training code: DCIT / e-learning / EN

Active Digital Learning - Troubleshooting Cisco Data Center Infrastructure v7.2

Cisco - On Demand E-Learning

The Troubleshooting Cisco Data Center Infrastructure (DCIT) training builds your knowledge and skills in troubleshooting LANs, SANs, Cisco Unified Fabric, Cisco Unified Computing System (Cisco UCS), and Cisco Application-Centric Infrastructure (Cisco ACI). You'll gain hands-on experience resolving problems on Cisco Multilayer Director Switch (MDS) switches, Cisco Nexus switches, Cisco Fabric Extenders (FEXs), Cisco UCS, Cisco ACI, and more.

This training helps prepare you to take the exam:

- 300-615 Troubleshooting Cisco Data Center Infrastructure (DCIT)

Access Duration: 180 days

Continuing Education Credits: 50

Training recipients

Who Should Enroll

- Network designers
- Network administrators
- Network engineers
- System engineers
- Data center engineers
- Consulting systems engineers
- Technical solutions architects

- Server administrators
- Network managers
- Cisco integrators and partners

Benefits

This training will help you:

- Learn how to deploy and troubleshoot various components of Cisco data center infrastructure to support performance, resiliency, scalability needs
- Gain knowledge and skills through Cisco’s unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software
- Qualify for professional-level job roles

Training program

Course Objectives

- Describe how to troubleshoot the data center network
- Describe the troubleshooting tools and methodologies that are available from the Command-Line Interface (CLI) and are used to identify and resolve issues in a Cisco Data Center network architecture
- Identify and resolve issues that are related to Virtual LANs (VLANs) and private VLANs (PVLANs)
- Identify and resolve issues that are related to port channels and virtual port channels
- Identify and resolve issues that are related to VXLAN
- Describe troubleshooting of routing and high-availability protocols
- Describe troubleshooting of the LAN security features
- Identify and resolve issues that are related to a single device
- Identify and resolve issues that are related to Fibre Channel interface operation
- Identify and resolve Fibre Channel switching issues when the Cisco NX-OS Software is used in switched mode
- Identify and resolve issues that are related to Fibre Channel switching when a Cisco NX-OS switch is used in N-Port Virtualization (NPV) mode
- Identify and resolve issues that are related to FIP and FCoE, including Fibre Channel over Ethernet (FCoE) performance
- Describe Cisco UCS architecture, initial setup, tools, and service aids that are available for Cisco UCS troubleshooting and interpretation of the output
- Describe Cisco UCS configuration and troubleshooting
- Describe Cisco UCS B-Series Blade Server operation and troubleshoot related issues

- Describe Cisco UCS B-Series LAN, SAN, and Fibre Channel operations, including in-depth troubleshooting procedures
- Describe Cisco Integrated Management Controller (IMC) tools for validating performance and facilitating data-gathering activities for Cisco UCS C-Series server troubleshooting, and the troubleshooting approach for hardware and firmware failures
- Define the proper procedures for configuring Cisco UCS C-Series LAN and SAN connectivity, avoiding issues with the VIC, and troubleshooting connectivity issues
- Troubleshoot Cisco UCS C-Series server integration with Cisco UCS Manager
- Identify the tools, protocols, and methods to effectively troubleshoot Cisco ACI
- Describe how to troubleshoot automation and scripting tools
- Describe how to troubleshoot programmability

Course Outline

Learning Path Curriculum

- Troubleshooting Foundation
- Troubleshooting LAN Issues
- Troubleshooting SAN Issues
- Troubleshooting UCS
- Troubleshooting Specific UCS Configurations and Connectivity

Lab Outline

Discovery 1: Document the Network Baseline
Discovery 2: Troubleshoot Rapid PVST+
Discovery 3: Troubleshoot LACP
Discovery 4: Troubleshoot vPC
Discovery 5: Troubleshoot VXLAN
Discovery 6: Troubleshoot OSPF
Discovery 7: Troubleshoot FHRP
Discovery 8: Troubleshoot Cisco Fabric Services
Discovery 9: Troubleshoot VRF
Discovery 10: Troubleshoot Cisco FEX
Discovery 11: Troubleshoot Fibre Channel Interfaces
Discovery 12: Troubleshoot Fibre Channel VSANs, Zones, and Domain Services
Discovery 13: Troubleshoot NPV Mode
Discovery 14: Troubleshoot FCoE
Discovery 15: Troubleshoot DCB
Discovery 16: Troubleshoot Cisco UCS Management and Service Profile Deployment
Discovery 17: Troubleshoot Cisco UCS C-Series Server LAN Connectivity
Discovery 18: Troubleshoot Cisco UCS C-Series Server Boot from the Fibre Channel LUN
Discovery 19: Troubleshoot Cisco UCS C-Series Server Management Connectivity
Discovery 20: Troubleshoot Cisco ACI Integration with VMware vCenter
Discovery 21: Troubleshoot Contracts in Cisco ACI
Discovery 22: Troubleshoot Cisco ACI External Layer 3 Connectivity

Discovery 23: Troubleshoot Cisco ACI External Layer 2 Connectivity

Expected preparation of the participant

Before taking this offering, you should be able to:

- Configure, secure, and maintain LAN and SAN based on Cisco Nexus and MDS switches
- Configure, secure, and maintain Cisco Unified Computing System
- Configure, secure, and maintain Cisco ACI

Training Includes

Labs
Self-Paced Training
Video Training

Language

Language: English
Materials: English

Duration

1 days / 1 hours

Examination description

Certification
Associated Certification: CCNP Data Center
Associated Exam: 300-615 DCIT