Go Passwordless with Passkeys

A WebAuthn Developer Workshop

identiverse

#identiverse

Introductions

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Today’s Agenda

- Why are we here?
- What is a passkey?
- Do you already have MFA? Here’s what do to
- Evolve into passwordless - demo time!
- Developer Gotchas & Myths
- Key Takeaways
- Q & A

Why are we here?


it's been 14 years...
imgflip.com

pass·key *noun*

Passkeys are a replacement for passwords that provide faster, easier, and more secure sign-ins to websites and apps across a user's devices.

https://fidoalliance.org/passkeys/

Embraced by platforms – and credential providers…

Google

Microsoft

1Password

DASHLANE

bitwarden

...and online services

DocuSign Google mercari HYATT

CVSHealth KAYAK docomo

PayPal SK telecom shopify YAHOO! JAPAN

What is a passkey?

pass·key *noun*

Passkeys are a replacement for passwords that provide faster, easier, and more secure sign-ins to websites and apps across a user's devices.

https://fidoalliance.org/passkeys/

Let’s unpack that marketing definition a bit…

A passkey:

- Is any discoverable FIDO credential
- Raises the bar for both security and UX
- Is most commonly synchronized across a user’s devices

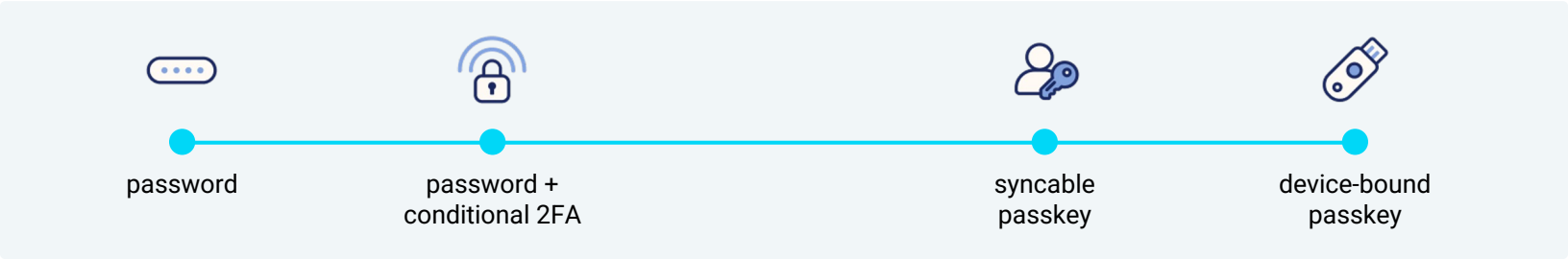
Synced Passkeys

A passkey that can be backed up and synchronized by the passkey provider across a user's devices.

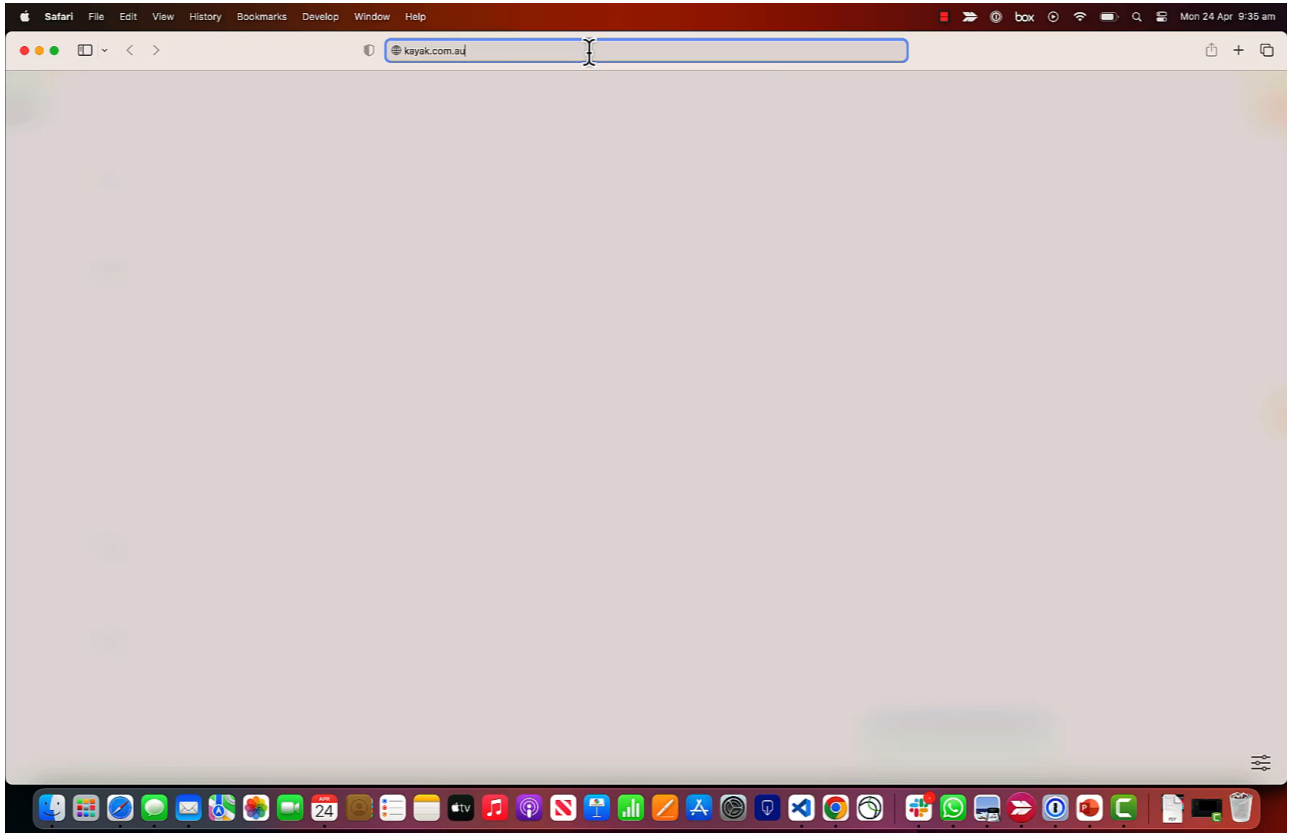
- A passkey provider might be a platform/OS vendor, or 3rd-party software such as a password manager.
- Facilitates new device bootstrapping and simplifies account recovery.
- Security of synced passkeys is the responsibility of the passkey provider.

But wait, don't I still need 2FA?

- 2FA was introduced to address the human-behavioural weaknesses associated with passwords leading to account takeover:
    - Simple, guessable or socially engineerable passwords
    - Password re-use
- FIDO credentials address these problems AND credential phishing



Let’s look at a passkey in action…



Are you...

...Already doing MFA?

- If you’re already using WebAuthn as a 2FA method, you’re all set to use passkeys!
- WebAuthn requests, without express disablement, can support passkey creation and login.
- This doesn't need to be an all or none scenario, in fact we recommend a rolling deployment.

...Not doing MFA at all?

If you don't, now is the time to cut over to passkeys:

- Offer more secure login covering 95%[1] of typical security requirements.
- Eliminate SMS expenses by removing SMS OTP entirely.
- Users are already comfortable with biometrics from using them with mobile apps.
- Users now bring their own hardware authenticators!

[1] https://techcommunity.microsoft.com/t5/microsoft-entra-azure-ad-blog/all-your-creds-are-belong-to-us/ba-p/855124

Evolve into passwordless…
and beyond!

Demo Time

Developer Gotchas & Myths

Developer Gotchas

- **Conditional UI fires a WebAuthn request on first load.**
  - Can make correlation of events difficult.
  - Conditional UI in general is still a work in progress.
- **Passkey Providers have to inject themselves into the DOM.**
  - Disabling JavaScript or extensions can cause some providers to be unable to operate.
- **There's limited ways to infer the type of passkey you'll receive before you receive it.**

Developer Myths

- **Passkeys are vendor-specific!** ❌
  - Vendors support passkeys, but don't own the standard.
  - Most users associate passkeys with Google, which can be good and bad.
- **Passkeys replace WebAuthn!** ❌
  - The WebAuthn standard covers the browser API that manages passkeys..
- **Passkeys are only for phones!** ❌
  - Passkeys can sync to devices of multiple form factors
  - They can also be device-bound
  - Imagine hybrid auth into an app on your TV…

Developer Myths, pt. 2

- **All passkeys are synced.** ❌
  - A hardware token can issue you a device-bound passkey.
- **I can't apply corporate policy with passkeys!** ❌
  - If you control the endpoint, you can control the passkey..
- **I can’t support passkeys without attestation!** ❌
  - Attestation can provide some assurances about authenticator identity, but the technology is more secure than typical password + 2FA techniques.
  - RP's in stricter regulatory environments can use existing out-of-band techniques for preventing passkey misuse.

So what’s next?

Key Takeaways

Passkeys are…

- Already being used at scale.
- Still phishing-resistant WebAuthn credentials.
    - Add features to reduce with account recovery the need for password resets.
- A superior alternative to MFA, and the means to move towards passwordless
- Easy to drop in and ready for browsers, especially if you're already using WebAuthn.

Resources

Learn more about adding passkeys to your site.

- For Developers:
  - https://passkeys.dev
  - https://webauthn.io
- For CXOs:
  - https://fidoalliance.org/passkeys/

Feel free to reach out to us!

Q & A

Thank you!