OAuth 2.0 Device Flow – Recap

Authorization flow designed for devices that have an internet connection, but no browser and/or only limited input options.

The user will review the authorization request on a secondary device, like a mobile phone, or laptop.
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Using the browser on your device, visit:

example.com/device

Enter the code:

WDJB–MJHT
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https://example.com/device

Enter the code shown on your device:

Next
Example with QR Code (using verification_uri_complete)

Using the browser on your device, visit:

example.com/device

Enter the code:

WDJB–MJHT
Changes in -07

Following IETF 99 consensus, updated the non-textual transmission option to be a separate URI verification_uri_complete.

Added security consideration about spying.

Explicitly Required that device_code not be shown.

Added text regarding a minimum polling interval.
Changes in -08

Clarified entropy guidance for the user code (it’s still at the authorization server’s discretion, but added some detail).

Documented the user-code brute force attack (a “reverse takeover” where the attacker’s credential is given to the victim’s device).
Running Code

Yahoo Japan implemented it: https://goo.gl/NczxW8

Used by the Air Stick 4K https://www.cccair.co.jp/airstick/
Running Code (Server)

Open source server implementation:

MITREid 1.3

https://github.com/mitreid-connect/OpenID-Connect-Java-Spring-Server
Running Code (Client)

Open source, but Google-specific client example:

https://github.com/google/GTMAppAuth/tree/master/Example-tvOS

Code will be moved to the AppAuth for iOS, macOS (and tvOS!) project once the spec is stable.

Tested on Google and MITREid’s server implementations.
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Thank You