

**802-1X**

## **Introduction to 802.1X Operations for Cisco Security Professionals (802.1X) v2.0**

24 horas

Security &amp; Cybersecurity

Cisco

### **INTRODUÇÃO**

The Introduction to 802.1X Operations for Cisco Security Professionals (802.1X) v2.0 shows you how to configure and prepare to deploy Cisco® Identity-Based Networking Services (IBNS) solutions based on Cisco Identity Services Engine (ISE), Cisco Catalyst switches, and Cisco Wireless LAN Controllers. You will learn the fundamentals of the 802.1X protocol and configuration, Cisco IBNS, configuring access for non-suppliant devices, Cisco ISE deployment options, architectural components, considerations with 802.1X, and more.

You will also gain hands-on experience configuring 802.1X-based network services using the Cisco Identity Services Engine and a Cisco Catalyst switch.

### **OBJETIVO DO CURSO**

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.

## **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