

## Cisco Data Center Unified Computing Implementation

**Duration: 5 Days**    **Course Code: DCUCI**    **Version: 6.2**

### Overview:

This extensively hands-on course focuses on deploying, securing, operating and maintaining the Cisco Unified Computing System (UCS) and UCS C-Series Rack Servers for use in data centers. It covers configuring and managing Cisco UCS servers using unified I/O networking for LAN and SAN connectivity, virtualizing server hardware identifiers to enable rapid recovery of server operating system images, automating UCS deployments using UCS Central Software and Cisco Integrated Management Controller (IMC) Supervisor, configuring fault tolerance, implementing rolebased access control (RBAC), backing up and restoring system configurations, using the monitoring and troubleshooting tools in Cisco UCS Manager and Cisco IMC..

The course is designed to help students prepare for Cisco's CCNP Data Center certification and for professional-level data center roles.

**This course is worth 40 Credits in the Continuing Education Program**

### Target Audience:

Engineers involved in deploying or maintaining a Cisco Unified Computing System (UCS) solution

### Objectives:

- **After completing this course you should be able to:**
- Describe Cisco UCS server form factors
- Describe Cisco UCS connectivity
- Configure identity abstraction
- Configure service profile templates
- Implement iSCSI
- Implement Fibre Channel port channels
- Implement FCoE
- Implement role-based access control (RBAC)
- Implement external authentication providers
- Implementing key management
- Implement Cisco UCS firmware updates
- Implement Cisco UCS backups
- Implement monitoring
- Deploy Cisco UCS Central and use it to add a Cisco UCS Manager domain, manage resources centrally, and create all required pools and templates to deploy a service profile.
- Implement Cisco UCS Director and Cisco Integrated Management Controller (Cisco IMC) Supervisor
- Compare scripting options for Cisco UCS Manager

### Prerequisites:

**Attendees should meet the following prerequisites:**

- Understanding of server system design and architecture
- Familiarity with Ethernet and TCP/IP networking
- Familiarity with SANs
- Familiarity with Fibre Channel protocol
- Understanding of Cisco Enterprise Data Center Architecture
- Familiarity with hypervisor technologies (such as VMware)

**This knowledge can be obtained by attending the courses below:**

- **DCICN** - Introducing Cisco Data Center Networking
- **DCICT** - Introducing Cisco Data Center Technologies
- **CCNA Routing and Switching - ICND1 and ICND2 or CCNAX (CCNABC)**

### Testing and Certification

**Recommended as preparation for exam:**

- **300-175 - DCUCI** - Implementing Cisco Data Center Unified Computing
- This is one of four exams required for the Cisco CCNP Data Center Certification

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## Follow-on-Courses:

**The following courses are recommended for further study:**

- **DCIT** - Troubleshooting Cisco Data Center Infrastructure

**Delegates looking to achieve their CCNP for DC will also require:**

- **DCII**- Implementing Cisco Data Center Infrastructure
- **DCVAI** - Implementing Cisco Data Center and Virtualisation and Automation

**Plus**

- **DCIT** - Troubleshooting Cisco Data Center Infrastructure

**OR**

- **DCID** - Designing Cisco Data Center Infrastructure
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## Content:

### Cisco Unified Computing System Implementation

- Describing Cisco UCS Server Form Factors
- Describing Cisco Unified Computing System Connectivity
- Configuring Identity Abstraction
- Configuring Service Profile Templates

### SAN Storage Implementation for Cisco Unified Computing System

- Implementing iSCSI
- Implementing Fibre Channel
- Implementing FCoE

### Security Implementation for Cisco Unified Computing System

- Implementing Role-Based Access Control
- Implementing External Authentication Providers
- Implementing Key Management

### Operations and Maintenance for Cisco Unified Computing System

- Implementing Cisco UCS Firmware Updates
- Implementing Cisco UCS Backups
- Implementing Monitoring

### Cisco Unified Computing System Automation

- Implementing Cisco UCS Central
- Implementing Cisco UCS Director and Cisco IMC Supervisor
- Comparing Scripting Options for Cisco UCS Manager

### Labs

- Lab 1: Provision Cisco UCS Fabric Interconnect Cluster
- Lab 2: Configure Server and Uplink Ports
- Lab 3: Configure VLANs
- Lab 4: Configure a Cisco UCS Service Profile Using Hardware Identities
- Lab 5: Configure Basic Identity Pools
- Lab 6: Configure a Cisco UCS Service Profile Using Pools
- Lab 7: Configure a Service Profile Template
- Lab 8: Configure an iSCSI Service Profile
- Lab 9: Configure Pod-Specific Device Aliases
- Lab 10: Configure Zoning
- Lab 11: Configure VSANs in Cisco UCS Manager
- Lab 12: Configure Unified Ports on UCS Fabric Interconnects
- Lab 13: Install and Boot VMware ESXi on Cisco UCS C-Series Servers from SAN LUN
- Lab 14: Install and Boot VMware ESXi on Cisco UCS B-Series Servers from SAN LUN
- Lab 15: Configure Organizations and Locales
- Lab 16: Configure Job-Specific Roles
- Lab 17: Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- Lab 18: Configure a Trusted Point and KeyRing in Cisco UCS Manager
- Lab 19: Perform Backup and Restore Activities
- Lab 20: Implement Syslog
- Lab 21: Deploy and Use Cisco UCS Central
- Lab 22: Deploy and Use Cisco IMC Supervisor
- Lab 23: Configure Cisco UCS Manager with XML API and Cisco UCS PowerTools

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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