

Transforming to a Cisco Intent-Based Network

DURATION: 5 DAYS COURSE CODE: IBNTRN FORMAT: LECTURE/LAB

COURSE DESCRIPTION

Transforming to a Cisco Intent-Based Network v1.1 (IBNTRN) is a 5-day instructor-led, virtual instructor-led, or e-learning course that teaches students how to successfully deploy Cisco SD-Access solution within their greenfield or brownfield Enterprise networks.

The course will discuss how Cisco SD-Access fits into Cisco Digital Network Architecture (DNA). The course covers Cisco SD-Access fundamentals, provisioning, policies, wireless integration, and border operations. Other topics covered by the course include: operating, managing, and integrating Cisco DNA Center, and understanding programmable network infrastructure.

PREREQUISITES

It is recommended, but not required, to have the following skills and knowledge before attending this course:

- Understanding of network routing and switching principles equivalent to a CCNP Enterprise level
- Understanding of Cisco Unified Wireless Network technologies
- Understanding of Cisco ISE, 802.1x, and Cisco TrustSec
- Understanding of segmentation technologies such as VLAN and VRFs
- Basic understanding of overlay technologies such as VXLAN
- Basic understanding of Locator ID Separation Protocol (LISP)

Here are recommended Cisco learning offerings that may help students meet these prerequisites:

- Implementing and Operating Cisco Enterprise Network Core Technologies (ENCOR)
- Configuring Cisco ISE Essentials for SD-Access (ISESDA)
- Understanding Cisco Wireless Foundations (WLFNDU)

WHO SHOULD ATTEND

System engineers

Network engineers

Technical architects

Technical support personnel

Channel partners and resellers

LEARNING OBJECTIVES

- Identify the Cisco Digital Network Architecture solution by describing the vision, strategy, general concepts, and components.
- Describe the Cisco DNA Center design application, hierarchical network design, and basic network settings, and describe the integration of Cisco DNA Center with Cisco Identity Services Engine (Cisco ISE) for Automation and Assurance.
- Describe the Cisco DNA Center Inventory and the available mechanisms for discovering and adding network devices, and explore the device compatibility with Cisco DNA Center and SD-Access.
- Describe the Cisco DNA Center automation features such as configuration templates, software image
- maintenance, and Plug and Play (PnP) device onboarding.
- Explore the Cisco DNA Center user interface, the available workflows for onboarding devices, and how to design and manage a network.
- Introduce Cisco SD-Access, describe the different node types in the fabric and the two-level segmentation provided by the solution, and take a deep dive into the control and data plane protocols used in Cisco SDAccess.
- Describe the Cisco DNA Center workflow for deploying Cisco SD-Access, defining all the prerequisite network settings and profiles, defining the required policies, creating fabric domains and sites, and provisioning fabric nodes.
- Create and manage fabric domains and sites, provision fabric devices, and onboard your endpoints in a single site or distributed fabric campus network.
- Describe the features available for automating and monitoring wireless networks with Cisco DNA Center, and describe the available deployment models with their benefits and limitations, such as wireless Over-theTop (OTT) and SD-Access Wireless.
- Describe the Cisco SD-Access Extension for IoT solution, its architecture and components, and the benefits and limitations of the solution
- Describe the use cases and migration scenarios for migrating users from traditional campus to SD

COURSE OUTLINE

- Introducing Cisco DNA Architecture
- Cisco DNA Center Design
- Cisco DNA Center Inventory
- Cisco DNA Center Automation
- Explore Cisco DNA Center and Automating Network Changes
- Introducing Cisco Software-Defined Access
- Deploying Cisco Software-Defined Access
- Deploy Wired Fabric Networks with Cisco DNA Center
- Cisco SD-Access for Wireless
- Cisco SD-Access Extension for IoT
- Deploy Brownfield and Fabric Wireless Network with Cisco DNA Center
- Migrating to Cisco SD-Access
- Cisco SD-Access Multicast
- Integrating Cisco DNA Center
- Deploy SD-Access Layer 2 Borders and Multicast and Integrate Cisco DNA Center with External Services or Applications
- Understanding Programmable Network Infrastructure
- Operating and Managing Cisco DNA Infrastructure
- Test Drive Cisco DNA Center APIs

LAB OUTLINE

- Explore Cisco DNA Center and Automate Network Changes
- Deploy Wired Fabric Networks with Cisco DNA Center
- Deploy Brownfield and Fabric Wireless Network with Cisco DNA Center
- Deploy SD-Access Layer 2 Borders and Multicast and Integrate Cisco DNA Center with External Services or Applications
- Test Drive Cisco DNA Center APIs