802-1X

Introduction to 802.1X Operations for Cisco Security Professionals (802.1X)

24 horas | Security & Cybersecurity | Cisco

Cisco Continuing Education Credits

12 CE Credits

INTRODUÇÃO

The Introduction to 802.1X Operations for Cisco Security Professionals (802.1X) training 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-supplicant 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.
This training also earns you 12 Continuing Education (CE) credits toward recertification.

How you'll benefit
This training will help you:
• Learn about and practice configuring Cisco Identity-Based Networking Services solutions at your own pace
• Build your skills using Cisco IBNS to secure network connectivity and resources
• Earn 12 CE credits toward recertification

OBJETIVO DO CURSO

We highlight the main objectives below:
Describe Cisco IBNS for providing access control to corporate networks
• Describe Extensible Authentication Protocol (EAP) authentication types and methods, and the role of Remote Authentication Dial-In User Service (RADIUS) 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-supplicant 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

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

• Cisco wireless LAN controllers

• Basic command-line configuration of Cisco Catalyst switches

• Microsoft Windows Server Active Directory

These skills can be found in the following Cisco Learning Offering: CCNA

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

Configure an 802.1X Supplicant for Tunneled EAP (TEAP)

Configure Cisco Catalyst Switch for IEEE 802.1X

802.1X Configuration on Cisco Wireless LAN Controllers

802.1X Configuration on Meraki Devices

Configure MAC Authentication Bypass on Cisco Network Devices

Troubleshoot Cisco IBNS Networks