Study Plan

Origin Kubernetes Distribution (OK-ADM)

About This Course

The OKD Administration course equips you with essential skills to manage and administer the OKD (Origin Kubernetes Distribution) effectively. It covers the utilization of developer and operations-centric tools, enabling rapid application development, seamless deployment, scaling, and long-term maintenance for various team sizes. Participants will gain expertise in deploying OKD clusters, leveraging hybrid cloud deployments, and utilizing enterprise-ready enhancements for stable and secure systems.

By the end of the course, you will possess the abilities to administer OKD, ensuring system stability, security, and optimal performance. They will be equipped to handle system updates, implement access controls, and efficiently resolve system-related issues. With this comprehensive training, you will be well-prepared to deploy and manage OKD environments confidently.

Summary

Training Duration: 32 Hours (4 Days)

Course Main Subjects

- Introduction
- Provisioning OKD Cluster
- Execute Commands
- Allocate Persistent Storage
- Securing Access to OKD Resources
- Explore OKD Networking Concepts
- Scaling Cluster and Applications
- Pod Scheduling
- Managing Images and Registry
- Managing a Cluster with the Web Console
- Build Applications
- Configuring Trusted TLS Certificates
- Manage and Monitor OKD Resources

Target Audience

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

Prerequisites

* LF-ADM, K9-ADM, GL-CICD

Learning Output

The learning topics will assist participants in :

* Cluster Management: Participants will learn to provision, secure, and manage an OKD cluster efficiently.
* Scalability and Application Management: Participants will gain skills in scaling the cluster and managing applications, including pod scheduling and image registry management.

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

Facilities

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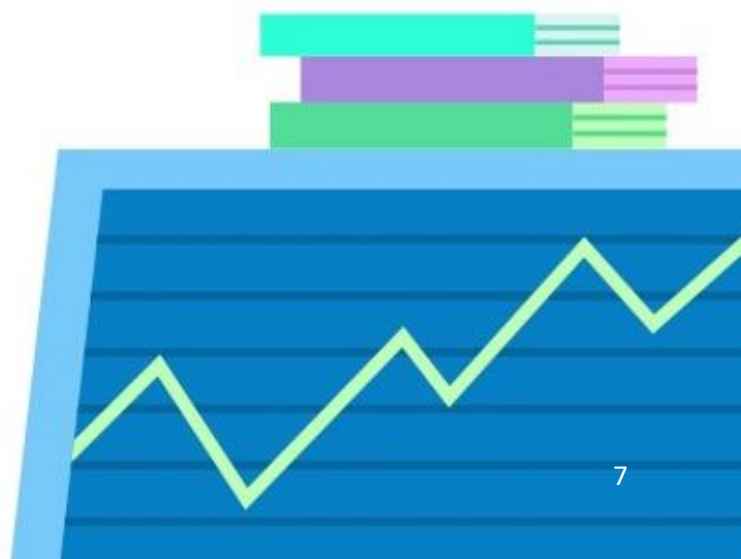- Certificate
- Recording (VITL)

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

Internet

okadm-podX-server

Learning Modules

Training Plan	
Topic	**Outcome**
Introduction	• Gain a comprehensive understanding of OKD and its key features. • Familiarize yourself with the concepts and principles of containerization and Kubernetes.
Provisioning OKD Cluster	• Learn how to set up and configure an OKD cluster from scratch. • Gain hands-on experience in deploying and managing OKD nodes and infrastructure.
Execute Commands	• Develop proficiency in executing various commands in OKD for cluster management and troubleshooting. • Learn to perform common administrative tasks using command-line interfaces.
Allocate Persistent Storage	• Understand the importance of persistent storage in OKD environments. • Learn how to allocate and manage persistent storage resources for applications running on the OKD cluster.
Securing Access to OKD Resources	• Learn best practices for securing access to OKD resources, including user authentication and authorization. • Implement access controls to ensure only authorized users can interact with the OKD cluster.

Topic	Outcome
Explore OKD Networking Concepts	• Gain a solid understanding of networking concepts and components within an OKD cluster. • Learn how to configure networking for intercommunication between applications and services.
Scaling Cluster and Applications	• Learn techniques for scaling the OKD cluster to accommodate growing workloads. • Understand how to scale individual applications within the cluster for optimal performance.
Pod Scheduling	• Explore pod scheduling strategies and learn how to schedule pods effectively in an OKD cluster. • Gain insights into resource allocation and workload balancing for efficient pod scheduling.
Managing Images and Registry	• Learn how to manage container images and utilize container registries within the OKD cluster. • Gain knowledge of image management best practices and the use of registries for application deployment.
Managing a Cluster with the Web Console	• Gain proficiency in using the OKD web console for cluster management and administration. • Learn how to perform various administrative tasks, monitor cluster health, and troubleshoot issues using the web console.

Topic	Outcome
Build Applications	•Acquire skills to build and deploy applications in OKD using containerization techniques. • Gain insights into application packaging, deployment strategies, and continuous integration and delivery (CI/CD) workflows.
Configuring Trusted TLS Certificates	•Learn how to configure and manage TLS certificates to secure communication within the OKD cluster. • Understand the importance of trusted certificates for establishing secure connections between components.
Manage and Monitor OKD Resources	•Gain knowledge of monitoring and managing resources in an OKD cluster. • Learn to utilize monitoring tools and techniques to optimize cluster performance and ensure reliability.

Thank You

Another Course :

https://adinusa.id/pro-training