1. Record Nr. UNINA9910298980703321

Titolo	Trusted Cloud Computing / / edited by Helmut Krcmar, Ralf Reussner, Bernhard Rumpe
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-12718-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (335 p.)
Disciplina	004 004.6 005.1 005.7
Soggetti	Computer networks Computer security Software engineering Application software Computer Communication Networks Systems and Data Security Software Engineering Information Systems Applications (incl. Internet)
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 at the end of each chapters.
Nota di contenuto	Part I Security and Privacy -- 1 GeneCloud: Secure Cloud Computing for Biomedical Research -- 2 Sealed Cloud – A Novel Approach to Safeguard against Insider Attacks -- 3 Side Channels in Secure Database Outsourcing on the Example of the MimoSecco Scheme -- 4 ReDS: A System for Revision-Secure Data Storage -- 5 Automatic Data Protection Certificates for Cloud-Services based on Secure Logging -- 6 A Trust Point-based Security Architecture for Sensor Data in the Cloud -- Part II Software Engineering and Software Quality -- 7 Quality Analysis Approaches for Cloud Services – Towards a Framework along the Customer's Activity Cycle -- 8 A Model-based Software Development Kit for the SensorCloud Platform -- 9 TRESOR – Towards the Realization of a Trusted Cloud Ecosystem -- 10 Towards Reliability

Estimation of Large Systems-of-Systems with the Palladio Component Model -- Part III Platforms, Middleware and Integration -- 11 Data Protection in the Cloud – The MimoSecco Approach -- 12 Secure Database Outsourcing to the Cloud Using the MimoSecco Middleware -- 13 SensorCloud: Towards the Interdisciplinary Development of a Trustworthy Platform for Globally Interconnected Sensors and Actuators -- 14 Testbed for the Sensor Cloud -- 15 An Architecture for Trusted PaaS Cloud Computing for Personal Data -- 16 Privacy-Preserving Cloud Computing for Biomedical Research -- Part IV Social Aspects, Business Models and Standards -- 17 Designing a Business Model for a Cloud Marketplace for Healthcare -- 18 SensorCloud: Sociological Contextualization of an Innovative Cloud Platform -- 19 Cutting Through the Jungle of Cloud Computing Whitepapers: Development of an Evaluation Model.

Sommario/riassunto

This book documents the scientific results of the projects related to the Trusted Cloud Program, covering fundamental aspects of trust, security, and quality of service for cloud-based services and applications. These results aim to allow trustworthy IT applications in the cloud by providing a reliable and secure technical and legal framework. In this domain, business models, legislative circumstances, technical possibilities, and realizable security are closely interwoven and thus are addressed jointly. The book is organized in four parts on “Security and Privacy”, “Software Engineering and Software Quality”, “Platforms, Middleware and Integration”, and “Social Aspects, Business Models and Standards”. It thus provides a holistic view on technological, societal, and legal aspects, which are indispensable not only to ensure the security of cloud services and the data they process, but also to gain the trust of society, business, industry, and science in these services. The ultimate goal of the book, as well as of the Trusted Cloud Program in general, is to distribute these results to a broader audience in both academia and industry, and thus to help with the proliferation of "Industry 4.0" services.