



## **CCIE DC V3.0 Lab Exam Overview**

Cisco CCIE Data Center certification acknowledges the expert-level knowledge and skills targeted on data center and upcoming technologies required to manage design, and implement a complex modern data center infrastructure. Cisco CCIE Data Center Lab Exam v3.0 will test your skills to plan, design, deploy, operate, and optimize complex Data Center networks. This exam is an eight-hour hands-on exam that will require hands-on lab experiences to pass.

### **Exam:**

CCIE Data Center (v3.0) Exam

### **About the training**

- **Study Material:-** Live online training, Streaming Recorded Videos, Online Lab Workbook, and Remote Virtual Lab access.
- **Duration:-** 10 Days (80 Hours)

### **Requirements**

Candidates are recommended to have basic knowledge of course outline and are encouraged to have 8 or more years of job experience.

### **What you will learn**

- Implementing and troubleshooting of data center technologies
- Understanding operating system, Network services for cloud enablement, virtualization and security
- Understanding L2 and L3 network infrastructure

### **About Instructor**

The instructor of this training is a master in technology and has 14+ years of industrial experience. He has delivered vast and complex projects on the same around the globe. In his experienced life, he has conveyed 80+ corporate and retail programs on several Cisco data and wireless products.

## **Course Content**

- Data Center L2/L3 Connectivity (20% of Lab Exam)
  - Layer 2 technologies
    - Link Aggregation
    - Tagging/Trunking
    - Static Path binding
    - Spanning Tree Protocol
  - Routing Protocols and features
    - OSPF (v2 and v3)
    - ISIS
    - BGP
    - BFD
    - FHRP
  - Multicast protocols
    - PIM
    - IGMP
- Data Center Fabric Infrastructure (15% of Lab Exam)
  - Physical fabric components
    - Fabric Discovery
    - Controllers/Network Managers
    - Switches
  - Fabric policies
    - Access Policies
    - Multi Tenancy
    - Monitoring Policies
  - Tenant Policies
    - Application profiles and EPGs
    - Networking
    - Security
  - Fabric Monitoring
    - Faults
    - Events
    - Health indicators
    - Audit Logs
  - Virtual Networking
    - vSphere VDS
- Data Center Fabric Connectivity (15% of Lab Exam)
  - VRF lite
  - L3Out
    - OSPF
    - BGP
    - Transit Routing

- Inter Fabric connectivity
  - Multi-Pod
  - Multi-Site
  - Virtual POD
  - remote Leaf
- Overlays
  - VXLAN EVPN
- Data Center Compute (15% of Lab Exam)
  - Compute Resources
    - UCSM Policies, Profiles and Templates
    - Hyperflex
  - Compute Connectivity
    - SAN/LAN uplinks
    - Rack server integration
    - Port Modes
- Data Center Storage Protocols and Features (10% of Lab Exam)
  - FC and FCoE
    - Zoning
    - NPV/NPIV
    - Trunking
    - Portchannel
    - Load Balancing
  - iSCSI
    - Authentication
    - Multipathing
  - RoCE v2 over IP Networks
- Data Center Security and Network Services (10% of Lab Exam)
  - Security features
    - ACL's
    - First Hop Security
    - Port security
    - Private VLANs
    - Contracts
  - RBAC
    - Radius
    - TACACS+
    - LDAP
    - AAA
  - Network Services Insertion and Redirection
    - Policy Based Routing
    - Policy Based Redirection
    - Inter VRF communication
    - Route Targets
    - Prefix Lists
  - Services

- Flow/Telemetry Export
- SPAN
- SNMP
- Syslog
- DHCP
- NTP/PTP
- Traffic management
  - Queueing
  - Policing
  - Classification/Marking
  - Scheduling
  - CoPP
- Data Center Automation and Orchestration (15% of Lab Exam)
  - Data center tasks using scripts (Python and Ansible)
    - Create, Read, Update, Delete using RESTful APIs
    - Deploy and modify configurations
    - Statistics, Data Collection
  - Data Center Automation and Orchestration using tools
    - DCNM
    - UCSD
    - Intersight
    - CloudCenter Suite

**Note:** \*\*\*Most of the course topics are covered with hands-on lab exercises and others are theoretical

**Thank You**  
**Visit us**

**<https://www.uninets.com/>**