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BOOK REVIEW

on

LINKED DATA – EVOLUVING THE WEB INTO A GLOBAL DATA SPACE
Tom Heath and Christian Bizer
Synthesis Lectures on *The Semantic Web: Theory and Technology*
James Hendler (Series Editor)

Morgan & Claypool Publishers, 2011
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Web Engineering has been described as encompassing those "technologies, methodologies, tools, and techniques used to develop and maintain Web-based applications leading to better systems, [thus to] enabling and improving the dissemination and use of content and services though the Web." (Source: International Conference on Web Engineering)

An especially interesting aspect of this description is "dissemination and use of content." Semantic Web technologies and particularly the Linked Data paradigm have evolved as powerful enablers for the transition of the current document-oriented Web into a Web of interlinked data/content and, ultimately, into the Semantic Web.

To facilitate this transition many aspects of distributed data and information management need to be adapted, advanced and integrated. Of particular importance are approaches for (1) extracting semantics from unstructured, semi-structured and existing structured sources, (2) management of large volumes of RDF data, (3) techniques for efficient automatic and semi-automatic data linking, (4) algorithms, tools, and inference techniques for repairing and enriching Linked Data with conceptual knowledge, (5) the collaborative authoring and creation of data on the Web, (6) the establishment of trust by preserving provenance and tracing lineage, (7) user-friendly means for browsing, exploration and search of large, federated Linked Data spaces. Particularly promising might be the synergistic combination of approaches and techniques touching upon several of these aspects at once.

For Web Engineering practitioners interested in being a part of this Web transition, *Linked Data – Evolving the Web into a Global Data Space* by Heath and Bizer will provide a valuable resource. The authors have done an excellent job of addressing the subject in a logical sequence of well-written chapters reflecting technical fundamentals, coverage of existing applications and tools, and the challenges for future development and research. The seven important approaches mentioned earlier are described in a consistent way and illustrated by means of a hypothetical scenario that evolves over the course of the book. The size of this book (122 pages) is deceiving in that it does not reflect the quality and density of its content. The authors have succeeded in presenting a complex topic both succinctly and clearly. It is not a "quick read," but rather a volume to be used for references, definitions, and meaningful and instructive code examples.

This book is available in digital format (PDF) at Link 1. It is the first in a planned series of books/lectures (see Link 2). The quality of this book should make the reader/practitioner look forward to the upcoming series volumes that promise to further explain the exciting future of this topic.

Link 1: http://www.morganclaypool.com/doi/abs/10.2200/S00334ED1V01Y201102WBE001
Link 2: http://www.morganclaypool.com/toc/wbe.1/1/1#lecturesUnderDevelopment

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