

# D 2.6.6 Report on Workshop and Conference Organization

## York Sure (UKARL)

## Abstract.

EU-IST Network of Excellence (NoE) IST-2004-507482 KWEB Deliverable D2.6.6 (WP2.6)

This deliverable provides an overview about the workshops and conferences organized in 2005 under the umbrella of Knowledge Web by its partners. Support of events is organized along a well-defined set of criteria which enable different levels of support.

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## **Executive Summary**

This deliverable is part of the "WP 2.6 Weaving the European Semantic Web Research Network". This deliverable provides an overview about the workshops and conferences organized in 2005 under the umbrella of Knowledge Web by its partners.

Support of events is organized along the well-defined set of criteria which enable different levels of support as introduced earlier in Knowledge Web Deliverable 2.6.3 which also covers an overview of events organized in 2004.

## **Key numbers for 2005:**

- 18 workshops,
- 4 conferences and
- a Dagstuhl Seminar

have been supported under the umbrella of Knowledge Web.

Plans for 2006: We plan to expand in collaboration with the portal provider the KWeb portal functionality to classify events according to KWeb pillars and event topics. We will discuss the application of strategic patterns for event support to stimulate research in particular directions.

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## 1 Overview and Future Plans

This deliverable provides an overview about the events organized under the umbrella of Knowledge Web by its partners. For completeness and self-containment we will illustrate in Section 2 the set of criteria which enable different levels of support offered by the network to its partners as introduced earlier in Knowledge Web Deliverable 2.6.3. In Section 3 we provide an overview about organized workshops and give for each a brief characterization. In subsequent sections 4 and 5 we do the same for organized conferences and other events.

In 2006 we plan to expand in collaboration with the portal provider the KWeb portal functionality to classify events according to KWeb pillars and event topics. We will discuss the application of strategic patterns for event support to stimulate research in particular directions.

## 2 Support Levels (A - F)

The following rules for event support by Knowledge Web (KWeb) are based on the initial proposal by Jerome Euzenat (INRIA), published on the KWeb mailing list and Knowledge Web Deliverable 2.6.3. They are included for completeness and self-containment of this deliverable.

There exist two main criteria for the decision whether events can be supported by KWeb and partners should ask themselves the following questions before asking for support:

- [1] Is the meeting actually part of the mission of KWeb?
  - Does it contribute to integration?
  - Does it reflect the goals of KWeb?
- [2] Does the meeting add to the popularity of KW by being sponsored?
  - Is it a (very) visible event?
  - Is it a (very) symbolic/decisive event?
  - Is it a high-quality event?

In case both of the above main criteria are fulfilled, the following rules apply for defining the level of support. We distinguish between 7 different levels (A-G). For each level we describe the typical support level, things organizers need to do in return for being supported, and additional notes and examples (e.g. events so far which are likely to fall in this category).

The most frequent levels being used are **levels D** and **E** which typically are granted without further decisions. However, most other options involve an additional (E)PMB decision.

## [A] KW organized events for outreach

## Support Level:

- Potentially funding the organization of the event
- Members can use their KWeb funds (e.g. for travelling)

#### In return:

• Acknowledgement of sponsorship (e.g. logo on website)

#### Note:

• To be evaluated by EPMB

#### **Examples:**

• European Semantic Web Conference, International Semantic Web Conference, Semantic Web Summer School, ...

## [B] Starting new initiatives from KW on KW topics

#### Support Level:

- Potentially funding the organization of the event
- Members can use their KWeb funds (e.g. for travelling)

#### In return:

• Acknowledgement of sponsorship (e.g. logo on website)

#### Note:

• To be evaluated by EPMB

#### **Examples:**

• E.g. a workpackage or area that want to launch a new event

## [C] Large, well-known conference in our field

## Support Level:

- Potentially funding the organization of the event
- Members can use their KWeb funds (e.g. for travelling)

#### In return:

• Acknowledgement of sponsorship (e.g. logo on website)

#### Note:

- Can be considered for both reasons [1] and [2] but with the understanding that we have no infinite resources, this should be considered case by case by EPMB
- The default policy is to not fund them (with few exceptions)

#### **Examples:**

• International Semantic Web Conference, European Knowledge Acquisition Workshop, ...

## [D] Open workshops at well-known events on KW topics

#### Support Level:

- The partners can spend some of their resources for attending
- The organizers can assume that the workshop is sponsored by KW (by the travelling of its members).
- No additional resource, exception: [F]

#### In return:

• Acknowledgement of sponsorship (e.g. logo on website)

#### Note:

- Mail to PMB list to announce the event (significantly before the event happens)
- Organizers can assume granted if no answer by EPMB

## Examples:

• ECAI or ISWC workshops clearly fall there, they qualify because of [1]

#### [E] KW meetings

Same as [D]

Note:

• KWeb meetings obviously contribute to integration

## [F] Travel funding on case by case basis

Support Level:

• Case by case travel funding for KWeb sponsored events, for instance for people from new member states or associated state people.

In return:

• Acknowledgement of sponsorship (e.g. logo on website)

Note:

Case by case decision of EPMB

## [G]Sub-event funding

Support Level:

• The funding of a special action, clearly labelled Knowledge web in an existing event

In return:

• Acknowledgement of sponsorship (e.g. logo on website)

Note:

Case by case decision of EPMB

**Examples:** 

• Invited speakers, the Knowledge web challenge at ISWC

## 3 Workshops in 2005

## 3.1 Overview

The following workshops have been organized in 2005 under the umbrella of Knowledge Web, typically being supported with option [D]. Since the KWeb members were quite active in organization of workshops the strategy so far for selecting workshops has been rather reactive, i.e. in case KWeb members applied for support. We will carefully evaluate in each stage of the project whether we need to be more active and stimulate e.g. workshops for upcoming topics.

• BAOSW @ EPIA2005 - Workshop on Building and Applying Ontologies for the Semantic Web

- SWCASE @ ISWC2005 Semantic Web Case Studies and Best Practices for eBusiness
- SWESE @ ISWC2005 Workshop on Semantic Web Enabled Software Engineering
- OWLED @ ISWC2005 OWL Experiences and Directions
- IntOnto @ K-Cap2005 Integrating Ontologies
- Font @ KI2005 Foundational Aspects of Ontologies
- WORM @ ODBASE2005 The 3rd International Workshop on Regulatory Ontologies
- LWS @ ICML2005 Learning in Web Search
- C&O @ AAAI2005 Contexts and Ontologies: Theory, Practice and Applications
- OntoP2P @ ESWC2005 Ontologies in P2P Communities
- SFSW @ ESWC2005 Scripting for the Semantic Web
- UserSWeb @ ESWC2005 Workshop on End User Aspects of the Semantic Web
- MSW @ ESWC2005 Multimedia and the Semantic Web
- Interoperability of Web-Based Educational Systems @ WWW2005
- IKMTOOLS @ WM2005 Workshop on Intelligent IT Tools for Knowledge Management Systems: Applicability, Usability, and Benefits
- CECC2005 Corporate Education Course Content
- SWOp2005 Workshop on Semantic Web Interoperability
- OMAC2005 Workshop on Ontology Modularization and Context

# 3.2 BAOSW2005 - Workshop on Building and Applying Ontologies for the Semantic Web

URL: <a href="http://baosw.epia05.di.ubi.pt/">http://baosw.epia05.di.ubi.pt/</a>

#### **Abstract:**

Ontologies promise a shared and common understanding of a domain that can be communicated between people and application systems. Therefore, they have emerged as an important research area since the 1990's. Ontologies are used for different purposes (natural language processing, e-commerce, e-learning, knowledge management, semantic web, information retrieval, etc) by different research communities (knowledge engineering, database, software engineering, etc).

The emergence of the Semantic Web has marked another stage in the evolution of the ontology field. According to Berners-Lee, the Semantic Web is an extension of the current Web in which information is given well-defined meaning, better enabling computers and people to work in cooperation. This cooperation can be achieved by using shared knowledge-components. Therefore ontologies have become a key instrument in developing the Semantic Web. They interweave human understanding of symbols with their machine processability.

This workshop addresses the problems of building and applying ontologies in the Semantic Web and other areas listed below, as well as the theoretical and practical challenges arising from these applications. We invite contributions to enhance the state-of-the-art of creating, managing and using ontologies.

## **Organization Committee:**

- Sofia Pinto, IST/INESC-ID, Portugal
- Andreia Malucelli, University of Porto, Portugal
- Fred Freitas, Federal University of Alagoas, Brazil
- Christoph Tempich, Karlsruhe University, Germany

# 3.3 SWCASE2005 - Semantic Web Case Studies and Best Practices for eBusiness

URL: <a href="http://nbi.inf.fu-berlin.de/conf/SWCASE05">http://nbi.inf.fu-berlin.de/conf/SWCASE05</a>

#### **Abstract:**

The Semantic Web reaches stability in its lower layers with the existence of standards and the upcoming availability of basic technologies and trialed applications. Still, the success of the Semantic Web depends on its capability to deploy in a commercial setting. While a variety of events exists on the foundations and engineering of Semantic Web technologies, this workshop complements these with a forum to learn and discuss about the actual realization of the Semantic Web with applications.

The workshop will focus on question of deploying Semantic Web technologies in real business applications. It will call for work on use cases for Semantic Web and Semantic Web Services, on experience reports on commercial deployment and on best practices in doing so. The goals are to provide a forum to exchange knowledge on Semantic Web deployment, the best paths to do so, and the real world obstacles to be considered and on overall cost/benefit expectations and experiences.

The workshop can be considered an outreach activity of the academic Semantic Web community to industry to encourage the take-up of research results. At the same time, it is an inreach event as a forum for practitioners to enter industry requirements on further research into the academic research agenda.

- Robert Tolksdorf, Freie Universität Berlin
- Alain Leger, France Telecom
- Guus Schreiber, W3C

# 3.4 SWESE2005 - Semantic Web Enabled Software Engineering

URL: http://www.mel.nist.gov/msid/conferences/SWESE/

#### **Abstract:**

Over the past five years there have been attempts to bring together languages and tools developed for Software Engineering (SE) with Semantic Web (SW) languages. One of the most recent of these attempts is the development of the Object Management Group's Ontology Definition Metamodel (ODM). Until recently, this work has been motivated largely by an interest to exploit the popularity and features of Unified Modeling Language (UML) tools for the creation of vocabularies and ontologies for the Semantic Web. But what are the potential benefits related to the reversal of this approach and the use of Semantic Web concepts in the field of Software Engineering? Could the Webbased, semantically rich formality of the Web Ontology Language OWL be combined with emerging model driven development tools to provide badly needed improvements in both the process and product of software development activities? Certainly there appear to be a number of strong arguments in favour of this approach, but consensus on the best way forward has not yet formed. This workshop seeks to explore and evaluate this area.

## **Organisation Committee:**

- Evan Wallace, NIST
- Jeff Z. Pan, University of Manchester
- Phil Tetlow, IBM
- Elisa F. Kendall, Sandpiper Software

## 3.5 OWLED2005 - OWL Experiences and Directions

URL: http://www.mindswap.org/2005/OWLWorkshop/

#### **Abstract:**

The W3C OWL Web Ontology Language has now been a W3C recommendation for more than one year. OWL is playing an important role in an increasing number and range of applications, and is the focus of research into tools, reasoning techniques, formal foundations, language extensions etc. This level of experience with OWL means that the community is now in a good position to discuss how OWL be applied, adapted and extended to fulfil current and future application demands.

The aim of the workshop is to establish 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 will bring users, implementors 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.

## **Organisation Committee:**

- Mu Bernardo Cuenca Grau, University of Maryland (USA)
- Ian Horrocks, University of Manchester (UK)
- Bijan Parsia, University of Maryland (USA)
- Peter Patel-Schneider, Bell Labs (USA)

## 3.6 IntOnt2005 - Integrating Ontologies

URL: http://km.aifb.uni-karlsruhe.de/ws/intont2005

#### **Abstract:**

The Integrating Ontologies workshop will bring together researchers and application developers from the area of ontology software interoperability. Its goal is to promote the exchange of knowledge, ideas, and future challenges for handling multiple competing ontologies. The workshop will facilitate methodological and technical discussions. For many domains, a variety of ontologies have been engineered, learned, and extended. Each is an interface for a similar purpose yet uses different nomenclatures. To enable collaboration within and across application domains, software agents require transparency between the various formalisms. This requires both semantic alignment and syntactical translation. Purely manual approaches are error-prone, onerous, and insufficient to support the vision of dynamic systems interoperability. However, recent research in data model alignment exploits "meaning" that is explicit and implicit in ontologies and schemas. Consequently, if heterogeneity can be mitigated with minimal use of standards by way of partially or fully automated alignment, then the interoperability of and for commercial, non-profit, military, and government systems will be simplified and improved. This workshop will exhibit new approaches to alignment, translation, and other methods that promise to help fulfill the vision of the Semantic Web.

- Benjamin Ashpole, Lockheed Martin Advanced Technology Lab
- Marc Ehrig, University of Karlsruhe
- Jérôme Euzenat, INRIA Rhône-Alpes
- Heiner Stuckenschmidt, Vrije Universiteit Amsterdam

## 3.7 Font2005 – Foundational Aspects of Ontologies

URL: http://www.aifb.uni-karlsruhe.de/WBS/phi/FOnt2005/

#### **Abstract:**

Representing and reasoning with ontologies is the core technology for the Semantic Web, and is growing in importance in many other areas of Computer Science where structured and hierarchically organized knowledge is of importance. While the need for ontological knowledge representation formalisms for practical applications is abundant, it is apparent that only conceptually and mathematically sound frameworks can provide the means for a significant technological advance in this area.

Indeed, formal and foundational aspects of ontologies are being studied in many application domains in order to serve practical needs. It lies in the nature of such fundamental research that a critical mass of different formal perspectives can generate a cross-fertilization of ideas and applications. We therefore intend to bring together researchers working on foundational aspects of ontologies in different application areas, in order to stimulate an exchange of ideas and methods between the subcommunities. We believe that a significant advance in understanding and establishing sound formal foundations for applied ontology research can this way be made.

## **Organization Committee:**

- Pascal Hitzler, AIFB, Universität Karlsruhe, Germany
- Carsten Lutz, Department of Computer Science, TU Dresden, Germany
- Gerd Stumme, Department of Mathematics and Computer Science, Universität Kassel, Germany

# 3.8 WORM2005 - The 3rd International Workshop on Regulatory Ontologies

URL: http://www.starlab.vub.ac.be/staff/mustafa/WORM\_2005.htm

#### Abstract:

In many application areas (such as e-commerce, e-government, content standardization, legal information systems etc.), the modeling of regulatory and legal knowledge is critical. Modeling and deploying regulatory knowledge has some specifics that differentiate it out from other kinds of knowledge modeling: reasoning methods and application scenarios, the legal weight (/order) of regulations, parsing legal texts require special semantic patterns, the sensitivity in cross-border regulations, etc. This workshop aims at bringing together academics, researchers, professionals and industrial practitioners to discuss issues involved in modeling regulatory ontologies. Regulatory

ontologies typically involve the description of rules and regulations within the social world. In particular, we seek original contributions on (but not limited to) the following issues of interest:

- Engineering of regulatory ontologies: conceptual analysis, representation, modularization and layering, reusability, evolution and dynamics, etc;
- Multilingual and terminological aspects of regulatory ontologies;
- Models of legal reasoning (from ontological viewpoint): regulatory compliance, case-based reasoning, reasoning with uncertainty, etc.
- Sensitivity on and harmonization of regulations;
- Regulatory metadata and content standardization (e.g. legal-XML/LeXML, ADR/ODR-XML,...);
- Regulatory ontologies of: property rights, persons and organizations, legal procedures, contracts, legal causality, etc;
- Task models for socially regulated activities;
- Experiences with projects and applications involving regulatory ontologies in legal knowledge based systems, legal information retrieval, e-governments, ecommerce;
- Automated extraction of Information from regulatory documents.

## **Organisation Committee:**

- Mustafa Jarrar, STARLAb, Vrije Universiteit Brussel, Belgium
- Aldo Gangemi, Laboratory for Applied Ontology, ISTC-CNR, Rome
- Joost Breuker, Leibniz Center for Law, Netherlands
- Jos Lehmann, Laboratory for Applied Ontology, ISTC-CNR, Rome
- André Valente, Knowledge Systems Ventures, USA

## 3.9 LWS2005 - Learning in Web Search

URL: http://cosco.hiit.fi/search/learninginsearch05/

#### **Abstract:**

The emerging world of search we see is one which makes increasing use of information extraction, gradually blends in semantic web technology and peer to peer systems, and uses grid computing as part of resources for information extraction and learning. This workshop explores the theory and application of machine learning in this context for the internet, intranets, the emerging semantic web, and peer to peer search. The workshop also aims to advertise and promote suitable software and data infrastructure to support the research, and community platforms, open source solutions, and grid tools for large scale experiments.

## **Organization Committee:**

• Stephan Bloehdorn, AIFB Universität Karlsruhe

- Wray Buntine, Helsinki Institute for Information Technology
- Andreas Hotho, Universität Kassel

# 3.10 C&O2005 - Contexts and Ontologies: Theory, Practice and Applications

URL: http://dit.unitn.it/~pavel/cando/

#### **Abstract:**

Ontologies are shared models of a domain that explicitly encode a view which is common to a set of different parties. Contexts are local models which explicitly encode one party's subjective view of a domain.

During the last decade, there has been a line of successful series of workshops and conferences on the development and application of contexts and ontologies. Early workshops were focused mostly on identifying what contexts and ontologies are, and how they can be formalized and exploited. In more recent years with the emergence of distributed systems (e.g., P2P systems, Semantic Web) the focus of workshops shifted towards questions of practical applications, such as semantic integration, coordination, and meaning negotiation among information sources, where both contexts and ontologies were applied as promising solutions. However, few, if any, of these meetings have focused on combining the themes of ontologies and contexts and discussed them as complementary disciplines.

The goal of the workshop is to bring together people from the context and ontology communities and to discuss the approaches they use for information integration. Therefore, the workshop will push the cross-fertilization and exchange of ideas (e.g., what are the commonalities and differences in the methods they use, which of the methods from the ontology community can be successfully adopted in the context community, and vice versa), and, hence, make their meeting mutually beneficial. In particular, the following technical issues are to be addressed within the workshop: to elaborate in details how the semantic heterogeneity problem can be tackled with the help of approaches for combination of multiple contexts and multiple ontologies; to proceed with further analysis and understanding of the technical problems related to integration of contexts and ontologies from theoretical, practical and application perspectives.

- Jerome Euzenat, INRIA Rhone-Alpes, France
- Alain Leger, France Telecom, France
- Deborah McGuiness, KSL Stanford, USA
- Pavel Shvaiko, University of Trento, Italy
- Holger Wache, Vrije Universiteit Amsterdam, NL

## 3.11 Onto P2P2005 - Ontologies in P2P Communities

URL: <a href="http://www.kde.cs.uni-kassel.de/ws/ontop2p2005">http://www.kde.cs.uni-kassel.de/ws/ontop2p2005</a>

#### **Abstract:**

Recently, a lot of research has been aimed at bringing together and mutually augmenting the benefits of SemanticWeb technologies on the one hand and P2P systems on the other. Ontologies are a vital part of the SemanticWeb vision, providing machineunderstandable, shared conceptualizations of the respective domains of interest within communities. Peer-to-peer (P2P) systems are a means for communities to establish communication among their members, foster collaboration and provide an infrastructure in which peers can share and create knowledge. The use of ontologies for and within P2P systems is expected be a crucial part of creating P2P communities that go beyond filesharing. While most existing P2P systems are used for exchanging objects such as data files, which are described by few simple attributes such as a file name or a hash code, ontology-based P2P systems will open up new possibilities. They can enable richer, potentially more useful descriptions of peers, services, and shared artifacts, thus facilitating new ways of querying, sharing, and organizing knowledge within communities. The goal of the intended workshop is to bring together researchers and practitioners from the P2P, Semantic Web and Knowledge Management fields to present their work done within one or more of the topics of interest. We believe that at the present time, discussions about a common understanding of the area, models for distributed knowledge management systems, and novel ways of using, creating, and sharing ontologies in P2P communities are essential for the progress of the field.

## **Organisation Committee:**

- Peter Haase, Institut AIFB, University of Karlsruhe, DE
- Christoph Schmitz, KDE Group, University of Kassel, DE
- York Sure, Institute AIFB, University of Karlsruhe, DE

## 3.12 SFSW2005 - Scripting for the Semantic Web

URL: http://www.semanticscripting.org/SFSW2005/

#### **Abstract:**

Large parts of the current Web rely on scripting languages such as Python, PHP, Perl, JavaScript, ASP, JSP, ActionScript, Ruby and ColdFusion. These languages are the tools of a generation of web programmers who use them to quickly create server-side and client-side web applications. Support for scripting languages is widely deployed within the current web infrastructure: PHP for example is installed on 16 million domains. It is

therefore likely that scripting languages will also play a crucial role in the Semantic Web gaining critical mass.

Scripting languages are lightweight and easy to learn, but on the other hand mature enough to be used within complex applications, as the Mozilla, Zope and CWM projects show. Many deployed Semantic Web applications, for example in the FOAF and RSS communities, are already using these languages and it is likely that the process of RDF-izing existing database-backed websites, wikis, weblogs and CMS will largely rely on scripting languages.

The workshop aims to bring together for the first time developers of the RDF base infrastructure for scripting languages with practitioners building applications using these languages. The goal of the workshop is to give an overview of the current support for Semantic Web technologies within scripting languages, to showcase innovative Semantic Web applications relying on these languages.

#### **Organisation Committee:**

- Chris Bizer, Freie Universität Berlin, Germany
- Libby Miller, @Semantics, Italy
- Sören Auer, Universität Leipzig, Germany

## 3.13 User SWeb 2005 - Workshop on End User Aspects of the Semantic Web

URL: <a href="http://kmi.open.ac.uk/events/usersweb/">http://kmi.open.ac.uk/events/usersweb/</a>

#### **Abstract:**

The aim of this workshop is to look at how an "ordinary user" might be able to tap into the resources of the Semantic Web, find out about the value of these resources for their work practice or their general web use, and feel compelled to use and perhaps even contribute to Semantic Web resources.

A substantial part of current research is going into the creation and aggregation of semantic content. The content is necessary but insufficient condition for the Semantic Web. It is a "means" to improving the end user's interaction with knowledge repositories. Thus, this workshop considers not only the usual "What content?" and "How to author the content?" questions, but also "Why, for which purposes, and how could content be (re-)used and re-purposed?"

Users often move between several modalities and use tools, each designed for a particular purpose and audience. The pervasiveness of the standard Web is partly due to its appeal

to non-specialists and immediate feedback when authoring HTML content. We want to look at the developments in making the Semantic Web more *accessible* and *comprehensible* to the end users. How can we facilitate the participation of these non-specialists in the development of the Semantic Web and its transplantation from a "research incubator" into everyday practice? What role does *"instant gratification"* to the user play in getting him or her involved in specifying and carrying out complex tasks within the Semantic Web? What tools and interfaces are likely to provide such a reward and thus help to break the barriers to the adoption of distributed environments and simplify interaction with large knowledge repositories?

## **Organisation Committee:**

- Martin Dzbor, Knowledge Media Institute, Open University, UK
- Hideaki Takeda, National Institute of Informatics, Japan
- Maria Vargas-Vera, Media Institute, Open University, UK

## 3.14 Multimedia and the Semantic Web 2005

URL: http://www.acemedia.org/ESWC2005\_MSW/

#### **Abstract:**

This one day workshop on Multimedia and the Semantic Web aims to bring together researchers and practitioners in the multimedia and Semantic Web domains in order to assist in forming bridges between the communities for mutual benefit.

This workshop features invited papers from keynote speakers Guus Schreiber and mc schraefel, as well as peer-reviewed papers examining the interaction of Semantic Web and multimedia technologies, with a balance of topics from the perspective of the Semantic Web and from the perspective of multimedia applications.

Multimedia community participants are invited to benefit from the workshop in discovering how Semantic Web technologies can be used to increase the value of image, video and multimedia assets, for example by the use of ontologies and reasoning to assist with multimedia analysis, or identification means to facilitate content location.

Semantic Web researchers are encouraged to join the workshop to benefit from the presentation of results from multimedia based research, which demonstrate important applications which could be enhanced by Semantic Web technologies.

We anticipate some significant debate owing to differences in opinions about approaches to take in solving the relevant joint problems, and we invite you to join the workshop to give your views on these subjects.

## **Organisation Committee:**

- Paola Hobson, Motorola
- Yiannis Kompatsiaris, CERTH/ITI
- John Davies, BT
- Ant Miller, BBC

## 3.15 Interoperability of Web-Based Educational Systems 2005

URL: <a href="http://www.l3s.de/~olmedilla/events/interoperability.html">http://www.l3s.de/~olmedilla/events/interoperability.html</a>

#### **Abstract:**

Nowadays learning resources are increasingly available via web-based educational systems, such as learning (content) management systems, electronic market places for learning materials and courses, or knowledge repositories. With the dawn of various specialised e-learning tools, learning resources became more and more stored in closed environments, restricting accessibility to a closed user community. While standardization bodies and consortia such as ADL, CEN/ISSS, IEEE, IMS, and ISO have already identified the need for interoperability of web-based educational systems, learners' choices to fill a particular knowledge gap are in many cases still limited to the offers of the system they are registered at.

Recently, researchers have started to focus in these issues in more depth. Web technologies have appeared as promising approaches where XML, RDF, Web query languages, and ontology-based data integration approaches became essential ingredients of this infrastructure.

This workshop will bring together researchers and interoperability experts from different communities (E-learning, Information Systems, Database, Semantic Web) interested in making educational systems interoperable. The workshop will deliver a state-of-the-art overview of successful interoperability cases and will provide guidelines for future research.

- Daniel Olmedilla, L3S Research Center and Hanover University
- Nobuo Saito, Keio University
- Bernd Simon, Vienna University of Economics and Business Administration

## 3.16IKMTOOLS2005 – Workshop on Intelligent IT Tools for Knowledge Management Systems: Applicability, Usability, and Benefits

URL: http://wm2005.iese.fraunhofer.de/workshop11-en.html

#### **Abstract:**

Successful knowledge management projects incorporate aspects from the following dimensions: processes, contents, corporate culture, information technologies (IT). IT has the role to facilitate the storage, retrieval and presentation of information and is therefore often called an enabler. An inadequate use of IT can lead to the failure of a knowledge management project, cause considerable delays and detract from the motivation of the people involved. It is therefore important to get a better understanding of

- how best to support knowledge management through IT tools, and
- how to ensure the implementation of efficient knowledge management systems.

To this end, the following issues are of special importance:

- Embedding into the application environment:

  The functions offered by a knowledge management system must be carefully tailored to the specific requirements of the context of the application and the needs of users.
- Usability:
  - Poorly designed user interfaces cause a loss of efficiency as well as severe quality and acceptance problems due to the high cognitive strain of the users. Since people tend to use knowledge management systems on a voluntary basis and not because they are mandatory for the work to be done, they will refuse to use them if the ergonomic design does not comply with state-of-the-art usability guidelines.
- Process integration:
  - The tasks to be accomplished with the help of a knowledge management system are often part of other processes and should thus be integrated into those processes with respect to information and process flow.
- *Information integration:* 
  - The integration of information from heterogeneous sources is important in order to avoid multiple entering of information, resulting in redundant and possibly inconsistent information. It is to be ensured that information is consistent across all systems and that information can be linked across system boundaries.
- System integration:
  - By integrating a knowledge management system with other systems we avoid the scattering of functions across several systems and relieve the user from having to change between systems when performing a task. This also ensures a uniform look and feel.

- Ulrich Reimer, University of Applied Sciences St. Gallen
- York Sure, University of Karlsruhe
- Andreas Eberhart, HP
- Edith Maier, University of Applied Sciences St. Gallen
- Hans-Peter Schnurr, Ontoprise GmbH

## 3.17 CECC 2005 - Corporate Education Course Content

URL: <a href="http://www.l3s.de/~diederich/cecc/index2.php">http://www.l3s.de/~diederich/cecc/index2.php</a>

#### **Abstract:**

eLearning in corporate education is gaining momentum, thus, more and more people become involved in eLearning projects within industry. Hence, there is a growing need for tools and systems that support the management of corporate learning processes on one hand and for digital content that covers the specific needs of corporate training and qualification on the other.

In this context, content brokerage becomes increasingly attractive, as it fosters the re-use of already existing material at relatively low cost. Especially the transfer of content and knowledge originating in academic and research-oriented settings to corporate fields of application is of large interest. For a considerable amount of academic content suitable for adaptation to corporate needs seems to exist.

And yet, the barriers for such a transfer are manifold. Corporate needs and expectations regarding learning content appear to differ largely from content provided by academic and research-oriented content producers. Especially material that originates in regular teaching and research activities at universities and research institutions needs further adaptation and customisation efforts.

The workshop analyses corporate needs and expectations with regard to digital content for training and qualification needs. It highlights requirements for adapting academic content and learning material to corporate contexts of application. And it provides insights into the needs for a successful transfer and re-use of academic content in non-academic settings.

Participants will benefit from the workshop by learning about the theoretical as well as best practice knowledge in respect to controlling and coordinating (small) eLearning projects and, most notably, content production projects for prospective users in the corporate sector. The workshop is geared specifically towards potential providers of eLearning materials generated in academic and research-oriented contexts. It provides orientation about the essentials of a successful transfer of academic knowledge and digital learning content.

Within this framework, the basics of didactics and methods in corporate learning scenarios, content-driven and textual requirements, technical realization, technical requirements and impacts, processes as well as the integration of web-based or computer-based trainings in learning management systems will be discussed in detail.

Participants will get insights, by means of concrete best practice examples and case studies, into the development of professional content and their transfer into multimedia content (e.g. WBT). For this purpose, field-tested checklists and guidelines as well as samples of content for corporate customers will be provided. At a smaller scale, the workshop also deals with project management and quality assurance issues as they relate to the main processes involved in content production for corporate users.

## **Organisation Committee:**

- Tilman Küchler, imc information multimedia communication AG
- Jörg Diederich, L3S Research Center

## 3.18 SWOp2005 - Workshop on Semantic Web Interoperability

URL: <a href="http://kmi.open.ac.uk/events/SWOp/">http://kmi.open.ac.uk/events/SWOp/</a>

#### **Abstract:**

Workshop on semantic web interoperability has been organized as an invitation-only workshop, with a purpose to gather together all the various groups who have developed or are developing semantic web sites, portals or other semantic infrastructures, in order to discuss the state of the art, key open issues and (especially) to agree concrete actions to foster interoperability between these sites.

The overall goal of the workshop has been to agree realistic steps to improve interoperability between sem web sites. By participating to the workshop each site agrees to commit 1-2 person months to achieve these goals. A metaphor the organizers proposed was one of an alliance of semantic providers analogous to the efforts of world-wide airlines, such as Star Alliance or Skyteam. The results of joining such alliance is essentially one service provider automatically giving access to all sort of services to other airlines.

This workshop was the first in what is hoped to become a series of regular meetings aiming to make a significant push towards "the second generation Web" (as Semantic Web is also known). The "network effect" of joining web-accessible, semantic knowledge repositories from a number of leading institutions active in the area of Semantic Web research, is seen as a key to bootstrapping the Semantic Web, and allowing more complex applications to emerge.

- Enrico Motta, KMI, Open University, UK
- Martin Dzbor, KMI, Open University, UK

# 3.19 OMAC2005 - Workshop on Ontology Modularization and Context

URL: <a href="http://www.starlab.vub.ac.be/staff/mustafa/OMAC.htm">http://www.starlab.vub.ac.be/staff/mustafa/OMAC.htm</a>

#### **Abstract:**

The notion of ontology context and the notion of ontology module are close to each other in several research approaches and methodologies. This workshop aims at bringing together researchers and professionals to discuss issues involved in Ontology Modularization and Context. Ontology composition vs integration; Context types in formal ontology; representing contextual ontologies; Semantic coordination; Database approaches to module integration, etc.

## **Organisation Committee:**

• Mustafa Jarrar, STARLAb, Vrije Universiteit Brussel, Belgium

## 4 Conferences in 2005

The conferences listed here were supported under scheme [C]. It should be noted that "The Semantic Web Days" and the "Berliner XML Tage" emerged out of the KWeb industry area and particularly attracted industrial participants.

## 4.1 European Semantic Web Conference (ESWC) 2005

URL: http://www.eswc2005.org/

#### **Abstract:**

The 2nd Annual European Semantic Web Conference was held in Heraklion, Crete May 29 – June 1, 2005. It presented the latest results in research and application in semantic web technologies (including knowledge markup languages, semantic web services, ontology management and more).

ESWC 2005 also featured a special industry-oriented event providing European industry with an opportunity to become even more familiar with these technologies. It offered a tutorial program, focusing on the latest in semantic web technologies.

ESWC 2005 was co-located with a meeting of the Knowledge Web network of excellence. Workshops and meetings of other European Commission 6th Framework Programme projects involved in the semantic web and semantic web technologies were able to showcase their developments.

ESWC 2005 was sponsored by SDK, a group of three European Commission 6th Framework Programme projects known as SEKT, DIP and Knowledge Web. Together these projects aim to improve world-wide research and standardisation in the area of the Semantic Web.

## **Organisation Committee:**

#### **General Chair:**

Jérôme Euzenat, INRIA Rhône-Alpes

#### **Program Chair:**

Asunción Gómez Pérez, UPM

#### **Workshop Chair:**

Wolfgang Nejdl, L3S and University of Hannover

#### **Poster Chair:**

Heiner Stuckenschmidt, Vrije Universiteit Amsterdam

#### **Demo Chair:**

Stefan Decker, DERI, NUI, Galway

#### **Tutorial Chair:**

Jos de Bruijn, DERI, Univeristy of Innsbruck

### **Industry Event:**

Alain Leger, France Telecom

#### **Publicity Chair:**

York Sure, Universität Karlsruhe

## **Sponsor Chair:**

Christen Ensor, DERI, NUI, Galway

## **Local Organiser:**

Brian Cummins, DERI, NUI, Galway Christen Ensor, DERI, NUI, Galway Ilona Zaremba, DERI, NUI, Galway

## **Local Correspondant:**

Martin Doerr, FORTH

#### Webmaster:

Johannes Breitfuss, DERI, University of Innsbruck

## **Submissions Webmaster:**

Miguel Esteban Gutiérrez, UPM

## 4.2 International Semantic Web Conference (ISWC) 2005

URL: http://iswc2005.semanticweb.org/

#### **Abstract:**

Building on the current architecture for the World Wide Web, Semantic Web technologies provide a wide range of tools and techniques to support automated reasoning over distributed representations of Web content. The Semantic Web will enable a new generation of applications for education, business, science, and consumer services. It will inspire novel tools for general collaboration and research. The Semantic Web presents an unprecedented challenge of scale and heterogeneity to existing work in expressive representation and query languages, reasoning engines, data representation and integration, interoperability middleware, and distributed computing. To foster the exchange of ideas and collaboration, the International Semantic Web Conference brings

together researchers in relevant disciplines such as artificial intelligence, databases, distributed computing, and information systems.

The Fourth International Semantic Web Conference (ISWC2005) follows on the success of previous conferences and workshops in Hiroshima, Japan (2004), Sanibel Island, USA (2003), Sardinia, Italy (2002), and Stanford, USA (2001).

In addition to this call for papers for the research track, ISWC 2005 will include an industrial track, a poster and demonstration track, and a special competition known as the Semantic Web Challenge.

## **Organisation Committee:**

#### **GENERAL CHAIR**

Mark A. Musen, Stanford University

#### RESEARCH TRACK CO-CHAIRS

Yolanda Gil, Information Sciences Institute, University of Southern California Enrico Motta, The Open University

#### INDUSTRIAL TRACK CHAIR

Richard Benjamins, iSOCO S.A.

## TUTORIAL CHAIR

R.V. Guha, Google,

#### **WORKSHOP CHAIR**

Natalya F. Noy, Stanford University

## META-DATA CHAIR

Eric Miller, World-Wide Web Consortium

### SPONSORSHIP CHAIRS

Liam O'Morain, Digital Enterprise Research Institute, Galway York Sure, University of Karlsruhe, Germany Akira Maeda, Hitachi Ltd., Japan Dean Allemang, Top Quadrant

#### LOCAL ORGANISING CHAIR

Christoph Bussler, Digital Enterprise Research Institute, Galway

## **PUBLICATIONS CHAIR**

Brahmananda Sapkota, Digital Enterprise Research Institute

#### DOCTORAL SYMPOSIUM CO-CHAIRS

Edward Curry, National University of Ireland, Galway

Enda Ridge, The University of York, UK

#### POSTERS AND DEMO CHAIR:

Riichiro Mizoguchi, The Institute of Scientific and Industrial Research, Osaka University

#### SEMANTIC WEB CHALLENGE:

Michel Klein, Vrije Universiteit Amsterdam Ubbo Visser, Universität Bremen / TZI - Center for Computing Technologies

## 4.3 Semantic Web Days 2005

**URL:** <a href="http://www.semantic-web-days.net/">http://www.semantic-web-days.net/</a>

**Abstract:** 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, was organised by the EU Network of Excellence REWERSE in cooperation with the EU Network of Excellence Knowledge Web.

One of the central questions of the two days focused on the degree of maturity of the technologies i.e. Ontology, Reasoning, Business rules, facing real needs in industry i.e. data, services and business automated integration. The message, which was also discernable in the concluding panel discussion, was that procedures to describe semantic coherences presently mainly exist in the form of pilot studies, but so far hardly in major industrial projects. But although only a limited number of projects are so far realized with 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 far more than 100 participants at the Semantic Web Days showed no doubt that there is high potential for the application and already convincing pre-deployed applications of Semantic Web technologies.

- Andrea Kulas, webXcerpt Software GmbH
- Dunja Ewinger, webXcerpt Software GmbH
- Tim Geisler, webXcerpt Software GmbH
- Alain Léger, France Telecom
- Stefanie Heidmann, Ludwig-Maximilians-Universität München
- Martin Josko, Ludwig-Maximilians-Universität München
- Ying Ding, Universität Innsbruck

## 4.4 Berliner XML Tage 2005 (German)

URL: http://www.xml-clearinghouse.de/ws/BXML2005/

#### **Abstract:**

XML-Technologien dominieren wichtige Bereiche von Integrationstechnologien und sind die Grundlage für eine neue Generation von Web-basierten Systemen mit Semantic Web, Web Services oder GRID Technologien. Aktuelle Forschung und Anwendung betrifft die Grundlagentechnologien selber, ihre Verwendung in den genannten Integrationstechnologien und ihre Verwendung in der gesamten Spannbreite der IT-Anwendungen.

Die Berliner XML-Tage 2005 bieten ein Forum zum Austausch wissenschaftlicher Ergebnisse in diesen Bereichen. Sie sind die führende deutschsprachige wissenschaftliche Konferenz zu XML. Sie sind als Konferenz mit mehreren themenfokussierten Tracks organisiert und werden durch verschiedene Zusatzevents wie dem W3C-Tag und dem Wirtschaftsforum ergänzt. Für Berichte aus laufenden Promotionsvorhaben ist der Doktorandenworkshop reserviert, dessen eigener Call for Papers unten steht.

Mit einer nahezu verdoppelten Teilnehmerzahl von 350 Fachbesuchern gegenüber den Berliner XML Tagen 2003 (s. <u>BerliNews</u>) und 18 Firmenpräsentationen beim Wirtschaftsforum waren die Berliner XML Tage 2004 ein voller Erfolg.

Die Schwerpunkte der Berliner XML Tage 2005 liegen in den Bereichen Semantic Web, Web Services, Sprachverarbeitung und Multimediaanwendungen mit XML-Technologien. Einen neuen Themenkomplex werden XML-basierte Human-Resource-Anwendungen bilden. Ein weiteres Highlight bildet der <u>W3C Tag</u> des deutsch-österreichischen Büros des W3C.

Nach der hervoragenden Resonanz im letzten Jahr bietet das eintägige <u>Wirtschafts</u> und <u>E-Learningforum</u> am 13.9. für Firmen eine Plattform zur Präsentation von XML-basierten Lösungen und zum Informationsaustausch zwischen Wirtschaft und Wissenschaft.

- Dr. Rainer Eckstein, HU zu Berlin
- Prof. Robert Tolksdorf, FU Berlin

## 5 Dagstuhl Seminar in 2005

The Dagstuhl Seminar listed here was supported under scheme [B].

## 5.1 Dagstuhl Seminar on Semantic Grid

URL: <a href="http://www.dagstuhl.de/05271/">http://www.dagstuhl.de/05271/</a>

Full report available at: http://drops.dagstuhl.de/portals/05271/

#### **Abstract:**

The scientific paradigms of the Semantic Web, Web Services, Agents, Peer-to-Peer Networks and Grid Computing are currently receiving a lot of attention in the research community, and are producing solutions to important problems ranging from e-science to e-business. The United States, the European Commission and other countries have also been investing heavily in these technologies. The proposed seminar aims to foster international collaboration among these areas of research and technological development with the aim to realize the vision of the Semantic Grid.

We briefly introduce the main research topics which potentially converge into the Semantic Grid:

- The **Semantic Web** aims to bring structure to the meaningful content of Web pages, creating an environment where software agents roaming from page to page can readily carry out sophisticated tasks for users" (T. Berners-Lee, J. Hendler and O. Lassila in Scientific American, May 2001). A large number of projects (e.g. the EU integrated project SEKT and the US DAML initiative) are aiming to solve problems like ontology merging and mapping, reasoning over inconsistent models or ontology learning, to name but a few.
- Web Services promise a new level of service on top of the current web. However, in order to employ their full potential, appropriate description means for web services need to be developed. Current technologies such as UDDI, WSDL, and SOAP provide limited support in mechanizing service discovery, service orchestration, service comparison and automated negotiation. Thus, current efforts (e.g. in the EU integrated project DIP) aim to use the strengths of Semantic Web technologies to enable Semantic Web Services.
- **Grid Computing** is a new field concentrating on "flexible, secure, coordinated resource sharing among dynamic collections of individuals, institutions, and resources what we refer to as virtual organizations" ("The Anatomy of the Grid: Enabling Scalable Virtual Organizations" by Foster, Kesselman and Tuecke). Initial research on Grid Computing focused on hiding the heterogeneity of computational resources and providing large scale data and computation systems (e.g. in the Global Grid Forum GGF). Current topics include support for a globally distributed collaboration, a service oriented approach and information layer issues.

As a consequence, one of the key challenges in today's Grids is the need to deal with knowledge and data sources that are distributed, heterogeneous, and dynamic, and where effective elicitation of implicit knowledge is a necessary component of the overall system. In such systems, a complete global viewpoint or understanding is impossible to achieve. We therefore need to go beyond centralised knowledge service provision, and develop effective open, distributed, knowledge-based solutions.

The **Semantic Grid** (<a href="http://www.semanticgrid.org">http://www.semanticgrid.org</a>) aims to overcome this problem by adding meaning (ontologies, annotations and negotiation processes as studied in the Semantic Web and Software Agent paradigms) to the Grid. In this way, the Semantic Grid not only provides a general semantic-based computational network infrastructure, but a rich, seamless collection of intelligent, knowledge-based services for enabling the management and sharing of complex resources and reasoning mechanisms. In the Semantic Grid knowledge and semantics are deployed explicitly for Grid applications and for the development of innovative Grid infrastructure. This knowledge-oriented semantics-based approach to the Grid goes hand-in-hand with the exploitation of techniques and methodologies from intelligent software agents representing various components of the virtual organizations and interacting in a P2P way. In recognition of the potential importance of Semantics in Grids, the Global Grid Forum standards body chartered a Semantic Grid Research Group in 2003, (GGF SEM-GRD RG).

The seminar topics include the following ones:

- Complex Problem Solving
- Intelligent Data Exploration
- Ontology-driven Organization of Grid-related Knowledge
- Semantic Information Integration
- Semantic Interoperability
- Semantic Routing
- Semantic Web Services
- Workflow Generation

- Carole Goble (Manchester Univ., GB)
- Carl Kesselman (USC Information Sciences Institute, US)
- York Sure (Univ. Karlsruhe, DE)