Cisco Elastic Services Controller (ESC300) v2.0

<u>**Outline:**</u>

- Cisco ESC Architecture

    - Cisco ESC Architecture in the European Telecommunications Standards Institute (ETSI) Management and Orchestration (MANO) Framework

    - VNF Lifecycle in Cisco ESC

- Cisco ESC Installation and Upgrade

    - Cisco ESC Installation on OpenStack

    - Cisco ESC Upgrade on OpenStack

    - Cisco ESC High Availability on OpenStack

    - Cisco ESC Installation on VMware and Kernel-based Virtual Machine (KVM)

    - Cisco ESC Post-Installation Tasks

- Managing VM Resources in Cisco ESC

    - VM Resource Management Overview

    - Managing Tenants

    - Managing Networks and Subnets

    - Managing Images and Flavors

- Deploying and Configuring Virtual Network Functions

    - Deployment Data Model

    - Day-Zero Configuration

    - Placement Rules

    - Deploying VNFs in OpenStack

    - Deploying VNFs in VMware

    - Deployment Notifications

- Monitoring, Scaling, and Healing Virtual Network Functions

    - Cisco ESC Key Performance Indicator (KPI) and Rules Data Model

    - Monitoring VNF Health and Healing

    - Monitoring VNF Load and Scaling

    - Custom Metrics and Actions

    - Dynamic Mapping

- o VNF Operations

- Cisco ESC Integration

    - o Cisco ESC Northbound APIs

    - o Cisco NSO Integration

    - o Virtual Multiprotocol Label Switching (MPLS) VPN

    - o Resource Manager

    - o VM Management Service

Lab outline

- Installing Cisco ESC on OpenStack

- Managing VNFs on OpenStack with Cisco ESC

- Deployment Scaling

- Custom Metrics and Custom Actions

- Cisco ESC Integration with Cisco NSO