DCCNX (CONFIGURING CISCO NX-OS SWITCHES AND FABRICS IN THE DATA CENTER) 1.0

Objetivo

After taking this course, you should be able to: â□¢ Describe the Cisco Nexus devices routing and forwarding; â□¢ Describe Overlap Transport Virtualization (OTV); â□¢ Describe and configure Virtual Extensible LAN (VXLAN); â□¢ Describe Locator/ID Separation Protocol (LISP); â□¢ Describe the key features of Cisco Nexus devices; â□¢ Describe Cisco Intelligent Traffic Director; â□¢ Describe Quality of Service (QoS) on Cisco Nexus devices; â□¢ Understand Cisco Nexus storage services; â□¢ Configure device alliances and zoning; â□¢ Configure Fibre Channel over Ethernet (FCoE); â□¢ Configuring N-Port Identifier Virtualization (NPIV) and N-Port Virtualization (NPV) Modes; â□¢ Describe NX-API and network orchestration solutions, and program Cisco NX-OS with Python; â□¢ Explain system management, monitoring, and troubleshooting processes; â□¢ Explain the troubleshooting processes.

PÃºblico Alvo

Professionals interested in knowing and implementing solutions using the Cisco Nexus Data Center Switches.

PrÃ©-Requisitos

To fully benefit from this course, you should have the following knowledge and skills: â□¢ Familiarity with Cisco data center technologies â□¢ Understand networking protocols, routing, and switching For reference, these are the recommended Cisco courses that may help you meet these prerequisites: â□¢ Implementing and Administering Cisco Solutions (CCNAÂ®) â□¢ Understanding Cisco Data Center Foundations (DCFNDU) â□¢ Implementing and Operating Cisco Data Center Core Technologies (DCCOR) â□¢ Introducing Cisco Nexus Series Switches (DCINX)

Carga HorÃiria

24 horas (3 dias).

ConteÃºdo ProgramÃitico

Course Introduction
Course Outline
Course Goals & Objectives

Describing the Cisco NX-OS Routing and Forwarding
Routing Overview
Multicast Routing
Cisco NX-OS Routing and Forwarding
Unicast and Multicast RIB and FIB

Describing Overlay Transport Virtualization
Cisco OTV Overview
Cisco OTV Control and Data Planes
Failure Isolation
Cisco OTV Features
Optimizing Cisco OTV

Describing Virtual Extensible LAN
VXLAN Benefits over VLAN
Layer 2 and Layer 3 VXLAN Overlay
VXLAN MP-BGP EVPN Control Plane
VXLAN Data Plane

Describing Locator/ID Separation Protocol
Locator/ID Separation Protocol
LISP VM Mobility
LISP ESM Multihop Mobility
LISP VPN Virtualization

Cisco Nexus Security Features
ACLs
Port Security
DCHP Snooping
Dynamic ARP Inspection
IP Source Guard
Unicast RPF
Trafic Storm Control
CoPP

Cisco Intelligent Trafic Director
Cisco ITD Overview
Cisco ITD Deployment Models
Cisco ITD Configuration and Verification

Describing QoS on Cisco Nexus Devices
QoS on Cisco Nexus Devices
Configure QoS on Nexus
Monitor QoS Statistics

Introducing Cisco Nexus Storage Services
Fibre Channel
Fibre Channel Flow Control
Fibre Channel Domain Initialization
Fibre Channel Addressing
FSPF Protocol

Configuring Device Aliases and Zoning
Distributed Device Alias Services Overview

Zoning Overview
Merge Zones Without Disruption
Recover from Zone Merge Failures
Enhanced Zoning

Configuring Fibre Channel Over Ethernet
Fibre Channel Over Ethernet
FCoE Requirements
Data Center Bridging
FCoE Addressing Scheme
FCoE Initialization Protocol
FCoE Port Types
Storage VDC

Configuring NPIV and NPV Modes
Cisco NPV Mode
N-Port ID Virtualization

Managing Automation and Programmability of Cisco Nexus Devices
Cisco NX-OS RESTful API
Network Orchestration
Programming Cisco NX-OS with Python

Configuring System Management and Monitoring
System Management Overview
System Monitoring Tools

Troubleshooting Cisco Nexus Switches
Cisco Nexus Troubleshooting Tools
Shell Access and Linux Containers
Troubleshooting Memory and Packet Issues

Lab Outline
Lab 1: Configure OSPF
Lab 2: Configure Cisco OTV
Lab 3: Configure VXLAN
Lab 4: Configure Cisco Nexus Security Features
Lab 5: Configure Basic Fibre Channel Features
Lab 6: Configure Device Aliases and Zoning
Lab 7: Confgure FCoE
Lab 8: Configure NPV
Lab 9: Manage Switch over Cisco NX-API
Lab 10: Program a Switch with Python
Lab 11: Configure System Management and Monitoring
Lab 12: Troubleshoot and Manage Switches Using Bash and Guest Shell