

**To use Wireshark effectively, follow these steps: install the tool, select the correct network interface, start capturing packets, apply filters, and analyze the data.** Here's a detailed breakdown tailored for your cybersecurity workflow:

### Step-by-Step Guide to Using Wireshark

#### 1. Install Wireshark

Download from the official Wireshark website.

Choose the correct installer for your OS (Windows, Linux, macOS).

During installation, allow WinPcap or Npcap (required for packet capture on Windows).

#### 2. Launch Wireshark and Select Interface

Open Wireshark and you'll see a list of available network interfaces.

Choose the one actively transmitting data (often your Ethernet or Wi-Fi adapter).

Click the blue shark fin icon to start capturing packets.

#### 3. Start Capturing Packets

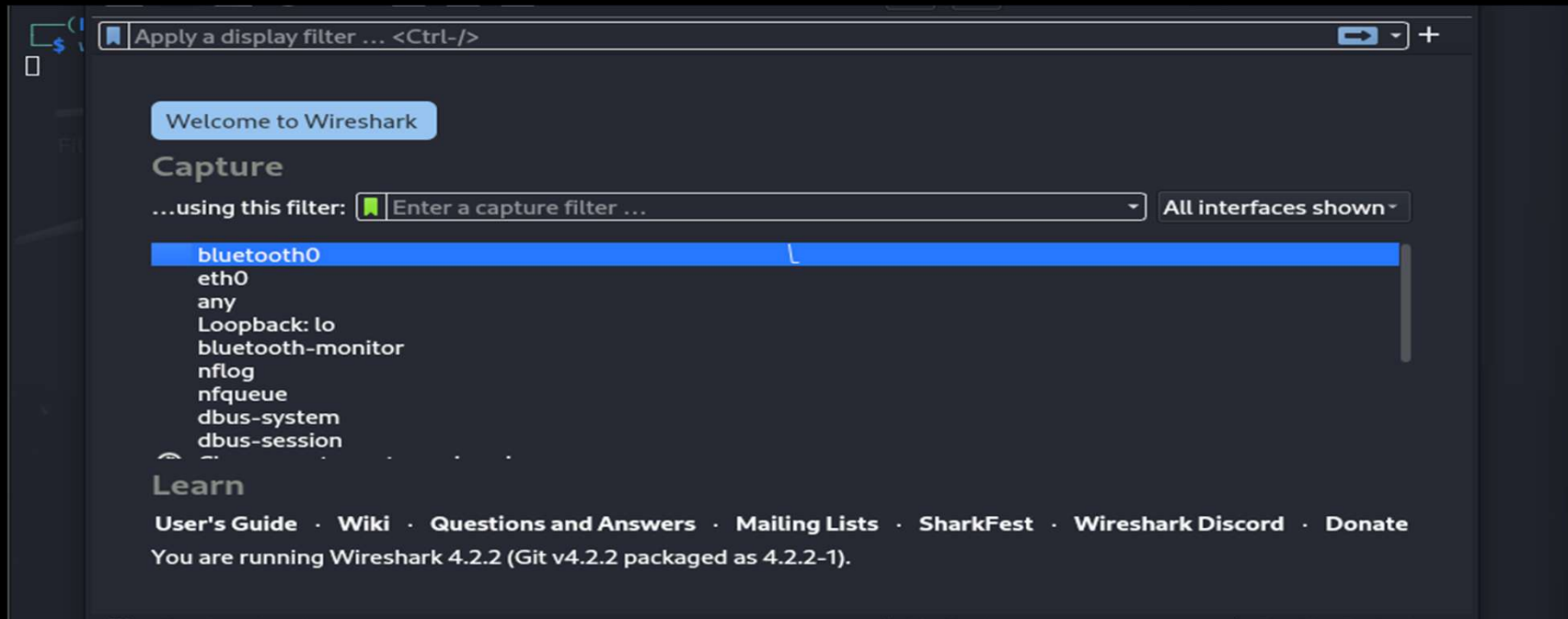
Once capture begins, Wireshark displays real-time packet data.

You'll see columns like *Time*, *Source*, *Destination*, *Protocol*, and *Info*.

Let it run for a few seconds or minutes depending on your analysis needs.



A terminal window on a Kali Linux system. The menu bar at the top shows 'File', 'Actions', 'Edit', 'View', and 'Help'. The terminal prompt is '(kali㉿kali)-[~]'. The user has entered the command '\$ wireshark' and the cursor is at the end of the line. In the background, there is a faint illustration of a laptop and a trash can icon labeled 'Trash'.



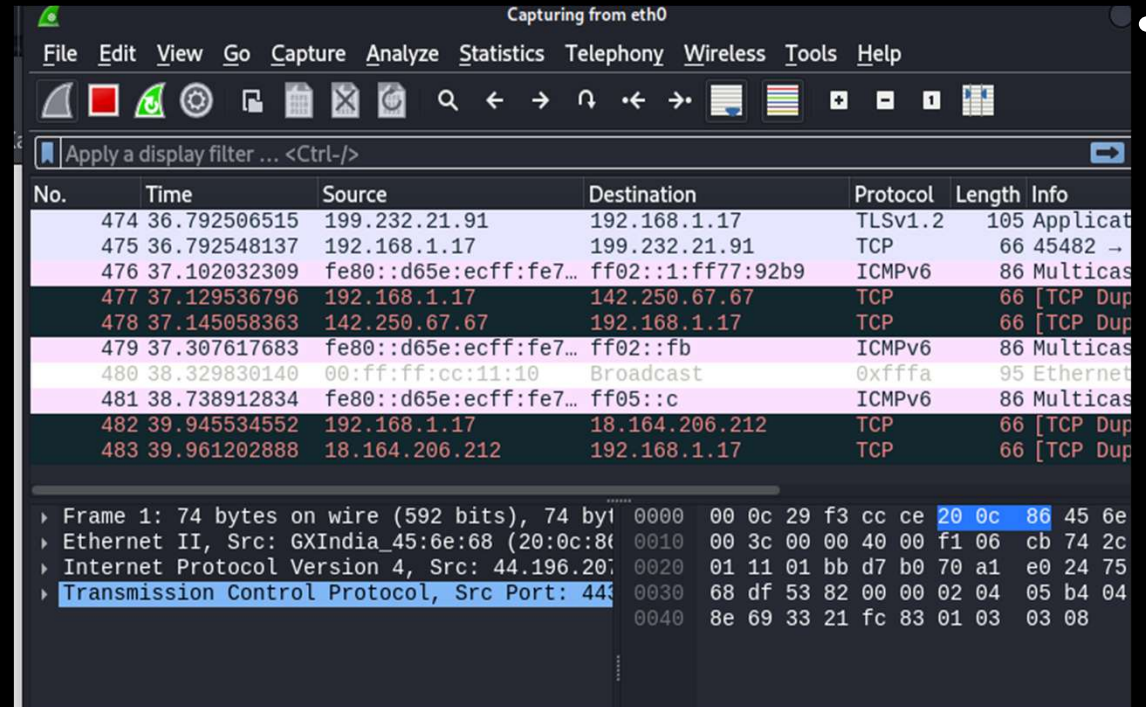
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- Let it run for a few seconds or minutes depending on your analysis needs.

### 4. Apply Capture or Display Filters

- Capture filters (set before starting): limit what gets recorded (e.g., ).
- Display filters (set after capture): narrow down what you see (e.g., , ).
- Use the filter bar at the top to enter expressions.



### 5. Analyze Packets

- Click on any packet to expand its details.
- You can inspect layers like Ethernet, IP, TCP/UDP, and application protocols (e.g., HTTP, DNS).
- Right-click a packet to follow TCP streams or export data.

The screenshot displays the Wireshark interface with a packet capture of network traffic. The packet list shows various protocols including Ethernet II, ARP, UDP, TCP, and STUN. The packet details pane for the selected packet (No. 2793) shows the structure of an Internet Protocol Version 4 packet, including the header, services field, and fragmentation information.

Overlaid on the right side of the screenshot are instructions for using the HOUND tool:

- 5. Share the Generated Link
- After setup, Hound will generate a Cloudflared link (e.g., <https://randomstring.tyocloudflare.com/>).
- Share this link with your devices or target (with permission).
- 6. Monitor the Output
- Once the link is accessed, Hound will log:
  - GPS coordinates
  - Device details
  - IP address
- These logs are saved in the tool's directory for analysis.

```

(kali㉿kali)-[~]
$ ls
akshansh Desktop Documents Downloads hound Music Pictures pr1 pr2 pr3 Public sherlock

(kali㉿kali)-[~]
$ Downloads

(kali㉿kali)-[~/Downloads]
$ ls
compat-wireless-2010-06-28 compat-wireless-2010-06-28.tar.bz2 Python-3.9.22 Python-3.9.22.tar.xz

(kali㉿kali)-[~/Downloads]
$ ufonet

(kali㉿kali)-[~/Downloads/ufonet]
$ ./ufonet --help
Usage: ./ufonet [options]

{(D)enial(OFF)ensive(S)ervice[ToolKit]}-{by_(io=psy+/03c8.net)}

Options:
  --version          show program's version number and exit
  -h, --help         show this help message and exit
  -v, --verbose      active verbose on requests
  --examples        print some examples
  --timeline        show program's code timeline
  --update          check for latest stable version
  --check-tor       check to see if Tor is used properly
  --force-ssl       force usage of SSL/HTTPS requests
  --force-yes       set 'YES' to all questions
  --gui            start GUI (UFONet Web Interface)

*Tools*:
  --crypter         Crypt/Decrypt messages using AES256+HMAC-SHA1
  --network         Show info about your network (MAC, IPs)
  --xray=XRAY       Fast port scanner (ex: --xray 'http(s)://target.com')
  --xray-ps=XRAYPS Set range of ports to scan (ex: --xray-ps '1-1024')

*Configure Request(s)*:
  --proxy=PROXY     Use proxy server (ex: --proxy 'http://127.0.0.1:8118')
  --user-agent=AGENT Use another HTTP User-Agent header (default: SPOOFED)
  --referrer=REFERER Use another HTTP Referer header (default: SPOOFED)
  --host=HOST       Use another HTTP Host header (default: NONE)
  --xforw          Set your HTTP X-Forwarded-For with random IP values
  --xclient        Set your HTTP X-Client-IP with random IP values
  --timeout=TIMEOUT Select your timeout (default: 5)

```

## Ethical DoS Simulation Lab with UFONet

✓ What You'll Need

Kali Linux (host or VM)

UFONet installed

Local web server (e.g., Apache or Flask app)

Isolated network or VM environment

✂ Setup Steps

### Install UFONet

git clone <https://github.com/epsylon/ufonet.git> cd ufonet python3 ufonet --help

### Set Up a Test Web Server Example using Python Flask:

```

pip3 install flask echo "from flask import Flask; app =
Flask(__name__); @app.route('/') def home(): return 'Test
Server'; app.run(host='0.0.0.0', port=8080)" > test_server.py
python3 test_server.py

```

### Download and Test Zombies

```

python3 ufonet --download-zombies python3 ufonet --test-
zombies

```

### Simulate Attack on Localhost

```

python3 ufonet --attack --target http://127.0.0.1:8080

```



```

(kali@kali)-[~/Downloads/ufonet]
$ ./ufonet --download-zombies

File System
      / ^ \
    -(00)- + (XX) + -(00)-
      ||      || 0 =*~~~~~* 0 ||
    -(00)- 0|0 (0) XX (0) -(00)-
      ||      || \ (00) | / |D_ ||
    0+!$(0)! (0) 0' _'0 (0) !(0)$!+0
    |00 00| .'.( xx ).'. |00 00|
    ***+*. ' ' +X| ' ' |X+ ' ' ***+*.
    .'. ' / _ . | 00 | _ . ' \ ' .'.
    +(0). )-|0| \ x| ## |x / |0|-(.(0)+
    .'. ' _ . / -00- \ .'. ' _ .'.
    .'. | || _ . | || _ . | || _ . |
    / ' ## | = | / _00_ \ || = | ' ## |
    (0)- | (0) | . 0 \ || ** || /0 .'. | (0) | -(0)
    * \ ' _ . ' \ _ ## / | .'. ' _ . / *
    .'. _ - | _ . | _ . | _ . | _ . |
    + Class: PSYoPs / ViPR404+/(model:I^4*2) +

#=====
||
|| > Botnet [DDoS] # > Close Combat [DoS]
||
|| ↳ ZOMBIES # ↳ LOIC
|| ↳ DROIDS # ↳ LORIS
|| ↳ ALIENS # ↳ UFOSYN
|| ↳ UCAVs # ↳ XMAS
|| ↳ X-RPCs # ↳ NUKE
|| ↳ DBSTRESS # ↳ UFOACK
|| ↳ SPRAY # ↳ UFORST
|| ↳ SMURF # ↳ DROPER
|| ↳ TACHYON # ↳ OVERLAP
|| ↳ MONLIST # ↳ PINGER
|| ↳ FRAGGLE # ↳ UFOUDP
|| ↳ SNIPER #
||
#=====
||
|| → [ UFONet: https://ufonet.03c8.net ] ←
||
#=====

888 888 88888888888 .d88888b. 888b 888 888
888 888 888 d88P Y888b 8888b 888 888
888 888 888 888 888 88888b 888 888
888 888 88888888 888 888 888Y88b 888 .d88b. 888888
888 888 888 888 888 888 Y88b888 d8P Y8b 888
888 888 888 888 888 888 Y88888 888888888 888
Y88b. .d88P 888 Y88b. .d88P 888 Y8888 Y8b. Y88b.
'Y88888P' 888 'Y88888P' 888 Y888 'Y8888 'Y8888

{(D)enial(OFF)ensive(S)ervice[ToolKit]}-{by_(io=psy+/03c8.net)}

[AI] Downloading list of [Zombies] from [Community] server ...

```



```
└─$ ./ufonet --down-from=DIP
```

```
+ Class: PSYoPs / ViPR404+/(model:I^4*2) +
```

```
#
#
# > Botnet [DDoS] # > Close Combat [DoS]
#
#   ↳ ZOMBIES #   ↳ LOIC
#   ↳ DROIDS #   ↳ LORIS
#   ↳ ALIENS #   ↳ UFOSYN
#   ↳ UCAVs #   ↳ XMAS
#   ↳ X-RPCs #   ↳ NUKE
#   ↳ DBSTRESS #   ↳ UFOACK
#   ↳ SPRAY #   ↳ UFORST
#   ↳ SMURF #   ↳ DROPER
#   ↳ TACHYON #   ↳ OVERLAP
#   ↳ MONLIST #   ↳ PINGER
#   ↳ FRAGGLE #   ↳ UFOUDP
#   ↳ SNIPER #
#
#
#
#
# → [ UFONet: https://ufonet.03c8.net ] ←
#
```

```

888      888 88888888888 .d88888b. 888b      888      888
888      888 888      d88P Y888b 8888b 888      888      888
888      888 888      888      888 888888b 888      888
888      888 88888888 888      888 888Y88b 888      .d88b. 888888
888      888 888      888      888 888 Y88b888 d8P Y8b 888
888      888 888      888      888 888 Y88888 888888888 888
Y88b. .d88P 888      Y88b. .d88P 888 Y888 Y8b. Y88b.
'Y88888P' 888      'Y88888P' 888 Y888 'Y8888 'Y8888

```

```
{(D)enial(OFF)ensive(S)ervice[ToolKit]}-{by_(io=psy+/03c8.net)}
```

```
[AI] Downloading list of [Zombies] from [Private] server: DIP ...
```

```
[AI] Trying [Blackhole] [Server]: DIP
```

# OTHER TOOLS USED

Tools used: -

Theharvester, hydra, nmap, wireshark, autopsy, ngork, phoneinfoga, sqlmap, dnsenum, burpsuite, volatility, etc.

**OTHER TOOLS USED**

**TheHarvester Ver. 3.0.0**  
• Coded by Christian Martorella  
• Edge-Security Research  
• cmartorell@edge-security.com

**Usage: theharvester options**

- d: Domain to search or company name
- b: data source: baidu, bing, bingapi, doppelie, google, googleCSE, googleplus, google-profiles, linkedin, pgg, twitter, vhost, virustotal, threatcrowd, crlsh, metcrafter, yahoo, all
- s: start in result number X (default: 0)
- v: verify host name via dns resolution and search for virtual hosts
- f: save the results into an HTML and XML file (both)
- n: perform a DNS reverse query on all ranges discovered
- c: perform a DNS brute force for the domain name
- t: perform a DNS TLD expansion discovery
- e: use this DNS server
- p: port scan the detected hosts and check for Takeovers (80,443,221,8080)
- l: limit the number of results to work with (going from 50 to 50 results, google 100 to 100, and pgp doesn't use this option)
- h: use CHUDAM database to query discovered hosts

**Examples:**

```
theharvester -d microsoft.com -l 500 -b google -h myresults.html
theharvester -d microsoft.com -b pgp
theharvester -d microsoft -l 200 -b linkedin
theharvester -d apple.com -b googleCSE -l 500 -s 300
```

**NMAP**

**BURPSUITE**

**SQLmap**

**Legal disclaimer:** Usage of sqlmap for attacking targets without explicit permission is illegal. It is the end user's responsibility to obey local laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program.

**Starting @ 10:44:53 /2019-04-30/**

**[10:44:54] [INFO]** testing connection to the target URL

**[10:44:54] [INFO]** heuristics detected web page charset

**[10:44:54] [INFO]** checking if the target is protected b

**[10:44:54] [INFO]** testing if the target URL content is

**[10:44:55] [INFO]** target URL content is stable

**[10:44:55] [INFO]** testing if GET parameter 'id' is dyna

**[10:44:55] [INFO]** GET parameter 'id' appears to be dyna