

OAuth and User Authentication

Jogesh K. Muppala



THE DEPARTMENT OF
COMPUTER SCIENCE & ENGINEERING
計算機科學及工程學系



香港科技大學
THE HONG KONG UNIVERSITY OF
SCIENCE AND TECHNOLOGY

OAuth 1 and OAuth 2

- Authorization framework based on open standards for Internet users to log into third party websites/apps using their Social Network accounts
 - Facebook, Google, Twitter, Microsoft, Instagram, Github, DigitalOcean and many others
- OpenID is a related but complementary service

OAuth 1 and OAuth 2

- OAuth 1 protocol:
 - First evolved from Twitter (Blaine Cook)
 - IETF RFC 5849
- OAuth 2 protocol:
 - Focuses on simplifying client development
 - IETF RFC 6749
 - Bearer token usage IETF RFC 6750

OAuth 2 Roles

- Resource owner: You, the user that authorizes a client application to access their account
- Client Application: Application (website or app) that wants access to the resource server to obtain information about you
- Resource Server: Server hosting protected data (e.g., your personal information)
- Authorization Server: Server that issues an access token to the client application to request resource from the resource server

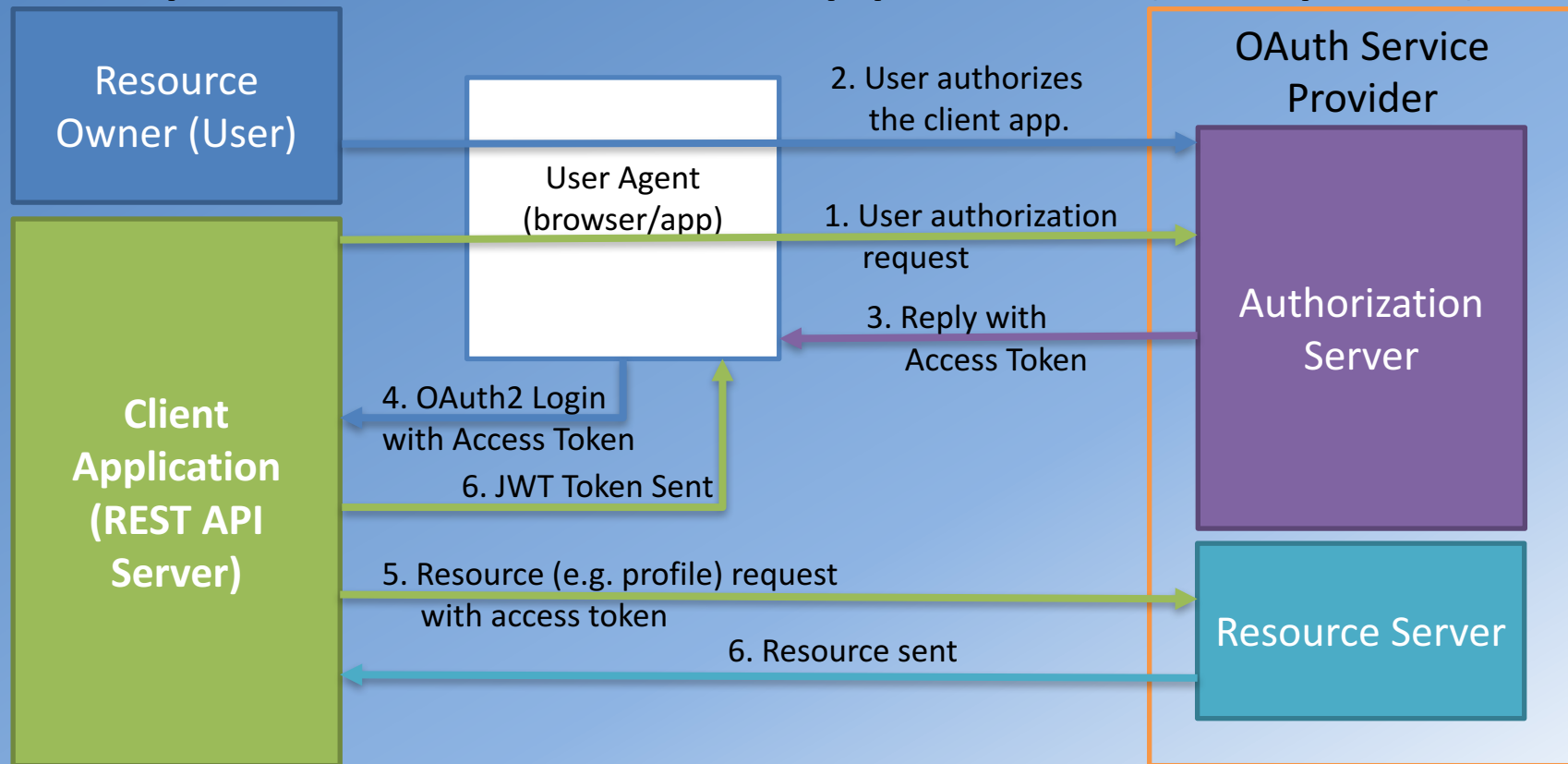
OAuth 2 Tokens

- Access token: allows access to user data by the client application
 - Has limited lifetime
 - Need to be kept confidential
 - Scope: parameter used to limit the rights of the access token
- Refresh token: Used to refresh an expired access token

Client Application Registration

- Register the client application on the OAuth service provider:
 - Client App Id
 - Client Secret
 - Redirect URL: URLs for the client for receiving the authorization code and access token

Implicit Flow Grant Approach (adapted)



Passport-Facebook-Token Module

- Passport strategy for authenticating with Facebook using OAuth 2.0 API
- Installing:
`npm install passport-facebook-token --save`
- Using
`var FacebookStrategy = require('passport-facebook-token');`