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Autonomous (self-hosted) BitTorrent DHT search engine suite. <http://labs.boramalper.org/magnetico/>

self-hosted bittorrent dht search-engine website

129 commits 1 branch 6 releases 10 contributors AGPL-3.0

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boramalper	mainline/service done, also changed the signatures of transport signals	Latest commit e0241fe 2 days ago
magnetico	mainline/service done, also changed the signatures of transport signals	2 days ago
magnetico	document search syntax in magnetico docs	12 days ago
.gitignore	updated .gitignore to ignore .mypy_cache	a month ago
.travis.yml	fix mypy errors (although there are many '# type: ignore' lying around)	a month ago
CONTRIBUTING.rst	fixed formatting in CONTRIBUTING.rst	a month ago
COPYING	initial commit	4 months ago
README.rst	Removed "incoming finals" notice from README.md	2 months ago
docker-compose.yml	Dockerize magnetico as a pair of conjoined containers	3 months ago
pylintrc	disable reports for pylint	a month ago

README.rst

magnetico

Autonomous (self-hosted) BitTorrent DHT search engine suite.



magnetico is the first autonomous (self-hosted) BitTorrent DHT search engine suite that is *designed for end-users*. The suite consists of two packages:

- **magnetico**: Autonomous BitTorrent DHT crawler and metadata fetcher.
- **magnetico**: Lightweight web interface for magnetico.

Both programs, combined together, allows anyone with a decent Internet connection to access the vast amount of torrents waiting to be discovered within the BitTorrent DHT space, *without relying on any central entity*.

magnetico liberates BitTorrent from the yoke of centralised trackers & web-sites and makes it *truly decentralised*. Finally!

Features

- Easy installation & minimal requirements:
 - Python 3.5+ and a few Python packages that is available on PyPI.
 - Root access is *not* required to install.
- Near-zero configuration:
 - magnetico works out of the box, and magnetico requires minimal configuration to work with the web server you choose.
 - Detailed, step-by-step manual to guide you through the installation.
- No reliance on any centralised entity:
 - **magnetico** crawls the BitTorrent DHT by "going" from one node to another, and fetches the metadata using the nodes without using trackers.
- Resilience:
 - Unlike client-server model that web applications use, P2P networks are *chaotic* and **magnetico** is designed to handle all the operational errors accordingly.
- High performance implementation:
 - **magnetico** utilizes every bit of your bandwidth to discover as many infohashes & metadata as possible.
- Built-in lightweight web interface:
 - **magnetico** features a lightweight web interface to help you access the database without getting on your way.

Screenshots

Click on the images to view full-screen.

The Homepage	Searching for torrents	Viewing the metadata of a torrent

Why?

BitTorrent, being a distributed P2P file sharing protocol, has long suffered because of the centralised entities that people dependent on for searching torrents (websites) and for discovering other peers (trackers). Introduction of DHT (distributed hash table) eliminated the need for trackers, allowing peers to discover peers through other peers and to fetch metadata from the leechers & seeders in the network. **magnetico** is the finishing move that allows users to search for torrents in the network & removes the need for torrent websites.

Installation Instructions

WARNING:

magnetico is still under active construction, and is considered *pre-alpha* software. Please use **magnetico** suite with care and follow the installation instructions carefully to install it & secure the installation. Feel perfectly free to send bug reports, suggestions, or whatever comes to your mind to send to us through GitHub or personal e-mail.

WARNING:

magnetico currently does NOT have any filtering system NOR it allows individual torrents to be removed from the database, and BitTorrent DHT network is full of the materials that are considered illegal in many countries (violence, pornography, copyright infringing content, and even child-pornography). If you are afraid of the legal consequences, or simply morally against (indirectly) assisting those content to spread around, follow the **magnetico** installation instructions carefully to password-protect the web-interface from others.

1. Install **magnetico** first by following its [installation instruction](#).
2. Install **magnetico** first by following its [installation instruction](#).

License

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Dedicated to Cemile Binay, in whose hands I thrived.

Bora M. ALPER <bora@boramalper.org>

