

# Securing Networks with Cisco Firepower Next Generation Firewall (SSNGFW) v1.0

## What you'll learn in this course

The **Securing Networks with Cisco Firepower Next Generation Firewall (SSNGFW) v1.0** course shows you how to deploy and use Cisco Firepower® Threat Defense system. This hands-on course gives you knowledge and skills to use and configure Cisco® Firepower Threat Defense technology, beginning with initial device setup and configuration and including routing, high availability, Cisco Adaptive Security Appliance (ASA) to Cisco Firepower Threat Defense migration, traffic control, and Network Address Translation (NAT). You will learn how to implement advanced Next-Generation Firewall (NGFW) and Next-Generation Intrusion Prevention System (NGIPS) features, including network intelligence, file type detection, network-based malware detection, and deep packet inspection. You will also learn how to configure site-to-site VPN, remote-access VPN, and SSL decryption before moving on to detailed analysis, system administration, and troubleshooting.

This course helps you prepare to take the exam, **Securing Networks with Cisco Firepower (300-710 SNCF)**, which leads to **CCNP Security** and **Cisco Certified Specialist – Network Security Firepower** certifications. The **300-710 SNCF** exam has a second preparation course as well, **Securing Networks with Cisco Firepower Next-Generation Intrusion Prevention System (SSFIPS)**. You can take these courses in any order.

## Course duration

- Instructor-led training: 5 days in the classroom with hands-on lab practice
- Virtual instructor-led training: 5 days of web-based classes with hands-on lab practice
- E-learning: Equivalent of 5 days of instruction with videos, practice, and challenges

## How you'll benefit

This class will help you:

- Implement Cisco Firepower NGFW to provide advanced threat protection before, during, and after attacks
- Gain leading-edge skills for high-demand responsibilities focused on security

## What to expect in the exam

The 300-710 SNCF exam certifies your knowledge of Cisco Firepower Threat Defense and Firepower, including policy configurations, integrations, deployments, management, and troubleshooting. The exam will be available beginning February 24, 2020.

After you pass 300-710 SNCF:

- You earn the **Cisco Certified Specialist - Network Security Firepower** certification.
- You will have satisfied the concentration exam requirement for the new CCNP Security certification. To complete your **CCNP Security**, you also need to pass the **Implementing and Operating Cisco Security Core Technologies (350-701 SCOR)** exam or its equivalent.

## Who should enroll

- Security administrators
- Security consultants
- Network administrators
- System engineers
- Technical support personnel
- Cisco integrators and partners

## How to enroll

- For instructor-led training, visit the [Cisco Learning Locator](#).
- For private group training, visit [Cisco Private Group Training](#).
- For e-learning, visit the [Cisco Learning Network Store](#).
- For digital library access, visit [Cisco Platinum Learning Library](#).
- For e-learning volume discounts, contact [ask\\_cpll@cisco.com](mailto:ask_cpll@cisco.com).

## Technology areas

- Security

## Course details

### Objectives

After taking this course, you should be able to:

- Describe key concepts of NGIPS and NGFW technology and the Cisco Firepower Threat Defense system, and identify deployment scenarios
- Perform initial Cisco Firepower Threat Defense device configuration and setup tasks
- Describe how to manage traffic and implement Quality of Service (QoS) using Cisco Firepower Threat Defense
- Describe how to implement NAT by using Cisco Firepower Threat Defense
- Perform an initial network discovery, using Cisco Firepower to identify hosts, applications, and services
- Describe the behavior, usage, and implementation procedure for access control policies
- Describe the concepts and procedures for implementing security intelligence features
- Describe Cisco Advanced Malware Protection (AMP) for Networks and the procedures for implementing file control and advanced malware protection
- Implement and manage intrusion policies
- Describe the components and configuration of site-to-site VPN
- Describe and configure a remote-access SSL VPN that uses Cisco AnyConnect®
- Describe SSL decryption capabilities and usage

### Prerequisites

To fully benefit from this course, you should have

- Knowledge of TCP/IP and basic routing protocols
- Familiarity with firewall, VPN, and Intrusion Prevention System (IPS) concepts

## Outline

- Cisco Firepower Threat Defense Overview
  - Examining Firewall and IPS Technology
  - Firepower Threat Defense Features and Components
  - Examining Firepower Platforms
  - Examining Firepower Threat Defense Licensing
  - Cisco Firepower Implementation Use Cases
- Cisco Firepower NGFW Device Configuration
  - Firepower Threat Defense Device Registration
  - FXOS and Firepower Device Manager
  - Initial Device Setup
  - Managing NGFW Devices
  - Examining Firepower Management Center Policies
  - Examining Objects
  - Examining System Configuration and Health Monitoring
  - Device Management
  - Examining Firepower High Availability
  - Configuring High Availability
  - Cisco ASA to Firepower Migration
  - Migrating from Cisco ASA to Firepower Threat Defense
- Cisco Firepower NGFW Traffic Control
  - Firepower Threat Defense Packet Processing
  - Implementing QoS
  - Bypassing Traffic
- Cisco Firepower NGFW Address Translation
  - NAT Basics
  - Implementing NAT
  - NAT Rule Examples
  - Implementing NAT
- Cisco Firepower Discovery
  - Examining Network Discovery
  - Configuring Network Discovery
- Implementing Access Control Policies
  - Examining Access Control Policies
  - Examining Access Control Policy Rules and Default Action
  - Implementing Further Inspection
  - Examining Connection Events
  - Access Control Policy Advanced Settings
  - Access Control Policy Considerations
  - Implementing an Access Control Policy

- Security Intelligence
  - Examining Security Intelligence
  - Examining Security Intelligence Objects
  - Security Intelligence Deployment and Logging
  - Implementing Security Intelligence
- File Control and Advanced Malware Protection
  - Examining Malware and File Policy
  - Examining Advanced Malware Protection
- Next-Generation Intrusion Prevention Systems
  - Examining Intrusion Prevention and Snort Rules
  - Examining Variables and Variable Sets
  - Examining Intrusion Policies
- Site-to-Site VPN
  - Examining IPsec
  - Site-to-Site VPN Configuration
  - Site-to-Site VPN Troubleshooting
  - Implementing Site-to-Site VPN
- Remote-Access VPN
  - Examining Remote-Access VPN
  - Examining Public-Key Cryptography and Certificates
  - Examining Certificate Enrollment
  - Remote-Access VPN Configuration
  - Implementing Remote-Access VPN
- SSL Decryption
  - Examining SSL Decryption
  - Configuring SSL Policies
  - SSL Decryption Best Practices and Monitoring

- Detailed Analysis Techniques

- Examining Event Analysis
- Examining Event Types
- Examining Contextual Data
- Examining Analysis Tools
- Threat Analysis

- System Administration

- Managing Updates
- Examining User Account Management Features
- Configuring User Accounts
- System Administration

- Cisco Firepower Troubleshooting
  - Examining Common Misconfigurations
  - Examining Troubleshooting Commands
  - Firepower Troubleshooting

### Lab outline

- Initial Device Setup
- Device Management
- Configuring High Availability
- Migrating from Cisco ASA to Cisco Firepower Threat Defense
- Implementing QoS
- Implementing NAT
- Configuring Network Discovery
- Implementing an Access Control Policy
- Implementing Security Intelligence
- Implementing Site-to-Site VPN
- Implementing Remote Access VPN
- Threat Analysis
- System Administration
- Firepower Troubleshooting