

# FIDO, Federation & Facebook Social login





Derek Hanson  
Director of Solution Architecture  
and Standards

yubico

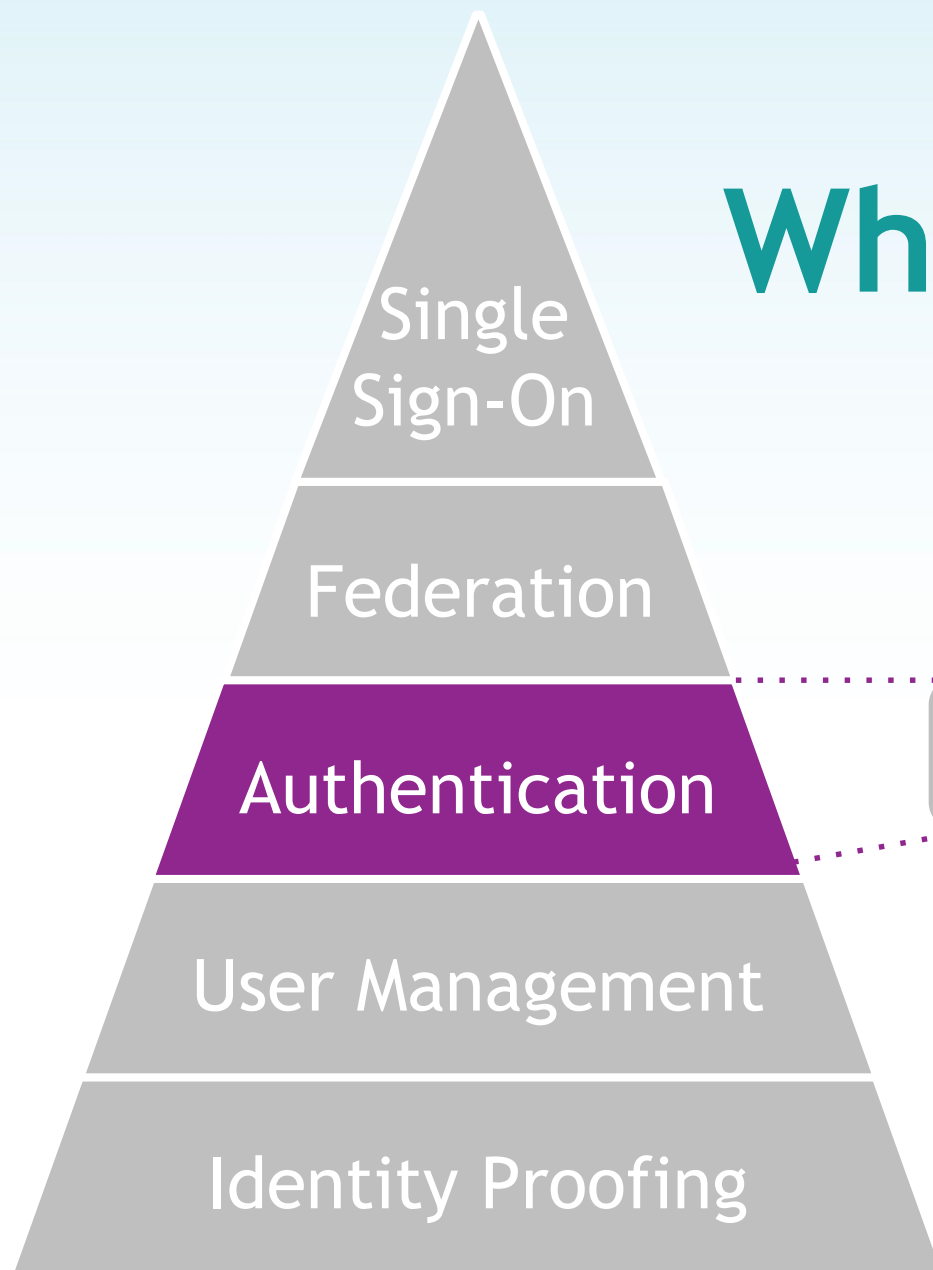
# AGENDA

- FIDO U2F: A strong second-factor
- U2F and Federation
- Facebook Integration & Social Login

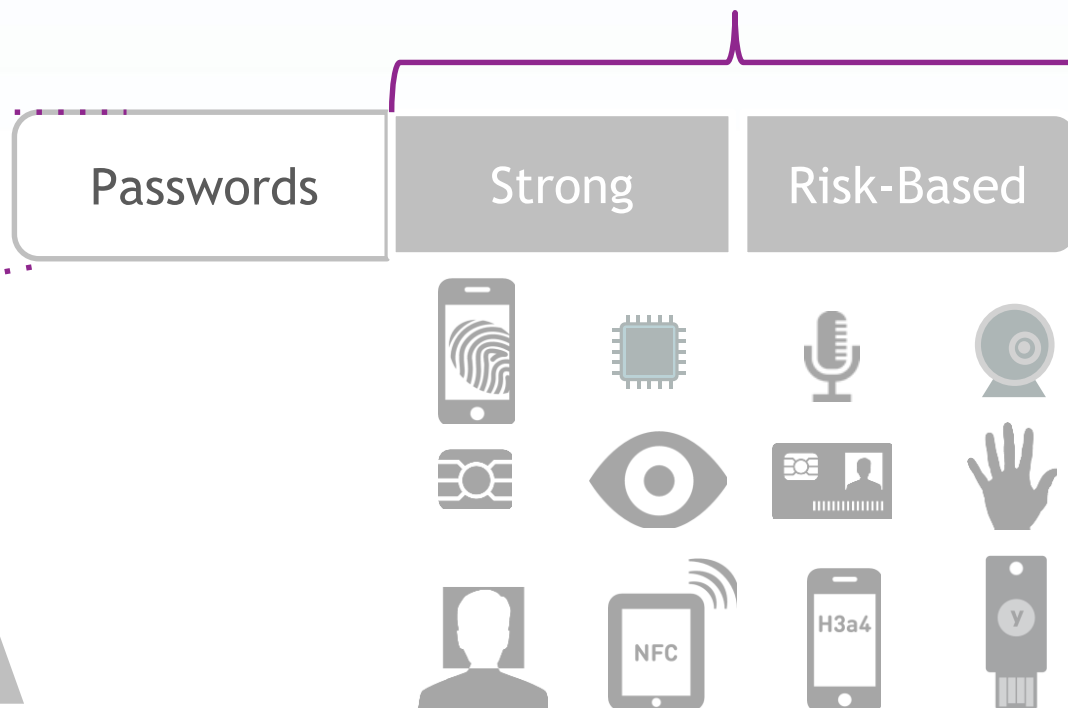
# Why FIDO?

- **Simple**, single gesture authentication
- **Scalable**, one device works across an unlimited number of sites
- **Secure**, protects against phishing and man-in-the-middle attacks
- **Privacy** preserving, no secrets shared between sites
- **Open Standard**, platform/browser support, no 3rd-party protocol

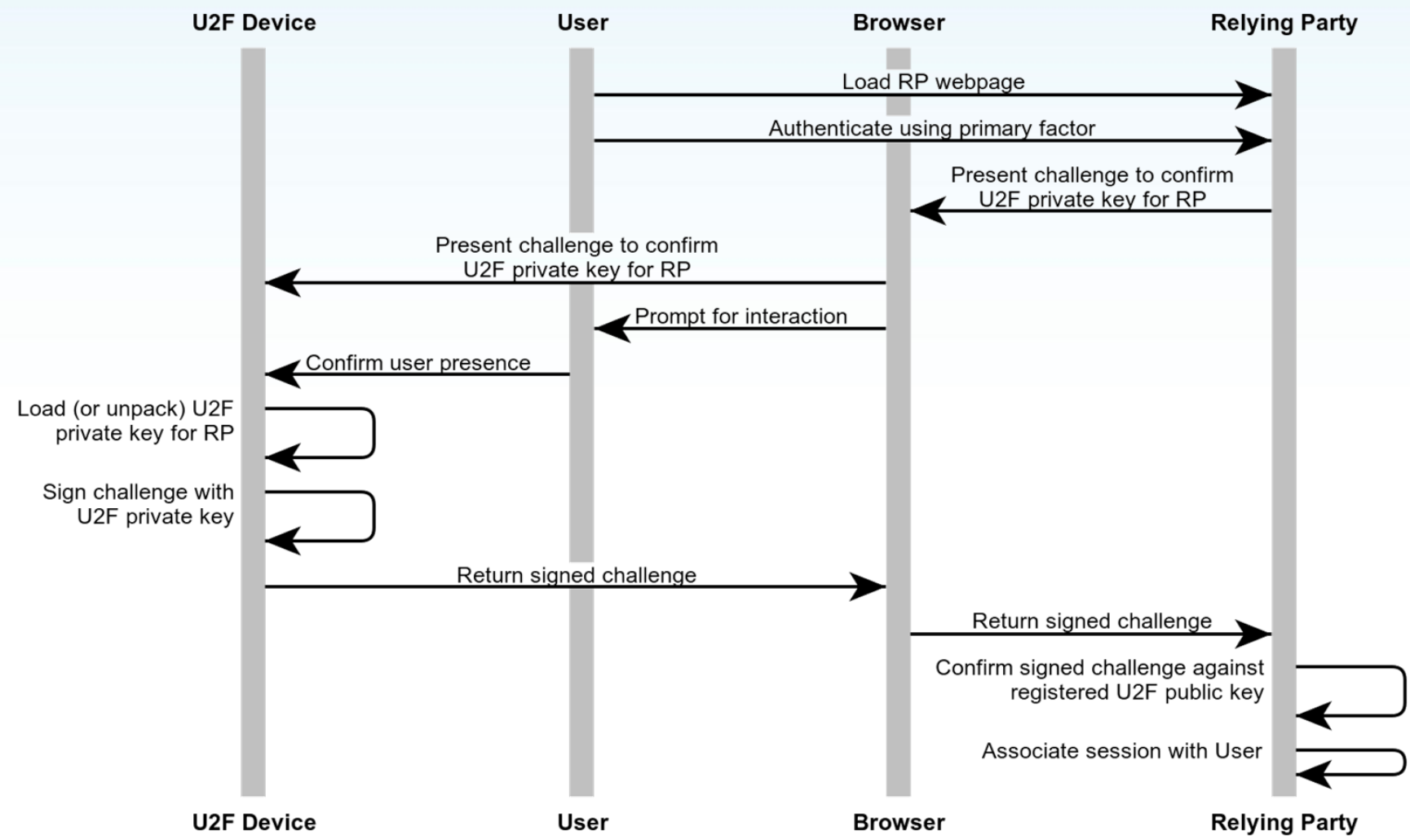
# Where Does FIDO Fit?



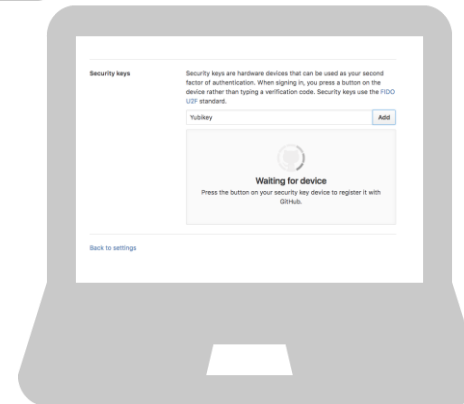
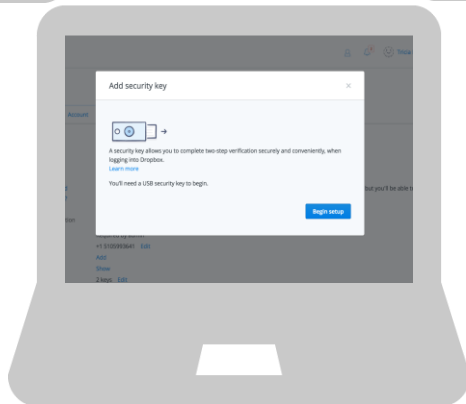
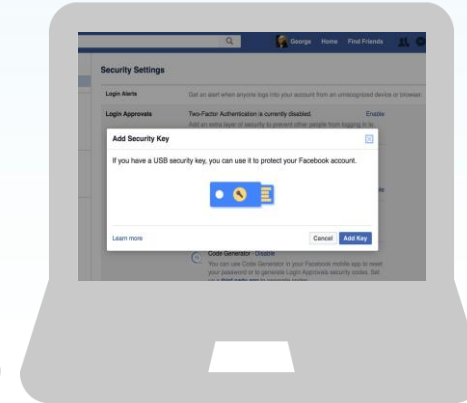
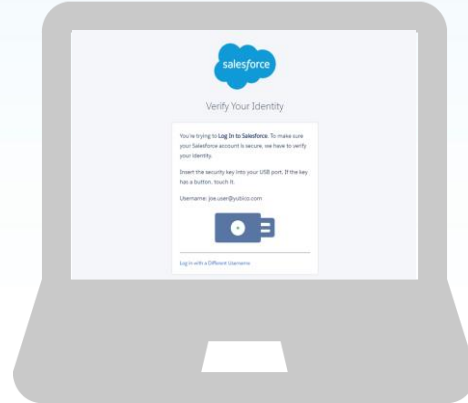
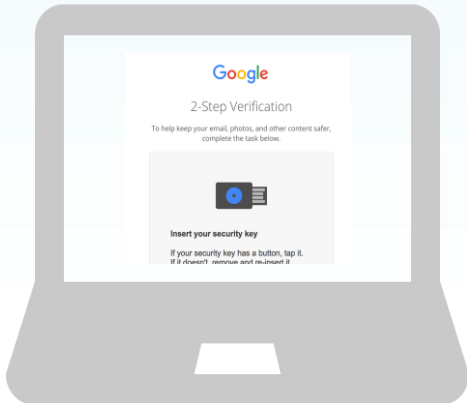
## MODERN AUTHENTICATION



# FIDO U2F Challenge/Response Flow



# Notable RPs using FIDO U2F



# FIDO U2F and Federation

- FIDO U2F Authentication protects login to federation account, which holds the “keys to the kingdom”
- FIDO U2F security benefits extend to federated logins
- Strengthens federation protocols: SAML, OAuth 2.0



# U2F, Federation, and Facebook

- Facebook added support for FIDO U2F in January 2017
- Social logins (Login with ‘X’) extends FIDO U2F security benefits to federated account access

# U2F, Federation, and Facebook

## Benefits:

- Phishing protection
- Fast, secure logins (and social logins)
- Interoperable (1 token, many services)

# Facebook Federation

- Facebook social logins use OAuth 2.0 and *OpenID Connect-like* extensions (Facebook Connect)
- SAML used for enterprise federation

# U2F, Federation and Facebook

Scenario: Currently Logged into Facebook with  
username/password & U2F Token

IdP: **facebook**<sup>®</sup>

Relying Party: **The New York Times**

# The New York Times

Tuesday, June 6, 2017

World U.S. Politics N.Y. Business Opinion

Stocks +0.10%

Travel Magazine T Magazine Real Estate ALL

## Trump Suggests He Led Saudis to Isolate Qatar Over Terror Ties

By MARK LANDLER  
1:22 PM ET

- “During my recent trip to the Middle East I stated that there can no longer be funding of Radical Ideology,” President Trump said on Twitter. “Leaders pointed to Qatar — look!”
- Mr. Trump’s tweets have huge potential strategic consequences in the Middle East, where Qatar is a crucial military outpost for the United States.



America  
Why do America  
higher H.I.V.

By LINDA VILLAROSA

64 Comments

### Log in

To save articles or get newsletters, alerts or recommendations – all free.



OR

Remember me [Forgot password?](#)

[Terms of Service](#) [Privacy Policy](#)



Don't have an account? [Sign Up](#)

### The Opinion Pages

the United  
rneys?  
Trump  
ter the  
Yet  
l-order  
asn't even  
a single  
t.



GAIL COLLINS & BRET STEPHENS  
The Polar Bear in the Room

Times columnists on President Trump's withdrawal from Paris and his insertion of himself into London.



iving Away

Still Stuck Between May and June of 1967

By YOSHI KLEIN HALEVI

The abrupt transition from trauma to triumph has shaped Israel's political choices for the past 50 years.



Case for

t: Lawless

tanamo, Two

oyage to

Isolation

The Unexpected Afterlife of American Communism

Wonder Woman's Real Power

Facebook

Secure | https://www.facebook.com/login.php?skip\_api\_login...

**Facebook**

Log in to use your Facebook account with **The New York Times**.

Email or Phone:

Password:

[Log In](#)

[Forgot account?](#)

[Create New Account](#)

### Trump Suggests He Led Saudis to Isolate Qatar Over Terror Ties

By MARK LANDLER  
1:22 PM ET

- "During my recent trip to the Middle East I stated that there can no longer be funding of Radical Ideology," President Trump said on Twitter. "Leaders pointed to Qatar — look!"
- Mr. Trump's tweets have huge potential strategic consequences in the Middle East, where Qatar is a crucial military outpost for the United States.

199 Comments

AUDIO Listen to 'The Daily'

The Women Who Fought for Hanoi

T Magazine Real Estate ALL

Opinion Pages

GAIL COLLINS & BRET STEPHENS

The Polar Bear in the Room

Times columnists on President Trump's withdrawal from Paris and his insertion of himself into London.

Still Stuck Between May and June of 1967

By YOSSI KLEIN HALEVI

The abrupt transition from trauma to triumph has shaped Israel's political choices for the past 50 years.

Wonder Woman's Real Power

Follow us on Twitter »

# The New York Times

Tuesday, June 6, 2017 | Today's Paper | Video | 73°F | Nasdaq +0.10% ↑

World U.S. Politics N.Y. Business Opinion Tech Science Health Sports Arts Style Food Travel Magazine T Magazine Real Estate ALL



## Trump Suggests He Led Saudis to Isolate Qatar Over Terror Ties

By MARK LANDLER  
1:22 PM ET

- “During my recent trip to the Middle East I stated that there can no longer be funding of Radical Ideology,” President Trump said on Twitter. “Leaders pointed to Qatar — look!”
- Mr. Trump’s tweets have huge potential strategic consequences in the Middle East, where Qatar is a crucial military outpost for the United States.

199 Comments

### FROM THE MAGAZINE



Ruddy Roye for The New York Times

## America’s Hidden H.I.V. Epidemic

Why do America’s black gay and bisexual men have a higher H.I.V. rate than any country in the world?

By LINDA VILLAROSA

70 Comments

AUDIO Listen to ‘The Daily’



### The Opinion Pages

**EDITORIAL**  
**Where Are the United States Attorneys?**  
President Trump fired half after the others quit. Yet the law-and-order president hasn’t even nominated a single replacement.



- Brooks: Giving Away Billions
- Cohen: A Case for Corbyn
- Leonhardt: Lawless Presidency
- One Guantánamo, Two Worlds
- Britain’s Voyage to Isolation
- The Unexpected Afterlife of American Communism
- The Women Who Fought for Hanoi

GAIL COLLINS & BRET STEPHENS

## The Polar Bear in the Room

Times columnists on President Trump’s withdrawal from Paris and his insertion of himself into London.



## Still Stuck Between May and June of 1967

By YOSSI KLEIN HALEVI

The abrupt transition from trauma to triumph has shaped Israel’s political choices for the past 50 years.



- Wonder Woman’s Real Power
- Follow us on Twitter »




## Use two-factor authentication

Log in with a code from your phone as well as a password


Close

Two-factor authentication is off. [Set Up](#)

Add an extra layer of security to prevent other people from logging into your account. [Learn More](#)

 [Text Message \(SMS\)](#) · [Add Phone](#)

Use your phone as an extra layer of security to keep other people from logging into your account.

 [Security Keys](#) · [Add Key](#)

Use a Universal 2nd Factor (U2F) security key to log in through USB or NFC.

**YubiKey NFC**


· Last used March 1, 2017

[Edit](#) · [Delete](#)


**YubiKey NEO**

· Last used March 1, 2017


[Edit](#) · [Delete](#)

 [Code Generator](#) · [Setup](#)

You can use [Code Generator](#) in your Facebook mobile app to reset your password or to generate login codes. Set up a [third party app](#) to generate codes.

 [Recovery Codes](#) · [Get Codes](#)

Use these codes for when you don't have your phone with you, like when you're traveling.

 [App Passwords](#) · [Generate](#)

Get a unique, one-time password for apps that don't support two-factor authentication (example: Xbox, Spotify) [Learn more](#)



# How does FIDO & Federation benefit me?

- Enable Social Authentication for Account Recovery
- Enable Users to Opt-Out of Managing Passwords
- Enable Secure and Simple to Use Social Login
- Become a Secure Identity Provider for Your Employees, Customers, Vendors, Partners, etc.

# Start Building a Better Authentication Stack Now!

## Learn

Read the U2F Specifications [FIDO specs](#) & [github.com/dainnilsson/u2f-tutorial](https://github.com/dainnilsson/u2f-tutorial)

## Implement

Build Your Own Server [https://developers.yubico.com/U2F/Libraries/List\\_of\\_libraries.html](https://developers.yubico.com/U2F/Libraries/List_of_libraries.html)

Use Standalone Server [dev.yubi.co/u2fval](https://dev.yubi.co/u2fval)

Use the Online Service [u2fval.appspot.com](https://u2fval.appspot.com)

## Test

Yubico U2F Demo Server [demo.yubico.com/u2f](https://demo.yubico.com/u2f)

Google U2F Demo Server [u2fdemo.appspot.com](https://u2fdemo.appspot.com)



# Thank You!

Derek Hanson  
[derek@yubico.com](mailto:derek@yubico.com)

**yubico**

# Extra slides

# FIDO + Federation

The Facebook logo, consisting of the word "facebook" in a bold, blue, lowercase, sans-serif font with a registered trademark symbol.

IdP

The logo for The New York Times, featuring the words "The New York Times" in a black, gothic-style serif font.

Relying Party

# How does FIDO Work?

