

Troubleshooting Cisco Data Center Infrastructure (DCIT)

Duration: **5 days**

Course Overview

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 (UCS), and Cisco Application-Centric Infrastructure (ACI). You will learn methodologies and tools to identify issues that may occur in data center network architecture. You will get extensive hands-on practice troubleshooting installation, configuration and interconnectivity issues on Cisco MDS switches, Cisco Nexus switches, Cisco Fabric Extenders (FEXs), Cisco UCS, Cisco ACI, and more.

This course helps prepare you to take the exam, Troubleshooting Cisco Data Center Infrastructure (300-615 DCIT), which leads to CCNP Data Center and the Cisco Certified Specialist - Data Center Operations certifications. The exam will be available beginning February 24, 2020.

Who should attend?

1. Network designers
2. Network administrators
3. Network engineers
4. System engineers
5. Consulting systems engineers
6. Technical solutions architects
7. Server administrators
8. Network managers
9. Cisco integrators and partners

Prerequisites

To fully benefit from this course, you should have the following knowledge and skills:

1. Configure, secure, and maintain LAN and SAN based on Cisco Nexus and MDS switches
2. Configure, secure, and maintain Cisco Unified Computing System
3. Configure, secure, and maintain Cisco ACI

Course Objectives

After taking this course, you should be able to:

1. Describe how to troubleshoot the data center network

2. Describe the troubleshooting tools and methodologies that are available from the CLI and are used to identify and resolve issues in a Cisco Data Center network architecture
3. Identify and resolve issues that are related to: VLANs and PVLANS; port channels and virtual port channels; OTV; and VXLAN
4. Describe troubleshooting of routing protocols such as OSPF, EIGRP, and PIM.
5. Describe troubleshooting of the LAN security features
6. Identify and resolve issues that are related to a single device
7. Identify and resolve issues that are related to Fibre Channel interface operation
8. Identify and resolve Fibre Channel switching issues when the Cisco NX-OS Software is used in switched mode, and in NPV mode
9. Identify and resolve issues that are related to FIP and FCoE, including FCoE performance
10. Describe Cisco UCS architecture, initial setup, tools, and service aids that are available for Cisco UCS troubleshooting and interpretation of the output
11. Describe Cisco UCS configuration and troubleshoot related issues
12. Describe Cisco UCS B-Series Blade Server operation and troubleshoot related issues
13. Describe LAN, SAN, and Fibre Channel operations, including in-depth troubleshooting procedures
14. Describe Cisco 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
15. Define the proper procedures for configuring LAN and SAN connectivity, avoiding issues with the VIC, and troubleshooting connectivity issues
16. Troubleshoot Cisco UCS C-Series server integration with Cisco UCS Manager
17. Identify the tools, protocols, and methods to effectively troubleshoot Cisco ACI
18. Describe how to troubleshoot automation, scripting tools, and programmability

This course will help you:

1. Learn how to deploy and troubleshoot various components of Cisco data center infrastructure to support performance, resiliency, scalability needs
2. 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
3. Qualify for professional-level job roles

What to expect in the exam

The 300-615 DCIT exam certifies your knowledge of troubleshooting a data center infrastructure including network, compute platforms, storage network, automation, management and operations. The exam will be available beginning February 24, 2020.

After you pass 300-615 DCIT:

1. You earn the Cisco Certified Specialist - Data Center Operations certification.
2. You will have satisfied the concentration exam requirement for new CCNP Data Center certification. To complete your CCNP Data Center certification, pass the

Implementing and Operating Cisco Data Center Core Technologies (300-601 DCCOR) exam or its equivalent.