Two-Factor Authentication in Nextcloud

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What is Two-Factor Authentication?

- Knowledge: something you *know*

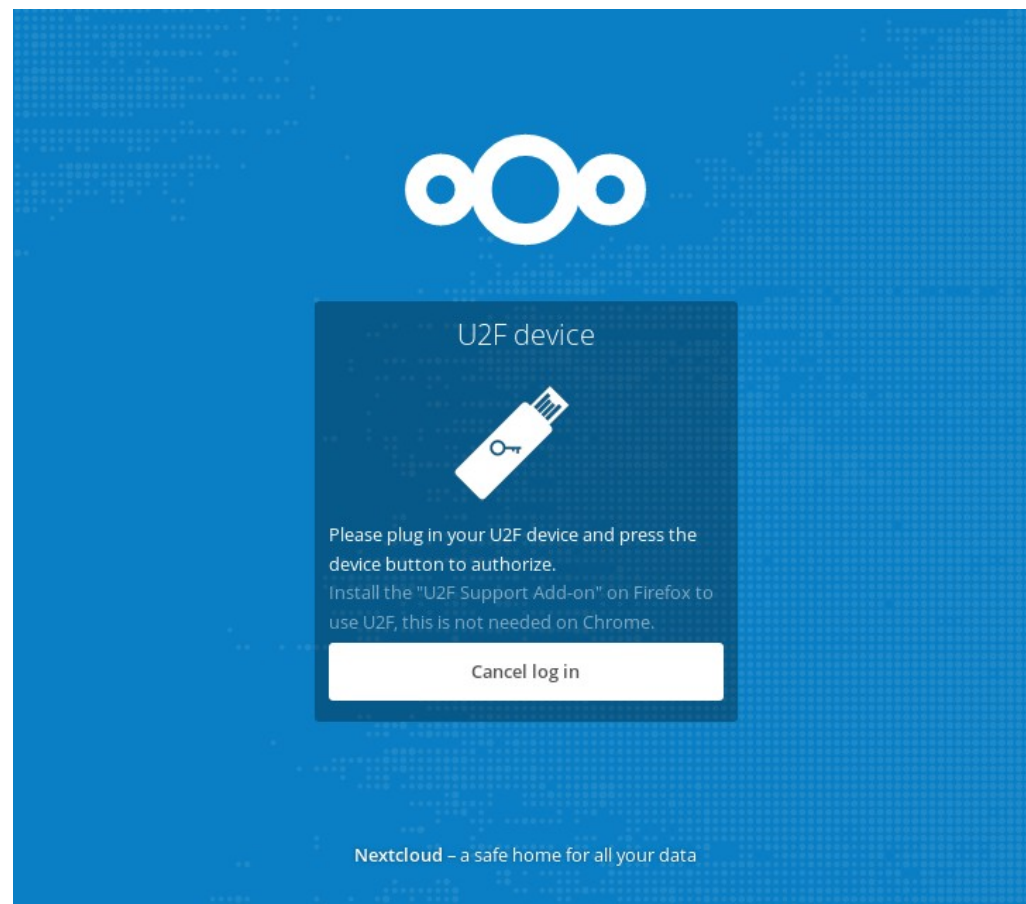- Possession: something you *have*

- Inherent: something you *are*

    →two distinct factors

Universal Two-Factor Authentication

- Open standard
- Hardware Key (USB)

- Secure
- Simple to use

U2F device

Please plug in your U2F device and press the
device button to authorize.
Install the "U2F Support Add-on" on Firefox to
use U2F, this is not needed on Chrome.

Cancel log in

Nextcloud – a safe home for all your data
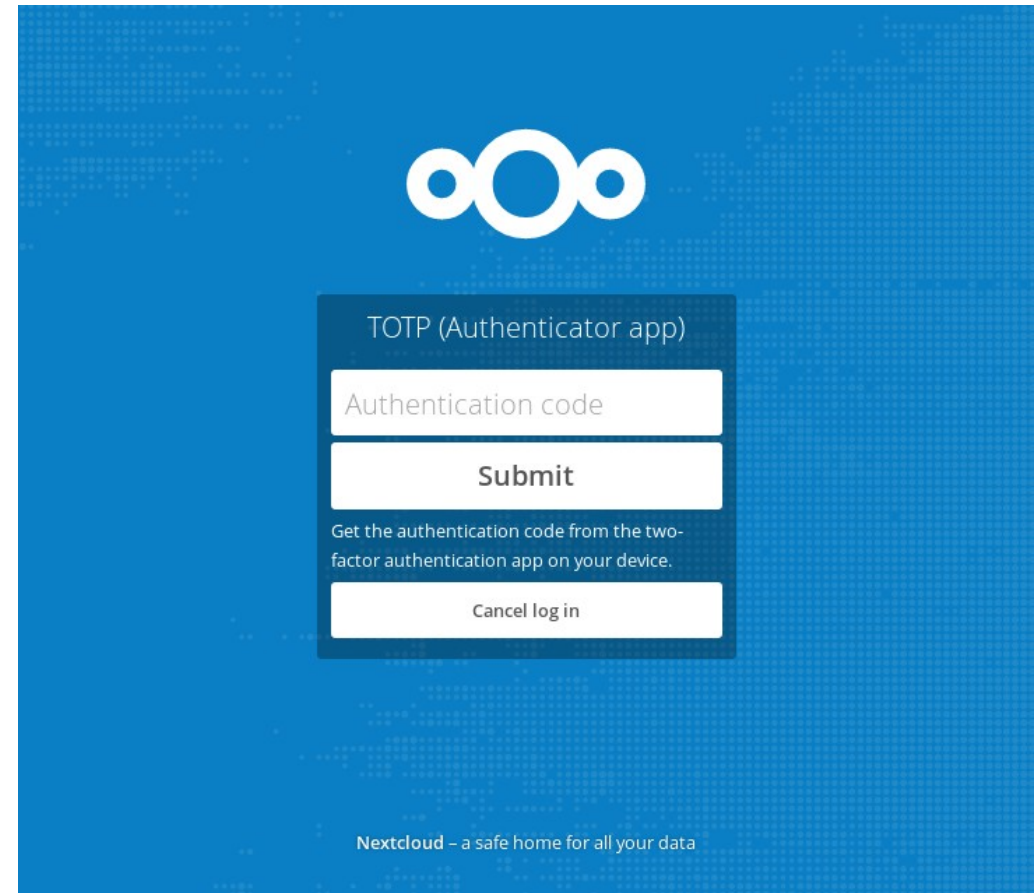
Time-Based One-Time Password

- Open standard
- Smartphone app

- Secure
- No hardware required

TOTP (Authenticator app)

Authentication code

Submit

Get the authentication code from the two-factor authentication app on your device.

Cancel log in

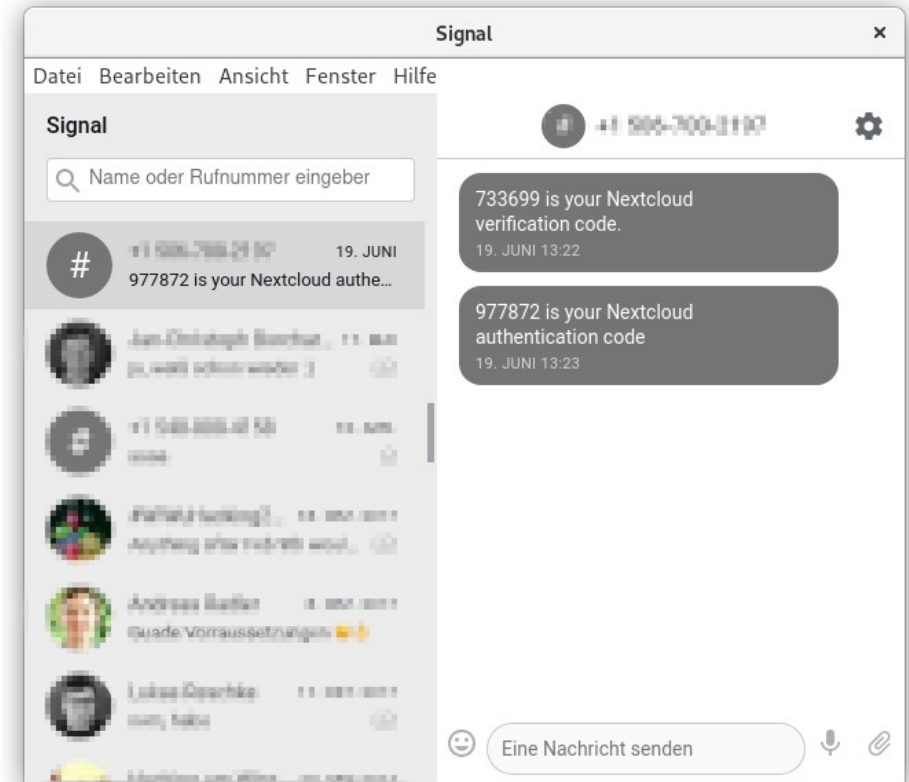Nextcloud – a safe home for all your data

Messaging Gateway

Send messages via external gateways

- SMS
- Signal
- Telegram

No app/hardware required

Tech preview

Current and future work

- Messaging Gateway
- Robustness to failure
- Status command

- Enhance login user experience
- More control for admins

```
[christoph@christoph-workstation nextcloud]$ php occ twofactorauth:state admin
Two-factor authentication is enabled for user admin

Enabled providers:
- backup_codes
Disabled providers:
- gateway
- totp
- u2f
- yubiotp
```