10th International Workshop on Scalable Semantic Web Knowledge Base Systems (SSWS 2014)

At the 13th International Semantic Web Conference (ISWC2014), Riva del Garda, Italy October, 2014

SSWS 2014 PC Co-chairs' Message

SSWS 2014 is the tenth edition of the successful Scalable Semantic Web Knowledge Base Systems workshop series. The workshop series is focussed on addressing scalability issues with respect to the development and deployment of knowledge base systems on the Semantic Web. Typically, such systems deal with information described in Semantic Web languages such as OWL and RDF(S), and provide services such as storing, reasoning, querying and debugging. There are two basic requirements for these systems. First, they have to satisfy the applications semantic requirements by providing sufficient reasoning support. Second, they must scale well in order to be of practical use. Given the sheer size and distributed nature of the Semantic Web, these requirements impose additional challenges beyond those addressed by earlier knowledge base systems. This workshop brought together researchers and practitioners to share their ideas regarding building and evaluating scalable knowledge base systems for the Semantic Web.

This year we received 9 submissions. Each paper was carefully evaluated by three workshop Program Committee members. Based on these reviews, we accepted 5 papers for presentation. We sincerely thank the authors for all the submissions and are grateful for the excellent work by the Program Committee members.

October 2014 Thorsten Liebig
Achille Fokoue

Program Committee

Mihaela Bornea

IBM Watson Research Center, USA

Oscar Corcho

Univ. Politecnica de Madrid, Spain

Mike Dean

Raytheon BBN Technologies, USA

Achille Fokoue

IBM Watson Research Center, USA

Jhonatan Garcia

University of Aberdeen, UK

Raúl García-Castro

Univ. Politecnica de Madrid, Spain

Volker Haarslev

Condordia University, Canada

Anastasios Kementsietsidis

Google Research, Mountain View, USA

Pavel Klinov

Ulm University, Germany

Adila A. Krisnadhi

Wright State University, Ohio, USA

Thorsten Liebig

derivo GmbH, Germany

Ralf Möller

Hamburg Univ. of Techn., Germany

Raghava Mutharaju

Wright State University, Ohio, USA

Jeff Z. Pan

University of Aberdeen, UK

Padmashree Ravindra

North Carolina State University, USA

Mariano Rodriguez-Muro

IBM Watson Research Center, USA

Pierpaolo Tommasi

IBM Research, Dublin, Ireland

Takahira Yamaguchi Keio University, Japan

Additional Reviewers

Yuan Ren

University of Aberdeen, UK

Jelena Vlasenko

Free University of Bozen-Bolzano, Italy

Table of Contents

Boris Motik Boris Motik	1
The NPD Benchmark for OBDA Systems	3
Scheduling for SPARQL Endpoints	19
Querying Distributed RDF Graphs: The Effects of Partitioning	29
A Distributed Query Execution Method for RDF Storage Managers	45
Distributed OWL EL Reasoning: The Story So Far	61