CANAC (IMPLEMENTING CISCO NAC APPLIANCE) 2.1

Objetivo

Este treinamento apresenta a solução NAC Appliance (Cisco Clean Access), que cuida do controle de admissão de usuários à rede através do reconhecimento e validação de postura das estações de trabalho. Nele são apresentados os componentes da solução e formas de configuração. Com aulas teóricas e práticas o profissional terá todos os conhecimentos necessários para entender o funcionamento da solução e implementá-la da forma eficiente, reconhecendo usuários, bem como seus dispositivos e direitos de acesso, além do controle dinâmico das estações de trabalho. Após completar este treinamento o profissional será capaz de: • Levantar os requerimentos necessários e descrever a distribuição correta do dispositivo NAC Appliance (Access Clean Access) dentro da rede • Configurar a solução NAC Appliance (Cisco Clean Access) • Implementar a solução NAC com alta disponibilidade para detectar possíveis ameaças a rede e para facilitar o acesso dos usuários que se enquadram às políticas de segurança • Manter a solução com alta disponibilidade em diferentes ambientes

Público Alvo

Este treinamento é voltado para profissionais que buscam sólidos conhecimentos para implementação da solução Cisco NAC Appliance e aos candidatos a certificação Cisco CCSP.

Pré-Requisitos

Para total aproveitamento neste treinamento é altamente recomendado que o aluno possua certificação Cisco CCNA e tenha assistido os treinamentos BSCI, BCMSN e SNRS ou possua os conhecimentos equivalentes.

Carga Horária

24 horas (3 dias).

Conteúdo Programático

THE CISCO NAC APPLIANCE SOLUTION

• Cisco Self-Defending Networks
o The Changing Landscape of Security
o The Cisco Host-Protection Strategy
o The Cisco SDN Initiative
o Trust & Identity
o Cisco NAC Products

• Cisco NAC Appliance
o Cisco NAC Appliance Solution
o Cisco NAC Appliance Features

o Cisco NAC Appliance Components
o Compliance Scenarios
o Deployment Options
o Configuration Overview
o User Interface

• Cisco NAC Appliance Deployment Options
o Cisco NAC Appliance Out-of-Band (OOB) Deployment
o Cisco NAC Appliance In-Band Deployment
o Compare Cisco NAC Appliance Deployment Options
o Cisco NAS Operating Modes
o Virtual Gateway vs. Real-IP Gateway
o Layer 2 vs. Layer 3

• Configure User Roles
o What is a User Role?
o Create User Roles
o Define Traffic Policies for User Roles
o Configure Traffic Policies for User Roles
o Create Local User Accounts

• Configure External Authentication
o Configure External Authentication Providers
o Authenticate Cisco NAC Appliance Users with Kerberos
o Authenticate Cisco NAC Appliance Users with RADIUS
o Authenticate Cisco NAC Appliance Users with LDAP
o Authenticate Cisco NAC Appliance Users with NT Domain
o Map Users to User Roles
o Test User Authentication
o Configure RADIUS Accounting for Users
o Adding Custom RADIUS Attributes

• Configure DHCP
o Cisco NAS DHCP Modes
o Enable the DHCP Module
o Configure IP Ranges (IP Address Pools)
o Work with Subnets
o Reserve IP Addresses
o Configure User-Specified DHCP Options

NAC APPLIANCE IMPLEMENTATION
• Implement Cisco NAC Appliance In-Band Deployment
o In-Band Process Flow
o In-Band Deployment Configurations
o Configure the Cisco NAS for In-Band Deployment
o Add the Cisco NAS to the Managed Domain
o Configure the Cisco NAS Interfaces
o Add Managed Subnets

o Configure Cisco NAS VLAN Settings

• Implement Windows Active Directory Single Sign-On (AD SSO)
o Kerberos Ticket Exchange
o Confirming a NAS Ticket
o Communications between the NAS and Active Directory
o AD SSO Configuration Checklist
o TCP & UDP Ports Required for AD SSO
o Configure the NAS for AD SSO
o Install Support Tools for Windows 2000 or 2003 Server
o Configure the Domain Controller with ktpass.exe

• Implement Virtual Private Network Single Sign-On (VPN SSO)
o Configuration Checklist
o Configure a Traffic Filter
o Add VPN Authentication Server to NAM
o Map VPN Users to Roles on NAM
o Enable VPN SSO on the NAS
o Adding a VPN Device to the NAS
o Configure RADIUS Accounting
o Configure the VPN Gateway as a Floating Device
o Test VPN SSO

• Implement Cisco NAC Appliance Out-of-Band Deployment
o OOB Process Flow
o OOB Deployment Considerations
o Layer 2 Central & Edge Deployment
o Layer 3 Virtual Gateway & Real-IP Gateway
o Layer 2 & 3 Clientless Host Options
o Differences between Cisco NAC Appliance OOB Setup and In-Band Setup
o Implement Cisco NAS OOB Operating Modes

• Manage Switches
o Implement Switch Management
o Configure the Network for OOB Deployment
o Configure Group, Switch, and Port Profiles
o Configure Port Profiles Adding Switches to the Managed Domain
o Configuring SNMP Advanced Settings
o Configure Switch Ports to Use Port Profiles
o Manage Switch Configuration Settings
o NAC Appliance Implementation Options

• Implement Cisco NAC Appliance on a Network
o Implement Cisco NAC Appliance
o General Setup Tab
o User Pages
o Configure Cisco NAA Support
o Manage Certified Devices

o Device Exemption
o Viewing User Reports

• Implement Network Scanning
o Configure the Quarantine Role
o Implement Nessus Plug-Ins
o Test a Scanning Configuration
o Customize the User Agreement Page
o View Scan Reports

• Configure the NAM to Implement Cisco NAC Appliance Agent on User Devices
o Configure the Cisco NAM to Implement the Cisco NAC Appliance Agent (NAA)
o Retrieve Updates
o Require the Use of the Cisco NAA
o Configure the Cisco NAA Temporary Role
o Introduce Checks, Rules, and Requirements
o Create a Check, Rules, and Requirements
o Map Requirements to Rules and Roles

• Configure NAM High Availability (HA)
o Introduce HA for Cisco NAMs
o Establish a Serial Connection Between Managers
o Digital Certificate Requirements
o Configure the Primary Cisco NAM
o Configure the Standby Cisco NAM

• Configure Cisco NAC Appliance Server (NAS) HA
o Introduce HA for NASs
o Implementation Considerations
o Digital Certificate Requirements
o Configure the Primary and Standby NAS
o Complete the Standby NAS HA Configuration
o Test the NAS HA Configuration
o Configure DHCP Failover
o NAC Appliance Monitoring and Administration

• Monitor a Cisco NAC Appliance Deployment
o Cisco NAC Appliance Monitoring
o Monitor Online Users
o Monitor NAS Health Event Logs
o Configure Basic SNMP Support
o Configure Syslog Support

• Administer Cisco NAM
o Define the Cisco NAM Administration Module
o Set Network and Failover Parameters
o Manage Administration Groups
o Manage Administration Users

o Manage User Passwords
o Administer the System Time
o Manage SSL Certificates
o Manage the Cisco NAC Appliance Software
o Protect Your NAM Configuration

• Labs:
o Lab 1: Remote Lab Familiarization
o Lab 2: Bootstrap Primary NAM & NAS
o Lab 3: Configuring User Roles and Traffic Policies
o Lab 4: Configure NAS In-Band Virtual Gateway
o Lab 5: Create a High Availability NAM Cluster
o Lab 6: Configuring Active Directory Single Sign-On (AD SSO)
o Lab 7: Configuring VPN Remote Access
o Lab 8: Configuring NAC VPN SSO
o Lab 9: Configure Switch for Out-Of-Band Operation
o Lab 10: Configuring the NAC Appliance Agent (NAA) for Specific Threats
o Lab 11: Enhanced SSO with LDAP Group Authorization