

Cisco Data Center Nexus Dashboard Essentials v2 (CPLL-DCNDE)

Duration: 180 Days

The Cisco Data Center Nexus Dashboard Essentials (DCNDE) Learning Path teaches you how to install, operate, administer, and automate Cisco Nexus Dashboard, the unified platform for operating modern data center networks. Built on Cisco Nexus Dashboard release 4.2, the platform consolidates the formerly separate fabric controller, insights, and orchestrator services into a single product with one installation, one user interface, and a one-step upgrade.

You will learn what Cisco Nexus Dashboard is made of and why it is used, install it on physical, virtual, and cloud form factors, license and size your deployment, build VXLAN EVPN fabrics, attach endpoints, apply templates and policies, and automate the platform using the REST API, Ansible, and Network as Code. The Learning Path is delivered as a modular Learning Path of six tracks and includes hands-on lab activities that run the live software solution.

Skills You'll Learn:

- Install Cisco Nexus Dashboard on physical nodes, virtualization platforms (VMware ESXi and KVM), and Amazon Web Services (AWS), completing the full cluster bring-up workflow
- Create VXLAN EVPN fabrics end-to-end, add switches, create VRFs and networks, attach endpoints to access and trunk ports (including multi-attach), and manage fabric-wide and per-switch policies using templates and freeform policies
- Configure users, roles, role-based access control (RBAC), and remote authentication; perform resource monitoring and reporting; create technical support bundles; and manage firmware upgrades for both Cisco Nexus Dashboard and switches
- Automate operations using REST API, Ansible, and the Network as Code framework, and perform automated switch discovery and onboarding using Power-On Auto Provisioning (POAP)
- Understand licensing models, size deployments using the Cisco Nexus Dashboard Sizer tool, and perform unified backup, restore, upgrades, and migration from earlier releases

Learning Path Objectives:

1. Cisco Nexus Dashboard Installation: Learn to deploy Cisco Nexus Dashboard across physical, virtual (ESXi/KVM), and AWS environments. This track covers essential licensing rules, deployment sizing considerations, and the procedures for successful cluster installation to ensure a robust foundation for your data center infrastructure.

2. Cisco Nexus Dashboard Essentials: Explore core platform capabilities, including Day 1/Day 2 operations, infrastructure provisioning, and AI/ML workload support. Review major version updates and understand the GUI, including built-in dashboards, topology views, and custom widget configuration to effectively onboard and monitor your network fabrics.
3. Cisco Nexus Dashboard Administration: Discover operational management by configuring user roles, RBAC, and remote authentication. Learn to monitor fabric resources, generate technical support bundles, perform backups, and manage firmware for both the dashboard and switches. This track ensures you have the skills to maintain a secure and efficient environment.
4. VXLAN Fabric Creation: Gain hands-on experience in building VXLAN fabrics. Learn to onboard switches, define VRFs, and create Layer 2 and Layer 3 networks. You will also learn endpoint attachment to access and trunk ports, including advanced configurations like multi-attach and external VRF-Lite connectivity for comprehensive fabric control.
5. Cisco Nexus Dashboard Policies and Templates: Leverage policy-driven automation to streamline network configurations. Learn to use the template library and policy templates for consistent deployments. Examine freeform policies to deploy custom configurations to individual switches or entire fabrics, including importing existing fabric settings.
6. Cisco Nexus Dashboard Automation: Scale your operations using programmatic control. Explore REST API integration, Ansible, and the Network-as-Code framework to automate fabric management. Learn to utilize POAP to automate switch discovery and onboarding, significantly reducing manual configuration efforts.