

# Designing Cisco Security Infrastructure (SDSI)

ID SDSI Price on request Duration 5 days

## Who should attend

- Cisco and Partner's Systems Engineers
- Customer Network & Infrastructure Engineers
- Customer Security/NOC Engineers

## Prerequisites

There are no prerequisites for this training. However, the knowledge and skills you are recommended to have before attending this training are:

- Cisco CCNP Security or equivalent knowledge
- Familiarity with Microsoft Windows Operating Systems
- Familiarity with the Cisco Security portfolio

These skills can be found in the following Cisco Learning Offerings:

- [Implementing and Operating Cisco Security Core Technologies \(SCOR\)](#)
- [Fundamentals of Cisco Firewall Threat Defense and Intrusion Prevention \(SFWIPF\)](#)
- [Implementing and Configuring Cisco Identity Services Engine \(SISE\)](#)
- [Designing and Implementing Secure Cloud Access for Users and Endpoints \(SCAZT\)](#)
- [Advanced Techniques for Cisco Firewall Threat Defense and Intrusion Prevention \(SFWIPA\)](#)
- [Implementing Automation for Cisco Security Solutions \(SAUI\)](#)
- [Implementing Secure Solutions with Virtual Private Networks \(SVPN\)](#)
- [Introducing Automation for Cisco Solutions \(CSAU\)](#)
- [Securing Your Email with Cisco IronPort C-Series \(SESA\)](#)
- [Securing the Web with Cisco Web Security Appliance \(SWSA\)](#)

## Course Objectives

- Identify and explain the fundamental concepts of security architecture and how they support the design, building, and maintenance of a secure infrastructure
- Identify the layers of security infrastructure, core security

- technologies, and infrastructure concepts
- Explain how security designs principles contribute to secure infrastructure
- Identify and discuss security design and management frameworks that can be used for infrastructure security design
- Explain the importance of and methods for enforcement of regulatory compliance in security design
- Identify tools that enable detection and response to infrastructure security incidents
- Explain various strategies that can be implemented to modify traditional security architectures to meet the technical requirements of modern enterprise networks
- Implement secure network access methods, such as 802.1X, MAC Authentication Bypass (MAB), and web-based authentication
- Describe security technologies that can be applied to enterprise Wide Area Network (WAN) connections
- Compare methods to secure network management and control plane traffic
- Compare the differences between traditional firewalls and next-gen firewalls (NGFWs) and identify the advanced features that NGFWs provide
- Explain how web application firewalls (WAFs) secure web applications from threats
- Describe the key features and best practices for deploying intrusion detection system (IDS) and intrusion prevention system (IPS) as part of the enterprise infrastructure security design
- Explain how endpoints and services in cloud-native or microservice environments can be protected with host-based or distributed firewalls
- Discuss security technologies that address application data and data that is in transit
- Identify several security solutions for cloud-native applications, microservices, and containers
- Explain how technology advancements allow for improvements in today's infrastructure security
- Identify tools that enable detection and response to infrastructure security incidents
- Describe frameworks and controls to access and mitigate security risks for infrastructure
- Explain how to make security adjustments following a security incident
- Identify DevSecOps integrations that improve security management and response
- Discuss how to ensure that automated services are secure

- Discuss how AI can aid in threat detection and response

## Training Centres worldwide



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