

Training: The Linux Foundation LFS241 Monitoring Systems and Services with Prometheus



TRAINING GOALS:

Prometheus is a monitoring system and time series database that is especially well-suited for monitoring dynamic cloud environments. With a powerful data model and query language as well as integrated alerting and service discovery support, Prometheus allows you to gain better insight into your systems and services and define more precise and meaningful alerts.

This course leads new Prometheus users through many of its major features, best practices, and use cases. Course participants are expected to have basic experience with Linux/Unix system administration, as well as some development experience in Go and/or Python.

The course will cover the following aspects:

- Prometheus architecture
- Setting up and using Prometheus
- Monitoring core system components and services
- Basic and advanced querying
- Creating dashboards
- Instrumenting services and writing third-party integrations
- Alerting
- Using Prometheus with Kubernetes
- Advanced operational aspects

CONSPECT:

- Course Introduction
- Introduction to Systems and Service Monitoring
- Introduction to Prometheus
- Installing and Setting Up Prometheus
- Basic Querying
- Dashboarding
- Monitoring Host Metrics

- Monitoring Container Metrics
- Instrumenting Code
- Building Exporters
- Advanced Querying
- Relabeling
- Service Discovery
- Blackbox Monitoring
- Pushing Data
- Alerting
- Making Prometheus Highly Available
- Recording Rules
- Scaling Prometheus Deployments
- Prometheus and Kubernetes
- Local Storage
- Remote Storage Integrations
- Transitioning From and Integrating with Other Monitoring Systems
- Monitoring and Debugging Prometheus

REQUIREMENTS:

To get the most out of this course, you should have:

- Basic experience with Linux/Unix system administration
- Familiarity with common shell commands, such as ls, cd, curl, etc.
- Some knowledge and/or development experience in Go and Python
- Some experience working with Kubernetes

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by The Linux Foundation.

TRAINER:

Certified The Linux Foundation Trainer.

ADDITIONAL INFORMATION:

20-25 hours of course material.

Hands-on Labs & Assignments.

Video Content.

12 Months of Access to Online Course.

Discussion Forums.