

# Course : Implementing and Operating Cisco Data Center Core Technologies (DCCOR)

**v1.3**

Official course, exam preparation 350-601 DCCOR

**Practical course - 5d - 35h00 - Ref. CDZ**

**Price : 4350 € E.T.**

With this 5-day classroom course and 3 days of self-study, you'll master the key skills needed to implement computing, LAN and SAN infrastructures in data centers. You'll also learn the basics of automation and security. Training includes hands-on practice in deploying, securing, operating and maintaining Cisco infrastructure, with MDS and Nexus switches, as well as Cisco UCS B-Series (blade) and C-Series (rack) servers.

## **Teaching objectives**

**At the end of the training, the participant will be able to:**

- ✓ Implement routing and switching protocols and overlay networks in data centers
- ✓ Introduce Cisco ACI™ concepts and Cisco VMM domain integration.
- ✓ Describe Cisco cloud services and the different deployment models
- ✓ Implement a unified Fibre Channel and FCoE infrastructure
- ✓ Implement security features in a data center environment
- ✓ Manage software and supervise data center infrastructure
- ✓ Deploying Cisco UCS Fabric Interconnect and server abstraction
- ✓ SAN connectivity for Cisco UCS® servers
- ✓ Introduce the concepts and benefits of Cisco HyperFlex™
- ✓ Using Cisco automation and scripting tools in the data center

## **Intended audience**

Network designers, administrators, network and systems engineers, data center engineers, technical architects, Cisco integrators, partners and IT managers.

### **PARTICIPANTS**

Network designers, administrators, network and systems engineers, data center engineers, technical architects, Cisco integrators, partners and IT managers.

### **PREREQUISITES**

Basic knowledge of Ethernet/TCP-IP networking, SAN, Fibre Channel, Cisco data center architecture, server design, and virtualization technologies such as VMware.

### **TRAINER QUALIFICATIONS**

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

### **ASSESSMENT TERMS**

Assessment of targeted skills prior to training.

Assessment by the participant, at the end of the training course, of the skills acquired during the training course.

Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.

At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.

An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

## Prerequisites

Basic knowledge of Ethernet/TCP-IP networking, SAN, Fibre Channel, Cisco data center architecture, server design, and virtualization technologies such as VMware.

## Practical details

### Teaching methods

Training in French. Official course material in English. Training duration: 5 days in class and 3 days self-study(\*)).

## Course schedule

### 1 Official program

- Implement data center switching protocols\*.
- Implement first-hop redundancy protocols (FHRP)\*.
- Implement routing in a data center environment\*.
- Implement multicast in data centers\*.
- Implement overlay protocols for the data center.
- Implement network infrastructure security\*.
- Introduce Cisco ACI (Application-Centric Infrastructure) architecture.
- Describe Cisco ACI components and VMM domain integration.
- Describe packet routing in the data center network\*.
- Introduce Cisco cloud services and deployment models.
- Describe data center\* management, maintenance and network operations.
- Explain Cisco\* network assurance concepts.
- Implement a Fibre Channel infrastructure.
- Implement data center storage services.
- Implement a unified FCoE infrastructure.
- Implement storage infrastructure security\*.
- Describe the maintenance and operation of the storage infrastructure\*.
- Describe Cisco UCS\* server formats.
- Implement network connectivity for Cisco UCS.
- Implement Cisco UCS server abstraction.
- Implement SAN connectivity for Cisco UCS.
- Implement security in the Unified Computing environment.
- Introduction to Cisco HyperFlex systems\*.
- Describe the management, maintenance and operations of Unified Computing\*.
- Implement Cisco automation and scripting tools for the data center\*.
- Present Cisco's integration with automation and orchestration platforms.
- Describe Cisco automation and orchestration technologies for the data center\*.

### TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training course.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: psh-accueil@orsys.fr so that we can assess your request and its feasibility.

## 2 Official practical work

- Configure VXLAN (Virtual Extensible LAN).
- 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 (N-Port Virtualization) mode.
- Provision a Cisco UCS Fabric Interconnect cluster.
- Configure server and uplink ports.
- Configure VLANs.
- Create a Cisco UCS server profile with hardware credentials.
- Configure basic identity pools.
- Create a Cisco UCS service profile using pools.
- Configure an iSCSI (Internet Small Computer Systems Interface) service profile.
- Configure Cisco UCS Manager for authentication via Microsoft Active Directory.
- Configure Cisco Nexus switches with Ansible.
- Programming a Cisco Nexus switch with Python.
- Automate Cisco ACI (Application-Centric Infrastructure) configuration.

## Options

### Certification : 450€ HT

To obtain Cisco Certified Network Professional Data Center (CCNP Data Center) certification, you must pass exam 350-601 DCCOR, as well as one of the following exams (your choice): 300-610 DCID, 300-615 DCIT, 300-620 DCACI and 300-625 DCSAN.

### [Comment passer votre examen ?](#)

The certification option comes in the form of a voucher or invitation that will allow you to take the exam at the end of the training course.

## Dates and locations

### REMOTE CLASS

2026 : 8 June, 23 Nov.