

Installation

*WebIOPi is developed and tested on **Raspbian**.* You only need Python, either 2.7 or 3.2. Download, then extract and install WebIOPi. The setup script will automatically download and install required dependencies using apt-get. You may have to manually install GCC and Python development headers if you are *not* using Raspbian.

Upgrade note: *Stop your existing WebIOPi service, then process with the setup. Your configuration will be kept but others files will be override.*

See downloads page (DOWNLOADS.html) to get latest package, and adapt x.y.z with the version you download.

```
$ tar xvzf WebIOPi-x.y.z.tar.gz
$ cd WebIOPi-x.y.z
$ sudo ./setup.sh
```

Setup may take a moment.

Running WebIOPi

Finally, use webiopi command :

```
$ sudo webiopi [-h] [-c config] [-l log] [-s script] [-d] [port]
```

Options:

| | | |
|---------------------|-------------|------------------------------|
| -h, --help | | Display this help |
| -c, --config | file | Load config from file |
| -l, --log | file | Log to file |
| -s, --script | file | Load script from file |
| -d, --debug | | Enable DEBUG |

Arguments:

| | |
|-------------|-------------------------------------|
| port | Port to bind the HTTP Server |
|-------------|-------------------------------------|

For instance, to start with verbose output and the default config file :

```
$ sudo webiopi -d -c /etc/webiopi/config
```

You're done, and ready to enjoy WebIOPi ! But the server and GPIO state will be lost when you'll stop the script (CTRL-C) or close the terminal.

Running WebIOPi (Daemon)

You can also start/stop the background service, the configuration will be loaded from /etc/webiopi/config.

```
$ sudo /etc/init.d/webiopi start
```

```
$ sudo /etc/init.d/webiopi stop
```

Auto start at boot

To setup your system to start webiopi at boot :

```
$ sudo update-rc.d webiopi defaults
```

To remove webiopi start from boot :

```
$ sudo update-rc.d webiopi remove
```

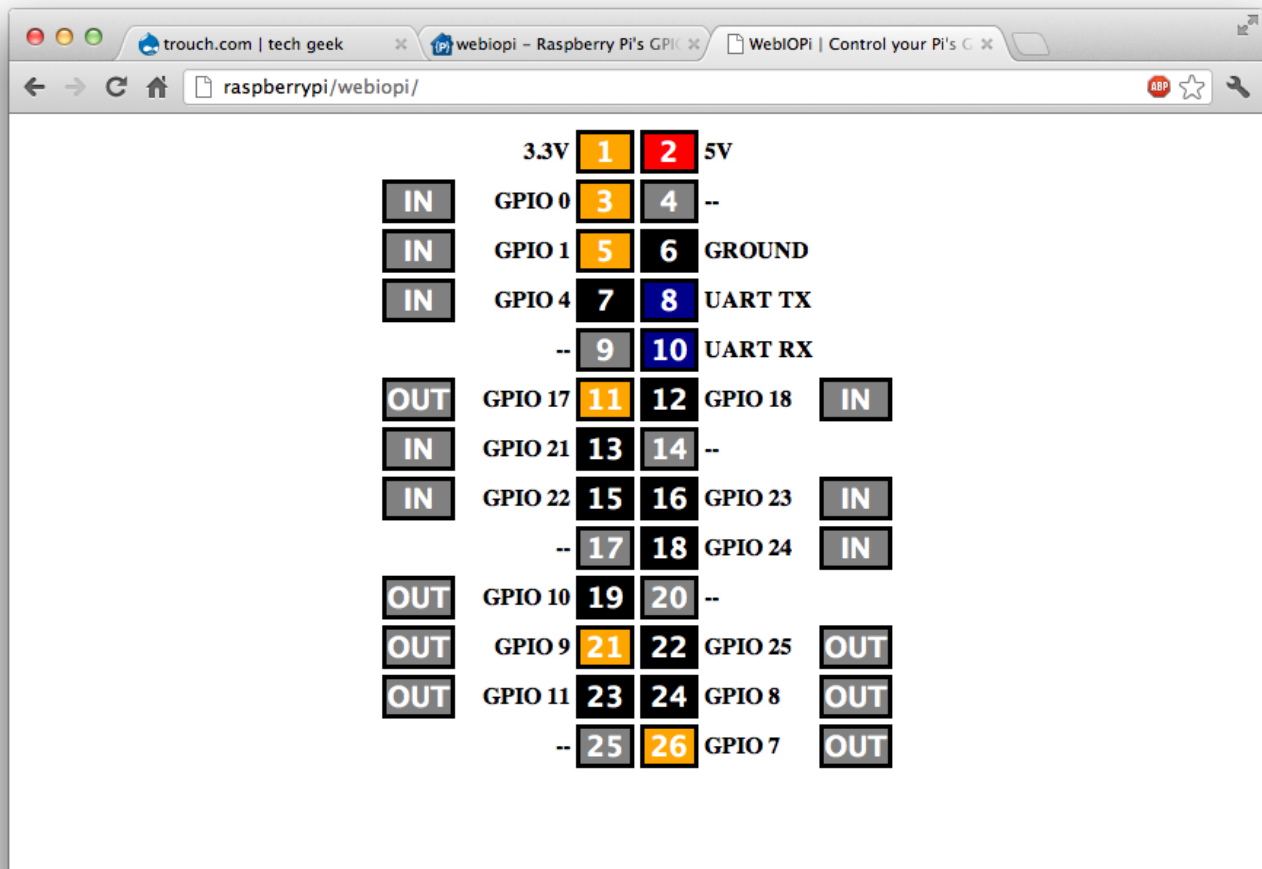
Access WebIOPi over local network

If your Raspberry Pi is connected to your network, you can open a browser to <http://raspberrypi:8000/> (http://raspberrypi:8000/) with any device of your network. *Replace raspberrypi by its IP.*

Default user is "webiopi" and password is "raspberry"

By choosing the GPIO Header link on the main page, you will be able to control GPIO using a web UI which looks like the board header.

- Click/Tap the OUT/IN button to change GPIO direction.
- Click/Tap pins to change the GPIO output state.



Access WebIOPi over Internet

Thanks to Weaved IoT Kit, it's easy to access your Raspberry from anywhere in a secure fashion.

Register on the Weaved developer portal

Go to <https://developer.weaved.com/portal/> (<https://developer.weaved.com/portal/>) and follow instruction to create an account.

Download Weaved for Raspberry Pi

Copy and paste the command line below into a terminal window or SSH client connected to your Raspberry Pi, then hit the Enter key.

```
wget https://github.com/weaved/installer/raw/master/binaries/weaved-nixinstaller_1.2.5.bin
```

Install Weaved

Make the installer executable:

```
chmod +x weaved-nixinstaller_1.2.5.bin
```

Launch the installer:

```
./weaved-nixinstaller_1.2.5.bin
```

Enter the e-mail address and password for your Weaved account.

```
Please enter your Weaved Portal Username (email address):
testpilot@example.com

Now, please enter your password:
[REDACTED]

previous version first
```

When asked, choose WebIOPi during the install process. then enter an alias, or nickname for your device.

```
We will now register your device with the Weaved backend services.
Please provide an alias for your device:
```

Note: If you run the installation more than once, you'll get this question.

```
It looks as if there's a previous version of WeaveConnectd service installed.
Would you like to uninstall the prior installation before proceeding? [y/n] [REDACTED]
```

Support of multiple services is not fully tested in 1.2.5. We recommend that you answer 'y' here to remove the previous installation before proceeding.

Test your setup

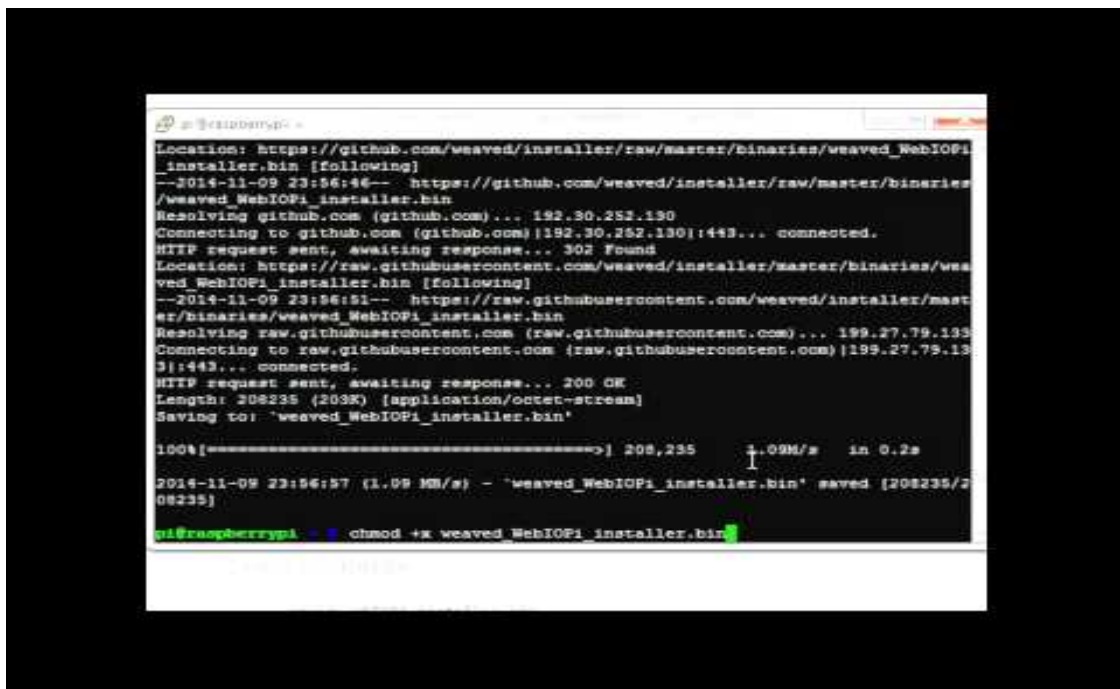
To test the connection to your Raspberry Pi from your browser, go to the device list (<https://developer.weaved.com/portal/members/betahome.php>), find the line with your Raspberry Pi's alias, and click on "Connect". Your device's internet address will be shown in the area blurred below.

Your current list of devices

Click on device names to connect. Your account allows for 2 hour connections.

| Name | Type | Status | |
|--|---------------------|--------------------------------------|--|
| Baby Room | Philips B120 Camera | | Share Settings |
| BeagleBone-http | PI Development | online at 76.103.130.46/192.168.2.39 | Share Settings |
| BeagleBone-Los-Gatos-SSH | Beagle Bone | online at 76.103.130.46/192.168.2.39 | Share Settings |

Click here to connect



(http://www.youtube.com/watch?feature=player_embedded&v=q7doiTx1ryM)

| | | | | | |
|-----|---------|----|----|---------|-----|
| IN | GPIO 2 | 3 | 4 | 5.0V | |
| IN | GPIO 3 | 5 | 6 | GROUND | |
| IN | GPIO 4 | 7 | 8 | UART TX | |
| | GROUND | 9 | 10 | UART RX | |
| OUT | GPIO 17 | 11 | 12 | GPIO 18 | OUT |
| IN | GPIO 27 | 13 | 14 | GROUND | |
| OUT | GPIO 22 | 15 | 16 | GPIO 23 | IN |
| | 3.3V | 17 | 18 | GPIO 24 | IN |
| OUT | GPIO 10 | 19 | 20 | GROUND | |
| OUT | GPIO 9 | 21 | 22 | GPIO 25 | OUT |
| OUT | GPIO 11 | 23 | 24 | GPIO 8 | OUT |

(http://www.youtube.com/watch?feature=player_embedded&v=Uhm9d_hrsxg)