

E-Science-Initiative: Forschungsdatenmanagement



Baden-Württemberg

MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST



Data In Motion

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The project *bwDIM* develops and implements interfaces and processes that allow for an efficient **data flow** between existing functional differing tiers, ranging from **archiving** to **publication**. The extension of the platform aims at supporting researchers to accomplish long-time preservation of **scientific data** and ensures the access without efforts, thus improving findability, access and fostering reuse.

It is important for researchers to publish their work. A vital element of publishing is the review process. Reviewers need access to the data to verify and evaluate the results described in papers. The access to the yet unpublished data needs to be restricted to the reviewers and the review duration. The published data has to be described in detail and linked to the publication to enable reuse.

Connecting services from different tiers of the research data management results in a complex network and

Research data produced by one scientist can be of great value for other scientists. It is the key to reproducible science. Not only published but also primary data must be stored for over 10 years using long term bit preservation. Special infrastructure like tape archives

provide enough capacity for petabytes of data, but increase access complexity and latency.

Scientists need to work together in projects that often span the borders of organizations and even countries. The FDM workflow needs to include possibilities for sharing and cooperating with granularly controllable access rights and roles. Information Allowing scientists to focus on their work, it is essential to condense, visualize and simplify by providing

work, it is essential to condense, visualize and simplify by providing information and contacts and support at a central point.

Forming infrastructure as a network by only implementing technical interfaces is insufficient to improve research. The services have to be embedded into existing scientific activities and workflows. Thus new processes have to be defined and implemented, giving guidance to researchers and unifying the interaction with the technical systems.

In the context of archiving data for over 10 years, researchers tend to change universities, their contact data or even their surnames. An FDM-compatible authentication and authorization infrastructure (AAI) must be flexible enough to cope with these changes and still provide ways for scientists to manage archived data over extensive time periods.

Sharing



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User

Das Projekt wird gefördert vom Ministerium für Wissenschaft, Forschung und Kunst, Baden-Württemberg.



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