WebIOPi - The Raspberry Pi Internet of Things Framework

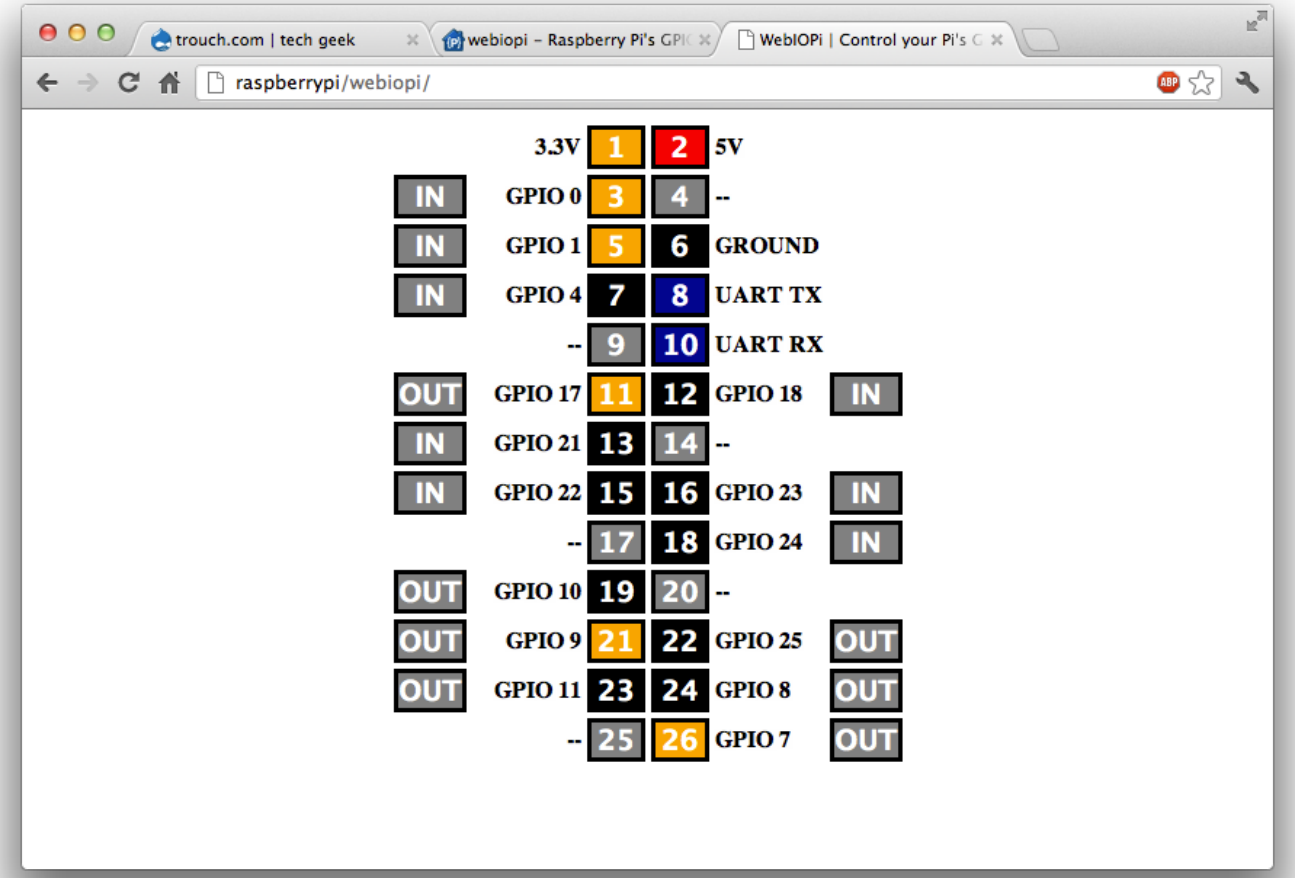
- **Control, debug, and use your Pi's GPIO, sensors and converters from a web browser or any app**
- **WebIOPi is the perfect Swiss-knife to make connected things**
- **Developed and provided by Eric PTAK (trouch)**
- **Runs on Raspberry Pi (http://www.raspberrypi.org)**

Features

- Bundled **Weaved IoT Kit (http://www.weaved.com/in-action/weaved-iot-kit)** to access your Pi over Internet with no hassle.
- Written in **Python**, with facilities to load and execute custom script, using a comprehensive structure with **setup and loop functions**
- Unified **Serial/SPI/I2C support** with a complete and **consistent set of functions** to control more than **30 devices (DEVICES.html)**, including most used analog converters (ANALOG.html), I/O expander (DIGITAL.html) and sensors (SENSOR.html)
- **Javascript/HTML client** library to make Web UI
- **Python/Java clients**, to make **Pi-to-Pi** systems or Android applications
- **CoAP support** brings the best Internet of Things protocol on the Pi, as a future proof of Pi possibilities
- Includes simple web apps, to debug GPIO, devices and Serial interface

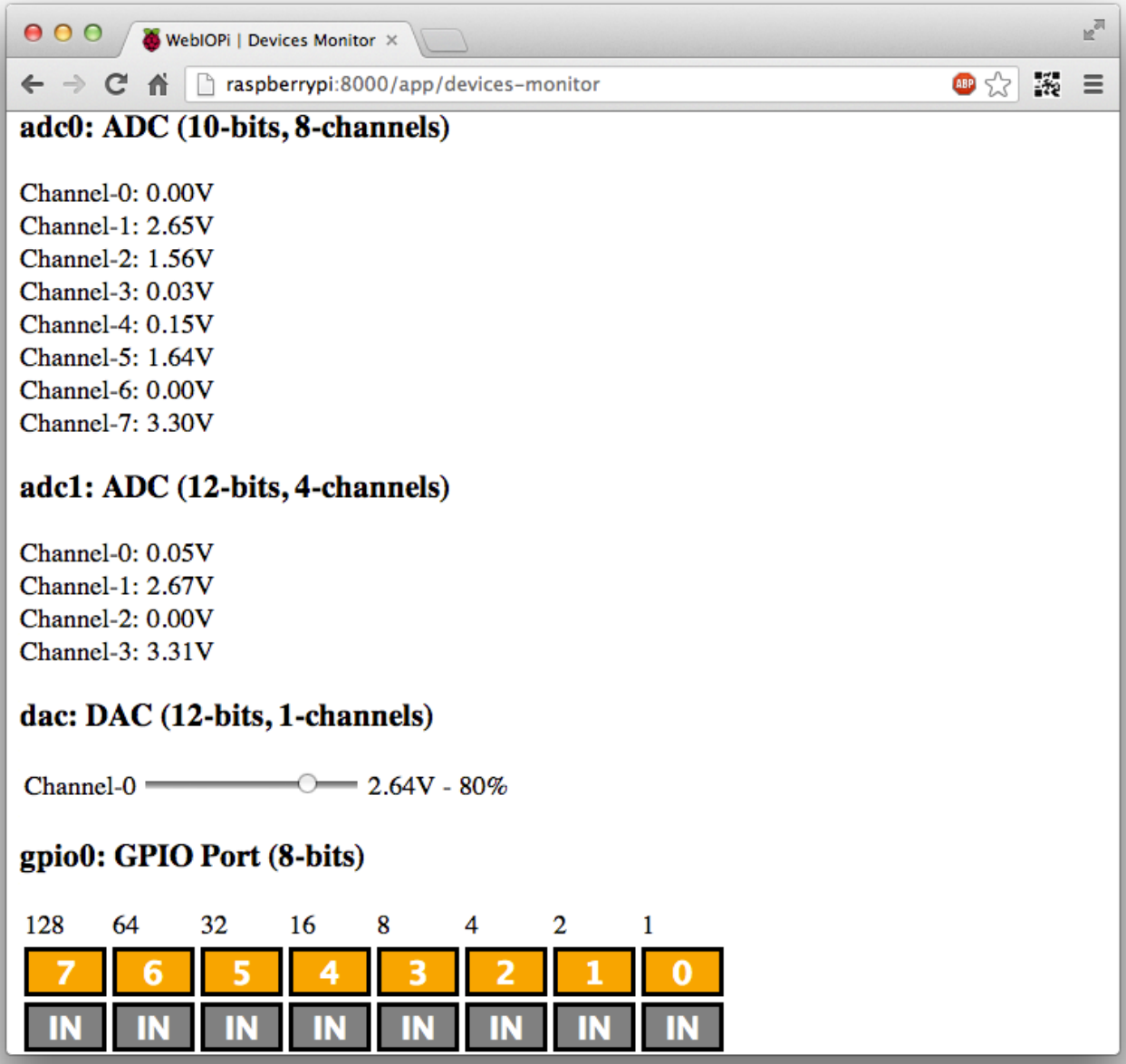
GPIO header web app

The GPIO header web application is included to quickly debug and controls GPIO.



Device monitor web app

The device monitor allows to debug and controls converters or sensors plugged in the GPIO/SPI/I2C...


WebIOPi | Devices Monitor
raspberrypi:8000/app/devices-monitor
adc0: ADC (10-bits, 8-channels)
Channel-0: 0.00V
Channel-1: 2.65V
Channel-2: 1.56V
Channel-3: 0.03V
Channel-4: 0.15V
Channel-5: 1.64V
Channel-6: 0.00V
Channel-7: 3.30V
adc1: ADC (12-bits, 4-channels)
Channel-0: 0.05V
Channel-1: 2.67V
Channel-2: 0.00V
Channel-3: 3.31V
dac: DAC (12-bits, 1-channels)
Channel-0
2.64V - 80%
gpio0: GPIO Port (8-bits)
128 64 32 16 8 4 2 1
7 6 5 4 3 2 1 0
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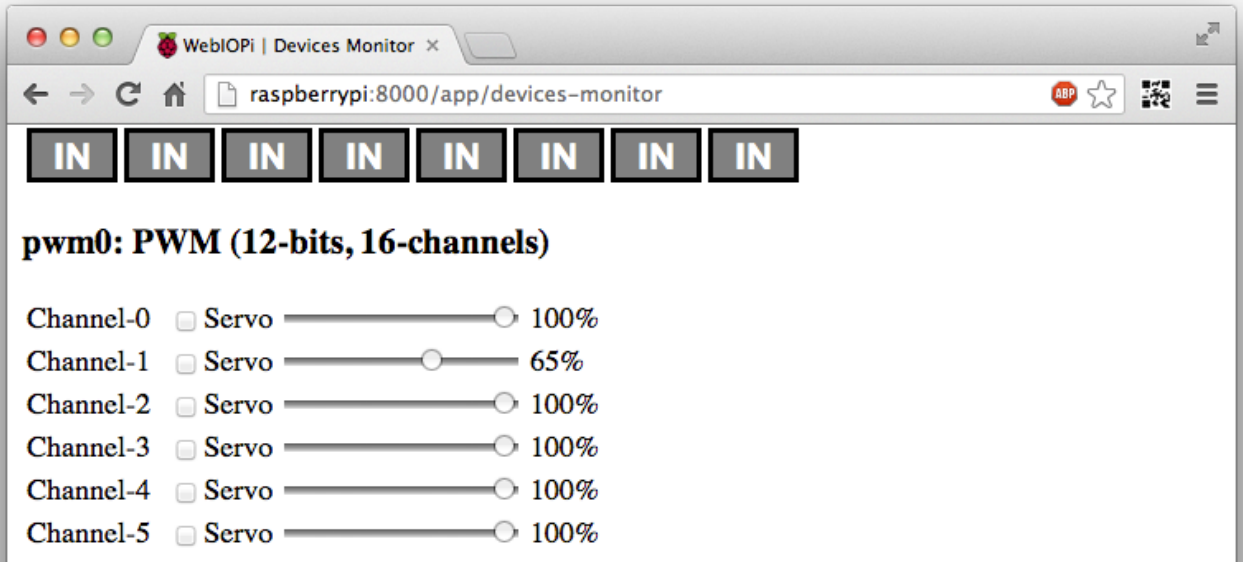
WebIOPi | Devices Monitor
raspberrypi:8000/app/devices-monitor
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pwm0: PWM (12-bits, 16-channels)
Channel-0 Servo 100%
Channel-1 Servo 65%
Channel-2 Servo 100%
Channel-3 Servo 100%
Channel-4 Servo 100%
Channel-5 Servo 100%

Channel-6 Servo 100%
Channel-7 Servo 7%
Channel-8 Servo 100%
Channel-9 Servo 100%
Channel-10 Servo 100%
Channel-11 Servo 100%
Channel-12 Servo 100%
Channel-13 Servo 100%
Channel-14 Servo 100%
Channel-15 Servo 100%

temp0: Temperature: 23.44°C

temp2: Temperature: 23.50°C