IQ AGENT MIDDLEWARE API DOCUMENTATION

Introduction

IQ Agent Middleware Api documentation

Doc version	Date	Description
v1.0	27/09/2019	First documentation of available api methods
v1.1	02/02/2020	Updated section 2 - Accounts
v1.2	15/12/2020	Updated Promocode lookup api endpoint url to v2 and added
		new sample response.
v1.3	10/06/2022	Added description for RoomList and Booking endpoints.
v1.4	28/04/2023	Added implementation diagram
v1.5	21/06/2023	Added DoubleOccupancy and Accessible flags properties to
		RoomAvailability endpoint response object.

Section 1 API Endpoints

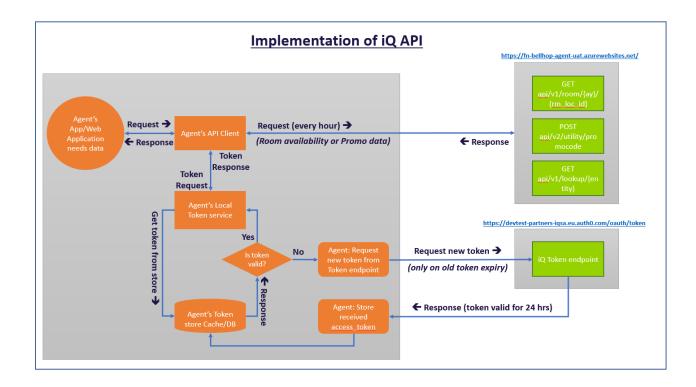
API Base url - UAT: https://fn-bellhop-agent-uat.azurewebsites.net/

Response type: Json Response codes:

- 200 OK (with data)
- 400 Bad request/Invalid request
- 401 Unauthorised access
- 404 Resource not found
- 500 Internal server error

Conventions:

- Compound-named input field format: snake_case e.g. rm_loc_id
- Compound-named output field format: camelCase e.g. roomName
- All input field letter case: lowercase e.g. gender, start_date
- Single word output field letter case: lowercase e.g. gender
- Acronym word in a camelCase field name: Title case e.g. roomld, roomTypeld, sugarCrmId



1.1 Room Availability

Room Availability API method

Gets a list of room availability data for defined route parameters.

"TermSessionID": "3437",

"ContractDateStart": "10/09/2023",

Valid format for {ay} is academic year e.g.: 2023-24

Valid value for {rm_loc_id} is roomLocationId from lookup value field in roomlocation lookup.

API	Query/Route Parameters Name	Value Type (M) – Mandatory (O) - Optional
GET		
api/v1/room/{ay}/{rm_loc_id}	ay	String (M)
	rm_loc_id	String (M)

```
Sample Request - Get Room Availability at iQ Shoreditch
Method
                 GET
URL
                 https://fn-bellhop-agent-uat.azurewebsites.net/api/v1/room/2023-24/13
Headers:
authorization
                 Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NilsImtpZCI6lk9FUXRGY0Hg7O23lEAsQCeTUjP_47Zcyp=
Content-Type
                 Application/json
Routeparameter
                 For this example: {ay} - Academic year (2023-24). {rm_loc_id} - RoomLocationId (13 - iQ Shoreditch)
Sample Response – Get Room availability at iQ Shoreditch
200
                   {
                     "TermID": "3857",
                      "TermDescription": "*2023-24 16wks Starting 10/09/2023 Sem 1",
                      "TermSessionID": "3437",
                      "ContractDateStart": "10/09/2023",
                      "ContractDateEnd": "31/12/2024",
                     "RoomLocationArealD": "50",
                      "RoomLocationAreaDescription": "iQ - London Shoreditch",
                      "RoomLocationID": "13",
                     "RoomLocationDescription": "Shoreditch",
                      "RoomTypeID": "171",
                     "RoomTypeDescription": "Bronze Studio",
                      "Amount": "428.00",
                      "NumberOfRooms": "0",
                     "Link": "",
                      "DepositAmount": "250.00",
                     "weeks": "16",
                      "AllowWebBooking": "True",
                      "DoubleOccupancy": "False",
                      "Accessible": "False"
                   },
                      "TermID": "3857",
                      "TermDescription": "*2023-24 16wks Starting 10/09/2023 Sem 1",
```

```
"ContractDateEnd": "31/12/2024",
  "RoomLocationArealD": "50",
  "RoomLocationAreaDescription": "iQ - London Shoreditch",
  "RoomLocationID": "13",
  "RoomLocationDescription": "Shoreditch",
  "RoomTypeID": "200",
  "RoomTypeDescription": "Bronze Studio Plus",
  "Amount": "449.00",
  "NumberOfRooms": "6",
  "Link": "",
  "DepositAmount": "250.00",
  "weeks": "16",
  "AllowWebBooking": "True",
  "DoubleOccupancy": " True",
  "Accessible": "True"
  "TermID": "3857",
  "TermDescription": "*2023-24 16wks Starting 10/09/2023 Sem 1",
  "TermSessionID": "3437",
  "ContractDateStart": "10/09/2023",
  "ContractDateEnd": "31/12/2024",
  "RoomLocationAreaID": "50",
  "RoomLocationAreaDescription": "iQ - London Shoreditch",
  "RoomLocationID": "13",
  "RoomLocationDescription": "Shoreditch",
  "RoomTypeID": "172",
  "RoomTypeDescription": "Silver Studio",
  "Amount": "447.00",
  "NumberOfRooms": "3",
  "Link": "",
  "DepositAmount": "250.00",
  "weeks": "16",
  "AllowWebBooking": "True",
  "DoubleOccupancy": " True",
  "Accessible": "False"
}
```

Note:

"allowWebBooking" would be "False" for Twin rooms & rooms requiring gender matching.

1.2 Promo Code Lookup

Promo Code Lookup API method.

Gets a list of promotion codes by academic year, room location Id (iQ property), and room type.

Valid format for {ay} is academic year e.g.: 2023-24

 $\label{thm:combocation} Valid \ value \ for \ \{rm_loc_id\} \ is \ roomLocationId \ from \ lookup \ value \ field \ in \ \textbf{roomlocation} \ lookup.$

Valid value for {rm_type_id} is roomTypeId from lookup value field in **roomtype** lookup.

API	Query/Route Parameters Name	Value Type (M) – Mandatory (O) - Optional
POST		
api/v2/utility/promocode	ay	String(M)
	rm_loc_id	String(M)
	rm_type_id	String(M)

```
Sample Request - Get Promo Codes
Method
                POST
URL
                https://fn-bellhop-agent-uat.azurewebsites.net/api/v2/utility/promocode
Headers:
authorization
                 Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzl1NilsImtpZCl6lk9FUXRGY0Hq7O23DIEAsQCeTUjP 47Zcyp=
Content-Type
                Application/json
Body:
  "rm_loc_id":"13",
  "rm_type_id":"172",
  "ay":"2023-24"
Sample Response – Get Promo Codes
200
                     "termId": "3867",
                     "term": "*2023-24 43wks Starting 10/09/2023",
                     "roomLocationId": "13",
                     "roomLocation": "Shoreditch",
                     "roomTypeld": "172",
                     "roomType": "Silver Studio",
                     "promotionType": "New Booker",
                     "dealDescription": "2023-24 Offers Available",
                     "promotionName": " £500 Cashback",
                     "promotionCode": "SHOR500-260122",
                     "promotionDescription": "Book this room for the 2023/24 academic year using code SHOR500-
                260122 to receive £500 cashback. Minimum of 34-week tenancy contracts. T&Cs apply.",
                     "promotionValue": "500.00",
                     "minContractLength": "34",
                     "maxContractLength": "52",
                     "promotionStartDate": "26/01/2023",
                     "promotionEndDate": "",
```

```
"tacLink": "https://www.iqstudentaccommodation.com/202324-new-customer-cashback-terms-
and-conditions"
  },
     "termId": "3860",
    "term": "*2023-24 34wks Starting 07/01/2023 Sem 2",
    "roomLocationId": "13",
    "roomLocation": "Shoreditch",
    "roomTypeld": "172",
    "roomType": "Silver Studio",
    "promotionType": "New Booker",
    "dealDescription": "2023-24 Offers Available",
    "promotionName": " £500 Cashback",
    "promotionCode": "SHOR500-260122",
    "promotionDescription": "Book this room for the 2023/24 academic year using code SHOR500-
260122 to receive £500 cashback. Minimum of 34-week tenancy contracts. T&Cs apply.",
    "promotionValue": "500.00",
    "minContractLength": "34",
    "maxContractLength": "52",
    "promotionStartDate": "26/01/2023",
    "promotionEndDate": "",
    "tacLink": "https://www.iqstudentaccommodation.com/202324-new-customer-cashback-terms-
and-conditions"
  },
    "termId": "3881",
    "term": "*2023-24 51wks Starting 10/09/2023",
    "roomLocationId": "13",
    "roomLocation": "Shoreditch",
    "roomTypeld": "172",
    "roomType": "Silver Studio",
    "promotionType": "New Booker",
    "dealDescription": "2023-24 Offers Available",
    "promotionName": " £500 Cashback",
    "promotionCode": "SHOR500-260122",
    "promotionDescription": "Book this room for the 2023/24 academic year using code SHOR500-
260122 to receive £500 cashback. Minimum of 34-week tenancy contracts. T&Cs apply.",
    "promotionValue": "500.00",
    "minContractLength": "34",
    "maxContractLength": "52",
    "promotionStartDate": "26/01/2023",
    "promotionEndDate": "",
    "tacLink": "https://www.iqstudentaccommodation.com/202324-new-customer-cashback-terms-
and-conditions"
  }
```

1.3 Lookup

Lookup API methods

Gets a list of look up data for defined {entity}.

Use this endpoint to look up values for roomLocationId [rm_loc_id / room_loc_id], and roomTypeId [rm_type_id / room_type_id] needed for the promotion code and the room list endpoints.

Applicable Field name	Lookup {Entity} valid value	
rm_loc_id / room_loc_id	roomlocation	
rm_type_id / room_type_id	roomtype	

API	Query/Route Parameters Name	Value Type (M) – Mandatory (O) - Optional
GET api/v1/lookup/{entity}	Entity – the required lookup entity	String (M)

Sample Request – Lookup for roomlocation		
Method	GET	
URL	https://fn-bellhop-agent-uat.azurewebsites.net/api/v1/lookup/roomlocation	
Headers:		
authorization	Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzl1NilsImtpZCl6lk9FUXRGY0Hg7O23lEAsQCeTUjP_47Zcyp=	
Content-Type	Application/json	
RouteParameter	{entity} value (see table above)	

Sample Response – Lookup for roomlocation (abridged list)

```
[

{
    "Lookup_Value": "97",
    "Lookup_Text": "Elliott House"
},

{
    "Lookup_Value": "10",
    "Lookup_Text": "Exchange"
},

{
    "Lookup_Value": "53",
    "Lookup_Text": "Fenton House"
},

{
    "Lookup_Text": "Fiveways House"
},

]
```

Section 2: Accounts

Account Name: [As provided in authentication details.]

Description: Use to read publicly-served data e.g. room availability etc.

Client ID: [As already provided]

Client Secret: ***********************************

Token Endpoint: https://devtest-partners-igsa.eu.auth0.com/oauth/token [UAT]

INPORTANT!

Token received must be stored on the client side and re-used for the lifetime of the token. (i.e. add the expire_in value [usually 86,400 seconds] to the current date and store as the expiration datetime for the token. New token should only be requested after the expiration datetime.

To avoid rate limit errors, new token **must not** be generated for every request.

Section 3: Example Auth Calls

3.1 PHP Example

```
Sample
                $curl = curl init();
Authorization
Request
                curl setopt array($curl, array(
                 CURLOPT URL => "https://devtest-partners-igsa.eu.auth0.com/oauth/token",
                 CURLOPT RETURNTRANSFER => true,
                 CURLOPT ENCODING => "",
                 CURLOPT MAXREDIRS => 10,
                 CURLOPT_TIMEOUT => 30,
                 CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
                 CURLOPT_CUSTOMREQUEST => "POST",
                 CURLOPT_POSTFIELDS => "{\"client_id\":\"[As already
                provided]\",\"client_secret\":\"************************\",\"audien
                ce\":\"https://agent-bellhop-iq-uat/api
                \",\"grant_type\":\"client_credentials\"}",
                 CURLOPT HTTPHEADER => array(
                  "content-type: application/json"
                 ),
                ));
                $response = curl exec($curl);
                $err = curl_error($curl);
                curl_close($curl);
                if ($err) {
                 echo "cURL Error #:" . $err;
                } else {
                 echo $response;
Sample
Authorisation
                 "access_token": "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImtpZCI6Ik...",
Response
                 "token type": "Bearer"
                }
                // Now extract the access_token and make authorized calls to the API.
Sending the
                // Use this bearer token with an Authorization Header in your request to obtain
access token
                authorized access to the Middleware.
with API
request
                $curl = curl init();
                curl_setopt_array($curl, array(
                 CURLOPT_URL => "http://path_to_the_middleware_api_endpoint/",
                 CURLOPT RETURNTRANSFER => true,
                 CURLOPT_ENCODING => "",
                 CURLOPT MAXREDIRS => 10,
                 CURLOPT_TIMEOUT => 30,
                 CURLOPT_HTTP_VERSION => CURL_HTTP_VERSION_1_1,
```

```
CURLOPT_CUSTOMREQUEST => "GET",
CURLOPT_HTTPHEADER => array(
    "authorization: Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzl1NilsImtpZCl6..."
    ),
    ));

$response = curl_exec($curl);
$err = curl_error($curl);

curl_close($curl);

if ($err) {
    echo "cURL Error #:" . $err;
} else {
    echo $response;
}
```

3.2 JQuery Example

```
Sample
                 var settings = {
Authorization
                  "async": true,
                  "crossDomain": true,
Request
                  "url": "https://devtest-partners-igsa.eu.auth0.com/oauth/token",
                  "method": "POST",
                  "headers": {
                   "content-type": "application/json"
                  },
                  "data": "{\"client_id\":\"\":\"[As already
                 provided]\",\"client_secret\":\"h**********************\",\"audie
                 nce\":\"https://agent-bellhop-iq-uat/api
                 \",\"grant_type\":\"client_credentials\"}"
                 $.ajax(settings).done(function (response) {
                  console.log(response);
                 });
Sample
Authorisation
                  "access token":
                 "eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiIsImtpZCI6Ik9FUXpNeIF5T...",
Response
                  "token_type": "Bearer"
                 // Now extract the access_token and make authorized calls to the API.
                 Use this bearer token with an Authorization Header in your request to obtain
Sending the
access token
                 authorized access to the Middleware.
with API
request
                 var settings = {
                  "async": true,
                  "crossDomain": true,
                  "url": "http://path to the middleware api endpoint/",
                  "method": "GET",
                  "headers": {
                   "authorization": "Bearer eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzl1NilsImtpZNelF5..."
                 }
                 }
                 $.ajax(settings).done(function (response) {
                  console.log(response);
                 });
```