
INDUSTRIAL APPLICATIONS OF SEMANTIC WEB

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INDUSTRIAL APPLICATIONS OF SEMANTIC WEB

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Foreword

The Semantic Web, that adds a conceptual layer of machine-understandable metadata to the existing content, will make the content available for processing by intelligent software allowing automatic resource integration and providing interoperability between heterogeneous systems. The Semantic Web is now the most important influence on the development of the Web. Next generation of intelligent applications will be capable to make use of such metadata to perform resource discovery and integration based on its semantics. Semantic Web, aims at developing a global environment on top of Web with interoperable heterogeneous applications, agents, web services, data repositories, humans, and so on. On the technology side, Web-oriented languages and technologies are being developed (e.g. RDF, OWL, OWL-S, WSMO, etc.), and the success of the Semantic Web will depend on a widespread industrial adoption of these technologies. Trend within worldwide activities related to Semantic Web definitely shows that the technology has emerging growth of interest both academic and industry during a relatively small time interval.

VAGAN TERZIYAN
University of Jyväskylä

Organization

IASW-2005 was organized by Industrial Ontologies Group within University of Jyväskylä in cooperation with International Federation for Information Processing (IFIP), Technical Committee 12 (Artificial Intelligence), Working Group 12.5 (Artificial Intelligence Applications) and Knowledge Web Network of Excellence.

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Preface

The main focus of the First International IFIP/WG12.5 Working Conference on Industrial Applications of Semantic Web, IASW-2005, held in Jyväskylä, Finland, August 25-27, 2005, is related to industrial applications of Semantic Web. The three more specific concerns within the focus are as follows:

The growing interest to the Semantic Web, as a research and educational domain, from the academy is evident. New scientific results and interesting challenges in the area appear rapidly. International networks cover topics related to intersections of various former scientific domains with Semantic Web technology and discover new challenging opportunities. Basic standards have been announced and the amount of pilot tools and applications around these standards is exponentially increasing. The question is how much the researchers are taking into account the applicability of their results to the industry? The Conference concerns to collect cases from scientists about industrial implementation of their Semantic Web related solutions or to hear arguments in favor of possibilities for such implementation.

In spite of growing hype around Semantic Web and appropriate standards, industry developed and is continuously developing own standards for interoperability and integration. What are the obstacles, companies will face or reasons for refusing wider scale implementation of Semantic Web standards? The Conference aims to collect grounded critics and doubts, related to Semantic Web standards and activities, from industry to raise open discussion between industry and academy concerning future of industrial approval of the Semantic Web technology.

On the other hand, more and more companies are being involved to various projects related to Semantic Web. Industrial investments to research projects aimed to monitor the status of the technology are also growing. Some

companies are extensively involved to the appropriate business. There are at least two categories of such enterprises: those who are producers and providers of Semantic Web based products and services and those who are consumers of these products and services. It would be interesting to hear an answer to the question “Why?” they are doing this. We are encouraging representatives from industry to present their opinions about feasibility of Semantic Web technology for their businesses. The Conference aims to collect grounded optimistic arguments, cases and success-stories from such companies.

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