Record Nr. UNINA9910144343603321 Middleware 2004: ACM/IFIP/USENIX International Middleware **Titolo** Conference, Toronto, Canada, October 18-20, 2004, Proceedings / / edited by Hans-Arno Jacobsen Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa **ISBN** 3-540-30229-8 Edizione [1st ed. 2004.] 1 online resource (XVI, 520 p.) Descrizione fisica Lecture Notes in Computer Science, , 0302-9743 ; ; 3231 Collana 005.3 Disciplina Soggetti Software engineering Computer programming Computer organization Computer communication systems Operating systems (Computers) Programming languages (Electronic computers) Software Engineering **Programming Techniques** Computer Systems Organization and Communication Networks Computer Communication Networks **Operating Systems** Programming Languages, Compilers, Interpreters 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 at the end of each chapters and index. Nota di contenuto Invited Paper -- Middleware and Web Services for the Collaborative Information Portal of NASA's Mars Exploration Rovers Mission -- Peerto-Peer Computing -- A Content Model for Evaluating Peer-to-Peer Searching Techniques -- Foreseer: A Novel, Locality-Aware Peer-to-Peer System Architecture for Keyword Searches -- Guiding Queries to Information Sources with InfoBeacons -- Routing Protocols and Overlays -- The Peer Sampling Service: Experimental Evaluation of Unstructured Gossip-Based Implementations -- Directed Flood-

Routing Framework for Wireless Sensor Networks -- On Exploring

Performance Optimizations in Web Service Composition -- iOverlay: A Lightweight Middleware Infrastructure for Overlay Application Implementations -- Middleware for Replication and Transactions --Ganymed: Scalable Replication for Transactional Web Applications --Adaptive Middleware for Data Replication -- Alternative Edge-Server Architectures for Enterprise JavaBeans Applications -- Transparent Information Dissemination -- Publish/Subscribe -- An Ontology-Based Publish/Subscribe System -- Meghdoot: Content-Based Publish/Subscribe over P2P Networks -- Subscription Propagation in Highly-Available Publish/Subscribe Middleware -- Web Services: Composition, Integration and Interoperability -- Composition of Coordinated Web Services -- Adaptive Resource Sharing in a Web Services Environment -- Interoperability Among Independently Evolving Web Services -- Middleware for Mobility -- SyD: A Middleware Testbed for Collaborative Applications over Small Heterogeneous Devices and Data Stores -- Dynamically Programmable and Reconfigurable Middleware Services -- MiddleWhere: A Middleware for Location Awareness in Ubiquitous Computing Applications -- A Game Theoretic Approach for Power Aware Middleware -- Application Servers, Enterprise Computing, and Software Engineering -- Extending a J2EETM Server with Dynamic and Flexible Resource Management -- Developing and Managing Software Components in an Ontology-Based Application Server -- Portable and Efficient Distributed Threads for Java -- Platform Independent Model Transformation Based on Triple.

Sommario/riassunto

Middleware systems comprise programming models, abstractions, protocols, and services to facilitate the design, the development, the integration, and the - ployment of distributed applications in heterogeneous computing environments. Conceptually, the term "middleware" refers to a layer of software above the networking substrate and the operating system and below the (distributed) application. In practice these boundaries are not clear cut, with middleware functionality moving into and out of these layers. Remote communication, p- lish/subscribe, messaging, and (distributed) transaction constitute examples of common middleware abstractions and services. Middleware researchencompasses, builds on and extends a wide spectrum of concepts, techniques and ideas from a broad range of ?elds, including progr- ming languages, distributed systems, operating systems, networking, and data management. Following the success of the past conferences in this series in the Lake D- trict, UK (1998), in Palisades, NY (2000), in Heidelberg, Germany (2001), and in Rio de Janeiro, Brazil (2003), the 5th International Middleware Conference in Toronto, Canada aimed to be the premier conference for middleware research and technology in 2004. The broad scope of the conference included the design, the implementation, the deployment, and the evaluation of distributed systems platforms and architectures for emerging computing environments. The conf- ence gave an overview of research on middleware for peer-to-peer computing, middleware for mobility, middleware for replication and transactions. on p- lish/subscribesystems, on routing protocols and overlay networks, onapplication servers, resource management, and software engineering, and on Web services. This year, the technical program of Middleware drew from 194 submitted papers, among which 13 were explicitly submitted as work-in-progress papers.