

Understanding Cisco SDA Fundamentals

Duration: 3 Days Course Code: SDAFND Version: 1.0

Overview:

The **Understanding Cisco SDA Fundamentals (SDAFND)** course introduces you to Cisco® Software-Defined Access and teaches you, through a combination of lectures and labs, how to implement simple, single-site fabric networks.

You will learn the benefits of leveraging Software-Defined Access in the Cisco-powered Enterprise Campus network. **SDAFND** will introduce the solution, its architecture and components, and guide you through labs to design and deploy simple Cisco SD-Access networks. The course will also introduce Cisco DNA Center as the single pane of glass for deploying and operating Cisco SD-Access enterprise networks. Students will explore automation, assurance and programmability features of Cisco DNA center both in theory and through practical labs.

This course will help you:

- Deploy Cisco SD-Access networks
- Explain Cisco Software-Designed Access
- Operate, manage, and integrate Cisco DNA Center™

Target Audience:

Anyone involved in the implementation and administration of an SDA solution.

Objectives:

- **After completing this course, you should be able to:**
- Describe Cisco SD-Access architecture and its components
- Explain Cisco DNA Center deployment models, scaling, and high availability
- Identify Cisco SD-Access fabric protocols and node roles
- Understand the Cisco SD-Access Wireless deployment models
- Automate Day 0 device onboarding with Cisco DNA Center LAN Automation and Network PnP
- Deploy simple Cisco SD-Access fabric networks
- Monitor health and performance of the network with Cisco DNA Center Assurance
- Interact with the Cisco DNA Center Platform Intent APIs

Prerequisites:

Attendees should meet the following prerequisites:

- CCNP® level core networking knowledge
- Ability to use Windows and Linux CLI tools such as ping, SSH, or running scripts
- CCNA - Implementing and Administering Cisco Solutions
- ENCOR - Implementing and Operating Cisco Enterprise Network Core Technologies

Testing and Certification

Recommended as preparation for the following exams:

- There is no exam currently aligned to this course

Follow-on-Courses:

- IBNTRN - Transforming to a Cisco Intent Based Network

Content:

Introducing Cisco SD-Access

- Cisco SD-Access Overview
- Cisco SD-Access Components and Roles

Introducing Cisco DNA Center

- Cisco Networking Overview
- Cisco DNA Center Deployment Models Overview
- Cisco SD-Access in Cisco DNA Center

Exploring Cisco SD-Access Solution Components

- Cisco SD-Access Protocols and Roles
- Cisco SD-Access Control Plane
- Cisco SD-Access Data Plane
- Cisco SD-Access Policy Plane
- Cisco DNA Center and Cisco ISE Integration

Exploring Cisco SD-Access Wireless Architecture

- Cisco SD-Access Wireless Overview
- Cisco SD-Access - Legacy Wireless Overview
- Deploying Cisco SD-Access - Fabric Enabled Wireless
- Cisco SD-Access - Guest Wireless Access Overview

Automating Network Changes with Cisco DNA Center

- Exploring Cisco DNA Center Design Workflow
- Exploring Cisco DNA Center Day 0 Onboarding
- Automating Device Onboarding with Cisco Network Plug and Play

Deploying Fabric Networks with Cisco DNA Center

- Deploying Cisco SD-Access Fabric - Policy Window
- Deploying Cisco SD-Access Fabric - Provision Workflow
- Cisco SD-Access Fusion Devices

Exploring Cisco DNA Center Assurance

- Cisco DNA Center Assurance Components, Analytics and Metrics
- Cisco DNA Center Assurance Health, Issues and Time Travel
- Monitoring Health and Performance with Cisco DNA Center Assurance
- Troubleshooting Cisco SD-Access with Cisco DNA Center Assurance

Exploring Cisco DNA Center Programmability

- Enterprise Network Programmability Overview
- Exploring Cisco DNA Center REST APIs
- Exploring Cisco DNA Center Python Libraries
- Introducing Cisco DNA Center Assurance Workflows

Lab Outline

- Explore Cisco DNA Center User Interface
- Verify Location Identifier Separation Protocol (LISP) Operation in Cisco SD-Access
- Integrate Cisco DNA Center and Cisco Identity Services Engine (Cisco ISE)
- Provision Access Points in Cisco DNA Center
- Provision Underlay Networks with Cisco DNA Center LAN Automation
- Provision Underlay Networks with Cisco DNA Center LAN Automation (cont.)
- Deploy Cisco SD-Access Single Site Fabric
- Deploy Cisco SD-Access Single Site Fabric (cont.)
- Explore Cisco DNA Center Assurance
- Cisco DNA Assurance Issues and Guided Remediation
- Interact with Cisco DNA Center Intent APIs Using Python

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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