

Implementing and Configuring Cisco Identity Services Engine (SISE)

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In this Implementing and Configuring Cisco Identity Services Engine course provides a comprehensive introduction to Cisco Identity Services Engine, focusing on how identity, context, and policy are used to control network access across wired, wireless, and VPN environments. It is designed for network and security professionals who need to deploy, configure, and troubleshoot Cisco ISE as a centralized policy engine for authentication, authorization, and accounting. The course establishes a strong architectural foundation before progressing into hands-on policy enforcement and operational use cases.

Students begin by exploring Cisco ISE architecture, deployment models, licensing, and new features introduced in Cisco ISE 3.x. Core policy enforcement components are covered in detail, including 802.1X, MAC Authentication Bypass, certificate-based authentication, Active Directory integration, and support for additional identity sources. Policy configuration modules guide students through building authentication and authorization rules that dynamically control user and device access based on identity, posture, and context.

The course expands into advanced access scenarios such as guest services, web authentication, BYOD onboarding, endpoint profiling, and posture compliance. Cisco TrustSec is introduced as a scalable segmentation framework using Security Group Tags, while TACACS+ device administration modules address centralized management of network infrastructure access.

Extensive CTCLC-custom labs reinforce each topic through real-world scenarios, including policy creation, profiling, guest access, BYOD compliance, TrustSec configuration, and troubleshooting, preparing students for enterprise deployments and the 300-715 certification exam.

How you'll benefit

This class will help you:

- Gain hands-on experience configuring, deploying, and operating Cisco ISE for identity-based access control in enterprise environments
- Develop skills to design and implement secure authentication, authorization, guest access, and BYOD onboarding policies for both wired and wireless networks
- Learn to integrate Cisco ISE with Active Directory, LDAP, and network devices, as well as configure endpoint profiling and compliance-based access controls
- Acquire troubleshooting techniques for authentication and policy issues using practical labs and reporting tools, improving real-world problem-solving abilities
- Prepare for the 300-715 SISE v1.1 exam
- Earn 32 CE credits toward recertification

Course Duration

5 days

Course Price

\$4,395.00 or 44 CLCs

Methods of Delivery

- Instructor Led
- Virtual ILT
- On-Site

Why Attend with Current Technologies CLC

- Our Instructors are in the top 10% rated by Cisco
- Our Lab has a dedicated 1 Gig Fiber Connection for our Labs
- Our Labs run up to Date Code for all our courses

Who Should Attend

The primary audience for this course is as follows:

- Network Security Engineers
- Network Administrators
- Consulting Security Engineers
- Technical Solutions Architects
- Network Managers
- Sales Engineers
- Account Managers

Prerequisites

To fully benefit from this course, you should have the following knowledge:

- Familiarity with the Cisco IOS® Software Command-Line Interface (CLI) for wired and wireless devices
- Familiarity with Cisco Secure Client
- Familiarity with Microsoft Windows operating systems
- Familiarity with 802.1X

OUTLINE

Module 1: Introducing Cisco ISE Architecture

- Cisco ISE as a Network Access Policy Engine
- Cisco ISE Use Cases
- Cisco ISE Functions

Module 2: Introducing Cisco ISE Deployment

- Cisco ISE Deployment Models
- Cisco ISE Licensing and Network Requirements
- Cisco ISE Context Visibility Features
- New Features in Cisco ISE 3.X

Module 3: Introducing Cisco ISE Policy Enforcement Components

- 802.1X for Wired and Wireless Access
- MAC Authentication Bypass for Wired and Wireless Access
- Identity Management
- Active Directory Identity Source
- Additional Identity Sources
- Certificate Services

Module 4: Introducing Cisco ISE Policy Configuration

- Cisco ISE Policy
- Cisco ISE Authentication Rules
- Cisco ISE Authorization Rules

Module 5: Troubleshooting Cisco ISE Policy and Third-Party NAD Support

- Cisco ISE Third-Party Network Access Device Support
- Troubleshooting Cisco ISE Policy Configuration

Module 6: Exploring Cisco TrustSec

- Cisco TrustSec Overview
- Cisco TrustSec Enhancements
- Cisco TrustSec Configuration

Module 7: Introducing Web Authentication and Guest Services

- Web Access with Cisco ISE
- Guest Access Components
- Guest Access Settings

Module 8: Configuring Hotspots and Guest Portals

Module 9: Configuring Cisco ISE BYOD

- Cisco ISE BYOD Solution Overview
- Cisco ISE BYOD Flow
- My Devices Portal Configuration
- Certificate Configuration in BYOD Scenarios

Module 10: Working with Network Access Devices

- Reviewing AAA
- Cisco ISE TACACS+ Device Administration
- Configuring TACACS+ Device Administration
- TACACS+ Device Administration Guidelines and Best Practices
- Migration from Cisco ACS to Cisco ISE

Module 11: Introducing the Cisco ISE Profiler

- ISE Profiler Overview
- Cisco ISE Probes
- Profiling Policy

Module 12: Introducing Profiling Best Practices and Reporting

- Profiling Best Practices

Module 13: Introducing Cisco ISE Endpoint Compliance Services

- Endpoint Compliance Services Overview

Module 14: Configuring Client Posture Services and Compliance

- Configuring Client Posture Services and Compliance
- Client Posture Services and Provisioning Configuration

LAB OUTLINE (these labs are Custom to CTCLC)

Lab 0: Lab Access via View Horizon Client

Lab 1: Cisco ISE GUI Familiarization and Initial Configuration

Lab 2: MAB Authentication

Lab 3: Integrate 9K-Client Switch and ISE

Lab 4: Create Policies for Domain Computers

Lab 5: Create Policies for Employee

Lab 6: Create Policies for Contractors

Lab 7: Create Policies for the Wireless Users

Lab 8: Configure Hotspot Portal

Lab 9: Client Testing – Hotspot Portal

Lab 10: Configure Self-Registration Portal

Lab 11: Configure Self-Registration Portal with Sponsor Approval

Lab 12: Configure Sponsored Guest Portal

Lab 13: Configure Profiling

Lab 14: Configure Profiling for Cisco IP Phone

Lab 15 (Optional): Create Cisco ISE Profiling Reports

Lab 16: Configure BYOD

Lab 17: BYOD Device Management

Lab 19: Configure Posture Compliance Services on Cisco ISE

Lab 20: Configure Client Provisioning Portal

Lab 21: Configure Posture Elements and Posture Policy

Lab 22: Posture Authorization Profiles and Policy Sets

Lab 23: Test Compliance Policy for BYOD User

Lab 24: Agentless Posture

Lab 25: Configure Cisco ISE for Basic Device Administration

Lab 26: Configure TACACS+ Command Authorization

Lab 27: Configure Cisco TrustSec