

# Network Security – Deep Dive

A Free Training Event Presented by Kevin Wallace, CCIEx2 #7945 Emeritus

Wednesday, Sept. 28<sup>th</sup> at 2:00pm EDT (UTC-4)

Duration: Approx. 5 Hours

Registration Link: <https://kwtrain.com/cyber>

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## Agenda

- **Module 1: The Demand for Network Security Professionals**
  - Most In-Demand Certs in 2022
  - Current Number of Network Security Job Openings
- **Module 2: Security's 3 Big Goals**
  - Confidentiality
    - Firewalls
    - ACLs
    - Encryption
  - Integrity
  - Availability
- **Module 3: Common Network Attacks and Defenses**
  - Dos and DDoS Attacks
  - DoS and DDoS Defenses
  - On-Path Attacks
  - On-Path Defenses
    - DEMO:
      - Port Security
      - DHCP Snooping
      - Dynamic ARP Inspection (DAI)
  - Other Common Attacks
  - Common Defenses
  - User Authentication

- **Module 4: Wireless Security**
  - Wireless Security Issues
  - Wireless Security Defenses
  
- **Module 5: Session Hijacking**
  - Application-Level Hijacking
  - Network-Level Hijacking
  - Session Hijacking Defenses
  
- **Module 6: Physical Security**
  - Detecting Physical Security Breaches
  - Preventing Physical Security Breaches
  - Equipment Disposal Best Practices
  
- **Module 7: IoT and Cloud Security**
  - Mirai Malware Example
  - IoT Best Practices
  - Cloud Security Options
    - TLS
    - VPN
    - Private WAN
    - CASB
  
- **Module 8: Virtual Private Networks (VPNs)**
  - Remote Access and Site-to-Site VPNs
  - GRE
  - IPsec
  - GRE over IPsec
  - Dynamic Multipoint VPNs (DMVPNs)