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# On the Move to Meaningful Internet Systems 2006: OTM 2006 Workshops

OTM Confederated International Workshops and Posters
AWeSOMe, CAMS, COMINF, IS, KSinBIT, MIOS-CIAO, MONET,
OnToContent, ORM, PerSys, OTM Academy Doctoral Consortium,
RDDS, SWWS, and SeBGIS 2006
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2 Part II


Springer

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# On the Move to Meaningful Internet Systems 2006: OTM 2006 Workshops

Springer

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# OTM 2006 General Co-chairs' Message

Dear OnTheMove Participant or Reader of these Proceedings,

The General Chairs of OnTheMove 2006, Montpellier, France, are happy to observe that the conference series that was started in Irvine, California in 2002 and subsequently held in Catania, Sicily in 2003 and in Cyprus in 2004 and 2005 clearly continues to attract a growing representative selection of today's worldwide research on the scientific concepts underlying distributed, heterogeneous and autonomous yet meaningfully collaborative computing, with the Internet and the WWW as its prime epitomes.

Indeed, as such large, complex and networked intelligent information systems become the focus and norm for computing, it is clear that there is an acute and increasing need to address and discuss in an integrated forum the implied software and system issues as well as methodological, theoretical and application issues. As we all know, e-mail, the Internet, and even video conferences are not sufficient for effective and efficient scientific exchange. This is why the OnTheMove (OTM) Federated Conferences series has been created to cover the increasingly wide yet closely connected range of fundamental technologies such as data and Web semantics, distributed objects, Web services, databases, information systems, workflow, cooperation, ubiquity, interoperability, mobility, grid and high-performance. OnTheMove aspires to be a primary scientific meeting place where all aspects of the development of Internet- and Intranet-based systems in organizations and for e-business are discussed in a scientifically motivated way. This fifth 2006 edition of the OTM Federated Conferences event therefore again provided an opportunity for researchers and practitioners to understand and publish these developments within their individual as well as within their broader contexts.

The backbone of OTM was originally 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, CoopIS (Cooperative Information Systems, since 1993) covering the application of these technologies in an enterprise context through, for example, workflow systems and knowledge management. For the 2006 edition, these were strengthened by a fourth conference, GADA (Grid computing, high-performAnce and Distributed Applications, a successful workshop at OTM since 2004), 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 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 several earlier successful workshops (notably WOSE, MIOS-INTEROP, AweSOMe, CAMS, SWWS, SeBGIS, ORM) re-appeared in 2006 with a second, third or sometimes fourth edition, and that not less than seven new workshops could be hosted and successfully organized by their respective proposers: IS (International Workshop on Information Security), COMINF (International Workshop on Community Informatics), KSinBIT (International Workshop on Knowledge Systems in Bioinformatics), MONET (International Workshop on MObile and NEtworking Technologies for social applications), OnToContent (Ontology content and evaluation in Enterprise), PerSys (International Workshop on Pervasive Systems), and RDDS (International Workshop on Reliability in Decentralized Distributed Systems). We know that as before, their audiences will mutually productively mingle with those of the main conferences, as is already visible from the overlap in authors! The OTM organizers are especially grateful for the leadership and competence of Pilar Herrero in managing this complex process into a success for the second year in a row.

A special mention for 2006 is again due for the third and enlarged edition of the highly attractive OnTheMove Academy (formerly called Doctoral Consortium Workshop). Its 2006 Chairs, Antonia Albani, Gábor Nagypál and Johannes Maria Zaha, three young and active researchers, further refined the original set-up and interactive formula to bring PhD students together: they call them to submit their research proposals for selection; the resulting submissions and their approaches are presented by the students in front of a wider audience at the conference, where they are then independently and extensively analyzed and discussed in public by a panel of senior professors. This year these were Johann Eder, Maria Orlowska, and of course Jan Dietz, the Dean of the OnTheMove Academy, who provided guidance, support and help for the team. The successful students are also awarded free access to all other parts of the OTM program, and only pay a minimal fee for the Doctoral Symposium itself (in fact their attendance is largely sponsored by the other participants!). The OTM organizers expect to further expand the OnTheMove Academy in future editions of the conferences and so draw an audience of young researchers into the OTM forum.

All four main conferences and the associated workshops share the distributed aspects of modern computing systems, and the resulting application-pull created by the Internet and the so-called Semantic Web. For DOA 2006, the primary emphasis was on the distributed object infrastructure; for ODBASE 2006, it became the knowledge bases and methods required for enabling the use of formal semantics; for CoopIS 2006, the topic was the interaction of such

technologies and methods with management issues, such as occur in networked organizations, and for GADA 2006, the topic was the scalable integration of heterogeneous computing systems and data resources with the aim of providing a global computing space. These subject areas naturally overlap and many submissions in fact also treat 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 Roberto Cencioni (European Commission), Alois Ferscha (Johannes Kepler Universität), Daniel S. Katz (Louisiana State University and Jet Propulsion Laboratory), Frank Leymann (University of Stuttgart), and Marie-Christine Rousset (University of Grenoble)! We also encouraged multiple event attendance by providing all authors, also those of workshop papers, with free access or discounts to one other conference or workshop of their choice.

We received a total of 361 submissions for the four main conferences and an impressive 493 (compared to the 268 in 2005 and 170 in 2004!) submissions for the workshops. Not only may we indeed again claim success in attracting an increasingly representative volume of scientific papers, but such a harvest of course allows the Program Committees to compose a higher quality cross-section of current research in the areas covered by OTM. In fact, in spite of the larger 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 2003, 2004 and 2005 (i.e., average one paper out of four submitted, not counting posters). For the workshops, the acceptance rate varies but was much stricter than before, about one in two to three, to less than one quarter for the IS (Information Security) international workshop. Also for this reason, we separated the proceedings into two books with their own titles, with the main proceedings in two volumes, and we are grateful to Springer for their suggestions and collaboration in producing these books and CDROMs. The reviewing process by the respective Program Committees as usual was performed very professionally and each paper in the main conferences was reviewed by at least three referees, with arbitrated e-mail discussions in the case of strongly diverging evaluations. It may be worthwhile to emphasize that it is an explicit OnTheMove policy that all conference Program Committees and Chairs make their selections completely autonomously from the OTM organization itself. Continuing a costly but nice tradition, the OnTheMove Federated Event organizers decided again to make all proceedings available to all participants of conferences and workshops, independently of one's registration to a specific conference or workshop. Each participant also received a CDROM with the full combined proceedings (conferences + workshops).

The General Chairs are once more especially grateful to all the many people directly or indirectly involved in the setup of these federated conferences who contributed to making it a success. Few people realize what a large number of people have to be involved, and what a huge amount of work, and sometimes risk, the organization of an event like OTM entails. Apart from the persons in the roles mentioned above, we therefore in particular wish to thank our 12 main conference

PC Co-chairs (GADA 2006: Pilar Herrero, María S. Pérez, Domenico Talia, Albert Zomaya; DOA 2006: Judith Bishop, Kurt Geihs; ODBASE 2006: Maurizio Lenzerini, Erich Neuhold, V.S. Subrahmanian; CoopIS 2006: Mike Papazoglou, Louiqa Raschid, Rainer Ruggaber) and our 36 workshop PC Co-chairs (Antonia Albani, George Buchanan, Roy Campbell, Werner Ceusters, Elizabeth Chang, Ernesto Damiani, Jan L.G. Dietz, Pascal Felber, Fernando Ferri, Mario Freire, Daniel Grosu, Michael Gurstein, Maja Hadzic, Pilar Herrero, Terry Halpin, Annika Hinze, Skevos Evripidou, Mustafa Jarrar, Arek Kasprzyk, Gonzalo Méndez, Aldo de Moor, Bart De Moor, Yves Moreau, Claude Ostyn, Andreas Persidis, Maurizio Rafanelli, Marta Sabou, Vitor Santos, Simao Melo de Sousa, Katia Sycara, Arianna D'Ulizia, Eiko Yoneki, Esteban Zimányi).

All, together with their many PC members, did a superb and professional job in selecting the best papers from the large harvest of submissions.

We also heartily thank Zohra Bellahsene of LIRMM in Montpellier for the considerable efforts in arranging the venue at their campus and coordinating the substantial and varied local facilities needed for a multi-conference event such as ours. And we must all also be grateful to Mohand-Said Hacid of the University of Lyon for researching and securing the sponsoring arrangements, to Gonzalo Méndez, our excellent Publicity Chair, to our extremely competent and experienced Conference Secretariat and technical support staff Daniel Meersman, Ana-Cecilia Martinez Barbosa, and Jan Demey, and last but not least to our hyperactive Publications Chair and loyal collaborator of many years, Kwong Yuen Lai, this year bravely assisted by Peter Dimopoulos.

The General Chairs gratefully acknowledge the academic freedom, logistic support and facilities they enjoy from their respective institutions, Vrije Universiteit Brussel (VUB) and RMIT University, Melbourne, 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 edition!


August 2006                Robert Meersman, Vrije Universiteit Brussel, Belgium
                                    Zahir Tari, RMIT University, Australia
                                    (General Co-chairs, OnTheMove 2006)

# Organization Committee

The OTM (On The Move) Federated Workshops aim at complementing the more "archival" nature of the OTM Federated Conferences with research results in a number of selected and more "avant garde" areas related to the general topic of distributed computing. In 2006, only 14 workshops were chosen after a rigourous selection process by Pilar Herrero. The 2006 selected international conferences were: AWeSOMe (International Workshop on Agents, Web Services and Ontologies Merging), CAMS (International Workshop on Context-Aware Mobile Systems), COMINF (International Workshop on Community Informatics), IS (International Workshop on Information Security), KSinBIT (International Workshop on Knowledge Systems in Bioinformatics), MIOS+CIAO (International Workshop on Inter-organizational Systems), MONET (International Workshop on MObile and NEtworking Technologies for social applications), OnToContent (International Workshop on Ontology content and evaluation in Enterprise), ORM (International Workshop on Object-Role Modeling), PerSys (International Workshop on Pervasive Systems), OTM Academy Doctoral Consortium, RDDS (International Workshop on Reliability in Decentralized Distributed Systems), SWWS (IFIP WG 2.12 and WG 12.4 International Workshop on Web Semantics), and SeBGIS (International Workshop on Semantic-based Geographical Information Systems).

OTM 2006 Federated Workshops are proudly supported by CNRS (Centre National de la Researche Scientifique, France), the City of Montpellier (France), Ecole Polytechnique Universitaire de Montepellier, Université de Montpellier II (UM2), Laboratoire d'Informatique de Robotique et de Microélectronique de Montpellier (LIRMM), RMIT University (School of Computer Science and Information Technology), and Vrije Universiteit Brussel (Department of Computer Science).

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