1. Record Nr. UNINA9910828488603321 Autore Karambelkar Hrishikesh Vijay

Titolo Scaling big data with Hadoop and Solr: understand, design, build, and

optimize your big data search engine with Hadoop and Apache Solr //

Hrishikesh Vijay Karambelkar

Pubbl/distr/stampa Birmingham, England:,: Packt Publishing,, 2015

©2015

Edizione [Second edition.]

Descrizione fisica 1 online resource (166 p.)

Community Experience Distilled Collana

004 Disciplina

Soggetti Electronic data processing

> Data mining Big data

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Note generali Includes index.

Cover; Copyright; Credits; About the Author; About the Reviewers; Nota di contenuto

> www.PacktPub.com; Table of Contents; Preface; Chapter 1: Processing Big Data Using Hadoop and MapReduce; Apache Hadoop's ecosystem; Core components; Understanding Hadoop's ecosystem; Configuring Apache Hadoop; Prerequisites; Setting up ssh without passphrase; Configuring Hadoop; Running Hadoop; Setting up a Hadoop cluster;

Common problems and their solutions; Summary; Chapter 2:

Understanding Apache Solr; Setting up Apache Solr; Prerequisites for

setting up Apache Solr; Running Apache Solr on jetty

Running Solr on other J2EE containersHello World with Apache Solr!; Understanding Solr administration; Solr navigation; Common problems

and solutions; The Apache Solr architecture; Configuring Solr;

Understanding the Solr structure; Defining the Solr schema; Solr fields; Dynamic fields in Solr; Copying the fields; Dealing with field types; Additional metadata configuration; Other important elements of the Solr schema; Configuration files of Apache Solr; Working with solr.xml

and Solr core; Instance configuration with solrconfig.xml;

Understanding the Solr plugin; Other configuration

Loading data in Apache SolrExtracting request handler - Solr Cell; Understanding data import handlers: Interacting with Solr through

SolrJ; Working with rich documents (Apache Tika); Querying for information in Solr; Summary; Chapter 3: Enabling Distributed Search using Apache Solr; Understanding a distributed search; Distributed search patterns; Apache Solr and distributed search; Working with SolrCloud; Why ZooKeeper?; The SolrCloud architecture; Building an enterprise distributed search using SolrCloud; Setting up SolrCloud for development; Setting up SolrCloud for production Adding a document to SolrCloudCreating shards, collections, and replicas in SolrCloud; Common problems and resolutions; Sharding algorithm and fault tolerance; Document Routing and Sharding; Shard splitting; Load balancing and fault tolerance in SolrCloud; Apache Solr and Big Data - integration with MongoDB; What is NoSQL and how is it related to Big Data?; MongoDB at glance; Installing MongoDB; Creating Solr indexes from MongoDB; Summary; Chapter 4: Big Data Search Using Hadoop and Its Ecosystem: Understanding NoSQL: Working with the Solr HDFS connector; Big data search using Katta How Katta works? Setting up the Katta cluster; Creating Katta indexes; Using Solr 1045 Patch - map-side indexing; Using Solr 1301 Patch reduce-side indexing; Distributed search using Apache Blur; Setting up Apache Blur with Hadoop; Apache Solr and Cassandra; Working with Cassandra and Solr: Single node configuration: Integrating with multinode Cassandra; Scaling Solr through Storm; Getting along with Apache Storm; Advanced analytics with Solr; Integrating Solr and R; Summary; Chapter 5: Scaling Search Performance; Understanding the limits; Optimizing search schema Specifying default search field

Sommario/riassunto

This book is aimed at developers, designers, and architects who would like to build big data enterprise search solutions for their customers or organizations. No prior knowledge of Apache Hadoop and Apache Solr/Lucene technologies is required.