



MONNET: Multilingual Ontologies for Networked Knowledge

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<http://www.monnet-project.eu/>

List of partners
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CITEC, Universität Bielefeld, Germany
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SAP AG, Germany
XBRL Europe, Belgium
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Summary

The core objective of Monnet is the provision of advanced services for ontology localisation. A first step in this is to analyse a given ontology and enrich it with appropriate information on i) the terminological structure of ontology labels, ii) linguistic information on terminology items, and iii) analysis of implicit semantics where needed. Together we refer to these analysis and enrichment steps as “ontology lexicalisation”. The resulting ontology-lexicon is represented on the basis of the ‘lemon’ format, a lexicon model for ontologies that has been defined by the Monnet project for the appropriate integration of linguistic and terminological information in ontologies.

After the generation of an appropriate ontology-lexicon, the ontology localization localisation can now operate on this for the translation process, i.e., Monnet implements ontology localisation by translation of the ontology-lexicon. A hybrid machine translation (MT) approach will be explored in this that builds on state-of-the-art statistical MT and knowledge-based approaches using domain knowledge provided by ontologies and related terminologies. Ontology localisation will be developed and tested in the context of two use cases: financial services taxonomies (XBRL) and public services ontologies.

Monnet will also implement a cross-lingual ontology-based information extraction component that exploits multilingual XBRL ontology-lexicons for fact extraction from financial reports as well as a component for multilingual querying and visualisation of such extracted facts for the purpose of cross-lingual business intelligence. A particular focus here is on supporting the internationalization of web applications by using linguistic knowledge available in the form of lemon models.