

Routing and tips for Adafruit's IO

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Some notes on the IO platform by Adafruit

Searching for a IoT solutions is simple. But most of them are not really user friendly. IO by ADA fruit was my second choice and useable.

So here are some notes about it, and I will skip the basics

Making a connection to the back-end

MQTT is a simple concept and the library uses this routine to link with the backend:

```
1
2 void MQTT_connect();
3
```

The routine is placed at the end of the program and only needs a wifi connection to run properly. If you get errors, then check you access codes. There's a 5 second delay in the loop.

Prepare a channel for transport or 'Subscribe'

The second MQTT step is 'preparing a downwards channel' from a server:

```
1
2 Adafruit_MQTT_Subscribe onoffbutton =
3   Adafruit_MQTT_Subscribe
4   (&mqtt, AIO_USERNAME
5    "/feeds/ XXX"
6   );
7
```

We are asking for data from the `onoffbutton`

Setup

You need to place and extra reference in the setup:

```
1
2 mqtt.subscribe(&onoffbutton);
3
```

Main loop

Will often start with the connect instruction and then hold the usual data exchange from sensors. After that we're ready to start the MQTT exchange:

```
1
2 Adafruit_MQTT_Subscribe *subscription;
3
```

This command checks the feeds for new data.

The fifth step is reading data from feeds.

```
1
2 subscription = mqtt.readSubscription(5000);
3
```

After that a routine is used to check if new data came in:





```
1
2 if (subscription == &onoffbutton) {
3   Serial.print(F("Got: "));
4   Serial.println((char *)onoffbutton.lastread);
5 }
```

Still in the main loop.

PROJECT INFO

Type	Protip
Difficulty	Easy
Estimated time	1 hour
Published	January 1, 2018
License	CC BY-NC-ND

Hardware components:

	Adafruit Feather HUZZAH with ESP8266 WiFi	x	1	
	NodeMCU ESP8266 Breakout Board	x	1	



CREDITS



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1 project • 1 follower

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Thanks to [Justin Cooper](#), [Todd Treece](#), [Tony DiCola](#), and [Alex Bucknall](#).