

# Migrating the JValue ODS to Microservices

## Summary

The Open-Data-Service (ODS) is an open source software project, which collects heterogeneous data from various sources and makes this data easy to consume through a unified programmatic interface. Moreover, the ODS can improve the quality and availability of the data, and apply different operations to enhance the data. On the source side, different adapters ensure that the proliferation of protocols, formats, and the complexity of the sources is easy to handle. On the user side, a query interface provides all data in a uniform and simple interface, regardless of their original format or interface. The goal of this bachelor/master thesis is to design and technically explore a migration of the existing software to a microservice-based architecture.

## Work Results

- Literature review
  - Pertinent literature on microservices and migration to microservices
- Thesis methods
  - **Definition and documentation of requirements before strategy design and implementation**
    - Includes risks and possible metrics to assess migration risks
  - Development of migration strategy, partial implementation of the strategy
  - Evaluation of strategy and partial implementation results based on requirement
- Thesis results
  - Definition of a migration strategy including risk and metrics
  - **Assessment of strategy based on partial implementation and evaluation**

## Supervisor

Andreas Bauer, [andi.bauer@fau.de](mailto:andi.bauer@fau.de)

Prof. Dr. Dirk Riehle, [dirk.riehle@fau.de](mailto:dirk.riehle@fau.de)

Open Source Research Group, Computer Science Department, Friedrich-Alexander University

More information: <http://osr.cs.fau.de/theses/resources/>