

ASACDO (CISCO ASA + CISCO DEFENSE ORCHESTRATOR)

1.0

Objetivo

Ao concluir este treinamento, o aluno será capaz de cumprir estes objetivos gerais:

- Explicar os principais recursos essenciais dos Cisco ASA 5500-X Next-Generation Firewalls;
- Descrever como implementar a conectividade básica Cisco ASA e o gerenciamento de dispositivos;
- Implementar integração do ASA junto a uma rede;
- Descrever e implementar controles básicos de política do Cisco ASA;
- Descrever os componentes VPN comuns do Cisco ASA;
- Descrever e implementar soluções VPN de túnel completo Cisco ASA e Cisco AnyConnect;
- Descrever as funcionalidades do CDO;
- Explicar o processo de integração do CDO junto ao Cisco ASA;
- Descrever as funcionalidades e ferramentas do CDO.

Público Alvo

Profissionais de segurança que necessitam de conhecimentos na instalação, configuração, operação e administração do Cisco ASA utilizando o ASDM/CLI, e a utilização do CDO e suas funcionalidades de integração e geração.

Pré-Requisitos

É recomendado que os alunos possuam as seguintes habilidades e conhecimentos prévios ao treinamento:

- Conhecimento prático em redes IP (básico);
- Conhecimento básico de firewall de segurança.

Carga Horária

40 horas (5 dias).

Conteúdo Programático

Parte 1: Cisco ASA (ASDM + CLI) 24 horas

Course Introduction

Course Outline

Course Goals & Objectives

Cisco ASA Adaptive Security Appliance Essentials

Evaluating Cisco ASA Adaptive Security Appliance Technologies

Firewall Technologies

Cisco ASA Adaptive Security Appliance Features

Cisco ASA 5508 Architecture

Basic Connectivity and Device Management

Preparing the Cisco ASA Adaptive Security Appliance for Network Integration
Managing the Cisco ASA Adaptive Security Appliance Boot Process
Managing the Cisco ASA Adaptive Security Appliance Using the CLI
Managing the Cisco ASA Adaptive Security Appliance Using Cisco ASDM
Navigating Basic Cisco ASDM Features
Managing the Cisco ASA Adaptive Security Appliance Basic Upgrade

Managing Basic Cisco ASA Adaptive Security Appliance Network Settings

Managing Cisco ASA Adaptive Security Appliance Security Levels
Configuring and Verifying Basic Connectivity Parameters
Configuring and Verifying Interface VLANs
Configuring a Default Route
Configuring and Verifying the Cisco ASA Security Appliance DHCP Server
Troubleshooting Basic Connectivity

Network Integration

Configuring Cisco ASA Adaptive Security Appliance NAT Features
NAT on Cisco ASA Security Appliances
Configuring Object (Auto) NAT
Configuring Manual NAT
Tuning and Troubleshooting NAT on the Cisco ASA Adaptive Security Appliance

Configuring Cisco ASA Adaptive Security Appliance Basic Access Control Features

Connection Table and Local Host Table
Configuring and Verifying Interface ACLs
Configuring and Verifying Global ACLs
Configuring and Verifying Object Groups
Configuring and Verifying Other Basic Access Controls
Troubleshooting ACLs

Configuring Cisco ASA Adaptive Security Appliance Routing Features

Static Routing
Dynamic Routing
EIGRP Configuration and Verification

Cisco ASA Adaptive Security Appliance Policy Controls

Defining the Cisco ASA Adaptive Security Appliance MPF
Cisco MPF Overview
Configuring and Verifying Layer 3 and Layer 4 Policies
Configuring and Verifying a Policy for Management Traffic

Configuring Cisco ASA Adaptive Security Appliance Advanced Application Inspections

Layer 5 to Layer 7 Policy Control Overview
Configuring and Verifying HTTP Inspection
Configuring and Verifying FTP Inspection
Supporting Other Layer 5 to Layer 7 Applications
Troubleshooting Application Layer Inspection

Cisco ASA Adaptive Security Appliance VPN Common Components

VPN Overview

VPN Definition

Key Threats to WANs and Remote Access

VPN Types

VPN Components

Implementing Profiles, Group Policies, and User Policies

Cisco ASA VPN Policy Configuration

Cisco ASA Adaptive Security Appliance Connection Profiles

Cisco ASA Adaptive Security Appliance Group Policies

Cisco ASA VPN AAA and External Policy Storage

Cisco ASA Adaptive Security Appliance User Attributes

Access Control Methods

VPN Accounting Using External Servers

DAP for SSL VPN

Implementing PKI Services

Using PKI

Provisioning Server-Side Certificates on the Cisco ASA Adaptive Security Appliance

CA Servers

Deploying Client-Based Certificate Authentication

SCEP Proxy Operations

Enable Certificate Authentication in Connection Profile

Configuring Certificate-to-Connection Profile Mappings

Cisco AnyConnect Full Tunnel VPN Solutions

Deploying Basic Cisco AnyConnect SSL VPN on Cisco ASA

Basic Cisco AnyConnect SSL VPN

SSL VPN Clients Authentication

SSL VPN Client IP Address Assignment

SSL VPN Split Tunneling

Configuration Scenario

Configuration Tasks

Enable Cisco AnyConnect SSL VPNs

Define IP Address Pool

Configure Identity NAT

Configure Group Policy

Configure Group Policy: Split Tunneling

Configure Connection Profile

Monitor Cisco AnyConnect VPN on Client Endpoint

Monitor Cisco AnyConnect VPN on Server

Deploying Advanced Cisco AnyConnect SSL VPN on Cisco ASA

Cisco AnyConnect SSL VPN Solution Components

DTLS Overview

Parallel DTLS and TLS Tunnels

Configure DTLS

Verify DTLS
Cisco AnyConnect Client Configuration Management
Managing Cisco AnyConnect Software from Cisco ASA
Cisco AnyConnect Client Operating System Integration Options
Deploying Cisco AnyConnect Trusted Network Detection
Cisco AnyConnect Start Before Logon
Deploying Cisco AnyConnect Start Before Logon

Deploying Cisco AnyConnect IPsec/IKEv2 VPNs

Cisco AnyConnect Support for IKEv2
Internet Key Exchange v1 and v2
Making IPsec the Primary Protocol for a Host Entry
IKEv2 Configuration Procedure
Configure a Cisco AnyConnect IPsec VPN on a Cisco ASA Appliance
Verify and Troubleshoot Cisco AnyConnect IPsec VPN on Cisco ASA Appliance

Cisco ASA Adaptive Security Appliance High Availability and Virtualization

Configuring Cisco ASA Adaptive Security Appliance Interface Redundancy Features
Configuring and Verifying EtherChannel
Configuring and Verifying Redundant Interfaces
Troubleshooting EtherChannel and Redundant Interfaces

Configuring Cisco ASA Adaptive Security Appliance Active/Standby High Availability

Failover Overview
Configuration Choices, Basic Procedures, and Required Input Parameters
Configuring and Verifying Active/Standby Failover
Tuning and Managing Active/Standby Failover
Remote Command Execution
Troubleshooting Active/Standby Failover

Labs Outline

Lab 1: Accessing the Remote Lab Environment
Lab 2: Configuring the Cisco ASA Adaptive Security Appliance
Lab 3: Configuring NAT
Lab 4: Configuring Basic Cisco Access Control Features
Lab 5: Configuring MPF, Basic Stateful Inspections, and QoS
Lab 6: Configuring MPF Advanced Application Inspections
Lab 7: Implementing Basic Cisco AnyConnect SSL VPN on the Cisco ASA
Lab 8: Configuring Advanced Authentication for Cisco AnyConnect SSL VPNs
Lab 9: Implementing Cisco AnyConnect IPsec/IKEv2 VPNs
Lab 10: Configuring Active/Standby High Availability

Parte 2: Cisco Defense Orchestrator (16 Horas)

Cisco Defense Orchestrator Architecture

Network Security Strategy
Security Management
Cisco Defense Orchestrator Solution

Licensing Options
Supported Platforms
Benefits of CDO

Deploy CDO

Initial Deployment
SDC: Secure Device Connector
SAL: Security Analytics & Logging
Cisco Devices Integration

Cisco CDO Tenant Management

General Settings
User Management
User Roles
Logging Settings

Managing Cisco ASA with CDO

CDO & Cisco Tenant
Using SDC on local Network
Integrating Cisco ASA & CDO
CDO Management Features for ASA Devices

Demonstration Cisco CDO Scenarios

Scenario 1. Network health status at-a-glance
Scenario 2. Onboard devices
Scenario 3. Clean up configurations and policies
Scenario 4. Use the Command-Line Interface (CLI)
Scenario 5. Schedule deployments
Scenario 6. Manage VPN
Scenario 7. Use the Logging and Security Analytics service
Scenario 8. Analytics and Detection
Scenario 9. Total Network Analytics and Detection
Scenario 10. Multi-Domain Management