

K8S Advanced for Operation

Course 35679 – 24 Hours

Overview

This course is for Production Operation teams and SRE's with daily and vast experience in K8S. We will learn how to deploy K8S using KOPS, Rancher and terraform and discuss the amazing benefits of developing our own CRD's and custom operators and how to handle K8S Auth mechanisms and role management. We'll deep dive into integrating ECK (ElasticCloudStack) Into our k8s cluster for logs, monitoring and dashboarding and lastly we will implement the Prometheus operator to monitor our k8s cluster and create custom alerts.

All of our materials are constantly being refactored, expanded and improved. We make sure to update and add more materials in order to keep providing the most relevant and updated information based on new releases from K8S and main cloud vendor providers.

Each student will work on a dedicated K8S Cluster hosted on AWS for the length of each session along with an option to provide off session labs and environments to practice

We are committed to 60/40 hands on labs / theory split in each session!

Who Should Attend

- Production Operation teams (devops)
- SRE

Prerequisites

- Docker basic Seminar OR real daily proven hands on experience with docker
- K8S Advanced Seminar OR real daily proven hands on experience with K8S
- Advanced networking concepts
- Python (for the operators part)

Course Contents

Deploying and managing k8s with

- Rancher
- Kubeadm
- Kops

Centralized logging and monitoring using ECK

ECK Architecture in K8s

- Deploying ECK
- Monitoring our cluster
- Log Shipping

Authentication

- Basic auth in K8S

Authorization

- Intro
- RBAC

K8S Operators

- Intro
- Building our first operator

Scheduling

- Scheduling with CronJobs

Monitoring using Prometheus and Grafana - need to / Extend

- Monitoring with Prometheus
- Alerting and dashboarding

Home Project