



EIC Munich 2015

Overview

14:00	14:30	FIDO Now	Donal O'Shea, FIDO Alliance
14:30	15:00	FIDO UAF 1.0 Specs: Overview and Insights	Rolf Lindemann, Nok Nok Labs
15:00	15:30	FIDO U2F 1.0 Specs: Overview and Insights	Alexei Czeskis, Google
15:30	15:45	Coffee	
15:45	16:15	FIDO, PKI & beyond: Where authentication meets identification	Kim Nguyen, D-Trust Cord Bartels, CBcon
16:15	16:45	Deploying FIDO: Ins and Outs	Panel: Moderator Matthias Reinwarth, Kuppinger Cole; Kevin Lynch, Synaptics; Bob Stewart, Sonavation; Michael Poitner, NXP; Chris Woodthorpe, Infineon
16:45	17:45	FIDO Ready™ Products	Entersekt-Infineon-Nok Nok Labs-Yubico
17:45	18:00	Q&A Wrap Up	FIDO

AGENDA

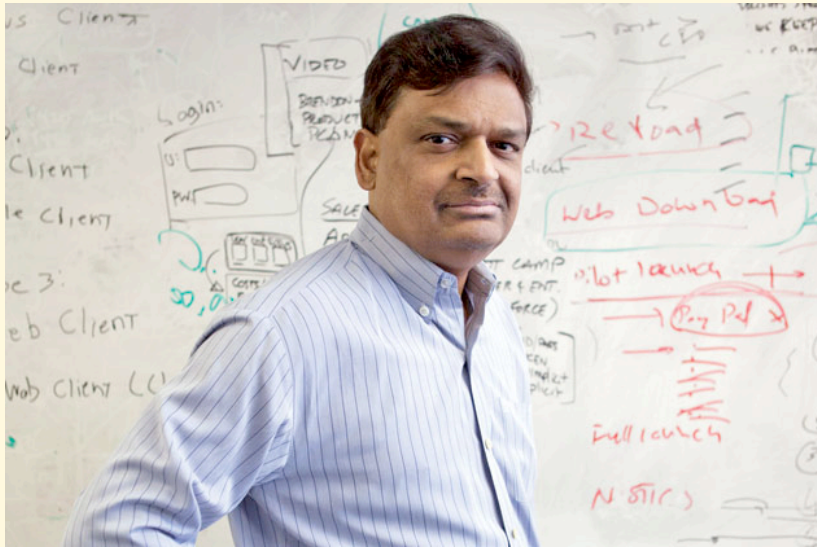
Interoperability Problem

Password Problem

FIDO Solution

About FIDO

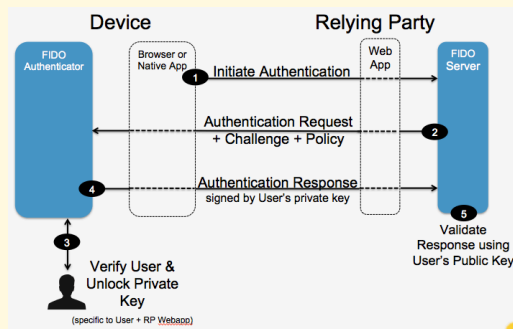
The FIDO Story



validity™

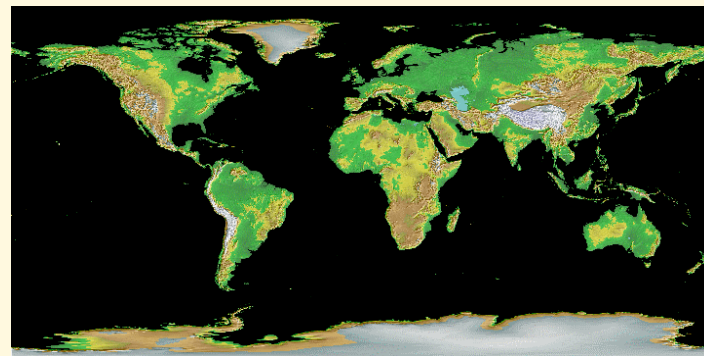


The FIDO Story—2



Technology

Ecosystem



AGENDA

Interoperability Problem

Password Problem

FIDO Solution

About FIDO

Cyber crime is out of

CONTROL

Anthem now says 78.8M were affected by breach



MORE LIKE THIS



Health insurer Anthem discloses customer and employee data breach



State-sponsored Chinese hackers suspected in breach

U.S. states want Anthem to provide quickly to customers

on IDG Answers → Mitt Romney thinks we need more... do you agree?

Simplify IT with the Cisco Unified

JPMorgan Chase Hacking Affects 76 Million Households

by JESSICA SILVER-GREENBERG, MATTHEW GOLDSTEIN and NICOLE PERLROTH OCTOBER 2, 2014 12:50 PM
528 Comments



Target Now Says 70 Million People Hit in Data Breach

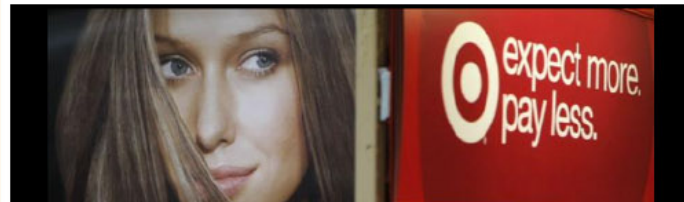
Neiman Marcus Also Says Its Customer Data Was Hacked

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ARTICLE FREE PASS Enjoy your free sample of exclusive subscriber content. \$12 FOR 12 WEEKS SUBSCRIBE NOW

By PAUL ZIOBRO And DANNY YADRON CONNECT

Updated Jan. 10, 2014 8:30 p.m. ET



IN 2014...

708 data breaches

82 million

personal records stolen



\$92.3 MILLION:

Average annual loss to mobile fraud

\$3.5 MILLION:

Average cost per data breach



We have a **PASSWORD PROBLEM**

Email Address:

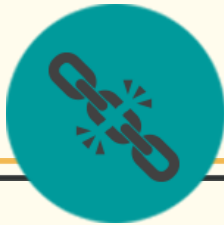
Password:

LOGIN

Passwords
no longer
keep us **safe**



Kept in centralized databases



Easily broken



Ill-suited for mobile devices

TOO MANY TO REMEMBER,
DIFFICULT TO TYPE,
AND **NOT SECURE**



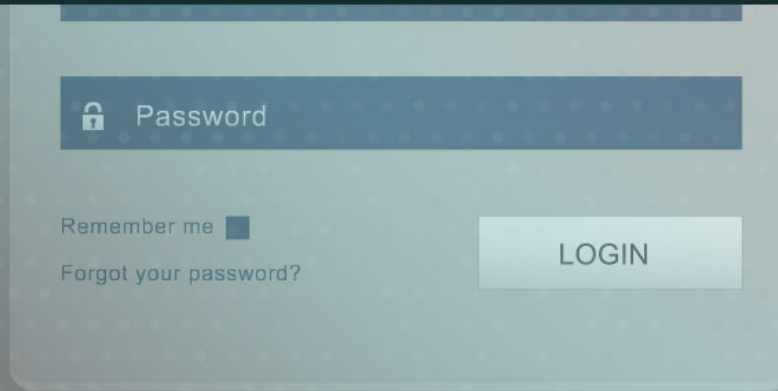
Re-used



Phished



Keylogged



Other mechanisms have not been a **success**



ONE-TIME CODES

Improve security but aren't easy enough



SMS
Usability

Coverage/ Delay/ Cost



Device
Usability

One per site/ Fragile



User
Experience

User Confusion



Still
Phishable

Know attacks today



WE NEED A
NEW MODEL

The FIDO Story—3

- Relevant companies with compelling interest
 - The FIDO founders
 - PayPal, Lenovo, Nok Nok Labs, Validity Sensors, Infineon, and Agnitio
 - Meetings started about four years ago
 - Technology — initial scoping and approach
 - Ecosystem — everybody talk to their friends
 - Legal —
 - Create an organization that
 - » Protects IP and
 - » Prevents antitrust

Putting It Together

The problem:

Simpler, Stronger, Interoperable online authentication

The trend:

Local device authentication

Why not:

Use local device auth for online authentication?

This is the core idea behind FIDO standards!

We need

fido™

AGENDA

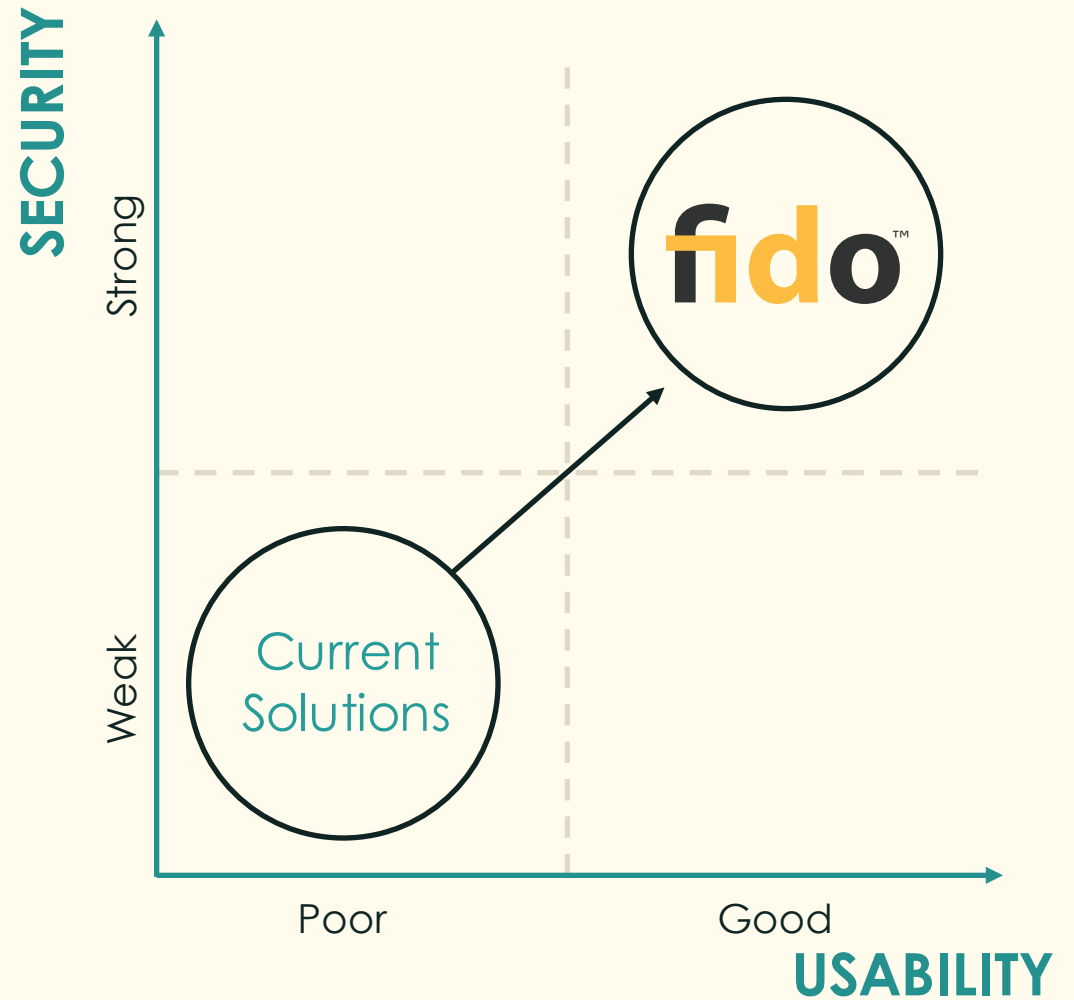
Interoperability Problem

Password Problem

FIDO Solution

About FIDO

THE FIDO SECURITY PARADIGM





THE FOCUS IS
PRIVACY



No 3rd Party in the Protocol



No Secrets on the Server side



Biometric data (if used) never leaves device

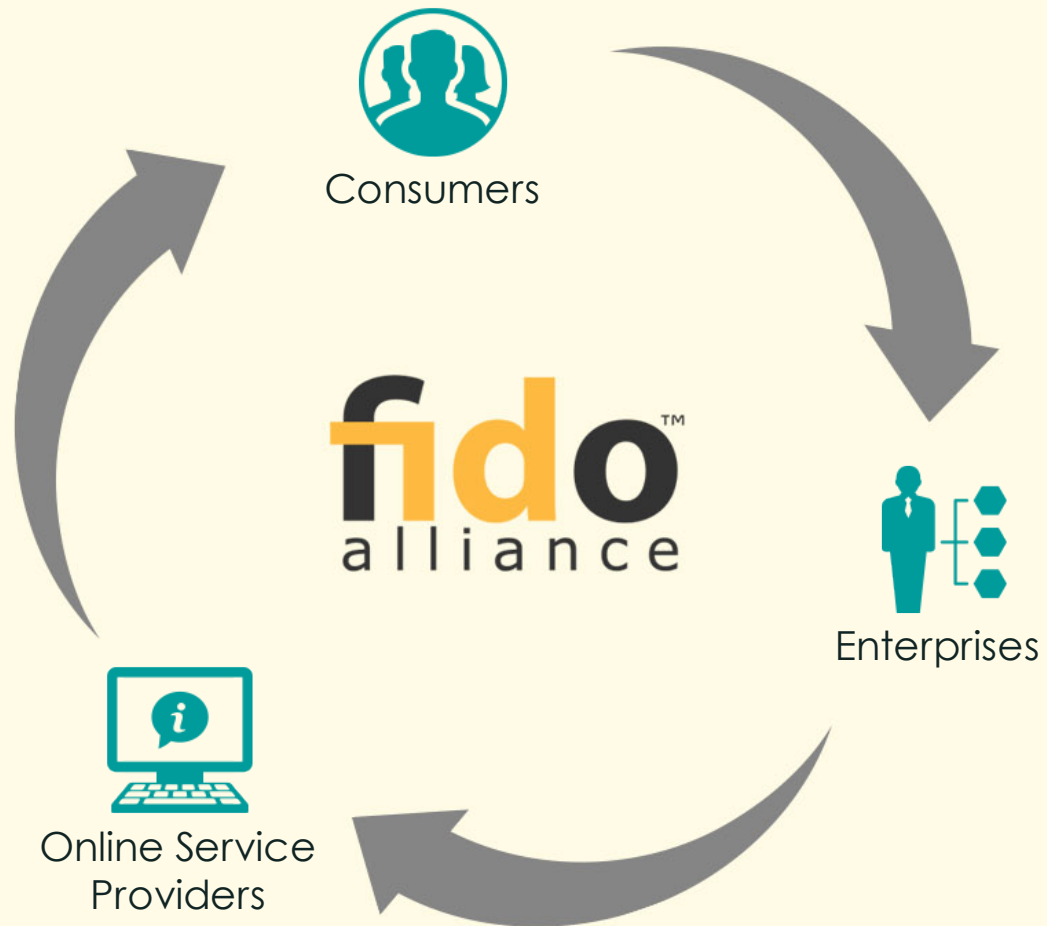


No link-ability between Services



No link-ability between Accounts

THE ECOSYSTEM



FIDO Standardization

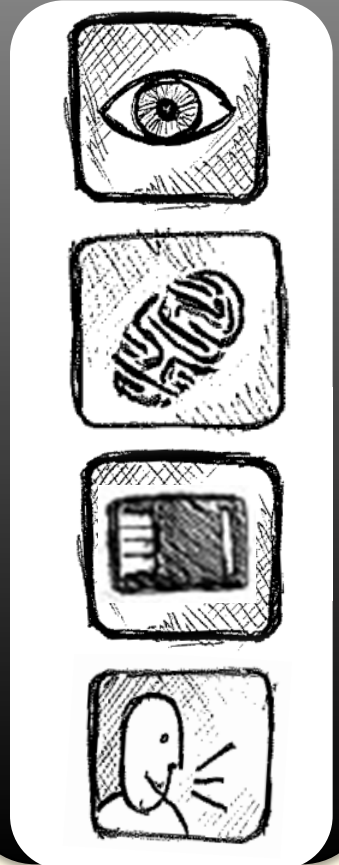
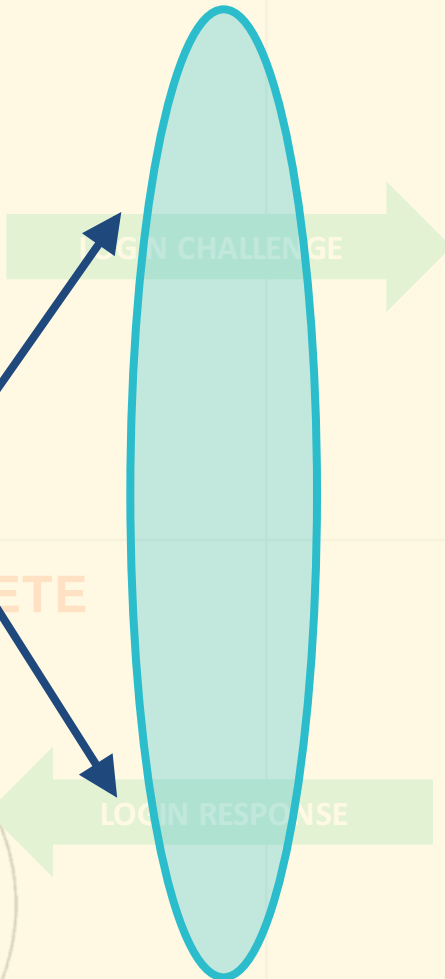
1

LOGIN

USER APPR

PLUGGABLE LOCAL AUTH

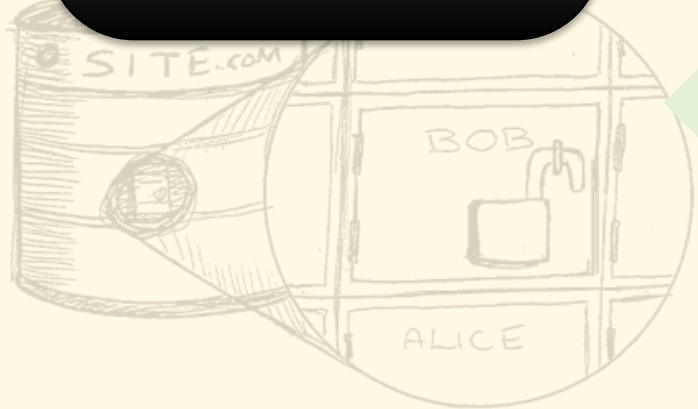
ONLINE CRYPTO PROTOCOL



4

COMPLETE

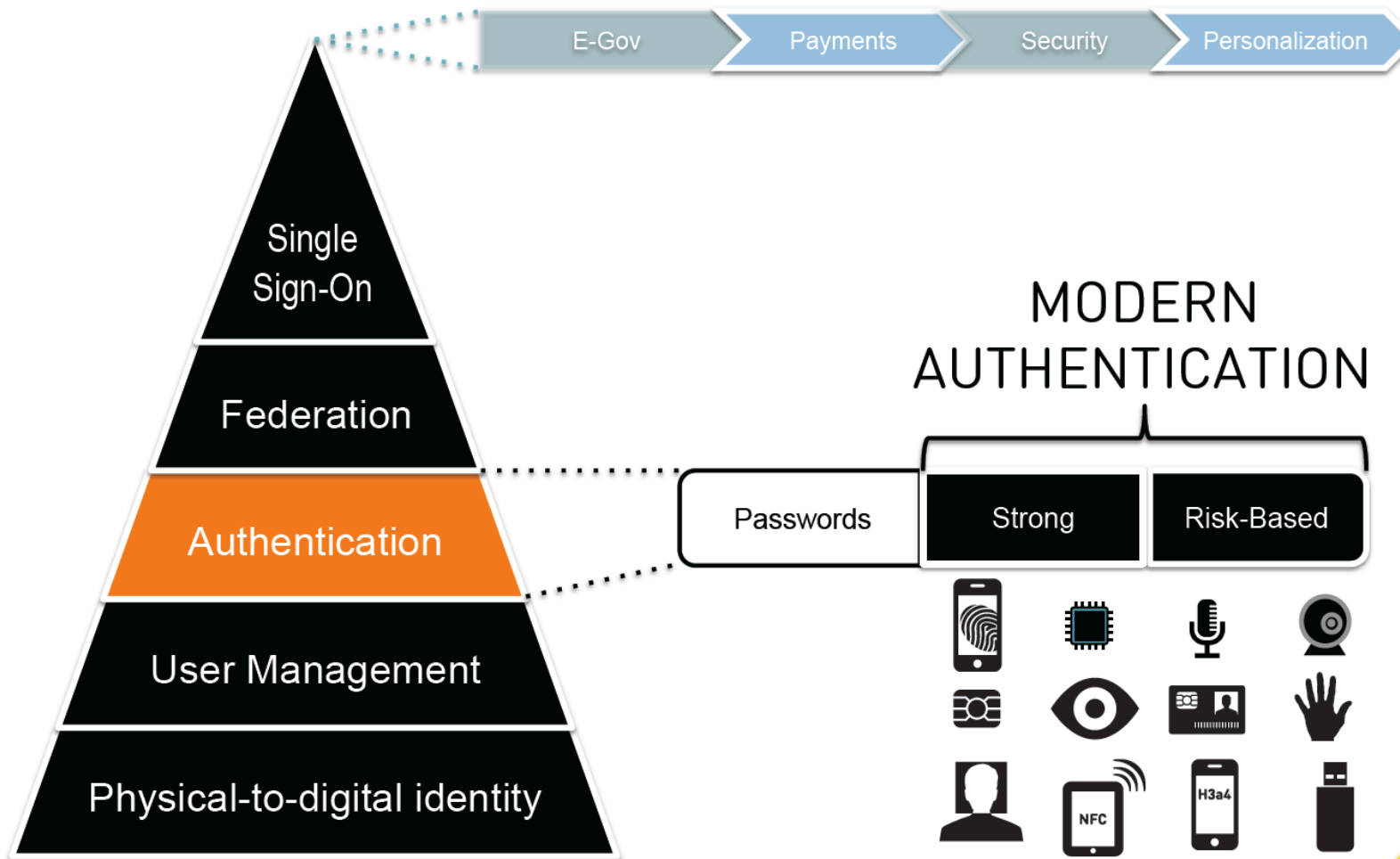
KEY SELEC



Leverage public key cryptography

Not boiling the sea

Identity Stack Authentication in Context



A man in a server room looking at a server rack. The room is dimly lit with blue and orange lights. The man is wearing a plaid shirt and glasses. He is looking at a server rack on the right side of the frame. The server racks are filled with equipment and have blue lights on them. The background is a warm orange glow.

Security for **providers**

Reduced **enterprise** costs

Simple for **consumers**



FOR CONSUMERS



Easy to Use



Interoperable



Private



Secure



FOR ENTERPRISES



Reduced cost &
complexity



Strong asset
protection



Effective BYOD
support

FOR ONLINE SERVICE PROVIDERS



Exceptional user experience



Stronger Security



Cost containment

LOWER COST AND COMPLEXITY FOR ONLINE SERVICE PROVIDERS



Single
Infrastructure



Any
Device



Risk
Appropriate

AGENDA

Interoperability Problem

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FIDO Solution

About FIDO

FIDO TIMELINE



FEB
2013



DEC
2013



FEB
2014



FEB-OCT
2014



DEC 9
2014

A photograph of four business professionals (three men and one woman) sitting around a conference table in a meeting. They are dressed in business attire (suits and blouses). The man on the right is pointing at a document on the table. The woman on the left is looking towards the center. The man in the middle is looking towards the right. The woman in the middle is looking towards the center. The table has papers, a tablet, and glasses of water. The background is a bright, modern office setting.

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board, associate,
& **sponsor members**

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Microsoft

lenovo® FOR
THOSE WHO DO.

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CrucialTec

IdentityX®

NXP

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oberthur
TECHNOLOGIES
THE M COMPANY



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A range of
FIDO PRODUCTS
is now available



Online Services



Chip Providers



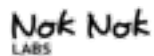
Device Providers



Biometrics Technology Providers



1.0 Specification



Enterprise Servers



Open Source sw/servers



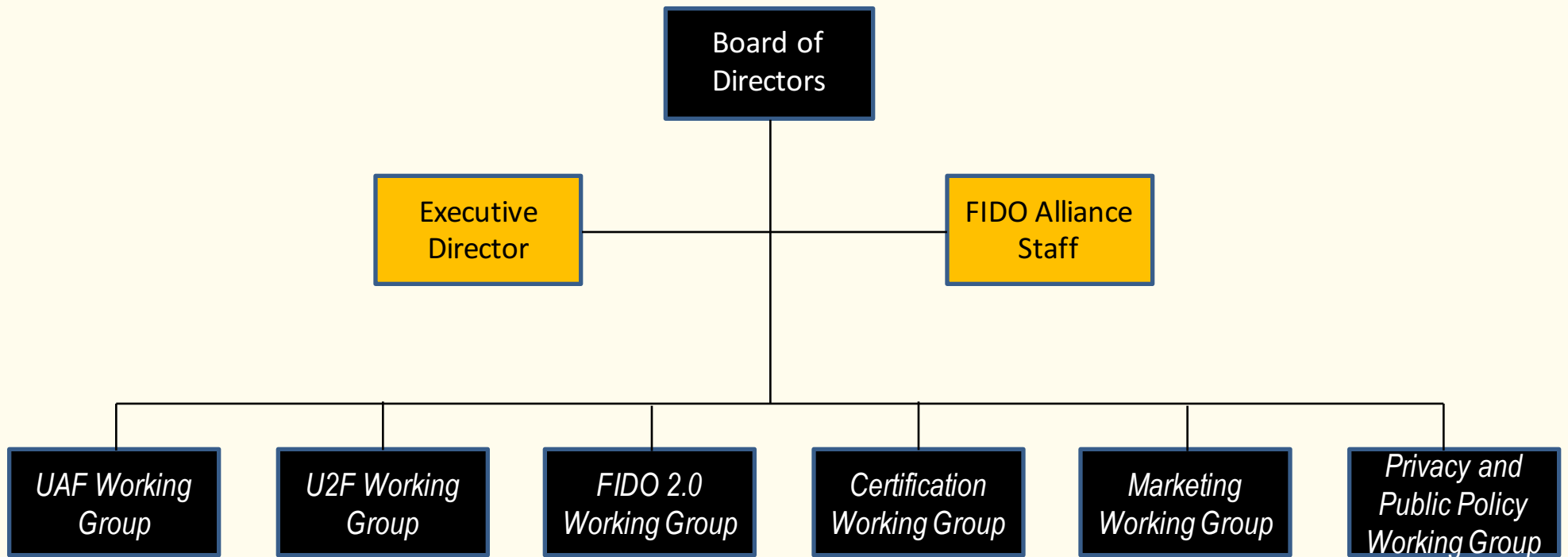
Mobile Aps & clients



Browsers



The FIDO Alliance





JOIN THE
FIDO ALLIANCE

Join FIDO

- Three levels of membership
 - Board of Directors
 - Member
 - Associate
- Website
 - www.fidoalliance.org
- Email me
 - donal@fidoalliance.org



EXPERIENCE SIMPLER, STRONGER AUTHENTICATION
