Welcome to Telco Cloud Part 5: Deployment and Operations

NWV_145d | 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 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

Award Solutions