

DHT-crawler

BitTorrent Distributed Hash Table Monitor

Installation guide

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This project was created as part of the TARZAN project and the bachelord thesis of Martin Vaško. DHT-crawler is supposed to monitor BitTorrent traffic with use of DHT tables.

1 Getting Started

To run this program you are supposed to install prerequisites. When you do not want to use it on your machine, there is a docker image to make container which is created for safety. `Setup.py` installs script with sudo privileges to `/usr/env/python`. From there you have to execute it from this repository with sudo privileges.

There is only 1 file which is executable found at `./dht_crawler/exec.py`.

2 Prerequisites

To run this application you need python 3 and more. `Bencoder` and `bencoder.pyx` package.

```
pip3 install -r requirements.txt
or
pip3 install bencoder bencoder.pyx
```

3 Outputs

Program has 3 types of output.

1. print IP addresses of detected peers.
2. `db_format`, which creates a JSON object carrying the detected peers, it can be send to server.
3. `print_as_country` format, which have translate IP-addresses to geolocation.
4. without formatting, which has every 5 seconds tells you about current status of crawling.

For example, to search for Debian netinst ISO torrent peers use the following command:

```
./dht_crawler/exec.py --file debian-9.6.0-amd64-netinst.iso.torrent
If you know the info hash, you can also use the following command:
./dht_crawler/exec.py --hash f71e7defc014563fc7d8ffe26f759b2518c30f34
```

4 Tests

There are unit tests which are supposed to rely on application, that is still runnable.

5 Contribution

There is possibility to contribute, when something is not working or something should be done better even refactor some part of library.