Record Nr. UNINA9910777915603321 At your service: service-oriented computing from an EU perspective // **Titolo** edited by Elisabetta Di Nitto [and others] Pubbl/distr/stampa Cambridge, Mass., : MIT Press, ©2009 **ISBN** 0-262-25508-1 9786612240157 1-282-24015-3 Descrizione fisica 1 online resource (577 p.) Collana Cooperative information systems Altri autori (Persone) Di NittoElisabetta Disciplina 006.7/6 Soggetti Web services - Research - Europe Internetworking (Telecommunication) Application program interfaces (Computer software) Business enterprises - Computer networks Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Presents results of collaborative research projects of the European Community's Information Society Technologies Programme about service-oriented computing. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Contents; Foreword; Preface; 1 Introduction; 2 BIONETS; 3 Service Discovery in Pervasive Computing Environments; 4 Unified Discovery and Composition of Heterogeneous Services; 5 Compositional Service Engineering Using Semantic Interfaces; 6 Developing Self-Adaptive Mobile Applications and Services with Separation-of-Concerns; 7 Sensoria; 8 ASTRO; 9 WS-DIAMOND; 10 SeCSE-Service-centric System Engineering; 11 User-centric Service Creation and Execution; 12 INFRAWEBS; 13 Enabling Data, Information, and Process Integration with Semantic Web Services: 14 AMIGO 15 Security and Dependability in the Evolving Service-centric Architectures16 GridTrust; 17 Security-by-Contract (SDC) for Software and Services of Mobile Systems; 18 The ATHENA Framework for Cross-Organizational Business Processes; 19 Dependability in Service-Oriented Systems; 20 Consolidating Research Results; 21 S-Cube; About the Authors: Index

Service-Oriented Applications and Architectures (SOAs) have captured

Sommario/riassunto

the interest of industry as a way to support business-to-business interaction, and the SOA market grew by \$4.9 billion in 2005. SOAs and in particular service-oriented computing (SOC) represent a promising approach in the development of adaptive distributed systems. With SOC, applications can open themselves to services offered by third parties and accessed through standard, well-defined interfaces. The binding between the applications and the services can be, in this context, extremely loose--enabling the ad hoc creation of new services when the need arises. This book offers an overview of some current research in the field, presenting the results of eighteen research projects funded by the European Community's Information Society Technologies Program (IST). The projects, collaborations between industry and academia, have produced practical, achievable results that point the way to real-world applications and future research. The chapters address such issues as requirement analysis, design, governance, interoperability, and the dependability of systems made up of components owned by third parties. The results are presented in the context of two roadmaps for research, one developed by European industry involved in software development and the other by researchers working in the service area. The contributors report first on the "Infrastructure Layer," then (in the bulk of the book) on the "Service Integration Layer," the "Semantic Layer," and finally on the issues that cut across the different layers. The book concludes by looking at ongoing research on both roadmaps.