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# Nmap:

Nmap (Network Mapper) is a free and open-source tool for network discovery and security auditing. It is used to scan IP addresses and ports in a network and to detect installed applications. Nmap allows network admins to find which devices are running on their network, discover open ports and services, and detect vulnerabilities.

```
.
                              fluxbirds@Fluxbird: ~
                                                            Q
                                                                      loop txqueuelen 1000 (Local Loopback)
       RX packets 24 bytes 1440 (1.4 KiB)
       RX errors 0 dropped 0 overruns 0 frame 0
       TX packets 24 bytes 1440 (1.4 KiB)
       TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
  —(fluxbirds⊕ Fluxbird)-[~]
s nmap 132.233.9.13 -sV -Pn
Starting Nmap 7.93 ( https://nmap.org ) at 2023-09-06 15:54 IST
Nmap scan report for 132.233.9.13
Host is up (0.014s latency).
Not shown: 997 filtered tcp ports (no-response)
      STATE SERVICE VERSION
PORT
21/tcp open ftp?
554/tcp open rtsp?
1723/tcp open pptp?
Service detection performed. Please report any incorrect results at https://nmap
.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 173.13 seconds
```

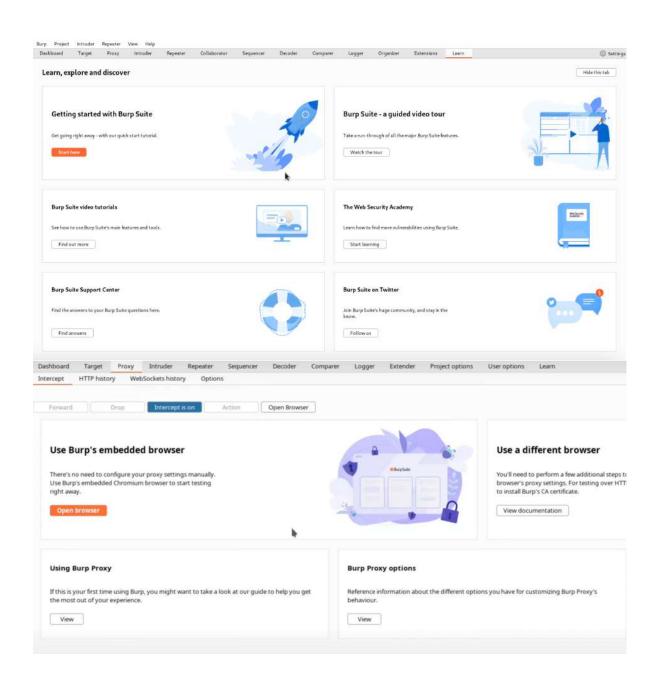
### Burp suit:

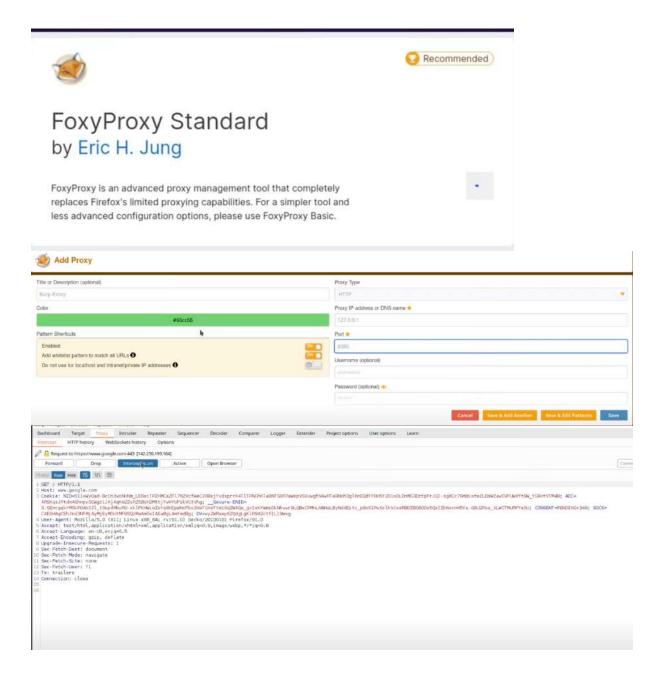
Burp Suite is a comprehensive suite of tools for web application security testing. It can be used to identify and exploit vulnerabilities in web applications, as well as to improve the security of web applications.

Burp Suite consists of a number of different tools, including:

- Proxy: The proxy intercepts all traffic between the user's browser and the webapplication. This allows Burp Suite to examine the traffic and identify potential vulnerabilities.
- Scanner: The scanner automatically scans web applications for knownvulnerabilities.
- Intruder: The intruder tool can be used to fuzz web applications and to identify vulnerabilities that are not detected by the scanner.
- Repeater: The repeater tool allows the user to manually send requests to the web application and to see the responses. This can be used to debug web applications and to identify vulnerabilities.

- Sequencer: The sequencer tool can be used to analyze the sequence of requests and responses in a web application. This can be used to identify vulnerabilities that are not detected by the other tools.
- Spider: The spider tool can be used to crawl a web application and to identifyall of the pages and resources that are available. This can be used to find vulnerabilities that are not easily accessible.
- Extender: The extender allows the user to add custom functionality to BurpSuite. This can be used to extend the capabilities of Burp Suite and to automate tasks.

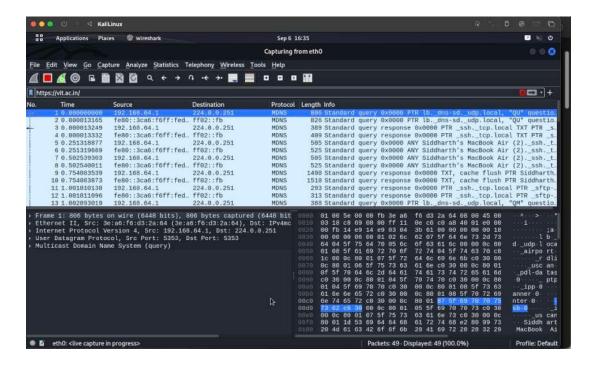




### Wireshark:

Wireshark is a tool that can be used to see what is happening on a network. It can be used to troubleshoot problems, see how applications are communicating, and even find security vulnerabilities.

Wireshark works by capturing packets of data as they travel over the network. It then decodes these packets and displays them in a human-readable format. This allows you to see the contents of the packets, including the source and destination addresses, the protocol used, and the data being transmitted.



# Metaspolit:

Metasploit is a penetration testing framework that is used to find and exploit vulnerabilities in computer systems and networks. It is a powerful tool that can be used by security professionals to test the security of their systems and by attackers exploit vulnerabilities.

Metasploit has a large library of exploits that can be used to exploit known vulnerabilities. It also has a variety of tools that can be used to automate tasks, such as scanning for vulnerabilities and generating reports.

- Penetration testing: Metasploit can be used by penetration testers to identify and exploit vulnerabilities in computer systems and applications. This helps to improve the security of the systems and applications.
- Vulnerability scanning: Metasploit can be used to scan networks and systems for vulnerabilities. This can help organizations to identify and fix vulnerabilities before they can be exploited by attackers.
- Security research: Metasploit can be used by security researchers to study vulnerabilities and to develop new ways to exploit them. This helps to improve theunderstanding of vulnerabilities and how to prevent them.
- Cyberwarfare: Metasploit can be used by governments and militaries to exploit vulnerabilities in enemy systems. This can be used to gain intelligence or todisrupt enemy operations.

```
=[ metasploit v6.3.16-dev
  -- --=[ 2315 exploits - 1208 auxiliary - 412 post
-- --=[ 975 payloads - 46 encoders - 11 nops
 -- --=[ 9 evasion
Metasploit tip: Enable HTTP request and response logging
with set HttpTrace true
Metasploit Documentation: https://docs.metasploit.com/
msf6 > search smb
```



# Aircrack-ng:

Aircrack-ng is a suite of tools that can be used to crack wireless security protocols, such as WEP and WPA. It can also be used to monitor wireless networks and capturepackets.

Aircrack-ng is a command-line tool, but there are also GUIs available. It is available for Linux, macOS, Windows, and FreeBSD.

To use Aircrack-ng, you will need to have a wireless adapter that supports monitormode. You can check if your adapter supports monitor mode by running the following command:

If your adapter supports monitor mode, you will see a list of interfaces that can be used in monitor mode.

```
$ aircrack-ng --help
 Aircrack-ng 1.7 - (C) 2006-2022 Thomas d'Otreppe
 https://www.aircrack-ng.org
 usage: aircrack-ng [options] <input file(s)>
 Common options:
     -a <amode> : force attack mode (1/WEP, 2/WPA-PSK)
     -e <essid> : target selection: network identifier
     -b <bssid> : target selection: access point's MAC
     -p <nbcpu> : # of CPU to use (default: all CPUs)
                : enable quiet mode (no status output)
     -q
     -C <macs> : merge the given APs to a virtual one
     -l <file> : write key to file. Overwrites file.
 Static WEP cracking options:
                : search alpha-numeric characters only
     -0
                : search binary coded decimal chr only
     -t
                : search the numeric key for Fritz!BOX
     -h
     -d <mask> : use masking of the key (A1:XX:CF:YY)
-m <maddr> : MAC address to filter usable packets
     -n <nbits> : WEP key length : 64/128/152/256/512
     -i <index> : WEP key index (1 to 4), default: any
     -f <fudge> : bruteforce fudge factor, default: 2
     -k <korek> : disable one attack method (1 to 17)
     -x or -x0 : disable bruteforce for last keybytes
                : last keybyte bruteforcing (default)
     -x1
     -x2
                : enable last 2 keybytes bruteforcing
     -X
                : disable bruteforce multithreading
                : experimental single bruteforce mode
     -V
                : use only old KoreK attacks (pre-PTW)
     -K
                : show the key in ASCII while cracking
     -5
     -M <num>
               : specify maximum number of IVs to use
                : WEP decloak, skips broken keystreams
     -D
     -P <num> : PTW debug: 1: disable Klein. 2: PTW
```

```
-(root®Fluxbird)-[/home/fluxbirds]
└# airmon-ng start
Found 3 processes that could cause trouble.
Kill them using 'airmon-ng check kill' before putting
the card in monitor mode, they will interfere by changing channels
and sometimes putting the interface back in managed mode
    PID Name
    477 dhclient
    590 NetworkManager
                                                           I
   1035 wpa supplicant
usage: airmon-ng <start|stop|check> <interface> [channel or frequency]
wlan0
         IEEE 802.11 Mode:Master Tx-Power=17 dBm
          RTS thr:off
                     Fragment thr:off
          Power Management:off
eth0
         no wireless extensions.
wlan0-1
         IEEE 802.11 Mode:Master Tx-Power=17 dBm
          RTS thr:off
                     Fragment thr:off
          Power Management:off
         no wireless extensions.
lo
wlan1mon IEEE 802.11 Mode: Monitor Frequency: 2.457 GHz Tx-Power=20 dBm
         RTS thr:off
                     Fragment thr:off
         Power Management:off
br-lan
         no wireless extensions.
eth1
         no wireless extensions.
```

# Jhon the ripper:

John the Ripper is a popular open source password cracking tool that combinesseveral different cracking programs and runs in both brute force and dictionary attack modes.

```
Using default input encoding: UTF-8
Loaded 4 password hashes with no different salts (Raw-MD5 [MD5 256/256 AVX2 8x3])
Warning: no OpenMP support for this hash type, consider --fork=4
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, rules:Wordlist
12345 (?)
1234 (?)
123 (?)
Proceeding with incremental:ASCII
1234589 (?)
4g 0:00:00:06 DONE 3/3 (2021-05-10 01:19) 0.6557g/s 12892Kp/s 12892Kc/s 12892KC/s tslggl6..1234532
Use the "--show --format=Raw-MD5" options to display all of the cracked passwords reliably
Session completed
```

```
Using default input encoding: UTF-8
Loaded 1 password hash (ZIP, WinZip [PBKDF2-SHA1 128/128 AVX 4x])
Cost 1 (HMAC size) is 302322 for all loaded hashes
Will run 4 OpenMP threads
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
123456 (demofile.zip/chinook.db)
1g 0:00:00:19 DONE 2/3 (2023-08-27 07:30) 0.05208g/s 2104p/s 2104c/s 2104C/s 123456..Peter
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
```

# Sqlmap:

- Penetration testing: SQLmap can be used by penetration testers to identify and exploit SQL injection vulnerabilities in web applications. This helps to improve the security of the applications and prevent attackers from exploiting them.
- Vulnerability scanning: SQLmap can be used to scan websites for SQL injection vulnerabilities. This can help organizations to identify and fix vulnerabilities before they can be exploited by attackers.
- Security research: SQLmap can be used by security researchers to study SQL injection vulnerabilities and develop new ways to exploit them. This helps to improve the understanding of SQL injection vulnerabilities and how to prevent them.

```
[1] tegal disclaimer: Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable e local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 17:47:09 | Usage of sqlmap for attacking targets without prior mutual consent is illegal. It is the end user's responsibility to obey all applicable e local, state and federal laws. Developers assume no liability and are not responsible for any misuse or damage caused by this program

[*] starting @ 17:47:09 | Usagu6 | cleaning up configuration parameters
[17:47:09] [usagu6 | setting the HTTP timeout
[17:47:00] [usagu6 | setting the HTTP timeout
[17:47:00] [usagu6 | creating HTTP requests opener object
do you want to check for the existence of site's sitemap(.xml) [y/m] N
[17:47:00] [usagu6 | setting the HTTP starter of the startence of site's sitemap(.xml) [y/m] N
[17:47:00] [usagu6 | searching for links with depth 1
[17:47:00] [usagu7 | usagu6 | searching for links with depth 1
[17:47:00] [usagu7 | usagu7 | usag
```

# Autopsy:

Autopsy is a free and open-source digital forensics platform that can be used to investigate what happened on a computer. It is used by law enforcement, military, and corporate examiners to investigate cybercrimes, data breaches, and other incidents.

Autopsy can be used to:

- Analyze disk images: Autopsy can be used to analyze disk images, which arecopies of hard drives or other storage devices. This can be used to recover deletedfiles, find hidden files, and identify malware.
- Extract files: Autopsy can be used to extract files from disk images or other sources. This can be used to recover files that have been deleted or encrypted.
- View file metadata: Autopsy can be used to view the metadata of files, such asthe file creation date, file modification date, and file size. This can be used to track the movement of files and to identify suspicious activity.
- Search for keywords: Autopsy can be used to search for keywords in files or in the file metadata. This can be used to find specific information, such as emails, documents, or images.
- Generate reports: Autopsy can be used to generate reports that summarize the findings of the investigation. These reports can be used to share the findings withlaw enforcement or other stakeholders.

Autopsy is a powerful tool that can be used to investigate a wide variety of digital evidence. It is easy to use and can be used by investigators of all levels of experience.

		Terminal	Q	: 008
[sudo] passwor	d for fluxbirds:			
========	=========			:=======
	http://www.s	/ Forensic Browser Sleuthkit.org/autopsy /er 2.24	/	
Evidence Locke	r: /var/lib/auto d Sep 6 18:16:0 ocalhost			
Open an HTML b	rowser on the re	emote host and paste	this URL in it:	
http://localhost:9999/autopsy				
Keep this process running and use <ctrl-c> to exit</ctrl-c>				
"the quieter you become, the more you are able to hear"				
CREATE A NEW CASE				
1. Case Name: The name of this investigation. It can contain only letters,				
numbers, a	nd symbols.			
	,			
2. Descript	ion: An optional, o	one line description of th	is case.	
	ator Names: The o	ptional names (with no	spaces) of the	
a		b.		
С.		d.		
e.		f.		
g		h.		
i.		j		
NE	W CASE	CANCEL	HELP	



#### The Harvester:

The Harvester is a tool that can be used to collect information about hosts and domains on the internet, such as email addresses, IP addresses, and social media profiles. It can be used for a variety of purposes, including:

- Penetration testing: The Harvester can be used by penetration testers to gather information about the target organization. This information can be used to identify potential vulnerabilities and to plan an attack.
- Cyber threat intelligence: TheHarvester can be used by cyber threat intelligence analysts to gather information about potential threats. This information are used to identify and track threats, as well as to develop mitigation strategies.
- OSINT: The Harvester can be used by open-source intelligence (OSINT) analysts to gather information about a wide variety of topics. This information can be used to support research, investigations, and decision-making.

```
| Continue | Continue
```

#### Setoolkit:

The Social engineering toolkit is an open sourced free python tool written by Dave Kennedy from TrustedSec. This open sourced tool is mostly used by penetration testers, black-hat hackers, blue and purple teams for performing social engineering attacks.

```
The Social-Engineer Toolkit (SET)
             Created by: David Kennedy (ReL1K)
Version: 8.0.3
Codename: 'Maverick'
             Follow us on Twitter: aTrustedSec
Follow me on Twitter: aHackingDaye
            Homepage: https://www.trustedsec.com
        Welcome to the Social-Engineer Toolkit (SET).
         The one stop shop for all of your SE needs.
  The Social-Engineer Toolkit is a product of TrustedSec.
           Visit: https://www.trustedsec.com
Visit https://github.com/trustedsec/ptf to update all your tools!
Select from the menu:
  1) Social-Engineering Attacks
  2) Penetration Testing (Fast-Track)
  3) Third Party Modules
  4) Update the Social-Engineer Toolkit
  5) Update SET configuration
  6) Help, Credits, and About
 99) Exit the Social-Engineer Toolkit
```

```
The Web Attack module is a unique way of utilizing multiple web-based attacks in order to compromise the intended victim.

The Java Applet Attack method will spoof a Java Certificate and deliver a metasploit based payload. Uses a customized java applet created by Thomas Werth to deliver the payload.

The Metasploit Browser Exploit method will utilize select Metasploit browser exploits through an iframe and deliver a Metasploit payload.

The Credential Harvester method will utilize web cloning of a web- site that has a username and password field and harvest all the information posted to the website.

The Tabhabbing method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack method will wait for a user to move to a different tab, then refresh the page to something different.

The Web-Jacking Attack wethod will add a combination of attacks through the malicious link. You can edit the link replacement settings in the set_config if its too slow/fast.

The HITA Attack method will allow you to clone a site and perform powershell injection through HTA files which can be used for Windows-based powershell exploit ation through the browser.

1) Java Applet Attack Method

2) Metasploit Browser Exploit Method

3) Credential Harvester Attack Method

4) Tabnabbing Attack Method

5) Web Jacking Attack Method

6) Multi-Attack Web Method

7) HTA Attack Method

9) Return to Main Menu
```

```
The first method will allow SET to import a list of pre-defined web applications that it can utilize within the attack.

The second method will completely clone a website of your choosing and allow you to utilize the attack vectors within the completely same web application you were attempting to clone.

The third method allows you to import your own website, note that you should only have an index.html when using the import website
```

- 1) Web Templates
- 2) Site Cloner

functionality.

- 3) Custom Import
- 99) Return to Webattack Menu

```
SET supports both HTTP and HTTPS
 Example: http://www.thisisafakesite.com
et:webattack> Enter the url to clone:https://www.instagram.com/
Enter the browser exploit you would like to use [8]:

    Adobe Flash Player ByteArray Use After Free (2015-07-06)
    Adobe Flash Player Nellymoser Audio Decoding Buffer Overflow (2015-06-23)
    Adobe Flash Player Drawing Fill Shader Memory Corruption (2015-05-12)

    4) MS14-012 Microsoft Internet Explorer TextRange Use-After-Free (2014-03-11)
    5) MS14-012 Microsoft Internet Explorer CMarkup Use-After-Free (2014-02-13)
   6) Internet Explorer CDisplayPointer Use-After-Free (10/13/2013)
7) Micorosft Internet Explorer SetMouseCapture Use-After-Free (09/17/2013)
8) Java Applet JMX Remote Code Execution (UPDATED 2013-01-19)
9) Java Applet JMX Remote Code Execution (2013-01-10)
  10) MS13-009 Microsoft Internet Explorer SLayoutRun Use-AFter-Free (2013-02-13)

    Microsoft Internet Explorer CDwnBindInfo Object Use-After-Free (2012-12-27)

                                                                                                                                                                                                  I
  12) Java 7 Applet Remote Code Execution (2012-08-26)
13) Microsoft Internet Explorer execCommand Use-After-Free Vulnerability (2012-09-14)
 13) Microsoft Internet Explorer execCommand Use-After-Free Vulnerability (2012-09-14)
14) Java AtomicReferenceArray Type Violation Vulnerability (2012-02-14)
15) Java Applet Field Bytecode Verifier Cache Remote Code Execution (2012-06-06)
16) MS12-037 Internet Explorer Same ID Property Deleted Object Handling Memory Corruption (2012-06-12)
17) Microsoft XML Core Services MSXML Uninitialized Memory Corruption (2012-06-12)
18) Adobe Flash Player Object Type Confusion (2012-05-04)
19) Adobe Flash Player MP4 "cprt" Overflow (2012-02-15)
20) MS12-004 midiOutPlayNextPolyEvent Heap Overflow (2012-01-10)
  21) Java Applet Rhino Script Engine Remote Code Execution (2011-10-18)
  22) MS11-050 IE mshtml!CObjectElement Use After Free (2011-06-16)
 23) Adobe Flash Player 10.2.153.1 SWF Memory Corruption Vulnerability (2011-04-11)
24) Cisco AnyConnect VPN Client ActiveX URL Property Download and Execute (2011-06-01)
25) Internet Explorer CSS Import Use After Free (2010-11-29)
26) Microsoft WMI Administration Tools ActiveX Buffer Overflow (2010-12-21)
  27) Internet Explorer CSS Tags Memory Corruption (2010-11-03)
  28) Sun Java Applet2ClassLoader Remote Code Execution (2011-02-15)
29) Sun Java Runtime New Plugin docbase Buffer Overflow (2010-10-12)
```

