

First Principles: Domain Separation, data hiding, simplicity, and least privilege

1. Time: 9 to 11
2. Lecture: Networking
  - a. OSI Model
  - b. Network Protocols
    - i. Application Layer Protocols
      1. HTTP
      2. FTP
      3. Sniffing traffic
    - ii. Transport Layer Protocols
      1. TCP
        - a. Threeway Handshake
        - b. Closing a connection
        - c. RST Flag
3. Activities
  - a. Activity: Use Netcat to make an HTTP request by hand
  - b. Activity: Use Netcat to interact with an FTP server
  - c. Activity: Sniffing HTTP/FTP traffic in Wireshark
  - d. Activity: Observe the threeway handshake in Wireshark
  - e. Activity: Observe a connection closing in Wireshark
  - f. Activity: Use netcat to try to connect to a port that isn't open and observe RST being sent back