OAuth Device Flow

William Denniss
wdenniss@google.com

#OAuthDeviceFlow

OAuth for Limited Input Devices
Device Flow Requirements

1. Internet connection (Device Flow is not a candidate for initial device setup)
2. One-way communication channel to user (screen, sound, etc)
3. User has capable secondary device
Protocol Flow

SEUV-JUAS
idp.com/device

Device Auth request

Token Request

polling

https://idp.com/device

SEUV-JU__

QWERTYUIOP
ASDFGHJKL
ZXCVBNM

OAuth Server
Production Example

https://youtube.com/tv or from the YouTube app on your connected TV
Production Example

Google’s Documentation:

https://developers.google.com/identity/protocols/OAuth2ForDevices

Facebook’s Documentation:

https://developers.facebook.com/docs/facebook-login/for-devices
User Code Format Suggestions

- Case Insensitive
- Alphabetic only
- Avoid “O” and “I”
- i.e. Base 24

Example: SEUV-JUAS
Next Steps
TODO: Add Device Endpoint to Discovery

The Device endpoint is separate to the Authorization Endpoint.

HTTP/1.1 200 OK
Content-Type: application/json
Cache-Control: no-store

{
    "device_code": "74tq5miHKB",
    "user_code": "94248",
    "verification_uri": "http://www.example.com/device",
    "interval": 5
}
Thank You!

William Denniss
@WilliamDenniss

#OAuthDeviceFlow