Record Nr. UNINA9910966386803321 Autore Friedenthal Sanford Titolo A practical guide to SysML: the systems modeling language // Sanford Friedenthal, Alan Moore, Rick Steiner Waltham, MA,: Morgan Kaufmann, c2012 Pubbl/distr/stampa **ISBN** 9780123852076 0123852072 [[2nd ed.].] Edizione Descrizione fisica 1 online resource (641 p.) Collana The MK/OMG Press Altri autori (Persone) SteinerRick Disciplina 620.001/171 Soggetti Systems engineering SysML (Computer science) Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Machine generated contents note: Part I Introduction Systems Engineering Overview Model-Based Systems Engineering3 SysML Language Overview SysML Language Overview Part II Language Description SysML Language Architecture Organizing the Model with Packages Modeling Structure with Blocks Modeling Constraints with Parametrics Modeling Flow-Based Behavior with Activities Modeling Message-Based Behavior with Interactions Modeling Event-Based Behavior with State Machines Modeling Functionality with Use Cases Modeling Text-Based Requirements and their Relationship to Design Modeling Cross-Cutting Relationships with Allocations Customizing SysML for Specific Domains Part III Modeling Examples Water Distiller Example Using Functional Analysis Residential Security System Example Using the Object-Oriented Systems Engineering Method Part IV Transitioning to Model-Based Systems Engineering Integrating SysML into a Systems Development Environment Deploying SysML into an Organization APPENDIXES A-1 SysML Reference Guide A-2 Cross Reference Guide to the OMG Systems Modeling Professional Certification Program (OCSMP) -- NEW .

A Practical Guide to SysML: The Systems Modeling Language is a comprehensive guide for understanding and applying SysML to model systems. The Object Management Group's OMG SysML is a general-

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purpose graphical modeling language for representing systems that may include combinations of hardware, software, data, people, facilities, and natural objects. SysML supports the practice of model-based systems engineering (MBSE) used to develop system solutions in response to complex and often technologically challenging problems. The book is organized into four parts. Part I provides an overview of sys