Information Gathering (Reconnaissance)

Passive Recon

Physical

- · Satellite images
- Drone Recon
- Building Layout(badge readers, break areas, security, fencing)

Social

- Employees (Names, Job Title, Phine Number, Manager, etc.)
- Pictures Badge photos, desk photos, computer photos, etc.

Web / Host

- Target Validation WHOIS, nslookup, dnsrecon
- Finding Subdomains Google Fu, dig, Nmap, Sublist3r, Bluto, crt.sh, etc.
- Fingerprinting Nmap, Wappalyzer, WhatWeb, BuiltWith, Netcat
- Data Breaches HavelBeenPwned, Breach-Parse, WeLeakInfo

Identifying our target

Finding a client to "attack". Find a client using <u>BugCrowd</u>. He goes over <u>Tesla</u> in his video, I will be going over <u>Humble Bundle</u>. No matter the target, be sure to stay in scope on any type of engagement.

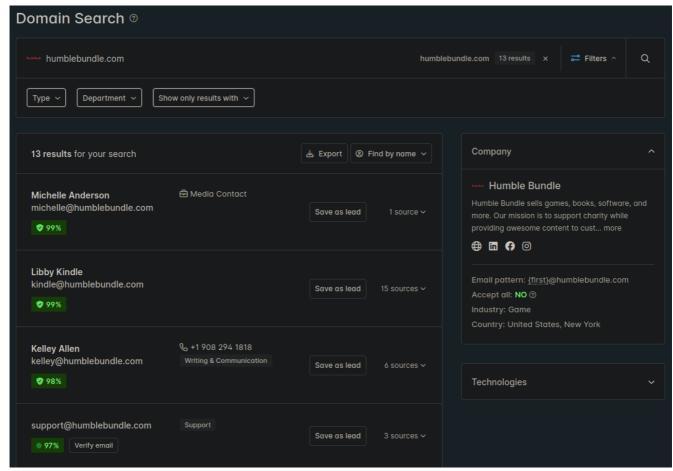
Discovering Email Addresses

Helpful Tools

I have my on list of various helpful tools on email OSINT <u>here</u>. Most of these tools were already added there.

Finding emails/username is very helpful for later on in the engagement as you can gather them for credential stuffing and other various types of attacks.

 <u>Hunter.io</u> - Discover email addresses by company name. This requires you to sign up with an email or Gmail)



We see various people with their job title and the source of where they found the email address. They have <u>plugins/add-ons</u>.

<u>Phonebook.cz</u> - Lists all domains, email addresses, or URLs for the given input domain. This
requires you to login with a <u>intelx.io</u> account.



<u>Clearbit.Connect</u> - Email discovery tool, only works in chrome.

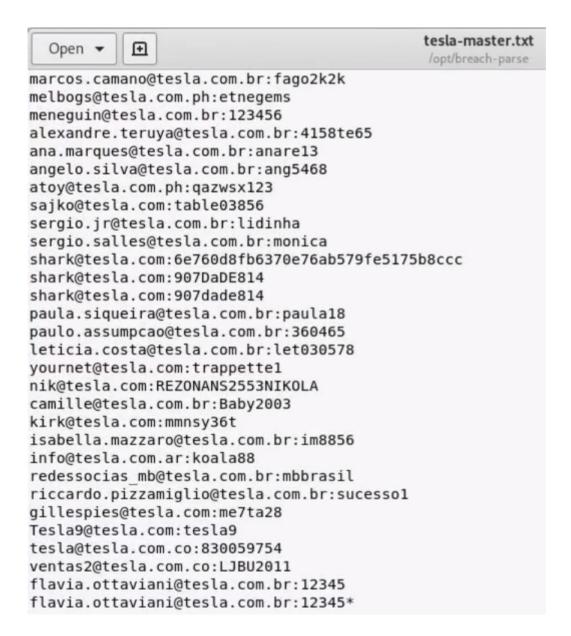
Gathering Breached Credentials with Breach-Parse

Breach-Parse is a tool created by <u>Heath</u> and is a tool for parsing breached usernames and passwords that have been dumped online. This pulls from a file under <u>/opt/breach-parse/BreachCompilation/data</u> under the <u>symbols file</u>. He does provide a password list located <u>here</u>. This is a magnet link so you will need some form of torrent software to download this. It is a larger

download(roughly 41GB).

humblebundle-master.txt humblebundle-passwords.txt humblebundle-users.txt

The master.txt file will show user:password. Unfortunately this pulled no information for me from HumbleBundle, but this is what teslas looks like from Heaths video:



This is very helpful for credential stuffing by using the found users and passwords, but also by changing the passwords with upper/lower case strings, and appending numbers or symbols to the end.

We can also do a password spray by talking all the users and trying the same password against all the different users.

Hunting Breached Credentials with DeHashed

<u>DeHashed</u> "DeHashed is a public data search-engine created for Security Analysts, Journalists, Security Companies, and everyday people to help secure accounts and provide insight on breaches and account leaks. DeHashed can also be used for investigations & fraud prevention." This does cost money to use with an active subscription.

We can search: email, username, IP address, address, name, Phone number, VIN. At the time of these notes, I do not have an active subscription.

Hashes.org

Hunting Subdomains

Sublist3r

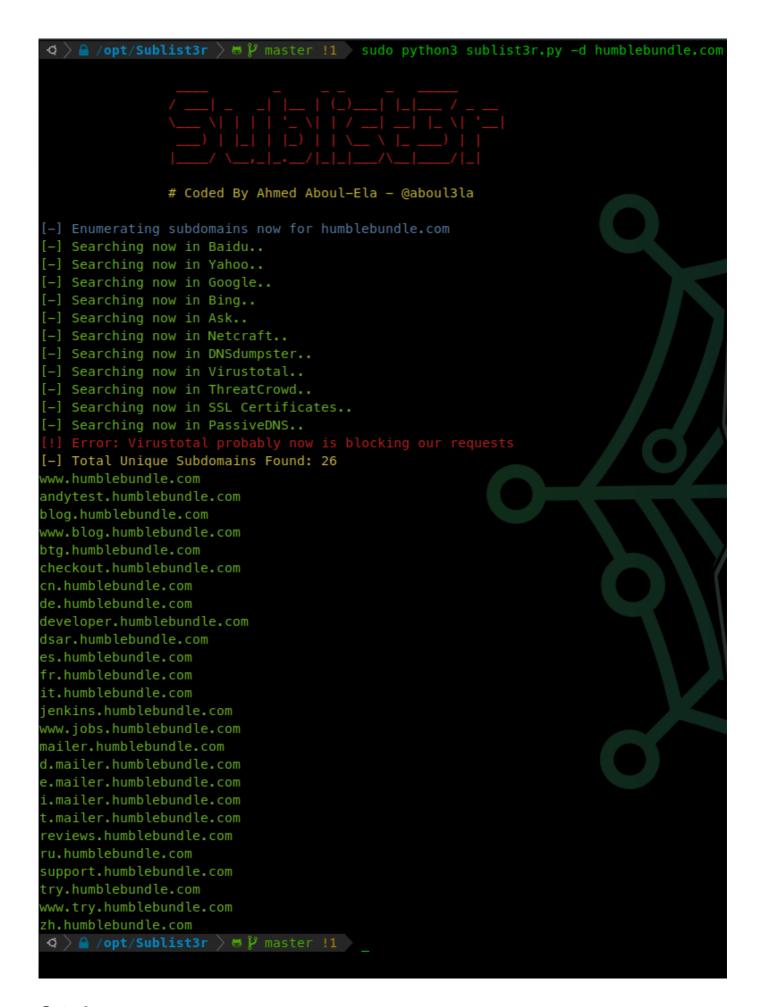
Sublist3r is a tool designed to enumerate subdomains of websites using OSINT.

```
usage: sublist3r.py [-h] -d DOMAIN [-b [BRUTEFORCE]] [-p PORTS] [-v [VERBOSE]] [-t THREADS] [-e ENGINES]
                 [-o OUTPUT] [-n]
OPTIONS:
                    show this help message and exit
 -d DOMAIN, --domain DOMAIN
                    Domain name to enumerate it's subdomains
 -b [BRUTEFORCE], --bruteforce [BRUTEFORCE]
 -p PORTS, --ports PORTS
                    Scan the found subdomains against specified tcp ports
 -v [VERBOSE], --verbose [VERBOSE]
                    Enable Verbosity and display results in realtime
 -t THREADS, --threads THREADS
                    Number of threads to use for subbrute bruteforce
 -e ENGINES, --engines ENGINES
                    Specify a comma-separated list of search engines
 -o OUTPUT, --output OUTPUT
                     Save the results to text file
                    Output without color
 -n, --no-color
Example: python sublist3r.py -d google.com
```

Note: As of lately, it won't return results, <u>this issue on github</u> show if we edit the sublist3r.py file, go to line 158 and replace the user agent from:

```
'User-Agent': 'Mozilla/5.0 (Windows NT 6.1; WOW64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/58.0.3029.110 Safari/537.36' to:
```

```
'User-Agent': 'Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:105.0) Gecko/20100101
Firefox/105.0'
```



Crt.sh is a tool to pull certificate fingerprints.



OWASP Amass

OWASP Amass "The OWASP Amass Project performs network mapping of attack surfaces and external asset discovery using open source information gathering and active reconnaissance

```
v4.1.0
                                        OWASP Amass Project - @owaspamass
                       In-depth Attack Surface Mapping and Asset Discovery
Jsage: amass intel|enum|db [options]
       Show the program usage message
 -h
 -help
       Show the program usage message
 -version
       Print the version number of this Amass binary
Subcommands:
       amass intel - Discover targets for enumerations
       amass enum - Perform enumerations and network mapping
       amass db — Manipulate the Amass graph database
The user's guide can be found here:
ttps://github.com/owasp-amass/amass/blob/master/doc/user_guide.md
An example configuration file can be found here:
nttps://github.com/owasp-amass/amass/blob/master/examples/config.yaml
The Amass tutorial can be found here:
nttps://github.com/owasp-amass/amass/blob/master/doc/tutorial.md
```

A basic way to use amass is amass enum -d example.com, but as I am testing against HumbleBundle

```
d > | opt/amass | ./amass | enum | -d | humblebundle.com |
humblebundle.com (FQDN) | --> | ns_record | --> | mary.ns.cloudflare.com (FQDN) |
humblebundle.com (FQDN) | --> | mx_record | --> | alt4.aspmx.l.google.com (FQDN) |
humblebundle.com (FQDN) | --> | mx_record | --> | alt2.aspmx.l.google.com (FQDN) |
humblebundle.com (FQDN) | --> | mx_record | --> | alt1.aspmx.l.google.com (FQDN) |
humblebundle.com (FQDN) | --> | mx_record | --> | aspmx.l.google.com (FQDN) |
humblebundle.com (FQDN) | --> | mx_record | --> | alt3.aspmx.l.google.com (FQDN) |
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humblebundle.com (FQDN) | --> | mx_record | --> | alt3.aspmx.l.google.com (FQDN
```

Identifying Website Technologies

Tools we can use:

Builtwith

We can see various technologies the site is running, any widgets, languages, etc. What frameworks it's running. CDN(Content Delivery Network), etc.

<u>Wappalyzer</u> - Ad-on/Extention for Chrome/Firefox and again see what technologies the website is using.

WhatWeb - Simply analyzes websites.

Information Gathering with Burp Suite

I have my own notes and documentation on Burpsuite here.

Burpsuite

Google Fu

Simple enough, use <u>Google</u>. Using and understanding <u>Google Search Syntax</u> will be helpful. understanding how to use <u>site</u>:, remove results using subtract (<u>-www</u>), <u>filetype</u>: to find documents or PDFs,

Utilizing Social Media

Use Social Media like LinkedIn, Facebook, Twitter, etc.

Images hold a lot of information that have valuable OPSEC. Badge pictures, desks, etc. See the people and their email addresses and roles. Use their names for potential email addresses like first.last@domain.com.