

Linked Data Mapper –

A Browser-based Semantic Mapping
Tool for Linked Data in Semantic Web

■ Chunying Zhou , Chengli Xu, Huajun Chen,
Kingsley Idehen

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1. Introduction

Why need Linked Data Mapper?

1.

Linked Data (database, XML, RDF triples) on the web are often isolated and heterogeneous with each other.

2

Ontology-based **Data Integration** needs semantic mappings from data schema to ontology schema

3

Defining semantic mapping manually is a burdensome and error-prone work.

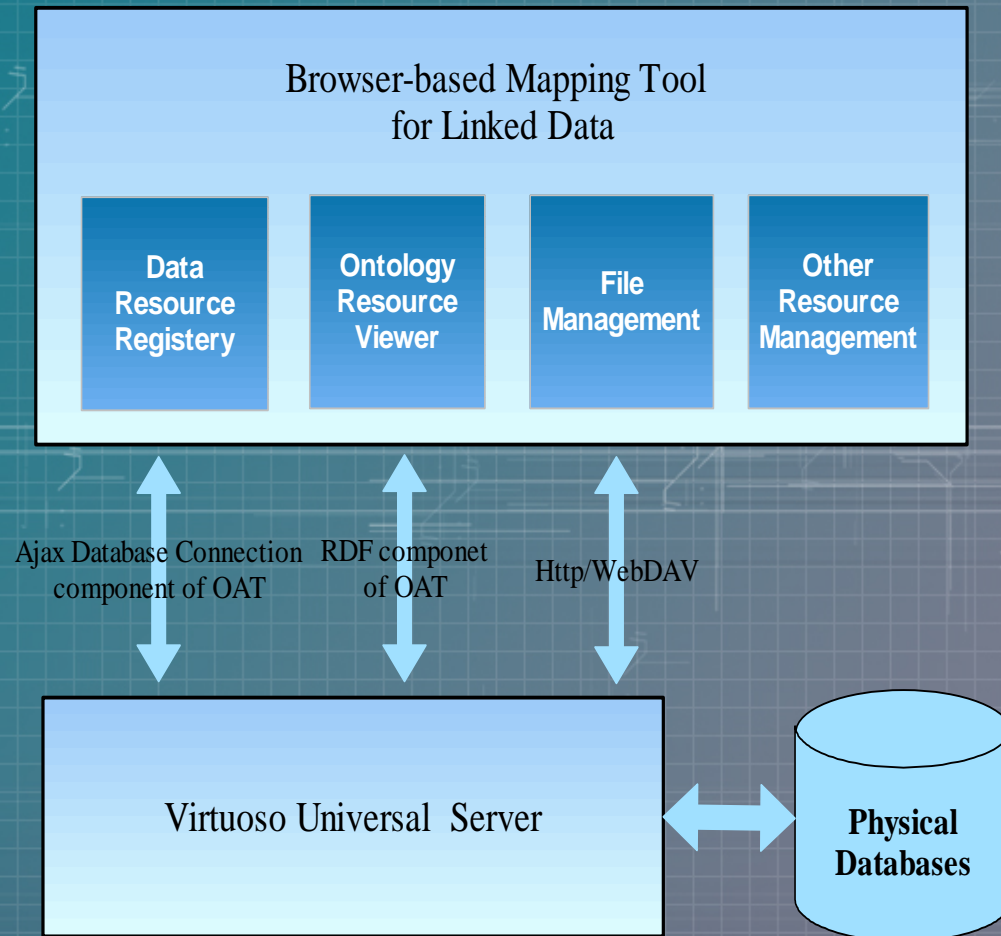
Goals of our Mapper?

- To provide **easy-to-use functionalities** to help users to define mappings from relational databases to ontology schema. (Now)
- To provide functionalities of converting relational data to RDF data automatically based on the mappings or not. (Now)
- To serve as a universal mapping space, in which semantic mappings can be shared, reused, and exchanged. (Future)

Linked Data Mapper

Architecture & Features

Architecture



➤ *Visualized mapping tool: provides functionalities to define semantic mappings by drag-and-drop*

➤ *Resource interaction server: is in charge of interaction with databases and ontology schemas.*

➤ *Physical resource: relational databases and ontology shemas (RDFS, .n3, XML.....)*

Functional components

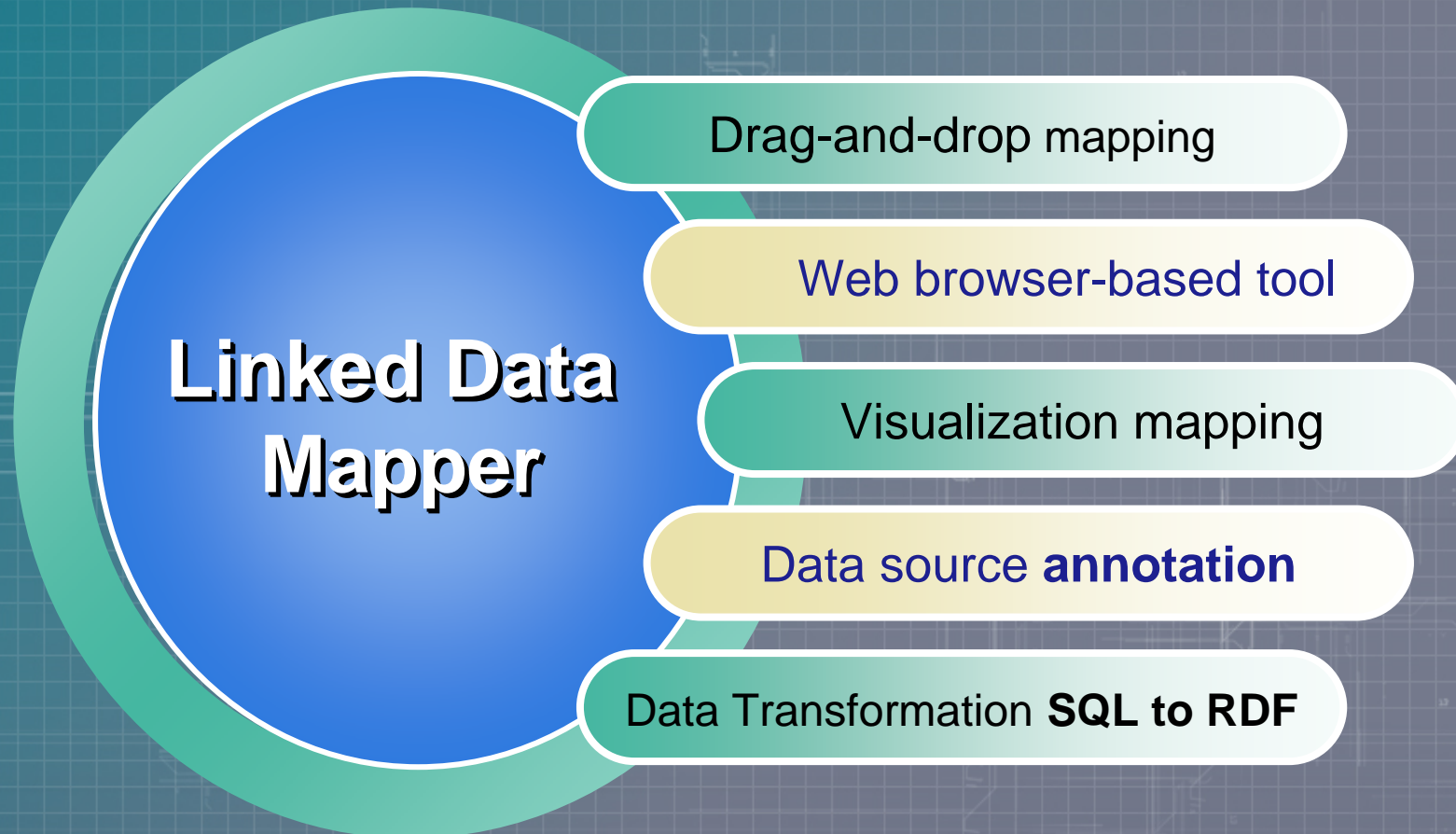
Display databases and ontology schema (supporting RDF graph)

Define semantic mappings from databases to shared ontology

Transform graphical mappings to Mata schema language executed to convert relational data to RDF data

Linked Data Mapper

Technical Features



Thank You !

[Demo Video](#)