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Descrizione fisica	1 online resource (XIV, 245 p. 230 illus.)
Disciplina	005.1
Soggetti	Agile software development
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Ch1: Basic concepts of Monitoring -- Ch 2: Collection of Events, Logs and Metrics -- Ch 3: Architecture of a Modern Monitoring System -- Ch 4: Prometheus -- Ch 5: TICK Platform -- Ch 6: Elastic Stack – Elastic Search -- Ch 7: Analyze and Investigate -- Ch 8: Type of Time Series Graphs -- Ch 9: Type of Summary Graphs -- Ch 10: Graphana -- Ch 11: Alerting and Notifications.
Sommario/riassunto	Introduce yourself to the nuances of modern monitoring for cloud-native applications running on Kubernetes clusters. This book will help you get started with the concepts of monitoring, introduce you to popular open-source monitoring tools, and help with finding the correct set of use cases for their implementation. It covers the in-depth technical details of open-source software used in modern monitoring systems that are tailor made for environments running microservices. Monitoring Cloud-Native Applications is divided into two parts. Part 1 starts with an introduction to cloud-native applications and the foundational concepts of monitoring. It then walks you through the various aspects of monitoring containerized workloads using Kubernetes as the de-facto orchestration platform. You will dive deep into the architecture of a modern monitoring system and look at its individual components in detail. Part 2 introduces you to popular open-source tools which are used by enterprises and startups alike and are well established as the tools of choice for industry stalwarts. First off,

you will look at Prometheus and understand its architecture and usage. You will also learn about InfluxDB, formerly called TICK Stack (Telegraf, InfluxDB, Chronograf, and Kapacitor). You will explore the technical details of its architecture and the use cases which it solves. In the next chapter, you will be introduced to Grafana, a multi-platform open source analytics and interactive visualization tool that can help you with visualization of data and dashboards. After reading this book, you will have a much better understanding of key terminologies and general concepts around monitoring and observability. You will also be able to select a suitable monitoring solution from the bouquet of open-source monitoring solutions available for applications, microservices, and containers. Armed with this knowledge, you will be better prepared to design and lead a successful agile operations team.

What You Will Learn

- Monitor and observe of metrics, events, logs, and traces
- Carry out infrastructure and application monitoring for microservices architecture
- Analyze and visualize collected data
- Use alerting, reporting, and automated actions for problem resolution

Who This Book Is For

DevOps administrators, cloud administrators, and site reliability engineers (SREs) who manage and monitor applications and cloud infrastructure on a day-to-day basis within their organizations.
