Re-use of E-mail Adresses: How to Prevent Impact on edu-ID Accounts

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E-Mail address in edu-ID

• Used as login name (like for many cloud services today)
• Any e-mail address associated to account can be used to login or for password reset!

Risk:
User looses e-mail address, another user inherits it and takes over original owner’s edu-ID account
E-Mail Address Recycling

• Every e-mail provider has own policy regarding address recycling:
  – Gmail never recycles
  – Most e-mail providers recycle addresses after some grace period
    (e.g. 1 year for Hotmail, 6 months for Yahoo, GMX deletes account after 6
    months inactivity and may recycle after 12 months)

• What about universities? Schools? Companies?
  – Example: Staff member with same name inherited address of student after just
    a few days of grace period
Counter-Measures by edu-ID 1

- If user loses university affiliation, **edu-ID automatically removes e-mail addresses**
  - If no other address is available, “.inactive” is appended to address.
  - User can regain account on his own if password still known
  - Reserved domain .inactive prevents password reset

- **Remind inactive users** of their account
- Remind users to **add long-term non-organisation address**
Counter-Measures by edu-ID II

- Starting in May/June 2020: **Bounce Mail Processing**
  - Bounce mail processing will recognize inactive addresses and remove them automatically.

(Permanent) Bounce mail received → after N days → Send e-mail to bounced address → Received another bounce?

- yes → Remove/replace e-mail and possibly inform user
- no → e-Mail address probably still works
Limitations of Bounce-Mail Processing

• Only works if we ever receive a bounce-mail or trigger one
  – edu-ID users don’t receive regular e-mails to their contact address
  – Additional/linked identities e-mail address are currently not checked regularly

• Does not work if e-mail address is recycled in less than N

• Future extension:
  Check e-mail addresses actively (by sending an e-mail) or via commercial service. But how often?
Counter Measures for End-User

• Keep e-mail addresses of edu-ID account up-to-date
• Enable Two-Step login (multi-factor authentication)
• Ideally add your (privately) owned long-term e-mail address as contact address