

# The Second International Workshop on the role of Semantic Web in Provenance Management

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## Introduction

The growing eScience infrastructure is enabling scientists to generate scientific data on an industrial scale. Similarly, using the Web as the platform, the Linked Open Data (LOD) initiative has created a vast amount of information that can be leveraged by Semantic Web application in a variety of real world scenarios. The importance of managing various forms of metadata has long been recognized as critical in the Semantic Web. In this workshop we focus specifically on metadata that describes the origins of the data. The term provenance from the French word "provenir", meaning "to come from", describes the lineage or origins of a data entity. Provenance metadata is essential to correctly interpret the results of a process execution, to validate data processing tools, to verify the quality of data, and to associate measures of trust to the data. The primary objective of this workshop is two-fold, (1) to explore the role of Semantic Web in addressing some of the critical challenges facing provenance management and (2) the role of provenance in real world Semantic Web applications. Specifically,

- Efficiently capturing and propagating provenance information as data is processed, fragmented and recombined across multiple applications on a Web scale, for example in the LOD cloud.
- A common representation model or vocabulary for provenance for processing and analysis by both agents and humans.
- Interoperability of provenance information generated in distributed environments.
- Tools leveraging the Semantic Web for visualization of provenance information.

We thank the keynote speakers, all members of the program committee, authors, invited speakers, participants and local organizers for their efforts.

We look forward to a successful workshop!

### Satya S. Sahoo, Jun Zhao, Paolo Missier, Jose Manuel Gómez-Pérez