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	Nota di contenuto	List of Contributors xvii -- Preface xxi -- 1 Fog Computing and Fogonomics 1 /Yang Yang, Jianwei Huang, Tao Zhang, and Joe Weinman -- 2 Collaborative Mechanism for Hybrid Fog-Cloud Scenarios 7 /Xavi Masip, Eva Mar<U+0083>in, Jordi Garcia, and Sergi S© nchez -- 2.1 The Collaborative Scenario 7 -- 2.1.1 The F2C Model 11 -- 2.1.1.1 The Layering Architecture 13 -- 2.1.1.2 The Fog Node 14 -- 2.1.1.3 F2C as a Service 16 -- 2.1.2 The F2C Control Architecture 19 -- 2.1.2.1 Hierarchical Architecture 20 -- 2.1.2.2 Main Functional Blocks 24 -- 2.1.2.3 Managing Control Data 25 -- 2.1.2.4 Sharing Resources 26 -- 2.2 Benefits and Applicability 28 -- 2.3 The Challenges 29 -- 2.3.1 Research Challenges 30 -- 2.3.1.1 What a Resource is 30 -- 2.3.1.2 Categorization 30 -- 2.3.1.3 Identification 31 -- 2.3.1.4 Clustering 33 -- 2.3.1.5 Resources Discovery 33 -- 2.3.1.6 Resource Allocation 34 -- 2.3.1.7 Reliability 35 -- 2.3.1.8 QoS 36 -- 2.3.1.9 Security 36 -- 2.3.2 Industry Challenges 37 -- 2.3.2.1 What an F2C Provider Should Be? 38 -- 2.3.2.2 Shall Cloud/Fog Providers Communicate with Each Other 38 -- 2.3.2.3 How Multifog/Cloud Access is Managed 39 -- 2.3.3 Business Challenges 40 -- 2.4 Ongoing Efforts 41 -- 2.4.1 ECC 41 -- 2.4.2 mF2C 42 -- 2.4.3 MEC 42 -- 2.4.4 OEC 44 -- 2.4.5 OFC 44 -- 2.5 Handling Data in Coordinated Scenarios

Sommario/riassunto

"Recent industry surveys expect the quantity of connected devices and

sensors to be in excess of 50 billion worldwide by 2020, and these devices can generate huge amounts of data every single day. It becomes a big challenge to analyze and create actionable information from the data. Fog computing, as a promising solution to extend the capability of Clouds, has attracted considerable attention. Fogs are lightweight distributed technology platforms diffused among end-user devices in wired and wireless networks to provide highly scalable and resilient environments that can be utilized by organizations in a multitude of ways. Discusses pricing, service level agreements, service delivery, and consumption of fog computing Examines how fog will change the information and communication technology industry in the next decade . Describes how fog enables new business models, strategies, and competitive differentiation, as with ecosystems of connected, smart, digital products and services"--