Implementing and Operating Cisco Data Center Core Technologies (DCCOR)

ID DCCOR **Price** 3,595.— €(excl. tax) **Duration** 5 days

Course Overview

The **Implementing and Operating Cisco Data Center Core Technologies (DCCOR)** training helps you prepare for the Cisco® CCNP® Data Center and CCIE® Data Center certifications for advanced-level data center roles. In this course, you will master the skills and technologies you need to implement data center compute, LAN and SAN infrastructure. You will also learn the essentials of automation and security in data centers. You will gain hands-on experience 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 Servers, and Cisco UCS C-Series Rack Servers. This course also earns you 64 Continuing Education (CE) credits towards recertification.

This course has 5 ILT days with 3 additional self-study days (3 days of content to be covered by the student in their own time).

This course, including the self-paced material, helps prepare you to take the exam:

- 350-601 Implementing Cisco Data Center Core Technologies (DCCOR)

How you'll benefit

This course will help you:

- Gain experience implementing, securing and automating network, compute, and storage infrastructure
- Gain knowledge and skills through Cisco's unique combination of lessons and hands-on practice using enterprise-grade Cisco learning technologies, data center equipment, and software
- Qualify for professional and expert-level job roles in the high-demand area of enterprise-class data center environments
- Earn 64 CE credits toward recertification

What to expect in the exam

This course will help you prepare to take the 350-601 DCCOR exam. This exam tests your knowledge of implementing core data center technologies including network, compute, storage network, automation, and security. After you pass 350-601 DCCOR:

- You earn the Cisco Certified Specialist - Data Center Core certification and you satisfy the core requirement for these certifications:
  - CCNP Data Center
  - CCIE Data Center

Who should attend

- Network Designers
- Network Administrators
- Network Engineers
- Systems Engineers
- Data Center Engineers
- Consulting Systems Engineers
- Technical Solutions Architects
- Cisco Integrators and Partners
- Field Engineers
- Server Administrators
- Network Managers
- Storage Administrators
- Program Managers
- Project Managers

This course is part of the following Certifications

Cisco Certified Network Professional Data Center (CCNP DATA CENTER)

Prerequisites

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

- Familiarity with Ethernet and TCP/IP networking

- Familiarity with SANs
- Familiarity with Fibre Channel protocol
- Identify products in the Cisco Data Center Nexus and Cisco MDS families
- Understanding of Cisco Enterprise Data Center architecture
- Understanding of server system design and architecture
- Familiarity with hypervisor technologies (such as VMware)

These Cisco courses are recommended to help you meet these prerequisites:

- Implementing and Administering Cisco Solutions (CCNA) v2.2
- Understanding Cisco Data Center Foundations (DCFNDU)

Course Objectives

This course provides you with the following skills & knowledge;

- Implement spanning tree protocol, port channels, and virtual port channels in the data center
- Implement first-hop redundancy protocols in the data center using Hot Standby Router Protocol (HSRP), Virtual Router Redundancy Protocol (VRRP), and Gateway Load Balancing Protocol (GLBP)
- Implement routing in the data center by using Open Shortest Path First (OSPF)v2, OSPFv3, and Border Gateway Protocol (BGP)
- Implement multicast functionality in the data center on the Cisco Nexus switches
- Implement overlay networks in the data center by using Virtual Extensible LAN (VXLAN)
- Implement network infrastructure security features on the Cisco Nexus switches
- Understand the architecture and features of high-performance Ethernet fabrics
- Introduce high-level Cisco Application Centric Infrastructure (ACI) concepts and describe various fabric discovery parameters
- Describe Cisco ACI building blocks and Virtual Machine Manager (VMM) domain integration
- Describe packet flow for various traffic types (unicast, multicast, and broadcast) in the data center
- Describe Cisco Cloud Service and deployment models
- Describe Cisco ACI fabric setup
- Implement network configuration management, describe software updates and their impacts, and implement network infrastructure monitoring
- Describe Cisco network assurance concepts such as Cisco Streaming Telemetry
- Implement Fibre Channel fabric
- Implement storage infrastructure services in the data center such as distributed device aliases, zoning, N Port Virtualization (NPV), and Fibre Channel over IP (FCIP)
- Implement Fibre Channel over Ethernet (FCoE) unified fabric
- Implement storage infrastructure security features in the data center
- Describe storage infrastructure software updates and their impacts, and implement infrastructure monitoring
- Describe Cisco UCS Server form factors
- Implement Cisco UCS Fabric Interconnect and establish network connectivity for the Cisco UCS B-Series Blade Servers and Cisco UCS C-Series Rack Servers
- Implement Cisco Unified Computing Server abstraction
- Implement SAN connectivity for Cisco UCS
- Implement Cisco UCS security features in the data center
- Implement Cisco UCS configuration management, describe software updates and their impacts, and implement infrastructure monitoring
- Implement Cisco automation and scripting tools in the data center
- Describe and evaluate the Cisco integration with automation and orchestration software platforms, such as Ansible, Puppet, and Python
- Describe and evaluate Cisco data center automation and orchestration technologies

Detailed Course Outline

- 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
- High-Throughput Converged Fabrics
- 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
- 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 Cisco Unified Computing System Security
- 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

About Fast Lane

Fast Lane is a global, award-winning specialist in technology and business training as well as consulting services for digital transformation. As the only global partner of the three cloud hyperscalers- Microsoft, AWS and Google- and partner of 30 other leading IT vendors, Fast Lane offers qualification solutions and professional services that can be scaled as needed. More than 4,000 experienced Fast Lane professionals train and advise customers in organizations of all sizes in 90 countries worldwide in the areas of cloud, artificial intelligence, cyber security, software development, wireless and mobility, modern workplace, as well as management and leadership skills, IT and project management.

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