

Hybrid Multi Factor Authentication

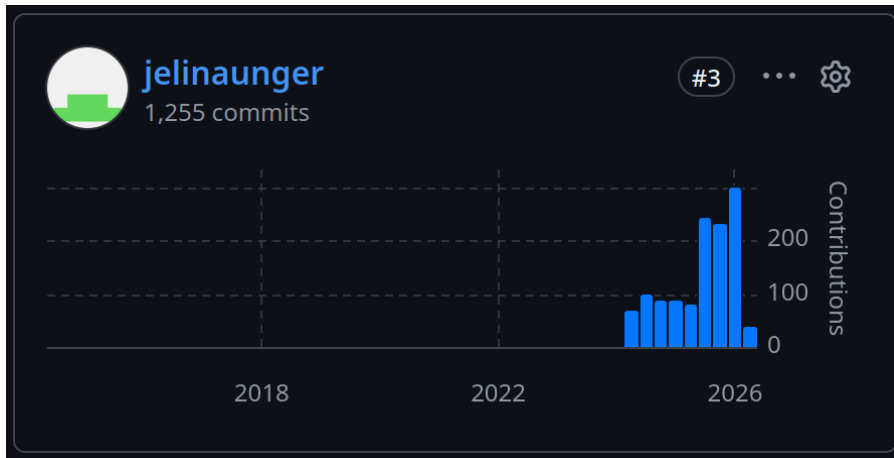
Balancing On-Premise Control and Cloud Integration with

privacyID3A
AUTHENTICATION SYSTEM



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FOSS North
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About Me



Full-stack developer








privacyIDEA



2 years, full-time

privacyIDEA

-  Multi Factor Authentication System
-  Centrally manage tokens for different applications
-  Vision: Help users retain control over accesses
-  Open-Source
-  Hosted on GitHub

Providing Versatility & Flexibility

Different configuration options to meet specific organizational needs



**Token
Types**



Policies



**Event
Handlers**



**User
Resolvers**



Token Types



E-Mail &
SMS



HOTP



TOTP



Certificate



Push



Passkey



Policies

- Access management
- Token enrollment configuration
- Authentication flow configuration
- Customizations



User Resolvers

Users are received from external sources via ...

- LDAP
- SQL
- HTTP

Deliberately On-Premise

Empower organizations to retain autonomy and control over their system and data.

✓ Control over whole system

✓ Data privacy and security

✓ Reduced attack surface

✓ Independency

! Most important
for critical
infrastructure

Benefits of a Hybrid Authentication System

✓ Allow to use cloud services

✓ Secure on-premise applications

✓ Prepare transition

➔ Integrate both to keep privacyIDEA versatile

Exemplary Cloud Integration with EntraID






User resolver



Integration into authentication



EntraID - User Resolver

- EntraID provides Graph API for user management
- Resolver Functionality
 -  Get users
 -  Check password
 -  Create / edit / delete user



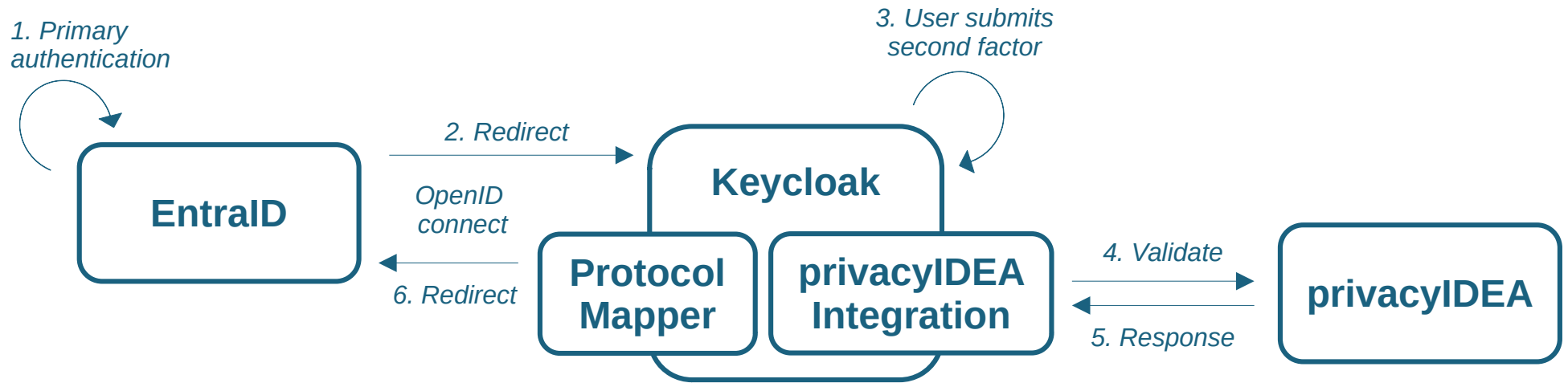
EntraID – Integration Into Authentication Flow

Two options:

- External MFA method via OpenID connect
- Use ADFS in a hybrid EntraID set-up

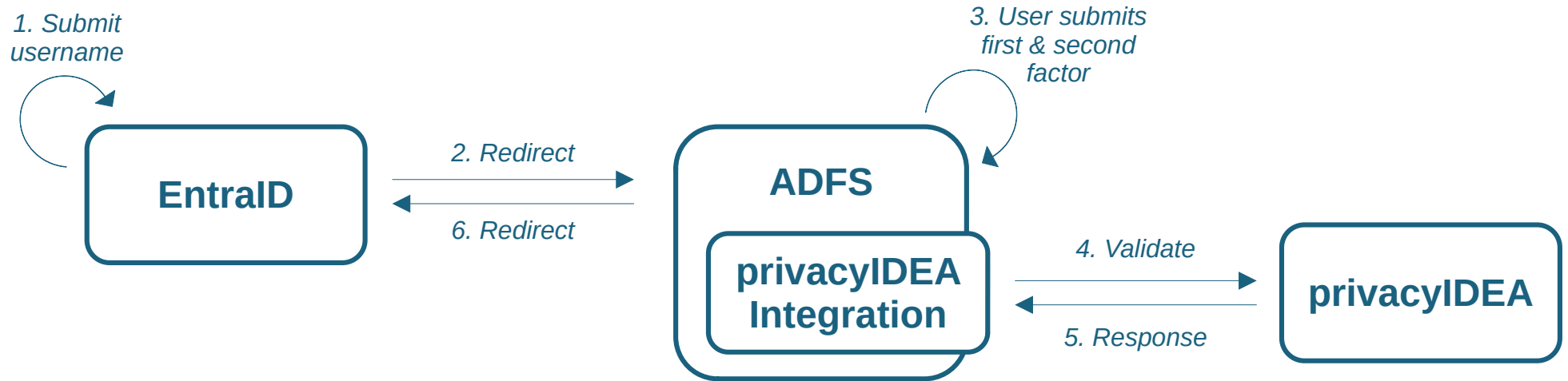


External MFA Method





Integration via ADFS



Conclusion

 Secure Cloud Systems

 Secure On-Premise Applications


privacyID3A
AUTHENTICATION SYSTEM

 Centralize Authentications

 Retain Control

 Be Flexible

Curious to dive deeper?



Stop by our booth!



<https://github.com/privacyidea>



<https://www.privacyidea.org>

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