

ESC300

Cisco Elastic Services Controller

8 horas

Automation, Programmability & DNA

Cisco

INTRODUÇÃO

The Cisco Elastic Services Controller (ESC300) v2.0 course teaches you how to install and maintain Cisco® Elastic Services Controller (ESC) in OpenStack and VMware environments, and how to integrate Cisco ESC with Cisco Network Services Orchestrator (NSO). You will also learn how to deploy and configure new Virtual Network Functions (VNFs).

OBJETIVO DO CURSO

After taking this course, you should be able to:

- Describe the Cisco ESC architecture and the VNF lifecycle
- Explain how to install and maintain Cisco ESC in an OpenStack or VMware environment
- Explain how to manage VM resources in Cisco ESC
- Explain how to deploy and configure new VNFs
- Explain how to monitor, scale, and heal VNFs
- Describe Cisco ESC integration with Cisco NSO and how to create a VNF solution

PÚBLICO-ALVO

- System installers
- System integrators
- System administrators
- Network administrators
- Solutions designers

PRÉ-REQUISITOS

Before you take this course, we recommend that you have the knowledge and skills that can be obtained by attending the Cisco Network Services Orchestrator Foundation (NSO201) class, which includes:

- Basic knowledge of the command line of UNIX-like operating systems
- Basic knowledge of Network Configuration Protocol (NETCONF)
- Basic knowledge of OpenStack
- Basic knowledge of Yet Another Next Generation (YANG) data modelling
- Basic knowledge of Python or Java software development

Outline

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

VNF Operations

Cisco ESC Integration

Cisco ESC Northbound APIs

Cisco NSO Integration

Virtual Multiprotocol Label Switching (MPLS) VPN

Resource Manager

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