

# Implementing and Configuring Cisco Identity Services Engine (SISE) Training

Cisco Authorized Training · Applied Technology Academy

In the Implementing and Configuring Cisco Identity Services Engine (SISE) course you will learn to deploy and use Cisco Identity Services Engine (ISE) v3.x, an identity and access control policy platform that simplifies the delivery of consistent, highly secure access control across wired, wireless, and VPN connections.

| LEVEL        | DURATION | EXPERIENCE | AVERAGE SALARY | LABS |
|--------------|----------|------------|----------------|------|
| Intermediate | 5 Days   | Cisco CCNA | \$122,000      | Yes  |

## Course Overview

This hands-on course provides you with the knowledge and skills to implement and apply Cisco ISE capabilities to support use cases for Zero Trust security posture. These use cases include tasks such as policy enforcement, profiling services, web authentication and guest access services, BYOD, endpoint compliance services, and TACACS+ device administration. Implementing and Configuring Cisco Identity Services Engine (SISE) course teaches you to deploy and use Cisco® Identity Services Engine (ISE) v3.x, an identity and access control policy platform that simplifies the delivery of consistent, highly secure access control across wired, wireless, and VPN connections.

After taking this course, you should be able to:

- Develop and Implement SASE architecture
- Understand application of ISE capabilities towards development of a Zero Trust Approach
- Enable BYOD and guest access
- Centrally configure and manage posture, authentication and authorization services in a single web-based GUI console
- Gain leading-edge career skills for high-demand job roles and responsibilities focused on enterprise security
- Explain Cisco ISE deployment
- Describe Cisco ISE policy enforcement components
- Describe Cisco ISE policy configuration
- Troubleshoot Cisco ISE policy and third-party Network Access Device (NAD) support
- Configure guest access
- Configure hotspots and guest portals
- Describe the Cisco ISE profiler services
- Describe profiling best practices and reporting
- Configure a Cisco ISE BYOD solution

- Configure endpoint compliance
- Configure client posture services
- Configure Cisco ISE device administration
- Describe Cisco ISE TrustSec configurations

## Course Outline

- Introducing Cisco ISE Architecture
- Introduction
- Cisco ISE as a Network Access Policy Engine
- Cisco ISE Use Cases
- Cisco ISE Functions
- Summary
- Summary Challenge
- Introducing Cisco ISE Deployment
- Introduction
- Cisco ISE Deployment Models
- Cisco ISE Licensing and Network Requirements
- Cisco ISE Context Visibility Features
- New Features in Cisco ISE 3.X
- Configure Initial Cisco ISE Setup and System Certificate Usage
- Summary
- Summary Challenge
- Introducing Cisco ISE Policy Enforcement Components
- Introduction
- 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
- Integrate Cisco ISE with Active Directory
- Summary
- Summary Challenge
- Introducing Cisco ISE Policy Configuration
- Introduction
- Cisco ISE Policy

- Cisco ISE Authentication Rules
- Cisco ISE Authorization Rules
- Configure Cisco ISE Policy for MAB
- Configure Cisco ISE Policy for 802.1X
- Summary
- Summary Challenge
- Troubleshooting Cisco ISE Policy and Third-Party NAD Support
- Introduction
- Cisco ISE Third-Party Network Access Device Support
- Troubleshooting Cisco ISE Policy Configuration
- Summary
- Summary Challenge
- Introducing Web Authentication and Guest Services
- Introduction
- Web Access with Cisco ISE
- Guest Access Components
- Guest Access Settings
- Configure Guest Access
- Summary
- Summary Challenge
- Configuring Hotspots and Guest Portals
- Introduction
- Sponsor and Guest Portals Configuration
- Configure Hotspot and Self-Registered Guest Access
- Configure Sponsor-Approved and Fully Sponsored Guest Access
- Create Guest Reports
- Summary
- Summary Challenge
- Introducing the Cisco ISE Profiler
- Introduction
- ISE Profiler Overview
- Cisco ISE Probes
- Profiling Policy
- Configure Profiling
- Customize the Cisco ISE Profiling Configuration
- Summary

- Summary Challenge
- Introducing Profiling Best Practices and Reporting
- Introduction
- Profiling Best Practices
- Create Cisco ISE Profiling Reports
- Summary
- Summary Challenge
- Configuring Cisco ISE BYOD
- Introduction
- Cisco ISE BYOD Solution Overview
- Cisco ISE BYOD Flow
- My Devices Portal Configuration
- Certificate Configuration in BYOD Scenarios
- Configure BYOD
- Manage a Lost or Stolen BYOD Device
- Summary
- Summary Challenge
- Introducing Cisco ISE Endpoint Compliance Services
- Introduction
- Endpoint Compliance Services Overview
- Configure Cisco ISE Compliance Services
- Summary
- Summary Challenge
- Configuring Client Posture Services and Compliance
- Introduction
- Client Posture Services and Provisioning Configuration
- Configure Client Provisioning
- Configure Posture Policies
- Test and Monitor Compliance-Based Access
- Summary
- Summary Challenge
- Working With Network Access Devices
- Introduction
- 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
- Configure Cisco ISE for Basic Device Administration
- Configure Cisco ISE Command Authorization
- Summary
- Summary Challenge
- Exploring Cisco TrustSec
- Introduction
- Cisco TrustSec Overview
- Cisco TrustSec Enhancements
- Cisco TrustSec Configuration
- Configure Cisco TrustSec
- Summary
- Summary Challenge

Labs:

- Lab 1A: Installation and Basic Setup of Cisco ISE
- Lab 1B: Verify Initial Cisco ISE Setup and System Certificate Usage
- Lab 2: Integrate Cisco ISE with Active Directory
- Lab 3: Configure Cisco ISE Policy for MAB
- Lab 4: Configure Cisco ISE Policy for 802.1X
- Lab 5: Configure Guest Access
- Lab 6: Configure Hotspot and Self-Registered Guest Access
- Lab 7: Configure Sponsor-Approved and Fully Sponsored Guest Access
- Lab 8: Create Guest Reports
- Lab 9: Configure Profiling
- Lab 10: Customize the Cisco ISE Profiling Configuration
- Lab 11: Create Cisco ISE Profiling Reports
- Lab 12: Configure BYOD
- Lab 13: Manage a Lost or Stolen BYOD Device
- Lab 14: Configure Cisco ISE Compliance Services
- Lab 15: Configure Client Provisioning
- Lab 16: Configure Posture Policies
- Lab 17: Test and Monitor Compliance-Based Access
- Lab 18: Configure Cisco ISE for Basic Device Administration
- Lab 19: Configure Cisco ISE Command Authorization

- Lab 20: Configure Cisco TrustSec

## Intended Audience

- Security Engineer
- Network Engineer
- Network Designer
- Network Administrator
- Systems Engineer
- Consulting Systems Engineer
- Technical Solutions Architect
- Cisco Integrators/Partners
- Network Manager
- Cisco integrators and partners

## Prerequisites

The knowledge and skills that a learner should have before attending this course are as follows:

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

Recommended Cisco offerings that may help you meet these prerequisites:

- Cisco CCNP Security Certification training

## Follow-On Courses

- Implementing and Operating Cisco Security Core Technologies (SCOR)
- Designing Cisco Security Infrastructure (SDSI)

**Ready to enroll?** Call 800.674.3550 or email Info@AppliedTechAc.com — private team cohorts, GSA MAS purchasing, military credentialing funding, VA GI Bill and VR&E and student financing available.