

1. Record Nr.	UNINA9910484192303321
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Titolo	Integrated Model of Distributed Systems // by Wiktor B. Daszczuk
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-12835-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XVIII, 238 p.)
Collana	Studies in Computational Intelligence, , 1860-949X ; ; 817
Disciplina	004.36 004.6
Soggetti	Computational intelligence Artificial intelligence Computational Intelligence Artificial Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Preface -- Acknowledgments -- Chapter 1. Introduction -- Chapter 2. Related work on deadlock and termination detection techniques -- Chapter 3. Integrated Model of Distributed Systems -- Chapter 4. Model Checking of IMDS specifications in the Dedan environment -- etc.
Sommario/riassunto	In modern distributed systems, such as the Internet of Things or cloud computing, verifying their correctness is an essential aspect. This requires modeling approaches that reflect the natural characteristics of such systems: the locality of their components, autonomy of their decisions, and their asynchronous communication. However, most of the available verifiers are unrealistic because one or more of these features are not reflected. Accordingly, in this book we present an original formalism: the Integrated Distributed Systems Model (IMDS), which defines a system as two sets (states and messages), and a relation of the "actions" between these sets. The server view and the traveling agent's view of the system provide communication duality, while general temporal formulas for the IMDS allow automatic verification. The features that the model checks include: partial deadlock and partial termination, communication deadlock and

resource deadlock. Automatic verification can support the rapid development of distributed systems. Further, on the basis of the IMDS, the Dedan tool for automatic verification of distributed systems has been developed.

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