# Troubleshooting Cisco Data Center Infrastructure (DCIT)

# Description

The focus of this skills-building course is troubleshooting of LAN, SAN, Cisco Data Center Unified Fabric, Cisco Unified Computing System (UCS), and Cisco Application Centric Infrastructure (ACI). The course provides rich, hands-on experience in resolving problems on Cisco MDS switches, Cisco Nexus switches, Cisco fabric extenders (FEXs), Cisco UCS, and Cisco ACI.

#### **Course Content**

#### Module 1: Cisco Data Center Network Virtualization

- Lesson 1: Describing Switch Virtualization
- Lesson 2: Describing Machine Virtualization
- Lesson 3: Describing Network Virtualization

# Module 2: Cisco Data Center Network Technologies Configuration

- Lesson 1: Describing Cisco FabricPath
- Lesson 2: Describing Cisco Fabric Extender
- Lesson 3: Describing Port Channels and Virtual Port Channels
- Lesson 4: Describing Cisco Unified Fabric

# Module 3: Cisco Unified Computing System

- Lesson 1: Describing Cisco UCS Components
- Lesson 2: Cisco UCS RBAC
- Lesson 3: Deploying Servers in Cisco UCS

#### Module 4: Data Center Automation and Orchestration

- Lesson 1: Using Application Programming Interfaces
- Lesson 2: Cloud Computing
- Lesson 3: Describing Cisco UCS Director
- Lesson 4: Using Cisco UCS Director for Orchestration

#### Module 5: Cisco Application-Centric Infrastructure

- Lesson 1: Describing Cisco ACI
- Lesson 2: Describing Cisco ACI Traffic Forwarding
- Lesson 3: Programming and Orchestrating Cisco ACI

#### Lab / Exercises

Lab 1: Configure Virtual Routing and Forwarding by Using SSH Lab 2: Explore the Elements of Virtual Device Contexts Lab 3: Install VMware ESXi and vCenter Lab 4: Configure Cisco FabricPath Lab 5: Configure the Cisco Nexus 2000 Fabric Extender Lab 6: Configure Virtual Port Channels Lab 7: Configure Virtual Port Channels with FEX Lab 8: Configure Unified Ports on Cisco Nexus Switch and Implement FCoE Lab 9: Explore Cisco UCS Server Environment Lab 10: Configure Local RBAC Lab 11: Configure Cisco UCS to Boot Servers from SAN Lab 12: Configure Cisco NX-OS with APIs Lab 13: Explore the Management Information Tree of the Cisco UCS Manager XML API Lab 14: Configure User Accounts in Cisco UCS Director Lab 15: Add Virtual and Physical Accounts to Cisco UCS Director Lab 16: Customize Cisco UCS Director Lab 17: Explore Cisco UCS Director Monitoring Capabilities Lab 18: Use Cisco UCS Director Orchestration Features **Documentation**  • Digital courseware included

# Exam

This course prepares you to the 300-615 DCIT Troubleshooting Cisco Data Center Infrastructure exam. If
you wish to take this exam, please contact our secretariat who will let you know the cost of the exam and
will take care of all the necessary administrative procedures for you.

# **Participant profiles**

• Individuals involved in the implementation of public, private and hybrid clouds based on Cisco Infrastructure

# Prerequisites

• Basic routing and switching knowledge

# Objectives

- Troubleshoot Layer 2 technologies, such as STP, port channels, vPC, Cisco FabricPath, and FEX
- Troubleshoot first-hop redundancy, routing, and CFS in the data center
- Troubleshoot virtualization solutions, such as OTV, VRF, and VXLAN
- Troubleshoot storage area networks, including Fibre Channel, FCoE, zoning, NPV, and NPIV
- Troubleshoot data center unified computing

#### Niveau

Intermédiaire Classroom Registration Price (CHF) -2 Virtual Classroom Registration Price (CHF) 4350 Duration (in Days) 5 Reference CIS-DCIT