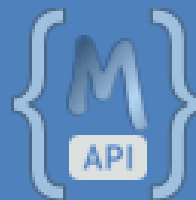




API Documentation

<http://mid.as/api>
v1.03



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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: <http://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 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.

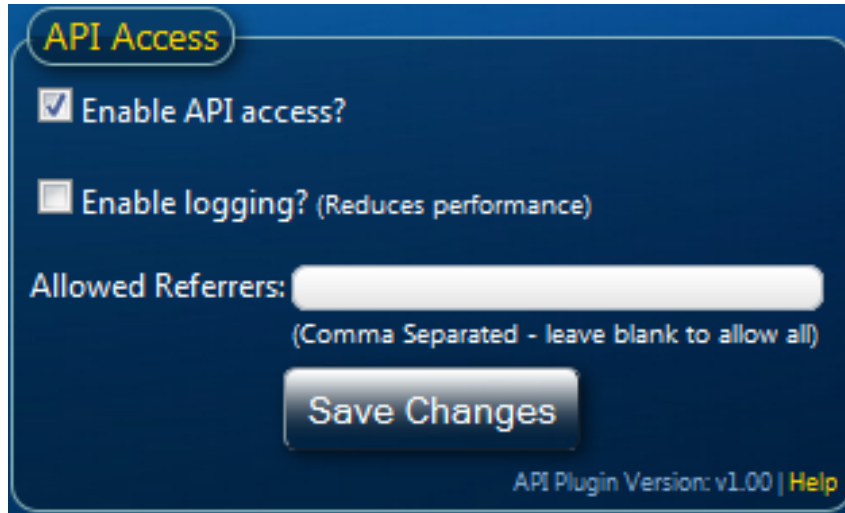
API responses

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 |
|---------------------------|--|
| Enable API access? | Allows enabling/disabling of API access. If disabled, any API calls will return: <code>{"error": "not enabled"}</code> |
| Enable logging? | <i>(Only available to self-hosted editions of MIDAS)</i> When enabled, API calls will be logged to <code>api_log.dat</code> (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. |
| Allowed Referrers | 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 |
|---------------------|-----------------|--|
| key | <API key> | 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. |
| action | <API command> | 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 |
|---------------------|-----------------|--|
| l | <language> | 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. |
| id | <database> | 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 "id" attribute. To locate the correct database code to pass with the "id" 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. |
| epoch | 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 MIDAS API is a read-only API - which should be sufficient for the majority of applications, allowing you to use existing data from MIDAS in your own applications. It is envisaged that Version 2 of the API will go on to provide a bi-directional interface to MIDAS.



API Command Reference

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 |
|---------------------|---|-------------|
| start | Valid date and time (Format: YYYYMMDDHHMM) | Start time |
| end | Valid date and time (Format: YYYYMMDDHHMM) | End time |

| Optional Parameters | Possible Values | Description |
|---------------------|-----------------------------|---|
| user | <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 |
| filter | <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

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



get_availability

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

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

| Optional Parameters | Possible Values | Description |
|---------------------|-----------------|---|
| attendees | <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

| | |
|---------------------|--|
| availability | 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_bookings

Returns all bookings between two dates/times

| Required Parameters | Possible Values | Description |
|---------------------|---|-------------|
| start | Valid date and time (Format: YYYYMMDDHHMM) | Start time |
| end | Valid date and time (Format: YYYYMMDDHHMM) | End time |

| Optional Parameters | Possible Values | Description |
|---------------------|-------------------------|---|
| venue | <Venue name> | Limits returned bookings to a specific venue |
| type | <Booking Type> | Limits returned bookings to a specific booking type |
| status | 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

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

| Optional Parameters | Possible Values | Description |
|---------------------|----------------------|--|
| match | <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

| | |
|---------------------|--|
| name | Client's name |
| organization | Client's organization |
| email | Client's email address |
| address | Client's postal address |
| phone | Client's telephone number |
| fax | Client's fax number |
| mobile | Client's mobile (cell) number |
| notes | Notes about the client |
| added | 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

| | |
|----------------------|--|
| consumable | The name of the consumable |
| qty_remaining | The current stock level. If no stock quantity has been defined, qty_remaining will return "Unlimited" |



get_invoice

Retrieves a specific invoice

| Required Parameters | Possible Values | Description |
|---------------------|---------------------|-------------------|
| invoice | <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

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



| | |
|-------------------|--|
| tax_rate | Tax rate (percentage) |
| tax_amount | Tax amount |
| paid | Amount paid |
| history | Invoice history |
| action | The action performed. This will be one of the following: "Created", "Modified", "Printed", "Emailed", "Payment Received", "Payment Overdue", "Paid In Full" |
| date | The date/time the action occurred |
| user | 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 |
|--|---------------------|-------------------|
| client | <Client name> | Client name |
| org | <Organization name> | Organization name |
| email | <email address> | Email address |

Example Response

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

Variables Returned

| | |
|-----------------|---|
| client | Client/Organization |
| email | Client's email address |
| invoices | 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 |
|--|-----------------|----------------------|
| email | <user's email> | User's email address |
| user | <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

| | |
|----------------|--|
| message | Details of the watch |
| author | The user who created the message |
| created | Date/Time the message was created |
| expires | 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 |
|--|-----------------|----------------------|
| email | <user's email> | User's email address |
| user | <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

| | |
|-----------------|---|
| reminder | Details of the reminder |
| expires | 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 |
|---------------------|---|-------------------|
| start | Valid date and time (Format: YYYYMMDDHHMM) | Start time |
| end | Valid date and time (Format: YYYYMMDDHHMM) | End time |
| resource | <Resource name> | Resource name |
| qty | <i>Number</i> | Quantity to check |

Example Response

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

Variables Returned

| | |
|------------------|--|
| available | Quantity of specified resources available during times specified |
|------------------|--|



get_setting

Returns a current MIDAS setting

| Required Parameters | Possible Values | Description |
|---------------------|-----------------|--|
| setting | <setting name> | Setting name. See Appendix B for available setting names |

Example Response

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

Variables Returned

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

get_user

Returns user information

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

| Optional Parameters | Possible Values | Description |
|---------------------|-----------------------------|---|
| match | <i>exact</i> / <i>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

| | |
|------------------------------|---|
| name | User's name |
| organization | User's email address |
| added | Date/Time user was added to MIDAS |
| last_login | Date/Time user last successfully logged in |
| last_password_change | Date/Time user last changed their password |
| last_modified | Date/Time user information was last modified |
| account_locked | Indicates if the user has been suspended / locked out of MIDAS |
| failed_login_attempts | The number of unsuccessful login attempt on this account since last successful login |
| day_starts_at | The hour (in 24-hour clock mode) the user's booking grid is displayed from |
| day_runs_for | The number of hours the user's booking grid displays |
| do_not_log_activity | 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 |



| | |
|--------------------------------------|---|
| email_calendar_events | Indicates whether reminders should also be sent to user's email as calendar events |
| email_messages | Indicates whether messages are forwarded to user's email |
| email_pending_notifications | Indicates whether new booking request notifications are forwarded to user's email |
| email_watch_notifications | Indicates whether watch notifications are forwarded to user's email |
| force_pw_change_at_login | Indicates whether user is required to change their password upon next login |
| suppress_messages_popup | Indicates whether the "My Messages" pop-up is suppressed (not shown) after login |
| venue_group_access | Indicates which Venue Groups the user has access to in the Booking Grid. A value of "*" indicates user can view all Venue Groups |
| permissions | 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. |
| can_add_bookings | 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 |
| can_add_clients | User can add clients |
| can_add_day_notes | User can add notes to calendar dates |
| can_add_historical_bookings | User can add bookings for dates occurring in the past |
| can_add_out_of_hours_bookings | User can add bookings outside of a venue's operating hours |
| can_change_password | User can change their password |
| can_delete_bookings | 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 |
| can_delete_clients | User can delete clients |
| can_email_clients | User can email clients directly from MIDAS |
| can_evac | User can print Emergency Evacuation data |
| can_invoice | User can use invoicing |
| can_manage_booking_types | User can manage Booking Types |
| can_manage_midas | User can manage MIDAS |
| can_manage_resources | User can manage Resources |
| can_manage_users | User can manage Users & Permissions |
| can_manage_venues | User can manage Venues |
| can_modify_bookings | 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 |
| can_modify_clients | User can modify clients |
| can_print | User can use print functions |
| can_process_requests | User can approve/reject pending booking requests |



| | |
|------------------------------|---|
| can_restore_bookings | User can restore previously deleted bookings |
| can_use_mymessages | User can use My Messages (Messages, Reminders, and Watches) |
| can_view_activity_log | User can access the Recent Activity log |
| can_view_clients | 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 |
| can_view_statistics | User can access Statistics |

get_venue

Returns venue information

| Required Parameters | Possible Values | Description |
|---------------------|-----------------|-------------|
| venue | <Venue name> | Venue name |

| Optional Parameters | Possible Values | Description |
|---------------------|----------------------|---|
| match | <i>exact 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

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

Example Response

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

Variables Returned

| | |
|--------------|---|
| <group name> | 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 |
|---------------------|---|-------------|
| start | Valid date and time (Format: YYYYMMDDHHMM) | Start time |
| end | Valid date and time (Format: YYYYMMDDHHMM) | End time |

Example Response

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

Variables Returned

| | |
|---------------|---------------------------------------|
| venues | 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 |
|--|-----------------|----------------------|
| email | <user's email> | User's email address |
| user | <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

| | |
|----------------|--------------------------------------|
| watch | Details of the watch |
| expires | Date/Time at which the watch expires |



util_from_epoch

Converts epoch seconds to a standard date/time format

| Required Parameters | Possible Values | Description |
|---------------------|-----------------|--------------------------|
| data | Epoch seconds | Epoch seconds to convert |

| Optional Parameters | Possible Values | Description |
|---------------------|-----------------|---|
| format | 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 |
|---------------------|---|--|
| data | 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 | | | |
| DELB | 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 | | | | |
| 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 | | | |
| UPSI | User updated invoice status | Invoice | | | |

Appendix B – Setting Names

The following codes may be used in conjunction with the “get_setting” call

| Setting | Description | Example value |
|----------------------------------|---|-----------------------|
| api_version | Current version of the MIDAS API | 1.02 |
| backup_email | The email address that automated database backups are sent to | backup@yourdomain.com |
| backup_last | The time of the last backup (epoch seconds) | 1365609454 |
| backup_persist | The number of days to keep backups on server | 7 |
| build_date | Current MIDAS build date | 1365608000 |
| datetime_amsymbol | The symbol denoting the first 12 hours of the day (when running in 12 hour clock mode) | AM |
| datetime_datefirst | If "1" dates are shown before times, otherwise times are shown before dates | 1 |
| datetime_dateformat | The date format | DD/MM/YYYY |
| datetime_dtlink | The link symbol between date and time | @ |
| datetime_gmtoffset | The timezone's GMT offset | 0 |
| datetime_mininterval | The granularity of minutes | 5 |
| datetime_pmsymbol | The symbol denoting the first 12 hours of the day (when running in 12 hour clock mode) | PM |
| datetime_startofweek | The day that should be considered the start of the week (0 = Sunday, 1 = Monday, etc) | 1 |
| datetime_timeformat | The time format | HH:mm |
| datetime_timenow | The current time (in epoch seconds) | 1365696187 |
| datetime_timezone | The timezone | Europe/London |
| datetime_tmlink | The link symbol between two times | - |
| email_bcc | The email address that outgoing email should be bcc'd to | bcc@yourdomain.com |
| email_sendfrom | The email address that outgoing email should appear sent from | midas@yourdomain.com |
| invoicing_counter | The next invoice number to be generated | 4 |
| invoicing_createbydefault | If "1" the "Create Invoice" option is checked when adding bookings | 0 |
| invoicing_createifzero | 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 |
| invoicing_currencycode | The currency code | USD |
| invoicing_currencysymbol | The currency symbol | \$ |
| invoicing_decimalsep | The decimal separator | . |
| invoicing_google_account | Your Google Wallet (formally Google Checkout) ID | 0000000000000000 |
| invoicing_google_enabled | If "1" online invoice payments are allowed via Google Wallet | 1 |
| invoicing_includezero | 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 |
| invoicing_paypal_account | Your PayPal email address | paypal@yourdomain.com |



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| | | |
|------------------------------------|---|------------------|
| invoicing_paypal_enabled | If "1" online invoice payments are allowed via PayPal | 1 |
| invoicing_pay_require_email | If "1" clients are required to enter their email address in order to view their invoice online | 1 |
| invoicing_prefix | The prefix that is added to all your invoice numbers | MIDAS |
| invoicing_rounding | If "1" invoice values are rounded up to the nearest whole number 0 | 1 |
| invoicing_silentdisc | If "1" booking type discounts are applied to invoices without any indication. If "0" invoices will denote that a discount has been applied | 0 |
| invoicing_tax | The default tax percentage to be added to invoices | 0 |
| invoicing_thousandsep | The thousand separator | , |
| occupancy_max | The maximum number of people allowed on your site at any one time | 510 |
| occupancy_show | Show the occupancy level when adding/modifying bookings | 1 |
| occupancy_warn | Warn if the number of people on site exceeds this value | 300 |
| print_evactolerance | 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 |
| print_sortby | The booking field to sort booking print outs by | start |
| print_sortdir | The sort order of print outs (0 = ascending, 1 = descending) | 0 |
| search_maxresults | The maximum number of search results to return per page | 50 |
| version | Current MIDAS version | 4.03 |
| view_autoclose_alerts | The number of seconds the "My Messages" pop-up should display for, if enabled by users | 10 |
| view_autoclose_notes | The number of seconds after which any "day notes" pop-ups should automatically close | 15 |
| view_changemonthcell | Allow users to choose what's displayed in the monthly overview | 1 |
| view_cutoffdays | The number of days to keep temporary logs for | 30 |
| view_default | The default view in the Booking Grid | All |
| view_gridrowheight | The height (in pixels) of each row in the booking grid | 30 |
| view_gridvenuewidth | The width (in pixels) of the first column in the booking grid | 100 |
| view_showonblocks | The booking field(s) to show on booking "blocks" in the booking grid | organisation |
| view_showonmonthcell | The booking field to show on dates in the monthly overview | client |
| view_showontools | The booking field(s) to show on tooltips when hovering over booking "blocks" in the booking grid | organisation |
| view_updatefrequency | The number of seconds between successive background data refreshes | 30 |
| view_viewsize | The number of days to show in the booking grid by default | 1 |
| webrequest_alloweddomains | A comma separated list of email domains from which | @yourdomain.com, |



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| | | |
|--------------------------------|---|--------------|
| | booking requests are permitted | @hotmail.com |
| webrequest_blockcolor | The color of existing booking blocks on the public booking request screen | red |
| webrequest_disablepast | The date past which booking requests are not permitted | |
| webrequest_enabled | If "1" public booking requests are enabled, if "0" public booking requests are disabled | 1 |
| webrequest_leadintime | The number of days in advance public booking request must be made | 7 |
| webrequest_leadouttime | The number of days in advance public booking request are allowed to be made for | 14 |
| webrequest_showonblocks | 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 |
|------------------------------|--|--|
| "invalid api key" | You have not supplied your API key in your call, or the API key supplied is invalid | All |
| "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 |
| "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 |
| "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 | 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 |
| "unknown user" | Indicates that the specified user doesn't exist | get_activity get_messegas get_reminders get_watches |
| "unknown venue group" | Indicates that the specified venue group doesn't exist | get_venues_in_group |
| "unknown venue" | Indicates that the specified venue doesn't exist | get_availability get_bookings (when the venue parameter is specified) get_venue |



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 = $ua-
>post("http://your_midas_url/api.pl",[key=>"your_api_key",action=>"get_c
lient",client=>"Joe Bloggs"]);
if ($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 );
```



Release Notes

v1.03

20th 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

18th February 2014 Added: Support for multiple databases

v1.01

7th October 2013 Added: "get_venues_in_use" call

v1.00

1st June 2013 Initial API release

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