Motivation
Large amounts of datasets are not integrated in the Linked Data due to expensive investments in terms of storage and maintenance.

Thus, how to integrate non-RDF datasets on-demand in the Linked Data simply and efficiently?

Our approach
We propose to transform Triple Pattern Fragments server but, instead of evaluating Triple pattern queries (TPQs) over a RDF store, it sends TPQs to ODMTP, an on-demand mapper.

ODMTP translations are possible thanks to mapping files for corresponding target datasets.

ODMTP an On-Demand Mapping using Triple Patterns

Triple Pattern Query is translated into the target query language and evaluated on the target non-RDF dataset.

The result set is then translated into triples and returned as a Triple Pattern Fragment.

Demo
We show an implementation of ODMTP over Twitter.

Mapping:

ODMTP uses this mapping file to evaluate this SPARQL query over Twitter.

Advantages
- Target database access control is preserved;
- Data freshness is maintained;
- Easy to implement and maintain;
- Low storage investment;
- Possible to use multiple mapping for a single dataset.

But...
- Query execution time depends on the storage management of the non-RDF dataset;
- It is Not appropriate for entity matching.

Querying non-RDF Datasets using Triple Patterns

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