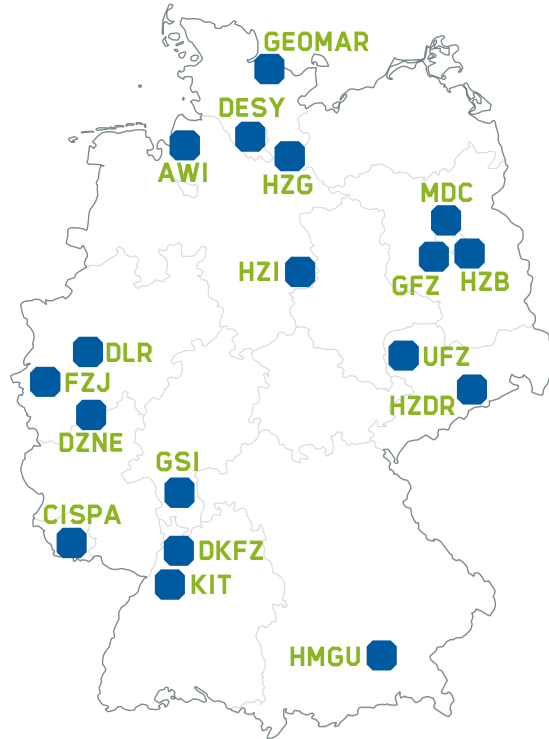


SYNC&SHARE FEDERATION FOR HELMHOLTZ

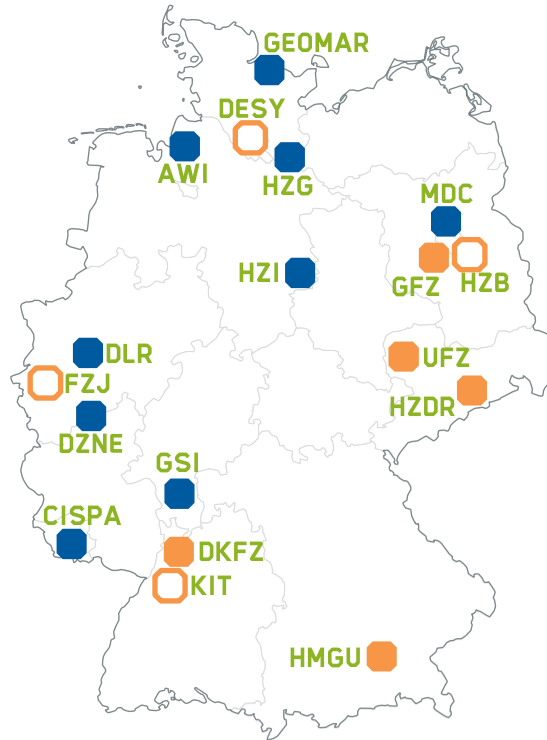
Challenges, solutions and outlook

Services	Service Provider
OpenStack	Jülich, Jülich (HDF), KIT, DKFZ
Storage (HDF)	Jülich, DESY
HAICORE (HAICU, HIP)	KIT, Jülich
Singularity	KIT, Jülich
Docker	DESY
GPU Compute Service	Jülich, HZDR
AWI Marketplace	AWI
GitLab	HZDR, KIT, Jülich, GEOMAR
JupyterHub	Jülich, DESY, DKFZ, HMGU
B2Share (Invenio)	Jülich

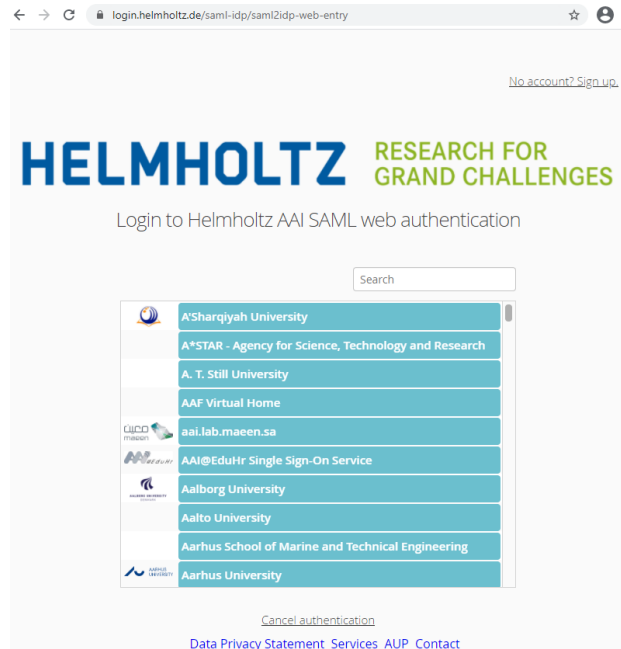
Services	Service Provider
JupyterHub Notebooks on HPC	KIT
ODV	AWI
RODARE	HZDR
Ocean and Climate Sensor Management	AWI
Rocket.Chat	Jülich
Zammad	HZDR
Mattermost	HZDR
Nextcloud	KIT, HZB, DESY
LimeSurvey	HMGU, DKFZ
Redmine	HZDR, HMGU
ShareLaTeX	HZDR



- Over 42.000 Employees
- 18 completely independent legal entities
- 18 data protection officers
- 18 employee representatives
- 18 information security officers



- 9 Centers without local Sync&Share instance
- 9 Centers operate Sync&Share instances
 - Currently, 4 of them want to offer it on Helmholtz Cloud
 - For all of Helmholtz and external project partners
 - Federation, not Consolidation



login.helmholtz.de/saml-ldap/saml2idp-web-entry

No account? Sign up.

HELMHOLTZ RESEARCH FOR GRAND CHALLENGES

Login to Helmholtz AAI SAML web authentication

Search

- A*STAR - Agency for Science, Technology and Research
- A. T. Still University
- AAF Virtual Home
- aai.lab.maeen.sa
- AAI@EduHr Single Sign-On Service
- Aalborg University
- Aalto University
- Aarhus School of Marine and Technical Engineering
- Aarhus University

Cancel authentication

[Data Privacy Statement](#) [Services](#) [AUP](#) [Contact](#)






- IdM via Helmholtz AAI
 - eduGAIN based Identity proxy
 - Also contains social IdPs
 - generating authoritative eduPersonUniqueIDs
 - VO management
 - Uses SAML2 and OIDC
- VOs are transmitted to S&S via custom SAML2 attribute
 - Format: VO#login.helmholtz.de
- AAI currently manages authorization for Sync&Share
- Policies built on WISE & AARC

Providing Sync&Share to every user

WHAT WORKS

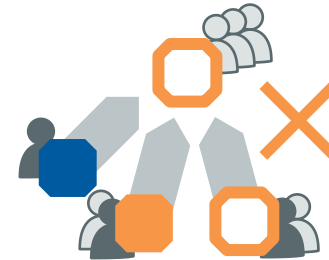
- Providing Sync&Share to whole centers without own instance



-  User account
-  User
-  Operating and providing S&S
-  Operating S&S locally
-  Center without local S&S

WHAT DOESN'T WORK

- Providing Sync&Share to VO's
 - Results in user account redundancy over multiple instances



- We will try to federate all Helmholtz Sync&Share instances
 - Later on: Integrate the federation with other HIFIS Service types

POSSIBLE ISSUES

- Large trend in VOs to work in group-based folders and calendars
 - Opportunities:
 - VO based quota management
 - Data not bound to users
- Collaboration in shared files across instances needs to be possible
- Data protection in federation is tricky
 - Protection of sensible user groups on Instances cannot be provided (e.g. Students on KIT instance)

Use cases: Technical solutions are needed

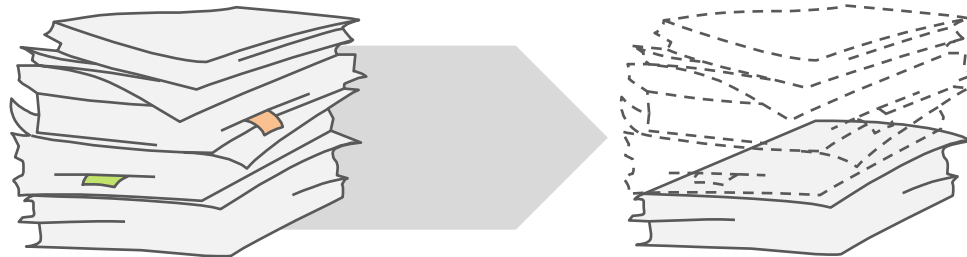
- Sync&Share instances need to recognize federation-spanning VOs
- Avoid data redundancy with group folders beyond group-based OCM sharing
- Shared files should always be opened on the sharers Office application
- Nextcloud Global Scale
 - Free-Software, but only applicable with vendor-support within bigger installations
 - Integrating lookup-Server with Helmholtz AAI is challenging
 - Does it work with other Sync&Share vendors?
- Data Protection: Allow selection on which users/groups will be shared in Federation

Data protection in a trusted environment



HIFIS Contract between all centers

- Also deals with privacy
- Contains Helmholtz AAI policies
- Emphasis on remaining open to other organizations
- Minimizing paperwork, maybe even data processing agreements



HIFIS Website:

<https://hifis.net>

HIFIS documentation:

<https://hifis.net/doc>

HIFIS Initial Service Portfolio

<https://hifis.net/doc/service-portfolio>

Helmholtz AAI Policies:

<https://hifis.net/doc/backbone-aai/policies>

AARC Blueprint VoPerson Schema:

<https://github.com/voperson/voperson/blob/master/voPerson.md>

AARC Guidelines:

<https://aarc-project.eu/guidelines/>