
TeamspeakStats Documentation

Release 1.4.1

Thor77

May 19, 2018

Contents

1	Command Line Interface	1
2	Config	3
2.1	Example	3
3	IdentMap	5
4	API	7
4.1	Log	7
4.2	Client	8
4.3	Template	8
4.4	Config	9
4.5	Exceptions	9
4.6	Utils	10
5	Development	11
5.1	Contributing	11
5.2	Style	11
5.3	Testing	11
5.4	Versioning	11
5.5	Python Versions	12
6	TeamspeakStats	13
7	Installation	15
8	Usage	17
9	Example	19
	Python Module Index	21

Command Line Interface

```
$ tsstats --help
usage: tsstats [-h] [-c CONFIG] [--idmap IDMAP] [-l LOG] [-o OUTPUT] [-d]
              [-ds] [-nod] [-t TEMPLATE] [-dtf DATETIMEFORMAT]
              [-otth ONLINETIMETHRESHOLD]

A simple Teamspeak stats-generator, based solely on server-logs

optional arguments:
  -h, --help                show this help message and exit
  -c CONFIG, --config CONFIG
                             path to config
  --idmap IDMAP              path to id_map
  -l LOG, --log LOG          path to your logfile(s). pass a directory to use all
                             logfiles inside it
  -o OUTPUT, --output OUTPUT
                             path to the output-file
  -d, --debug                debug mode
  -ds, --debugstdout         write debug output to stdout
  -nod, --noonlinedc         don't add connect until now to onlinetime
  -t TEMPLATE, --template TEMPLATE
                             path to custom template
  -dtf DATETIMEFORMAT, --datetimeformat DATETIMEFORMAT
                             format of date/time-values (datetime.strptime)
  -otth ONLINETIMETHRESHOLD, --onlinetimethreshold ONLINETIMETHRESHOLD
                             threshold for displaying onlinetime (in seconds)
```


The configfile is using the .ini-format. Currently all settings are read from the [General]-section.

Key	Description
log	Path to TS3Server-logfile(s) (supports globbing)
output	Path to the location, where the generator will put the generated .html-file
idmap	Path to <code>IdentMap</code>
debug	debug mode
onlinedc	Add <code>timedelta</code> from last-connect until now to <code>onlinetime</code> for connected clients
template	Path to a custom template file (relative from <code>tsstats/</code> or absolute)
datetimeformat	Format of date/time-values used for <code>render-timestamp</code> and <code>last online</code> (using <code>datetime.strftime</code>)
onlinetimethresh-old	Clients with an <code>onlinetime</code> below that threshold (in seconds) are hidden in the <code>onlinetime</code> -section

2.1 Example

config.ini

```
[General]
log = /usr/local/bin/teamspeak-server/logs/ts3server*_1.log
output = /var/www/html/stats.html
```

```
$ tsstats -c config.ini
```

IdentMap

An IdentMap is used to map multiple (U)ID's of one client to one client. This can be useful, if a user creates multiple identities and you want to summarize all actions from all identities. To pass an IdentMap to TeamspeakStats, create your IdentMap as shown above and pass it to the cli:

```
tsstats --idmap <path to idmap.json>
```

TeamspeakStats' IdentMap-file is saved in json-format:

```
[
  {
    "primary_id": "1",
    "alternate_ids": ["2", "3", "4"]
  }
]
```

If you would pass this IdentMap to TeamspeakStats and your log would contain entries for clients with id's 1, 2, 3 and 4, your output will just show data for one client (1).

The format is flexible enough to support other arbitrary data to assist you in maintaining your IdentMap:

```
[
  {
    "name": "Friend 1",
    "primary_id": "1",
    "alternate_ids": ["2", "3", "4"]
  }
]
```

The parser will ignore all nodes other than the "primary_id" and "alternate_ids" nodes, allowing you to use them for whatever you want.

The original IdentMap format is still supported:

```
{  
  '2': '1',  
  '3': '1',  
  '4': '1'  
}
```

While it is less expressive, it is also less verbose.

4.1 Log

class `tsstats.log.TimedLog` (*path*, *timestamp*)

path

Alias for field number 0

timestamp

Alias for field number 1

class `tsstats.log.Server` (*sid*, *clients*)

clients

Alias for field number 1

sid

Alias for field number 0

`tsstats.log.parse_logs` (*log_glob*, *ident_map=None*, *online_dc=True*)

Parse logs from *log_glob*

Parameters

- **log_glob** (*str*) – path to server-logs (supports globbing)
- **ident_map** (*dict*) – identmap used for Client-initializations

Returns list of servers

Return type [*tsstats.log.Server*]

4.2 Client

class `tsstats.client.Client` (*identifier*, *nick=None*)
 Client provides high-level-access to a Teamspeak-Client

`__init__` (*identifier*, *nick=None*)
 Initialize a new Client

Parameters `identifier` (*int* or *str*) – Identifier of the client

`connect` (*timestamp*)
 Connect client at *timestamp*

Parameters `timestamp` (*int*) – time of connect

`disconnect` (*timestamp*)
 Disconnect client at *timestamp*

Parameters `timestamp` (*int*) – time of disconnect

`kick` (*target*)
 Let client kick *target*

Parameters `target` (*Client*) – client to kick

`ban` (*target*)
 Let client ban *target*

Parameters `target` (*Client*) – client to ban

class `tsstats.client.Clients` (*ident_map=None*, **args*, ***kwargs*)
 A high-level-interface to multiple Client-objects

`__init__` (*ident_map=None*, **args*, ***kwargs*)
 Initialize a new Client-collection

Parameters `ident_map` (*dict*) – Identity-map (see *IdentMap*)

`__iter__` ()
 Yield all Client-objects from the collection

`apply_events` (*events*)
 Apply events to this Client-collection

Parameters `events` (*list*) – list of events to apply

4.3 Template

class `tsstats.template.SortedClients` (*onlinetime*, *kicks*, *pkicks*, *bans*, *pbans*)

bans
 Alias for field number 3

kicks
 Alias for field number 1

onlinetime
 Alias for field number 0

pbans
 Alias for field number 4

pkicks

Alias for field number 2

`tsstats.template.prepare_clients` (*clients*, *onlinetime_threshold=-1*)

Prepare *clients* for rendering

sort them, clean their nick-history and convert onlinetime to string

Parameters

- **clients** (`tsstats.client.Clients`) – List of clients to prepare
- **onlinetime_threshold** – threshold for clients onlinetime

Returns *clients* sorted by onlinetime, kics, pkicks, bans and pbans

Return type `tsstats.template.SortedClients`

`tsstats.template.render_servers` (*servers*, *output*, *title='TeamspeakStats'*, *tem-*
plate='index.jinja2', *datetime_fmt='%x %X %Z'*,
onlinetime_threshold=-1, *lastseen_relative=True*)

Render *servers*

Parameters

- **servers** (`[tsstats.log.Server]`) – list of servers to render
- **output** (*str*) – path to output-file
- **template_name** (*str*) – path to template-file
- **title** (*str*) – title of the resulting html-document
- **template_path** (*str*) – path to template-file
- **datetime_fmt** (*str*) – custom datetime-format
- **onlinetime_threshold** (*int*) – threshold for clients onlinetime
- **lastseen_relative** (*bool*) – render last seen timestamp relative

4.4 Config

`tsstats.config.load` (*path=None*)

parse config at *config_path*

Parameters **config_path** (*str*) – path to config-file

Returns values of config

Return type tuple

4.5 Exceptions

exception `tsstats.exceptions.InvalidConfiguration`

The configuration is invalid (either config-file or cli-args)

4.6 Utils

`tsstats.utils.sort_clients` (*clients*, *key_l*)

sort *clients* by *key*

Parameters

- **clients** (`tsstats.client.Clients`) – clients to sort
- **key_l** (*function*) – lambda/function returning the value of *key* for a client

Returns sorted *clients*

Return type list

`tsstats.utils.seconds_to_text` (*seconds*)

convert *seconds* to a text-representation

Parameters **seconds** (*int*) – seconds to convert

Returns *seconds* as text-representation

Return type str

`tsstats.utils.filter_threshold` (*clients*, *threshold*)

Filter clients by threshold

Parameters **clients** (*list*) – List of clients as returned by `tsstats.utils.sort_clients`

Returns Clients matching given threshold

Return type list

`tsstats.utils.transform_pretty_identmap` (*pretty_identmap*)

Transforms a list of client ID mappings from a more descriptive format to the traditional format of alternative IDs to actual ID.

Parameters **pretty_identmap** (*list*) – ID mapping in “nice” form

Returns ID mapping in simple key/value pairs

Return type dict

5.1 Contributing

Contributions are very welcome!

Before developing a new (possibly breaking) feature, please open an Issue about it first so we can discuss your idea and possible implementations.

Please read this document carefully before submitting your Pull Request to avoid failing CI tests.

5.2 Style

Your contribution should pass `flake8` as well as `isort`.

5.3 Testing

There are unit tests for all parts of the project built with `py.test`. Besides `py.test` tests require `BeautifulSoup` for `template-testing`. Those requirements are listed in `testing_requirements.txt`:

```
$ pip install -r testing_requirement.txt
$ py.test tsstats/tests/
```

5.4 Versioning

TeamspeakStats uses [Semantic Versioning](#). Please don't bump versions in your Pull Requests, though, we will do that after merging.

5.5 Python Versions

To keep the tool accessible and maintainable at the same time at least `Python 2.7` is required, so keep this in mind when using fancy new features from a recent Python version.

TeamspeakStats

A simple Teamspeak stat-generator - based solely on server-logs

Onlinetime

Client1	15245h 22m 57s
Client2	05/18/15 15:54:38 19s

Kicks

Client1	1
---------	---

Passive kicks

Client2	1
---------	---

Bans

Client1	1
---------	---

Passive bans

Client2	1
---------	---

Generated by [TeamspeakStats](#) at 02/11/17 21:16:54

CHAPTER 7

Installation

- Install the package via PyPi `pip install tsstats`
- Clone this repo `git clone https://github.com/Thor77/TeamspeakStats` and install with `python setup.py install`
- Just use the package as is via `python -m tsstats [-h]`

Usage

- Run the script `tsstats [-h]`
- Optionally create a config-file (see [Configuration](#))
- The package works entirely off your Teamspeak server's logs, so that no ServerQuery account is necessary

CHAPTER 9

Example

```
tsstats -l /var/log/teamspeak3-server/ -o /var/www/tsstats.html
```

Parse logs in `/var/log/teamspeak3-server` and write output to `/var/www/tsstats.html`.

For more details checkout the [documentation!](#)

t

`tsstats.config`, 9
`tsstats.exceptions`, 9
`tsstats.log`, 7
`tsstats.template`, 8
`tsstats.utils`, 10

Symbols

`__init__()` (tsstats.client.Client method), 8
`__init__()` (tsstats.client.Clients method), 8
`__iter__()` (tsstats.client.Clients method), 8

A

`apply_events()` (tsstats.client.Clients method), 8

B

`ban()` (tsstats.client.Client method), 8
`bans` (tsstats.template.SortedClients attribute), 8

C

`Client` (class in tsstats.client), 8
`Clients` (class in tsstats.client), 8
`clients` (tsstats.log.Server attribute), 7
`connect()` (tsstats.client.Client method), 8

D

`disconnect()` (tsstats.client.Client method), 8

F

`filter_threshold()` (in module tsstats.utils), 10

I

`InvalidConfiguration`, 9

K

`kick()` (tsstats.client.Client method), 8
`kicks` (tsstats.template.SortedClients attribute), 8

L

`load()` (in module tsstats.config), 9

O

`onlinetime` (tsstats.template.SortedClients attribute), 8

P

`parse_logs()` (in module tsstats.log), 7

`path` (tsstats.log.TimedLog attribute), 7
`pbans` (tsstats.template.SortedClients attribute), 8
`pkicks` (tsstats.template.SortedClients attribute), 8
`prepare_clients()` (in module tsstats.template), 9

R

`render_servers()` (in module tsstats.template), 9

S

`seconds_to_text()` (in module tsstats.utils), 10
`Server` (class in tsstats.log), 7
`sid` (tsstats.log.Server attribute), 7
`sort_clients()` (in module tsstats.utils), 10
`SortedClients` (class in tsstats.template), 8

T

`TimedLog` (class in tsstats.log), 7
`timestamp` (tsstats.log.TimedLog attribute), 7
`transform_pretty_idmap()` (in module tsstats.utils), 10
`tsstats.config` (module), 9
`tsstats.exceptions` (module), 9
`tsstats.log` (module), 7
`tsstats.template` (module), 8
`tsstats.utils` (module), 10