

Recommendations for DESY Proposal Use Case

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To the attention of: Paul Millar, Frank Schlünzen, Regina Hinzmann
DESY

In reference to the proposal use case presented in the document ***DESYcase.pdf*** emailed to me by Regina on 2024/04/15, I see two possible solutions described below. The first can be implemented in SciCat as it is now, although can be seen as massaging for the information to fit the current models. The second will require some planning and more effort as code refactoring and a PR are required, but it will meet the needs highlighted in the document and, also, would benefit the community at large. After presenting the two possible solutions, I will propose a course of actions to implement a solution and touch briefly on the frontend label configuration.

Before I dive in the material, I would like to share my thoughts about the proposed solution to promote the MeasurementPeriodClass as an independent entity. As of now, I would shy away from this solution as it is not clear in the community the intended use of such class and the discussion is still at the initial stages.

Following are the two solutions that I see to the DESY case.

Solution 1

I would create a SciCat proposal for each beam time where the proposal id is the combination of the DOOR proposal and beamtime ids. For examples, SciCat proposal id can be <DOOR proposal id>:<DOOR beamtime id>.

Each dataset acquired under the beamtime should be associated to the proposal with id proposal_id:beamtime_id.

This solution will introduce some duplication, but will meet the requirements in the short time.

To make the link between datasets and proposals more solid, I would add the following metadata to each datasets:

- DOOR proposal id
- DOOR beamtime id.

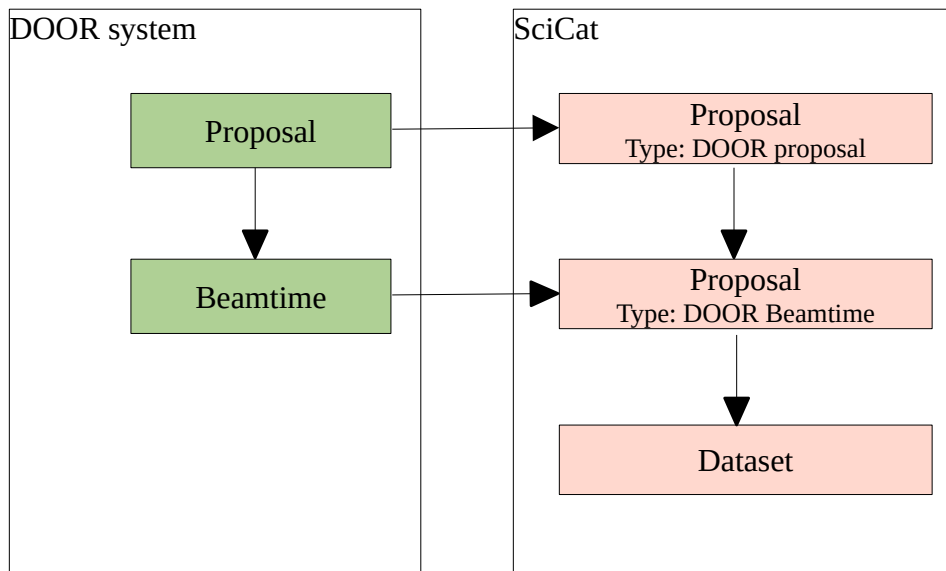
This would allow users to search on the datasets by DOOR proposal and beamtime ids. Some duplication is introduced, but it is minimal and greatly improve the user experience.

Solution 2

In the long term, I would update the Proposal class and, as it is proposed in the referenced document, add the following three new fields:

- type (string): type of proposal
- relationships (list of relationships): relationships with other proposals
- properties (object): unconstrained list of user defined properties. Similar to the datasets relationships.

The field type might be redundant as such property can be stored in the properties field. This will allow to store in SciCat the full set of information to meet the DESY use case.



This solution will allow a better provenance, more granularity and added flexibility, but also requires a bigger investment than solution 1. It will also take longer time to production.

Proposed Implementation Plan

I recommend to implement **solution 1** first. Such decision will allow DESY to deploy SciCat in production. Once SciCat is in use, I suggest to allocate the required resources to help the SciCat collaboration in implementing the features included in **solution 2** and work to release them officially in SciCat BE v4.x.

Configurable frontend labels

This feature has been on my agenda to be explored for while. Given the variability of the configuration, wording and workflow present between all the instances of SciCat, I think it makes complete sense to implement such feature. This will also help addressing localization as in language used in the UI.

Unfortunately, this feature requires careful planning, design and implementation, and therefore it has to wait until the current releases work is completed or new resources are added to the collaboration to be able to start working.

I would suggest to open a github issue presenting this use case, so the community can start discussing. If you are aware of untapped resources that can help with such work or grant that can support such resources, please add that info in the issue.

I hope that this document helps. Please feel free to contact me with questions or for further clarifications.

Sincerely

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