

Troubleshooting Cisco Data Centre Infrastructure

DCIT: 350-615

Course Overview

The Troubleshooting Cisco Data centre Infrastructure (DCIT) v7.0 course shows you how to troubleshoot LAN, SAN, Cisco® Data centre Unified Fabric, Cisco Unified Computing System™ (Cisco UCS®), and Cisco Application-Centric Infrastructure (Cisco ACI®). You will learn methodologies and tools to identify issues that may occur in data centre network architecture. You will get extensive hands-on practice troubleshooting installation, configuration and interconnectivity issues on Cisco Multilayer Director Switch (MDS) switches, Cisco Nexus® switches, Cisco Fabric Extenders (FEXs), Cisco UCS, Cisco ACI, and more.

This course helps you prepare to take the 300-615 Troubleshooting Cisco Data centre Infrastructure (DCIT) Exam

Prerequisite Knowledge

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 Unified Computing System
- Configure, secure, and maintain Cisco ACI

These Cisco courses are recommended to help you meet these prerequisites:

- Implementing and Administering Cisco Networking Technologies (CCNA®)
- Understanding Cisco Data centre Foundations (DCFNDU)
- Implementing and Operating Cisco Data centre Core Technologies (DCCOR)
- Introducing Cisco NX-OS Switches and Fabrics in the Data centre (DCINX)
- Configuring Cisco NX-OS Switches and Fabrics in the Data centre (DCCNX)
- Introducing Cisco Unified Computing System (DCIUCS)
- Configuring Cisco Unified Computing System (DCCUCS)



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Objectives

Upon completing this course, the learner will be able to meet these overall objectives:

- Describe how to troubleshoot the data centre network, troubleshooting tools and methodologies available from the Command-Line Interface (CLI) that are used to identify and resolve issues in a Cisco data centre network architecture
- Identify and resolve issues that are related to: Virtual LANs (VLANs) and private VLANs (PVLANS); port channels and virtual port channels; Overlay Transport Virtualization (OTV); and Virtual Extensible LAN (VXLAN)
- Describe troubleshooting of routing protocols such as Open Shortest Path First (OSPF), Enhanced Interior Gateway Routing Protocol (EIGRP), Protocol-Independent Multicast (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 N-Port Virtualization (NPV) mode
- Identify and resolve issues that are related to Fibre Channel over Ethernet (FCoE) and FCoE Initialization Protocol (FIP), including 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, 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

