Record Nr. UNINA9910457175603321 Delay tolerant networks: protocols and applications / / editors, **Titolo** Athanasios Vasilakos, Yan Zhang, Thrasyvoulos Spyropoulos Pubbl/distr/stampa Boca Raton:,: CRC Press,, 2012 **ISBN** 0-429-14819-4 1-4665-1300-4 1-280-12161-0 9786613525475 1-4398-1112-1 Edizione [1st edition] Descrizione fisica 1 online resource (332 p.) Wireless networks and mobile communications;; 19 Collana Altri autori (Persone) VasilakosAthanasios ZhangYan <1977-> SpyropoulosThrasyvoulos Disciplina 004.6/5 Soggetti Computer networks - Reliability Routing (Computer network management) Fault-tolerant computing Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Auerbach publications. Nota di bibliografia Includes bibliographical references. Nota di contenuto Front Cover; Contents; Preface; List of Contributors; 1. Delay Tolerant Networking; 2. DTN Routing: Taxonomy and Design; 3. Energy-Aware Routing Protocol for Delay Tolerant Networks; 4. A Routing-Compatible Credit-Based Incentive Scheme for DTNs; 5. R-P2P: a Data-Centric Middleware for Delay Tolerant Applications; 6. Mobile Peer-to-Peer Systems over Delay Tolerant Networks; 7. Delay Tolerant Monitoring of Mobility-Assisted WSN: 8. Message Dissemination in Vehicular Networks; 9. Delay Tolerant Networking (DTN) Protocols for Space Communications; 10. DTN and Satellite Communications Sommario/riassunto A class of Delay Tolerant Networks (DTN), which may violate one or more of the assumptions regarding the overall performance characteristics of the underlying links in order to achieve smooth

operation, is rapidly growing in importance but may not be well served

by the current end-to-end TCP/IP model. Delay Tolerant Networks: Protocols and Applications takes you on a systematic exploration of DTN concepts, architectures, protocols, enabling technologies, and applications. Containing a wealth of illustrative material for ease of understanding, this one-stop reference discusses the various challenges associated with DTN. Written for a broad audience of researchers and practitioners, it supplies useful reference material for graduate students and senior undergraduate students in courses of networking, wireless, and mobile communications. Starting with an accessible introduction to DTNs, their architecture, bundle protocols, and routing schemes, the book provides authoritative coverage of:DTN RoutingEnergy-Aware Routing Protocol for DTNsA Routing-Compatible Credit-Based Incentive SchemeR-P2P: a Data-Centric Middleware for Delay Tolerant ApplicationsMobile Peer-to-Peer Systems over DTNsDelay-Tolerant Monitoring of Mobility-Assisted WSNMessage Dissemination in Vehicular NetworksDTN Protocols for Space CommunicationsDTN for Satellite CommunicationsReporting on the latest developments in these domains, the distinguished panel of contributors supplies a realistic look into the future of networking. Complete with sections that summarize open issues in each domain, this book arms you with the understanding and methods required to make an impact on the advancement of these emerging networks that continue to grow in importance. --