



# OpenAtlas

## A Database System for the Humanities and Beyond

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# Alexander Watzinger (Alex)



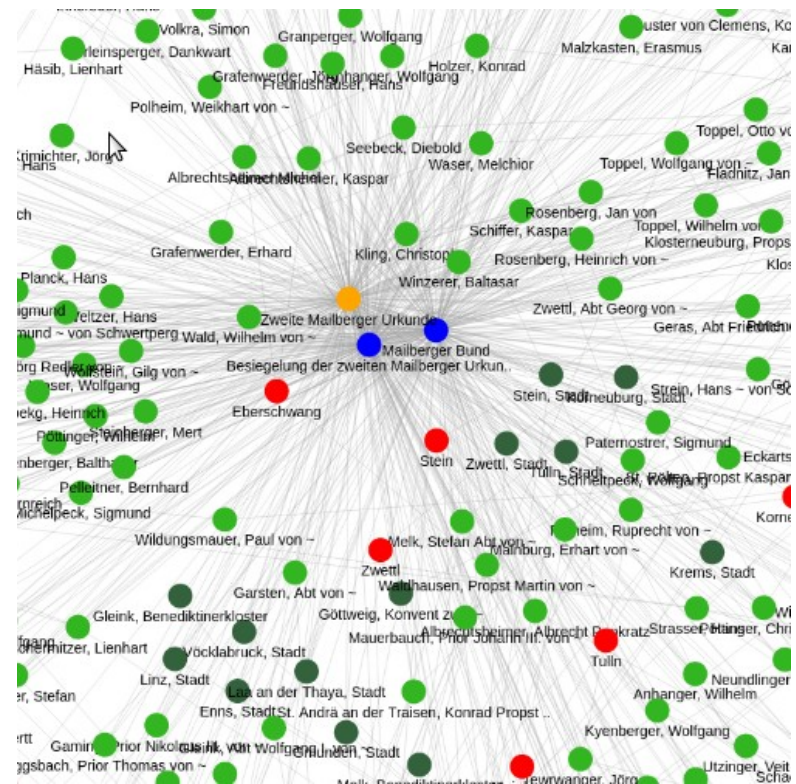
INDIGO workshop 2021

- Lead developer of OpenAtlas
- Works at the ACDH-CH, an institute of the Austrian Academy of Sciences
- Loves open source and scientific projects

# About OpenAtlas

<https://openatlas.eu>

- Open source, browser based database software
- Initiated about 10 years ago by Stefan Eichert
- Acquire, edit and manage research data
- CIDOC CRM as model
- Mainly developed at the ACDH-CH



<https://demo.openatlas.eu/overview/network/>

# OpenAtlas Mission Statement

<https://openatlas.eu/mission>

- **Open:** open source, open data
- **Transparent:** public development, documentation, roadmap, meeting minutes, ...
- **High-Quality:** standards, tested, check functions, ...
- **Interoperable:** CIDOC CRM, FAIR, API, Arche, ...
- **Usable:** focus on usability, configurable, multi-lang, ...

# OpenAtlas Cooperations

Projects from all fields of the humanities

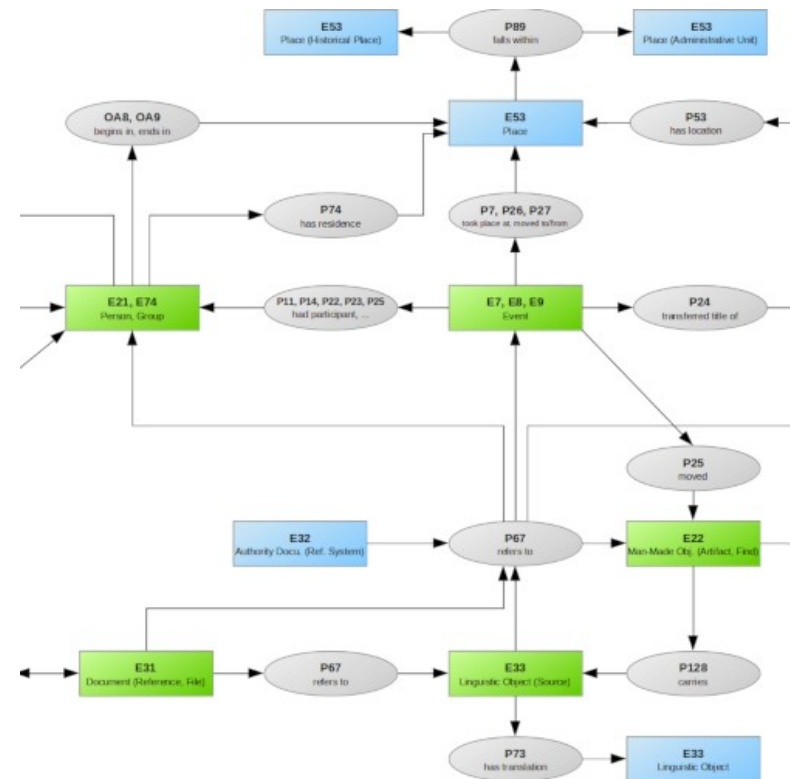
- Historical, archaeological and prosopographic **projects**
- A lot of synergies between the cooperations

The logo for MAMEMS features the word "MAMEMS" in a blue, sans-serif font. The first "M" is stylized with a teal triangle above it.The logo for "Approaching Byzantium" consists of the words "APPROACH" and "BYZANTIUM" stacked vertically. To the right of the text are five horizontal red lines of varying lengths, resembling a staircase or a series of steps.The logo for Indigo features the word "Indigo" in a blue, sans-serif font. To the left of the text are three colored squares: a blue one at the top, a red one in the middle, and a yellow one at the bottom.The logo for THANADOS features the word "THANADOS" in a bold, black, sans-serif font. A small skull icon is integrated into the letter "O".The logo for FemCare Vienna features a stylized profile of a woman's face on the left, with a white skull on the right. Below the skull is a horizontal orange bar. To the right of the bar, the text "FemCare Vienna" is written in a black, sans-serif font.The logo for Moving Byzantium features the text "Moving Byzantium" in a black, sans-serif font. A red arrow points from the text towards the right.The logo for MEDCON features the word "MEDCON" in a bold, black, sans-serif font. To the left of the text is a stylized graphic of a network or map with red, yellow, and blue lines.The logo for bITEM features a stylized graphic of a network or map with blue and green lines on the left, followed by the text "bITEM" in a blue, sans-serif font.The logo for DPP features a stylized graphic of a network or map with blue and yellow dots on the left, followed by the text "DPP" in a bold, black, sans-serif font. To the right of the text is the tagline "Digitising Patterns of Power" in a smaller, black, sans-serif font.The logo for connec features a stylized graphic of a network or map with red, green, and yellow dots on the left, followed by the text "connec" in a black, sans-serif font.

# 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

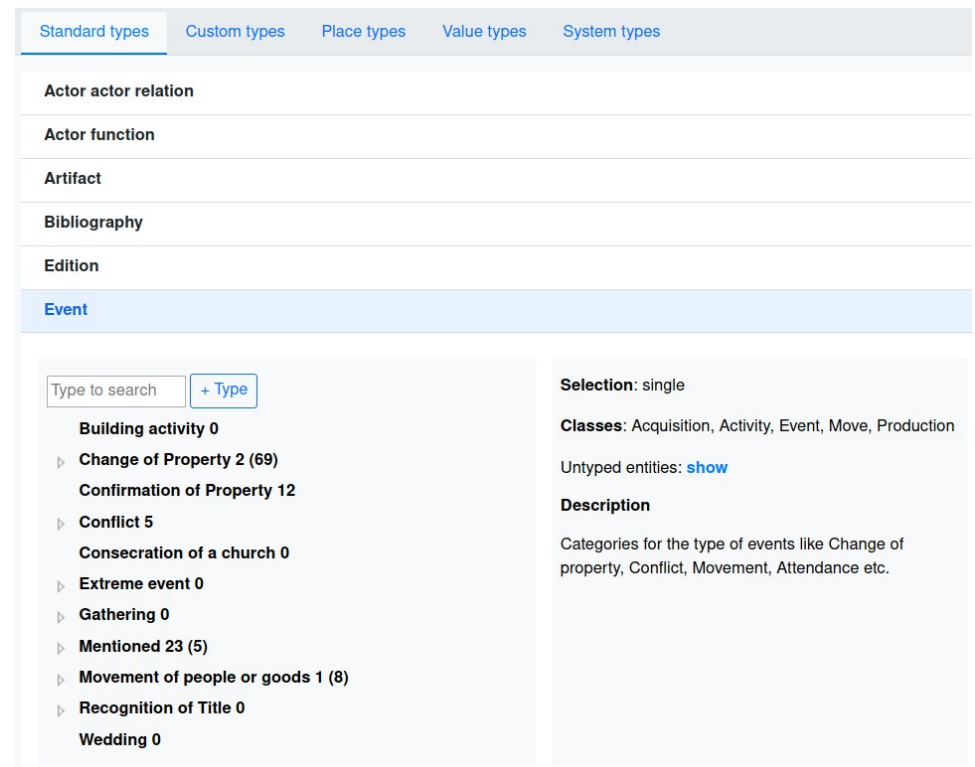


<https://demo.openatlas.eu/overview/model>

# Project Data

## Data enrichment with types and links

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



The screenshot displays the OpenAtlas interface for selecting a type. At the top, there are tabs for 'Standard types', 'Custom types', 'Place types', 'Value types', and 'System types'. The 'Standard types' tab is active, showing a list of types: 'Actor actor relation', 'Actor function', 'Artifact', 'Bibliography', 'Edition', and 'Event'. The 'Event' type is selected and highlighted in blue. Below the list, there is a search bar with the text 'Type to search' and a '+ Type' button. A list of sub-types is shown, including 'Building activity 0', 'Change of Property 2 (69)', 'Confirmation of Property 12', 'Conflict 5', 'Consecration of a church 0', 'Extreme event 0', 'Gathering 0', 'Mentioned 23 (5)', 'Movement of people or goods 1 (8)', 'Recognition of Title 0', and 'Wedding 0'. On the right side, there is a 'Selection: single' section with 'Classes: Acquisition, Activity, Event, Move, Production' and 'Untyped entities: show'. Below that is a 'Description' section with the text 'Categories for the type of events like Change of property, Conflict, Movement, Attendance etc.'

<https://demo-dev.openatlas.eu/type>



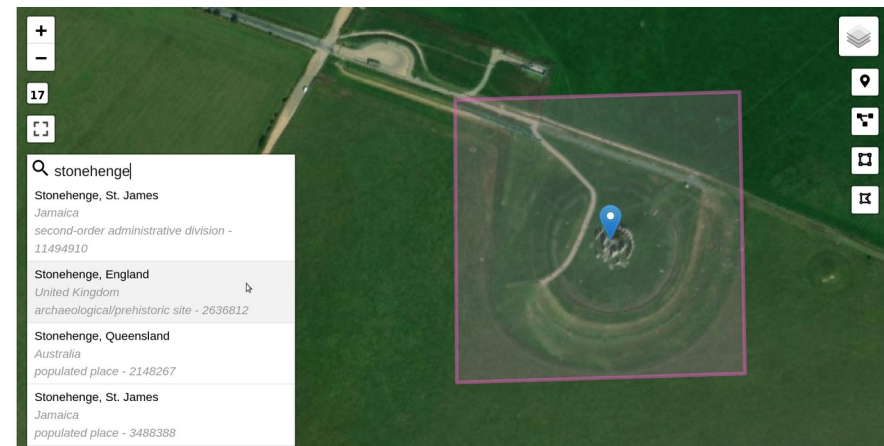
# Uncertainty

## Solutions and Implementation in OpenAtlas

- Time
  - Begin and end date
  - Both can be a time span
  - If uncertain, chose a wide enough time span to be certain it's within
- Place
  - Point
  - Line
  - Polygon: exact
  - Polygon: uncertain, but big enough to be certain that the location is inside
  - All above can be combined

Begin	1464	01	01	It was a sunny day
	1464	12	31	
End	1524	04	07	Mortally wounded at a chess game
	YYYY	MM	DD	

<https://demo.openatlas.eu/insert/person>



<https://demo.openatlas.eu/insert/place>



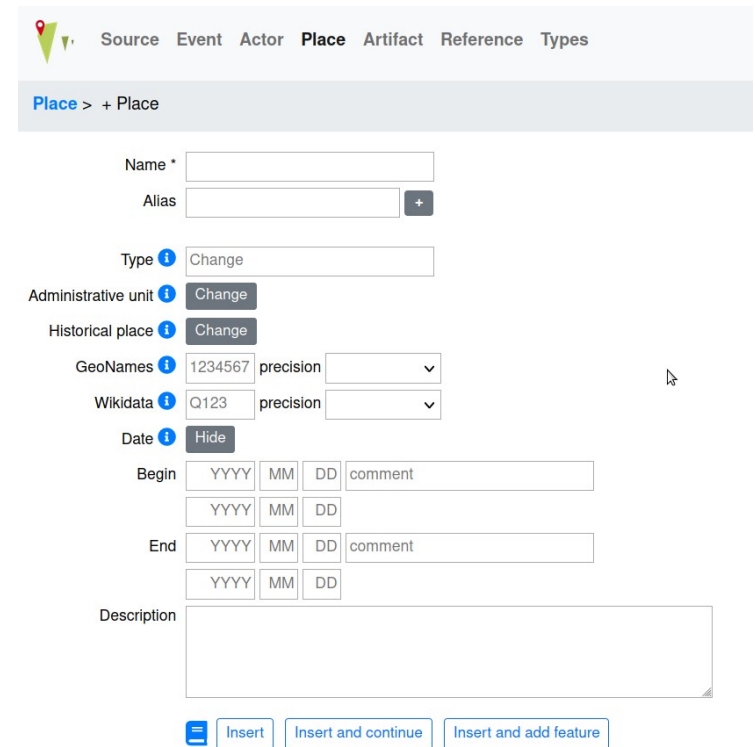
# Bernhard Koschiček-Krombholz

- Studied
  - Computer Science at Applied University Technikum Vienna
  - History at University of Vienna
- OpenAtlas Responsibilities
  - API
  - Backend development
  - Server administration

# Live Demonstration

At <https://demo.openatlas.eu>

- Acquiring data
- Customizable types
- Adding spatial data
- External references
- Dealing with uncertainty in space and time
- and a lot more ...



The screenshot displays the OpenAtlas demo interface for creating a new 'Place' entity. The top navigation bar includes 'Source', 'Event', 'Actor', 'Place', 'Artifact', 'Reference', and 'Types'. Below the navigation, the breadcrumb 'Place > + Place' is visible. The form contains the following fields and controls:

- Name \***: A required text input field.
- Alias**: A text input field with a '+' button to add more aliases.
- Type**: A dropdown menu with 'Change' selected.
- Administrative unit**: A dropdown menu with 'Change' selected.
- Historical place**: A dropdown menu with 'Change' selected.
- GeoNames**: A text input field containing '1234567' and a 'precision' dropdown menu.
- Wikidata**: A text input field containing 'Q123' and a 'precision' dropdown menu.
- Date**: A dropdown menu with 'Hide' selected.
- Begin**: A date range selector with fields for 'YYYY', 'MM', 'DD', and a 'comment' field.
- End**: A date range selector with fields for 'YYYY', 'MM', 'DD', and a 'comment' field.
- Description**: A large text area for entering a description.

At the bottom of the form, there are three buttons: 'Insert', 'Insert and continue', and 'Insert and add feature'.

# Short fictive story of ...

- Leopold Müller
  - Born in Graz between 1870 and 1873
  - Child of Franziska Müller and Franz Müller
  - Moved on 04.06.1901 to Rabensteig 3 in Vienna
  - On 12.10.1901 began to write a diary which is preserved and the texts are available in an edition
  - Entry on 04.02.1902 says: "Wien am 04.02.1902, Heute ist das erste Mal Schnee gefallen."

# Thank you for listening



<https://openatlas.eu>