

PSI

Center for Scientific Computing,
Theory and Data

SciCat - Frontend&Microservices

Grenoble, 2024/09

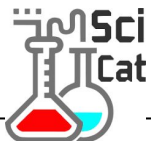
SciCat ecosystem

SciCat

RI-s



Frontends/UIs



Main frontend



UI for DOI-ready datasets

RI-specific UIs

REST services

Main backend

jupyter-templater

OAIPMH

zip-downloader

pan-search

logbook

pan-scorer

ingestor

panet

Other clients/ SDKs

python-SDK

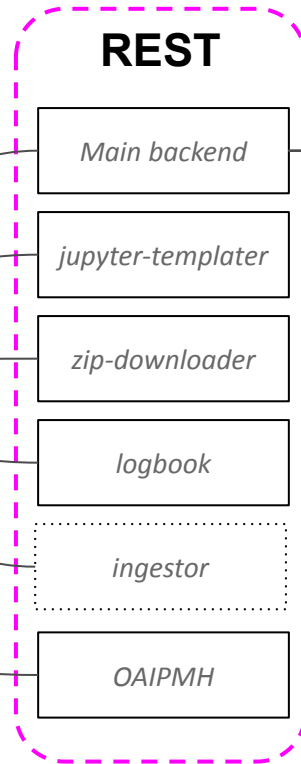
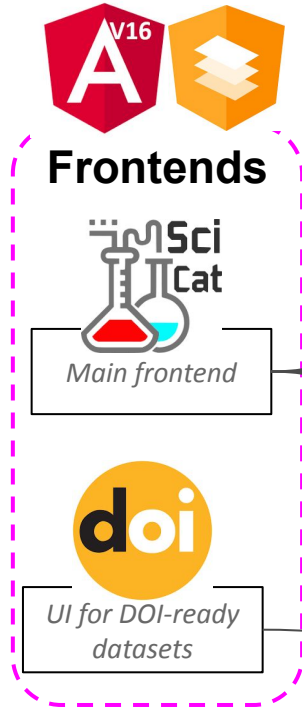
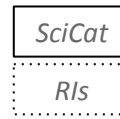
file-writer-ingest

RI-specific ingestors

RI-specific SDKs

Docker containers

FE interactions



- Authn [with OIDC delegation]
- Authz
- CRUD datasets
- Datasets sharing
- External actions dispatching

Main Frontend architecture



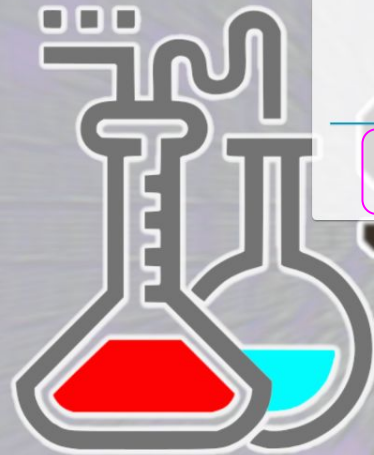
- **Togglable** functionalities
- Split into angular **modules** (by functionality)
 - Often **lazy** loaded
 - Organised in angular **components**
 - **Internal** components dedicated **routing**
 - **Guards** protected
- Shared module for **common functionalities**, e.g. size display
- Interaction with **additional** (to main backend for CRUD metadata) **HTTP** SciCat services, e.g. logbook service for logbook linking
- NgRx for **state management** (in memory state management)
- Some components are **standalone**

Togglable functionalities

togglable



[Help](#) [About](#) [Sign in](#)



External Local

Login with Login with OIDC

Site Login Background

Angular (functional) modules 1/2

[Datasets /](#)

Search

 Clear

PID

Text Search

Location

Group

Type

Keywords

Start Date - End Date [+ Add Condition](#)

My Data

All Public Data




(lazy loaded)
angular modules

Items per page:

25

1 - 19 of 19

| Name | Type | Start Time | Proposal ID |
|---|---------|----------------------------|-------------|
| main/mantid-files | derived | 2021-02-23 Tue 14:46 | |
| main/original_reduced_data | raw | 2021-02-23 Tue 14:46 | |
| main/nexus_files | derived | 2021-02-23 Tue 14:46 | |
| Tests_Carto.tar | raw | 2021-02-20 Sat 14:46 | |
| Globalmap_268_noslope_q0.033_lmax_1_9.zip | derived | 2021-02-20 Sat 14:46 | |
| MOF_data.hspy | derived | 2020-07-04 Sat 15:46 | |
| record/277 | derived | 2020-04-15 Wed 15:46 | ...Analysis |

 Datasets Files Instruments Policies Proposals Published Data Samples Settings Logout

...exus_files

Angular (functional) modules 2/2



Help About



Datasets **PID.SAMPLE.PREFIX/hzdr_ds1 /**

Navigation menu with buttons: Details, Datafiles, Related Datasets, Reduce, Logbook, Attachments, Lifecycle, Admin. A 'Public' status indicator is shown below the Admin button.

General Information

| | |
|---------------|----------------------------|
| Name | record/277 |
| Description | - |
| PID | PID.SAMPLE.PREFIX/hzdr_ds1 |
| Type | derived |
| Creation Time | 2020-04-15 15:46 |
| Keywords | |

[Edit](#)

Creator Information

| | |
|---------------|--|
| Owner | Hao Chu |
| Investigator | Hao Chu |
| Contact Email | email.com |
| Owner Group | aGroup |
| Access Groups | |

File Information

| | |
|---------------|----------|
| Source Folder | Analysis |
| Size | 2 TiB |

Dataset-module specific angular components with (lazy) routing

Additional HTTP service

Guard (isAdmin)

Shared module component (size pipe)

NgRx state management

Standalone component

Open points for microFE architecture

- Guards are shared between modules
- Some module components are used in other modules
- State management is not always restricted to the relative module
- Could we use a standalone component or a module to test microFE feasibility?