
Reference: Knowledge Engineering – ODM(QSE: KE)

Topics: Ontology data management

LVA-Type: Praktikum, Bakk-/Diplomarbeit

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.

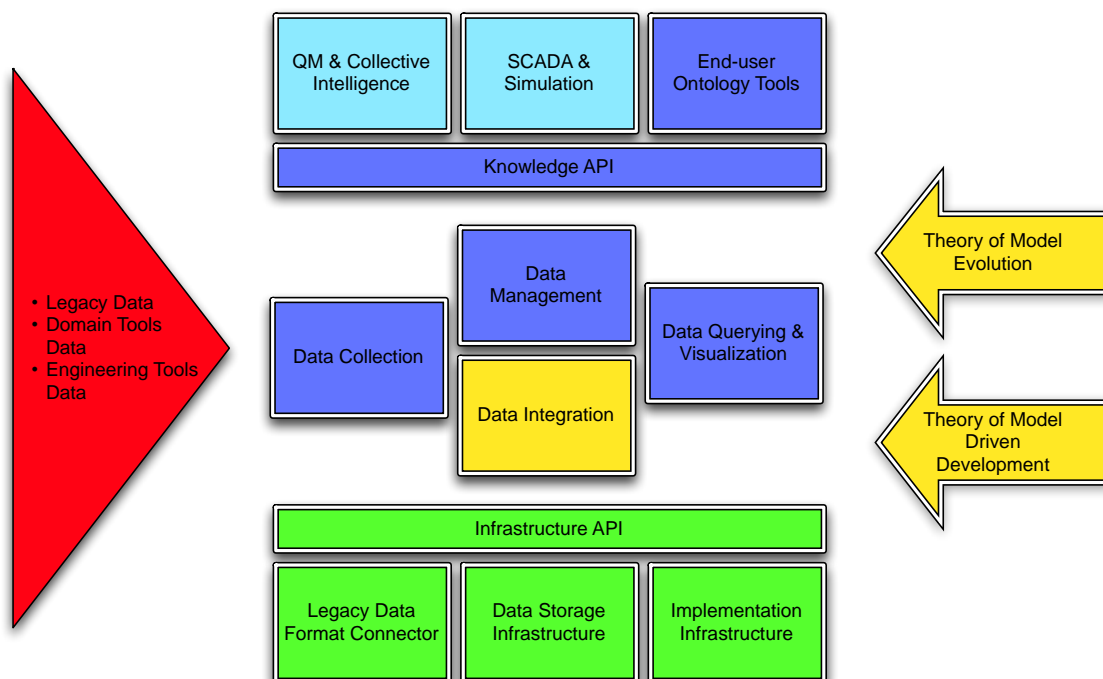


Figure 1: Overall picture of the Knowledge Engineering areas (dark blue) in regards with other reseach areas in CDL-Flex lab.

Tasks

The tasks here is independent from each other, which mean you can work in the chosen areas of yours.

Ontology data management

- a. The goal is the concept and prototype development of ontology-based KB data management.
- b. Features needed
 - i. User and users roles
 - ii. Ontology data versioning

Experience and skills needed

While the experience and skill that is needed will depend on the specific task(s) that you choose, the following preconditions are needed/recommended.

- Java.
- Interest in user experience/interface design.
- Basic understanding of and interest in ontology
- Basic understanding of data transformation.