Preface

The EDOC conference series has travelled three times around the world now, alternating between stops on the continents of Asia, America and Europe. Via Gold Coast (Australia), San Diego (USA), Mannheim (Germany), Makuhari (Japan), Washington (USA), Lausanne (Switzerland), Brisbane (Australia) and Monterey (USA), EDOC 2005 completes its third world tour in Enschede (The Netherlands). EDOC has evolved to become a full-fledged International IEEE Conference, bringing together leading researchers and industry experts to discuss problems, solutions, and experiences related to enterprise computing.

The conference is as significant, if not more, as it was when it first started eight years ago. Enterprise computing continues to pose challenges to business architects, IT architects, software developers, and vendors of middleware, EAI and B2B integration solutions. Recent advances in Internet-based information and communication technology (ICT) have drastically improved the possibilities for businesses to engage in much more dynamic, new forms of co-operation. The appearance of networked enterprises, in which organisations work together for mutual benefit, leads to a change in the nature of enterprise computing for achieving operational cost saving and enhancing value-adding services. Enterprise computing traditionally deals with the organisational, technical and engineering challenges when introducing or integrating distributed business information systems within one organisation. Today, it has to manage application integration across company boundaries and support inter-organisational business processes, collaboration, and transactions, while satisfying the flexibility and security requirements of each business partner. Papers addressing these challenges can be found in the parts on Electronic Contracting, Enterprise Service Management and Business-to-Business Integration in these proceedings.

Over the years, EDOC has contributed to the advancement and adoption of middleware technologies, standards, and emerging new paradigms for enterprise computing. Eight years ago, the conference addressed innovations and applications based on CORBA, Java-RMI, DCOM, RM-ODP and UML. Now those have matured and researchers focus on their extensions and descendants: the CORBA Component Model (CCM), the Meta Object Facility (MOF), Web Services, Service Oriented Architecture (SOA), and Model Driven Architecture (MDA). This change of focus is reflected in this year's conference program, which includes sessions around the cutting-edge topics of enterprise computing support for business processes; real-time applications for the extended enterprise; interoperability models, platforms, and techniques; MDA and other model-driven approaches; modelling and description languages; inter-enterprise collaboration and virtual enterprises; trust, security, privacy and QoS issues in enterprise computing; and service- and component-oriented development and architecture. In particular, MDA has (as it did last year) again caught the attention of both researchers and practitioners. Enterprise modelling and enterprise architecture have always been high on the agenda of EDOC, but since the OMG defined the MDA roadmap for distributed system development three years ago, more than half of the EDOC papers address topics related to model-driven design. Also, many papers address topics on services computing, which leverages computing technology to model, create, and manage business solutions, scientific applications, as well as modernized services. The underneath technology suite includes Web services and SOA, business consulting methodology and utilities, business process modelling, transformation and integration.

In total, these proceedings present 25 high-quality research and experience papers selected from 79 submissions that have not been published previously. All submissions were thoroughly reviewed by at least three members of the program committee who were familiar with the subject addressed. The program committee members and reviewers each deserve credit for the diligent and rigorous peer-reviewing and paper selection process. Unfortunately, we had to reject several papers with good reviews due to the limitations imposed by a three-day single-track conference. At the conference, the selected papers are presented by the authors and discussed in highly interactive sessions. Some of the papers will become journal articles in special issues of journals of wide circulation such as the IEEE Transactions on Systems, Man, and Cybernetics (SMC) Part C: Applications & Reviews, and the International Journal of Cooperative Information Systems (IJCIS). In addition, a post-conference article will be published in IEEE IT Professional in Nov-Dec 2005. This article will cover the important topics and issues discussed in the conference.

In addition to the paper presentations, this year's program also includes two distinguished keynote speakers: Prof. Dr. Frank Leymann, Full Professor and Director of the Institute of Architecture of Application Systems from the University of Stuttgart, Germany and Dr. Umeshwar Dayal, Director of the Intelligent Enterprise Technologies Laboratory from Hewlett-Packard Labs Palo Alto, California, USA.

Finally a word of thanks, to all those who submitted papers, to the program committee members and their colleagues for reviewing, to the steering committee for directing us, to Bryan Wood the Workshop Chair, to Lea Kutvonen the Publicity Chair, to the local arrangements committee for managing the website as well as handling practical and administrative matters, and to Danielle Martin from IEEE Computer Society Press for the production of this book, which is the culmination of a remarkable, mostly virtual, collaborative effort involving all of you.

The conference was organized and sponsored by the IEEE Communications Society, the IEEE Computer Society, the University of Twente / Centre for Telematics and Information Technology, Telematica Instituut, TNO, and the Netherlands Organisation for Scientific Research (NWO). In addition, the conference was also supported by the ACM, the OMG, The Open Group, and the Nederlands Architectuur Forum.

Thank you for your active participation in IEEE EDOC 2005. We hope that you will find the conference to be productive and informative and that you enjoy your stay in Enschede. We look forward to seeing you next year at EDOC 2006 in Hong Kong.

Marten J. van Sinderen

Maarten W.A. Steen

Marc M. Lankhorst

Markus Aleksy

Patrick C.K. Hung