

---

## Introduction to 802.1X Operations for Cisco Security Professionals

**Duration: 3 Days**    **Course Code: 8021X**

---

### Overview:

The Introduction to 802.1X Operations for Cisco Security Professionals (802.1X) course is designed to prepare Cisco Channel Partners, systems engineers, and implementers with the knowledge and hands-on experience to prepare them to configure Cisco TrustSec solutions based on Cisco Identity Services module, Cisco Catalyst switches, and Cisco Wireless LAN Controllers. The goal of the course is to provide students with foundational knowledge in the capabilities and functions of the IEEE 802.1X protocol and the ability to configure the Cisco Identity Services Engine (ISE) for 802.1X operation. The course will introduce the architecture, components, and features of a Cisco TrustSec network designed around the IEEE 802.1X and RADIUS protocols

---

### Target Audience:

This course is designed for: Cisco Channel Partner systems engineers and field engineers that are seeking to meet the education requirements to attain Authorized Technology Provider (ATP) authorization to sell Cisco ISE. Security architects, design engineers, and others seeking hands-on experience with Cisco TrustSec 802.1X deployments with Cisco ISE

---

### Objectives:

- Upon completing this course, the learner will be able to meet these overall objectives:
    - Describe identity-based networking concepts and components
    - Define the components and processes of port-based authentication
    - Identify the 802.1X components and their interrelation at a high level
    - Identify requirements and options for non-suppliant devices
    - Position individual components of an 802.1X network and identify compatibilities
- 

### Prerequisites:

The knowledge and skills that a learner must have before attending this course are as follows:

- Knowledge of Microsoft Windows Server 2008 Active Directory
  - Knowledge of Cisco wireless LAN controllers and lightweight access points
  - Knowledge of basic command-line configuration of Cisco Catalyst switches
  - Attendance of Securing Networks with Routers and Switches (SNRS) or equivalent knowledge
- 

### Follow-on-Courses:

- Implementing Cisco Identity Services Engine Secure Solutions(ICISE)
-

## Content:

### Cisco TrustSec

- Surveying Cisco TrustSec
- Surveying Cisco TrustSec Architecture Components

### Port-Based Authentication

- Surveying the IEEE 802.1X Standard
- Surveying 802.1X and EAP
- Describing the Role of RADIUS in EAP Communications

### Configure Devices for 802.1X Operation

- Identifying 802.1X Components and Topologies
- Configuring Cisco ISE for 802.1X
- Configuring Network Devices for 802.1X
- Configuring Supplicants for 802.1X Operation

### Configure Guest Access

- Configuring Cisco TrustSec for Non-Supplicant Devices
- Configuring Cisco WebAuth for Non-Supplicant Devices

### Design Cisco TrustSec Networks with Cisco ISE and 802.1X

- Identifying Component Compatibilities with 802.1X
- Reviewing 802.1X Design Considerations That Impact Implementation
- Reviewing Scalable 802.1X Architectures

---

## Further Information:

For More information, or to book your course, please call us on +254 713 027 191

[training@clclearningafrica.com](mailto:training@clclearningafrica.com)

[www.clclearningafrica.com](http://www.clclearningafrica.com)

Computer Learning Centre 2nd Floor Museum Hill Centre, Muthithi Road, Westlands, Nairobi, Kenya