

## Understanding Cisco SDA Fundamentals

**Duration: 3 Days**    **Course Code: SDAFND**    **Version: 1.0**    **Delivery Method: Company Event**

### 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™

### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

### 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

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## 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

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## Further Information:

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

[info@globalknowledge.co.uk](mailto:info@globalknowledge.co.uk)

[www.globalknowledge.com/en-gb/](http://www.globalknowledge.com/en-gb/)

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK