
Implementing and Operating Cisco Data Center Core Technologies (DCCOR) V1.3

***WHERE GREAT TRAINING
HAPPENS EVERYDAY!***



Implementing and Operating Cisco Data Center Core Technologies (DCCOR) V1.3

Course Duration

5 Days

Course Price

\$4,595.00

46 CLCs

Methods of Delivery

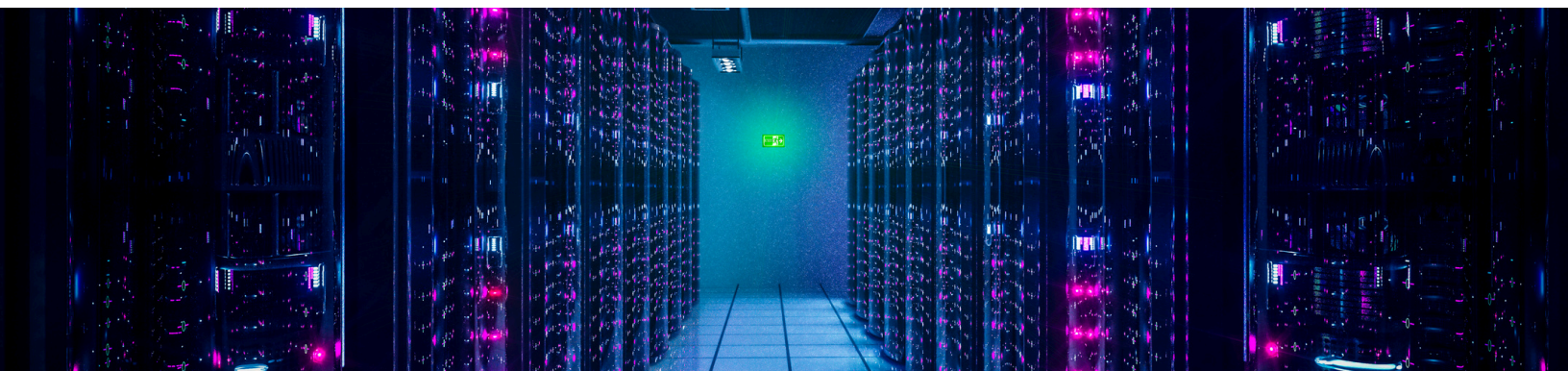
In-Person ILT

Virtual ILT

Onsite ILT

About this Class

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, including the self-paced material prepares you to take the exam: 350-601 Implementing Cisco Data Center Core Technologies (DCCOR)



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How you will benefit

This class 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

Why Attend with Current Technologies CLC

- Our Instructors are the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The job roles best suited to the material in this course are:

- 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

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Objectives

After taking this course, you should be able to:

- Implement routing and switching protocols in Data Center environment
- Implement overlay networks in data center
- Introduce high-level Cisco Application Centric Infrastructure (Cisco ACI™) concepts and Cisco Virtual Machine manager (VMM) domain integration
- Describe Cisco Cloud Service and deployment models
- Implement Fibre Channel fabric
- Implement Fibre Channel over Ethernet (FCoE) unified fabric
- Implement security features in data center
- Implement software management and infrastructure monitoring
- Implement Cisco UCS Fabric Interconnect and Server abstraction
- Implement SAN connectivity for Cisco Unified Computing System™ (Cisco UCS®)
- Describe Cisco HyperFlex™ infrastructure concepts and benefits
- Implement Cisco automation and scripting tools in data center
- Evaluate automation and orchestration technologies

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)

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Course Outline

- Implementing Data Center Switching Protocols
 - Spanning Tree Protocol
 - Port Channels Overview
- Implementing First-Hop Redundancy Protocols
 - Hot Standby Router Protocol (HSRP) Overview
 - Virtual Router Redundancy Protocol (VRRP) Overview
- Implementing Routing in Data Center
 - Open Shortest Path First (OSPF) v2 and Open Settlement Protocol (OSP) v3
 - Border Gateway Protocol
- Implementing Multicast in Data Center
 - IP Multicast in Data Center Networks
 - Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD)
- Implementing Data Center Overlay Protocols
 - Cisco Overlay Transport Virtualization
 - Virtual Extensible LAN
- Implementing Network Infrastructure Security
 - User Accounts and Role Based Access Control (RBAC)
 - Authentication, Authorization, and Accounting (AAA) and SSH on Cisco NX-OS
- Describing Cisco Application-Centric Infrastructure
 - Cisco ACI Overview, Initialization, and Discovery
 - Cisco ACI Management
- Describing Cisco ACI Building Blocks and VMM Domain Integration
 - Tenant-Based Components
 - Cisco ACI Endpoints and Endpoint Groups (EPG)

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Course Outline

- Describing Packet Flow in Data Center Network
 - Data Center Traffic Flows
 - Packet Flow in Cisco Nexus Switches
- Describing Cisco Cloud Service and Deployment Models
 - Cloud Architectures
 - Cloud Deployment Models
- Describing Data Center Network Infrastructure Management, Maintenance, and Operations
 - Time Synchronization
 - Network Configuration Management

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Lab Outline

- Lab 1: Configure Virtual Extensible LAN (VXLAN)
- Lab 2: Explore the Cisco ACI Fabric
- Lab 3: Implement Cisco ACI Access Policies and Out-of-Band Management
- Lab 4: Implement Cisco ACI Tenant Policies
- Lab 5: Integrate Cisco ACI with VMware
- Lab 6: Configure Fibre Channel
- Lab 7: Configure Device Aliases
- Lab 8: Configure Zoning
- Lab 9: Configure NPV
- Lab 10: Provision Cisco UCS Fabric Interconnect Cluster
- Lab 11: Configure Server and Uplink Ports
- Lab 12: Configure VLANs
- Lab 13: Configure a Cisco UCS Server Profile Using Hardware Identities
- Lab 14: Configure Basic Identity Pools
- Lab 15: Configure a Cisco UCS Service Profile Using Pools
- Lab 16: Configure an Internet Small Computer Systems Interface (iSCSI) Service Profile
- Lab 17: Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
- Lab 18: Configure Cisco Nexus Switches with Ansible
- Lab 19: Program a Cisco Nexus Switch with Python
- Lab 20: Automate Cisco Application-Centric Infrastructure Configuration