Implementing Cisco Data Center Infrastructure

Duration: 5 Days **Course Code: DCII** **Version: 6.0**

Overview:

This skills-building course focuses on the implementation of LAN and SAN switching technologies, device management and monitoring using Cisco MDS switches, Cisco Nexus switches and Cisco Nexus 2000 Series Fabric Extenders (FEXs). This rich, hands-on experience of implementing a Cisco data center infrastructure helps students prepare for professional level data center roles and the achievement of the Cisco CCNP Data Center Certification.

Target Audience:

Engineers who install and implement the Cisco Nexus 7000 and 5000 Series switches and the Cisco Nexus 2000 Series fabric extenders. Individuals looking to achieve the Cisco CCNP Data Center Certification

Objectives:

- **After completing this course you should be able to:**
- Configure RSTP, MST, and port channels and implement Cisco FabricPath, OTV, VXLAN, and LISP
- Configure first-hop redundancy, routing, and multicast in the data center
- Configure user management and implement system security features on Nexus switches
- Perform basic Fibre Channel configuration, manage Fibre Channel domains, and implement Fibre Channel port security and binding
- Configure FCoE
- Configure distributed device aliases, zoning, NPV, and FCIP
- Configure system management and infrastructure monitoring

Prerequisites:

Attendees should meet the following prerequisites:

- Have attended or have equivalent knowledge to **DCICN, DCICT** and **ICND1, ICND2** or **CCNABC (CCNAX**)

Testing and Certification

Recommended as preparation for the following exam:

- **300-165** - Implementing Cisco Data Center Unified Fabric
This is one of four exams required for the Cisco CCNP Data Center Certification

Follow-on-Courses:

The following courses are recommended for further study:

- **DCUCI** - Implementing Cisco Data Center Unified Computing
- **DCVAI** - Implementing Cisco Data Center Virtualization and Automation
- **DCID** - Designing Cisco Data Center Infrastructure
- **DCIT** - Troubleshooting Cisco Data Center Infrastructure

Content:

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

Layer 3 Switching Features in the Data Center

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

Data Center Infrastructure Security

- Configuring User Management
- Configuring System Security Features

Data Center Infrastructure Storage Fabric

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

FCoE Unified Fabric

- Describing FCoE
- Implementing FCoE

Data Center Infrastructure Storage Services

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

Data Center Infrastructure Maintenance, Management, and Operations

- Configuring System Management
- Configuring Infrastructure Monitoring

Labs:

- 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

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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