Containers and Microservices in Telecom

TPR1025d | On-Demand | 5G Core | Expanded
Course Duration: 4 hours

This training provide high-level technical overview of containers and microservices along with their applications and their implementations used in the industry.

Intended Audience

A high-level technical overview to personnel involved in product management, marketing, planning, design, engineering, and operations.

Objectives

After completing this course, the student will be able to:

- Differentiate between light weight and heavy weight virtualization
- Illustrate the container management components
- Sketch microservice architecture and its relevance to containers
- Identify the key container lifecycle management concepts
- Step through the examples of uses of microservices

Course Prerequisites

Welcome to SDN and NFV - Foundations

Outline

1. Server Host Virtualization
1.1 Server Virtualization
1.2 Virtual Servers - Challenges and Examples
1.3 5G Containerized Network Functions
Exercise: Knowledge Checks

2. Containers
2.1 What is a Container?
2.2 Role of Docker
2.3 Container Security
2.4 Open Container Initiative (OCI)
Exercise: Knowledge Checks

3. Container Orchestration
3.1 Container Management
3.2 Kubernetes Overview
3.3 Kubernetes Operations
Exercise: Knowledge Checks

4. Microservice Architecture
4.1 Microservices
4.2 Software Decomposition
Exercise: Knowledge Checks

Putting it all together
Final Assessment

Award Solutions