domogik-plugin-rfplayer

Release 0.1

May 02, 2017

Contents

CHAPTER 1

Plugin documentation

Last changes

New instructions to apply changes from immediatly previous version.

- 0.1.1 : (22-04-2017) udev-rules updated with ziblue dongle identification, add X10/CHACON/BLISS commands.
- Previous change

Purpose

Note: Please notice that this plugin is **still in development**!

If you find any issue, please create a ticket on the Gihub repository : https://github.com/Nico0084/domogik-plugin-rfplayer/issues

In the same way, if something is not clear or wrong in this documentation, feel free to open a ticket!

Plugin to handle dongle RFPLAYER RFP1000 by Ziblue .

RFPLAYER is a new generation radio Frequency device. It looks like USB key with 2 independent Radio Frequency transceivers 433 Mhz and 868 Mhz dedicated to a Home Automation usage.

The RFP1000 can be used in 2 ways :

- Plugged to a Domogik, it will perform as a bidirectional radio GATEWAY to a multitude of Legacy Home Automation protocols. It can also be used as "PAROT : Learn & Play", ie being able to recognize or generate unknown protocols that have been learned by the RFP1000.
- Used in Stand Alonemode, it can then act as Plug & Play REPEATER with the possibility to do a TRANSCODING on 32 voices a RF protocol to another protocol. This mode is not used by domogi plugin.

Protocols handled : VISONIC, CHACON/DIO, DOMIA, X10, DELTADORE, SOMFY, BLYSS (433Mhz), KD101, PARROT, Scientific Oregon, OWL Firmware is upgradable. Supported by Domogik >=0.5.0 Development is in progress, features will get gradually

Steps to set up your first rfplayer device

To set up your first rfplayer device, you will have to :

- install this plugin on Domogik (see install a plugin on Domogik)
- install this plugin dependencies
- create an udev rule for your rfplayer dongle (the usb device you plug on the computer)
- configure this plugin
- create a Domogik device for your rfp1000 dongle
- start the plugin
- in the *Detected devices* pages, look for your devices and get informations about them
- create the Domogik device for your devices

Dependencies

- pyserial (>=3.0)

Install the RFPlayer usb device

Create an udev rule

You may create a udev rule for this device. You can find sample udev rules in the **udev_rules/** folder of this plugin.

RFPLAYER dongle model	udev rule file	device declared
 RFP1000 dongle	97-usbrfp1000.rules	/dev/rfp1000

To install a udev rule, copy the appropriate file in the udev rules folder on your system. Example

```
$ sudo cp udev_rules/97-usbrfp1000.rules /etc/udev/rules.d/
```

Then, you can use the following command to apply the udev rule, or unplug/plug the dongle.

```
$ sudo udevadm control --reload-rules
$ sudo udevadm trigger
```

Plugin configuration

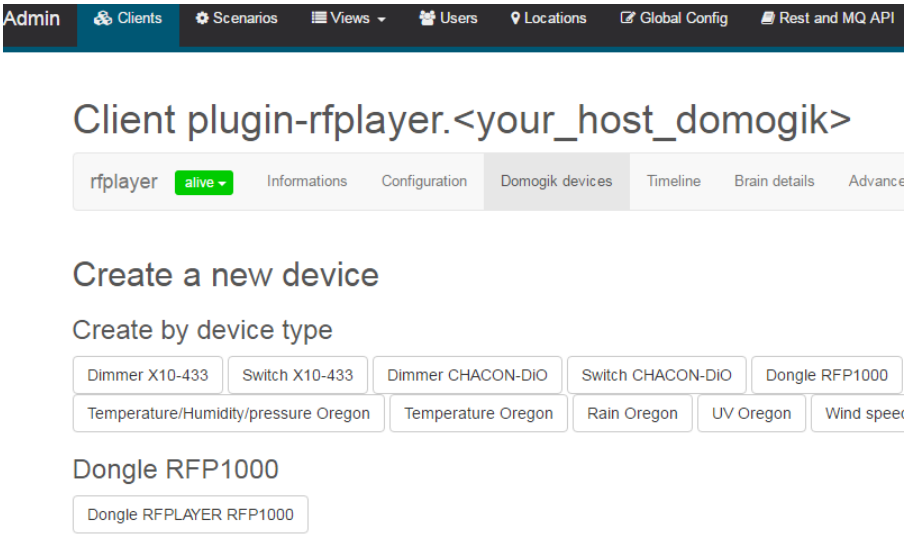
Configuration

In Domogik administration section, go to client plugin-nutserve details page.

Key	Default value	Description
startup-plugin	false	Automatically start plugin at Domogik startup

Creating devices for RFPlayer Client

In clients page of admin UI, go to **plugin-rfplayer.<your_host_domogik>**, select tab **"Devices"**, **"New"** to create your devices.



Chose one way creation by product or instance type.

Instance-type : rfplayer.rfp1000 (Dongle RFP1000)

Key	Example	Description
Device	My_RFPlayer	The display name for this device. Used by device with command (switch/dimmer...) This is the way to identify witch dongle control devices.
Description	What you want	A short descriptionn for this device.
Global device	/dev/rfp1000	The path to the RFXCOM RFP1000 device. See udev rule to avoid /dev/ttyUSBx and changed port
Global timer_status	60	Timer (seconds) for poll RFP status "0": desactivat polling. Status is sended to domogik only on change.

Devices capabilities

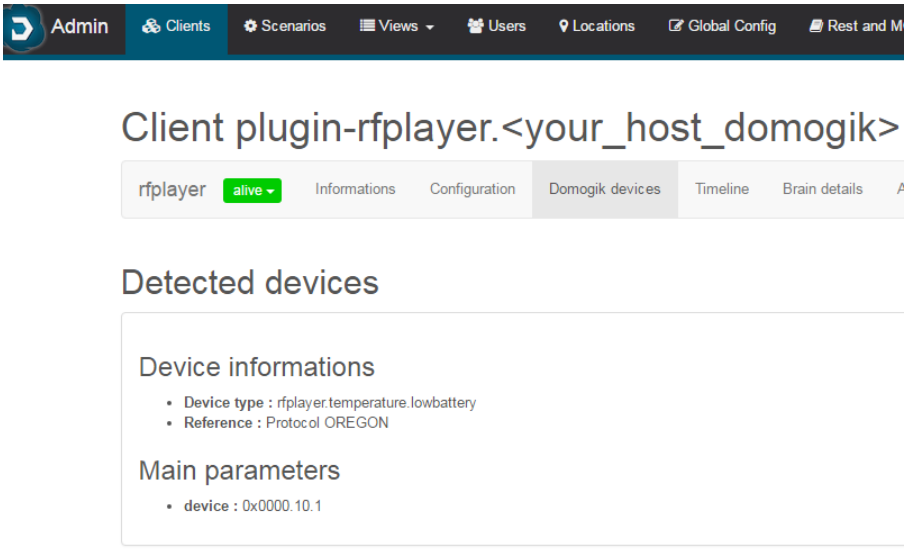
Protocoles and device_type

Select corresponding device :

Type	device type	Protocols	Model	key	Example	Description
Temperature sensors	rfplayer.temperature.lowbattery	OREGON	THN122/132/... THC238/268 THRN122 AW129/131	device	0x0000.0.3	Device address retrieve from device detected
Temperature/Humidity sensors	rfplayer.temperature.hygrometry.lowbattery	OREGON	THGR122/228/238 /328/810/918/928 THGN50/122/123 /132/800 THGRN228 RTGR328	device	0x1A2D.1.2	Device address retrieve from device detected
Temperature/Humidity/Pressure sensors	rfplayer.temperature.hygrometry.pressure.lowbattery	OREGON	THGR918N	device	0x5A6D.2.8	Device address retrieve from device detected
Wind speed sensor	rfplayer.wind_speed_direction.lowbattery	OREGON	WGR800	device	0x1A89.3.2	Device address retrieve from device detected
UV sensors	rfplayer.uv.lowbattery	OREGON	UVN800	device	0xDA78.1.0	Device address retrieve from device detected
Rain sensor	rfplayer.total_rain.lowbattery	OREGON	PCR800	device	0x2A19.1.4	Device address retrieve from device detected
Devices command						
Dimmer X10	rfplayer.1.dimmer	X10		dongle_id device	***My_RFPlayer*** A2	Dongle identification name which control dimmer Device house and unit cod
Switch X10	rfplayer.1.switch	X10		dongle_id device	***My_RFPlayer*** A3	Dongle identification name which control switch Device house and unit cod
Dimmer BLISS	rfplayer.3.dimmer	BLISS		dongle_id device	***My_RFPlayer*** B2	Dongle identification

Detected devices

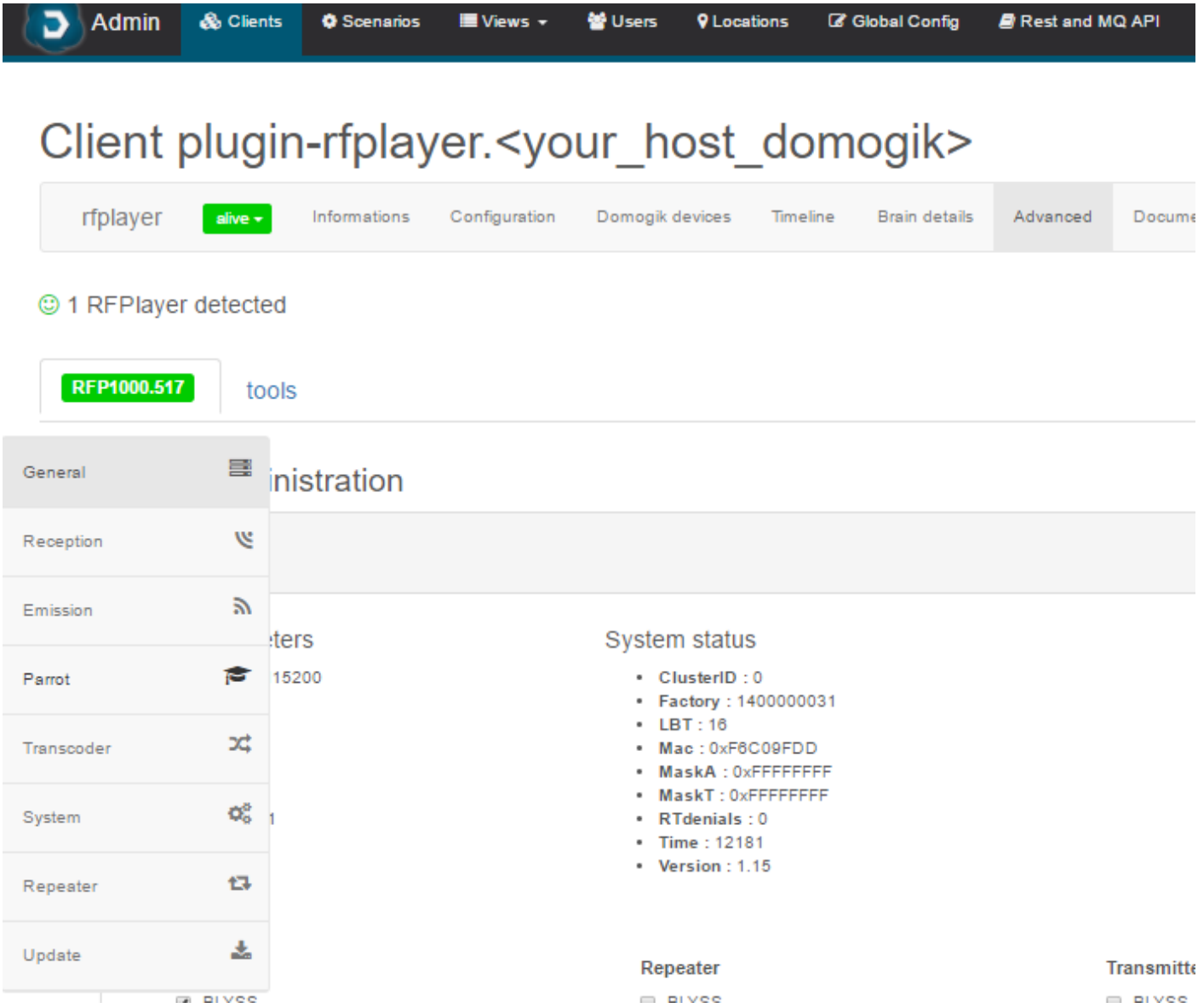
In clients page of admin UI, go to **plugin-rfplayer.<your_host_domogik>**, select tab **"Devices"**, **"Detected devices"** to get list of all sensors devices not created.



Only devices sending sensors value himself can be detected. Use it to find device address for new or change.

CHAPTER 2

Advanced Admin



In plugin **Advanced** page

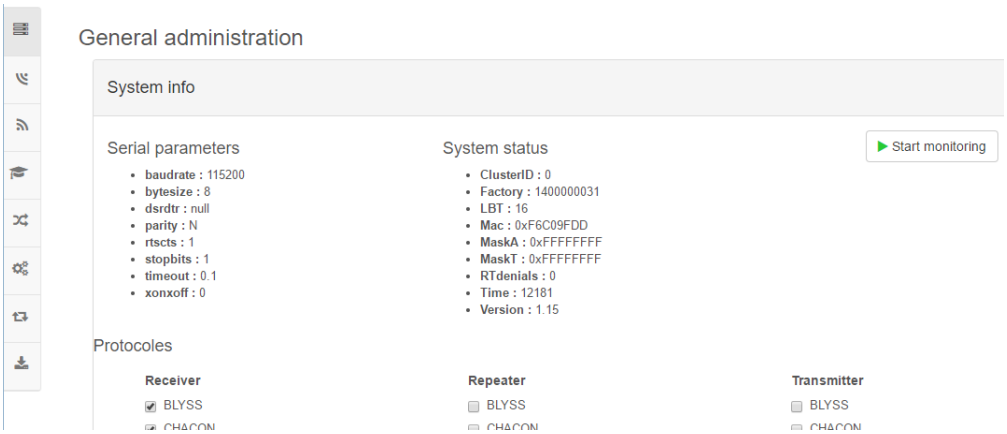
- Select tab of your RFPLAYER
- Select item on popup left menu for dongle administration

General

For moment infomations are only on read.

Give information about system and protocoles activation

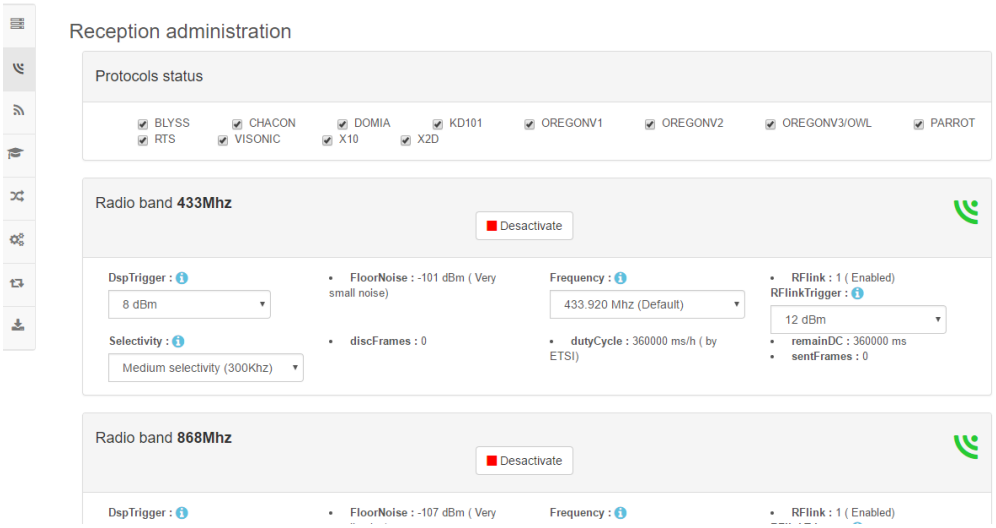
You can start a monitoring of all dongle data. Usefull to debug and join it to issue on plugin github repository.



Reception

For moment infomations are only on read.

Give infomations about protoles reception and radio band configuration.



Emission

Under construction

Parrot

Under construction

Transcoder

Under construction

System

Under construction

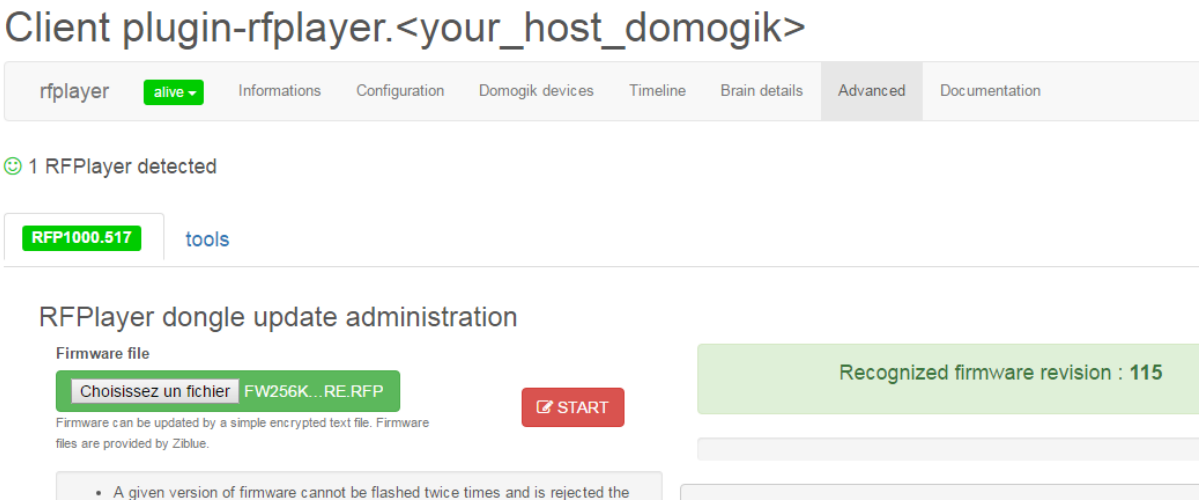
Repeater

Under construction

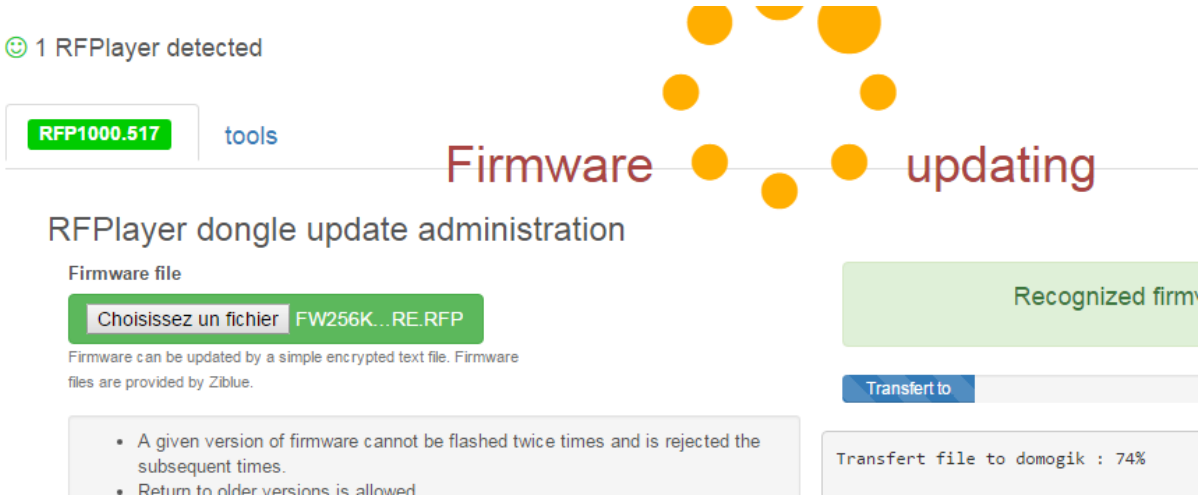
Update

Menu to update the dongle firmware

- Please, pay attention to the displayed instructions.
- Chose a official Ziblue Firmware, It will be checked and a **Start** button will appears.



- Proccess information will display during all update process.


1 RFPlayer detected
RFP1000.517
tools
Firmware updating
RFPlayer dongle update administration
Firmware file
Choisissez un fichier
FW256K...RE.RFP
Firmware can be updated by a simple encrypted text file. Firmware files are provided by Ziblue.
Recognized firm
Transfert to
A given version of firmware cannot be flashed twice times and is rejected the subsequent times.
Transfert file to domogik : 74%

CHAPTER 3

Manager tools

Page to get log and others plugin manager info

CHAPTER 4

Development informations

xPL messages

No xPL message handle, use only 0MQ

RFPlayer driver compatibility

Plugin just need serial connection for working with RFPlayer dongle.

Driver identification to UDEV Rules

InfoType structure

CHAPTER 5

Changelog

0.1.1 (22-04-2017)

- Update udev rules **97-usbrfp1000.rules** with ziblue dongle identification
- Add X10/CHACON/BLISS commands.
- Update doc.

0.1.0 (12-04-2017)

- domogik 0.5 compatibility
- Plugin creation