

Module Title : DCUFT - Troubleshooting Cisco Data Center Unified Fabric v5.0

Duration : 3 days

Overview

In this course, you will cover the key components and procedures needed to troubleshoot and resolve common issues with the Cisco Nexus 7000, 5000, MDS Switches, and the Nexus 2000 Fabric Extenders in the network and SAN environment.

What You'll Learn

- Troubleshooting tools and methodologies available from the command line interface (CLI) and in Data Center Network Manager (DCNM) used to identify and resolve issues in a Cisco Data Center network architecture
- Identify and resolve issues related to VLANs and PVLANS
- Identify and resolve issues related to Port Channels and virtual Port Channels
- Identify and resolve issues related to Cisco FabricPath
- Identify and resolve issues related to Overlay Transport Virtualization (OTV)
- Identify and resolve issues related to Fibre Channel interface operation
- Identify and resolve issues related to Fibre Channel Switching when the NX-OS Switch is used in switched mode or in N Port virtualization (NPV) mode
- Identify and resolve issues related to Fibre Channel over Ethernet (FCoE) in the Cisco data center architecture
- Identify and resolve issues related to the Nexus 7000
- Identify and resolve issues specific to the Nexus 5000 family
- Identify and resolve issues specific to the Nexus 2000 FEX
- Identify and resolve issues specific to the Cisco MDS family of switches

Prerequisites

- CCNA or CCNP certification
- Experience with Fibre Channel Protocol
- DCUFI - Implementing Cisco Data Center Unified Fabric
- DCMDS v2.0 - Configuring Cisco MDS 9000 Series Switches
- Attendance of Nexus 7000, 5000, and MDS courses
 - DCNX5K - Implementing the Cisco Nexus 5000 and 2000 v2.0

- DCNX7K - Configuring Cisco Nexus 7000 Switches v2.0
- [DCUFI - Implementing Cisco Data Center Unified Fabric v5.0](#)
- [DCMDS v2.0 - Configuring Cisco MDS 9000 Series Switches](#)

Who Needs To Attend

- Data center administrators and engineers, network administrators and engineers, consulting systems engineers, and Cisco integrators and partners
- Data center designers and managers, network designers and managers, and systems engineers

Course Outline

1. Tools and Methodologies Troubleshooting

- CLI Troubleshooting Tools
- Cisco DCNM Troubleshooting Tools

2. Layer 2 Issues Troubleshooting

- Troubleshooting VLANs and Private VLANs
- Troubleshooting Port Channels and Virtual Port Channels
- Troubleshooting Cisco FabricPath
- Troubleshooting OTV

3. SAN Switching Issues Troubleshooting

- Troubleshooting Fibre Channel Interfaces
- Troubleshooting Fibre Channel Fabric Service
- Troubleshooting NPV Mode

4. FCoE Troubleshooting

- Troubleshooting DCBx

5. Platform Specific Issues Troubleshooting

- Troubleshooting the Cisco Nexus 7000
- Troubleshooting the Cisco Nexus 5000 and 5500 Switches
- Troubleshooting the Cisco Nexus 2000 Fabric Extender
- Troubleshooting the Cisco MDS Switch

Classroom Labs

Lab 1: Troubleshoot vPCs

Lab 2: Troubleshoot Cisco FabricPath

Lab 3: Troubleshoot OTV Issues

Lab 4: Troubleshoot FC Interfaces



Lab 5: Troubleshoot FC VSANs, Zones, and Domain Services

Lab 6: Troubleshoot NPV Mode

Lab 7: Troubleshoot FCoE: Part 1

Lab 8: Troubleshoot FCoE: Part 2

Lab 9: Troubleshoot Virtual Device Contexts (VDCs)

Lab 10: Troubleshoot Cisco Fabric Services (CFS)

Lab 11: Troubleshoot the Fabric Extender