Understanding Cisco Cloud Fundamentals (CLDFND) v1.1 and v1.2

What you’ll learn in this course

The Understanding Cisco Cloud Fundamentals (CLDFND) v1.1 and v1.2 course prepares you for the Cisco CCNA® Cloud certification and for associate-level cloud operations roles. This course covers the following foundational knowledge, skills, and technologies:

- Cloud characteristics
- Cloud deployment models such as Cisco® cloud infrastructure (i.e., unified computing, including Cisco UCS® and server virtualization)
- Unified fabric, including data center network architecture and infrastructure virtualization
- Unified storage, including integrated infrastructure solutions

IT practitioners who have Cisco CCNA Cloud training and certification are qualified for associate-level roles in enterprise-class cloud computing environments, with skills in the broad range of technologies and industry best practices needed for these in-demand roles.

Version 1.1 of this course is instructor-led, and version 1.2 is e-learning.

Course duration

- Instructor-led training: 5 days in the classroom 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, videos, and challenges

How you’ll benefit

This class will help you:

- Gain job-role-based knowledge and skills through Cisco’s unique combination of theory, practical application, and hands-on practice
- Succeed in today’s demanding associate-level cloud operations roles
- Prepare to pass the Cisco CCNA Cloud certification exam

Who should enroll

- Cloud engineers
- Cloud administrators
- Cloud operations engineers
- Support engineers
- Cloud design engineers
- Cloud infrastructure architects
- Virtualization engineers
- Cisco integrators and partners
How to enroll

- For instructor-led training, visit the Cisco Learning Locator.
- For 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

- Cloud

Course details

Objectives

After taking this course, you should be able to:

- Describe common cloud characteristics and service models
- Compare cloud deployment models
- Explain the function of the data center as a major resource for cloud services
- Illustrate key features of Cisco UCS
- Define server virtualization
- Describe network architectures for the data center
- Describe Cisco Application Centric Infrastructure (Cisco ACI™)
- Describe infrastructure virtualization
- Define virtual application containers
- Analyze storage provisioning concepts
- Describe basic SAN and NAS storage concepts
- Describe the differences between all the storage access technologies
- Identify the various Cisco storage network devices
- Describe various reference architectures for converged infrastructure

Prerequisites

- Understanding of network fundamentals, including routing, switching, and VLANs
- Understanding of compute fundamentals, including servers and operating systems
- Understanding of storage fundamentals, including the basics of Fibre Channel, Fibre Channel over Ethernet (FCoE), and VSANs

Outline

- Introduction to Cloud Computing
  - Introducing Cloud Computing Basic Concepts
  - Describing Cloud Service Models
  - Comparing Cloud Deployment Models
  - Exploring the Cisco Intercloud™ Solution
Cloud Networking
- Describing Cisco Data Center Network Architecture
- Exploring Virtual Networking
- Identifying Cisco Nexus® 1000V Series Switches
- Defining and Analyzing Cisco Virtual Networking Service Appliances
- Defining and Analyzing Software-Defined Network Fundamentals
- Describing the Cisco ACI Solution

Cloud Storage
- Comparing Storage Options
- Describing Fibre Channel Storage Networking Concepts
- Exploring NAS Basic Concepts
- Identifying Cisco MDS and Cisco UCS Invicta™ Products

Cloud Compute
- Describing the Cisco UCS C-Series Product Family
- Identifying the Cisco UCS B-Series Product Family
- Explaining Cisco UCS Provisioning
- Defining Server Virtualization

Cloud Automation and Reference Architectures
- Exploring Reference Architectures for Converged Infrastructure
- Describing Cloud Automation, Provisioning, and Management Platforms

Lab outline
- Examine Cisco Intercloud Fabric Director
- Explore the Cisco UCS Manager GUI
- Review Cisco UCS Series Configuration
- Deploy VMware ESXi Server on Cisco UCS Servers
- Examine the Cisco Prime Network Services Controller
- Deploy Cisco Virtual Security Gateway
- Deploy Cisco ASA 1000V Cloud Firewall

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