



# 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

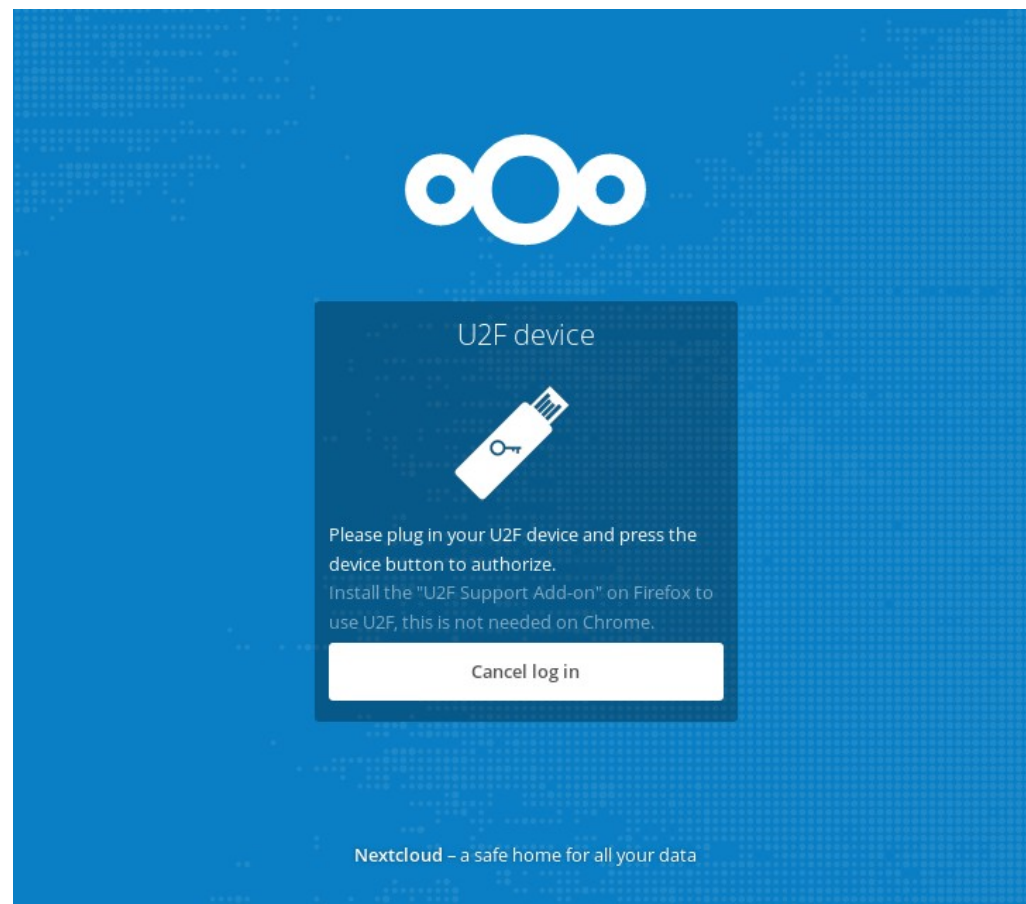


# Universal Two-Factor Authentication





-  Open standard
-  Hardware Key (USB)

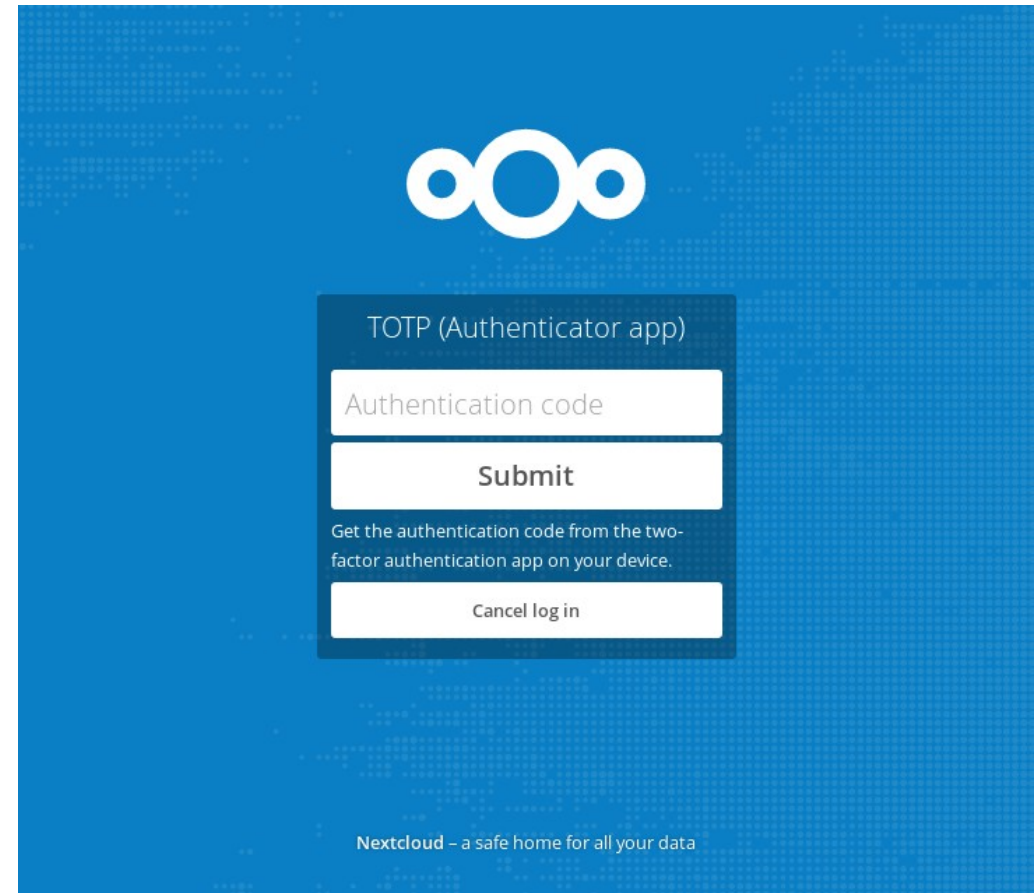
 Secure

 Simple to use



# Time-Based One-Time Password

-  Open standard
-  Smartphone app
-  Secure
-  No hardware required



The image shows a screenshot of the Nextcloud TOTP (Authenticator app) login interface. The background is a blue gradient with a subtle dot pattern. At the top center is the Nextcloud logo, which consists of three white circles of varying sizes arranged in a horizontal line. Below the logo, the text "TOTP (Authenticator app)" is displayed in white. Underneath, there is a white input field labeled "Authentication code". Below the input field is a white button with the text "Submit". Below the "Submit" button, there is a line of white text: "Get the authentication code from the two-factor authentication app on your device." At the bottom of the form is another white button with the text "Cancel log in". At the very bottom of the page, the text "Nextcloud - a safe home for all your data" is visible in white.

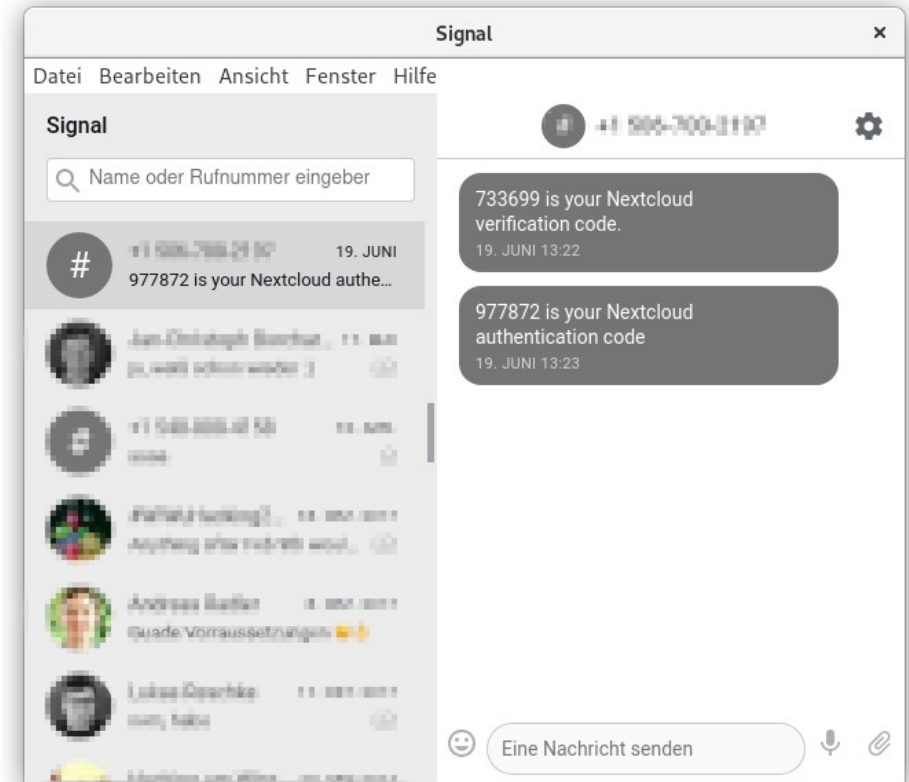
# Messaging Gateway

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
```

