OAuth 2.0 and OpenID Connect and SSO, Oh My!

Security Simplified with IdentityServer4

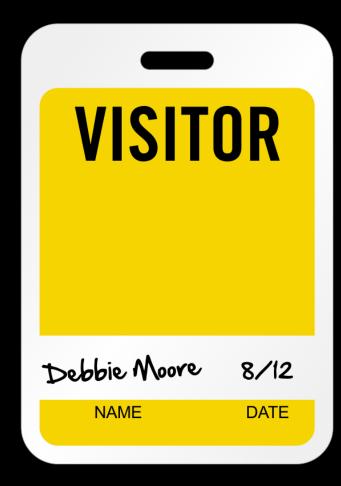
Where to get this presentation and the resources?

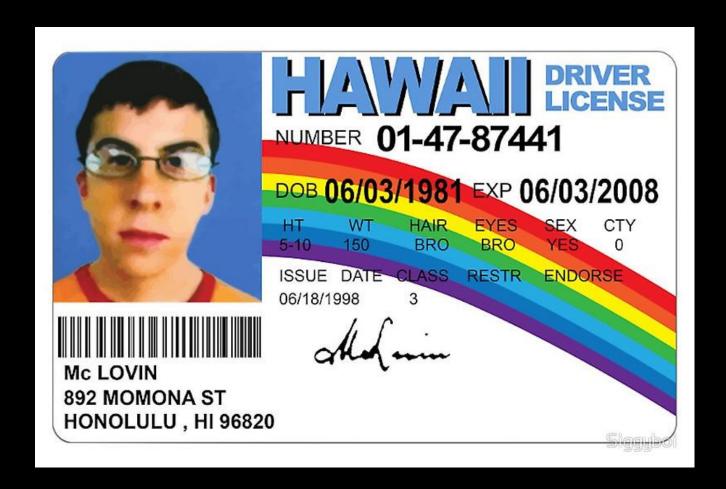
- IdentityServer4 Demos 1 & 2
- IdentityServer4 Demo 3
- OIDC JavaScript client
- OpenID Connect Implementations
- iOS OAuth 2.0 & OpenID Connect example
- Xamarin example
- OAuth 2.0 --rfc6749
- OpenID Connect

What will you learn today?

- The principals of OAuth 2.0 and OpenID Connect security protocols.
- How IdentityServer4 can be used to implement the OAuth 2.0 and OpenID Connect protocols to secure your API's, Web and Mobile applications.
- How IdentityServer4 can be used to implement a SSO

Authorization vs. Authentication





OAuth 2.0 (Authorization)

Authorization Server

Resource Server

Resource Owner

Client

API

Business

Console App

End User

MVC App

SPA

Okta

Mobile App

OAuth 2.0 (Authorization)

Authorization Server

Resource Server

Resource Owner

Client

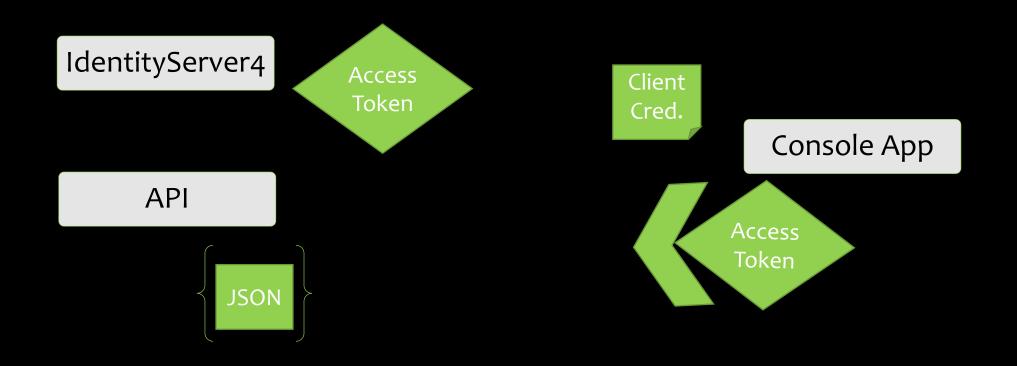
IdentityServer4

API

Business

Console App

OAuth 2.0 Authorization Grant Type: Client Credentials



DEMO 1

Console App(Windows Service) accessing a secured API

OAuth 2.0 Authorization Grant Types cont..

Authorization Code

Implicit

Resource Owner Password Credentials

OpenID Connect: Authentication Flows

Authorization

Server Side

Implicit

SPA

Mobile App

Hybrid*

Server Side

DEMO 2

MVC Web Application Authentication & Authorization

DEMO 3

SPA Web Application Authentication & Authorization

Authentication

IdentityServer4 Login/Logout **OpenID Connect** Authorization **End Session** Discovery Token **OAuth** User Info

OAuth 2.0 Spec Links

OAuth 2.0 Core

- OAuth 2.0 Framework—RFC 6749
- Bearer Token Usage—RFC 6750
- Threat Model and Security Considerations—RFC 6819

OAuth 2.0 Extensions

- JSON Web Token—RFC 7519
- OAuth Assertions Framework—RFC 7521
- <u>SAML2 Bearer Assertion</u>—RFC 7522, for integrating with existing identity systems
- <u>JWT Bearer Assertion</u>—RFC 7523, for integrating with existing identity

OpenID Connect Spec Links

OpenID Connect

- Core 1.0
- Discovery

Helpful links

- OAuth 2.0 Protocol Detailed Walkthrough
- OpenID Connect Flows
- OKTA SaaS
- Explicit Logout from IdentityServer4
- Using existing DB with IdentityServer4
- Why not use OAuth 2.0 Resource Owner Password Grant Type

Q & A

Twitter :: @cajunAA

Instagram :: double a ralls

Stackoverflow :: aaronR

Email:: aaron.ralls@gmail.com

Blog:: https://arkeytek.com

Facebook.com/aaron.ralls.9 http://aaronralls.com Github.com/aaronRalls