ESS Visit SciCat Marathon 24.-25.10.2023

Summary of topics discussed and follow ups

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Topics discussed

Topics discussed

- I came with a list a questions to visit Max Novelli (ESS) who invited also Daphne and Marco (both MaxIV).
 Nicolas Hayen (CAU Kiel) also joined. Online participation by Spencer (PSI) and Despina (EMBA).
- Max' goal was to make progress with release 4.4 ("jobs migration").
- My goal was to understand better scicat internals to get input for DESY users: **authentication**, **authorization**, **grouping/tagging datasets**, **openAPIs for python bindings**, **several GitHub issues**
 - proposal ingestion: incorrect validation #495,
 - Ingestor is no more Dataset ingestor #712
 - ingestor does not have read access to proposal metadata #819

Grouping/Tagging/"Hierarchy problem in datamanagement"

- This issue, observed at P08 testinstance old BE, led to many many datasets ingested and made scicat uncapable of being used - besides other problems.
- I learned that around 1000 OrigDataBlocks can be related to a dataset.
- Worth checking how to properly use these OrigDataBlocks?
- Max told me a possible solution, to be checked if useful for us, ie P08 (one way using DerivedDataset class).
- Follow up on this is in progress, but leads to more questions: What is the query that you are going to ask yourself to find your data? How precise do you know your data when I tell you what you search is in this dataset? How do you select a specific datafile to download or how do you select your data? How often do you search?



Authentication / Authorisation

How is it supposed to work?

- New with the new backend, organisation of permissions: no more roles, but "groups".
 - o implementation of 2 types of authentication: 1. endpoint auth 2. instance auth
- To the user no difference, but internally CASL Ability is used to allow fine-grained user permissions.
 - ingestor, proposalIngestor, admin, archiveManager are now configured in groups. Not all of these have tests!
- Max is preparing a summary table from which one should see the fine-grained permissions. This should shed light on issue #712.

Testing infrastructure

- Max gave short introduction about how tests are performed in SciCat.
- Mainly mocha framework is used (other is jest tests for normal function tests) and usually tests are automatically run when a PR is performed.
- All tests are defined in a folder tests/ (parallell to src/) and points as a reference to datasets as this "endpoint entity" is most elaborated
- For local testing he explained how to do it (see also <u>https://github.com/SciCatProject/scicat-backend-next#test-the-app</u>)
- participation in github issue #626 brainstorming for tests for jobs
- Plan: write a test that matches the case described in issue #819. Follow up in progress.

Release 4.4

Jobs migration

Still missing in v4

Drafting jobs

- Clarified the problem and its applications: communication of scicat to external services
 - RabbitMQ
 - Kafka
 - URL
- Started implementation for the simplest case: URL

URL case: example "Beautify"

- discussed in detail single design steps of functions and templates and started implementing
- at the end single tasks/github issues were assigned
- git workflow was highlighted



General remarks

It was just the beginning

I personally found this training visit useful, because

- we were very productive. I could start discussing DESY issues.
- I committed to help out for the jobs migrations earlier, even though it might not have an obvious and direct impact for DESY/DAPHNE users yet, this helps to gain insight and this gave reason for this meet up.
- They appreciated the promised contribution by DESY.
- They mentioned that they are willing to come to DESY for further training on site.
- I figured that SciCat has many undocumented features.

Follow up appointments with people in concern are scheduled.

I hope to show some progress on these issues here by the end of this year.

Please come forward with your usecase!

Collaborative spirit

Marathon Day 1



Thank you