Address book **Remote** > Next
   - Select **CardDAV**, fill in the address of your Nextcloud server, your user name and password




3. Click on “Validate”, click Next, then choose the name of the address book and click Next again:




4. When you are finished, CardBook synchronizes your address books. You can always trigger a synchronization manually by clicking the **Synchronize** button in CardBook:



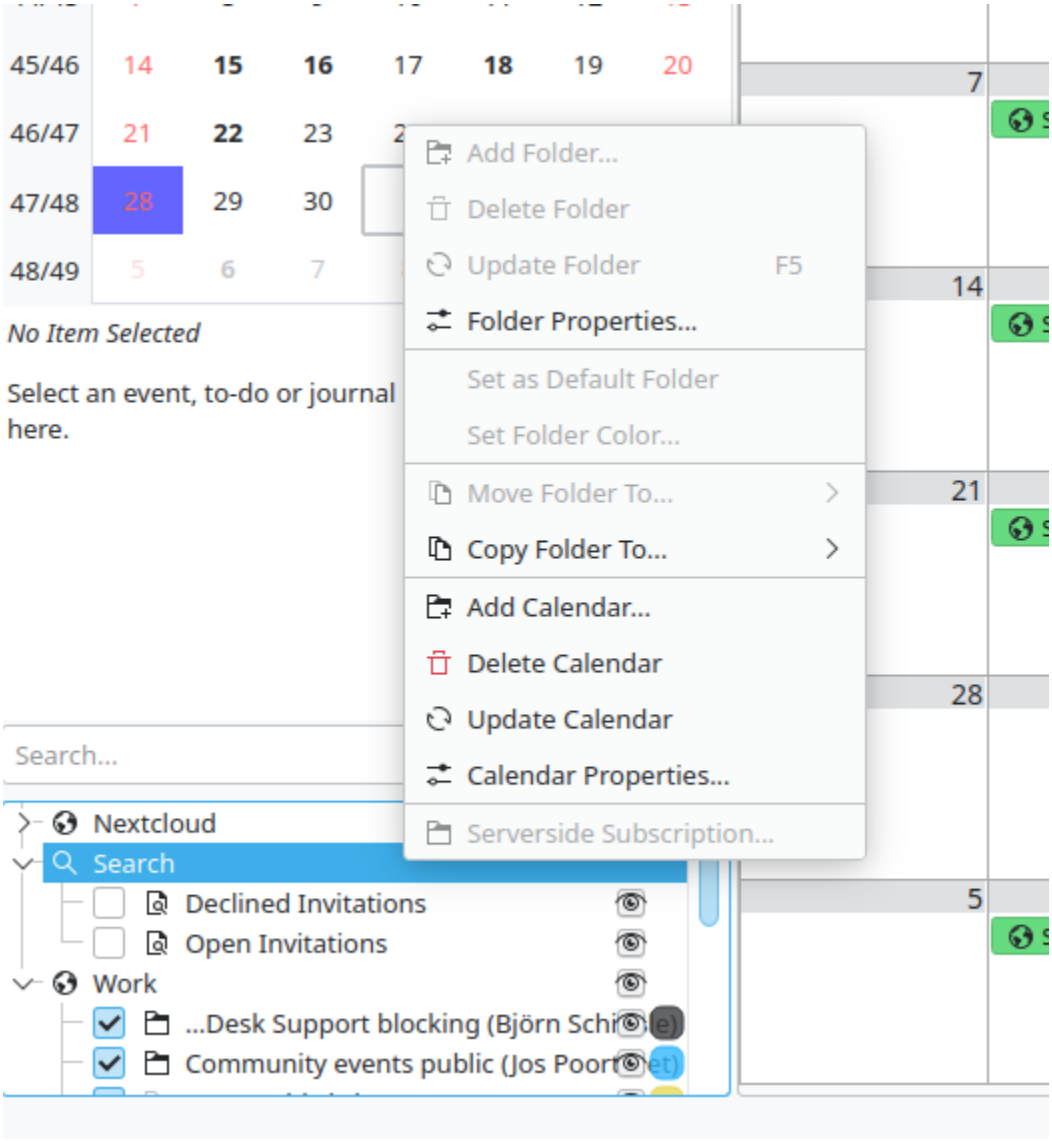

## 6.9 Synchronizing with KDE Kontact

KOrganizer, Kalendar and KAddressBook can synchronize your calendar, contacts and tasks with a Nextcloud server.

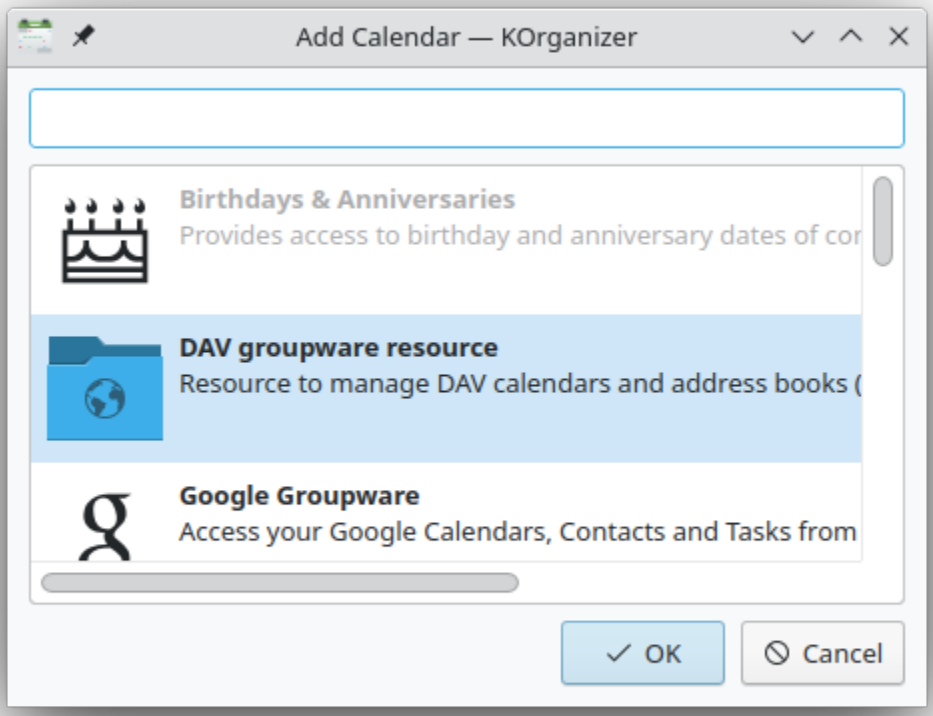
This can be done by following these steps depending on if you use KOrganizer or Kalendar:

In KOrganizer:

1. Open KOrganizer and in the **Calendar** list on the left right-click and choose `Add Calendar`:

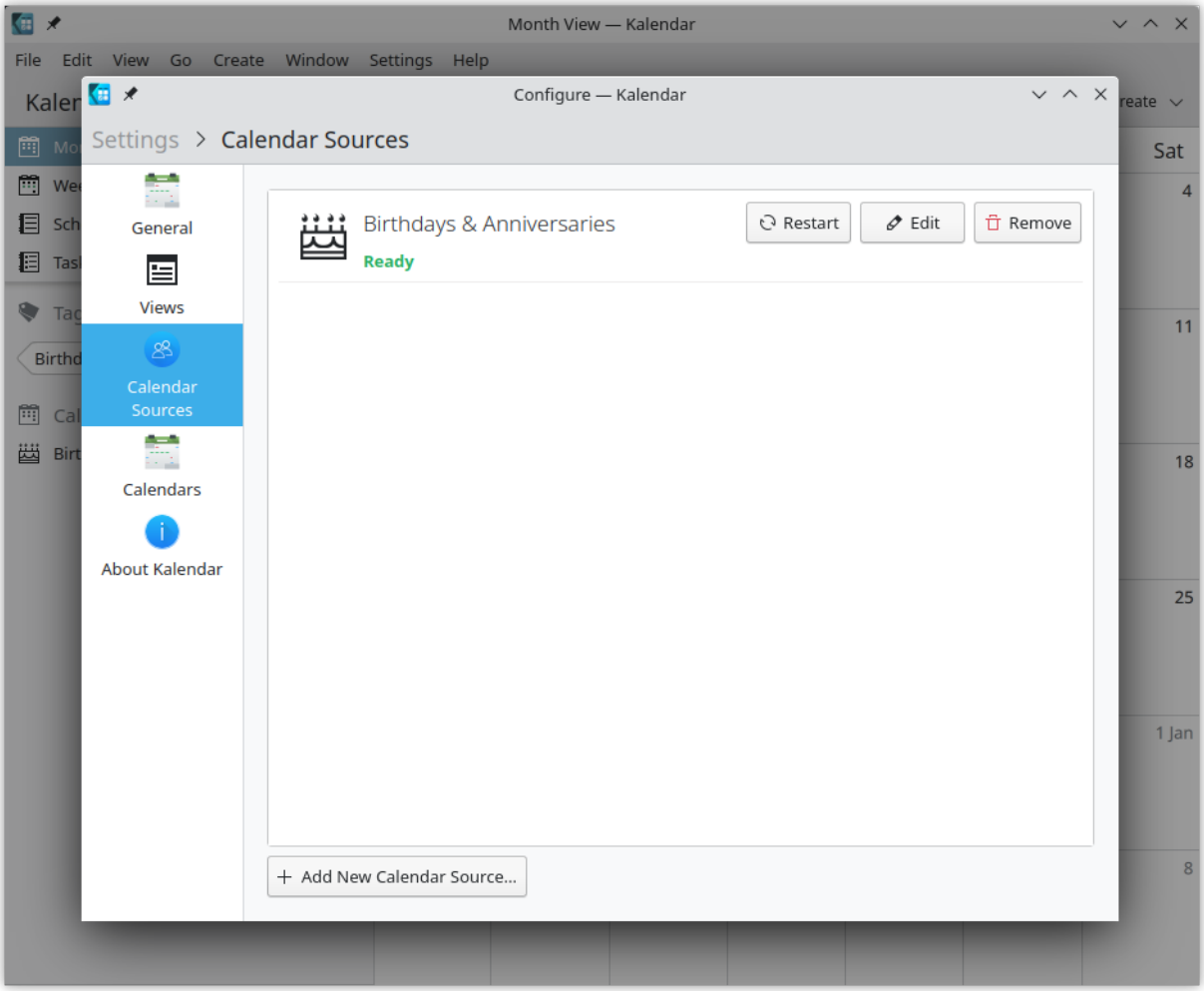



2. In the resulting list of resources, pick `DAV groupware resource`:

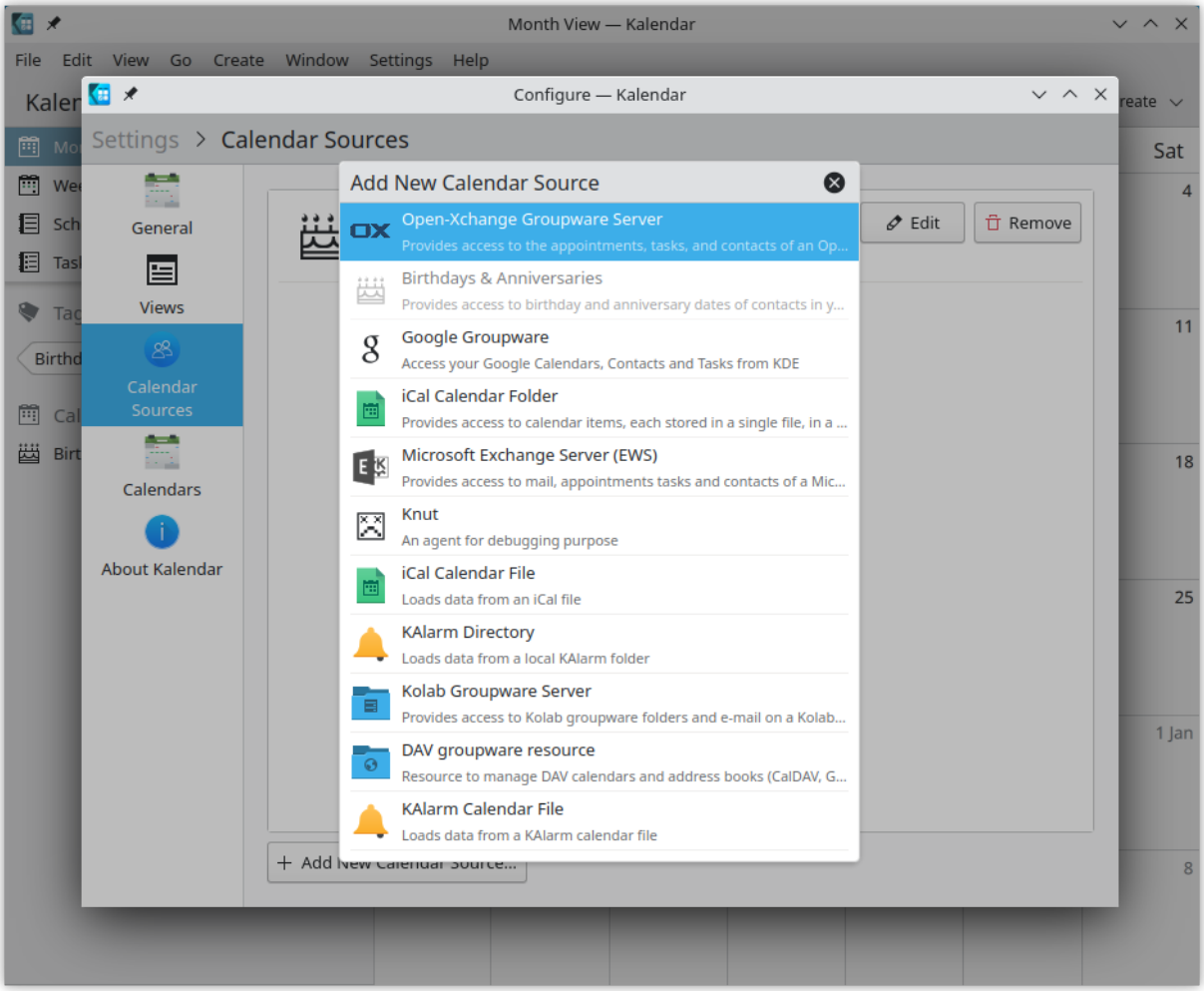



In Kalendar:

1. Open Kalendar and in the menu bar open the setting and then choose `Calendar Sources` -> `Add Calendar`:

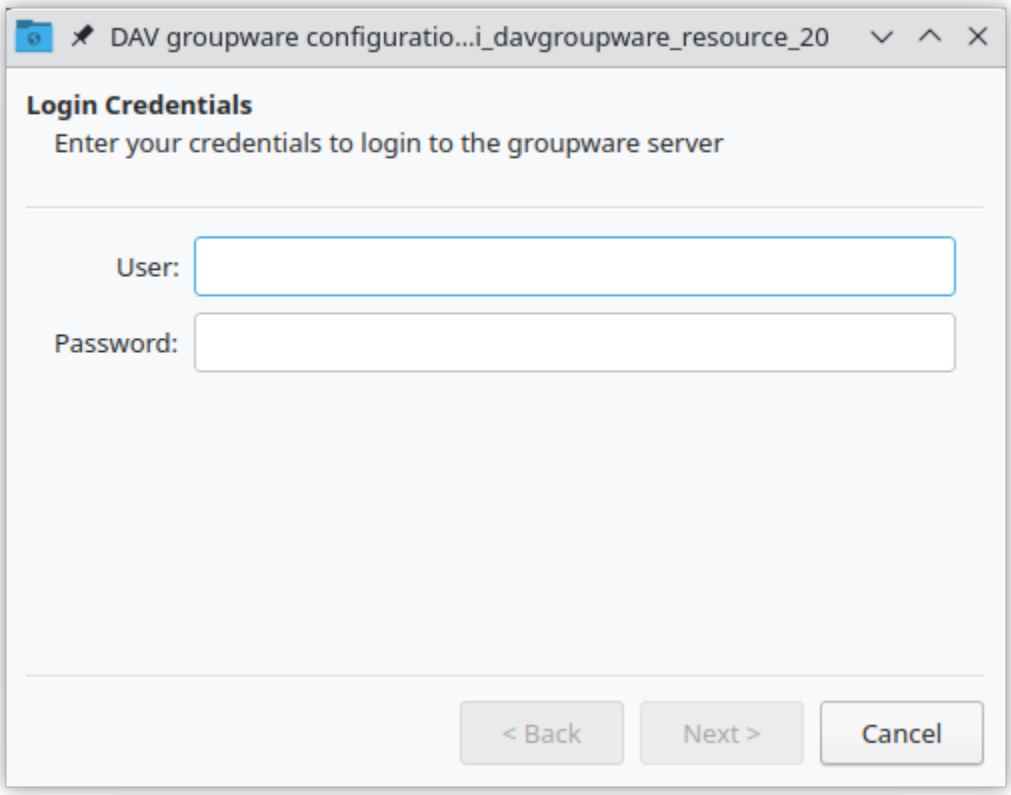



2. In the resulting list of resources, pick `DAV groupware resource`:

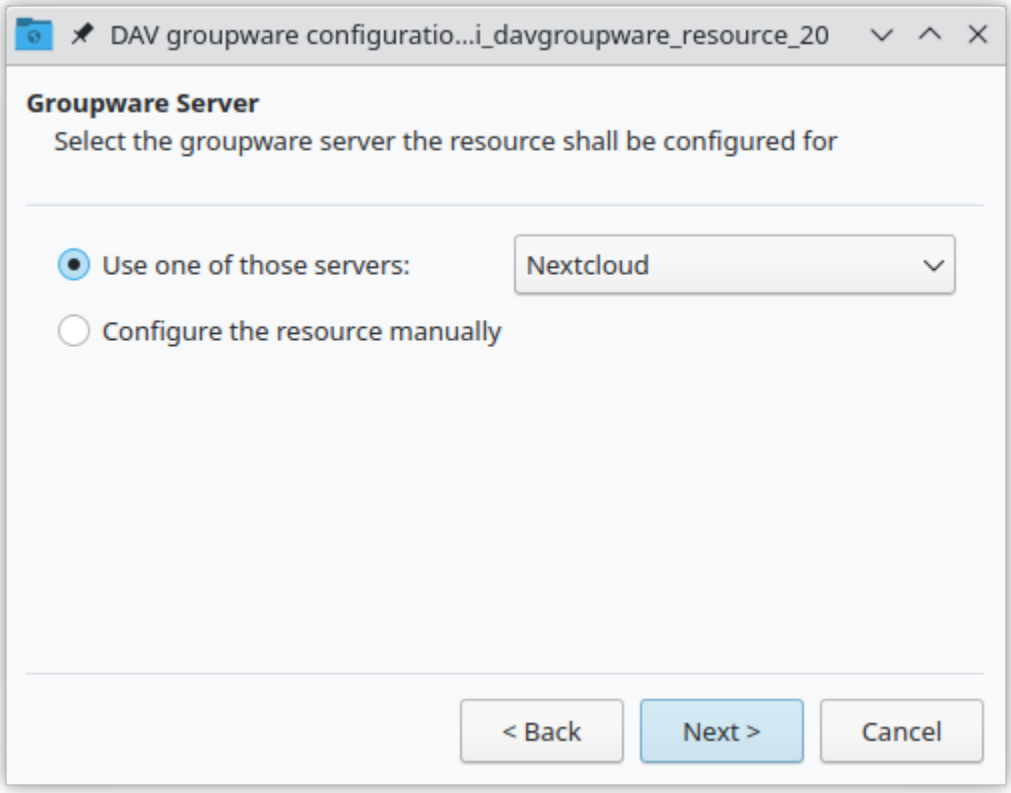



In KOrganizer and Kalendar:

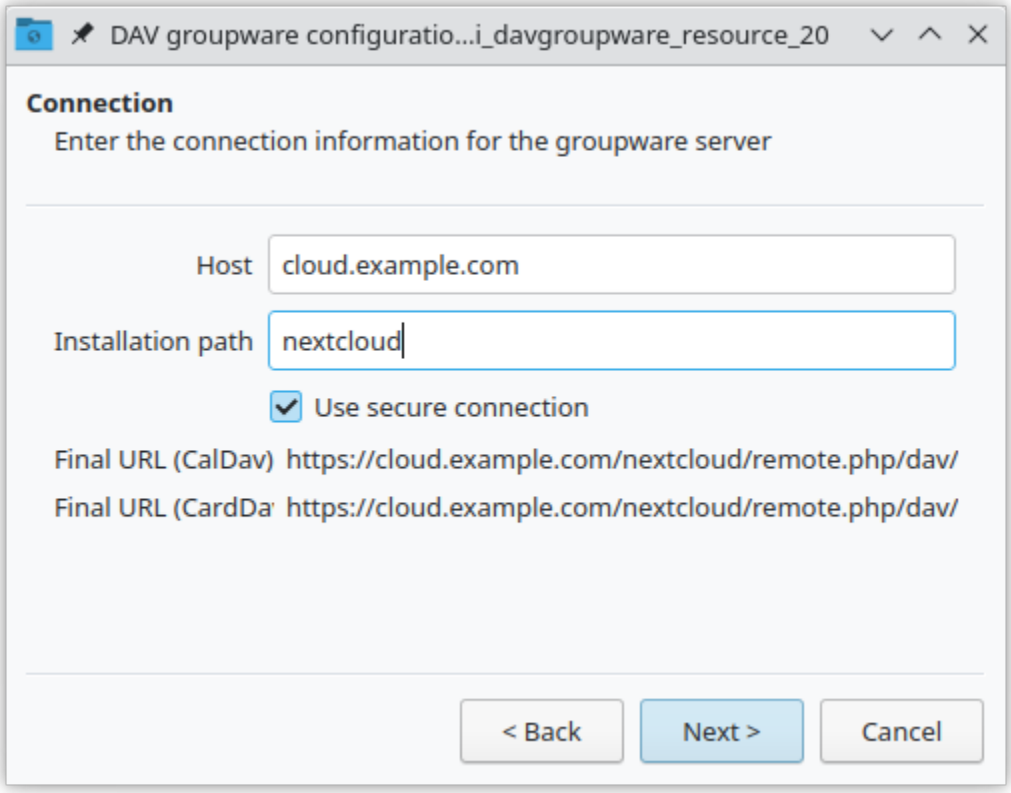
3. Enter your username. As password, you need to generate an app-password/token (*Learn more*):



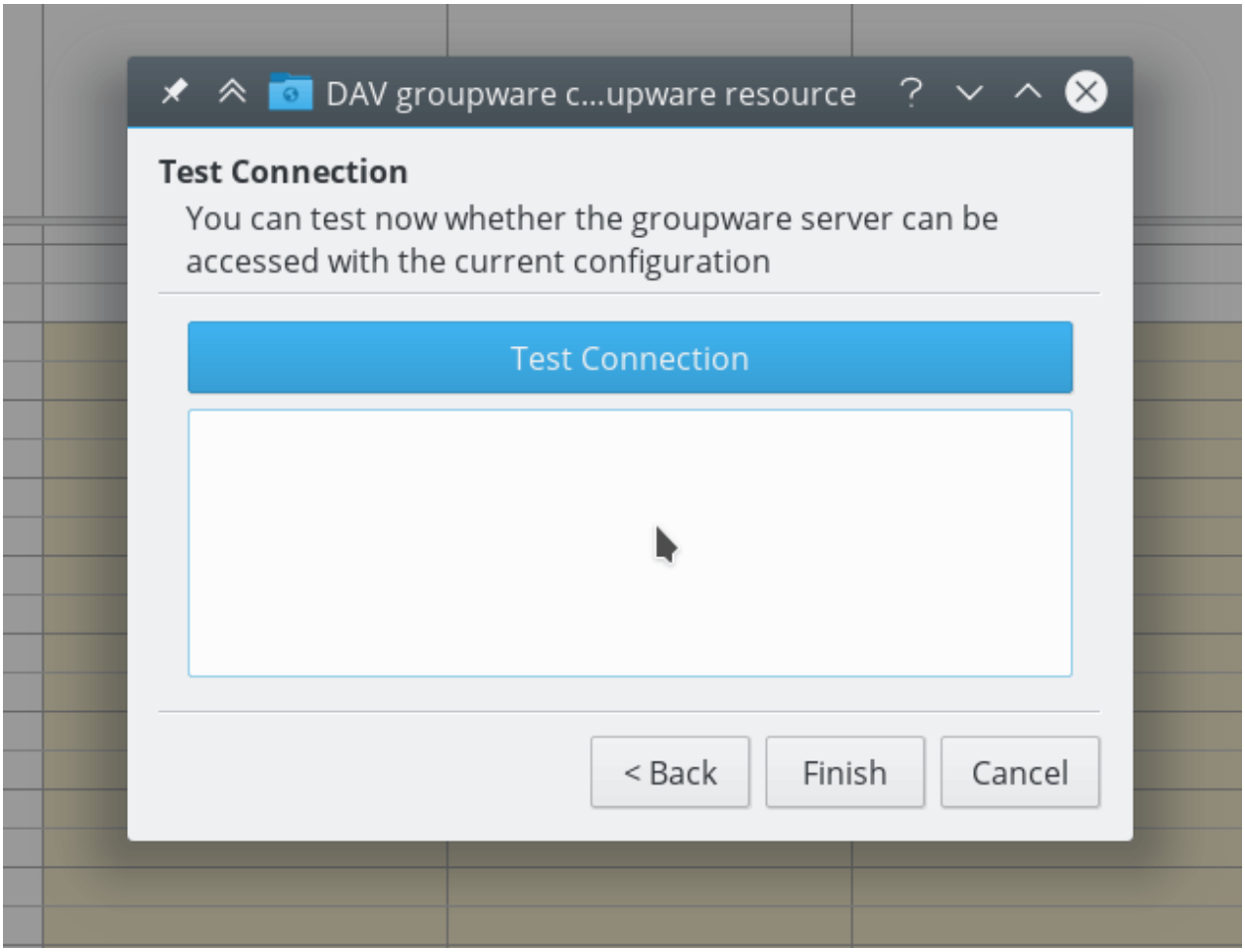

4. Choose `Nextcloud` as Groupware server option:

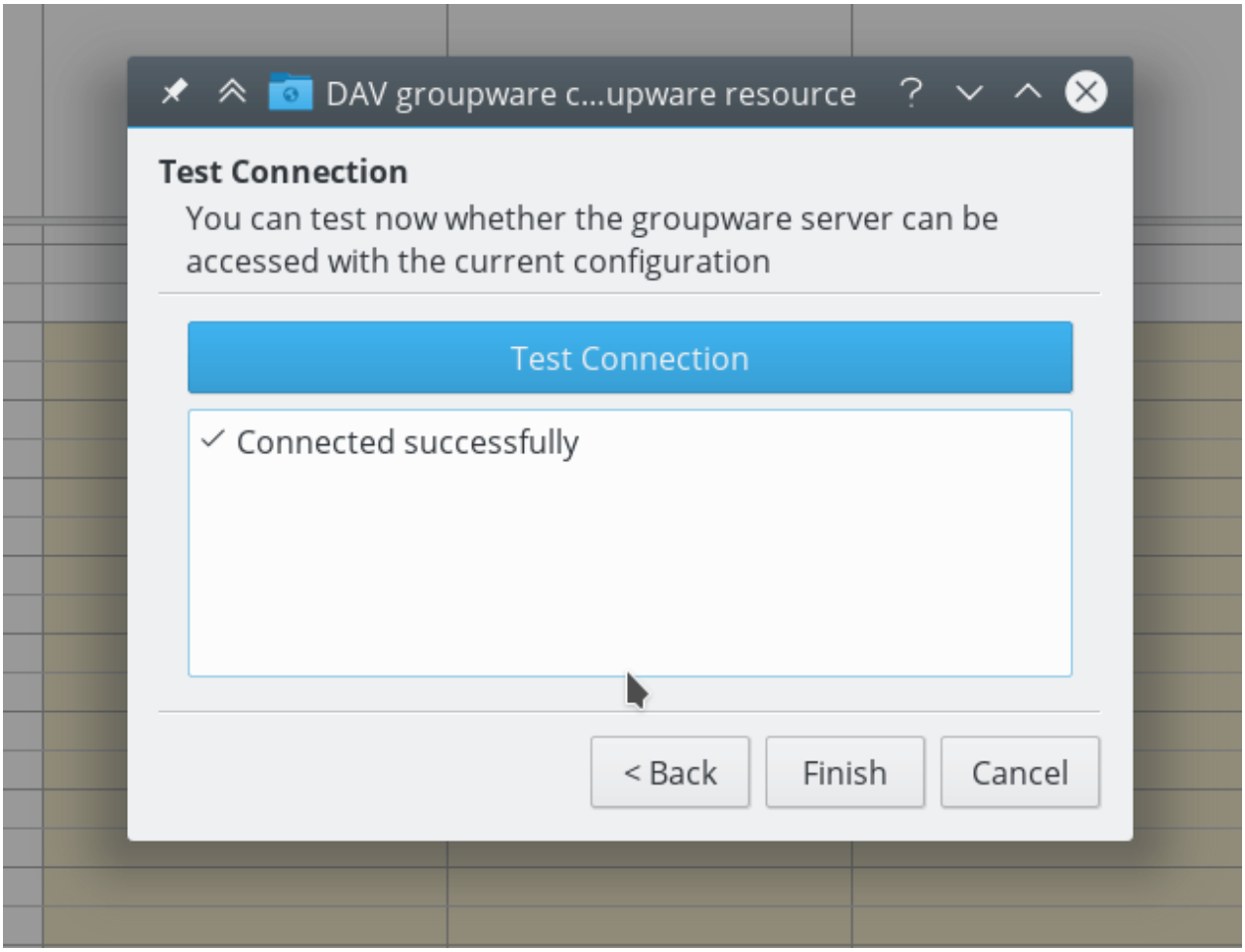



5. Enter your Nextcloud server URL and, if needed, installation path (anything that comes after the first /, for example `mynextcloud` in `https://example.com/mynextcloud`). Then click next:

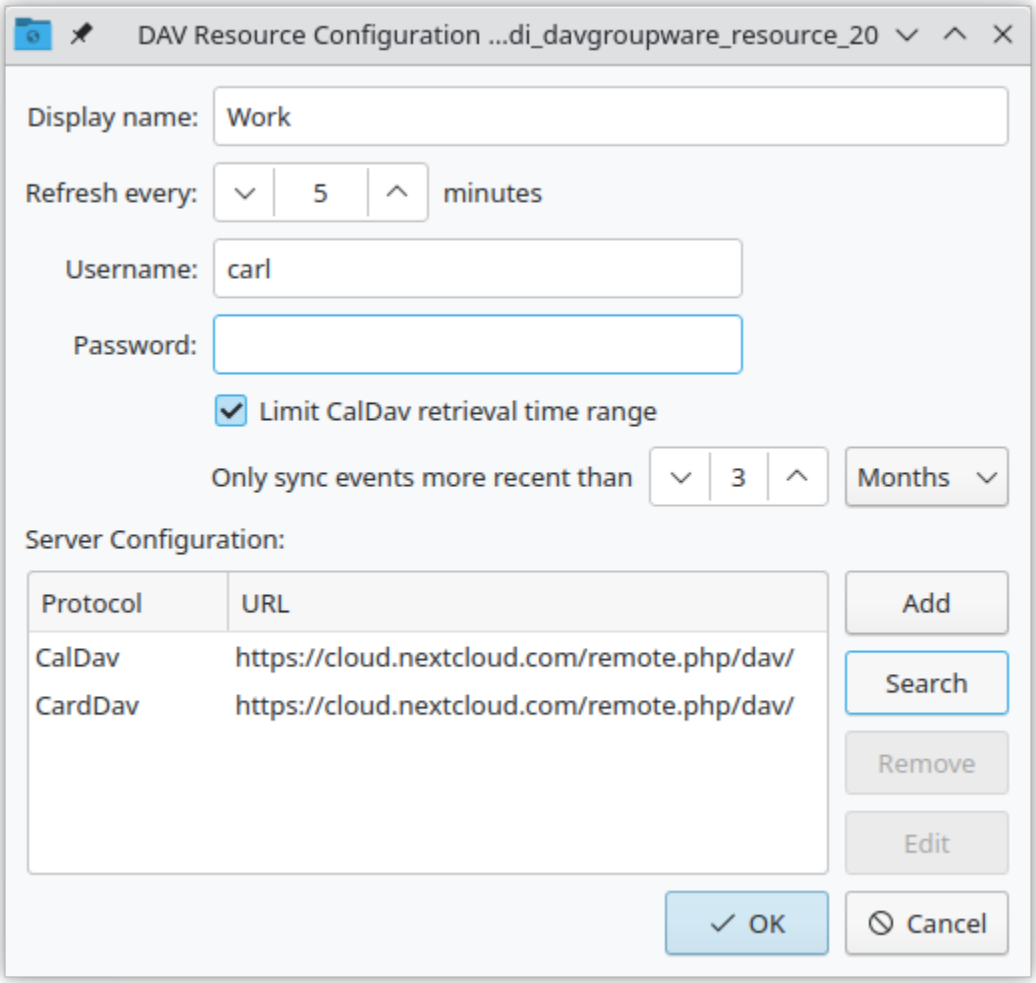



6. You can now test the connection, which can take some time for the initial connection. If it does not work, you can go back and try to fix it with other settings:


DAV groupware c...upware resource
Test Connection
You can test now whether the groupware server can be accessed with the current configuration
Test Connection
< Back
Finish
Cancel



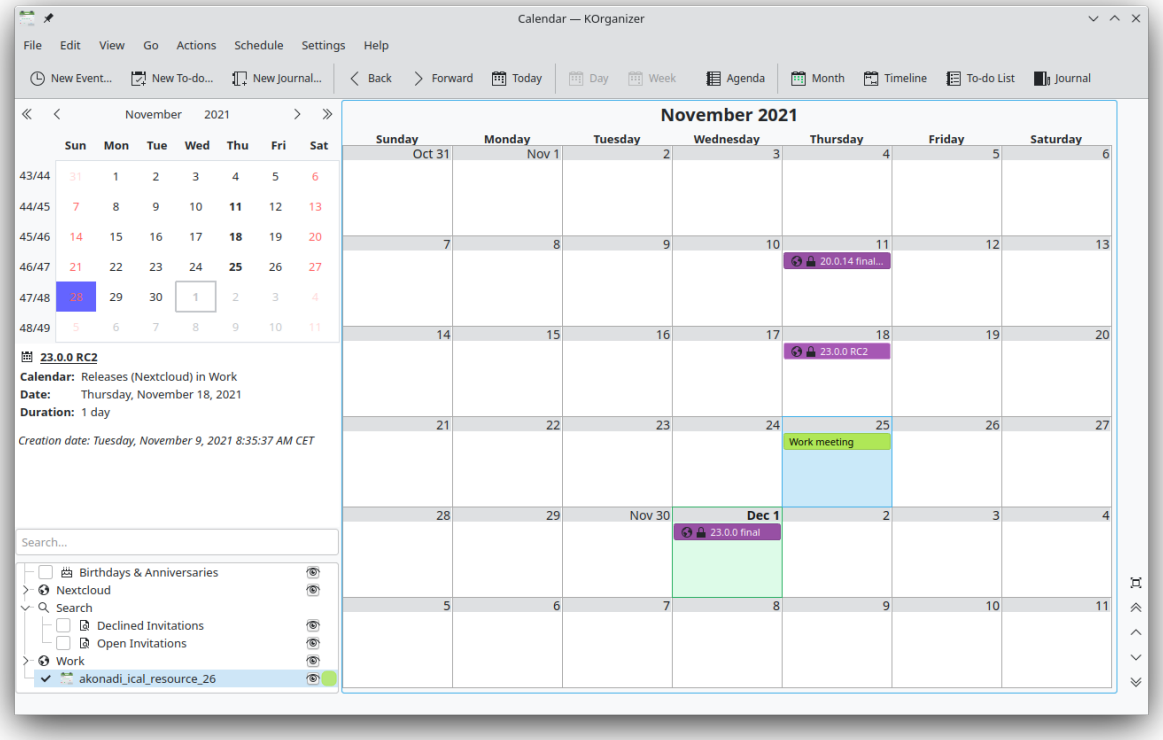

7. Pick a name for this resource, for example `Work` or `Home`. By default, both CalDAV (Calendar) and CardDAV (Contacts) are synced:

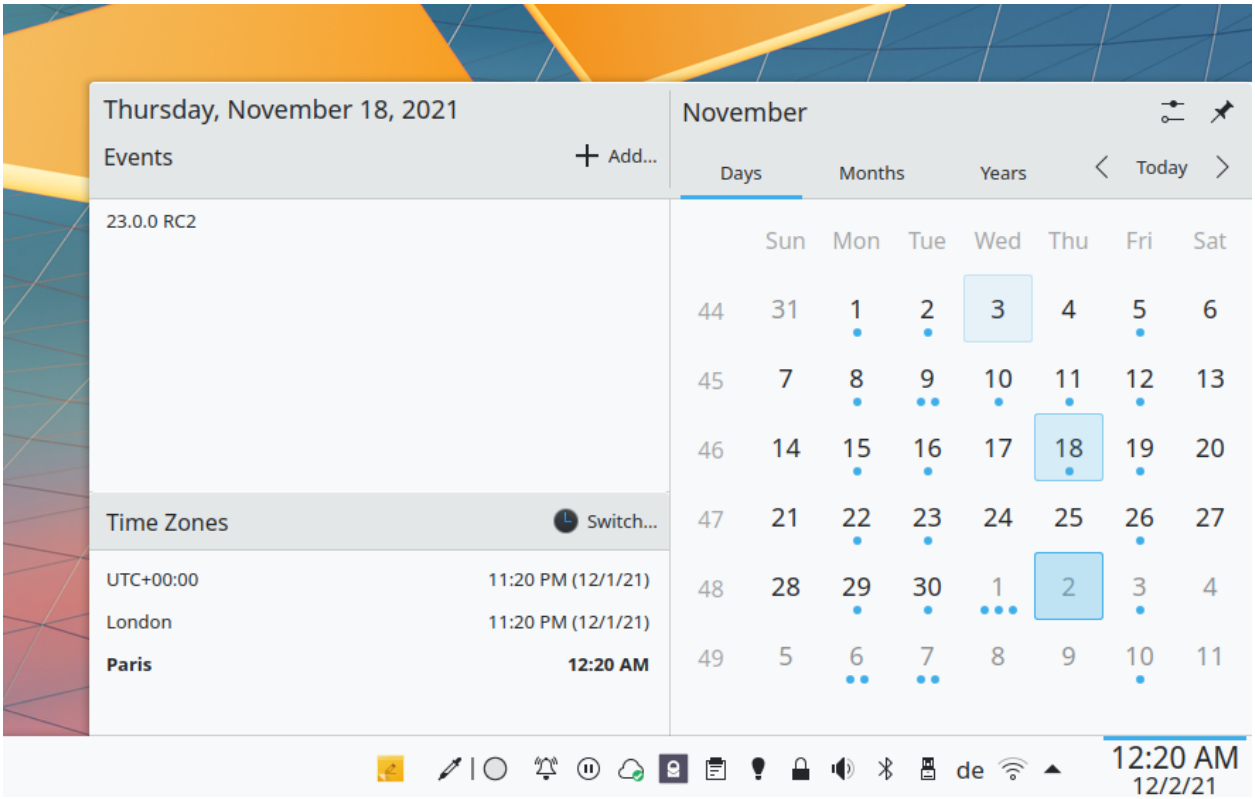

DAV Resource Configuration ...di_davgroupware_resource_20
Display name:
Work
Refresh every:
5
minutes
Username:
carl
Password:
Limit CalDav retrieval time range
Only sync events more recent than
3
Months
Server Configuration:
Protocol
URL
CalDav
https://cloud.nextcloud.com/remote.php/dav/
CardDav
https://cloud.nextcloud.com/remote.php/dav/
Add
Search
Remove
Edit
OK
Cancel

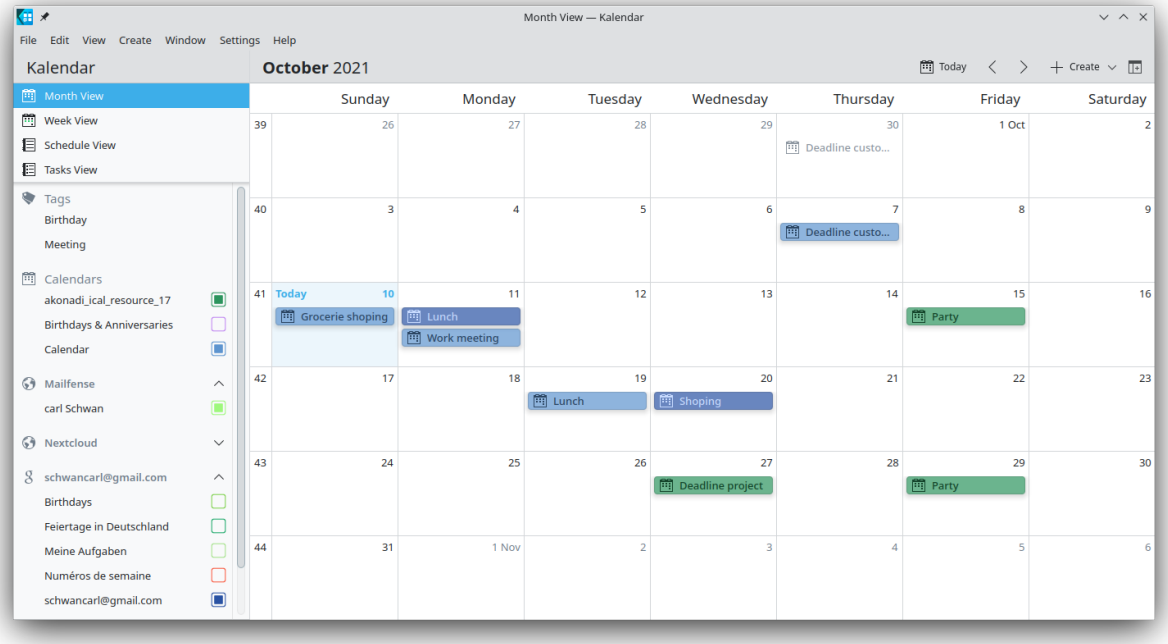
**Note**

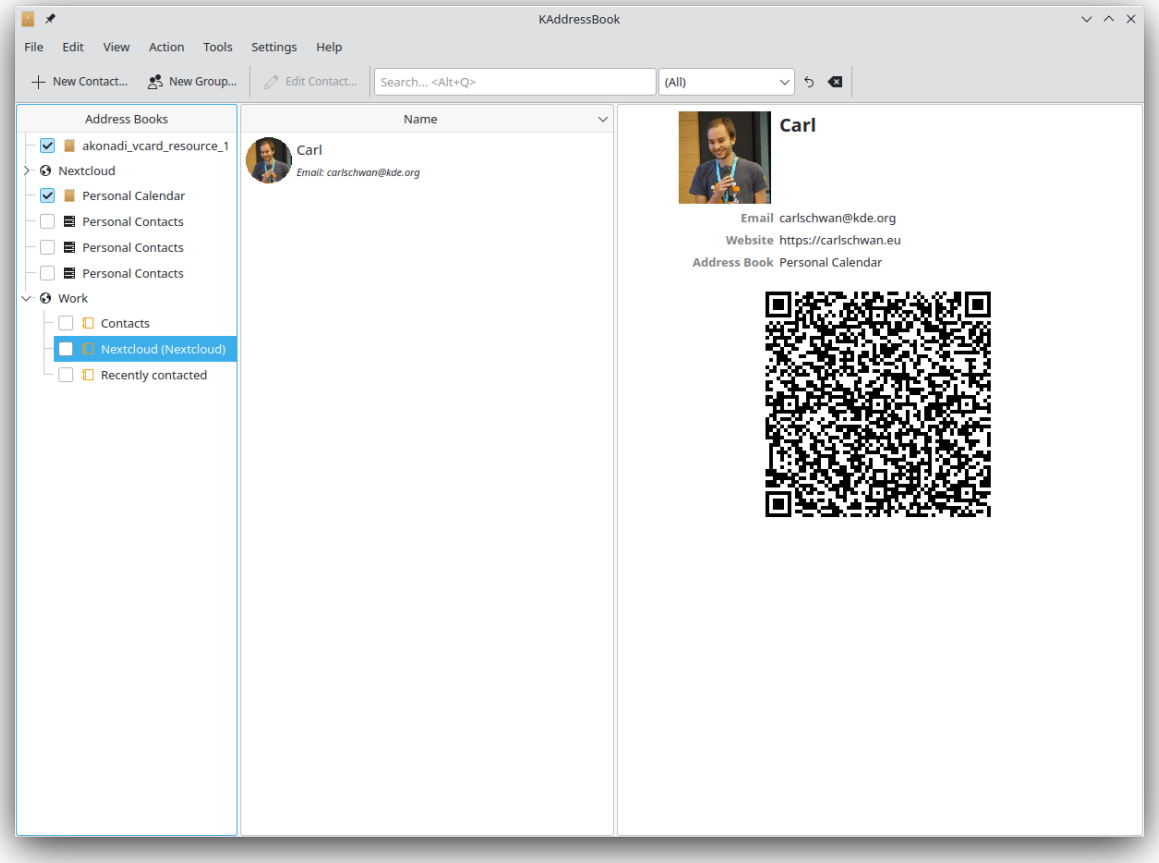
You can set a manual refresh rate for your calendar and contacts resources. By default this setting is set to 5 minutes and should be fine for the most use cases. When you create a new appointment it is synced to Nextcloud right away. You may want to change this for saving your power or cellular data plan, so that you can update with a right-click on the item in the calendar list.

8. After a few seconds to minutes depending on your internet connection, you will find your calendars and contacts inside the KDE Kontact applications KOrganizer, Kalendar and KAddressBook as well as Plasma calendar applet:




Thursday, November 18, 2021
Events
Add...
23.0.0 RC2
Time Zones
Switch...
UTC+00:00
11:20 PM (12/1/21)
London
11:20 PM (12/1/21)
Paris
12:20 AM
November
Days
Months
Years
Today
Sun Mon Tue Wed Thu Fri Sat
de
12:20 AM
12/2/21


Month View — Kalendar
File Edit View Create Window Settings Help
Kalendar
October 2021
Today
Create
Month View
Week View
Schedule View
Tasks View
Tags
Birthday
Meeting
Calendars
akonadi_ical_resource_17
Birthdays & Anniversaries
Calendar
Mailfense
carl Schwan
Nextcloud
schwancarl@gmail.com
Birthdays
Feiertage in Deutschland
Meine Aufgaben
Numéros de semaine
schwancarl@gmail.com
Sunday Monday Tuesday Wednesday Thursday Friday Saturday
Deadline custo...
Deadline custo...
Grocerie shoping
Lunch
Work meeting
Party
Lunch
Shoping
Deadline project
Party

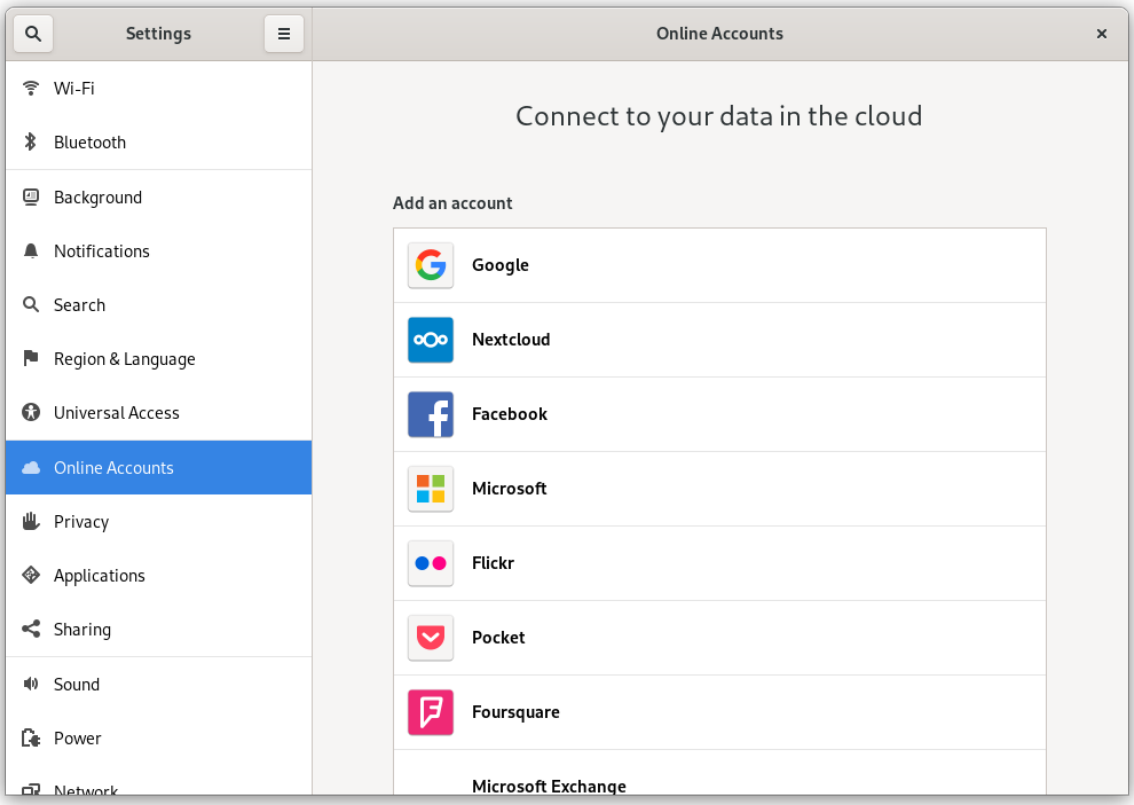



## 6.10 Synchronizing with the GNOME desktop

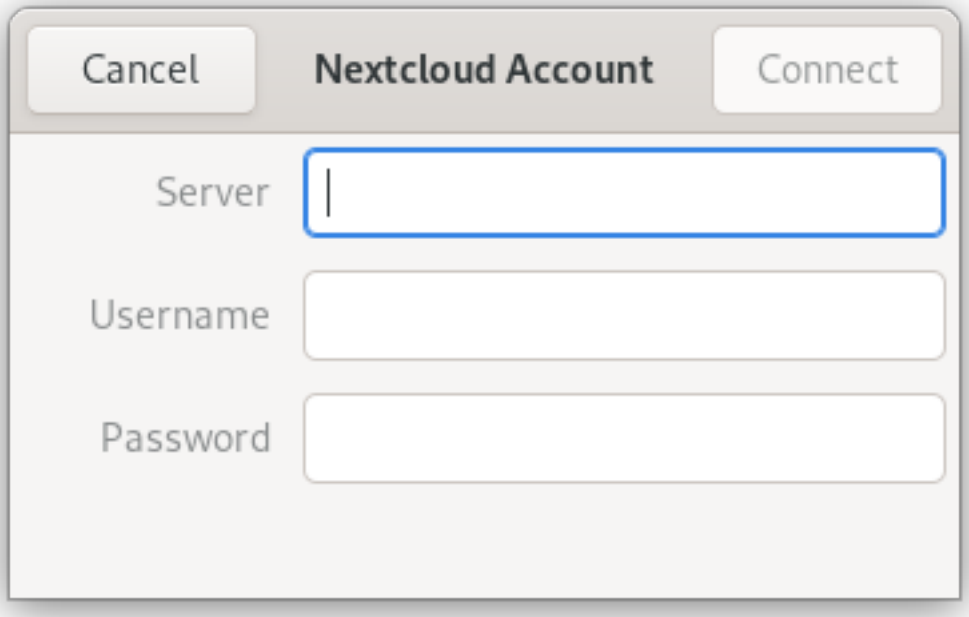
The GNOME desktop has built-in support for Nextcloud's calendar, contacts, and tasks which will be displayed by the Evolution Personal Information Manager (PIM), or the Calendar, Tasks, and Contacts apps. Similarly, Files integrates into the Nautilus file manager via WebDAV. The latter works only while the computer is connected.

This can be done by following these steps:

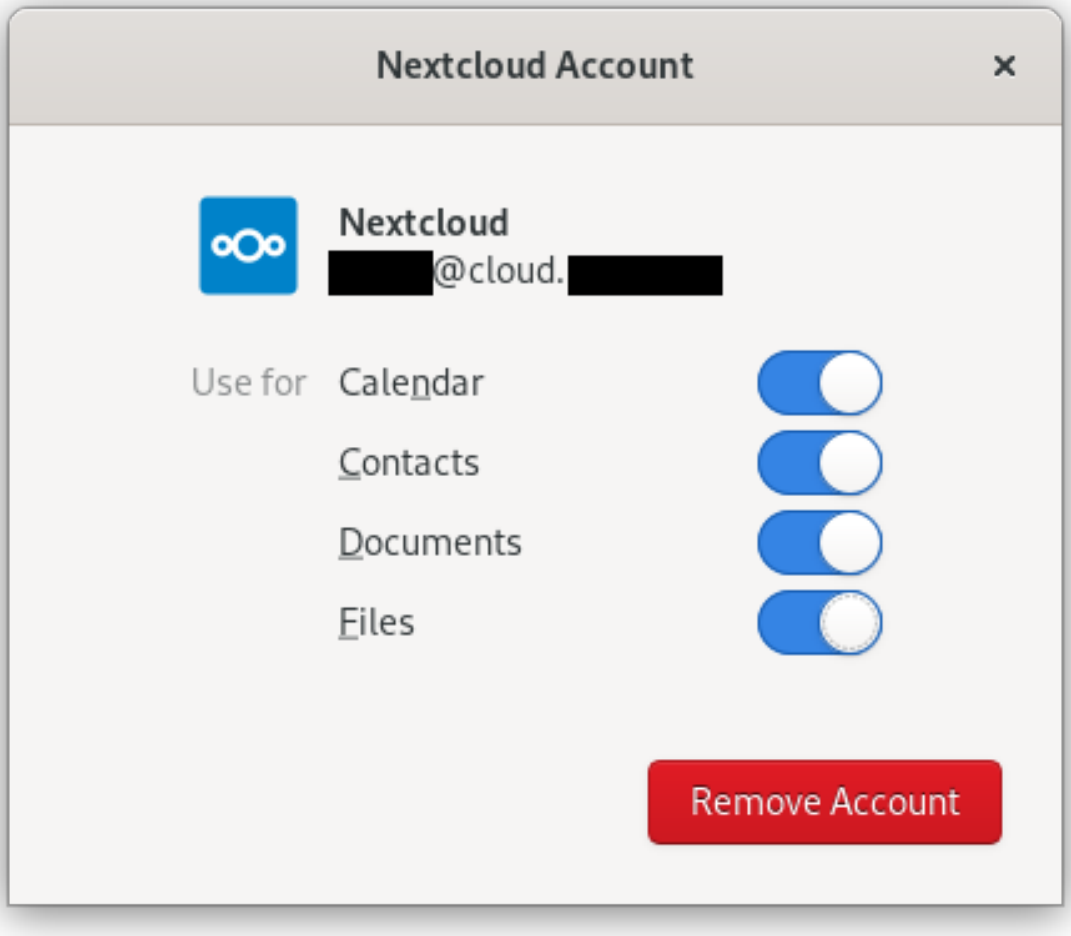
1. In the GNOME settings, open Online Accounts.
2. Under "Add an account" pick `Nextcloud`:




3. Enter your server URL, username, and password. If you have enabled two-factor authentication (2FA), you need to generate an application password/token, because GNOME Online Accounts doesn't support Nextcloud's WebFlow login yet (*Learn more*):



4. In the next window, select which resources GNOME should access and press the **Close** button to close the dialog:




Nextcloud tasks, calendars, and contacts should now be visible in the Evolution PIM, as well as the Task, Contacts, and Calendars apps.

Files will be shown as a WebDAV resource in the Nautilus file manager, and also be available in the GNOME file open/save dialogues. Documents should be integrated into the GNOME Documents app.

All resources should also be searchable from anywhere by pressing the Windows key and entering a search term.

## 6.11 Synchronizing with Windows 10

### 6.11.1 Calendar

1. In your browser, navigate to the Nextcloud Calendar app. Under “Calendar settings”, copy the address using “Copy iOS/macOS CalDAV address” into your clipboard.
2. Launch the Windows 10 Calendar app. Then, click the settings icon (gear icon) and select “Manage accounts”.
3. Click “Add account” and choose “iCloud”.
4. Enter an email, username and password. None of this information has to be valid-it will all be changed in the upcoming steps.

5. Click “Done”. A message should appear indicating the settings were saved successfully.
6. In the “Manage Accounts” menu, click on the iCloud account created in previous steps, and select “Change settings”. Then, click on “Change mailbox sync settings”.
7. Scroll to the bottom of the dialog box, select “Advanced mailbox settings”. Scroll once more to the bottom of the dialog box and paste your CalDAV URL in the field labelled “Calendar server (CalDAV)”.
8. Click “Done”. Enter your Nextcloud username and password in the appropriate fields, and change the account name to whatever you prefer (e. g. “Nextcloud Calendar”). Click “Save”.

### 6.11.2 Contacts

1. Repeat steps 1–7 from the *Calendar instructions*. If you already have set up the Calendar synchronization, you can use the same account for this.
2. From the “Advanced mailbox settings” screen, scroll to the bottom of the dialog box and paste your CardDAV URL in the field labelled “Contacts server (CardDAV)”.
3. Replace the path “principals” within the URL with “addressbooks”.
4. Click “Done”. Enter your Nextcloud username and password in the appropriate fields, and change the account name to whatever you prefer (e. g. “Nextcloud”). Click “Save”.

### 6.11.3 Troubleshooting: 2FA

**NOTE: You will not be able to synchronize your calendar if you have two-factor authentication enabled. Follow the steps below to get an app password that can be used with the Calendar client app:**

1. Log into Nextcloud. Click on your user icon, then click on “Settings”.
2. Click on “Security”, then locate a button labeled “Create new app password”. Next to this button, enter “Windows 10 Calendar app”. Then, click the button, copy and paste the password. Use this password instead of your Nextcloud password when prompted for credentials during setup, for example in Calendar step 8 or Contacts step 4.

### 6.11.4 Troubleshooting: TLSv1.2

- For Windows 10 your Nextcloud https server must support TLSv1.2. This is apparent if no connection attempts are seen on the server, and the Windows client Event Viewer will display Schannel TLS errors under “Windows Logs -> System”.

### 6.11.5 Credits

Special thanks to this Reddit user for their post: https://www.reddit.com/r/Nextcloud/comments/5rcypb/using_the_windows_10_calendar_application_with/

## 6.12 Migrate data between instances

The User Migration App lets you move your Nextcloud Groupware data between instances.

The following data can be migrated:

- Contacts and groups
- Calendars including events, details and attendees
- Calendar app settings including appointment and proposal schedule configurations
- Mail account parameters, aliases and preferences

**Important**

The User Migration App must be installed on both instances, along with the latest version of the respective Nextcloud Groupware app.

Once the User Migration App is installed, you can start the migration process by going to your **Personal settings** and clicking on **Data migration** on the left side. You can choose which data you want to migrate and start the export process. Once the export is finished, download the generated file and import it onto the new instance by going to the same section.

CHAPTER

SEVEN

# TALK

Nextcloud Talk offers audio/video and text chat integrated in Nextcloud. It is available as a web interface, desktop client, and mobile apps for Android and iOS.

You can find out more about Nextcloud Talk on our website. Download the desktop and mobile clients from nextcloud.com/install.




## 7.1 Chat

### 7.1.1 Sending messages

#### Using Markdown

You can enhance your messages using Markdown syntax. Supported elements:

**Headings and dividers**

```
# Heading 1
## Heading 2
### Heading 3
#### Heading 4
##### Heading 5
###### Heading 6

Heading
===
Normal text
***
Normal text
```

**Inline decorations**

````
**bold text** __bold text__
*italicized text* _italicized text_
`inline code` ``inline code``
```
.code-block {
  display: pre;
}
```
````

**Lists**

```
1. Ordered list
2. Ordered list

* Unordered list
- Unordered list
+ Unordered list
```

**Quotes**

```
> blockquote
second line of blockquote
```

**Task lists**

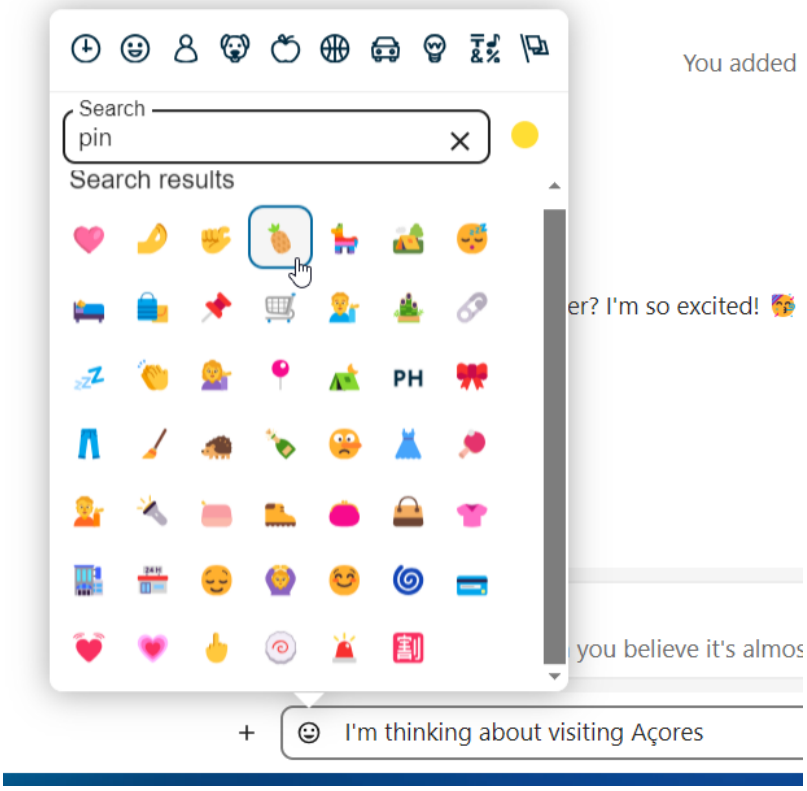
```
- [ ] task to be done
- [x] completed task
```

**Tables**

```
Column A | Column B
-- | --
Data A | Data B
```

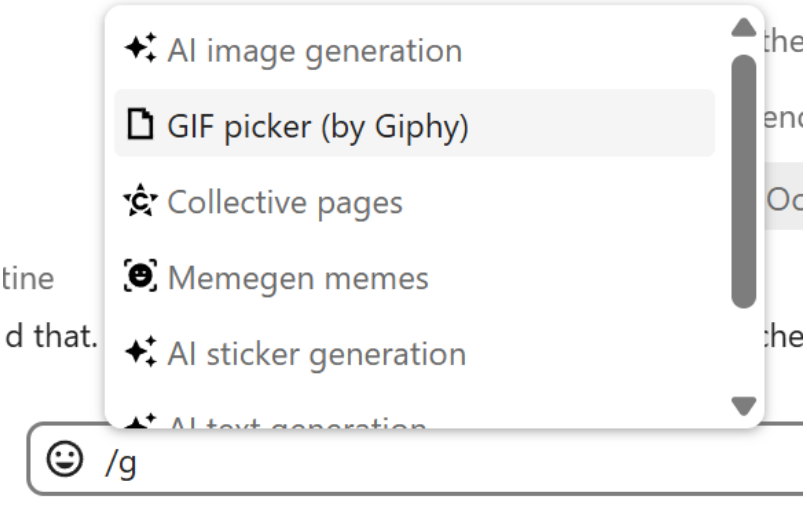
### Inserting emoji

You can add emoji using the picker on the left of the text input field.




### Smart Picker

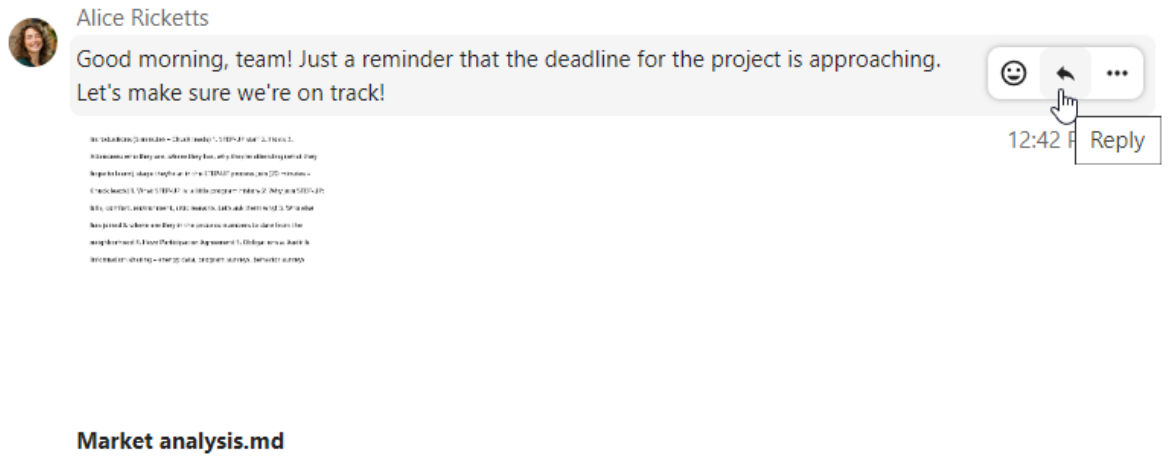
The smart picker makes it easier to insert links, files, or other content into your conversations. Just choose the type of content you want to insert (files, Talk conversations, Deck cards, GIFs, etc.). You can also type / in the chat input to open the selector.



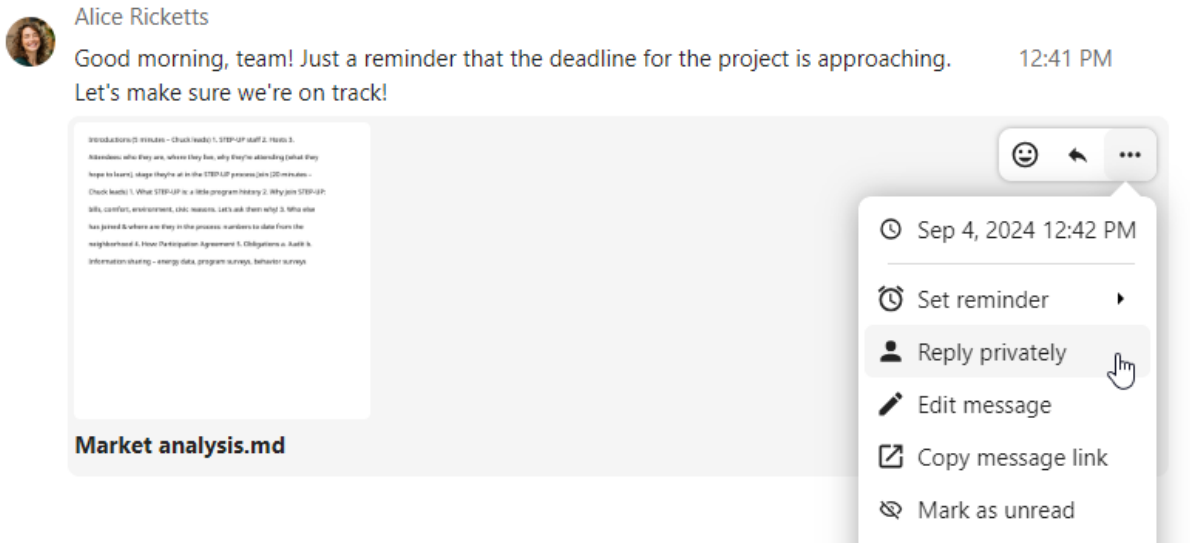

Several integration apps can extend the Smart Picker with additional content types, such as GitHub and GitLab issues, Giphy GIFs, and more. Ask your administrator which integrations are available on your instance.

### Replying to messages and more

You can reply to a message using the arrow that appears when you hover a message.



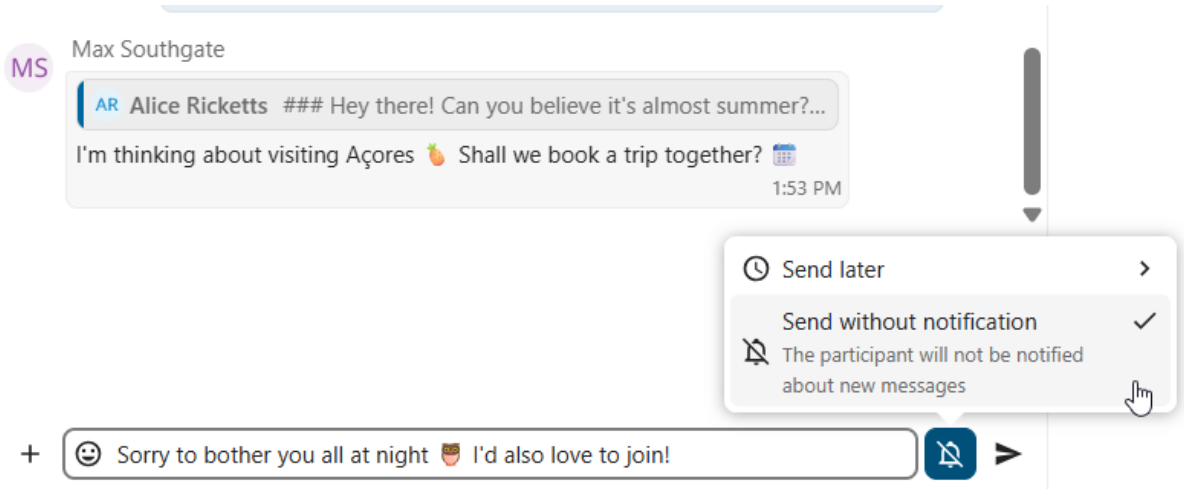

In the . . . menu you can also choose to reply privately. This will open a one-to-one conversation.




Here you can also create a direct link to the message or mark it unread so you will scroll back there next time you enter the chat. When it is a file, you can view the file in Files.

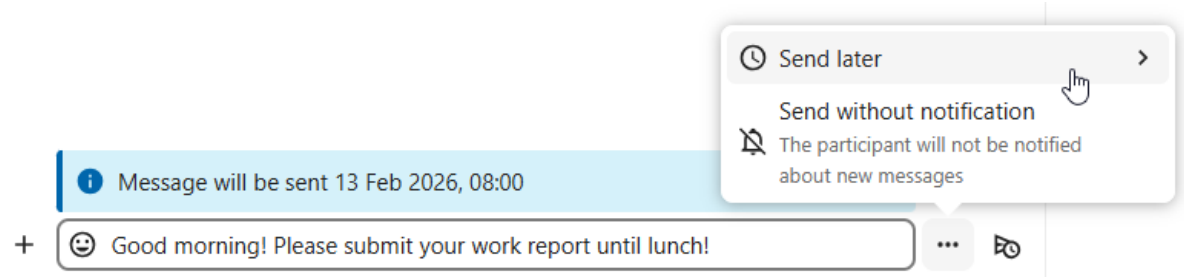
### Silent messages

If you don't want to disturb anyone in the middle of the night, there is a silent mode for chatting. While it is enabled, other participants will not receive notifications from your messages.




### Scheduling messages

If you want to send a message not right now, but at a specific time, you can schedule it. Just select the desired date and time in the quick actions next to the input field.

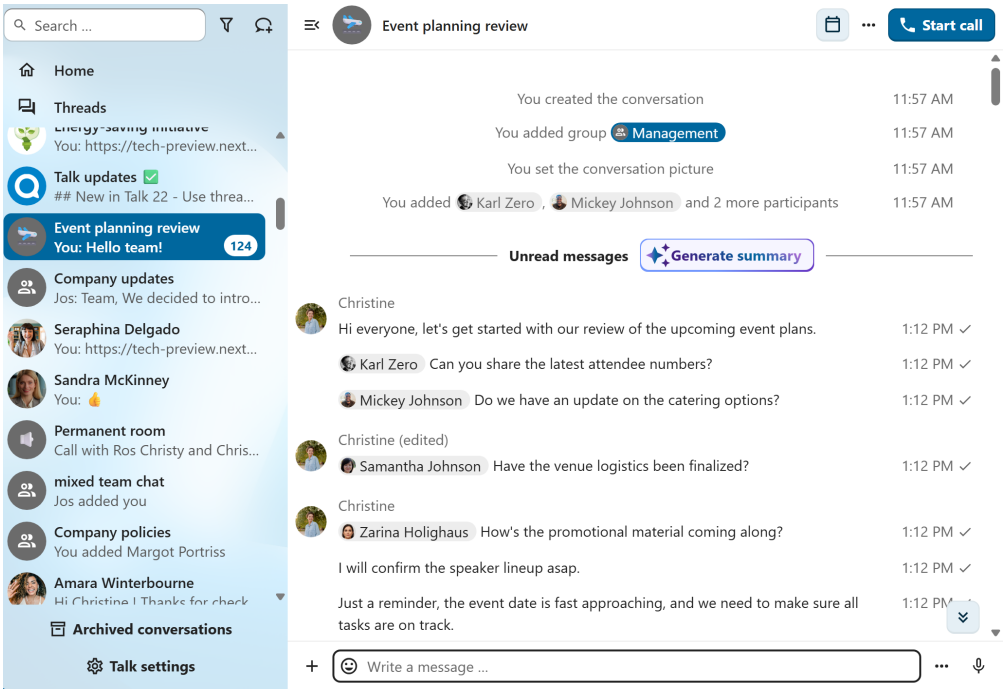


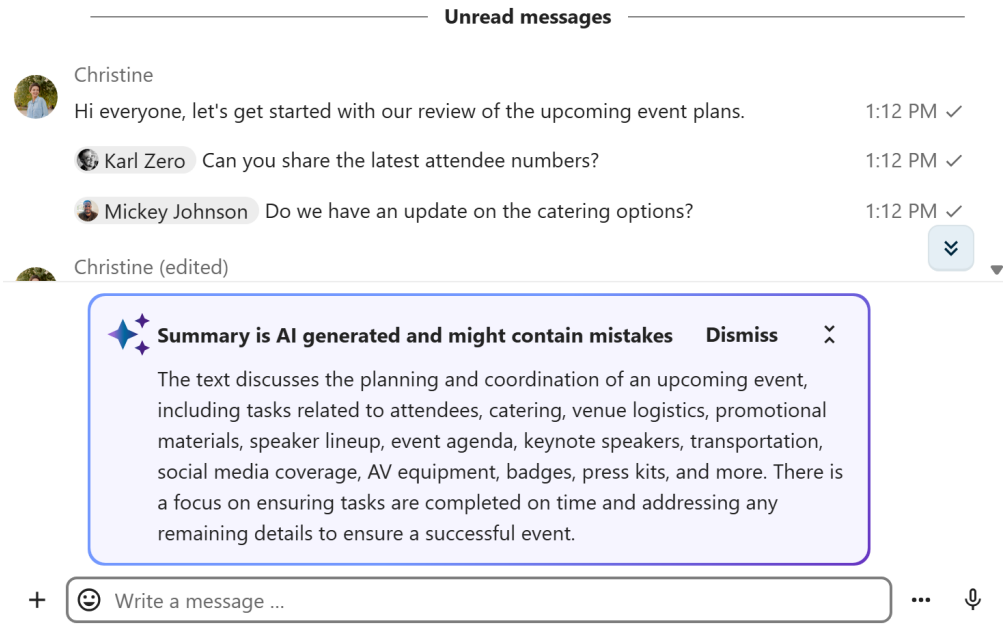

You can find all your scheduled messages by clicking on the clock icon next to the input field. There you can edit, reschedule or delete currently prepared messages.




### Chat summary

When AI assistant is enabled, a summary can be generated for a conversation if there are more than 100 unread messages. You can generate it by pressing the button that is visible in chat above the first unread messages.

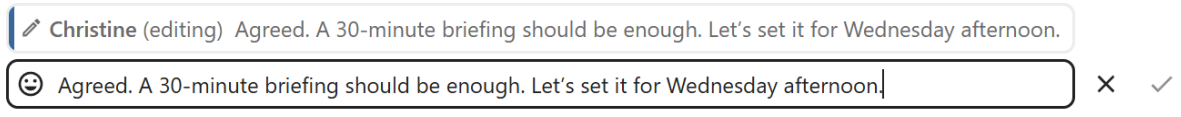



## 7.1.2 Interacting with messages

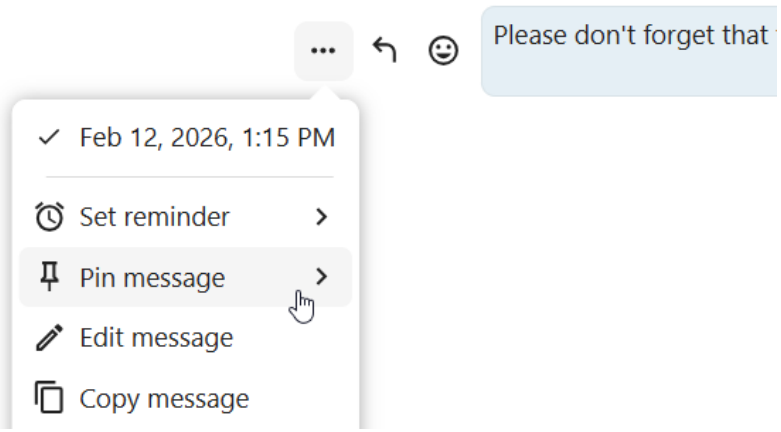
### Editing messages

You can edit messages and captions to file shares up to 6 hours after sending.

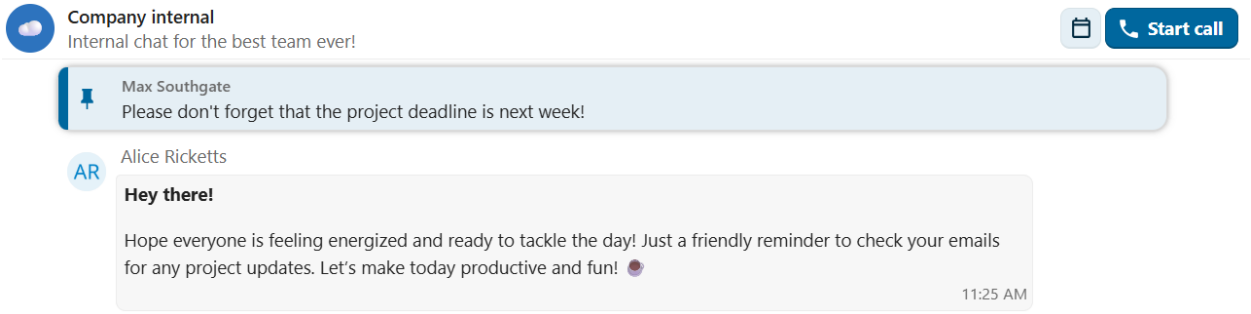


### Pinning messages

A moderator can pin important messages in a conversation, for a certain period of time or until it's no longer relevant.

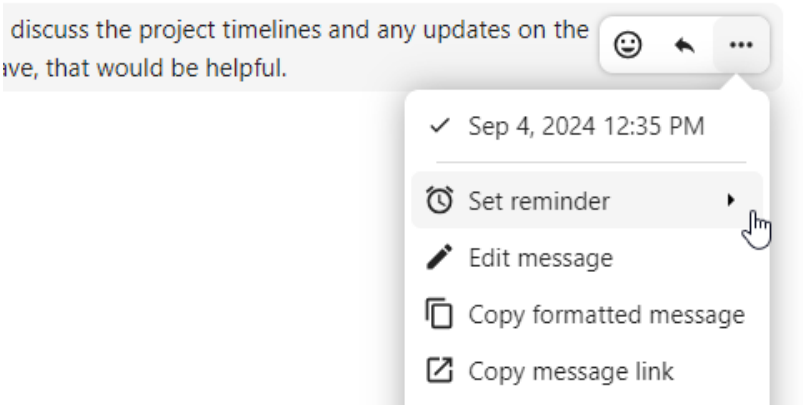



Pinned messages are highlighted and accessible above the chat or in the `Shared items` tab of the content sidebar. If you no longer need a pinned message, you can unpin it for everyone or only yourself from quick actions.

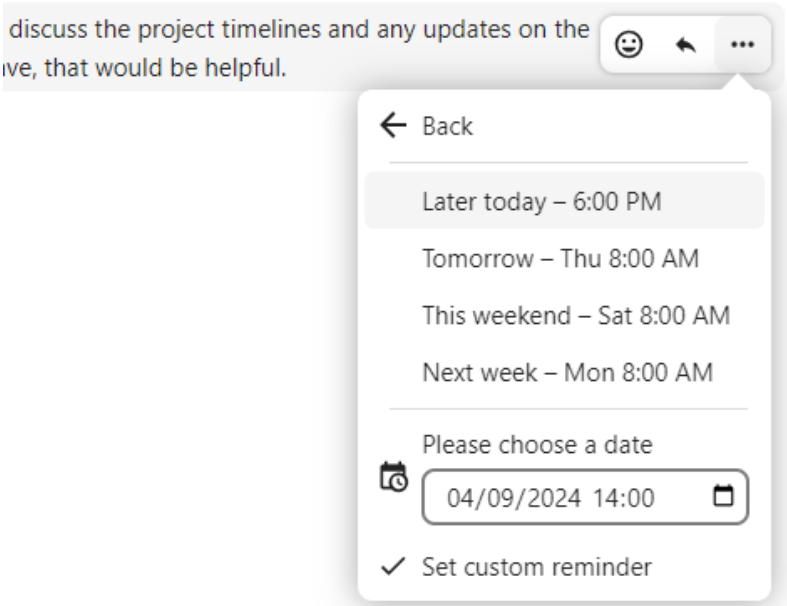



### Setting reminder on messages

You can set reminders on specific messages. If there's an important message you want to be notified about later, simply hover over it and click on the reminder icon.



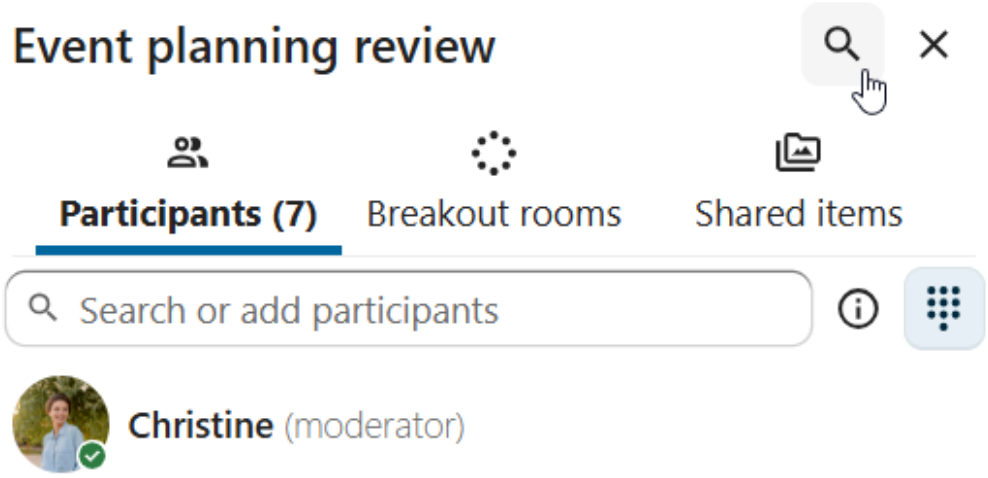

In the submenu, you can select an appropriate time to receive a notification later.



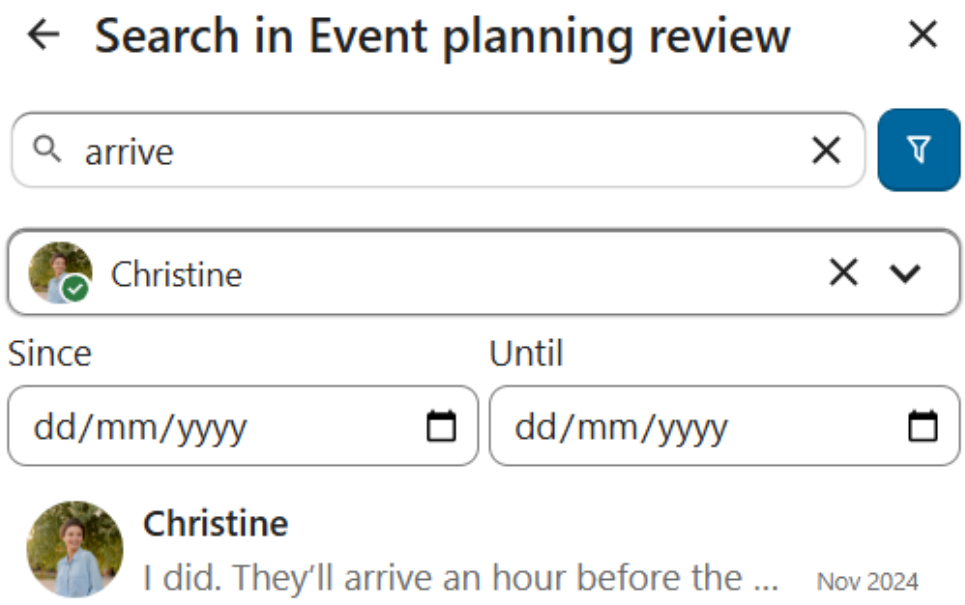

You can also forward a message to another conversation using the . . . menu, or send it to your **Note to self** conversation for personal reference.

### Messages search in a conversation

In addition to global unified search, you can search for messages within a specific conversation. In the content sidebar of a conversation, click the search icon to open the search tab.

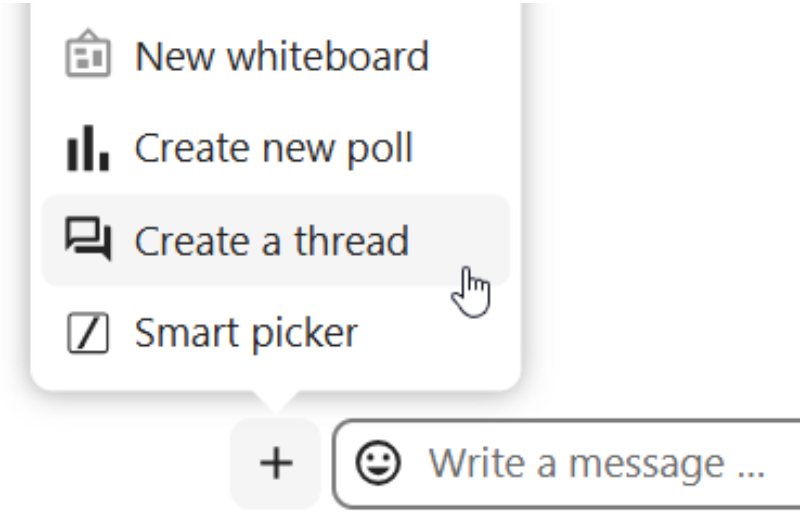



You can narrow down your search by using filters such as date range, and sender.

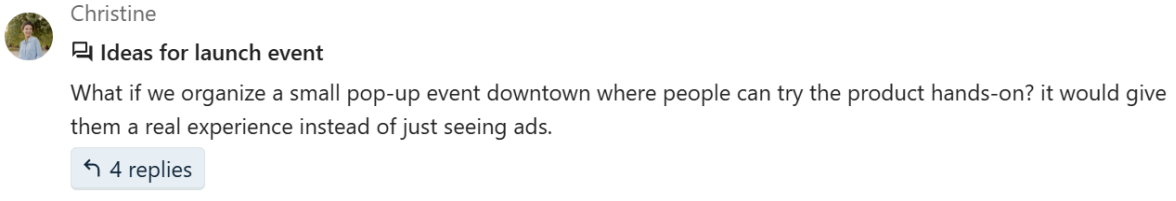



### Threaded messages

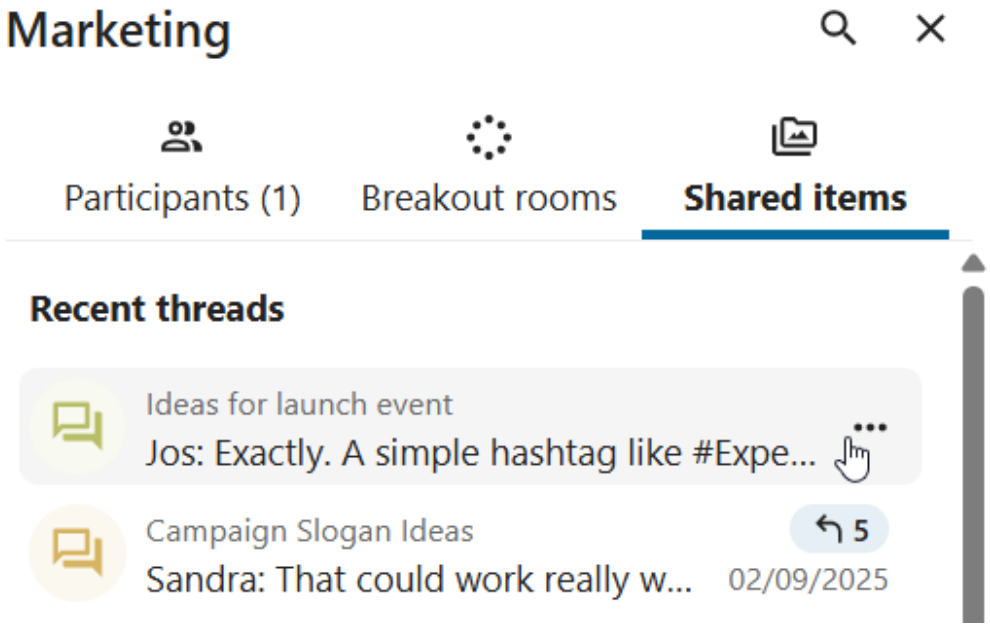
You can create threads in conversations to keep discussions organized. The thread creation option is available in the new message additional actions.



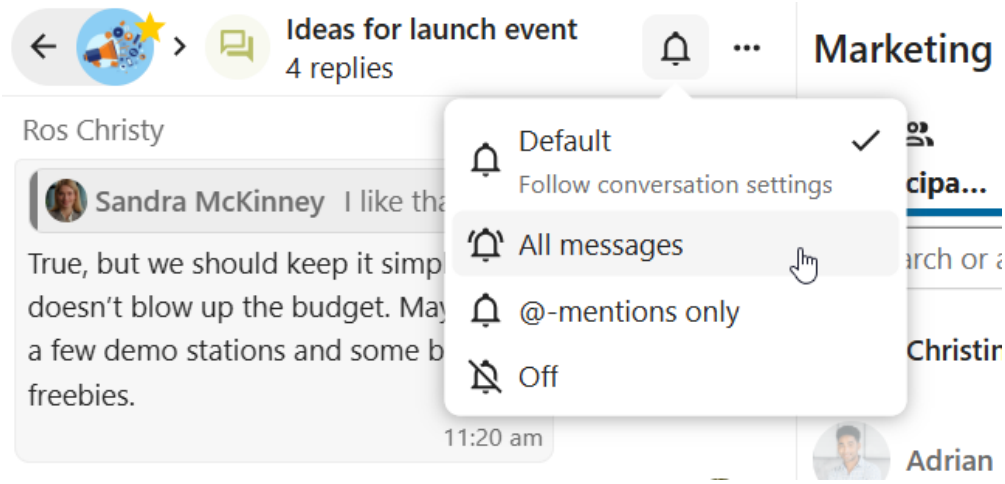

Then, you can add a title and description for the thread and start the discussion.



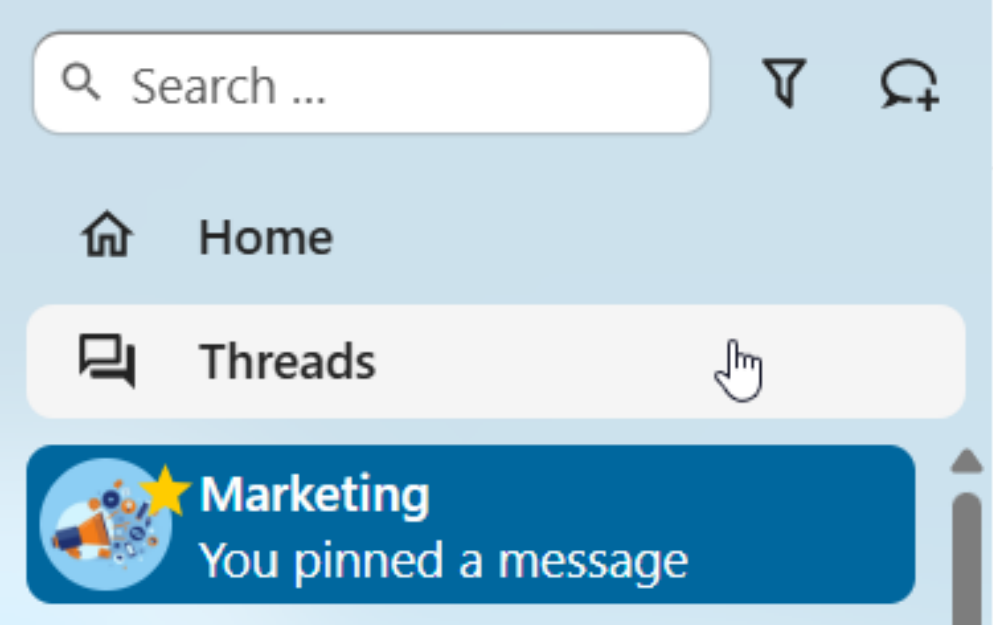

You can view all replies in a thread either from the replies button on the message or from `Shared items` tab in the content sidebar.



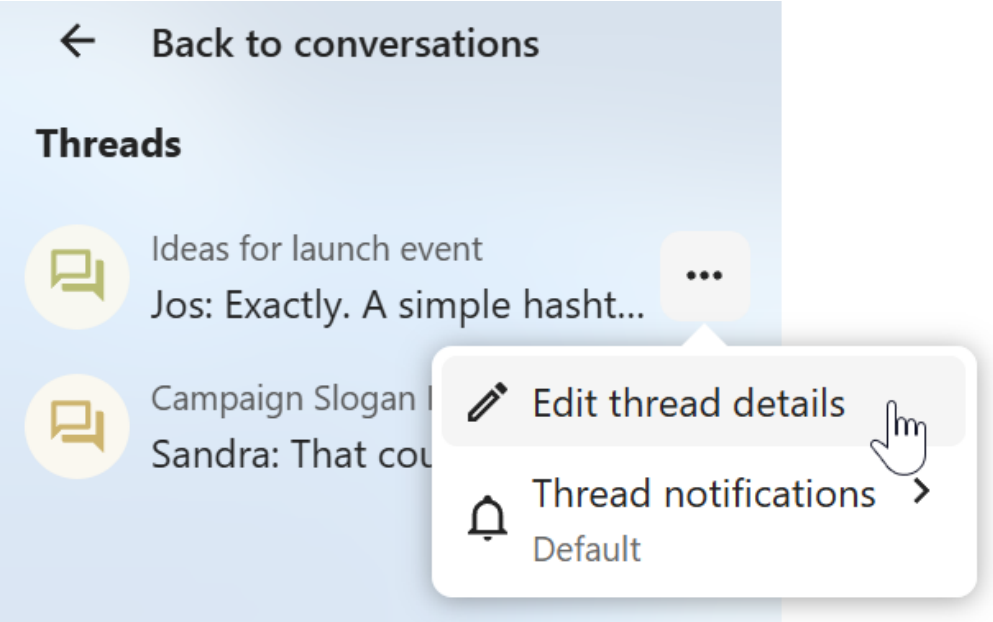

You can subscribe to a thread to receive notifications about new replies. It is possible to subscribe from the thread itself or from the sidebar.




Subscribed threads are easily accessible from the navigation bar in `Threads` navigation.




You can edit the thread title from the thread itself or from the sidebar.



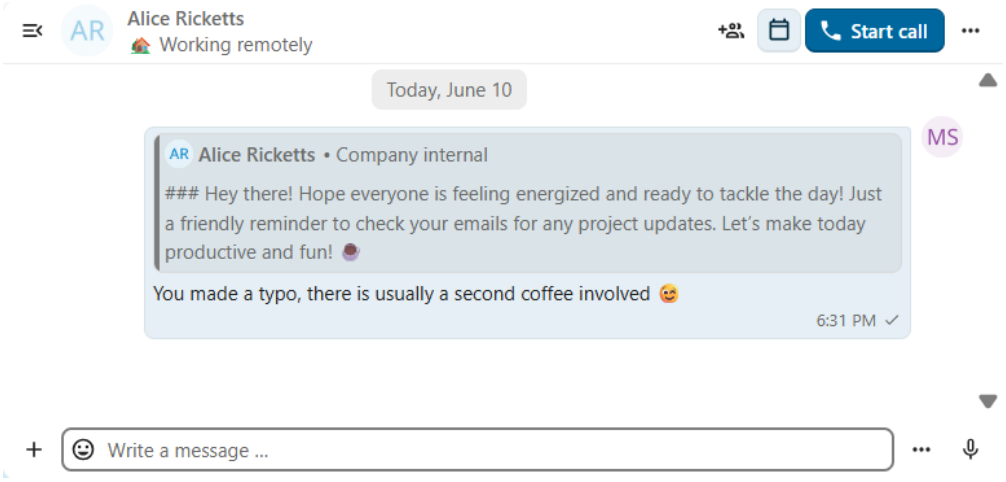

### Private replies

Private replies are messages that are forwarded directly to a one-to-one conversation between you and specific message author, to maintain privacy where it's needed.

1. In group and public conversations, select a message you want to reply to privately
2. In message actions, select `Reply privately`
3. A one-to-one conversation window opens with the original message quoted
4. Add your response and send a message

The reply provides a full context of a quoted message — including the original sender's name, original conversation

context, and backlink.




### Message reactions

Add emoji reactions to messages to quickly express agreement, celebrate, or indicate emotions without typing full responses.

1. Hover over a message in the chat
2. Click the `Add reaction` button from message actions
3. Select an emoji from the list of frequently used or full picker

You can hover over a reaction to see other users who reacted with it. Click one of the existing reactions to react with the same emoji! You can click it again to remove your reaction from the message.



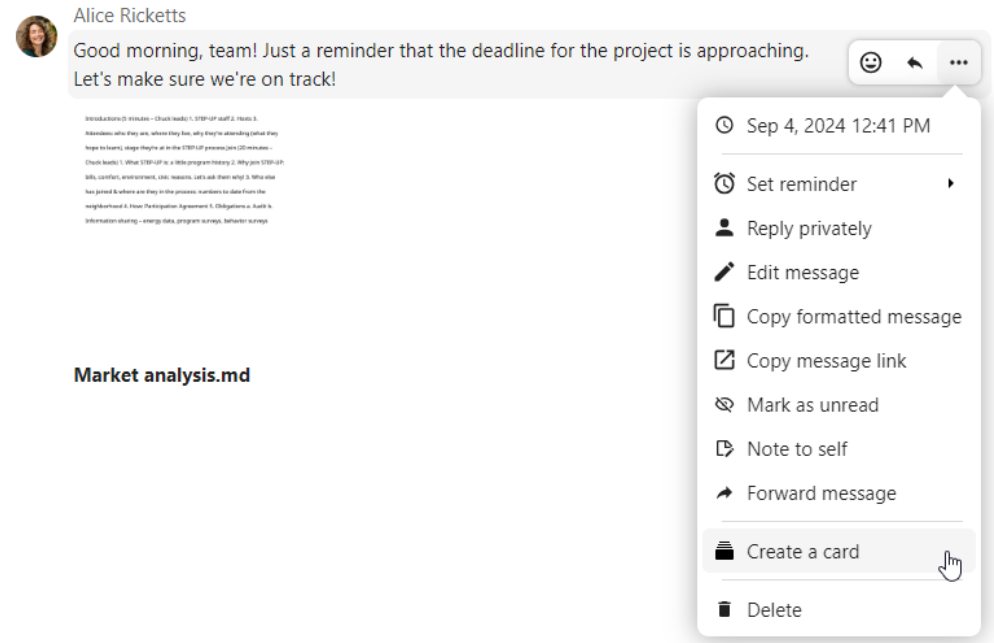

## 7.1.3 Apps integrating with messages

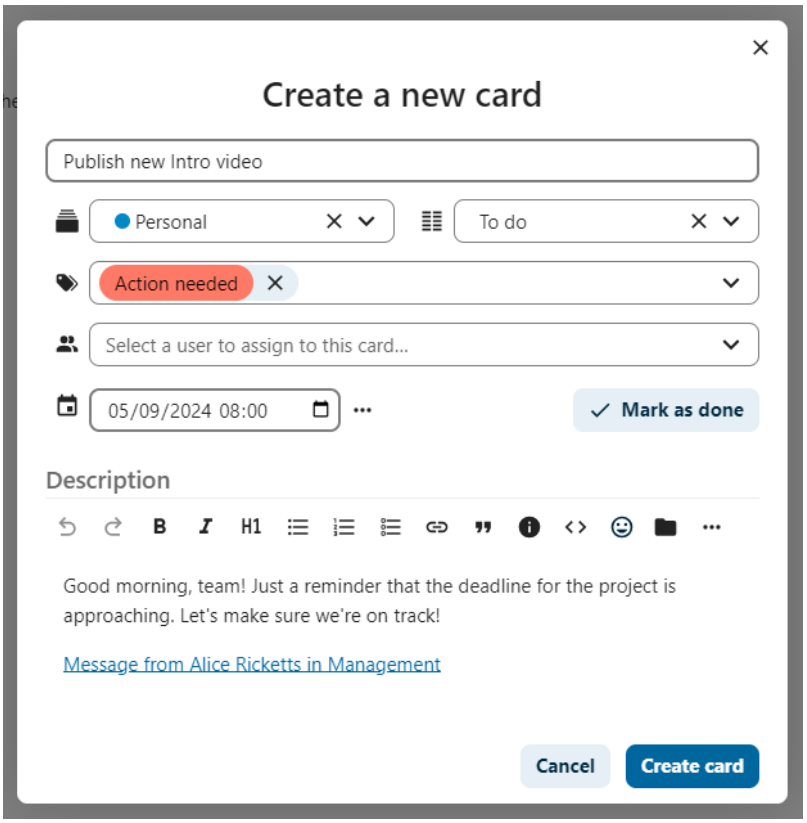
Several apps integrate with Talk messages, allowing you to turn messages into actionable items or share content directly in conversations.

### Deck

### Create tasks from chat message

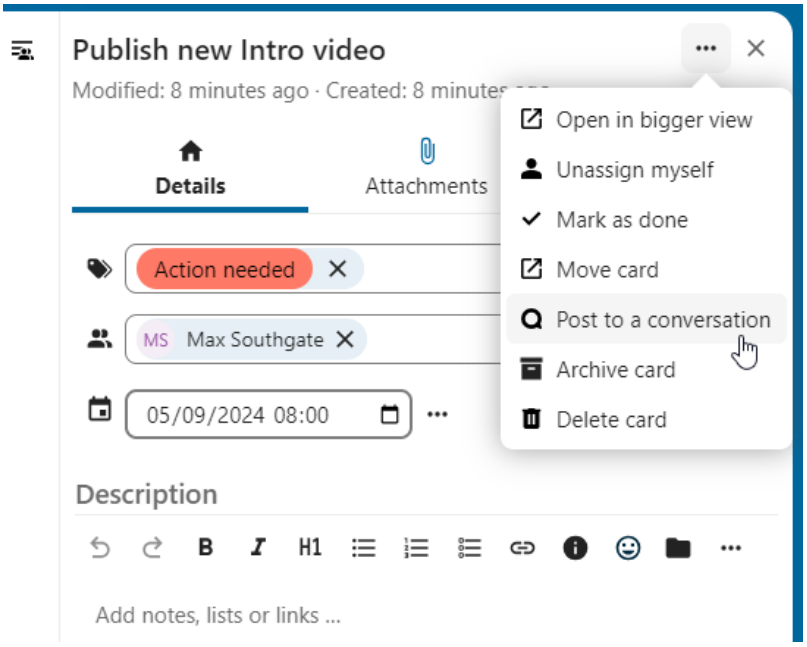
If Deck is installed, you can use the `...` menu of a chat message and turn the message into a Deck card.


Alice Ricketts
Good morning, team! Just a reminder that the deadline for the project is approaching. Let's make sure we're on track!
Market analysis.md
Sep 4, 2024 12:41 PM
Set reminder
Reply privately
Edit message
Copy formatted message
Copy message link
Mark as unread
Note to self
Forward message
Create a card
Delete


Create a new card
Publish new Intro video
Personal
To do
Action needed
Select a user to assign to this card...
05/09/2024 08:00
Mark as done
Description
Good morning, team! Just a reminder that the deadline for the project is approaching. Let's make sure we're on track!
Message from Alice Ricketts in Management
Cancel
Create card

### Share card into a chat

From within Deck, you can share cards into a chat.





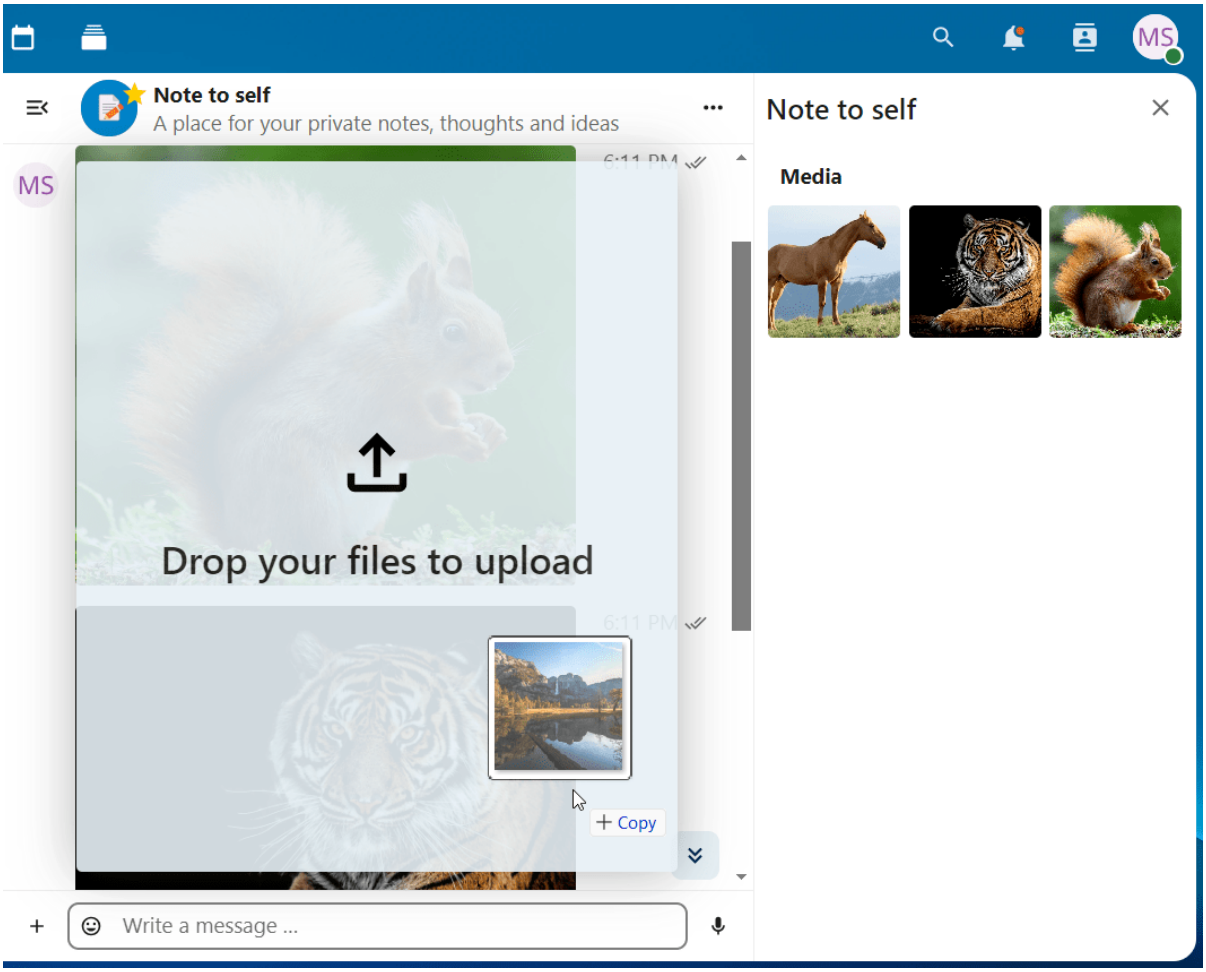


## 7.1.4 Attachments

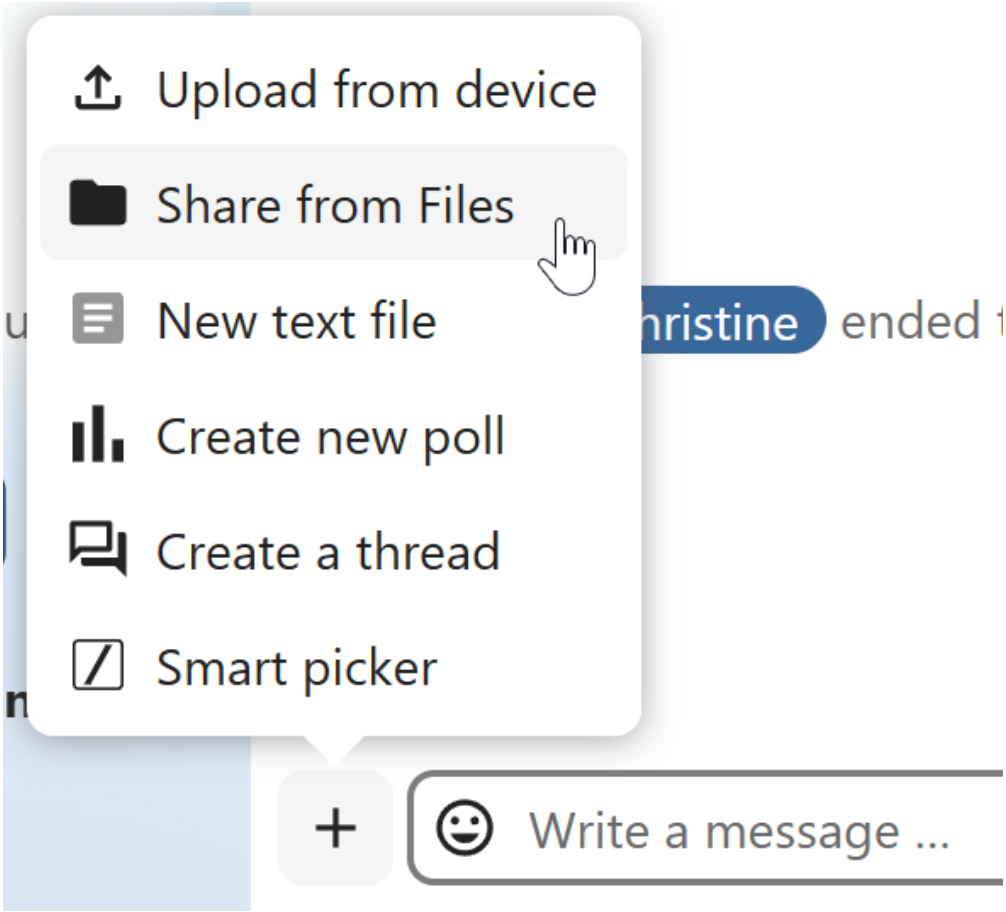
### Sharing files in a chat

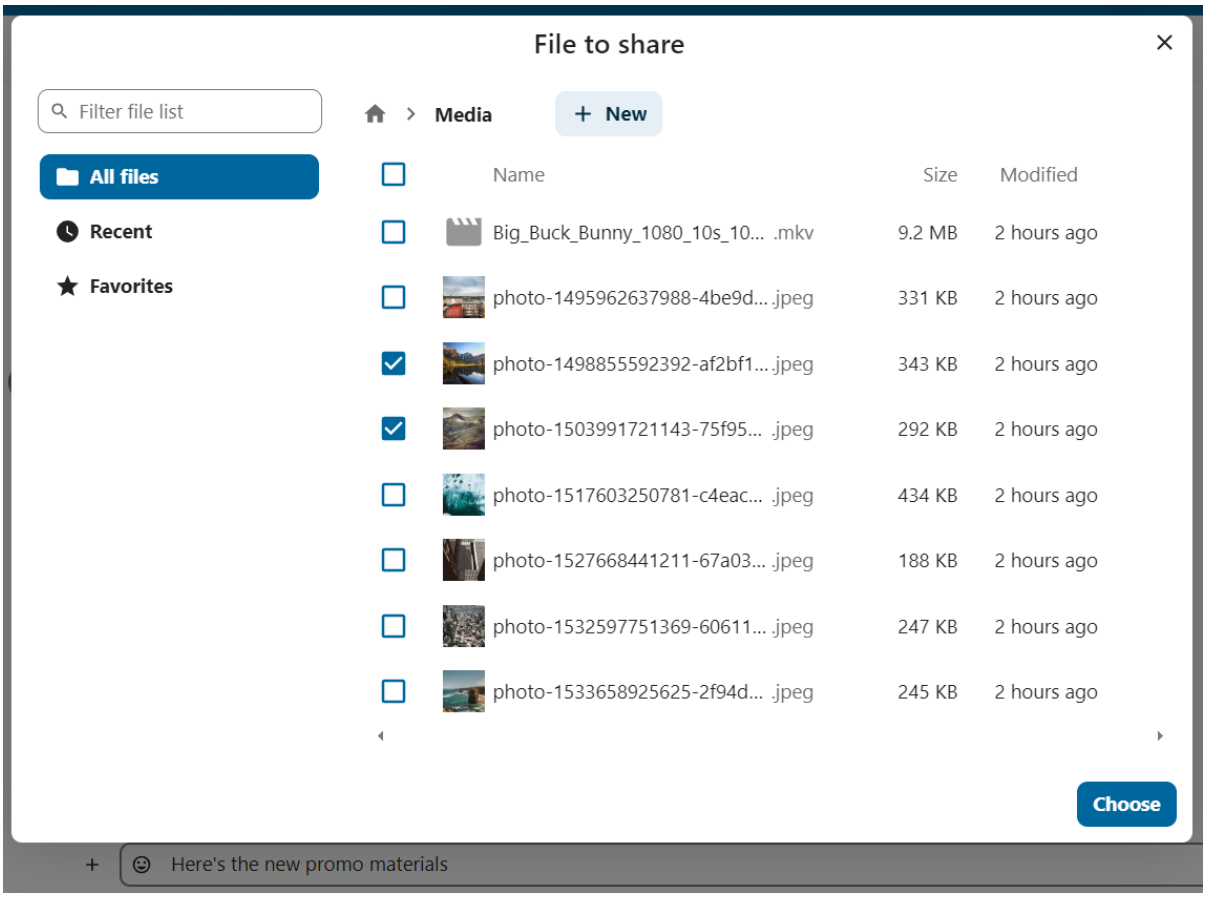
You can share files in a chat in three ways.

First, you can simply drag'n'drop them on the chat.

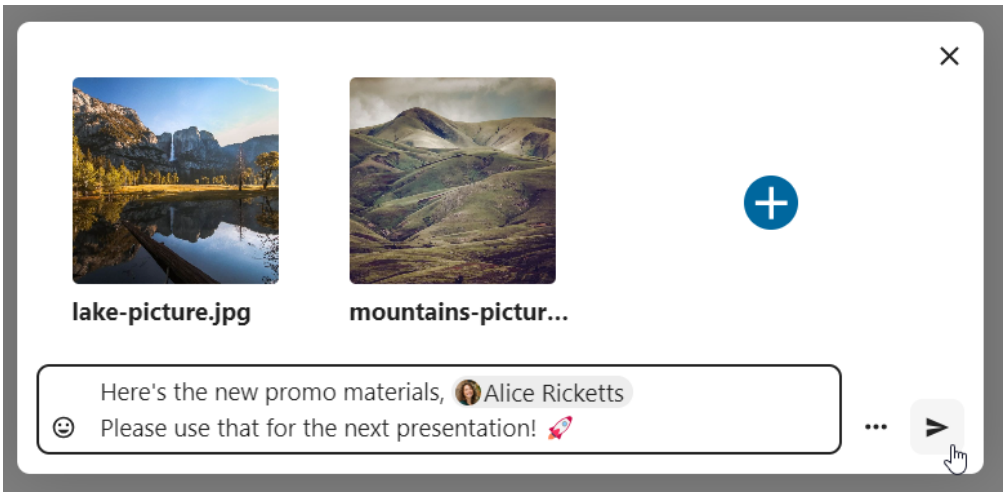



Second, you can select a file from your Nextcloud Files or a file manager by choosing the little paperclip and selecting where you'd like to pick the file from.

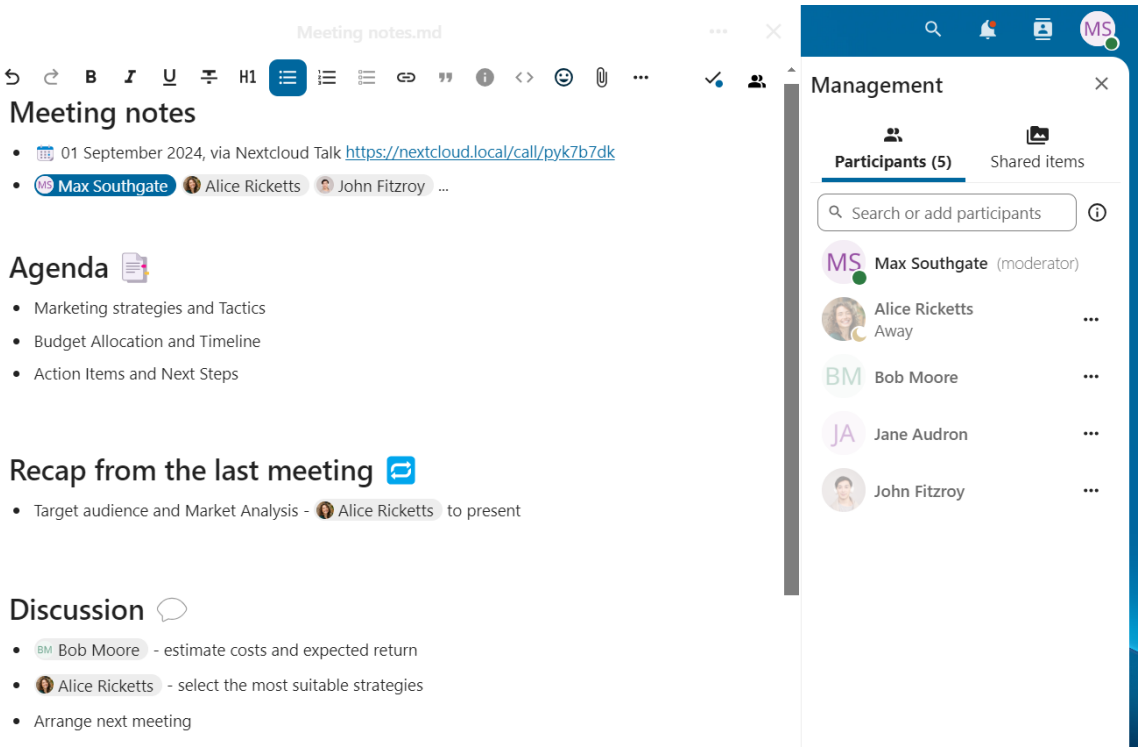

Upload from device
Share from Files
New text file
Create new poll
Create a thread
Smart picker
ristine
ended
Write a message ...




You can add more files until you are done and decide to share the files. You can also add a text caption to your shared files, providing a brief description or context.

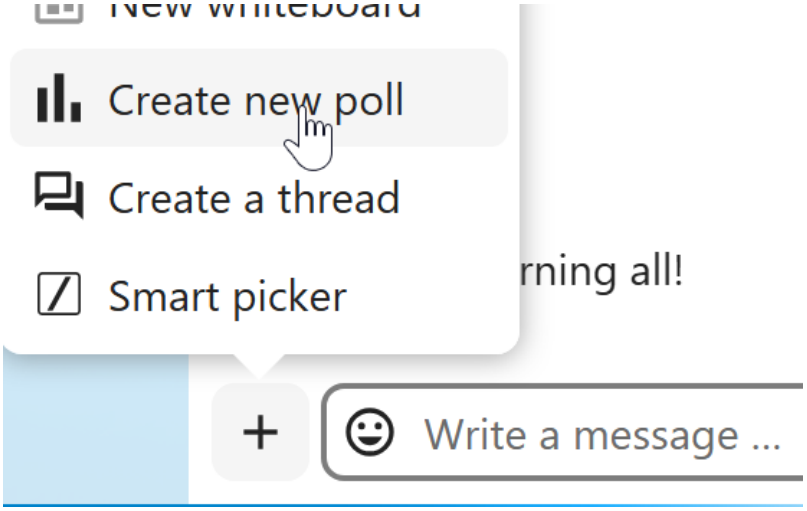



All users will be able to click the files to view, edit or download them, regardless of whether they have a Nextcloud account. Users with an account will have the file automatically shared with them while external guest users will get them shared as a public link.




### Polls in chat

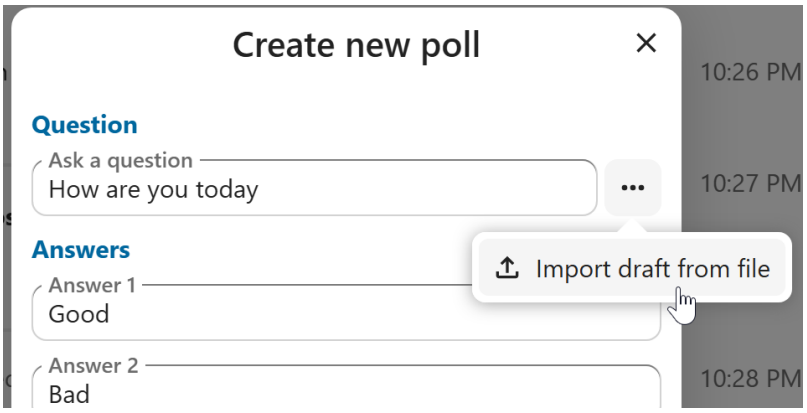
You can create a poll in groups chats from the new message additional actions.



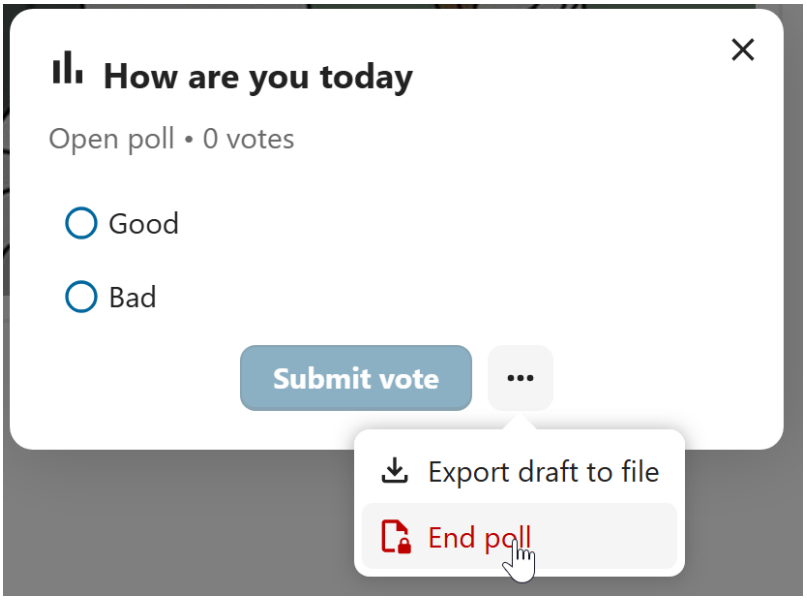

A poll has two settings:

- **Anonymous polls**: Participants cannot see who voted for which option.
- **Allow multiple choices**: Participants can select more than one option.

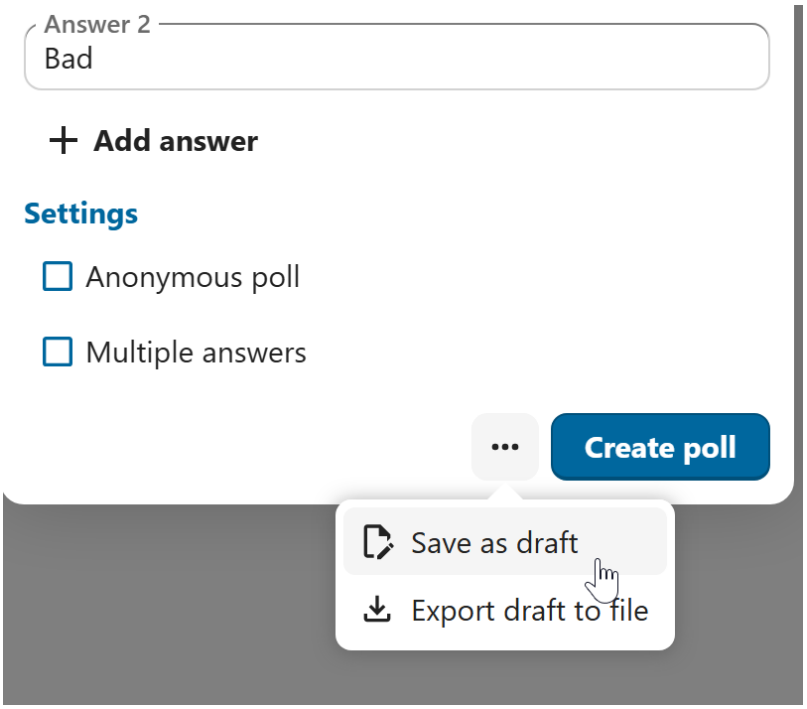
You can also import polls for auto-fill and export polls as JSON files to save them locally.



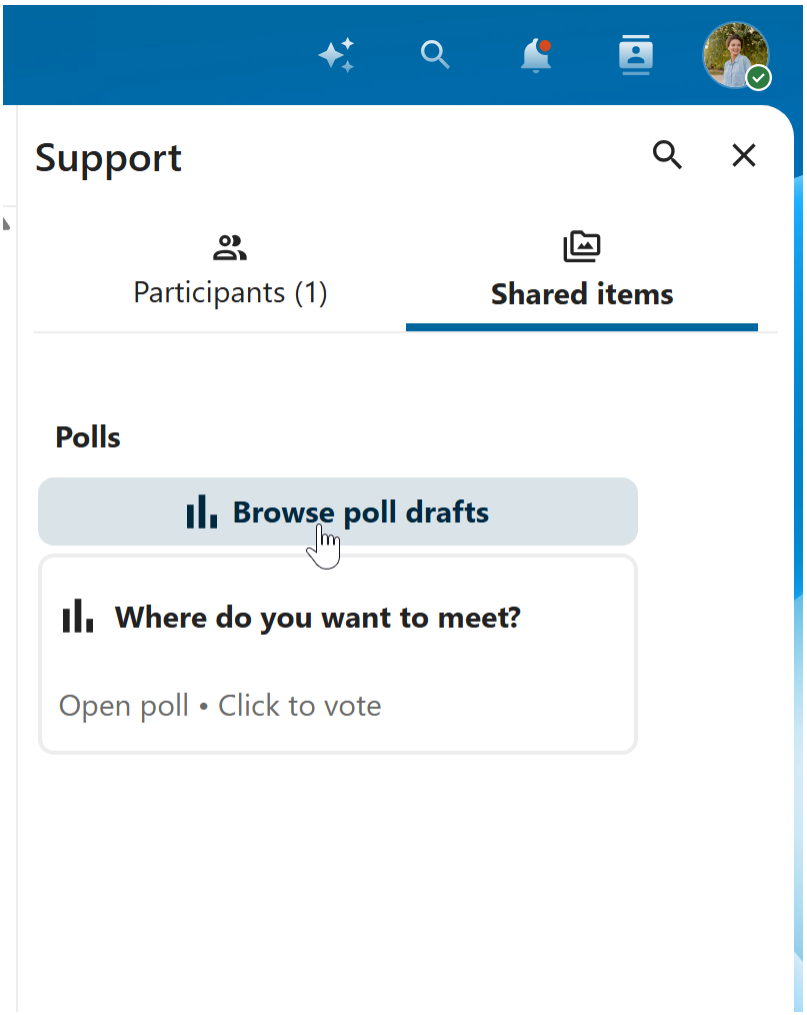

You can close a poll from the poll dialog.




As a moderator, you can create the poll directly or you can save it as a draft to edit it later.




You can find poll drafts in `Shared items` tab or next to the poll title input field.




## 7.2 Conversations

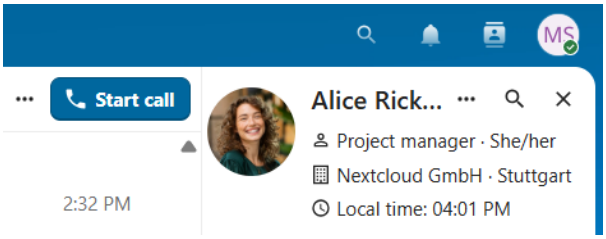
### 7.2.1 Conversations

Chats and calls take place in conversations. You can create any number of conversations. There are different types of conversations:

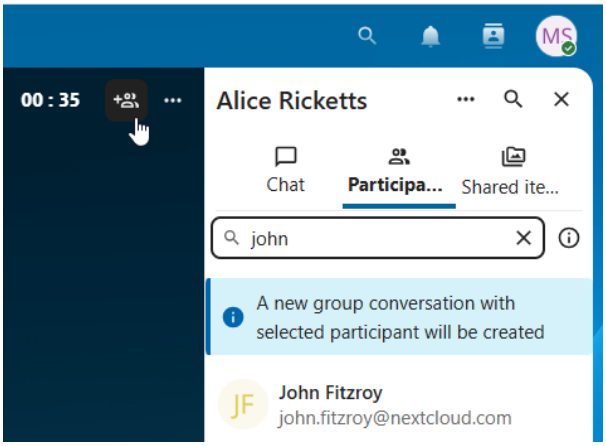
#### 1. Private (one-to-one) conversations

This is where you have a private chat or call with another Talk user.

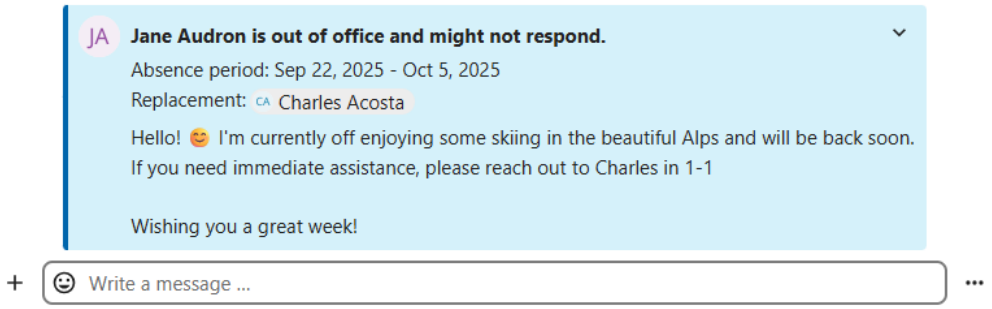
In the content sidebar, you can find additional information about the person you are chatting with, such as their email address, phone number, or other details they have shared in their profile.



Nobody except you and the other person can see this conversation or join a call in it. You can extend an ongoing call to a new group conversation by adding more people. Call will be continued there without interruption.



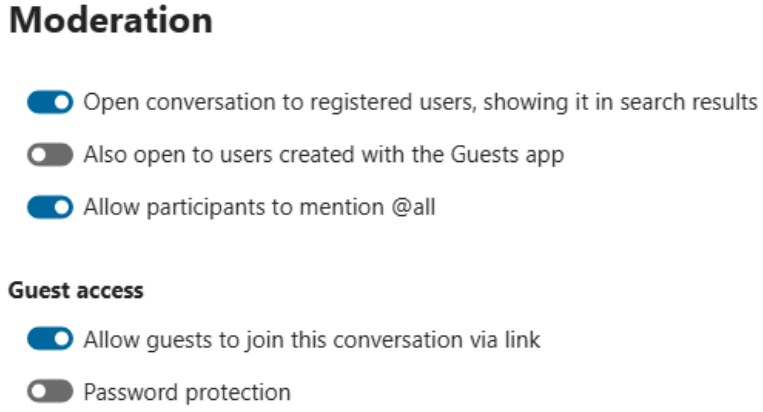

If a user becomes unavailable and has set an **out-of-office** status in `Personal settings > Availability`, you will find additional information in this conversation, such as provided description, absence date, or their replacement person.




## 2. Group conversations

A group conversation can have any number of people in it. You can add internal users, email guests, groups or teams to a group conversation upon creation, or when it already exists, via the `Participants` tab.

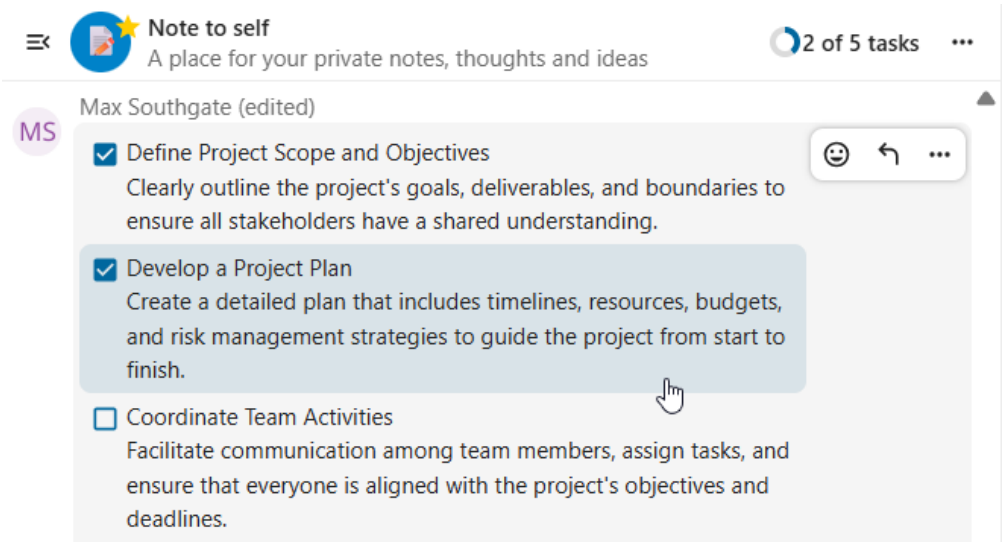
A group conversation can be shared with a public link, so guests can join a chat and a call. It can also be opened to registered users (or users from 'Guests' app), so they can discover and join this conversation.



### 3. Note to self

This is a special conversation with yourself. Messages here do not have a limit for editing or deletion. You can use it to:

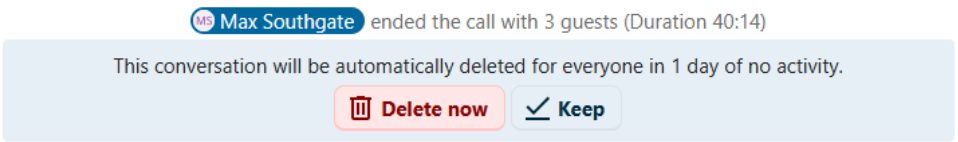
- **Take notes**: write down ideas, reminders, or important information you want to keep handy.
- **Create to-do lists**: use Markdown syntax to create checklists for tasks you need to complete.
- **Forward messages from other chat**: use the message menu to forward important messages from other conversations to your Note to self.




### 4. Disposable conversations

These conversations cover some special cases and exist for a limited period of time. Retention period can be configured by an instance administration:

- **Instant meetings**: these conversations can be created for quick, ad-hoc meetings. They can be started instantly from the Talk Dashboard.
- **Meeting conversations**: these are created when set as an event location by Calendar app.
- **Phone conversations**: these are dedicated for SIP dial-in & dial-out phone calls (requires a SIP gateway).
- **Video verification**: these are created, when someone tries to access a public link, protected by password with video verification (deleted instantly after call ends).

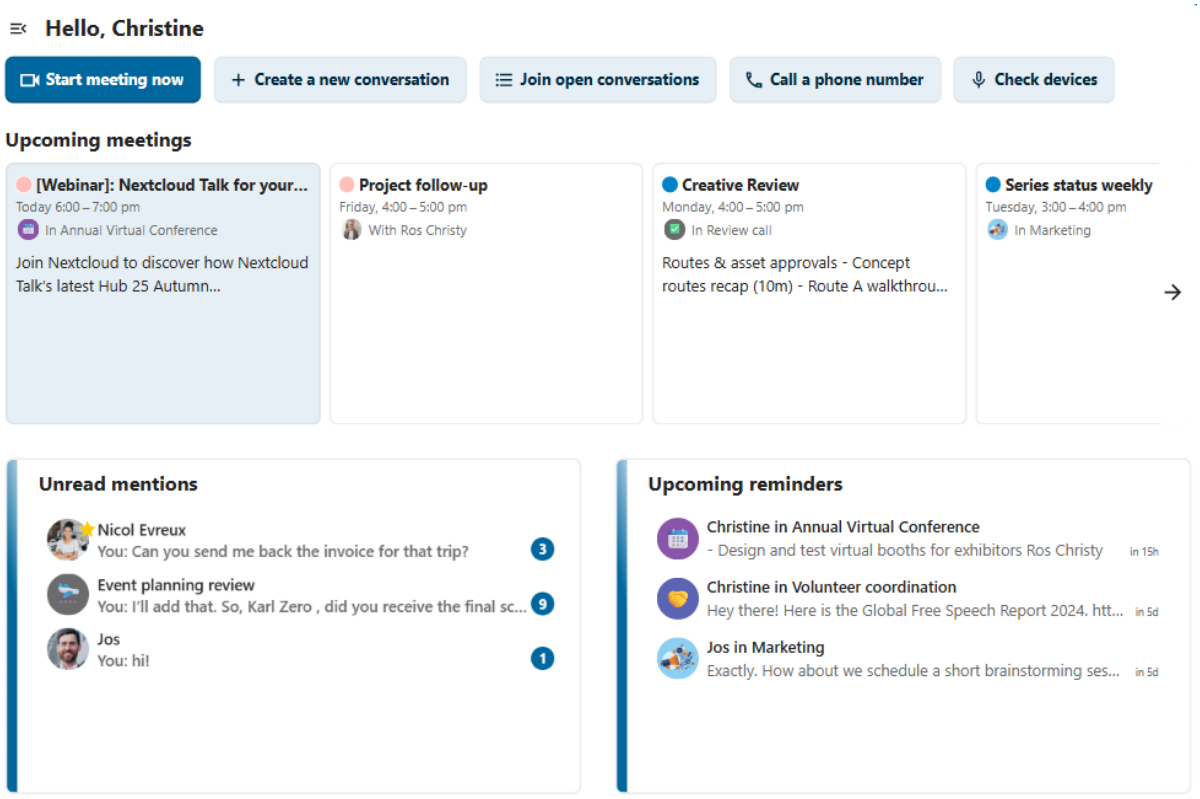



## Talk Dashboard

The Talk Dashboard is your central hub for managing and accessing your conversations. It provides an overview of your:

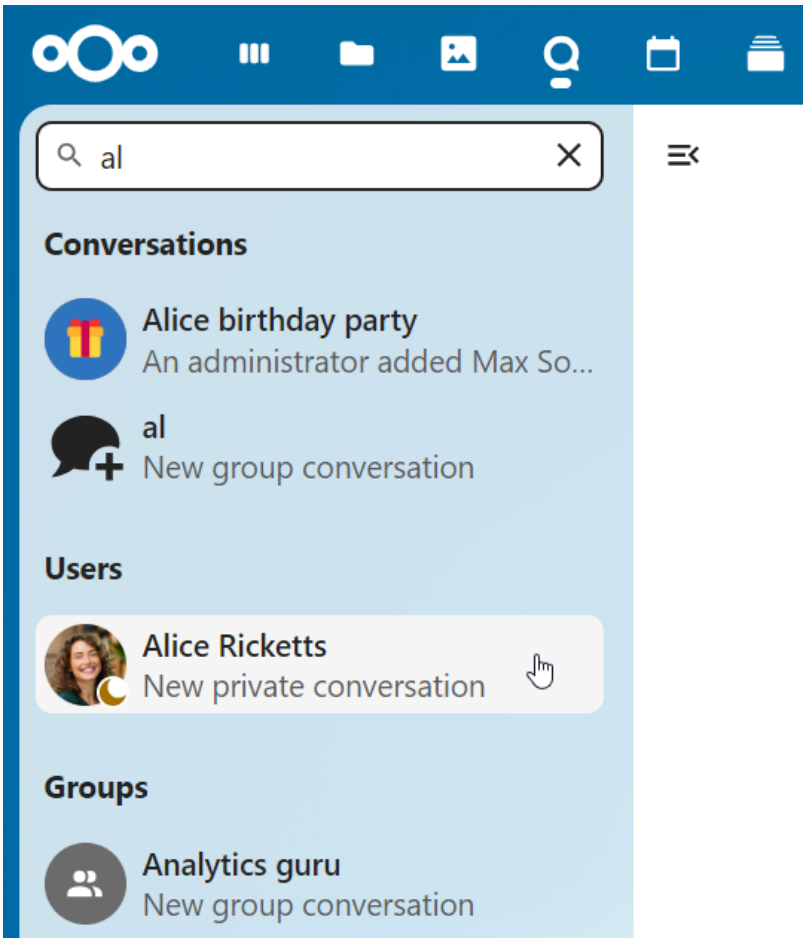
- Unread mentions and messages in private chats;
- Message reminders, scheduled to be tackled on later;
- Scheduled meetings, with event details and shortcut buttons to join them;

- Shortcut actions to create new conversations, join open ones, or quickly check your media devices.

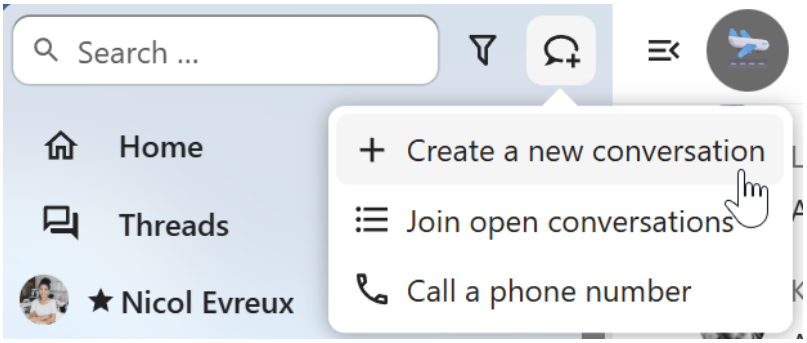



## Creating a conversation

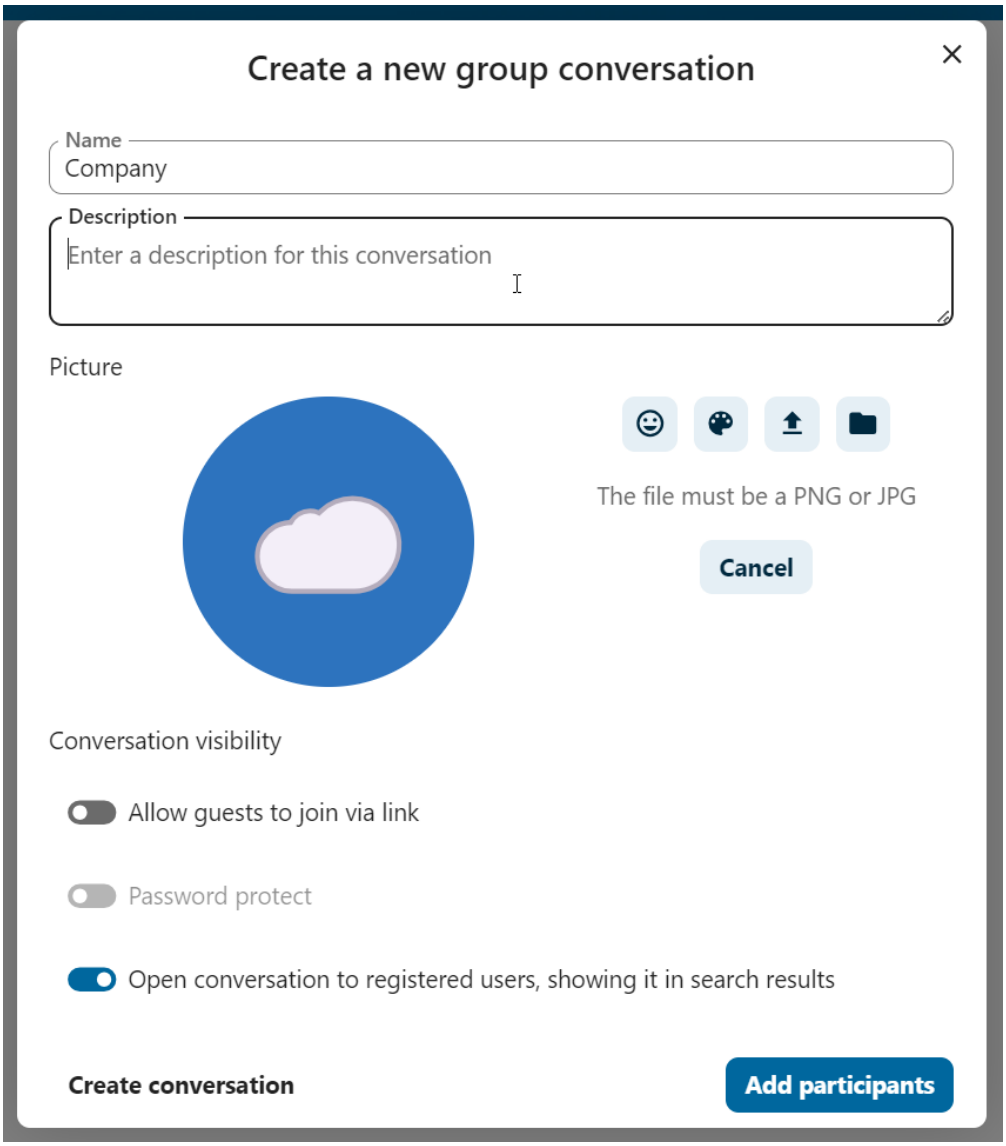
You can create a private (one-to-one) chat by searching for the name of a user, a group or a team and clicking it. For a single user, a conversation is immediately created and you can start your chat. For a group or circle you get to pick a name and settings before you create the conversation and add the participants.



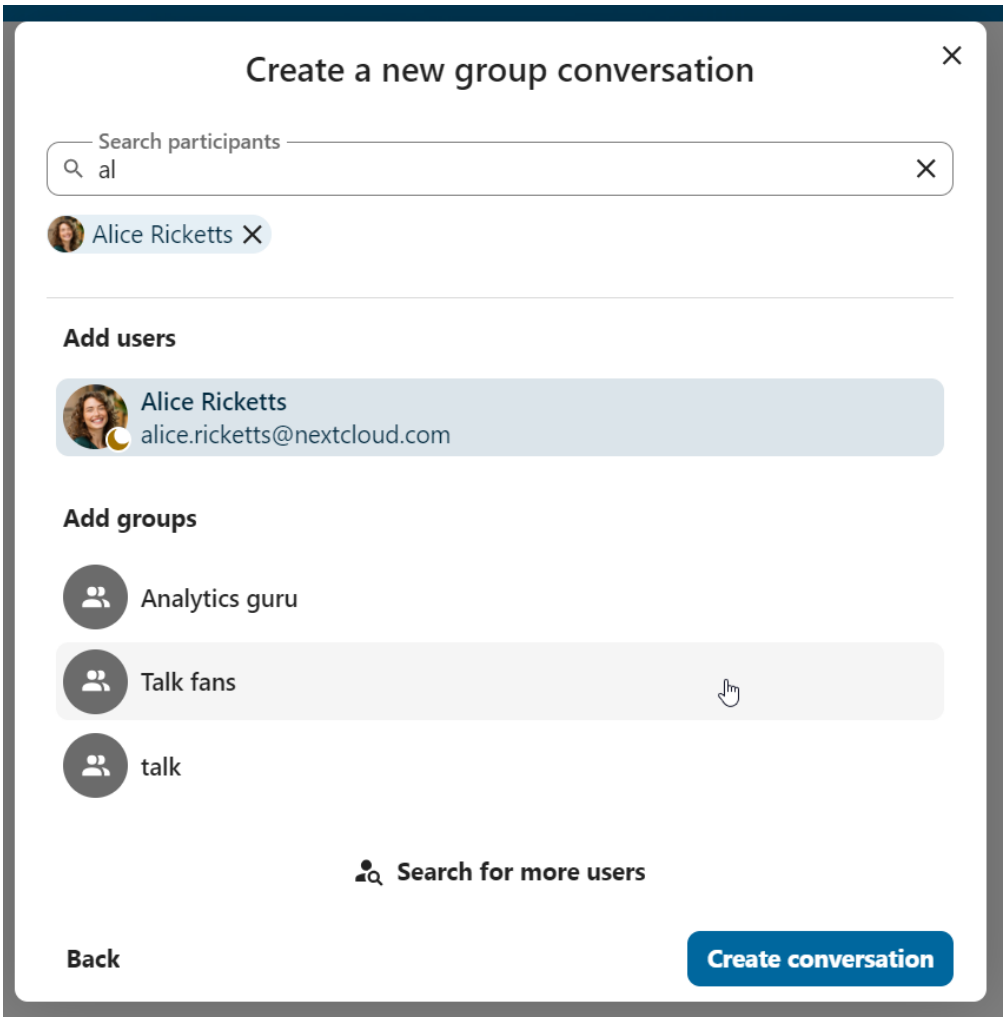

If you want to create a custom group conversation, click the button next to the search field and filters button and then on `Create a new conversation`.



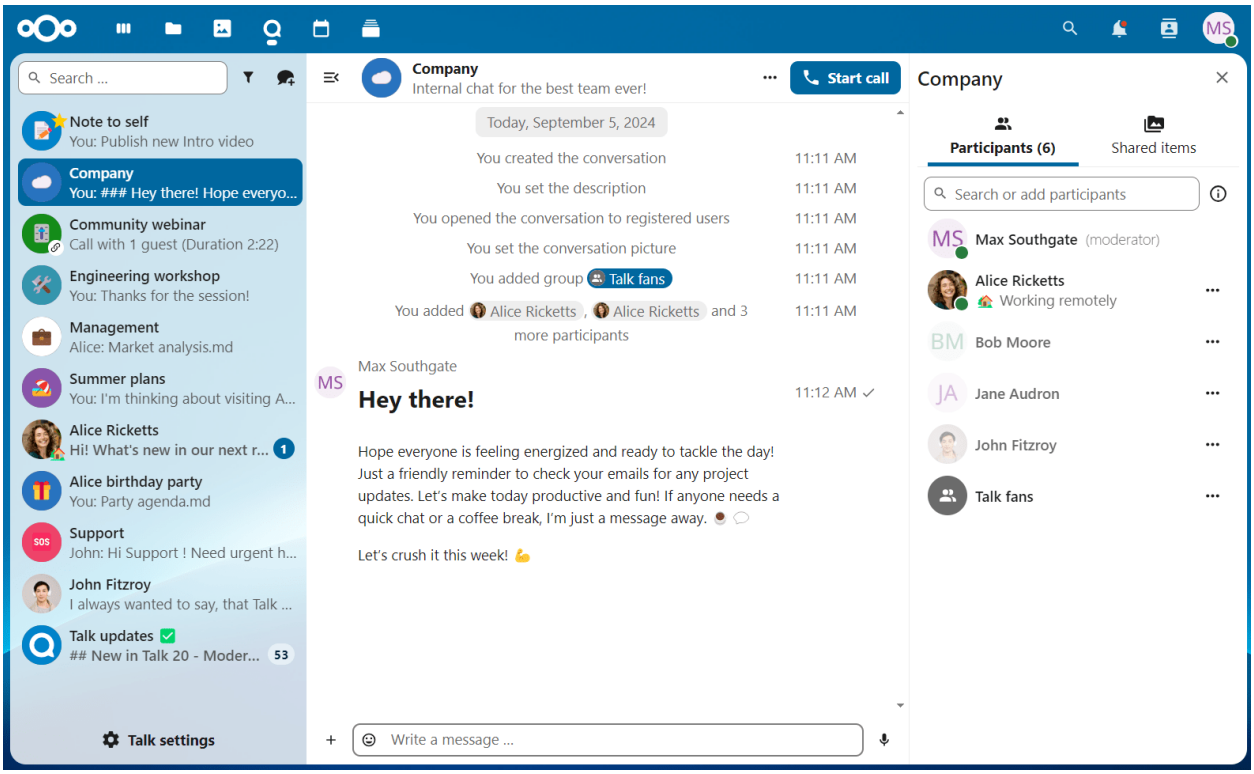

You can then pick a name for the conversation, put a description, and set up an avatar for it (with uploaded photo or emoji), and select if the conversation should be open to external users and if other users on the server can see and join the conversation.




In the second step, you get to add participants and finalize the creation of the conversation.

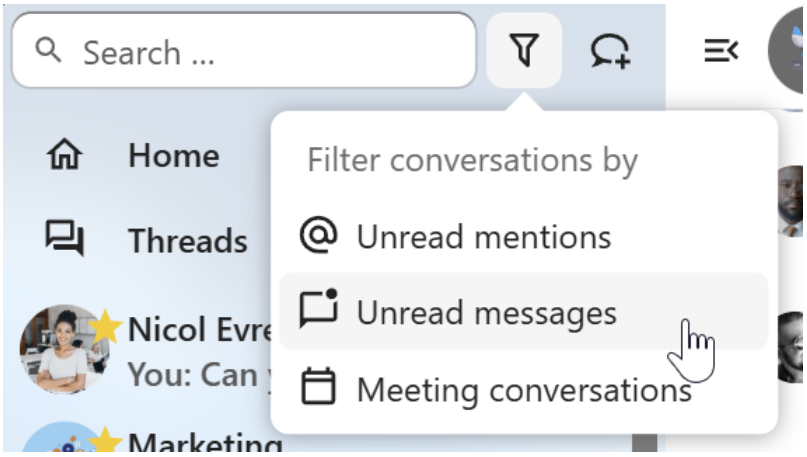



After confirmation you will be redirected to the new conversation and can start communicating right away.

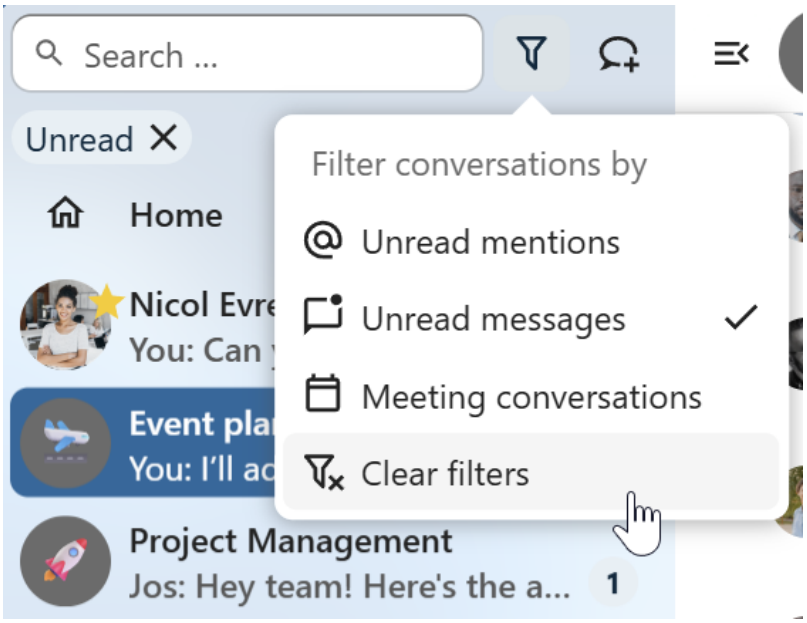



## Filter your conversations

You can filter your conversations using the filter button next to the search field. There are several options for filtering: 1. **Unread mentions**: view unread private conversations, or group conversations, where you have been mentioned. 2. **Unread messages**: view unread messages in all conversations you are a part of. 3. **Meeting conversations**: view all conversations, created for upcoming or past events.

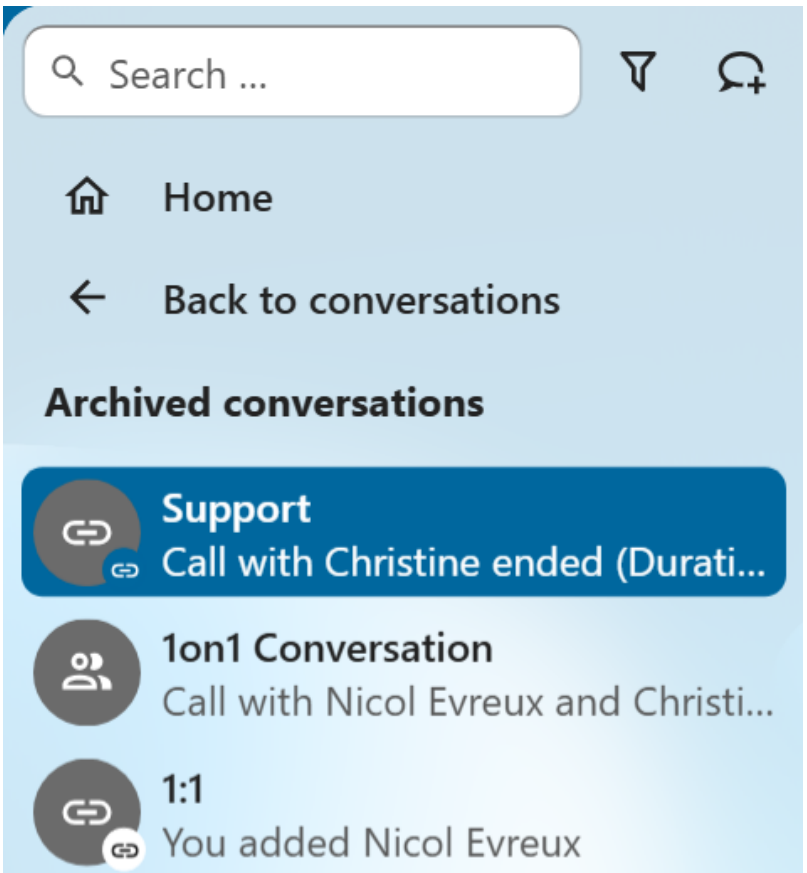



You can then clear the filter from the filters menu.

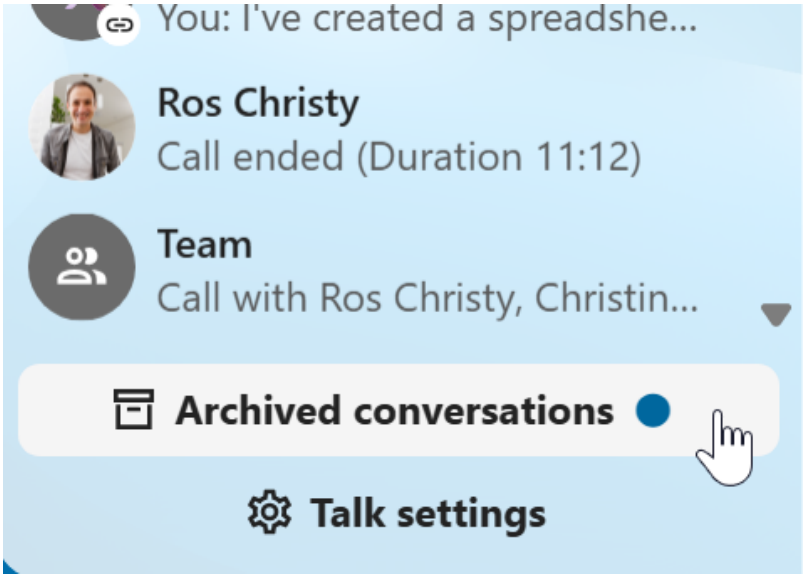



### Archive conversations

You can archive conversations that you no longer need to see in your main conversation list. When a conversation is archived, it will be moved to the `Archived conversations` section. An archived conversation will not appear in your main conversation list, but it will still align with notification level set in its settings.



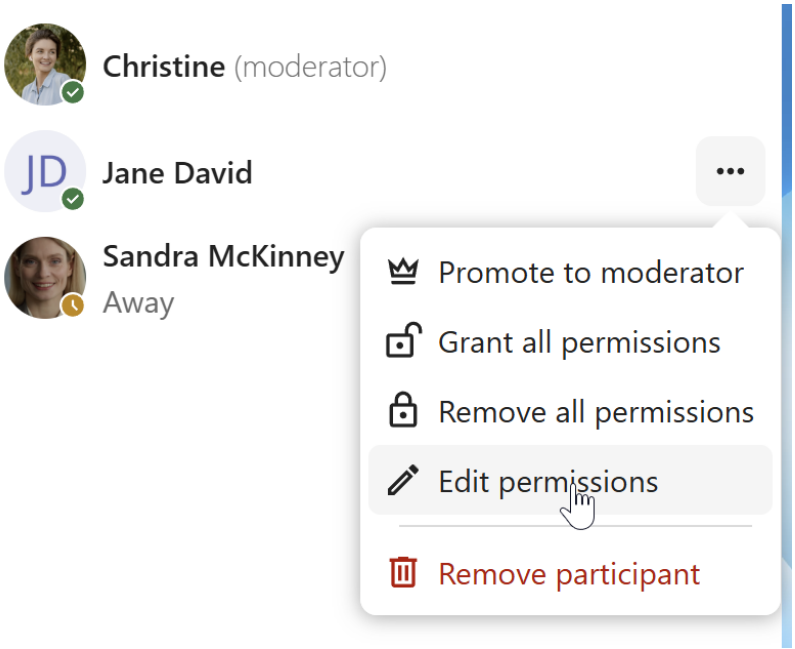
The list is accessible from the button at the bottom of the navigation bar.



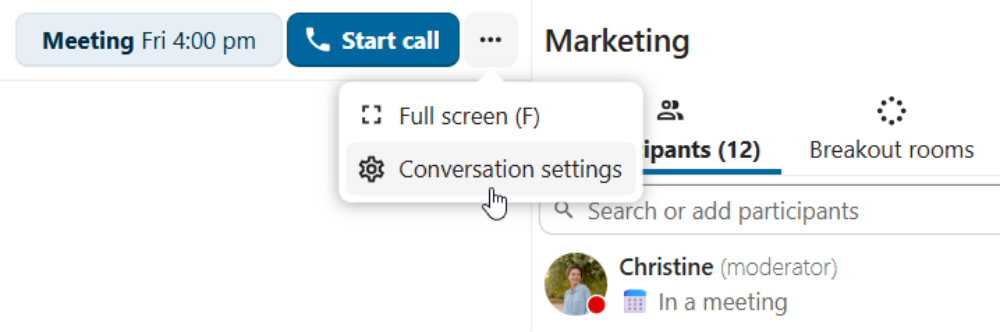

### Managing a conversation

You are always moderator in your new conversation. In the participant list you can promote other participants to moderators using the `...` menu to the right of their user name, assign them custom permissions or remove them from the conversation.

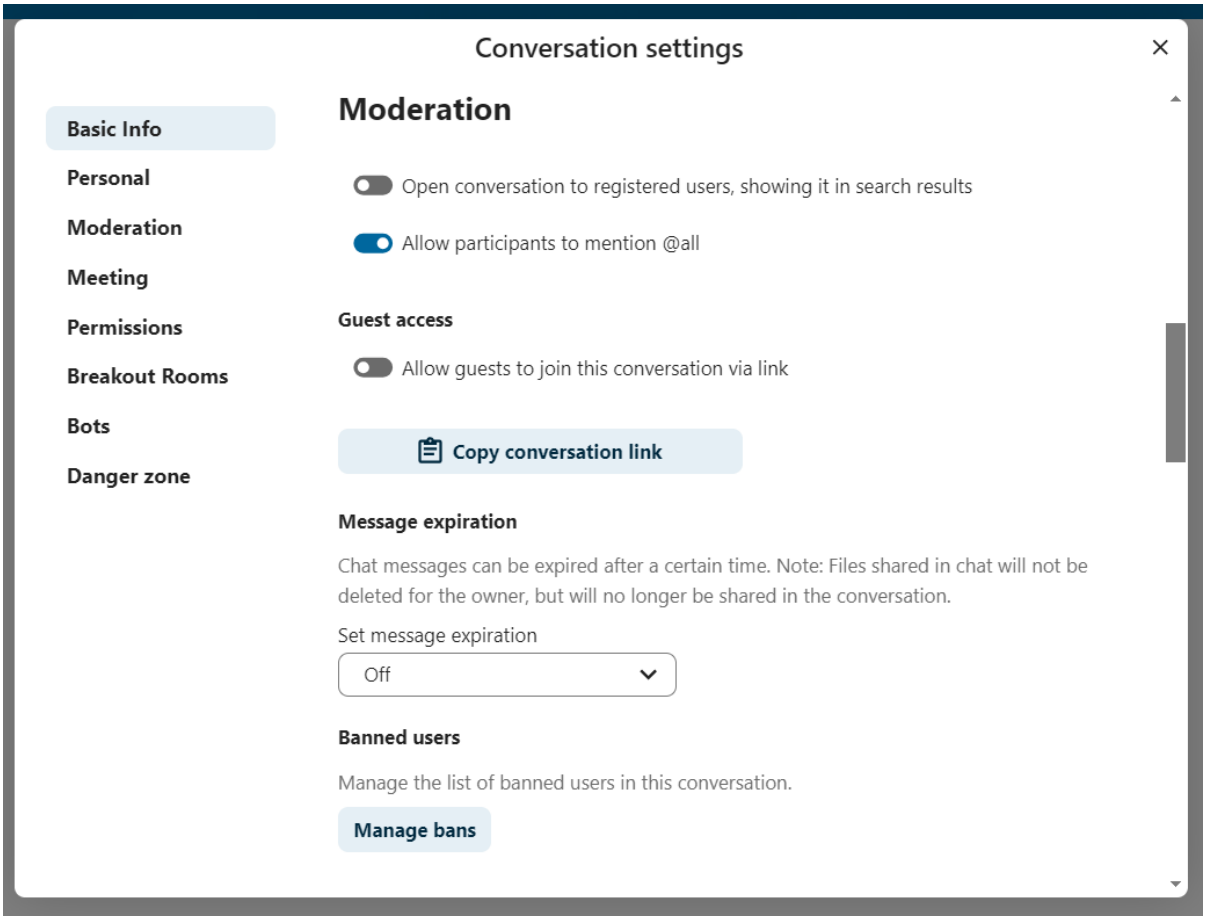
Changing permissions of a user that joined a public conversation will also permanently add them to the conversation.




Moderators can configure the conversation. Select `Conversation settings` from the `...` menu of the conversation on the top to access the settings.



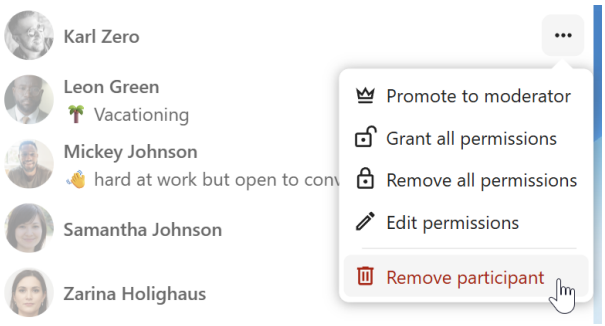

Here you can configure the description, guest access, if the conversation is visible to others on the server and more.



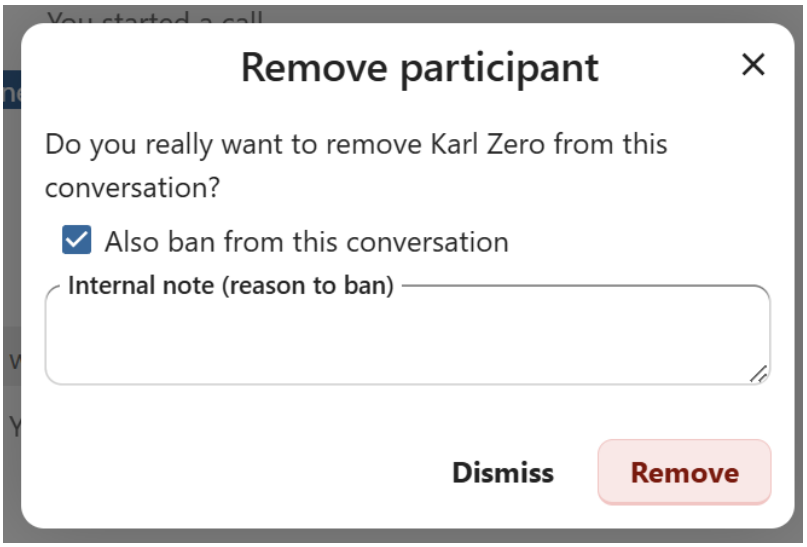

### Ban participants

To help keep discussions safe and under control, moderators can ban participants from conversations. This applies to internal users and guests alike; for guests, their IP address will also be banned.

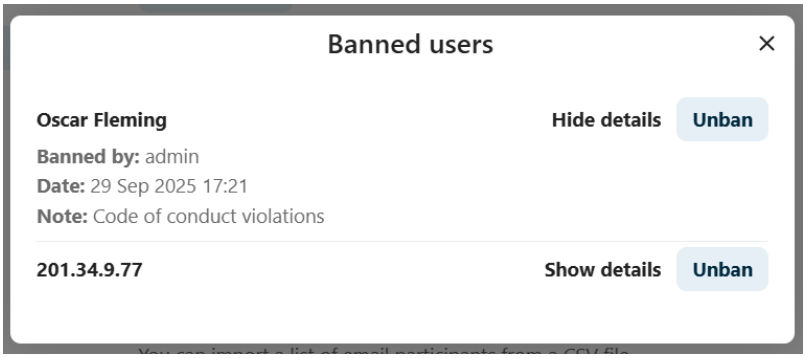
In the participants list, select the user or guest, and click `Remove participant`.




There, toggle checkbox `Also ban from this conversation` and provide a reason for the ban. The banned user will be removed and prevented from rejoining.

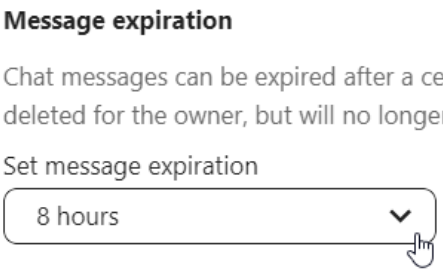



You can later find the list of banned users in the `Moderation` section of conversation settings. Here, you can see the reason for the ban and revert it if needed.




### Messages expiration

A moderator can configure message expiration under the `Conversation settings` within the `Moderation` section. Once a message reaches its expiration time, it is automatically removed from the conversation. The available expiration durations are 1 hour, 8 hours, 1 day, 1 week, 4 weeks, or never (which is the default setting).



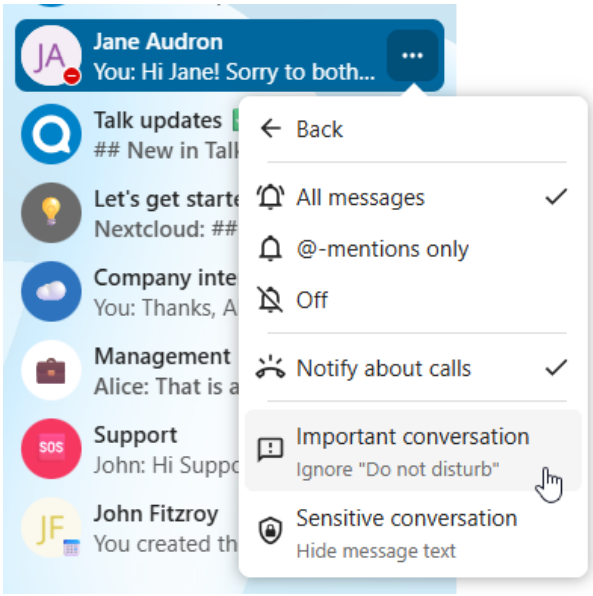

### Notifications and privacy

By default, Nextcloud Talk will notify you about:

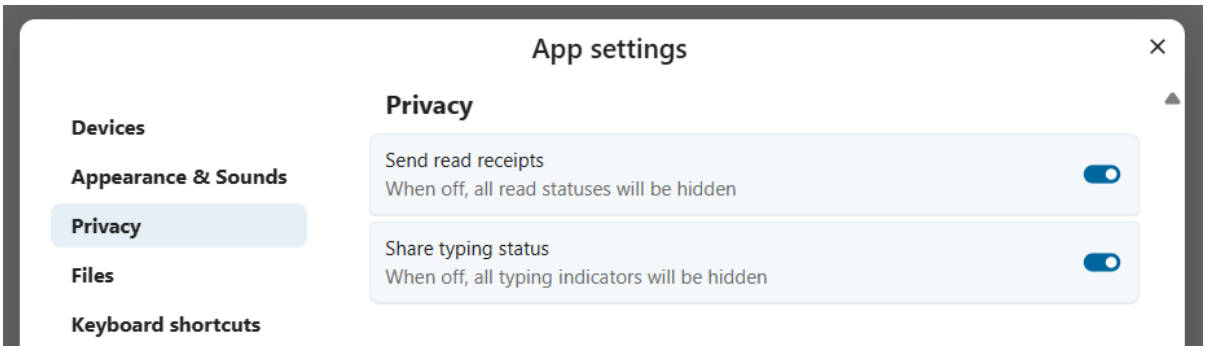
- New messages in private conversations;
- Replies to messages you sent;
- Messages mentioning you or group/team you are member of;
- Started calls in conversations you are part of.

You can change this behavior in the conversation settings. Additionally, you can configure:

- **Important conversations**: you will be always notified about new messages, even if you are in "Do Not Disturb" mode;
- **Sensitive conversations**: content of messages will not be shown in the conversation list and obscured from notifications.




To have more control over your privacy, you can also configure the visibility of your typing and read indicators in `Talk settings`:

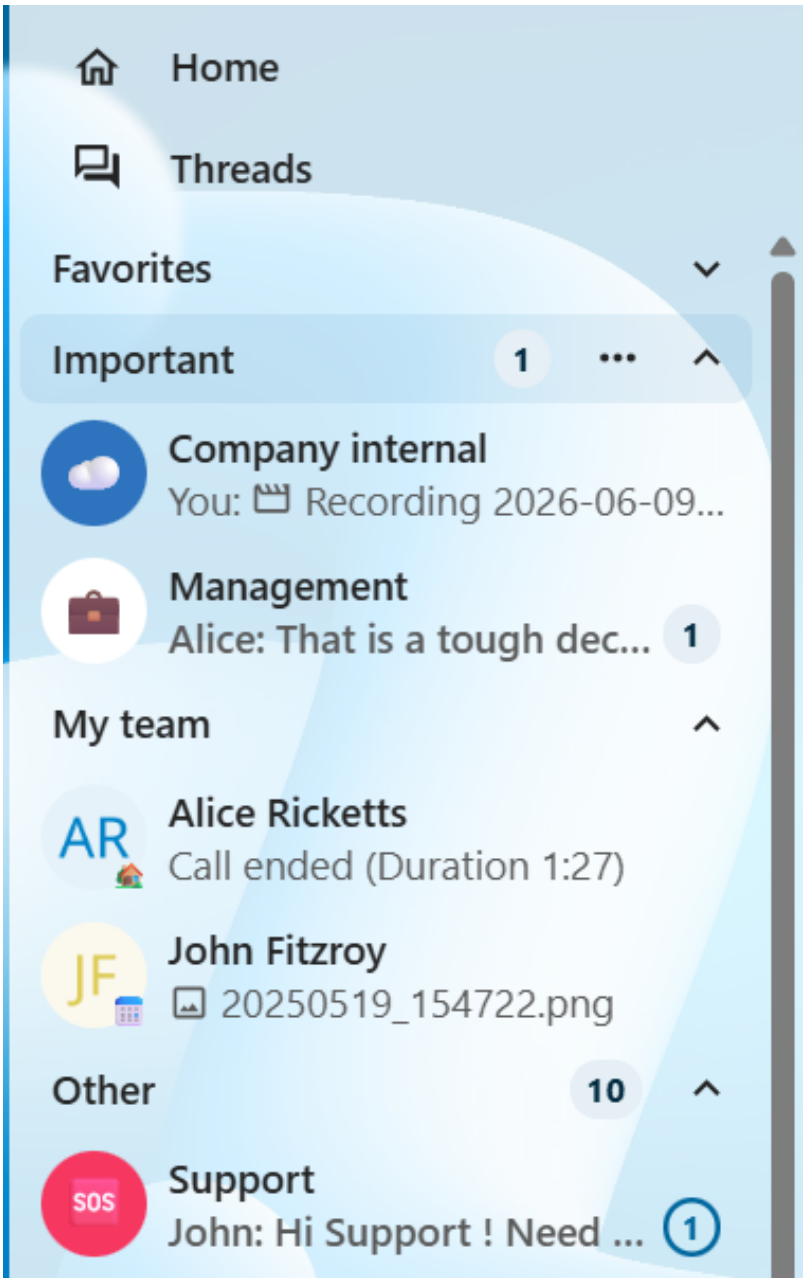



### 7.2.2 Organizing conversations

Nextcloud Talk offers features to organize and manage your conversations efficiently.

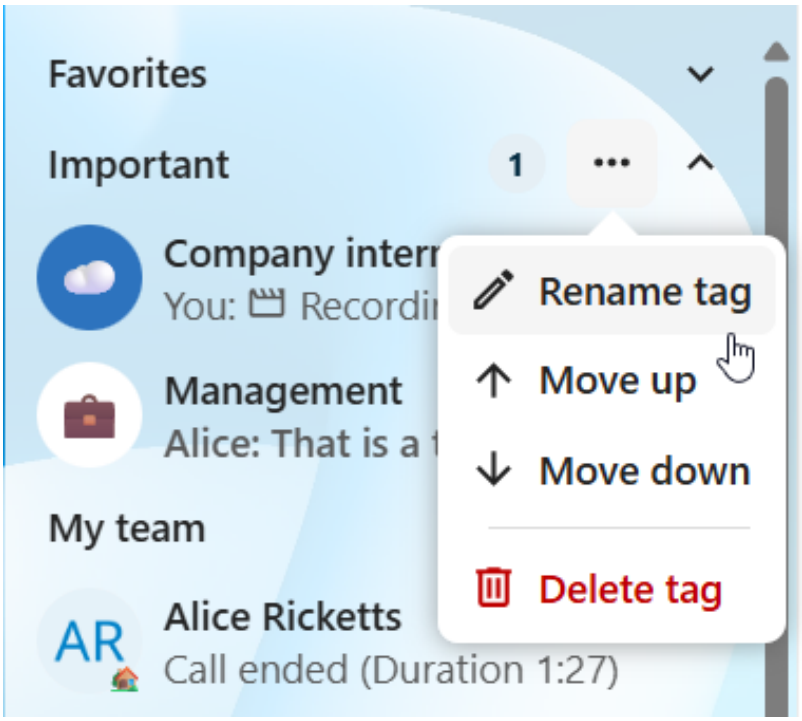
#### Tags

Create custom tags to categorize your conversations and keep them organized. Tags help you group conversations by project, team, topic, or any other criteria that makes sense for your workflow.




1. Select a conversation and open actions menu
2. Select `Tags` and choose an existing tag or create a new one
3. The conversation will now be tagged and grouped accordingly

You can later manage existing tags by renaming, reordering or deleting them.



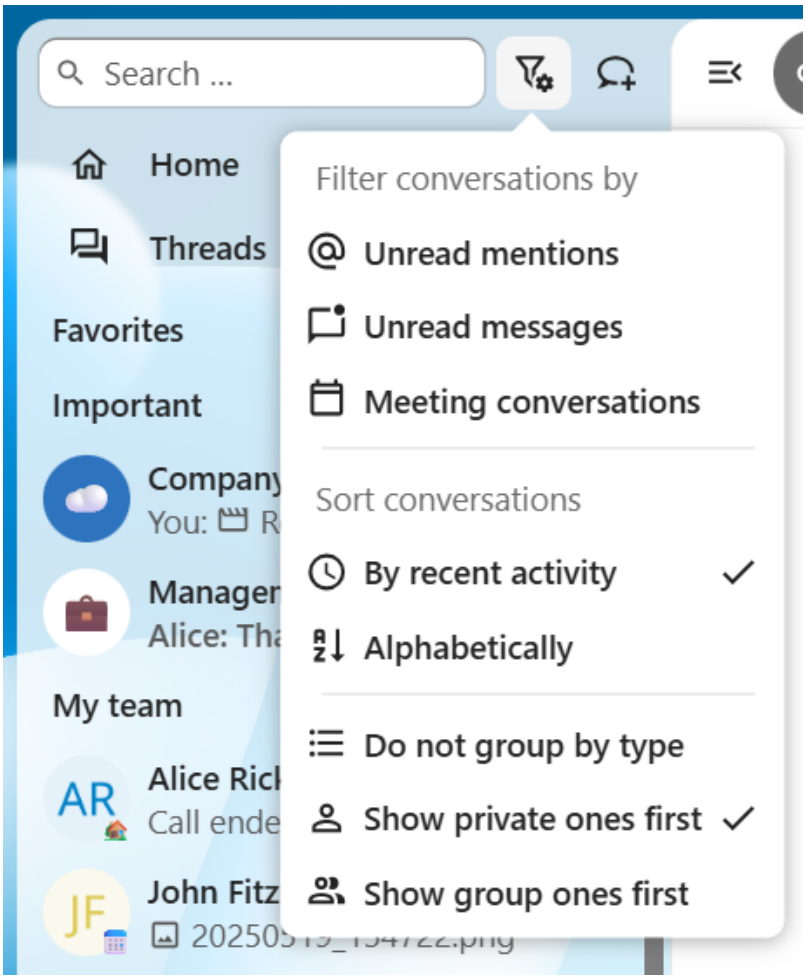

### Sorting and grouping

You can additionally customize how conversations appear in the list. They can be sorted:

- **By last activity**: Show most recently active conversations first (default)
- **Alphabetically**: Sort conversations alphabetically by name

Similar types can also be grouped together:

- **Do not group by type**: Keep a flat list of all conversations
- **Show private ones first**: Show private conversations before groups/public
- **Show group ones first**: Show groups/public conversations before private




See also:

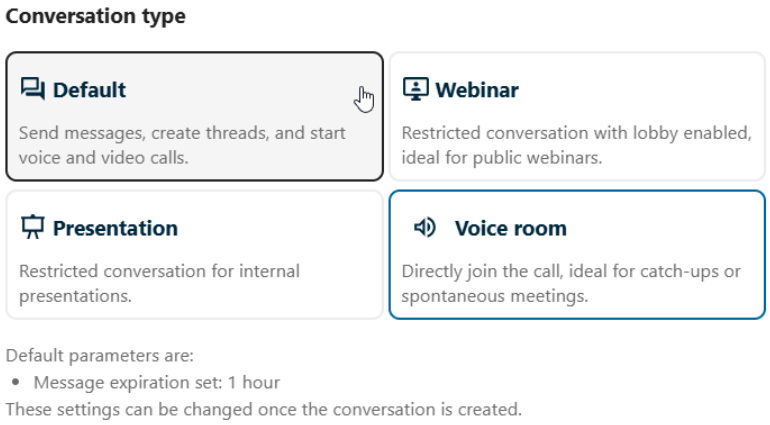
- *Conversations*
- *Open conversations*
- *Calendar integration with Talk*

### 7.2.3 Conversation presets

Conversation presets allow administrators to define templates for new conversations, with pre-configured settings such as permissions, lobby rules, and conversation type.

#### Available presets

Depending on your instance configuration, you may see presets when creating a new conversation. Each preset applies a specific set of defaults suited to a particular use case.




### Voice room

A permanent call room ("Voice room") is a conversation preset optimized for non-obligatory, always-available meetings. Any person entering the conversation will be joining the call there, making it easier to start communicating. Messages in voice room conversation are set to expire after certain time, to keep it lightweight and spontaneous.

### Webinar

Moderators can configure a preset to force the lobby, ensuring participants wait for a moderator before joining. When a conversation uses a forced lobby preset:

- Participants see a waiting room upon joining
- A moderator must allow them to the conversation or lift the lobby
- Useful for webinars, interviews, or controlled meetings

### Presentation

Presentation preset is useful for internal meetings, where it is expected to have more listeners than speakers. Participant permissions are optimized to ensure the best performance and moderation experience, allowing presenters to speak uninterrupted.

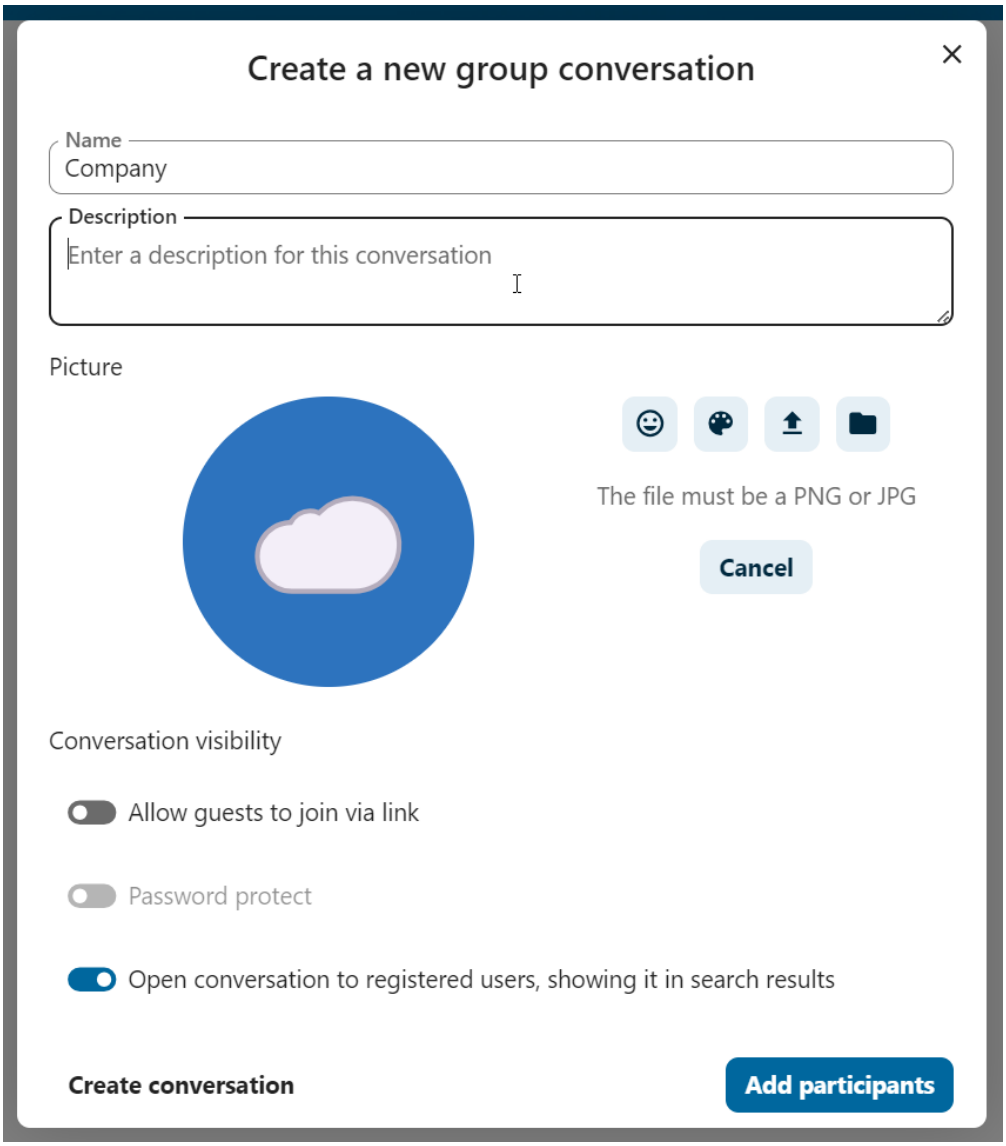
See also:

- *Conversations*
- *Webinar and lobby*
- *Open conversations*

## 7.2.4 Open conversations

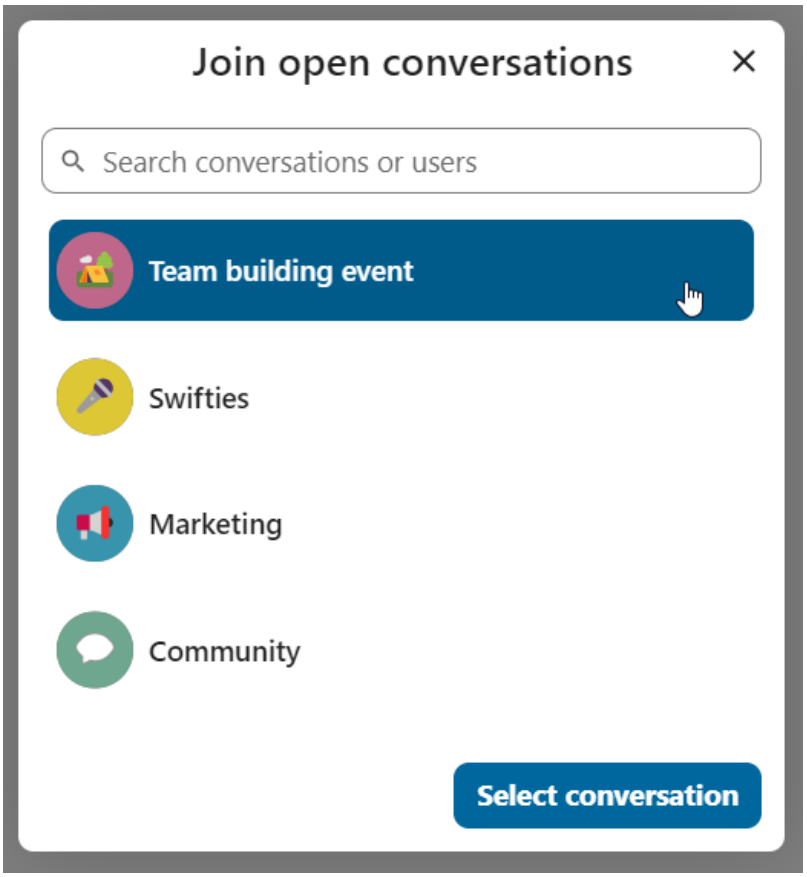
### Creating an open conversation

You can create an open conversation that any registered user on this server can discover and join.




### View all open conversations

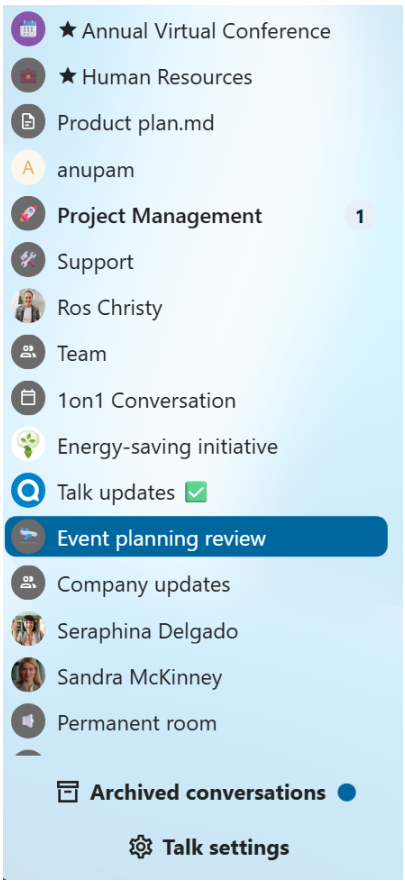
You can view all the conversations that you can join by clicking the button next to the search field, then clicking `Join open conversations`.




### 7.2.5 Appearance

#### Compact view of conversations list

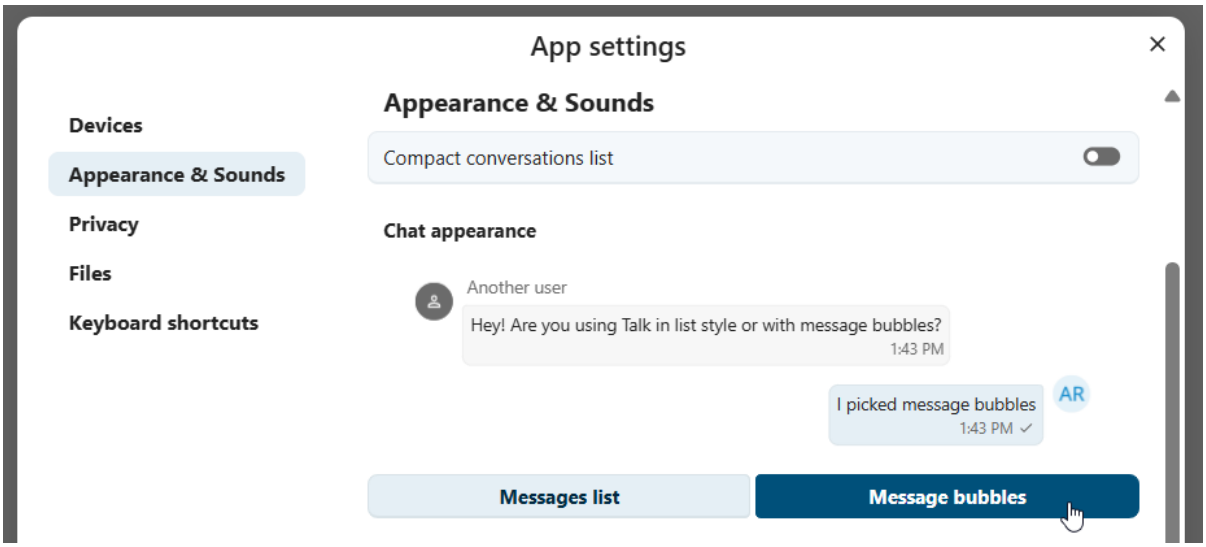
Compact view hides last message preview in the conversation list, providing a more focused interface.




## Chat messages

Chat appearance settings allow you to customize the look of your conversation chats. You can choose between classic list or message bubbles, with your own messages on the side.

You can change both settings from the `Talk settings` dialog in the `Appearance` section.



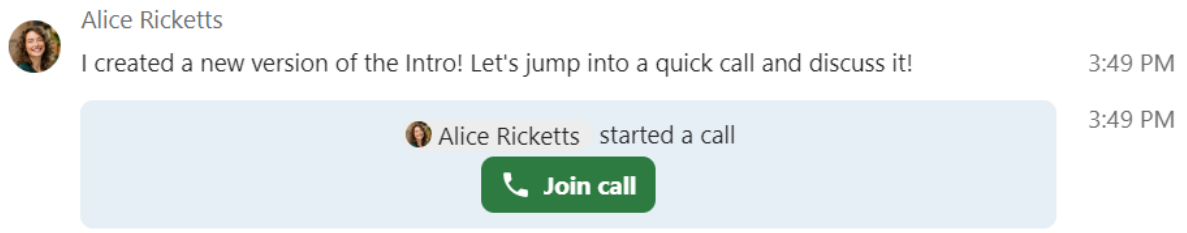
# 7.3 Calls

## 7.3.1 Joining a call

### Starting or joining a call

### Browser and Talk Desktop client

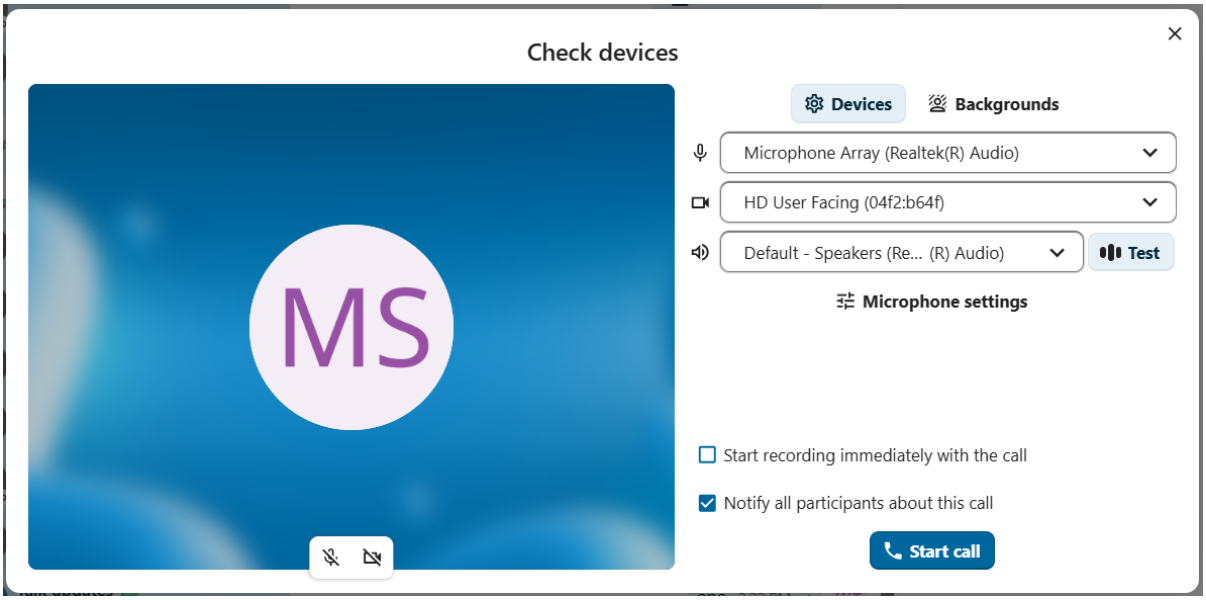
When you are part of a conversation and have permission to do so, you can start a call at any time by clicking `Start call` in the top bar. When a call is already in progress, join it by clicking the green `Join call` button in the chat area or the top bar.




**Note**

If you have not yet given permission to the browser or the Talk Desktop client to use your microphone and camera, you will be prompted to do so when you click `Start call` or `Join call`. Choose the microphone and camera you would like to use and click `Allow` to grant access to your devices.

You will see the `Check devices` dialog, where you can customise your call experience:



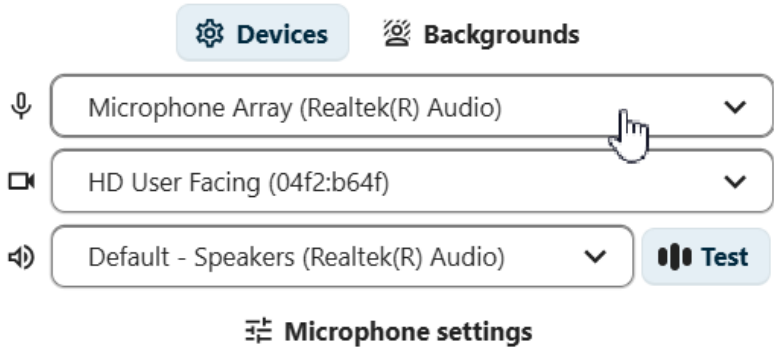

### Controlling audio and video

Use the microphone and camera icons at the bottom of the video preview to mute or unmute your microphone and enable or disable your camera before joining.

**Note**

If one or both of your icons are greyed out, you either do not have a microphone or camera installed, or you did not give permission to the browser or Talk Desktop client to use your microphone or camera. Check that you have granted permission to the browser or Talk Desktop client, and make sure your microphone and camera are not in use by another application.

Device settings allow you to choose which microphone and camera you want to use. This is useful if you have more than one microphone or camera available:

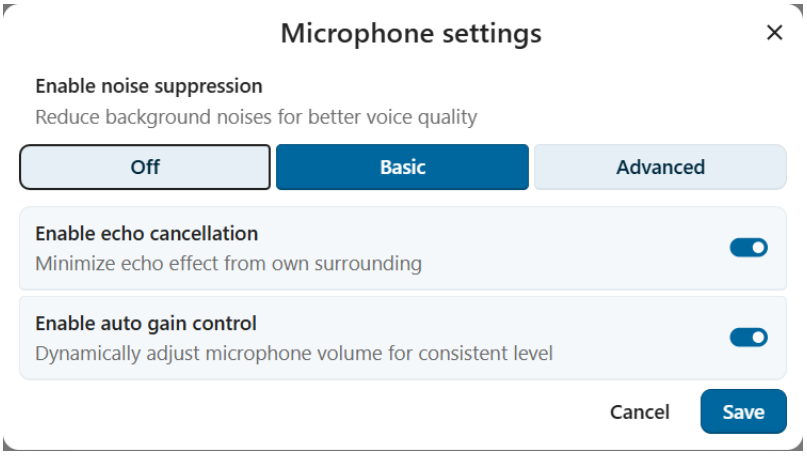



### Noise suppression

Enable noise suppression to reduce background noise during calls with following steps:

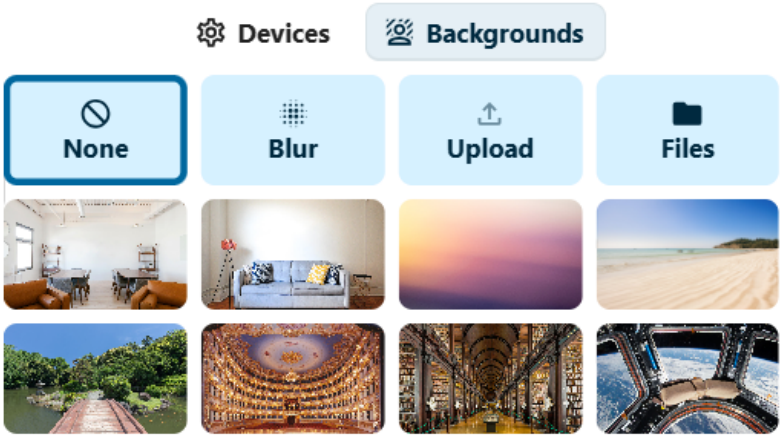
1. Open the `Check devices` dialog before or during a call
2. Locate the `Microphone settings` section
3. Enable `Noise suppression` at desired level

Auto-gain control and echo cancellation options are also available in the same section.



### Backgrounds

Backgrounds let you replace your video background with one of the predefined images. You can also upload your own image or choose one already in Nextcloud Files. Alternatively, choose the `blur` option to blur your live video background.




### Immediately join a call

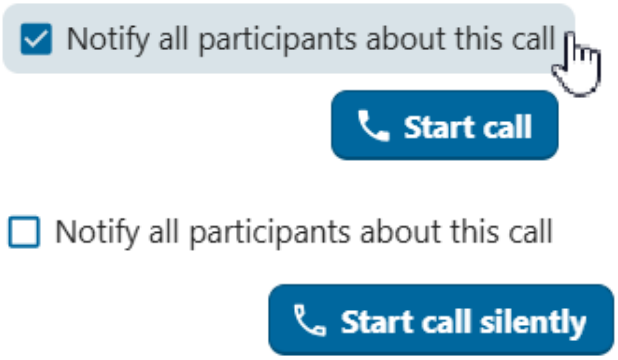
If you wish to skip the `Check devices` dialog in the future, toggle the `Skip device preview before joining a call` switch in app settings. For future calls in this conversation, you will join directly, skipping the preview dialog.

### Record a call

If you started the call and wish to record it, check the `Start recording immediately with the call` checkbox. The call recording option might not be available to you, depending on whether your system administrators have enabled this option and whether you have `Moderator` permission for the conversation. If you are joining and the call is being recorded, you might be required to consent before being allowed to join. For more information, see *Call recording*.

### Start the call

Click the `Start call` button at the bottom of the `Check devices` dialog to notify all conversation participants of the call. If you do not want to notify the other participants, start a silent call by opening the three-dot menu to the left of the `Start call` button and choosing `Start call silently`.



> **Note**
>
> Other participants can modify notifications on a per-conversation level, including whether they want to receive call notifications.

Your user status will be set to `In a call` and your user status icon will display the speech bubble emoji.

### Mobile clients

When you are part of a conversation and have permission to do so, you can start a call at any time by tapping the `Phone` or `Video` icon in the top bar. The `Phone` icon starts a voice-only call; the `Video` icon starts a video call.

A voice call uses the device microphone and earpiece, like a regular phone call. A video call uses the loudspeaker in hands-free mode and enables your front-facing camera by default; you can disable it at any time.

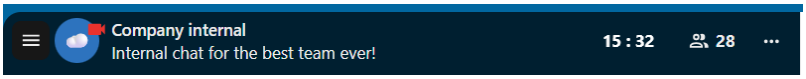
If someone else starts a call, you may receive a notification and your device may ring or vibrate, depending on your notification settings. Tap `Phone` or `Video` to join, or tap the red button to decline. Declining dismisses the call notification on that device.

You can control your microphone and camera (if in a video call) with the options shown at the bottom of the screen.

Your user status will be set to `In a call` and your user status icon will display a speech bubble.

### During a call

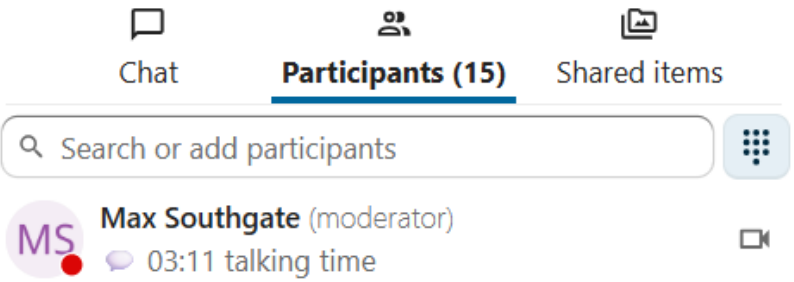
After you join a call, you will see the call view. It shows the video feeds of all participants currently in the call, with additional information and controls.



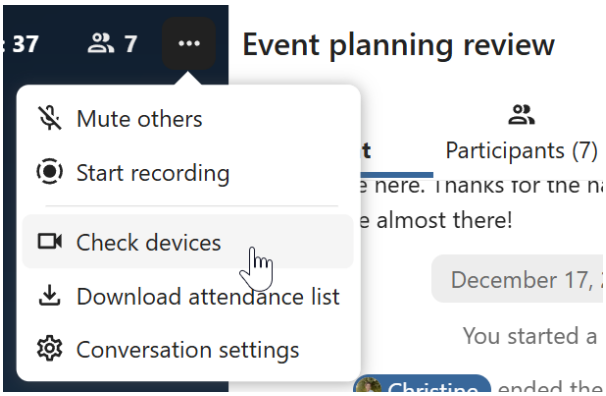

The leftmost element shows the elapsed call time.

Next to it, you will see the number of participants that have joined the current call. Clicking the number opens the right sidebar and shows the list of participants. Participants that have joined the call will be listed first.

You will also see each participant's talking time if they have spoken during the call:




You can access additional call options and settings from the three-dot menu in the top bar.

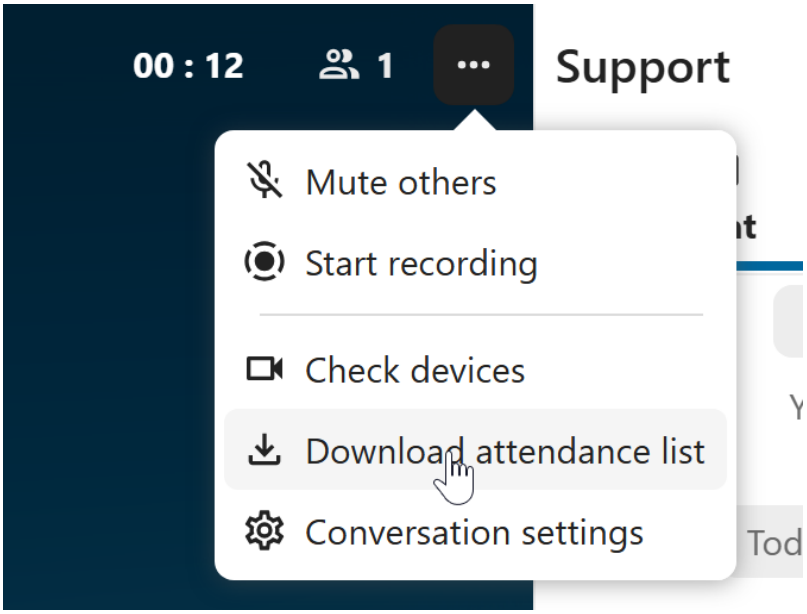



### Set up breakout rooms

Breakout rooms allow you to divide a call into smaller groups for more focused discussions. Depending on your permissions and how your instance is configured, this option may not be available to you. For more information, see *Breakout rooms*.

### Download call participants list

You can download the list of participants in a call from the three-dot menu in the top bar. This downloads a CSV file with the names and email addresses of all participants.

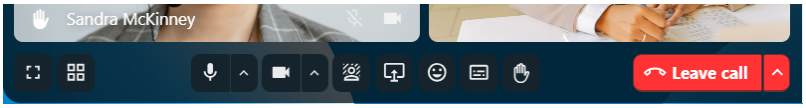



The CSV file contains the following columns:

- **Name**: The name of the participant.
- **Email**: The email address of the participant.
- **Type**: Indicates whether the participant is a registered user or a guest.
- **Identifier**: Unique identifier for the participant.

### Controlling audio and video

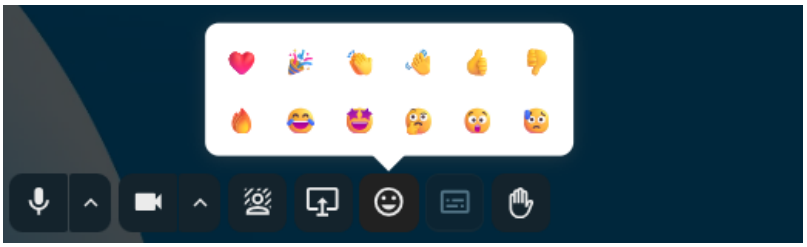
Bottom bar of the call view offers media controls, layout settings and other features you can use during a call.




Use the microphone and camera icons to mute/unmute your microphone and enable/disable your camera. You can also use the keyboard shortcuts `M` to mute/unmute your microphone and `V` to enable/disable your camera. Use `Space` for push-to-talk: holding space temporarily unmutes you while muted, or temporarily mutes you while unmuted.

### Reactions

The reactions button lets you send an emoji reaction to all participants in the call.



Every participant will see the emoji rising from the bottom of their call screen. The emoji disappears after two seconds.

### Raise hand

Clicking `Raise hand` will notify moderators and show an icon next to your name. This is also available via the keyboard shortcut `R`.

### Full screen

Resizes your browser window or the Talk Desktop client to full-screen mode. Also available via the keyboard shortcut `F`. Press `Esc` to return to the regular view.

## 7.3.2 Screen sharing

Click the monitor icon in the toolbar to share your screen.

> **Note**
>
> If you have not yet given permission to the browser or the Talk Desktop client to share your screen, you might be prompted to do so when you click `Share screen`. Please click on `Allow` to grant the browser or Talk Desktop client access to your screen.

Depending on your browser or the Talk Desktop client, you will get the option to share a monitor, an application window, or a single browser tab. If video from your camera is also available, other participants will see it in a small presenter view next to the screen share.

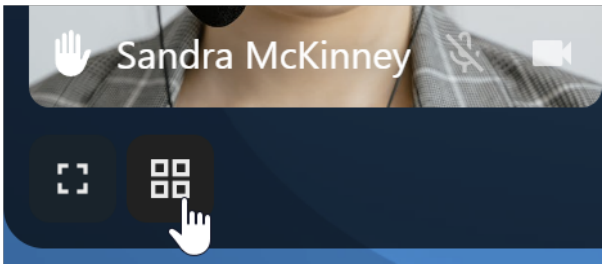



To stop sharing your screen, click the `Share screen` button again and choose `Stop screensharing`.

You can zoom in and out of the shared screen with the mouse wheel, double-click, or touchpad gestures.

### 7.3.3 Call layout

You can switch between grid view and speaker view using the toggle icon in the three-dot menu or the bottom bar.



### Grid view

Grid view shows all participants as tiles. Use the navigation buttons on the left and right to scroll through participants when they do not all fit on the screen.




### Speaker view

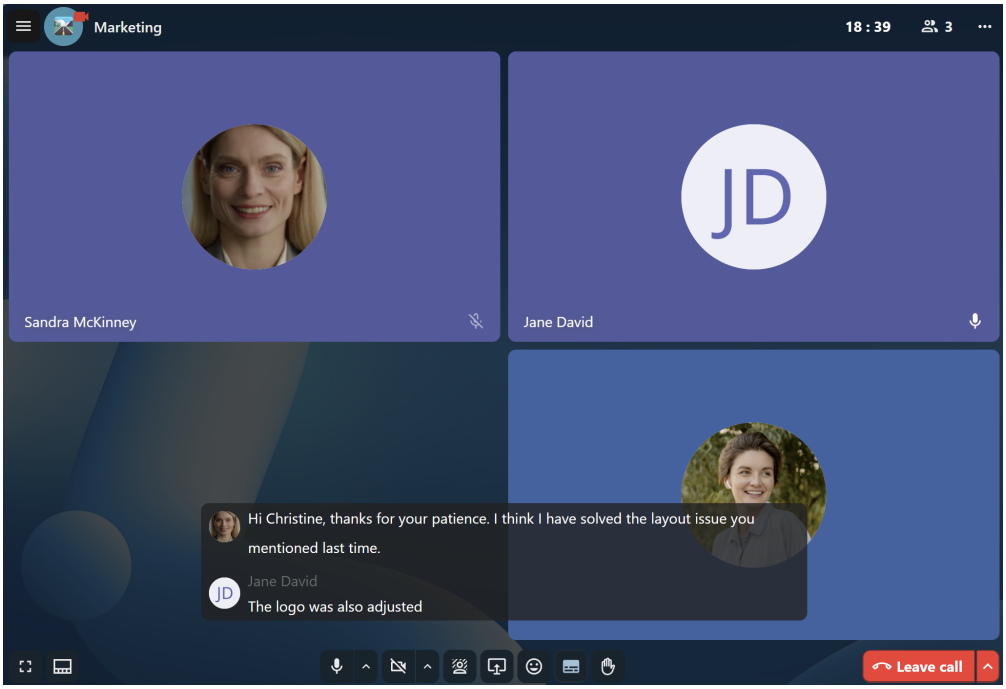
Speaker view (also called promoted view) centres the active speaker in a large tile and places the other participants in a row below. Use the navigation buttons on the left and right to scroll through participants when the row overflows.




### 7.3.4 Transcription and translation

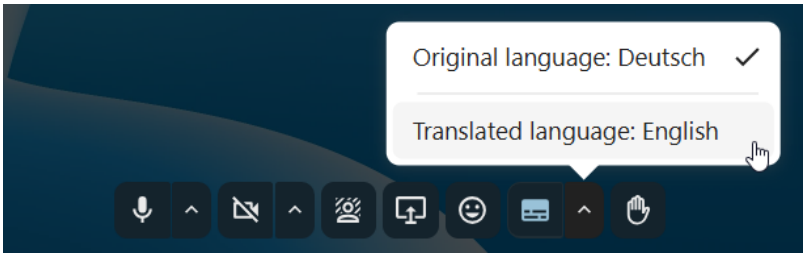
#### Call live transcription

Call live transcription transcribes speech in real-time during a call. It is set up by the system administration (High-performance backend and Live Transcription App are required). Moderators need to set the transcription language in the conversation settings. All participants can then enable or disable the transcription for themselves in the call bottom bar. When enabled, the transcription appears at the bottom of the screen and is updated in real-time.




### Live translation

With the *live_transcription* provider app enabled, you can also use live translation. Instead of receiving the transcription in the original language, it will be translated to the language of your choice.




## 7.3.5 Call recording

The recording feature lets you:

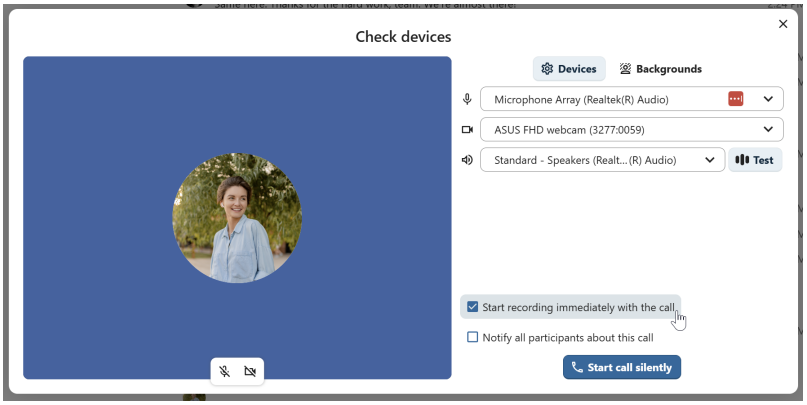
- Start and stop recordings during a call.
- Record the video and audio stream of the speaker, as well as screen share.
- Access, share and download recorded files for future reference or distribution.

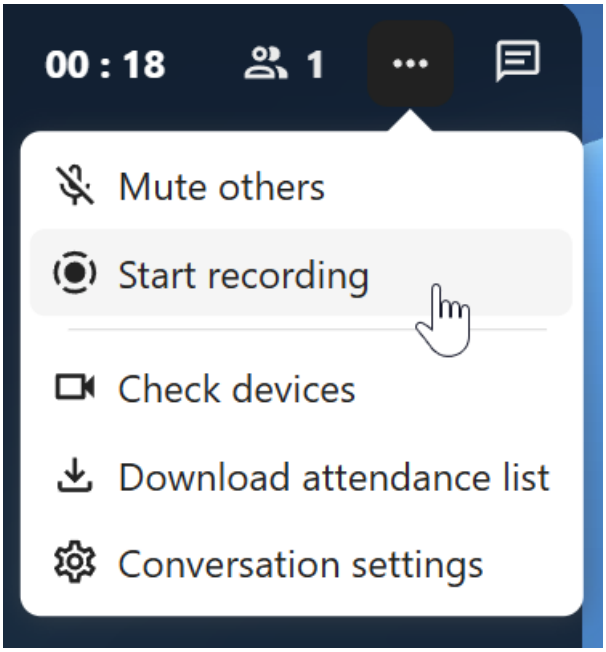
Enabling this feature requires the recording server to be set up by the system administration.

### Manage a recording

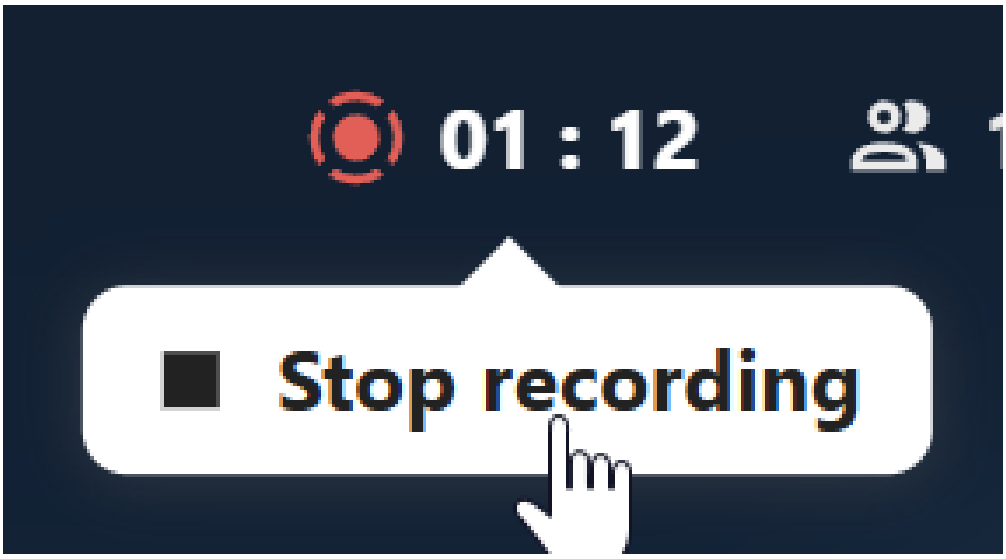
The moderator of the conversation can start a recording together with a call start or anytime during a call:

- **Before the call**: tick the checkbox “Start recording immediately with the call” in the “Check devices” dialog, then click on “Start call”.
- **During the call**: click on the top-bar menu, then click “Start recording”.

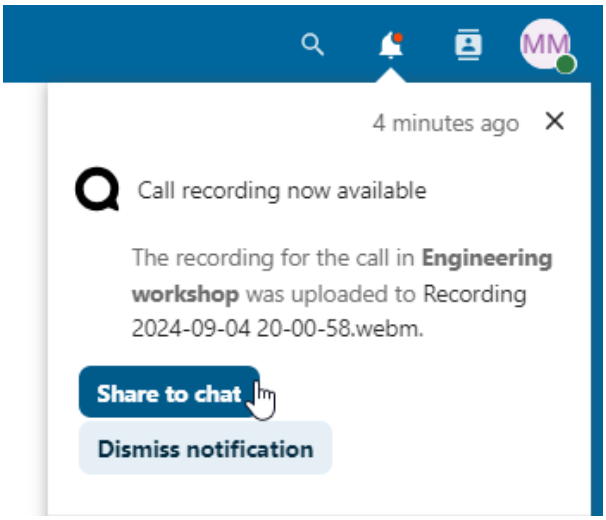


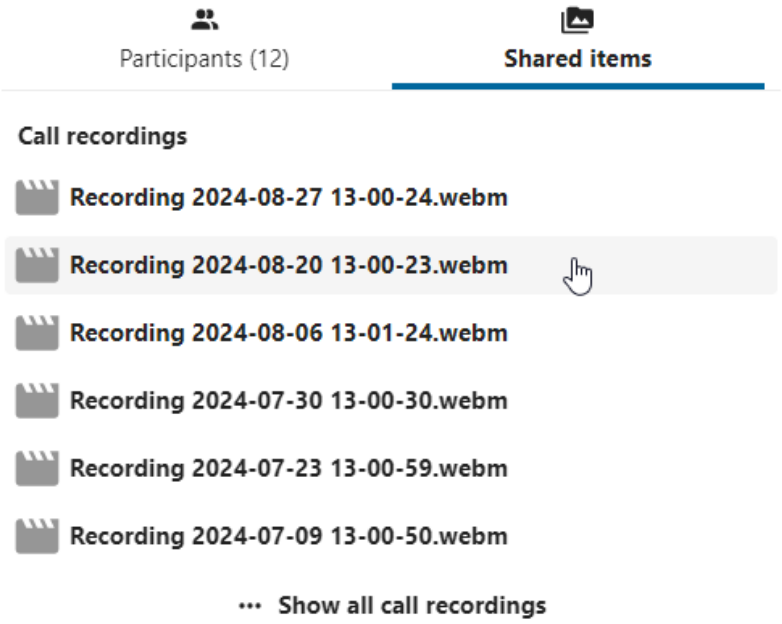




The recording will start shortly, and you will see a red indicator next to the call time. You can stop the recording at any time while the call is still ongoing by clicking on that indicator and selecting “Stop recording”, or by using the same action in the top-bar menu. If you do not manually stop the recording, it will end automatically when the call ends.




After stopping a recording, the server will take a few seconds to prepare and save the recorded file. The moderator, who started the recording, receives a notification when the file is uploaded. From there, it can be shared in the chat.

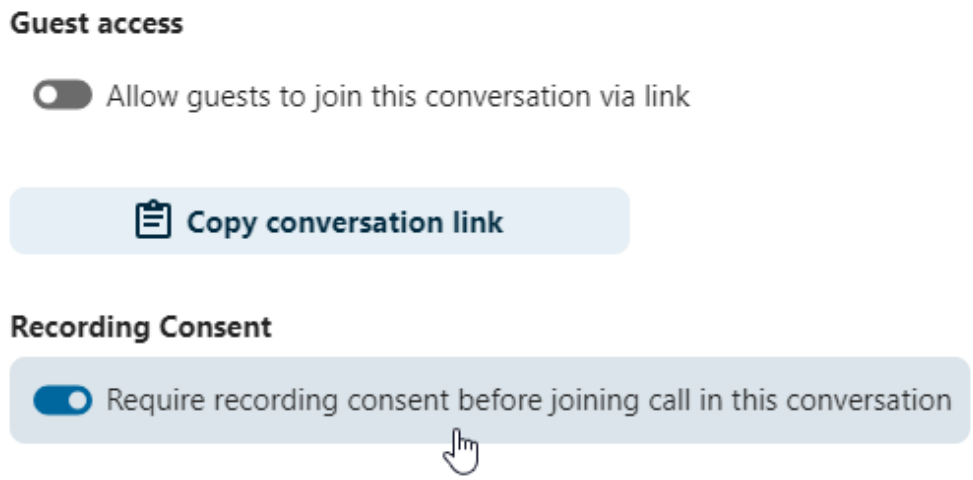




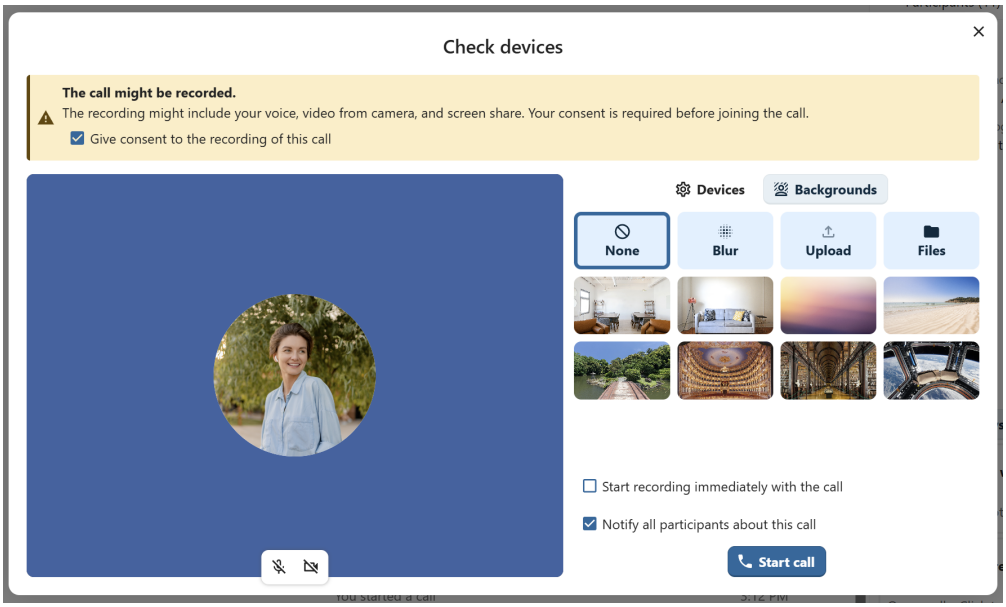

### Recording consent

For compliance with privacy regulations, it is possible to ask participants for consent to be recorded before joining the call. Administrators can configure this feature in several ways:

- Disable consent completely.
- Enable mandatory consent system-wide, requiring consent for all conversations.
- Allow moderators to configure this option on a conversation level. In such cases, moderators can access the conversation settings to configure this option accordingly:




If recording consent is enabled, every participant, including moderators, will see a highlighted section in the “Check devices” dialog before joining a call. This section informs participants that the call may be recorded. To give explicit consent for recording, participants must check the box. If they do not give consent, they will not be allowed to join the call.



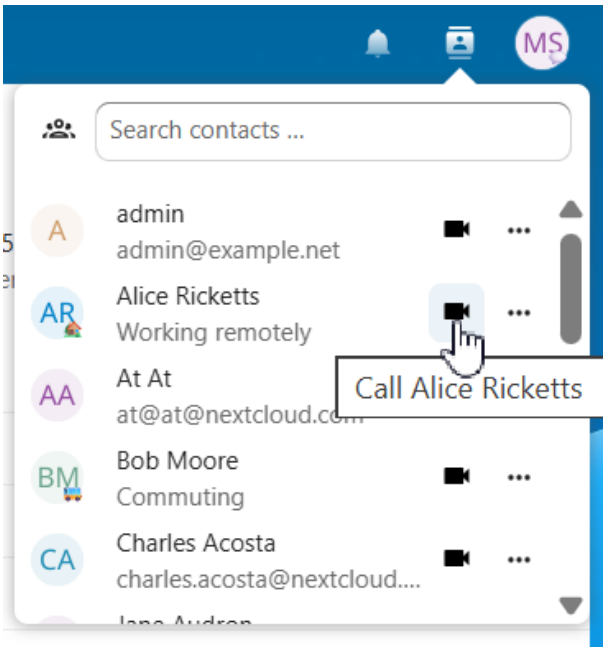

After a call ends, the recording is processed and saved to the chat as a shared file. Participants can play it back directly from the chat or download it from the conversation's shared items.

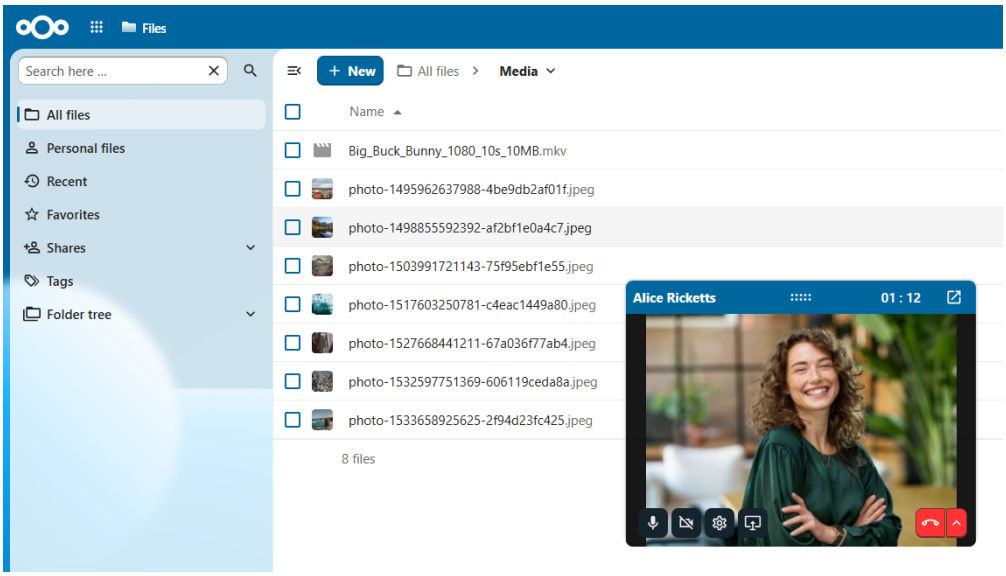
### 7.3.6 Call from anywhere

Start a call with any user directly from the avatar menu. No need to navigate to a conversation first; call while working on files, tasks, or other activities!

#### Accessing the call menu

1. Click on a user's avatar from any app in your Nextcloud workspace to open a menu
2. Select `Call {user}`
3. A direct call is initiated immediately in a floating window






### Best Practices

- **Check availability**: Check user status to see whether people are available before calling
- **Respect preferences**: Some may prefer messages over calls. Could this have been an e-mail?
- **Switch to groups**: Create a dedicated conversation for multi-user discussions

See also:

- *Joining a call*
- *Conversations*
- *Open conversations*

## 7.4 Federation

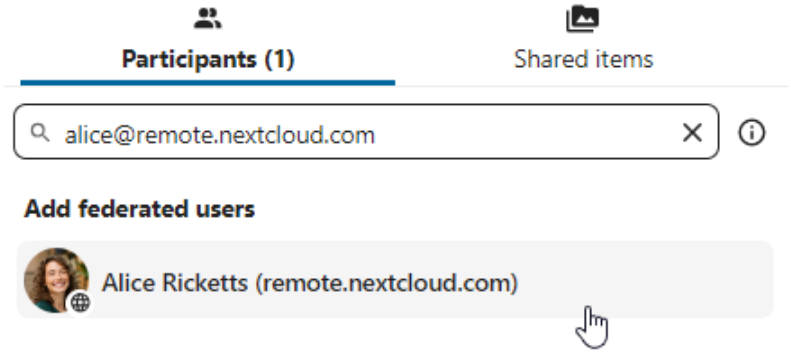
With the Federation feature, users can create conversations across different federated Talk instances and use Talk features as if they were on the same server.

This feature must be enabled by a system administrator.

### 7.4.1 Sending an invitation

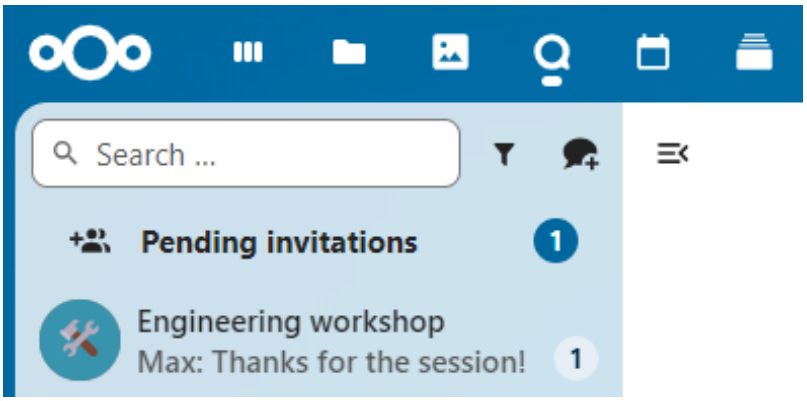
To receive an invitation, the other party needs your CloudID — your federated identity across Nextcloud instances. You can find your CloudID in **Personal settings** under **Sharing** — it looks like `user@cloud.example.com`.

The moderator of the conversation can send an invite to a participant on a different server:

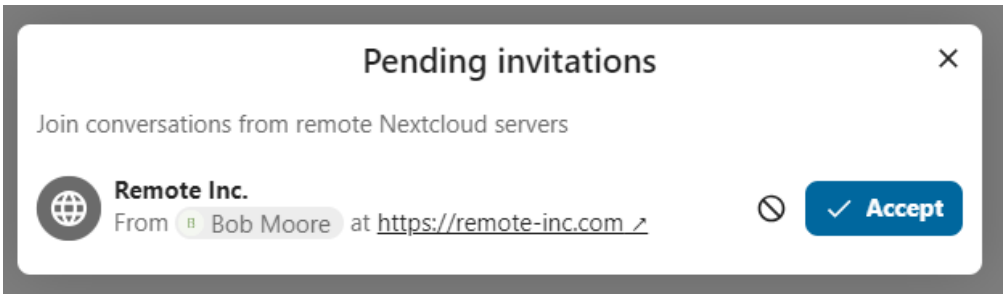



### 7.4.2 Accepting an invitation

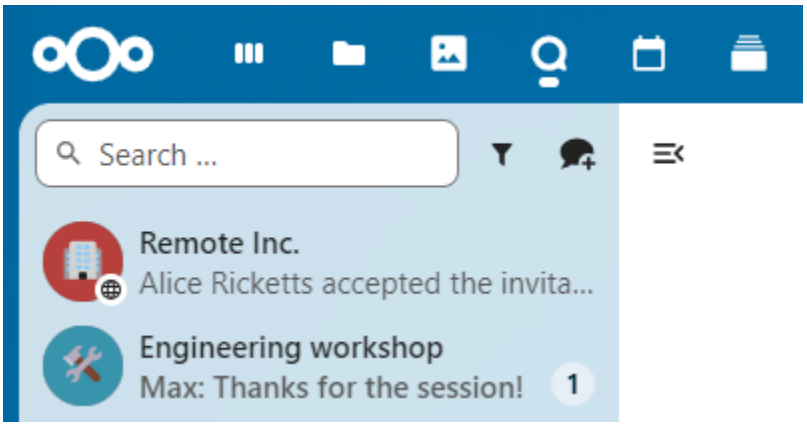
When receiving a notification, the user will see a counter of pending invites above the conversations list.




Upon clicking it, more information will be provided about the inviting party, and the user can either accept or decline the invitation.




By accepting the invite, the conversation will appear in the list as any other one.



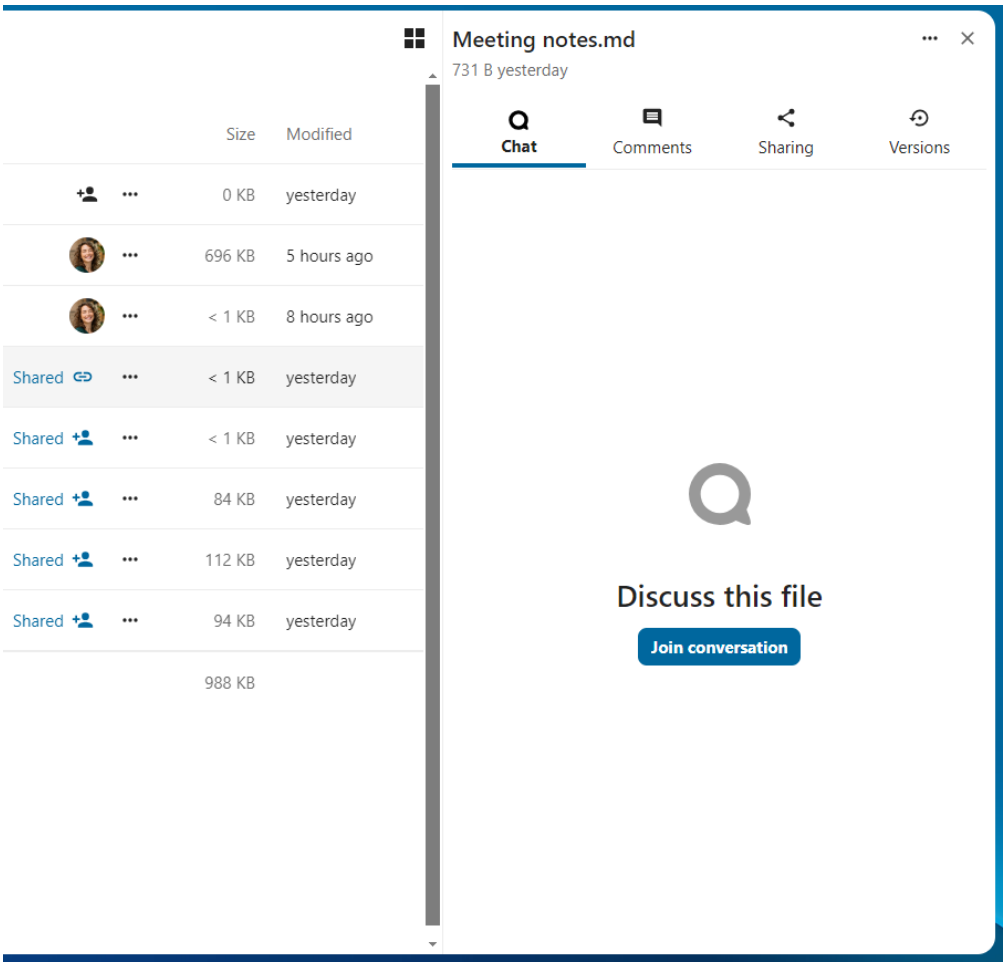

You can use it to chat with participants from other federated servers, join calls, and use other available Talk features.

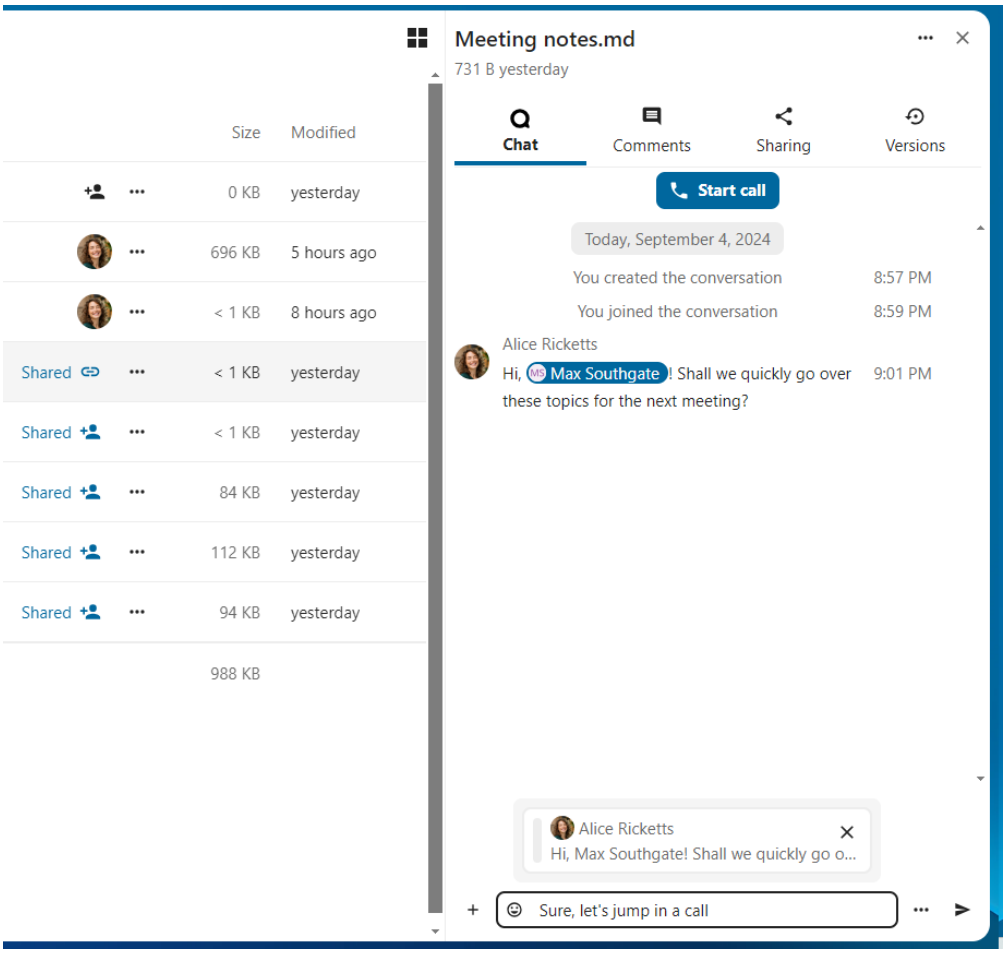
## 7.5 Integrations

### 7.5.1 Files integration

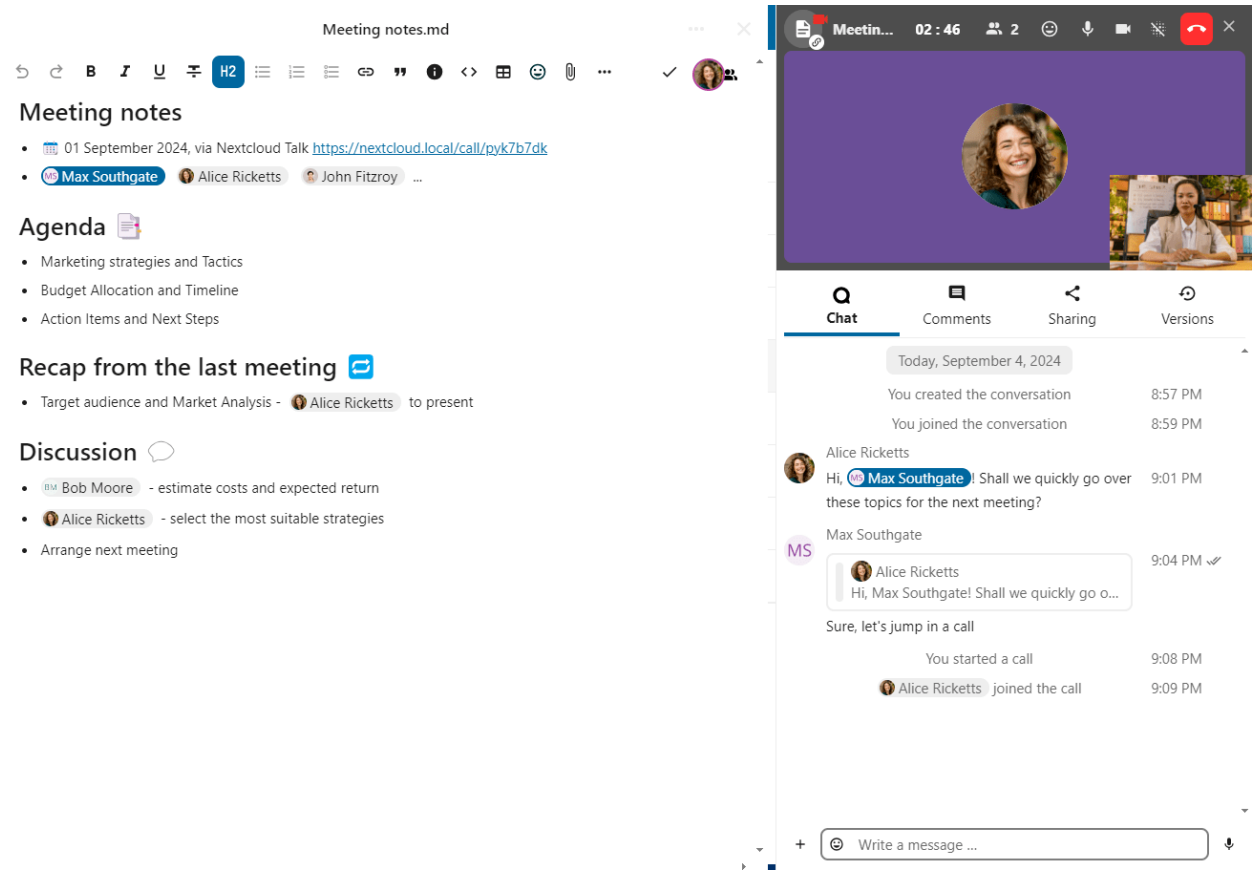
#### Talk from Files

In the Files app, you can chat about files in the sidebar, and even have a call while editing the file. You first have to join the chat.

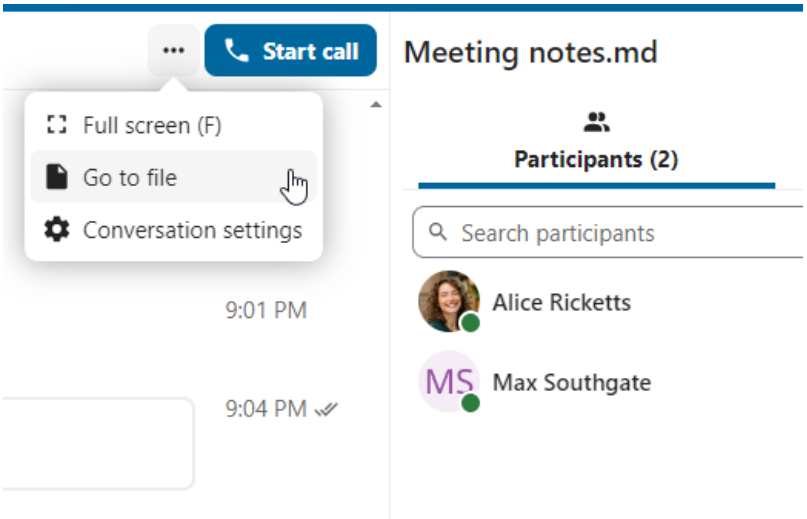

Meeting notes.md
731 B yesterday
Chat
Comments
Sharing
Versions
Size
Modified
0 KB yesterday
696 KB 5 hours ago
< 1 KB 8 hours ago
Shared < 1 KB yesterday
Shared < 1 KB yesterday
Shared 84 KB yesterday
Shared 112 KB yesterday
Shared 94 KB yesterday
988 KB
Discuss this file
Join conversation




You can then chat or have a call with other participants, even when you start editing the file.



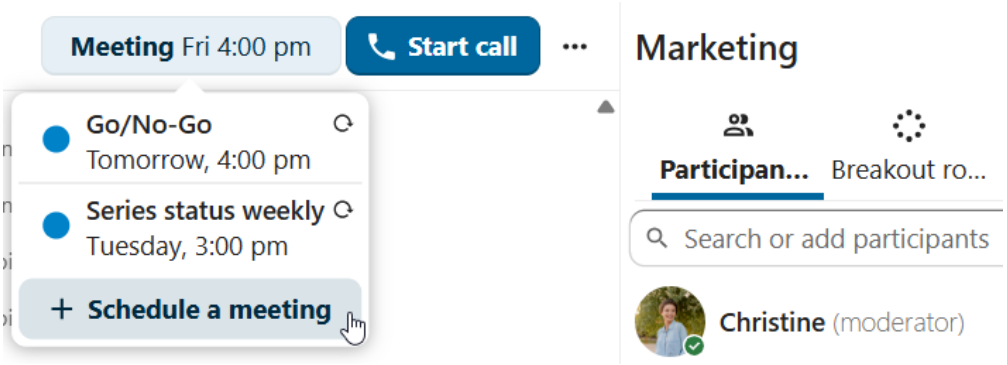

In Talk, a conversation will be created for the file. You can chat from there, or go back to the file using the . . . menu at the top of the conversation.



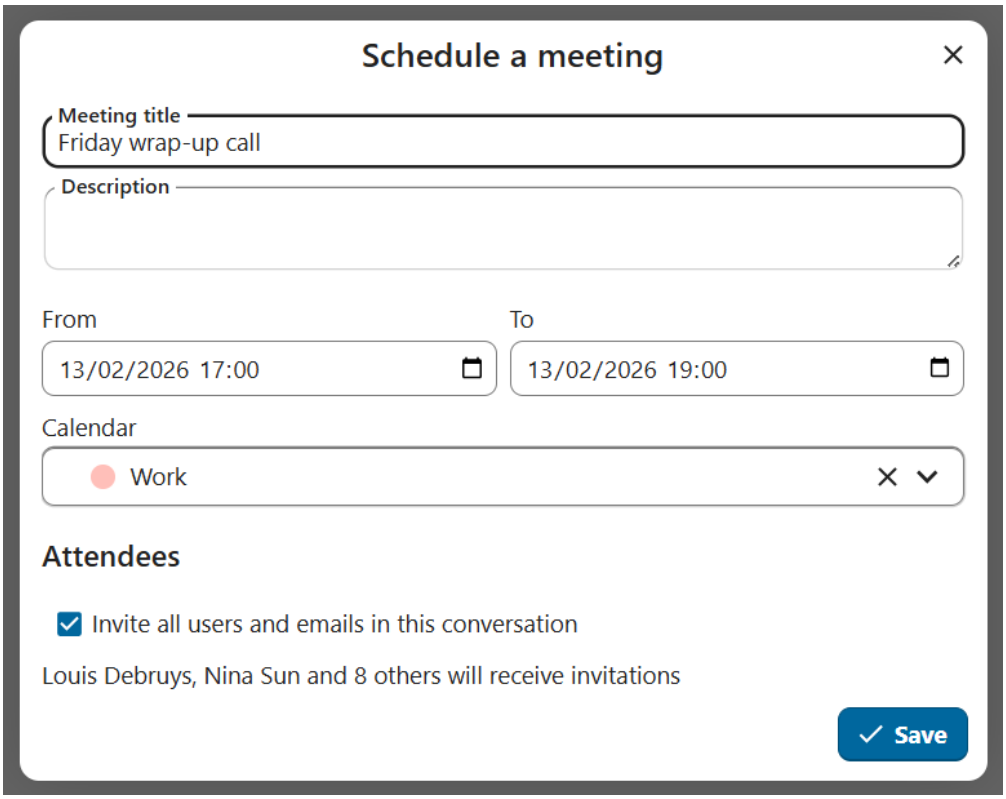

## 7.5.2 Calendar integration with Talk

### Meetings and events

If calendar events have a Talk conversation set as event location, you will see information about upcoming events inside of this conversation. That way you can stay informed about scheduled meetings or activities directly within your chat. If Calendar app is enabled, you can click on an event to view details.

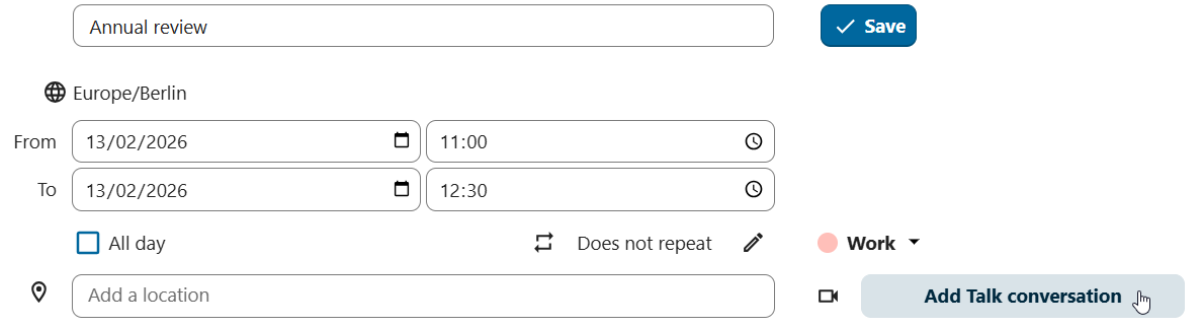



It is possible to schedule a meeting directly from a conversation. In the dialog, you can set meeting details such as title, date, time and description. You can also choose to invite all participants including email guests, or select specific ones.

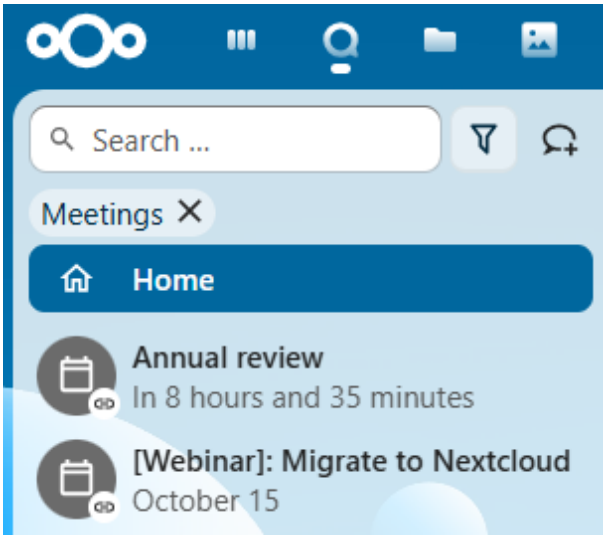



### Schedule from Calendar

When creating a new event in Calendar, you can set a Talk conversation as event location. This will create a new conversation if one does not exist yet.




When the event is created, you will see a link to the conversation in the event details. The conversation will also appear in the list of conversations (discoverable by the `Meeting conversations` filter).




Like instant meetings, event conversations will be automatically deleted after configured period of inactivity (by default 28 days).

## 7.6 For moderators

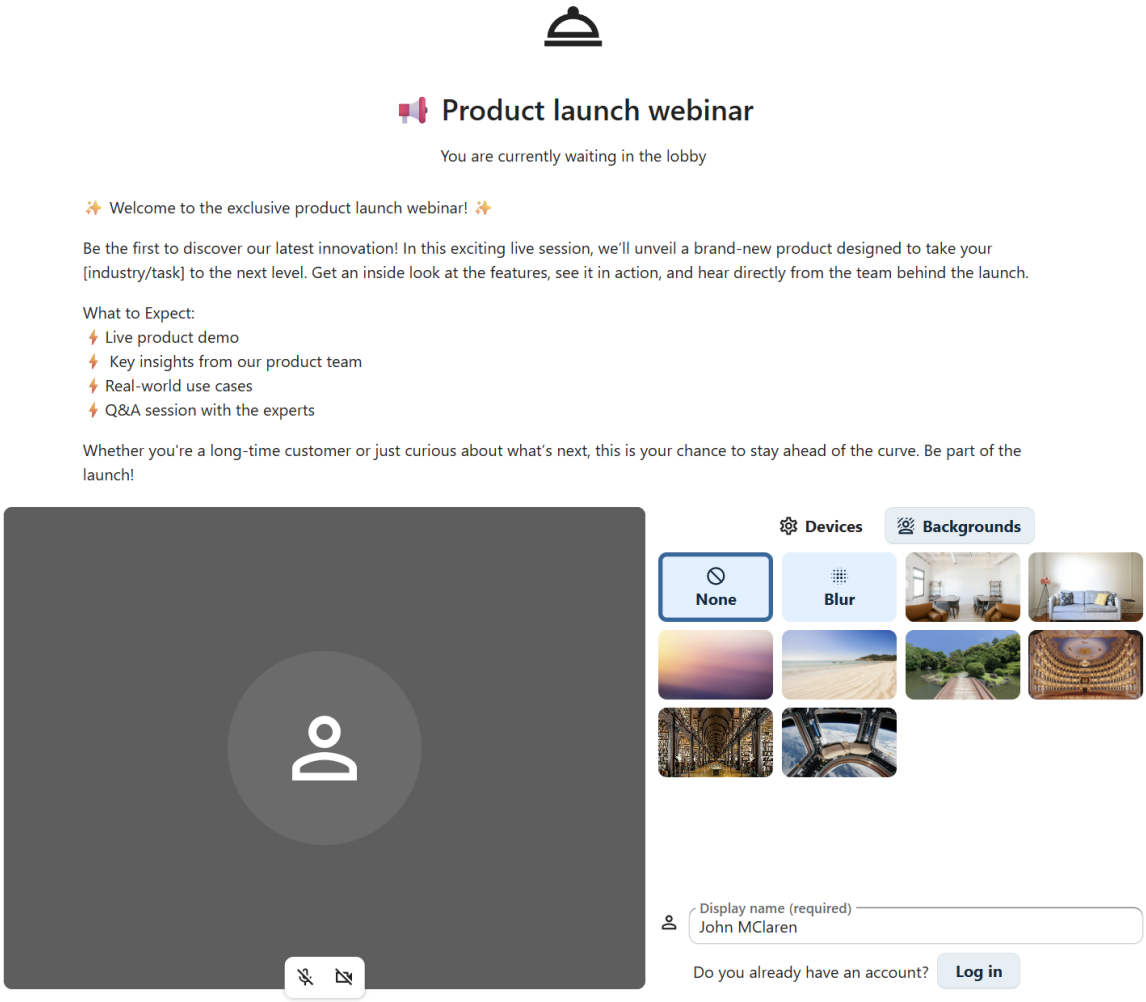
As a moderator you can create and configure conversations, manage participants, run webinars with a lobby, record calls, set up breakout rooms, and integrate external chat services.

**Note**

Moderator-only actions inside conversations and calls are also described in the general *Conversations* and *Calls* pages — look for sections marked *moderator*.

### 7.6.1 Webinar and lobby

The lobby feature allows you to show guests a waiting screen until the call starts. This is ideal for webinars with external participants, for example.




You can choose to let the participants join the call at a specific time, or when you dismiss the lobby manually.

You can configure the lobby in `Conversation settings` under the `Webinar` section.

### 7.6.2 Breakout rooms

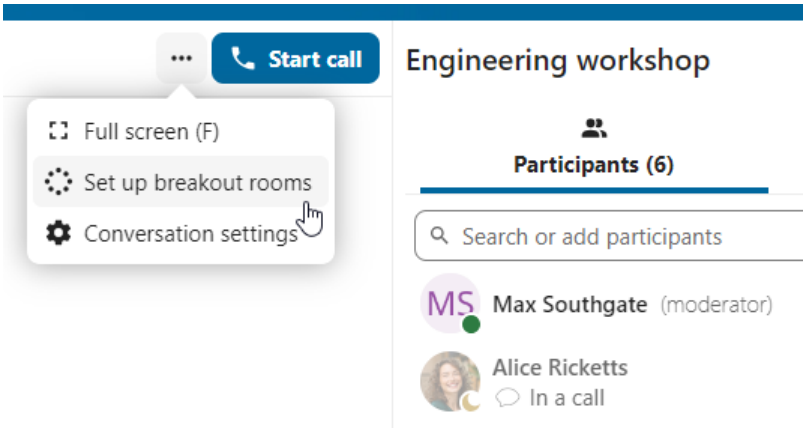
Breakout rooms allow you to divide a Nextcloud Talk call into smaller groups for more focused discussions. The moderator of the call can create multiple breakout rooms and assign participants to each room.

**Note**

Breakout rooms are currently not available in conversations that are joinable by guests (public conversations).

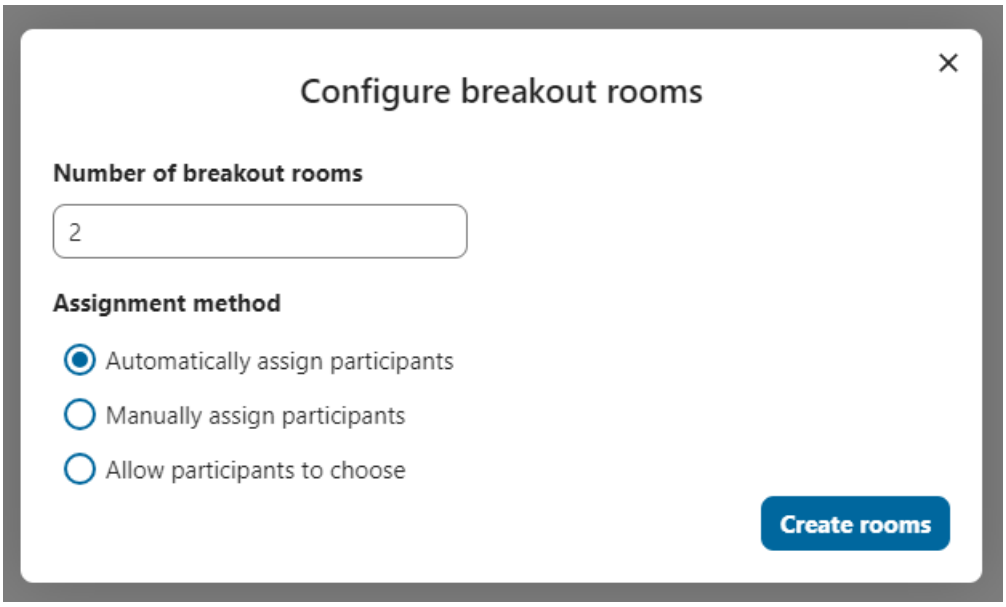
### Configure breakout rooms

To create breakout rooms, you need to be a moderator in a group conversation. Click on the top-bar menu and click on `Setup breakout rooms`.



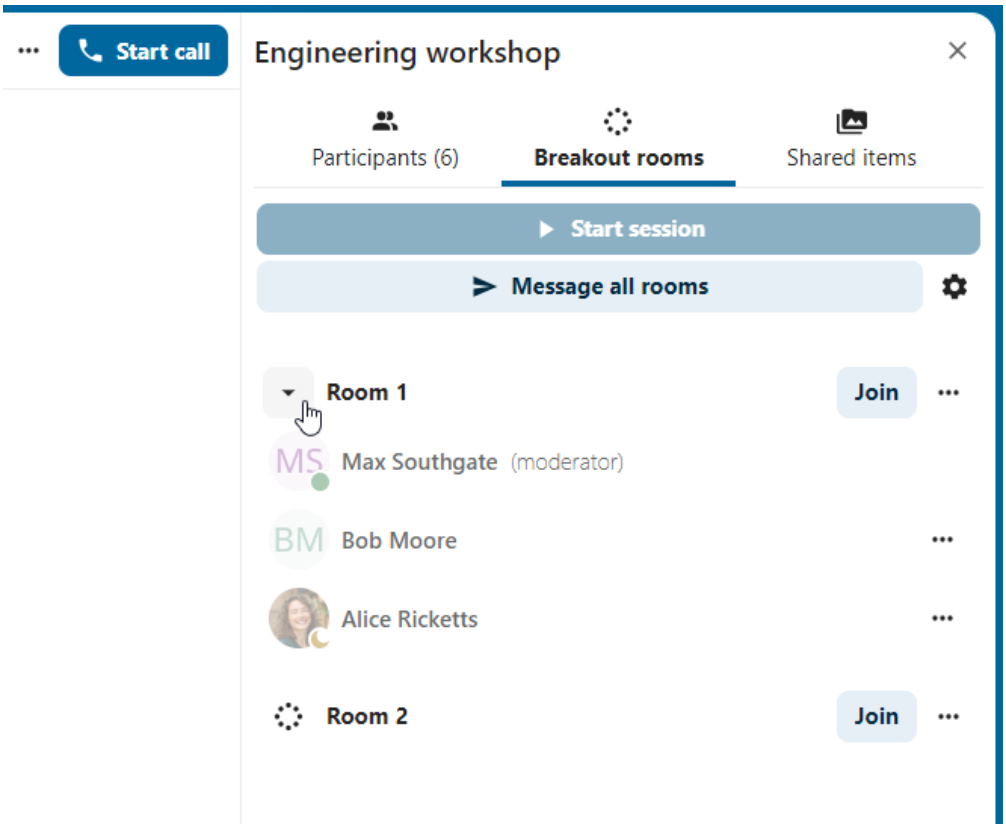

A dialog will open where you can specify the number of rooms you want to create and the participants assignment method. You have three options:

- **Automatically assign participants**: Talk will automatically assign participants to the rooms.
- **Manually assign participants**: You'll go through a participants editor where you can assign participants to rooms.
- **Allow participants to choose**: Participants will be able to join breakout rooms themselves.



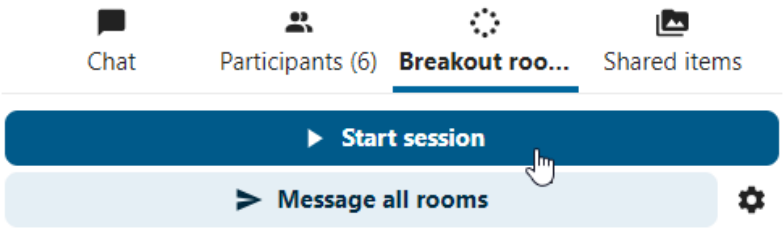
### Manage breakout rooms

Once the breakout rooms are created, you will be able to see them in the sidebar.

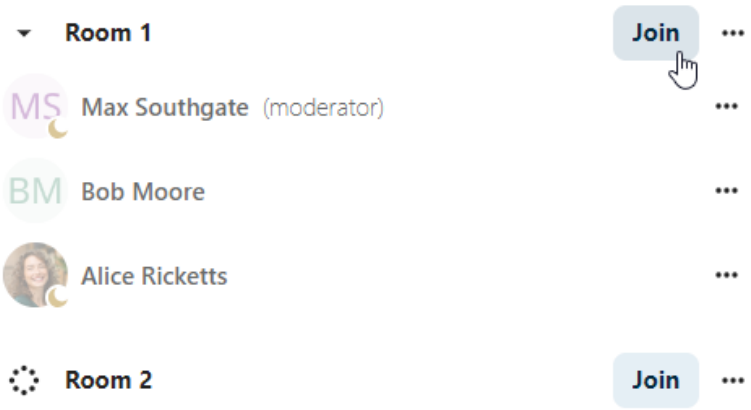



From the sidebar header, you can:

- **Start and stop the breakout rooms**: this will move all the users in the parent conversation to their respective breakout rooms.
- **Broadcast a message to all the rooms**: this will send a message to all the rooms at the same time.
- **Make changes to the assigned participants**: this will open the participants editor where you can change which participants are assigned to which breakout room. From this dialog it's also possible to delete the breakout rooms.




From the breakout room element in the sidebar, you can also join a particular breakout room or send a message to a specific room.




### 7.6.3 Bots and commands

#### Bots

Bots can respond to chat messages, provide automated replies, and integrate with external services. Your administrator can enable bots for your Talk instance.

Some examples of available bots:

- **Call summary** — Posts an overview message after a call ends, listing all participants and outlining any tasks that were mentioned.
- **Agenda bot** — Helps manage meeting agendas with time monitoring and permission-based access control.
- **Roll a dice** — Type `/roll` in a conversation to roll dice.

A full list of available bots and installation instructions can be found in the Talk administration documentation.

#### Commands

**Warning**

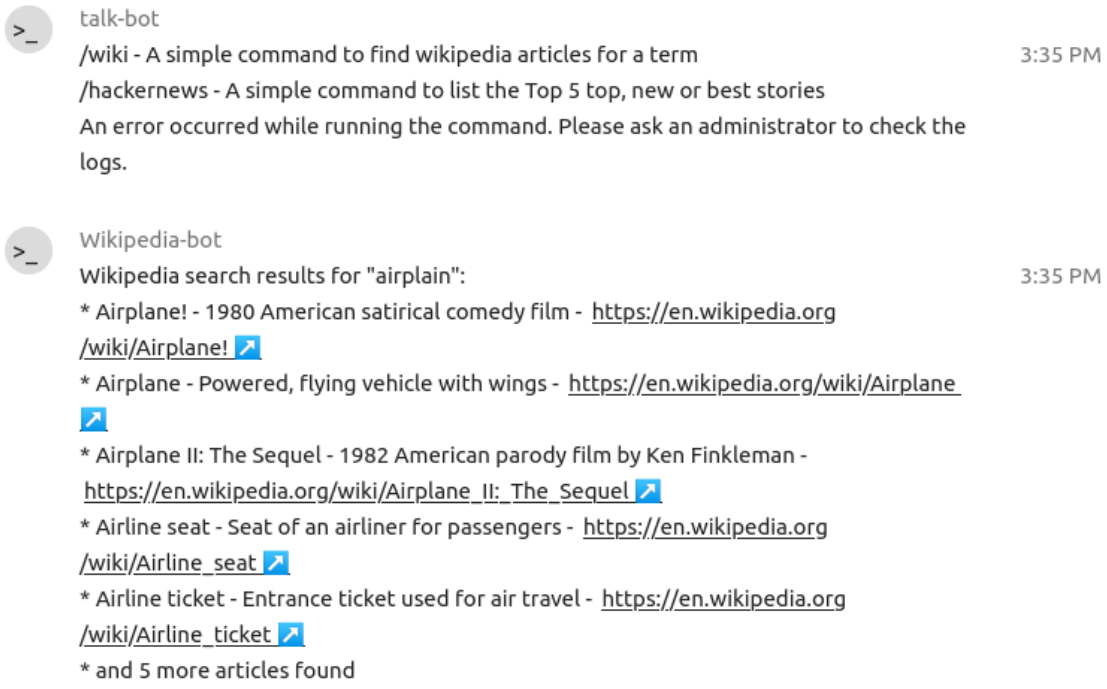
Commands have been removed in favor of Bots.

Nextcloud allows users to execute actions using commands. A command typically looks like:

```
/wiki airplanes
```

Administrators can configure, enable and disable commands. Users can use the `help` command to find out what commands are available.

```
/help
```

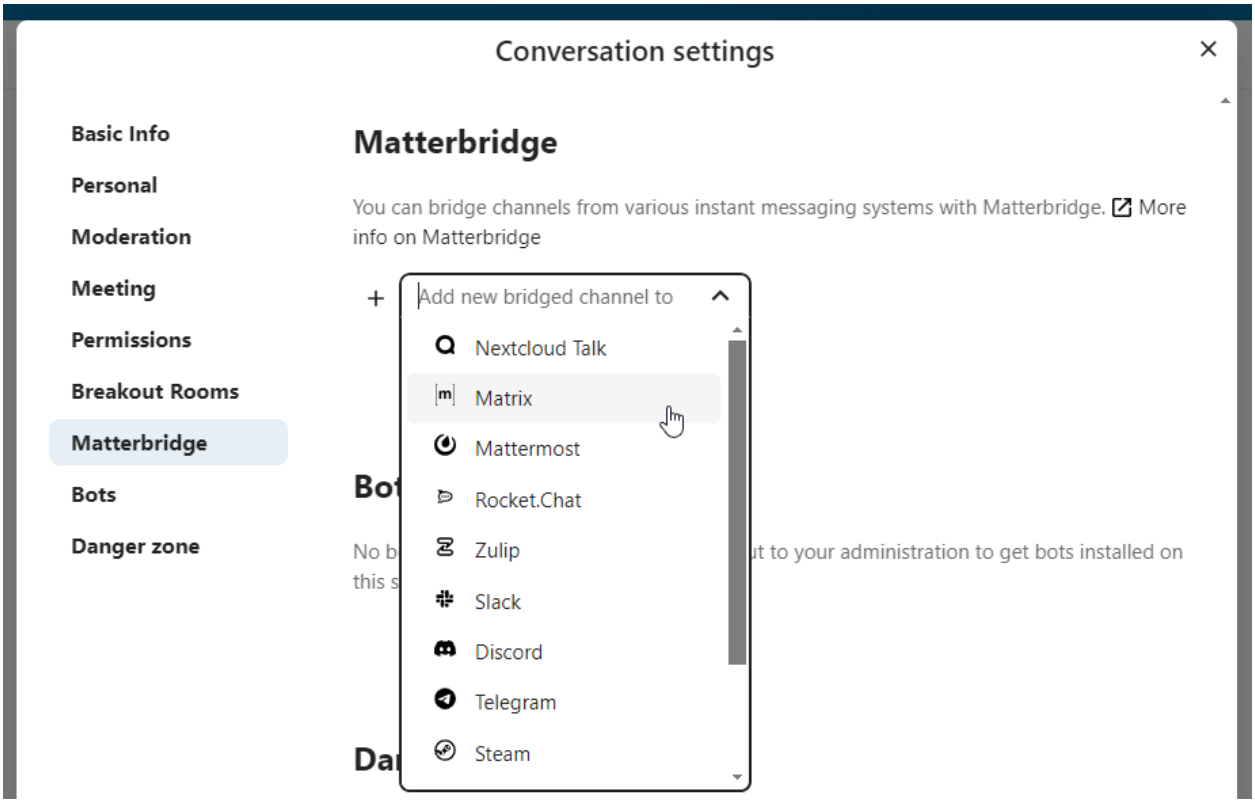



### 7.6.4 Matterbridge

Matterbridge integration in Nextcloud Talk makes it possible to create 'bridges' between Talk conversations and conversations on other chat services like MS Teams, Discord, Matrix and others. You can find a list of supported protocols on the Matterbridge github page.

> **Note**
>
> The Matterbridge app must be installed by an administrator before this feature is available. See the Talk administration documentation for setup instructions.

A moderator can add a Matterbridge connection in the chat conversation settings.



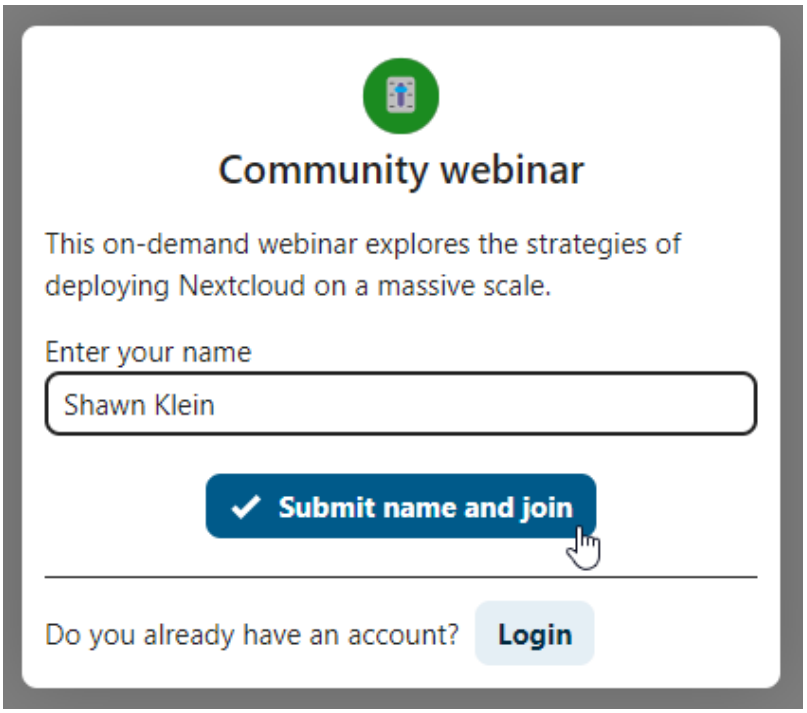

Each bridge has its own configuration requirements. Information for most is available on the Matterbridge wiki and can be accessed behind `more information` menu in the `...` menu. You can also access the wiki directly.

## 7.7 Join a call or chat as guest

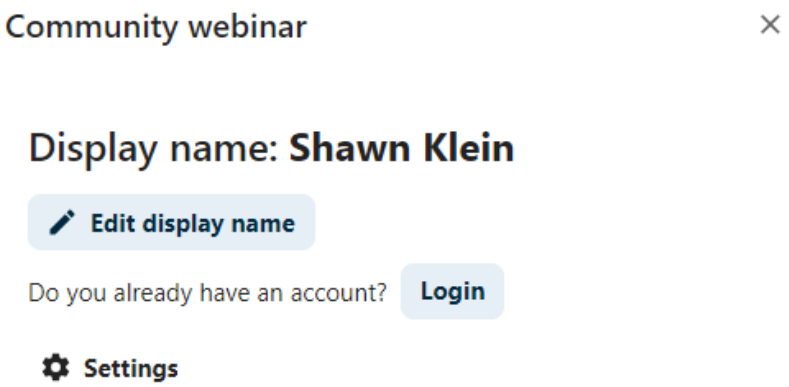
If you received a link to a Nextcloud Talk conversation, you can join as a guest without a Nextcloud account.

### 7.7.1 Joining a chat

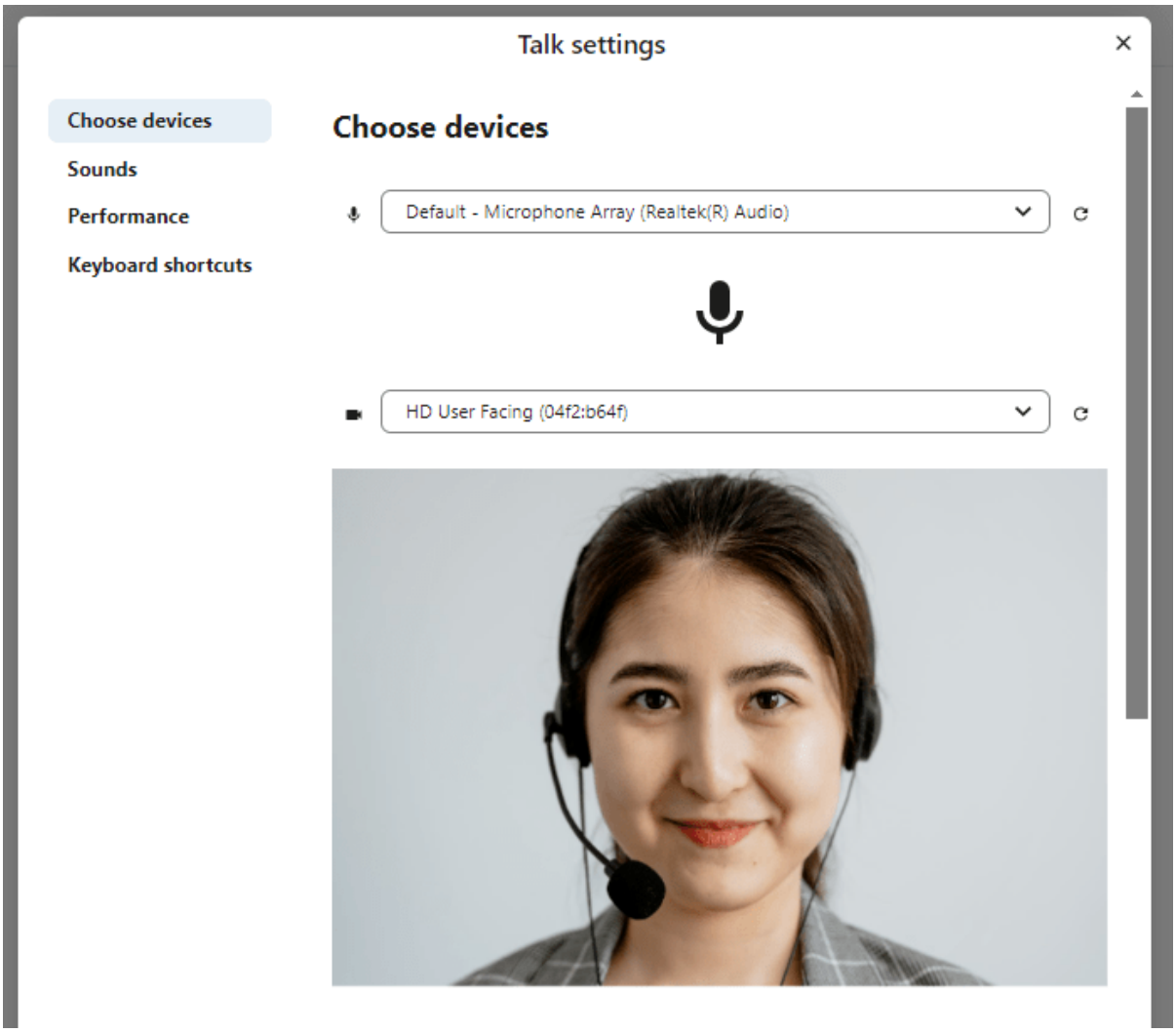
If you received a link to a chat conversation, you can open it in your browser to join the chat. Here, you will be prompted to enter your name before joining.




You can also change your name later by clicking the `Edit` button in the top bar.

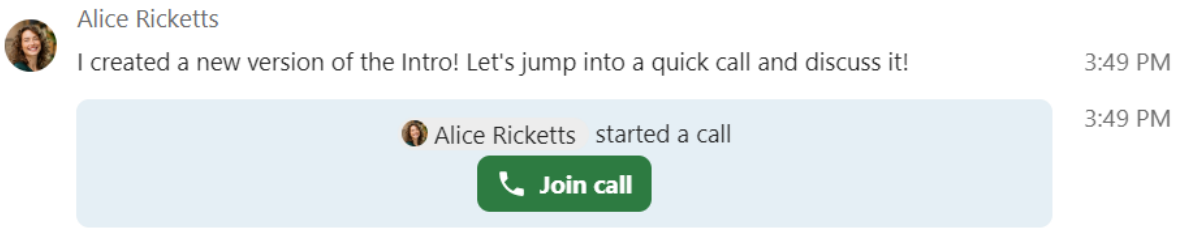



Your camera and microphone settings can be found in the `Settings` menu. There you can also find a list of shortcuts you can use.

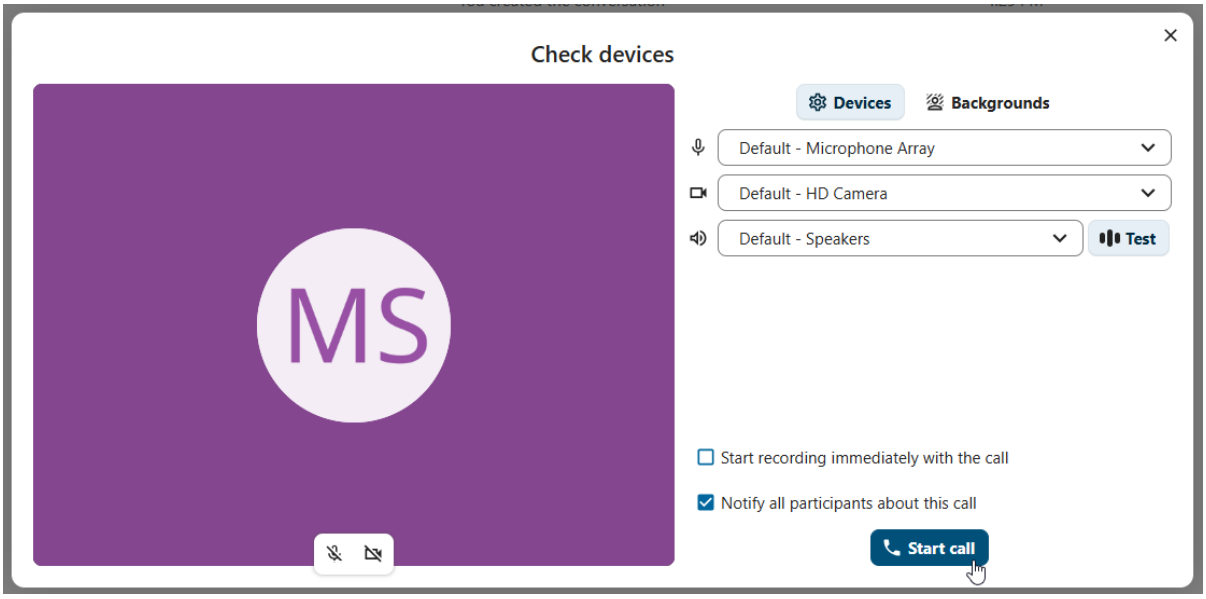



### 7.7.2 Joining a call

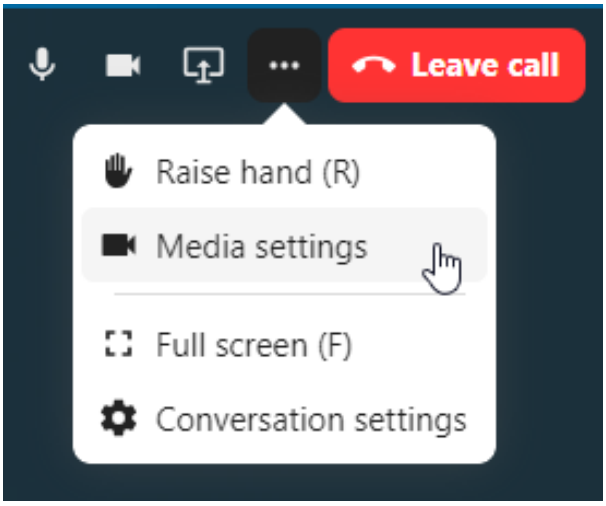
You can start a call any time with the `Start call` button. Other participants will get notified and can join the call. If somebody else has started a call already, the button will change in a green `Join call` button.




Before joining, you will see a device check where you can select your camera and microphone, enable background blur, or join without any devices.




During a call, you can find the Camera and Microphone settings in the ... menu in the top bar.




During a call, you can mute your microphone and disable your video with the mute and camera toggle buttons in the call toolbar, or using the shortcuts `M` to mute audio and `V` to disable video. You can also use the `space bar` to toggle mute. When you are muted, pressing space will unmute you so you can speak until you let go of the space bar. If you are unmuted, pressing space will mute you until you let go.

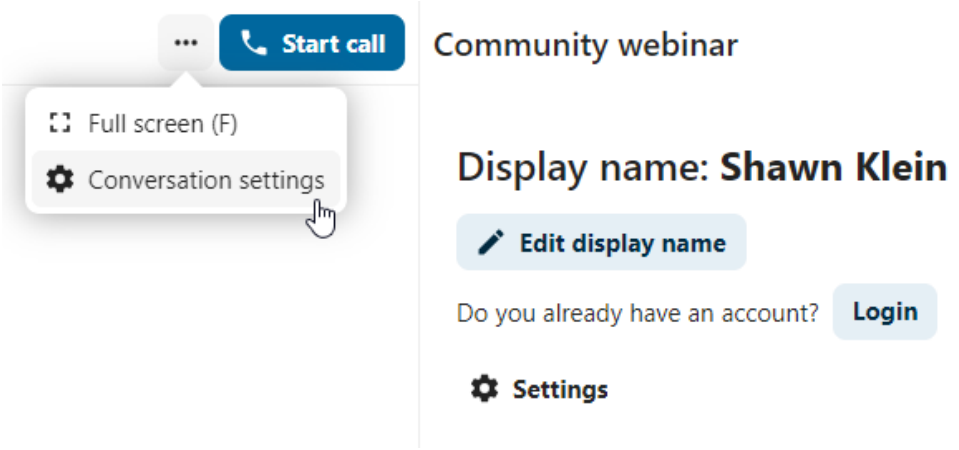
You can hide your video (useful during a screen share) with the little arrow just above the video stream. Bring it back with the little arrow again.

### 7.7.3 Starting a screen share

You can click the monitor icon on your video stream to share your screen. Depending on your browser, you will get the option to share a monitor, an application window or a single browser tab.

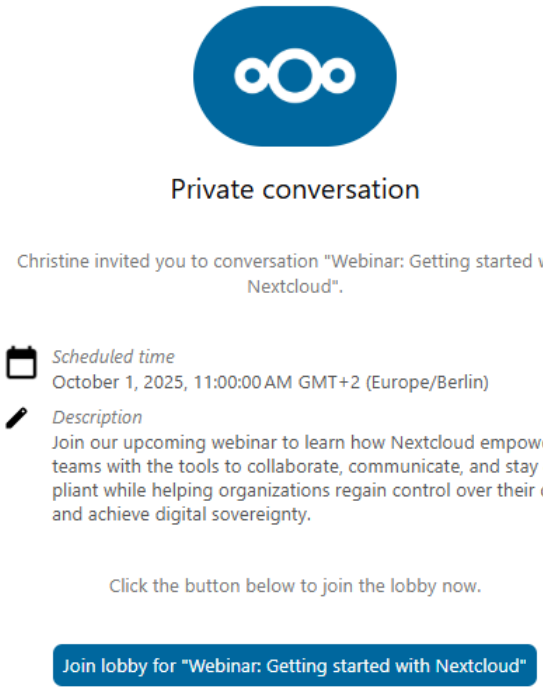
### 7.7.4 Full-screen and other settings

In the conversation menu you can choose to go full-screen. You can also do this by using the `F` key on your keyboard. In the conversation settings, you can find notification options and the full conversation description.

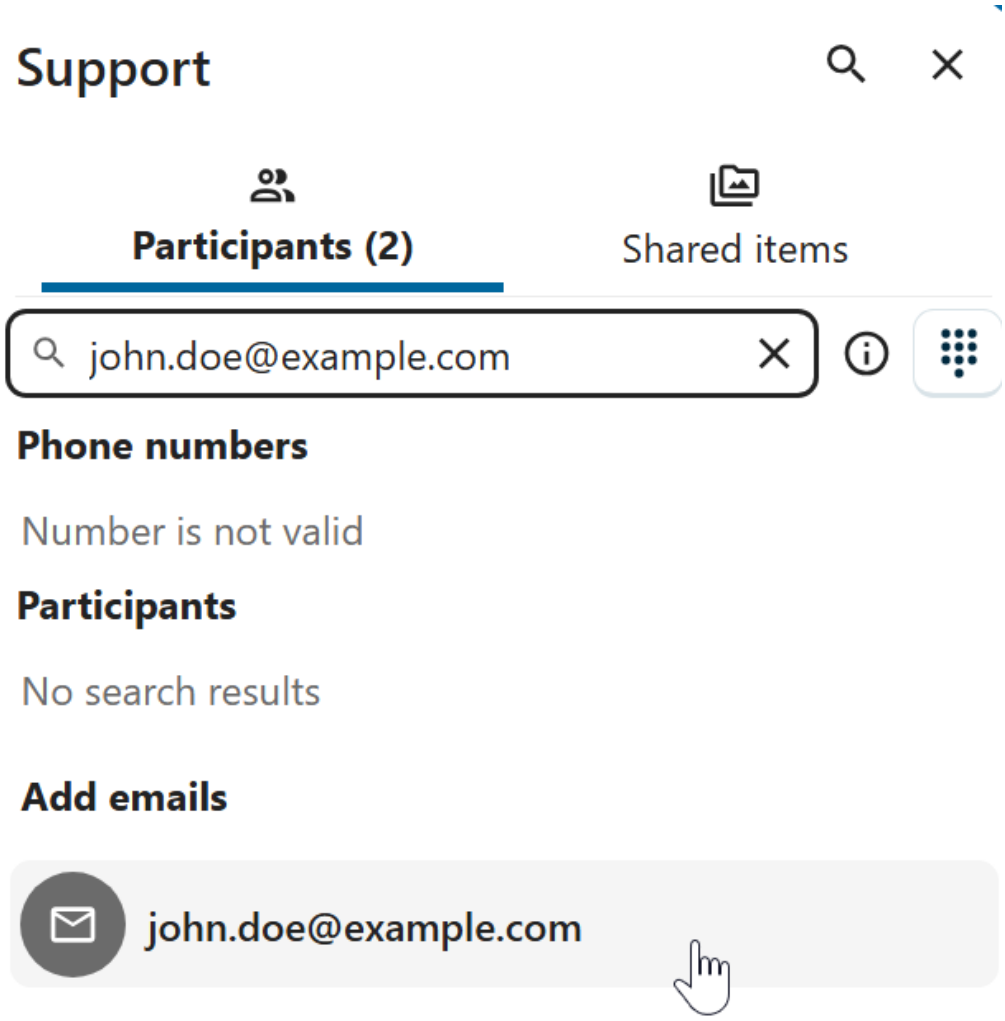



### 7.7.5 Joining as an email guest

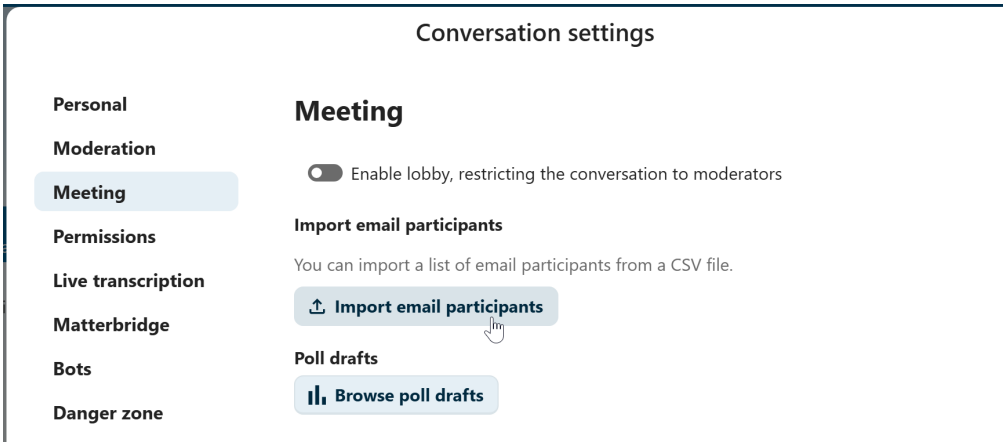
A guest can be invited to a conversation via email. The email contains a link to join the conversation. If the guest clicks the link, they will be redirected to the conversation with an individual access token.




An invitation can be done via inserting the email address in `Participants` tab search field.




You can bulk invite email participants by uploading a CSV file. The option is available in the conversation settings under `Meeting` section.



CHAPTER

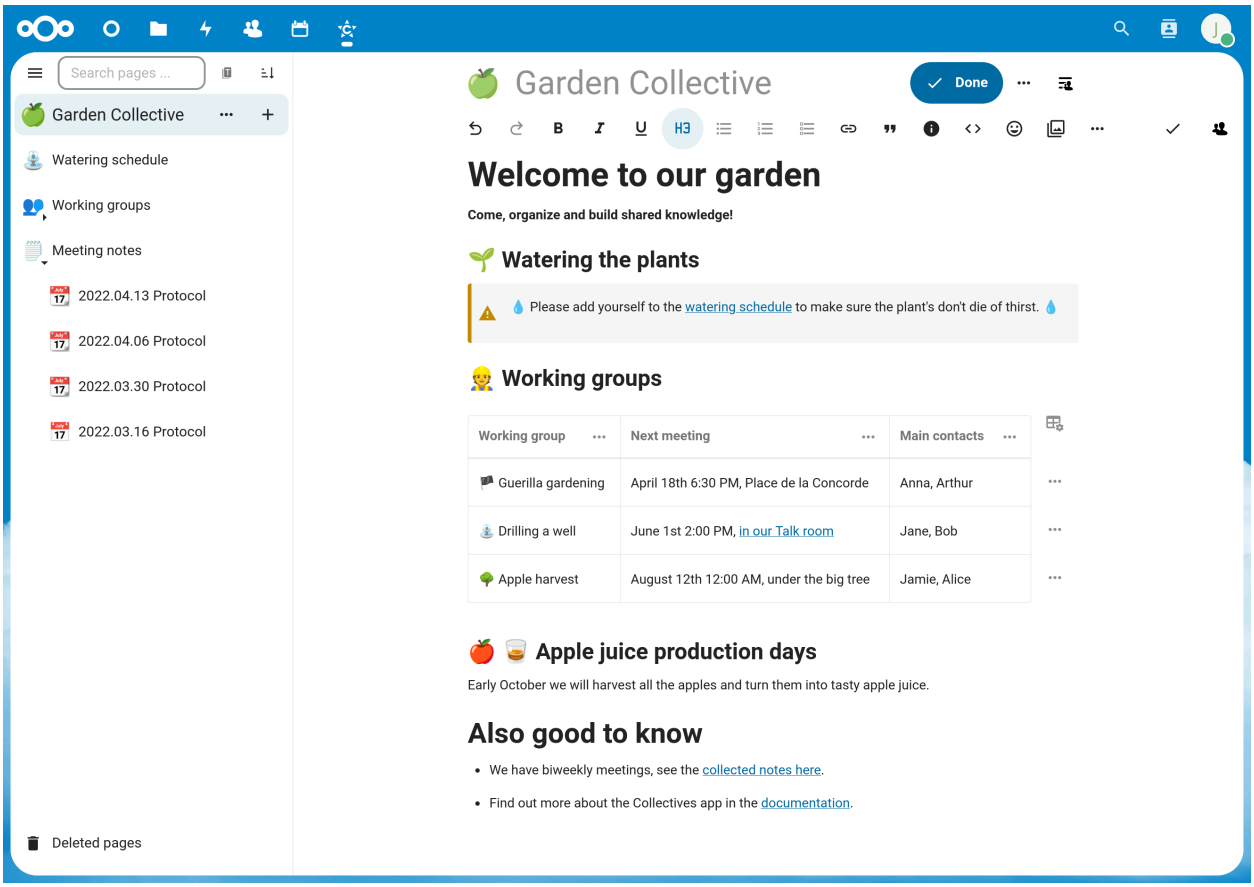
EIGHT

# COLLECTIVES

Your space to collaboratively write and organize. Collectives is designed for groups and communities to structure shared knowledge.

## 8.1 Getting started

Think of Collectives as your space to take notes together and collaborate online. You and your peers can write documents collaboratively and structure your shared knowledge. You can even embed task boards, whiteboards and calendars. Collectives emphasizes horizontal and non-hierarchical workflows.



### 8.1.1 Why use Collectives?

- You need a tool to collaborate, cowork or organize with others.
- You want all your shared knowledge in one place.
- You want a quick and easy overview of your pages and subpages.
- You want to share parts of the knowledge with external people.
- You already use Nextcloud.

### 8.1.2 First steps

You will create your first collective with two pages and a link from one to the other. It expects that you open Collectives in a desktop browser (i.e. not on mobile).

1. Select the Collectives app in the app menu on the top:




2. Click on “New collective”.
3. Enter the name `My first collective` and choose an emoji (or keep the preselected one).
4. Select “Create without members”. We’ll learn how to add other members later.
5. In the page list on the left, click the **+** button next to the landing page. Congratulations, you just created a first page in your collective.
6. Give the page a title by typing `My first page`.
7. Now press `Enter` and the cursor will jump to the (still empty) page content.
8. Type `## My first heading` to insert a second-level heading. Alternatively you can open the headings menu in the editor toolbar, select “Heading 2” and then type `My first heading`. You just learned that there’s more than way to format text
9. Create a subpage of “My first page” by clicking the **+** button next to “My first page” in the page sidebar. The button will only appear once you hover the mouse cursor over the entry in the page list.
10. Give the subpage a title by typing “My subpage”.
11. Add a link from to the first page by opening the link menu in the editor toolbar and selecting “Link to page”. A dialogue to select the page will open. Type `first` in the search field and “My first page” will appear. Click on it and it will be added as a link preview to the subpage.

Congratulations, you learned two important basics when working with Collectives: how to create and link between pages and how to format content in a page.

### 8.1.3 What’s next

- To learn how to use Collectives in your team, see *How to onboard your team*.
- For an overview over features, see here.

## 8.2 How to onboard your team

### 8.2.1 Our first project: Introductions

#### Step 1: Create an "Introductions" parent page

1. Click on the + button next to the collective name in the sidebar on the left hand side of Collectives.
2. A new page is created. We can use this page as a parent page for our introductions! Let's fill it with some nice introductory words for visitors and give it the title `Introductions`.

#### Step 2: Create an "Introduction"-template together

1. It can be nice and more accessible, when all introductions follow the same format! Everyone should add a picture, a brief description and answer what they like about collective organizing. Collectives makes this very easy. We quickly create a template with exactly this content, so that everyone who onboards can answer easily.
2. Click the … button next to your collective. Choose "Manage templates", then "Add a template". Collectives now adds a page for you to fill, which later can be easily and accessibly copied for everyone who wants to create an introduction.
3. Give your template the title `Introduction`. Now add your fields as simple text to your document - don't forget to decide on them collectively! By pressing on the Tt button in the formatting toolbar, you can format your new text as headings!
4. When you're finished, just press the **Close** button - your template will be automatically saved and you should be back in your template manager.
5. Let's add a fun emoji for our new template last. Click the … button next to your new template and click choose emoji…. Afterwards you can close the template manager.

#### Step 3: Everyone creates their own!

1. This is where the magic happens ! Everyone on their own computers now! Click the + button next to your "Introductions" page that we created in step one. Select the "Introductions" template. Title the page with your name or nick and fill out the fields your decided on!
2. Wow! We just quickly created a cohesive and unifying "Introductions" page in our collective. Becoming part of your collective will be much less scary now for new members! Congratulations! 

## 8.3 Access Markdown files

The pages of your collectives are stored in Markdown files. You can access them via the Files app. Per default, the folder is hidden as it's called `.Collectives` (or a translated version of it). To access the hidden folder, enable "Show hidden files" in the Files app settings.

You can also change the name of the folder in the Collectives app settings. The setting is located in the Collectives app at the bottom of the collectives list. If you want the folder to be visible permanently without showing other hidden files, set the folder setting to a name without leading dot (e.g. `Collectives`). Please note that this is a per-user setting, it only affects the Collectives user folder for the current user.

CHAPTER

NINE

# DESKTOP CLIENT

The Nextcloud desktop client for Windows, macOS, and Linux keeps files synchronized between your computer and your Nextcloud server.

## 9.1 Installation

### 9.1.1 Download

You can download the latest version of the Nextcloud Desktop Synchronization Client from the Nextcloud download page. Clients are available for Linux, macOS, and Microsoft Windows.

You will also find links to source code archives and older versions on the download page.

### 9.1.2 Supported server versions

Each desktop client release supports the latest three stable Nextcloud server major versions at the time of release. See the Nextcloud Server release schedule for supported major versions.

### 9.1.3 System Requirements

- Windows 10+ (64-bits only)
- macOS 12.0+ (64-bits only)
- Linux (Ubuntu 24.04 or openSUSE 15.5 or Alma 8 or …) (64-bits only)

  For Linux distributions, we support, if technically feasible, the current LTS releases. For BSD, we support them if technically feasible, but we do not test them.

**Note**

We do not support Citrix.

- We will do our best to advise Citrix users from the desktop client point of view.
- We will fix issues that are also reproducible on the standard supported systems.
- Everything else is outside of our scope.

### 9.1.4 Install on macOS and Windows

Installation on macOS and Windows is the same as for any other software application: download the program and then double-click it to launch the installation, and then follow the installation wizard. After it is installed and configured the desktop client will automatically keep itself updated; see *The Automatic Updater* for more information.

For administrator-focused deployment options such as advanced Windows MSI configuration, non-interactive account provisioning, and command-line wizard preconfiguration, see the Admin Manual chapter on desktop client deployment and setup.

### 9.1.5 Install on Linux

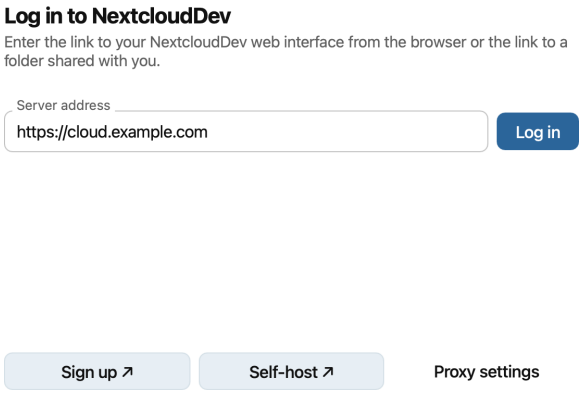
For Linux, Nextcloud officially provides the desktop client as an AppImage on the Nextcloud download page.

Some Linux distributions also provide the Nextcloud desktop client through their package managers. These packages are maintained by the distribution or community, not by Nextcloud. If you prefer a package-managed installation, refer to your distribution's documentation.

Linux users must also have a password manager enabled, such as GNOME Keyring or KWallet, so that the desktop client can log in automatically.

### 9.1.6 Initial setup

After installation, the setup wizard opens. Enter the address you use to access your Nextcloud server in a browser, then click **Log in**.



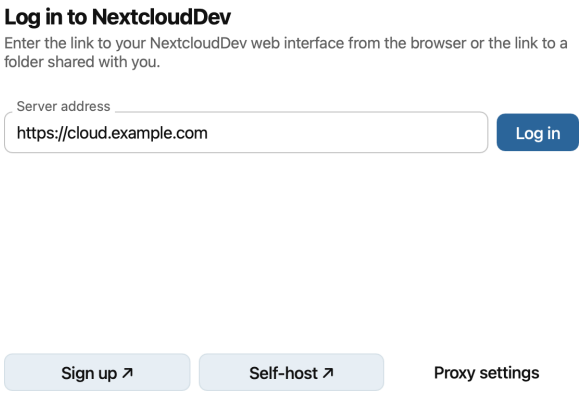

For the remaining wizard steps, including browser authorization and sync options, see *Add account*.

## 9.2 Using the Client

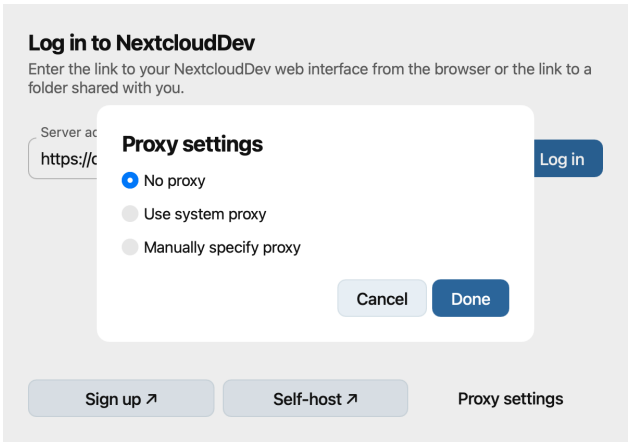
The Nextcloud desktop client runs in the background. Open its settings from the system tray on Windows and Linux or the menu bar on macOS.

### 9.2.1 Add account

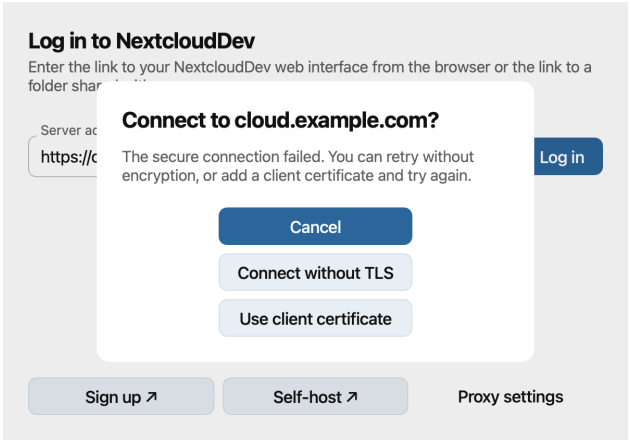
To connect another Nextcloud account, open the settings dialog and click **Add account** in the sidebar. Enter the address you use to access your Nextcloud server in a browser, then click **Log in**.



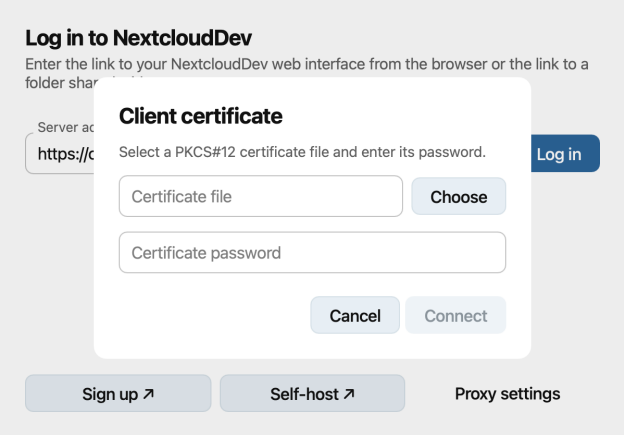

If your network requires a proxy, click **Proxy settings** before logging in. Choose the system proxy or enter your proxy settings manually, then click **Done**.



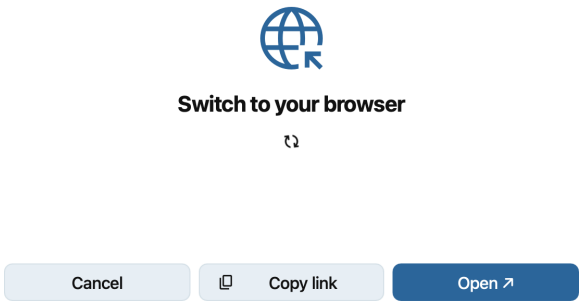

If the secure connection fails, check the server address and contact your server administrator. The wizard may offer to connect without TLS or use a client certificate. Use **Use client certificate** only if your server requires one.



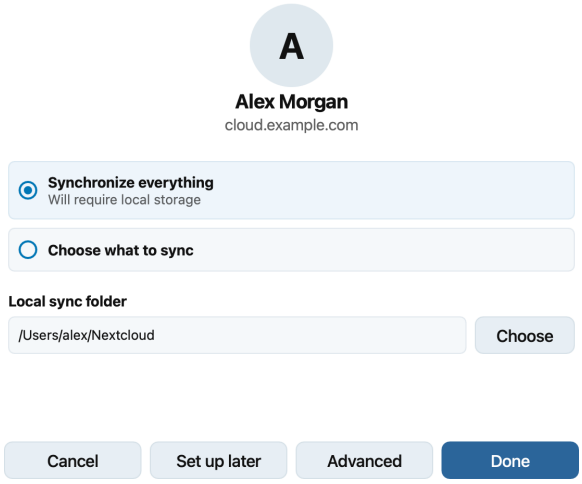

If prompted for a client certificate, choose the PKCS#12 file provided by your administrator, enter its password, and click **Connect**.



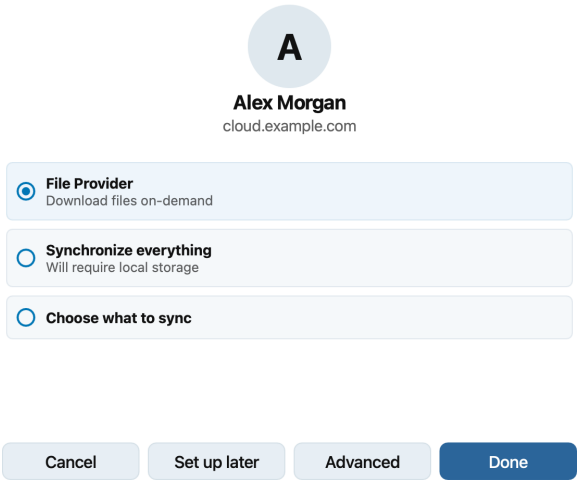

The wizard asks you to switch to your browser. Click **Open** if the browser does not open automatically. Log in and grant the desktop client access when prompted. Then return to the wizard.



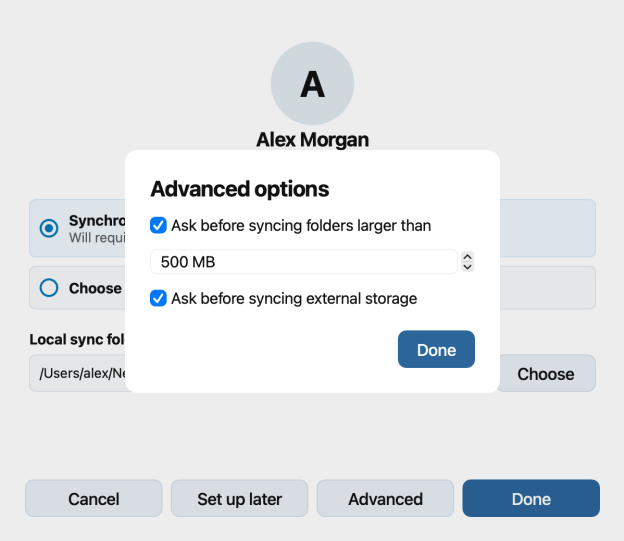

Choose how to sync your files. With classic synchronization, choose **Synchronize everything** or **Choose what to sync**. Use **Choose** beside **Local sync folder** to change where files are stored, then click **Done**.




You can choose **File Provider** to download files on demand. Click **Done** to finish adding the account. On macOS, see *Using the macOS File Provider* for details about Finder integration.

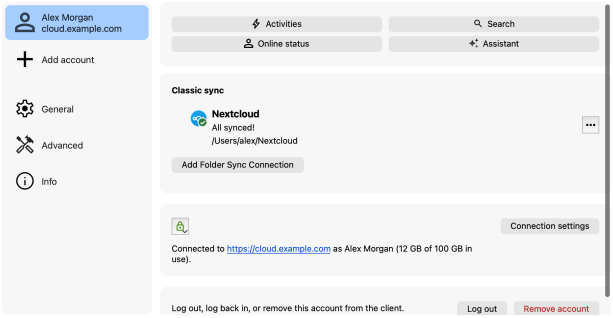



Before finishing classic synchronization, click **Advanced** if you want confirmation before syncing large folders or external storage. Set your preferences in **Advanced options**, then click **Done** to return to the wizard.

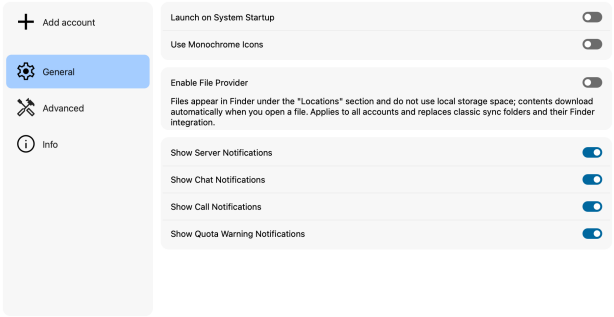



### 9.2.2 Settings dialog

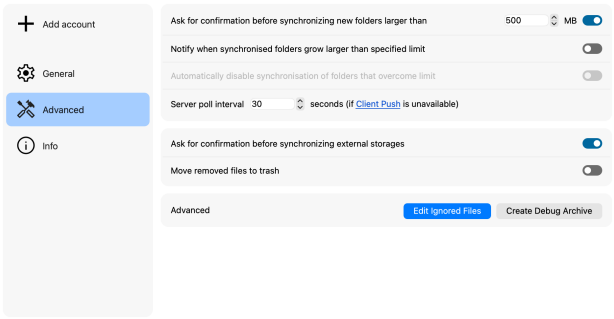
Select an account in the sidebar to see its sync status, local folder, storage usage, and connection settings. Use **Add Folder Sync Connection** to set up another classic sync folder for that account. You can log out or remove the account from the same page.



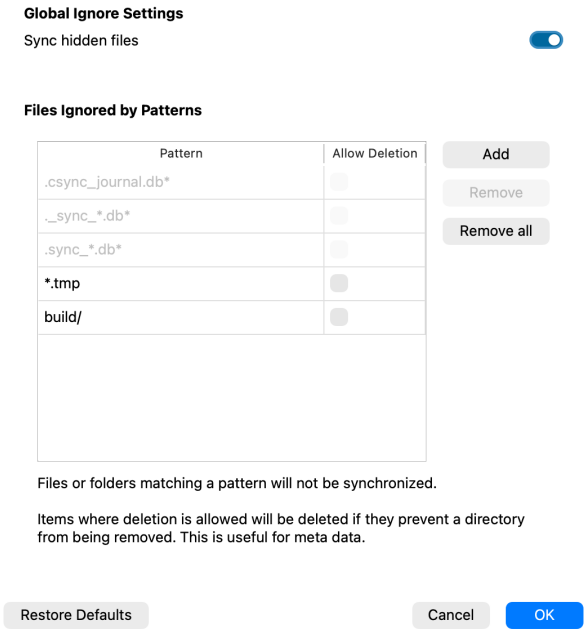
Under **General**, choose whether to launch the client at startup, use monochrome icons, and show notifications. On macOS, you can also enable File Provider for all accounts. This setting replaces classic sync folders and their Finder integration.



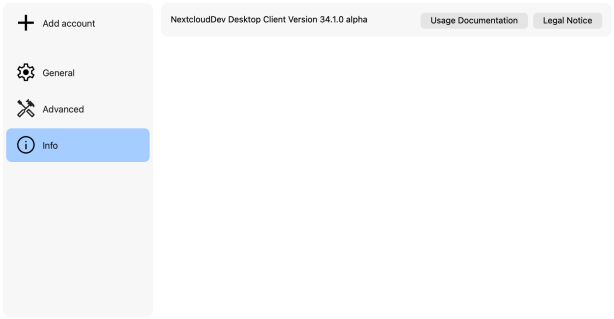

Under **Advanced**, set confirmation thresholds for large folders and external storage. You can also adjust the server polling interval, decide whether removed files go to the trash, edit ignored files, or create a debug archive.




To exclude files or folders from synchronization, click **Edit Ignored Files** under **Advanced**. Add a pattern for each item you want to ignore. An asterisk (`*`) matches any number of characters, a question mark (`?`) matches one character, and a trailing slash (`/`) limits a pattern to folders. Select **Allow Deletion** only for ignored items that the client may remove when they prevent a folder from being deleted. Click **OK** to save.



Under **Info**, you can check the desktop client version and open its usage documentation or legal notice.




### 9.2.3 Systray icon

The desktop client shows a status icon in the system tray on Windows and Linux or the menu bar on macOS. Colorful status icons and colorful or monochrome tray icons are available for the same sync states. You can choose monochrome icons under **General** in the settings dialog.

Table 1: Synchronization status icons

| State | Status | Mono tray | Color tray |
|---|---|---|---|
| Up to date and connected | | | |
| Synchronizing | | | |
| Paused | | | |
| Offline | | | |
| Warning; open the client for details | | | |
| Error; open the client for details | | | |

Open the tray or menu bar icon to view the client and its available actions, such as pausing or resuming sync.

### 9.2.4 File manager overlay icons

For classic sync folders, the desktop client adds overlay icons to files in the file manager. A green checkmark means a file is up to date. A warning icon can mean that a file is ignored; a red X indicates a sync error. A blue icon indicates a file waiting to sync or currently syncing. When the client is offline, it does not show overlays for the folder's current sync state.

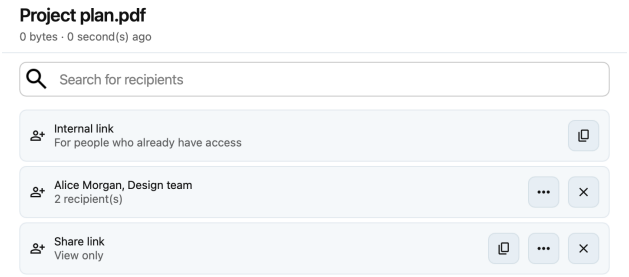
A folder's overlay reflects sync errors in its contents. Ignored files do not change the parent folder's status. On macOS, File Provider uses the standard Finder status indicators described in *Using the macOS File Provider*.

### 9.2.5 Sharing

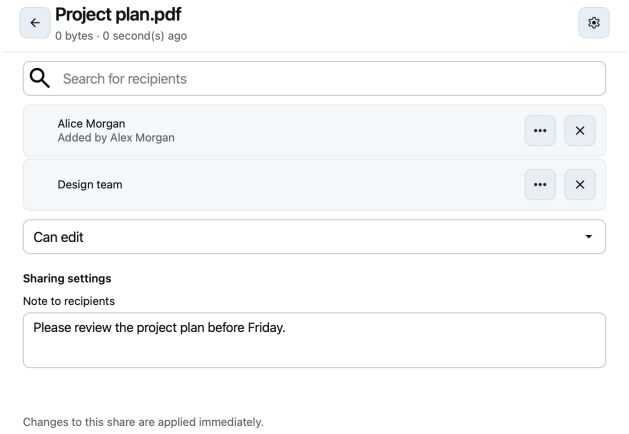
The desktop client integrates sharing actions into Finder on macOS and Explorer on Windows. On Linux, install the integration package for your file manager, such as `nautilus-nextcloud` or `dolphin-nextcloud`.

In your file manager, right-click a file and select **Nextcloud > Share options** to open the share dialog.

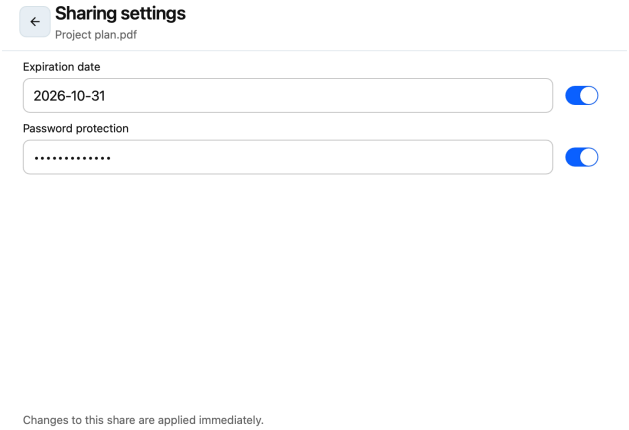
Use **Search for recipients** to share the file with people or groups. Existing shares and share links appear below the search field. Use the copy button to copy an internal link or share link. Use the three-dot menu to edit a share, or the **X** button to remove it.




When you edit a share, choose the recipient's permission from the dropdown menu. You can also add a note for the recipients. Changes are applied immediately.




Open **Sharing settings** with the gear button to set an expiration date or protect the share with a password. Changes are applied immediately.



## 9.3 Using the macOS File Provider

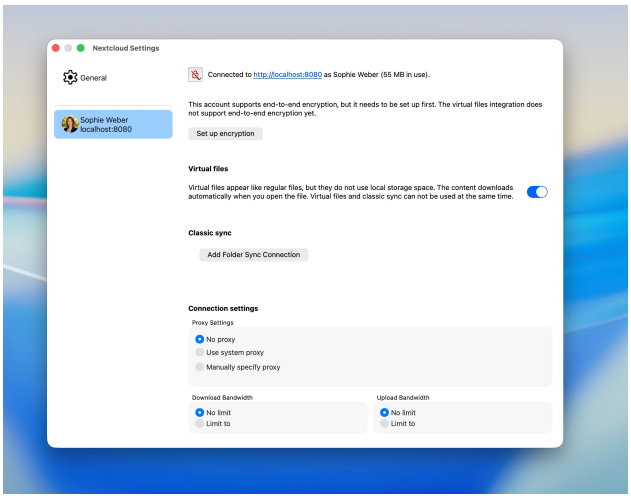
On macOS, our client can also seamlessly integrate Nextcloud files into macOS as a File Provider extension. Any newly configured Nextcloud account will have the integration enabled by default.

### 9.3.1 Supported features

- Keeping files or whole folders available offline
- Freeing up local disk space by evicting local copies without deleting items
- Intelligent and automatic local data eviction
- File previews within Finder for files which are not downloaded yet
- Support for Apple-specific formats, for example Pages, Numbers or Keynote bundles
- Support for server-side file locking (if supported by the connected server)
- “Edit locally” support
- Sharing with other users
- Server-side actions integrated directly in Finder’s context menu
- Automatic discovery of server-side changes

### 9.3.2 Configuration

Settings related to the File Provider extension can be adjusted on a per-account basis via the Nextcloud desktop client’s settings window.

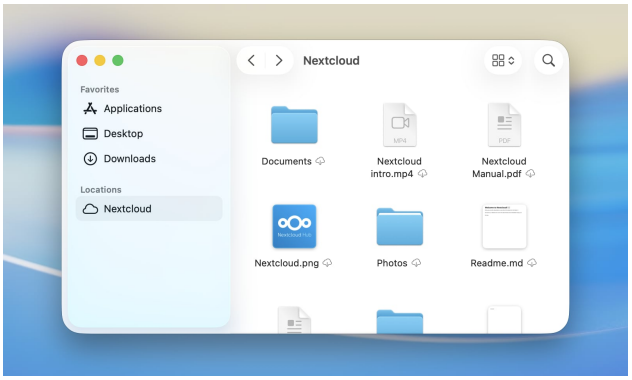



Here the integration into Finder can be enabled or disabled.

When disabling the File Provider extension while still having unsynchronized changes, macOS will save the unsynchronized items in a folder that is automatically revealed after the integration is disabled.

### 9.3.3 Finder integration

On macOS, remote storage like a Nextcloud files account appears like a dedicated location in the Finder sidebar. The actual location of the content on disk is defined by macOS.




**Note**

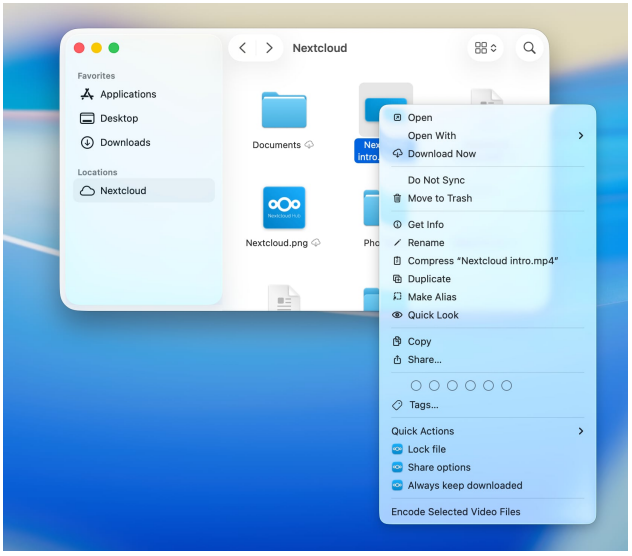
To accelerate server-side change detection, we recommend enabling the `notify_push` app on your Nextcloud server. This app will notify the desktop client of changes on the server as soon as they happen, reducing the time it takes for changes to appear in Finder. Otherwise the client needs to poll the server which will result in an increased delay between a change on the server and its local visibility.

### 9.3.4 Sync status indicators

Similar to classic synchronization folders, Finder displays status indicators next to items. Unlike the custom indicators in classic synchronization folders, these standardized indicators are provided by macOS to ensure a consistent appearance across all cloud storage apps which a user may use on their system.

- *Cloud with downward arrow*: The item and its descendants are not downloaded yet. They can be downloaded, assuming a network connection is available.
- *Outlined cloud*: The item is not fully uploaded yet in its current local state.
- *Strikethrough cloud*: The item is excluded from synchronization.
- *Pie chart*: The item is currently being uploaded or downloaded, and the progress is visualized.
- *Filled circle with a pin*: The item is available offline and will be kept locally.
- *No icon*: The item is available offline and up to date.

### 9.3.5 Context menu actions




The File Provider extension also provides special Nextcloud features through the context menu in Finder.

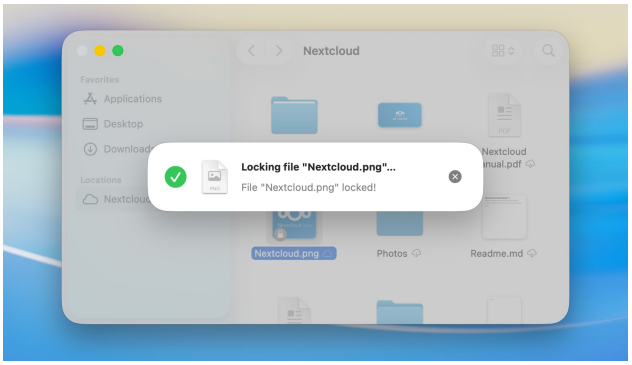
#### Keep Downloaded

Files and folders can be marked to be kept downloaded and available offline permanently. If this is chosen on folders, it will also apply to all their contents. This is especially useful for users with limited or no network access, as it ensures that they can always access their important files without needing to worry about connectivity. macOS will **not** free up local disk space by evicting items which are marked to be kept downloaded, even if they have not been accessed for a long time.

This can be undone by selecting "Allow automatic freeing up space" on the same items.

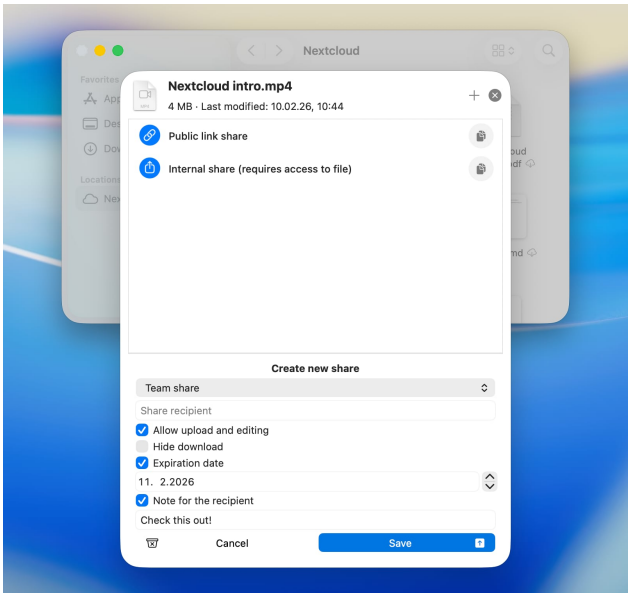
To always keep everything in an account available locally, you can select "Always keep downloaded" on the location root in the Finder sidebar.

#### Locking




If the server supports file locking, the client will offer manual locking and unlocking of files in Finder.

### Sharing




When the server supports sharing and the item is allowed to be shared, then you can create new shares or manage existing shares for an item directly from the context menu in Finder, as in the Nextcloud web interface.

### File actions

If the server has apps installed which provide file actions for the selected file types, these actions will also be available in the context menu in Finder. This allows you to use server-side features of your Nextcloud instance directly from the Finder.

## 9.3.6 Known issues

### macOS Extensions conflict

Due to technical limitations in macOS which are imposed by Apple, it is not possible to have the Finder integration for classic sync folders running in parallel to an enabled File Provider extension. This means that item decorations and context menu options will be unavailable for classic sync folders while the File Provider extension is enabled.

### Alias files

When opening a macOS alias file stored on Nextcloud for the first time on a device where it has not yet been downloaded, the file may open as a binary document in a text editor instead of jumping to its target. This happens because macOS decides how to open a file before downloading it, and alias files carry no recognisable file extension or type information on the server — the only way to identify them is by reading their content. Once the file has been opened or downloaded once, Nextcloud Desktop learns that it is an alias and stores that information locally, so all subsequent opens will work correctly. To avoid the issue entirely, right-click the alias file in Finder and choose **Keep Downloaded** before opening it for the first time.

### Edit locally

The *Edit locally* action offered by the Nextcloud web interface cannot open files that are managed by the File Provider extension. It can only reveal them in Finder.

This is a restriction of macOS itself, not a fault in the client. For your protection, macOS only lets specific apps open a given file, and it does not allow an app to grant itself that permission. The part of the client that is allowed to manage

these files is not permitted to launch other apps, and the part that could launch your editor is not permitted to open the file.

Granting Full Disk Access does not help, because a different part of the macOS security system is responsible for this.

### 9.3.7 Troubleshooting

#### Debug-level Logging

Debug-level log entries for the File Provider extension are disabled by default. If you want to report an issue with the File Provider, it can be helpful to enable them to get more detailed information about what is happening under the hood. To enable them, you have to issue the following command in Terminal:

```
defaults write com.nextcloud.desktopclient.FileProviderExt debugLoggingEnabled -bool␣
↪YES
```

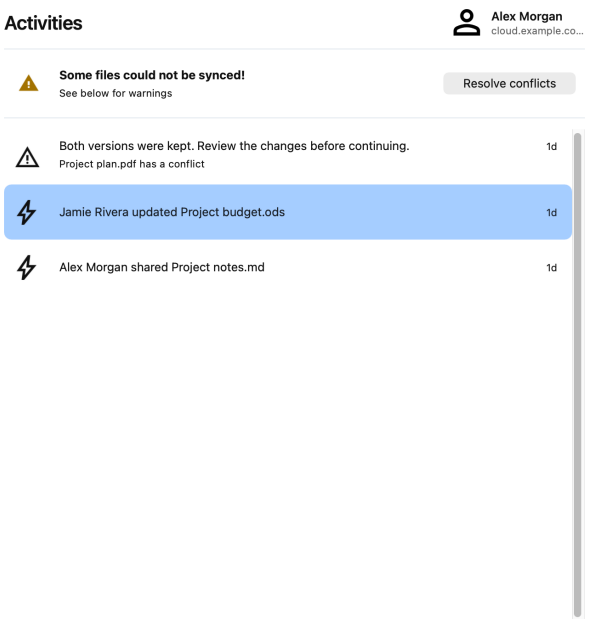
The change takes effect within a couple of seconds; no restart of the extension or the Mac is required. It is recommended to restore the default value by deleting the explicit value after you have resolved the problem you were investigating:

```
defaults delete com.nextcloud.desktopclient.FileProviderExt debugLoggingEnabled
```

## 9.4 Client features

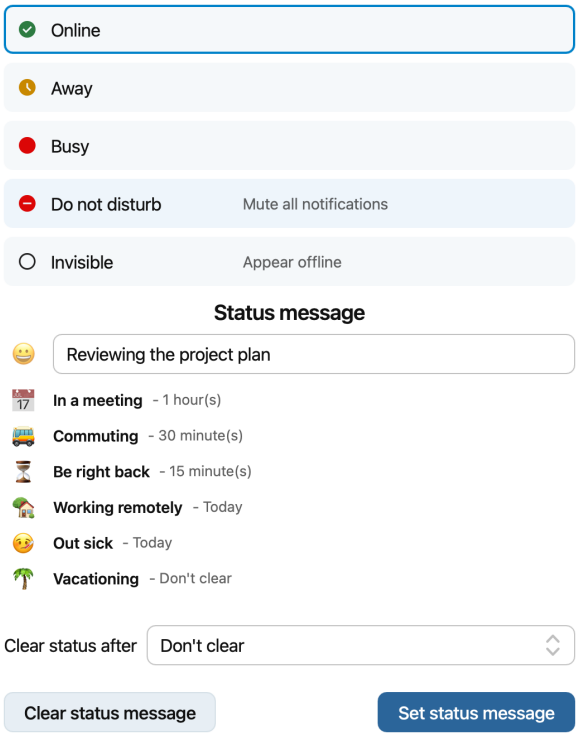
### 9.4.1 Activities

Open **Activities** in the client to see recent file activity and synchronization warnings. If files conflict, use **Resolve conflicts** to review them.



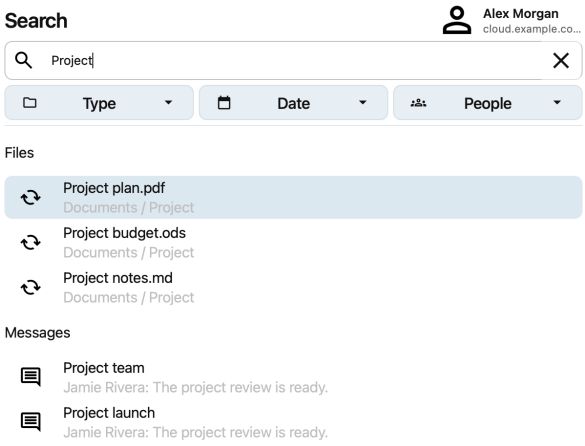

### 9.4.2 User status

If your server has the user status app, open your account in the settings dialog and click **Online status**. Choose your availability, enter a status message or select a suggested one, and choose when to clear it. Click **Set status message** to save it, or **Clear status message** to remove an existing message.



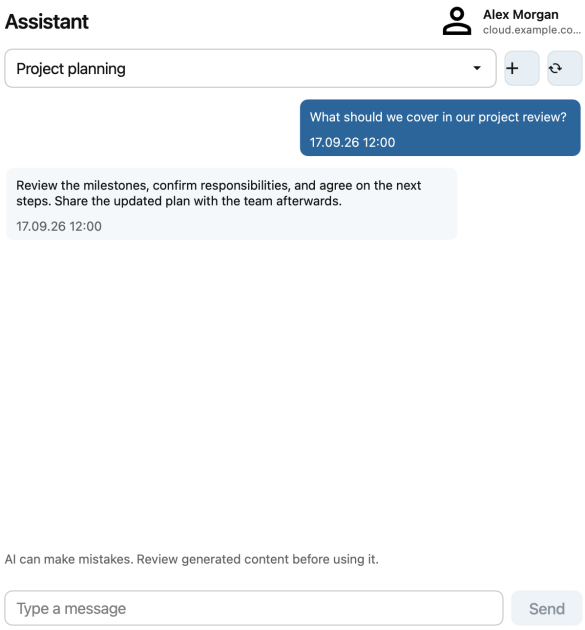

### 9.4.3 Search

Open **Search** in the client and enter a term to find files and other results from your Nextcloud server. Use the **Type**, **Date**, and **People** filters to narrow the results.



### 9.4.4 Assistant

If your server provides the Assistant, open **Assistant** in the client to ask a question or continue a conversation. Select a conversation, type your message, and click **Send**.




## 9.5 Advanced configuration

You can configure the desktop app through command-line options, `nextcloud.cfg`, and environment variables. Use the app's **Settings** window for options available there; this page describes advanced settings and overrides. For the separate tool that performs a single synchronization run, see *Command-line client*.

**On this page**


- *Command-line options*
  - *General options*
  - *Logging options*
  - *Account setup options*
- *Configuration file*
  - *`[Nextcloud]` section*
  - *`[General]` section*
  - *Per-account network settings*
  - *Legacy proxy settings*
- *Environment variables*
  - *Transfer settings*
  - *Synchronization and disk space*

- *Checksums*
- *Troubleshooting*

Defaults below refer to the standard Nextcloud client. Branded clients, server capabilities, and operating system policies can change some defaults. Sync-engine settings apply to classic sync, including Windows virtual files. The macOS File Provider extension handles its own file transfers; these settings do not configure its transfer engine. See *Using the macOS File Provider*.

### 9.5.1 Command-line options

Start the desktop app with `nextcloud [options]`. Use `nextcloud --help` to see the options in your installed version. Options with a value accept both `--option value` and `--option=value`.

Quit the running client before applying startup options or environment variables. Starting another instance can forward commands to the existing process instead of starting a new process with the requested environment.

#### General options

| Parameter | Default | Description |
|---|---|---|
| `--help`, `-h` | Not requested | Show the available command-line options and exit. |
| `--version`, `-v` | Not requested | Show version information and exit. |
| `--quit`, `-q` | Not requested | Quit the running desktop client. |
| `--confdir <directory>` | Standard location | Use a different configuration directory. See *Configuration file* for the standard locations. |
| `--background` | Not set | Start without opening the main dialog. |
| `--set-language <language>` | From `language` | Save the interface language and exit. For example, use `de` for German. An empty value restores the operating system language. Start the client again to apply it. |
| `--overrideserverurl <url>` | Not set | Save `overrideServerUrl` for the next account setup and exit. Start the client again to open the setup wizard. |
| `--overridelocaldir <path>` | Not set | Save `overrideLocalDir` for the next account setup and exit. |
| `--forcelegacyconfigimport` | Not set | Force import of an available legacy client configuration. Only available in builds that support account migration. |
| `--reverse` | Normal direction | Reverse the interface layout direction for this run. |

### Logging options

| Parameter | Default | Description |
|---|---|---|
| `--logwindow`, `-l` | Not set | Open the log output window. |
| `--logfile <filename>` | Not set | Write logs to this file. Use `-` to write to standard output. Takes precedence over `--logdir`. |
| `--logdir <directory>` | From `logDir` | Write rotating log files to this directory. |
| `--logexpire <hours>` | From `logExpire` | Set retention for rotating logs. A positive value overrides `logExpire`; zero or a negative value uses the configuration setting. |
| `--logflush` | From `logFlush` | Flush the log after each write so that recent messages are available immediately. |
| `--logdebug` | From `logDebug` | Enable debug messages in Nextcloud logging categories. This does not enable all Qt debug categories. |
| `--debug` | Not set | Also enables debug logging. Prefer `--logdebug` when collecting diagnostic logs. |

For example, collect debug output in a file on Linux:

```
nextcloud --logdebug --logflush --logfile "$HOME/nextcloud-debug.log"
```

For persistent logging settings, see *[General] section*.

### Account setup options

These options create and save an account, then exit. Start the desktop app again to use the account.

| Parameter | Default | Description |
|---|---|---|
| `--userid <user>` | Required | User ID for the account to create. |
| `--serverurl <url>` | Required | Base URL of the Nextcloud server, for example `https://cloud.example.com`. |
| `--apppassword <password>` | Not set | App password for the account. If omitted, the account is saved and you must log in from the desktop app later. |
| `--localdirpath <path>` | Suggested folder | Local sync folder. If omitted, use the folder suggested by the setup wizard. An existing folder must be empty. Ignored when macOS File Provider mode is enabled. |
| `--remotedirpath <path>` | `/` | Remote folder for the new classic sync connection. Applies when a local sync folder is created. |
| `--isvfsenabled <0\|1>` | `0` | Use `1` to request virtual files for the new classic sync folder, where supported, or `0` to download files. This does not enable macOS File Provider mode. |

For example, create an account and log in from the desktop app afterward:

```
nextcloud --userid carla --serverurl https://cloud.example.com --localdirpath "$HOME/
↪Nextcloud"
```

### 9.5.2 Configuration file

The client stores its settings in `nextcloud.cfg` using the INI format. Quit the client and back up this file before editing it, then start the client again. Changes made in the app's **Settings** window can overwrite the corresponding values in the file.

The standard locations are:

- Linux: `$HOME/.config/Nextcloud/nextcloud.cfg`. If `XDG_CONFIG_HOME` is set, use `$XDG_CONFIG_HOME/Nextcloud/nextcloud.cfg`.
- Windows: `%APPDATA%\Nextcloud\nextcloud.cfg`.
- macOS, client 33.0.0 and later: `$HOME/Library/Containers/com.nextcloud.desktopclient/Data/Library/Preferences/Nextcloud/nextcloud.cfg`.
- Older macOS clients: `$HOME/Library/Preferences/Nextcloud/nextcloud.cfg`.

`--confdir` overrides the configuration directory. Branded clients can use a different directory and filename. In Citrix and other environments with roaming profiles, persist the user's configuration between sessions to retain account setup.

The tables identify the INI section for each setting. For example:

```
[Nextcloud]
remotePollInterval=30000

[General]
logDebug=true
logExpire=48
```

Account identities, credentials, sync-folder state, window geometry, caches, migration markers, and updater state are managed by the client. Use the setup wizard and **Settings** window to change those values.

Precedence depends on the setting. The environment overrides listed below apply only to their corresponding settings. For `skipUpdateCheck` and `autoUpdateCheck`, a value in `[General]` takes precedence over `[Nextcloud]`. On Windows, administrator policies can override those update settings and the folder-size and external-storage settings. See *Preventing Automatic Updates in Windows Environments* for details about update policies.

### `[Nextcloud]` section

| Parameter | Default | Description |
|---|---|---|
| `remotePollInterval` | `30000` ms | Interval for polling the server for changes. Values below `5000` ms fall back to `30000` ms. Server push can reduce the need for polling. |
| `forceSyncInterval` | `7200000` ms | Schedule a sync after this much time has passed since the last sync (2 hours). Values below `remotePollInterval` are raised to that interval. |
| `fullLocalDiscoveryInterval` | `3600000` ms | After this interval (1 hour), the next eligible sync scans the local filesystem fully. Use `-1` to disable periodic full scans. Overridden by `OWNCLOUD_FULL_LOCAL_DISCOVERY_INTERVAL`. |
| `notificationRefreshInterval` | `60000` ms | Interval for polling server notifications. Values below `60000` ms are raised to `60000` ms. |
| `skipUpdateCheck` | `false` | Disable update checks and hide the updater interface. |
| `autoUpdateCheck` | `true` | Enable automatic update checks, provided `skipUpdateCheck` is false. |
| `updateCheckInterval` | `36000000` ms | Automatic update-check interval (default: 10 hours). Values below `300000` ms (5 minutes) are raised to that minimum. |

### [General] section

Table 2: Synchronization and transfers

| Parameter | Default | Description |
|---|---|---|
| chunkSize | 104857600 bytes | Initial upload chunk size (100 MiB). The client can adjust it during upload. Server capabilities can replace it; OWNCLOUD_CHUNK_SIZE overrides the resulting value. |
| minChunkSize | 5242880 bytes | Minimum configured upload chunk size (5 MiB). The sync engine initially bounds it between 5 MB and 5 GB. Overridden by OWNCLOUD_MIN_CHUNK_SIZE. |
| maxChunkSize | 104857600 bytes | Maximum configured upload chunk size (100 MiB). A server-provided maximum takes precedence. OWNCLOUD_MAX_CHUNK_SIZE overrides the resulting value. |
| timeout | 300 seconds | Default network inactivity timeout. Activity can reset the timer and individual requests can use different timeouts. A nonzero OWNCLOUD_TIMEOUT overrides it. |
| promptDeleteAllFiles | false | Ask for confirmation when all files are detected as deleted or when the number of deleted files exceeds deleteFilesThreshold. Applies to desktop classic sync; nextcloudcmd does not show this prompt. |
| deleteFilesThreshold | 100 files | Deletion count above which promptDeleteAllFiles asks for confirmation. Has no effect unless that setting is enabled. |
| moveToTrash | false | Move files deleted on the server to the local trash instead of deleting them permanently, where the local filesystem supports it. |
| newBigFolderSizeLimit | 500 MB | Size above which a new remote folder requires confirmation before downloading. Used when useNewBigFolderSizeLimit is true; a negative value disables the limit. Does not apply to virtual-file folders. |
| useNewBigFolderSizeLimit | true | Enable the folder-size confirmation limit. |
| confirmExternalStorage | true | Ask before synchronizing newly discovered external storage folders. |
| notifyExistingFoldersOverLimit | false | Notify when an existing synchronized folder grows beyond the active folder-size limit. Requires that limit to be enabled and virtual files to be disabled. |
| stopSyncingExistingFoldersOverLimit | From notifyExistingFoldersOverLimit | Also stop synchronizing such folders until you choose to keep syncing them. Requires notifyExistingFoldersOverLimit and the folder-size limit to be enabled. |

For classic desktop sync, the client applies chunk settings from the configuration file, then server capabilities, then environment overrides. It adjusts the minimum and maximum afterward to include the initial chunk size. The targetChunkUploadDuration configuration key is not used by the sync engine; use OWNCLOUD_TARGET_CHUNK_UPLOAD_DURATION instead. forceLoginV2 is no longer read by the client.

Table 3: Interface and notifications

| Parameter | Default | Description |
|---|---|---|
| `showExperimentalOptions` | `false` | Show experimental options in the interface. This does not itself enable experimental features. |
| `showMainDialogAsNormalWindow` | `false` | Show the main dialog as a normal window even when a tray icon is available. |
| `monoIcons` | Platform dependent | Use monochrome tray icons. Defaults to `true` for the standard Nextcloud client on macOS and `false` elsewhere. |
| `optionalServerNotifications` | `true` | Show optional server notifications. Individual notification settings below also apply. |
| `showChatNotifications` | `true` | Show chat notifications when optional server notifications are enabled. |
| `showCallNotifications` | `true` | Show call notifications when optional server notifications are enabled. |
| `showQuotaWarningNotifications` | `true` | Show quota warnings when optional server notifications are enabled. |
| `showInExplorerNavigationPane` | Platform dependent | Show sync folders in the Windows Explorer navigation pane. Defaults to `true` on Windows 10 and later, and `false` on other platforms. |
| `launchOnSystemStartup` | `true` | Store the startup preference. Use **Settings** to change it so that the operating system startup registration is updated too. |
| `language` | Empty | Interface language code, for example `de`. An empty value uses the operating system language. |
| `updateChannel` | Build/server dependent | Select a supported update channel. Invalid values are ignored. Branded clients and server subscription settings can restrict the selection. See *Update channels*. |
| `showConfigBackupWarning` | `false` | Show a notification listing configuration backups created during startup. |

Table 4: Logging

| Parameter | Default | Description |
|---|---|---|
| `logToTemporaryLogDir` | `false` | Use a temporary log directory when logging has not already been directed to a file or standard output. Also enables debug logging and sets retention to 4 hours. |
| `logDir` | `<config path>/logs` | Directory for rotating log files. Overridden by `--logdir`; `--logfile` selects a file or standard output instead. |
| `logDebug` | `false` | Enable Nextcloud debug logging. `--logdebug` also enables it. |
| `logExpire` | `24` hours | Retention for rotating logs. A value of `0` disables age-based removal. A positive `--logexpire` value overrides this setting. |
| `logFlush` | `false` | Flush the log after every write. `--logflush` also enables it. |

Development and debug builds can enable debug logging and immediate flushing regardless of these defaults.

Table 5: Account setup defaults

| Parameter | Default | Description |
|---|---|---|
| `overrideServerUrl` | Empty | Force the server URL in the next account setup and start login automatically. Cleared after successful wizard setup. Can also be set with `--overrideserverurl`. |
| `overrideLocalDir` | Empty | Suggested local directory for account setup. Cleared after successful wizard setup. Can also be set with `--overridelocaldir`. |
| `isVfsEnabled` | `false` | Virtual-file preference used with `overrideServerUrl` during setup. Does not convert existing sync folders or enable macOS File Provider mode. |

### Per-account network settings

Use the account's network settings in the app where possible. Values below belong to the existing account group inside `[Accounts]`. In the INI file they appear with the account ID prefix, for example `0\networkProxyType=0` for account `0`. Use the account ID already present in your file. Proxy passwords belong in the system keychain.

| Parameter | Default | Description |
|---|---|---|
| `networkProxyType` | `0` if absent | `0`: system proxy; `1`: SOCKS5 proxy; `2`: no proxy; `3`: HTTP proxy. Account setup or migration can store a different value. |
| `networkProxyHostName` | Empty | Proxy hostname. |
| `networkProxyPort` | `0` | Proxy port. Set the actual port when configuring a manual proxy. |
| `networkProxyNeedsAuth` | `false` | Whether the proxy requires authentication. |
| `networkProxyUser` | Empty | Proxy username. |
| `networkUploadLimitSetting` | `0` | Upload limit mode: `0` for unlimited, `1` for a manual limit. Negative values are reserved for legacy migration. |
| `networkDownloadLimitSetting` | `0` | Download limit mode: `0` for unlimited, `1` for a manual limit. Negative values are reserved for legacy migration. |
| `networkUploadLimit` | `0` KB/s | Manual upload limit, used when `networkUploadLimitSetting` is `1`. |
| `networkDownloadLimit` | `0` KB/s | Manual download limit, used when `networkDownloadLimitSetting` is `1`. |

### Legacy proxy settings

The top-level `[Proxy]` section is retained for migration from older clients. Current desktop accounts use the per-account settings above. Legacy proxy settings can be removed automatically after migration.

| Parameter | Default | Description |
|---|---|---|
| `type` | `0` | Legacy proxy type: `0` for system proxy, `1` for SOCKS5, `2` for no proxy, or `3` for HTTP proxy. |
| `host` | Empty | Legacy proxy hostname. |
| `port` | `0` | Legacy proxy port. |
| `needsAuth` | `false` | Whether the legacy proxy requires authentication. |
| `user` | Empty | Legacy proxy username. |

### 9.5.3 Environment variables

Set environment variables before starting the client. A variable set in a terminal applies to processes launched from that terminal; an already running client or a client launched from the desktop does not automatically inherit it. For example, temporarily change the network inactivity timeout on Linux:

```
OWNCLOUD_TIMEOUT=600 nextcloud
```

The historic `OWNCLOUD_` prefix is still used by the Nextcloud client. Follow the value format in each description: some switches require `0` or `1`, while others react to any nonempty value, including `0`. `Default` describes behavior when the variable is unset.

#### Transfer settings

The chunk-size and parallel-job overrides apply after configuration values and server capabilities in desktop classic sync. `nextcloudcmd` also reads these variables, but starts with its sync-engine defaults instead of the desktop app's chunk configuration.

| Parameter | Default | Description |
|---|---|---|
| `OWNCLOUD_CHUNK_SIZE` | Effective chunk size | Initial chunk size in bytes. Desktop sync starts from `chunkSize` or the server-provided size. `nextcloudcmd` defaults to `104857600` bytes (100 MiB). |
| `OWNCLOUD_MIN_CHUNK_SIZE` | Effective minimum | Minimum chunk size in bytes. Desktop sync starts from `minChunkSize`; `nextcloudcmd` defaults to `5000000` bytes (5 MB). |
| `OWNCLOUD_MAX_CHUNK_SIZE` | Effective maximum | Maximum chunk size in bytes. Desktop sync starts from `maxChunkSize` or the server-provided maximum; `nextcloudcmd` defaults to `5000000000` bytes (5 GB). |
| `OWNCLOUD_TARGET_CHUNK_UPLOAD_D` | `60000` ms | Target duration for dynamic chunk sizing (1 minute). Use `0` to disable dynamic sizing. The similarly named configuration-file key has no effect. |
| `OWNCLOUD_MAX_PARALLEL` | Server/protocol dependent | Positive maximum number of parallel sync jobs. Desktop sync uses the server-provided value when available; otherwise it uses `20` for HTTP/2 or `6` for HTTP/1. `nextcloudcmd` defaults to `6`. This is not the number of simultaneous file transfers. |
| `OWNCLOUD_TIMEOUT` | `timeout` or 300 seconds | Network inactivity timeout. A nonzero integer overrides `timeout` in the desktop app. `nextcloudcmd` defaults to 300 seconds. Zero or an invalid value uses the normal default. |
| `OWNCLOUD_HTTP2_ENABLED` | Disabled | Set to `1` to allow HTTP/2 for HTTPS requests. Other values disable it. Actual use still depends on the server and network connection. |
| `OWNCLOUD_CHUNKING_NG` | Server capability | Set to `0` to disable the newer chunked-upload protocol or `1` to force it. Other values use the server capability. Only force it when the server supports it. |
| `NEXTCLOUD_BULK_UPLOAD` | Server capability | Set to `0` to disable bulk uploads or `1` to force them. Other values use the server capability. Only force them when the server supports them. |
| `OWNCLOUD_PARALLEL_CHUNK` | Server dependent | For the legacy chunked-upload path only: `0` or `false` disables parallel chunks. Other nonempty values enable them unless the server disables them. |
| `OWNCLOUD_LAZYOPS` | Disabled | A nonzero integer adds the `OC-LazyOps: true` header to upload requests. Its effect depends on server support. |

Keep chunk sizes positive. The client adjusts the minimum and maximum to include the initial chunk size. The environment parser accepts unsigned 32-bit byte values for the three chunk-size overrides, so do not use values above `4294967295` bytes for those variables.

### Synchronization and disk space

| Parameter | Default | Description |
|---|---|---|
| `OWNCLOUD_FULL_LOCAL_DISCOVERY_` | `fullLocalDiscoveryInterval` | Desktop classic sync only. Override the full local scan interval in milliseconds. Use `-1` to disable periodic full scans. |
| `OWNCLOUD_CRITICAL_FREE_SPACE_B` | `512000000` bytes | Abort the folder sync when remaining local space is below this threshold (512 MB). The value is bounded between zero and `OWNCLOUD_FREE_SPACE_BYTES`. |
| `OWNCLOUD_FREE_SPACE_BYTES` | `1000000000` bytes | Skip or abort downloads that would leave less than this amount of local free space (1 GB). Other synchronization can continue. |
| `OWNCLOUD_BLACKLIST_TIME_MIN` | `25` seconds | Minimum retry delay for files that failed to synchronize. Values below `25` are raised to `25`. |
| `OWNCLOUD_BLACKLIST_TIME_MAX` | `86400` seconds | Maximum retry delay for files that failed to synchronize (1 day). Only positive values override the default. |
| `OWNCLOUD_UPLOAD_CONFLICT_FILES` | Server capability | Set to `1` to upload conflict copies or `0` to prevent their upload. A nonempty value overrides the server setting. See *Conflicts*. |

Downloads skipped because of the free-space threshold are retried in later sync runs. The critical threshold stops the whole folder sync. These limits are independent of your server storage quota.

### Checksums

| Parameter | Default | Description |
|---|---|---|
| `OWNCLOUD_CONTENT_CHECKSUM_TYPE` | Server preference, then `SHA1` | Override the preferred upload checksum algorithm. Choose an algorithm supported by both client and server. |
| `OWNCLOUD_DISABLE_CHECKSUM_UPLC` | Unset | Any nonempty value disables sending upload checksums. Unset it to restore normal checksum uploads. |
| `OWNCLOUD_DISABLE_CHECKSUM_COMP` | Unset | Any nonempty value disables synchronous checksum calculations. Upload and download paths using asynchronous calculations still run. |

Use checksum overrides only when diagnosing a specific compatibility problem; disabling checksums reduces integrity checks used during synchronization.

#### Troubleshooting

| Parameter | Default | Description |
|---|---|---|
| `OWNCLOUD_SQLITE_JOURNAL_MODE` | `WAL` or `DELETE` | Override the sync journal database mode. Normally `WAL`; `DELETE` on Windows FAT filesystems and macOS sync paths under `/Volumes/`. Change only when diagnosing a database compatibility problem. |
| `OWNCLOUD_SQLITE_LOCKING_MODE` | `EXCLUSIVE` | Override the SQLite locking mode for the sync journal database. |
| `OWNCLOUD_SQLITE_TEMP_STORE` | SQLite default | Override the SQLite `temp_store` setting for the sync journal database. |
| `OWNCLOUD_CORE_DUMP` | Unset | On Unix systems, any nonempty value requests an unlimited core-dump size limit for the desktop app. Operating system restrictions still apply. |
| `QT_LOGGING_RULES` | Qt logging defaults | Set logging-category filters, for example `nextcloud.*.debug=true`. This Qt variable also allows selecting individual categories. |

For `nextcloudcmd` credentials, see *Credential handling*. Its `NC_USER` and `NC_PASSWORD` variables do not configure accounts in the desktop app.

## 9.6 The Automatic Updater

The Automatic Updater ensures that you always have the latest features and bug fixes for your Nextcloud synchronization client.

The Automatic Updater updates only on macOS and Windows computers; Linux users only need to use their normal package managers. However, on Linux systems the Updater will check for updates and notify you when a new version is available.

### 9.6.1 Basic Workflow

The following sections describe how to use the Automatic Updater on different operating systems.

#### Windows

The Nextcloud client checks for updates and downloads them when available. You can view the update status under `Settings -> General -> Updates` in the Nextcloud client.

If an update is available, and has been successfully downloaded, the Nextcloud client starts a silent update prior to its next launch and then restarts itself. Should the silent update fail, the client offers a manual download.

> **Note**
>
> Administrative privileges are required to perform the update.

#### macOS

The macOS client has an autoupdater which uses the Sparkle framework. This autoupdater is bundled into the client App Bundle and checks for updates on launch, notifying you if an update is available. This will present a pop-up that can let you automatically download and install the latest client update with one click.

In versions of the client where the Sparkle-based autoupdater is not bundled, a clickable notification will appear informing of an update being available. Upon clicking on said notification, the download page for the latest version of the client will be opened in the system's web browser.

Like on other systems, you can view the update status under `Settings -> General -> Updates` in the Nextcloud client.

#### Linux

Linux distributions provide their own update tools, so Nextcloud clients that use the Linux operating system do not perform any updates on their own. The client will inform you (`Settings -> General -> Updates`) when an update is available.

### 9.6.2 Preventing Automatic Updates

In controlled environments, such as companies or universities, you might not want to enable the auto-update mechanism, as it interferes with controlled deployment tools and policies. To address this case, it is possible to disable the auto-updater entirely. The following sections describe how to disable the auto-update mechanism for different operating systems.

#### Preventing Automatic Updates in Windows Environments

Users may disable automatic updates by adding this line to the [General] section of their `nextcloud.cfg` files:

```
skipUpdateCheck=true
```

Windows administrators have more options for preventing automatic updates in Windows environments by using one of two methods. The first method allows users to override the automatic update check mechanism, whereas the second method prevents any manual overrides.

To prevent automatic updates, but allow manual overrides:

1. Edit this Registry key:

   `HKEY_LOCAL_MACHINE\Software\Nextcloud GmbH\Nextcloud`

2. Add the key `skipUpdateCheck` (of type DWORD).
3. Specify a value of `1` to the machine.

To manually override this key, use the same value in `HKEY_CURRENT_USER`.

To prevent automatic updates and disallow manual overrides:

> **Note**
>
> This is the preferred method of controlling the updater behavior using Group Policies.

1. Edit this Registry key:

   `HKEY_LOCAL_MACHINE\Software\Policies\Nextcloud GmbH\Nextcloud`

2. Add the key `skipUpdateCheck` (of type DWORD).
3. Specify a value of `1` to the machine.

> **Note**
>
> Branded clients use a different key in place of `Nextcloud GmbH\Nextcloud` that matches the branded application vendor and name.

### Preventing Automatic Updates in Linux Environments

Because the Linux client does not provide automatic updating functionality, there is no need to remove the automatic-update check. However, if you want to disable it edit your desktop client configuration file, `$HOME/.config/Nextcloud/nextcloud.cfg`. Add this line to the [General] section:

```
skipUpdateCheck=true
```

## 9.7 Update channels

Whether you want the latest features, want to help with testing, or just want to wait until everything is perfectly ready to go, we've got options for you.

The desktop client has 4 update channels: *Enterprise*, *Stable*, *Beta* and *Daily*.

| Channels | |
|---|---|
| Enterprise | Special version for enterprise customers for the best possible experience. |
| Stable | Latest feature releases ready for most users at minimal risk. |
| Beta | Short-term versions created in preparation for testers to report bugs against before a stable release. |
| Daily | Daily versions to reproduce bugs and to follow the development of the next stable version. |

References:

- Enterprise deployment options
- Latest stable release
- Pre-releases
- Daily builds

## 9.8 Conflicts

### 9.8.1 Overview

The Nextcloud desktop client uploads local changes and downloads remote changes. When a file has changed on the local side and on the remote between synchronization runs the client will be unable to resolve the situation on its own. It will create a conflict file with the local version, download the remote version and notify the user that a conflict occurred which needs attention.

### 9.8.2 Example

Imagine there is a file called `mydata.txt` in your synchronized folder. It has not changed for a while and contains the text "contents" locally and remotely. Now, nearly at the same time you update it locally to say "local contents" while the file on the server gets updated to contain "remote contents" by someone else.

When attempting to upload your local changes the desktop client will notice that the server version has also changed. It creates a conflict and you will now have two files on your local machine:

- `mydata.txt` containing "remote contents"
- `mydata (conflicted copy 2018-04-10 093612).txt` containing "local contents"

In this situation the file `mydata.txt` has the remote changes (and will continue to be updated with further remote changes when they happen), but your local adjustments have not been sent to the server (unless the server enables conflict uploading, see below).

The desktop client notifies you of this situation via system notifications, the system tray icon and a yellow "unresolved conflicts" badge in the account settings window. Clicking this badge shows a list that includes the unresolved conflicts and clicking one of them opens an explorer window pointing at the relevant file.

To resolve this conflict, open both files, compare the differences and copy your local changes from the "conflicted copy" file into the base file where applicable. In this example you might change `mydata.txt` to say "local and remote contents" and delete the file with "conflicted copy" in its name. With that, the conflict is resolved.

### 9.8.3 Uploading conflicts (experimental)

By default the conflict file (the file with "conflicted copy" in its name that contains your local conflicting changes) is not uploaded to the server. The idea is that you, the author of the changes, are the best person for resolving the conflict and showing the conflict to other users might create confusion.

However, in some scenarios it makes a lot of sense to upload these conflicting changes such that local work can become visible even if the conflict won't be resolved immediately.

The server can enable conflict uploads. To override the server setting, use `OWNCLOUD_UPLOAD_CONFLICT_FILES=1` to enable uploads or `OWNCLOUD_UPLOAD_CONFLICT_FILES=0` to disable them. See *Environment variables* for how to apply environment variables.

## 9.9 Command-line client

`nextcloudcmd` synchronizes a local directory with a Nextcloud server, then exits. It can perform follow-up syncs when needed, but it does not continuously monitor local files or poll for server changes like the desktop app. For options passed to the desktop app's `nextcloud` command, see *Command-line options*.

### 9.9.1 Installation

Install a package that provides `nextcloudcmd`. Availability depends on your operating system and package:

| Operating system | Package source |
|---|---|
| Alpine Linux | nextcloud-client |
| Debian | nextcloud-desktop-cmd |
| Fedora | nextcloud-client |
| Ubuntu | nextcloud-desktop-cmd |
| Ubuntu PPA | Nextcloud client PPA |
| Windows | Nextcloud downloads |

### 9.9.2 Usage

Use an existing local directory and the base URL of the Nextcloud server:

```
nextcloudcmd [options] local_directory server_url
```

For example, synchronize the remote `Music` folder into an existing local folder:

```
nextcloudcmd --user carla --path /Music "$HOME/media/music" https://cloud.example.com
```

The client prompts for the password. You can use an app password from your Nextcloud account's security settings. Do not append a WebDAV endpoint to the server URL; use `--path` for a remote subfolder.

Run `nextcloudcmd` without arguments to display its help, or `nextcloudcmd --version` to display its version. Options with values accept both `--option value` and `--option=value`.

### 9.9.3 Options

| Parameter | Default | Description |
|---|---|---|
| `--path <path>` | Server root | Synchronize a remote subfolder, for example `/Documents`. |
| `--user <user>`, `-u <user>` | See credentials below | Login name. Overrides the username in the server URL. |
| `--password <password>`, `-p <password>` | See credentials below | Password or app password. Overrides the password in the server URL. Command-line passwords may be visible in process listings and shell history. |
| `-n` | Not set | Read credentials from a matching host or default entry in `.netrc`. These replace credentials supplied in the URL or with `--user` and `--password`. |
| `--non-interactive` | Not set | Do not prompt for credentials. Read missing credentials from `NC_USER` and `NC_PASSWORD`. |
| `--silent`, `-s` | Not set | Suppress Qt log messages. Does not suppress every console message. |
| `--trust` | Not set | Accept untrusted TLS certificates. Use only for a controlled diagnostic run; normally fix the certificate trust configuration. |
| `--httpproxy <url>` | No explicit proxy | Set an HTTP proxy using `http://hostname:port`. This option does not parse proxy credentials in the URL. |
| `--exclude <file>` | System exclude list | Add an exclude list. The file must exist. Pattern anchoring depends on its filename; see *Exclude lists*. |
| `--exclude-anchored <file>` | Not set | Add an exclude list with patterns anchored at the sync root, regardless of the filename. |
| `--unsyncedfolders <file>` | Not set | Read remote folders to exclude from synchronization, one relative path per line. Empty lines and lines starting with `#` are ignored. |
| `--max-sync-retries <number>` | `3` | Maximum number of follow-up runs when the sync engine requests another sync. This is not a general retry count for every failed request. |
| `--uplimit <number>` | `0` KB/s | Upload speed limit in KB/s (1000 bytes per second). Zero means unlimited. |
| `--downlimit <number>` | `0` KB/s | Download speed limit in KB/s (1000 bytes per second). Zero means unlimited. |
| `-h` | Hidden files included | Include hidden files. This is already the default; `-h` does not display help. |
| `--logdebug` | Not set | Enable Nextcloud debug logging and send log output to standard output. |
| `--confdir <directory>` | Standard location | Use a different configuration directory. Does not make the one-run sync inherit all desktop sync settings. |
| `--version`, `-v` | Not requested | Display version information and exit. Run this option without the directory and server arguments. |

### 9.9.4 Credential handling

Credentials are read in this order:

1. Username and password in the server URL, if supplied.
2. `--user` and `--password`, which replace the corresponding URL values.
3. A matching host or default `.netrc` entry when `-n` is used, which replaces both values.

4. Prompts for any missing values, or the environment variables below when `--non-interactive` is used.

Prefer a password prompt or a protected `.netrc` file over putting passwords in a command or URL.

| Parameter | Default | Description |
|---|---|---|
| `NC_USER` | Unset | Username fallback for a one-run sync with `--non-interactive`. Only used if no username was supplied by the preceding methods. |
| `NC_PASSWORD` | Unset | Password fallback for a one-run sync with `--non-interactive`. Only used if no password was supplied by the preceding methods. |

These variables do not supply credentials for the account setup mode below. For transfer overrides shared with the desktop sync engine, see *Environment variables*. `nextcloudcmd` uses an initial chunk size of 100 MiB, a minimum of 5 MB, a maximum of 5 GB, and 6 parallel jobs unless overridden by those variables. It does not read the desktop app's chunk-size settings from `nextcloud.cfg`.

### 9.9.5 Exclude lists

The client loads the system exclude list when available. You can add your own list with `--exclude` or `--exclude-anchored`. A missing explicitly supplied file is an error.

With `--exclude`, a file named `sync-exclude.lst` uses the sync root for pattern matching. Other filenames can use the exclude file's directory as the base. Use `--exclude-anchored` when the filename and location should not affect matching.

Write one pattern per line. Wildcards are supported, for example:

```
*.tmp
._*
Thumbs.db
```

### 9.9.6 Account setup

`nextcloudcmd` can also save an account for use by the desktop app. The presence of `--userid` selects this mode; omit the positional local directory and server URL used for a one-run sync. The command exits after setup completes.

| Parameter | Default | Description |
|---|---|---|
| `--userid <user>` | Required | User ID for the account to create. |
| `--serverurl <url>` | Required | Base URL of the Nextcloud server, for example `https://cloud.example.com`. |
| `--apppassword <password>` | Not set | App password for the account. If omitted, the account is saved and you must log in from the desktop app later. |
| `--localdirpath <path>` | Suggested folder | Local sync folder. If omitted, use the folder suggested by the setup wizard. An existing folder must be empty. Ignored when macOS File Provider mode is enabled. |
| `--remotedirpath <path>` | `/` | Remote folder for the new classic sync connection. Applies when a local sync folder is created. |
| `--isvfsenabled <0\|1>` | `0` | Use `1` to request virtual files for the new classic sync folder, where supported, or `0` to download files. This does not enable macOS File Provider mode. |

For example, save an account and log in from the desktop app afterward:

```
nextcloudcmd --userid carla --serverurl https://cloud.example.com --localdirpath "
↪$HOME/Nextcloud"
```

## 9.10 Uninstallation

It is safe to uninstall the files desktop client by using the built-in tools within your operating system.

### 9.10.1 General instructions

In each operating system:

1. Make sure to *quit the desktop client* before removing it.
2. *Uninstall* the desktop client.
3. You may also need to take into consideration that uninstalling the desktop client will not remove the *user's configuration* file and synced data.

   For data removal (sync folders), consider using the server feature remote wipe. This feature is available across all clients.

Below are platform specific instructions.

#### Windows

There are two ways of removing the desktop client:

1. Using *Add or Remove Programs*.
2. You can use the msiexec command line options:

```
msiexec /uninstall Nextcloud-x.y.z-x64.msi /quiet``
```

3. The *user's configuration* is located at `%APPDATA%\Nextcloud\nextcloud.cfg`.

#### macOS

Beyond deleting the desktop client from the *Applications* folder, you may also need to remove all related data, specially if you are using virtual files.

1. To simply uninstall the software: you can do this from the Launchpad or the Finder.
2. For the complete removal of all related data, the following commands can be used:

```
rm -rf "$HOME/Library/Application Scripts/com.nextcloud.desktopclient"*
rm -f  "$HOME/Library/Application Support/CrashReporter/Nextcloud_"*
rm -rf "$HOME/Library/Application Support/Nextcloud"
rm -rf "$HOME/Library/Caches/Nextcloud"
rm -rf "$HOME/Library/Containers/com.nextcloud.desktopclient"*
rm -rf "$HOME/Library/Group Containers/NKUJUXUJ3B.com.nextcloud.desktopclient"
rm -rf "$HOME/Library/Group Containers/com.nextcloud.desktopclient"
rm -f  "$HOME/Library/LaunchAgents/com.nextcloud.desktopclient.plist"
rm -rf "$HOME/Library/Preferences/Nextcloud"
rm -f  "$HOME/Library/Preferences/com.nextcloud.desktopclient.plist"
```

3. From version 33.0.0 the *user's configuration* is located at `$HOME/Library/Containers/com.nextcloud.desktopclient/Data/Library/Preferences/Nextcloud/nextcloud.cfg`. On older versions it is located at `$HOME/Library/Preferences/Nextcloud/nextcloud.cfg`.

#### Linux

It depends on how you installed the desktop client:

1. If you are running the Nextcloud AppImage, you can simply delete the AppImage file.
2. If you have used your package manager to install the desktop client, you can use it to uninstall the desktop client as well. For example, on Ubuntu you can use the following command:

```
sudo apt remove nextcloud-desktop
```

3. The *user's configuration* is located at *$HOME/.config/Nextcloud/nextcloud.cfg*.

## 9.11 FAQ

### 9.11.1 How the "Edit locally" functionality works

This functionality depends on the desktop client ability to register the nc:// protocol handler. That is the handler used by the server to open a file locally. This will allow the desktop client to open a document with the local editor when you click on the option "Edit locally" in your Nextcloud instance.

**Note**

Without properly registering the mime, independent of the browser and distro being used, the desktop client will fail to open a document with the local editor when you click on the option "Edit locally" in your Nextcloud instance.

The browser will warn you of the failure: "Failed to launch 'nc://…' because the scheme does not have a registered handler."

#### How to enable it

In order to do that, you need to install the desktop client with the MSI installer on Windows or use a third party software to integrate the AppImage in your system on Linux.

#### On Linux

We use AppImage due to its universal compatibility but to take full advantage of the desktop client features you will need a third part software to integrate the AppImage in your system: we have tested AppImageLauncher and alternatively there is Go AppImage.

#### On Windows

The MSI installer will alter your system registry to register the nc:// protocol handler.

Alternatively, you can manually register the nc:// protocol handler:

1. Save the following content to a .reg file:

```
Windows Registry Editor Version 5.00

[HKEY_CLASSES_ROOT\nc\shell\open\command]
@="\"C:\\Program Files\\Nextcloud\\nextcloud.exe\" \"%1\""
```

2. Double click on the .reg file to import it into the registry.

See https://nextcloud.com/blog/nextcloud-office-release-solves-document-compatibility-overhauls-knowledge-management/ for more information.

### 9.11.2 Some Files Are Continuously Uploaded to the Server, Even When They Are Not Modified.

It is possible that another program is changing the modification date of the file. If the file is uses the `.eml` extension, Windows automatically and continually changes all files, unless you remove `\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\PropertySystem\PropertyHandlers` from the windows registry. See http://petersteier.wordpress.com/2011/10/22/windows-indexer-changes-modification-dates-of-eml-files/ for more information.

### 9.11.3 Syncing Stops When Attempting To Sync Deeper Than 100 Sub-directories.

The sync client has been intentionally limited to sync no deeper than 100 sub-directories. The hard limit exists to guard against bugs with cycles like symbolic link loops. When a deeply nested directory is excluded from synchronization it will be listed with other ignored files and directories in the "Not synced" tab of the "Activity" pane.

### 9.11.4 There Was A Warning About Changes In Synchronized Folders Not Being Tracked Reliably.

On linux when the synchronized folder contains very many subfolders the operating system may not allow for enough inotify watches to monitor the changes in all of them.

In this case the client will not be able to immediately start the synchronization process when a file in one of the unmonitored folders changes. Instead, the client will show the warning and manually scan folders for changes in a regular interval (two hours by default).

This problem can be solved by setting the fs.inotify.max_user_watches sysctl to a higher value. This can usually be done either temporarily:

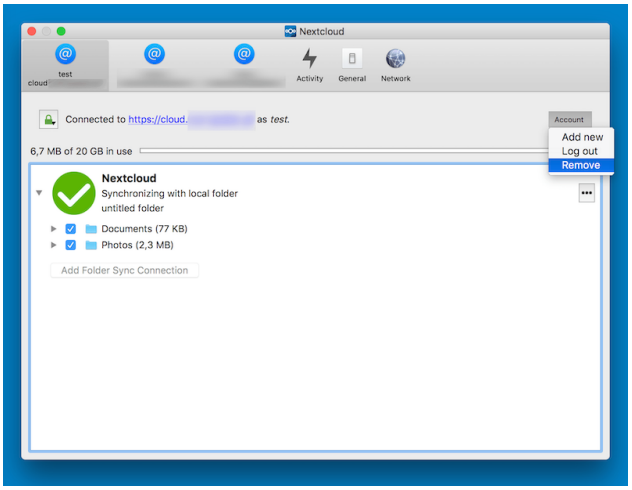
```
echo 524288 > /proc/sys/fs/inotify/max_user_watches
```

or permanently by adjusting `/etc/sysctl.conf`.

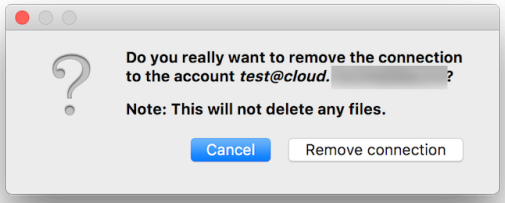
### 9.11.5 I Want To Move My Local Sync Folder

The Nextcloud desktop client does not provide a way to change the local sync directory. However, it can be done, though it is a bit unorthodox. Specifically, you have to:

1. Remove the existing connection which syncs to the wrong directory
2. Add a new connection which syncs to the desired directory

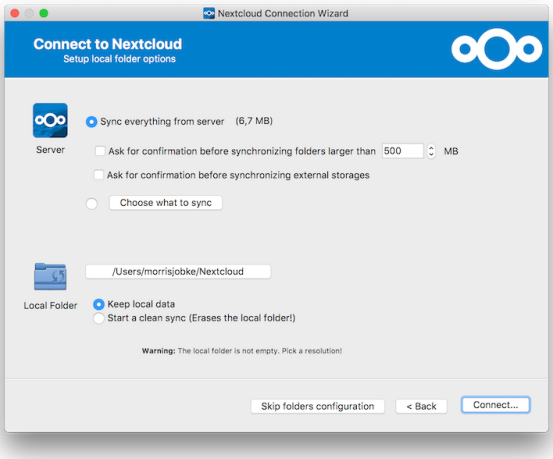


To do so, click the "**Account**" drop-down menu and then click "Remove". This will display a "**Confirm Account Removal**" dialog window.




If you're sure, click "**Remove connection**".

Then, click the Account drop-down menu again, and this time click "**Add new**".




This opens the Nextcloud Connection Wizard *but* with an extra option. This option provides the ability to either: keep the existing data (synced by the previous connection) or to start a clean sync (erasing the existing data).

**Important**

Be careful before choosing the "Start a clean sync" option. The old sync folder *may* contain a considerable amount of data, ranging into the gigabytes or terabytes. If it does, after the client creates the new connection, it will have to download **all** of that information again. Instead, first move or copy the old local sync folder, containing a copy of the existing files, to the new location. Then, when creating the new connection choose "*keep existing data*" instead. The Nextcloud client will check the files in the newly-added sync folder and find that they match what is on the server and not need to download anything.

Make your choice and click "**Connect…**". This will then step you through the Connection Wizard, just as you did when you setup the previous sync connection, but giving you the opportunity to choose a new sync directory.

### 9.11.6 I would like to change the language of the user interface

To do this, the configuration file `nextcloud.cfg` must be changed. A line with the desired language must be added to the `General` section.

```
[General]
language=de
```

For additional information, see:

- Admin manual
- Developer manual

CHAPTER

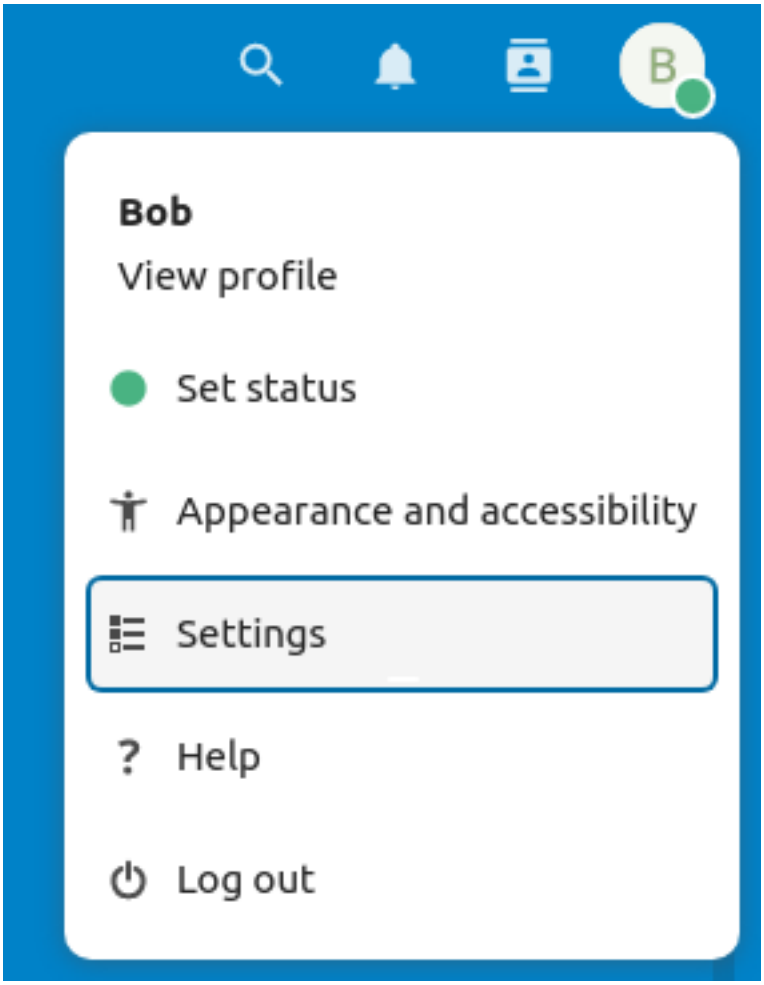
TEN

# SETTING YOUR PREFERENCES

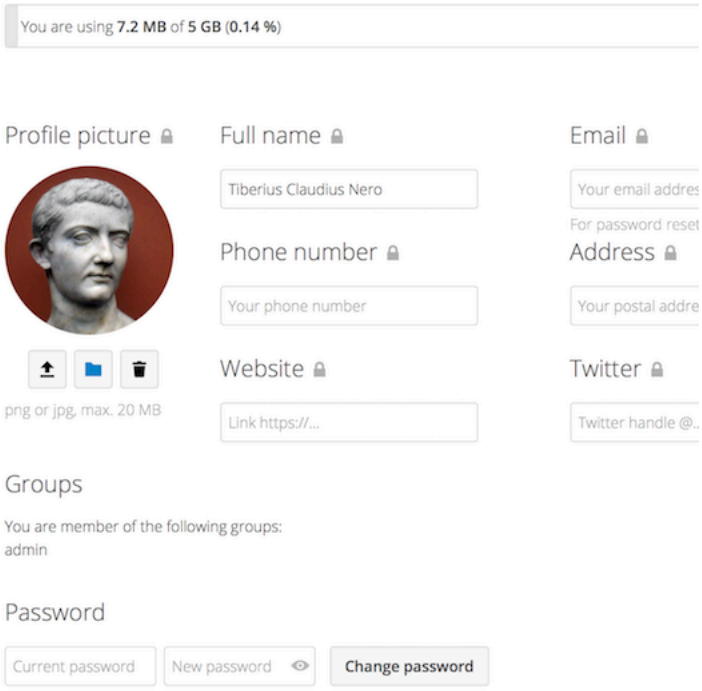
As a user, you can manage your personal settings.

To access your personal settings:

1. Click your profile picture to open the menu.




2. Click **Settings** in the dropdown menu to open your personal settings.




**Note**

If you are an administrator, you can also manage users and administer the server. These links do not appear to a non-administrator user.

The options listed in the Personal Settings Page depend on the applications that are enabled by the administrator. Some of the features you will see include the following:

- Usage and available quota
- Manage your profile picture
- Full name (You can make this anything you want, as it is separate from your Nextcloud login name, which is unique and cannot be changed)
- Email address
- List of your Group memberships
- Change your password
- *Using two-factor authentication*
- User preferences
- Choose the language for your Nextcloud interface
- Choose your preferred first day of the week
- Links to desktop and mobile apps
- Manage your Activity stream and notifications
- Default folder to save new documents to

- Your Federated sharing ID
- Social sharing links
- Nextcloud version

**Note**

Available options and settings depend on your administrator's configuration. If you are not able to change the password or the display name in your personal settings, please contact your administrator for help.

## 10.1 Sharing your data in the global address book

Some administrators share their global address book with other Nextcloud instances (so-called *Trusted Servers*) or even with the wider world. This is helpful when two instances want to work closely together, or when people want to use Nextcloud as a virtual telephone book for others to browse. It also allows searching for contacts, creating shares, and much more.

You can change what personal data is shared by setting the scope of your data. Click the lock icon to open the following dropdown next to each entry:

If you set your data to **Private**, nobody but you will be able to see it.

If you set your data to **Local**, all logged-in users within your Nextcloud instance will be able to see the information, but no one outside of it.

If you set your data to **Federated**, the trusted server(s) added by your administrator will be able to see this data, in addition to all logged-in users.

If you set your data to **Published**, anyone can see your data. This is useful in some cases. Someone with a public-facing role such as marketing or sales might want to share their contact details with a wide variety of connections who might not be using Nextcloud.

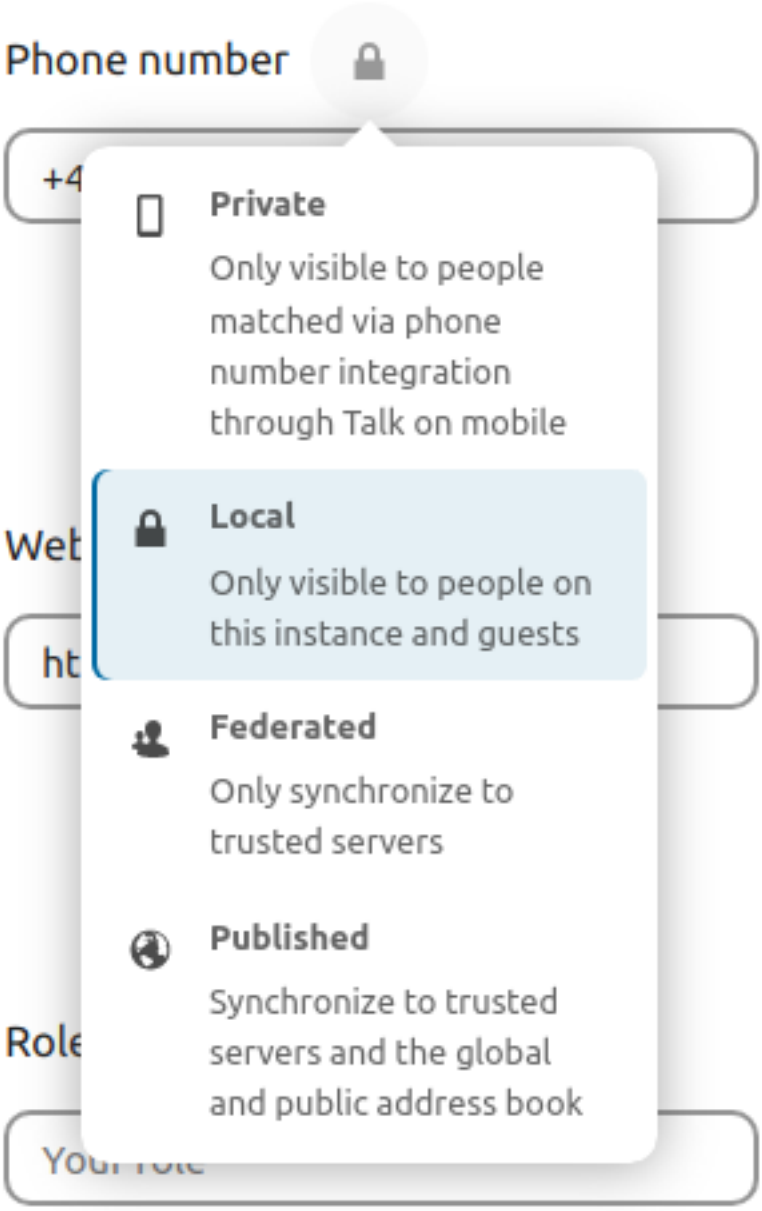
## 10.2 Restrict who can see your profile data

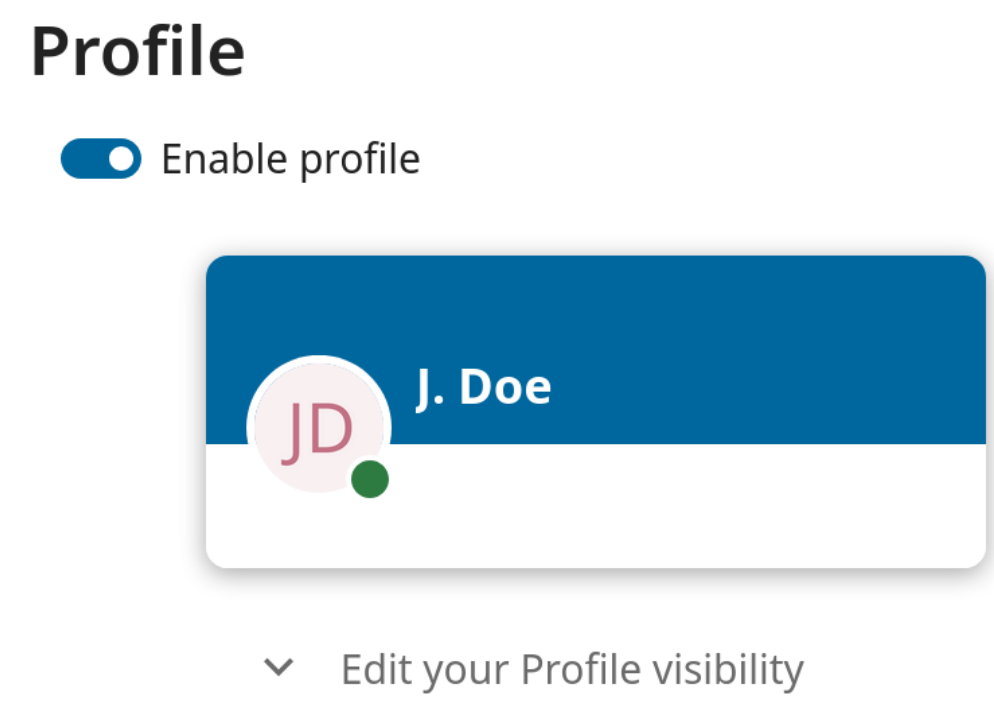
If the profile is enabled by your administrator, your profile data can be read by other users and guests. To control who can see which information, adjust the scopes mentioned above:

- **Private** will only allow you and users you have added to your phone book to see the data.
- **Local** and above will also allow guests to see your data.

To restrict the visibility further, you can prevent guests from seeing your profile data by changing the profile visibility to logged-in users. In your personal settings, find the profile visibility button:

This allows you to configure the visibility for each profile attribute:


Phone number
+4
Private
Only visible to people matched via phone number integration through Talk on mobile
Wet
Local
Only visible to people on this instance and guests
ht
Federated
Only synchronize to trusted servers
Published
Synchronize to trusted servers and the global and public address book
Role


Profile
Enable profile
JD
J. Doe
Edit your Profile visibility
Details

## Profile visibility

The more restrictive setting of either visibility or scope is respected on your Profile. For example, if visibility is set to "Show to everyone" and scope is set to "Private", "Private" is respected.

| | |
|---|---|
| About | Show to everyone |
| Address | Show to logged in accounts only |
| Display name | Show to everyone |
| Email | Show to logged in accounts only |
| Headline | Show to everyone |
| Organisation | Show to everyone |
| Phone | Show to logged in accounts only |
| Profile picture | Show to everyone |
| Pronouns | Show to everyone |
| Role | Show to everyone |
| Twitter | Show to everyone |
| Website | Show to everyone |

CHAPTER

ELEVEN

# UNIVERSAL ACCESS

Universal access is very important to us. We follow web standards and ensure everything is usable with a keyboard and assistive software such as screen readers. We aim to be compliant with the Web Content Accessibility Guidelines 2.1 on AA level, with the high contrast theme even on AAA level. We also follow the German BITV 2.0 guidelines.

If you find any issues, don't hesitate to report them on our issue tracker. And if you want to get involved, come join our design team!

## 11.1 Zoom and responsiveness

The Nextcloud interface is fully responsive and usable on any size of screen. You can zoom in and out to fit the text and element size to your liking. The navigation and sidebar can be expanded or collapsed.

## 11.2 Navigating via keyboard

You can navigate the web interface with a keyboard, just as you would with a mouse:

- `Tab` and `Shift`+`Tab` to move between elements
- `Enter` or `Space` to activate or open the element (depending on the type of element)
- `Escape` to be used to close modals, popover menus, and file viewers
- `Left arrow` and `Right arrow` to navigate between photos in the viewer
- `Ctrl`+`F` to focus the search field
- `Ctrl`+`S` to save changes in editors like Nextcloud Text

For quicker navigation, we offer two "skip links" at the beginning of the document which allow you to:

- Skip to main content
- Skip to navigation of app

Nextcloud Talk has shortcuts which are also documented inside the settings of the app itself:

- `C` to focus the message input field
- `Escape` to unfocus the message input field to be able to use shortcuts
- `F` to fullscreen the chat or call
- **While in a call:**
  - `M` to toggle the microphone on and off
  - `V` to toggle video on and off

  - `Space` for push to talk or push to mute
  - `R` to raise or lower hand

Nextcloud Mail has shortcuts as well, also documented inside the settings of the app itself:

- `C` to compose a new message
- `Left arrow` to switch to a newer message
- `Right arrow` to switch to an older message
- `S` to toggle a message as favorite
- `U` to toggle a message unread
- `Del` to delete a message
- `Ctrl+Enter` to send
- `R` to refresh and load new mails

## 11.3 Included themes

We offer several themes you can activate to aid accessibility:

- **High contrast theme:** A high contrast mode to ease your navigation. Visual quality will be reduced but clarity will be increased.
- **Dark theme:** A dark theme to ease your eyes by reducing the overall luminosity and brightness. It is still under development, so please report any issues you may find.
- **Dyslexia font:** OpenDyslexic is a free typeface/font designed to mitigate some of the common reading errors caused by dyslexia.

To reach the accessibility settings:

1. Open the settings menu at the end of the header
2. Pick **Settings**
3. In the navigation, pick **Accessibility**

> **Note**
>
> Contrast of elements can vary based on custom theming. For example, the primary theming color is used as background color by the header, log in page, and primary buttons. If this causes contrast issues, please contact your administrator for help.

CHAPTER

TWELVE

# USING TWO-FACTOR AUTHENTICATION

Two-factor authentication (2FA) is a way to protect your Nextcloud account against unauthorized access. It works by requiring two different 'proofs' of your identity. For example, *something you know* (like a password) and *something you have* like a physical key. Typically, the first factor is a password like you already have and the second can be a text message you receive or a code you generate on your phone or another device (*something you have*). Nextcloud supports a variety of 2nd factors and more can be added.

Once a two-factor authentication app has been enabled by your administrator, you can enable and configure it in *Setting your preferences*.

## 12.1 Configuring two-factor authentication

In your personal settings, look up the **Second-factor Auth** setting. In this example this is TOTP, a Google Authenticator compatible time-based code:

You will see your secret and a QR code which can be scanned by the TOTP app on your phone (or another device). Depending on the app or tool, type in the code or scan the QR and your device will show a login code which changes every 30 seconds.

## 12.2 Recovery codes if you lose your second factor

You should always generate backup codes for 2FA. If your second factor device gets stolen or stops working, you can use one of these codes to unlock your account. It effectively functions as a backup second factor. To get the backup codes, go to your personal settings and look under **Second-factor Auth** settings. Choose *Generate backup codes*:

You will then see a list of one-time-use backup codes:

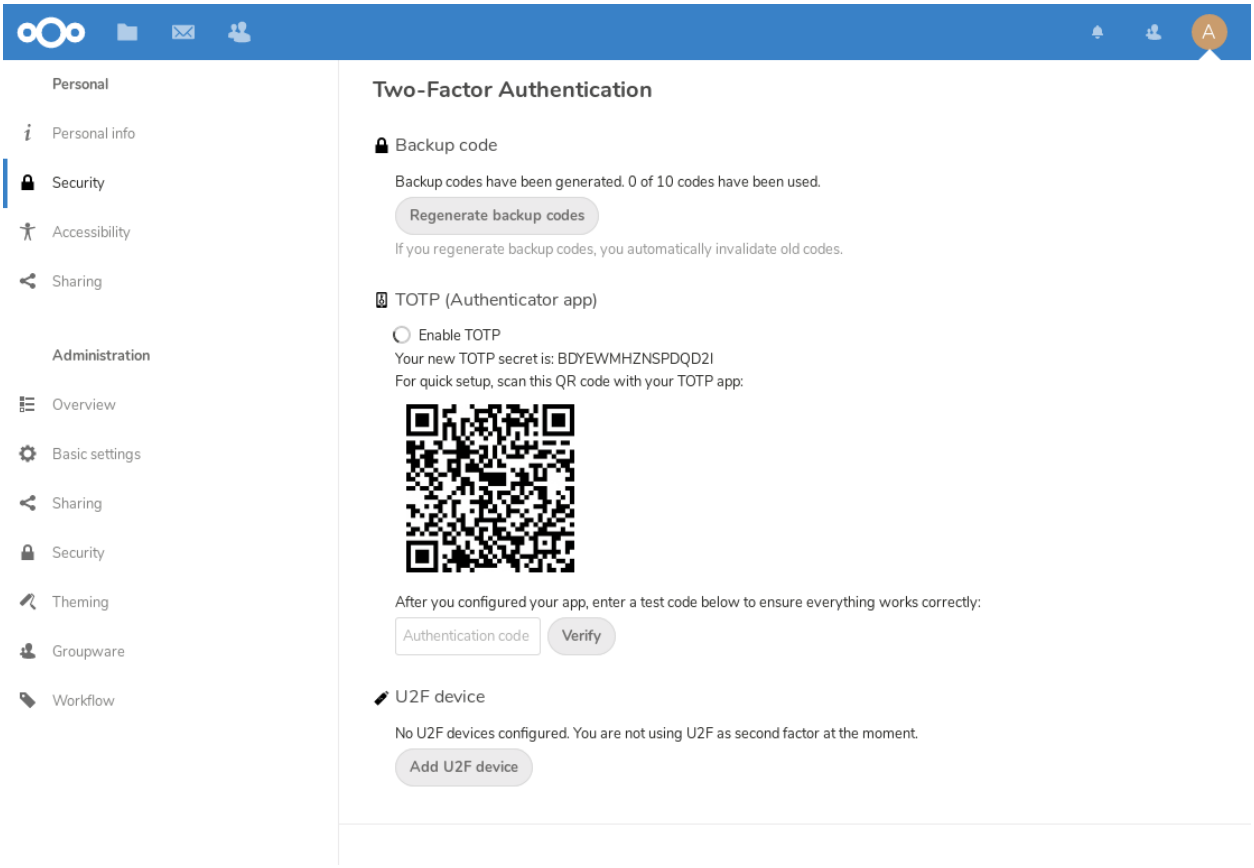
Store these codes somewhere safe where you can find them. Do not keep them with your second factor (such as your mobile phone), but store them separately so that losing one does not mean losing the other.

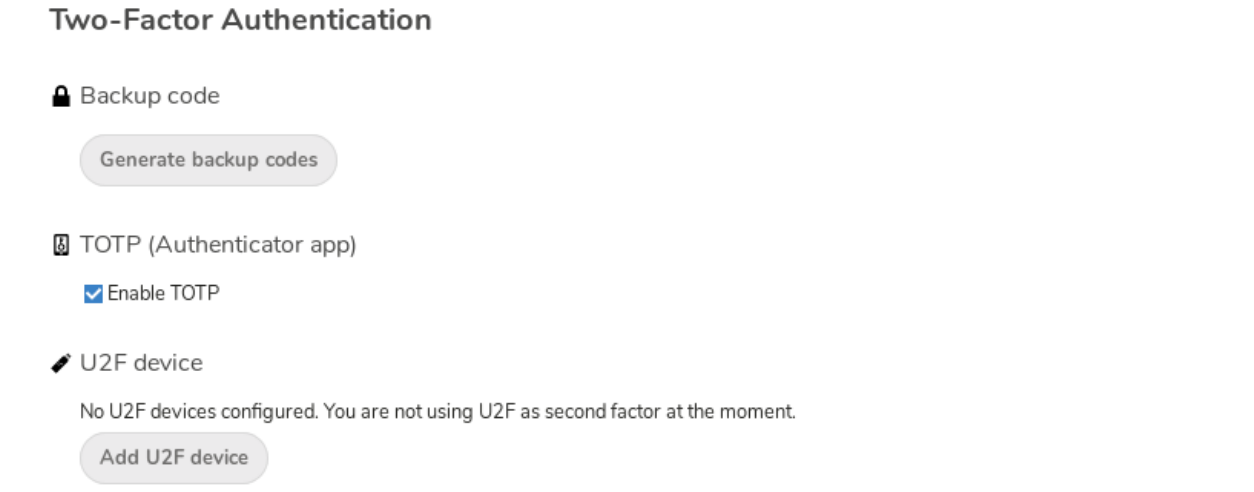
## 12.3 Logging in with two-factor authentication

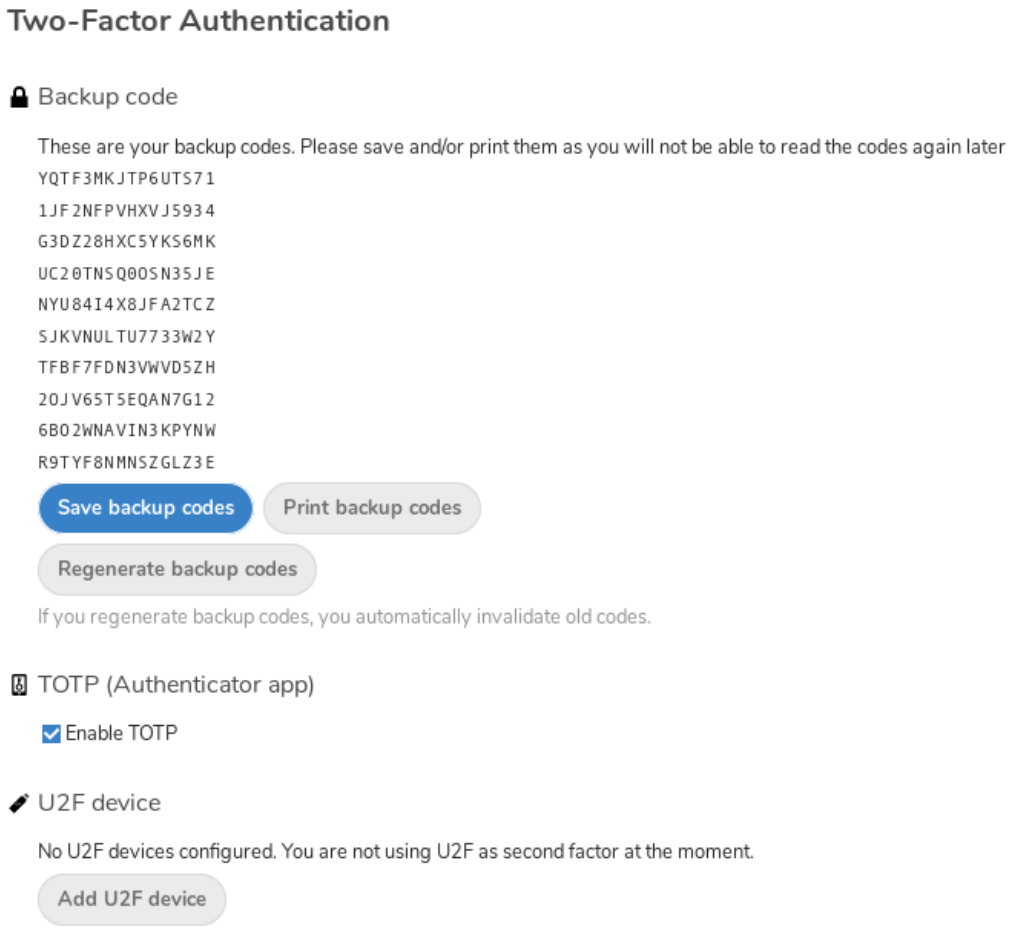
After you log out and log in again, you will see a prompt to enter the TOTP code in your browser. If you have enabled more than one second factor, you will see a selection screen where you can choose which method to use for this login. Select TOTP:

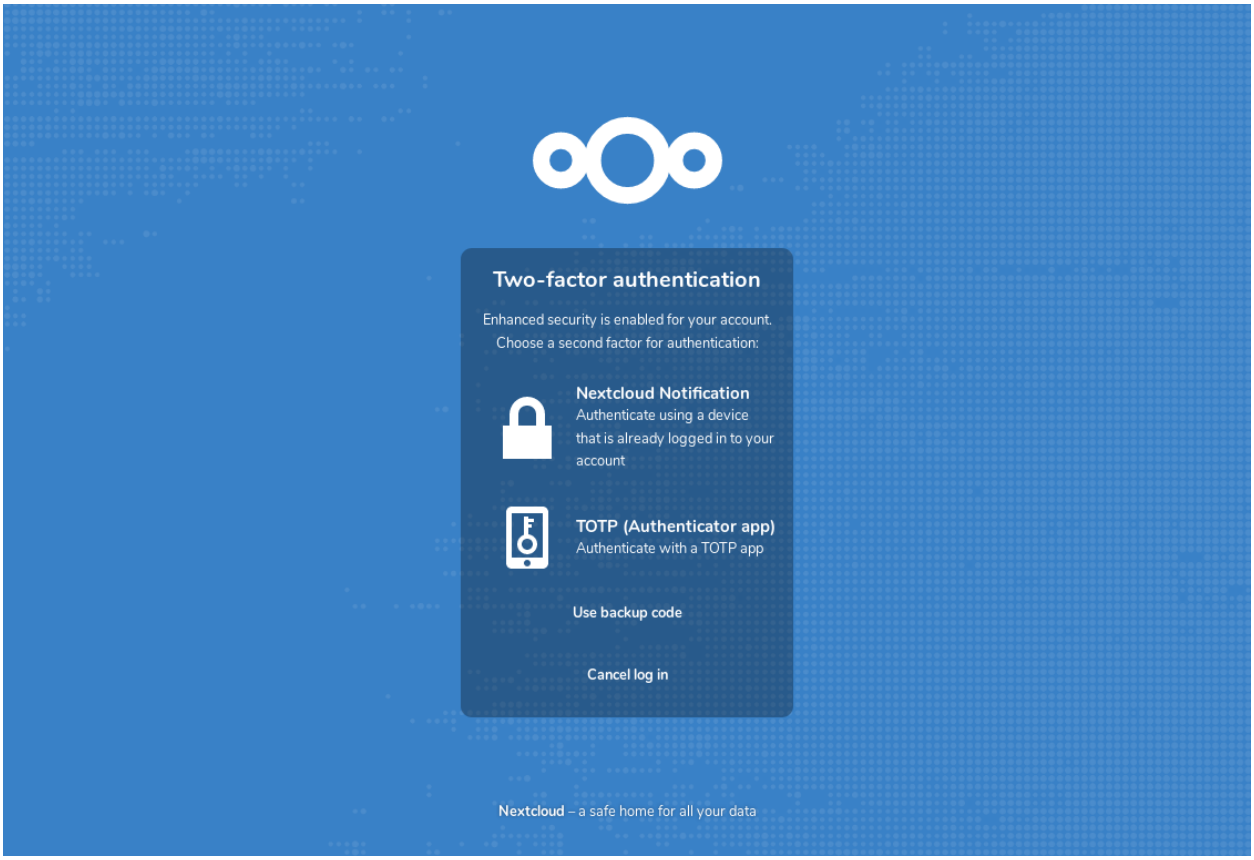
Now, just enter your code:

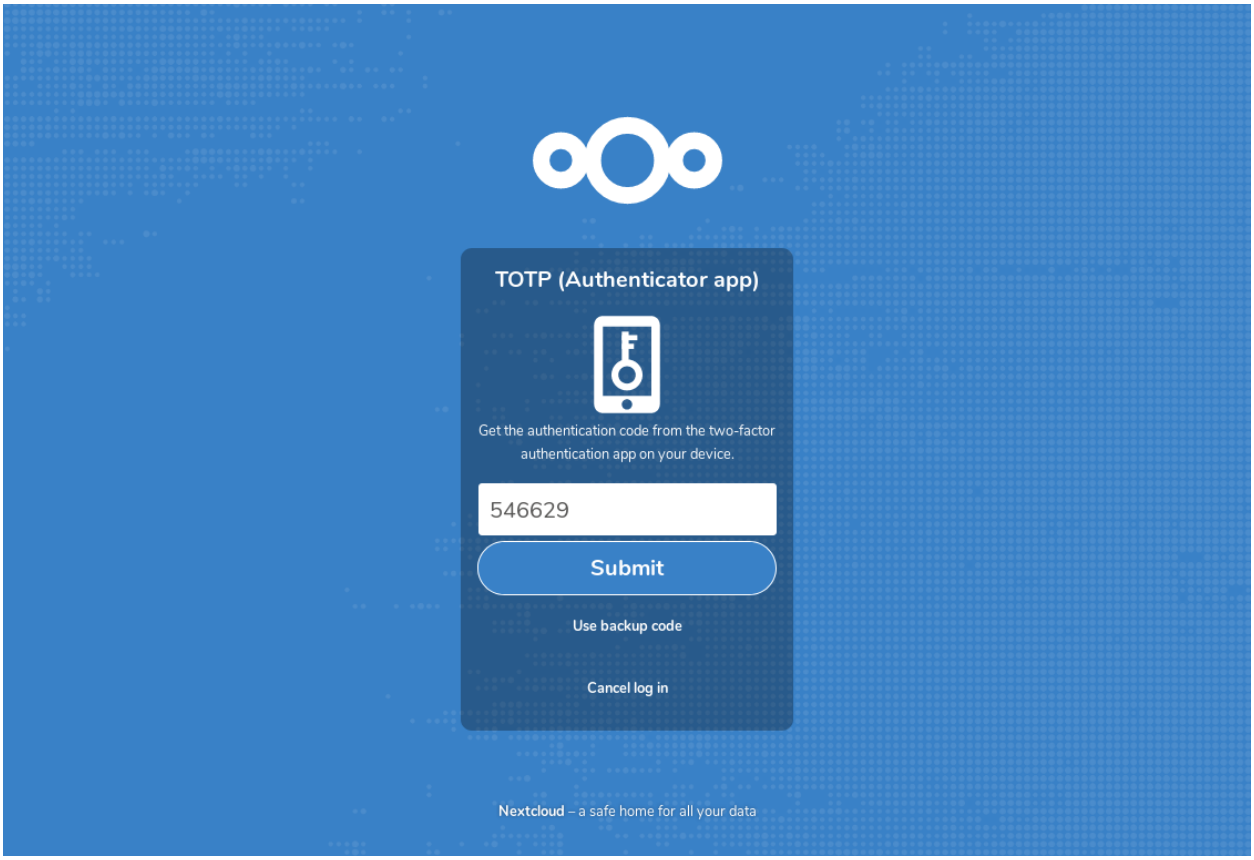
If the code was correct you will be redirected to your Nextcloud account.


Personal
Personal info
Security
Accessibility
Sharing
Administration
Overview
Basic settings
Sharing
Security
Theming
Groupware
Workflow
Two-Factor Authentication
Backup code
Backup codes have been generated. 0 of 10 codes have been used.
Regenerate backup codes
If you regenerate backup codes, you automatically invalidate old codes.
TOTP (Authenticator app)
Enable TOTP
Your new TOTP secret is: BDYEWMHZNSPDQD2I
For quick setup, scan this QR code with your TOTP app:
After you configured your app, enter a test code below to ensure everything works correctly:
Authentication code
Verify
U2F device
No U2F devices configured. You are not using U2F as second factor at the moment.
Add U2F device


Two-Factor Authentication
Backup code
Generate backup codes
TOTP (Authenticator app)
Enable TOTP
U2F device
No U2F devices configured. You are not using U2F as second factor at the moment.
Add U2F device


Two-Factor Authentication
Backup code
These are your backup codes. Please save and/or print them as you will not be able to read the codes again later
YQTF3MKJTP6UTS71
1JF2NFPVHXVJ5934
G3DZ28HXC5YKS6MK
UC20TNSQ0OSN35JE
NYU84I4X8JFA2TCZ
SJKVNULTU7733W2Y
TFBF7FDN3VWVD5ZH
2OJV65T5EQAN7G12
6BO2WNAVIN3KPYNW
R9TYF8NMNSZGLZ3E
Save backup codes
Print backup codes
Regenerate backup codes
If you regenerate backup codes, you automatically invalidate old codes.
TOTP (Authenticator app)
Enable TOTP
U2F device
No U2F devices configured. You are not using U2F as second factor at the moment.
Add U2F device


Two-factor authentication
Enhanced security is enabled for your account.
Choose a second factor for authentication:
Nextcloud Notification
Authenticate using a device that is already logged in to your account
TOTP (Authenticator app)
Authenticate with a TOTP app
Use backup code
Cancel log in
Nextcloud – a safe home for all your data


TOTP (Authenticator app)
Get the authentication code from the two-factor authentication app on your device.
546629
Submit
Use backup code
Cancel log in
Nextcloud – a safe home for all your data

**Note**

Since the code is time-based, it is important that your server's and your smartphone's clock are almost in sync. A time drift of a few seconds won't be a problem.

## 12.4 Using two-factor authentication with hardware tokens

You can use two-factor authentication based on hardware tokens. The following devices are known to work:

- TOTP based:
  - Nitrokey Pro
  - Nitrokey Storage
- FIDO2 based:
  - Nitrokey FIDO2
  - Nitrokey FIDO U2F

## 12.5 Using client applications with two-factor authentication

Once you have enabled 2FA, your clients will no longer be able to connect with just your password unless they also have support for two-factor authentication. To solve this, you should generate device-specific passwords for them. See *Manage connected browsers and devices* for more information on how to do this.

## 12.6 Considerations

If you use WebAuthn to log in to your Nextcloud, be sure to not use the same token for 2FA, as this would mean you are again only using a single factor.

CHAPTER

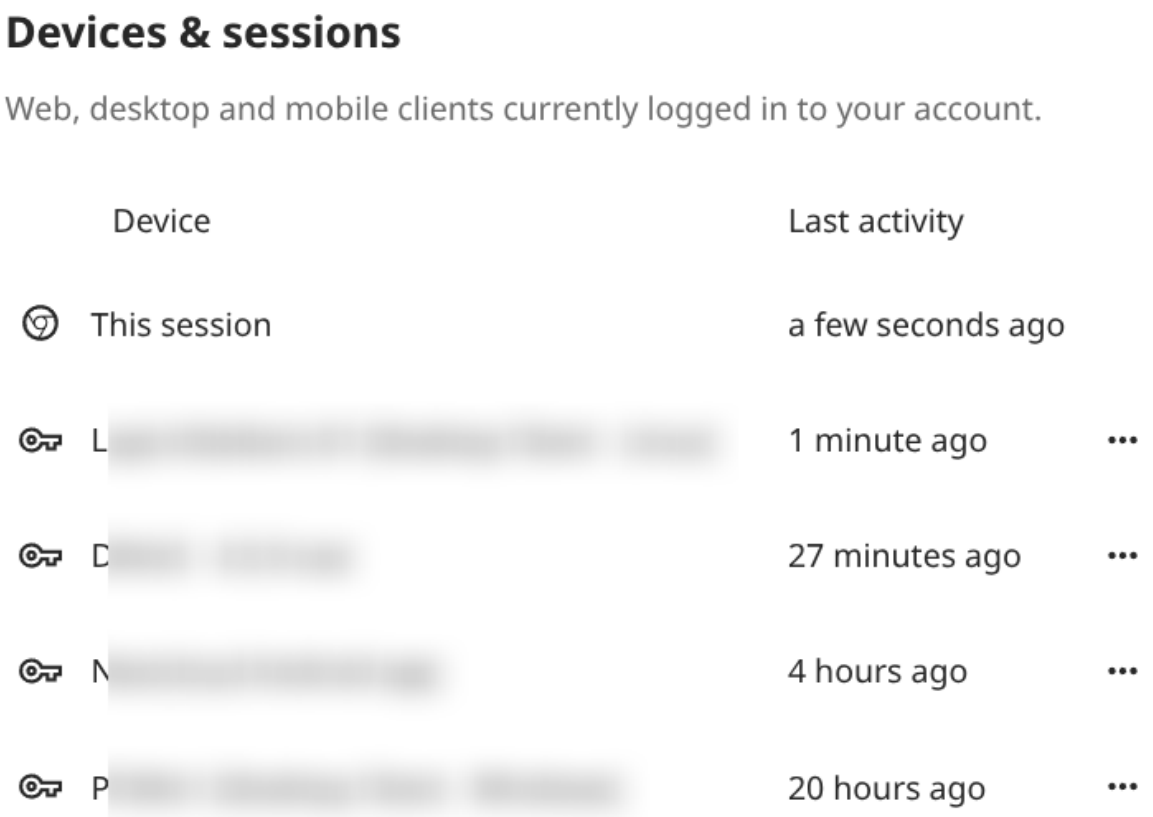
THIRTEEN

# MANAGE CONNECTED BROWSERS AND DEVICES

The personal settings page gives you an overview of the connected browsers and devices under the “Security” tab.

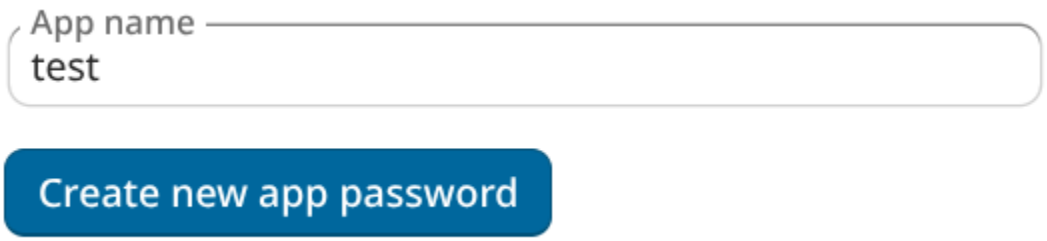
## 13.1 Managing connected browsers and devices

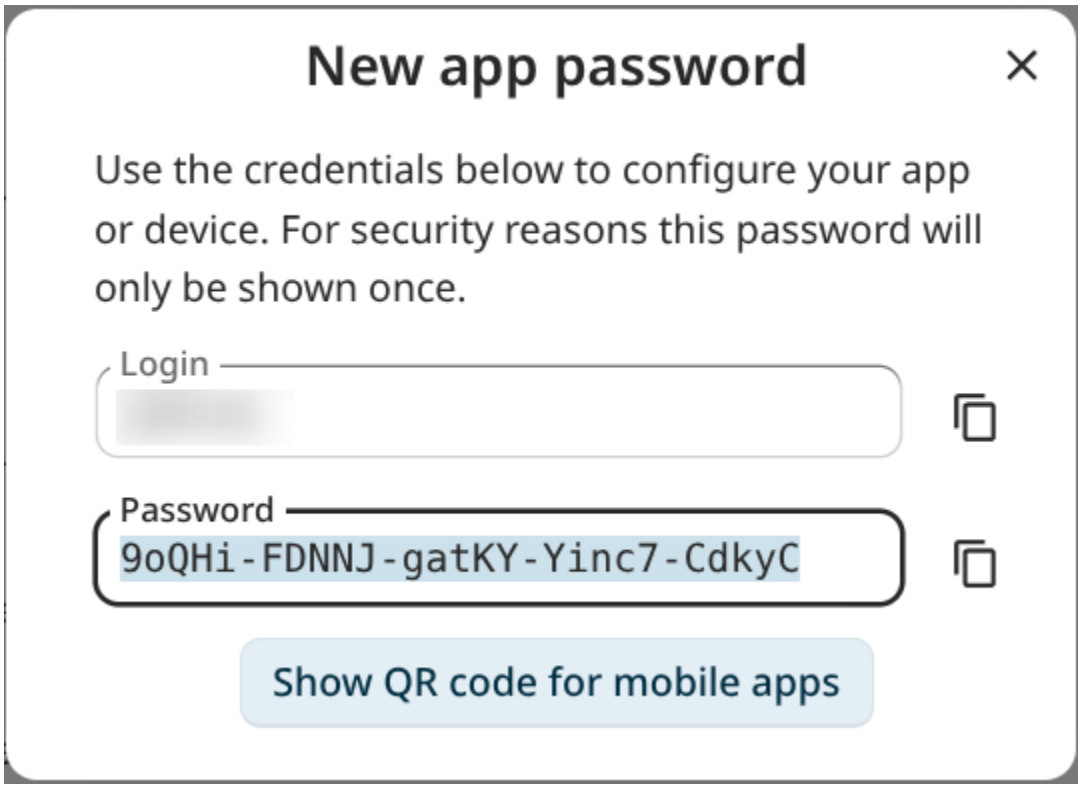
The list of connected browsers and devices shows which browsers and devices have connected to your account recently:




You can open the menu beside every device or session to revoke the access.

At the bottom of the list, you can create a new device-specific password. The generated password is used for configuring the new client. Ideally, generate individual tokens for every device you connect to your account, so you can disconnect those individually if necessary:


App name
test
Create new app password


New app password
Use the credentials below to configure your app or device. For security reasons this password will only be shown once.
Login
Password
9oQHi-FDNNJ-gatKY-Yinc7-CdkyC
Show QR code for mobile apps

**Note**

You only have access to the device password when creating it. Nextcloud does not save the plain password, so enter the password on the new client immediately.

**Note**

If you use *Using two-factor authentication* for your account, device-specific passwords are the only way to configure clients. The server will then deny connections from clients using your login password.

## 13.2 Device-specific passwords and password changes

When a password changes in an external user backend, all device-specific passwords are marked as invalid. Once you log in with the main password, all device-specific passwords are updated and work again.