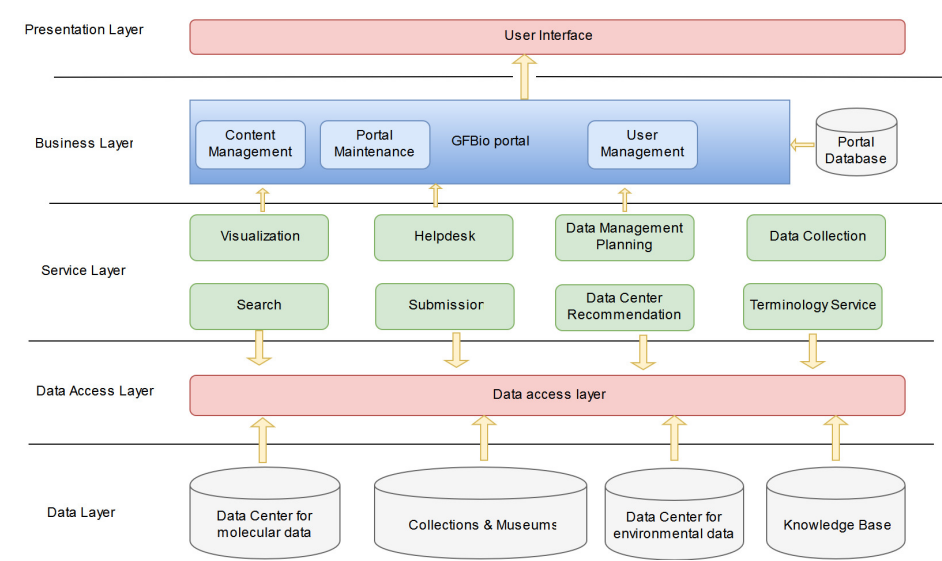# WP 3.1 – DATA PORTAL & SEARCH
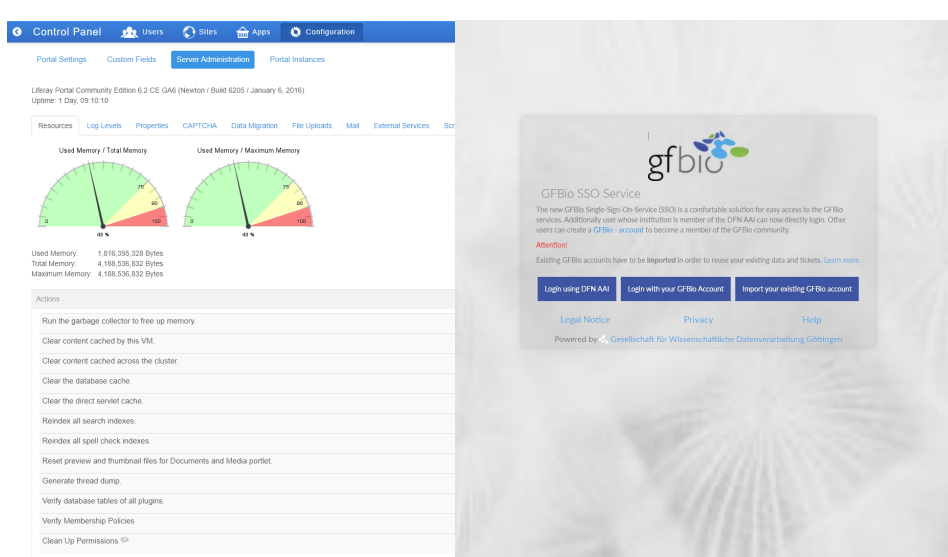
[1]Birgitta König-Ries, [2]Robert Huber, [2]Michael Diepenbroek, [1]Samira Babalou, [4]Florian Becker, [2]Andree Behnken, [3]Sven Bingert, [5]David Fichtmüller, [1]Marcel Frömming, [1]Philipp Kahn, [4]Naouel Karam, [1]René Lachmann, [1]Felicitas Löffler*, [4]Claudia Müller-Birn, [1]Kobkaew Opasjumruskit, [2]Uwe Schindler, [1]Fateme Shafiei, [1]Sven Thiel*, [1]Valentin Wesp
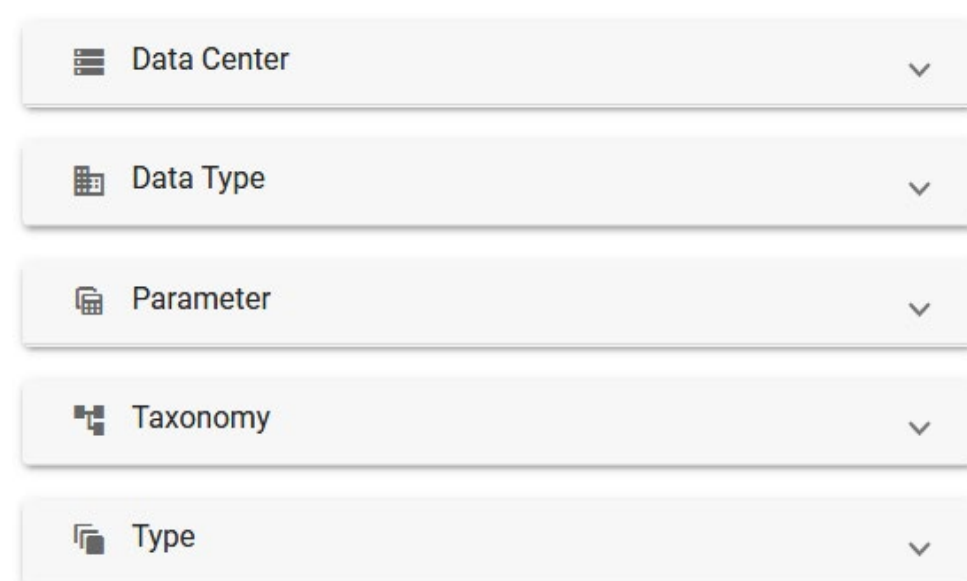
#SERVICE INTEGRATION

The data portal acts as the central access point for various GFBio services. Providing access and ensuring the communication between these services were one of the main tasks in WP 3.1.
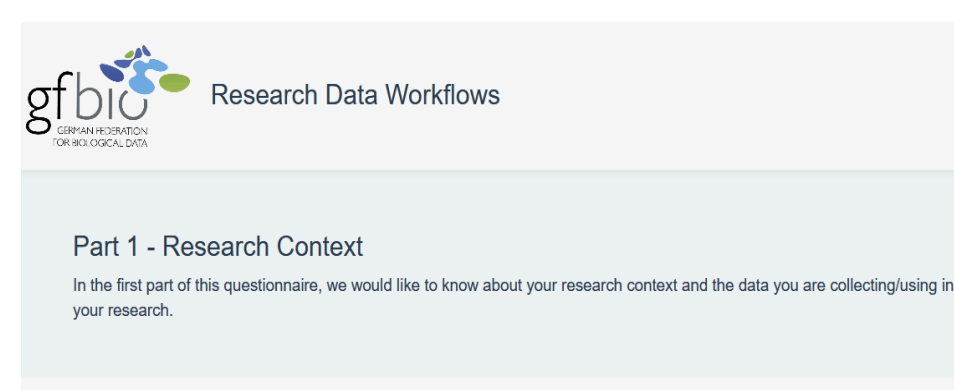
#SERVER MAINTENANCE

During the entire project lifetime the Windows and Linux servers were regularly maintained. Besides Liferay updates, new versions of the GFBio services were continuously integrated, e.g., the switch of the authentication system (SSO).

#DATA PORTAL

https://www.gfbio.org - Single point of entry for all steps in the Data Lifecycle: Dataset Search, Data Submission, Visualization, Data Management Planning, Training, Workbenches & Tools, Terminology Service

#SEARCH

GFBio's search enables scholars to retrieve datasets from multiple archives and data repositories. The developed search interface - [Dai:Si] - allows an easy usage and presents search results in a user-friendly and comprehensive view.

#SEMANTIC SEARCH

GFBio's Terminology Service has been integrated to expand query terms on related terms such as synonyms and common names. Explanations and further hierarchical terms are provided on demand.

#DATA BASKET

Selected datasets can be collected in a data basket for download or later reuse, e.g., in GFBio's visualization tool – GeoEngine.

#SEARCH FACETS

- Data Center
- Data Type
- Parameter
- Taxonomy
- Type

Together with biodiversity experts and project members search facets were revised according to user preferences in dataset search.

#SEMANTIC USER PROFILES

ScholarLensViz provides different visualizations for semantic user profiles generated from scholarly publications. Explanations for all profile entries are provided based on techniques from Natural Language Processing and Semantic Web.

#REST API

All search functions are separately available and described with swagger.
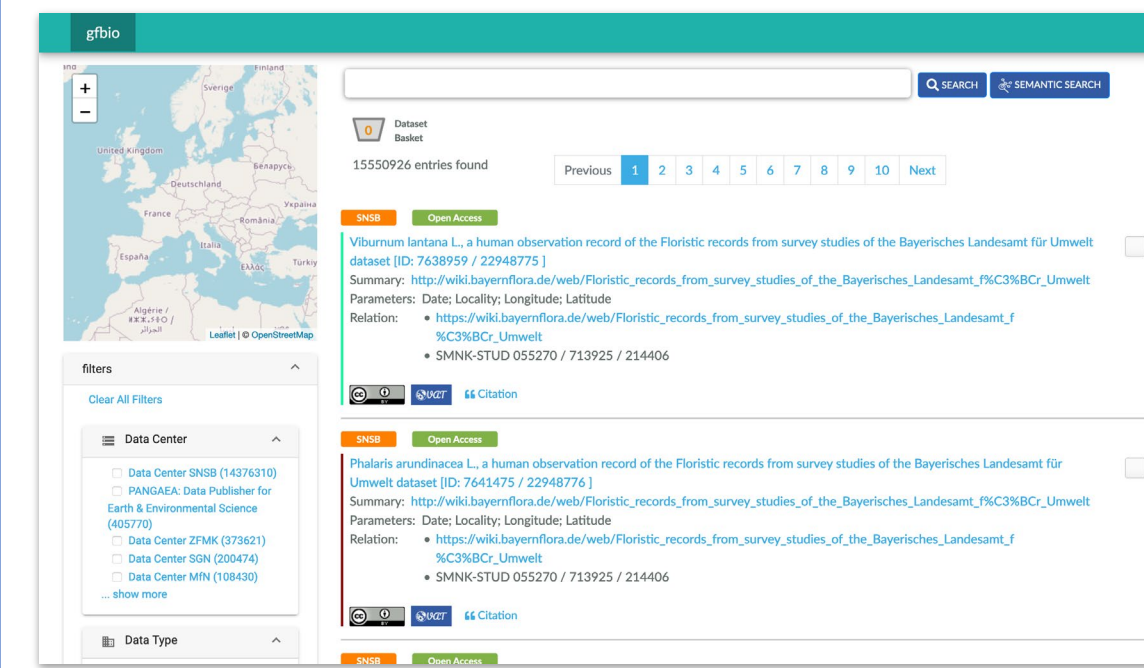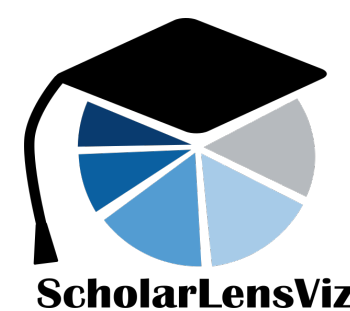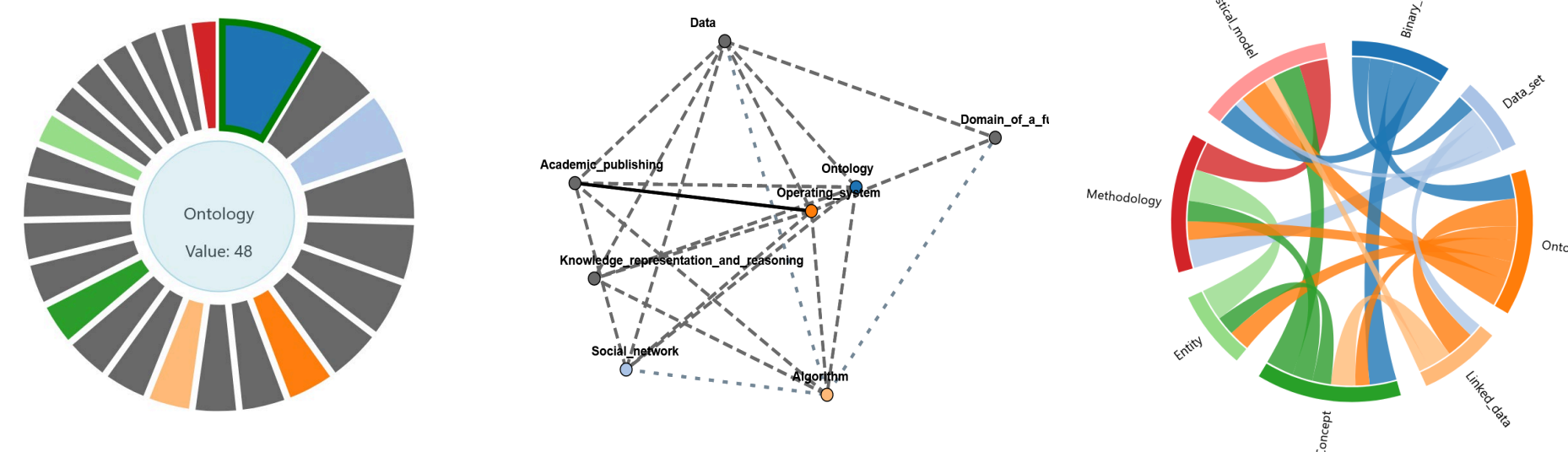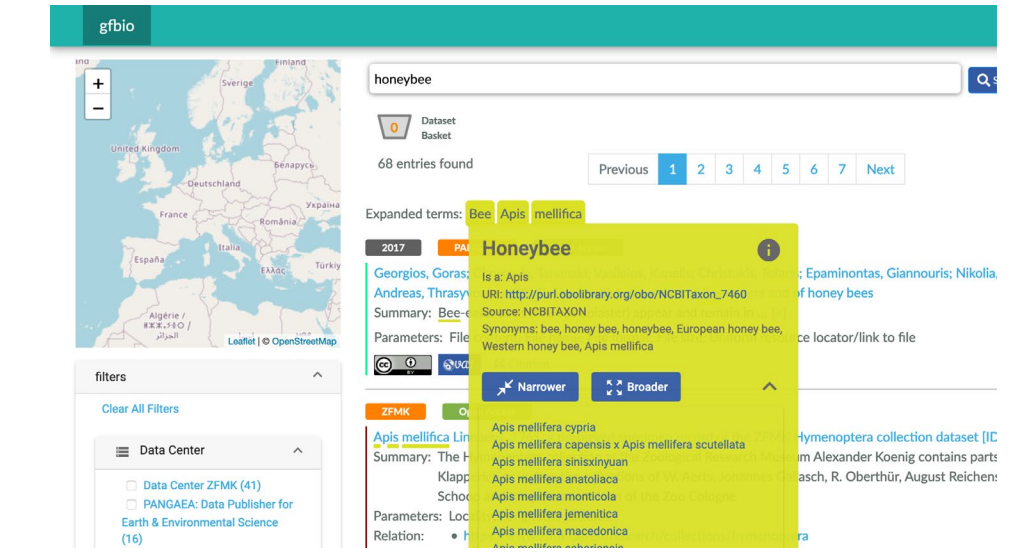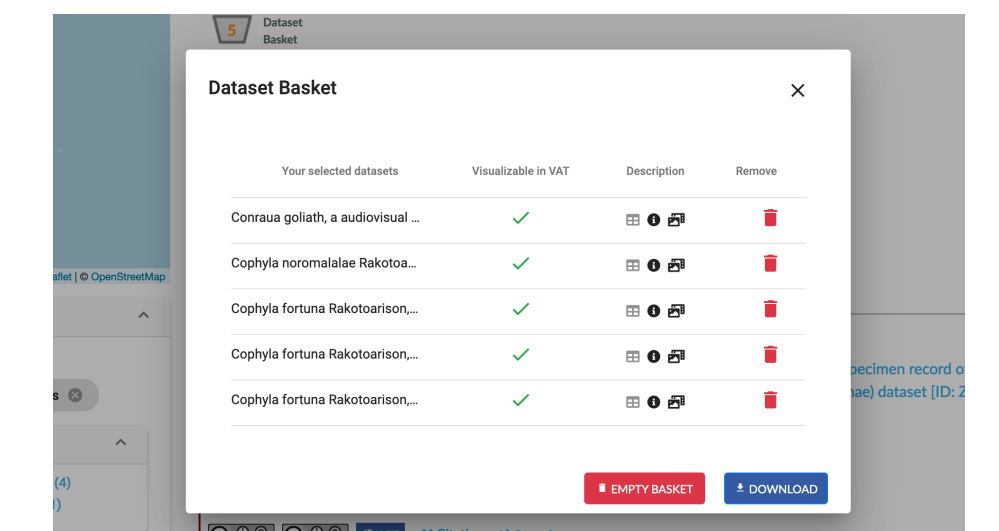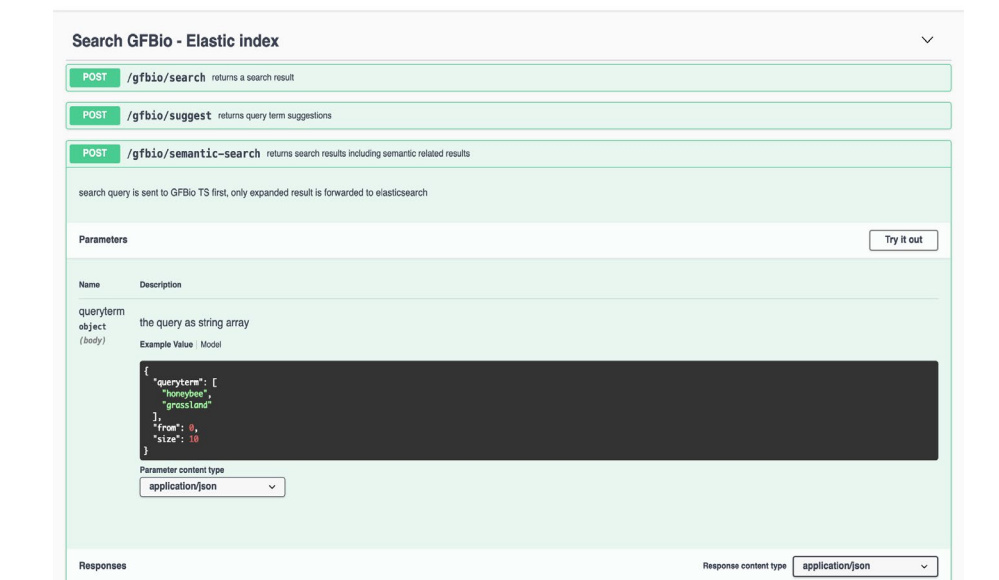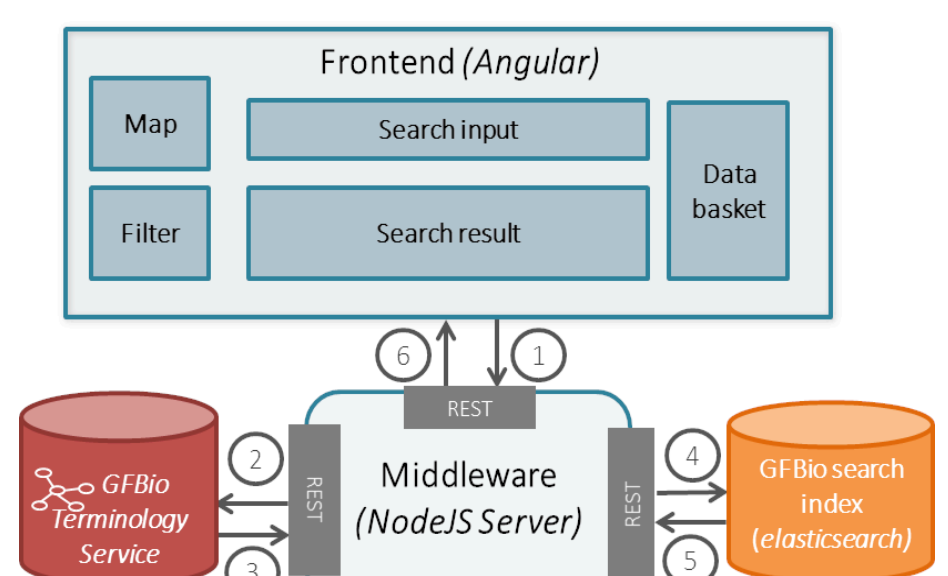
#EVALUATION

Multiple user evaluations took place to explore information needs in terms of data management, search, submission and visualization and to improve the accuracy of search results.

#MODULARIZATION

A modular infrastructure allows an easy exchange and reuse of UI components for custom search indexes.

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