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On the Move to Meaningful Internet Systems: OTM 2009

Confederated International Conferences
CoopIS, DOA, IS, and ODBASE 2009
Vilamoura, Portugal, November 1-6, 2009
Proceedings, Part I

Volume Editors

Robert Meersman

Vrije Universiteit Brussel (VUB), STARLab
Bldg G/10, Pleinlaan 2, 1050 Brussel, Belgium
E-mail: meersman@vub.ac.be

Tharam Dillon

Curtin University of Technology, DEBII - CBS
De Laeter Way, Bentley, WA 6102, Australia
E-mail: t.dillon@curtin.edu.au

Pilar Herrero

Universidad Politécnica de Madrid, Facultad de Informática
Campus de Montegancedo S/N, 28660 Boadilla del Monte, Madrid, Spain
E-mail: pherrero@fi.upm.es

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Robert Meersman
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Ted Goranson
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Maira C. Norrie

DOA 2009

Mark Little
Jean-Jacques Dubray
Fabio Panizeri

IS 2009

Stefanos Gritzalis
Xueqi Cheng

ODBASE 2009

Avigdor Gal
Annika Hinze
Sharma Chakravarthy

General Co-chairs' Message for OTM 2009

The OnTheMove 2009 event in Vilamoura, Portugal on 1-5 November, further consolidated the growth of the conference series that was started in Irvine, California in 2002, and held in Catania, Sicily in 2003, in Cyprus in 2004 and 2005, in Montpellier in 2006, a first time in Vilamoura in 2007, and in Monterrey Mexico in 2008. The event continues to attract a diversified and representative selection of today's worldwide research on the scientific concepts underlying new computing paradigms, which, of necessity, must be distributed, heterogeneous and autonomous yet meaningfully collaborative. Indeed, as such large, complex and networked intelligent information systems become the focus and norm for computing, there continues to be an acute and even increasing need to address and discuss face to face in an integrated forum the implied software, system and enterprise issues as well as methodological, semantical, theoretical and applicational issues. As we all know, email, the Internet, and even video conferences are not sufficient for effective and efficient scientific exchange.

The OnTheMove (OTM) Federated Conferences series has been created to cover the scientific exchange needs of the community/ies that work in the broad yet closely connected fundamental technological spectrum of Web-based distributed computing. The OTM program every year covers data and Web semantics, distributed objects, Web services, databases, information systems, enterprise workflow and collaboration, ubiquity, interoperability, mobility, grid and high-performance computing.

OnTheMove aspires to be a primary scientific meeting place where all aspects of the development of such Internet- and Intranet-based systems in organizations and for e-business are discussed in a scientifically motivated way. This eighth edition of the OTM Federated Conferences event again provided an opportunity for researchers and practitioners to understand and publish these developments within their individual as well as within their broader contexts. Originally the federative structure of OTM was formed by the co-location of three related, complementary and successful main conference series: DOA (Distributed Objects and Applications, since 1999), covering the relevant infrastructure-enabling technologies, ODBASE (Ontologies, DataBases and Applications of SEmantics, since 2002) covering Web semantics, XML databases and ontologies, and CoopIS (Cooperative Information Systems, since 1993) covering the application of these technologies in an enterprise context through, e.g., workflow systems and knowledge management, and in 2007 IS was added (Information Security). In 2006 GADA (Grid computing, high-performAnce and Distributed Applications) was added to this as a main symposium but unfortunately this year attracted too few submissions to guarantee both representativity and quality; a new GADA edition is, however, planned for 2010. Both IS and GADA started as successful workshops at OTM, the first covering the issues of security in complex

Internet-based information systems, the second covering the large-scale integration of heterogeneous computing systems and data resources with the aim of providing a global computing space.

Each of these four conferences encourages researchers to treat their respective topics within a framework that incorporates jointly (a) theory, (b) conceptual design and development, and (c) applications, in particular case studies and industrial solutions.

Following and expanding the model created in 2003, we again solicited and selected quality workshop proposals to complement the more "archival" nature of the main conferences with research results in a number of selected and more "avant-garde" areas related to the general topic of Web-based distributed computing. For instance, the so-called Semantic Web has given rise to several novel research areas combining linguistics, information systems technology, and artificial intelligence, such as the modeling of (legal) regulatory systems and the ubiquitous nature of their usage. We were glad to see that ten of our earlier successful workshops (ADI, CAMS, EI2N, SWWS, ORM, OnToContent, MONET, SEMELS, COMBEK, IWSSA) re-appeared in 2008 with a second, third or even fifth edition, sometimes by alliance with other newly emerging workshops, and that no fewer than three brand-new independent workshops could be selected from proposals and hosted: ISDE, ODIS and Beyond SAWSDL. Workshop audiences productively mingled with each other and with those of the main conferences, and there was considerable overlap in authors.

We were also happy to see that in 2009 the number of quality submissions for the OnTheMove Academy (OTMA, formerly called Doctoral Consortium Workshop), our "vision for the future" in research in the areas covered by OTM, took off again. We must thank the new OTMA Dean, Erich Neuhold, and his team of collaborators led by Peter Spyns and Anja Schanzenberger, for their gallant efforts in implementing our interactive formula to bring PhD students together: research proposals are submitted for evaluation; selected submissions and their approaches are (eventually) presented by the students in front of a wider audience at the conference, and intended to be independently and extensively analyzed and discussed in public by a panel of senior professors.

As said, all four main conferences and the associated workshops shared the distributed aspects of modern computing systems, and the resulting application-pull created by the Internet and the so-called SemanticWeb. For DOA 2009, the primary emphasis stayed on the distributed object infrastructure; for ODBASE 2009, it became the knowledge bases and methods required for enabling the use of formal semantics; for CoopIS 2009, the focus as usual was on the interaction of such technologies and methods with management issues, such as occur in networked organizations, and for IS 2008 the emphasis was on information security in the networked society. These subject areas overlap in a scientifically natural fashion and many submissions in fact also treated an envisaged mutual impact among them. As for the earlier editions, the organizers wanted to stimulate this cross-pollination by a "shared" program of famous keynote speakers: this year we were proud to announce Wolfgang Prinz in Computing Science at the

University of Bonn, Santosh Shrivastava in Computing Science at the University of Newcastle upon Tyne, Kai Hwang in Electrical Engineering and Computer Science and Director of Internet and Cloud Computing Lab at the University of Southern California (USC) and last but not least Alejandro Buchmann of the Department of Computer Science at Technische Universität Darmstadt where he heads the Databases and Distributed Systems Group.

The registration fee structure again wanted to strongly encourage multiple event attendance by providing *all* main conference authors with free access or discounts to *all* other conferences and workshops (workshop authors paid a small extra fee to attend the main conferences).

We received a total of 234 submissions for the four main conferences and 131 submissions in total for the workshops. The numbers are about 25% lower than for 2008, not unexpected because of the prevailing economic climate. But, not only may we indeed again claim success in attracting an increasingly representative volume of scientific papers, many from the USA, Central and South America, but these numbers of course allow the Program Committees to compose a high-quality cross-section of current research in the areas covered by OTM. In fact, in spite of the number of submissions, the Program Chairs of each of the three main conferences decided to accept only approximately the same number of papers for presentation and publication as in 2007 and 2008 (i.e., average 1 paper out of 3-4 submitted, not counting posters). For the workshops, the acceptance rate varies but the aim was to stay as strict as before, consistently about 1 accepted paper for 2-3 submitted. We have separated the proceedings into three books with their own titles, two for the main conferences and one for the workshops, and we are grateful to Springer for their suggestions and collaboration in producing these books and USB sticks. The reviewing process by the respective Program Committees was again performed very professionally, and each paper in the main conferences was reviewed by at least three referees, with arbitrated email discussions in the case of strongly diverging evaluations. It may be worthwhile emphasizing that it is an explicit OnTheMove policy that all conference Program Committees and Chairs make their selections completely autonomously from the OTM organization itself. The OnTheMove Federated Event organizers again made all proceedings available on a CDROM to all participants of the conferences and workshops, independently of their registration to a specific conference or workshop. Paper proceedings were on request this year, and incurred an extra charge.

The General Chairs are once more especially grateful to the many people directly or indirectly involved in the setup of these federated conferences. Few people realize what a large number of people have to be involved, and what a huge amount of work, and in 2009 certainly also financial risk, the organization of an event like OTM entails. Apart from the persons in their roles mentioned above, we therefore wish to thank in particular our 17 main conference PC Co-chairs: DOA 2009: Mark Little, Jean-Jacques Dubray, Fabio Panizeri, ODBASE 2009: Avigdor Gal, Annika Hinze, Sharma Chakravarthy, CoopIS 2009: Ted Goranson, Hai Zhuge, Moira C. Norrie, IS 2009: Gritzalis Stefanos, Xueqi Cheng; and

the Workshop PC Co-chairs: Stefan Jablonski, Olivier Curé, Christoph Busler, Annika Hinze, George Buchanan, Hervé Panetto, Ricardo Goncalves, Peter Bernus, Ted Goranson, Alok Mishra, Deepti Mishra, Ozlem Albayrak, Lawrence Chung, Nary Subramanian, Manuel Noguera, José Luis Garrido, Patrizia Grifoni, Fernando Ferri, Irina Kondratova, Arianna D’Ulizia, Paolo Ceravolo, Mustafa Jarrar, Andreas Schmidt, Matt-Mouley Bouamrane, Christophe Gravier, Frederic Cuppens, Jacques Fayolle, Simon Harper, Saturnino Luz, Masood Masoodian, Terry Halpin, Herman Balsters, Tharam S. Dillon, Ernesto Damiani, Elizabeth Chang, Chen Wu, Amandeep Sidhu, Jaipal Singh, Jacek Kopecky, Carlos Pedrinaci, Karthik Gomadam, Maria Maleshkova, Reto Krummenacher, Elena Simperl, Françoise Baude, Philippe Merle, Ramonville Saint-Agne, Pieter De Leenheer, Martin Hepp, Amit Sheth, Peter Spyns, Erich J. Neuhold and Anja Schanzenberger.

All, together with their many PC members, performed a superb and professional job in selecting the best papers from the harvest of submissions. We are all grateful to Ana Cecilia Martinez-Barbosa and to our extremely competent and experienced Conference Secretariat and technical support staff in Antwerp, Daniel Meersman, Ana-Cecilia (again), and Jan Demey, and last but not least to our two editorial teams, one in Perth (DEBII-Curtin University) and one in Madrid (Quoriam Ingenieros).

The General Chairs gratefully acknowledge the academic freedom, logistic support and facilities they enjoy from their respective institutions, Vrije Universiteit Brussel (VUB), Curtin University, Perth Australia, and Universidad Politécnica de Madrid (UPM), without which such an enterprise would not be feasible. We do hope that the results of this federated scientific enterprise contribute to your research and your place in the scientific network... We look forward to seeing you again at next year’s event!

August 2009

Robert Meersman
Tharam Dillon
Pilar Herrero

Organization

OTM (On The Move) is a federated event involving a series of major international conferences and workshops. These proceedings contain the papers presented at the OTM 2009 Federated conferences, consisting of four conferences, namely CoopIS 2009 (Cooperative Information Systems), DOA 2009 (Distributed Objects and Applications), IS 2009 (Information Security) and ODBASE 2009 (Ontologies, Databases and Applications of Semantics).

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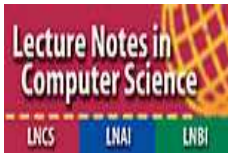


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