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Principles and Practice of Semantic Web Reasoning

Third International Workshop, PPSWR 2005
Dagstuhl Castle, Germany, September 11-16, 2005
Proceedings



Springer

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Library of Congress Control Number: 2005931600

CR Subject Classification (1998): H.4, H.3, I.2, F.4.1, D.2

ISSN 0302-9743

ISBN-10 3-540-28793-0 Springer Berlin Heidelberg New York

ISBN-13 978-3-540-28793-3 Springer Berlin Heidelberg New York

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© Springer-Verlag Berlin Heidelberg 2005

Printed in Germany

Typesetting: Camera-ready by author, data conversion by Scientific Publishing Services, Chennai, India

Printed on acid-free paper SPIN: 11552222 06/3142 5 4 3 2 1 0

Preface

The promise of the Semantic Web is to move from a Web of data to a Web of meaning and distributed services. This vision of the Web has attracted researchers from different horizons with the aims of defining new architectures and languages necessary to make it possible, and of developing the first applications of these concepts.

This book contains the articles selected for publication and presentation at the workshop “Principles and Practice of Semantic Web Reasoning” PPSWR 2005, together with three invited talks. Three major aspects of Semantic Web research are represented in this selection: architecture issues, language issues, and reasoning methods. These advances are investigated in the context of new design principles and challenging applications.

The PPSWR 2005 workshop was part of the Dagstuhl seminar on the Semantic Web organized by F. Bry (Univ. München, Germany), F. Fages (INRIA Rocquencourt, France), M. Marchiori (MIT, Cambridge, USA) and H.-J. Ohlbach (Univ. München, Germany), held in Dagstuhl, Germany, 11–16 September 2005. It was supported by the European Network of Excellence REWERSE (Reasoning on the Web with Rules and Semantics, <http://rewerse.net>). This four-year project includes 27 European research and development organizations, and is intended to bolster Europe’s expertise in Web reasoning systems and applications. It consists of eight main working groups: “Rule Markup Language”, “Policy Language, Enforcement, Composition”, “Composition and Typing”, “Reasoning-Aware Querying”, “Evolution”, “Time and Location”, “Adding Semantics to the Bioinformatics Web”, and “Personalized Information Systems”. The papers in this volume reflect most of the topics investigated in REWERSE; one third of them come from outside REWERSE.

July 2005

François Fages and Sylvain Soliman

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Table of Contents

Architectures

SomeWhere in the Semantic Web <i>P. Adjiman, P. Chatalic, F. Goasdoué, M.-C. Rousset, L. Simon</i>	1
A Framework for Aligning Ontologies <i>Patrick Lambrix, He Tan</i>	17
A Revised Architecture for Semantic Web Reasoning <i>Peter F. Patel-Schneider</i>	32
Semantic Web Architecture: Stack or Two Towers? <i>Ian Horrocks, Bijan Parsia, Peter Patel-Schneider, James Hendler</i>	37

Languages

Ten Theses on Logic Languages for the Semantic Web <i>François Bry, Massimo Marchiori</i>	42
Semantic and Computational Advantages of the Safe Integration of Ontologies and Rules <i>Riccardo Rosati</i>	50
Logical Reconstruction of RDF and Ontology Languages <i>Jos de Bruijn, Enrico Franconi, Sergio Tessaris</i>	65
Marriages of Convenience: Triples and Graphs, RDF and XML in Web Querying <i>Tim FURCHE, François Bry, Oliver Bolzer</i>	72
Descriptive Typing Rules for Xcerpt <i>Sacha Berger, Emmanuel Coquery, Włodzimierz Drabent, Artur Wilk</i>	85
A General Language for Evolution and Reactivity in the Semantic Web <i>José Júlio Alferes, Ricardo Amador, Wolfgang May</i>	101

Reasoning

Use Cases for Reasoning with Metadata or What Have Web Services to Do with Integrity Constraints? <i>Stefan Decker</i>	116
Principles of Inductive Reasoning on the Semantic Web: A Framework for Learning in \mathcal{AL} -Log <i>Francesca A. Lisi</i>	118
Computational Treatment of Temporal Notions: The CTTN-System <i>Hans Jürgen Ohlbach</i>	133
A Geospatial World Model for the Semantic Web – A Position Paper <i>François Bry, Bernhard Lorenz, Hans Jürgen Ohlbach, Mike Rosner</i>	145
Generating Contexts for Expression Data Using Pathway Queries <i>Florian Sohler</i>	160
Author Index	163