



Side view of the different kinds of research support environment used by research communities

## EUDAT's B2SAFE featured in the paper describing the data subscription service provided by the Euro-Argo

The increasing volume of data being produced, curated, and made available by research infrastructures in the environmental science domain require services that are able to optimize the delivery and staging of data for researchers and other users of scientific data. Specialized data services for managing data life cycle, for creating and delivering data products, and for customized data processing and analysis all play a crucial role in how these research infrastructures serve their communities, and many of these activities are time-critical—needing to be carried out frequently within specific time windows. The paper describes the experiences in identifying the time-critical requirements of environmental scientists making use of computational research support environments. It presents a microservice-based infrastructure optimization suite, the Dynamic Real-Time Infrastructure Planner, used for constructing virtual infrastructures for research applications on demand. Finally, the paper provides a case study whereby the suite is used to optimize runtime service quality for a data subscription service provided by the Euro-Argo using EGI Federated Cloud and EUDAT's B2SAFE services, and to consider how such a case study relates to other application scenarios.

[Read the full paper here.](#)