

# Preface

This volume consists of the proceedings of the 1st International Conference on Grid Services Engineering and Management (GSEM 2004) that was held in conjunction with the 5th International Conference Net.ObjectDays 2004 (NODE 2004) and the European Conference on Web Services 2004 (ECOWS 2004) in Erfurt, Germany on 27–30 September 2004.

The Grid has emerged as a global platform to support on-demand virtual organizations for coordinated sharing of distributed data, applications and processes. Service orientation of the Grid also makes it a promising platform for seamless and dynamic development, integration and deployment of service-oriented applications. The application components can be discovered, composed and delivered within a Grid of services, which are loosely coupled to create dynamic business processes and agile applications spanning organizations and computing platforms. The technologies contributing to such grids of services include Web services, the semantic Web, grid computing, component software and agent technologies.

The GSEM 2004 conference provided an international forum for presenting the latest theoretical and practical results in technology solutions for engineering and management of Grid services and service-oriented applications. The conference aimed at bringing together researchers and practitioners from diverse fields and interests, including Web services, the semantic Web, Grid infrastructures, software components, workflows, agent technologies and service management, and those looking for new business and research cooperation opportunities in the area of Grid services and service-oriented applications.

These proceedings present the 11 best papers accepted at GSEM 2004 as a result of the thorough peer-review process. More than 21 submissions were reviewed by at least three members of the international program committee and assessed by the conference chairs. The final acceptance decisions were based on the technical merits and quality of the submissions. The papers selected for presentation at the conference represent some of the most interesting latest developments in the areas of architecture, composition, security and management of Grid services.

We would like to take this opportunity to thank all the members of the International Program Committee for their excellent work, effort and support in ensuring the high-quality program and successful outcome of the GSEM 2004 conference. We would also like to thank the organizers of Net.ObjectDays in Erfurt, and especially its chair, Prof. Rainer Unland, for their help and the support provided to GSEM 2004. Finally, our thanks go to Springer for its cooperation and help in putting this volume together.

Mario Jeckle  
Ryszard Kowalczyk  
Peter Braun

On behalf of the Organizing and Program Committees of the GSEM 2004 conference we would like to dedicate this conference to the memory of its co-chair and our dear colleague Prof. Mario Jeckle, who prematurely died in a tragic car accident before the conference.

September 2004

Ryszard Kowalczyk  
Peter Braun

# Organization

## Conference Chairs

Mario Jeckle	University of Applied Sciences Furtwangen, Germany
Ryszard Kowalczyk	Swinburne University of Technology, Australia

## Organizing Committee

Peter Braun	Swinburne University of Technology, Australia
Bogdan Franczyk	Leipzig University, Germany
Holger Krause	tranSIT GmbH, Germany

## International Program Committee

S. Ambroszkiewicz (Polish Academy of Sciences, Poland)  
P. Braun (Swinburne University of Technology, Australia)  
J. de Bruijn (University of Innsbruck, Austria)  
B. Burg (HP, USA)  
R. Buyya (University of Melbourne, Australia)  
F. Casati (HP Labs, USA)  
J. Debenham (University of Technology, Sydney, Australia)  
F. Dignum (Utrecht University, Netherlands)  
D. Fensel (DERI, Austria)  
I. Foster (Argonne National Laboratory, USA)  
B. Franczyk (Leipzig University, Germany)  
M. Grigg (DSTO, Australia)  
J. Han (Swinburne University of Technology, Australia)  
Y. Han (Chinese Academy of Sciences, China)  
M. Himsolt (DaimlerChrysler Research, Germany)  
Y. Huang (IBM T.J. Watson Research Center, USA)  
M. Jeckle (University of Applied Sciences Furtwangen, Germany)  
C. Kesselman (University of Southern California, USA)  
R. Kowalczyk (Swinburne University of Technology, Australia)  
J.P. Martin-Flatin (CERN, Switzerland)  
J. Noll (Telenor, Norway)  
A. Polze (HPI, Germany)  
C. Preist (HP Labs, UK)  
J. Rodriguez-Aguilar (iSOCO Lab, Spain)  
M.-C. Shan (HP Labs, USA)  
K.M. Sim (Chinese University of Hong Kong, P.R. China)  
B. Spencer (NRC, Canada)

## VIII Organization

S. Staab (University of Karlsruhe, Germany)

M. Stroebel (BMW, Germany)

H. Tianfield (Glasgow Caledonian University, UK)

R. Unland (University of Duisburg-Essen, Germany)

T. van Do (Telenor, Norway)

J. Veijalainen (University of Jyväskylä, Finland)

M. Weske (Hasso-Plattner-Institut/Potsdam University, Germany)

J. Yang (Swinburne University of Technology, Australia)

Y. Yang (Swinburne University of Technology, Australia)

L.J. Zhang (IBM, USA)