

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

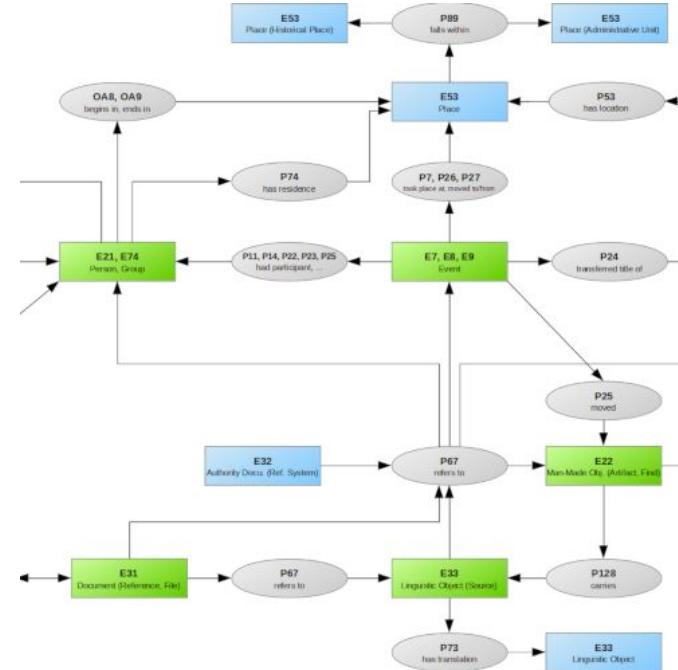
- Identify classes for entities
- Add attributes
- Link entities -> network

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

Type to search

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.

Dimension	Value
Length	10.000
Width	~7.000
Height	~6.000
Diameter	~4.000
Degrees	~3.000
Thickness	~2.000
Elevation	~1.000
Weight	~0.500

+ Reference system

Show 10 entries Search:

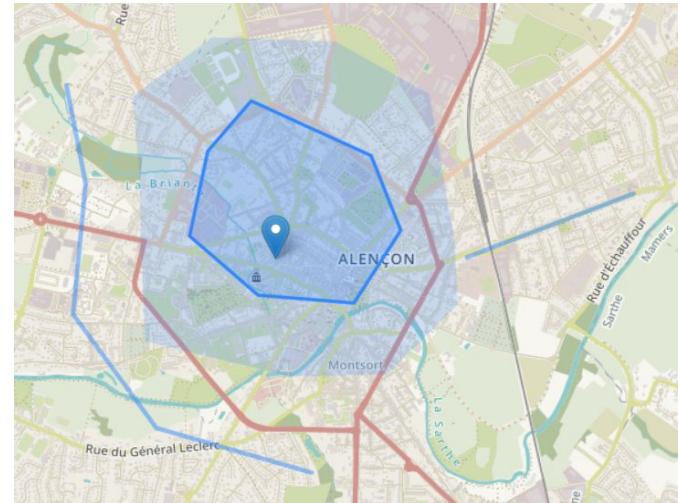
Name	Count	Website URL	Resolver URL	Example ID	Default precision	Description
AMA number	2424				exact match	Fortlaufende ...
Archaeologi...		https://digitar...	C-TX-20220...		exact match	
ArchWort	4	https://archw...	https://archw...	2873	exact match	
English Tra...	83				exact match	EN
GeoNames	798	https://www....	https://www....	1234567	close match	Geographical...
German Tra...	85				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

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
<input type="button" value="Save"/>	

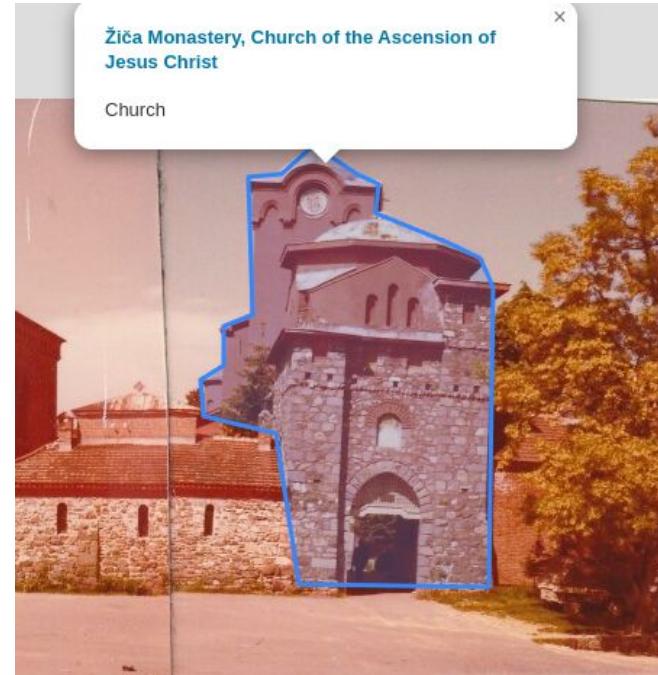


Sex estimation

	<input type="button" value="Edit"/>	<input type="button" value="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](#)
 - Detailed [User Manual](#)
 - Technical [Wiki](#), [installation notes](#)
 - [Issue tracker](#), [roadmap](#) for planning
 - Public meeting [protocols](#)



Search docs

USER INTERFACE

- ⊕ Features
- Overview
- Entity
- Tools
- Admin

DOCUMENTATION

- Model
- API
- Database Structure
- Application Structure

HELP

- Examples
- Troubleshooting
- FAQ

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

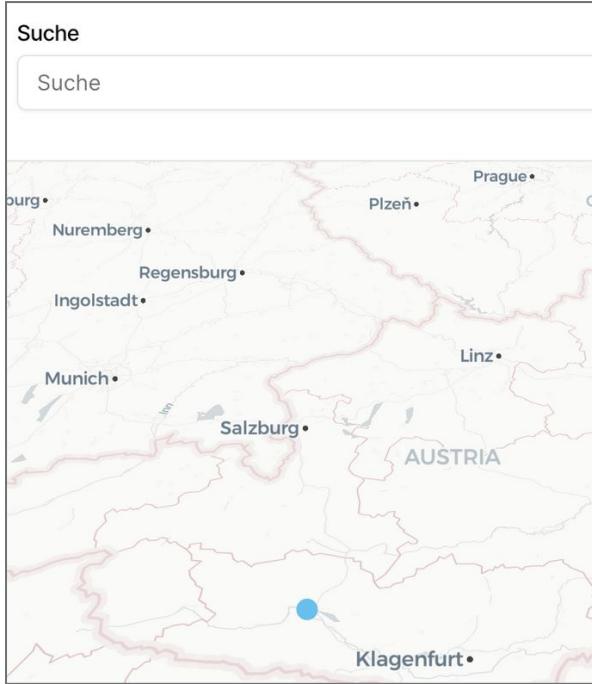
Features

Accessible

Visual

Configurable

2 Parts



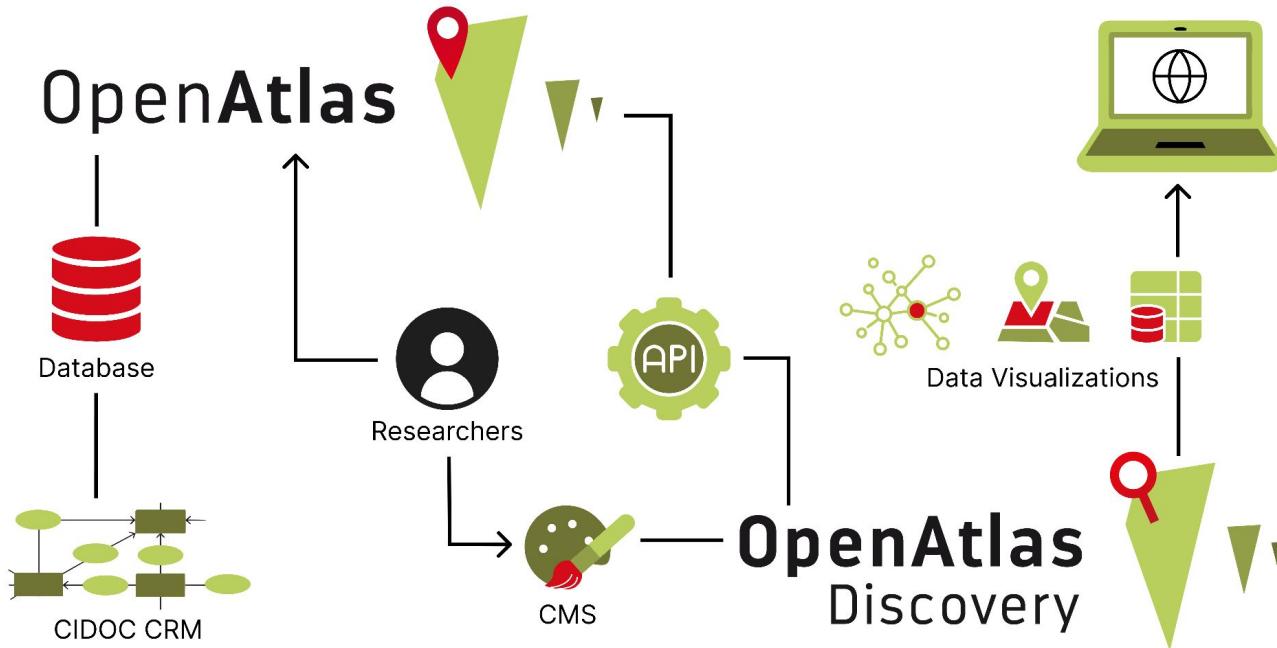
Team

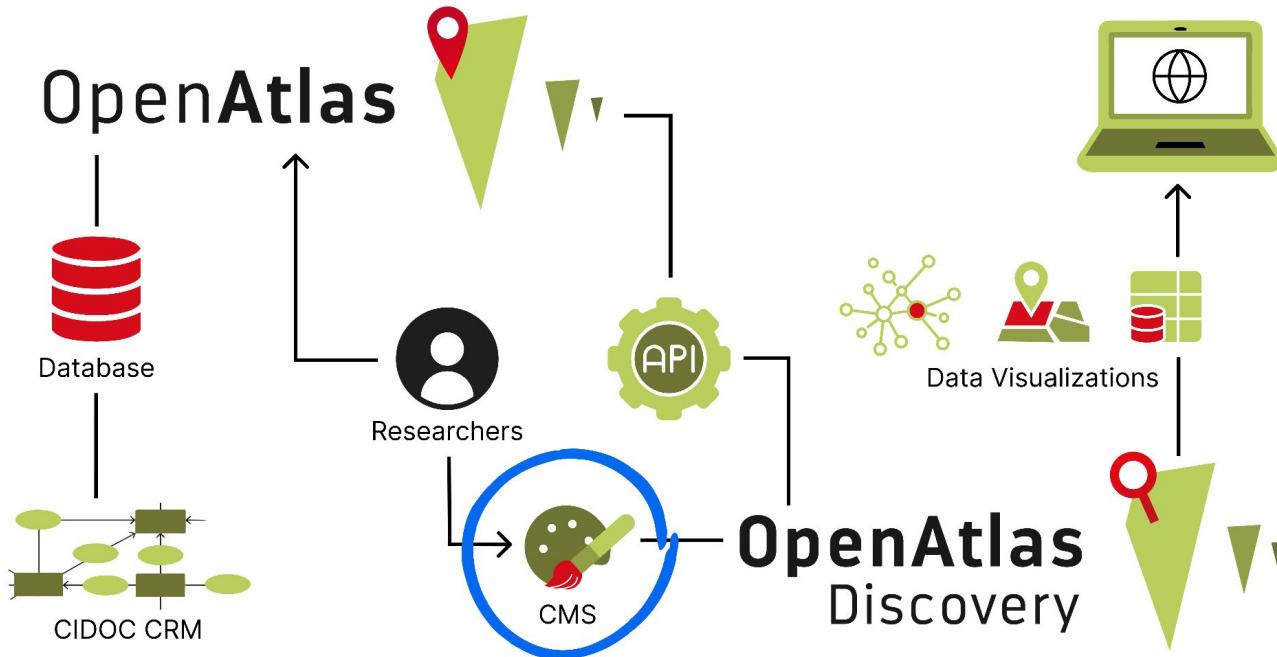
Fugiat quis anim mollit sit nulla do dolore dolor eu
reprehenderit proident eu tempor est adipisicing
cupidatat adipisicing. Eiusmod aliquip magna dol
non sint eu dolor.

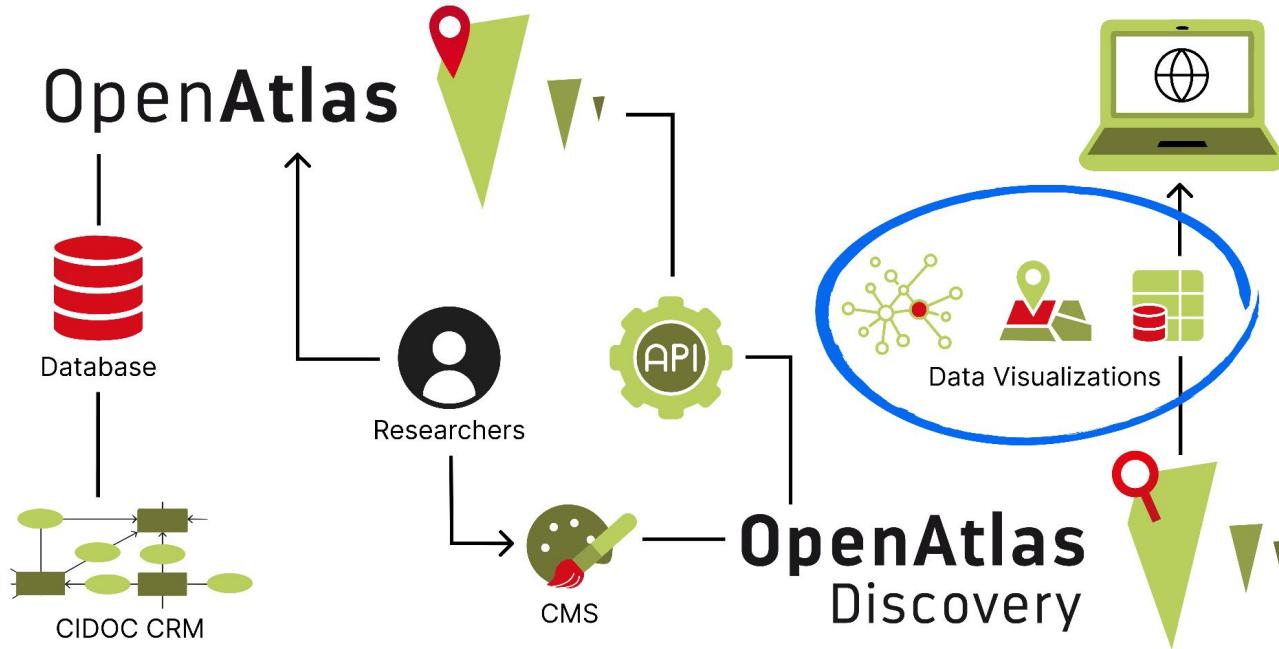


Stefan Eichert

Stefan is 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

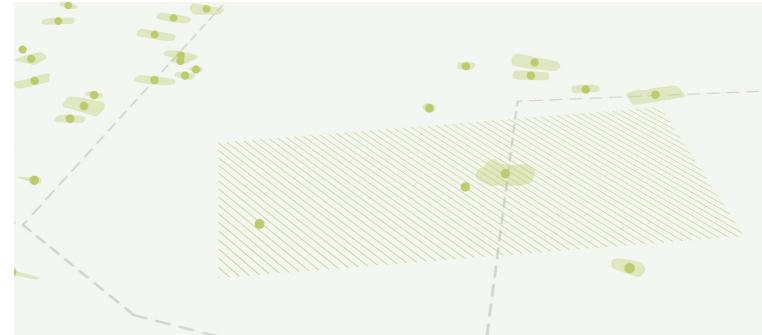
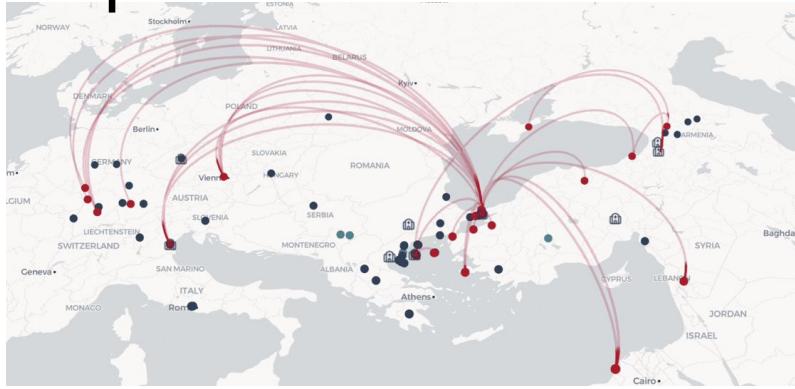


Search

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

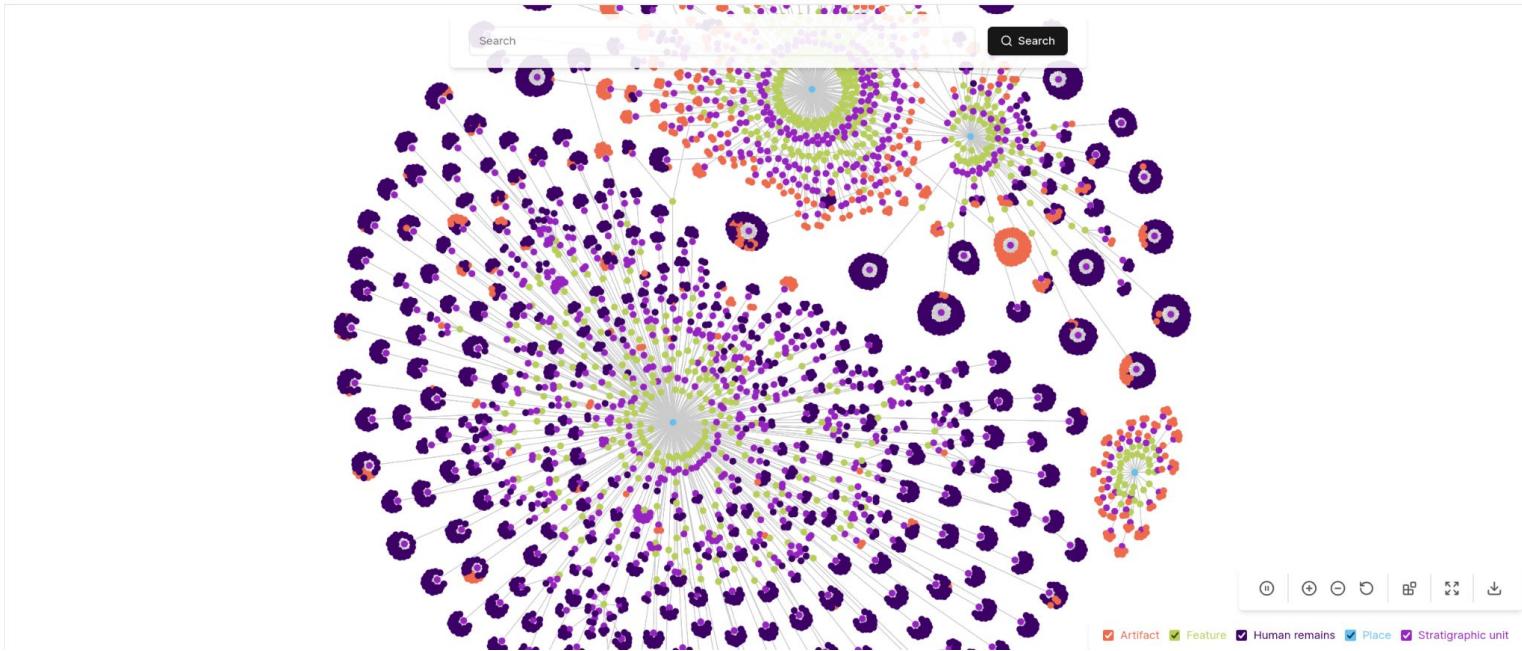
Map



Network

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DE | EN





AUSTRIAN
ACADEMY OF
SCIENCES



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



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