

Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional)

Category: Infrastructure & IT Operations | **Vendor:** Cisco

Duration: 5.00 hours (1 days)

4.1 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: vILT

Certification: Cisco Certified Specialist – Data Center Operations

Related Exam: 300-615

Course Overview

The Troubleshooting Cisco Data Center Infrastructure (DCIT) training 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®). 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 Multilayer Director Switch (MDS) switches, Cisco Nexus® switches, Cisco Fabric Extenders (FEXs), Cisco UCS, and Cisco ACI.

This training prepares you for 300-615 DCIT v1.2 exam. If passed, you earn the Cisco Certified Specialist – Data Center Operations certification and satisfy the concentration exam requirement for the Cisco Certified Network Professional (CCNP) Data Center certification.

About This Course

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Who Should Attend

Implementing and Administering Cisco Solutions (CCNA) v2.2

--Or--

Understanding Cisco Data Center Foundations (DCFNDU) v2.0

--Or--

Implementing and Operating Cisco Data Center Core Technologies (DCCOR) v1.4

--Or--

Implementing Cisco NX-OS Switches and Fabrics in the Data Center (DCNX) v1.1

--Or--

Introducing Cisco Unified Computing System (DCIUCS) v1.0

--Or--

Configuring Cisco Unified Computing System (DCCUCS) v1.0

Prerequisites & Entry Requirements

General Prerequisites:

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 Unified Computing System

Configure, secure, and maintain Cisco ACI

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Describe how to troubleshoot the data center network

Describe the troubleshooting tools and methodologies available from the Command-Line Interface (CLI) that 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); port channels and virtual port channels; and Virtual Extensible LAN (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 and in N-Port Virtualization (NPV) mode

Identify and resolve issues that are related to Fibre Channel switching when a Cisco NX-OS switch is used in NPV mode

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 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, troubleshooting connectivity issues

Troubleshooting Cisco UCS C-Series server integration with Cisco UCS Manager

Describe Cisco Intersight characteristics

Explore the Cisco Nexus Dashboard platform

Explain Cisco Nexus Dashboard cluster connectivity and installation procedures

Identify the tools, protocols, and methods to effectively troubleshoot Cisco ACI

Describe how to troubleshoot automation and programmability tools

Understand functionality provided by the on-box tooling on the Cisco Nexus series switches and implement simple solutions to improve daily operations

Describe the use of Python and Ansible to leverage the NX-API to implement and verify configuration state using modern workflows

Detailed Course Outline

Describing the Troubleshooting Process

Understanding CLI Troubleshooting Tools

Troubleshooting VLANs and PVLANS

Troubleshooting Port Channels and Virtual Port Channels

Troubleshooting VXLAN

Troubleshooting Routing and High-Availability Protocols

Troubleshooting Data Center LAN Security

Troubleshooting Platform-Specific Issues

Troubleshooting Fibre Channel Interfaces

Troubleshooting Fibre Channel Fabric Services

Troubleshooting NPV Mode

Troubleshooting Cisco UCS Architecture and Initialization

Troubleshooting Cisco UCS Configuration

Troubleshooting Cisco UCS B-Series Servers

Troubleshooting Cisco UCS B-Series LAN and SAN Connectivity

Troubleshooting Cisco UCS C-Series Servers

Troubleshooting Cisco UCS C-Series LAN and SAN Connectivity

Troubleshooting Cisco UCS C-Series and Cisco UCS Manager Integration

Cisco Intersight Overview

Cisco Nexus Dashboard Overview

Cisco Nexus Dashboard Connectivity and Installation

Exploring the Tools and Methodologies for Troubleshooting Cisco ACI

Troubleshooting Automation and Programmability Tools

On-Box Programmability and Automation with Cisco NX-OS

Off-Box Programmability and Automation with Cisco NX-OS

Lab Outline

Document the Network Baseline

Troubleshoot Rapid PVST+

Troubleshoot LACP

Troubleshoot vPC

Troubleshoot VXLAN

Troubleshoot OSPF

Troubleshoot FHRP

Troubleshoot Cisco Fabric Services

Troubleshoot VRF

Troubleshoot Fibre Channel Interfaces

Troubleshoot Fibre Channel VSANs, Zones, and Domain Services

Troubleshoot NPV Mode

Troubleshoot Cisco UCS Management and Service Profile Deployment

Troubleshoot Cisco UCS C-Series Server LAN Connectivity

Troubleshoot Cisco UCS C-Series Server Boot from the Fibre Channel LUN

Troubleshoot Cisco UCS C-Series Server Management Connectivity

Troubleshoot Cisco ACI Integration with VMware vCenter

Troubleshoot Contracts in Cisco ACI

Troubleshoot Cisco ACI External Layer 3 Connectivity

Troubleshoot Cisco ACI External Layer 2 Connectivity

Certification Path

Cisco Certified Specialist – Data Center Operations

Exam: 300-615

Frequently Asked Questions

Q: What delivery options are available for Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
 - Traditional Instructor-Led Classroom Training (ILT)
 - On-site delivery at your offices anywhere in United Kingdom
 - Private dedicated courses customized for your team
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Q: What certification does this course prepare me for?

The Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional) course helps prepare you for the Cisco Certified Specialist – Data Center Operations certification path.

Q: Which exam does this course prepare me for?

This course prepares you for the 300-615 official exam. You can take this exam at any exam center across United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online wherever you are located.

Q: How many CPD hours does this course provide?

The 1-day Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional) course provides up to 4.1 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional) training?

The training takes place over 1 day(s), with each day lasting approximately 5.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional)?

Yes, we provide corporate training, dedicated training, and closed classes for Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Troubleshooting Cisco Data Center Infrastructure (DCIT) v7.2 (Professional), Cisco, vILT

Q: Why choose Nexus Human for Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
 - National Training Partner of the Year (Ireland) - Multiple Years
 - Global Top 30 Instructor Awards (2012, 2019, 2021)
 - Tech Excellence Award Nominations
 - Learning Performance Institute (LPI) External Training Provider Sponsor 2024
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Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Troubleshooting Cisco Data Center Infrastructure (DCIT) (Professional) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

Professional Training & Development

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