



AGREEMENT
TECHNOLOGIES

 Action IC0801

COST Action IC0801: Agreement Technologies

Report on the WG1 Meeting collocated with WWW'09 in Madrid

WG1 Chair: Axel Polleres (NUIG, IE)

Attendees:

- Manuel Atencia, CSIC (early stage researcher)
- Analay Balta, URJC (early stage researcher)
- Alberto Fernandez, URJC (early stage researcher)
- Rosario Laurendi, University of Reggio Calabria (early stage researcher)
- Sascha Ossowski, URJC
- David Pearce, UPM
- Axel Polleres, NUIG (early stage researcher)
- Sergio Saugar, URJC (early stage researcher)
- Marco Schorlemmer, CSIC (early stage researcher)
- Juan Manuel Serrano, URJC (early stage researcher)

Date: 23.4.2009, 11:30h – 18:00h

Location: Instituto Química Física "Rocasolano", CSIC, Madrid, ES

First Prof. Ossowski gave an introduction to the COST action, its goals, structure and working groups.

Thereafter Dr. Polleres introduced specifically the goals and work objectives of WG1. The general topics of the WG include, but are not limited to:

- Integration of Ontologies and nonmonotonic Rules
- Querying over distributed ontologies involving mapping rules and alignments
- Alignment with existing (Semantic) Web standards such as RDF, RIF, OWL, SPARQL, SA-WSDL

The general introduction was followed by talks from researchers from all involved sites in the meeting.

Marco Schorlemmer and Manuel Atencia from CSIC, Barcelona, Spain, gave a talk on aligning message ontologies by analysing message protocols. Parallels and orthogonality to protocol mediation work done in Semantic Web Services was discussed. A prototype has been implemented in Prolog and tested on an artificial testdataset so far. This work is ongoing as part of the national Agreement Technologies project in Spain.

Thereafter, David Pearce from UPM, Madrid, Spain, gave some overview of his work on equivalences for hybrid knowledge bases (i.e. ontology and rules combinations) which is conducted also in the national Agreement Technologies project as well as part of another national project in Spain with University of Malaga and Coruña involved. The main focus for ongoing research will be investigation of different concepts of equivalence and modularity so far defined for ontologies or rules separately within combinations. Possible collaborations with DERI, TU Vienna, and Univ. of Liverpool have been pointed out which may lead to STSMs in the ongoing COST action.

Alberto Fernandez from URJC, Mostoles, Spain, reported about his research in Semantic Service discovery and different notions of Semantic matchmaking for Semantic Service descriptions in terms of ontologies. The lack of testdata and future directions such as matching based on more lightweight Semantic descriptions such as Tags and folsonomies have been discussed. A general architecture for semantic matchmaking involving an alignment repository for mappings between ontologies has been presented and parallels with related works ongoing in DERI have been discussed. Dr. Fernandez had visited DERI already last year for some joint work in this area and will continue his work also within the national Agreement Technologies project, supported by Analay Balta, who was also at the meeting.

Next, Manuel Serrano presented his joint work with Sergio Saugar from URJC and Rosario Laurendi from University of Reggio Calabria on a social middleware for virtual organizations and online communities. Some overlaps with WG1 have been identified but also strong relations to WG3 on organisations. Also there was some discussion about the reuse of existing ontologies within the existing system. Dr. Serrano is also involved in a joint project with David Pearce from UPM and STSMs with Univ. Reggio Calabria in the course of WG1 or WG3 could be an option.

Finally, Dr. Polleres gave an overview of ongoing work within DERI, which is mainly applied on real Web data and standardization. STSMs with George

Vouros from Greece and Piero Bonatti from Univ. of Napels are already planned. A short presentation of Semantic Search engines (SWSE and Sindice) and reasoning done therein closed this presentation. Some plans on extending these to search facilities for ontologies and mappings were discussed. In this realm, also the work of INRIA (Jerome Euzenat from INRIA, France, recently joined the WG and a former student of his started working in DERI recently) will give interesting opportunities.

The meeting closed with a discussion of possible next steps which will involve further identification of STSMs, joint workshop organisation and spreading the work towards the Semantic Web and Social Networks communities.