

**Proceedings of the  
Second International Workshop on  
Debugging Ontologies and  
Ontology Mappings - WoDOOM13**

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## Preface

Developing ontologies is not an easy task and, as the ontologies grow in size, they are likely to show a number of defects. Such ontologies, although often useful, also lead to problems when used in semantically-enabled applications. Wrong conclusions may be derived or valid conclusions may be missed. Defects in ontologies can take different forms. Syntactic defects are usually easy to find and to resolve. Defects regarding style include such things as unintended redundancy. More interesting and severe defects are the modeling defects which require domain knowledge to detect and resolve such as defects in the structure, and semantic defects such as unsatisfiable concepts and inconsistent ontologies. Further, during the recent years more and more mappings between ontologies with overlapping information have been generated, e.g. using ontology alignment systems, thereby connecting the ontologies in ontology networks. This has led to a new opportunity to deal with defects as the mappings and other ontologies in the network may be used in the debugging of a particular ontology in the network. It also has introduced a new difficulty as the mappings may not always be correct and need to be debugged themselves.

The WoDOOM series deals with these issues. This volume contains the proceedings of its second edition: WoDOOM13 - Second International Workshop on Debugging Ontologies and Ontology Mappings held on May 27, 2013 in Montpellier, France. WoDOOM13 was an ESWC 2013 (10th Extended Semantic Web Conference) workshop.

In his excellent invited talk, Heiner Stuckenschmidt proposed approaches for debugging weighted ontologies. In this generalization of the classical debugging problem, axioms in the ontology to be debugged have weights assigned and the task is to remove axioms from this set such that the resulting model is consistent and the sum of weights is maximal. Further, there were presentations of six full papers. The topics included both detection and repair of defects. Several papers used patterns for the detection. Regarding repairing wrong information, one paper proposed a method for reformulating axioms with the aim to retain as much information as possible. Another paper formalized the repairing of missing information in ontologies as a new abductive reasoning problem. Finally, a recently started EU project was presented in which ontology and mapping management is one of the core components. Two of the papers were selected for republication in the ESWC 2013 post-proceedings.

The editors would like to thank the Program Committee for their work in enabling the timely selection of papers for inclusion in the proceedings. We also appreciate our cooperation with EasyChair as well as our publisher CEUR Workshop Proceedings.

May 2013

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*Papers marked with (\*) were selected for republication in the ESWC 2013 post-proceedings.*