DCCOR - IMPLEMENTING AND OPERATING CISCO DATA CENTER CORE TECHNOLOGIES V1.3

Course Code: 100482

Prepare for advanced-level data center roles and the Cisco CCNP Data Center and CCIE Data Center certification exams.

Learn to master the skills and technologies you need to implement data center compute, LAN and SAN infrastructures. Understand the essentials of automation and security in data centers. Gain hands-on experience with deploying, securing, operating, and maintaining Cisco data center infrastructures 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 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
- Prepare to take the 350-601 Implementing Cisco Data Center Core Technologies (DCCOR)exam.
- This course is worth 64 Continuing Education (CE) credits towards recertification.

What You'll Learn

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

Who Needs to Attend

Individuals looking for the knowledge and skills required to implement, secure and automate network, compute and storage infrastructures.

Prerequisites

Attendees should meet the following prerequisites:

- 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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CLASSROOM LIVE	$5,851 CAD	5 Day

Classroom Live Outline

Implementing Data Center Switching Protocols

- Spanning Tree Protocol
- Port Channels Overview
- Virtual 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)
- Multicast Distribution Trees and Routing Protocols
- IP Multicast on Cisco Nexus Switches

Implementing Data Center Overlay Protocols

- 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

- Keychain Authentication
- First Hop Security
- Media Access Control Security
- Control Plane Policing

Describing Cisco Application-Centric Infrastructure

- Cisco ACI Overview, Initialization, and Discovery
- Cisco Nexus Dashboard Overview
- Cisco CLoud ACI Overview
- Cisco ACI Management
- Cisco ACI Fabric Access Policies

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
- VMM Domain EPG Association
- Cisco ACI Integration with Hypervisor Solutions

Describing Packet Flow in Data Center Network

- Data Center Traffic Flows
- Packet Flow in Cisco Nexus Switches
- Packet Flow in Cisco ACI Fabric

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
- Software Updates
- Network Infrastructure Monitoring

Explaining Cisco Network Assurance Concepts

- Need for Network Assurance
- Cisco Streaming Telemetry Overview

Implementing Fibre Channel Fabric

- Fibre Channel Basics
- Virtual Storage Area Network (VSAN) Overview
- SAN Port Channels Overview
- Fibre Channel Domain Configuration Process

Implementing Storage Infrastructure Services

- Distributed Device Aliases
- Zoning

- N-Port Identifier Virtualization (NPIV) and N-Port Virtualization (NPV)
- Fibre Channel over IP
- Network Access Server (NAS) Concepts
- Storage Area Network (SAN) Design Options

Implementing FCoE Unified Fabric

- Fibre Channel over Ethernet
- Describing FCoE
- FCoE Topology Options
- FCoE Implementation

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- User Accounts and RBAC
- Authentication, Authorization, and Accounting
- Fibre Channel Port Security and Fabric Binding

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- Time Synchronization
- Software Installation and Upgrade
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Describing Cisco UCS Server Form Factors

- Cisco UCS B-Series Blade Servers
- Cisco UCS C-Series Rack Servers

Implementing Cisco Unified Computing Network Connectivity

- Cisco UCS Fabric Interconnect
- Cisco UCS B-Series Connectivity
- Cisco UCS C-Series Integration

Implementing Cisco Unified Computing Server Abstraction

- Identity Abstraction
- Service Profile Templates

Implementing Cisco Unified Computing SAN Connectivity

- Cisco Unified Computing Storage Connectivity Options
- iSCSI Overview
- Fibre Channel Overview
- Implement FCoE

Implementing Unified Computing Security

- User Accounts and RBAC
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- Key Management

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- Hyperconverged and Integrated Systems Overview
- Cisco HyperFlex Solution
- Cisco HyperFlex Scalability and Robustness

Describing Data Center Unified Computing Management, Maintenance, and Operations

- Compute Configuration Management
- Software Updates
- Infrastructure Monitoring
- Cisco Intersight™

Implementing Cisco Data Center Automation and Scripting Tools

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- Power On Auto Provisioning
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- Cisco Nexus Dashboard Fabric Controller Overview
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Oct 20 - 24, 2025 | 8:30 AM - 4:30 PM EDT

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ON-DEMAND	$1,950 CAD

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Visit us at www.globalknowledge.com or call us at 1-866-716-6688.

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