

Monitoring and Logging in Cloud Environments

COURSE OVERVIEW

This foundational course provides basic understanding of how to analyze cloud-based applications and infrastructure to ensure performance, reliability, and security. It introduces participants to monitoring principles, observability frameworks, and logging practices that enable proactive detection of issues, optimization of resources, and faster incident response. The course covers industry-leading tools and services such as Amazon CloudWatch, Azure Monitor, Google Cloud Operations Suite, Prometheus, Grafana, and ELK/EFK stacks, while also addressing log management, metrics, tracing, and alerting in multi-cloud and hybrid environments. Delegates will develop the skills to design and implement effective monitoring strategies, build actionable dashboards, and integrate monitoring into DevOps and Site Reliability Engineering (SRE) practices.

WHO SHOULD ATTEND?

This course is designed for cloud engineers, DevOps professionals, site reliability engineers (SREs), system administrators, and IT operations teams responsible for managing modern cloud-based applications and infrastructure. It is also suitable for anyone who wants to deepen their expertise in observability and operational excellence. Both early-career professionals and experienced practitioners aiming to strengthen their cloud monitoring and logging capabilities, will find this course valuable.

COURSE OUTCOMES

Delegates will gain the skills and knowledge to:

- Explain the principles of monitoring, logging, and observability in cloud environments.
- Implement monitoring solutions using AWS, Azure, and GCP native tools.
- Configure centralized log collection, storage, and analysis with ELK/EFK stacks.
- Use Prometheus and Grafana to collect metrics and visualize system performance.
- Set up alerts, thresholds, and automated notifications for proactive incident response.
- Apply monitoring best practices to support DevOps, SRE, and compliance requirements.
- Optimize cloud infrastructure and application performance through data-driven insights.

KEY COURSE HIGHLIGHTS

At the end of the course, you will understand;

- The foundations of Monitoring & Observability using metrics, logs, traces, and SRE principles.
- Cloud-Native Monitoring Tools using AWS CloudWatch, Azure Monitor, and Google Cloud Operations Suite.
- ELK/EFK stacks for log aggregation, parsing, and visualization.
- Open-Source Monitoring, Alerting and Incident response.
- Application Performance Monitoring (APM).
- Security & Compliance Monitoring, including Audit logs, anomaly detection, and regulatory requirements.
- Embedding monitoring into pipelines and workflows through Integration with DevOps & CI/CD.

All our courses are dual-certificate courses. At the end of the training, the delegates will receive two certificates.

1. A GTC end-of-course certificate
2. Continuing Professional Development (CPD) Certificate of completion with earned credits awarded.