Site Reliability Engineering (SRE) Foundation℠ Course Description

DURATION - 16 Hours

Introduces a range of practices for improving service reliability through a mixture of automation, working methods and organizational re-alignment. Tailored for those focused on large-scale service availability.

OVERVIEW

The SRE (Site Reliability Engineering) Foundation℠ course is an introduction to the principles & practices that enable an organization to reliably and economically scale critical services. Introducing a site-reliability dimension requires organizational re-alignment, a new focus on engineering & automation, and the adoption of a range of new working paradigms.

The course highlights the evolution of SRE and its future direction, and equips participants with the practices, methods, and tools to engage people across the organization involved in reliability and stability evidenced through the use of real-life scenarios and case stories. Upon completion of the course, participants will have tangible takeaways to leverage when back in the office such as understanding, setting and tracking Service Level Objectives (SLO's).

The course was developed by leveraging key SRE sources, engaging with thought-leaders in the SRE space and working with organizations embracing SRE to extract real-life best practices and has been designed to teach the key principles & practices necessary for starting SRE adoption.

This course positions learners to successfully complete the SRE Foundation certification exam.

COURSE OBJECTIVES

The learning objectives for the SRE Foundation course include a practical understanding of:

- The history of SRE and its emergence at Google
- The inter-relationship of SRE with DevOps and other popular frameworks
- The underlying principles behind SRE
- Service Level Objectives (SLO's) and their user focus
- Service Level Indicators (SLI's) and the modern monitoring landscape
- Error budgets and the associated error budget policies
- Toil and its effect on an organization's productivity
- Some practical steps that can help to eliminate toil
- Observability as something to indicate the health of a service

- SRE tools, automation techniques and the importance of security
- Anti-fragility, our approach to failure and failure testing
- The organizational impact that introducing SRE brings

AUDIENCE

The target audience for the SRE Foundation course are professionals including:

- Anyone starting or leading a move towards increased reliability
- Anyone interested in modern IT leadership and organizational change approaches
- Business Managers
- Business Stakeholders
- Change Agents
- Consultants
- DevOps Practitioners
- IT Directors
- IT Managers
- IT Team Leaders
- Product Owners
- Scrum Masters
- Software Engineers
- Site Reliability Engineers
- System Integrators
- Tool Providers

LEARNER MATERIALS

- Sixteen (16) hours of instructor-led training and exercise facilitation
- Learner Manual (excellent post-class reference)
- Participation in unique exercises designed to apply concepts
- Sample documents, templates, tools and techniques
- Access to additional value-added resources and communities

PREREQUISITES

An understanding and knowledge of common DevOps terminology and concepts and related work experience are recommended.

CERTIFICATION EXAM

Successfully passing (65%) the 60-minute examination, consisting of 40 multiple-choice questions, leads to the SRE (Site Reliability Engineering) Foundation certificate. The certification is governed and maintained by the DevOps Institute.