

Transforming to a Cisco Intent-Based Network (IBNTRN)

Description

The **Transforming to a Cisco Intent-Based Network (IBNTRN)** training 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 Catalyst 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.

This training also earns you 40 Continuing Education (CE) credits toward recertification.

How you'll benefit

This training will help you:

- Configure an open, software-driven approach that makes the network simpler, more agile, and responsive to business needs
- Leverage the functionality of Cisco DNA Center to streamline operations, reduce costs, detect and contain threats, and continuously align the network to business needs
- Earn 40 CE credits toward recertification

Who should enroll

- Channel Partners and Resellers
- Network Administrators
- Network Engineers
- Sales Engineers
- System Engineers
- Technical Architects
- Technical Support Personnel

Technology areas

- Networking

Objectives

- Identify the Cisco Digital Network Architecture solution by describing the vision, strategy, general concepts, and components
- Describe the Catalyst Center design application, hierarchical network design, and basic network settings, and describe the integration of Catalyst Center with Cisco Identity Services Engine (Cisco ISE) for Automation and Assurance
- Describe the Catalyst Center Inventory and the available mechanisms for discovering and adding network devices, and explore the device compatibility with Catalyst Center and SD-Access
- Describe the Catalyst Center automation features such as configuration templates, software image maintenance, and Plug and Play (PnP) device onboarding
- Explore the Catalyst 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 Catalyst 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 Catalyst 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
- Describe the use cases and migration scenarios for migrating users from traditional campus to SD

Prerequisites

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

- Understanding of network routing and switching principles equivalent to a CCNP® Enterprise level
- Experience with Cisco Unified Wireless Network technologies
- Experience with Cisco ISE, 802.1x, and Cisco TrustSec
- Understanding of segmentation technologies such as VLANs and Virtual Routing and Forwarding (VRF)
- Basic understanding of overlay technologies such as Virtual Extensible LAN (VXLAN)
- Basic understanding of Locator ID Separation Protocol (LISP)

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

- [Implementing Cisco Enterprise Network Core Technologies \(ENCOR\)](#)
- [Understanding Cisco Wireless Foundations \(WLFNDU\)](#)

Outline

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

Lab Outline

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

Links

- [Cisco U. Learning Path](#)
- [Cisco Learning Network Store](#)
- [Cisco Learning Locator](#)