



Automating the Cisco Enterprise Cloud (300-470)

Exam Description: The Automating the Cisco Enterprise Cloud (CLDAUT) exam (300-470) 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 provision private IaaS, provision private IaaS with catalog scaling, provision private IaaS with network automation, provision hybrid IaaS, and perform application provisioning a life-cycle management. Candidates can prepare for this assessment by taking the Automating the Cisco Enterprise Cloud (CLDAUT 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.

- 27%** **1.0** **Provision Private IaaS Infrastructure**
- 1.1 Create cloud tenant
 - 1.1.a Provision infrastructure devices
 - 1.1.a.1 Provision network
 - 1.1.a.2 Provision compute
 - 1.1.a.3 Provision storage
- 1.2 Develop policies
 - 1.2.a Network
 - 1.2.b Storage
 - 1.2.c Compute
 - 1.2.d Cost model
 - 1.2.e Service catalog
- 1.3 Manage virtual data centers
 - 1.3.a Create virtual data center
 - 1.3.b Manage application categories in a VDC
- 1.4 Manage workflows
 - 1.4.a Create input/output parameters
 - 1.4.b Add tasks to workflow designer
 - 1.4.c Create custom workflow tasks
 - 1.4.d Describe the open automation tool kit (SDK)
- 1.5 Manage catalogs
 - 1.5.a Publish standard and advanced catalogs
 - 1.5.b Cloning a catalog
 - 1.5.c Create user VM action policy
 - 1.5.d Cost (monetary) tracking

- 1.6 Configure self-service provisioning in Cisco UCS Director
 - 1.6.a Customize portals
 - 1.6.b Create service request workflow
 - 1.6.c Monitor service requests

- 17%** **2.0 Provision Private IaaS Catalog**
 - 2.1 Publish Cisco UCS Director services in PSC 11.0
 - 2.1.a Discover Cisco UCS Director catalogs and templates
 - 2.1.b Publish services with RBAC for end-user ordering

 - 2.2 Order PSC IaaS services as end users
 - 2.2.a Login as an end user
 - 2.2.b Order a VM based on standard or advanced
 - 2.2.c Catalogs
 - 2.2.d Order a service container

 - 2.3 Publish application stack services
 - 2.3.a Design application stack services
 - 2.3.b Publish application stack services with RBAC for end-user ordering
 - 2.3.c Order application stack as an end user

- 18%** **3.0 Provision Private IaaS with Network Automation**
 - 3.1 Define policies for container
 - 3.1.a Computing policies
 - 3.1.b Network policy
 - 3.1.c Storage policies
 - 3.1.d System policies

 - 3.2 Defining global resource pools
 - 3.2.a Configure VLAN/VXLAN pools
 - 3.2.b Configure IP subnet pools
 - 3.2.c Configure static IP pools

 - 3.3 Creating a Cisco VACS three-tier internal template
 - 3.3.a Specifying a template type
 - 3.3.b Selecting the deployment options
 - 3.3.c Configuring network resource pools
 - 3.3.d Configuring VM networks
 - 3.3.e Adding virtual machines to a template

 - 3.4 Creating a Cisco VACS three-tier external template
 - 3.4.a Define ACL for three-tier external template
 - 3.4.b Configure security zones

 - 3.5 Publish discovered VACS services in PSC 11.0
 - 3.5.a Discover the VACS containers
 - 3.5.b Register the VACS application container templates

- 18% 4.0 Provision Hybrid IaaS**
- 4.1 Configure intercloud fabric connectivity
 - 4.1.a Set up provider cloud account
 - 4.1.b Set up infrastructure image
 - 4.1.c Set up secure extension
 - 4.1.d Add port profile
 - 4.1.e Create IP pools for VMs
 - 4.1.f Create user groups and users
 - 4.1.g Configure vDCs
 - 4.1.h Configure network and system policies
- 4.2 Create VM templates to deploy new workloads in the hybrid cloud
 - 4.2.a Configure a virtual machine template
 - 4.2.b Configure network policies
 - 4.2.c Configure system policies
 - 4.2.d Configure storage policies
 - 4.2.e Configure VMware policies (network, system, computing, and storage)
 - 4.2.f Create a catalog for templates
- 4.3 Create VM templates to migrate workloads between public cloud and private clouds
 - 4.3.a Configure a virtual machine template
 - 4.3.b Configure network policies
 - 4.3.c Configure system policies
 - 4.3.d Configure storage policies
 - 4.3.e Configure VMware policies (network, system, computing, and storage)
 - 4.3.f Create a catalog for templates
- 4.4 Deploy security appliances in the hybrid cloud
 - 4.4.a Run infrastructure wizard through ICF to bring up ICS services controller and cloud components (such as: PNSC)
 - 4.4.b Add the compute firewall
 - 4.4.c Define compute security profile
 - 4.4.d Define object groups, zones, rules, and policies
 - 4.4.e Create service path
 - 4.4.f Bind the service path to port profile
- 4.5 Configure routing policies to enable secure communication between hybrid cloud VMs
 - 4.5.a Add edge routers
 - 4.5.b Add system policies
 - 4.5.c Add network policies
 - 4.5.d Add routing policies
 - 4.5.e Assign VMs
- 4.6 Configure end-user workflows to manage virtual machines in hybrid cloud environment
 - 4.6.a Bursting
 - 4.6.b Sandbox for development
 - 4.6.c Disaster recovery
 - 4.6.d Production deployment on public environment

- 20%** **5.0 Application Provisioning and Life-Cycle Management**
- 5.1 Order a virtual server on PSC 11.0
 - 5.1.a Order a VM based on standard or advanced catalogs
 - 5.1.b Order a service container
- 5.2 Order a physical server on PSC 11.0
 - 5.2.a Order a bare-metal physical server
 - 5.2.b Order a virtualized physical server
- 5.3 Order a multitier application container on PSC 11.0
 - 5.3.a Order a three-tier application container
- 5.4 Managing application containers
 - 5.4.a Access the application container reports
 - 5.4.b Power on the application container
 - 5.4.c Power off the application container
 - 5.4.d Add VMs to application container
 - 5.4.e Delete VMs from application container
 - 5.4.f Delete an application container
- 5.5 Managing life cycles
 - 5.5.a VM
 - 5.5.b Compute
 - 5.5.c Storage
 - 5.5.d Network
- 5.6 Snapshots
 - 5.6.a Types
 - 5.6.b Requirements
 - 5.6.c Limitations