

Troubleshooting Cisco Data Center Infrastructure (CPLL-DCIT)

Duration: 180 days

The Troubleshooting Cisco Data Center Infrastructure (DCIT) Learning Path 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 Learning Path 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.

Skills You'll Learn

- Diagnose and resolve issues in Cisco Data Center network architectures, including LAN, SAN, Cisco UCS, and Cisco ACI environments
- Use command-line interface (CLI) tools and troubleshooting methodologies to identify and fix configuration and connectivity problems
- Troubleshoot and optimize protocols and features such as virtual LANs (VLANs), private LANs (PVLANS), port channels, virtual extensible LAN (VXLAN), routing, and high availability
- Identify and resolve Fibre Channel and storage networking issues on Cisco Nexus and MDS switches
- Implement and troubleshoot automation and programmability solutions using on-box (NX-OS, Python) and off-box (Ansible, Terraform) tools in Cisco data center environments

Learning Path Objectives

1. Troubleshooting Foundation: Cover the basics of troubleshooting the data center network, tools, and methodologies available from the CLI that you use to identify and resolve issues in a Cisco data center network architecture.
2. Troubleshooting LAN Issues: Learn to identify and resolve issues related to VLANs as well as PVLANS. You'll learn about port channels and virtual port channels, as well as overlay transport virtualization (OTV) and VXLAN.
3. Troubleshooting SAN Issues: Define the proper procedures to configure SAN connectivity and avoid issues with the VIC, troubleshooting connectivity issues and Cisco UCS C-Series server integration with Cisco UCS Manager.
4. Troubleshooting UCS: Discover Cisco Integrated Management Controller (IMC) tools for validating performance and facilitating data-gathering activities for Cisco UCS B-Series and C-Series server troubleshooting as well as the troubleshooting approach for hardware and firmware failures.

5. Troubleshooting Specific UCS Configurations and Connectivity: Explore troubleshooting installation, configuration, and interconnectivity issues on Cisco UCS®.

