Study Plan

Kubernetes Developer (K9-DEV)

boer technology

About This Course

This course is ideal for developers looking to gain skills in Kubernetes application development. Students should be familiar with the Linux command line programming languages like Python, Node.js, Golang and have a basic understanding of cloud-native application concepts and architectures. The course covered is directly aligned with the knowledge domains tested by the Cloud Native Computing Foundation Certified Kubernetes Application Developer (CKAD) Program and will substantially increase participants' certification ability.

Summary

Training Duration: 32 Hours (4 Days)

Course Main Subjects

- Introduction to Kubernetes

- Installing Kubernetes with kubeadm

- Kubernetes Deployment

- Application Design and build using multi language programming

- Kubernetes Application Environment and Security

- Kubernetes Services and Networking

- Application Deployment

- Application Obersavility and Maintance

Target Audience

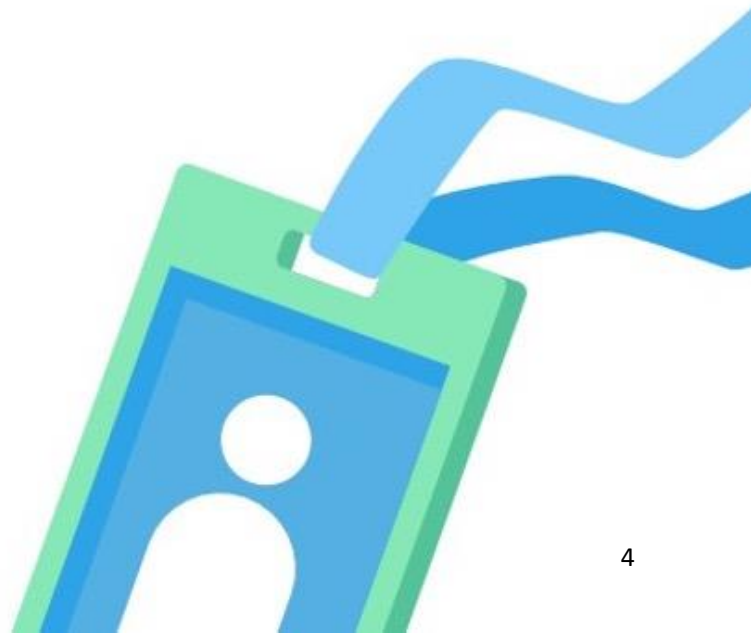System Administrators, Cloud Administrators, Developers, Site Reliability Engineer.

Prerequisites

- Docker Administration (DO-ADM)

Learning Output

The learning topics will assist participants in :

1. Understanding how to management Kubernetes

2. Understanding how to create container image at K8S Cluster

3. Management Kubernetes Cluster.

Requirements

Have a laptop/computer with min. specifications and installed tools:

Operating System	Windows, Linux, or MacOs
Processor	Intel Core i3
Memory	4 GB RAM
SSH Client	Termius / Putty / MobaXTerm
Text Editor	Sublime Text / VSCode
Browser	Chrome and Firefox
VPN (Optional)	https://client.pritunl.com/

Facilities

- Virtual machine (available until H+5 post training)
- Class materials (Access 1 years)
- Certificate
- Recording (VITL)

Certification

- Certificate of Course Completion
- Btech Internal Exam (optional)

Learning Strategies

- Theory

- Study Case

- Pre-Test & Post-Test

- Quiz / Internal Exam

- Hands-on Lab

Training Topology

podX-master
10.4.X.10

podX-worker1
10.4.X.11

podX-worker2
10.4.X.12

Learning Modules

Training Plan	
Topic	**Outcome**
Introduction Kubernetes	Understand the concept of microservices technology in building applications Understanding kubernetes technology
Kubernetes Architecture	Understand the master and worker function Understand the concepts of pods, containers, and nodes Understanding network services on a Kubernetes cluster
Kubernetes Installation and Configuration	Preparation for Kubernetes Cluster installation Install the services needed in the Kubernetes cluster Build a Kubernetes Cluster
Application Design and Build	Understand Efficient Resource Management Understand Improved Scalability
Application Environment, Configuration, and Security	Understand Improved Configuration Management Understand Implementation Security Features

Services & Networking	Understand the concept of Reliable Service Discovery Can implement Network Policies on kubernetes
Application Deployment	Understand the concept of Blue/Green Deployments Can implement Rolling Updates
Application Observability and Maintenance	Understand the concept of Improved Observability kubernetes Can implement proactive maintance kubernetes

Thank You

Another Course :

https://adinusa.id/pro-training