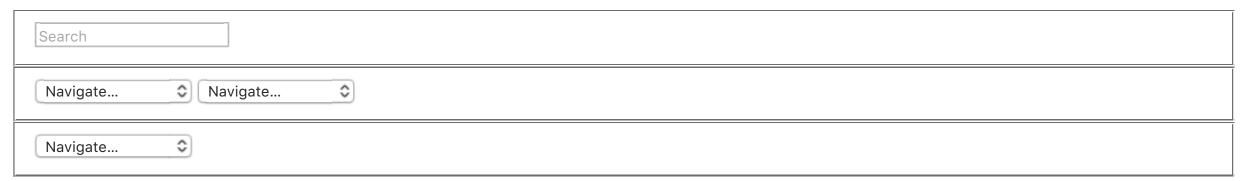
# **Core dump overflow**

# Core dump in progress...

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# Kali tools catalog - Password Attacks

Apr 4th, 2015 | Comments

Tools for password related attacks

### **GPU Tools**

#### oclhashcat

```
1 Worlds fastest password cracker
2 Worlds first and only GPGPU based rule engine
3 Free
4 Multi-GPU (up to 128 gpus)
5 Multi-Hash (up to 100 million hashes)
6 Multi-OS (Linux & Windows native binaries)
7 Multi-Platform (OpenCL & CUDA support)
8 Multi-Algo (see below)
9 Low resource utilization, you can still watch movies or play games while cracking
10 Focuses highly iterated modern hashes
11 Focuses dictionary based attacks
12 Supports distributed cracking
13 Supports pause / resume while cracking
14 Supports sessions
15 Supports restore
16 Supports reading words from file
17 Supports reading words from stdin
18 Supports hex-salt
19 Supports hex-charset
20 Built-in benchmarking system
21 Integrated thermal watchdog
22 150+ Algorithms implemented with performance in mind
23 ... and much more
```

Screenshot from the official <u>site</u> showing it in action:

```
Device #1: Hawaii, 3072MB, 1000Mhz, 44MCU
Hashes: 1 hashes; 1 unique digests, 1 unique salts
Bitmaps: 8 bits, 256 entries, 0x000000ff mask, 1024 bytes
Applicable Optimizers:
  .
Zero-Byte
  Single-Hash
  Single-Salt
  Brute-Force
Watchdog: Temperature abort trigger set to 95c
Watchdog: Temperature retain trigger set to 80c
SCRYPT tmto optimizer value set to: 2
Device #1: Kernel ./kernels/4098/m08900_1024_1_1_2.Hawaii_1573.4_1573.4 (VM).kernel Device #1: Kernel ./kernels/4098/markov_le_v1.Hawaii_1573.4_1573.4 (VM).kernel
Device #1: Kernel ./kernels/4098/amp_a3_v1.Hawaii_1573.4_1573.4 (VM).kernel
SCRYPT: 1024: 1:1:NjM00A==:TWU9Rx1o8AnB1A7CC/jUoTsLE6RaVZkuLGzDudgdJaA=:gra2020
Session.Name...: oc1Hashcat
Status.....: Cracked
Input.Mode....: Mask (?a?a?a?a?a?a?a) [7]
Hash.Target....: SCRYPT:1024:1:1:NjM00A==:TWU9Rx1o8AnB1A7CC/jUoTsLE6RaVZkuLGzDudgdJaA=
Hash.Type....: scrypt
Time.Started...: Thu Jan 15 15:59:44 2015 (5 mins, 46 secs)
Speed.GPU.#1...: 862.1 kH/s
Recovered.....: 1/1 (100.00%) Digests, 1/1 (100.00%) Salts
Progress..... 295567360/69833729609375 (0.00%)
Skipped.....: 0/295567360 (0.00%)
Rejected.....: 0/295567360 (0.00%)
HWMon.GPU.#1...: 0% Util, 76c Temp, 100% Fan
Started: Thu Jan 15 15:59:44 2015
Stopped: Thu Jan 15 16:05:31 2015
```

root@sf:~/oclHashcat-1.32# ./oclHashcat64.bin -m 8900 -a 3 ?a?a?a?a?a?a?a -n 512 hash

### pyrit

Pyrit exploits the computational power of many-core- and GPGPU-platforms to create massive databases, pre-computing part of the WPA/WPA2-PSK authentication phase in a space-time tradeoff. It is a powerful attack against one of the world's most used security protocols.

```
1 Pyrit 0.4.0 (C) 2008-2011 Lukas Lueg <a href="http://pyrit.googlecode.com">http://pyrit.googlecode.com</a>
2 This code is distributed under the GNU General Public License v3+
4 Usage: pyrit [options] command
6
 Recognized options:
7
    -b
                      : Filters AccessPoint by BSSID
8
    -e
                      : Filters AccessPoint by ESSID
                      : Print help for a certain command
9
    -h
10
    -\mathtt{i}
                      : Filename for input ('-' is stdin)
                      : Filename for output ('-' is stdout)
11
    -0
12
    -r
                      : Packet capture source in pcap-format
                      : URL of the storage-system to use
13
    -u
    --all-handshakes: Use all handshakes instead of the best one
16 Recognized commands:
                              : Analyze a packet-capture file
17
    analyze
                              : Attack a handshake with PMKs/passwords from the db
18
    attack_batch
                              : Attack a handshake with PMKs from a cowpatty-file
19
    attack_cowpatty
                              : Attack a handshake with PMKs from the db
20
    attack db
    attack_passthrough
21
                              : Attack a handshake with passwords from a file
22
    batch
                              : Batchprocess the database
23
                              : Determine performance of available cores
    benchmark
24
                              : Longer and more accurate version of benchmark (~10 minutes)
    benchmark long
25
    check db
                              : Check the database for errors
26
    create_essid
                              : Create a new ESSID
                              : Delete a ESSID from the database
27
    delete_essid
28
    eval
                              : Count the available passwords and matching results
29
    export_cowpatty
                              : Export results to a new cowpatty file
30
    export_hashdb
                              : Export results to an airolib database
31
    export_passwords
                              : Export passwords to a file
32
    help
                              : Print general help
                              : Import passwords from a file-like source
33
    import_passwords
    import_unique_passwords : Import unique passwords from a file-like source
34
35
    list cores
                              : List available cores
36
                              : List all ESSIDs but don't count matching results
    list_essids
```

```
37
    passthrough
                             : Compute PMKs and write results to a file
38
    relay
                              Relay a storage-url via RPC
39
                              Test hardware to ensure it computes correct results
    selftest
                             : Serve local hardware to other Pyrit clients
40
    serve
                             : Strip packet-capture files to the relevant packets
41
    strip
                             : Capture relevant packets from a live capture-source
42
    stripLive
                             : Verify 10% of the results by recomputation
43
    verify
```

#### **Offline Attacks**

#### cachedump

Recover Windows password cache entries

1 usage: /usr/bin/cachedump <system hive> <security hive>

### chntpw

chntpw is a utility to view some information and change user passwords in a Windows NT/2000 SAM userdatabase file, usually located at \WINDOWS\system32\config\SAM on the Windows file system. It is not necessary to know the old passwords to reset them. In addition it contains a simple registry editor (same size data writes) and hex-editor with which the information contained in a registry file can be browsed and modified.

```
chntpw version 0.99.6 080526 (sixtyfour), (c) Petter N Hagen
chntpw: change password of a user in a NT/2k/XP/2k3/Vista SAM file, or invoke registry editor.
chntpw [OPTIONS] <samfile> [systemfile] [securityfile] [otherreghive] [...]
-h
            This message
            Username to change, Administrator is default
-u <user>
-1
            list all users in SAM file
            Interactive. List users (as -l) then ask for username to change
-i
            Registry editor. Now with full write support!
-е
            Enter buffer debugger instead (hex editor),
-d
-t
            Trace. Show hexdump of structs/segments. (deprecated debug function)
            Be a little more verbose (for debuging)
- V
            Write names of changed files to /tmp/changed
-L
            No allocation mode. Only (old style) same length overwrites possible
See readme file on how to get to the registry files, and what they are.
Source/binary freely distributable under GPL v2 license. See README for details.
NOTE: This program is somewhat hackish! You are on your own!
```

#### cmospwd

A cmos/bios password recovery tool

```
Terminal
File Edit View Search Terminal Help
CmosPwd - BIOS Cracker 5.0, October 2007, Copyright 1996-2007
GRENIER Christophe, grenier@cgsecurity.org
http://www.cgsecurity.org/
Keyboard : US
Acer/IBM
                            [ - ][
AMI BIOS
                            []
AMI WinBIOS (12/15/93)
                            AMI WinBIOS 2.5
                            AMI ?
                            ][]
                            [10101331][000100][000100]
Award 4.5x/6.0
                            [000100][000100][000100][000100]
Award 4.5x/6.0
                            [1200031][1120210][000100][33332123]
Award Medallion 6.0
Award 6.0
                            Compaq (1992)
                            Compaq DeskPro
                             ][ 2]
Compaq
                            []][_47n
DTK
IBM (PS/2, Activa ...)
IBM Thinkpad boot pwd
                            []
Thinkpad x20/570/t20 EEPROM
                            Thinkpad 560x EEPROM
                            [][]
                            [][]"the quieter you become, the more you as
Thinkpad 765/380z EEPROM
IBM 300 GL
                                   ] [
Packard Bell Supervisor/User [
                                             ]
Press Enter key to continue
```

#### crunch

Generate wordlists from a character set

```
1 crunch version 3.6
2
3 Crunch can create a wordlist based on criteria you specify. The outout from crunch can be sent to the screen,
4
5 Usage: crunch <min> <max> [options]
6 where min and max are numbers
7
8 Please refer to the man page for instructions and examples on how to use crunch.
```

#### dictstat

Generate dictionary file statistics

### fcrackzip

Searches each zipfile given for encrypted files and tries to guess the password. All files must be encrypted with the same password, the more files you provide, the better.

```
fcrackzip version 1.0, a fast/free zip password cracker
written by Marc Lehmann <pcg@goof.com> You can find more info on
http://www.goof.com/pcg/marc/
USAGE: fcrackzip
          [-b|--brute-force]
                                        use brute force algorithm
          [-D|--dictionary]
                                        use a dictionary
          [-B|--benchmark]
                                        execute a small benchmark
                                        use characters from charset
          [-c|--charset characterset]
                                        show this message
          [-h|--help]
          [--version]
                                        show the version of this program
          [-V|--validate]
                                        sanity-check the algortihm
          [-v|--verbose]
                                        be more verbose
         [-p|--init-password string]
                                        use string as initial password/file
         [-l|--length min-max]
                                        check password with length min to max
                                        use unzip to weed out wrong passwords
          [-u|--use-unzip]
                                        use method number "num" (see below)
          [-m|--method num]
                                        only calculcate 1/m of the password
         [-2|--modulo r/m]
                                     the zipfiles to crack
          file...
methods compiled in (* = default):
                                            "the quieter you become, the m
0: cpmask
1: zip1
*2: zip2, USE MULT TAB
```

#### hashcat

Advanced password recovery

```
root@kali:~# hashcat --help
   hashcat, advanced password recovery
4
   Usage: hashcat [options] hashfile [mask|wordfiles|directories]
5
6
   ======
7
   Options 0
8
   ======
9
10 * General:
11
12
     -m, --hash-type=NUM
                                         Hash-type, see references below
13
     -a, --attack-mode=NUM
                                         Attack-mode, see references below
14
     -V, --version
                                         Print version
15
     -h, --help
                                         Print help
16
          --eula
                                         Print EULA
17
          --expire
                                         Print expiration date
18
          --quiet
                                         Suppress output
19
20 * Benchmark:
21
     -b, --benchmark
22
                                         Run benchmark
23
24 * Misc:
25
26
                                         Assume salt is given in hex
          --hex-salt
          --hex-charset
27
                                         Assume charset is given in hex
                                         Abort session after NUM seconds of runtime
28
          --runtime=NUM
29
30 * Files:
31
32
     -o, --outfile=FILE
                                         Define outfile for recovered hash
          --outfile-format=NUM
33
                                         Define outfile-format for recovered hash, see references below
                                         Disable the use of $HEX[] in output plains
          --outfile-autohex-disable
34
                                         Define separator char for hashlists/outfile
35
         --separator=CHAR
                                         Show cracked passwords only (see --username)
          --show
36
                                         Show uncracked passwords only (see --username)
37
          --left
                                         Enable ignoring of usernames in hashfile (Recommended: also use --show)
38
          --username
                                         Enable remove of hash once it is cracked
39
          --remove
                                         Stdout mode
40
          --stdout
                                         Do not write potfile
41
          --potfile-disable
                                         Defines the debug mode (hybrid only by using rules), see references below
          --debug-mode=NUM
42
                                         Output file for debugging rules (see --debug-mode)
43
          --debug-file=FILE
```

```
-e, --salt-file=FILE
45
46 * Resources:
47
48
     -c, --segment-size=NUM
                                         Size in MB to cache from the wordfile
49
     -n, --threads=NUM
                                        Number of threads
50
     -s, --words-skip=NUM
                                         Skip number of words (for resume)
51
     -l, --words-limit=NUM
                                        Limit number of words (for distributed)
52
53 * Rules:
54
55
     -r, --rules-file=FILE
                                         Rules-file use: -r 1.rule
56
     -g, --generate-rules=NUM
                                        Generate NUM random rules
57
          --generate-rules-func-min=NUM Force NUM functions per random rule min
58
          --generate-rules-func-max=NUM Force NUM functions per random rule max
59
                                        Force RNG seed to NUM
          --generate-rules-seed=NUM
60
61 * Custom charsets:
62
63
     -1, --custom-charset1=CS
                                         User-defined charsets
     -2, --custom-charset2=CS
64
                                         Example:
65
     -3, --custom-charset3=CS
                                         --custom-charset1=?dabcdef : sets charset ?1 to 0123456789abcdef
66
     -4, --custom-charset4=CS
                                        -2 mycharset.hcchr : sets charset ?2 to chars contained in file
67
68 * Toggle-Case attack-mode specific:
69
70
          --toggle-min=NUM
                                        Number of alphas in dictionary minimum
71
          --toggle-max=NUM
                                        Number of alphas in dictionary maximum
72
73 * Mask-attack attack-mode specific:
74
75
          --pw-min=NUM
                                         Password-length minimum
76
          --pw-max=NUM
                                         Password-length maximum
77
78 * Permutation attack-mode specific:
79
80
                                         Filter words shorter than NUM
          --perm-min=NUM
81
          --perm-max=NUM
                                         Filter words larger than NUM
82
83 * Table-Lookup attack-mode specific:
84
85
     -t, --table-file=FILE
                                        Table file
86
          --table-min=NUM
                                        Number of chars in dictionary minimum
87
          --table-max=NUM
                                        Number of chars in dictionary maximum
88
89 * Prince attack-mode specific:
90
91
          --pw-min=NUM
                                         Password-length minimum
92
          --pw-max=NUM
                                         Password-length maximum
93
          --elem-cnt-min=NUM
                                        Minimum number of elements per chain
94
          --elem-cnt-max=NUM
                                        Maximum number of elements per chain
95
96 =======
97 References
98 =======
99
100 * Outfile formats:
101
102
       1 = hash[:salt]
103
       2 = plain
104
       3 = hash[:salt]:plain
105
       4 = hex_plain
106
       5 = hash[:salt]:hex_plain
       6 = plain:hex plain
107
       7 = hash[:salt]:plain:hex_plain
108
       8 = crackpos
109
       9 = hash[:salt]:crackpos
110
      10 = plain:crackpos
111
112
      11 = hash[:salt]:plain:crackpos
113
      12 = hex_plain:crackpos
114
      13 = hash[:salt]:hex_plain:crackpos
115
      14 = plain:hex_plain:crackpos
116
      15 = hash[:salt]:plain:hex_plain:crackpos
117
118 * Debug mode output formats (for hybrid mode only, by using rules):
119
120
       1 = save finding rule
121
       2 = save original word
       3 = save original word and finding rule
122
123
       4 = save original word, finding rule and modified plain
124
```

Salts-file for unsalted hashlists

44

```
125 * Built-in charsets:
126
127
      ?l = abcdefghijklmnopgrstuvwxyz
128
       ?u = ABCDEFGHIJKLMNOPQRSTUVWXYZ
129
       ?d = 0123456789
130
      ?s = !"#$%&'()*+,-./:;<=>?@[\]^_`{|}~
131
      a = ?1?u?d?s
132
      ?b = 0x00 - 0xff
133
134 * Attack modes:
135
136
       0 = Straight
137
       1 = Combination
138
       2 = Toggle-Case
139
       3 = Brute-force
140
       4 = Permutation
141
       5 = Table-Lookup
142
       6 = Prince
143
144 * Hash types:
145
146
        0 = MD5
147
       10 = md5(spass.salt)
148
       20 = md5(\$salt.\$pass)
149
       30 = md5(unicode($pass).$salt)
150
       40 = md5($salt.unicode($pass))
       50 = HMAC-MD5 (key = $pass)
151
152
       60 = HMAC-MD5 (key = $salt)
153
      100 = SHA1
      110 = sha1(spass.salt)
154
155
      120 = sha1($salt.$pass)
156
      130 = sha1(unicode($pass).$salt)
157
      140 = sha1($salt.unicode($pass))
158
      150 = HMAC-SHA1 (key = $pass)
      160 = HMAC-SHA1 (key = $salt)
159
      200 = MySQL323
160
       300 = MySQL4.1/MySQL5
161
      400 = phpass, MD5(Wordpress), MD5(phpBB3), MD5(Joomla)
162
      500 = md5crypt, MD5(Unix), FreeBSD MD5, Cisco-IOS MD5
163
164
      900 = MD4
     1000 = NTLM
165
166
     1100 = Domain Cached Credentials, mscash
167
     1400 = SHA256
     1410 = sha256($pass.$salt)
168
169
     1420 = sha256($salt.$pass)
170
     1430 = sha256(unicode($pass).$salt)
171
     1440 = sha256($salt.unicode($pass))
172
     1450 = HMAC-SHA256 (key = $pass)
173
     1460 = HMAC-SHA256 (key = $salt)
174
     1600 = md5apr1, MD5(APR), Apache MD5
175
     1700 = SHA512
176
     1710 = sha512($pass.$salt)
177
     1720 = sha512($salt.$pass)
     1730 = sha512(unicode($pass).$salt)
178
     1740 = sha512($salt.unicode($pass))
179
180
     1750 = HMAC-SHA512 (key = $pass)
181
     1760 = HMAC-SHA512 (key = $salt)
182
     1800 = SHA-512(Unix)
183
     2400 = Cisco-PIX MD5
     2410 = Cisco-ASA MD5
184
     2500 = WPA/WPA2
185
     2600 = Double MD5
186
187
     3200 = bcrypt, Blowfish(OpenBSD)
     3300 = MD5(Sun)
188
189
     3500 = md5(md5(md5(spass)))
190
     3610 = md5(md5(\$salt).\$pass)
191
     3710 = md5(\$salt_md5(\$pass))
192
     3720 = md5(spass_md5(ssalt))
193
     3810 = md5($salt.$pass.$salt)
194
     3910 = md5(md5(\$pass).md5(\$salt))
195
     4010 = md5(\$salt.md5(\$salt.\$pass))
196
     4110 = md5(\$salt.md5(\$pass.\$salt))
197
     4210 = md5(susername.0.spass)
198
     4300 = md5(strtoupper(md5(spass)))
199
     4400 = md5(sha1(spass))
200
     4500 = Double SHA1
201
     4600 = sha1(sha1(sha1(spass)))
202
     4700 = sha1(md5(spass))
203
     4710 = sha1($salt.$pass.$salt)
     4800 = MD5(Chap), iSCSI CHAP authentication
204
     5000 = SHA-3(Keccak)
205
```

```
206
     5100 = Half MD5
     5200 = Password Safe SHA-256
207
208
     5300 = IKE-PSK MD5
209
     5400 = IKE-PSK SHA1
     5500 = NetNTLMv1-VANILLA / NetNTLMv1-ESS
210
211
     5600 = NetNTLMv2
212
     5700 = Cisco-IOS SHA256
213
     5800 = Android PIN
214
     6300 = AIX \{smd5\}
215
     6400 = AIX {ssha256}
216
     6500 = AIX \{ssha512\}
217
     6700 = AIX \{ssha1\}
218
     6900 = GOST, GOST R 34.11-94
     7000 = Fortigate (FortiOS)
219
220
     7100 = 0S \times v10.8 / v10.9
221
     7200 = GRUB 2
     7300 = IPMI2 RAKP HMAC-SHA1
222
223
     7400 = sha256crypt, SHA256(Unix)
224
     7900 = Drupal7
     8400 = WBB3, Woltlab Burning Board 3
225
226
     8900 = \text{scrypt}
227
     9200 = Cisco $8$
228
     9300 = Cisco $9$
229
     9800 = Radmin2
230 10000 = Django (PBKDF2-SHA256)
231 \ 10200 = Cram \ MD5
232 10300 = SAP CODVN H (PWDSALTEDHASH) iSSHA-1
233 99999 = Plaintext
234
235 * Specific hash types:
236
237
      11 = Joomla < 2.5.18
      12 = PostgreSQL
238
      21 = osCommerce, xt:Commerce
239
      23 = Skype
240
241
     101 = nsldap, SHA-1(Base64), Netscape LDAP SHA
242
     111 = nsldaps, SSHA-1(Base64), Netscape LDAP SSHA
     112 = Oracle 11g/12c
243
     121 = SMF > v1.1
244
245
     122 = 0S \times v10.4, v10.5, v10.6
246
     123 = EPi
247
     124 = Django (SHA-1)
248
     131 = MSSQL(2000)
249
     132 = MSSQL(2005)
250
     133 = PeopleSoft
251 141 = EPiServer 6.x < v4
252 	ext{ } 1421 = hMailServer
253 1441 = EPiServer 6.x > v4
254 1711 = SSHA-512(Base64), LDAP {SSHA512}
255 	 1722 = 0S 	 X 	 v10.7
256 1731 = MSSQL(2012 & 2014)
257 2611 = vBulletin < v3.8.5
258 \ 2612 = PHPS
259 2711 = vBulletin > v3.8.5
260 2811 = IPB2+, MyBB1.2+
261 3711 = Mediawiki B type
262 	ext{ } 3721 = WebEdition CMS
263 7600 = Redmine Project Management Web App
```

#### hashid

hashID is a tool written in Python 3.x which supports the identification of over 200 unique hash types using regular expressions.

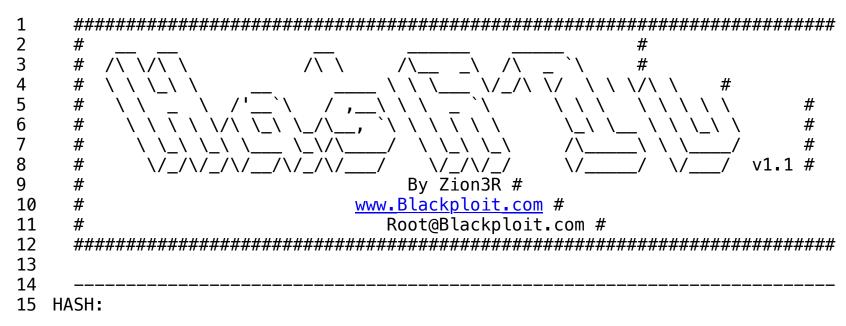
Usage example from the project's <u>Github page</u>:

```
1 $ ./hashid.py '$P$8ohUJ.1sdFw09/bMaAQPTGDNi2BIUt1'
2 Analyzing '$P$8ohUJ.1sdFw09/bMaAQPTGDNi2BIUt1'
3 [+] Wordpress \ge v2.6.2
4 [+] Joomla \ge v2.5.18
5 [+] PHPass' Portable Hash
6
7 $ ./hashid.py -mj '$racf$*AAAAAAA*3c44ee7f409c9a9b'
8 Analyzing '$racf$*AAAAAAAA*3c44ee7f409c9a9b'
9 [+] RACF [Hashcat Mode: 8500][JtR Format: racf]
10
11 $ ./hashid.py hashes.txt
12 --File 'hashes.txt'--
13 Analyzing '*85ADE5DDF71E348162894C71D73324C043838751'
```

```
14 [+] MySQL5.x
15 [+] MySQL4.1
16 Analyzing '$2a$08$VPzNKPAY60FsAbnq.c.h5.XTCZtC1z.j3hnlDFGImN9FcpfR1QnLq'
17 [+] Blowfish(OpenBSD)
18 [+] Woltlab Burning Board 4.x
19 [+] bcrypt
20 --End of file 'hashes.txt'--
```

#### hash-identifier

Identify different types of hashes



john

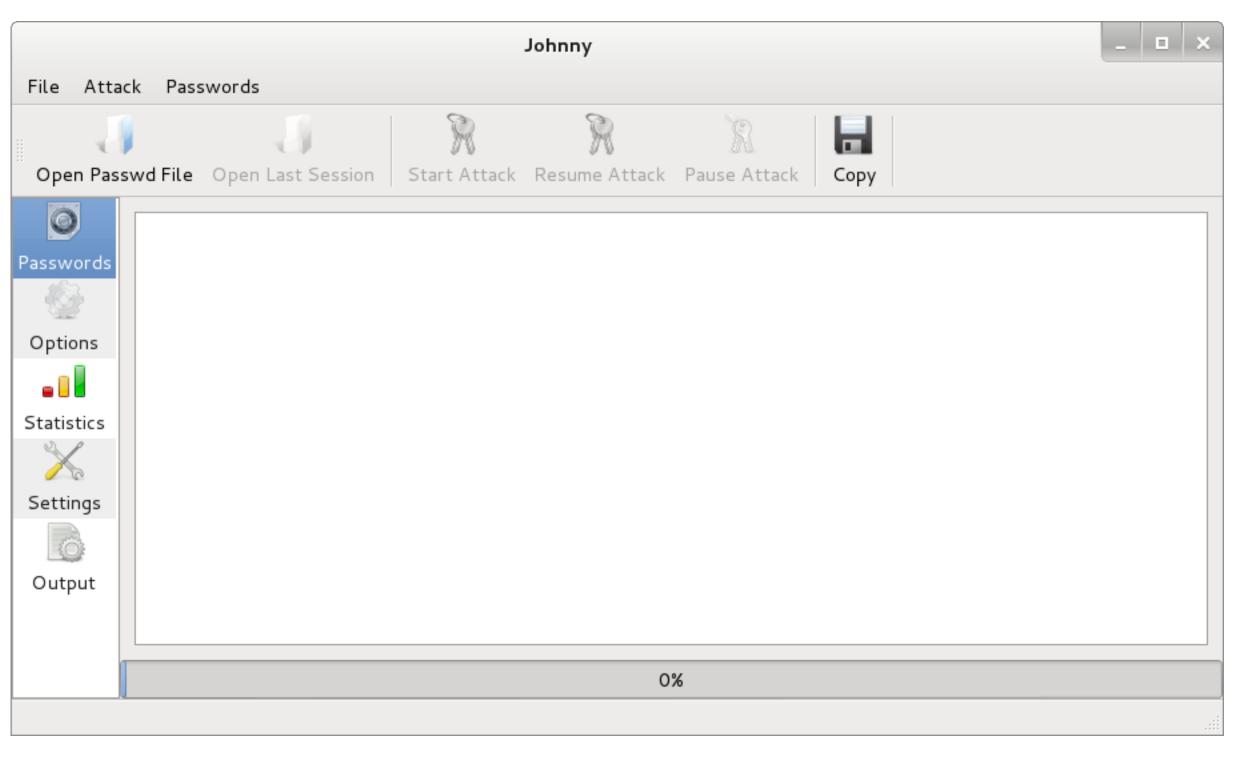
John the Ripper is a tool to find weak passwords of users in a server. John can use a dictionary or some search pattern as well as a password file to check for passwords. John supports different cracking modes and understands many ciphertext formats, like several DES variants, MD5 and blowfish. It can also be used to extract AFS and Windows NT passwords.

```
1 John the Ripper password cracker, ver: 1.7.9-jumbo-7_omp [linux-x86-64]
  Copyright (c) 1996-2012 by Solar Designer and others
  Homepage: http://www.openwall.com/john/
  Usage: john [OPTIONS] [PASSWORD-FILES]
                             use FILE instead of john.conf or john.ini
  --config=FILE
  --single[=SECTION]
                             "single crack" mode
  --wordlist[=FILE] --stdin wordlist mode, read words from FILE or stdin
9
                             like ——stdin, but bulk reads, and allows rules
                     --pipe
10 -- loopback[=FILE]
                             like --wordlist, but fetch words from a .pot file
                             suppress all dupes in wordlist (and force preload)
11 — dupe—suppression
12 -- encoding=NAME
                             input data is non-ascii (eg. UTF-8, ISO-8859-1).
                             For a full list of NAME use --list=encodings
13
14 -- rules [=SECTION]
                             enable word mangling rules for wordlist modes
                             "incremental" mode [using section MODE]
15 -- incremental [=MODE]
                             "Markov" mode (see doc/MARKOV)
16 --markov[=OPTIONS]
17 -- external = MODE
                             external mode or word filter
                             just output candidate passwords [cut at LENGTH]
18 --stdout[=LENGTH]
19 -- restore [=NAME]
                             restore an interrupted session [called NAME]
20 -- session=NAME
                             give a new session the NAME
21 -- status [=NAME]
                             print status of a session [called NAME]
22 -- make-charset=FILE
                             make a charset file. It will be overwritten
                             show cracked passwords [if =LEFT, then uncracked]
23 -- show [=LEFT]
24 -- test [=TIME]
                             run tests and benchmarks for TIME seconds each
                             [do not] load this (these) user(s) only
25 --users=[-]LOGIN|UID[,...]
                             load users [not] of this (these) group(s) only
26 -- groups = [-] GID[,...]
                             load users with[out] this (these) shell(s) only
27 -- shells=[-]SHELL[,...]
28 -- salts = [-] COUNT [:MAX]
                             load salts with[out] COUNT [to MAX] hashes
29 -- pot=NAME
                             pot file to use
30 -- format=NAME
                             force hash type NAME: afs bf bfegg bsdi crc32 crypt
31
                             des django dmd5 dominosec dragonfly3-32 dragonfly3-64
32
                             dragonfly4-32 dragonfly4-64 drupal7 dummy dynamic n
33
                             epi episerver gost hdaa hmac-md5 hmac-sha1
34
                             hmac-sha224 hmac-sha256 hmac-sha384 hmac-sha512
35
                             hmailserver ipb2 keepass keychain krb4 krb5 lm lotus5
36
                             md4-gen md5 md5ns mediawiki mscash mscash2 mschapv2
37
                             mskrb5 mssql mssql05 mysql mysql-sha1 nethalflm netlm
38
                             netlmv2 netntlm netntlmv2 nsldap nt nt2 odf office
39
                             oracle oracle11 osc pdf phpass phps pix-md5 pkzip po
40
                             pwsafe racf rar raw-md4 raw-md5 raw-md5u raw-sha
41
                             raw-sha1 raw-sha1-linkedin raw-sha1-ng raw-sha224
```

```
42
                             raw-sha256 raw-sha384 raw-sha512 salted-sha1 sapb
43
                             sapg sha1-gen sha256crypt sha512crypt sip ssh
44
                             sybasease trip vnc wbb3 wpapsk xsha xsha512 zip
                             list capabilities, see --list=help or doc/OPTIONS
45 ——list=WHAT
46 -- save-memory=LEVEL
                             enable memory saving, at LEVEL 1..3
                             size threshold for wordlist preload (default 5 MB)
47 --mem-file-size=SIZE
48 — nolog
                             disables creation and writing to john log file
49 -- crack-status
                             emit a status line whenever a password is cracked
50 --max-run-time=N
                             gracefully exit after this many seconds
                             regenerate lost salts (see doc/OPTIONS)
51 -- regen-lost-salts=N
                             load this (these) dynamic plugin(s)
52 -- plugin=NAME[,...]
```

### johnny

GUI for the John the Ripper password cracking tool.



#### lsadump

Dump LSA secrets

### <u>Usage example from Kali site</u>:

```
1 root@kali:~# lsadump system security
2 _SC_ALG
4 _SC_Dnscache
 _SC_upnphost
8 20ed87e2-3b82-4114-81f9-5e219ed4c481-SALEMHELPACCOUNT
10 _SC_WebClient
11
12 _SC_RpcLocator
13
14 0083343a-f925-4ed7-b1d6-d95d17a0b57b-RemoteDesktopHelpAssistantSID
15 0000
         01 05 00 00 00 00 00 05 15 00 00 00 B6 44 E4 23
                                                             ..........D.#
16 0010
         F4 50 BA 74 07 E5 3B 2B E8 03 00 00
                                                             .P.t..;+....
17
18 0083343a-f925-4ed7-b1d6-d95d17a0b57b-RemoteDesktopHelpAssistantAccount
         00 38 00 48 00 6F 00 31 00 49 45 00 4A 00 26 00
                                                             E.J.&.8.H.o.1.I.
19 0000
```

```
20 0010 00 63 00 72 00 48 00 68 00 53 6B 00 00 00 h.S.c.r.H.k...
21
22 _SC_MSDTC
23
24 _SC_SSDPSRV
25
26 _SC_Alerter
27
28 _SC_RpcSs
29
30 _SC_LmHosts
31
32 _SC_BthServ
```

#### maskgen

Generate hashcat masks

```
Usage: maskgen [options] masksfile.csv
Options:
                        show program's version number and exit
  --version
                        show this help message and exit
  -h, --help
                        Minimum password length
  --minlength=8
                        Maximum password length
  --maxlength=8
                        Minimum time to crack
  --mintime=MINTIME
  --maxtime=MAXTIME
                        Maximum time to crack
  --complexity=COMPLEXITY
                        maximum password complexity
  --occurence=OCCURENCE
                        minimum times mask was used
  --checkmask=?u?l ?l ?l ?l ?l ?d
                        check mask coverage
                        Show matching masks
  --showmasks
                        Passwords per Second
  --pps=1000000000
```

#### multiforcer

A CUDA & OpenCL accelerated rainbow table implementation from the ground up, and a CUDA hash brute forcing tool with support for many hash types including MD5, SHA1, LM, NTLM, and lots more.

### Basic command line parameters:

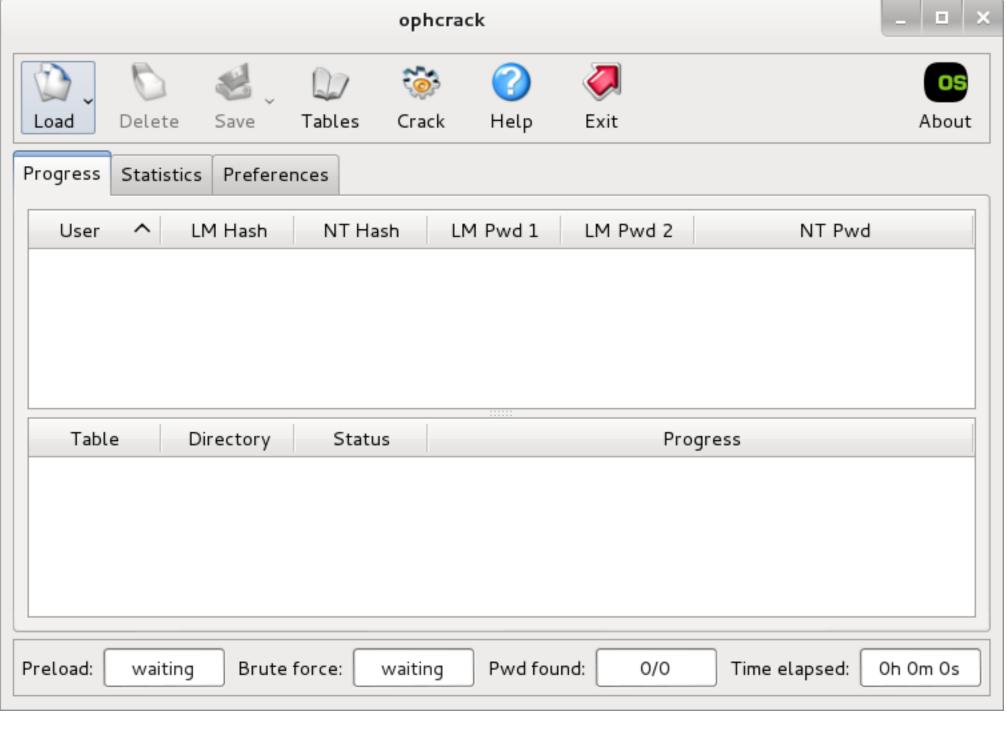
```
1-h / --hashtype [hash type] (required) This specifies the hash type to search. See the wiki for a current list of 2-c / --charsetfile <filename> This specifies the charset file for single charset use.

3-u / --charsetfilemulti <filename> This specifies the charset file for per-position charset use.

4-o / --outputfile (optional) This specifies the output for found hashes. The file will be appended, not overwrith 5-f / --hashfile (required) This specifies the file of hashes. Hashes should be in ASCII-hex format (as they are 6-min / --max (required) These set the minimum and maximum password lengths to search. Lengths of 0 through 14 of 7-m / --ms (optional) This specifies the target kernel time, in milliseconds (1/1000th of a second). When using 8-l / --lookup (optional) Use a 512MB chunk of GPU RAM to improve performance on very large hashlists. Requires a
```

### ophcrack

A Microsoft Windows password cracker using rainbow tables



### ophcrack-cli

Command line interface for ophcrack

```
1 ophcrack 3.4.0 by Objectif Securite (http://www.objectif-securite.ch)
  Usage: ophcrack [OPTIONS]
  Cracks Windows passwords with Rainbow tables
5
6
                     disable audit mode (default)
    -a
7
                     enable audit mode
    -A
8
                     disable bruteforce
    -b
9
                     enable bruteforce (default)
    -B
                    specify the config file to use
10
    -c config file
                    display (lots of!) debugging information
11
    -D
12
                     specify tables base directory
    -d dir
                     do not display empty passwords
13
    -e
14
    -f file
                     load hashes from the specified file (pwdump or session)
                     disable GUI
15
    -g
16
                     display this information
    -h
17
                     hide usernames
    -i
                     show usernames (default)
18
    -I
19
    -l file
                     log all output to the specified file
20
                     specify the number of threads to use
    -n num
21
                    write cracking output to file in pwdump format
    -o file
22
                    preload (0 none, 1 index, 2 index+end, 3 all default)
    -p num
23
                     quiet mode
    -q
24
                     launch the cracking when ophcrack starts (GUI only)
    -r
25
                     disable session auto-saving
    -s
    -S session file specify the file to use to automatically save the progress of the search
26
                     display statistics when cracking ends
27
    -u
28
    -t table1[,a[,b,...]][:table2[,a[,b,...]]]
29
                     specify which table to use in the directory given by -d
30
    -v
31
    −w dir
                     load hashes from encrypted SAM file in directory dir
32
                     export data in CSV format to file
    -x file
33
34
35 Example: ophcrack -g -d /path/to/tables -t xp_free_fast,0,3:vista_free -f in.txt
36
37
        Launch ophcrack in command line using tables 0 and 3 in
38
        /path/to/tables/xp_free_fast and all tables in /path/to/tables/vista_free
```

#### policygen

Generate hashcat masks

```
1 Usage: policygen [options]
  Type ——help for more options
5
  Options:
6
    --version
                           show program's version number and exit
7
    -h, --help
                           show this help message and exit
8
    --length=8
                           Password length
9
    -o masks.txt, --output=masks.txt
10
                           Save masks to a file
11
                           Passwords per Second
    --pps=1000000000
12
    -v, --verbose
13
14
    Password Policy:
15
      Define the minimum (or maximum) password strength policy that you
      would like to test
16
17
18
                           Minimum number of digits
      --mindigits=1
                           Minimum number of lower-case characters
19
      --minlower=1
20
      --minupper=1
                           Minimum number of upper-case characters
21
      --minspecial=1
                           Minimum number of special characters
                           Maximum number of digits
22
      --maxdigits=3
                           Maximum number of lower-case characters
23
      --maxlower=3
24
                           Maximum number of upper-case characters
      --maxupper=3
25
      --maxspecial=3
                           Maximum number of special characters
```

### pwdump

Dump password hashes

<u>Usage example from Kali site</u>:

```
1 root@kali:~# pwdump system sam
2 Administrator:500:41aa818b512a8c0e72381e4c174e281b:1896d0a309184775f67c14d14b5c365a:::
3 Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
4 HelpAssistant:1000:667d6c58d451dbf236ae37ab1de3b9f7:af733642ab69e156ba0c219d3bbc3c83:::
5 SUPPORT_388945a0:1002:aad3b435b51404eeaad3b435b51404ee:8dffa305e2bee837f279c2c0b082affb:::
```

#### rainbowcrack

Cracks hashes with rainbow tables.

```
1 RainbowCrack 1.5
2 Copyright 2003-2010 RainbowCrack Project. All rights reserved.
3 Official Website: <a href="http://project-rainbowcrack.com/">http://project-rainbowcrack.com/</a>
  usage: rcrack rt_files [rt_files ...] -h hash
          rcrack rt files [rt files ...] -l hash list file
6
7
          rcrack rt_files [rt_files ...] -f pwdump_file
          rcrack rt files [rt files ...] -n pwdump file
8
9 rt_files:
                            path to the rainbow table(s), wildchar(*, ?) supported
10 -h hash:
                            load single hash
11 - l hash_list_file:
                            load hashes from a file, each hash in a line
12 -f pwdump file:
                            load lanmanager hashes from pwdump file
13 -n pwdump file:
                            load ntlm hashes from pwdump file
14
15 hash algorithms implemented in alglib0.so:
       lm, plaintext_len limit: 0 - 7
16
17
      ntlm, plaintext_len limit: 0 - 15
18
      md5, plaintext_len limit: 0 - 15
19
      sha1, plaintext_len limit: 0 - 20
      mysqlsha1, plaintext len limit: 0 - 20
20
      halflmchall, plaintext_len limit: 0 - 7
21
22
      ntlmchall, plaintext_len limit: 0 - 15
23
      oracle-SYSTEM, plaintext_len limit: 0 - 10
24
      md5-half, plaintext_len limit: 0 - 15
25
```

```
26 example: rcrack *.rt -h 5d41402abc4b2a76b9719d911017c592
27 rcrack *.rt -l hash.txt
```

#### rcracki\_mt

A modified version of rcrack which supports hybrid and indexed tables. In addition to that, it also adds multi-core support.

```
1 RainbowCrack (improved, multi-threaded) - Making a Faster Cryptanalytic Time-Memory Trade-Off
2 by Martin Westergaard <martinwj2005@gmail.com>
3 multi-threaded and enhanced by neinbrucke
4 *nix/64-bit compatibility and co-maintainer - James Nobis <quel@quelrod.net>
5 <a href="http://www.freerainbowtables.com/">http://www.freerainbowtables.com/</a>
6 All code/binaries are under GPL2 Copyright at a minimum
7 original code by Zhu Shuanglei <shuanglei@hotmail.com>
9 usage: rcracki_mt -h hash rainbow_table_pathname
10
          rcracki_mt -l hash_list_file rainbow_table_pathname
          rcracki_mt -f pwdump_file rainbow_table_pathname
11
12
          rcracki_mt -c lst_file rainbow_table_pathname
13
14 -h hash:
                            use raw hash as input
15 -l hash_list_file:
16 -f pwdump_file:
17 -c lst_file:
                            use hash list file as input, each hash in a line
                            use pwdump file as input, handles lanmanager hash only
                            use .lst (cain format) file as input
18 -r [-s session_name]:
                            resume from previous session, optional session name
19 rainbow table pathname: pathname(s) of the rainbow table(s)
20
21 Extra options:
                      -t [nr] use this amount of threads/cores, default is 1
                      -o [output_file] write (temporary) results to this file
22
                      -s [session name] write session data with this name
23
24
                      -k keep precalculation on disk
25
                      -d run sha1 hashes against mysqlsha1 tables
26
                      -m [megabytes] limit memory usage
                      -v show debug information
27
28
29 example: rcracki_mt -h 5d41402abc4b2a76b9719d911017c592 -t 2 [path]/MD5
            rcracki_mt -l hash.txt [path_to_specific_table]/*
30
31
            rcracki_mt -f hash.txt -t 4 -o results.txt *.rti
```

### rsmangler

RSMangler will take a wordlist and perform various manipulations on it similar to those done by John the Ripper, the main difference being that it will first take the input words and generate all permutations and the acronym of the words (in the order they appear in the file) before it applies the rest of the mangles.

```
1 rsmangler v 1.4 Robin Wood (robin@digininja.org) < www.randomstorm.com >
  To pass the initial words in on standard in do:
  cat wordlist.txt | ./rsmangler.rb --file - > new wordlist.rb
  All options are ON by default, these parameters turn them OFF
9 Usage: rsmangler.rb [OPTION]
    --help, -h: show help
11
    --file, -f: the input file, use - for STDIN
    --max, -x: maximum word length
12
13
    --min, -m: minimum word length
14
    --perms, -p: permutate all the words
15
    --double, -d: double each word
    --reverse, -r: reverser the word
16
    --leet, -t: 133t speak the word
17
18
    --full-leet, -T: all posibilities l33t
19
    --capital, -c: capitalise the word
    --upper, -u: uppercase the word
20
    --lower, -l: lowercase the word
21
22
    --swap, -s: swap the case of the word
23
    --ed, -e: add ed to the end of the word
24
    --ing, -i: add ing to the end of the word
25
    --punctuation: add common punctuation to the end of the word
26
    --years, -y: add all years from 1990 to current year to start and end
    --acronym, -a: create an acronym based on all the words entered in order and add to word list
27
28
    --common, -C: add the following words to start and end: admin, sys, pw, pwd
29
    --pna: add 01 - 09 to the end of the word
30
    --pnb: add 01 - 09 to the beginning of the word
```

```
31   --na: add 1 - 123 to the end of the word
32   --nb: add 1 - 123 to the beginning of the word
33   --force - don't check ooutput size
34   --space - add spaces between words
```

### samdump2

Dumps Windows 2k/NT/XP/Vista password hashes

```
1 samdump2 1.1.1 by Objectif Securite
2 http://www.objectif-securite.ch
3 original author: ncuomo@studenti.unina.it
4
5 Usage:
6 samdump2 samhive keyfile
```

### sipcrack

SIPcrack is a SIP login sniffer/cracker that contains 2 programs: sipdump to capture the digest authentication and sipcrack to bruteforce the hash using a wordlist or standard input.

sipcrack bruteforces the user's password with the dump file generated by sipdump. If a password is found, the sniffed and cracked login will be updated in the dump file.

#### sucrack

Multithreaded Linux/UNIX tool for brute-force cracking of local user accounts via su.

```
1 sucrack [options] wordlist
```

#### truecrack

TrueCrack is a brute-force password cracker for TrueCrypt volumes. It works on Linux and it is optimized for Nvidia Cuda technology. It supports:

PBKDF2 (defined in PKCS5 v2.0) based on key derivation functions: Ripemd160, Sha512 and Whirlpool.

XTS block cipher mode for hard disk encryption based on encryption algorithms: AES, SERPENT, TWOFISH.

File-hosted (container) and Partition/device-hosted.

Hidden volumes and Backup headers.

TrueCrack is able to perform a brute-force attack based on:

Dictionary: read the passwords from a file of words.

Alphabet: generate all passwords of given length from given alphabet.

TrueCrack works on gpu and cpu

```
1 TrueCrack v3.0
2 Website: <a href="http://code.google.com/p/truecrack">http://code.google.com/p/truecrack</a>
3 Contact us: infotruecrack@gmail.com
4 Bruteforce password cracker for Truecrypt volume. Optimazed with Nvidia Cuda technology.
5 Based on TrueCrypt, freely available at <a href="http://www.truecrypt.org/">http://www.truecrypt.org/</a>
6 Copyright (c) 2011 by Luca Vaccaro.
8 Usage:
9 truecrack -t <truecrypt_file> -k <ripemd160|sha512|whirlpool> -w <wordlist_file> [-b <parallel_block>]
10 truecrack -t <truecrypt_file> -k <ripemd160|sha512|whirlpool> -c <charset> [-s <minlength>] -m <maxlength> [-l
11
12 Options:
13 -h --help
                                       Display this information.
14 -t --truecrypt <truecrypt file>
                                         Truecrypt volume file.
                                                      Key derivation function (default ripemd160).
15 -k --key <ripemd160 | sha512 | whirlpool>
                                             Number of parallel computations (board dependent).
16 -b --blocksize <parallel_blocks>
17 -w --wordlist <wordlist file>
                                         File of words, for Dictionary attack.
                                    Alphabet generator, for Alphabet attack.
18 -c --charset <alphabet>
19 -s --startlength <minlength>
                                         Starting length of passwords, for Alphabet attack (default 1).
20 -m --maxlength <maxlength>
                                    Maximum length of passwords, for Alphabet attack.
21 -r --restore <number>
                                     Restore the computation.
22 -v --verbose
                                       Show computation messages.
23
24 Sample:
25 Dictionary mode: truecrack --truecrypt ./volume --wordlist ./dictionary.txt
26 Charset mode: truecrack --truecrypt ./volume --charset ./dictionary.txt --maxlength 10
```

#### **Online Attacks**

#### cewl

CeWL is a ruby app which spiders a given url to a specified depth, optionally following external links, and returns a list of words which can then be used for password crackers such as John the Ripper.

```
CeWL 5.0 Robin Wood (robin@digininja.org) (www.digininja.org)
Usage: cewl [OPTION] ... URL
        --help, -h: show help
        --keep, -k: keep the downloaded file
        --depth x, -d x: depth to spider to, default 2
        --min word length, -m: minimum word length, default 3
        --offsite, -o: let the spider visit other sites
        --write, -w file: write the output to the file
        --ua, -u user-agent: useragent to send
        --no-words, -n: don't output the wordlist
        --meta, -a include meta data
        --meta file file: output file for meta data
        --email, -e include email addresses
        --email file file: output file for email addresses
        --meta-temp-dir directory: the temporary directory used by exiftool when parsing files, default
        --count, -c: show the count for each word found
        Authentication
        --auth type: digest or basic
        --auth user: authentication username
        --auth pass: authentication password
        Proxy Support
        --proxy_host: proxy host
        --proxy_port: proxy port, default 8080.
        --proxy_username: username for proxy, the required you become, the more you are able to
        --proxy password: password for proxy, if required
        --verbose, -v: verbose
        URL: The site to spider.
```

### findmyhash

```
1 /usr/bin/findmyhash 1.1.2 ( http://code.google.com/p/findmyhash/ )
2
3 Usage:
4
5
6
    python /usr/bin/findmyhash <algorithm> OPTIONS
7
8
9
  Accepted algorithms are:
10 -
11
12
   MD4
              - RFC 1320
13
   MD5
              - RFC 1321
              - RFC 3174 (FIPS 180-3)
14
    SHA1
15
    SHA224
              - RFC 3874 (FIPS 180-3)
              - FIPS 180-3
16
    SHA256
17
    SHA384
              - FIPS 180-3
              - FIPS 180-3
18
    SHA512
    RMD160
              - RFC 2857
19
              - RFC 5831
20
    G0ST
21
    WHIRLPOOL - ISO/IEC 10118-3:2004
22
    LM

    Microsoft Windows hash

23
    \mathsf{NTLM}

    Microsoft Windows hash

24
    MYSQL

    MySQL 3, 4, 5 hash

25
    CISC07

    Cisco IOS type 7 encrypted passwords

    JUNIPER - Juniper Networks $9$ encrypted passwords
26
27
    LDAP MD5 - MD5 Base64 encoded
28
    LDAP_SHA1 - SHA1 Base64 encoded
29
    NOTE: for LM / NTLM it is recommended to introduce both values with this format:
30
31
           python /usr/bin/findmyhash LM -h 9a5760252b7455deaad3b435b51404ee:0d7f1f2bdeac6e574d6e18ca85fb58a7
32
           python /usr/bin/findmyhash NTLM -h 9a5760252b7455deaad3b435b51404ee:0d7f1f2bdeac6e574d6e18ca85fb58a7
33
34
35 Valid OPTIONS are:
36 --
37
38
    -h <hash_value> If you only want to crack one hash, specify its value with this option.
39
40
    -f <file>
                      If you have several hashes, you can specify a file with one hash per line.
41
                     NOTE: All of them have to be the same type.
42
43
                      If your hash cannot be cracked, search it in Google and show all the results.
    -g
44
                      NOTE: This option ONLY works with -h (one hash input) option.
45
46
47 Examples:
48 -----
49
    -> Try to crack only one hash.
50
51
       python /usr/bin/findmyhash MD5 -h 098f6bcd4621d373cade4e832627b4f6
52
    -> Try to crack a JUNIPER encrypted password escaping special characters.
53
54
       python /usr/bin/findmyhash JUNIPER -h "\$9\$LbHX-wg4Z"
55
    -> If the hash cannot be cracked, it will be searched in Google.
56
       python /usr/bin/findmyhash LDAP SHA1 -h "{SHA}cRDtpNCeBigl5K0QsKVyrA0sAiA=" -q
57
58
59
    -> Try to crack multiple hashes using a file (one hash per line).
       python /usr/bin/findmyhash MYSQL -f mysqlhashesfile.txt
60
61
62
63 Contact:
64 -----
65
66 [Web]
                   http://laxmarcaellugar.blogspot.com/
                   bloglaxmarcaellugar@gmail.com
67 [Mail/Google+]
68 [twitter]
                   @laXmarcaellugar
```

#### hydra

Hydra is a parallized login cracker which supports numerous protocols to attack. New modules are easy to add, beside that, it is flexible and very fast.

Currently this tool supports:

```
AFP, Cisco AAA, Cisco auth, Cisco enable, CVS, Firebird, FTP, FTPS, HTTP-FORM-GET, HTTP-FORM-POST, HTTP-GET, HTTP-HEAD, HTTP-PROXY,
```

```
1 Hydra v8.1 (c) 2014 by van Hauser/THC - Please do not use in military or secret service organizations, or for :
  Syntax: hydra [[[-l LOGIN|-L FILE] [-p PASS|-P FILE]] | [-C FILE]] [-e nsr] [-o FILE] [-t TASKS] [-M FILE [-T
  Options:
    -l LOGIN or -L FILE login with LOGIN name, or load several logins from FILE
6
    -p PASS or -P FILE try password PASS, or load several passwords from FILE
7
              colon separated "login:pass" format, instead of -L/-P options
8
    -C FILE
              list of servers to attack, one entry per line, ':' to specify port
    -M FILE
    -t TASKS run TASKS number of connects in parallel (per host, default: 16)
10
11
    -U
               service module usage details
12
               more command line options (COMPLETE HELP)
    -h
13
              the target: DNS, IP or 192.168.0.0/24 (this OR the -M option)
    server
              the service to crack (see below for supported protocols)
14
    service
15
               some service modules support additional input (-U for module help)
    0PT
16
17 Supported services: asterisk cisco cisco-enable cvs firebird ftp ftps http[s]-{head|get} http[s]-{get|post}-for
18
19 Hydra is a tool to guess/crack valid login/password pairs. Licensed under AGPL
20 v3.0. The newest version is always available at <a href="http://www.thc.org/thc-hydra">http://www.thc.org/thc-hydra</a>
21 Don't use in military or secret service organizations, or for illegal purposes.
23 Example: hydra -l user -P passlist.txt ftp://192.168.0.1
```

HTTP-PROXY-URLENUM, ICQ, IMAP, IRC, LDAP2, LDAP3, MS-SQL, MYSQL, NCP, NNTP, Oracle, Oracle-Listener, Oracle-SID, PC-Anywhere, PCNFS, POP3, POSTGRES,

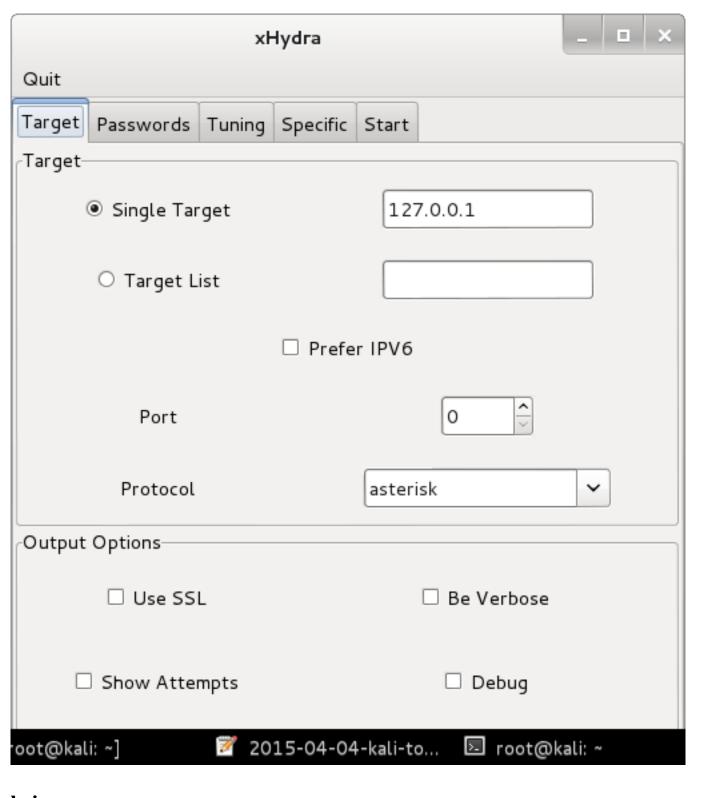
For most protocols, SSL mode is available (e.g. https-get, ftp-ssl, etc.)

RDP, REXEC, RLOGIN, RSH, SAP/R3, SIP, SMB, SMTP, SMTP-Enum, SNMP, SOCKS5, SSH(v1 and v2), SSHKEY, Subversion, Teamspeak (TS2), Telnet,

VMware-Auth, VNC and XMPP.

#### hydra-gtk

Hydra GUI



### keimpx

keimpx is an open source tool, released under a modified version of Apache License 1.1.

It can be used to quickly check for valid credentials across a network over SMB. Credentials can be:

- Combination of user / plain-text password.
- Combination of user / NTLM hash.
- Combination of user / NTLM logon session token.

If any valid credentials has been discovered across the network after its attack phase, the user is asked to choose which host to connect to and which valid credentials to use, then he will be prompted with an interactive SMB shell where the user can:

- Spawn an interactive command prompt.
- Navigate through the remote SMB shares: list, upload, download files, create, remove files, etc.
- Deploy and undeploy his own service, for instance, a backdoor listening on a TCP port for incoming connections.
- List users details, domains and password policy.

```
keimpx 0.3-dev
      by Bernardo Damele A. G. <bernardo.damele@gmail.com>
  Usage: keimpx.py [options]
5
  Options:
    --version
                     show program's version number and exit
8
    -h, --help
                     show this help message and exit
9
    -v VERBOSE
                    Verbosity level: 0-2 (default: 0)
10
    -t TARGET
                    Target address
11
    -l LIST
                     File with list of targets
12
    -U USER
                    User
    -P PASSWORD
13
                     Password
14
    --nt=NTHASH
                    NT hash
15
                    LM hash
    --lm=LMHASH
16
                     File with list of credentials
    -c CREDSFILE
17
    -D DOMAIN
                    Domain
    -d DOMAINSFILE File with list of domains
18
19
                     SMB port: 139 or 445 (default: 445)
    −p PORT
20
                    Local hostname
    -n NAME
21
    -T THREADS
                    Maximum simultaneous connections (default: 10)
22
                    Batch mode: do not ask to get an interactive SMB shell
    -b
23
    -x EXECUTELIST Execute a list of commands against all hosts
```

#### medusa

Medusa is intended to be a speedy, massively parallel, modular, login brute-forcer. The goal is to support as many services which allow remote authentication as possible. The author considers following items to some of the key features of this application:

- Thread-based parallel testing. Brute-force testing can be performed against multiple hosts, users or passwords concurrently.
- Flexible user input. Target information (host/user/password) can be specified in a variety of ways. For example, each item can be either a single entry or a file containing multiple entries. Additionally, a combination file format allows the user to refine their target listing.
- Modular design. Each service module exists as an independent .mod file. This means that no modifications are necessary to the core application in order to extend the supported list of services for brute-forcing.

```
1 Medusa v2.0 [http://www.foofus.net] (C) JoMo-Kun / Foofus Networks <jmk@foofus.net>
3 ALERT: Host information must be supplied.
  Syntax: Medusa [-h host|-H file] [-u username|-U file] [-p password|-P file] [-C file] -M module [OPT]
    -h [TEXT]
                 : Target hostname or IP address
                 : File containing target hostnames or IP addresses
7
    -H [FILE]
8
    -u [TEXT]
                 : Username to test
                 : File containing usernames to test
    -U [FILE]
                 : Password to test
10
    -p [TEXT]
11
    -P [FILE]
                 : File containing passwords to test
12
    -C [FILE]
                 : File containing combo entries. See README for more information.
                 : File to append log information to
13
    -0 [FILE]
14
    -e [n/s/ns]
                 : Additional password checks ([n] No Password, [s] Password = Username)
    -M [TEXT]
15
                 : Name of the module to execute (without the .mod extension)
16
    -m [TEXT]
                  : Parameter to pass to the module. This can be passed multiple times with a
17
                    different parameter each time and they will all be sent to the module (i.e.
```

```
18
                    -m Param1 -m Param2, etc.)
19
                  : Dump all known modules
    -d
20
    -n [NUM]
                  : Use for non-default TCP port number
21
    -s
                  : Enable SSL
22
                  : Give up after trying to connect for NUM seconds (default 3)
    -g [NUM]
23
    -r [NUM]
                  : Sleep NUM seconds between retry attempts (default 3)
24
    -R [NUM]
                  : Attempt NUM retries before giving up. The total number of attempts will be NUM + 1.
25
    -t [NUM]
                  : Total number of logins to be tested concurrently
26
    -T [NUM]
                  : Total number of hosts to be tested concurrently
27
    -L
                  : Parallelize logins using one username per thread. The default is to process
28
                    the entire username before proceeding.
29
    -f
                  : Stop scanning host after first valid username/password found.
30
    -\mathsf{F}
                  : Stop audit after first valid username/password found on any host.
31
                  : Suppress startup banner
    -b
                  : Display module's usage information
32
    -q
33
    −v [NUM]
                  : Verbose level [0 - 6 (more)]
34
                  : Error debug level [0 - 10 (more)]
    -w [NUM]
35
    -V
                  : Display version
36
    -Z [TEXT]
                  : Resume scan based on map of previous scan
```

#### ncrack

Ncrack is an open source tool for network authentication cracking. It was designed for high-speed parallel cracking using a dynamic engine that can adapt to different network situations. Ncrack can also be extensively fine-tuned for special cases, though the default parameters are generic enough to cover almost every situation. It is built on a modular architecture that allows for easy extension to support additional protocols. Ncrack is designed for companies and security professionals to audit large networks for default or weak passwords in a rapid and reliable way. It can also be used to conduct fairly sophisticated and intensive brute force attacks against individual services.

The output from Ncrack is a list of found credentials, if any, for each of the targets specified. Ncrack can also print an interactive status report of progress so far and possibly additional debugging information that can help track problems, if the user selected that option.

A typical Ncrack scan is shown in Example 1. The only Ncrack arguments used in this example are the two target IP addresses along with the the corresponding ports for each of them. The two example ports 21 and 22 are automatically resolved to the default services listening on them: ftp and ssh.

```
Example 1. A representative Ncrack scan
3
               $ ncrack 10.0.0.130:21 192.168.1.2:22
4
5
              Starting Ncrack 0.01ALPHA ( <a href="http://ncrack.org">http://ncrack.org</a> ) at 2009-07-24 23:05 EEST
6
7
              Discovered credentials for ftp on 10.0.0.130 21/tcp:
8
              10.0.0.130 21/tcp ftp: admin hello1
9
              Discovered credentials for ssh on 192.168.1.2 22/tcp:
10
              192.168.1.2 22/tcp ssh: guest 12345
11
              192.168.1.2 22/tcp ssh: admin money$
12
13
              Ncrack done: 2 services scanned in 156.03 seconds.
14
              Ncrack finished.
15
```

#### patator

A multi-purpose brute-forcer, with a modular design and a flexible usage.

```
1 Patator v0.5 (<a href="http://code.google.com/p/patator/">http://code.google.com/p/patator/</a>)
2 Usage: patator.py module --help
  Available modules:
5
     + ftp_login
                       : Brute-force FTP
     + ssh login
                       : Brute-force SSH
6
     + telnet_login : Brute-force Telnet
7
                       : Brute-force SMTP
8
     + smtp_login
                       : Enumerate valid users using SMTP VRFY
9
     + smtp_vrfy
10
    + smtp rcpt
                       : Enumerate valid users using SMTP RCPT TO
    + finger_lookup : Enumerate valid users using Finger
11
12
    + http_fuzz
                       : Brute-force HTTP
13
    + pop_login
                       : Brute-force POP3
14
    + pop_passd
                       : Brute-force poppassd (<a href="http://netwinsite.com/poppassd/">http://netwinsite.com/poppassd/</a>)
                       : Brute-force IMAP4
15
    + imap_login
    + ldap_login
                       : Brute-force LDAP
16
17
    + smb_login
                       : Brute-force SMB
    + smb_lookupsid : Brute-force SMB SID-lookup
18
     + vmauthd_login : Brute-force VMware Authentication Daemon
```

```
20
    + mssql_login
                   : Brute-force MSSQL
    + oracle_login : Brute-force Oracle
21
22
   + mysql_login
                  : Brute-force MySQL
    + mysql_query : Brute-force MySQL queries
23
24
    + pgsql_login
                  : Brute-force PostgreSQL
    + vnc_login
25
                   : Brute-force VNC
26
    + dns_forward : Forward lookup names
27
    + dns reverse
                  : Reverse lookup subnets
28
    + snmp_login
                   : Brute-force SNMP v1/2/3
29
    + unzip_pass : Brute-force the password of encrypted ZIP files
    + keystore_pass : Brute-force the password of Java keystore files
30
31
    + tcp_fuzz : Fuzz TCP services
32
    + dummy_test
                   : Testing module
```

#### phrasendrescher

phrasenldrescher (pld) is a modular and multi processing pass phrase cracking tool. It comes with a number of plugins but a simple plugin API allows an easy development of new plugins. The main features of pld are:

- Modular with the use of plugins
- Multi processing
- Dictionary attack with or without permutations (uppercase, lowercase, 133t, etc.)
- Incremental brute force attack with custom character maps
- Runs on FreeBSD, NetBSD, OpenBSD, MacOS and Linux

```
1 phrasen|drescher 1.2.2 - the passphrase cracker
2 Copyright (C) 2008 Nico Leidecker; <a href="http://www.leidecker.info">http://www.leidecker.info</a>
  Usage: pd plugin [options]
6
   Available plugins:
7
     enc-file pkey ssh mssql http-raw
8
9
   General Options:
10
                  : print this message
     h
11
                  : verbose mode
     i from[:to] : incremental mode beginning with word length `from'
12
13
                    and going to `to'
                  : run dictionary based with words from `file'
     d file
14
                  : number of worker threads (default is one)
15
     w number
                  : specify rewriting rules for the dictionary mode:
16
     r rules
17
                      A = all characters upper case
18
                      F = first character upper case
19
                      L = last character upper case
20
                      W = first letter of each word to upper case
21
                      a = all characters lower case
22
                      f = first character lower case
23
                      l = last character lower case
                      w = first letter of each word to lower case
24
25
                      D = prepend digit
26
                      d = append digit
27
                      e = 1337 characters
28
                      x = all rules
29
30
   Environment Variables:
     PD_PLUGINS: the directory containing plugins
31
32
                   (current is /usr/lib/phrasendrescher)
     PD_CHARMAP: the characters for the incremental mode are
33
34
                   taken from a character list. A customized list
35
                   can be specified in the environment variable
```

#### thc-pptp-bruter

Brute force program against pptp vpn endpoints (tcp port 1723). Fully standalone. Supports latest MSChapV2 authentication. Tested against Windows and Cisco gateways. Exploits a weakness in Microsoft's anti-brute force implementation which makes it possible to try 300 passwords the second.

```
4  -W     Disable windows hack [default: enabled]
5  -u <user> User [default: administrator]
6  -w <file> Wordlist file [default: stdin]
7  -p <n> PPTP port [default: 1723]
8  -n <n> Number of parallel tries [default: 5]
9  -l <n> Limit to n passwords / sec [default: 100]
10
11 Windows-Hack reuses the LCP connection with the same caller-id. This 12 gets around MS's anti-brute forcing protection. It's enabled by default.
```

### **Passing the Hash**

#### Pass the Hash Toolkit

This is a collection of scripts for pass-the-hash scenarios

root@kali:~# pth-curl --help

#### pth-curl

```
Usage: curl [options...] <url>
3
   Options: (H) means HTTP/HTTPS only, (F) means FTP only
4
        --anyauth
                        Pick "any" authentication method (H)
5
                        Append to target file when uploading (F/SFTP)
    -a, --append
6
                        Use HTTP Basic Authentication (H)
        --basic
7
        --cacert FILE
                        CA certificate to verify peer against (SSL)
8
        --capath DIR
                        CA directory to verify peer against (SSL)
9
    -E, --cert CERT[:PASSWD] Client certificate file and password (SSL)
10
        --cert-type TYPE Certificate file type (DER/PEM/ENG) (SSL)
11
        --ciphers LIST SSL ciphers to use (SSL)
12
        --compressed
                        Request compressed response (using deflate or gzip)
13
    -K, --config FILE
                        Specify which config file to read
14
        --connect-timeout SECONDS Maximum time allowed for connection
15
    -C, --continue-at OFFSET Resumed transfer offset
    -b, --cookie STRING/FILE String or file to read cookies from (H)
16
17
    -c, --cookie-jar FILE Write cookies to this file after operation (H)
18
                        Create necessary local directory hierarchy
        --create-dirs
19
        --crlf
                         Convert LF to CRLF in upload
20
        --crlfile FILE Get a CRL list in PEM format from the given file
21
    -d, --data DATA
                        HTTP POST data (H)
22
        --data-ascii DATA HTTP POST ASCII data (H)
23
        --data-binary DATA HTTP POST binary data (H)
24
        --data-urlencode DATA HTTP POST data url encoded (H)
25
        --delegation STRING GSS-API delegation permission
26
                        Use HTTP Digest Authentication (H)
27
        --disable-eprt Inhibit using EPRT or LPRT (F)
28
        --disable-epsv Inhibit using EPSV (F)
29
    -D, --dump-header FILE Write the headers to this file
30
        --egd-file FILE EGD socket path for random data (SSL)
31
        --engine ENGINGE Crypto engine (SSL). "--engine list" for list
32
                        Fail silently (no output at all) on HTTP errors (H)
33
    -F, --form CONTENT Specify HTTP multipart POST data (H)
34
        --form-string STRING Specify HTTP multipart POST data (H)
35
        --ftp-account DATA Account data string (F)
        --ftp-alternative-to-user COMMAND String to replace "USER [name]" (F)
36
37
        --ftp-create-dirs Create the remote dirs if not present (F)
38
        --ftp-method [MULTICWD/NOCWD/SINGLECWD] Control CWD usage (F)
                         Use PASV/EPSV instead of PORT (F)
39
        --ftp-pasv
40
    -P, --ftp-port ADR Use PORT with given address instead of PASV (F)
        --ftp-skip-pasv-ip Skip the IP address for PASV (F)
41
42
        --ftp-pret
                         Send PRET before PASV (for drftpd) (F)
                        Send CCC after authenticating (F)
43
        --ftp-ssl-ccc
44
        --ftp-ssl-ccc-mode ACTIVE/PASSIVE Set CCC mode (F)
45
        --ftp-ssl-control Require SSL/TLS for ftp login, clear for transfer (F)
46
                         Send the -d data with a HTTP GET (H)
    -G, --get
    -g, --globoff
                        Disable URL sequences and ranges using {} and []
47
48
    -H, --header LINE
                        Custom header to pass to server (H)
    −I, --head
49
                        Show document info only
50
    -h, --help
                        This help text
        --hostpubmd5 MD5 Hex encoded MD5 string of the host public key. (SSH)
51
52
    -0, --http1.0
                        Use HTTP 1.0 (H)
        --ignore-content-length Ignore the HTTP Content-Length header
53
54
                        Include protocol headers in the output (H/F)
    −i, --include
55
    -k, --insecure
                        Allow connections to SSL sites without certs (H)
56
        --interface INTERFACE Specify network interface/address to use
57
    -4, --ipv4
                        Resolve name to IPv4 address
58
    -6, --ipv6
                        Resolve name to IPv6 address
59
    -j, --junk-session-cookies Ignore session cookies read from file (H)
```

```
60
        --keepalive-time SECONDS Interval between keepalive probes
61
                        Private key file name (SSL/SSH)
        --key-type TYPE Private key file type (DER/PEM/ENG) (SSL)
62
63
        --krb LEVEL
                        Enable Kerberos with specified security level (F)
64
        --libcurl FILE Dump libcurl equivalent code of this command line
65
        --limit-rate RATE Limit transfer speed to this rate
66
    -l, --list-only
                        List only names of an FTP directory (F)
67
        --local-port RANGE Force use of these local port numbers
68
    -L, --location
                        Follow redirects (H)
69
        --location-trusted like --location and send auth to other hosts (H)
70
                        Display the full manual
        --mail-from FROM Mail from this address
71
72
        --mail-rcpt TO Mail to this receiver(s)
73
        --mail-auth AUTH Originator address of the original email
74
        --max-filesize BYTES Maximum file size to download (H/F)
75
        --max-redirs NUM Maximum number of redirects allowed (H)
76
    -m, --max-time SECONDS Maximum time allowed for the transfer
77
                        Use HTTP Negotiate Authentication (H)
        --negotiate
78
    -n, --netrc
                        Must read .netrc for user name and password
79
        --netrc-optional Use either .netrc or URL; overrides -n
80
        --netrc-file FILE Set up the netrc filename to use
                        Disable buffering of the output stream
81
    -N, --no-buffer
82
        --no-keepalive Disable keepalive use on the connection
83
        --no-sessionid
                        Disable SSL session—ID reusing (SSL)
84
        --noproxy
                        List of hosts which do not use proxy
85
                        Use HTTP NTLM authentication (H)
        --ntlm
86
    -o, --output FILE
                        Write output to <file> instead of stdout
87
                        Pass phrase for the private key (SSL/SSH)
        --pass PASS
88
                        Do not switch to GET after following a 301 redirect (H)
        --post301
89
                        Do not switch to GET after following a 302 redirect (H)
        --post302
90
                        Do not switch to GET after following a 303 redirect (H)
        --post303
91
    -#, --progress-bar Display transfer progress as a progress bar
        --proto PROTOCOLS Enable/disable specified protocols
92
93
        --proto-redir PROTOCOLS Enable/disable specified protocols on redirect
94
    -x, --proxy [PROTOCOL://]HOST[:PORT] Use proxy on given port
95
        --proxy-anyauth Pick "any" proxy authentication method (H)
96
                        Use Basic authentication on the proxy (H)
        --proxy-basic
97
        --proxy-digest Use Digest authentication on the proxy (H)
98
        --proxy-negotiate Use Negotiate authentication on the proxy (H)
99
        --proxy-ntlm
                        Use NTLM authentication on the proxy (H)
100
    -U, --proxy-user USER[:PASSWORD] Proxy user and password
        --proxy1.0 HOST[:PORT] Use HTTP/1.0 proxy on given port
101
102 -p, --proxytunnel
                        Operate through a HTTP proxy tunnel (using CONNECT)
103
        --pubkey KEY
                        Public key file name (SSH)
104 -Q, --quote CMD
                        Send command(s) to server before transfer (F/SFTP)
105
        --random-file FILE File for reading random data from (SSL)
106 -r, --range RANGE
                        Retrieve only the bytes within a range
107
                        Do HTTP "raw", without any transfer decoding (H)
        --raw
108 -e, --referer
                        Referer URL (H)
109 -J, --remote-header-name Use the header-provided filename (H)
110 -0, --remote-name
                        Write output to a file named as the remote file
111
        --remote-name-all Use the remote file name for all URLs
112 -R, --remote-time
                        Set the remote file's time on the local output
113 -X, --request COMMAND Specify request command to use
114
        --resolve HOST:PORT:ADDRESS Force resolve of HOST:PORT to ADDRESS
115
                      Retry request NUM times if transient problems occur
116
        --retry-delay SECONDS When retrying, wait this many seconds between each
117
        --retry-max-time SECONDS Retry only within this period
118 -S, --show-error
                        Show error. With -s, make curl show errors when they occur
                        Silent mode. Don't output anything
119 -s, --silent
        --socks4 HOST[:PORT] SOCKS4 proxy on given host + port
120
121
        --socks4a HOST[:PORT] SOCKS4a proxy on given host + port
122
        --socks5 HOST[:PORT] SOCKS5 proxy on given host + port
123
        --socks5-hostname HOST[:PORT] SOCKS5 proxy, pass host name to proxy
124
        --socks5-gssapi-service NAME SOCKS5 proxy service name for gssapi
        --socks5-gssapi-nec Compatibility with NEC SOCKS5 server
125
126 -Y, --speed-limit RATE Stop transfers below speed-limit for 'speed-time' secs
    -y, --speed-time SECONDS Time for trig speed-limit abort. Defaults to 30
127
128
        --ssl
                        Try SSL/TLS (FTP, IMAP, POP3, SMTP)
129
        --ssl-reqd
                        Require SSL/TLS (FTP, IMAP, POP3, SMTP)
130 -2, --sslv2
                        Use SSLv2 (SSL)
131 -3, --sslv3
                        Use SSLv3 (SSL)
132
        --ssl-allow-beast Allow security flaw to improve interop (SSL)
                        Where to redirect stderr. - means stdout
133
        --stderr FILE
        --tcp-nodelay
134
                        Use the TCP NODELAY option
135 -t, --telnet-option OPT=VAL Set telnet option
136
        --tftp-blksize VALUE Set TFTP BLKSIZE option (must be >512)
137 -z, --time-cond TIME Transfer based on a time condition
138 -1, --tlsv1
                        Use TLSv1 (SSL)
139
        --trace FILE
                        Write a debug trace to the given file
140
        --trace-ascii FILE Like --trace but without the hex output
```

```
141
        --trace-time
                        Add time stamps to trace/verbose output
142
                        Request compressed transfer encoding (H)
        --tr-encoding
143 -T, --upload-file FILE Transfer FILE to destination
144
        --url URL
                        URL to work with
145 -B, --use-ascii
                        Use ASCII/text transfer
146 -u, --user USER[:PASSWORD] Server user and password
147
        --tlsuser USER TLS username
        --tlspassword STRING TLS password
148
149
        --tlsauthtype STRING TLS authentication type (default SRP)
150 -A, --user-agent STRING User-Agent to send to server (H)
151 -v, --verbose
                        Make the operation more talkative
                  Show version number and quit
152 -V, --version
153 -w, --write-out FORMAT What to output after completion
154
                       Store metadata in extended file attributes
        --xattr
155 -q
                       If used as the first parameter disables .curlrc
```

#### pth-net

1 Usage:

```
2 net rpc
                       Run functions using RPC transport
3 net rap
                       Run functions using RAP transport
4 net ads
                       Run functions using ADS transport
5 net file
                       Functions on remote opened files
6 net share
                       Functions on shares
7 net session
                      Manage sessions
8 net server
                       List servers in workgroup
9 net domain
                       List domains/workgroups on network
10 net printq
                      Modify printer queue
11 net user
                      Manage users
12 net group
                      Manage groups
13 net groupmap
                      Manage group mappings
14 net sam
                       Functions on the SAM database
                       Validate username and password
15 net validate
16 net groupmember
                      Modify group memberships
17 net admin
                       Execute remote command on a remote OS/2 server
18 net service
                       List/modify running services
19 net password
                       Change user password on target server
20 net changetrustpw
                       Change the trust password
21 net changesecretpw
                      Change the secret password
22 net setauthuser
                       Set the winbind auth user
                       Get the winbind auth user settings
23 net getauthuser
24 net time
                       Show/set time
25 net lookup
                       Look up host names/IP addresses
26 net g_lock
                      Manipulate the global lock table
                       Join a domain/AD
27 net join
28 net dom
                       Join/unjoin (remote) machines to/from a domain/AD
29 net cache
                       Operate on the cache tdb file
                       Get the SID for the local domain
30 net getlocalsid
31 net setlocalsid
                       Set the SID for the local domain
32 net setdomainsid
                       Set domain SID on member servers
33 net getdomainsid
                       Get domain SID on member servers
34 net maxrid
                       Display the maximum RID currently used
35 net idmap
                       IDmap functions
36 net status
                       Display server status
37 net usershare
                      Manage user-modifiable shares
38 net usersidlist
                      Display list of all users with SID
39 net conf
                      Manage Samba registry based configuration
40 net registry
                      Manage the Samba registry
41 net eventlog
                       Process Win32 *.evt eventlog files
                       Process tdb printer files
42 net printing
43 net serverid
                      Manage the serverid tdb
44 net help
                       Print usage information
45 Valid targets: choose one (none defaults to localhost)
    -S or --server=<server>
                                   server name
47
    -I or --ipaddress=<ipaddr>
                                   address of target server
48
    -w or --workgroup=<wq>
                                   target workgroup or domain
49
50 Valid miscellaneous options are:
    -p or --port=<port>
51
                               connection port on target
    -W or --myworkgroup=<wg>
                               client workgroup
52
    -d or --debuglevel=<level>
53
                                   debug level (0-10)
    -n or --myname=<name>
                               client name
54
55
    -U or --user=<name>
                               user name
    -s or --configfile=<path> pathname of smb.conf file
56
    -l or --long
                             Display full information
57
    -V or --version
58
                             Print samba version information
59
    -P or --machine-pass
                                 Authenticate as machine account
    -e or --encrypt
                             Encrypt SMB transport (UNIX extended servers only)
60
61
    -k or --kerberos
                             Use kerberos (active directory) authentication
```

#### pth-openchangeclient

```
Usage: openchangeclient [OPTION...]
2
    -f, --database=STRING
                                      set the profile database path
3
                                      access public folders instead of mailbox
        --pf
4
    -p, --profile=STRING
                                      set the profile name
    -P, --password=STRING
                                      set the profile password
6
        --username=STRING
                                      set the username of the mailbox to use
7
    −S, −−sendmail
                                      send a mail
8
        --sendappointment
                                      send an appointment
9
        --sendcontact
                                      send a contact
10
        --sendtask
                                      send a task
11
        --sendnote
                                      send a note
12
                                      fetch user INBOX mails
    −F, −−fetchmail
        --fetchsummary
13
                                      fetch message summaries only
14
    -G, --storemail=STRING
                                      retrieve a mail on the filesystem
15
    -i, --fetch-items=STRING
                                      fetch specified user INBOX items
16
        --freebusy=STRING
                                      display free / busy information for the specified user
17
        --force
                                      force openchangeclient behavior in some circumstances
18
        --delete=STRING
                                      delete a message given its unique ID
19
    -u, --update=STRING
                                      update the specified item
20
    -m, --mailbox
                                      list mailbox folder summary
21
    −D, −−deletemail
                                      delete a mail from user INBOX
22
    -A, --attachments=STRING
                                      send a list of attachments
23
    -I, --html-inline=STRING
                                      send PR_HTML content
24
    -W, --html-file=STRING
                                      use HTML file as content
25
    -t, --to=STRING
                                      set the To recipients
26
                                      set the Cc recipients
    -c, --cc=STRING
27
    -b, --bcc=STRING
                                      set the Bcc recipients
28
    -s, --subject=STRING
                                      set the mail subject
29
    −B, −−body=STRING
                                      set the mail body
30
        --location=STRING
                                      set the item location
31
        --label=STRING
                                      set the event label
32
                                      set the event start date
        --dtstart=STRING
33
        --dtend=STRING
                                      set the event end date
34
        --busystatus=STRING
                                      set the item busy status
35
        --taskstatus=STRING
                                      set the task status
36
        --importance=STRING
                                      Set the item importance
37
        --email=STRING
                                      set the email address
38
        --fullname=STRING
                                      set the full name
39
        --cardname=STRING
                                      set a contact card name
40
        --color=STRING
                                      set the note color
41
        --notifications
                                     monitor INBOX newmail notifications
42
        --folder=STRING
                                      set the folder to use instead of inbox
43
        --mkdir
                                      create a folder
                                      delete a folder
44
        --rmdir
        --userlist
45
                                      list Address Book entries
46
        --folder-name=STRING
                                      set the folder name
47
        --folder-comment=STRING
                                      set the folder comment
    -d, --debuglevel=STRING
48
                                      set Debug Level
        --dump-data
49
                                      dump the hex data
50
        --private
                                      set the private flag on messages
51
        --ocpf-file=STRING
                                      set OCPF file
52
        --ocpf-dump=STRING
                                      dump message into OCPF file
53
        --ocpf-syntax
                                      check OCPF files syntax
54
        --ocpf-sender
                                      send message using OCPF files contents
56 Help options:
57 -?, --help
                                      Show this help message
        --usage
                                      Display brief usage message
58
59
60 Common openchange options:
61 -V, --version
                                      Print version
```

### pth-rpcclient

```
1 Usage: rpcclient [OPTION...]
    -c, --command=COMMANDS
                                            Execute semicolon separated cmds
    -I, --dest-ip=IP
                                            Specify destination IP address
4
    -p, --port=PORT
                                            Specify port number
  Help options:
7
    -?, --help
                                            Show this help message
8
        --usage
                                            Display brief usage message
9
```

```
10 Common samba options:
   -d, --debuglevel=DEBUGLEVEL
                                            Set debug level
12
   -s, --configfile=CONFIGFILE
                                            Use alternate configuration file
13
   -l, --log-basename=LOGFILEBASE
                                            Base name for log files
14
   -V, --version
                                            Print version
15
        --option=name=value
                                            Set smb.conf option from command line
16
17 Connection options:
18
   -0, --socket-options=SOCKETOPTIONS
                                            socket options to use
19
   -n, --netbiosname=NETBIOSNAME
                                            Primary netbios name
20
   -W, --workgroup=WORKGROUP
                                            Set the workgroup name
21
   -i, --scope=SCOPE
                                            Use this Netbios scope
22
23 Authentication options:
24
   -U, --user=USERNAME
                                            Set the network username
   −N, −−no−pass
25
                                            Don't ask for a password
26
    -k, --kerberos
                                            Use kerberos (active directory)
27
                                            authentication
28
                                            Get the credentials from a file
    -A, --authentication-file=FILE
    -S, --signing=on|off|required
29
                                            Set the client signing state
30
    -P, --machine-pass
                                            Use stored machine account password
31
    -e, --encrypt
                                            Encrypt SMB transport (UNIX extended
32
                                            servers only)
33
   -C, --use-ccache
                                            Use the winbind ccache for
34
                                            authentication
35
        --pw-nt-hash
                                            The supplied password is the NT hash
```

### pth-smbclient

```
1 Usage: smbclient [-?EgBVNkPeC] [-?|--help] [--usage]
           [-R|--name-resolve=NAME-RESOLVE-ORDER] [-M|--message=HOST]
           [-I|--ip-address=IP] [-E|--stderr] [-L|--list=HOST]
3
4
           [-m|--max-protocol=LEVEL] [-T|--tar=<c|x>IXFqgbNan]
5
           [-D|--directory=DIR] [-c|--command=STRING] [-b|--send-buffer=BYTES]
           [-p|--port=PORT] [-g|--grepable] [-B|--browse]
           [-d|--debuglevel=DEBUGLEVEL] [-s|--configfile=CONFIGFILE]
7
           [-l|--log-basename=LOGFILEBASE] [-V|--version] [--option=name=value]
8
          [-0] --socket-options=SOCKETOPTIONS] [-n] --netbiosname=NETBIOSNAME]
9
10
           [-W|--workgroup=WORKGROUP] [-i|--scope=SCOPE] [-U|--user=USERNAME]
           [-N|--no-pass] [-k|--kerberos] [-A|--authentication-file=FILE]
11
12
           [-S|--signing=on|off|required] [-P|--machine-pass] [-e|--encrypt]
13
           [-C|--use-ccache] [--pw-nt-hash] service <password>
```

#### pth-smbget

```
1 Usage: smbget [OPTION...]
                                 Work as user guest
    -a, --guest
3
                                 Encrypt SMB transport (UNIX extended servers
    -e, --encrypt
5
                                 Automatically resume aborted files
    -r, --resume
    −U, --update
                                 Download only when remote file is newer than
7
                                 local file or local file is missing
8
    -R, --recursive
                                 Recursively download files
9
                                 Username to use
    -u, --username=STRING
10
                                 Password to use
    -p, --password=STRING
    -w, --workgroup=STRING
                                 Workgroup to use (optional)
11
12
    -n, --nonprompt
                                 Don't ask anything (non-interactive)
    -d, --debuglevel=INT
13
                                 Debuglevel to use
                                 Write downloaded data to specified file
14
    -o, --outputfile=STRING
15
    -0, --stdout
                                 Write data to stdout
16
                                 Show dots as progress indication
    −D, −−dots
17
    -q, --quiet
                                 Be quiet
                                 Be verbose
18
    -v, --verbose
19
    -P, --keep-permissions
                                 Keep permissions
20
    -b, --blocksize=INT
                                 Change number of bytes in a block
21
                                 Use specified rc file
    -f, --rcfile=STRING
22
23 Help options:
                                 Show this help message
24 -?, --help
25
        --usage
                                 Display brief usage message
```

#### pth-sqsh

```
[-d severity] [-D database] [-e] [-E editor] [-f severity]
2
3
            [-G TDS version] [-h] [-H hostname] [-i filename] [-I interfaces]
4
            [-J charset] [-k keywords] [-K keytab] [-l level|flags]
5
            [-L var=value] [-m style] [-n {on|off}] [-N appname] [-o filename]
            [-p] [-P [password]] [-Q query_timeout] [-r [sqshrc]]
6
            [-R principal] [-s colsep] [-S server] [-t [filter]]
7
            [-T login_timeout] [-U username] [-v] [-V [bcdimoqru]] [-w width]
8
9
            [-X] [-y directory] [-z language] [-Z [secmech]]
10
11 -a Max. # of errors before abort
                                           -m Set display mode
12 -A Adjust TDS packet size
                                               Set chained transaction mode
13 -b Suppress banner message on startup -N
                                               Set Application Name (sqsh)
14 -B Turn off file buffering on startup
                                               Direct all output to file
15 -c Alias for the 'go' command
                                               Display performance stats
16 -C Send sql statement to server
                                               Sybase password (NULL)
17 -d Min. severity level to display
                                           -Q Query timeout period in seconds
18 -D Change database context on startup
                                           -r Specify name of .sqshrc
19 -e Echo batch prior to executing
                                           -R Network security server principal
20 -E Replace default editor (vi)
                                           -s Alternate column separator (\t)
21 -f Min. severity level for failure
                                           -S Name of Sybase server ($DSQUERY)
22 -G TDS version to use
                                           -t Filter batches through program
23 -h Disable headers and footers
                                           -T Login timeout period in seconds
24 -H Set the client hostname
                                           –U Name of Sybase user
25 —i Read input from file
                                           -\mathsf{v}
                                               Display current version and exit
26 -I Alternate interfaces file
                                               Request network security services
                                           -V
27 -J Client character set
                                           -w Adjust result display width
28 -k Specify alternate keywords file

    –X Enable client password encryption

29 -K Network security keytab file (DCE) -y Override value of $SYBASE
30 -l Set debugging level
                                           -z Alternate display language
31 -L Set the value of a given variable
                                           –Z Network security mechanism
```

#### pth-winexe

```
1 winexe version 1.1
2 This program may be freely redistributed under the terms of the GNU GPLv3
3 Usage: winexe [OPTION]... //HOST COMMAND
4 Options:
5
    -?, --help
                                                 Display help message
                                                 Set the network username
    -U, --user=[DOMAIN/]USERNAME[%PASSWORD]
                                                 Get the credentials from a file
    -A, --authentication-file=FILE
    -k, --kerberos=STRING
                                                 Use Kerberos, -k [yes|no]
9
    -d, --debuglevel=DEBUGLEVEL
                                                 Set debug level
10
        --uninstall
                                                 Uninstall winexe service after remote execution
11
                                                 Reinstall winexe service before remote execution
        --reinstall
12
        --system
                                                 Use SYSTEM account
13
                                                 Load user profile
        --profile
14
        --convert
                                                 Try to convert characters between local and remote code-pages
15
                                                 Run as user (BEWARE: password is sent in cleartext over net)
        --runas=[DOMAIN\]USERNAME%PASSWORD
16
        --runas-file=FILE
                                                 Run as user options defined in a file
                                                 Desktop interaction: 0 - disallow, 1 - allow. If you allow use a
17
        --interactive=0|1
18
                                                 requirement). Vista do not support this option.
19
        --ostype=0|1|2
                                                 OS type: 0 - 32-bit, 1 - 64-bit, 2 - winexe will decide. Determin
20
                                                 of service will be installed.
```

### pth-wmic

```
Usage: [-?|--help] [--usage] [-d|--debuglevel DEBUGLEVEL] [--debug-stderr]
           [-s|--configfile CONFIGFILE] [--option=name=value]
2
3
           [-l|--log-basename LOGFILEBASE] [--leak-report] [--leak-report-full]
           [-R|--name-resolve NAME-RESOLVE-ORDER]
4
5
           [-0|--socket-options SOCKETOPTIONS] [-n|--netbiosname NETBIOSNAME]
           [-W|--workgroup WORKGROUP] [--realm=REALM] [-i|--scope SCOPE]
6
7
           [-m|--maxprotocol MAXPROTOCOL] [-U|--user [DOMAIN\]USERNAME[%PASSWORD]]
           [-N|--no-pass] [--password=STRING] [-A|--authentication-file FILE]
8
9
           [-S|--signing on|off|required] [-P|--machine-pass]
           [--simple-bind-dn=STRING] [-k|--kerberos STRING]
10
           [--use-security-mechanisms=STRING] [-V|--version] [--namespace=STRING]
11
           [--delimiter=STRING]
12
13
          //host query
14
15 Example: wmic -U [domain/]adminuser%password //host "select * from Win32 ComputerSystem"
```

```
Usage: [-?|--help] [--usage] [-d|--debuglevel DEBUGLEVEL] [--debug-stderr]
          [-s|--configfile CONFIGFILE] [--option=name=value]
3
           [-l|--log-basename LOGFILEBASE] [--leak-report] [--leak-report-full]
           [-R|--name-resolve NAME-RESOLVE-ORDER]
5
           [-0|--socket-options SOCKETOPTIONS] [-n|--netbiosname NETBIOSNAME]
6
           [-W|--workgroup WORKGROUP] [--realm=REALM] [-i|--scope SCOPE]
7
           [-m|--maxprotocol MAXPROTOCOL] [-U|--user [DOMAIN\]USERNAME[%PASSWORD]]
           [-N|--no-pass] [--password=STRING] [-A|--authentication-file FILE]
           [-S|--signing on|off|required] [-P|--machine-pass]
10
          [--simple-bind-dn=STRING] [-k|--kerberos STRING]
           [--use-security-mechanisms=STRING] [-V|--version]
11
12
          //host
13
14 Example: wmis -U [domain/]adminuser%password //host cmd.exe /c dir c:\ > c:\windows\temp\output.txt
```

People are beginning to notice you. Try dressing before you leave the house.

Posted by chousensha Apr 4th, 2015 kali, penetration testing, tools

« Pentest lab - Flick Kali tools catalog - Wireless Attacks »

## **Comments**

### whoami

```
switch (interests){
    case INFORMATION SECURITY:
    Mostly offensive security, but trying to be well-rounded in everything;
    case PYTHON:
    Mainly security and sysadmin related scripting;
    case LINUX:
    Greetings from /dev/null;
    case JAPANESE:
    Language, anime, samurai;
    case MARTIAL ARTS:
    If it's fighting I like it;
    case MILITARY SCIENCE:
    Ancient, medieval, modern;
```

### **Recent Posts**

default: GAMING;}

- There be Tr0lls Part 3
- No Mercy
- Pond. Analoguepond
- <u>Derpnstink</u>
- Donkey Docker

### **GitHub Repos**

• <u>cyber-support-base</u>

Collection of bookmarked tools for security, red teaming, blue teaming, pentesting and other

• <u>automation</u>

Various automation tasks

<u>network scripts</u>

Collection of miscellaneous scripts

• <u>linux privcheck</u>

Check privileges, settings and other information on Linux systems and suggest exploits based on kernel versions

• <u>kloggy</u>

@chousensha on GitHub

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Red Team Journal

Corelan Team

Mad Irish

redteams.net

MattAndreko.com

Portswigger Web Security

Cobalt Strike blog

HighOn.Coffee

<u>Penetration Testing Lab</u>

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