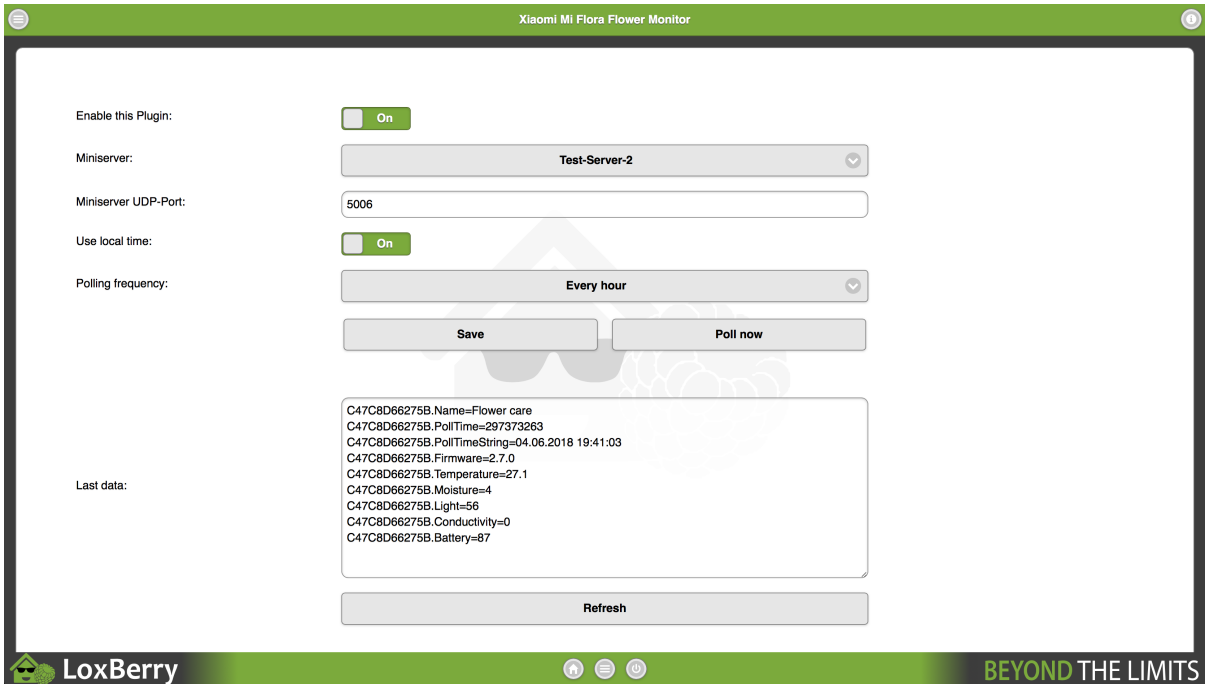
Plugin-Daten	
Autor	Michael Miklis
Logo	
Status	STOPPED
Version	2.0.4
Min. LB Version	1.0
Release Download	https://github.com/michaelmiklis/loxberry-plugin-miflora/archive/refs/tags/2.0.4.zip
Beschreibung	Loxberry plugin for querying Xiaomi MiFlora Flower Sensors
Sprachen	EN, DE
Diskussion	https://www.loxforum.com/forum/projektforen/loxberry/plugins/156917-plugin-xiaomi-miflora-flower-monitor

Xiaomi MiFlora Flower Sensor

Version History...

- 2022-02-13 Release 2.0.4 - Added MQTT experimental MQTT functionality
- 2021-08-01 Release 2.0.3 - Fixed issue in WebUI with On/Off switches
- 2020-01-05 Release 2.0.2 - Fixed issue with btlewrap __init__
- 2019-12-31 Release 2.0.1 - Support for Loxberry 2.0.0.4 and above
- 2018-06-18 Release 1.0.1 - Fixed typo in postroot.sh install script
- 2018-06-04 Release 1.0.0 - Initial release of version 1.0.0

This Plugin queries the Xiaomi MiFlora Flower Sensors via bluetooth low energy (btle) and sends the data via UDP and MQTT (experimental support) to the Loxone Miniserver.



The Xiaomi MiFlora Plugin supports multiple flower sensors. During each execution a bluetooth scan

for Xiaomi MiFlora devices is performed and each found device will be queried.

UDP Mode (default)

Each received value will be send as an individual UDP packet. The UDP packets will have the following format:

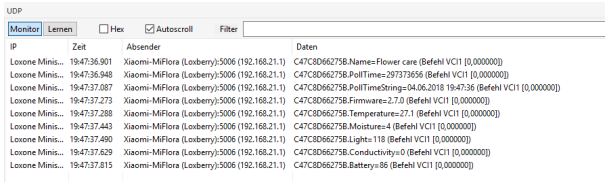
[Device-MAC].[Sensor-Name]=[Value]

Sample:

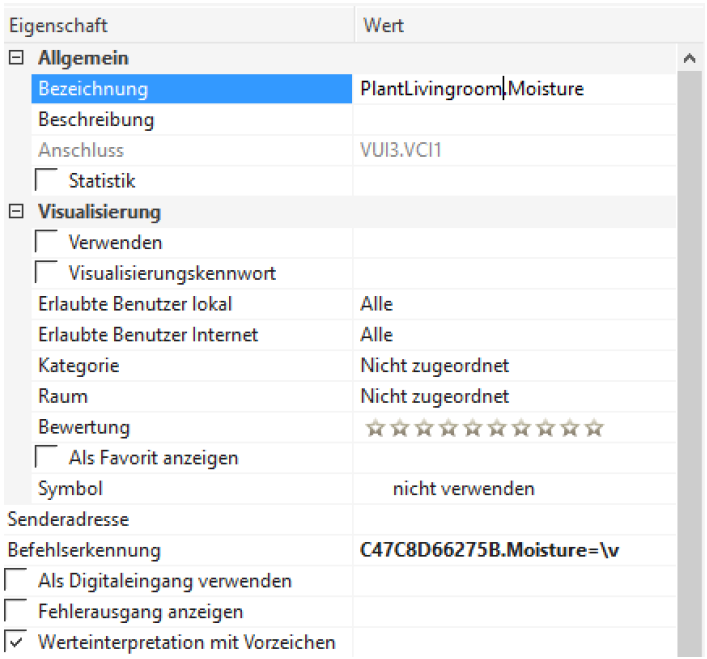
C47C8D66275B.Moisture=4

C47C8D66275B.Light=136

The UDP packages will be sent as follows:



With the following command recognition the values can be assigend to a "UDP-Command" / virtual input:



MQTT Mode (Experimental Support)

Starting in version 2.0.4 the Xiaomi MiFlora Flower Sensor Plugin also supports MQTT for sending data to the Loxone Miniserver. This requires the MQTT Gateway Plugin to be installed and successfully configured.

Further documentation and improvements on MQTT will be added in future releases.

Sensor data

Sensor Name	Description	Sample value
Name	Name of the sensor	Flower care
PollTime	Date/Time in Loxone format	297370058
PollTimeString	Date/Time string	03.06.2018 18:47:38
Firmware	Firmware version	2.7.0
Temperature	Temperature in Celcius	27.1
Moisture	Moisture (unknown unit)	4
Light	Light (unknown unit)	136
Conductivity	Conductivity (unknown unit)	0
Battery	Battery level in percent	86

Troubleshooting and feedback

If you have any issues you can run the plugin manually from the Loxberry command line (SSH) using the following command:

```
/usr/bin/python3 /opt/loxberry/bin/plugins/xiaomi-miflora/miflora.py
```

If the above command does NOT find you Xiaomi Flower Sensors proceed with the following steps to find the cause:

Step 1: Are the sensors are discoverable by the OS?

Test if the bluetooth stack from Raspbian can find the devices:

```
hcitool lescan (must be executed as root)
```

If your device is not found - it seems to be a low-level problem either with the bluetooth device, your raspbian drivers, bluetooth chip, e.g. Please understand that I cannot provide support for these kind of problems as they are not related to the plugin.

Step 2: Are the sesnors are discoverable by the Python btle-wrapper?

Start the btle-wrapper (called bluepy-helper). This module makes the bluetooth stack available in python3.

```
./usr/local/lib/python3.7/dist-packages/bluepy/bluepy-helper
```

Enter `scan` and check the output if your devices are listed here (rsp=$scanaddr=b{YOUR DEVICE ID}type)

If your device is not found or any module-errors are shown it seems to be a problem with the bluepy

python3 moduel. Check the version and try to manually reinstall the module:

`pip3 show bluepy` `apt-get install --no-install-recommends --reinstall python3-pip`

Please understand that I cannot provide support for these kind of problems as they are not related to the plugin.

Step 3: Discover using pyhton3 script blescan

To start a discovery of the BLE devices using blescan.py execute the following command:

`python3 /usr/local/bin/blescan`

If your device is not found - it seems to be a problem with the bluepy python3 module. Check the developers page https://github.com/IanHarvey/bluepy for further assistance.

Step 4: Check Logfile in Loxberry WebUI

Navigate to "Log Manager" → "More Logfiles" → "Xiaomi Flower Monitor (Plugin Log)" and check the log file for error messages.

Step 5: Execute plugin locally using SSH connection

Open an SSH connection to your Loxberry and execute the following command:

```
python3 /usr/bin/python3 /opt/loxberry/bin/plugins/xiaomi-miflora/miflora.py --logfile=/opt/loxberry/log/plugins/xiaomi-miflora/xiaomi-miflora.log --configfile=/opt/loxberry/config/plugins/xiaomi-miflora/miflora.cfg
```

If python specific errors occur, they will be displayed in the console.

Step 6: All of the above worked correctly, but the plugin still fails

Post an issue on my GitHub Page or in the Loxberry Forum.https://www.loxforum.com/forum/projektforen/loxberry/plugins/156917-plugin-xiaomi-miflora-flower-monitor

Feedback & Discussion

This plugin will be improved over time and feedback is appreciated. Therefore I created a thread in the LoxForum:

https://www.loxforum.com/forum/projektforen/loxberry/plugins/156917-plugin-xiaomi-miflora-flower-m

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Where to buy

Amazon: https://www.amazon.de/Flower-Care-Pflanzenmonitor-Bodenfruchtbarkeit-feuchtigkeitsgrad-White/dp/B01MUDQD8I/

AliExpress:
https://de.aliexpress.com/item/Original-Xiaomi-Mi-Plants-Monitor-Flower-Plants-Tester-Xiaomi-Flora-Sensor-with-Bluetooth-for-Aquarium-Garden/32739947607.html

AliExpress:
https://de.aliexpress.com/item/Xiaomi-MIJIA-Flora-Monitor-Digital-Flower-Grass-Plants-Care-Garden-Soil-Water-Smart-Tester-Sensor-International/32864987731.html

Otherwise search for "Flora" on AliExpress, Zapals or any other shopping site.

Tested Devices

The following devices have been tested with this plugin:

Device Description	Result
Xiaomi MiFlora International Version	(successful)
Raspberry Pi 3 internal Bluetooth Module (Buster)	(successful)
== LogiLink® Bluetooth 4.0 Adapter ==	