1. Record Nr. UNINA9910705300503321 Natesan K (Krishnamurti), <1942-> Autore Titolo Knowledge base report on emergency core cooling sump performance in operating light water reactors // prepared by K. Natesan [and three others] Pubbl/distr/stampa Washington, D.C.:,: United States Nuclear Regulatory Commission, Office of Nuclear Regulatory Research, , 2014 Descrizione fisica 1 online resource (469 unnumbered pages): color illustrations Collana NUREG/CR;;7172 Soggetti Light water reactors - Accidents - Prevention Pumping stations - Safety measures Pressurized water reactors - Loss of coolant - Safety measures Water cooled reactors - Loss of coolant - Safety measures Nuclear power plants - Safety measures Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Title from title screen (viewed on Mar. 21, 2014). "January 2014." "ANL-10/38." Nota di bibliografia Includes bibliographical references (pages 9-1-9-12).

Record Nr. UNINA9910437574703321 Autore Bernardi Simona Titolo Model-Driven Dependability Assessment of Software Systems / / by Simona Bernardi, José Merseguer, Dorina Corina Petriu Berlin, Heidelberg: .: Springer Berlin Heidelberg: .: Imprint: Springer. Pubbl/distr/stampa , 2013 **ISBN** 9783642395123 3642395120 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (xvi, 187 pages): illustrations (some color) Collana Gale eBooks 004.0151 Disciplina 005.10285 Soggetti Software engineering Computer science Electronic digital computers - Evaluation Software Engineering Theory of Computation System Performance and Evaluation 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. 1 Dependability Assessment and Software Life-cycle -- 2 Dependability Nota di contenuto Concepts -- 3 Software models -- 4 Dependability Domain Model -- 5 Dependability Modeling and Analysis Profile -- 6 Dependability Analysis Techniques -- 7 Proposals for Dependability Assessment -- 8 From Software Models to Dependability Analysis Models -- 9 Conclusions and Advanced Open Issues -- A The MARTE profile -- B Classes in the dependability domain model. Sommario/riassunto Over the last two decades, a major challenge for researchers working on modeling and evaluation of computer-based systems has been the assessment of system Non Functional Properties (NFP) such as performance, scalability, dependability and security. In this book, the authors present cutting-edge model-driven techniques for modeling

and analysis of software dependability. Most of them are based on the use of UML as software specification language. From the software system specification point of view, such techniques exploit the

standard extension mechanisms of UML (i.e., UML profiling). UML profiles enable software engineers to add non-functional properties to the software model, in addition to the functional ones. The authors detail the state of the art on UML profile proposals for dependability specification and rigorously describe the trade-off they accomplish. The focus is mainly on RAMS (reliability, availability, maintainability and safety) properties. Among the existing profiles, they emphasize the DAM (Dependability Analysis and Modeling) profile, which attempts to unify, under a common umbrella, the previous UML profiles from literature, providing capabilities for dependability specification and analysis. In addition, they describe two prominent model-to-model transformation techniques, which support the generation of the analysis model and allow for further assessment of different RAMS properties. Case studies from different domains are also presented, in order to provide practitioners with examples of how to apply the aforementioned techniques. Researchers and students will learn basic dependability concepts and how to model them using UML and its extensions. They will alsogain insights into dependability analysis techniques through the use of appropriate modeling formalisms as well as of model-to-model transformation techniques for deriving dependability analysis models from UML specifications. Moreover, software practitioners will find a unified framework for the specification of dependability requirements and properties of UML, and will benefit from the detailed case studies.