Record Nr. UNINA9910974597603321 Autore Vasseur Jean-Philippe Titolo Interconnecting smart objects with IP: the next Internet // Jean-Philippe Vasseur, Adam Dunkels Amsterdam; ; Boston, : Elsevier / Morgan Kaufmann Publishers, c2010 Pubbl/distr/stampa **ISBN** 9786612666179 9781282666177 1282666177 9780123751669 0123751667 Edizione [1st edition] Descrizione fisica 1 online resource (432 p.) Altri autori (Persone) **DunkelsAdam** Disciplina 004.01/9 Soggetti Ubiquitous computing **Embedded Internet devices** Ad hoc networks (Computer networks) TCP/IP (Computer network protocol) Automatic control Ambient intelligence 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. Nota di contenuto Front Cover; Interconnecting Smart Objects with IP: The Next Internet; Copyright Page: Dedication: About the Authors: Contents: Foreword: Preface; OBJECTIVES; STRUCTURE OF THE BOOK; Acknowledgements; SPECIAL ACKNOWLEDGMENTS; PART 1 THE ARCHITECTURE; CHAPTER 1 What Are Smart Objects?; 1.1 Where Do Smart Objects Come From?; 1.1.1 Embedded Systems; 1.1.2 Ubiquitous and Pervasive Computing; 1.1.3 Mobile Telephony; 1.1.4 Telemetry and Machine-to-machine Communication: 1.1.5 Wireless Sensor and Ubiquitous Sensor Networks: 1.1.6 Mobile Computing: 1.1.7 Computer Networking 1.2 Challenges for Smart Objects1.2.1 Node-level Challenges; 1.2.2 Network-level Challenges; 1.2.3 Standardization; 1.2.4 Interoperability; 1.3 Conclusions; CHAPTER 2 IP Protocol Architecture; 2.1 Introduction; 2.2 From NCP to TCP/IP; 2.3 Fundamental TCP/IP Architectural Design

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Sommario/riassunto

Smart object technology, sometimes called the Internet of Things, is having a profound impact on our day-to-day lives. Interconnecting Smart Objects with IP is the first book that takes a holistic approach to the revolutionary area of IP-based smart objects. Smart objects are the intersection of networked embedded systems, wireless sensor networks, ubiquitous and pervasive computing, mobile telephony and telemetry, and mobile computer networking. This book consists of three parts, Part I focuses on the architecture of smart objects networking, Part II covers the hardware, software, a