Reference: Knowledge Engineering – EDT (QSE: KE)

Topics: Efficient data transformer from XML/spreadsheets to ontology

LVA-Type: Praktikum

Start: Ab sofort

End: Nach Vereinbarung

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## **Background**

Knowledge engineering in the the context of multi-disciplinary engineering environments (e.g., industrial automation systems) enables data collection, integration, management, querying and visualization of various data sources and formats. For knowledge engineering and data integration, we use ontology as the data storage.

We already have tools for several parts of knowledge engineering, but of course the improvement of current tools (e.g., enhancing the efficiency of data transformer) and additional tools (e.g., Ontology data management) is always important for us.

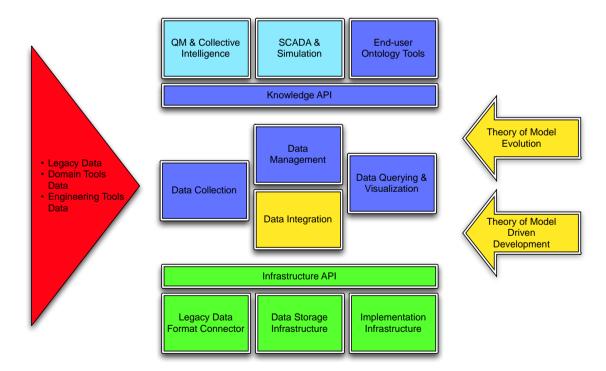


Figure 1: Overall picture of the Knowledge Engineering areas (dark blue) in regards with other reseach areas in CDL-Flex lab.

## **Tasks**

The goal is to improve the current implementation of an existing OWL importer. Improve existing importers from XML/spreadsheets to OWL:

- a. Improve the performance of XML importer.
- b. Improve the flexibility of the Spreadsheet importer.

## **Experience and skills needed**

The following preconditions are needed/recommended.

- Java.
- Basic understanding of and interest in ontology
- Basic understanding of data transformation.