



Implementing Cisco Secure Access Solutions (SISAS)

Course ID#: 1575-953-ZZ-W

Hours: 35

Course Content

Course Description:

The Implementing Cisco Security Access Solutions (SISAS) course describes an access control solution that centers on the Cisco Identity Services Engine (ISE). The learners build the solution by implementing basic authentication and then extending the system with the authorization, guest services, Cisco TrustSec, posture, and profiling components. The most fundamental concepts include the authentication methods, such as 802.1X, MAC Authentication Bypass (MAB), and Web authentication (WebAuth). The learners implement various types of the Extensible Authentication Protocol (EAP) using two different 802.1X supplicants: the native Windows OS supplicant and the Cisco AnyConnect supplicant. The Cisco AnyConnect supplicant is used for a range of scenarios, including EAP chaining. Although the Web Authentication and the guest services are often deployed together, the learners first implement the WebAuth feature for employee access and then enable the guest feature to allow guest access. The posture service on the ISE is used to determine the security posture status of the endpoints. The learners use the built-in posture elements pre-configured in the ISE, and also implement a custom remediation to automatically install antivirus software. The ISE offers a wide range of profiling capabilities. The learners test the default functionality with the common probes enabled, and extend the profiling granularity by defining custom policies. The course ends with a troubleshooting lesson and an optional troubleshooting lab exercise.

Prerequisites:

- Familiarity with basic Cisco access control solutions and 802.1X
- Familiarity with general networking principles equivalent to the CCNA level
- Familiarity with basic network security concepts equivalent to the CCNA Security level

Topics:

Module 1: Threat Mitigation Through Identity Services

- Identity Services
- 802.1X and EAP
- Identity System Quick Start

Module 2: Cisco ISE Fundamentals

- Cisco ISE Overview
- Cisco ISE PKIPKI
- Cisco ISE Authentication
- Cisco ISE External Authentication



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Module 3: Advanced Access Control

- Certificate-Based User Authentication
- Authorization
- Cisco TrustSec and MACsec

Module 4: Web Authentication and Guest Access

- Deploying WebAuth
- Deploying Guest Service

Module 5: Endpoint Access Control Enhancements

- Deploying Posture Service
- Deploying Profiler Service
- Implementing BYOD

Module 6: Access Control Troubleshooting

- Troubleshooting Network Access Controls



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