Designing the Cisco Cloud (CLDDES) v1.1

What you’ll learn in this course

The Designing the Cisco Cloud (CLDDES) v1.1 course helps you prepare for the Cisco CCNP® Cloud certification and for professional-level cloud engineering and administration roles. In this course, you’ll master the professional-level skills and technologies to make design choices required to deploy and automate private and hybrid cloud infrastructure—including applications, compute, storage, network, virtualization, and security—using Cisco® data center and cloud technologies.

IT practitioners who have Cisco CCNP Cloud training and certification have validated, professional-level, hands-on skills in Cisco technologies and industry best practices needed for in-demand job roles.

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 instruction with video and hands-on lab practice

How you’ll benefit

This class will help you:

- Learn the skills, technologies, and best practices you need to make design choices required to deploy and automate private and hybrid clouds, including applications, compute, storage, network, virtualization, and security, based on Cisco technologies
- Validate your knowledge and skills for the Cisco CCNP Cloud certification through a combination of lessons and hands-on practice using enterprise-grade Cisco cloud products and equipment

Who should enroll

- Cloud engineers
- Cloud administrators
- Cloud operations and 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:

- Translate business requirements into Cisco cloud automation designs
- Define the appropriate Cisco cloud solution, based on a broad range of products and technologies
- Design for the self-service user portal
- Design for the application and Platform as a Service (PaaS)
- Design for a private cloud infrastructure, automation, and security
- Design for a hybrid cloud infrastructure, automation, and security
- Design for virtual network services for private and hybrid clouds
- Describe VM lifecycle management

Prerequisites

To fully benefit from this course, you should first complete the following courses or obtain the equivalent level of knowledge and skills:

- Data center experience
- OS experience
- Experience with designing and deploying IT solutions
- Understanding Cisco Cloud Fundamentals (CLDFND) course
- Introducing Cisco Cloud Administration (CLDADM) course

Outline

- Translating Requirements into Automation Designs
  - Describing Cloud and Automation
  - Gathering Business Requirements
  - Using Automation as a Foundation of Cloud Design
  - Choosing the Appropriate Solution to Automate Private or Hybrid Clouds
  - Designing Appropriate Automation Tasks to Meet Requirements
  - Designing Application and PaaS Using Stack Designer
- Designing a Private Cloud Infrastructure
  - Comparing and Contrasting Private Cloud Integrated Infrastructures
  - Designing Cloud Storage
  - Determining Methods to Access Storage
  - Determining Storage Provisioning Methods for the Cloud Environment
  - Interconnecting Private Clouds
  - Determining Appropriate Solutions to Automate Network Services
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Course overview

- Designing a Hybrid Cloud Infrastructure
  - Comparing and Contrasting Public Cloud Architectures
  - Automating Hybrid Cloud Provisioning
  - Connecting to Public Clouds
- Securing a Cloud Infrastructure
  - Using Best Practices for Securing Cloud Infrastructure
  - Designing a Secure Multitenant Environment
- Virtualization and Virtual Network Services for Private and Hybrid Clouds
  - Describing the Hypervisor Ecosystem
  - Designing Workload Mobility for Cloud
  - Designing VM Lifecycle for Cloud
- Appendix
  - Cloud Resource Guide

Lab Outline

- Create a Cisco UCS® Director Workflow for Bare-Metal Provisioning
- Design and Create Cisco UCS Director Catalog Entries for Discovered VM Templates
- Design a Cisco Prime® Service Catalog Storefront for Cisco UCS Director
- Create an Application Template in the Cisco Stack Designer
- Provision a Cisco VACS Container
- Configure RBAC and LDAP Integration in Cisco UCS Director

Case studies available in the instructor-led format of this course:

- Plan for ICF Cloud Requirements and Deployment
- Design Hybrid Cloud Connectivity and Security
- Design for VM Lifecycle and Cisco ICFD Integration in the Hybrid Cloud

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