

Read Book Learning Kibana 5 0 Pdf For Free

Learning Kibana 5.0 Mastering Elasticsearch 5.x Learning Kibana 5.0
Elasticsearch: The Definitive Guide Learning Elastic Stack 7.0
Monitoring Elasticsearch Advanced Elasticsearch 7.0 Hadoop Real-World
Solutions Cookbook Hadoop: Data Processing and Modelling Kibana 7
Quick Start Guide Kubernetes Cookbook Getting Started with Elastic
Stack 8.0 Elasticsearch 5.x Cookbook Mastering Elastic Stack IBM Cloud
Private System Administrator's Guide Learning DevOps: Continuously
Deliver Better Software Beginning Elastic Stack Advanced Elasticsearch
7.0 Elasticsearch 7.0 Cookbook The Logstash Book DevOps for VMware
Administrators Learning Elastic Stack 6.0 Learning Elasticsearch
Learning Elastic Stack 7.0 IBM Open Platform for DBaaS on IBM Power
Systems Information Science and Applications Kibana Essentials
Software Defined Data Center with Red Hat Cloud and Open Source IT
Operations Management Mastering Kibana 6.x Elasticsearch for Hadoop
Building Microservices Implementing Enterprise Cybersecurity with
Opensource Software and Standard Architecture Elasticsearch 8.x
Cookbook Mastering OpenStack Hands-On Microservices with Spring Boot
and Spring Cloud Learning ELK Stack Learning Kibana 7 Kubernetes - A
Complete DevOps Cookbook Machine Learning with the Elastic Stack
????????????????Elastic Stack 5: Elasticsearch?Logstash?Kibana?X-
Pack?Beats

Hadoop Real-World Solutions Cookbook Sep 29 2022 Over 90 hands-on recipes to help you learn and master the intricacies of Apache Hadoop 2.X, YARN, Hive, Pig, Oozie, Flume, Sqoop, Apache Spark, and Mahout About This Book Implement outstanding Machine Learning use cases on your own analytics models and processes. Solutions to common problems when working with the Hadoop ecosystem. Step-by-step implementation of end-to-end big data use cases. Who This Book Is For Readers who have a basic knowledge of big data systems and want to advance their knowledge with hands-on recipes. What You Will Learn Installing and maintaining Hadoop 2.X cluster and its ecosystem. Write advanced Map Reduce programs and understand design patterns. Advanced Data Analysis using the Hive, Pig, and Map Reduce programs. Import and export data from various sources using Sqoop and Flume. Data storage in various file formats such as Text, Sequential, Parquet, ORC, and RC Files. Machine learning principles with libraries such as Mahout Batch and Stream data processing using Apache Spark In Detail Big data is the current requirement. Most organizations produce huge amount of data every day. With the arrival of Hadoop-like tools, it has become easier for everyone to solve big data problems with great efficiency and at minimal cost. Grasping Machine Learning techniques will help you

greatly in building predictive models and using this data to make the right decisions for your organization. Hadoop Real World Solutions Cookbook gives readers insights into learning and mastering big data via recipes. The book not only clarifies most big data tools in the market but also provides best practices for using them. The book provides recipes that are based on the latest versions of Apache Hadoop 2.X, YARN, Hive, Pig, Sqoop, Flume, Apache Spark, Mahout and many more such ecosystem tools. This real-world-solution cookbook is packed with handy recipes you can apply to your own everyday issues. Each chapter provides in-depth recipes that can be referenced easily. This book provides detailed practices on the latest technologies such as YARN and Apache Spark. Readers will be able to consider themselves as big data experts on completion of this book. This guide is an invaluable tutorial if you are planning to implement a big data warehouse for your business. Style and approach An easy-to-follow guide that walks you through world of big data. Each tool in the Hadoop ecosystem is explained in detail and the recipes are placed in such a manner that readers can implement them sequentially. Plenty of reference links are provided for advanced reading.

IBM Open Platform for DBaaS on IBM Power Systems Apr 12 2021 This IBM Redbooks publication describes how to implement an Open Platform for Database as a Service (DBaaS) on IBM Power Systems environment for Linux, and demonstrate the open source tools, optimization and best practices guidelines for it. Open Platform for DBaaS on Power Systems is an on-demand, secure, and scalable self-service database platform that automates provisioning and administration of databases to support new business applications and information insights. This publication addresses topics to help sellers, architects, brand specialists, distributors, resellers and anyone offering secure and scalable Open Platform for DBaaS on Power Systems solution with APIs that are consistent across heterogeneous open database types. An Open Platform for DBaaS on Power Systems solution has the capability to accelerate business success by providing an infrastructure, and tools leveraging Open Source and OpenStack software engineered to optimize hardware and software between workloads and resources so you have a responsive, and an adaptive environment. Moreover, this publication provides documentation to transfer the how-to-skills for cloud oriented operational management of Open Platform for DBaaS on Power Systems service and underlying infrastructure to the technical teams. Open Platform for DBaaS on Power Systems mission is to provide scalable and reliable cloud database as a service provisioning functionality for both relational and non-relational database engines, and to continue to improve its fully-featured and extensible open source framework. For example, Trove is a database as a service for OpenStack. It is designed to run entirely on OpenStack, with the goal of allowing users to quickly and easily utilize the features of a relational or non-

relational database without the burden of handling complex administrative tasks. Cloud users and database administrators can provision and manage multiple database instances as needed. Initially, the service focuses on providing resource isolation at high performance while automating complex administrative tasks including deployment, configuration, patching, backups, restores, and monitoring. In the context of this publication, the monitoring tool implemented is Nagios Core which is an open source monitoring tool. Hence, when you see a reference of Nagios in this book, Nagios Core is the open source monitoring solution implemented. Also note that the implementation of Open Platform for DBaaS on IBM Power Systems is based on open source solutions. This book is targeted toward sellers, architects, brand specialists, distributors, resellers and anyone developing and implementing Open Platform for DBaaS on Power Systems solutions.

IBM Cloud Private System Administrator's Guide Feb 20 2022 IBM® Cloud Private is an application platform for developing and managing containerized applications across hybrid cloud environments, on-premises and public clouds. It is an integrated environment for managing containers that includes the container orchestrator Kubernetes, a private image registry, a management console, and monitoring frameworks. This IBM Redbooks covers tasks performed by IBM Cloud Private system administrators such as installation for high availability, configuration, backup and restore, using persistent volumes, networking, security, logging and monitoring. Istio integration, troubleshooting and so on. As part of this project we also developed several code examples and you can download those from the IBM Redbooks GitHub location: <https://github.com/IBMRedbooks>. The authors team has many years of experience in implementing IBM Cloud Private and other cloud solutions in production environments, so throughout this document we took the approach of providing you the recommended practices in those areas. If you are an IBM Cloud Private system administrator, this book is for you. If you are developing applications on IBM Cloud Private, you can see the IBM Redbooks publication IBM Cloud Private Application Developer's Guide, SG24-8441.

The Logstash Book Sep 17 2021 A new book designed for SysAdmins, Operations staff, Developers and DevOps who are interested in deploying a log management solution using the open source tool Logstash. In this book we will walk you through installing, deploying, managing and extending Logstash. We'll teach you how to: * Install and deploy Logstash. * Ship events from a Logstash Shipper to a central Logstash server. * Filter incoming events using a variety of techniques. * Output those events to a selection of useful destinations. * Use Logstash's awesome web interface Kibana. * Scale out your Logstash implementation as your environment grows. * Quickly

and easily extend Logstash to deliver additional functionality you might need. By the end of the book you should have a functional and effective log management solution that you can deploy into your own environment.

Mastering OpenStack Jul 04 2020 Discover your complete guide to designing, deploying, and managing OpenStack-based clouds in mid-to-large IT infrastructures with best practices, expert understanding, and more About This Book Design and deploy an OpenStack-based cloud in your mid-to-large IT infrastructure using automation tools and best practices Keep yourself up-to-date with valuable insights into OpenStack components and new services in the latest OpenStack release Discover how the new features in the latest OpenStack release can help your enterprise and infrastructure Who This Book Is For This book is for system administrators, cloud engineers, and system architects who would like to deploy an OpenStack-based cloud in a mid-to-large IT infrastructure. This book requires a moderate level of system administration and familiarity with cloud concepts. What You Will Learn Explore the main architecture design of OpenStack components and core-by-core services, and how they work together Design different high availability scenarios and plan for a no-single-point-of-failure environment Set up a multinode environment in production using orchestration tools Boost OpenStack's performance with advanced configuration Delve into various hypervisors and container technology supported by OpenStack Get familiar with deployment methods and discover use cases in a real production environment Adopt the DevOps style of automation while deploying and operating in an OpenStack environment Monitor the cloud infrastructure and make decisions on maintenance and performance improvement In Detail In this second edition, you will get to grips with the latest features of OpenStack. Starting with an overview of the OpenStack architecture, you'll see how to adopt the DevOps style of automation while deploying and operating in an OpenStack environment. We'll show you how to create your own OpenStack private cloud. Then you'll learn about various hypervisors and container technology supported by OpenStack. You'll get an understanding about the segregation of compute nodes based on reliability and availability needs. We'll cover various storage types in OpenStack and advanced networking aspects such as SDN and NFV. Next, you'll understand the OpenStack infrastructure from a cloud user point of view. Moving on, you'll develop troubleshooting skills, and get a comprehensive understanding of services such as high availability and failover in OpenStack. Finally, you will gain experience of running a centralized logging server and monitoring OpenStack services. The book will show you how to carry out performance tuning based on OpenStack service logs. You will be able to master OpenStack benchmarking and performance tuning. By the end of the book, you'll be ready to take steps to deploy and manage an

OpenStack cloud with the latest open source technologies. Style and approach This book will help you understand the flexibility of OpenStack by showcasing integration of several out-of-the-box solutions in order to build a large-scale cloud environment.. It will also cover detailed discussions on the various design and deployment strategies for implementing a fault-tolerant and highly available cloud infrastructure.

Elasticsearch 8.x Cookbook Aug 05 2020 Search, analyze, store and manage data effectively with Elasticsearch 8.x Key Features • Explore the capabilities of Elasticsearch 8.x with easy-to-follow recipes • Extend the Elasticsearch functionalities and learn how to deploy on Elastic Cloud • Deploy and manage simple Elasticsearch nodes as well as complex cluster topologies Book Description Elasticsearch is a Lucene-based distributed search engine at the heart of the Elastic Stack that allows you to index and search unstructured content with petabytes of data. With this updated fifth edition, you'll cover comprehensive recipes relating to what's new in Elasticsearch 8.x and see how to create and run complex queries and analytics. The recipes will guide you through performing index mapping, aggregation, working with queries, and scripting using Elasticsearch. You'll focus on numerous solutions and quick techniques for performing both common and uncommon tasks such as deploying Elasticsearch nodes, using the ingest module, working with X-Pack, and creating different visualizations. As you advance, you'll learn how to manage various clusters, restore data, and install Kibana to monitor a cluster and extend it using a variety of plugins. Furthermore, you'll understand how to integrate your Java, Scala, Python, and big data applications such as Apache Spark and Pig with Elasticsearch and create efficient data applications powered by enhanced functionalities and custom plugins. By the end of this Elasticsearch cookbook, you'll have gained in-depth knowledge of implementing the Elasticsearch architecture and be able to manage, search, and store data efficiently and effectively using Elasticsearch. What you will learn • Become well-versed with the capabilities of X-Pack • Optimize search results by executing analytics aggregations • Get to grips with using text and numeric queries as well as relationship and geo queries • Install Kibana to monitor clusters and extend it for plugins • Build complex queries by managing indices and documents • Monitor the performance of your cluster and nodes • Design advanced mapping to take full control of index steps • Integrate Elasticsearch in Java, Scala, Python, and big data applications Who this book is for If you're a software engineer, big data infrastructure engineer, or Elasticsearch developer, you'll find this Elasticsearch book useful. The book will also help data professionals working in e-commerce and FMCG industries who use Elastic for metrics evaluation and search analytics to gain deeper insights and make better business decisions. Prior experience with

Elasticsearch will help you get the most out of this book.

Implementing Enterprise Cybersecurity with Opensource Software and Standard Architecture Sep 05 2020 Many small and medium scale businesses cannot afford to procure expensive cybersecurity tools. In many cases, even after procurement, lack of a workforce with knowledge of the standard architecture of enterprise security, tools are often used ineffectively. The Editors have developed multiple projects which can help in developing cybersecurity solution architectures and the use of the right tools from the opensource software domain. This book has 8 chapters describing these projects in detail with recipes on how to use opensource tooling to obtain standard cyber defense and the ability to do self-penetration testing and vulnerability assessment. This book also demonstrates work related to malware analysis using machine learning and implementation of honeypots, network Intrusion Detection Systems in a security operation center environment. It is essential reading for cybersecurity professionals and advanced students.

Information Science and Applications Mar 12 2021 This book presents selected papers from the 10th International Conference on Information Science and Applications (ICISA 2019), held on December 16-18, 2019, in Seoul, Korea, and provides a snapshot of the latest issues regarding technical convergence and convergences of security technologies. It explores how information science is at the core of most current research as well as industrial and commercial activities. The respective chapters cover a broad range of topics, including ubiquitous computing, networks and information systems, multimedia and visualization, middleware and operating systems, security and privacy, data mining and artificial intelligence, software engineering and web technology, as well as applications and problems related to technology convergence, which are reviewed and illustrated with the aid of case studies. Researchers in academia, industry, and at institutes focusing on information science and technology will gain a deeper understanding of the current state of the art in information strategies and technologies for convergence security. ?

Elasticsearch: The Definitive Guide Feb 03 2023 Whether you need full-text search or real-time analytics of structured data—or both—the Elasticsearch distributed search engine is an ideal way to put your data to work. This practical guide not only shows you how to search, analyze, and explore data with Elasticsearch, but also helps you deal with the complexities of human language, geolocation, and relationships. If you're a newcomer to both search and distributed systems, you'll quickly learn how to integrate Elasticsearch into your application. More experienced users will pick up lots of advanced techniques. Throughout the book, you'll follow a problem-based approach to learn why, when, and how to use Elasticsearch features. Understand how Elasticsearch interprets data in your documents Index

microservices using Spring Boot. This microservices book will take you through tried and tested approaches to building distributed systems and implementing microservices architecture in your organization. Starting with a set of simple cooperating microservices developed using Spring Boot, you'll learn how you can add functionalities such as persistence, make your microservices reactive, and describe their APIs using Swagger/OpenAPI. As you advance, you'll understand how to add different services from Spring Cloud to your microservice system. The book also demonstrates how to deploy your microservices using Kubernetes and manage them with Istio for improved security and traffic management. Finally, you'll explore centralized log management using the EFK stack and monitor microservices using Prometheus and Grafana. By the end of this book, you'll be able to build microservices that are scalable and robust using Spring Boot and Spring Cloud. What you will learn

- Build reactive microservices using Spring Boot
- Develop resilient and scalable microservices using Spring Cloud
- Use OAuth 2.0/OIDC and Spring Security to protect public APIs
- Implement Docker to bridge the gap between development, testing, and production
- Deploy and manage microservices using Kubernetes
- Apply Istio for improved security, observability, and traffic management

Who this book is for This book is for Java and Spring developers and architects who want to learn how to break up their existing monoliths into microservices and deploy them either on-premises or in the cloud using Kubernetes as a container orchestrator and Istio as a service Mesh. No familiarity with microservices architecture is required to get started with this book.

Learning DevOps: Continuously Deliver Better Software Jan 22 2022

Learn to use some of the most exciting and powerful tools to deliver world-class quality software with continuous delivery and DevOps About This Book Get to know the background of DevOps so you understand the collaboration between different aspects of an IT organization and a software developer Deploy top-quality software and ensure software maintenance and release management with this practical guide This course covers some of the most exciting technology available to DevOps engineers, and demonstrates multiple techniques for using them Real-world and realistic examples are provided to help you as you go about the implementation and adoption of continuous delivery and DevOps Who This Book Is For This course is for developers who want to understand how the infrastructure that builds today's enterprises works, and how to painlessly and regularly ship quality software. What You Will Learn

- Set up and familiarize yourself with all the tools you need to be efficient with DevOps
- Design an application that is suitable for continuous deployment systems with DevOps in mind
- Test the code using automated regression testing with Jenkins Selenium
- Managing the lifecycle of hosts, from creation to ongoing management using Puppet
- Razor Find out how to manage, use, and work with Code in the Git

version management system See what traps, pitfalls, and hurdles to look out for as you implement continuous delivery and DevOps In Detail Harness the power of DevOps to boost your skill set and make your IT organization perform better. If you're keen to employ DevOps techniques to better your software development, this course contains all you need to overcome the day-to-day complications of managing complex infrastructures the DevOps way. Start with your first module - Practical DevOps - that encompasses the entire flow from code from testing to production. Get a solid ground-level knowledge of how to monitor code for any anomalies, perform code testing, and make sure the code is running smoothly through a series of real-world exercise, and develop practical skills by creating a sample enterprise Java application. In the second module, run through a series of tailored mini-tutorials designed to give you a complete understanding of every DevOps automation technique. Create real change in the way you deliver your projects by utilizing some of the most commendable software available today. Go from your first steps of managing code in Git to configuration management in Puppet, monitoring using Sensu, and more. In the final module, get to grips with the continuous delivery techniques that will help you reduce the time and effort that goes into the delivery and support of software. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: Practical DevOps by Joakim Verona DevOps Automation Cookbook by Michael Duffy Continuous Delivery and DevOps : A Quickstart Guide - Second Edition by Paul Swartout Style and approach This course is an easy to follow project based guide for all those with a keen interest in deploying world-class software using some of the most effective and remarkable technologies available.

Getting Started with Elastic Stack 8.0 May 26 2022 Use the Elastic Stack for search, security, and observability-related use cases while working with large amounts of data on-premise and on the cloud Key FeaturesLearn the core components of the Elastic Stack and how they work togetherBuild search experiences, monitor and observe your environments, and defend your organization from cyber attacksGet to grips with common architecture patterns and best practices for successfully deploying the Elastic StackBook Description The Elastic Stack helps you work with massive volumes of data to power use cases in the search, observability, and security solution areas. This three-part book starts with an introduction to the Elastic Stack with high-level commentary on the solutions the stack can be leveraged for. The second section focuses on each core component, giving you a detailed understanding of the component and the role it plays. You'll start by working with Elasticsearch to ingest, search, analyze, and store data for your use cases. Next, you'll look at Logstash, Beats, and Elastic Agent as components that can collect, transform, and load data. Later

chapters help you use Kibana as an interface to consume Elastic solutions and interact with data on Elasticsearch. The last section explores the three main use cases offered on top of the Elastic Stack. You'll start with a full-text search and look at real-world outcomes powered by search capabilities. Furthermore, you'll learn how the stack can be used to monitor and observe large and complex IT environments. Finally, you'll understand how to detect, prevent, and respond to security threats across your environment. The book ends by highlighting architecture best practices for successful Elastic Stack deployments. By the end of this book, you'll be able to implement the Elastic Stack and derive value from it. What you will learn

- Configure Elasticsearch clusters with different node types for various architecture patterns
- Ingest different data sources into Elasticsearch using Logstash, Beats, and Elastic Agent
- Build use cases on Kibana including data visualizations, dashboards, machine learning jobs, and alerts
- Design powerful search experiences on top of your data using the Elastic Stack
- Secure your organization and learn how the Elastic SIEM and Endpoint Security capabilities can help
- Explore common architectural considerations for accommodating more complex requirements

Who this book is for Developers and solutions architects looking to get hands-on experience with search, security, and observability-related use cases on the Elastic Stack will find this book useful. This book will also help tech leads and product owners looking to understand the value and outcomes they can derive for their organizations using Elastic technology. No prior knowledge of the Elastic Stack is required.

Learning Kibana 5.0 May 06 2023 Exploit the visualization capabilities of Kibana and build interactive, powerful dashboards

About This Book*

- Get introduced to the data-driven architecture and the Elastic stack
- Build effective dashboards for data visualization and explore datasets with Elastic Graph
- A comprehensive guide to learning scalable data visualization techniques in Kibana with ease

Who This Book Is For

If you are a developer, data visualization engineer, or data scientist who wants to get the best of data visualization at scale, this book is perfect for you. A basic understanding of Elasticsearch and Logstash is required to make the best use of this book.

What you will learn*

- Ingest data and start creating visualizations in Kibana
- Find out how to embed Kibana visualization on web pages
- Build a metrics dashboard in Timelion based on time series data
- Use the Graph plugin visualization feature and leverage a graph query
- Create, implement, package, and deploy a new custom plugin

In Detail

Kibana, an open source data visualization platform, allows you to interact with your data through stunning, powerful graphics. Its simple, browser-based interface enables you to quickly create and share dynamic dashboards that display changes to Elasticsearch queries in real time. In this book, you'll learn how to

use the Elastic stack on top of a data architecture to visualize data in real time. All data architectures have different requirements and expectations when it comes to visualizing the data, whether it's logging analytics, metrics, or business analytics, graph analytics, or scaling them as per your business requirements. This book will help you master Elastic visualization tools and adapt them to the context. You will start by understanding how to use the basic visualization features of Kibana 5. Then, you will see how to implement a pure metric analytics architecture and visualize it using Timelion, a very recent and trendy feature of the Elastic stack. You will learn how to correlate data using the brand new Graph visualization and build relationships between documents. Finally, we dig into the setup of a Kibana development environment in order to build a custom Kibana plugin. By the end of this book, you will have all the information you need to take your Elastic stack skills for data visualization to a new level.

Kubernetes Cookbook Jun 26 2022 Learn how to automate and manage your containers and reduce the overall operation burden on your system. Key Features Use containers to manage, scale and orchestrate apps in your organization Transform the latest concept of Kubernetes 1.10 into examples Expert techniques for orchestrating containers effectively Book Description Kubernetes is an open source orchestration platform to manage containers in a cluster environment. With Kubernetes, you can configure and deploy containerized applications easily. This book gives you a quick brush up on how Kubernetes works with containers, and an overview of main Kubernetes concepts, such as Pods, Deployments, Services and etc. This book explains how to create Kubernetes clusters and run applications with proper authentication and authorization configurations. With real-world recipes, you'll learn how to create high availability Kubernetes clusters on AWS, GCP and in on-premise datacenters with proper logging and monitoring setup. You'll also learn some useful tips about how to build a continuous delivery pipeline for your application. Upon completion of this book, you will be able to use Kubernetes in production and will have a better understanding of how to manage containers using Kubernetes. What you will learn Build your own container cluster Deploy and manage highly scalable, containerized applications with Kubernetes Build high-availability Kubernetes clusters Build a continuous delivery pipeline for your application Track metrics and logs for every container running in your cluster Streamline the way you deploy and manage your applications with large-scale container orchestration Who this book is for This book is for system administrators, developers, DevOps engineers, or any stakeholder who wants to understand how Kubernetes works using a recipe-based approach. Basic knowledge of Kubernetes and Containers is required.

Kibana Essentials Feb 08 2021 Use the functionalities of Kibana to

discover data and build attractive visualizations and dashboards for real-world scenarios

About This Book Perform real-time data analytics and visualizations, on streaming data, using Kibana Build beautiful visualizations and dashboards with simplicity and ease without any type of coding involved Learn all the core concepts as well as detailed information about each component used in Kibana Who This Book Is For Whether you are new to the world of data analytics and data visualization or an expert, this book will provide you with the skills required to use Kibana with ease and simplicity for real-time data visualization of streaming data. This book is intended for those professionals who are interested in learning about Kibana, its installations, and how to use it . As Kibana provides a user-friendly web page, no prior experience is required. What You Will Learn Understand the basic concepts of elasticsearch used in Kibana along with step by step guide to install Kibana in Windows and Ubuntu Explore the functionality of all the components used in Kibana in detail, such as the Discover, Visualize, Dashboard, and Settings pages Analyze data using the powerful search capabilities of elasticsearch Understand the different types of aggregations used in Kibana for visualization Create and build different types of amazing visualizations and dashboards easily Create, save, share, embed, and customize the visualizations added to the dashboard Customize and tweak the advanced settings of Kibana to ensure ease of use In Detail With the increasing interest in data analytics and visualization of large data around the globe, Kibana offers the best features to analyze data and create attractive visualizations and dashboards through simple-to-use web pages. The variety of visualizations provided, combined with the powerful underlying elasticsearch capabilities will help professionals improve their skills with this technology. This book will help you quickly familiarize yourself to Kibana and will also help you to understand the core concepts of this technology to build visualizations easily. Starting with setting up of Kibana and elasticsearch in Windows and Ubuntu, you will then use the Discover page to analyse your data intelligently. Next, you will learn to use the Visualization page to create beautiful visualizations without the need for any coding. Then, you will learn how to use the Dashboard page to create a dashboard and instantly share and embed the dashboards. You will see how to tweak the basic and advanced settings provided in Kibana to manage searches, visualizations, and dashboards. Finally, you will use Kibana to build visualizations and dashboards for real-world scenarios. You will quickly master the functionalities and components used in Kibana to create amazing visualizations based on real-world scenarios. With ample screenshots to guide you through every step, this book will assist you in creating beautiful visualizations with ease. Style and approach This book is a comprehensive step-by-step guide to help you understand Kibana. It's

explained in an easy-to-follow style along with supporting images. Every chapter is explained sequentially , covering the basics of each component of Kibana and providing detailed explanations of all the functionalities of Kibana that appeal.

Hadoop: Data Processing and Modelling Aug 29 2022 Unlock the power of your data with Hadoop 2.X ecosystem and its data warehousing techniques across large data sets About This Book Conquer the mountain of data using Hadoop 2.X tools The authors succeed in creating a context for Hadoop and its ecosystem Hands-on examples and recipes giving the bigger picture and helping you to master Hadoop 2.X data processing platforms Overcome the challenging data processing problems using this exhaustive course with Hadoop 2.X Who This Book Is For This course is for Java developers, who know scripting, wanting a career shift to Hadoop - Big Data segment of the IT industry. So if you are a novice in Hadoop or an expert, this book will make you reach the most advanced level in Hadoop 2.X. What You Will Learn Best practices for setup and configuration of Hadoop clusters, tailoring the system to the problem at hand Integration with relational databases, using Hive for SQL queries and Sqoop for data transfer Installing and maintaining Hadoop 2.X cluster and its ecosystem Advanced Data Analysis using the Hive, Pig, and Map Reduce programs Machine learning principles with libraries such as Mahout and Batch and Stream data processing using Apache Spark Understand the changes involved in the process in the move from Hadoop 1.0 to Hadoop 2.0 Dive into YARN and Storm and use YARN to integrate Storm with Hadoop Deploy Hadoop on Amazon Elastic MapReduce and Discover HDFS replacements and learn about HDFS Federation In Detail As Marc Andreessen has said "Data is eating the world," which can be witnessed today being the age of Big Data, businesses are producing data in huge volumes every day and this rise in tide of data need to be organized and analyzed in a more secured way. With proper and effective use of Hadoop, you can build new-improved models, and based on that you will be able to make the right decisions. The first module, Hadoop beginners Guide will walk you through on understanding Hadoop with very detailed instructions and how to go about using it. Commands are explained using sections called "What just happened" for more clarity and understanding. The second module, Hadoop Real World Solutions Cookbook, 2nd edition, is an essential tutorial to effectively implement a big data warehouse in your business, where you get detailed practices on the latest technologies such as YARN and Spark. Big data has become a key basis of competition and the new waves of productivity growth. Hence, once you get familiar with the basics and implement the end-to-end big data use cases, you will start exploring the third module, Mastering Hadoop. So, now the question is if you need to broaden your Hadoop skill set to the next level after you nail the basics and the advance concepts, then this course is indispensable. When you finish this

course, you will be able to tackle the real-world scenarios and become a big data expert using the tools and the knowledge based on the various step-by-step tutorials and recipes. Style and approach This course has covered everything right from the basic concepts of Hadoop till you master the advance mechanisms to become a big data expert. The goal here is to help you learn the basic essentials using the step-by-step tutorials and from there moving toward the recipes with various real-world solutions for you. It covers all the important aspects of Hadoop from system designing and configuring Hadoop, machine learning principles with various libraries with chapters illustrated with code fragments and schematic diagrams. This is a compendious course to explore Hadoop from the basics to the most advanced techniques available in Hadoop 2.X.

Learning Elastic Stack 6.0 Jul 16 2021 Deliver end-to-end real-time distributed data processing solutions by leveraging the power of Elastic Stack 6.0 Key Features - Get to grips with the new features introduced in Elastic Stack 6.0 - Get valuable insights from your data by working with the different components of the Elastic stack such as Elasticsearch, Logstash, Kibana, X-Pack, and Beats - Includes handy tips and techniques to build, deploy and manage your Elastic applications efficiently on-premise or on the cloud Book Description The Elastic Stack is a powerful combination of tools for distributed search, analytics, logging, and visualization of data from medium to massive data sets. The newly released Elastic Stack 6.0 brings new features and capabilities that empower users to find unique, actionable insights through these techniques. This book will give you a fundamental understanding of what the stack is all about, and how to use it efficiently to build powerful real-time data processing applications. After a quick overview of the newly introduced features in Elastic Stack 6.0, you'll learn how to set up the stack by installing the tools, and see their basic configurations. Then it shows you how to use Elasticsearch for distributed searching and analytics, along with Logstash for logging, and Kibana for data visualization. It also demonstrates the creation of custom plugins using Kibana and Beats. You'll find out about Elastic X-Pack, a useful extension for effective security and monitoring. We also provide useful tips on how to use the Elastic Cloud and deploy the Elastic Stack in production environments. On completing this book, you'll have a solid foundational knowledge of the basic Elastic Stack functionalities. You'll also have a good understanding of the role of each component in the stack to solve different data processing problems. What you will learn - Familiarize yourself with the different components of the Elastic Stack - Get to know the new functionalities introduced in Elastic Stack 6.0 - Effectively build your data pipeline to get data from terabytes or petabytes of data into Elasticsearch and Logstash for searching and logging - Use Kibana

to visualize data and tell data stories in real-time - Secure, monitor, and use the alerting and reporting capabilities of Elastic Stack - Take your Elastic application to an on-premise or cloud-based production environment Who this book is for This book is for data professionals who want to get amazing insights and business metrics from their data sources. If you want to get a fundamental understanding of the Elastic Stack for distributed, real-time processing of data, this book will help you. A fundamental knowledge of JSON would be useful, but is not mandatory. No previous experience with the Elastic Stack is required.

DevOps for VMware Administrators Aug 17 2021 DevOps for VMware® Administrators is the first book focused on using DevOps tools and practices with VMware technologies. The authors introduce high-value tools from third parties and VMware itself, and guide you through using them to improve the performance of all your virtualized systems and applications. You'll walk through automating and optimizing configuration management, provisioning, log management, continuous integration, and more. The authors also offer step-by-step coverage of deploying and managing applications at scale with Docker containers and Google Kubernetes. They conclude with an up-to-the-minute discussion of VMware's newest DevOps initiatives, including VMware vRealize Automation and VMware vRealize Code Stream. Coverage includes

- Understanding the challenges that DevOps tools and practices can help VMware administrators to solve
- Using Vagrant to quickly deploy Dev and Test environments that match production system specifications
- Writing Chef "recipes" that streamline server configuration and maintenance
- Simplifying Unix/Linux configuration management and orchestration with Ansible
- Implementing Docker containers for faster and easier application management
- Automating provisioning across the full lifecycle with Razor
- Integrating Microsoft PowerShell Desired State Configuration (DSC) and VMware PowerCLI to automate key Windows Server and vSphere VM admin tasks
- Using Puppet to automate infrastructure provisioning, configuration, orchestration, and reporting
- Supercharging log management with ELK (Elasticsearch, Logstash, Kibana)
- Supporting DevOps source code management with Git and continuous integration practices with Jenkins
- Achieving continuous integration, delivery, and deployment with VMware's vRealize Code Stream

Learning Kibana 7 Mar 31 2020 A beginner's guide to analyzing and visualizing your Elasticsearch data using Kibana 7 and Timelion Key Features Gain a fundamental understanding of how Kibana operates within the Elastic Stack Explore your data with Elastic Graph and create rich dashboards in Kibana Learn scalable data visualization techniques in Kibana 7 Book Description Kibana is a window into the Elastic Stack, that enables the visual exploration and real-time analysis of your data in Elasticsearch. This book will help you

understand the core concepts of the use of Kibana 7 for rich analytics and data visualization. If you're new to the tool or want to get to grips with the latest features introduced in Kibana 7, this book is the perfect beginner's guide. You'll learn how to set up and configure the Elastic Stack and understand where Kibana sits within the architecture. As you advance, you'll learn how to ingest data from different sources using Beats or Logstash into Elasticsearch, followed by exploring and visualizing data in Kibana. Whether working with time series data to create complex graphs using Timelion or embedding visualizations created in Kibana into your web applications, this book covers it all. It also covers topics that every Elastic developer needs to be aware of, such as installing and configuring Application Performance Monitoring (APM) servers and agents. Finally, you'll also learn how to create effective machine learning jobs in Kibana to find anomalies in your data. By the end of this book, you'll have a solid understanding of Kibana, and be able to create your own visual analytics solutions from scratch. What you will learn

- Explore the data-driven architecture of the Elastic Stack
- Install and set up Kibana 7 and other Elastic Stack components
- Use Beats and Logstash to get input from different data sources
- Create different visualizations using Kibana
- Build enterprise-grade Elastic dashboards from scratch
- Use Timelion to play with time series data
- Install and configure APM servers and APM agents
- Work with Dev Tools, Spaces, Graph, and other important tools

Who this book is for If you're an aspiring Elastic developer or data analysts, this book is for you. You'll also find it useful if you want to get up to speed with the new features of Kibana 7 and perform data visualization on enterprise data. No prior knowledge of Kibana is expected, but some experience with Elasticsearch will be helpful.

Advanced Elasticsearch 7.0 Oct 31 2022 Master the intricacies of Elasticsearch 7.0 and use it to create flexible and scalable search solutions

Key Features Master the latest distributed search and analytics capabilities of Elasticsearch 7.0 Perform searching, indexing, and aggregation of your data at scale Discover tips and techniques for speeding up your search query performance

Book Description Building enterprise-grade distributed applications and executing systematic search operations call for a strong understanding of Elasticsearch and expertise in using its core APIs and latest features. This book will help you master the advanced functionalities of Elasticsearch and understand how you can develop a sophisticated, real-time search engine confidently. In addition to this, you'll also learn to run machine learning jobs in Elasticsearch to speed up routine tasks. You'll get started by learning to use Elasticsearch features on Hadoop and Spark and make search results faster, thereby improving the speed of query results and enhancing the customer experience. You'll then get up to speed with performing analytics by

building a metrics pipeline, defining queries, and using Kibana for intuitive visualizations that help provide decision-makers with better insights. The book will later guide you through using Logstash with examples to collect, parse, and enrich logs before indexing them in Elasticsearch. By the end of this book, you will have comprehensive knowledge of advanced topics such as Apache Spark support, machine learning using Elasticsearch and scikit-learn, and real-time analytics, along with the expertise you need to increase business productivity, perform analytics, and get the very best out of Elasticsearch. What you will learn

- Pre-process documents before indexing in ingest pipelines
- Learn how to model your data in the real world
- Get to grips with using Elasticsearch for exploratory data analysis
- Understand how to build analytics and RESTful services
- Use Kibana, Logstash, and Beats for dashboard applications
- Get up to speed with Spark and Elasticsearch for real-time analytics
- Explore the basics of Spring Data Elasticsearch, and understand how to index, search, and query in a Spring application

Who this book is for This book is for Elasticsearch developers and data engineers who want to take their basic knowledge of Elasticsearch to the next level and use it to build enterprise-grade distributed search applications. Prior experience of working with Elasticsearch will be useful to get the most out of this book.

Learning Elasticsearch Jun 14 2021 Store, search, and analyze your data with ease using Elasticsearch 5.x

About This Book Get to grips with the basics of Elasticsearch concepts and its APIs, and use them to create efficient applications

Create large-scale Elasticsearch clusters and perform analytics using aggregation

This comprehensive guide will get you up and running with Elasticsearch 5.x in no time

Who This Book Is For If you want to build efficient search and analytics applications using Elasticsearch, this book is for you. It will also benefit developers who have worked with Lucene or Solr before and now want to work with Elasticsearch. No previous knowledge of Elasticsearch is expected.

What You Will Learn

- See how to set up and configure Elasticsearch and Kibana
- Know how to ingest structured and unstructured data using Elasticsearch
- Understand how a search engine works and the concepts of relevance and scoring
- Find out how to query Elasticsearch with a high degree of performance and scalability
- Improve the user experience by using autocomplete, geolocation queries, and much more
- See how to slice and dice your data using Elasticsearch aggregations.
- Grasp how to use Kibana to explore and visualize your data
- Know how to host on Elastic Cloud and how to use the latest X-Pack features such as Graph and Alerting

In Detail

Elasticsearch is a modern, fast, distributed, scalable, fault tolerant, and open source search and analytics engine. You can use Elasticsearch for small or large applications with billions of documents. It is built to scale horizontally and can handle both

structured and unstructured data. Packed with easy-to-follow examples, this book will ensure you will have a firm understanding of the basics of Elasticsearch and know how to utilize its capabilities efficiently. You will install and set up Elasticsearch and Kibana, and handle documents using the Distributed Document Store. You will see how to query, search, and index your data, and perform aggregation-based analytics with ease. You will see how to use Kibana to explore and visualize your data. Further on, you will learn to handle document relationships, work with geospatial data, and much more, with this easy-to-follow guide. Finally, you will see how you can set up and scale your Elasticsearch clusters in production environments. Style and approach This comprehensive guide will get you started with Elasticsearch 5.x, so you build a solid understanding of the basics. Every topic is explained in depth and is supplemented with practical examples to enhance your understanding.

Learning ELK Stack May 02 2020 Build mesmerizing visualizations, analytics, and logs from your data using Elasticsearch, Logstash, and Kibana About This Book Solve all your data analytics problems with the ELK stack Explore the power of Kibana4 search and visualizations built over Elasticsearch queries and learn about the features and plugins of Logstash Develop a complete data pipeline using the ELK stack Who This Book Is For If you are a developer or DevOps engineer interested in building a system that provides amazing insights and business metrics out of data sources, of various formats and types, using the open source technology stack that ELK provides, then this book is for you. Basic knowledge of Unix or any programming language will be helpful to make the most out of this book. What You Will Learn Install, configure, and run Elasticsearch, Logstash, and Kibana Understand the need for log analytics and the current challenges in log analysis Build your own data pipeline using the ELK stack Familiarize yourself with the key features of Logstash and the variety of input, filter, and output plugins it provides Build your own custom Logstash plugin Create actionable insights using charts, histograms, and quick search features in Kibana4 Understand the role of Elasticsearch in the ELK stack In Detail The ELK stack—Elasticsearch, Logstash, and Kibana, is a powerful combination of open source tools. Elasticsearch is for deep search and data analytics. Logstash is for centralized logging, log enrichment, and parsing. Kibana is for powerful and beautiful data visualizations. In short, the Elasticsearch ELK stack makes searching and analyzing data easier than ever before. This book will introduce you to the ELK (Elasticsearch, Logstash, and Kibana) stack, starting by showing you how to set up the stack by installing the tools, and basic configuration. You'll move on to building a basic data pipeline using the ELK stack. Next, you'll explore the key features of Logstash and its role in the ELK stack, including creating Logstash plugins, which will enable you to use your own customized plugins. The

importance of Elasticsearch and Kibana in the ELK stack is also covered, along with various types of advanced data analysis, and a variety of charts, tables, and maps. Finally, by the end of the book you will be able to develop full-fledged data pipeline using the ELK stack and have a solid understanding of the role of each of the components. Style and approach This book is a step-by-step guide, complete with various examples to solve your data analytics problems by using the ELK stack to explore and visualize data.

Machine Learning with the Elastic Stack Jan 28 2020 Elastic has announced the integration of PreAlert machine learning technology within its ecosystem allowing real-time generation of business insights from the Elasticsearch data without it leaving the cluster at all. This book will demonstrate these unique features and teach you to perform machine learning on the Elastic Stack without any hassle.

Elasticsearch for Hadoop Nov 07 2020 Integrate Elasticsearch into Hadoop to effectively visualize and analyze your data About This Book Build production-ready analytics applications by integrating the Hadoop ecosystem with Elasticsearch Learn complex Elasticsearch queries and develop real-time monitoring Kibana dashboards to visualize your data Use Elasticsearch and Kibana to search data in Hadoop easily with this comprehensive, step-by-step guide Who This Book Is For This book is targeted at Java developers with basic knowledge on Hadoop. No prior Elasticsearch experience is expected. What You Will Learn Set up the Elasticsearch-Hadoop environment Import HDFS data into Elasticsearch with MapReduce jobs Perform full-text search and aggregations efficiently using Elasticsearch Visualize data and create interactive dashboards using Kibana Check and detect anomalies in streaming data using Storm and Elasticsearch Inject and classify real-time streaming data into Elasticsearch Get production-ready for Elasticsearch-Hadoop based projects Integrate with Hadoop eco-system such as Pig, Storm, Hive, and Spark In Detail The Hadoop ecosystem is a de-facto standard for processing terra-bytes and peta-bytes of data. Lucene-enabled Elasticsearch is becoming an industry standard for its full-text search and aggregation capabilities. Elasticsearch-Hadoop serves as a perfect tool to bridge the worlds of Elasticsearch and Hadoop ecosystem to get best out of both the worlds. Powered with Kibana, this stack makes it a cakewalk to get surprising insights out of your massive amount of Hadoop ecosystem in a flash. In this book, you'll learn to use Elasticsearch, Kibana and Elasticsearch-Hadoop effectively to analyze and understand your HDFS and streaming data. You begin with an in-depth understanding of the Hadoop, Elasticsearch, Marvel, and Kibana setup. Right after this, you will learn to successfully import Hadoop data into Elasticsearch by writing MapReduce job in a real-world example. This is then followed by a comprehensive look at Elasticsearch essentials, such as full-text search analysis, queries, filters and aggregations; after which you

gain an understanding of creating various visualizations and interactive dashboard using Kibana. Classifying your real-world streaming data and identifying trends in it using Storm and Elasticsearch are some of the other topics that we'll cover. You will also gain an insight about key concepts of Elasticsearch and Elasticsearch-hadoop in distributed mode, advanced configurations along with some common configuration presets you may need for your production deployments. You will have "Go production checklist" and high-level view for cluster administration for post-production. Towards the end, you will learn to integrate Elasticsearch with other Hadoop eco-system tools, such as Pig, Hive and Spark. Style and approach A concise yet comprehensive approach has been adopted with real-time examples to help you grasp the concepts easily.

Advanced Elasticsearch 7.0 Nov 19 2021 Master the intricacies of Elasticsearch 7.0 and use it to create flexible and scalable search solutions Key Features Master the latest distributed search and analytics capabilities of Elasticsearch 7.0 Perform searching, indexing, and aggregation of your data at scale Discover tips and techniques for speeding up your search query performance Book Description Building enterprise-grade distributed applications and executing systematic search operations call for a strong understanding of Elasticsearch and expertise in using its core APIs and latest features. This book will help you master the advanced functionalities of Elasticsearch and understand how you can develop a sophisticated, real-time search engine confidently. In addition to this, you'll also learn to run machine learning jobs in Elasticsearch to speed up routine tasks. You'll get started by learning to use Elasticsearch features on Hadoop and Spark and make search results faster, thereby improving the speed of query results and enhancing the customer experience. You'll then get up to speed with performing analytics by building a metrics pipeline, defining queries, and using Kibana for intuitive visualizations that help provide decision-makers with better insights. The book will later guide you through using Logstash with examples to collect, parse, and enrich logs before indexing them in Elasticsearch. By the end of this book, you will have comprehensive knowledge of advanced topics such as Apache Spark support, machine learning using Elasticsearch and scikit-learn, and real-time analytics, along with the expertise you need to increase business productivity, perform analytics, and get the very best out of Elasticsearch. What you will learn Pre-process documents before indexing in ingest pipelines Learn how to model your data in the real world Get to grips with using Elasticsearch for exploratory data analysis Understand how to build analytics and RESTful services Use Kibana, Logstash, and Beats for dashboard applications Get up to speed with Spark and Elasticsearch for real-time analytics Explore the basics of Spring Data Elasticsearch, and understand how to index,

search, and query in a Spring application Who this book is for This book is for Elasticsearch developers and data engineers who want to take their basic knowledge of Elasticsearch to the next level and use it to build enterprise-grade distributed search applications. Prior experience of working with Elasticsearch will be useful to get the most out of this book.

Elasticsearch 7.0 Cookbook Oct 19 2021 Search, analyze, and manage data effectively with Elasticsearch 7 Key Features Extend Elasticsearch functionalities and learn how to deploy on Elastic Cloud Deploy and manage simple Elasticsearch nodes as well as complex cluster topologies Explore the capabilities of Elasticsearch 7 with easy-to-follow recipes Book Description Elasticsearch is a Lucene-based distributed search server that allows users to index and search unstructured content with petabytes of data. With this book, you'll be guided through comprehensive recipes on what's new in Elasticsearch 7, and see how to create and run complex queries and analytics. Packed with recipes on performing index mapping, aggregation, and scripting using Elasticsearch, this fourth edition of Elasticsearch Cookbook will get you acquainted with numerous solutions and quick techniques for performing both every day and uncommon tasks such as deploying Elasticsearch nodes, integrating other tools to Elasticsearch, and creating different visualizations. You will install Kibana to monitor a cluster and also extend it using a variety of plugins. Finally, you will integrate your Java, Scala, Python, and big data applications such as Apache Spark and Pig with Elasticsearch, and create efficient data applications powered by enhanced functionalities and custom plugins. By the end of this book, you will have gained in-depth knowledge of implementing Elasticsearch architecture, and you'll be able to manage, search, and store data efficiently and effectively using Elasticsearch. What you will learn Create an efficient architecture with Elasticsearch Optimize search results by executing analytics aggregations Build complex queries by managing indices and documents Monitor the performance of your cluster and nodes Design advanced mapping to take full control of index steps Integrate Elasticsearch in Java, Scala, Python, and big data applications Install Kibana to monitor clusters and extend it for plugins Who this book is for If you're a software engineer, big data infrastructure engineer, or Elasticsearch developer, you'll find this book useful. This Elasticsearch book will also help data professionals working in the e-commerce and FMCG industry who use Elastic for metrics evaluation and search analytics to get deeper insights for better business decisions. Prior experience with Elasticsearch will help you get the most out of this book.

Elasticsearch 5.x Cookbook Apr 24 2022 Over 170 advanced recipes to search, analyze, deploy, manage, and monitor data effectively with Elasticsearch 5.x About This Book Deploy and manage simple

Elasticsearch nodes as well as complex cluster topologies Write native plugins to extend the functionalities of Elasticsearch 5.x to boost your business Packed with clear, step-by-step recipes to walk you through the capabilities of Elasticsearch 5.x Who This Book Is For If you are a developer who wants to get the most out of Elasticsearch for advanced search and analytics, this is the book for you. Some understanding of JSON is expected. If you want to extend Elasticsearch, understanding of Java and related technologies is also required. What You Will Learn Choose the best Elasticsearch cloud topology to deploy and power it up with external plugins Develop tailored mapping to take full control of index steps Build complex queries through managing indices and documents Optimize search results through executing analytics aggregations Monitor the performance of the cluster and nodes Install Kibana to monitor cluster and extend Kibana for plugins Integrate Elasticsearch in Java, Scala, Python and Big Data applications In Detail Elasticsearch is a Lucene-based distributed search server that allows users to index and search unstructured content with petabytes of data. This book is your one-stop guide to master the complete Elasticsearch ecosystem. We'll guide you through comprehensive recipes on what's new in Elasticsearch 5.x, showing you how to create complex queries and analytics, and perform index mapping, aggregation, and scripting. Further on, you will explore the modules of Cluster and Node monitoring and see ways to back up and restore a snapshot of an index. You will understand how to install Kibana to monitor a cluster and also to extend Kibana for plugins. Finally, you will also see how you can integrate your Java, Scala, Python, and Big Data applications such as Apache Spark and Pig with Elasticsearch, and add enhanced functionalities with custom plugins. By the end of this book, you will have an in-depth knowledge of the implementation of the Elasticsearch architecture and will be able to manage data efficiently and effectively with Elasticsearch. Style and approach This book follows a problem-solution approach to effectively use and manage Elasticsearch. Each recipe focuses on a particular task at hand, and is explained in a very simple, easy to understand manner.

Learning Kibana 5.0 Mar 04 2023 Exploit the visualization capabilities of Kibana and build powerful interactive dashboards About This Book Introduction to data-driven architecture and the Elastic stack Build effective dashboards for data visualization and explore datasets with Elastic Graph A comprehensive guide to learning scalable data visualization techniques in Kibana Who This Book Is For If you are a developer, data visualization engineer, or data scientist who wants to get the best of data visualization at scale then this book is perfect for you. A basic understanding of Elasticsearch and Logstash is required to make the best use of this book. What You Will Learn How to create visualizations in Kibana Ingest log data, structure an

Elasticsearch cluster, and create visualization assets in Kibana Embed Kibana visualization on web pages Scaffold, develop, and deploy new Kibana & Timelion customizations Build a metrics dashboard in Timelion based on time series data Use the Graph plugin visualization feature and leverage a graph query Create, implement, package, and deploy a new custom plugin Use PreAlert to solve anomaly detection challenges In Detail Kibana is an open source data visualization platform that allows you to interact with your data through stunning, powerful graphics. Its simple, browser-based interface enables you to quickly create and share dynamic dashboards that display changes to Elasticsearch queries in real time. In this book, you'll learn how to use the Elastic stack on top of a data architecture to visualize data in real time. All data architectures have different requirements and expectations when it comes to visualizing the data, whether it's logging analytics, metrics, business analytics, graph analytics, or scaling them as per your business requirements. This book will help you master Elastic visualization tools and adapt them to the requirements of your project. You will start by learning how to use the basic visualization features of Kibana 5. Then you will be shown how to implement a pure metric analytics architecture and visualize it using Timelion, a very recent and trendy feature of the Elastic stack. You will learn how to correlate data using the brand-new Graph visualization and build relationships between documents. Finally, you will be familiarized with the setup of a Kibana development environment so that you can build a custom Kibana plugin. By the end of this book you will have all the information needed to take your Elastic stack skills to a new level of data visualization. Style and approach This book takes a comprehensive, step-by-step approach to working with the visualization aspects of the Elastic stack. Every concept is presented in a very easy-to-follow manner that shows you both the logic and method of implementation. Real world cases are referenced to highlight how each of the key concepts can be put to practical use.

Kubernetes - A Complete DevOps Cookbook Feb 29 2020 Leverage Kubernetes and container architecture to successfully run production-ready workloads Key Features Implement Kubernetes to orchestrate and scale applications proficiently Leverage the latest features of Kubernetes to resolve common as well as complex problems in a cloud-native environment Gain hands-on experience in securing, monitoring, and troubleshooting your application Book Description Kubernetes is a popular open source orchestration platform for managing containers in a cluster environment. With this Kubernetes cookbook, you'll learn how to implement Kubernetes using a recipe-based approach. The book will prepare you to create highly available Kubernetes clusters on multiple clouds such as Amazon Web Services (AWS), Google Cloud Platform (GCP), Azure, Alibaba, and on-premises data centers. Starting with recipes

for installing and configuring Kubernetes instances, you'll discover how to work with Kubernetes clients, services, and key metadata. You'll then learn how to build continuous integration/continuous delivery (CI/CD) pipelines for your applications, and understand various methods to manage containers. As you advance, you'll delve into Kubernetes' integration with Docker and Jenkins, and even perform a batch process and configure data volumes. You'll get to grips with methods for scaling, security, monitoring, logging, and troubleshooting. Additionally, this book will take you through the latest updates in Kubernetes, including volume snapshots, creating high availability clusters with kops, running workload operators, new inclusions around kubectl and more. By the end of this book, you'll have developed the skills required to implement Kubernetes in production and manage containers proficiently. What you will learn

Deploy cloud-native applications on Kubernetes
Automate testing in the DevOps workflow
Discover and troubleshoot common storage issues
Dynamically scale containerized services to manage fluctuating traffic needs
Understand how to monitor your containerized DevOps environment
Build DevSecOps into CI/CD pipelines

Who this book is for
This Kubernetes book is for developers, IT professionals, and DevOps engineers and teams who want to use Kubernetes to manage, scale, and orchestrate applications in their organization. Basic understanding of Kubernetes and containerization is necessary.

Mastering Kibana 6.x Dec 09 2020 Get to grips with Kibana and its advanced functions to create interactive visualizations and dashboards

Key Features
Explore visualizations and perform histograms, stats, and map analytics
Unleash X-Pack and Timelion, and learn alerting, monitoring, and reporting features
Manage dashboards with Beats and create machine learning jobs for faster analytics

Book Description
Kibana is one of the popular tools among data enthusiasts for slicing and dicing large datasets and uncovering Business Intelligence (BI) with the help of its rich and powerful visualizations. To begin with, Mastering Kibana 6.x quickly introduces you to the features of Kibana 6.x, before teaching you how to create smart dashboards in no time. You will explore metric analytics and graph exploration, followed by understanding how to quickly customize Kibana dashboards. In addition to this, you will learn advanced analytics such as maps, hits, and list analytics. All this will help you enhance your skills in running and comparing multiple queries and filters, influencing your data visualization skills at scale. With Kibana's Timelion feature, you can analyze time series data with histograms and stats analytics. By the end of this book, you will have created a speedy machine learning job using X-Pack capabilities. What you will learn

Create unique dashboards with various intuitive data visualizations
Visualize Timelion expressions with added histograms and stats analytics
Integrate X-Pack with your Elastic Stack in simple steps
Extract data

from Elasticsearch for advanced analysis and anomaly detection using dashboards Build dashboards from web applications for application logs Create monitoring and alerting dashboards using Beats Who this book is for Mastering Kibana 6.x is for you if you are a big data engineer, DevOps engineer, or data scientist aspiring to go beyond data visualization at scale and gain maximum insights from their large datasets. Basic knowledge of Elasticstack will be an added advantage, although not mandatory.

Mastering Elastic Stack Mar 24 2022 Get the most out of the Elastic Stack for various complex analytics using this comprehensive and practical guide About This Book Your one-stop solution to perform advanced analytics with Elasticsearch, Logstash, and Kibana Learn how to make better sense of your data by searching, analyzing, and logging data in a systematic way This highly practical guide takes you through an advanced implementation on the ELK stack in your enterprise environment Who This Book Is For This book cater to developers using the Elastic stack in their day-to-day work who are familiar with the basics of Elasticsearch, Logstash, and Kibana, and now want to become an expert at using the Elastic stack for data analytics. What You Will Learn Build a pipeline with help of Logstash and Beats to visualize Elasticsearch data in Kibana Use Beats to ship any type of data to the Elastic stack Understand Elasticsearch APIs, modules, and other advanced concepts Explore Logstash and it's plugins Discover how to utilize the new Kibana UI for advanced analytics See how to work with the Elastic Stack using other advanced configurations Customize the Elastic Stack and plugin development for each of the component Work with the Elastic Stack in a production environment Explore the various components of X-Pack in detail. In Detail Even structured data is useless if it can't help you to take strategic decisions and improve existing system. If you love to play with data, or your job requires you to process custom log formats, design a scalable analysis system, and manage logs to do real-time data analysis, this book is your one-stop solution. By combining the massively popular Elasticsearch, Logstash, Beats, and Kibana, elastic.co has advanced the end-to-end stack that delivers actionable insights in real time from almost any type of structured or unstructured data source. If your job requires you to process custom log formats, design a scalable analysis system, explore a variety of data, and manage logs, this book is your one-stop solution. You will learn how to create real-time dashboards and how to manage the life cycle of logs in detail through real-life scenarios. This book brushes up your basic knowledge on implementing the Elastic Stack and then dives deeper into complex and advanced implementations of the Elastic Stack. We'll help you to solve data analytics challenges using the Elastic Stack and provide practical steps on centralized logging and real-time analytics with the Elastic Stack in production. You will get to grip with advanced techniques for log

analysis and visualization. Newly announced features such as Beats and X-Pack are also covered in detail with examples. Toward the end, you will see how to use the Elastic stack for real-world case studies and we'll show you some best practices and troubleshooting techniques for the Elastic Stack. Style and approach This practical guide shows you how to perform advanced analytics with the Elastic stack through real-world use cases. It includes common and some not so common scenarios to use the Elastic stack for data analysis.

Learning Elastic Stack 7.0 Jan 02 2023 A beginner's guide to storing, managing, and analyzing data with the updated features of Elastic 7.0 Key Features Gain access to new features and updates introduced in Elastic Stack 7.0 Grasp the fundamentals of Elastic Stack including Elasticsearch, Logstash, and Kibana Explore useful tips for using Elastic Cloud and deploying Elastic Stack in production environments Book Description The Elastic Stack is a powerful combination of tools for techniques such as distributed search, analytics, logging, and visualization of data. Elastic Stack 7.0 encompasses new features and capabilities that will enable you to find unique insights into analytics using these techniques. This book will give you a fundamental understanding of what the stack is all about, and help you use it efficiently to build powerful real-time data processing applications. The first few sections of the book will help you understand how to set up the stack by installing tools, and exploring their basic configurations. You'll then get up to speed with using Elasticsearch for distributed searching and analytics, Logstash for logging, and Kibana for data visualization. As you work through the book, you will discover the technique of creating custom plugins using Kibana and Beats. This is followed by coverage of the Elastic X-Pack, a useful extension for effective security and monitoring. You'll also find helpful tips on how to use Elastic Cloud and deploy Elastic Stack in production environments. By the end of this book, you'll be well versed with the fundamental Elastic Stack functionalities and the role of each component in the stack to solve different data processing problems. What you will learn Install and configure an Elasticsearch architecture Solve the full-text search problem with Elasticsearch Discover powerful analytics capabilities through aggregations using Elasticsearch Build a data pipeline to transfer data from a variety of sources into Elasticsearch for analysis Create interactive dashboards for effective storytelling with your data using Kibana Learn how to secure, monitor and use Elastic Stack's alerting and reporting capabilities Take applications to an on-premise or cloud-based production environment with Elastic Stack Who this book is for This book is for entry-level data professionals, software engineers, e-commerce developers, and full-stack developers who want to learn about Elastic Stack and how the real-time processing and search engine works for business analytics and enterprise search applications. Previous

experience with Elastic Stack is not required, however knowledge of data warehousing and database concepts will be helpful.

Mastering Elasticsearch 5.x Apr 05 2023 Master the intricacies of Elasticsearch 5 and use it to create flexible and scalable search solutions About This Book Master the searching, indexing, and aggregation features in Elasticsearch Improve users' search experience with Elasticsearch's functionalities and develop your own Elasticsearch plugins A comprehensive, step-by-step guide to master the intricacies of Elasticsearch with ease Who This Book Is For If you have some prior working experience with Elasticsearch and want to take your knowledge to the next level, this book will be the perfect resource for you. If you are a developer who wants to implement scalable search solutions with Elasticsearch, this book will also help you. Some basic knowledge of the query DSL and data indexing is required to make the best use of this book. What You Will Learn Understand Apache Lucene and Elasticsearch 5's design and architecture Use and configure the new and improved default text scoring mechanism in Apache Lucene 6 Know how to overcome the pitfalls while handling relational data in Elasticsearch Learn about choosing the right queries according to the use cases and master the scripting module including new default scripting language, painlessly Explore the right way of scaling production clusters to improve the performance of Elasticsearch Master the searching, indexing, and aggregation features in Elasticsearch Develop your own Elasticsearch plugins to extend the functionalities of Elasticsearch In Detail Elasticsearch is a modern, fast, distributed, scalable, fault tolerant, and open source search and analytics engine. Elasticsearch leverages the capabilities of Apache Lucene, and provides a new level of control over how you can index and search even huge sets of data. This book will give you a brief recap of the basics and also introduce you to the new features of Elasticsearch 5. We will guide you through the intermediate and advanced functionalities of Elasticsearch, such as querying, indexing, searching, and modifying data. We'll also explore advanced concepts, including aggregation, index control, sharding, replication, and clustering. We'll show you the modules of monitoring and administration available in Elasticsearch, and will also cover backup and recovery. You will get an understanding of how you can scale your Elasticsearch cluster to contextualize it and improve its performance. We'll also show you how you can create your own analysis plugin in Elasticsearch. By the end of the book, you will have all the knowledge necessary to master Elasticsearch and put it to efficient use. Style and approach This comprehensive guide covers intermediate and advanced concepts in Elasticsearch as well as their implementation. An easy-to-follow approach means you'll be able to master even advanced querying, searching, and administration tasks with ease.

Kibana 7 Quick Start Guide Jul 28 2022 A quick start guide to

visualize your Elasticsearch data Key Features Your hands-on guide to visualizing the Elasticsearch data as well as navigating the Elastic stack Work with different Kibana plugins and create effective machine learning jobs using Kibana Build effective dashboards and reports without any hassle Book Description The Elastic Stack is growing rapidly and, day by day, additional tools are being added to make it more effective. This book endeavors to explain all the important aspects of Kibana, which is essential for utilizing its full potential. This book covers the core concepts of Kibana, with chapters set out in a coherent manner so that readers can advance their learning in a step-by-step manner. The focus is on a practical approach, thereby enabling the reader to apply those examples in real time for a better understanding of the concepts and to provide them with the correct skills in relation to the tool. With its succinct explanations, it is quite easy for a reader to use this book as a reference guide for learning basic to advanced implementations of Kibana. The practical examples, such as the creation of Kibana dashboards from CSV data, application RDBMS data, system metrics data, log file data, APM agents, and search results, can provide readers with a number of different drop-off points from where they can fetch any type of data into Kibana for the purpose of analysis or dashboarding. What you will learn Explore how Logstash is configured to fetch CSV data Understand how to create index patterns in Kibana Become familiar with how to apply filters on data Discover how to create ML jobs Explore how to analyze APM data from APM agents Get to grips with how to save, share, inspect, and edit visualizations Understand how to find an anomaly in data Who this book is for Kibana 7 Quick Start Guide is for developers new to Kibana who want to learn the fundamentals of using the tool for visualization, as well as existing Elastic developers.

Learning Elastic Stack 7.0 May 14 2021 A beginner's guide to storing, managing, and analyzing data with the updated features of Elastic 7.0 Key Features Gain access to new features and updates introduced in Elastic Stack 7.0 Grasp the fundamentals of Elastic Stack including Elasticsearch, Logstash, and Kibana Explore useful tips for using Elastic Cloud and deploying Elastic Stack in production environments Book Description The Elastic Stack is a powerful combination of tools for techniques such as distributed search, analytics, logging, and visualization of data. Elastic Stack 7.0 encompasses new features and capabilities that will enable you to find unique insights into analytics using these techniques. This book will give you a fundamental understanding of what the stack is all about, and help you use it efficiently to build powerful real-time data processing applications. The first few sections of the book will help you understand how to set up the stack by installing tools, and exploring their basic configurations. You'll then get up to speed with using

Elasticsearch for distributed searching and analytics, Logstash for logging, and Kibana for data visualization. As you work through the book, you will discover the technique of creating custom plugins using Kibana and Beats. This is followed by coverage of the Elastic X-Pack, a useful extension for effective security and monitoring. You'll also find helpful tips on how to use Elastic Cloud and deploy Elastic Stack in production environments. By the end of this book, you'll be well versed with the fundamental Elastic Stack functionalities and the role of each component in the stack to solve different data processing problems. What you will learn

- Install and configure an Elasticsearch architecture
- Solve the full-text search problem with Elasticsearch
- Discover powerful analytics capabilities through aggregations using Elasticsearch
- Build a data pipeline to transfer data from a variety of sources into Elasticsearch for analysis
- Create interactive dashboards for effective storytelling with your data using Kibana
- Learn how to secure, monitor and use Elastic Stack's alerting and reporting capabilities
- Take applications to an on-premise or cloud-based production environment with Elastic Stack

Who this book is for This book is for entry-level data professionals, software engineers, e-commerce developers, and full-stack developers who want to learn about Elastic Stack and how the real-time processing and search engine works for business analytics and enterprise search applications. Previous experience with Elastic Stack is not required, however knowledge of data warehousing and database concepts will be helpful.

Software Defined Data Center with Red Hat Cloud and Open Source IT Operations Management Jan 10 2021 This IBM® Redbooks® publication delivers a Site Reliability Engineering (SRE) solution for cloud workloads that uses Red Hat OpenStack for Infrastructure as a Service (IaaS), Red Hat OpenShift for Platform as a Service (PaaS), and IT operations management that uses open source tools. Today, customers are no longer living in a world of licensed software. Curiosity increased the demand for investigating the Open Source world for Community Open Source and Enterprise grade applications. IBM as one of the contributors to the Open Source community is interested in helping the software be maintained and supported. Having companies, such as IBM, support the evolution of Open Source software helps to keep the Open Source community striving for enterprise grade open source solutions. Lately, companies are working on deciphering how to take advantage of Enterprise and Community Open Source to implement in their enterprises. The business case for open source software is no longer a mystery and no surprise that most of the new positions in IT enterprises are related to open source projects. The ability of a large enterprise to manage this sort of implementations is to engage in a hypertrophied cooperation, where the ability to not only cooperate with teams and people outside your organization, but also to find new ways of working together and devise new ways to improve the

software and its code. A goal for this publication is to help the client's journey into the open source space and implement a private Cloud Container-based architecture with the ability to manage the entire IT Service Management processes from the open source framework. This publication describes the architecture and implementation details of the solution. Although not every piece of this solution is documented here, this book does provide instructions for what was achieved incorporating open source technologies. Moreover, with this publication, the team shares their collaboration experiences working in a team of technologists, open source developers, Red Hat, and the open source community. This publication is for designers, developers, managers, and anyone who is considering starting a Cloud open source project, or users who started that journey. This book also can be a manual to guide the implementation of a technical viable architecture and help those enterprises participate in an open source project but have not done so before. The reader must be familiar with principles in programming and basic software engineering concepts, such as source code, compilers, and patches.

Monitoring Elasticsearch Dec 01 2022 Monitor your Elasticsearch cluster's health, and diagnose and solve its performance and reliability issues About This Book Understand common performance and reliability pitfalls in Elasticsearch Use popular monitoring tools such as Elasticsearch-head, BigDesk, Marvel, Kibana, and more This is a step-by-step guide with lots of case studies on solving real-world Elasticsearch cluster issues Who This Book Is For This book is for developers and system administrators who use Elasticsearch in a wide range of capacities. Prior knowledge of Elasticsearch and related technologies would be helpful, but is not necessary. What You Will Learn Explore your cluster with Elasticsearch-head and BigDesk Access the underlying data of the Elasticsearch monitoring plugins using the Elasticsearch API Analyze your cluster's performance with Marvel Troubleshoot some of the common performance and reliability issues that come up when using Elasticsearch Analyze a cluster's historical performance, and get to the bottom of and recover from system failures Use and install various other tools and plugins such as Kibana and Kopf, which is helpful to monitor Elasticsearch In Detail Elasticsearch is a distributed search server similar to Apache Solr with a focus on large datasets, a schema-less setup, and high availability. This schema-free architecture allows Elasticsearch to index and search unstructured content, making it perfectly suited for both small projects and large big data warehouses with petabytes of unstructured data. This book is your toolkit to teach you how to keep your cluster in good health, and show you how to diagnose and treat unexpected issues along the way. You will start by getting introduced to Elasticsearch, and look at some common performance issues that pop up when using the system. You will then see how to install and

configure Elasticsearch and the Elasticsearch monitoring plugins. Then, you will proceed to install and use the Marvel dashboard to monitor Elasticsearch. You will find out how to troubleshoot some of the common performance and reliability issues that come up when using Elasticsearch. Finally, you will analyze your cluster's historical performance, and get to know how to get to the bottom of and recover from system failures. This book will guide you through several monitoring tools, and utilizes real-world cases and dilemmas faced when using Elasticsearch, showing you how to solve them simply, quickly, and cleanly. Style and approach This is a step-by-step guide to monitoring your Elasticsearch cluster and correcting performance issues. It is filled with lots of in-depth, real-world use-cases on solving different Elasticsearch cluster issues.

Building Microservices Oct 07 2020 Distributed systems have become more fine-grained as organizations shift from code-heavy monolithic applications to smaller, self-contained microservices. But developing these systems brings its own set of problems. With lots of examples and practical advice, this expanded second edition takes a holistic view of the topics system architects and administrators must consider when building, managing, and evolving microservices architectures. Author Sam Newman provides you with a firm grounding in the concepts while diving into the latest solutions for modeling, integrating, testing, deploying, and monitoring your own autonomous services. Through real-world examples, you'll learn how organizations worldwide are getting the most out of these architectures. Microservices technologies are moving quickly. This book brings you up to speed. Get new information on user interfaces, container orchestration, and serverless Use microservices to align system design with your organization's goals Explore options for integrating a service with the rest of your system Take an incremental approach when splitting monolithic codebases Deploy individual microservices through continuous integration Examine the complexities of testing and monitoring distributed services Manage security with expanded content around user-to-service and service-to-service models Understand the challenges of scaling microservices architectures.