DotVision energy

Ethernet
RS485 (Modbus)
DotVision
SPOONY 1.5
Power
Network
Error
Cloud device
for energy management
OUT A
OUT B
OUT C
TIC
Phase 1
Phase 2
Phase 3

Spoony 1.5 | Dashboard

Evolutive Solution

Load Management

Secured

Cloud connected

Intelligent (automate)

Small

Simple

Wifi Ethernet

Smart Grid deployement lacks a flexible way to gather data and act onto network.

Spoony, Cloud Device, is the solution.

Directly installed within an electric panel (format DIN 3/2), captures energy consumption data, analyzes and transmits it through the Cloud.

This programmable device can answer to any request regarding energy management system.

energy.dotvision.com

Version du document

Date	Version	Auteur	
01/03/2017	1.0	Guillaume Deroy	Première publication

Summary

Safety instructions

⚠ This product must be installed, configured, and put into service by qualified personnel only. Usual electrical security rules apply and must be followed. In case of incorrect installation or usage, damages to the user or the product can occur.

⚠ This product must only be manipulated when no power is present. Risk of electrical shock exists if the product is misused.

⚠ This product must be installed, configured and used according to the related documentation. Any use not described in the related documentation must be considered unsafe. If the product is not used according to the cases described in the related documentation, no warranty is applicable.

⚠ To avoid product overheating, only use in a well ventilated area.

⚠ Product disassembly and fixing can only be realized by authorized and qualified personnel. In case of doubt regarding the product functioning, please contact DotVision. Incorrect use can damage the product.

Product version

This manual concern product version 1.5 ONLY. Any other version of the product must following related documentation.

Product package content

Following accessories are provided with Spoony :

- Micro SD card
- Micro SD / SD adapter

Optional accessories

Following accessories are available as options in order to extend product fonctionnalities. Please contact DotVision for further informations

- Split-core current transformers
- Rogowski coil current sensors
- Wifi extension card

Notes: - Split-core & Rogowski coils can only be installed on matching version of Spoony. Do not install rogowski Coils on a product sold for compatibility with Current transformers.

- Current transformers or Rogowski coils are needed for full product functionality. Please ask DotVision for references fitting your target application.

Handling

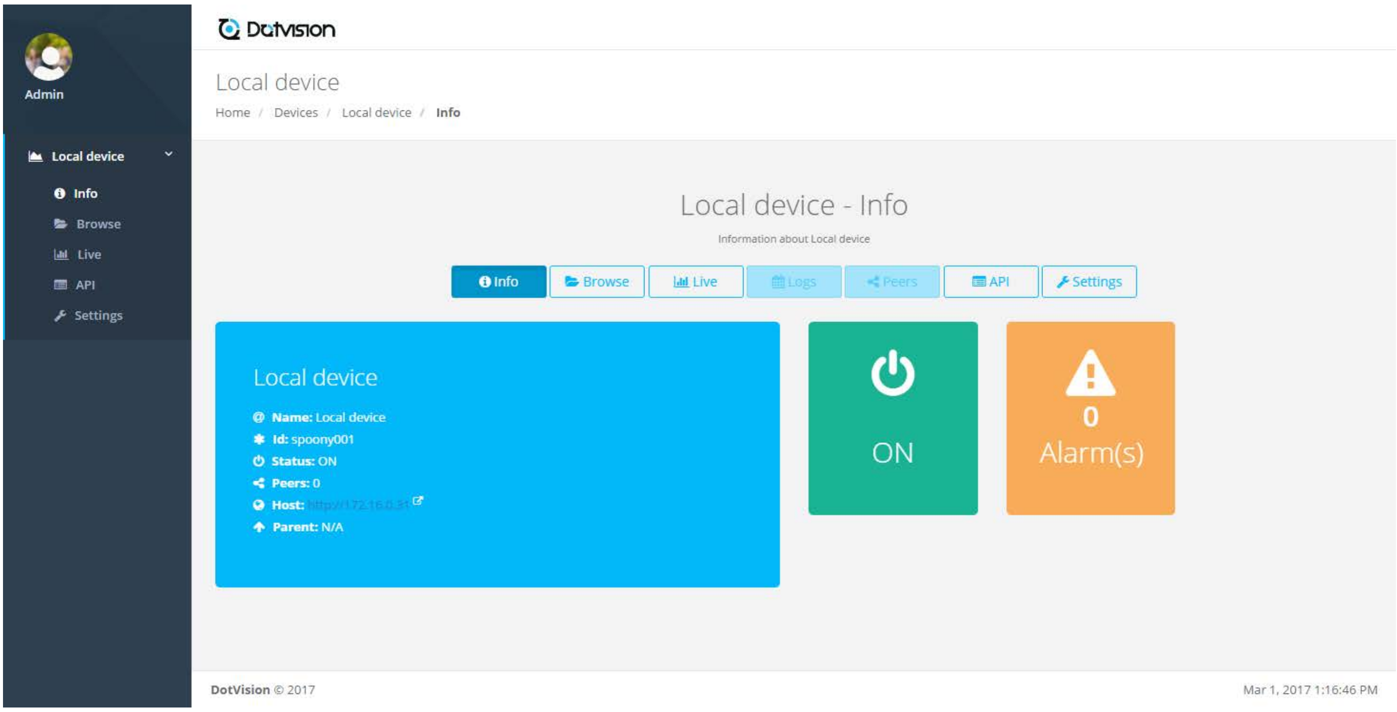
The product must be carried in its original packaging only. The product package is made to protect the product. Remove the product from its packaging only when on installation site. In order to protect the product from any damage caused by moisture, unwrap it and wait until all humidity has evaporated before putting into service.

Product inspection

Please inspect each part of the product before installation and check that all parts are presents. Keep product package in case you must carry it. If the product present visible damages or defect, or if some parts are missing, do not install the product and contact DotVision.

Embedded Dashboard

Home Page – Device Info



Local device

Local device - Info

Information about Local device

Local device

Name: Local device

Id: spoony001

Status: ON

Peers: 0

Host: http://172.16.0.31

Parent: N/A

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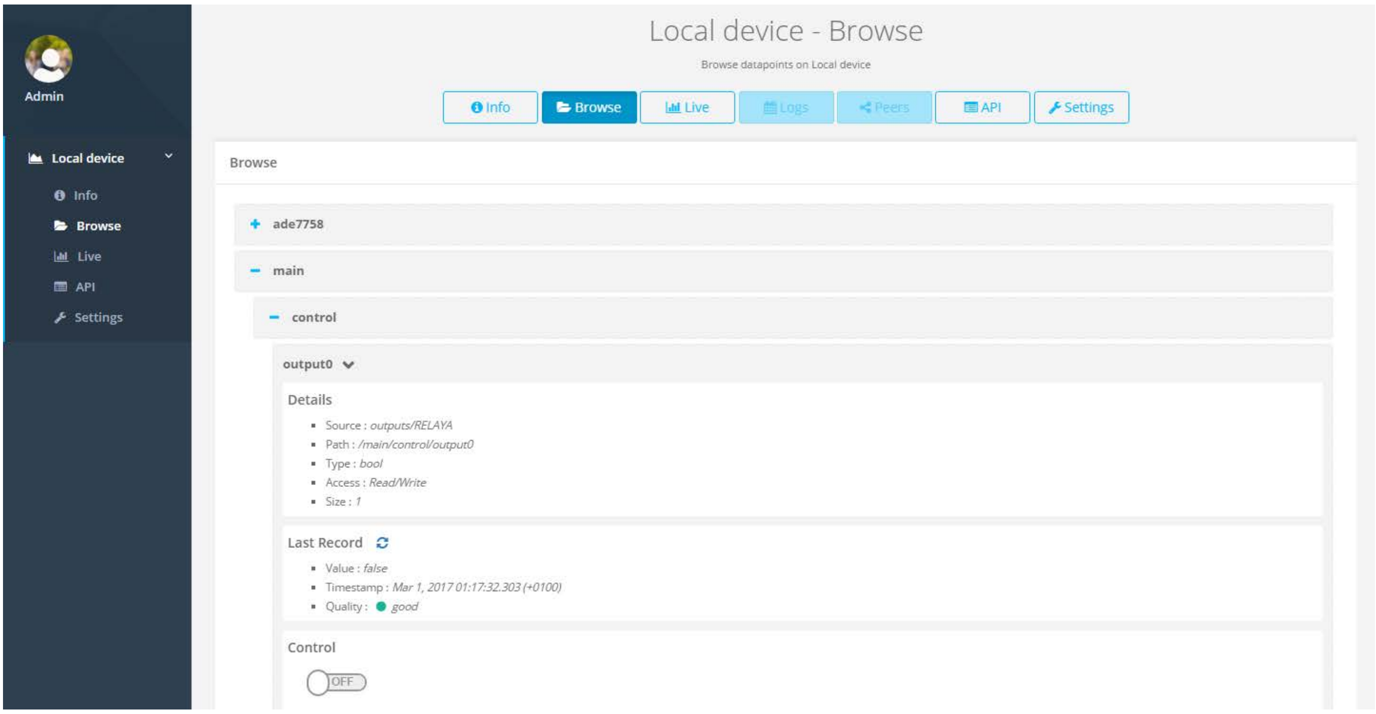
Mar 1, 2017 1:16:46 PM

Screenshot 1 - Home page - Information about Local device

Browse Page – Datapoints Info



Local device - Browse

Browse datapoints on Local device

Details

- Source : *outputs/RELAYA*
- Path : */main/control/output0*
- Type : *bool*
- Access : *Read/Write*
- Size : *1*

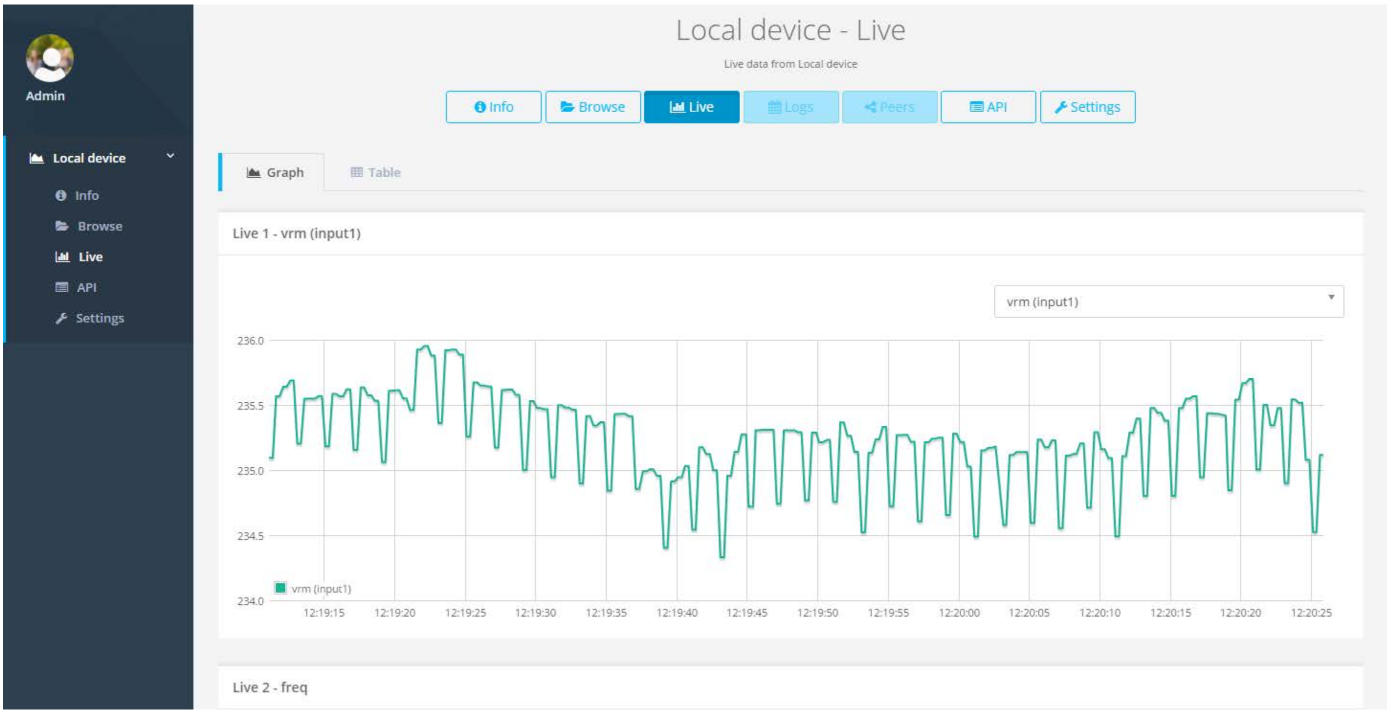
Last Record

- Value : *false*
- Timestamp : *Mar 1, 2017 01:17:32.303 (+0100)*
- Quality : ● *good*

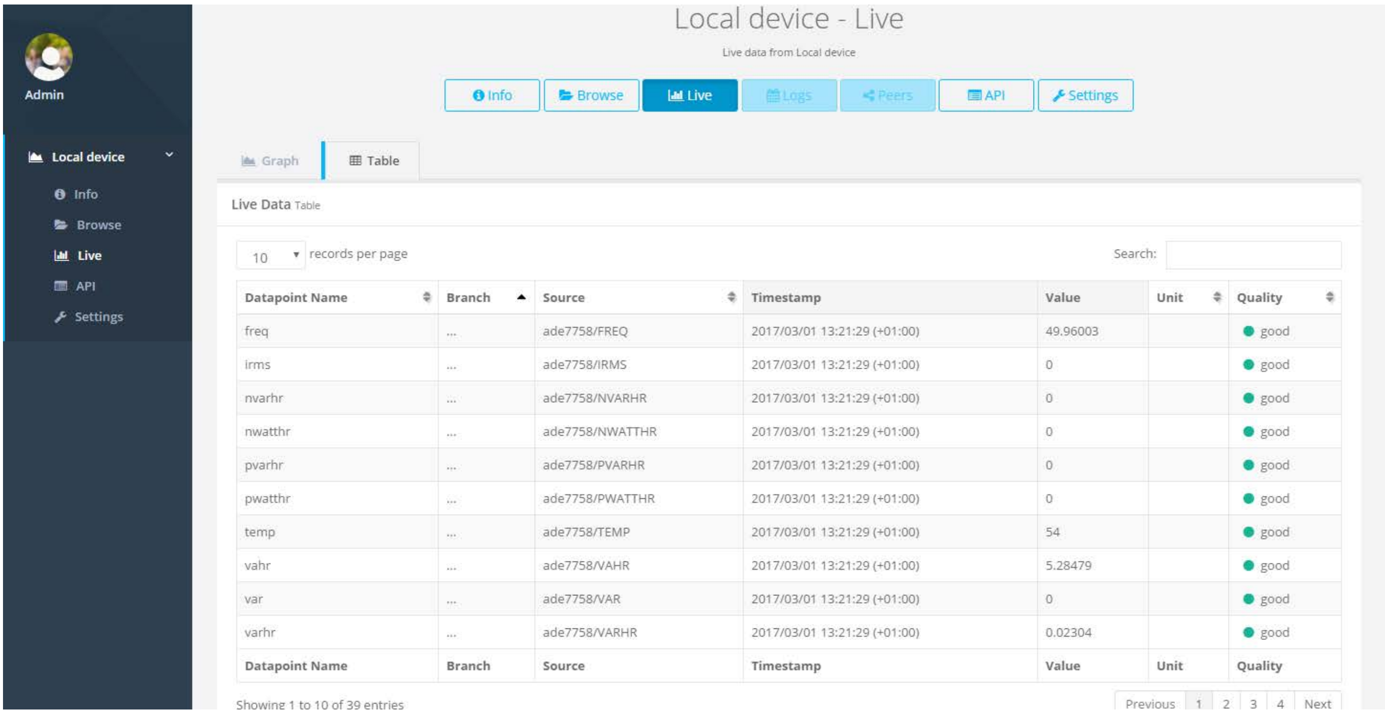
Control

Screenshot 2 - Browse page - Browse datapoints on Local device

Live Pages – Live Data



Screenshot 3 - Live page – Graph - Live data from Local device



Live Data Table

10 records per page

Search:

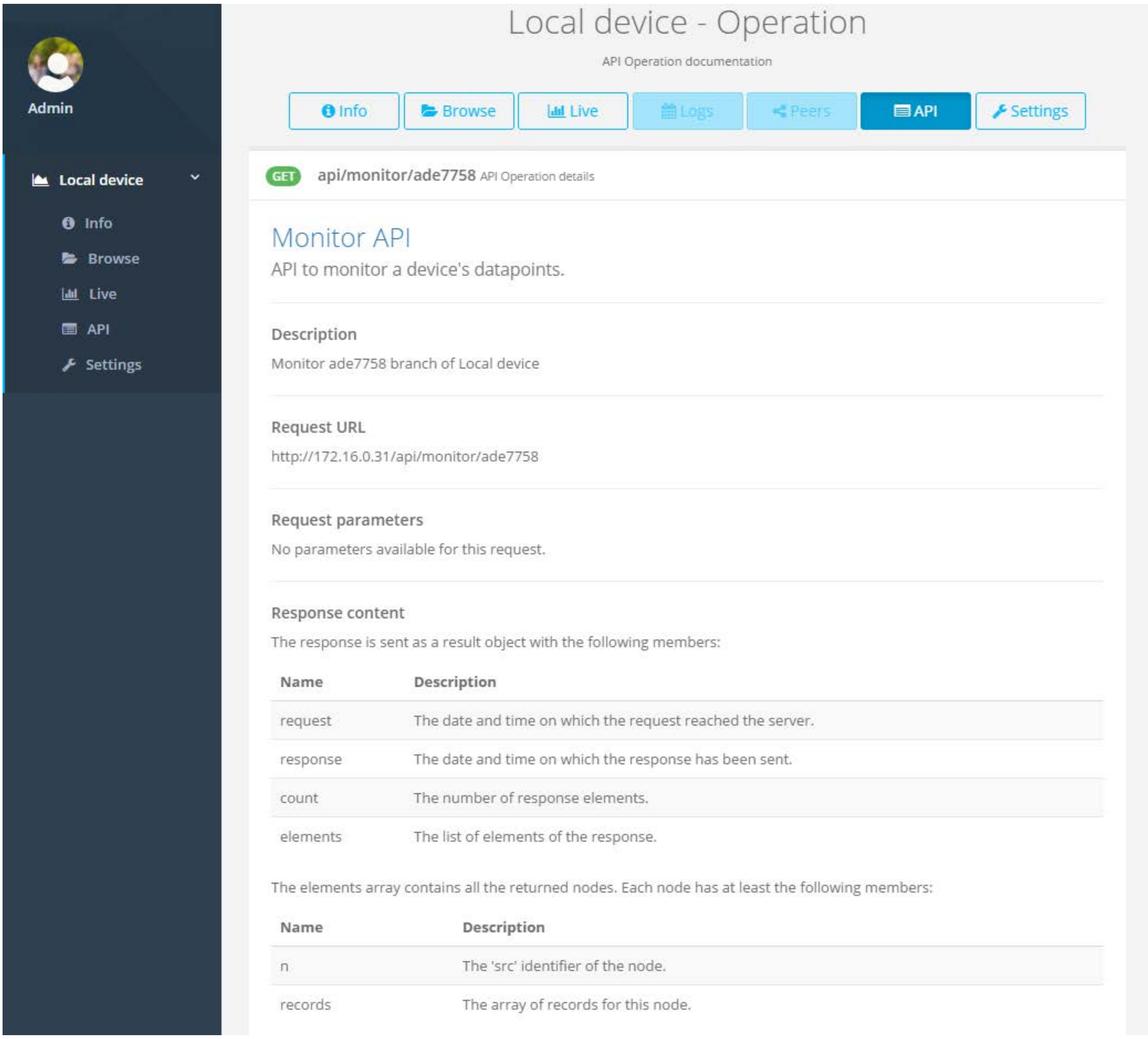
Datapoint Name	Branch	Source	Timestamp	Value	Unit	Quality
freq	...	ade7758/FREQ	2017/03/01 13:21:29 (+01:00)	49.96003		● good
irms	...	ade7758/IRMS	2017/03/01 13:21:29 (+01:00)	0		● good
nvarhr	...	ade7758/NVARHR	2017/03/01 13:21:29 (+01:00)	0		● good
nwatthr	...	ade7758/NWATTHR	2017/03/01 13:21:29 (+01:00)	0		● good
pvarhr	...	ade7758/PVARHR	2017/03/01 13:21:29 (+01:00)	0		● good
pwatthr	...	ade7758/PWATTHR	2017/03/01 13:21:29 (+01:00)	0		● good
temp	...	ade7758/TEMP	2017/03/01 13:21:29 (+01:00)	54		● good
vahr	...	ade7758/VAHR	2017/03/01 13:21:29 (+01:00)	5.28479		● good
var	...	ade7758/VAR	2017/03/01 13:21:29 (+01:00)	0		● good
varhr	...	ade7758/VARHR	2017/03/01 13:21:29 (+01:00)	0.02304		● good
Datapoint Name	Branch	Source	Timestamp	Value	Unit	Quality

Showing 1 to 10 of 39 entries

Previous 1 2 3 4 Next

Screenshot 4 - Live page – Table - Live data from Local device

API Pages – API documentation



Local device - Operation

API Operation documentation

api/monitor/ade7758 API Operation details

Monitor API

API to monitor a device's datapoints.

Description

Monitor ade7758 branch of Local device

Request URL

http://172.16.0.31/api/monitor/ade7758

Request parameters

No parameters available for this request.

Response content

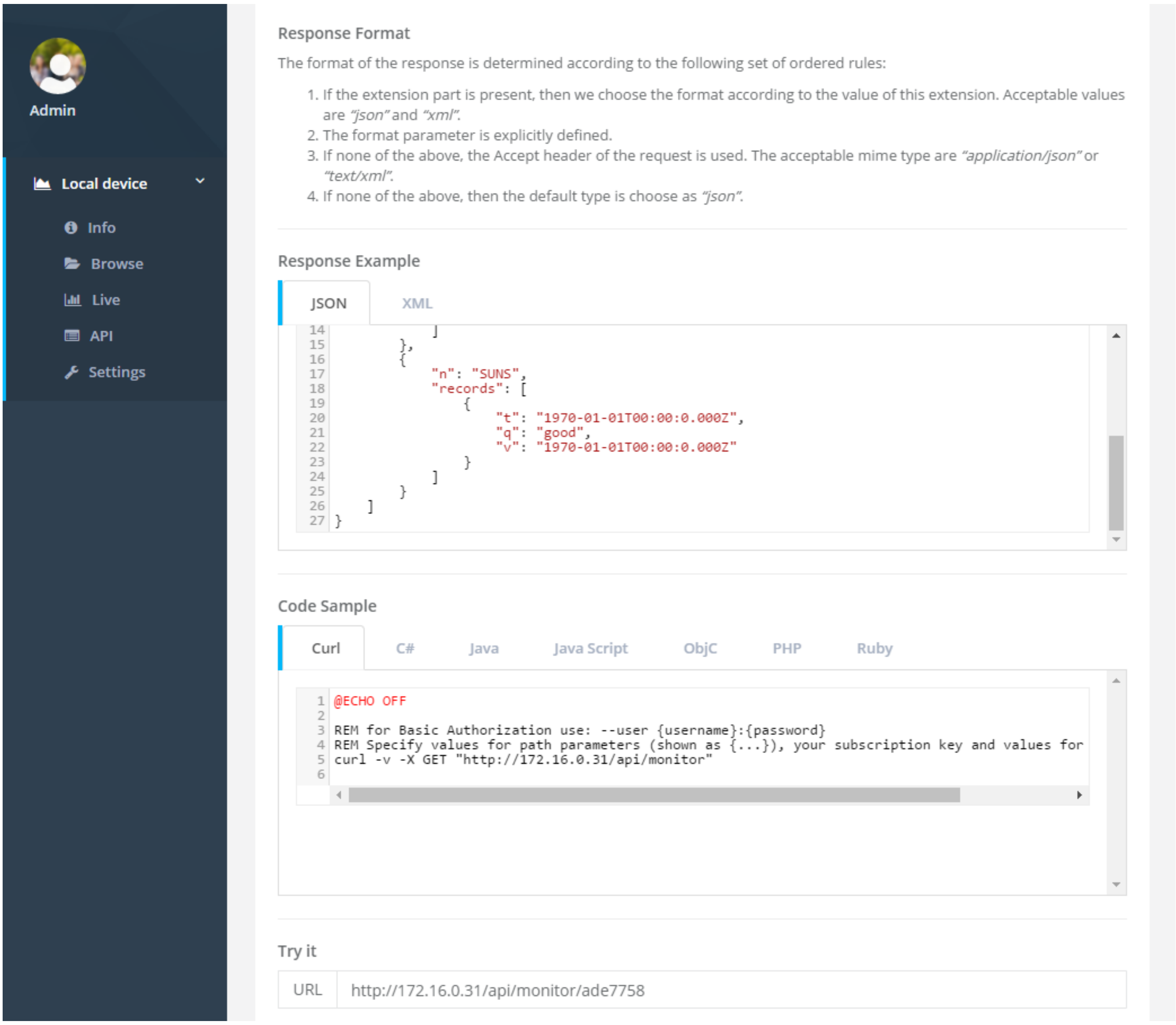
The response is sent as a result object with the following members:

Name	Description
request	The date and time on which the request reached the server.
response	The date and time on which the response has been sent.
count	The number of response elements.
elements	The list of elements of the response.

The elements array contains all the returned nodes. Each node has at least the following members:

Name	Description
n	The 'src' identifier of the node.
records	The array of records for this node.

Screenshot 5 – API page - API documentation of Local device – Part. 1



Response Format

The format of the response is determined according to the following set of ordered rules:

1. If the extension part is present, then we choose the format according to the value of this extension. Acceptable values are *"json"* and *"xml"*.
2. The format parameter is explicitly defined.
3. If none of the above, the Accept header of the request is used. The acceptable mime type are *"application/json"* or *"text/xml"*.
4. If none of the above, then the default type is choose as *"json"*.

Response Example

```
                ]
            },
            {
                "n": "SUNS",
                "records": [
                    {
                        "t": "1970-01-01T00:00:0.000Z",
                        "q": "good",
                        "v": "1970-01-01T00:00:0.000Z"
                    }
                ]
            }
        ]
}
```

Code Sample

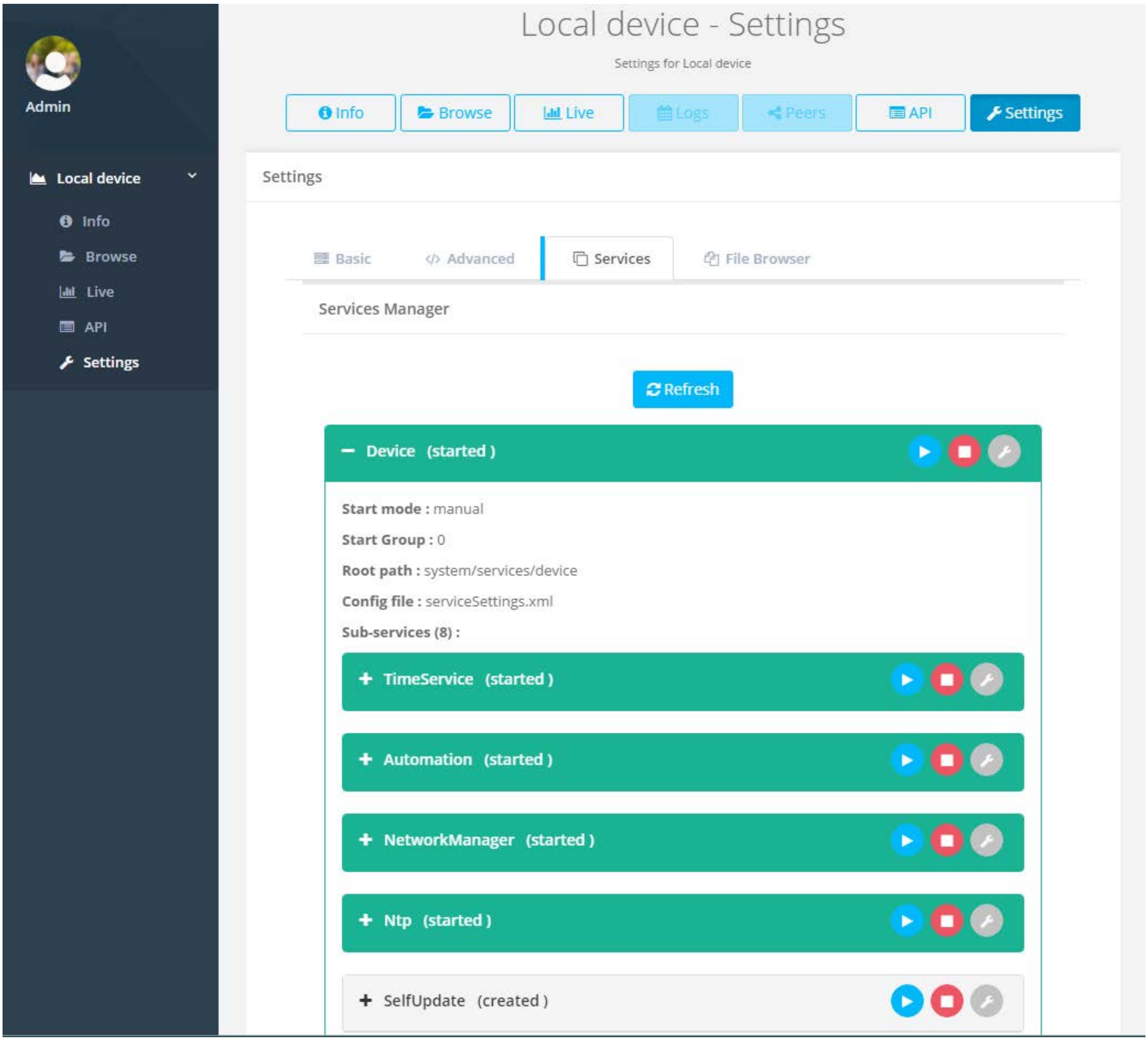
```
@ECHO OFF

REM for Basic Authorization use: --user {username}:{password}
REM Specify values for path parameters (shown as {...}), your subscription key and values for
curl -v -X GET "http://172.16.0.31/api/monitor"

```

Try it

URL http://172.16.0.31/api/monitor/ade7758

Screenshot 6 – API page - API documentation of Local device – Part. 2

Settings Pages – Device Settings



Local device - Settings

Settings for Local device

Settings

Services Manager

− Device (started)

Start mode : manual

Start Group : 0

Root path : system/services/device

Config file : serviceSettings.xml

Sub-services (8) :

+ TimeService (started)

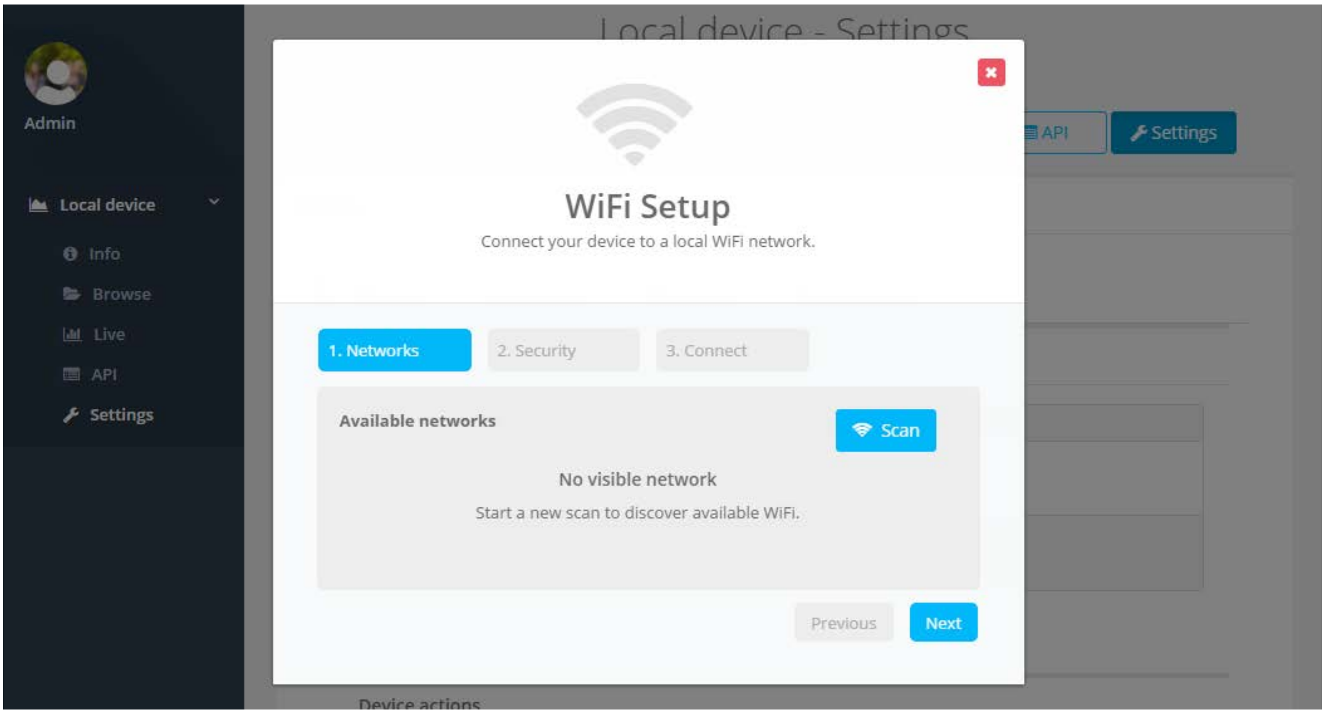
+ Automation (started)

+ NetworkManager (started)

+ Ntp (started)

+ SelfUpdate (created)

Screenshot 7 – Settings page - Settings for Local device – Service manager



WiFi Setup

Connect your device to a local WiFi network.

Available networks

No visible network

Start a new scan to discover available WiFi.

Screenshot 8 - Settings page - Settings for Local device – WiFi Setup