
Implementing Cisco Data Center Unified Computing

Duration: 5 Days **Course Code: DCUCI**

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.

Target Audience:

This course is designed for: Data-center technicians, data-center administrators, and system engineers Data-center designers and managers

Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
- Implement Cisco UCS C-Series rack servers in standalone mode. Boot from the local hard drive and mount the Fibre Channel SAN LUN for shared storage
- Install Cisco R-Series rack enclosures in the data center
- Install components in the Cisco UCS C-Series rack server prior to rack mounting
- Install Cisco UCS C-Series rack servers in a Cisco R-Series rack
- Use the Cisco UCS Host Upgrade Utility to upgrade or downgrade C-Series firmware to the correct version
- Provision SNMP and syslog, and use C-Series monitoring tools
- Use the Cisco Integrated Management Controller to provision LAN and SAN connectivity for the C-Series server
- Use the LSI MegaRAID web user interface to provision local hard drives into a RAID 5 array
- Install VMware ESXi in the C-Series server local hard drives
- Implement system management, maintenance, and high-availability services for Cisco UCS B-Series
- Implement local and remote authentication services to restrict privileges and delegate management authority in Cisco UCS Manager
- List the processes for managing the firmware repository and upgrade or downgrade Cisco UCS firmware components using Cisco UCS Manager
- Implement backup and restore capabilities in Cisco UCS Manager
- Implement syslog, Smart Call Home, and SPAN
- Maintain Cisco UCS in a high-availability configuration
- Implement generation 1 and generation 2 connectivity
- Differentiate between physical connections on the IOM and the redundant connections for management and data plane over the I/O MUX and midplane
- Install and power up Cisco UCS B-Series hardware
- Implement LAN connectivity for Cisco UCS B-Series hardware
- Implement SAN connectivity for Cisco UCS B-Series hardware
- Provision servers by leveraging reusable pools, policies, and templates that allow for rapid provisioning and consistency of policy
- Perform initial Cisco UCS cluster setup and provide management IP addresses for blade servers
- Provision VLANs and fabric interconnect uplinks for server connectivity to the Layer 3 data center cloud
- Provision VSANs and fabric interconnect Fibre Channel uplinks for server connectivity to the data center storage cloud
- Provision resource pools for servers, UUIDs, MAC addresses, WWNN, WWPN, and iSCSI
- Configure reusable server policies in Cisco UCS Manager
- Provision service profiles with initial and updating templates
- Implement virtualization features unique to Cisco UCS that improve performance and manageability
- Describe Cisco VM-FEX and Cisco VM-FEX universal passthrough technologies
- Provision Cisco VM-FEX in Cisco UCS Manager and the VMware vCenter Server
- Provision Cisco VM-FEX universal passthrough in Cisco UCS Manager and the VMware vCenter Server

Prerequisites:

The knowledge and skills that a learner must have before attending this course are as follows:

Server operating systems, hypervisor and virtualization familiarity

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

- Implementing Cisco Storage Networking Solutions (ICSNS)
- Implementing Cisco Data Center Unified Fabric (DCUFI)

Testing and Certification

Recommended as preparation for:

- 642-999 - Implementing Cisco Data Center Unified Computing DCUFI is one of the courses required for the **Cisco Data Center Unified Computing** Partner Specialization and the **Advanced Data Center Architecture** Specialization

Content:

Implement Cisco UCS C-Series Rack Servers

- Implementing Cisco R-Series Rack Enclosures
- Installing Cisco UCS C-Series Server Hardware
- Installing Cisco UCS C-Series Servers in a Cisco R-Series Rack Enclosure
- Updating Cisco UCS C-Series Firmware with the Host Upgrade Utility
- Provisioning Monitoring and Logging on the Cisco UCS C-Series Server
- Provisioning LAN and SAN Connectivity in the Cisco Integrated Management Controller
- Provisioning RAID on the Cisco UCS C-Series Server
- Installing VMware ESXi on the Cisco UCS C-Series Server Local RAID Array

Manage the Cisco UCS B-Series

- Implementing RBAC
- Managing and Upgrading Cisco UCS B-Series Firmware
- Implementing Backup, Import, and Restore of the Cisco UCS Manager Database
- Implementing Logging and Monitoring
- Implementing High Availability

Implement Cisco UCS B-Series Connectivity

- Implementing Cisco UCS B-Series Physical Connectivity
- Installing Cisco UCS B-Series Hardware
- Implementing Cisco UCS B-Series LAN Connectivity
- Implementing Cisco UCS B-Series SAN Connectivity

Provision Cisco UCS Compute Resources

- Provisioning the Cisco UCS Cluster
- Provisioning LAN Networking
- Provisioning SAN Networking
- Provisioning Resource Pools in Cisco UCS Manager
- Provisioning Server Policies in Cisco UCS Manager
- Provisioning Service Profiles from Templates in Cisco UCS Manager
- Provisioning Cisco UCS C-Series Server Integration in Cisco UCS Manager

Implement Cisco UCS Server Virtualization Features

- Provisioning Cisco VM-FEX and Cisco VM-FEX Universal Pass-Through
- Provisioning Cisco VM-FEX
- Provisioning Cisco VM-FEX Universal Pass-Through

Further Information:

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

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