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# Multi-Factor Authentication

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OLLI Fullerton: CLECAT Club

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# Summary

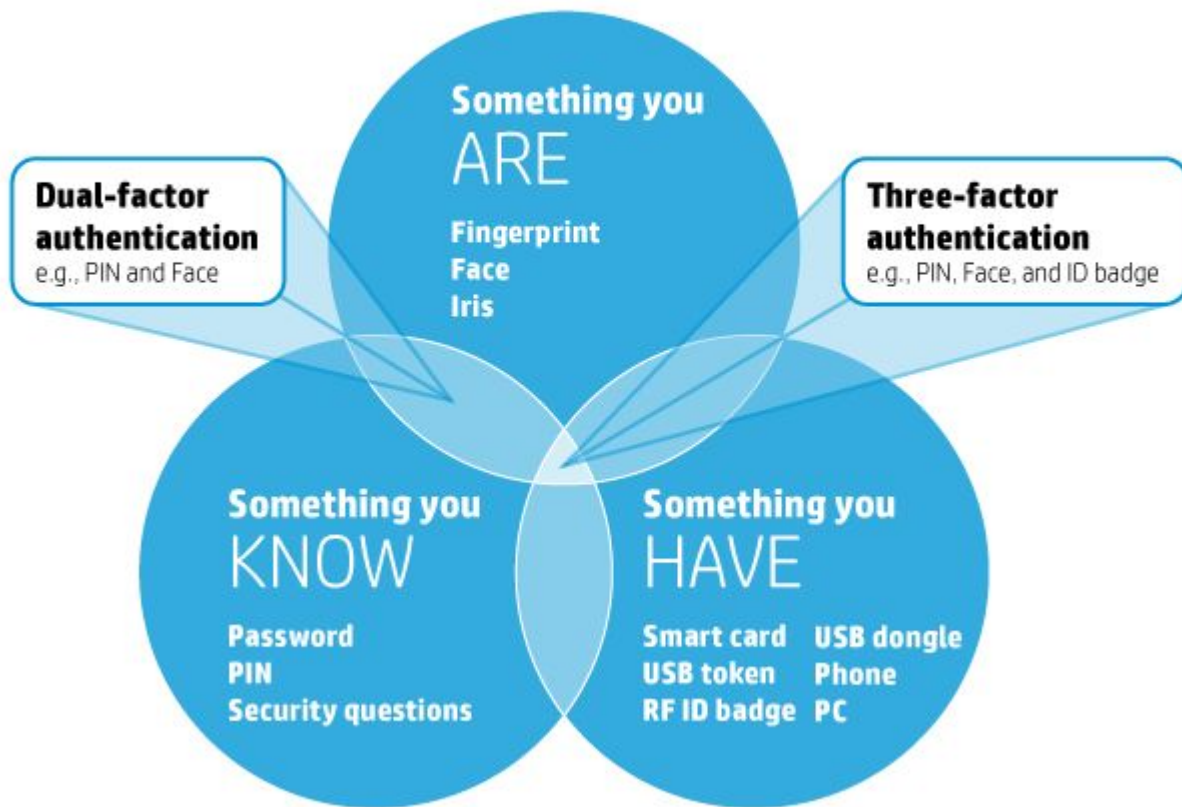
What is Multi-Factor Authentication?

Password Managers

Other security features

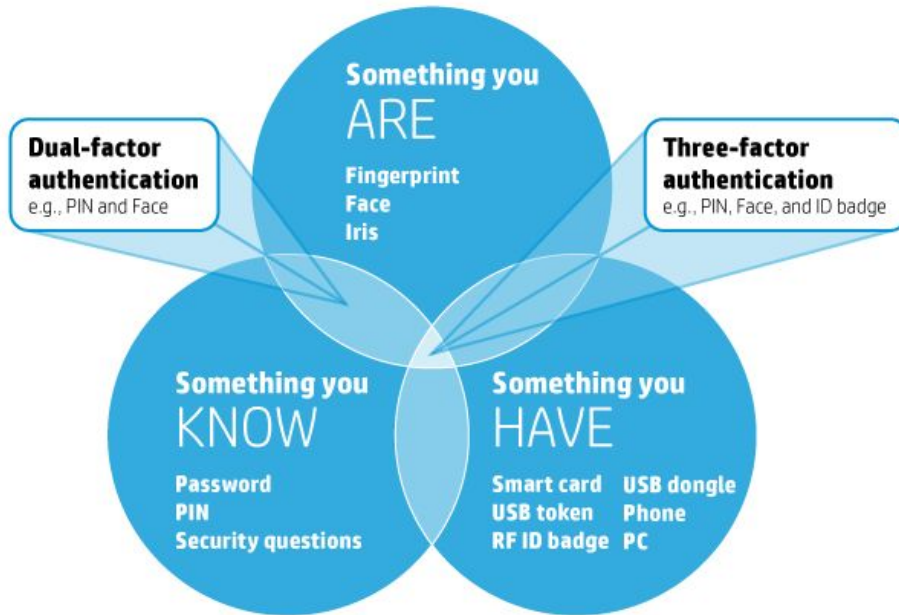
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# Multi-factor authentication



# Something you KNOW

## Multi-factor authentication



## Benefits

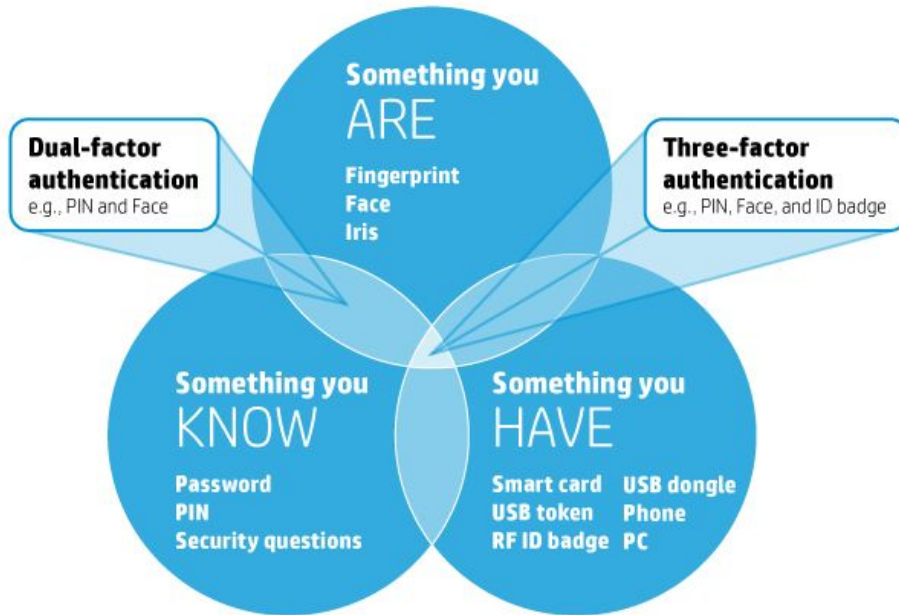
- Your knowledge remains with you.

## Risks of Breach

- Data breach
- Re-using passwords increases this risk.
- Social engineering
- Guessing/Brute force

# Something You HAVE

## Multi-factor authentication



## Benefits

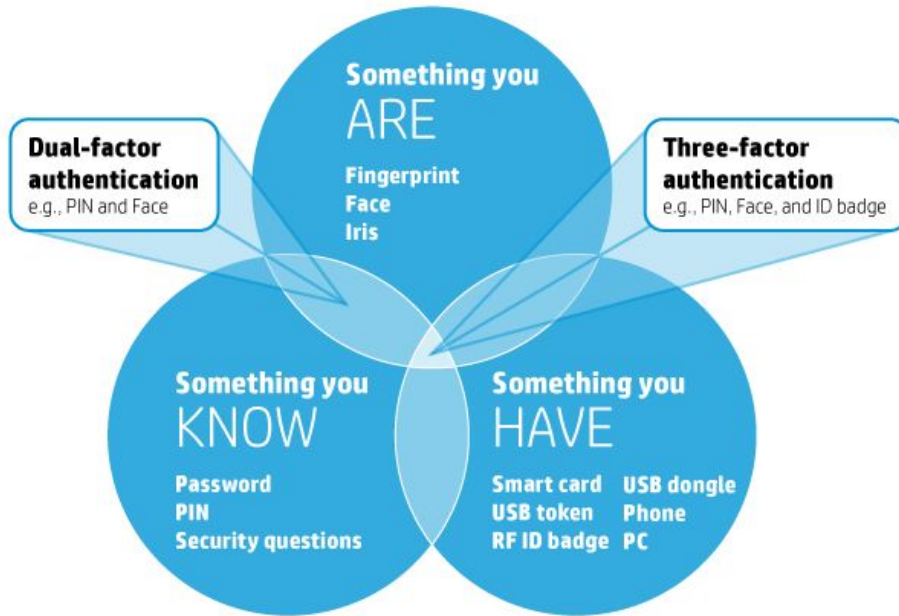
- Something you have is inaccessible to the distant data-breach hacker.

## Risks of Breach

- Theft of device, or it falling into the wrong hands.

# Something You ARE

## Multi-factor authentication



## Benefits

- Your biomarkers are much harder to replicate or steal than a password or device.

## Risks of Breach

- Your photograph
- Your identical twin?

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# MFA Options

1. Phone - SMS Text Message (least secure)
  2. Phone App - DUO, Google Authenticator, Authy
  3. Physical Key - YubiKey, RFID card
  4. Face/fingerprint
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# MFA Account Priority

1. Fullerton.edu (DUO)
  2. Bank
  3. Investment broker
  4. Email - The keys to the kingdom, can reset ALL your passwords
  5. Password manager
  6. Phone (pattern, fingerprint, code)
  7. Social media (Facebook, Twitter, etc) - Your online reputation.
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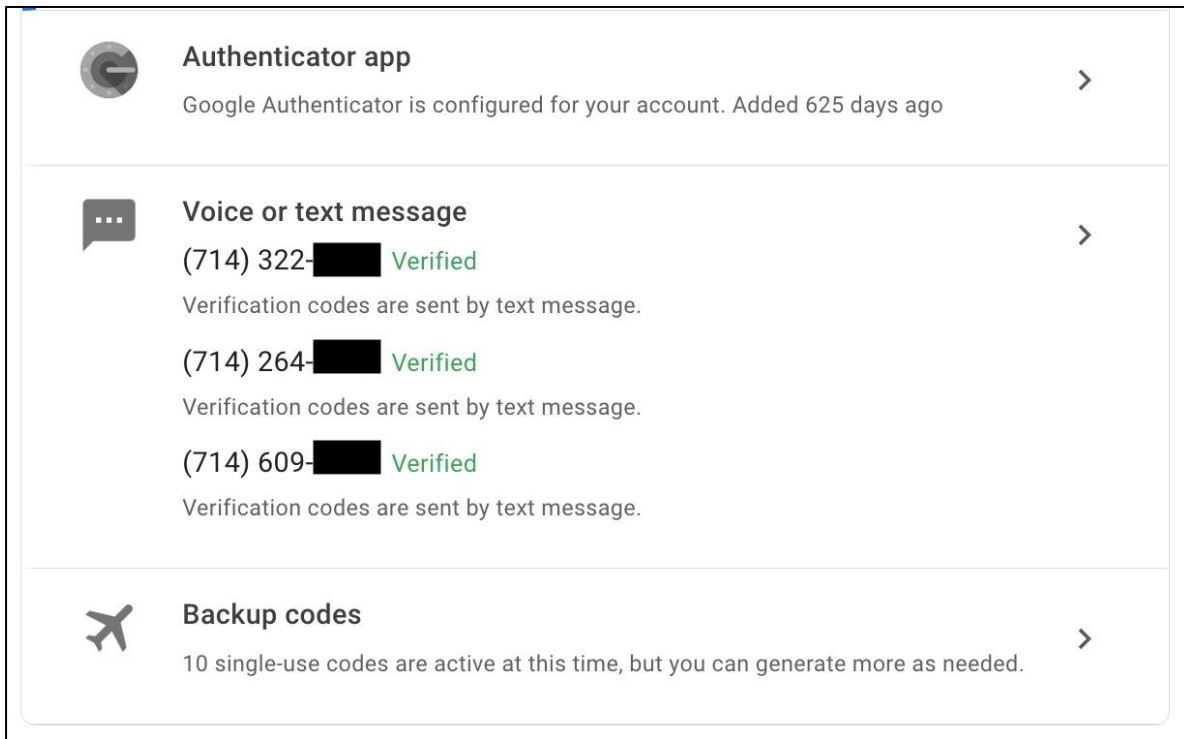
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# Don't lock yourself out!

- Losing the MFA device
  - Former employee had the 2FA device for company Facebook.
  - Ending employment or losing an ISP email address.
  - Shared accounts
  - Digital Estate Planning (CLECAT Oct 31, 2022)
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# Configuring Multiple MFA Methods on Google

- myaccount.google.com
- > Security
- > Signing into Google
- > 2 Step



The screenshot displays the 'Signing into Google' section of a Google Account's security settings. It lists three MFA methods:

- Authenticator app**: Indicated by a circular icon with a 'G'. The text states 'Google Authenticator is configured for your account. Added 625 days ago'.
- Voice or text message**: Indicated by a speech bubble icon. It lists three verified phone numbers, each with a 'Verified' status in green text:
  - (714) 322-████████ Verified
  - (714) 264-████████ Verified
  - (714) 609-████████ VerifiedEach number is followed by the text 'Verification codes are sent by text message.'
- Backup codes**: Indicated by an airplane icon. The text states '10 single-use codes are active at this time, but you can generate more as needed.'



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**fido**<sup>TM</sup>

**ALLIANCE**

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LastPass 

or

1Password 

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# Other Online Security

Password Managers

HTTPS

Incognito Mode

VPN

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# Password Managers

CLECAT presentation February 14, 2022 on

LastPass password manager

Link <https://vimeo.com/656744369/53a578749e>

1Password and many others are all better than not having one.

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# HTTPS

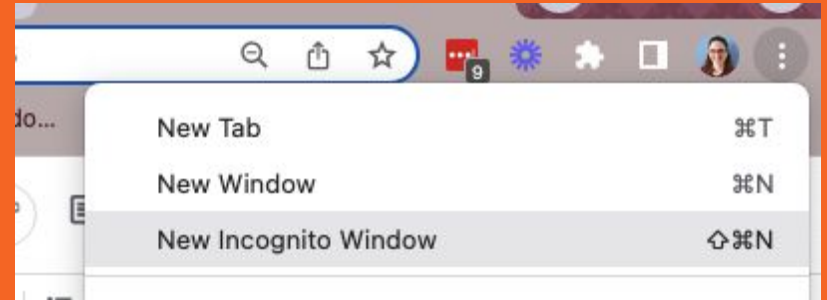
Hypertext transfer protocol secure





# Incognito Mode

Or Private Mode



# VPN

Virtual Private Network

[Top 10 VPNs of 2022](#)



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# Questions

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