



# Nextcloud integration

COOL Days 2023  
28th March 2023, Cambridge UK

Julius Härtl

# Agenda

- Nextcloud - Nextcloud Office - Collabora Online
- Collaboration for integration
- Post messages
- Integration examples

Recent

Favorites

Airbnb-for-cars

Family time in Vienna

Verilium

Media

Photos

Talk

Shares

Tags

External storage

Deleted files

598.8 MB used

Files settings

All files

Recent

Favorites

Airbnb-for-cars

Family time in Vienna

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External storage

Deleted files

598.8 MB used

Files settings

Projects

Internal project space

Any projects should be in here so we can use it for coordination.

Name	Size	Modified
Airbnb-for-cars	25.2 MB	10 days ago
Readme.md	< 1 KB	seconds ago
subrana brand	2.5 MB	4 days ago
Project butterscotch	5.3 MB	14 days ago
Kaffee.odt	< 1 KB	5 months ago
new office space	1.1 MB	a year ago

4 folders and 2 files

34.1 MB

Airbnb-for-cars

25.2 MB, 10 days ago

internal project

Activity

Comments

Sharing

Search for share recipients

Name, email, or Federated Cloud ID ...

Share link

Others with access

Internal link  
Only works for users with access to this folder

Group fo... Read Write Create Delete Share

You

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Local editing

Zotero

Mentions

Carlito

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Text Box

Shape

Conn

Activity

Comments

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Versions

Search for share recipients

Name, email, or Federated Cloud ID ...

Share link

bob

alice

Others with access

Internal link

Only works for users with access to this file

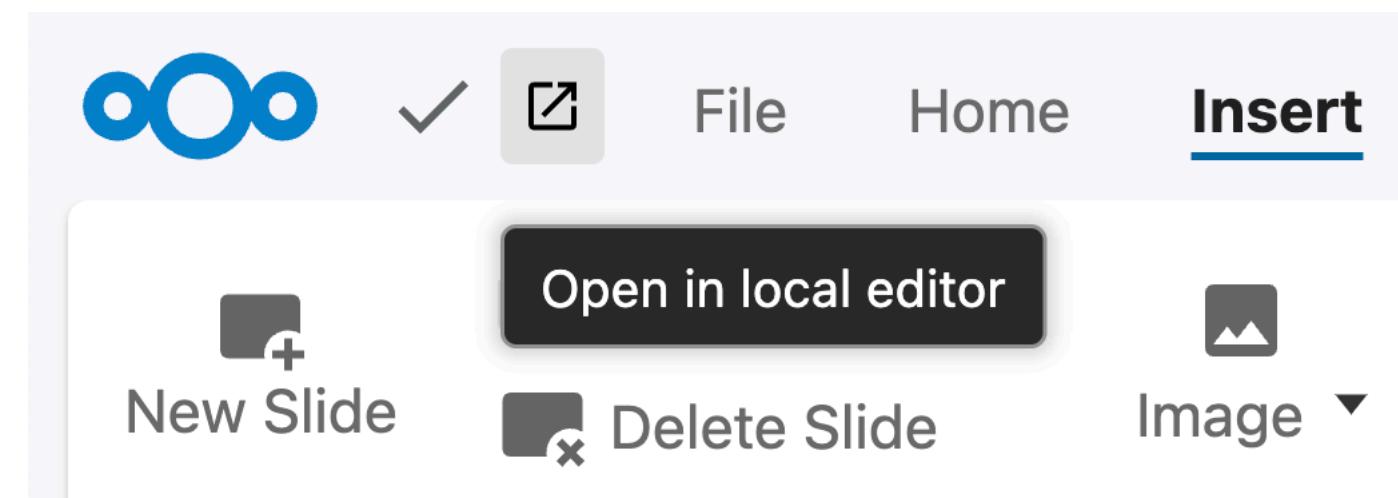
# Post Messages

- Collabora Online is running in an iframe
- Post messages are the way to go to interact and extend
- Listen for messages  
`window.addEventListener("message", () => {})`
- Send messages  
`window.postMessage(...)`

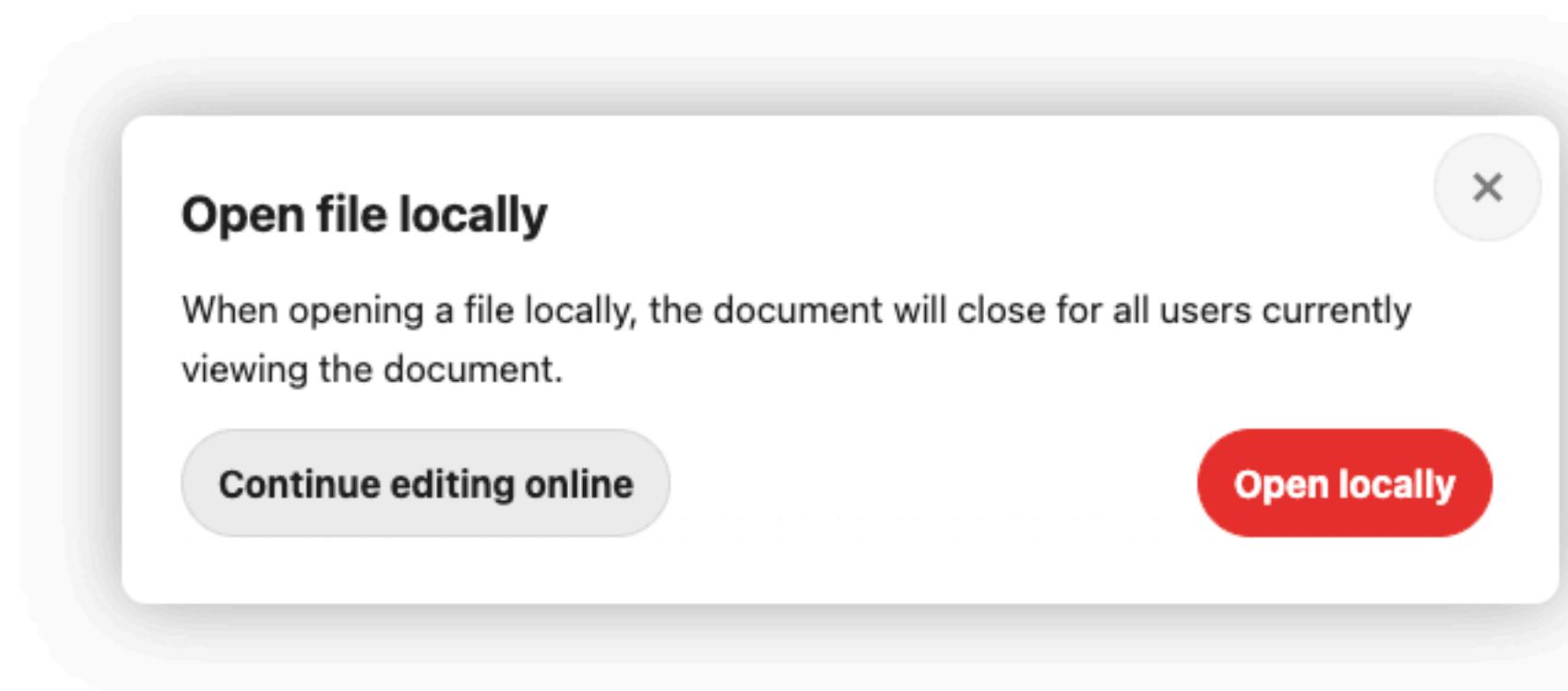
```
{  
  "MessageId": "<MessageId>",  
  "SendTime": "<Timestamp when message is sent>",  
  "Values": {  
    "<key>": "<value>"  
  }  
}
```

# Local editing

- Insert\_Button



- URL handler to pass to the desktop client



# Zotero

- Nextcloud users can setup their Zotero API key
- We provide this through the WOPI CheckFileInfo  
`[ 'UserPrivateInfo' ][ 'ZoteroAPIKey' ]`
- Easy to setup through additional post message  
`UI_ZoteroKeyMissing`

# Mentions

- UI\_Mention
- Action\_Mention
- Embedding in documents as a link to the user profile
- Prefetch mentions

# Smart picker

- Picker action added to the Collabora UI
- Triggers a post message that opens the picker **UI\_PickLink**
- Picker then determines the result type
- Different post messages sent back depending on the type
  - **Action\_Paste**  
`{ Mimetype: "text/plain; charset=utf-8", Data: "foo" }`
  - **Action\_InsertLink { url: link }**
  - Link previews Action\_GetLinkPreview



✓ File Home

**Insert**

Layout

References

Review

Format

Form

View

Help

Example.odt

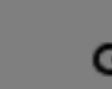
□ X



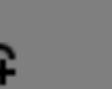
Title Page



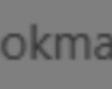
Insert Table ▾



Hyperlink



Pick Link



Bookmark



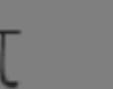
Page Number



Header



Text Box



Formula Object



Shapes

Fontwork



Line

Vertical Text

For

secure and compliant file sync and share solution on servers you control.

With Nextcloud Hub you can:

- Sync and share and access all your files and documents from all your devices.
- Communicate with other via chat, audio or video calls.
- Manage access and share your calendars

### Smart picker



Select a link provider

GitHub issues, pull requests and comments

GIF picker (by Giphy)

Files

Collective pages

Deck boards, cards and comments

GitLab repositories, issues and merge requests

Mastodon people, toots and hashtags



Page Break Title Page Section Image



## Text templates



Search templates

### podcast invite

Dear [Guest's Name],

I hope this email finds you well.

I'm reaching out to you because

we're big fans of your work, and

### travel expense report

Personal information of the

employee, such as name,

employee ID, department, and

date of travel.

Purpose of travel and duration of

### work report

Last week CW

-

-

-

### Not available

I'm in vacation under the sun

right now, I will send you a

postcard

### daily standup report

1. What did you do yesterday?

2. What are you planning to do

today?

3. Are there any blockers or

obstacles that are preventing you

### Polite answer

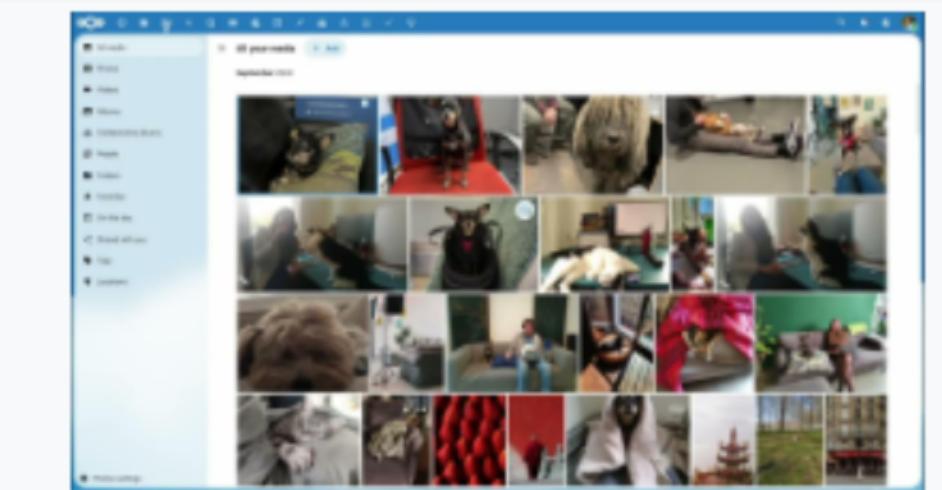
I'm afraid I can't make it...

+ Add templates



Carlito 12 A<sup>+</sup> A<sup>-</sup> Default Paragraph Text Body Heading 1 Heading 2 Heading 3  
Heading 4 Title Subtitle Quotations Preformatted Paste B I U S x<sub>2</sub> x<sup>2</sup> V A A

"Lorem ipsum dolor sit amet, consectetur adipiscing et dolore magna aliqua. Ut enim ad minim veniam, aliquip ex ea commodo consequat. Duis aute irure dolor eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum."



Nextcloud Photos 2.0 [Hub 3]

<https://www.youtube.com/w...>

[https://www.youtube.com/watch?v=XpZqpSvN3MM&ab\\_channel=Nextcloud](https://www.youtube.com/watch?v=XpZqpSvN3MM&ab_channel=Nextcloud)

# References

<https://github.com/nextcloud/richdocuments>

[https://sdk.collaboraonline.com/docs/postmessage\\_api.html](https://sdk.collaboraonline.com/docs/postmessage_api.html)



# Questions?

[julius@nextcloud.com](mailto:julius@nextcloud.com)