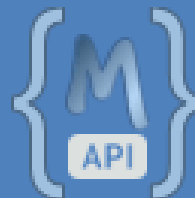




# API Documentation

<http://mid.as/api>

v2.00



*...making your facilities work for you!*

*making your facilities work for you!*





## Table of Contents

API Usage Guide.....	1	get_reminders.....	26
Overview.....	1	get_resource_availability.....	26
Installing the API.....	1	get_setting.....	27
Making API calls.....	1	get_template.....	28
API responses.....	1	get_user.....	29
API Settings.....	2	get_venue.....	32
Global Parameters.....	3	get_venues_in_group.....	34
Scope.....	3	get_venues_in_use.....	35
API Command Reference.....	4	get_watches.....	35
add_booking.....	4	mod_booking.....	36
add_client.....	6	mod_client.....	38
add_invoice.....	7	mod_invoice.....	39
add_resource.....	8	mod_resource.....	40
approve_request.....	9	notify_user.....	41
del_booking.....	9	reject_request.....	42
del_bookings.....	10	restore_booking.....	42
del_client.....	11	set_setting.....	43
del_invoice.....	12	set_template.....	44
del_resource.....	12	util_from_epoch.....	45
email_client.....	13	util_to_epoch.....	45
get_activity.....	14	Appendix A – Activity Codes.....	46
gen_invoice.....	15	Appendix B – Setting Names.....	47
get_availability.....	16	Appendix C – Error Handling.....	51
get_booking.....	17	Code Samples.....	53
get_bookings.....	19	jQuery.....	53
get_client.....	21	Perl.....	53
get_consumable_levels.....	22	PHP.....	53
get_invoice.....	23	Python.....	54
get_invoices.....	24	C#.....	54
get_messages.....	25	Release Notes.....	55

# API Usage Guide

## Overview

The MIDAS API (Application Programming Interface) allows developers to interface directly with MIDAS from their own applications.

## Installing the API

The MIDAS API is an optional add-on for MIDAS v4.03 (or later), that can be purchased along with MIDAS, or added at a later stage.

- To purchase MIDAS and the API add-on, please visit: <https://mid.as/purchase>
- To add the API add-on to an existing MIDAS installation, please go to MIDAS Admin Options → Manage Addons → Available Addons → API Access

Once purchased, the API will become available for one-click installation via MIDAS Admin Options → Manage Addons → Addons Ready To Install → API Access

Once installed, various API settings are available via MIDAS Admin Options → Manage Addons → Installed Addons → API Access

## Making API calls

To make an API call, your application will need to perform an HTTP POST request (GET requests can also be enabled - see [API Settings](#) below) to `http://your_midas_url/api.pl`. Each request must include as a minimum your unique API key, an API command and all associated required parameters for the API command issued. Please refer to the API Command Reference for details of available API commands and associated parameters.

## API responses

The MIDAS API returns JSON (JavaScript Object Notation) formatted data. Example responses are shown throughout the API Command Reference. Error responses are also returned in JSON format and denoted by the term "error".



## API Settings

A number of API settings are available via MIDAS Admin Options → Manage Add-ons → API Access.

Setting	Description
<b>Enable API access?</b>	Allows enabling/disabling of API access. If disabled, any API calls will return: <code>{"error": "not enabled"}</code>
<b>Read Only access?</b>	With this setting enabled, the API will operate in "read-only" mode and will be prevented from making any changes to your MIDAS. If you only intend to read data from MIDAS, and not write/make changes using the API, you should select this option.
<b>Allow GET (as well as POST) method?</b>	By default, only http POST requests to the API are allowed, and http GET requests are rejected. Enabling this setting will allow you to perform either GET and POST http requests to the API
<b>Enable logging of all calls?</b>	<i>(Only available to self-hosted editions of MIDAS)</i> When enabled, API calls will be logged to an <code>api_log.dat</code> file (located in your MIDAS directory). The format of each line of this file is as follows: <code>timestamp IP_address api_command</code> This can be used to log/monitor calls to your API. It should only be enabled for debugging purposes as it will reduce performance of the API, and may lead to a large <code>api_log.dat</code> file if left enabled for a long of time.
<b>API actions appear in Recent Activity log?</b>	By default when a user performs an action in MIDAS (such as adding a booking), the action is recorded in the <a href="#">Recent Activity log</a> . This setting controls whether actions performed through the API that result in changes to data within MIDAS should also be included in the Recent Activity log.
<b>Allowed Referrers</b>	Allows calls to your API to be restricted from certain domains/IP addresses. If left blank, API calls will be allowed from any referrer. For calls from banned referrers, the API will return: <code>{"error": "referrer not allowed"}</code>



## Global Parameters

The following parameters are required with each API call

Required Parameters	Possible Values	Description
<b>key</b>	<code>&lt;API key&gt;</code>	Your unique API key. For security, the API will only respond to your unique key. Calls made to the API without a key, or with an invalid key, will not be processed. You should not make your API key visible/available to anyone.
<b>action</b>	<code>&lt;API command&gt;</code>	The action you wish the API to perform. See the API Command Reference for a full list of supported commands.

The following parameters are optional, but may also be included with any API call

Optional Parameters	Possible Values	Description
<b>l</b>	<code>&lt;language&gt;</code>	By default, the API will use the "en-US" language pack where applicable. To optionally use a different language pack, its corresponding language code can be specified.
<b>db</b>	<code>&lt;database&gt;</code>	MIDAS allows you to optionally run multiple, independent, databases from the same interface. If multiple databases have been setup in your MIDAS, API calls will be made to whichever database is currently set as the "default". To make API calls to one of the other defined databases, its corresponding database code can be passed in the "db" parameter. To locate the correct database code to pass with the "db" parameter, open up your midasglobal.dat settings file in a standard text editor and locate the <database> section within this file. This section contains details of all defined databases for your MIDAS. The database "code" to use is the current value of the "r" parameter for the relevant database.
<b>epoch</b>	1   0	For API calls that require start/end times, setting "epoch" to "1" will accept start/end values in epoch seconds (instead of the default YYYYMMDDHHMM format) For API calls that return a date/time, setting "epoch" to "1" will return date/time values in epoch seconds (instead of following the current MIDAS date/time format settings, for instance, "DD/MM/YYYY @ HH:MM")

## What are epoch seconds?

Epoch seconds are the number of seconds that have elapsed since midnight Coordinated Universal Time (UTC) on 1 January 1970

## Scope

Version 1.xx of the API offered a "read-only" interface to the MIDAS system, allowing data to be read, but not be added, changed, or removed.

Version 2.xx of the API provides a "bi-directional" interface to the MIDAS system, allowing data to be both read and also to be added, changed, or removed.



# API Command Reference

## add\_booking

Adds a new booking.

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Start time
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	End time
<b>venue</b>	Venue ID   Venue Name	The unique numeric ID or the name of the venue the booking is for

Optional Parameters	Possible Values	Description
<b>client</b>	Client ID	The numeric ID of the existing client that the booking to be added is for
<b>type</b>	Booking Type ID   Booking Type Name	The numeric ID of the Booking Type, or the name of the Booking Type the booking should be assigned
<b>attendees</b>	Number	The number of booking attendees
<b>notes</b>	String	Notes about the booking
<b>resources</b>	Quantity & Resource ID   Resource Name	Resources to be added to the booking. Values should be passed as "qty resource (ID or name)". For example, to add 2 Tables to a booking, pass "2 Tables". This parameter can be added multiple times to add further resources
<b>accept_limited_resources</b>	0   1	For bookings with Resources, this parameter determines whether those bookings should still be added if the quantity of resources requested isn't available. For example, if you add 10 Tables to a booking, yet only 5 Tables are available, an error will be returned and the booking won't be added. However, passing the <code>accept_limited_resources</code> parameter with a value of "1" will add the booking, but with reduced resource quantities (in the previous example, this would mean that only 5 Tables would be added to the booking, instead of the desired 10)
<b>no_watches</b>	0   1	Setting the "no_watches" parameter to "1" will suppress generation of Watch notifications for users who are monitoring new bookings, otherwise omitting this parameter (or setting it to "0") will allow Watch notifications to be generated accordingly
<b>status</b>	request   confirmed	If omitted or set to "confirmed", bookings will be added. If set to "request", the booking will be added as a



		provisional booking "request" only
<b>&lt;custom fields&gt;</b>	Custom Value	If you've defined custom booking fields in your MIDAS, you can optionally specify values for these fields for the booking you're adding. For example, if you have a custom field named "My Custom Field", you would pass the parameter "my_custom_field" together with the value you wish to set

#### Example Response

```
{  
  "booking_added": "123"  
}
```

#### Variables Returned (on success)

<b>booking_added</b>	A unique booking ID corresponding the newly added booking
----------------------	---

#### Variables Returned (on error)

<b>error</b>	The reason why the booking couldn't be added. Typical examples include: Unavailable ( <i>clashes with an existing booking</i> ) Unavailable - Blocked By Meeting Room 1 45 Attendees will exceed the maximum capacity of Meeting Room 1 (15) Outside Operating Hours Venue unavailable from 1/1/2015 Venue unavailable between 1/1/2015-1/2/2015 Venue not available until 1/1/2015 Only x5 Tables Available
--------------	--



## add\_client

Adds a new client record.

Required Parameters	Possible Values	Description
<b>client</b>	String	Client name

Optional Parameters	Possible Values	Description
<b>org</b>	String	The client's Organization name
<b>email</b>	Email address	The client's Email address
<b>address</b>	String	The client's postal/mailling address
<b>phone</b>	Number	The client's telephone number
<b>fax</b>	Number	The client's fax number
<b>mobile</b>	Number	The client's mobile/cell number
<b>notes</b>	String	Notes about the client
<b>tax_exempt</b>	0   1	Specifies whether the client is exempt from being charged tax on their invoices. If this parameter is omitted a default value of "0" will be assumed (i.e. client' is not exempt from tax) quantities (in the previous example, this would mean that only 5 Tables would be added to the booking, instead of the desired 10)

### Example Response

```
{  
  "client_added": "56"  
}
```

### Variables Returned

<b>client_added</b>	A unique client ID corresponding the newly added client record
---------------------	--





## add\_invoice

Creates a new invoice.

Required Parameters	Possible Values	Description
<b>client</b>	Client ID	The numeric ID of the existing client that the invoice being added for
<b>item_x</b>	String	The item to be invoiced. Increment <i>x</i> to each new item to appear on the invoice. For example, to create an invoice with two items, the first item to appear on the invoice should be passed as <i>item_1</i> , the second as <i>item_2</i> , and so forth
<b>qty_x</b>	Number	The quantity of the corresponding <i>item_x</i> item to be added
<b>rate_x</b>	Number	The rate (charge) (without currency symbol - i.e. 10.00) of the corresponding <i>item_x</i> item to be added

Optional Parameters	Possible Values	Description
<b>notes</b>	String	Additional notes to appear on the invoice
<b>tax</b>	Number	The percentage rate of tax to be applied to the invoice. If this parameter is omitted, the default tax rate will be applied

### Example Response

```
{
  "invoice_added": "MIDAS00075"
}
```

### Variables Returned

<b>invoice_added</b>	The Invoice number/reference of the newly created invoice
----------------------	---



## add\_resource

Adds a new resource to the system.

Required Parameters	Possible Values	Description
<b>resource</b>	String	The name of the new resource

Optional Parameters	Possible Values	Description
<b>type</b>	equipment   consumable   staffing	The type of resource to be added. If this parameter is omitted, the resource type will default to "equipment"
<b>qty</b>	Number	The available quantity of the new resource. If this parameter is omitted an "Unlimited" available quantity will be assumed
<b>charge</b>	Decimal	The charge (without currency symbol - i.e. 10.00) for the resource. This will be a per-hour charge where the <code>type</code> parameter is set to "staffing", otherwise this is a per-booking charge
<b>public</b>	0   1	Sets whether the resource is publicly requestable (can appear on the Public Booking Request screen). If this parameter is omitted, the resource won't be publicly requestable
<b>venues</b>	Venue IDs	A comma-separated list of Venue ID's the resource will be available to. If this parameter is omitted, the resource will be available to all venues

### Example Response

```
{
  "resource_added": "67"
}
```

### Variables Returned

<b>resource_added</b>	A unique resource ID corresponding the newly added resource
-----------------------	---



## approve\_request

Approves a booking request.

Required Parameters	Possible Values	Description
<b>id</b>	Booking ID	The numeric ID of the booking request to be approved

Optional Parameters	Possible Values	Description
<b>silent</b>	0   1	By default when a booking request is approved, the original requestor is sent an email notification informing them that their request has been approved. Setting "silent" to "1" will suppress the sending of this notificaton

### Example Response

```
{
  "request_approved": "1"
}
```

### Variables Returned

<b>request_approved</b>	Returns "1" after a successful approval
-------------------------	---

## del\_booking

Deletes a single booking.

Required Parameters	Possible Values	Description
<b>id</b>	Booking ID	The unique numerical reference of the booking to be deleted (which can be determined from the <a href="#">"get_bookings"</a> call)

Optional Parameters	Possible Values	Description
<b>force</b>	0   1	By default, when a booking is "deleted", it still persists in a "hidden" state (allowing it to be restored at a later stage). Passing the "force" parameter with a value of "1" will mean that the booking will be completely removed from the system
<b>no_watches</b>	0   1	Setting the "no_watches" parameter to "1" will supress generation of Watch notifications for users who are monitoring deleted bookings, otherwise omitting this parameter (or setting it to "0") will allow Watch notifications to be generated accordingly

### Example Response

```
{
  "bookings_deleted": "1"
}
```

### Variables Returned

<b>bookings_deleted</b>	The number of bookings deleted
-------------------------	--------------------------------



## del\_bookings

Deletes multiple bookings across a date range.

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Sets the start of the window in which bookings should be deleted
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	Sets the end of the window in which bookings should be deleted

Optional Parameters	Possible Values	Description
<b>client</b>	Client ID	Limits deleting bookings to a specific client
<b>venue</b>	<Venue Name>	Limits deleting of bookings to a specific venue
<b>type</b>	<Booking Type>	Limits deleting of bookings to a specific booking type

Any combination of the above optional parameters may be used to limit which bookings are deleted. For example, specifying both a client and a venue will only delete bookings which match BOTH criteria.

Optional Parameters	Possible Values	Description
<b>force</b>	0   1	By default, when a booking is "deleted", it still persists in a "hidden" state (allowing it to be restored at a later stage). Passing the "force" parameter with a value of "1" will mean that the booking will be completely removed from the system
<b>no_watches</b>	0   1	Setting the "no_watches" parameter to "1" will suppress generation of Watch notifications for users who are monitoring deleted bookings, otherwise omitting this parameter (or setting it to "0") will allow Watch notifications to be generated accordingly

### Example Response

```
{
  "bookings_deleted": "7"
}
```

### Variables Returned

<b>bookings_deleted</b>	The number of bookings deleted
-------------------------	--------------------------------



## del\_client

Deletes existing client records.

Required Parameters (at least 1 required)	Possible Values	Description
<b>id</b>	Client ID	The unique numerical id of the client (which can be determined from the " <a href="#">get_client</a> " call) Passing this parameter will override all other required parameters
<b>client</b>	String	Client name
<b>org</b>	String	Organization name
<b>email</b>	Email address	Email address
<b>address</b>	String	Postal/mailling address
<b>phone</b>	Number	Telephone number
<b>fax</b>	Number	Fax number
<b>mobile</b>	Number	Mobile/cell number
<b>notes</b>	String	Notes about the client

Optional Parameters	Possible Values	Description
<b>retain_bookings</b>	1   0	By default, when a client is deleted, all associated bookings for the client are also deleted. Passing the <code>retain_bookings</code> parameter with a value of "1" will mean that no bookings will be removed when a client is deleted

### Example Response

```
{
  "clients_deleted": "1",
  "bookings_deleted": "24"
}
```

### Variables Returned

<b>clients_deleted</b>	The number of clients deleted
<b>bookings_deleted</b>	The number of bookings deleted



## del\_invoice

Deletes an existing invoice

Required Parameters	Possible Values	Description
<b>invoice</b>	Invoice ID	The number/reference of the invoice to delete

### Example Response

```
{
  "invoice_deleted": "MIDAS00075"
}
```

### Variables Returned

<b>invoice_deleted</b>	The Invoice number/reference of the deleted invoice
------------------------	---

## del\_resource

Deletes an existing resource, and removes it from any existing bookings

Required Parameters	Possible Values	Description
<b>resource</b>	Resource ID	The numeric ID of the existing resource to delete

### Example Response

```
{
  "resource_deleted": "67",
  "bookings_affected": "4,8,15,16,23,42"
}
```

### Variables Returned

<b>resource_deleted</b>	The numeric ID of the deleted resource
<b>bookings_affected</b>	A comma-separated list of all the booking ID's from which the deleted resource has been removed



## email\_client

Send an email to an existing client.

Required Parameters	Possible Values	Description
<b>client</b>	Client ID	The numeric ID of the existing client to email
<b>subject</b>	String	The subject line of the email
<b>body</b>	Text	The main body of the email. HTML is allowed

Optional Parameters	Possible Values	Description
<b>invoice</b>	Invoice ID	The number/reference of an invoice to include within the email. Note: Only invoices for the specific client being emailed can be included

### Example Response

```
{
  "completed": "1"
}
```

### Variables Returned

<b>completed</b>	Returns "1" once the API call has completed
------------------	---



## get\_activity

Returns all MIDAS user activity between two times. The optional “user” parameter can be used to limit the activity returned to a specific user, and the optional “filter” parameter can be used to limit the results to a specific activity.

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Start time
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	End time

Optional Parameters	Possible Values	Description
<b>user</b>	<User's Full Name>   SYSTEM	Limit the returned activity to a specific user identified by <User's Full Name> or the keyword “SYSTEM”. “SYSTEM” will return activity not assigned to a specific user (for example database backups, new booking requests received, etc). If this parameter is omitted, activity for all users (including “SYSTEM”) will be returned
<b>filter</b>	<activity code>	Limit the returned activity to a specific action. See Appendix A for a list of activity codes

### Example Response

```
{
  {
    "time": "5/4/2013 @ 07:53",
    "user": "SYSTEM",
    "action": "BKUP"
  },
  {
    "time": "5/4/2013 @ 07:26",
    "user": "Joe Bloggs",
    "action": "ADD",
    "data1": "12/5/2013 @ 22:00"
  }
}
```

### Variables Returned

<b>time</b>	Date/Time activity occurred
<b>user</b>	User who generated activity
<b>action</b>	Code of action performed. See Appendix A for a list of activity codes
<b>data1</b>	Returns additional data specific to action. See Appendix A for more information
<b>data2</b>	Returns additional data specific to action. See Appendix A for more information
<b>data3</b>	Returns additional data specific to action. See Appendix A for more information
<b>data4</b>	Returns additional data specific to action. See Appendix A for more information





## gen\_invoice

Automatically generate invoice(s).

### To generate an invoice from an existing booking:

Required Parameters	Possible Values	Description
<b>booking</b>	Booking ID	The numeric ID of the existing booking for which to generate an invoice for

### Example Response

```
{
  "invoice_created": "MIDAS00075"
}
```

### Variables Returned

<b>invoice_created</b>	The Invoice number/reference of the newly generated invoice
------------------------	---

### To generate a series of invoices across a date range:

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Sets the start of the window in which bookings should be included in generated invoices
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	Sets the end of the window in which bookings should be included in generated invoices

Optional Parameters	Possible Values	Description
<b>client</b>	Client ID	The numeric ID of the existing client who's bookings should be included on the generated invoice

Including the optional "client" parameter will limit invoice generation to a single invoice containing all bookings for the specified client which take place between the specified `start/end` values.

Omitting the optional "client" parameter will generate separate invoices for each client with bookings taking place between the specified `start/end` values.

### Example Response

```
{
  "invoices_created": "MIDAS00076,MIDAS00077,MIDAS00078,MIDAS00079"
}
```

### Variables Returned

<b>invoices_created</b>	A comma-separated list of all newly generated invoices
-------------------------	--



## get\_availability

Checks whether a venue is available (free) for booking between two times

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Start time
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	End time
<b>venue</b>	<Venue name>	Venue

Optional Parameters	Possible Values	Description
<b>attendees</b>	<number>	The number of desired attendees. If specified, availability will also be dependent upon whether the number of attendees is less than the venue's capacity and/or maximum global occupancy levels.

### Example Response

```
{  
  "availability": "1"  
}
```

### Variables Returned

<b>availability</b>	Current Venue Availability A value of "1" means the venue is "available" on the dates/times specified A value of "Unavailable" means the venue is not available on the dates/times specified (i.e. clashes with an existing booking) Any other values also mean "Unavailable" but will specify the reason for the unavailability i.e. "This will exceed your maximum occupancy level", or "Venue unavailable from 6/5/2103"
---------------------	--



## get\_booking

Returns details of a specific booking.

Required Parameters	Possible Values	Description
<b>id</b>	Booking ID	The unique numerical reference of the booking

### Example Response

```
{
  "id": "222",
  "start": "5/4/2013 @ 13:00",
  "end": "5/4/2013 @ 14:00",
  "venue": "Room 3",
  "client": "Some User (Some Org)",
  "type": "Community",
  "attendees": "30",
  "notes": "",
  "resources": [
    {
      "resource": "Laptop",
      "qty": "2"
    },
    {
      "resource": "Projector",
      "qty": "1"
    }
  ],
  "invoice": "MIDAS00001",
  "history": [
    {
      "action": "Added",
      "date": "2/4/2013 @ 08:23",
      "user": "Joe Bloggs"
    },
    {
      "action": "Modified",
      "date": "2/4/2013 @ 16:52",
      "user": "Joe Bloggs"
    }
  ],
  "status": "confirmed"
}
```

Variables Returned	
<b>id</b>	Internal Booking ID
<b>start</b>	Start date/time of booking
<b>end</b>	End date/time of booking
<b>venue</b>	Venue
<b>client</b>	Client the booking is for
<b>type</b>	Booking Type
<b>attendees</b>	Estimated number of people attending booking
<b>notes</b>	Booking Notes
<b>resources</b>	Resources assigned to booking



<b>resource</b>	The name of the resource
<b>qty</b>	The quantity of the resource
<b>invoice</b>	Invoice in which the booking appears
<b>history</b>	Booking history
<b>action</b>	The action performed. This will be one of the following: "Booking Request Received", "Added", "Modified", "Deleted", "Restored", or "Invoice Created"
<b>date</b>	The date/time the action occurred
<b>user</b>	The user who performed the action
<b>custom fields</b>	Any custom booking fields setup in your MIDAS will also be returned
<b>status</b>	Denotes whether the booking is a "request", a "confirmed" booking, or whether it has been "deleted"



## get\_bookings

Returns all bookings between two dates/times

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Sets the start of the window for which bookings should be returned
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	Sets the end of the window for which bookings should be returned

Optional Parameters	Possible Values	Description
<b>venue</b>	<Venue name>	Limits returned bookings to a specific venue
<b>type</b>	<Booking Type>	Limits returned bookings to a specific booking type
<b>status</b>	all   request   deleted	Controls which bookings are returned. "request" will only return booking requests. "deleted" will only return deleted bookings. "all" will return all bookings (including deleted bookings and booking requests). If this parameter is omitted only confirmed bookings will be returned

### Example Response

```
{
  {
    "id":"222",
    "start":"5/4/2013 @ 13:00",
    "end":"5/4/2013 @ 14:00",
    "venue":"Room 3",
    "client":"Some User (Some Org)",
    "type":"Community",
    "attendees":"30",
    "notes":"",
    "resources":[
      {
        "resource":"Laptop",
        "qty":"2"
      },
      {
        "resource":"Projector",
        "qty":"1"
      }
    ],
    "invoice":"MIDAS00001",
    "history":[
      {
        "action":"Added",
        "date":"2/4/2013 @ 08:23",
        "user":"Joe Bloggs"
      },
      {
        "action":"Modified",
        "date":"2/4/2013 @ 16:52",
        "user":"Joe Bloggs"
      }
    ]
  },
}
```



```
{
  "id": "223",
  "start": "5/4/2013 @ 14:15",
  "end": "5/4/2013 @ 16:30",
  "venue": "Room 4",
  "client": "Some User (Some Org)",
  "type": "Community",
  "attendees": "40",
  "notes": "",
  "resources": [],
  "invoice": "MIDAS00001",
  "history": [
    {
      "action": "Added",
      "date": "2/4/2013 @ 08:25",
      "user": "Joe Bloggs"
    }
  ]
}
```

#### Variables Returned

<b>id</b>	Internal Booking ID
<b>start</b>	Start date/time of booking
<b>end</b>	End date/time of booking
<b>venue</b>	Venue
<b>client</b>	Client the booking is for
<b>type</b>	Booking Type
<b>attendees</b>	Estimated number of people attending booking
<b>notes</b>	Booking Notes
<b>resources</b>	Resources assigned to booking
<b>resource</b>	The name of the resource
<b>qty</b>	The quantity of the resource
<b>invoice</b>	Invoice in which the booking appears
<b>history</b>	Booking history
<b>action</b>	The action performed. This will be one of the following: "Booking Request Received", "Added", "Modified", "Deleted", "Restored", or "Invoice Created"
<b>date</b>	The date/time the action occurred
<b>user</b>	The user who performed the action
<b>custom fields</b>	Any custom booking fields setup in your MIDAS will also be returned



## get\_client

Returns client records

Required Parameters (at least 1 required)	Possible Values	Description
<b>client</b>	<Client name>	Client name
<b>org</b>	<Organization name>	Organization name
<b>email</b>	<email address>	Email address

Optional Parameters	Possible Values	Description
<b>match</b>	<i>exact   loose</i>	Allows specifying the closeness of the match. If match is set "exact" and "client" is set to "Joe Bloggs", only clients with the name "Joe Bloggs" will be returned. If match is set to "loose" and "email" is set to "@mid.as", any client with an "@mid.as" email address will be returned. If the match parameter is omitted only exact matches are returned

### Example Response

```
{
  {
    "name": "Joe Bloggs",
    "organization": "MIDAS",
    "email": "joe@mid.as",
    "address": "PO Box 224, Cheadle, Cheshire. SK8 4AF",
    "phone": "01234 567 890",
    "fax": "01234 567 891",
    "mobile": "07123456789",
    "notes": "",
    "added": "7/8/2012 @ 16:49"
  }
}
```

Variables Returned	
<b>name</b>	Client's name
<b>organization</b>	Client's organization
<b>email</b>	Client's email address
<b>address</b>	Client's postal address
<b>phone</b>	Client's telephone number
<b>fax</b>	Client's fax number
<b>mobile</b>	Client's mobile (cell) number
<b>notes</b>	Notes about the client
<b>added</b>	Date/time when client was added to MIDAS



## get\_consumable\_levels

Returns the current stock level of all consumable items

### Required Parameters

*This API command has no additional required parameters*

### Example Response

```
{
  {
    "consumable": "Flipchart Paper",
    "qty_remaining": "23",
  },
  {
    "consumable": "Permanent Marker Pens",
    "qty_remaining": "156",
  }
}
```

### Variables Returned

<b>consumable</b>	The name of the consumable
<b>qty_remaining</b>	The current stock level. If no stock quantity has been defined, <b>qty_remaining</b> will return "Unlimited"





## get\_invoice

Retrieves a specific invoice

Required Parameters	Possible Values	Description
<b>invoice</b>	<Invoice Reference>	Invoice Reference

### Example Response

```
{
  "client": "MIDAS (MIDAS2)",
  "date": "5/11/2012 @ 10:00",
  "items": [
    {
      "description": "Room 1 (6/11/2012 @ 19:30 - 21:30)",
      "qty": "2.00",
      "rate": "23.50"
    },
    {
      "description": "Room 2 (13/11/2012 @ 19:30 - 21:30)",
      "qty": "2.00",
      "rate": "23.50"
    }
  ],
  "total": "94.00",
  "tax_rate": "20.00",
  "tax_amount": "18.80",
  "paid": "0.00",
  "history": [
    {
      "action": "Created",
      "date": "5/11/2012 @ 08:45",
      "user": "MIDAS Administrator"
    },
    {
      "action": "Modified",
      "date": "5/11/2012 @ 09:42",
      "user": "MIDAS Administrator"
    },
    {
      "action": "Emailed",
      "date": "5/11/2012 @ 10:00",
      "user": "MIDAS Administrator"
    }
  ]
}
```

### Variables Returned

<b>client</b>	Client
<b>date</b>	Invoice Date (or "Invoice Not Sent if invoice hasn't been emailed/printed)
<b>items</b>	Invoice items
<b>description</b>	The item's description
<b>qty</b>	The item's quantity
<b>rate</b>	The item's rate (charge)
<b>total</b>	Invoice total (ex tax)



<b>tax_rate</b>	Tax rate (percentage)
<b>tax_amount</b>	Tax amount
<b>paid</b>	Amount paid
<b>history</b>	Invoice history
<b>action</b>	The action performed. This will be one of the following: "Created", "Modified", "Printed", "Emailed", "Payment Received", "Payment Overdue", "Paid In Full"
<b>date</b>	The date/time the action occurred
<b>user</b>	The user who performed the action

## get\_invoices

Retrieves a list of invoices for a specific client

Required Parameters (at least 1 required)	Possible Values	Description
<b>client</b>	<Client name>	Client name
<b>org</b>	<Organization name>	Organization name
<b>email</b>	<email address>	Email address

### Example Response

```
{
  "client": "Joe Bloggs (Bloggs Inc)",
  "email": "joe@bloggsinc.com",
  "invoices": "MIDAS0001,MIDAS0003,MIDAS0004"
}
```

### Variables Returned

<b>client</b>	Client/Organization
<b>email</b>	Client's email address
<b>invoices</b>	A comma separated list of all invoices associated with the client



## get\_messages

Retrieves all current internal messages for a specific user

Required Parameters (only 1 required)	Possible Values	Description
<b>email</b>	<user's email>	User's email address
<b>user</b>	<user's name>	User's name

### Example Response

```
{
  {
    "message": "Hello World!",
    "author": "Joe Bloggs",
    "created": "24/4/2013 @ 00:03",
    "expires": "26/4/2013 @ 00:00"
  },
  {
    "message": "This is a test message",
    "author": "Jane Doe",
    "created": "25/4/2013 @ 03:42",
    "expires": "29/4/2013 @ 12:30"
  }
}
```

### Variables Returned

<b>message</b>	Details of the watch
<b>author</b>	The user who created the message
<b>created</b>	Date/Time the message was created
<b>expires</b>	Date/Time at which the message expires



## get\_reminders

Retrieves all current reminders for a specific user

Required Parameters (only 1 required)	Possible Values	Description
<b>email</b>	<user's email>	User's email address
<b>user</b>	<user's name>	User's name

### Example Response

```
{
  {
    "reminder": "Reminder: Room 3: 25/4/2013 @ 13:00 - 15:00 Booking for Joe Bloggs",
    "expires": "25/4/2013 @ 15:00"
  },
  {
    "reminder": "Reminder: Room 3: 26/4/2013 @ 14:00 - 16:30 Booking for Jane Doe",
    "expires": "26/4/2013 @ 16:30"
  }
}
```

### Variables Returned

<b>reminder</b>	Details of the reminder
<b>expires</b>	Date/Time at which the reminder expires

## get\_resource\_availability

Returns the quantity available of a specified resource between two dates/times

Required Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Start time
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	End time
<b>resource</b>	<Resource name>	Resource name
<b>qty</b>	Number	Quantity to check

### Example Response

```
{
  "available": "2"
}
```

### Variables Returned

<b>available</b>	Quantity of specified resources available during times specified
------------------	--



## get\_setting

Returns a current MIDAS setting

Required Parameters	Possible Values	Description
<b>setting</b>	<setting name>	Setting name. See <a href="#">Appendix B</a> for available setting names

### Example Response

```
{
  "email_sendfrom": "midas@yourorganization.com"
}
```

### Variables Returned

<setting>	The current value of the specified <setting>
-----------	--



## get\_template

Returns the contents of a template

Required Parameters	Possible Values	Description
<b>template name</b>	<i>&lt;template name&gt;</i>	Template name. See below for available template names

Template Name	Description	Additional
<b>email</b>	Email (General)	
<b>email_book_confirm</b>	Email (Booking Confirmation)	Email subject
<b>email_book_remind</b>	Email (Booking Reminder)	Email subject
<b>email_req_approved</b>	Email (Booking Request Approved)	Email subject
<b>email_req_approved_m</b>	Email (Booking Request Approved –with changes)	Email subject
<b>email_req_rejected</b>	Email (Booking Request Rejected/Declined)	Email subject
<b>email_req_submitted</b>	Email (Booking Request Submitted)	Email subject
<b>email_inv_overdue</b>	Email (Invoice Overdue)	Email subject
<b>email_inv_remind</b>	Email (Invoice Reminder)	Email subject
<b>invoice</b>	Invoice	
<b>payonline</b>	Online Payments	URL of external .css file
<b>print</b>	Print	
<b>webrequest</b>	Public Booking Requests	URL of external .css file
<b>intro</b>	Welcome Note (on login screen)	

### Example Response

```
{
  "email": "<table style=\"width:100%\"><tr>
    <td>%LOGO%</td><td><b>%DATABASE%</b></td><td>%MIDASLOGO%</td></tr>
  </table>%CONTENT%"
}
```

### Variables Returned

<b>&lt;template&gt;</b>	The current contents of the specified <template>
<b>additional</b>	For templates which contain an additional value in addition to the main template content (such as email templates with an additional subject line), this value is returned in the "additional" parameter



## get\_user

Returns user information

Required Parameters (at least 1 required)	Possible Values	Description
<b>user</b>	<name>	User's full name
<b>email</b>	<email address>	User's email address

Optional Parameters	Possible Values	Description
<b>match</b>	<i>exact   loose</i>	Allows specifying the closeness of the match. If match is set "exact" and "user" is set to "Joe Bloggs", only users with the name "Joe Bloggs" will be returned. If match is set to "loose" and "user" is set to "Joe", any user named "Joe" will be returned. If the match parameter is omitted only exact matches are returned

### Example Response

```
{
  {
    "name":"Joe Bloggs",
    "email":"joe@bloggs.com",
    "added":"25/2/2013 @ 16:49",
    "last_login":"23/4/2013 @ 20:51",
    "last_password_change":"29/3/2013 @ 18:34",
    "last_modified":"25/2/2013 @ 23:42",
    "account_locked":"0",
    "failed_login_attempts":"0",
    "day_starts_at":"00",
    "day_runs_for":"24",
    "do_not_log_activity":"0"
    "email_calendar_events":"1",
    "email_messages":"0",
    "email_pending_notifications":"1",
    "email_watch_notifications":"0",
    "force_pw_change_at_login":"0",
    "suppress_messages_popup":"0",
    "venue_group_access":"Group A,Group B",
    "permissions":[
      {
        "can_add_bookings":"1",
        "can_add_clients":"1",
        "can_add_day_notes":"1",
        "can_add_historical_bookings":"0",
        "can_add_out_of_hours_bookings":"0",
        "can_change_password":"1",
        "can_delete_bookings":"2",
        "can_delete_clients":"1",
        "can_email_clients":"1",
        "can_evac":"1",
        "can_invoice":"1",
        "can_manage_booking_types":"1",
        "can_manage_midas":"1",
```



```
"can_manage_resources": "1",
"can_manage_users": "1",
"can_manage_venues": "1",
"can_modify_bookings": "2",
"can_modify_clients": "",
"can_print": "1",
"can_process_requests": "1",
"can_restore_bookings": "1",
"can_use_mymessages": "1",
"can_view_activity_log": "1",
"can_view_clients": "2",
"can_view_statistics": "1"
}
]
}
```

### Variables Returned

<b>name</b>	User's name
<b>organization</b>	User's email address
<b>added</b>	Date/Time user was added to MIDAS
<b>last_login</b>	Date/Time user last successfully logged in
<b>last_password_change</b>	Date/Time user last changed their password
<b>last_modified</b>	Date/Time user information was last modified
<b>account_locked</b>	Indicates if the user has been suspended / locked out of MIDAS
<b>failed_login_attempts</b>	The number of unsuccessful login attempt on this account since last successful login
<b>day_starts_at</b>	The hour (in 24-hour clock mode) the user's booking grid is displayed from
<b>day_runs_for</b>	The number of hours the user's booking grid displays
<b>do_not_log_activity</b>	If "0" all user activity within MIDAS will be recorded in the Recent Activity Log If "1" user activity within MIDAS will appear in the Recent Activity Log, except for logins/logouts If "2" no user activity will be recorded in the Recent Activity Log
<b>email_calendar_events</b>	Indicates whether reminders should also be sent to user's email as calendar events
<b>email_messages</b>	Indicates whether messages are forwarded to user's email
<b>email_pending_notifications</b>	Indicates whether new booking request notifications are forwarded to user's email
<b>email_watch_notifications</b>	Indicates whether watch notifications are forwarded to user's email
<b>force_pw_change_at_login</b>	Indicates whether user is required to change their password upon next login
<b>suppress_messages_popup</b>	Indicates whether the "My Messages" pop-up is suppressed (not shown) after login
<b>venue_group_access</b>	Indicates which Venue Groups the user has access to in the Booking Grid. A value of "*" indicates user can view all Venue Groups
<b>permissions</b>	The various permissions associated with the user account. Most take a value of either "1" meaning user has been granted a permission, "0" meaning the user does not have a permission. Permissions with





	additional possible values are indicated.
<b>can_add_bookings</b>	User can add bookings. "0" indicates user may not make bookings "1" indicates user may make bookings "2" indicates user may only make booking requests
<b>can_add_clients</b>	User can add clients
<b>can_add_day_notes</b>	User can add notes to calendar dates
<b>can_add_historical_bookings</b>	User can add bookings for dates occurring in the past
<b>can_add_out_of_hours_bookings</b>	User can add bookings outside of a venue's operating hours
<b>can_change_password</b>	User can change their password
<b>can_delete_bookings</b>	User can delete bookings "0" indicates user cannot delete any bookings "1" indicates user may delete only those bookings originally added by them "2" indicates user may delete any booking
<b>can_delete_clients</b>	User can delete clients
<b>can_email_clients</b>	User can email clients directly from MIDAS
<b>can_evac</b>	User can print Emergency Evacuation data
<b>can_invoice</b>	User can use invoicing
<b>can_manage_booking_types</b>	User can manage Booking Types
<b>can_manage_midas</b>	User can manage MIDAS
<b>can_manage_resources</b>	User can manage Resources
<b>can_manage_users</b>	User can manage Users & Permissions
<b>can_manage_venues</b>	User can manage Venues
<b>can_modify_bookings</b>	User can modify bookings "0" indicates user cannot modify any bookings "1" indicates user may modify only those bookings originally added by them "2" indicates user may modify any booking
<b>can_modify_clients</b>	User can modify clients
<b>can_print</b>	User can use print functions
<b>can_process_requests</b>	User can approve/reject pending booking requests
<b>can_restore_bookings</b>	User can restore previously deleted bookings
<b>can_use_mymessages</b>	User can use My Messages (Messages, Reminders, and Watches)
<b>can_view_activity_log</b>	User can access the Recent Activity log
<b>can_view_clients</b>	User can view client information "0" indicates user cannot view any client data "1" indicates user can view client and organization names only "2" indicates user can view full client info for any client "3" indicates user can only view full client info for clients they've added bookings for
<b>can_view_statistics</b>	User can access Statistics



## get\_venue

Returns venue information

Required Parameters	Possible Values	Description
<b>venue</b>	<Venue name>	Venue name

Optional Parameters	Possible Values	Description
<b>match</b>	<i>exact</i> / <i>loose</i>	Allows specifying the closeness of the match. If match is set "exact" and "venue" is set to "Meeting Room", only the venue with the name "Meeting Room" will be returned. If match is set to "loose" and "venue" is set to "Meeting Room", any venue containing the name "Meeting Room", such as "Meeting Room A", "Meeting Room B", etc will be returned. If the match parameter is omitted only exact matches are returned

### Example Response

```
{
  {
    "venue": "Room 1",
    "capacity": "20",
    "description": "A small meeting room",
    "requestable": "1",
    "rates": [
      {
        "Mon": [
          {
            "rate": "100.00",
            "rate_length": "1",
            "rate_type": "Hourly"
          },
          {
            "rate": "80.00",
            "rate_length": "4",
            "rate_type": "Hourly"
          },
          {
            "rate": "450.00",
            "rate_length": "6",
            "rate_type": "Booking"
          }
        ],
        "Tue": [
          {
            "rate": "20.00",
            "rate_type": "Hourly"
          }
        ],
        "Wed": [
          {
            "rate": "20.00",
```



```
        "rate_type":"Hourly"
      }
    ],
    "Thu":[
      {
        "rate":"20.00",
        "rate_type":"Hourly"
      }
    ],
    "Fri":[
      {
        "rate":"20.00",
        "rate_type":"Hourly"
      }
    ],
    "Sat":[
      {
        "rate":"20.00",
        "rate_type":"Hourly"
      }
    ],
    "Sun":[
      {
        "rate":"20.00",
        "rate_type":"Hourly"
      }
    ]
  ]
},
"operating_hours":[
  {
    "day":"Mon",
    "closed":"0000-0800,2100-2400",
  },
  {
    "day":"Tue",
    "closed":"0000-0800,2100-2400",
  },
  {
    "day":"Wed",
    "closed":"0000-0800,2100-2400",
  },
  {
    "day":"Thu",
    "closed":"0000-0800,2100-2400",
  },
  {
    "day":"Fri",
    "closed":"0000-0800,2100-2400",
  },
  {
    "day":"Sat",
    "closed":"0000-0930,2000-2400",
  },
  {
    "day":"Sun",
    "closed":"0000-1000,1600-2400"
  }
],
```



```

"closed_from":"","
"closed_until":"1/4/2013",
"managers":"Jane Doe,Joe Bloggs",
"member_of":"Group A,Group B"
}
}

```

**Variables Returned**

<b>venue</b>	Venue name
<b>capacity</b>	The maximum occupancy of the venue
<b>description</b>	The venue's description
<b>requestable</b>	Whether the venue is available for public requesting
<b>rates</b>	The room rate/hire charge for each day of the week
<b>&lt;day&gt;</b>	Can be one of the following: "Mon", "Tue", "Wed", "Thu", "Fri", "Sat", "Sun" to denote subsequent rate information for each day of the week
<b>rate</b>	The room/rate hire charge amount
<b>rate_length</b>	The minimum length of the booking the rate applies to (in hours)
<b>rate_type</b>	If "Hourly", the rate is per-hour, if "Daily", the rate is per-day, if "Booking", the rate is per-booking
<b>operating_hours</b>	The times between which the venue is closed during each day of the week
<b>day</b>	The day of the week
<b>closed</b>	A comma separated list of the times (24 hour format) the venue is closed
<b>closed_from</b>	The date after which the venue is considered closed
<b>closed_until</b>	The date until which the venue is considered closed
<b>managers</b>	A comma separated list of user who are "Managers" of the venue i.e. can approve Booking Requests for the venue
<b>member_of</b>	A comma separated list of Venue Groups to which the venue belongs to

## get\_venues\_in\_group

Returns a list of venues in a venue group

Required Parameters	Possible Values	Description
<b>group</b>	<i>&lt;venue group&gt;</i>	Name of a venue group

**Example Response**

```

{
  "Group A": "Room 1,Room 2,Room3"
}

```

**Variables Returned**

<b>&lt;group name&gt;</b>	Comma separated list of current venues in group
---------------------------	---



## get\_venues\_in\_use

Returns a list of all venues in use at the point in time when the API call is made. If optional start and end parameters are supplied, returns a list of all venues in use between start and end parameters.

Optional Parameters	Possible Values	Description
<b>start</b>	Valid date and time (Format: YYYYMMDDHHMM)	Start time
<b>end</b>	Valid date and time (Format: YYYYMMDDHHMM)	End time

### Example Response

```
{
  "venues": "Room 1, Room 2, Room3"
}
```

### Variables Returned

<b>venues</b>	Comma separated list of venues in use
---------------	---------------------------------------

## get\_watches

Retrieves all current watches for a specific user

Required Parameters (only 1 required)	Possible Values	Description
<b>email</b>	<user's email>	User's email address
<b>user</b>	<user's name>	User's name

### Example Response

```
{
  {
    "watch": "Booking Matching [Venue: Room 1] on 25/4/2013 @ 13:00 - 15:00 For Joe Bloggs Added",
    "expires": "25/4/2013 @ 15:00"
  },
  {
    "watch": "Booking Matching [Venue: Room 4] on 25/4/2013 @ 14:00 - 16:30 For Jane Doe Deleted",
    "expires": "26/4/2013 @ 16:30"
  }
}
```

### Variables Returned

<b>watch</b>	Details of the watch
<b>expires</b>	Date/Time at which the watch expires



## mod\_booking

Modifies an existing booking.

Required Parameters	Possible Values	Description
<b>id</b>	Booking ID	The unique numeric ID of the booking to be modified

In addition, one or more of the parameters from the following table must also be included with the call. Only values for the parameters you specify will be changed. For example, to only change a booking type, whilst retaining the booking's original start, end, and venue details, only pass the "new\_type" parameter. To change the venue and the type and the venue, pass both "new\_type" and "new\_venue".

Optional Parameters (at least 1 required)	Possible Values	Description
<b>new_start</b>	Valid date and time (Format: YYYYMMDDHHMM)	The new start date/time the booking should be changed to
<b>new_end</b>	Valid date and time (Format: YYYYMMDDHHMM)	The new end date/time the booking should be changed to
<b>new_venue</b>	Venue ID   Venue Name	The numeric ID or name of the venue the booking should be changed to
<b>new_client</b>	Client ID	The numeric ID of the client the booking should be changed to
<b>new_type</b>	Booking Type ID   Booking Type Name	The numeric ID of the Booking Type, or the name of the Booking Type the booking should be changed to
<b>new_attendees</b>	Number	The new number of booking attendees
<b>new_notes</b>	String	New notes about the booking
<b>new_resources</b>	Quantity & Resource ID   Resource Name	New resources to be added to the booking. Values should be passed as "qty resource (ID or name)". For example, to add 2 Tables to a booking, pass "2 Tables". This parameter can be added multiple times to add further resources Note: Passing the "new_resources" parameter will remove any previous resources that had been assigned to the booking
<b>&lt;new_custom_fields&gt;</b>	Custom Value	If you've defined custom booking fields in your MIDAS, you can optionally specify new values for these fields for the booking you're modifying. For example, if you have a custom field named "Insurance", you would pass the parameter "new_insurance" together with the new value you wish to set

Optional Parameters	Possible Values	Description
<b>accept_limited_resources</b>	0   1	If you're specifying new resources for a booking, this parameter determines whether the bookings should still be modified if the quantity of resources requested isn't available.



For example, if you add 10 Tables to a booking, yet only 5 Tables are available, an error will be returned and the booking won't be modified. However, passing the "accept\_limited\_resources" parameter with a value of "1" will continue the modify booking, but with reduced resource quantities (in the previous example, this would mean that only 5 Tables would be added to the booking, instead of the desired 10)

**no\_watches**                    0 | 1

Setting the "no\_watches" parameter to "1" will suppress generation of Watch notifications for users who are monitoring modified bookings, otherwise omitting this parameter (or setting it to "0") will allow Watch notifications to be generated accordingly

#### Example Response

```
{
  "booking_modified": "1"
}
```

#### Variables Returned (on success)

**booking\_modified**           Returns "1" if the booking was successfully modified

#### Variables Returned (on error)

**error**                        The reason why the booking couldn't be modified. Typical examples include:  
Unavailable (*clashes with an existing booking*)  
Unavailable - Blocked By Meeting Room 1  
45 Attendees will exceed the maximum capacity of Meeting Room 1 (15)  
Outside Operating Hours  
Venue unavailable from 1/1/2015  
Venue unavailable between 1/1/2015-1/2/2015  
Venue not available until 1/1/2015  
Only x5 Tables Available



## mod\_client

Modifies an existing client record.

Two sets of parameters are required (outlined in the tables below) - the first set controls which client(s) to modify, the second set specifies which parameters of the selected client(s) to modify.

### Controlling which client(s) to modify:

Required Parameters (at least 1 required)	Possible Values	Description
<b>id</b>	Client ID	The unique numerical id of the client (which can be determined from the " <a href="#">get_client</a> " call) Passing this parameter will override all other required parameters in this table
<b>client</b>	String	The name of the existing client to be modified
<b>org</b>	String	Organization name
<b>email</b>	Email address	Email address
<b>address</b>	String	Postal/mailling address
<b>phone</b>	Number	Telephone number
<b>fax</b>	Number	Fax number
<b>mobile</b>	Number	Mobile/cell number
<b>notes</b>	String	Notes about the client

To ensure that only a single client is modified, pass only the "id" parameter, or alternatively as many of the other above parameters as possible to ensure a specific individual client is modified, rather than a group of clients. For example, if you only pass the "org" parameter alone ALL clients in the database that match the organization name you supply will be modified. Whereas passing both the client name and the organization name will ensure that only client records that match BOTH will be modified. Passing "client\_id" alone will ensure that only one client will be modified.

### Setting new values:

Required Parameters (at least 1 required)	Possible Values	Description
<b>new_client</b>	String	The new Client name
<b>new_org</b>	String	The new Organization name
<b>new_email</b>	Email address	The new Email address
<b>new_address</b>	String	The new postal/mailling address
<b>new_phone</b>	Number	The new telephone number
<b>new_fax</b>	Number	The new fax number
<b>new_mobile</b>	Number	The new mobile/cell number
<b>new_notes</b>	String	New notes about the client
<b>new_tax_exempt</b>	0   1	Specifies whether the client is exempt from being charged tax on their invoices

Omitting any of the above parameters will leave its current value unchanged. Passing any of the above parameters with a "blank" value will clear/delete the current value of the corresponding field.



**Example Response**

```
{
  "clients_modified": "1"
}
```

**Variables Returned**

<b>clients_modified</b>	The number of clients modified
-------------------------	--------------------------------

## mod\_invoice

Modifies/Updates the status of an existing invoice.

Required Parameters	Possible Values	Description
<b>invoice</b>	Invoice ID	The number/reference of the invoice to update

Required Parameters (at least 1 required)	Possible Values	Description
<b>client</b>	Client ID	The numeric ID of the existing client to change the invoice for. Note: Only unsent invoices can have their client changed
<b>notes</b>	String	Additional notes to appear on the invoice
<b>paid</b>	Decimal	The amount (without currency symbol - i.e. 100.00) of the invoice total already paid

**Example Response**

```
{
  "invoice_updated": "MIDAS00075"
}
```

**Variables Returned**

<b>invoice_updated</b>	The Invoice number/reference of the updated invoice
------------------------	---



## mod\_resource

Modifies an existing resource.

Required Parameters	Possible Values	Description
<b>resource</b>	Resource ID	The numerical ID of the existing resource to modify

Optional Parameters (at least 1 required)	Possible Values	Description
<b>new_name</b>	String	The new name for the existing resource
<b>new_type</b>	equipment   consumable   staffing	The new type (category) of the resource
<b>new_qty</b>	Number	The new available quantity of the resource. Passing this parameter with a blank value will reset the available quantity to "Unlimited"
<b>new_charge</b>	Decimal	The new charge (without currency symbol - i.e. 10.00) for the resource. This will be a per-hour charge where the resource is of "staffing" type/category, otherwise this is a per-booking charge
<b>new_public</b>	0   1	Sets whether the resource is publicly requestable (can appear on the Public Booking Request screen)
<b>new_venues</b>	Venue IDs	A comma-separated list of Venue ID's the resource is available to. Passing this parameter with a blank value will reset the resource to be available to all venues

Omitting any of the above parameters will leave its current value unchanged. Passing any of the above parameters with a "blank" value will clear/delete the current value of the corresponding field.

### Example Response

```
{  
  "resource_modified": "67"  
}
```

### Variables Returned

<b>resource_modified</b>	The unique resource ID corresponding the modified resource
--------------------------	--



## notify\_user

Sends an internal notification to a MIDAS user.

The notification will appear in the user's "[My Messages](#)" screen, and may also be forwarded to their email address if they have configured message forwarding.

Required Parameters	Possible Values	Description
<b>user</b>	User ID   User email	The numeric ID of the existing user to message, or their email address (Note: If an email address is supplied which doesn't match an existing user, the message will fail)
<b>message</b>	Text	The message to send
<b>expires</b>	Valid date and time (Format: YYYYMMDDHHMM)	The date/time after which the message should expire and be automatically removed from the recipient's My Messages screen (The user may choose to manually remove the message sooner)

Optional Parameters	Possible Values	Description
<b>type</b>	message   reminder	Sets the type of notification to send. If omitted, the type will be set to "message"

### Example Response

```
{
  "completed": "1"
}
```

### Variables Returned

<b>completed</b>	Returns "1" once the API call has completed
------------------	---



## reject\_request

Rejects/declines a booking request.

Required Parameters	Possible Values	Description
<b>id</b>	Booking ID	The numeric ID of the booking request to be rejected

Optional Parameters	Possible Values	Description
<b>reason</b>	String	A reason why the request is being rejected (will be included in the rejection email notification sent to the original requestor)
<b>silent</b>	0   1	By default when a booking request is rejected, the original requestor is sent an email notification informing them as such. Setting "silent" to "1" will suppress the sending of this notification

### Example Response

```
{
  "request_rejected": "1"
}
```

### Variables Returned

<b>request_rejected</b>	Returns "1" after a successful rejected
-------------------------	---

## restore\_booking

Re-instates a recently deleted booking, or bookings.

Required Parameters	Possible Values	Description
<b>id</b>	Booking ID	The unique numerical reference (or comma separated list of references) of the deleted booking(s) to be re-instated (which can be determined from the " <a href="#">get bookings</a> " call)

### Example Response

```
{
  "restored": "925",
  "not_restored": "927,929,1024",
}
```

### Variables Returned

<b>restored</b>	Comma-separated list of all deleted booking references successfully
<b>not_restored</b>	Comma-separated list of all booking references that couldn't be restored (i.e. those which would now clash with other bookings if restored)



## set\_setting

Changes the value of a current MIDAS setting

Required Parameters	Possible Values	Description
<b>setting</b>	<setting name>	Setting name. See <a href="#">Appendix B</a> for available setting names
<b>value</b>	<new value>	The new value for the setting

### Example Response

```
{  
  "response": "ok"  
}
```

### Variables Returned

<b>response</b>	Returns "ok" after a successful setting change
-----------------	--



## set\_template

Set/Modify a template

Required Parameters	Possible Values	Description
<b>template name</b>	<template name>	Template name. See below for available template names
<b>content</b>	Text	New HTML template content

Optional Parameters	Possible Values	Description
<b>additional</b>	String	For templates where an additional value can be set (such as email templates where a subject line may be specified), this new value can be passed via the "additional" parameter. See below for which templates support this paramter

Template Name	Description	Additional
<b>email</b>	Email (General)	
<b>email_book_confirm</b>	Email (Booking Confirmation)	Email subject
<b>email_book_remind</b>	Email (Booking Reminder)	Email subject
<b>email_req_approved</b>	Email (Booking Request Approved)	Email subject
<b>email_req_approved_m</b>	Email (Booking Request Approved –with changes)	Email subject
<b>email_req_rejected</b>	Email (Booking Request Rejected/Declined)	Email subject
<b>email_req_submitted</b>	Email (Booking Request Submitted)	Email subject
<b>email_inv_overdue</b>	Email (Invoice Overdue)	Email subject
<b>email_inv_remind</b>	Email (Invoice Reminder)	Email subject
<b>invoice</b>	Invoice	
<b>payonline</b>	Online Payments	URL of external .css file
<b>print</b>	Print	
<b>webrequest</b>	Public Booking Requests	URL of external .css file
<b>intro</b>	Welcome Note (on login screen)	

Example Response
<pre>{   "response": "ok" }</pre>

Variables Returned
<b>response</b> Returns "ok" after a successful template change



## util\_from\_epoch

Converts epoch seconds to a standard date/time format

Required Parameters	Possible Values	Description
<b>data</b>	Epoch seconds	Epoch seconds to convert

Optional Parameters	Possible Values	Description
<b>format</b>	1   0	If omitted (or "0"), the returned date/time string will be in the format "YYYYMMDDHHMM". If "1", the returned date/time string will reflect the current time/date format settings in MIDAS, for instance, "DD/MM/YYYY @ HH:MM"

### Example Response

```
{  
  "response": "201305121008"  
}
```

### Variables Returned

**response** The converted epoch time, returned in a date/time format specified by the "format" parameter. If no "format" parameter specified, response is returned as "YYYYMMDDHHMM"

## util\_to\_epoch

Converts a date/time to epoch seconds

Required Parameters	Possible Values	Description
<b>data</b>	Valid date and time (Format: YYYYMMDDHHMM)	Date/Time string to convert to epoch seconds

### Example Response

```
{  
  "response": "1357066800"  
}
```

### Variables Returned

**response** The converted date/time, returned as epoch seconds



# Appendix A – Activity Codes

The following codes may be used in conjunction with the “get\_activity” call

CODE	Description	Data1	Data2	Data3	Data4
ADD	User added booking	Date/Time			
ADD2VG	User added venue to group	Venue	Venue Group		
ADDBT	User added booking type	Type	Color		
ADDC	User added client	Client	Organization		
ADDI	User created invoice	Invoice			
ADDRES	User added resource	Resource			
ADDU	User added User	Name	Email		
ADDV	User added venue	Venue			
ADDVG	User added venue group	Venue Group			
BKUP	MIDAS backup (Automatic)				
CANR	Booking request cancelled	Client	Organization		
DELB	User deleted booking	Date/Time			
DELBT	User deleted booking type	Type			
DELC	User deleted client	Client	Organization		
DELI	User deleted invoice	Invoice			
DELRES	User Deleted Resource	Resource			
DELV	User deleted venue	Venue			
DELVG	User deleted venue group	Venue Group			
EMS	User sent email	Client	Subject		
EMSI	User sent email invoice	Client	Invoice		
EXPB	User exported bookings				
EXPC	User exported clients				
EXPIS	User exported invoice summaries				
EXPR	User exported resources				
GENI	User generated invoice	Invoice			
IN	User logged in				
MBKUP	MIDAS backup (Manual)				
MOD	User modified booking	Date/Time			
MODBT	User modified booking type	Previous Type	Previous Color	New Type	New Color
MODC	User modified client	Client	Organization		
MODI	User modified invoice	Invoice			
MODRES	User Modified Resource	Resource			
MODU	User modified User	Name	Email		
MODV	User modified venue	Venue			
MREST	User Restored a MIDAS backup	Date/Time			
NEWR	Booking request received	Client	Organization		
OUT	User logged out				
PAYIF	Payment received in full	Invoice	Payer name	Payer email	Transaction ID
PAYIP	Partial payment received	Invoice	Payer name	Payer email	Transaction ID
PEED	User printed Emergency Evacuation Data				
PENA	User approved booking	Date/Time	Client		
PENR	User rejected booking	Date/Time	Client	Reason	
PRNT	User printed bookings	Print Title			
PRNTI	User printed invoice	Client	Invoice		
PWC	User changed password				
REMFVG	User removed venue from group	Venue	Venue Group		
REMU	User deleted User	Name	Email		
RENVG	User renamed venue group	Previous Venue Group	New Venue Group		
REST	User restored booking	Date/Time			
UPDATE	MIDAS updated	New Version	New Build Date		
UPSI	User updated invoice status	Invoice			





## Appendix B – Setting Names

The following codes may be used in conjunction with the "get\_setting" and "set\_setting" calls. The "Settable" column denotes which settings can be changed via the "set\_setting" call.

Setting	Description	Example value	Settable
<b>api_version</b>	Current version of the MIDAS API	1.02	
<b>availability_include_pending</b>	If "1" MIDAS takes into account any pending booking requests when checking booking availability. If "0" confirmed bookings can be made over provisional booking slots	0	•
<b>backup_email</b>	The email address that automated database backups are sent to	backup@yourdomain.com	•
<b>backup_last</b>	The time of the last backup (epoch seconds)	1365609454	
<b>backup_persist</b>	The number of days to keep backups on server	7	•
<b>build_date</b>	Current MIDAS build date	1365608000	
<b>callto_enabled</b>	If "1" client phone/cell numbers become clickable "callto" links within MIDAS	1	•
<b>cron_enable_invoice_overdue</b>	If "1" automated invoice overdue notifications are enabled	1	•
<b>cron_enable_invoice_remind</b>	If "1" automated upcoming invoice reminders are enabled	1	•
<b>cron_enable_start_remind</b>	If "1" automated upcoming booking reminders are enabled	1	•
<b>cron_hour</b>	The hour (0-24) during which daily scheduled tasks should run	11	•
<b>cron_invoice_overdue</b>	The number of days after an unpaid invoice was due to automatically send an overdue notification to the client	7	•
<b>cron_inovice_remind</b>	The number of days before an unpaid invoice is due to automatically send a payment reminder to the client	3	•
<b>cron_last</b>	The time that scheduled tasks were last run (epoch second)	1407123529	
<b>cron_start_remind</b>	If "1" automated upcoming booking reminders are enabled	1	•
<b>datetime_amsymbol</b>	The symbol denoting the first 12 hours of the day (when running in 12 hour clock mode)	AM	•
<b>datetime_datefirst</b>	If "1" dates are shown before times, otherwise times are shown before dates	1	•
<b>datetime_dateformat</b>	The date format	DD/MM/YYYY	•
<b>datetime_dtlink</b>	The link symbol between date and time	@	•
<b>datetime_gmtoffset</b>	The timezone's GMT offset	0	•
<b>datetime_minterval</b>	The granularity of minutes	5	•



<b>datetime_pmsymbol</b>	The symbol denoting the first 12 hours of the day (when running in 12 hour clock mode)	PM	•
<b>datetime_startofweek</b>	The day that should be considered the start of the week (0= Sunday, 1 = Monday, etc)	1	•
<b>datetime_timeformat</b>	The time format	HH:mm	•
<b>datetime_timenow</b>	The current time (in epoch seconds)	1365696187	•
<b>datetime_timezone</b>	The timezone	Europe/London	•
<b>datetime_tmlink</b>	The link symbol between two times	-	•
<b>email_bcc</b>	The email address that outgoing email should be bcc'd to	bcc@yourdomain.com	•
<b>email_sendfrom</b>	The email address that outgoing email should appear sent from	midas@yourdomain.com	•
<b>invoicing_counter</b>	The next invoice number to be generated	4	•
<b>invoicing_createbydefault</b>	If "1" the "Create Invoice" option is checked when adding bookings	0	•
<b>invoicing_createifzero</b>	If "1" invoices will be created even if the calculated invoice total is zero. If "0" invoices will only be created if their values are non-zero	1	•
<b>invoicing_currencycode</b>	The currency code	USD	•
<b>invoicing_currencysymbol</b>	The currency symbol	\$	•
<b>invoicing_decimalsep</b>	The decimal separator	.	•
<b>invoicing_includezero</b>	If "1" items will be included on invoices even if their total value is zero. If "0" invoices will only include items that have an associated cost	1	•
<b>invoicing_itemize_notes</b>	If "1" notes on invoices will be itemized per booking. If "0" invoice notes will be combined	1	•
<b>invoicing_generate_notes</b>	The internal name of a booking field to optionally include in the "notes" section on generated invoices	notes	•
<b>invoicing_no_booking_mod</b>	If "1" bookings from which invoices have been generated can then no longer be modified	0	•
<b>invoicing_no_invoice_delete</b>	If "1" invoices cannot be deleted/removed from the system until they have been paid in full	0	•
<b>invoicing_paypal_account</b>	Your PayPal email address	paypal@yourdomain.com	•
<b>invoicing_paypal_enabled</b>	If "1" online invoice payments are allowed via PayPal	1	•
<b>invoicing_pay_require_email</b>	If "1" clients are required to enter their email address in order to view their invoice online	1	•
<b>invoicing_prefix</b>	The prefix that is added to all your invoice numbers	MIDAS	•
<b>invoicing_rounding</b>	If "1" invoice values are rounded up to	1	•



	the nearest whole number 0		
<b>invoicing_silentdisc</b>	If "1" booking type discounts are applied to invoices without any indication. If "0" invoices will denote that a discount has been applied	0	•
<b>invoicing_tax</b>	The default tax percentage to be added to invoices	0	•
<b>invoicing_thousandsep</b>	The thousand separator	,	•
<b>occupancy_max</b>	The maximum number of people allowed on your site at any one time	510	•
<b>occupancy_show</b>	Show the occupancy level when adding/modifying bookings	1	•
<b>occupancy_warn</b>	Warn if the number of people on site exceeds this value	300	•
<b>print_evactolerance</b>	When printing Emergency Evacuation Data, this number reflects how many minutes either side of the current time the calculation of the number of people on site should account for	15	•
<b>print_sortby</b>	The booking field to sort booking print outs by	start	•
<b>print_sortdir</b>	The sort order of print outs (0 = ascending, 1 = descending)	0	•
<b>search_maxresults</b>	The maximum number of search results to return per page	50	•
<b>version</b>	Current MIDAS version	4.07	
<b>view_autoclose_alerts</b>	The number of seconds the "My Messages" pop-up should display for, if enabled by users	10	•
<b>view_autoclose_notes</b>	The number of seconds after which any "day notes" pop-ups should automatically close	15	•
<b>view_changemonthcell</b>	Allow users to choose what's displayed in the monthly overview	1	•
<b>view_cutoffdays</b>	The number of days to keep temporary logs for	30	•
<b>view_default</b>	The default view in the Booking Grid	All	•
<b>view_gridrowheight</b>	The height (in pixels) of each row in the booking grid	30	•
<b>view_gridvenuewidth</b>	The width (in pixels) of the first column in the booking grid	100	•
<b>view_showonblocks</b>	The booking field(s) to show on booking "blocks" in the booking grid	organisation	•
<b>view_showonmonthcell</b>	The booking field to show on dates in the monthly overview	client	•
<b>view_showontools</b>	The booking field(s) to show on tooltips when hovering over booking "blocks" in the booking grid	organisation	•
<b>view_updatefrequency</b>	The number of seconds between	30	•



# API Documentation

	successive background data refreshes		
<b>view_viewsiz</b>	The number of days to show in the booking grid by default	1	•
<b>webrequest_alloweddomains</b>	A comma separated list of email domains from which booking requests are permitted	@yourdomain.com, @hotmail.com	•
<b>webrequest_autoapprove</b>	If "1" booking requests are auto-approved. If "0" booking requests must be approved by an administrator	0	•
<b>webrequest_blockcolor</b>	The color of existing booking blocks on the public booking request screen	red	•
<b>webrequest_disablepast</b>	The date (YYYYMMDD) past which booking requests are not permitted	20141231	•
<b>webrequest_enabled</b>	If "1" public booking requests are enabled, if "0" public booking requests are disabled	1	•
<b>webrequest_leadintime</b>	The number of days in advance public booking request must be made	7	•
<b>webrequest_leadouttime</b>	The number of days in advance public booking request are allowed to be made for	14	•
<b>webrequest_showcapacities</b>	If "1" selected venue's capacities are shown during public booking requesting. If "0" venue capacities are not revealed to requestors	1	•
<b>webrequest_showclosed</b>	If "1" selected venue's operating hours are shown during public booking requesting. If "0" operating hours are not revealed to requestors	0	•
<b>webrequest_showonblocks</b>	What information should be shown on booking blocks in the public booking request screen	times	•



# Appendix C – Error Handling

When making API calls, your applications should take into account possible errors that may be returned.

API errors will be returned in JSON format as follows:

## Example Error Response

```
{"error": "error response"}
```

Error Response	Meaning	Applies To
"not enabled"	API access is not enabled at this time. API access can be enabled from within MIDAS via MIDAS Admin Options → Manage Addons → API Access → Enabled	All
"invalid api key"	You have not supplied your API key in your call, or the API key supplied is invalid	All
"GET method not allowed. Use POST instead"	An http GET request has been made to the API, but the API has been set to accept http POST requests only. This setting may be changed via MIDAS Admin Options → Manage Addons → API Access → Allow GET (as well as POST) method	All
"API running in read only mode"	You have tried to make an API call that would result in changes to data within MIDAS, yet the API is currently restricted to "read only" mode. To make your call, you will first need to untick the "Read only access" setting (MIDAS Admin Options → Manage Addons → API Access)	add_* approve_request del_* email_client gen_invoice mod_* notify_user reject_request set_*
"no matches found"	No data was returned for the API call. Try broadening the search parameters	get_activity get_bookings get_client get_consuable_levels get_invoice get_invoices get_messages get_reminders get_user get_venues_in_group get_watches set_setting
"protected setting"	The setting you're trying to modify is read-only and cannot be modified	
"referrer not allowed"	The API call originates from a blocked domain/IP address. Allowed domains/IP's may be specified from within MIDAS via MIDAS Admin Options → Manage Addons → API Access → Allowed Referrers	All
"required parameter missing"	One or more parameters are required for the particular call you're making is missing	All
"unknown booking type"	Indicates that the specified booking type doesn't exist	del_bookings get_bookings (when the type parameter is specified)
"unknown command"	The API command you've specified was unrecognized. Please check you're using a valid command	All



"unknown resource"	Indicates that the specified resource doesn't exist	get_resource_availability
"unknown setting"	Indicates that the specified setting isn't recognized	get_setting set_setting
"unknown template"	Indicates that the specified template isn't recognized	get_template set_template
"unknown user"	Indicates that the specified user doesn't exist	get_activity get_messages get_reminders get_watches
"unknown venue"	Indicates that the specified venue doesn't exist	del_bookings get_availability get_bookings (when the venue parameter is specified) get_venue
"unknown venue group"	Indicates that the specified venue group doesn't exist	get_venues_in_group



# Code Samples

## jQuery

```
$.post("http://your_midas_url/api.pl", { key: "your_api_key", action: "get_client", client: "Joe Bloggs" })  
.done(function(response) {  
    alert("Response: " + response);  
}, "JSON");
```

## Perl

```
use LWP::UserAgent;  
my$ua = LWP::UserAgent->new(env_proxy => 0,keep_alive => 0,timeout => 30,agent =>'Mozilla/4.0 (compatible; MSIE 9.0; Windows NT 5.0)');  
my$r = $ua->  
>post("http://your_midas_url/api.pl", [key=>"your_api_key",action=>"get_client",client=>"Joe Bloggs"]);  
if ($r->is_success) {  
    $response=$r->content;  
}
```

## PHP

```
$myvars = "key=your_api_key&action=get_client&client=Joe Bloggs";  
  
$ch = curl_init("http://your_midas_url/api.pl");  
curl_setopt( $ch, CURLOPT_POST, 1);  
curl_setopt( $ch, CURLOPT_POSTFIELDS, $myvars);  
curl_setopt( $ch, CURLOPT_FOLLOWLOCATION, 1);  
curl_setopt( $ch, CURLOPT_HEADER, 0);  
curl_setopt( $ch, CURLOPT_RETURNTRANSFER, 1);  
  
$response = curl_exec( $ch );
```



## Python

```
import urllib
import urllib2
parameters = {'key' : 'your_api_key',
              'action' : 'get_client',
              'client' : 'Joe Bloggs' }
data = urllib.urlencode(parameters)
req = urllib2.Request("http://your_midas_url/api.pl", data)
getresponse = urllib2.urlopen(req)
response = getresponse.read()
```

## C#

```
using(WebClient client = new WebClient())
{
    System.Collections.Specialized.NameValueCollection reqparm = new
System.Collections.Specialized.NameValueCollection();
    parameters.Add("key", "your_api_key");
    parameters.Add("action", "get_client");
    parameters.Add("client", "Joe Bloggs");
    byte[] responsebytes =
client.UploadValues("http://your_midas_url/api.pl", "POST", parameters);
    string response = Encoding.UTF8.GetString(responsebytes);
}
```





# Release Notes

## V2.00

- The API now allows bi-directional communication with MIDAS - meaning you can now add/set/change data as well as reading it.
- The following new API calls have been implemented:
  - add\_booking
  - add\_client
  - add\_invoice
  - add\_resource
  - approve\_request
  - del\_booking
  - del\_bookings
  - del\_client
  - del\_invoice
  - del\_resource
  - email\_client
  - gen\_invoice
  - get\_booking
  - get\_template
  - mod\_booking
  - mod\_client
  - mod\_resource
  - notify\_user
  - reject\_request
  - restore\_booking
  - set\_setting
  - set\_template

## v1.03

20<sup>th</sup> March 2014

- Added: "member\_of" to the list of returned values for the "get\_venue" call
- Change: Format of "rates" information returned by "get\_venue" call updated for MIDAS v4.06
- Fixed: "closed\_from"/"closed\_to" values from "get\_venue" call may return 1/1/1970

## v1.02

18<sup>th</sup> February 2014

- Added: Support for multiple databases

## v1.01

7<sup>th</sup> October 2013

- Added: "get\_venues\_in\_use" call

## v1.00

1<sup>st</sup> June 2013

- Initial API release

For the most up-to-date API documentation, please visit <http://mid.as/api>