コースコード：EL-CI-DCCOR
税込価格：297,000円 (税抜価格：270,000円)
日数：180日間

コース概要

The Implementing and Operating Cisco Data Center Core Technologies (DCCOR) v1.0 course helps you prepare for the Cisco® CCNP® Data Center and CCIE® Data Center certifications and 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 get hands-on experience with 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, including the self-paced material, helps prepare you to take the exam, Implementing Cisco Data Center Core Technologies (300-601 DCCOR), which leads to to the new CCNP Data Center, CCIE Data Center, and the Cisco Certified Specialist - Data Center Core certifications. The exam will be available beginning February 24, 2020.

ここに注目

受講対象者

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

前提条件

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)

下記のコースを受講済み、または同等の知識を有する方

目的

このコースを修了すると次のことができるようになります。

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

アウトライン

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
First Hop Redundancy Protocol (FHRP) for IPv6
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
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
Keychain Authentication
First Hop Security
Media Access Control Security
Control Plane Policing
Describing Cisco Application-Centric Infrastructure
Cisco ACI Overview, Initialization, and Discovery
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
Implementing Storage Infrastructure Security*
User Accounts and RBAC
Authentication, Authorization, and Accounting
Fibre Channel Port Security and Fabric Binding
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 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
iSCSI Overview
Fibre Channel Overview
Implement FCoE
Implementing Unified Computing Security
User Accounts and RBAC
Options for Authentication
Key Management
Introducing Cisco HyperFlex Systems*
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*
Cisco NX-OS Programmability
Scheduler Overview
Cisco Embedded Event Manager Overview
Bash Shell and Guest Shell for Cisco NX-OS
Cisco Nexus API
Describing Cisco Integration with Automation and Orchestration Software Platforms
Cisco and Ansible Integration Overview
Cisco and Puppet Integration Overview
Python in Cisco NX-OS and Cisco UCS
Describing Cisco Data Center Automation and Orchestration Technologies*
Power On Auto Provisioning
Cisco Data Center Network Manager Overview
Cisco UCS Director Fundamentals
Cisco UCS PowerTool
* This section is self-study material that can be done at your own pace after the instructor-led portion of the course.

Lab Outline

Configure Overlay Transport Visualization (OTV)
Configure Virtual Extensible LAN (VXLAN)
Explore the Cisco ACI Fabric
Implement Cisco ACI Access Policies and Out-of-Band Management
Implement Cisco ACI Tenant Policies
Integrate Cisco ACI with VMware
Configure Fibre Channel
Configure Device Aliases

Configure Zoning
Configure NPV
Configure FCoE
Provision Cisco UCS Fabric Interconnect Cluster
Configure Server and Uplink Ports
Configure VLANs
Configure a Cisco UCS Server Profile Using Hardware Identities
Configure Basic Identity Pools
Configure a Cisco UCS Service Profile Using Pools
Configure an Internet Small Computer Systems Interface (iSCSI) Service Profile
Configure Cisco UCS Manager to Authenticate Users with Microsoft Active Directory
Program a Cisco Nexus Switch with Python