

DCICT - Introducing Cisco Data Center Technologies v1.0

Learn the data center configuration fundamentals.

In this course, you will be given the foundational knowledge and a broad overview of Cisco Data Center products and their operation. The course covers the architecture, components, connectivity, and features of a Cisco Data Center network. You will gain practical experience configuring the initial setup of Cisco Nexus 7009, Cisco Nexus 5548UP, Cisco Unified Computing System (UCS) 6120XP, and Cisco MDS 9124 Multilayer Fabric Switch. You will also learn to verify the proper operation of a variety of features such as Overlay Transport Virtualization (OTV), Cisco FabricPath, Port Channels, virtual Port Channels (vPCs), and Cisco Nexus 1000V Distributed Virtual Switch for VMware ESXi.

What You'll Learn

- Cisco Data Center Fundamentals
- Cisco Data Center Virtualization
- Cisco Data Center Storage Networking
- Cisco Data Center Unified Fabric
- Cisco Unified Computing System (UCS)

Who Needs to Attend

- Network designers, administrators, engineers, and managers
- Storage administrators
- Server administrators
- Program managers
- Project managers
- Systems engineers

Prerequisites

DCICN - Introducing Cisco Data Centers Networking v1.0 or equivalent knowledge

- [DCICN - Introducing Cisco Data Center Networking v1.0](#)

Follow-On Courses

There are no follow-ons for this course.

Certification Programs and Certificate Tracks

This course is part of the following programs or tracks:

- [CCNA Data Center](#)

Course Outline

1. Cisco Data Center Network Services

- Functional Layers of the Data Center

- Cisco Nexus Product Family
- Cisco MDS Product Family
- Monitoring the Cisco Nexus 7000 and 5000 Series Switches
- Virtual Port Channels (vPCs) and Cisco FabricPath in the Data Center
- Using OTV on Cisco Nexus 7000 Series Switches

2. Cisco Data Center Virtualization

- Virtualizing Network Devices
- Virtualizing Storage
- Virtualizing Server Solutions
- Using the Cisco Nexus 1000V Series Switch
- Verifying Setup and Operation of the Cisco Nexus 1000V Series Switch

3. Cisco Data Center Storage Networking

- Comparing Storage Connectivity Options in the Data Center
- Fibre Channel Storage Networking
- Verifying Fibre Channel Communications on Cisco MDS 9000 Series Multilayer Switches

4. Cisco Data Center Unified Fabric

- Data Center Bridging (DCB)
- Connectivity Options for Fibre Channel over Ethernet (FCoE) on the Cisco Nexus 5000 Series Switch
- Enhanced FCoE Scalability with Cisco Nexus 2232 10GE Fabric Extenders

5. Cisco UCS

- Cisco UCS B-Series Product Family
- Cisco UCS C-Series Product Family
- Connecting Cisco UCS B-Series Blade Servers
- Setting Up an Initial Cisco UCS B-Series Cluster
- Cisco UCS Manager Operations
- Cisco UCS Manager Pools, Policies, Templates, and Service Profiles

Labs

Lab 1: Connect to a Cisco Nexus 7000 Series Switch Using Secure Shell (SSH)

Lab 2: Connect to a Cisco Nexus 5000 Series Switch Using SSH

Lab 3: Run Command Line Interface (CLI) Commands

Lab 4: Configure vPCs

Lab 5: Validate Cisco FabricPath Configuration

Lab 6: Validate Overlay Transport Virtualization (OTV) Configuration

Lab 7: Verify Current Virtual Device Context (VDC) Settings

Lab 8: Validate a Cisco Nexus 2000 Series Fabric Extender Configuration

- Lab 9: Validate a Cisco Nexus 1000V Series Switch Configuration**
- Lab 10: Validate a Cisco MDS 9100 Series Multilayer Fabric Switch License**
- Lab 11: Configure VSANs and Zoning**
- Lab 12: Validate FLOGI and FCNS**
- Lab 13: View the Tech-Support Command Output**
- Lab 14: Validate the Physical Connections for FCoE**
- Lab 15: Explore the Cisco UCS Manager Graphical User Interface (GUI)**
- Lab 16: Create a Service Profile from a Template and Performing VMware ESXi 5.0 SAN Boot**