Using AI in HPE Aruba Networking

Course Description

This two-day instructor-led course provides network professionals with the knowledge and hands-on experience needed to leverage AI-driven solutions in HPE Aruba Networking environments. Participants will learn how to apply conversational AI and prompt engineering techniques to streamline network configuration, deployment, and troubleshooting.

Through a series of hands-on lab exercises, attendees will explore AI enhanced methods for managing HPE Aruba AOS-CX switches and Campus Access Networks. The course emphasizes real-world applications of AI to optimize network efficiency, automate troubleshooting, and improve operational workflows.

Course Duration:

2 days

Prerequisites:

Suggest you have the following before attending:

- Implementing AOS-CX Switching

Objectives:

After completing this course, you should be able to:
- Understand and utilize conversational AI to enhance network operations.
- Apply prompt engineering techniques to optimize AI responses for network-related tasks.
- Configure and troubleshoot network protocols using AI-assisted methodologies.
- Use AI tools for HPE Aruba Networking network automation and scripting.

Course Outline:

Introduction to AI-assisted networking with ChatGPT
- Comparing AI machine learning (ML) versus deep learning (DL)
- Understanding neural networks in deep learning algorithms
- Understanding algorithm training and optimization
- Comparing validation and overfitting
- Examining AI products and implementations in the industry

Configuring VSX, VSF, L2, and port access with AI
- VSX technology overview
- VSF stacking overview
- MSTP and loop protection
- DHCP snooping and ARP inspection, Wired Access Control

Implementing L3 routing protocols and technologies with AI
- OSPF overview
- BGP overview
- VRF and IVRL overview
- VNBT in EVPN-VXLAN fabric

Using AI for network automation and scripting
- Explain APIs and work with REST API
- Describe and use API Tools
- Introduction to Python automation with AOS-CX and Central APIs
- Using ChatGPT to generate and troubleshoot automation scripts
- Python and ChatGPT for network configuration management
- OpenAI API Platform overview
- Describe HPE Aruba Networking, AOS-CX and OpenAI SDKs
- HPE Aruba Networking Central AI

Real-world troubleshooting and case studies with AI
- Use show commands, diagnostic tools, debug and packet capture for troubleshooting
- ChatGPT-assisted interpretation of network logs and errors
- Common troubleshooting scenarios with AI-assisted solutions
- Diagnosing VSX, VSF and L2 issues with ChatGPT
- Routing misconfiguration and convergence troubleshooting
- Debugging OSPF and BGP issues using AI-assisted insights
- Case studies of network issues and AI-driven resolutions

Who Should Attend

This course is ideal for candidates having a strong understanding of HPE Aruba Networking technologies and products. They should have a professional level knowledge of HPE Aruba Networking AOS-CX switching.