

Introducing Cisco Data Center Technologies (DCICT) v6.2

What you'll learn in this course

The **Introducing Cisco Data Center Technologies (DCICT) v6.2** course prepares you for the Cisco CCNA® Data Center certification and for associate-level data center roles. The course covers foundational knowledge, skills, and technologies, including networking technologies, data center network virtualization, unified computing, data center automation and orchestration, and Cisco® Application Centric Infrastructure (Cisco ACI™). The training provided in this course is focused on data center basic operations covering the topics needed for today's demanding associate-level positions. The hands-on lab exercises focus on configuring features in Cisco NX-OS Software, Cisco Unified Computing System™ (Cisco UCS®), and Cisco UCS Director.

Course duration

- Instructor-led training: 5 days with hands-on lab practice
- Virtual instructor-led training: 5 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 5 days of instruction with hands-on lab practice

How you'll benefit

IT professionals who are Cisco trained and certified are uniquely qualified for associate-level or higher roles in enterprise-class data center environments. The Cisco CCNA certification equips you with skills in a broad range of technologies and industry best practices sought by hiring managers.

This class will help you:

- Gain knowledge and skills through Cisco's unique combination of theory, practical application, and hands-on practice
- Succeed in today's demanding associate-level data center roles
- Prepare to pass the Cisco CCNA Data Center certification exam

Who should enroll

IT professionals with one to three years of experience in these roles:

- Data center engineer
- Network administrator
- Network engineer
- System administrator
- Systems engineer
- Network designer
- Consulting systems engineer
- Technical solutions architect

How to enroll

- For instructor-led training, visit the [Cisco Learning Locator](#).
- For self-paced e-learning, visit the [Cisco Learning Network Store](#).
- For private group training, visit [Cisco Private Group Training](#).
- For digital library access, visit [Cisco Platinum Learning Library](#).
- For e-learning volume discounts, visit [Cisco Training on Demand](#).

Technology areas

- Data center
- Networking

Course details

Objectives

After taking this course, you should be able to:

- Describe switch virtualization
- Describe machine virtualization
- Describe network virtualization, including overlays, virtual switches, and the Cisco Nexus® 1000V solution
- Describe Cisco FabricPath
- Describe Cisco Fabric Extender (FEX) connectivity
- Describe Ethernet port channels and virtual Port Channels (vPCs)
- Describe Cisco Unified Fabric
- Identify Cisco UCS components
- Describe the Cisco UCS organizational hierarchy and Role-Based Access Control (RBAC)
- Describe how to deploy servers in Cisco UCS
- Describe the purpose and advantages of Application Programming Interfaces (APIs)
- Describe cloud computing basic concepts
- Describe Cisco UCS Director and its functional blocks and deployment models
- Describe Cisco UCS Director orchestration features: policies, virtual data centers, workflows, and catalogs
- Describe Cisco ACI, traffic forwarding through the Cisco ACI fabric, and programming and orchestration capabilities
- Explain the traffic forwarding mechanisms in Cisco ACI
- Describe the programmability and orchestration capabilities of Cisco ACI

Prerequisites

- Good understanding of networking protocols
- Good understanding of the VMware environment

To fully benefit from this course, you should have completed the following course or obtained the equivalent level of knowledge:

- **Introducing Cisco Data Center Networking (DCICN)**

Outline

- Cisco Data Center Network Virtualization
 - Describing Switch Virtualization
 - Describing Machine Virtualization
 - Describing Network Virtualization
- Cisco Data Center Network Technologies Configuration
 - Describing Cisco FabricPath
 - Describing Cisco Fabric Extender
 - Describing Port Channels and Virtual Port Channels
 - Describing Cisco Unified Fabric
- Cisco Unified Computing System
 - Describing Cisco UCS Components
 - Cisco UCS RBAC
 - Deploying Servers in Cisco UCS
- Data Center Automation and Orchestration
 - Using Application Programming Interfaces
 - Cloud Computing
 - Describing Cisco UCS Director
 - Using Cisco UCS Director for Orchestration
- Cisco Application-Centric Infrastructure
 - Describing Cisco ACI
 - Describing Cisco ACI Traffic Forwarding
 - Programming and Orchestrating Cisco ACI

Lab outline

- Configure Virtual Routing and Forwarding by Using SSH
- Explore the Elements of Virtual Device Contexts
- Install VMware ESXi and vCenter
- Configure Cisco FabricPath
- Configure the Cisco Nexus 2000 Series Fabric Extender
- Configure Virtual Port Channels
- Configure Virtual Port Channels with FEX
- Configure Unified Ports on a Cisco Nexus Switch and Implement FCoE
- Explore the Cisco UCS Server Environment
- Configure Local RBAC
- Configure Cisco UCS to Boot Servers from SAN
- Configure Cisco NX-OS with APIs
- Explore the Management Information Tree of the Cisco UCS Manager XML API

- Configure User Accounts in Cisco UCS Director
- Add Virtual and Physical Accounts to Cisco UCS Director
- Customize Cisco UCS Director
- Explore Cisco UCS Director Monitoring Capabilities
- Use Cisco UCS Director Orchestration Features




Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

 Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: <https://www.cisco.com/go/trademarks>. Third-party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)

Course content is dynamic and subject to change without notice.

© 2018 Cisco and/or its affiliates. All rights reserved.

Course version: DCICT_6-2 C22-740791-00 06/18