

Introduction

The iVectorOne API allows customers to integrate with a large number of different suppliers via a single API. It is organised around REST with predictable resource-oriented URLs, accepts form-encoded request bodies, returns JSON-encoded responses, and uses standard HTTP response codes, authentication, and verbs.

Accounts

iVectorOne users will be provided with two accounts: Test and Production. The Test account should only be used during the development phase to test your integration and validate your supplier connections. Bookings created in one account cannot be moved to another account.

Authentication

Authentication to the API is performed via HTTP Basic Auth. You will be provided with a different username and password for each account. The credentials you use to authenticate the request determines whether the request is routed to the Test or Production account.

All API requests must be made over HTTPS. Calls made over plain HTTP will fail. API requests without authentication will also fail.

Message Formats

Requests are sent as JSON or in some cases form-encoded. String properties are encoded using UTF-8, and date properties are represented by ISO 8601 strings.

Errors

iVectorOne uses conventional HTTP response codes to indicate the success or failure of an API request. In general: Codes in the 2xx range indicate success. Codes in the 4xx range indicate an error that failed given the information provided (e.g., a required parameter was omitted, etc.). Codes in the 5xx range indicate an error with iVectorOne servers (these are rare).

| Code | Reason |
|------------------------------------|--|
| 400 - Bad Request | The request was unacceptable, often due to missing a required parameter. |
| 401 - Unauthorised | No valid username and / or password provided |
| 500, 502, 503, 504 - Server Errors | Something went wrong on the iVectorOne end. (These are rare.) |

Versioning

The API base URL contains a version identifier. The current version is **V2**.

Whenever we make a backwards-incompatible change to a general availability, non-beta product, we release a new API version to avoid causing breakages for existing developers. You can then continue to use the old API version, or update your application to upgrade to the new API version. APIs for beta products are subject to breaking changes without versioning.

We consider the following changes to be backwards compatible:

- Adding new API endpoints
- Adding new optional parameters to existing endpoints
- Adding new data elements to existing response schemas
- Adding new enum values, including `error_types` and `error_codes`
- Changing the length or format of opaque strings, such as object IDs, error messages, and other human-readable strings.

Postman collection

The Postman collection is a convenient tool for exploring iVectorOne API endpoints without writing code. The Postman collection provides pre-formatted requests for almost all of iVectorOne API endpoints. All you have to do is fill in your authentication and any arguments.

To get started, check out the iVectorOne Postman Collection

<https://documenter.getpostman.com/view/19225969/VUjOmiqT>

Support

For help and support during your integration, please email the support team and we'll do our best to assist.

helpdesk@ivectorone.com

API Reference

Base URL

Each API call has its own REST path relative to the base Url, eg. [Base Url]/property/search.

<https://api.ivectorone.com/v2>

Property List

Retrieve a list of properties

Request

GET [Base URL]/properties

Parameters

| Query Parameter | Data Type | Description |
|-----------------|-----------|---|
| suppliers | String? | Optional comma-separated list of supplier names to list properties for. If blank all properties will be returned. |
| lastmodified | Date? | Optional parameter to filter properties to only those modified after a certain date. |

Response

| Node | Data Type | Description |
|----------------------|-----------|---|
| PropertyListResponse | | |
| Properties | List? | The list of properties. |
| PropertyID | Integer | The unique identifier of the property. This can be used in the GetPropertyContent call to get full content. |

Property Content

Retrieve the full content for specified properties. Includes the content for every third party supplier mapped to that property.

Request

GET [Base URL]/properties

Parameters

| Parameter | Data Type | Description |
|---------------|-----------|--|
| propertyids | String | Comma-separated list of property ids to return content for. This is limited to 500 property ids per request for performance reasons. |
| languageCodes | String? | Optional string. By default English content will be returned only. When specified, any additional content provided by the supplier will be returned. See Appendix 1 for a full list of currently supported languages. Multiple language codes can be specified, separated by commas. |

Response

| Parameter | Data Type | Description |
|---------------------------|-----------|---|
| PropertyContentResponse | | |
| Properties | List ? | The list of properties. |
| PropertyID | Integer | The unique identifier of the property. |
| TTICode | string | The TTI code identifying the property |
| SupplierContent | List | A list of supplier-specific content for the property. |
| SupplierContent | Single | |
| PropertyName | String | The name of the property. |
| Supplier | String | The name of the supplier |
| SupplierPropertyReference | String | The supplier's reference for the property |
| Address | Single | The property Address |
| AddressLine1 | String | The first line of the address |
| AddressLine2 | String ? | The second line of the address |
| TownOrCity | String | The town or city name |
| CountyOrState | String ? | The county or state name |
| PostCodeOrZip | String | The postcode or Zip code |
| Telephone | String | The telephone number |

| | | |
|---------------------|---------|--|
| Geography | Single | |
| Country | String | The name of the country the property is in. |
| Region | String | The name of the region the property is in. |
| Resort | String | The name of the resort the property is in. |
| Latitude | Decimal | The latitude of the property. |
| Longitude | Decimal | The longitude of the property. |
| Code | String | The geography code of the property. |
| Rating | String | The star rating of the property. |
| Description | String | The description of the property |
| Facilities | List ? | A list of facilities that the property provides |
| Facility | String | The name of the facility |
| MainImageURL | String | The URL of the main image |
| Images | List ? | A list of Image URLs |
| ImageURL | String | |
| MultilingualContent | List? | |
| languageCode | String | |
| PropertyName | String | |
| Description | String | |
| ContentVariables | List? | A list of content variables |
| ParentGroupKey | Int | A parent group of the content variable(Distance = 1, Distances= 2, km=3, AccommodationTypes=4,AccommodationType=5) |
| Group | Int | A group of the content variable (Distance = 1, Distances= 2, km=3, AccommodationTypes=4,AccommodationType=5) |
| SubGroup | String? | A subgroup of the content variable |
| Key | String | A subtype of group i.e. AccommodationType |
| Value | String | A value of subtype i.e. Hotel |
| Units | Int | A number of units |

Search

Retrieve the availability for specified properties.

Request

GET [Base URL]/properties/search

Parameters

| Parameter | Data Type | Description |
|-----------------------|--------------|--|
| PropertySearchRequest | | |
| ArrivalDate | Date | The first stay date. |
| Duration | Integer | The length of the stay. |
| Properties | Integer List | CSV of unique identifiers of the properties to search. |
| Rooms | List | <p>Pipe separated room pax combinations</p> <ul style="list-style-type: none"> - (adults,children,infants~child ages) - adults - integer, each room must have at least one - children - integer - Infants - integer - Child ages - csv of integer, total must match # of children (infant ages don't need to specified) <p>E.g. rooms=(1,1,1~7) (2,0,0)</p> <ul style="list-style-type: none"> - Is a 2 room search - Room 1 - 1 Adult, 1 child, 1 infant, aged 7(child) - Room 2 - 2 Adults |
| NationalityID | String? | The lead guest nationality ID using ISO 3166-2 country code |
| Currency code | String? | The ISO 4217 currency code. (Default is set to GBP) |
| OpaqueRates | String? | A boolean indicating whether opaque rates are supported (Default false) |
| SellingCountry | String? | The selling country using ISO 3166-2 country code |
| Suppliers | String? | The supplier(s) to search |
| DedupeMethod | String? | <p>The method of which the results will be deduped by. Will be one of four options:</p> <ul style="list-style-type: none"> • cheapestLeadIn • cheapestLeadInByMealBasis • roomTypeAndMealBasis • none <p>Further explanation on what each means can be found in the appendixes.</p> |
| emailLogsTo | String | The email address to send supplier search logs to that relate to the search request |

Response

| Parameter | Data Type | Description |
|---------------------------|-----------|--|
| PropertySearchResponse | | |
| PropertyResults | List ? | The property search results. |
| PropertyResult | Single | |
| BookingToken | String | Stores information needed to book the result. Must be passed into the pre-book request. |
| PropertyID | Integer | Unique property identifier. |
| RoomTypes | List | List of bookable room results. |
| RoomType | Single | Header node for a single bookable room beneath the RoomTypes node |
| RoomID | Integer | Unique identifier of the rooms in the order they were specified in the request. |
| RoomBookingToken | String | Stores information needed to book the room result. Must be passed into the pre-book request. |
| SupplierReference1 | String | Room Token returned from the third party. Must be passed into the pre-book request |
| SupplierReference2 | String | Room Token returned from the third party. Must be passed into the pre-book request |
| Supplier | String | The name of the supplier. |
| SupplierPropertyReference | String | The Supplier Property Reference. |
| MealBasisCode | String | Unique identifier of the meal basis. |
| RoomType | String | The name of the room type. |
| RoomTypeCode | String | The code of the room type. |
| SupplierRoomType | String | The supplier's name for the room type. |
| CurrencyCode | String | The ISO code of the currency. |
| TotalCost | Decimal | The total cost of the room. |
| Discount | Decimal | The discount for the room. |
| NonRefundable | Boolean | Determines whether the room is refundable. |
| RateCode | String | The rate code for the room. |
| CancellationTerms | List ? | The cancellation terms for the room, if supported at search. |
| CancellationTerm | Single | |
| StartDate | Date | The start date of the cancellation policy. |
| EndDate | Date | The end date of the cancellation policy. |

| | | |
|----------------------|-----------|--|
| Amount | Decimal | The cancellation cost. Note that this expressed as a percentage of the total cost |
| Adjustments | List? | The adjustment terms for the room, if supported at search. |
| AdjustmentType | String | The adjustment type. Possible values : Supplement, Offer, Tax |
| AdjustmentName | String | The name of the adjustment |
| AdjustmentAmount | Decimal | The amount of the adjustment |
| Description | String | The description of the adjustment |
| CommissionPercentage | Decimal ? | The commission percentage of the room type |
| OnRequest | Boolean ? | Determines whether room is on request |
| GrossCost | Decimal ? | The gross cost of the room type. Only returned if different than the amount and not 0. |
| RateBasis | String | Advises the strategy for pricing based on the type of rate received. Possible values: Net, Gross Margin. |
| SpecialOffer | String | Special offer that applies to this room. |
| PayLocalRequired | Boolean | Whether paying at the hotel is the only payment option permitted (cannot pre-pay). Note that this option is only relevant to the following suppliers: Amadeus Hotels, Price Travel, Trend Operadora and Expedia Rapid. |
| PayLocalAvailable | Boolean | Whether paying at the hotel is allowed. Note that this option is only relevant to the following suppliers: Amadeus Hotels, Price Travel and Trend Operadora. |
| AvailableRooms | Integer | Max number of rooms available to book. Only rooms with availability are returned therefore a value of 0 is equivalent to no max cap / unlimited. |

Pre-book

Confirm the availability and price for specified properties.

Request

POST [Base URL]/properties/prebook

Parameters

| Parameter | Data Type | Description |
|------------------------|-----------|--|
| PropertyPrebookRequest | | |
| BookingToken | String | Taken from a property result in the property search response. |
| RoomBookings | List | A list of room search results to pre-book. |
| RoomBooking | Single | |
| RoomBookingToken | String | Taken from a room result in the property search response. |
| SupplierReference1 | String | Taken from a room result in the property search response. |
| SupplierReference2 | String | Taken from a room result in the property search response. |
| Nationality ID | String? | The customer nationality ID using ISO 3166-2 country code |
| OpaqueRates | String? | A boolean indicating whether opaque rates are supported(Default false) |
| SellingCountry | String? | The source market country using ISO 3166-2 country code |

Response

| Parameter | Data Type | Description |
|-------------------------|-----------|--|
| PropertyPrebookResponse | | |
| BookingToken | String | Stores information needed to book the result. Must be passed into the book request. |
| SupplierReference1 | String | Property level Token returned from the third party. Must be passed into the book request if returned at prebook. |
| SupplierReference2 | String | Property level Token returned from the third party. Must be passed into the book request if returned at prebook. |
| TotalCost | Decimal | The total price of the property booking. |
| RoomBookings | List | |
| RoomBooking | Single | |
| Supplier | String | The name of the supplier |
| TotalCost | Decimal | The total cost for the room. |
| RoomBookingToken | String | Stores information needed to book the result. Must be passed into the book request. |

| | | |
|-------------------|---------|---|
| SupplierReference | String | Room level Token returned from the third party. Must be passed into the book request |
| CancellationTerms | List ? | The cancellation terms for the property booking. |
| CancellationTerm | Single | |
| StartDate | Date | The start date of the cancellation policy. |
| EndDate | Date | The end date of the cancellation policy. |
| Amount | Decimal | The cancellation cost. Note that this is an actual cancellation amount, and not a percentage |
| Errata | List ? | |
| Erratum | String | Any notes relevant to the customer before booking (eg. regional taxes apply, facilities not available, etc) |
| SupplierLogs | List? | |
| SupplierLog | Single | |
| LogTitle | String | Returns a name applied to the log returned |
| LogText | String | Returns the URL, headers and body of the Supplier request or response |

Book

Finalise and confirm a booking for specified properties.

Request

POST [Base URL]/properties/book

Parameters

| Parameter | Data Type | Description |
|---------------------|-----------|---|
| PropertyBookRequest | | |
| BookingToken | String | Taken from the property pre-book response |
| BookingReference | String | Unique reference to be passed to the third party to identify the booking in their system (if supported) |
| SupplierReference1 | String | Taken from the property pre-book response, must be passed in if returned at pre-book. |
| SupplierReference2 | String | Taken from the property pre-book response, must be passed in if returned at pre-book. |
| RoomBookings | List | A list of room pre-book results to book |
| RoomBooking | Single | |
| RoomBookingToken | String | Taken from a room result in the property prebook response |
| SpecialRequest | String? | Any special request for the room |
| SupplierReference | String | Taken from the property pre-book response |
| GuestDetails | List | The details of all the guests on the booking |
| GuestDetail | Single | |
| Type | String | Must be one of "Adult", "Child" or "Infant" |
| Title | String | The guest's title, eg. Mr, Mrs. |
| FirstName | String | The guest's first name. |
| LastName | String | The guest's last name. |
| DateOfBirth | Date | The guest's date of birth. |
| LeadCustomer | Single | The details of the lead customer |
| CustomerTitle | String | |
| CustomerFirstName | String | |
| CustomerLastName | String | |
| DateOfBirth | Date | |
| CustomerAddress1 | String | |
| CustomerAddress2 | String? | |
| CustomerTownCity | String | |
| CustomerCounty | String | |

| | | |
|----------------------------|---------|--|
| CustomerPostcode | String | |
| CustomerBookingCountryCode | String | ISO Alpha-2 code |
| CustomerPhone | String? | |
| CustomerMobile | String? | |
| CustomerEmail | String? | |
| PassportNumber | String? | |
| NationalityID | String? | The customer nationality ID using ISO 3166-2 country code |
| OpaqueRates | String? | A boolean indicating whether opaque rates are supported(Default false) |
| SellingCountry | String? | The source market country using ISO 3166-2 country code |

Response

| Parameter | Data Type | Description |
|--------------------------|-----------|--|
| PropertyBookResponse | | |
| SupplierBookingReference | String | The supplier's unique identifier of the booking. |
| SupplierReference1 | String | Token returned from the third party. Must be passed into the cancel request if returned at book. |
| SupplierReference2 | String | Token returned from the third party. Must be passed into the cancel request if returned at book. |
| BookingToken | String | Stores information needed to book the result. Must be passed into the book request. |
| AdditionalDetails | String | Supplier specific key value pairs of information that may be required for documentation |
| ConfirmationStatus | String | Returns the Confirmation Status of the booked component |
| SupplierLogs | List? | |
| SupplierLog | Single | |
| LogTitle | String | Returns a name applied to the log returned |
| LogText | String | Returns the URL, headers and body of the Supplier request or response |

Pre-Cancel

Pre-cancel a confirmed booking, returns the cancellation cost

Request

POST [Base URL]/properties/precancel

Parameters

| Parameter | Data Type | Description |
|--------------------------|-----------|--|
| PropertyPreCancelRequest | | |
| SupplierBookingReference | String | The supplier's booking reference returned in the property book response |
| BookingToken | String | Stores information needed to book the result. Must be passed into the book request. |
| SupplierReference1 | String | Token returned from the third party. Must be passed into the cancel request if returned at book. |
| SupplierReference2 | String | Token returned from the third party. Must be passed into the cancel request if returned at book. |

Response

| Parameter | Data Type | Description |
|---------------------------|-----------|-----------------------------------|
| PropertyPreCancelResponse | | |
| Amount | Decimal | The amount to cancel the booking. |
| CurrencyCode | String | The ISO code of the currency. |

Cancel

Cancel a confirmed booking

Request

POST [Base URL]/properties/cancel

Parameters

| Parameter | Data Type | Description |
|--------------------------|-----------|--|
| PropertyCancelRequest | | |
| SupplierBookingReference | String | The supplier's booking reference returned in the property book response |
| SupplierReference1 | String | Token returned from the third party. Must be passed into the cancel request if returned at book. |
| SupplierReference2 | String | Token returned from the third party. Must be passed into the cancel request if returned at book. |
| BookingToken | String | Stores information needed to book the result. Must be passed into the book request. |

Response

| Parameter | Data Type | Description |
|-------------------------------|-----------|---|
| PropertyCancelResponse | | |
| SupplierCancellationReference | String | The supplier's unique reference for the cancellation if returned otherwise supplier booking reference |
| SupplierLogs | List? | |
| SupplierLog | Single | |
| LogTitle | String | Returns a name applied to the log returned |
| LogText | String | Returns the URL, headers and body of the Supplier request or response |

Booking Retrieve

Return information about an existing Booking

Request

GET [Base URL]/booking

Parameters

| Parameter | Data Type | Description |
|-------------------|-----------|---|
| BookingReference | String | Unique reference provided during the Booking process |
| SupplierName | String | The name of the supplier |
| SupplierReference | String | The supplier's booking reference returned in the property book response |

Response

| Parameter | Data Type | Description |
|--------------------------|-----------|--|
| BookingRetrieve | | |
| Booking | | |
| BookingReference | Integer | Taken from the BookingReference field in the Booking Table |
| SupplierBookingReference | Integer | Taken from the SupplierBookingReference field in the Booking Table |
| SupplierID | Integer | Taken from the SupplierID field in the Booking Table |
| PropertyID | Integer | Taken from the PropertyID field in the Booking Table |
| PropertyName | String | Taken from the PropertyName field from the Property Table |
| Status | String | Taken from the Status field in the Booking Table |
| LeadGuestName | String | Taken from the LeadGuestName field in the Booking Table |
| BookingDateTime | Integer | Taken from the BookingDateTime field in the Booking Table |
| DepartureDate | Integer | Taken from the DepartureDate field in the Booking Table |
| Duration | Integer | Taken from the Duration field in the Booking Table |
| TotalPrice | Integer | Taken from the TotalPrice field in the Booking Table |
| CurrencyCode | String | Taken from the CurrencyCode field in the Currency Table |
| CancellationDateTime | Date | Returns the data of Cancellation if applicable to the component |
| ConfirmationStatus | String | Returns the current Confirmation Status for the component |
| iVectorOneLogs | | |
| RequestLog | String | Taken from the RequestLog field in the APILog Table |
| ResponseLog | String | Taken from the ResponseLog field in the APILog Table |
| ResponseTime | Integer | Taken from the Time field in the APILog Table returned in milliseconds |

| | | |
|--------------|---------|--|
| SupplierLogs | | |
| RequestLog | String | Taken from the RequestLog field in the SupplierAPILog Table |
| ResponseLog | String | Taken from the ResponseLog field in the SupplierAPILog Table |
| ResponseTime | Integer | Taken from the ResponseTime field in the SupplierAPILog Table returned in milliseconds |

Appendix 1 - Language Codes

Language codes currently supported in iVectorOne

- AR
- CN
- CO
- CS
- DA
- DE
- EL
- ES
- FI
- FR
- HR
- HU
- ID
- IS
- IT
- JA
- KO
- LT
- MX
- NL
- NO
- PL
- PT
- RU
- SK
- SV
- TH
- UK
- VI
- ZH

Appendix 2 - Deduplication Methods

Explanation of what each Deduplication Method will do to the search results.

| Deduplication Method | Description |
|---------------------------|---|
| cheapestLeadIn | which selects property results from the supplier with the cheapest room cost for that property |
| cheapestLeadInByMealBasis | Establishes a standardised set of meal basis and we do NOT map the supplier room types. For each meal basis in the total result set (across all suppliers) we will find the supplier with the cheapest lead-in price for the meal basis. We will then return all of the room types from this supplier for this meal basis |
| roomTypeAndMealBasis | Establishes a standardised set of meal basis and supplier room types, from the responses received during search. For each combination of room type and meal basis, we will find the cheapest price from all suppliers and return this result. |
| none | Selects all property results from the supplier and does not dedupe |