

Wireshark Network Traffic Analysis Report

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Task: Capture and Analyze Network Traffic Using Wireshark

Objective: Capture live packets and identify basic protocols in network traffic.

Protocols Identified:

Protocol	Description	Packet Count
TCP	Connection-oriented protocol for reliable transmission	~120
DNS	Resolves domain names to IP addresses	~30

Observations:

- DNS queries were made to resolve domain names when browsing websites.
- TCP connections were established showing SYN, ACK, and data transfer packets.

Sample Packet Details:

DNS Query:

- Query: www.google.com
- Response: IP address 142.250.182.4

TCP Packet:

- Flags: SYN, ACK
- Port: 443 (HTTPS)
- Indicates successful TCP 3-way handshake.

Summary:

The capture shows active DNS resolution and TCP-based communication. No HTTP was observed, likely due to secure HTTPS traffic. Wireshark effectively helped identify and analyze basic traffic types.