

Course : Understanding Cisco Data Center Foundations (DCFNDU) v1.1

Understanding the basics of Cisco data centers

Practical course - 5d - 35h00 - Ref. CDW

Price : 4250 € E.T.

With this training, you'll learn how to configure Cisco® data center technologies, including: networking, virtualization, storage area networking and unified computing. You'll get an introduction to Cisco Application Centric Infrastructure (Cisco ACI), automation and cloud computing. You'll also get hands-on experience configuring features on the Cisco Nexus Operating System (Cisco NX-OS) and Cisco Unified Computing System (Cisco UCS).

Teaching objectives

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

- ✓ Basics of data center networking and presentation of Cisco Nexus and NX-OS products
- ✓ First-hop redundancy (L3), Cisco FEX connectivity, and port/vPC aggregation
- ✓ Switch, machine and network virtualization
- ✓ Comparison of data center storage connectivity options
- ✓ Fibre Channel communication between initiating server and target storage
- ✓ Fibre Channel, NPV and NPIV zone types
- ✓ Ethernet enhancements for lossless networking
- ✓ Introducing FCoE and server connectivity in the data center
- ✓ Cisco UCS Manager and API overview
- ✓ Introduction to Cisco ACI and cloud computing concepts

Intended audience

Data center administrators and engineers, systems engineers, network architects, Cisco partners and integrators.

Prerequisites

Basic knowledge of network protocols, VMware environment and Windows operating systems.

PARTICIPANTS

Data center administrators and engineers, systems engineers, network architects, Cisco partners and integrators.

PREREQUISITES

Basic knowledge of network protocols, VMware environment and Windows operating systems.

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.

Certification

This course does not lead directly to a certification exam, but it covers the basic knowledge that can help you prepare for several CCNP courses and exams and other professional-level data center courses: DDCOR, DCID, DCIT, DCACI and DCNX.

Practical details

Teaching methods

Training in French. Official course material in English.

Course schedule

1 Official program

- Description of the Cisco Nexus family and Cisco NX-OS software.
- Description of Layer 3 First-Hop Redundancy.
- Cisco FEX description.
- Description of port aggregations and vPCs (Port Channels and vPCs).
- Description of switch virtualization.
- Description of machine virtualization.
- Description of network virtualization.
- Introduction to the basic concepts of data center storage.
- Description of Fibre Channel communication between initiating server and target storage.
- Description of Fibre Channel zone types and their uses.
- Description of Cisco NPV mode and NPIV functionality.
- Description of FCoE (Fibre Channel over Ethernet).
- Description of Cisco UCS components.
- Description of Cisco UCS Manager.
- Using APIs.
- Cisco ACI description.
- Description of cloud computing.

2 Official practical work

- Explore the Cisco NX-OS command line interface (CLI).
- Explore the discovery of topology.
- Configure HSRP (Hot Standby Router Protocol).
- Configure the Cisco Nexus 2000 FEX.
- Configure vPCs (virtual Port Channels).
- Configure vPCs with Cisco FEX.
- Configure a VRF (Virtual Routing and Forwarding).
- Explore VDC (Virtual Device Contexts) elements.
- Install VMware ESXi and vCenter.
- Configure VSANs (Virtual Storage Area Networks).
- Validate FLOGI (Fibre Channel Login) and FCNS (Fibre Channel Name Server).
- Configure zoning.
- Configure unified ports on a Cisco Nexus switch and implement FCoE (Fibre Channel over Ethernet).
- Explore the Cisco UCS server environment.
- Configure a Cisco UCS server profile.
- Configure Cisco NX-OS with APIs.
- Explore the Cisco UCS Manager XML API management information tree.

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.

Dates and locations

REMOTE CLASS

2026 : 23 Mar., 22 June, 5 Oct., 14 Dec.