

Course Outline

Transforming to a Cisco Intent-Based Network Course IBNTRN: 5 days Instructor Led

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About this course

This 5-day course, Transforming to a Cisco Intent-Based Network (IBNTRN), teaches you how the functionality of Cisco® SD-Access fits into Cisco Digital Network Architecture (Cisco DNA™). Through a combination of lessons and hands-on learning, you will practice operating, managing, and integrating Cisco DNA Center, programmable network infrastructure, and Cisco SD-Access fundamentals. You will learn how Cisco delivers intent-based networking across the campus, branch, WAN, and extended enterprise and ensures that your network is operating as intended.

Audience profile

- Channel partners and resellers
- Network administrators
- Network engineers
- Sales engineers
- System engineers
- Technical architects
- Technical support personnel

At course completion

After completing this course, students will be able to:

- 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 SD-Access.
- 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-the-Top (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

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- Describe the use cases and migration scenarios for migrating users from traditional campus to SD

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- 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