Uptrends Infra API

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2 Introduction

The Uptrends Infra API allows you to programmatically obtain measured data in your account, like device statuses and sensor values. The API is a web service that is located on https://api.uptrendsinfra.com.

2.1 Prerequisites

To use the Uptrends Infra API you need the following:

1. The username and password of an Uptrends Infra user.
2. Access to the API webservice (https://api.uptrendsinfra.com)

2.2 Accessing the API

The API can be accessed at the specified base URL using the HTTPS protocol.

All API operations require HTTP Basic Authentication to get access to the information. The operations that are described in chapter 2 require an API account. You can obtain such an API account by the Register operation, described in paragraph 2.5.

Please note that all operations are executed within the authorization context of the user that created the API account. You can therefore perform the same actions as the user would, when logged into the website.

2.3 Content type

You may specify an Accept header in the HTTP request, in order to receive the most appropriate content type for your application. Available content types are:

- `Accept: application/json`
- `Accept: application/xml`

All examples in this document are based on the application/json content type.

2.4 Defining a period

Many API operations have a period parameter, which allows you to specify a specific period. If that's the case, you can specify any of the following literals: *CurrentDay, CurrentWeek, CurrentMonth, CurrentYear, PreviousDay, PreviousWeek, PreviousMonth, PreviousYear, Last24Hours, Last48Hours, Last7Days, Last30Days, Last60Days, Last90Days, Last365Days, Last3Months, Last6Months, Last12Months, Last24Months*.

It is also possible to define a custom period, using a start and end date. You should use the following format: yyyymmdd-yyyymmdd. A period from May 10, 2014 until May 20, 2014 would therefore be formatted as: "20140510-20140520".

2.5 Create an API account

In order to use the API, your first action should be to create an API account. The returned credentials can be used to access the API. Please store them in a secure place, because anyone who has access to the API account can use the API with your user account's authorization context.

Url: /v1/register
Method: GET
Credentials: Any valid Uptrends Infra user account

Parameters:

Name	Required/Optional	Default value	Comment
Description	Optional	API account	Description of the API account

Returns:

An object containing properties:

- U   The user name of the API account
- P   The password of the API account

Examples:

The URL https://api.uptrendsinfra.com/v1/register yields:

`{"U":"bc0a9b0ee8fa4736ba6dac5eeb74435a","P":"ZR2Ix5XgyTVIEJlRojwsK7msgNU="}`

You are encouraged to use a description parameter, e.g.:

https://api.uptrendsinfra.com/v1/register?description=MyTestApplication

3 API operations

This chapter describes the available API operations. Please keep in mind that more operations are available (or can be made available for you) that are not listed in this document. Feel free to contact support if you would like to use the API in a more extended way.

3.1 Get account info

This operation returns basic account information.

Url: /v1/account
Method: GET
Credentials: Any valid API account
Parameters: none
Returns:

An object containing properties:

- AccountName   The name of the current account
- UserName   The name of the current user

Example:

The URL https://api.uptrendsinfra.com/v1/account yields:

```
{"AccountName":"1234565","UserName":"Michael Johnson"}
```

3.2 Get device group data

This operation returns current status data about the specified device group (or the "All devices" group, if no group is specified).

Url: /v1/DeviceGroupData
Method: GET
Credentials: Any valid API account
Parameters:

Name	Required/Optional	Default value	Comment
DeviceGroup	Optional	All devices	ID of the device group
ShowDetailInfo	Optional	True	Indication whether current values of the first two sensors must be returned.
SortOrder	Optional	ByStatus	Sort order. Allowed values are ByStatus and Alphabetical.
StatusFilter	Optional	All	Filter by status. Allowed values are All, Errors, ErrorsAndWarnings, NoData
GroupFilter	Optional	ItemsOnly	Filter groups or devices. Allowed values are All, GroupsOnly, ItemsOnly
Skip	Optional	0	Skip/Take are used in conjunction with each other to determine the "page" of requested data.
Take	Optional	10	

Period	Optional	Last24Hours	The period to be used to calculate the Uptime percentage. See paragraph 2.4 for formatting options.

Returns:

An object containing properties:

-     Count   The total number of items in the group
-     Status   The current status of the group. Possible values are Error, Warning, OK, Unknown.
-     Devices   A list of member items (devices or groups) in the group.

Each item has the following properties:

-     Id   The ID of the item
-     Name   The name of the item
-     Type   The type of the item (either Device or Group)
-     Status   The current status of the item (Error, Warning, OK, or Unknown)
-     Uptime   The uptime of the item during the specified period
-     FriendlyUptime   The uptime, formatted per the user's preferences
-     DataFeeds   A list of datafeeds for this item

Each datafeed has the following properties:

-     Id   The ID of the datafeed
-     Name   The name of the datafeed
-     Type   The datatype of the datafeed
-     Status   The current status of the datafeed (Error, Warning, OK, or Unknown)
-     Value   The last value of the datafeed
-     FriendlyUptime   The last value, formatted per the user's preferences

Examples:

The URL https://api.uptrendsinfra.com/v1/devicegroupdata yields:

```
{    "Status": "Error",
     "Count": 2,
     "Devices": [
         {   "Id": "d8b4a807-9d67-49bf-8d30-cf3c5a0d8c1c",
             "Type": "Device",
             "Name": "Server 1",
             "Status": "OK",
             "Uptime": 100.0,
             "FriendlyUptime": "100.00",
             "DataFeeds": [
                 {  "Id": "1c28fe8c-2245-45de-af5c-4e6b14108701:0",
                    "Name": "CPU Load%",
                    "Status": "OK",
                    "Type": "Double",
                    "Value": "8.1535912",
```

```
                 "FriendlyValue": "8.15" },
             { "Id": "b6f0b8a8-82dd-4040-8818-a4f7309fcb32:0",
               "Name": "Memory available",
               "Status": "OK",
               "Type": "Double",
               "Value": "1636",
               "FriendlyValue": "1,636" } ] },
     {   "Id": "c6db88b2-856a-46be-b5cf-3ecd162607f8",
         "Type": "Device",
         "Name": "Server 2",
         "Status": "Error",
         "Uptime": 45.33,
         "FriendlyUptime": "45.33",
         "DataFeeds": [
             { "Id": "194e4c4d-4de9-4bf0-b6f2-1f72b43b9d09:0",
               "Name": "CPU Load%",
               "Status": "OK",
               "Type": "Double",
               "Value": "2.93857122",
               "FriendlyValue": "2.93" },
             { "Id": "ee391ea7-0921-4fdc-b904-7321368518c6:0",
               "Name": "Memory available",
               "Status": "OK",
               "Type": "Double",
               "Value": "2477",
               "FriendlyValue": "2,477" }
         ]
     }
   ]
}]}
```

You may also specify any combination of parameters, e.g:

- To obtain information for a specific device group, sorted alphabetically:
  https://api.uptrendsinfra.com/v1/devicegroupdata?SortOrder=Alphabetical&DeviceGroup=de7f11df-d284-4fb8-9e45-c2958313cf0e

- To obtain the third page of 20 items:
  https://api.uptrendsinfra.com/v1/devicegroupdata?Skip=40&Take=20

- To obtain only the items that are in error:
  https://api.uptrendsinfra.com/v1/devicegroupdata?StatusFilter=Errors