Meet the digital data steward Jarves

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Abstract:
Researchers need guidance in their research data management (RDM). While it becomes clear that RDM grows in importance with the amount of data and new methodologies, most researchers are not sure how to manage their data accordingly. Processes, solutions, tools and services are most often not used or even not known. This applies for engineering sciences as well as other disciplines to some extent.

One reason for this is that currently, the “How to” of RDM is either hidden behind abstract frameworks like the data life cycle or accessible through initiatives or helpdesks. However, both solutions lack an immediate nature, meaning that researchers do not receive help at their point of need. Instead, there is effort required to apply RDM and define it beforehand, due to additional tasks that RDM requires and the lack of knowledge researchers have. Therefore, the general structure of the RDM process has to be defined by researchers themselves. Afterwards, RDM has to be applied, resulting in enquiries for solutions or tools to be used in RDM. Lastly, the usage of these solutions or tools has to be figured out by the researchers.

The digital data steward Joined Assistant in Research for Versatile Engineering Sciences (Jarves) aims to address these problems. Jarves supports engineering researchers in their everyday work. It focuses on the reduction of effort and time for RDM. By ordering the RDM activities based on their occurrence in the engineering research process, Jarves provides a structure for RDM in engineering. Based on the research’s general environment, like requirements of funding organisations or institutional boundaries, the next steps, available tools and suitable trainings are recommended. Its partial automation reduces the effort needed in everyday RDM, allowing for seamless (meta)data exchange. While the tool was developed for engineering sciences, researchers in other domains can apply its concepts and possibly transfer them to their needs.

The proposed contribution is set to inform the members of the NFDI about Jarves and its goals, collect feedback and connect to similar solutions in the NFDI. Participants will be introduced to the digital data steward Jarves with a short presentation on the aim and scope of the tool. Afterwards, participants will be able to log in to Jarves, test the tool and collaborate with each other. The participants will be questioned for their possible applications and wishes for Jarves further development. This step aims for the identification of requirements to enhance Jarves' functionality beyond NFDI4Ing, eventually integrating it into Base4NFDI and the EOSC Service portfolio.

Keywords: Engineering, RDM Process, decision support, service interconnection, RDM framework