Understanding Cisco Data Center Foundations (CPLL-DCFNDU)

Duration: 180 days

The Understanding Cisco Data Center Foundations (DCFNDU) Learning Path helps you prepare for entry-level data center roles. In this Learning Path, you will learn the foundational knowledge and skills you need to configure Cisco® data center technologies, including networking, virtualization, storage area networking, and unified computing. You will get an introduction to Cisco Application Centric Infrastructure (Cisco ACI), automation and cloud computing. You will get hands-on experience with configuring features on Cisco Nexus Operating System (Cisco NX-OS) and Cisco Unified Computing System (Cisco UCS).

This Learning Path does not lead directly to a certification exam, but it does cover foundational knowledge that can help you prepare for several Cisco Certified Network Professional (CCNP) and other professional-level data center trainings and exams.

Skills You'll Learn

This training will help you:
- Describe the foundations of data center networking and cloud computing
- Describe Cisco Nexus products, and explain the basic Cisco NX-OS functionalities and tools
- Describe switch, machine, and network virtualization
- Compare storage connectivity options in the data center
- Gain knowledge for protocols, solutions, and designs to acquire entry-level data center roles

Learning Path Objectives

1. Cisco Data Center Foundations: Examine the foundations of data center networking, including traditional three-tier networks and spine-and-leaf architecture.
2. Cisco Data Center Switching: Gain an introduction to Cisco Nexus data center products and NX-OS software. Study Layer 3 first-hop redundancy protocols such as HSRP, VRRP, and GLBP and explore Ethernet Port Channels and Virtual Port Channels.
3. Cisco Data Center Virtualization: Explore Cisco Nexus switch management and control planes, Virtual Routing and Forwarding, virtualization concepts such as hypervisors and Virtual Machine Managers, and overlay network protocols including Virtual Extensible LAN (VXLAN).
4. Cisco Data Center Storage: Compare data center storage connectivity, focusing on Fibre Channel, Cisco MDS switches, zoning, NPV/NPIV modes, FLOGI, flow control, and FCoE architecture.
5. Cisco Unified Computing System: Learn the purpose, benefits, and tools for modern data centers with Cisco UCS Server Hardware, IMC Supervisor, Intersight, and Compute

Hyperconverged with Nutanix. Also, cover UCS Manager features and Intersight deployment modes and use cases.

6. Cisco Data Center Advanced Services: Learn Cisco NX-OS programming tools and models, including Nexus API, Python, Ansible, and Terraform. Understand Cisco ACI concepts, cloud computing basics, and the functions of Cisco Nexus Dashboard and Fabric Controller.