# **MSF API**

**DEVELOPER'S GUIDE** 

TRAVEL PROLOGUE (V1.0E – 16 MAY 2017)

# Change History

#	Version	Date	Created / Modified By	Verified By	Remarks on changes
1	V1.0A	12 May 2017	Siow Yew Mun		Initial commit based on previous
					MSF API Reference and MSF User
					Guide.
2	V1.0B	13 May 2017	Siow Yew Mun		Added and reorganized request
					parameters and response fields for
					each MSF API call.
3	V1.0C	15 May 2017	Shiming		Clarified on request parameters and
					response fields.
4	V1.0D	16 May 2017	Shiming		Updated on Todos.
5	V1.0E	16 May 2017	Siow Yew Mun		Updated message format and
					shortened response for better
					presentation.

# Introduction

Travel Prologue MSF (Multi-Supplier Framework) API is a JSON Rest API that allows agents to connect to the Travel Prologue hotel information database and book from various hotel suppliers' through the Travel Prologue booking system.

#### Overview of the API

The MSF API provides a complete set of APIs to allow users to search for hotels given a destination, get detailed information about the hotel and rooms, check that rates are still valid before making a booking, make a reservation and cancel a previous reservation.

#### **API List**

The following table shows the list of API requests that can be made to perform bookings. This document goes into detail for each such request and the corresponding response. In the next section *Error! Not a valid bookmark self-reference.*, the requests are explained together using a typical booking flow.

API	URL	Description	Method
Register (required in production environment)	/api/MSFRegister	Register an API Key with user name and user info.	POST
GetHotels	/api/ MSFGetHotels	This method will allow the user to retrieve a list of available hotels, their details, lowest rates and promotions based on the dates, room travelers and city that is passed in.	POST
GetPolledHotelsList		This method will allow the user to retrieve the additional pages of hotels from the various providers and provide a fully sorted list of hotels based on the cheapest provider for each hotel.	POST
GetHotelDetails	/api/MSFGetHotelDetails	This method will allow the user to obtain all room rates of a selected hotel, as well as details of the hotels based on the parameters that have been passed in.	POST
GetRateRules	/api/MSFGetRateRules	This method will allow the user to verify with the provider that the rates previously provided is accurate and that the selected hotel is still available.	POST
Booking	/api/MSFBooking	This method will allow the user to book the selected hotel.	POST
Cancel	/api/ MSFGetHotelCancellation	This method allows the user to perform a booking cancellation.	POST

Table 1 Essential API Requests

### **Booking Flow**

The following sequence *Figure 1 Basic Booking Flow* depicts the typical booking flow from registering to use the production API to getting hotels through providing search criteria and finally ending up with a booking or cancelling a previous one.

Each of the 'Squares' below represents a potential API request. The other symbols are basic flowchart elements that denote terminal and decision points.

The Register request is sent to get the API key to make further requests in the production environment. Thereafter, calls to GetHotels will retrieve the initial list of hotels. GetPolledHotelsList request helps to retrieve all searched for hotel availability similar to responses for GetHotels with the difference that GetPolledHotelsList will try (1) to get as complete as possible the availability information that hotel providers progressively make available and (2) return such information after filtering and sorting through them based on the search criteria. GetHotelDetails will get hotel room rates of a selected hotel with GetRateRules verifying if the currently received rate and hotel are still available so that ultimately a Book request can be issued to confirm the reservation of such rates or to cancel a previously booked reservation.

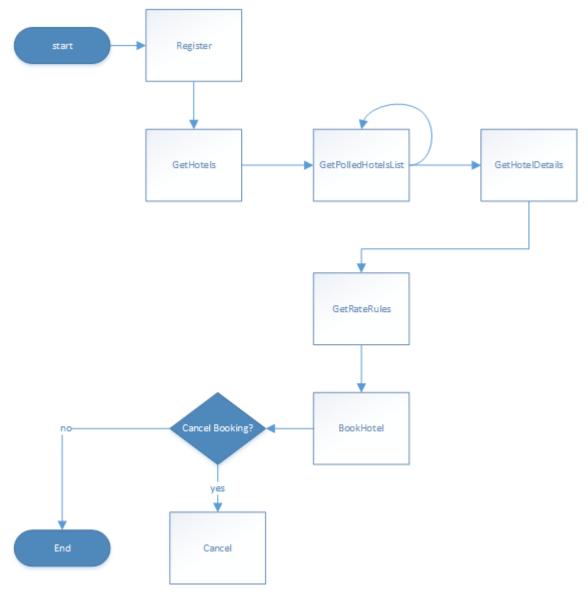


Figure 1 Basic Booking Flow

# Important Concept and Definitions

### Connecting to the API

Use HTTP/HTTPS to connect to the API. The request and response will be in JSON format.

In production environment, you will have to use *https* as the protocol and make use of the *Register* command to first get the API key the first time to subsequently use the rest of the other commands to complete the booking flow.

#### Example HTTP/JSON Request

```
{
        "CheckIn": "2017-08-24",
        "CheckOut": "2017-08-26",
        "RoomFormat": "room1=2,0",
        "roomBedFormat": "room1=2,0",
        "Adults": 2,
        "Childs": 0,
        "Rooms": 1,
        "Currency": "SGD",
        "Destination": "",
        "HotelId": "0",
        "CityID": 5047,
        "PageNo": 1,
        "availToken": null,
        "Isfirst": false,
        "ApplicationType": "B2B",
        "RequestID": 0,
}
```

#### Message Format

#### Request format

Each request in the JSON Message Format will have the following headers:

- 1. Parameters. The parameters that make up the request.
- 2. Type. The type of parameter for eg string, number, boolean, etc
- 3. Required? Y indicates this parameter is required otherwise the request will be invalid.
- 4. Remarks. The parameter will be explained possibly with examples.

#### Response format

- 1. Fields. The keys that make up the response.
- 2. Type. The type of the field for eg string, number, Boolean, etc.
- 3. Null? N indicates that this field in the response is \* not \* null.
- 4. Remarks. The field will be explained possibly with examples.

Note: The ellipse string '...' within the messages will denote repetition of the same items directly before it

#### **Room Format**

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The room format is a string that contains highly concise booking request which specifies the number of rooms to book and the *adult and child* combination in each such room.

For example, if the room format is room1=1,0,7-1&room2=2,0,3-1,9-0, the following can be inferred:

Firstly, the '&' token in the room format string acts as a separator for each room (so we have a request for 2 rooms in the above case)

Room 1 request (room1= request ...)

- 1 adult
- '0' here separates the *number of adult* information from the *number of children* information. The child information in this Room 1 request is 7-1 which is further explained below.
- 7 years old or One Child of age seven
- '-' token separates the *child age* information from the *child with bed* information
- 1 means the child requires bed otherwise '0' is specified for not the child not needing bed

Room 2 request (room2= request ...)

- 2 adults
- '0' here separates the *number of adult* information from the *number of children* information. The child information in this Room 2 request is *3-1,9-0* which is further explained below.
- 3-1 means a child of age 3 requiring bed
- 9-0 means a child of age 9 not requiring bed

### **Error Response**

There are 2 main categories of errors. The first category of errors that result because invalid or malformed request structure. The second category are transactional errors that are raised because it is not possible to serve the originating request for some reason such as invalid Registration information provided, booking already cancelled, unexpected system issues etc.

Error Code	Error Message	Reason
500 Internal server error		Either the request was malformed, or a provider return a result tha we could not interpret
	Provider error	This is an error on the provider end that we are directly relaying back

# JSON Message Format

#### **API Security**

The API requests are based on the REST and sent using standard JSON format. Each API call has a request and response structure which will be explained below.

Before using the API, it is important to understand how the MSF calls to the production system require HMAC Authentication. In this section, we explain how and App Id and API Key can be obtained to facilitate further API requests.

Note: This security layer will only be required on the production environment. You do not need to implement this for the test environment.

The server provides the client with a public **APP Id** and shared secret key (**API Key**– shared only between server and client), this process happens only the first time when the client registers with the server (with /api/MSFRegister service).

When client have a public App Id and a secret key, each time they want to use another api, they need to flow these step:

- 1. Client should build a string by combining all the data that will be sent, this string contains the following parameters (APP Id, HTTP method, request URI, request time stamp, nonce, and Base 64 string representation of the request pay load).
- 2. Note: **Request time stamp** is calculated using <u>UNIX time</u> (number of seconds since Jan. 1st 1970) to overcome any issues related to a different timezone between client and server. **Nonce**: is an arbitrary number/string used only once. **More about this later**.
- 3. Client will **hash** this large string built in the first step using <u>SHA256 hash algorithm</u> and the API Key assigned to it, the result for this hash is a unique **signature** for this request.
- 4. The signature will be sent in the **Authorization** header using a **custom scheme** "amx". The data in the Authorization header will contain the APP Id, request time stamp, and nonce separated by colon ':'. The format for the Authorization header will be like: [Authorization: amx APPId:Signature:Nonce:Timestamp].
- 5. Client send the request as usual along with the data generated in step 3 in the Authorization header.

Additional information can be found on:

Reference: <a href="http://bitoftech.net/2014/12/15/secure-asp-net-web-api-using-api-key-authentication-hmac-authentication/">http://bitoftech.net/2014/12/15/secure-asp-net-web-api-using-api-key-authentication-hmac-authentication/</a>

# Register

# What this request does

The Register request allows the user to get the ApiKey authentication token to access the MSF API in the production environment.

# Request Parameters

Parameters	Type	Required?	Remarks
Username	string	Υ	
CompanyName	string	Υ	
EmailAddress	string	Υ	
MailingAddress	string	Υ	

### Request

```
{
    "Username":"user1",
    "CompanyName":"tripanzee",
    "EmailAddress":"user1@tripanzee.com",
    "MailingAddress":"171 Chin Swee Road #10-09, CES Centre Singapore 169877"
}
```

# Response Key Fields

Fields	Туре	Null?	Remarks
UserID	string	N	Agent user ID
UserName	string	N	Agent user name
AppID	string	N	Agent application token. This identifies to the MSF what is the application using the API service.
ApiKey	String	N	This authentication token is required for access to the production version of the MSF

# Response

```
{
    " UserID ":"1",
    " UserName ":" user1",
    " AppID ":"51afd2f259fa4401b3afb3ad134329f1",
    " ApiKey ":" H13kwiPT0BlBjOwwgvB+3OJinTvKewFsxHHJZSyHzTY="
}
```

#### GetHotels

# What this request does

GetHotels returns a list of hotels that satisfies the search criteria made of the following parameters.

# **Request Parameters**

Paramaters	Туре	Required?	Remarks
CheckIn	string	Υ	Check in date in yyyy-MM-dd format
CheckOut	string	Υ	Check out date in yyyy-MM-dd format
RoomFormat	string	Υ	The rooming arrangement format, as explained above
Adults	int	Υ	Total number of adults
Childs	int	Υ	Total number of child
Rooms	int	Υ	Total number of rooms
Currency	string	Υ	The currency required
CityID	string	N	The ID of the city for the hotel results

### Request

```
{
    "CheckIn":"2017-05-29",
    "CheckOut":"2017-05-30",
    "RoomFormat":"room1=2,0",
    "Adults":2,
    "Childs":0,
    "Rooms":1,
    "Currency":"SGD",
    "Destination":null,
```

```
"HotelId":null,
             "Provider":null,
             "ApplicationType":"B2B",
             "ChildsAgeFormat":";",
             "Keywordsearch":null,
            "MinStar":0,
            "MaxStar":0,
             "StarRange":null,
             "StarCount":null,
             "Amenities":null,
             "ChainCodesIncludes":null,
             "ChainCodesExcludes":null,
            "HotelCode":null,
            "HotelName":null,
             "PageNo":null,
             "PageSize":null,
             "SortBy":null,
            "DisplayOrder":null,
             "_IsStatus":false,
             "roomBedFormat":"room1=2,0",
             "RequestID":0,
             "CityID":5047,
             "MaxPrice":0.0,
            "pricerange":null,
             "SearchHotelProviders":{"orbitz":true,"hstravel":true,"expedia":true,"hpn":true,"SearchHPNCorporateCodes":{"SearchHPI
rporate Code":""\}, "hotelbeds": true, "travellanda": true, "westminster": true, "zyberhubs": true, "jactravel": true, "itank": true, "fitruums": true\}, \\
             "strpricerange":null,
             "TotalAvalibleHotels":0,
             "Area":null,
             "Supplier":null,
             "MinPrice":0.0,
             "Isfirst":false
```

#### Response Key Fields

Fields	Туре	Null?	Remarks
HotelsList	Object	N	List of Sequence Objects – see just below
SearchCriteria	string	N	null,
StatusR	string	N	"Done" to denote that there is no more data for the <i>GetHotel</i> search, otherwise, there is still data to be retrieved through <i>GetPolledHotelsList</i>
MaxPrice	string	N	379.87

#### Sequence object

Fields	Type	Null?	Remarks	
Sequence	string	N	The ranking of the hotel	
CheckIn string N The check in da		N	The check in date in yyyy-MM-dd format, for example "2017-	
			08-24"	

CheckOut	string	N	The check-out date in yyyy-MM-dd format, for example "2017-08-26"	
RoomFormat string		N	The room format, as explained above, for example "room1=2,0"	
Adults	string	N	The total number of adults, for example 2	
Childs	string	N	The total number of child, for example 0	
Rooms	string	N	The total number of rooms, example 1	
Currency	string	N	The currency that is requested, for example "SGD"	
Destination	string	N	The city, state and country name of the destination being requested: "Singapore, Singapore"	
HotelID	string	N	The ID of the hotel, for example "134927"	
HotelName	string	N	The name of the hotel, for example "Village Hotel Bugis"	
Description	string	N	The description of the hotel	
Hotellmage	string	N	The link of the image of the hotel for example	
	_		"https://res.cloudinary.com/travelprologue1/image/fetch/s lm93VDTb /http://media.expedia.com/hotels/1000000/900000/892800/8 92751/04de3a5a b.jpg"	
StarRating	string	N	The star rating of the hotel "4.0"	
		N	The average nightly rate of the hotel, for example 182.82	
AverageNightlyStrikeRate	string	N	The average nightly strike rate of the hotel, in other words, the nightly rate before discount, whereas the AverageNightlyRate would be the already discounted rate. If this value is 0 or NULL, that means there is no information about discount.	
latitude	string	N	The latitude of the hotel	
longitude	string	N	The longitude of the hotel	
PromotionText	string	N	A string array containing all promotions of this room ["Free Wireless Internet"]	
HotelCode	string	N	The same as HotelID "134927"	
Provider	string	N	See availToken	
availToken	string	N	This token needs to be returned in subsequent requests, for example "JGphcW2k80MGRN7qCdTN"	
RoomNo	string	N	Ignore this value	
FreeCancellable	string	N	Whether or not this rate can be cancelled without penalty	
isFreeInternet	string	N	Whether or not this rate includes free Internet	
TotalRecords	string	N	The total number of rates being returned	
RoomDesc	string	N	The description of the room	
TotalCostInclusive	string	N	The total cost of the room. Note that this value will be 0 for GetHotels and GetPolledHotels	

#### Response

```
"HotelsList": [{
                                    "Sequence": 0,
                                    "CheckIn": "2017-08-24",
                                    "CheckOut": "2017-08-26",
                                    "RoomFormat": "room1=2,0",
                                    "Adults": 2,
                                    "Childs": 0,
                                    "Rooms": 1,
                                    "Currency": "SGD",
                                    "Destination": "Singapore, Singapore",
                                    "HoteIID": "134927",
                                    "HotelName": "Village Hotel Bugis",
                                    "Description": "",
                                    "HotelImage": "https://res.cloudinary.com/travelprologue1/image/fetch/s--Im93VDTb--
/http://media.expedia.com/hotels/1000000/900000/892800/892751/04de3a5a_b.jpg",
                                    "StarRating": "4.0",
                                    "AverageNightlyRate": 182.82,
                                    "AverageNightlyStrikeRate": 0.0,
                                    "latitude": 0.0,
                                    "longitude": 0.0,
                                    "PromotionText": ["Free Wireless Internet"],
                                    "HotelCode": "134927",
                                    "Provider": "JGphcW2k80MGRN7qCdTN",
                                    "availToken": "JGphcW2k80MGRN7qCdTN",
                                    "RoomNo": 0.
                                    "FreeCancellable": false,
                                    "isFreeInternet": false,
                                    "TotalRecords": 0.
                                    "RoomDesc": null.
                                    "TotalCostInclusive": 0.0
                       }, {
                                    "Sequence": 1,
                                    "CheckIn": "2017-08-24",
                                    "CheckOut": "2017-08-26",
                                    "RoomFormat": "room1=2,0",
                                    "Adults": 2,
                                    "Childs": 0,
                                    "Rooms": 1,
                                    "Currency": "SGD",
                                    "Destination": "Singapore, Singapore",
                                    "HoteIID": "107546",
                                    "HotelName": "Holiday Inn Orchard City Centre",
                                    "Description": null,
                                    "HotelImage": "https://res.cloudinary.com/travelprologue1/image/fetch/s--Znh2cVRI--
/http://media.expedia.com/hotels/1000000/10000/6200/6152/28966aba_b.jpg",
                                    "StarRating": "4.0",
                                    "AverageNightlyRate": 238.81,
                                    "AverageNightlyStrikeRate": 0.0,
                                    "latitude": 0.0,
                                    "longitude": 0.0,
                                    "PromotionText": [""],
                                    "HotelCode": "107546",
                                    "Provider": "JGphcW2k80MGRN7qCdTN",
                                    "availToken": "JGphcW2k80MGRN7qCdTN"
```

```
"RoomNo": 0,
                                    "FreeCancellable": false.
                                    "isFreeInternet": false.
                                    "TotalRecords": 0.
                                    "RoomDesc": null.
                                    "TotalCostInclusive": 0.0
                        }, {
                                    "Sequence": 2,
                                    "CheckIn": "2017-08-24",
                                    "CheckOut": "2017-08-26",
                                    "RoomFormat": "room1=2,0",
                                    "Adults": 2,
                                    "Childs": 0,
                                    "Rooms": 1,
                                    "Currency": "SGD",
                                    "Destination": "Singapore, Singapore",
                                    "HoteIID": "399872",
                                    "HotelName": "Miramar Singapore",
                                    "Description": null.
                                    "HotelImage": "https://res.cloudinary.com/travelprologue1/image/fetch/s--gTne8XDO--
/http://media.expedia.com/hotels/8000000/7400000/7399000/7398914/7398914_10_b.jpg",
                                    "StarRating": "4.0",
                                    "AverageNightlyRate": 344.26,
                                    "AverageNightlyStrikeRate": 0.0,
                                    "latitude": 0.0,
                                    "longitude": 0.0,
                                    "PromotionText": ["Free Wireless Internet", "Breakfast Buffet", "Free Breakfast"],
                                    "HotelCode": "399872".
                                    "Provider": "JGphcW2k80MGRN7qCdTN",
                                    "availToken": "JGphcW2k80MGRN7qCdTN",
                                    "RoomNo": 0.
                                    "FreeCancellable": false.
                                    "isFreeInternet": false.
                                    "TotalRecords": 0,
                                    "RoomDesc": null,
                                    "TotalCostInclusive": 0.0
                        }, ...
            ],
"SearchCriteria": null,
"StatusR": "Done",
"MaxPrice": 379.87
```

### GetPolledHotelsList

#### What this request does

GetPolledHotelsList can be called after the *GetHotels* call. Both calls have the same purpose and same response format: to obtain a list of hotels satisfying a particular search criteria. The system remembers recently requested search criteria (via GetHotels) and returns the most current search results at the point in time of calling GetPolledHotelsList. This allows the search availability results to be accumulated over time as hotel source providers return the results from their system.

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Request Parameters

Same as GetHotel's Request Parameters.

### Request

Same as GetHotel's Request.

### Response Key Fields

Same as GetHotel's Response Key Fields.

### Response

Same as GetHotel's Response.

#### GetHotelDetails

### What this request does

This method will allow the user to obtain all room rates of a selected hotel, as well as details of the hotels based on the parameters that have been passed in.

### **Request Parameters**

Parameters	Туре	Required?	Remarks
CheckIn	string	Υ	The check in date in yyyy-MM-dd format, for example "2017-08-24"
CheckOut	string	Υ	The check-out date in yyyy-MM-dd format, for example "2017-08-26"
RoomFormat	string	Υ	The room format, as explained above, for example "room1=2,0"
roomBedFormat	string	Υ	The room format, as explained above, for example "room1=2,0"
Adults	string	Υ	The total number of adults, for example 2
Childs	string	Υ	The total number of child, for example 0

Currency	string	Υ	The currency that is requested, for example "SGD"
Destination	string	N	The city, state and country name of the destination being requested: "Singapore, Singapore"
HotelId	string	Υ	The ID of the hotel, as returned in the previous call
CityID	string	Υ	The ID of the destination
PageNo	string	Υ	This value should always be 1
availToken	string	Υ	The token as returned in the previous call
Isfirst	string	Υ	false
ApplicationType	string	Υ	This value should be "B2B"
RequestID	string	Υ	This value should be "0"

### Request

```
{
    "CheckIn":"2017-05-29",
    "CheckOut":"2017-05-30",
    "RoomFormat":"room1=2,0",
    "roomBedFormat":"room1=2,0",
    "Adults":2,"Childs":0,"Rooms":1,
    "Currency":"SGD",
    "Destination":"",
    "HotelId":"220613",
    "CityID":5047,
    "PageNo":1,
    "availToken":"O1Q08YVCyGqxAH9ojty7",
    "Isfirst":false,
    "ApplicationType":"B2C",
    "RequestID":0,
}
```

# Response Key Fields

### **Base Object**

Fields	Туре	Null?	Remarks
CachekeyValue	string	N	If this value is returned, please pass it in in subsequent requests
CheckIn	string	N	The check in date in yyyy-MM-dd format, for example "2017-08-24"
CheckOut	string	N	The check-out date in yyyy-MM-dd format, for example "2017-08-26"
RoomFormat	string	N	The room format, as explained above, for example "room1=2,0"

Adults	string	N	The total number of adults, for example 2
Childs	string	N	The total number of child, for example 0
Rooms	string	N	The number of rooms, for example 1
Currency	string	N	The currency being requested, for example "SGD"
Destination	string	N	The city, state and country name of the destination being requested: "Singapore, Singapore"
HotelID	string	N	The ID of the hotel, as returned in the previous call
HotelName	string	N	The name of the hotel, for example "Raintr33 Hotel Singapore"
Description	string	N	The description of the hotel, if any
city	string	N	The name of the city where the hotel is "Singapore"
Country	string	N	The name of the country where the hotel is
latitude	string	N	The latitude of the hotel, for example 1.3883
longitude	string	N	The longitude of the hotel, for example 103.97826
street1	string	N	The street address of the hotel
postalCode	string	N	The postal code of the hotel
StarRating	string	N	The star rating of the hotel
TotalCostInclusive	string	N	The total cost of the room, including taxes
NoOfNights	string	N	The number of nights that was requested
LstHotelImages	Object	N	list of hotel <i>image</i> objects (refer to Image Object below)
LstRooms	Object	N	list of Room objects (refer to Room Object below)
CheckInTime	string	N	The check in time of the hotel
CheckOutTime	string	N	The check out time of the hotel
HotelCode	string	N	The Hotel ID

# Image Object

Fields	Туре	Null?	Remarks
Title	string	Υ	Title or caption of image
URL	string	N	URL to get image

# Room Object

The Room Object will return a list of RoomDetail Objects. The sequence follows the Room specified in the room format.

Fields	Туре	Null?	Remarks
LstRoomDetails	Object	N	List of RoomDetail objects for this particular Room. (Refer to RoomDetail Object below)

# RoomDetail Object

Fields	Туре	Null?	Remarks
Id	string	N	The ID of the room, if any
CachekeyValue	string	N	The cache key value, if any. This value needs to be passed into subsequent requests, if it is returned here
HotelID	string	N	The ID of the hotel, for example "489939"

String				
TypeCode string N The description code of the room, if any, for example "25"  Location string N null  RoomCode string N The room code, for example, "20128174525"  RateType string N This is for internal use only, "MerchantStandard"  Key string N This is for internal use only, "MerchantStandard"  Key string N This value is needed for subsequent requests, please send it through, for example, "20128174525"  "Expedia-Ya89393-ar903e9b-8207-474f-ab72-2446adfd005-5206-*2017-08-24-2017-08-26*SGD*17*room1=2,0"-25*-208176641*-201281745"  Taxes string N The taxes of the room, if available. 47.78  DistributorFee string N Additional fees, if available, for example, 0.0  AverageNightlyStrikeRate string N The total cost of the room before discount, if any TotalCstlindusive string N The total cost of the room before discount, if any The total cost of the room, after applying any discount. Use this property for the  Fee string N Any additional fees payable upon checkout Use this property for the Any additional fees payable upon checkout CheckoutFee string N Any additional fees payable upon checkout CheckoutFee string N Any additional fees payable upon checkout CheckoutFee string N Any additional fees payable upon checkout CheckoutFee string N Any additional fees payable upon checkout CheckoutFee string N This value is needed for subsequent requests, please send it through, for example:  "Expedia-Ya8939-ac903e9-8207-474f-ab72-27446adfd005-5206*2017-08-24*-2017-08-26*-560*17*-coom1=2,0"-25*-208176641*-201281745"  RoomNo string N The room number in which this rate element represents AverageNightlyRate string N The average nightly rate of the room after any discount The total cost of the rooms, excluding taxes. This value is not guaranteed to contain a value.  ChargeablesText string N Textual information for additional charges, if any PromotionText string N This property will always return an empty string Amount string N This property will always return on the room rate, if any N This property will always return on the common rate,	Description	string	N	·
"25"	TypeValue	string	N	
RoomCode RateType string N This is for internal use only, "MerchantStandard" Key string N This is for internal use only, "MerchantStandard" Key string N This is for internal use only, "MerchantStandard" Key string N This value is needed for subsequent requests, please send it through, for example: "expedia*489939*ac903e9b-8207-474f-ab72-27446adfd005-5206*-2017-08-24*-2017-08-26*-52017-08-26*-2017-08	TypeCode	string	N	
RateType string N This is for internal use only, "MerchantStandard" N This value is needed for subsequent requests, please send it through, for example:  "expedia"489939"ac903e9b-8207-474f-ab72-2f446adfd005-5206"2017-08-24"2017-08-26"5GD"1"room1=2,0"25"208176641"201281745"  Taxes string N The taxes of the room, if available, 47.78  DistributorFee string N Additional fees, if available, for example, 0.0  AverageNightlyStrikeRate string N The average nightly rate before discount, if any TotalCostinclusive string N The total cost of the room before discount, if any TotalCostinclusive string N The total cost of the room, after applying any discount. Use this property for the  Fee string N Any additional fees payable upon checkout Any additional fees payable upon checkout CheckoufFee string N Any additional fees payable upon checkout CheckoufFee string N Any additional fees payable upon checkout think string N This value is needed for subsequent requests, please send it through, for example:  "expedia"489939"ac903e9b-8207-474f-ab72-2f446adfd005-5206"2017-08-24"2017-08-26"5GD"1"room number in which this rate element represents AverageNightlyRate string N The room number in which this rate element represents AverageNightlyRate string N The average nightly rate of the room after any discount TotalCost string N Textual information for additional charges, if any PromotionText string N Textual information for promotions on the room rate, if any PromotionText string N This property will always return an empty string N This property will always return an empty string N This property will always return an empty string N This property will always return be same as the Hotel ID, or NULL  FreeCancellable boolean N Boolean indicating if this room can be cancelled without refund breakfast type string N The type of breakfast this rate is inclusive of, if any Indicates if this rate includes breakfast HasfreeInternet string N Indicates if this rate includes breakfast HasfreeInternet string N Indicates if this rate includes breakfast	Location	string	N	null
Key  String  N  This value is needed for subsequent requests, please send it through, for example: "expedia"489939"-eq039eb-8207-474f-ab72- 2f446adfd005-5206"2017-08-24"2017-08- 26"-56D"-1"-room1=2,0"-25"-208176641"201281745"  Taxes  String  N  The taxes of the room, if available, 47 awailable, 470-00  AverageNightlyStrikeRate  string  N  The total cost of the room, if available, for example, 0.0  AverageNightlyStrikeRate  string  N  The total cost of the room, after applying any discount, if any  TotalCostInclusive  string  N  The total cost of the room, after applying any discount.  Use this property for the  BookingFee  string  N  Any additional fees payable upon checkout  Link  string  N  This value is needed for subsequent requests, please send it through, for example: "expedia"489939"-ac903e9b-8207-474f-ab72- 2f446adfd005-5206"-2017-08-24"-2017-08- 26"-56D"-1"room1=2,0"25"-2081766641"-201281745"  RoomNo  string  N  The room number in which this rate element represents  AverageNightlyRate  string  N  The average nightly rate of the room after any discount  TotalCost  string  N  The average nightly rate of the room after any discount  TotalCost  string  N  The average nightly rate of the room after any discount  TotalCost  string  N  The average nightly rate of the room after any discount  TotalCost  string  N  The average nightly rate of the room after any discount  TotalCost  string  N  The average nightly rate of the room after any discount  TotalCost  string  N  The total cost of the room, excluding taxes. This value  is not guaranteed to contain a value.  ChargeablesText  PromoCode  string  N  This property will always return an empty string  Amount  string  N  This property will always return an empty string  Amount  string  N  This property will always return an empty string  N  This property will always return an empty string  N  This property will always return an empty string  N  This property will always return an empty string  N  The total cost of the room can be cancelled without refund  Dreakf	RoomCode	string	N	The room code, for example, "20128174525"
send it through, for example: "expedia" 489939" ac903e9b-8207-474f-ab72- 27446ad7d005-5206" 2017-08-24-2017-08- 26" 5GD"1" room1=2,0" 25" 208176641" 201281745"  Taxes  DistributorFee string N Additional fees, if available, for example, 0.0  AverageNightlyStrikeRate  String N The toxal cost of the room, if available, for for axample, 0.0  AverageNightlyStrikeRate  String N The total cost of the room, after applying any discount. Use this property for the  Fee string N Any additional fees payable upon checkout Use this property for the  Fee string N Any additional fees payable upon checkout CheckoutFee string N Any additional fees payable upon checkout  Link string N Any additional fees payable upon checkout  Link string N This value is needed for subsequent requests, please send it through, for example:  "expedia" 489939" ac903e9b-8207-474f-ab72- 27446ad7d005-5206" 2017-08-24" 2017-08- 26" 5GD" 17-room1=2,0" 25" 208176641" 201281745"  RoomNo string N The room number in which this rate element represents AverageNightlyRate string N The average nightly rate of the room after any discount  TotalCost string N The total cost of the rooms, excluding taxes. This value is not guaranteed to contain a value.  ChargeablesText string N Textual information for additional charges, if any PromotionText string N Textual information for promotions on the room rate, if any Amount string N This property will always return an empty string Amount string N This property will always return an empty string N This property will always return an empty string N This property will always return an empty string N The total case if this rate is inclusive of, if any Indicates if this rate includes breakfast Indicates if this rate includes breakfast Indicates if this rate includes free internet Board string N The tope of boradfast this rate is inclusive of, if any Indicates if this rate includes free internet Board string N The tope of borad this rate is inclusive of, if any Please relay this value for subsequent requests, for example, "de25hM	RateType	string	N	•
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send it through, for example:  "expedia~489939~ac903e9b-8207-474f-ab72- 2f446adfd005-5206~2017-08-24~2012181745"  RoomNo string N The room number in which this rate element represents  AverageNightlyRate string N The average nightly rate of the room after any discount  TotalCost string N Textual information for additional charges, if any  PromotionText string N Textual information for promotions on the room rate, if any  PromoCode string N This property will always return an empty string  Amount string N This property will always return an empty string  Amount string N This property will return the same as the Hotel ID, or NULL  FreeCancellable boolean N Boolean indicating if this room can be cancelled without refund  breakfast_type string N The type of breakfast this rate is inclusive of, if any isbreakfast string N Indicates if this rate includes breakfast  HasFreeInternet string N The type of board this rate is inclusive of, if any penalty. This is always based on hotel's local time  ProviderCode string N Please relay this value for subsequent requests, for example, "de2ShMVvmkJpSmSgnsDt"  availToken String N Please relay this value for subsequent requests, for		string		
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refund  breakfast_type string N The type of breakfast this rate is inclusive of, if any isbreakfast string N Indicates if this rate includes breakfast  HasFreeInternet string N Indicates if this rate includes free internet  Board string N The type of board this rate is inclusive of, if any  CancellUpto string N The date the room can be cancelled without any penalty. This is always based on hotel's local time  ProviderCode string N Please relay this value for subsequent requests, for example, "de2ShMVvmkJpSm5gnsDt"  availToken String N Please relay this value for subsequent requests, for	HotelCode	string	N	
isbreakfast       string       N       Indicates if this rate includes breakfast         HasFreeInternet       string       N       Indicates if this rate includes free internet         Board       string       N       The type of board this rate is inclusive of, if any         CancellUpto       string       N       The date the room can be cancelled without any penalty. This is always based on hotel's local time         ProviderCode       string       N       Please relay this value for subsequent requests, for example, "de2ShMVvmkJpSm5gnsDt"         availToken       string       N       Please relay this value for subsequent requests, for	FreeCancellable	boolean	N	_
HasFreeInternet         string         N         Indicates if this rate includes free internet           Board         string         N         The type of board this rate is inclusive of, if any           CancellUpto         string         N         The date the room can be cancelled without any penalty. This is always based on hotel's local time           ProviderCode         string         N         Please relay this value for subsequent requests, for example, "de2ShMVvmkJpSm5gnsDt"           availToken         string         N         Please relay this value for subsequent requests, for		string	N	
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CancellUpto         string         N         The date the room can be cancelled without any penalty. This is always based on hotel's local time           ProviderCode         string         N         Please relay this value for subsequent requests, for example, "de2ShMVvmkJpSm5gnsDt"           availToken         string         N         Please relay this value for subsequent requests, for		string	N	
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availToken string N Please relay this value for subsequent requests, for	ProviderCode	string	N	
	availToken	string	N	

#### Response

```
"CachekeyValue": "",
         "CheckIn": "2017-08-24",
         "CheckOut": "2017-08-26",
         "RoomFormat": "room1=2,0",
         "Adults": 2,
         "Childs": 0,
         "Rooms": 1,
         "Currency": "SGD",
         "Destination": "Singapore, Singapore",
         "HoteIID": "489939",
         "HotelName": "Raintr33 Hotel Singapore",
         "Description": null,
         "city": "Singapore",
         "Country": null,
         "latitude": 1.3883,
         "longitude": 103.97826,
         "street1": "",
         "postalCode": null,
         "StarRating": "0",
         "ReviewScores": "",
         "ReviewCount": "",
         "RecommendationCount": "",
         "TotalCost": 0.0,
         "TotalCostInclusive": 317.78,
         "NoOfNights": 2,
         "LstHotelImages":
                   [{
                             "Title": null,
                             "URL":
"http://media.expedia.com/hotels/10000000/9830000/9824500/9824440/4294e4a2 b.jpg"
                   },
                   }, {
                             "Title": null,
                             "URL":
"http://media.expedia.com/hotels/10000000/9830000/9824500/9824440/fdd81cd4_b.jpg"
         ],
         "LstRooms":
                   [{
                             "LstRoomDetails": [{
                                                 "Id": null,
                                                 "CachekeyValue": null,
                                                "HoteIID": "489939",
                                                 "Description": "Maple Twin. 2 twin beds",
```

```
"TypeValue": "Maple Twin. 2 twin beds",
                                               "TypeCode": "25",
                                               "Location": null,
                                               "RoomCode": "20128174525",
                                               "RateType": "MerchantStandard",
                                               "Key": "expedia~489939~ac903e9b-8207-474f-ab72-
2f446adfd005-5206~2017-08-24~2017-08-26~SGD~1~room1=2,0~25~208176641~201281745",
                                               "Taxes": 47.78,
                                               "DistributorFee": 0.0,
                                               "AverageNightlyStrikeRate": 0.0,
                                               "TotalStrikeRate": 270.0,
                                               "TotalCostInclusive": 317.78,
                                               "Fee": 0.0,
                                               "BookingFee": 0.0,
                                               "CheckoutFee": 0.0,
                                               "Link": "expedia~489939~ac903e9b-8207-474f-ab72-
2f446adfd005-5206~2017-08-24~2017-08-26~SGD~1~room1=2,0~25~208176641~201281745",
                                               "RoomNo": 1,
                                               "AverageNightlyRate": 135.0,
                                               "TotalCost": 270.0,
                                               "ChargeablesText": null,
                                               "PromotionText": "Free Internet",
                                               "PromoCode": "",
                                               "Amount": 0.0,
                                               "HotelCode": null,
                                               "FreeCancellable": false,
                                               "breakfast_type": null,
                                               "isbreakfast": false,
                                               "HasFreeInternet": false,
                                               "Board": null,
                                               "CancellUpto": "11 May 2017",
                                               "ProviderCode": "de2ShMVvmkJpSm5gnsDt",
                                               "availToken": "de2ShMVvmkJpSm5gnsDt"
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                                               "Id": null,
                                               "CachekeyValue": null,
                                               "HoteIID": "489939",
                                               "Description": "Mulberry. 1 queen bed",
                                               "TypeValue": "Mulberry. 1 queen bed",
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                                               "Location": null,
                                               "RoomCode": "20088412915",
                                               "RateType": "MerchantStandard",
                                               "Key": "expedia~489939~0f43468e-3414-43b2-864d-
2354b4d926bc-5206~2017-08-24~2017-08-26~SGD~1~room1=2,0~15~208176642~200884129",
                                               "Taxes": 47.78,
                                               "DistributorFee": 0.0,
                                               "AverageNightlyStrikeRate": 0.0,
                                               "TotalStrikeRate": 270.0,
                                               "TotalCostInclusive": 317.78,
                                               "Fee": 0.0,
```

```
"BookingFee": 0.0,
                                              "CheckoutFee": 0.0,
                                              "Link": "expedia~489939~0f43468e-3414-43b2-864d-
2354b4d926bc-5206~2017-08-24~2017-08-26~SGD~1~room1=2,0~15~208176642~200884129",
                                              "RoomNo": 1,
                                              "AverageNightlyRate": 135.0,
                                              "TotalCost": 270.0,
                                              "ChargeablesText": null,
                                              "PromotionText": "Free Internet",
                                              "PromoCode": "",
                                              "Amount": 0.0,
                                              "HotelCode": null,
                                              "FreeCancellable": false,
                                              "breakfast_type": null,
                                              "isbreakfast": false,
                                              "HasFreeInternet": false,
                                              "Board": null,
                                              "CancellUpto": "11 May 2017",
                                              "ProviderCode": "de2ShMVvmkJpSm5gnsDt",
                                              "availToken": "de2ShMVvmkJpSm5gnsDt"
                                     },
                  }
         "CheckInTime": "2017-08-24",
         "CheckOutTime": "2017-08-26",
         "HotelCode": null,
         "Provider": ""
```

#### GetRateRules

# What this request does

This request checks that the recently received hotel rates from the MSF providers are still valid at the time of the request. This call is typically performed before the *Book* request is made.

### **Request Parameters**

Parameters	Туре	Required?	Remarks
CheckIn	string	Υ	The check in date in yyyy-MM-dd format
CheckOut	string	Υ	The check out date in yyyy-MM-dd format
cityID	string	Υ	The ID of the city in which the hotel is locationed in
roomBedFormat	string	Υ	The room format
currency	string	Υ	The currency the rates are requested in
HotelId	string	Υ	The ID of the hotel
roomLinks	string	Υ	An array containing all the links from the rooms that are to be booked, for example ["expedia~220613~d643a6b7-7b68-4c43-abde-db076c2e47e0-5206~2017-08-29~2017-08-30~SGD~1~room1=2,0~14~236762~28715"]
roomCodes	string	Υ	An array containing the room codes from the rooms that are to be booked. This value is not needed for now.
roomKeys			An array containing all the keys from the rooms that are to be booked, for example ["expedia~220613~d643a6b7-7b68-4c43-abde-db076c2e47e0-5206~2017-08-29~2017-08-30~SGD~1~room1=2,0~14~236762~28715"]
BookingType	string	Υ	The type of booking this is. This value should always be "Hotel"
availToken	string	Υ	This value should be taken from the token of the room in order for the rates to be returned
cacheKeyValue	String	Υ	This value should be obtained from the response of the rooms. It may be NULL.

### Request

# Response Key Fields

# Base Object

Fields	Type	Null?	Remarks
HotelName	string	N	The name of the hotel, for example, "Shangri-La's Rasa Sentosa Resort"
Hotellmage	string	Υ	The URL of the hotel image, for example "http://media.expedia.com/hotels/1000000/10000/6600/6519/07fb2f0c_b.jpg"
StarRating	string	Υ	The star rating of the hotel, for example, "5"
Chaincode	string	Υ	The chain code of the hotel
HotelId	string	N	The ID of the hotel
City	string	Υ	The city in which the hotel is located
State	string	Υ	The state in which the hotel is located
Country	string	Υ	The country in which the hotel is located
Postalcode	string	Υ	The postal code of the hotel
bf_type	string	Υ	The type of breakfast
PriceBreakDown	string	N	List of PriceOption (Refer to PriceOption object below)
purchaseToken	string	Υ	If this value is returned, please pass it in the booking request
agencyReference	string	Υ	If this value is returned, please pass it in the booking request

# PriceOption Object

Fields	Туре	Null?	Remarks
key	string	Υ	This value will be NULL for now
HotelId	string	N	The ID of the hotel
RoomType	string	Υ	The room type code, if any.
RoomDescription	string	N	The description of the room
RoomCode	string	Υ	The code of the room, if ay
RoomCategory	string	Υ	The category of the room, if any
RateCode	string	N	The code of the room rate if any
RateAccessCode	string	N	This code will be used for the booking request "expedia~220613~fafe6531-9fd1-4283-8d32-3f56ce20f8f8-5206~2017-08-29~2017-08-30~SGD~1~room1=2,0~14~236762~28715"
TotalCost	string	Υ	The cost of the room, without taxes
TotalCostCurrecy	string	Υ	The currency code
Taxes	string	Υ	The amount of taxes for the room
TaxesCurrency	string	Υ	The currency code

TaxesAndFees	string	Υ	Taxes and fees for the room
TaxesAndFeesCurrency	string	Υ	The currency code
DistributorFee	string	Υ	Any distributor fees for the room
DistributorFeeCurrency	string	Y	The currency code
CheckoutFee	string	Υ	Fees payable by the guest directly at the hotel. This
			information needs to be appear in the page for the booker to read.
CheckoutFeeCurrency	string	Υ	The currency code in which the check out fees are returned. If the currency code is different from the currency that the hotel is handling, this is a converted value for the convenience of the user only. Check out fees are always paid in local hotel currency
TotalCostInclusive	string	N	The cost of the room, including all applicable taxes (but excluding taxes payable by the guest directly to the hotel). This value is recommended to use to display to the user
TotalCostInclusiveCurrency	string	N	The currency code the cost is returned in
TotalStrikeRate	string	Υ	The rate of the rooms, before discount
TotalStrikeRateCurrency	string	Υ	The currency of the undiscounted rate
ListHotelFees	string	Υ	An array containing fees that the guest needs to pay
Listpromotions	string	Υ	List of <i>Promotion</i> object. (Refer to the Promotion Object below).
CancellationPolicy	string	Υ	List of <i>CancellationPolicy</i> Object. (Refer to the CancellationPolicy Object below)
bed_type	string	Υ	The bedding type
isbreakfast	boolean	Υ	Indicates if breakfast is included in the rate
bf_type	string	Υ	The type of breakfast, if the rate includes breakfast
commentContract	string	N	If this value is returned, this information needs to be shown to the booker as it contains important information for the guest.
adultIDs	string	Υ	If this value is returned, it needs to be included in the booking request
childIDs	string	Υ	If this value is returned, it needs to be included in the booking request
isBreakfastIncluded	boolean	Υ	If this is value is true, the rates have additional meal details
breakfastIncludedForNoOfAdults	string	Υ	Indicates the number of adult breakfast is included for
breakfastIncludedForNoOfChildren	string	Υ	Indicates the number of child breakfast is included for
BreakfastChargesPerExtraAdult	double	Υ	Indicates the cost of breakfast for the adults that exceeds the included amount.
BreakfastTotalCost	double	Υ	The total cost of the breakfast. This is already
D. Carrasti otaleost	acable	'	included in the rates and are returned here for
			informational purposes only
mealPlan	string	Υ	The type of meals included in the rate
mean lan	Julia		The type of frieds included in the rate

# Promotion Object

Fields	Туре	Null?	Remarks
code	string	Υ	The promotion code

amount	string	Υ	The amount that the promotion is applicable for. This is informational only, the TotalCostInclusive has already taken promotions into consideration.
endDate	string	Υ	The date in which the promotion will end
startDate	string	Υ	The date in which the promotion will start. This could be in the past.
shortMarketingText	string	N	Description of the promotion
nightsRequired	string	Υ	Minimum number of nights required before the promotion will apply
nightsFree	string	Υ	Number of nights the promotion will give free nights
isPosExclusive	boolean	Υ	Indicates if the promotion is exclusive to certain point of sales only

# CancellationPolicy Object

Fields	Туре	Null?	Remarks
Description	string	N	The cancellation policy of the room in text, for example "Charges will apply if changes or cancellations are made on or after 22 Aug 2017 11:59 hotel local time."
OrbitzPenalty	string	Υ	This value will always be NULL for now
HotelPenalty	string	Υ	This value will always be NULL for now
PenaltyTypeCode	string	N	Either "FREE_CANCELLATION" or "NONREFUNDABLE" to indicate if this rate is non-refundable or not.
PenaltyType	string	N	The cancellation policy of the room in text, for example "Charges will apply if changes or cancellations are made on or after 22 Aug 2017 11:59 hotel local time."
AsOfDate	string	N	The hotel local date and time in which the cancellation policy will come into effect, for example "22 Aug 2017 11:59"

### Response

```
"key": null,
    "HotelId": "220613",
    "RoomType": "14",
    "RoomDescription": "Superior Room, Hill View. 1 king bed",
    "RoomCode": "28715",
    "RoomCategory": null,
    "RateCode": "236762".
    "RateAccessCode": "expedia~220613~fafe6531-9fd1-4283-8d32-3f56ce20f8f8-5206~2017-08-29~2017-08-
30~SGD~1~room1=2,0~14~236762~28715",
    "TotalCost": 425,
    "TotalCostCurrecy": "SGD",
    "Taxes": 75.23,
    "TaxesCurrency": "SGD",
    "TaxesAndFees": 75.23,
    "TaxesAndFeesCurrency": null,
    "DistributorFee": 0,
    "DistributorFeeCurrency": null,
    "CheckoutFee": 0.
    "CheckoutFeeCurrency": null,
    "TotalCostInclusive": 500.23,
    "TotalCostInclusiveCurrency": "SGD",
    "TotalStrikeRate": 425,
    "TotalStrikeRateCurrency": "SGD",
    "ListHotelFees": null,
    "Listpromotions": [
     {
       "code": null,
       "amount": 0.
       "endDate": null.
       "startDate": null.
       "shortMarketingText": "Breakfast Buffet",
       "nightsRequired": 0,
       "nightsFree": 0.
       "isPosExclusive": false
       "code": null,
       "amount": 0,
       "endDate": null,
       "startDate": null.
       "shortMarketingText": "Free Wireless Internet",
       "nightsRequired": 0,
       "nightsFree": 0.
       "isPosExclusive": false
     "CancellationPolicy": {
     "Description": "Charges will apply if changes or cancellations are made on or after 22 Aug 2017 11:59 hotel local time.",
     "OrbitzPenalty": null,
     "HotelPenalty": null,
     "PenaltyTypeCode": "FREE_CANCELLATION",
     "PenaltyType": "Charges will apply if changes or cancellations are made on or after 22 Aug 2017 11:59 hotel local time.",
     "AsOfDate": "22 Aug 2017 11:59"
    "bed_type": null,
    "isbreakfast": false.
    "bf_type": null,
    commentContract": "p><b>Know Before You Go</b> <br /> One child 3 years old or younger stays free when occup
the parent or guardian's room, using existing bedding. The property has connecting/adjoining rooms, which are subject to
availability and can be requested by contacting the property using the number on the booking confirmation.
```

have restricted access. Guests can contact the property for details using the contact information on the booking confirmation.

```
<b>Fees</b> <br/>following fees and deposits are charged by the property at time of service, check-in, or che
           out.  
                                Rollaway bed fee: SGD 120.00 per night
                                                                                   The above list may not be comprehensive
           Fees and deposits may not include tax and are subject to change. Mandatory Fees and Taxes
           asked to pay the following charges at the property: Deposit: SGD 100 per night We have included all charges at the property:
           provided to us by the property. However, charges can vary, for example, based on length of stay or the room you book. -
               "adultIDs": null,
               "childIDs": null,
               "isBreakfastIncluded": 0,
               "breakfastIncludedForNoOfAdults": null,
               "breakfastIncludedForNoOfChildren": null,
               "BreakfastChargesPerExtraAdult": 0,
               "BreakfastTotalCost": null,
               "mealPlan": "Breakfast Buffet"
             "purchaseToken": null,
             "agencyReference": null
]
```

# Booking

# What this request does

This method will allow the user to book the selected hotel.

# Request Parameters

# **Base Request Object**

Parameters	Type	Required?	Remarks
Booking	object	Υ	Booking Object. (Refer to the Booking Object below)
Travellers	object	Υ	List of <i>Traveller</i> Objects. (Refer to the Traveller Object below)
BillingAddressDetails	object	Υ	Address Object. (Refer to the Address Object below)
ProductDetails	object	Υ	List of <i>ProductDetail</i> . (Refer to the ProductDetail Object below)

# **Booking Object**

Parameters	Туре	Required?	Remarks
BookingStatus	string	Υ	Send "Pending" for this property
IpAddress	string	Υ	The IP address of the guest
Currency	string	Υ	The currency in which the booking is requested in
TotalAmount	string	Υ	The TotalCostInclusive in the RateRules response
TzMemberId	string	Υ	The ID which you have been assigned with
Checkin	string	Υ	The check in date in yyyy-MM-dd format
Checkout	string	Υ	The check out date in yyyy-MM-dd format
Destination	string	Υ	The city and country where the hotel is located in
Adults	string	Υ	The number of adults being requested for
Childs	string	Υ	The number of child being requested for
Rooms	string	Υ	The number of rooms being requested for
RoomFormat	string	Υ	The room format

### **Traveller Object**

Most providers require one name per guest, so if you are booking for 4 adults and 2 child, you will need to have 6 elements in the Traveller object.

Parameters	Type	Required?	Remarks

Index	string	Y	The sequence index in which this guest will be sent for the booking
FirstName	string	Υ	The first name of the guest
LastName	string	Υ	The last name of the guest
Email	string	Υ	The email address of the guest
CountryCode	string	N	null
Phone	string	Υ	The country code of the guest's contact number
PhoneNumber	string	Υ	The guest's contact number
TravellerType	string	Υ	The type of guest, Adult or Child
Salutation	string	Υ	The salutation of the guest

# Address Object

Parameters	Type	Required?	Remarks
BillingLine1	string	Υ	The billing address of the guest
BillingLine2	string	N	The second line of the billing address
BillingCity	string	Υ	The city of the billing address
BillingState	string	Υ	The state of the billing address
BillingCountry	string	Υ	The ISO country code of the billing address
BillingZipCode	string	Υ	The postal code of the billing address

# ProductDetail Object

Parameters	Type	Required?	Remarks
Booksource	string	Υ	The availToken from the RateRules response
ProductId	string	Υ	The ID of the hotel
ProductType	string	Υ	Send as "hotel" always
ProductName	string	Υ	The name of the hotel
Currency	string	Υ	The currency in which the hotel is being booked in
TotalCost	string	Υ	The TotalCostInclusive value of the hotel
purchaseToken	string	N	If the value is returned in the RateRules call, please add in
agencyReference	string	N	If the value is returned in the RateRules call, please add in
RoomsArrangement	string	Y	List of Room Objects. A Room Object for every Room booked. (Refer to the Room Object below).

# Room Object

Parameters	Туре	Required?	Remarks
Key	string	Υ	The key from the RateRules response, for example "413023515713-3023515713-1-0-2017-08-24"
Link	string	Υ	The link from the RateRules response, for example "413023515713-3023515713-1-0-2017-08-24"
Currency	string	Υ	The currency in which the booking is requested in
TotalCost	string	Υ	The TotalCost of the room. If TotalCost is not available, use TotalCostInclusive

Taxes	string	Υ	The taxes of the room, if any
TaxesFee	string	Υ	The taxes and fees of the room if any
CheckoutFee	string	Υ	The check out fees that the guest needs to be directly to the hotel, if any
TotalCostInclusive	string	Υ	The TotalCostInclusive of the room
DistributorFee	string	Υ	The distributor fees of the room
HotelFee	string	Υ	Any additional fees that are payable directly to the hotel
TotalCostCurrency	string	Υ	The currency of TotalCost
TaxesCurrency	string	Υ	The currency of Taxes
TaxesFeeCurrency	string	Υ	The currency of TaxesFees
CheckoutFeeCurrency	string	Υ	The currency of the check out fees
TotalCostInclusiveCurrency	string	Υ	The currency of the TotalCostInclusive
DistributorFeeCurrency	string	Υ	The currency of the distributor fees
HotelFeeCurrency	string	Υ	The currency of the hotel fees
RoomCode	string	Υ	The room code, if returned from RateRules
RoomDesc	string	Υ	The description of the room
CancellationPolicy	string	Υ	CancellationPolicy Object. (Refer to the CancellationPolicy Object below).
bed_type	string	Υ	The bed_type as returned from RateRules response
isbreakfast	boolean	Υ	The isbreakfast value as returned from the RateRules response
bf_type	string	Υ	The bf_type value as returned from the RateRules response
RoomCategory	string	Υ	The category of the room as returned in the RateRules response
RoomAccessCode	string	Υ	The RateAccessCode value as returned in the RateRules response
adultIDs	string	Υ	List of string of adult IDs as returned in RateRules response
childIDs	string	Υ	List of ChildIDs as returned in RateRules response

# CancellationPolicy Object

Parameters	Туре	Required?	Remarks
Description	string	Y	The cancellation policy of the hotel, as returned in RateRules response, for example "This rate is non-refundable and cannot be changed or cancelled - if you do choose to change or cancel this booking you will not be refunded any of the payment."
OrbitzPenalty	string	N	Leave blank
HotelPenalty	string	N	Leave blank
PenaltyTypeCode	string	Y	Code indicating if its free cancellable or non-refundable, as returned in the rate rules response
PenaltyType	string	Y	The cancellation policy of the hotel, as returned in RateRules response, for example "This rate is non-refundable and cannot be changed or cancelled - if you do choose to change or cancel this booking you will not be refunded any of the payment."

1-OfD-t-		V	
AsOfDate	string	Y	The hotel local date and time in which the cancellation
			policy will come into effect, for example "5/8/2017
			6:08:28 PM"

#### Request

```
"Booking": {
         "BookingStatus": "Pending",
         "IpAddress": "203.118.42.200",
         "Currency": "SGD",
         "TotalAmount": 306.74,
         "TzMemberId": "2313",
         "Checkin": "2017-08-24T00:00:00",
         "Checkout": "2017-08-26T00:00:00",
         "Destination": "Singapore, Singapore",
         "Adults": 2,
         "Childs": 0,
         "Child2": 0,
         "Senior": 0,
         "Youth": 0,
         "Rooms": 1,
         "RoomFormat": "room1=2,0",
},
"Travellers": [{
                   "Index": 1,
                   "FirstName": "Hoang",
                   "LastName": "Thanh",
                   "Email": "hoang.dinh.thanh@miyatsu.vn",
                   "CountryCode": null,
                   "Phone": "+ 84",
                   "PhoneNumber": "123456789",
                   "TravellerType": "Adult",
                   "Salutation": null,
         }, {
                   "Index": 2,
                   "FirstName": "TBA",
                   "LastName": "TBA",
                   "Email": "helpdesk@tripanzee.com",
                   "CountryCode": null,
                   "Phone": "+ 84",
                   "PhoneNumber": "123456789",
                   "TravellerType": "Adult",
                   "Salutation": null,
],
"BillingAddressDetails": {
```

```
"BillingLine1": "1001 Doi Can",
                   "BillingLine2": "",
                   "BillingCity": "Ba Dinh",
                   "BillingState": "Ha Noi",
                   "BillingCountry": null,
                   "BillingZipCode": "100000"
         "ProductDetails": [{
                             "Booksource": "qtVo4PqzfZMAMY35uwnX",
                             "ProductId": "2831170",
                             "ProductType": "hotel",
                             "ProductName": "Village Hotel Bugis",
                             "Currency": "SGD",
                             "TotalCost": 306.74,
                             "RoomsArrangement": [{
                                                "RoomNo": 0,
                                                "Key": "413023515713-3023515713-1-0-2017-08-24",
                                                "Link": "413023515713-3023515713-1-0-2017-08-24",
                                                "TravellerIndex": 0,
                                                "Currency": "SGD",
                                                "TotalCost": 306.74,
                                                "Taxes": 0.0.
                                                "TaxesFee": 0.0,
                                                "CheckoutFee": 0.0,
                                                "TotalCostInclusive": 306.74,
                                                "DistributorFee": 0.0,
                                                "HotelFee": 0.0,
                                                "TotalCostCurrency": "SGD",
                                                "TaxesCurrency": "SGD",
                                                "TaxesFeeCurrency": "SGD",
                                                "CheckoutFeeCurrency": null,
                                                "TotalCostInclusiveCurrency": "SGD",
                                                "DistributorFeeCurrency": "SGD",
                                                "HotelFeeCurrency": null,
                                                "RoomCode": "413023515713",
                                                "RoomDesc": "Superior Room",
                                                "CancellationPolicy": {
                                                          "Description": "This rate is non-refundable and cannot b
changed or cancelled - if you do choose to change or cancel this booking you will not be refunded any of the
payment.",
                                                          "OrbitzPenalty": "",
                                                          "HotelPenalty": "214.5",
                                                          "PenaltyTypeCode": "NONREFUNDABLE",
                                                          "PenaltyType": "This rate is non-refundable and cannot
changed or cancelled - if you do choose to change or cancel this booking you will not be refunded any of the
payment.",
                                                          "AsOfDate": "5/8/2017 6:08:28 PM"
                                                },
                                                "PackageHotelId": 0,
                                                "PackageHotelName": null,
                                                "Commission": null,
```

# Response Key Fields

### Base Response Object

Fields	Type	Null?	Remarks
UniqueTxnId	string	N	The transaction ID of the booking
Amount	string	N	The amount charged
CustomerName	string	N	The name of the guest
CustomerEmail	string	N	The email address of the guest
BookingStatus	string	N	The status of the booking, Successful, Failed
BookingId	string	N	The booking ID of the booking
Currency	string	N	The currency that the booking was made in
ErrorMsg	string	N	The error message, if any
ProductType	string	N	This will always be "hotel"
BookingRef	string	N	The reference of the booking. Use this value for cancellation and any subsequent follow up.

### Response

```
{
    "UniqueTxnld": "",
    "Amount": "563.87",
    "CustomerName": "Hoang",
    "CustomerEmail": "hoang.dinh.thanh@miyatsu.vn",
    "BookingStatus": "Failed",
    "BookingId": "f11a06d0-188c-46bd-a8f5-e92a6cd56d6e",
    "Currency": "SGD",
    "ErrorMsg": "",
    "ProductType": "hotel",
```

```
"BookingRef": "201705000059",
"ProductBookingId": "20907",
"ObjActivitySearch": {
 "Destination": "Singapore, Singapore",
 "TravelDate": "2017-08-29T00:00:00",
 "Adults": 2.
 "Childs": 0,
 "Currency": "SGD"
"Status": false,
"IsPayLink": false,
"PaymentId": "f3622812-736d-44e0-867d-e9c151c2f248",
"PaymentType": null,
"CardNumber": null,
"ExpiryDate": null,
"TransactionID": null,
"SourceApplication": null,
"PNRNumber": null,
"IsPromotion": false,
"AgentID": 0,
"paymenttypemsg": null
```

#### Cancel

### What this request does

This method allows the user to perform a booking cancellation.

### **Request Parameters**

Parameters	Type	Required?	Remarks
BookingRef	string	Y	This is the booking reference number that MSF will cancel.  For eg, 201705000084
Email	string	Υ	The email address of the principal booker.  For eg, "testing@booking.com"

#### Request

### MSF API – Developer's Guide

```
{
    BookingRef: "201705000084",
    Email: "testing@booking.com"
}
```

# Response Key Fields

Fields	Туре	Null?	Remarks
cancellationNumber	string	N	The cancellation number returned from MSF.  For eg, "284186057-1234-1234"
message	string	N	Response message in detail that can be reproduced on Agent website  For eg "Your hotel booking is cancelled successful"
status	boolean	N	Status of the cancellation. True for cancelled, False for otherwise.  For eg, true

### Response

```
{
    "cancellationNumber": "284186057-1234-1234",
    "message": "Your hotel booking is cancelled successful",
    "status": true
}
```