

Meeting Notes 11th of December 2024

Merry Christmas and Happy New Year

- Christmas break
 - Meeting scheduled on December 24th, 2024 is canceled due to Christmas break
 - Next meeting is scheduled for January 7th, 2025
- SciCatCon 2025
 - o ESS final approval came through
 - It will be held on-site at the ESS DMSC located in Lyngby, located north of Copenhagen city center.
 - Doodle poll is available to specify availability https://doodle.com/meeting/participate/id/ej5QkPvd
 - With the new year, ESS will start the organization process, including creating the web presence.
- Branding
 - Laura presented the latest updates regarding SciCat identity.
 - Logo is confirmed to be this one:







- github issue: https://github.com/SciCatProject/scicatproject.github.io/issues/54
- new proposed logo in github issue: https://github.com/SciCatProject/scicatproject.github.io/issues/54#issuecomment-2500964064
- Tagline.

Advance your data to advance your science

- Updated tagline based on feedback received
- github issue: https://github.com/SciCatProject/scicatproject.github.io/issues/55
- Selected tagline in github issue:
 https://github.com/SciCatProject/scicatproject.github.io/issues/55#issuecomment-2531473335

o Project mission:

Advance your data to advance your science. SciCat is a community driven scientific metadata catalog designed to simplify metadata management, enabling data sharing, discovery, and collaboration. By providing a central hub for metadata, SciCat makes data easily findable and accessible for the entire community. With flexible integration into diverse infrastructures and a clear path to data publication, SciCat empowers organizations to foster an open and innovative data culture, driving high-quality science forward.

- github issue: https://github.com/SciCatProject/scicatproject.github.io/issues/56
- selected project mission in github issue:
 https://github.com/SciCatProject/scicatproject.github.io/issues/56#issuecomment-2531467928

Release jobs

- On-going internal refactor to improve code management and maintenance
- There is a PR open to review
- We are in the final push to release job to master
- Regina asked about documentation
- PR #56 in documentation is open with the jobs updates https://github.com/SciCatProject/documentation/pull/56
- README file has been added in code with info for developers



- Regina asked if MaxIV is using jobs.
 MaxIV is using BE v4 and is not using jobs at the moment.
- RFI is currently rabbitmq with jobs in BE v3, but they are intend to migrate to kafka when they switch to BE v4.0
- Dataset subsystem V4
 - Max introduced the work that Martin is doing on Datasets under the DAPHNE contribution to SciCat
 - Martin presented the work in details
 - Dataset V4 aims to:
 - uses only Unified dataset schema
 - simplify the code
 - offer functionalities related only to datasets
 - leverage mongodb aggregation functionality
 - Dataset v4 will co-exists with Dataset v3
 - Spencer asked if any endpoints can be offered on multiple API versions.
 According to the documentation available at the following url: https://docs.nestjs.com/techniques/versioning

The same code and route can be offered under multiple API versions:

- api/v3/proposals -> GET proposals
- api/v4/proposals -> GET proposals

SDK

- Emil asked the reason to create the python and python-pydantic packages, as the python package leverages pydantic v2, while python-pydantic uses pydantic v1.
- Given that the python SDK are relatively new and they are not widely used yet, It was decided to remove python-pydantic with pydantic v1 and keep the python package based on pydantic v2.
- Carlo introduced new PSI collaborators: Fredric and Omkar
- Bjorn reported on PR.
 - Most of the outstanding PR from dependabot have been resolved and merged.
 - FE PR #1626 to update angular to v18 is still outstanding. He will test if it can be done without to much effort
- Performance

Igor presented quickly the results of the performance tests that he performed.



- Discussion about when to run such tests?
- Laura suggested to run them only on major releases
- Jay proposed to run on each release and, also, continuously on the individual instances
- Igor would like to establish a baseline in a controlled environment and then promote continuous monitoring
- Max is concerned about forcing a specific monitoring tool, which might make it hard to adopt scicat specifically if an IT infrastructure is already present
- Can we de-couple monitoring tools from monitoring protocols, so we can use libraries tight to the protocol?
- Do well defined and well adopted monitoring protocols exists? Can such protocols be consumed by different monitoring tools?
- We will need to be conscious of the hardware were the tests are run on, as different hardware might influence tests' results.
- Bjorn suggested to look in open telemetry protocol, which can de-couple the scicat from the monitoring tools.
 https://opentelemetry.io/
- There is a library to integrate nestjs application with open telemetry systems:
 - https://github.com/open-telemetry/opentelemetry-js-contrib/tree/main/plugins/node/opentelemetry-instrumentation-nestjs-core#readme



SDK roadmap proposal

Following the discussion during the last collaboration meeting, I propose the following roadmap forward regarding the SDK:

- Finalize auto generation of javascript and python SDKs CI/CD. COMPLETED
- Create SDK and openapi file as artifacts at every merge to master.

COMPLETED

Artifacts should be named according to the following shema:

sdk-<language>[-<additional-options>]-<git-commit-id>.zip

- Publish them automatically on the language specific platforms with the following names:
 - typescript with angular: scicat-sdk-ts
 - python: scicat_sdk_py (with pydantic v2)
 - python-pydantic: scicat_sdk_pydantic (with pydantic v1), obsolete and removed

COMPLETED

- Publishing platforms are:
 - javascript: npm-js
 - o python: pypi

COMPLETED

- Renamed python packages to address naming issues: **COMPLETED**
- Clearly state that SDKs are provided as they are, with no guarantee.
 No testing is done on SDKs during CI/CD.
- Include new languages as needed.

Planned:

- o Typescript with fetch: scicat-sdk-ts-fetch
- refactor pySciCat to extend scicat-sdk-py, with backward compatibility, additional functionalities and validation and include testing like the ones included in discarded PR.
- Proposed pySciCat as the low level SciCat python library, providing the following:
 - additional functionalities,
 - o extensive testing
 - backward compatibility
 - different release cycle from the SDK due to human revisions
- After 6/12 months evaluate if having scicat-sdk-py and pyScicat is sustainable and the most sensible solution.
 - We will adapt the road map forward based on the outcome.
- Refactor FE to use new SDK: COMPLETED. bug fixing

This roadmap is recorded in the following github issues:



https://github.com/SciCatProject/scicat-backend-next/issues/1403



Proposed Agenda 7th of January 2025

- Current updates
 - o Jobs
 - o SDK
 - o Datasets v4
- Performance test discussion
- SciCatCon 2025
 - o Poll: https://doodle.com/meeting/participate/id/ej5QkPvd
- PR and issues
- Additional topics



Open discussions for future features

currently not scheduled on any release

- Proposed types for Scientific Metadata, Issue #984
 - https://github.com/SciCatProject/scicat-backend-next/issues/984
- Metadata entry schema
 - o The overall metadata schema is free for the user to design their own structure
 - SciCat will impose a schema at the entry level to be able to interpret and visualize the values reducing uncertainty and wrong interpretation
 - https://github.com/SciCatProject/scicat-backend-next/issues/939#issuecomm ent-1874033672

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- Dataset hierarchy
 - Proposed solution:
 - unify the dataset schema
 - add dataset type: collection (specialized type of derived dataset)
 - add relationships and leverage them to build a hierarchy
 - https://github.com/SciCatProject/scicat-backend-next/issues/805
- Independent endpoint for datasets scientific metadata management
 - https://github.com/SciCatProject/scicat-backend-next/issues/954
 - As we use SciCat as our platform to curate our dataset, it is becoming more important to be able to add, update or delete individual scientific metadata entries
 - High priority
- Dataset history and update history
 - should we create a stand alone collection for update history?
 - should we track any changes made to datasets?
 - should we track changes made to other objects?



SciCat Collaborators Zoom meeting details

Topic: SciCat Collaborators Meeting Time: Jan 7, 2025 04:00 PM Copenhagen

Every 2 weeks on Tue, until Dec 23, 2025, 26 occurrence(s)

Please download and import the following iCalendar (.ics) files to your calendar system.

Weekly:

https://ess-eu.zoom.us/meeting/u5Upd-yhqzlvGdU6_6kfQjr_Gr3-A_FaoUcT/ics?icsToken=98tyKu-pqjsvE9GctRqGRMcBoigZPwmFhYjadoyiCzCCZiaBHJEfARf5NANtnf

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