

# Discovery API Documentation

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## 1. Introduction API

This is the API documentation of the COFOMO-project. Let´s work together on open markets!

## 2. Discovery Provider API

Collection of endpoints to manage provider operations

### 2.1. Get all Mobility Providers

#### 2.1.1. Sample Request

```
GET /v1 HTTP/1.1
Host: api.cofomo.org
```

#### 2.1.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 479
```

```
[ {
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.859988"
}, {
  "id" : null,
  "name" : "BikeSharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72073 ],
  "serviceOffers" : [ "bikesharing", "escootersharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.860018"
} ]
```

## 2.2. Get all Active Mobility Providers

Depending if endpoints of mobility provider still active

### 2.2.1. Sample Request

```
GET /v1/active HTTP/1.1
Host: api.cofomo.org
```

### 2.2.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 479

[ {
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.881919"
}, {
  "id" : null,
  "name" : "BikeSharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72073 ],
  "serviceOffers" : [ "bikesharing", "escootersharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.881942"
} ]
```

## 2.3. Add Mobility Provider

### 2.3.1. Sample Request

```
POST /v1 HTTP/1.1
Content-Type: application/json
Accept: application/json
Host: api.cofomo.org
Content-Length: 226

{
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.789753"
}
```

### 2.3.2. Fields of Request Body

Path	Type	Description
id	Null	Autogenerated UUID of the provider
name	String	Name of the provider
url	String	URI-endpoint of provider
operationAreas	Array	Operation area of provider
serviceOffers	Array	Services offered by provider
alive	Boolean	Service still alive?
lastHeartBeat	String	Time of last heart beat

### 2.3.3. Sample Response

```

HTTP/1.1 201 Created
Content-Type: application/json
Content-Length: 226

{
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.789753"
}
```

## 2.4. Get Mobility Provider by Id

### 2.4.1. Sample Request

```

GET /v1/1 HTTP/1.1
Accept: application/json
Host: api.cofomo.org
```

### 2.4.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 226

{
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.905045"
}
```

### 2.4.3. Fields of Response Body

Path	Type	Description
<code>id</code>	<code>Null</code>	Autogenerated UUID of the provider
<code>name</code>	<code>String</code>	Name of the provider
<code>url</code>	<code>String</code>	URI-endpoint of provider
<code>operationAreas</code>	<code>Array</code>	Operation area of provider
<code>serviceOffers</code>	<code>Array</code>	Services offered by provider
<code>alive</code>	<code>Boolean</code>	Service still alive?
<code>lastHeartBeat</code>	<code>String</code>	Time of last heart beat

## 2.5. Update Mobility Provider

### 2.5.1. Sample Request

```

PUT /v1/1 HTTP/1.1
Content-Type: application/json
Accept: application/json
Host: api.cofomo.org
Content-Length: 226

{
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.951936"
}

```

### 2.5.2. Fields of Request Body

Path	Type	Description
id	Null	Autogenerated UUID of the provider
name	String	Name of the provider
url	String	URI-endpoint of provider
operationAreas	Array	Operation area of provider
serviceOffers	Array	Services offered by provider
alive	Boolean	Service still alive?
lastHeartBeat	String	Time of last heart beat

### 2.5.3. Sample Response

```

HTTP/1.1 202 Accepted

```

## 2.6. Delete Mobility Provider

### 2.6.1. Sample Request

```

DELETE /v1/1 HTTP/1.1
Host: api.cofomo.org

```

## 2.6.2. Sample Response

HTTP/1.1 200 OK

# 3. Discovery Consumer API

Collection of endpoints to manage crud operations

## 3.1. By travel request

### 3.1.1. Sample Request

```
POST /v1/lookup/search HTTP/1.1
Content-Type: application/json
Accept: application/json
Host: api.cofomo.org
Content-Length: 198

{
  "origin" : {
    "latitude" : 48.521637,
    "longitude" : 9.057645
  },
  "destination" : {
    "latitude" : 48.521637,
    "longitude" : 8.057645
  },
  "mobilityServices" : [ "carsharing" ]
}
```

### 3.1.2. Fields of Request Body

Path	Type	Description
origin	Object	Origin of travel
origin.latitude	Number	Latitude
origin.longitude	Number	Longitude
destination	Object	Destination of travel
destination.latitude	Number	Latitude
destination.longitude	Number	Longitude
mobilityServices	Array	Requested mobility services

### 3.1.3. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 230

[ {
  "id" : null,
  "name" : "Carsharing Inc.",
  "url" : "https://test.carsharing.org",
  "operationAreas" : [ 72072 ],
  "serviceOffers" : [ "carsharing" ],
  "alive" : true,
  "lastHeartBeat" : "2019-12-09T09:16:44.012269"
} ]
```

## 3.2. By location

### 3.2.1. Sample Request

```
GET /v1/lookup/operationarea/72072 HTTP/1.1
Host: api.cofomo.org
```

### 3.2.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 188

[{"id":null,"name":"Carsharing
Inc.,"url":"https://test.carsharing.org","operationAreas":[72072],"serviceOffers":["c
arsharing"],"alive":true,"lastHeartBeat":"2019-12-09T09:16:44.214945"}]
```