



# 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