
UCS Troubleshooting Boot Camp

Duration: 5 Days **Course Code: UCSTSBC**

Overview:

The UCS Troubleshooting Boot Camp (UCSTSBC) is an intensive course that combines the Cisco UCS B-Series and C-series troubleshooting courses. Delegates will learn how to identify and configure the features available in the Cisco UCS B-Series and C-series products to ensure that can successfully deploy and maintain their unified computing system.

This course includes the new features added by Cisco UCM code version 2.0. You will receive an overview of the new hardware available with this release, namely the Cisco 6248 Fabric Interconnects, 2208 IOMs, and 1208 VICs. Hands-on experience is vital to a successful deployment and in this course you will be able to properly install, configure, and troubleshoot UCS B-Series servers in conjunction with UCS C-Series servers operating in standalone mode.

Target Audience:

This course is designed for: Anyone involved in the deployment and maintenance of a Cisco UCS solution.

Objectives:

- After you complete this course you will be able to :
 - UCS benefits, connectivity configuration, management, and maintenance
 - Stateless computing and unified fabric
 - MACROBUTTON NoMaro UCS Series product platform with an emphasis on feature support
 - Initial setup, configuration, and connectivity to ensure proper Cisco Integrated Management Controller (CIMC) operation
 - UCS Series troubleshooting methodology and common configuration challenges
 - CIMC utilities that enable performance validation and facilitate data gathering activities for troubleshooting purposes
 - Download firmware updates by using Host Upgrade Utility (HUU)
 - Perform server BIOS updates with various methods
 - Update the server BIOS by using the EFI shell
 - Recover a UCS Series server using a USB Recovery Module
 - Features and benefits of the UCS C-Series P81E Virtual Interface Card (VIC)
 - Perform the proper network (LAN) configuration steps for the P81E VIC
 - Troubleshoot issues and recommended solutions for the UCS Series P81E VIC
 - Cisco VIC P81E SAN configuration and vHBA properties
 - Fibre Channel over Ethernet Initialization Protocol (FIP) and validate its proper configuration
 - SAS extender and expander options for the C-Series servers
 - Install an operating system onto a local disk and using a SAN boot
 - Download and install additional device drivers after successful OS installation
 - Common device driver and operating system troubleshooting issues and their recommended solutions
 - Execute the password recovery process for UCS 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 (IPMI) for management access
 - Configure the UCS C-Series Serial over LAN (SoL) service
 - Components 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
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Prerequisites:

Attendees should meet the following pre-requisites:

- Understanding of server system design/architecture and Cisco Enterprise Data Center Architecture
- Familiarity with Cisco UCS Architecture
- Familiarity with Ethernet and TCP/IP networking, SANs, Fibre Channel Protocol (FCP), and hypervisor technologies (VMware vSphere, Microsoft Hyper-V, Citrix Xen)
- Attendance of **DCUCD** or **DCUCI** courses is recommended

Content:

Troubleshooting Cisco UCS in the Data Center

- Cisco UCS Configuration Confirmation
- UCS Architecture
- Using Management Interfaces to Identify UCS Configuration Parameters
- Chassis and Blade Discovery
- Cisco UCS Support Tools
- IPMI, SoL, and Data Gathering
- Cisco UCS Advanced Operations
- Ethernet Switching Mode
- EHV Mode
- Fibre Channel Switching Mode
- NPV Mode
- Counters and Statistics
- LAN and SAN Connectivity
- SAN Boot

Troubleshooting Nexus 1000V Installation and Operations Problems

- Installations on Cisco UCS
- Troubleshooting the Installation of Nexus 1000V on UCS B-Series Servers Running VMware
- VSM and VEM Installation Considerations
- Troubleshooting VSM-VEM Connectivity Issues and High Availability Problems
- Data Plane Issues
- Virtual and Physical Interfaces: VM Guest to External Network
- Nexus 1000V Operations: Data Plane Pack Flow
- Troubleshooting Approaches Based on TAC Cases

Troubleshooting Methodology

- UCS C-Series Product Review
- Server Models, including the C200, C210, C250, and C460
- C-Series Installation, Setup, and Configuration
- Configuring the CIMC to Enable Remote Access Management
- UCS C-Series Troubleshooting Methodology
- Proper Configurations
- C-Series Data Gathering Activities
- CIMC GUI
- Navigating Utilities and Interpreting the Various Command Outputs

Troubleshooting LAN Connectivity

- UCS C-Series P81E VIC Configuration
- Troubleshoot the UCS C-Series P81E VIC Installation and Configuration

Troubleshooting SAN Connectivity

- Cisco VIC P81E SAN Configuration and vHBA Properties
- FIP: Validating Proper Operation
- Cisco VIC P81E SAN Troubleshooting Configuration Problems
- Configure and Verify SAN Connectivity Using the P81E VIC Interfaces

Configuring UCS C-Series Integration with UCS Manager

- UCS C-Series and UCS Manager Integration
- UCS B-Series and C-Series Components
- Cisco Nexus Products
- UCS C-Series and UCS Manager Installation
- Connect Data and Management Paths
- UCS C-Series and UCS Manager Troubleshooting
- Configure the UCS C-Series Server

Further Information:

For More information, or to book your course, please call us on 00 20 (0) 2 2269 1982 or 16142

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