

Lecture Notes in Computer Science

Edited by G. Goos, J. Hartmanis, and J. van Leeuwen

2672

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Middleware 2003

ACM/IFIP/USENIX International Middleware Conference
Rio de Janeiro, Brazil, June 16-20, 2003
Proceedings



Springer

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Cataloging-in-Publication Data applied for

A catalog record for this book is available from the Library of Congress.

Bibliographic information published by Die Deutsche Bibliothek
Die Deutsche Bibliothek lists this publication in the Deutsche Nationalbibliografie;
detailed bibliographic data is available in the Internet at <<http://dnb.ddb.de>>.

CR Subject Classification (1998): C.2.4, D.4, C.2, D.1.3, D.3.2, D.2

ISSN 0302-9743

ISBN 3-540-40317-5 Springer-Verlag Berlin Heidelberg New York

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Springer-Verlag Berlin Heidelberg New York
a member of BertelsmannSpringer Science+Business Media GmbH

<http://www.springer.de>

©IFIP International Federation for Information Processing, Hofstraße 3, A-2361 Laxenburg, Austria 2003
Printed in Germany

Typesetting: Camera-ready by author, data conversion by Olgun Computergrafik
Printed on acid-free paper SPIN: 10927472 06/3142 5 4 3 2 1 0

Preface

Next-generation distributed applications and systems are increasingly developed using middleware. This dependency poses hard R&D challenges, including latency hiding, masking partial failure, information assurance and security, legacy integration, dynamic service partitioning and load balancing, and end-to-end quality of service specification and enforcement. To address these challenges, researchers and practitioners must discover and validate techniques, patterns, and optimizations for middleware frameworks, multi-level distributed resource management, and adaptive and reflective middleware architectures.

Following the success of the past IFIP/ACM Middleware conferences (Lake District/UK, Palisades/USA, and Heidelberg/Germany) and building upon the success of past USENIX COOTS conferences, the Middleware 2003 conference is the premier international event for middleware research and technology. The scope of the conference is the design, implementation, deployment, and evaluation of distributed system platforms, architectures, and applications for future computing and communication environments.

This year, we had a record of 158 submissions, among which the top 25 papers were selected for inclusion in the technical program of the conference. All papers were evaluated by at least three reviewers with respect to their originality, technical merit, presentation quality, and relevance to the conference themes. The selected papers present the latest results and breakthroughs on middleware research in areas including peer-to-peer computing, publish-subscriber architectures, component- and Web-based middleware, mobile systems, and adaptive computing.

We would like to express our thanks to the authors of the submitted papers and to all the reviewers and program committee members for their efforts in reviewing a large number of papers in a relatively short time. We would also like to thank ACM, IFIP, USENIX, and the corporate sponsors for their technical sponsorship and financial support, respectively. Finally, special thanks go to Alexandre Sztajnberg, Renato Cerqueira, Fabio Kon, and Fabio M. Costa and all the other organizing committee members for their hard work and efforts to bring Middleware 2003 to Brazil and make it a successful conference.

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Table of Contents

Peer-to-Peer Computing

Approximate Object Location and Spam Filtering on Peer-to-Peer Systems	1
<i>Feng Zhou, Li Zhuang, Ben Y. Zhao, Ling Huang, Anthony D. Joseph, and John Kubiatawicz</i>	
Efficient Peer-to-Peer Keyword Searching	21
<i>Patrick Reynolds and Amin Vahdat</i>	
NaradaBrokering: A Distributed Middleware Framework and Architecture for Enabling Durable Peer-to-Peer Grids	41
<i>Shrideep Pallickara and Geoffrey Fox</i>	

Publish-Subscribe Middleware I

A Framework for Event Composition in Distributed Systems	62
<i>Peter R. Pietzuch, Brian Shand, and Jean Bacon</i>	
Content Distribution for Publish/Subscribe Services	83
<i>Mao Chen, Andrea LaPaugh, and Jaswinder Pal Singh</i>	
Supporting Mobility in Content-Based Publish/Subscribe Middleware	103
<i>Ludger Fiege, Felix C. Gärtner, Oliver Kasten, and Andreas Zeidler</i>	

Adaptability and Context-Awareness

Fine-Grained Dynamic Adaptation of Distributed Components	123
<i>Frédéric Peschanski, Jean-Pierre Briot, and Akinori Yonezawa</i>	
A Middleware for Context-Aware Agents in Ubiquitous Computing Environments	143
<i>Anand Ranganathan and Roy H. Campbell</i>	
Adaptable Architectural Middleware for Programming-in-the-Small-and-Many	162
<i>Marija Mikic-Rakic and Nenad Medvidovic</i>	

Publish-Subscribe Middleware II

Opportunistic Channels: Mobility-Aware Event Delivery	182
<i>Yuan Chen, Karsten Schwan, and Dong Zhou</i>	

Congestion Control in a Reliable Scalable Message-Oriented Middleware . .	202
<i>Peter R. Pietzuch and Sumeer Bhola</i>	

On Shouting “Fire!”: Regulating Decoupled Communication in Distributed Systems	222
<i>Takahiro Murata and Naftaly H. Minsky</i>	

Web-Based Middleware

Performance Comparison of Middleware Architectures for Generating Dynamic Web Content	242
<i>Emmanuel Cecchet, Anupam Chanda, Sameh Elnikety, Julie Marguerite, and Willy Zwaenepoel</i>	

Prefetching Based on Web Usage Mining	262
<i>Daby M. Sow, David P. Olshefski, Mandis Beigi, and Guruduth Banavar</i>	

Distributed Versioning: Consistent Replication for Scaling Back-End Databases of Dynamic Content Web Sites	282
<i>Cristiana Amza, Alan L. Cox, and Willy Zwaenepoel</i>	

Component-Based Middleware

Abstraction of Transaction Demarcation in Component-Oriented Platforms	305
<i>Romain Rouvoy and Philippe Merle</i>	

Optimising Java RMI Programs by Communication Restructuring	324
<i>Kwok Cheung Yeung and Paul H. J. Kelly</i>	

The JBoss Extensible Server	344
<i>Marc Fleury and Francisco Reverbel</i>	

Next Generation Middleware

Flexible and Adaptive QoS Control for Distributed Real-Time and Embedded Middleware	374
<i>Richard E. Schantz, Joseph P. Loyall, Craig Rodrigues, Douglas C. Schmidt, Yamuna Krishnamurthy, and Irfan Pyarali</i>	

Large-Scale Service Overlay Networking with Distance-Based Clustering . .	394
<i>Jingwen Jin and Klara Nahrstedt</i>	

A Step Towards a New Generation of Group Communication Systems . . .	414
<i>Sergio Mena, André Schiper, and Paweł Wojciechowski</i>	

Mobile and Ubiquitous Computing

A Middleware-Based Application Framework for Active Space Applications.....	433
<i>Manuel Román and Roy H. Campbell</i>	
A Proactive Middleware Platform for Mobile Computing.....	455
<i>Andrei Popovici, Andreas Frei, and Gustavo Alonso</i>	
A Flexible Middleware System for Wireless Sensor Networks	474
<i>Flávia Coimbra Delicato, Paulo F. Pires, Luci Pirmez, and Luiz Fernando Rust da Costa Carmo</i>	
A Middleware Service for Mobile Ad Hoc Data Sharing, Enhancing Data Availability	493
<i>Malika Boulkenafed and Valérie Issarny</i>	
Author Index	513