

Site Reliability Engineering (SRE) PractitionerSM BLUEPRINT

SRE practitioners deliver reliable service to all stakeholders by engineering software and systems to meet Service Level Objectives.



SRE anti-patterns

SRE is not rebranding Ops or DevOps. It is more than responding to alerts. It is not about mob reactions. It is about engineering and codifying solutions.



Full-stack observability

Provides high-level overviews of system health and granular insights into failure modes of the system. Furnishes context about its inner workings to uncover systemic issues.

> BENEFITS

Organization:

Stable, reliable services, improved customer experience, culture of collaboration between development and operations.

Individuals:

Knowledge and skills for implementing secure and reliable, fault-tolerant systems, observability, intelligent operations, and human skills.



Platforms, GenAI and AIOps

SREs leverage Platform Engineering and Value Stream Management for 'self-service' provisioning, and configuration. GenAI improves efficiency of SRE automation. SREs use AIOps to automate event correlation, anomaly detection, and analysis.



Secure and reliable systems

Non-abstract, large-scale design, intentional architecture, design for changing landscape, design for changing security, multi-grained services architecture, container management, Kubernetes, reactive systems and deployment strategies such as canary and blue-green.



SLOs for customer happiness

Identify system boundaries, define capabilities for each system, define SLIs for each capability, define SLOs targets, measure baseline.



Chaos Engineering

SREs proactively experiment with systems to find and mitigate systems reliability and security issues by leveraging Chaos Engineering and Game Days strategies.



SRE and incident response

SREs ensure fast, effective incident detection, resolution, and learning, using collaborative workflows, developing standardized playbooks and applying AI/ML tools.



Transforming to SRE

SREs use a disciplined engineering approach to transform operations by building SRE practices and measures according to SRE principles.