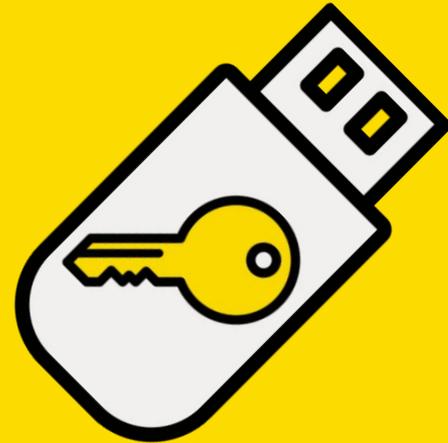




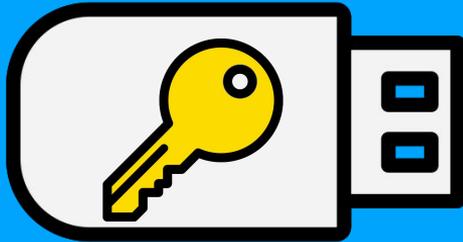
SSH-Login mit FIDO-Tokens statt Keyfiles



Inhalt

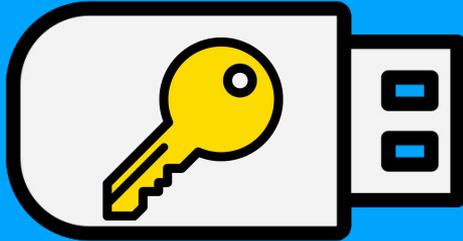
- 35-40 Minuten + Fragen
- FIDO Tokens? Yubikeys?
- SSH Logins
- Demo
- Praktisches: Schlüsseltypen, mehrere Schlüssel, etc.

FIDO Tokens? Yubikeys?



FIDO Tokens? Yubikeys?

FIDO2 Authenticators!



FIDO Alliance

- Seit 2013
- Onlinedienste und Hardwarehersteller



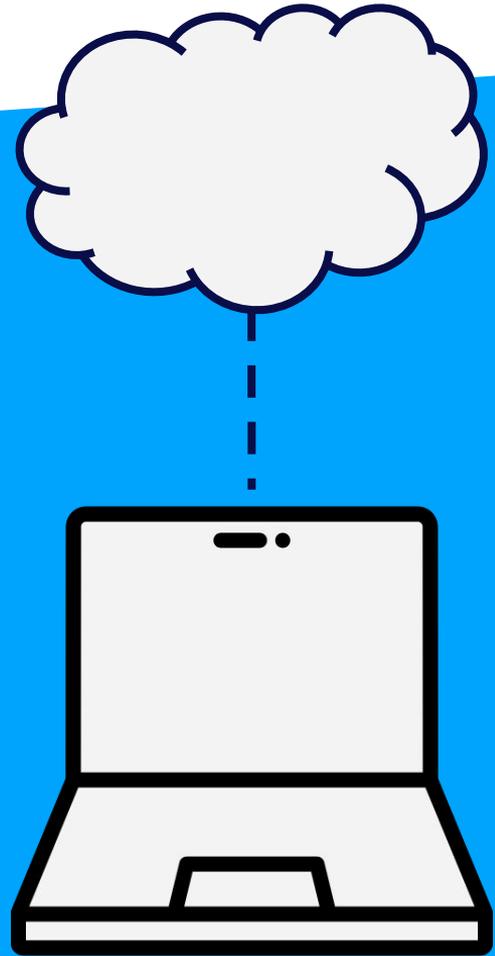
FIDO Alliance

- Seit 2013
- Onlinedienste und Hardwarehersteller
- Altbekanntes Problem: Passwörter



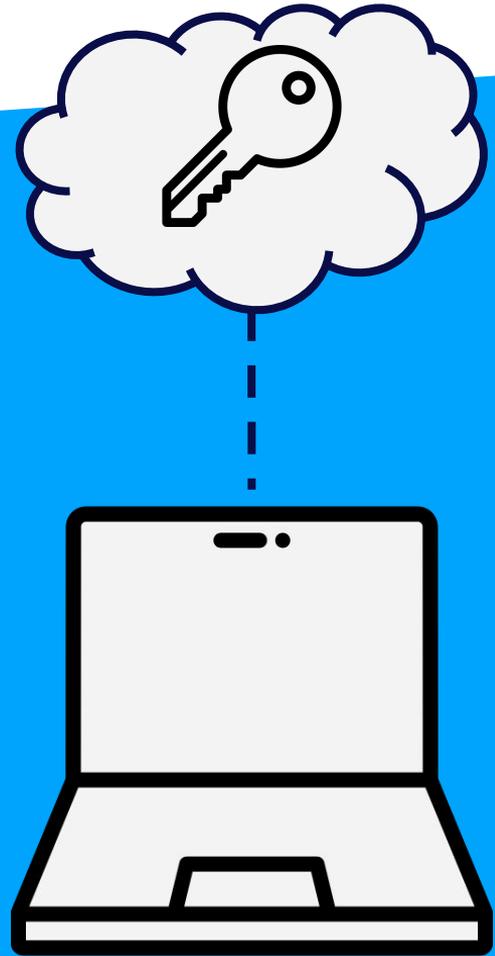
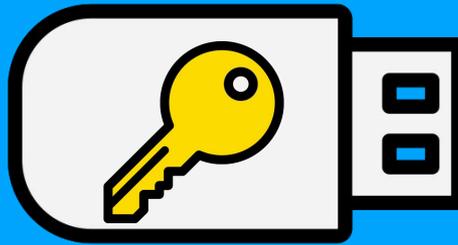
FIDO2 Standard

- Multi-Factor Authentifizierung
- WebAuthn (Browser) + CTAP (Hardware)



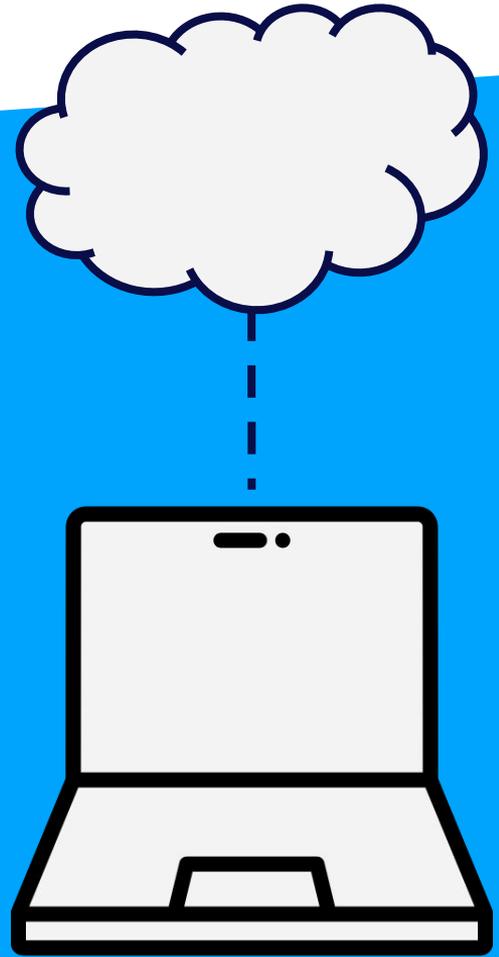
FIDO2 Standard

- Multi-Factor Authentifizierung
- WebAuthn (Browser) + CTAP (Hardware)
- Public + Private Key



SSH Login

SSH Login



SSH Login

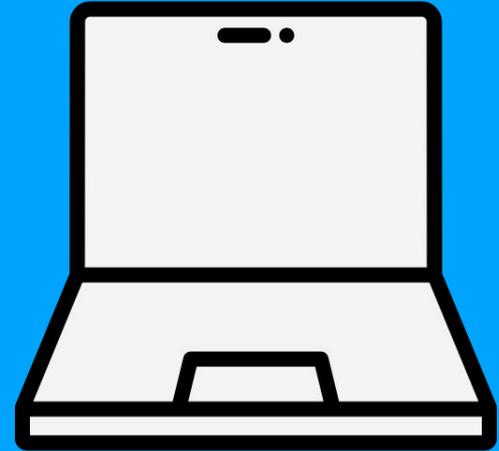
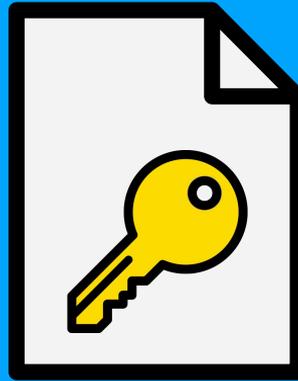
Der Klassiker: Passwort



SSH Login

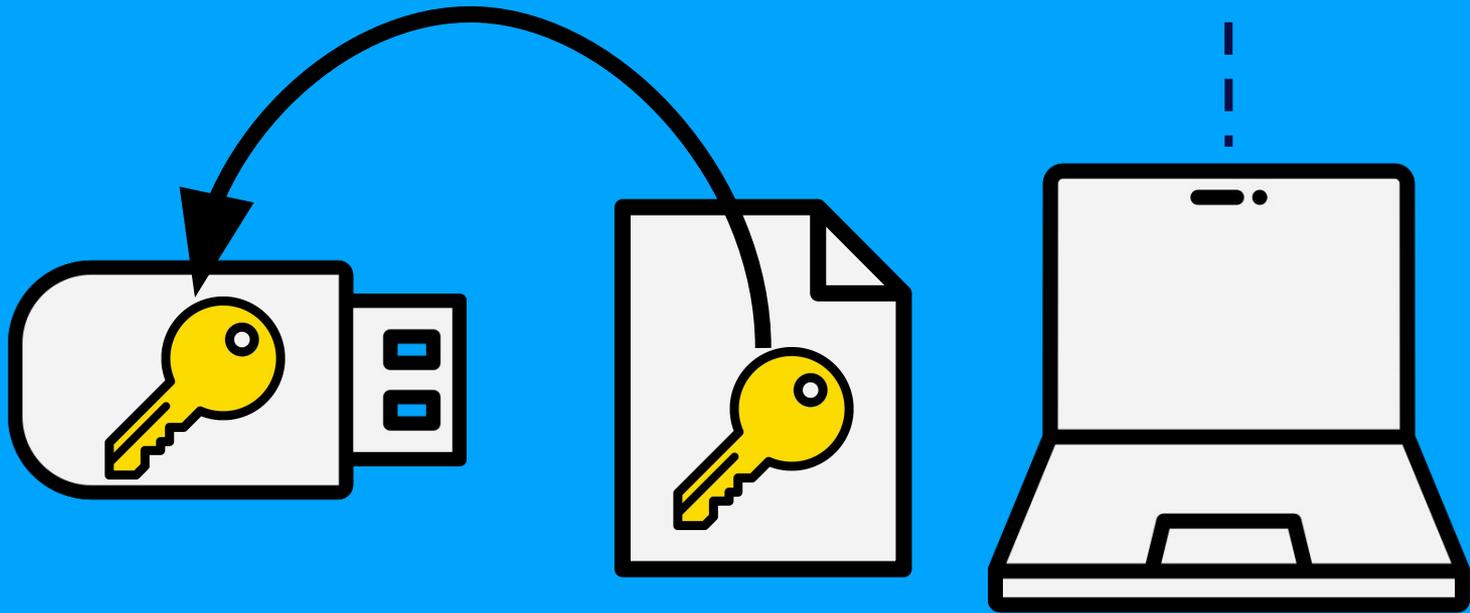
Besser: Keyfiles

- Komfortabel
- Sicherer



SSH mit FIDO

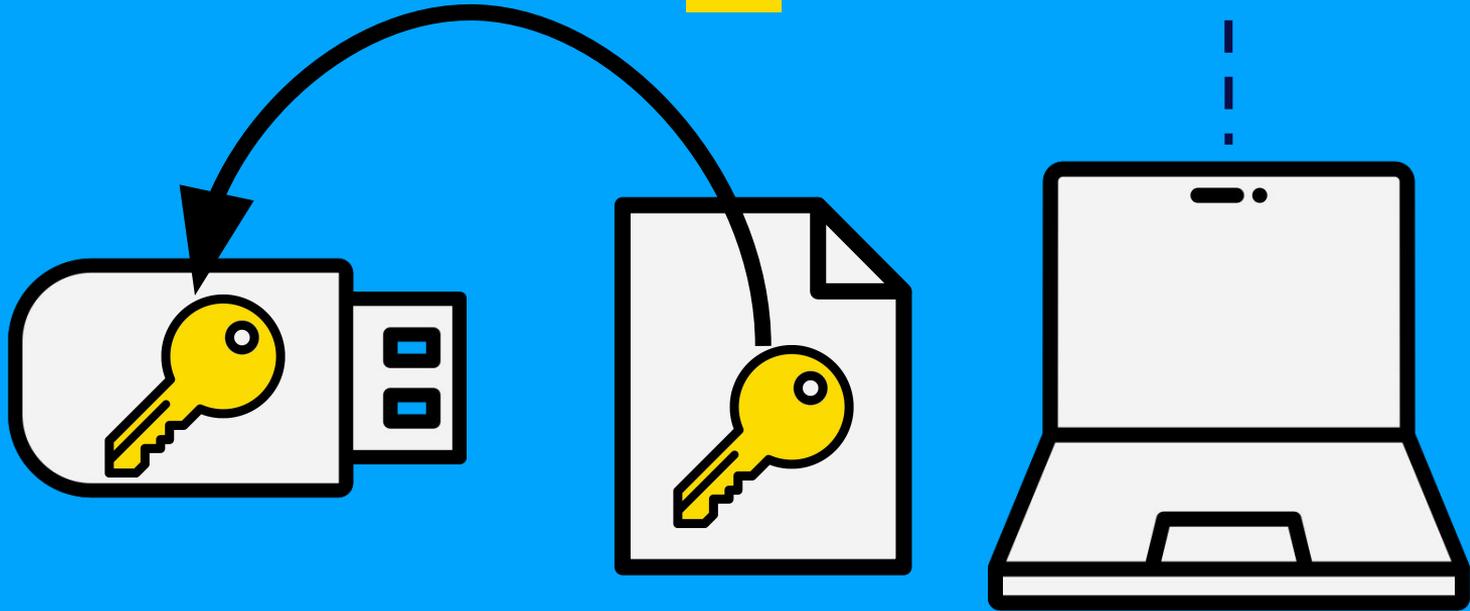
Geht das auch mit FIDO Tokens?



SSH mit FIDO

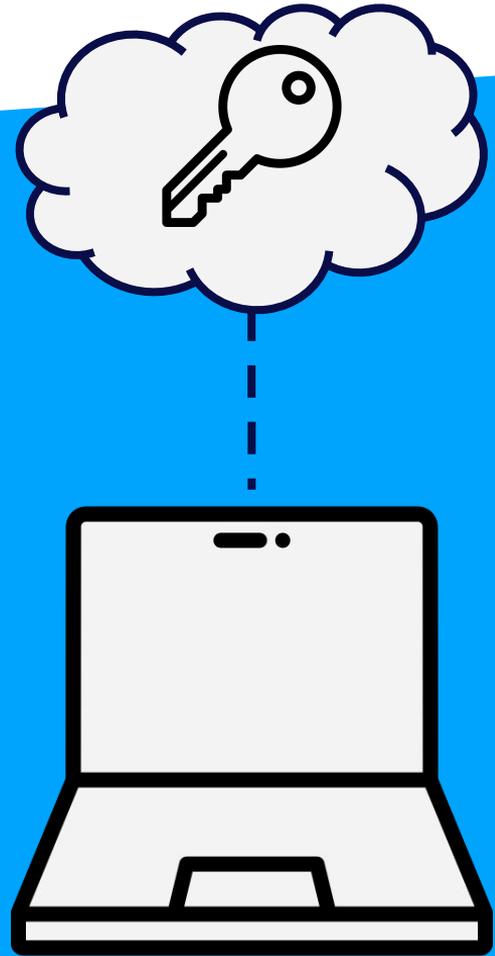
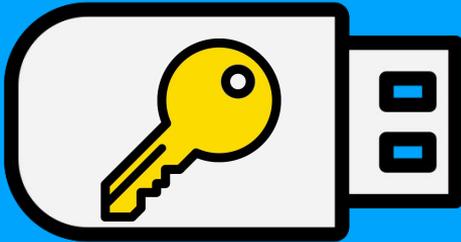
Geht das auch mit FIDO Tokens?

Ja!



SSH mit FIDO

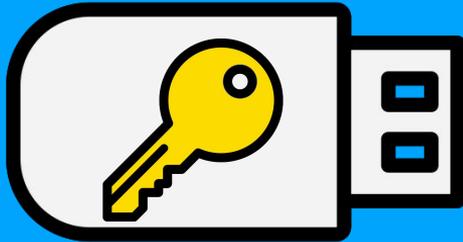
Seit OpenSSH Version 8.2 (Anfang 2020)



SSH mit FIDO

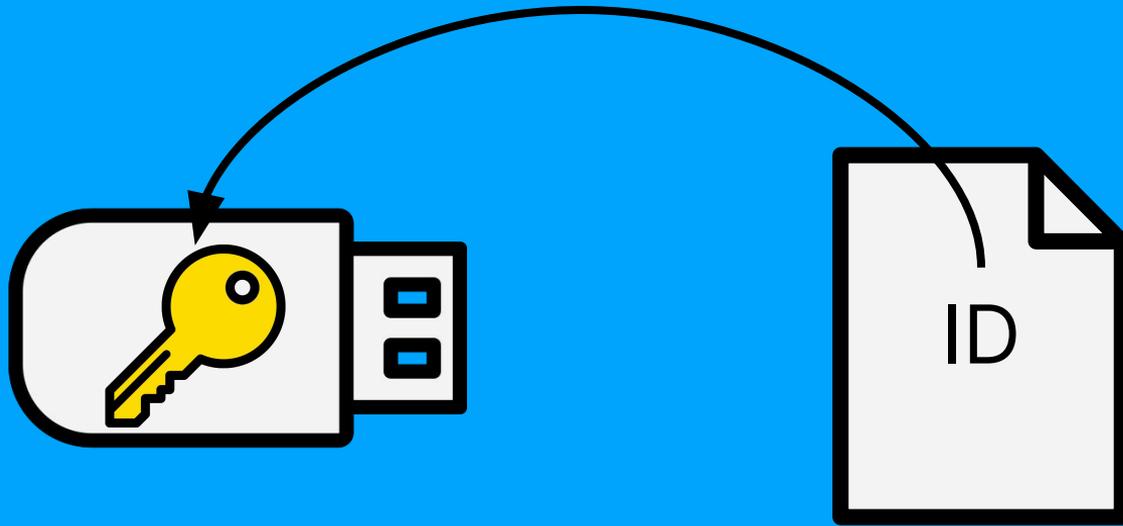
Seit OpenSSH Version 8.2 (Anfang 2020)

Probieren wir es aus!

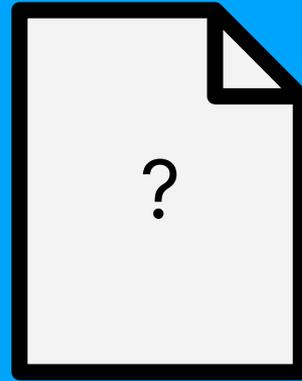


Schlüsseltypen

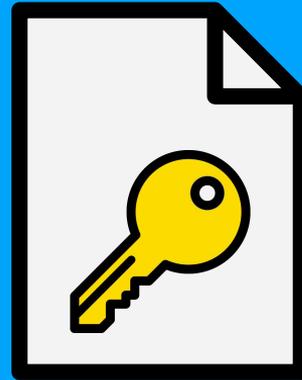
Schlüsseltypen



Schlüsseltypen

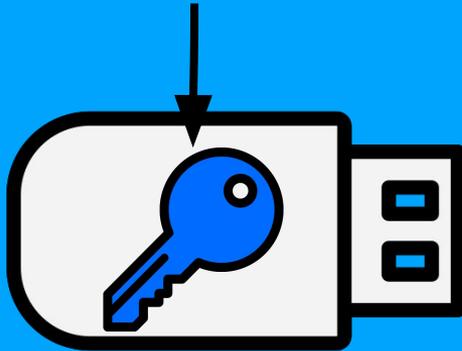


Schlüsseltypen



Schlüsseltypen

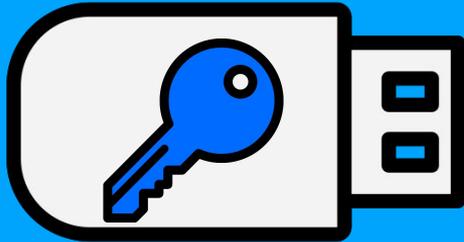
Device Master Key



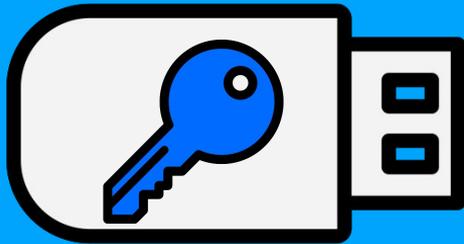
Verschlüsselter Private Key



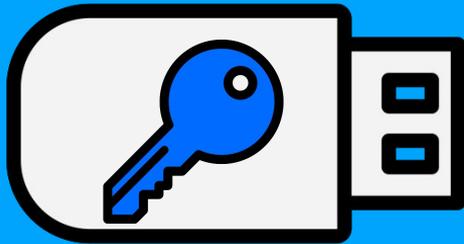
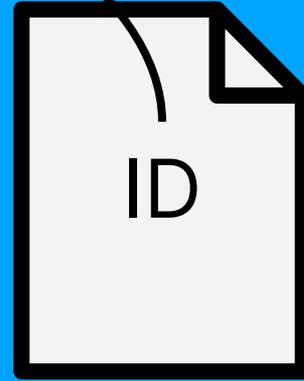
Schlüsseltypen



Schlüsseltypen

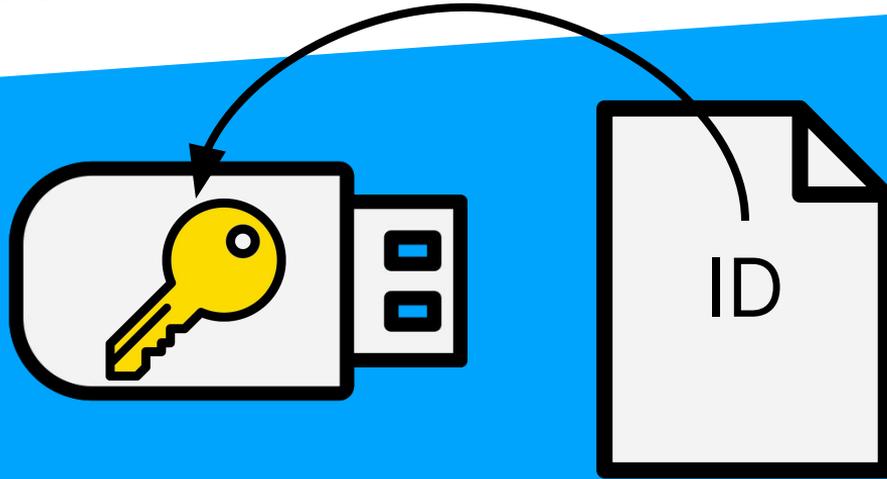


Schlüsseltypen

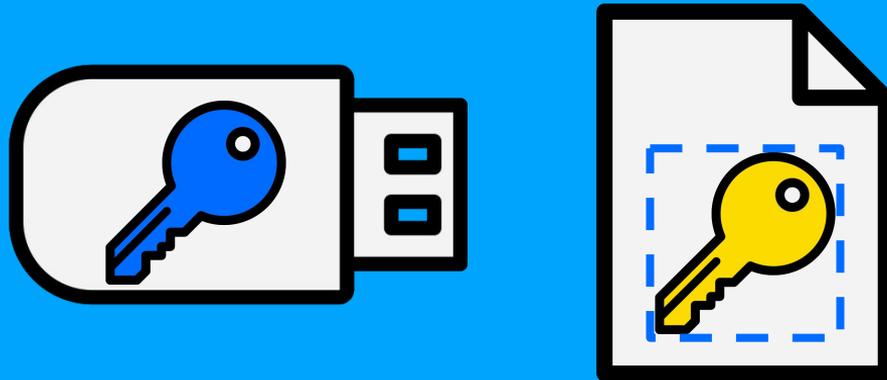


Schlüsseltypen

Resident Key
*Discoverable
Credential*



Non-Resident Key
*Non-Discoverable
Credential*



Weitere Optionen

- User Verification
- No Touch
- Mehrere Resident Keys

Fazit

- ssh mit FIDO ist einfach
- ssh mit FIDO ist verfügbar
- Mehrere Keys sind kein Problem
- Es gibt Spielraum für Konfiguration
 - Resident vs Non-Resident Keys
 - No-Touch vs Touch vs Verify-required (nur PIN)

Image Credits

- USB Device, Laptop: iconmas via flaticon.com
- Key: Freepik via flaticon.com
- FIDO Alliance logo by FIDO Alliance - fidoalliance.org
- Others: own work

Vielen Dank für eure Aufmerksamkeit

Fragen?

KOMMT ZU UNS!



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