D1.5.6 Report on cooperation between KnowledgeWeb and REWERSE regarding industrial events

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Abstract.
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This deliverable reports about past and ongoing cooperation between the NoE Knowledge Web and the NoE REWERSE with regard to technology transfer to Industry. The main intention of the cooperation is to describe common activities to deepen the impact of both networks for disseminating the State-of-the-Art in Semantic Web technologies to the European IT industry.

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The following partners have taken an active part in the work leading to the elaboration of this document, even if they might not have directly contributed by writing parts of this document:

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L3S
WebXcerpt (REWERSE)

University of Sheffield for the Quality Control

Changes

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Executive Summary

As stressed many times from the start of the NoE Knowledge web and the NoE REWERSE, by Industry area partners and the reviewers: **"we must maximise the impact of the research work funded by the EU, to increase the successful transfer rate to the European IT industry"**.

Discussions went on often on what would be the best strategy for **Knowledge Web and REWERSE** for transferring rapidly the state of the art of the technologies and best practices. As recorded in the overall Knowledge Web Industry area annual report, the work done so far shows clearly that we have put many instruments in place to ease the take-off of the technology in the European IT industry (industry tracks, technology shows, best practices, use cases, industry board, newsletter, technology roadmap, industry forum, Semantic Web Days 2005, Semantic 2005/2006).

From the launch of the project (2004) one of our targets was to be visible in a large Industry event like IT Hanover Messe or Cebit.

In addition to ad-hoc industry events like the Industry Forum day at ESWC or Industry Tracks at ISWC and other dedicated gatherings to specific economic sectors (see Deliverable on Communications means with industry - D 1.1.5 v3), we decided in 2005 to co-organise a major European Industry event on Semantic Web Technology where REWERSE took a decisive part. This was the very successful "**Semantic web days**", 6-7 October 2005, Munich, Germany.

In 2005 also, we became aware of the first Semantic Technology Conference (STC) that was considered as a key event for Semantic Technology Industry in the US.

So, in January 2006 (Trento Knowledge Web General Assembly), we decided to attend the second edition of STC'06 (March 2006, CA, USA). 2 partners (FT and DERI) made a detailed report and proposed some actions to the executive board of Knowledge Web.

Lastly, in June 2006 (Budva Knowledge Web General Assembly) we decided to concentrate our energy[1] on a single large industry gathering attractive for the European IT industry, and merging many ad-hoc initiatives, and therefore decided to launch a European version of the **Semantic Technology Conference (ESTC 2007)**.

During those 3 years of cooperation to help the take-off of the technology in the European IT industry, we have reached the conclusion that the technology has matured enough now in the US and in Europe to expect to be successful in attracting many Industrial and Business participants at our first large European Technology Conference (ESTC 2007), and **to be as successful as its sister conferences in the Research area, namely the ESWC and ISWC worldwide renowned series**.

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[1] So far we organised, reviewed or sponsored many emerging ad-hoc initiatives in 2005 and 2006 (see the annex).

Contents

1 Introduction

This deliverable reports about past and ongoing cooperation between the NoE Knowledge Web and the NoE REWERSE with regard to technology transfer to Industry. The main intention of the cooperation is to describe common activities which are intended to deepen the impact of both networks for disseminating the State-of-the-Art in Semantic Web technologies to the European IT industry.

2 Past Activities

2.1 The Semantic Web Days 2005, 6-7 October 2005, Munich, Germany

2.1.1 Rationale

Semantic web days, 6-7 October 2005, Munich, Germany

The Semantic Web Days was a 2-day event co-organised by REWERSE and Knowledge Web, that offers a forum of exchange for innovative businesses and European research institutions that concentrate on Semantic Web tools and technologies. As a special industry-oriented event, a particular focus was on applications driven by ontology and reasoning-based technologies to process (Semantic) Web data. An important issue hereby was the sharing and reuse of data and services across applications.
Application areas such as Life Sciences, Knowledge Management, Publishing, Natural Language Processing, e-work, and e-business have offered insights into practical application issues.

Event Report

The Semantic Web Days 2005, which took place in Munich in October, offered a forum for innovative companies and research institutions with the strong desire to accelerate the uptake of Semantic Web technologies. A major goal of the two-day conference was to present the latest Semantic Web technologies which are very promising or already in use.

The international conference with attendees from all over Europe, as well as the US and Korea was organised jointly by the EU Network of Excellence REWERSE (REasoning on the WEb with Rules and SEmantics) and by the EU Network of Excellence Knowledge Web (Realizing the Semantic Web).

One of the central questions of the two days focused on the degree of maturity of the technologies e.g. Ontologies, Reasoning, and Business rules, facing real needs in industry e.g. data, services and business automated integration. The message, which was also discernable in the concluding panel discussion, was that procedures to describe semantic

coherences currently mainly exist in the form of pilot studies, but so far only rarely in major industrial projects. But although only a limited number of projects are so far realised by means of Semantic Web technologies, the power of the Semantic Web approach as well as the need for catch-up became obvious at the Semantic Web Days. The attendance of far more than 100 participants at the Semantic Web Days showed no doubt that there is high potential for the application of Semantic Web technologies in addition to its already convincing pre-deployed applications.

At present, established projects are mainly focused on the development of corporate Knowledge Management, Telecommunication applications, Business integration for agile enterprises and Health care. Furthermore, the exhibition with more than 12 companies and institutions organized in reference to the Semantic Web Days demonstrated that quite a number of SMEs already have products on the basis of Semantic Web technologies.

Keynote speaker Hermann Friedrich, who is responsible at Siemens AG for the development of the knowledge database used internally in the company speaks about first experiences with the Semantic Web. He reported that adding few semantics to the company documents demonstrate more complex coherences in content management and namely in automated classification.

Modelling complex causal coherences is also a focus for Thomas Syldatke from Audi AG, one of the panelists at the concluding panel discussion "Earning Money with Semantic Web Technologies – examples of best practice and outlook for promising projects of the future". He is responsible at Audi AG for the development of software for testing engines and he reported that testing engines is a very complex procedure, that requires a lot of rules to be integrated with ontologies, He noted. That 100 percent of the rules was supposed to be integrated with the ontology by December 2005.

Four workshops on the topics "Industrial Applications of Semantic Web technologies", "Vocabularies and Rules for Enterprise Applications", "Semantic Web Services in Industry" and "Semantic Web for Life Sciences" as well as a presentation on "Geospatial Information Processing for the Web" demonstrated in more detail that there is high potential for semantic technologies such as ontologies and rules to provide better and faster solutions than conventional methods. Pilot projects presented at the Semantic Web Days proved those potential advantages.

Overall, the organizers have been extremely happy with the success of the event, and their impression has been backed by the tenor of the participants, who wished to establish this conference so that developments and applications of Semantic Web Technologies can be communicated between companies and research institutions in a timely manner. Last but not least, the participants list of the Semantic Web Days demonstrated that the goal of exchange between business and research has been achieved, as half of the participants came from companies while the other half came from research institutions. High quality presentations, the participants themselves, nice surroundings and many opportunities for social networking contributed to the success of the two days.

An exciting field for demonstrating the power of semantic technologies is the combination with rules. Researchers at the University of Munich demonstrated the possibilities with a geographical information system based on scalable vector graphics (SVG). Ontologies model rules which form the basis for adapting the graphics. According to the developer, Hans Jürgen Ohlbach, their solution is better than conventional navigation (e.g. Google Earth) tools because it has the advantage of being independent of certain tools.

2.1.2 Organisation Committee

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3 Current Plan

3.1 Rationale

As stressed many times from the start of the NoE KnowledgeWeb and NoE Rewerse, by Industry area partners and the reviewers: "we must maximise the impact of the research work funded by the EU, to the European IT industry". Many discussions took place as to what would be the best strategy for Knowledge Web and REWERSE for transferring the state of the art of the technologies and the best practices. As recorded in the overall KnowledgeWeb NoE Industry area annual report, the work done so far showns clearly that we have put many instruments in place to ease the take-off of the technology in the European IT industry (industry tracks, technology show, best practices, use cases, industry board, newsletter, technology roadmap, industry forum).

From the launch of the project (2004) one of our targets was to be visible in a big Industry event like IT Hanover Messe or Cebit. In 2005 we became aware of the first Semantic Technology Conference (STC) held in the US. In January 2006 (Trento KWeb General Assembly), we decided to attend the second edition of STC'06 (March 2006, CA, USA), 2 partners (FT and DERI) made a detailed report and proposed some actions to the executive board of Knowledge Web. In June 2006 (Budva KWeb General Assembly) we decided to concentrate our energy[2] on a single large industry gathering attractive for the European IT industry, merging many ad-hoc initiatives, but also Semantics 2005/2006 and decided to launch also in Europe a Semantic Technology Conference (ESTC 2007).

3.2 Semantic Technology Conferences in the USA (STC 2006)

http://www.semantic-conference.com

The Semantic Technology Conference (STC2006) – took place in San Jose, CA, USA from 5th to 9th March 2006. This conference has shown a rapid growth in development of semantic technologies in industry and with more than 650 attendees and 300 companies compared with the 300 attendees of STC2005, reached a large international audience. However, it is worth noticing that the majority of the participation of research and industry was from the USA.

The Semantic Technology Conference (SemTech) is the leading educational conference on the commercial applications and opportunities for the burgeoning semantic technology industry. Launched in 2005, the conference immediately established itself as the convergence point for developers, entrepreneurs, investors and corporate customers.

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[2] So far we organized, reviewed or sponsored many emerging ad-hoc initiatives in 2005 and 2006 (see the annex).

Lastly, the conference was very dense (6 parallel tracks and early bird sessions) and very well targeted to the Technology and Best Practices from a very large number of SMEs and large companies.

Overall it is a major event for the Industry, Technology and solution providers and final customers and users. It clearly complements the research oriented conferences (ISWC, ESWC, ESWC, ECOWS, ICWS, ECAI, IJCAI, IAAI …).

3.3 European Semantic Technology Conference (ESTC 2007)

The 1st European Semantic Technology Conference (ESTC2007) initiates a new conference series in Semantic technologies in Europe.
http://www.estc2007.com

ESTC2007 is a new European meeting ground for customers, practitioners, developers and researchers to discuss the applicability and commercialization of Semantic technologies for enterprises and public organizations.

The conference will be held in Hofburg Redouten Säle, Vienna, Austria, May 31 – June 1, 2007 and will feature case study and practical experience presentations, workshops and tutorials, invited talks and an industrial exhibition.

ESTC2007 is organised with the support of the Austrian Computer Society and the European Semantic Systems Initiative (ESSI), a group of four European projects in the area of Semantic Technologies known as ESSI (SEKT, DIP, Knowledge Web, REWERSE, GRID), … , SUPER and Tripcom.

The ESTC2007 Steering Committee invites the submission of case studies and practical experience papers and/or presentations, tutorial and workshop proposals on industry aspects of the development of Semantic Web technology, particularly relating to the following subject areas: Ontology and Rules Systems Deployment, Semantic Web Services Tools and Applications (e.g. description, discovery, composition, orchestration, etc), Practices in Migration to Knowledge technology, Real World Deployments of Semantic Web technologies (value proposition, ROI, adoption of technologies, etc), Semantic technologies for content and unstructured data in legacy systems, knowledge acquisition, ontology creation and management (e.g. evolution, evaluation), Semantic Web for e-Business, e-Health, e-Government, Multimedia, Bio-Pharmacy drug discovery, Semantic Interoperability in Data and Services for the enterprise, Semantic Mining for Business Intelligence, Semantic Searching, Querying, Navigation and Browsing, Semantic Annotation of Data, Resources and services.

3.4 Organisation of ESTC 2006 [3]

3.4.1 Steering Committee

John Davies (BT)
Dieter Fensel (DERI)
Alain Léger (FT/Orange)
Hans-Peter Schnurr (Ontoprise)
Alexander Wahler (Hanival)

3.4.2 Organisation Committee

Conference Chair
　　　John Davies (BT)
Program Chair
　　　Richard Benjamins (iSOCO)
Workshop and Tutorial Chairs
　　　Alain Léger (Orange)
　　　Louis Vincent (Orange)
　　　York Sure (AIFB Karlsruhe)
Exhibition and Sponsorship Chair
　　　Peter Schnurr (Ontoprise)
Investors Chair
　　　Dieter Hacker (Hanival)
Local Organization Chair
　　　Alexander Wahler (Hanival)
Webmaster
　　　Andreas Klotz (DERI Innsbruck)
Administrative Support
　　　Ilona Zaremba (DERI Innsbruck)

3.4.3 Industry support

British Telecom (telecommunication)
Ontoprise (integration)
Hanival (integration)
France Telecom / Orange (telecommunication)
Deutsche Bank (finance)
Audi (manufacturing)
ThyssenKrupp (manufacturing, steel)
Deutsche Telekom (telecommunication)
Deutsche Post (logistics)
Isoco (services)
Oracle (data base)
Many others have been contacted and will likely support the Industry event

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[3] REWERSE decided – at the time of writing – to promote and cooperate to the success of the ESTC event

4 Summary and Future Plans

During those 3 years of cooperation to help the take-off of the technology in the European IT industry, we reached the conclusion that the technology has matured enough now in the US and in Europe to expect success in attracting many Industrial and Business participants at a large European Technology Conference

Knowledge Web has decided to launch ESTC 2007, expecting to be as successful as its sister conferences in the Research area: the ESWC and ISWC worldwide renowned series.

REWERSE will hold a "Semantic Web Days 2007" event in Vienna in September 2007.

It was agreed that REWERSE, KnowledgeWeb and other relevant EU collaborative projects should be invited to participate in a area of the exhibition specially reserved for them.

5 Annex

Co-organised Industrial events

5.1 ESWC 2006

Industry Forum day, 12 June 2006, Budva
http://www.eswc2006.org/industry_programme.html

CEUR proceedings and slides published at http://ceur-ws.org/Vol-194/
Slides also available on REASE at http://rease.semanticweb.org

KnowledgeWeb and REWERSE contribution: co-organisers

5.2 SDC 2006

Industry Forum Day, 30 June 2006, Nantes
http://www.sdc2006.org/aitc2006/index.html
Week of the Knowledge 2006
All proceedings available on the conference web site

KnowledgeWeb and REWERSE contribution: co-organisers

5.3 Reasoning Web 2006

Industry related Lecture for Summer School, in cooperation with NoE REWERSE,
3-7, Sept 2006, Lisbon.
http://reasoningweb.org/2006/Objectives.html
Lecture presentation available on the Knowledge Web (REASE) educational portal

REWERSE contribution: Organiser
Knowledge Web: Industry lecture

5.4 RuleML 2006

Industry track participation, Nov 2006, Athens, USA
http://2006.ruleml.org

Organisers: Thomas Eiter, Technical University, Vienna, Austria, Enrico Franconi, Free University of Bolzano, Italy (Kweb), Susie Stephens, Oracle, USA, Ralph Hodgson, TopQuadrant, Inc., USA, Michael Kifer, State University of New York at Stony Brook, USA, Jos de Bruijn, DERI Innsbruck, Austria

REWERSE: organiser
Knowledge Web contribution: member of PC and involvement in Industry Track

5.5 Semantics 2006

28-30 November 2006 at the TechGate in Vienna, Austria
http://www.semantics2006.net

SEMANTICS 2006 offers a forum of exchange for innovative businesses and European research institutions and companies that concentrate on semantic technologies. For the first time in Europe, vendors and developers of semantic technologies and applications have presented their products and services to the public. Leading international experts have discussed state of the art developments and future trends from the technological, economical and social view and present up-to-the-minute research & development in semantic systems.

REWERSE: partners in the Programme committee
Knowledge Web: partners in the organization committee

5.6 OWLED2006

Athens, Georgia, USA, November 10-11 2006
OWL: implementation and directions
http://owl-workshop.man.ac.uk/OWLWorkshop06.html

The OWL: Experiences and Direction (OWLED) workshop series is a forum for practitioners in industry and academia, tool developers, and others interested in OWL to describe real and potential applications, to share experience, and to discuss requirements for language extensions/modifications. The workshop has brought to the users, implementers and researchers together to measure the state of need against the state of the art, and to set an agenda for research and deployment in order to incorporate OWL-based technologies into new applications.

REWERSE contribution: partners in the organisation committee
Knowledge Web contribution: partners in the organisation committee