Cisco® Introduction to 802.1X Operations for Cisco® Security Professionals v1.0 (8021X)

Overview

Students will gain the foundational knowledge of IEEE 802.1X protocol; the skills that are needed to configure the Cisco Identity Services Engine (ISE) for 802.1X operation; hands-on experience configuring a network for 802.1X-based network services.

Prerequisite Comments

The following prerequisite skills and knowledge are recommended before attending this course:
- Cisco CCNA
- Familiarity with the TCP/IP protocol suite
- Command line-level experience with Cisco IOS commands
- Basic knowledge of Microsoft Windows Active Directory

Target Audience

This course is intended for Cisco Partner Sales Engineers and Field engineers supporting customers with 802.1x solutions. The primary audience for this course is Cisco Channel Partner SEs and FEs that are seeking to meet the education requirements to attain ATP authorization to sell Cisco ISE. The secondary audience for this course is security architects, design engineers, and others seeking hands-on experience with Cisco TrustSec 802.1X deployments with Cisco ISE.

Course Objectives

Upon completing this course, students will be able to meet these 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

Course Outline

1 - Cisco TrustSec

Surveying Cisco TrustSec
Surveying Cisco TrustSec Architecture Components
2 - Port-Based Authentication
Surveying the IEEE 802.1X Standard
Surveying 802.1X and EAP
Surveying 802.1X and EAP

3 - Configure Devices for 802.1X Operation
Identifying 802.1X Components and Topologies
Identifying 802.1X Components and Topologies
Configuring Network Devices for 802.1X
Configuring Supplicants for 802.1X Operation

4 - Configure Guest Access
Configuring Cisco TrustSec for Non-Supplicant Devices
Configuring Cisco WebAuth for Non-Supplicant Devices

5 - 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