

YubiKeys for Entra ID passwordless user enablement guide

Copyright

© 2025 Yubico Inc. All rights reserved.

Trademarks

Yubico and YubiKey are registered trademarks of Yubico Inc. All other trademarks are the property of their respective owners.

Disclaimer

The contents of this document are subject to revision without notice due to continued progress in methodology, design, and manufacturing. Yubico shall have no liability for any error or damages of any kind resulting from the use of this document.

The Yubico Software referenced in this document is licensed to you under the terms and conditions accompanying the software or as otherwise agreed between you or the company that you are representing.

Contact Information

Yubico Inc

5201 Great America Pkwy #122

Santa Clara, CA 95054

USA

yubi.co/contact

Original Document Release Date

September 22, 2020

Version History

| Version | Date | Changes |
|---------|--------------------|---|
| 2.3 | May 20, 2025 | <ul style="list-style-type: none">• Updated with passkey terminology• Added instructions for the Yubico Authenticator App• Added instructions for the ykman CLI |
| 2.2 | May 8th, 2023 | <ul style="list-style-type: none">• Edits and Revisions to User Guide |
| 2.1 | July 29, 2021 | <ul style="list-style-type: none">• Minor revisions |
| 2.0 | March 2, 2021 | <ul style="list-style-type: none">• Updated for general availability |
| 1.0 | October 6, 2020 | <ul style="list-style-type: none">• Added YubiKey Lifecycle Management Section |
| 0.5 | September 22, 2020 | <ul style="list-style-type: none">• Initial Release |

| | |
|--|-----------|
| Copyright | 2 |
| Trademarks | 2 |
| Disclaimer | 2 |
| Contact Information | 2 |
| Original Document Release Date | 2 |
| Version History | 2 |
| Introduction | 4 |
| Objectives | 4 |
| Before you begin | 4 |
| YubiKey Bio Series Setup (if applicable) | 5 |
| Using Windows Hello on Windows 10 or 11 to enroll fingerprints | 5 |
| Using the Yubico Authenticator App on Windows 10/11: | 9 |
| Register a passkey (FIDO2) on your YubiKey | 11 |
| Use a Temporary Access Pass to sign-in | 11 |
| Register a passkey on your YubiKey | 13 |
| Sign-in to a web application with your YubiKey | 19 |
| Sign into Windows 10 or 11 with a YubiKey | 21 |
| YubiKey Lifecycle Management | 23 |
| Change YubiKey PIN | 23 |
| Using Windows Hello | 23 |
| Using Google Chrome (macOS and Linux only) | 25 |
| Using the Yubico Authenticator App | 26 |
| Using YubiKey Manager CLI | 28 |
| Reset the YubiKey | 29 |
| Using Windows Hello | 29 |
| Using Google Chrome (macOS and Linux only) | 31 |
| Using Yubico Authenticator | 32 |
| Using YubiKey Manager CLI | 34 |
| Deleting a YubiKey from your Entra account | 35 |

Introduction

This guide walks you through registering your YubiKey and signing in with a passkey, a secure, passwordless way to access your work account.

Objectives

- Biometric enrollment:
 - Enroll fingerprints for authentication using biometrics (optional):
 - Using Windows Hello on a Windows 10 or 11 device
 - Using the Yubico Authenticator App
- Registration:
 - Sign-in with a Temporary Access Pass (TAP)
 - Register a passkey (FIDO2) on a YubiKey using self-service registration bootstrapped with a TAP
- Authentication:
 - Sign-in to a web application using a passkey (FIDO2) on a YubiKey
 - Sign-in to a Windows 10 or 11 device with a passkey (FIDO2) on a YubiKey
- Lifecycle management:
 - Change the PIN on a YubiKey
 - Reset a YubiKey
 - Delete a YubiKey from an Entra account

Before you begin

- You will need a supported YubiKey approved for use by your organization.
- Internet connectivity is required the first time you sign in with your YubiKey.
 - For device sign-in:
 - Windows 10 or 11, cached credentials allow you to sign in offline after the initial sign-in.
 - If you have multiple passkeys registered on a single YubiKey, Windows will automatically select the most recently registered passkey. This is a Microsoft Windows limitation.
- If you're signing in to a Windows 10 or 11 device with your YubiKey, the device must be Entra joined to Entra hybrid joined. This does not apply to web-based sign-in.
- There is a limit of ten security keys per user. If your account already has ten security keys one will have to be removed to register a new YubiKey.

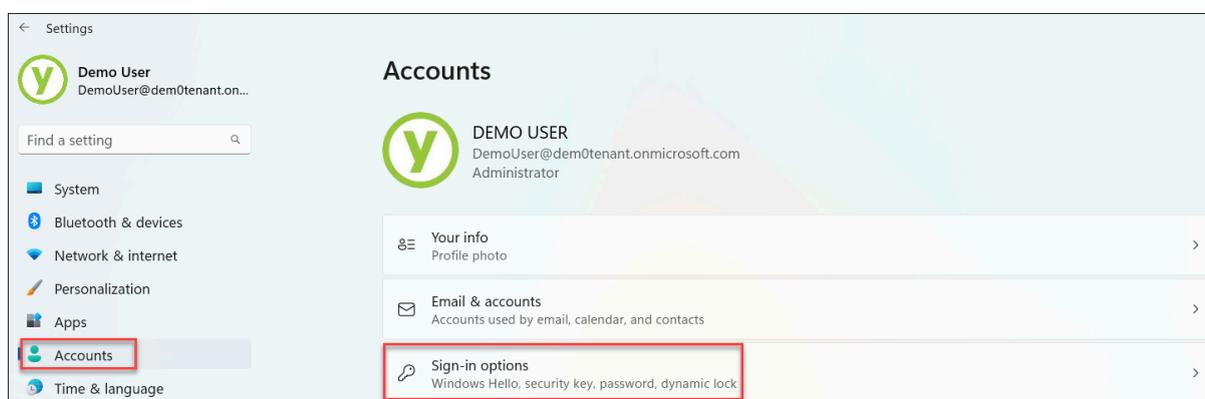
YubiKey Bio Series Setup (if applicable)

The YubiKey Bio Series (FIDO Edition and Multi-Protocol Edition) requires fingerprint enrollment to enable biometric authentication without the need for a PIN during sign-in. However, a PIN is required during setup and serves as a fallback if fingerprint matching fails. After three unsuccessful fingerprint attempts, the YubiKey will prompt you to enter the PIN.

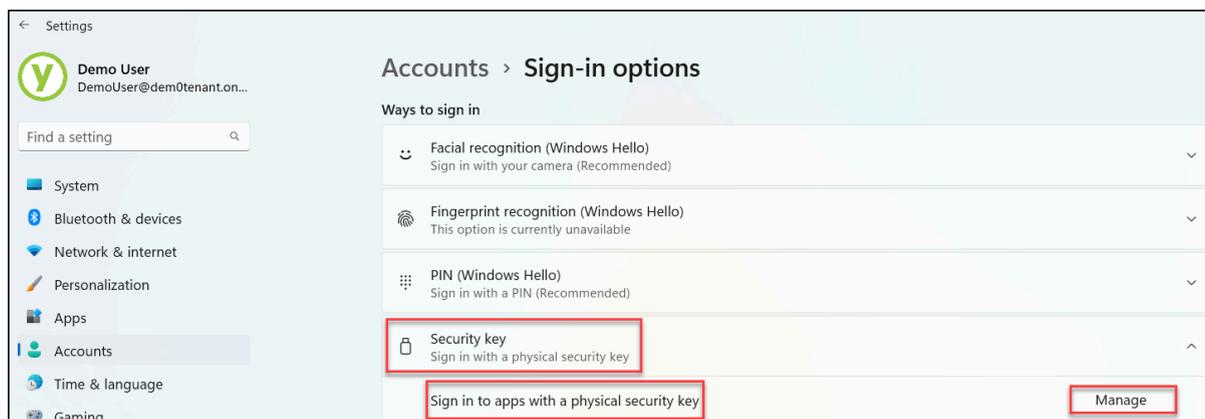
These instructions demonstrate how to enroll fingerprints on the YubiKey Bio using the native Windows Hello utility and using the Yubico Authenticator App.

Using Windows Hello on Windows 10 or 11 to enroll fingerprints

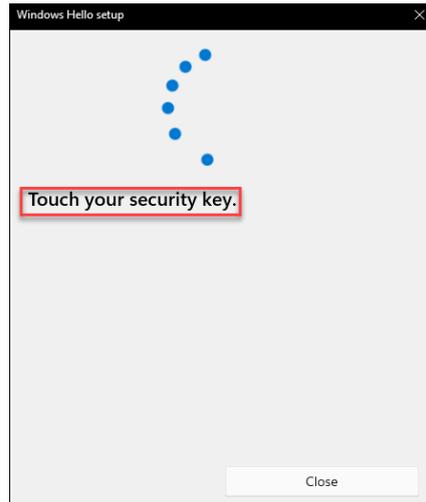
1. Insert your YubiKey Bio
2. Click on **Start > Settings > Accounts**
 - a. Under **Account Settings**, select **Sign-in options**



3. Select **Security key**, in the **Sign in to apps with a physical security menu**, click **Manage**



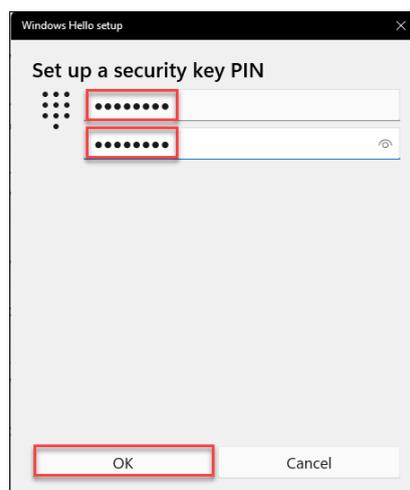
4. **Touch** the YubiKey when prompted



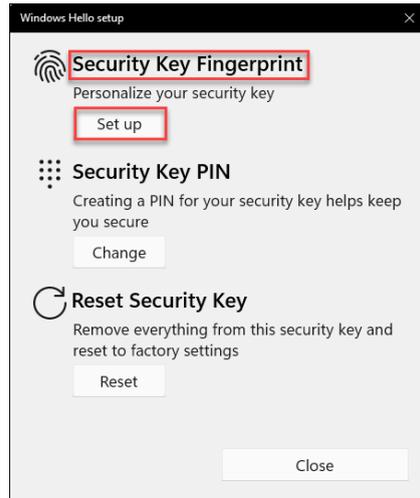
5. Under **Security Key PIN**, click **Add**



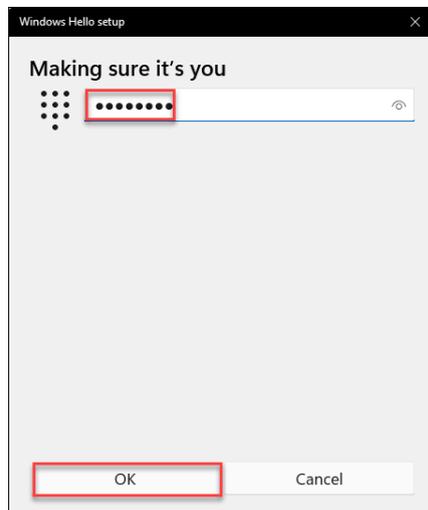
6. Create a **PIN**, confirm it and click **OK**



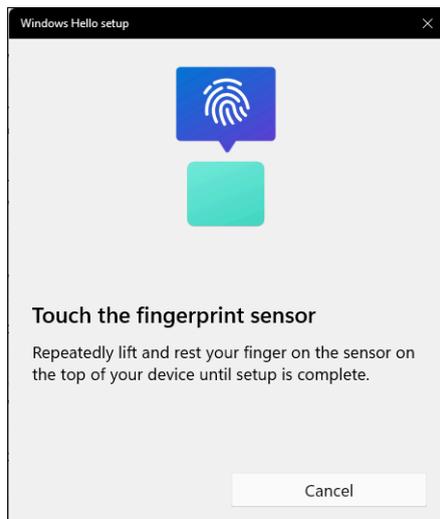
7. Under **Security Key Fingerprint**, Click **Set up**



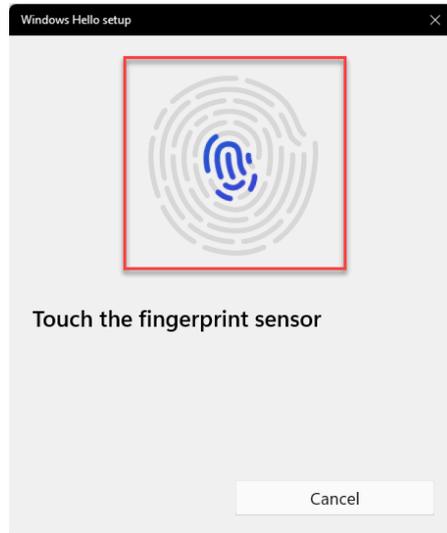
8. Enter your **PIN** and click **Ok**



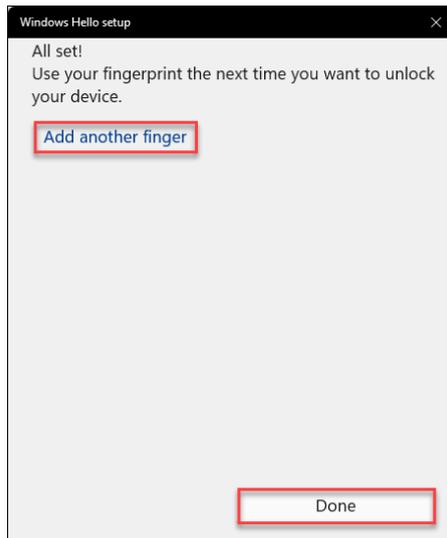
9. **Touch** your YubiKey Bio to begin the fingerprint enrollment process



10. Continue to touch the circular area within the silver ring with the fingerprint you are enrolling repeatedly until the fingerprint capture process is complete

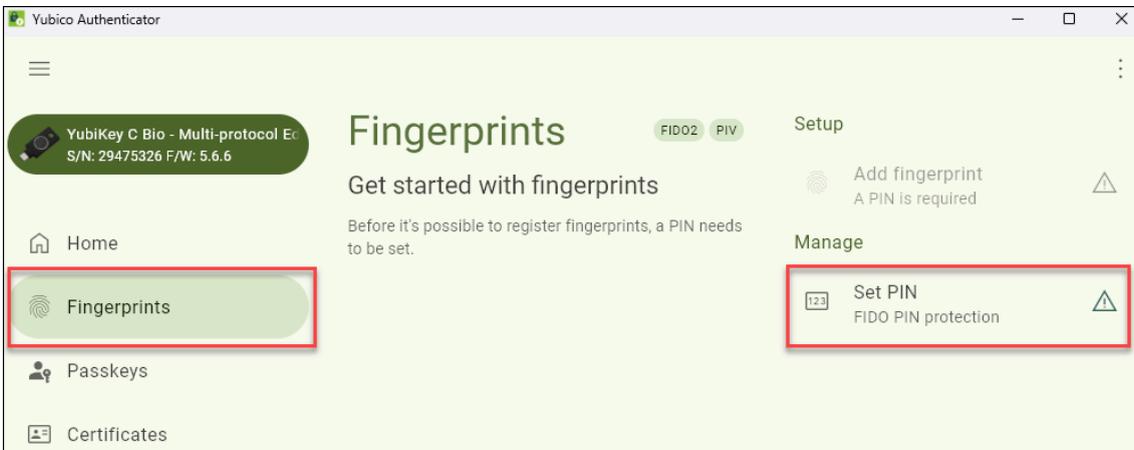


11. We recommend that you **add an additional fingerprint**. You may add up to five fingerprints. Once complete, click **Done**

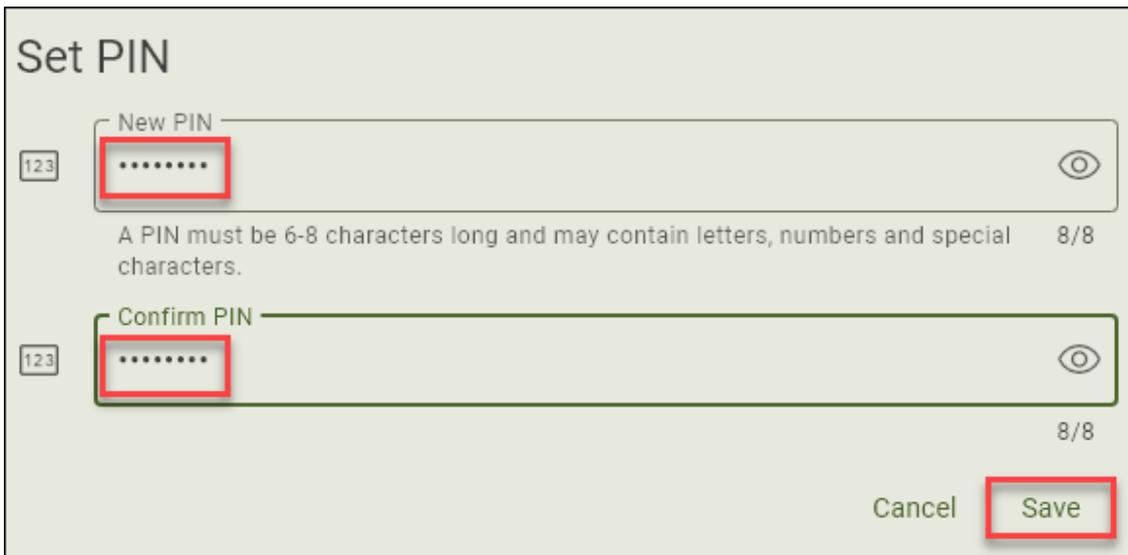


Using the Yubico Authenticator App on Windows 10/11:

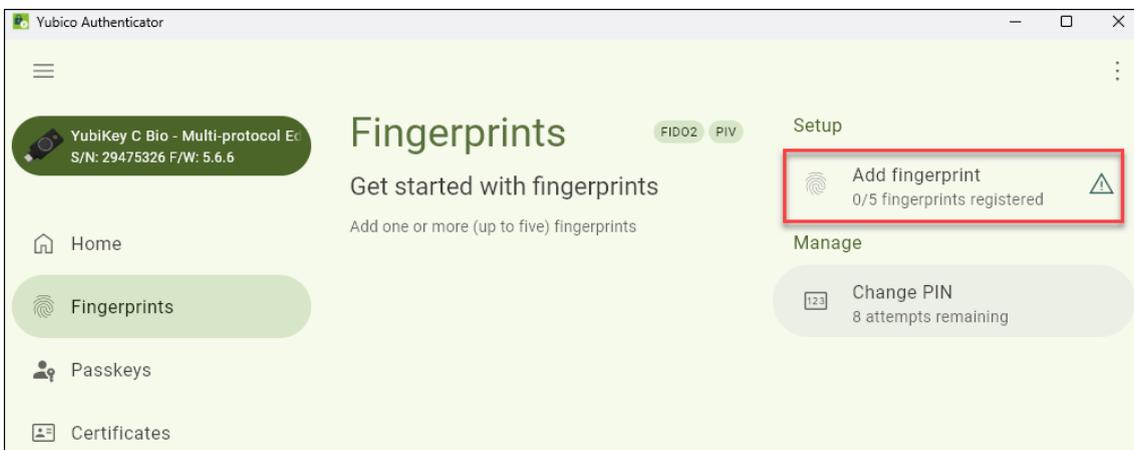
1. Insert the YubiKey into your Windows device
2. Launch the [Yubico Authenticator App](#)
3. Select **Fingerprints > Set PIN**



4. Create a **New PIN**, **Confirm the PIN** and click **Save**



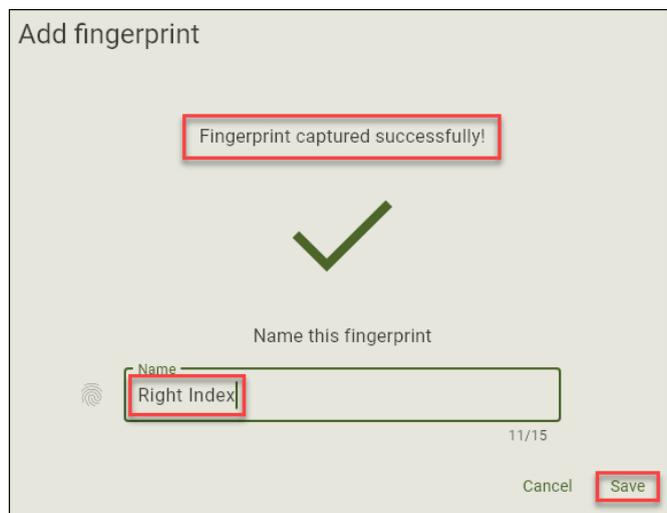
5. Select **Add Fingerprint**



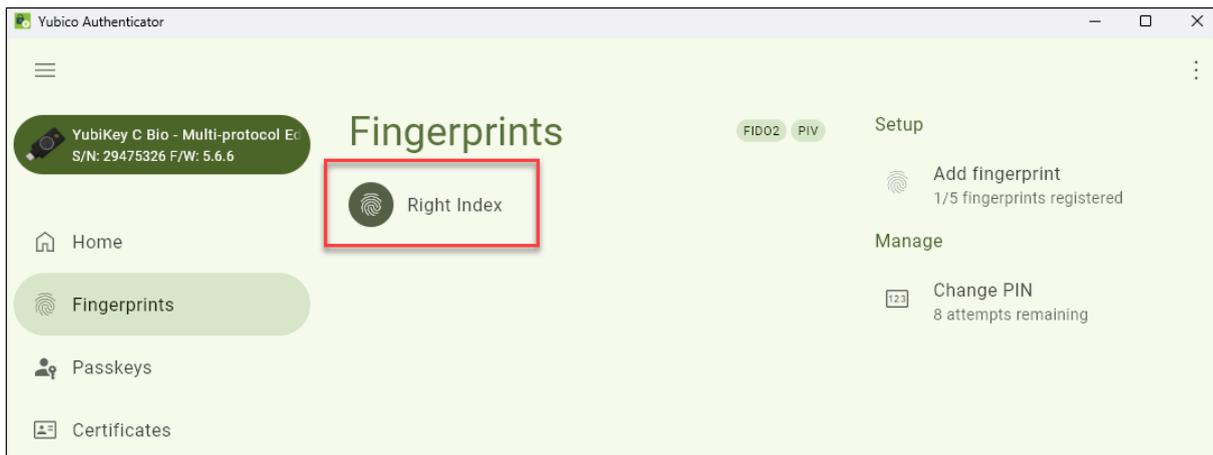
6. Touch the YubiKey to begin enrolling your fingerprint and follow the instructions



7. Provide a name for the fingerprint and click **Save**. Repeat this process and add an additional fingerprint.



8. Your fingerprint will be saved and you can now use it to sign-in once you have a passkey registered with Entra ID.



Register a passkey (FIDO2) on your YubiKey

To register a YubiKey for passwordless sign-in, you'll need to first prove your identity using either:

- An existing multifactor authentication (MFA) method
- A **Temporary Access Pass** (TAP) provided by your administrator

What is a TAP?

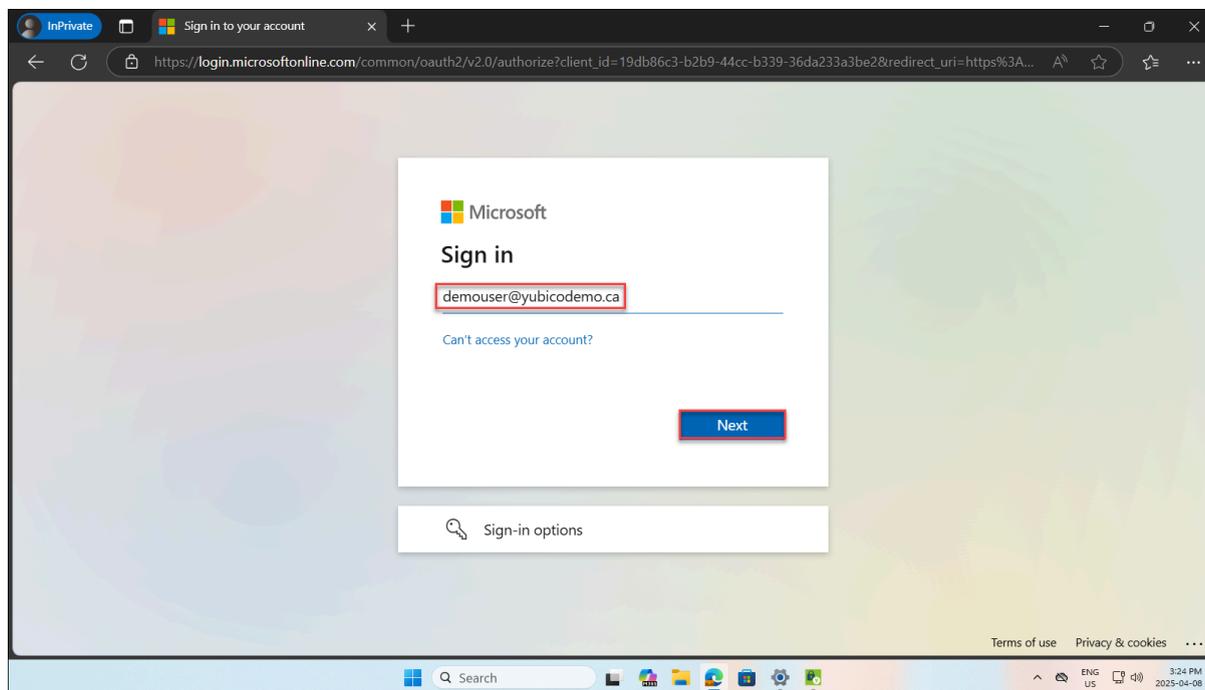
A TAP is a one-time or time-limited code that allows you to register a security key without needing a password or existing MFA method. It is issued by your IT administrator and should be handled securely.

Important:

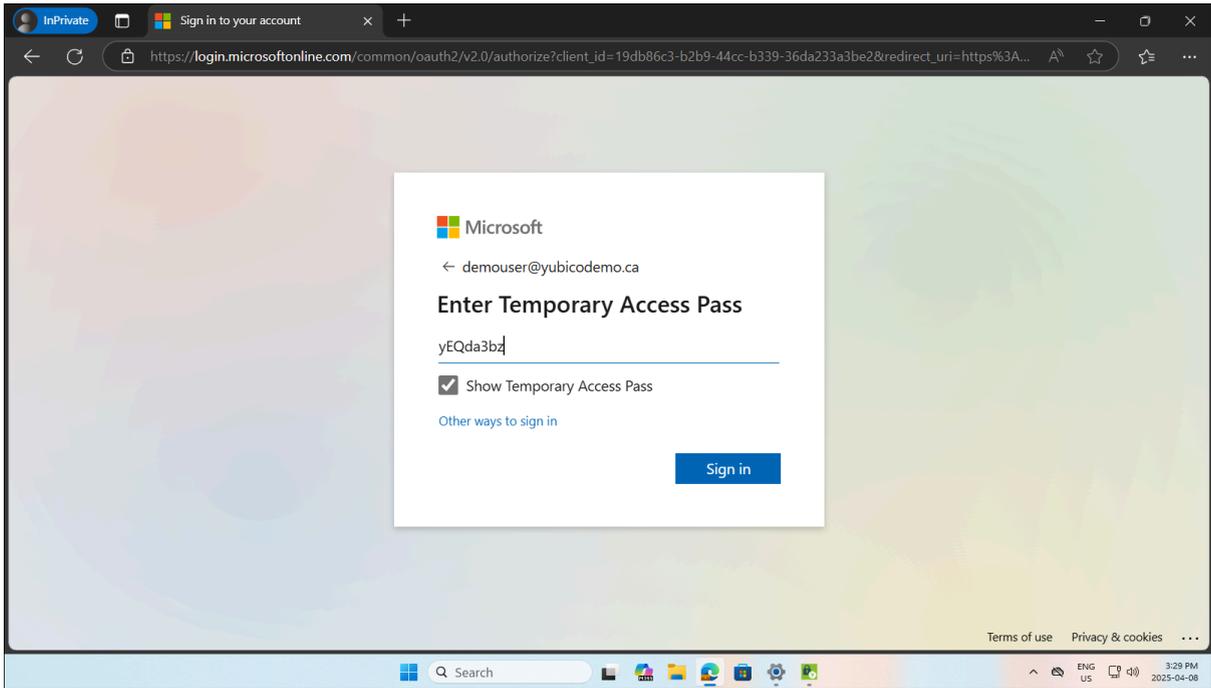
- A TAP can only be used within its valid time window.
- If you're using a one-time TAP, you must complete registration within 10 minutes of signing in.
- If your TAP expires or is deleted, it cannot be used again.

Use a Temporary Access Pass to sign-in

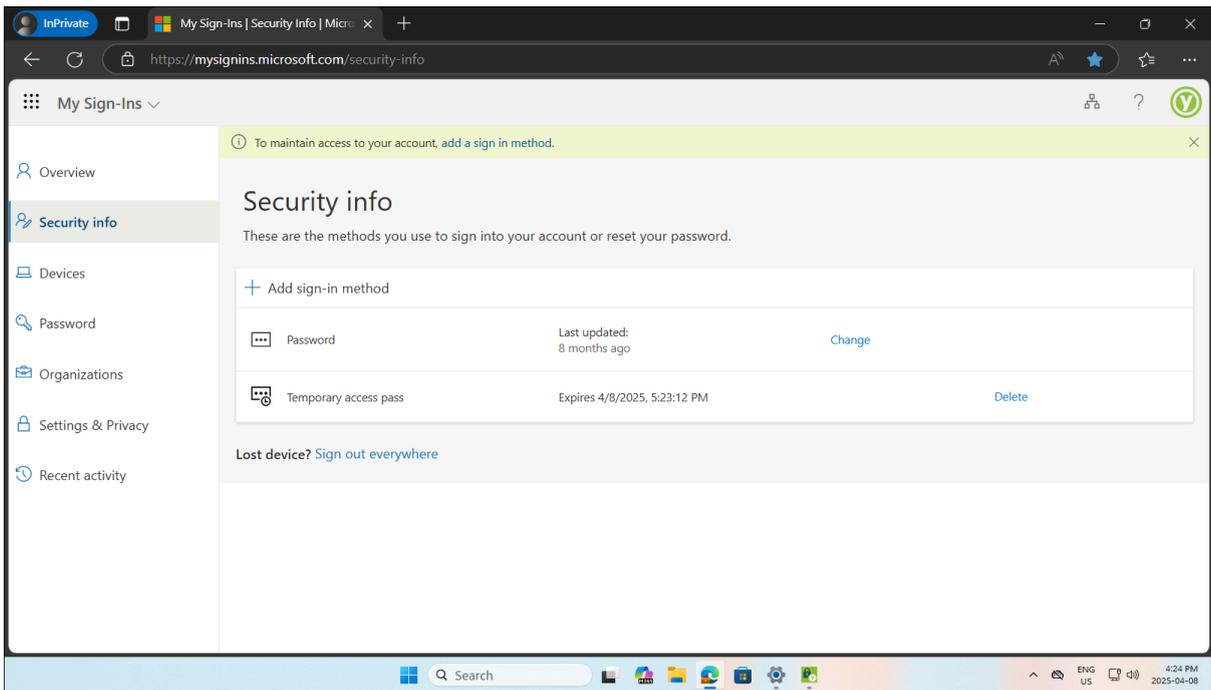
1. Insert your YubiKey
2. Launch a browser and navigate to <https://aka.ms/mysecurityinfo>
3. Enter your **email address** and click **Next**



4. Enter the TAP and click Sign in

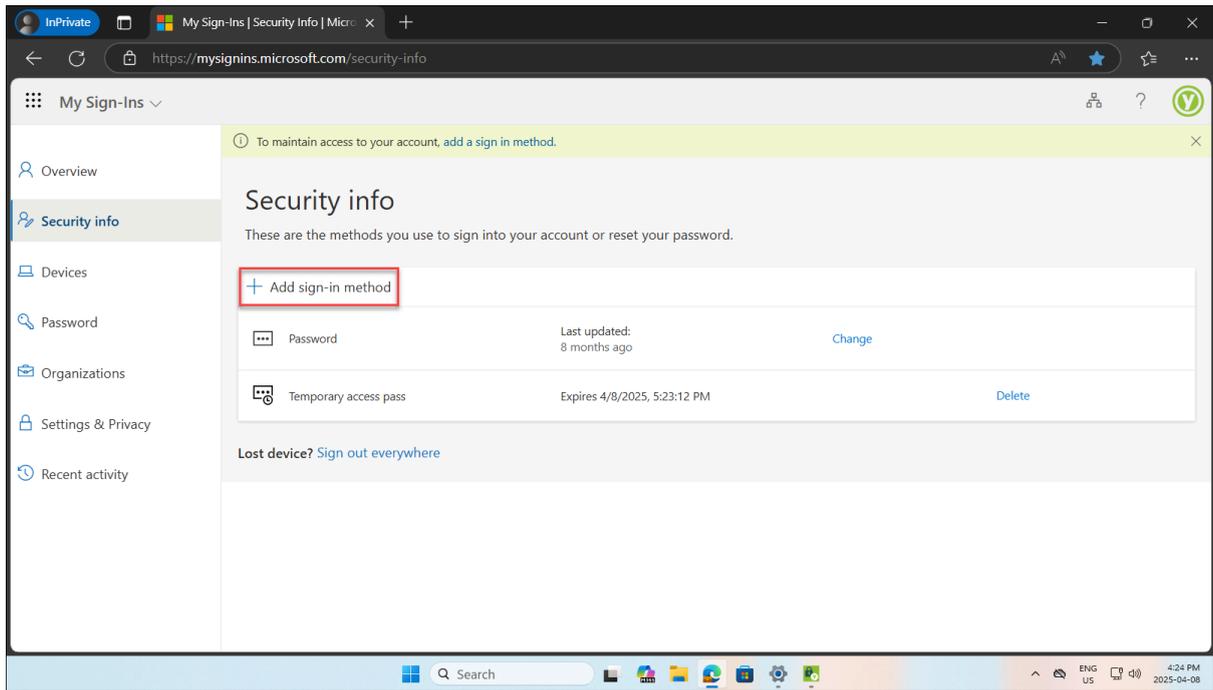


5. Successful authentication will sign you in to the Security Info portal

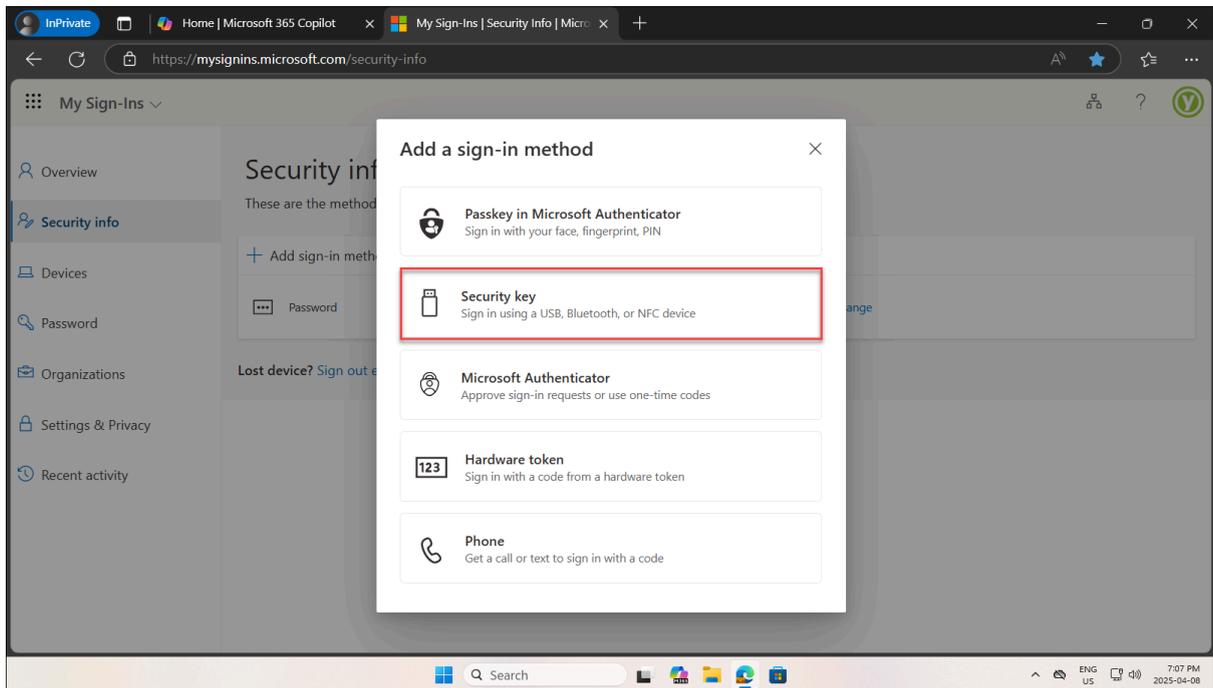


Register a passkey on your YubiKey

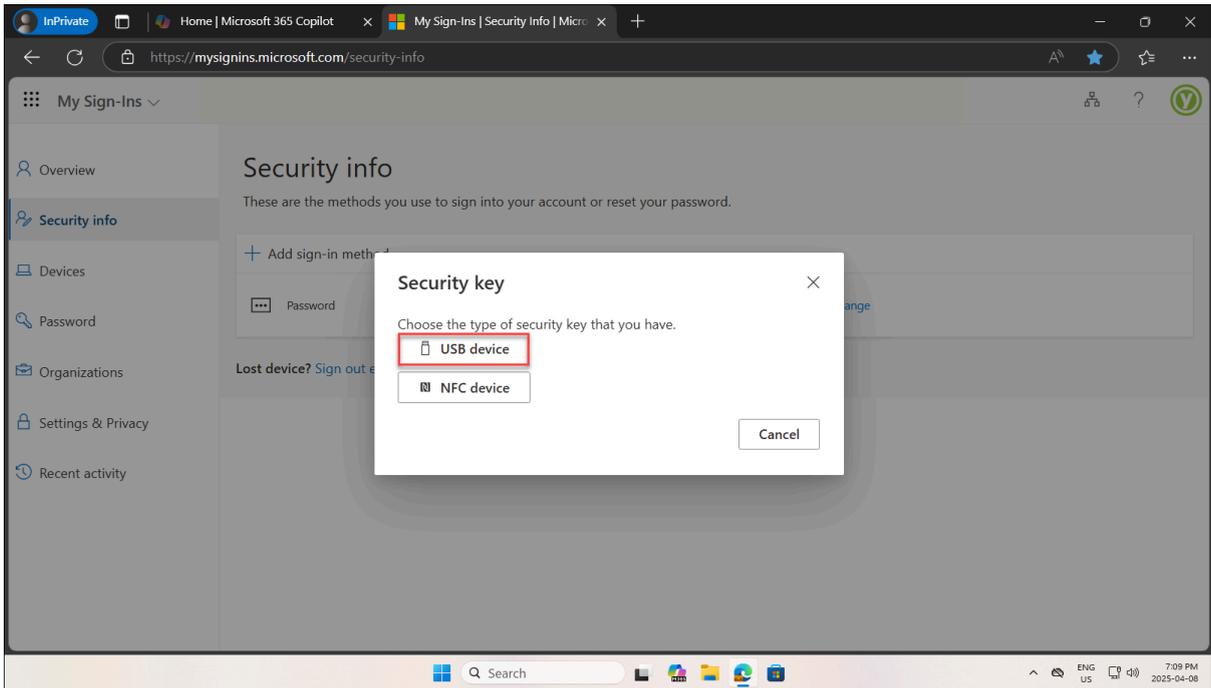
1. In the **Security Info** portal, click on the **Add sign-in method**



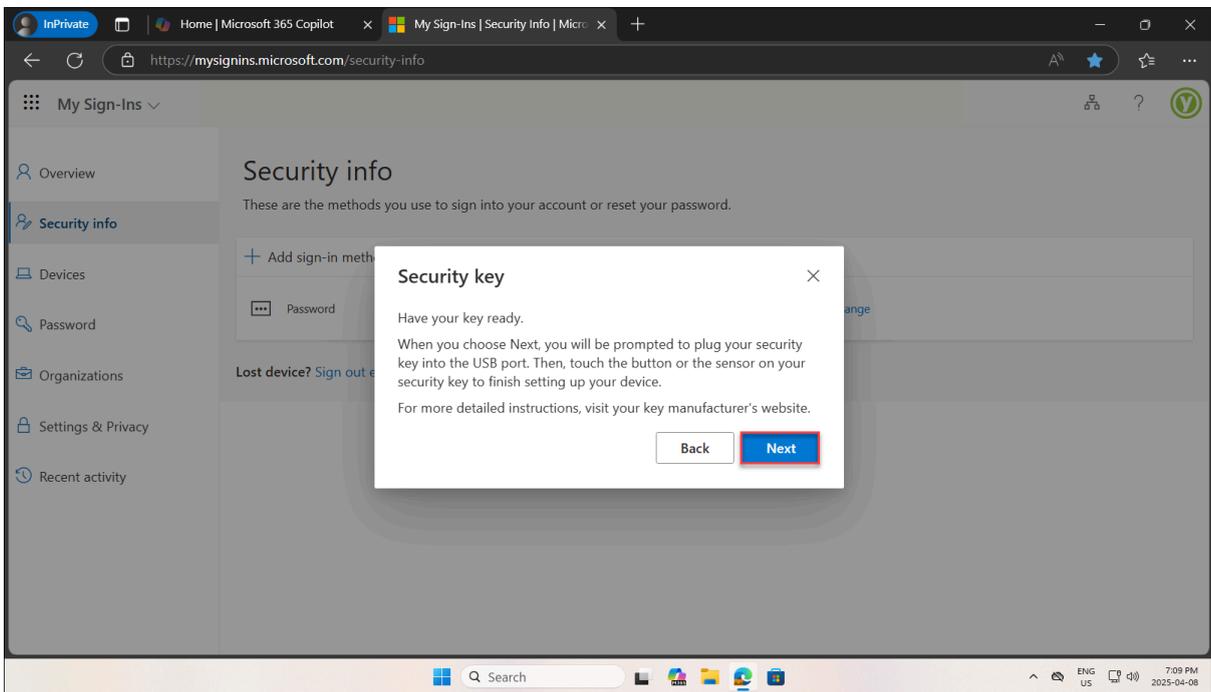
2. Select the **Security Key** option



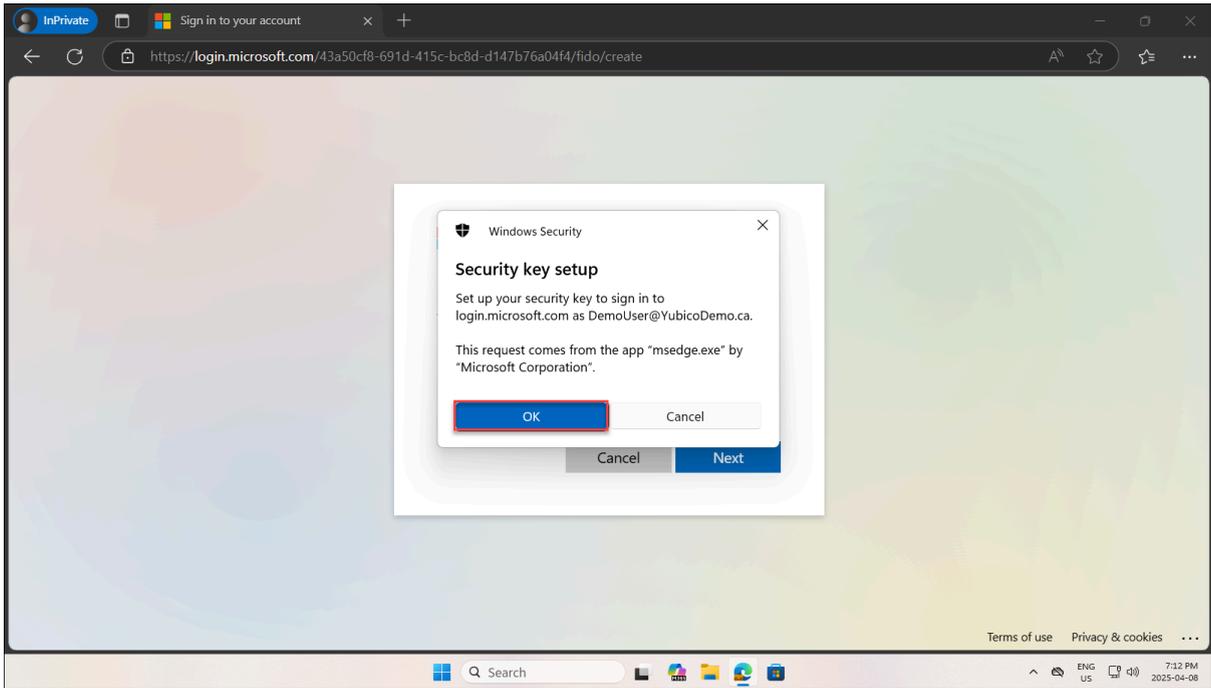
3. Select the **USB device** option. Alternatively, the NFC device option can also be selected when using a YubiKey that is NFC capable and you have a compatible NFC reader connected to your device.



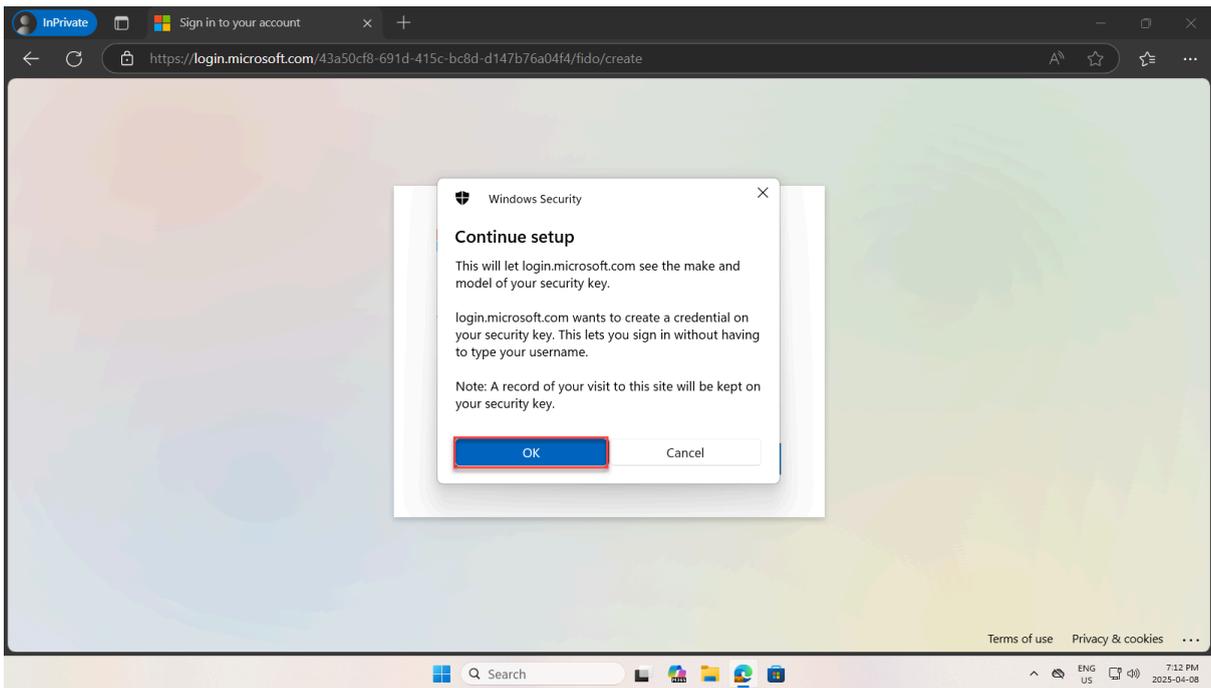
4. Click **Next**



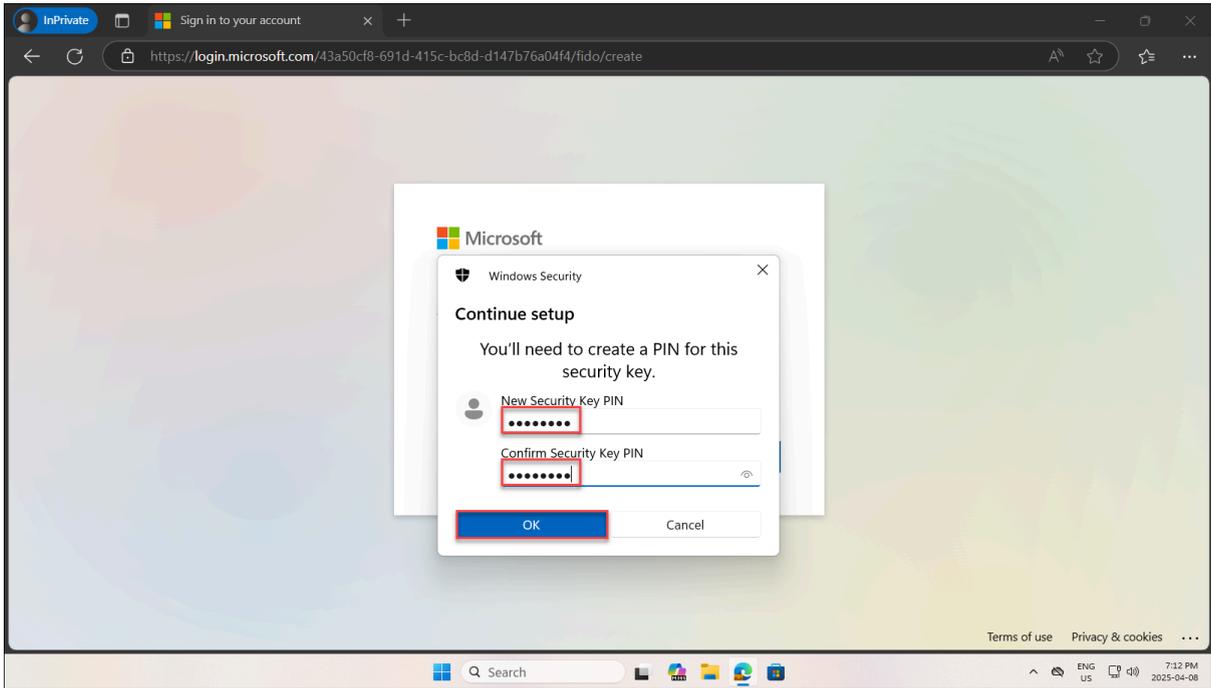
5. Click **Ok** to allow registration of your YubiKey



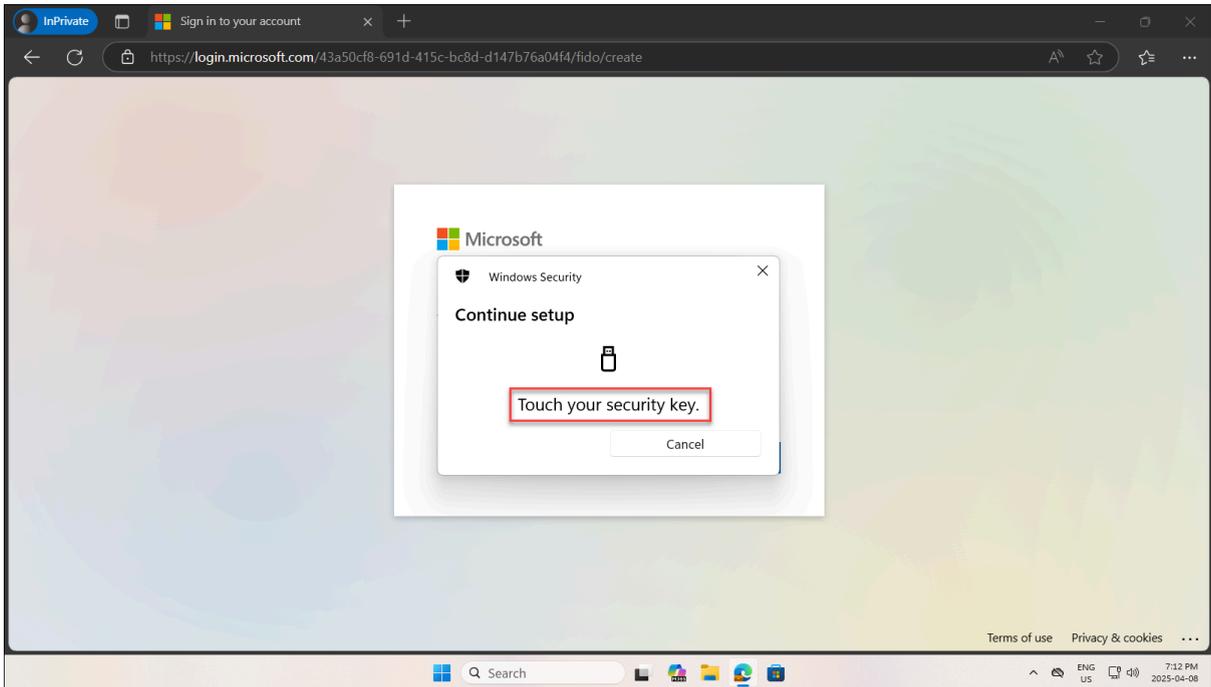
6. Click **Ok** to allow Entra ID to view the make and model of your YubiKey



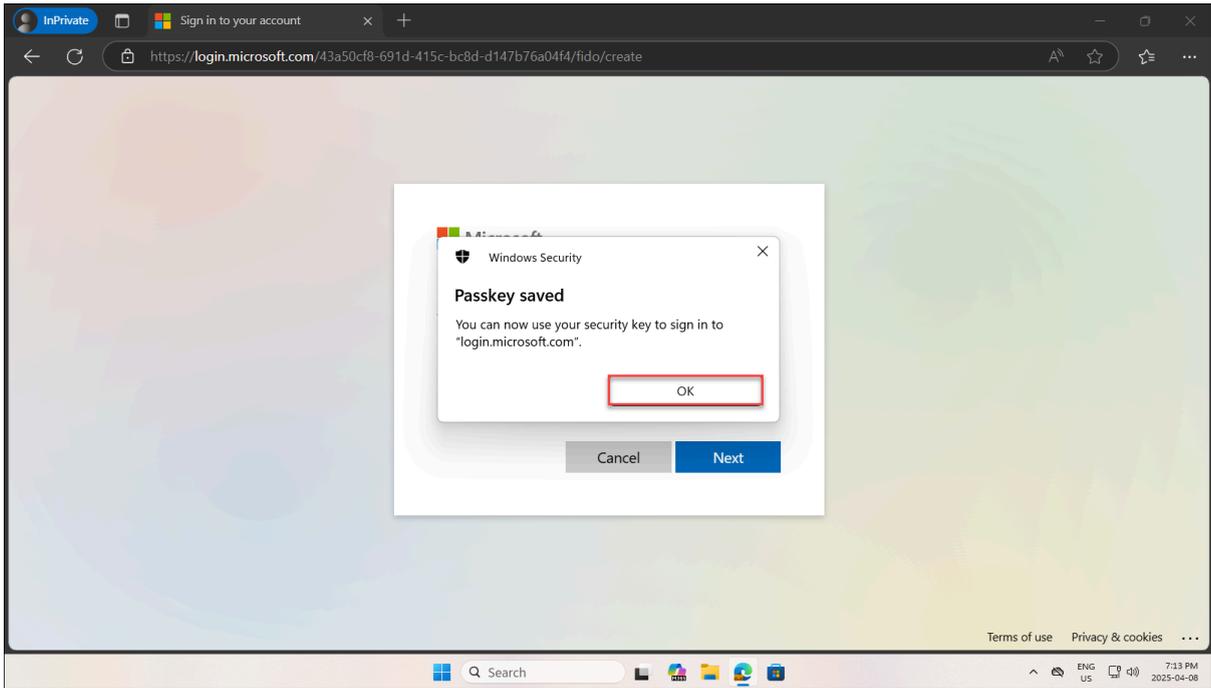
- 7. **Create a PIN and confirm it**, then click **Ok**. Note if you are using the YubiKey Bio and have a fingerprint enrolled, you will be prompted to touch your key instead of creating a PIN.



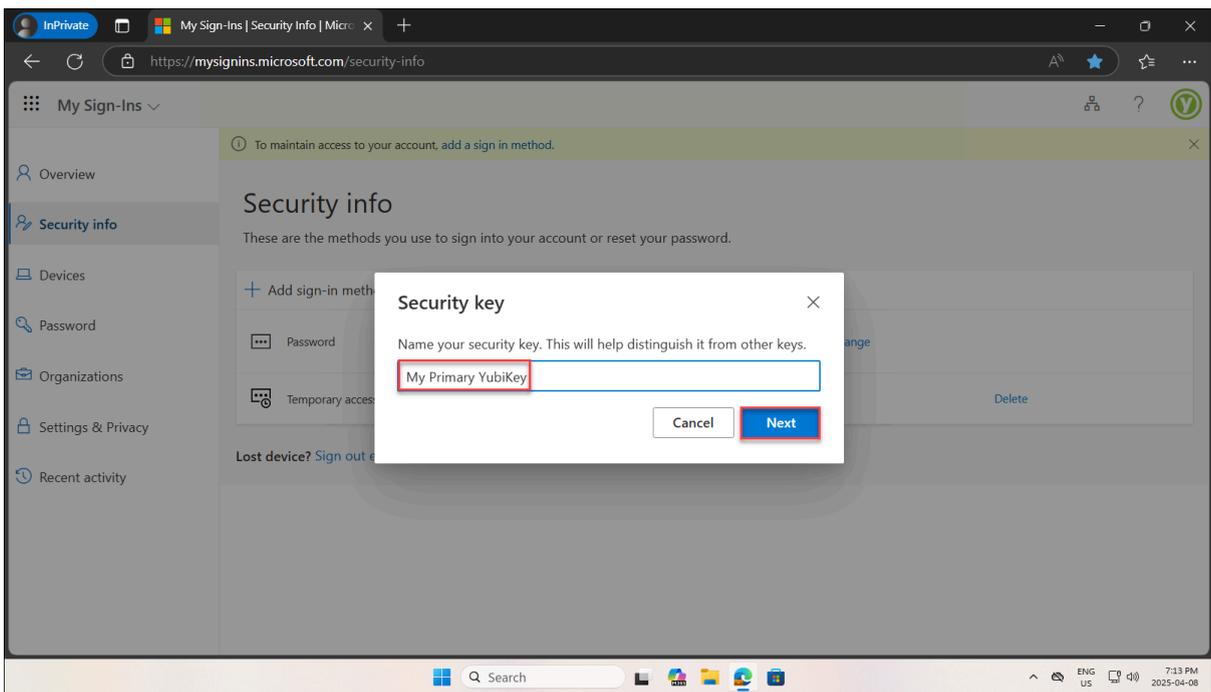
- 8. **Touch the YubiKey** when prompted. You will be prompted twice.



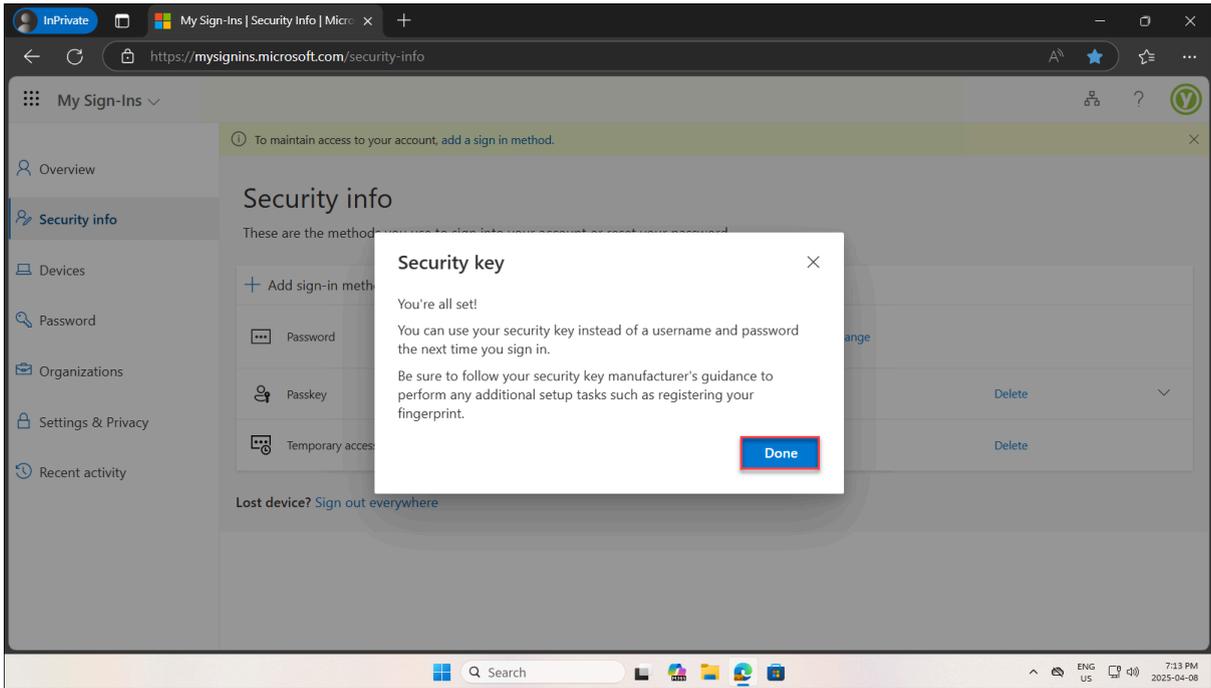
9. You will receive confirmation that the passkey has been saved. Click **Ok** to proceed.



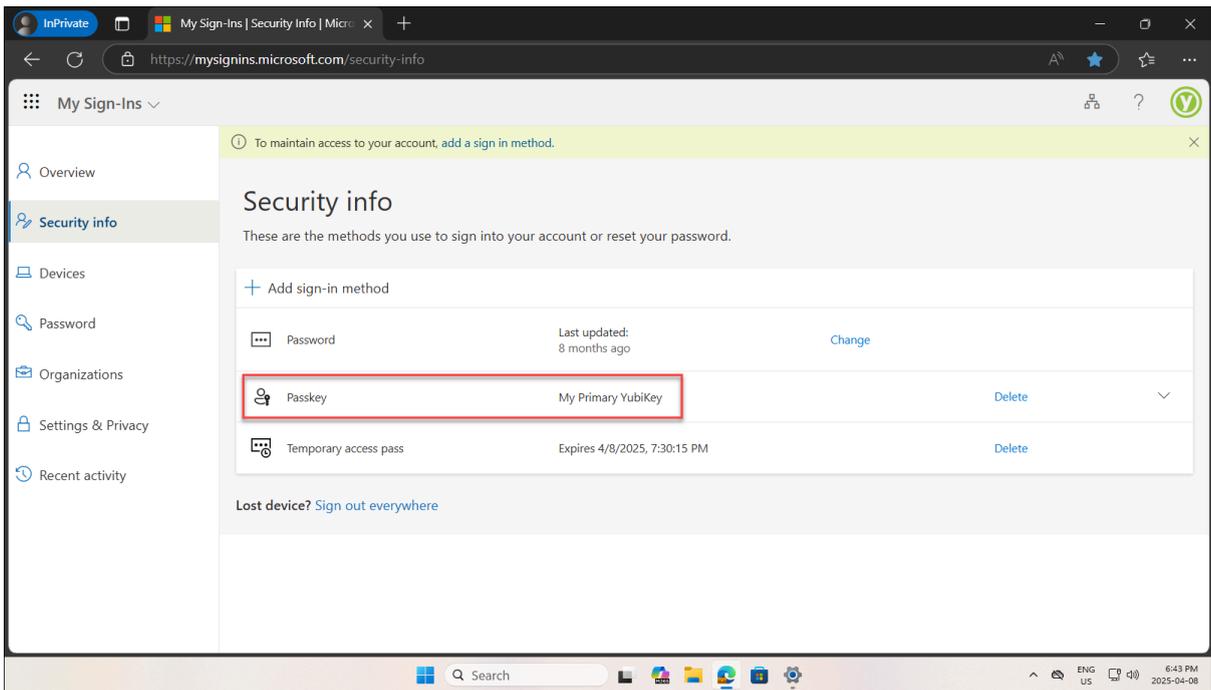
10. Provide a friendly name for your YubiKey and click **Next**



11. Click **Done** to complete the registration process.



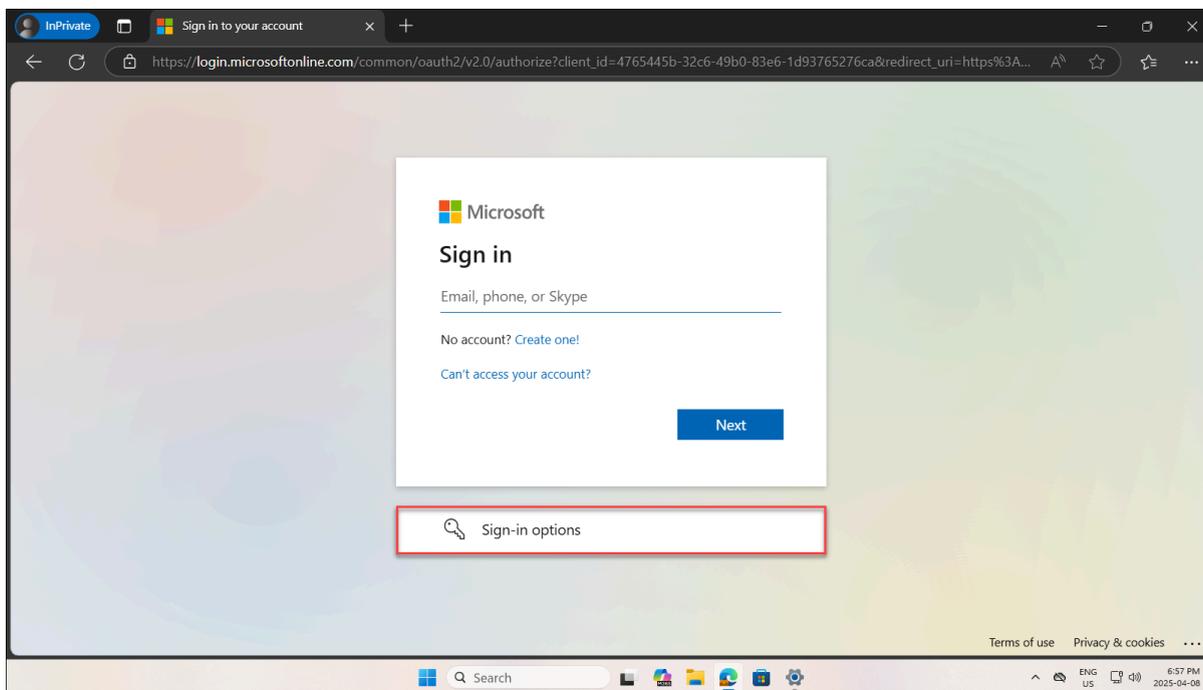
12. Successful registration will display your newly registered YubiKey as a **Paskey**



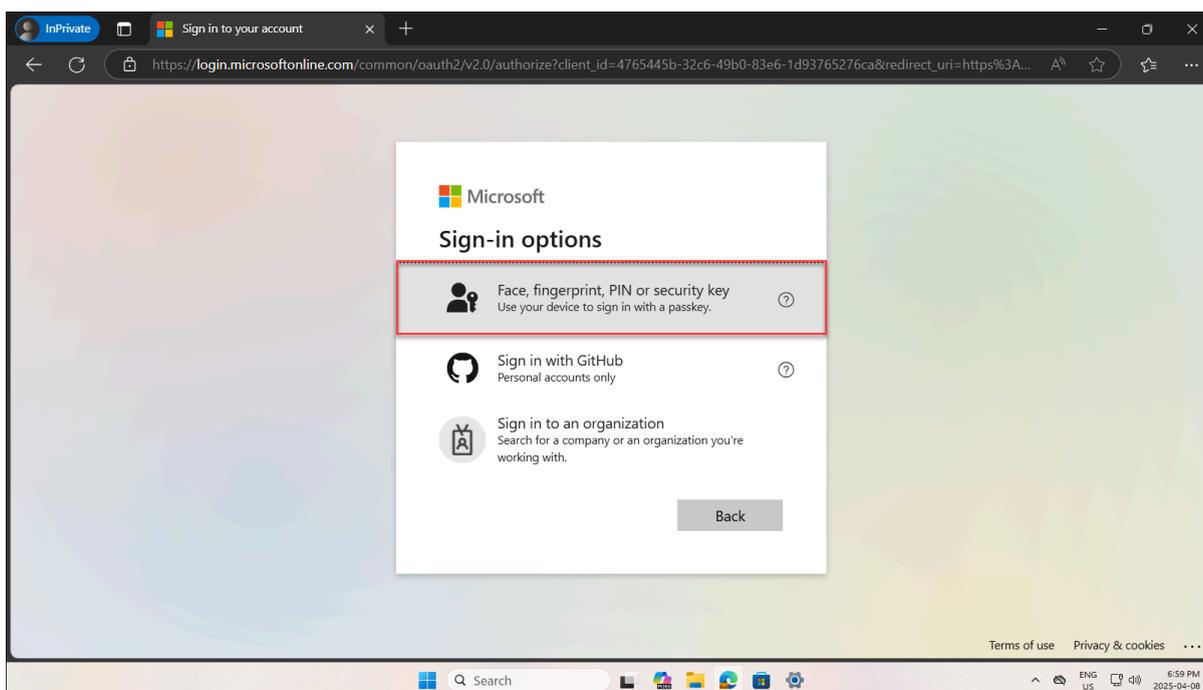
Sign-in to a web application with your YubiKey

These instructions demonstrate how to sign-in to the Office 365 portal, however you can sign-in to any web application you have access to that is connected to Entra ID.

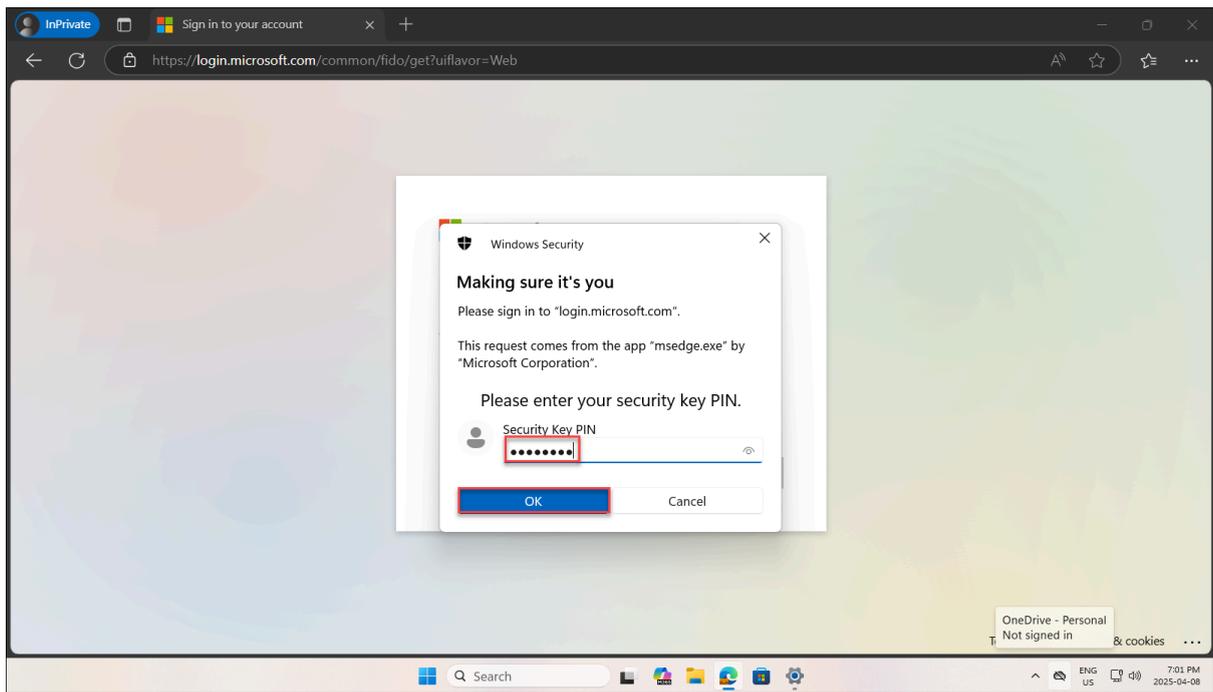
1. Launch a browser and navigate to <https://portal.office.com>
2. At the Sign in prompt select **Sign-in options**



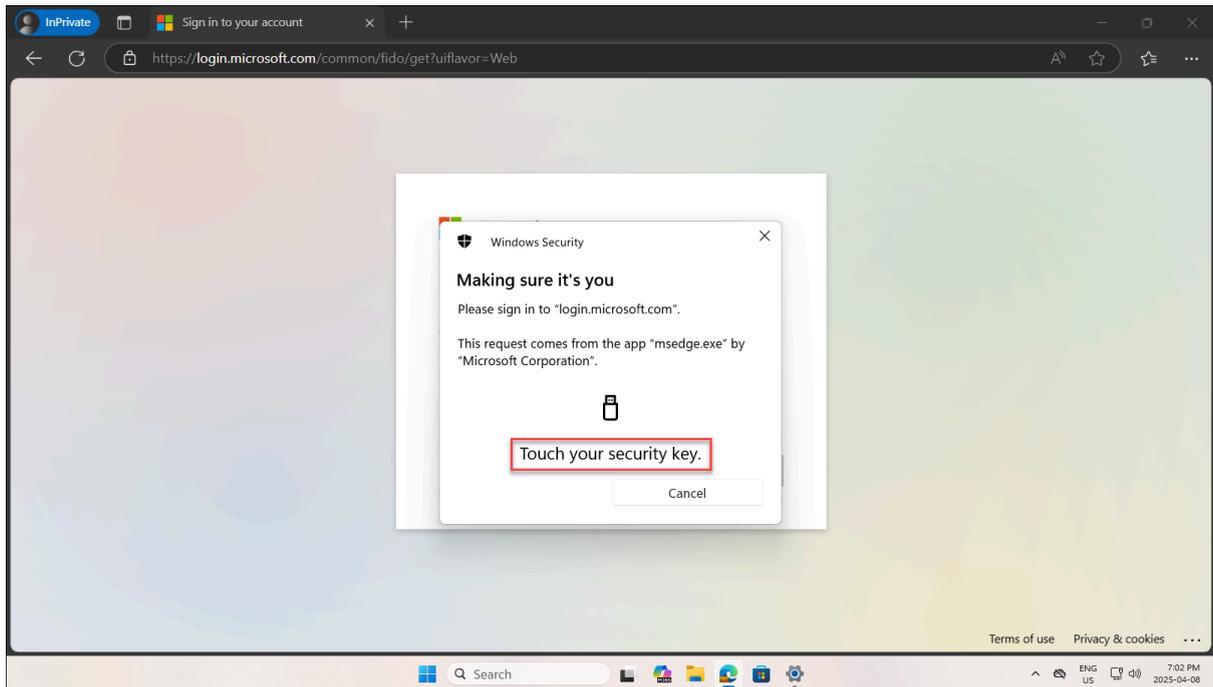
3. At the Sign-in options screen select the **Face, fingerprint, PIN or security key** option



- 4. Enter your **PIN** and click **Ok**. Note if you are using a YubiKey Bio, you will be prompted to touch your key and provide your fingerprint.



- 5. **Touch** your YubiKey to complete the authentication

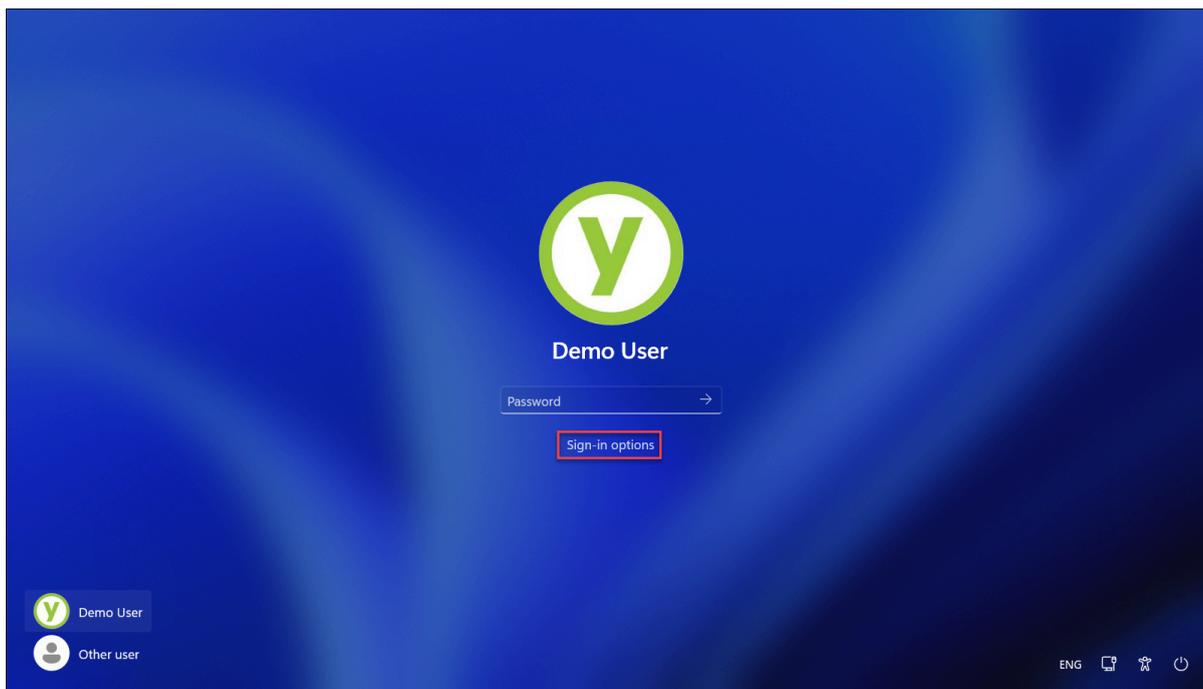


- 6. You should now be signed in to Office 365

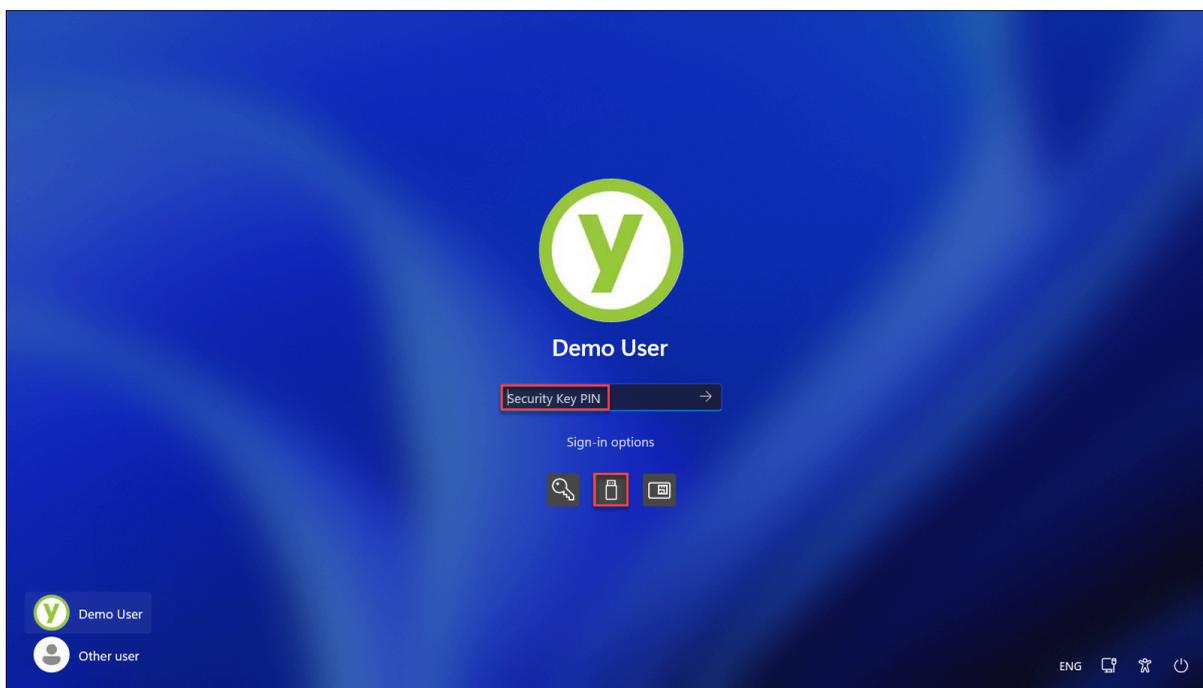
Sign into Windows 10 or 11 with a YubiKey

These instructions demonstrate how to sign-in to your Windows PC with your registered YubiKey. Once successfully signed-in you should have single sign-on (SSO) access into your Entra applications.

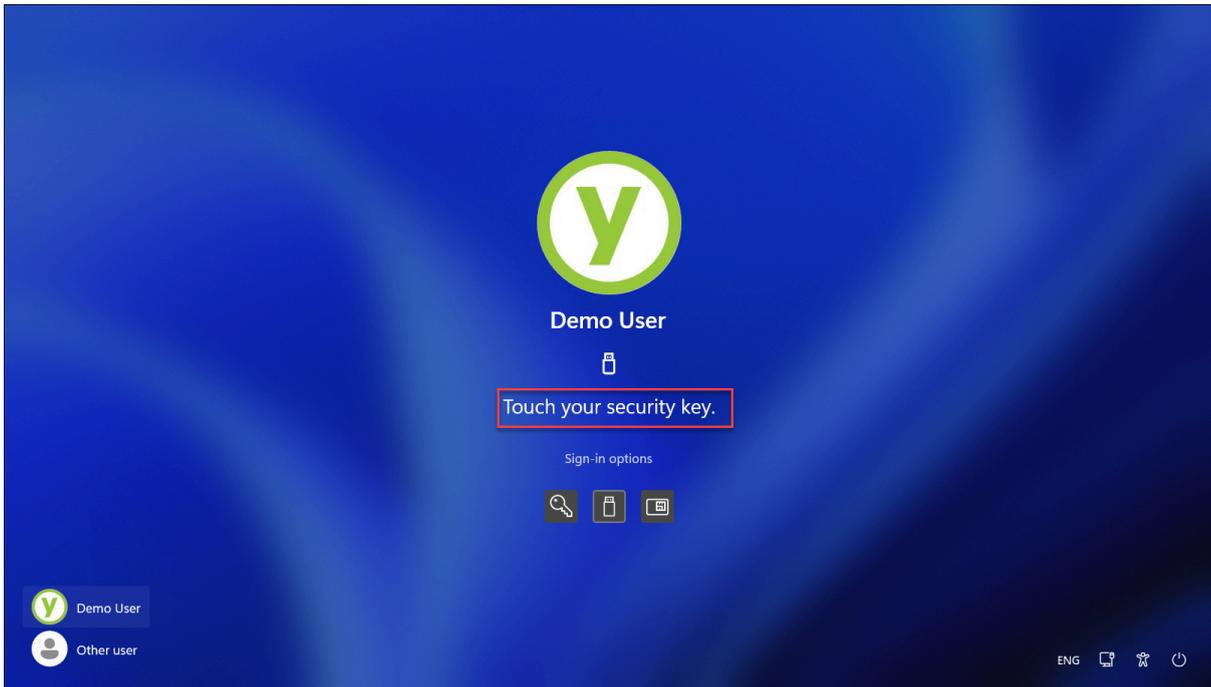
1. Insert your YubiKey into your Windows device
2. From the Windows lock screen select your user account
3. Click on **Sign-in options**



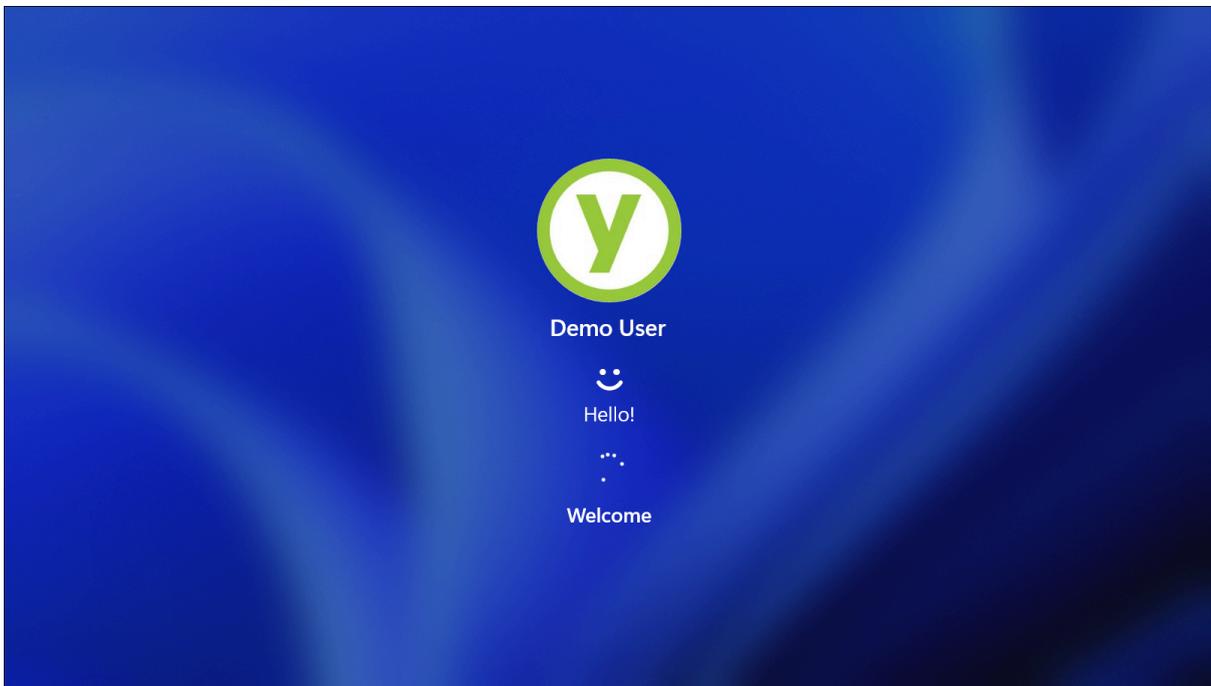
4. Select the **security key icon**, enter your **PIN** and hit enter. If you are using a YubiKey Bio, you will be prompted to touch your YubiKey instead.



5. **Touch** your YubiKey when prompted



6. You will be successfully signed-in to the desktop



YubiKey Lifecycle Management

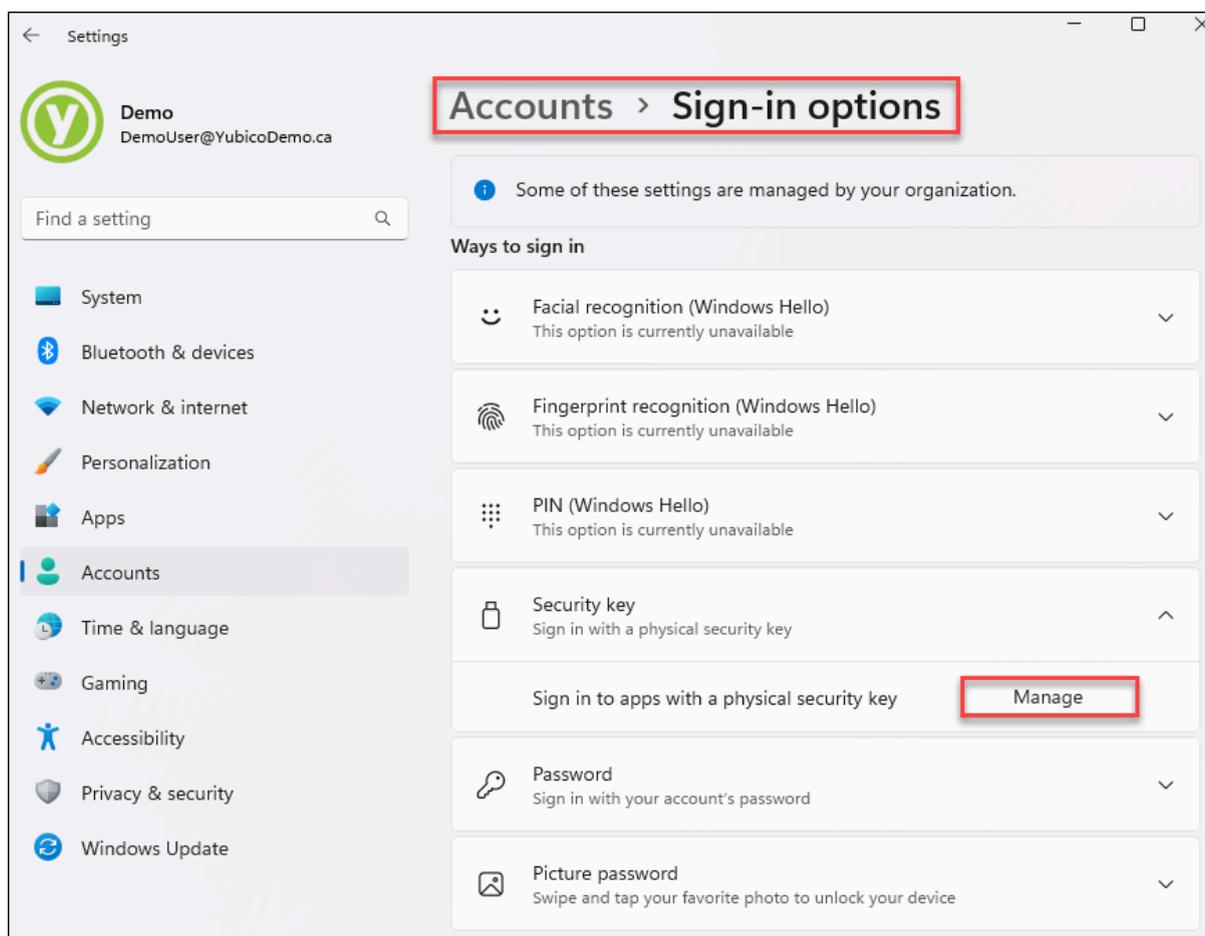
This section outlines some additional considerations when managing YubiKeys, to include removal of YubiKeys from a user account, changing the PIN, or resetting the YubiKey. The end user has the option to use the following tools:

- 1) Windows 10/11 Windows Hello utility
- 2) macOS Google Chrome Security Key Settings
 - a) Supported on macOS 10.14 or later
 - b) Recommended version 85 or later
- 3) The [Yubico Authenticator App](#)
- 4) The [YubiKey Manager CLI](#)

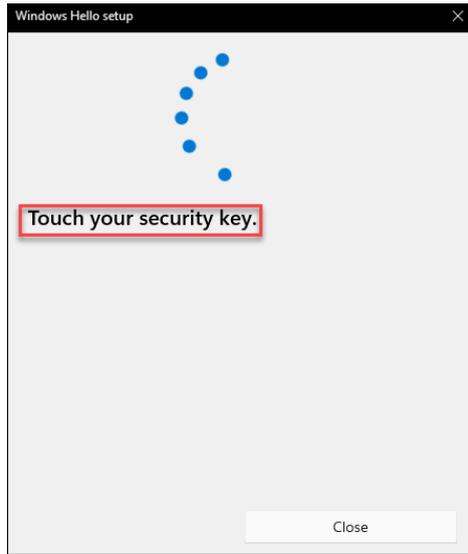
Change YubiKey PIN

Using Windows Hello

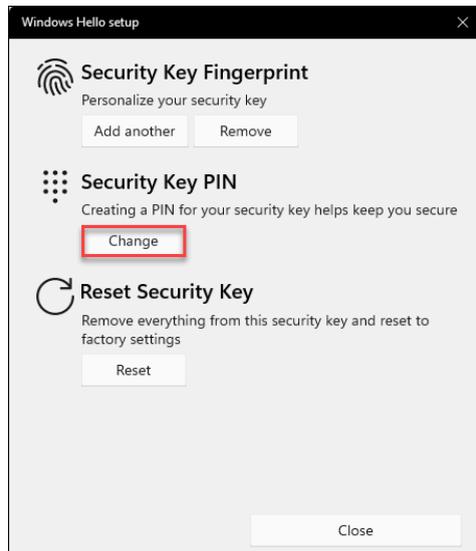
1. Insert the YubiKey into the device.
2. Sign-in to the Windows 10 or 11 machine.
3. Navigate to **Settings > Accounts > Sign-in options**.
4. Click **Security Key**. Once expanded, click **Manage**.



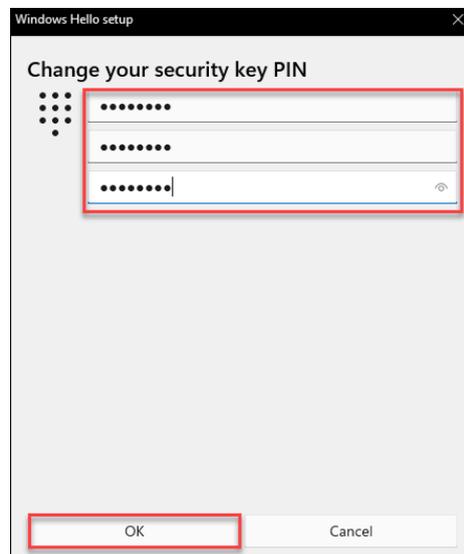
5. When prompted, touch the YubiKey



6. Under **Security Key PIN** select **Change**

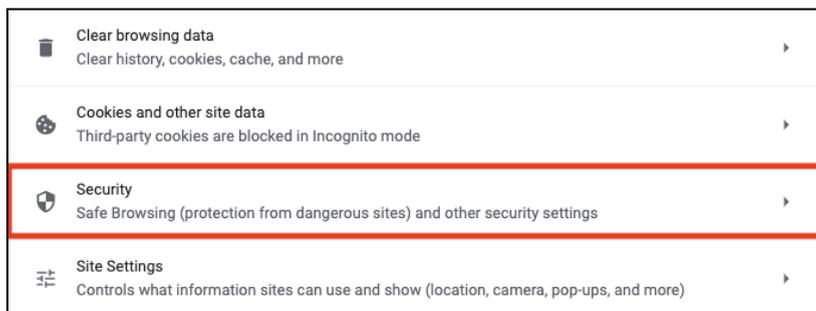


7. In the **Change your security key PIN** window, provide the **current PIN**, the **new PIN**, and **confirm the new PIN**. Click **OK**.

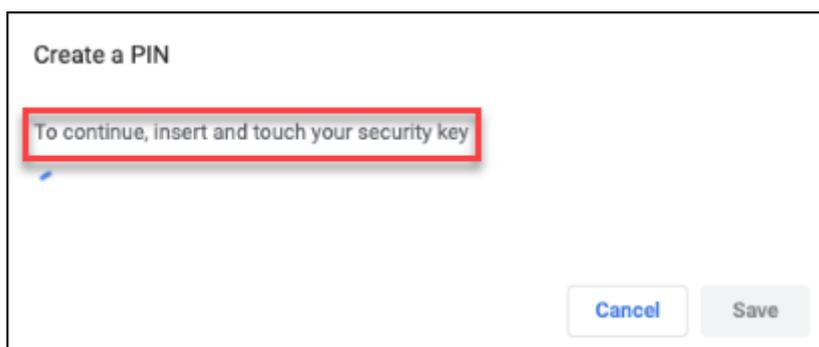


Using Google Chrome (macOS and Linux only)

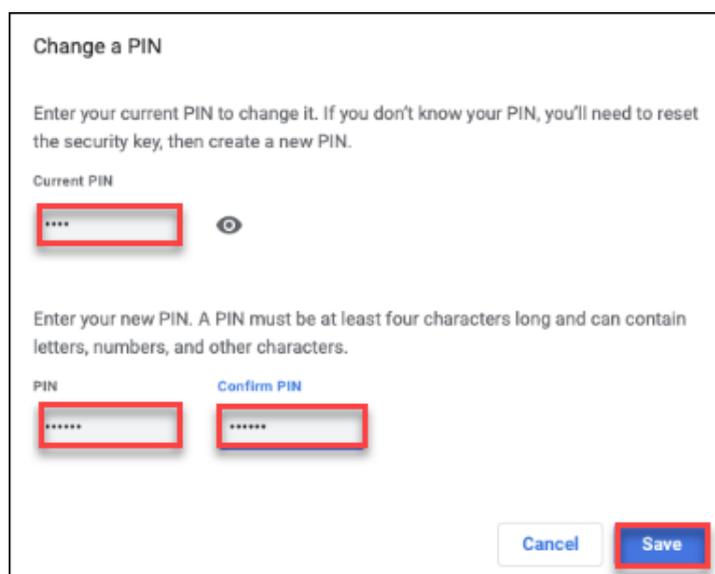
1. Open Google Chrome.
2. Navigate to “chrome://settings/securityKeys” in address bar or use the menu as described below:
 - a. **Menu (⋮) → Settings.**
 - b. From the left menu, select “**Privacy and security.**” Under the **Privacy and security** menu, click **Security.**



- c. Under **Advanced**, click **Manage security keys.**
3. Click **Create a PIN.**
 4. When prompted, insert the YubiKey and tap it.



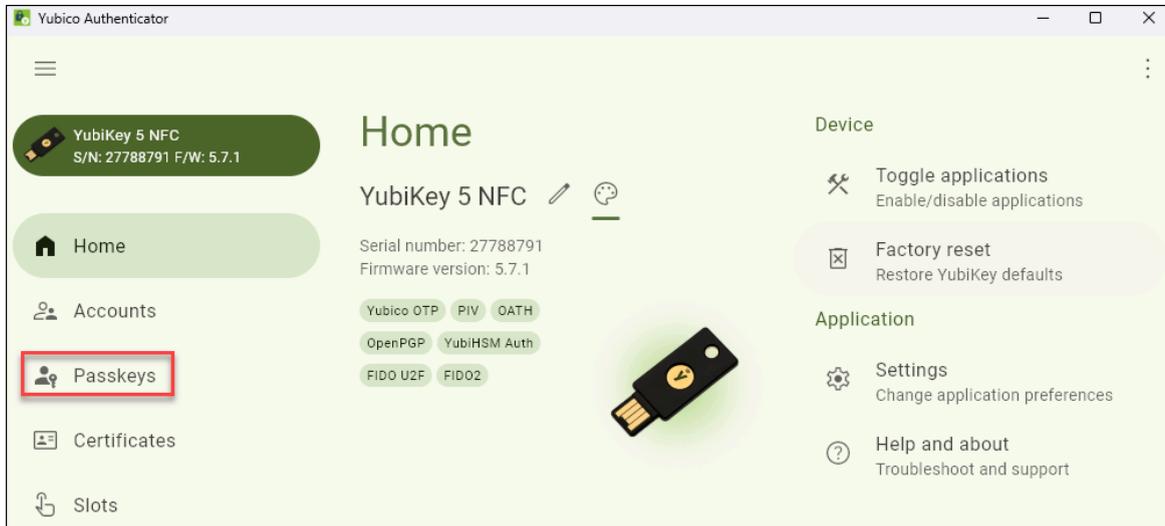
5. At the **Change a PIN** screen, enter in the current PIN, the new PIN, and confirm the new PIN. Once completed, click **Save.**



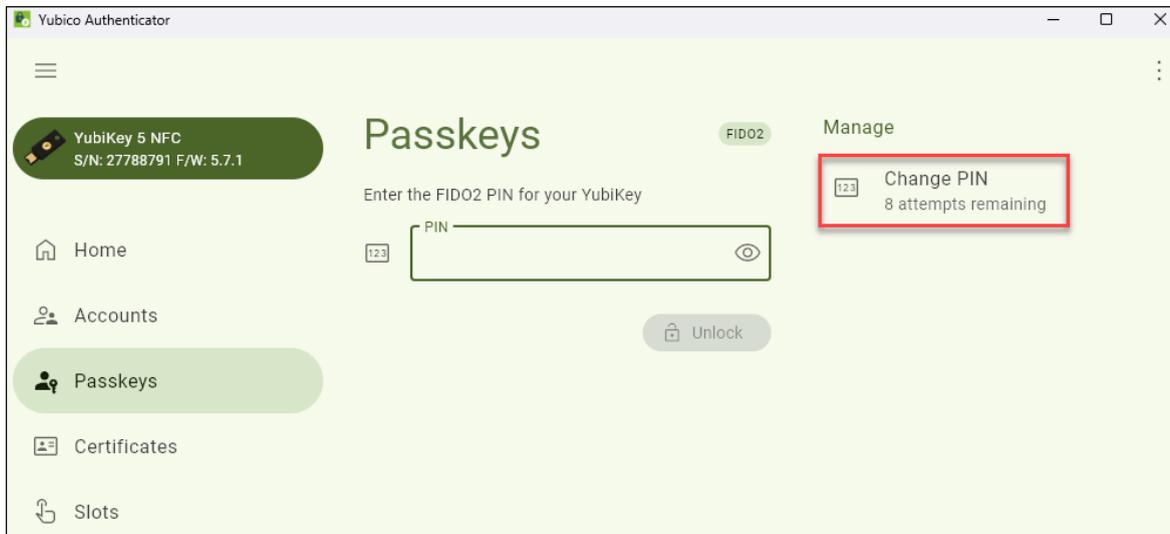
6. If successful, Chrome will indicate the PIN was created.

Using the Yubico Authenticator App

1. Insert the YubiKey
2. Launch Yubico Authenticator App
 - a. **Note:** On Windows 10 and 11, Yubico Authenticator will request to elevate to administrator privileges when performing passkey management functions.
3. Select **Passkeys**



4. Select **Change PIN**



5. Enter the **Current PIN** and then enter the **New PIN** and **Confirm PIN** and click **Save**

Change PIN

123 Current PIN 8/63

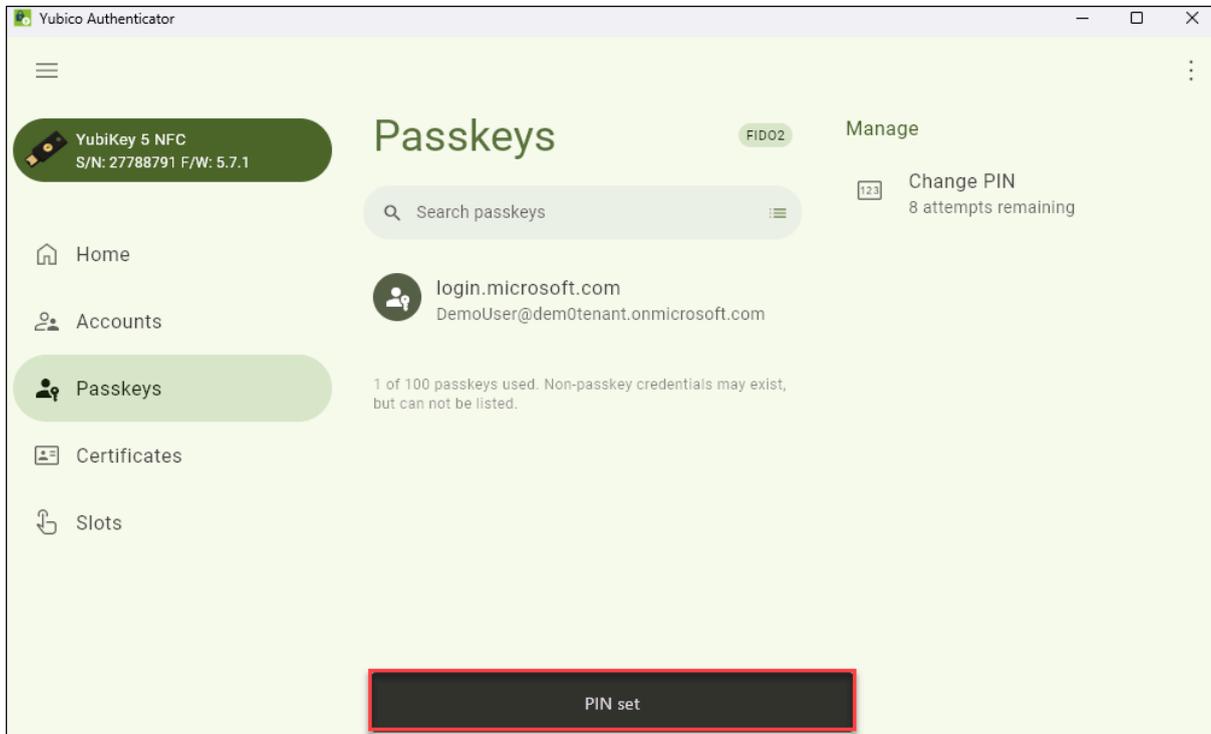
123 New PIN 8/63

A PIN must be 4-63 characters long and may contain letters, numbers and special characters.

123 Confirm PIN 8/63

Cancel Save

6. The Yubico Authenticator App will display a **PIN set** confirmation



Using YubiKey Manager CLI

1. Open a terminal
 - a. **Note:** On Windows 10 or 11, passkey management in YubiKey Manager CLI will need to be run as an administrator.
2. Navigate to the YubiKey Manager CLI installation path
3. Run the following command: ***ykman fido access change-pin --pin 123456 --new-pin 654321*** (modify the PIN values to your values)
4. Hit Enter

Reset the YubiKey

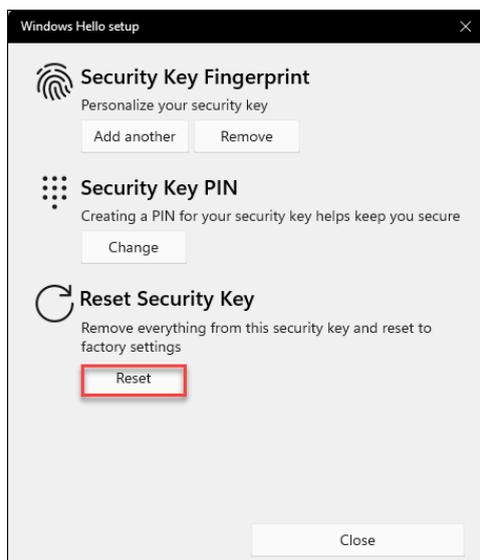
Using Windows Hello

Microsoft Windows allows you to reset your security key if you have forgotten your PIN. There is no way to recover a forgotten PIN and a reset of the YubiKey will be required.

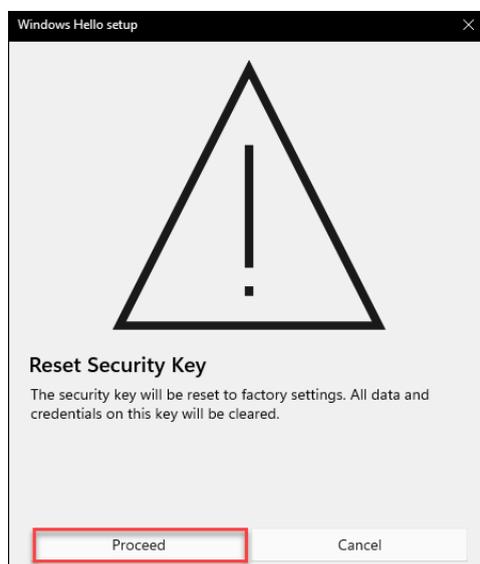
Note: If you reset your YubiKey, it will no longer be associated with your user account in Entra ID and will need to be re-registered. The corresponding registrations in Entra ID will not be automatically removed after resetting a YubiKey. Sign-in to My Security Info portal with each Entra account associated with the YubiKey to remove the registrations. Refer to the section below **Removing a YubiKey as a security method**.

Note: Windows 10 versions below Spring 2020 (2004) are not able to reset FIDO2 security keys successfully. Use a different method.

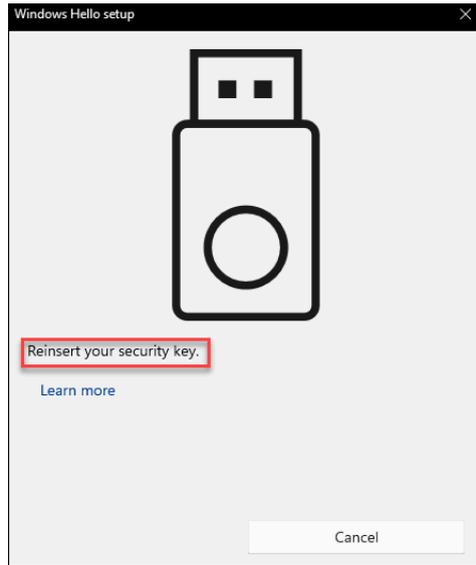
1. Insert the YubiKey
2. Navigate to **Settings > Accounts > Sign-in options**.
3. Click **Security Key**. Once expanded, click **Manage**.
4. When prompted, touch the YubiKey
5. **Under Reset Security Key, select Reset**



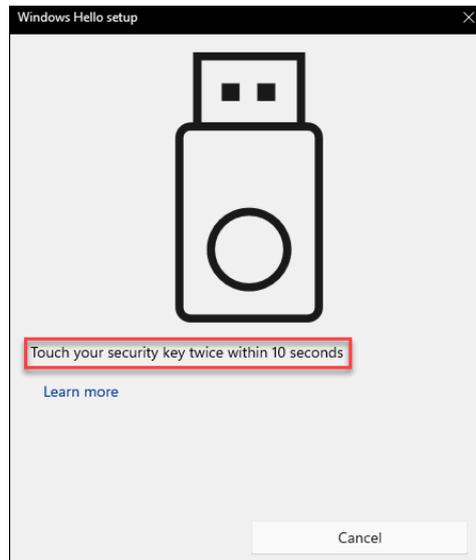
6. Click **Proceed** to reset the Security Key.



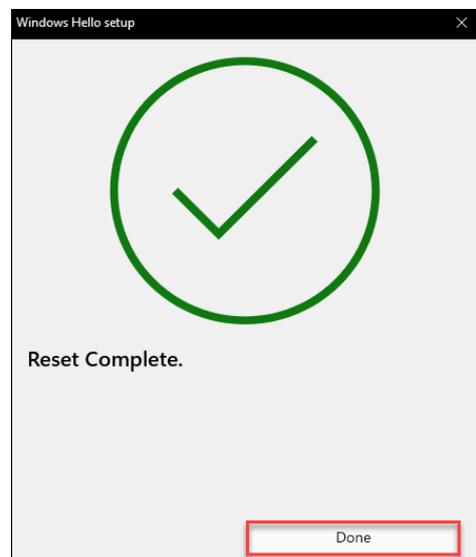
7. When prompted, **unplug** and **reinsert** the YubiKey



8. When prompted, **Touch** the YubiKey **twice within 10 seconds**

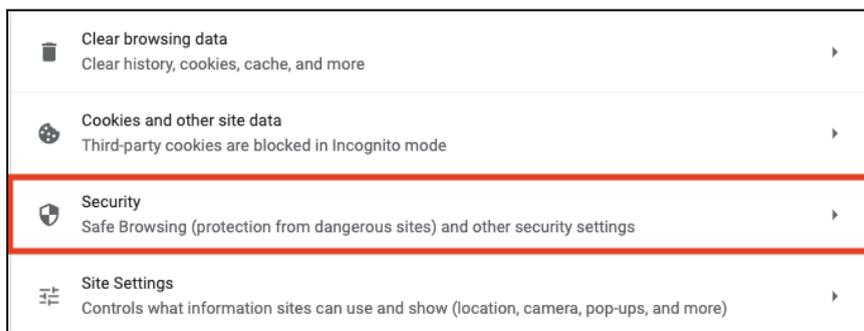


9. Upon a successful reset, click **Done**

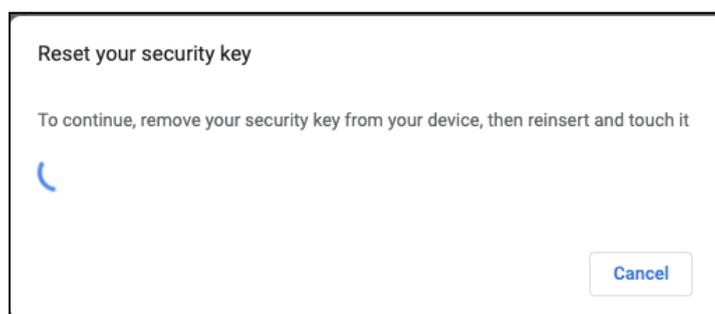


Using Google Chrome (macOS and Linux only)

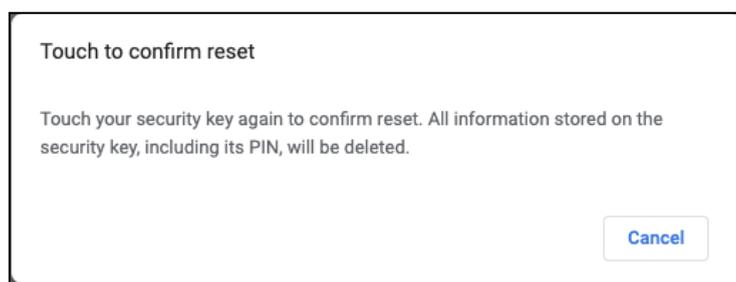
1. Open Google Chrome.
2. Navigate to “chrome://settings/securityKeys” in address bar or use the menu as described below:
 - a. **Menu (⋮) → Settings.**
 - b. From the left menu, select “**Privacy and security.**” Under the **Privacy and security** menu, click **Security.**



- c. Under **Advanced**, click **Manage security keys.**
3. Click **Reset your security key.**
 4. When prompted, remove the YubiKey from the device, reinsert the YubiKey and touch it.



5. Touch the YubiKey again to confirm reset.

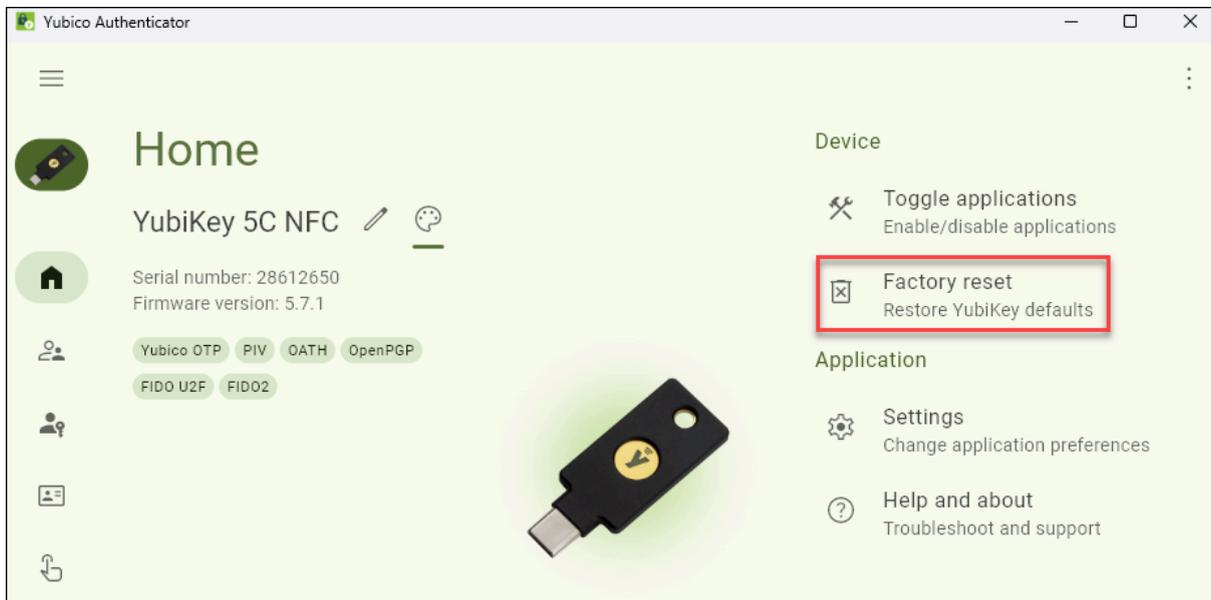


6. Chrome will display “Your security key has been reset” when completed.

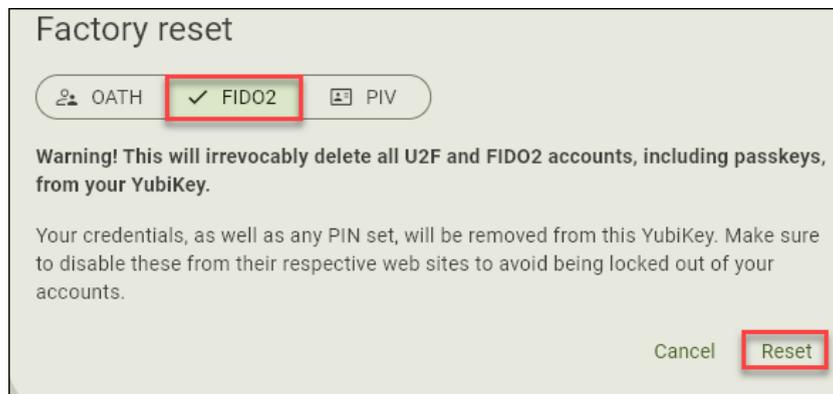


Using Yubico Authenticator

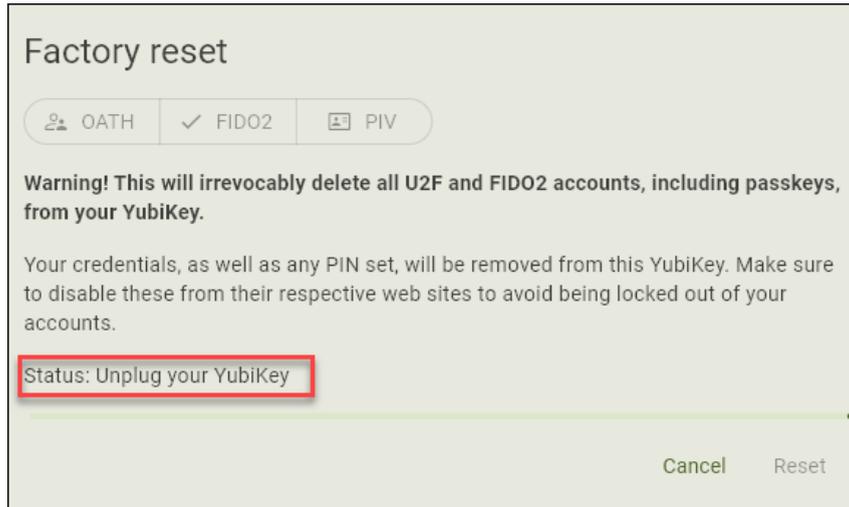
1. Insert the YubiKey
2. Launch the Yubico Authenticator App
 - a. **Note:** On Windows 10 and 11, Yubico Authenticator will request to elevate to administrator privileges when performing passkey management functions.
3. Select **Factory Reset**



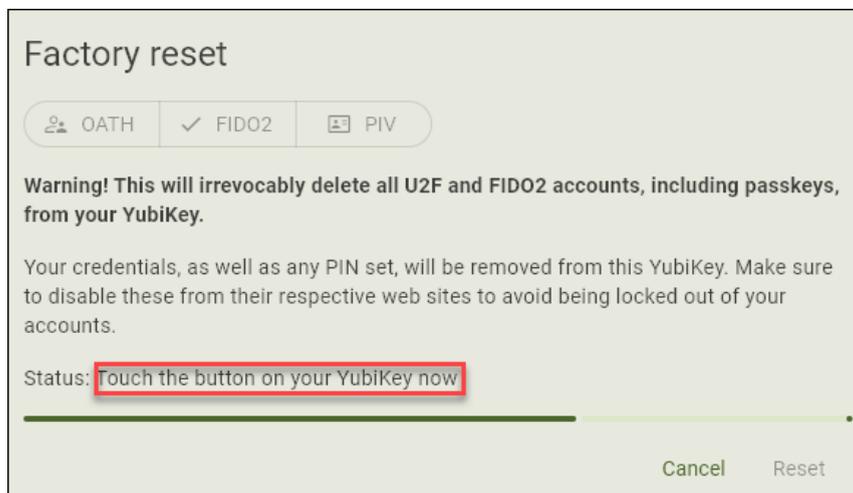
4. Select **FIDO2** and click **Reset**



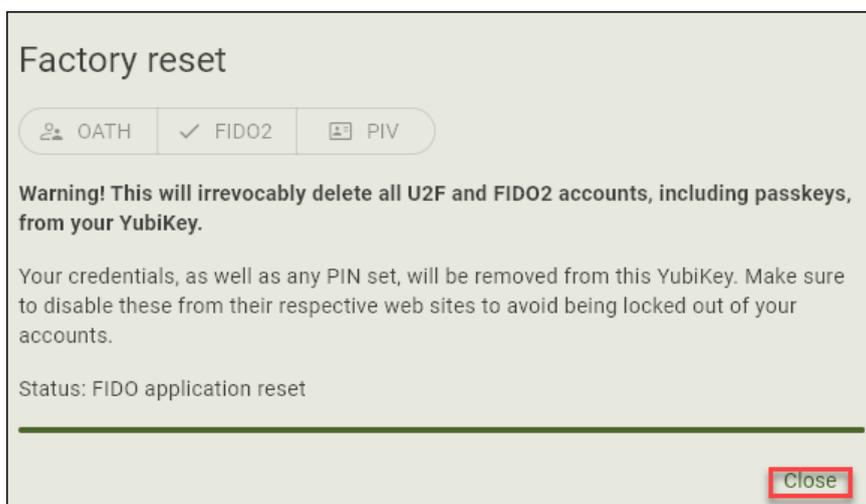
5. **Unplug** the YubiKey and **reinsert** it when prompted



6. **Touch** the YubiKey when prompted



7. Click **Close**

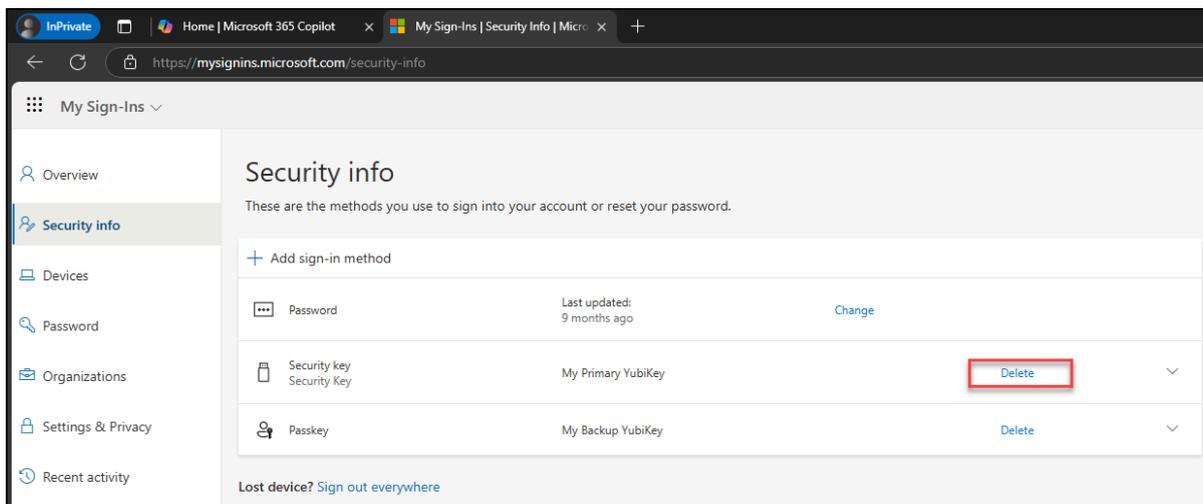


Using YubiKey Manager CLI

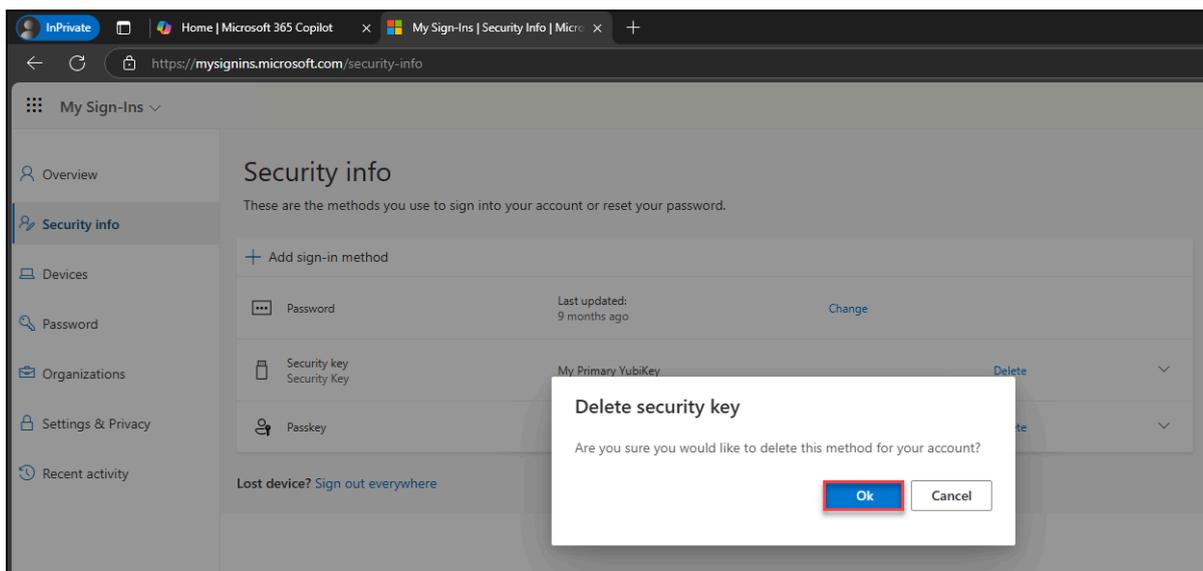
1. **Note:** On Windows 10/11, passkey management in YubiKey Manager CLI will need to be run as an administrator.
2. Launch a terminal
3. Navigate to the the path the YubiKey Manager CLI installation path
4. Run the following command: ***ykman fido reset***
5. Hit Enter
6. Remove and reinsert the YubiKey when prompted
7. Touch the YubiKey when prompted

Deleting a YubiKey from your Entra account

1. Navigate to <https://aka.ms/mysecurityinfo>
2. Under **Security Info**, click **delete** on the YubiKey you intend to remove



3. In the **Delete security key** prompt, Click **Ok**



4. The security key authentication method is no longer associated with the Entra ID account and can no longer be used to sign-in. If the YubiKey has not been reset, it cannot be used to sign-in to the account until it is registered again and associated with the account .