

Wireshark

- It has a graphical user interface (GUI).
- In addition to live traffic analysis, historical traffic can be visualized.
- Uses more resources (due to GUI).
- It is used when detailed visualization and user-friendly analysis are required.

Similarities

- Both tools are used to capture and analyze network traffic.
- Both tools can record and read network traffic as a .pcap file. A .pcap file created with tcpdump can be opened and analyzed with Wireshark.

tcpdump

- It has a command line interface (CLI).
- Real-time traffic analysis can be done.
- It is lighter and faster; It works with the command line.
- Preferred when a lightweight and fast tool is required, especially on remote servers or when there is only command line access