Study Plan

Docker Administration (DO-ADM)

boer technology

About This Course

This course will teach you how to use Docker, an open-source platform for developing, shipping, and running applications in containers. You will learn the basics of Docker, including how to set up, configure, and manage containers and images. The course also covers Docker networking, storage, security, and orchestration with Docker Swarm.

By the end, you'll be able to package applications into Docker containers, scale them efficiently, and secure your environments. You'll gain hands-on experience in deploying and managing Docker containers, improving the reliability and scalability of your applications, and optimizing your infrastructure management.

Summary

Training Duration: 24 Hours (3 Days)

Course Main Subjects

- Introduction Of Container

- Introduction to Docker

- Managing Docker Container

- Creating Custom Docker Container Image

- Docker Compose

- Docker Continous Integration (CI)

- Logging and Error Handling

- Logging Driver

- Health Check

- Security

- Storage Driver

- Portainer

Target Audience

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

Prerequisites

- Linux System Administration (LF-ADM)

Learning Output

The learning topics will assist participants in :
- **Master the core concepts of Docker, including containerization, image creation, networking, and storage.**
- **Apply best practices in building, managing, and securing Docker containers and images.**
- **Perform hands-on tasks to deploy and operate containers across various environments, including cloud and orchestration tools like Docker Swarm.**
- **Integrate Docker into modern DevOps workflows, emphasizing automation, scalability, and security.**

Technical Requirements

Participants must have a laptop or computer with the following minimum specifications and tools installed:

Specification	Details
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 and Resources

Participants will have access to the following resources on and after the training:

- **Virtual machine lab** : Available until H+5 post-training for hands-on practice and experimentation.

- **Discussion group** : Available until H+30 post-training for ongoing support and collaboration with peers.

- **Class materials** : Access to all class materials for 1 year (start day one training)

- **Certificate** : Participants will receive a certificate of completion upon finishing the course.

- **Recording Class** : Access to recorded sessions for review and reinforcement of learning.

Terms and Conditions

Course Purchase Rules

- **Registration**:
  Participants must register through the official ADINUSA website and fill out the registration form with accurate and complete information.

- **Payment**:
  Course payment must be made in full before access to training materials is granted. Accepted payment methods include bank transfer, credit card, and digital payment.

- **Purchase Confirmation**:
  After payment is received, participants will receive a confirmation email containing course details and instructions for accessing the materials.

- **Schedule Changes**:
  ADINUSA reserves the right to change the course schedule or replace instructors if necessary. Participants will be notified of such changes via email or whatsapp.

Terms and Conditions

Access Management

- **Access License**:

  Each participant will be granted an access license for 1 year, starting from the date of registration. This license includes access to all relevant training materials.

- **Use of Materials**:

  Training materials may only be used for personal purposes and may not be distributed, sold, or published without written permission from ADINUSA.

- **Account Security**:

  Participants are responsible for maintaining the confidentiality of their account information. ADINUSA is not liable for any losses arising from unauthorized account use.

- **Access Termination**:

  ADINUSA reserves the right to terminate a participant's access to training materials if violations of the applicable terms and conditions are found, including but not limited to unauthorized distribution of materials.

For detailed information regarding our terms and conditions, please visit Terms and Conditios.

Certification

Upon successful completion of the course, participants will receive two certificates with validation 2 years:

Physical Certificate   **Digital Certificate**

Learning Strategies
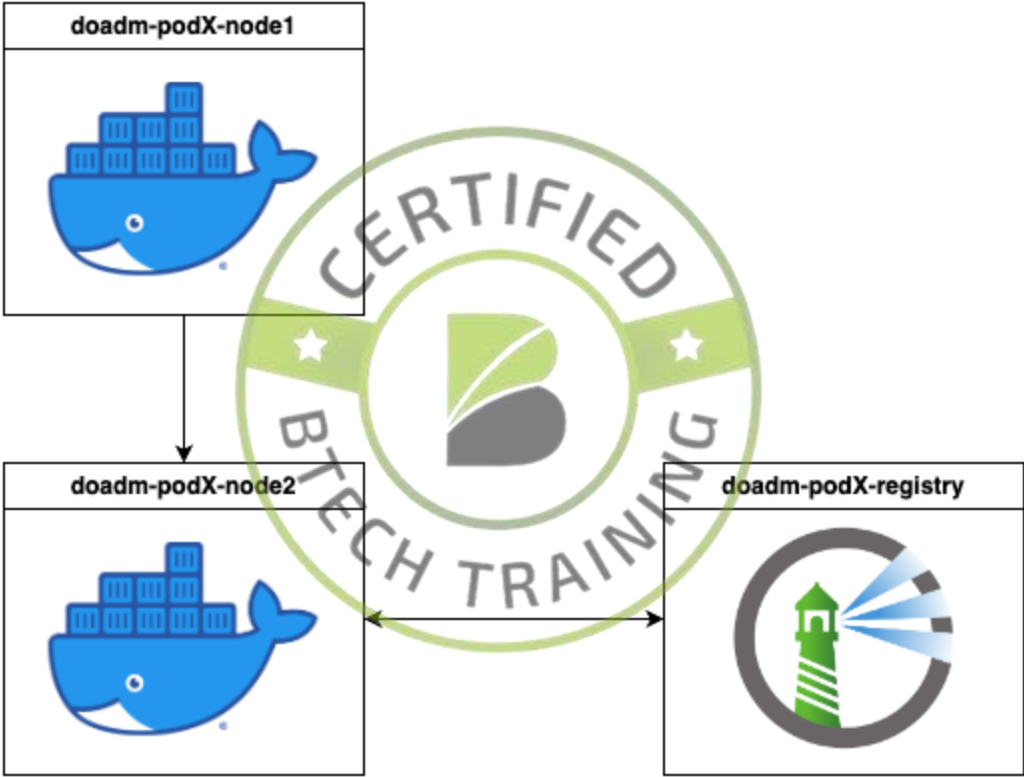
Pre-Test

Theory

Hands-on Lab

Post-Test

Internal Exam

Reporting

Forum
Discussion

Training Topology

Learning Modules

Training Plan	
Topic	**Outcome**
Introduction	• Understand containerization and Docker's role in modern apps. • Identify Docker architecture and DevOps integration
Installation and Configuration	• Understand Docker behavior across OS, VMs, and cloud platforms. • Analyze how Docker config affects performance and security. • Perform Docker install, basic operations, and driver configurations through labs and quizzes.
Image Creation, Management, and Registry	• **Build and manage efficient, secure Docker images using best practices.** • **Understand image layers, multi-stage builds, and registry usage.** • **Practice building language-specific images and managing registries via labs and quizzes.**

Networking	• **Understand Docker networking architecture and built-in drivers.** • **Apply advanced concepts like custom networks, DNS, and port mapping.** • **Implement and secure Docker networks through hands-on labs and quizzes.**
Storage and Volumes	• **Understand Docker storage options and data persistence methods.** • **Explore volume types, storage drivers, and their practical use cases.** • **Manage Docker storage through labs on volumes, bind mounts, and tmpfs.**
Security	• **Understand Docker security concepts, isolation, and access control.** • **Apply best practices for securing images and managing vulnerabilities.** • **Perform security-focused tasks through labs and quizzes.**
Orchestration	• **Understand Docker Swarm orchestration, services, and stacks.** • **Manage scaling, load balancing, and secrets in Swarm environments.** • **Deploy and operate multi-service apps using Compose and Swarm labs.**

Thank You

Explore our full course offerings in the training catalog:

https://adinusa.id/pro-training/catalogue

For further assistance, please contact us at:
Phone: +62 8111123242
Email: kontak@adinusa.id