



ویستا فن آوری فردا

مشاوره، اجرا، تامین و ارائه تجهیزات
آموزش دوره های تخصصی IT، مخابرات، مدیریت
شناسه ملی: ۱۴۰۰۷۲۹۶۴۲۹

CCNP DATACENTER (DCUCI-DCUFI-DCUCD-DCUFD)

100 TO 120 HOURS

Implementing Cisco Data Center Unified Computing (DCUCI) 5.0

Prerequisites

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:

- Configuring Cisco Data Center Unified Computing (DCUCS)

Course Content

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

Course Objectives

- Install Cisco R-Series Rack Enclosures in the data center.
- Use 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.
- Implement system management, maintenance, and high availability services for Cisco UCS B-Series.
- Maintain Cisco UCS in a high-availability configuration Implement generation 1 and generation 2 connectivity.
- Implement LAN & SAN connectivity for Cisco UCS B-Series hardware.
- Provision VLANs and fabric interconnect uplinks for server connectivity to the Layer 3 data center cloud.



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- Provision VSANs and fabric interconnect Fibre Channel uplinks for server connectivity to the data center storage cloud.
- Provision service profiles with initial and updating templates Implement virtualization features.
- Provision Cisco VM-FEX

Course Outline

- Course Introduction
- Implement Cisco UCS C-Series Rack Servers
- Manage the Cisco UCS B-Series
- Implement Cisco UCS B-Series Connectivity
- Provision Cisco UCS Compute Resources
- Implementing Cisco UCS Server Virtualization Features

Who Should Attend

- Channel Partner / Reseller
- Customer
- Employee

Implementing Cisco Data Center Unified Fabric (DCUFI) 5.0

Prerequisites

- Good understanding of networking Protocols
- Recommended CCNA DC Certification
- Good understanding of the Fibre Channel Protocol and the SAN environment
- Recommended attendance of a Fibre Channel Protocol class or equivalent experience
- Recommended to read the Robert Kembel books on Fibre Channel and Fibre Channel switched fabrics

Course Content

Implementing Cisco Data Center Unified Fabric (DCUFI) v5.0 is a 5-day instructor led training course designed for Systems and Field Engineers, Consulting Systems Engineers, Technical Solutions Architects, and Cisco integrators and partners who install and implement the Cisco Nexus 7000 Series, the Cisco Nexus 5000 Series, the Cisco Nexus 2000 Series, and the Cisco MDS. The course covers the key components and procedures needed to install, configure, and



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manage the Cisco Nexus 7000 Series, the Cisco Nexus 5000 Series, the Cisco Nexus 2000 Series, and the Cisco MDS in the network and SAN environment.

Course Objectives

The goal of the course is to develop competency in learners that will enable them to implement data center components such as the Cisco Nexus 7000 Series, the Cisco Nexus 5000 Series, the Cisco Nexus 1000V Series, the Cisco MDS, and the Cisco Nexus 2000 Series.

The only product specific features, installation details or configuration details in the course are focused on data center functionality and interconnectivity. Details about Cisco Nexus product related features are moved from DCUFI to the Cisco Nexus product courses.

Course Outline

- Module 1: Cisco Unified Fabric Products Overview
- Module 2: Cisco NX-OS Software Feature Configuration
- Module 3: Cisco Nexus Switch Advanced Feature Configuration
- Module 4: Cisco Nexus Series Switch Management
- Module 5: Cisco Nexus Storage Features

Who Should Attend

- Channel Partner / Reseller
- Customer
- Employee

Designing Cisco Data Center Unified Computing (DCUCD) 5.0

Prerequisites

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

- Introducing Cisco Data Center Networking (DCICN) and Introducing Cisco Data Center Technologies (DCICT) courses
- Cisco Nexus product family courses (DCNXxK)
- Cisco MDS product family courses (DCMDS)
- Server and desktop virtualization (for example, VMware vSphere, Microsoft Hyper-V, VMware View, Citrix XenDesktop, and so on)



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- Operating system administration familiarity (for example, Linux and Windows)

Course Content

The Designing Data Center Unified Computing (DCUCD) v5.0 course is part of the curriculum path leading to the Cisco Data Center Unified Computing Design Specialist and Professional level certification. This course enables engineers to choose and design scalable, reliable, and intelligent data center unified computing and virtualization solutions based on the Cisco Unified Computing System (UCS) product portfolio as a centerpiece integrated with contemporary virtualization solutions (for example, VMware vSphere, VMware View, Microsoft Hyper-V, Citrix XenServer, Citrix XenDesktop, Red hat Kernel-based Virtual Machine [KVM], and so on), operating systems (for example, Microsoft Windows and Linux), and applications (database, collaboration, and so on). The course is built upon the foundations of the Cisco Data Center Unified Computing Design (DCUCD) v4.0. It describes the data center unified computing and virtualization solutions based on Cisco data center unified computing product portfolio, explains how to evaluate existing data center computing solution and determine the requirements, and design Cisco data center unified computing solution.

Course Objectives

These are the job tasks (domains and skill objectives from the audience, as well as job definition and job task analyses that will be taught and practiced in the course).

- 1.00 Describe the design methodology
- 2.00 Describe the data center structure and modularity
- 3.00 Describe the technologies used within the data center
- 4.00 Design the access layer of a data center
- 5.00 Design virtualization solution using Cisco UCS
- 6.00 Design network management considerations into a data center

Course Outline

- Module 1: Cisco Data Center Solution Architecture and Components
- Module 2: Assess Data Center Computing Requirements
- Module 3: Size Cisco Unified Computing Solutions
- Module 4: Design Cisco Unified Computing Solutions
- Module 5: Design Cisco Unified Computing Solutions Server Deployment



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Who Should Attend

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- Customer
- Employee

Designing Cisco Data Center Unified Fabric (DCUFD) 5.0

Prerequisites

The recommended knowledge and skills that a learner should have to attend this course can be obtained in the following courses:

- Introducing Cisco Data Center Networking (DCICN)
- Introducing Cisco Data Center Technologies (DCICT)

Course Content

The Designing Cisco Data Center Unified Fabric (DCUFD) v5.0 course enables engineers to choose and design scalable, reliable and intelligent data center networks based on Unified Fabric, 10 Gigabit Ethernet, Fibre Channel, and virtualized devices and topologies. The DCUFD 5.0 course is a 5-day instructor-led course (ILT) The course describes the technologies used in modern Cisco-based data centers, ways of integrating components, and latest guidelines and principles on data center design.

Course Objectives

These are the job tasks (domains and skill objectives from the audience, as well as job definition and job task analyses that will be taught and practiced in the course).

- 1.00 Describe the design methodology
- 2.00 Describe data center structure and modularity
- 3.00 Describe the technologies used within the data center
- 4.00 Design the core layer of a data center
- 5.00 Design the aggregation layer of a data center
- 6.00 Design the access layer of a data center
- 7.00 Design storage and SAN solution
- 8.00 Design security considerations into a data center
- 9.00 Design network management considerations into a data center



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Course Outline

- Module 1 : Cisco Data Center Solution
- Module 2: Data Center Technologies
- Module 3: Data Center Topologies
- Module 4: Data Center Storage
- Module 5: Data Center Security

Who Should Attend

- Channel Partner / Reseller
- Customer
- Employee