AAI: Experiences with Making a Service Available for Users Worldwide

Jozef Mišutka, Ondřej Košarko, Amir Kamran,
Michal Josífko, Pavel Straňák
LINDAT/CLARIN dev team

Institute of Formal and Applied Linguistics
Charles University in Prague, Czech Republic

CLARIN

- The ultimate objective of CLARIN ERIC is to advance research in humanities and social sciences **by giving researchers unified single sign-on (SSO) access** to a platform which integrates language-based resources and advanced tools at a European level.

LINDAT/CLARIN AAI requirements

- unified SSO
- users are verified (researchers)
- possibility to identify users
- possibility of a project wide authorisation

Repository:

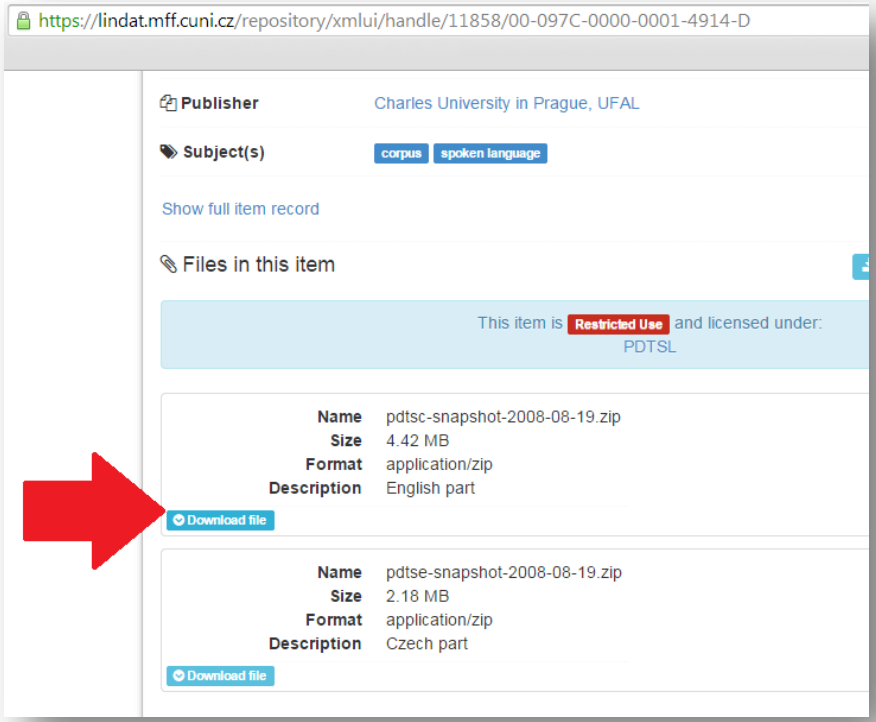
- valid email address

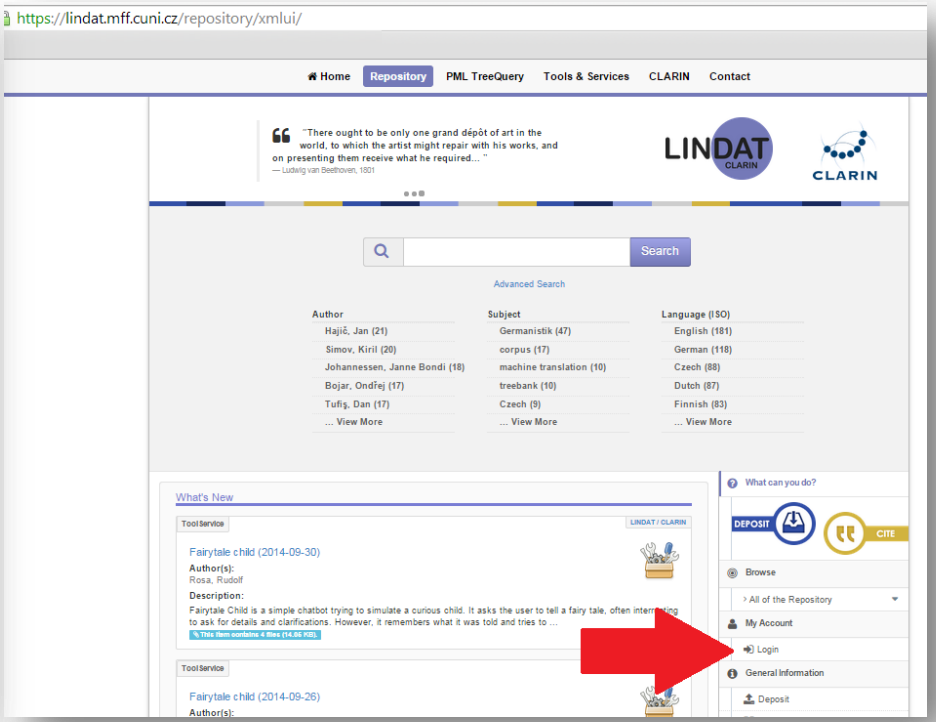
LINDAT/CLARIN AAI

- **shibboleth** federated identity solution
- Security Assertion Markup Language (SAML)
- trust between Service Providers (SPs) and Identity Providers (IdP)
- umbrella model

Web based login

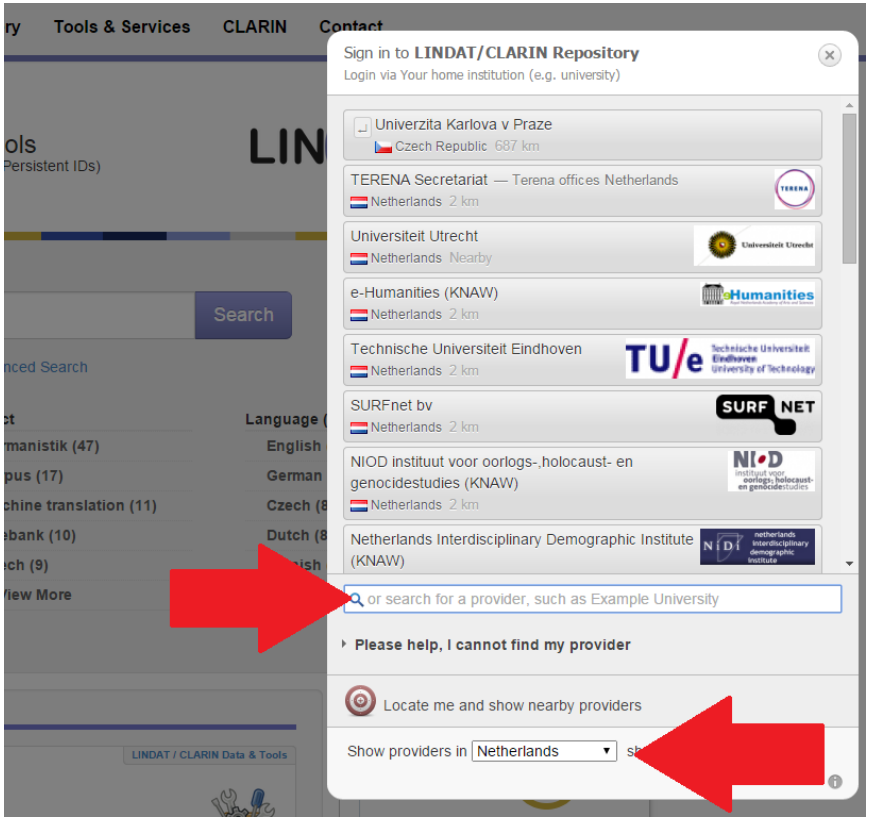
- visit http://lindat.mff.cuni.cz/repository





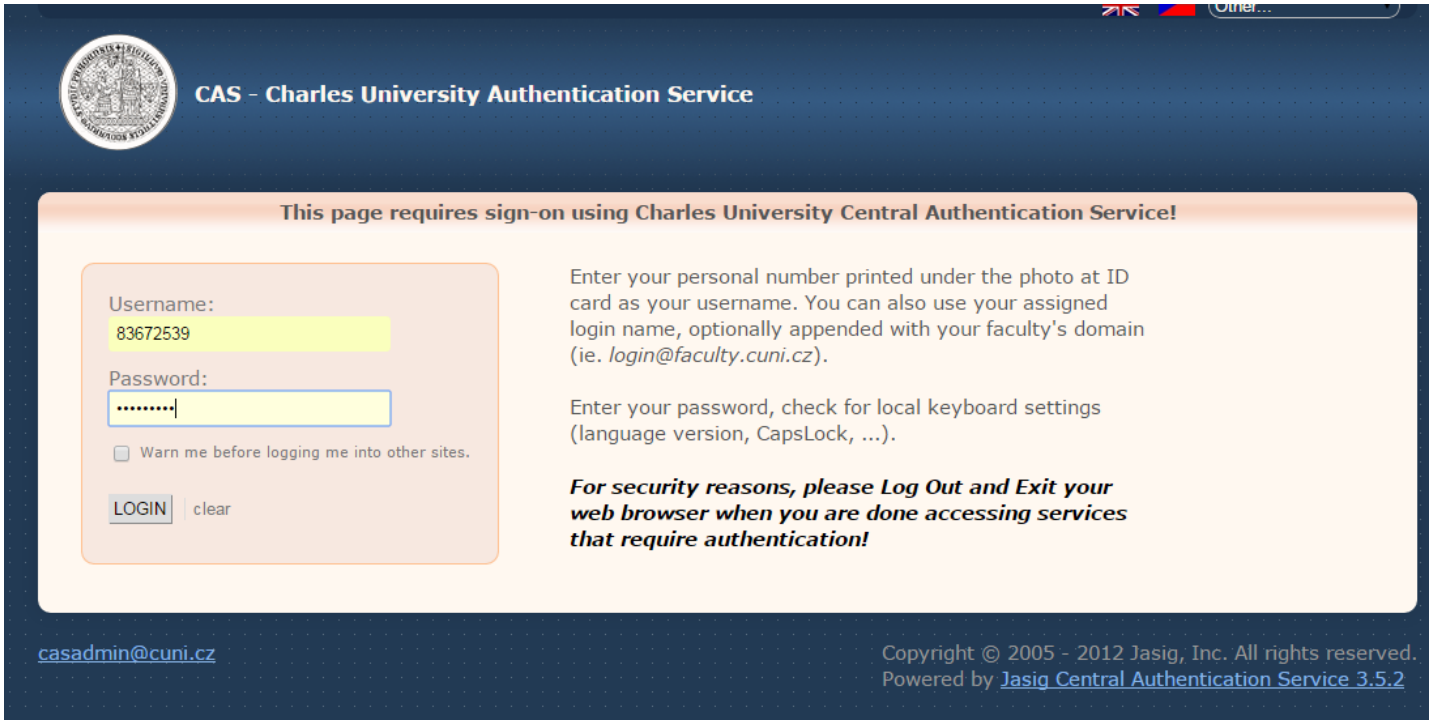
Web based login

- select your IdP



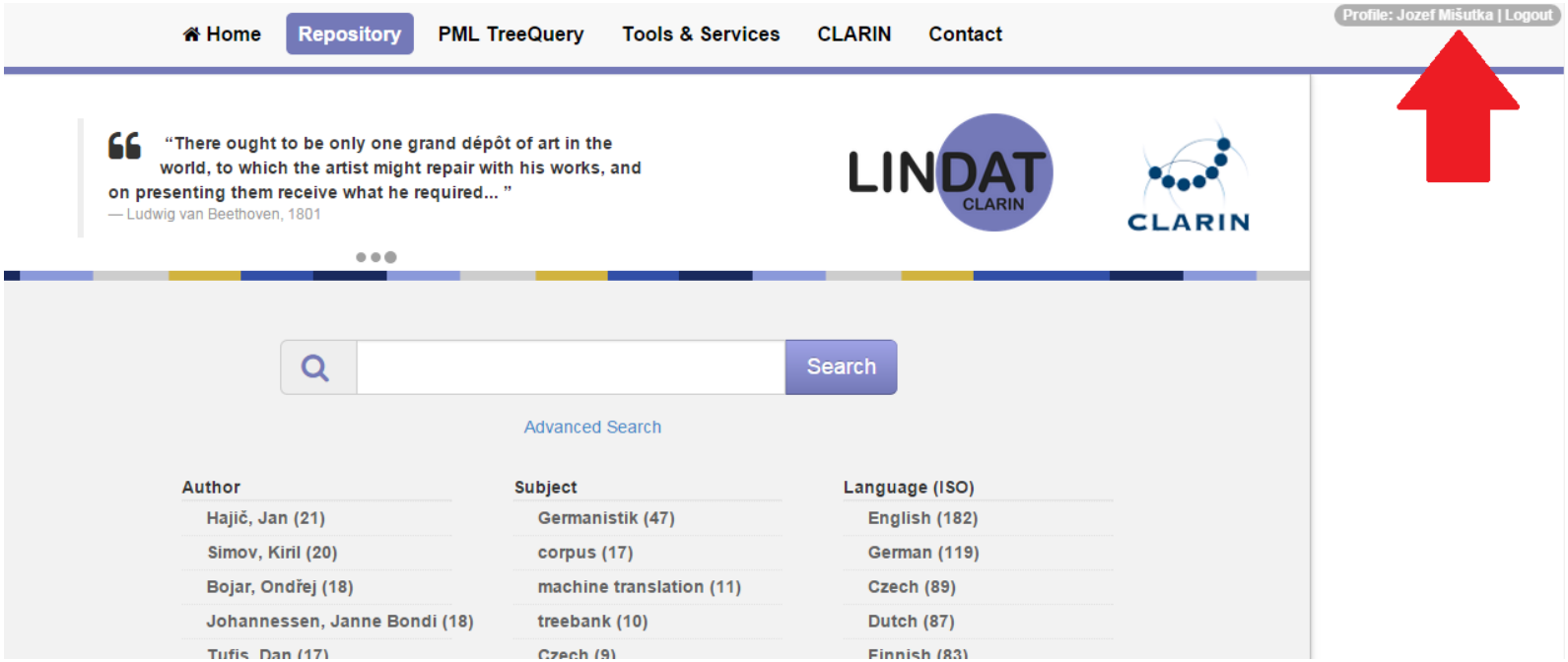
Web based login

- redirected to your IdP's login page which should be known to you



Web based login

- enter your credentials and you will be redirected back to our service



How to achieve

- install shibboleth (or SimpleSAMLphp)
- join federations and get metadata feeds of trusted IdPs
  - national federation
  - inter-federation e.g., Service Provider Federation by CLARIN, eduGAIN
  - individually e.g., project wide IdP for “homeless” users
  - setup harvesting of the trusted IdP metadata feeds
- allow the user to select one of the trusted IdPs using DiscoJuice library

Consistency between components

- harvest metadata feed of IdPs that your SP trusts
- IdPs must trust your SP
- the user should be able to select from the list of trusted IdPs

Reality – what can happen

- IdPs do not trust your SP
  - only the technical trust is granted
  - either technical problem on their side or they explicitly filter your SP out, opt-out policies
- IdPs do not send ANY attributes
  - information that a user exists
- IdPs send attributes but not the ones which can be used for identification
- IdPs send only one of the "id" attributes (eppn, eptid, persistent-id?)

Reality

- users are not from R&E
  - hopefully, they are at least properly tagged
- scoped attributes are filtered
  - do not specify shibmd:Scope

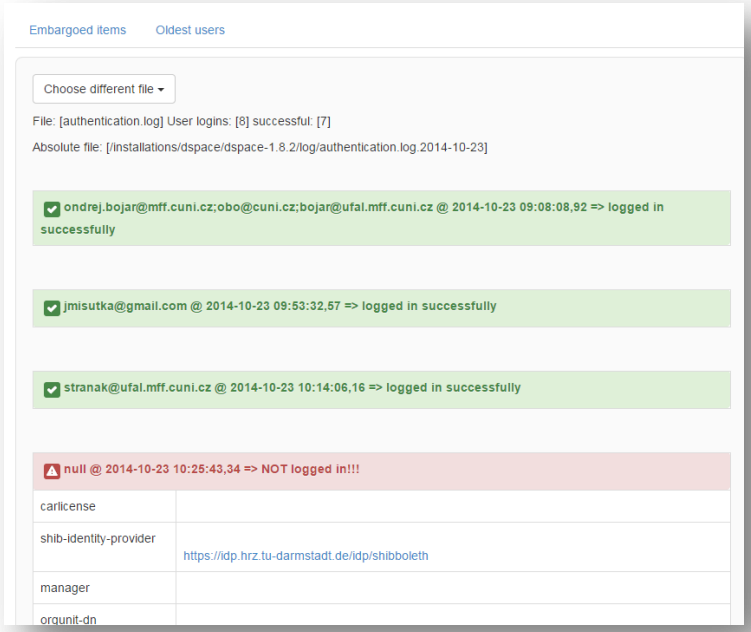
Persuade IdPs that you play nicely

- Data Protection Code of Conduct
- SP is responsible

```
<saml:Attribute
        xmlns:saml="urn:oasis:names:tc:SAML:2.0:assertion"
        Name="http://macedir.org/entity-category"
        NameFormat="urn:oasis:names:tc:SAML:2.0:attrname-format:uri">
<saml:AttributeValue>
        http://www.geant.net/uri/dataprotection-code-of-conduct/v1
</saml:AttributeValue>
<mdui:PrivacyStatementURL xml:lang="en">
        https://lindat.mff.cuni.cz/privacypolicy.html
</mdui:PrivacyStatementURL>
```

Monitor

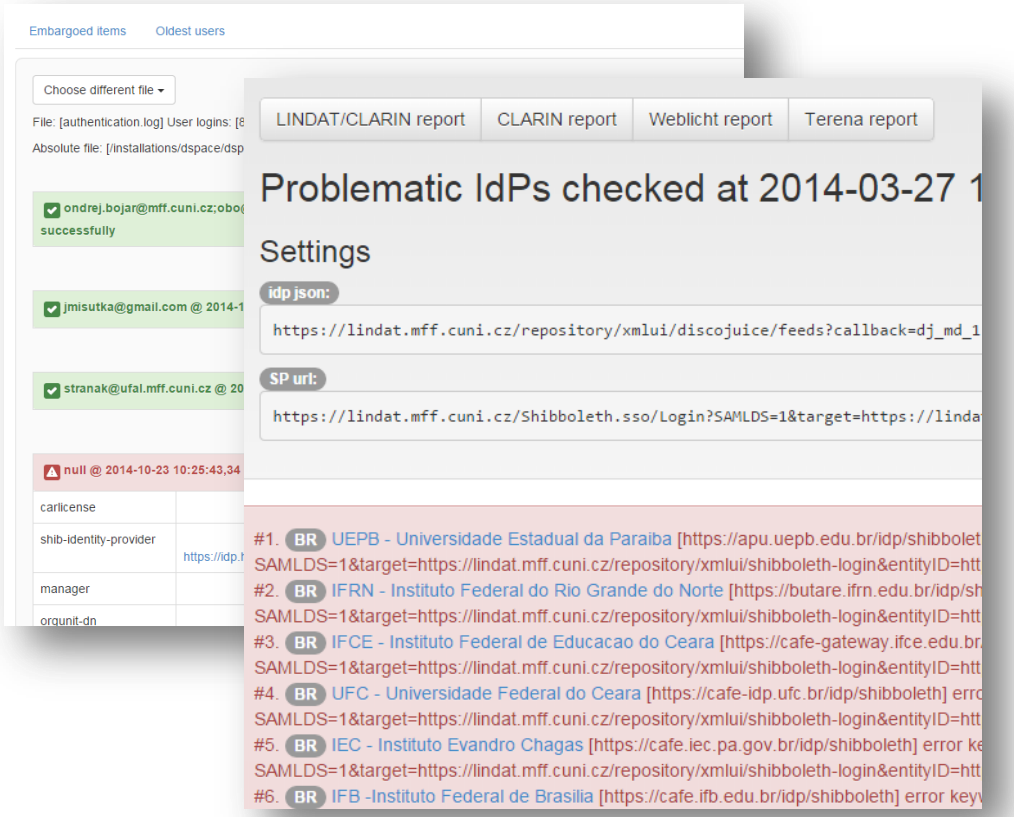
- successful / failed login attempts



```
Subject: Error in LINDAT/CLARIN repository
 [https://lindat.mff.cuni.cz/repository]
MIME-Version: 1.0
Content-Type: text/plain; charset=UTF-8
Content-Transfer-Encoding: 7bit

Could not identify a user from [https://idp.hrz.tu-darmstadt.de/idp/shibboleth] - w

Details:
Unable to register a new eperson because we can find neither an email address nor a
  NetId Headers: eppn,persistent-id=null (Optional)
  Email Header: mail=null
  First Name Header: givenName='
  Last Name Header: sn='

Headers received:
postalcode = []
carlicense = []
shib-identity-provider = [https://idp.hrz.tu-darmstadt.de/idp/shibboleth]
manager = []
orgunit-dn = []
shib-authncontext-decl = []
accept = [text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8]
street = []
shib-session-index = [_4fd7d3b3f05672a740369f1fbee6575c]
telephonenumber = []
edupersonstudysubject = []
shib-session-id = [_0e7bc45d74e04b9e29a0ada211d704f9]
employeenumber = []
shib-application-id = [default]
unstructuredname = []
initials = []
```

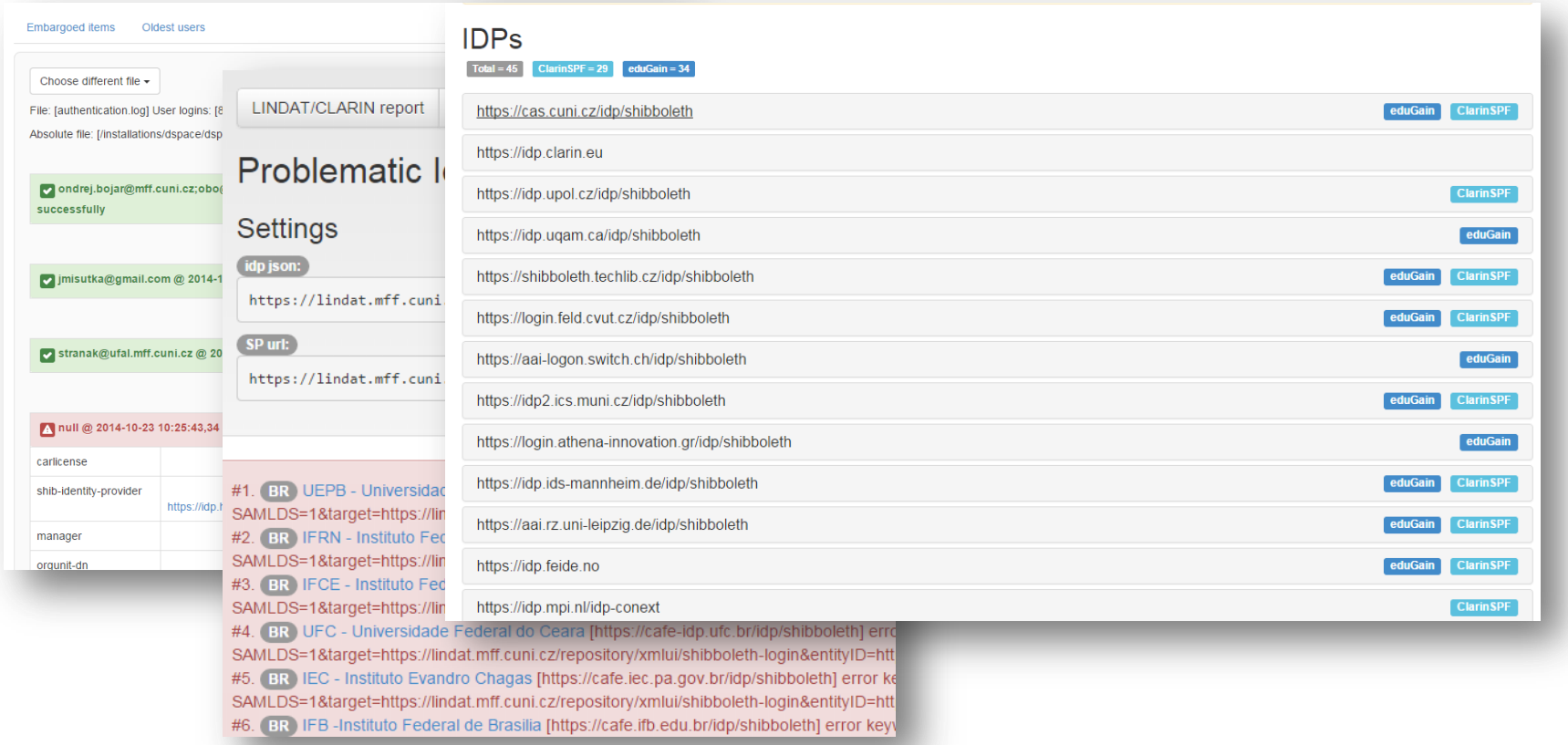
Monitor

- IdP QA



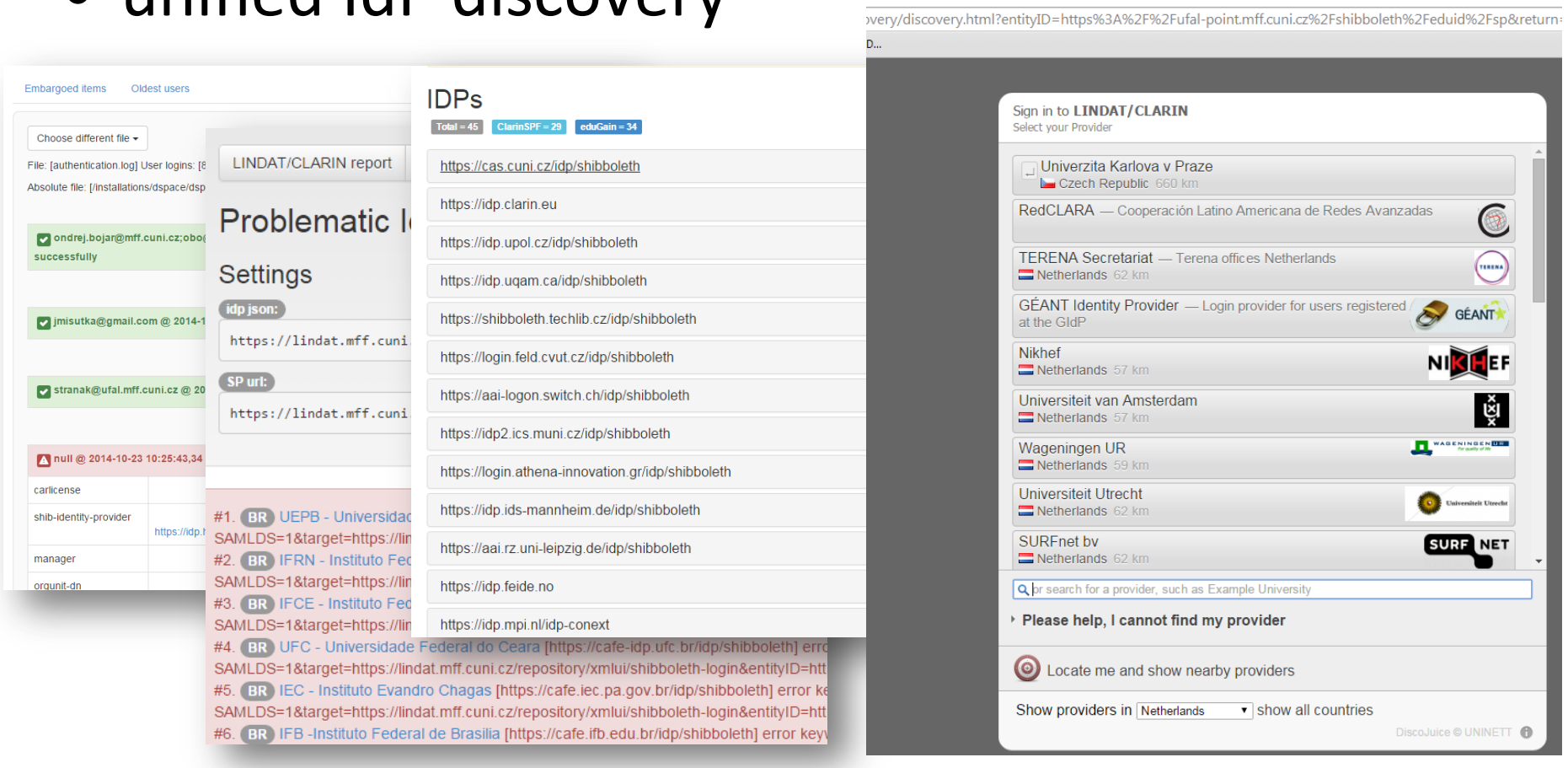
Monitor

- attributes statistics



Monitor

- unified IdP discovery



Few statistics

- 45 IdPs or national IdPs
  - SPF: 29 (10)
  - eduGAIN: 34 (15)
  - eduID: 14
- eppn: 36 (10)
- targeted id: 30 (4)
- email: 33
- no attributes: 5

Conclusion

- state-of-the-art best results for R&E
  - SAML + national federation + SPF + eduGAIN
  - DP-CoC
  - optionallly create your own list of trusted IdPs

Thank you