

Building a DINI

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Data Indexing

- Investigated the details of current DAFNI data management APIs
- Reviewed the methods of data filtering and indexing used to configure our OpenSearch cluster
- Looking to expand on the capabilities of our data management, following plans for accessing external datasets within DAFNI.
- Utilising the information around barriers and benefits from the DINI Landscape to identify the requirements for Data Indexing in a national Research Data Cloud

DAFNI and JASMIN Integration

- Produced a proposals document for authentication. We studied the practical methods and reviewed these with the JASMIN team to decide on some preferred methods.
- Analysed our current projects to highlight user stories that support the need for a DAFNI-JASMIN link
- Identified early-stage opportunities to begin integration of DAFNI and JASMIN
- Identified larger tasks to be considered as part of the overall DAFNI roadmap

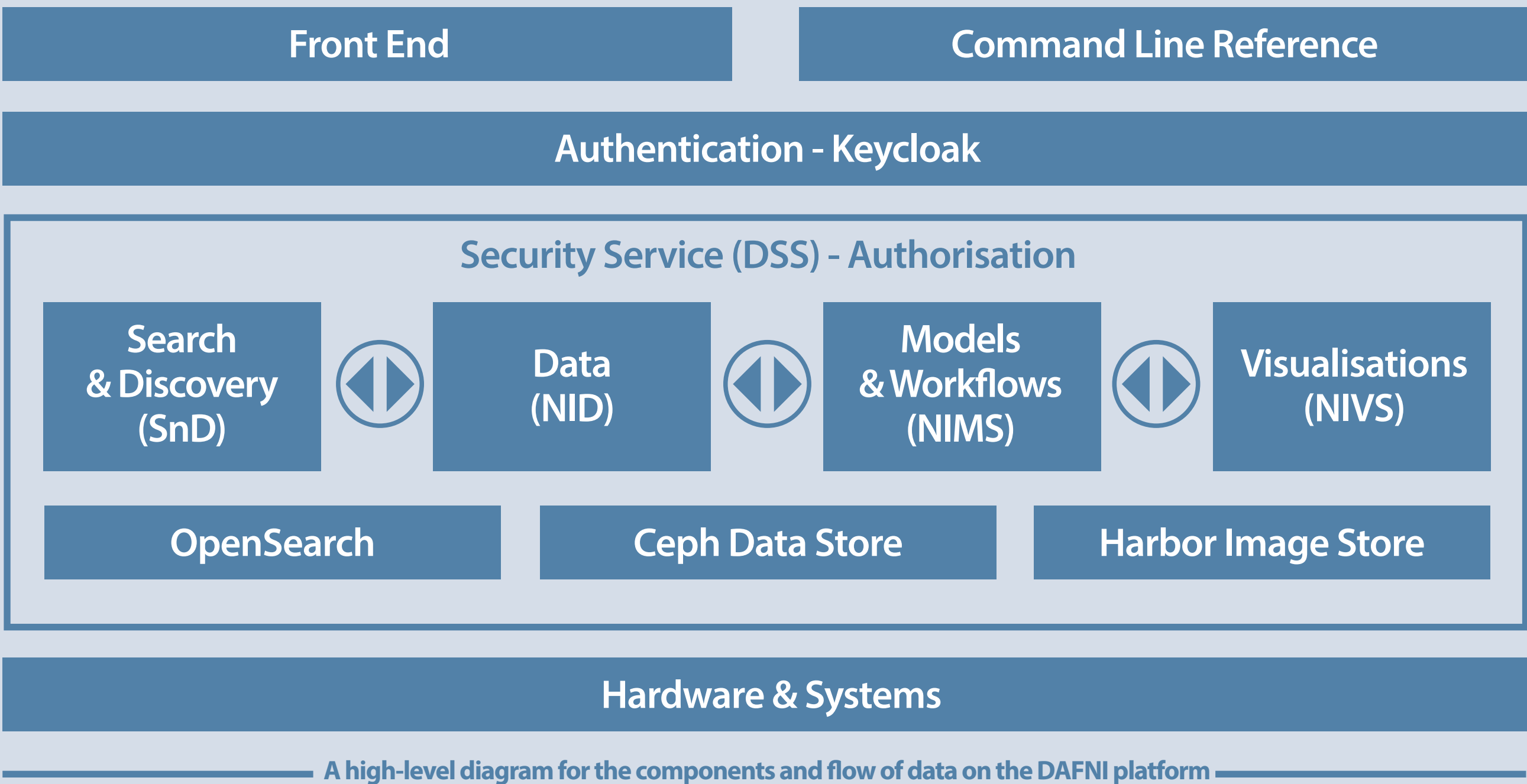


DAFNI Data Indexing

One of the milestones for DINI is to demonstrate a data brokering service for data search, discovery, and access, across diverse data sources.

By using the range of ongoing DAFNI BSRW projects we have showcased the use cases of data sharing and access across national infrastructure which has allowed us to begin to realise the potential barriers and benefits.

We compared the current data management that takes place within the DAFNI platform with components as a starting place for data indexing in DINI. We may highlight where we would need to adapt and improve the technical aspects of these services to support a national Research Data Cloud.



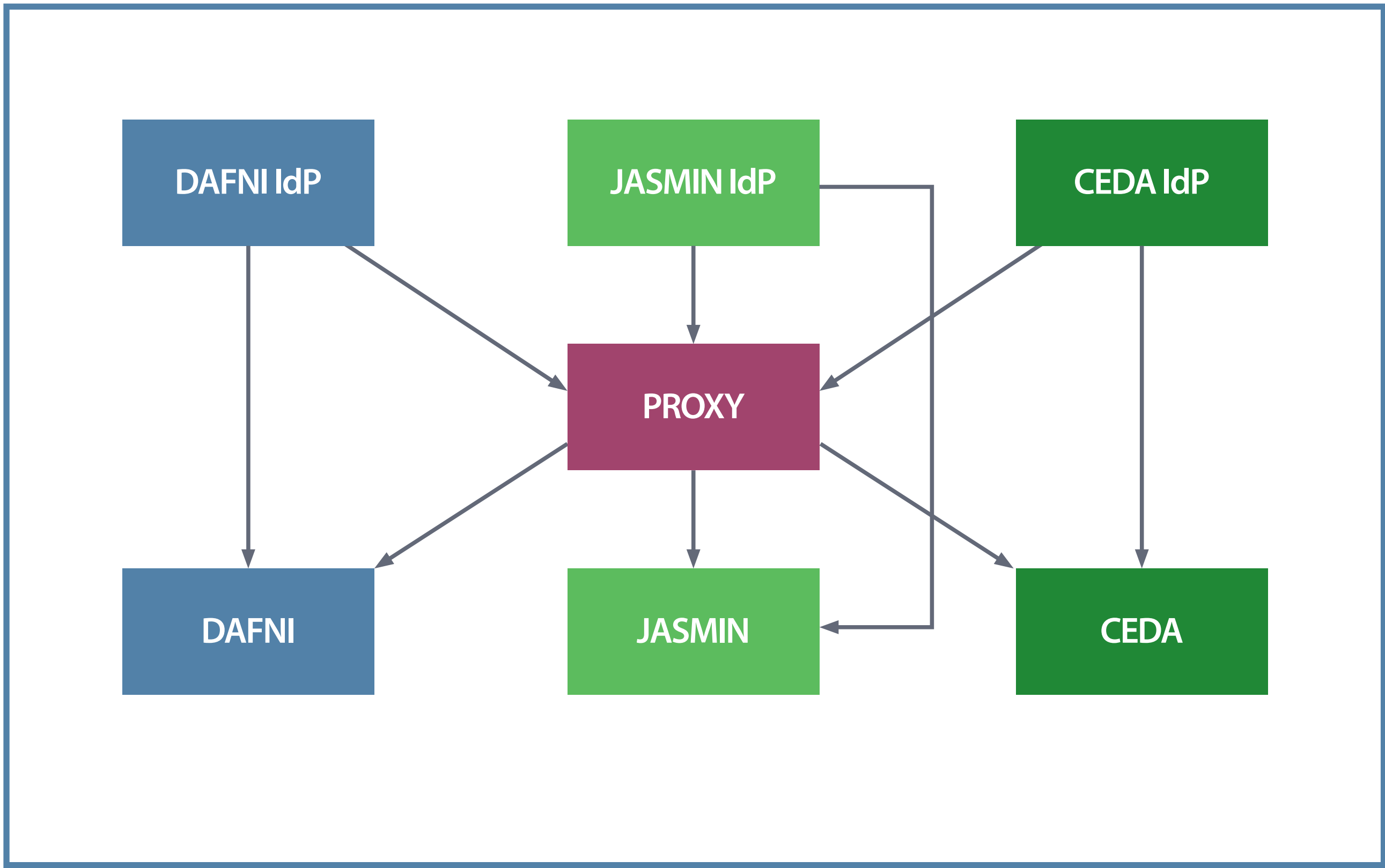
Progress towards DAFNI and JASMIN Integration

Early Stages

- Begun experimentation of Keycloak token exchange, as a knowledge developing exercise for the options of token introspection
- Reviewing the possibility of HTTP access to public GWS in the CEDA archive, either;
 - via DAFNI model http calls
 - or as a separate component in an external dataset

Future Development

- Once access to external datasets is built into DAFNI, explore general token introspection for user data on JASMIN
- As a possible alternative if token exchange is not possible. We can investigate registering a client in the cloud with the OpenID provider



Use Case Evidence for DAFNI and JASMIN Integration

STORMS project

“As a user I want to combine datasets from different sources – infrastructure, ground/soil, geographic/geospatial and climate”

CGFI

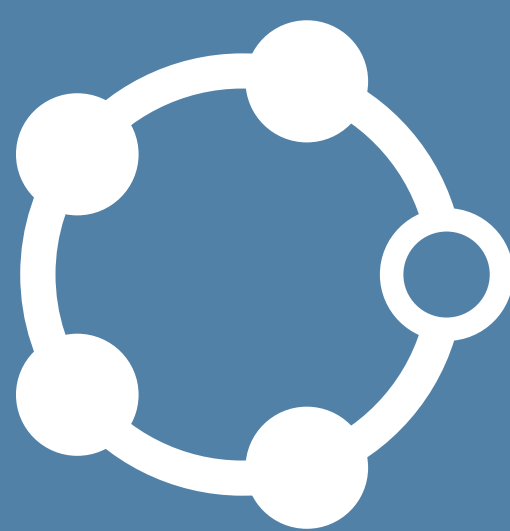
“As a project participant, I wish to make my models available to domain expert users in a user-friendly way”

OpenCLIM project

“As a user, I want to access data in a JASMIN GWS from a DAFNI workflow”

CRDo

“As a project practitioner, I wish to explore regional climate data predictions to example cross-network effects in the region”



DAFNI

Data & Analytics Facility
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