



## Crush the CKAD

- Self-Paced
- Labs Only

### Course Overview

This self-paced Practice Exam prepares students for the Certified Kubernetes Application Developer (CKAD) exam. Kubernetes is a Cloud Orchestration Platform providing reliability, replication, and stability while maximizing resource utilization for applications and services. By the conclusion of this hands-on training you will be able to complete the CKAD Exam with confidence, being prepared for all topics and having the ability to verify your work, effectively allowing you to grade yourself as you take the Exam. We prioritize covering all objectives and concepts necessary for passing the Certified Kubernetes Application Developer (CKAD) exam. During your self-paced training period, you will be able to teardown all previous work, and start again – taking each part of the exam, or the entire exam, as many times as you need.

Review this course online at https://www.alta3.com/courses/crush-the-ckad-exam

## Who Should Attend

- Anyone who wants to pass their CKAD Certification
- Anyone who plans to work with Kubernetes at any level or tier of involvement
- Application Developers
- Operations Developers
- IT Directors/Managers

### What You'll Learn

- Deploy applications to a Kubernetes cluster
- Use Kubernetes primitives to implement common deployment strategies (e.g. blue/green or canary)
- Configure SecurityContexts
- Establish Network Policy
- Implement probes and health checks
- Multi-container Pod design patterns (e.g. sidecar, init and others)
- ConfigMaps
- Create & consume Secrets
- Assigning Service Accounts
- Troubleshooting and debugging
- Provide access to applications via services

#### Outline

### Getting Set Up

- P Lecture: CKAD Tips and Tricks
- \( \subseteq \text{Lecture} + \text{Lab: Deploy Kubernetes using Ansible} \)

#### Refresh Environment

• 🖳 Lecture + Lab: Refresh Environment

# Practice Exam Tasks

- \( \subseteq \text{Lecture} + \text{Lab: API Primitives} \)
- $\blacksquare$  Lecture + Lab: Pod Basics
- $\blacksquare$  Lecture + Lab: Multi-Container Pods
- 🖳 Lecture + Lab: Deployments
- 🖳 Lecture + Lab: Rollbacks
- \( \subseteq \text{Lecture} + \text{Lab: Jobs and CronJobs} \)
- 🖳 Lecture + Lab: Storage
- $\blacksquare$  Lecture + Lab: ConfigMaps
- 🖳 Lecture + Lab: SecurityContexts
- 🖳 Lecture + Lab: Secrets
- 🖳 Lecture + Lab: ServiceAccounts
- 🖳 Lecture + Lab: Adding Probes
- \( \subseteq \text{Lecture} + \text{Lab: Container Logging} \)
- $\blacksquare$  Lecture + Lab: Application Monitoring
- \( \subseteq \text{Lecture} + \text{Lab: Troubleshooting} \)
- 🖳 Lecture + Lab: Services
- $\blacksquare$  Lecture + Lab: Network Policies

# Prerequisites

## **Next Courses**

- CKAD Kubernetes Bootcamp
- CKA Certifed Kubernetes Administrator
- Securing Kubernetes CKS
- Developing Microservices