

Operation Monitoring

Operation Monitoring API refers to any operations dealing with real time information.

- **Vehicle Position**

The operation returns real time vehicle position for given line id's

Endpoint	https://opendata-api.stib-mivb.be/OperationMonitoring/4.0/VehiclePositionByLine/{line id's}
Method	GET
MimeType	application/json
Arguments	a comma separated list of line id's, maximum 10 id's are allowed in the list.
Returned value	an array of "lines" and for each requested line, an array of "vehiclePositions"

1. Sample of a request using Curl

```
> curl -k -X GET --header "Accept: application/json" --header "Authorization: Bearer  
Replace_this_text_by_your_token" "https://opendata-  
api.stibmivb.be/OperationMonitoring/4.0/VehiclePositionByLine/1"
```

2. Sample of a request using JQuery

```
var me = this;  
  
// get Vehicle  
Positions $.ajax({  
  url: me.openDataBaseUrl + '/OperationMonitoring/4.0/  
VehiclePositionByLine/' + me.lineId,  
  type: 'GET',  
  error: function (jqXHR, textStatus)  
  { // process error  
  },  
  beforeSend: function setHeader(xhr) {  
    xhr.setRequestHeader('Accept', 'application/json');  
    xhr.setRequestHeader('Authorization', 'Bearer ' + me.apiToken);  
  // add the api token here  
  },  
  success: function (data) {  
    // process the result here  
    console.log('vehiclePosition: ' + data);  
  },  
}); // end of $.ajax({
```

3. Sample of the returned value

```
{
  "lines": [
    {
      "lineId": 1,
      "vehiclePositions": [
        {
          "directionId": 8161,
          "distanceFromPoint":0,
          "pointId": 8012
        },
        {
          "directionId": 8731,
```

```
          "distanceFromPoint":0,
          "pointId": 8021
        }
      ]
    }
  ]
}
```

4. Remarks:

- a. Note that the position of a vehicle is given in the following format:
 - "directionId": the direction of the vehicle as the terminal "pointId"
 - "distanceFromPoint": the distance (in meters) covered by a vehicle since the last point represented by the "pointId" attribute
 - "pointId": the last Stop crossed by a vehicle
- b. *Note about the Id's usage:*
 - The Line Id used as argument of the operation refers to the field "route_short_name" of the GTFS file "routes.txt"
 - The returned "directionId" and "pointId" refer to the fields "stop_id" of the GTFS file "stops.txt"
- c. *Lifetime:*
 - A vehicle position has a lifetime of about 20 seconds, therefore it is not necessary to poll the service at a higher frequency.
 - The array of vehiclePositions may include some technical stops. These kind of stops are not published in the GTFS stops files, which is why you should ignore them.