MT
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HELIPORT - An Integrated Research Data Lifecycle

HELIPORT is a data management solution that aims at making the components and steps of the entire research experiment's life cycle discoverable, accessible, interoperable and reusable according to the FAIR principles. Among other information, HELIPORT integrates documentation, scientific workflows, and the final publication of the research results - all via already established solutions for proposal management, electronic lab notebooks, software development and devops tools, and other additional data sources. The integration is accomplished by presenting the researchers with a high-level overview to keep all aspects of the experiment in mind, and automatically exchanging relevant metadata between the experiment's life cycle steps.

Computational agents can interact with HELIPORT via a REST API that allows access to all components, and landing pages that allow for export of digital objects in various standardized formats and schemas. An overall digital object graph combining the metadata harvested from all sources provides scientists with a visual representation of interactions and relations between their digital objects, as well as their existence in the first place. Through the integrated computational workflow systems, HELIPORT can automate calculations using the collected metadata.

By visualizing all aspects of large-scale research experiments, HELIPORT enables deeper insights into a comprehensible data provenance with the chance of raising awareness for data management.

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