Welcome to Telco Cloud Part 2: Cloud-Native Apps

NWV_142d | On-Demand | 5G Core | Express
Course Duration: 1 hour

Telecom operators are on the cusp of a multitude of network and business transformation choices. This course (part of multi-part series) provides a high-level view of the impact and benefits of Cloud-native Network Functions (CNFs) and applications, microservice architecture, and example implementations of Telco network functions based on cloud-native principles. It provides concrete examples of cloud-native applications and network functions using containers and Kubernetes in telecom networks.

Intended Audience

This course is designed for a broad audience of personnel working in the telecom industry.

Objectives

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

- Identify the need for cloud-native applications for NFs in telecom
- Sketch the architecture framework for CNFs and apps in the Telco cloud
- Explain an implementation of CNFs and apps using containers, Kubernetes

Course Prerequisites

Welcome to Telco Cloud Part 1: Virtualization and Orchestration

Outline

1. Cloud Native: What and Why?
1.1 Challenges of current Telco applications
1.2 Benefits of cloud-native applications and NFs
1.3 Value of cloud-native NFs for RAN and Core
1.4 Microservices as cloud-native apps for NFs

2. Infrastructure for Cloud Native
2.1 Webscale architecture for cloud-native apps
2.2 Operational framework of Telco clouds (i.e., metrics, tracing, logging)
2.3 Need for cloud-native application management

3. Implementation of Cloud Native Apps in Telco
3.1 Cloud-native apps in RAN and Core
3.2 Role of container runtime and Kubernetes
3.3 Example of end-to-end service in telco network

Putting it all together

Final assessment

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