Gefördert durch:

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Einfach. Sicher. Riesig.

sciebo

dieCampuscloud

User Management and Sharing in sciebo, the Academic Cloud Storage Service in NRW

Holger Angenent

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> sciebo

- sciebo is the brand name, short for “science box”
- Sync and share service for universities and universities of applied sciences in North Rhine Westphalia
- Up to 500,000 users in NRW (if all 30 universities and applied universities participate)
- Organized as a consortium of all participants with the University of Münster as the head
- Service distributed to three sites
- Home grown user registration portal

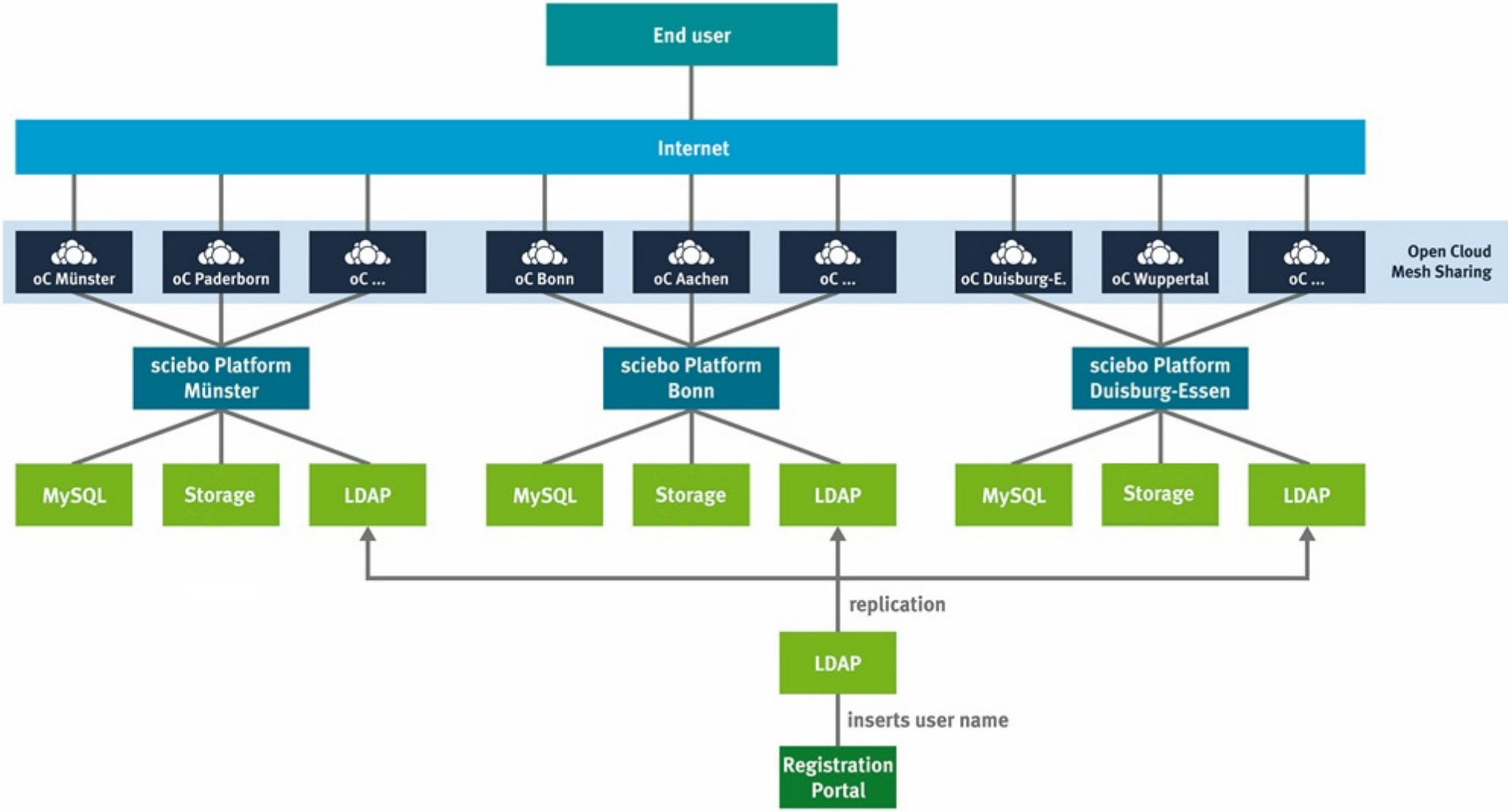
> Three Sites

Setup

- One ownCloud installation per institution
- Replication of user data between the sites for disaster recovery
- Sharing between institutions via the server to server sharing or federated cloud sharing

Reasons for multiple sites

- Lower room requirements per computing center
- More aggregated network bandwidth
- Servers are closer to users
- Scaling the service becomes easier


End user
Internet
oC Münster
oC Paderborn
oC ...
oC Bonn
oC Aachen
oC ...
oC Duisburg-E.
oC Wuppertal
oC ...
Open Cloud Mesh Sharing
sciebo Platform Münster
sciebo Platform Bonn
sciebo Platform Duisburg-Essen
MySQL
Storage
LDAP
MySQL
Storage
LDAP
MySQL
Storage
LDAP
replication
LDAP
inserts user name
Registration Portal

> Naming Scheme

- User IDs are composed of the username at home institution and the domain name of institution, e.g.:
  j_doe01@uni-muenster.de
- Individual server addresses for each institution, e.g.:
  uni-muenster.sciebo.de or *uni-paderborn.sciebo.de*
- Client do not need server names. A lookup server interpretes the scope and sends the user to their servers:
  j_doe01@uni-muenster.de is sent to *uni-muenster.sciebo.de*

> Sharing

- Displayname is composed of common name and sciebo-ID: *Doe, John (j_doe01@uni-muenster.de)*
- Auto completion deactivated
- sciebo-ID is used for sharing
- If username entered completely, full displayname is shown

Pro:

- Privacy
- Better control of shares

Con:

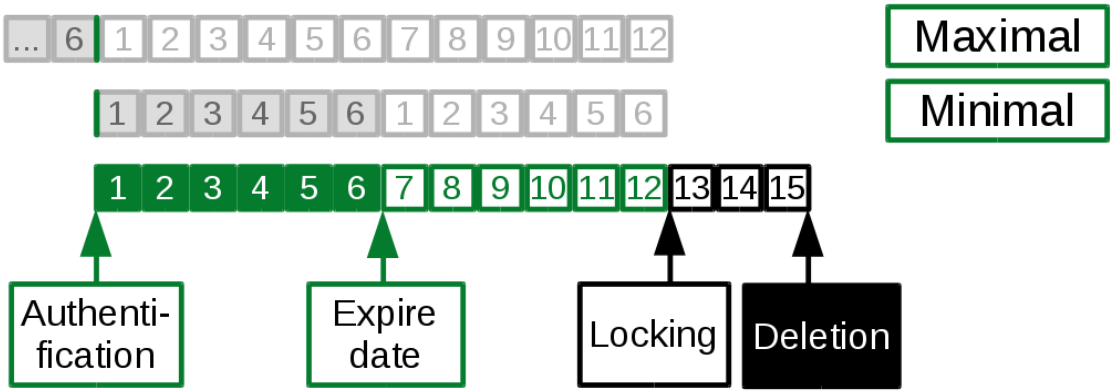
- One has to know the sciebo-ID of the receiver
- Sharing between instances relies on Federated Sharing

> Federated Sharing

- Federated Sharing used to share with
  - Guests
  - Other sciebo instances
  - Other ownCloud users
- Version 8 necessary
- Syntax: Username@Servername, e.g. *j_doe01@uni-muenster.de@uni-muenster.sciebo.de*
- We asked ownCloud to create a mechanism where servers exchange their usernames so that the "@servername" part can be omitted

> User Management

- Users register at www.sciebo.de via DFN-AAI for the service
- An account is created in a central LDAP server
- A separate password is set
- The LDAP is replicated to every ownCloud application server
- After six months, the user will be asked to re-register
- After 12 months, the account will be locked
- After 15 months, the account will be deleted
  ⇒ A user is able to access the service at least six months after leaving university.



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> Special Accounts

Project Boxes

- Used for big amounts of data and user independent accounts
- Ownership can be transfered to other users
- Institutions decide, who is able to create project boxes
- Naming scheme: project.pbox@institution
- Lifetime of 2 years (renewal by support)

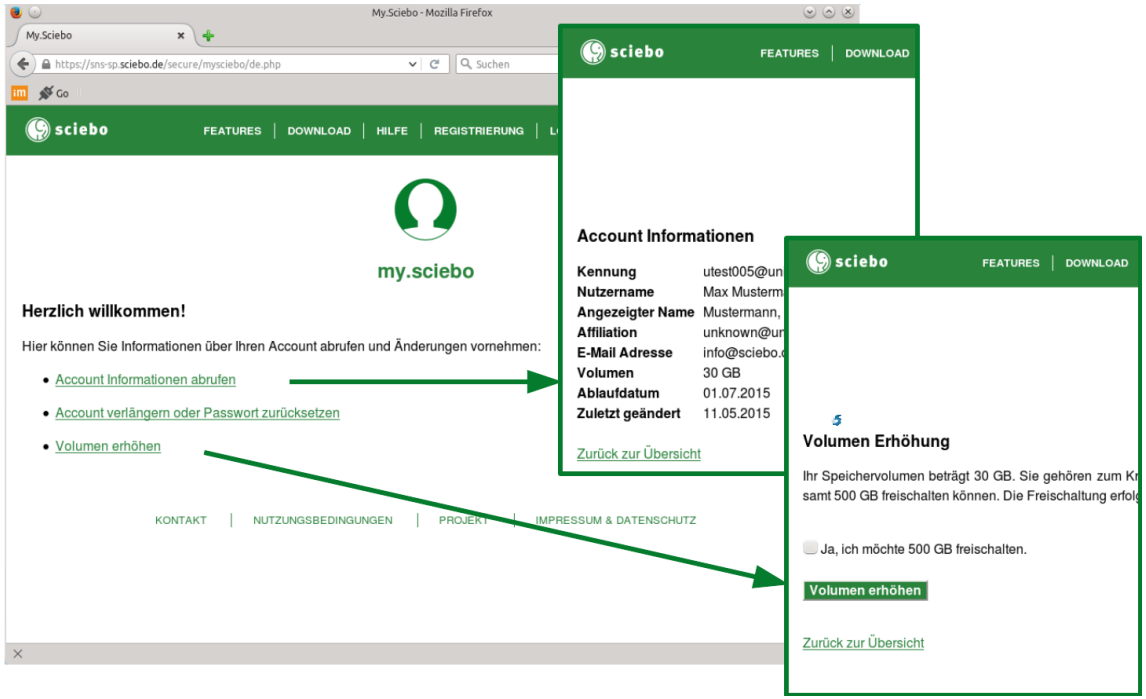
Guest Accounts

- Access for non NRW users (can use clients to sync shared data)
- 0 byte quota (use quota of other users)
- Email address serves as username
- Separate instance with (re-)sharing not allowed
- Federated Sharing needed to share with guests
- Lifetime of 6 months (renewal by inviting user)

> Self-Service Tool MySciebo

Capabilities

- Show information about account
- Increase quota (for employees)
- Delete account (to do)
- Request project box and manage guest accounts



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> Lessons learned

- Different credentials at university and sciebo is a bit confusing for some users
- If we would have to design it again, we would maybe get rid of the scope
- Guest accounts and project boxes are most welcome
- In contrast to a pure Shibboleth implementation we have much more control and customization options

Thank you for your attention!