

Inverting knowledge graphs back to raw data

How can we leverage the rules we use to construct knowledge graphs to do the inverse?

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Contents

Contents	iii
1 Thesis details	1

Chapter 1

Thesis details

Title: Inversion: from knowledge graphs to raw data

Subject:

- **RQ1:** How can we leverage RML to construct raw data from heterogeneous data.
- **RQ2:** How can we extend an existing system like RML or create a new system to construct raw data from knowledge graphs.

Description: Knowledge graphs are gaining traction nowadays and more and more companies use them, such as Amazon, Bosch, IKEA, Facebook, Google, LinkedIn, SIEMENS, Zalando, etc. Most knowledge graphs are nowadays constructed from other heterogeneous data sources, such as tables in relational databases, data in XML files or in JSON format derived from a Web API. While the construction of knowledge graphs from heterogeneous data was thoroughly investigated so far, the inverse, namely constructing raw data from knowledge graphs is not explored so far.

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