Training: Aruba
Configuring Network Automation Solutions

TRAINING GOALS:

The Configuring Aruba Network Automation Solutions course is structured to help students better understand Aruba network automation solutions. This course is designed to build a solid foundation for the network administrator or engineer entering the world of coding, scripting, and automation. After completing this course, students will have intelligent conversations with their automation team and close the gap between the automation and networking teams. This course teaches the essentials of Python, REST API, Ansible, and working knowledge. In addition, this course teaches the framework and the workflow of Aruba Python modules, Aruba SDK, and Ansible roles and collections.

This course is approximately 40% lecture and 60% hands-on lab exercises.

Objectives

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

- Be familiar with different types of Version Control Systems and have a working knowledge of git and GitHub.
- Understand Python essentials, built-in Python data types, and Python functions.
- Understand how to create User-Defined Functions, Python modules, and different types of data formats (XML, JSON, and YAML).
- Understand REST API architecture and concepts and have a working knowledge of REST API.
- Be familiar to work with REST API tools, such as Swagger UI and Postman.
- Demonstrate a working knowledge of Aruba Central SDK and leverage its extensible features to build custom monitoring, configuration tools, custom dashboards, alerts, and notification frameworks.
- Have the ability to leverage Aruba AOS-CX SDK and Aruba AOS 8 to call upon its Python modules to access the REST API to automate and configure various features.
- Learn the skills to work with Aruba Network Analytics Engine (NAE) scripts, which help automation and assist with the root-cause analysis.
- Build a deeper understanding of Ansible as a network automation tool.
- Demonstrate a working knowledge of Ansible inventory, playbook, variables andAnsible, Ansible roles, and Ansible collections installation.
- Be familiar with Ansible’s roles and collections; use Ansible loops and conditionals; evaluate Ansible Tower and AWX.
- Demonstrate a working knowledge of Ansible workflows with Aruba products.

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Target Audience

Ideal candidates are interested in network automation or network automation engineering role. Also, IT professionals are looking to further advance their knowledge on HPE Aruba network automation solutions for career growth.

CONSPECT:

- **Version Control System**
  - Version Control System Overview
  - git and GitHub Overview
  - git Workflow
- **Programming Fundamentals**
  - Python Basics and Python Editors
  - Python Data Structures
    - Data type overview
    - Conditional statements and decision making
    - Python loop, functions and modules
    - Python classes and objects
    - Python try except
  - Summary of Data Format Types (XML, JSON, YAML)
- **REST API**
  - REST API Overview
  - API and API Use Case
  - Aruba Networks API overview
  - API Tools
- **Python Workflow**
  - Aruba Central SDK
  - Aruba AOS-CX SDK
  - Aruba AOS8 Automation and Python
  - Aruba NAE Script
- **Ansible Part 1**
  - Overview
  - Architecture
  - Inventory and Playbook
  - Variable
  - Installation
  - Roles and Collections Installation

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- **Ansible Part 2**
  - Role and Collections
  - Loops
  - Conditionals and Blocks
  - Vault
  - Tower or AWX
- **Ansible Workflow**
  - Ansible Workflows with Aruba products

REQUIREMENTS:

While there are no programming or automation prerequisites, students should understand networking concepts such as device configuration of L2/L3 interfaces, VLANs, LAG, ACL, and OSPF.

Difficulty level



CERTIFICATE:

The participants will obtain certificates signed by Aruba Networks.

TRAINER:

Aruba Networks Certified Trainer

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