Record Nr. UNINA9910260656403321 Autore Murthy C. Siva Ram Titolo Resource management in real-time systems and networks // C. Siva Ram Murthy and G. Manimaran Pubbl/distr/stampa Cambridge, Massachusetts:,: MIT Press,, 2001 [Piscatagay, New Jersey]:,: IEEE Xplore,, [2001] **ISBN** 0-262-29220-3 1-282-09664-8 9786612096648 0-262-25670-3 Descrizione fisica 1 PDF (xiv, 450 pages): illustrations Altri autori (Persone) ManimaranG Disciplina 005.273 Soggetti Real-time programming Computer networks 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. Sommario/riassunto Real-time systems and networks are of increasing importance in many applications, including automated factories, telecommunication systems, defense systems, and space systems. This book introduces the concepts and state-of-the-art research developments of resource management in real-time systems and networks. Unlike other texts in the field, it covers the entire spectrum of issues in resource management, including task scheduling in uniprocessor real-time systems; task scheduling, fault-tolerant task scheduling, and resource reclaiming in multiprocessor real-time systems; conventional task scheduling and object-based task scheduling in distributed real-time systems; message scheduling; QoS routing; dependable communication; multicast communication; and medium access protocols in real-time networks. It provides algorithmic treatments for all of the issues addressed, highlighting the intuition behind each algorithm and giving examples. The book also includes two chapters of

case studies.