## WP3 – Long-Term Storage

Both public and private sector researchers are investing a great deal of money as well as expertise into obtaining and processing data. Data is the basis of modern research. It is necessary to establish a sustainable data management system in order to maximize the usage of this data in interdisciplinary context. The main goal of WissGrid is to provide pivotal components for the long-term preservation of research data in grid computing environments.

These components include:

- An architecture for long-term preservation in grids
- An archival-system as an extensible core for a virtual research environment
- A set of modular long-term preservation services
- Blueprints for long-term preservation that pass on existing experience to new grid communities
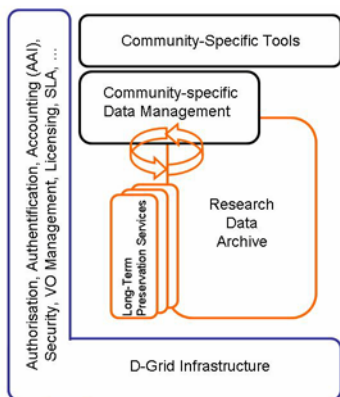
With this approach, new as well as established community grids will receive support to implement long-term preservation methods for their research data.

Partners

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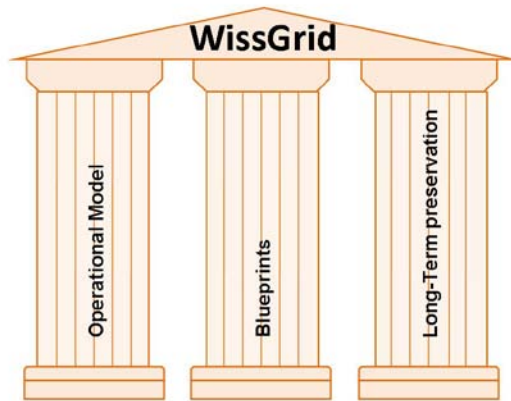
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Grid for

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Objectives and Structure

WissGrid is part of the D-Grid Initiative with the objective to establish long-term organizational and technical structures in D-Grid for the academic domain.


WissGrid combines the heterogeneous requirements of a variety of scientific disciplines and develops concepts for the long-term sustainable use of the organizational and technical grid infrastructure. In this context, the project aims to strengthen the organizational cooperation among scientists in the grid and to lower the entry thresholds for new community grids. Three key tasks have been identified from WissGrid's objectives:

1. Operational model for academic grid users

2. Blueprints for new community grids

3. Long-term preservation for research data

WP1 – Operational Model

The objective of the operational model is to organize the interests of academic users and communities within D-Grid in a representational layer. Based on the requirements of the users, the accessibility of geographically distributed IT resources in D-Grid will offer them an additional benefit. With an organized representation of their interests the academic users will obtain the necessary influence to have the requirements of a multi-disciplinary context acknowledged within D-Grid.
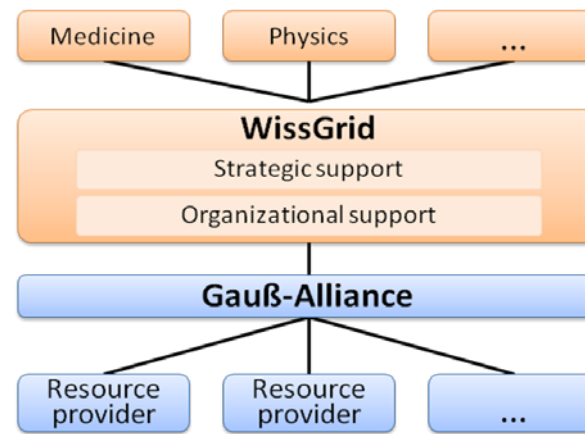
This support will help to make grid technology accessible to new communities as well as individual users and also significantly improve the efficiency of organizational processes for grids in the academic area.

Additionally, the operational model will encompass financing of dispersed IT resources as a cooperative carrier model in the context of publicly-funded research projects.

Therefore, WissGrid will carry out discussions with representatives from universities and funding agencies and the results of these meetings will be incorporated into the operational model.

WP2 – Blueprints

The innovation of using grid technology implies conceptual as well as technical challenges, especially for new academic users or communities.
For that reason, blueprints for migrating to the grid and for specific user support are necessary.
The concept is based on the experiences and best practices of the AstroGrid-D, C3-Grid, HEPGrid, MediGRID and TextGrid communities from the first funding phase of D-Grid.
To facilitate access to the grid, WissGrid will develop training fundamentals, organizational concepts as well as processes for the integration into grids.
Based on the developed blueprints, a professional support team will advise new academic communities.
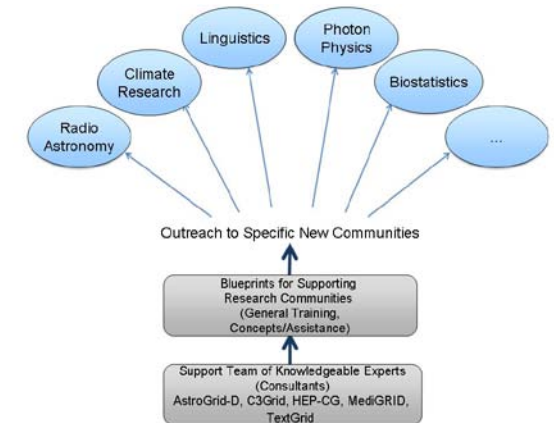
In addition to the existing support of the D-Grid Initiative (DGI) for operating systems, basic tools, and middleware from the resource providers, WissGrid will establish a community-specific user-support structure.
Along with the organizational model, general guidelines will be defined in order to assist new academic communities within D-Grid.