yubico

YubiKey for Mobile

Securing mobile users with strong two factor authentication while reducing IT costs.

Growing mobile usage exposes security risks

Mobile apps designed to run on smartphones, tablets and other mobile devices are steadily on the rise. In fact, 79% of internet use is predicted to be on mobile in 2018.[1] With billions of stolen passwords and usernames available on the black market combined with rampant phishing scams, two-factor authentication (2FA) is a must-have feature on mobile.

As repositories of stolen usernames and passwords grow, it is becoming a priority for service providers, from banks to online retail, to healthcare providers, to enable 2FA to protect user access via mobile.

2FA via Mobile SMS is not Secure

Many organizations have initially enabled 2FA for users by using the phone to deliver authentication codes and serve as a second factor, but mobile SMS is not a trusted second factor any longer.[2] Social engineering scams now often target SMS messages[3] to route to other devices and port the second factor to a mobile device in the hands of a criminal.

And for a legitimate user who has lost or upgraded their mobile device, re-enrollment to all of their mobile apps using SMS-based authentication, is not a sufficiently secure process and is also a cumbersome often involving multiple steps. This leads to a high volume of password-related helpdesk calls which is the number one IT cost for an organization.

For these reasons, in order to do secure mobile login, it is important to have a second factor other than a phone and involves establishing a trusted relationship between the phone and apps. Users gain an easy, seamless experience with reduced calls to the IT helpdesk which reduces support costs.
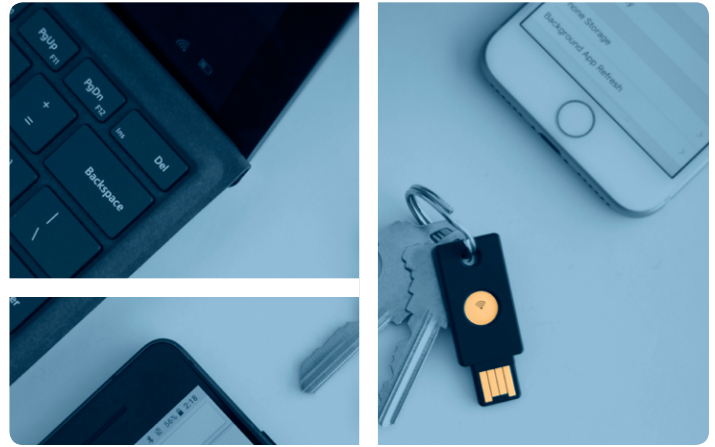
The YubiKey secures the leading mobile platforms across iOS, Android and Windows 10.

The YubiKey offers secure 2FA for all leading mobile platforms. The YubiKey is designed to provide strong authentication and a root of trust for both the phone and the computer and provides a faster, more secure alternative to authentication using SMS codes and authentication mobile apps.

The YubiKey makes it easy to deploy strong, scalable authentication that eliminates account takeovers from phishing attacks. And, with a secure and easy way to help users enroll to their mobile app, and using step-up authentication while in the app for specific actions, the YubiKey significantly enhances security and reduces IT support costs.

The YubiKey is a hardware-based solution that:

- Offers multiple authentication and cryptographic protocols including FIDO Universal 2nd Factor (U2F), PIV-compatible Smart Card, and Yubico OTP to protect employee access to computers, networks, and online services with just one touch

- Works across leading mobile platforms and major operating systems including Microsoft Windows, Mac OS X, Android, and Linux, as well as leading browsers

- Available in a choice of four form factors that enable users to connect via USB or NFC

YubiKeys deployed:

Google 190,000+

facebook 50,000+

salesforce 35,000+

[1] https://www.impactbnd.com/blog/mobile-marketing-statistics, [2] NIST Special Publication, https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-63b.pdf, [3] See SKO 2018 deck, slide 7. German Banks lose money - https://www.theregister.co.uk/2017/05/03/hackers_fire_up_ss7_flaw/

YubiKey: Proven, easy-to-use security for mobile apps that makes being secure effortless

Secure enrollment for in-house and consumer-facing mobile apps

- The YubiKey stores the authentication secret on a secure element hardware chip. This secret is never transmitted and therefore cannot be copied or stolen, allowing for complete defense against phishing.

Flexible step-up authentication for high assurance transactions

- Once a user has verified their identity to the mobile app during enrollment, the YubiKey can allow users to authenticate their identity again for key transactions, such as transferring funds above a threshold amount.

Reduces IT costs

- The YubiKey dramatically reduces the number one IT support cost—password resets—which cost Microsoft over $12M per month.[4]

- By switching from mobile OTPs to YubiKeys, Google reduced password support incidents by 92% because YubiKeys are more reliable, faster, and easier to use.[5]

- In the event of an organization using mobile devices as a second factor, replacement costs are high if a user loses their device or it is stolen. In contrast, replacing a YubiKey is far more cost efficient and fast.

Easy to use, fast, and reliable

- Users don't need to install anything—customers or employees simply register their own YubiKey, enter their username and password as usual, and plug in and tap the YubiKey when prompted.

- The YubiKey NEO with NFC capabilities is able to communicate seamlessly with mobile devices over NFC and USB-A. The YubiKey 4 Series also work with various Android tablets and Windows Surface devices that accept a USB-A or USB-C connection.

- YubiKeys are made in the USA and Sweden to precise durability and quality standards. The YubiKey 4 Keychain / Nano, and NEO are crush-resistant and waterproof.

[4] "Saying Goodbye to Passwords," Alex Simons, Manini Roy, Microsoft Ignite 2017
[5] Security Keys: Practical Cryptographic Second Factors for the Modern Web, Google Inc.

Mobile Device	NFC	Non NFC
iOS - iPhone *New* (enabled with the Yubico Mobile SDK for iOS)	iPhone 7+ YubiKey NEO	iPhone 6 or lower iPad QR Code
Android - Smartphone & Tablet	YubiKey NEO	YubiKey 4C YubiKey 4C Nano
Windows 10 - Surface Tablet	YubiKey NEO	YubiKey 4 YubiKey 4 Nano YubiKey 4C YubiKey 4C Nano

Yubico Delivers Strong 2FA Across Leading Mobile Platforms. Rapidly integrate 2FA into your mobile apps for greater security.

Easy to deploy

- IT can deploy YubiKeys in days, not months. A single key can access several modern and legacy systems, which eliminates the need for separate keys or extra integration work.

Trusted authentication leader

- Yubico is the the principal inventor of the U2F and FIDO2 authentication standards adopted by the FIDO alliance and was the first company to produce the Security Key by Yubico that incorporates both U2F and FIDO2 support.

- YubiKeys are deployed in eight of the top ten global technology companies, four of the top ten US banks, and two of the top three global retailers.

- YubiKeys are produced in our offices in the USA and Sweden, maintaining security and quality control over the entire manufacturing process.

Yubico Mobile SDK for iOS:
- Enable rapid 2FA integration for mobile apps on iOS
- Effectively secure enrollment to in-house and consumer apps
- Deliver a seamless user experience