Record Nr. UNINA9910143605103321 Performance Engineering: State of the Art and Current Trends // **Titolo** edited by Reiner Dumke, Claus Rautenstrauch, Andreas Schmietendorf, Andre Scholz Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-45156-0 Edizione [1st ed. 2001.] 1 online resource (XIV, 349 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743;; 2047 Collana 004.24 Disciplina Soggetti Computer system failures Software engineering Management information systems Computer science System Performance and Evaluation Software Engineering Management of Computing and Information Systems Lingua di pubblicazione Inglese Materiale a stampa **Formato** Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references at the end of each chapters and index. Nota di contenuto Relations between Software and Performance Engineering --Conception of a Web-Based SPE Development Infrastructure --Performance and Robustness Engineering and the Role of Automated Software Development -- Performance Engineering of Component-Based Distributed Software Systems -- Conflicts and Trade-Offs between Software Performance and Maintainability -- Performance Engineering on the Basis of Performance Service Levels -- Possibilities of Performance Modelling with UML -- Origins of Software Performance Engineering: Highlights and Outstanding Problems -- Performance Parameters and Context of Use -- Performance Modeling and Performance Measurement -- Using Load Dependent Servers to Reduce the Complexity of Large Client-Server Simulation Models --Performance Evaluation of Mobile Agents: Issues and Approaches --

UML-Based Performance Modeling Framework for Component-Based

Distributed Systems -- Scenario-Based Performance Evaluation of SDL/MSC-Specified Systems -- Characterization and Analysis of Software and Computer Systems with Uncertainties and Variabilities -- The Simalytic Modeling Technique -- Resource Function Capture for Performance Aspects of Software Components and Sub-systems -- Practical Experience -- Shared Memory Contention and Its Impact on Multiprocessor Call Control Throughput -- Performance and Scalability Models for a Hypergrowth e-Commerce Web Site -- Performance Testing for IP Services and Systems -- Performance Modelling of Interaction Protocols in Soft Real-Time Design Architectures -- A Performance Engineering Case Study: Software Retrieval System? -- Performance Management of SAP® Solutions.

Sommario/riassunto

Initially, computer systems performance analyses were carried out primarily because of limited resources. Due to ever increasing functional complexity of computational systems and user requirements, performance engineering continues to play a major role in software development. This book assesses the state of the art in performance engineering. Besides revised chapters drawn from two workshops on performance engineering held in 2000, additional chapters were solicited in order to provide complete coverage of all relevant aspects. The first part is devoted to the relation between software engineering and performance engineering; the second part focuses on the use of models, measures, and tools; finally, case studies with regard to concrete technologies are presented. Researchers, professional software engineers, and advanced students interested in performance analysis will find this book an indispensable source of information and reference.