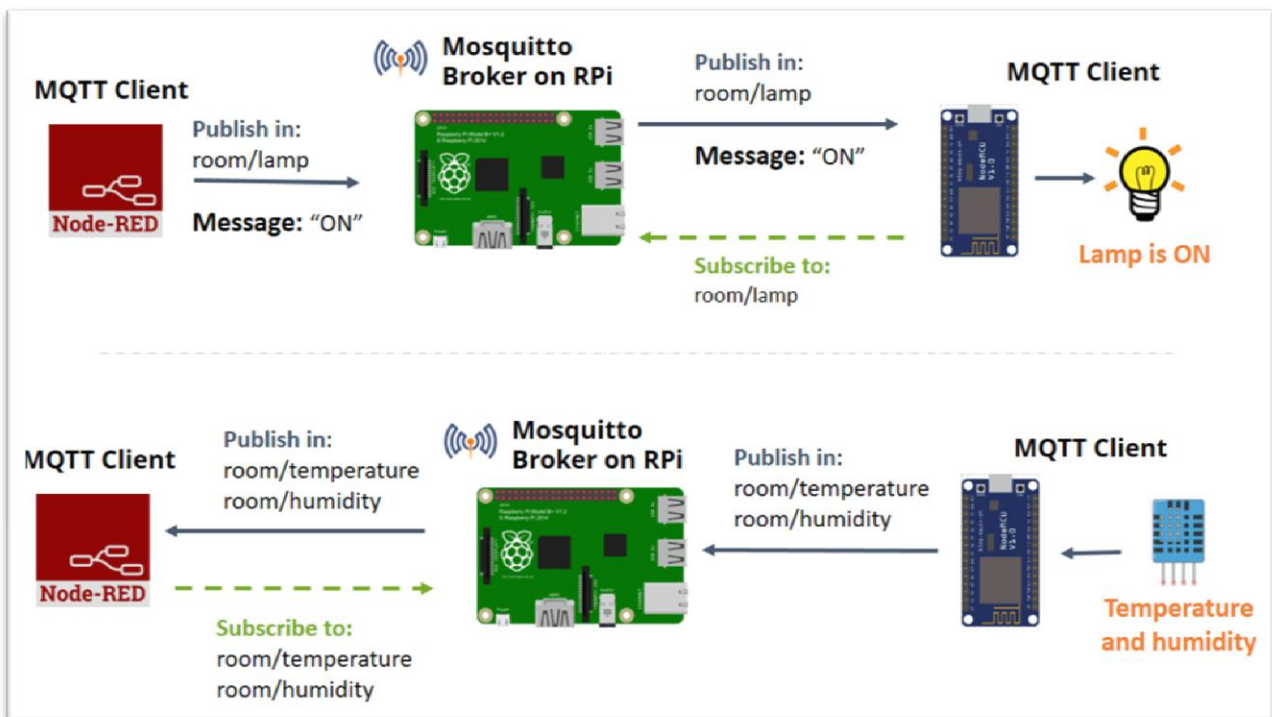
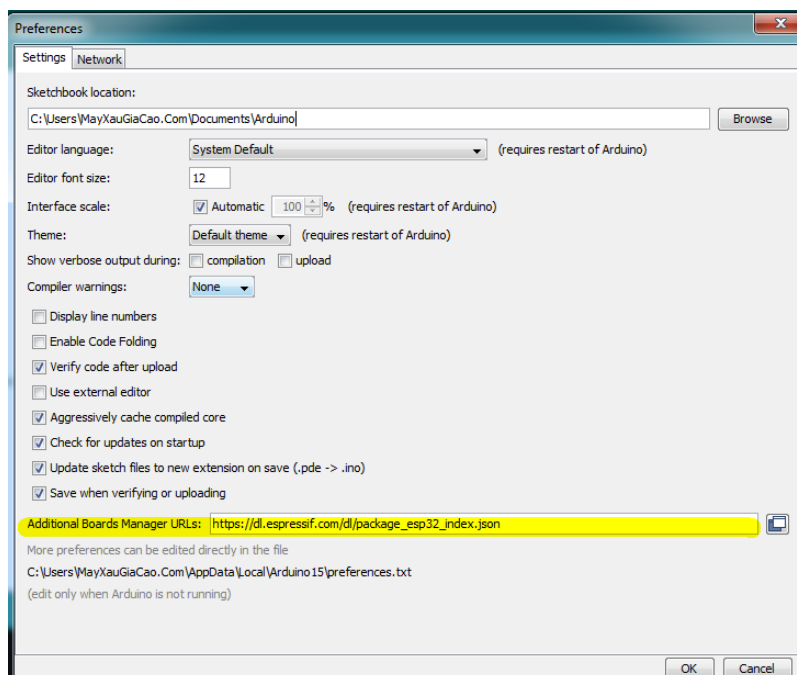


Lab 3: Làm quen Node-Red, MQTT, ESP32

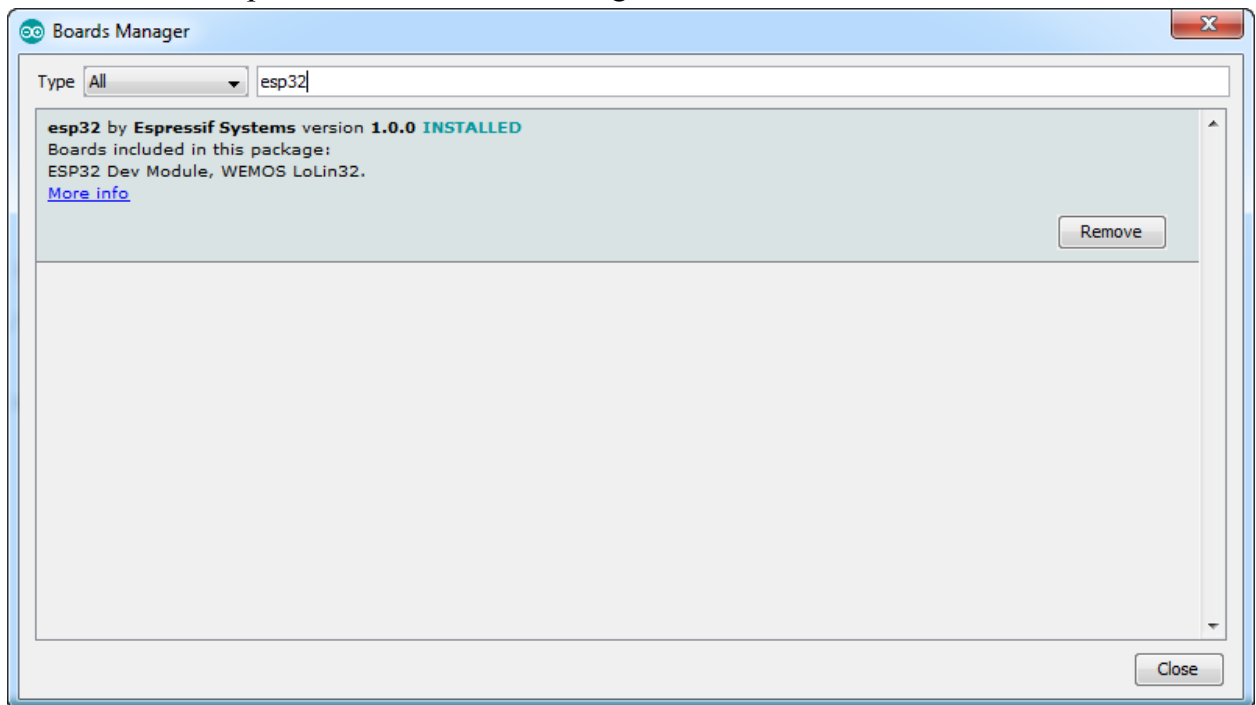


1.1 Yêu cầu

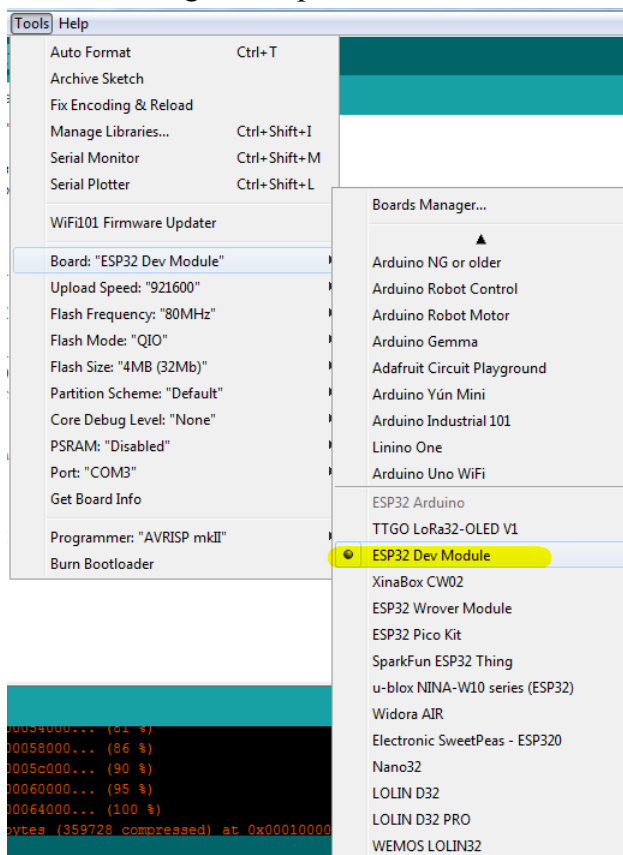
- Đã cài đặt thư viện cho ESP32 trong Arduino File/Preferences



Tools/ Board “Esp32 Dev...”/Boards Manager



- Đã chọn đúng board phát triển là ESP32 dev...

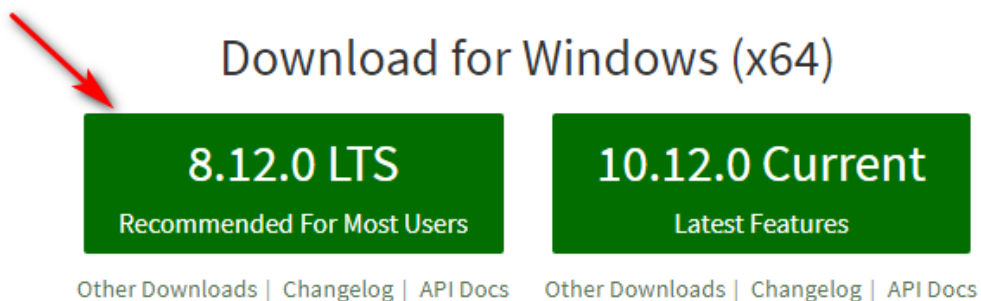


- Đảm bảo đã kết nối được với thiết bị ESP32 → xuất hiện cổng Port “Com3”

1.2 Cài đặt Node-Red (theo hướng dẫn tại: <https://nodered.org/docs/platforms/windows>)

1.2.1 Cài đặt Node JS

Node.js® is a JavaScript runtime built on Chrome's V8 JavaScript engine.



Or have a look at the Long Term Support (LTS) schedule.

1.2.2 Chạy Command Line

npm install -g --unsafe-perm node-red

1.2.3 Khởi động Node-red

- Bật CMD và chạy lệnh: node-red

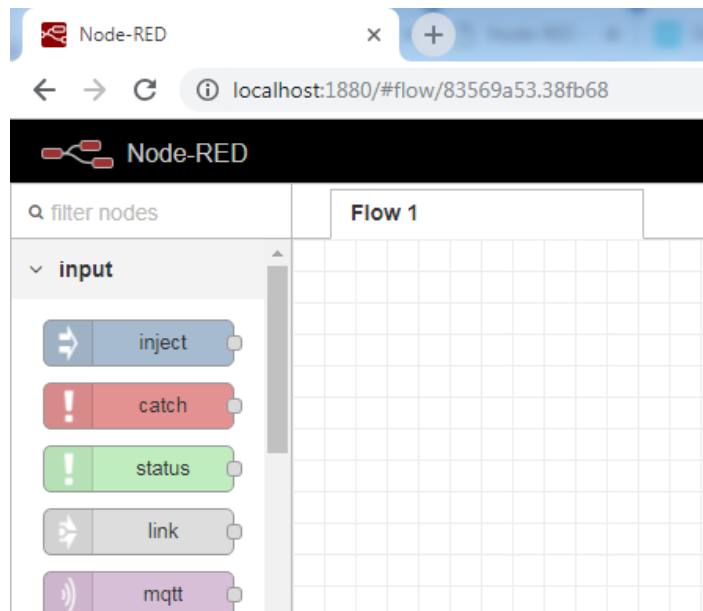
```
node-red
+ node-red@0.19.4
added 389 packages from 354 contributors in 54.365s

C:\Users\MayXauGiaCao.Com>node-red
19 Oct 23:26:16 - [info]

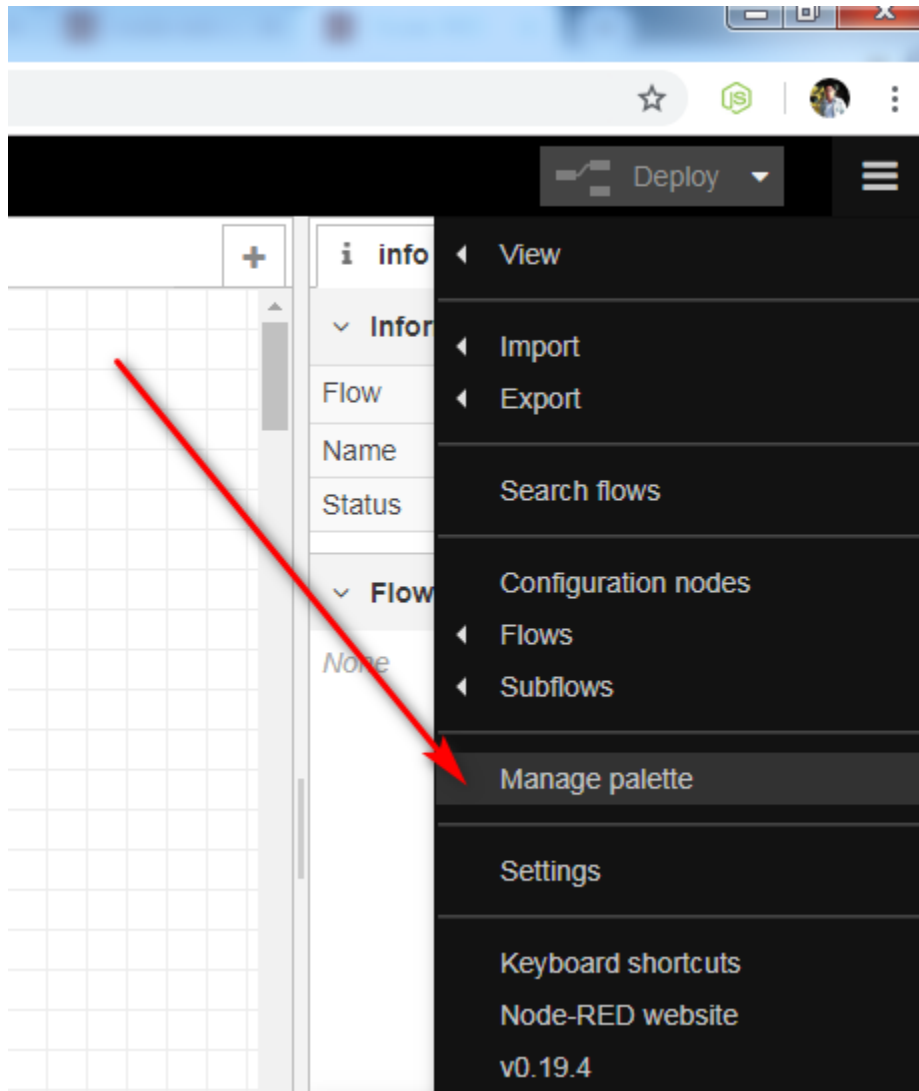
Welcome to Node-RED
=====

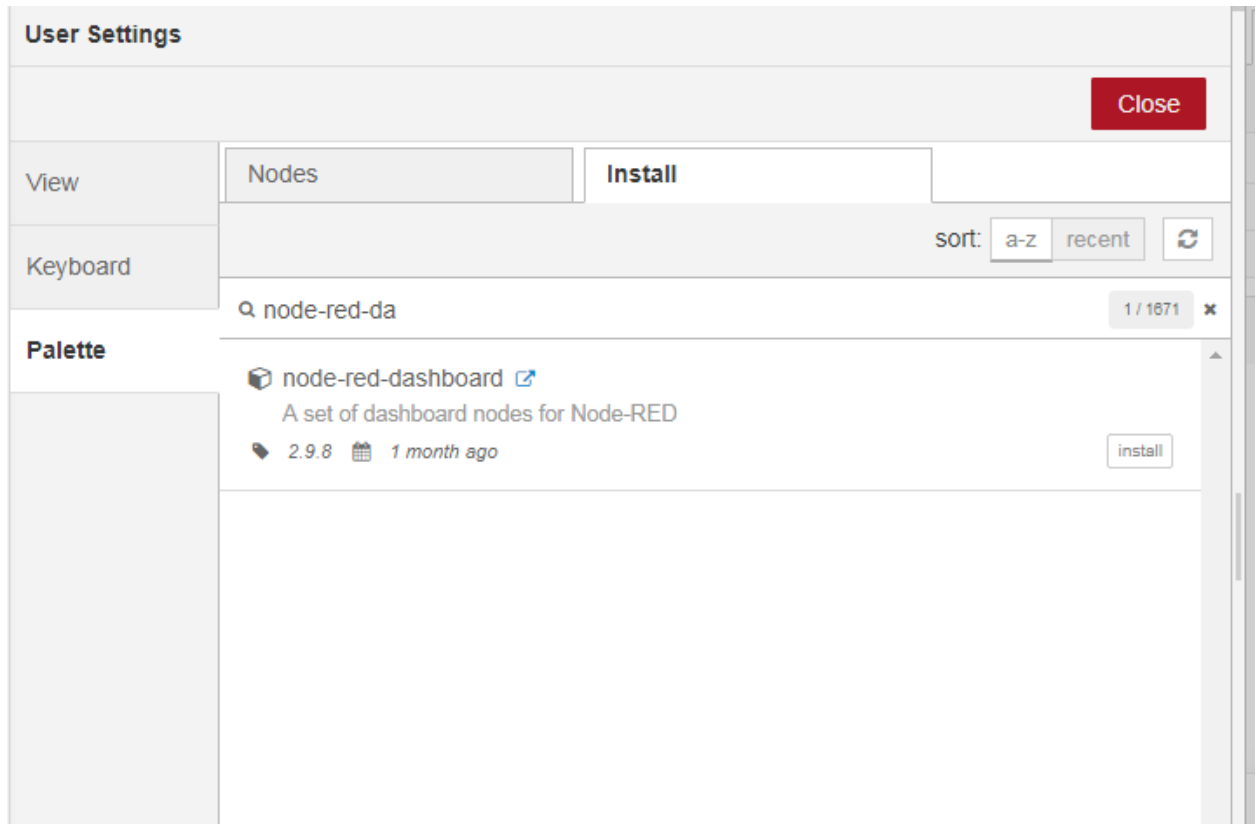
19 Oct 23:26:16 - [info] Node-RED version: v0.19.4
19 Oct 23:26:16 - [info] Node.js version: v8.12.0
19 Oct 23:26:16 - [info] Windows_NT 6.1.7601 x64 LE
19 Oct 23:26:17 - [info] Loading palette nodes
19 Oct 23:26:18 - [warn] rpi-gpio : Raspberry Pi specific node set inactive
19 Oct 23:26:21 - [warn] -----
19 Oct 23:26:21 - [warn] [node-red/tail] Not currently supported on Windows.
19 Oct 23:26:21 - [warn] -----
19 Oct 23:26:21 - [info] Settings file   : C:\Users\MayXauGiaCao.Com\.node-red\se
ttings.js
19 Oct 23:26:21 - [info] Context store   : 'default' [module=memory]
19 Oct 23:26:21 - [info] User directory : C:\Users\MayXauGiaCao.Com\.node-red
19 Oct 23:26:21 - [warn] Projects disabled : editorTheme.projects.enabled=false
19 Oct 23:26:21 - [info] Flows file      : C:\Users\MayXauGiaCao.Com\.node-red\fl
ows_MayXauGiaCaoCom.json
19 Oct 23:26:21 - [info] Creating new flow file
```

- Màn hình chạy node-red trên browser

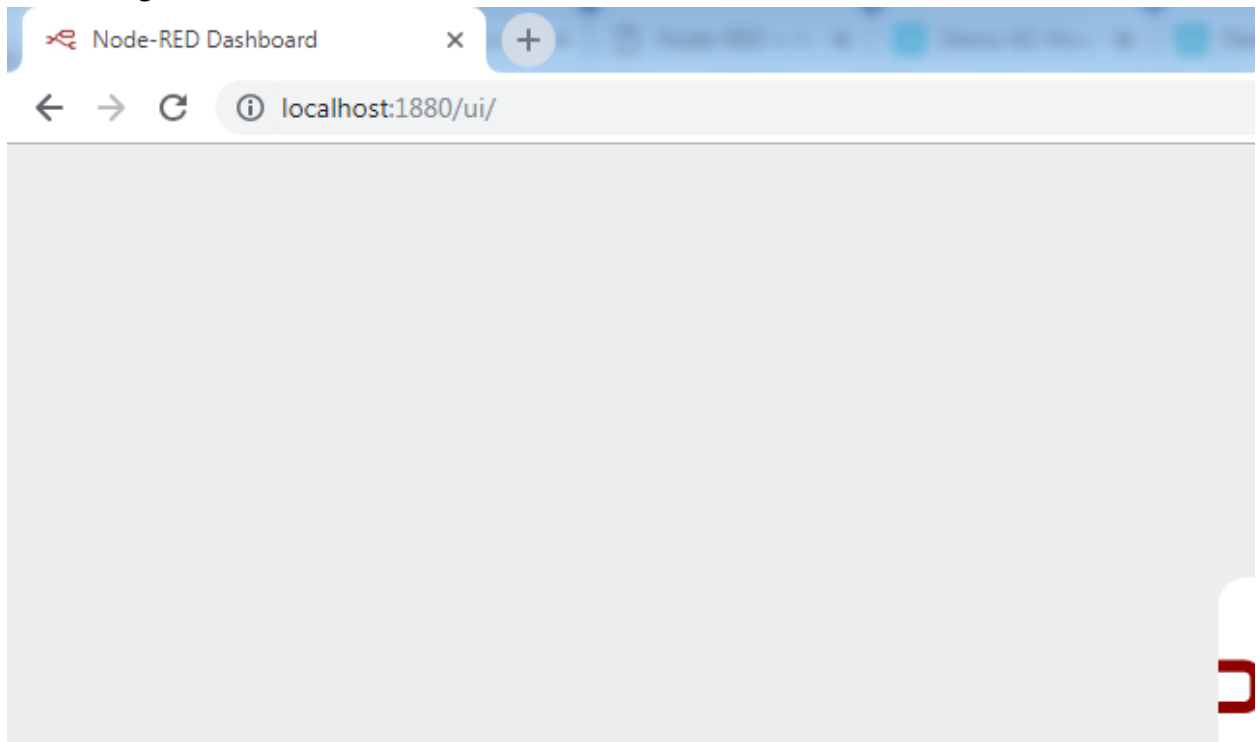


- Cài đặt node-red dashboard





- Khởi động



➔ Xem tiếp: <https://randomnerdtutorials.com/esp8266-and-node-red-with-mqtt/>

