## **Information Gathering (Using GUI Base Tool with Url Target)**

Wireshark is a powerful network analysis tool that allows you to capture, filter, and inspect network packets. It can be used for information gathering and troubleshooting network communication issues. Here's a step-by-step guide on how to use Wireshark for information gathering:

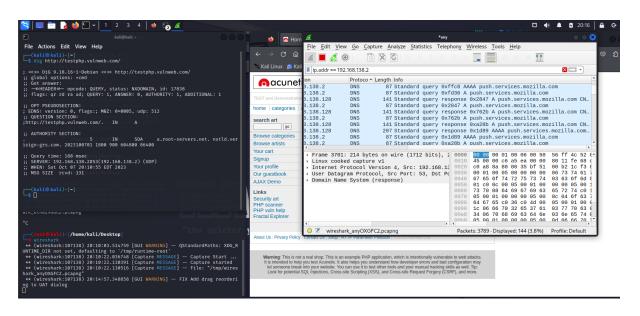
## **Capturing Packets:**

Download and install Wireshark from the official website.

Launch Wireshark and select the network interface you want to capture packets from. For example, if you want to capture traffic on your wireless network, select your wireless interface.

By default, Wireshark captures all packets on the network. If you want to capture only specific packets, you can apply filters. Click on "Capture > Options" to configure advanced features and apply filters if necessary.

Once you've configured the capture options, click the interface's name, and Wireshark will start capturing packets in real-time.



To stop capturing packets, click the red "Stop" button near the top left corner of the window.

## **Analyzing Packets:**

After capturing packets, Wireshark displays them in the Packet List pane.

The Packet List pane shows a list of captured packets with columns like No., Time, Source, Protocol, Length, and Info.

Clicking on a packet in the Packet List pane displays detailed information about that packet in the Packet Details pane.

The Packet Bytes pane displays the packet in hexadecimal format.

You can apply filters to analyze specific types of packets or conversations. Right-click on a packet and select "Follow" to see only the packets that are part of that conversation.

Use the Wireshark menu options and toolbar buttons to navigate, filter, and analyze the captured packets.

## **Additional Wireshark Commands:**

Wireshark can also be used from the command line with various options:

wireshark -h: Displays available command-line parameters for Wireshark.

wireshark -a duration:300 -i eth1 -w wireshark.pcap: Captures traffic on the Ethernet interface "eth1" for five minutes and saves it to a file named "wireshark.pcap". The -a option automatically stops the capture after the specified duration, and the -i option specifies the interface to capture from.

**Remember,** when using Wireshark for information gathering, ensure that you have the necessary permissions and legal rights to capture and analyze network traffic. Wireshark is a powerful tool that requires a good understanding of networking protocols and packet analysis techniques to effectively gather information from network traffic.