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# Troubleshooting Cisco Data Center Infrastructure v7.1 (DCIT)

Price  
**\$3,595.00**

Duration  
**5 Daytime Classes  
or  
10 Evening Classes**

Delivery Methods  
**Virtual, Private  
Group,**

## CAREER SKILLS+™

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 also earns you 50 Continuing Education (CE) credits towards recertification.

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### Who Should Attend

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

## Course Prerequisites

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

## Course Objectives

Describe how to troubleshoot the data center network

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

Identify and resolve issues that are related to: VLANs and PVLANS; port channels and virtual port channels; OTV; and VXLAN

Describe troubleshooting of routing protocols such as OSPF, EIGRP, and PIM.

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, and in NPV mode

Identify and resolve issues that are related to FIP and FCoE, 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 and troubleshoot related issues

Describe 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 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, 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, scripting tools, and programmability

## Agenda

Section 1: Describing the Troubleshooting Process

Section 2: Understanding CLI Troubleshooting Tools

Section 3: Troubleshooting VLANs and PVLANS

Section 4: Troubleshooting Port Channels and Virtual Port Channels

Section 5: Troubleshooting VXLAN

Section 6: Troubleshooting Routing and High-Availability Protocols

Section 7: Troubleshooting Data Center LAN Security

Section 8: Troubleshooting Platform-Specific Issues

Section 9: Troubleshooting Fibre Channel Interfaces

Section 10: Troubleshooting Fibre Channel Fabric Services

Section 11: Troubleshooting NPV Mode

Section 12: Troubleshooting FCoE

Section 13: Troubleshooting Cisco UCS Architecture and Initialization

Section 14: Troubleshooting Cisco UCS Configuration

Section 15: Troubleshooting Cisco UCS B-Series Servers

Section 16: Troubleshooting Cisco UCS B-Series LAN and SAN Connectivity

Section 17: Troubleshooting Cisco UCS C-Series Servers

Section 18: Troubleshooting Cisco UCS C-Series LAN and SAN Connectivity

Section 19: Troubleshooting Cisco UCS C-Series and Cisco UCS Manager Integration

Section 20: Exploring the Tools and Methodologies for Troubleshooting Cisco ACI

Section 21: Troubleshooting Automation and Scripting Tools

Section 22: Troubleshooting Programmability