

Data Center Unified Computing System C-Series Troubleshooting

Duration: 2 Days **Course Code: DCUCSCTS**

Overview:

The Cisco Data Center Unified Computing System C-Series Troubleshooting (DCUCSCTS) course is designed to prepare Cisco Channel Partners, systems engineers, and implementers with the knowledge and hands-on experience to properly install, configure, and troubleshoot UCS C-Series servers operating in standalone mode.

The goal of the course is to enable the UCS Partner to troubleshoot Level 1 and 2 standalone UCS C-Series integration issues.

Target Audience:

This course is designed for Cisco Channel Partner SEs and FEs that are seeking to assume active roles in addressing and correcting Level 1 and 2 UCS C-Series Standalone Server issues.

Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
- Review the UCS C-Series product platform with an emphasis on feature support
- Describe the initial setup, configuration, and connectivity to ensure proper Cisco Integrated Management Controller (CIMC) operation
- Review the UCS C-Series troubleshooting methodology as well as present common configuration challenges
- Describe CIMC utilities that enable performance validation and facilitate data gathering activities for troubleshooting purposes
- Describe the process to download firmware updates by using Host Upgrade Utility (HUU)
- Perform server BIOS updates with various methods
- Describe the correct process to update the server BIOS by using the EFI shell
- Describe the correct process for recovering a UCS C-Series server by using a USB Recovery Module
- Describe the features and benefits of the UCS C-Series P81E Virtual Interface Card (VIC)
- Perform the proper network (LAN) configuration steps for the P81E VIC
- Describe common troubleshooting issues and recommended solutions for the UCS C-Series P81E VIC
- Review the Cisco VIC P81E SAN configuration and vHBA properties
- Describe the Fibre Channel over Ethernet Initialization Protocol (FIP) and validate its proper configuration
- Describe the process for determining P81E configuration-related
- Review and introduce the RAID controller options for the UCS C-Series servers
- Introduce the SAS Extender and Expander options for the C-Series servers
- Configure the LSI 1068E, LSI 9261-8i, and the software ICH10R RAID controllers
- Identify the symptoms and recommended solutions of RAID adapter and disk failure modes
- Describe the steps for installing an operating system onto a local disk
- Describe the steps for installing an operating system by using a SAN boot
- Describe the process to download and install additional device drivers after successful OS installation
- Describe common device driver and operating system troubleshooting issues and their recommended solutions
- Execute the password recovery process for UCS C-Series server CIMC and BIOS passwords
- Configure management access to the UCS C-Series server through the LAN on Motherboard and NIC ports
- Configure the UCS C-Series Intelligent Peripheral Management Interface for management access
- Configure the UCS C-Series Serial over LAN service
- Describe the rationale and various components that are required to complete UCS C-Series integration with UCS Manager
- Configure the Fabric Interconnect and Fabric Extender for a UCS C-Series server
- Configure the UCS C-Series server to operate as part of a UCS Manager instance

Prerequisites:

To gain the prerequisite skills and knowledge, Cisco strongly recommends the knowledge of the following courses:

- Data Center Unified Computing Implementation (DCUCI) v4.0 course.

Content:

Troubleshooting Methodology

- UCS C-Series Product Review
- C-Series Initial Setup and Configuration
- C-Series Troubleshooting Methodology
- C-Series Data Gathering Activities

Configuring Firmware Updates

- Download Firmware Updates by Using the Host Upgrade Utility
- Perform a Remote Update to the Server BIOS
- Perform a BIOS Update by Using the EFI Shell
- Configure USB Recovery Modules for Server BIOS Recovery

Troubleshooting LAN Connectivity

- UCS C-Series P81E Virtual Interface Card Overview
- UCS C-Series P81E Virtual Interface Card Configuration
- Troubleshoot the UCS C-Series VIC (P81E) Installation and Configuration

Troubleshooting SAN Connectivity

- Cisco VIC P81E SAN Configuration
- Fibre Channel over Ethernet Initialization Protocol
- Cisco VIC P81E SAN Troubleshooting

Troubleshooting Local Disk and RAID

- UCS C-Series RAID Controller Overview
- UCS C-Series LSI Controller SAS Expanders and Extenders
- UCS C-Series RAID Controller Configuration
- Troubleshoot RAID Adapter and Disk Failures

Troubleshooting Operating System Driver Issues

- Installing a Windows Operating System onto a Local Drive
- Installing the Operating System Using a SAN Boot
- OS Device Drivers After Installation
- Troubleshoot OS Device Driver Problems

Troubleshooting Management Access

- Execute CIMC and BIOS Password Recovery
- Troubleshoot the LOM and Cisco Card Mode
- Troubleshoot IPMI Access
- Troubleshoot SoL Access

Configuring UCS C-Series Integration with UCS Manager

- UCS C-Series and UCS Manager Integration Overview
- UCS C-Series and UCS Manager Installation

UCS C-Series and UCS Manager Troubleshooting

Further Information:

For More information, or to book your course, please call us on +254 713 027 191

training@clclearningafrica.com

www.clclearningafrica.com

Computer Learning Centre 2nd Floor Museum Hill Centre, Muthithi Road, Westlands, Nairobi, Kenya