Cisco Certified Network Associate (CCNA) Data Center Training Boot Camp v6.0 (CS-CCNA-Data-Center v6.0)

Modality: Virtual Classroom

Duration: 5 Days

CLC: 40 Units

About the course:

You will increase useful involvement with the operation and configuration of Overlay Transport Virtualization (OTV), FabricPath, virtual Port Channels (vPCs), and Fabric Extension (FEX). A current CCNA-RS or equivalent information is essential for participation. While the quickened track is an emphasis around a more hands-on operation based method, the standard DCICT and DCICN are intended for an increasingly information-level focused on people who can perform just the more essential configuration jobs.

This boot camp incorporates test vouchers and makes you ready for the following tests:

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- 200-155 DCICT
- 200-150 DCICN

Salary Estimate:

The normal pay for the Technician of Cisco Systems Data Center is $77,670 annually.

This boot camp includes the following courses:

1. DCICT - Introducing Cisco Data Center Networking Technologies
2. DCICN - Introducing Cisco Data Center Networking

Course Objectives:

1. Describe and validate the fundamentals of Cisco data center
2. Define and verify Cisco UCS
3. Define storage networking of Cisco data center
4. Describe the virtualization of Cisco data center
5. Describe unified fabric of Cisco data center

Targeted Audience:

1. Cisco Integrators and Partners
2. Network Engineer
3. Systems Engineer
4. Network Designer
5. Technical Solutions Architect
6. Consulting Systems Engineer

The secondary Targeted Audience are:

1. Network Manager
2. Network Administrator
3. Storage Administrator
4. Server Administrator

The tertiary Targeted Audience are:

1. Project Manager
2. Program Manager

Prerequisites:

The skills and knowledge that a student should have before appearing this course are:

1. Basic computer literacy
2. Basic know-how of MS Windows operating systems
3. Basic skills of Internet use
4. Knowledge of CCNA Route and Switch level

Highly recommended courses:

Either CCNA v2.0 or ICND2 and ICND1

Course Outline:

Course Introduction

Overview Learner Prerequisite Skills and Knowledge

Course Goal and Objectives

Course Flow

Additional References

Cisco Online Education Resources

Day 1

Lesson 1: Examining Functional Layers of the Data Center

Traditional Isolated LAN and SAN Networks

LAN Core, Aggregation, and Access Layers

Core and Access Layers in a LAN Collapsed Core Design

Core and Edge Layers in a Data Center SAN Design

Lesson 2:

Cisco NX-OS Software Architecture

Lesson 3:

Describing the Features of the CLI

Identifying the Help Functions of the CLI

Describing the Startup Characteristics of the Switch

Lesson 4:

The Cisco NX-OS Software Architecture

The Cisco NX-OS Software CLI

Lesson 5:

Lesson 6:

Scaling the Data Center Virtualized Access Layer with the Cisco Nexus 2232 10GE

Fabric Extenders

Cisco Nexus 2232 10GE Fabric Extender-to-Cisco Nexus 5500 Switch

Connectivity

Adapter FEX on the Cisco Nexus 2232 10GE Fabric Extender

Lesson 7:

Configuring the Cisco Nexus 2000 Series Fabric Extender

Configuring Static Pinning

Configuring Dynamic Pinning

Day 2

Lesson 1: Describing vPCs and Cisco FabricPath in the Data Center

Virtual Port Channels

Verifying vPCs

Cisco FabricPath

Lesson 2:

Configuring Ethernet Port Channels

Understanding Virtual Port Channels

Lesson 3:

Understanding Cisco FP

Configuring Cisco FP

Day 3

Lesson 1: Virtualizing Network Devices

Describing VDCs on the Cisco Nexus 7000 Series Switch

Verifying VDCs on the Cisco Nexus 7000 Series Switch

Navigating Between VDCs on the Cisco Nexus 7000 Series Switch

Lesson 2:

OTV on the Cisco Nexus 7000 Series Switches

Lesson 3:

Understanding ACLs

ACL Processing

Configuring ACLs

Understanding Object Groups

Day 4

Lesson 1: Comparing Storage-Connectivity Options in the Data Center

Comparing Block- and File-Based Network Storage

NFS, Fibre Channel, iSCSI, and SCSI

Lesson 2:

Fibre Channel SAN Topologies

Fibre Channel Port Types

Fibre Channel Addressing

Fibre Channel Layered Model

FCNS and the FLOGI process

Lesson 3:

Configure a Cisco MDS 9000 Series Multilayer Switch from the CLI Setup Script

Update the Cisco NX-OS on a Cisco MDS 9000 Series Multilayer Switch

Update Licensed Features on the Cisco MDS 9000 Series Multilayer Switch

Verify Initiator and Target Fabric Login

Verify Fibre Channel Zoning on a Cisco MDS 9000 Series Multilayer Switch

Lesson 4:

Unified Fabric Benefits

IEEE Standards That Enable FCoE

Priority Flow Control

Enhanced Transmission Selection

DCB Exchange

Day 5

Lesson 1: Describing the Cisco UCS B-Series Product Family

Cisco UCS 6100 and 6200 Series Fabric Interconnects

Cisco UCS 5108 Blade Server Chassis

Cisco UCS B200 M3 Blade Server

Cisco UCS B230 M2 Blade Server

Cisco UCS B250 M2 Extended Memory Blade Server

Cisco UCS B440 M2 High-Performance Blade Server

Mezzanine Card Options for Cisco UCS B-Series Blade Servers

Lesson 2:

Cisco UCS C-Series Product Family

Cisco UCS C200 M2 High-Density Rack Server

Cisco UCS C210 M2 General-Purpose Rack Server

Cisco UCS C220 M3 Rack Server

Cisco UCS C240 M3 Rack Server

Cisco UCS C250 M2 Extended-Memory Rack Server

Cisco UCS C260 M2 Rack Server

Cisco UCS C460 M2 High-Performance Rack Server

PCIe Adapter Options for Cisco UCS C-Series Rack Servers

RAID Adapter Options for Cisco UCS C-Series Rack Servers

Lesson 3:

Chassis-to-Fabric Interconnect Physical Connectivity

I/O Module Architectures

Cisco Integrated Management Controller Chip on Cisco UCS B-Series Blade

Servers

Three Basic Port Personalities in the Fabric Interconnect

Lesson 4:

Cabling a Cisco UCS Fabric Interconnect Cluster

Initial Setup Script for the Primary Peer

Initial Setup Script for the Secondary Peer

Lesson 5:

Cisco UCS Manager

Layout of the Cisco UCS Manager GUI

Navigation Window Tabs

Device Discovery in Cisco UCS Manager

Lesson 6:

Benefits of Stateless Computing

Using Identity Pools in Service Profiles

Using Service Profile Templates to Enable Rapid Provisioning and Consistent Application of Policy

Creation of Policies for Service Profiles and Service Profile Templates

Chassis and Blade Power Capping