Survey on Existing Science Gateways - Based on DEGREE

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Science Gateways gather community-developed specific tools, applications, and data that is usually combined and presented in a graphical user interface which is customized to the needs of the target user community. Science Gateways serve as a single point of entry for the users and are usually represented by fat clients or web portals.

Part of the DEGREE project (Dissemination and Exploitation of Grids in Earth Science) was a state-of-the-art survey of portal usage in Earth Science (ES) applications. This survey considered a list of 29 portals, including 17 ES portals and 12 generic developments coming from outside of the ES domain.

The survey identified three common usage types of ES portals, including data dissemination (e.g. observational data), collaboration as well as usage of Grid-based resources (e.g. for processing of ES datasets). Based on these three usage types, key requirements could be extracted. These requirements were furthermore used for a feature comparison with existing portal developments coming from outside of the ES domain.

This presentation gives an overview of the results of the survey (including a feature comparison of ES and non-ES portals). Furthermore, three portals are discussed in detail, one for each usage type (data dissemination, collaboration, Grid-based).