
Designing the Cisco Cloud

DURATION: 5 DAYS

COURSE CODE: CLDDDES

FORMAT: LECTURE/LAB

COURSE DESCRIPTION

This course is designed to provide students with the knowledge and skills required to design cloud deployments using the Cisco Cloud portfolio. You will be able to translate requirements into automation designs and design a hybrid or private cloud deployment incorporating Security Best Practices.

This is one of the four cloud specific courses required for the Cisco Certified Network Professionals for Cloud Certification.

This course is worth 40 Credits in the Continuing Education Program.

PREREQUISITES

Ideally individuals will have Data Center experience, OS experience and experience with designing and deploying IT solutions

Attendance of CLDFND and CLDADM or equivalent experience is recommended

TARGET AUDIENCE

Cloud Architects and Cloud Infrastructure Architects responsible for the creation of cloud deployment designs and the design of infrastructure and operations for cloud services using Cisco cloud products and solutions.

TESTING AND CERTIFICATION

Cloud Architects and Cloud Infrastructure Architects responsible for the creation of cloud deployment designs and the design of infrastructure and operations for cloud services using Cisco cloud products and solutions.

FOLLOW-ON-COURSES

CLDINF - Implementing and Troubleshooting the Cisco Cloud Infrastructure

CLDAUT- Automating the Cisco Enterprise Cloud

CLDACI - Building the Cisco Cloud with Application Centric Infrastructure

LEARNING OBJECTIVES

After completing this course, you should be able to:

Translate the 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

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 for the VM Lifecycle management

COURSE OUTLINE

1. 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

2. 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

3. Designing a Hybrid Cloud Infrastructure

Comparing and Contrasting Public Cloud Architectures

Automating Hybrid Cloud Provisioning

Connecting to Public Clouds

4. Securing the Cloud Infrastructure

Using Best Practices for Securing Cloud Infrastructure

Designing a Secure Multitenant Environment

5. Virtualization and Virtual Network Services for Private and Hybrid Clouds

Describing the Hypervisor Ecosystem

Designing Workload Mobility for Cloud

Designing VM Lifecycle for Cloud

6. Appendix

Troubleshooting IPv4 Network Connectivity

Troubleshooting IPv6 Network Connectivity

7. Implementing Network Device Security

Cloud Resource Guide

LABS AND EXERCISES

1: Create a UCS Director Workflow for Bare Metal Provisioning

2: Design and Create Cisco UCS Director Catalog Entries for Discovered VM Templates

3: Design Prime Service Catalog Storefront for UCS Director

4: Creating an Application Template in the Cisco Stack Designer

5: Provision VACS Container

6: Configure RBAC and LDAP Integration in Cisco UCS Director

7: Plan for ICF Cloud Requirements and Deployment

8: Design Hybrid Cloud Connectivity and Security

9: Design for VM Lifecycle and Cisco ICFD Integration in the Hybrid Cloud