

# y-api

## About y-api service

The service provides domain categorization services and can be used both locally and in a distributed system. In the latter case, the speed of receiving a response decreases due to network delays.

A stable connection to the Internet is required for the uninterrupted operation of the service:

- loading the database and updating it
- sending counter\_cat and counter\_unknown\_cat values
- sending additional information about the instance with the container

Stats are sent every 5 minutes.

The performance of the y-api service varies approximately from 70k to 150k requests per second. The performance depends on the number of domains and threads addressing the y-api. It operates based on a parallel server architecture, where a thread is created upon the arrival of a request.

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## Using y-api service

### Starting the service

1. Install docker.

2. Load the archive with the container image with `sudo docker load -i y_api.tar.gz`

3. Run the image in the docker subnet.

3.1 Alternatively, create a separate subnet

```
sudo docker network create --driver=bridge --subnet=193.33.33.0/24 y-api-net
```

and run the container

```
sudo docker run -it -d --net y-api-net --ip 193.33.33.33 y-api:1
```

4. Check the service with `curl http://193.33.33.33/qwerty.com`

193.33.33.33 is an example, you can use any other network.

Service response: `{"category": [36, 49], "bad": false, "category_name": ["Education", "Computers & Internet"]}`

**ATTENTION!** The request counter is sent every 5 minutes. Check time must be shorter so the data is not sent to the statistics server for billing.

Logging is done to **stdout** and **stderr**.

The supported request is **GET**.

## Request examples

| Request  | Answer  |
|--|---|
| <code>curl -v http://193.33.33.33/qwerty.com</code>  | < HTTP/1.1 200 OK<br>< Content-type: application/json<br>< Connection: keep-alive<br>* no chunk, no close, no size. Assume close to signal end<br><<br>* Closing connection 0<br>{ "category": [36, 49], "bad": false, "category_name": ["Education", "Computers & Internet"] } |
| <code>curl -v http://193.33.33.33/foo</code>   | < HTTP/1.1 404 Not Found<br>< Connection: keep-alive<br>* Connection #0 to host 193.33.33.33 left intact  |
| <code>curl -v http://193.33.33.33/stat/</code>   | < HTTP/1.1 200 OK<br>< Content-type: application/json<br>< Connection: close<br><<br>* Closing connection 0<br>{ "counter_cat": [150002], "counter_unknown_cat": [0] }  |
| <code>curl -v -X POST http://193.33.33.33/qwerty.com</code>  | < HTTP/1.1 405 Method Not Allowed<br>< Content-Type: text/html<br>< Allow: GET<br>< Connection: close<br>* Closing connection 0   |
| If there is no connection with the statistics server or any response from it other than "200 OK".<br><br><code>curl -v http://193.33.33.33/qwerty.com</code> | < HTTP/1.1 503 Service Unavailable<br>< Content-type: application/json<br>< Connection: close<br><<br>* Closing connection 0<br>{ "details": "billing failure" }  |

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