MOTIVATION AND PROBLEM

- RDF Mappings describe the transformations of structured datasets into RDF datasets.
- Making RDF mapping is challenging, and for one dataset, different mappings are possible.
- We argue that a tool capable of evaluating the quality of an RDF mapping would make the creation of mapping easier.

The problem we address is:

How to automatically help users to create RDF mappings without errors and how to choose the best mapping from a set of RDF mappings?

SOLUTION

EvaMap is a framework to Evaluate RDF Mappings.

It can evaluate the quality of the resulting RDF dataset through its RDF mapping without having to generate the RDF dataset.

It is based on:

- a set of metrics organized in 7 dimensions.
- a function that is the weighted mean of the quality of each metric to compute the global quality of an RDF mapping.
- feedback for each metric allowing user to improve its RDF mapping.

TOOL

EvaMap

RDF MAPPING $M_i$

DATASET $D$

7 DIMENSIONS

- Availability
- Clarity
- Conciseness
- Consistency
- Metadata
- Connectability
- Coverability

A FUNCTION

that is the weighted mean of the quality of each metric.

$$q(M_i, D) = \frac{\sum_{j=1}^{n} w_j m_j(M_i, D)}{\sum_{j=1}^{n} w_j}$$

- $m_j$ is the quality of a metric evaluated on $M_i$ and $D$.
- $w_j$ is the weight to give more or less importance to the corresponding metric.

QUALITY $q(M_i, D)$

FEEDBACK

OUR DEMONSTRATION

is an implementation of EvaMap to evaluate YARRRML mappings for datasets of the Opendatasoft’s data network.

https://evamap.herokuapp.com/