VINCSS FIDO2® FINGERPRINT USER MANUAL

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VERSION TRACKING

Version	Date	Writer	Position	Contact	Note
1.0	14/04/2021				VinCSS FIDO2® Fingerprint User Manual
1.1	07/06/2021				Update LED indicator colors
1.2	18/08/2021				Update FCC Statement

VinCSS Passwordless & IAM Services

FCC Regulations:

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
This device has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Note:
Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF Exposure Information

This device meets the government's requirements for exposure to radio waves.
This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.
This device complies with FCC radiation exposure limits set forth for an uncontrolled environment.

Contact Information:

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I. PRODUCT INFORMATION

VinCSS FIDO2® Fingerprint

I.1. General Information

Information	Detail
Product name	VinCSS FIDO2® Fingerprint
USB type	USB Type-C
Bluetooth	Bluetooth Low Energy 5.0
NFC	ISO7816/ISO14443
Supported OS	Windows, macOS, Linux, Android, iOS
Authentication Methods	Passwordless, Strong Two Factor, Strong Multi-Factor
Certificate	FIDO2 Certified
Supported protocol	FIDO U2F/CTAP1, FIDO2(CTAP2)
Supported browser	Google Chrome, Mozilla Firefox, Apple Safari, Microsoft Edge, Microsoft Edge Chromium
Encryption algorithm	ECC p256
CPU	32-bit ARM® Cortex™-M4
Account storage	50
Fingerprint storage	5
Indicator lights	RGB Led
Fingerprint Sensor resolution	508 dpi
Fingerprint Sensor FAR	<0.0002%
Weight	
Product dimensions	
Battery	25mA, Lithium-ion Battery
Battery life	5-7 days

Information	Detail
Operation Voltage/Current	5V/1A
Operation Temperatures	-10ºC ~ 60ºC

I.2. LED indicator

The VinCSS FIDO2® Fingerprint's LED indicator will let you know about current battery state, charging state or working mode.

LED indicator	Meaning	State
Blinking Red 3 times in a row	The built-in battery is running low and needs to be charged	Using Bluetooth or NFC
Solid Amber	The security key is being charged	Connecting with USB
Solid Green	The security key is fully charged	Connecting with USB
Solid Blue	Bluetooth mode On, the security key is connected to a Bluetooth device	Using Bluetooth
Blinking Blue	The security key enters the pairing mode	Using Bluetooth
Blinking Purple	NFC activated	Using NFC
Blinking White quickly	The security key is processing request and require user interaction	Requiring user verification by touching the fingerprint sensor

II. MANAGING PIN CODE AND FINGERPRINT

PIN code for VinCSS FIDO2® Fingerprint is required to add/remove fingerprints, to ensure the safety of the device, avoid adding unauthorized fingerprints, trying to scan fingerprints many times of delete fingerprints from unauthorized users.

Please follow the steps to create/change PIN, manage fingerprints or reset VinCSS FIDO2® Fingerprint.

II.1. Windows

II.1.1. Connecting to computer

II.1.1.1. Connecting via USB

Plug the VinCSS FIDO2® Fingerprint into your computer using USB cable, make sure the security key is **not** in Bluetooth or NFC working mode. If the LED blinks red 3 times in a row indicating the battery level is below 20%, the amber LED indicates the security key is being charged, the green LED indicates the battery is

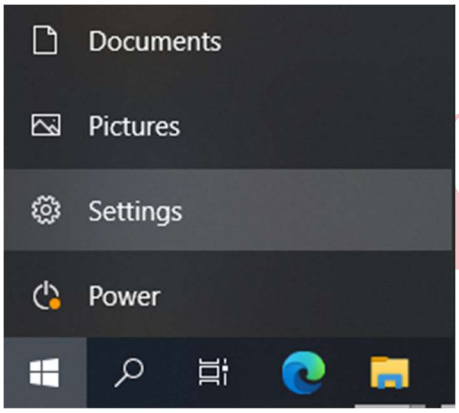
fully charged. The VinCSS FIDO2® Fingerprint security key can be used while charging.

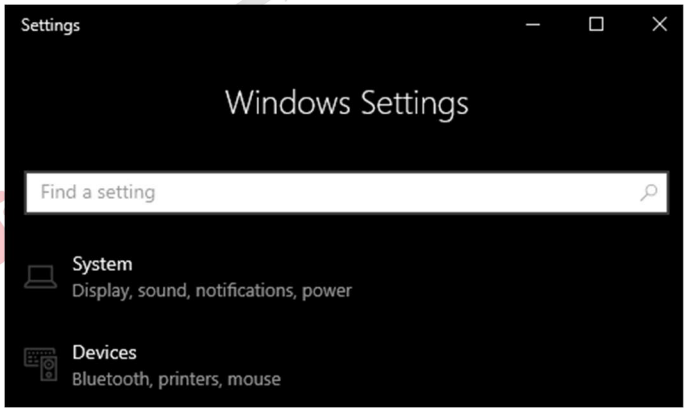
II.1.1.2. Connecting via NFC

Put VinCSS FIDO2® Fingerprint on the NFC reader. When the LED indicator on the key turns purple, the VinCSS FIDO2® Fingerprint can be used.

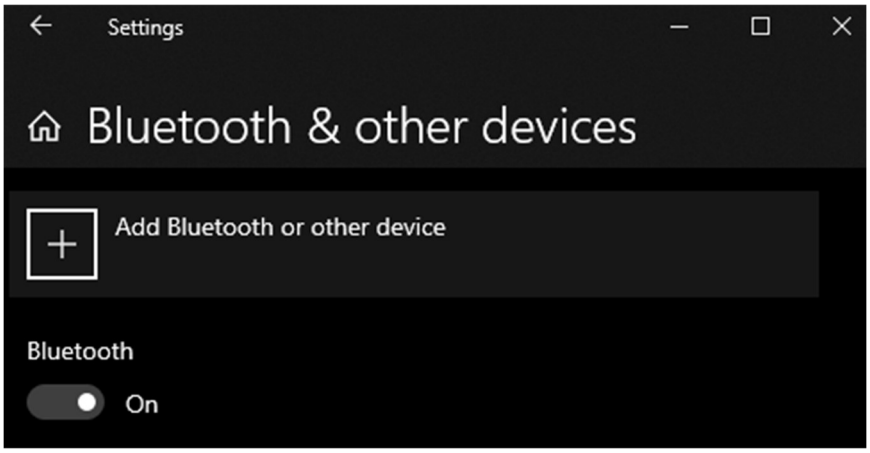
II.1.1.3. Connecting via Bluetooth

- In the off state (no LED indicator), turn VinCSS FIDO2® Fingerprint into Bluetooth mode by holding down the fingerprint sensor for 4 seconds until the Bluetooth indicator lights up, the security key will connect automatically to the previously connected device.
- If you have not connected the security key with device before, hold down the fingerprint sensor for 4 seconds to switch to pairing mode.
- Go to ***Windows > Settings > Devices > Bluetooth & other devices***.

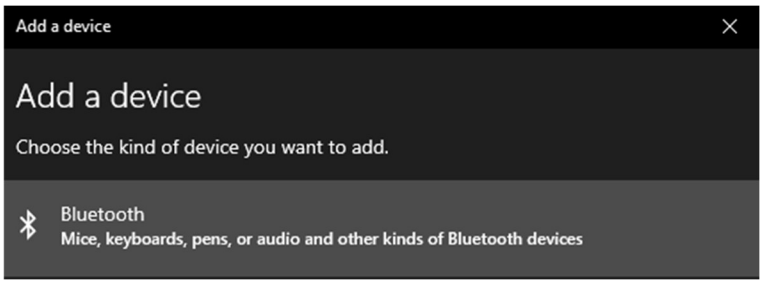




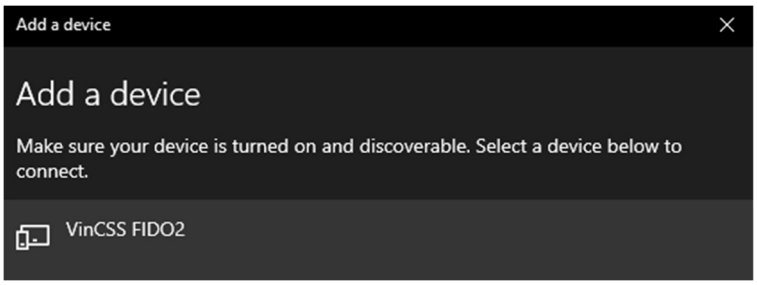
- In the ***Bluetooth*** section, select ***On***, then select ***Add Bluetooth or other device***.



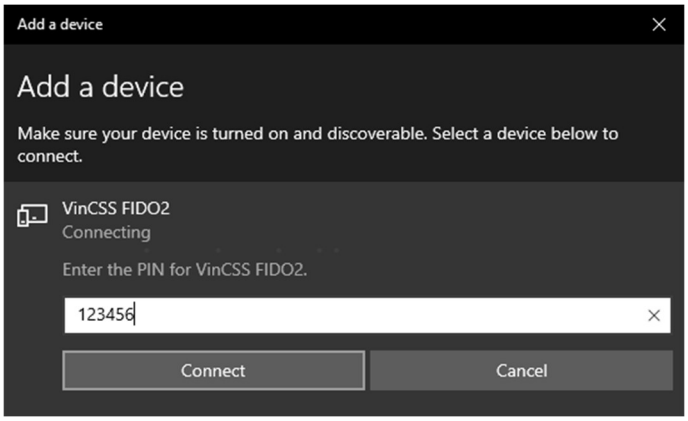
- In ***Add a device*** section, select ***Bluetooth***.



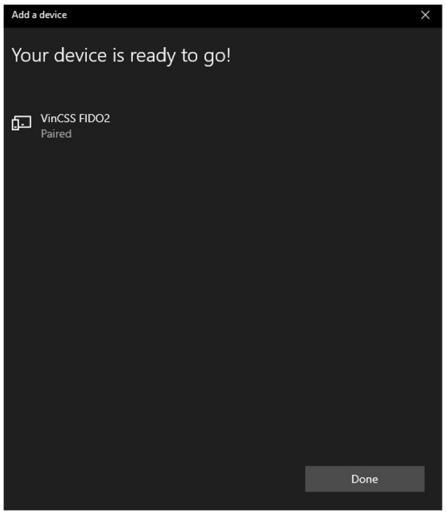
- Select the device named **VinCSS FIDO2**.



- Enter pairing code to connect (Pairing code is on the back of the key).



- Successful connection. Click ***Done*** to finish.



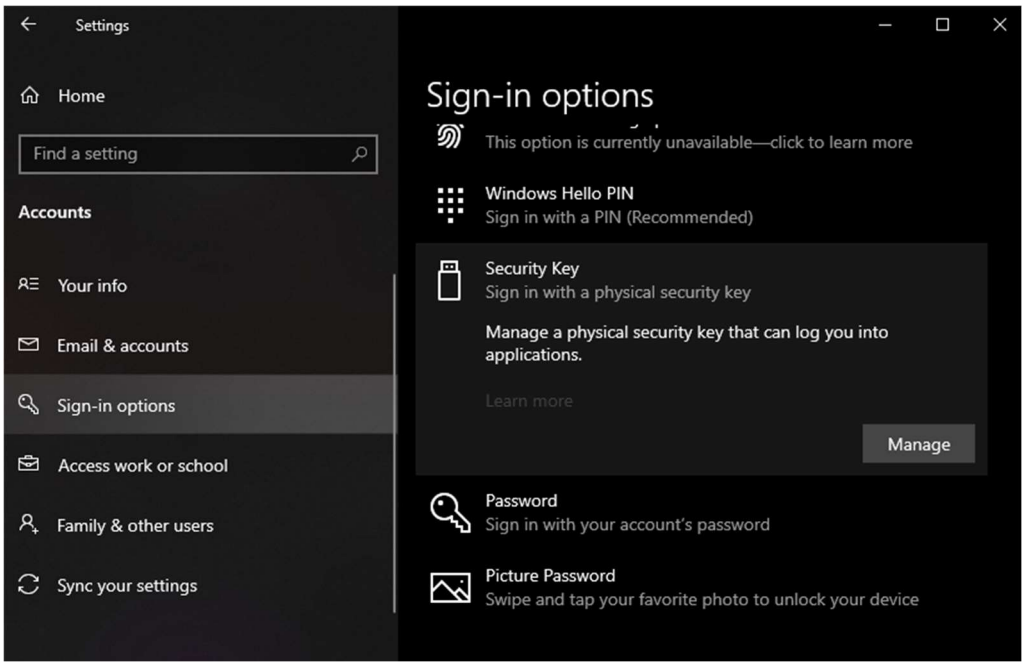
- After successful connection, the device list will show the VinCSS FIDO2® Fingerprint security key and the remaining battery of the key.

Note:

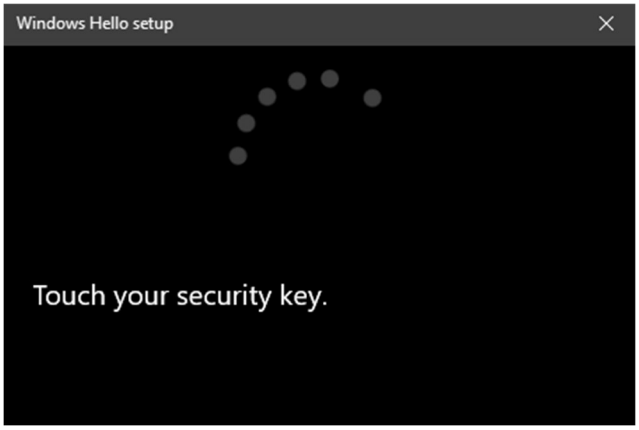
- *In case you want to pair with a new device, hold down the fingerprint sensor for 4 seconds while the key is on.*
- *If there is no authentication for 90 seconds, the LED indicator will turn off and the key will automatically enter sleep mode.*

II.1.2. Creating a new PIN

- Go to ***Start > Settings***
- Select ***Account > Sign-in options > Security Key***. Then select ***Manage***

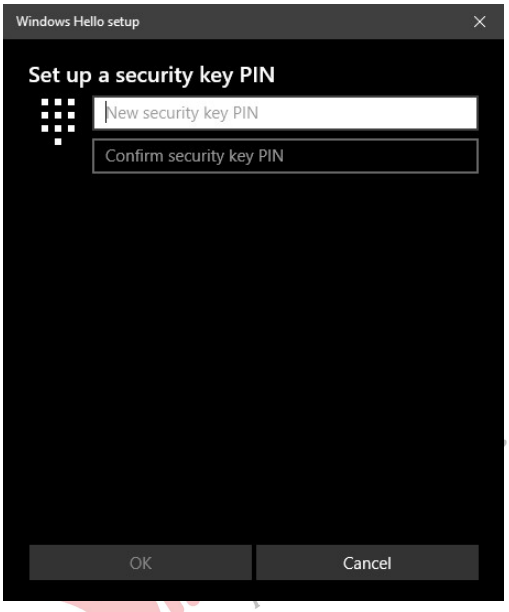


- Touch the fingerprint sensor on the security key.



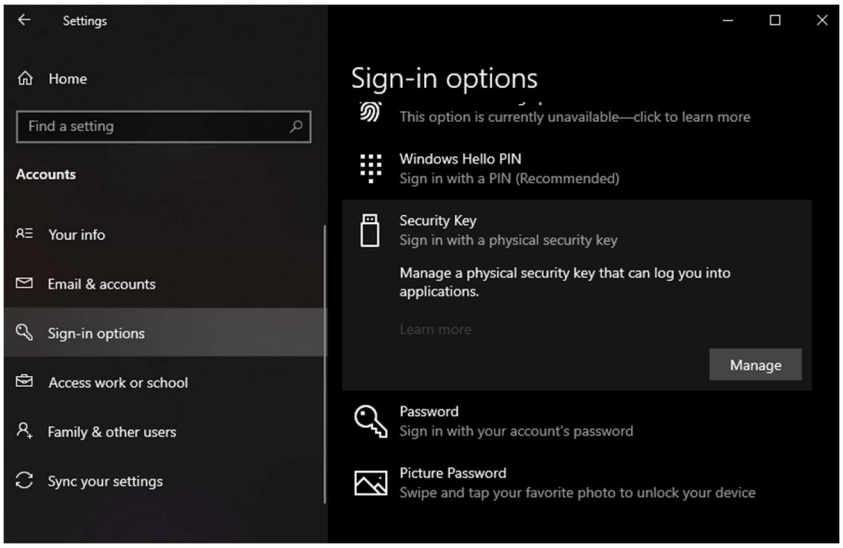
- By default, VinCSS FIDO2® Fingerprint does not have a PIN. To create a new PIN for the key, in the **Security Key PIN**, click ***Add***.

- Type in the new PIN, then click ***OK***.

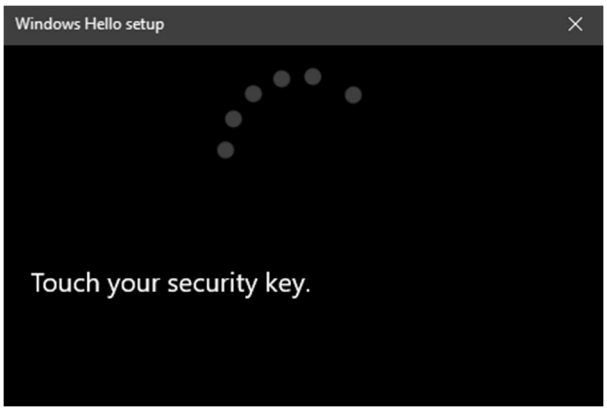


II.1.3. Changing PIN

- Go to ***Start > Settings***.
- Select ***Account > Sign-in options > Security Key***. Then select ***Manage***.



- Touch the fingerprint sensor on the security key.



- In ***Security Key PIN*** section, select ***Change*** to change the PIN code of the key.

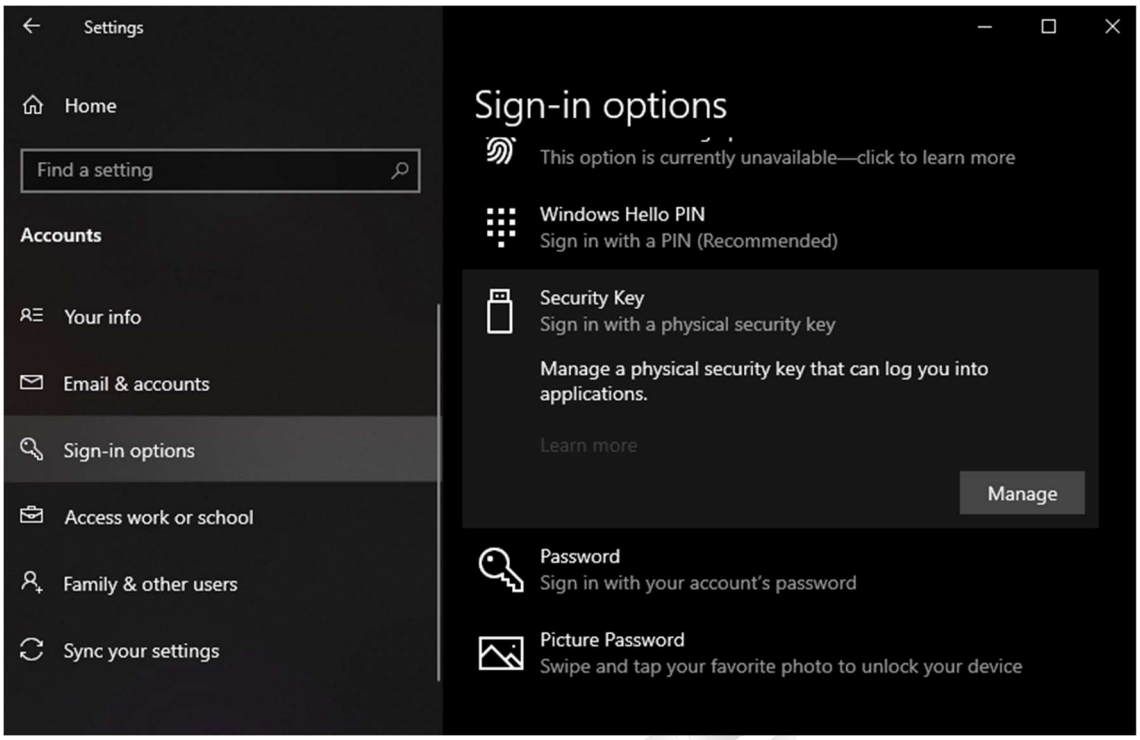
- Fill the information in order: old PIN, new PIN, confirm new PIN. Then select ***OK***.

II.1.4. Adding fingerprints

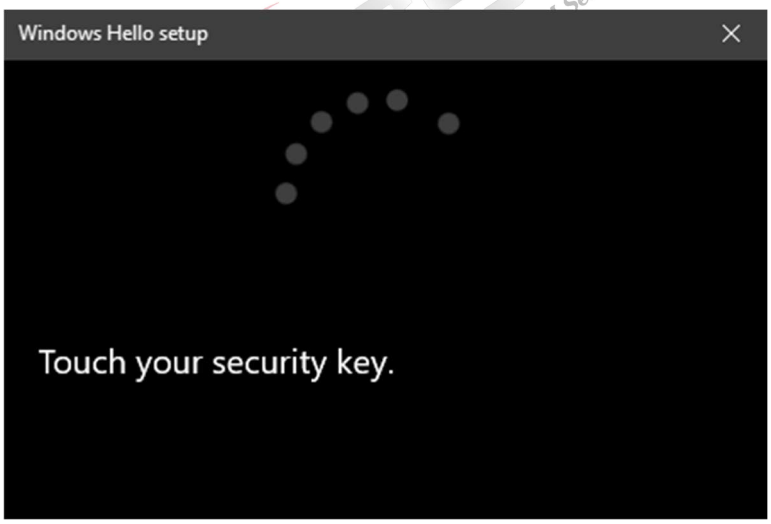
After successfully creating a PIN for VinCSS FIDO2® Fingerprint, users can add fingerprints to the key (up to 5 fingerprints). Follow the steps below:

- Go to ***Start > Settings***.

- Select ***Account*** > ***Sign-in options*** > ***Security Key***. Then select ***Manage***.



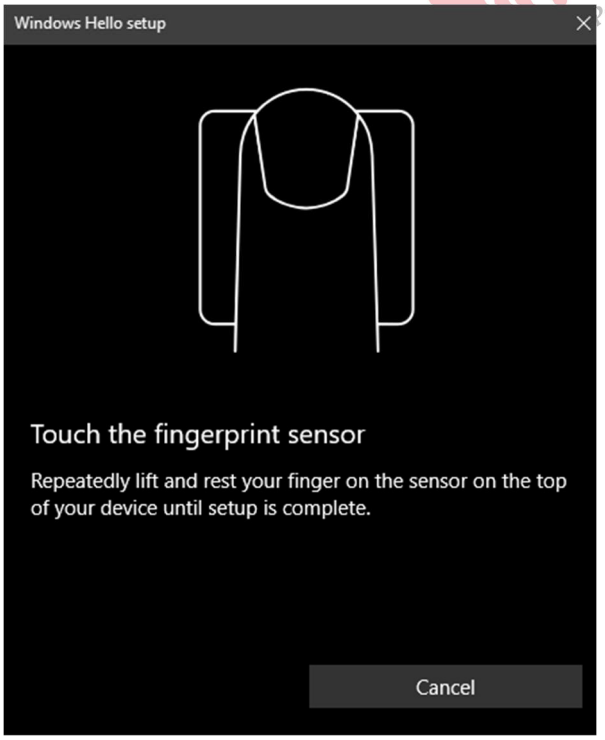
- Touch the fingerprint sensor on the security key.



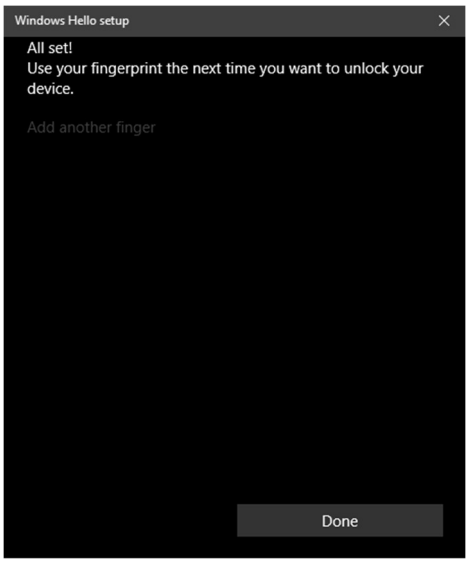
- In ***Security Key Fingerprint*** section, select ***Set up***.

- Enter the PIN (created in the above step) then select ***OK***.

- When the screen displays as shown and on the key flashes white LED indicator, proceed to scan the fingerprint by touching the fingerprint sensor, then release the finger when the key shows the green LED indicator 5 times.



- After finishing the fingerprint scan, select ***Done*** to finish.

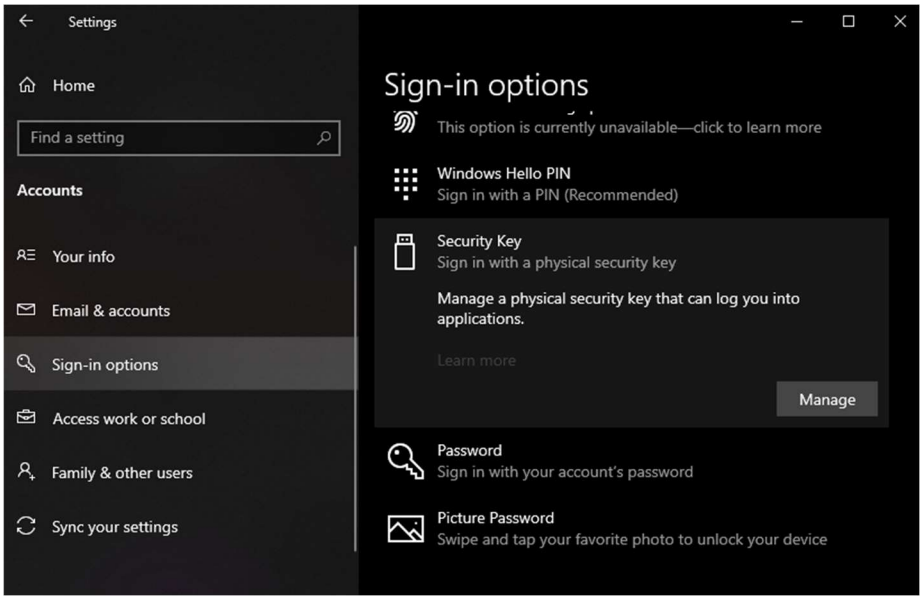


- To add more fingerprints, at ***Security Key Fingerprint***, select ***Add another***, then do the same steps as above.

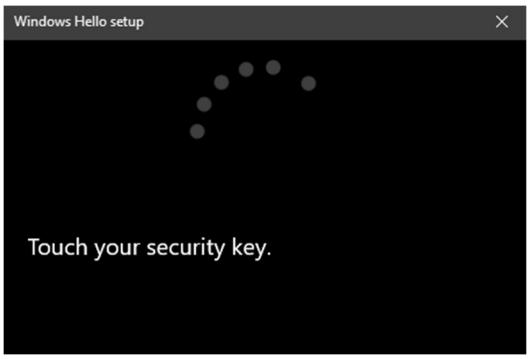
II.1.5. Removing fingerprints

Currently, Windows does not support deleting each fingerprint on the security key. It can only delete all fingerprints. Follow the steps below:

- Go to ***Start > Settings***.
- Select ***Account > Sign-in options > Security Key***. Then select ***Manage***.

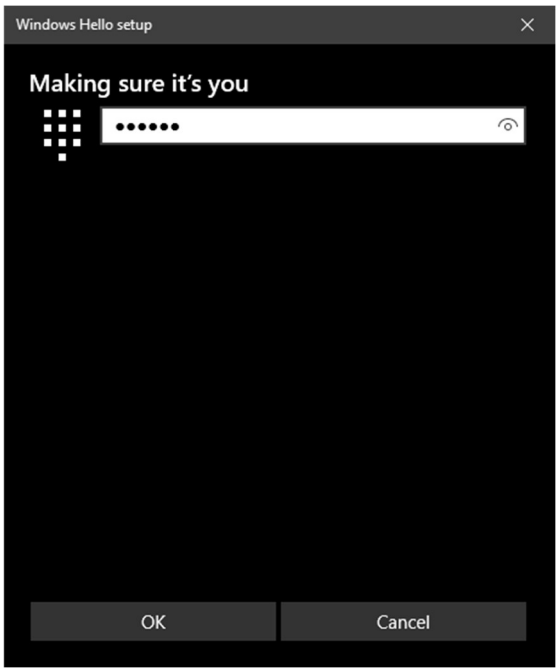


- Touch the fingerprint sensor on the security key.



- In ***Security Key Fingerprint*** section, select ***Remove***.

- Enter the PIN (created in the above step) then select ***OK***.

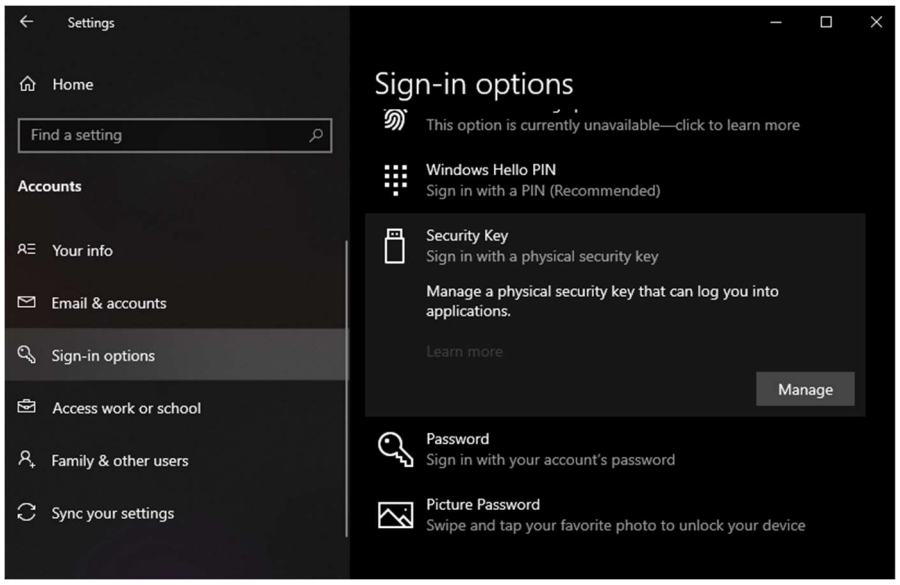


II.1.6. Resetting

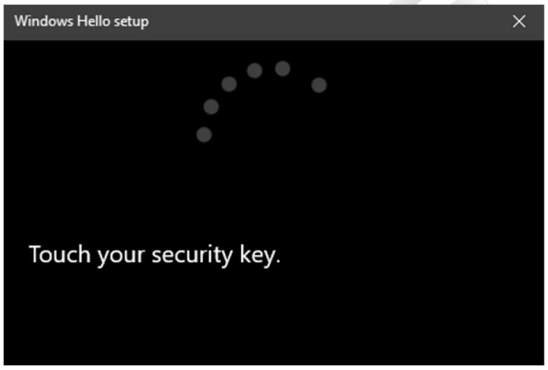
In the case of forgetting the PIN of VinCSS FIDO2® Fingerprint, users can reset the key, but this will make the previously registered services unable to authenticate by using the key. After resetting, the device becomes a new security key, so services need to be re-registered to authenticate. In case the PIN code is entered incorrectly many times (more than 8 times), the device will be locked permanently, the user will also be forced to reset to use the VinCSS FIDO2® Fingerprint as a new device.

To reset VinCSS FIDO2® Fingerprint, follow the steps below:

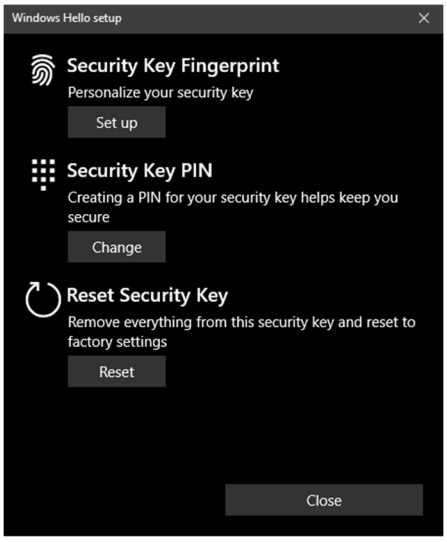
- Go to ***Start > Settings***.
- Select ***Account > Sign-in options > Security Key***, then select ***Manage***.



- Touch the fingerprint sensor on the security key.

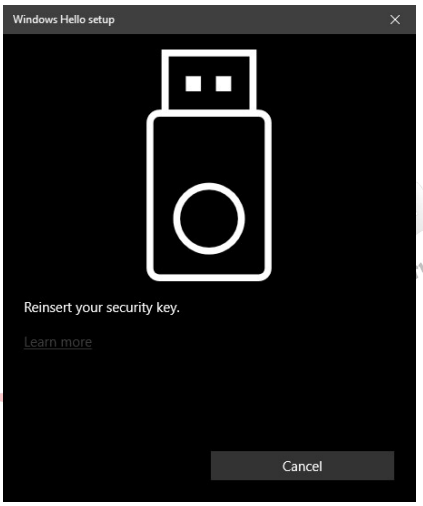


- In ***Reset Security Key*** section, select ***Reset***.

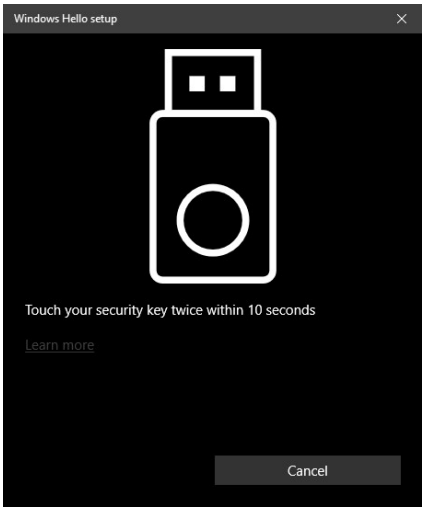


- Select ***Proceed*** to reset VinCSS FIDO2® Fingerprint.

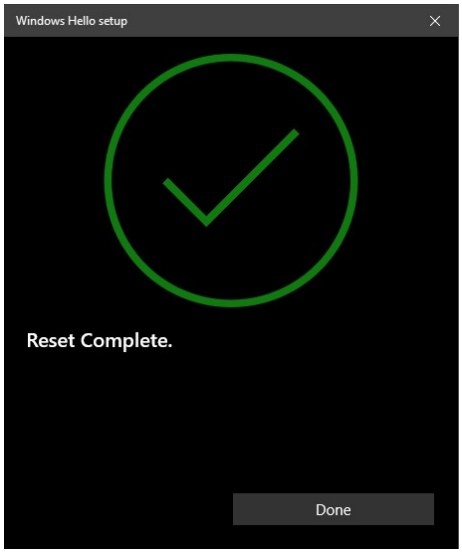
- Unplug the VinCSS FIDO2® Fingerprint, then plug it in again.



- When the white LED indicator appears on VinCSS FIDO2® Fingerprint, touch the fingerprint sensor on your security key twice within 10 seconds.



- Successfully reset the security key



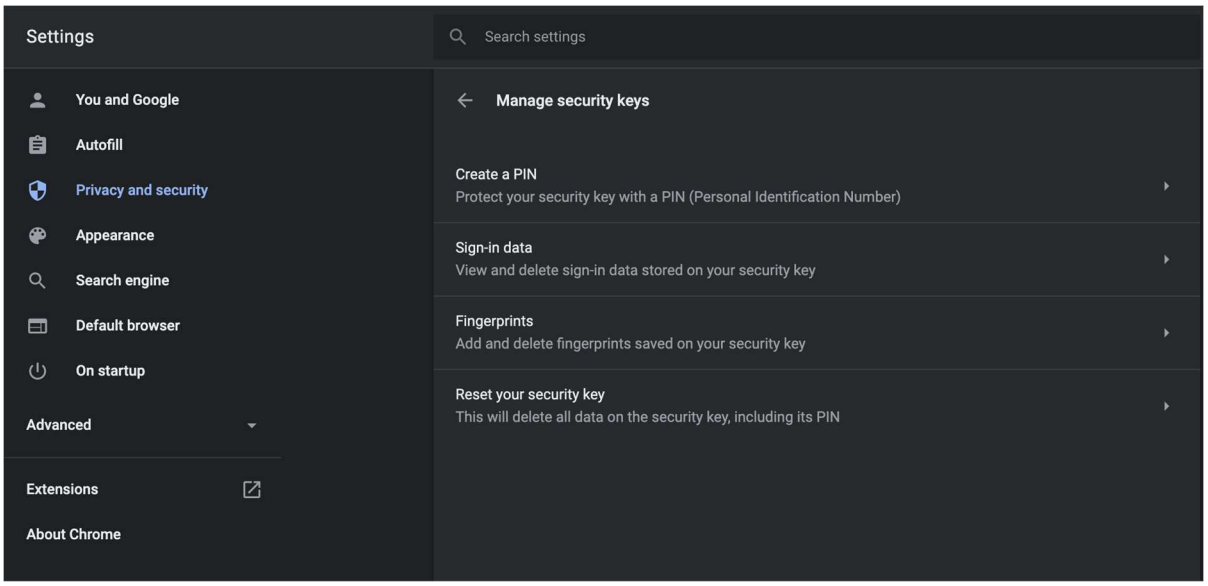
II.2. macOS

II.2.1. Connecting to computer

Plug the VinCSS FIDO2® Fingerprint into your computer using USB cable. If the LED blinks red 3 times in a row indicating the battery level is below 20%, the amber LED indicates the security key is being charged, the green LED indicates the battery is fully charged. The VinCSS FIDO2® Fingerprint security key can be used while charging.

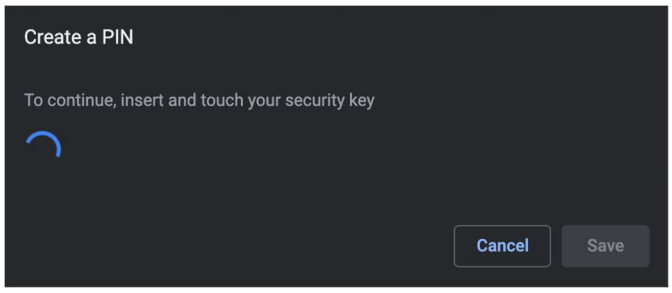
II.2.2. Creating a new PIN

- Open Google Chrome browser, then select ***Setting > Privacy and security > More > Manage security keys***.

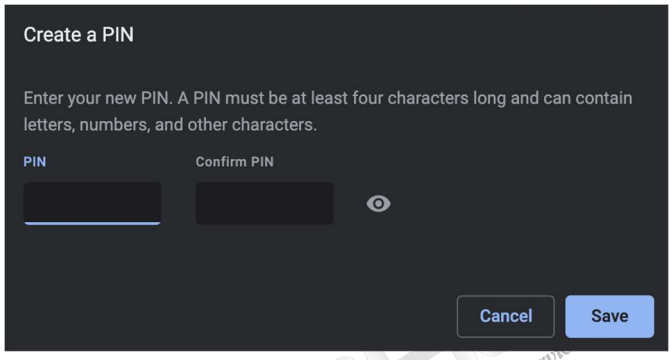


- By default, VinCSS FIDO2® Fingerprint does not have a PIN. To create a

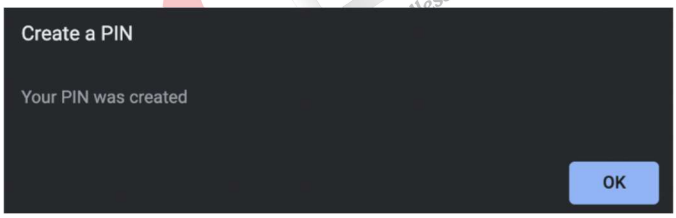
new PIN for the key, in the **Manage security keys**, select **Create a PIN** then touch the fingerprint sensor to confirm.



- Next, enter PIN and confirm PIN then click ***Save*** to create a PIN.

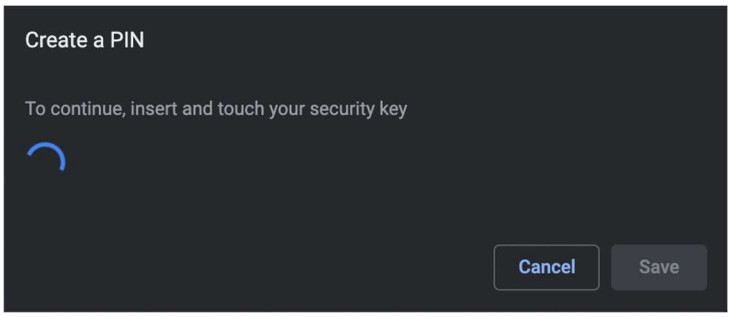


- Click ***OK*** to complete.

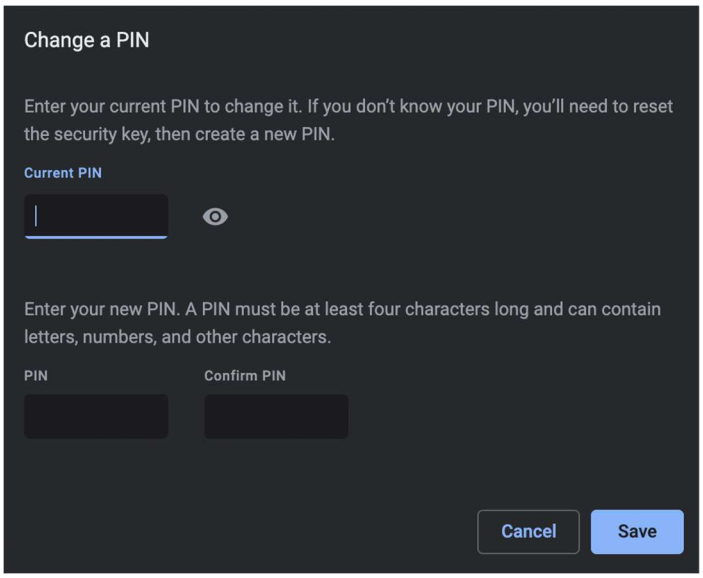


II.2.3. Changing PIN

- To change PIN for VinCSS FIDO2® Fingerprint, in ***Manage security keys*** section (*Open Chrome browser, then select* ***Setting > Privacy and security > More > Manage security keys***), select ***Create a PIN*** then touch the fingerprint sensor on the key to confirm.



- In ***Change a PIN*** section, enter current PIN. At the bottom, enter a new PIN and confirm PIN, then select ***Save*** to change.



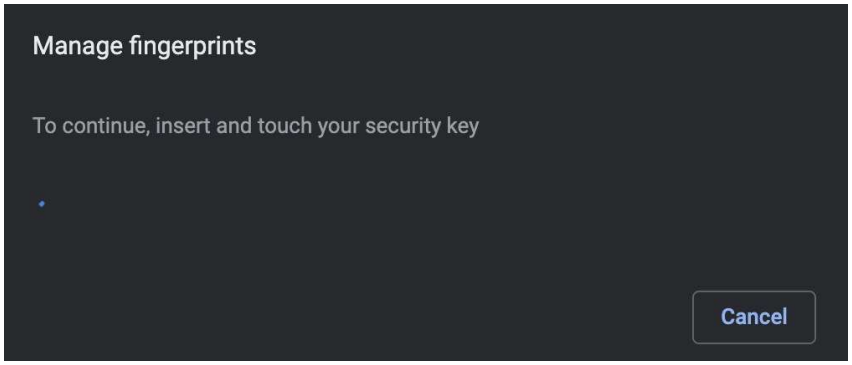
- Click ***OK*** to finish.

II.2.4. Adding fingerprints

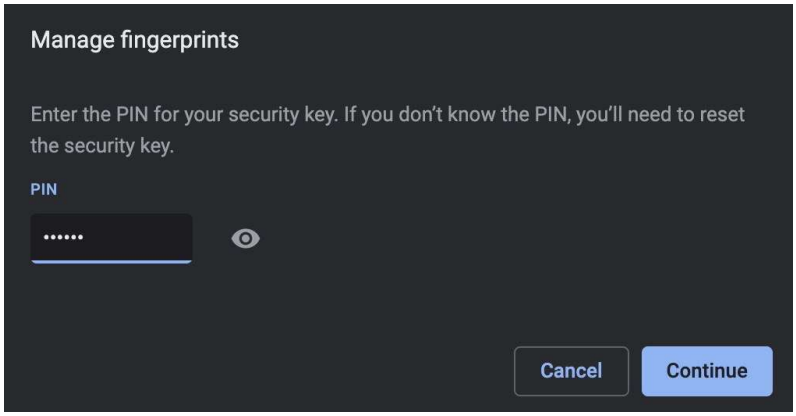
After successfully creating a PIN for VinCSS FIDO2® Fingerprint, users can add additional fingerprints to the key (up to 5 fingerprints).

Follow the steps below:

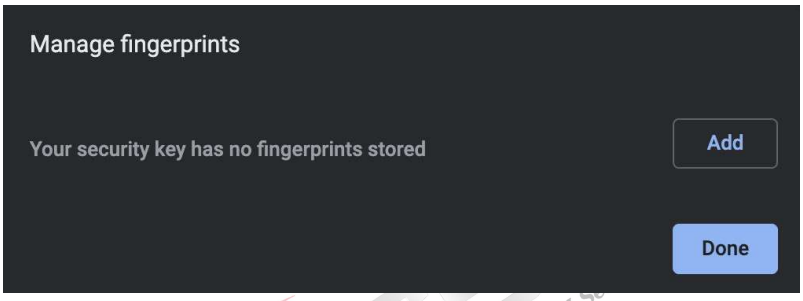
- In ***Manage security keys*** section (*Open Chrome browser, then select* ***Setting > Privacy and security > More > Manage security keys***), select ***Fingerprints***, then touch the fingerprint sensor on the security key.



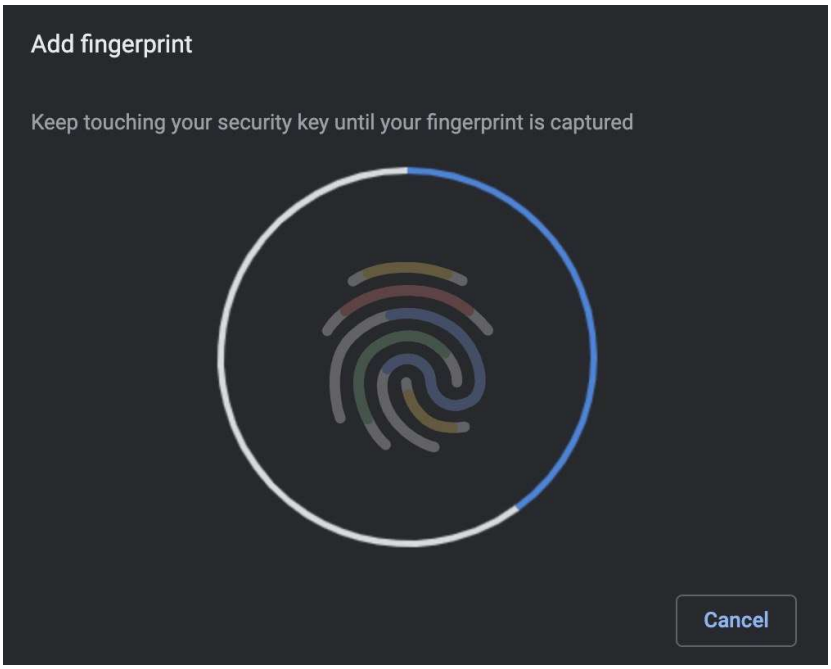
- Enter the PIN (created in the above step) then select ***Continue***.



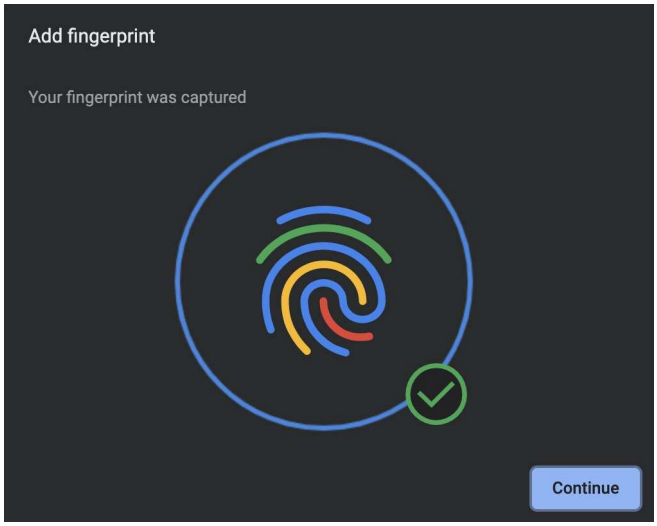
- Click ***Add*** to add a new fingerprint for the security key.



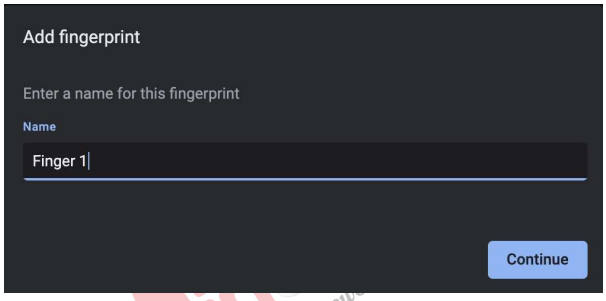
- When the screen displays as shown and on the key flashes with white LED indicator, proceed to scan the fingerprint by touching the fingerprint sensor, then release the finger when the key shows the green LED indicator. Scan a few more times for better fingerprint recognition.



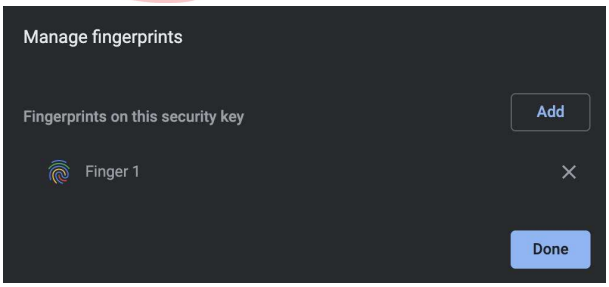
- After scanning fingerprint, click ***Continue***.



- Name the fingerprint (up to 30 characters), then click ***Continue***.

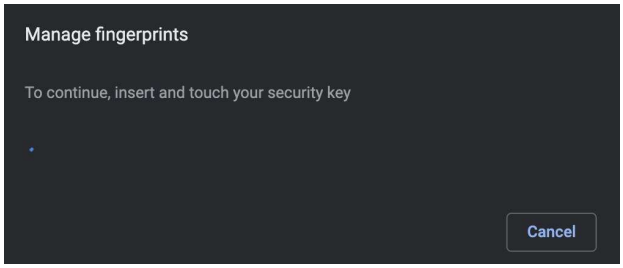


- Select ***Add*** to continue adding fingerprints, or select ***Done*** to finish.

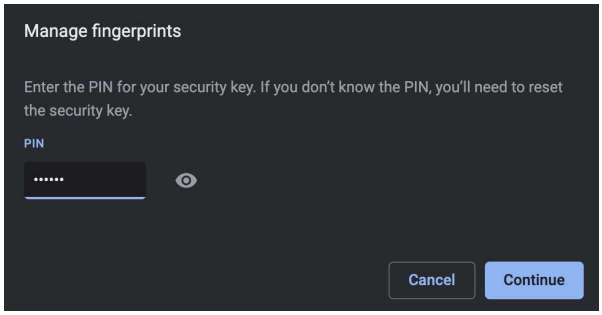


II.2.5. Removing fingerprints

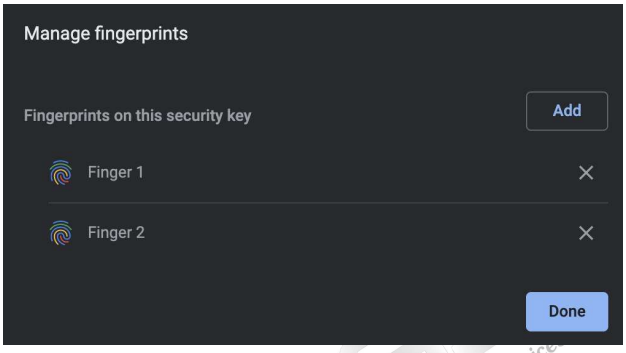
- In ***Manage security keys*** section (*Open Chrome browser, then select* ***Setting > Privacy and security > More > Manage security keys***), select ***Fingerprints***, then touch the fingerprint sensor on the security key.



- Enter the PIN (created in the above step) then select ***Continue***.

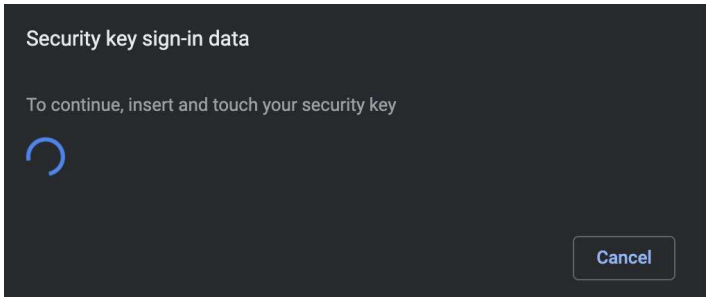


- A list of fingerprints that have been registered on the security key will be displayed. Click on the "X" icon at each corresponding fingerprint to delete.

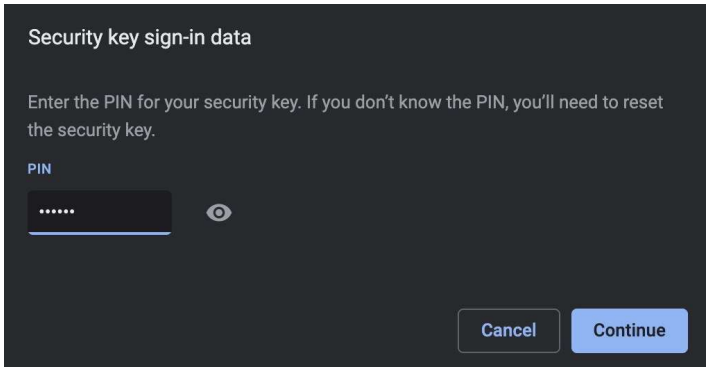


II.2.6. Managing sign-in data

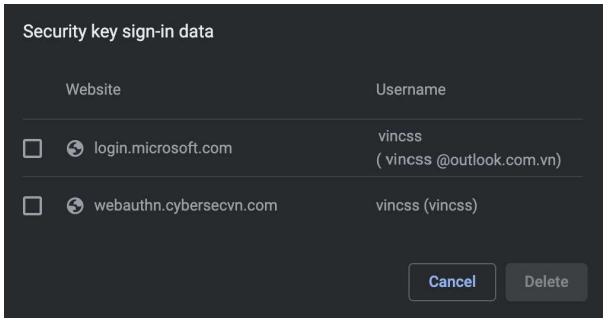
- In ***Manage security keys*** section (*Open Chrome browser, then select* ***Setting > Privacy and security > More > Manage security keys***), select ***Sign-in data***, then touch the fingerprint sensor on the security key.



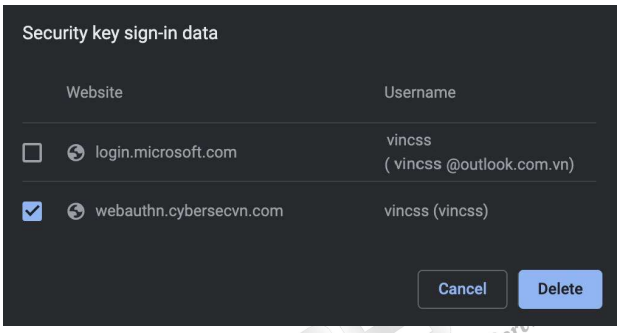
- Enter the PIN (created in the above step) then select ***Continue***.



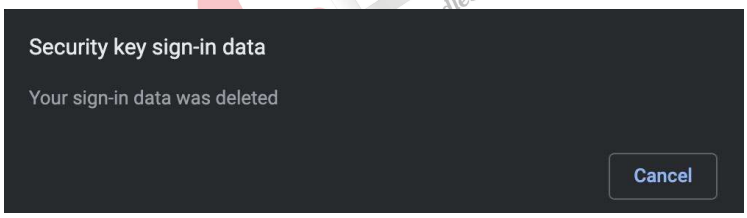
- Login data will be listed on the screen, including website and username.



- To delete the login data, click on the checkbox at the top of each line, then click ***Delete***.



- After deleting, press ***Cancel***.



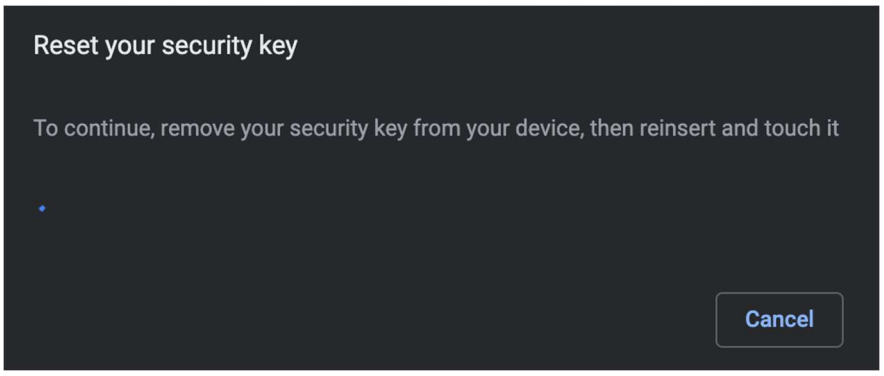
II.2.7. Resetting

In the case of forgetting the PIN of VinCSS FIDO2® Fingerprint, users can reset the key, but this will make the previously registered services unable to authenticate by using the key. After resetting, the device becomes a new security key, so services need to be re-registered to authenticate. In case the PIN code is entered incorrectly many times (more than 8 times), the device will be locked permanently, the user will also be forced to reset to use the VinCSS FIDO2® Fingerprint as a new device.

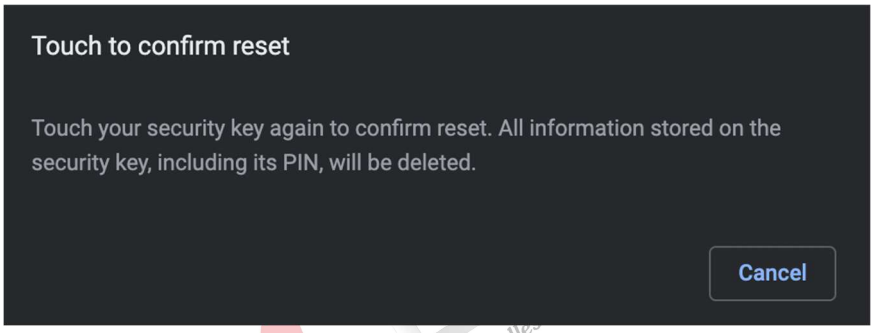
To reset VinCSS FIDO2® Fingerprint, follow the steps below:

- In ***Manage security keys*** section (*Open Chrome browser, then select* ***Setting > Privacy and security > More > Manage security keys***), select ***Reset your security keys***, then unplug VinCSS FIDO2® Fingerprint from

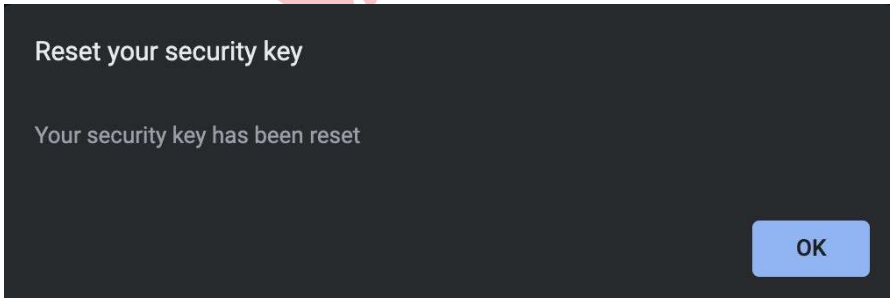
the computer and re-plug it. Touch the fingerprint sensor on VinCSS FIDO2® Fingerprint to confirm.



- Touch the fingerprint sensor on VinCSS FIDO2® Fingerprint again to confirm the reset process of VinCSS FIDO2® Fingerprint.



- Successfully reset security key. Click ***OK*** to finish.



III. PASSWORDLESS AUTHENTICATION USING VINCSS FIDO2® FINGERPRINT

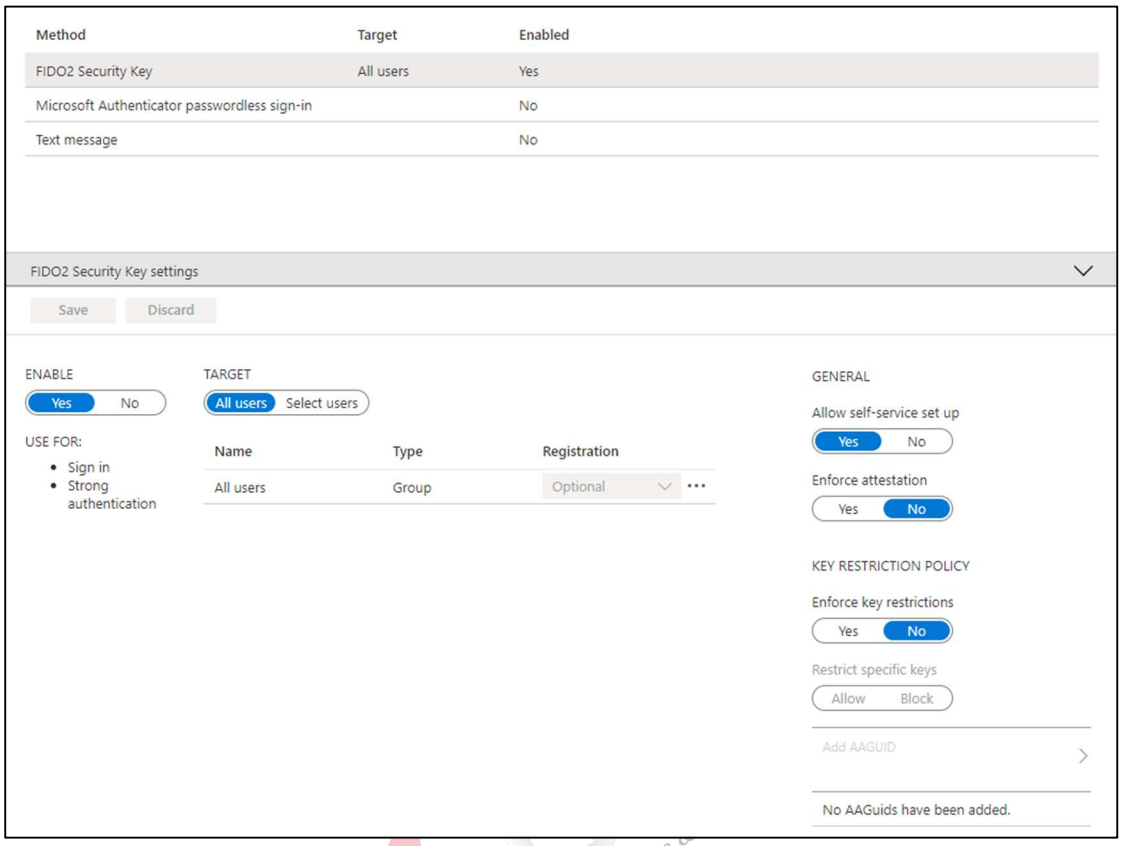
III.1. Windows 10

III.1.1. Configuration on Azure AD system

III.1.1.1. Configuration on Azure AD

- Go to the link: https://portal.azure.com/#blade/Microsoft_AAD_IAM/AuthenticationMethodsMenuBlade/AdminAuthMethods

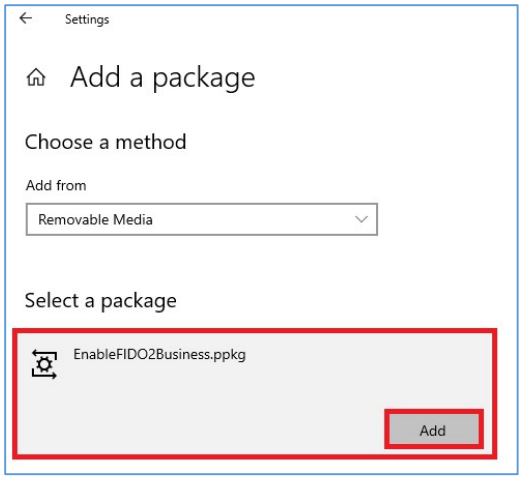
- Select method ***FIDO2 Security Key***, then select the following configurations:



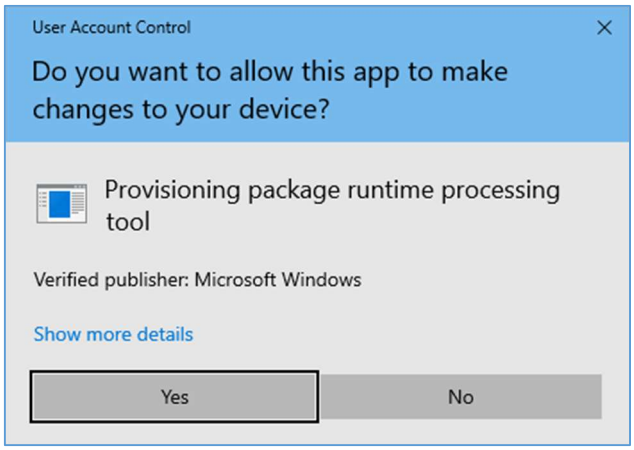
- Click **Save** to save the configurations.

III.1.1.2. Login Windows 10 using FIDO2 with provisioning packages

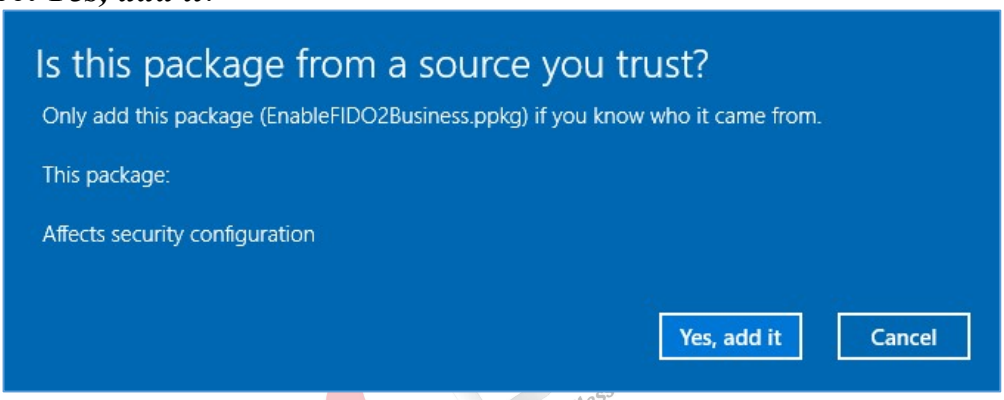
- Transfer 2 files ***EnableFIDO2Business.cat*** and ***EnableFIDO2Business.ppkg*** provided by VinCSS to storage device.
- Connect that storage device to the computer needed to enable FIDO, then go to ***Settings*** > ***Accounts*** > ***Access work or school*** > ***Add or remove a provisioning package*** > ***Add a package***, select package, then click ***Add***.



- Select ***Yes***.

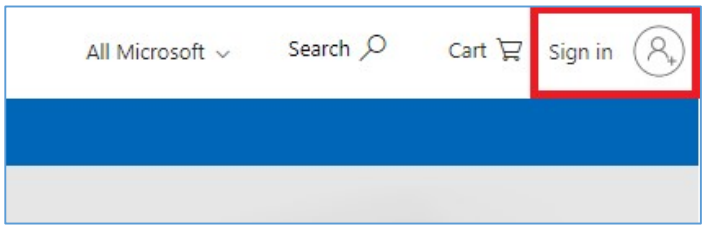


- Select ***Yes, add it***.

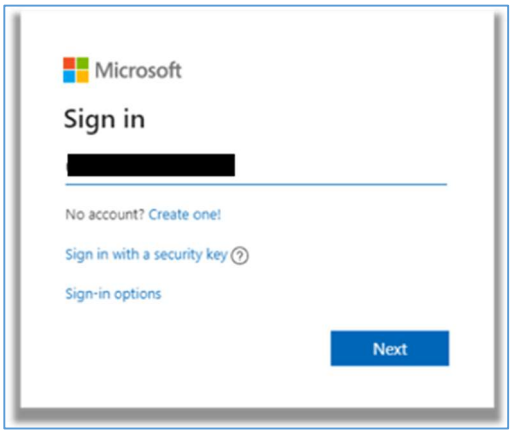


III.1.1.3. Register authentication key for Azure AD

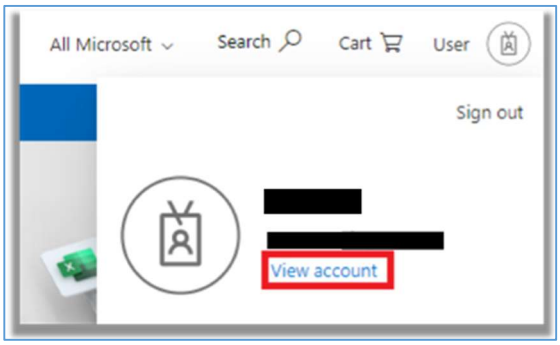
- Go to https://microsoft.com, then select ***Sign in***.



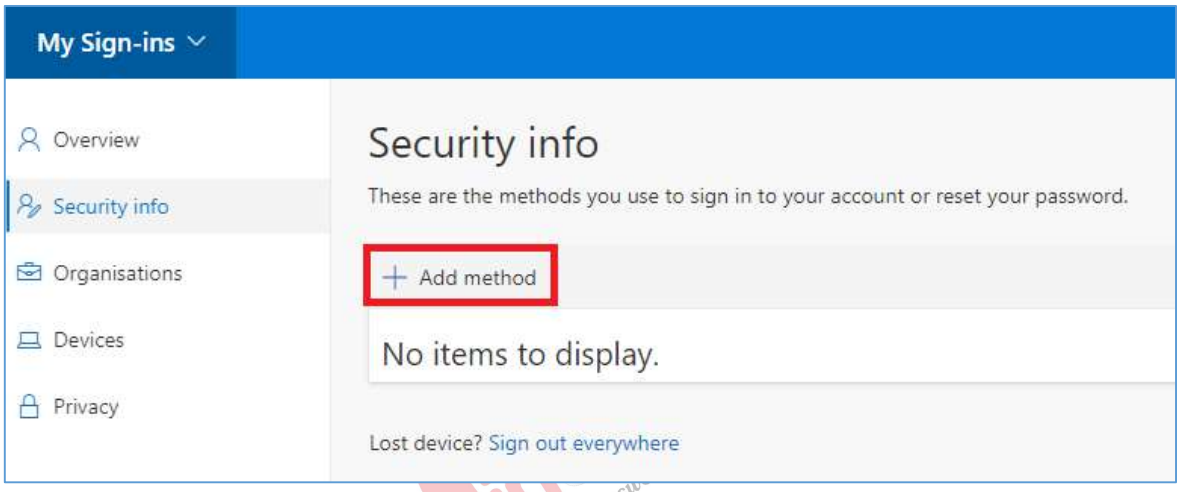
- Enter the AD account information (username/password) to login.



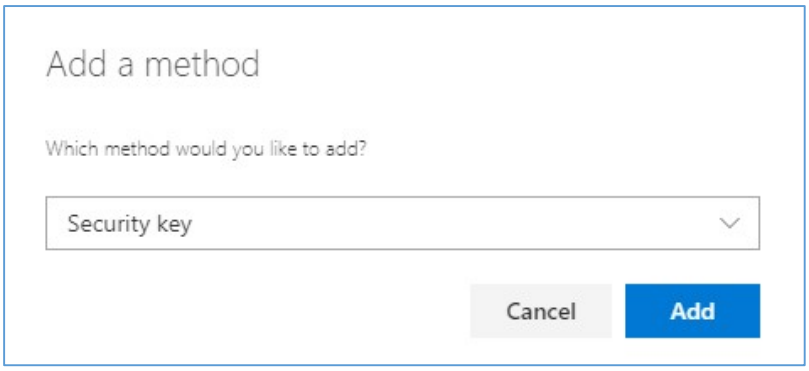
- After successful login, select ***View account*** to configure.



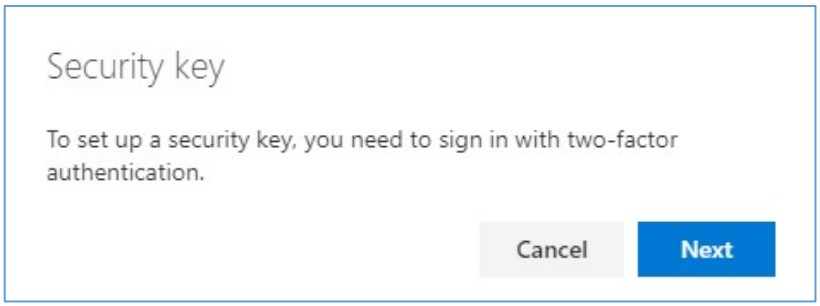
- Select ***Security info > Add method*** to add login option.



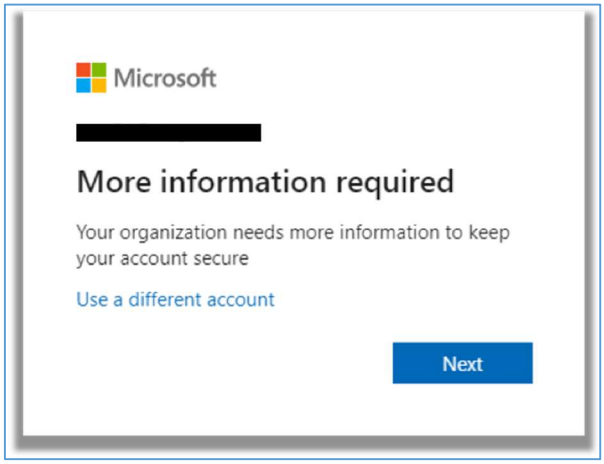
- Select **Security key**, click **Add**.



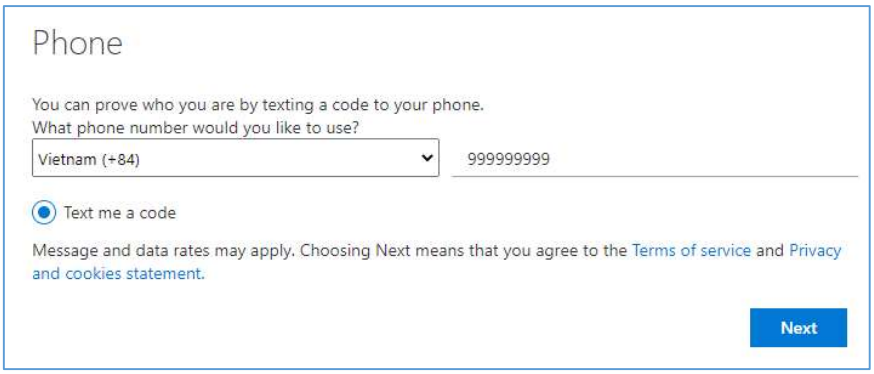
- Click ***Next*** to enable two-factor authentication.



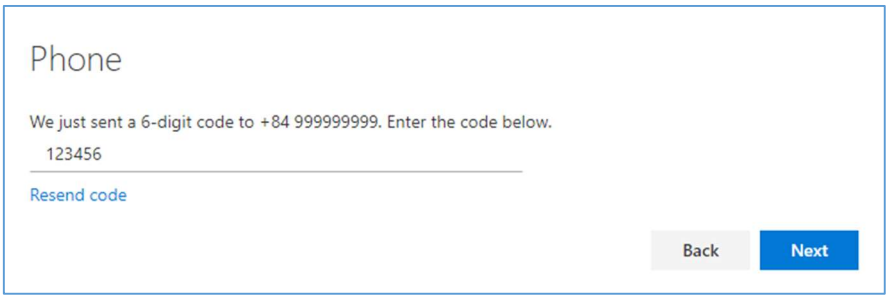
- Select ***Next*** to continue.



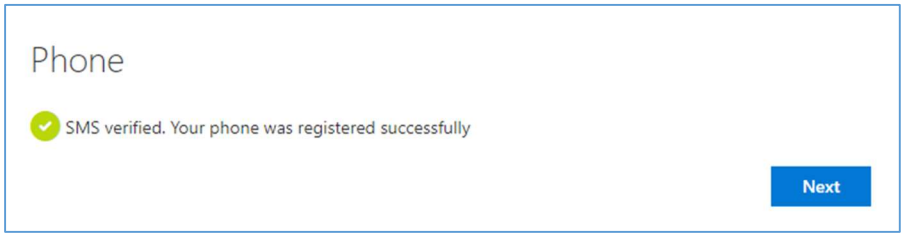
- Optional: If you have not registered phone number before, please do the following steps:
  - Provide country code and phone number to receive verification code.



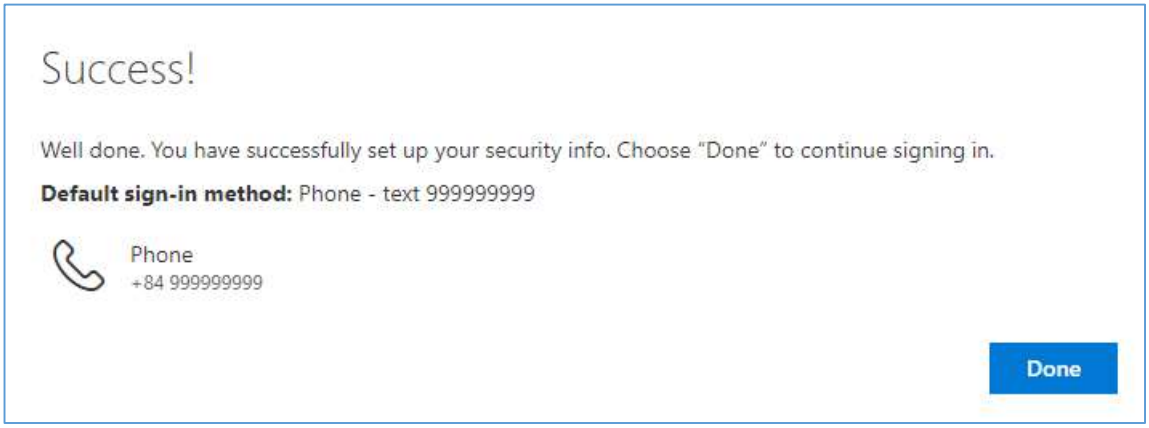
  - Enter 6-digit code sent to your phone.



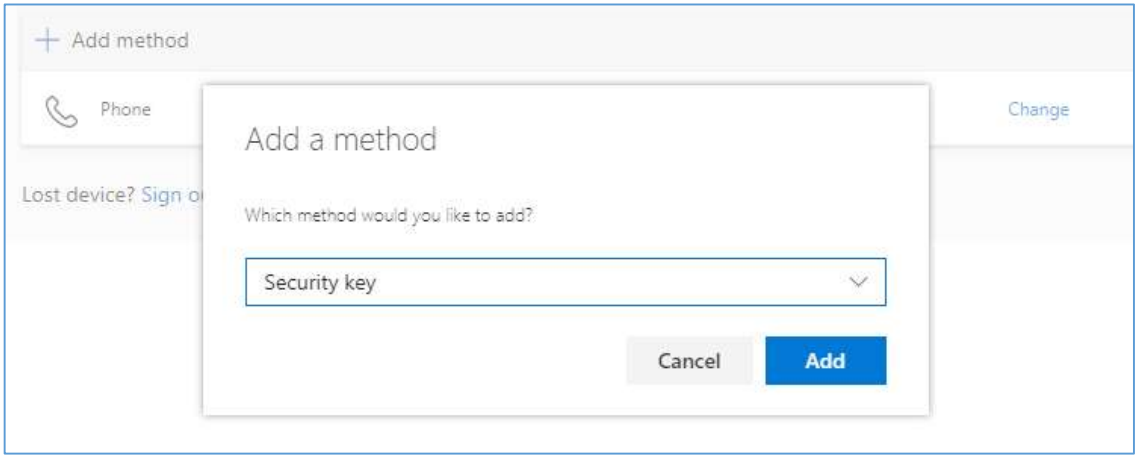
  - Click ***Next*** to continue.



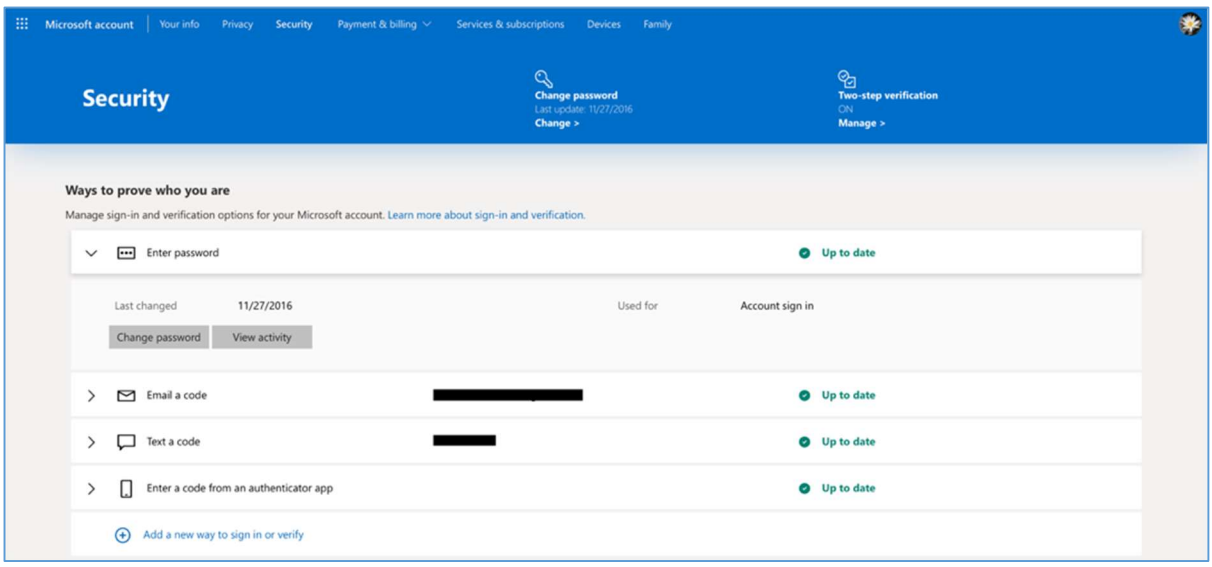
- Confirm registered information, click ***Done*** to back **Security info** site.



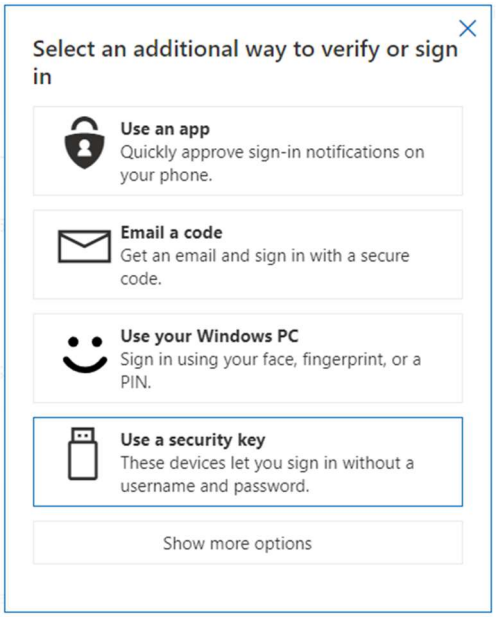
- Select ***Add method*** → ***Security key***, click ***Add***.



- Go to https://microsoft.com, then login with Microsoft account.
- Then go to https://account.live.com/proofs/Manage/additional, select ***Add a new way to sign in or verify***.

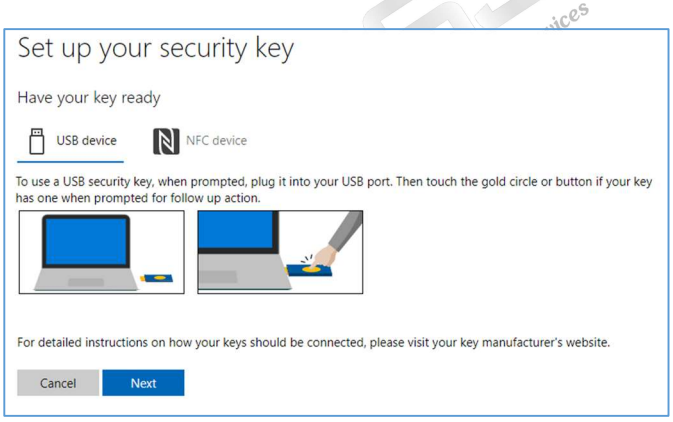


- Select ***Use a security key***.



Using via Bluetooth

- Select ***USB device***.

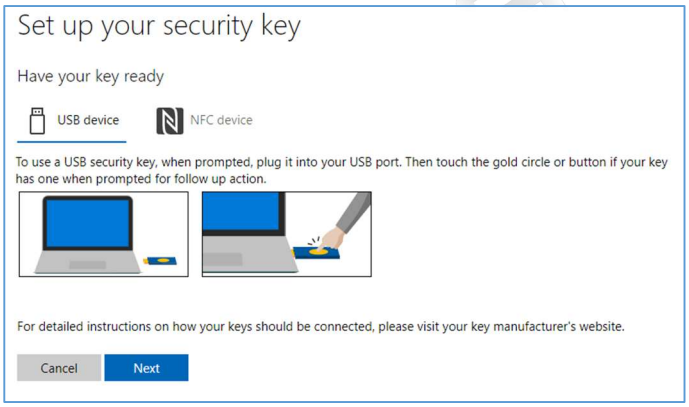


- Connect the VinCSS FIDO2® Fingerprint to your computer via Bluetooth.

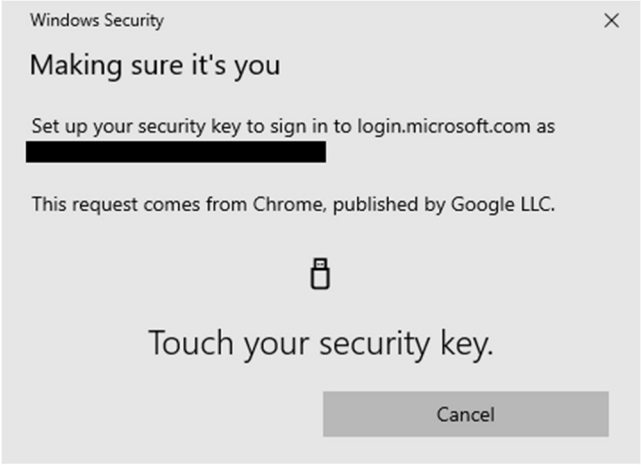
- Scan your fingerprint when receiving notification.

Using via USB

- Select ***USB device***.

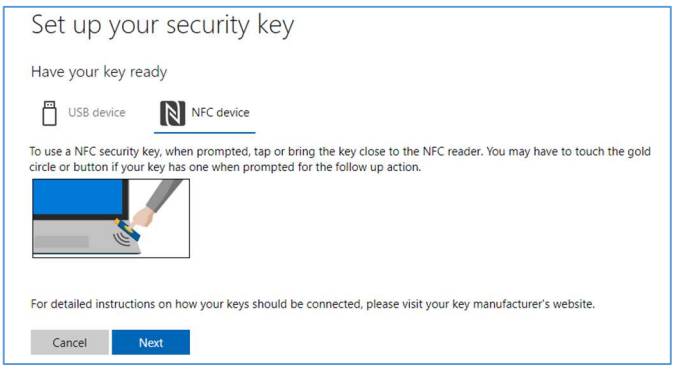


- Connect the VinCSS FIDO2® Fingerprint to the computer via USB, scan your fingerprint on the sensor when receiving the notification.

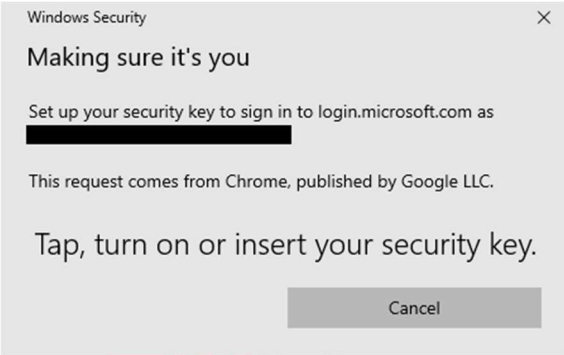


Using via NFC

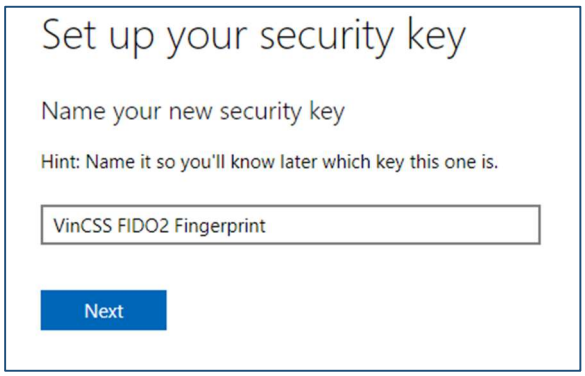
- Select ***NFC device***.



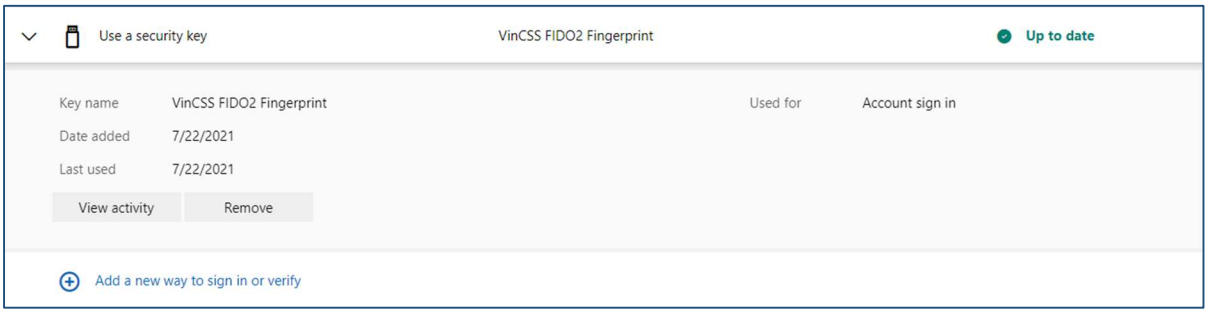
- Touch the key to the NFC reader when receiving the notification, then scan your fingerprint on the sensor.



- Name the security key to distinguish between keys, then click **Next**.

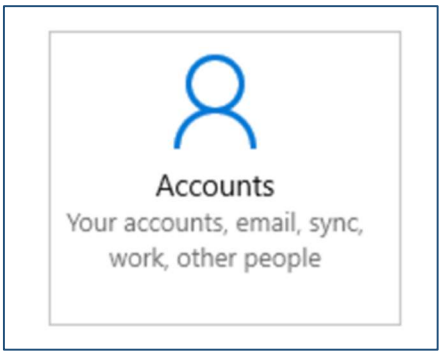


- When the security key is successfully added, the key will be displayed in the list.

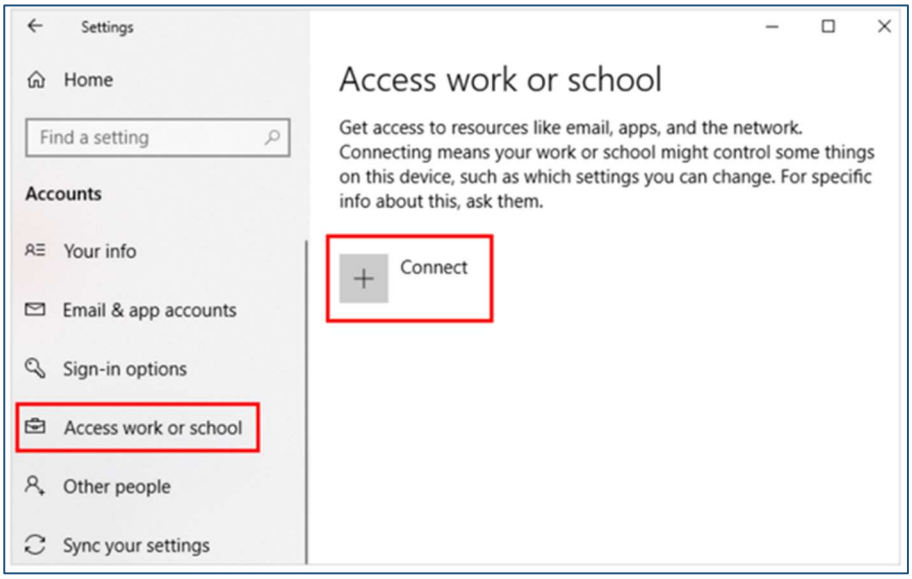
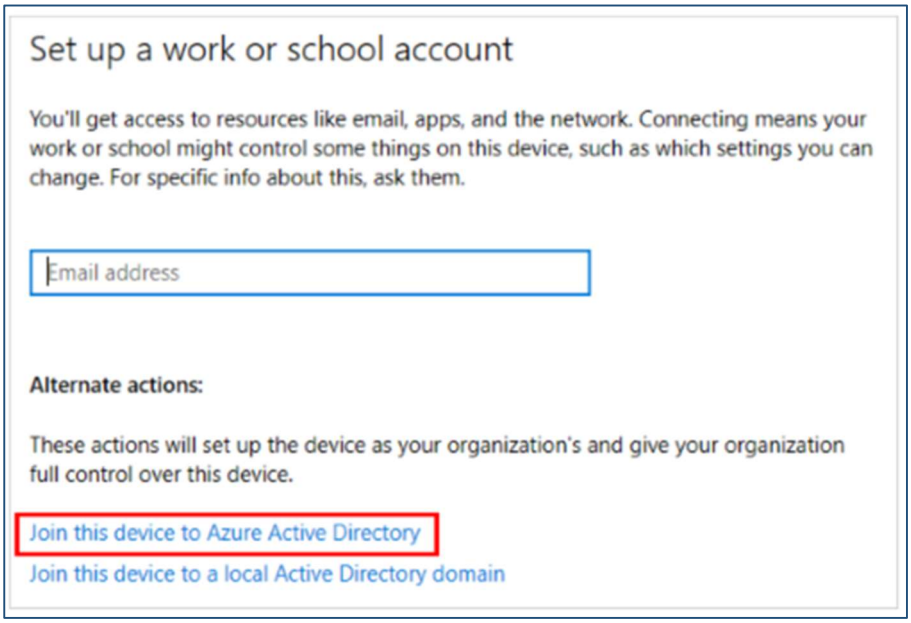


III.1.1.4. Connect User to Azure Work Account

- On Windows, select ***Settings*** > ***Account***.



- Select ***Access work or school*** > ***Connect***.



- Select ***Join this device to Azure Active Directory***.