



# TROUBLESHOOTING CISCO DATA CENTER UNIFIED COMPUTING (DCUCT) V5.0 REMOTE LABS



This set of lab exercises (lab bundle) contains all the exercises associated with the [Implementing Troubleshooting Cisco Data Center Unified Computing \(DCUCT\) v5.0](#) course. The course is designed to prepare system engineers and implementers with the knowledge and hands-on experience to properly troubleshoot Cisco UCS B-Series and C-Series servers operating in standalone and integrated modes.

The course offers the student to gain hands-on experience with proper configuration procedures, and become familiar with common troubleshooting scenarios and recommended solutions.

## Content

This set of lab exercises contains the following exercises:

- **Cisco UCS Network Baseline Documentation**

In this activity, you will use the CLI or GUI to log in to the equipment in your pod.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Check that you can access the lab environment
- Examine Cisco UCS B-Series server equipment using the Cisco UCSM GUI
- Examine Cisco UCS C-Series server equipment using the Cisco IMC
- Examine LAN and SAN network topology

- **Cisco UCS Management and Service Profile Deployment**

In this activity, you will troubleshoot service profiles.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Successfully associate the service profile created from the service profile template

- **Troubleshoot Cisco UCS B-Series Server Boot from SAN**

In this activity, you will troubleshoot a bootup from the SAN.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Boot the ESXi server from the SAN

- **Troubleshoot LAN Connectivity: Part 1**

In this activity, you will troubleshoot network connectivity.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Ping or access the management interface of the host

- **Troubleshoot LAN Connectivity: Part 2**

Complete this lab activity to practice what you learned in the related module.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Ping or access the management interface of the ESXi host

- **Troubleshoot Failover Connectivity: Part 1**

In this activity, you will troubleshoot network connectivity in a failover scenario.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Ping or access the management interface of the ESXi host

- **Troubleshoot Failover Connectivity: Part 2**

In this activity, you will troubleshoot network connectivity.

### Objectives

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue

- Ping or access the management interface of the ESXi host

- **Troubleshoot Cisco UCS C-Series Server Boot from SAN**

In this activity, you will troubleshoot the boot-up from the SAN.

### **Objectives**

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Boot ESXi server from the SAN

- **Troubleshoot Network Connectivity**

In this activity, you will troubleshoot network connectivity of the Cisco UCS C-Series server.

### **Objectives**

After completing this activity, you will be able to meet these objectives:

- Perform trouble analysis and identify the cause of the problem
- Resolve the issue
- Ping the ESXi server from your student laptop

## **Objectives**

Upon finishing this set of exercises, you will be able to meet these overall objectives:

- Describe the Cisco UCS B-series architecture, installation, and configuration, and the process and tools for determining related issues
- Describe troubleshooting processes on the standalone Cisco UCS C-Series deployments
- Describe the valid Cisco UCS C-Series integrated architecture and the process of determining issues related to integration of Cisco UCS C-Series server with Cisco UCS Manager

## Outline

The course contains these components:

- Cisco UCS B-Series Troubleshooting
  - Troubleshooting Cisco UCS B-Series Architecture and Initialization
  - Troubleshooting Cisco UCS B-Series Configuration
  - Troubleshooting Cisco UCS B-Series Operation
  - Troubleshooting Cisco UCS B-Series LAN and SAN Connectivity
  - Troubleshooting and Upgrading Cisco UCS Manager
  - Troubleshooting Cisco UCS B-Series Hardware
- Cisco UCS C-Series Troubleshooting
  - Cisco UCS C-Series Architecture and Configuration
  - Troubleshooting Cisco UCS C-Series Hardware and Firmware
  - Troubleshooting Cisco UCS C-Series LAN and SAN Connectivity
  - Troubleshooting Locally Attached Storage
  - Troubleshooting Operating System-Related Issues
- Cisco UCS C-Series Integration Troubleshooting
  - Integrating Cisco UCS C-Series and Cisco UCS Manager
  - Troubleshooting Cisco UCS C-Series and Cisco UCS Manager Integration

## Importance

This lab bundle is mandatory for students attending the [Troubleshooting Cisco Data Center Unified Computing \(DCUCT\) v5.0](#) training.

## Audience

The primary audience for this course is data center designers, data center administrators, and system engineers.

The secondary audience for this course is data center engineers and managers.

## Prerequisite Knowledge

To successfully complete this set of exercises, you need to have the following skills:

- Knowledge covered by the Introducing Cisco Data Center Technologies (ICDCT) course
- Knowledge covered by the Implementing [Cisco Data Center Unified Computing \(DCUCI\)](#) course
- Familiarity with server virtualization (for example, VMware vSphere and Microsoft Hyper-V)
- Familiarity with administration of common operating systems (for example, Linux and Windows)

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