

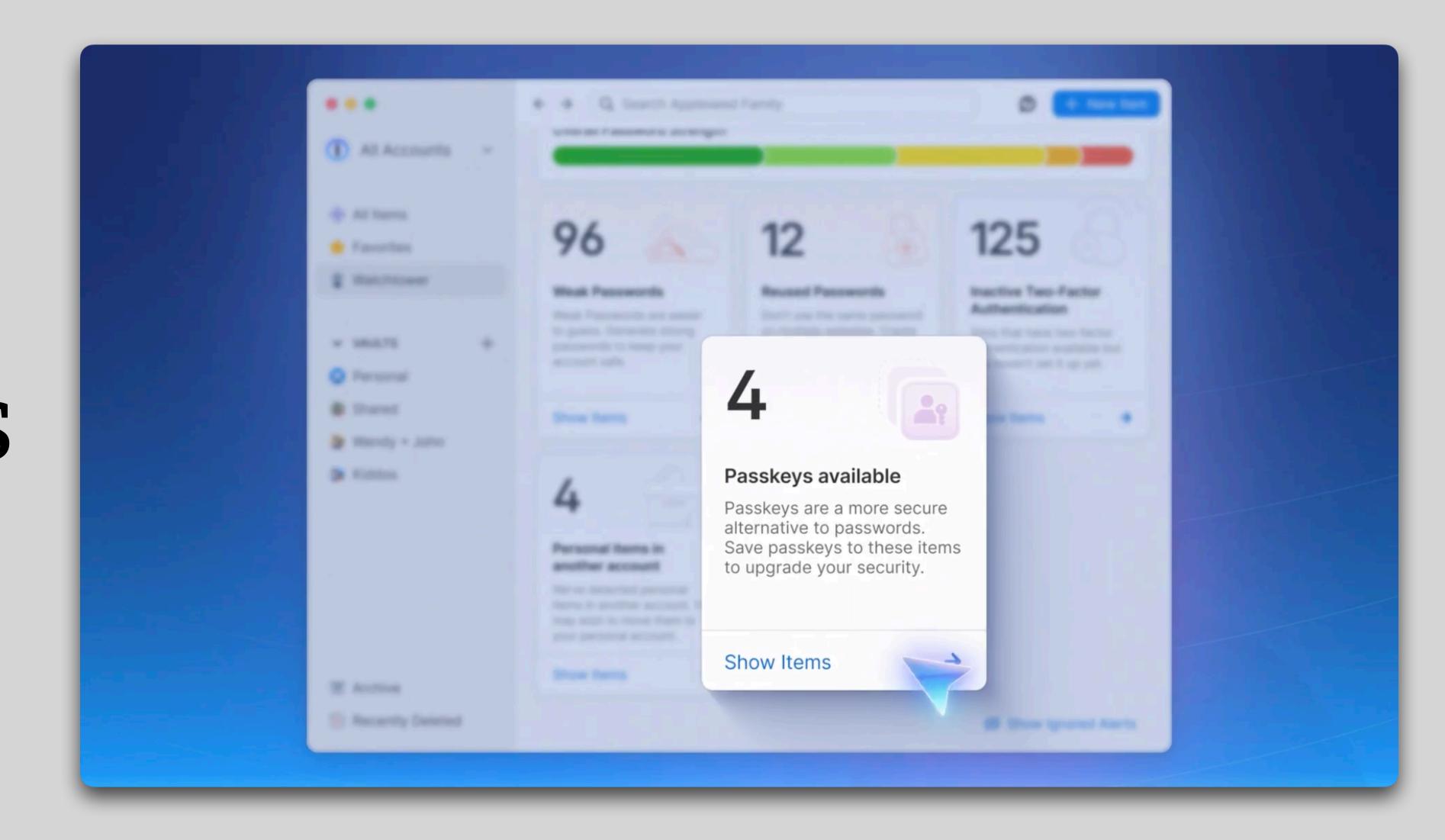
Tonight's Topics

- Passkeys!
 - In iOS & Mac
 - In 1Password
- Coming soon: A Nerd Abroad

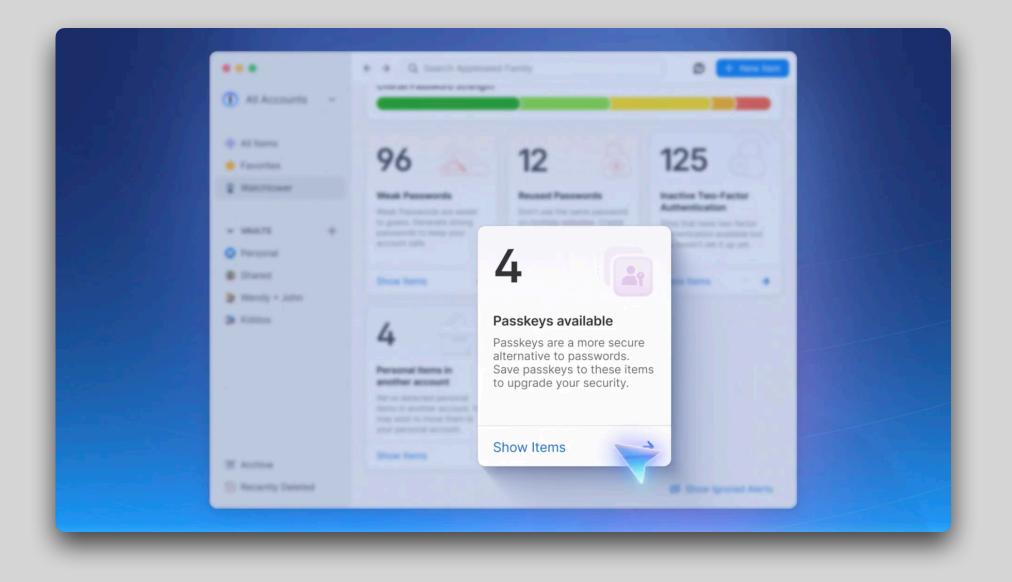
Remember!

- The presentation of tonight's meeting will soon be available to download from our Archives website, in both Keynote and PDF format
- Visit CoveAppleClubArchives.com

Passkeys



Or, how our long national nightmare with passwords might finally come to an end



Passwords

The bane of our existence

- 70-year old "technology" even older than Yours Truly!
- Universally hated
- Insecure in 1,000 different ways
- Most people (> 90%) have no password management regimen
- Even those of us who do (*ahem*, 1Password), it takes effort + expense to stick with it
- The industry, until now, has done almost nothing to fix it

2FA: putting lipstick on the pig

Nice try, but still not great

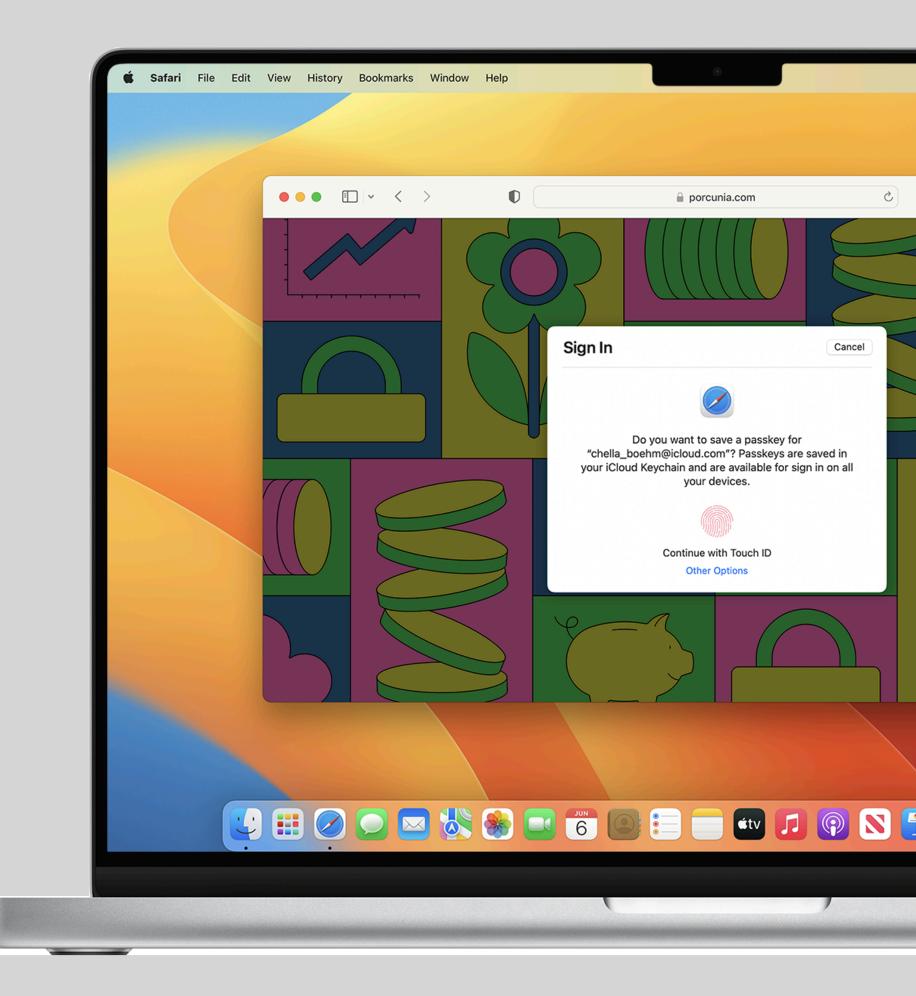
- 2-Factor Authentication
 - Requires something you know (a password), and something you have (a physical device)
- Usually a SMS text message code to your phone
 - Susceptible to SMS phishing, SMS cloning, SMS takeover attacks

- Can also use an offline authenticator app, or built-in 2FA authenticator in 1Password
- Best case: still more work, more hassle, larger attack surface for bad guys
- Just a transitional technology until Passkeys became widely practical

Passkeys

I shall sing for you the song of my people!

- A decade-long industry-wide initiative
- Developed by a huge consortium of industry giants, and the Web standards body, WC3
- Built on secure hardware like Touch ID, Face ID, other biometric security features
- Secured from all attack vectors that plague passwords and 2FA



Passkeys Secure Biometric Hardware **Device Lock** (Face ID, Touch ID) Public Keys Kept in **App or Website** Unique, Cryptographic Private Key **Not Sent Off-Device**

Passkeys

A radical upgrade in security — and easy to use

- No passwords to remember! Your face or fingerprint is your password!
- Since there's nothing to remember, there's nothing to forget!
- Nothing new to learn: one-step passkey creation and sign-in with Face ID or Touch ID, which you already have set up and know how to use!
- Passkeys are synced automatically with iCloud Keychain and/or 1Password
- Works alongside passwords: continue to use passwords on apps & sites not upgraded to passkeys yet; use passkeys where offered

How passkeys are better than passwords

Meet the new hotness

- Every passkey is unique: device & app/website combine private and public keys to create a universally-unique, strong passkey
 - Never guessable, and there's no password field to try to brute-force with a "credential stuffing" attack on the website
 - Never re-used, in the dictionary, in a pre-computed password table, or weak
- Safe from server leaks: because servers only keep public keys, servers are a less valuable target for hackers
- Safe from phishing: passkeys are intrinsically linked with the app or website they were created for, so people can never be tricked into using their passkey to sign in to a fraudulent app or website & prevents "social engineering" attacks

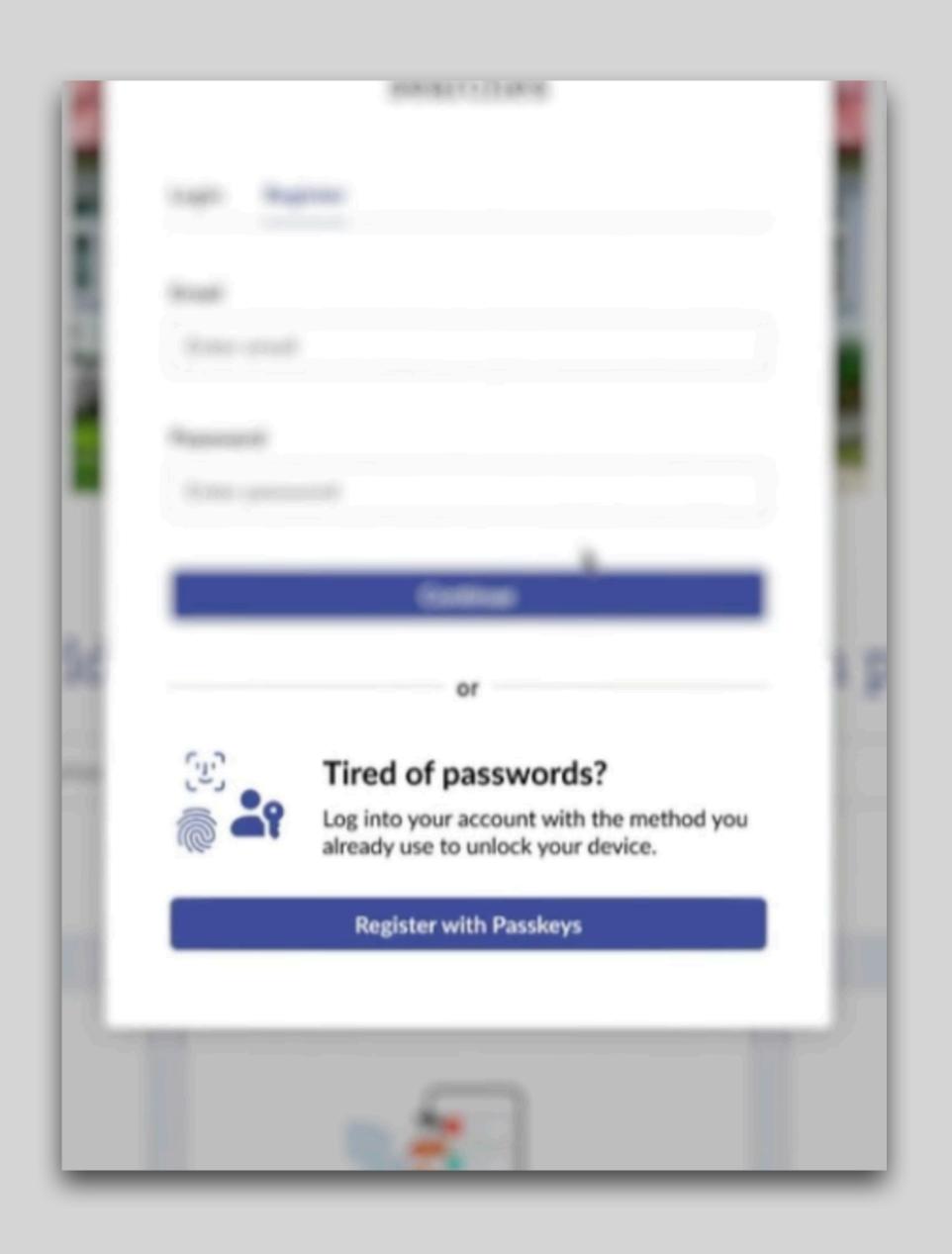
How passkeys are better than passwords You want this. You just don't know it yet.

- Secure storage: In iCloud Keychain and 1Password, passkeys are end-to-end encrypted
 - Face ID or Touch ID acts as the "bank vault door," providing the only unlock needed to use passkeys on any app or website
 - Neither Apple or 1Password can read them. Your private key (biometric signature in Face ID or Touch ID) locks them.
- **Private** keys are never sent off-device, and are secured on-device by the Apple Secure Enclave chip
- A passkey ensures a strong, private relationship between a person and your app or website

Passkeys: what's supported

Everything, pretty much

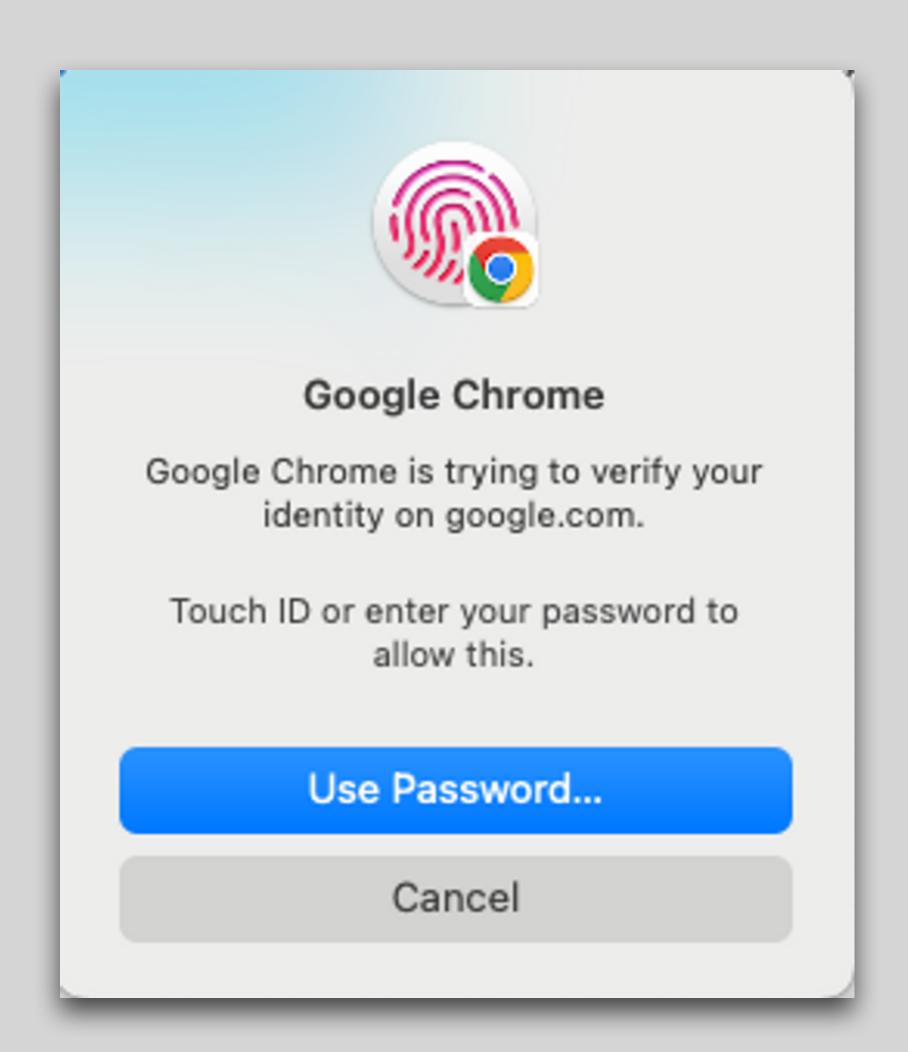
- Passkey support is built-in to the latest versions of:
 - iOS 17 and iPadOS 17
 - Safari on macOS 14 Sonoma
 - 1Password 8 for iOS, iPadOS & macOS
 - Google Password Manager on Android (ugh!)
 - Google Chrome web browser on Windows 10 (ugh!)
 - Microsoft Edge web browser on Mac or Windows (extra steps required)



Passkeys: where they work

A good start, with lots more coming

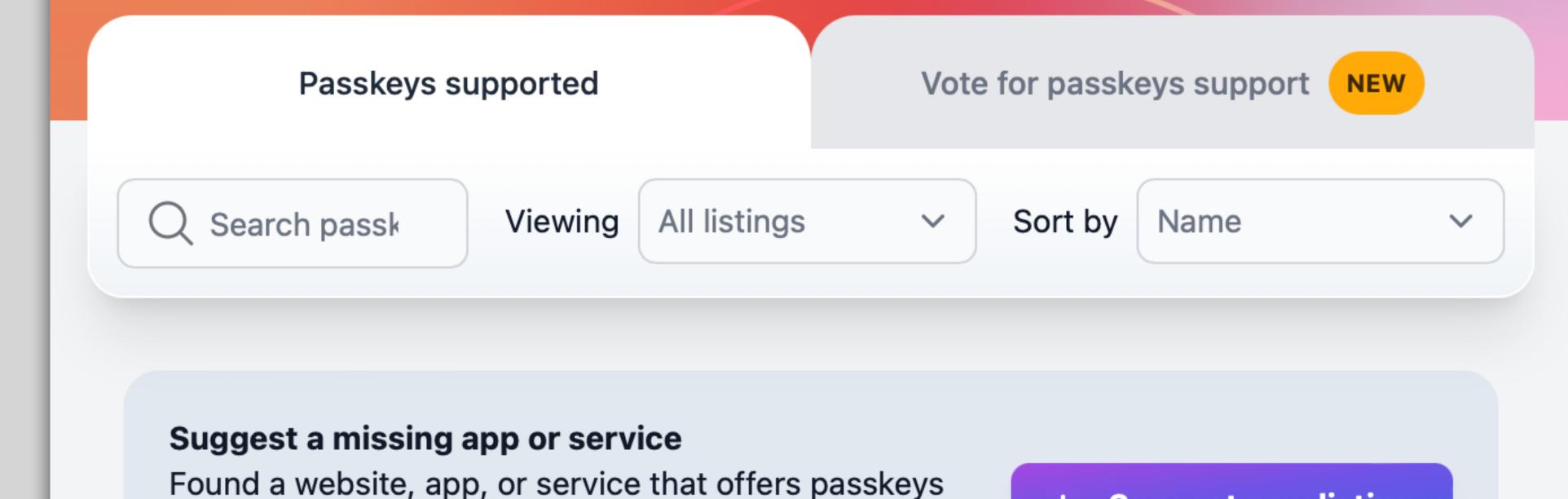
- Google go to g.co/passkeys to enable
- Amazon, Uber, CVS, TikTok, Ring, PayPal
- Passkeys.Directory Online listing of sites / apps with passkey support
- WebAuthn.io Demo site to test & practice!
- Finance, medical, other high-value "careful!" Sites will be slower to adopt, but they will get there



Passkeys.directory

Passkeys.directory is a community-driven index of websites, apps, and services that offer signing in with passkeys.

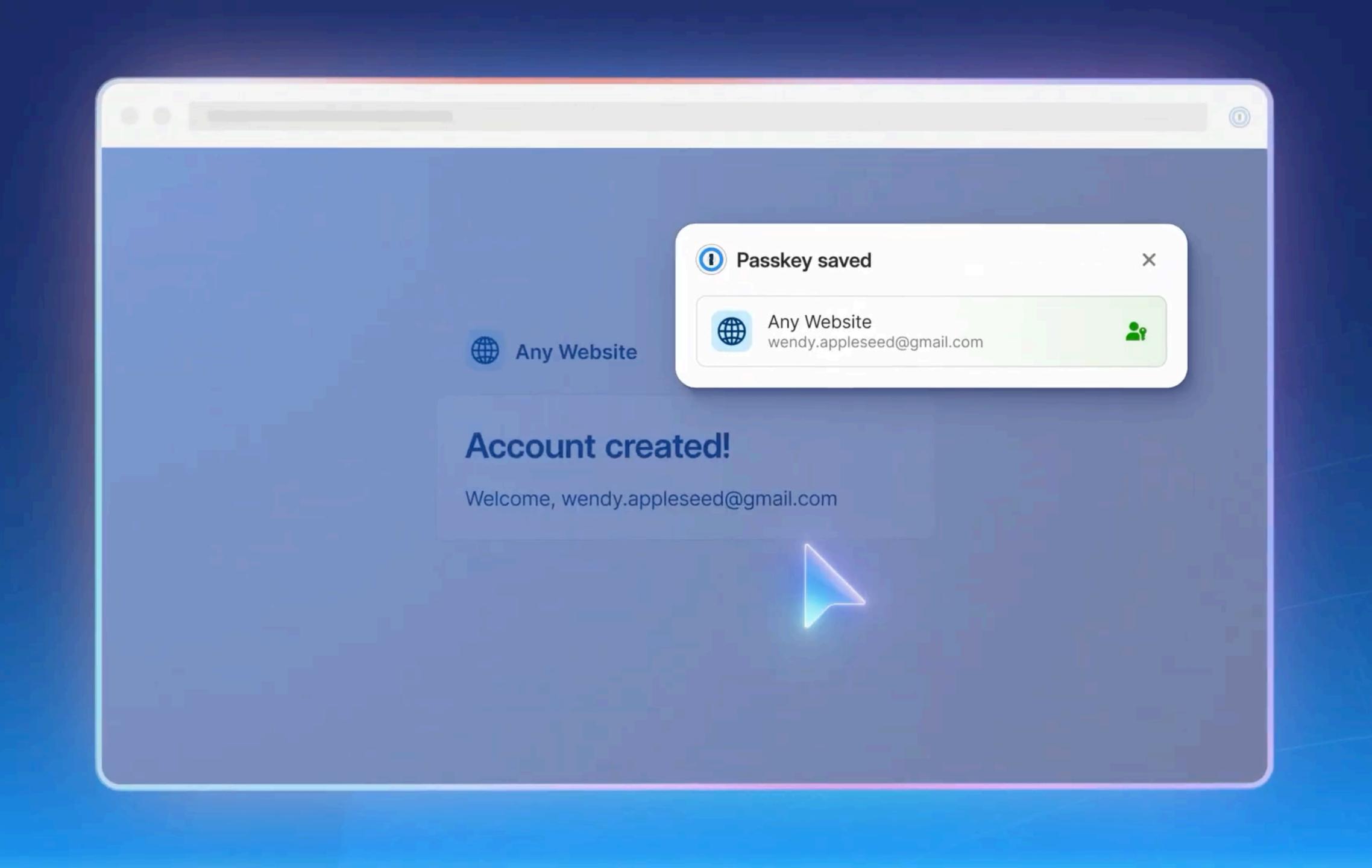
Provided by 1Password



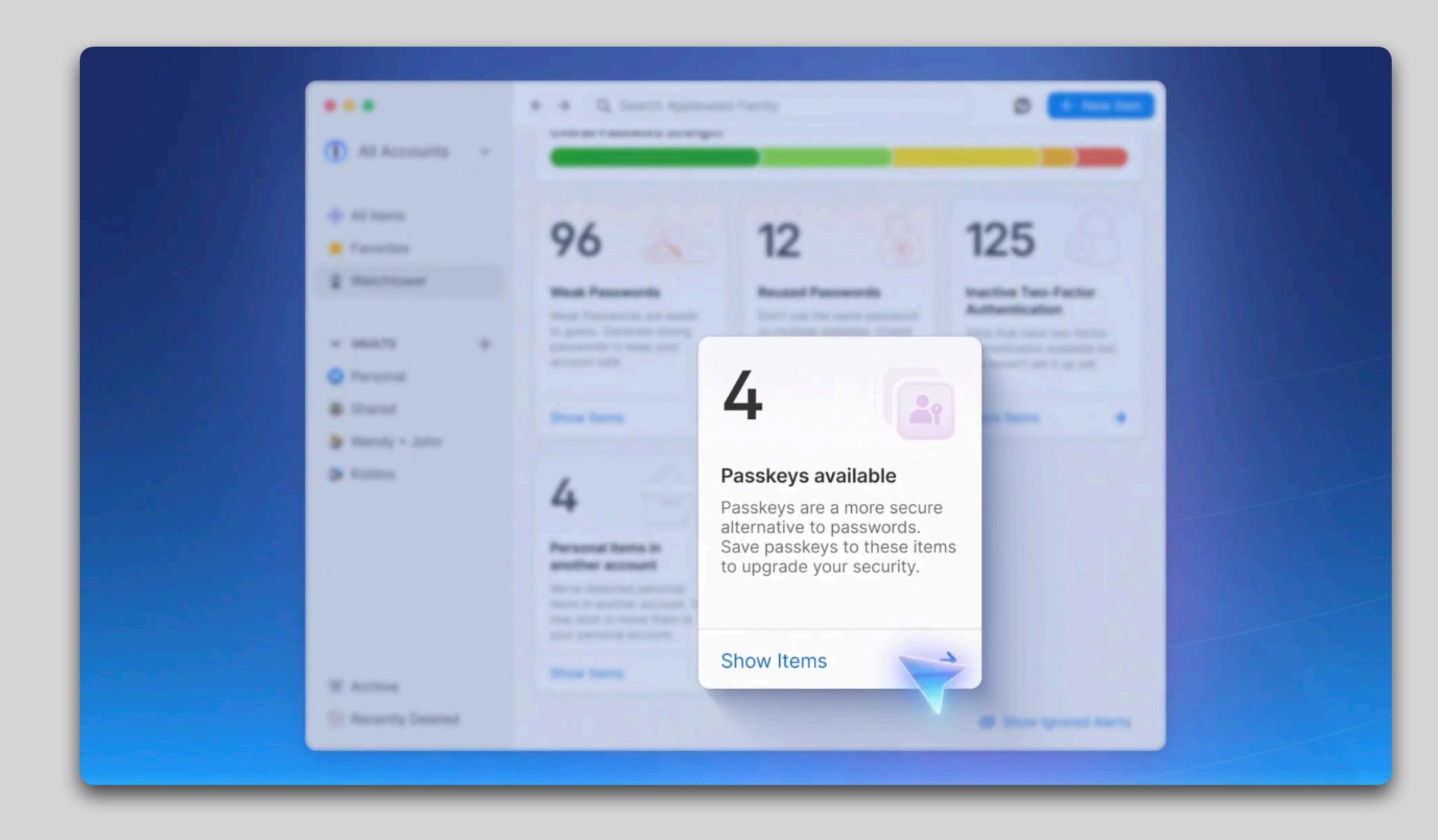
support but isn't on this list? Use the suggestion form

to contribute a new listing

Suggest new listing



Demo!



Upcoming meeting dates

All meetings begin at 7pm ET on Wednesday nights

- November 8:
 - How AirTags Saved the Day: A tale of a delayed bag, a seaplane, and a cruise ship
 - A nerd abroad, or cool/interesting/awesome tech Mike noticed on his trip to Japan this month
- November 22 Nope, Thanksgiving week!
- December 13

A Nerd Abroad: Sneak Peek

With apologies to Mark Twain

