

# Elevate Labs

## Short Report of Protocols Identified

### 1. DNS (Domain Name System)

- **Purpose:** Resolves domain names (like google.com) to IP addresses.
- **Captured Example:** Queries from client to DNS server (A records, responses with IPs).

### 2. TCP (Transmission Control Protocol)

- **Purpose:** Provides reliable, connection-oriented communication between devices.
- **Captured Example:** TCP 3-way handshake packets (SYN → SYN/ACK → ACK).

### 3. UDP (User Datagram Protocol)

- **Purpose:** Connectionless protocol used for faster communication (no reliability).
- **Captured Example:** DNS queries/responses were carried over UDP port 53.

### 4. HTTP/HTTPS (Hypertext Transfer Protocol)

- **Purpose:** Used for web browsing.
- **Captured Example:**
  - HTTP GET request to a website.
  - HTTPS packets visible (but encrypted, so only handshake info is visible).



### Summary

- **Protocols Identified:** DNS, TCP, UDP, HTTP/HTTPS
- **Traffic Observed:**
  - DNS lookups for websites
  - TCP connection establishment
  - Web browsing traffic over HTTP/HTTPS