

eSecu FIDO2 NFC Security Key

User Manual

(V2.3)

Excelsecu Data Technology Co., Ltd.

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Thank You for Using eSecu FIDO2 NFC Security Key

IMPORTANT INSTRUCTIONS

Please read this manual before operating your eSecu FIDO2 NFC Security Key and keep it for future reference.

1. Product Overview

eSecu FIDO2 NFC Security Key is a hardware authenticator supporting FIDO2 standard and FIDO U2F standard, as well as NFC and USB communication interfaces. It can be used on FIDO2-enabled or U2F-enabled services and applications' two-factor authentication, multi-factor authentication or passwordless authentication. And multiple interfaces make it easier for you to complete authentication on PCs and mobile devices.

2. Product Picture



eSecu FIDO2 NFC Security Key

The button has the following lighting states:

Steady white light:

1. When the eSecu FIDO2 NFC Security Key is plugged into a computer's USB port.
2. When the eSecu FIDO2 NFC Security Key is placed on an NFC card reader or on the NFC sensor of a mobile device.

Flashing white light: the eSecu FIDO2 NFC Security Key is receiving an authentication request when it's on USB mode.

3. The Basic Operation

3.1 Register (First Time Only)

1. Enter the user name and password to log in to any web service that supports U2F/FIDO2.
2. Insert the eSecu FIDO2 NFC Security Key in your computer over USB connection.
3. Add the eSecu FIDO2 NFC Security Key to your account(s).

3.2 Signing-In (After Completing Registration)

1. Open the website you want to log in.
2. Enter your usual username and password (for U2F-enabled services).
3. Connect the registered eSecu FIDO2 NFC Security Key to a mobile device or PC.
4. When prompted, press the button on eSecu FIDO2 NFC Security Key to sign in or tap the eSecu FIDO2 NFC Security Key on an NFC sensor.

3.2.1 USB Mode

1. Insert the registered eSecu FIDO2 NFC Security Key to the computer's USB port. The indicator light is white on.
2. When an authentication request is received, the white light blinks. Press the button to confirm this authentication.

3.2.2 NFC Mode

1. Please make sure NFC of the mobile device is turned on.
2. Tap your registered eSecu FIDO2 NFC Security Key on the NFC sensor of mobile device when it's asking for a security key.
3. The indicator light is white on and the authentication will complete in a moment.



To use NFC, you need to expose the USB connector and put it close to the NFC field. Metal casing will block the NFC signal, avoid being triggered by mistake when you are not using it.

4. How to use FIDO2 NFC Security Key for 2-Step Verification

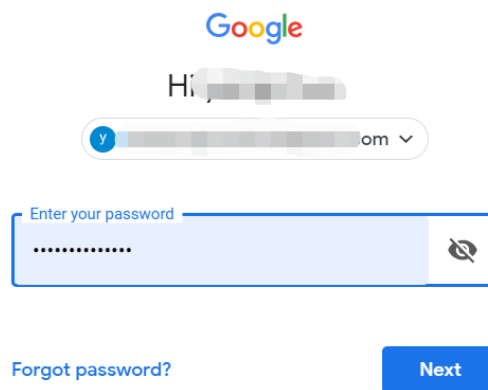
4.1 Register

Register FIDO2 Security Key with your Google account to make it become the second authentication factor.

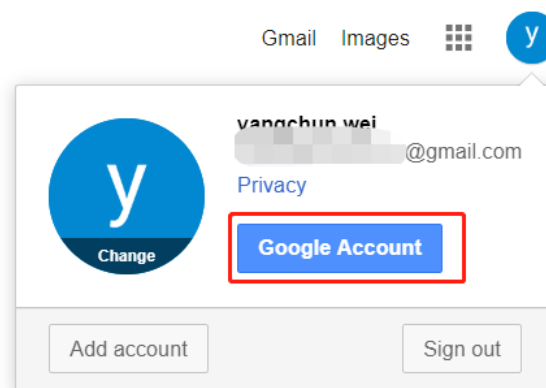


The registration can only be done from a non-mobile device.

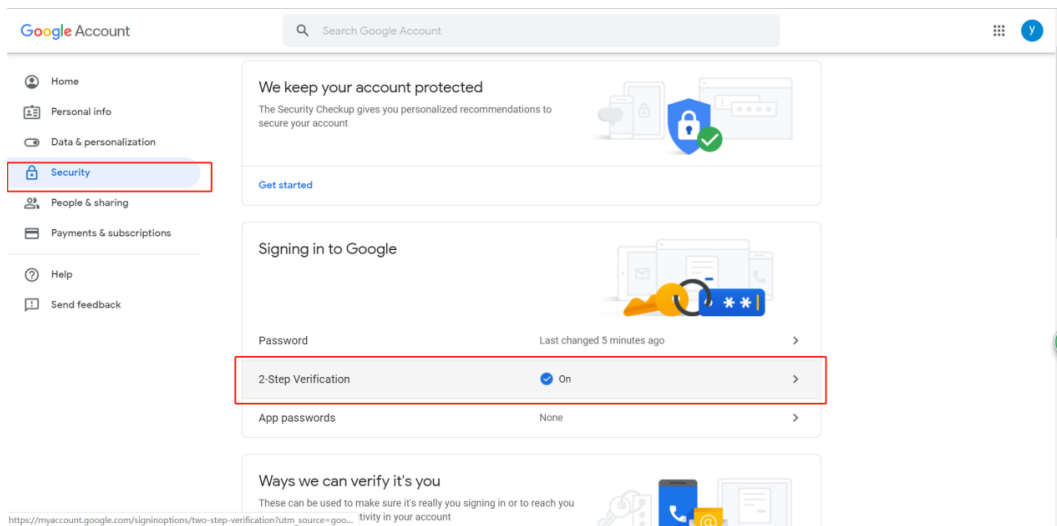
1. Log in to the website: <https://www.google.com> and click **Sign In** on the top right corner. Enter your account name and password.



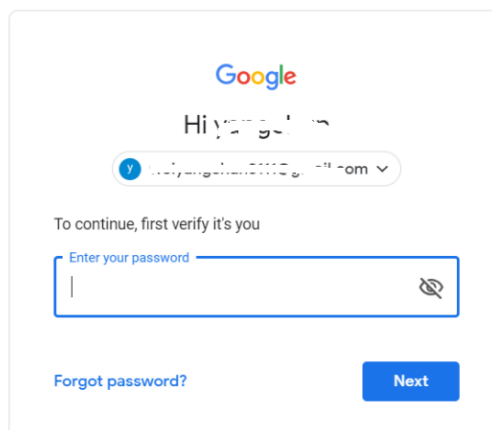
2. Once you have successfully logged in, click on your **Google Account**.



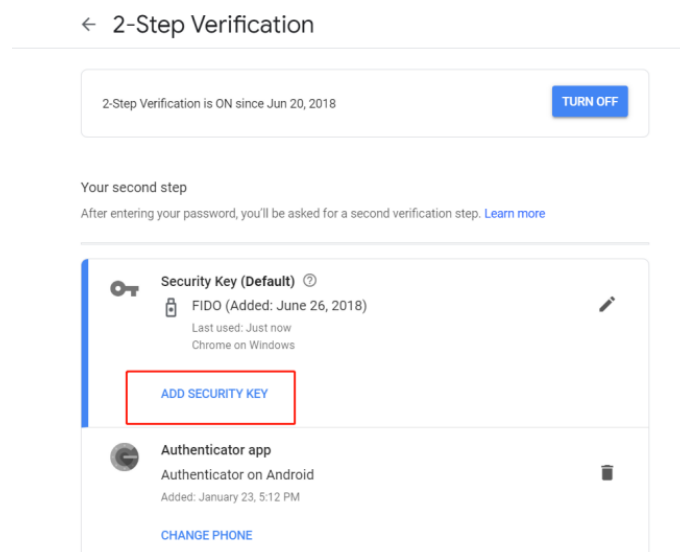
3. Select **Security**, and go to **2-Step Verification**.



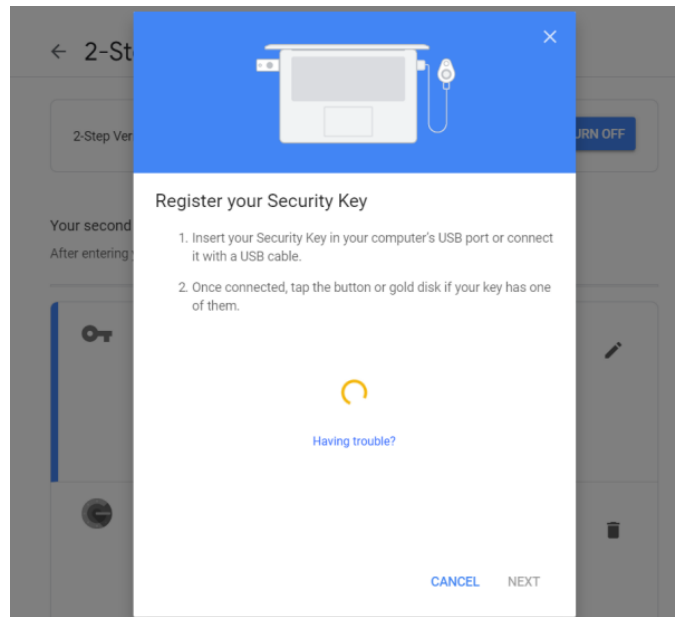
4. You will be asked to log in again.



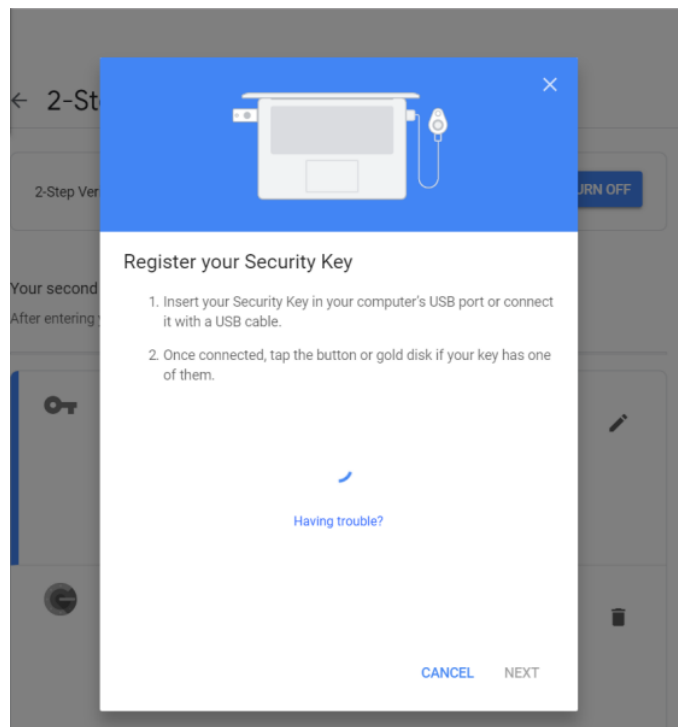
5. Click **ADD SECURITY KEY**.



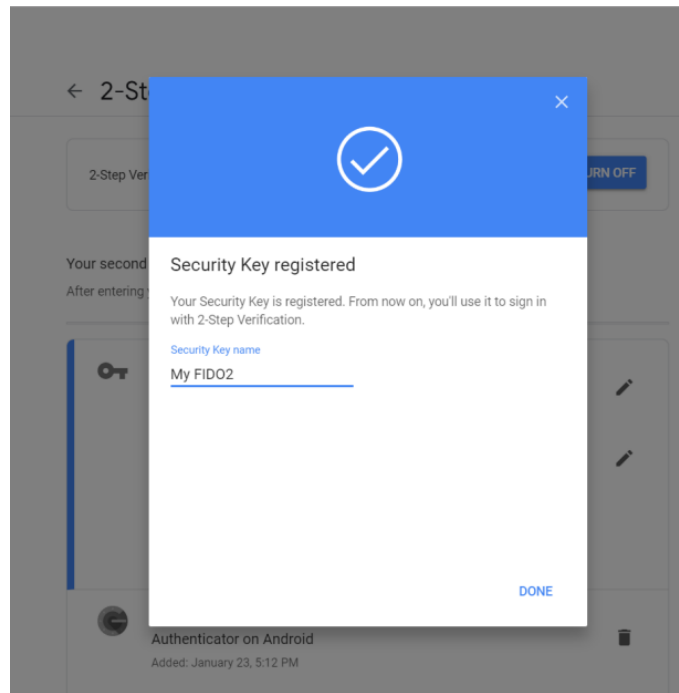
6. You will be prompted to insert your FIDO2 security key into a USB port. Click **NEXT** to continue.



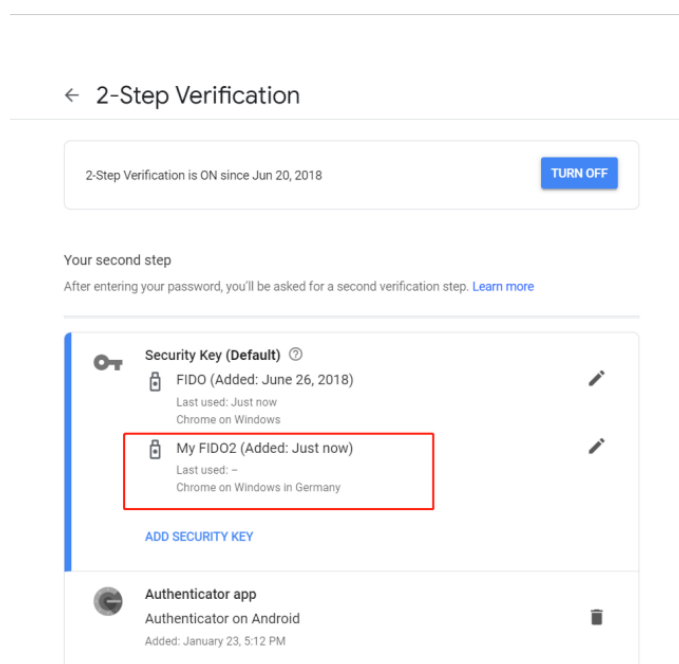
7. When the white light of the key is flashing, short press the button on the eSecu FIDO2 NFC Security Key.



8. Rename your security key, click **DONE** to finish.

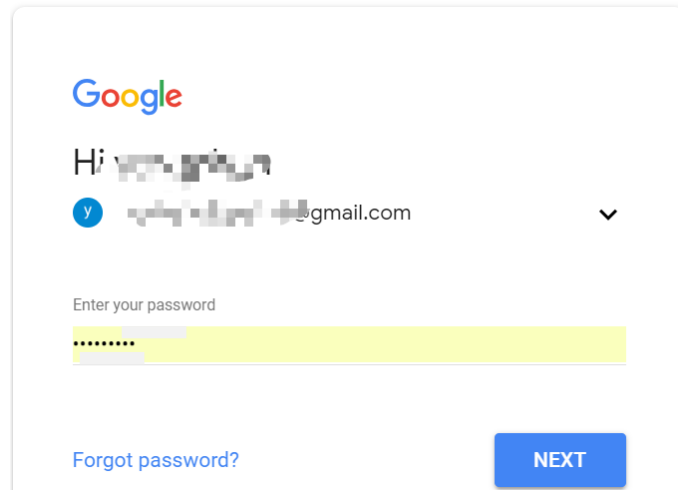


9. The eSecu FIDO2 NFC Security Key becomes the default second authentication factor of your account. You will be asked to use it to complete 2-Step Verification when sign in to Google in the future.

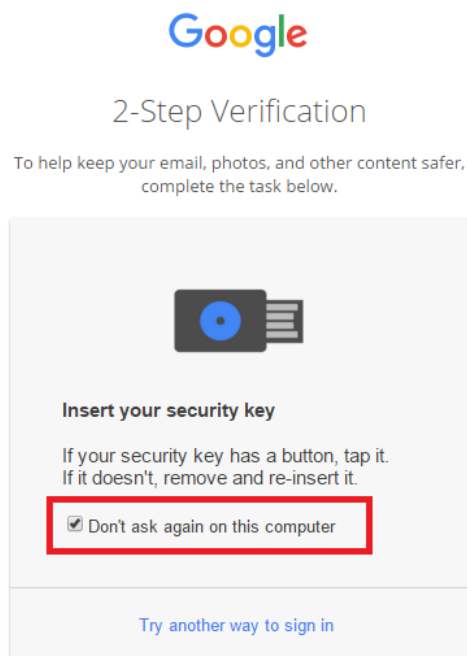


4.2 Sign in (USB Mode)

1. Sign in to Google with username and password. Since you have an eSecu FIDO2 NFC Security Key as the strong second authentication factor, you can simplify your password (e.g. 4-digit PIN) without compromising security.



2. Insert eSecu FIDO2 NFC Security Key to a USB port and tap the button on the key. You will be authorized to access your Google account now.

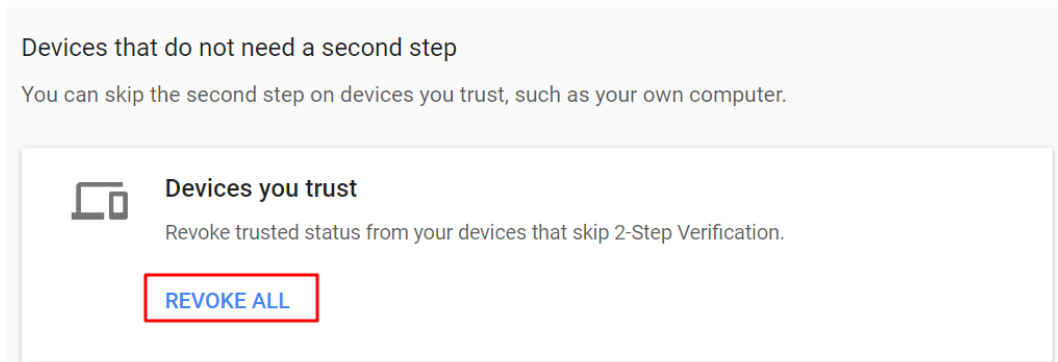




By default, "Don't ask again on this computer" is checked. After checking the box, the next login will skip the two-step verification and log in directly with the user name and password.

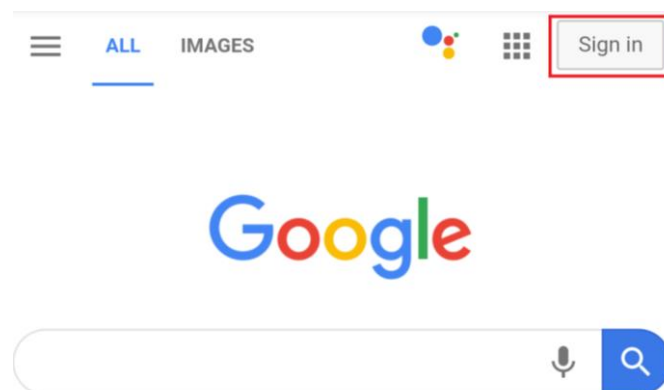
You can undo trusted devices in settings to restore the use of two-step verification.

Click **Revoke All** to clear the trusted device and restore the use of two-step verification.



4.3 Sign in (NFC + Android Mobile Device)

1. Turn on NFC on your mobile device. Open the Chrome browser on your Android mobile device, and go to <https://www.google.com>, then click the **Sign in** button on the top right corner, then enter the username and password.



2. If the 2-step Verification of your Google account is turned on, you will be asked to use your Security Key for verification, click on **Use your Security Key with NFC**.



Use your Security Key with google.com

To use most keys, simply tap the button.

Using your Security Key with google.com helps protect your private data.



[Use your Security Key with NFC](#)

[Use your Security Key with USB](#)

[Pair another Security Key](#)

3. Hold your registered eSecu FIDO2 NFC Security Key flat against the NFC sensor of your mobile device, a white indicator light on the key shall steady on.



Allow using your Security Key?

Hold your key flat against the back of your device until it stops vibrating



[Use your Security Key with Bluetooth](#)

[Use your Security Key with USB](#)

4. The authentication will complete in a while, and you will be authorized to login with your account.



2-Step Verification

This extra step shows it's really you trying to sign in



You're all set

Don't ask again on this computer

Next

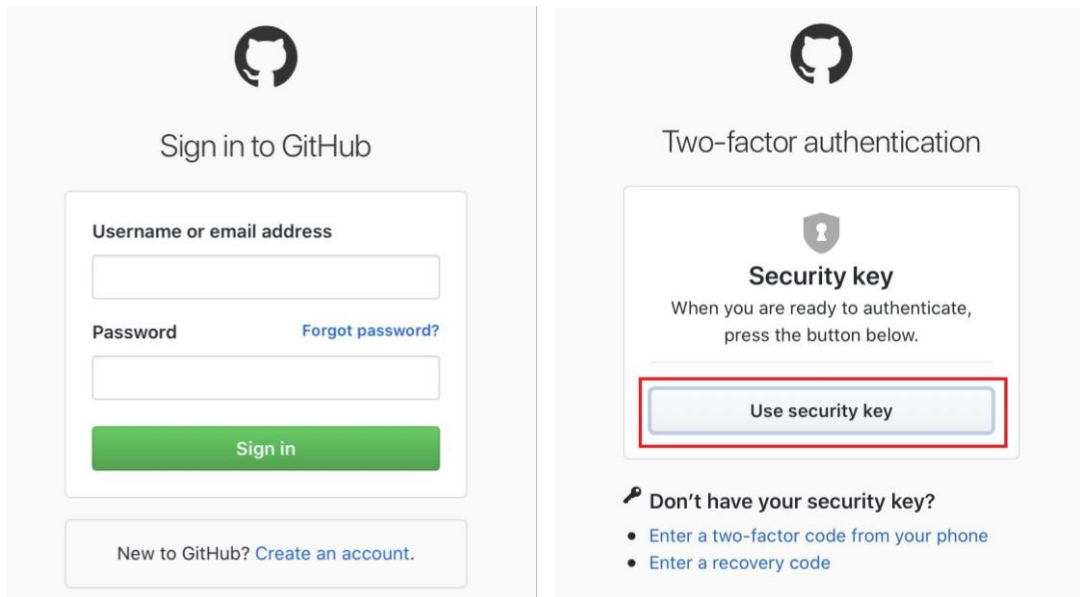
4.4 Sign in (NFC Mode + iOS13.3 and Above)

Only iOS 13.3 and above supports FIDO security key over NFC connection. Here we take GitHub as an example.

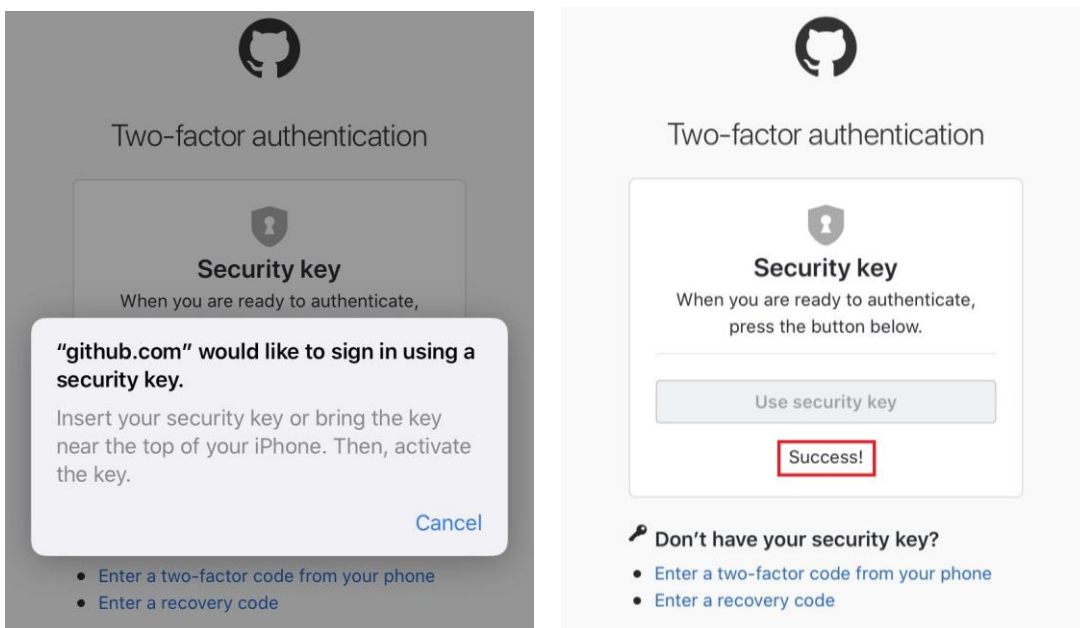
1. Log into your GitHub account on your PC, go to **Settings** -> **Security**, enable **Two-factor authentication**, and register your eSecu FIDO2 NFC Security Key.

The screenshot shows the GitHub Security settings page. On the left sidebar, the 'Security' menu item is highlighted with a red box. The main content area shows the 'Two-factor authentication' section, which is also highlighted with a red box and has a green 'Enabled' status. Below this, the 'Two-factor methods' section lists 'Authenticator app' (Configured) and 'Security keys' (1 security key), with the 'Security keys' item highlighted by a red box. The 'New password' and 'Confirm new password' fields are visible above the two-factor authentication section.

- Turn on NFC on your iPhone, open Safari, and go to <https://www.github.com>, sign in with the username and password, then press **Use security key**.



- Hold your registered eSecu FIDO2 NFC Security Key near the top of your iPhone, a white indicator light on the key shall steady on. The authentication will complete in a while, and you will be authorized to login automatically.



5. Usage of FIDO Manager and OTP

The Software used to configure the FIDO and OTP (TOTP/HOTP) is described in document of “Excelsecu Manager User Manual”, you could refer to it for more details.

6. FAQ

Question 1: I have two Gmail accounts, how many FIDO2 NFC Security Keys do I need to protect two gmail account. Do I need two FIDO2 NFC Security Keys?

Answer: You can use one FIDO2 NFC Security Key with multiple accounts, but that is not recommended. Regardless of if you're protecting one gmail account, or two - you should register multiple keys (if the service allows it). That way, if you lose your key, or it's damaged, or it's stolen, you will still have a backup key ready to use.

Question 2: What should I do if I lost my FIDO2 NFC Security Key?

Answer: Just go to the website your key already registered. On the 2-step verification tab or similar tab, delete the device. Two FIDO2 NFC Security Keys are recommended, one for normal use, the other for backup.

Question 3: Why does GitHub say “this browser doesn't support security key” on my iPhone?

Answer: Please make sure your iPhone is updated to iOS 13.3 and sign in with Safari.

Question 4: What applications support FIDO2 NFC Security Key?

Answer: The applications support FIDO U2F/FIDO2 include but not limited to: Google, Facebook, Dropbox, GitHub, Dashlane, DUO, StrongAuth etc.

Question 5: Can I register a FIDO2 NFC Security Key over my smart phone?

Answer: No. You can always authenticate the FIDO2 NFC Security Key with your mobile devices, but registration can only be done from a non-mobile device.

7. Product Spec

Product	eSecu FIDO2 NFC Security Key (FD202)
System	Windows, macOS, Linux
Browser	Edge, Chrome, Firefox, Opera, Safari
Functions	FIDO U2F, FIDO2, HOTP, TOTP
Algorithm	SHA256, AES, HMAC, ECDH, ECDSA
Size	44.7x16.0x9.0 (mm)
Interface	USB-A, NFC
Data Retention	≥10 years
Rewrite Cycle	≥100,000 times
Operating Voltage	5V±10%

Operating Current	Max <40mA
Button	Single button
Button Endurance	≥100,000 times
Operating Temperature	-10~60°C
Storage Temperature	-20~60°C
Indicator Light	White
Material	AL, PC
Certificate	CE, FCC, RoHS, WEEE, FIDO2 L1