

OpenAtlas



A Database System for the Humanities and Beyond

12th December 2025, OpenAtlas Workshop @ LMU

Agenda

- Introduction to OpenAtlas and OpenAtlas Discovery
- Live presentation
- Finding groups and topics
- Entering data: interactive group work
- Results, feedback and discussions

Alexander Watzinger (Alex)



- Lead developer of OpenAtlas
- Works at the [ACDH](#) / [ÖAW](#)
- Loves open source and scientific projects

OpenAtlas



- Project site: <https://openatlas.eu>
- Open Source, browser based database software
- Acquire, edit and manage research data
- Based on the model of [CIDOC CRM](#)
- Initiated over 10 ago by Stefan Eichert
- Mainly developed at the [ACDH](#) / [ÖAW](#)

OpenAtlas Cooperations

- [Projects](#) from all fields of the humanities
- Mostly historical and archaeological projects
- A lot of synergy between the cooperations



Mission Statement

- <https://openatlas.eu/mission>
- Open source – Open data access
- Transparent workflow and communication
- High data integrity and coding standards
- Usability
- Interoperability through
 - [CIDOC CRM](#)
 - [FAIR](#) principles
 - API and links to external reference systems

Structured data

Aim

- Search
- Compare
- Merge
- Research questions

Workflow

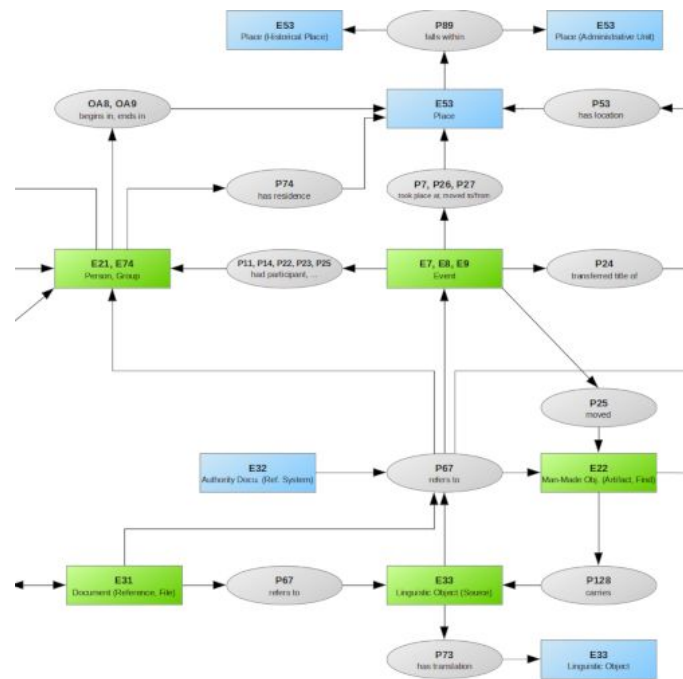
- Identify classes for entities
- Add attributes
- Link entities -> network

Challenge

- Balance between easy data entry and acquiring detailed information

Model - CIDOC Conceptual Reference Model

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



Features

- Detailed description of [Features](#) in the manual
- Spatial, object, actor and event information
 - Detailed descriptions of objects
 - Person networks
 - Members of groups and their functions
 - Personal relations, kinship and more
 - Events
 - Hierarchical structure
 - Sequences of events
 - Geographical and temporal information about every entity

Features

- Very adaptable types and reference systems

Dimensions

Azimuth 0

Degrees 2,700

▸ Diameter 2,735 (983)

Bottom diameter 317

Max Diameter 321

Min Diameter 85

Top Diameter 260

▸ Distance 0

Elevation 801

▸ Height 6,336 (150)

Height max 75

Height min 75

▸ Length 8,756 (356)

Classes: Artifact, Feature, Place, Stratigraphic unit

Multiple linked entities: [show](#)

Untyped entities: [show](#)

Description

Physical dimensions like weight and height.

+ Reference system

Show entries

Search:

| Name | Count | Website URL | Resolver URL | Example ID | Default precision | Description |
|--------------------------------|-------|----------------------------------|------------------------------------|----------------|-----------------------------|------------------|
| AMA number | 2424 | | | | exact match | Fortlaufende ... |
| Archaeologi... | | | https://digiar... | C-TX-20220... | exact match | |
| ArchWort | 4 | https://archw... | https://archw... | 2873 | exact match | |
| English Tra... | 83 | | | english name | exact match | EN |
| GeoNames | 798 | https://www.... | https://www.... | 1234567 | close match | Geographical... |
| German Tra... | 85 | | | Name auf De... | exact match | DE |
| Getty AAT | 327 | http://vocab.... | http://vocab.... | 300400650 | exact match | The Getty Re... |
| GND | 4 | https://gnd.n... | https://d-nb.i... | 119338467 | exact match | |
| NHMW Prae... | 425 | | | 1234 | exact match | Inventory Nu... |
| PeriodO | 38 | https://perio... | http://n2t.net/... | p0qhb66drd9 | exact match | |

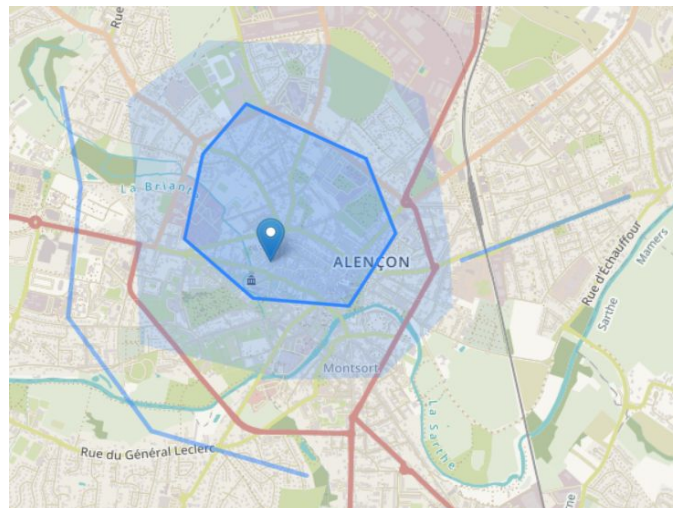
Showing 1 to 10 of 12 entries

Previous
1
2
Next

Features

- Solutions for uncertainty in space and time

| | | | | |
|-------|------|----|----|-------------|
| Begin | 1011 | 01 | 01 | comment |
| | 1020 | 12 | 31 | |
| End | 1425 | 08 | 01 | destruction |
| | 1425 | 10 | 31 | |



Features

- Archaeological/anthropological features
 - Subunits
 - Radiocarbon dating
 - Sex estimation

Radiocarbon dating

Laboratory ID *

VERA

Specimen ID *

23432A

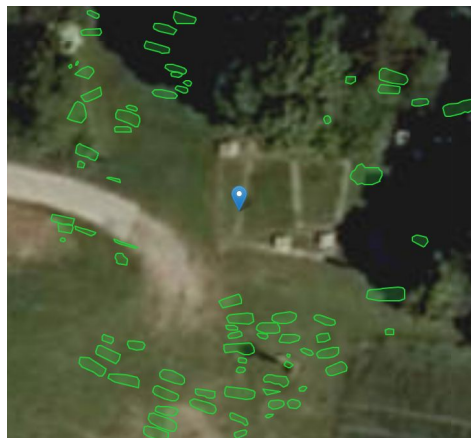
Radiocarbon year *

2040

Range *

30

Save



Sex estimation

Edit

Delete

Skull

Glabella

3

Not preserved

Arcus superciliaris

2

Not preserved

Tuber frontalis and parietalis

2

Not preserved

Inclinatio frontalis

1

Not preserved

Processus mastoideus

3

Not preserved

Relief of planum nuchale

3

Not preserved

Protuberantia occipitalis externa

2

Not preserved

Processus zygomaticus

3

Not preserved

Os zygomaticum

2

Not preserved

Crista supramastoideum

2

Not preserved

Margo supraorbitalis

1

Not preserved

Shape of orbita

1

Not preserved

Mandible

Overall apperence

3

Not preserved

Mentum

2

Not preserved

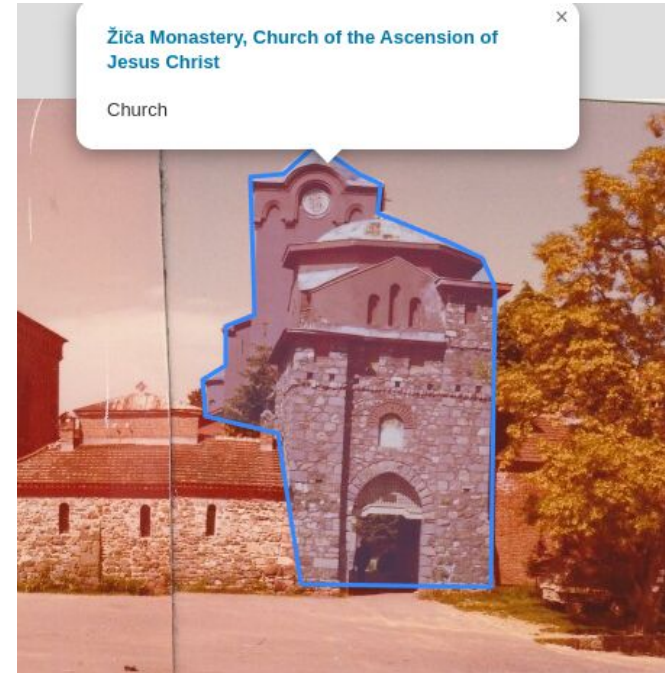
Angulus

1

Not preserved

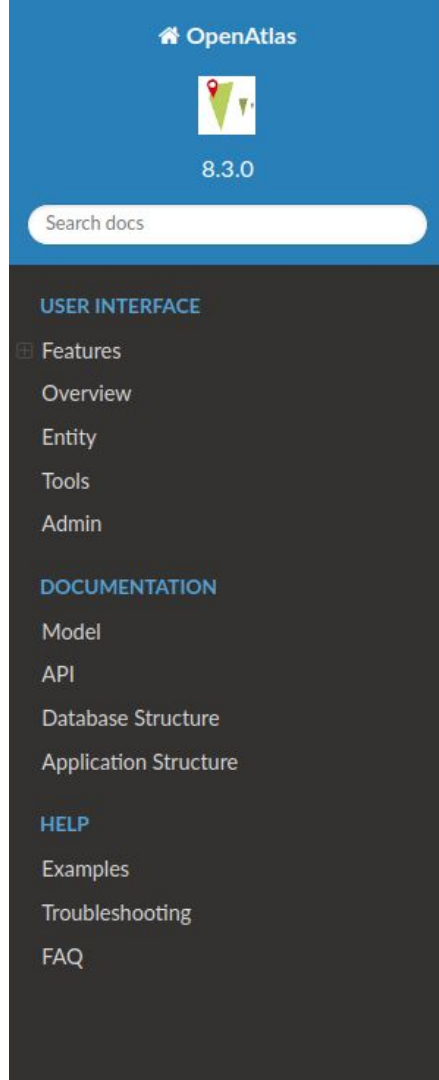
Features

- IIIF technology
- Image annotation
- Text annotation



Features

- Documentation
 - Project website: openatlas.eu
 - Code on [GitHub](https://github.com)
 - Detailed [User Manual](#)
 - Technical [Wiki](#), [installation notes](#)
 - [Issue tracker](#), [roadmap](#) for planning
 - Public meeting [protocols](#)



Features

- User management
- Password functions
- Newsletter

| | Admin | Manager | Editor | Contributor | Readonly | Guest |
|-----------------------|-------|---------|--------|-------------|----------|-------|
| Browse data | yes | yes | yes | yes | yes | |
| Edit data | yes | yes | yes | yes* | | |
| Edit types | yes | yes | yes | | | |
| Add custom types | yes | yes | | | | |
| Add reference systems | yes | yes | | | | |
| Import/Export | yes | yes | | | | |
| User management | yes | yes | | | | |
| System settings | yes | | | | | |

OpenAtlas Discovery



A Cross-Domain Visualization Platform for the Digital Humanities

12th December 2025, OpenAtlas Workshop @ LMU

Olivia Reichl

- Frontend developer in the OpenAtlas team
- Works at [ACDH](#) / [ÖAW](#)
- Studies at the Danube University Krems
- Loves everything about good design, gamification and lifelong learning



OpenAtlas Discovery

Presentation site for OpenAtlas projects

Demo: <https://openatlas-discovery-demo.acdh-ch-dev.oeaw.ac.at>

- Currently under development: Version 1.0.0 is coming soon
- Open source, accessible via [GitHub](#)
- Goal: make project data and results available to a wider audience

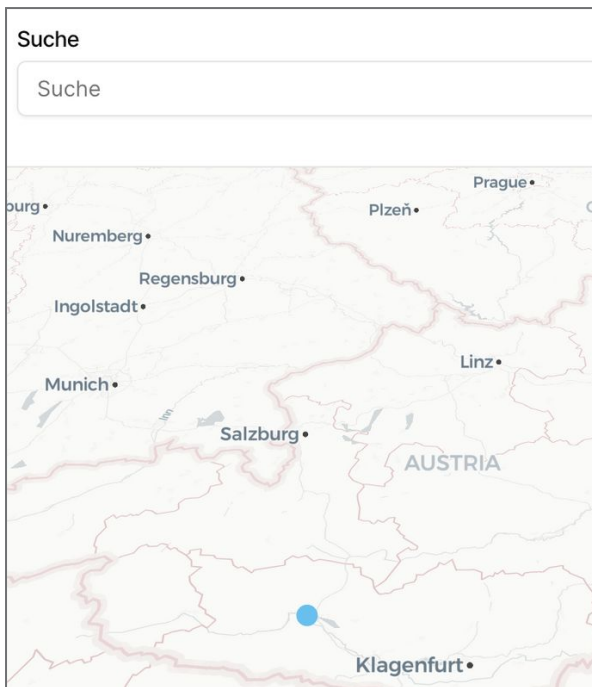
Features

Accessible

Visual

Configurable

2 Parts



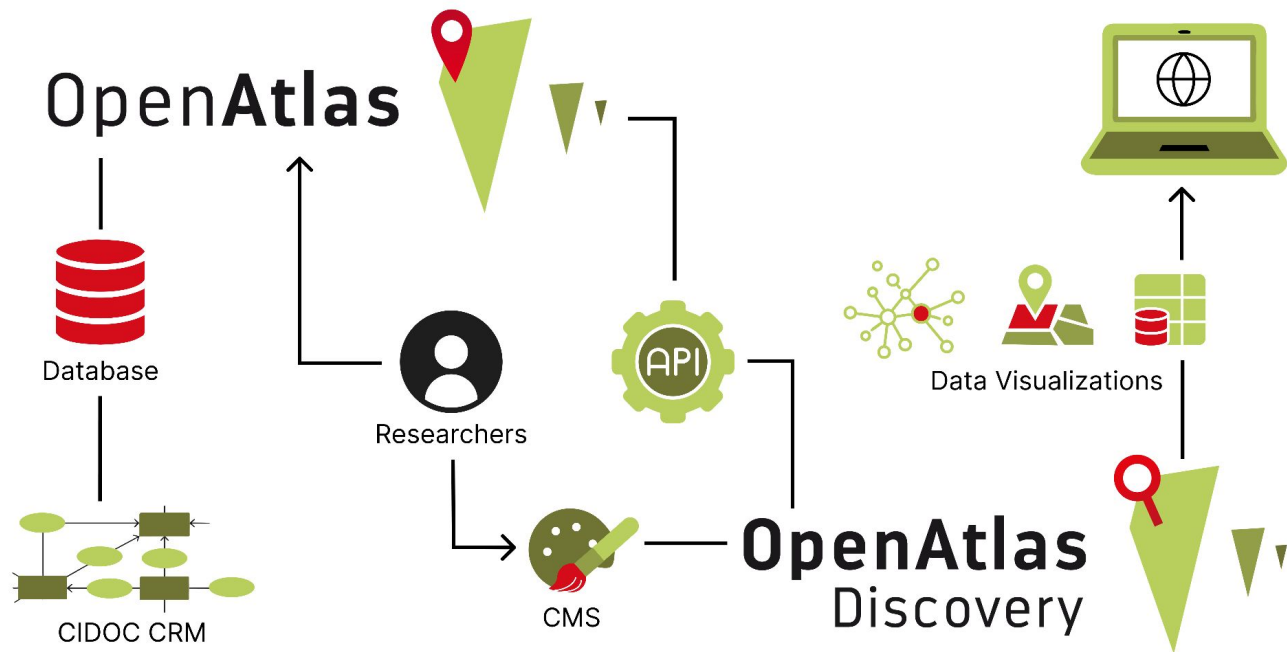
Team

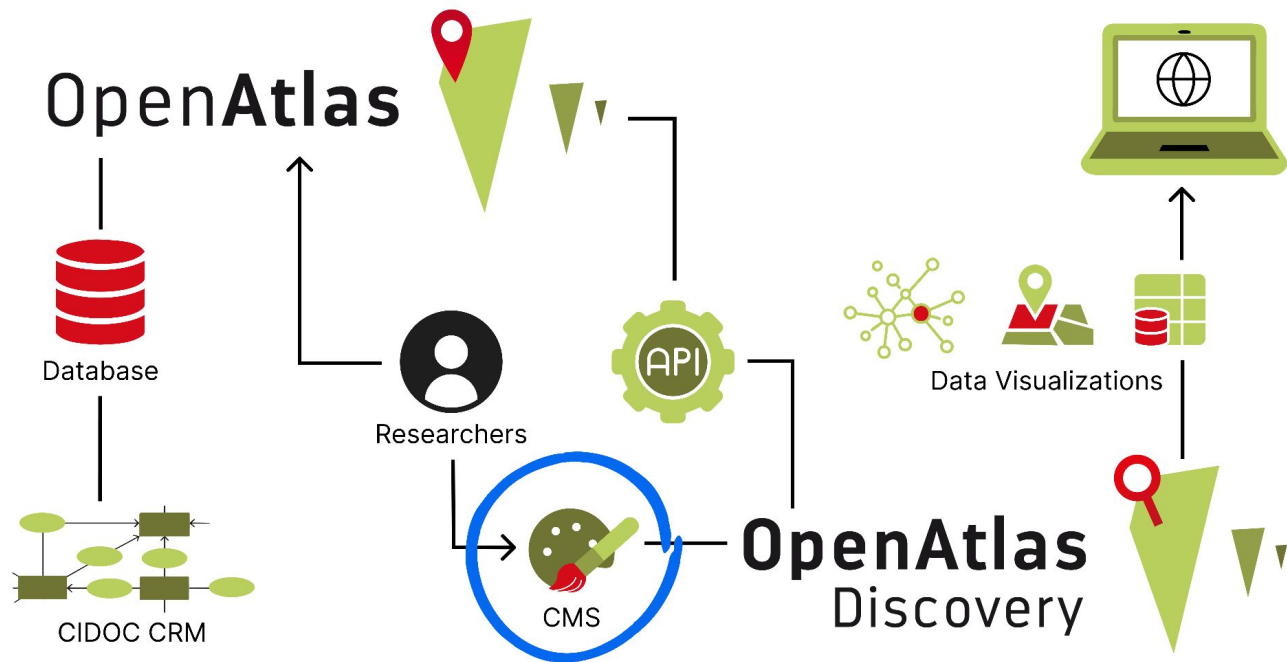
Fugiat duis anim mollit sit nulla do dolore dolor eu reprehenderit proident eu tempor est adipisicing cupidatat adipisicing. Eiusmod aliquip magna dolor non sint eu dolor.

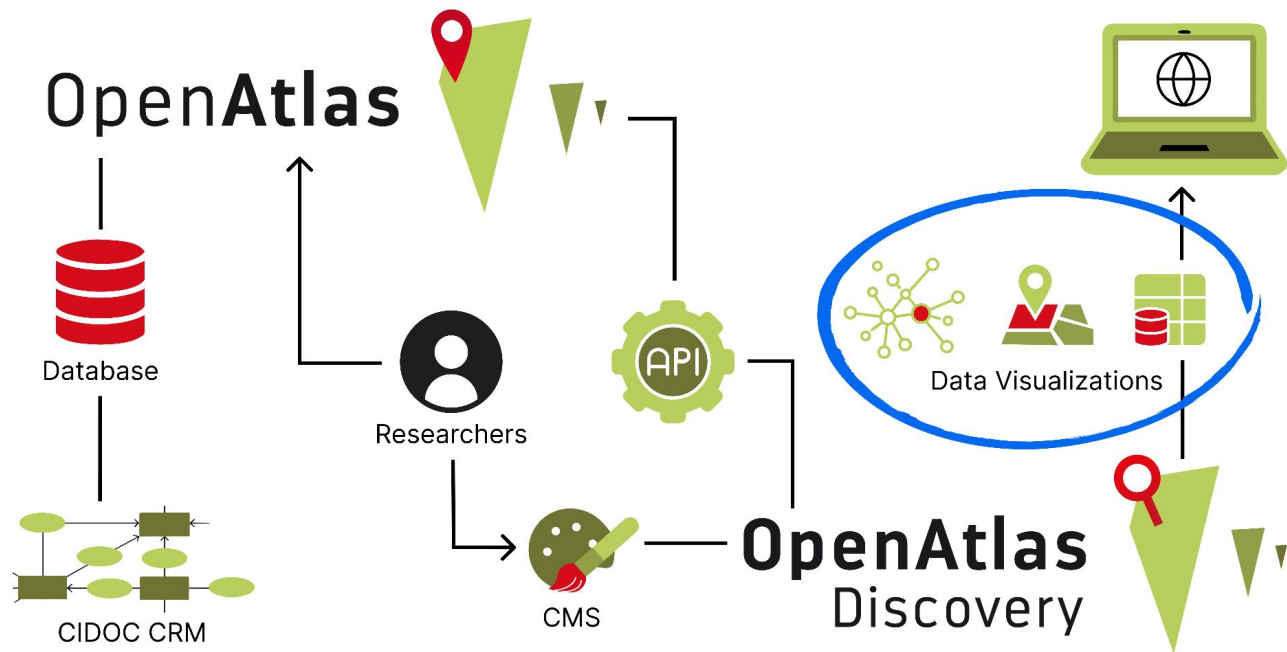


Stefan Eichert

Stefan is the the initiator and master mind behind the OpenAtlas project. His main research fields







Data Table


[Home](#) [Map](#) [Network](#) **[Data](#)** [Team](#) [About the project](#)

DE | EN

Category

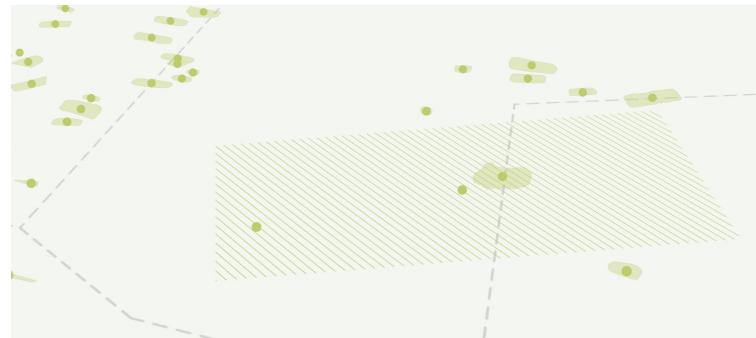
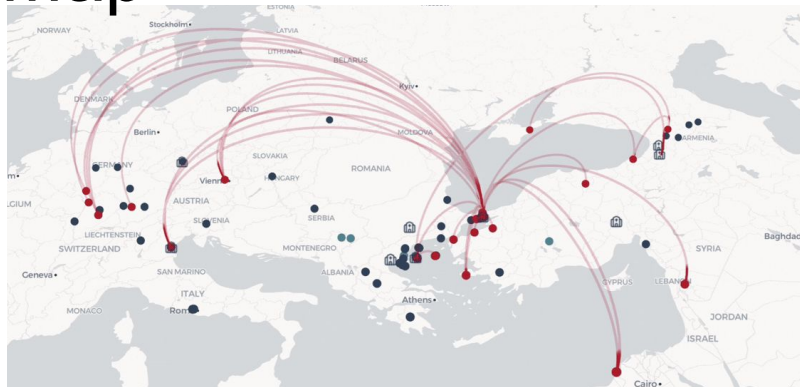


Search

Search

| Class ↑↓ | Name ↑↓ | Description | Begin ↑↓ | End ↑↓ |
|----------|---|---|----------|------------|
| | Arpadian Age | | 1/1/890 | 1/1/1200 |
| | Burial 060 | Individual of unknown sex and age. Heavily fragmented human re... | 1/1/900 | 12/31/1100 |
| | Cen_AS1 | No burial. Grave pit oriented: approx. E-W respectively W-E. ##G... | 1/1/750 | 12/31/950 |
| | Cen_AS1F01 | An iron object of unknown function. Lost without a trace. ##Germ... | 1/1/750 | 12/31/950 |
| | Cenotaph_A | Irregular rectangular grave pit, mostly cut into the rock. Completel... | 1/1/750 | 12/31/950 |
| | Early Middle Ages | | 1/1/500 | 1/1/1000 |
| | Eastern Alps Typochronology | Typochronological groups for the material culture of the Eastern A... | 1/1/550 | 1/1/1000 |
| | G001 | Elongated, oval shaped grave pit, slightly widened at the lower en... | 1/1/900 | 12/31/1100 |
| | G001_1986S1 | Adult female (20-40 years). Oriented: NW-SE (310°). Disturbed. F... | 1/1/750 | 12/31/950 |
| | G001S01 | Late adult/early mature male. Oriented: WNW-ESE. Skeleton mostl... | 1/1/900 | 12/31/1100 |

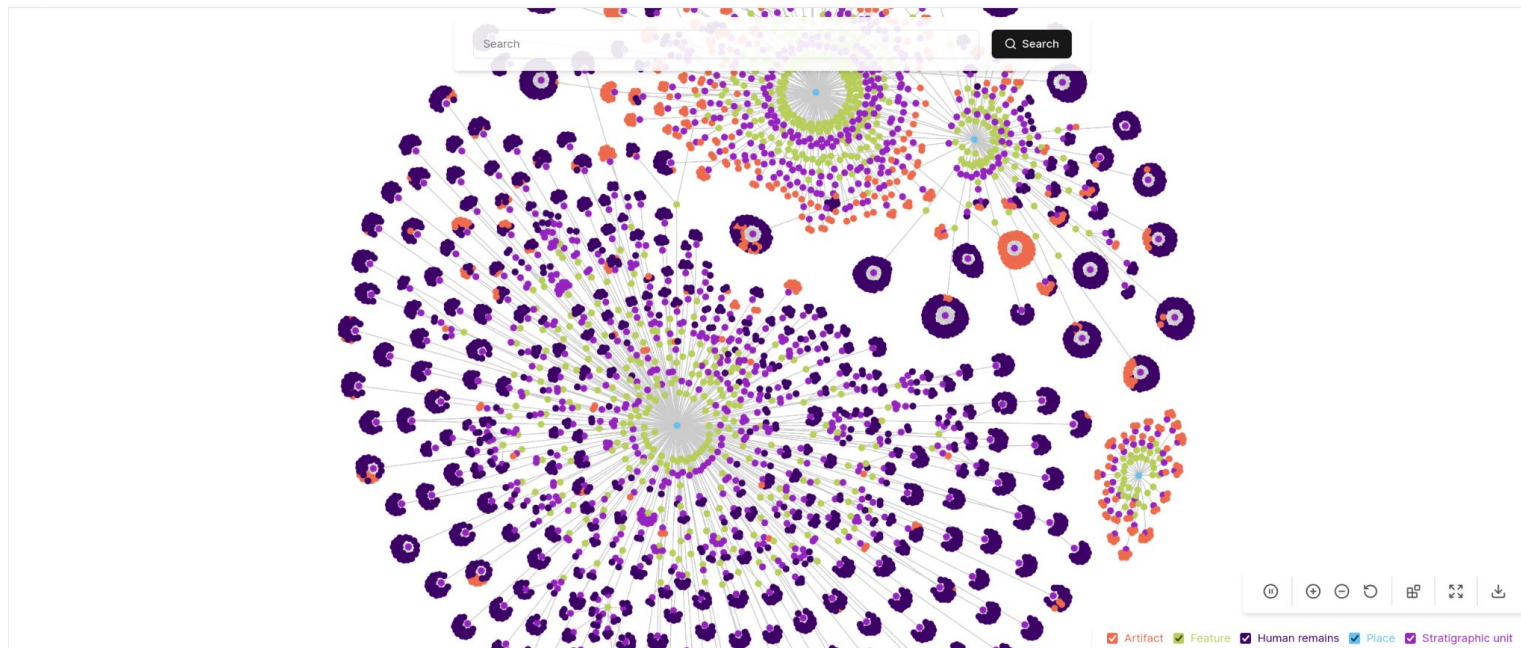
Map



Network

[Home](#) [Map](#) [Network](#) [Data](#) [Team](#) [About the project](#)

☼ DE | EN



Live Demonstration

<https://demo.openatlas.eu>

User: Demolina, Password: Demolina

Exercise

Level: **easy**

- <https://lmu.openatlas.eu>
- Create an artifact (painting / sculpture / ...) and add an image
- Create a person and add it as the artifact owner
- Create a place where it has been created
- Create a place where it is at this date
- Create a move event to showcase it's movement
- Results are visible at the presentation site:
<https://discover-lmu.openatlas.eu>

Exercise

Level: **advanced**

- <https://lmu.openatlas.eu>
- Use your own ideas / data
- Ideally, the data contains sources, persons, places and events
- The features of text- or image-annotation should be explored
- Relevant data connections should be entered via links
- Results are visible at the presentation site:
<https://discover-lmu.openatlas.eu>

Thank you!

OpenAtlas



Logos originate from the respective project pages.

Source and, if available, licence of external images are indicated.

The remaining content is licenced under [Creative Commons Attribution 4.0 International](https://creativecommons.org/licenses/by/4.0/).