# DCCOR Implementing and Operating Cisco Data Center Core Technologies

This training course will teach you the skills and technologies you need to implement data center, LAN and SAN infrastructures. You will also learn the basics of automation and security in data centers. You will gain hands-on knowledge of deploying, securing, operating and maintaining Cisco Data Center infrastructure, including Cisco MDS Switches and Cisco Nexus Switches; Cisco Unified Computing System™ (Cisco UCS®) B-Series Blade Server and Cisco UCS C-Series Rack Server.

This training, including self-study material, prepares you for the Cisco Data Center Core Technologies (DCCOR) exam, which leads to the new CCNP Data Center. CCIE Data Center, and Cisco Certified Specialist - Data Center Core certifications

#### **Course Contents**

- Implementing Data Center Switching Protocols\*
- Implementing First-Hop Redundancy Protocols
- Implementing Routing in Data Center
- Implementing Multicast in Data Center\*
- Implementing Data Center Overlay Protocols
- Implementing Network Infrastructure Security\* Describing Cisco Application-Centric Infrastructure
- Describing Cisco ACI Building Blocks and VMM Domain Integration
- Describing Packet Flow in Data Center Network\*
- Describing Cisco Cloud Service and Deployment Models
- Describing Data Center Network Infrastructure Management, Maintenance, and Operations\*
- Explaining Cisco Network Assurance Concepts\*
- Implementing Fibre Channel Fabric
- Implementing Storage Infrastructure Services
- Implementing FCoE Unified Fabric
- Implementing Storage Infrastructure Security\*
- Describing Data Center Storage Infrastructure Maintenance and Operations
- Describing Cisco UCS Server Form Factors\*
- Implementing Cisco Unified Computing Network Connectivity
- Implementing Cisco Unified Computing Server Abstraction
- Implementing Cisco Unified Computing SAN Connectivity
- Implementing Unified Computing Security
- Introducing Cisco HyperFlex Systems\*
- Describing Data Center Unified Computing Management, Maintenance, and Operations\*
- Implementing Cisco Data Center Automation and Scripting Tools\*
- Describing Cisco Integration with Automation and Orchestration Software Platforms
- Describing Cisco Data Center Automation and Orchestration Technologies\*

\*This module is self-study material that can be done at your own pace after the instructor-led portion of the course.

### Target Group

- Network designers
- Network administrators
- Network engineers Systems engineers
- · Data center engineers
- Consulting systems engineers
- Technical solutions architects
- Field engineers
- Cisco integrators and partners
- Server administrator
- Network manager

### Prereauisites

To fully benefit from this course, you should have the following knowledge and skills:

- Familiarity with Ethernet and TCP/IP networks
- Familiarity with SANs
- Familiarity with the Fibre Channel protocol
- Identification of products in the Cisco Data Center Nexus and Cisco MDS families
- Understanding the Cisco Enterprise Data Center architecture
- Understanding of the design and architecture of server systems
- Familiarity with hypervisor technologies (e.g. VMware)

In order to acquire the basic knowledge and skills you need to configure Cisco® Data Center technologies, we recommend that newcomers to the topic take the courses in advance:

- DCFNDU Understanding Cisco Data Center Foundations.
- Implementing and Administering Cisco Solutions (CCNA)

Processing time approx. 30 hours



### This Course in the Web



You can find the up-to-date information and options for ordering under the following link: www.experteach-training.com/go/DCCO

### Reservation

On our Website, you can reserve a course seat for 7 days free of charge and in an non-committal manner. This can also be done by phone under +49 6074/4868-0.

### **Guaranteed Course Dates**

To ensure reliable planning, we are continuously offering a wide range of guaranteed course dates.

### Your Tailor-Made Course!

We can precisely customize this course to your project and the corresponding requirements.

# **Cisco Digital Learning**

This course is available in the Cisco Digital Learning Library. These recently developed, multi-modal training events include HD videos moderated by lecturers with stored searchable text and subtitles, as well as a exercises, labs, and explanatory text and graphics. We provide this offer to you via our myExperTeach learning portal. Effective of the activation of the account, access to the courses will be granted for a duration of 6 months. In the case of packet solutions (Cisco Digital Learning Subscriptions), this time period will amount to 12 months.

Prices,	excl. of V.A.T.
	€ 1,500
Prices,	excl. of V.A.T.
5 Days	€ 3,595
5 Days	€ 3,595
5 Days	€ 3,595
Course language	German 💻
01/09-05/09/25	HY Online
29/09-02/10/25	Online
29/09-02/10/25	Wien
03/11-07/11/25	HY Hamburg
03/11-07/11/25	Online
08/12-12/12/25	<b>H</b> Düsseldorf
08/12-12/12/25	<b>H</b> YOnline
	Prices, 5 Days 5 Days 5 Days 5 Days 5 Days 01/09-05/09/25 29/09-02/10/25 29/09-02/10/25 03/11-07/11/25 03/11-07/11/25 03/12/12/12/25



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- Spanning Tree Protocol
- Port Channels Overview
- Virtual Port Channels Overview

# Implementing First-Hop Redundancy Protocols\*

- Hot Standby Router Protocol (HSRP) Overview
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- First Hop Redundancy Protocol (FHRP) for IPv6

# Implementing Routing in Data Center\*

- Open Shortest Path First (OSPF) v2 and Open Shortest Path First (OSPF) v3
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- IP Multicast in Data Center Networks
- Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD)
- Multicast Distribution Trees and Routing Protocols
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### Implementing Data Center Overlay Protocols

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- Authentication, Authorization, and Accounting (AAA) and SSH
   on Cisco NX-OS
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- Media Access Control Security
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## Describing Cisco Application-Centric Infrastructure

#### Cisco ACI Overview. Initialization. and Discoverv

- Cisco ACI Management
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# Describing Cisco ACI Building Blocks and VMM Domain Integration

- Tenant-Based Components
- Cisco ACI Endpoints and Endpoint Groups (EPG)
- Controlling Traffic Flow with Contracts
- Virtual Switches and Cisco ACI VMM Domains
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- Cisco ACI Integration with Hypervisor Solutions

### **Describing Packet Flow in Data Center Network\***

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# Describing Cisco Cloud Service and Deployment Models Cloud Architectures

Cloud Deployment Models

# Describing Data Center Network Infrastructure Management,

- Maintenance, and Operations\*
- Time Synchronization
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# Explaining Cisco Network Assurance Concepts\*

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- Cisco Streaming Telemetry Overview

### Implementing Fibre Channel Fabric

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- SAN Port Channels Overview
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### Implementing Storage Infrastructure Services

- Distributed Device Aliases
- Zoning
- N-Port Identifier Virtualization (NPIV) and N-Port Virtualization (NPV)
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- Storage Area Network (SAN) Design Options

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- FCoE Implementation

#### Implementing Storage Infrastructure Security\*

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### Describing Data Center Storage Infrastructure Maintenance and Operations\*

- Time Synchronization
- Software Installation and Upgrade
- Storage Infrastructure Monitoring

# Describing Cisco UCS Server Form Factors\*

- Cisco UCS BSeries Blade Servers
- Cisco UCS CSeries Rack Servers

### Implementing Cisco Unified Computing Network Connectivity

Cisco UCS Fabric Interconnect
 Cisco UCS BSeries Connectivity

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# Cisco UCS CSeries Integration

# Implementing Cisco Unified Computing Server Abstraction

- Identity Abstraction
- Service Profile Templates

## Implementing Cisco Unified Computing SAN Connectivity

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- Fibre Channel Overview
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Cisco HyperFlex Scalability and Robustness

Hyperconverged and Integrated Systems Overview

Describing Data Center Unified Computing Management,

Implementing Cisco Data Center Automation and Scripting

Cisco HyperFlex Solution

Software Updates

Cisco Intersight<sup>™</sup>

Tools\*

Maintenance, and Operations\*

Infrastructure Monitoring

Cisco NX-OS Programmability

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Power On Auto Provisioning

Cisco UCS PowerTool

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Cisco and Ansible Integration Overview

Cisco and Puppet Integration Overview

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Python in Cisco NX-OS and Cisco UCS

Cisco Embedded Event Manager Overview
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Describing Cisco Integration with Automation and

**Describing Cisco Data Center Automation and Orchestration** 

\* This section is selfstudy material that can be done at your

own pace after the instructor-led portion of the course.

Scheduler Overview

Cisco Nexus API

Technologies\*

Compute Configuration Management