

# Autentizace QR kódem

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Konference e-infrastruktury CESNET

30. 1. 2019



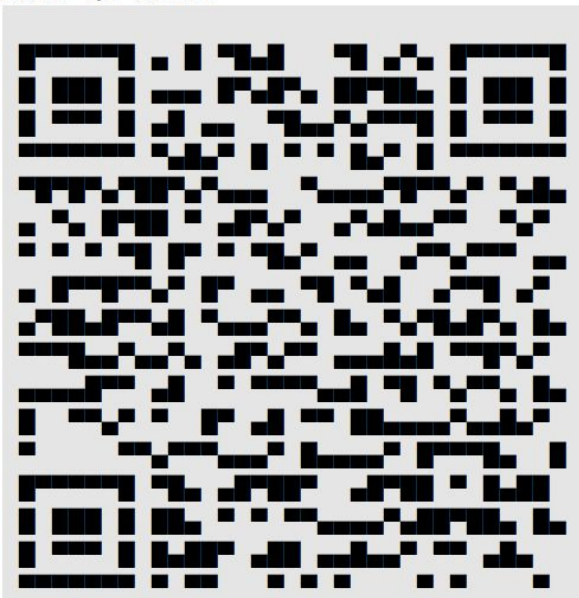
# Použití autentizace QR kódem

- Pro newebové služby
  - Podpora federované autentizace (např. s využitím eduID.cz)
  - Využití standardních technologií
  - Minimální nároky na uživatele
- 
- Ukázka na přístupu na stroj pomocí SSH

micHALP — ssh root@cloud255-130.cerit-sc.cz -

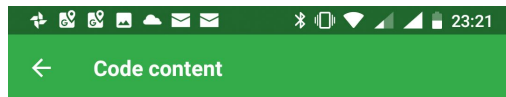
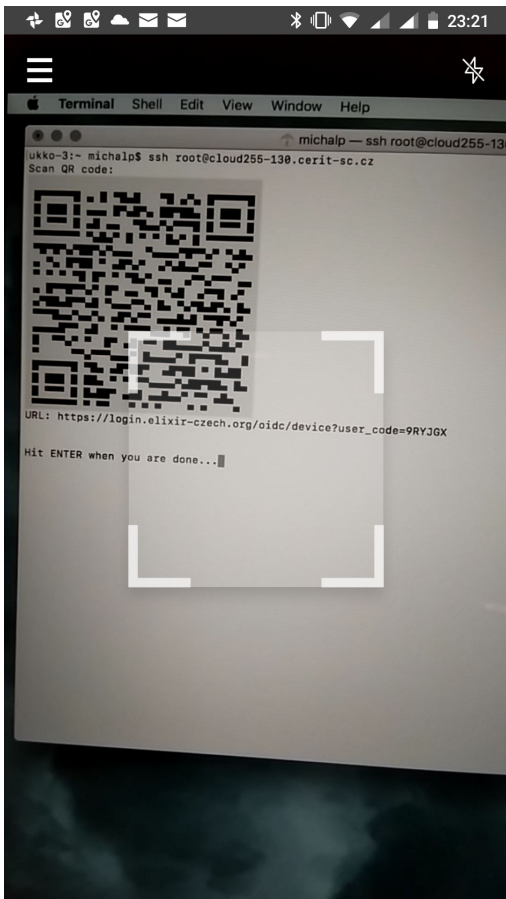
ukko-3:~ micHALP\$ ssh root@cloud255-130.cerit-sc.cz

Scan QR code:



URL: [https://login.elixir-czech.org/oidc/device?user\\_code=9RYJGX](https://login.elixir-czech.org/oidc/device?user_code=9RYJGX)

Hit ENTER when you are done... █



**URL is safe**

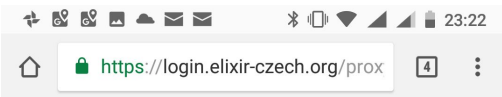
[https://login.elixir-czech.org/oidc/device?user\\_code=9RYJGX](https://login.elixir-czech.org/oidc/device?user_code=9RYJGX)

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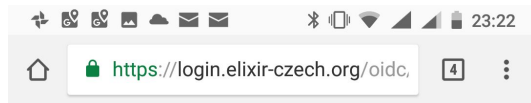
 Sign in with ORCID

or

your institutional account

 Type the name of your institution

Aalborg University
Aalto University
Aarhus Basic Health Care College
Aarhus School of Marine and Technical Engineering




## Approval Required for *ELIXIR Cloud* Demo

**Caution:**

This client was dynamically registered .  
It has been approved {0} times previously.

Access to:

-  Log in using your identity

Do you authorize "ELIXIR Cloud  
Demo"?

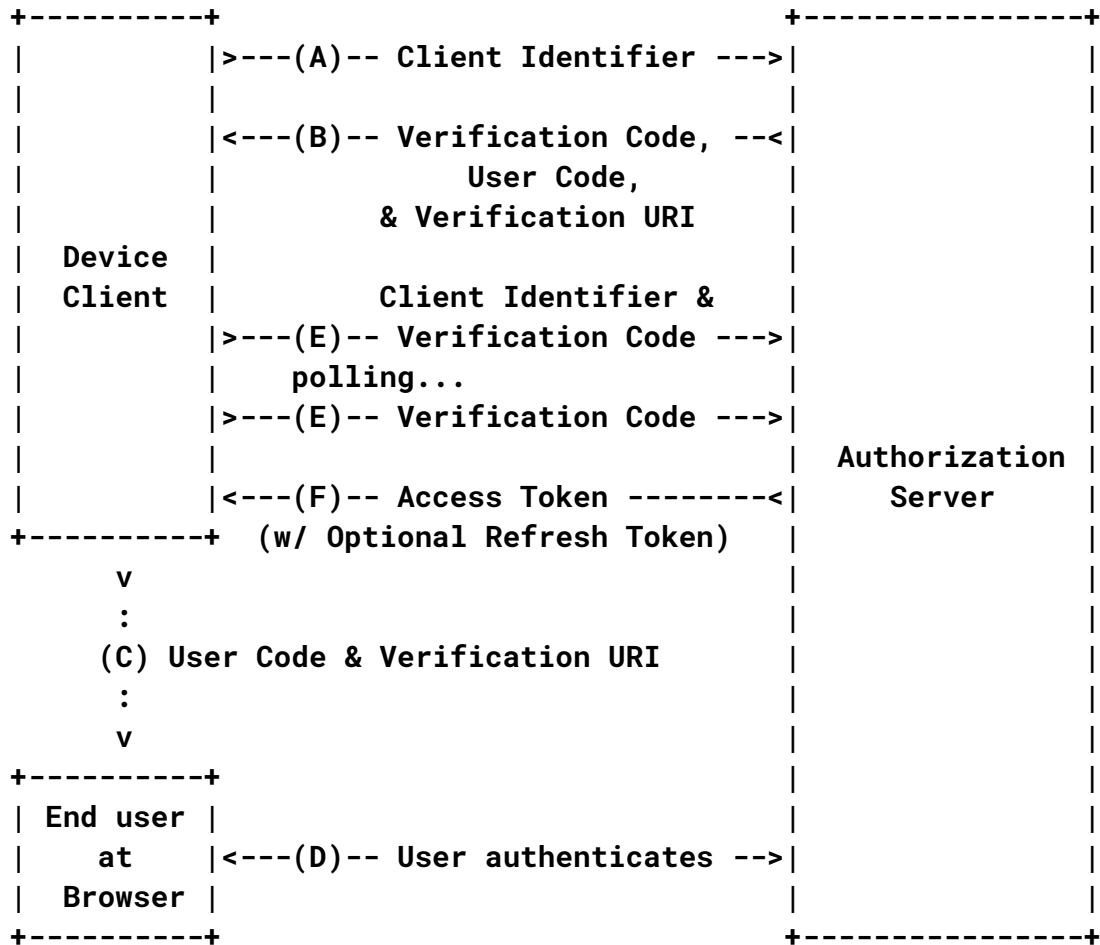
Authorize

Deny



# Použité koncepty a technologie

- Out of band autentizace
- OpenID Connect (OIDC)
  - Standardizované OAuth2 Device flow
- Pluggable Authentication Module (PAM)
  - PAM modul s podporou OAuth2 Device flow
  - Lze použít pro jakoukoliv službu podporující PAM
- Jednoduché pro uživatele
  - Stačí vyfotit QR obsahující URL
  - Alternativně lze URL přepsat ručně
- Single sign-on

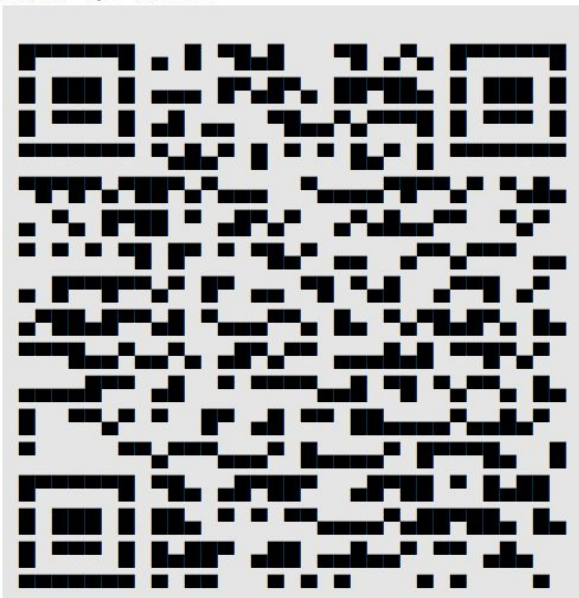




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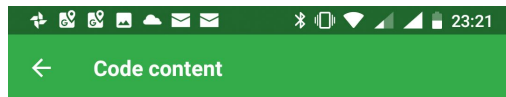
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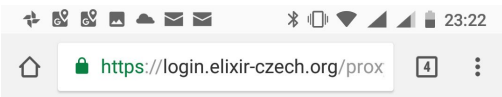
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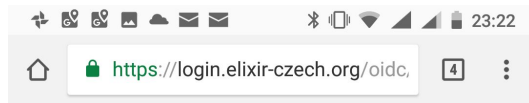
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# Možná využití a rozšíření

- **OIDC agent (obdoba ssh-agent)**
  - Proof of concept implementace
  - Modifikace Dropbear SSH serveru
  - Nutnost mít OIDC agent nainstalovaný na klientské straně
- **Použití na libovolném zařízení schopné zobrazit QR kód**
  - Sdílené tiskárny, náhrada karet na zabezpečení místností, IOT zařízení
- **Aplikace v mobilu jako náhrada federovaného přihlášení**
  - Single sign-on
  - Jednodušší na použití

# Děkuji za pozornost

Zdrojový kód PAM modulu:

[https://github.com/ICS-MU/pam\\_oauth2\\_device](https://github.com/ICS-MU/pam_oauth2_device)

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