# **Provider API Documentation**

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Name	URL	Description
<b>G</b> GitHub	https://github.com/cofomo- platform/provider	Repository of the provider project
■ API- Documentation	https://provider.cofomo.io	Autogenerated up to date API documentation
☑ Swagger-UI	https://provider.cofomo.io/swagger	Interactive test suite of the API
<b>₽</b> API	https://provider.cofomo.io/api	Provider API

# 1. Booking API

Collection of endpoints to manage bookings on provider site. This is the implementation of the IBooking interface.

## 1.1. Booking Model

Path	Туре	Description
id	String	Autogenerated UUID of the booking
startTime	DateTime	Booking start time
endTime	DateTime	Booking end time
option	MobilityOption	Mobility option to book
claims	<pre>VerifiableClaim[]</pre>	List of claims corresponding to essential claims of mobility options
status	BookingStatus	Can one of: booked, running, finished, canceled
communicationOptions	CommunicationOptions	Link communication options

## 1.2. Get all Bookings

### 1.2.1. Sample Request

GET /v1/booking HTTP/1.1 Host: provider.cofomo.org

### 1.2.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 835
[ {
  "id" : null,
  "startTime" : null,
  "endTime" : null,
  "option" : {
    "provider" : {
      "id" : null,
      "name": "Carsharing Inc.",
      "url": "https://test.carsharing.org",
      "operationAreas" : [ 72072 ],
      "serviceOffers" : [ "carsharing" ],
      "alive" : true,
      "lastHeartBeat": "2019-12-28T00:25:59.834754"
    },
    "pickupLocation" : {
      "latitude" : 48.521637,
      "longitude" : 8.057645
    },
    "pickupTime" : "2019-12-27T23:25:59+0000"
  "claims" : [ {
    "context" : "https://www.w3.org/2018/credentials/v1",
    "type" : "vct_can_pay",
    "owner": "xMpCOKC5I4INzFCab3WEmw==",
    "issuer": "Authority of vct can pay",
    "validation": "",
    "issuanceDate" : "2019-12-27T23:25:59+0000"
  } ],
  "status": "booked",
  "communicationOptions" : [ "email", "phone" ]
} ]
```

### 1.3. Get all Bookings by status

Get all Bookings by status.

#### 1.3.1. Sample Request

```
GET /v1/booking/status/booked HTTP/1.1
Host: provider.cofomo.org
```

#### 1.3.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 834
[ {
  "id" : null,
  "startTime" : null,
  "endTime" : null,
  "option" : {
    "provider" : {
      "id" : null,
      "name": "Carsharing Inc.",
      "url" : "https://test.carsharing.org",
      "operationAreas" : [ 72072 ],
      "serviceOffers" : [ "carsharing" ],
      "alive" : true,
      "lastHeartBeat" : "2019-12-28T00:26:00.02095"
    "pickupLocation" : {
      "latitude" : 48.521637,
      "longitude" : 8.057645
    },
    "pickupTime" : "2019-12-27T23:26:00+0000"
  "claims" : [ {
    "context" : "https://www.w3.org/2018/credentials/v1",
    "type" : "vct_can_pay",
    "owner" : "xMpCOKC5I4INzFCab3WEmw==",
    "issuer": "Authority of vct_can_pay",
    "validation" : "",
    "issuanceDate": "2019-12-27T23:26:00+0000"
  "status": "booked",
  "communicationOptions" : [ "email", "phone" ]
} ]
```

## 1.4. Get Booking by Id

Get Booking by Id.

### 1.4.1. Sample Request

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

#### 1.4.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 831
{
 "id" : null,
  "startTime" : null,
  "endTime" : null,
  "option" : {
    "provider" : {
      "id" : null,
      "name": "Carsharing Inc.",
      "url" : "https://test.carsharing.org",
      "operationAreas" : [ 72072 ],
      "serviceOffers" : [ "carsharing" ],
      "alive" : true,
      "lastHeartBeat" : "2019-12-28T00:25:59.976868"
    "pickupLocation" : {
      "latitude" : 48.521637,
      "longitude" : 8.057645
    "pickupTime" : "2019-12-27T23:25:59+0000"
  "claims" : [ {
    "context" : "https://www.w3.org/2018/credentials/v1",
    "type" : "vct_can_pay",
    "owner" : "xMpCOKC5I4INzFCab3WEmw==",
    "issuer": "Authority of vct_can_pay",
    "validation" : "",
    "issuanceDate" : "2019-12-27T23:25:59+0000"
 "status": "booked",
  "communicationOptions" : [ "email", "phone" ]
}
```

## 1.5. Create Booking

Create new booking.

#### 1.5.1. Request Body

Path	Туре	Description
id	String	Autogenerated UUID of the
		booking

Path	Туре	Description
startTime	DateTime	Booking start time
endTime	DateTime	Booking end time
option	MobilityOption	Mobility option to book
claims	VerifiableClaim[]	List of claims corresponding to essential claims of mobility options
status	BookingStatus	Can one of: booked, running, finished, canceled
communicationOptions	CommunicationOptions	Link communication options

### 1.5.2. Sample Response

HTTP/1.1 201 Created

## 1.6. Update Booking

Update Booking.

### 1.6.1. Sample Request

```
PUT /v1/booking/1 HTTP/1.1
Content-Type: application/json
Accept: application/json
Content-Length: 831
Host: provider.cofomo.org
{
  "id" : null,
  "startTime" : null,
  "endTime" : null,
  "option" : {
    "provider" : {
      "id" : null,
      "name" : "Carsharing Inc.",
      "url" : "https://test.carsharing.org",
      "operationAreas" : [ 72072 ],
      "serviceOffers" : [ "carsharing" ],
      "alive" : true,
      "lastHeartBeat" : "2019-12-28T00:25:59.738099"
    "pickupLocation" : {
      "latitude" : 48.521637,
      "longitude" : 8.057645
    },
    "pickupTime" : "2019-12-27T23:25:59+0000"
  },
  "claims" : [ {
    "context" : "https://www.w3.org/2018/credentials/v1",
    "type" : "vct_can_pay",
    "owner" : "xMpCOKC5I4INzFCab3WEmw==",
    "issuer": "Authority of vct_can_pay",
    "validation": "",
    "issuanceDate" : "2019-12-27T23:25:59+0000"
  } ],
  "status": "booked",
  "communicationOptions" : [ "email", "phone" ]
}
```

#### 1.6.2. Sample Response

```
HTTP/1.1 202 Accepted
```

### 1.7. Cancel Booking

Cancel Booking.

#### 1.7.1. Sample Request

PUT /v1/booking/1/cancel HTTP/1.1 Host: provider.cofomo.org

#### 1.7.2. Sample Response

HTTP/1.1 200 OK

### 1.8. Start Booking

Start Booking.

#### 1.8.1. Sample Request

PUT /v1/booking/1/start HTTP/1.1 Host: provider.cofomo.org

#### 1.8.2. Sample Response

HTTP/1.1 200 OK

### 1.9. Finish Booking

Finish Booking.

### 1.9.1. Sample Request

PUT /v1/booking/1/finish HTTP/1.1 Host: provider.cofomo.org

### 1.9.2. Sample Response

HTTP/1.1 200 OK

### 2. Invoice API

Collection of endpoints to manage invoices on provider site. This is the implementation of the IInvoice interface.

### 2.1. Invoice Model

Path	Туре	Description
id	String	Autogenerated UUID of the booking
paymentProviderId	String	Id of payment provider
clientId	String	Id of corresponding client
status	InvoiceStatus	Status of invoice
lastUpdate	DateTime	Last update of invoice
value	Number	Value of invoice
currency	String	Currency of invoice

### 2.2. Get all Invoices

Gets all Unvoices by the API.

### 2.2.1. Sample Request

GET /v1/invoice HTTP/1.1 Host: provider.cofomo.org

### 2.2.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 321
[ {
  "id" : null,
  "paymentProviderId" : null,
  "clientId" : null,
  "status": "pending",
  "lastUpdate" : null,
  "value" : 14.2,
  "currency" : "ethereum"
}, {
  "id" : null,
  "paymentProviderId" : null,
  "clientId" : null,
  "status": "payed",
  "lastUpdate" : null,
  "value" : 5.3,
  "currency" : "dollar"
} ]
```

### 2.3. Get all Invoices by status

Gets all Invoices by the status.

### 2.3.1. Sample Request

```
GET /v1/invoice/status/payed HTTP/1.1
Host: provider.cofomo.org
```

### 2.3.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 159

[ {
    "id" : null,
    "paymentProviderId" : null,
    "clientId" : null,
    "status" : "payed",
    "lastUpdate" : null,
    "value" : 5.3,
    "currency" : "dollar"
} ]
```

### 2.4. Get Invoices by id

Get Invoice by its id.

#### 2.4.1. Sample Request

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

#### 2.4.2. Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 160

{
    "id" : null,
    "paymentProviderId" : null,
    "clientId" : null,
    "status" : "pending",
    "lastUpdate" : null,
    "value" : 14.2,
    "currency" : "ethereum"
}
```

## 3. Using API

Collection of endpoints to manage communication during a booking. This is the implementation of the IUsing interface.

## 3.1. Send message.

Send message to provider to exchange information (e.g. delay).

### 3.1.1. Sample Request

```
POST /v1/using/message HTTP/1.1
Content-Type: application/json
Accept: application/json
Content-Length: 32
Host: provider.cofomo.org

{
    "message" : "I am delayed"
}
```

#### 3.1.2. Sample Response

```
HTTP/1.1 200 OK
```

### 3.2. Add communication options.

Adds communication options to get in contact with provider.

#### 3.2.1. Sample Request

```
POST /v1/using/communicationOptions HTTP/1.1
Content-Type: application/json
Accept: application/json
Content-Length: 48
Host: provider.cofomo.org

{
    "communicationList" : [ "email", "phone" ]
}
```

### 3.2.2. Sample Response

```
HTTP/1.1 200 OK
```