1. Record Nr. UNINA9910787012003321

Autore	Tian Wenhong
Titolo	Optimized cloud resource management and scheduling : theory and practice / / Wenhong Tian, Yong Zhao
Pubbl/distr/stampa	Waltham, Massachusetts : , : Morgan Kaufmann, , 2015 ©2015
ISBN	0-12-801645-0
Edizione	[1st edition]
Descrizione fisica	1 online resource (285 p.)
Disciplina	004.6782
Soggetti	Cloud computing - Management
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	Front Cover; Optimized Cloud Resource Management and Scheduling; Copyright Page; Contents; Foreword; Preface; About the Authors; Acknowledgments; 1 An Introduction to Cloud Computing; Main Contents of this Chapter; 1.1 The background of Cloud computing; 1.2 Cloud computing is an integration of other advanced technologies; 1.2.1 Parallel computing; 1.2.2 Grid computing; 1.2.3 Utility computing; 1.2.4 Ubiquitous computing; 1.2.5 Software as a service; 1.2.6 Virtualization technology; 1.3 The driving forces of Cloud computing; 1.4 The development status and trends of Cloud computing 1.5 The classification of Cloud computing applications1.5.1 Classification by service type; 1.5.2 Classification by deployment method; 1.6 The different roles in the Cloud computing industry chain; 1.7 The main features and technical challenges of Cloud computing; 1.7.1 The main features of Cloud computing; 1.7.2 Challenging issues; Summary; References; 2 Big Data Technologies and Cloud Computing; Main Contents of this Chapter; 2.1 The background and definition of big data; 2.2 Big data problems; 2.2.1 The problem of speed; 2.2.2 The type and architecture problem 2.2.3 Volume and flexibility problems2.2.4 The cost problem; 2.2.5 The value mining problem; 2.2.6 The security and privacy problem; 2.2.7 Interoperability and data sharing issues; 2.3 The dialectical relationship between Cloud computing and big data; 2.4 Big data technologies; 2.4.1 Infrastructure support; 2.4.2 Data acquisition; 2.4.3 Data storage;

Sommario/riassunto

Optimized Cloud Resource Management and Scheduling identifies research directions and technologies that will facilitate efficient management and scheduling of computing resources in cloud data centers supporting scientific, industrial, business, and consumer applications. It serves as a valuable reference for systems architects, practitioners, developers, researchers and graduate level students. Explains how to optimally model and schedule computing resources in cloud computingProvides in depth quality analysis of different load-balance and energy-efficient scheduling algorithms for cloud dat