Implementing Network Security (IANS)

ID IANS **Price** CHF 3,990.—(excl. VAT) **Duration** 5 days

Who should attend

Network engineer responsible for implementing security controls on enterprise networks. Candidate can describe the network security stack (firewall, proxy, remote access, IDS/IPS, access control, NTA, UEBA).

This course is part of the following Certifications

Aruba Certified Professional – Network Security (ACP-NS)

Prerequisites

The following knowledge is recommended for this seminar:

Aruba recommends that the candidate has attended the Network Security Fundamentals (ANSF) course prior to attending this professional level course. Or have equivalent experience and knowledge of network security fundamentals.

Course Objectives

After you successfully complete this course, expect to be able to:

1. Protect and Defend

- Define security terminologies
- PKI
- Zero Trust Security
- WIPS & WIDS
- Harden devices Securing network infrastructure
- Securing L2 & L3 protocols
- Secure a WLAN
- Deploy AAA with CPPM
- Secure a wired LAN Deploy AAA with CPPM Deploy 802.1x Deploy certificate based authentication for users & devices Secure the WAN Understand Aruba's SD-Branch for automating VPN deployment Design and deploy VPN with Aruba's VIA client Classify endpoints Deploy endpoint classification to devices Integrate ClearPass and CPDI

2. Analyze

- Threat detection
- Investigate Central alerts
- Interpret packet captures
- Evaluate endpoint postures
- Troubleshooting
- Deploy and analyze results from NAE scripts
- Endpoint classification
- Analyze endpoint classification data to identify risks
- Analyze endpoint classification data on CPDI

3. Investigate

- Forensics
- Explain CPDI capabilities of showing network conversations on supported Aruba devices

Course Content

ArubaSecurity Strategy&ClearPass Fundamentals

- Explain Aruba Zero Trust Security
- Explain how Aruba solutions apply to different security vectors

Deploy TrustedCertificatestoArubaSolutions

- Describe PKI dependencies
- Set up appropriate certificates & trusted root CAs on CPPM

Implement Certificate-Based802.1x

- Deploy AAA for WLANs with ClearPass Policy Manager (CPPM)
- Deploy certificate based authentication for users and devices

Implement Advanced Policies one the Role-Based ArubaOS Firewall

- Deploy AAA for WLANs with ClearPass Policy Manager (CPPM)
- Define and apply advanced firewall policies

Evaluate Endpoint Posture

- Evaluate different endpoint postures

Implement aTrusted Network Infrastructure

- Set up secure authentication and authorization of network infrastructure managers, including,
- Advanced TACACS+ authorization
- Multi-factor authentication
- Secure L2 and L3 protocols, as well as other protocols such as SFTP

Implement 802.1XandRole-BasedAccess Control onAOS-CX

- Deploy AAA for wired devices using ClearPass Policy Manager (CPPM), including local and downloadable roles
- Explain Dynamic Segmentation, including its benefits and use cases
- Deploy Dynamic Segmentation using VLAN steering
- Configure 802.1X authentication for APs

Implement Dynamic Segmentation on AOS-CXSwitches

- Explain Dynamic Segmentation, including its benefits and use cases
- Deploy Dynamic Segmentation, including:
- User-based tunneling (UBT)
- Virtual network-based tunneling (VNBT)

Monitor with Network Analytics Engine(NAE)

- Deploy and use Network Analytics
- Engine (NAE) agents for monitoring

ImplementWIDS/WIPS

- Explain the Aruba WIPS and WIDS technology
- Configure AP rogue detection and mitigation

Use CPPM and Third-Party Integration to Mitigate Threats

- Describe log types and levels and use the CPPM Ingress Event Engine to integrate with third-party logging solutions
- Set up integration between the Aruba infrastructure and CPPM, allowing CPPM

Implement Device Profiling with CPPM

- Explain benefits and methods of endpoint classification on CPPM, including active and passive methods
- Deploy and apply endpoint classification to devices
- Analyze endpoint classification data on CPPM to identify risks

Introduction to ClearPassDeviceInsight

- Define ClearPass Device Insight (CPDI)
- Analyze endpoint classification data on CPDI

Deploy ClearPassDeviceInsight

- Define and deploy ClearPass Device Insight (CPDI)
- Analyze endpoint classification data on CPDI

IntegrateCPDIwith CPPM

- Integrate ClearPass Policy Manager (CPPM) and ClearPass Device Insight (CPDI)
- Mitigate threats by using CPDI to identify traffic flows and apply tags and CPPM to take actions based on tags

UsePacket CapturesTo Investigate Security Issues

- Perform packet capture on Aruba infrastructure locally and using Central
- Interpret packet captures

Establish aSecureRemoteAccess

- Explain VPN concepts
- Understand that Aruba SD-WAN solutions automate VPN deployment for the WAN
- Describe the Aruba 9x00 Series Gateways
- Design and deploy remote VPNs using Aruba VIA

ConfigureArubaGateway IDS/IPS

- Describe the Aruba 9x00 Series Gateways
- Define and apply UTM policies

Use Central Alertsto Investigate Security Issues

- Investigate Central alerts
- Recommend action based on the analysis of Central alerts

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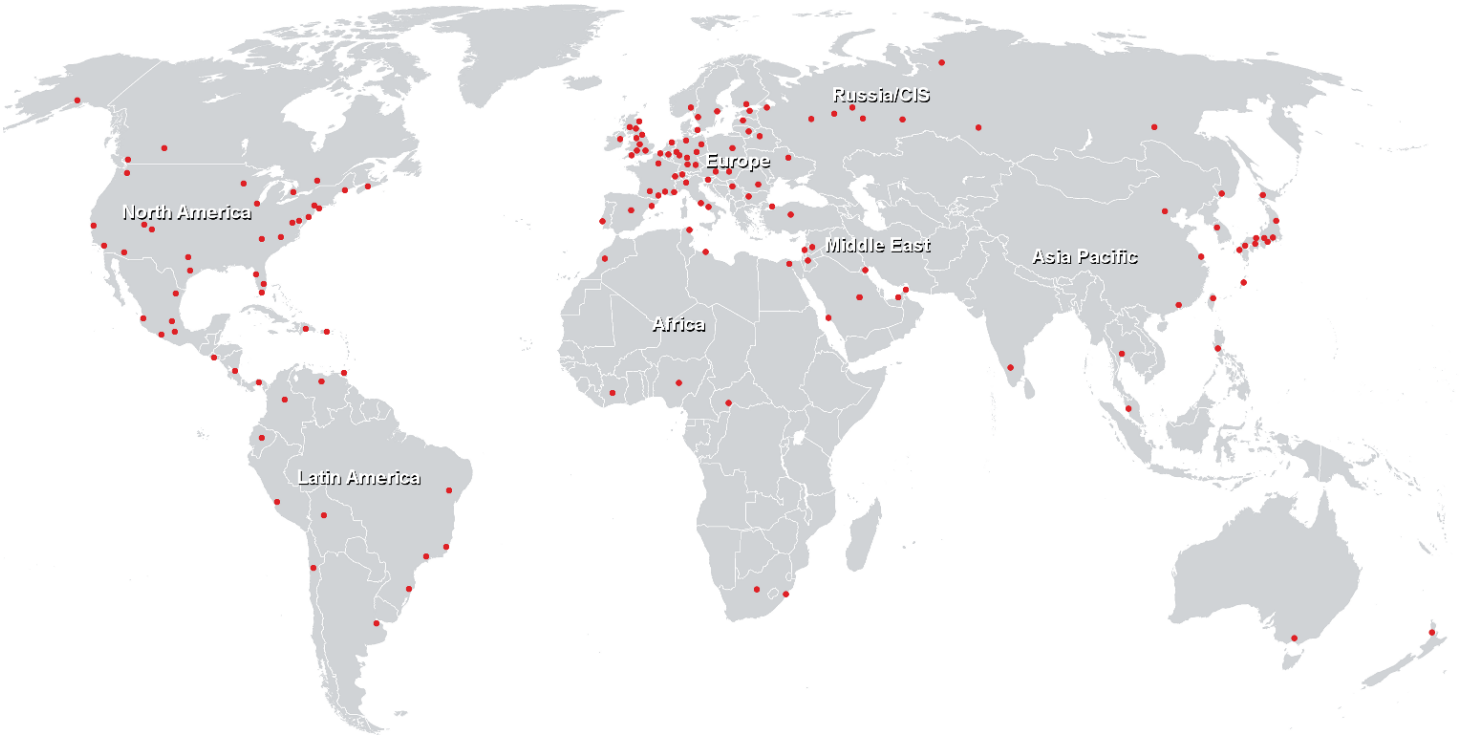

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