



Observability FoundationSM Course Description

DURATION - 16 Hours

OVERVIEW

Microservices and Cloud-Native architectures have been goals of many organizations to help increase speed and agility, but as complexity grows, systems become increasingly challenging to observe. When issues occur, these issues are often difficult to triage and identify the root causes. This course introduces a range of practices for advancing resilience and how to architect end-to-end Observability for Cloud-Native applications. The advantages of building full-stack metrics, events, logs, and distributed tracing are introduced, along with the impact of DevSecOps on Observability and how AIOps enhance Observability capabilities. This course also covers how Network and Security Observability plays a key role in building reliability, the key aspects of security operations and automated responses are covered,

The course aims to equip participants with the practices, methods, and tools to engage people across the organization involved in Observability by using real-life scenarios and case stories. Upon completion of the course, participants will have tangible takeaways to leverage situations such as implementing MELT models effectively, that fit their organizational context, building distributed tracing and resiliency by design.

The course is developed by leveraging key experts in the fields of telemetry, sources of knowledge and engaging with thought-leaders in the Observability space, and working with organizations who have crossed the chasm of modern Observability to extract real-life best practices.

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

COURSE OBJECTIVES

At the end of the course, the following learning objectives are expected to be achieved:

1. Practical view of how to successfully implement a flourishing Observability culture in your organization
2. The underlying principles of Observability and an understanding why monitoring on its own will not provide the required results in microservices based containerized environments
3. Understanding the three pillars of Observability
4. Adopting open Telemetry standards helps achieve innovation and distributed tracing in a seamless manner
5. Observability Maturity Model and the measurement of practical observability
6. Implementing full stack Observability and distributed tracing will enable a DevSecOps culture

7. Curating Observability using AI to move from reactive to proactive and predictive incident management. Also, how you use DataOps to build a clean data lineage of observable data.
8. Implementing Network, Container level Observability and why is security a first class citizen in building the Observability culture
9. What is Time based Topology, and how does it add value in Observability for a distributed environment
10. The Data paradox, and how we address data issues using a systematic approach (DataOps) to build a clean Observability pipeline
11. How do we feedforward DevSecOps wisdom into Observability
12. Observability practices for DevSecOps and SRE

AUDIENCE

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

- Anyone focused on large-scale service scalability and 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 discussion facilitation
- Learner Manual (excellent post-class reference)
- Participation in unique exercises designed to apply concepts
- Sample exam
- Glossary
- Access to additional value-added resources and communities

PREREQUISITES

It is highly recommended that learners attend the SRE Foundation course with an accredited DevOps Institute Education Partner and earn the SRE Foundation certification prior to attending the Observability Foundation course and exam. An understanding and knowledge of common SRE terminology, concepts, principles and related work experience are recommended.

CERTIFICATION EXAM

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

COURSE OUTLINE

Course Introduction

Module 1: Exploring Observability

Module 2: Pillars of Observability

Module 3: Open Source Landscape for Observability

Module 4: Service Maps and Topology

Module 5: DataOps Helps Get Observability Right

Module 6: Building Observability with AIOps

Module 7: Security and Networking with Observability

Module 8: Observability Practices for DevOps and SRE