Training: Aruba
Campus Access Fundamentals

TRAINING GOALS:

This course teaches you the fundamental knowledge, skills, and practical experience required to configure and manage modern, open standards-based networking solutions using Aruba's wired, wireless, security and management technologies. This course consists of approximately 60% lecture and 40% hands-on lab exercises to help you learn how to implement and validate small-to-medium enterprise network solutions. This 5-day course prepares you for the Aruba Certified Associate - Campus Access exam.

Objectives

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

- Explain Networking Fundamentals
- Install and configure devices running the ArubaOS-CX Network Operating System
- Describe and configure VLANs
- Explain, describe and configure Spanning Tree Protocol
- Understand when to use VRRP and how to configure it
- Explain and configure Link Aggregation
- Understand and configure IP Routing
- Understand and configure OSPFv2 – Single Area
- Describe and configure Switch Stacking using VSF
- Describe Aruba ESP platform and product portfolio
- Perform AP onboarding
- Explain how Aruba's wireless networking solutions meet customers’ requirements
- Explain fundamental WLAN technologies, RF concepts, and 802.11 Standards
- Recognize and explain Radio Frequency Bands and channels, and the standards used to regulate them
- Describe the concept of radio frequency coverage and interference and successful implementation and diagnosis of WLAN systems
- Identify and differentiate antenna technology options to ensure optimal coverage in various deployment scenarios
- Describe RF power technology including, signal strength, how it is measured and why it is critical in designing wireless networks

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70

BNP Paribas Bank Polska S.A.
EUR: PL 79 1600 1462 1853 6451 3000 0006
USD: PL 52 1600 1462 1853 6451 3000 0007

- Control secure access to the WLAN using Aruba Firewall Policies and Roles
- Perform network monitoring functions and troubleshooting

Target Audience

The ideal candidate has 1+ years of experience with networking, vendor agnostic understanding of basic network protocols. Under the direction of a Professional or Expert, can apply the configuration and verify the status of a campus network.

CONSPECT:

- Networking Fundamentals
  - Defines networking, LAN, WAN and their components
  - Explains OSI model & encapsulation
  - Discusses different types of physical media
  - Compares unicast, multicast, and broadcast
  - Explains TCP/IP stack
  - Discusses different types of networking devices
- Switching Fundamentals
  - Explains how to connect to and access a switch
  - Describes initial switch setup
  - Describes how to and configure VLANs, tagging, and IP addressing
  - Explains how to use LLDP and ICMP for network discovery and diagnosis
  - Explains how to configure link aggregation to improve performance/resiliency
- Basic IP Setup
  - Discusses Inter-VLAN routing
  - Explains DHCP relay
  - Discusses static IP routing
  - Explains how to configure single-area OSPF
- Network Redundancy
  - Discusses Spanning Tree
  - Explains VRRP and VSX
- VSF
  - Describes VSF
  - Explains how to configure VSF
  - Describes Auto-VSF
  - Explains VSF MAD
- Introduction to Aruba Solutions

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70
BNP Paribas Bank Polska S.A.
EUR: PL 79 1600 1462 1853 6451 3000 0006
USD: PL 52 1600 1462 1853 6451 3000 0007

- Discusses ESP
- Introduces Aruba switching products
- Introduces Aruba WLAN portfolio
- Introduces to Aruba Central
- Introduces to Aruba ClearPass

- Central for Device Management
  - Explains how to perform device onboarding
  - Describes how to create Central Groups
  - Describes UI config mode
  - Describes template config mode
  - Describes Central licensing
- Device Profiling and AP onboarding
  - Describes the use of device profiling
  - Describes LLDP and MAC profiling
  - Explains how to connect AP to Aruba Central
  - Explains how to perform initial AP setup
- WLAN Fundamentals
  - Describe the fundamentals of 802.11, RF frequencies and channels
  - Explain RF Patterns and coverage including SNR
  - Roaming Standards and QOS requirements
  - Describe aspects of RF design
  - Explains how to configure WLANs
- Implementing Secure WLANs
  - Explain AAA
  - Describe 802.1X authentication
  - Explain how to configure secure WLANs
  - Discuss roles and access rules
- Guest Access
  - Describe guest access
  - Explain how to setup captive portal authentication
  - Describe how to configure guest WLANs
- WLAN Security
  - Describe WLAN security
  - Explain certificates
  - Describe cloud authentication
- Monitoring and Maintenance

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70
BNP Paribas Bank Polska S.A.
EUR: PL 79 1600 1462 1853 6451 3000 0006
USD: PL 52 1600 1462 1853 6451 3000 0007

- Explains the use Aruba Central monitoring capabilities
- Describe how to identify LED status
- Explain how to perform firmware upgrades
- Describe how to enable SNMP on devices
- Describe AI Insights
- Describe Alerts & Reports
- Explain UXI

- Troubleshooting
  - Describe how to perform password recovery and factory reset procedures
  - Explain Central connectivity troubleshooting
  - Describe how to enable spectrum analysis
  - Explore Central Troubleshooting tools

REQUIREMENTS:

It is recommended that candidates have foundational networking experience or attend Aruba's Essentials eLearning series to glean knowledge on Aruba's Campus Access design solution.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Aruba Networks.

This course prepares you additionally to the Aruba Certified Campus Access Associate certification exam

https://certification-learning.hpe.com/tr/datacard/Certification/ACA-CamAcss

TRAINER:

Aruba Networks Certified Trainer.

Compendium Centrum Edukacyjne Spółka z o.o.
ul. Tatarska 5, 30-103 Kraków, tel.: (12) 298 47 77
ul. Postępu 18B, 02-676 Warszawa, tel.: (22) 417 41 70

BNP Paribas Bank Polska S.A.
EUR: PL 79 1600 1462 1853 6451 3000 0006
USD: PL 52 1600 1462 1853 6451 3000 0007