

Hands-on course , 4  
day(s)  
Ref : CPF

### Participants

Security managers. System  
and network engineers.  
Security architects. Network  
or security technicians.

### Pre-requisites

Good knowledge of network  
administration with Cisco  
equipment and of computer  
security.

### Next sessions

# Cisco ASA Firewall, configuration and administration

## OBJECTIVES

*This course will help you acquire all the knowledge you need to deploy and maintain a security solution based on Cisco ASA.*

### [1\) Introduction](#)

### [2\) Address translation and connections](#)

### [3\) ACL and Content Filtering](#)

### [4\) AAA configuration](#)

### [5\) Routing and switching](#)

### [6\) VPN](#)

### [7\) Transparent firewall](#)

### [8\) Failover](#)

### [9\) Cisco Security Appliance Device Manager](#)

### [10\) Maintenance](#)

## 1) Introduction

- Firewall technologies and characteristics.
- Introduction to firewalls. Terminology and features.
- Examples of architectures. The ASA product line.
- Setting up an ASA. The user interface. Configuring the firewall.
- NTP settings. ASA security levels.
- Syslog configuration.

### Workshop

*Basic configuration of an ASA.*

## 2) Address translation and connections

- Dynamic NAT, static PAT and NAT.
- The TCP Intercept function.
- Connections, port redirects.
- DMZ configuration.

### Workshop

*Configuring an ASA for PAT with two and three interfaces. Publishing a Web server.*

## 3) ACL and Content Filtering

- Overview of the ACLs.
- Configuration of the ACLs.
- Filtering malicious active code.
- URL filtering.
- Groups of objects.
- Overview of object groups. Usages.
- Configuring object groups.

### Workshop

*Filtering HTTP and FTP network traffic. Creating and using object groups in the ACL.*

## 4) AAA configuration

- Overview of Cisco Secure ACS.
- Installing Cisco Secure ACS.
- Configuring authentication and authorization.
- Downloading ACLs.
- Troubleshooting AAA.

### Workshop

*Installing CSACS. Configuring ASA for AAA.*

## 5) Routing and switching

- Reminders about VLANs.
- Features supported.
- Static and dynamic routing.
- Multicasting.

### Workshop

*Configuring ASA for multi-VLAN, RIPv2, and OSPF.*

## 6) VPN

- Setting up VPNs.
- Configuring IPSec.
- The Cisco VPN client.
- Configuring remote access with Easy VPN.

- Configuring the Easy VPN server.
- Characteristics of remote Easy VPN.
- Overview and configuration of the client.
- Overview and configuration of WebVPN.

#### **Workshop**

*Setting up site-to-site VPN, VPN remote access, and WebVPN.*

### 7) Transparent firewall

- Transparent vs. Routed firewall.
- Unsupported features.
- Configuring IP addresses, ACLs, and ARP.
- Maintenance and troubleshooting.

#### **Workshop**

*Setting up a transparent firewall.*

### 8) Failover

- Overview of Failover modes. Configuring Failover and LAN Failover. Setting up Failover.
- Configuring Failover.
- Configuring LAN Failover.
- Setting up Failover in Active/Active mode.

#### **Workshop**

*Setting up failover in Active/Standby mode, as well as in Active/Active mode.*

### 9) Cisco Security Appliance Device Manager

- Using ASDM to configure ASA.
- Creating a site-to-site VPN and VPN remote access.

#### **Workshop**

*Installing ASDM. VPN configuration.*

### 10) Maintenance

- Access configuration.
- Levels of privileges.
- Password Recovery.
- Managing the iOS.
- Configuration management.
- License management.

#### **Workshop**

*Updating the iOS. Backing up the configuration. Password Recovery.*