

## **Implementing Cisco Data Center Virtualization and Automation v6.0 (CS-DCVAI-5DAYS)**

**Modality: Virtual Classroom**

**Duration: 5 Days**

**SATV Value:**

**CLC: 40 Units**

**NATU:**

**SUBSCRIPTION: No**

### ***About this course:***

This is a Five-day course with intermediate difficulty level. This course conducts discussion on the topic of implementing Cisco Data Center Virtualization and Automation (DCVAI). This course provides you with the opportunity of constructing your skills in this field. The course will teach you on the incorporation and installing automation of Cisco Application Centric Infrastructure (ACI) and Cisco Nexus switches. By taking this course, you will be able to avail number of benefits like getting an extensive experience of constructing a data center solution on the basis of Cisco ACI. The course provides a concise introduction to its learners about the automation features offered by Python and RESTful APIs.

On average, the earning of a Cisco Systems Data Center Technician is \$77,670 per annum.

### ***Learning Objectives:***

The course has the following learning objectives:

- Explaining the two fundamental features in order to logically separate a physical switch
- Explaining the Nexus 1000 virtual switch, programmability options on Cisco NX operating system, and alongside, various other scripting tools available with Cisco NX operating system
- Explaining the CLI features that simplify configuration regulation
- Giving concise introduction of the high-end topics and explaining the various fabric discovery parameters for Cisco ACI
- Devise tenant-based regulating policies for bare metal hosts
- Explaining the incorporation of VM Manager Domains with Cisco ACI
- Explaining the mechanism of multitier applications support by Cisco ACI platform, its monitoring features, and programmability and orchestration
- Explaining the APC-based aggregation and availability
- Explaining the Cisco AVS, distributed firewall, and micro-segmentation
- Explaining the packet flows within the Cisco ACI and integrating Cisco ACI with external Layer 3 network
- Explaining the method of insertion of L4-L7 services in Cisco ACI fabric, and method of diverting the traffic followed

## ***Audience:***

The course has been designed specifically for network designers, administrators and engineers, system engineers, consulting system engineers, technical solutions architect, and channel partners.

## ***Requirements:***

The course requires you to have fulfilled some requirements prior to the start of the course in order to fully reap its benefits. You must have completed the introductory courses of Cisco Data Center Networking (DCICN) v6.0 or higher, or Cisco Data Center Technologies (DCICT) v6.0 or higher. Else, you must have completed the configuration course of Cisco Nexus 9000 Series Switches in ACI Mode (DCAC9K) v2.0 or higher or sound comprehension of the VMware environment. If you do not have any of these courses, you need to have the equal amount of knowledge on these topics.

There are other requirements for this course too but they are only recommendations, for better understanding of this course. These include the ability to explain adequately the data center networking concepts, storage concepts, and virtualization.

## **Course Outline:**

### **Module 1: Infrastructure Virtualization Implementation**

- Lesson 1: Configuring Logical Device Separation
- Lesson 2: Configuring Virtual Switching Technology

### **Module 2: Cisco NX-OS Configuration Automation**

- Lesson 1: Implementing Configuration Programmability
- Lesson 2: Implementing Configuration Profiles
- Lesson 3: Using Scripting Tools

### **Module 3: Application-Centric Infrastructure Overview**

- Lesson 1: Introducing Cisco ACI

### **Module 4: Cisco ACI Building Blocks and Application Policies**

- Lesson 1: Building Tenant-Based Policies with Bare-Metal Hosts
- Lesson 2: Describing VMM Domain Integration
- Lesson 3: Multitier Applications in Cisco ACI

### **Module 5: Cisco ACI Manageability and Programmability**

- Lesson 1: Monitoring and Managing Cisco ACI
- Lesson 2: Describing Cisco ACI Programmability and Orchestration

## **Module 6: Cisco ACI Enhanced Features**

- Lesson 1: Describing vPC
- Lesson 2: Deploying Cisco AVS

## **Module 7: Data Center Compute Resource Parameters Design**

- Lesson 1: Describing Packet Flow Internal to the ACI Fabric
- Lesson 2: Describing External Layer 3 Network Integration
- Lesson 3: Describing External Layer 2 Network Integration
- Lesson 4: Configuring Service Insertion and Redirection