

MQTT Hands-On Cheat Sheet

Code repository:

https://github.com/relayr/ESP8266_Lua - USE 'WORKSHOP' BRANCH

Toolchain and prerequisites:

1. Install the USB to UART driver:
<http://www.wemos.cc/downloads/>
2. Install the esptool:
<https://github.com/themadinventor/esptool> ('pip install esptool')
3. Build / download the firmware:
<http://nodemcu-build.com/> or use the one provided in the repository.
4. Flash the Wemos with the firmware:

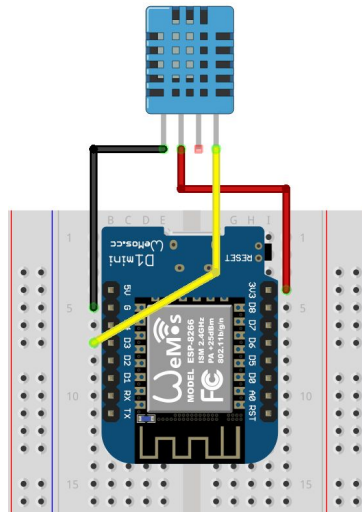
```
esptool.py --port /dev/ttyUSB0 write_flash -fm dio -fs 32m -ff 40m 0x00000  
/path/to/firmware.bin
```

5. Download the Explorer IDE
<http://esp8266.ru/esplorer/>
 6. Create a relayr developer account:
<http://tinyurl.com/relayr-vdb16>
 7. Create a model and a device on relayr Dashboard
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Hardware:

8. Connect the DHT sensor to Wemos.



ESP8266 code:

9. Clone / download the ESP8266_Lua repository:
https://github.com/relayr/ESP8266_Lua ('WORKSHOP' BRANCH)
10. Modify the 'config.lua' file with your credentials.

```
-- Replace with the desired network SSID.  
ssid = '<my SSID>'.  
-- Replace with the desired network SSID.  
psk = '<psk here>'.  

```

```
-- User ID for MQTT basic auth. This is the device ID for  
the  
-- relayr cloud.  
user = '<device ID>'.  
-- User password for MQTT Basic Auth.  
password = '<password here>'.  
-- This is just a convenience that allows you to identify  
the  
-- client on the MQTT broker. It can be anything you  
choose.  
client_id = '<client_id>'.  

```

11. Upload the files to Wemos (8266) flash drive; use Explorer or luatool.
12. Run the 'app.lua' file -> dofile('app.lua')