Privacy & Security Standards for Digital Identity

Luis Maas, MD, PhD CTO, EMR Direct



Definitions

Privacy
 The right to control how your personal information is used or disclosed

Security
 The mechanisms used to protect the privacy of your personal information





OAuth 2.0

An "authorization" protocol
Most common form: authorization code flow
Lets you authorize an app to "do something" with data you have rights to access
Your credentials are not shared with the app
The app doesn't need to know who you are





OpenID Connect (OIDC)

• An "authentication" protocol

- ° Builds on OAuth 2.0
- Lets a relying party (RP) ask for you to be authenticated by an Identity Provider (IdP)

 The IdP provides the RP with an identifier uniquely assigned to you and (possibly) identity attributes like name, DOB, etc.





OpenID Connect (OIDC) – continued

- Lets you prove to the RP that you are the person associated with the identifier
- Lets you decide which identity attributes you want to share with the RP
- Back-channel protects privacy: RP gets data directly from the IdP





Unified Data Access Profiles (UDAP)

A "trust network" protocol
Builds on OAuth 2.0 and OpenID Connect
A number of profiles to scale Open API ecosystems via trust communities
Not just about user identity, but also the identities of apps, data holders, and IdPs





UDAP Tiered OAuth

- Enables dynamic networks of trusted IdPs
- Data holders can request authentication from your preferred IdP
- Back-channel communication of attributes with your consent with OIDC
- Trust networks can set the bar for identity proofing, authenticators, etc.





Self-Sovereign Identity (SSI)

- Rapidly evolving area of digital identity
 Focus on User-Centric Identity
- Decentralized Identifiers (DIDs) provide mechanisms for authentication and sharing of attributes via Verifiable Credentials
- Since DIDs are URIs, they can also be used as identifiers in UDAP workflows





For more information:

OAuth 2.0: tools.ietf.org/html/rfc6749
OIDC: openid.net/specs/openid-connect-core-1_0.html
UDAP: www.udap.org/
DIDs: www.w3.org/TR/did-core/





Thank you

<u>luis@emrdirect.com</u>
<u>collaborate@udap.org</u>
@udapTools



