
bwscanner Documentation

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several

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CHAPTER 1

Installation for development

It is recommended to install bwscanner in a virtualenv

Check **‘virtualenv installation <<https://virtualenv.pypa.io/en/latest/installation.html>>’**. In Debian:

```
sudo apt install python-virtualenv
```

Create a virtual environment:

```
mkdir ~/.virtualenvs  
virtualenv ~/.virtualenvs/bwscannerenv  
source ~/.virtualenvs/bwscannerenv/bin/activate
```

Get bwscanner sources:

```
git clone https://github.com/TheTorProject/bwscanner
```

Install it in development mode:

```
cd bwscanner  
pip install -e .
```

1.1 Running tests

Unit and integration tests are run automatically for each pull request. The tests must pass before code will be merged. Tox is used to run the tests reproducibly in your development environment.

Tox can be used to create new Python virtual environments with a reproducible state and to run all the tests.

Install the test dependencies:

```
pip install -e .[test]
```

The integration tests are run against a local Tor network which is managed by `chutney`. You can start `chutney` as follows:

```
./test/scripts/install-chutney.sh
```

The bandwidth scanner needs to be able to connect to a Tor control port to interact with the network. If using `chutney` the port 8021 should work. Tests are run by simply calling `tox`.

```
export CHUTNEY_CONTROL_PORT=8021
tox
```

To stop and start `chutney`, run:

```
cd chutney
./chutney stop networks/basic-025
./chutney start networks/basic-025
cd ..
```

2.1 Submodules

2.2 bwscanner.aggregate module

2.3 bwscanner.attacher module

2.4 bwscanner.circuit module

2.5 bwscanner.fetcher module

2.6 bwscanner.logger module

2.7 bwscanner.measurement module

2.8 bwscanner.scanner module

2.9 bwscanner.writer module

2.10 Module contents

CHAPTER 3

Indices and tables

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