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Peter Bernus  
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Günter Schmidt  
Editors

# Handbook on Architectures of Information Systems

Second Edition  
with 317 Figures  
and 19 Tables

 Springer

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## Foreword

This book is the first volume of a running series under the title *International Handbooks on Information Systems*. The series is edited by Peter Bernus, Jacek Blazewicz, Günter Schmidt and Mike Shaw. One objective is to give state of the art surveys on selected topics of information systems theory and applications. To this end, a distinguished international group of academics and practitioners are invited to provide a reference source not only for problem solvers in business, industry, and government but also for professional researchers and graduate students.

It seemed appropriate to start the series with a volume covering some basic aspects about information systems. The focus of the first volume is therefore architectures. It was decided to have a balanced number of contributions from academia and practitioners. The structure of the material follows a differentiation between modelling languages, tools and methodologies. These are collected into separate parts, allowing the reader of the handbook a better comparison of the contributions.

Information systems are a major component of the entire enterprise and the reader will notice that many contributions could just as easily have been included in another volume of the series which is on enterprise integration. Conversely, some traditionally information systems topics, as organisational analysis and strategic change management methods, will be treated in more depth in the *Handbook on Enterprise Integration*. The two volumes will complement each other.

The second edition of this volume is a representative survey on the most important results on Architectures of Information Systems which are presented by prominent experts. We have to thank not only the contributors for their effort but also various colleagues who helped us by suggesting relevant topics and qualified authors. The editors acknowledge the role of the advisory board members: Andy Bond, Guy Doumeingts, Keith Duddy, Mark Fox, Tom Gruber, Ted Goranson, Rudolf Haggenmüller, Linda Harvey, Matthias Jarke, Jim Melton, Chris Menzel, John Mylopoulos, Elmar J. Sinz, Riitta Smeds, François Vernadat.

One of the challenges was a technical one. We had to compile text and graphics together generated by distributed software systems from all over the world. Jörg Winckler and Anett Wagner for the second edition expertly resolved not only this problem with a number of supporters who are too many to name them all. We sincerely thank them for their help and support.

P. Bernus, K. Mertins, G. Schmidt

## Contents

|                                                                                               |           |
|-----------------------------------------------------------------------------------------------|-----------|
| Architectures of Information Systems .....                                                    | 1         |
| <i>Peter Bernus, Günter Schmidt</i>                                                           |           |
| <b>Part One: Techniques and Languages for the Description of<br/>Information Systems.....</b> | <b>11</b> |
| <i>Peter Bernus, Günter Schmidt</i>                                                           |           |
| Properties of Information Modeling Techniques for Information<br>Systems Engineering.....     | 17        |
| <i>John Mylopoulos, Alex Borgida</i>                                                          |           |
| EXPRESS .....                                                                                 | 59        |
| <i>Reiner Anderl, Harald John, Christian Pütter</i>                                           |           |
| Object-Role Modeling (ORM/NIAM).....                                                          | 81        |
| <i>Terry Halpin</i>                                                                           |           |
| Database Language SQL .....                                                                   | 105       |
| <i>Jim Melton</i>                                                                             |           |
| Petri Nets .....                                                                              | 133       |
| <i>Jean-Marie Proth</i>                                                                       |           |
| State Transition Diagrams .....                                                               | 153       |
| <i>Jules Desharnais, Marc Frappier, Ali Mili</i>                                              |           |
| The Process Interchange Format.....                                                           | 173       |
| <i>Jintae Lee, Michael Gruninger, Yan Jin, Thomas Malone,<br/>Austin Tate, Gregg Yost</i>     |           |
| Process Language GPN .....                                                                    | 197       |
| <i>Günter Schmidt, Oliver Braun</i>                                                           |           |
| The IDEF Family of Languages .....                                                            | 215       |
| <i>Christopher Menzel, Richard J. Mayer</i>                                                   |           |
| The CIMOSA Languages .....                                                                    | 251       |
| <i>François Vernadat</i>                                                                      |           |

|                                                                                                                                                               |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| ConceptBase: Managing Conceptual Models about Information Systems<br><i>Manfred A. Jeusfeld, Matthias Jarke, Hans W. Nissen</i><br><i>Martin Staudt</i> ..... | 273 |
| Conceptual Graphs.....<br><i>John F. Sowa</i>                                                                                                                 | 295 |
| GRAI GridDecisional Modelling.....<br><i>Guy Doumeingts, Bruno Vallespir, David Chen</i>                                                                      | 321 |
| Modeling of Business Systems Using SOM.....<br><i>Otto K. Ferstl, Elmar J. Sinz</i>                                                                           | 347 |
| Workflow and Service Composition Languages .....<br><i>Mathias Weske, Gottfried Vossen, Frank Puhlmann</i>                                                    | 369 |
| XML - The Extensible Markup Language and its Use in the Field of EDI<br><i>Erik Wüstner, Peter Buxmann, Oliver Braun</i> .....                                | 391 |
| Modeling Information-Systems with UML<br>Unified Modeling Language.....<br><i>Fritz Letters</i>                                                               | 411 |
| <b>Part Two: Software Engineering Methods for Information System<br/>Construction</b> .....<br><i>Peter Bernus</i>                                            | 457 |
| Information Engineering Methodology .....<br><i>Clive Finkelstein</i>                                                                                         | 459 |
| Object-Oriented Software Engineering Methods.....<br><i>Brian Henderson-Sellers</i>                                                                           | 485 |
| Euromethod Contract Management.....<br><i>Alfred Helmerich</i>                                                                                                | 521 |
| <b>Part Three: Tools for Analysis and Design</b> .....<br><i>Peter Bernus</i>                                                                                 | 535 |
| An Integrated Enterprise Modeling Environment.....<br><i>Florence Tissot, Wes Crump</i>                                                                       | 539 |

|                                                                                                  |     |
|--------------------------------------------------------------------------------------------------|-----|
| WorkParty - Business Processes and Workflow Management .....                                     | 569 |
| <i>Walter Rupietta</i>                                                                           |     |
| Business Process Reengineering with PROPLAN® .....                                               | 591 |
| <i>Günther Schuh, Thomas Siepmann, Volker Levering</i>                                           |     |
| ARIS – Architecture of Integrated Information Systems.....                                       | 605 |
| <i>August-Wilhelm Scheer, Kristof Schneider</i>                                                  |     |
| Tools for Analysis and Simulation: BONAPART .....                                                | 625 |
| <i>Herrmann Krallmann, K. Wiener, Gay Wood</i>                                                   |     |
| MO <sup>2</sup> GO: User Oriented Enterprise Models for Organisational and IT<br>Solutions ..... | 649 |
| <i>Kai Mertins, Frank-Walter Jaekel</i>                                                          |     |
| <b>Part Four: Reference Models</b> .....                                                         | 665 |
| <i>Kai Mertins, Peter Bernus</i>                                                                 |     |
| IBM Insurance Application Architecture (IAA).....                                                | 669 |
| <i>Jürgen Huschens, Marilies Rumpold-Preining</i>                                                |     |
| Fraunhofer Simulation Reference Models .....                                                     | 693 |
| <i>Markus Rabe, Kai Mertins</i>                                                                  |     |
| Configuring Business Application Systems.....                                                    | 705 |
| <i>Stefan Meinhardt, Karl Popp</i>                                                               |     |
| The SIZ Banking Data Model.....                                                                  | 723 |
| <i>Hans-Bernd Kittlaus, Daniela Krah</i>                                                         |     |
| ODP and OMA Reference Models .....                                                               | 745 |
| <i>Andy Bond, Keith Duddy, Kerry Raymond</i>                                                     |     |
| <b>Part Five: Selected Topics in Integrating Infrastructures</b> .....                           | 765 |
| <i>Peter Bernus</i>                                                                              |     |
| Architectural Requirements of Commercial Products .....                                          | 767 |
| <i>Ted Goranson</i>                                                                              |     |
| Integration Infrastructures for Agile Manufacturing Systems .....                                | 789 |
| <i>Richard H. Weston, Ian A. Coutts and Paul E. Clements</i>                                     |     |

|                                                             |     |
|-------------------------------------------------------------|-----|
| Distributed Processing: DCE, CORBA, and Java .....          | 823 |
| <i>Andy Bond, Keith Duddy, Kerry Raymond</i>                |     |
| Higher Level Integration by Multi-Agent Architectures ..... | 855 |
| <i>Mihai Barbuceanu, Rune Teigen</i>                        |     |
| <b>List of Contributors</b> .....                           | 887 |
| <b>Index</b> .....                                          | 893 |