

# KUBERNETES

CERTIFICATE NUMBER : CERT20221205588



This is to certify that

**Adam Furqon**

Has completed a 32 hours program of Kubernetes Administration - CKA Training at the IDN.ID Training Center, Jakarta, on 19, 20, 21, 22 Desember 2022  
The student was able to obtain proficiency:

## 1. Basic Containerization (Containers)

- Container & Microservices Architecture
- Container Runtime Introduction
- Containers Installation
- Containers Basic Command
- Create Container Application on Container

## 2. Introduction to Kubernetes

- Container Orchestration Introduction
- Basic of Kubernetes
- Kubernetes Architecture
- Installation & Create Cluster
- API Concept Kubernetes
- Manage RBAC
- Manage High-Availability Kubernetes Cluster
- Implement etcd Backup & Restore

## 3. Workload & Scheduling

- Understand deployment and how to perform rolling updates and rollbacks
- Use ConfigMaps and Secret to configure applications
- Know how to scale applications
- Understand the primitives used to create robust, self-healing application deployments
- Understand how resource limit can affect Pod Scheduling
- Resiliency of manifest management and common templating tools

## 4. Network & Services

- Understand how networking configuration on the cluster nodes
- Understand connectivity between Pods
- Understand ClusterIP, NodePort, LoadBalancer service types and endpoints
- Know how to ingress controllers and ingress resources
- Know how to configure and use CoreDNS
- Choose an appropriate container network interface plugin

## 5. Storage, Logging & Troubleshooting

- Understand storage classes, persistent volume
- Understand volume mode, access modes and reclaim policies for volumes
- Understand persistent volume claims primitive
- Know how to configure applications with persistent storage
- Evaluate Cluster and node logging
- Understand how to monitor applications
- Manage container without & system logs
- Troubleshoot application failure
- Troubleshoot cluster component failure
- Troubleshoot networking

22 Desember 2022



ID Networkers

Infrastructure & Cloud Expert Solutions

Dedi Gunawan

CEO of IDN.ID Training Center