Data storage concepts- optimally secured in every phase of the data lifecycle

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The amount of research data increases in size at a high rate in almost every field. However, the correct storage solution depends on the type of data and the context that it is used in. Since a research project usually last for several years, the requirements for storage space can change.

From the planning phase of a research project, throughout the collection of data, the writing of code, the analyzing and processing on the HPC system, storing the results, writing publications, providing access to third party researchers, and finally archiving of the project, different storage solutions are used to support the researchers.

Integrating the solutions into the researchers' workflows is a challenge that must be addressed on multiple levels to ensure a good adaptation of the solutions and sustainable research.

In this presentation, we will present the current storage solutions for research data management at the RWTH Aachen University and showcase the interconnection between these solutions and the utilization of the different storage systems as well as the challenges throughout the lifetime of a research project.