CCNA – Cloud (Boot Camp)

Pre-Requisites:

- CCNET Certification – or – ICND1 V3.0 – Interconnecting Cisco Networking Devices (Part 1)
- Basic knowledge of network fundamentals (routing and switching)
- Basic knowledge of compute fundamentals (server virtualization)
- Basic knowledge of storage fundamentals (fibre channel)

Course Content:

This course provides you with the necessary knowledge and skills to perform foundational tasks related to cloud computing, and helps prepare you for the CCNA Cloud certification, an associate-level certification specializing in cloud technologies. You'll learn the following in this course:

- Introduction to Basic Cloud Computing
- Describing Cisco Data Center Network Architecture
- Explore virtual networking with Nexus 1000v
- Defining Software Defined Network (SDN)
- Describe Cisco Application Centric Infrastructure (ACI) Solution
- Explore storage options with Fibre Channel and Ethernet
- Explore Cisco UCS C-Series family
- Explore Cisco UCS B-Series family
- Explore server virtualization
- Introduce UCS Director
- Administrating Cisco UCS Director

- VM operations Cisco UCS Director
- Describe Cisco Prime Service Catalog (PSC)
- Deploying UCS templates via Cisco UCS Director
- Describe Cisco UCS Director's Appliance Containers
- Understanding monitoring in Cisco UCS Director
- Reporting in Cisco UCS Director
- Budgeting in Cisco UCS Director
- Describing Cisco UCS Performance Manager

Course Outline:

- Intro to Cloud Computing
    - o Introduction Cloud Computing Basic Concepts
    - o Describing Cloud Service Models
    - o Comparing Cloud Deployment Models
- Cloud Network
    - o Describing Cisco Data Center Network Architecture
    - o Exploring Virtual Networking
    - o Identifying Cisco Nexus 1000v Switches
    - o Defining and Analyzing Software Defined Network Fundamentals
    - o Describing the Cisco ACI Solution
- Cloud Storage
    - o Comparing Storage Options
    - o Describing Fibre Channel Storage Network Concepts
- Cloud Compute
    - o Describing Cisco UCS C-Series Product Family
    - o Identifying Cisco UCS B-Series Family
    - o Explaining Cisco UCS Blade Provisioning
    - o Defining Server Virtualization
- Cisco Cloud Administration
    - o Understanding Cisco UCS Director Overview
    - o Administering the Portal in Cisco UCS Director
    - o Describing VM Operations in the UCS Director
    - o Describing Cisco PSC Services
- Cisco Cloud Provisioning
    - o Deploying Cisco UCS Templates with Cisco UCS Director
    - o Explaining Cisco UCS Director Application Containers
    - o Describing Basics of Cisco Virtual Application Container Services
- Cloud Systems Management and Monitoring
    - o Understanding System Monitoring in Cisco UCS Director
    - o Monitoring Dashboards in Cisco UCS Director
    - o Reporting in Cisco UCS Director (CloudSense)
    - o Creating Budget and Resource Limits in Cisco UCS Director
    - o Describing Cisco UCS Performance Manager
- Labs:
    - o (CLDFND) Lab 1: Validate VSAN and Zoning
    - o (CLDFND) Lab 2: Validate FLOGI and FCNS

- (CLDFND) Lab 3: Deploy VMware ESXi Server on Cisco UCS Blade
- (CLDADM) Lab 1: Explore Cisco UCS Director Portal, Register Virtual and Physical Components
- (CLDADM) Lab 2: Explore Cisco UCS Director Portal Administrative Task
- (CLDADM) Lab 3: Explore Cisco UCS Director VM Operation Tasks using Predefined Workflow.
- (CLDADM) Lab 4: Explore Cisco PSC
- (CLDADM) Lab 5: Explore VM, Cisco UCS, and Server Templates in Cisco UCS Director
- (CLDADM) Lab 6: Explore Application Container Tasks Defining Two-Tier Application Container
- (CLDADM) Lab 7: Explore Cisco UCS Director Monitoring Capabilities
- (CLDADM) Lab 8: Explore Cisco UCS Director Built-in Reports
- (CLDADM) Lab 9: Explore Monitoring Dashboards in Cisco UCS Director and Generate Top-N Report
- (CLDADM) Lab 10: Explore Charge-Back Reporting Capabilities of Cisco UCS Director