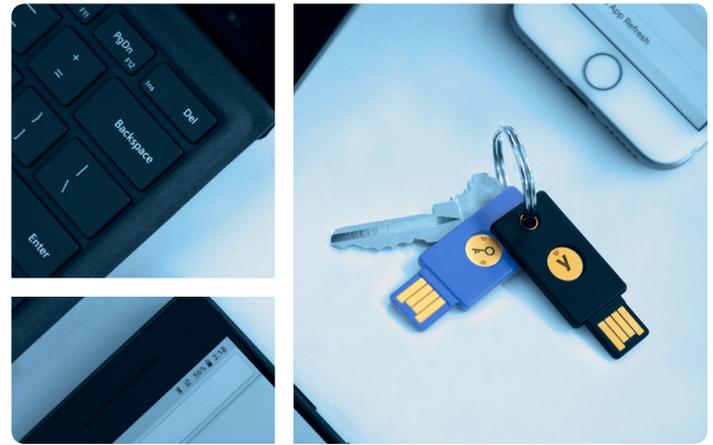




## YubiKey for Mobile

Securing mobile users with strong 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, over 80% of mobile minutes is spent on mobile apps.

With billions of stolen passwords and usernames available on the black market, combined with rampant phishing scams, strong authentication 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 two-factor authentication (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 no longer considered a trusted second factor. Social engineering scams now often target SMS messages to route to other devices and thereby port the second factor to a mobile device in the hands of a criminal. And for legitimate users who have 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 cumbersome for users 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 ensure secure mobile login, it is important to have a second factor other than a phone and to establish a trusted relationship between the phone and apps.

### The YubiKey secures the leading mobile platforms across iOS, Android, and Windows 10

The YubiKey offers secure authentication for all leading mobile platforms. The YubiKey is designed to provide authentication and a root of trust for both mobile devices and computers and provides a faster, more secure alternative to authentication using SMS codes and mobile apps.

The YubiKey makes it easy to deploy strong, scalable authentication that eliminates account takeovers from phishing attacks. By providing a secure and easy way for users to enroll to their mobile app, and use step-up authentication, the YubiKey significantly enhances security and reduces IT support costs.

### The YubiKey is a hardware-based solution that:

- The YubiKey 5 NFC offers multiple authentication and cryptographic protocols including FIDO2, PIV-compatible smart card, and Yubico OTP, and is available with USB-A and NFC to protect employee access to computers, networks, and online services with just one touch or secure tap-and-go.
- The Security Key NFC by Yubico supports the U2F and FIDO2 authentication protocols, and is available with USB-A and NFC to secure hundreds of U2F and FIDO2 compatible services with just one touch or secure tap-and-go.
- Works across leading mobile platforms and major operating systems including Microsoft Windows, macOS, Android, and Linux, as well as leading browsers.



YubiKeys  
deployed in:

9 of the top 10  
global technology  
companies

4 of the top 10  
U.S. banks

2 of the top 3  
global retailers

<sup>1</sup> <https://www.smartinsights.com/mobile-marketing/mobile-marketing-analytics/mobile-marketing-statistics/> July 2018 <sup>2</sup> NIST Special Publication, <https://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-63b.pdf>

<sup>3</sup> The Security Key by Yubico will not work with the LastPass app. Users are advised to consider the YubiKey 5 NFC.

# 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 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 be used for step-up authentication for key transactions, such as transferring funds above a threshold amount.

## Reduces IT costs

- The YubiKey dramatically reduces the primary IT support cost—password resets—which cost Microsoft over \$12M per month.
- By switching from mobile OTPs to the YubiKey, Google reduced password support incidents by 92% because the YubiKey is more reliable, faster, and easier to use.
- 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 YubiKey, enter their username and password as usual, and plug in and tap the YubiKey when prompted.
- YubiKeys are made in the USA and Sweden.
- The YubiKey 5 NFC, YubiKey 5 Nano, and the Security Key NFC by Yubico are crush-resistant and water-resistant.

## Easy to deploy

- IT can deploy the YubiKey in days, not months. A single key can access multiple modern and legacy systems.

## Trusted authentication leader

- Yubico is 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 Series by Yubico that incorporates both U2F and FIDO2 support.
- The YubiKey is 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 iOS SDK:

- Enable rapid integration of the YubiKey for mobile apps on iOS
- Effectively secure enrollment to in-house and consumer apps
- Enable step-up authentication for sensitive transactions
- Deliver a seamless user experience

For more information on the Mobile iOS SDK, go to: <https://www.yubico.com/why-yubico/for-developers/>

<sup>4</sup> "Saying Goodbye to Passwords," Alex Simons, Manini Roy, Microsoft Ignite 2017

Security Keys: Practical Cryptographic Second Factors for the Modern Web, Google Inc.

**About Yubico** Yubico sets new global standards for easy and secure access to computers, servers, and Internet accounts. Founded in 2007, Yubico is privately held with offices in Australia, Germany, Singapore, Sweden, UK, and USA. Learn why nine of the top 10 internet brands and millions of users in more than 160 countries use our technology at [www.yubico.com](http://www.yubico.com).

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