

## 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](mailto: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"> <li>- (adults,children,infants~child ages)</li> <li>- adults - integer, each room must have at least one</li> <li>- children - integer</li> <li>- Infants - integer</li> <li>- Child ages - csv of integer, total must match # of children (infant ages don't need to specified)</li> </ul> <p>E.g. rooms=(1,1,1~7) (2,0,0)</p> <ul style="list-style-type: none"> <li>- Is a 2 room search</li> <li>- Room 1 - 1 Adult, 1 child, 1 infant, aged 7(child)</li> <li>- Room 2 - 2 Adults</li> </ul>
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"> <li>• cheapestLeadIn</li> <li>• cheapestLeadInByMealBasis</li> <li>• roomTypeAndMealBasis</li> <li>• none</li> </ul> <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. <b>Must be passed into the pre-book request.</b>
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
AmountType	String	Returns Amount of Percent to inform how to interpret the Cancellation Amount
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
CustomerNotes	String	Returns Customer Notes for Special Offers and Mandatory Supplements from iVectorOne Contracting
OptionalSupplements		Parent Node
OptionalSupplement		Container Node for each Optional Supplement
OptionalSupplementID	Integer	Unique Identifier for the OptionalSupplement. Taken from the database
OptionalSupplementName	String	Name from the Name field on the Optional Supplement
OptionalSupplementAmount	Integer	Value of the Supplement
CustomerNotes	String	Returns Customer Notes for Optional Supplements from iVectorOne Contracting
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.
CombinationRooms	List	List of multi-room results returned as a combination



CombinationID	Integer	A unique ID for the combination room result
CombinationToken	String	Stores information needed to booking the combination of rooms. Must be passed into the pre-book request.
RoomTypes	List	List of Room Types returned in the combination
RoomType	String	The supplier's name for the room type
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
MealBasisCode	String	Unique identifier of the meal basis
CurrencyCode	String	The ISO code of the currency.
TotalCost	Decimal	The total cost of the room combination
Discount	Decimal	The discount for the room combination
NonRefundable	Boolean	Determines whether the room combination 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 <b>percentage</b> of the total cost
CommissionPercentage	Decimal	The commission percentage of the room combination
OnRequest	Boolean	Determines whether room combination is on request
GrossCost	Decimal	The gross cost of the room combination. 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.
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.
OptionalSupplements		Parent Node
OptionalSupplementID	Integer	
CombinationRoomBooking	Single	Required if booking a combination multi-room search result
CombinationToken	String	Taken from a combination room result in the property search response.
SupplierReference1	String	Taken from a combination room result in the property search response.
SupplierReference2	String	Taken from a combination 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.  <b>Note: ensure this token is passed into the book request NOT the token received at search</b>
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.
CombinationRoomBooking	Single	Required if booking a combination multi-room search result
CombinationToken	String	Taken from a combination room result in the property search response.
SupplierReference1	String	Taken from a combination room result in the property search response.
SupplierReference2	String	Taken from a combination room result in the property search response.
TotalCost	Decimal	The net cost of the property booking.
GrossCost	Decimal	Returns the gross cost for the property. Only returned if non-zero
CommissionPercentage	Decimal	The commission percentage for the property
CommissionAmount	Decimal	The commission amount for the property
RateBasis	String	Advises the strategy for pricing based on the type of rate received. One of Net, Gross or Margin
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.  <b>Must be passed into the book request.</b>
SupplierReference	String	Room level Token returned from the third party. Must be passed into the book request
PaymentsDue	List ?	The payment due for the property booking.
PaymentDue	Single	
DueDate	Date	The due date of the payment
Amount	Decimal	The amount of the required payment
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	+ -3
Errata	List ?	

Erratum	String	Any notes relevant to the customer before booking (eg. regional taxes apply, facilities not available, etc)
PendingSupplierBooking	Boolean	Returns true if the supplier may return bookings which are not immediately confirmed
DigitalServicesAct	List?	Returned for Expedia results only
Traders	Single	
Name	String	
Address	String	
Line_1	String	
Line_2	String	
Line_3	String	
City	String	
StateProvinceCode	String	
PostalCode	String	
CountryCode	String	
BusinessRegisterName	String	
BusinessRegisterNumber	String	
SelfCertification	String	
ContactMessage	String	
Email	String	
TermsAndConditions	String	
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.  <b>Note: Ensure it's the SupplierReference1 received from the prebook response that is passed into the book request NOT the value received at search</b>
SupplierReference2	String	Taken from the property pre-book response, must be passed in if returned at pre-book.  <b>Note: Ensure it's the SupplierReference2 received from the prebook response that is passed into the book request NOT the value received at search</b>
AcceptPendingBooking	Boolean	Specifies the customer has accepted the booking may not be confirmed immediately
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  <b>Note: Ensure it's the RoomBookingToken received from the prebook response that is passed into the book request NOT the value received at search</b>
SpecialRequest	String?	Any special request for the room
SupplierReference	String	Taken from the property pre-book response  <b>Note: Ensure it's the SupplierReference received from the prebook response that is passed into the book request NOT the value received at search</b>
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.
CombinationRoomBooking	Single	Sent in place of RoomBookings when confirming a combination multi-room booking
CombinationToken	String	Taken from teh CombinationRoomBooking result in the pre-book response
SupplierReference	String	Taken from the property pre-book response  <b>Note: Ensure it's the SupplierReference received from the prebook response that is passed into the book request NOT the value received at search</b>
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.
BookingStatus	String	Returns 'Live' if booking has been confirmed immediately or 'Pending' if confirmation is delayed
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
BookingStatus	String	Returns 'Live' if booking has been confirmed immediately or 'Pending' if confirmation is delayed
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