**Cayenne MQTT ESP8266 Library**

The Cayenne MQTT ESP8266 Library provides functions to easily connect to the [Cayenne IoT project builder](https://www.cayenne-mydevices.com). This library is designed to work with ESP8266 WiFi modules. With it you can send data to and receive data from Cayenne.

[Adafruit HUZZAH ESP8266 Image](https://learn.adafruit.com/assets/24792) by [lady ada](https://learn.adafruit.com/users/adafruit2) is licensed under [CC BY-SA 3.0](https://creativecommons.org/licenses/by-sa/3.0/)

**Requirements**

**Hardware**

* An ESP8266 module, e.g. the [Adafruit HUZZAH ESP8266](https://www.adafruit.com/product/2471).
* A USB to Serial FTDI or console cable.

**Software**

* [Arduino IDE](https://www.arduino.cc/en/Main/Software) for Windows, Linux or Mac OS.
* [This library](https://github.com/myDevicesIoT/Cayenne-MQTT-ESP8266/archive/master.zip).

**Getting Started**

**Environment Setup**

1. Download and install the [Arduino IDE](https://www.arduino.cc/en/Main/Software).
2. Under **File -> Preferences** add http://arduino.esp8266.com/stable/package\_esp8266com\_index.json to the **Additional Boards Manager URLs** field.
3. Install the **esp8266** platform from **Tools -> Board -> Boards Manager**.
4. Download this library as a zip file [here](https://github.com/myDevicesIoT/Cayenne-MQTT-ESP8266/archive/master.zip).
5. Install the downloaded zip library from **Sketch -> Include Library -> Add .ZIP Library**.
6. Connect your ESP8266 module to your computer using a USB to Serial FTDI or console cable.
7. Select your ESP8266 module and port from the **Tools** menu.

**Cayenne Setup**

1. Create your Cayenne account at <https://www.cayenne-mydevices.com>.
2. Add a new device using the Bring Your Own Thing API selection.

**Building Examples**

1. Open the included example sketch from **File -> Examples -> Cayenne-MQTT-ESP8266**.
2. Modify the included sketch with your network info, and the Cayenne authentication info you received when adding your device.
3. Compile and upload the sketch to your device. Uploading may require setting the device into bootload mode. For the Adafruit HUZZAH ESP8266 module this is done with the folowing steps:
4. Hold down the **GPIO0** button.
5. Click the **Reset** button.
6. Let go of the **GPIO0** button.
7. The red LED should light up, indicating the device is ready for uploading.