OpenAtlas
A web based tool to acquire and manage historical and archaeological data

Alexander Watzinger
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OpenAtlas

https://openatlas.eu

- Open source, browser based database software
- Acquire, edit and manage research data
- Historical, archaeological and prosopographic projects
- Developed by a small core team

https://demo.openatlas.eu/overview/network/
OpenAtlas Team

Stefan Eichert
Idea, Concept and Data Modeling

Alexander Watzinger
Lead Developer and Concept

Bernhard Koschiček-Krombholz
Software Development, API

Christoph Hoffmann
Frontend Development

Nina Brundke
Bioarchaeological Expertise

Jan Belik
Logo Design and Design Consulting

And many contributors: https://openatlas.eu/team
Projects

A small selection

The Anthropological and Archaeological Database of Sepultures
PI: Stefan Eichert, Nina Brundke
2019 - 2021

Mount Athos in Medieval Eastern Mediterranean Society
PI: Zachary Chitwood
2020 - 2025

INventory and Disseminate Graffiti along the dOnaukanal
PI: Geert Verhoeven, Norbert Pfeifer
2021 - 2023

Mapping Medieval Conflict
PI: Johannes Preiser-Kapeller
2014 - 2017

https://openatlas.eu/projects
Model

CIDOC Conceptual Reference Model

- International standard (ISO)
- Developed by CIDOC CRM Special Interest Group
- Specifies classes for entities like actor, source, event, place and rules how to link them
- Stored in an object oriented network

https://demo.openatlas.eu/overview/model
Project Data

Data enrichment with types and links

- Standard types
- Custom types
- Value types
- Linked open data
  - Wikidata
  - GeoNames
  - Custom, e.g. Viaf, GND

https://demo-dev.openatlas.eu/types
API

Application Programming Interface

- Interface to external systems
- Abstraction layer for standardized data exchange
- Can be used for
  - Presentation sites
  - GIS applications
  - Analytic applications, e.g. network visualization
  - Complex research queries
API

OpenAtlas API

- Web based REST-like API
- Uses the OpenAPI specification 3
- Different output formats, e.g.
  - Linked Places format (Pelagios)
  - GeoJSON
  - RDF
  - XML
API

Links

- OpenAPI
  - https://swagger.io/specification
- Linked Places format
  - https://github.com/LinkedPasts/linked-places-format
- OpenAtlas API documentation
  - https://app.swaggerhub.com/apis/ctot-nondef/OpenAtlas/0.2
Development

- Active development, a new version about every month
- Technologies: Python3, Flask, PostgreSQL + PostGIS
- High coding standards
  - Bug free
  - Tested
  - Current software
- Close cooperation with the projects teams
- Transparent workflow, e.g. public
  - Code
  - Roadmap
  - Issues
Demonstration

Live demonstration of OpenAtlas

- OpenAtlas website (openatlas.eu)
- OpenAtlas user interface (demo.openatlas.eu)
- OpenAtlas manual (link)
- OpenAtlas issue tracker and Wiki (link)
- OpenAtlas Discovery (link)
Thank you for listening

https://openatlas.eu