

API Reference

# Simulator API

API Version: 1.0

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# API

## 1. SCENARIO CONTROLLER

Endpoint for controlling the simulation

### 1.1 GET /simulator

#### Get status of simulation

Returns the information of the simulation or null

#### REQUEST

No request parameters

#### RESPONSE

STATUS CODE - 200: Successful response

RESPONSE MODEL - application/json

```
{
  id                string          ID of scenario
  trafficLights [{
    Array of object: Collection of all the traffic lights we want to simulate
    id              string          ID of the traffic light
    position        integer         >=0
                                The position of the traffic light
    scanDistance    integer         >=10
                                The scan distance of the traffic light
    entryDelay      integer         >=0
                                The entry delay in ms after when the first state change should be triggered
    stateHoldSeconds integer         >=1
                                How long a state holds in seconds
    stateHoldInMs   integer
  }]
  cars [{
    Array of object: Collection of all the cars we want to simulate
    vin             string          The vin of the car
    oem             string          The oem of the car
    model           string          The model of the car
    entryTime       integer         >=0
                                After how many ms the car should enter the scene
    speed           integer         >=0
                                The speed of the car
    location        integer         >=0
                                The start location of the car
    destination     integer         >=0
                                The desired destination of the car
  }]
  scenarioLength    integer         The length of the scenario in meters
  timelapse         boolean         Whether the simulation should be run in timelapse mode or not
  done              boolean         Boolean flag to indicate if the simulation is completed or not
}
```

## 1.2 POST /simulator

### Get status of simulation

Returns the information of the simulation or null

#### REQUEST

REQUEST BODY - application/json

```
{
  id                string      ID of scenario
  trafficLights [{
    Array of object: Collection of all the traffic lights we want to simulate
    id              string      ID of the traffic light
    position        integer     >=0
                                The position of the traffic light
    scanDistance    integer     >=10
                                The scan distance of the traffic light
    entryDelay      integer     >=0
                                The entry delay in ms after when the first state change should be triggered
    stateHoldSeconds integer     >=1
                                How long a state holds in seconds
    stateHoldInMs   integer
  }]
  cars [{
    Array of object: Collection of all the cars we want to simulate
    vin            string      The vin of the car
    oem            string      The oem of the car
    model          string      The model of the car
    entryTime      integer     >=0
                                After how many ms the car should enter the scene
    speed          integer     >=0
                                The speed of the car
    location       integer     >=0
                                The start location of the car
    destination    integer     >=0
                                The desired destination of the car
  }]
  scenarioLength   integer     The length of the scenario in meters
  timelapse        boolean     Whether the simulation should be run in timelapse mode or not
  done             boolean     Boolean flag to indicate if the simulation is completed or not
}
```

#### RESPONSE

STATUS CODE - 201: Successful response

STATUS CODE - 400: Validation error, see error message for more information

## 1.3 DELETE /simulator

### Stops the simulation

Stops an active simulation and makes sure the other services return to an pre simulation state

#### REQUEST

No request parameters

## RESPONSE

**STATUS CODE - 200:** Successful response

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