training code: DCIT / e-learning / EN

E-Learning - Troubleshooting Cisco Data Center Infrastructure

Cisco - On Demand E-Learning

The Troubleshooting Cisco Data Center Infrastructure (DCIT) v7.0 course shows you how to troubleshoot LAN, SAN, Cisco Data Center Unified Fabric, Cisco Unified Computing System (Cisco UCS), and Cisco Application-Centric Infrastructure (Cisco ACI).

This course helps you prepare to take the Troubleshooting Cisco Data Center Infrastructure (300-615 DCIT) exam, which leads to CCNP Data Center and the Cisco Certified Specialist - Data Center Operations certifications.

Access Duration: 180 days

Continuing Education Credits: 50

Purpose of the training

- Network designers, administrators, engineers, and managers
- System engineers
- Data center engineers
- Consulting systems engineers
- Technical solutions architects
- Server administrators
- Cisco integrators and partners

Benefits of completing the training

This course 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

Exam description

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

Expected Listener Preparation

- To fully benefit from this course, you should have the following knowledge and skills:
- Configure, secure, and maintain LAN and SAN based on Cisco Nexus and MDS switches
- Configure, secure, and maintain Cisco UCS
- Configure, secure, and maintain Cisco ACI
- These are the recommended Cisco courses that may help you meet these prerequisites:
- Implementing and Administering Cisco Networking Technologies (CCNA)
- Understanding Cisco Data Center Foundations (DCFNDU)
- Implementing and Operating Cisco Data Center Core Technologies (DCCOR)
- Introducing Cisco NX-OS Switches and Fabrics in the Data Center (DCINX)
- Configuring Cisco NX-OS Switches and Fabrics in the Data Center (DCCNX)
- Introducing Cisco Unified Computing System (DCIUCS)
- Configuring Cisco Unified Computing System (DCCUCS)

Training Language

Language: English
Materials: English

Training Includes

Labs
Self-Paced Training
Video Training

Duration

1 days / 1 hours

Training agenda

- Describe how to troubleshoot the data center network, troubleshooting tools and methodologies available from the CLI that are used to identify and resolve issues in a Cisco data center network architecture
- Identify and resolve issues that are related to: VLANs and private VLANs; port channels and virtual port channels; Overlay Transport Virtualization (OTV); and Virtual Extensible LAN
- Describe troubleshooting of routing protocols such as OSPF, EIGRP, PIM, and 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, and in NPV mode
- Identify and resolve issues that are related to Fibre Channel over Ethernet and FCoE Initialization Protocol (FIP), including FCoE performance
- Describe Cisco UCS architecture, initial setup, tools, and service aids
- Describe Cisco UCS configuration, Cisco UCS B-Series Blade Server operation and troubleshoot related issues
- Describe 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 LAN and SAN connectivity, avoiding issues with the VIC, troubleshooting connectivity issues and 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, scripting tools, and programmability