DCCOR (IMPLEMENTING AND OPERATING CISCO DATA CENTER CORE TECHNOLOGIES) 1.4

Objetivo

â¢ Implement spanning tree protocol, port channels, and virtual port channels in the data center â¢ Implement first-hop redundancy protocols in the data center using Hot Standby Router Protocol (HSRP), Virtual Router Redundancy Protocol (VRRP), and Gateway Load Balancing Protocol (GLBP) â¢ Implement routing in the data center by using Open Shortest Path First (OSPF)v2, OSPFv3, and Border Gateway Protocol (BGP) â¢ Implement multicast functionality in the data center on the Cisco Nexus switches â¢ Implement overlay networks in the data center by using Virtual Extensible LAN (VXLAN) â¢ Implement network infrastructure security features on the Cisco Nexus switches â¢ Understand the architecture and features of high-performance Ethernet fabrics â¢ Introduce high-level Cisco Application Centric Infrastructure (ACI) concepts and describe various fabric discovery parameters â¢ Describe Cisco ACI building blocks and Virtual Machine Manager (VMM) domain integration â¢ Describe packet flow for various traffic types (unicast, multicast, and broadcast) in the data center â¢ Describe Cisco Cloud Service and deployment models â¢ Describe Cisco ACI fabric setup â¢ Implement network configuration management, describe software updates and their impacts, and implement network infrastructure monitoring â¢ Describe Cisco network assurance concepts such as Cisco Streaming Telemetry â¢ Implement Fibre Channel fabric â¢ Implement storage infrastructure services in the data center such as distributed device aliases, zoning, N Port Virtualization (NPV), and Fibre Channel over IP (FCIP) â¢ Implement Fibre Channel over Ethernet (FCoE) unified fabric â¢ Implement storage infrastructure security features in the data center â¢ Describe storage infrastructure software updates and their impacts, and implement infrastructure monitoring â¢ Describe Cisco UCS Server form factors â¢ Implement Cisco UCS Fabric Interconnect and establish network connectivity for the Cisco UCS B-Series â¢ Blade Servers and Cisco UCS C-Series Rack Servers â¢ Implement Cisco Unified Computing Server abstraction â¢ Implement SAN connectivity for Cisco UCS â¢ Implement Cisco UCS security features in the data center â¢ Implement Cisco UCS configuration management, describe software updates and their impacts, and implement infrastructure monitoring â¢ Implement Cisco automation and scripting tools in the data center â¢ Describe and evaluate the Cisco integration with automation and orchestration software platforms, such as Ansible, Puppet, and Python â¢ Describe and evaluate Cisco data center automation and orchestration technologies

PÃºblico Alvo

Professionals interested in implementing, configuring, operating and management Cisco Data Center solutions. â¢ Network Designers â¢ Network Administrators â¢ Network Engineers â¢ Systems Engineers â¢ Data Center Engineers â¢ Consulting Systems Engineers â¢ Technical Solutions Architects â¢ Cisco Integrators and Partners â¢ Field Engineers â¢ Server Administrators â¢ Network Managers â¢ Storage Administrators â¢ Program Managers â¢ Project Managers

PrÃ©-Requisitos

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are: â¢ Familiarity with Ethernet and TCP/IP networking â¢ Familiarity with SANs â¢ Familiarity with Fibre Channel protocol â¢ Identify products in the Cisco Data Center Nexus and Cisco MDS

families â□¢ Understanding of Cisco Enterprise Data Center architecture â□¢ Understanding of server system design and architecture â□¢ Familiarity with hypervisor technologies (such as VMware) These skills can be found in the following Cisco Learning Offerings: â□¢ Implementing and Administering Cisco Solutions (CCNA) â□¢Understanding Cisco Data Center Foundations (DCFNDU)

Carga HorÃiria

40 horas (5 dias).

ConteÃºdo ProgramÃitico

Course Outline

- Implementing Data Center Switching Protocols
- Implementing First-Hop Redundancy Protocols
- Implementing Routing in Data Center
- Implementing Multicast in Data Center
- Implementing Data Center Overlay Protocols
- Implementing Network Infrastructure Security
- High-Throughput Converged Fabrics
- Describing Cisco Application-Centric Infrastructure
- Describing Cisco ACI Building Blocks and VMM Domain Integration
- Describing Packet Flow in Data Center Network
- Describing Cisco Cloud Service and Deployment Models
- Describing Data Center Network Infrastructure Management
- Explaining Cisco Network Assurance Concepts
- Implementing Fibre Channel Fabric
- Implementing Storage Infrastructure Services
- Implementing FCoE Unified Fabric
- Implementing Storage Infrastructure Security
- Describing Data Center Storage Infrastructure Maintenance and Operations
- Describing Cisco UCS Server Form Factors
- Implementing Cisco Unified Computing Network Connectivity
- Implementing Cisco Unified Computing Server Abstraction
- Implementing Cisco Unified Computing SAN Connectivity
- Implementing Cisco Unified Computing System Security
- Describing Data Center Unified Computing Management, Maintenance, and Operations
- Implementing Cisco Data Center Automation and Scripting Tools
- Describing Cisco Integration with Automation and Orchestration Software Platforms
- Describing Cisco Data Center Automation and Orchestration Technologies

Lab Outline

- Configure VXLAN
- Explore the Cisco ACI Fabric

- Implement Cisco ACI Access Policies and Out-of-Band Management
- Implement Cisco ACI Tenant Policies
- Integrate Cisco ACI with VMware
- Configure Fibre Channel
- Configure Device Aliases
- Configure Zoning
- Configure NPV
- Provision Cisco UCS Fabric Interconnect
- Configure Server and Uplink Ports
- Configure VLANs
- Configure Cisco UCS Server Profile Using Hardware Identities
- Configure Basic Identity Pools
- Configure a Cisco UCS Service Profile Using Pools
- Configure an iSCSI Service Profile
- Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- Configure Cisco Nexus Switches with Ansible
- Program a Cisco Nexus Switch with Python