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Preface

This volume contains the *Proceedings of the Fourth International Conference on Coordination Models and Languages, Coordination 2000*. It was held in the wake of three successful earlier conferences whose proceedings were also published in this series, in volumes 1061, 1282 and 1594. The need for increased programmer productivity and rapid development of complex systems provides pragmatic motivation for the development of coordination languages and models. The intellectual excitement associated with such endeavors is rooted in the decades-old desire to cope with increasingly higher levels of abstraction. Coordination-based methods provide a clean separation between individual software components and their interactions within the overall software organization. This separation promises to make application development more tractable, to support global analysis, and to enhance software reuse. These are indeed major concerns in the information age, at a time when all aspects of society are relying, to an ever increasing degree, on software systems of unprecedented complexity. Research on coordination methods is likely to play a central role in addressing these technological concerns by changing the software culture around us and by leading to the development of effective technical solutions for a broad range of important problems.

Following a tradition of careful selection of high-quality contributions, 18 regular papers were chosen out of 52 submissions. Another nine were selected for presentation as short papers. The papers included in this volume reflect some of the new directions coordination research is pursuing (e.g., mobility, coordination styles, open systems, etc.) as well as continued study of established problem areas (e.g., semantic models, software architecture, dependability, etc.). The volume exhibits intellectual breadth, a great deal of diversity in views and pursuits, but also a surprising degree of cohesion. This enabled us to group papers by subject matter into sessions that are reflected in the organization of this volume. It is our hope that these papers will become a useful reference for many researchers worldwide and will stimulate further advances in coordination-centered technologies, methods, and formal studies.

The conference and this volume would not have been possible without the intellectual contributions of all the authors, the advice and careful reviews by members of the program committee, and the additional referees who helped us complete the paper evaluations. Special thanks go to Amy L. Murphy for helping with the administration of the submission and review process and to George Papadopoulos for chairing the local organization in Cyprus. Finally, we acknowledge the support from the University of Cyprus and the sponsorship and support from the Esprit Working Group 24512 “Coordina”.

July 2000

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Table of Contents

Regular Papers

Coordination Styles and Trends

OpenSpaces: An Object-Oriented Framework for Reconfigurable Coordination Spaces	1
<i>S. Ducasse, T. Hofmann, and O. Nierstrasz</i>	
Scripting Coordination Styles	19
<i>F. Achermann, S. Kneubuehl, and O. Nierstrasz</i>	
Coordination Technology for Workflows on the Web: Workspaces	36
<i>R. Tolksdorf</i>	

Tuple Space Semantics and Implementation

A Principled Semantics for <code>inp</code>	51
<i>J.L. Jacob and A.M. Wood</i>	
Proving the Correctness of Optimising Destructive and Non-destructive Reads over Tuple Spaces	66
<i>R. De Nicola, R. Pugliese, and A. Rowstron</i>	
On Timed Coordination Languages	81
<i>J.-M. Jacquet, K. De Bosschere, and A. Brogi</i>	

Coordination Policies

Coordination and Access Control in Open Distributed Agent Systems: The TuCSoN Approach	99
<i>M. Cremonini, A. Omicini, and F. Zambonelli</i>	
Distributed Splitting of Constraint Satisfaction Problems	115
<i>F. Arbab and E. Monfroy</i>	
Law-Governed Internet Communities	133
<i>X. Ao, N. Minsky, T.D. Nguyen, and V. Ungureanu</i>	

Dynamics of Coordination

Reconfiguration of Software Architecture Styles with Name Mobility	148
<i>D. Hirsch, P. Inverardi, and U. Montanari</i>	

An Agent Mediated Approach to Dynamic Change in Coordination Policies	164
<i>P. Bose and M.G. Matthews</i>	

Coordination Models for Dynamic Resource Allocation	182
<i>S. Johansson, P. Davidsson, and B. Carlsson</i>	

Mobility

MobileML: A Programming Language for Mobile Computation	198
<i>M. Hashimoto and A. Yonezawa</i>	

Hybrid Models for Mobile Computing	216
<i>M. Katara</i>	

Mobile Agents Coordination in Mob _{adtl}	232
<i>G. Ferrari, C. Montangero, L. Semini, and S. Semprini</i>	

Semantic Models

A Logical Interface Description Language for Components	249
<i>F. Arbab, F.S. de Boer, and M.M. Bonsangue</i>	

A Formalization of the IWIM Model	267
<i>P. Katis, N. Sabadini, and R.F.C. Walters</i>	

GCCS: A Graphical Coordination Language for System Specification	284
<i>R. Cleaveland, X. Du, and S.A. Smolka</i>	

Short papers

Shifting Linda Perspectives

A Timed Linda Language	299
<i>F.S. de Boer, M. Gabbrielli and M.C. Meo</i>	

The LuCe Coordination Technology for MAS Design and Development on the Internet	305
<i>E. Denti, A. Omicini, and V. Toschi</i>	

Scoped Coordination in Open Distributed Systems	311
<i>I. Merrick and A. Wood</i>	

Directions in Software Architecture

Patterns for Coordination	317
<i>L.F. Andrade, J.L. Fiadeiro, J. Gouveia, A. Lopes, and M. Wermelinger</i>	

Coordination Models and Software Architectures in a Unified Software Development Process	323
<i>P. Inverardi and H. Muccini</i>	
Wilde: Supporting Change in Groupware	329
<i>S. Barrett and B. Tangney</i>	
Achieving Software Dependability	
On the Verification of Coordination	335
<i>P. Dechering and I. van Langevelde</i>	
Guaranteeing Coherent Software Systems when Composing Coordinated Components	341
<i>M. Sánchez, J.L. Herrero, J.M. Murillo, and J. Hernández</i>	
Coordination-Based Design of Distributed Systems	347
<i>J.N. Kok and K. Sere</i>	
Author Index	353