



# **Cisco Data Center Unified Computing Implementation**

Duración: 5 Días Código del Curso: DCUCI Version: 5.0

#### Temario:

This course is designed to provide engineers involved in the deployment of Cisco's Unified Computing System (UCS) B-Series Blade Servers and Cisco UCS C-Series Rack-Mount Servers. The course will take students from rack installation to the provisioning ofserver hardware, operating systems, hypervisors, and applications. Management, maintenance and troubleshooting aspects are incorporated into this course.

#### Dirigido a:

Any individuals involved in the deployment of the Cisco Unified Computing System.

### Objetivos:

- After you complete this course you will be able to :
- 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
- Implement LAN and SANconnectivity 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
- 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

## Prerequisitos:

### Attendees should meet the following prerequisites:

- CCNA DC (DCICN and DCICT) or equivalent knowledge.
- CCNA (ICND1 and ICND2) this will be superceeded by CCNA DC
- Prior Attendance of **DCUFI** and **ICSNS** recommended
- Familiarity with hypervisor technologies (VMware vSphere, Microsoft Hyper-V,Citrix Xen) - VSICM recommended

## Exámenes y certificación

Recommended preparation for exam(s).

642-999 - DCUCI - (V5 Exam)

This exam is required for individuals looking to achieve the Cisco Certified Network Professional for Data Center Certification or the Cisco Data Center Unified Computing Support Specialist Certification - Please note that VCP certification is also required to obtain the Cisco Data Center Unified Computing Support Specialist Certification accreditation - VSICM attendance is recommended.

### Siguientes cursos recomendados:

The following courses are recommended for further study:

Delegates looking to achieve their CCNP for DC will require:

■ DCUFI- Implementing Cisco Data Center Unified Fabric

Plus

- DCUCT Troubleshooting Cisco Data Center Unified Computing
- **DCUFT** Troubleshooting Cisco Data Center Unified Fabric

or

- DCUCD Designing Cisco Data Center UnifiedComputing
- DCUFD Designing Cisco Data Center Unified Fabric

Delegates looking for skills and product knowledge may want to consider

- DCUCSCTS Data Center Unified Computing System C-Series Troubleshooting
- **DCUCTS** Data Center Unified Computing System Troubleshooting
- UCSTSBC UCS Troubleshooting Boot Camp The UCSTSBC course is a combination of the DCUCTS and DCUCSCTS courses

#### Contenido:

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

#### Labs

- Lab 1-1: Perform Initial C-Series Implementation
- Lab 1-2: Update Cisco UCS C-Series
  Firmware from the Cisco UCS Host
  Upgrade Utility
- Lab 1-3: Implement LAN and SAN Connectivity
- Lab 1-4: Install VMware ESXi on the Local RAID and Verify SAN Connectivity
- Instructor Demo: Provision Initial B-Series Configuration
- Lab 2-1: Provision Cisco UCS Ethernet Connectivity and Management IP Pools
- Lab 2-2: Configure RBAC
- Lab 2-3: Back Up and Restore Cisco UCS Manager Database Objects
- Lab 2-4: Configure Logging in Cisco UCS
- Lab 4-1: Provision Identity and Resource Pools
- Lab 4-2: Provision Mobile Service Profiles from Updating Templates
- Lab 4-3: Test High Availability
- Lab 5-1: Provision VMware Integration
- Lab 5-2: Provision M81-KR Cisco VM-FEX
- Lab 5-3: Provision M81-KR Cisco VM-FEX Universal Pass-Through

## Información Adicional:

### Recertification

Complete one of the following recertification options every two years:Re-take and pass all exams for each Specialist certification indicated on the specific certification page. Please note: this includes ALL exams whether refreshed or not. Pass a current CCIE or CCDE written exam Achieving or recertifying CCDE or any CCIE automatically extends your active Specialist certification(s) up to the point of expiration of the last certification achieved.

## Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

info.cursos@globalknowledge.es

www.globalknowledge.es

Global Knowledge Network Spain, C/Retama 7, 6a planta, 28045 Madrid