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Our Scenario

- Assistive technologies
- Health monitoring systems, health sensor technology, spatial and temporal representations
- Open Architecture for Accessible Service Integration (OASIS, EU project)
- Heterogeneous ontologies

Motivation

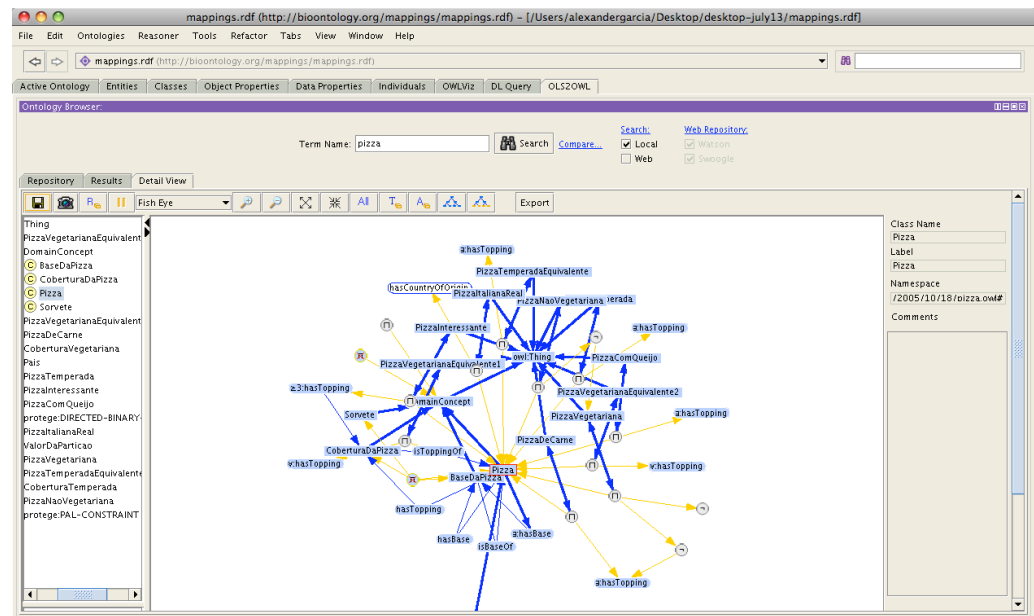
- Supporting the development of ontologies within a decentralized environment
- Facilitating the connectivity tissue across ontologies in the form of formalized mappings
- Enabling distributed reasoning across those ontologies hosted by ORATE (Ontology Repository for Assistive Technologies)

Our Software Infrastructure

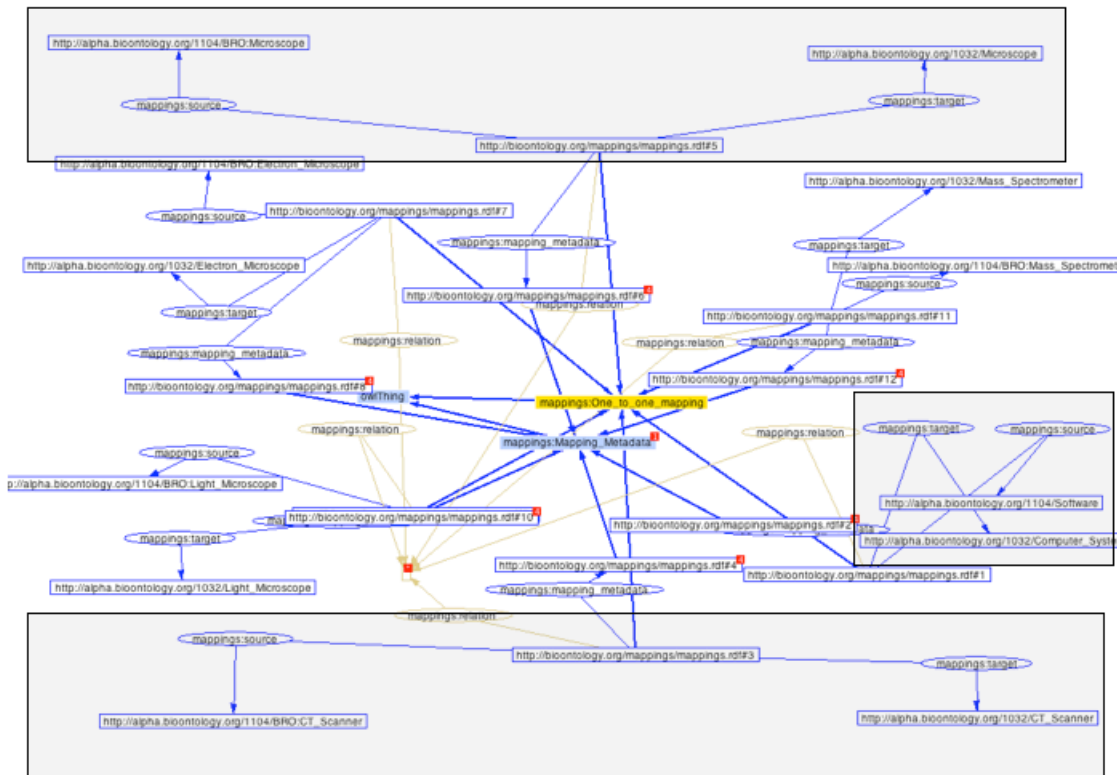
- ORATE (to be released in October)
 - Bioportal technology
- Ontology development
 - Protégé
 - OLS2OWL (developed)
 - DataMaster (under development)
 - OWLingMaps (to be developed)
 - ...other existing plug-ins

OLS2OWL

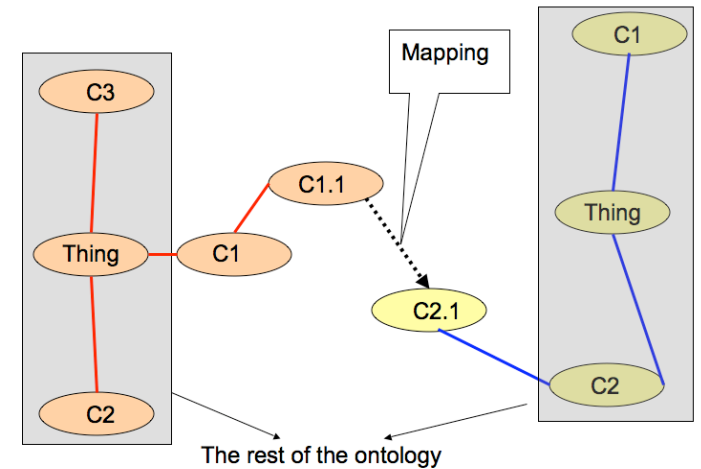
- P4 plug in
- Supports the work of the Ontology Engineer
 - Sometimes the domain expert as well...
- Facilitates reusability
- Currently works with:
 - WATSON, SWOOGLE, BIOPORTAL
- Slicing is also allowed: drag and drop a segment of an ontology



OWLingMaps

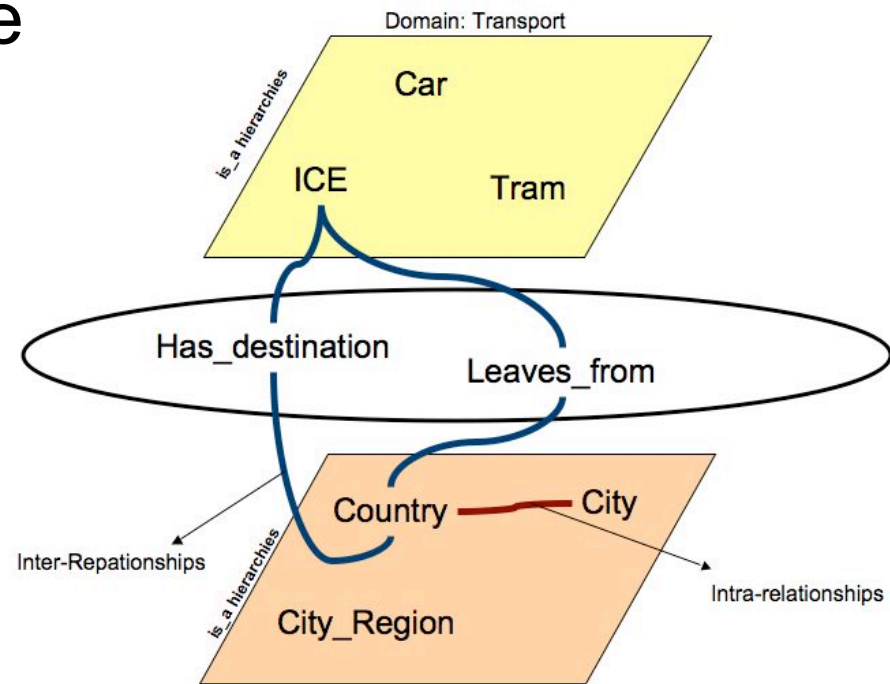


P4 side: Loading, Visualizing and Manipulating Mappings



OWLingMaps

- ORATE, server, side
 - Visual generation of mappings
 - Mappings are informal e-connections
 - e-connections are the way forward for mappings



Outcomes and Deliverables

- [OLS2OWL http://ols2owl.sourceforge.net/](http://ols2owl.sourceforge.net/)
- **OLS2OWL, a repository management facility.**
Alexander Garcia, Leyla-Jael Garcia, Jose Villaveces, Guillermo Calderon, Martin Hepp. Oral presentation at the 11th Protege International Conference, June 2009, Amsterdam.
- Alexander Garcia Castro, Immanuel Normann, Joana Hois, Oliver Kutz “**Ontologizing metadata for assistive technologies: The OASIS repository**”. IEEE Explore, October 2008.