
domogik-plugin-onewired

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Contents

1	Plugin onewired	1
1.1	Purpose	1
1.2	Dependencies	1
1.3	Plugin configuration	2
1.4	Create the devices	2
1.5	Start the plugin	5
1.6	Set up your widgets on the user interface	5
2	Changelog	7
2.1	0.1	7

Purpose

Another Domogik plugin for 1-wire bus.

- This is a no xPL plugin, sensor value are update by **0mq messages**
- The plugin read only the 1-wire sensor created devices
- There are one sensor for one device
- Except for 1-wire counter, there is 2 sensors: one sensor counter et one incremental counter sensor
- The plugin can read all properties of 1-wire chip like “**B1-R1-A/pressure**” for a **DS2438** chip.
- The plugin only support a few datatype like Temperature, Humidity, Pressure
- But there is generic Voltage datatype for 1-wire CAN like **DS2438** or **DS2450**
- The plugin can read/write Input/Output sensor device like **DS2405/6/7/8/13** (Tested for DS2405/6)

Dependencies

- A owfsserver on local or remote host

On Debian jessie:

```
# apt-get install owfs ow-shell
```

- Python module: ow

On Debian jessie:

```
# pip install ow
```

In plugin configuration, you can choose a direct access to the 1-wire bus ou use the owfs server **owserver**. In this case, you can test the 1-wire with this shell command.

Example with a remote owfs server:

```
$ owdir -s vesta
/28.7079D0040000
/28.2CAED7010000
/28.5C1FD0040000
/28.219ED7010000
/26.D050E7000000
/26.3442E7000000
/26.99E4F1000000
/81.E1BC2C000000
/05.3A9233000000
/1D.6C010F000000
/1D.61BF0D000000
/bus.0
/uncached
/settings
/system
/statistics
/structure
/simultaneous
/alarm
```

Example reading temperature sensor:

```
$ owget -s vesta /28.7079D0040000/temperature ; echo
9.875
```

Plugin configuration

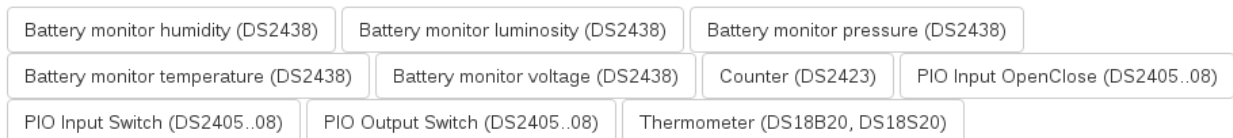
Here is the global configuration:

Key	Type	Description
1-wire_device	string	1-Wire device (usb: 'u', lan: 'host:4304')
1-wire_cache	integer	If you use have a lot of 1wire devices you should use the cache

Create the devices

Device's type available:

Create by device type



Parameters configuration for device type : sensors

Key	Type	Description
device	string	The hexadecimal 1-wire sensor address (example: 28.2CAED7010000)
interval	number	The time in seconds between two sensor's reading
properties	choice	Select the 1-wire propertie in the list (example: temperature for a DS18B20 sensor)

Parameters configuration for device type : Command

This device is for output IO chips like DS2405, DS2406/7, DS2408.

You need to configure this parameter :

Key	Type	Description
device	string	The hexadecimal 1-wire sensor address (example: 28.2CAED7010000)
properties	choice	Select the 1-wire propertie in the list (example: PIO for a DS2405 sensor)

Here are some screenshots of devices type creation

Create a new device : onewire.batterymonitor_humidity

Main parameters

Device name
The display name for this device

Description
A description for this device

Reference
A reference for this device

Global parameters

Global parameters are parameters which are not directly related to the device handled by the plugin. They are related to the way 1

interval
Interval in secondes between reading sensors (plugin must be restart).

properties

device

Create a new device : onewire.counter_count

Main parameters

Device name	<input type="text" value="Eau"/>
	The display name for this device
Description	<input type="text"/>
	A description for this device
Reference	<input type="text"/>
	A reference for this device

Global parameters

Global parameters are parameters which are not directly related to the device handled by the plugin. They are related to the way it

interval	<input type="text" value="60"/>
	Interval in secondes between reading sensors (plugin must be restart).
properties	<div><div>counters.A ▼</div><div>counters.A</div><div>counters.B</div></div>
device	<input type="text" value="1D.6C010F000000"/>
	The hexadecimal address

Create the device

Create a new device : onewire.pio_input_openclose

Main parameters

Device name	<input type="text" value="Porte garage"/>
	The display name for this device
Description	<input type="text"/>
	A description for this device
Reference	<input type="text"/>
	A reference for this device

Global parameters

Global parameters are parameters which are not directly related to the device handled by the plugin. They are related to the way 1

properties	<input type="text" value="Input (DS2405 sensed)"/>
interval	<input type="text" value=""/>
device	<input type="text" value=""/>

en reading sensors (plugin must be restart).

Create the device

Start the plugin

You can now start the plugin (start button) and use the created devices.

Set up your widgets on the user interface

You can now place the widgets of your devices features on the user interface.

CHAPTER 2

Changelog

0.1

- Plugin creation