Highlight

Passkeys Compatibility: Which Platforms Support Passkeys?

Passkeys are now supported by iOS, macOS, Chrome and Android. Learn more about passkeys and their compatibility with major browsers and platforms.

Last updated: June 19, 2023

Apple previewed iOS 16, which was released in September 2022, during its developer conference. One fascinating feature of iOS 16 is Passkeys, which are digital credentials that can potentially eliminate passwords once and for all.

Passkeys is a marketing term for “multi-device FIDO credentials.” It allows users to create a credential (encryption key) on a device to sign up for a service, such as an e-

commerce site. The encryption key is also backed up to the user's Google Account or Apple ID to be used on another device.

It is very similar to how one would use password managers today to securely sign up and log in to a website, which is far more secure as the server only has a public key instead of a password.

Aside from Apple, Google also announced that they have brought passkey support to both Chrome and Android in October 2022. As Google, Microsoft and Apple committed to support Passkeys and to eliminate passwords together, it's the first time that we have a promising technology that not only is capable of eliminating passwords but is also easy to use and compatible with major platforms.

So besides iOS 16, how far are we from adopting Passkeys and eliminating Passwords? This article will look into the current compatibility state and supports of Safari (iOS), Chrome (Android, Google), and Firefox.

Compatibility of WebAuthn

Passkey relies on WebAuthn, a protocol that supports the use of Authenticator. An authenticator is something that can store a credential. There are 2 kinds of authenticators, namely platform authenticators and cross-platform authenticators. A platform authenticator (e.g., browsers) resides on the device, while a cross-platform authenticator (e.g., security keys like Yubikeys) can be attached to devices.

So why do we still need Passkeys support if we got WebAuthn already?

Because without Passkeys, a credential only lives on the same device (e.g., for Safari, credentials will be cleared along with the browsing history), which can be quite inconvenient for end-users. You can't log in to another platform (e.g. if your credential is created from iOS Safari, you can't transfer it to Android for logging in to the same site).

According to caniuse.com, WebAuthn is supported by all the latest major browsers. This means you can use the WebAuthn API without running into compatibility issues if you are only targeting modern browsers.

	Chrome/Edge	Safari	Firefox
WebAuthn	79 and onward	13 and onward	60 and onward
Platform Authenticator (e.g. Credential stored in Browser)	79 and onward	13 and onward	No (source 1)
Cross-Platform Authenticator (e.g. Credential stored in Yubikey, or 1Password Passkey)	79 and onward	13 and onward	60 and onward

Compatibility of Passkeys

iOS 16 is the first platform that supports Passkeys. Credentials could be stored in iCloud Keychain (or other services) and can be synced across devices.

Passkey could also let you sign in to another device running another platform without the credential leaving the original device. When users want to sign in on a new device,

they could simply use the device with the credential to scan a QR code generated on the target device. Technically, it is supported by FIDO2 CTAP2.

Passkey-supported browsers would also show an **autofill prompt** when you visit a login screen, which allows the end-user to select one of the credentials and then log in instantly. This feature depends on Client-side discoverable credential and Conditional mediation.

	Chrome/Edge	Safari	Firefox
Login to a nearby device by QR code	79 and onward (source 1, source 2)	13 and onward	No (source 1, source 2)
Sync Credentials across Devices	Toward the end of 2022 (source 1, source 2)	16 and onward (via iCloud Keychain)	No (source 1)
Autofill Prompt	To be shipped in 106 (source 1)	16 and onward	No (source 1)

Conclusion

Currently, iOS 16 and Safari deliver the best support for passkeys. The passkeys on iOS 16 are syncing via iCloud Keychain, and it is also usable on an Android phone via QR code and supports autofill to sign the end-user in instantly. Passkeys support from other vendors is expected to come by the end of 2022. We are looking forward to a future without passwords!

Latest articles

Industry

Top Three Types of User Authentication

User Authentication is basically a security check that confirms who a user is before allowing them to access a system. There are many methods and options for adding user authentication to an application. This post discusses the top 3 types of user authentication and how to pick the right one for your use case.

June 26, 2024

Industry

Ditch the Password, Secure Your Accounts with YubiKey: The Future of Authentication is Here

In today's digital world, our online identities are more important than ever. Protecting them with strong passwords feels like a constant, uphill battle. But what if there was a better way? Enter the YubiKey, a powerful hardware authentication device that offers unmatched security and convenience.

February 9, 2024