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Nota di contenuto	THE SEMANTIC WEB; Contents; Foreword; Preface; Part I Content Concepts; 1 Enhancing the Web; Chapter 1 at a Glance; There and Back Again; Resource Identifiers; Extending Web Functionality; From Flat Hyperlink Model; To Richer Informational Structures; The Collaboration Aspect; Extending the Content Model; Mapping the Infosphere; Well-Defined Semantic Models; 2 Defining the Semantic Web; Chapter 2 at a Glance; From Model to Reality; The Semantic Web Concept; Representational Models; The Road Map; Identity; Markup; Relationships; Reasoning; Agency on the Web; Semantic P2P; The Visual Tour The MapThe Architectural Goals; The Implementation Levels; 3 Web Information Management; Chapter 3 at a Glance; The Personal View; Creating and Using Content; Authoring; Publishing; Exporting Databases; Distribution; Searching and Sifting the Data; Semantic Web Services; Security and Trust Issues; XML Security; Trust; A Commercial or Free Web; 4 Semantic Web Collaboration and Agency; Chapter 4 at a Glance; Back to Basics; The Return of P2P; WebDAV; Peer Aspects; Peering the Data; Peering the Services; Edge Computing; Automation and Agency; Kinds of Agents; Multi-Agent Systems Part II Current Technology Overview5 Languages and Protocols; Chapter 5 at a Glance; Markup; The Bare Bones (HTML); Disentangling the Logic

(XHTML and XML); Emerging Special-Purpose Markup; Higher-Level Protocols; A Messaging Framework (SOAP versus REST); Expressing Assertions (RDF); The Graphical Approach; Exchanging Metadata (XMI); Applying Semantic Rules; RDF Query Languages; Multi-Agent Protocols; 6 Ontologies and the Semantic Web; Chapter 6 at a Glance; Ontology Defined; Ontologies for the Web; Ontology Types; Building Ontologies; Web Ontology Language, OWL; Other Web Ontology Efforts Knowledge Representation Conceptual Graphs; Promoting Topic Maps; Description Logics; 7 Organizations and Projects; Chapter 7 at a Glance; Major Players; W3C; Semantic Web Communities; Dublin Core Metadata Initiative; DARPA; EU-Chartered Initiatives; AIC at SRI; Bioscience Communities; Biopathways Consortium; 8 Application and Tools; Chapter 8 at a Glance; Web Annotation; The Annotea Project; Evaluating Web Annotation; Infrastructure Development; Develop and Deploy an RDF Infrastructure; Building Ontologies; Information Management; Haystack; Digital Libraries; Applying RDF Query Solutions Project Harmony DSpace; Simile; Web Syndication; RSS and Other Content Aggregators; Metadata Tools; Browsing and Authoring Tools; Metadata Gathering Tools; 9 Examples of Deployed Systems; Chapter 9 at a Glance; Application Examples; Retsina Semantic Web Calendar Agent; MusicBrainz and Freedb; Semantic Portals and Syndication; SUMO Ontology; Open Directory Project; Ontolingua; Industry Adoption; Adobe XMP; Sun Global Knowledge Engineering (GKE); Implemented Web Agents; Agent Environments; Intelligent Agent Platforms; Part III Future Potential; 10 The Next Steps; Chapter 10 at a Glance What Would It Be Like?

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## Sommario/riassunto

The Semantic Web is an idea of World Wide Web inventor Tim Berners-Lee that the Web as a whole can be made more intelligent and perhaps even intuitive about how to serve a users needs. Although search engines index much of the Web's content, they have little ability to select the pages that a user really wants or needs. Berners-Lee foresees a number of ways in which developers and authors, singly or in collaborations, can use self-descriptions and other techniques so that the context-understanding programs can selectively find what users want. The Semantic Web: Crafting Infrastructure for

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