The Web is a decentralized system full of information provided by diverse open sources of varying quality. For any given question there will be a multitude of answers offered, raising the need for assessing their relative value and for making decisions about what sources to trust. In order to make effective use of the Web, we routinely evaluate the information we get, the sources that provided it, and the processes that produced it. A trust layer was always present in the Web architecture, and Berners-Lee envisioned an “oh-yeah?” button in the browser to check the sources of an assertion. The Semantic Web raises these questions in the context of automated applications (e.g. reasoners, aggregators, or agents), whether trying to answer questions using the Linked Data cloud, use a mashup appropriately or determine trust on a social network. Therefore, provenance is an important aspect of the Web that becomes crucial in Semantic Web research.

This special issue on “Using Provenance in the Semantic Web” of the Journal of Web Semantics aims to collect representative research in handling provenance while using and reasoning about information and resources on the web. Provenance has been addressed in a variety of areas in computer science targeting specific contexts, such as databases and scientific workflows. Provenance is important in a variety of contexts, including open science, open government, and intellectual property and copyright. Provenance requirements must be understood for specific kinds of Web resources, such as documents, services, ontologies, workflows, and datasets.

We seek high quality submissions that describe recent projects, articulate research challenges, or put forward synergistic perspectives on provenance. We solicit submissions that advance the Semantic Web through exploiting provenance, addressing research issues including:

- representing provenance
- relating provenance to the underlying data and information
- managing provenance in a distributed web
- reasoning about trust based on provenance
- handling incomplete provenance
- taking advantage of the web’s structure for provenance

Submissions may focus on uses of provenance in the Semantic Web for:
• linked data
• social networking
• data integration
• inference from diverse sources
• trust and proof

Papers may also focus on application areas, highlighting the challenges and benefits of using provenance:
• provenance in open science
• provenance in open government
• provenance in copyright and intellectual property for documents
• provenance in web publishing

**Important Dates**

We will aim at an efficient publication cycle in order to guarantee prompt availability of the published results. We will review papers on a rolling basis as they are submitted and explicitly encourage submissions well before the submission deadline.

Submission deadline:        15 September 2010
Author notification:       15 December 2010
Revisions submitted:          1 February 2010
Final decisions:                 15 March 2011
Publication:                     1 April 2011

The submission site is [http://ees.elsevier.com/jws/default.asp](http://ees.elsevier.com/jws/default.asp).

**Submission guidelines**

The Journal of Web Semantics solicits original scientific contributions of high quality. Following the overall mission of the journal, we emphasize the publication of papers that combine theories, methods and experiments from different subject areas in order to deliver innovative semantic methods and applications. The publication of large-scale experiments and their analysis is also encouraged to clearly illustrate scenarios and methods that introduce semantics into existing Web interfaces, contents and services. Submission of your manuscript is welcome provided that it, or any translation of it, has not been copyrighted or published and is not being submitted for publication elsewhere. Upon acceptance of an article, the author(s) will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information. Manuscripts should be prepared for publication in accordance with instructions given in the "Guide for Authors" (available from the publisher), details can be found at: [http://www.elsevier.com/wps/find/journaldescription.cws_home/671322/authorinstructions](http://www.elsevier.com/wps/find/journaldescription.cws_home/671322/authorinstructions).
The submission and review process will be carried out using Elsevier's Web-based EES system available at http://ees.elsevier.com/jws/default.asp.

Final decisions of accepted papers will be approved by an editor in chief.

About the Journal of Web Semantics

The Journal of Web Semantics is published by Elsevier since 2003. It is an interdisciplinary journal based on research and applications of various subject areas that contribute to the development of a knowledge-intensive and intelligent service Web. These areas include: knowledge technologies, ontology, agents, databases and the semantic grid, obviously disciplines like information retrieval, language technology, human-computer interaction and knowledge discovery are of major relevance as well. All aspects of the Semantic Web development are covered.

Editors-in-Chief: Tim Finin, Riichiro Mizoguchi, Steffen Staab

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