Implementing Cisco Data Center Infrastructure (CS-DCII v6.0) v6.0

Modality: Virtual Classroom

Duration: 4 Days

CLC: 34 Units

About this course:

The five day intermediate-level course serves as the perfect training program to help prepare students for the Cisco Certified Network Professional examination and a variety of data center related roles and responsibilities. Focusing on the implementation of Cisco Nexus 2000 Series Fabric Extenders (FEXs) and Cisco Nexus switches, the Implementing Cisco Data Center Infrastructure course helps build the skills you'll need to perform professional Fibre Channel operations.

The course also focuses on the use of Cisco MDS switches for the implementation of SAN, the Data Center Unified Fabric, and LAN, making it a great and extremely comprehensive IT ops training course. In addition to covering the theoretical aspect, the course also focuses on hands-on experience to equip students with the tools and skills they will need to become a data center professional.

Course objectives:

Upon completion of the Implementing Cisco Data Center Infrastructure course, you should be able to:

- Understand the concepts of multicast, routing, and first-hop redundancy in the data center for successful configuration

- Gain thorough information regarding user management, allowing you to create configurations

- Understand how Nexus switch security features work for successful implementation

- Grasp the concept of Fibre Channel for successful configuration, management, and implementation

- Configure Fibre Channel over Ethernet (FCoE)

- Configure infrastructure monitoring, FCIP, NPV, zoning, system management, and distributed device aliases

Audience:

This course is intended for data center managers, field and system engineers, project managers, program managers, and technical solution architects. Professionals responsible for the installation and implementation of Cisco Nexus 2000 Series Fabric Extenders, Cisco Nexus 5000 switches, and

https://www.quickstart.com/ *Contact Us: (866) 991-3924*

Cisco Nexus 7000 Series switches should also be able to benefit from the course.

Prerequisites:

- Understanding of data center networking and storage concepts

- Understanding of the concept of virtualization in data centers

- In-depth knowledge of the Cisco Unified Computing System

- Knowledge of Cisco UCS Director and Cisco ACI and how they can help with automation and orchestration of the data center

- Understanding of Cisco Data Center Nexus and MDS family products

- Understanding of networking fundamentals including routing and switching

Course Outline:

Module 1: Data Center Protocols

- Configuring Spanning Tree Protocol
- Configuring Port Channels
- Configuring Fabric Extenders
- Implementing Cisco FabricPath
- Understanding Cisco Overlay Transport Virtualization
- Implementing VXLAN
- Implementing LISP

Module 2: Layer 3 Switching Features in the Data Center

- Configuring First-Hop Redundancy
- Configuring Routing
- Configuring IP Multicast

Module 3: Data Center Infrastructure Security

- Configuring User Management
- Configuring System Security Features

Module 4: Data Center Infrastructure Storage Fabric

- Basic Fibre Channel Configuration
- Managing Domains
- Implementing Port Security and Fabric Binding

Module 5: FCoE Unified Fabric

- Describing FCoE
- Implementing FCoE

Module 6: Data Center Infrastructure Storage Services

- Configuring Distributed Device Aliases
- Implementing Zoning
- Configuring NPIV and NPV
- Configuring Fibre Channel Over IP

Module 7: Data Center Infrastructure Maintenance, Management, and Operations

- Configuring System Management
- Configuring Infrastructure Monitoring

<u>Labs</u>

- Lab 1: Configure Layer 2 Switching
- Lab 2: Configure Port Channels
- Lab 3: Configure FEX
- Lab 4: Configure Cisco FabricPath
- Lab 5: Configure OTV
- Lab 6: Configure VXLAN
- Lab 7: Configure VRRP
- Lab 8: Configure OSPF
- Lab 9: Configure User Management Security Features
- Lab 10: Configure System Security Features
- Lab 11: Configure Fibre Channel
- Lab 12: Manage Domains and Configure Persistent FCIDs
- Lab 13: Configure Fabric Binding and Port Security
- Lab 14: Configure FCoE
- Lab 15: Configure Device Aliases
- Lab 16: Configure Zoning
- Lab 17: Configure NPV
- Lab 18: Configure System Management
- Lab 19: Implement Infrastructure Monitoring