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Nota di bibliografia	Includes bibliographical references and index. "Appendix: readings and resources": p. 397-401.
Nota di contenuto	PROCESS-AWARE INFORMATION SYSTEMS; Contents; Preface; Contributors; PART I Concepts; 1 Introduction; 1.1 From Programs and Data to Processes; 1.2 PAIS: Definition and Rationale; 1.3 Techniques and Tools; 1.4 Classifications; 1.5 About the Book; References; 2 Person-to-Application Processes: Workflow Management; 2.1 Introduction; 2.2 Workflow Terminology; 2.3 Workflow Modeling; 2.4 Workflow Management Systems; 2.5 Outlook; 2.6 Exercises; References; 3 Person-to-Person Processes: Computer-Supported Collaborative Work; 3.1 Introduction; 3.2 Characterization of Person-to-Person

## Interactions

3.3 Characterization of Person-to-Person Systems3.4 Example Systems; 3.5 Summary and Conclusions; 3.6 Exercises; References; 4 Enterprise Application Integration and Business-to-Business Integration Processes; 4.1 Introduction; 4.2 Examples of EAI and B2B Processes; 4.3 Concepts, Architectures, and Tools; 4.4 Future Developments; 4.5 Exercises; References; PART II Modeling Languages; 5 Process Modeling Using UML; 5.1 Introduction; 5.2 Modeling Control Flow with Activity Diagrams; 5.3 Modeling Objects and Object Flow; 5.4 Modeling Organizational Structure 5.5 Modeling Business Partner Interactions5.6 System-Specific Process Models; 5.7 Summary; 5.8 Exercises; References; 6 Process Modeling Using Event-Driven Process Chains; 6.1 Introduction; 6.2 Overview of EPC; 6.3 The ARIS Business Process Meta-Model; 6.4 How to Correctly Model EPCs; 6.5 The ARIS Architecture; 6.6 Future Extensions; 6.7 Exercises; References; 7 Process Modeling Using Petri Nets; 7.1 Introduction; 7.2 Petri Nets; 7.3 Petri Net Classes and Behavior; 7.4 Modeling Single Processes Without Resources; 7.5 Modeling Processes with Resources; 7.6 Behavior and Refinement; 7.7 Analysis 7.8 Net ClassesExercises; References; 8 Patterns of Process Modeling; 8.1 Introduction; 8.2 Classification of Patterns; 8.3 Examples of Control-Flow Patterns; 8.4 Conclusion; 8.5 Exercises; Acknowledgments; References; PART III Techniques; 9 Process Design and Redesign; 9.1 Introduction; 9.2 Methodologies, Techniques, and Tools; 9.3 Business Process Performance Indicators; 9.4 Redesigning Processes Using Best Practices; 9.5 Information-Based Business Process Design; 9.6 Conclusion; 9.7 Exercises; References; 10 Process Mining; 10.1 Introduction; 10.2 Process Mining: An Overview 10.3 Process Mining with the a Algorithm10.4 Limitations of the Alpha Approach and Possible Solutions; 10.5 Conclusion; Acknowledgments; 10.6 Exercises; References; 11 Transactional Business Processes; 11.1 Introduction; 11.2 Transactional Consistency; 11.3 Atomicity; 11.4 Infrastructure for Implementing Atomicity; 11.5 Outlook; 11.6 Exercises and Assignments; Acknowledgments; References; PART IV Standards and Tools; 12 Standards for Workflow Definition and Execution; 12.1 Introduction; 12.2 Standardization Bodies Relevant to PAIS; 12.3 WfMC Reference Model and WfMC Glossary 12.4 Process Definition in XPDL

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### Sommario/riassunto

A unifying foundation to design and implement process-aware information systemsThis publication takes on the formidable task of establishing a unifying foundation and set of common underlying principles to effectively model, design, and implement process-aware information systems. Authored by leading authorities and pioneers in the field, Process-Aware Information Systems helps readers gain a thorough understanding of major concepts, languages, and techniques for building process-aware applications, including:\* UML and EPCs: two of the most widely used notations for business proces

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