

# **Monitoring and Alerting cloud services via Grafana, Prometheus Course Outline**

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## Day 1

Introduction

Introduction to Systems and Service Monitoring

Introduction to Prometheus

Installing and Setting Up Prometheus

Prometheus Configuration

Basic Querying

Dashboarding

Monitoring Host Metrics

Monitoring Container Metrics

Node Exporter

Client Libraries

## Day 2

Instrumenting Code

Building Exporters

Advanced Querying

Relabeling

Service Discovery

Client Libraries

Blackbox Monitoring

Pushing Data

Alerting

Making Prometheus Highly Available

Day 3

Recording Rules

Scaling Prometheus Deployments

Introduction to Alerting

Setting Up Alerts

Prometheus and Kubernetes

Prometheus Storage

Day 4

Local Storage

Prometheus Security

TLS & Authentication on Prometheus Server

Mutual TLS for Prometheus Targets

Remote Storage Integrations

Transitioning From and Integrating with Other Monitoring Systems

Monitoring and Debugging Prometheus

