1. Record Nr. UNINA9910299236603321

Autore	Di Martino Beniamino
Titolo	Cloud Portability and Interoperability : Issues and Current Trends / / by Beniamino Di Martino, Giuseppina Cretella, Antonio Esposito
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-13701-8
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (132 p.)
Collana	SpringerBriefs in Computer Science, , 2191-5768
Disciplina	003.3 004 004.6 005.1 621.382
Soggetti	Computer communication systems Software engineering Architecture, Computer Electrical engineering Computer Communication Networks Software Engineering Computer System Implementation Communications Engineering, Networks
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	1 Cloud Portability and Interoperability -- 2 Methodologies for Cloud Portability and Interoperability -- 3 Cross-platform Cloud APIs -- 4 Ready to go solutions -- 5 Research Initiatives and Emerging Standards.
Sommario/riassunto	This book offers readers a quick, comprehensive and up-to-date overview of the most important methodologies, technologies, APIs and standards related to the portability and interoperability of cloud applications and services, illustrated by a number of use cases representing a variety of interoperability and portability scenarios. The lack of portability and interoperability between cloud platforms at

different service levels is the main issue affecting cloud-based services today. The brokering, negotiation, management, monitoring and reconfiguration of cloud resources are challenging tasks for developers and users of cloud applications due to the different business models associated with resource consumption, and to the variety of services and features offered by different cloud providers. In chapter 1 the concepts of cloud portability and interoperability are introduced, together with the issues and limitations arising when such features are lacking or ignored. Subsequently, chapter 2 provides an overview of the state-of-the-art methodologies and technologies that are currently used or being explored to enable cloud portability and interoperability. Chapter 3 illustrates the main cross-platform cloud APIs and how they can solve interoperability and portability issues. In turn, chapter 4 presents a set of ready-to-use solutions which, either because of their broad-scale use in cloud computing scenarios or because they utilize established or emerging standards, play a fundamental part in providing interoperable and portable solutions. Lastly, chapter 5 presents an overview of emerging standards for cloud Interoperability and portability. Researchers and developers of cloud-based services will find here a brief survey of the relevant methodologies, APIs and standards, illustrated by case studies and complemented by an extensive reference list for more detailed descriptions of every topic covered.