



# SISE: Implementing and Configuring Cisco Identity Services Engine v1.2

Course ID#: 1575-954-ZZ-W

Hours: 35

## Course Content

### Course Description:

This course is geared towards students who have no prior knowledge of ISE and 802.1X. The ISE product is Cisco's flagship security product, intended to replace several major current products, including NAC Servers and Managers, NAC Profiler, Guest Server, Profiler, and the Cisco Secure Access Control Server (ACS).

In this course with enhanced hands-on labs, you will cover the Cisco Identity Services Engine (ISE) version 1.1.1, a next generation identity and access control policy platform that provides a single policy plane across the entire organization combining multiple services, including authentication, authorization, and accounting (AAA), posture, profiling, device on-boarding, and guest management.

You will gain the knowledge and skills needed to enforce security posture compliance for wired and wireless endpoints and enhance infrastructure security using the Cisco ISE. You will learn how to perform a fundamental installation of ISE and how to configure identity-based networks using 802.1X for both wired and wireless clients, using a Windows 7 client. You will also learn to use many of the new features, including AnyConnect 3.1, EAP-FAST, PEAP, BYOD, and EAP Chaining. You'll also see how the new Virtual Wireless Controller (vWLC) works to integrate with ISE along with advanced features within ISE.

### Prerequisites:

- CCNA certification or equivalent level of experience configuring Cisco routers and switches
- Basic knowledge of IOS commands
- LAN security related concepts
- 802.1X - Introduction to 802.1X Operations for Cisco Security Professionals

### Topics:

#### Module 1: Cisco ISE Product

- Cisco ISE
- Cisco TrustSec
- Cisco ISE Architecture
- Cisco ISE Deployment Options
- Getting Started with Cisco ISE Installing Cisco ISE
- Network Time Protocol
- Cisco ISE Certificates
- Monitoring Basics



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- Configuring and Verifying Cisco ISE for Distributed Deployment

## Module 2: Cisco ISE Authentication and Authorization

- Configuring Basic Access
- Network Access Device (NAD)
- IEEE 802.1X Primer
- Cisco Switch Configuration
- Cisco WLC Configuration
- Cisco ASA Appliance Configuration
- Cisco ISE Authentication Process
- Internal Databases
- Simple Authentication
- Rule-Based Authentication
- Sessions in Cisco ISE
- External Authentication
- External Authentication Process
- Active Directory
- Lightweight Directory Access Protocol (LDAP)
- RADIUS
- Certificates
- Identity Source Sequencing
- Authentication Support and Performance
- Using Cisco ISE Dictionaries
- Cisco ISE Dictionaries
- Read-Only Dictionaries
- Administrable Dictionaries
- RADIUS Vendor Dictionaries
- Configuring Authorization
- Authorization Policies and Components
- Authorization Policy Configuration
- Exception Policies

## Module 3: Web Authentication and User Access Management

- Implementing Web Authentication
- Web Authentication
- Configure Cisco ISE Web Authentication
- Verifying Web Authentication
- Implementing Guest Services
- Guest Services
- Preparing the Deployment
- Configuring Sponsor Portal
- Configuring Guest Portal
- Creating Guest Accounts
- Verifying Guest Accounts

## Module 4: Cisco ISE Profiler, Posture, and Endpoint Protection Services

- Implementing Cisco ISE Profiler Service
- Profiler Service
- Configuring Profiling on Cisco ISE
- Verifying Profiling
- Implementing Cisco ISE Posture Service
- Posture Service
- Configuring Cisco ISE for Client Provisioning
- Adapting the Authorization Policy for Posture Compliance
- Configuring the Posture System Settings
- Configuring the Posture Policy
- Verifying the Posture Service
- Implementing Cisco ISE Endpoint Protection Services (EPS)EPS
- Configuring EPS
- Monitoring EPS
- Implementing BYOD
- BYOD
- Designing BYOD
- Dual SSID BYOD Design
- Device Onboarding User Experience



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## Module 5: Reports, Monitoring, Troubleshooting, and Security

- Implementing Inline Posture and TrustSec Security
- Inline Posture
- Security Group Access
- MAC Security
- Cisco ISE Architecture
- Cisco ISE Deployment Types
- Deploying Monitoring Personas
- Preparing the Network Infrastructure
- Performing Cisco ISE Administration and Maintenance
- Role-Based Access Control
- Cisco ISE Licensing
- Backing Up and Restoring the System Configuration
- Using Cisco ISE Reporting, Monitoring, and Troubleshooting
- Cisco ISE Dashboard Monitoring
- Implementing Logging
- Managing Alarms
- Cisco ISE Reports
- Troubleshooting the Network
- Backing Up and Restoring the Monitoring Database