Data Engineering



Tech Assessment - Data Dictionary

Data

You can find the data on this S3 bucket.

All the events stored in the S3 bucket are JSON strings, which is not the most suitable data model for the data analysis, of the form:

```
{
  "event": "create",
  "on": "some_entity",
  "at": "2019-05-19T16:02:02Z",
  "data": { /* ... */ },
  "organization_id": "id-of-organization"
}
```

- event indicates the type of event on the entity each entity has its own set of events;
- on indicates on which entity the event occurred see sections below;
- data will be an object containing information about the entity that the event occurred on see sections below;
- organization_id identifies the organization the event belongs to.

Events on vehicle

Possible events:

- register adds a vehicle to the operating period;
- update updates a vehicle location;
- deregister removes a vehicle from the operating period. After this event occurs, the vehicle will never send further location updates.

When a vehicle event is emitted, the data field has the following format:

```
{
    "id": "s0m3-v3h1cl3-1D",
    "location":
    {
        "lat": 50.1,
        "lng": 40.2,
        "at": "2016-02-02T01:00:00Z", // IS08601
    }
}
```

where lat, lng and at can be null if vehicle is new and no location updates were received yet.

Events on operating_period

Possible events: create and delete.

When an operator adds or removes an operation period, the on field will be set to operating_period, and the data field will have the following format:

```
{
   "id": "s0m3-p3r1od-1D",
   "start": "2016-12-30T18:00:00Z", // UTC time, IS08601
   "finish": "2016-12-31T02:00:00Z" // UTC time, IS08601
}
```