

Building a community driven vision for Research Software: Connecting the scholarly ecosystem

FAIRCORE4EOSC's WP6 develops tools and services for archiving, referencing, describing, and citing research software. It aims to connect repositories, publishers, and aggregators via Software Heritage integration, CodeMeta, and Software Hash Identifiers (SWHID).

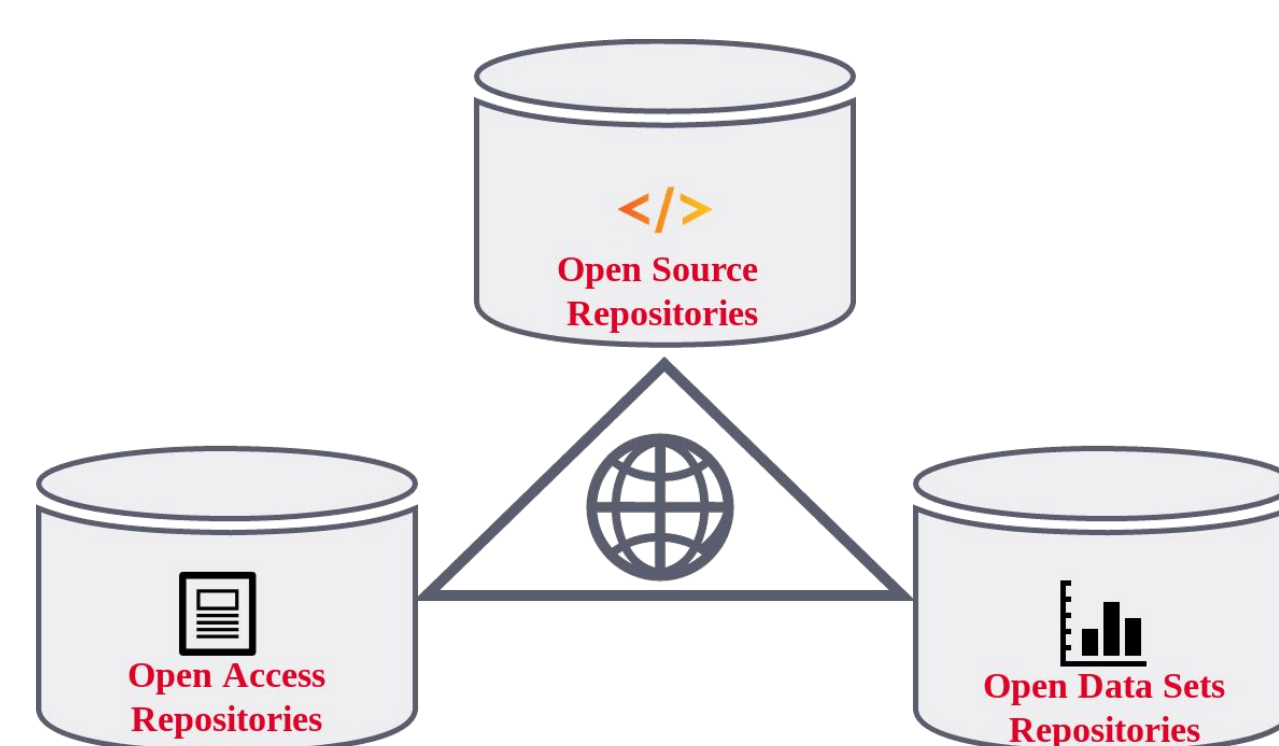
Implementing the Scholarly Infrastructures for Research Software (SIRS) report

Making Research Software FAIR in EOSC:
The 2021 SIRS report recommended including software in the scholarly ecosystem alongside publications and data. Building on a survey of European research software infrastructures, the FAIRCORE4EOSC project is implementing these recommendations, focusing on:

- Improved collaboration between aggregators, publishers, repositories, and Software Heritage.
- Standardized metadata and tools.
- Wider use of PIDs (including SWHID)

Software has multiple facets:

- a tool
- a research outcome
- the object of research



Three pillars of Open Science Software Heritage CC-BY 4.0 2019

Archive

- make sure we can access to retrieve the software (reproducibility)

Reference

- make sure we can identify the software artifacts (reproducibility)

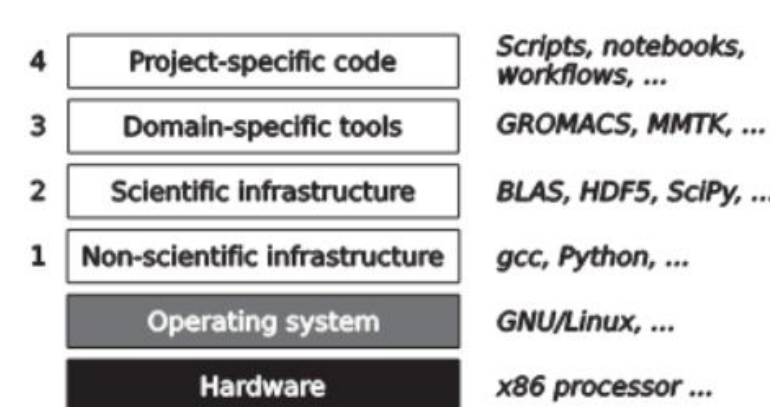
Describe

- make it easy to discover the software projects (visibility)

Cite (for credit)

- make it rewarding to create software by giving credit to authors (evaluation!)

Software is fragile! A software stack can collapse.



Konrad Hinsén. Dealing With Software Collapse. Computing in Science and Engineering, 2019, 21 (3), pp.104-108. (10.1109/MCSE.2019.2900945). (hal-02117588)

The Software Metadata Curation Roadmap



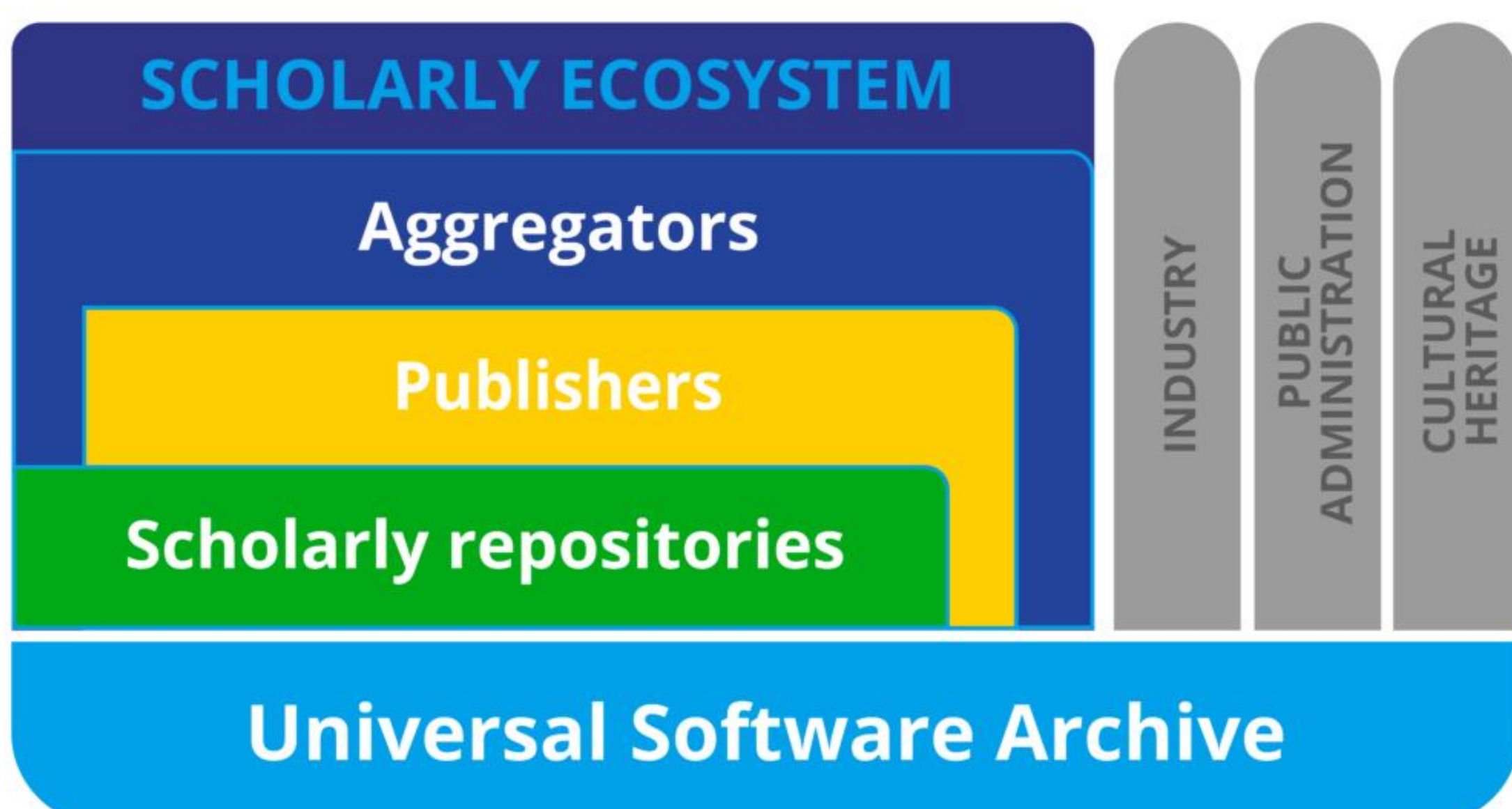
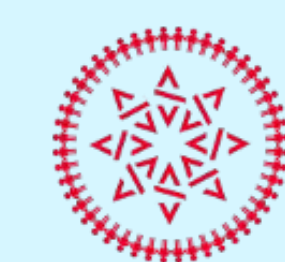
10.5281/zenodo.14509418

Towards a distributed and multistakeholder infrastructure: the EOSC Software Heritage Mirror (SWHM)

A mirror of the Software Heritage universal source code archive will be deployed in 2025 in Greece at GRNET. A mirror is a full copy the archive, operated in agreement with, but independently from the Software Heritage organization.

"Let us save what remains: not by vaults and locks which fence them from the public eye and use in consigning them to the waste of time, but by such a multiplication of copies, as shall place them beyond the reach of accident."

— Thomas Jefferson



The Research Software API's and connectors (RSAC) components are enhancing Research Software services and connecting Software Heritage with key infrastructures:

- Scholarly repositories: Zenodo (CERN), DANS Dataverse's instance,
- Publishers: Dagstuhl, Episciences
- Aggregators: swMath, OpenAire & Datacite



SIRS report: European Commission, Directorate-General for Research and Innovation, Scholarly infrastructures for research software : report from the EOSC Executive Board Working Group (WG) Architecture Task Force (TF) SIRS, Publications Office, 2020, <https://data.europa.eu/doi/10.2777/28598>

Software preservation requires a **global** and **coordinated** effort.

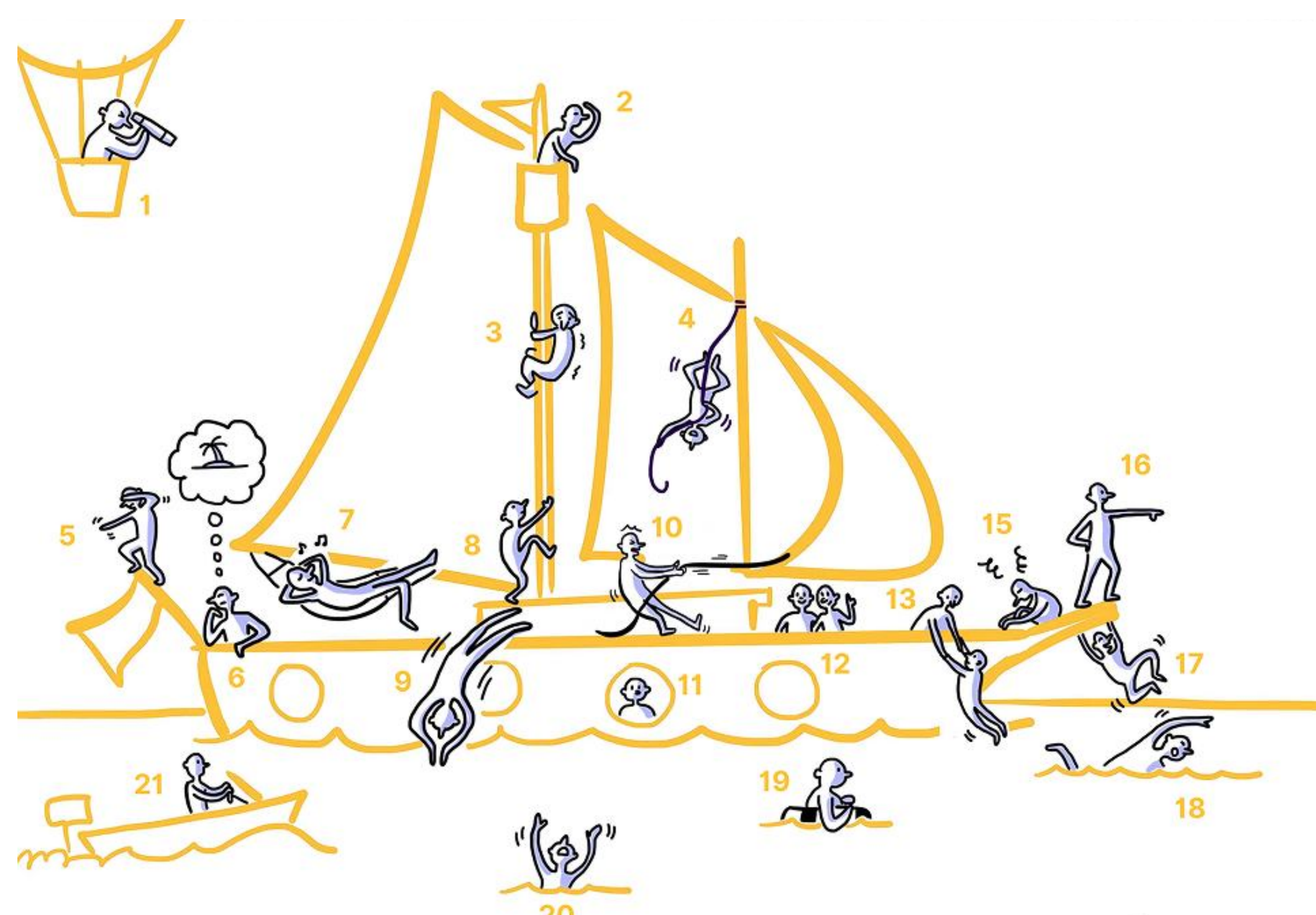
Reflections on the Research Software infrastructures

Join the discussion on the EOSC OA7



OA Expert Group:
Research Software

This boat represents your journey through Research Software infrastructures. Using the different situations, on a post-it, tell us more about where you are now and what are your plans in the Research Software journey.



Watch the demo of RSAC



RSAC
EOSC Research Software
APIs & Connectors



SWHM
EOSC Software
Heritage Mirror