

# Course : Implementing Cisco Catalyst 9000 Series Switches (ENC9K) v4.0

Implementing Cisco Catalyst 9000 switches

*Practical course - 3d - 21h00 - Ref. CLY*

*Price : 2630 € E.T.*

With this training course, you'll master the architecture, features and positioning of Cisco Catalyst 9000 Series switches. You'll learn how to deploy and manage them efficiently using the CLI, Cisco DNA Center and the IOS-XE web interface. You'll also be introduced to key advanced features such as security, automation, cloud and many other elements essential to a modern network infrastructure.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Introducing Catalyst 9000 switches, designed for Cisco DNA and the SD-Access solution
- ✓ Position 9000 models in the network and plan migration from older Catalysts
- ✓ Identifying the role of Cisco Silicon One in campus environments
- ✓ Examine Catalyst 9000 management, scalability and performance
- ✓ Describe security, QoS, IoT support and new BGP EVPN functions
- ✓ Explore automation functions: APIs, Infrastructure as Code, Cisco tools
- ✓ Discover DNA Center's application hosting and maintenance functions
- ✓ Deploy Day 0 automation with Cisco DNA Center (LAN Automation, PnP)
- ✓ Manage cloud networking with Meraki Dashboard and analysis tools
- ✓ Describe 9200 to 9600 series architectures, modules and components

## Intended audience

Network engineers, designers, managers, system engineers.

### PARTICIPANTS

Network engineers, designers, managers, system engineers.

### PREREQUISITES

Cisco CCNP® certification or equivalent experience. Knowledge of: routing configuration, LAN switching with legacy Cisco Catalyst switches, Cisco IOS XE, Cisco ISE, etc.

### TRAINER QUALIFICATIONS

The experts who lead the training courses are specialists in the subjects covered. They are approved by the publisher and certified for the course. They have also been validated by our teaching teams in terms of both professional knowledge and teaching skills for each course they teach. They have at least three to ten years of experience in their field and hold or have held positions of responsibility in companies.

### ASSESSMENT TERMS

Assessment of targeted skills prior to training.

Assessment by the participant, at the end of the training course, of the skills acquired during the training course.

Validation by the trainer of the participant's learning outcomes, specifying the tools used: multiple-choice questions, role-playing exercises, etc.

At the end of each training course, ITTCERT provides participants with a course evaluation questionnaire, which is then analysed by our teaching teams. Participants also complete an official evaluation of the publisher.

An attendance sheet for each half-day of attendance is provided at the end of the training course, along with a certificate of completion if the participant has attended the entire session.

## Prerequisites

Cisco CCNP® certification or equivalent experience. Knowledge of: routing configuration, LAN switching with legacy Cisco Catalyst switches, Cisco IOS XE, Cisco ISE, etc.

## Certification

This course does not lead to a certification exam.

## Practical details

### Teaching methods

Training in French. Official course material in English.

## Course schedule

### 1 Official program

- Introducing Cisco Catalyst 9000 series switches.
- Positioning of Cisco Catalyst 9000 series switches.
- Catalyst Silicon One architecture description.
- Examine the management capabilities of Cisco Catalyst 9000 series switches.
- Description of the scalability and performance features of Cisco Catalyst 9000 series switches.
- Description of the security features of Cisco Catalyst 9000 series switches.
- An introduction to the automation features of Cisco Catalyst 9000 series switches.
- Presentation of QoS, IoT, and BGP EVPN features on Cisco Catalyst 9000 series switches.
- Maintenance features of Cisco Catalyst 9000 series switches.
- Description of the Cisco SD-Access solution and Cisco Catalyst 9000 series switches.
- Application hosting with Cisco Catalyst 9000 series switches.
- Cloud management of Cisco Catalyst 9000 series switches using Meraki Dashboard.
- Automation of network modifications using Cisco DNA Center.
- Introducing Cisco Catalyst 9200 series switches.
- Introducing Cisco Catalyst 9300 series switches.
- Introducing Cisco Catalyst 9400 series switches.
- Introducing Cisco Catalyst 9500 series switches.
- Introducing Cisco Catalyst 9600 series switches.

### TEACHING AIDS AND TECHNICAL RESOURCES

The teaching resources used are the publisher's official materials and practical exercises.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training course.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you have specific accessibility requirements? Contact Ms FOSSE, disability advisor, at the following address: [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) so that we can assess your request and its feasibility.

## 2 Official practical work

- Configure and troubleshoot network problems using WebGUI.
- Host applications on Cisco Catalyst 9000 series switches with CLI.
- Configure switch stacking with Cisco Catalyst 9300 series switches.
- Activate and verify a Switch-to-Switch MACSec configuration.
- Enable and verify encrypted traffic analysis.
- Discover the automation and programmability of switch management.
- Discover network automation using Ansible Playbooks and Terraform Scripts.
- Configure perpetual PoE and fast PoE on a Cisco Catalyst 9000 family switch.
- Configure Packet Capture on Cisco Catalyst 9300 series switches.
- Perform an IRM on a Cisco Catalyst 9000 family switch.
- Host applications on Cisco Catalyst 9300 series switches using Cisco DNA Center.
- Integrate Cisco DNA Center and Cisco ISE.
- Provision underlying networks with Cisco DNA Center LAN Automation.

### Dates and locations

#### REMOTE CLASS

2026 : 2 June, 15 Sep., 24 Nov.

#### PARIS LA DÉFENSE

2026 : 2 June, 15 Sep., 24 Nov.