ENC9K – Implementing Cisco Catalyst 9000 Switches

COURSE OVERVIEW:

The Implementing Cisco Catalyst 9000 Series Switches (ENC9K) v3.0 course provides insight into Cisco Catalyst 9000 Series Switches and its solution components. Cisco Catalyst 9000 Series Switches are the next generation in the Cisco Catalyst family of enterprise LAN access, aggregation, and core switches. The switches integrate the new realities of the digital era. The switches are twice as fast, with double the capacity, providing end-to-end security, and automation using centralized management in the Cisco DNA Center.

This course will help you:

- Prepare for successful deployment of the Cisco Catalyst 9000 Series Switches
- Understand the role of Cisco Catalyst 9000 Series Switches in the SD-Access fabric
- Learn to provision Cisco Catalyst 9000 Series Switches using Cisco DNA center as the orchestration platform
- Gain hands-on practice through in-depth lab exercises

WHO WILL BENEFIT FROM THIS COURSE?

This course is ideal for network engineers, designers, managers, and system engineers who are adopting the Cisco Digital Network Architecture (Cisco DNA™) and will use Cisco Catalyst 9000 Series Switches to enable an SD-Access solution provisioned with Cisco DNA Center.

PREREQUISITES:

You are expected to have the following knowledge and skills before attending this course:

- Cisco CCNP® certification or equivalent experience
- Knowledge of configuring LAN routing and switching with legacy Cisco Catalyst switches
- Familiarity with the Cisco IOS XE operating system
- Awareness of Cisco Identity Services Engine (ISE) as an authentication platform and policy manager
- Familiarity with using network management software
- Knowledge of Cisco Unified Computing Systems fundamentals
- Familiarity with Cisco Intent-based networking and policy-based management automation technologies

The following Cisco offerings can help you prepare for this course:

- Implementing Cisco Secure Access Solutions (SISAS) replaced by Implementing and Operating Cisco Security Core Technologies (SCOR)
- Cisco ACI Implementation and Design (ACI) replaced by Implementing Cisco Application Centric Infrastructure (DCACI)

COURSE OBJECTIVES:

After taking this course, you should be able to:

- Review the Cisco Catalyst 9000 Series Switches identify the switches' features and examine the functionalities purpose-built for Cisco DNA and the SD-Access solution.

- Describe the Cisco Catalyst 9200 Series Switch architecture, model types, port types, uplink modules, components including power supplies, and other switch features and capabilities.
- Describe the Cisco Catalyst 9300 Series Switch architecture, model types, port types, uplink modules, and components, including power supplies and stacking cables.
- Describe the Cisco Catalyst 9400 Series Switches, different modular chassis, supervisor and line card options, architectural components, uplink, and power redundancy, and Multigigabit ports
- Describe the Cisco Catalyst 9500 Series Switches, model types, switch components, RFID support, architecture, and switch profiles.
- Describe the Cisco Catalyst 9600 Series Switch architecture, supervisor and line card options, and high availability features.
- Position the different Cisco Catalyst 9000 Series Switch model types in the network, and map older Cisco Catalyst switches to the 9000 family for migration.
- Examine management capabilities of the Cisco Catalyst 9000 Series Switches.
- Describe the Cisco Catalyst 9000 Series Switches deployed in a Cisco StackWise Virtual environment and an SD-Access fabric.
- Describe the new Cisco IOS XE software management, patchability, and Graceful Insertion and Removal (GIR) features on the Cisco Catalyst 9000 Series Switches.
- Describe the scalability and performance features supported by the Cisco Catalyst 9000 Series Switches.
- Describe the Cisco Catalyst 9000 Series Switch support for security, Quality of Service (QoS), and Internet of Things (IoT) convergence features.
- Describe the Cisco Catalyst 9000 Series support for cloud hosting and connectivity, along with automation features
- Explore the SD-Access solution fundamentals, deployment models for the Cisco Catalyst 9000 Series Switch, and the use of Cisco DNA Center to manage infrastructure devices.

COURSE OUTLINE:

- Introducing the Cisco Catalyst 9000 Series Switches
- 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
- Positioning Cisco Catalyst 9000 Series Switches
- Examining the Cisco Catalyst 9000 Series Management Capabilities
- Deploying Cisco Catalyst 9000 Series Switches in Cisco StackWise Virtual and SD-Access Fabric
- Describing New Features on Cisco Catalyst 9000Series Switches
- Describing Scale and Performance Features on Cisco Catalyst 9000 Series Switches
- Describing Security, QoS, and IoT Convergence Features on Cisco Catalyst 9000 Series Switches
- Describing Cloud and Automation Features on Cisco Catalyst 9000 Series Switches
- Describing Cisco SD-Access Solution and Cisco Catalyst 9000 Series Switches

Lab outline

- Application Hosting on Cisco Catalyst 9000 Series Switches Using the CLI
- Perform GIR on a Cisco Catalyst 9000 Series Switch
- Application Hosting on Cisco Catalyst 9300 Using Cisco DNA Center
- Configuring and Verifying a Switch Stack
- Enable and Verify Encrypted Traffic Analytics
- Configure Perpetual PoE and Fast PoE on a Cisco Catalyst 9000 Series Switch
- Configure Packet Capture on a Cisco Catalyst 9300 Series Switch
- Explore Switch Management Automation and Programmability

SUNSET LEARNING INSTITUTE (SLI) DIFFERENTIATORS:

Sunset Learning Institute (SLI) has been an innovative leader in developing and delivering authorized technical training since 1996. Our goal is to help our customers optimize their cloud technology investments by providing convenient, high quality technical training that our customers can rely on. We empower students to master their desired technologies for their unique environments.

What sets SLI apart is not only our immense selection of trainings options, but our convenient and consistent delivery system. No matter how complex your environment is or where you are located, SLI is sure to have a training solution that you can count on!

Premiere World Class Instruction Team

- All SLI instructors have a four-year technical degree, instructor level certifications and field consulting work experience.
- Sunset Learning has won numerous Instructor Excellence and Instructor Quality Distinction awards since 2012

Enhanced Learning Experience

- The goal of our instructors during class is ensure students understand the material, guide them through our labs and encourage questions and interactive discussions.

Convenient and Reliable Training Experience

- You have the option to attend classes at any of our established training facilities or from the convenience of your home or office with the use of our HD-ILT network (High Definition Instructor Led Training)
- All Sunset Learning Institute classes are guaranteed to run – you can count on us to deliver the training you need when you need it!

Outstanding Customer Service

- Dedicated account manager to suggest the optimal learning path for you and your team
- Enthusiastic Student Services team available to answer any questions and ensure a quality training experience