1. Record Nr. UNINA9910786777203321

Autore	Menon Rohit
Titolo	Cloudera administration handbook : a complete, hands-on guide to building and maintaining large Apache Hadoop clusters using Cloudera Manager and CDH5 / / Rohit Menon ; cover image by John Michael Harkness
Pubbl/distr/stampa	Birmingham, England : , : Packt Publishing Ltd, , 2014 ©2014
ISBN	1-78355-897-0
Edizione	[1st edition]
Descrizione fisica	1 online resource (254 p.)
Collana	Community Experience Distilled
Disciplina	004.36
Soggetti	Electronic data processing - Distributed processing File organization (Computer science) - Computer programs
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Cover; Copyright; Credits; About the Author; About the Reviewers; www.PacktPub.com; Table of Contents; Preface; Chapter 1: Getting Started with Apache Hadoop; History of Apache Hadoop and its trends; Components of Apache Hadoop; Understanding the Apache Hadoop daemons; Namenode; Secondary namenode; Jobtracker; Tasktracker; Resource Manager; NodeManager; Job submission in YARN; Introducing Cloudera; Introducing CDH; Responsibilities of a Hadoop administrator; Summary; Chapter 2: HDFS and Map Reduce; Essentials of HDFS; Configuring HDFS; The read/write operational flow in HDFS Writing files in HDFS Reading files in HDFS; Understanding the name node UI; Understanding the secondary namenode UI; Exploring HDFS commands; Commonly used HDFS commands; Commands to administer HDFS; Getting acquainted with MapReduce; Understanding the map phase; Understanding the reduce phase; Learning all about the MapReduce job flow; Configuring MapReduce; Understanding the jobtracker UI; Getting MapReduce job information; Summary; Chapter 3: Cloudera's Distribution Including Apache Hadoop - CDH; Getting started with CDH; Understanding the CDH components; Apache Hadoop; Apache Flume NG Apache Sqoop Apache Pig; Apache Hive; Apache ZooKeeper; Apache

HBase; Apache Whirr; Snappy - previously known as Zippy; Apache Mahout; Apache Avro; Apache Oozie; Cloudera Search; Cloudera Impala; Cloudera Hue; Beeswax - Hive UI; Cloudera Impala UI; Pig UI; File Browser; Metastore Manager; Sqoop Jobs; Job Browser; Job Designs; Dashboard; Collection Manager; Hue Shell; HBase Browser; Installing CDH; Stopping Hadoop services; Understanding a YARN cluster; Installing the CDH components; Installing Apache Flume; Installing Apache Sqoop; Installing Apache Sqoop 2; Installing Apache Pig Installing Apache Hive Installing Apache Oozie; Installing Apache ZooKeeper; Summary; Chapter 4: Exploring HDFS Federation and Its High Availability; Implementing HDFS Federation; Configuring HDFS Federation; Configuring ViewFS for federated HDFS; Implementing HDFS High Availability; Quorum-based storage; Configuring HDFS high availability by Quorum-based storage; Shared storage using NFS; Configuring HDFS high availability by shared storage sing NFS; Configuring automatic fail over for HDFS high availability; Jobtracker high availability; Configuring Jobtracker High Availability Configuring automatic fail over for Job tracker high availability Summary; Chapter 5: Using Cloudera Manager; Introducing Cloudera Manager; Understanding the Cloudera Manager architecture; Installing Cloudera Manager; Navigating the Cloudera Manager Web console; Navigating the Home screen; Navigating the Clusters menu; Exploring the Hosts menu; Understanding the Diagnostics menu; Understanding the Audits screen; Understanding the Charts menu; Understanding the Backup menu; Understanding the Administration menu; Configuring High Availability using Cloudera Manager; Summary
Chapter 6: Implementing Security Using Kerberos

Sommario/riassunto

An easy-to-follow Apache Hadoop administrator's guide filled with practical screenshots and explanations for each step and configuration. This book is great for administrators interested in setting up and managing a large Hadoop cluster. If you are an administrator, or want to be an administrator, and you are ready to build and maintain a production-level cluster running CDH5, then this book is for you.

2. Record Nr. UNINA9910337597303321

Autore	Mohamad A. A
Titolo	Lattice Boltzmann Method : Fundamentals and Engineering Applications with Computer Codes / / by A. A. Mohamad
Pubbl/distr/stampa	London : , : Springer London : , : Imprint : Springer, , 2019
ISBN	1-4471-7423-2
Edizione	[2nd ed. 2019.]
Descrizione fisica	1 online resource (228 pages)
Disciplina	620.106
Soggetti	Thermodynamics Heat engineering Heat - Transmission Mass transfer Field theory (Physics) Fluid mechanics Physics Engineering Thermodynamics, Heat and Mass Transfer Classical and Continuum Physics Engineering Fluid Dynamics Numerical and Computational Physics, Simulation
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction and Kinetic of Particles -- The Boltzmann Equation -- Similarities and Scaling -- Boundary Conditions -- The Diffusion Equation -- Laplace and Poisson and Biharmonic Equations -- Advection-Diffusion Problems -- Isothermal Incompressible Fluid Flow -- Non-isothermal Incompressible Fluid Flow -- Multi-relaxation Schemes -- References -- Appendix-Computer Codes.
Sommario/riassunto	This book introduces readers to the lattice Boltzmann method (LBM) for solving transport phenomena – flow, heat and mass transfer – in a systematic way. Providing explanatory computer codes throughout the book, the author guides readers through many practical examples, such as: • flow in isothermal and non-isothermal lid-driven cavities; • flow over obstacles; • forced flow through a heated channel; •

conjugate forced convection; and • natural convection. Diffusion and advection–diffusion equations are discussed, together with applications and examples, and complete computer codes accompany the sections on single and multi-relaxation-time methods. The codes are written in MatLab. However, the codes are written in a way that can be easily converted to other languages, such as FORTRANm Python, Julia, etc. The codes can also be extended with little effort to multi-phase and multi-physics, provided the physics of the respective problem are known. The second edition of this book adds new chapters, and includes new theory and applications. It discusses a wealth of practical examples, and explains LBM in connection with various engineering topics, especially the transport of mass, momentum, energy and molecular species. This book offers a useful and easy-to-follow guide for readers with some prior experience with advanced mathematics and physics, and will be of interest to all researchers and other readers who wish to learn how to apply LBM to engineering and industrial problems. It can also be used as a textbook for advanced undergraduate or graduate courses on computational transport phenomena.