# Open Museum for an Open Science and an Open Society

UNIVERSITÄT BONN

RHEINISCHE
FRIEDRICH-WILHELMS
TRAN
RESEL



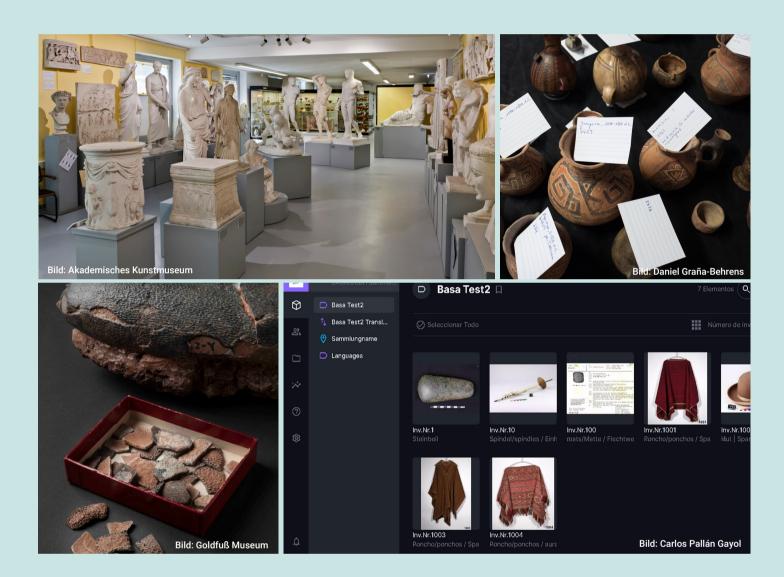


Authors: Alma Hannig, Elizabeth Stauß, Edouard Grigowski and Carlos Pallán Gayol

"Open Museum" is a digital platform that facilitates access to the collections of the University of Bonn for research and teaching in compliance with the FAIR and CARE principles. By providing a common infrastructure for analogue and virtual exhibitions as well as education formats, it encourages greater participation and engagement with the collections.

#### Goals >>>>>

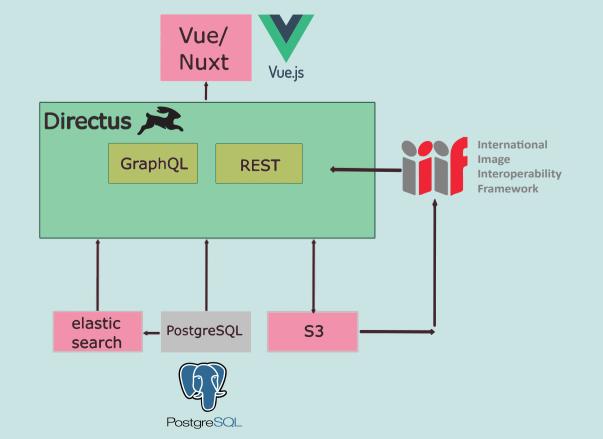
- Creating a state-of-the-art digital platform able to host all university collections in Bonn.
- Open-access to the collections including digital exhibits, outreach and educational tools.
- Enhancing networking and communication, locally and globally.
- > Democratization and dissemination of knowledge, transparency and accessibility.



# **Technical Setup**



- Postgres database (widely used open-source db)
- Directus (state-of-the art open-source CMS with introspection capabilities)
- > REST API
- GraphQL API
- S3 storage (scalable storage for future project expansion)
- Advanced visualisation through an IIIF-compatible image server
- Elasticsearch (indexing engine)



## Challenges



- Sustainable data management (funding)
- > Joint digital strategy
- Scalability of the project
- Transdisciplinary data model
- Handling of sensitive data
- Data security
- Licensing of exported data
- Standardised workflows for entry of analog and digital data
- > Workshops to train all employees involved
- Validation of data also for non-technical users
- > Standardised input mask

#### **Current Status**

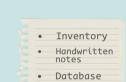


**43 Teaching and learning collections** cover a large variety of disciplines and research areas at the University of Bonn. They range from anatomy, ancient American studies, and astronomy to botany, geodesy, theology, dental history, Mongolian studies and zoology. The university collections include **10 smaller and larger museums** as well as the botanical gardens.

#### **Status of cataloguing** varies between:









No capture at all

Old inventory books from the 19th century

Partially captured

completely captured

#### Status of digitisation varies between:









No digital data at all

Spreadsheet listings

Digital photos

Professional databases and 3D captures

### Stakeholders and Users



- Researchers, teachers and students of the University of Bonn
- Other universities and research institutions.
- Other museums and educational and cultural institutions
- > Broader public, global and local stakeholder groups (civil society, students, visitors, communities of origin)

