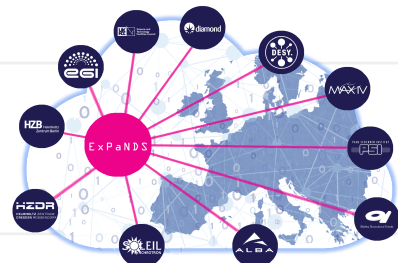# Search API for data catalogues

## Sustainability sheet

Backend API that enables the creation of websites, apps or services to **search data catalogues** of the participating PaN facilities. Plugins for SciCat and ICAT community data catalogues are also available to facilitate the **deployment** of the search API at the facility level.

| | |
|---|---|
| **Target audiences** | **Benefits** |
| - Software engineers for data catalogues<br>- Data managers<br>- Data consumers | - Rather than performing the same search in each and every PaN data repository the search API enables the creation of a final website/app/service that can become a **one-stop-shop**, thus facilitating its use and saving time to researchers<br>- The plugins for the data catalogues help facility staff deploy the endpoint at their facility |

| | |
|---|---|
| **Accessibility**<br>Source code of the:<br>- Federated API (1)<br>- SciCat search-API plugin (2)<br>- ICAT plugin (3) | **Documentation**<br>- Federated API service (7)<br>- Search API (8)<br>- SciCat plugin (9)<br>- ICAT plugin (10) |
| **Feedback mechanism**<br>GitHub issue tracking for the federated API (4), SciCat (5) and ICAT (6) plugins | **Licence**<br>SciCat: BSD-2-Clause licence (11)<br>ICAT: Apache License 2.0 (12) |

| |
|---|
| **Competitors**<br>Not known at present |
| **Technology readiness**<br>**Prototype**, used by the PaNOSC search portal (13) |
| **EOSC integration status**<br>N/A - what is integrated in EOSC are the services built on top |

### Plans and conditions for long-term sustainability

- The future OSCARS project will consolidate the federated search-API, enhancing its functionalities to become the entry point to the **PaN data commons**
- The federated search-API is hosted at ESS, which is participating in the **FAIR data management MoU** discussions
- SciCat and ICAT plugins will be maintained by their relative community as long as they are used, with a strong dependency on the federated search uptake
- Each member of the community adopting the search-API will continue to host its own instance
- To keep the federated search useful, the metadata exposed by each facility needs to be of good quality and follow the community standards; the sustainability of the federated search is thus highly linked to the maintenance of a **PaN metadata framework**

### Exploitability potential

- Other PaN projects wanting to have a rich federated PaN search, e.g. DAPHNE4NFDI (14)
- Other PaN facilities who want to have their data in the PaN data commons

### Conditions to increase exploitability

- Add embargoed data
- Create a mentoring program to onboard new facilities, e.g. in the frame of OSCARS

### Links

(1)   https://github.com/panosc-eu/panosc-federated-search-service
(2)   https://github.com/SciCatProject/panosc-search-api
(3)   https://github.com/ral-facilities/datagateway-api
(4)   https://github.com/panosc-eu/panosc-federated-search-service/issues
(5)   https://github.com/SciCatProject/panosc-search-api/issues
(6)   https://github.com/ral-facilities/datagateway-api/issues
(7)   https://github.com/panosc-eu/panosc-federated-search-service/blob/master/README.md
(8)   https://github.com/panosc-eu/search-api/tree/master/doc
(9)   https://github.com/SciCatProject/panosc-search-api/blob/master/README.md
(10)  https://github.com/ral-facilities/datagateway-api/blob/main/README.md
(11)  https://github.com/SciCatProject/panosc-search-api/blob/master/LICENSE
(12)  https://github.com/ral-facilities/datagateway-api/blob/main/LICENSE
(13)  https://data.panosc.eu/
(14)  https://www.daphne4nfdi.de/english/index.php