Fast Lane

HPE Aruba Networking ClearPass Advanced Workshop (CPAC)

ID CPAC **Preis** 4'950.– € (exkl. MwSt.) **Dauer** 5 Tage

Zielgruppe

- Network security experts
- Individuals who implement network access control solutions
- Network managers with Aruba access device experience (wired and wireless).
- Network administrators who already own a ClearPass solution and are looking to deploy advanced features

Voraussetzungen

- Any current Aruba ClearPass certification.
- HPE Aruba Networking ClearPass Configuration (CPC) 25.23

Kursziele

After successful completion of this course, you should be able to:

- Design a ClearPass cluster
- Design a high availability solution with virtual IP addresses following best practices
- Describe public key infrastructure and certificate format types
- Plan the certificates used by ClearPass
- Explain how enrollment over secure transport can automate the certificate generation process
- Leverage RADIUS services to handle corporate wireless connections
- Deploy WEBAUTH services to handle health checks
- Describe the proposed RADIUS services that handles guest wireless connections
- Explain general guest considerations
- Design guest RADIUS services
- Describe the proposed Onboard services
- Describe the MPSK feature
- Leverage these features in your deployment
- Plan a successful wired access deployment
- Provide administrative access control to ClearPass modules and NADs
- Generate custom reports and alerts

Kursinhalt

Network Requirements

- ClearPass goals
- Network topology
- List of available resources
- Scenario analysis
- Authentication requirements
- Multiple user account databases
- User account attributes
- High level design

PDI and Digital Certificates

- Certificate types
- PKI
- Certificate trust
- Certificate file formats
- ClearPass as CA
- Certificate use cases
  - EAP
  - HTTPS
  - Service-based certificates
  - Onboarding
  - Clustering
  - RadSec
  - NAD Captive portal
- Installing certificates
- Enrollment over secure transport

Cluster Design

- ClearPass server placement
- Determine the layout of the cluster
- High availability schema
- Design high availability
- VIP failover
- VIP mapping
- Insight primary and secondary

Network Integration

- Authentication sources
  - Local user repository
  - Endpoint repository
  - Admin user repository
  - Guest user repository
  - Guest device repository

- - Onboard device repository
    - Active Directory
    - SQL server
  - Define external servers
    - Unified endpoint management
    - Email server
  - Endpoint profiling
    - IF-MAP
    - Active scans (SNMP)
    - DHCP
    - HTTPS
  - Network devices
    - RadSec
    - Dynamic authorization
    - Logging of RADIUS accounting
    - Device groups
    - Location attributes
  - Policy simulation

Corporate Access Design

- Define the requirements
- High level design
- Services design
- Plan TIPs roles
- User authentication
- Machine authentication
- Tunneled EAP, EAP-TLS and protected EAP
- One versus multiple services
- Plan enforcement
- Device-groups based enforcement
- Service implementation
- OnGuard design and implementation
  - Quarantine users
  - Remediation
- Onboard design and implementation
  - User and device authorization
- Informational pages
- Authorization validation
- Troubleshooting roles

Guest Access Design

- Guest network design
- Captive portal flow
- Design tasks
- Define web pages
- Guest services design
- Guest services
- Guest access controls
- Configure network access devices
- Guest account creation
- Guest self registration
- Guest sponsor approval

- Self registration AD drop-down list
- Requirements for guest enforcement

Multi Pre-Shared Key

- Define the requirements
- High level design
- Device authorization
- Service design and implementation

Wired Access

- AAA configuration
- 802.1X and MAC auth
- Using client profiling for authorization
- Using conflict attribute for authorization
- User roles configuration in ArubaOS-S
- User roles configuration in ArubaOS-CX
- Web fedirection
- Multi-service ports
- Downloadable user roles enforcement profiles
- Downloadable user roles configuration and validation

Wired Access

- TACACs+ based NAD administration
- TACACs+ command authorization
- Policy Manager administrators
- Guest and Onboard operators
- Register devices for MPSK
- Insight operators
- Insight reports and alerts

HPE Aruba Networking ClearPass Advanced Workshop (CPAC)

Weltweite Trainingscenter

Fast Lane Institute for Knowledge Transfer (Switzerland) AG

Husacherstrasse 3
CH-8304 Wallisellen
Tel. +41 44 832 50 80

info@flane.ch, https://www.flane.ch