

INTRODUCTION TO KUBERNETES

2 Days Classroom
2 Days Live Online

Individual: \$1650

Group: \$1550

GSA: \$1540

REGISTER HERE:
www.cprime.com/learning

COURSE OVERVIEW

This Kubernetes training workshop is a fast-paced engineering overview which sends you back to work ready to begin using Kubernetes in your own environment. Of the limited tools available to manage containers at scale and implement strategies like microservices pragmatically, Kubernetes strikes a delicate balance between powerful capability and ease of use. We focus on getting you up to speed quickly and attaching your use of the tool to the best practices we've seen adopted and proven by top-performing IT teams in the enterprise DevOps community.

COURSE OUTLINE

Part 1: Part 1: Prerequisites – Kubernetes Foundations

1. Containers
2. Linux Kernel Features
3. Container User Experience
4. New Container Capabilities
5. Gaps using Containers in Production
6. Microservices
7. DevOps

Part 2: Core Concepts of Kubernetes

1. Cluster Orchestration
2. Looking at K8S Origination at Google
3. Open Source
4. Benefits
5. Design Principles

Part 3: Navigating Kubernetes Architecture

1. Master/Node
2. Kubectl
3. Replication Controller
4. Kubelet
5. Kube-Proxy
6. Persistent Volumes
7. Etcd
8. High Availability

Part 4: Using Kubernetes Features

1. Pods
2. Labels
3. Services
4. Namespaces

Part 5: Security and Kubernetes

1. Goals
2. Roles
3. Attribute-Based Access Control
4. Policies
5. Service Accounts
6. Secrets

Part 6: Networking and Kubernetes

1. Docker Networking
2. Kubernetes Networking
3. Pod to Pod
4. Exposing Services
5. IP Per Pod
6. Inter Pod Communication
7. Intra Pod Communication

Part 7: Cluster Add-ons

1. Cluster DNS
2. Logging with Elasticsearch and Fluentd
3. Container Level Monitoring
4. cAdvisor
5. InfluxDB
6. Prometheus

Part 8: Practical Kubernetes Examples

1. Hello World
2. Wordpress
3. Guestbook
4. 3 Tier App
5. Http/Https Load Balancing

See website for full outline

© 2020 Cprime, Inc. All Rights Reserved.