DevOps INSTITUTE

Site Reliability Engineering Practitioner℠

BLUEPRINT

SRE Practitioners deliver business value to customers through collaboration with DevOps teams and engineering of reliable, secure application environments and software systems.

SRE Anti-Patterns

SRE is not a rebranding of Ops.
Alert for user, not system issues.
SLOs are for perceiving user experiences.
False positives are worse than no alerts.
Change by replacement, not updating.
Incidents have plans, not mob reactions.

Full Stack Observability

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

Platform SRE and AIOps

Platform SRE solves organizational scalability challenges by applying product management to promoting unified SRE and DevOps culture.
AIOps combines big data and machine learning to automate operations including event correlation, anomaly detection and causality determination.

SLOs For Customer Happiness

Identify system boundaries, define capabilities for each system, define SLI for each capability, define SLO targets, measure baseline.

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.

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.

Chaos Engineering

Chaos Engineering is the discipline of experimenting on a distributed system in order to build confidence in the system's ability to withstand turbulent conditions.

SRE is the Purest Form of DevOps

SREs code infrastructure and tools; set SLOs, alerts, and report against the SLI such as availability; workload is capped; use tracing and APM tools to understand applications performance and do on-call and postmortems.