

Training: The Linux Foundation LFS243 Service Mesh Fundamentals



TRAINING GOALS:

More and more applications today are adopting a microservices-style distributed architecture. As these architectures grow in complexity, new challenges arise. These include security, resilience, and observability of these large distributed systems.

LFS243 introduces service meshes, an emerging technology for addressing these challenges. Designed for DevOps engineers, site reliability engineers, and platform engineers adopting microservice architectures, this course will introduce the challenges of distributed systems, strategies for managing these challenges, and the architecture of service meshes.

The course will also cover key concepts such as data plane vs control plane and the evolution of ingress. Specific technologies discussed in this course include Envoy Proxy, Linkerd, Istio, Consul, and the Service Mesh Interface specification.

Course objectives:

- Understand the core challenges of distributed systems and common strategies for addressing these challenges.
- Explain the architecture of a service mesh.
- Discuss the benefits and costs of adopting a service mesh.
- Install a service mesh.
- Use a service mesh to dynamically route requests.
- And much more!

CONSPECT:

- Course Introduction
- Cloud Native Apps
- Resilience for Distributed Systems
- Service Mesh Data Planes and Control Planes
- Service Mesh Fundamentals
- Service Mesh Standards

REQUIREMENTS:

- Experience with Kubernetes and Docker
- Familiarity with command line tools
- Experience with Linux systems
- Ubuntu VM with at least 4 CPUs, 15 GB RAM, and 30 GB of boot disk space allocated

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by The Linux Foundation.

TRAINER:

Certified The Linux Foundation Trainer.