



# 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 FunctionsExercise: 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 OperationsExercise: Knowledge Checks
  4. Microservice Architecture
    - 4.1 Microservices
    - 4.2 Software DecompositionExercise: Knowledge Checks
- Putting it all together  
Final Assessment