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Aligning Enterprise, System, and Software Architectures

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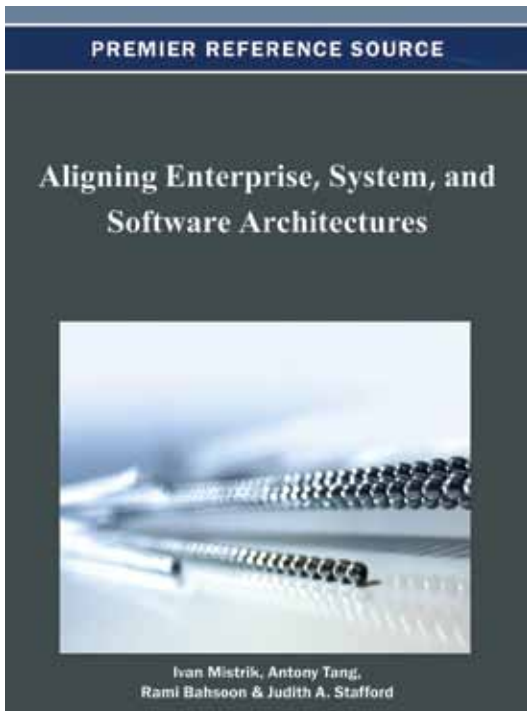
Although enterprise, system, and software architectures have many common features and often overlap in practice, the presence of each architecture is required in the planning and design of a system. The alignment of these architectures in the design processes is important in the development of software-intensive complex systems.

Aligning Enterprise, System, and Software Architectures covers both theoretical approaches and practical solutions in the processes for aligning enterprise, systems, and software architectures. This book aims to provide architects and researchers with a clear understanding of all three types of architectures.

Topics Covered:

- Architecture Alignment
- Choreographing Agility
- Embedded Software and Systems
- Enterprise Service Architectures
- Open Architectures
- Open Source Components
- Software Architectures
- Software Licenses

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Ivan Mistrik is an independent researcher in software-intensive systems engineering. He is a computer scientist who is interested in system and software engineering (SE/SWE) and in system and software architecture (SA/SWA). In particular, life cycle system/software engineering, requirements engineering, relating software requirements and architectures, knowledge management in software development, rationale-based software development, aligning enterprise/system/software architectures, value-based software engineering, agile software architectures, and collaborative system/software engineering. He has more than forty years' experience in the field of computer systems engineering as an information systems developer, R&D leader, SE/SA research analyst, educator in computer sciences, and ICT management consultant. In the past 40 years, he has been primarily working at various R&D institutions in USA and Germany and has done consulting on a variety of large international projects sponsored by ESA, EU, NASA, NATO, and UN. He has also taught university-level computer sciences courses in software engineering, software architecture, distributed information systems, and human-computer interaction. He is the author or co-author of more than 90 articles and papers in international journals, conferences, books and workshops, most recently a chapter *Capture of Software Requirements and Rationale through Collaborative Software Development*, a paper *Knowledge Management in the Global Software Engineering Environment*, and a paper *Architectural Knowledge Management in Global Software Development*. He has also written over 120 technical reports and presented over 70 scientific/technical talks. He has served in many program committees and panels of reputable international conferences and organized a number of scientific workshops, most recently two workshops on Knowledge Engineering in Global Software and Development at International Conference on Global Software Engineering 2009 and 2010 and IEEE International Workshop on the Future of Software Engineering for/in the Cloud (FoSEC) held in conjunction with IEEE Cloud 2011. He has been the guest-editor of *IEE Proceedings Software: A special Issue on Relating Software Requirements and Architectures* published by IEE in 2005 and the lead-editor of the book *Rationale Management in Software Engineering* published by Springer in 2006. He has been the co-author of the book *Rationale-Based Software Engineering* published by Springer in May 2008. He has been the lead-editor of the book *Collaborative Software Engineering* published by Springer in 2010 and the book on *Relating Software Requirements and Architectures* published by Springer in 2011.

Section 1: Architecture Alignment - Theories

Chapter 1

Relating Enterprise, Application, and Infrastructure Architects
Woods Eoin (Artechra, UK)
Rozanski Nick (Artechra, UK)

Chapter 2

Semantic Wiki for Tracing Process and Requirements Knowledge in Small and Medium Enterprises
Nordheimer Khrystyna (University of Mannheim, Germany)
Seedorf Stefan (University of Mannheim, Germany)
Thum Christian (University of Mannheim, Germany)

Chapter 3

Evolutionary Architecting of Embedded and Enterprise Software and Systems
Axelsson Jakob (Swedish Institute of Computer Science (SICS), Sweden & Mälardalen University, Sweden)

Chapter 4

Software Licenses, Open Source Components, and Open Architectures
Alspaugh Thomas A. (University of California Irvine, USA)
Asuncion Hazelina U. (University of Washington Bothell, USA)
Scacchi Walt (University of California Irvine, USA)

Section 2: Crossing Enterprise, System, and Software Architecture Boundaries

Chapter 5

Mitigating Mobile Diversity with RESTful Services
Wehrmaker Tristan (Leibniz Universität Hannover, Germany)
Schneider Kurt (Leibniz Universität Hannover, Germany)

Chapter 6

Enterprise Applications:
Choppy Christine (LIPN, University Paris 13, France)
Hatebur Denis (University Duisburg-Essen, Germany)
Heisel Maritta (University Duisburg-Essen, Germany)
Reggio Gianna (Universita di Genova, Italy)

Chapter 7

Using Genetic Algorithms to Search for Key Stakeholders in Large-Scale Software Projects
Lim Soo Ling (University College London, UK)
Harman Mark (University College London, UK)
Susi Angelo (Fondazione Bruno Kessler, Italy)

Section 3: Architecture Processes, Tools, and Techniques

Chapter 8

An Approach for Integrated Lifecycle Management for Business Processes and Business Software
Betz Stefanie (Karlsruhe Institute of Technology, Germany)
Oberweis Andreas (Karlsruhe Institute of Technology, Germany)
Burger Erik (Karlsruhe Institute of Technology, Germany)
Reussner Ralf (Karlsruhe Institute of Technology, Germany)
Eckert Alexander (FZI Research Center for Information Technologies, Germany)
Trunko Ralf (FZI Research Center for Information Technologies, Germany)

Chapter 9

High-Level Modeling to Support Software Design Choices
Muller Gerrit (Buskerud University College, Norway)

Chapter 10

Decisions Required vs. Decisions Made:
Zimmermann Olaf (IBM Research GmbH, Switzerland & ABB Corporate Research, Switzerland)
Mikovic Christoph (IBM Research GmbH, Switzerland)

Chapter 11

Linking Business and Application Architectures
Kamath Suresh (MetLife Inc., USA)

Section 4: Industrial Case Studies and Practices

Chapter 12

Software Architecture Practices in Agile Enterprises
Eloranta Veli-Pekka (Tampere University of Technology, Finland)
Koskimies Kai (Tampere University of Technology, Finland)

Chapter 13

Contexts and Challenges:
Alfred Charlie (Foliage, Inc., USA)

Chapter 14

Using Obstacles for Systematically Modeling, Analysing, and Mitigating Risks in Cloud Adoption
Zardari Shehnila (University of Birmingham, UK)
Faniyi Funmilade (University of Birmingham, UK)
Bahsoon Rami (University of Birmingham, UK)

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