# Nextcloud User Manual

***Release latest***

**The Nextcloud developers**

**Aug 24, 2025**

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CHAPTER

ONE

# NEXTCLOUD LATEST 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.

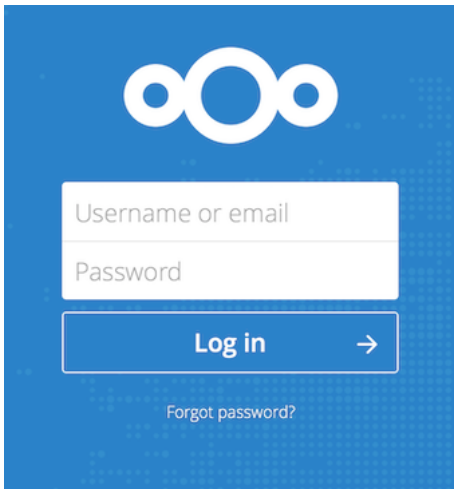
Help translate.

CHAPTER

TWO

# THE NEXTCLOUD WEB INTERFACE

You can connect to your Nextcloud server using any Web browser. Just point it to your Nextcloud server URL (e.g. cloud.example.com) and enter your username and password:




## 2.1 Web browser requirements

For the best experience with the Nextcloud web interface, we recommend that you use the latest and supported version of a browser from this list:

- Google **Chrome**/Chromium (Desktop and Android)
- Mozilla **Firefox** (Desktop and Android)
- Apple **Safari** (Desktop and iOS)
- Microsoft **Edge**

**Note**

Not all versions are supported. Nextcloud is tested and built to work with these versions only.

**Note**

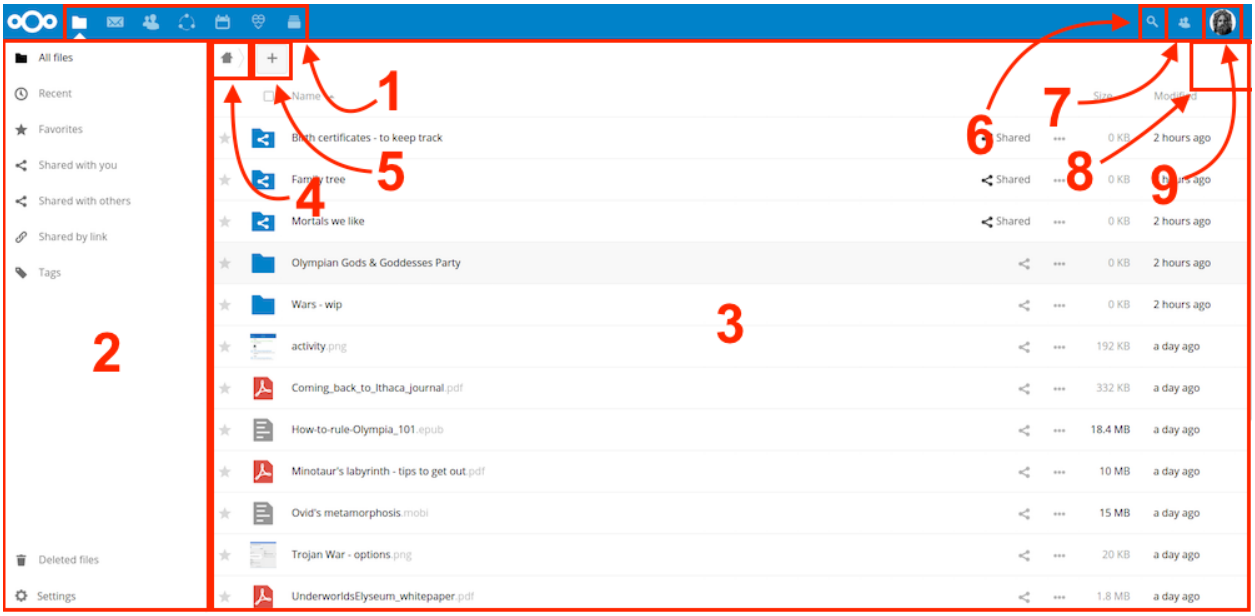
If you want to use Nextcloud Talk you need to run Mozilla **Firefox** 52+ or Google **Chrome**/Chromium 49+ to have the full experience with video calls and screensharing.

**Warning**

Microsoft **Internet Explorer** is **NOT** supported.

## 2.2 Navigating the main user interface

By default, the Nextcloud Web interface opens to your Dashboard or Files page:




In Files you can add, remove, and share files, and the server administrator can change access privileges.

The Nextcloud user interface contains the following fields and functions:

- **Apps Selection Menu** (1): Located in the upper left corner, you'll find all your apps which are available on your instance of Nextcloud. Clicking on an app icon will redirect you to the app.
- **Apps Information** field (2): Located in the left sidebar, this provides filters and tasks associated with your selected app. For example, when you are using the Files app you have a special set of filters for quickly finding your files, such as files that have been shared with you, and files that you have shared with others. You'll see different items for other apps.
- **Application View** (3): The main central field in the Nextcloud user interface. This field displays the contents or user features of your selected app.
- **Navigation Bar** (4): Located over the main viewing window (the Application View), this bar provides a type of breadcrumbs navigation that enables you to migrate to higher levels of the folder hierarchy up to the root level (home).
- **New** button (5): Located in the Navigation Bar, the `New` button enables you to create new files, new folders, or upload files.

**Note**

You can also drag and drop files from your file manager into the Files Application View to upload them to your instance.

- **Search** field (6): Click on the Magnifier in the upper right corner to search for files and entries of the current app.
- **Contacts Menu** (7): Gives you an overview about your contacts and users on your server. Dependent on the given details and available apps, you can directly start a video call with them or send emails.
- **Grid view** button (8): This looks like four little squares, which toggles the grid view for folders and files.
- **Settings** menu (9): Click on your profile picture, located to the right of the Search field, to open your Settings dropdown menu. Your Settings page provides the following settings and features:
  - Links to download desktop and mobile apps
  - Server usage and space availability
  - Password management
  - Name, email, and profile picture settings
  - Manage connected browsers and devices
  - Group memberships
  - Interface language settings
  - Manage notifications
  - Federated Cloud ID and social media-sharing buttons
  - SSL/TLS certificate manager for external storages
  - Your Two-factor Settings
  - Nextcloud Version information

See *Setting your preferences* section to learn more about these settings.

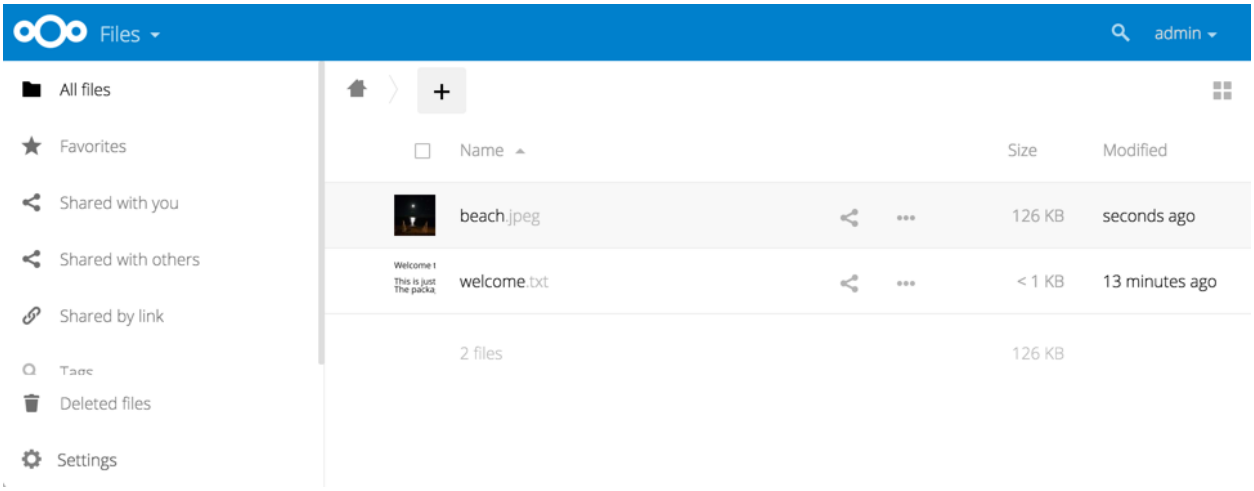
CHAPTER

THREE

# FILES & SYNCHRONIZATION

## 3.1 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.




### 3.1.1 Tagging files

You can assign tags to files. To create tags, open a file to the Details view. Then type your tags. To enter more than one tag press the return key after creating each tag. All tags are system tags, and are shared by all users on your Nextcloud server.

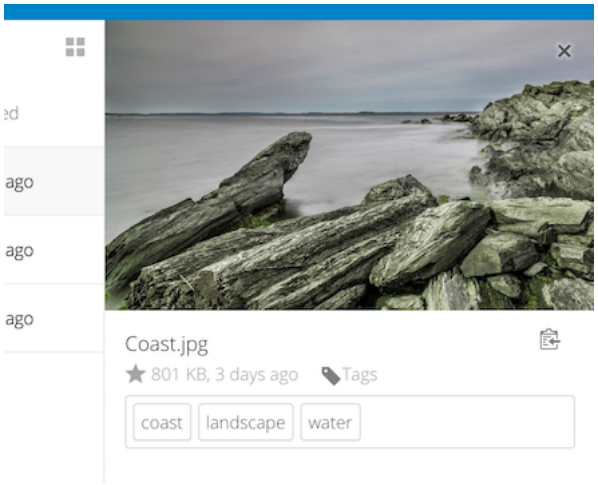
Then use the Tags filter on the left sidebar to filter files by tags:

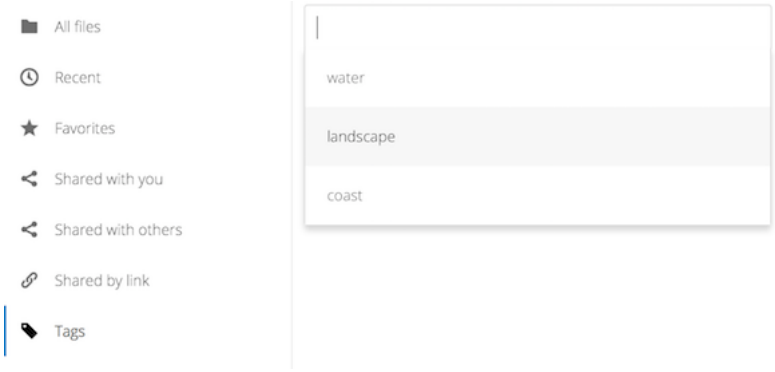
### 3.1.2 Comments

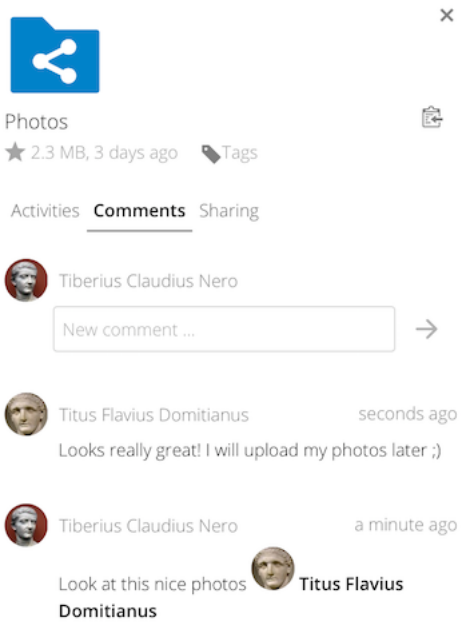
Use the Details view to add and read comments on any file or folder. Comments are visible to everyone who has access to the file:

### 3.1.3 Video player

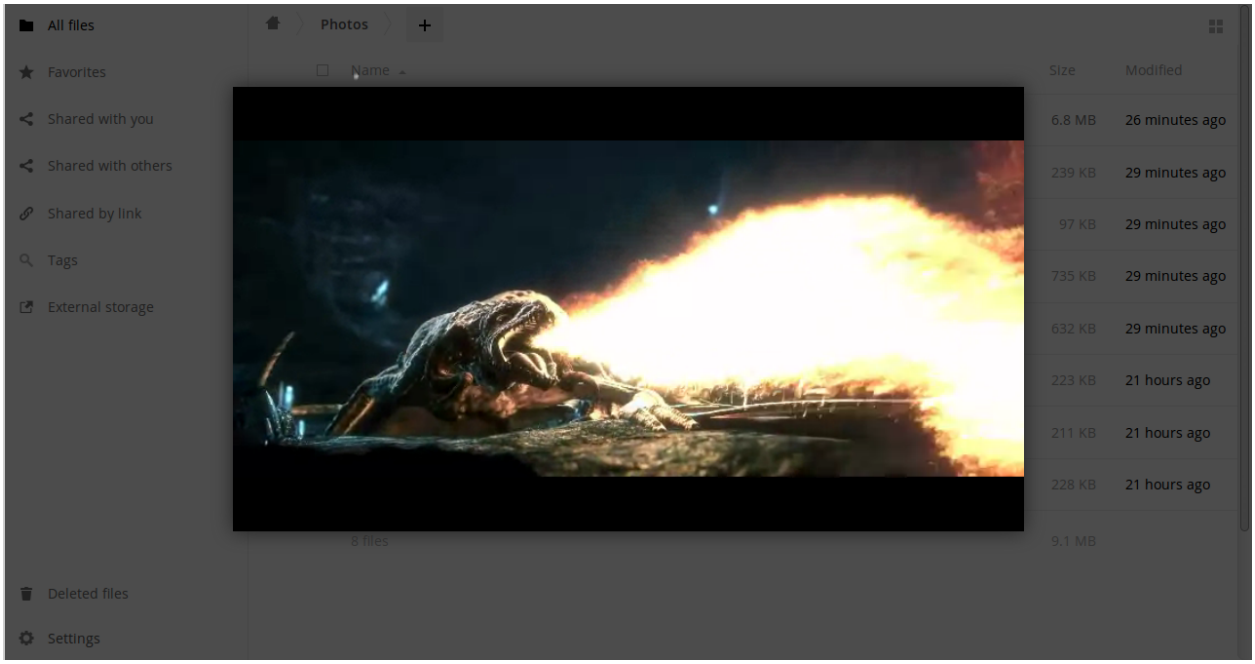
You can play videos in Nextcloud with the Video Player app by simply clicking on the file. Video streaming by the native Nextcloud video player depends on your Web browser and the video format. If your Nextcloud administrator has enabled video streaming, and it doesn't work in your Web browser, it may be a browser issue. See https://developer.mozilla.org/


ago
ago
ago
Coast.jpg
801 KB, 3 days ago
Tags
coast
landscape
water


All files
Recent
Favorites
Shared with you
Shared with others
Shared by link
Tags
water
landscape
coast


Photos
2.3 MB, 3 days ago
Tags
Activities
Comments
Sharing
Tiberius Claudius Nero
New comment ...
Titus Flavius Domitianus
seconds ago
Looks really great! I will upload my photos later ;)
Tiberius Claudius Nero
a minute ago
Look at this nice photos
Titus Flavius Domitianus

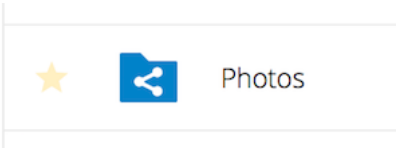
en-US/docs/Web/HTML/Supported_media_formats#Browser_compatibility for supported multimedia formats in Web browsers.




### 3.1.4 File controls

Nextcloud can display thumbnail previews for image files, MP3 covers, and text files, if this enabled by your server administrator. Hover your cursor over a file or folder to expose the controls for the following operations:

**Favorites**
Click the star to the left of the file icon to mark it as a favorite:




You can also quickly find all of your favorites with the Favorites filter on the left sidebar.

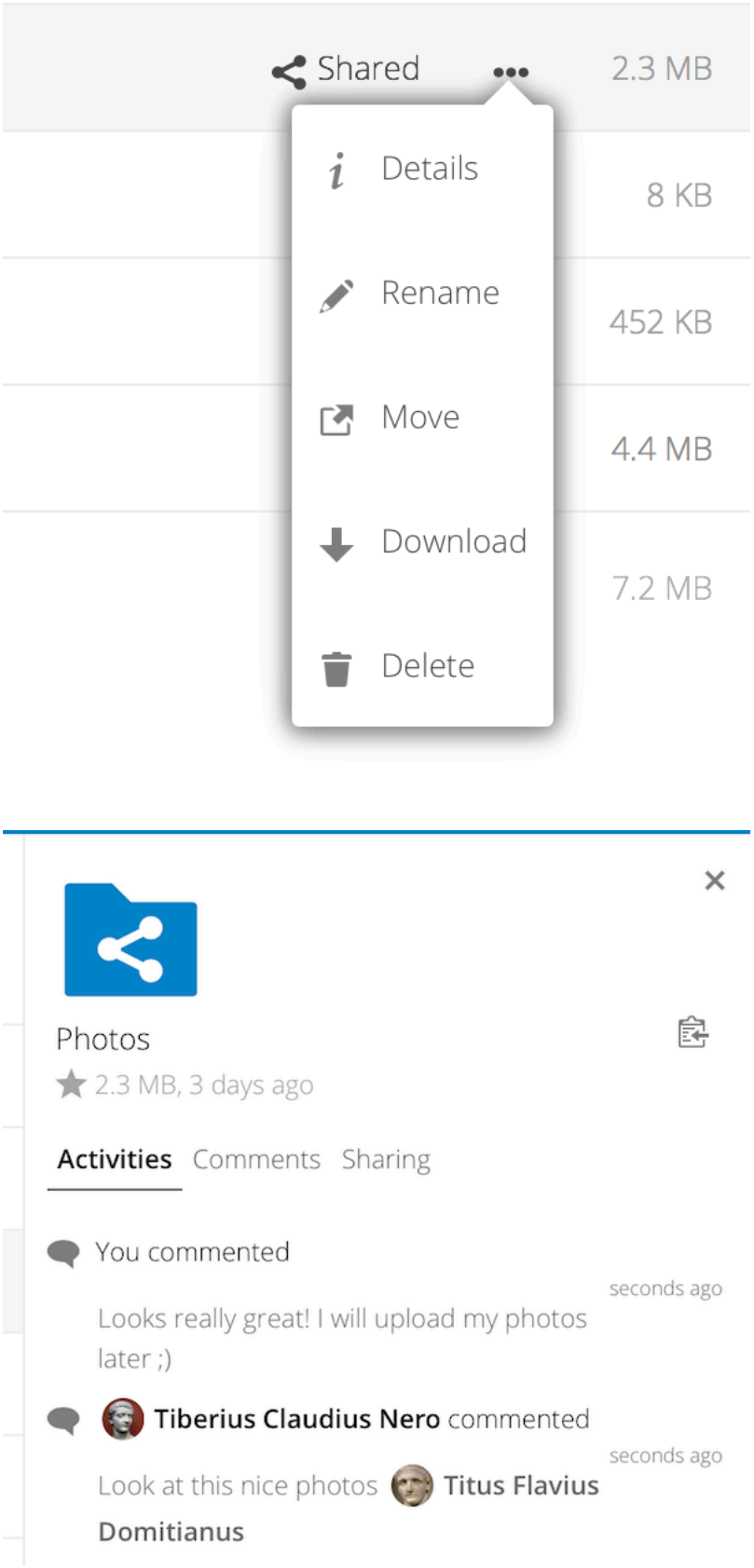
**Overflow Menu**
The Overflow menu (three dots) displays file details, and allows you to rename, download, or delete files:

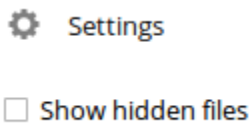
The Details view shows Activities, Sharing, and Versions information:

The **Settings** gear icon at the lower left allows you to show or hide hidden files in your Nextcloud Web interface. These are also called dotfiles, because they are prefixed with a dot, e.g. `.mailfile`. The dot tells your operating system to hide these files in your file browsers, unless you choose to display them. Usually these are configuration files, so having the option to hide them reduces clutter.

### 3.1.5 Previewing files

You can display uncompressed text files, OpenDocument files, videos, and image files in the Nextcloud embedded viewers by clicking on the file name. There may be other file types you can preview if your Nextcloud administrator has enabled them. If Nextcloud cannot display a file, it starts a download process and downloads the file to your computer.


Shared
2.3 MB
Details
8 KB
Rename
452 KB
Move
4.4 MB
Download
7.2 MB
Delete
Photos
2.3 MB, 3 days ago
Activities
Comments
Sharing
You commented
seconds ago
Looks really great! I will upload my photos later ;)
Tiberius Claudius Nero commented
seconds ago
Look at this nice photos
Titus Flavius Domitianus

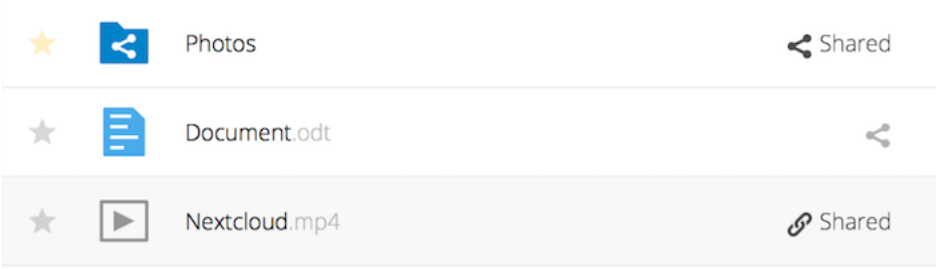



### 3.1.6 Navigating inside your Nextcloud

Navigating through folders in Nextcloud is as simple as clicking on a folder to open it and using the back button on your browser to move to a previous level. Nextcloud also provides a navigation bar at the top of the Files field for quick navigation.

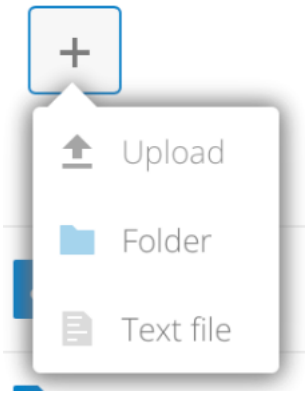
### 3.1.7 Sharing status icons

Any folder that has been shared is marked with the `Shared` overlay icon. Public link shares are marked with a chain link. Unshared folders are not marked:




### 3.1.8 Creating or uploading files and directories

Upload or create new files or folders directly in a Nextcloud folder by clicking on the *New* button in the Files app:




The *New* button provides the following options:

**Up arrow**
: Upload files from your computer into Nextcloud. You can also upload files by dragging and dropping them from your file manager.

**Text file**
: Creates a new text file and adds the file to your current folder.

**Folder**
: Creates a new folder in the current folder.

### 3.1.9 Selecting files or folders

You can select one or more files or folders by clicking on their checkboxes. To select all files in the current directory, click on the checkbox located at the top of the files listing.

When you select multiple files, you can delete all of them, or download them as a ZIP file by using the `Delete` or `Download` buttons that appear at the top.

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

### 3.1.10 Filtering the files view

The left sidebar on the Files page contains several filters for quickly sorting and managing your files.

**All files**
: The default view; displays all files that you have access to.

**Favorites**
: Files or folders marked with the yellow star.

**Shared with you**
: Displays all files shared with you by another user or group.

**Shared with others**
: Displays all files that you have shared with other users or groups.

**Shared by link**
: Displays all files that are shared by you via public link.

**External Storage (optional)**
: Files that you have access to on external storage devices and services such as Amazon S3, SMB/CIFS, FTP…

### 3.1.11 Moving files

You can move files and folders by dragging and dropping them into any directory.

### 3.1.12 Creating or connecting to a Federation Share link

Federated Cloud Sharing allows you to mount file shares from remote Nextcloud servers, and manage them just like a local share. See *Using Federation Shares* to learn to how to create and connect to new Federated Cloud shares.

## 3.2 Accessing Nextcloud files using WebDAV

Nextcloud fully supports the WebDAV protocol, and you can connect and synchronize with Nextcloud Files over WebDAV. In this chapter, you will learn 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 we get into configuring WebDAV, let's take a quick look at the recommended way of connecting client devices to Nextcloud.

### 3.2.1 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
```

### 3.2.2 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 improved security, this increases performance significantly. To configure an application password, log into the Nextcloud Web interface, click on the avatar in the top right 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.

See the WebDAV URL (bottom left in settings) on your Nextcloud.

### 3.2.3 Accessing files using Linux

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

#### Nautilus file manager

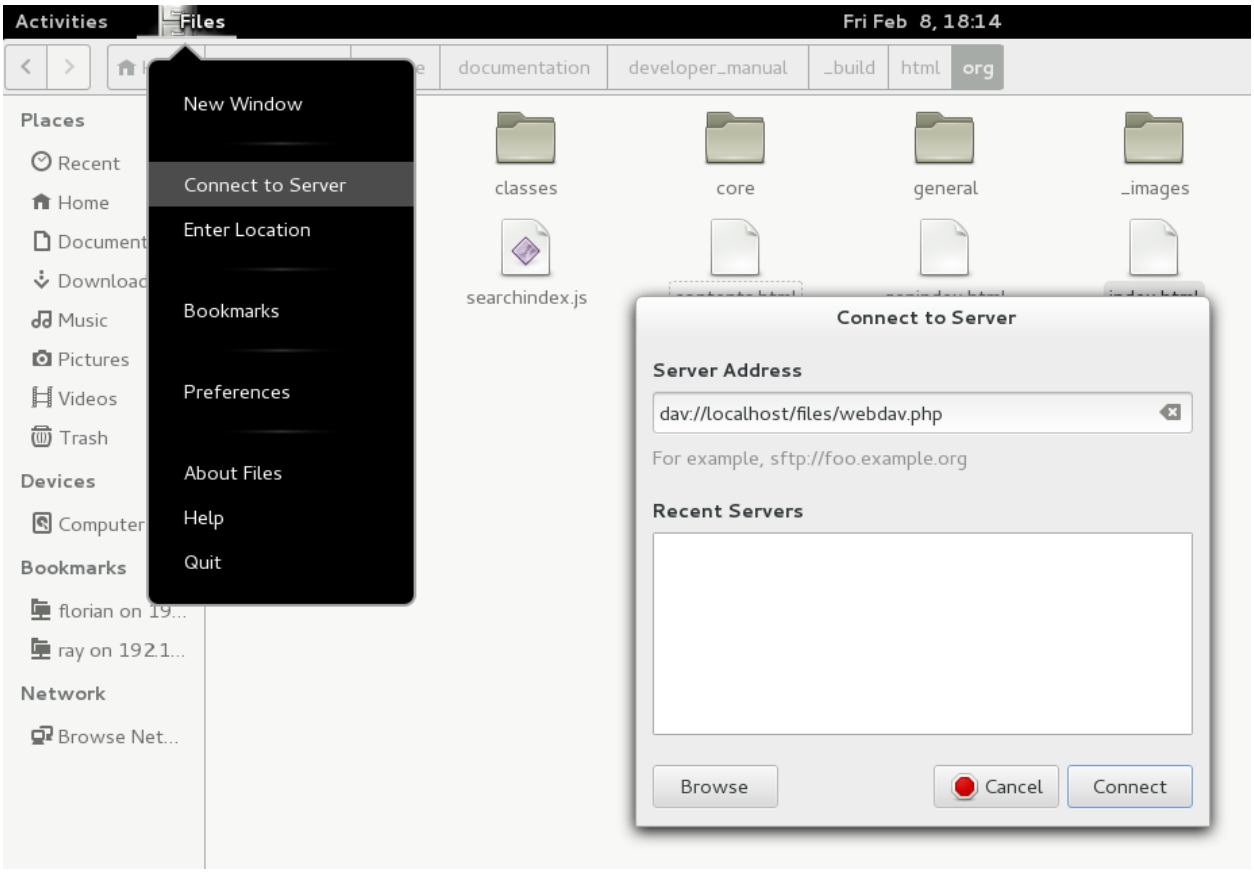
**When you configure your Nextcloud account in the** GNOME Control Center, **your files will automatically be mounted by Nautilus as a WebDAV share, unless you deselect file access**.

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 file manager

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 as a shortcut in the sidebar, right click "Nextcloud Storage" then "Add to Places"
9. (Optional) To customise the shortcut, right click the shortcut in the sidebar then "Edit…" and customise the icon and label as you please

### 3.2.4 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>
```

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

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

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

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

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

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

7. 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
```

8. 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
```

9. 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
```

10. 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`.

### 3.2.5 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
```

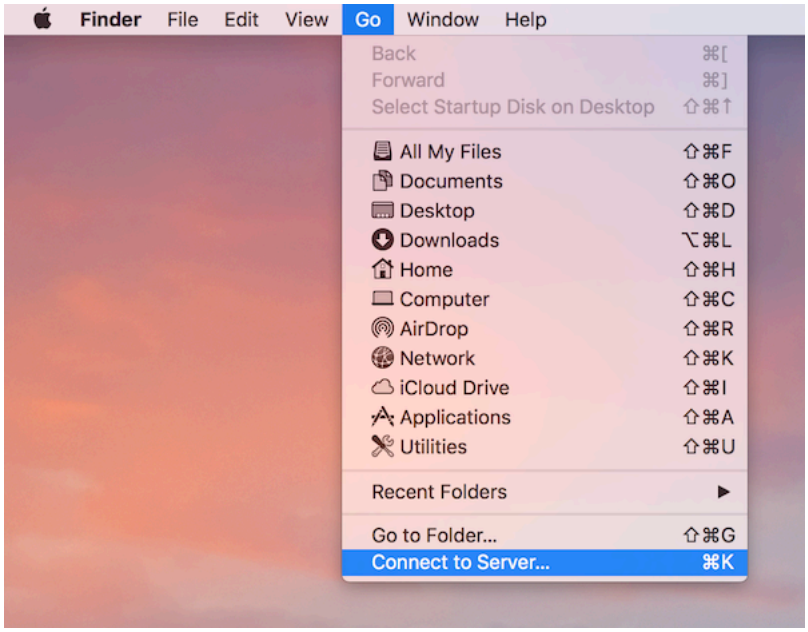
### 3.2.6 Accessing files using macOS

**Note**

The macOS Finder suffers from a series of implementation problems and should only be used if the Nextcloud server runs on **Apache** and **mod_php**, or **Nginx 1.3.8+**. Alternative macOS-compatible clients capable of accessing WebDAV shares include open source apps like Cyberduck (see instructions here) and Filezilla. Commercial clients include Mountain Duck, Forklift, Transmit, and Commander One.

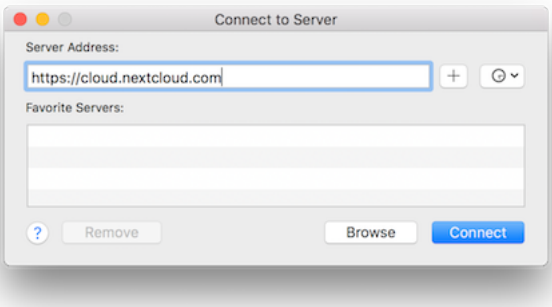
To access files through the macOS Finder:

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.

### 3.2.7 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**

Windows 10 now defaults to allow Basic Authentication if 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.

### 3.2.8 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.

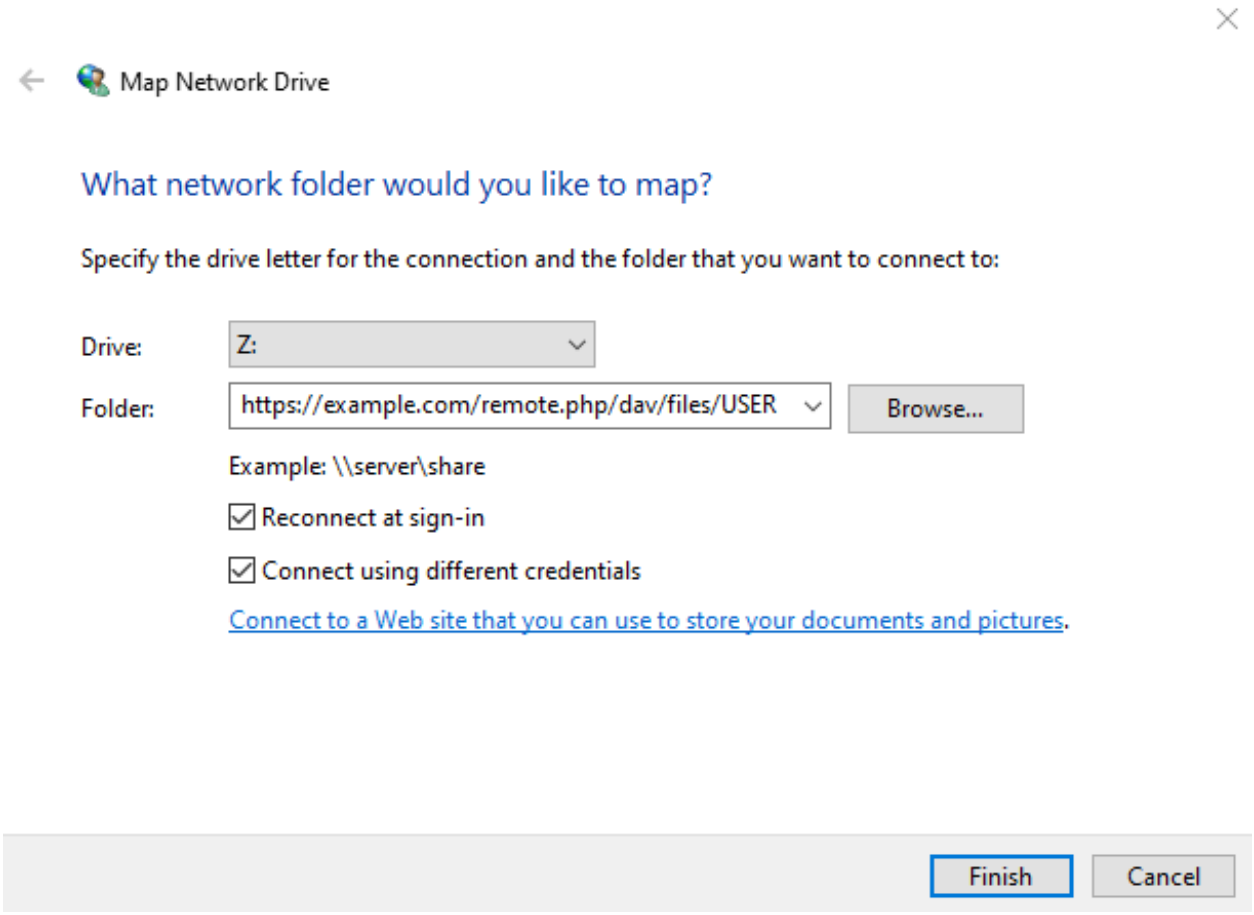
   The port you choose depends on whether or not your Nextcloud server supports SSL. Cyberduck requires that you select a different connection type if you plan to use SSL.

   **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/`


Map Network Drive
What network folder would you like to map?
Specify the drive letter for the connection and the folder that you want to connect to:
Drive:
Z:
Folder:
https://example.com/remote.php/dav/files/USER
Browse...
Example: \\server\share
Reconnect at sign-in
Connect using different credentials
Connect to a Web site that you can use to store your documents and pictures.
Finish
Cancel

Now Cyberduck enables file access to the Nextcloud server.

### 3.2.9 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/webdav
```

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).

### 3.2.10 Known problems

#### 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 via the above described steps does not display the correct size of in Nextcloud available space and instead shows the size of the C: drive with its available space.

### Answer

Unfortunately is this a limitation of WebDAV itself, because it does not provide a way for the client to get the available free space from the server. Windows automatically falls back to show the size of the C: drive with its available space instead. So unfortunately there is no real solution to this problem.

### 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 to your Nextcloud instance via your favorite 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.

### 3.2.11 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>
```

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```
  <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>
```

### 3.2.12 Accessing files using WinSCP

WinSCP is an open source free SFTP, FTP, WebDAV, S3, and SCP client for Windows. Its main function is file transfer between a local and a remote computer. Beyond this, WinSCP 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, download wine through your distribution's package manager, then run it with the command: `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**

It is recommended to use an app password for the password if you use TOTP as WinSCP does not understand TOTP with Nextcloud at the time of writing (2022-11-07).

## 3.3 Managing deleted files

When you delete a file in Nextcloud, it is not immediately deleted permanently, only moved into the trash bin. It is not permanently deleted until you manually delete it, or when the Deleted Files app deletes it to make room for new files.

Find your deleted files by clicking on the **Deleted files** button on the Files page of the Nextcloud Web interface. You'll have options to either restore or permanently delete files.

### 3.3.1 Quotas

Deleted files are not counted against your storage quota. Only your personal files count against your quota, not files which were shared with you. (See *Storage quota* to learn more about quotas.)

### 3.3.2 What happens when shared files are deleted

Deleting files gets a little complicated when they are shared files, as this scenario illustrates:

1. User1 shares a folder "test" with User2 and User3
2. User2 (the recipient) deletes a file/folder "sub" inside of "test"
3. The folder "sub" will be moved to the trash bin of both User1 (owner) and User2 (recipient)
4. But User3 will not have a copy of "sub" in their trash bin

When User1 deletes "sub" then it is moved to User1's trash bin. It is deleted from User2 and User3, but not placed in their trash bins.

When you share files, other users may copy, rename, move, and share them with other people, just as they can for any computer files; Nextcloud does not have magic powers to prevent this.

### 3.3.3 How the deleted files app manages storage space

To ensure that users do not run over their storage quotas, the Deleted Files app allocates a maximum of 50% of their currently available free space to deleted files. If your deleted files exceed this limit, Nextcloud deletes the oldest files (files with the oldest timestamps from when they were deleted) until it meets the memory usage limit again.

Nextcloud checks the age of deleted files every time new files are added to the deleted files. By default, deleted files stay in the trash bin for 30 days. The Nextcloud server administrator can adjust this value in the `config.php` file by setting the `trashbin_retention_obligation` value. Files older than the `trashbin_retention_obligation` value will be deleted permanently. Additionally, Nextcloud calculates the maximum available space every time a new file is added. If the deleted files exceed the new maximum allowed space Nextcloud will permanently delete those trashed files with the soonest expiration until the space limit is met again.

**Note**

Your administrator may have configured the trash bin retention period to override the storage space management. See admin documentation for more details.

## 3.4 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 to the files on one computer, it will flow 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.

### 3.4.1 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.

Unfortunately, 2-way-sync, a.k.a bidirectional sync, isn't fully implemented in the Android client yet. See this issue on GitHub for the current feature's status.

## 3.5 Encrypting your Nextcloud files on the server

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 snoop in your files, and if the server is compromised the intruder may get access to your files. (Read Encryption in Nextcloud to learn more.)

### 3.5.1 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?

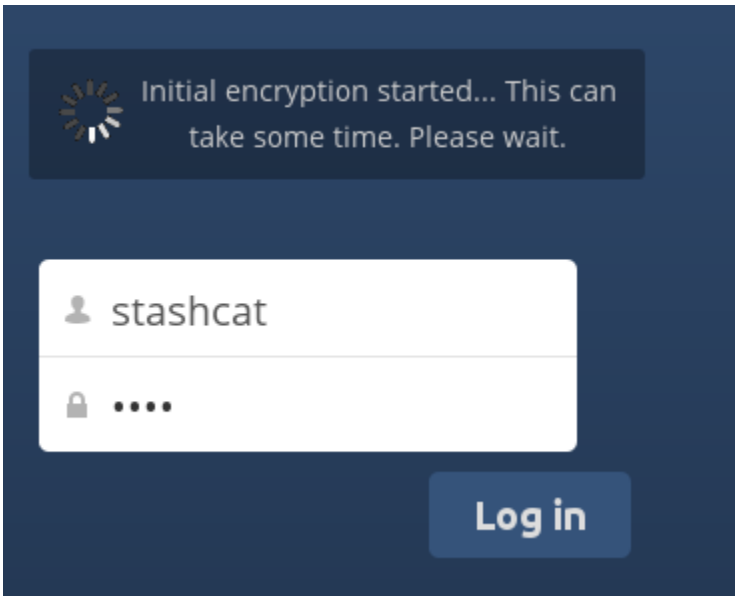
If you mean adding users to groups and make it magically work? No. This only works with the master key.

### 3.5.2 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.

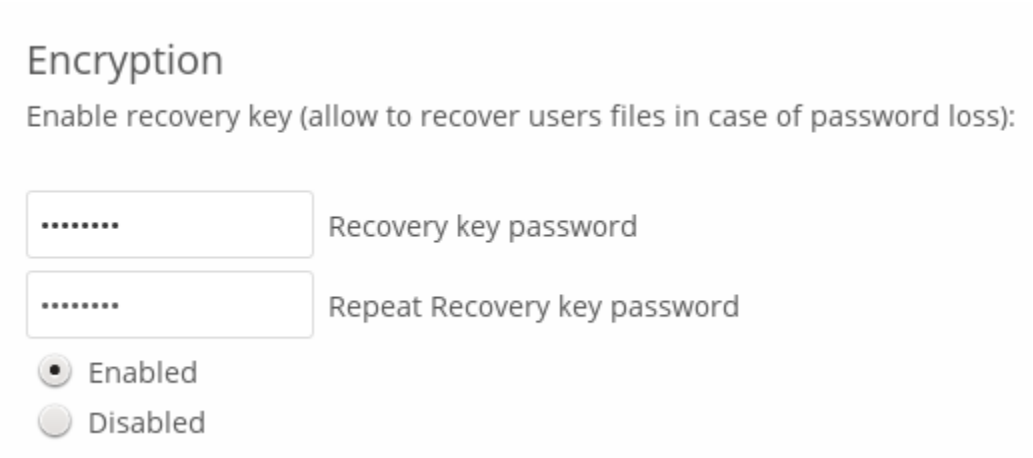
### 3.5.3 Sharing encrypted files

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 "Encryption App is enabled but your keys are not initialized, please log-out and log-in again."

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.




### 3.5.4 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

Only those files that are shared with third-party storage providers can be encrypted, the rest of the files may not be encrypted.

#### 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.

## 3.6 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.

### 3.6.1 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

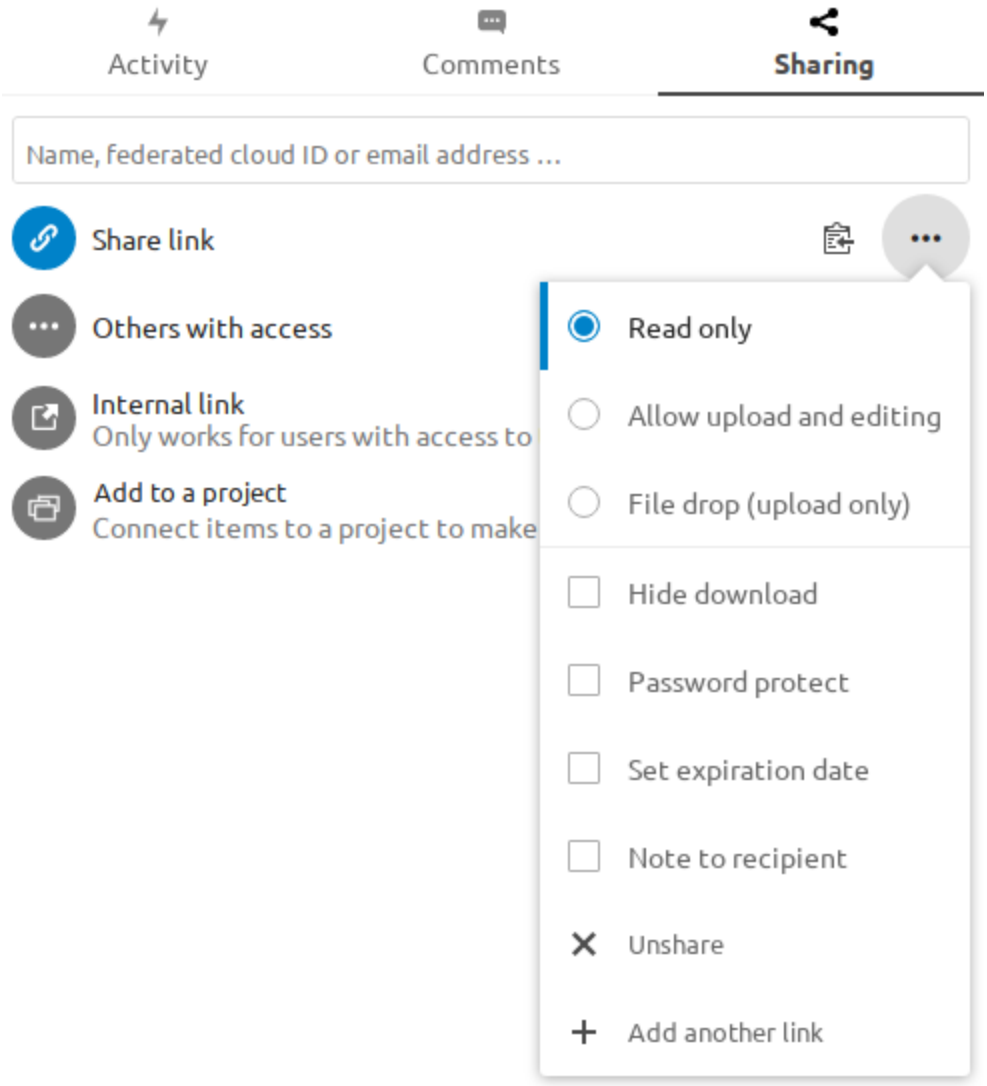
For public *file* shares, you may allow editing the file with one of Nextcloud's collaborative editing solutions:

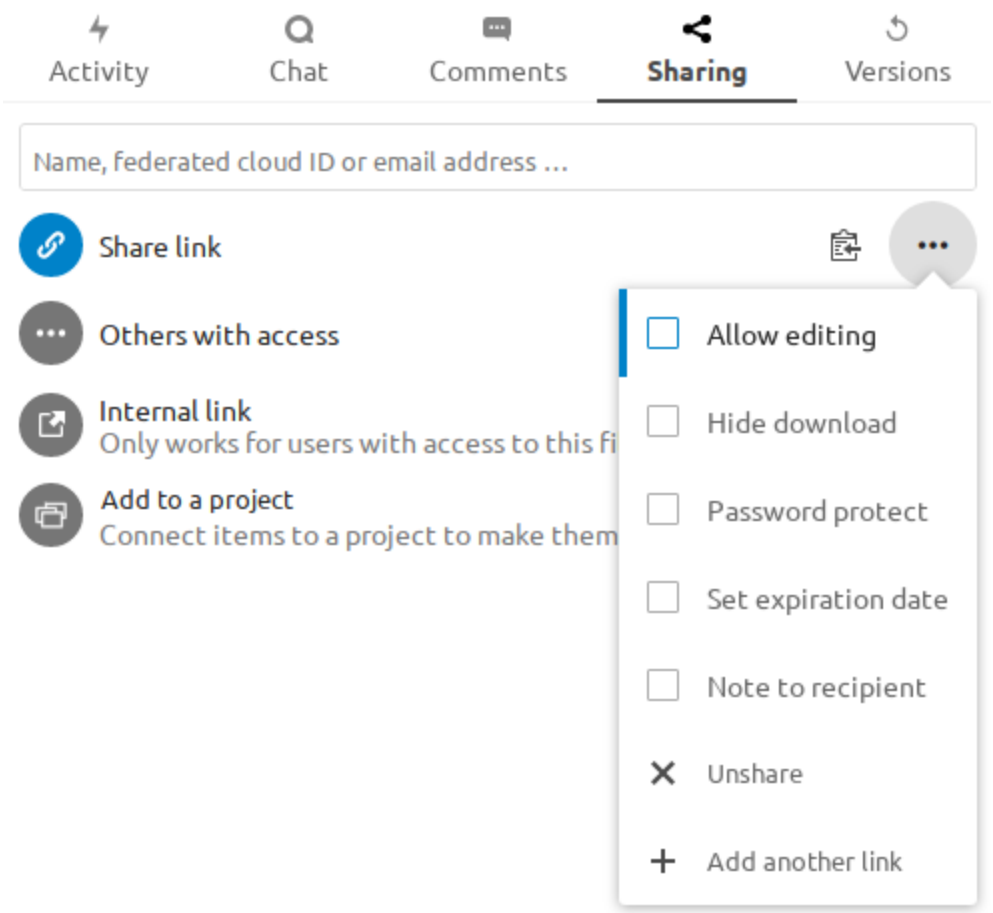
> **Note**
>
> Password protection as well as file expiration are also propagated using Federated File Sharing since Nextcloud 22.

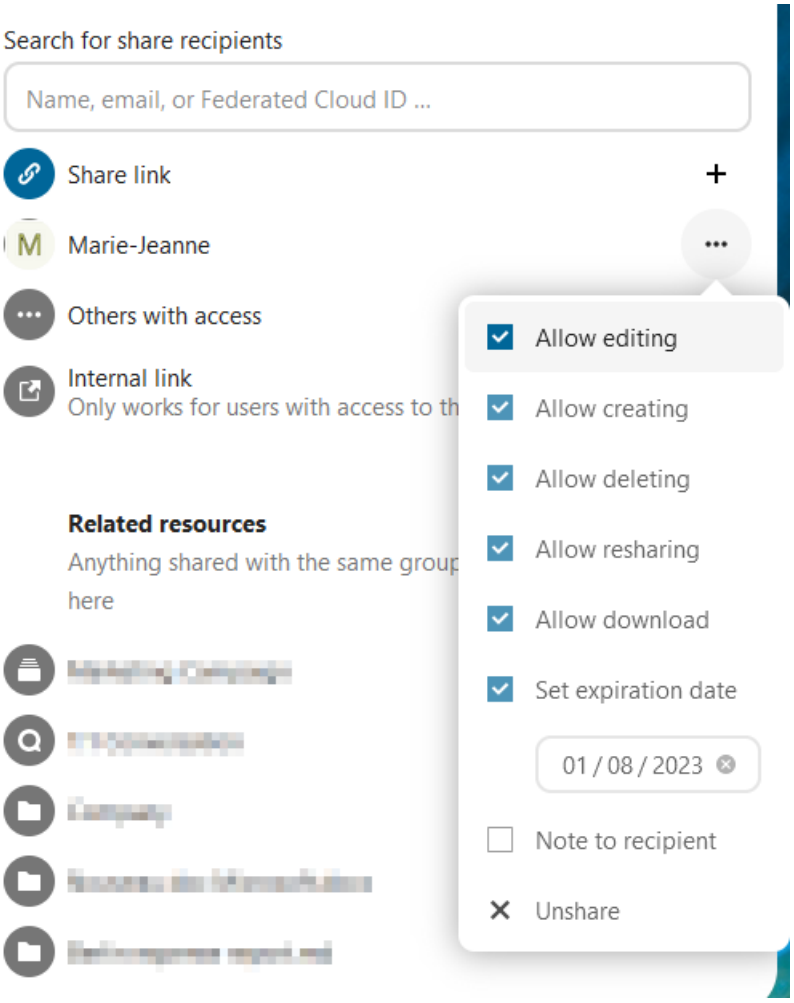
### 3.6.2 Internal shares with users and groups

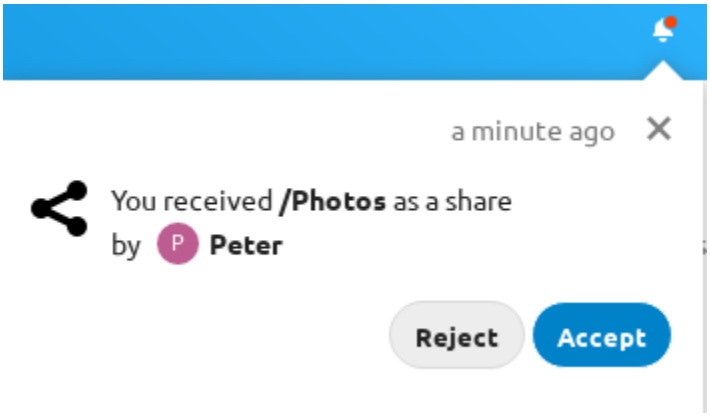
When sharing with users, groups, circles or members of a Talk conversation, rights for the files or folder contents are adjustable:

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.

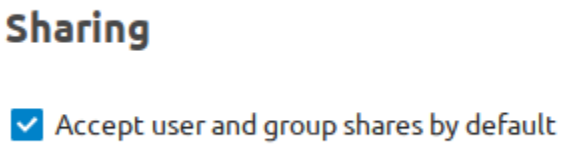

Activity
Comments
Sharing
Name, federated cloud ID or email address …
Share link
Others with access
Internal link
Only works for users with access to
Add to a project
Connect items to a project to make
Read only
Allow upload and editing
File drop (upload only)
Hide download
Password protect
Set expiration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


Search for share recipients
Name, email, or Federated Cloud ID ...
Share link
Marie-Jeanne
Others with access
Internal link
Only works for users with access to th
Related resources
Anything shared with the same group
here
Allow editing
Allow creating
Allow deleting
Allow resharing
Allow download
Set expiration date
01 / 08 / 2023
Note to recipient
Unshare


a minute ago
You received /Photos as a share
by Peter
Reject
Accept

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

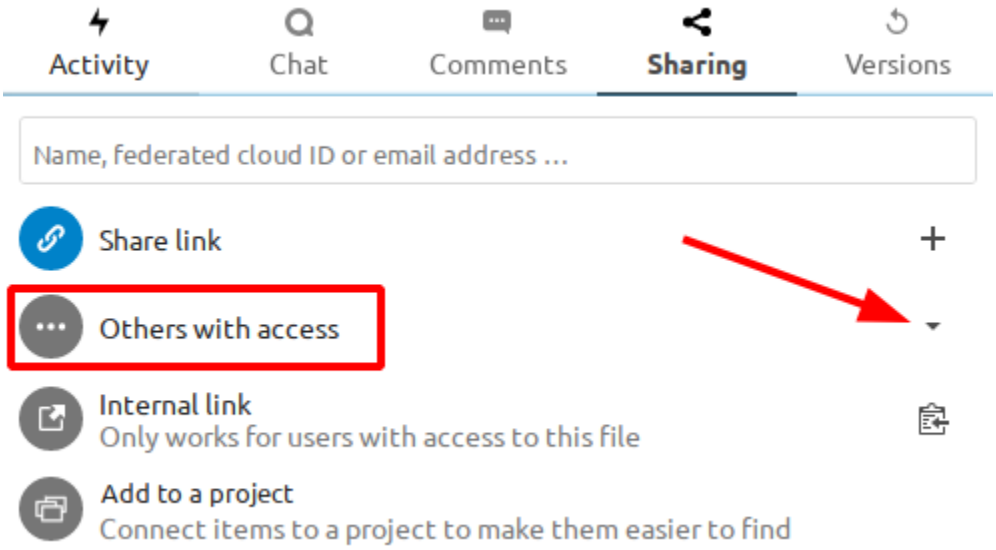



**Warning**

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.

### 3.6.3 Others with access

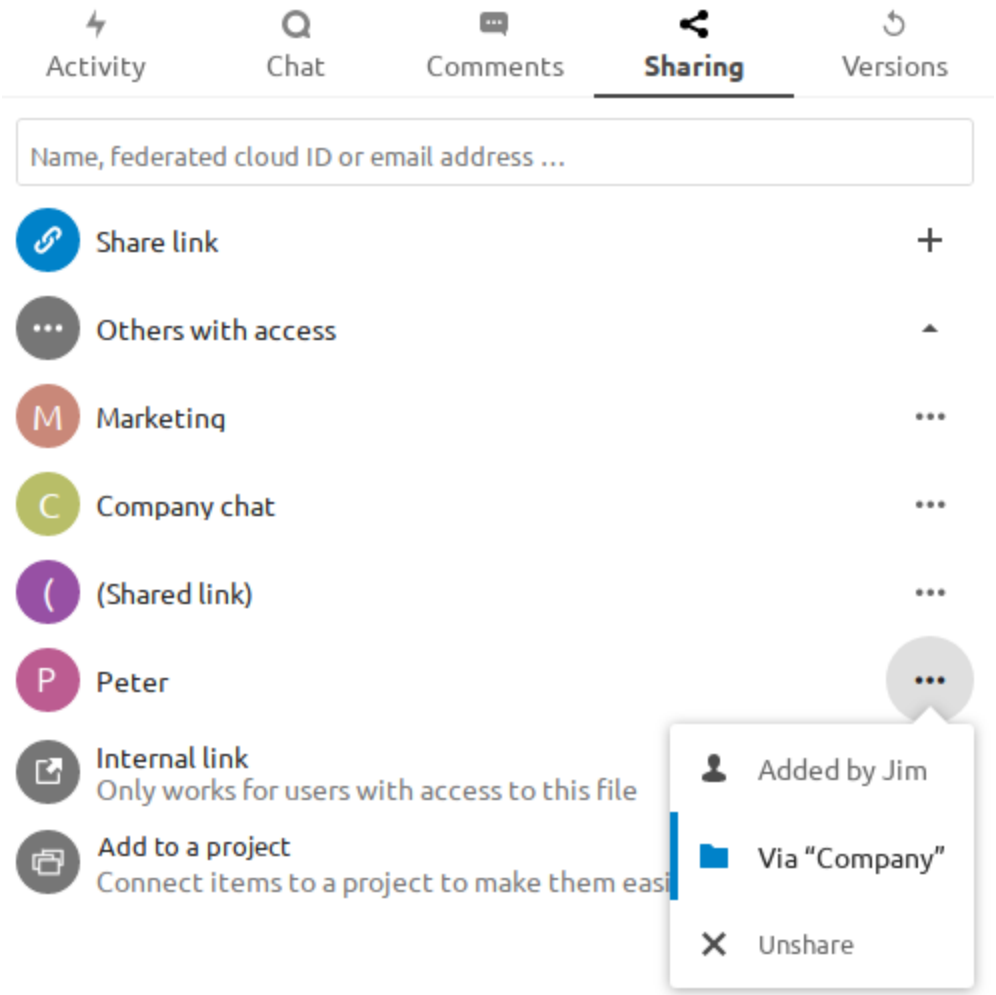
In order to find out if a file or folder is accessible to others through sharing of a superior folder hierarchy level, click on **Others with access** in the sharing tab:




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)


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

**Note**

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

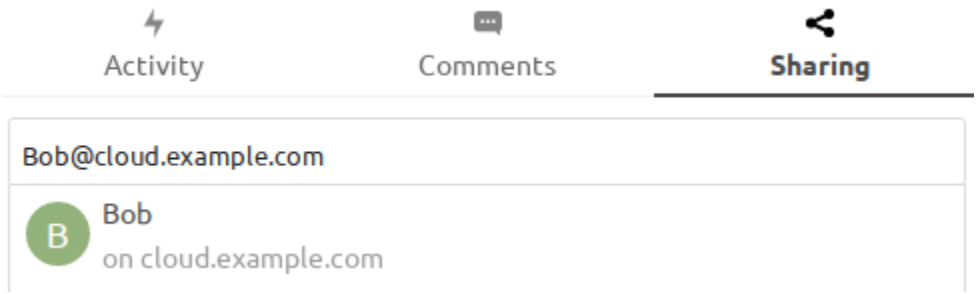
## 3.7 Federated Shares

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.

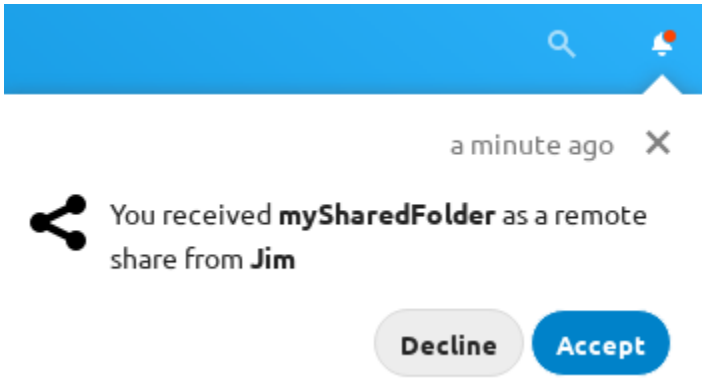
### 3.7.1 Creating a new Federation Share

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`:

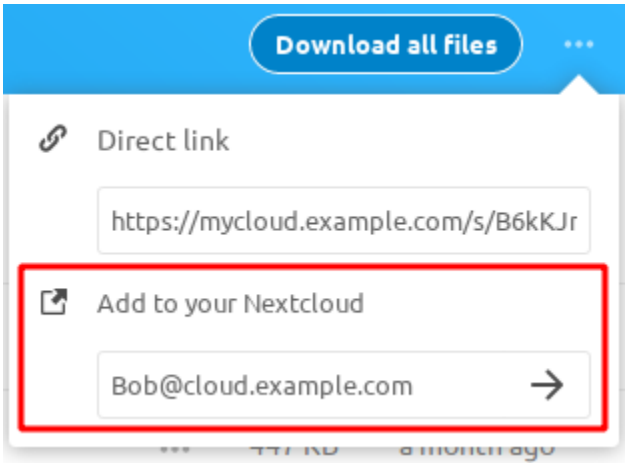



The sharee is receiving a notification in their Nextcloud, allowing them to either accept or decline the incoming share:




### 3.7.2 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. Just enter your `<username>@<nc-server-url>` just like shown for outbound shares above:

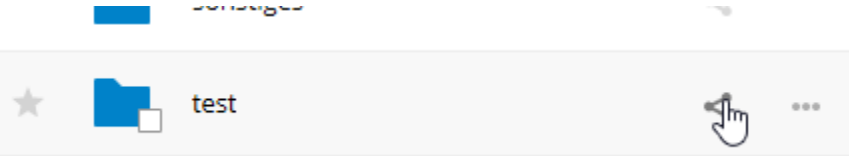



## 3.8 Making anonymous uploads

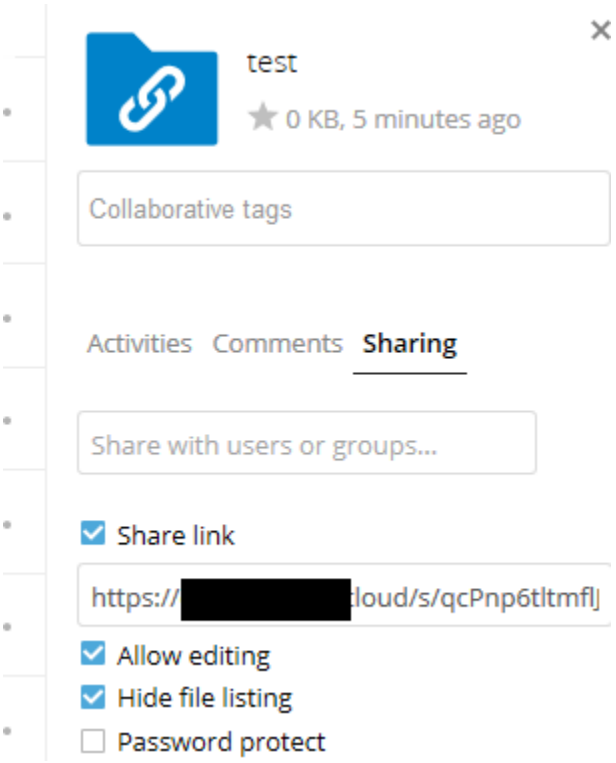
You may create your own special upload directories so that other people can upload files to you without having to log in to the server, and without being a Nextcloud user. They will not be allowed to see the contents of this directory, or to make any changes. This is an excellent alternative to sending large attachments via email, using an FTP server, or using commercial file-sharing services.

### 3.8.1 Setting up your own file drop

Go to Files and create or choose the folder, the anonymous upload should be made to:



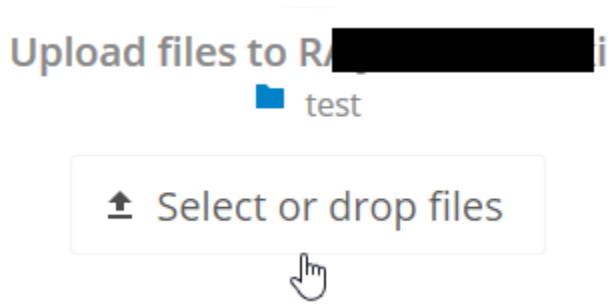

Check Share Link, Allow editing, Hide file listing:




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

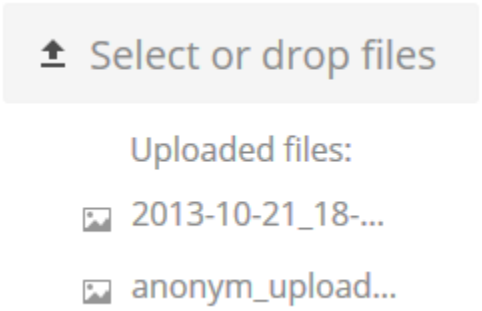
### 3.8.2 Uploading files

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're also able to just drop files into the window.

When your upload is completed, the filenames are listed:




## 3.9 Large file uploads

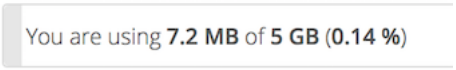
When uploading files through the web client, Nextcloud is limited by PHP and Apache configurations. By default, PHP is configured for only 2 megabyte uploads. As this default upload limit is not entirely useful, we recommend that your Nextcloud administrator increase the Nextcloud variables to sizes 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 section in the Administration Documentation that describes how to manage file upload size limits.

## 3.10 Storage quota

Your Nextcloud administrator has the option to set a storage quota on users. Look at your the Personal page to see what your quota is, and how much you have used.




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

Metadata (thumbnails, temporary files, cache, and encryption keys) takes up about 10% of disk space, but is not counted against user quotas. Some apps store information in the database, such as the Calendar and Contacts apps. This data is excluded from your quota.

When other users share files with you, the shared files count against the original share owner's quota. When you share a folder and allow other users or groups to upload files to it, all uploaded and edited files count against your quota. When you re-share files shared with you, the re-share still counts against the quota of the original share owner.

Encrypted files are a little larger than unencrypted files; the unencrypted size is calculated against your quota.

Deleted files that are still in the trash bin do not count against quotas. The trash bin is set at 50% of quota. Deleted file aging is set at 30 days. When deleted files exceed 50% of quota then the oldest files are removed until the total is below 50%.

**Note**

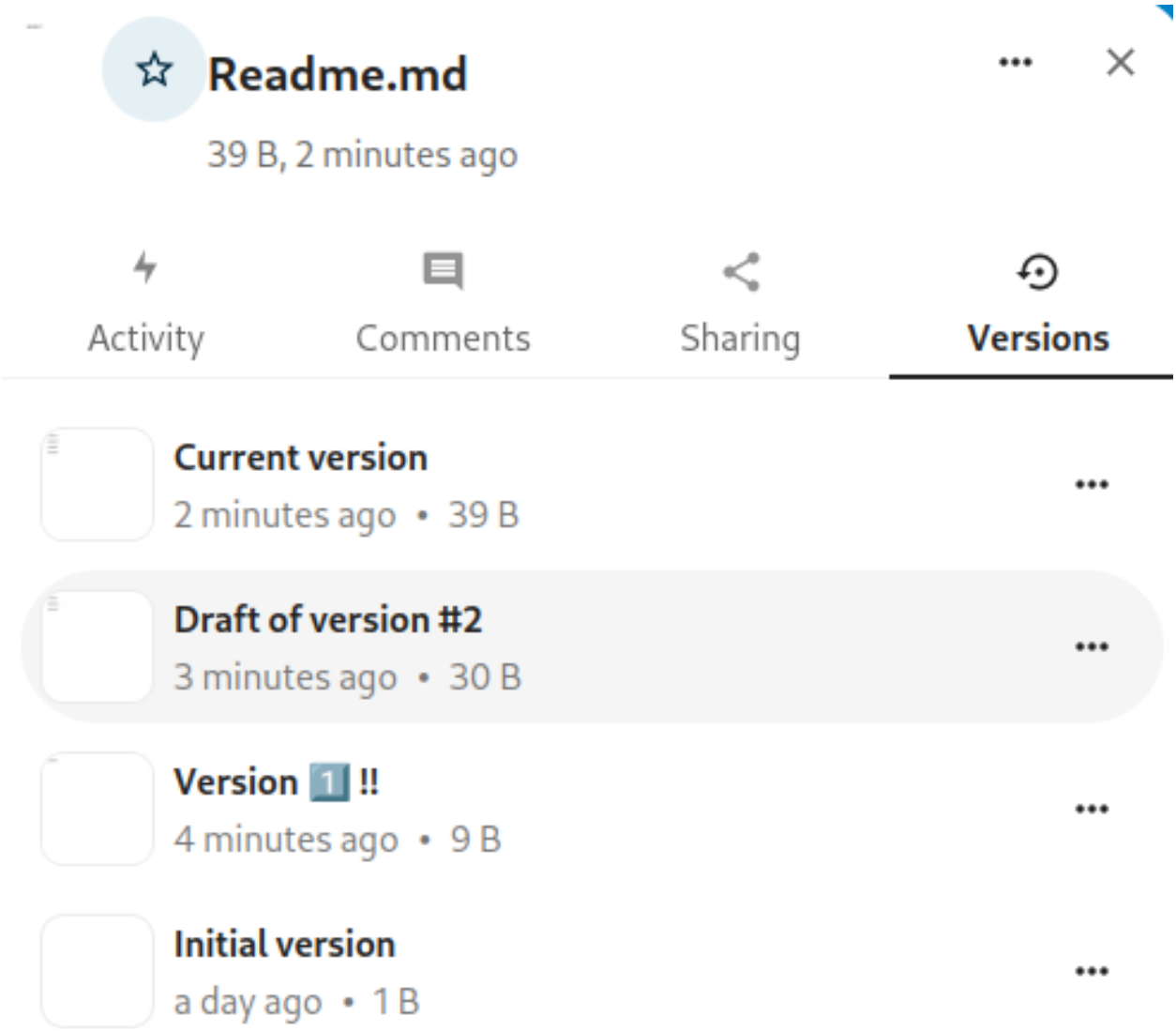
Your administrator may have configured the trash bin retention period to override the storage space management. See administrator documentation for more details.

When version control is enabled, the older file versions are not counted against quotas.

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

## 3.11 Version control

Nextcloud supports 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. Changes made at intervals greater than two minutes are saved 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 the user doesn'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

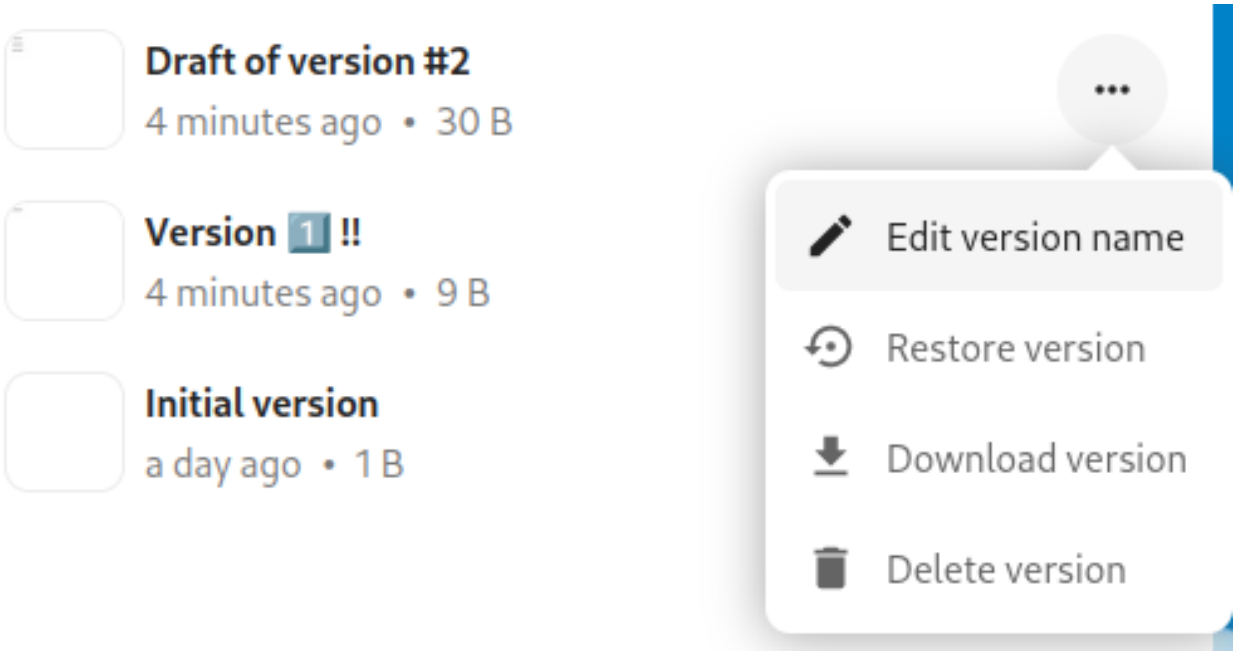
- For the first minute Nextcloud keeps one version every 10 seconds
- For the first hour Nextcloud keeps one version every minute
- For the first 24 hours Nextcloud keeps one version every hour
- For the first 30 days Nextcloud keeps one version every day
- After the first 30 days Nextcloud keeps one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

### 3.11.1 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.

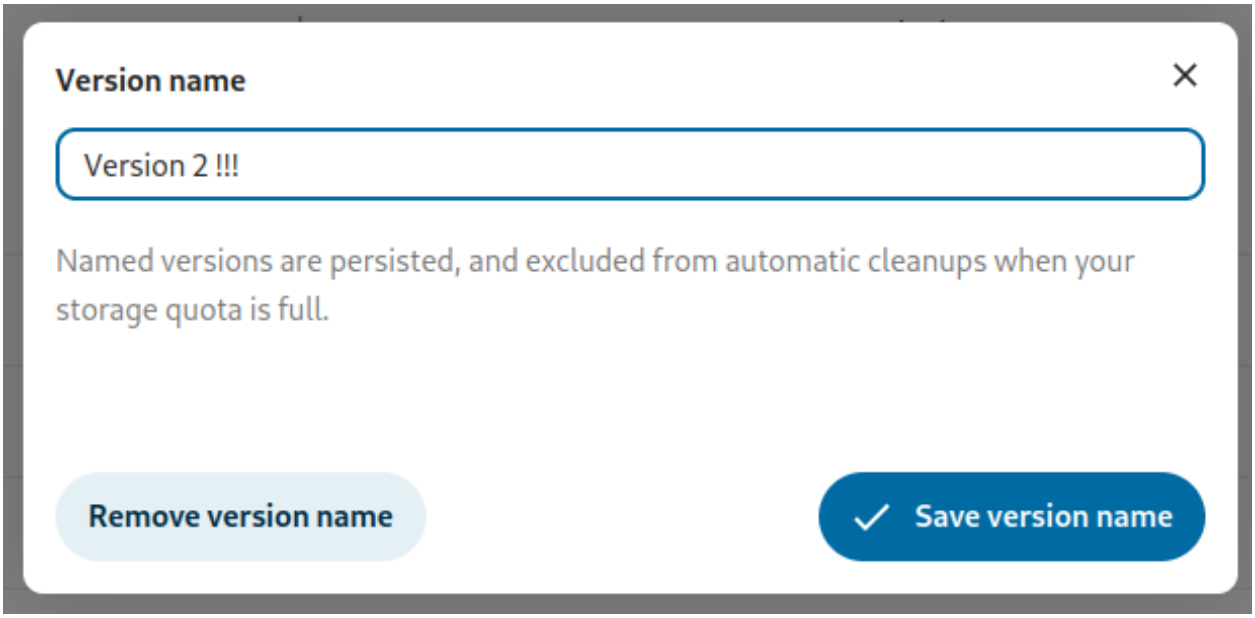
### 3.11.2 Deleting a version

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

## 3.12 Projects

Deprecated since version 25: This feature was replaced by the shipped related resources app.

Users can associate files, chats and other items with each other in projects. The various apps will present these items in a list, allowing users to immediately jump to them. Projects are Nextcloud wide. When a user shares a file that is part of a project, the share recipient can see that project, too. A click on any of the items in a project leads right to it, be it a chat, a file or a task.




### 3.12.1 Create a new project

A new project can be created by linking two items together. Start off by opening a file or folders sharing sidebar.

Click *Add to a project* and select the type of item you want to link with the current file/folder. A selector will open that allows you selecting a Talk conversation for example.

Once the item has been selected a new project is being created and listed in the sharing tab of the sidebar. The same project will also appear in the sharing sidebar of the linked items.

The list entry shows quick links to a limited number of items. By opening the context menu, the project can be renamed and the full list of items can be expanded.

### 3.12.2 Adding more entries to a project

If another item should be added to an already existing project this can be done by searching for the project name in the *Add to a project* picker.

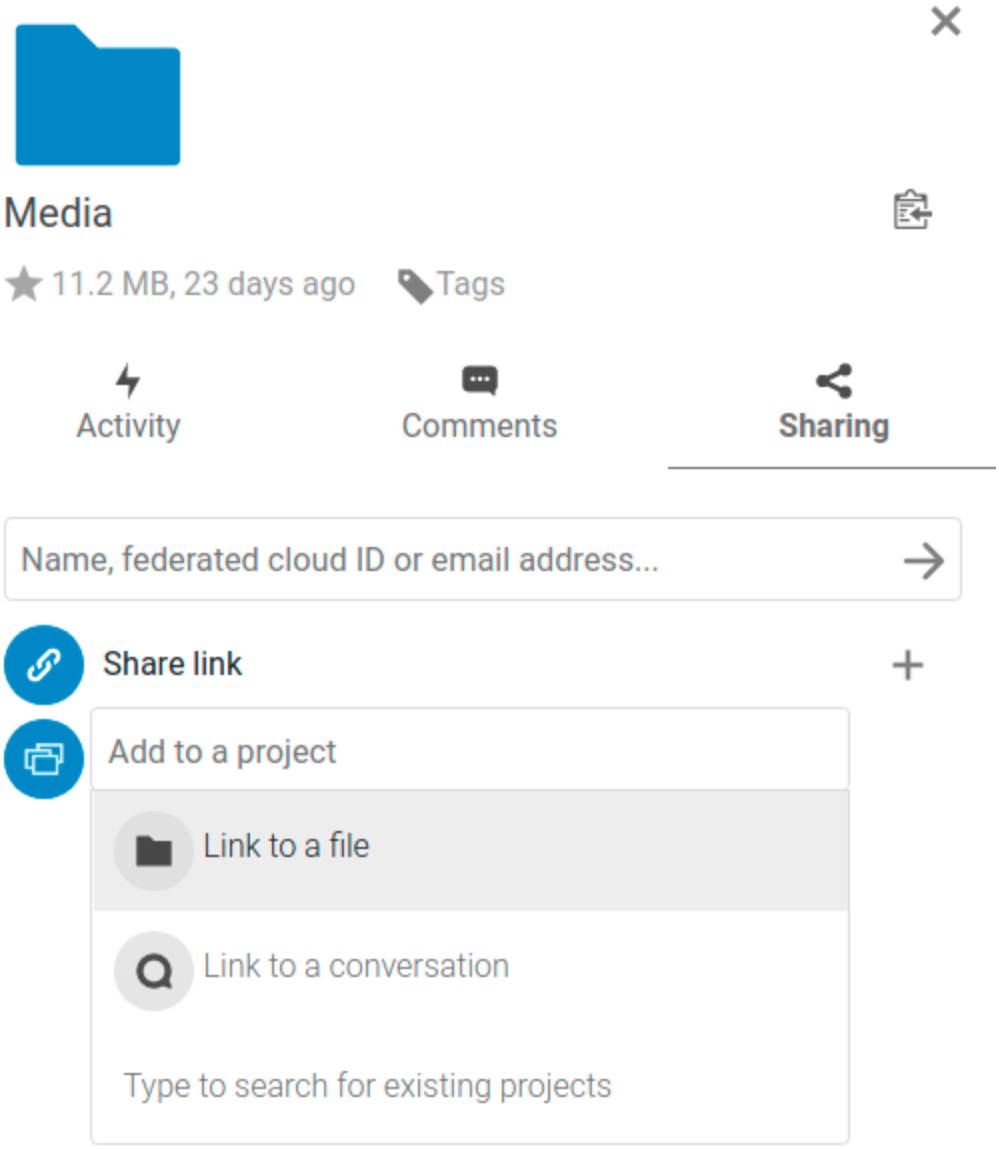
### 3.12.3 Visibility of projects

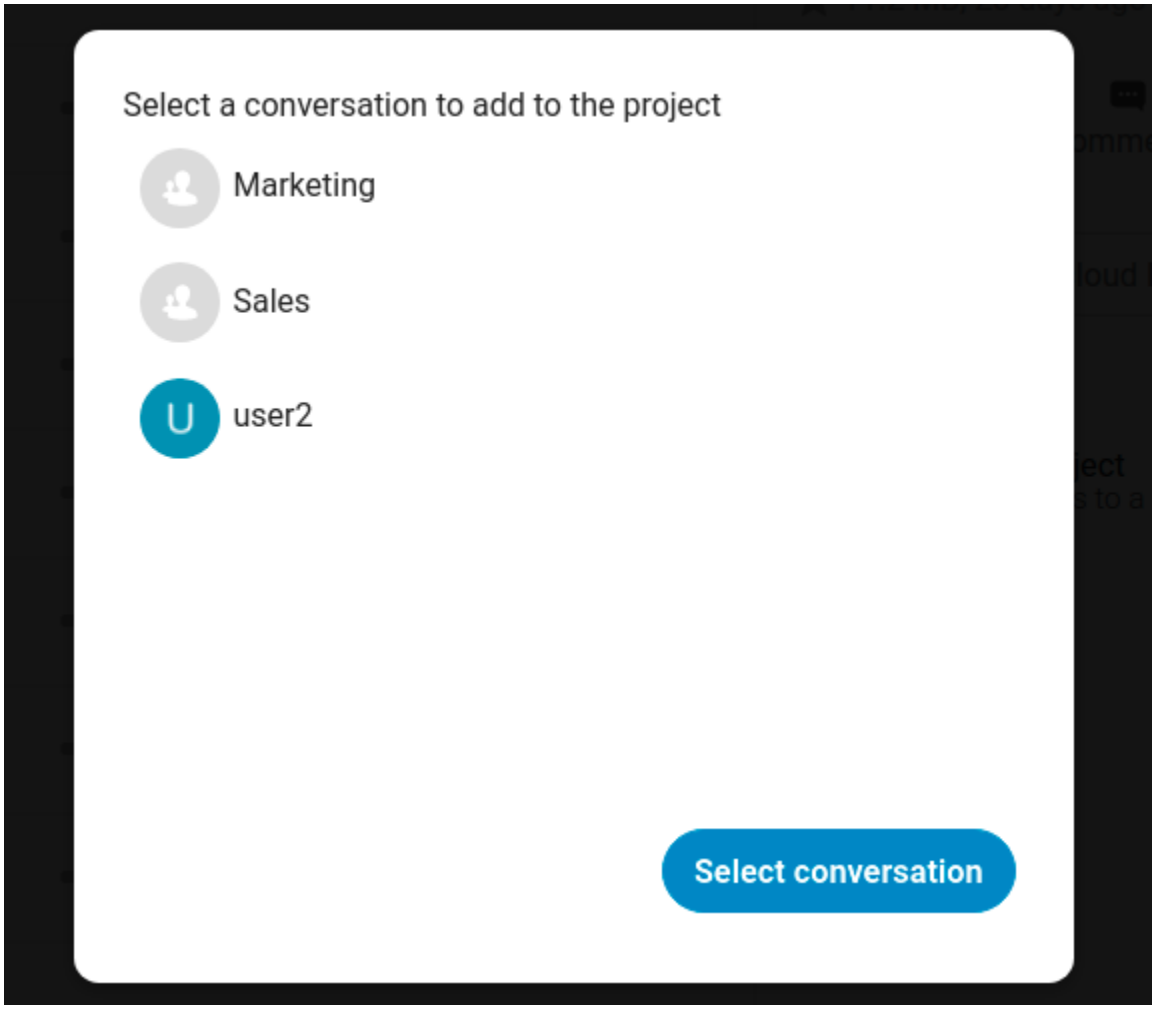
Projects do not influence the access and visibility of the different items. Users will only see projects of other users if they have access to all contained items.

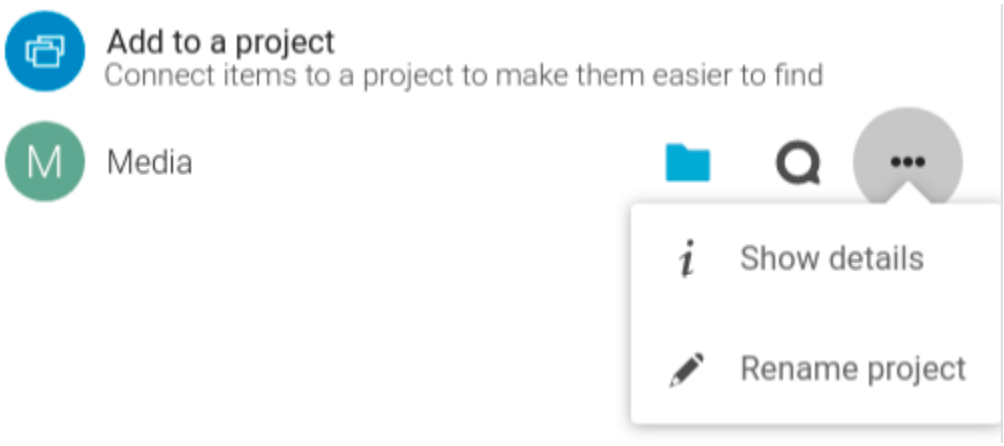
## 3.13 Transfer Ownership

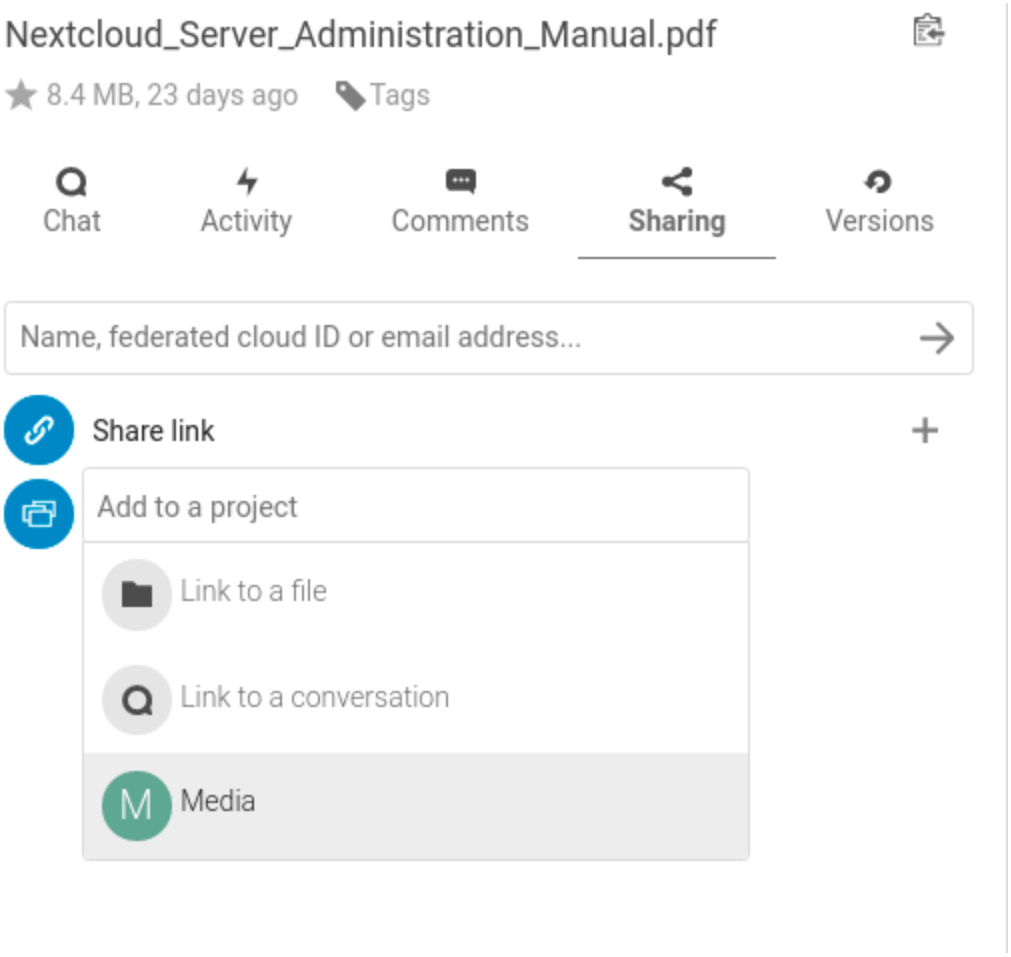
Users can transfer the ownership of files and folders to other users. Sharing ownerships of those transferred files/folders will also be transferred.

1. Navigate to *Settings* (top-right menu) > *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.


Media
11.2 MB, 23 days ago
Tags
Activity
Comments
Sharing
Name, federated cloud ID or email address...
Share link
Add to a project
Link to a file
Link to a conversation
Type to search for existing projects


Select a conversation to add to the project
Marketing
Sales
U
user2
Select conversation

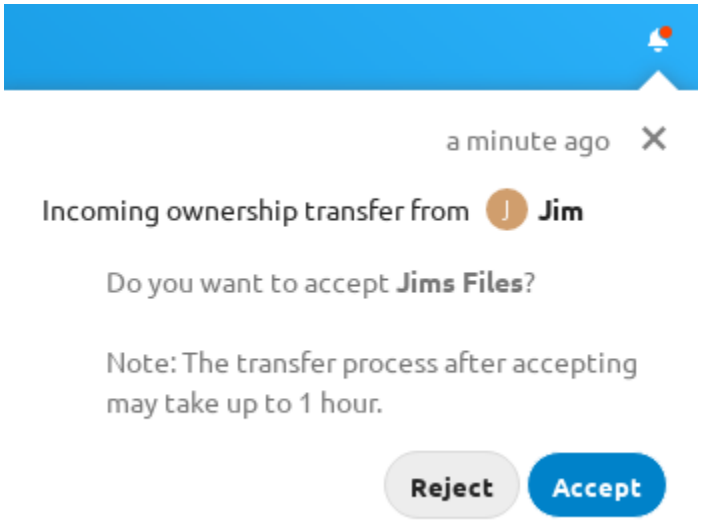

Add to a project
Connect items to a project to make them easier to find
M
Media
Show details
Rename project


Nextcloud_Server_Administration_Manual.pdf
8.4 MB, 23 days ago
Tags
Chat
Activity
Comments
Sharing
Versions
Name, federated cloud ID or email address...
Share link
Add to a project
Link to a file
Link to a conversation
M
Media

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.

1. The target user receives a notification where they are being asked whether to accept or reject the incoming transfer.




2. If accepted, the target user finds the transferred files and folders in their root under a folder *Transferred from [user] on [timestamp]*.
3. The source user gets informed about the acceptance or rejection by a notification.

## 3.14 Using Federation Shares

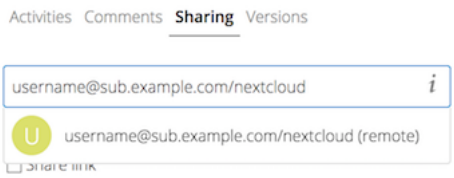
Federation Sharing allows you to mount file shares from remote Nextcloud servers, in effect creating your own cloud of Nextclouds. You can create direct share links with users on other Nextcloud servers.

### 3.14.1 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’ll see a confirmation. Your only share option is **Can edit**.

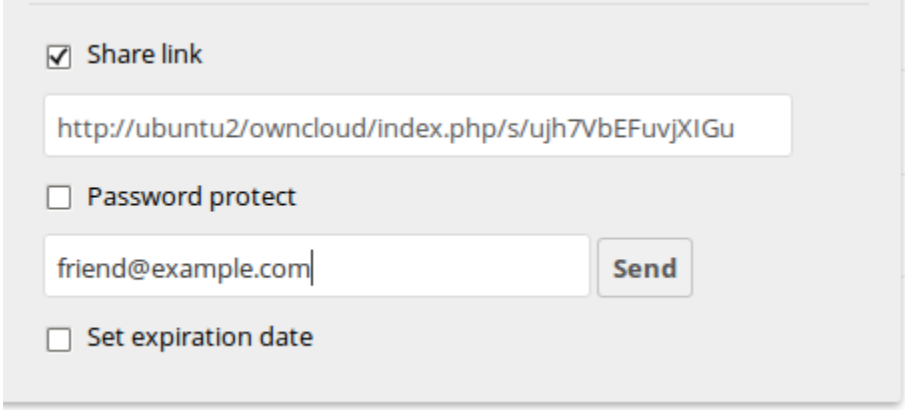



Click the Share button anytime to see who you have shared your file with. Remove your linked share anytime by clicking the trash can icon. This only unlinks the share, and does not delete any files.

### 3.14.2 Creating a new Federated Cloud Share via email

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

What if you do not know the username or URL? Then you can have Nextcloud create the link for you and email it to your recipient.

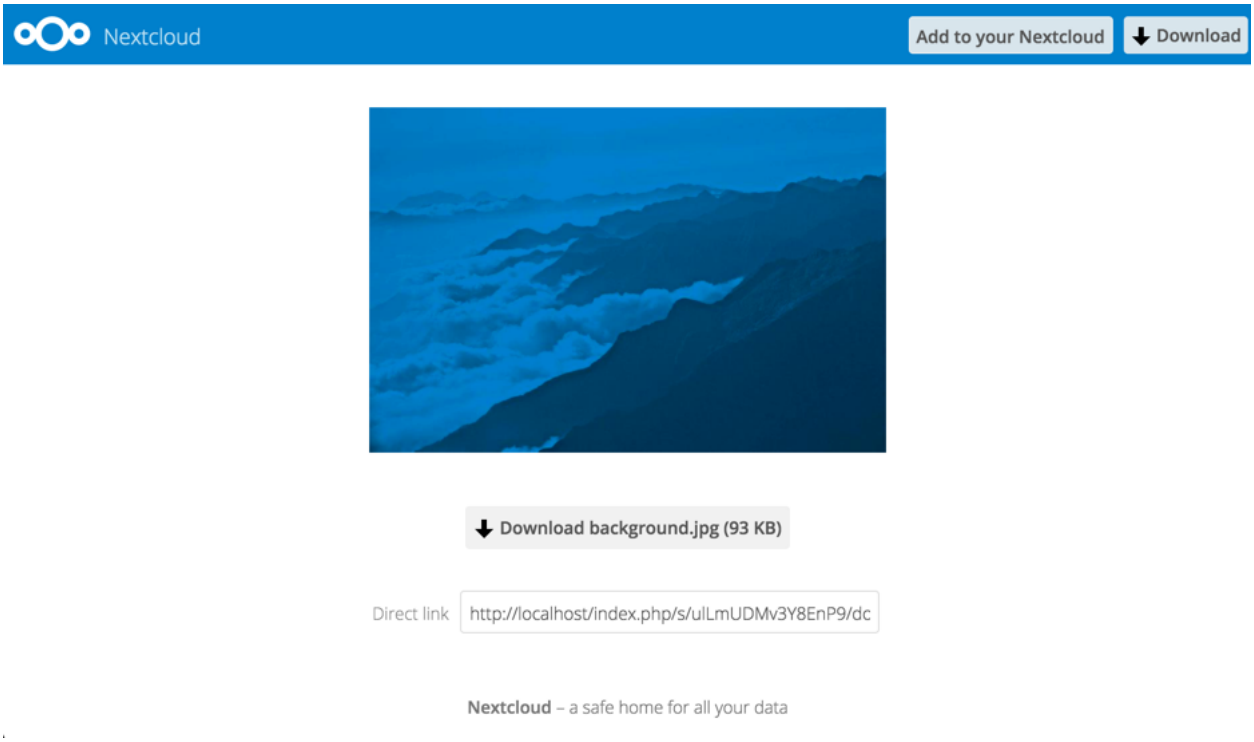


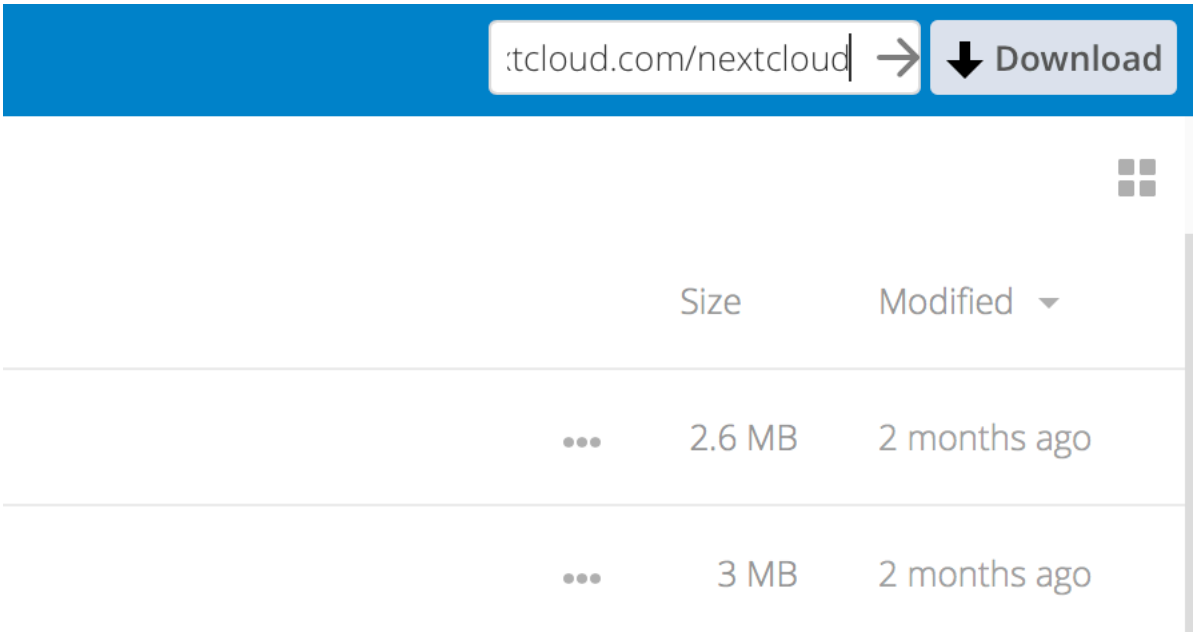

When your recipient receives your email they will have to take a number of steps to complete the share link. First they must open the link you sent them in a Web browser, and then click the **Add to your Nextcloud** button.

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.


Nextcloud
Add to your Nextcloud
Download
Download background.jpg (93 KB)
Direct link
http://localhost/index.php/s/ulLmUDMv3Y8EnP9/dc
Nextcloud – a safe home for all your data


:tcloud.com/nextcloud
Download
Size
Modified
2.6 MB
2 months ago
3 MB
2 months ago

CHAPTER

FOUR

# 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.

## 4.1 Using the Contacts app

The Contacts app is not enabled by default in Nextcloud latest 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. Let's run through 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.

### 4.1.1 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. On top left of the screen you have "Import contacts" button that is shown only when you don't have any 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:

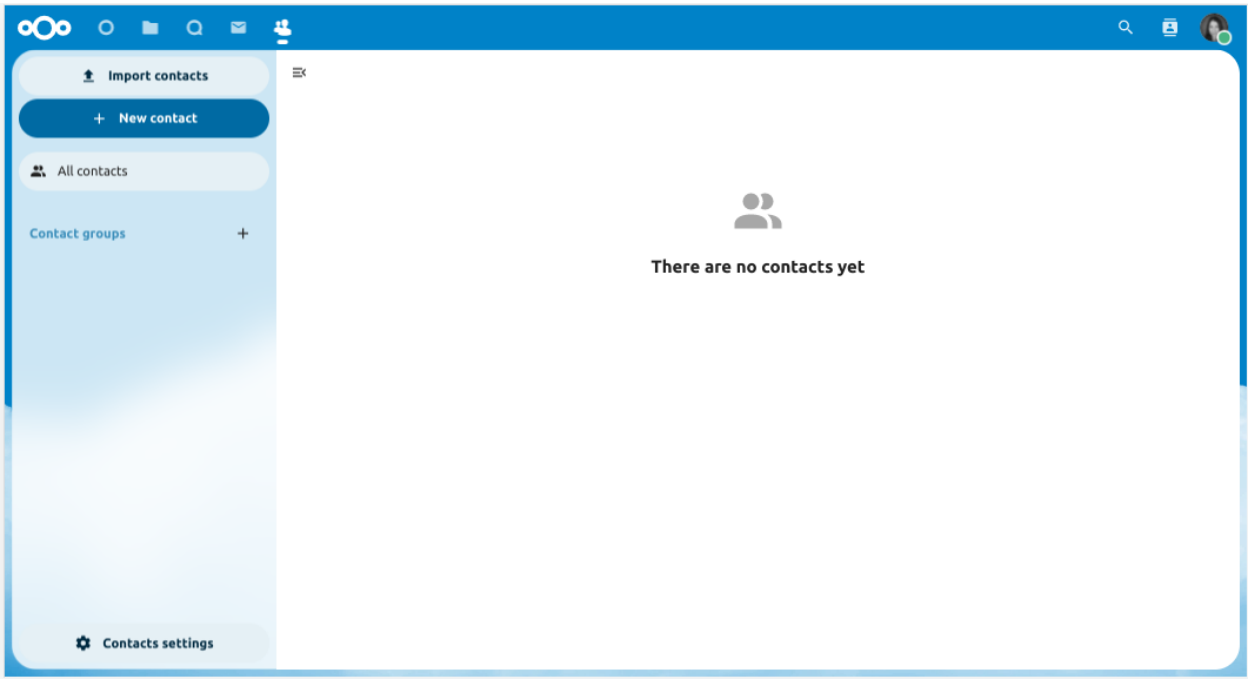
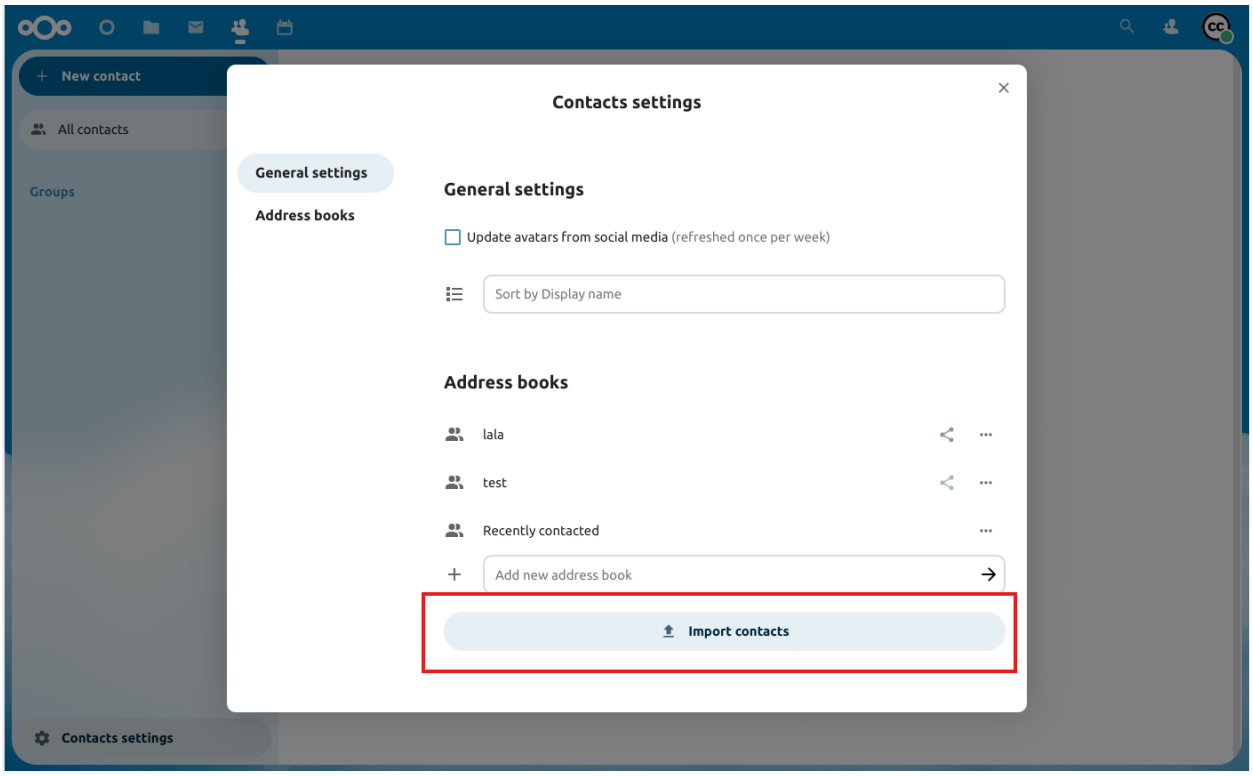



Fig. 1: *Default Address Book (empty)*




**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:

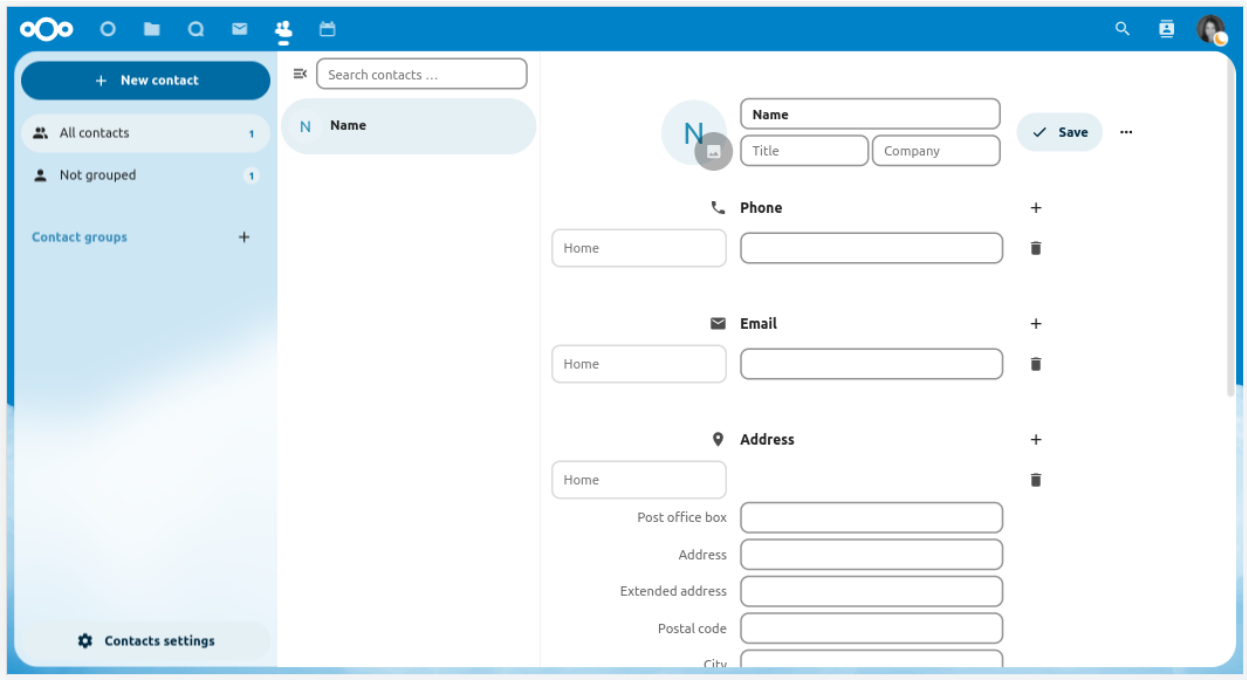
2. Specify the new contact information then click Save.
3. The View mode will be shown with the data you added

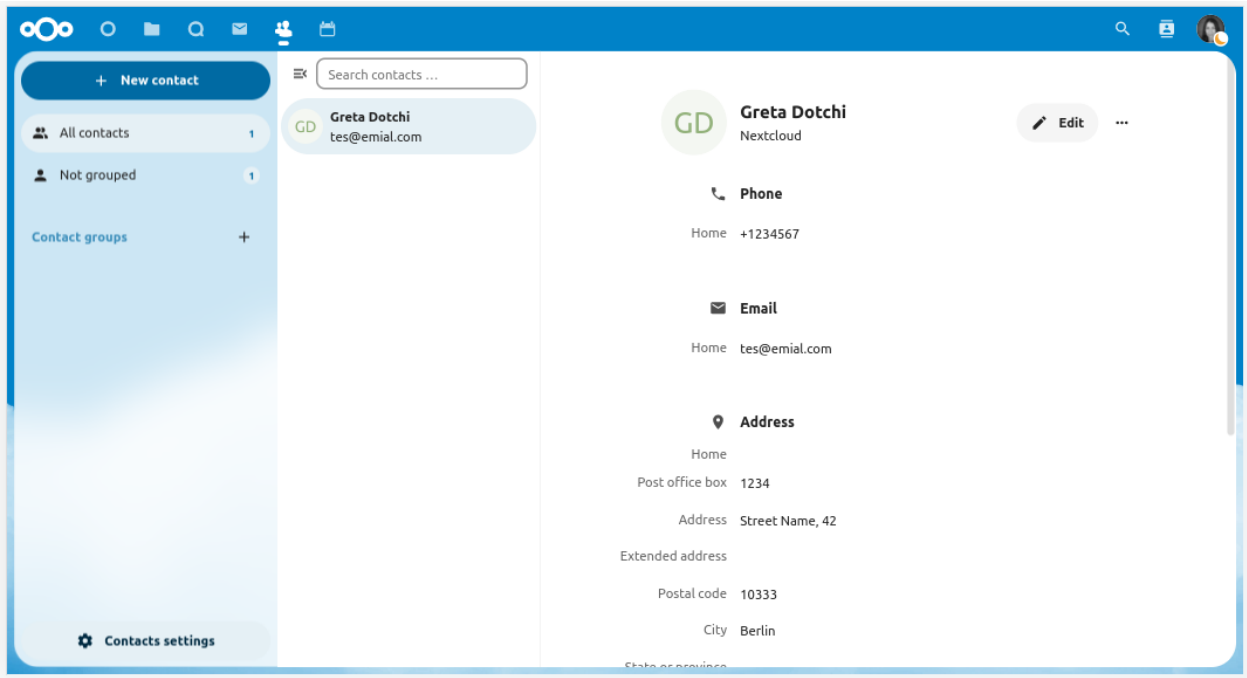
### Edit or Remove Contact Information

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 1
Not grouped 1
Contact groups
Contacts settings
N Name
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 1
Not grouped 1
Contact groups
Contacts settings
GD Greta Dotchi
tes@emial.com
GD
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

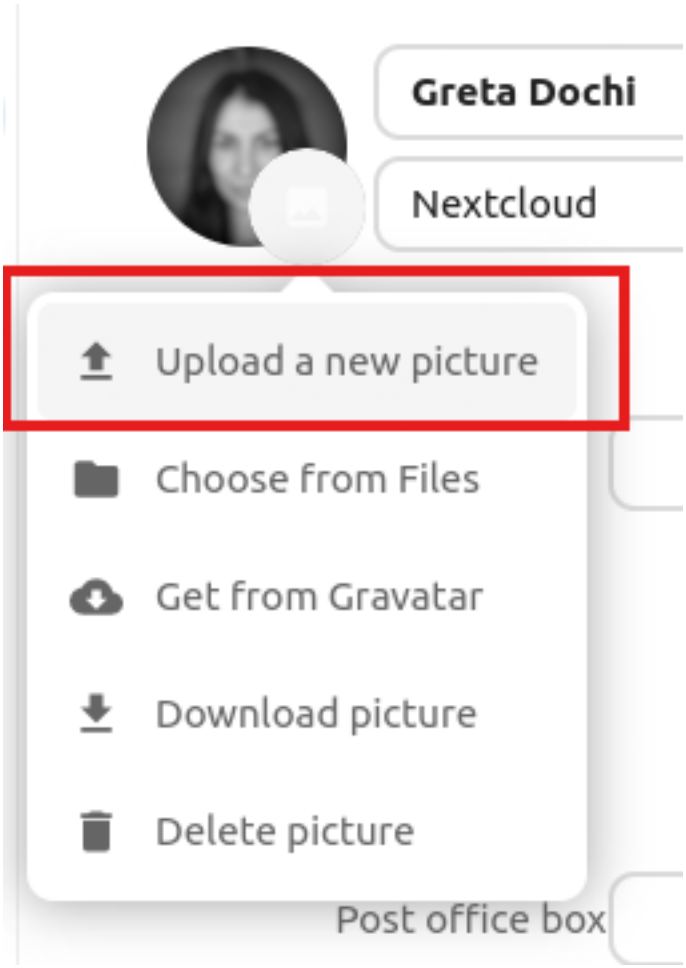
2. Select the information in the field that you want to edit or remove.
3. Make your modifications or click on the trash bin.

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*.

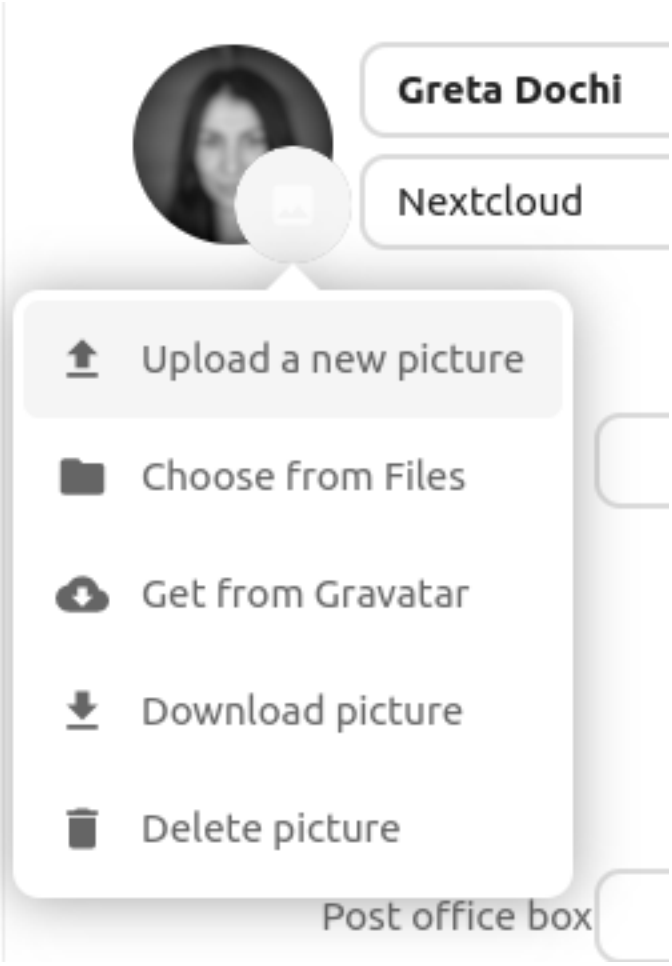
### Contact Picture

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

### 4.1.2 Organize your Contacts with Contact Groups

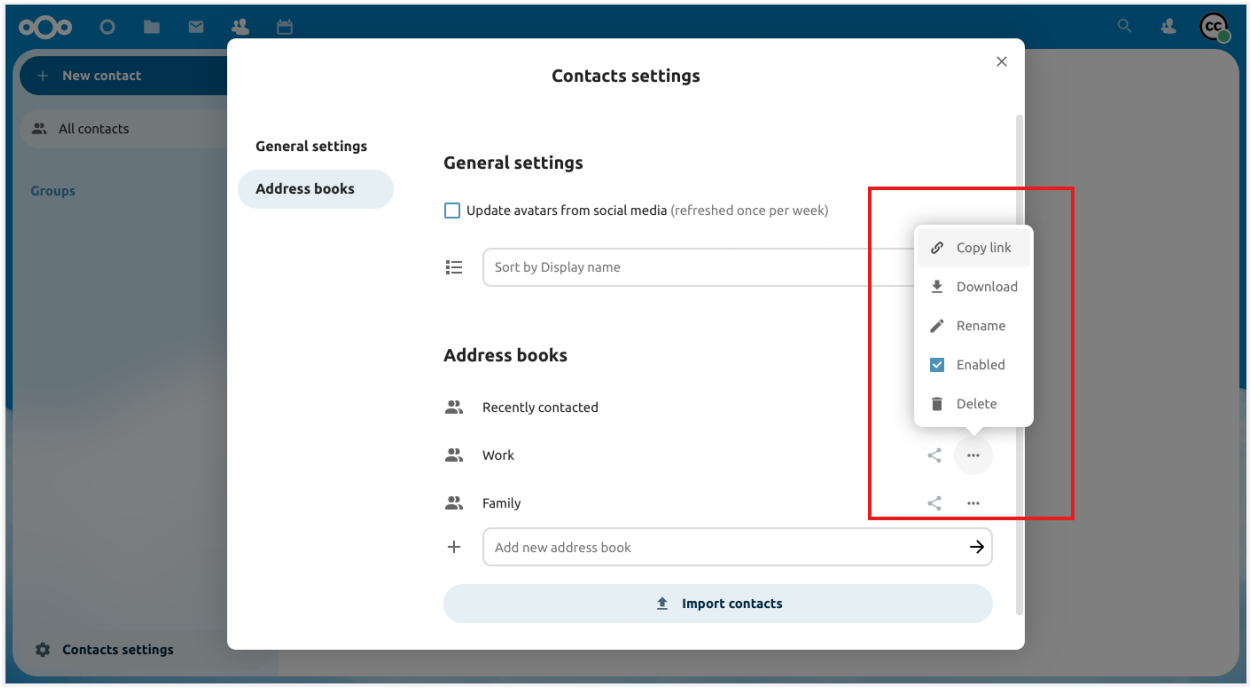
Contact Groups help you to organize your contacts into groups.

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.

### 4.1.3 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.

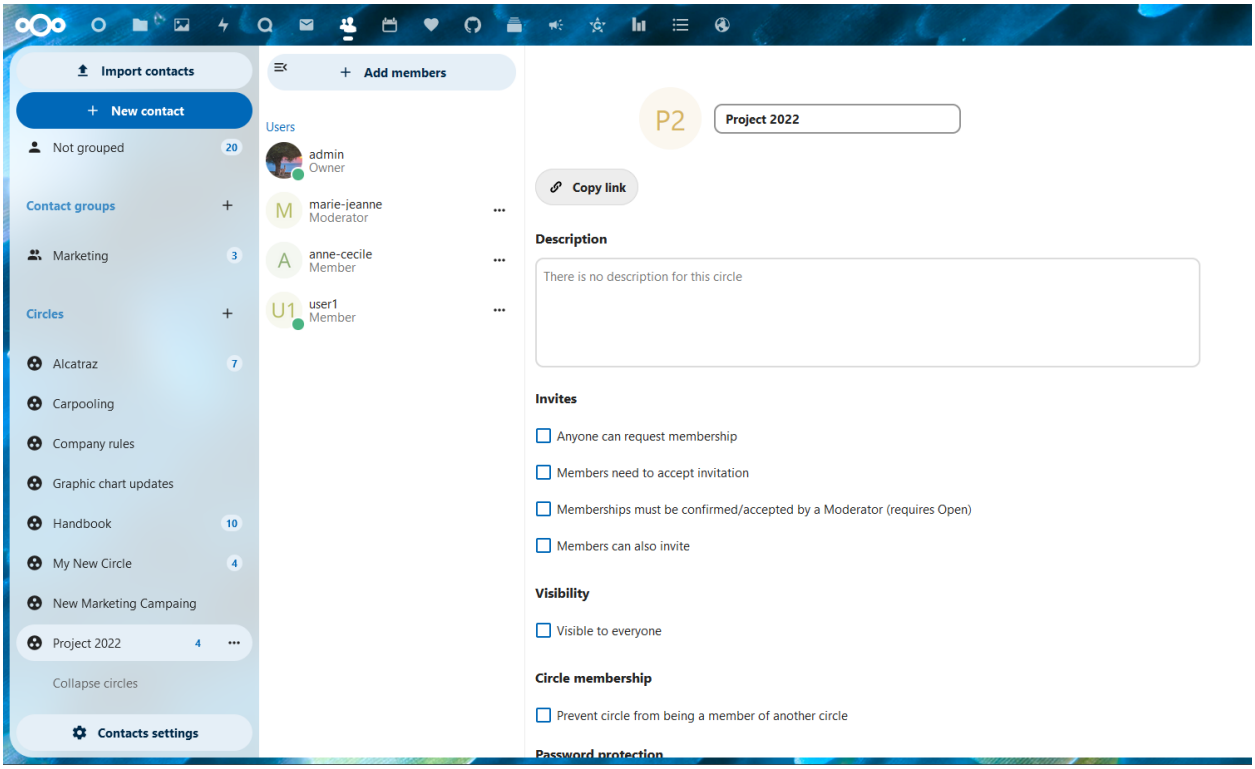
> **Note**
>
> Contacts in disabled address books are not shown in the Contacts app and the Contact menu.

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

### 4.1.4 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, a feature embedded in the Contacts app, 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.




#### 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.

#### Shared items

Added in version 5.5.

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.

## 4.2 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.

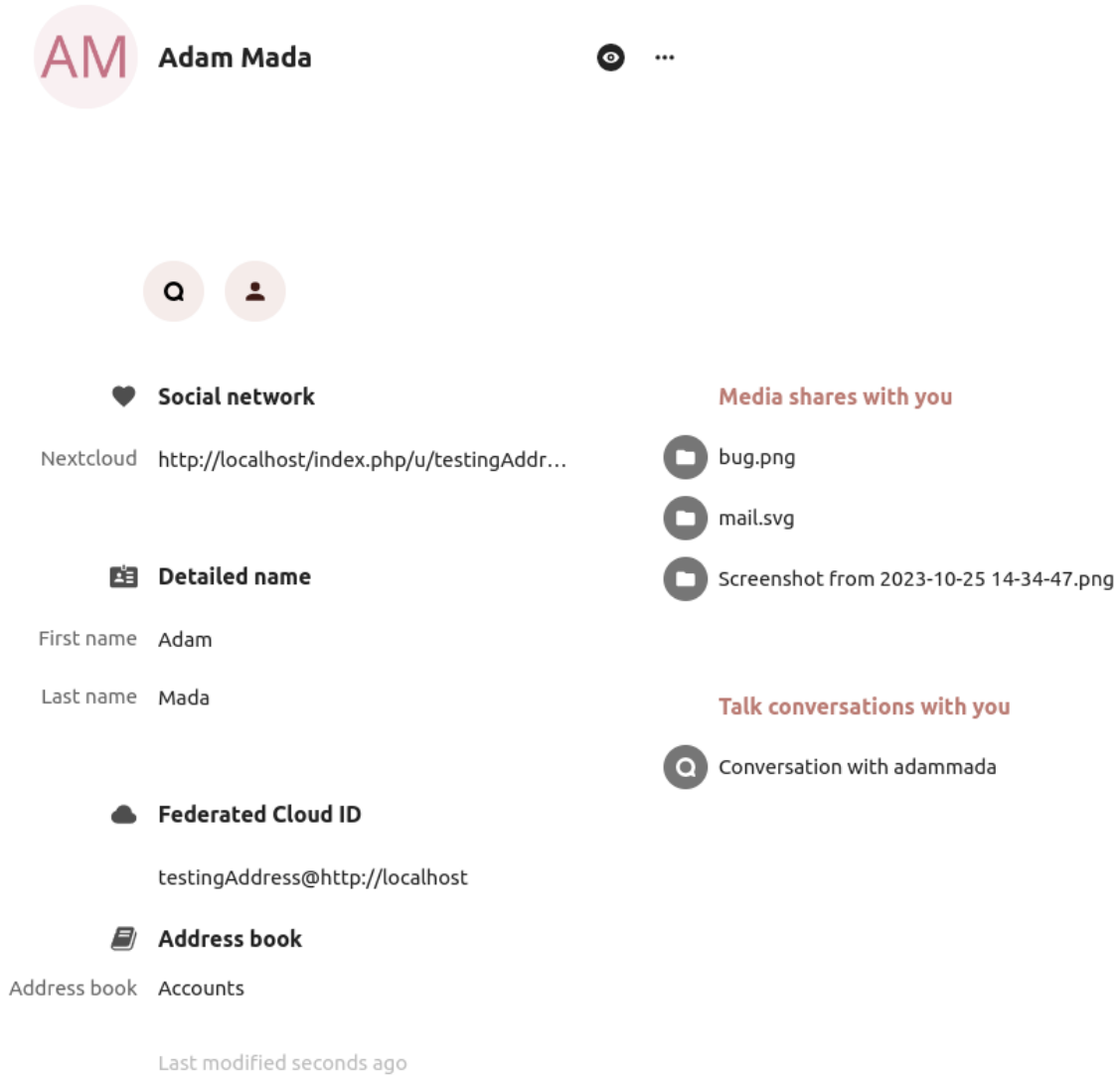
When you first access the Calendar app, a default first calendar will be created for you.

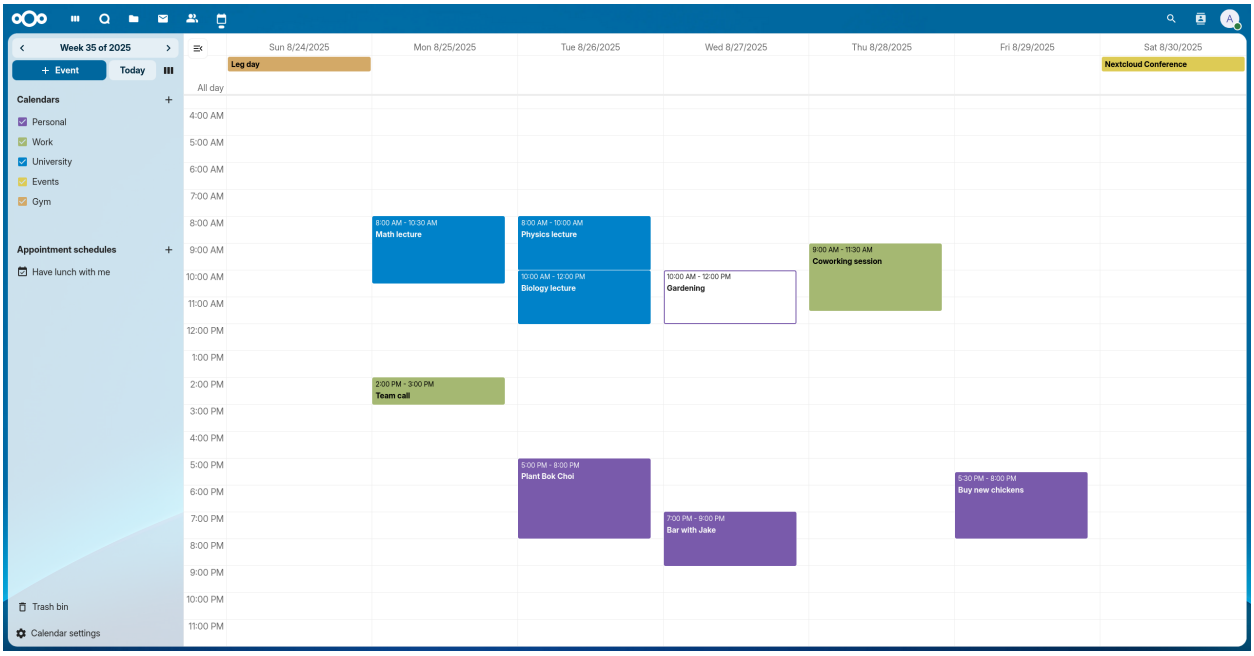
### 4.2.1 Managing your calendars

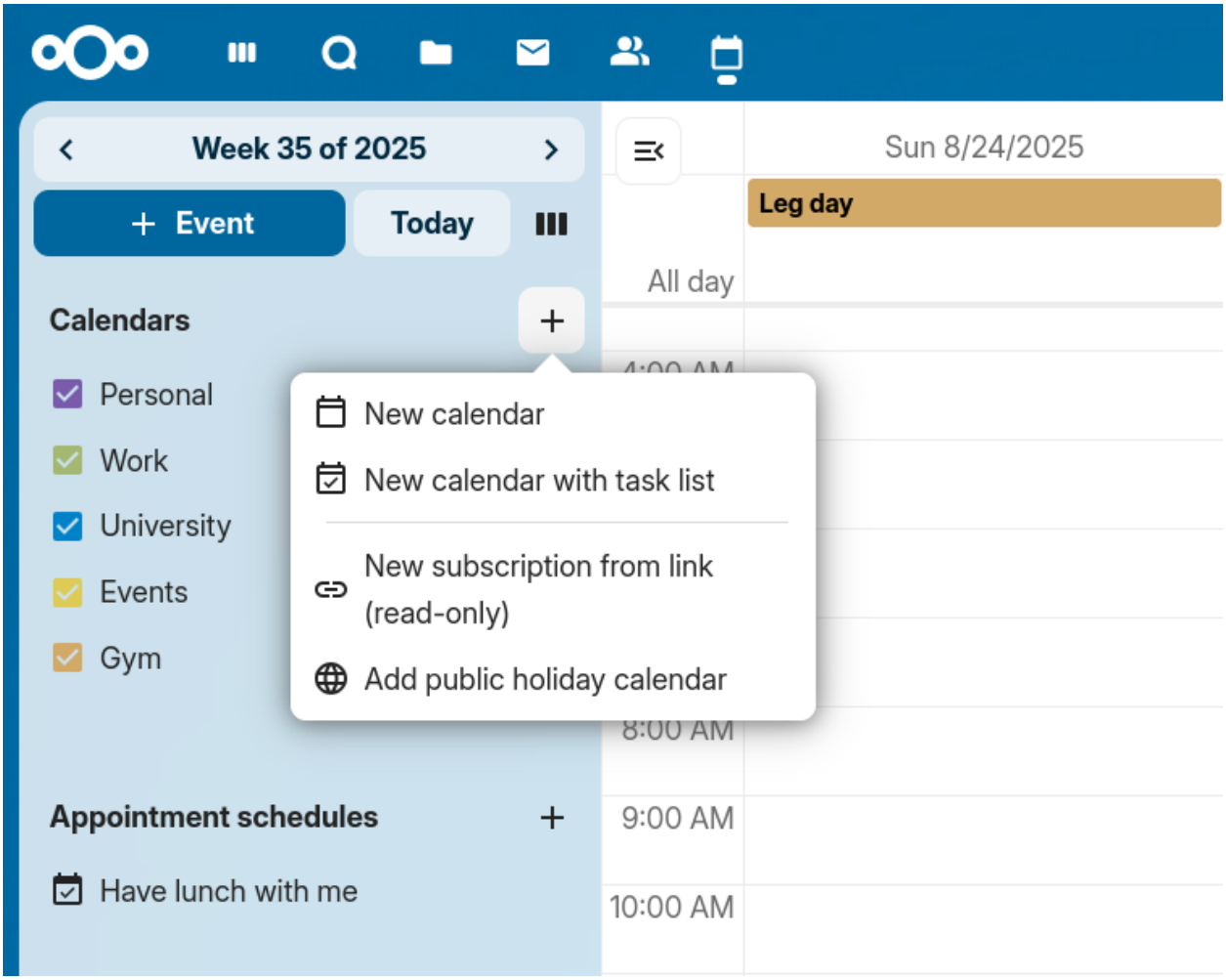
#### Create a new Calendar

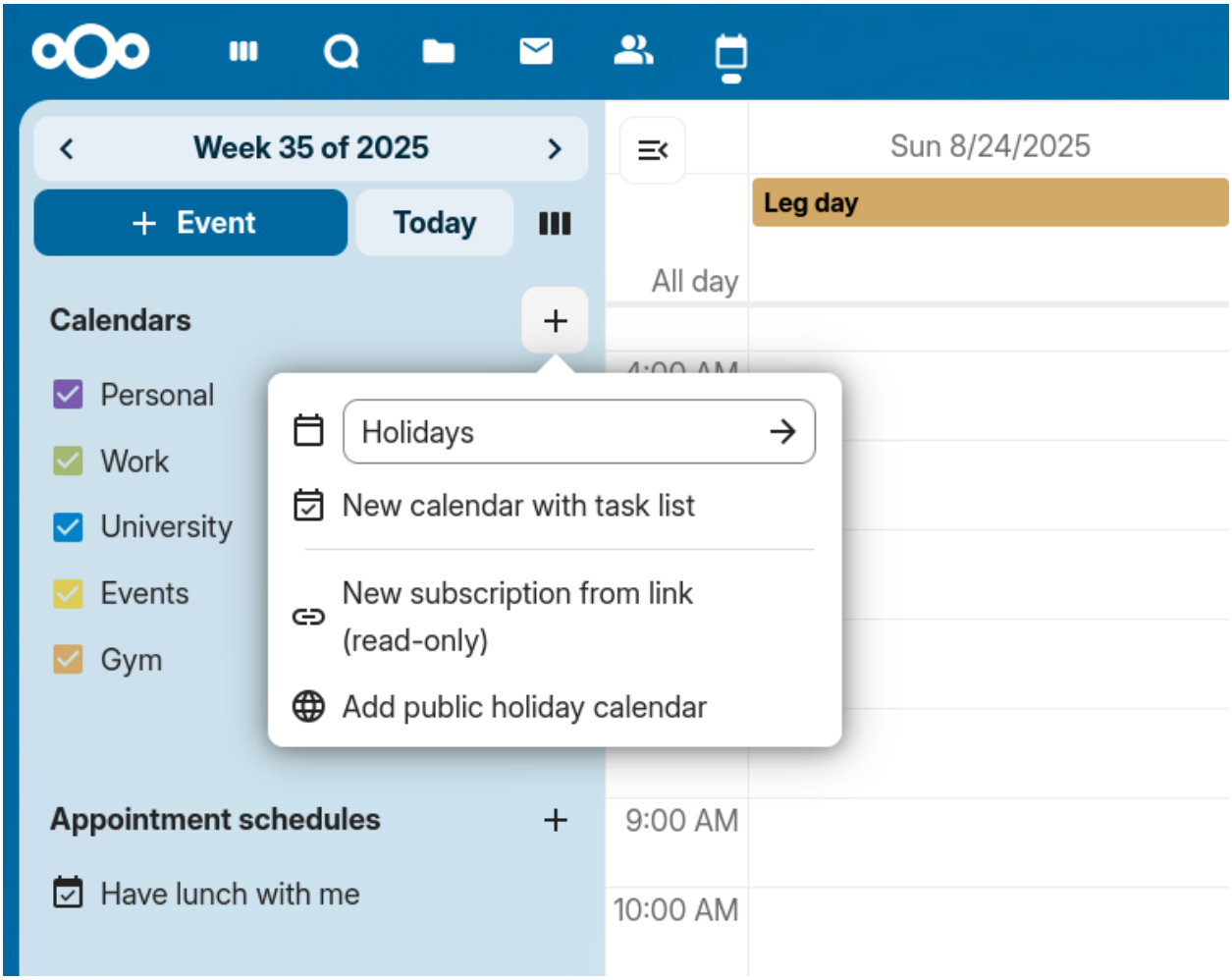
If you plan on setting up a new calendar without transferring any old data from your previous calendar, creating a new calendar is the way you should go.

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.


AM
Adam Mada
Social network
Nextcloud
http://localhost/index.php/u/testingAddr…
Detailed name
First name
Adam
Last name
Mada
Federated Cloud ID
testingAddress@http://localhost
Address book
Address book
Accounts
Last modified seconds ago
Media shares with you
bug.png
mail.svg
Screenshot from 2023-10-25 14-34-47.png
Talk conversations with you
Conversation with adammada

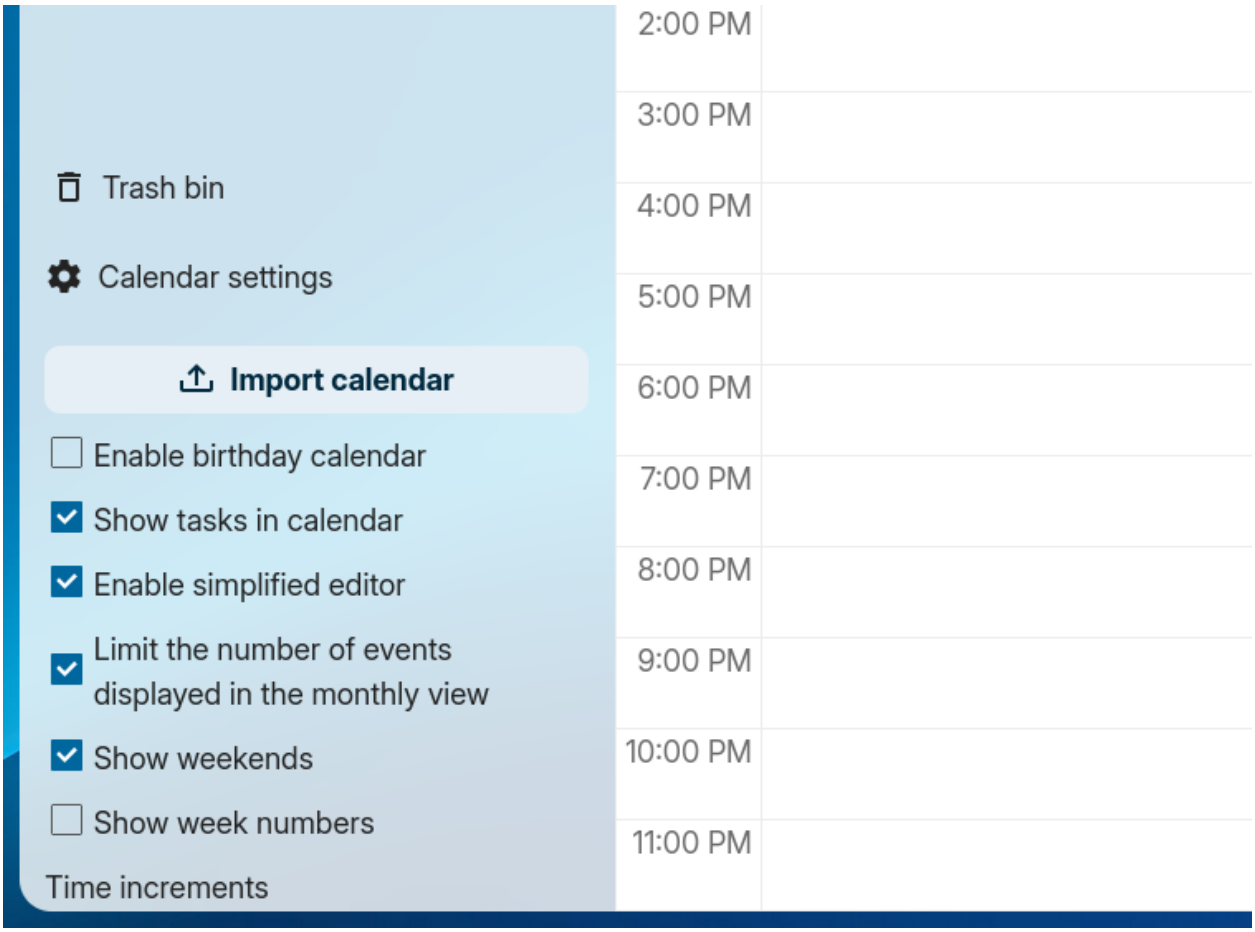

Week 35 of 2025
+ Event
Today
Calendars
Personal
Work
University
Events
Gym
Appointment schedules
Have lunch with me
Trash bin
Calendar settings
Sun 8/24/2025
Mon 8/25/2025
Tue 8/26/2025
Wed 8/27/2025
Thu 8/28/2025
Fri 8/29/2025
Sat 8/30/2025
Leg day
Nextcloud Conference
All day
8:00 AM - 10:30 AM
Math lecture
8:00 AM - 10:00 AM
Physics lecture
10:00 AM - 12:00 PM
Biology lecture
10:00 AM - 12:00 PM
Gardening
9:00 AM - 11:30 AM
Coworking session
2:00 PM - 3:00 PM
Team call
5:00 PM - 8:00 PM
Plant Bok Choi
7:00 PM - 9:00 PM
Bar with Jake
5:30 PM - 8:00 PM
Buy new chickens


Week 35 of 2025
+ Event
Today
Calendars
Personal
Work
University
Events
Gym
Appointment schedules
Have lunch with me
New calendar
New calendar with task list
New subscription from link (read-only)
Add public holiday calendar
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 settings-icon labeled with `Calendar settings` at the bottom-left.
2. After clicking on `Import Calendar` 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

In many places, you can download event details as an .ics file, or via a button saying “ical”, “Apple Calendar” or “Outlook”.

1. Click on the settings-icon labeled with `Calendar settings` at the bottom-left.
2. After clicking on `Import calendar` 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/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 a 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 other users or groups.

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.

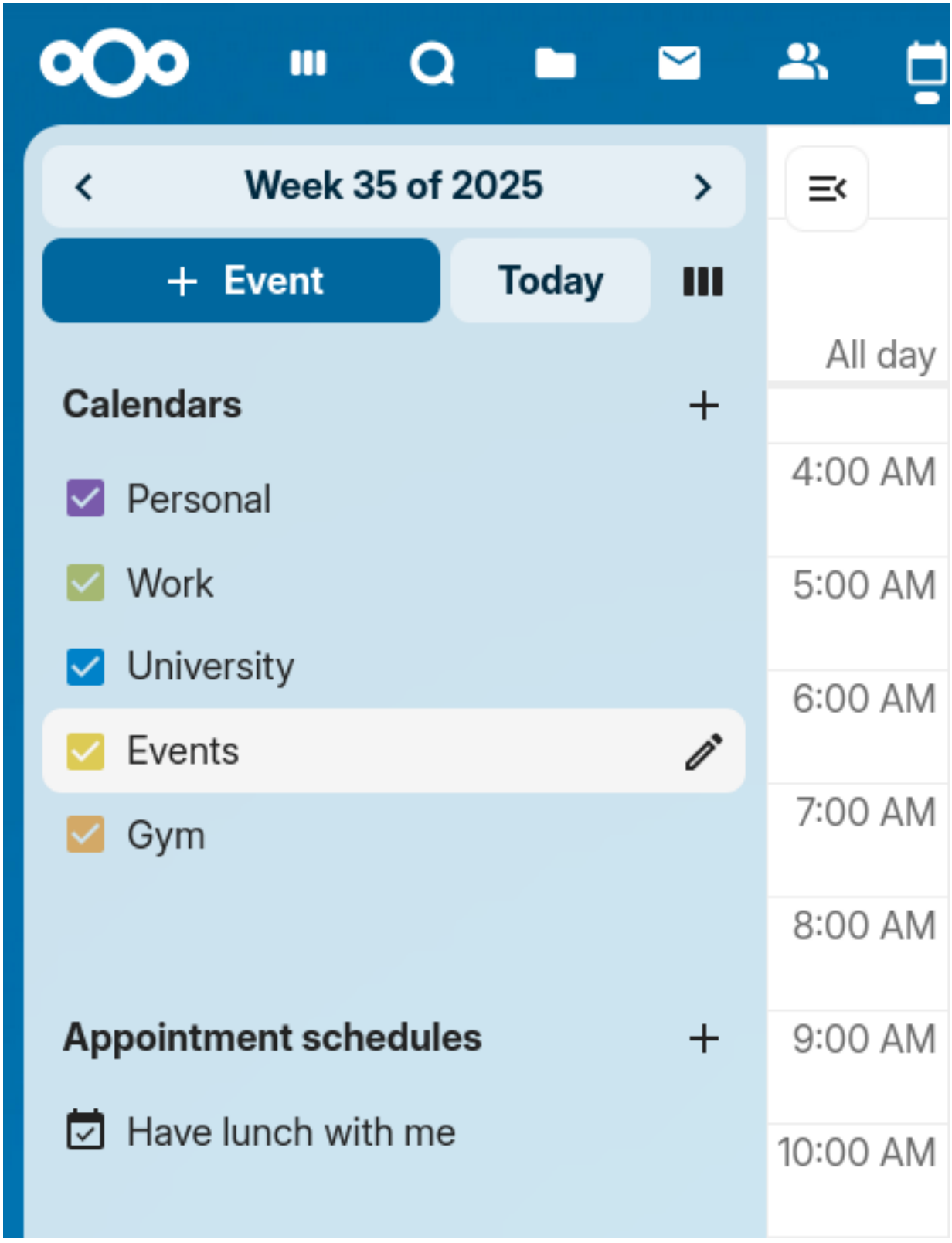
> **Note**
>
> Calendar shares currently cannot be accepted or rejected. If you want to stop having a calendar that someone shared with you, you can click on the 3-dot menu next to the calendar in the calendar list and click on “Unshare from me”. To restore a share, the calendar can be reshared again,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

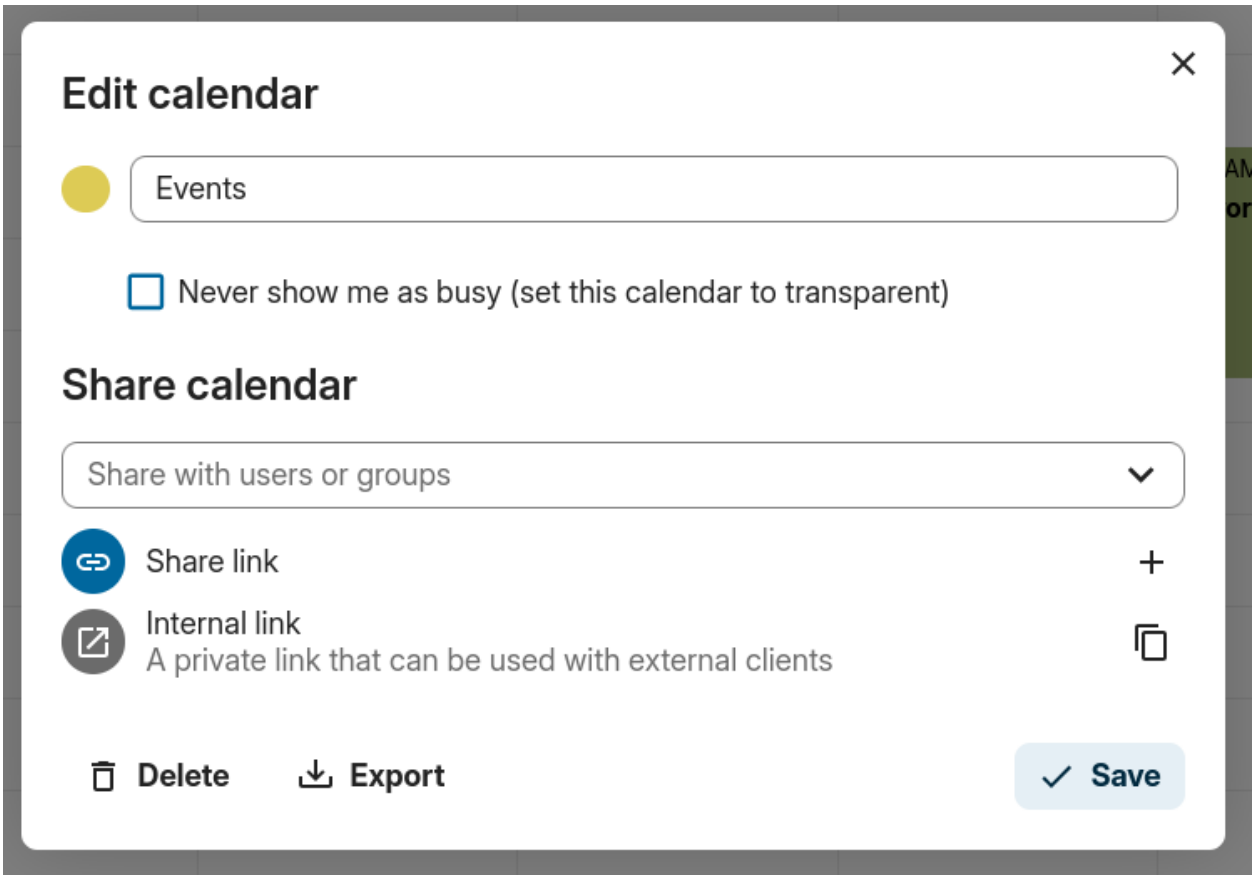
### Publishing a calendar

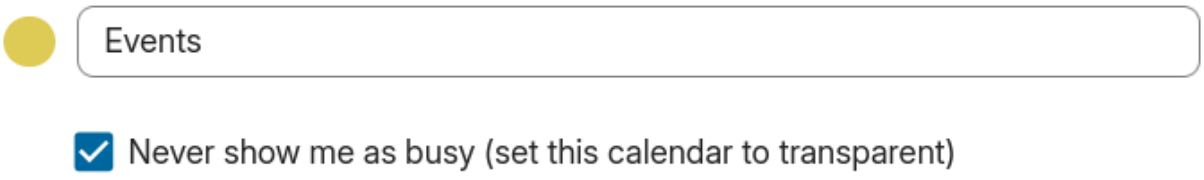
Calendars can be published through a public link to make them viewable (read-only) to external users. You may create a public link by opening the share menu for a calendar and clicking on « + » next to « Share link ». Once created you can copy the public link to your clipboard or send it through email.

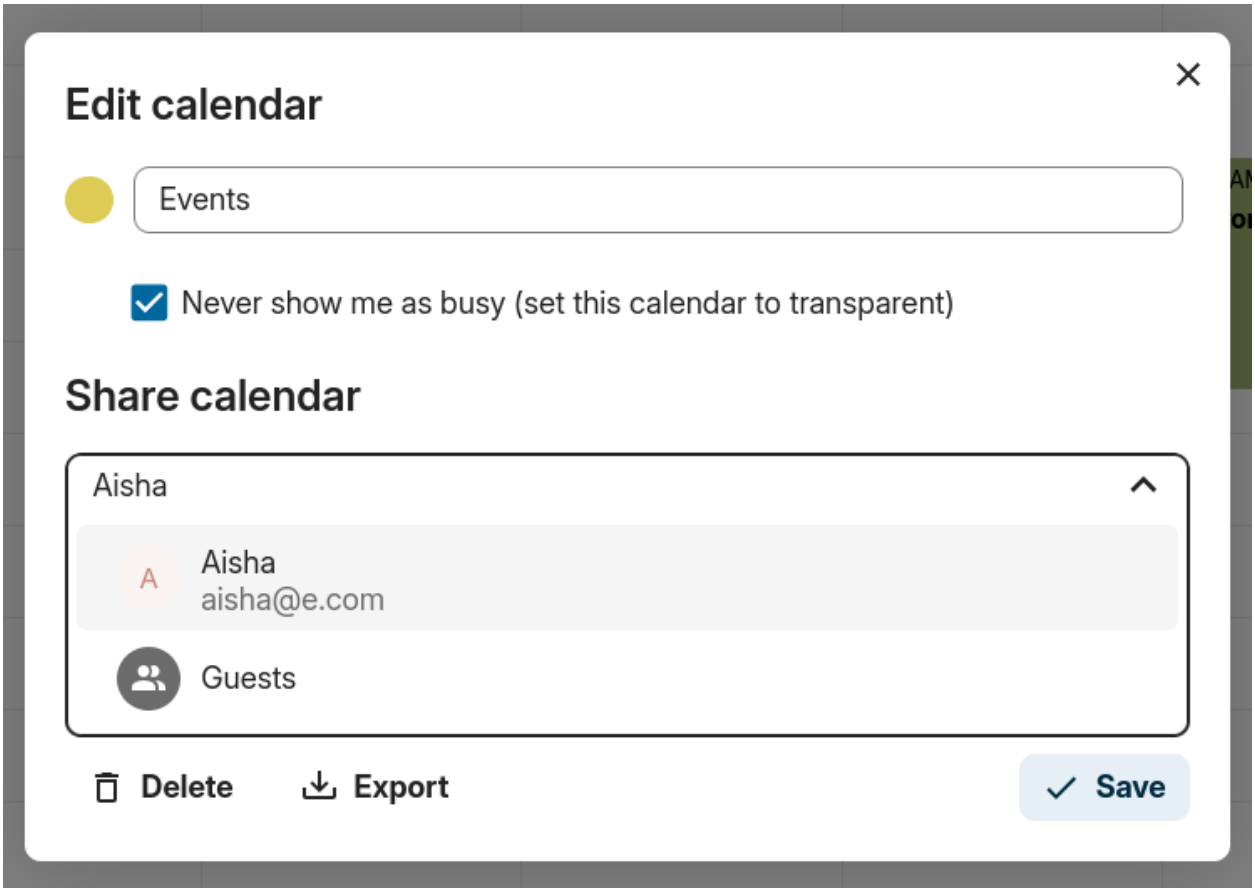
There’s also an « embedding code » that provides an HTML iframe to embed your calendar into public pages.

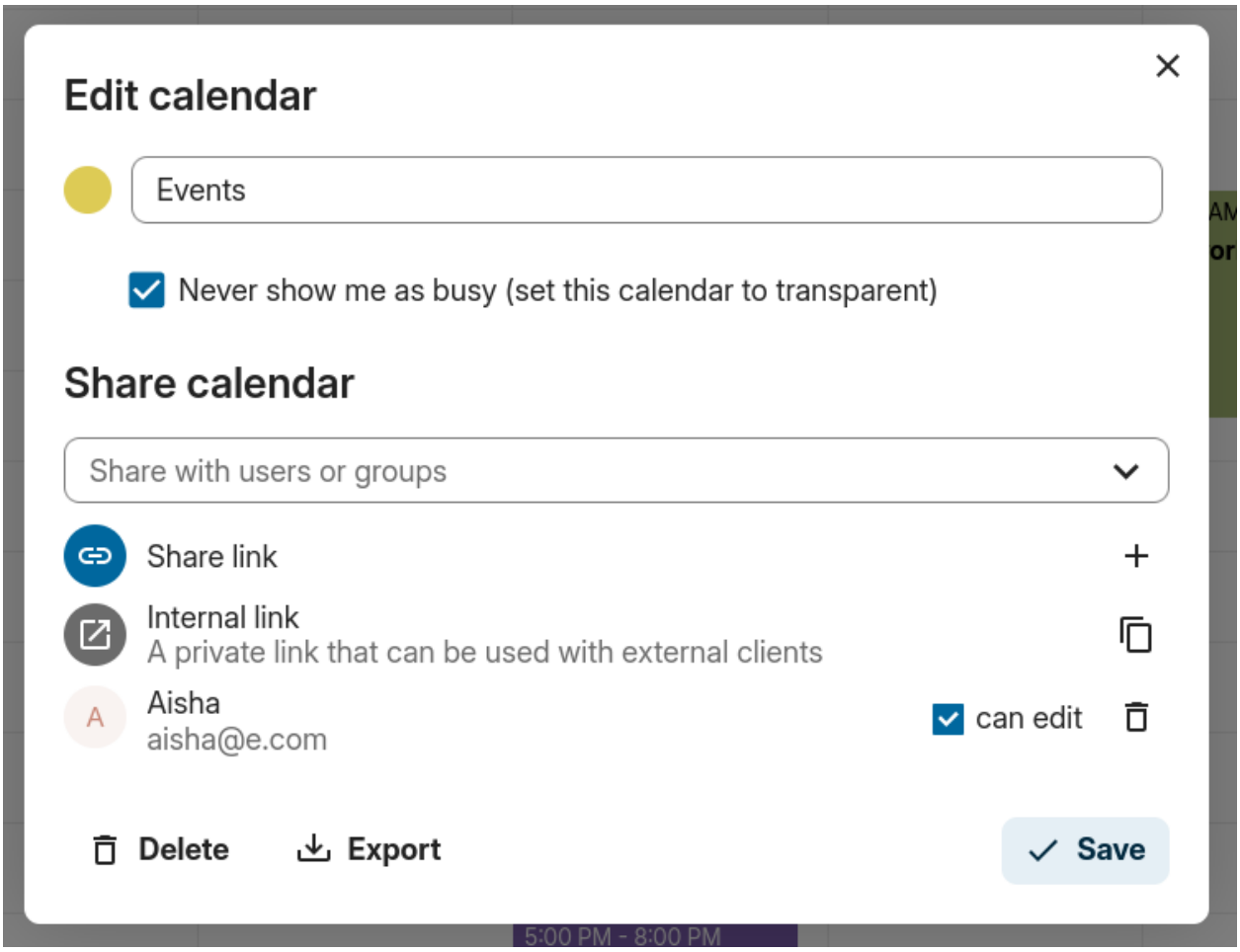
Multiple calendars can be shared together by adding their unique tokens to the end of an embed link. Individual tokens can be found at the end of each calendar’s public link. The full address will look like `https://cloud.example.com/index.php/apps/calendar/embed/<token1>-<token2>-<token3>`


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

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.

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`

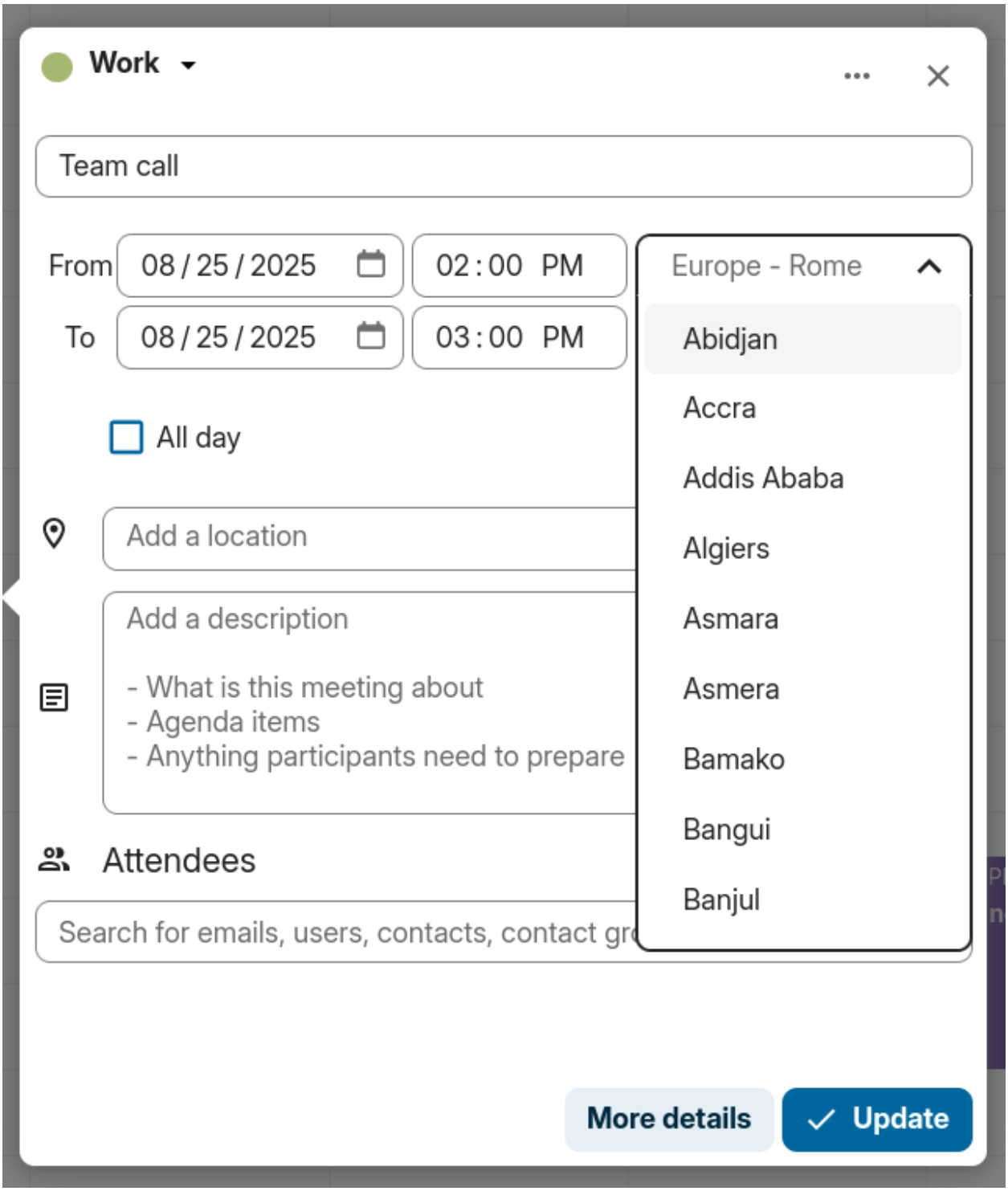
### 4.2.2 Managing Events

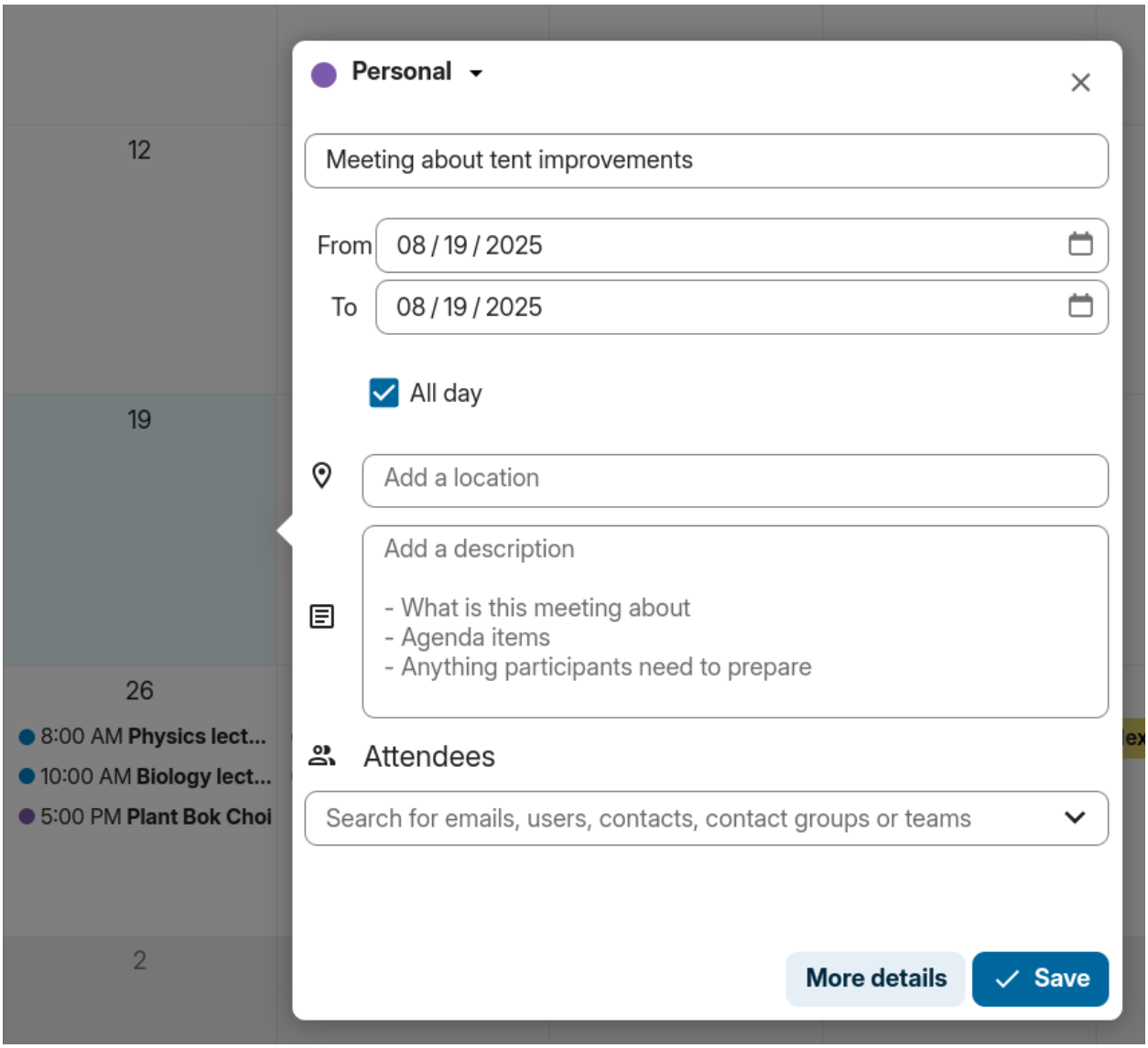
#### Create a new event

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.


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

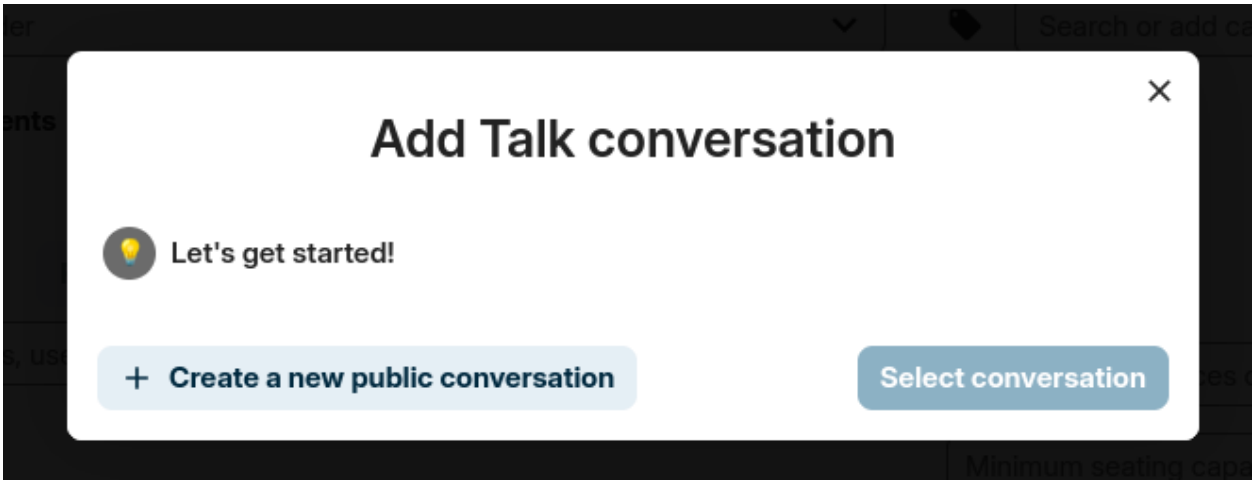

Personal
Meeting about tent improvements
From 08 / 19 / 2025
To 08 / 19 / 2025
All day
Add a location
Add a description
- What is this meeting about
- Agenda items
- Anything participants need to prepare
Attendees
Search for emails, users, contacts, contact groups or teams
More details
Save
12
19
26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

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 can set a `Skip simple event editor` checkmark in the `Settings & Import` 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`.

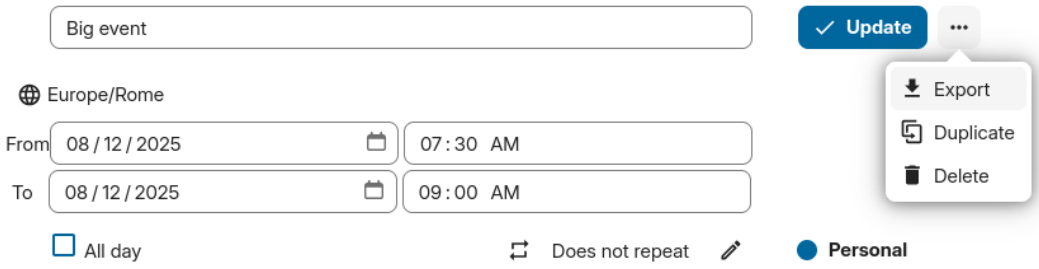
Clicking on the `Update` button will update the event. To cancel your changes, click on the close icon on top right of the popup or advanced editor.

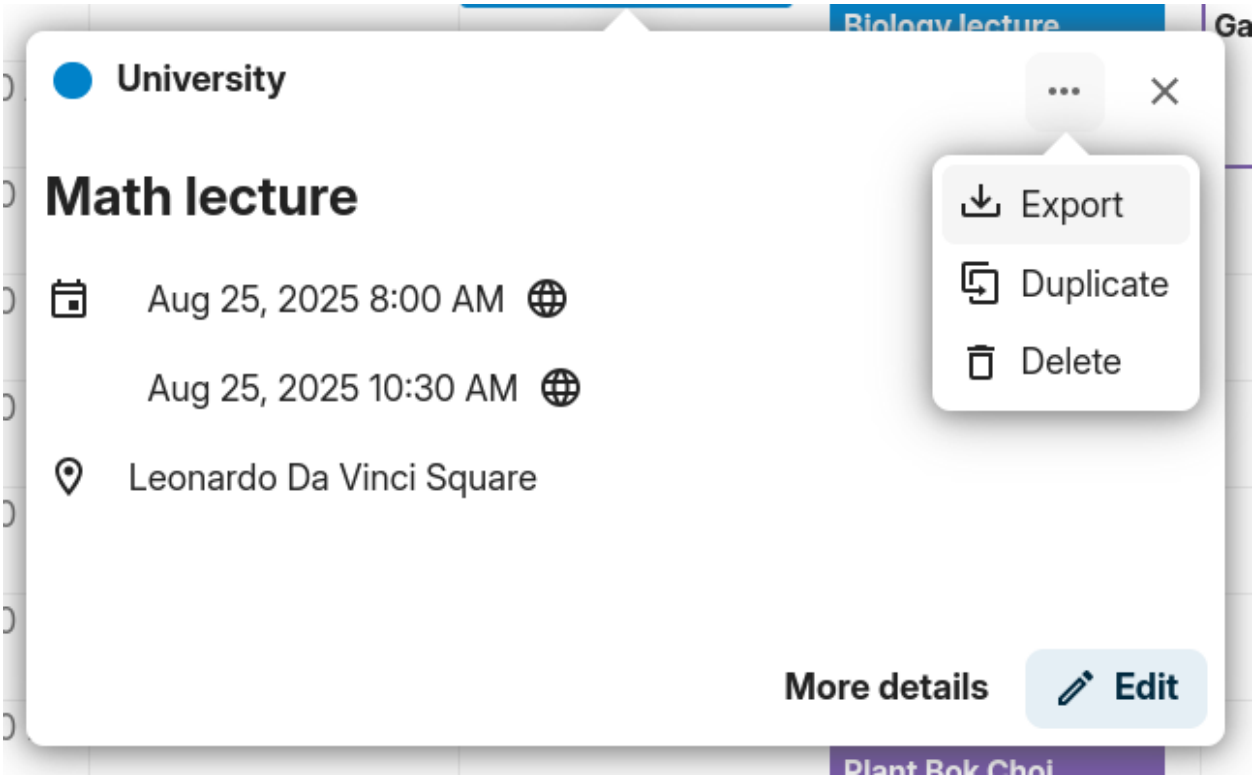
If you open the advanced view and click the three dot menu next to the event name, you have an option to export the event as an `.ics` file or remove the event from your calendar.

**Tip**

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

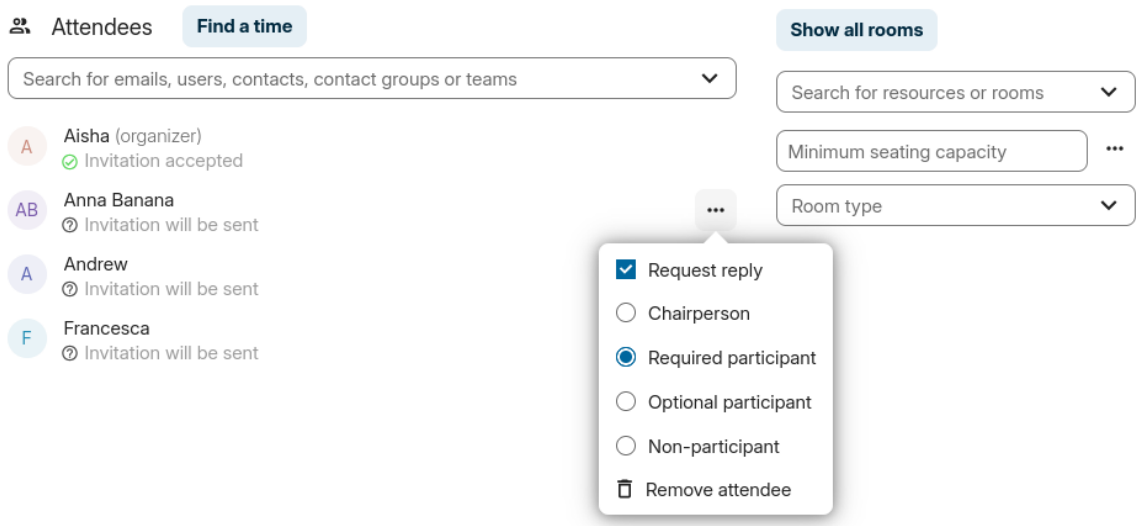
You can also export, duplicate or delete an event from the basic editor.


Big event
Update
Europe/Rome
Export
Duplicate
Delete
From
08 / 12 / 2025
07 : 30 AM
To
08 / 12 / 2025
09 : 00 AM
All day
Does not repeat
Personal


University
Math lecture
Aug 25, 2025 8:00 AM
Aug 25, 2025 10:30 AM
Leonardo Da Vinci Square
Export
Duplicate
Delete
More details
Edit

### 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: 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.

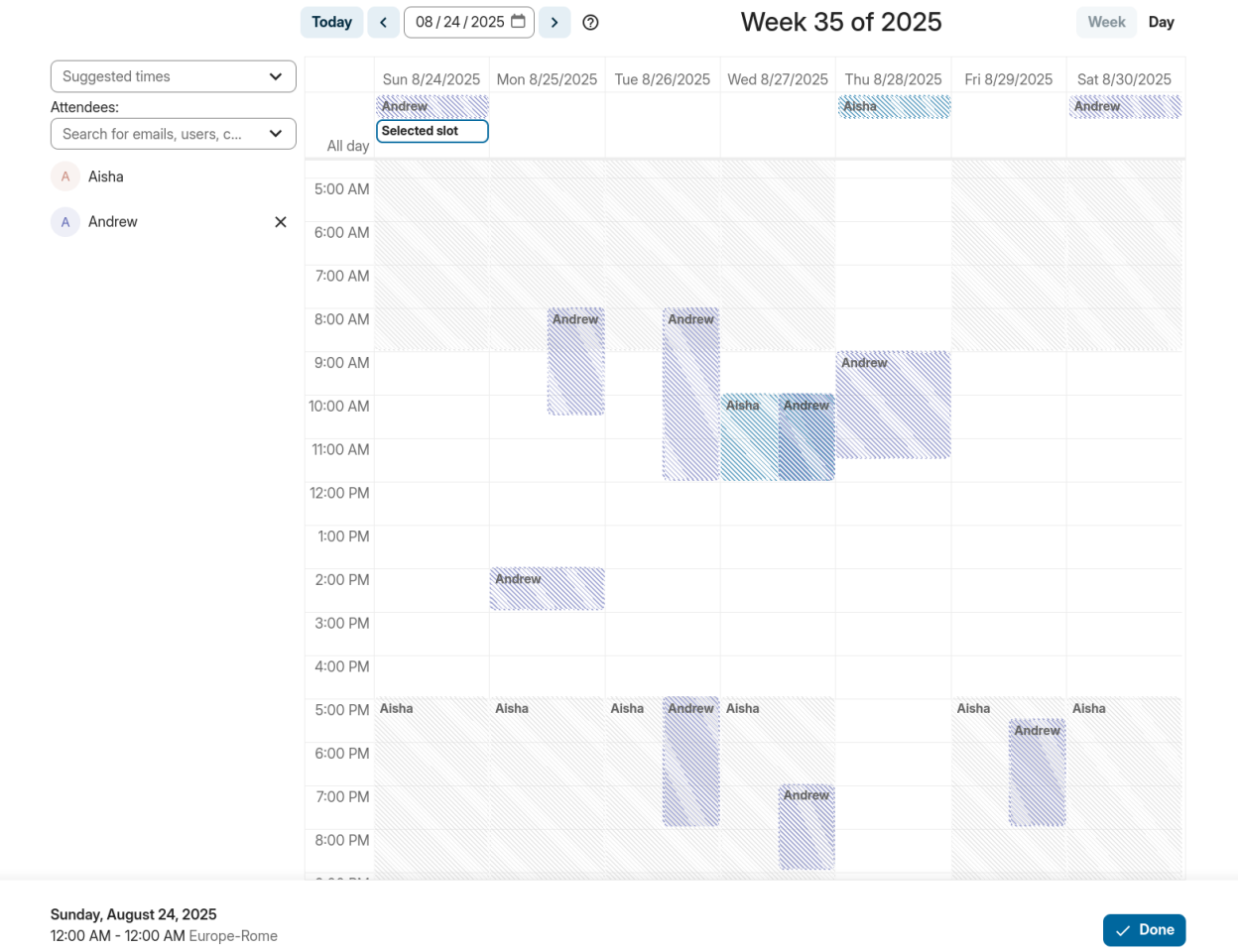
Invitation status legend (as an attendee):

- **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.

### Assign rooms and resources to an event

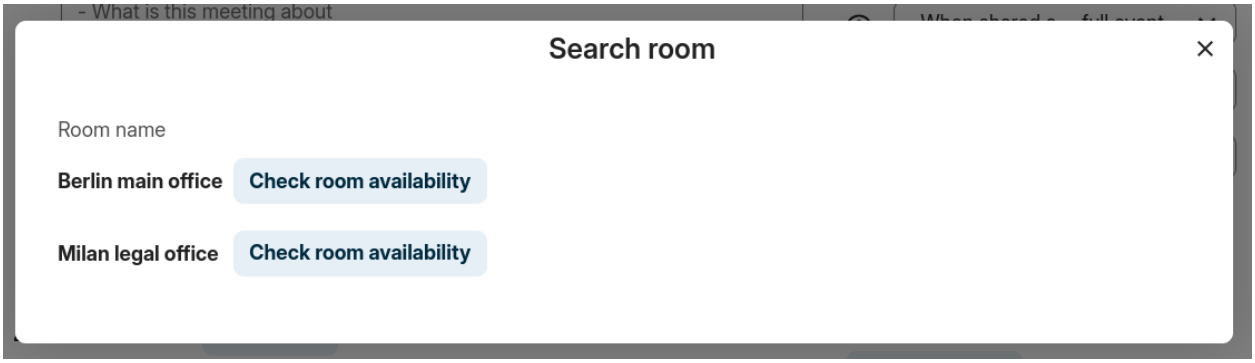
Similar to attendees you can add rooms and resources to your events. The system will make sure that each room and resource is booked without conflict. The first time a user adds the room or resource to an event, it will show as accepted. Any further events at overlapping times will show the room or resource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

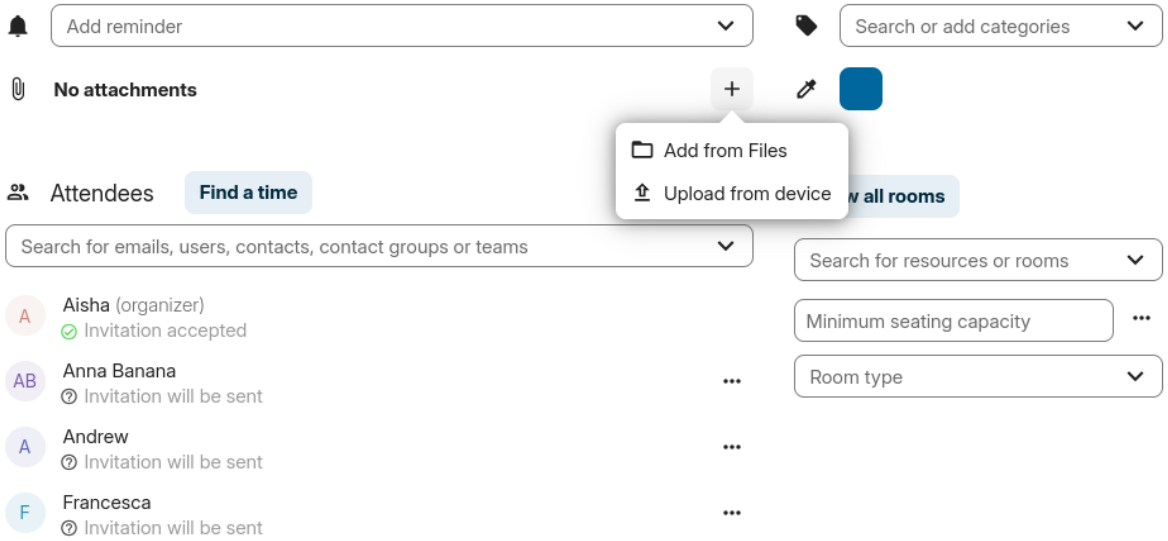
Added in version 5.0.

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

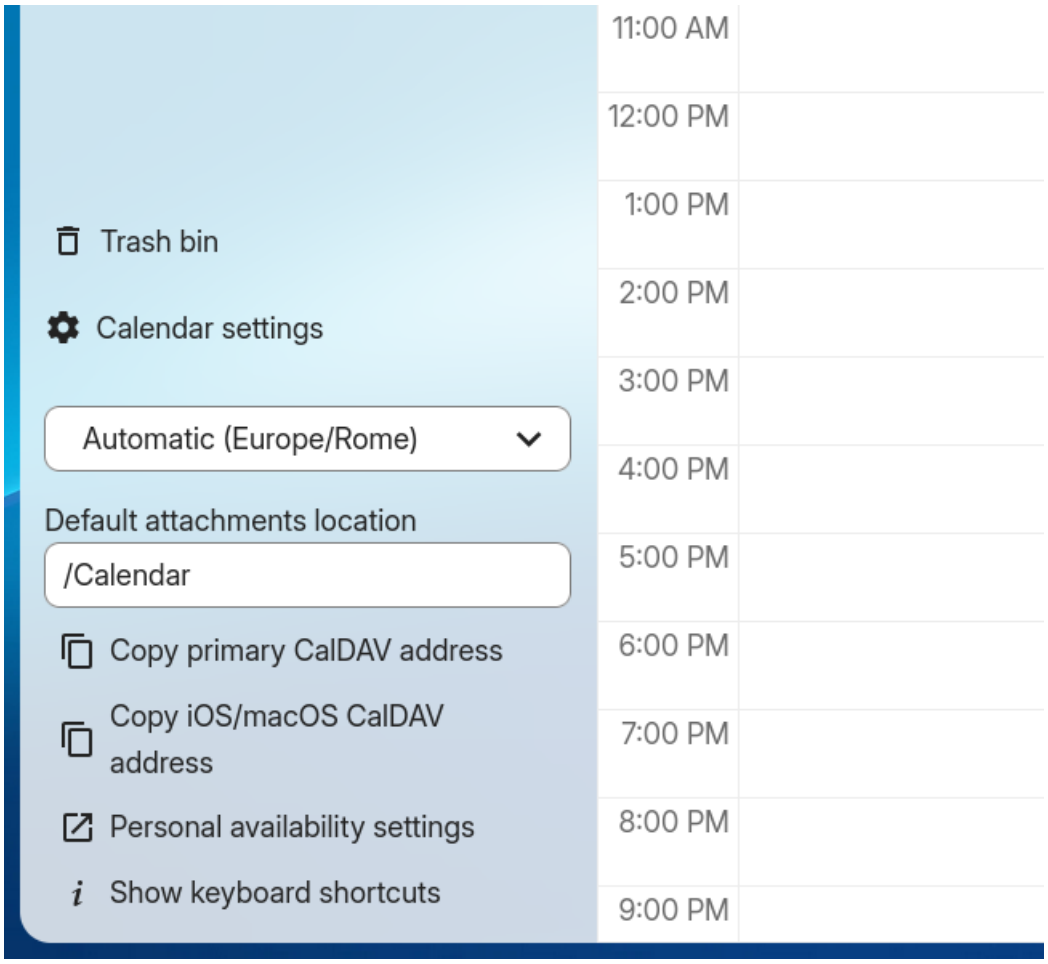
You can import attachments to your events either by uploading them or adding them from files




**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` in the bottom left corner and changing `default attachments location`.

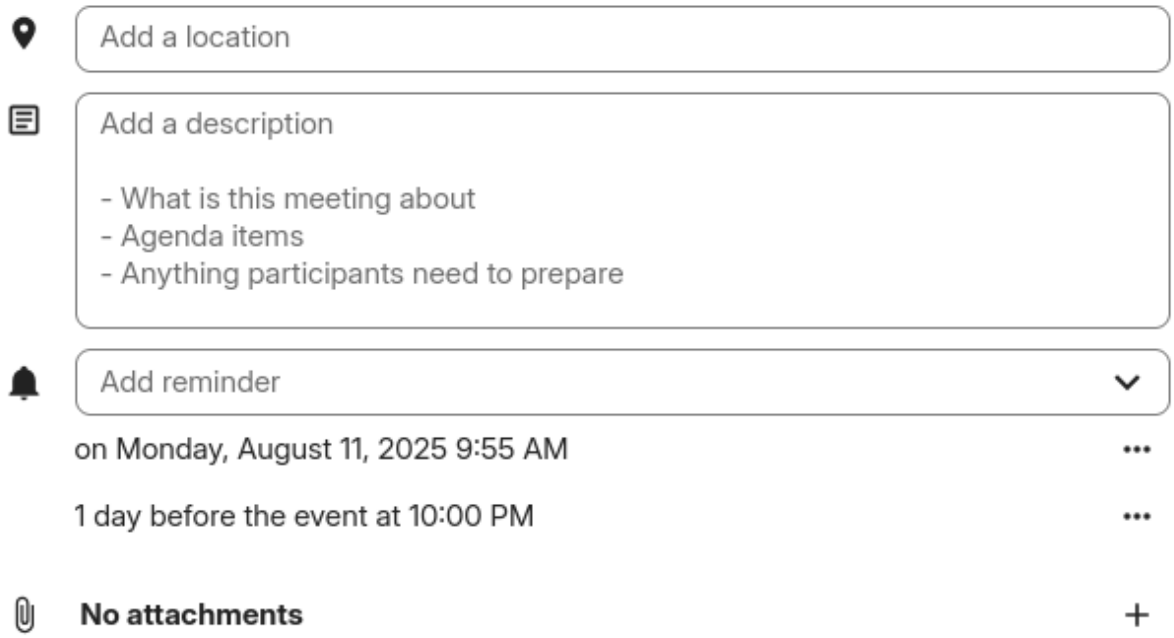

Trash bin
Calendar settings
Automatic (Europe/Rome)
Default attachments location
/Calendar
Copy primary CalDAV address
Copy iOS/macOS CalDAV address
Personal availability settings
Show keyboard shortcuts
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM

### 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.




**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.

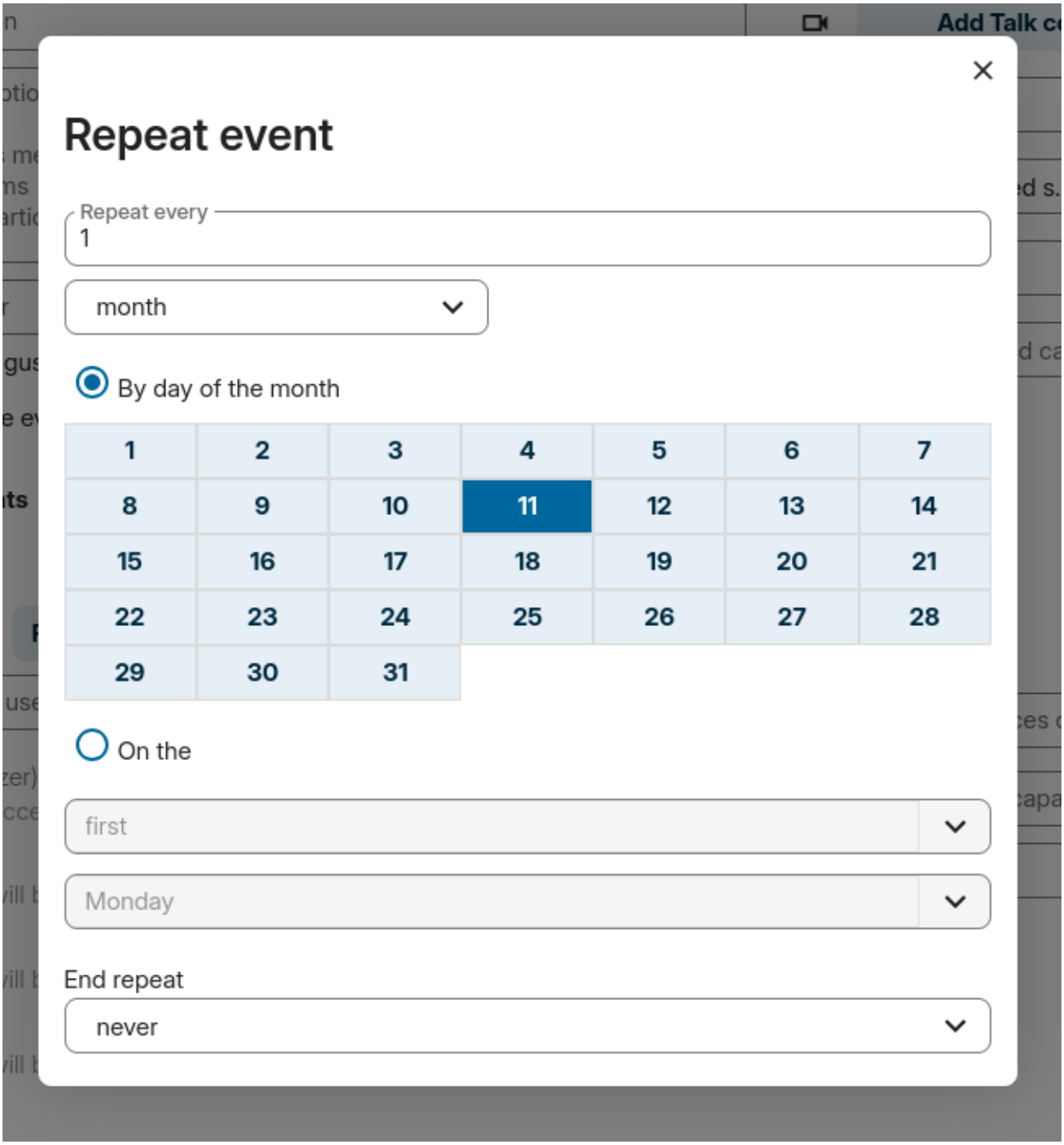
**Note**

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

### Add recurring options

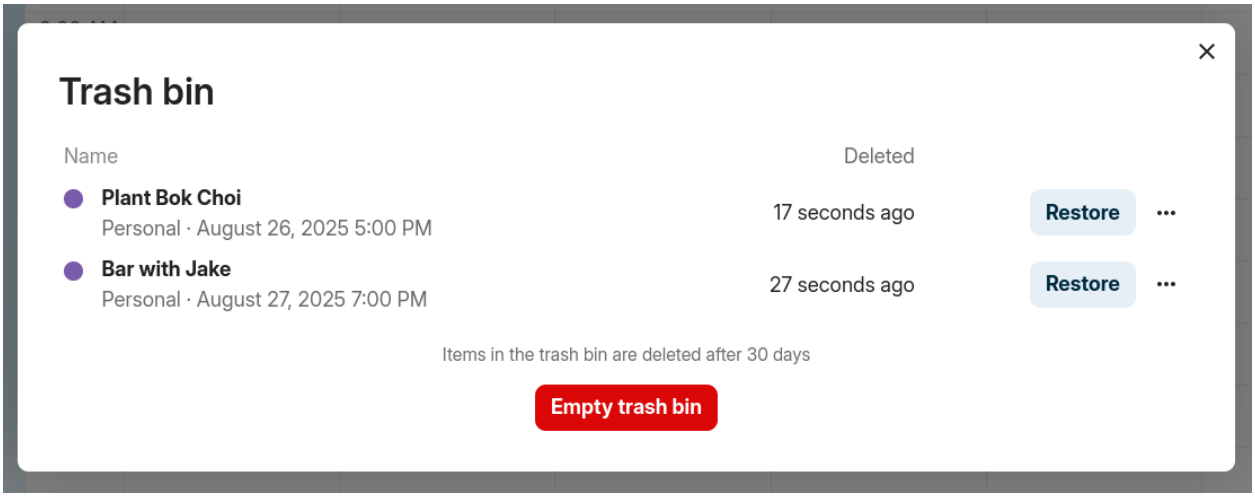
An event may be set as "recurring", so that it can happen every day, week, month or year. Specific rules can be added to set which day of the week the event happens or more complex rules, such as every fourth Wednesday of each month.

You can also tell when the recurrence ends.


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

### 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 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.

## 4.2.3 Responding to invitations

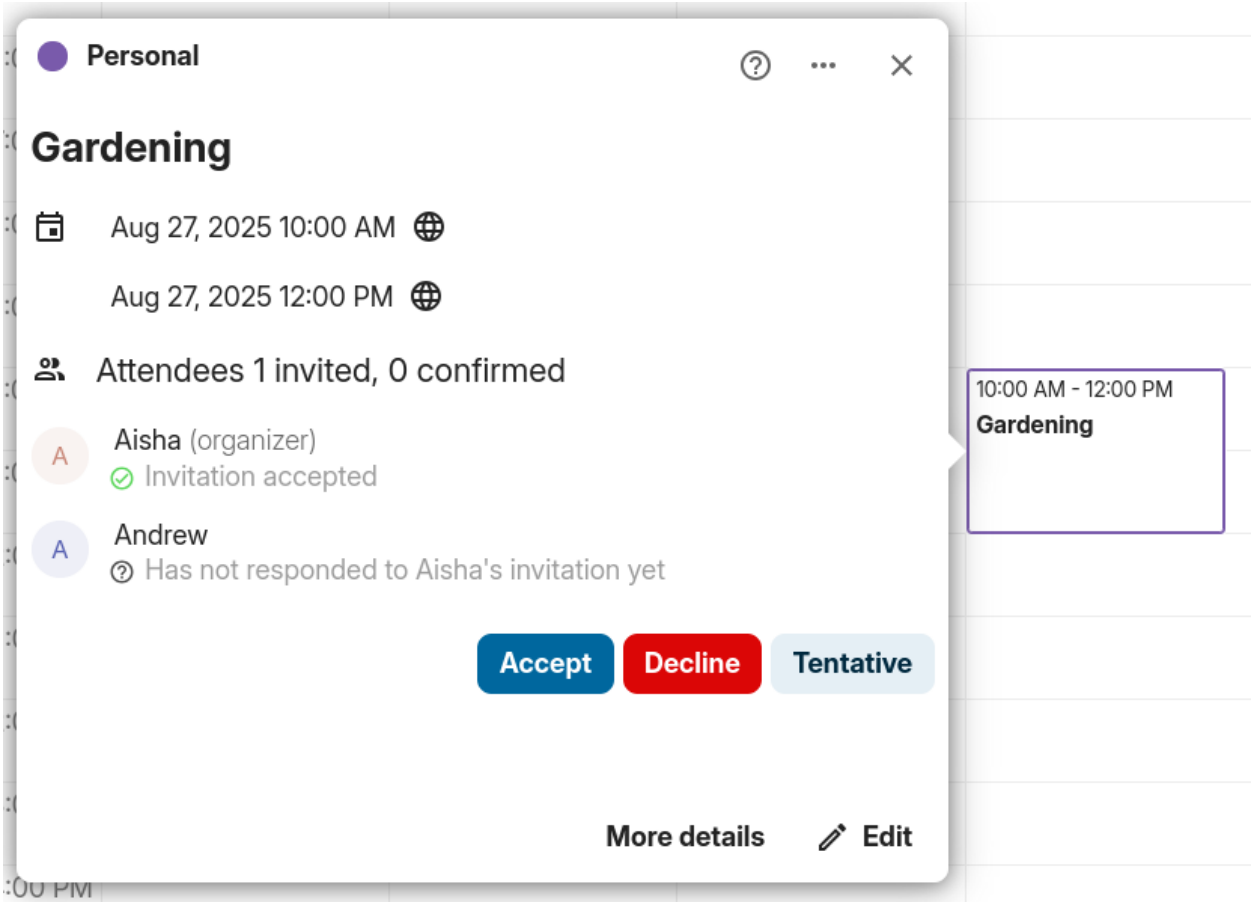
You can directly respond to invitations inside the app. Click on the event and select your participation status. You can respond to an invitation by accepting, declining or accepting tentatively.

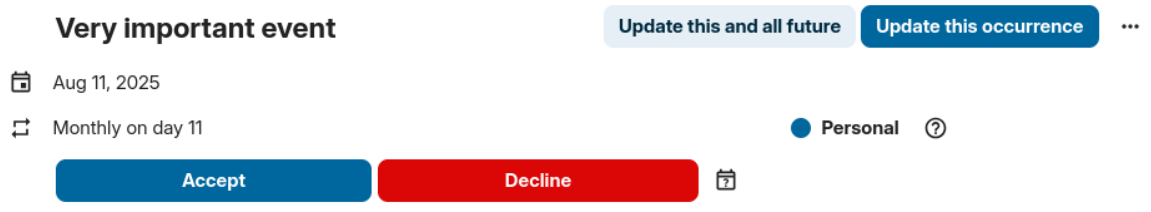
You can respond to an invitation from the advanced editor too.

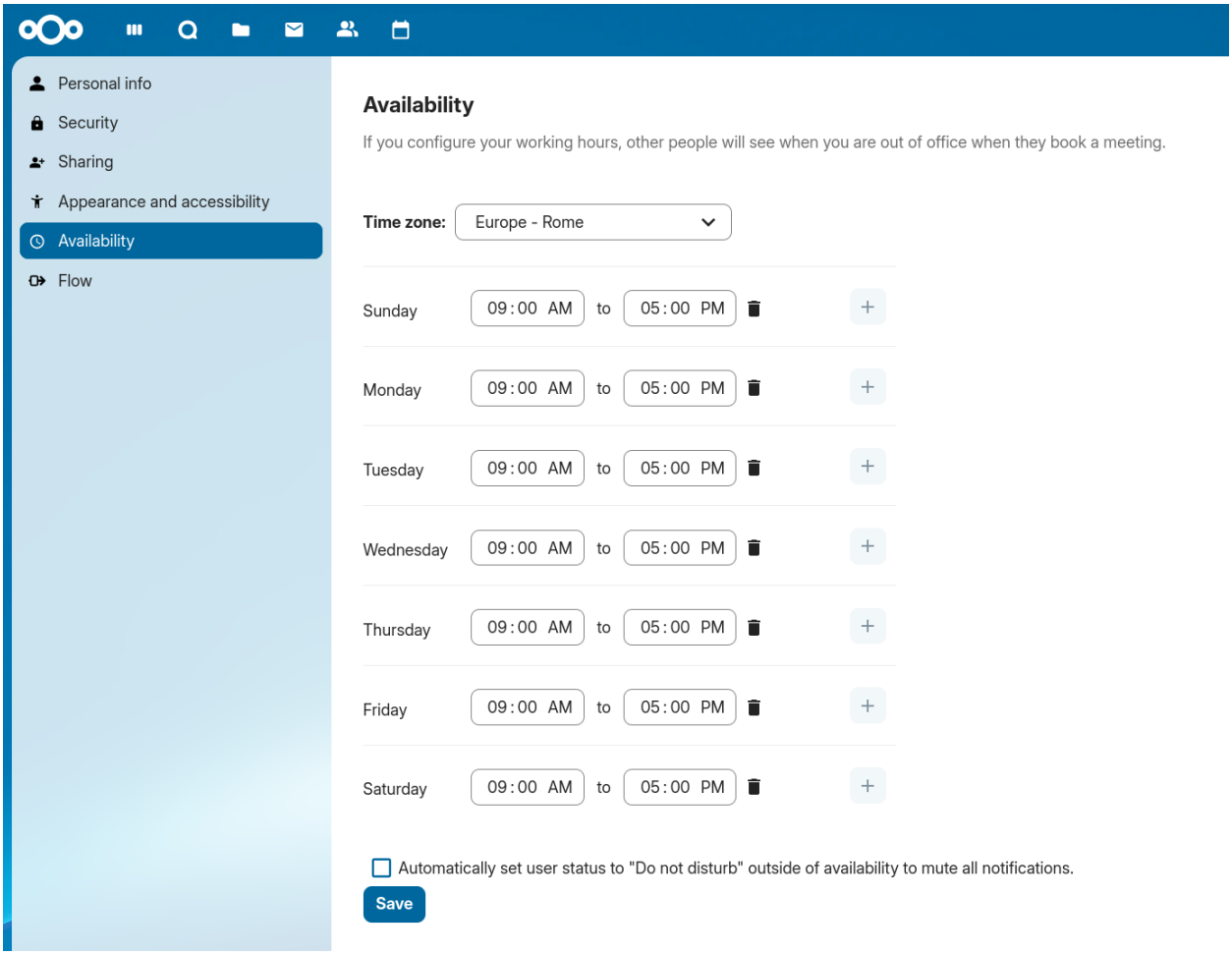
## 4.2.4 Availability (Working Hours)

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*.


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

### 4.2.5 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.

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

### 4.2.6 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.

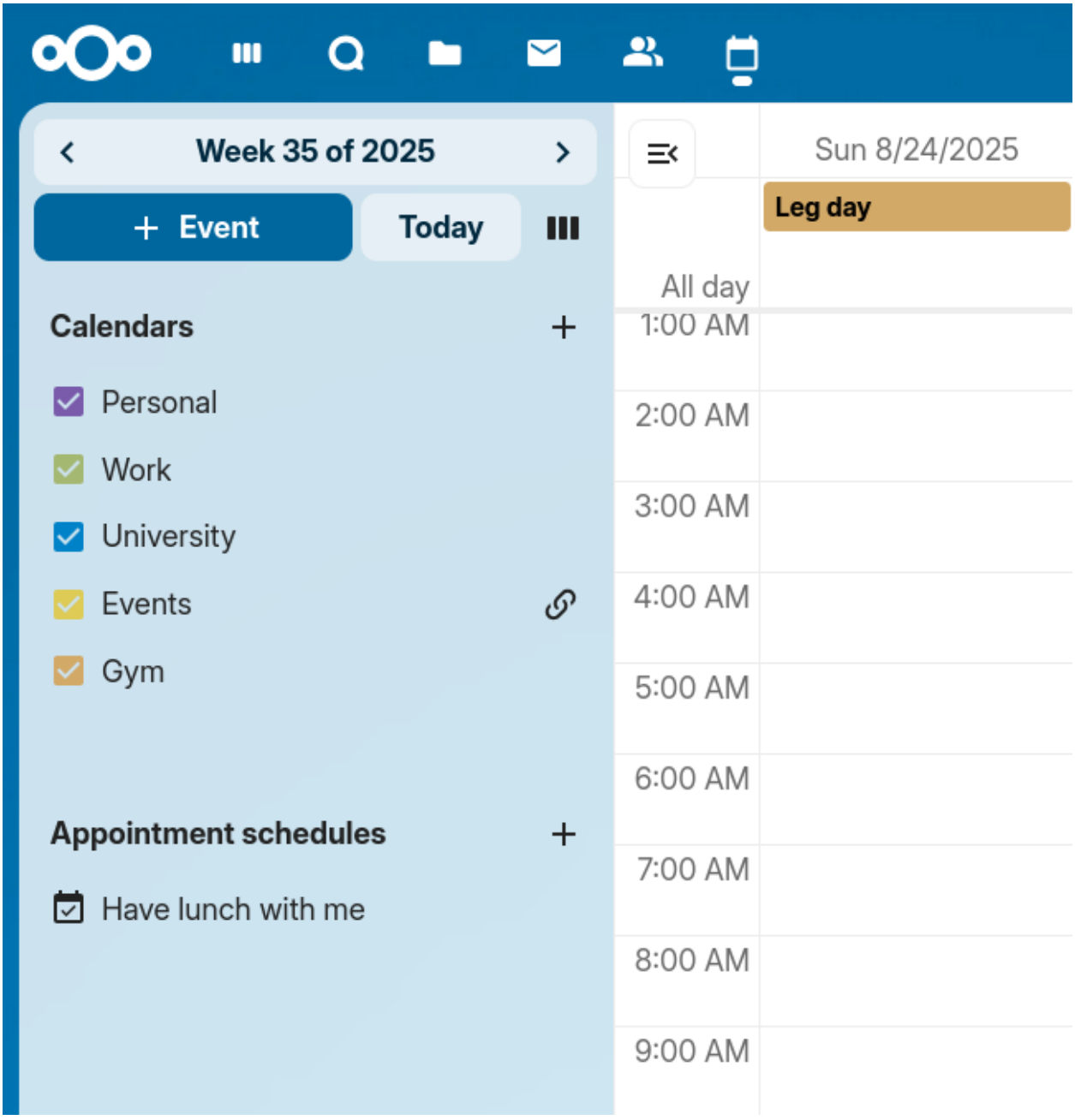
The duration of the appointment can be picked from a predefined list. Next, you can set the desired increment. The increment is the rate at which possible slots are available. For example, you could have one hour long slots, but you give them away at 30 minute increments so an attendee can book at 9:00AM 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.

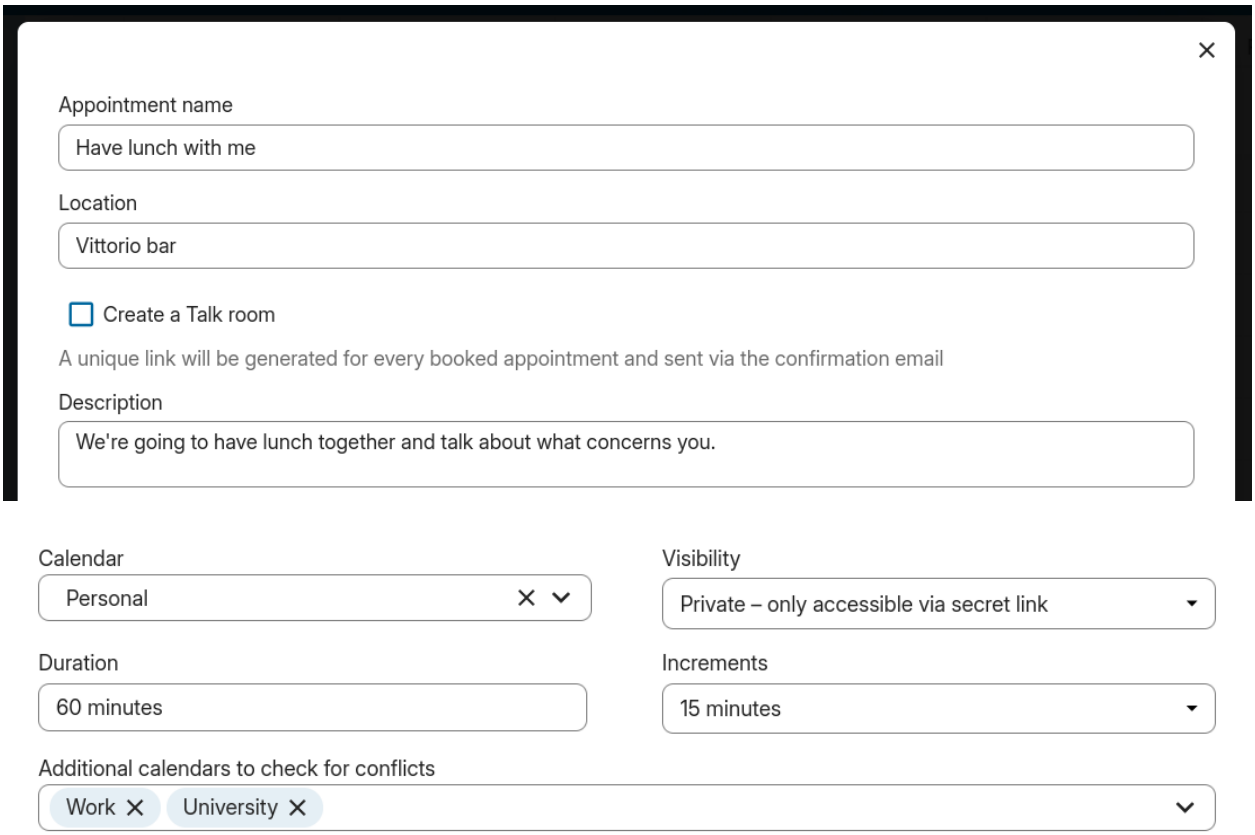
> **Note**
>
> Only slots that do not conflict with existing events in your calendars will be shown to attendees.

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.


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




### 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.

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.

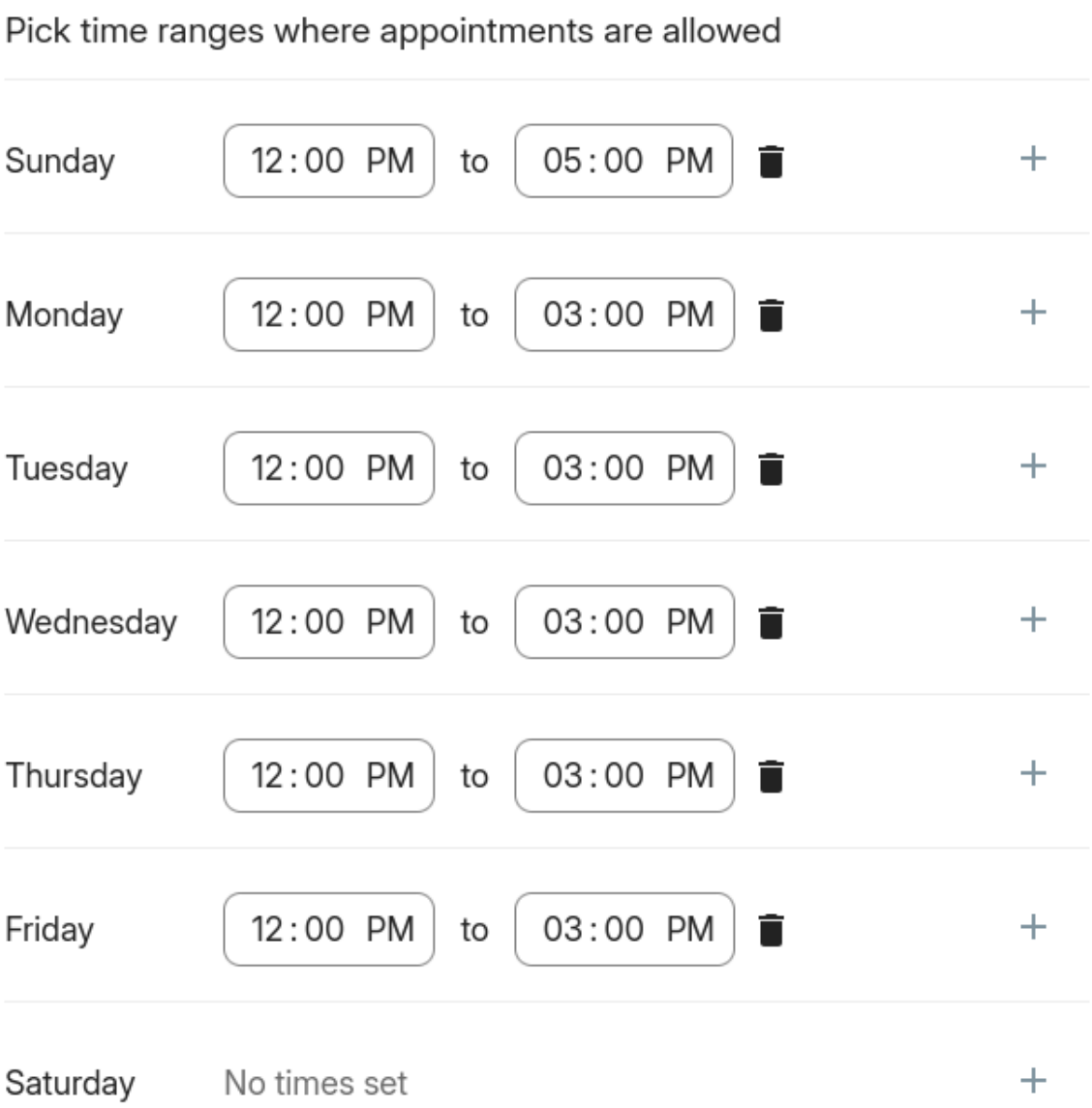
The attendee will receive another email confirming the details of their appointment.

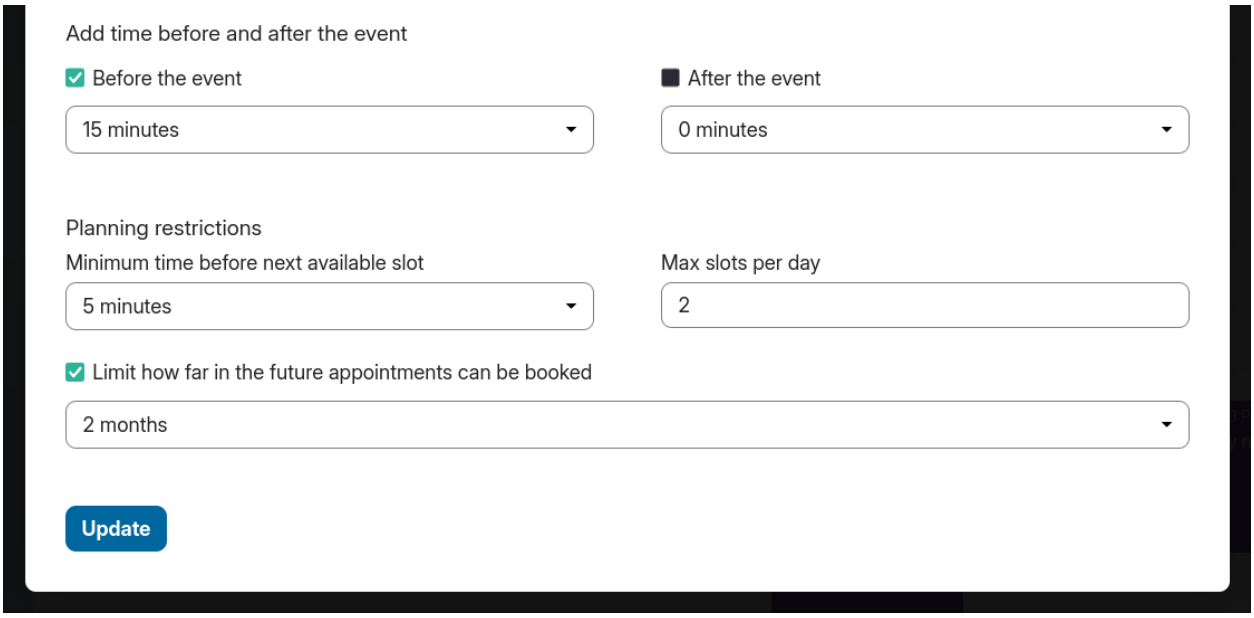
> **Note**
>
> If a slot has not been confirmed, it will still show up as bookable. Until then the time slot might also be booked by another user who confirms their booking earlier. The system will detect the conflict and offer to pick a new time slot.

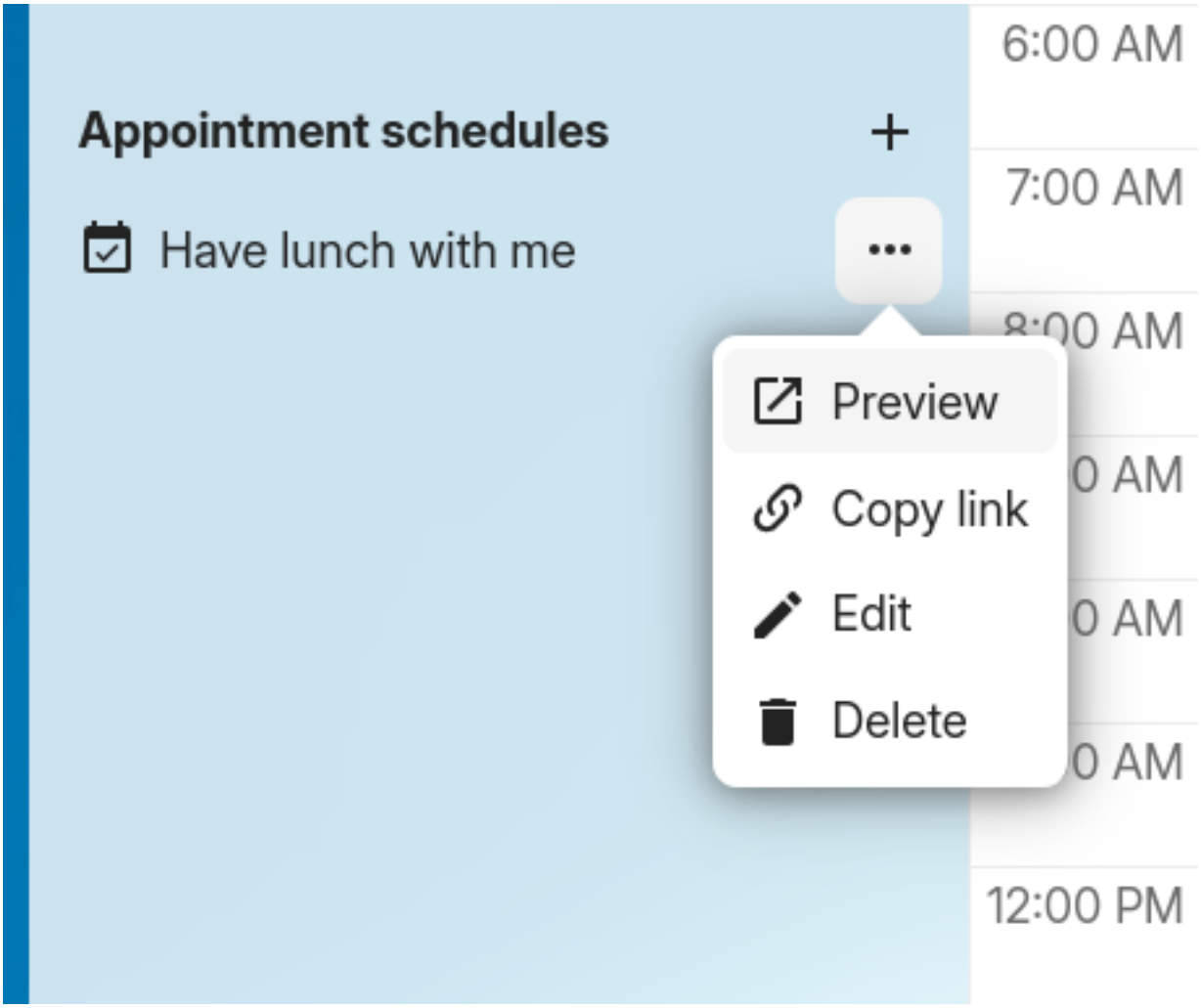
### Working with the booked appointment

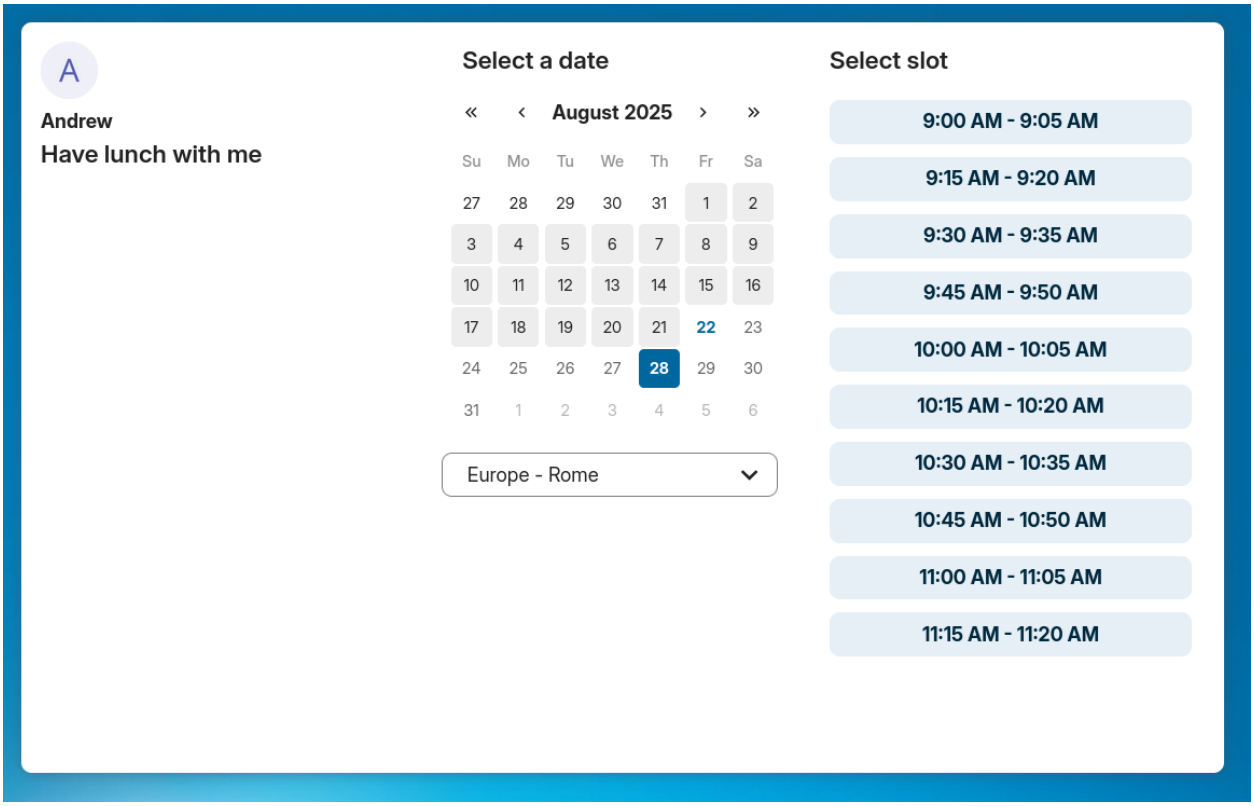
Once the booking is done, the organizer will find an event in their calendar with the appointment details and the *attendee*.

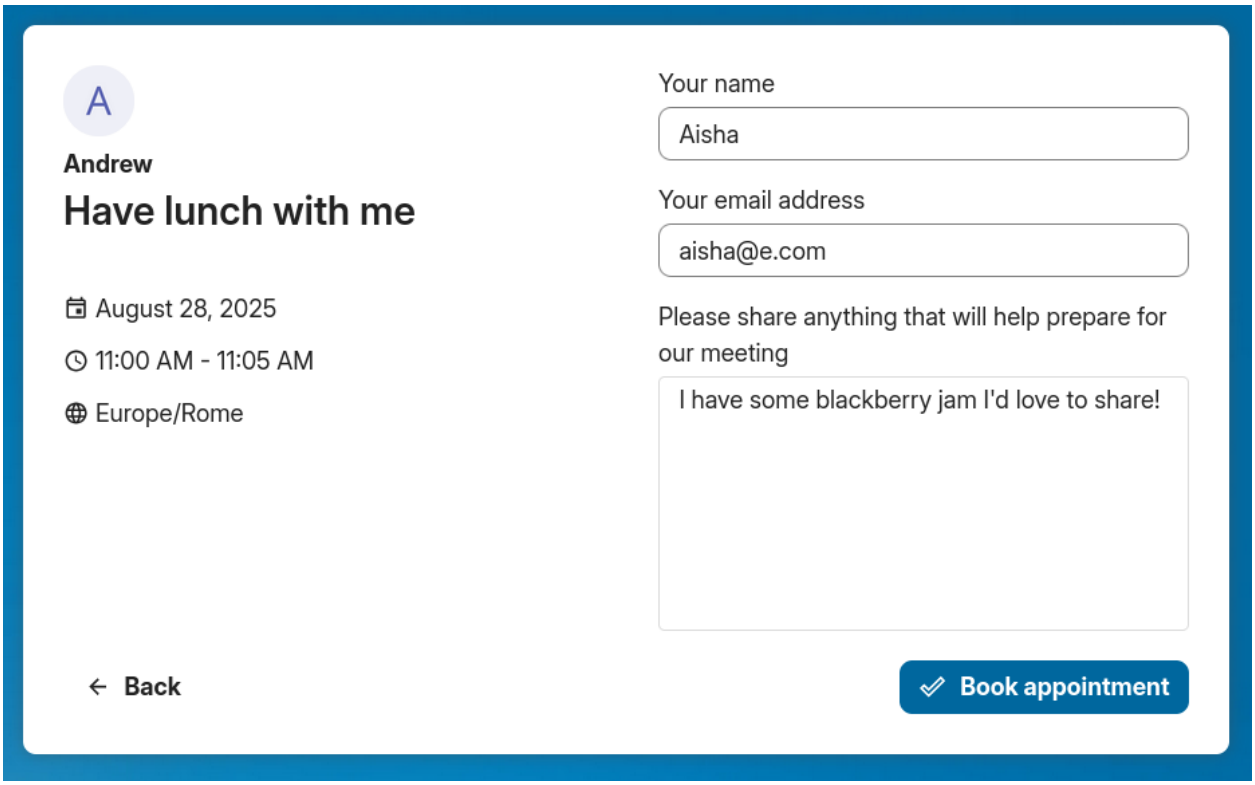
If the appointment has the setting “Add time before event” or “Add time after the event” enabled, they will show up as separate events in the calendar for the organizer.

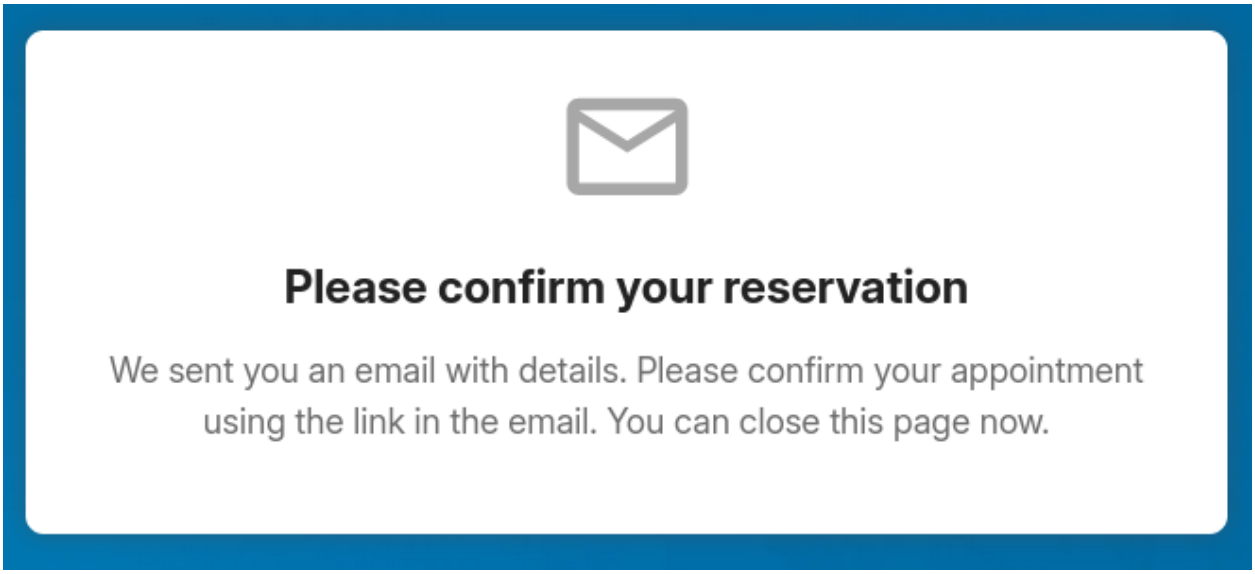

Pick time ranges where appointments are allowed
Sunday
12 : 00 PM
to
05 : 00 PM
Monday
12 : 00 PM
to
03 : 00 PM
Tuesday
12 : 00 PM
to
03 : 00 PM
Wednesday
12 : 00 PM
to
03 : 00 PM
Thursday
12 : 00 PM
to
03 : 00 PM
Friday
12 : 00 PM
to
03 : 00 PM
Saturday
No times set


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




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.

#### 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.

## 4.3 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.

### 4.3.1 Managing your mail account

#### Switch layout

Added in version 3.6.

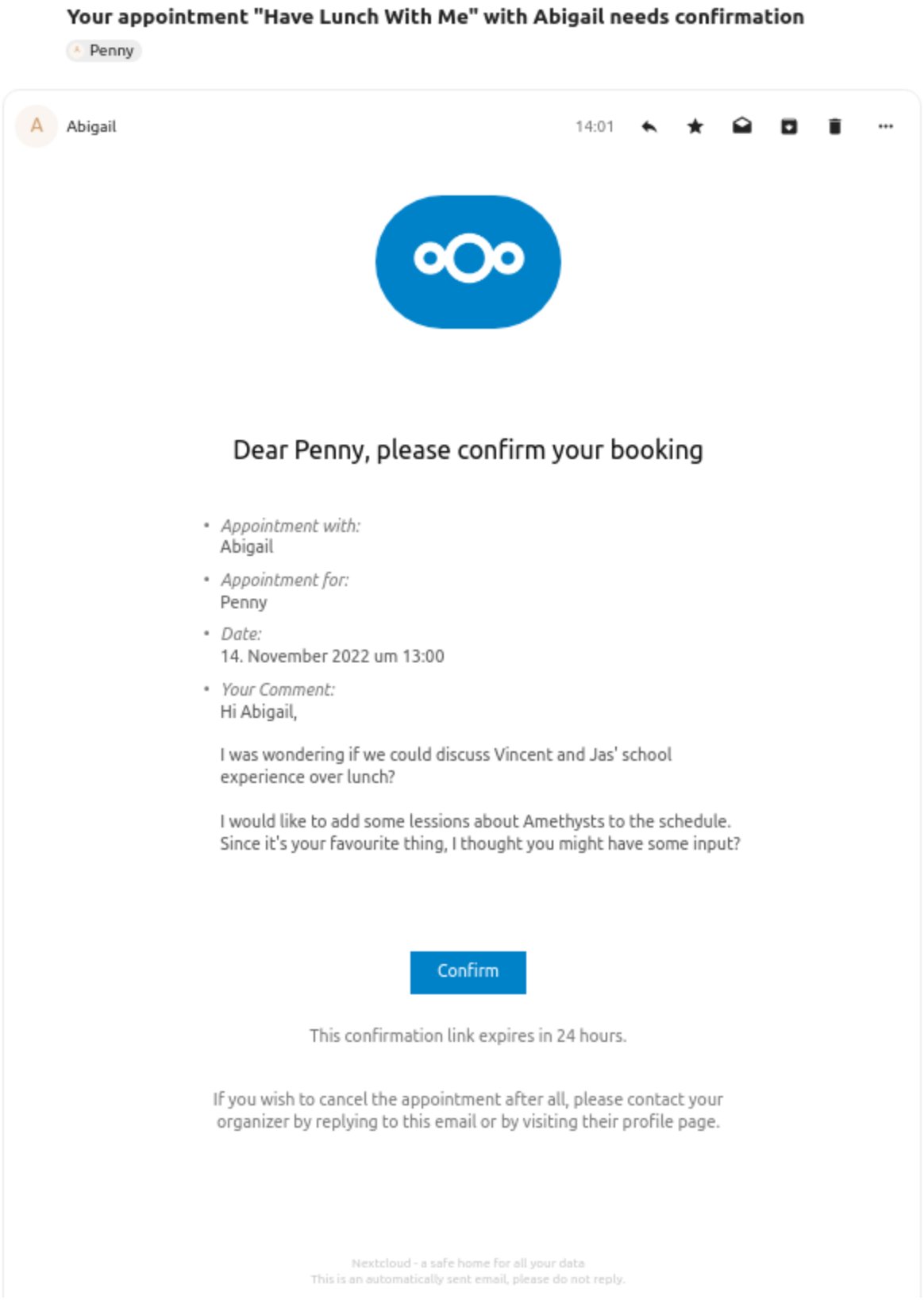
1. Visit mail settings
2. Choose between *List*, *Vertical split* and *Horizontal split*

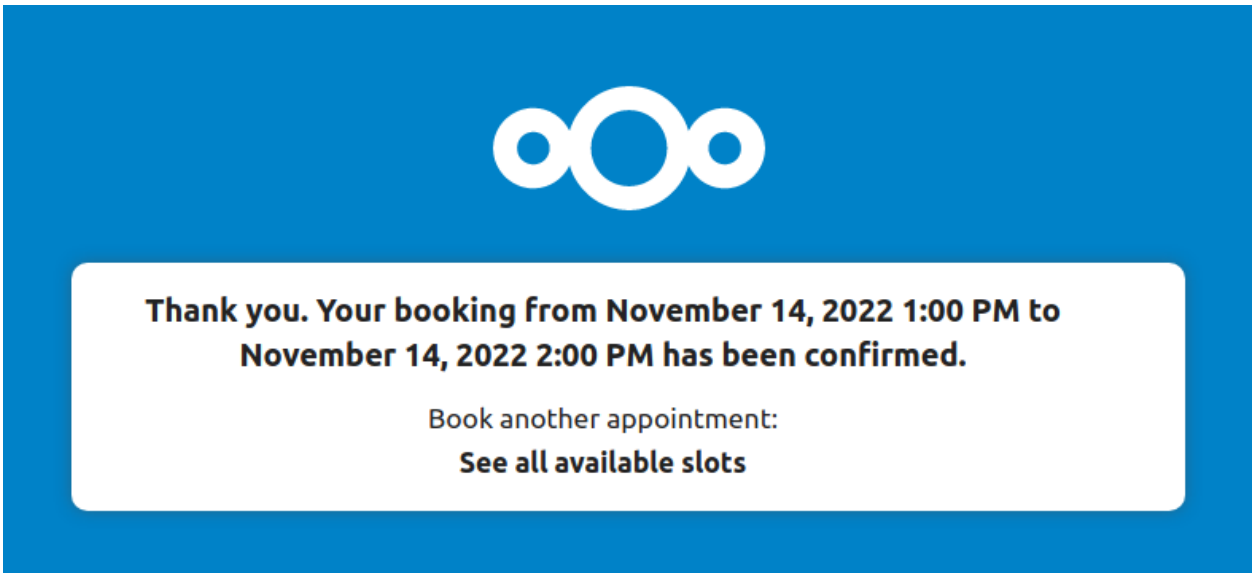
#### Message Display / Operation Mode

Added in version 5.2.

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 mailbox 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


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.




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 mailbox 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)

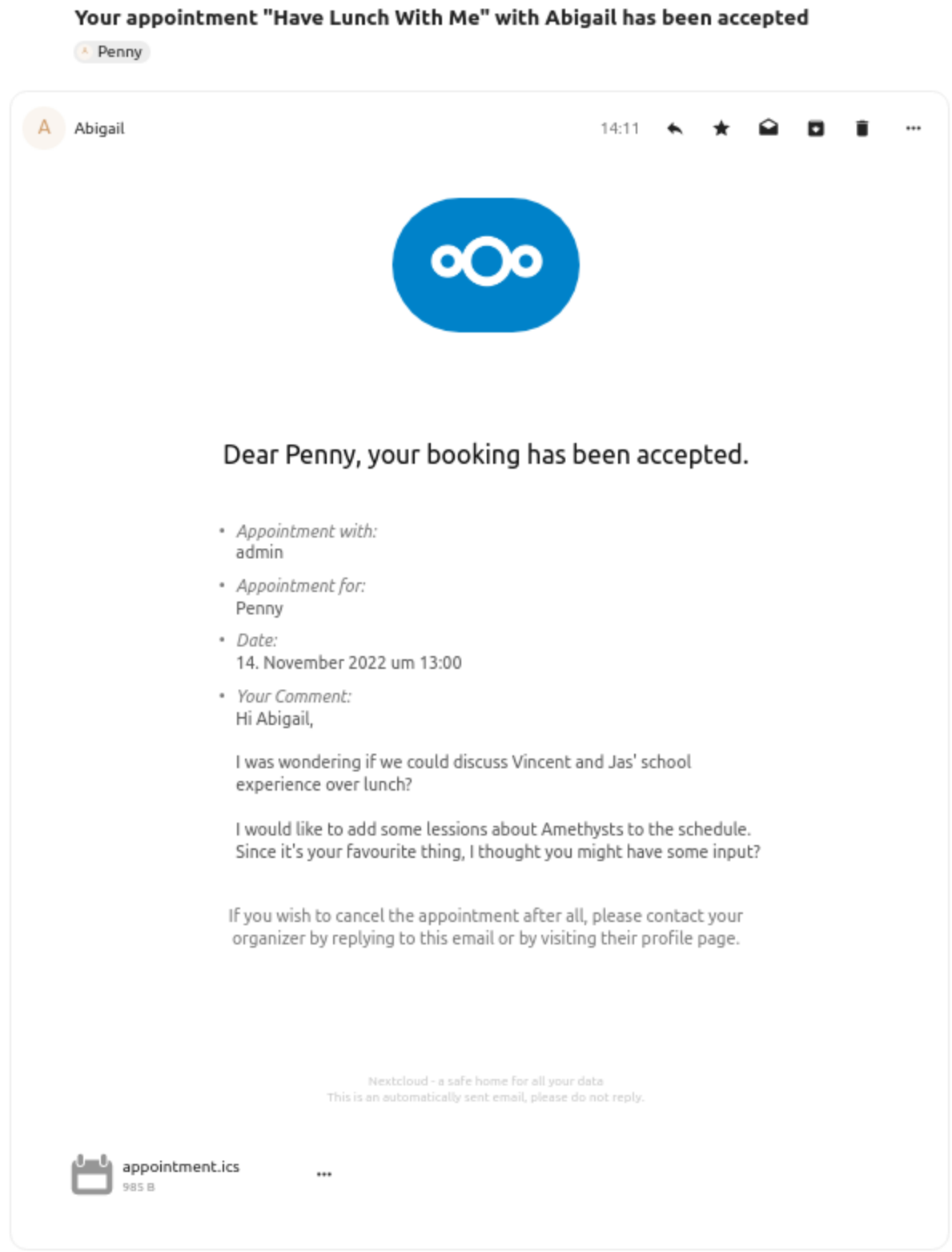
### Change sort order

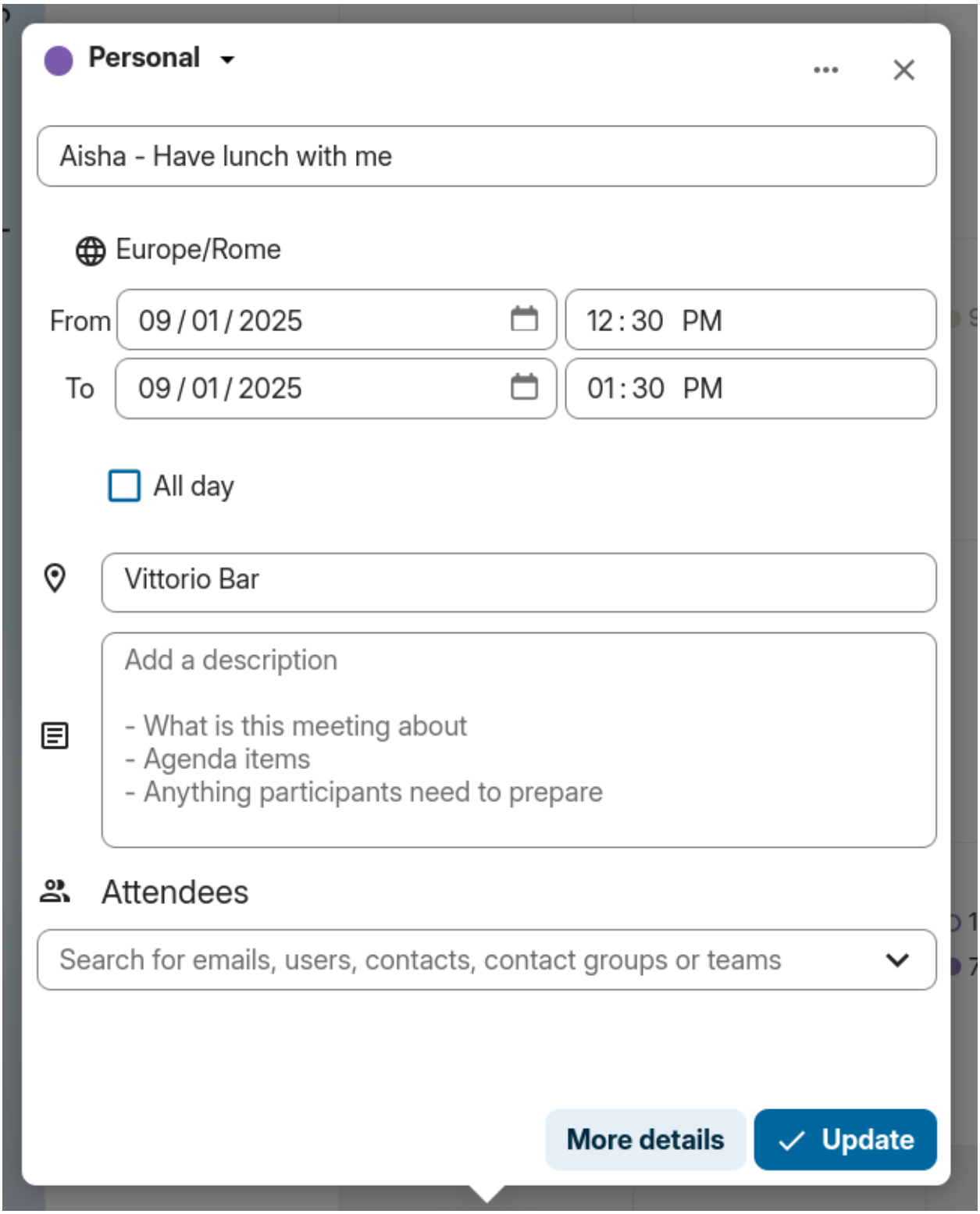
Added in version 3.5.

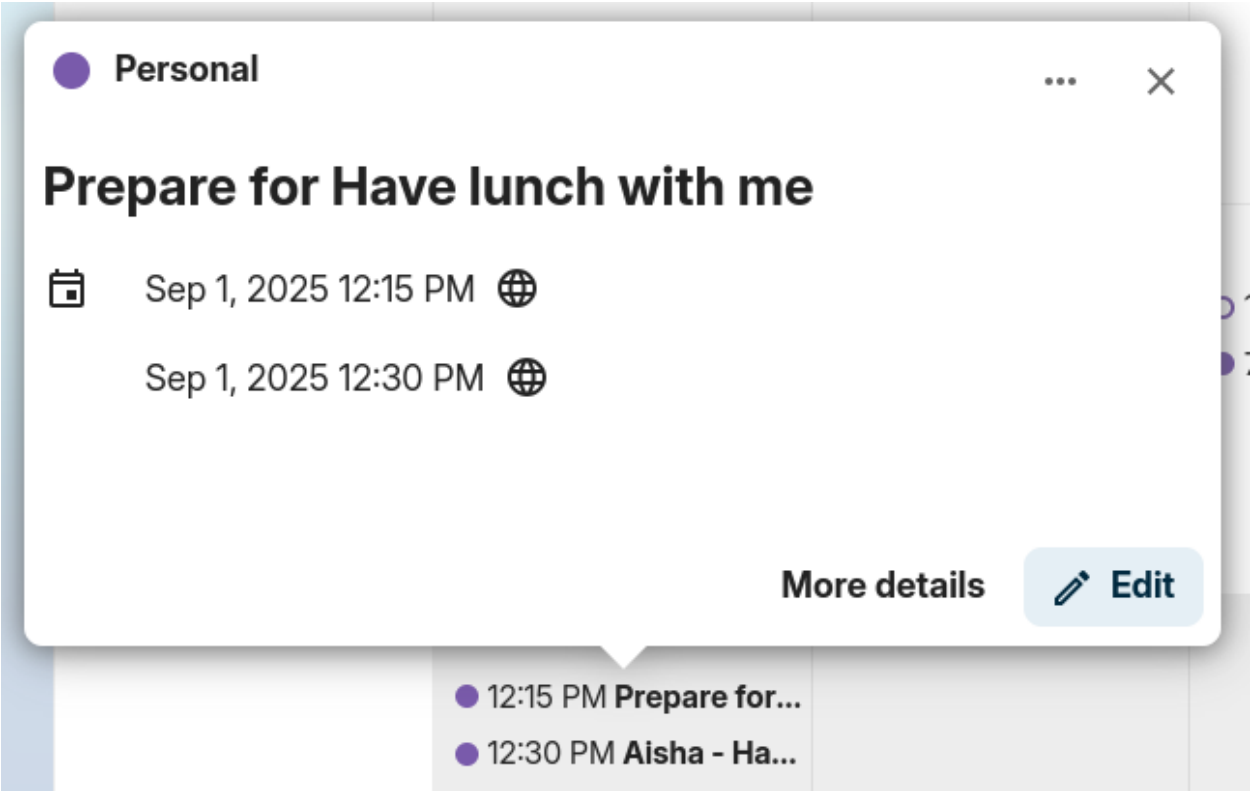
1. Visit mail settings
2. Go to *Sorting*
3. You can choose *Oldest* or *Newest* mail first

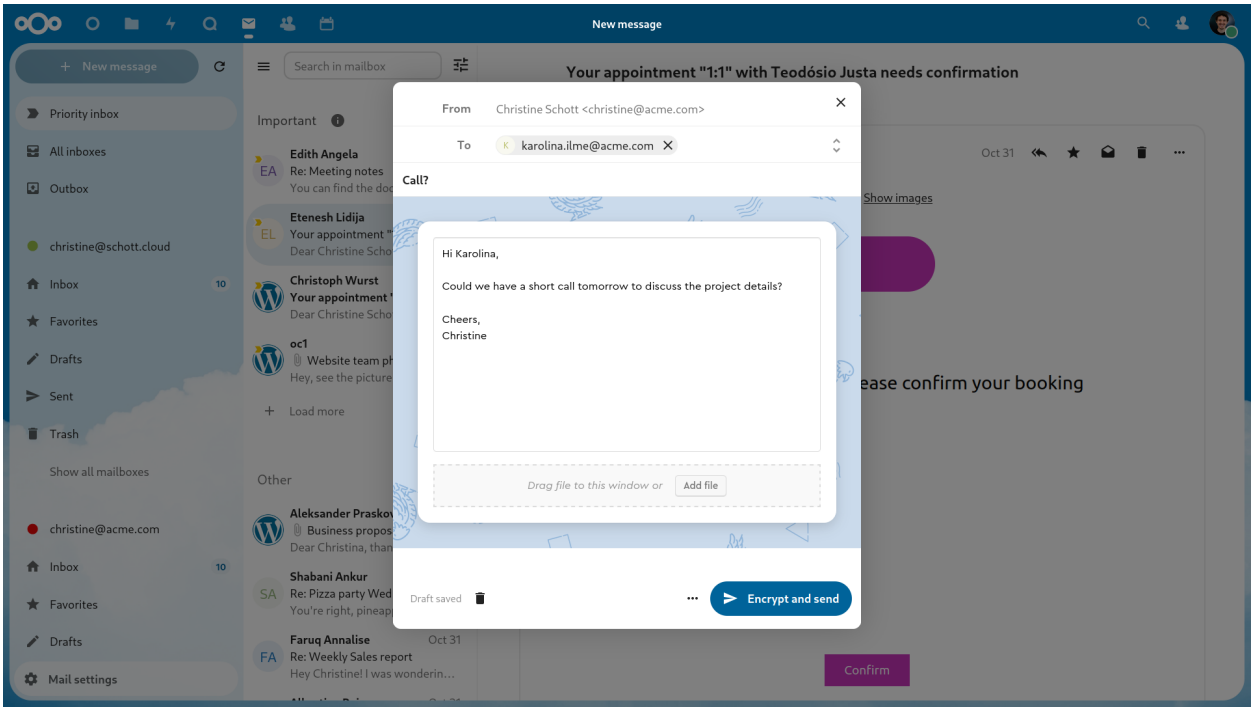
**Note**

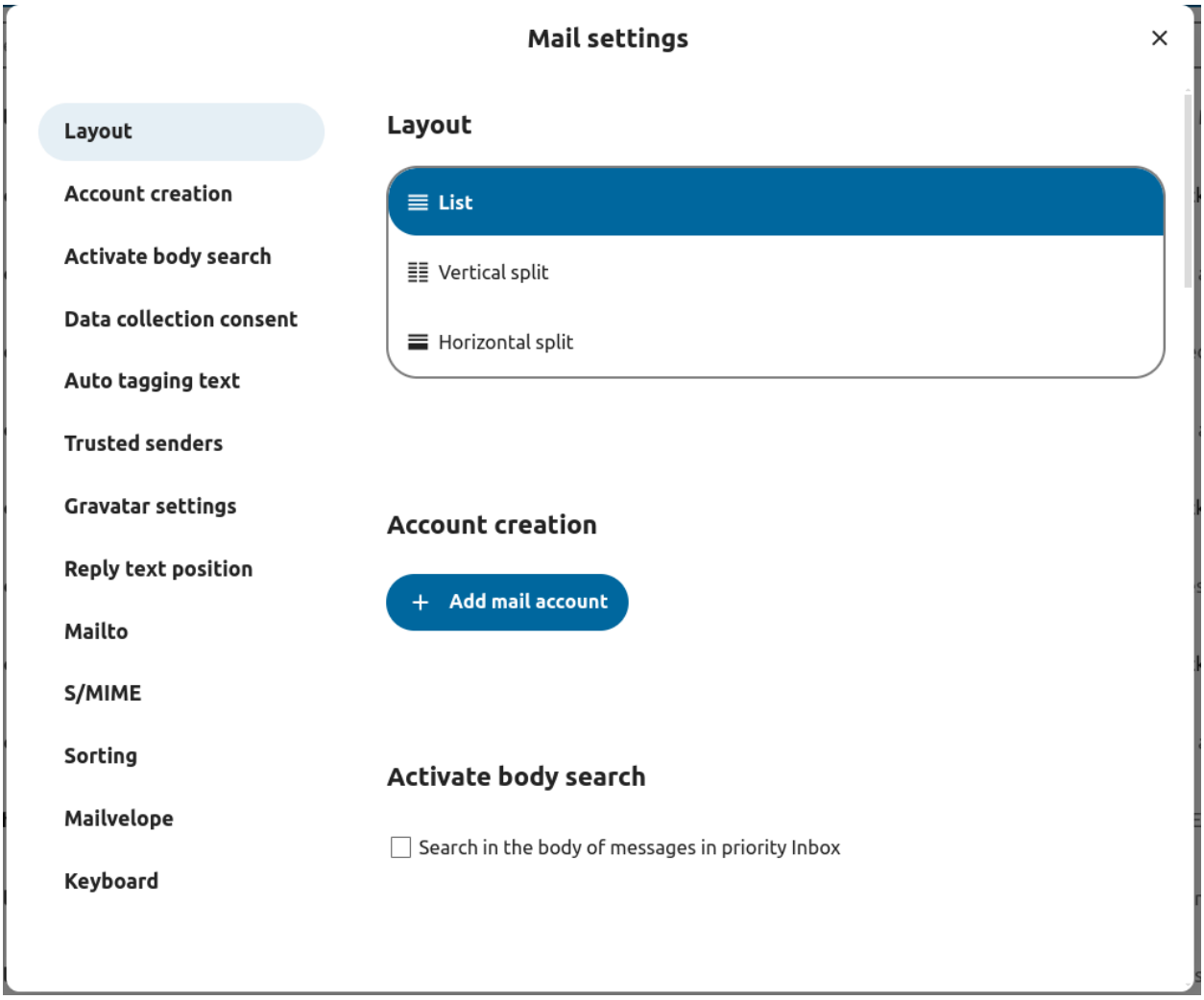
This change will apply across all your accounts and mailboxes

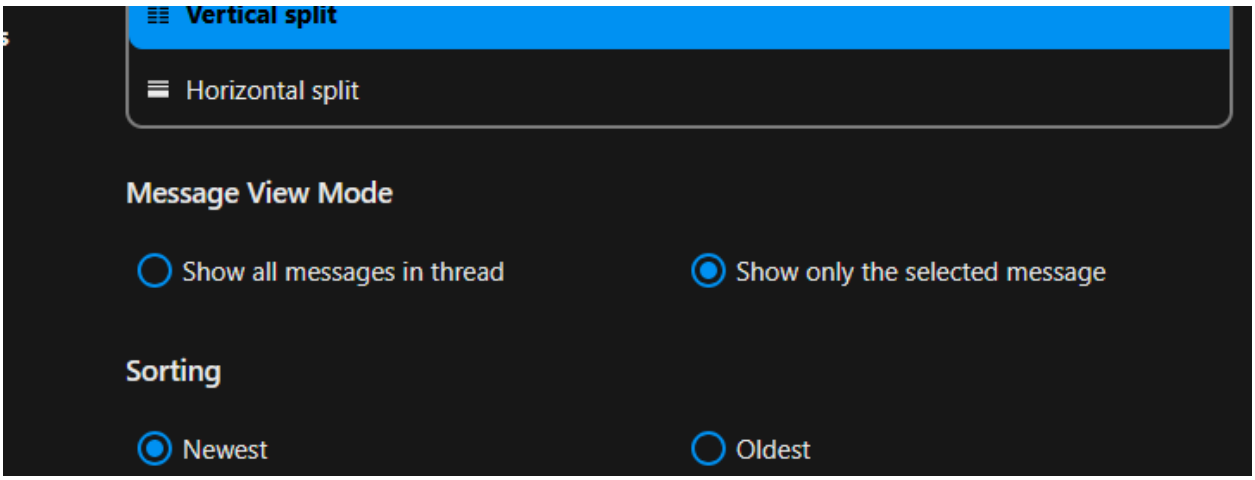

Your appointment "Have Lunch With Me" with Abigail has been accepted
Penny
A
Abigail
14:11
Dear Penny, your booking has been accepted.
Appointment with:
admin
Appointment for:
Penny
Date:
14. November 2022 um 13:00
Your Comment:
Hi Abigail,
I was wondering if we could discuss Vincent and Jas' school 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...


New message
Your appointment "1:1" with Teodósio Justa needs confirmation
From
Christine Schott <christine@acme.com>
To
karolina.ilme@acme.com
Call?
Hi Karolina,
Could we have a short call tomorrow to discuss the project details?
Cheers,
Christine
Drag file to this window or
Add file
Draft saved
Encrypt and send
Show images
Confirm


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


Vertical split
Horizontal split
Message View Mode
Show all messages in thread
Show only the selected message
Sorting
Newest
Oldest

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

### Scheduled messages

1. Click new message button on top left of your screen
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.

### 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.

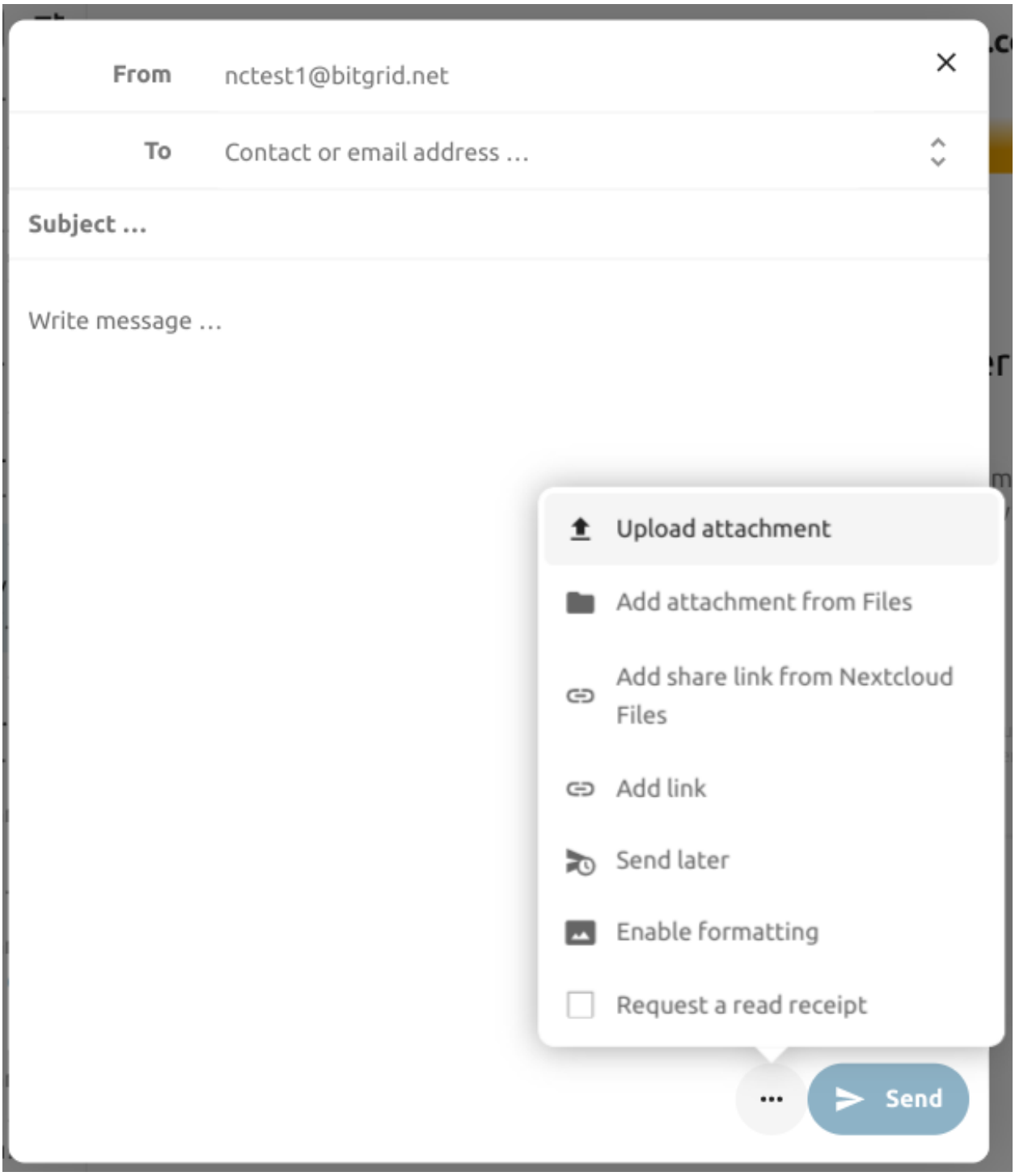
Mail can move a message to a different folder when it is marked as junk.

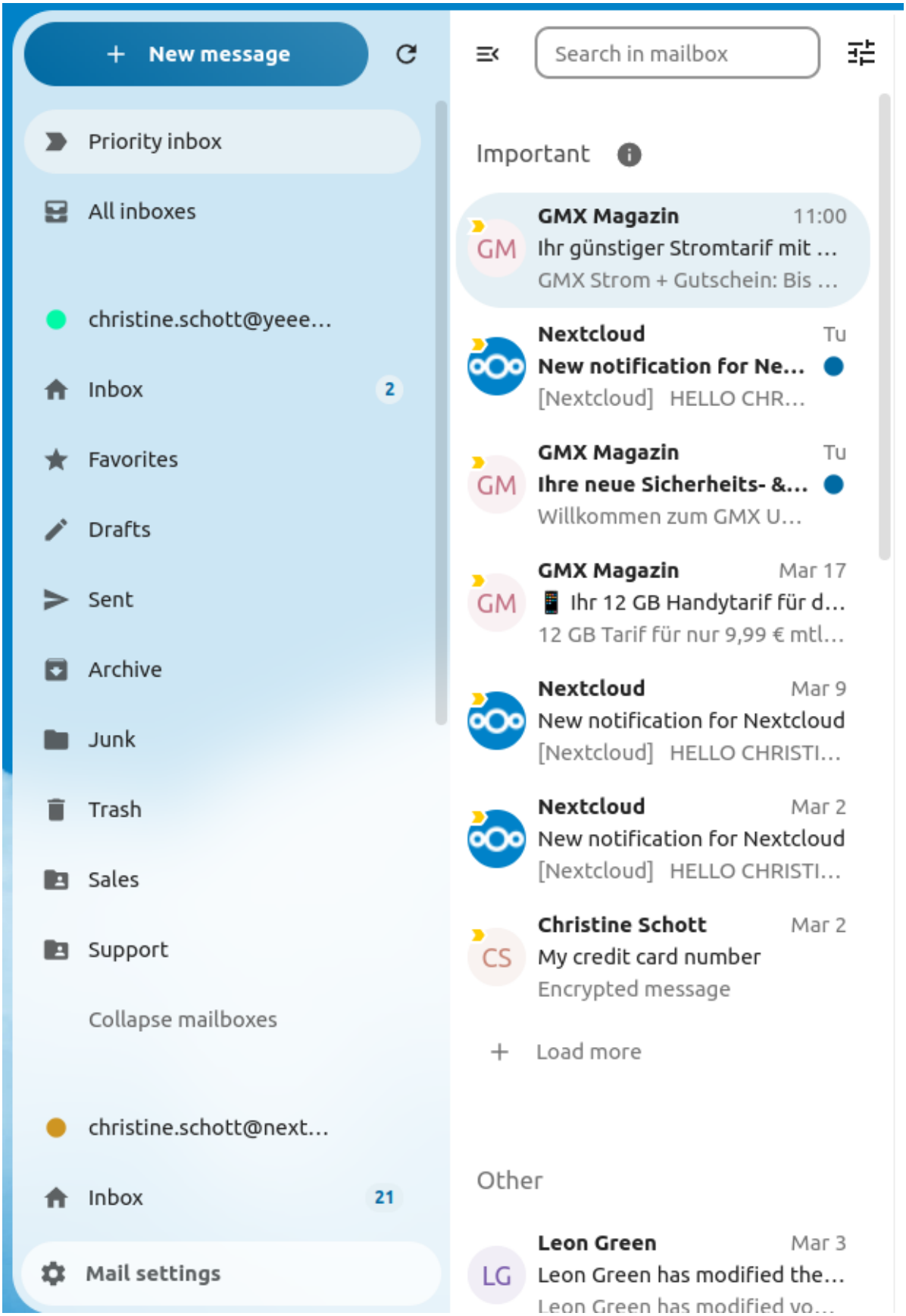
1) Visit Account settings
2) Go to Default folders
3) Check that a folder is selected for the junk messages
4) Go to Junk settings
5) Click Move messages to Junk folder

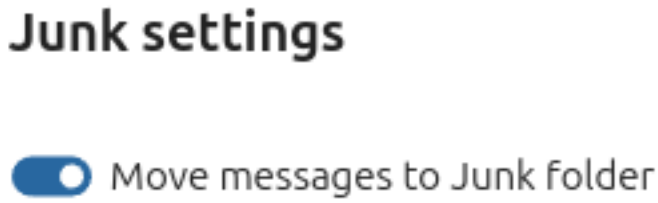
### Search in mailbox

Added in version 2.1.

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.


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...




### Advanced search in mailbox

Added in version 3.4.

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.

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 Mailbox search
3) Enable mail body search

> **Warning**
>
> If you want to also enable it for unified mailboxes 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 allows account delegation so that one user can send emails from the address of another.

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* mailbox.

### Automatic trash deletion

Added in version 3.4.

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

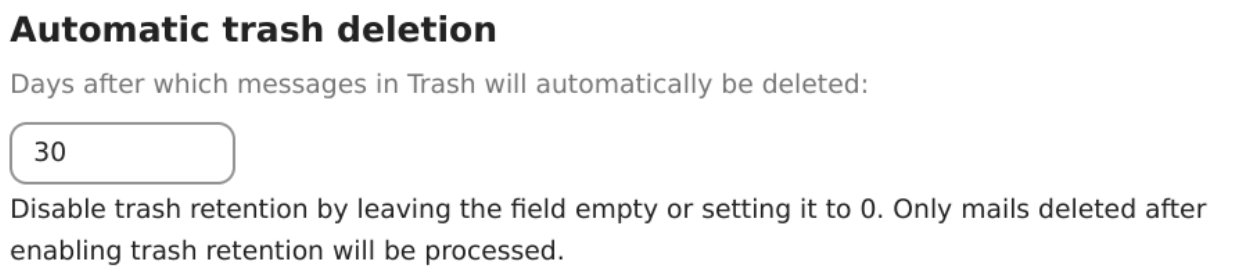
1) Visit Account settings

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.



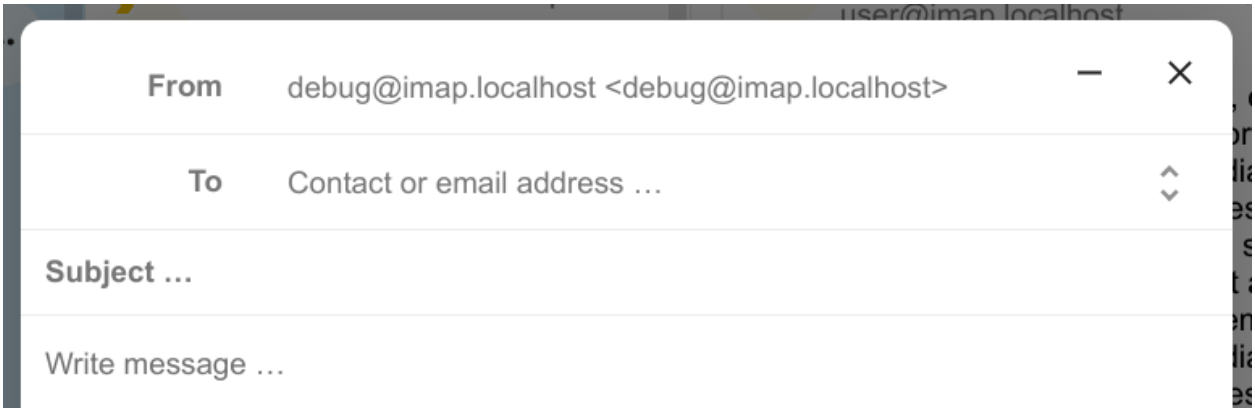

### 4.3.2 Compose messages

1. Click new message on the top left of your screen
2. Start writing your message

#### Minimize the composer modal

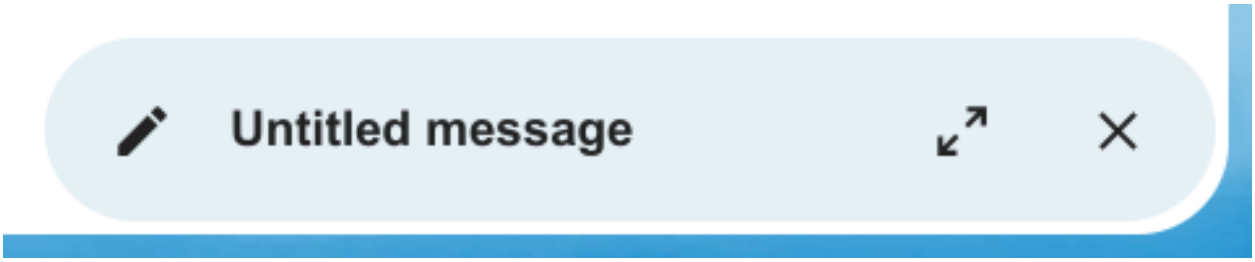
Added in version 3.2.

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 top right of the modal or click anywhere outside the modal.




You can resume your minimized message by clicking anywhere on the indicator on the bottom right of your screen.

Press close button on the modal or the indicator in the bottom right corner to stop editing a message. A draft will be saved automatically into your draft mailbox.




### 4.3.3 Recipient info on composer

Added in version 4.2.

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 top-right corner. To show the right pane again, simply click the minimize icon in the same location.

### 4.3.4 Mention contacts

Added in version 4.2.

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.

### 4.3.5 Text blocks

Added in version 5.2.

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.

### 4.3.6 Outbox

When a message has been composed and the "Send" button was clicked, the message is added to the outbox which can be found in the bottom left corner 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 re- open 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" mailbox**
: The mail was sent but couldn't be copied to the "Sent" mailbox. 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 than 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.

### 4.3.7 Mailbox actions

#### Add a mailbox

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

#### Add a submailbox

1. Open the action menu of a mailbox
2. Click add submailbox

#### Shared mailbox

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

### 4.3.8 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**

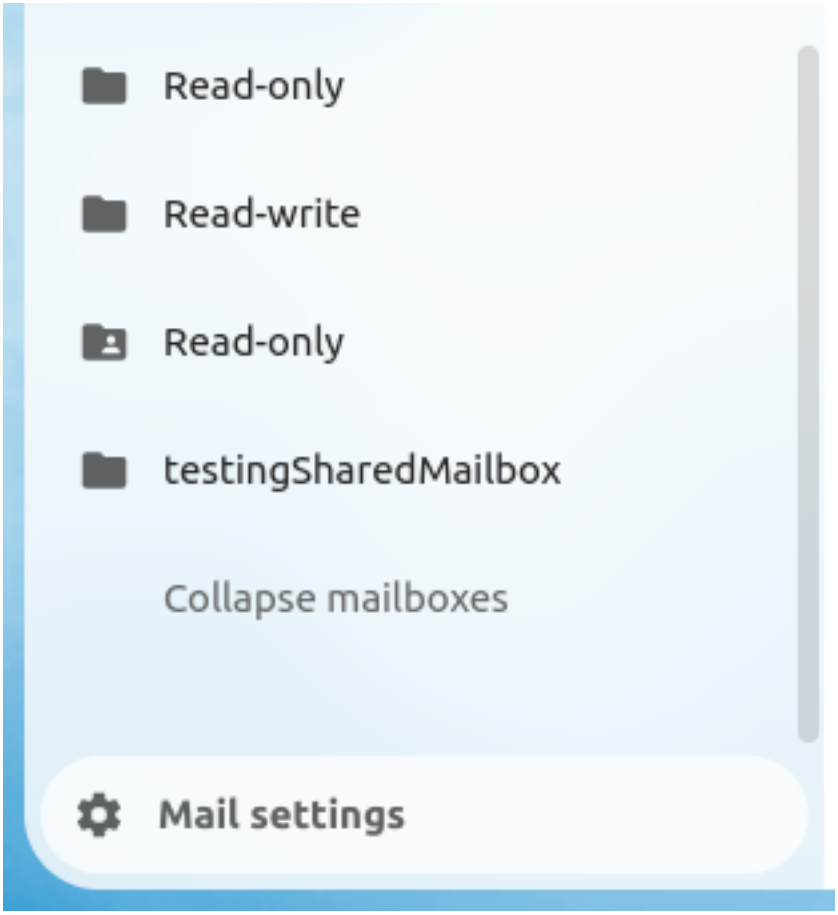
Event title and an agenda is created for you if the administrator has enabled it.

#### Create a task

Added in version 3.2.

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*


Read-only
Read-write
Read-only
testingSharedMailbox
Collapse mailboxes
Mail settings

**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.

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.

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.

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

**Note**

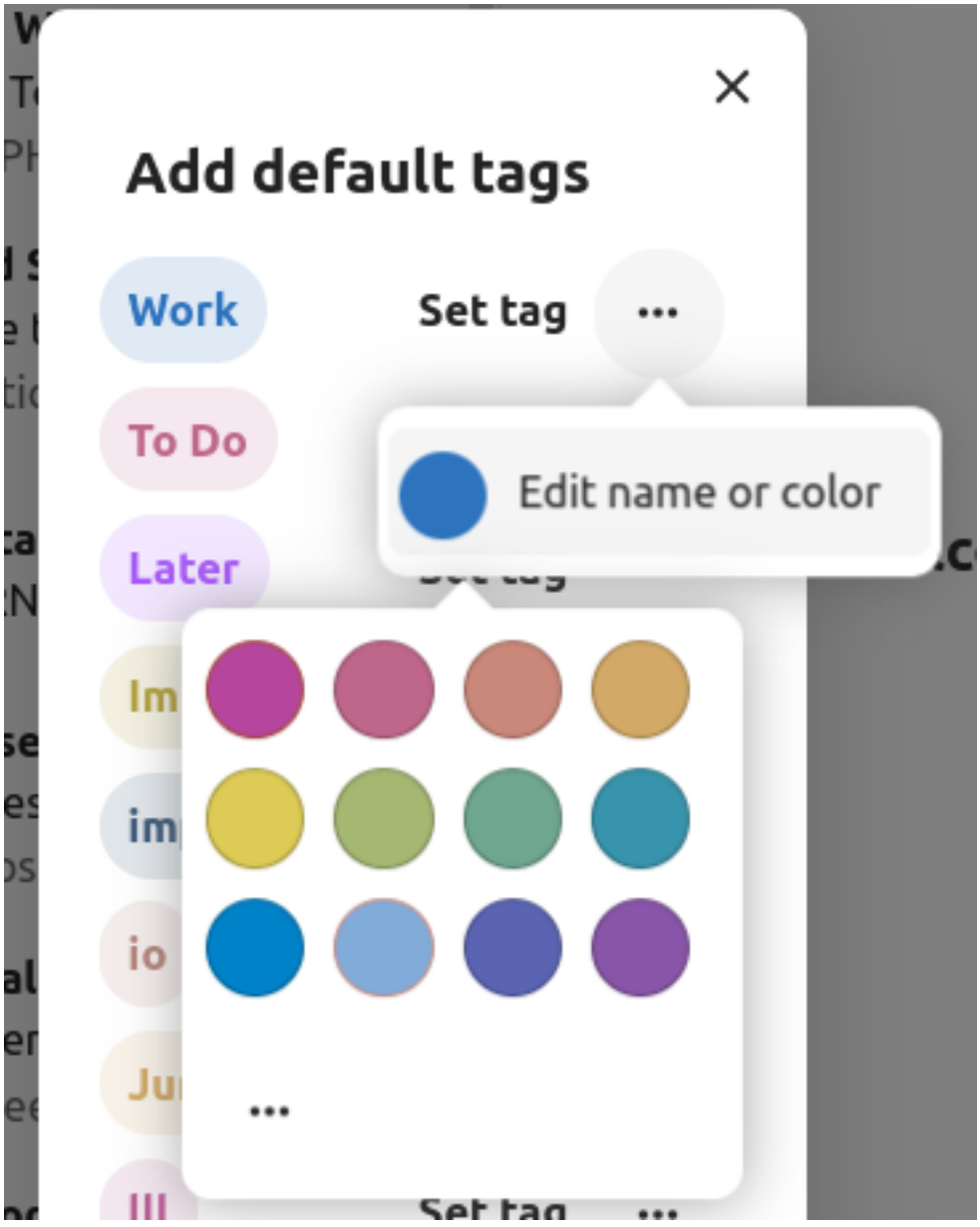
Please note that the feature has to be enabled by the administrator

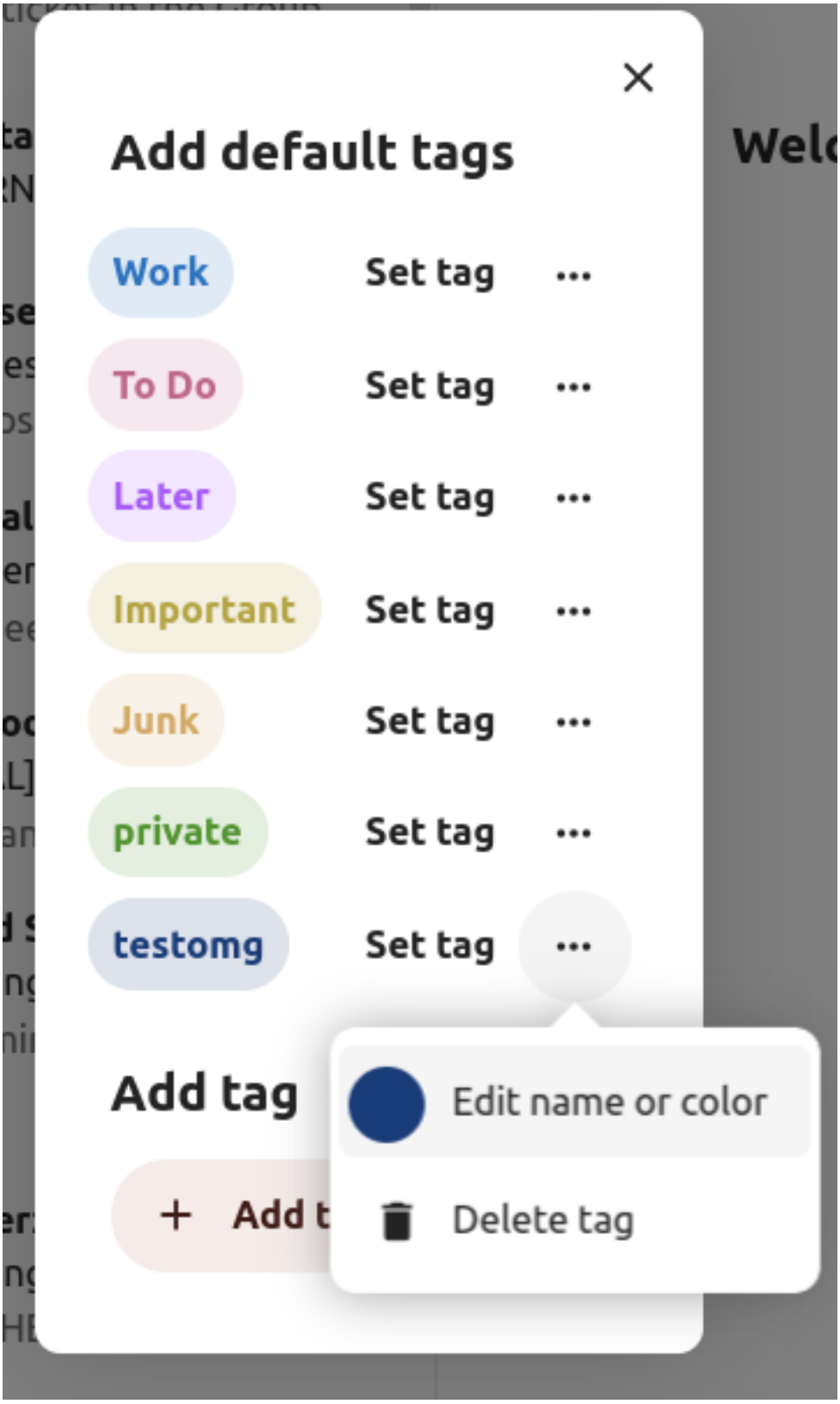
## 4.3.9 Message actions

### Unsubscribe from a mailing list

Added in version 3.1.

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.


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

### Snooze

Added in version 3.4.

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

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.

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.

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

## 4.3.10 Thread summary

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

Added in version 3.4.

> **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.

### 4.3.11 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: Autoresponder can follow system settings.

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.

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:

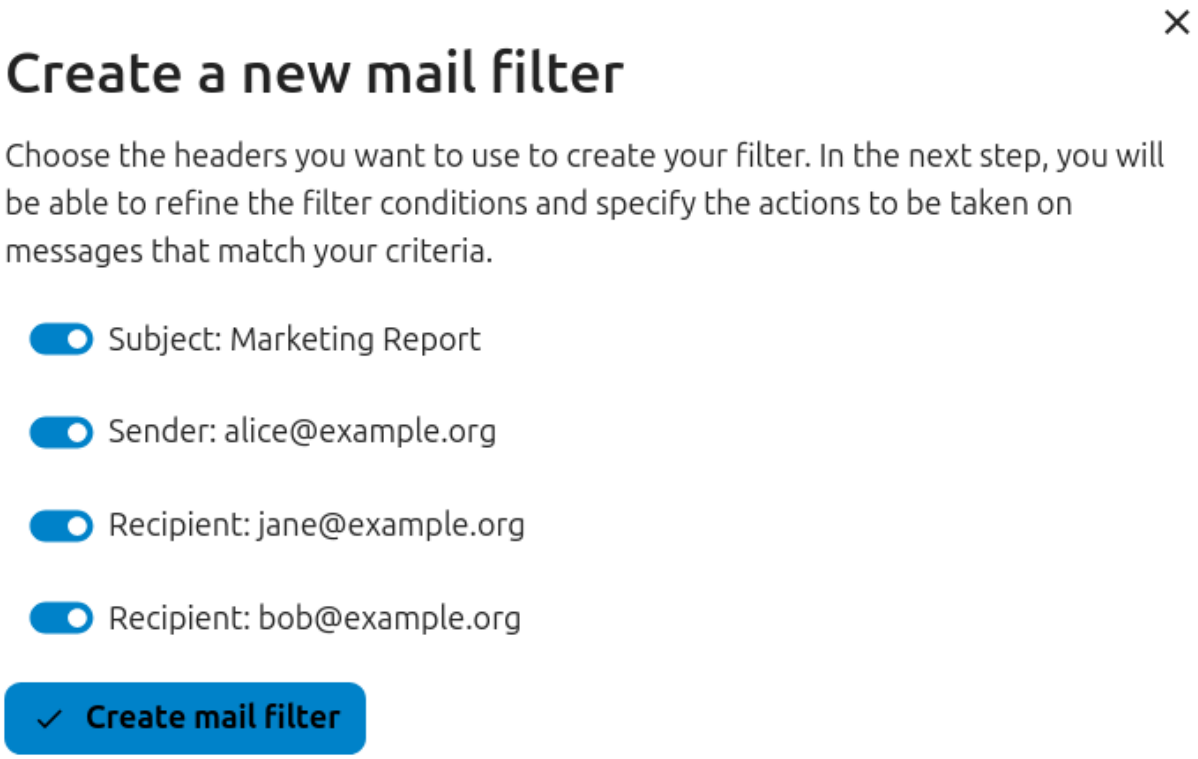
- **fileinto**: Moves the message into a specified folder.
- **addflag**: Adds a flag to the message.
- **stop**: Halts the execution of the filter script. No further filters with will be processed after this action.

#### Create a filter from a message

Added in version 5.2.

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."




### 4.3.12 Follow-up reminders

Added in version 4.0.

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.

### 4.3.13 Security

#### Phishing detection

Added in version 4.0.

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.

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

### 4.3.14 Dashboard integration

Added in version 1.8.

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.

## 4.4 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) And 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.

## 4.5 Synchronizing with Android

### 4.5.1 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.

### 4.5.2 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**. **Base URL:** URL of your Nextcloud instance (e.g. `https://sub.example.com/remote.php/dav`) and your credentials.
5. For the **Contact Group Method:** choose the option `Groups are per-contact categories`.
6. Click **Connect**.
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.

**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.

## 4.6 Synchronizing with iOS

### 4.6.1 Calendar

1. Open the settings application.
2. Select Apps.
3. Select Calendar.
4. Select Calendar Accounts.
5. Select Add Account.
6. Select Other as account type.
7. Select Add CalDAV account.
8. For server, type the domain name of your server i.e. `example.com`.
9. Enter your user name and password.
10. Select Next.
11. Open Advanced Settings

12. For server, type the domain name of your server and username, i.e., `example.com/remote.php/dav/principals/users/username/`.
13. Close Advanced Settings

Your calendar will now be visible in the Calendar application.

**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).

### 4.6.2 Contacts

1. Open the settings application.
2. Select Apps.
3. Select Contacts.
4. Select Contacts Accounts.
5. Select Add Account.
6. Select Other as account type.
7. Select Add CardDAV account.
8. For server, type the domain name of your server i.e. `example.com`.
9. Enter your user name and password.
10. Select Next.

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).

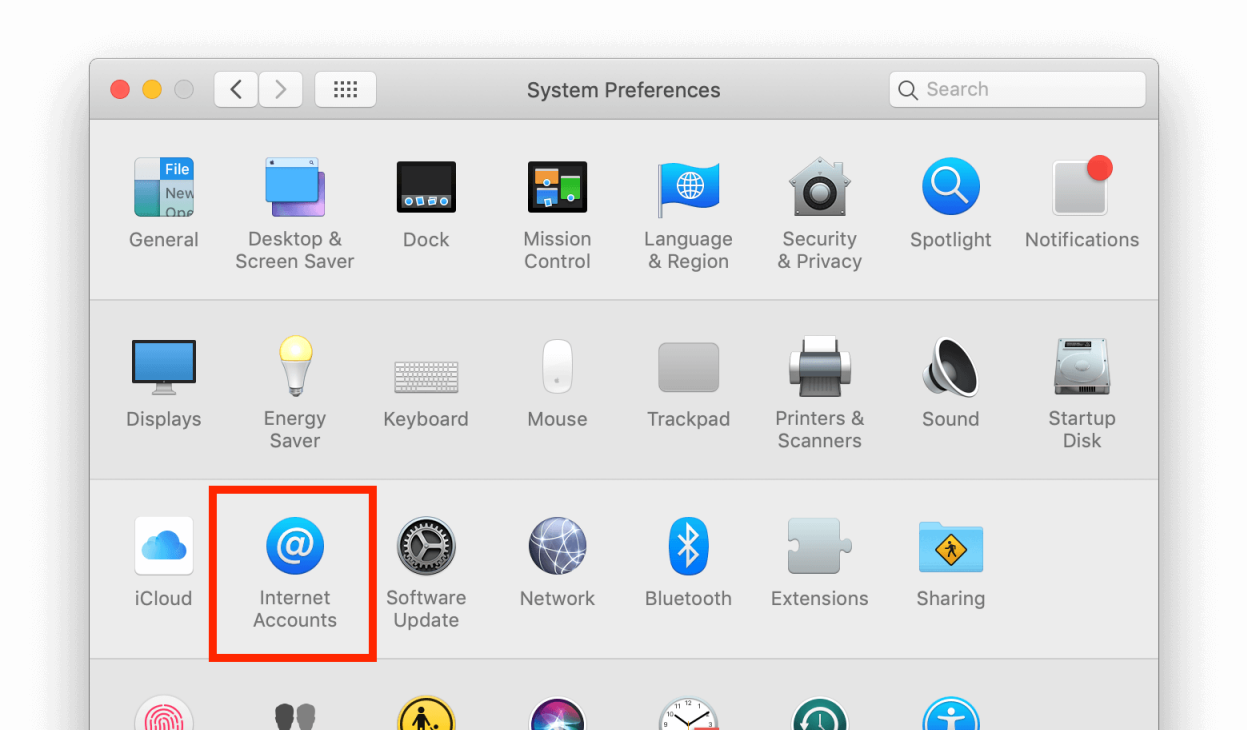
If it's still not working, have a look at Troubleshooting Contacts & Calendar or Troubleshooting Service Discovery.

## 4.7 Synchronizing with macOS

### 4.7.1 Setup your Accounts

In the following steps you will add your server resources for **CalDAV** (Calendar) and **CardDAV** (Contacts) to your Nextcloud.

1. Open the **system preferences** of your macOS device.
2. Navigate to **Internet Accounts**:




3. Click on **Add Other Account…** and click on **CalDAV Account** for Calendar or **CardDAV Account** for Contacts:

> **Note**
>
> You can not setup Calendar/Contacts together. You need to setup them in **separate accounts**.

4. Select **Manual** as Account-Type and type in your respective credentials:

   **Username**: Your Nextcloud username or email

   **Password**: Your generated app-password/token (*Learn more*).

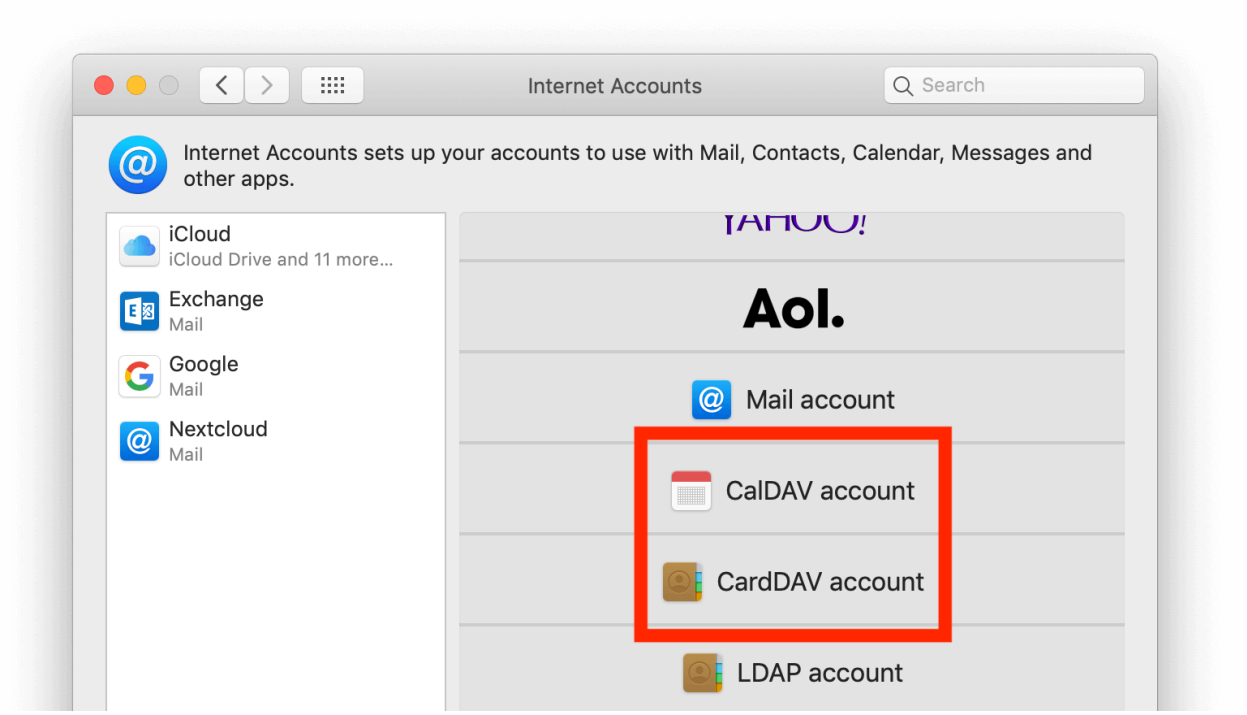
   **Server Address**: URL of your Nextcloud server (e.g. `https://cloud.example.com`)

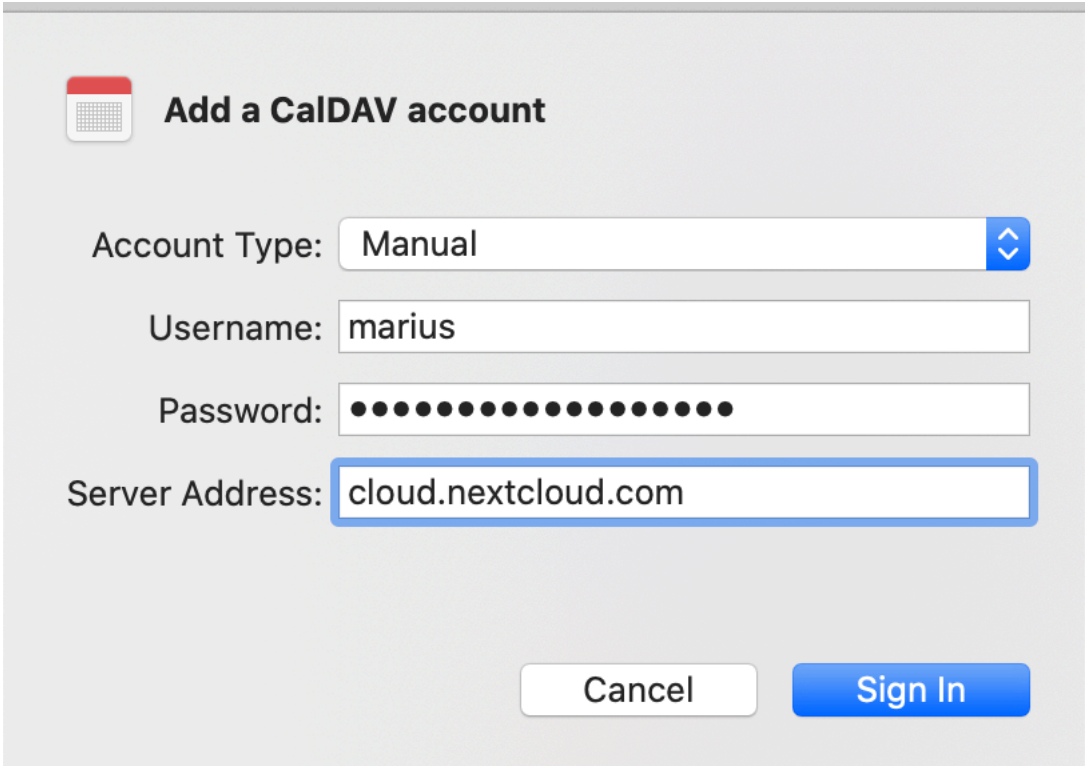
5. Click on **Sign In**.

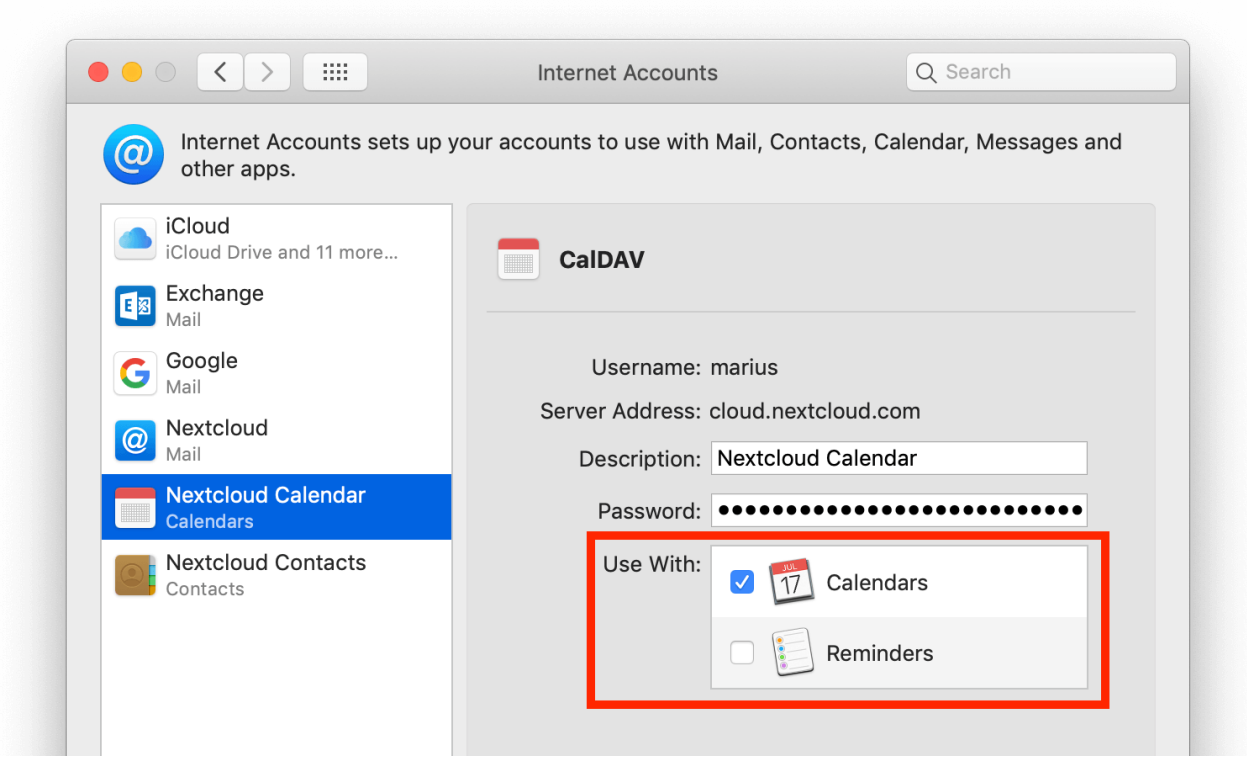
For **CalDAV (Calendar)**: You can now select, with which applications you want to use this resource. In the most cases, this will be the "Calendar" application, sometimes you may also want to use it for your **Tasks and reminders**.

### 4.7.2 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.


Internet Accounts
Search
Internet Accounts sets up your accounts to use with Mail, Contacts, Calendar, Messages and other apps.
iCloud
iCloud Drive and 11 more...
Exchange
Mail
Google
Mail
Nextcloud
Mail
Aol.
Mail account
CalDAV account
CardDAV account
LDAP account


Add a CalDAV account
Account Type:
Manual
Username:
marius
Password:
Server Address:
cloud.nextcloud.com
Cancel
Sign In




## 4.8 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.

### 4.8.1 Recommended method

Since Thunderbird 102, the CardDAV & CalDAV protocols are natively supported.

#### Contacts

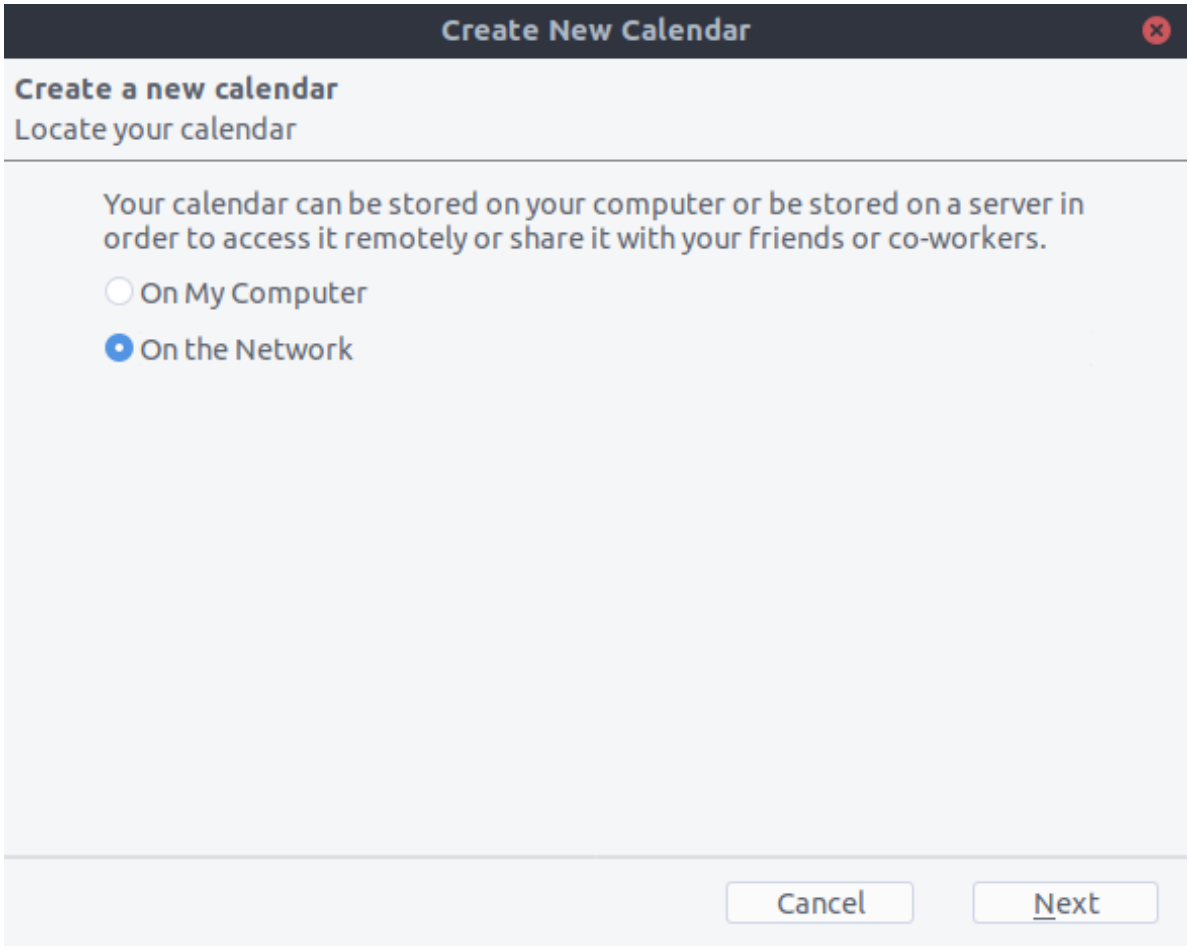
1. On the address book view, click the down arrow near **New Address Book** and choose **Add CardDAV Address Book**.
2. In the next window, type your **Username** and **Location** (Server URL).
3. The next window will ask for your username and password for this account.
4. The previous window will be 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**:



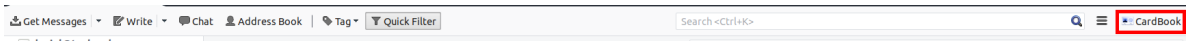

3. Type your **Username** and **Location** (Server URL), then click on **Find Calendars**.
4. Choose which calendars you want to add and click **Subscribe**

Same thing here, if you later want to add more calendars, just redo the procedure.

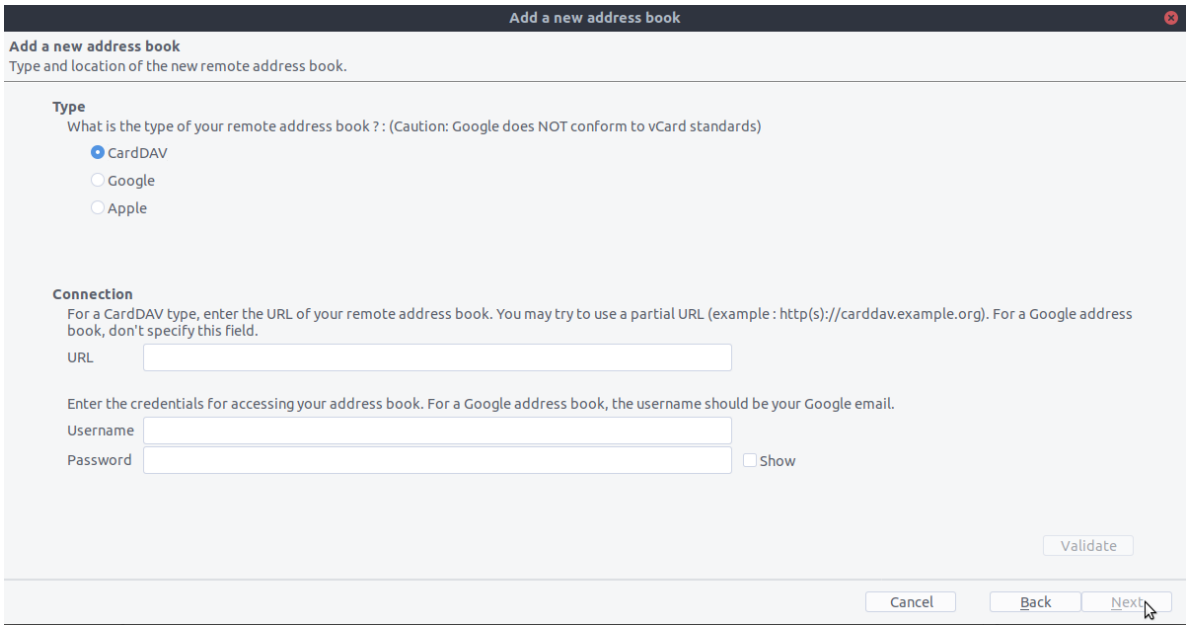
## 4.8.2 Alternative: Using the CardBook add-on (Contacts only)

CardBook is an advanced alternative to Thunderbird's address book, which supports CardDAV.

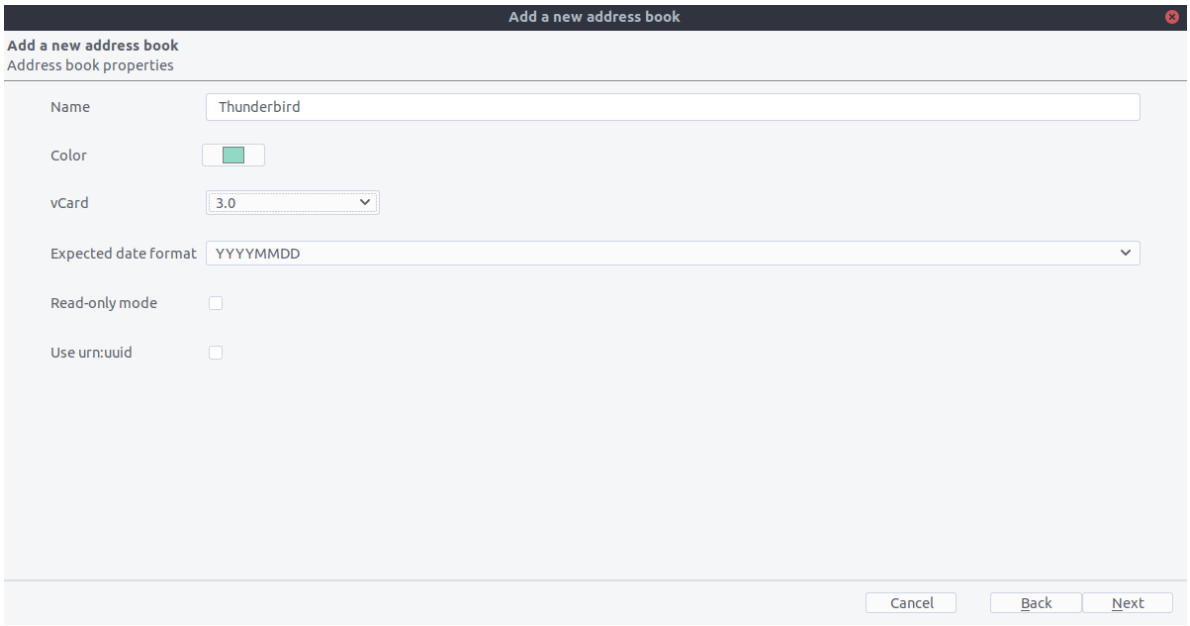
1. Click the CardBook icon in the upper right corner of Thunderbird:



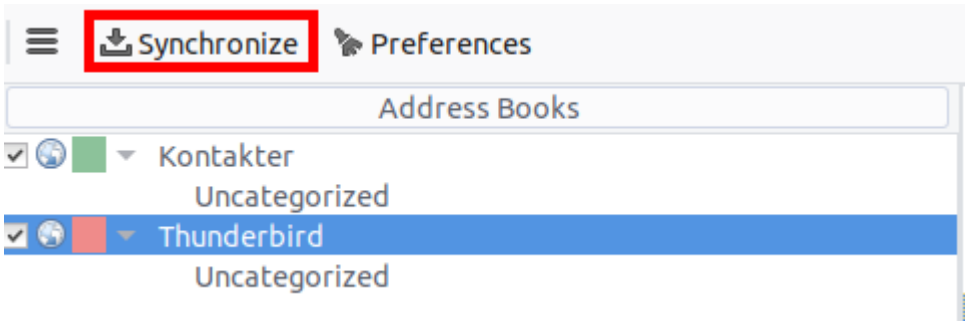

2. In CardBook:
   - Go to Address book > New Address book **Remote** > Next
   - Select **CardDAV**, fill in the address of your Nextcloud server, your user name and password




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 “Synchronize” in the top left corner of CardBook:



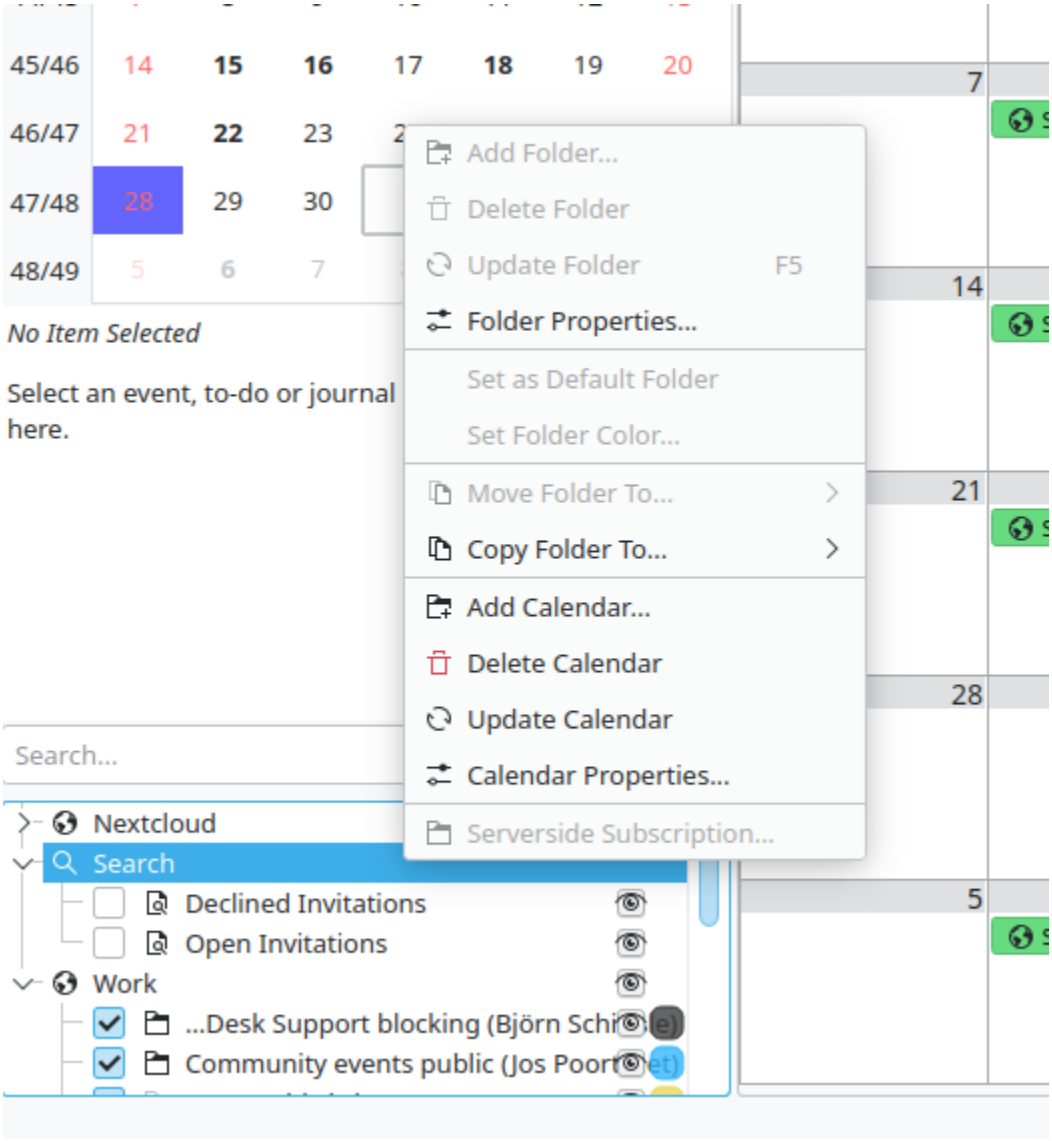

## 4.9 Synchronizing with KDE Kontact

KOrganizer, Kalendar and KAddressBook can synchronize your calendar, contacts and tasks with a Nextcloud server.

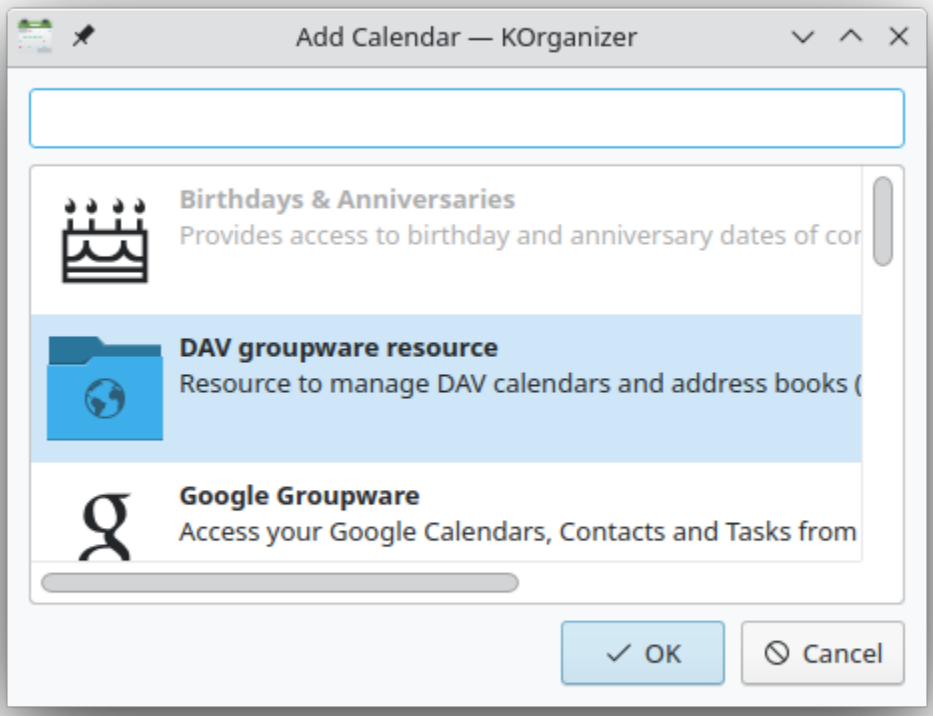
This can be done by following these steps depending on if you use KOrganizer or Kalendar:

In KOrganizer:

1. Open KOrganizer and in the calendar list (bottom left) right-click and choose `Add Calendar`:

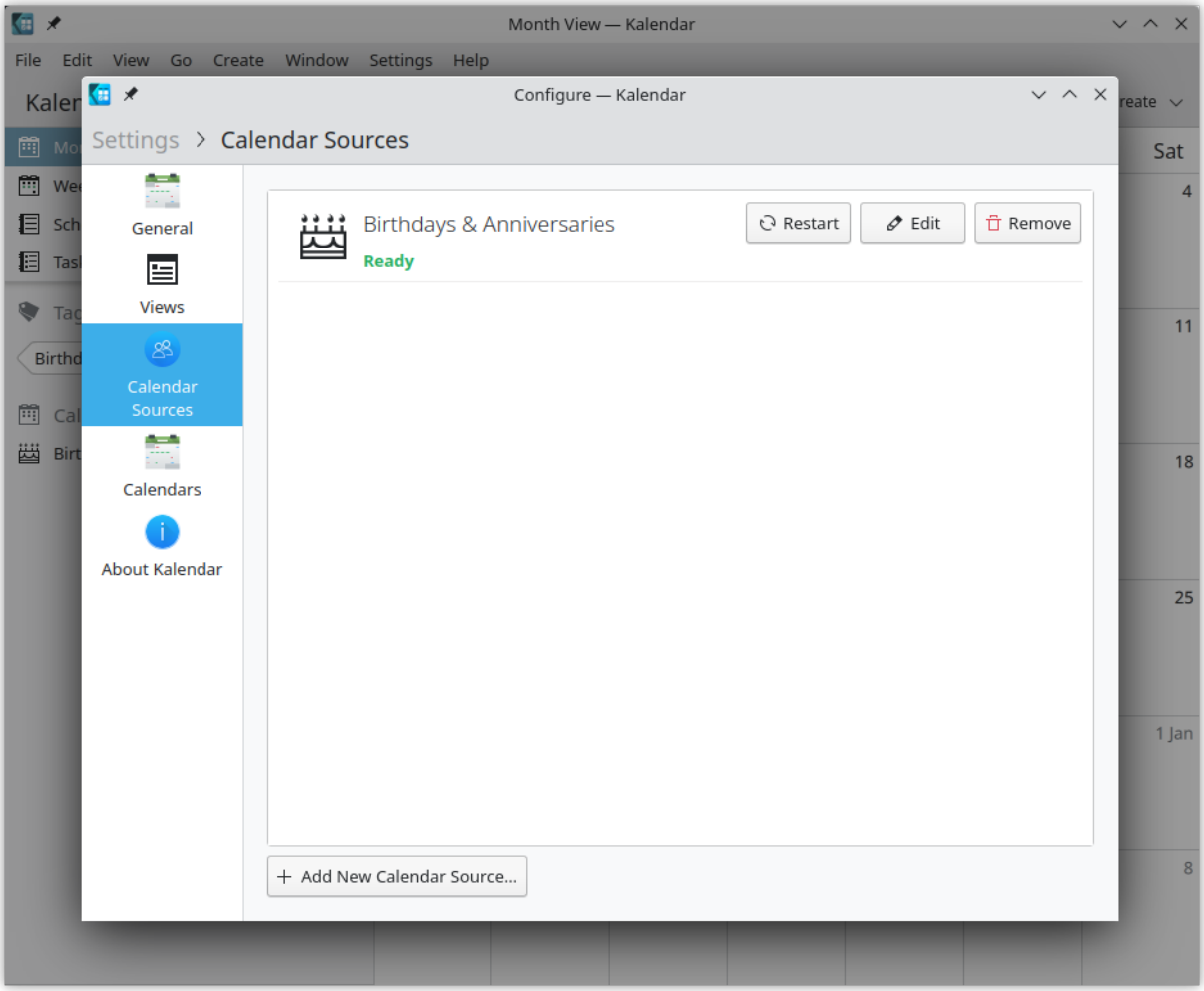



2. In the resulting list of resources, pick `DAV groupware resource`:

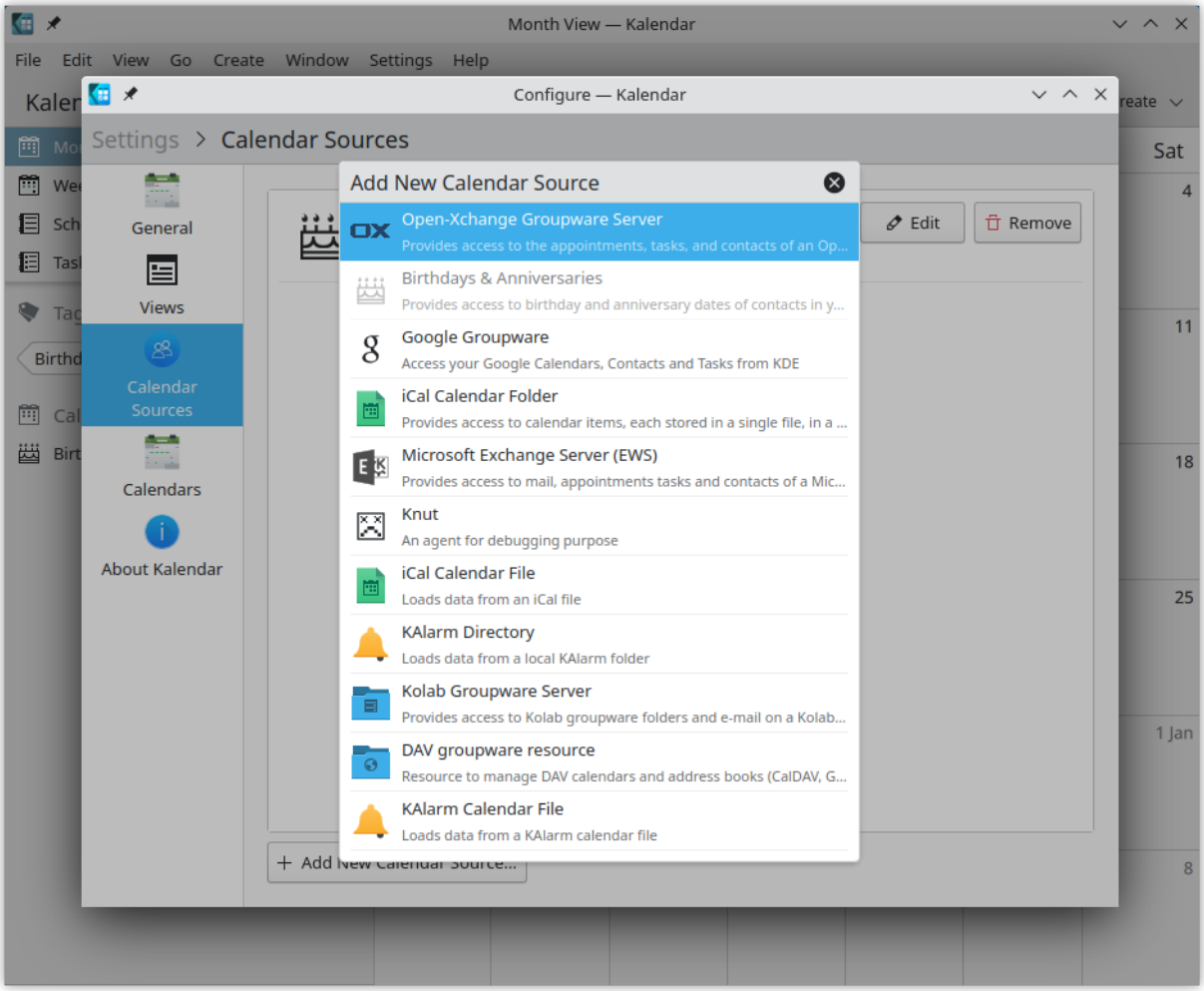



In Kalendar:

1. Open Kalendar and in the menu bar open the setting and then choose `Calendar Sources` -> `Add Calendar`:

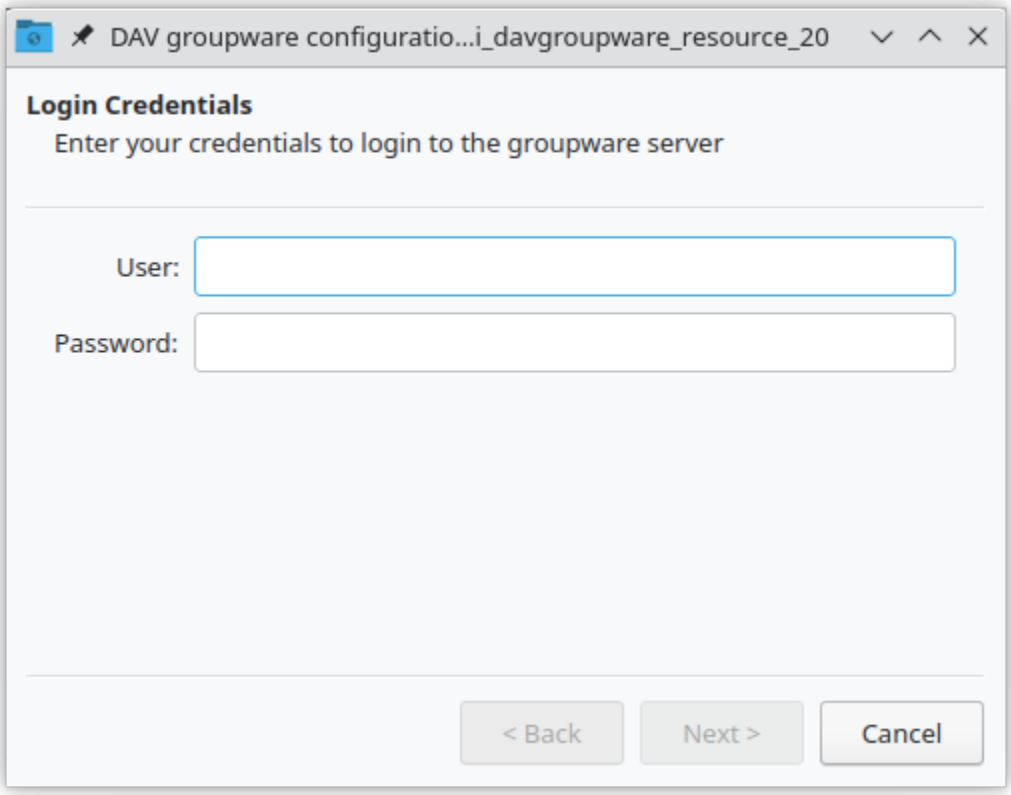



2. In the resulting list of resources, pick `DAV groupware resource`:

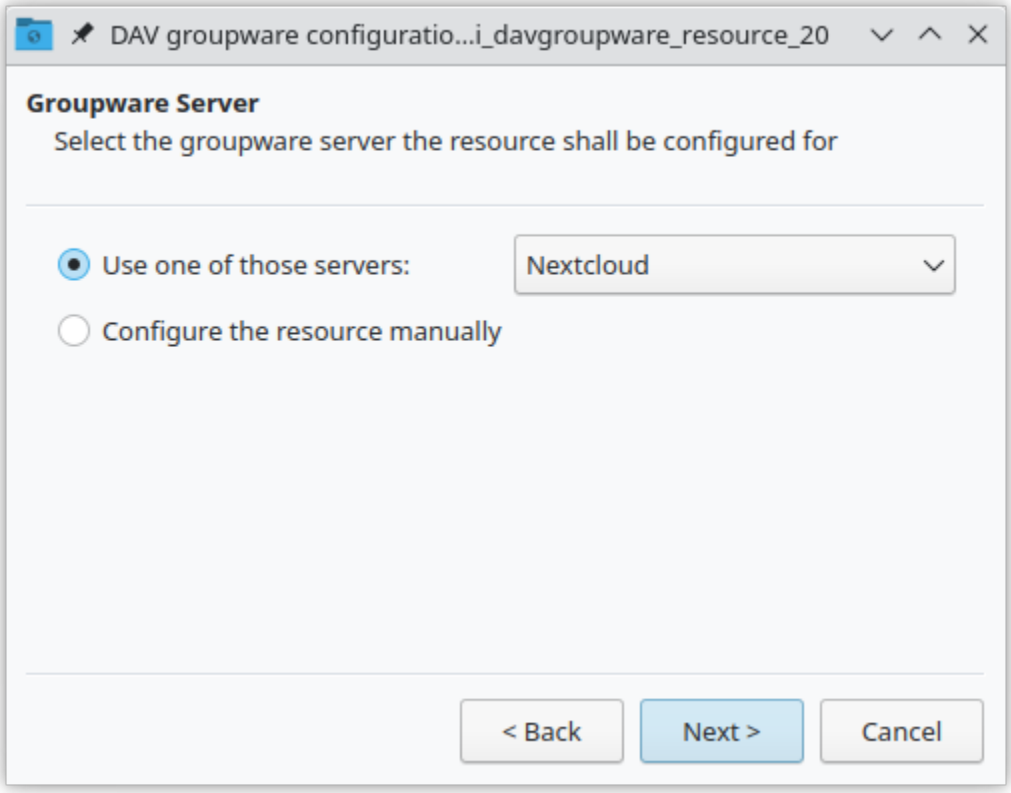



In KOrganizer and Kalendar:

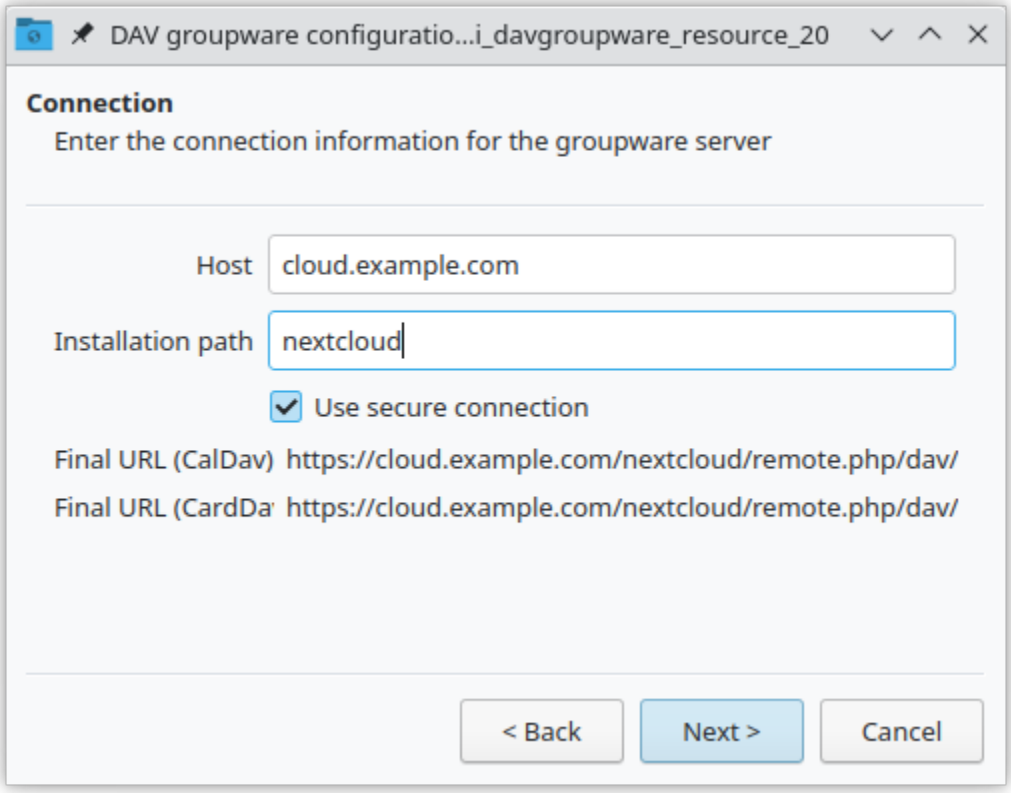
3. Enter your username. As password, you need to generate an app-password/token (Learn more):



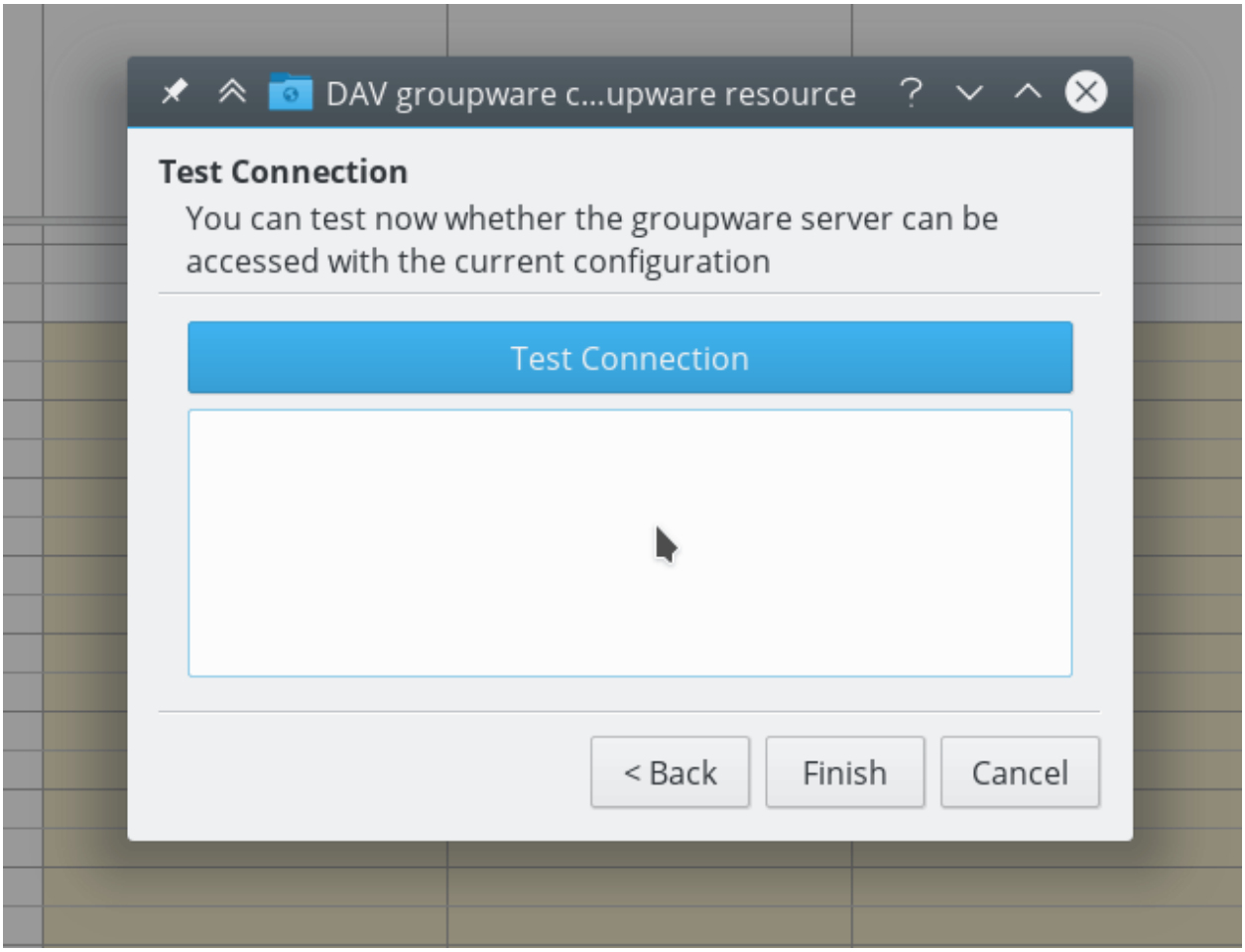

4. Choose `Nextcloud` as Groupware server option:

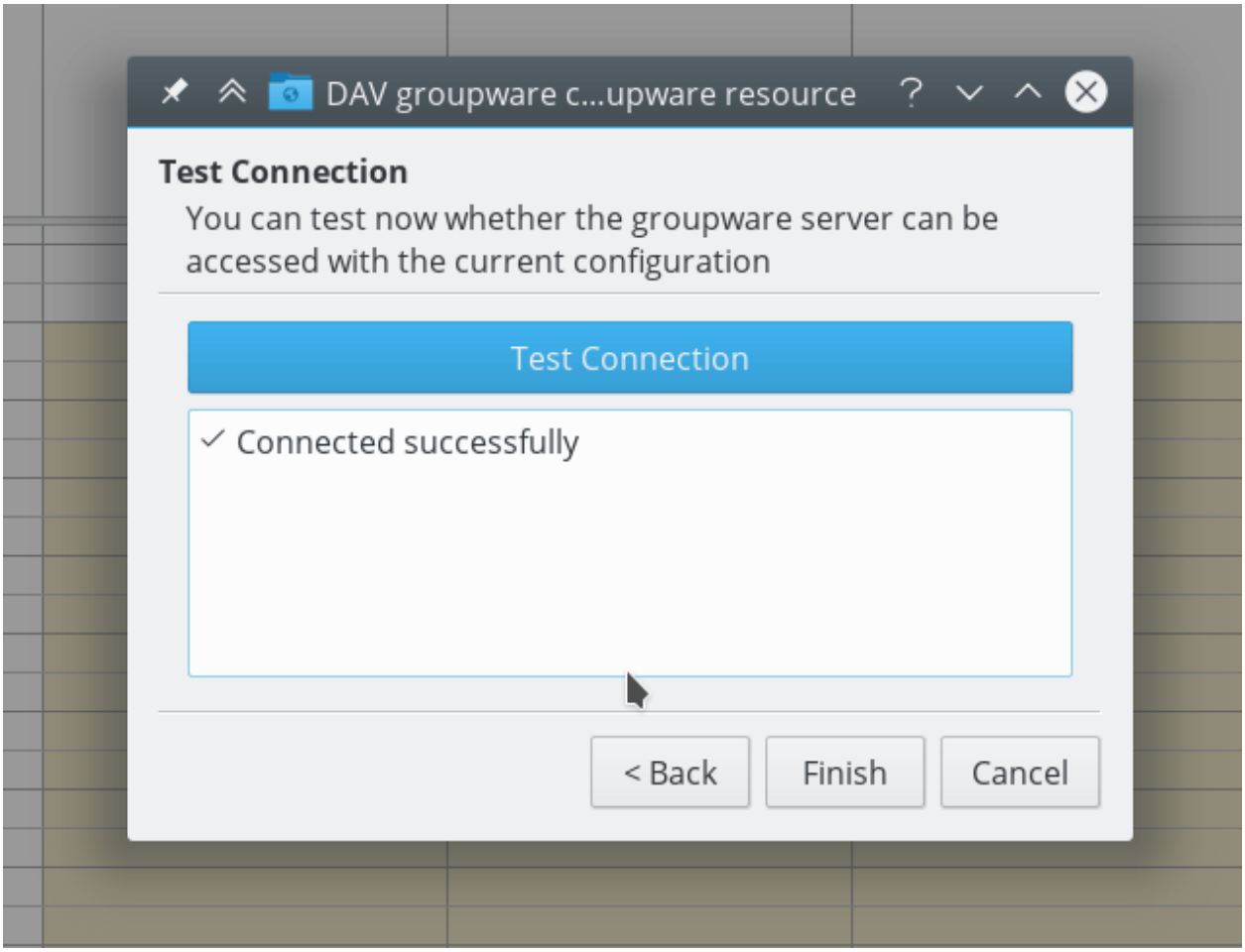



5. Enter your Nextcloud server URL and, if needed, installation path (anything that comes after the first /, for example `mynextcloud` in `https://example.com/mynextcloud`). Then click next:

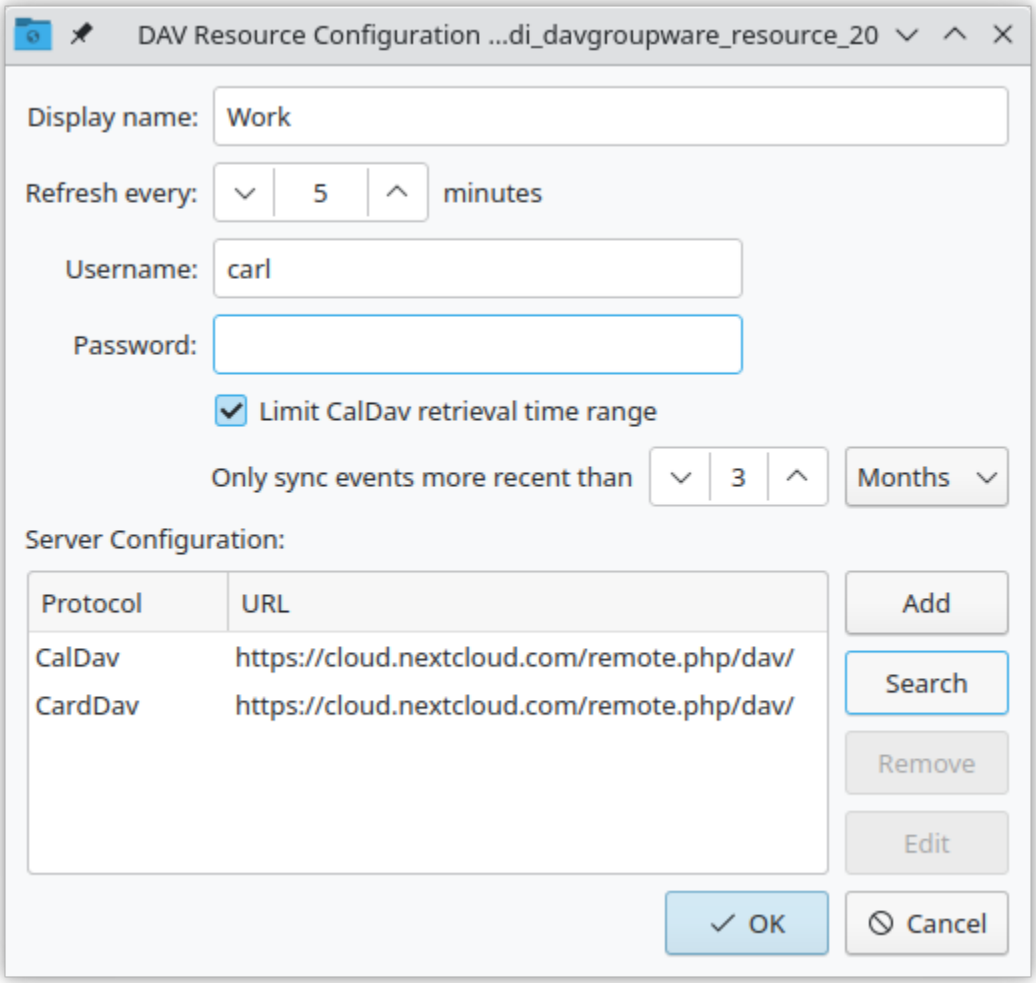



6. You can now test the connection, which can take some time for the initial connection. If it does not work, you can go back and try to fix it with other settings:


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



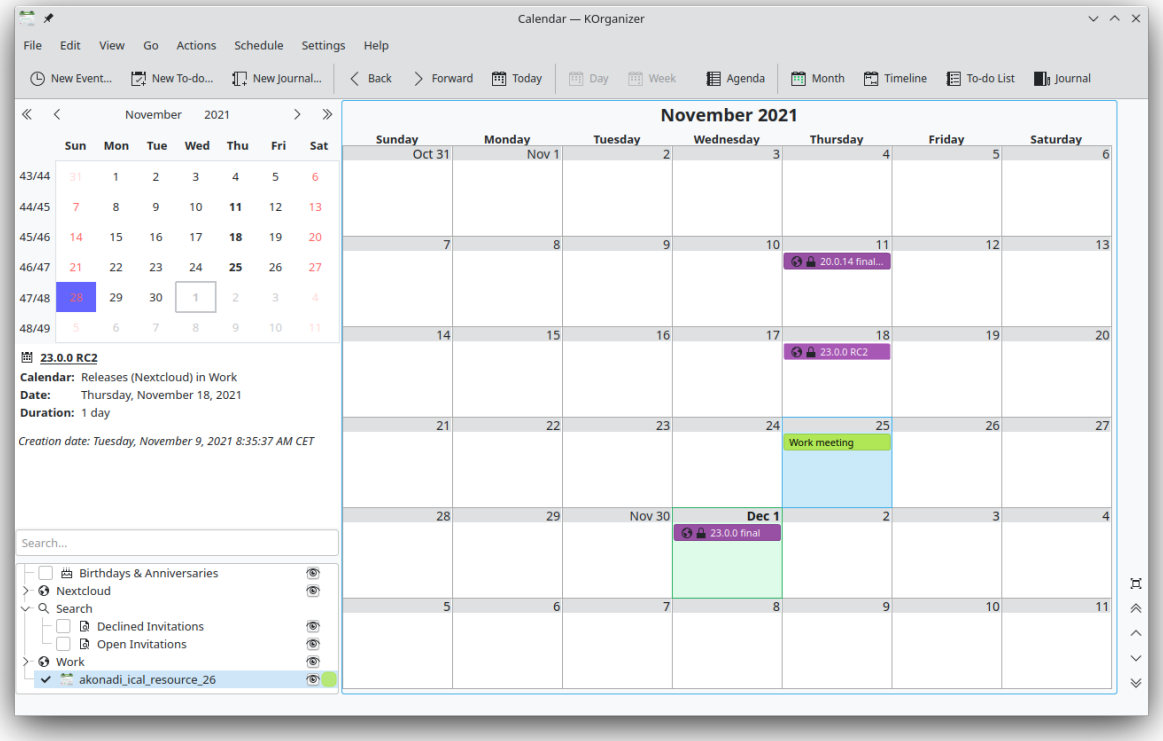

7. Pick a name for this resource, for example `Work` or `Home`. By default, both CalDAV (Calendar) and CardDAV (Contacts) are synced:

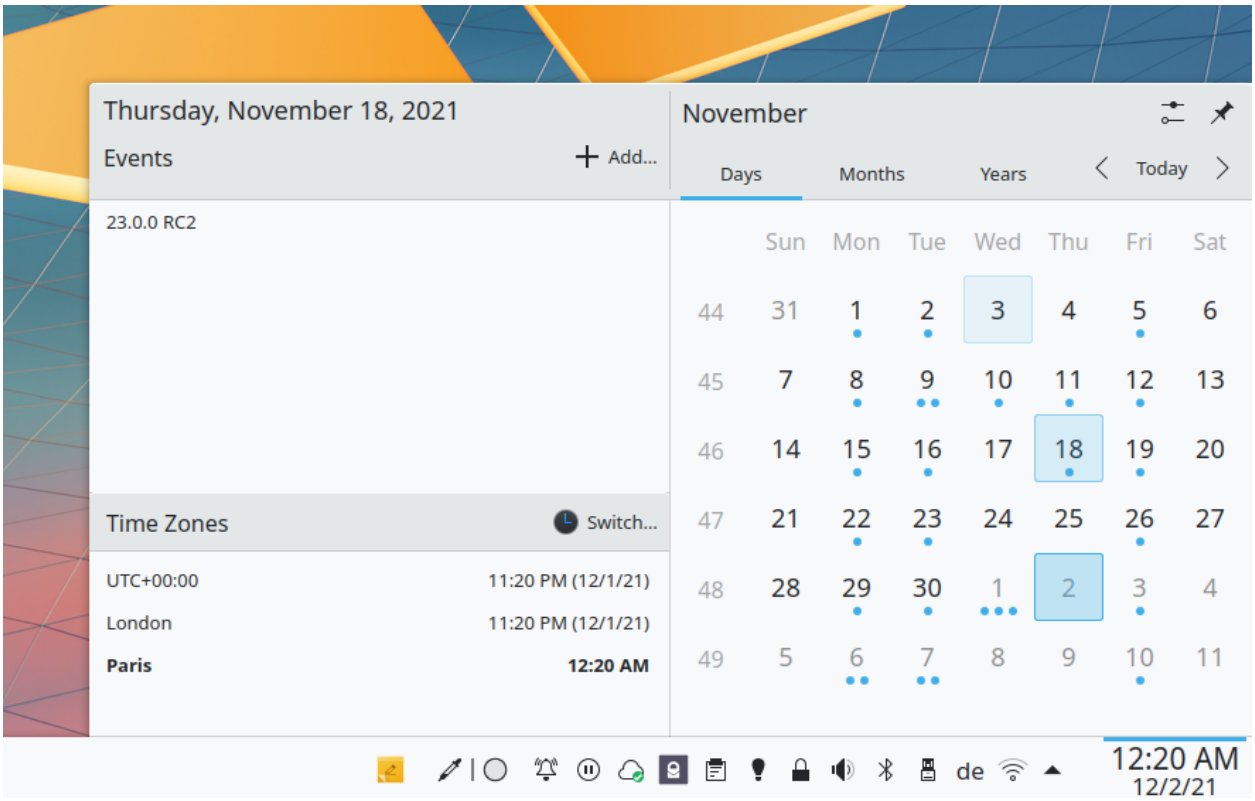


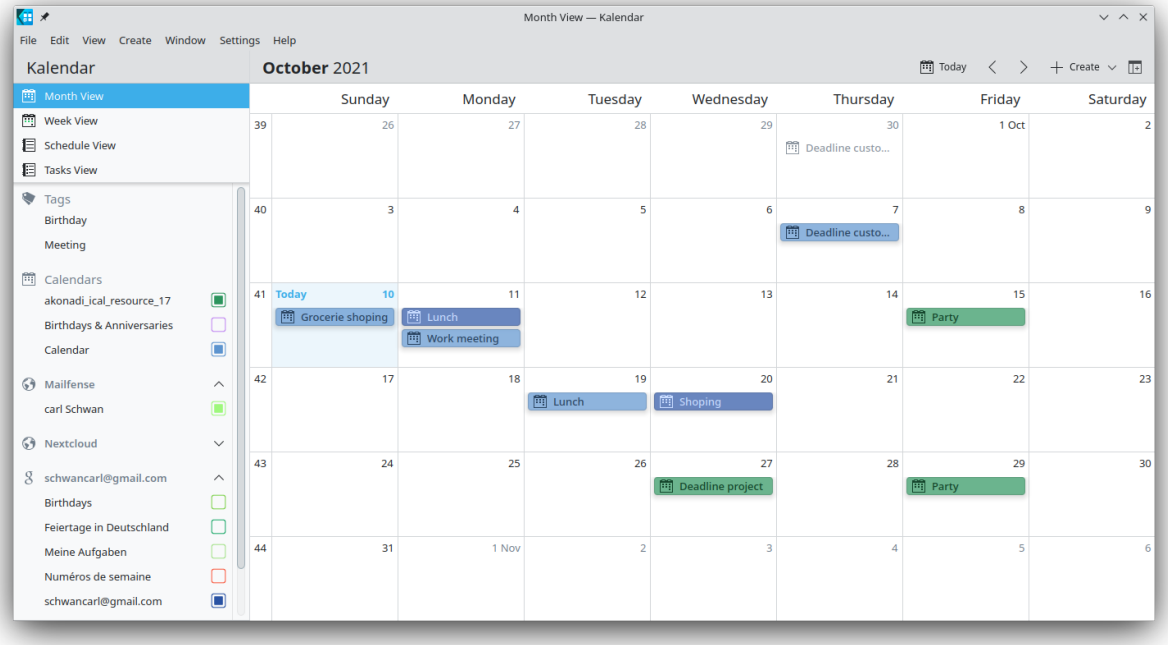

**Note**

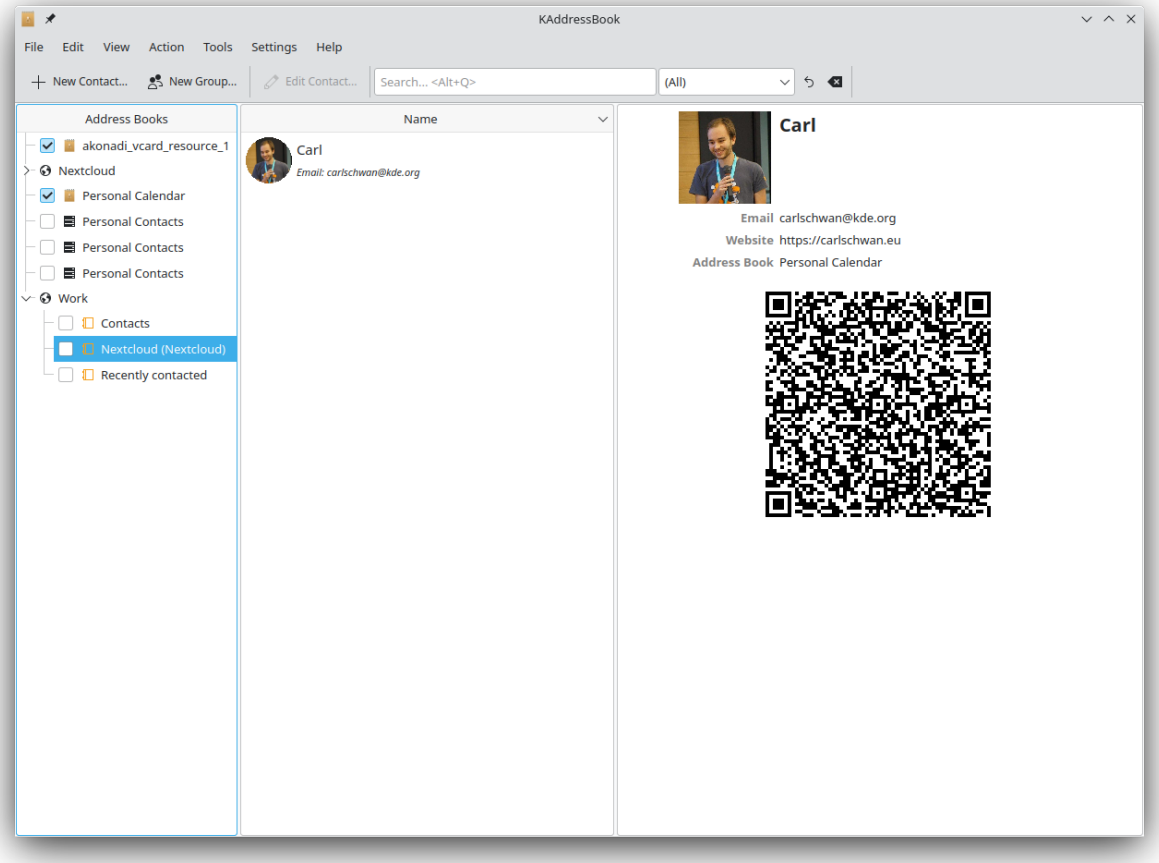
You can set a manual refresh rate for your calendar and contacts resources. By default this setting is set to 5 minutes and should be fine for the most use cases. When you create a new appointment it is synced to Nextcloud right away. You may want to change this for saving your power or cellular data 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:


Calendar — KOrganizer
File Edit View Go Actions Schedule Settings Help
New Event... New To-do... New Journal... Back Forward Today Day Week Agenda Month Timeline To-do List Journal
November 2021
Sunday Monday Tuesday Wednesday Thursday Friday Saturday
23.0.0 RC2
Calendar: Releases (Nextcloud) in Work
Date: Thursday, November 18, 2021
Duration: 1 day
Creation date: Tuesday, November 9, 2021 8:35:37 AM CET
Work meeting
Birthdays & Anniversaries
Nextcloud
Search
Declined Invitations
Open Invitations
Work
akonadi_ical_resource_26


Thursday, November 18, 2021
Events
Add...
23.0.0 RC2
November
Days Months Years
Today
Sun Mon Tue Wed Thu Fri Sat
Time Zones
Switch...
UTC+00:00 11:20 PM (12/1/21)
London 11:20 PM (12/1/21)
Paris 12:20 AM
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...
Today
Grocerie shoping
Lunch
Work meeting
Party
Lunch
Shoping
Deadline project
Party

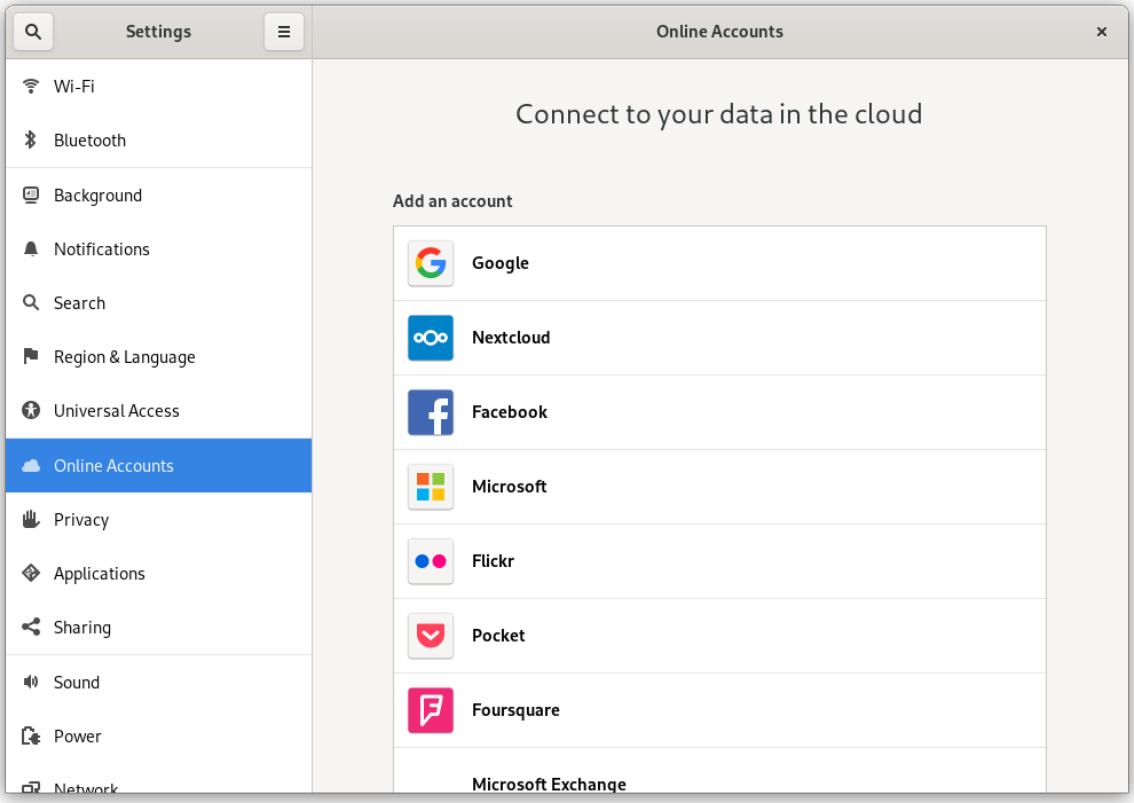

KAddressBook
File Edit View Action Tools Settings Help
New Contact...
New Group...
Edit Contact...
Search... <Alt+Q>
(All)
Address Books
akonadi_vcard_resource_1
Nextcloud
Personal Calendar
Personal Contacts
Personal Contacts
Personal Contacts
Work
Contacts
Nextcloud (Nextcloud)
Recently contacted
Name
Carl
Email: carlschwan@kde.org
Carl
Email carlschwan@kde.org
Website https://carlschwan.eu
Address Book Personal Calendar

## 4.10 Synchronizing with the GNOME desktop

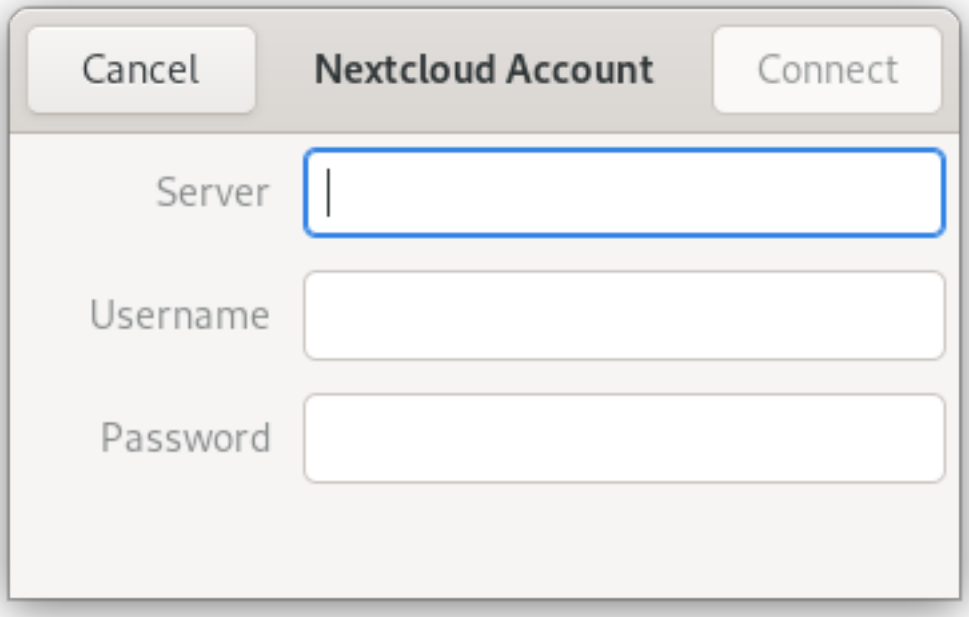
The GNOME desktop has built-in support for Nextcloud's calendar, contacts, and tasks which will be displayed by the Evolution Personal Information Manager (PIM), or the Calendar, Tasks, and Contacts apps. Similarly, Files integrates into the Nautilus file manager via WebDAV. The latter works only while the computer is connected.

This can be done by following these steps:

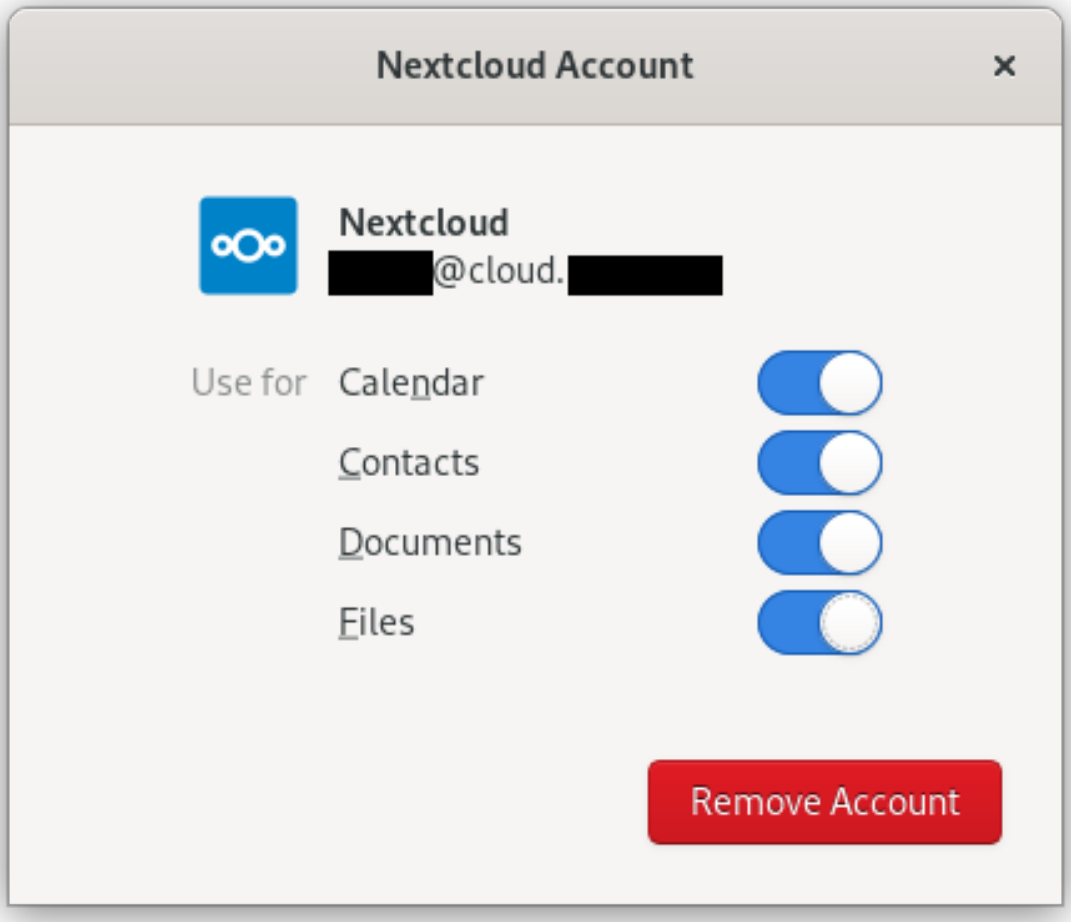
1. In the GNOME settings, open Online Accounts.
2. Under "Add an account" pick `Nextcloud`:




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 cross in the top right to close:




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.

## 4.11 Synchronizing with Windows 10

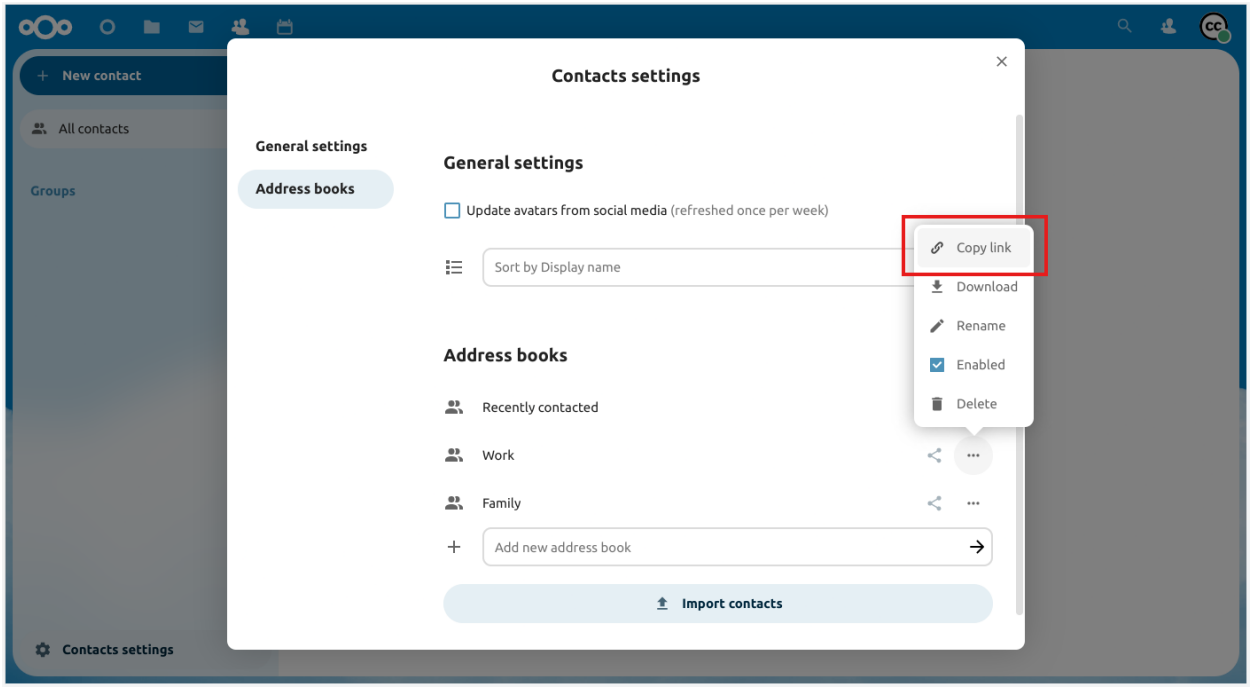
### 4.11.1 Calendar

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”.

### 4.11.2 Contacts

1. In the bottom left of the Contacts View (in Nextcloud Contacts) look for a little (chain) link symbol that looks like this:




which will display a URL that looks something like this: https://cloud.nextcloud.com/remote.php/dav/addressbooks/users/daniel/Thunderbird/

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 “Sign in” and then “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 CardDAV URL in the field labelled “Contacts server (CardDAV)”.
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 Contacts”). Click “Save”.

### 4.11.3 Troubleshooting

After following all these steps, your Nextcloud calendar should synchronize. If not, check your username and password. Otherwise, repeat these steps.

**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 for Step 8.

### 4.11.4 Contacts

1. Repeat steps 1–7 from the Calendar instructions. If you already have setup the Calendar synchronization, you can use the same account for this.
2. In the “Advanced mailbox settings” paste your CalDAV 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”.

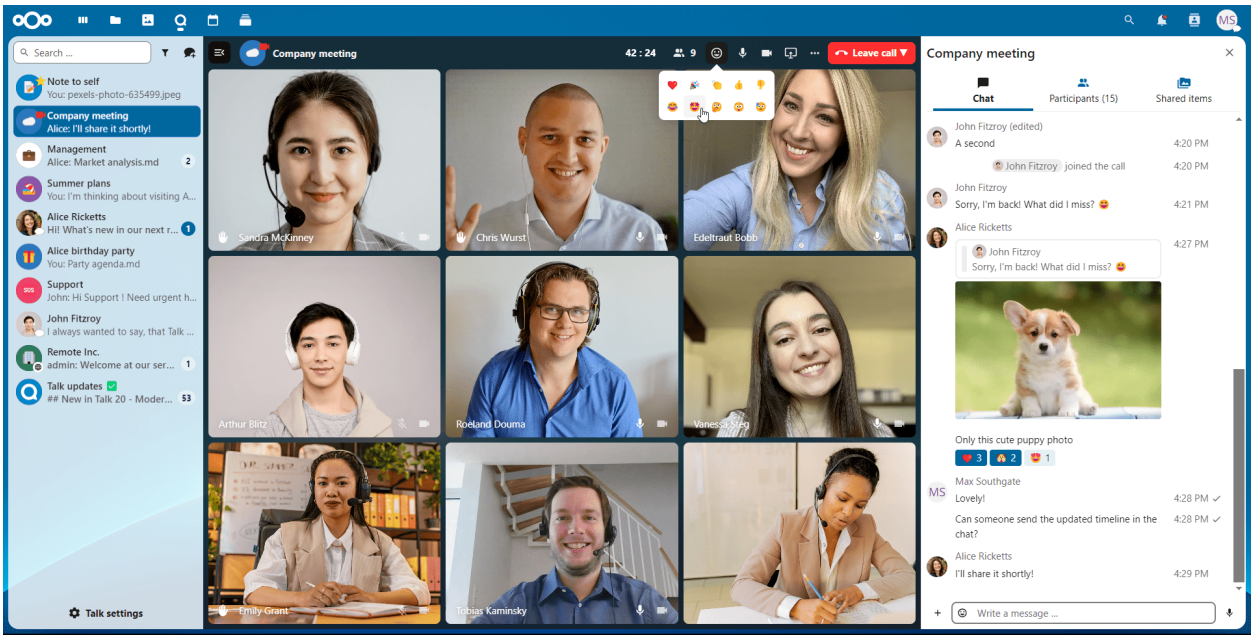
CHAPTER

FIVE

# TALK

Nextcloud Talk offers audio/video and text chat integrated in Nextcloud. It offers a web interface as well as mobile apps.

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




## 5.1 Basics of Nextcloud Talk

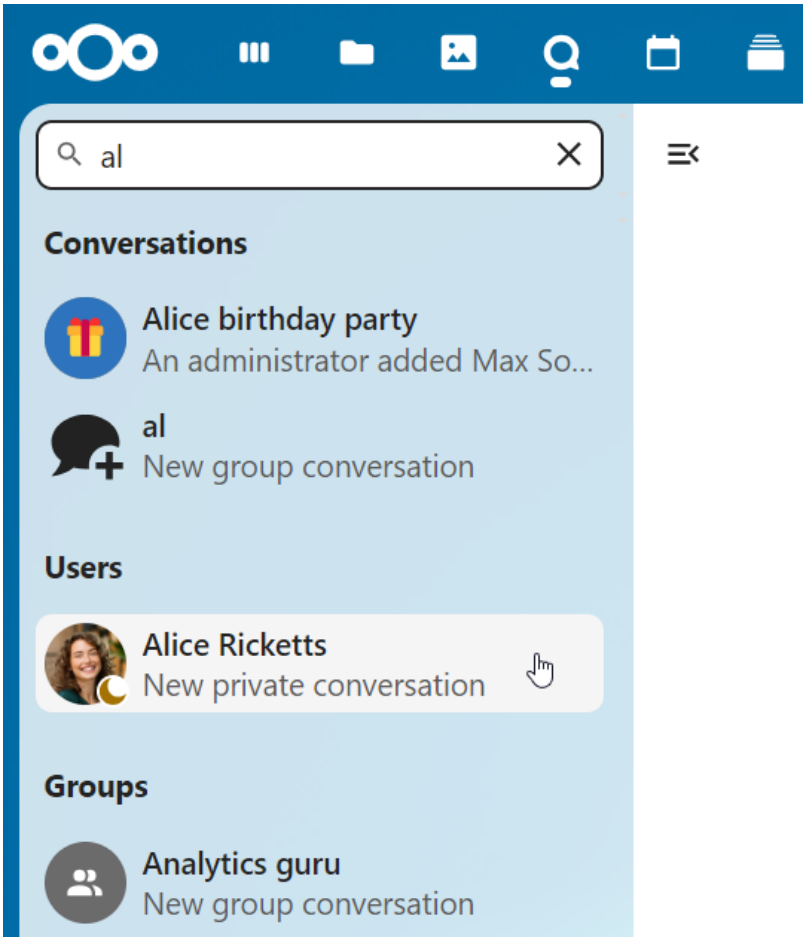
Nextcloud Talk lets you chat and have video calls on your own server.

Chats and calls take place in conversations. You can create any number of conversations. There are two kinds of conversations:

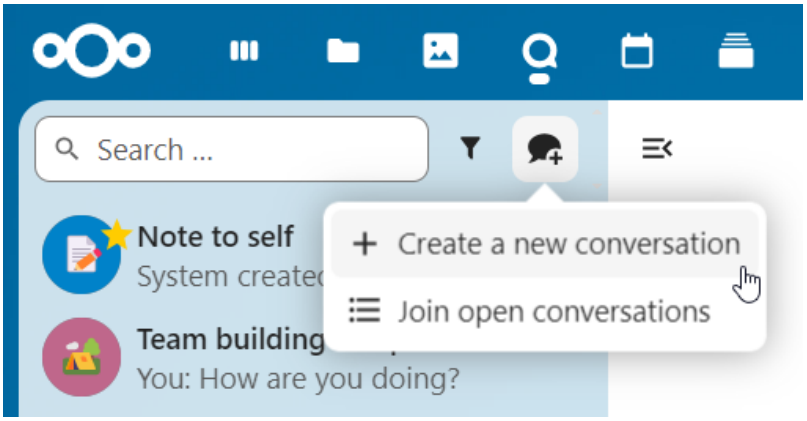
1. **One-on-one conversations.** This is where you have a private chat or call with another Talk user. You can't add other people to this conversation or share it with a link. You start a direct one-on-one chat by looking for another user in the search bar and then clicking their name.
2. **Group conversations.** Besides the person who created the conversation, a group conversation can have any number of people in it. A group conversation can be shared publicly with a link, so external guest users can join a call. It can also be listed, so other people on your Nextcloud server can join the conversation.

### 5.1.1 Creating a chat

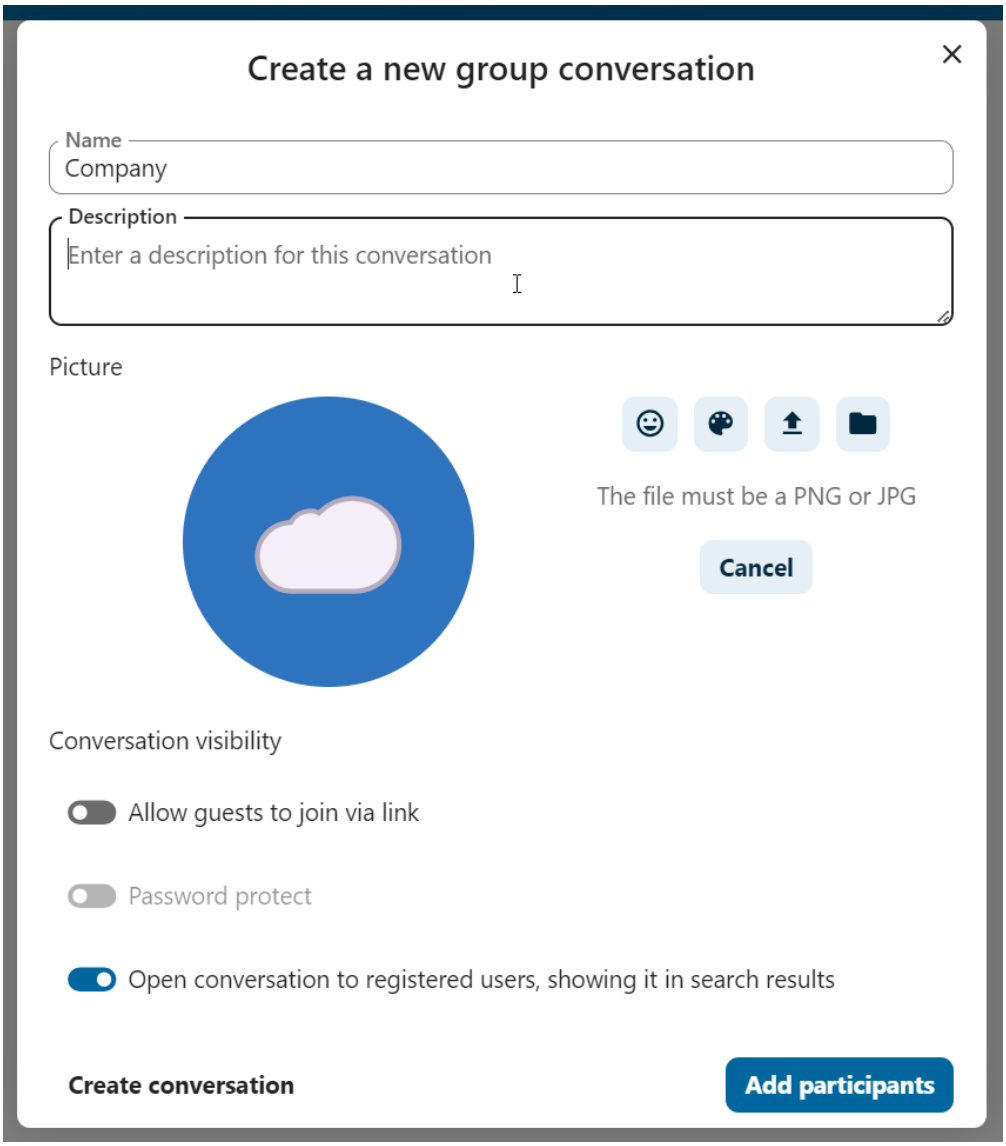
You can create a direct, one-on-one chat by searching for the name of a user, a group or a team and clicking it. For a single user, a conversation is immediately created and you can start your chat. For a group or circle you get to pick a name and settings before you create the conversation and add the participants.



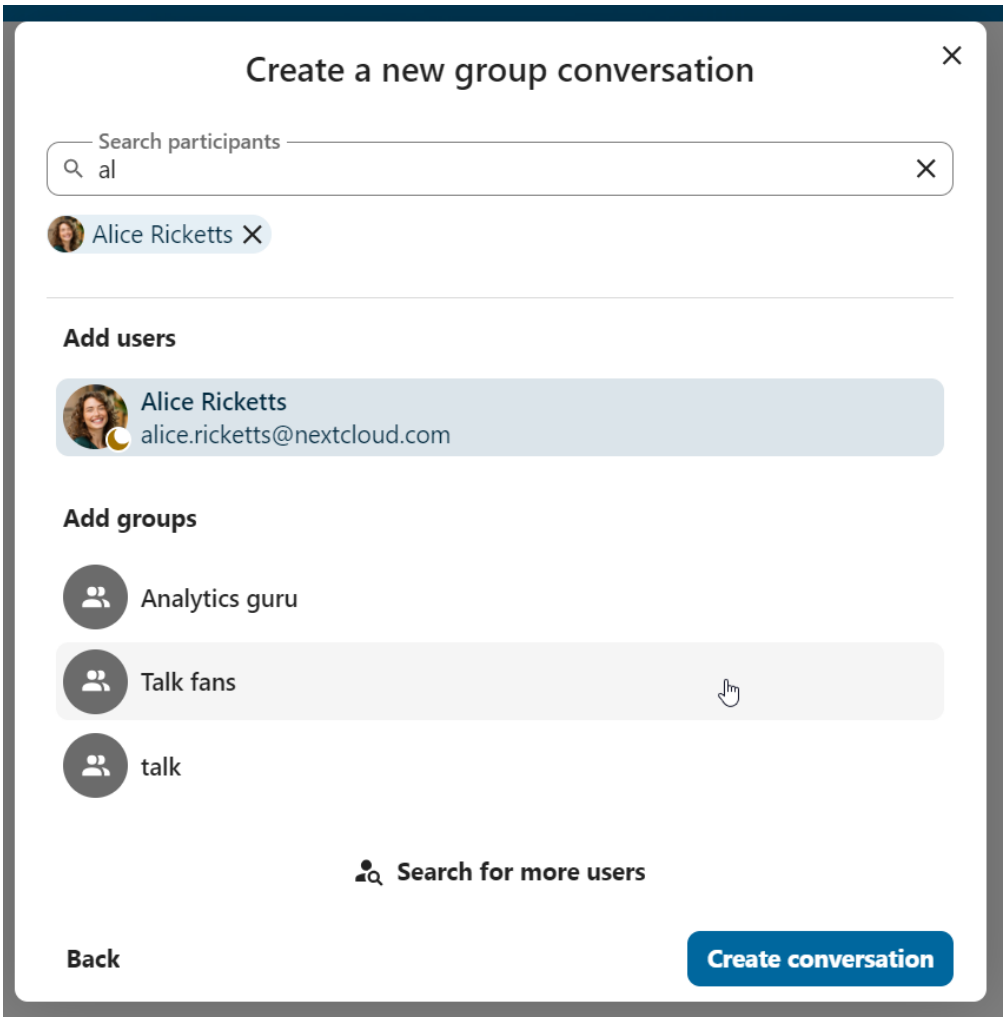

If you want to create a custom group conversation, click the button next to the search field and filters button and then on `Create a new conversation`.



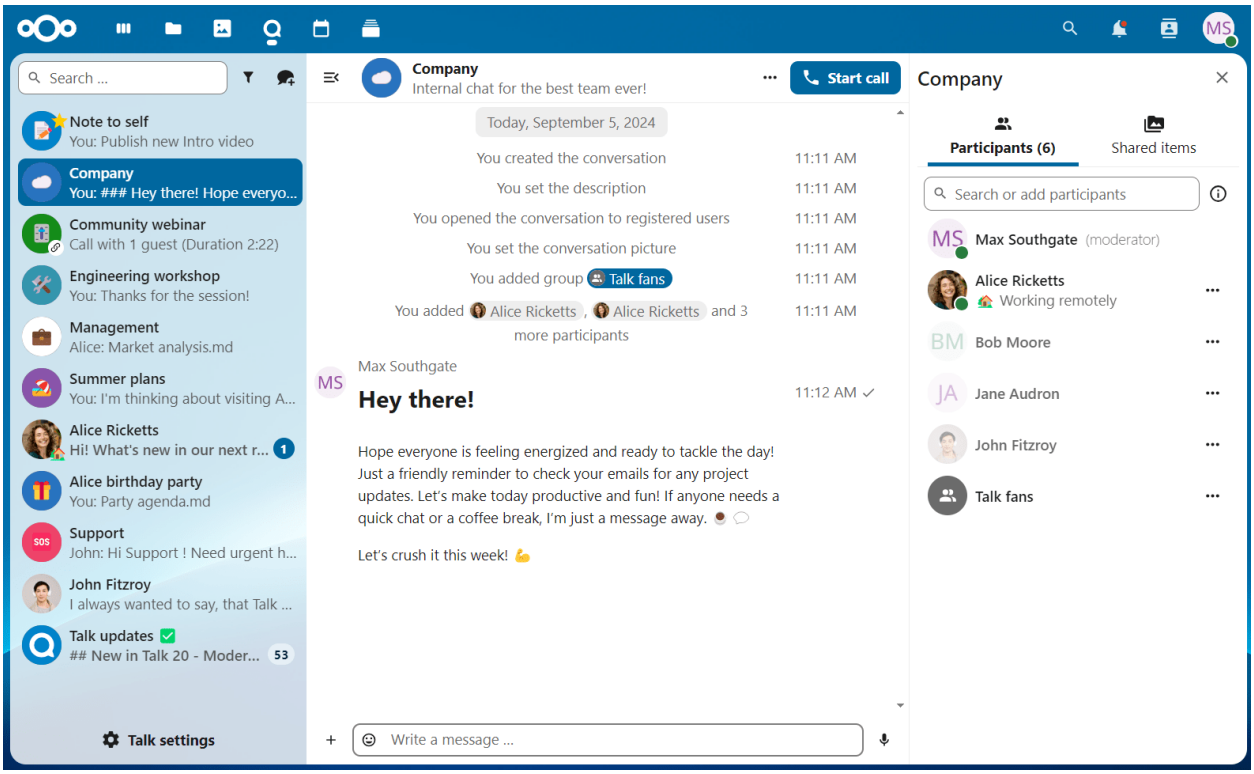

You can then pick a name for the conversation, put a description, and set up an avatar for it (with uploaded photo or emoji), and select if the conversation should be open to external users and if other users on the server can see and join the conversation.




In the second step, you get to add participants and finalize the creation of the conversation.

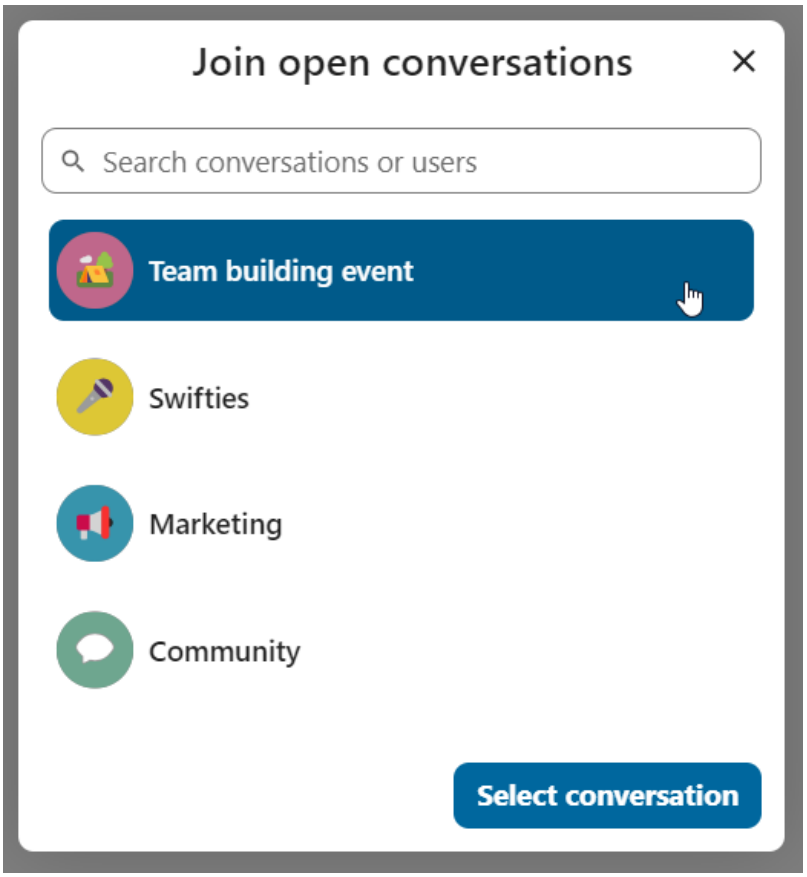



After confirmation you will be redirected to the new conversation and can start communicating right away.



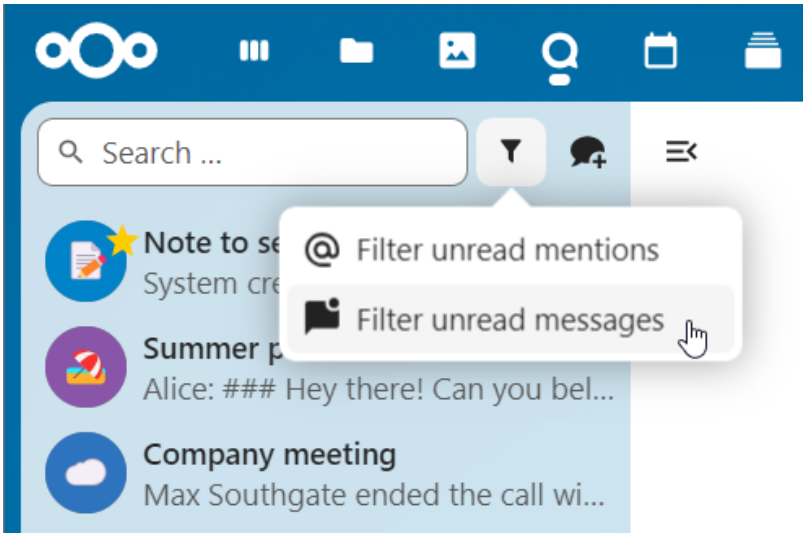

### 5.1.2 View all open conversations

You can view all the conversations that you can join by clicking the button next to the search field and filters button and then on `Join open conversations.`

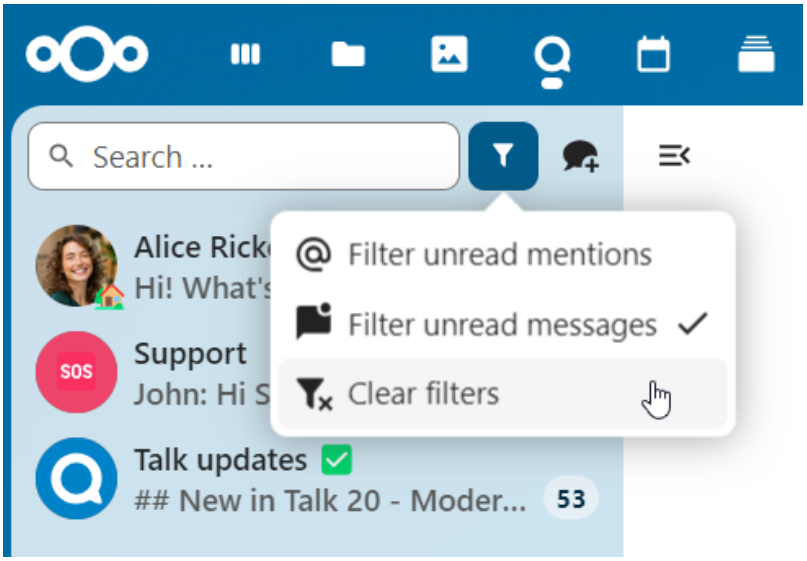



### 5.1.3 Filter your conversations

You can filter your conversations using the filter button located next to the search field. There are two options for filtering: 1. Filter unread mentions: This option allows you to view group conversations with unread mentions or unread one-on-one conversations. 2. Filter unread messages: This option allows you to view all unread messages in all joined conversations.



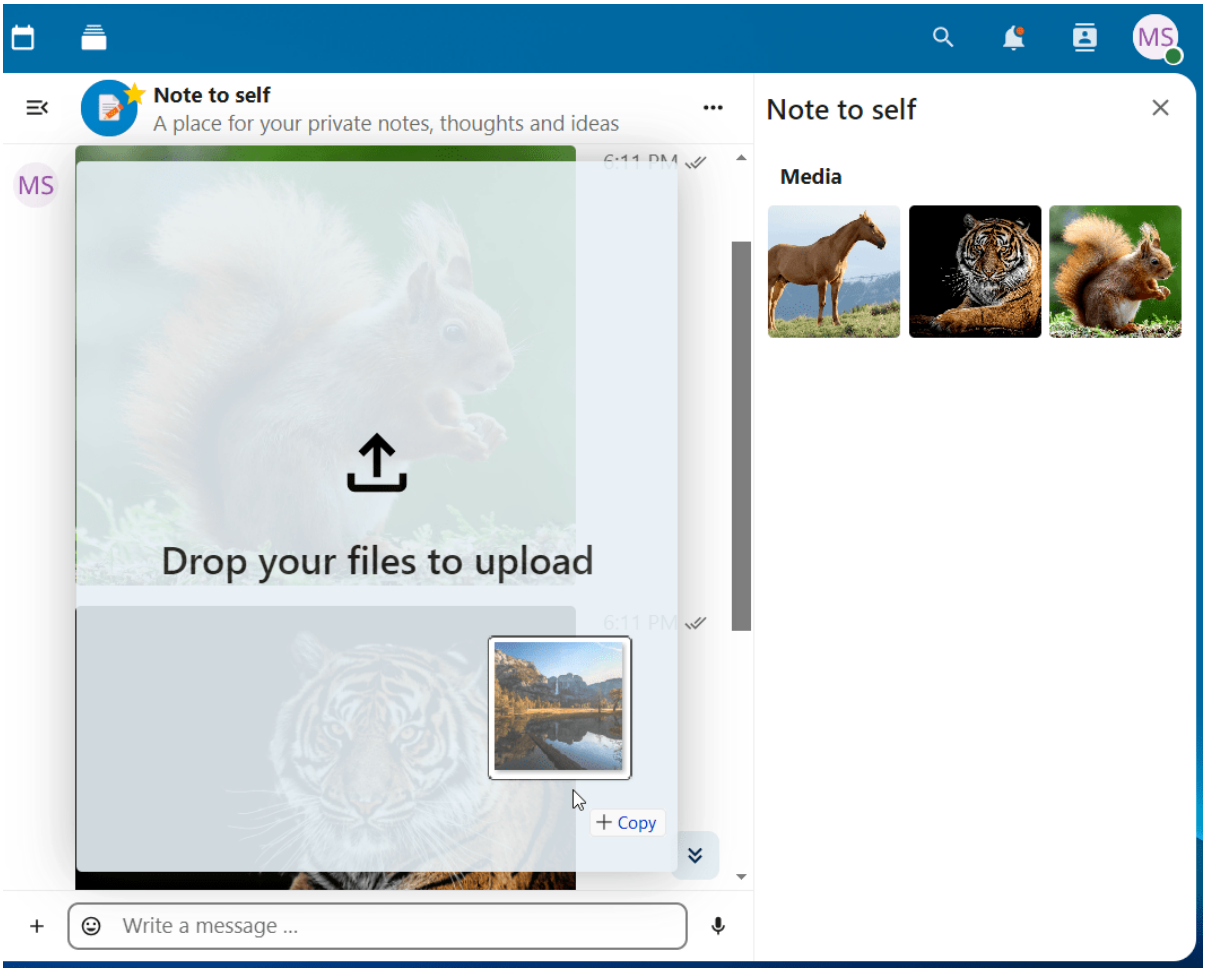

You can then clear the filter from the filters menu.



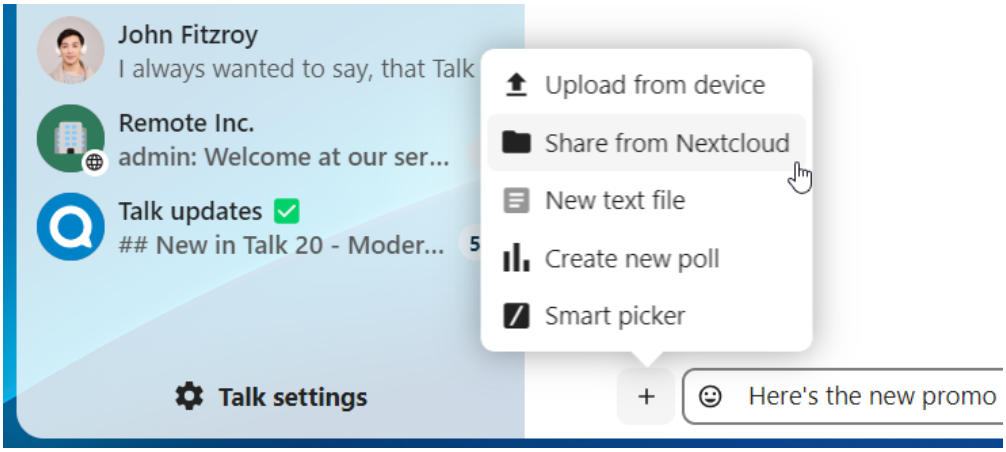

### 5.1.4 Sharing files in a chat

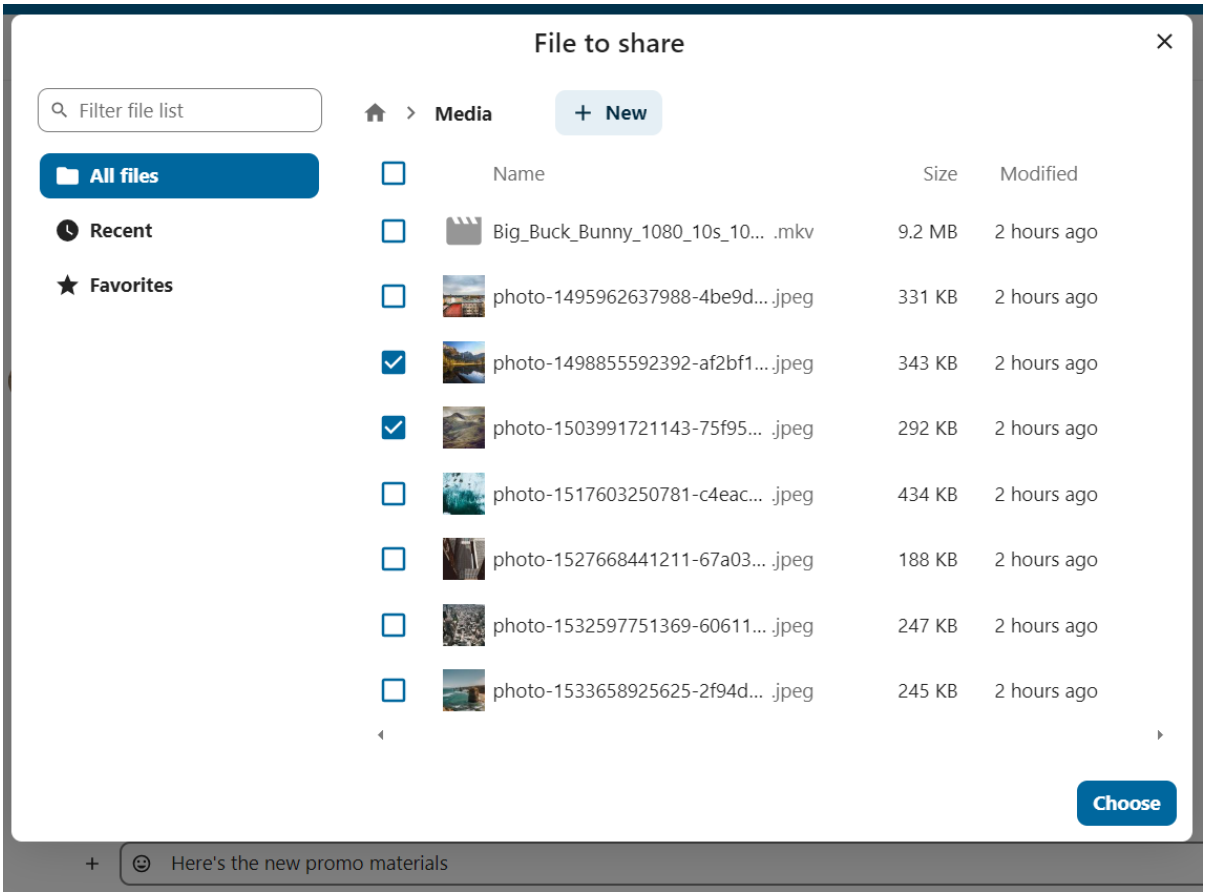
You can share files in a chat in 3 ways.

First, you can simply drag'n'drop them on the chat.

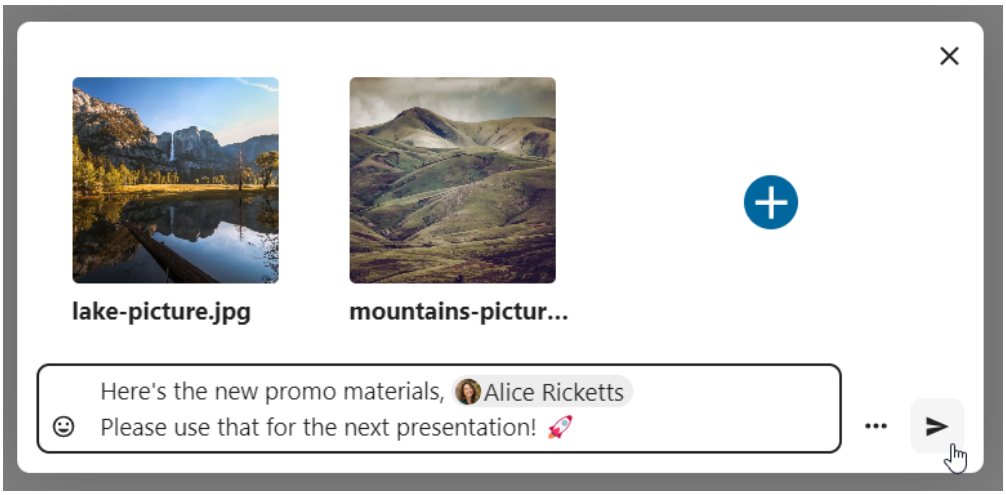


Second, you can select a file from your Nextcloud Files or a file manager by choosing the little paperclip and selecting where you'd like to pick the file from.

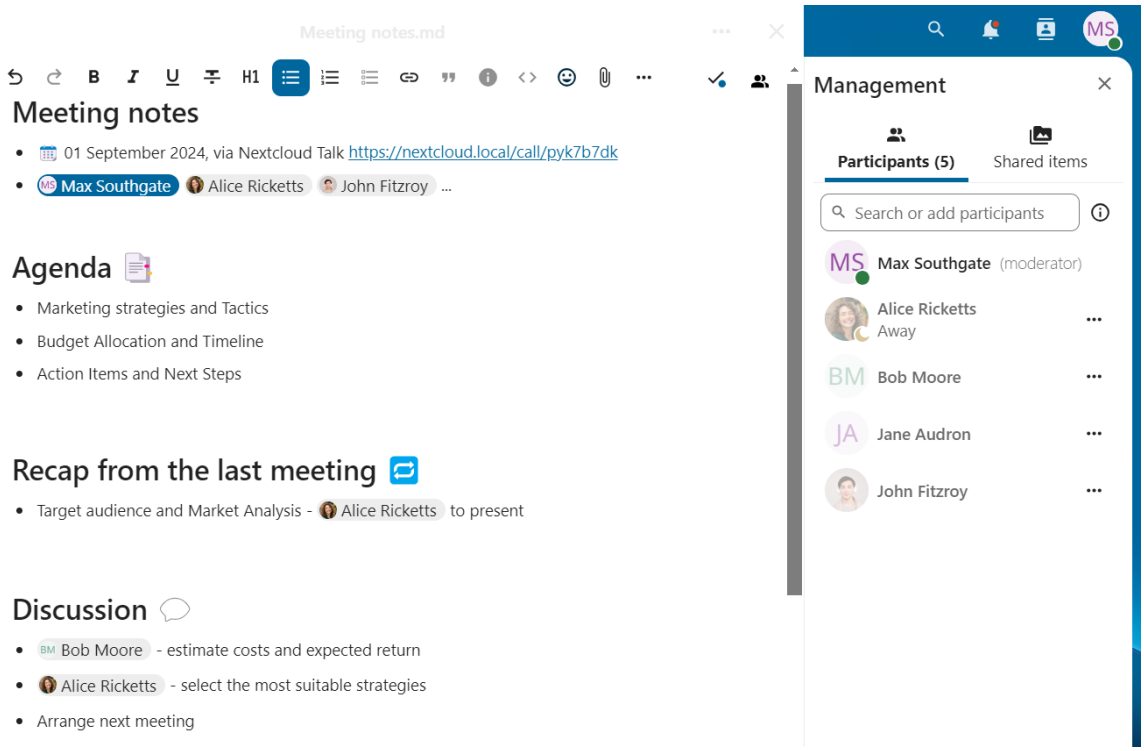



You can add more files until you are done and decide to share the files. You can also add a text caption to your shared files, providing a brief description or context.

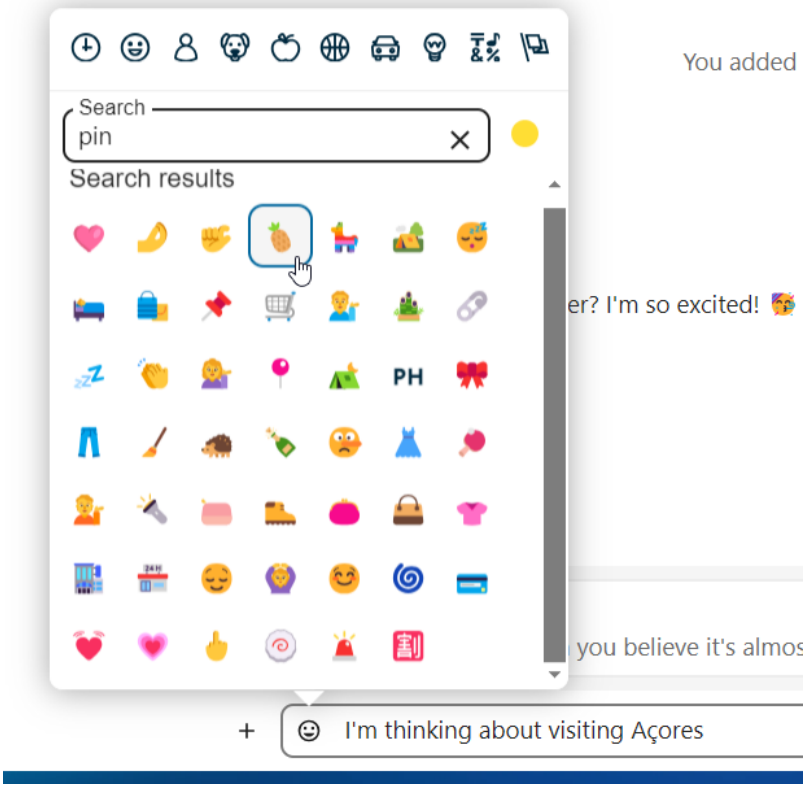



All users will be able to click the files to view, edit or download them, irrespective of them having a user account. Users with an account will have the file automatically shared with them while external guest users will get them shared as a public link.



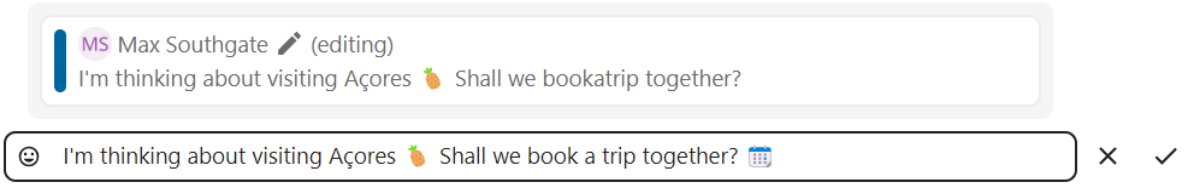

### 5.1.5 Inserting emoji

You can add emoji using the picker on the left of the text input field.




### 5.1.6 Editing messages

You can edit messages and captions to file shares up to 6 hours after sending.




### 5.1.7 Using Markdown

You can enhance your messages with a markdown syntax support. See list for usage:

**Headings and dividers**

```
# Heading 1
## Heading 2
### Heading 3
#### Heading 4
##### Heading 5
###### Heading 6

Heading
===
Normal text
```

(continues on next page)

(continued from previous page)

```
***
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**

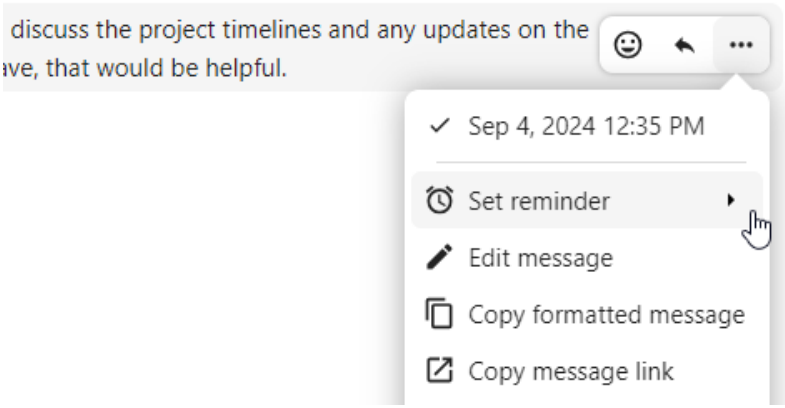
```
- [ ] task to be done
- [x] completed task
```

**Tables**

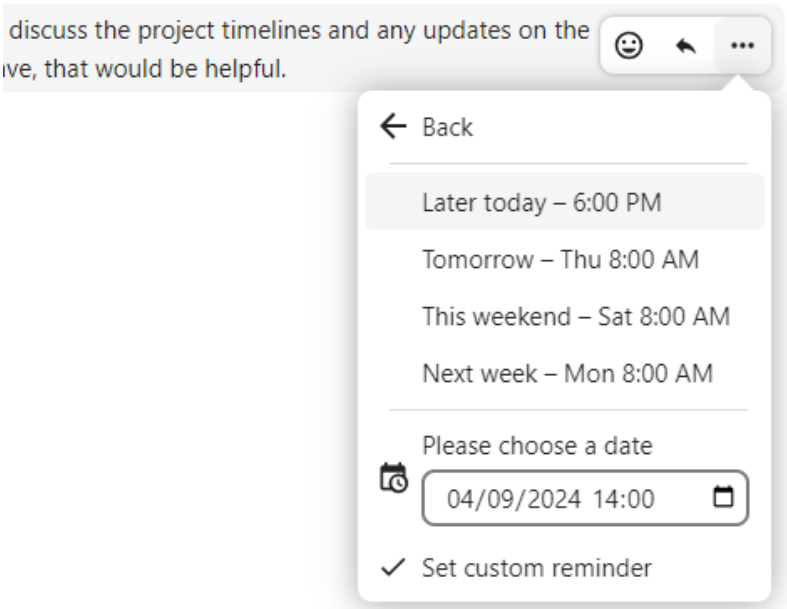
```
Column A | Column B
-- | --
Data A | Data B
```

### 5.1.8 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.

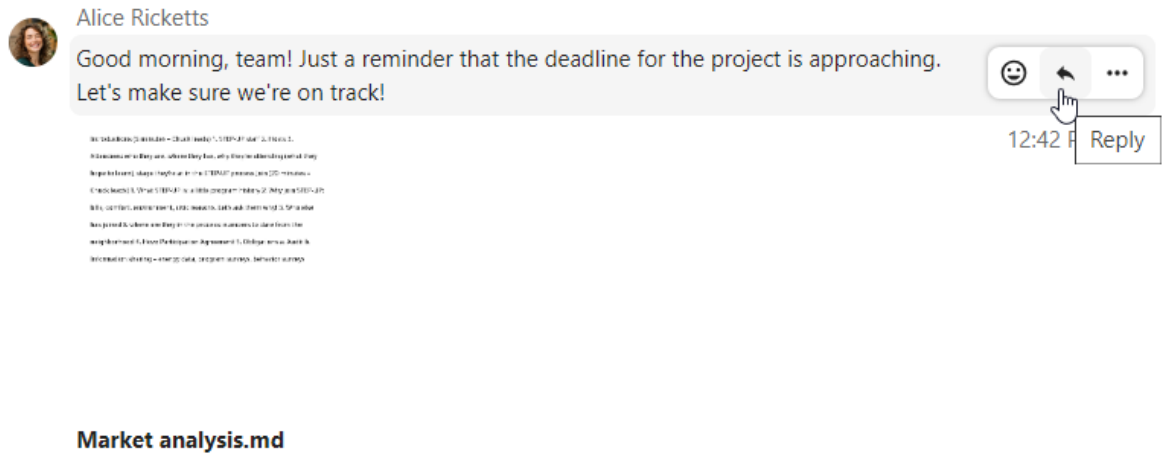



In the submenu, you can select an appropriate time to receive a notification later.

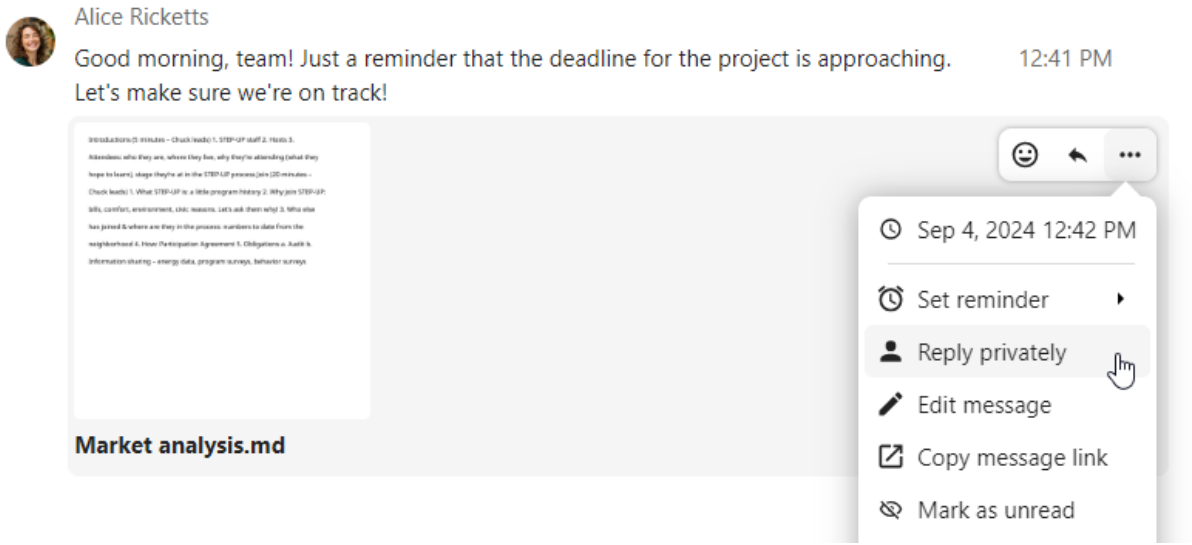



### 5.1.9 Replying to messages and more

You can reply to a message using the arrow that appears when you hover a message.



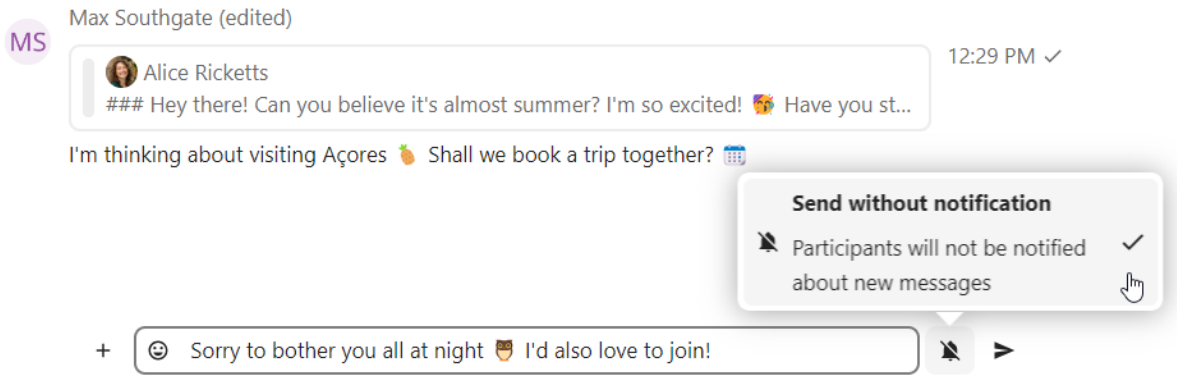

In the . . . menu you can also choose to reply privately. This will open a one-on-one chat.




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.

### 5.1.10 Silent messages

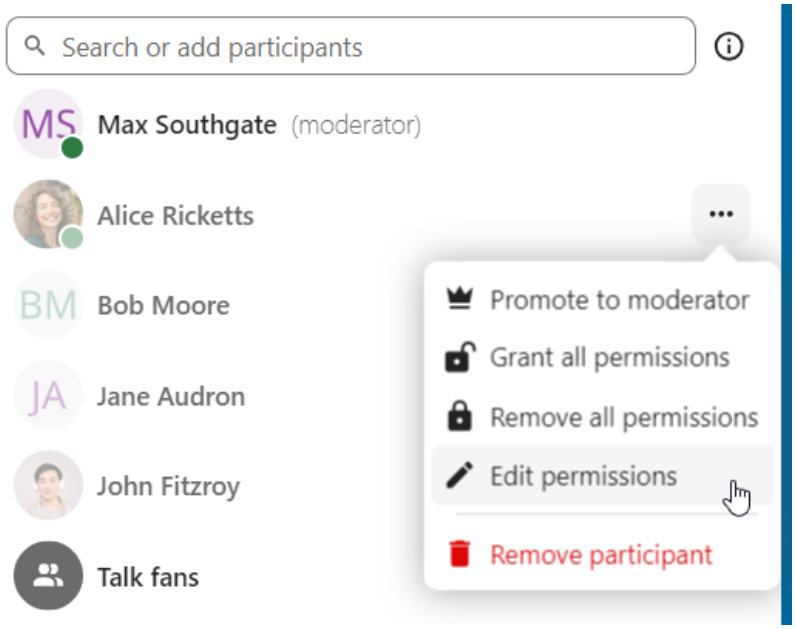
If you don't want to disturb anyone in the middle of the night, there is a silent mode for chatting. While it is enabled, other participants will not receive notifications from your messages.



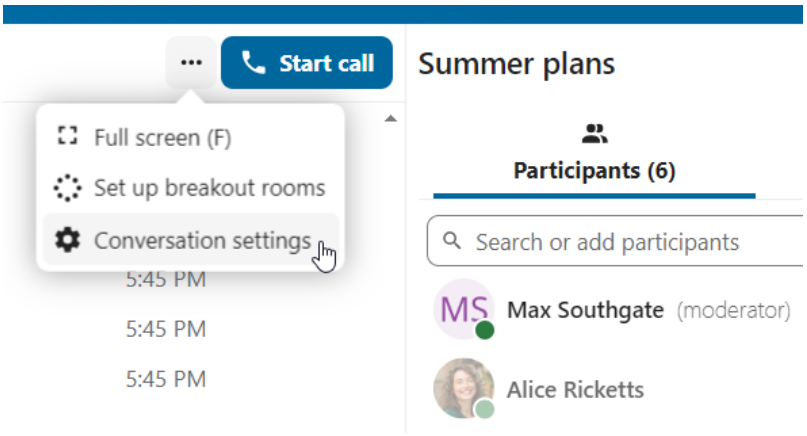

### 5.1.11 Managing a conversation

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.

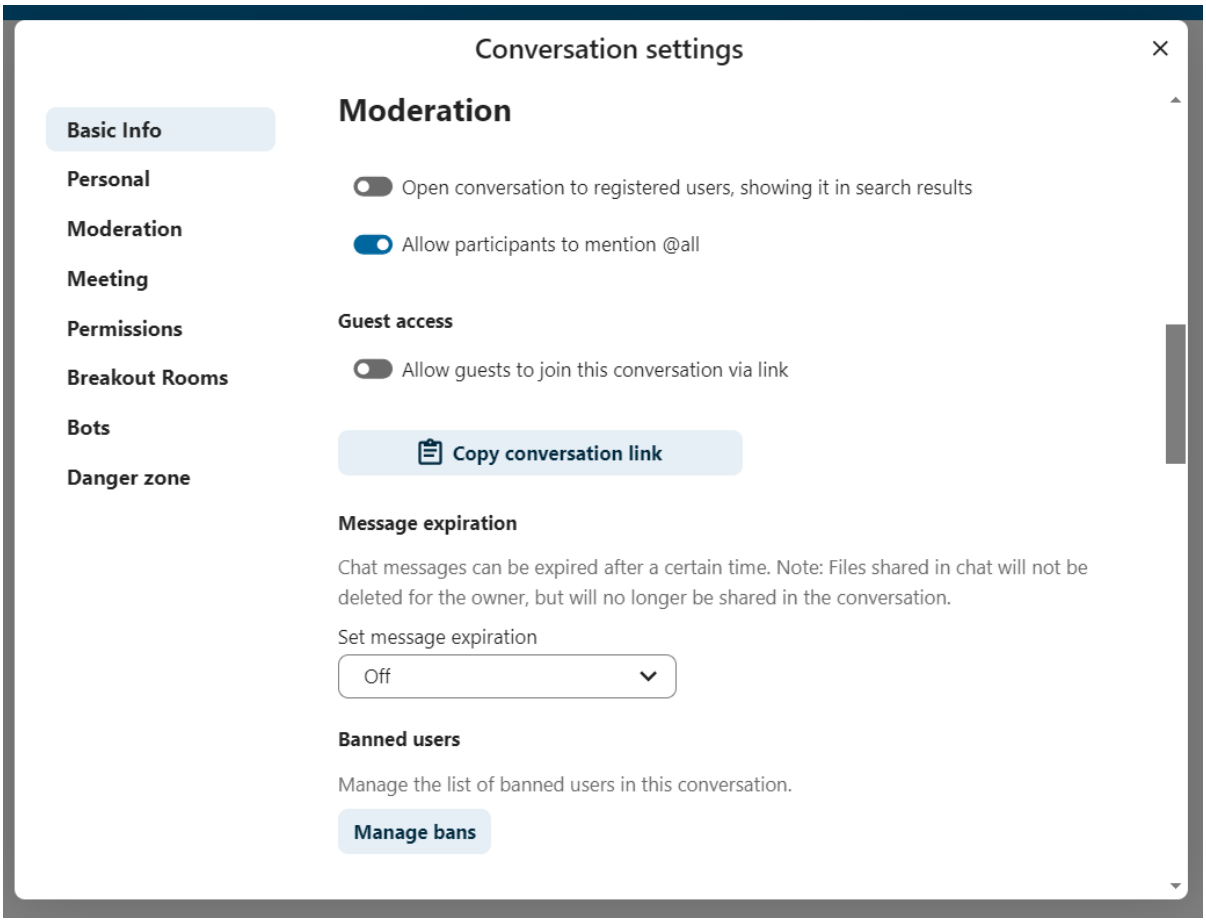
Changing permissions of a user that joined a public conversation will also permanently add them to the conversation.




Moderators can configure the conversation. Select `Conversation settings` from the ... menu of the conversation on the top to access the settings.

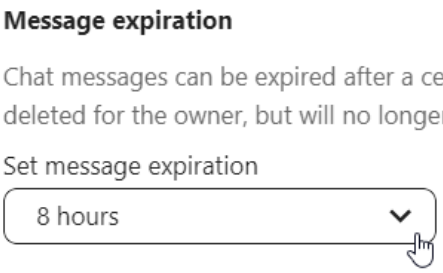



Here you can configure the description, guest access, if the conversation is visible to others on the server and more.



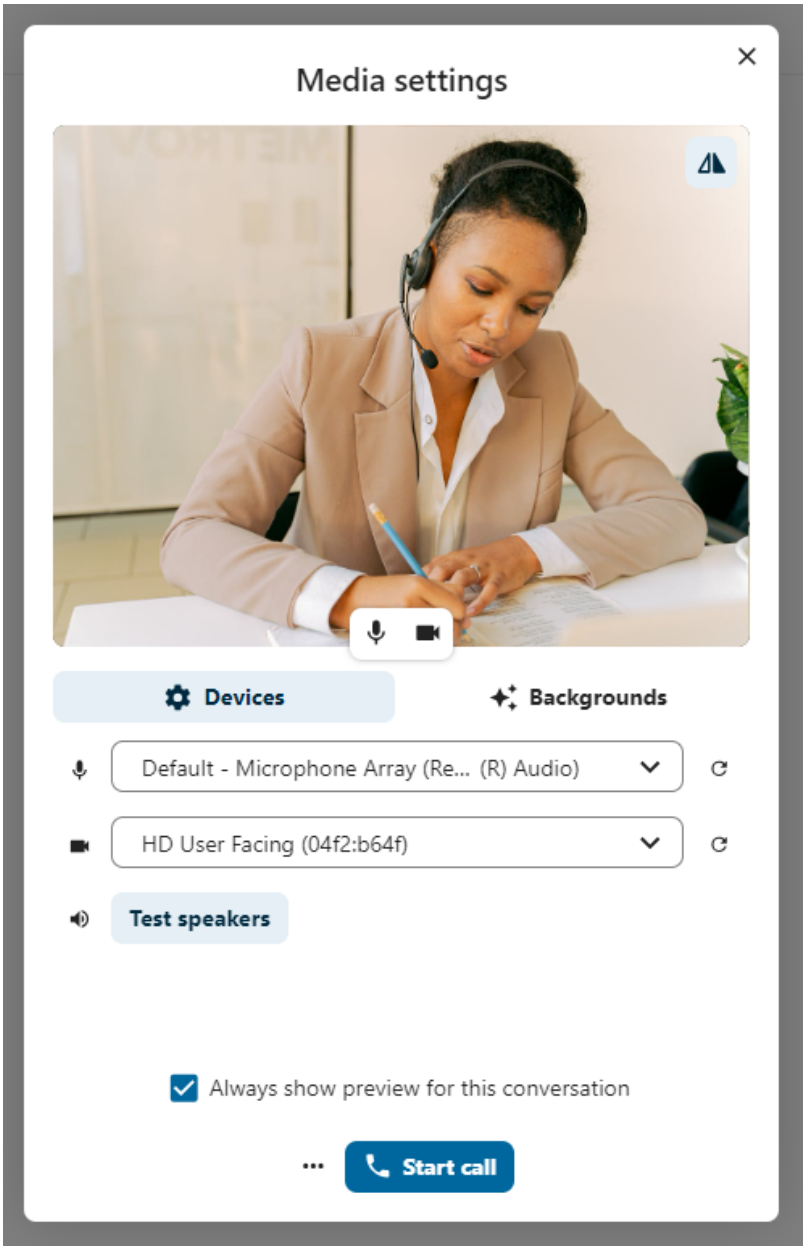

### 5.1.12 Messages expiration

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).

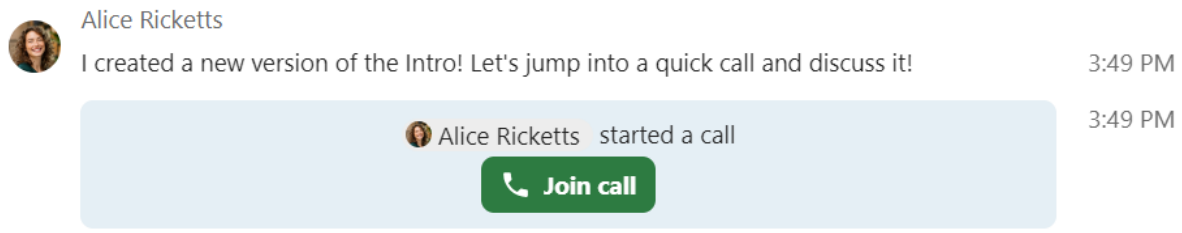



### 5.1.13 Starting a call

When you're in a conversation, you can start a call any time with the `Start call` button. Other participants will get notified and can join the call.



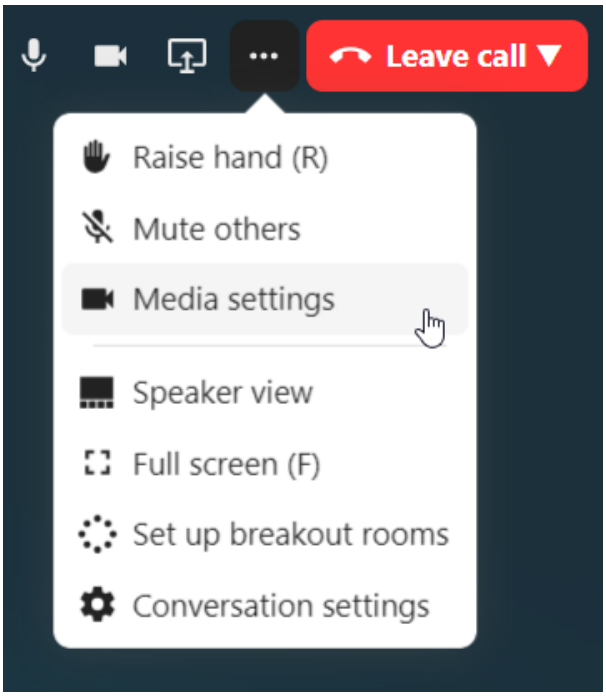
If somebody else has started a call already, the button will change in a green `Join call` button.



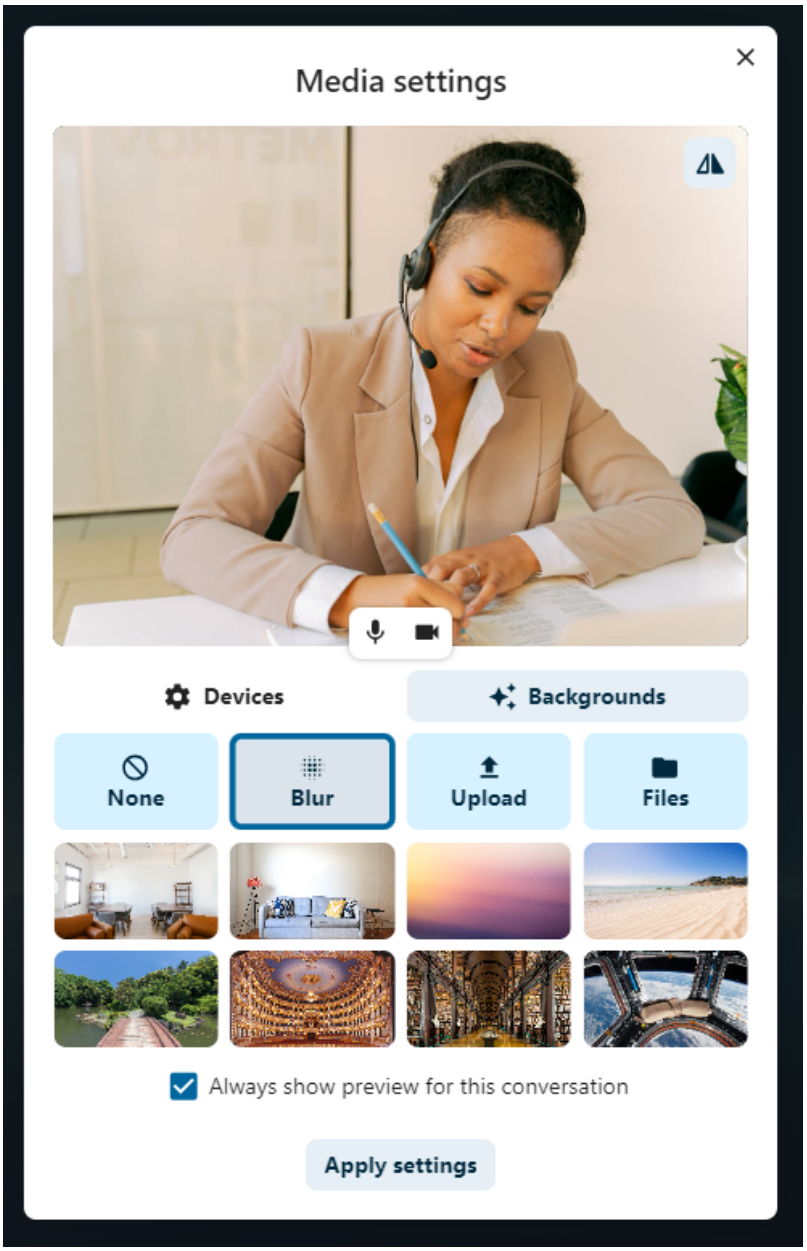

During a call, you can mute your microphone and disable your video with the buttons on the right side of the top bar, or using the shortcuts `M` to mute audio and `V` to disable video. You can also use the space bar to toggle mute. When you are muted, pressing space will unmute you so you can speak until 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.

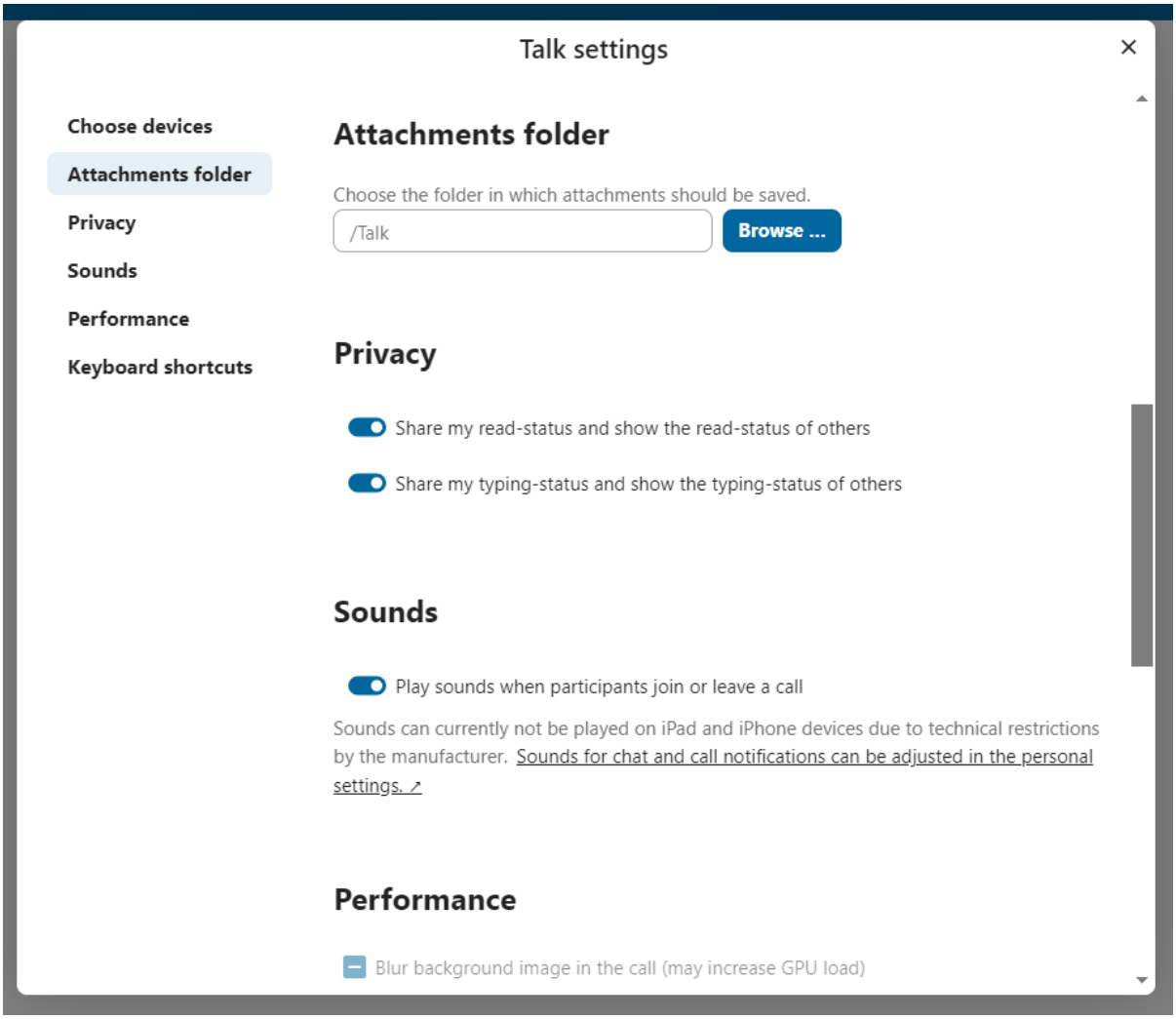
You can access your settings and choose a different webcam, microphone and other settings in the `...` menu in the top bar.




From media settings dialog, you can also change the background of your video.

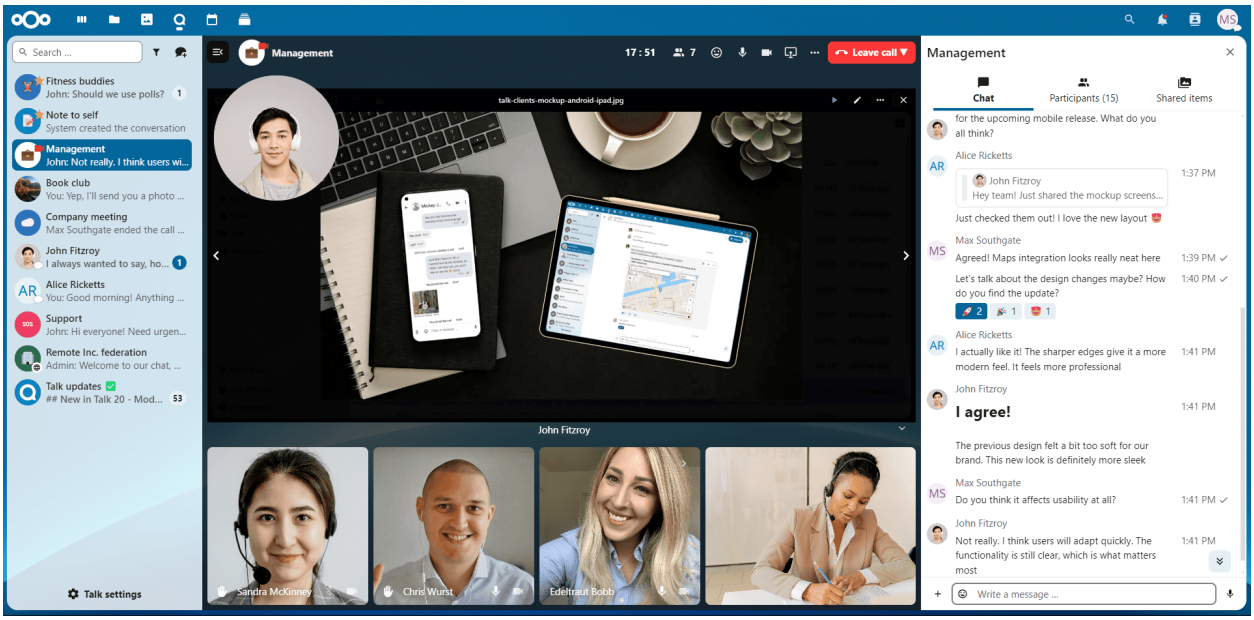



You can change other settings in the `Talk settings` dialog.



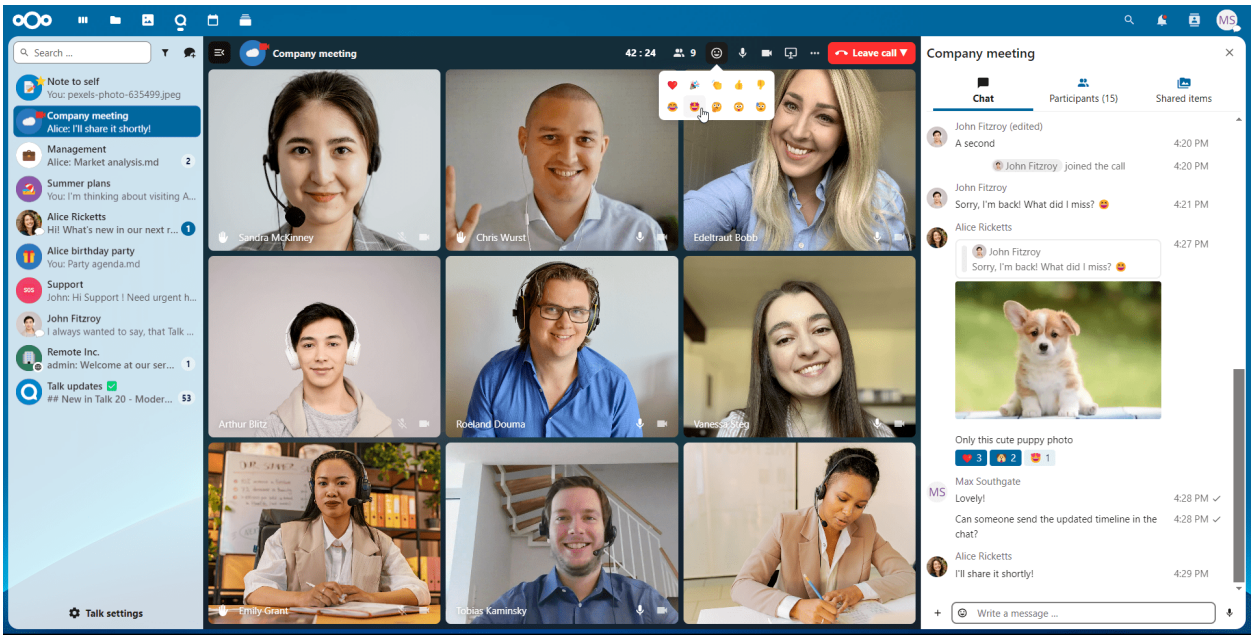

### 5.1.14 Starting a screen share

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. If video from your camera is also available, other participants will see it in a small presenter view next to the screen share.




## 5.1.15 Changing view in a call

You can switch the view in a call with the little four-block icon in the top-right between promoted-view and grid view. The grid view will show everyone equally big and if the people do not fit on the screen, buttons will appear on the left and right that let you navigate.




The promoted view shows the speaker large and others in a row below. If the people do not fit on the screen, buttons will appear on the left and right that let you navigate.

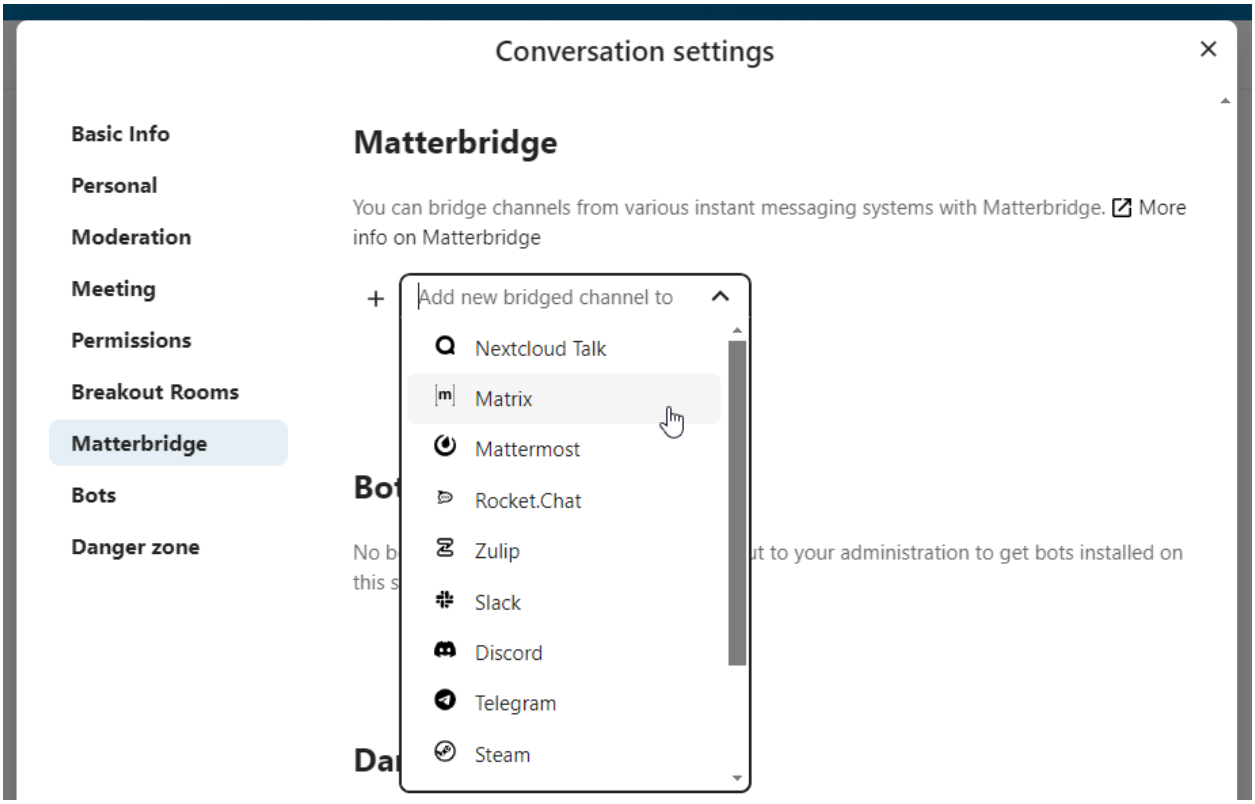
## 5.2 Advanced Talk features

Nextcloud Talk has a number of advanced features users might find useful.

### 5.2.1 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.

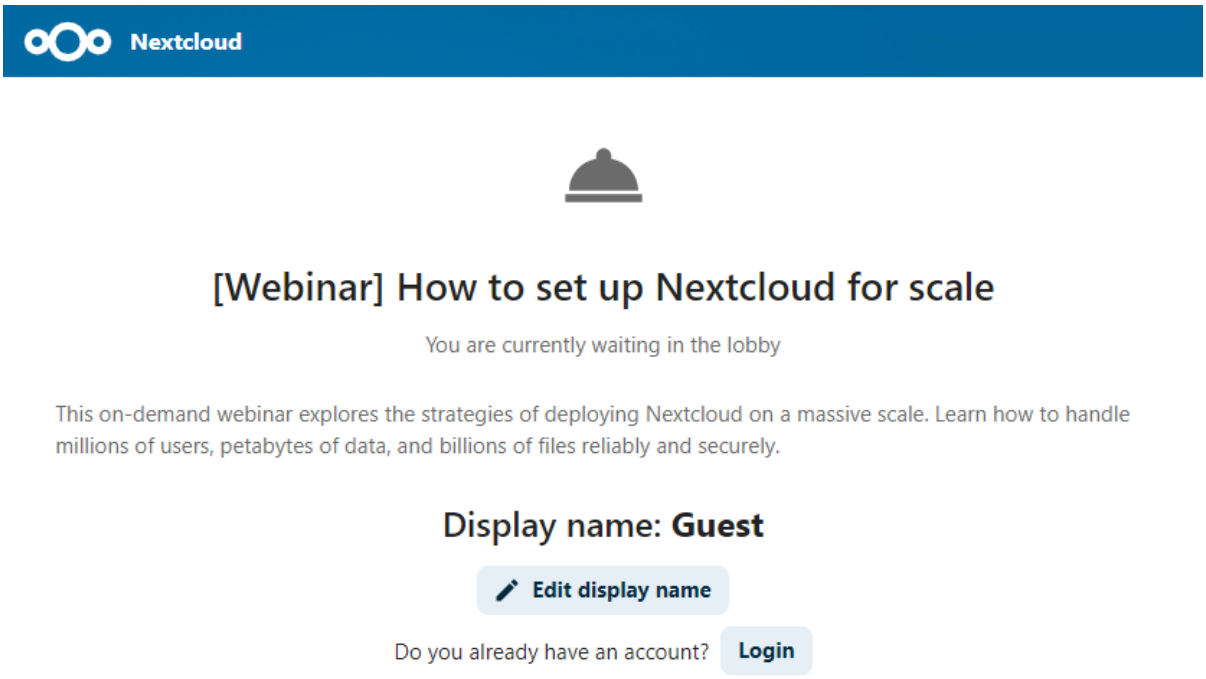
A moderator can add a Matterbridge connection in the chat conversation settings.




Each of the bridges has its own need in terms of configuration. 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.

### 5.2.2 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.

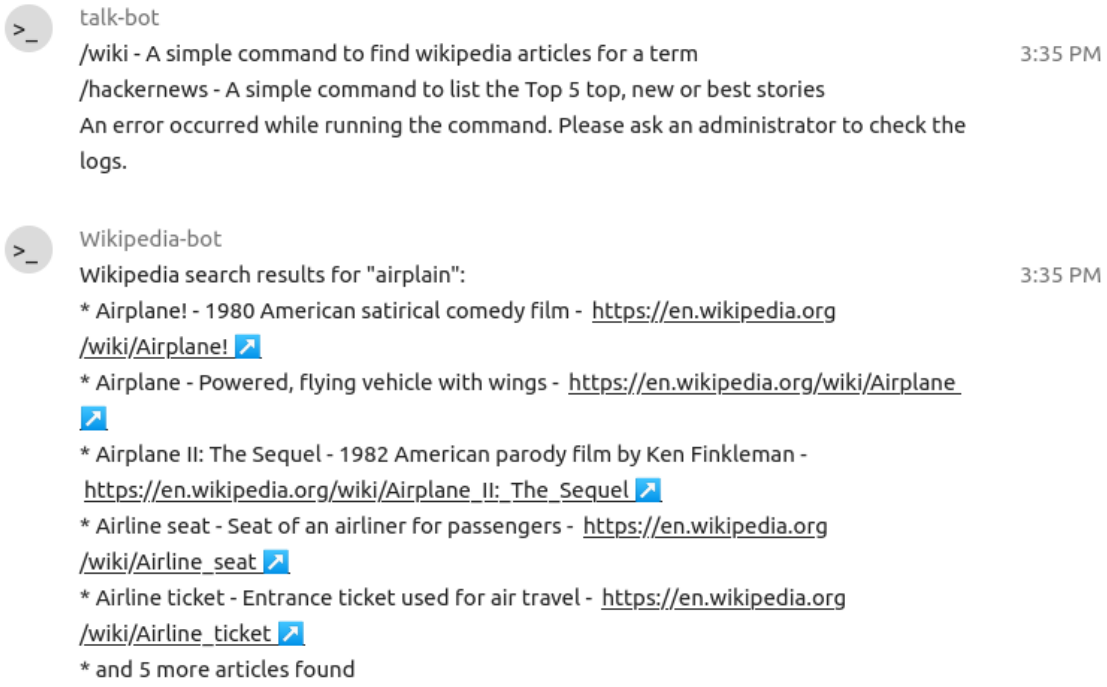
### 5.2.3 Commands

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.

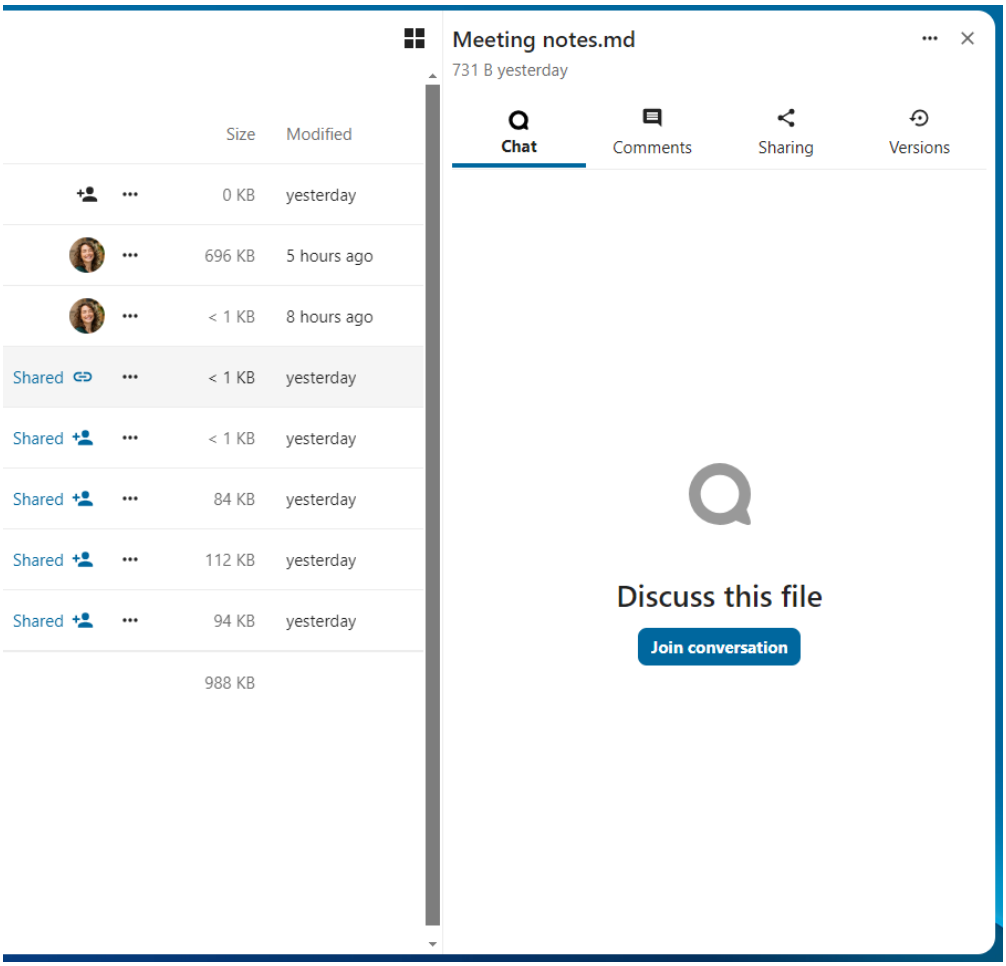
```
/help
```

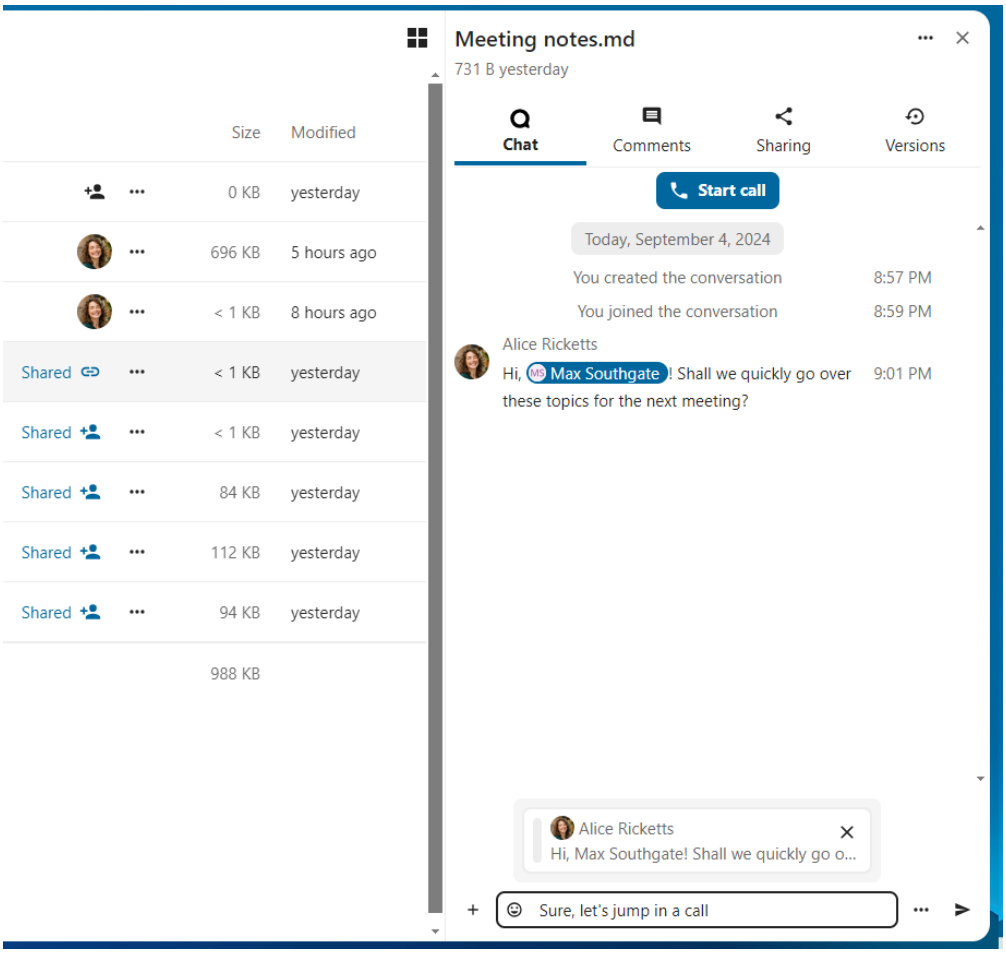



Find more information in the administrative documentation for Talk.

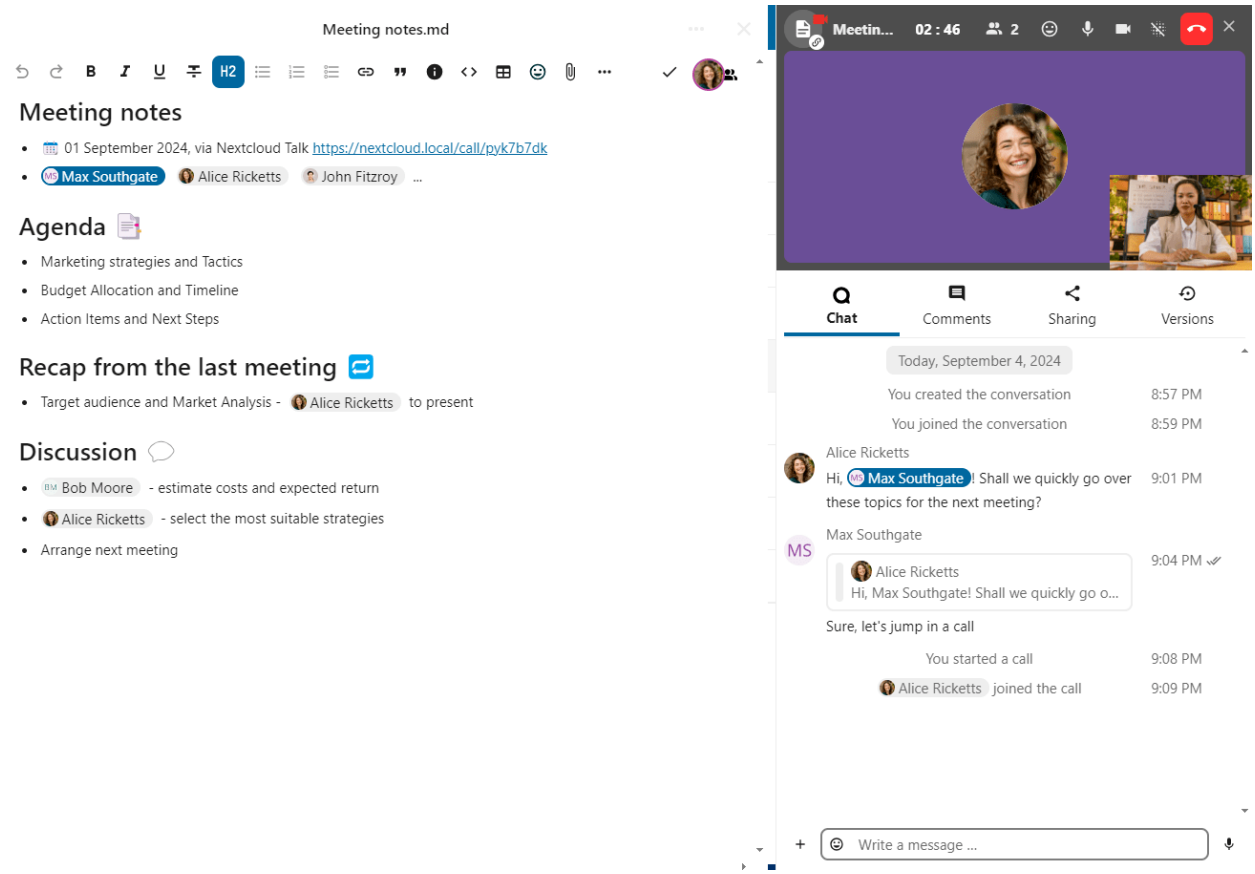
### 5.2.4 Talk from Files

In the Files app, you can chat about files in the sidebar, and even have a call while editing it. You first have to join the chat.

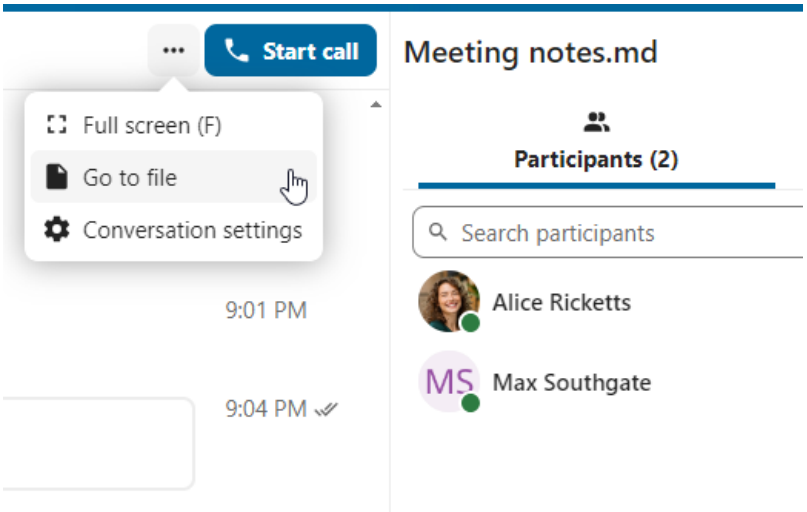

Meeting notes.md
731 B yesterday
Chat
Comments
Sharing
Versions
Size
Modified
0 KB yesterday
696 KB 5 hours ago
< 1 KB 8 hours ago
Shared < 1 KB yesterday
Shared < 1 KB yesterday
Shared 84 KB yesterday
Shared 112 KB yesterday
Shared 94 KB yesterday
988 KB
Discuss this file
Join conversation




You can then chat or have a call with other participants, even when you start editing the file.

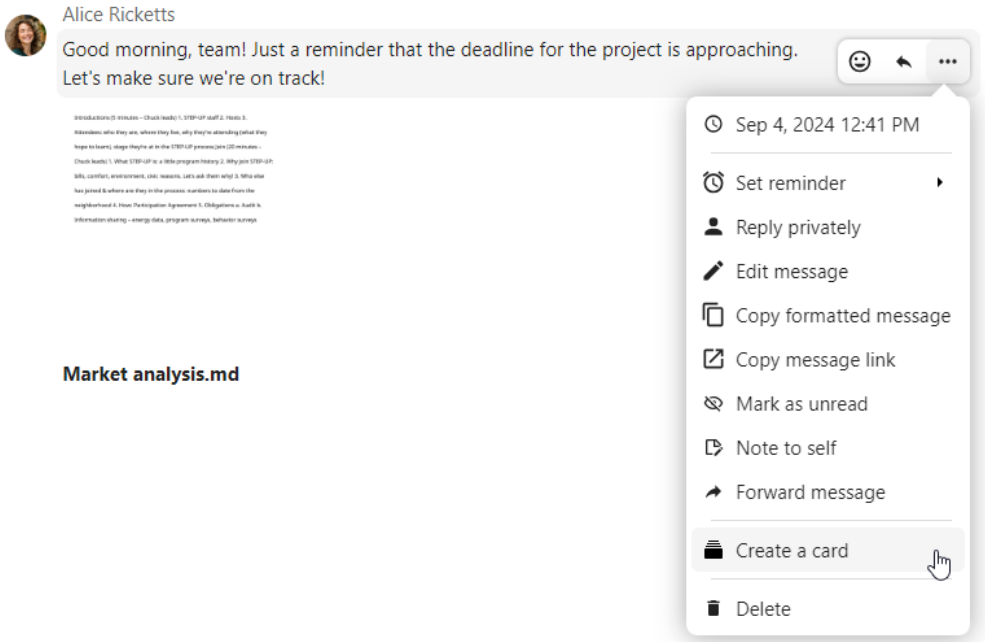


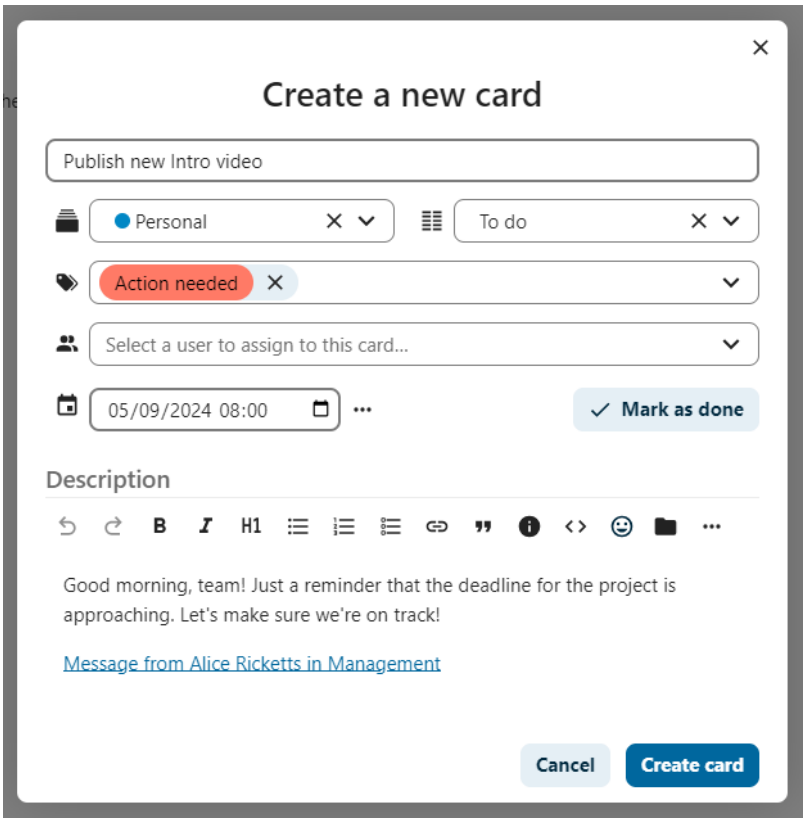

In Talk, a conversation will be created for the file. You can chat from there, or go back to the file using the . . . menu in the top-right.



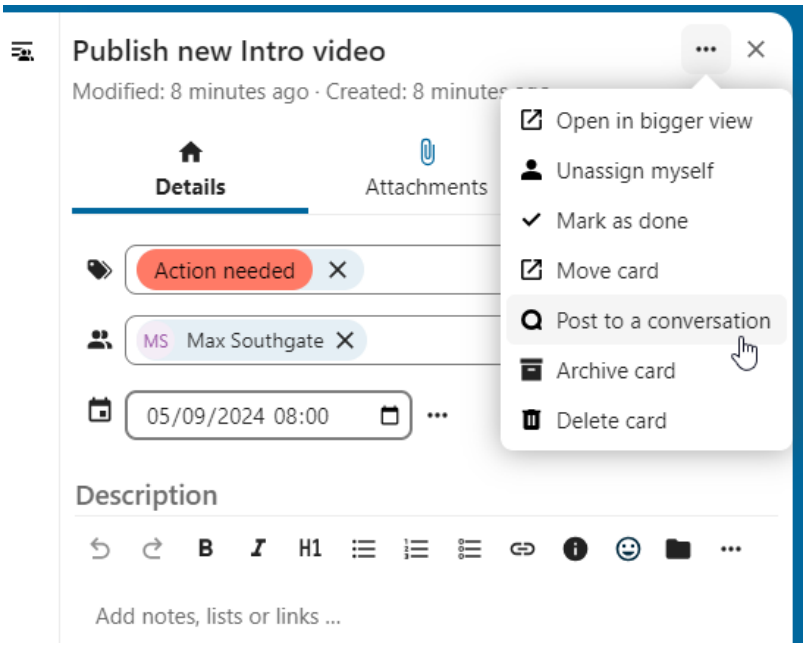
### 5.2.5 Create tasks from chat or share tasks in chat

If Deck is installed, you can use the . . . menu of a chat message and turn the message into a Deck task.






From within Deck, you can share tasks into chat conversations.



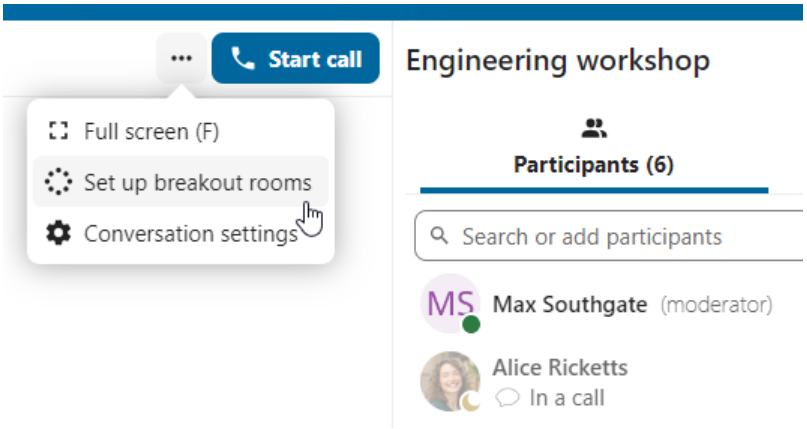
### 5.2.6 Breakout rooms

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).

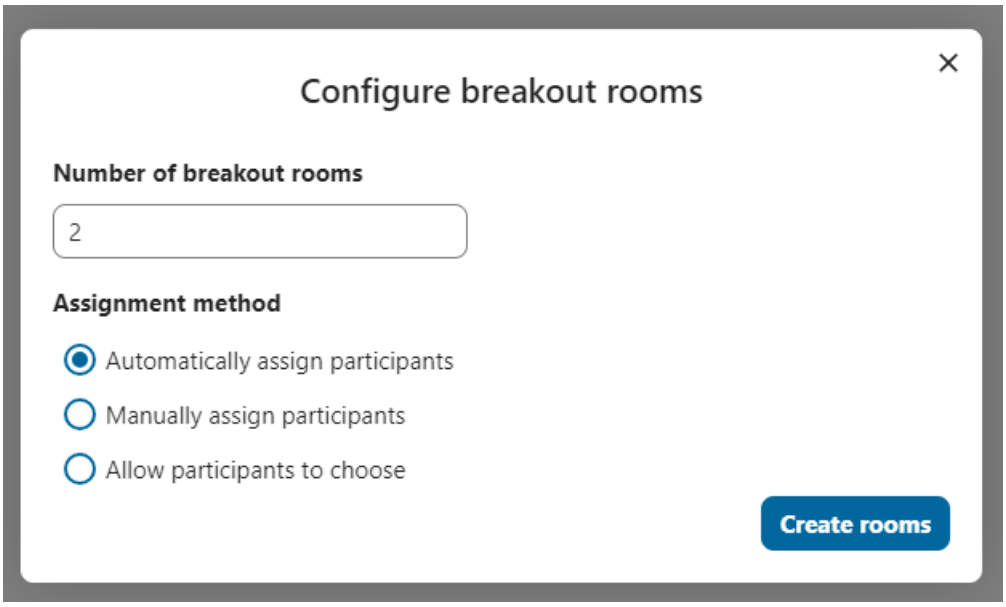
#### Configure breakout rooms

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".



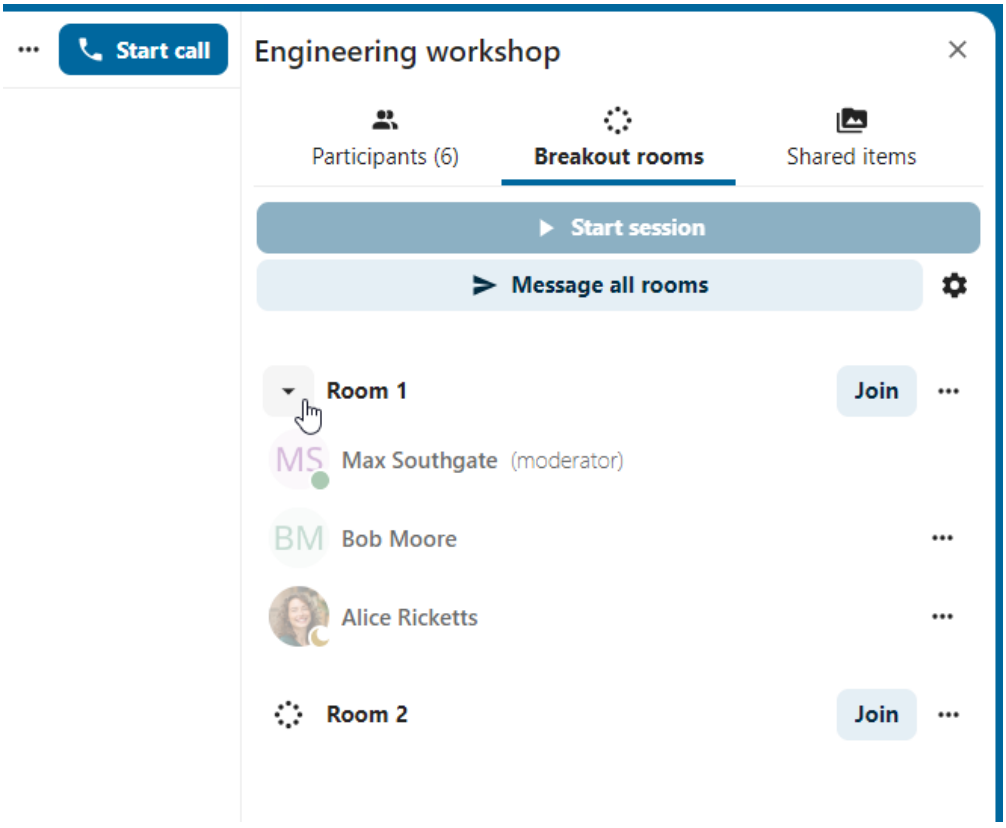

A dialog will open where you can specify the number of rooms you want to create and the participants assignment method. Here you'll be presented with 3 options:

- **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 choose**: Participants will be able to join breakout rooms themselves.




### Manage breakout rooms

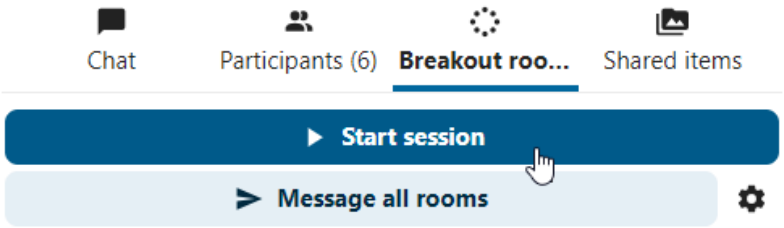
Once the breakout rooms are created, you will be able to see them in the sidebar.



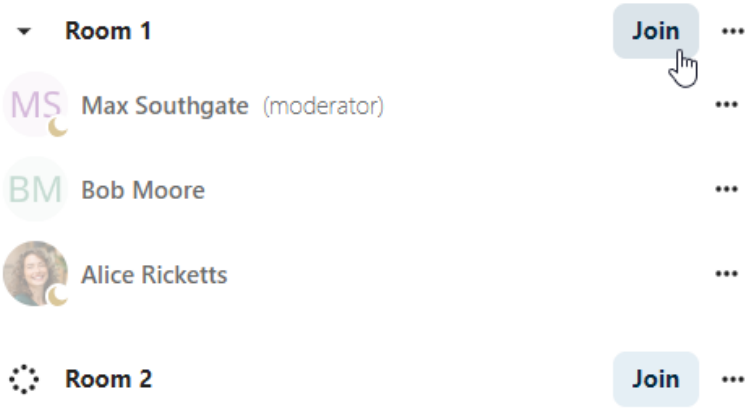

From the sidebar header

- **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.




### 5.2.7 Call recording

The recording feature provides users with an opportunity to:

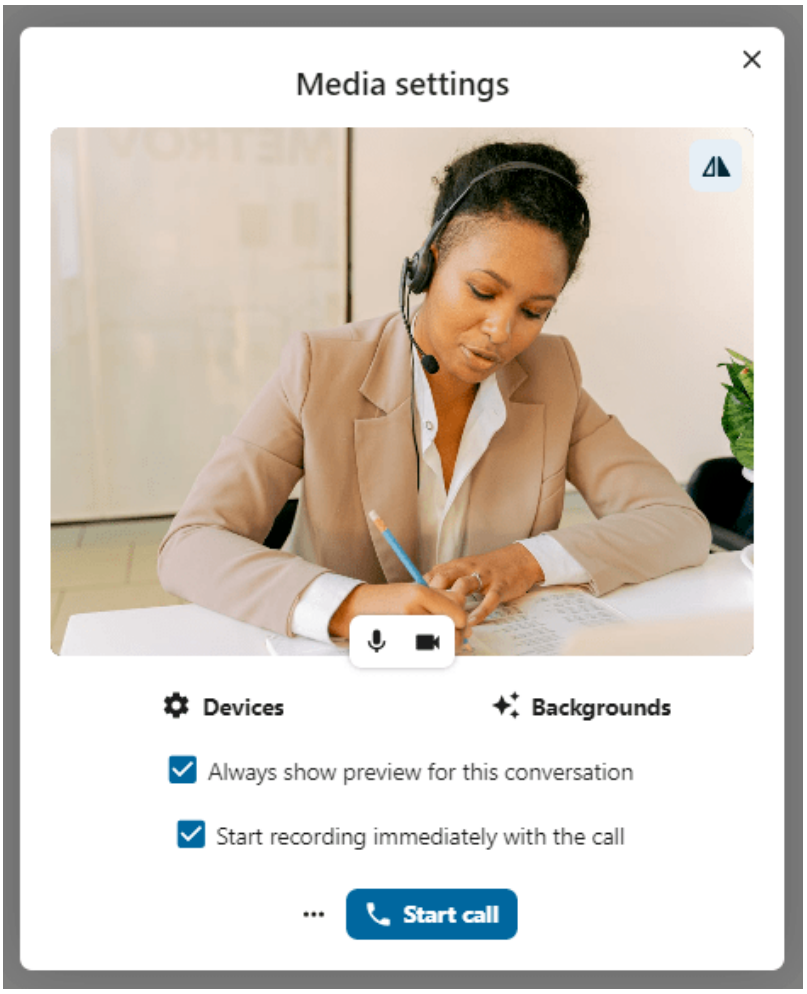
- Start and stop recordings during a call.
- Record the video and audio stream of the speaker, as well as screen share.
- Access, share and download recorded files for future reference or distribution.

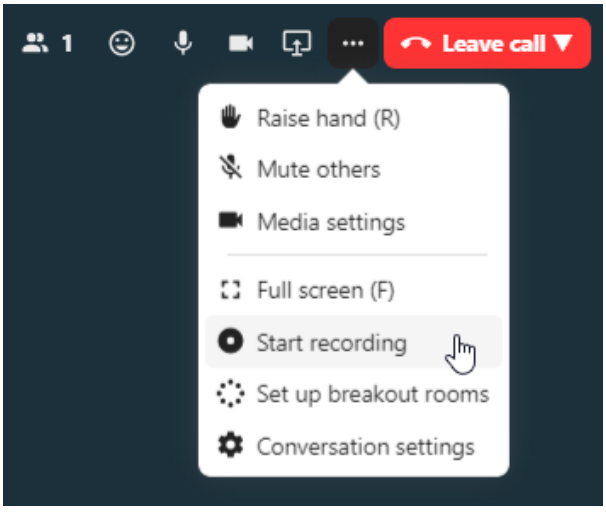
Enabling this feature requires the recording server to be set up by the system administration.

#### Manage a recording

The moderator of the conversation can start a recording together with a call start or anytime during a call:

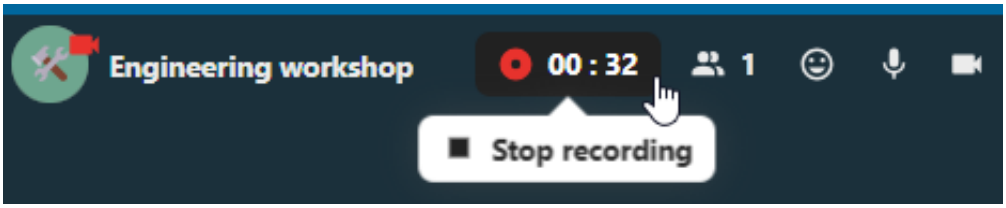
- **Before the call**: tick the checkbox "Start recording immediately with the call" in "Media settings", then click on "Start call".
- **During the call**: click on the top-bar menu, then click "Start recording".



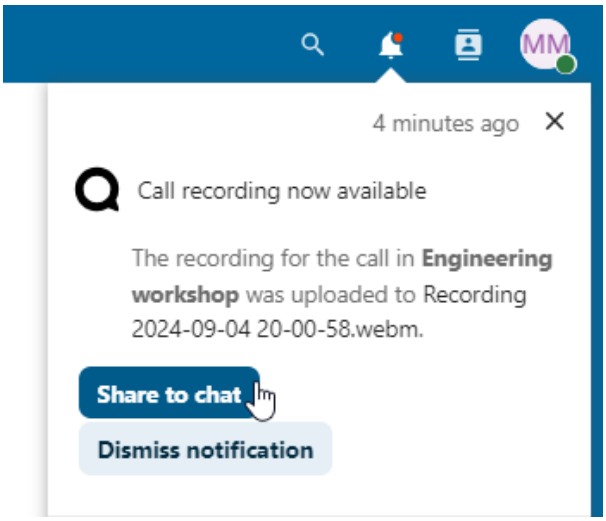



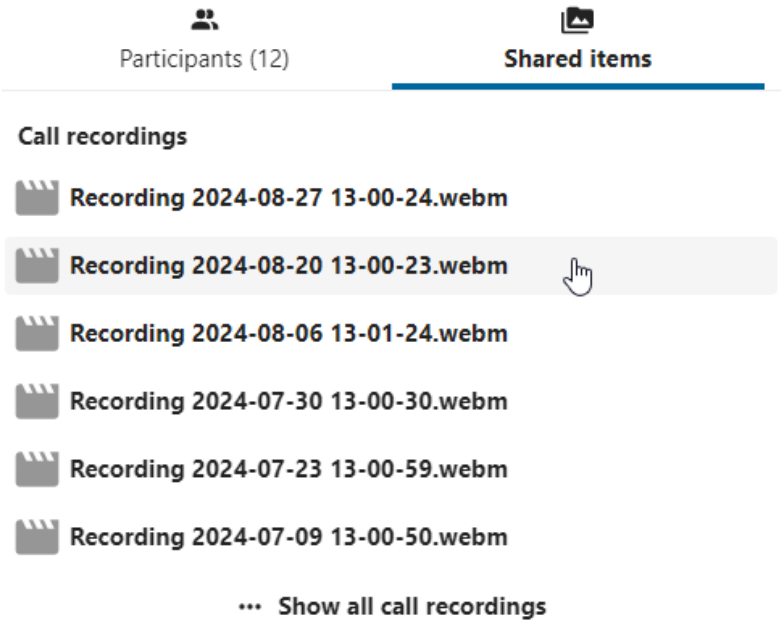

The recording will start shortly, and you will see a red indicator next to the call time. You can stop the recording at any time while the call is still ongoing by clicking on that indicator and selecting “Stop recording”, or by using the same action

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 some time 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.

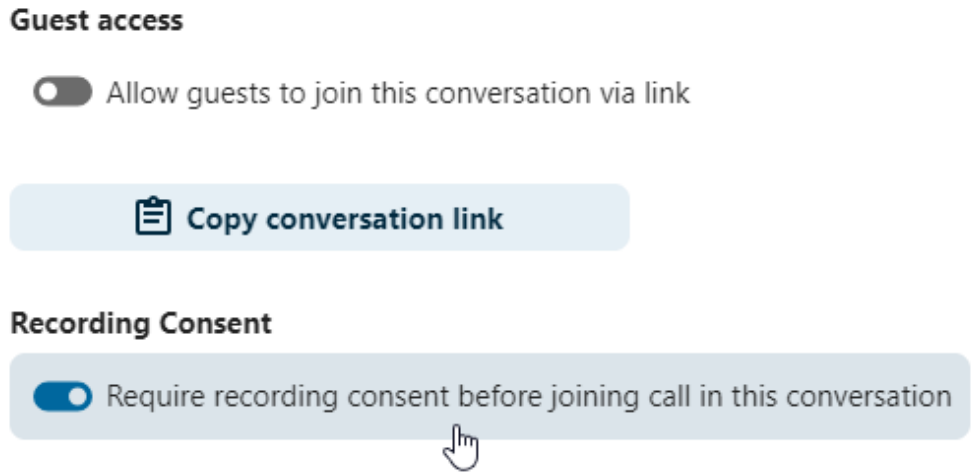


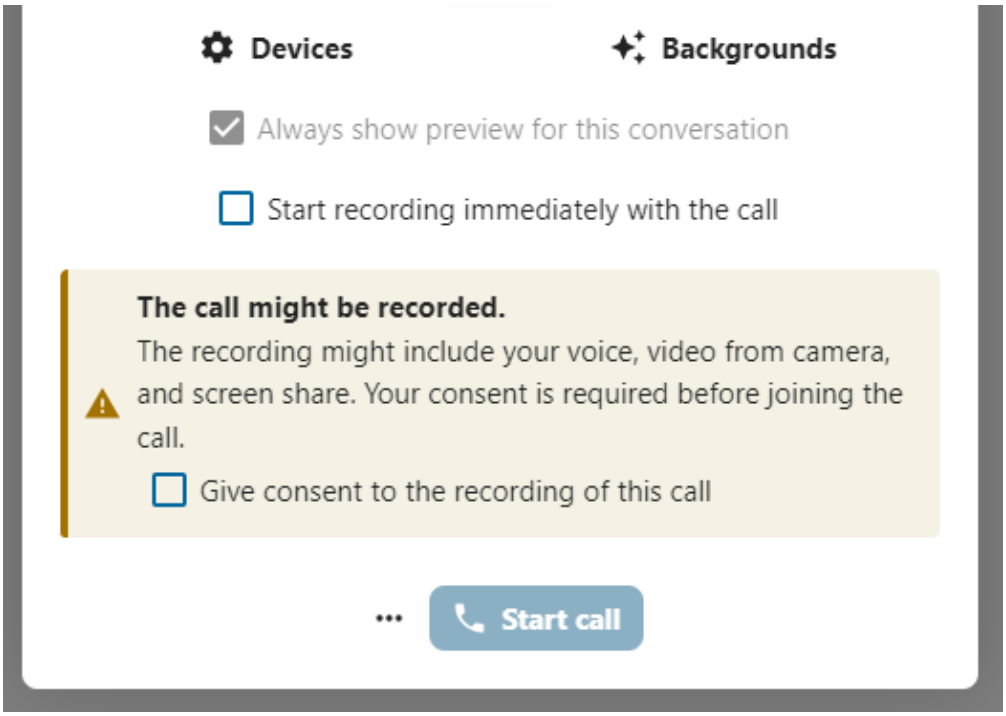
### Recording consent

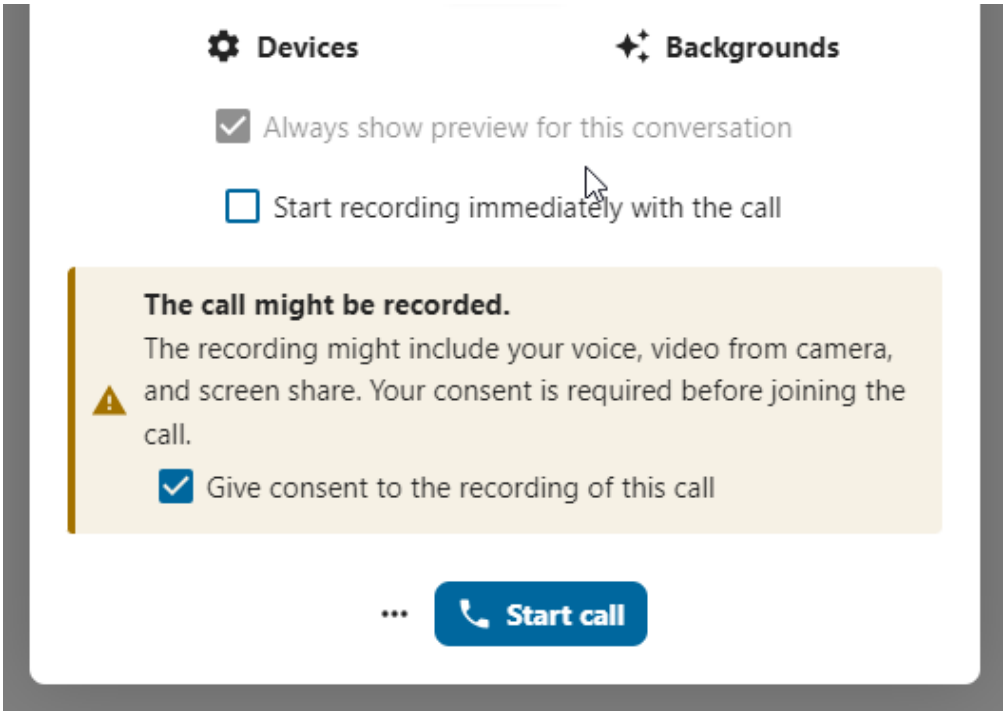
For compliance reasons with various privacy rights, it is possible to ask participants for consent to be recorded before joining the call. The system administration has the flexibility to utilize this feature in several ways:

- 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 "Media settings" 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.






### 5.2.8 Federated conversation

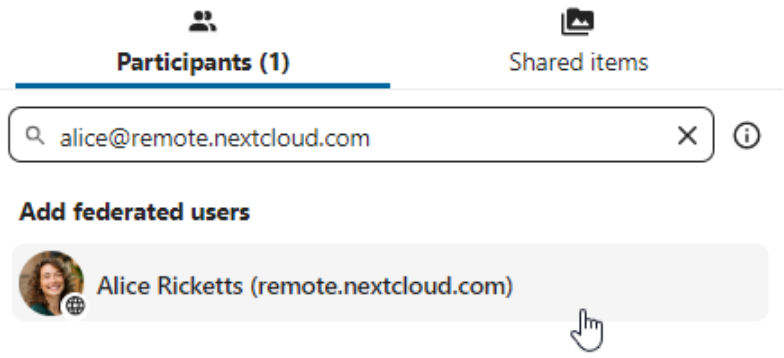
With Federation feature, users can create conversations across different federated Talk instances and use Talk features as if they were on a same server.

**Important** Under current development. Basic chat features are available, more to come in the future!

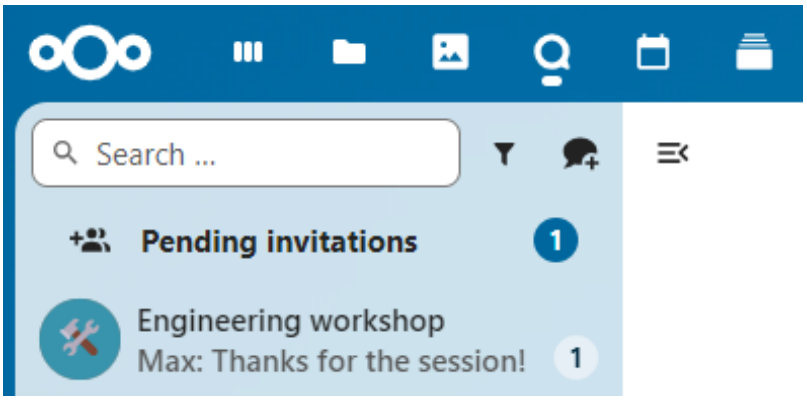
Feature is required to be set up by the system administration.

#### Send and accept invites

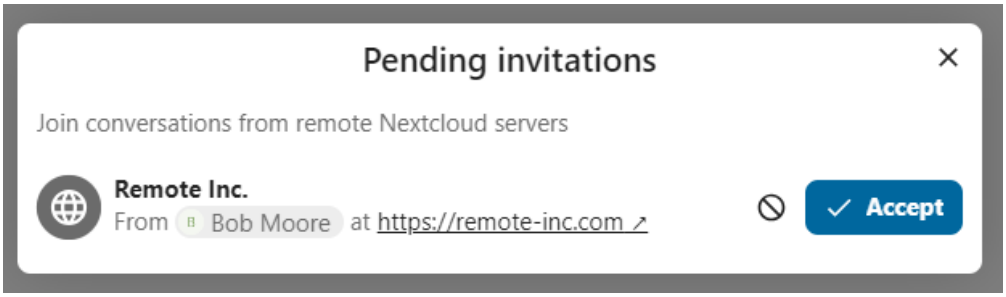
The moderator of the conversation can send an invite to participant on a different server:



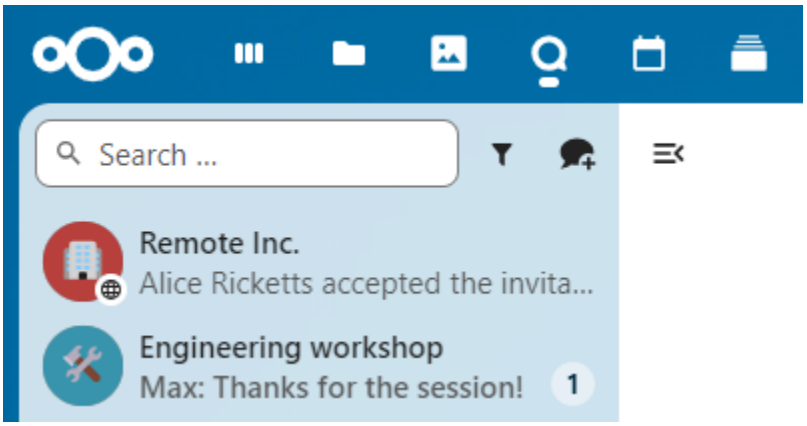

When receiving a notification, user will see a counter of pending invites above the conversations list.




Upon clicking it, more information will be provided about inviting party, and user can either accept or decline the invitation.




By accepting the invite, conversation will appear in the list as any other one.



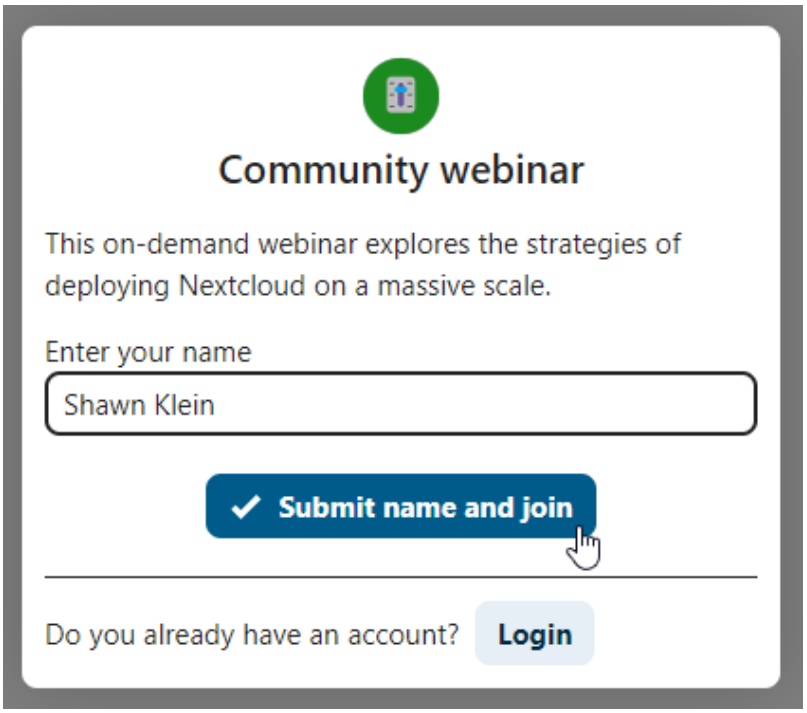

## 5.3 Join a call or chat as guest

Nextcloud Talk offers audio/video call and text chat integrated in Nextcloud. It offers a web interface as well as mobile apps.

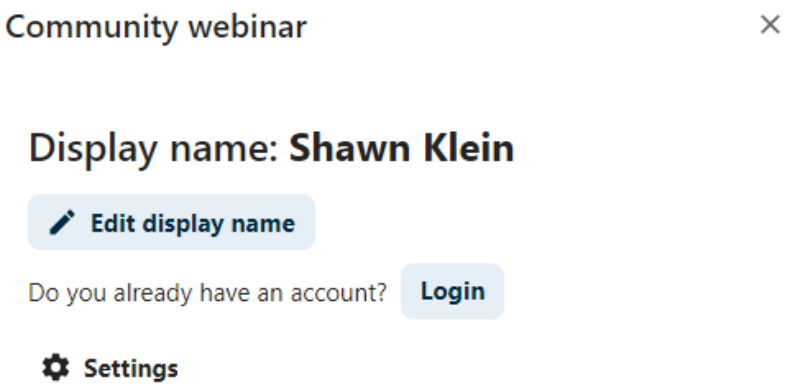
You can find out more about Nextcloud Talk on our website.

### 5.3.1 Joining a chat

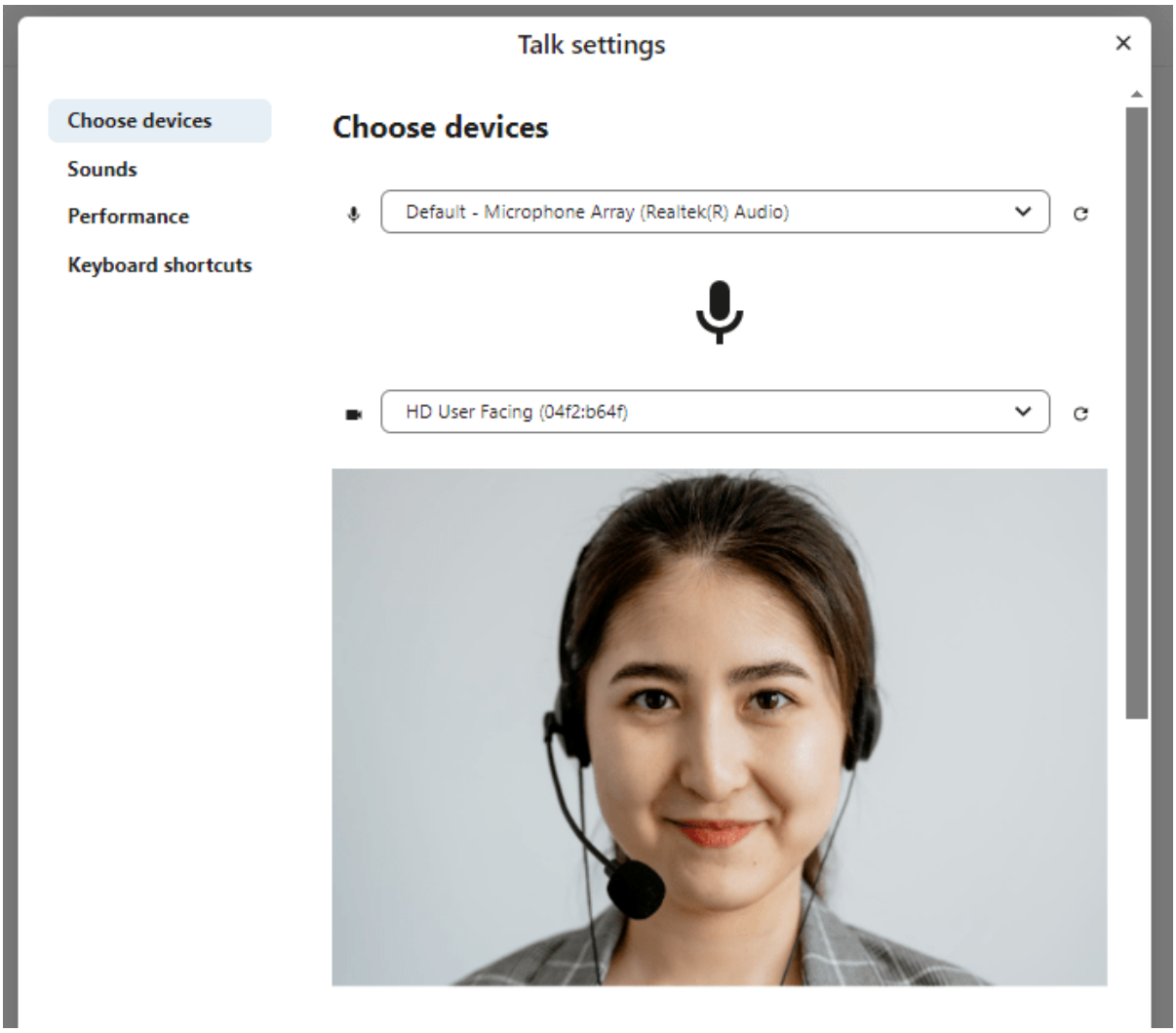
If you received a link to a chat conversation, you can open it in your browser to join the chat. Here, you will be prompted to enter your name before joining.




You can also change your name later by clicking the `Edit` button, located top-right.

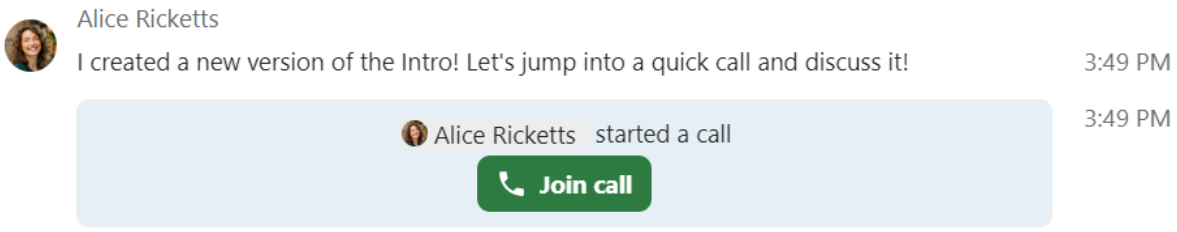



Your camera and microphone settings can be found in the `Settings` menu. There you can also find a list of shortcuts you can use.

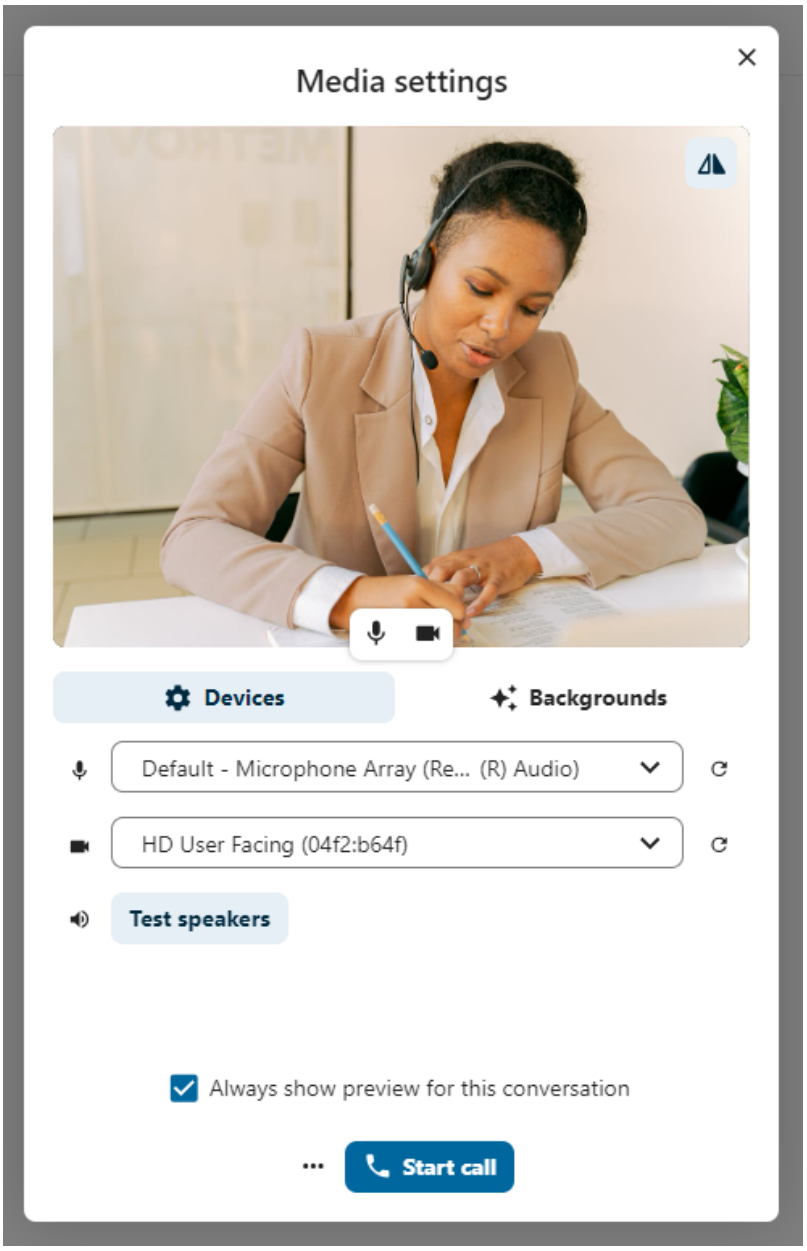



### 5.3.2 Joining a call

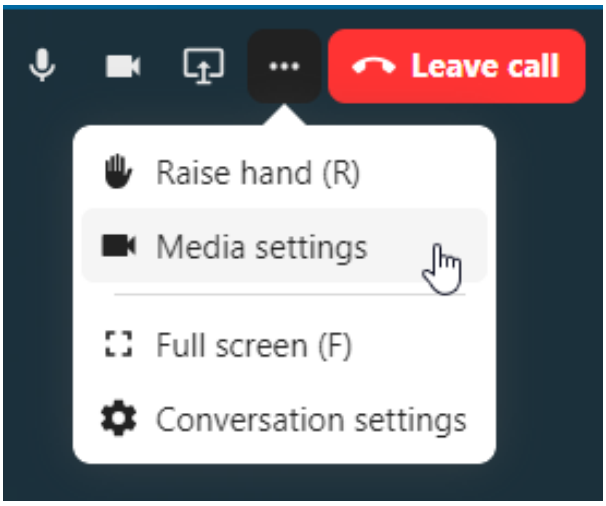
You can start a call any time with the `Start call` button. Other participants will get notified and can join the call. If somebody else has started a call already, the button will change in a green `Join call` button.




Before actually joining the call you will see a device check, where you can pick the right camera and microphone, enable background blur or even join with 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 buttons in the top-right, 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.

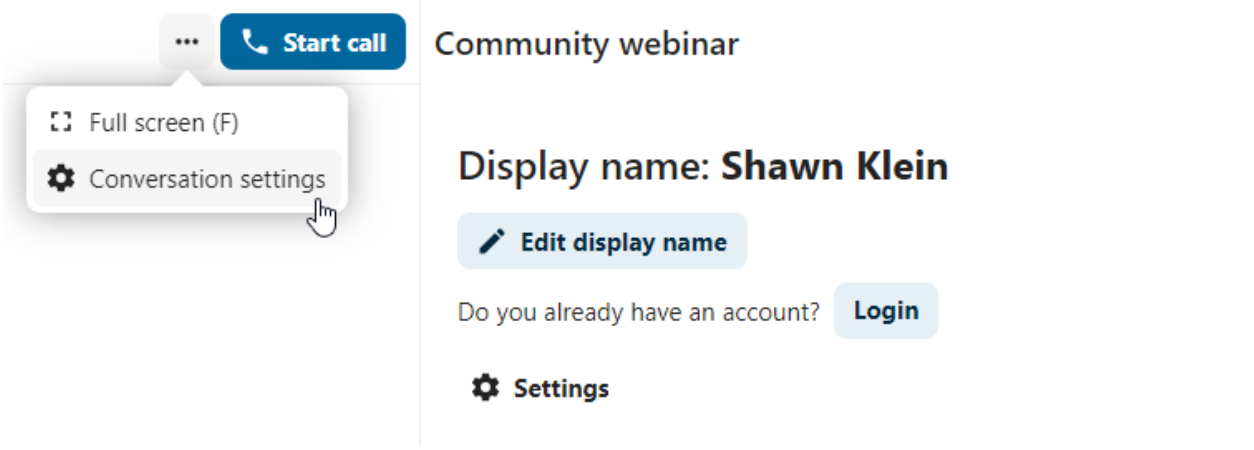
You can hide your video (useful during a screen share) with the little arrow just above the video stream. Bring it back with the little arrow again.

### 5.3.3 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.

### 5.3.4 More 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.



CHAPTER

SIX

# DESKTOP CLIENTS

Available for Windows, macOS, and various Linux distributions, the Nextcloud Desktop Sync client enables you to:

- Specify one or more directories on your computer that you want to synchronize to the Nextcloud server.
- Always have the latest files synchronized, wherever they are located.

Your files are always automatically synchronized between your Nextcloud server, computer and mobile device.

## 6.1 Installation

You can download the latest version of the Nextcloud Desktop Synchronization Client from the Nextcloud download page. There are clients for Linux, macOS, and Microsoft Windows.

The currently supported server releases are the latest three stable versions at time of publication. It means that the latest release series is supporting stable server major versions. See https://github.com/nextcloud/server/wiki/Maintenance-and-Release-Schedule for supported major versions.

Installation on macOS and Windows is the same as for any 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 sync client will automatically keep itself updated; see *The Automatic Updater* for more information.

Linux users must follow the instructions on the download page to add the appropriate repository for their Linux distribution, install the signing key, and then use their package managers to install the desktop sync client. Linux users will also update their sync clients via package manager, and the client will display a notification when an update is available.

Linux users must also have a password manager enabled, such as GNOME Keyring or KWallet, so that the sync client can login automatically.

You will also find links to source code archives and older versions on the download page.

### 6.1.1 System Requirements

- Windows 10+ (64-bits only)
- macOS 12.0+ (64-bits only)
- Linux (Ubuntu 22.04 or openSUSE 15.5 or Alma 8 or …) (64-bits only)

**Note**

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

### 6.1.2 Customizing the Windows Installation

If you just want to install Nextcloud Desktop Synchronization Client on your local system, you can simply launch the *.msi* file and configure it in the wizard that pops up.

#### Features

The MSI installer provides several features that can be installed or removed individually, which you can also control via command-line, if you are automating the installation, then run the following command:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi
```

The command will install the Nextcloud Desktop Synchronization Client into the default location with the default features enabled. If you want to disable, e.g., desktop shortcut icons you can simply change the above command to the following:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi REMOVE=DesktopShortcut
```

See the following table for a list of available features:

| Feature | Enabled by default | Description | Property to disable |
|---|---|---|---|
| Client | Yes, required | The actual client | |
| DesktopShortcut | Yes | Adds a shortcut to the desktop | `NO_DESKTOP_SHORTCUT` |
| StartMenuShortcuts | Yes | Adds a shortcut to the start menu | `NO_START_MENU_SHORTCUTS` |
| ShellExtensions | Yes | Adds Explorer integration | `NO_SHELL_EXTENSIONS` |

#### Installation

You can also choose to only install the client itself by using the following command:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi ADDDEFAULT=Client
```

If you for instance want to install everything but the `DesktopShortcut` and the `ShellExtensions` feature, you have two possibilities:

1. You explicitly name all the features you actually want to install (whitelist) where `Client` is always installed anyway:

   ```
   msiexec /passive /i Nextcloud-x.y.z-x64.msi ADDDEFAULT=StartMenuShortcuts
   ```

2. You pass the `NO_DESKTOP_SHORTCUT` and `NO_SHELL_EXTENSIONS` properties:

   ```
   msiexec /passive /i Nextcloud-x.y.z-x64.msi NO_DESKTOP_SHORTCUT="1" NO_SHELL_
   ↪EXTENSIONS="1"
   ```

**Note**

The Nextcloud `.msi` remembers these properties, so you don't need to specify them on upgrades.

**Note**

You cannot use these to change the installed features, if you want to do that, see the next section.

### Changing Installed Features

You can change the installed features later by using `REMOVE` and `ADDDEFAULT` properties.

1. If you want to add the the desktop shortcut later, run the following command:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi ADDDEFAULT="DesktopShortcut"
```

2. If you want to remove it, simply run the following command:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi REMOVE="DesktopShortcut"
```

Windows keeps track of the installed features and using `REMOVE` or `ADDDEFAULT` will only affect the mentioned features.

Compare REMOVE and ADDDEFAULT on the Windows Installer Guide.

> **Note**
>
> You cannot specify `REMOVE` on initial installation as it will disable all features.

### Installation Folder

You can adjust the installation folder by specifying the `INSTALLDIR` property like this:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi INSTALLDIR="C:\Program Files\Non Standard␣
↪Nextcloud Client Folder"
```

Be careful when using PowerShell instead of `cmd.exe`, it can be tricky to get the whitespace escaping right there. Specifying the `INSTALLDIR` like this only works on first installation, you cannot simply re-invoke the `.msi` with a different path. If you still need to change it, uninstall it first and reinstall it with the new path.

### Disabling Automatic Updates

To disable automatic updates, you can pass the `SKIPAUTOUPDATE` property.:

```
msiexec /passive /i Nextcloud-x.y.z-x64.msi SKIPAUTOUPDATE="1"
```

### Launch After Installation

To launch the client automatically after installation, you can pass the `LAUNCH` property.:

```
msiexec /i Nextcloud-x.y.z-x64.msi LAUNCH="1"
```

This option also removes the checkbox to let users decide if they want to launch the client for non passive/quiet mode.

> **Note**
>
> This option does not have any effect without GUI.

### No Reboot After Installation

The Nextcloud Client schedules a reboot after installation to make sure the Explorer extension is correctly (un)loaded. If you're taking care of the reboot yourself, you can set the `REBOOT` property:

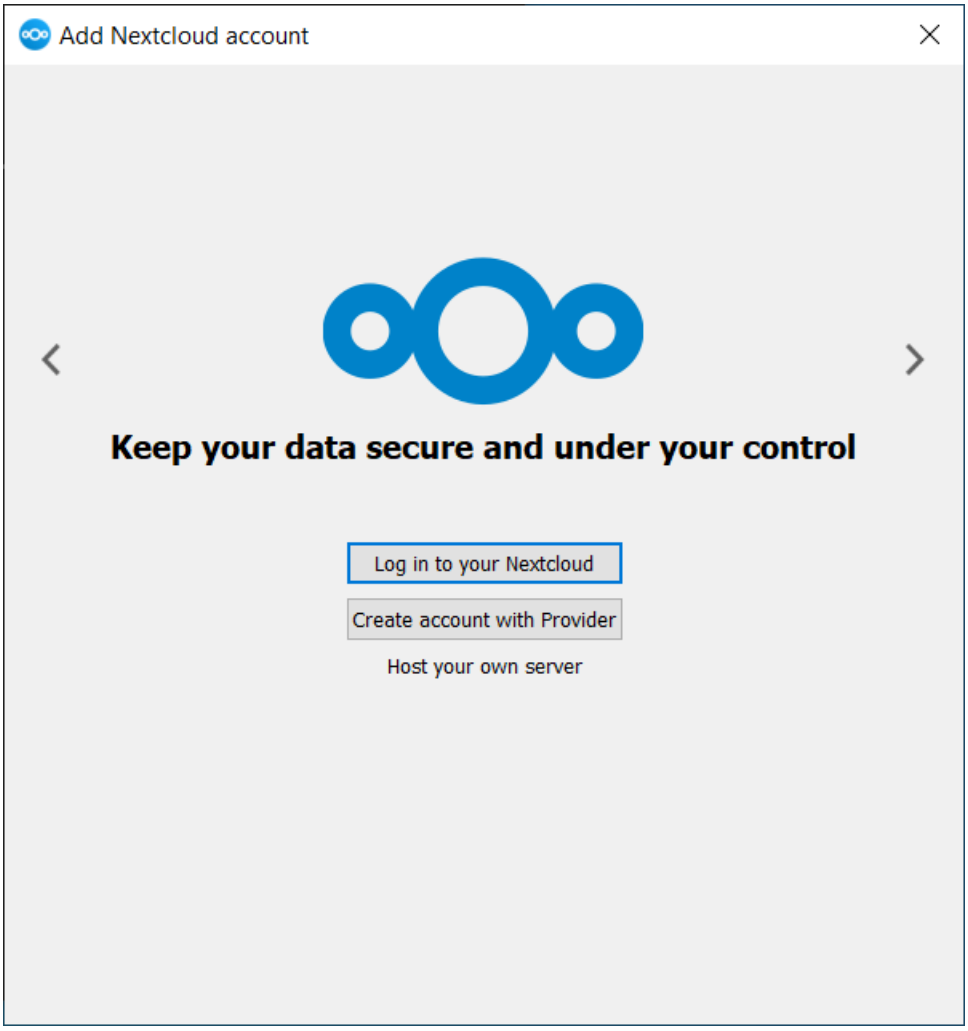
```
msiexec /i Nextcloud-x.y.z-x64.msi REBOOT=ReallySuppress
```

This will make `msiexec` exit with error `ERROR_SUCCESS_REBOOT_REQUIRED` (3010). If your deployment tooling interprets this as an actual error and you want to avoid that, you may want to set the `DO_NOT_SCHEDULE_REBOOT` instead:

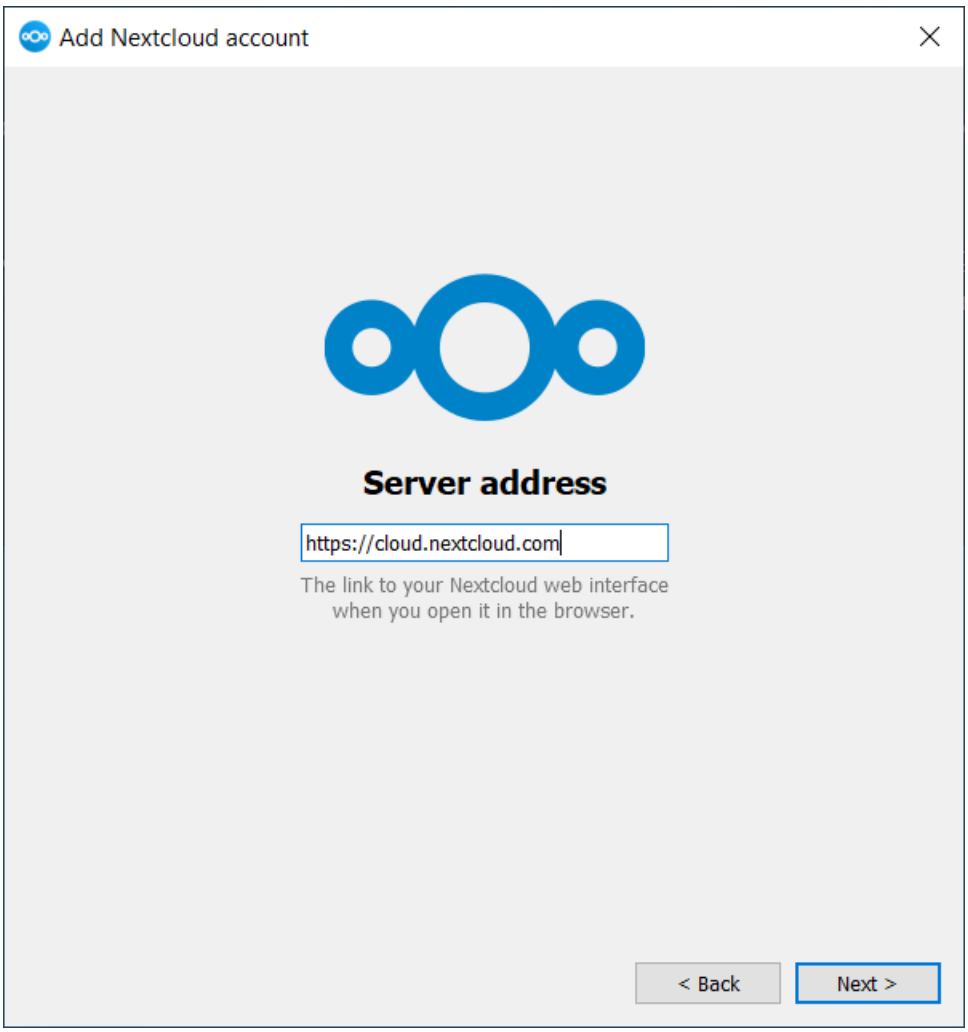
```
msiexec /i Nextcloud-x.y.z-x64.msi DO_NOT_SCHEDULE_REBOOT="1"
```

### 6.1.3 Installation Wizard

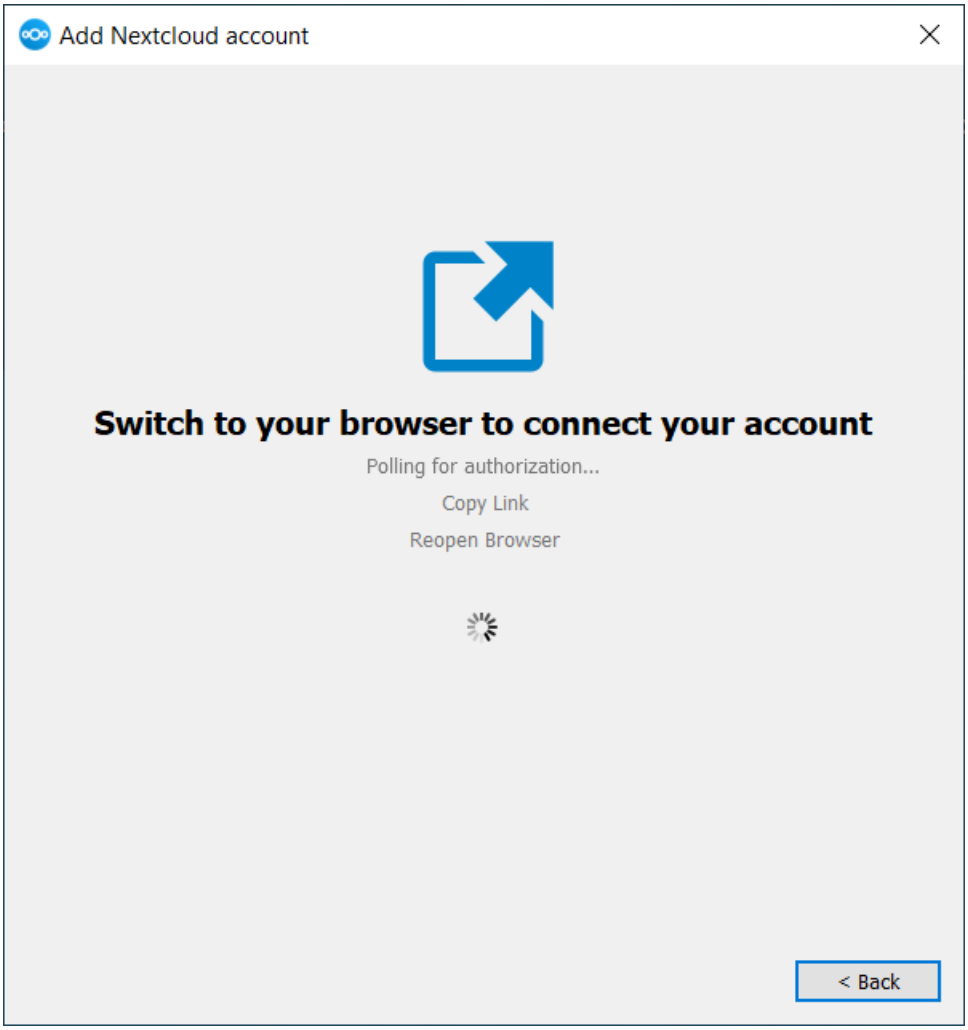
The installation wizard takes you step-by-step through configuration options and account setup. First, you need to enter the URL of your Nextcloud server.



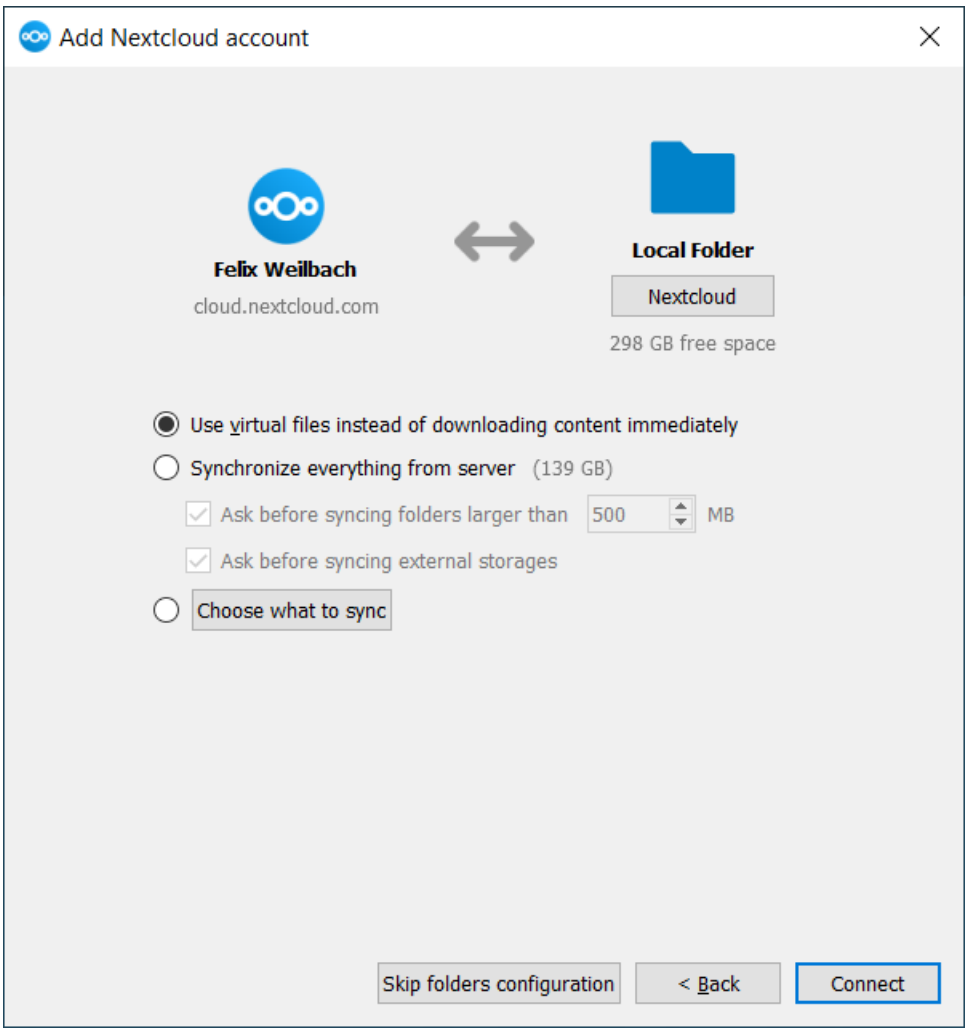

If you already have an account on a Nextcloud instance, you want to press the button `Login to your Nextcloud`. If you don't have a Nextcloud instance and an account there, you might want to register an account with a provider. Press `Create account with Provider` in that case. Please keep in mind that the desktop client might have built without provider support. In that case, you won't see this page. Instead, you will be prompted with the next page.




Enter the URL for your Nextcloud instance. The URL is the same URL that you type into your browser when you try to access your Nextcloud instance.




Now your web browser should open and prompt you to login into your Nextcloud instance. Enter your username and password in your web browser and grant access. After you did that, go back to the wizard. Please keep in mind that you might not need to enter your username and password if you are already logged in to your browser.




On the local folder options screen, you may sync all of your files on the Nextcloud server, or select individual folders. The default local sync folder is `Nextcloud`, in your home directory. You may change this as well.

When you have completed selecting your sync folders, click the Connect button at the bottom right. The client will attempt to connect to your Nextcloud server, and when it is successful, the wizard closes itself. You can now observe the sync activity if you open the main dialogue by clicking on the tray icon.

## 6.2 Using the Synchronization Client

The Nextcloud Desktop Client remains in the background and is visible as an icon in the system tray (Windows, KDE), menu bar (macOS), or notification area (Linux).

The status indicator uses icons to indicate the current status of your synchronization. The green circle with the white checkmark tells you that your synchronization is current and you are connected to your Nextcloud server.

The blue icon with the white semi-circles means synchronization is in progress.

The yellow icon with the parallel lines tells you your synchronization has been paused. (Most likely by you.)

The gray icon with three white dots means your sync client has lost its connection with your Nextcloud server.

When you see a yellow circle with the sign "!" that is the informational icon, so you should click it to see what it has to tell you.

The red circle with the white "x" indicates a configuration error, such as an incorrect login or server URL.

### 6.2.1 Systray Icon

A right-click on the systray icon opens a menu for quick access to multiple operations.

This menu provides the following options:

- Open main dialog
- Pause sync/Resume sync
- Settings
- Exit Nextcloud, logging out and closing the client

A left-click on your systray icon opens the main dialog of the desktop client.

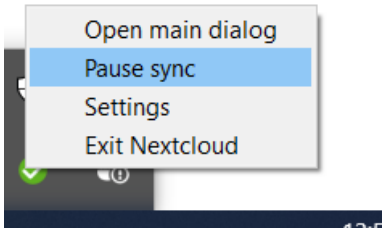
The main dialogs show recent activities, errors and server notifications.

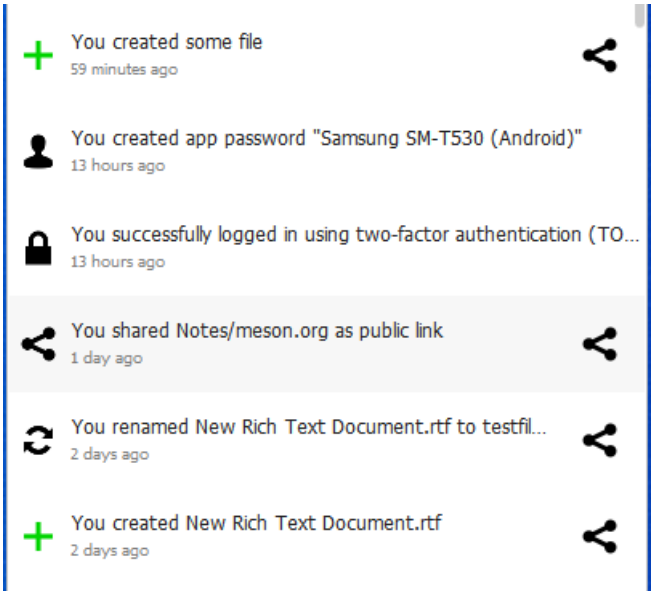
When clicking on the main dialog and then clicking on the avatar of the user, the Settings can be opened.

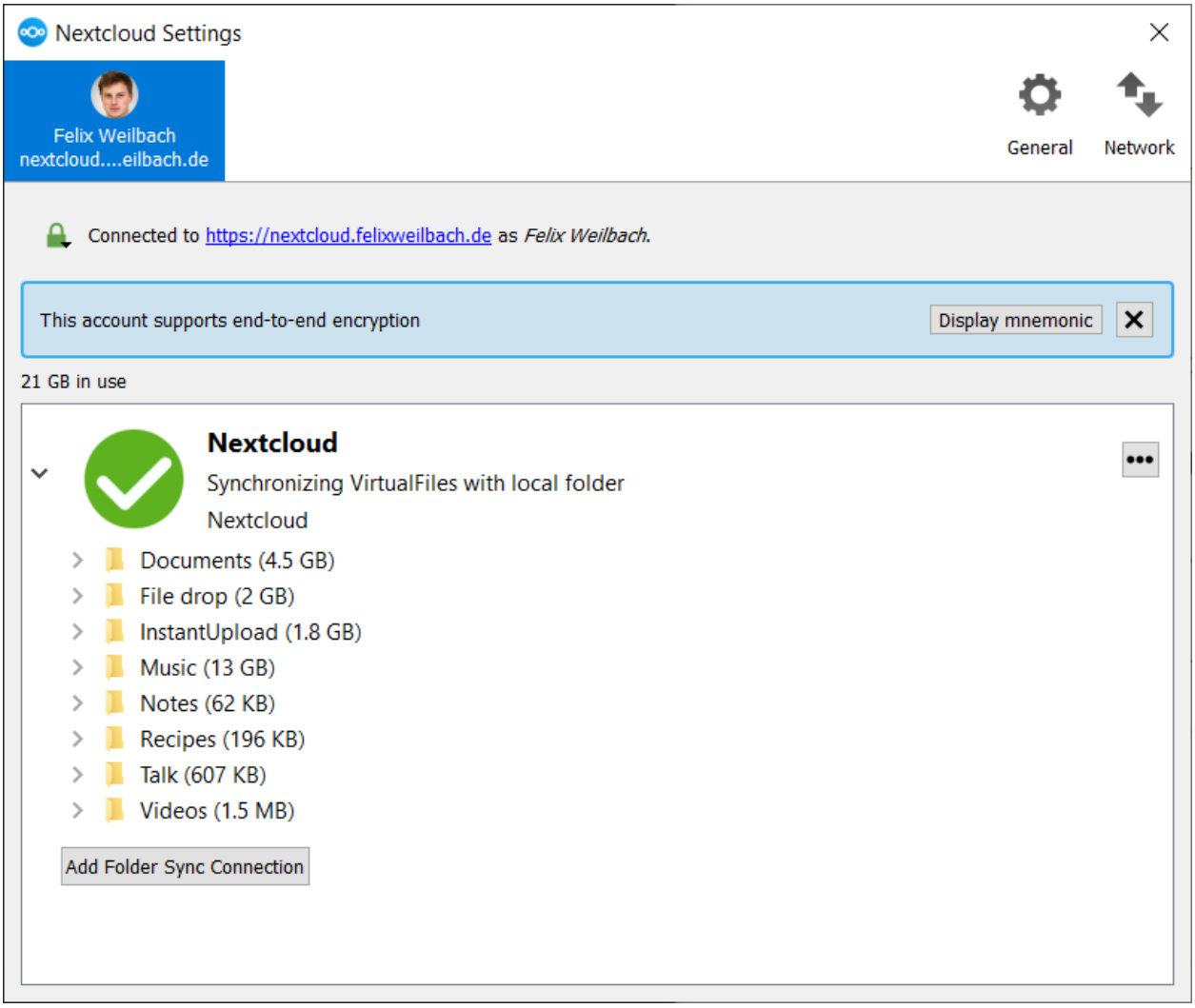
### 6.2.2 Configuring Nextcloud Account Settings

At the top of the window are tabs for each configured sync account, and two others for General and Network settings. On your account tabs you have the following features:

- Connection status, showing which Nextcloud server you are connected to, and your Nextcloud username.
- Used and available space on the server.
- Current synchronization status.


Open main dialog
Pause sync
Settings
Exit Nextcloud


You created some file
59 minutes ago
You created app password "Samsung SM-T530 (Android)"
13 hours ago
You successfully logged in using two-factor authentication (TO...
13 hours ago
You shared Notes/meson.org as public link
1 day ago
You renamed New Rich Text Document.rtf to testfil...
2 days ago
You created New Rich Text Document.rtf
2 days ago


Nextcloud Settings
Felix Weilbach
nextcloud....eilbach.de
General
Network
Connected to https://nextcloud.felixweilbach.de as Felix Weilbach.
This account supports end-to-end encryption
Display mnemonic
21 GB in use
Nextcloud
Synchronizing VirtualFiles with local folder
Nextcloud
Documents (4.5 GB)
File drop (2 GB)
InstantUpload (1.8 GB)
Music (13 GB)
Notes (62 KB)
Recipes (196 KB)
Talk (607 KB)
Videos (1.5 MB)
Add Folder Sync Connection

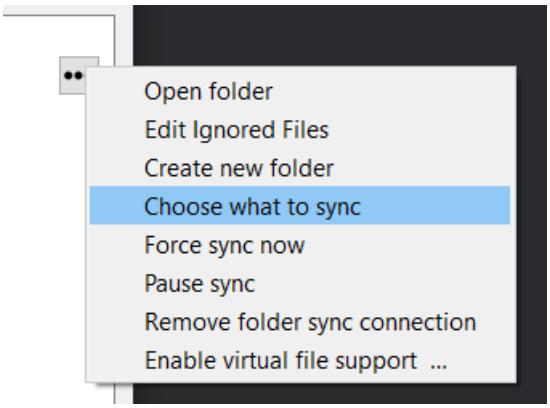
- **Add Folder Sync Connection** button.

The little button with three dots (the overflow menu) that sits to the right of the sync status bar offers additional options:

- Open Folder
- Choose What to Sync (This appears only when your file tree is collapsed, and expands the file tree)
- Pause Sync / Resume Sync
- Remove folder sync connection
- Availability (Only available if virtual files support is enabled)
- Enable virtual file support/Disable virtual file support

**Open Folder** opens your local Nextcloud sync folder.

**Pause Sync** pauses sync operations without making any changes to your account. It will continue to update file and folder lists, without downloading or updating files. To stop all sync activity use **Remove Folder Sync Connection**.




**Note**

Nextcloud does not preserve the mtime (modification time) of directories, though it does update the mtimes on files. See Wrong folder date when syncing for discussion of this.

### 6.2.3 Adding New Accounts

You may configure multiple Nextcloud accounts in your desktop sync client. Simply click the **Account > Add New** button on any account tab to add a new account, and then follow the account creation wizard. The new account will appear as a new tab in the settings dialog, where you can adjust its settings at any time. Use **Account > Remove** to delete accounts.

### 6.2.4 File Manager Overlay Icons

The Nextcloud sync client provides overlay icons, in addition to the normal file type icons, for your system file manager (Explorer on Windows, Finder on Mac and Nautilus on Linux) to indicate the sync status of your Nextcloud files.

The overlay icons are similar to the systray icons introduced above. They behave differently on files and directories according to sync status and errors.

The overlay icon of an individual file indicates its current sync state. If the file is in sync with the server version, it displays a green checkmark.

If the file is ignored from syncing, for example because it is on your exclude list, or because it is a symbolic link, it displays a warning icon.

If there is a sync error, or the file is blacklisted, it displays an eye-catching red X.

If the file is waiting to be synced, or is currently syncing, the overlay icon displays a blue cycling icon.

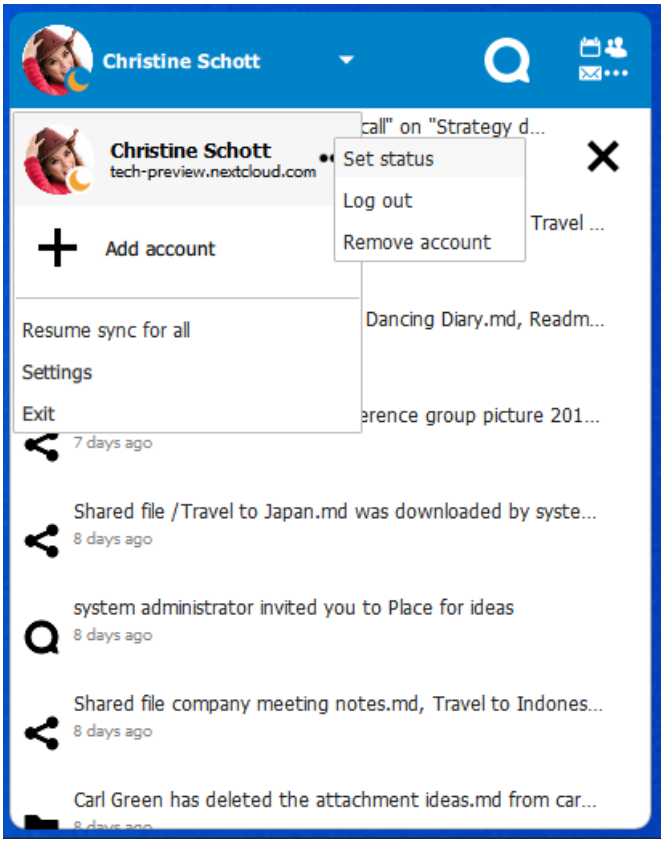
When the client is offline, no icons are shown to reflect that the folder is currently out of sync and no changes are synced to the server.

The overlay icon of a synced directory indicates the status of the files in the directory. If there are any sync errors, the directory is marked with a warning icon.

If a directory includes ignored files that are marked with warning icons that does not change the status of the parent directories.

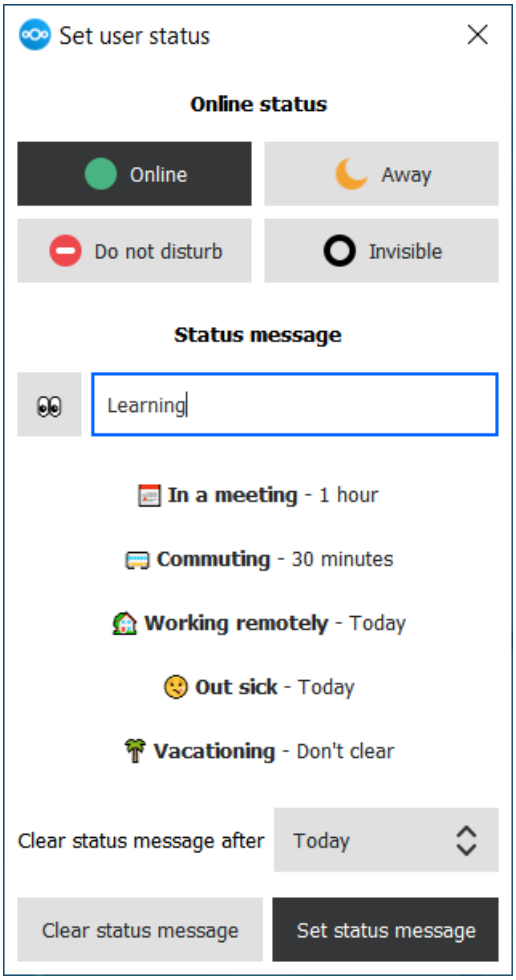
### 6.2.5 Set the user status

If you have the user status app installed on your Nextcloud server, you can set your user status from the desktop client. To do so, open the main dialog. Then click on your avatar and then click on the three dots. In the menu that opens click on **Set status**.




In the dialog that opens, you can set your online status if you click on either **Online**, **Away**, **Do not disturb** or **Invisible**. You can also set a custom status message with the text field below or choose one of the predefined status messages below. It is also possible to set a custom emoji if you click on the button with the emoji beside the text input field. The last thing you might want to set is when your user status should be cleared. You can choose the period after which the user status will be cleared by clicking on the button on the left hand side of the text **Clear status message after**.

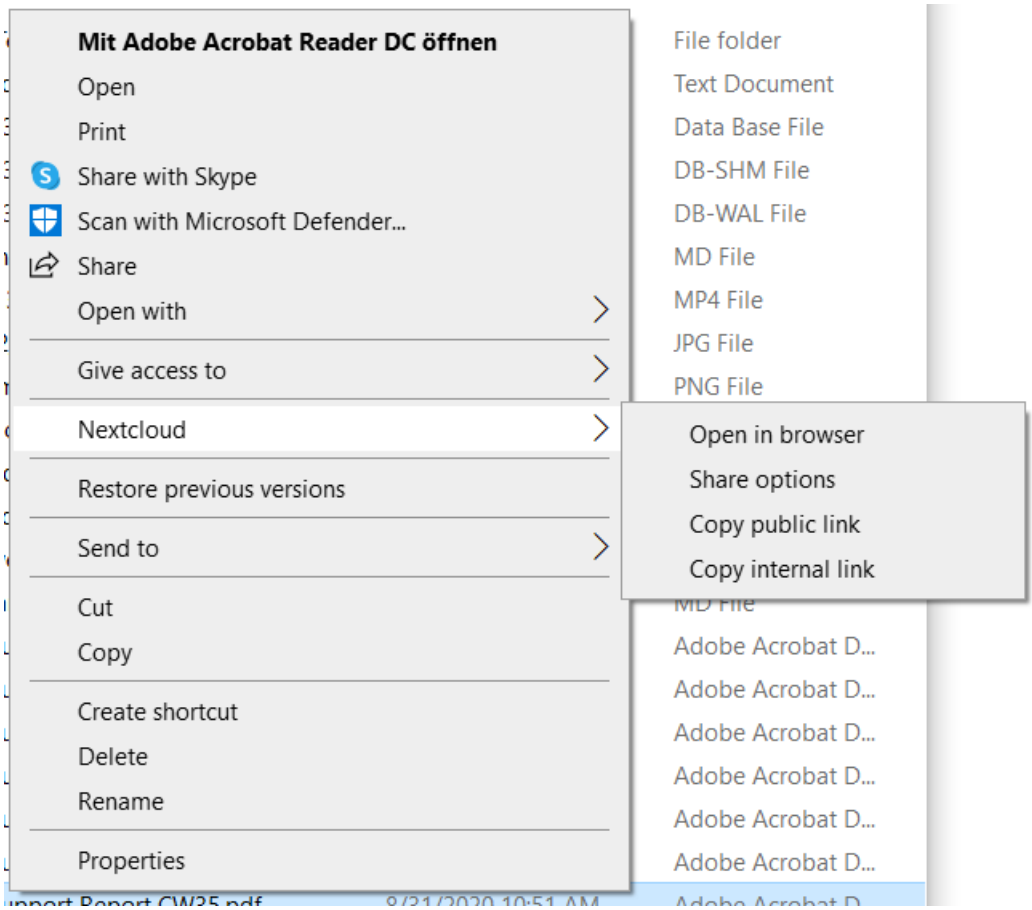
If you are happy with the status you have created you can enable this status with the button **Set status message**. If you had already a status set, you can clear the status by clicking the cutton **Clear status message**.


Set user status
Online status
Online
Away
Do not disturb
Invisible
Status message
Learning
In a meeting - 1 hour
Commuting - 30 minutes
Working remotely - Today
Out sick - Today
Vacationing - Don't clear
Clear status message after
Today
Clear status message
Set status message

### 6.2.6 Sharing From Your Desktop

The Nextcloud desktop sync client integrates with your file manager. Finder on macOS and Explorer on Windows. Linux users must install an additional package depending on the used file manager. Available are e.g. `nautilus-nextcloud` (Ubuntu/Debian), `dolphin-nextcloud` (Kubuntu), `nemo-nextcloud` and `caja-nextcloud`. You can create share links, and share with internal Nextcloud users the same way as in your Nextcloud Web interface.

In your file explorer, click on a file and in the context menu go to **Nextcloud** and then lick on **Share options** to bring up the Share dialog.



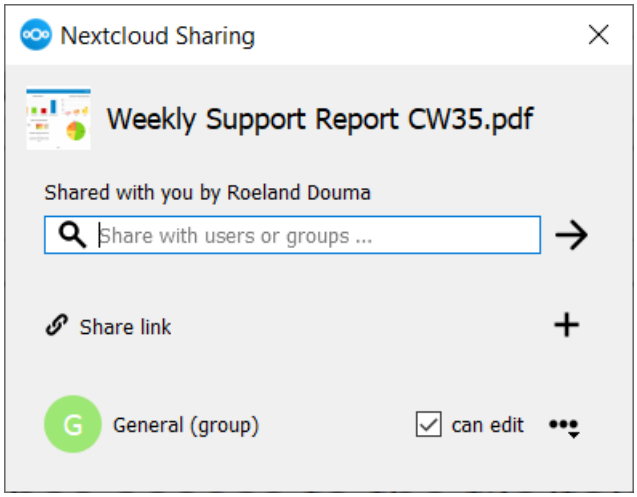

From this dialog you can share a file.

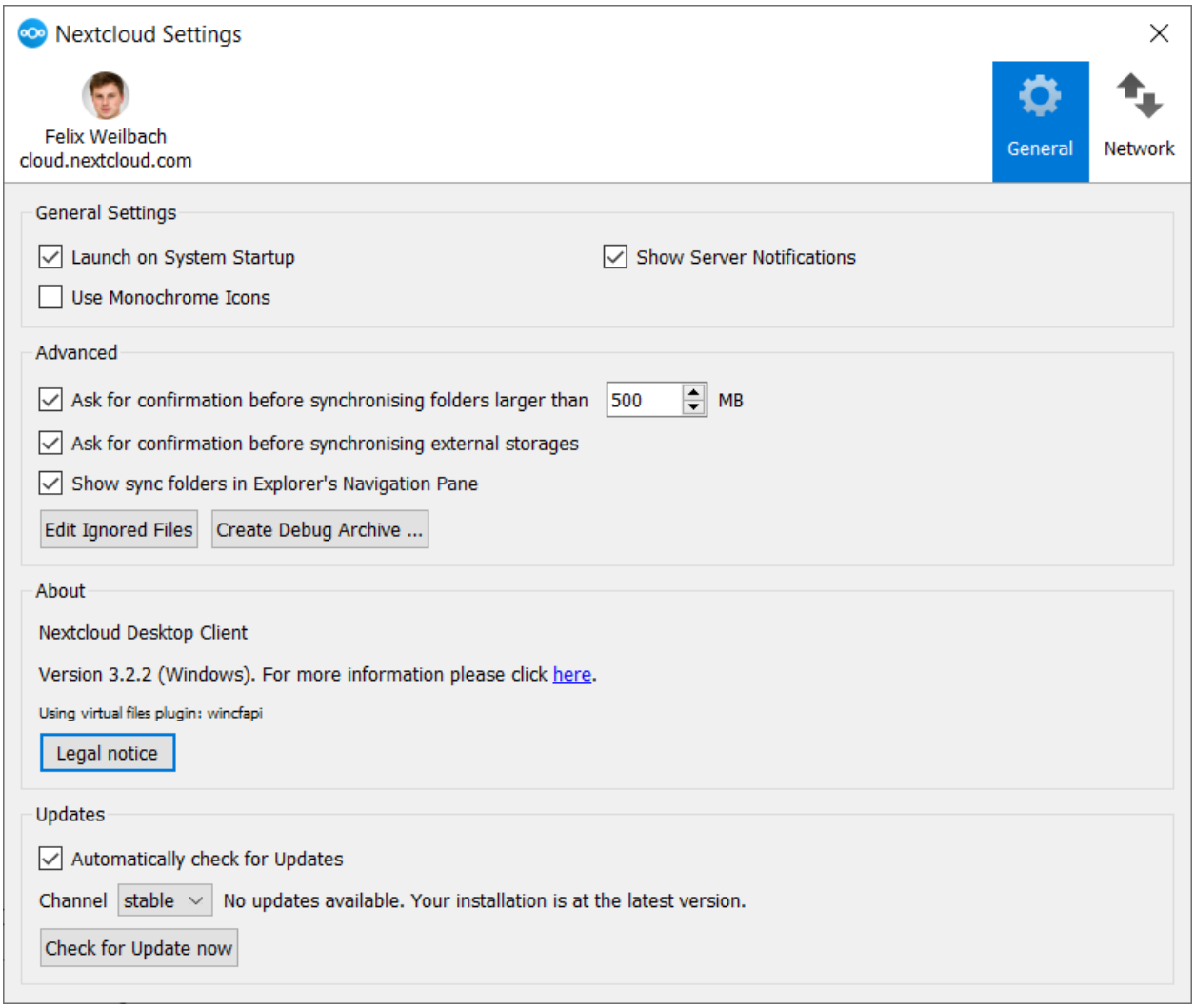
### 6.2.7 General Window

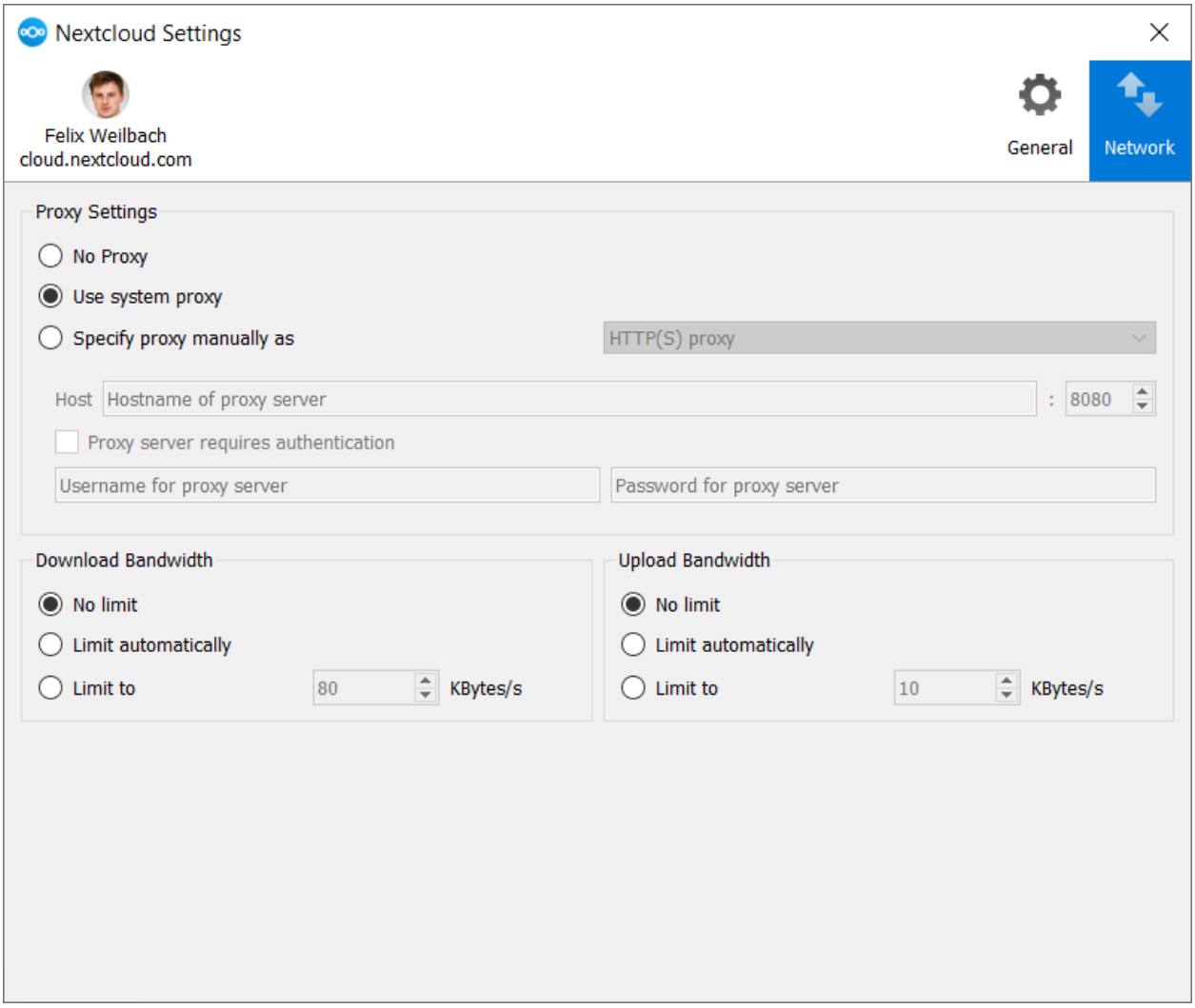
The General window has configuration options such as **Launch on System Startup**, **Use Monochrome Icons**, and **Show Server Notifications**. This is where you will find the **Edit Ignored Files** button, to launch the ignored files editor, and **Ask confirmation before downloading folders larger than [folder size]**.

### 6.2.8 Using the Network Window

The Network settings window enables you to define network proxy settings, and also to limit download and upload bandwidth.

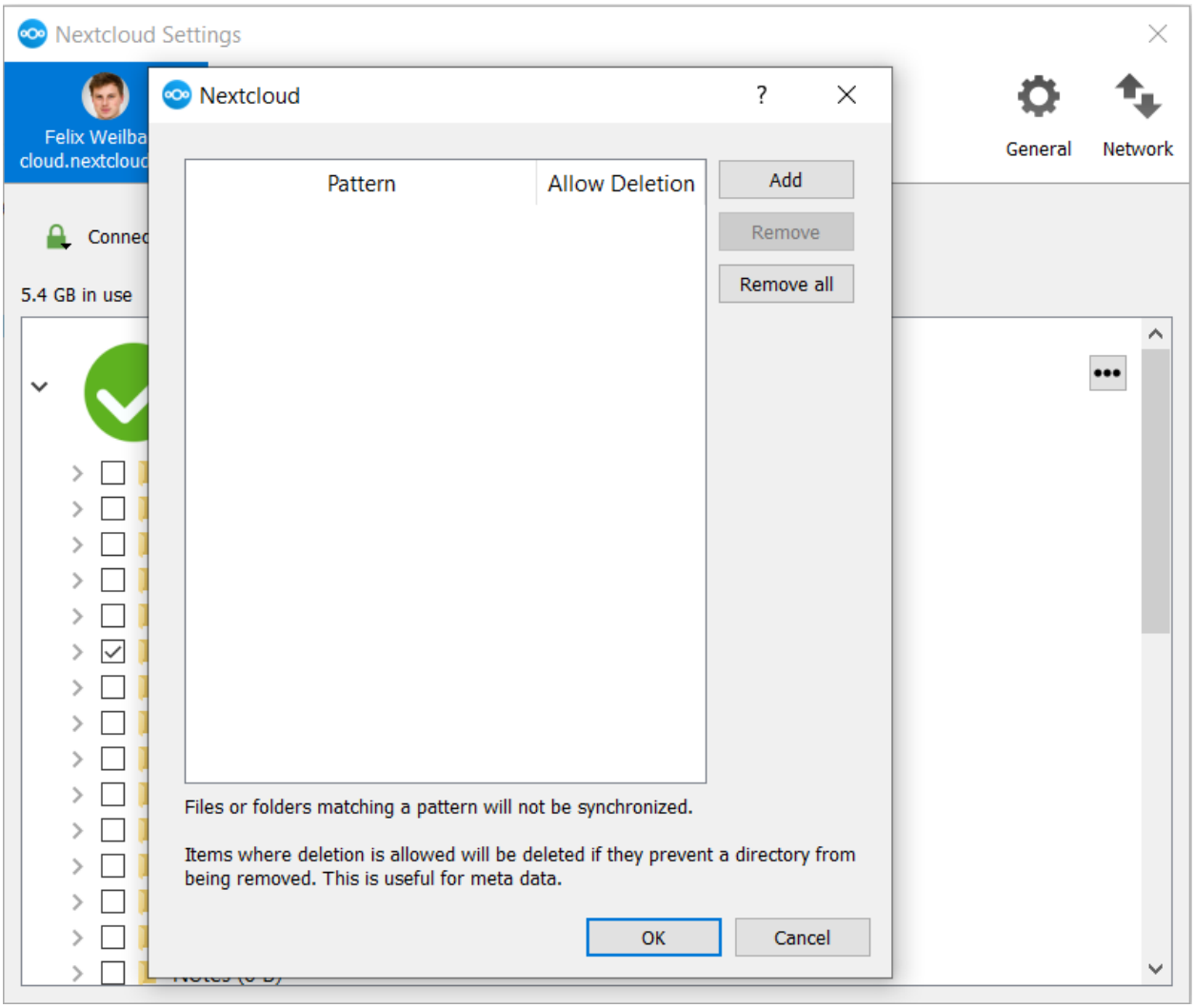

Nextcloud Sharing
Weekly Support Report CW35.pdf
Shared with you by Roeland Douma
Share with users or groups ...
Share link
G
General (group)
can edit


Nextcloud Settings
Felix Weilbach
cloud.nextcloud.com
General
Network
General Settings
Launch on System Startup
Show Server Notifications
Use Monochrome Icons
Advanced
Ask for confirmation before synchronising folders larger than
500
MB
Ask for confirmation before synchronising external storages
Show sync folders in Explorer's Navigation Pane
Edit Ignored Files
Create Debug Archive ...
About
Nextcloud Desktop Client
Version 3.2.2 (Windows). For more information please click here.
Using virtual files plugin: wincfapi
Legal notice
Updates
Automatically check for Updates
Channel
stable
No updates available. Your installation is at the latest version.
Check for Update now


Nextcloud Settings
Felix Weilbach
cloud.nextcloud.com
General
Network
Proxy Settings
No Proxy
Use system proxy
Specify proxy manually as
HTTP(S) proxy
Host
Hostname of proxy server
8080
Proxy server requires authentication
Username for proxy server
Password for proxy server
Download Bandwidth
No limit
Limit automatically
Limit to
80
KBytes/s
Upload Bandwidth
No limit
Limit automatically
Limit to
10
KBytes/s

### 6.2.9 Using the Ignored Files Editor

You might have some local files or directories that you do not want to backup and store on the server. To identify and exclude these files or directories, you can use the *Ignored Files Editor* (General tab).




For your convenience, the editor is pre-populated with a default list of typical ignore patterns. These patterns are contained in a system file (typically `sync-exclude.lst`) located in the Nextcloud Client application directory. You cannot modify these pre-populated patterns directly from the editor. However, if necessary, you can hover over any pattern in the list to show the path and filename associated with that pattern, locate the file, and edit the `sync-exclude.lst` file.

> **Note**
>
> Modifying the global exclude definition file might render the client unusable or result in undesired behavior.

Each line in the editor contains an ignore pattern string. When creating custom patterns, in addition to being able to use normal characters to define an ignore pattern, you can use wildcards characters for matching values. As an example, you can use an asterisk (`*`) to identify an arbitrary number of characters or a question mark (`?`) to identify a single character.

Patterns that end with a slash character (`/`) are applied to only directory components of the path being checked.

**Note**

Custom entries are currently not validated for syntactical correctness by the editor, so you will not see any warnings for bad syntax. If your synchronization does not work as you expected, check your syntax.

Each pattern string in the list is followed by a checkbox. When the check box contains a check mark, in addition to ignoring the file or directory component matched by the pattern, any matched files are also deemed "fleeting metadata" and removed by the client.

In addition to excluding files and directories that use patterns defined in this list:

- The Nextcloud Client always excludes files containing characters that cannot be synchronized to other file systems.
- Files are removed that cause individual errors three times during a synchronization. However, the client provides the option of retrying a synchronization three additional times on files that produce errors.

## 6.3 macOS Virtual Files client

Virtual file-based synchronisation for Nextcloud desktop users is now available on macOS.

Unlike on Windows, virtual files support on macOS is provided by a separate client version. This allows us to maintain the best possible experience for classically-synced files, including sync status integration and context menu actions, for users who want to keep using this sync method. Just like our classic sync client, the macOS virtual files client is released alongside the desktop client for Windows and Linux, and will benefit from regular bug-fix and feature updates that improve the user experience.

### 6.3.1 Supported features

- Per-file local retention and eviction
- Intelligent local copy eviction
- Integration with Spotlight
- File previews within Finder for virtual files
- Support for Apple-specific formats such as app bundles and iWork (Pages, Numbers, Keynote) bundles
- Remote file locking compatibility
- "Edit locally" support
- File sharing with other users
- Automatic synchronisation of remote changes
- More!

**Note**

To improve remote 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 the client to detect changes. This will also eliminate the need for the desktop client to continuously poll the server for changes.

### 6.3.2 Installation and initial setup

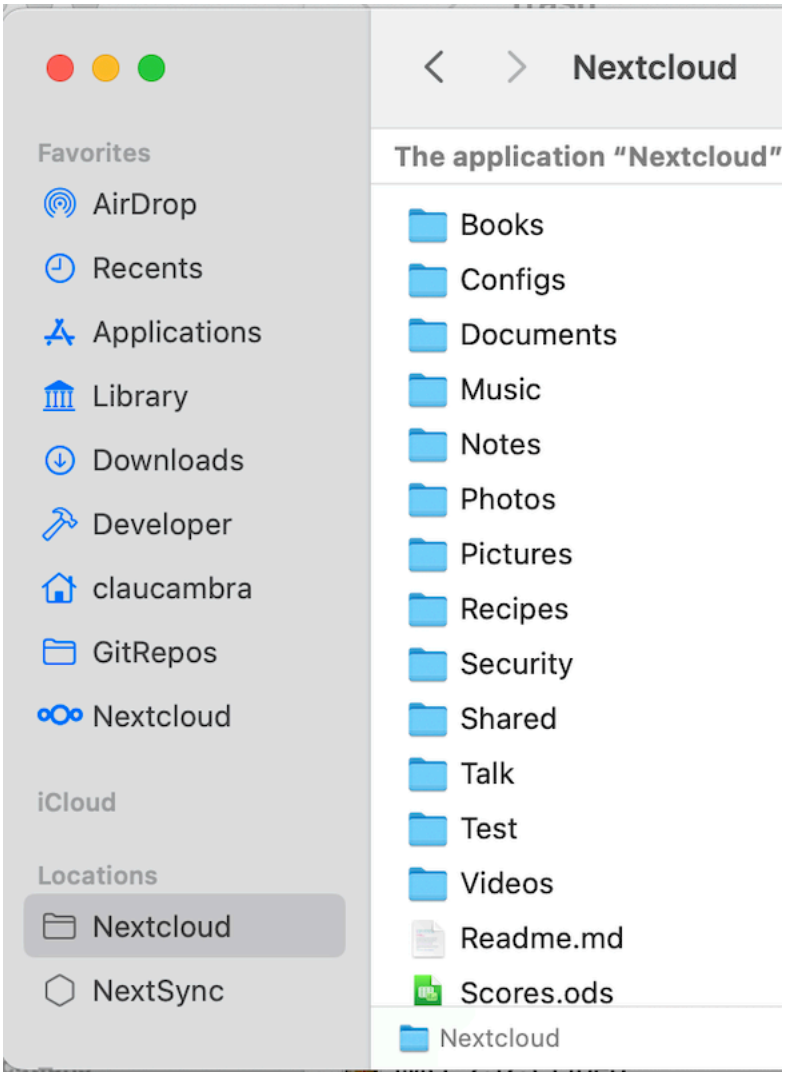
The virtual files client is distributed as an installer package that resembles the macOS classic sync client. The desktop client can be installed by following the steps presented by the installer.

The virtual files desktop client is interchangeable with the classic sync desktop client. This means your existing accounts and settings will carry over to this client and vice-versa, should you ever decide to go back to the classic sync client. This includes any pre-existing standard sync folders, as the virtual files client also supports classic sync.

**Note**

Due to technical limitations in macOS we are unable to provide integration in Finder for both classic sync folders and virtual file sync folders. Classic sync folders in the virtual files client will therefore not have Finder integrations such as sync state icons or context menu actions.

Any existing or newly-configured accounts will have virtual files automatically enabled. On macOS, each account's virtual files live under their own domain, separate from any pre-existing classic sync folders. These domains can be found listed under the "Locations" group in the Finder sidebar.




Upon first accessing one of these domains, the desktop client will being to request information on remote files from the

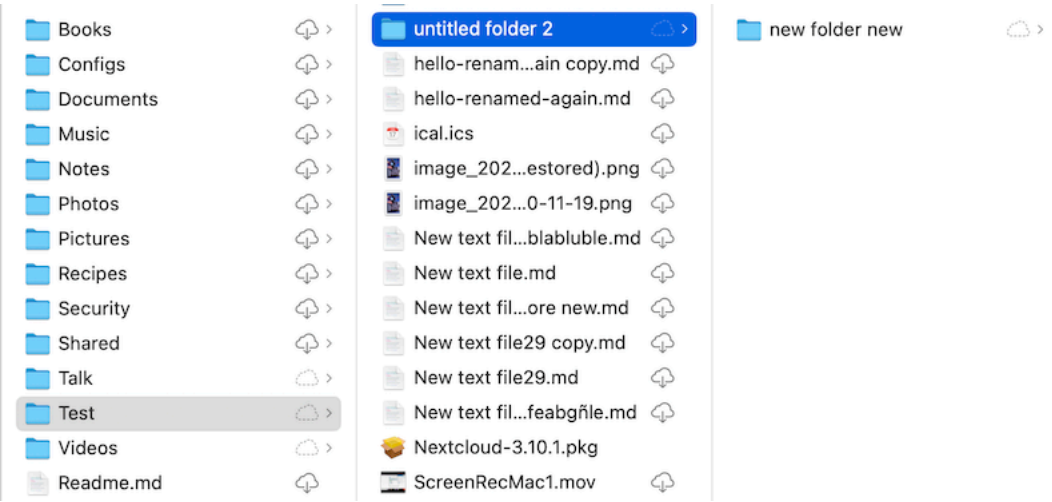
server. This first synchronisation may take some time depending on the quantity of files hosted on the server.

### 6.3.3 Finder integration

The virtual files client has distinct Finder integrations that allow it to more deeply and more natively integrate with the macOS file browser than the classic sync client.

### 6.3.4 Sync status indicators

Similarly to classic sync client, the virtual files client displays icons next to virtual files that indicate what their status is.

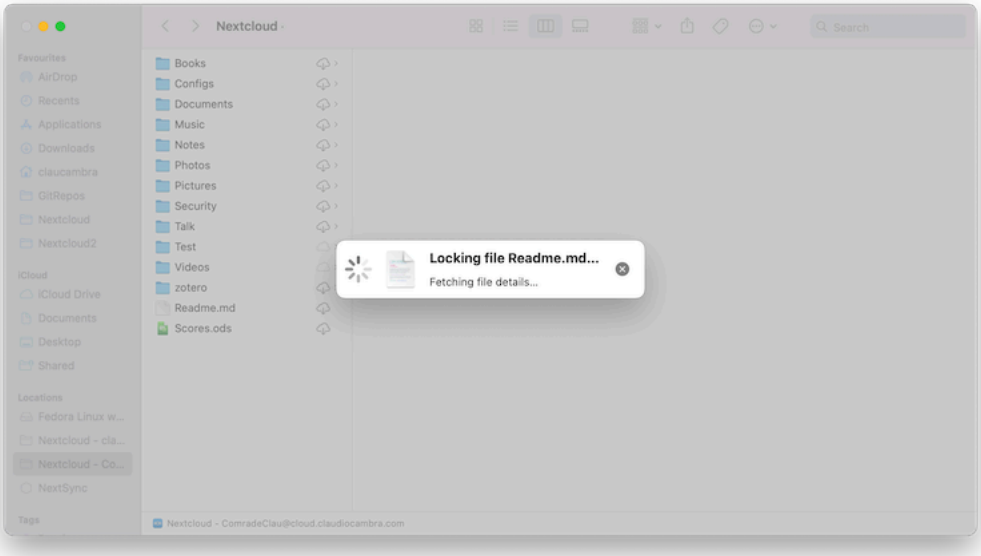



- *Cloud with arrow*: item or its children is virtual and is available for local keeping
- *Cloud outline*: item is partially available locally
- *No icon*: item is available offline

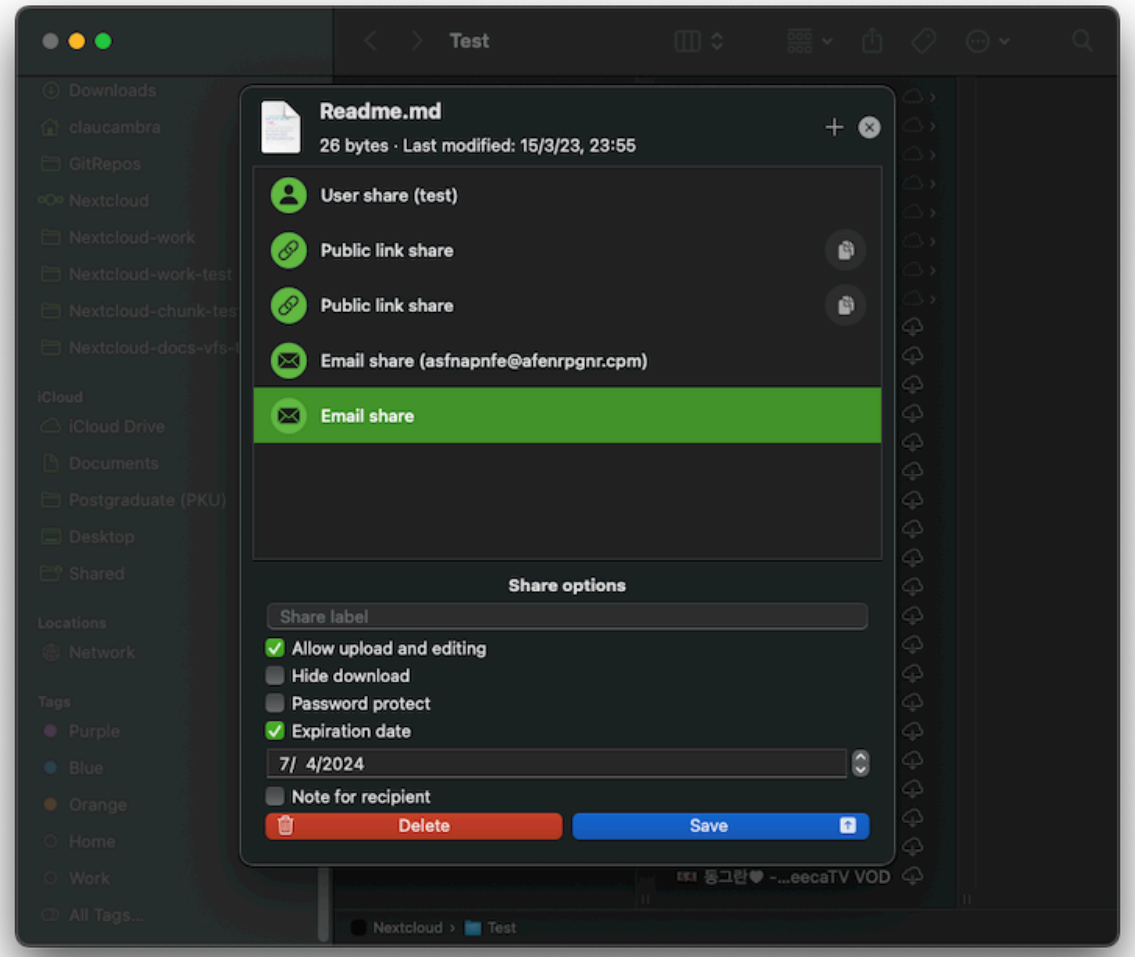
### 6.3.5 Context menu actions

Control-clicking, two-finger clicking, or right-clicking on a Finder item will provide the context menu, in which you may find several entries provided by the virtual files client that allow you to use some of the features supported by Nextcloud. These include:

- File locking (if supported by server)

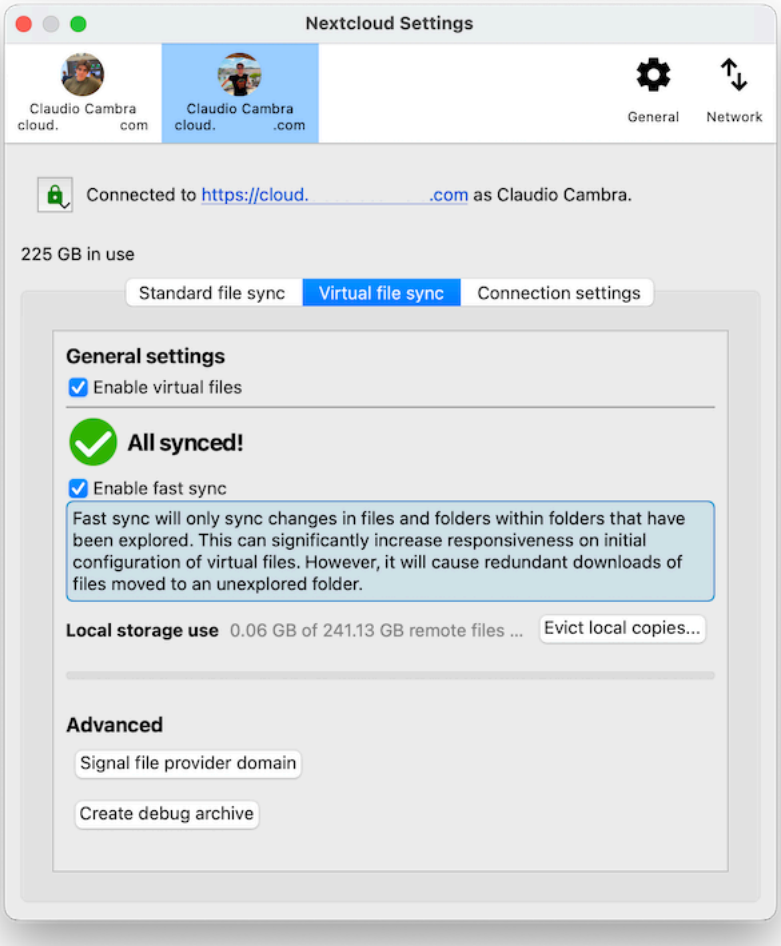



- File sharing (if supported by server)




### 6.3.6 Configuration

Virtual files-related settings can be adjusted on a per-account basis via the Nextcloud desktop client's settings window.




The virtual files section offers a number of options relevant to virtual files interaction:

- Enable/disable virtual files for the target account
- Enable/disable fast sync
- Manage local storage usage and evict local copies
- Force the virtual files domain to check for updates

## 6.4 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.

### 6.4.1 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.

### 6.4.2 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 these Registry keys:
   a. (32-bit-Windows) `HKEY_LOCAL_MACHINE\Software\Nextcloud\Nextcloud`
   b. (64-bit-Windows) `HKEY_LOCAL_MACHINE\Software\Wow6432Node\Nextcloud\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 have different key names

### 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
```

## 6.5 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

## 6.6 Conflicts

### 6.6.1 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.

### 6.6.2 Example

Imagine there is a file called `mydata.txt` 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.

### 6.6.3 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.

In the future there might be a server-wide switch for this behavior. For now it can already be tested by setting the environment variable `OWNCLOUD_UPLOAD_CONFLICT_FILES=1`.

## 6.7 FAQ

### 6.7.1 How the "Edit locally" functionality works

This functionality depends on the desktop client ability to register the mime to handle the nc:// scheme. 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 mime to handle the nc:// scheme.

Alternatively, you can manually register the mime to handle the nc:// scheme:

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.

### 6.7.2 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.

### 6.7.3 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.

### 6.7.4 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:

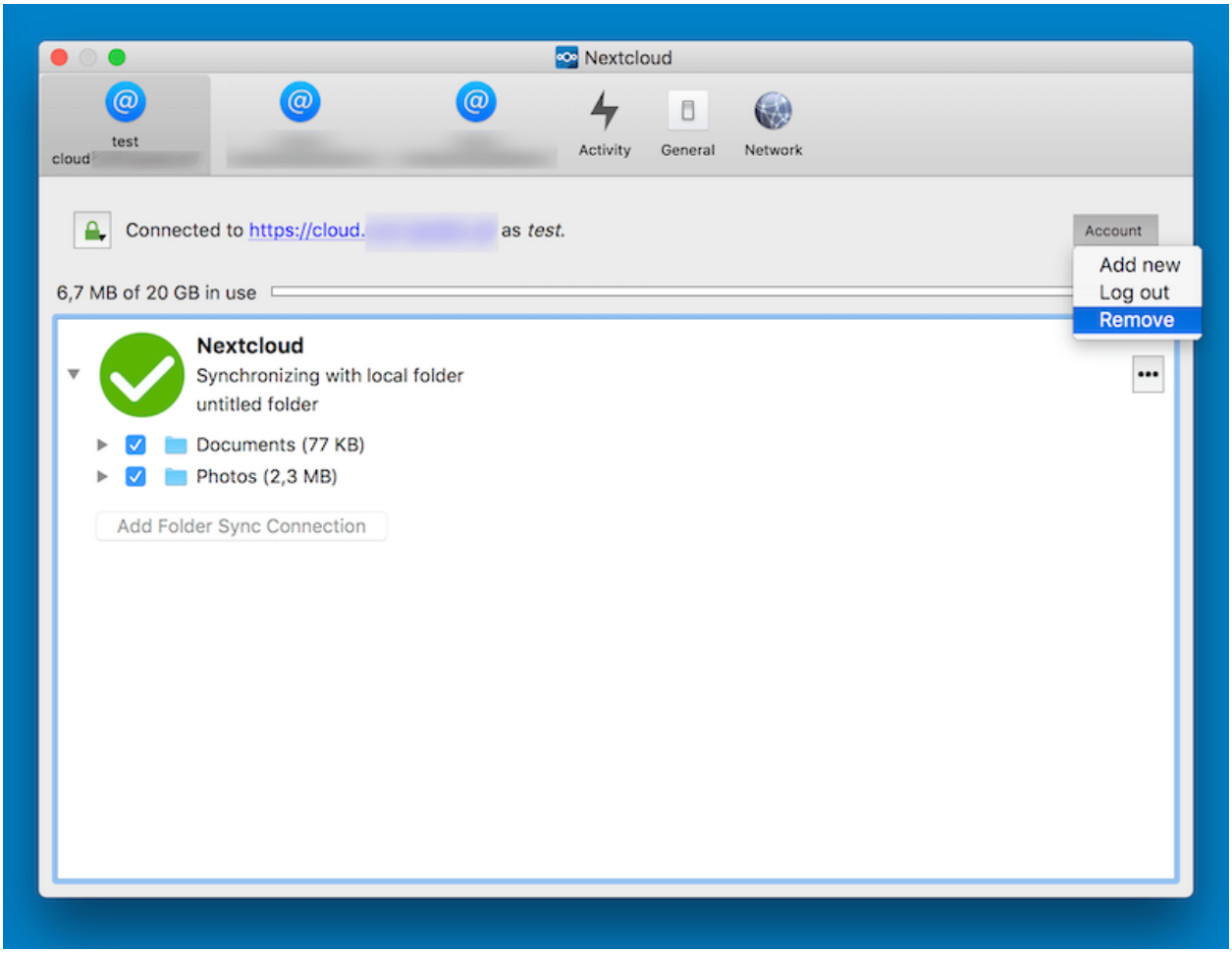
```
echo 524288 > /proc/sys/fs/inotify/max_user_watches
```

or permanently by adjusting `/etc/sysctl.conf`.

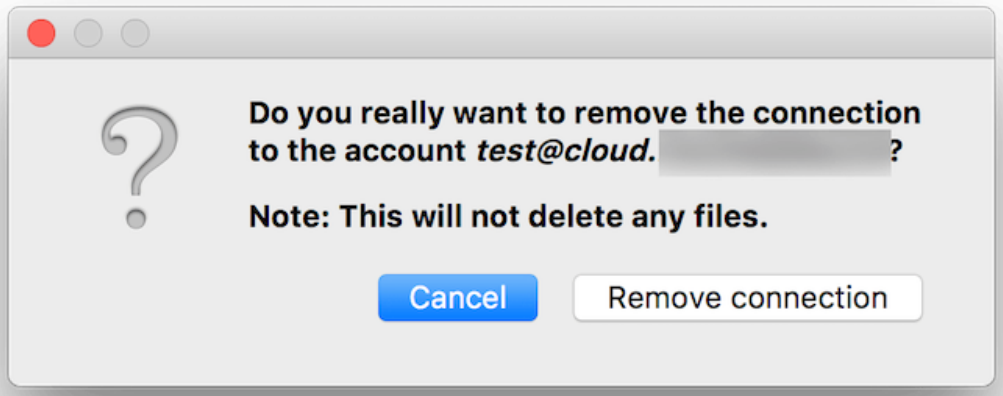
### 6.7.5 I Want To Move My Local Sync Folder

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, in the client UI, which you can see above, 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, which you can see above, *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).

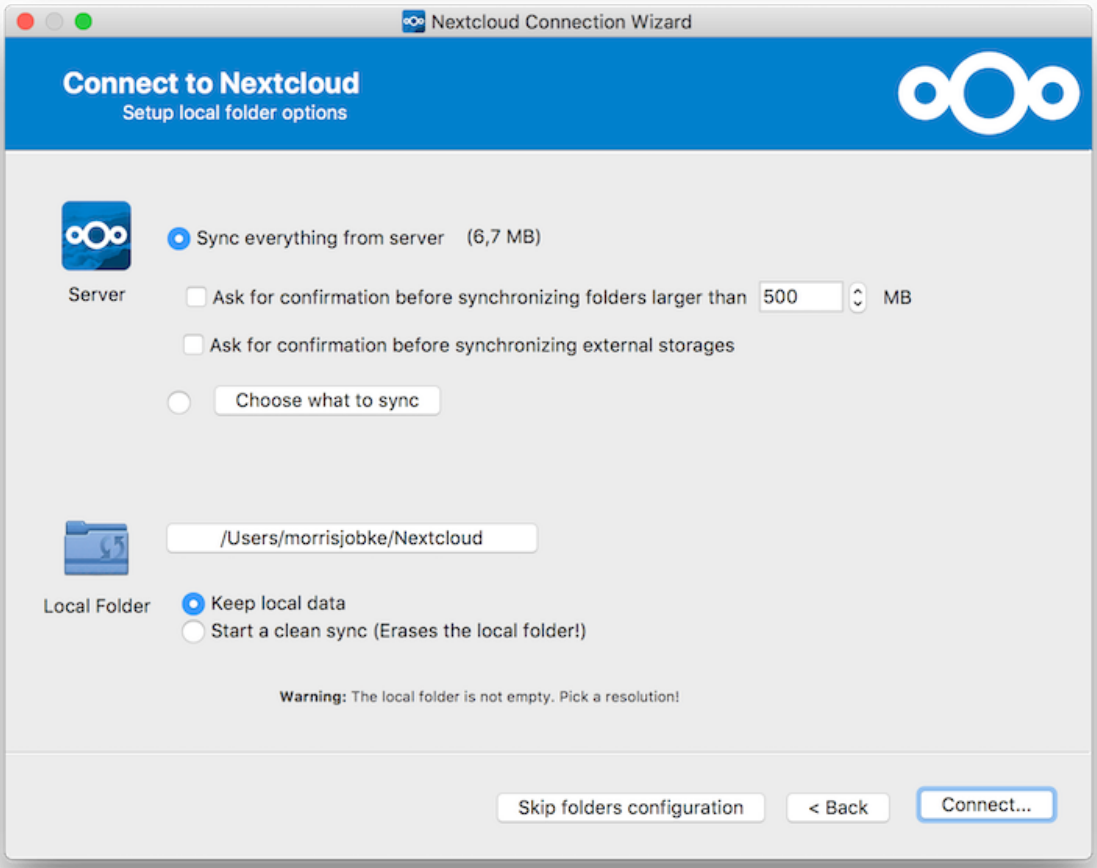
**Important**

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.

You can find additional information here:

- Admin manual
- Developer manual


Nextcloud Connection Wizard
Connect to Nextcloud
Setup local folder options
Server
Sync everything from server (6,7 MB)
Ask for confirmation before synchronizing folders larger than 500 MB
Ask for confirmation before synchronizing external storages
Choose what to sync
/Users/morrisjobke/Nextcloud
Local Folder
Keep local data
Start a clean sync (Erases the local folder!)
Warning: The local folder is not empty. Pick a resolution!
Skip folders configuration
< Back
Connect...

CHAPTER

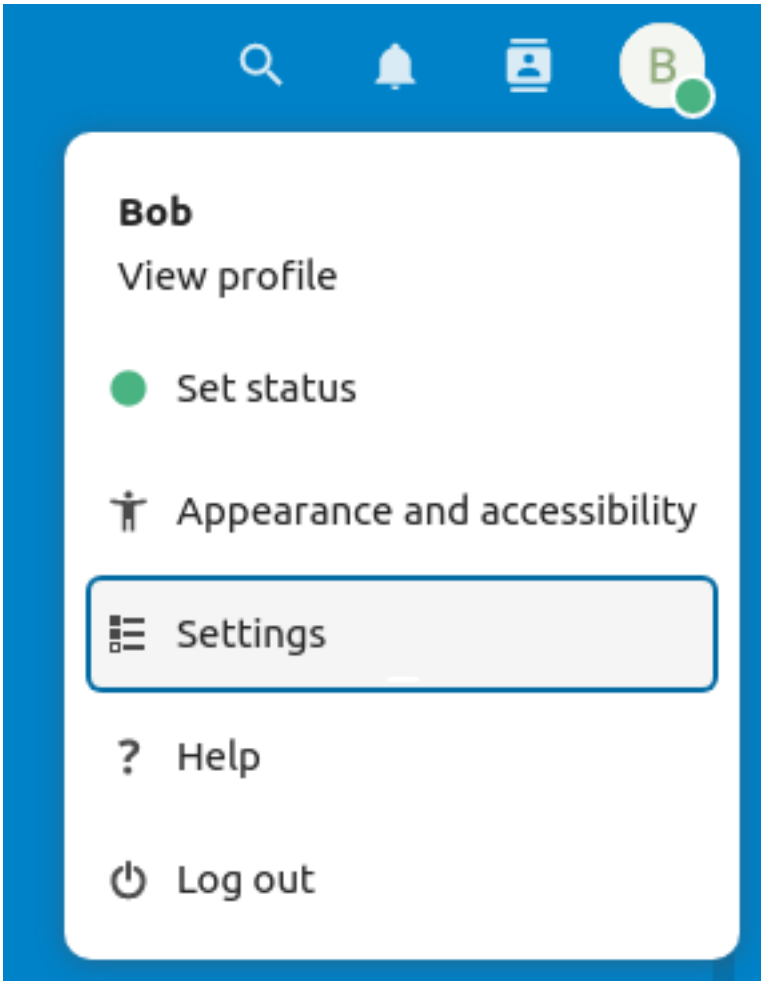
SEVEN

# SETTING YOUR PREFERENCES

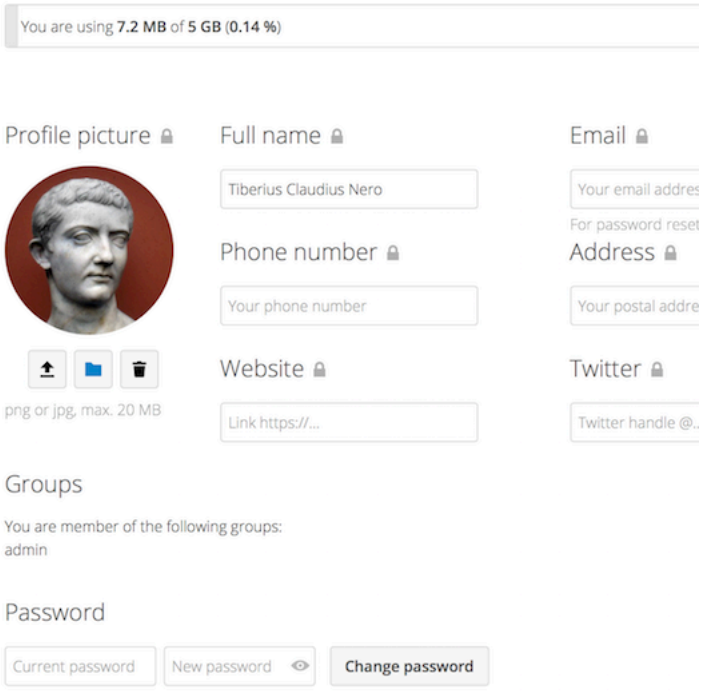
As a user, you can manage your personal settings.

To access your personal settings:

1. Click on your profile picture in the top right corner of your Nextcloud instance to open the menu




2. Clicking on *Settings* from the drop down menu opens the user preferences




**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*
- *Setting your 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 depending 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.

## 7.1 Sharing your data in the global address book

Some administrators decide to 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 of yours is shared by setting the scope of your data. Clicking on the lock icon will 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) which are 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. For some use cases this is wanted. Someone with a public facing role such as marketing or sales might want to share their contact with a wide variety of connections which might not be using Nextcloud.

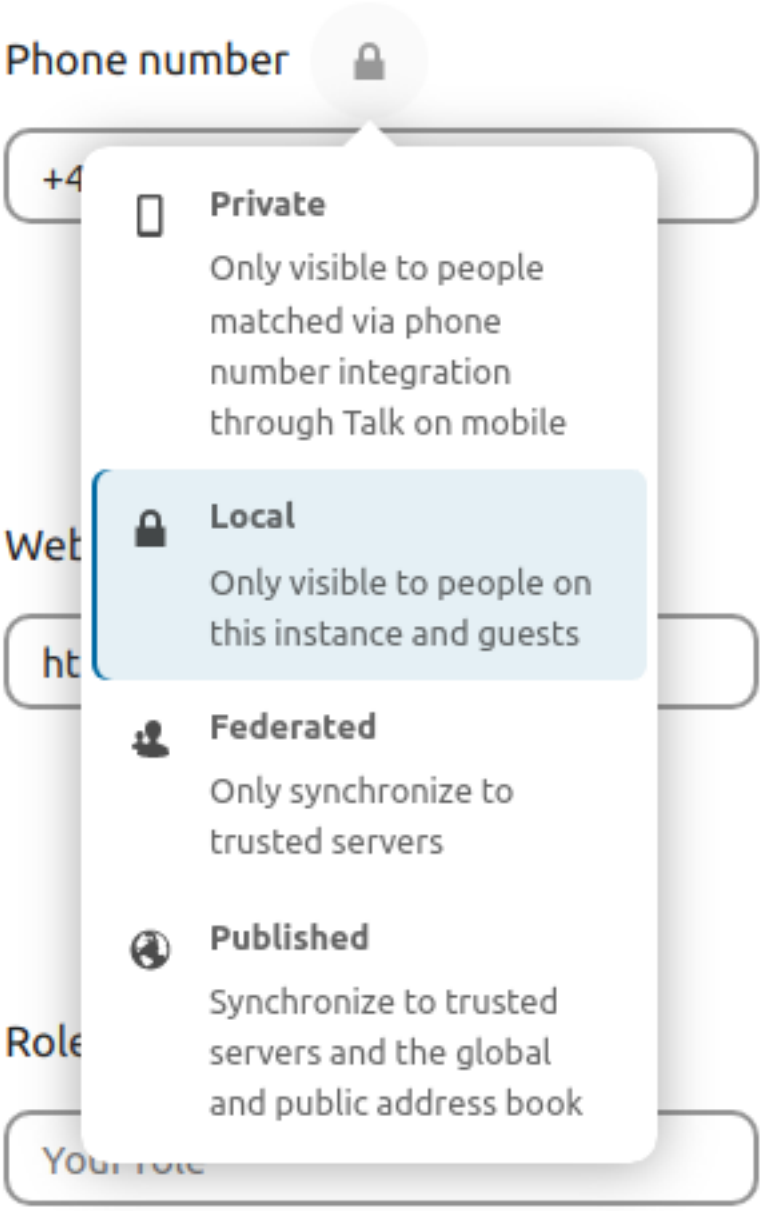
## 7.2 Restrict who can see your profile data

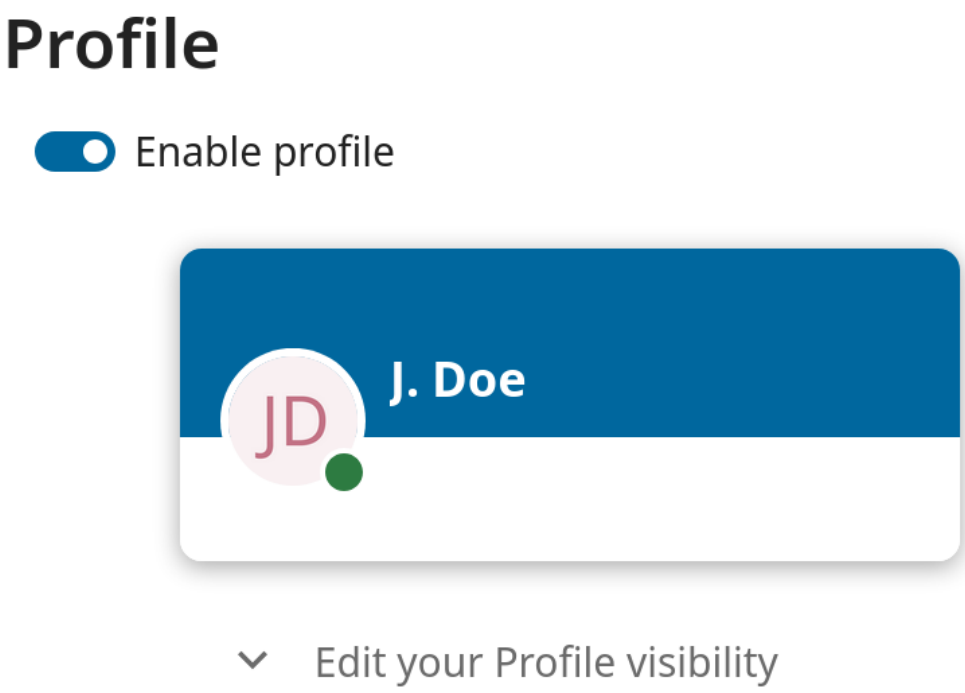
If the profile is enabled by your administrator, then your profile data can be read by other users and guest. To control who can see which information you can adjust the scopes already mentioned:

- **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 even more you can disable guest from seeing your profile data by changing the profile visibility to logged-in users. On the personal settings you can find the button for profile visibility:

Which allows 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
J. Doe
JD
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

EIGHT

# UNIVERSAL ACCESS

Universal access is very important to us. We follow web standards and check to make everything usable also with 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!

## 8.1 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.

## 8.2 Navigating via keyboard

You can navigate the web interface with keyboard only just like you can with the 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 2 "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

## 8.3 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

NINE

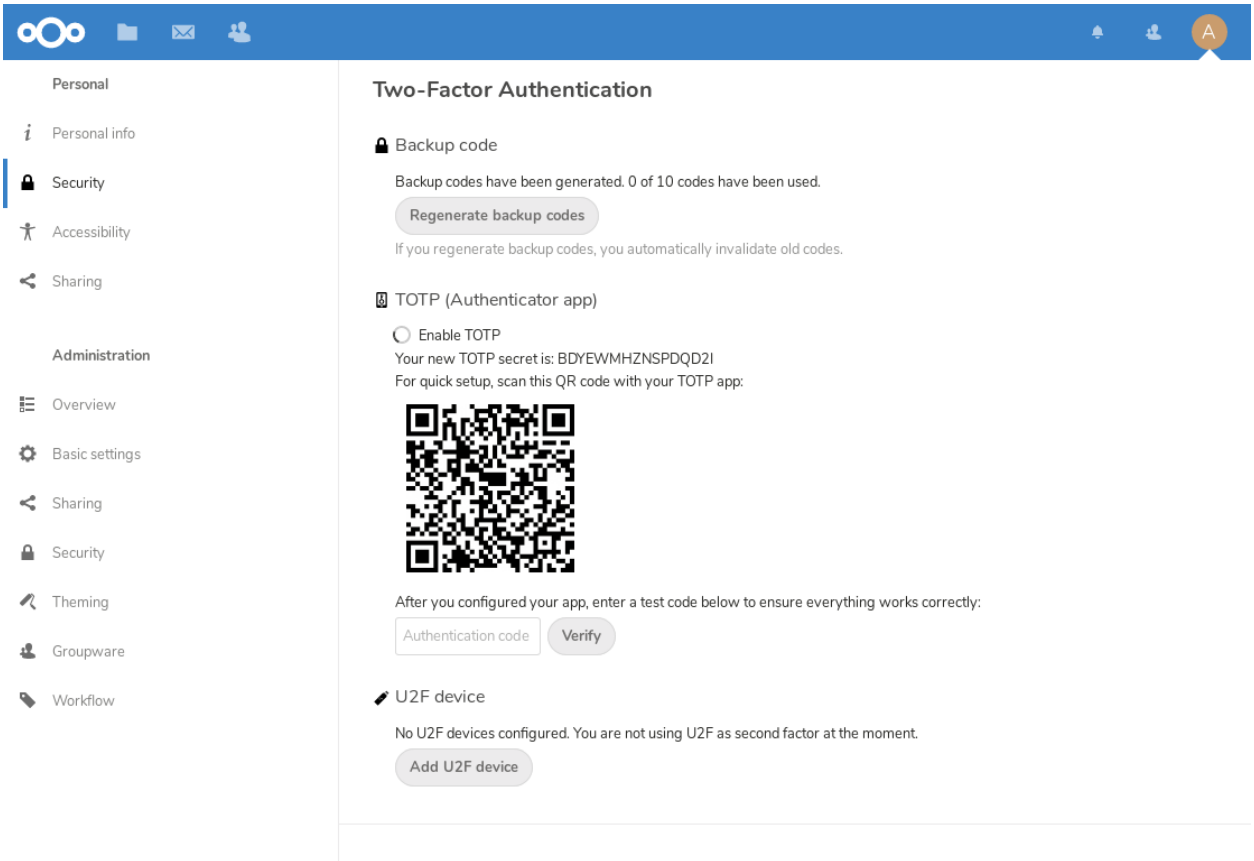
# USING TWO-FACTOR AUTHENTICATION

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*. Below you can see how.

## 9.1 Configuring two-factor authentication

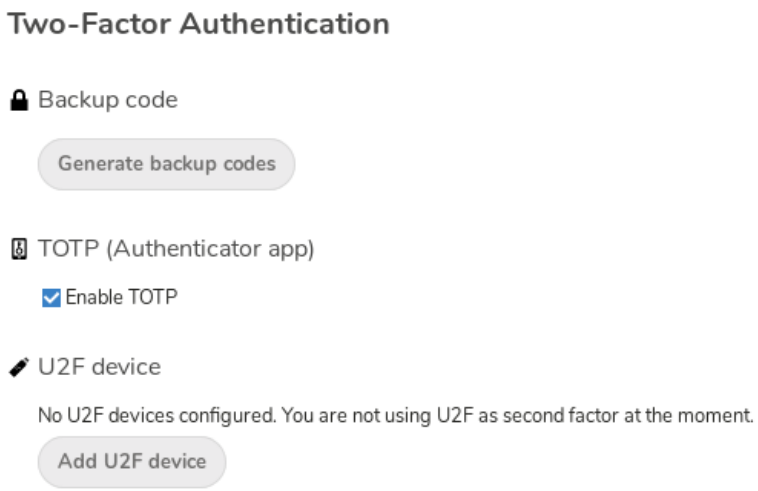
In your Personal Settings look up the Second-factor Auth setting. In this example this is TOTP, a Google Authenticator compatible time-based code:



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.

## 9.2 Recovery codes in case you lost your 2nd factor

You should always generate backup codes for 2FA. If your 2nd factor device gets stolen or is not working, you will be able to use one of these codes to unlock your account. It effectively functions as a backup 2nd 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 be presented with a list of one-time-use backup codes:

You should put these codes in a safe spot, somewhere you can find them. Don't put them together with your 2nd factor like your mobile phone but make sure that if you lose one, you still have the other. Keeping them at home is probably the best thing to do.

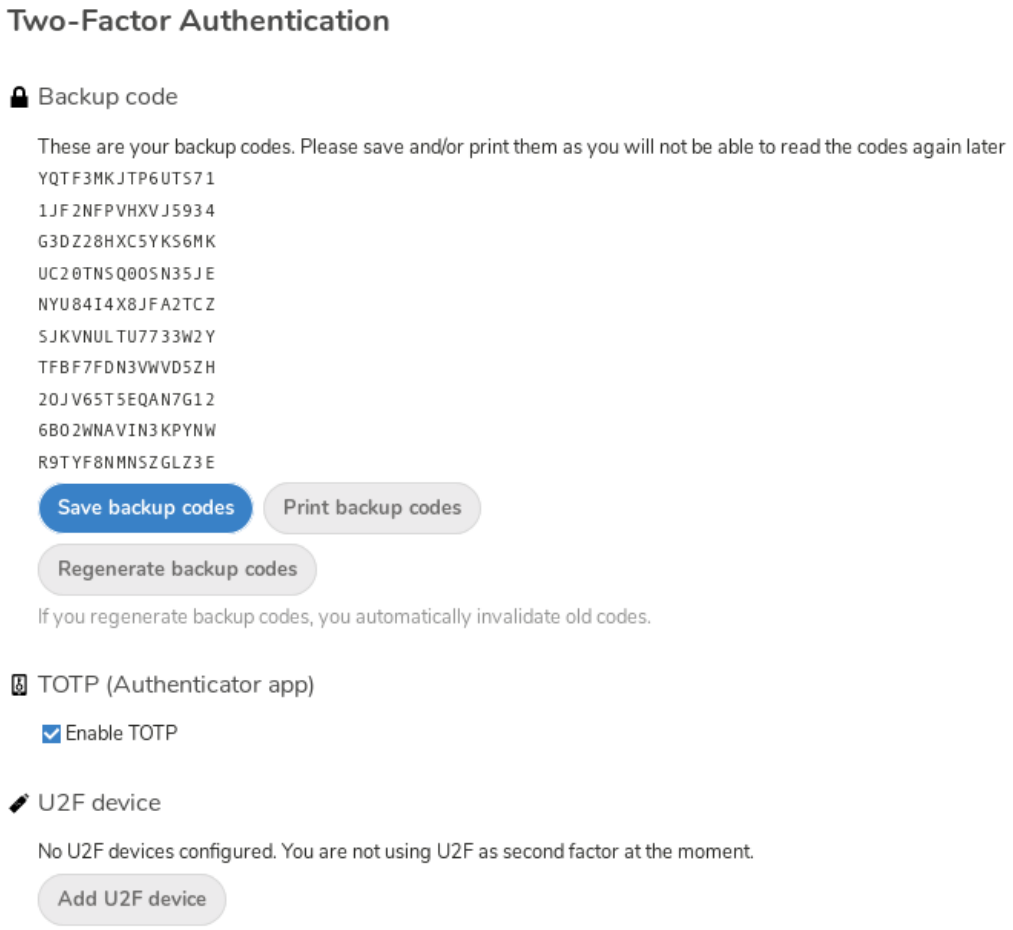
## 9.3 Logging in with two-factor authentication

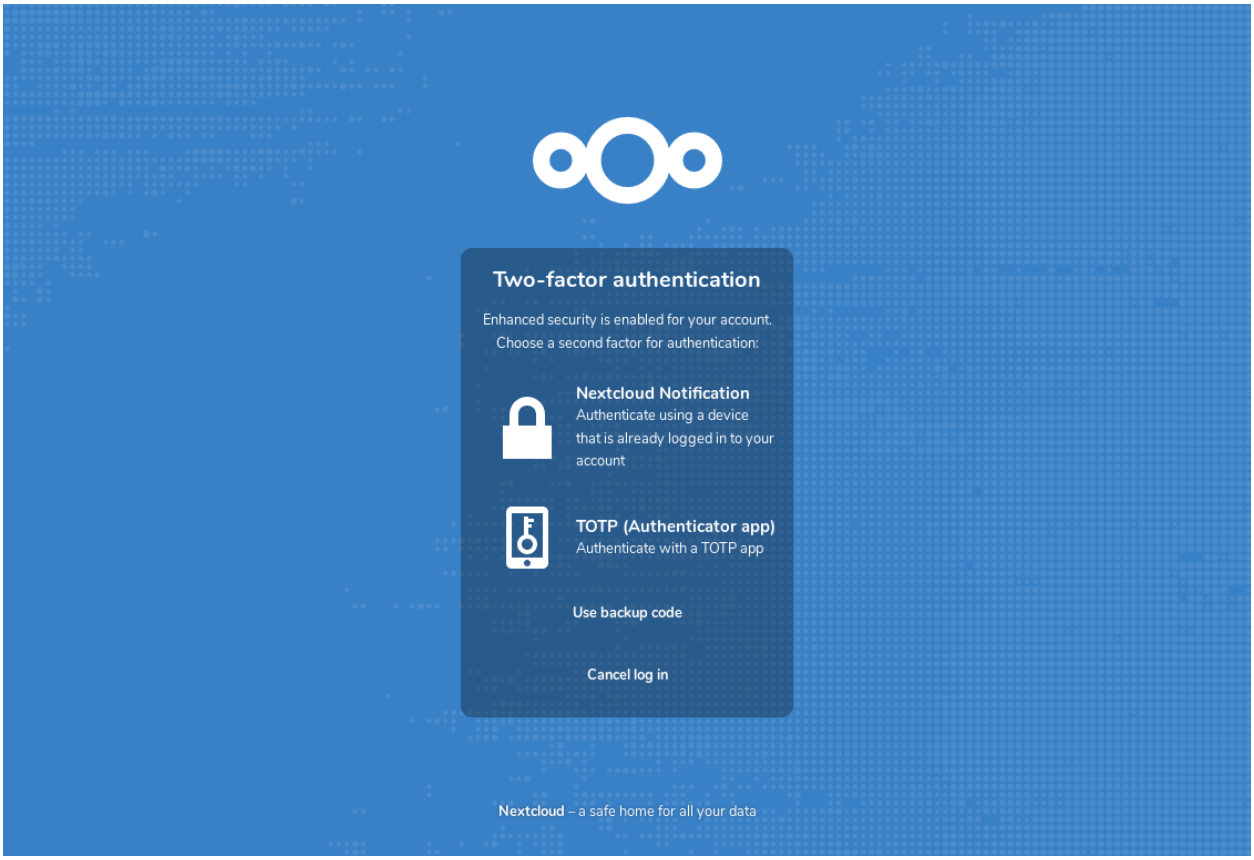
After you have logged out and need to log in again, you will see a request to enter the TOTP code in your browser. If you enable not only the TOTP factor but another one, you will see a selection screen on which you can choose two-factor method for this login. Select TOTP:

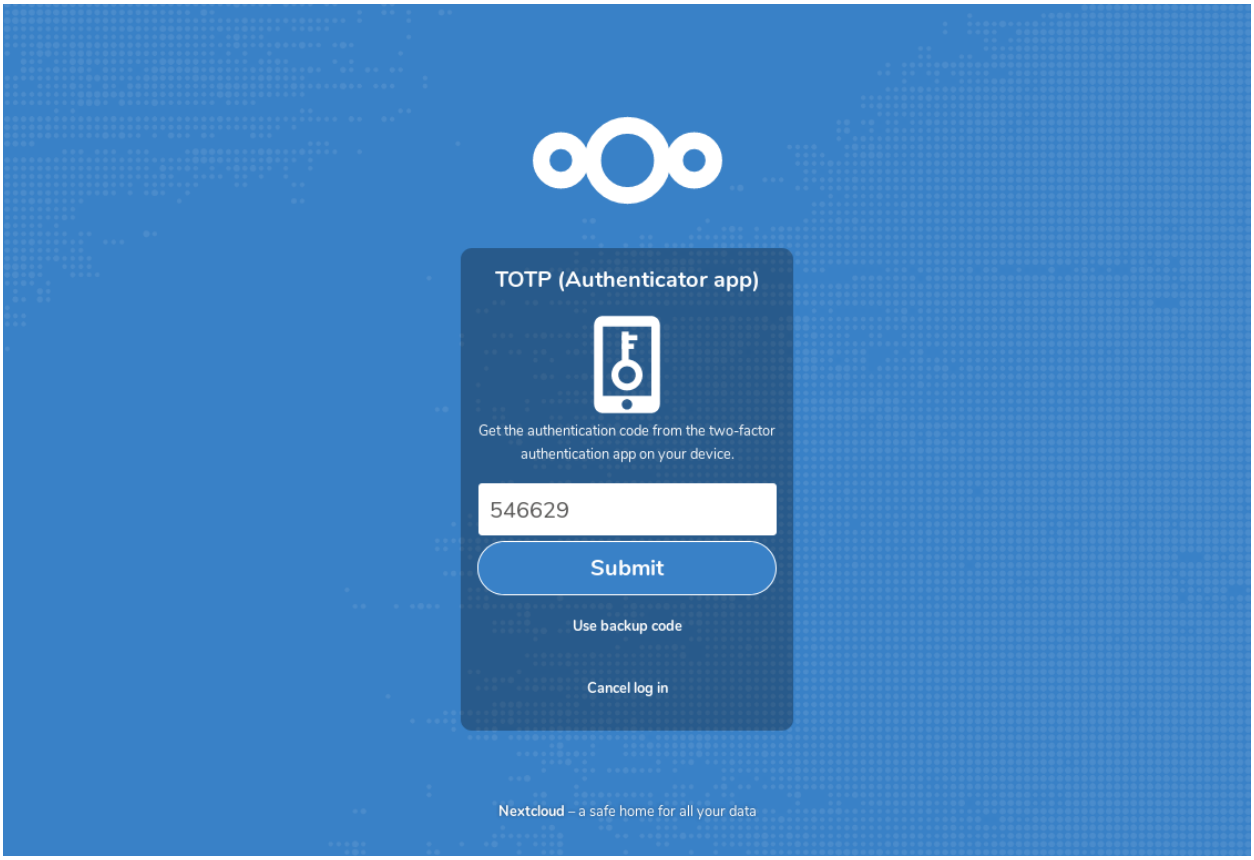
Now, just enter your code:

If the code was correct you will be redirected to your Nextcloud account.

> **Note**
>
> Since the code is time-based, it's 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.


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

## 9.4 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

## 9.5 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.

## 9.6 Considerations

If you use WebAuthn to login 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

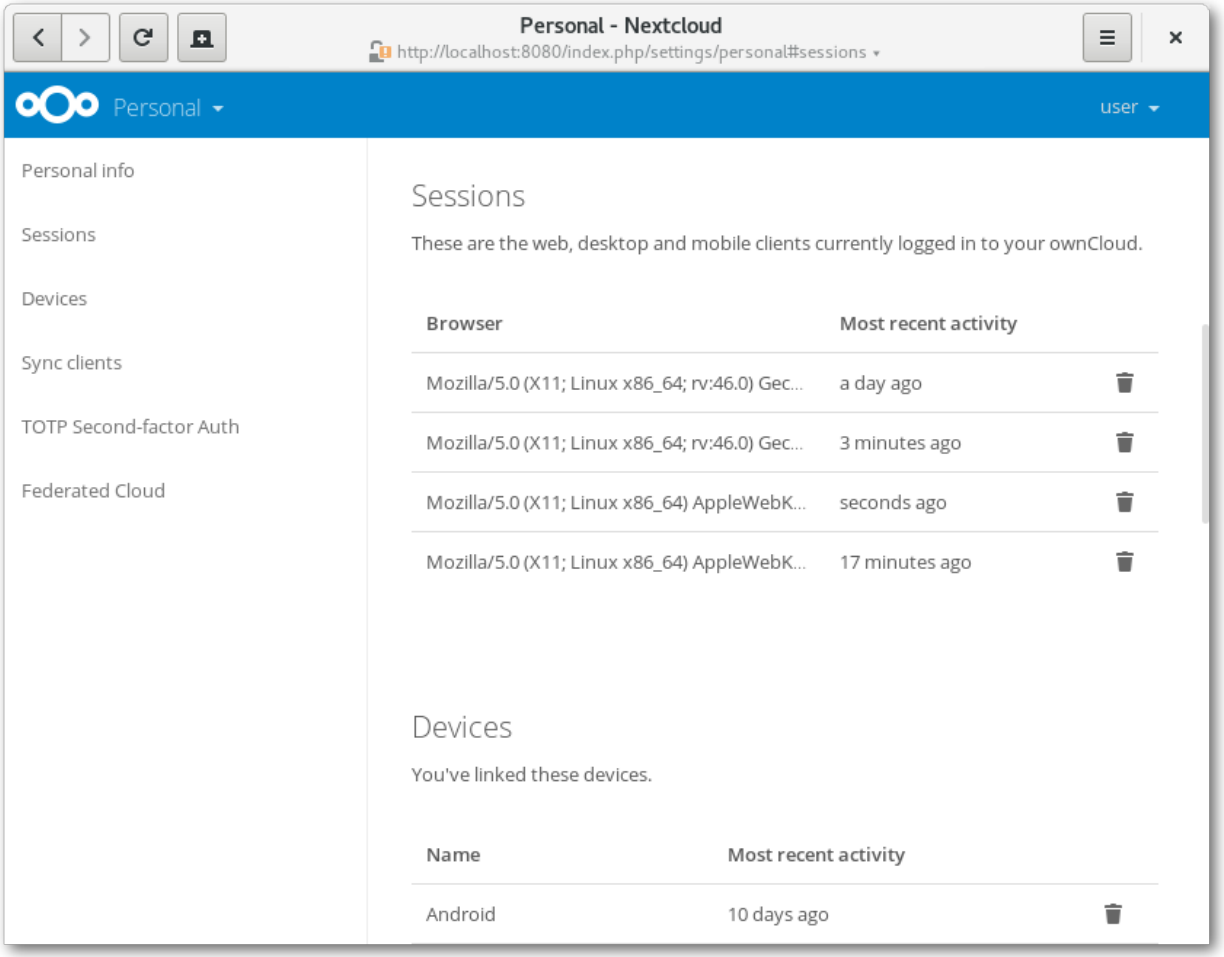
TEN

# MANAGE CONNECTED BROWSERS AND DEVICES

The personal settings page allows you to have an overview on the connected browsers and devices.

## 10.1 Managing connected browsers

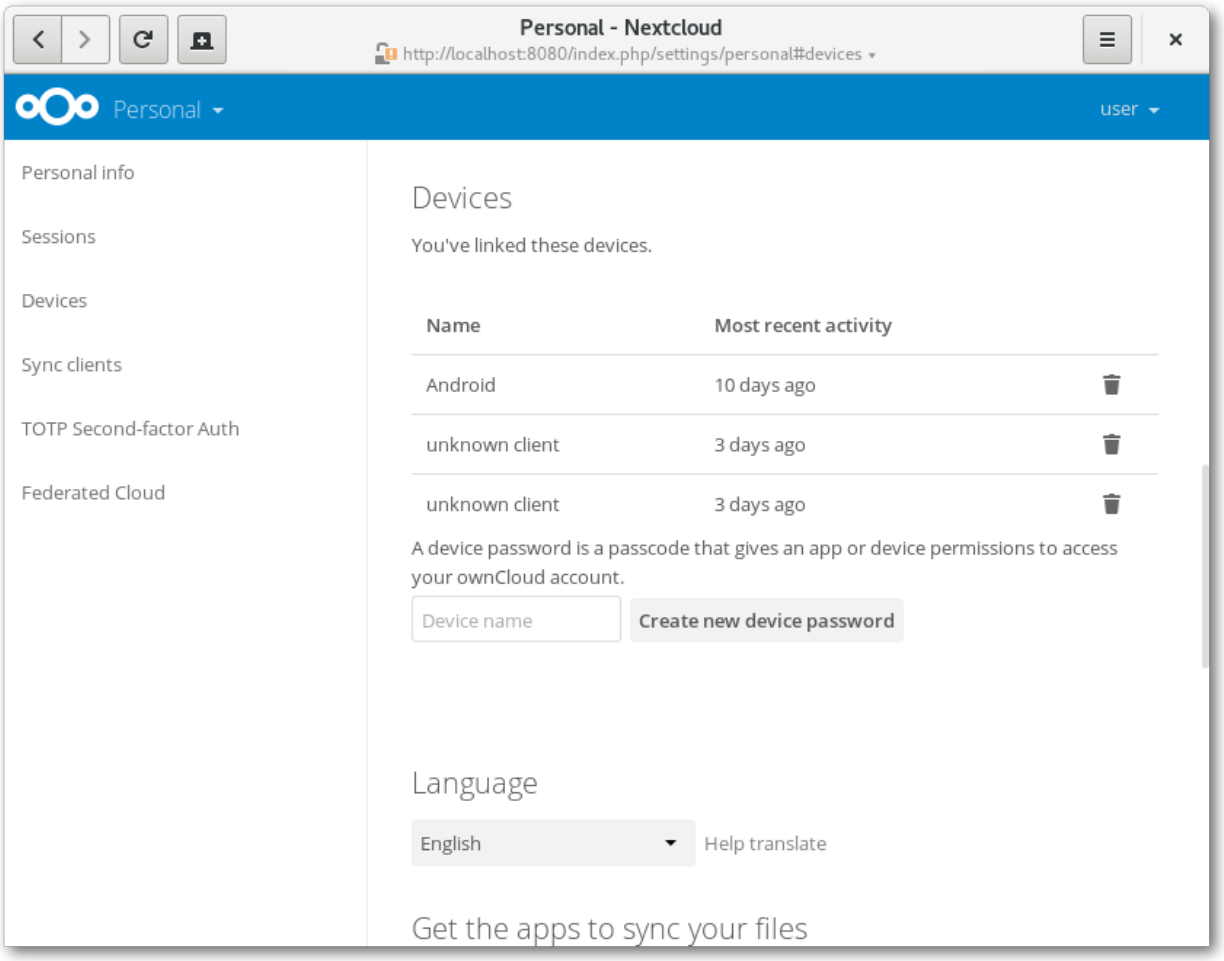
In the list of connected browsers you see which browsers connected to your account recently:




You can use the trash icon to disconnect any of the browsers in the list.

## 10.2 Managing devices

In the list of connected devices you see all the devices and clients you generated a device password for and their last activity:

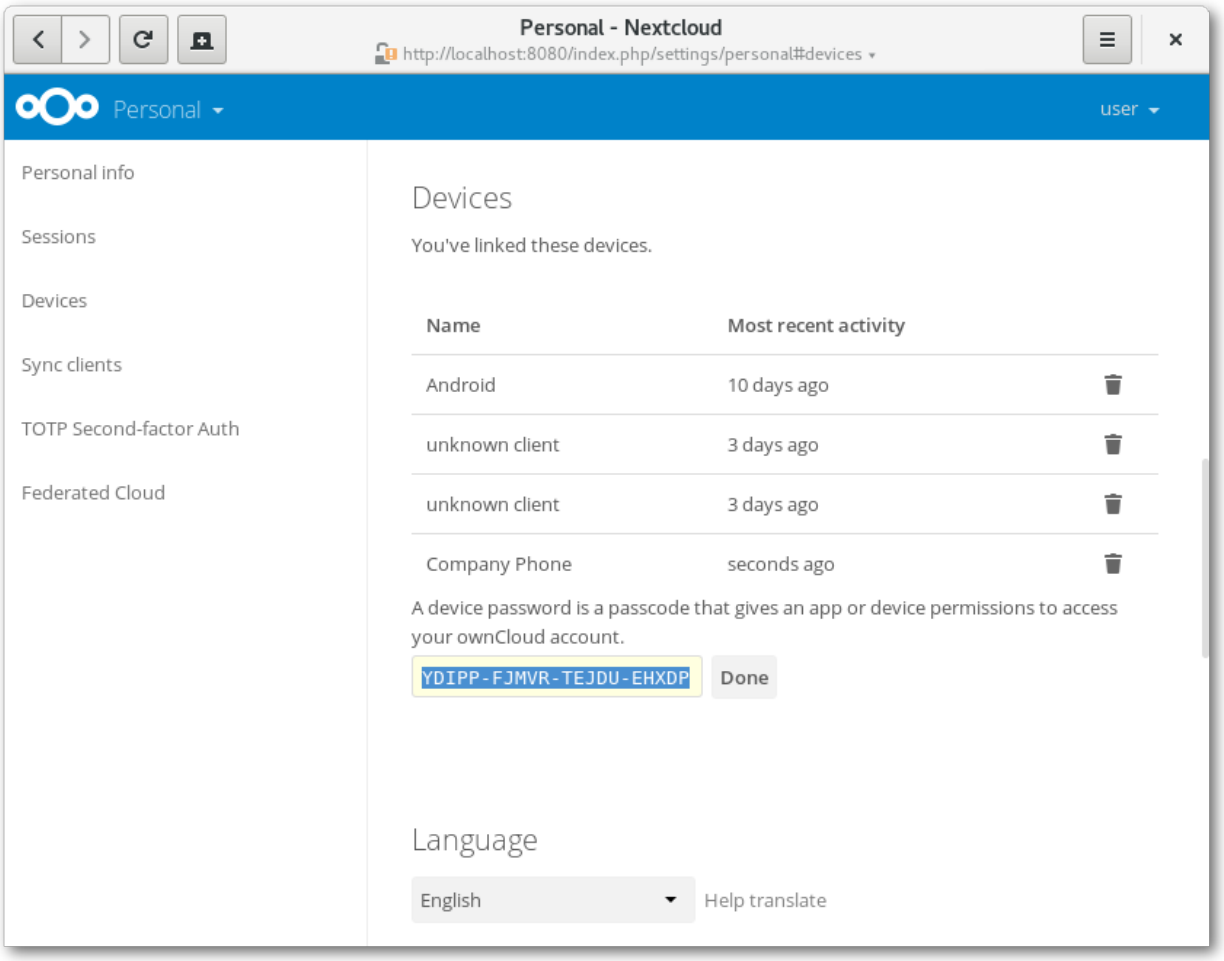



You can use the trash icon to disconnect any of the devices in the list.

At the bottom of the list you find a button to create a new device-specific password. You can choose a name to identify the token later. 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:

> **Note**
>
> You have only access to the device password when creating it, Nextcloud will not save the plain password, hence it's recommended to enter the password on the new client immediately.

> **Note**
>
> If you are *Using two-factor authentication* for your account, device-specific passwords are the only way to configure clients. The server will deny connections of clients using your login password then.


Personal - Nextcloud
http://localhost:8080/index.php/settings/personal#devices
Personal
user
Personal info
Sessions
Devices
Sync clients
TOTP Second-factor Auth
Federated Cloud
Devices
You've linked these devices.
Name
Most recent activity
Android
10 days ago
unknown client
3 days ago
unknown client
3 days ago
Company Phone
seconds ago
A device password is a passcode that gives an app or device permissions to access your ownCloud account.
YDIPP-FJMVR-TEJDU-EHXDP
Done
Language
English
Help translate

## 10.3 Device-specific passwords and password changes

For password changes in external user backends the device-specific passwords are marked as invalid and once a login of the user account with the main password happens all device-specific passwords are updated and work again.

CHAPTER

ELEVEN

# EXTERNAL STORAGE

## 11.1 Configuring External Storage

The External Storage application allows you to mount external storage services, such as Amazon S3, SMB/CIFS file servers and FTP servers… in Nextcloud. Your Nextcloud server administrator controls which of these are available to you. Please see Configuring External Storage (GUI) in the Nextcloud Administrator's manual for configuration how-tos and examples.

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