



# Welcome to Telco Cloud Part 5: Deployment and Operations

NWV\_145d | On-Demand | 5G Core | ⚙️

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 commonly used open-source solutions for packaging, logging, tracing, observability, monitoring of network functions and services in Telco clouds. It provides context of frequently used open-source projects and their relationship to deployment and operations (i.e., log management, infrastructure performance management) in telecom networks and clouds. In addition, the course explains a commonly used visualization solution for items like metrics.

## 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:

- Describe options for network function deployment automation and orchestration
- Explain configuration management for Day-0 and Day-1 flow
- Identify the need for operational solutions for NFs and services in Telco cloud
- Describe solutions for deployment and NF communication control, security and observability
- Explain solutions for log management, tracing and visualization

## Course Prerequisites

[Welcome to Telco Cloud Part 4: Kubernetes](#)

## Outline

1. Network Function Deployment and Configuration
    - 1.1 Network Function Deployment Orchestration
    - 1.2 Day-0 and Day-1 Configuration Management
  2. Tools for Kubernetes Deployment
    - 2.1 Elasticsearch, Fluentd and Kibana Stack
    - 2.2 EFK Log Visualization
    - 2.3 Communication and Observability using Service Mesh
    - 2.4 Network Function Resiliency using Service Mesh
    - 2.5 Jaeger Distributed Tracing
    - 2.6 Telco Performance Management using Prometheus
    - 2.7 Operational Visualization using Grafana
- Putting it all together
- Final assessment