# Cisco Data Center Nexus Dashboard Essentials

**: 5 : DCNDE : 2.0 : Company Event**

:

The **Cisco Data Center Nexus Dashboard Essentials (DCNDE)** training 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 training is delivered as a modular Learning Path of six tracks and includes hands-on lab activities that run the live software solution.
**This training also earns you 31 Continuing Education (CE) credits toward recertification.**

:

This class is intended for the following participants:
- Systems Engineers
- Implementation Engineers
- Consulting Engineers
- Data Center Network Administrators
- Data Center Network Operators
- Data Center Architects

:

- After this course participants should be able to:
- Install Cisco Nexus Dashboard on physical nodes
- Install Cisco Nexus Dashboard on a virtualization platform (VMware ESXi and KVM)
- Install Cisco Nexus Dashboard on Amazon Web Services (AWS)
- Describe the steps needed to fully bring up a Cisco Nexus Dashboard cluster
- Describe licensing of Cisco Nexus Dashboard and fabrics
- Describe the sizing considerations for Cisco Nexus Dashboard clusters
- Describe the capabilities of Cisco Nexus Dashboard to provision, manage, and analyze network infrastructure (Day 1 and Day 2 functions)
- List the major changes between Cisco Nexus Dashboard releases 3.2 and 4.2
- Review the Cisco Nexus Dashboard graphical user interface
- Configure users, roles, role-based access control (RBAC), and remote authentication
- Describe resource monitoring and reporting in Cisco Nexus Dashboard
- Perform common administration tasks, including creating a technical support bundle and using unified backup
- Describe firmware management for Cisco Nexus Dashboard and switches, and the migration from release 3.2 to 4.2
- Describe the fabric creation process in Cisco Nexus Dashboard
- Create VRFs and networks in a fabric
- Attach endpoints to access and trunk ports, including multi-attach
- Describe the use of templates and policies
- Describe the use of freeform policies
- Review automation options, including the REST API, Ansible, and the Network as Code framework
- Automate switch discovery and onboarding using Power-On Auto Provisioning (POAP)

:

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Understanding of Cisco routing and switching in a data center
- Familiarity with data center network management and operation
- Basic understanding of VXLAN EVPN concepts

These skills can be found in the following Cisco Learning Offerings:

- DCFNDU - Understanding Cisco Data Center Foundations

- *None*

:

- *None recommended*

:

Course Outline

- Cisco Nexus Dashboard Physical Node Installation
- Cisco Nexus Dashboard Virtual Node Installation
- Cisco Nexus Dashboard Cloud Installation
- Cisco Nexus Dashboard Licensing Options
- Cisco Nexus Dashboard Deployment Size
- Day 1 and Day 2 Functions of Cisco Nexus Dashboard
- Survey of Changes in Cisco Nexus Dashboard
- Cisco Nexus Dashboard GUI Overview
- Users, Roles, RBAC, and Remote Authentication
- Cisco Nexus Dashboard Resource Monitoring
- Common Administration Tasks
- Upgrades and Migration
- Create a Fabric
- Create VRFs and Networks
- Attach Endpoints
- Cisco Nexus Dashboard Policies and Templates
- Freeform Policies
- Cisco Nexus Dashboard Automation Options
- Automate Switch Discovery with POAP

Lab Outline

- Deploy OVA in ESXi
- Finish the Cluster Bring-Up Procedure
- Explore Cisco Nexus Dashboard GUI
- Add an ACI Fabric
- Configure Remote Authentication
- Create a Tech Support Bundle
- Create a VXLAN Fabric
- Create Networks
- Attach Endpoints
- Apply Freeform Policies
- Create Fabric and Add Switches using Network as Code
- Use POAP to Add Switches to Fabric

: