





Strong Passwordless (FIDO) Authentication

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THE DEATH OF PASSWORDS



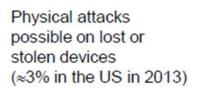




Opportunity for Better Authentication is Upon Us Passwords Just Do Not Work



Attack Classes



Scalable attacks

Physically attacking user devices steal data for impersonation

Remotely attacking lots of user devices

2

steal data for impersonation

Remotely attacking lots of user devices

misuse them for impersonation

Remotely attacking lots of user devices

Physically attacking user

devices

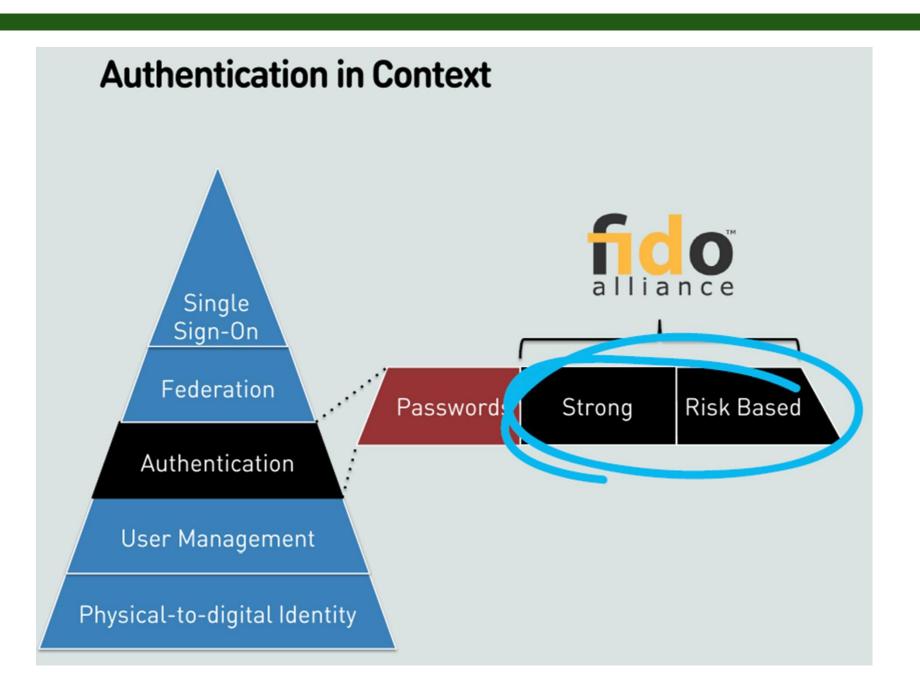
misuse them for

impersonation

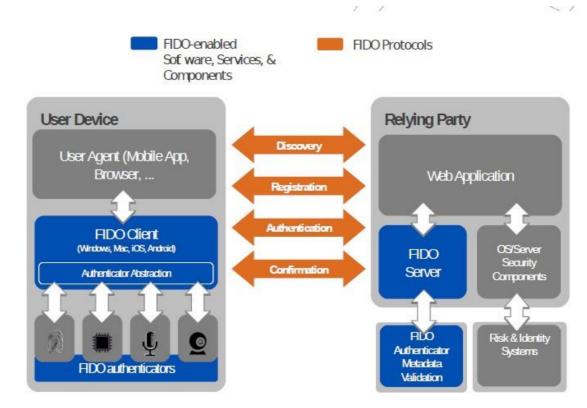
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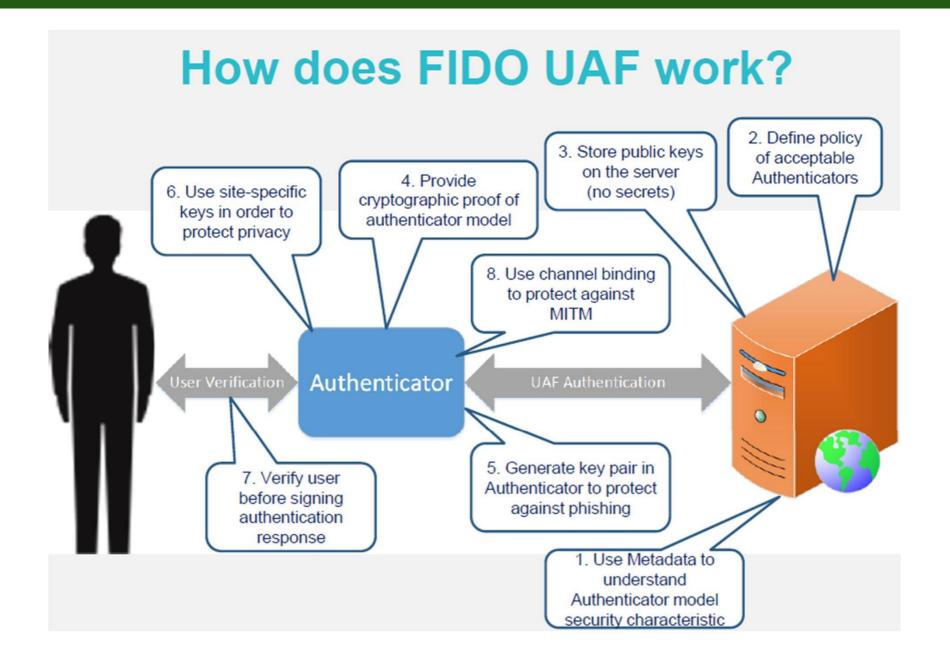
misuse authenticated sessions

Remotely attacking central servers steal data for impersonation

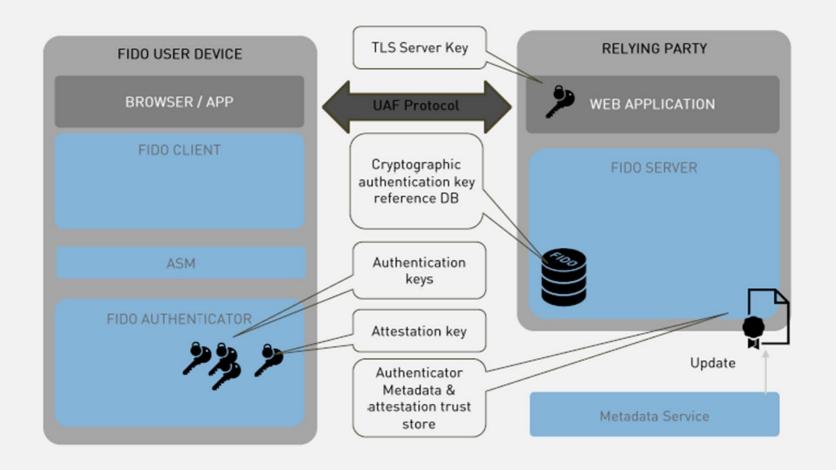


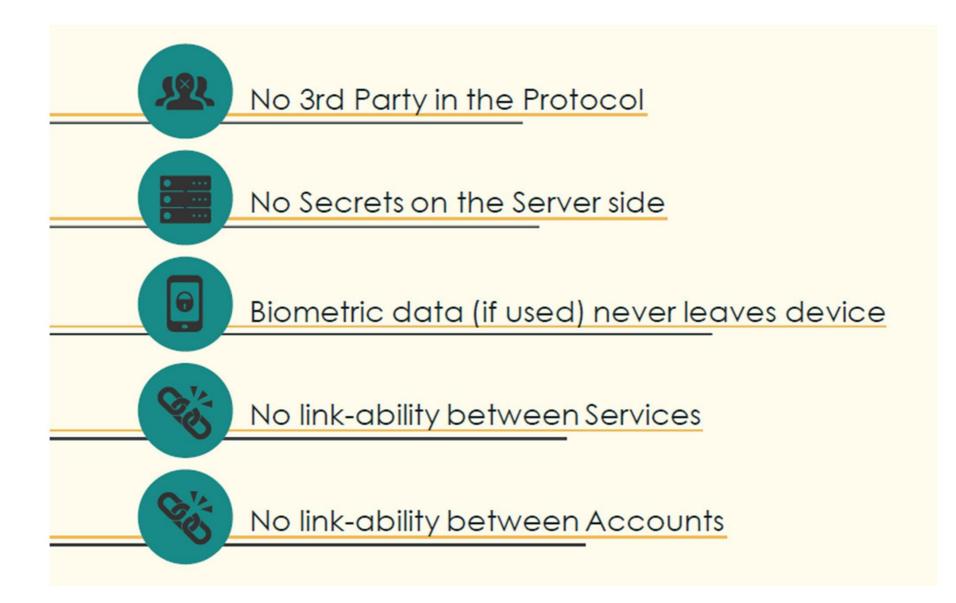
- ✦FIDO UAF strong authentication framework enables online services and websites, whether on the open Internet or within enterprises, to transparently leverage native security features of end-user computing devices for strong user authentication and to reduce the problems associated with creating and remembering many online credentials.
- +FIDO UAF high-level architecture is illustrated on the following picture





FIDO Building Blocks





Use Cases

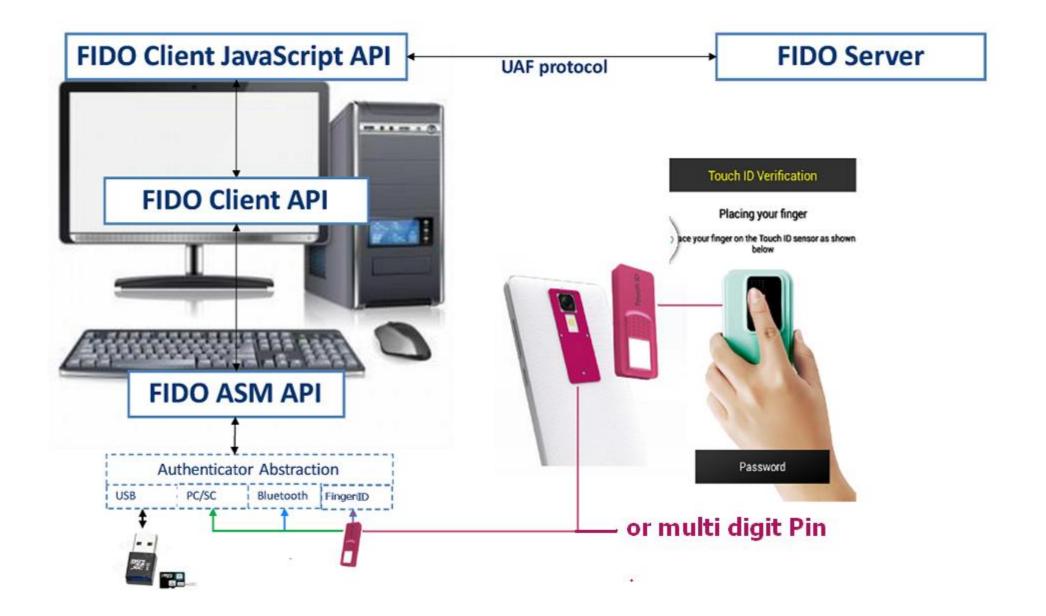
- Secure microSD card as an independent secure element form factor in an Android phone in combination with FIDO authentication technology, HCE/NFC, Nurugo Biometrics and Bluetoooth communication interfaces is enabling the following use cases
- ✦Mobile Use Cases
 - ✦ FIDO password-free authentication using secure microSD card inserted into the phone (user authentication for various use cases where strong authentication is required like Online Shopping, Remote Access,...), Nurugo Biometrics,...
 - Classical NFC contactless use cases like Mobile Payment, Mobile Ticketing, Loyalty Programs,...
 - Nurogo Biometrics, Fingerprint, Eye print, Face Recognition, PIN, for example Mobile Payment, Mobile Ticketing, Loyalty Programs, User Identity, encrypted messages,..
- ✦PC Use Cases
 - ✦ FIDO password-free authentication using secure microSD card (inserted into the phone) over NFC/HCE interface
 - ✦ FIDO password-free authentication using secure microSD card (inserted into the phone) over Bluetooth interface
 - ✦ FIDO password-free authentication using Nurugo Biometrics on the Mobile device, over Bluetooth interface

Passwordless Authentication with Nurugo* Biometrics

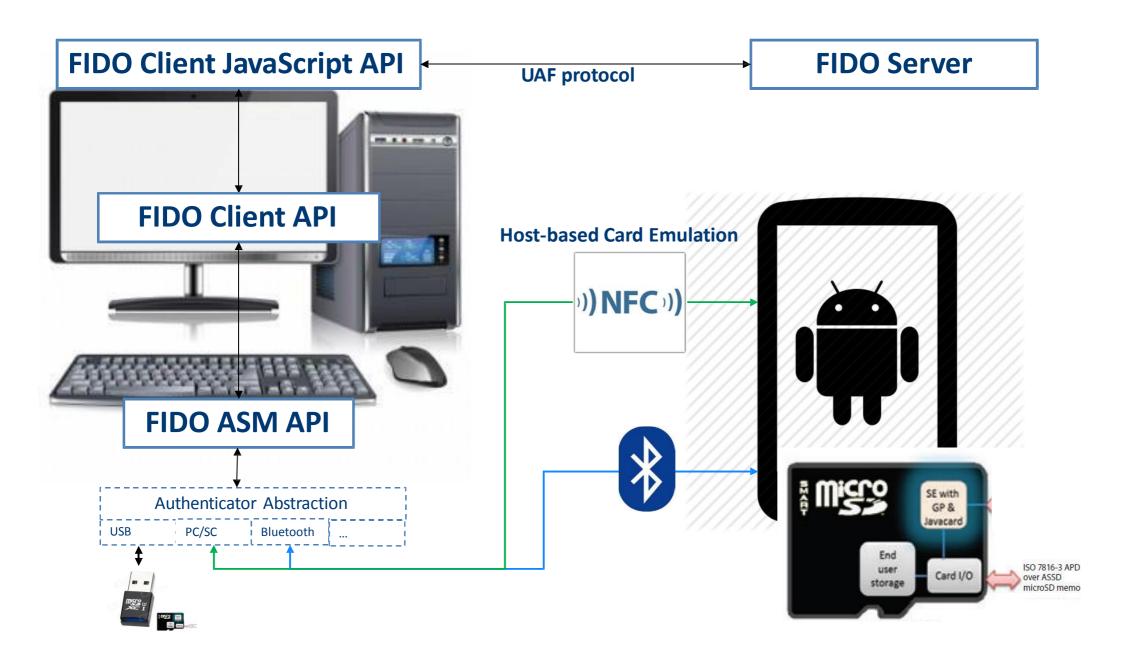


*NURUGO patented and copyright

Passwordless Authentication with Nurugo* Biometrics



Passwordless Authentication with smartSD Card





Solution Partners







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