

- Filename: eccouncil-ceh31250-v10-8-1-2-network\_sniffing\_pt2.md
  - Show Name: CEHv10 (312-50)
  - Topic Name: Attacks and Exploits
  - Episode Name: Network Sniffing Pt.2
  - Description: In this episode, Daniel and Zach take the time to dive into the merits and practice of sniffing networks. Here they look at methods for packet sniffing on a switched network through MAC flooding, port stealing, and ARP poisoning. Finally, they discuss sniffing detection methods.
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## Network Sniffing Pt.2

- MAC Flooding
  - Fill the CAM table with fake entries
  - Switch then acts like a hub
    - Forwards all packets out all ports
- Port Stealing
  - MAC Spoofing/Duplicating
    - Windows
      - NIC properties > Advanced > Network Address > Value
    - Linux
      - macchanger -m 11:aa:33:bb:55:ff
  - DIAGRAM
- DHCP Starvation
  - Request IPs until scope is exhausted
  - A DoS type of attack
- Rogue DHCP
  - Competes for DHCP requests
  - Another DoS
- ARP Spoofing/Poisoning
  - Creates entries in victim's ARP Cache
  - Defend using
    - DHCP Snooping
    - ARP Spoof Detection Tools
- DNS Spoofing/Poisoning
  - Intercepts the DNS requests and returns malicious info
  - Changes DNS info
    - DNS Server IP to malicious DNS IP
    - DNS Resolver Cache poisoning
- **Is there any way to defend against these kinds of attacks?**
- Sniffing detection methods
  - Check for reverse DNS lookup traffic
    - Likely to be a sniffer
  - Ping suspected client with wrong MAC
    - Good clients reject
    - Sniffers accept and respond

- Nmap

- nmap --script=sniffer-detect 10.0.0.165
  - DON'T FORGET TO ENABLE TCPDUMP!!!