

Wireshark

- Graphical User Interface (GUI)
- Tree-like protocol breakdown
- Suitable for educational and demo purposes
- Supports color-coding, statistics, and graphical tools
- More accessible for beginners
- Detailed protocol analysis with visual interpretation
- Supports GUI plugins and extensions

Similarities

Open-source and free.
Real-time packet capture.
Use of BPF filters.
Save and read `.pcap` files.
Require admin/root privileges.

tcpdump

- Command-Line Interface (CLI) only
- Lightweight and fast, ideal for non-GUI systems
- Frequently used in scripting and automation
- Preferred for remote servers or headless systems
- Text-based output, ideal for parsing in scripts
- Convenient for SSH sessions and low-resource environments