Kenfil Hong Kong Ltd.

Managing Containers Images Lifecycle with Docker and CRI-O

Course Outline

Overview

Docker is an extremely powerful tool for running and managing containers. Currently, Docker is the industry-leading container runtime platform and offers a colossal number of features revolving around container management, plus orchestration.

In this training, you will learn how to leverage core features contained within Docker such as Image, registry, networking and storage management.

Course Outline

Introduction to Docker (1 hour)
- Installing Docker on CentOS
- Installing Docker on Ubuntu
- Running a Container

Managing images and registry service (2 hours)
- Using the registry service
- Create a repository
- Push an image to registry server
- Build docker image
- Managing access tokens
- Pull an image from registry server
- Tag the image
- Control the container process
- Commit the container to image layer
- Dive to image layer

Managing container storage (3 hours)
- Storage and volumes
- File handling in container
- Bind mount control
- Docker volume
- Backup restore docker volumes
- Docker storage in Depth

Course Fee
Standard Fee: HK$10,200
Discounted Fee: HK$8,670

Duration & Time
Sep 29-30, 2025 (12 hours)
9:30am - 12:30pm & 2:00pm - 5:00pm
(12:30pm - 2:00pm Lunch Break)

Medium of instruction
Cantonese with English terminology

Mode of Instruction
In-person Classroom Training

Training Venue
2/F., Centre Point, 181 Gloucester Road, Wan Chai, Hong Kong

How to Apply
- Complete Course Enrollment with Kenfil

AND

- Submit Training Grant Application to NITTP Secretariat at least five weeks before the commencement of training

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*The training grant applications submitted by companies for registered courses will be vetted and approved by the NITTP Secretariat - The Vocational Training Council (VTC). A maximum amount of training grant for each course will be set out in the application approval but the actual training grant to be reimbursed will be subject to the actual expenditure. Kenfil makes no promises or representations whatsoever as to the result of your application.

- Dockerfiles scripting
- Container restart policy

Managing container bridge networking (3 hours)
- Understanding Docker networking
- Built-in Network Drivers
- Create network virtual bridge network
- Exposing container externally
- User-defined networking
- Network troubleshooting
- Configuring Docker to use external DNS
- Docker compose with YAML file
- Monitor service
- Install private registry server
- Building Efficient Images
- Registry server API
- Run 3 tier container in production environment (WEB, APP, DB)
- Compile and Run java program with container
- Run python program with container
- Introduction to buildpacks – container image lifecycle
- Differentiate Builder , Build image, Run image and stack
- Build your Java/Go app

Introduction to cri-o (3 hours)
- Introduction to cri-o
- CRI-O COMPONENTS
- Podman commands

Trainer

Sung Po Man (Simon)

Simon has about 19+ years IT training experience, out of which 10 years were working on cloud and virtualization technologies and training. He has high proficiency in a wide range of technical training spectrum and specialized in conducting IT technical and certification courses including Microsoft Windows Server, Hyper-V, Exchange Server, SQL Server, SharePoint Server, System Center Configuration Manager, System Center Operations Manager; VMware vSphere, Horizon View, Tanzu, Virtual SAN, NSX, VMware Cloud on AWS, Workspace ONE, vRealize Automation, vRealize Operations Manager, Site Recovery Manager; vCloud Director; Nutanix Hyperconverged Infrastructure for Enterprise Datacenters; DevOps, Kubernetes, Containerization, Docker, Linux, etc. to customers mainly came from enterprise/corporations, public utilities and the Government in which thousands of IT Managers/Professionals, Project Managers, Systems Engineers, Administrators, Pre-sales and Post-sales Consultants had been successfully trained up. He also designed &

customized training solutions to align the training curriculum in-sync with the objectives and mission-oriented needs for the staff of clients' companies.

Apart from conducting trainings on these technologies for clients in Hong Kong, Macau, Taiwan and Greater China in the past years, Simon has experience in the IT industry with "Real-world" hands-on project experience by providing cloud or virtualized solutions to corporate houses based on their requirements. He has profound knowledge in system migration, cloud infrastructure implementation and design, and virtualization technologies.