

## Training: The Linux Foundation LFS258 Kubernetes Fundamentals



### TRAINING GOALS:

This course will teach you how to use the container management platform used by companies like Google to manage their application infrastructure.

You'll learn:

- Kubernetes architecture
- Deployment
- How to access the cluster
- Secrets and ConfigMaps
- And much more!

This course is designed to work with a wide range of Linux distributions, so you will be able to apply these concepts regardless of your distro.

Kubernetes is quickly becoming the de-facto standard to operate containerized applications at scale in the data-center. This course covers the fundamentals needed to understand Kubernetes and get quickly up-to-speed, to start building distributed applications that will scale, be fault-tolerant and simple to manage. From understanding its origin, to its high-level architecture, powerful API and key primitives, this course takes you from nothing to being in a position to start building complex applications. Kubernetes builds on 15 years of Google's experience managing containerized applications. With a growing open-source community, it is poised to change the way we build and manage applications, as well as change the role of system administrators. This self-paced course will distill key principles, such as pods, deployments, replicaset, and services, and will give you enough information so that you can start using Kubernetes on your own.

### CONSPECT:

- Course Introduction
- Basics of Kubernetes
- Installation and Configuration
- Kubernetes Architecture
- APIs and Access
- OPI Objects
- Managing State with Deployments

- Services
- Volumes and Data
- Ingress
- Scheduling
- Logging and Troubleshooting
- Custom Resource Definitions
- Kubernetes Federations
- Helm
- Security

## REQUIREMENTS:

To get the most out of this course, you should have basic Linux command line skills and at least some knowledge of linux containers (e.g. Docker). Our free LFS158 Introduction to Kubernetes course is useful preparation for this course.

## Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by The Linux Foundation.

## TRAINER:

Certified The Linux Foundation Trainer.

## ADDITIONAL INFORMATION:

35 hours of self-course material.

Hands-on Labs & Assignments.

Video Content.

12 Months of Access to Online Course.

Discussion Forums.