

# 802.1X (INTRODUCTION TO 802.1X OPERATIONS FOR CISCO SECURITY PROFESSIONALS (802.1X) V2.0) 2.0

## Objetivo

We highlight the main objectives below:

- Describe Cisco Identity-Based Networking Services (IBNS) for providing access control to corporate networks
- Describe Extensible Authentication Protocol (EAP) authentication types and methods, and the role of RADIUS protocol in EAP communications;
- Describe how to configure Cisco Catalyst switches, Cisco Wireless LAN Controllers (WLCs), and Cisco ISE for 802.1X operation;
- Describe how to configure access for non-suppliant devices in an 802.1X deployment;
- Describe how to plan and deploy Cisco IBNS Networks with Cisco ISE and 802.1X.

## Público Alvo

Professionals interested in knowing and implementing solutions using the 802.1X protocol in wired and wireless networks.

## Pré-Requisitos

The knowledge and skills recommended before attending this course are:

- Configuring Cisco wireless LAN controllers;
- Basic command-line configuration of Cisco Catalyst switches;
- Microsoft Windows Server Active Directory.

## Carga Horária

24 horas (3 dias).

## Conteúdo Programático

### **Describing Cisco Identity-Based Networking Services**

Cisco IBNS Overview

Authentication, Authorization, and Accounting (AAA) Role in Cisco IBNS

Compare Cisco IBNS and Cisco ISE Solutions

Explore Cisco IBNS Architecture Components

Explore Cisco TrustSec

### **Describing 802.1X EAP Authentication**

Explore the IEEE 802.1X Standard

Explore 802.1X and EAP

Explain EAP Methods

Describe the Role of RADIUS in EAP Communications

### **Configuring Devices for 802.1X Operation**

- Identify 802.1X Components and Topologies
- Configure Cisco Catalyst Switch for 802.1X
- Compare IBNS 1.0 and 2.0 on Cisco Catalyst Switch
- Configure Cisco WLC for 802.1X
- Configure Cisco ISE for 802.1X
- Configure Supplicants for 802.1X Operation

### **Configuring Access for Non-Supplicant Devices**

- Configure Cisco IBNS for Non-Supplicant Devices
- Explore IBNS 2.0 for Non-Supplicant Devices
- Configure Cisco Central Web Authentication for Guests

### **Designing Cisco IBNS Networks with Cisco ISE and 802.1X**

- Cisco ISE Architectural Components
- Introducing the Cisco ISE Bring Your Own Device (BYOD) Process
- Identify Cisco ISE Deployment Options
- Identify Component Compatibilities with 802.1X
- Review 802.1X Design Considerations

### **Lab outline**

Lab 1: Configure and Test 802.1X Operations