

Cisco Unified Computing System for Implementation Professionals

Duration: 5 Days **Course Code: UCS-IP** **Version: 5.3** **Delivery Method: Company Event**

Overview:

This course is delivered in partnership between Global Knowledge and Firefly Education. This partnership has enabled the Cisco market to conduct training on the latest technology addressing business relevant issues and is constantly invested in, to keep the materials up to date of any changes that happen.

The Cisco Unified Computing System for Implementation Professionals is a five-day, hands-on course designed for system engineers, data-center administrators, technicians, and architects implementing Cisco Unified Computing System B- and C-Series Servers. The course teaches how to deploy, configure, and manage UCS servers with consolidated I/O networking for LAN and SAN connectivity including multi-hop FCoE. It teaches how to virtualize server properties with the goal of enabling simple and rapid mobility of service profiles between physical servers. In the lab, students will configure mobile service profiles, upgrade firmware, configure a multitenant management model, enable high availability and fault tolerance as well as perform back-ups and restore system configuration. Students are also introduced to UCS Central 1.1 operations. Students will learn to use the built-in monitoring and troubleshooting tools. They will also install and configure VMware VM-FEX and VM-FEX Universal Pass-Through Mode with the Cisco Virtual Interface Card on the Cisco UCS infrastructure.

Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

Target Audience:

This course prepares students for exam 642-999, Implementing Cisco Data Center Unified Computing. Upon passing this exam, the student will be a certified Cisco Data Center Unified Computing Support Specialist and be able to configure, implement, and manage UCS environments.

Objectives:

- Describe the Cisco UCS B-Series management and system architecture in UCS Manager 2.1.
- Implement system management, maintenance, and high-availability services for Cisco UCS B- and C-Series Servers.
- Configure Cisco UCS Stateless Computing using resource pools, templates, and policies with Cisco Unified Fabric.
- Discuss how to manage firmware upgrades.
- Describe how to provision the Cisco UCS Compute resources.
- Discuss how to troubleshoot errors and faults using the built-in logging systems.
- Describe how to monitor performance statistics using the built-in tools.
- Install Cisco R-Series rack enclosures in the data center.
- Configure UCS Central 1.1
- Describe Cisco UCS C-Series System architecture and hardware components in UCS Manager 2.1.
- Describe Cisco C-Series stand-alone operations.
- Describe Cisco UCS C-Series integration with UCSM 2.1.
- Implement Stateless Computing on B- and C-Series Servers.
- Explain and configure Cisco UCS VM-FEX technology in UCS Manager 2.1 in a VMware environment.

Prerequisites:

- Understanding of server system design and architecture
- Familiarity with Ethernet and TCP/IP networking
- Familiarity with LAN/SAN technology
- Familiarity with Fibre Channel Protocol
- Understanding of Cisco Enterprise Data Center architecture
- Familiarity with server virtualization technologies (VMware vSphere, Microsoft Hyper-V, Red Hat KVM, Citrix Xen)

Follow-on-Courses:

Related Training

- Designing Cisco Data Center Unified Computing Design (DCUCD)
 - Designing Cisco Data Center Unified Fabric (DCUFD)
 - Implementing Cisco Data Center Unified Fabric (DCUFI)
 - Troubleshooting Cisco Data Center Unified Computing (DCUCT)
 - Troubleshooting Cisco Data Center Unified Fabric (DCUFT)
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Content:

Module 1: Cisco Unified Computing System Overview

- Lesson 1: Overview the Cisco
- Lesson 2: Implementing an HA Cluster
- Lesson 3: Implementing Role Based Access Control
- Lesson 4: Managing and Upgrading UCS B-Series Firmware
- Lesson 5: Backing Up and Restoring the Cisco UCS Manager Database
- Lesson 6: Implementing Logging and Monitoring
- Lesson 7: Implementing Cisco UCS B-Series Physical Connectivity
- Lesson 8: Implementing Cisco UCS B-Series LAN Connectivity
- Lesson 9: Implementing Cisco UCS B-Series SAN Connectivity
- Lesson 10: Provisioning Resource Pools in Cisco UCS Manager
- Lesson 11: Provisioning Server Profiles, Policies, and Templates in Cisco UCS Manager
- Lesson 12: Implementing Cisco R-Series Rack Enclosures
- Lesson 13: Implementing Cisco UCS B-Series Hardware
- Lesson 14: UCS Management Tools

Module 2: Configuring Cisco C-Series Rack Servers

- Lesson 1: Installing Cisco UCS C-Series Servers
- Lesson 2: Installing Cisco UCS C-Series Servers in Cisco R-Series Rack Enclosure
- Lesson 3: Updating Cisco UCS C-Series Firmware with the Host Upgrade Utility
- Lesson 4: Provisioning Monitoring and Logging on the Cisco UCS C-Series Server
- Lesson 5: C-Series Server Configuration Utility
- Lesson 6: Provisioning Raid on the C-Series Server
- Lesson 7: Installing VMware ESXi on the C-Series Server Local RAID Array
- Lesson 8: Provisioning LAN and SAN Connectivity in the eCIMC
- Lesson 9: Provisioning Cisco UCS C-Series Server Integration in Cisco UCS Manager

Module 3: Design and Implementation with VM-FEX

- Lesson 1: Overview Cisco VM-FEX and Cisco VM-FEX Universal Pass-Through
- Lesson 2: Configuring Cisco UCS VM-FEX
- Lesson 3: Provisioning Cisco VM-FEX Universal Pass-Through

Lab

- Demonstration 1: Provision Initial B-Series Configuration
- Lab 1: Upgrading UCS Components
- Lab 2: Creating Simple Service Profiles
- Lab 3: Configuring Resource Pools
- Lab 4: Creating Service Profiles from Templates
- Lab 5: Creating Mobile Service Profiles
- Lab 6: Advanced Service Profiles Creation
- Lab 7: Testing High Availability
- Lab 8: Backing up and Importing Configuration Data
- Lab 9: Role Based Access Controls
- Lab 10: Configuring and Exploring UCS Central 1.1
- Lab 11: C-Series Single-Wire UCSM Integration
- Lab 12: Installing ESXi 5.1 on C-Series to Boot from SAN
- Lab 13: Configuring VM-FEX

Further Information:

For More information, or to book your course, please call us on Head Office +44 (0) 118 912 1819

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