

Status of FS SciCat for DOIs

screenshot demo of status

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SciCat Technical meeting



wip -> almost-final-for-um

Content overview

1. scicat for beamlines
2. outlook



What happened in Year 2025, especially w/ SciCat at DESY?

a bit of history – what did we do. Highlights.

- **Nov 2024:** IT and FS fixed a plan for a DOI minting scicat that “mints DOIs” inspired by the work of IT-RIC colleagues who set up the public-data portal. We anticipated about 3-4 months assuming crucial configuration and set up would not cost much efforts as has been done essentially.
- **Jan 2025:** For security reasons, we all (every service using OpenStack) discussed first to move to a new cluster, run and set up by the IT-systems group.
- **Mar 2025:** we moved. We reduced to two scicat instances only, away from “1 instance per beamline” to one internal, plus a development version. scicat.desy.de (March, 14th) and scicat-dev.desy.de were born.
- **Q1/Q2/Q3 2025:** DCS1 finished, we also had DCS2, created a third instance: fsdata.desy.de
- **In Q2 until Aug 2025:** several meetings to get the requirements fixed to produce the tool FS desired. FS wanted DOIs for cold PETRA data, for entire beamtime data, for an example publication use case, etc.
- **On Aug 11th** Nicolas, Linus and me met online to agree requirements. From then on it was clear, who does what and what we can expect and what we cannot expect.
- **17.10.2025** FS Data policy is out. We directly use it. **Today:** we both present you the results of this efforts and prospects.

SciCat at DESY for general DOI minting

Status in more detail (until week 50)

External service (*publisher*) is in gitlab and runs as a container in the cluster.

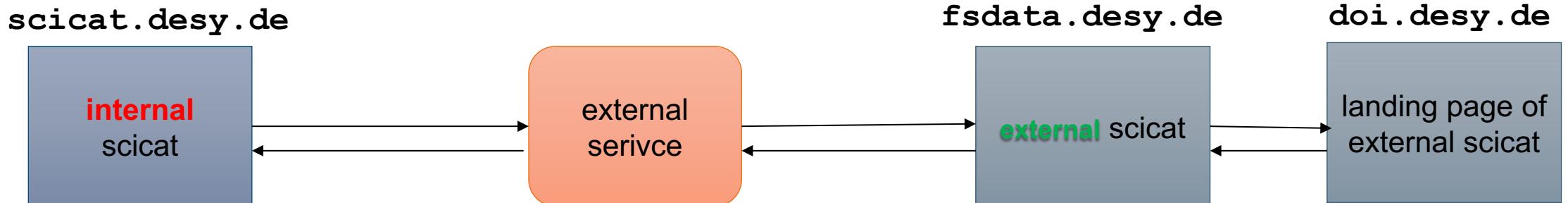
- The user is on the **internal scicat** at the validated summary dataset and **kicks off the publication** process. An email is sent with a **link to fsdata**.
- The user finds him/herself logged into the external scicat ready to start the actual DOI minting:
- adding it to selection, performing the “publish” action, metadata DataCite-conform is provided

The publisher

- grabs **all associated datafiles** and **attachments** of the summary and other related datasets
- ownership of metadata is transferred to DESY according to FS data policy*: *photon-doi@desy.de*
- datafile name is updated to contain original PID

In SciCat, fsdata, the user continues:

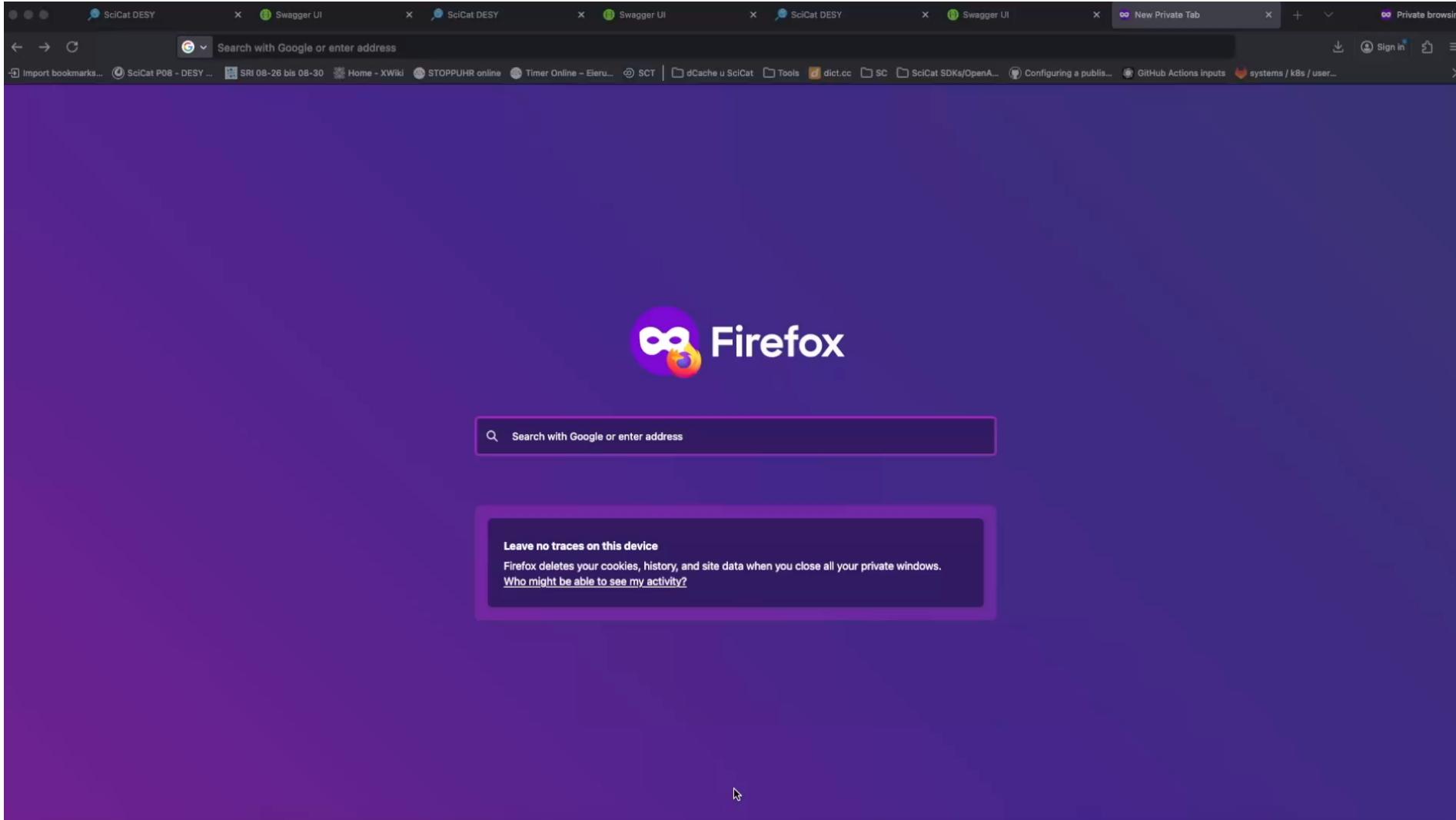
- one can edit, save, save and continue, publish and register. Email will be sent upon successful registration with the DOI for reference in PubDB.



*Paragraph 4.1.e: DESY is the custodian of all data stored at DESY

Workflow of minting a DOI w/ beamline scicat

from scicat to external production fsdata on test DataCite.



Outlook

Status summary

- **2025:** DOI minting tool is **close to ready** so it can be presented at the Users Meeting to the users end of January 2026.
 - workflow foresees a reviewer; a team of FS persons that handle each request.
 - Testing phase also with FS.
 - Switch to productive DataCite on January 20th 2026.

Lots of skills and knowledge were combined, many thanks to my colleagues, esp. *Johannes Reppin*, at DESY, in CAU *Nicolas Hayen* and *Bridget Murphy*, SciCat collaborators like *Spencer Bliven* (PSI), *Sofya Laskina* (EPFL) and *Despina Adamopoulou* (EMBL).

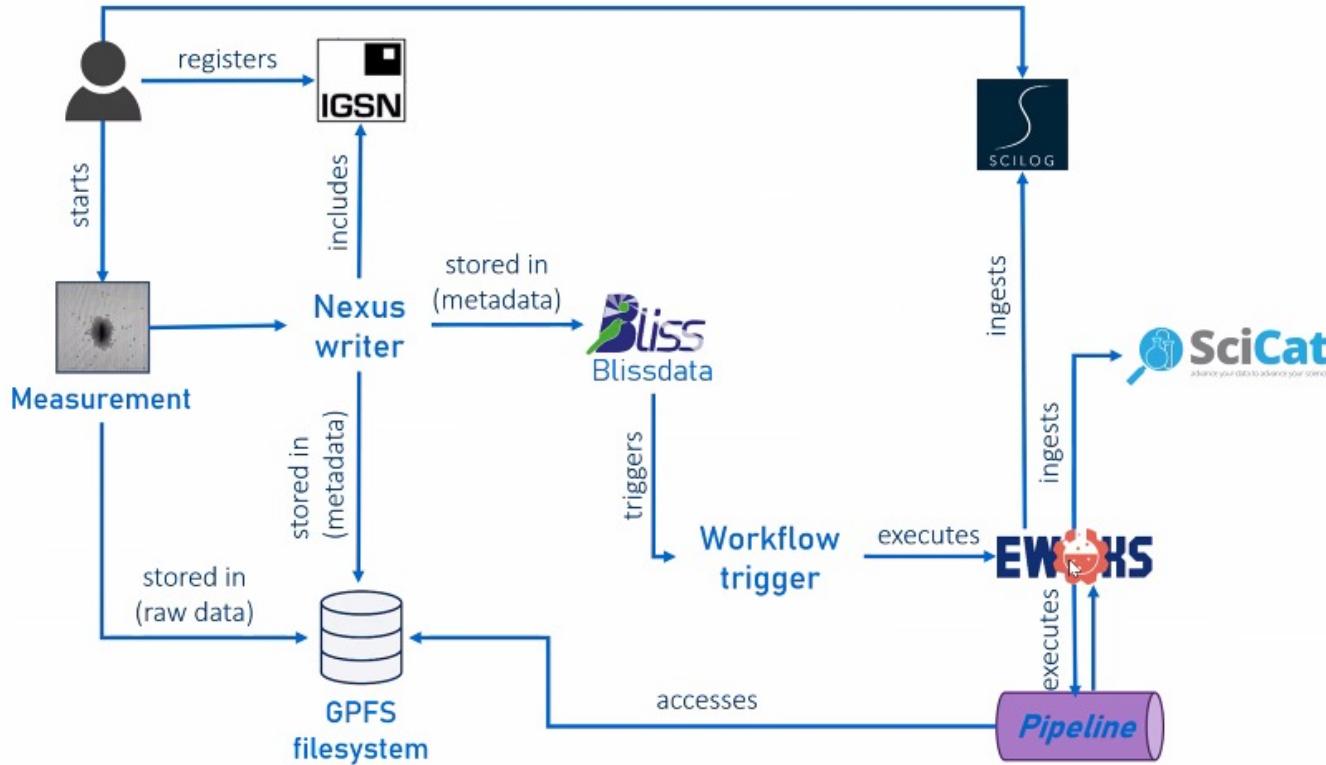
- **For 2026:** We plan to extend the by two features (and what we learned from 2025) most important for successful outcome is an agreed written requirements document.
 1. Interfacing to library/PubDB: 1st meeting held on Dec 8th, needs a follow up for technical details.
 2. Interfacing to storage: 1st meeting scheduled for 2nd February.

Example workflow of beamline p08

everything's set up to end up in SciCat

Screenshot of a presentation by Julia Kobus (CAU)
given last Friday, 2025-12-12 at TA2 Monthly.

LISA Workflow @P08



14