A universal source code archive serving the scholarly ecosystem

Morane Gruenpeter

Head of Open Science operations

meosc

Software Heritage

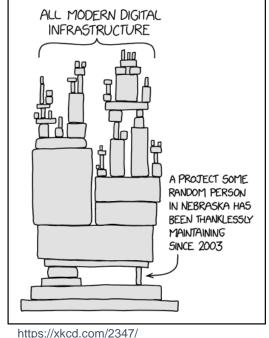


Innín

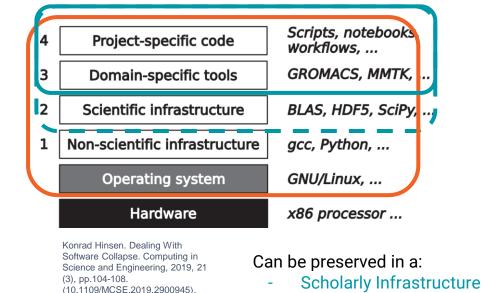
EOSC Symposium 2024 | CC-BY 4.0

The software stack: More than Research Software

Research Software is a thin layer on top of the global software stack



What's the Software Collapse?



Universal Source Code Archive

EOSC Symposium 2024 | Software Heritage | Gruenpeter M. | CC-BY 4.0

(hal-02117588)



Software Heritage THE GREAT LIBRARY OF SOURCE CODE

An open infrastructure

to collect, preserve and share all source code

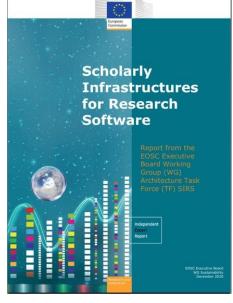
Size

As of today the archive already contains and keeps safe for you the following amount of objects:

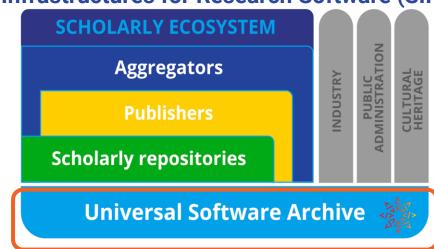


Archive, Reference, Describe and Cite software

Scholarly Infrastructures for Research Software (SIRS)



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



Short term recommendations

- Strengthening interactions between
 - Aggregators, publishers , scholarly repositories, and Software Heritage
- Metadata standards & tools
- Generalizing the use of PIDs (extrinsic & intrinsic) => **SWHID**



Implementing an interoperable community driven vision



- The <u>RSAC components</u> connecting Software Heritage with
 - Scholarly repositories: Zenodo (CERN), DANS Dataverse's instance,
 - Publishers: Dagstuhl, Episciences
 - Aggregators: SwMath, OpenAire & Datacite
- Deploying in 2025 the EOSC mirror of Software Heritage at GRNET
- COEOSC | FAIR-IMPACT Expanding FAIR solutions across EOSC
 - Maintaining the Research Software MetaData guidelines
 - o <u>RSMD guidelines</u>
 - Contributing to the <u>CodeMeta</u> initiative, towards FAIRer mappings

EPISCIENCES

zenodo

DataCite

EVERSE

swMATH

DANS

RÉPUBLIQUE FRANÇAISE

arnet

Call to action



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

"Policy describes what is required, desired, and incentivised; infrastructure determines what is possible; but the community determines how things are done in practice."

(Brinkman et al., 2020)

Mutualisation

Sustainability



Curation

Recognition

Open by default