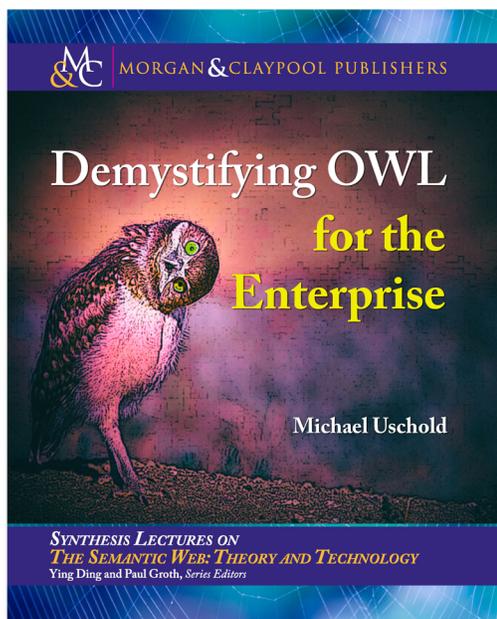▶ Speeding up the process of learning and mastering OWL by focusing on the 30% of OWL that is used 90% of the time. Illustrated and reinforced with real-world examples.

Demystifying OWL for the Enterprise

Michael Uschold, *Semantic Arts, Inc.*

After a slow incubation period of nearly fifteen years, a large and growing number of organizations now have one or more projects using the Semantic Web stack of technologies. The Web Ontology Language (OWL) is an essential ingredient in this stack, and the need for ontologists is increasing faster than the number and variety of available resources for learning OWL.

This is especially true for the primary target audience for this book: modelers who want to build OWL ontologies for practical use in enterprise and government settings. The purpose of this book is to speed up the process of learning and mastering OWL. To that end, the focus is on the 30% of OWL that gets used 90% of the time. Others who may benefit from this book include technically oriented managers, semantic technology developers, undergraduate and post-graduate students, and—finally—instructors looking for new ways to explain OWL. The book unfolds in a spiral manner, starting with the core ideas. Each subsequent cycle reinforces and expands on what has been learned in prior cycles and introduces new related ideas.

Part 1 is a cook's tour of ontology and OWL, giving an informal overview of what things need to be said to build an ontology, followed by a detailed look at how to say them in OWL. This is illustrated using a healthcare example. Part 1 concludes with an explanation of some foundational ideas about meaning and semantics to prepare the reader for subsequent chapters.

Part 2 goes into depth on properties and classes, which are the core of OWL. There are detailed descriptions of the main constructs that you are likely to need in everyday modeling, including what inferences are sanctioned. Each is illustrated with real-world examples.

Part 3 explains and illustrates how to put OWL into practice using examples in healthcare, collateral, and financial transactions. A small ontology is described for each, along with some key inferences. Key limitations of OWL are identified, along with possible workarounds. The final chapter gives a variety of practical tips and guidelines to send the reader on their way.

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