

SUSE Observability Deployment and Basic Operations

Course Duration: 16 Hours

Course code: OBSV201v1

1. Course Overview

This course focuses on deploying and operating SUSE Observability solutions to monitor, analyze, and optimize modern IT environments. Learners will gain hands-on experience in setting up observability tools, collecting metrics, logs, and traces, and ensuring system reliability and performance across distributed infrastructures.

2. What you'll learn?

By the end of the course, you will be able to:

- Understand observability concepts (metrics, logs, traces)
- Deploy SUSE Observability platform components
- Monitor infrastructure and applications effectively
- Configure alerts and dashboards
- Troubleshoot performance and availability issues
- Manage logs and distributed tracing
- Optimize system performance using observability insights
- Implement best practices for monitoring modern environments

3. Target Audience

- DevOps Engineers
- Site Reliability Engineers (SREs)
- System Administrators
- Cloud Engineers
- IT Operations Professionals

4. Pre-Requisites

Before taking this course, you should have:

- Basic knowledge of Linux systems
- Familiarity with cloud or container environments
- Understanding of networking basics
- Basic knowledge of monitoring tools (optional but helpful)

5. Course content

Module 1: Course Introduction

- Course objectives and structure
- Overview of observability
- Introduction to SUSE Observability

Module 2: Observability Fundamentals

- What is observability
- Metrics, logs, and traces explained
- Monitoring vs observability
- Use cases and benefits

Module 3: SUSE Observability Architecture

- Components and architecture
- Data collection and processing
- Integration with infrastructure
- Deployment models

Module 4: Installation and Deployment

- Prerequisites and system requirements
- Installing SUSE Observability components
- Initial configuration
- Accessing dashboards and interfaces

Module 5: Metrics Collection and Monitoring

- Collecting system and application metrics
- Configuring metric sources
- Visualizing metrics
- Setting thresholds

Module 6: Log Management

- Log collection and aggregation
- Centralized logging
- Log analysis techniques
- Troubleshooting with logs

Module 7: Distributed Tracing

- Introduction to tracing
- Tracking application requests
- Analyzing latency and bottlenecks
- Trace visualization

Module 8: Dashboards and Visualization

- Creating dashboards
- Customizing visualizations
- Using templates
- Best practices for monitoring views

Module 9: Alerting and Notifications

- Configuring alerts
- Setting thresholds and conditions
- Notification channels
- Incident response basics

Module 10: Troubleshooting and Root Cause Analysis

- Identifying performance issues
- Using observability data for RCA
- Debugging distributed systems
- Common troubleshooting scenarios

Module 11: Security and Access Control

- Managing user access
- Securing observability data
- Authentication and authorization
- Best practices

Module 12: Performance Optimization

- Using observability insights
- Identifying bottlenecks
- Optimizing system performance
- Capacity planning

Module 13: Integration with Cloud and Kubernetes

- Integrating with Kubernetes environments
- Monitoring containerized applications
- Cloud platform integrations
- Multi-environment monitoring

Module 14: Hands-On Labs and Real-World Scenarios

- Deploying observability stack
- Monitoring applications and infrastructure
- Troubleshooting real-world issues
- Configuring alerts and dashboards

Module 15: Capstone Project

- Deploy and manage observability solution
- Monitor a distributed application
- Perform root cause analysis
- Final project evaluation and presentation

