

GRNconnect Hub API

V3 API Documentation 1.0



GRNconnect.com
Global Reservations Network

1. Introduction



2. Language and Format

3. Hypertext Transfer Protocol (HTTP)

4. Content Negotiation

5. HTTP Content Type Negotiation

6. API Authentication

6.1 Error Codes

7. Search and Availability Request

7.1 Request

7.2 Payload

7.3 Sample Search and Availability Payload

8. Search Response

8.1 Response

8.1.1 Error Codes

8.1.2 Sample Search Response

8.2 Re-Fetch Availability with search ID

8.2.1 Error Codes

8.3 Re-fetch Availability for a Single Hotel

8.3.1 Error Codes

8.4 Fetch Cancellation Policies for the rate using rate-key

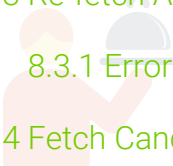
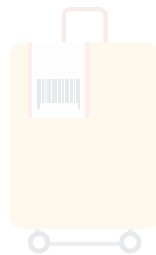
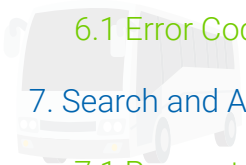
8.4.1 Request

8.4.2 Payload

8.4.3 Sample Cancellation Policies Payload

8.4.4 Sample Cancellation Policy Response

8.4.5 Error Codes





8.5 Rate Re-check using rate_key

8.5.1 Request

8.5.2 Payload

8.5.3 Response

8.5.4 Sample Rate-Recheck Payload

8.5.5 Sample Rate-Recheck Response

8.5.6 Error Codes



9. Booking Request

9.1 Request

9.2 Booking Payload

9.2.1 Sample Booking Payload

10. Booking Response

10.1 Response

10.2 Error Codes

10.3 Sample Booking Response

11. Fetch a Booking with booking reference

11.1 Error Codes

12. Cancellation Request

12.1 Request

12.2 Payload

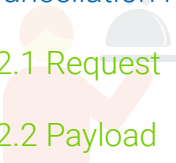
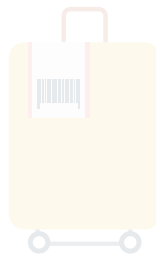
12.3 Sample Cancellation Payload

13. Cancellation Response

13.1 Response

13.2 Error Codes

13.3 Sample Cancellation Response



14. Fetch Bookings List

Parameters

14.1 Sample Response

14.2 Error Codes

15. Images

15.1 Response

15.2 Error Codes

15.3 Sample Response

16. Static Assets

16.1 Countries

16.1.1 Get Countries

Sample Response

16.1.2 Get Country details using Country code

Sample Get Country details using Country code request

Sample Response

16.2 Destinations

16.2.1 Get Destinations

Sample Response

16.2.2 Get Destination details using destination code

Sample Request

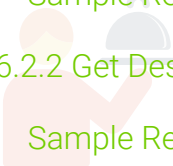
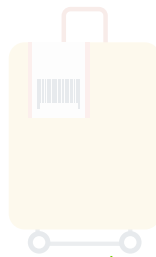
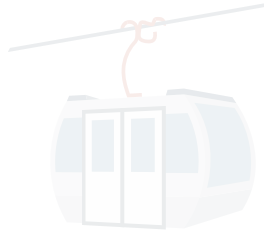
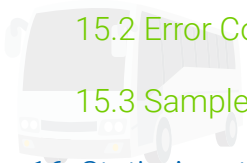
Sample Response

16.2.3 Get Destinations available in the Country

Sample Request

Sample Response

16.3 Cities



16.3.1 Get Cities Request

Sample Response

16.3.2 Get City Details using City code

Sample Request

Sample Response

16.3.3 Get Cities available in the Country

Sample Request

Sample Response

16.3.4 Get Cities available in the Destination

Sample Request

Sample Response

16.4 Airports

16.4.1 Request

Sample Response

16.4.2 Get Airport Details using Airport code

Sample Request

Sample Response

16.5 Currencies

16.5.1 Get Currencies Request

Sample Response

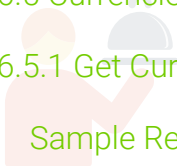
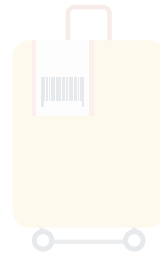
16.5.2 Get Currency details using currency code

Sample Request

Sample Response

APPENDIX

A.1 Response Schema



1. Introduction

The pace at which technology is moving is truly amazing. It is no exaggeration to say that there is no business that has not been redefined by advances in technology over the last few decades. Travel business is no exception to this trend!

We, at GRNconnect, have been keenly following developments in travel technology and the wider space of highly-networked and massively concurrent applications. We are always eager to adopt scalable and resilient technology stacks, to better serve our API consumers and agencies.

This new release of GRNconnect's API is a complete redesign of the existing API, among other new developments. It is characterised by an intuitive RESTful interface, pervasive use of lean JSON formats for data exchange, and highly utilitarian request structures. The new architecture features lower peak latency in responses, enabling smooth user experiences.

Our endeavour at GRNconnect is to provide a solid API backbone for your travel needs. We are here to help you in integrating your applications with GRNconnect's new API. We appreciate your feedback towards improving the capability and the usability of the API.

We had great fun designing and implementing this new API. We invite you to join our growing group of international users!

- GRNconnect Development Team

2. Language and Format

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119. This applies only when the said keywords appear in all-upercase outside any quoted context.

All field names, property names and other standards-specified key names (keywords) used in this document are case-sensitive, unless overridden explicitly.

All references to "JSON" MUST comply with the specification in RFC 7159.

3. Hypertext Transfer Protocol (HTTP)

HTTP is the application layer protocol that MUST be used for requests and responses. Accordingly, unless overridden explicitly hereunder, the rules governing the semantics of HTTP requests and responses apply from RFCs 7230-7237.

In particular, GRNconnect server ensures that the method GET is safe (i.e. its semantics are read-only) in the sense of RFC 7231. In addition to that safe method, DELETE and PUT are idempotent (i.e. multiple invocations have the same effect as that of the first such).

4. Content Negotiation

All clients connecting to GRNconnect's API server MUST provide all request payloads in JSON formats as defined by the standard APIs described in this document.

GRNconnect server's support for reactive negotiation of content is OPTIONAL, and is not specified hereunder. Consequently, a compliant client SHOULD NOT expect the server to support reactive content negotiation.

5. HTTP Content Type Negotiation

All text data in requests sent to GRNconnect servers MUST be in **UTF-8** encoding, unless explicitly indicated otherwise.

Clients MUST send all API requests with the header **Content-Type: application/json**. There MUST NOT be any media type parameters.

Header Key	Value
Content-Type	application/json
Accept	application/json

Clients MUST specify the same media type for **Accept** header as well. There MUST NOT be any media type parameters.

If a response from the server contains any media type parameters, clients MUST ignore them.

5.1 Error Codes

HTTP Status Code	Error Code	Description
400	1104	Malformed syntax in request body
406	1105	Response content type is not acceptable according to the request accept headers
415	1103	Unsupported media type

6. API Authentication

GRNconnect API consumers MUST have a sandbox account approved by GRNconnect to access the API. Once you have an account in the sandbox, you SHOULD use the API Key provided in the account to access the API, by passing the key in the header for every request as follows.

Header Key	Value
api-key	C9C43593E47D6EBAAE731B6957EA1DDF

6.1 Error Codes

HTTP Status Code	Error Code	Description
401	1101	API key is not provided in the request
401	1102	Invalid API key

7. Search and Availability Request

7.1 Request

Method	Endpoint
POST	api/v3/hotels/availability

7.2 Payload

Attribute	Type	Required	Description
destination_code	string	REQUIRED if hotel_codes is not specified	City, State(area or destination) or Airport(IATA) code from the provided master data
hotel_codes	array	REQUIRED if destination _code is not specified	List of GRN hotel codes. When hotel codes are given, destination, category and hotel name are not required and ignored. Max no. of hotel codes allowed is 3000
checkin	date	REQUIRED	Format: ISO8601 (yyyy-mm-dd) Date of Check-in
checkout	date	REQUIRED	Format: ISO8601 (yyyy-mm-dd) Date of Check-out
client_nationality	string	REQUIRED	Nationality of the guest Format: Two-letter ISO Country code
hotel_name	string	OPTIONAL	Prefix of any word in the name of the hotel
hotel_category	array	OPTIONAL	The category (star rating) of the hotel. An array with minimum and maximum values. Minimum allowed value is 2. Maximum allowed value is 7. When [a,b] is given, the array is closed, i.e. it includes a and b. E.g. 1: [2,5] will fetch hotels with categories between 2 and 5. This will be inclusive of 2 and 5. E.g. 2: [3] will fetch only 3 star hotels.
currency	string	OPTIONAL	Preferred currency for the prices in the results. Default is the agent's base currency. Format: Three letter ISO Currency code. In case a supplier supports the requested currency, answered prices from that supplier will be in the requested currency.
rooms	array	REQUIRED	An array of 'room' elements. 'room' element is described later in the document.

rates	string	OPTIONAL	<ul style="list-style-type: none"> ● Allowed values: “comprehensive” or “concise” ● Default is “concise”. ● Concise will return only the rate with lowest price for all qualifying hotels. ● Comprehensive will return a full set of room rates for all qualifying hotels.
response	string	OPTIONAL	<ul style="list-style-type: none"> ● Allowed values: “fast” or “full” ● Default is “fast”. ● “fast” will return a response within an internally-defined cut-off time. Therefore, it includes only a subset of the results. ● “fast” is recommended for fetching “Starts from” prices, and for mobile applications. ● “full” will return the complete result set. More properties and prices are returned, but response time may be longer.

Room :

Attribute	Type	Required	Description
adults	integer	REQUIRED	The number of adults in the room
children_ages	array	OPTIONAL	An array with the ages of children in the room E.g. 2 children aged 10 and 15 years [10, 15]
no_of_extra_beds	integer	OPTIONAL	The number of extra beds required in the room (for children)
no_of_infants	integer	OPTIONAL	Number of infants in the room

7.3 Sample Search and Availability Payload

Sample request using GRN city code

```
{
  "destination_code": "C!000555",
  "checkin": "2016-12-29",
  "checkout": "2016-12-30",
  "client_nationality": "IN",
  "response": "full",
  "currency": "INR",
  "rates": "comprehensive",
  "hotel_category": [2, 6],
  "rooms": [
    {
      "adults": "1"
    },
    {
      "adults": "2",
      "children_ages": ["3"]
    }
  ]
}
```

Sample Request using GRN hotel codes

```
{
  "hotel_codes":["H!0048370","H!0050274","H!0061041","H!0071904"],
  "checkin": "2016-12-29",
  "checkout": "2016-12-30",
  "client_nationality": "IN",
  "response": "full",
  "currency": "INR",
  "rates": "comprehensive",
  "hotel_category": [2, 6],
  "rooms": [
    {
      "adults": "1"
    },
    {
      "adults": "2",
      "children_ages": ["3"]
    }
  ]
}
```

8. Search Response

8.1 Response

Attribute	Type	Description
search_id	string	Unique ID for the search request
no_of_hotels	integer	The number of hotels in the response
no_of_rooms	integer	The number of rooms requested for
no_of_nights	integer	The number of nights the rooms are requested for
no_of_children	integer	Number of children
no_of_infants	integer	Number of Infants
no_of_adults	integer	Number of adults
checkin	date	Check-in date
checkout	date	Check-out date
hotels	array	An array of hotels with availability information. "Hotel" is described below.

Hotel:

Attribute	Type	Description
hotel_code	string	Unique GRN hotel code
name	string	Name of the hotel
description	string	Description of the hotel
city_code	string	City code
country	string	Country code
recommended	boolean	"true" if the hotel is recommended by at least one top supplier
min_rate	object	Contains the lowest price within a given hotel for the given search criteria. See "rate" for more info.
images	object	Images of the hotel
geolocation	object	Geolocation of the hotel
facilities	string	List of facilities available in the hotel delimited by semicolon
category	float	The star category of the hotel
address	string	Address of the hotel
rates	array	<ul style="list-style-type: none">● An array of all available rates for a hotel.● Returned only if 'comprehensive' rates are requested.● The "rate" element is described below.

Images

Attribute	Type	Description
main_image	string	Path for the main image of the hotel

N.B: All image paths should be prefixed with the base url <https://cdn.grnconnect.com/>

Example : <https://cdn.grnconnect.com/hotels/images/fa/67/fa67573977698e4442dd4c301168a20-c9bd411b4.jpg>

Rate

Attribute	Type	Description
rate_key	string	Unique code representing the rate. REQUIRED, to be included when making a booking request.
rate_type	string	Possible values are 'bookable' and 'recheck'. If rate_type = 'recheck', you must use re-check endpoint before booking.
rate_comments	object	Object of dynamic key value pairs. Eg: { "comments": "Rate comments come here", "checkin-Instruction": "Checking details come here" }
non_refundable	boolean	'true' if the rate is Non-refundable. Otherwise, cancellation policies applicable.
room_code	string	Room code representing the rooms in the rate. REQUIRED to be included when making a booking request.
no_of_rooms	integer	Number of rooms included in this rate
group_code	string	<ul style="list-style-type: none">● Represents a group of related rates.● When booking multiple rates, you must use rates from the same group.● REQUIRED to be included when making a booking request.
price	float	Price for the rooms included in this rate.
price_details	object	Price details. Refer below for more info.
currency	string	Three-letter ISO currency code of the price
payment_type	string	Allowed payment types: AT_WEB, AT_HOTEL
allowed_card_types	array	An array of allowed card types.
cancellation_policy	object	Cancellation policy for the rate. See "Cancellation Policy" for details.

<code>cancellation_policy_code</code>	<code>string</code>	<ul style="list-style-type: none"> ● Code representing the cancellation policy for the rate. ● This is returned when cancellation policies are not available for the rate. ● This shall be used for fetching cancellation policies for the rate using cancellation policy end point.
<code>has_promotions</code>	<code>boolean</code>	"true" if any promotions are included in this rate
<code>promotions_details</code>	<code>array</code>	List of promotions (strings), if any
<code>includes_boarding</code>	<code>boolean</code>	"true" if boarding is included in this rate
<code>boarding_details</code>	<code>array</code>	Array of boarding details (strings), if available
<code>other_inclusions</code>	<code>array</code>	Array of other inclusions (strings), if available
<code>includes_wifi</code>	<code>boolean</code>	"true" if wi-fi is included in this rate
<code>supports_amendment</code>	<code>boolean</code>	"true" if this booking can be amended through api.
<code>supports_cancellation</code>	<code>boolean</code>	"true" if this booking can be cancelled through api.
<code>rooms</code>	<code>array</code>	List of rooms included for this rate. See "room" for details.

Price Details:

Dynamic key-value pairs, where each value is an array of charge details.

These details are for display purpose only. A compliant implementation is not required to process or interpret these details.

Refer sample price_details below.

Charge Details:

Attribute	Type	Description
name	string	Name of the charge.
included	boolean	'true' if the charge is already included in the price.
amount_type	string	Defines the type of amount: 'value' represents flatfee 'percent' represents percentage
amount	float	flat fee or percentage value.
mandatory	boolean	'true' if this must be paid either at booking or at hotel. Otherwise, this has to be paid(at hotel) only if you need the supplement/facility.
currency	string	Three-letter ISO currency code
comments	string	Description or any notes for the charge if available.

Sample price_details

```
{
  "price_details":{
    "surcharge_or_tax":[
      {
        "amount":48.47,
        "name":"roomTax",
        "included":true,
        "currency":"USD",
        "amount_type":"value"
      },
      {
        "amount":4,
        "name":"salesTax",
        "included":true,
        "currency":"USD",
        "mandatory":true,
        "amount_type":"percent"
      }
    ]
  }
}
```

```

],
  "hotel_charges":[
    {
      "amount":129.92,
      "mandatory":true,
      "name":"Resort",
      "included":false,
      "comments":"Per Room",
      "amount_type":"value",
      "currency":"USD"
    }
  ]
}

```

Room

Attribute	Type	Description
room_type	string	Room type. E.g. single room, executive room, suite
room_reference	string	Unique room reference for the room
no_of_rooms	integer	Number of rooms(included) of the same type.
no_of_adults	integer	Number of adults in the room
no_of_children	integer	Number of children in the room
children_ages	array	Ages of the children
no_of_infants	integer	Number of infants in the room
description	string	Description of the room
bed_types	array	Array of bed type Objects. If returned, you can choose and include bed type in the booking request.
max_room_occupancy	object	An object representing maximum room occupancy

Max room Occupancy:

Attribute	Type	Description
max_pax	integer	Maximum number of total guests allowed in the room
max_adults	integer	Maximum number of adults allowed in the room
max_children	integer	Maximum number of children allowed in the room

Bed Type Object:

Attribute	Type	Description
id	string	Bed type id
type	string	Bed type name/description

Geolocation:

Attribute	Type	Description
latitude	float	Latitude of the hotel
longitude	float	Longitude of the hotel

Cancellation Policy:

Attribute	Type	Description
under_cancellation	boolean	“true” if the booking is under cancellation, i.e. cancellation charges will apply should a cancellation be made later.
cancel_by_date	datetime	Last date for cancellation without charges. Mutually-exclusive with “under_cancellation” being “true”.
no_show_fee	object	Charges for no show. An Object with the following fields <ul style="list-style-type: none">● amount_type represents the type of value. As mentioned below.● currency Three-letter ISO currency code● flatfee/percent/nights as mentioned in amount_type
amount_type	string	Defines the type of value in details: <ul style="list-style-type: none">● value represents amount● percentage represents percentage● nights represents charges in number of nights.● For nights, in some cases, percentage is also returned. In those cases charges have to be calculated by taking (percentage x nights) value.
details	array	List of cancellation windows and applicable charges. Refer policy details below.

Policy Details:

Attribute	Type	Description
from	datetime	date from which the charge in this window applies
nights	integer	charges in number of nights.
percent	float	Charges in percentage
flatfee	float	Charge applicable
currency	string	Three-letter ISO currency code

8.1.1 Error Codes

HTTP Status Code	Error Code	Description
200	5101	Field[name] is required
200	5102	Field[name] value/type is invalid
200	5108	Check-In and check-out dates must be valid, and in ISO8601 format (YYYY-MM-DD)
200	5109	Check-In date cannot be older than today
200	5110	Stay cannot exceed 30 days
200	5111	Check-out date must be greater than check-in date
200	5103	Invalid hotel category
200	5106	Children ages should be between 0 and 18
200	1501	No availability for the requested search criteria
200	1502	No hotels found for the query
401	1102	Invalid API key

8.1.2 Sample Search Response

```
{
  "search_id": "d3kmmkyqvuhyi7pnrkcm5szkvu",
  "no_of_rooms": 2,
  "no_of_nights": 1,
  "no_of_hotels": 2,
  "no_of_children": 1,
  "no_of_adults": 3,
  "hotels": [
    {
      "recommended": true,
      "rates": [
        {
          "supports_cancellation": true,
          "supports_amendment": false,
          "rooms": [
            {
              "room_type": "200432",
              "no_of_rooms": 1,
              "no_of_children": 1,
              "no_of_adults": 2,
              "description": "Executive Double or Twin Room - Non Refundable BB",
              "children_ages": [
                3
              ],
              "bed_types": [
                {
```

```

        "type": "2 twin beds",
        "id": 25
      },
      {
        "type": "1 queen bed",
        "id": 15
      }
    ]
  },
  {
    "room_type": "200432",
    "no_of_rooms": 1,
    "no_of_children": 0,
    "no_of_adults": 1,
    "description": "Executive Double or Twin Room - Non Refundable BB",
    "bed_types": [
      {
        "type": "2 twin beds",
        "id": 25
      },
      {
        "type": "1 queen bed",
        "id": 15
      }
    ]
  }
],
"room_code": "4ddfznbt7quczuc3",
"rate_type": "bookable",
"rate_key": "wknvbnjq4n6sjr2qusmwaags4hn2zxhz6czoztzjr",
"rate_comments": {
  "tax_information": "SalesTax and HotelOccupancyTax(if charged) are
included in TaxAndServiceFee"
},
"price_details": {
  "surcharge_or_tax": [
    {
      "name": "TaxAndServiceFee",
      "included": true,
      "currency": "INR",
      "amount_type": "value",
      "amount": 1064.42
    }
  ]
},
"hotel_charges": [
  {
    "name": "MandatoryTax",
    "included": false,
    "currency": "INR",
    "amount_type": "value",
    "amount": 290.03
  }
],
"net": [
  {
    "name": "Net",

```

```

        "included":true,
        "currency":"INR",
        "amount_type":"value",
        "amount":18805.01
    }
]
},
"price":18805.01,
"payment_type":[
    "AT_HOTEL"
],
"other_inclusions":[
    "Free Wireless Internet"
],
"non_refundable":true,
"no_of_rooms":2,
"includes_wifi":true,
"includes_boarding":true,
"has_promotions":false,
"group_code":"wsdbjylcxn4uf",
"currency":"INR",
"cancellation_policy":{
    "under_cancellation":true,
    "details":[
        {
            "percent":100,
            "from":"2016-11-22T07:59:56.491271",
            "currency":"INR"
        }
    ],
    "amount_type":"percent"
},
"boarding_details":[
    "Breakfast Buffet"
]
},
{
    "supports_cancellation":true,
    "supports_amendment":false,
    "rooms":[
        {
            "room_type":"28076",
            "no_of_rooms":1,
            "no_of_children":1,
            "no_of_adults":2,
            "description":"City Room",
            "children_ages":[
                3
            ]
        }
    ],
    "room_code":"43fevnb45bouroa",
    "rate_type":"bookable",
    "rate_key":"nhzihyw3fv1aj5xq5ua2dcgfb6oxye4wktlutu3vs",
    "price_details":{
        "net":[

```

```

        {
          "name": "Net",
          "included": true,
          "currency": "INR",
          "amount_type": "value",
          "amount": 8773.25
        }
      ]
    },
    "price": 8773.25,
    "payment_type": [
      "AT_WEB"
    ],
    "non_refundable": false,
    "no_of_rooms": 1,
    "includes_wifi": null,
    "includes_boarding": true,
    "has_promotions": false,
    "group_code": "wcobnyltrv3xhbq",
    "currency": "INR",
    "cancellation_policy_code": "wcobnyltrv3xhb-
qi7lhg2f6q4hj2ns5c6g663v16",
    "boarding_details": [
      "Bed & Breakfast"
    ]
  },
  {
    "supports_cancellation": true,
    "supports_amendment": false,
    "rooms": [
      {
        "room_type": "28076",
        "no_of_rooms": 1,
        "no_of_children": 0,
        "no_of_adults": 1,
        "description": "City Room"
      }
    ],
    "room_code": "47eevnb45bouroa",
    "rate_type": "bookable",
    "rate_key": "cmg5hph74uaq6qghgwbthpxr5cmtuxec5liojekowzhzspwdpa2v4",
    "price_details": {
      "net": [
        {
          "name": "Net",
          "included": true,
          "currency": "INR",
          "amount_type": "value",
          "amount": 8193.34
        }
      ]
    }
  },
  "price": 8193.34,
  "payment_type": [
    "AT_WEB"
  ]
}

```

```

    ],
    "non_refundable":false,
    "no_of_rooms":1,
    "includes_wifi":null,
    "includes_boarding":true,
    "has_promotions":false,
    "group_code":"wcobnyltrv3xhbq",
    "currency":"INR",
    "cancellation_policy_code":"wcobnyltrv3xhb-
qi7lhg2f6q4hj2ns5c6g663v16",
    "boarding_details":[
        "Bed & Breakfast"
    ]
    }
],
"name":"Lutecia Smart Design Hotel",
"images":{"
    "main_image":"hotels/images/51/7b/517bf51a2c54e013ced-
ba6d26687355d0ce11f81.jpg"
},
"hotel_code":"H!0049396",
"geolocation":{"
    "longitude":-9.138914,
    "latitude":38.746067
},
"facilities":"porter/bellhop; security safe (room); designer toiletries;
year built 1969; desk; free toiletries; restaurant(s); check-out time is noon; total
number of rooms - 175; bathtub only; dry cleaning/laundry service; 24-hour business
center; visa; cable tv service; television in common areas; babysitting or childcare
(surcharge); safe-deposit box at front desk; air conditioning (room); satellite/ca-
ble tv; flat-screen tv; conference space size (meters) - 110; restaurant; diners
club; free wi-fi (public areas); luggage storage; airport transportation (sur-
charge); meeting rooms 5; blackout drapes/curtains; number of floors - 11; check-in
time starts at 2 pm; private bathroom; 24-hour front desk; conference space size
(feet) - 1184; breakfast available (surcharge); parking - nearby; air conditioned
(public areas); concierge services; bidet; mini bar; room service (limited hours);
air conditioning; bar/lounge; mastercard; free cribs/infant beds; laundry service;
free wi-fi; connecting/adjoining rooms available; designated smoking areas; led tv;
tours/ticket assistance; coffee shop or café; daily housekeeping; espresso maker;
free wifi; premium bedding; business centre; babysitting available; direct-dial
telephone; free newspapers in lobby; gym; hair dryer; pets not allowed; jcb interna-
tional; number of buildings/towers - 1; spa services on site; bar(s); minibar;
24-hour fitness facilities; room service; minimum check-in age is 18; american
express; concierge; rollaway/extra beds available; number of meeting rooms - 5;
multilingual staff; babysitting or childcare; conference facilities; elevator/lift;
in-room safe (laptop compatible); laundry facilities; phone",
"description":"This smart design hotel is located in a prime residential
area in Lisbon, close to the popular Avenida de Roma. Guests will find Rossio square
and the city centre just a short metro ride away, making this establishment an ideal
base for those travellers wishing to explore this vibrant city. Spread over 9 themed
floors, the tastefully decorated guest rooms boast panoramic views over the city and
offer an array of modern conveniences to guarantee a truly memorable stay, such as
air conditioning and satellite television. Guests will appreciate the fusion restau-
rant serving a wide choice of Portuguese dishes as well as Indian specialities. Five
meeting rooms are available to meet all business travellers' needs.",
"country":"PT",

```

```

"city_code": "C!000555",
"category": 4,
"address": "Av. Frei Miguel Contreiras 52 1749-086 Lisboa"
},
{
  "rates": [
    {
      "supports_cancellation": true,
      "supports_amendment": false,
      "rooms": [
        {
          "room_type": "DBL.PI",
          "no_of_rooms": 1,
          "no_of_children": 1,
          "no_of_adults": 2,
          "description": "DOUBLE PREMIUM",
          "children_ages": [
            3
          ]
        }
      ],
      "room_code": "4pgvlzuyy",
      "rate_type": "BOOKABLE",
      "rate_key": "4phflmrx4avcjfstusngchgu4pjop-6hdlqrp55lh4ium4ph6tdrrn6nciw",
      "promotions_details": [
        "Child discount -90.66",
        "Exclusive discount 25.90"
      ],
      "price_details": {
        "net": [
          {
            "name": "Net",
            "included": true,
            "currency": "INR",
            "amount_type": "value",
            "amount": 20309.01
          }
        ]
      }
    },
    {
      "price": 20309.01,
      "payment_type": [
        "AT_WEB"
      ],
      "non_refundable": false,
      "no_of_rooms": 1,
      "includes_wifi": false,
      "includes_boarding": true,
      "has_promotions": true,
      "group_code": "xgirbylkwb6xtg",
      "currency": "INR",
      "cancellation_policy": {
        "under_cancellation": false,
        "details": [
          {
            "from": "2016-12-25T00:00:00",
            "flat_fee": 20309.01,
            "currency": "INR"
          }
        ]
      }
    }
  ]
}

```

```

    ],
    "cancel_by_date": "2016-12-24T00:00:00",
    "amount_type": "value"
  },
  "boarding_details": [
    "BED AND BREAKFAST"
  ],
  "allotment": 2
},
{
  "supports_cancellation": true,
  "supports_amendment": false,
  "rooms": [
    {
      "room_type": "DBL.PI",
      "no_of_rooms": 1,
      "no_of_children": 0,
      "no_of_adults": 1,
      "description": "DOUBLE PREMIUM"
    }
  ],
  "room_code": "4phf3kr64ercplzuyy",
  "rate_type": "BOOKABLE",
  "rate_key": "4far7zqeuaoqt1436otsfyhfgjuk6cbhakoooro2mwn7x5k34-
sumyop7d7t2s6nhq",
  "promotions_details": [
    "Exclusive discount 23.31"
  ],
  "price_details": {
    "net": [
      {
        "name": "Net",
        "included": true,
        "currency": "INR",
        "amount_type": "value",
        "amount": 18619.31
      }
    ]
  },
  "price": 18619.31,
  "payment_type": [
    "AT_WEB"
  ],
  "non_refundable": false,
  "no_of_rooms": 1,
  "includes_wifi": false,
  "includes_boarding": true,
  "has_promotions": true,
  "group_code": "xgirbylkwb6xtg",
  "currency": "INR",
  "cancellation_policy": {
    "under_cancellation": false,
    "details": [
      {
        "from": "2016-12-25T00:00:00",
        "flat_fee": 18619.31,
        "currency": "INR"
      }
    ]
  },
  ],

```

```

        "cancel_by_date":"2016-12-24T00:00:00",
        "amount_type":"value"
    },
    "boarding_details":[
        "BED AND BREAKFAST"
    ],
    "allotment":2
}
],
"name":"behotelisboa",
"images":{
    "main_image":"hotels/images/7f/56/7f560e65d515fc4f5bf3f14b83c33.jpg"
},
"hotel_code":"H!0432594",
"geolocation":{
    "longitude":-9.14528,
    "latitude":38.7234
},
"facilities":"free toiletries; check-out time is noon; slippers; visa;
soundproofed rooms; parking (limited spaces); safe-deposit box at front desk; no
rollaway/extra beds available; plasma tv; luggage storage; private bathroom; 24-hour
front desk; year built 2015; breakfast available (surcharge); number of floors - 5;
smoke-free property; air conditioning; mastercard; check-in time starts at 2:00 pm;
total number of rooms - 39; room service (24 hours); tours/ticket assistance; daily
housekeeping; free wifi; no cribs (infant beds) available; hair dryer; pets not
allowed; self parking (surcharge); number of buildings/towers - 1; minibar; shower
only; minimum check-in age is 18; american express; satellite tv service; in-room
safe (laptop compatible)",
"description":"Property Location With a stay at behotelisboa, you'll be
centrally located in Lisbon, steps from Santa Justa Elevator and Figueira Square.
This 4-star hotel is within close proximity of Armazens do Chiado Mall and Carmo
Convent.Rooms Make yourself at home in one of the 39 air-conditioned rooms featuring
minibars and plasma televisions. Complimentary wireless Internet access keeps you
connected, and satellite programming is available for your entertainment. Private
bathrooms with showers feature complimentary toiletries and hair dryers. Conveni-
ences include laptop-compatible safes, and housekeeping is provided daily.Amenities
Make use of convenient amenities, which include complimentary wireless Internet
access and tour/ticket assistance.Dining Take advantage of the hotel's 24-hour room
service.Business, Other Amenities Featured amenities include a 24-hour front desk,
luggage storage, and a safe deposit box at the front desk.",
    "country":"PT",
    "city_code":"C!000555",
    "category":4,
    "address":""
}
],
"checkout":"2016-12-30",
"checkin":"2016-12-29"
}

```

8.2 Re-Fetch Availability with search ID

You can use this method to fetch complete availability of a previous search.

Method	Endpoint
GET	api/v3/hotels/availability/<sid>

<sid> refers to the 'search_id' returned in the search response.
The response structure for this request will be same as the search response.

8.2.1 Error Codes

HTTP Status Code	Error Code	Description
200	1501	No availability for the requested search criteria
403	5003	Not authorised
200	1504	Invalid search ID or it might have expired
401	1102	Invalid API key

8.3 Re-fetch Availability for a Single Hotel

You can use this method to re-fetch availability of a single hotel from a previous search.

Method	Endpoint
GET	api/v3/hotels/availability/<sid>?hcode=<hcode>

<hcode> refers to the 'hotel_code' returned in the search response.
<sid> refers to the 'search_id' returned in the search response.
Response to this will be similar to the search response with results for just one hotel.

8.3.1 Error Codes

HTTP Status Code	Error Code	Description
200	1501	No availability for the requested search criteria
200	1507	Invalid hotel code
200	1504	Invalid search ID or it might have expired
401	1102	Invalid API key
404	5002	Hotel not found

8.4 Fetch Cancellation Policies for the rate using rate-key

You can use this method to fetch the cancellation policies for the selected rate from the previous search if cancellation policy code is returned instead of cancellation policy.

8.4.1 Request

Method	Endpoint
POST	api/v3/hotels/availability/<sid>/rates/cancellation_policies/

8.4.2 Payload

Attribute	Type	Required	Description
rate_key	string	REQUIRED	Refers to rate key returned in search response for the selected rate.
cp_code	string	REQUIRED	Refers to cancellation policy code returned in search response.

8.4.3 Sample Cancellation Policies Payload

```
{
  "rate_key": "szgueavmvt6db4xhrhdqtf3wdwr3eau3vs",
  "cp_code": "wcobnyl1trv3xhbqi71hg2f6q4hj2ns5c6g663v16"
}
```

8.4.4 Sample Cancellation Policy Response

The response will be similar to the cancellation policies which are returned in the search response. Refer **Cancellation Policy** in 8.1(Search Response) for more info.

```
{
  "under_cancellation": true,
  "no_show_fee": {
    "flat_fee": 7153.14,
    "currency": "INR",
    "amount_type": "value"
  },
  "details": [
    {
      "from": "2016-11-22T08:35:19",
      "flat_fee": 7153.14,
      "currency": "INR"
    }
  ],
  "cancellation_policy_code": "uwird5tpwf3spucqu2nwigox4xmklqfm62zorvl63i",
  "amount_type": "value"
}
```

8.4.4 Error Codes

HTTP Status Code	Error Code	Description
200	1504	Invalid search ID or it may have expired
200	5146	No permissions / Not Authorised at supplier's end
200	5147	Supplier API is currently unavailable
200	5140	Unknown Error at Supplier's end
200	2004	The booking item is not available/sold out
200	2008	The rate_key is invalid/expired
200	5102	cancellation_policies_code value/type is invalid
200	5102	rate_key value/type is invalid
200	5101	Field[name] is required

8.5 Rate Re-check using rate_key

You shall use this method to fetch the updated rate. It is mandatory to perform this check before booking if "rate_type" is "recheck" in search response.

8.5.1

Method	Endpoint
POST	api/v3/hotels/availability/<sid>/rates/?action=recheck

8.5.2 Payload

Attribute	Type	Required	Description
rate_key	string	REQUIRED	Refers to rate key returned in search response for the selected rate.
group_code	string	REQUIRED	Refers to group code returned in search response for the selected rate.

8.5.3 Response

The response will be similar to that of search response. Find the sample response below.

8.5.4 Sample Rate-Recheck Payload

```
{
  "rate_key": "4phf1mrx4mvc7fstusngchg4",
  "group_code": "xgirby1kwb6xtgk3v2mgafos"
}
```

8.5.5 Sample Rate-Recheck Response

```
{
  "search_id": "d3kmmkyqvuyhi7pnrkcm5szkvu",
  "hotel": {
    "rate": {
      "supports_cancellation": true,
      "supports_amendment": false,
      "rooms": [
        {
          "room_type": "28076",
          "no_of_rooms": 1,
          "no_of_children": 1,
          "no_of_adults": 2,
          "description": "City Room",
          "children_ages": [
            3
          ]
        }
      ],
      "room_code": "43fevnb45bouroa",
      "rate_type": "bookable",
      "rate_key": "nhzihyw3fv1aj5xq5ua2dcgfb6oxye4wktlutu3vs",
      "price_details": {
        "net": [
          {
            "name": "Net",
            "included": true,
            "currency": "INR",
            "amount_type": "value",
            "amount": 8773.25
          }
        ]
      },
      "price": 8773.25,
      "payment_type": [
        "AT_WEB"
      ],
      "non_refundable": false,
      "no_of_rooms": 1,
      "includes_wifi": null,
      "includes_boarding": true,
      "has_promotions": false,
      "group_code": "wcobnyl1trv3xhbq",
      "currency": "INR",

```

```

"cancellation_policy_code":"wcbonyltrv3xhbqi7lhg2f6q4hj2ns5c6g663v16",
"cancellation_policy":{
  "under_cancellation":false,
  "details":[
    {
      "from":"2016-12-28T00:00:00",
      "flat_fee":8773.25,
      "currency":"INR"
    }
  ],
  "cancel_by_date":"2016-12-27T00:00:00",
  "amount_type":"value"
},
"boarding_details":[
  "Bed & Breakfast"
]
},
"name":"Lutecia Smart Design Hotel",
"images":{
  "main_image":"hotels/images/51/7b/517bf51a2c54e013ced-
ba6d26687355d0ce11f81.jpg"
},
"hotel_code":"H!0049396",
"geolocation":{
  "longitude":-9.138914,
  "latitude":38.746067
},
"facilities":"porter/bellhop; security safe (room); designer toiletries; year
built 1969; desk; free toiletries; restaurant(s); check-out time is noon; total
number of rooms - 175; bathtub only; dry cleaning/laundry service; 24-hour busi-
ness center; visa; cable tv service; television in common areas; babysitting or
childcare (surcharge); safe-deposit box at front desk; air conditioning (room);
satellite/cable tv; flat-screen tv; conference space size (meters) - 110; restau-
rant; diners club; free wi-fi (public areas); luggage storage; airport transporta-
tion (surcharge); meeting rooms 5; blackout drapes/curtains; number of floors -
11; check-in time starts at 2 pm; private bathroom; 24-hour front desk; conference
space size (feet) - 1184; breakfast available (surcharge); parking - nearby; air
conditioned (public areas); concierge services; bidet; mini bar; room service
(limited hours); air conditioning; bar/lounge; mastercard; free cribs/infant beds;
laundry service; free wi-fi; connecting/adjoining rooms available; designated
smoking areas; led tv; tours/ticket assistance; coffee shop or café; daily house-
keeping; espresso maker; free wifi; premium bedding; business centre; babysitting
available; direct-dial telephone; free newspapers in lobby; gym; hair dryer; pets
not allowed; jcb international; number of buildings/towers - 1; spa services on
site; bar(s); minibar; 24-hour fitness facilities; room service; minimum check-in
age is 18; american express; concierge; rollaway/extra beds available; number of
meeting rooms - 5; multilingual staff; babysitting or childcare; conference facil-
ities; elevator/lift; in-room safe (laptop compatible); laundry facilities; phone",
"description":"This smart design hotel is located in a prime residential area
in Lisbon, close to the popular Avenida de Roma. Guests will find Rossio square and
the city centre just a short metro ride away, making this establishment an ideal
base for those travellers wishing to explore this vibrant city. Spread over 9
themed floors, the tastefully decorated guest rooms boast panoramic views over the
city and offer an array of modern conveniences to guarantee a truly memorable stay,
such as air conditioning and satellite television. Guests will appreciate the

```

```

fusion restaurant serving a wide choice of Portuguese dishes as well as Indian
specialities. Five meeting rooms are available to meet all business travellers'
needs.",
  "country":"PT",
  "city_code":"C!000555",
  "category":4,
  "address":"Av. Frei Miguel Contreiras 52 1749-086 Lisboa"
}
}

```

8.5.6 Error Codes

HTTP Status Code	Error Code	Description
404	1504	Invalid search Id or it may have expired
200	2001	Invalid group code
200	5146	Not Authorised at supplier's end
200	5147	Supplier API is currently unavailable
200	5140	Unknown Error at Supplier's end
200	2004	The booking item is not available/sold out
200	2008	The rate_key is invalid or expired
200	5102	group_code value/type is invalid
200	5102	rate_key value/type is invalid
200	5101	Field[name] is required

9. Booking Request

9.1 Request

Method	Endpoint
POST	api/v3/hotels/bookings

9.2 Booking Payload

Attribute	Type	Required	Description
search_id	string	REQUIRED	Search ID returned in the search response
hotel_code	string	REQUIRED	GRN hotel code returned in search
city_code	string	REQUIRED	City code returned in search
booking_name	string	OPTIONAL	Name of the booking; for agent's reference
group_code	string	REQUIRED	Group code returned in search
checkin	date	REQUIRED	Check-in date; must be in the format yyyy-mm-dd.
checkout	date	REQUIRED	Check-out date; must be in the format yyyy-mm-dd.
payment_type	string	REQUIRED	"AT_WEB" or "AT_HOTEL". Must get matched with the booking item selected
holder	object	REQUIRED	Information of the lead passenger. See " holder " for details.
booking_items	array	REQUIRED	Information of the rooms and the pax in the rooms. See "Booking Item" for details.
booking_comments	string	OPTIONAL	Optional booking comments to be passed along to the hotel
credit_card	object	REQUIRED if payment_type = "AT_HOTEL"	Contains Fields of Credit Card

Booking Item:

Attribute	Type	Required	Description
rate_key	string	REQUIRED	rate_key value from the search response
room_code	string	REQUIRED, if returned in the search response	room_code value from the search response
rooms	array	REQUIRED	List of "room" elements

Room :

Attribute	Type	Required	Description
room_reference	string	REQUIRED, if returned in the search response	Unique room reference for the room
paxes	array	REQUIRED	Contains the information of pax in the room
no_of_infants	integer	OPTIONAL, required if Infants are present	Number of infants
no_of_extra_beds	integer	OPTIONAL, required if children are present	Number of extra beds needed for children
bedtype_id	integer	OPTIONAL	Preferred bed type which can be selected from the list of bed types returned in the search response.

Pax:

Attribute	Type	Required	Description
title	string	REQUIRED	Title of the passenger (accepted values are: "Mr.,""Ms.,""Mrs.,""Mstr.")
name	string	REQUIRED	Name of the person staying in the room. Must not contain any special characters and numbers.
surname	string	REQUIRED	Surname/patronymic of the person staying in the room. Must not contain any special characters and numbers.
type	string	REQUIRED	Must be either "AD" or "CH"
age	integer	REQUIRED if type = "CH"	Age of the children

Holder:

Attribute	Type	Required	Description
title	string	REQUIRED	Title of the passenger (accepted values are: "Mr.,""Ms.,""Mrs.,""Mstr.")
name	string	REQUIRED	Name of the lead passenger. Must not contain any special characters and numbers.
surname	string	REQUIRED	Surname/patronymic of the lead passenger. Must not contain any special characters and numbers.
email	string	REQUIRED	Valid email address of the lead passenger
phone_number	string	REQUIRED	Phone number of the lead passenger
client_nationality	string	REQUIRED	Two-letter ISO country code of the lead passenger

Credit Card

Attribute	Type	Required	Description
address_line1	string	REQUIRED	First line for street address, 28 char max.
address_line2	string	OPTIONAL	Optional second line for street address, 28 char max.
address_line3	string	OPTIONAL	Optional third line for street address, 28 char max.
amount	float	REQUIRED	Amount to be paid for the booking
card_cv2	integer	REQUIRED	Credit card identification number or the card security value (CSV or CVV) that is found on the back of the card. Never store this value after the customer's initial entry and booking attempt.
card_holder_name	string	REQUIRED	Full first name of the credit card holder. Only accepts non-accented Latin ASCII (26 letter alphabet). 25 char max - no salutations or company names.
card_issue_number	integer	OPTIONAL	Card issue number..
card_number	integer	REQUIRED	Must be a valid card number in-order to book a hotel
card_type	string	REQUIRED	Must be in the list of card_types provided
city_name	string	REQUIRED	Customer's city.
country	string	REQUIRED	Two character ISO-3166 code for the country containing the specified city. Use only country codes designated as "officially assigned" in the ISO-3166 decoding table.
expiry_month	integer	REQUIRED	Credit card expiration month, in MM format.
expiry_year	integer	REQUIRED	Credit card expiration year, in YYYY format.
issuing_bank	string	OPTIONAL	Bank name Which issued the credit card
state	string	OPTIONAL	Must be in the list of state codes provided (destination master).
zip	string	REQUIRED	This must match the credit card provider's records or the booking will not be valid.

N.B. GRNconnect does **not** store any credit card information of the users. The details are passed to the supplier with whom the booking is made.

9.2.1 Sample Booking Payload

For Bundled Rates:

```
{
  "search_id":"d3kmmkyqvuhyi7pnrkcm5szkvu",
  "hotel_code":"H!0049396",
  "city_code":"C!000555",
  "group_code":"wsdbjylcxn4uf",
  "checkin":"2016-12-29",
  "checkout":"2016-12-30",
  "booking_comments":"Testing",
  "payment_type":"AT_HOTEL",
  "booking_items":[
    {
      "room_code":"4ddfznbt7quczuc3",
      "rate_key":"wknvbnjq4n6sjr2qusmwaags4hn2zxhz6czoztzjr",
      "rooms":[
        {
          "bedtype_id":25,
          "paxes":[
            {
              "title":"Mr.",
              "name":"Sam",
              "surname":"Patrick",
              "type":"AD"
            }
          ]
        },
        {
          "paxes":[
            {
              "title":"Mr.",
              "name":"Henry",
              "surname":"Patrick",
              "type":"AD"
            },
            {
              "title":"Mr.",
              "name":"Harry",
              "surname":"Patrick",
              "type":"AD"
            },
            {
              "title":"Mr.",
              "name":"Luke",
              "surname":"Patrick",
              "type":"CH",
              "age":"3"
            }
          ]
        }
      ]
    }
  ],
}
```

```

"holder":{
  "title":"Mr.",
  "name":"James",
  "surname":"Patrick",
  "email":"james@pat.com",
  "phone_number":"6614565589",
  "client_nationality":"fr"
},
"credit_card":{
  "city_name":"delhi",
  "amount":23128.09,
  "card_type":"VISA",
  "card_number":"4242424242424242",
  "expiry_month":"03",
  "expiry_year":"2018",
  "card_cv2":"832",
  "card_holder_name":"TEST CUSTOMER",
  "country":"NL",
  "address_line1":"delhi, india",
  "state":"D!001175"
}
}
}

```

For Non Bundled Rates

```

{
  "search_id":"d3kmmkyqvuhyi7pnrkcm5szkvu",
  "hotel_code":"H!0049396",
  "city_code":"C!000555",
  "group_code":"wcobnyltrv3xhbq",
  "checkin":"2016-12-29",
  "checkout":"2016-12-30",
  "booking_comments":"Testing",
  "payment_type":"AT_WEB",
  "booking_items":[
    {
      "room_code":"43fevnb45bouroa",
      "rate_key":"nhzihyw3fv1aj5xq5ua2dcgfb6oxye4wktlutu3vs",
      "rooms":[
        {
          "paxes":[
            {
              "title":"Mr.",
              "name":"Henry",
              "surname":"Patrick",
              "type":"AD"
            },
            {
              "title":"Mr.",
              "name":"Harry",
              "surname":"Patrick",
              "type":"AD"
            }
          ]
        }
      ]
    }
  ]
}

```

```

        {
            "title": "Mr.",
            "name": "Luke",
            "surname": "Patrick",
            "type": "CH",
            "age": "3"
        }
    ]
}
],
{
    "room_code": "47eevnb45bouroa",
    "rate_key": "cmg5hph74uaq6qghgwbthpxr5cmtuxec5liojekowzhzspwdpa2v4",
    "rooms": [
        {
            "paxes": [
                {
                    "title": "Mr.",
                    "name": "Sam",
                    "surname": "Patrick",
                    "type": "AD"
                }
            ]
        }
    ]
}
],
"holder": {
    "title": "Mr.",
    "name": "James",
    "surname": "Patrick",
    "email": "james@pat.com",
    "phone_number": "6614565589",
    "client_nationality": "fr"
}
}

```

10. Booking Response

10.1 Response

Attribute	Type	Description
booking_id	string	Unique booking ID
booking_reference	string	Unique booking code. REQUIRED for all future transactions and support.
booking_name	string	Booking name provided while booking
checkin	date	Check-in date Format: YYYY-MM-DD
checkout	date	Check-out date Format: YYYY-MM-DD
price	object	Price details of the booking (refer below for more info)
payment_type	string	Payment type used for the booking
non_refundable	boolean	'true' if the rate is Non-refundable. Otherwise, cancellation policies applicable.
payment_status	string	Status of the payment.
currency	string	Three-letter ISO currency code of the price
booking_date	datetime	The date when booking was made
status	string	Booking status will be one of the following <ul style="list-style-type: none">● Confirmed● Failed● Rejected● Pending
holder	object	Lead passenger details. Defined in the holder section above.
hotel	object	Hotel element
supports_amendment	boolean	"true" if amendments are allowed
supports_cancellation	boolean	"true" if cancellations are allowed
booking_comment	string	Optional booking comments passed along to the hotel
additional_info	object	Additional information if any. Object of dynamic key value pairs. Eg: { "comments": "comments come here", "Checkin-Instruction": "Checking details come here" }

Price:

Attribute	Type	Description
total	float	Booking amount
breakdown	object	Dynamic key value pairs, with values being an array of charge details. Refer below for charge details and sample response.

Charge Details:

Attribute	Type	Description
name	string	Name of the charge.
included	boolean	'true' if the charge is already included in the price.
amount_type	string	Defines the type of amount: 'value' represents flatfee 'percent' represents percentage
amount	float	flatfee or percentage value.
mandatory	boolean	'true' if this must be paid either at booking or at hotel. Otherwise, this has to be paid(at hotel) only if you need the supplement/facility.
currency	string	Three-letter ISO currency code
comments	string	Description or any notes for the charge if available.

er_inclusions

Sample response for 'price' element:

```
{
  "total": 159828,
  "breakdown": {
    "surcharge_or_tax": [
      {
        "name": "TaxAndServiceFee",
        "included": true,
        "currency": "INR",
        "amount_type": "value",
        "amount": 14529.14
      }
    ],
    "hotel_charges": [
      {
        "name": "MandatoryTax",
        "Mandatory": true,
        "included": false,
        "currency": "INR",
        "amount_type": "value",
        "amount": 8854.72
      }
    ]
  }
}
```

Hotel:

Attribute	Type	Description
hotel_code	string	GRN hotel code
name	string	Name of the hotel
description	string	Description of the hotel
category	float	The star category of the hotel
address	string	Address of the hotel
geolocation	object	Geolocation
paxes	array	List of the pax in the booking
booking_items	array	List of booking items

Booking Item:

Attribute	Type	Description
room_code	string	Unique key representing the rooms in the booking item
rooms	array	List of room elements. Rooms that are part of the booking item.
non_refundable	boolean	'true' if the rate is Non-refundable. Otherwise, cancellation policies applicable.
rate_comments	object	Additional rate information, if any Object of dynamic key value pairs. Eg: { "comments": "comments come here", "additional rate info": "additional details come here" }
includes_boarding	boolean	"true" if boarding is included in this rate
boarding_details	array	List of boarding details, if applicable
other_inclusions	array	List of additional inclusions (strings), if available
cancellation_policy	object	Cancellation policy details
price	float	Price of the booking item
currency	string	Currency of the price.

Room:

Attribute	Type	Description
description	string	Room description
room_reference	string	Unique key referencing the room
pax_ids	array	List of pax identification details. Represents pax allocation to the rooms.
no_of_adults	integer	Number of adults in the room
no_of_infants	integer	Number of infants in the room
no_of_children	integer	Number of children in the room
bed_type	object	bed type details with the following structure { "id": 69, "type": "One double and two single beds" }

10.2 Error Codes

HTTP Status Code	Error Code	Description
200	1504	Invalid search ID or it may have expired
200	2001	Booking failed [with reason for failure]
200	2002	Invalid group code
200	5102	Field[name] value/type is invalid
200	5101	Field[name] value/type is required
200	5108	Check-in and check-out dates must be valid, and in ISO8601 format (YYYY-MM-DD)
200	5109	Check-in date cannot be older than today
200	2006	Need confirmation from supplier
200	5140	Unknown Error at Supplier's end
200	5144	Exceeded request limit
200	2004	The booking item is not available/sold out
200	2005	price mismatch
200	5126	Rate key 'Field[value]' and the rooms specified do not match
200	5113	No of rooms per request cannot exceed 10
200	5113	No of booking_items per request cannot exceed 10
200	5114	Paxes data does not match with the given room
200	5134	Age is required for type Children
200	5127	Only One Room For The Given Rate Can Be Booked
200	5126	Rate key and the rooms specified do not match
200	5112	group_code Does Not Match With The hotel_code or city_code
200	5115	hotel_code Does Not Match With The city_code
200	5110	Stay cannot exceed 30 days
200	5124	Existing Itinerary
200	5123	Credit Card Is Required For Booking
200	5122	Only One Rate_Key Per Booking For Bundled Rates

200	1511	Payment Type is Invalid for the rate_key 'Field[value]'
200	2012	room_code is Invalid for the rate_key 'Field[value]'
200	2013	room_reference is Invalid for the rate_key 'Field[value]'
200	2010	Rooms in the booking request doesn't match with the rooms in the search request
200	5111	Check-out date must be greater than check-in date
200	5120	Request timed out at supplier's end
200	5126	Rate key and the rooms specified do not match
403	5003	Not authorised
200	6000	Supplier error: Error[message]
401	1102	Invalid API key
404	5002	Hotel not found
200	5106	Children ages should be between 0 and 18
200	1505	Insufficient credit to create the booking
200	5139	Atleast one adult required in a room
200	5149	Search and Booking mismatch

10.3 Sample Booking Response

For Bundled Rates

```
{
  "supports_cancellation": true,
  "supports_amendment": false,
  "status": "confirmed",
  "price": {
    "total": 18805.01,
    "breakdown": {
      "surcharge_or_tax": [
        {
          "name": "TaxAndServiceFee",
          "included": true,
          "currency": "INR",
          "amount_type": "value",
          "amount": 1064.42
        }
      ],
      "hotel_charges": [
        {
          "name": "MandatoryTax",
          "included": false,
          "currency": "INR",
          "amount_type": "value",
          "amount": 290.03
        }
      ],
      "net": [
        {
          "name": "Net",
          "included": true,
          "currency": "INR",
          "amount_type": "value",
          "amount": 18805.01
        }
      ]
    }
  },
  "payment_type": "AT_WEB",
  "payment_status": "paid",
  "non_refundable": true,
  "hotel": {
    "paxes": [
      {
        "type": "CH",
        "surname": "Patrick",
        "pax_id": 1,
        "name": "Luke"
      },
      {
        "type": "AD",
        "surname": "Patrick",
        "pax_id": 2,
        "name": "Harry"
      }
    ],
    {
```

```

    "type": "AD",
    "surname": "Patrick",
    "pax_id": 3,
    "name": "Henry"
  },
  {
    "type": "AD",
    "surname": "Patrick",
    "pax_id": 4,
    "name": "Sam"
  }
],
"name": "Lutecia Smart Design Hotel",
"hotel_code": "H!0049396",
"geolocation": {
  "longitude": "-9.138914",
  "latitude": "38.746067"
},
"description": "This smart design hotel is located in a prime residential area in Lisbon, close to the popular Avenida de Roma. Guests will find Rossio square and the city centre just a short metro ride away, making this establishment an ideal base for those travellers wishing to explore this vibrant city. Spread over 9 themed floors, the tastefully decorated guest rooms boast panoramic views over the city and offer an array of modern conveniences to guarantee a truly memorable stay, such as air conditioning and satellite television. Guests will appreciate the fusion restaurant serving a wide choice of Portuguese dishes as well as Indian specialities. Five meeting rooms are available to meet all business travellers' needs.",
"country_code": "PT",
"city_code": "C!000555",
"category": "4",
"booking_items": [
  {
    "rooms": [
      {
        "room_reference": 1234,
        "pax_ids": [
          4
        ],
        "no_of_children": 0,
        "no_of_adults": 1,
        "bed_type": {
          "type": "2 twin beds",
          "id": 25
        }
      }
    ],
  },
  {
    "room_reference": 1235,
    "pax_ids": [
      1, 2, 3
    ],
    "no_of_children": 1,
    "no_of_adults": 2
  }
]
],

```

```

"room_code": "4ddfznb7quczuc33xsqkf6441jk5rvm6s6ovvts2fdbr7hochiq",
"price": 18805.01,
"other_inclusions": [
  "Breakfast Buffet",
  "Free Wireless Internet"
],
"non_refundable": true,
"includes_boarding": true,
"currency": "INR",
"cancellation_policy": {
  "under_cancellation": true,
  "details": [
    {
      "percent": 100,
      "from": "2016-11-22T08:44:05.447386Z",
      "currency": "INR"
    }
  ],
  "amount_type": "percent"
},
"boarding_details": [
  "Breakfast Buffet"
]
}
],
"address": "Av. Frei Miguel Contreiras 52 1749-086 Lisboa"
},
"holder": {
  "title": "Mr.",
  "surname": "Patrick",
  "phone_number": "6614565589",
  "name": "James",
  "email": "james@pat.com",
  "client_nationality": "fr"
},
"currency": "INR",
"checkout": "2016-12-30",
"checkin": "2016-12-29",
"booking_reference": "5hngtnl3x15uga",
"booking_id": "GRN-201611-000568",
"booking_date": "2016-11-22T08:44:06",
"booking_comment": "Testing",
"additional_info": {
  "tax_information": "SalesTax and HotelOccupancyTax(if charged) are included in TaxAndServiceFee",
  "spl_checkin_instructions": "Extra-person charges may apply and vary depending on property policy. <br />Government-issued photo identification and a credit card or cash deposit are required at check-in for incidental charges. <br />Special requests are subject to availability upon check-in and may incur additional charges. Special requests cannot be guaranteed. <ul><li>No onsite parking is available. </li></ul>",
  "checkin_instructions": "Extra-person charges may apply and vary depending on property policy. <br />Government-issued photo identification and a credit card or cash deposit are required at check-in for incidental charges. <br />Special requests are subject to availability upon check-in and may incur additional charges. Special requests cannot be guaranteed. <ul><li>No onsite parking is available. </li></ul>"
}
}

```

For Non Bundled Rates

```
{
  "supports_cancellation": true,
  "supports_amendment": false,
  "status": "confirmed",
  "price": {
    "total": 16966.59,
    "breakdown": {
      "net": [
        {
          "name": "Net",
          "included": true,
          "currency": "INR",
          "amount_type": "value",
          "amount": 16966.59
        }
      ]
    }
  },
  "payment_type": "AT_WEB",
  "payment_status": "pending",
  "hotel": {
    "paxes": [
      {
        "type": "CH",
        "surname": "Patrick",
        "pax_id": 1,
        "name": "Luke"
      },
      {
        "type": "AD",
        "surname": "Patrick",
        "pax_id": 2,
        "name": "Harry"
      },
      {
        "type": "AD",
        "surname": "Patrick",
        "pax_id": 3,
        "name": "Henry"
      },
      {
        "type": "AD",
        "surname": "Patrick",
        "pax_id": 4,
        "name": "Sam"
      }
    ],
    "name": "Lutecia Smart Design Hotel",
    "hotel_code": "H!0049396",
    "geolocation": {
      "longitude": "-9.138914",
      "latitude": "38.746067"
    },
    "description": "This smart design hotel is located in a prime residential area in
```

Lisbon, close to the popular Avenida de Roma. Guests will find Rossio square and the city centre just a short metro ride away, making this establishment an ideal base for those travellers wishing to explore this vibrant city. Spread over 9 themed floors, the tastefully decorated guest rooms boast panoramic views over the city and offer an array of modern conveniences to guarantee a truly memorable stay, such as air conditioning and satellite television. Guests will appreciate the fusion restaurant serving a wide choice of Portuguese dishes as well as Indian specialities. Five meeting rooms are available to meet all business travellers' needs.",

```

"city_code": "C!000555",
"category": "4",
"booking_items": [
  {
    "rooms": [
      {
        "room_type": "28076",
        "room_reference": "BB",
        "pax_ids": [
          1,
          2,
          3
        ],
        "no_of_children": 1,
        "no_of_adults": 2,
        "description": "City Room"
      }
    ],
    "price": 12182.37,
    "non_refundable": false,
    "includes_boarding": true,
    "currency": "INR",
    "cancellation_policy": {
      "under_cancellation": false,
      "details": [
        {
          "from": "2016-12-28T00:00:00",
          "flat_fee": 12182.37,
          "currency": "INR"
        }
      ]
    },
    "cancel_by_date": "2016-12-27T00:00:00",
    "amount_type": "value"
  },
  "boarding_details": [
    "Bed & Breakfast"
  ]
},
{
  "rooms": [
    {
      "room_type": "28076",
      "room_reference": "BB",
      "pax_ids": [
        4
      ],
      "no_of_children": 0,
      "no_of_adults": 1,
      "description": "City Room"
    }
  ]
}

```

```

    }
  ],
  "price": 11602.47,
  "non_refundable": false,
  "includes_boarding": true,
  "currency": "INR",
  "cancellation_policy": {
    "under_cancellation": false,
    "details": [
      {
        "from": "2016-12-28T00:00:00",
        "flat_fee": 11602.47,
        "currency": "INR"
      }
    ]
  },
  "cancel_by_date": "2016-12-27T00:00:00",
  "amount_type": "value"
},
"boarding_details": [
  "Bed & Breakfast"
]
}
],
"address": "Av. Frei Miguel Contreiras 52 1749-086 Lisboa"
},
"holder": {
  "title": "Mr.",
  "surname": "Patrick",
  "phone_number": "6614565589",
  "name": "James",
  "email": "james@pat.com",
  "client_nationality": "fr"
},
"currency": "INR",
"checkout": "2016-12-30",
"checkin": "2016-12-29",
"booking_reference": "ftjtcf167mmlgii",
"booking_id": "GRN-201611-000566",
"booking_date": "2016-11-22T08:11:51",
"booking_comment": "Testing",
"additional_info": {
  "Msg": "Global Warnings for HOTELS"
}
}
}

```

11. Fetch a Booking with booking reference

You can use this method to fetch a single booking using booking reference.

Method	Endpoint
GET	api/v3/hotels/bookings/<bref>

<bref> refers to the 'booking_reference' returned in the booking response.

11.1 Error Codes

HTTP Status Code	Error Code	Description
404	5121	Booking not found
200	2002	Invalid Booking Reference

12. Cancellation Request

12.1 Request

Method	Endpoint
DELETE	api/v3/hotels/bookings/<bref>

<bref> refers to the 'booking_reference' returned in the booking response.

12.2 Payload

Attribute	Type	Required	Description
comments	string	OPTIONAL	Cancellation comments

12.3 Sample Cancellation Payload

```
{
  "comments": "cancellation comments"
}
```

13. Cancellation Response

13.1 Response

Attribute	Type	Description
cancellation_reference	string	Unique cancellation code
cancellation_comments	string	Cancellation message
status	string	Cancellation status will be one of the following <ul style="list-style-type: none">● Confirmed● Failed● Rejected● Pending
cancellation_charges	object	When available, cancellation charges are returned as shown below <pre>{ "amount": 346.42, "currency": "EUR" }</pre>
booking_id	string	Booking ID
booking_reference	string	Booking reference
booking_price	object	Booking price as shown below <pre>{ "amount": 346.42, "currency": "EUR" }</pre>

13.2 Error Codes

HTTP Status Code	Error Code	Description
200	2003	Booking has already been cancelled
200	2002	Invalid Booking Reference
200	5120	Request timed out at supplier's end
404	5121	Booking not found
200	5151	This Booking cannot be cancelled from Supplier's end. Supplier does not support cancellation from API if the cancel_by_date has crossed or is under_cancellation
200	2006	Need confirmation from supplier
200	5143	Past booking items cannot be cancelled
200	5142	Changes cannot be done to this booking item

13.3 Sample Cancellation Response

```
{
  "status": "confirmed",
  "cancellation_reference": "i5qaijh2qujw7k4km4sueop63a",
  "cancellation_comments": "cancellation comments",
  "cancellation_charges": {
    "currency": "INR",
    "amount": 0
  },
  "booking_reference": "ftjtcf167mmlgii",
  "booking_price": {
    "currency": "INR",
    "amount": 16966.59
  },
  "booking_id": "GRN-201611-000566"
}
```

14. Fetch Bookings List

You can use this method to fetch all bookings and cancellations.

Method	Endpoint
GET	api/v3/hotels/bookings

Parameters

Attribute	Type	Required	Description
filter_type	string	OPTIONAL	'booking_date' to fetch bookings based on booking date 'checkin_date' to fetch bookings based on check-in date Defaults to 'booking_date'
start	date	OPTIONAL	The starting date for the given filter type
end	date	OPTIONAL, REQUIRED IF 'start' IS GIVEN	The end date for the given filter type
from	string	OPTIONAL	Booking reference of the starting item
count	integer	OPTIONAL REQUIRED IF 'from' IS GIVEN	Number of bookings to fetch Maximum value is 100 Defaults to 30
direction	string	OPTIONAL REQUIRED IF 'from' IS GIVEN	'next' to fetch the next 'count' bookings 'prev' to fetch the previous 'count' bookings
type	string	OPTIONAL	Type of the booking 'B' to fetch bookings 'C' to fetch cancellations When type is not specified, both types are fetched

Note

- 'start' and 'end' date duration cannot exceed 30 days
- When no options are given, recent 30 bookings will be fetched (both types)

14.1 Sample Response

```
{
  "total":474,
  "count":1,
  "bookings":[
    {
      "supports_cancellation":true,
      "supports_amendment":true,
      "supplier_reference":"5007557",
      "search_id":"d3kmmkyqvuhyi7pnrkcm5szkvu",
      "price":{
        "total":"16966.59",
        "breakdown":{
          "name":"Net",
          "amount":"16966.59"
        }
      }
    },
    "payment_type":"AT_WEB",
    "payment_status":"pending",
    "nationality":"fr",
    "hotel":{
      "paxes":[
        {
          "type":"AD",
          "surname":"Patrick",
          "pax_id":4,
          "name":"Sam"
        },
        {
          "type":"AD",
          "surname":"Patrick",
          "pax_id":3,
          "name":"Henry"
        },
        {
          "type":"AD",
          "surname":"Patrick",
          "pax_id":2,
          "name":"Harry"
        },
        {
          "type":"CH",
          "surname":"Patrick",
          "pax_id":1,
          "name":"Luke"
        }
      ]
    },
    "hotel_code":"H!0049396",
    "city_code":"C!000555",
    "booking_items":[
      {
        "rooms":[
          {

```

```

        "room_type": "28076",
        "room_reference": "BB",
        "pax_ids": [
            4
        ],
        "no_of_children": 0,
        "no_of_adults": 1
    }
],
"price": "11602.47",
"non_refundable": false,
"includes_boarding": true,
"currency": "INR",
"cancellation_policy": {
    "under_cancellation": false,
    "details": [
        {
            "from": "2016-12-28T00:00:00",
            "flat_fee": "11602.47",
            "currency": "INR"
        }
    ],
    "cancel_by_date": "2016-12-27T00:00:00",
    "amount_type": "value"
},
"boarding_details": [
    "Bed & Breakfast"
]
},
{
    "rooms": [
        {
            "room_type": "28076",
            "room_reference": "BB",
            "pax_ids": [
                3,
                2,
                1
            ],
            "no_of_children": 1,
            "no_of_adults": 2
        }
    ],
    "price": "12182.37",
    "non_refundable": false,
    "includes_boarding": true,
    "currency": "INR",
    "cancellation_policy": {
        "under_cancellation": false,
        "details": [
            {
                "from": "2016-12-28T00:00:00",
                "flat_fee": "12182.37",
                "currency": "INR"
            }
        ]
    },
    ],

```

```

        "cancel_by_date": "2016-12-27T00:00:00",
        "amount_type": "value"
    },
    "boarding_details": [
        "Bed & Breakfast"
    ]
}
]
},
"holder": {
    "surname": "Patrick",
    "phone_number": "6614565589",
    "name": "James",
    "email": "james@pat.com"
},
"currency": "INR",
"checkout": "2016-12-30",
"checkin": "2016-12-29",
"booking_type": "C",
"booking_status": "cancellation confirmed",
"booking_reference": "rpftjtcfl67mmlgiigtbezboy",
"booking_id": "GRN-201611-000566",
"booking_date": "2016-11-22T08:11:51"
}
]
}

```

14.2 Error Codes

HTTP Status Code	Error Code	Description
200	2005	Internal server error
200	5128	Field(type_1) is required when Field(type_2) is given
200	5129	Field(name) dates must be valid, and in ISO8601 format (YYYY-MM-DD)
200	5130	start and end date duration cannot exceed 30 days
200	5131	a maximum of 100 bookings can be viewed at a time
200	5132	type must be either B or C (Booking, Cancelled)
200	5133	filter_type type must be either booking_date or checkin_date

15. Images

You can use this method to fetch images for a given hotel using hotel_code.

Method	Endpoint
GET	api/v3/hotels/<hcode>/images

<hcode> refers to the 'hotel_code' returned in the search response.

N.B: All image paths should be prefixed with the base url : <https://cdn.grnconnect.com/>

Example : <https://cdn.grnconnect.com/hotels/images/fa/67/fa67573977698e4442dd4c301168a-20c9bd411b4.jpg>

15.1 Response

Attribute	Type	Description
images	object	An object of image paths grouped by size.

Images

Attribute	Type	Description
regular	array	Contains the list of image paths
small	array	Contains the list of image paths
large	array	Contains the list of image paths

15.2 Error Codes

HTTP Status Code	Error Code	Description
200	1507	Invalid hotel code
200	5137	No images found for the hotel
404	5002	Hotel not found

15.3 Sample Response

```
{
  "images": {
    "regular": [
      {
        "path": "hotels/images/fa/67/fa67573977698e4442dd4c301168a20c9bd411b4.jpg"
      },
      {
        "path": "hotels/images/e4/14/e414d4545fe00cd16336ab91af20ccdc4ccdec31.jpg"
      }
    ]
    "small": [
      {
        "path": "hotels/images/ff/e7/ffe7d4545fe00cd16336ab91af20ccdc4ccdec31.jpg"
      }
    ],
    "large": [
      {
        "path": "hotels/images/07/1d/071dd4545fe00cd16336ab91af20ccdc4ccdec31.jpg"
      }
    ]
  }
}
```

16. Static Assets

All required static assets can be downloaded from the following url.

URL : <https://cdn.grnconnect.com/static-assets/>

The above link will contain the master data for the following:

- Country codes
- Destination codes
- City codes
- Airport codes
- Currency codes

16.1 Countries

You can use this method to fetch

1. All the countries and their details
2. Country details based on the country code.

16.1.1 Get Countries

Method	Endpoint
GET	<code>api/v3/countries</code>

Sample Response

```
{
  "total": 2,
  "countries": [
    {
      "name": "Zimbabwe",
      "code3": "ZWE",
      "code": "ZW"
    },
    {
      "name": "Zambia",
      "code3": "ZMB",
      "code": "ZM"
    }
  ]
}
```

16.1.2 Get Country details using Country code

Method	Endpoint
GET	api/v3/countries/<country_code>

Sample Get Country details using Country code request

Method	Endpoint
GET	api/v3/countries/ZW

Sample Response

```
{
  "total": 1,
  "country": {
    "name": "Zimbabwe",
    "code3": "ZWE",
    "code": "ZW"
  }
}
```

16.2 Destinations

You can use this method to fetch

1. All the destinations and their details
2. Destination details based on the Destination code
3. All the Destinations available in the Country.

16.2.1 Get Destinations

Method	Endpoint
GET	api/v3/destinations

Sample Response

```
{
  "total": 2,
  "destinations": [
    {
      "code": "D!000683",
      "name": "Aarhus",
      "country": "DK"
    },
    {
      "code": "D!001447",
      "name": "Abchasien",
      "country": "GE"
    }
  ]
}
```

16.2.2 Get Destination details using destination code

Method	Endpoint
GET	api/v3/destination/<destination_code>

Sample Request

Method	Endpoint
GET	api/v3/destination/D!000683

Sample Response

```
{
  "total": 1,
  "destination": {
    "code": "D!000683",
    "name": "Aarhus",
    "country": "DK"
  }
}
```

16.2.3 Get Destinations available in the Country

Method	Endpoint
GET	api/v3/destinations?country=<country_code>

Sample Request

Method	Endpoint
GET	api/v3/destination/?country=DZ

Sample Response

```
{
  "total": 2,
  "destinations": [
    {
      "code": "D!000890",
      "name": "Algeria",
      "country": "DZ"
    },
    {
      "code": "D!000891",
      "name": "Algeria",
      "country": "DZ"
    }
  ]
}
```

16.3 Cities

You can use this method to fetch

1. All the Cities and their details
2. City details based on the City code
3. All the Cities available in the Country.
4. All the Cities available in the Destination.

16.3.1 Get Cities Request

Method	Endpoint
GET	api/v3/cities/

Sample Response

```
{
  "total": 2,
  "cities": [
    {
      "name": "Zaafaranah, Red Sea, Egypt, EG",
      "code": "C!000001"
    },
    {
      "name": "Dahab, Sinai, Egypt, EG",
      "code": "C!000002"
    }
  ]
}
```

16.3.2 Get City Details using City code

Method	Endpoint
GET	api/v3/cities/<city_code>

Sample Request

Method	Endpoint
GET	api/v3/cities/C!000001

Sample Response

```
{
  "total": 1,
  "city": {
    "name": "Zaafaranah, Red Sea, Egypt, EG",
    "dest_code": "D!001031",
    "country": "EG",
    "code": "C!000001"
  }
}
```

16.3.3 Get Cities available in the Country

Method	Endpoint
GET	api/v3/cities?country=<country_code>

Sample Request

Method	Endpoint
GET	api/v3/cities?country=IN

Sample Response

```
{
  "total": 2,
  "cities": [
    {
      "name": "South 24 Parganas, West Bengal, India, IN",
      "code": "C!076452"
    },
    {
      "name": "Abohar, Punjab, India, IN",
      "code": "C!077294"
    }
  ]
}
```

16.3.4 Get Cities available in the Destination

Method	Endpoint
GET	api/v3/cities?destination=<destination_code>

Sample Request

Method	Endpoint
GET	api/v3/cities?destination=D!001031

Sample Response

```
{
  "total": 2,
  "cities": [
    {
      "name": "Hurghada",
      "dest_code": "D!001031",
      "country": "EG",
      "code": "C!000003"
    },
    {
      "name": "Zaafaranah",
      "dest_code": "D!001031",
      "country": "EG",
      "code": "C!000001"
    }
  ]
}
```

16.4 Airports

You can use this method to fetch

1. All the Airports and their details
2. Airport details based on the airport code.

16.4.1 Request

Method	Endpoint
GET	api/v3/airports/

Sample Response

```
{
  "total": 1,
  "airports": [
    {
      "name": "Rome State Airport",
      "code": "A!REO",
      "city_name": "Rome"
    }
  ]
}
```

16.4.2 Get Airport Details using Airport code

Method	Endpoint
GET	api/v3/airports/<airport_code>

Sample Request

Method	Endpoint
GET	api/v3/airports/A!REO

Sample Response

```
{
  "total": 1,
  "airport": {
    "name": "Rome State Airport",
    "code": "A!REO",
    "city_name": "Rome"
  }
}
```

16.5 Currencies

You can use this method to fetch

1. All the Currencies and their details
2. Currency details based on the currency code.

16.5.1 Get Currencies Request

Method	Endpoint
GET	api/v3/currencies/

Sample Response

```
{
  "total": 1,
  "currencies": [
    {
      "name": "Euro",
      "code": "EUR"
    }
  ]
}
```

16.5.2 Get Currency details using currency code

Method	Endpoint
GET	api/v3/currencies/<currency_code>

Sample Request

Method	Endpoint
GET	api/v3/currencies/EUR

Sample Response

```
{
  "total": 1,
  "currency": {
    "name": "Euro",
    "code": "EUR"
  }
}
```

APPENDIX

A1. Response Schema

Responses sent by GRNconnect API servers conform to the following structure.

```
{
  "$schema": "http://json-schema.org/draft-04/schema#",
  "id": "/api/v3/response-schema#",
  "title": "Response Schema",
  "description": "Schema definition for a compliant API response",
  "type": "object",
  "properties": {
    "oneOf": [
      {
        "$ref": "#/definitions/data"
      },
      {
        "$ref": "#/definitions/error"
      }
    ],
    "links": {
      "type": "array",
      "items": {
        "$ref": "#/definitions/link"
      },
      "uniqueItems": true
    },
    "meta": {
      "$ref": "#/definitions/meta"
    }
  },
  "definitions": {
    "data": {
      "type": "object",
      "description": "The primary payload of the request.",
      "properties": {
        "type": {
          "type": "string",
          "description": "The unique name of the resource class.",
          "minLength": 1
        },
        "id": {
          "type": "string",
          "description": "The unique ID of the resource.",
          "minLength": 1
        },
        "revision": {
          "type": "integer",
          "description": "A monotonously increasing version number.",
          "minimum": 1
        },
        "attributes": {
          "type": "object",
          "description": "Data members of the resource.",
          "minProperties": 1
        }
      }
    }
  }
}
```

```

"links": {
  "type": "array",
  "description": "Relationship information of the current resource to other
resources.",
  "items": {
    "$ref": "#/definitions/link"
  },
  "uniqueItems": true
},
"required": [
  "type"
],
"additionalProperties": false
},
"link": {
  "type": "object",
  "properties": {
    "rel": {
      "type": "string",
      "description": "Specification of the relationship.",
      "minLength": 1
    },
    "href": {
      "type": "string",
      "description": "Absolute or relative URI pointing to the related resource.",
      "format": "uri"
    }
  },
  "required": ["rel", "href"],
  "additionalProperties": true
},
"error": {
  "type": "object",
  "properties": {
    "code": {
      "type": "string",
      "description": "Application-specific error code.",
      "minLength": 1
    },
    "title": {
      "type": "string",
      "description": "A short description of the error; in English.",
      "minLength": 1,
      "maxLength": 150
    },
    "message": {
      "type": "string",
      "description": "A more detailed description of the error; localised.",
      "minLength": 10,
      "maxLength": 10000
    }
  },
  "required": ["code", "title", "message" ],
  "additionalProperties": true
},

```

```

"meta": {
  "properties": {
    "status": {
      "type": "string",
      "description": "HTTP status code of this response."
    },
    "message": {
      "type": "string",
      "description": "Associated information, if any."
    }
  },
  "required": [ "status" ],
  "additionalProperties": true
},
"required": [ "meta" ]
}

```

Thus, the top-level object MAY contain either “data” or “error” sub-objects, but not both. They are both OPTIONAL, however. A valid response MAY have neither of them included in a response.

The OPTIONAL array “links” MAY have link resources to aiding in navigation or context-specific actions. Consumers of GRNconnect API can ignore this currently.

The REQUIRED member “meta” contains a copy of the message’s HTTP status code associated with this response, as well as OPTIONAL additional information. Such information MAY provide additional context, where applicable.

The response payloads described in this document, accordingly, are the “data” part of this schema definition.

GRNconnect may revise the schema or other data definitions from time to time, in order to best serve the evolving needs of the API.