

Troubleshooting Cisco Application Centric Infrastructure

Duration: 2 Days **Course Code: DCACIT** **Version: 5.2**

Overview:

This course teaches you the key components and procedures that you need to know to manage, monitor, and troubleshoot Cisco® Nexus® 9000 Series Switches in Application Centric Infrastructure (ACI) mode. This course is for advanced engineers who have installed and managed existing fabrics or for those who have completed the **Implementing Cisco Application-Centric Infrastructure-Advanced (DCACI)** course.

This course will help you:

Learn how to design policy-driven automation to streamline the deployment lifecycle

Integrate a comprehensive solution using any hypervisor, supporting any workload, for any location, and in any cloud

Expand your knowledge of Cisco Nexus 9000 Series Switches

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

Engineers experienced with the implementation of Cisco Nexus 9000 Series switches who need to develop their troubleshooting skills

Objectives:

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| <ul style="list-style-type: none"> ■ After completing this course, you should be able to: ■ Apply troubleshooting methodology to Cisco ACI networks ■ Troubleshoot logical and physical constructs of the Cisco ACI policy ■ Understand Cisco APIC and its troubleshooting aspects ■ Troubleshoot endpoint learning in Cisco ACI | <ul style="list-style-type: none"> ■ Troubleshoot Layer 2 traffic bridging and Layer 3 routing in the Cisco ACI network ■ Troubleshoot hypervisor integration in Cisco ACI ■ Troubleshoot Layer 4 to Layer 7 service insertion ■ Troubleshoot contracts and route leaking in Cisco ACI |
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Prerequisites:

Attendees should meet the following prerequisites:

- Familiarity with data center infrastructure operations
- Familiarity with management of Cisco data center switches
- Basic programming
- Basic network troubleshooting
- System or network administration (Linux or Windows)
- Data center operations
- DCACI - Implementing Cisco Application Centric Infrastructure
- DCACIO - Cisco Application Centric Infrastructure Operations and Troubleshooting

Testing and Certification

Recommended as preparation for the following exams:

- There are no exams currently aligned to this course

Content:

Describing Cisco ACI Troubleshooting Methodology

- Logical Constructs Review
- Physical Constructs Review
- Cisco ACI Troubleshooting Approaches
- VMM/Container Integration Review
- VMware Networking Review
- Cisco ACI APIC and Built-In Tools

Troubleshooting Logical and Physical Constructs

- Troubleshooting Logical Constructs Methodology
- Troubleshooting Physical Constructs Methodology

Troubleshooting Cisco APIC

- Verifying Cisco APIC Cluster
- Troubleshooting Cisco APIC Cluster

Troubleshooting Endpoint Learning

- Verifying Endpoint Connectivity
- Controlling Endpoint Learning
- Troubleshooting Endpoint Learning

Troubleshooting Layer 2

- VLAN and VXLAN Mapping
- Traffic Flow
- Layer 2 Unknown Unicast Flooding
- ARP Flooding
- ARP Gleaning
- Spanning Tree and BPDUs
- BPDU Flooding
- Verifying VLANs and Endpoints

Troubleshooting Layer 3 Routing

- Troubleshooting Layer 3 Connectivity Within Cisco ACI
- Troubleshooting L3Outs
- Layer 3 Transit Routing

Troubleshooting VMM Integration

- Troubleshooting VMware
- Verifying Blade Chassis
- Verifying Leafs
- Verifying VMM Integration

Troubleshooting Layer 4-7 Service Insertion

- Layer 4–7 Service Graph Overview
- Layer 4–7 Service Insertion Modes
- Troubleshooting Service Insertion with PBR

Troubleshooting Contracts and Route Leaking

- VRF-VRF Contracts and Route Leaking

Labs:

- Verify Endpoints
- Examine VLANs
- Troubleshoot ACI Policy
- Troubleshoot CMM integration and External Connectivity
- Troubleshoot Contracts

Further Information:

For More information, or to book your course, please call us on Head Office Tel.: +974 40316639

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