

---

# **MapRoulette API Wrapper Documentation**

***Release 0.2.9***

**Martijn van Exel**

February 28, 2016



<b>1</b>	<b>Installation</b>	<b>3</b>
<b>2</b>	<b>Access Credentials</b>	<b>5</b>
<b>3</b>	<b>Prepare a challenge</b>	<b>7</b>
<b>4</b>	<b>API</b>	<b>9</b>
4.1	MapRoulette Server . . . . .	9
4.2	MapRoulette Challenge . . . . .	9
4.3	MapRoulette Task . . . . .	9
4.4	A Task Collection . . . . .	9



This project provides a convenient wrapper around the [MapRoulette API](#). You can create and maintain Challenges and Tasks on a local MapRoulette server or on the main MapRoulette [dev](#) and [production](#) servers.



## **Installation**

---

See the project README



---

## Access Credentials

---

The MapRoulette Challenge administration API endpoints are protected with HTTP basic authentication. This means that you will need to supply a username and password for most operations to work. If you do not have credentials, contact [maproulette@maproulette.org](mailto:maproulette@maproulette.org). Passwords are transmitted in plain text, so use a password you do not use anywhere else.



---

## Prepare a challenge

---

You need a few things to create your own MapRoulette challenge:

- Challenge metadata. At the very least you need a `title`, a `slug` and some instructions to show the user.
- Tasks.
- Access to a server. It is recommended that you try your challenge on a `local development server` first, then move on to the main MapRoulette servers.

Once you have those things, you can get to work!

First, we get a MapRoulette server instance:

```
>>> from maproulette import MapRouletteServer
>>> server = MapRouletteServer(
    url='http://localhost:5000/api',
    user=foo,
    password=bar)
```

This will get a `MapRouletteServer` instance that points at a local MapRoulette development server at `http://localhost:5000`.

Let's see if it is alive:

```
>>> server.alive()
True
```

Next, we create a new Challenge on this server:

```
from maproulette import MapRouletteChallenge
challenge = MapRouletteChallenge(
    slug='test-challenge',
    title='Test Challenge')
challenge.create(server)
```

Finally, let's prepare a task and add it to the challenge:

```
from maproulette import MapRouletteTask
from geojson import FeatureCollection, Feature, Point
task = MapRouletteTask(
    challenge,
    identifier='test-task-1',
    geometries=FeatureCollection([Feature(
        geometry=Point((random(), random())))]))
task.create(server))
```

See how we use `geojson.FeatureCollection`, `geojson.Feature` and `geojson.Point` to generate a GeoJSON geometry on the fly. In real life, you would probably get these from another source. Note that MapRoulette requires the task geometry to be wrapped in a FeatureCollection, even if the geometry is just a single point, like in the example above.

You can also use `MapRouletteTaskCollection` to create multiple tasks at once.

## 4.1 MapRoulette Server

## 4.2 MapRoulette Challenge

## 4.3 MapRoulette Task

## 4.4 A Task Collection