

1. Record Nr.	UNINA9910595047903321
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Titolo	The Art of Site Reliability Engineering (SRE) with Azure : Building and Deploying Applications That Endure / / by Unai Huete Beloki
Pubbl/distr/stampa	Berkeley, CA : , : Apress : , : Imprint : Apress, , 2022
ISBN	9781484287040 1484287045
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (289 pages)
Disciplina	629.8
Soggetti	Microsoft software Microsoft .NET Framework Cloud computing Microsoft Cloud Computing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter 1: The foundation of Site Reliability Engineering -- Chapter 2: Service Level Management Definitions and Acronyms -- Chapter 3: Azure Well-Architected Framework (WAF) -- Chapter 4: Architecting Resilient Solutions in Azure -- Chapter 5: Automation to Enable SRE with GitHub Actions/Azure DevOps/ Azure Automation -- Chapter 6: Monitoring as the Key to Knowledge -- Chapter 7: Efficiently Handle Incident Response and Blameless Post-Mortems -- Chapter 8: Azure Chaos Studio (Preview) and Azure Load Testing (Preview).
Sommario/riassunto	Gain a foundational understanding of SRE and learn its basic concepts and architectural best practices for deploying Azure IaaS, PaaS, and microservices-based resilient architectures. The book starts with the base concepts of SRE operations and developer needs, followed by definitions and acronyms of Service Level Agreements in real-world scenarios. Moving forward, you will learn how to build resilient IaaS solutions, PaaS solutions, and microservices architecture in Azure. Here you will go through Azure reference architecture for high-available storage, networking and virtual machine computing, describing Availability Sets and Zones and Scale Sets as main scenarios. You will

explore similar reference architectures for Platform Services such as App Services with Web Apps, and work with data solutions like Azure SQL and Azure Cosmos DB. Next, you will learn automation to enable SRE with Azure DevOps Pipelines and GitHub Actions. You'll also gain an understanding of how an open culture around post-mortems dramatically helps in optimizing SRE and the overall company culture around managing and running IT systems and application workloads. You'll be exposed to incident management and monitoring practices, by making use of Azure Monitor/Log Analytics/Grafana, which forms the foundation of monitoring Azure and Hybrid-running workloads. As an extra, the book covers two new testing solutions: Azure Chaos Studio and Azure Load Testing. These solutions will make it easier to test the resilience of your services. After reading this book, you will understand the underlying concepts of SRE and its implementation using Azure public cloud. You will: Learn SRE definitions and metrics like SLI/SLO/SLA, Error Budget, toil, MTTR, MTTF, and MTBF Understand Azure Well-Architected Framework (WAF) and Disaster Recovery scenarios on Azure Understand resiliency and how to design resilient solutions in Azure for different architecture types and services Master core DevOps concepts and the difference between SRE and tools like Azure DevOps and GitHub Utilize Azure observability tools like Azure Monitor, Application Insights, KQL or Grafana Understand Incident Response and Blameless Post-Mortems and how to improve collaboration using ChatOps practices with Microsoft tools.
