Automated FAIR4RS software publication with HERMES

Software as an important method and output of research should follow the RDA "FAIR for Research Software Principles". In practice, this means that research software, whether open, inner or closed source, should be published with rich metadata to enable FAIR4RS. For research software practitioners, this currently often means following an arduous and mostly manual process of software publication. HERMES, a project funded by the Helmholtz Metadata Collaboration, aims to alleviate this situation. We develop configurable, executable workflows for the publication of rich metadata for research software, alongside the software itself. These workflows follow a push-based approach: they use existing continuous integration solutions, integrated in common code platforms such as GitHub or GitLab, to harvest, unify and collate software metadata from source code repositories and code platform APIs. They also manage curation of unified metadata, and deposits on publication platforms. These deposits are based on deposition requirements and curation steps defined by a targeted publication platform, the depositing institution, or a software management plan. In addition, the HERMES project works to make the widely-used publication platforms InvenioRDM and Dataverse "research software-ready", i.e., able to ingest software publications with rich metadata, and represent software publications and metadata in a way that supports findability, assessability and accessibility of the published software versions. Beyond the open source workflow software, HERMES will openly provide templates for different continuous integration solutions, extensive documentation, and training material. Thus, researchers are enabled to adapt automated software publication quickly and easily. Our poster presents a high-level overview of the HERMES concept, its status and an outlook.

Please assign your poster to one of the following keywords.

Tools

In addition please add keywords.

Software publication, Software metadata, automation

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Scientist/Software Producer, Data/Software Infrastructure Provider, Metadata Curators

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