



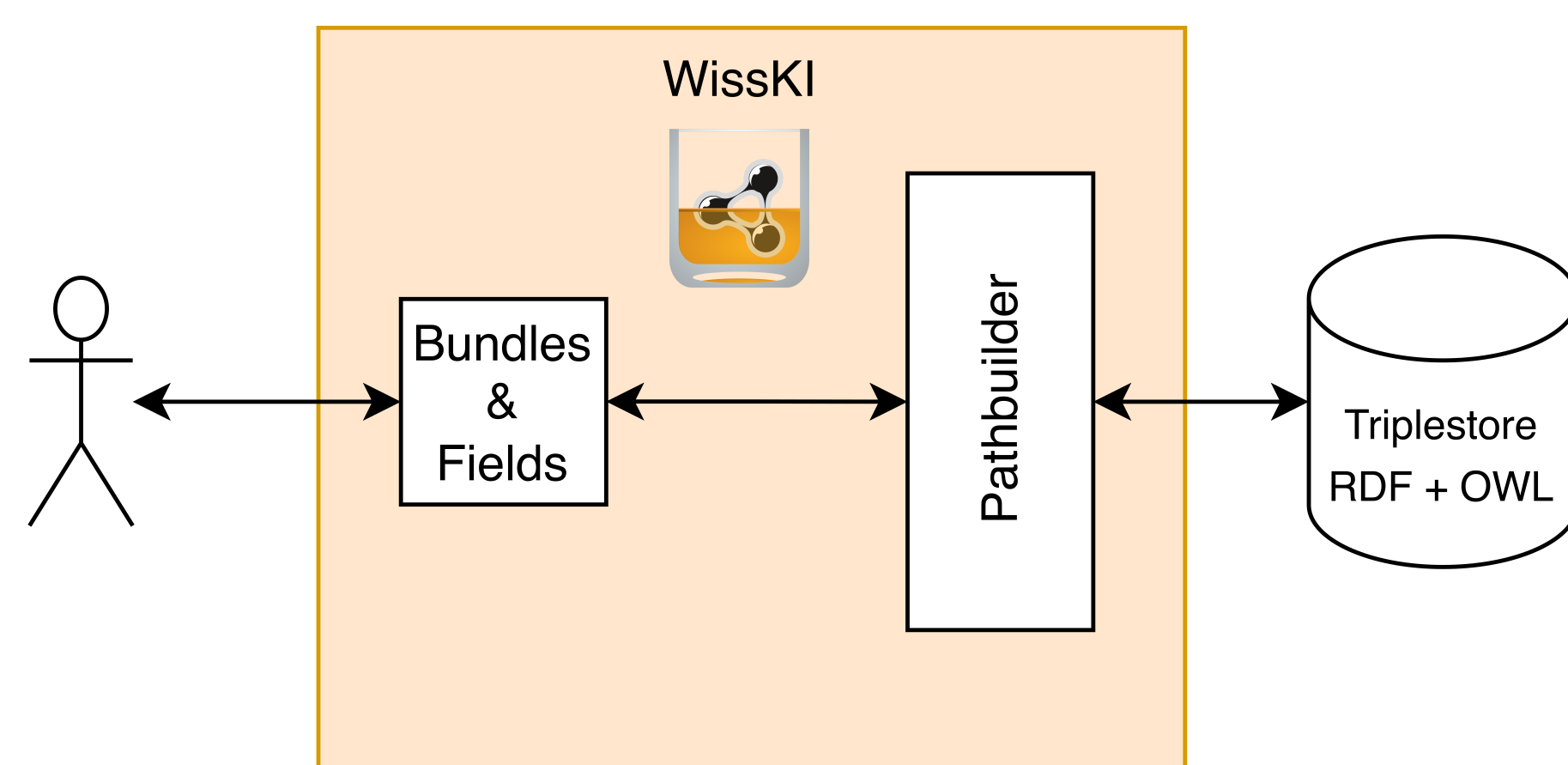
Introduction

- **WissKI** is a virtual research environment for digital humanities.
- Object data stored as **RDF Triples** use an **OWL Ontology** to produce **5-Star FAIR Linked Open Data**.
- **Problem:** End users only make use of the interface and do not understand the formal data model.
- **Solution:** The **TIPSy Tool** allows anyone to inspect and visualize a WissKI data model.

The WissKI Data Model

The WissKI software (available at <https://wiss-ki.eu>) records data about objects of cultural heritage as formal and informal entities:

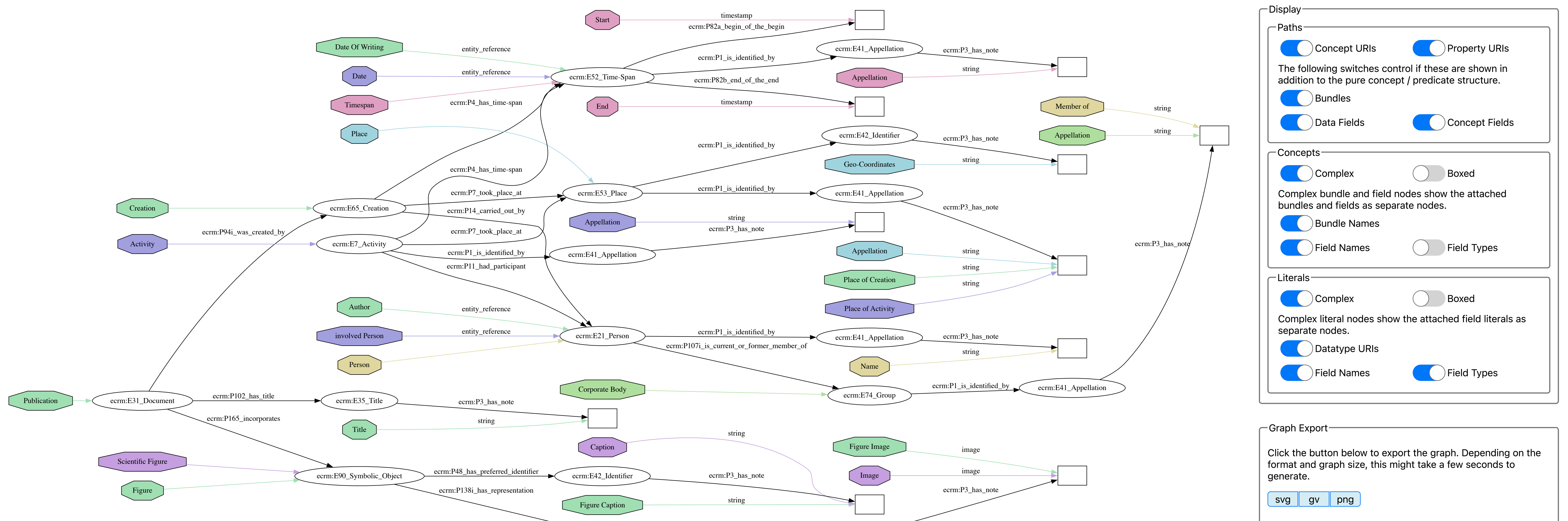
- informal representation as **Drupal Bundles and Fields** (relational database like).
- formal **RDF-based** representation using **OWL Ontologies** (e.g. CIDOC-CRM).
- aligned using **WissKI Pathbuilder**.



- WissKI end users work in the **informal** representation.
- WissKI software internally works with **formal** representation.
- **Mapping** required to answer research questions.
- **Problem:** End users do not understand the editing-oriented tabular WissKI pathbuilder interface.
- **Solution:** **TIPSy Tool** for visualization.

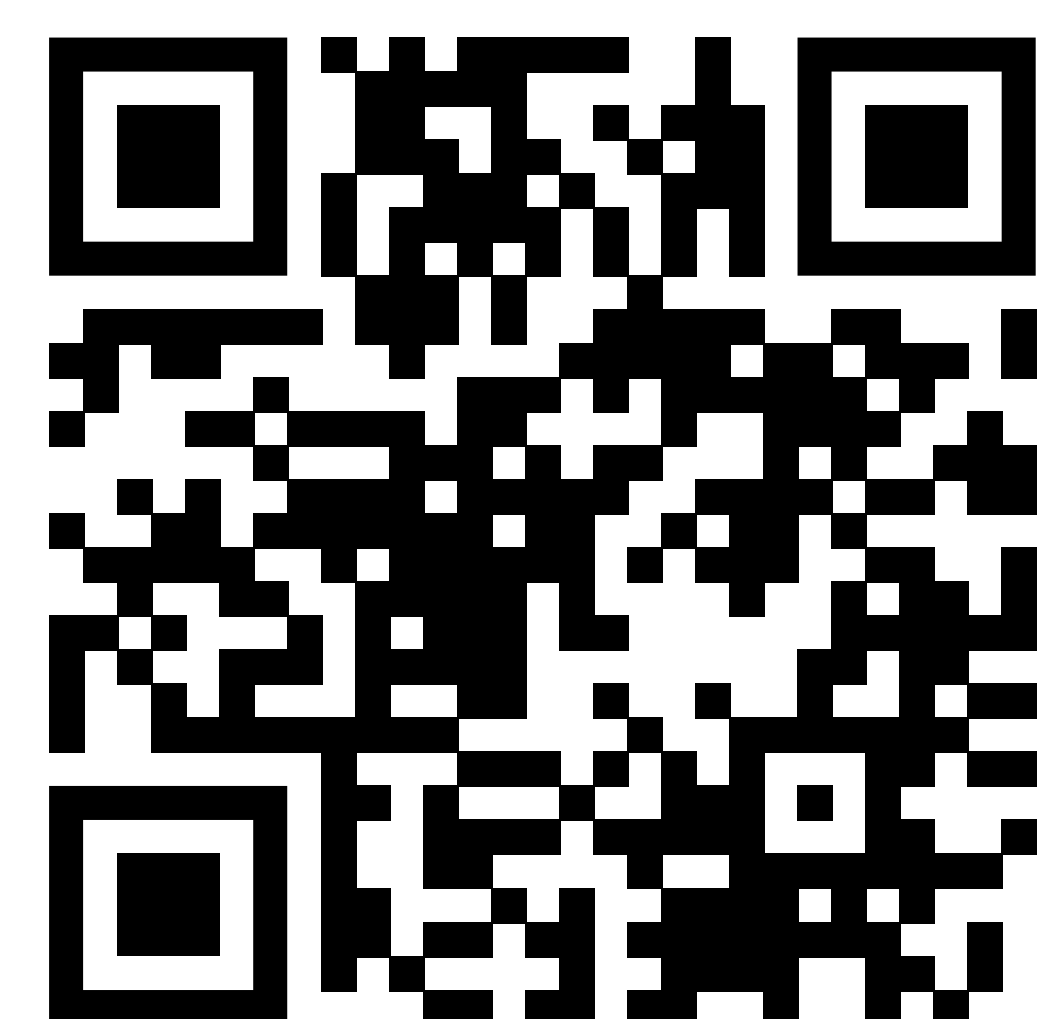
The TIPSy Tool – Making Pathbuilders Accessible and Understandable

- TIPSy runs client-side via a **web browser**.
- allows loading any **WissKI Pathbuilder** using **XML**.
- **graph representation** of and alignment between formal and informal WissKI data models.
- customizable graph using **GraphViz**, **vis-network**, **Sigma.js** or **Cytoscape**.



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	+8				Publication	publication	ecrm:E31_Document	unlimited
				Title	title	ecrm:E31_Document → ecrm:P102_has_title → ecrm:E35_Title → ecrm:P3_has_note	string	1
	+3			Creation	creation	ecrm:E31_Document → ecrm:P94i_was_created_by → ecrm:E65_Creation		1
	+2			Figure	figure	ecrm:E31_Document → ecrm:P165_incorporates → ecrm:E90_Symbolic_Object		unlimited
	+2			Scientific Figure	scientific_figure	ecrm:E90_Symbolic_Object		unlimited
				Caption	caption	ecrm:E90_Symbolic_Object → ecrm:P48_has_preferred_identifier → ecrm:E42_Identifier → ecrm:P3_has_note	string	1
				Image	image	ecrm:E90_Symbolic_Object → ecrm:P138i_has_representation → ecrm:E36_Visual_Item → ecrm:P48_has_preferred_identifier → ecrm:E42_Identifier → ecrm:P3_has_note	image	1

For more information have a look at the demo and technical documentation at:



<https://github.com/tkw1536/TIPSy>