



Sens2Cloud HTTP REST Sensaris API

Version	Author	Updates
0.1	Marc CEBO	Initial version



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Introduction

The HTTP REST Sensaris API allows developers to design their own applications interfacing with Senspods.

This initial release covers only reading functionality. Next updates of the Sensaris API will address updating firmware remotely, managing Senspods fleets ...

The Sensaris API is easy to use. It is based on HTTP queries containing optional or compulsory parameters.



Overview

A. Authentication

All Sensaris API functions require authentication.
All responses are related to the authenticated user.

To use the Sensaris API, simply contact Sensaris (www.sensaris.com) to obtain a user id and a user key.
These identifiers will need to be passed as parameters for each HTTP query.

B. Query format

All HTTP queries have the same format with at least three compulsory parameters.

<http://v2.sensdots.com/api/<entity>.php?uid=<uid>&ukey=<ukey>&action=<action>>

Description :

< entity > : entity related to the action (Senspod, Fleet, etc...)
<uid> : user id
<ukey> : user key
<action> : action to execute

C. Return value

The Sensaris API uses JSON format for the HTTP queries return values.

JSON return object always have the following structure:



```
result = {  
    action : <action>,  
    status : <status>,  
    infos : <infos>,  
    errors : <info>,  
    object : <object>  
}
```

Description :

<action> : action to perform

<status> : query status (success / error)

<infos> : information messages list returned by the server if status = success

<error> : error messages list returned by the server if status = error

<object> : object returned by the action (could be null)



Senspod's functions

A. Get the Senspod's frame data units

HTTP Query :

<http://v2.sensdots.com/api/senspod.php>

Method :

GET or POST

Parameters :

Parameter	Compulsory	Value	Comment
uid	Yes	User id	
ukey	Yes	User key	
action	Yes	getDataUnit	
id	Yes	Senspod's MAC address	Format : AABBCCDDEEFF

Example :

To retrieve the Senspod AA:BB:CC:DD:EE:FF frame data units, simply send :

http://v2.sensdots.com/api/senspod.php?uid=<user_id>&ukey=<user_key>&action=getDataUnit &id=AABBCCDDEEFF



Return value :

```
{  
  "action": " getDataUnit ",  
  "status": "success",  
  "infos": [" Data unit retrieved successfully "],  
  "errors": [],  
  "object": {  
    "gps": "coord",  
    "cox": "ppm",  
    "nox": "ppb",  
    "noise": "dB",  
    "tint": "°C",  
    "hint": "%",  
    "text": "°C",  
    "hext": "%",  
    "pm": "%"  
  }  
}
```



B. Get the last X Senspod's frames

HTTP query :

<http://v2.sensdots.com/api/senspod.php>

Method :

GET or POST

Parameters :

Parameter	Compulsory	Value	Comment
uid	Yes	User id	
ukey	Yes	User key	
action	Yes	getLastNbFrames	
id	Yes	Senspod's MAC address	Format : AABCCDDEEFF
nb	No	Number of frames to retrieve	If no specified, all the frames will be returned !

Example :

To retrieve the last two Senspod AA:BB:CC:DD:EE:FF frames, simply send :

http://v2.sensdots.com/api/senspod.php?uid=<user_id>&ukey=<user_key>&action=getLastNbFrames&id=AABCCDDEEFF&nb=2



Return value :

```
{
  "action": "getLastNbFrames",
  "status": "success",
  "infos": ["SensPod's last frames retrieved successfully"],
  "errors": [],
  "object": [
    { "date": "2012-05-11T08:56:35",
      "gps": "34.08828984494467;-118.21421388231595;A",
      "cox": "75.375181911565",
      "nox": "0",
      "noise": "8",
      "temp": "22",
      "hum": "7" },
    { "date": "2012-05-11T08:56:34",
      "gps": "34.0882176218668;-118.21430710816065;A",
      "cox": "1.5585736936114e-48",
      "nox": "0",
      "noise": "28",
      "temp": "80",
      "hum": "9" }
  ]
}
```



C. Get Senspod's frames between two dates

HTTP query :

<http://v2.sensdots.com/api/senspod.php>

Method :

GET or POST

Parameters :

Parameter	Compulsory	Value	Comment
uid	Yes	User id	
ukey	Yes	User key	
action	Yes	getFramesFromInterval	
id	Yes	Senspod's MAC address	Format : AABBCCDDEEFF
date_from	No	First date of the interval	ISO format Ex : 2012-06-30T16:30:15
date_to	No	Last date of the interval	ISO format Ex : 2012-06-30T16:30:15

Example :

To retrieve all Senspod AA:BB:CC:DD:EE:FF frames between 2012-05-11on 8:50 AM and 2012-05-11on 8:59 AM simply send :

http://v2.sensdots.com/api/senspod.php?uid=<user_id>&ukey=<user_key>&action=getFramesFromInterval&id=AABBCCDDEEFF&nb=2



Return value :

```
{
  "action": "getFramesFromInterval",
  "status": "success",
  "infos": ["SensPod replay successfully"],
  "errors": [],
  "object": [
    { "date": "2012-05-11T08:55:59",
      "gps": "34.067018648637024;-118.22900448854679",
      "cox": "13665.16197492",
      "nox": "155.45203690433",
      "noise": "2",
      "temp": "78",
      "hum": "2" },
    { "date": "2012-05-11T08:55:58",
      "gps": "34.06631140216366;-118.22959188543621",
      "cox": "75.375181911565",
      "nox": "0",
      "noise": "23",
      "temp": "63",
      "hum": "3" },
    ... ,
    { "date": "2012-05-11T08:55:26",
      "gps": "34.05239060126006;-118.24351278677362",
      "cox": "75.375181911565",
      "nox": "0",
      "noise": "9",
      "temp": "98",
      "hum": "4" }
  ]
}
```