What Is MFA and Why Use It?

Cybersecurity Awareness Month

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10/10/2023

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18+ years in IT

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Interests outside of IT:

Running, Biking,

Photography, Wolves

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Interests outside of IT:

Trail running with my dog,

Retro computers

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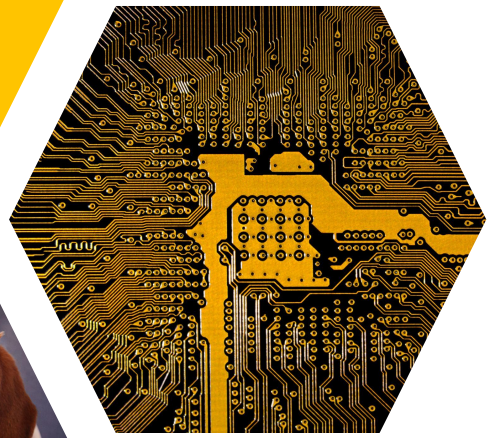
MFA - Agenda

- Introductions
- What is MFA?
- Authentication Methods
- Q&A
- Giveaway?!?



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Many Frustrating Annoyances

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Multi Factor Authentication

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So, what exactly is it called then?

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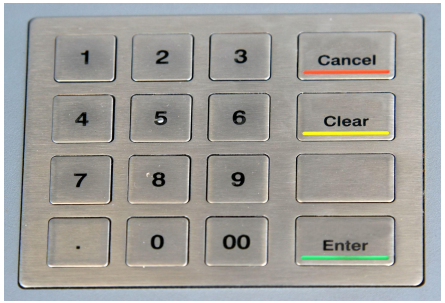
Multiple Factors

Something you know

Password/PIN



Something you have

Bank Card

Something you are

Fingerprint / FaceID

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First takeaway

Have a plan:
register multiple methods

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Authentication Method Examples

Bad: Password

123456

qwerty

password

iloveyou

Password1

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Authentication Method Examples

Bad: Password	Good: Password and...
123456	SMS
qwerty	
password	
iloveyou	Voice
Password1	

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Second takeaway

Never share your password or provide your multifactor authentication code to anyone, including IT. **Do not** approve authenticator notifications that you did not request.

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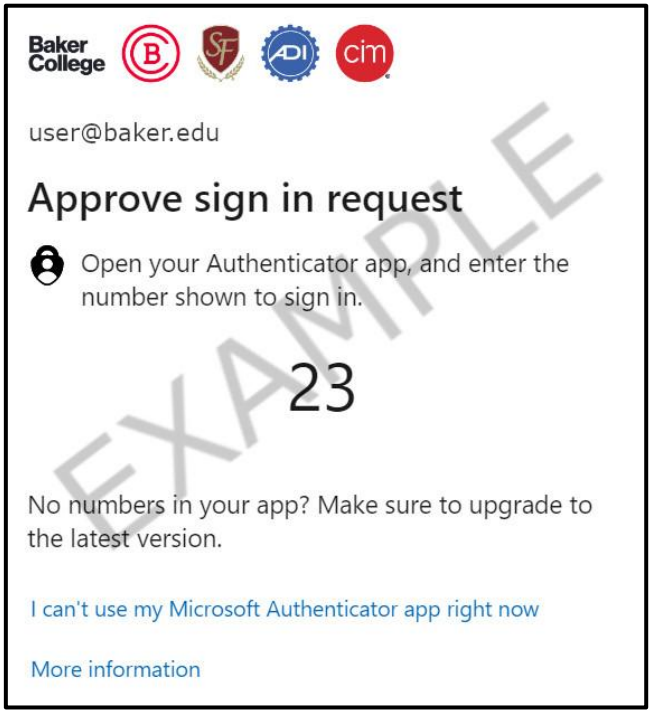
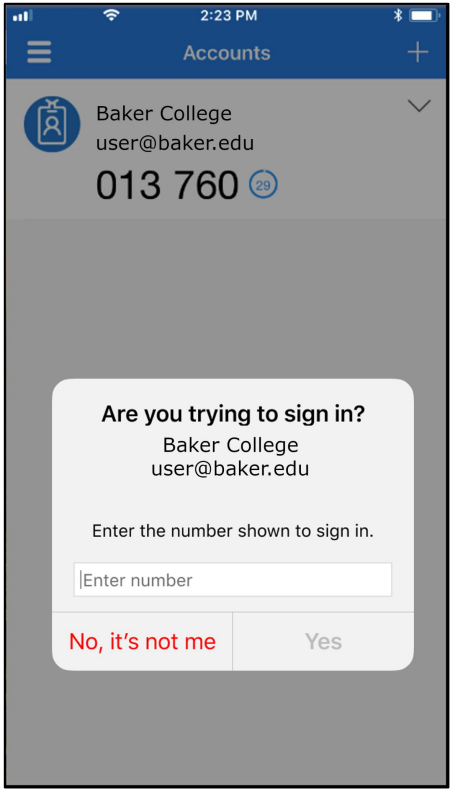
Authentication Method Examples

Bad: Password	Good: Password and...	Better: Password and...
123456	SMS	Authenticator (Push Notifications)
qwerty		
password	Voice	Software Tokens OTP
iloveyou		
Password1		

Number Matching Examples





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Passwordless Demo!

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Authentication Method Examples

Bad: Password	**Good:** Password and...	**Better:** Password and...	**Best:** Passwordless
123456 qwerty password iloveyou Password1	 SMS Voice	 Authenticator (Push Notifications) Software Tokens OTP	 Authenticator (Phone Sign-in) FIDO2 security key

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Security Key Demo!

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YubiKey 5C NFC

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YubiKey Bio

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The Future is...
Passkeys

Here’s hoping for passwords

to go away someday!

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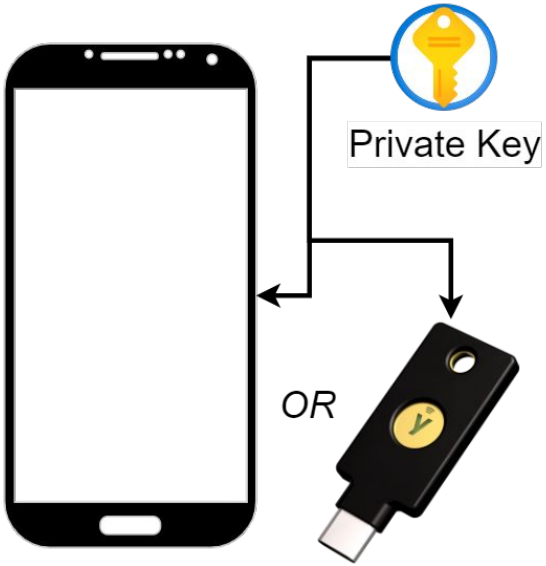
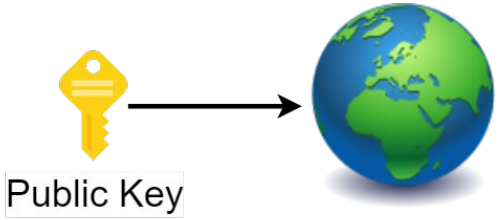
Registration



Registering a Mobile Device or Security Key creates a key pair. The private key remains securely on the device.
A public key is sent to the website/service.



If a website is breached, someone getting your public key is not enough to gain access to your account.
This is far superior to passwords being leaked.

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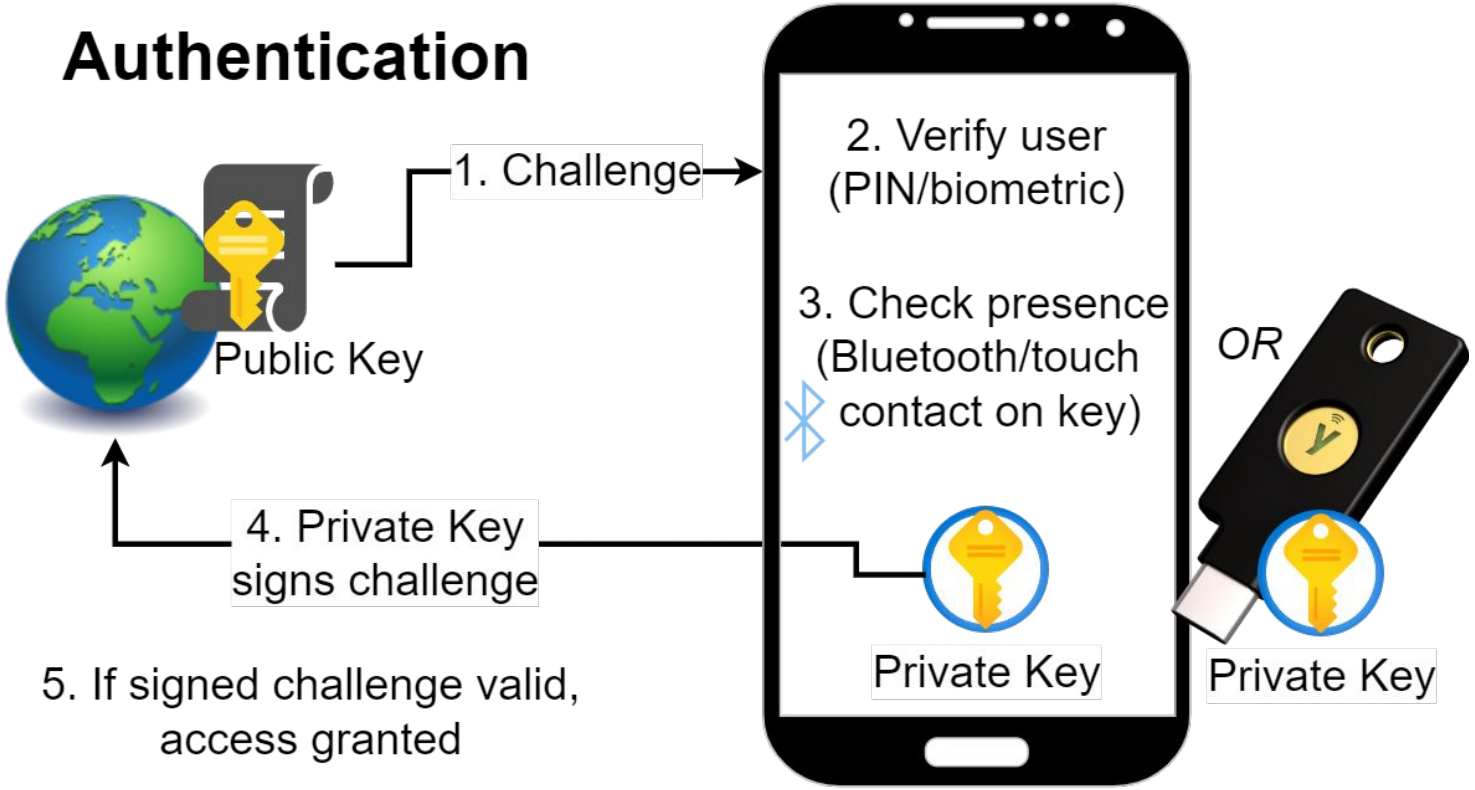
Authentication



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Helpful links

FIDO2 certified devices

https://fidoalliance.org/certification/fido-certified-products

Sites supporting YubiKeys

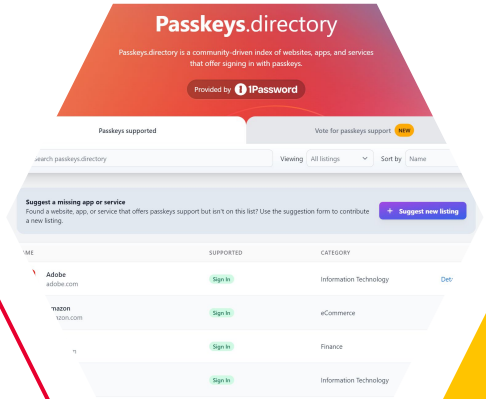
https://www.yubico.com/works-with-yubikey/catalog

Sites supporting MFA/2FA

https://2fa.directory/us

Sites supporting Passkeys

https://passkeys.directory



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Q&A

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Giveaway!

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Sorry! The giveaway was only during the live presentation.

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Thank you!

Be sure to join us:

"How to Recognize and Defend Against Phishing"
Wed, October 18, 2023 12pm-1pm
@ Owosso campus & virtual

"Tips to Keep Your Devices Secure"
Wed, October 25, 2023 12pm-1pm
@ Royal Oak campus & virtual

10/10/2023

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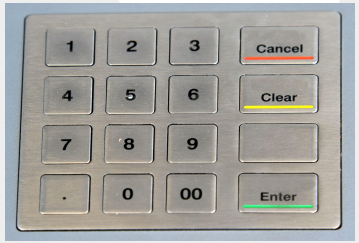

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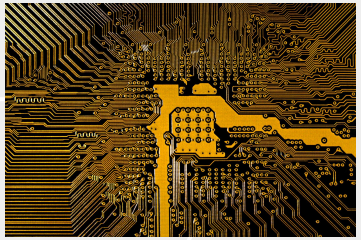
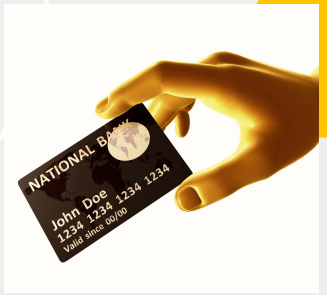


Neural Network - Royalty free use © Kaabregel



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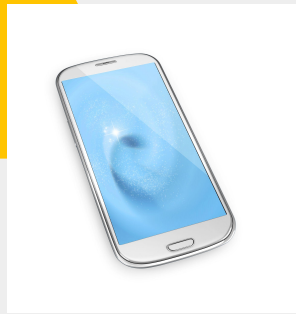

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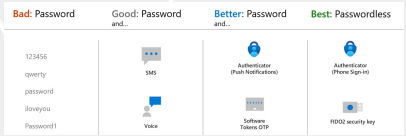

MFA methods © Microsoft