

# Meeting Notes 29th of October 2024

#### Release Frontend SDK

- Supported by DAPHNE contribution
- Martin is working on this release
- Martin provided an update
- New branch has been created: new-sdk-release
- First PR to add authorization subsystem which is not included in the SDK
- when developing locally, it will be possible to use an official SDK release, or, alternatively, a script will be provided to create a local copy of the SDK provided that local instance of the BE is running.
- In production, we will support only an official SDK release provided through npm package
- documentation will be updated.
- the SDK is already distributed as npm package, available at <a href="https://www.npmjs.com/package/@scicatproject/scicat-sdk-ts">https://www.npmjs.com/package/@scicatproject/scicat-sdk-ts</a>
- Despina asked and reminded us about multiple FE. The autogenerated SDK will help
- Current version of the API is V3. As soon as a breaking change is released, we should move to V4.
- Carlo noted that the base URL is defined in the backend. Most likely hardcoded.
- Jay created and merged a PR to define the api version from configuration and through an environmental variable.

#### Release Jobs

- Validate actions
- The old BE V3 code checking and validating jobs has been migrated to BE V4
- MVP not reached yet

#### Search UI

- Topic that still needs to be discussed: list of scientific metadata and the type
- We should find some use cases to guide the proof of concept:
  - beam energy
- Ideas:



- use indexed created at startup
- select the fields that are most used in search
- implement separate table with indexed fields or leverage db.get\_index functionality
- indexes should be easily configurable
- implement admin endpoints in BE and admin section in FE
- Dataset search form discussion
  - Filters on high level fields and conditions on scientific metadata should behave and look the same
  - list of missing filters should be created

#### NMX and IsPyB

- Carla (Max IV) mentioned that MaxIV is interested in exploring using SciCat as BE for NMX and IsPyB, as ESRF stopped supporting the dedicated backend
- Questions:
  - Can all the data entities used in IsPyB saved in SciCat?
     Examples: shipments, samples
  - Scientific metadata
  - customized visualization
- Max will stop by at MaxIV to discuss in person
- IMPORTANT: Organizers of the IsPyB meeting in Trieste reached out regarding the same issue. Max will present remotely.
- DESY and SOLEIL are interested in such effort

#### Governance

- Ideas:
  - Technical advisory group It will replace the current meeting and will deal with all the technical decisions. Only members.
    - Frequency: every 2 weeks
  - Management advisory board It will work on the vision, directions and sustainability of the project. New non technical group. It will help secure funds to sustain the development. Only members.
    - Frequency: every three months
- Members should ask to their management if they are interested in participating in the board and provide guidance and insights.
- Governance examples:
  - https://github.com/bluesky/governance



- https://github.com/jupyter/governance
- o we should aim for a simple structure

#### SciCatCon 2025

- o It will be held in Copenhagen hosted at ESS
- Max is trying to securing some fundings
- Meeting will be held the beginning of July A poll will be created
- It will include a visit to MaxIV and ESS

#### Authorization

- Soleil has needs for more granular authorization
- Examples:
  - Only PI should be able to publish dataset or create published data entities
  - Dataset editing should not be allowed for owner groups



## 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:
  - javascript: scicat-sdk-js
  - python: scicat-sdk-py
  - o python-pydantic: scicat-sdk-pydantic

#### **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. No requests have been received yet
- 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,
  - extensive testing
  - backward compatibility
  - o 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: in progress

This roadmap is recorded in the following github issues:

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



# Proposed Agenda 12th of November 2024

- Current releases updates
- Discussions
  - Dedicated project URL
  - Project leadership and governance
    - https://opensource.guide/leadership-and-governance/
    - http://oss-watch.ac.uk/resources/benevolentdictatorgovernancemodel
    - <a href="https://www.linuxfoundation.org/resources/open-source-guides/building-leadership-in-an-open-source-community">https://www.linuxfoundation.org/resources/open-source-guides/building-leadership-in-an-open-source-community</a>
  - o Datasets details
    - configurable view
    - interface definition
    - third parties custom view components
- 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
  - 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-backendnext/issues/939#issuecomment-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
  - o <a href="https://github.com/SciCatProject/scicat-backend-next/issues/954">https://github.com/SciCatProject/scicat-backend-next/issues/954</a>
  - 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?
  - o should we track any changes made to datasets?
  - should we track changes made to other objects?