Troubleshooting Networks

At the end of this episode, I will be able to:

1. Identify common network issues.

Exam Objective: 5.7 - Given a scenario, troubleshoot problems with wired and wireless networks.

Description: In this episode, we will discuss issues related to network issues and common causes.

- Common symptoms
  - **Performance**
    - Intermittent wireless connectivity
      - Antenna placement
      - Distance
      - Roaming aggressiveness
      - Demo: Wi-Fi Analyzer
    - Slow network speeds and high latency
      - Bandwidth saturation
      - Demo: speed and duplex settings on wired adapter
      - Demo: Wireless adapter settings

- - - Demo: tracert
  - External interference
    - Bad cables
    - Bad termination
    - Channel congestion on 2.4 GHz frequency
      - Demo: Wi-Fi Analyzer
  - VoIP issues (quality and jitter)
    - Demo: QoS protocol setting
  - Port flapping
    - Wrong cable (unsupported, non-standard)
    - Bad or wrong SFP module
  - **Configuration**
    - IP address (dynamic vs. static)
    - Limited connectivity
      - Default Gateway
      - Power failure
    - Name resolution

- Additional Reference Materials
  - Not applicable if blank.