DCUCI 5.0 - Data Center Unified Computing Implementation (5 Days)

Course Overview

Data Center Unified Computing Implementation (DCUCI) is designed to serve the needs of engineers and technicians who implement Cisco Unified Computing System (UCS) B-Series Blade Servers and Cisco UCS C-Series Rack-Mount Servers.

Data Center Unified Computing Implementation (DCUCI) v5.0 updates and replaces Data Center Unified Computing Implementation (DCUCI) v4.0 and guides learners through rack installation and the provisioning of server hardware, operating systems or hypervisors, and applications. Significant content is devoted to management, maintenance, and troubleshooting. Data Center Unified Computing Implementation (DCUCI) v5.0 articulates Cisco data-center virtualization solutions and explains how to execute a virtualization solution that is based on a detailed implementation plan.

Because of the rapid development pace of new product features, approximately 50 percent or more of the course content is modified or replaced in this update. This design effort aims to achieve several goals:

- Restructure the content to better suit the needs of implementation personnel, by aligning course content and labs with actual workflow and by preparing learners to configure the most recent, innovative Cisco Unified Computing System solutions
- Complete an overall update of Cisco data-center product portfolio hardware and software releases for Cisco UCS B-Series, Cisco UCS C-Series, and Cisco Nexus 1000V product families
- Provide updated implementation guidelines for included technologies

Target Audience

The following prerequisite skills and knowledge are recommended before attending this course:

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

Attendance of the following Cisco learning offerings is recommended to fully benefit from this course:

- Implementing Cisco Data Center Network Infrastructure 2 (DCNI-2)
- Implementing Cisco Storage Networking Solutions (ICSNS)

Prerequisites

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Course Objectives

- Explain how Cisco Unified Computing System addresses key management challenges in data center server environments
- Describe the Cisco UCS B-Series and C-Series system architectures, hardware components, and field-installable options
- Explain how to connect to and manage Cisco Unified Computing System components
- Configure Cisco UCS B-Series blade servers with Cisco UCS Manager
- Configure Cisco UCS C-Series blade servers with Cisco IMC
- Explain the connectivity requirements for the Cisco UCS platform
- Configure server profiles to allocate physical resources
- Configure maintenance tasks
- Configure high availability at the LAN, SAN, and server NIC level
- Identify common deployment scenarios for Cisco Unified Computing System
- Troubleshoot common LAN and SAN connectivity issues
- Troubleshoot service profile issues
- Configure Cisco Nexus 1000V in a VMware vSphere 4.1 environment
- Configure Cisco UCS Manager to support VMware PTS
- Configure Cisco UCS Manager to support VMware DirectPath I/O

Course Outline

- Module 1: Review of Data Center Unified Computing Implementation E-Learning
- Module 2: Installation of the Cisco UCS C-Series Rack-Mount Servers
- Module 3: Cisco IMC Configuration
- Module 4: Cisco UCS B-Series Hardware and Management
- Module 5: Cisco UCS Connectivity Configuration and Management
- Module 6: Server Resources Implementation
- Module 7: Virtual Server Networking
- Module 8: Cisco Unified Computing System Management and Maintenance