

Better Know Your IP

Example Application: Cybersecurity Analysis

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- General Workflow: ETL

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Aim: Better ways of learning about, and from outliers.

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- Zmap and Zgrab scans of IPv4

Notes and Concerns

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- You give away your location. `tcpdump`.

Know, Know Your IP

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- Links to:

- GeoNames
- MaxMind
- Virustotal
- IpVoid
- AbuseIPDB
- Shodan
- Censys
- Ping
- Traceroute
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- Rate limits for free tier
- Use it for a handful of IPs

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pip install know_your_ip
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sudo apt-get install traceroute
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- Components:

1. Configuration file:

```
know_your_ip.cfg
```

```
[abuseipdb]
```

```
enable = 1
```

```
user_id = 1234
```

```
key = a0fbe08ccef49245179490713e551b589
```

```
cat_catid = abuseipdb_cat_catid.csv
```

```
[ipvoid]
```

```
enable = 1
```

Components of KIP

2. What columns do you want

```
columns.txt
```

```
# Ping
```

```
ping.timeout
```

```
ping.count
```

```
ping.max
```

```
...
```

```
# abuseipdb API
```

```
abuseipdb.bad_isp
```

```
abuseipdb.categories
```

```
abuseipdb.reports
```

```
abuseipdb.total
```

```
...
```

Using KIP

```
python know_your_ip.py
```

```
# Paths
```

```
--file path_to_input_file (default input.csv)
```

```
--config path_config_file (default know_your_ip.cfg)
```

```
--output path_to_output_file (default output.csv)
```

```
# Max connections (multi-threaded)
```

```
--maxconn MAX_CONN
```

```
# From/to Row
```

```
--from from_row
```

```
--to to_row
```

```
# Verbose
```

```
--verbose verbose
```

Actually Using KIP

```
# For one/few IP(s)
```

```
python know_your_ip.py 94.31.29.154
```

```
python know_your_ip.py 94.31.29.154 204.2.197.211
```

```
# File, some rows
```

```
python know_your_ip.py --file input_small.csv --from 1  
--to 2
```