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Transactions and Database Dynamics

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Selected Papers

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Preface

These post-proceedings contain the revised versions of the accepted papers of the international workshop "*Transactions and Database Dynamics*", which was the eighth workshop in a series focusing on foundations of models and languages for data and objects (FoMLaDO).

Seven long papers and three short papers were accepted for inclusion in the proceedings. The papers address various issues of transactions and database dynamics:

- criteria and protocols for global snapshot isolation in federated transaction management,
- unified theory of concurrency control and replication control,
- specification of evolving information systems,
- inheritance mechanisms for deductive object databases with updates,
- specification of active rules for maintaining database consistency,
- integrity checking in subtransactions,
- open nested transactions for multi-tier architectures,
- declarative specification of transactions with static and dynamic integrity constraints,
- logic-based specification of update queries as open nested transactions, and
- execution guarantees and transactional processes in electronic commerce payments.

In addition to the regular papers, there are papers resulting from two working groups. The first working group paper discusses the basis for transactional computation. In particular, it addresses the specification of transactional software. The second working group paper focuses on transactions in electronic commerce applications. Among others, Internet transactions, payment protocols, and concurrency control and persistence mechanisms are discussed.

Moreover, there is an invited paper by Jari Veijalainen which discusses transactional aspects in mobile electronic commerce.

Acknowledgments: We are grateful to the members of the program committee and others who have reviewed the submitted papers. We are also thankful to all authors who have submitted papers to this workshop. Finally, we thank all participants of the workshop for the lively discussions.

December 1999

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