

# PwnyCorral

April 29, 2019

## Overview

PwnyCorral takes advantage of the haveibeenpwned API to determine if an account has been part of a data breach. The primary goal of this script is to allow organizations/companies to track the breaches in which their users have fallen victim. Identifying and tracking accounts that come from one particular source may allow proactive remediation to occur.

## Installation

### Prerequisites

TinyDB

```
# pip install tinydb
```

Requests

```
# pip install requests
```

Termgraph

```
# pip3 install termgraph
```

## Usage

### Help

```
# python pwnycorral.py -h
```

```
usage: pwnycorral.py [-h] [-a ADDACCNAME] [-r REMACCNAME] [-c] [-s]
                  [-f FILENAME] [-l] [-e ACCEXISTS] [-d ACCDET] [-v] [-g]

optional arguments:
  -h, --help            show this help message and exit
  -a ADDACCNAME          ADD account to database. Support -v flag.
  -r REMACCNAME          REMOVE account from database.
  -c                    COUNT accounts in database.
  -s                    Number of SITES in database.
  -f FILENAME            Bulk add accounts based on FILE. One email address per line.
  -l                    List accounts in database
  -e ACCEXISTS           Determine if account is in database
  -d ACCDET              Show details of specific account
  -v                    VERBOSE output. Display description of compromise
  -g                    GRAPH breaches to show greatest_threat.
```

### Add Account

```
# python pwnycorral.py -a [email address]
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -a obama@whitehouse.gov
The account obama@whitehouse.gov has been added to the DB
```

### Remove Account

```
# python pwnycorral.py -r [email address]
```

### Number of Breached Accounts in DB

```
# python pwnycorral.py -c
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -c
15
```

### Number of Breached Sites in DB

```
# python pwnycorral.py -s
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -s
B2BUSABusinesses count: 1
Dailymotion count: 1
Dropbox count: 4
Houzz count: 3
Lastfm count: 3
OnlinerSpambot count: 2
Tumblr count: 2
```

### Bulk load Accounts into DB

```
# python pwnycorral.py -f [filename]
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -f bulk.txt
The account obama@whitehouse.gov was found.
The account trump@whitehouse.gov was not found.
The account 123@aol.com was found.
```

### List Breached Sites and Number of Accounts in Each

```
# python pwnycorral.py -l
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -l
obama@whitehouse.gov count: 24
123@aol.com count: 96
```

### Does Account Exist in DB

```
# python pwnycorral.py -e [email address]
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -e 123@aol.com
The account 123@aol.com exists in the database
```

## Details of Specific Account in DB

```
# python pwnycorral.py -d [email address]
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -d 123@aol.com
Details for 123@aol.com...
000webhost
In approximately March 2015, the free web hosting provider <a href="http://www.troyhunt.com/2015/10/breaches-traders-plain-text-passwords.html" target="_blank">000webhost</a> that exposed almost 15 million customer records. The data was sold and traded before 000webhost was alerted in October. The
8tracks
In June 2017, the online playlists service known as <a href="https://blog.8tracks.com/2017/06/27/password-security-alert/" target="_blank">8tracks</a> 18 million accounts. In their disclosure, 8Tracks advised that &quot;the vector for the attack was an employee's GitHub account, which was password hashes for users who <em>didn't</em> sign up with either Google or Facebook authentication were also included. The data was provided in CSV format and contained almost 8 million unique email addresses.
```

## Verbose Output

```
# python pwnycorral.py -v
```

## Graph Breaches and Accounts in Each

```
# python pwnycorral.py -g
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -g
BitcoinTalk      : █ 1.00
Disqus           : █ 2.00
Dropbox          : █ 2.00
Dubsmash         : █ 2.00
Evony            : █ 2.00
HeroesOfNewerth  : █ 2.00
```

## Description of Breach

```
# python pwnycorral.py -b [Breach Name (case sensitive)]
```

```
(project_env) brad@ubuntu:~/Desktop/PwnyCorral$ python pwnycorral.py -b MyFitnessPal
Details for MyFitnessPal...
In February 2018, the diet and exercise service <a href="https://content.myfitnesspal.com/security-information/FAQ.html" target="_blank" rel="noopener">MyFitnessPal</a> exposed 144 million unique email addresses alongside usernames, IP addresses and passwords stored as SHA-1 and bcrypt hashes (the former for earlier accounts). The data appeared listed for sale on the dark web (see <a href="https://www.theregister.co.uk/2019/02/11/620_million_hacked_accounts_dark_web/" target="_blank" rel="noopener">this</a> for more details) and subsequently began circulating more broadly. The data was provided to HIBP by a source who requested it to be attributed to &quot;MyFitnessPal Breach 2018".
```