Overview of METHOD 2014: The 3rd International Workshop on Methods for Establishing Trust of (Open) Data

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1 Introduction

The METHOD workshop aims to bring together researchers working on the problem of trust and quality assessment of (open) data, and all components that contribute to this goal. It provides a forum for researchers from both the Semantic Web and the Trust Management community, with the goal of gaining new insights towards solutions for this complex problem. Due to the relatively low number of submissions, and to maximize the impact of the accepted papers, METHOD 2014 merged with the 10th International Workshop on Uncertainty Reasoning for the Semantic Web (URSW), as a special session. In this short editorial paper, we provide an overview of the topics discussed during this session.

Trust assessment of content on the Web is a highly complex concept that depends on objective as well as subjective criteria, including the content's provenance, data quality estimation, and also the consumer's background, personality, and context. However, the exact criteria and tolerances differ for each context and for each assessor, requiring detailed knowledge about the data and its uses. This also makes it very challenging to find generic solutions and assessments that are applicable everywhere or transferrable from one context to another. Therefore, stakeholders in this field are continuously investigating new techniques to handle and prepare data in such a way that it becomes easier for machines to process it with the goal of trust and/or quality assessment. The METHOD workshop is a venue for presenting and discussing novel research ideas in this field, as well as technical applications.

2014 is the third year for METHOD. The two previous editions were held in conjunction with the IEEE Annual International Computer Software & Applications Conference (COMPSAC). This year, the workshop is held for the first time at ISWC, since the topics of provenance, data quality, and trust are highly relevant to the Semantic Web community. The diversity in the ways that these topics may be approached is also visible judging from the subject of the submis-

sions we received. Although only three papers were accepted, each submission covers a distinctly different aspect of the general theme of the workshop.

2   Papers and Discussion Topics

This year's submissions cover the following aspects of trust of (open) data: content *rating*, data quality *rewarding*, data *attribution*, and trust *representation*.

The first two aspects are covered by Couto, who proposes a number of guidelines for a system that rates as well as rewards good practices in data sharing, by means of a virtual currency [1]. A large number of unsolved technical challenges are identified by this position paper, and some issues are left open, such as how to uniquely identify and attribute data to its creators. This is exactly what Höfig and Schieferdecker investigate, proposing a new hash function for RDF graphs [3]. The solution proposed in this research paper may contribute to a tamper-resistant way of attributing RDF data to its authors, allowing one to make claims about the data's trustworthiness. Of course, a representation for these trustworthiness assessments is needed. In the final position paper of our workshop, Ceolin et. al. propose an ontology to represent trust of web data, extending existing solutions [2].

Despite the diverse aspects discussed in the submissions, a number of common themes and open questions can be identified, listed below.

- What *incentive* is there for data creators to make their data trustworthy?
- Which *mechanisms* are in place to attribute data to its creators and editors, and do they suffice for our needs?
- How can we estimate *ratings or assessments* of data quality and trustworthiness?
- How would it be possible to allow the *reuse* of such trust and quality estimations?
- How do we *represent* the aforementioned aspects in an *interoperable* way?

These are the questions we hope to see addressed during the discussions at METHOD 2014, and in future editions of the workshop.

References

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