Designing the Cisco Cloud (300-465)

Exam Description: The 300-465 (CLDDES) Designing the Cisco Cloud is a 90-minute, 55-65 question assessment that is associated with the CCNP Cloud Certification. This exam tests a candidate's knowledge and ability to: translate requirements into cloud/automation process designs; design Private Cloud infrastructures; design Public Cloud infrastructures, design Cloud Security Policies; and design Virtualization and Virtual Network Services. Candidates can prepare for this assessment by taking the Designing the Cisco Cloud (CLDDES v1.0) course.

The following topics are general guidelines for the content likely to be included on the exam. However, other related topics may also appear on any specific delivery of the exam. In order to better reflect the contents of the exam and for clarity purposes, the guidelines below may change at any time without notice.

22% 1.0 Translate Requirements into Automation Designs

- 1.1 Gather business requirements
  - 1.1.a Identify key business requirements for cloud/automation
  - 1.1.b Choose appropriate cloud implementation to meet business requirements
- 1.2 Describe automation as a foundation of cloud design
- 1.3 Design appropriate automation tasks to meet requirements
  - 1.3.a Design infrastructure container automation within UCS Director
  - 1.3.b Design catalog
  - 1.3.c Define infrastructure container
  - 1.3.d Design workflow and services
- 1.4 Design Prime Services Catalog store front for UCS Director
- 1.5 Design Application and Platform as a Service using Stack Designer
- 1.6 Select the appropriate solution to automate private or hybrid clouds
  - 1.6.a Cisco Enablement Platform
  - 1.6.b UCS Director
  - 1.6.c Cisco Intelligent Automation for Cloud (CIAC)

22% 2.0 Design a Private Cloud Infrastructure

- 2.1 Compare and contrast the various private cloud integrated infrastructures
  - 2.1.a Flexpod
  - 2.1.b VBlock
  - 2.1.c Virtual System Specifications (VSPEX)

2.2 Given a set of requirements, determine when to use file or block storage

2.3 Select the methods of accessing storage
- 2.3.a Determine connectivity types
- 2.3.b Determine access rights

2.4 Determine the thin/thick provisioning methods for a given environment

2.5 Determine the appropriate methods of interconnecting private clouds

2.6 Determine when to use the appropriate solution to automate network services

16% 3.0 Design a Hybrid Cloud Infrastructure

3.1 Compare and contrast the various public cloud architectures

3.2 Select the methodology to connect to public clouds

3.3 Select the appropriate solution to automate hybrid cloud provisioning

20% 4.0 Design a Cloud Security Policy

4.1 Describe best practices for securing cloud infrastructure

4.2 Describe best practices for securing cloud services

4.3 Design a secure multi tenant environment

4.4 Design a security policy to protect a private cloud

4.5 Design a security policy to protect a hybrid cloud

20% 5.0 Virtualization and Virtual Network Services for Private and Hybrid Clouds

5.1 Describe the advantages, disadvantages and features of different hypervisors
- 5.1.a Resource scheduling
- 5.1.b DR
- 5.1.c HA

5.2 Describe the use of cloud automation tools to facilitate physical to virtual or virtual to virtual migrations
- 5.2.a Workflows
  - 5.2.a.1 Cisco Enablement Platform
  - 5.2.a.2 UCS Director
  - 5.2.a.3 Virtual Application Container Services (VACS)
- 5.2.b Compare benefits and limitation of Virtual Machines

5.3 Select the appropriate virtual network and security services to meet requirements

5.4 Describe context aware infrastructure and workflow identity
- 5.4.a Methodologies
- 5.4.b Components
- 5.4.c Use cases

5.5 Describe workload mobility
- 5.5.a Describe VM migration: move VMs from any hypervisor to any public cloud and back

5.5.b Describe VM conversion
5.5.c Describe use cases

5.6 Describe the ability to automate VM life cycle
5.6.a Describe workflow creation using Intercloud Fabric Director and Prime Services Catalog