VANTAGEPOINT
I.T. TRAINING & CONSULTING
Technology Innovation Centre (UTECH), 237 Old Hope Road, Kingston 6, Jamaica W.I.
Tel: 876-970-0197, Fax: 927-1925, Email: info@vantagepointitc.com Website: www.vantagepointitc.com

CCNA Cloud

Many companies are embracing the Cloud to help them to be more agile, flexible, and effective at delivering better business outcomes. Today, the majority of companies are already using XaaS offerings, and by 2018, it's estimated that 78% of workloads will be processed through the cloud.

The CCNA Cloud certification is a job role focused certification and training program that helps Cloud engineers, Cloud Administrators, and Network Engineers to develop, advance, and validate their cloud skill set, and enables them to help their IT organization meet changing business demands from technology transitions.

With a CCNA Cloud certification, you will obtain the skills to perform entry-level provisioning and support of Cisco cloud solutions. Learn from the only company that has an end-to-end Cloud and Intercloud story.

Prerequisites:

No prerequisites

Required Exams:

Understanding Cisco Cloud Fundamentals (210-451)

The Understanding Cisco Cloud Fundamentals (CLDFND) exam (210-451) is a 90-minute, 55-65 question assessment that is associated with the CCNA Cloud. This exam tests a candidate's knowledge of Cloud characteristics and deployment models including Cisco InterCloud; the basics of Cisco Cloud infrastructure i.e. Unified Compute, Unified Fabric, and Unified Storage.

Exam Topics:

1.0 Cloud Characteristics and Models	**14%**

1.1 Describe common cloud characteristics

- 1.1.a On-demand self service
- 1.1.b Elasticity
- 1.1.c Resource pooling
- 1.1.d Metered service
- 1.1.e Ubiquitous network access (smartphone, tablet, mobility)
- 1.1.f Multi-tenancy

1.2 Describe Cloud Service Models

- 1.2.a Infrastructure as a Service (IaaS)
- 1.2.b Software as a Service (SaaS)
- 1.2.c Platform as a Service (PaaS)

Technology Innovation Centre (UTECH), 237 Old Hope Road, Kingston 6, Jamaica W.I.
Tel: 876-970-0197, Fax: 927-1925, Email: info@vantagepointitc.com Website: www.vantagepointitc.com

2.0 Cloud Deployment **16%**

2.1 Describe cloud deployment models

- 2.1.a Public
- 2.1.b Private
- 2.1.c Community
- 2.1.d Hybrid

2.2 Describe the Components of the Cisco Intercloud Solution

- 2.2.a Describe the benefits of Cisco Intercloud
- 2.2.b Describe Cisco Intercloud Fabric Services

3.0 Basic Knowledge of Cloud Compute **24%**

3.1 Identify key features of Cisco UCS

- 3.1.a Cisco UCS Manager
- 3.1.b Cisco UCS Central
- 3.1.c B-Series
- 3.1.d C-Series
- 3.1.e Server identity (profiles, templates, pools)

3.2 Describe Server Virtualization

- 3.2.a Basic knowledge of different OS and hypervisors

4.0 Basic Knowledge of Cloud Networking **22%**

4.1 Describe network architectures for the data center

- 4.1.a Cisco Unified Fabric
  - 4.1.a.1 Describe the Cisco Nexus product family
  - 4.1.a.2 Describe device virtualization
- 4.1.b SDN
  - 4.1.b.1 Separation of control and data
  - 4.1.b.2 Programmability
  - 4.1.b.3 Basic understanding Open Daylight
- 4.1.c ACI
- 4.1.c.1 Describe how ACI solves the problem not addressed by SDN
  - 4.1.c.2 Describe benefits of leaf/spine architecture
  - 4.1.c.3 Describe the role of APIC Controller

Technology Innovation Centre (UTECH), 237 Old Hope Road, Kingston 6, Jamaica W.I.
Tel: 876-970-0197, Fax: 927-1925, Email: info@vantagepointitc.com Website: www.vantagepointitc.com

4.2 Describe Infrastructure Virtualization

- 4.2.a Difference between vSwitch and DVS
- 4.2.b Cisco Nexus 1000V components
  - 4.2.b.1 VSM
  - 4.2.b.2 VEM
  - 4.2.b.3 VSM appliance
- 4.2.c Difference between VLAN and VXLAN
- 4.2.d Virtual networking services
- 4.2.e Define Virtual Application Containers
  - 4.2.e.1 Three-tier application container
  - 4.2.e.2 Custom container

5.0 Basic Knowledge of Cloud Storage **24%**

5.1 Describe storage provisioning concepts

- 5.1.a Thick
- 5.1.b Thin
- 5.1.c RAID
- 5.1.d Disk pools

5.2 Describe the difference between all the storage access technologies

- 5.2.a Difference between SAN and NAS; block and file
- 5.2.b Block technologies
- 5.2.c File technologies

5.3 Describe basic SAN storage concepts

- 5.3.a Initiator, target, zoning
- 5.3.b VSAN
- 5.3.c LUN

5.4 Describe basic NAS storage concepts

- 5.4.a Shares / mount points
- 5.4.b Permissions

5.5 Describe the various Cisco storage network devices

- 5.5.a Cisco MDS family
- 5.5.b Cisco Nexus family
- 5.5.c UCS Invicta (Whiptail)

5.6 Describe various integrated infrastructures

- 5.6.a FlexPod (NetApp)

Technology Innovation Centre (UTECH), 237 Old Hope Road, Kingston 6, Jamaica W.I.
Tel: 876-970-0197, Fax: 927-1925, Email: info@vantagepointitc.com Website: www.vantagepointitc.com

- 5.6.b VBlock (VCE)
- 5.6.c VSPEX (EMC)
- 5.6.d OpenBlock (Red Hat)

Introducing Cisco Cloud Administration (210-455)

The Introducing Cisco Cloud Administration (CLDADM) exam (210-455) is a 90-minute, 55–65 question assessment that is associated with the CCNA Cloud Certification. This exam tests a candidate's knowledge of the basics of Cisco Cloud administration including Cloud provisioning, management, monitoring, reporting, charge-back models, and remediation.

Exam Topics:

1.0 Cloud Infrastructure Administration and Reporting	**21%**

1.1 Configure users/groups and role-based access control in the portal, including basic troubleshooting

- 1.1.a Describe default roles
- 1.1.b Configure new user with single role
- 1.1.c Describe multirole user profiles
- 1.1.d Configure a user profile

1.2 Perform virtual machine operations

- 1.2.a Configure live migrations of VMs from host to host
- 1.2.b Edit VM
- 1.2.c Configure VM snapshots
- 1.2.d Describe reverting a VM to a snapshot

1.3 Deploy virtual app containers

- 1.3.a Provide basic support and troubleshoot app container with firewall, networking, and load balancer

2.0 Chargeback and Billing Reports	**10%**

2.1 Describe the chargeback model

- 2.1.a Describe chargeback features
- 2.1.b Describe budget policy
- 2.1.c Describe cost models

Technology Innovation Centre (UTECH), 237 Old Hope Road, Kingston 6, Jamaica W.I.
Tel: 876-970-0197, Fax: 927-1925, Email: info@vantagepointitc.com Website: www.vantagepointitc.com

- 2.1.d Describe adding a cost model to a tenant

2.2 Generate various reports for virtual and physical accounts

- 2.2.a Execute billing reports
- 2.2.b Execute a system utilization reporting
- 2.2.c Execute a snapshot report

3.0 Cloud Provisioning **26%**

3.1 Describe predefined Cisco UCS Director-based services within the Cisco Prime Service Catalog

- 3.1.a Describe the configuration of service names and icons
- 3.1.b Describe order permissions
  - 3.1.b (i) RBAC
  - 3.1.c Describe template formats
  - 3.1.c (i) Storage
  - 3.1.c (ii) Compute
  - 3.1.c (iii) Network
  - 3.1.c (iv) Virtualization

3.2 Describe provisioning verification

- 3.2.a Describe how to place an order for a service from the Cisco Primer Service Catalog as an end-user
- 3.2.b Verify that provisioning is done correctly
- 3.2.c Access VMs and applications that have been provisioned

3.3 Deploy preconfigured templates and make minor changes to the service catalog offerings that do not affect workflows or services

- 3.3.a Describe the deployment of templates: storage, compute, network, and virtualization
- 3.3.b Describe differences between the templates
- 3.3.c Describe the need to convert between templates

4.0 Cloud Systems Management and Monitoring **26%**

4.1 Identify the components of Cisco Prime Service Catalog

- 4.1.a End-user store front
- 4.1.b Stack designer
- 4.1.c Heat orchestration

4.2 Describe the components of Cisco UCS Director

- 4.2.a Describe infrastructure management and monitoring
- 4.2.b Describe orchestration
- 4.2.c Describe the portal
- 4.2.d Describe the Bare Metal Agent

4.3 Describe Cisco UCS Performance Manager

- 4.3.a Describe capacity planning
- 4.3.b Describe bandwidth monitoring
- 4.3.c Describe how host groups facilitate dynamic monitoring

4.4 Describe the components of Cisco IAC

- 4.4.a Describe Cisco Process Orchestrator
- 4.4.b Describe Cisco Prime Service Catalog
- 4.4.c Describe Cisco Server Provisioner

4.5 Perform cloud monitoring using Cisco Prime Service Catalog, Cisco UCS Director, Cisco Prime infrastructure

- 4.5.a Describe fault monitoring
- 4.5.b Describe performance monitoring
- 4.5.c Describe monitoring of provisioning outcomes

4.6 Create monitoring dashboards

- 4.6.a Configure custom dashboards
- 4.6.b Configure threshold settings

5.0 Cloud Remediation **17%**

5.1 Configure serviceability options

- 5.1.a Configure syslog
- 5.1.b Configure NTP
- 5.1.c Configure DNS
- 5.1.d Configure DHCP
- 5.1.e Configure SMTP

5.2 Interpret Logs for root cause analysis

- 5.2.a Analyze fault logs
- 5.2.b Analyze admin logs
- 5.2.c Analyze application logs

5.3 Configure backups

- 5.3.a Configure database backup

Technology Innovation Centre (UTECH), 237 Old Hope Road, Kingston 6, Jamaica W.I.
Tel: 876-970-0197, Fax: 927-1925, Email: info@vantagepointitc.com Website: www.vantagepointitc.com

- 5.3.b Configure database restore