Course : Cisco ASA Firewall, configuration and administration

Practical course - 4d - 28h00 - Ref. CPF
Price : 2790 CHF E.T.

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

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

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

Course schedule

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.

Hands-on work
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.

Hands-on work
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.

Hands-on work
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.

Hands-on work
Installing CSACS. Configuring ASA for AAA.

5 Routing and switching

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

Hands-on work
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.

Hands-on work
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.

Hands-on work
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.

Hands-on work
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.

Hands-on work
Installing ASDM. VPN configuration.

(10) Maintenance

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

Hands-on work
Updating the iOS. Backing up the configuration. Password Recovery.