EHARMONY - PLAINTEXT AND HASHDUMP

Well, I have cracked more then 80% of the EHarmony hashdump so time for me to report on the passwords and release the plaintexts. I will update this page as I get to 90% and so on. I used cracking this hashdump to test my LinkedIn plaintexts and to explain some hashcat basics (see here).

- the hashes are MD5, but there seems to be a few non-MD5 entries that hashcat will complain about
- the hacker who released them has removed all duplicates
- EHarmony converted all lowercase to uppercase thus greatly reducing the keyspace for cracking
- I am guessing that these passwords represent a password rules change, there are some passwords that look like they were cut off at 14 characters but also a very few with more then 14 characters. Also there are almost no passwords with special characters in them. I would guess that at some time EHarmony changed the password rules and this hashdump represents passwords from before and after that change.
- [Here](here) is the hashdump
- [Here](here) are the plaintexts (currently 1258045 of 1513805 or 83% done)
- [Here](here) are some rules which were generated by hashcat when using the *"g"* option

Here is the analysis of the plaintexts (using pipal of course, everyone say thanks to DigiNinja):

Top 10 passwords
FREETOBEME = 2 (0.0%)
PEACEOUT911 = 1 (0.0%)
COFCOF = 1 (0.0%)
COFCOUGAS = 1 (0.0%)
COFDAN = 1 (0.0%)
COFE4CAKES = 1 (0.0%)
COFELON = 1 (0.0%)
COFER1 = 1 (0.0%)
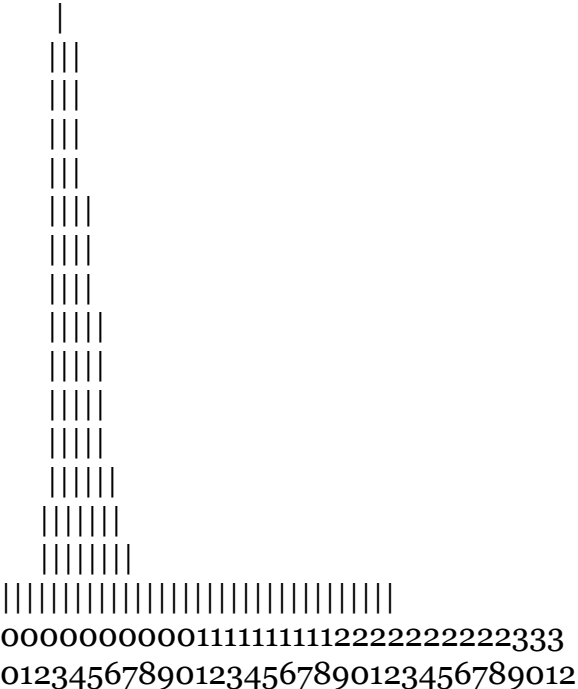COFERGIE = 1 (0.0%)
COFF178 = 1 (0.0%)

Top 10 base words
lisa = 263 (0.02%)
chris = 233 (0.02%)
tina = 200 (0.02%)
eric = 194 (0.02%)
usmc = 174 (0.01%)
mike = 173 (0.01%)
nana = 167 (0.01%)
mama = 166 (0.01%)
love = 165 (0.01%)
emma = 162 (0.01%)

Password length (length ordered)
5 = 46618 (3.71%)
6 = 253321 (20.14%)
7 = 279881 (22.25%)
8 = 251675 (20.01%)
9 = 175822 (13.98%)
10 = 136600 (10.86%)
11 = 57976 (4.61%)
12 = 31813 (2.53%)
13 = 14767 (1.17%)
14 = 8355 (0.66%)

15 = 551 (0.04%)
16 = 457 (0.04%)
17 = 122 (0.01%)
18 = 56 (0.0%)
19 = 23 (0.0%)
20 = 15 (0.0%)
21 = 2 (0.0%)
22 = 4 (0.0%)
23 = 2 (0.0%)
25 = 3 (0.0%)
31 = 2 (0.0%)

Password length (count ordered)
7 = 279881 (22.25%)
6 = 253321 (20.14%)
8 = 251675 (20.01%)
9 = 175822 (13.98%)
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22 = 4 (0.0%)
25 = 3 (0.0%)
23 = 2 (0.0%)
31 = 2 (0.0%)
21 = 2 (0.0%)

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One to six characters = 299937 (23.84%)
One to eight characters = 831491 (66.09%)
More than eight characters = 426553 (33.91%)

Only lowercase alpha = 0 (0.0%)
Only uppercase alpha = 499128 (39.67%)
Only alpha = 499128 (39.67%)
Only numeric = 18770 (1.49%)

First capital last symbol = 166 (0.01%)
First capital last number = 566723 (45.05%)

Months
january = 32 (0.0%)
february = 7 (0.0%)
march = 221 (0.02%)
april = 302 (0.02%)
may = 2653 (0.21%)
june = 461 (0.04%)
july = 268 (0.02%)
august = 101 (0.01%)
september = 14 (0.0%)
october = 51 (0.0%)
november = 56 (0.0%)
december = 35 (0.0%)

Days
monday = 38 (0.0%)
tuesday = 12 (0.0%)
wednesday = 2 (0.0%)
thursday = 4 (0.0%)
friday = 36 (0.0%)
saturday = 6 (0.0%)
sunday = 35 (0.0%)

Months (Abreviated)
jan = 3448 (0.27%)
feb = 554 (0.04%)
mar = 12221 (0.97%)
apr = 943 (0.07%)
may = 2653 (0.21%)
jun = 1701 (0.14%)
jul = 1486 (0.12%)
aug = 1076 (0.09%)
sept = 165 (0.01%)
oct = 767 (0.06%)
nov = 1220 (0.1%)
dec = 1123 (0.09%)

Days (Abreviated)
mon = 8873 (0.71%)
tues = 25 (0.0%)
wed = 361 (0.03%)
thurs = 15 (0.0%)

fri = 1157 (0.09%)
sat = 1113 (0.09%)
sun = 2205 (0.18%)

Includes years
1975 = 688 (0.05%)
1976 = 696 (0.06%)
1977 = 704 (0.06%)
1978 = 764 (0.06%)
1979 = 725 (0.06%)
1980 = 901 (0.07%)
1981 = 782 (0.06%)
1982 = 800 (0.06%)
1983 = 799 (0.06%)
1984 = 906 (0.07%)
1985 = 796 (0.06%)
1986 = 785 (0.06%)
1987 = 768 (0.06%)
1988 = 632 (0.05%)
1989 = 696 (0.06%)
1990 = 511 (0.04%)
1991 = 464 (0.04%)
1992 = 365 (0.03%)
1993 = 311 (0.02%)
1994 = 326 (0.03%)
1995 = 382 (0.03%)
1996 = 347 (0.03%)
1997 = 343 (0.03%)
1998 = 453 (0.04%)
1999 = 503 (0.04%)
2000 = 1590 (0.13%)
2001 = 918 (0.07%)
2002 = 858 (0.07%)
2003 = 935 (0.07%)
2004 = 990 (0.08%)
2005 = 1186 (0.09%)
2006 = 1342 (0.11%)
2007 = 1412 (0.11%)
2008 = 1554 (0.12%)
2009 = 1554 (0.12%)
2010 = 1062 (0.08%)
2011 = 236 (0.02%)
2012 = 271 (0.02%)
2013 = 105 (0.01%)
2014 = 66 (0.01%)
2015 = 72 (0.01%)
2016 = 61 (0.0%)
2017 = 63 (0.01%)
2018 = 66 (0.01%)
2019 = 129 (0.01%)
2020 = 503 (0.04%)

Years (Top 10)
2000 = 1590 (0.13%)

2009 = 1554 (0.12%)
2008 = 1554 (0.12%)
2007 = 1412 (0.11%)
2006 = 1342 (0.11%)
2005 = 1186 (0.09%)
2010 = 1062 (0.08%)
2004 = 990 (0.08%)
2003 = 935 (0.07%)
2001 = 918 (0.07%)

Colours
black = 1262 (0.1%)
blue = 2045 (0.16%)
brown = 774 (0.06%)
gray = 270 (0.02%)
green = 1037 (0.08%)
orange = 304 (0.02%)
pink = 1205 (0.1%)
purple = 363 (0.03%)
red = 5087 (0.4%)
white = 546 (0.04%)
yellow = 305 (0.02%)
violet = 62 (0.0%)
indigo = 39 (0.0%)

Single digit on the end = 121737 (9.68%)
Two digits on the end = 165564 (13.16%)
Three digits on the end = 83330 (6.62%)

Last number
0 = 53392 (4.24%)
1 = 113735 (9.04%)
2 = 66367 (5.28%)
3 = 65818 (5.23%)
4 = 50124 (3.98%)
5 = 51856 (4.12%)
6 = 46778 (3.72%)
7 = 54089 (4.3%)
8 = 47620 (3.79%)
9 = 53403 (4.24%)

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0123456789
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Last digit
1 = 113735 (9.04%)
2 = 66367 (5.28%)
3 = 65818 (5.23%)
7 = 54089 (4.3%)
9 = 53403 (4.24%)
0 = 53392 (4.24%)
5 = 51856 (4.12%)
4 = 50124 (3.98%)
8 = 47620 (3.79%)
6 = 46778 (3.72%)

Last 2 digits (Top 10)
23 = 17057 (1.36%)
12 = 13240 (1.05%)
11 = 12545 (1.0%)
01 = 12113 (0.96%)
00 = 10450 (0.83%)
21 = 9590 (0.76%)
22 = 9415 (0.75%)
69 = 9325 (0.74%)
13 = 9081 (0.72%)
10 = 8990 (0.71%)

Last 3 digits (Top 10)
123 = 9527 (0.76%)
007 = 2989 (0.24%)
000 = 2855 (0.23%)
234 = 2600 (0.21%)
777 = 1897 (0.15%)
009 = 1894 (0.15%)
101 = 1886 (0.15%)
001 = 1874 (0.15%)
008 = 1817 (0.14%)
420 = 1743 (0.14%)

Last 4 digits (Top 10)
1234 = 2083 (0.17%)
2009 = 1403 (0.11%)
2008 = 1390 (0.11%)
2000 = 1276 (0.1%)
2007 = 1251 (0.1%)
2006 = 1166 (0.09%)
2005 = 1032 (0.08%)
2345 = 952 (0.08%)
2010 = 911 (0.07%)
2004 = 855 (0.07%)

Last 5 digits (Top 10)

12345 = 824 (0.07%)
23456 = 454 (0.04%)
54321 = 162 (0.01%)
55555 = 135 (0.01%)
11111 = 127 (0.01%)
56789 = 123 (0.01%)
77777 = 115 (0.01%)
00000 = 98 (0.01%)
96969 = 74 (0.01%)
34567 = 67 (0.01%)

Character sets
upperalphanum: 738906 (58.73%)
upperalpha: 499128 (39.67%)
numeric: 18770 (1.49%)
upperalphaspecialnum: 546 (0.04%)
upperalphaspecial: 529 (0.04%)
specialnum: 62 (0.0%)

Character set ordering
stringdigit: 546415 (43.43%)
allstring: 499128 (39.67%)
digitstring: 70448 (5.6%)
stringdigitstring: 69494 (5.52%)
othermask: 36999 (2.94%)
alldigit: 18770 (1.49%)
digitstringdigit: 16009 (1.27%)
stringspecialstring: 397 (0.03%)
stringspecialdigit: 275 (0.02%)
stringspecial: 95 (0.01%)
specialstring: 8 (0.0%)
specialstringspecial: 6 (0.0%)

Hashcat masks (Top 10)
?u?u?u?u?u?u?u: 121805 (9.68%)
?u?u?u?u?u?u: 101111 (8.04%)
?u?u?u?u?u?u?u: 88475 (7.03%)
?u?u?u?u?u?u?u?u: 65230 (5.19%)
?u?u?u?d?d?d?d: 52666 (4.19%)
?u?u?u?u?u?u?u?u?u: 47302 (3.76%)
?u?u?u?u?d?d: 38723 (3.08%)
?u?u?u?u?u?d?d: 32910 (2.62%)
?u?u?d?d?d?d: 30207 (2.4%)
?u?u?u?u?d?d?d?d: 28667 (2.28%)