Record Nr. UNISA996466164403316 Autore Daduna Hans Titolo Queueing Networks with Discrete Time Scale [[electronic resource]]: Explicit Expressions for the Steady State Behavior of Discrete Time Stochastic Networks / / by Hans Daduna Berlin, Heidelberg:,: Springer Berlin Heidelberg:,: Imprint: Springer, Pubbl/distr/stampa 2001 3-540-44592-7 ISBN Edizione [1st ed. 2001.] Descrizione fisica 1 online resource (X, 142 p.) Collana Lecture Notes in Computer Science, , 0302-9743 ; ; 2046 Disciplina 519.8/2 Soggetti Computer communication systems **Probabilities** Computer engineering Computer system failures Operating systems (Computers) Information technology Business—Data processing Computer Communication Networks Probability Theory and Stochastic Processes Computer Engineering System Performance and Evaluation Operating Systems IT in Business Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Includes bibliographical references and index. State dependent Bernoulli Servers -- Closed Cycles of State Dependent Nota di contenuto Bernoulli Servers with Different Customer Types -- Open Tandems of State Dependent Bernoulli Servers with Different Customer Types --Networks with Doubly Stochastic and Geometrical Servers -- General

Networks with Batch Movements and Batch Services.

Sommario/riassunto

Building on classical queueing theory mainly dealing with single node

queueing systems, networks of queues, or stochastic networks has been a field of intensive research over the last three decades. Whereas the first breakthrough in queueing network theory was initiated by problems and work in operations research, the second breakthrough, as well as subsequent major work in the area, was closely related to computer science, particularly to performance analysis of complex systems in computer and communication science. The text reports on recent research and development in the area. It is centered around explicit expressions for the steady behavior of discrete time queueing networks and gives a moderately positive answer to the question of whether there can be a product form calculus in discrete time. Originating from a course given by the author at Hamburg University, this book is ideally suited as a text for courses on discrete time stochastic networks.