Record Nr. UNISA996465641703316 Architecting Dependable Systems VI [[electronic resource] /] / edited by **Titolo** Rogério de Lemos, Jean-Charles Fabre, Cristina Gacek, Fabio Gadducci, Maurice H. ter Beek Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-642-10248-4 Edizione [1st ed. 2009.] 1 online resource (XII, 335 p.) Descrizione fisica Programming and Software Engineering;; 5835 Collana 004.22 Disciplina Soggetti Software engineering Computer organization Special purpose computers Computer system failures Operating systems (Computers) Software Engineering/Programming and Operating Systems Software Engineering Computer Systems Organization and Communication Networks Special Purpose and Application-Based Systems System Performance and Evaluation **Operating Systems** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. Nota di contenuto 1. Dependable Service-Oriented Architectures -- A System of Architectural Patterns for Scalable, Consistent and Highly Available Multi-Tier Service-Oriented Infrastructures -- Towards Self-adaptation for Dependable Service-Oriented Systems -- Architecting Dependable Access Control Systems for Multi-domain Computing Environments --Soft Constraints for Dependable Service Oriented Architectures --Robustness Validation in Service-Oriented Architectures -- 2. Fault Tolerance and System Evaluation -- A Self-repair Architecture for Cluster Systems -- Handling Software Faults with Redundancy -- A Uniform Approach to Security and Fault-Tolerance Specification and

Analysis -- A Comprehensive Exploration of Challenges in

Architecture-Based Reliability Estimation -- 3. Architecting Security -- Weak Behavioral Equivalences for Verifying Secure and Performance-Aware Component-Based Systems -- Architecting Security with Paradigm -- Trust-Based and Context-Aware Authentication in a Software Architecture for Context and Proximity-Aware Services -- Compositional Verification of Architectural Refactorings.

Sommario/riassunto

As software systems become increasingly ubiquitous, issues of dependability become ever more crucial. Given that solutions to these issues must be considered from the very beginning of the design process, it is reasonable that dependability and security are addressed at the architectural level. This book has originated from an effort to bring together the research communities of software architectures, dependability and security. This state-of-the-art survey contains expanded and peer-reviewed papers based on the carefully selected contributions to two workshops: the Workshop on Architecting Dependable Systems (WADS 2008), organized at the 2008 International Conference on Dependable Systems and Networks (DSN 2008), held in Anchorage, Alaska, USA, in June 2008, and the Third International Workshop on Views On Designing Complex Architectures (VODCA 2008) held in Bertinoro, Italy, in August 2008. It also contains invited papers written by recognized experts in the area. The 13 papers are organized in topical sections on dependable service-oriented architectures, fault-tolerance and system evaluation, and architecting security.