

SNIFFING USING WIRESHARK

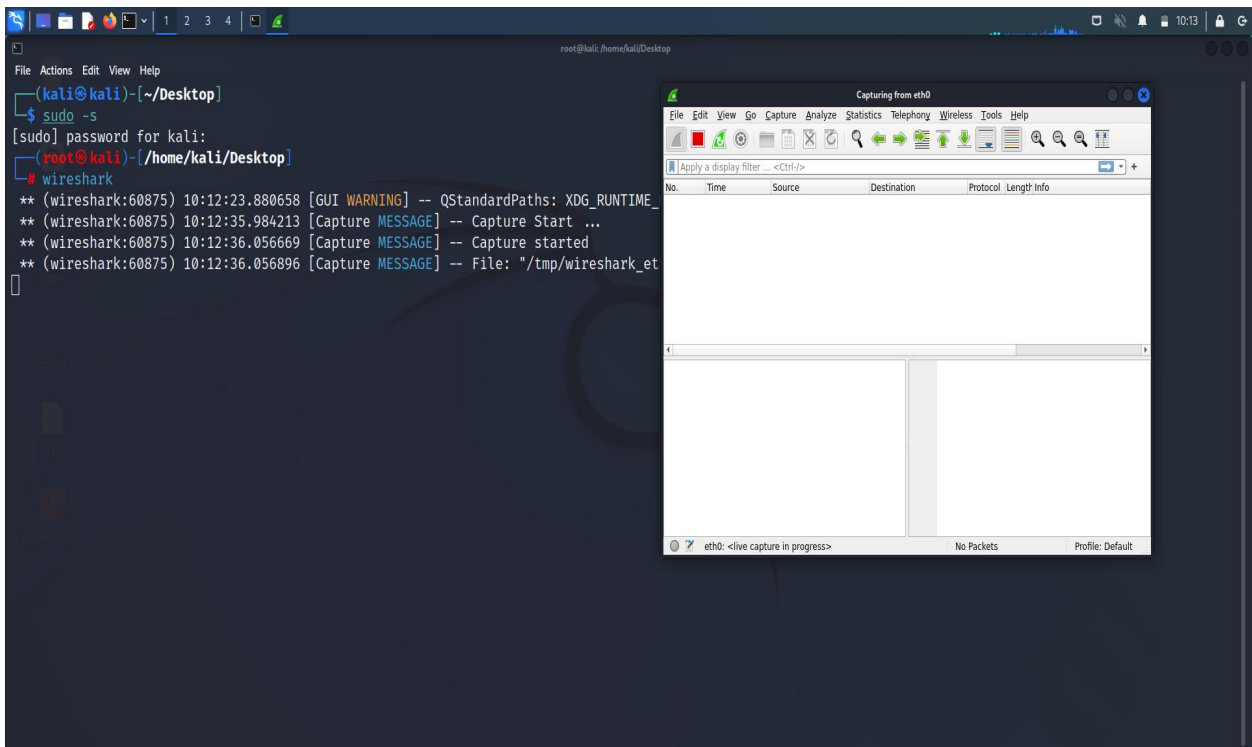
Wireshark is a free open source tool that analyzes network traffic in real-time for Windows, Mac, Unix, and Linux systems. It captures data packets passing through a network interface (such as Ethernet, LAN, or SDRs) and translates that data into valuable information for IT professionals and cybersecurity teams.

Wireshark is a type of packet sniffer (also known as a network protocol analyzer, protocol analyzer, and network analyzer). Packet sniffers intercept network traffic to understand the activity being processed and harvest useful insights. Wireshark is the most often-used packet sniffer in the world. Like any other packet sniffer, Wireshark does three things.

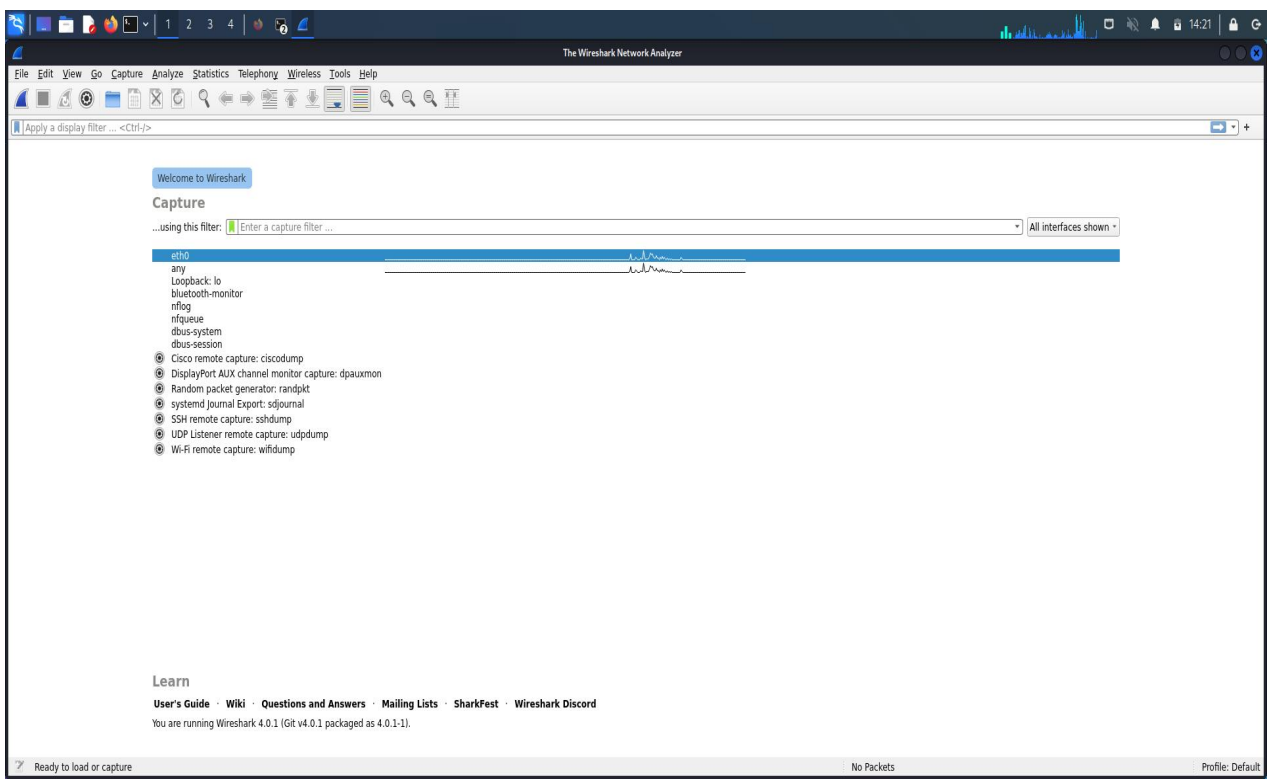
METHODS:

1. **Packet Capture:** Wireshark listens to a network connection in real time and then grabs entire streams of traffic – quite possibly tens of thousands of packets at a time.
2. **Filtering:** Wireshark is capable of slicing and dicing all of this random live data using filters. By applying a filter, you can obtain just the information you need to see.
3. **Visualization:** Wireshark, like any good packet sniffer, allows you to dive right into the very middle of a network packet. It also allows you to visualize entire conversations and network streams.

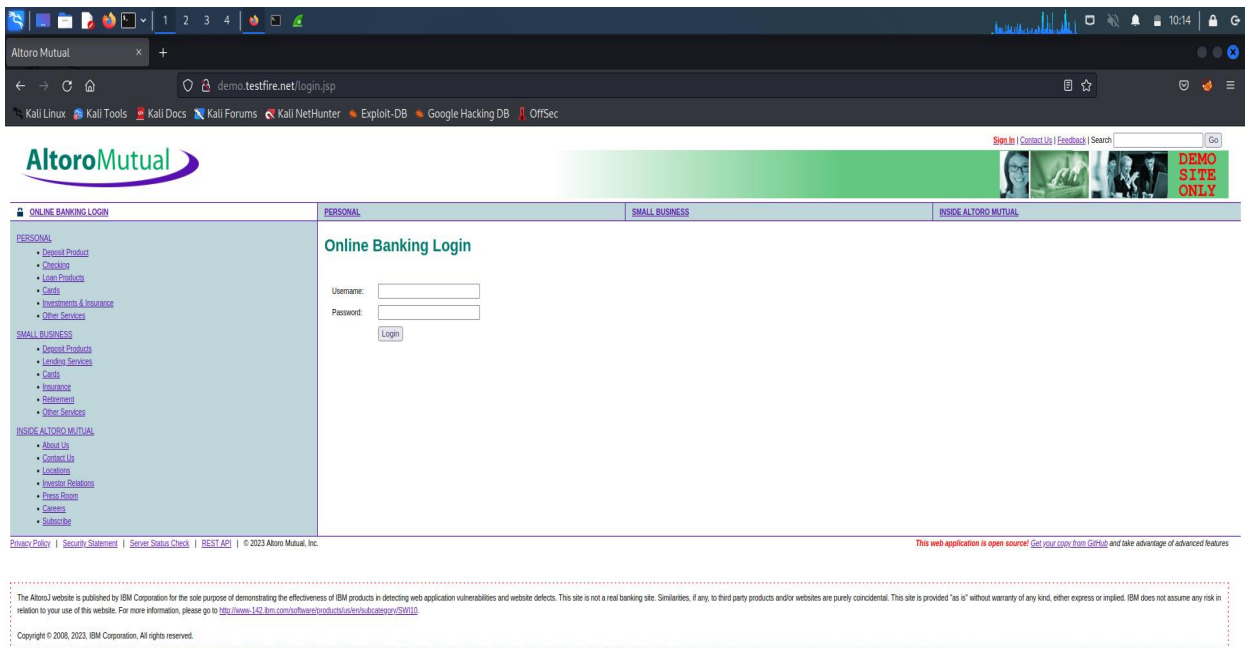
Step 1: Login to kali as root user and type Wireshark.



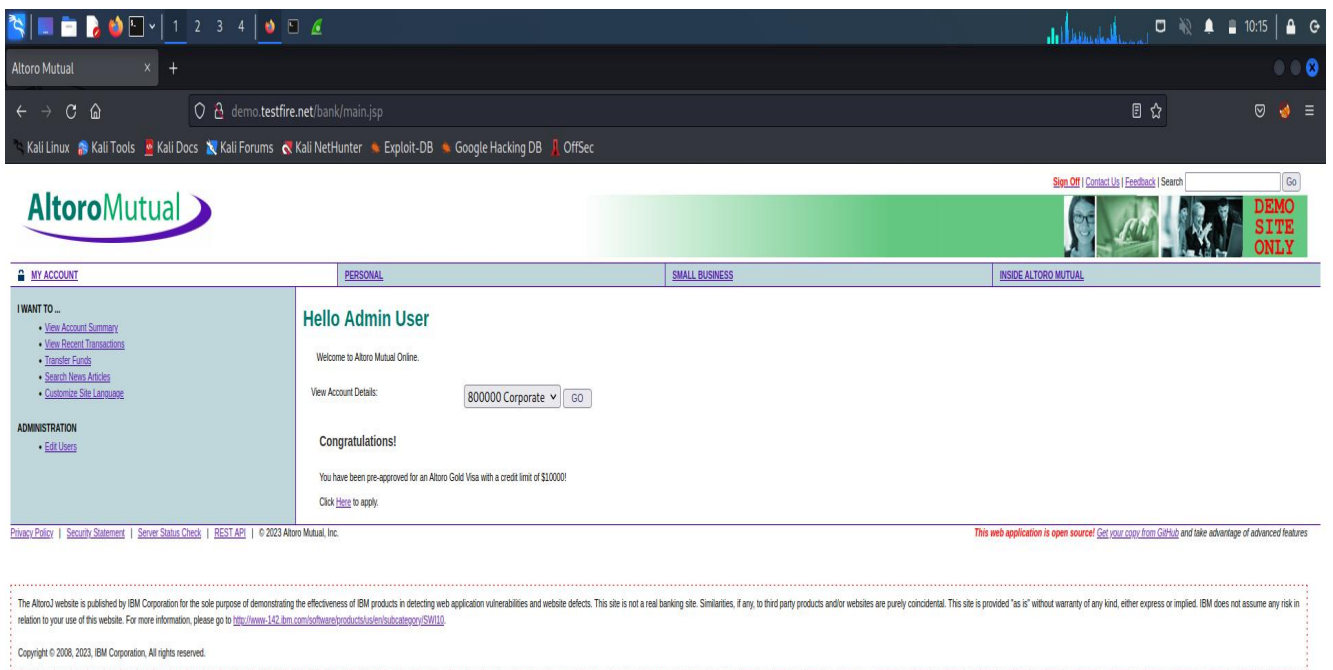
Step 2: Wireshark Network Analyzer will be opened and double click on **eth0**(1st option).



Step 3: Go to Firefox and search **testfire.net**



Username: **admin** Password: **admin**



Step 4: Go to wire shark and in search bar filter http -post. By clicking last option, you will get the password and username to crack it.

Wireshark interface showing a network capture of an HTTP session. The top pane displays a list of captured packets, with packet 620 selected. The middle pane shows the details of the selected packet, including the Request URI, Request Version, Host, User-Agent, Accept, Accept-Language, Accept-Encoding, Content-Type, Content-Length, Origin, Connection, Referer, Cookie, and Upgrade-Insecure-Requests. The bottom pane displays the raw packet data in hexadecimal and ASCII.

Packet List:

No.	Time	Source	Destination	Protocol	Length	Info
416	25.109611726	10.0.2.15	65.61.137.117	HTTP	400	GET /images/home1.jpg HTTP/1.1
418	25.110146510	10.0.2.15	65.61.137.117	HTTP	402	GET /images/pf_lock.gif HTTP/1.1
419	25.110626753	65.61.137.117	10.0.2.15	HTTP	1406	HTTP/1.1 200 OK (JPEG JFIF image)
430	25.128554952	65.61.137.117	10.0.2.15	HTTP	1175	HTTP/1.1 200 OK (JPEG JFIF image)
436	25.140236975	65.61.137.117	10.0.2.15	HTTP	527	HTTP/1.1 200 OK (JPEG JFIF image)
442	25.140649778	65.61.137.117	10.0.2.15	HTTP	883	HTTP/1.1 200 OK (JPEG JFIF image)
444	25.1504436254	65.61.137.117	10.0.2.15	HTTP	354	HTTP/1.1 200 OK (GIF89a)
446	25.1534952828	10.0.2.15	65.61.137.117	HTTP	395	GET /favicon.ico HTTP/1.1
458	25.1836434302	65.61.137.117	10.0.2.15	HTTP	372	HTTP/1.1 404 Not Found (text/html)
530	52.926559994	10.0.2.15	65.61.137.117	HTTP	404	GET /login.jsp HTTP/1.1
540	53.224167076	65.61.137.117	10.0.2.15	HTTP	1143	HTTP/1.1 200 OK (text/html)
550	53.456893701	10.0.2.15	65.61.137.117	HTTP	405	GET /style.css HTTP/1.1
552	53.483820226	10.0.2.15	65.61.137.117	HTTP	418	GET /images/logo.gif HTTP/1.1
553	53.484114145	10.0.2.15	65.61.137.117	HTTP	424	GET /images/header.pic.jpg HTTP/1.1
554	53.484306979	10.0.2.15	65.61.137.117	HTTP	421	GET /images/pf_lock.gif HTTP/1.1
574	53.620267077	65.61.137.117	10.0.2.15	HTTP	354	HTTP/1.1 200 OK (GIF89a)
620	75.621383541	65.61.137.117	10.0.2.15	HTTP	278	HTTP/1.1 302 Found
622	75.634328155	10.0.2.15	65.61.137.117	HTTP	587	GET /bank/main.jsp HTTP/1.1
632	75.937151308	65.61.137.117	10.0.2.15	HTTP	1346	HTTP/1.1 200 OK (text/html)
706	117.579430698	10.0.2.15	152.195.38.76	OCSP	470	Request
708	117.634598947	152.195.38.76	10.0.2.15	OCSP	795	Response
876	301.822224140	10.0.2.15	194.84.232.81	OCSP	469	Request
878	301.139796902	194.84.232.81	10.0.2.15	OCSP	942	Response

Packet 620 Details:

Request URI: /doLogin
Request Version: HTTP/1.1
Host: demo.testfire.net/r/n
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:102.0) Gecko/20100101 Firefox/102.0/r/n
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8/r/n
Accept-Language: en-US,en;q=0.5/r/n
Accept-Encoding: gzip, deflate/r/n
Content-Type: application/x-www-form-urlencoded/r/n
Content-Length: 37/r/n
[Content length: 37]
Origin: http://demo.testfire.net/r/n
Connection: keep-alive/r/n
Referer: http://demo.testfire.net/login.jsp/r/n
Cookie: JSESSIONID=7A6294D3AA13EAF94D3DA108AE440B83/r/n
Cookie pair: JSESSIONID=7A6294D3AA13EAF94D3DA108AE440B83
Upgrade-Insecure-Requests: 1/r/n
[Full request URI: http://demo.testfire.net/doLogin]
[HTTP request 1/1]
[Response in frame: 620]
File Data: 37 bytes
HTML Form URL Encoded: application/x-www-form-urlencoded
Form item: "uid" = "admin"
Form item: "passw" = "admin"
Form item: "btnSubmit" = "Login"

Raw Data:

0000 52 54 00 12 35 00 08 00 27 b1 9d 67 08 00 45 00 RT-5... 'g-E
0010 82 73 50 81 40 00 40 06 11 43 0a 00 02 0f 41 3d sP @ @ C...A-
0020 09 75 b1 1e 00 50 a5 12 84 49 00 00 e0 8e 50 10 u .P . I . .P
0030 fa f0 09 28 00 00 50 4f 53 54 20 2f 64 6f 4c 6f . & PQ ST /doLo
0040 67 69 6e 20 48 54 54 50 2f 31 2e 31 0d 0a 48 6f gln HTTP /1.1. Ho
0050 73 74 3a 20 64 65 6d 6f 2e 74 65 73 74 66 69 72 st: demo .testfir
0060 65 2e 6e 65 74 0d 0a 55 73 65 72 2d 41 67 65 6e e.net -U ser-Agen
0070 74 3a 20 4d 6f 7a 69 6e 6c 61 2f 35 2e 30 29 28 t: Mozil la/5.0 (
0080 58 31 31 30 29 4c 69 6e 75 78 20 78 38 36 5f 36 XII; Lin ux x86.6
0090 34 3b 20 72 76 3a 31 30 32 2e 30 29 29 20 47 65 63 4; rv:10 2.0) Gec
00a0 6b 6f 2f 32 30 31 30 30 31 30 31 20 46 69 72 65 ko/20100 101 Fire
00b0 66 6f 78 2f 31 30 32 2e 30 0d 0a 41 63 63 65 70 fox/102. 0- Accep
00c0 74 3a 20 74 65 78 74 2f 68 74 6d 6c 2c 61 70 70 t: text/ html,app
00d0 6c 69 63 61 74 69 6f 6e 2f 78 68 74 6d 6c 2b 78 lication /html+x
00e0 6d 6c 2c 61 70 70 6c 69 63 61 74 69 6f 6e 2f 78 ml,appli cation/x
00f0 6d 6c 30 71 3d 30 2e 30 2c 69 6d 61 67 65 2f 61 ml;q=0.9 ,image/a
0100 76 69 66 2c 69 6d 61 67 65 2f 77 65 62 70 2c 2a vif,imag e/webp,*
0110 2f 2a 3b 71 3d 30 2e 30 0d 0a 41 63 63 65 70 74 /*;q=0.8 -Accept
0120 2d 4c 61 6e 67 75 61 67 65 3a 20 65 6e 2d 55 53 -Languag e: en-US
0130 2c 65 6e 3b 71 3d 30 2e 35 0d 0a 41 63 63 65 70 ,en;q=0.5 -Accept
0140 74 2d 45 6e 63 6f 64 69 6e 67 3a 20 67 7a 69 70 t-Enco di ng: gzip
0150 2c 20 64 65 66 6c 61 74 65 0d 0a 43 6f 6e 74 65 , deflat e Conte
0160 6e 74 2d 54 79 70 65 3a 20 61 70 70 6c 69 63 61 nt-Type: applica
0170 74 69 6f 6e 2f 78 2d 77 77 77 2d 66 6f 72 6d 2d tion/x-ww -form-
0180 75 72 6c 65 6e 63 6f 64 65 64 0d 0a 43 6f 6e 74 urlencod ed Cont