1. Record Nr. UNINA9910826925503321

Titolo	A Semantic Web primer / / Grigoris Antoniou ... [et al.]
Pubbl/distr/stampa	Cambridge, MA, : MIT Press, 2012
ISBN	0-262-30468-6 0-262-30561-5
Edizione	[3rd ed.]
Descrizione fisica	1 online resource (287 p.)
Collana	Cooperative information systems
Altri autori (Persone)	AntoniouG (Grigoris)
Disciplina	025.04/27
Soggetti	Semantic Web Semantic integration (Computer systems)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cover -- Title -- Copyright -- Contents -- List of Figures -- Series Foreword -- Chapter 1. The Semantic Web Vision -- 1.1 Introduction -- 1.2 Semantic Web Technologies -- 1.3 A Layered Approach -- 1.4 Book Overview -- 1.5 Summary -- Suggested Reading -- Chapter 2. Describing Web Resources: RDF -- 2.1 Introduction -- 2.2 RDF: Data Model -- 2.3 RDF Syntaxes -- 2.4 RDFS: Adding Semantics -- 2.5 RDF Schema: The Language -- 2.6 RDF and RDF Schema in RDF Schema -- 2.7 An Axiomatic Semantics for RDF and RDF Schema -- 2.8 A Direct Inference System for RDF and RDFS -- 2.9 Summary -- Suggested Reading -- Exercises and Projects -- Chapter 3. Querying the Semantic Web -- 3.1 SPARQL Infrastructure -- 3.2 Basics: Matching Patterns -- 3.3 Filters -- 3.4 Constructs for Dealing with an Open World -- 3.5 Organizing Result Sets -- 3.6 Other Forms of SPARQL Queries -- 3.7 Querying Schemas -- 3.8 Adding Information with SPARQL Update -- 3.9 The Follow Your Nose Principle -- 3.10 Summary -- Suggested Reading -- Exercises and Projects -- Chapter 4. Web Ontology Language: OWL2 -- 4.1 Introduction -- 4.2 Requirements for Ontology Languages -- 4.3 Compatibility of OWL2 with RDF/RDFS -- 4.4 The OWL Language -- 4.5 OWL2 Profiles -- 4.6 Summary -- Suggested Reading -- Exercises and Projects -- Chapter 5. Logic and Inference: Rules -- 5.1 Introduction -- 5.2 Example of Monotonic Rules: Family Relationships -- 5.3 Monotonic Rules: Syntax -- 5.4 Monotonic Rules:

Semantics -- 5.5 OWL2 RL: Description Logic Meets Rules -- 5.6 Rule Interchange Format: RIF -- 5.7 SemanticWeb Rules Language (SWRL) -- 5.8 Rules in SPARQL: SPIN -- 5.9 Nonmonotonic Rules: Motivation and Syntax -- 5.10 Example of Nonmonotonic Rules: Brokered Trade -- 5.11 Rule Markup Language (RuleML) -- 5.12 Summary -- Suggested Reading -- Exercises and Projects -- Chapter 6. Applications -- 6.1 GoodRelations.
6.2 BBC Artists -- 6.3 BBC World Cup 2010 Website -- 6.4 Government Data -- 6.5 New York Times -- 6.6 Sig.ma and Sindice -- 6.7 OpenCalais -- 6.8 Schema.org -- 6.9 Summary -- Chapter 7. Ontology Engineering -- 7.1 Introduction -- 7.2 Constructing Ontologies Manually -- 7.3 Reusing Existing Ontologies -- 7.4 Semiautomatic Ontology Acquisition -- 7.5 Ontology Mapping -- 7.6 Exposing Relational Databases -- 7.7 SemanticWeb Application Architecture -- Suggested Reading -- Exercises and Projects -- Chapter 8. Conclusion -- 8.1 Principles -- 8.2 Where Next? -- Appendix A. XML Basics -- Index.

Sommario/riassunto

A new edition of the widely used guide to the key ideas, languages, and technologies of the Semantic Web.