

Automated FAIR4RS software publication with HERMES

Stephan Druskat, Michael Meinel, Tobias Schlauch

Deutsches Zentrum für Luft- und Raumfahrt

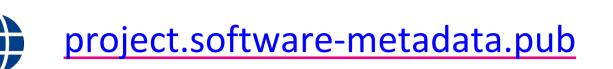
Jeffrey Kelling, Oliver Knodel, Guido Juckeland Helmholtz-Zentrum Dresden-Rossendorf

Oliver Bertuch

Forschungszentrum Jülich



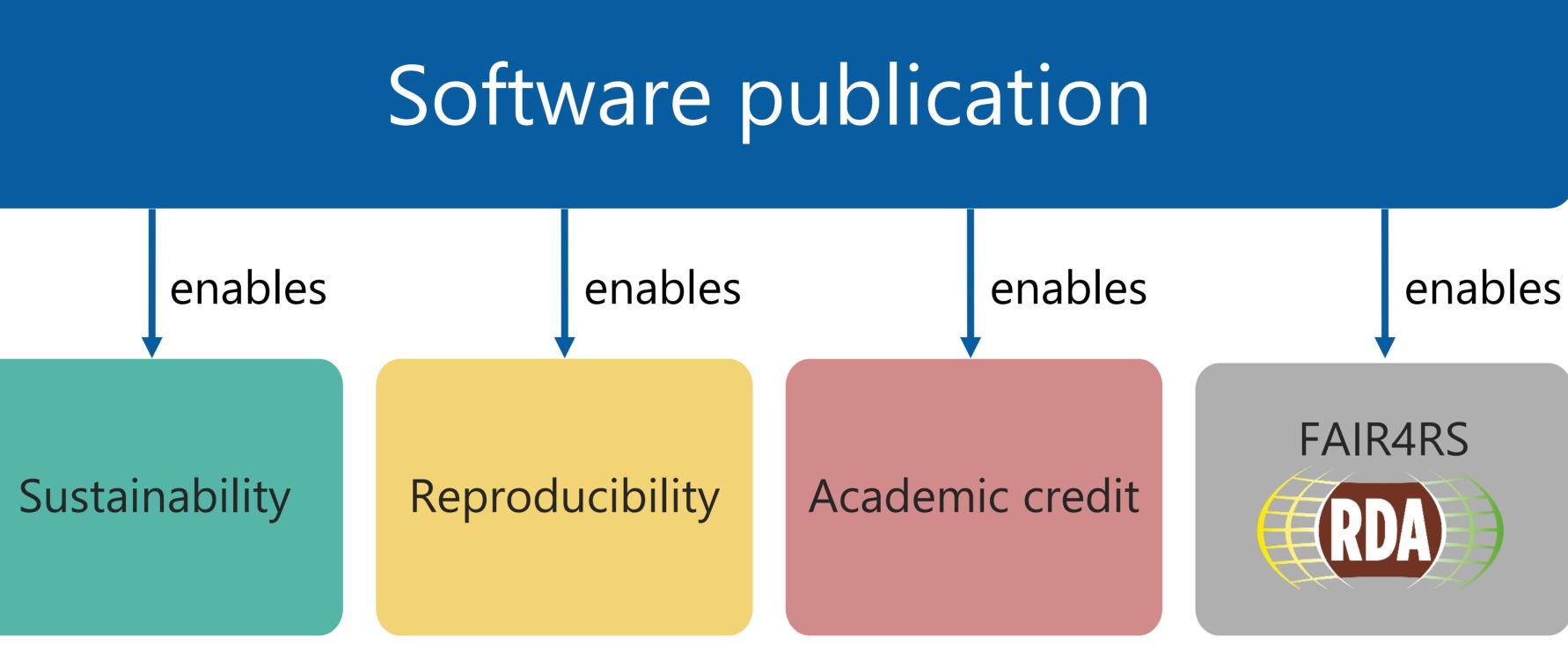




github.com/hermes-hmc

team@software-metadata.pub

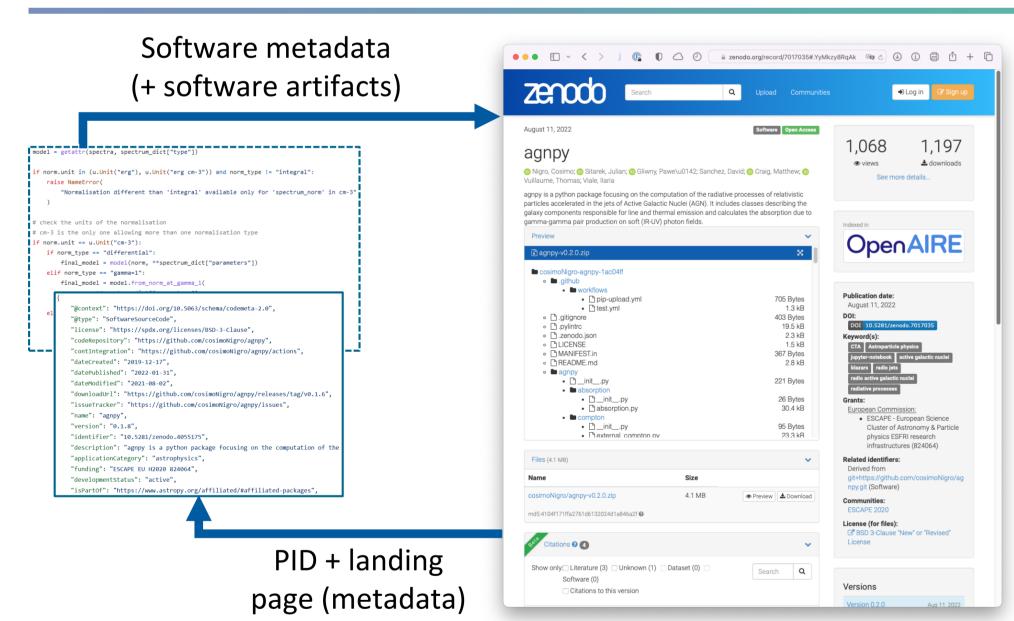




55 To satisfy the principles of <u>FAIR research software</u>, software sustainability and software citation, research software must be formally published. Publication repositories make this possible and provide published software versions with unique and persistent identifiers. However, software publication is still a tedious, mostly manual process and impedes promoting software to first class research citizenship.



The State of the Art



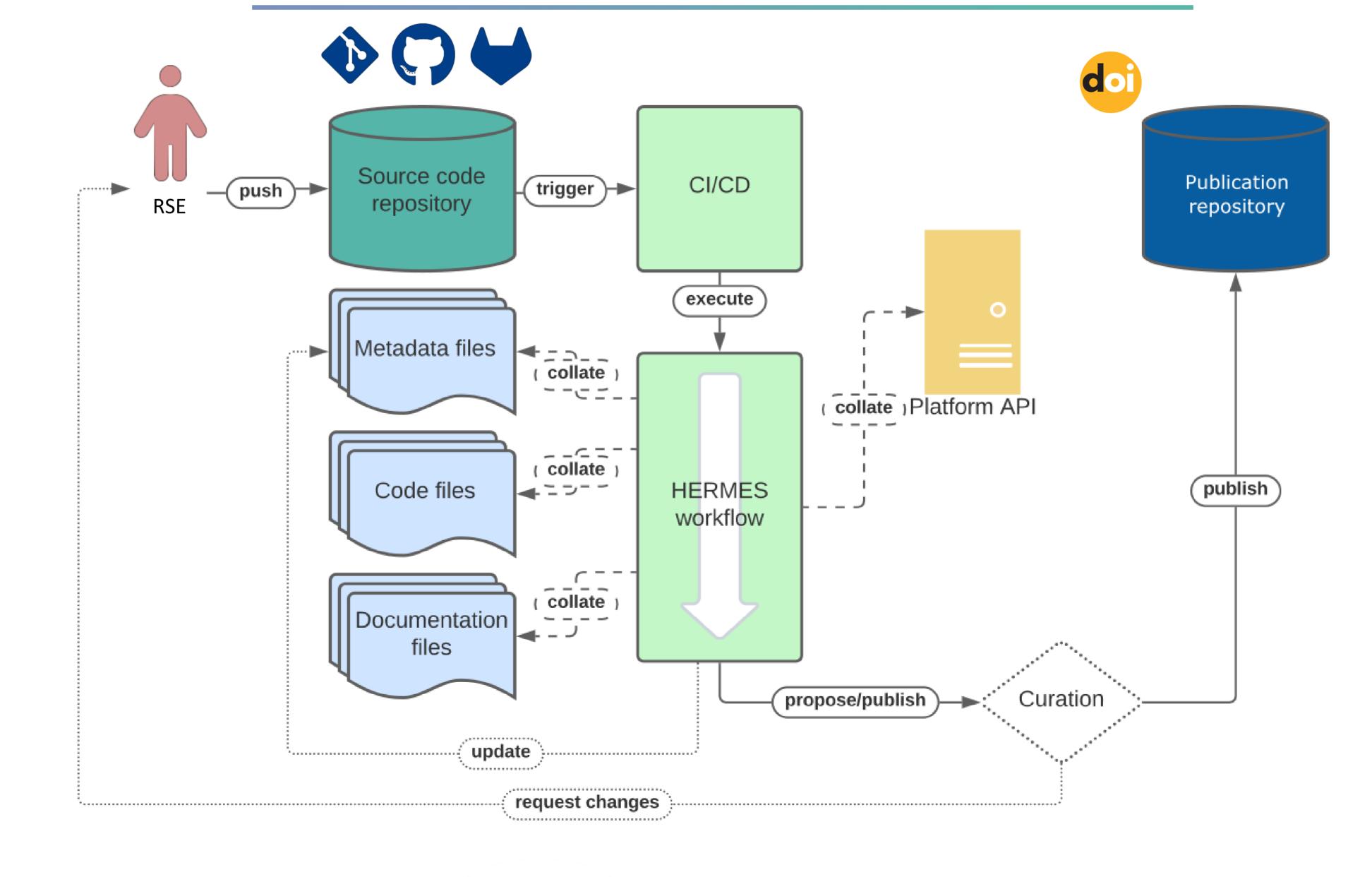
Pull-based workflows

- Code & metadata must be accessible and properly formatted
- Less control over extracted metadata
- Centralized service
- Most prominent examples: Zenodo (and SWH)

Push-based workflows

- Works for all types of software (closed, restricted, embargoed, open source)
- Complete control over metadata
- Distributed approach
- Not many examples or standardised procedures

Simplified Overview of the HERMES Workflow



Where we are

- Harvesting: Citation File Format, CodeMeta, Git
- **Processing:** Unified data model
- Curation/Deposition: Deposition pipelines and user feedback (currently: logs)
- **Post-processing:** (CodeMeta files)
- One (further work in progress) | In progress

Outreach & community:

- Community workshop 2021
- Presentations & active stakeholder outreach
- Workshop at #RSECon22
- Growing potential user base: SURESOFT, HIFIS / Helmholtz RSD, The Carpentries

Target Repositories





http://s.dlr.de/DCM2022

















