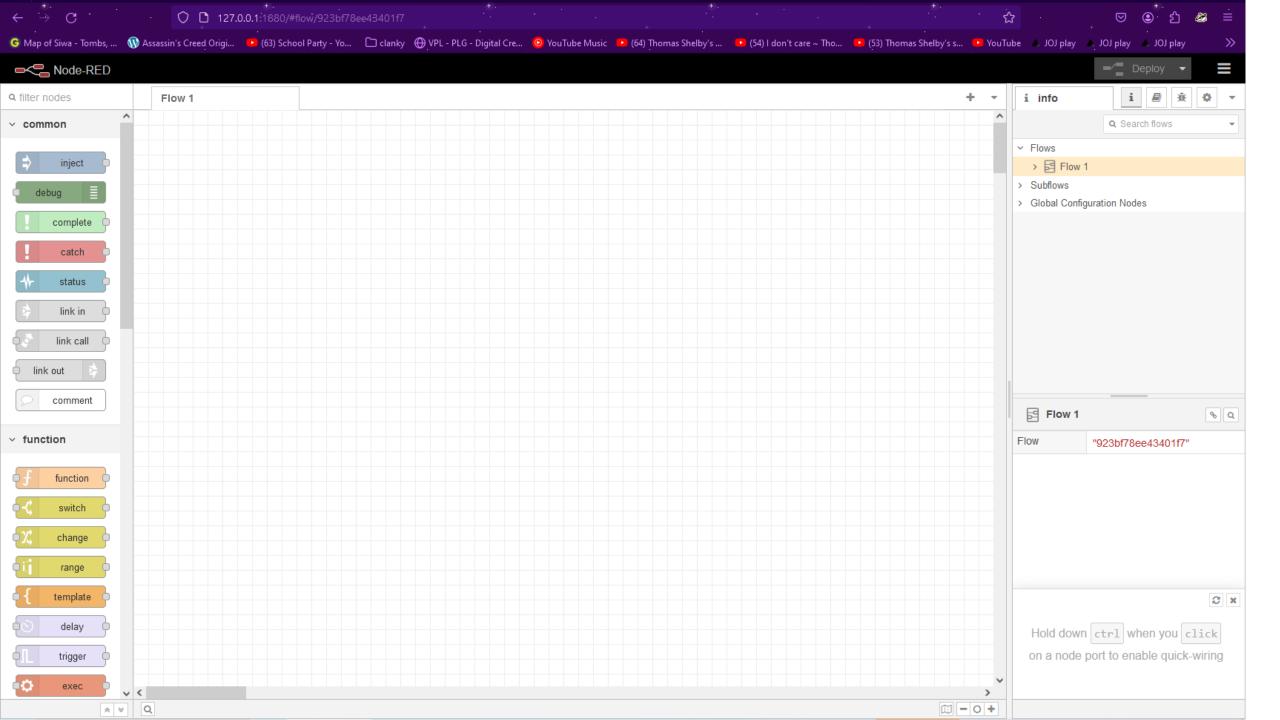
### Node Red

### Installation

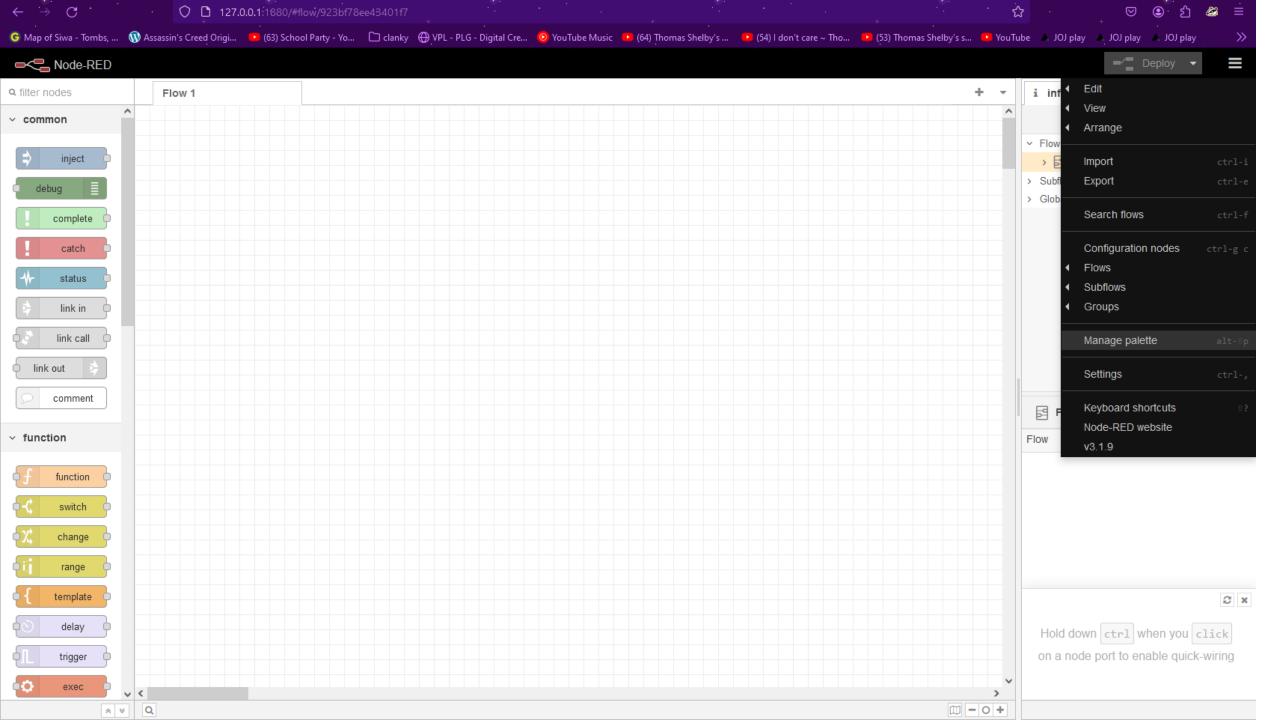
https://nodejs.org/en/

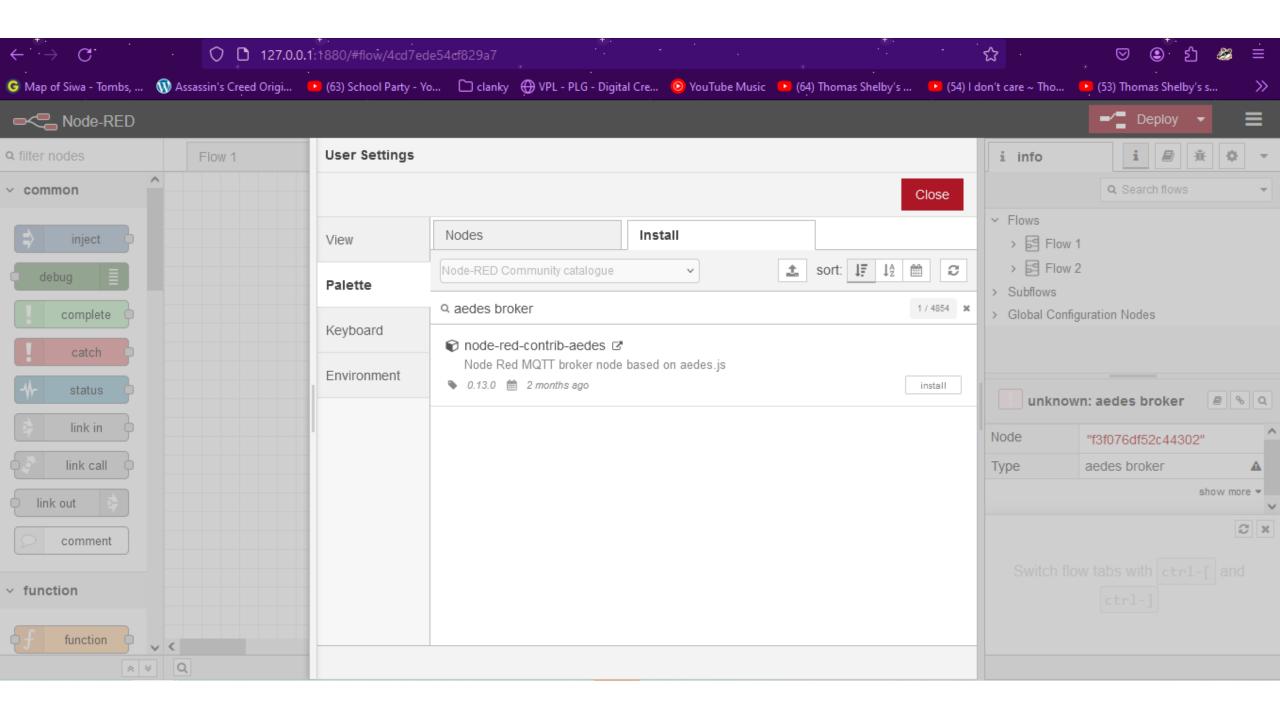
• Running Node-RED locally: Node-RED (nodered.org)

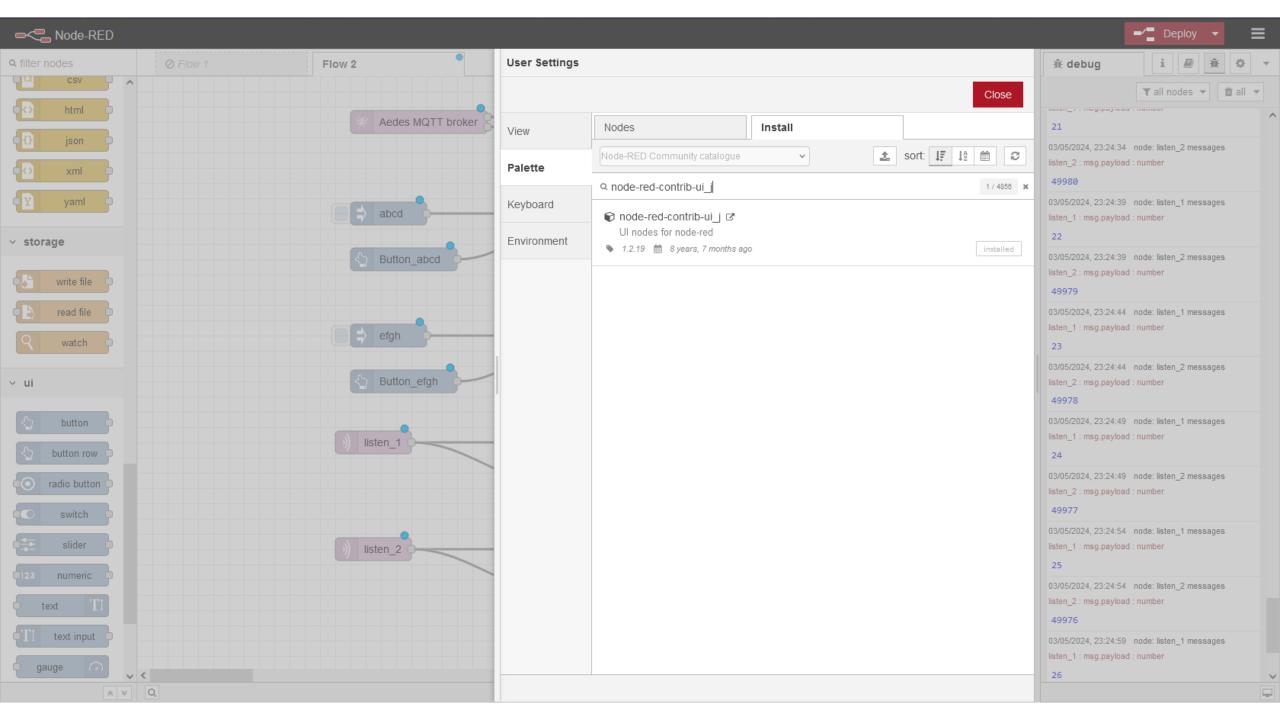


• http://127.0.0.1:1880/

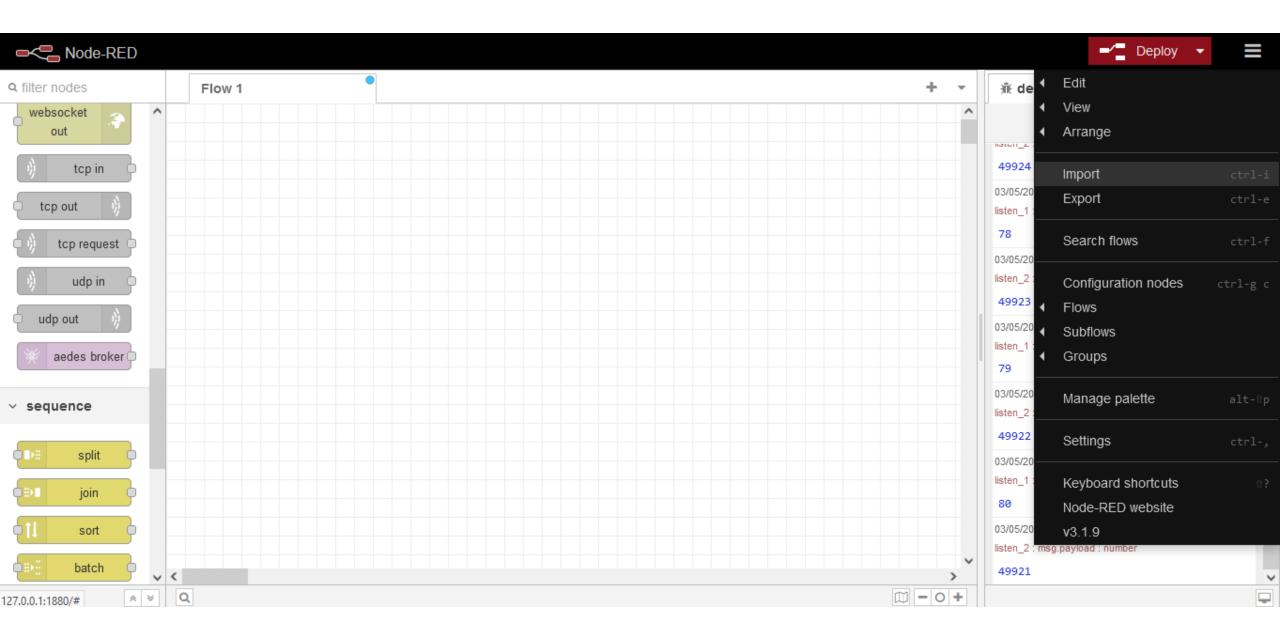
### Installing packages

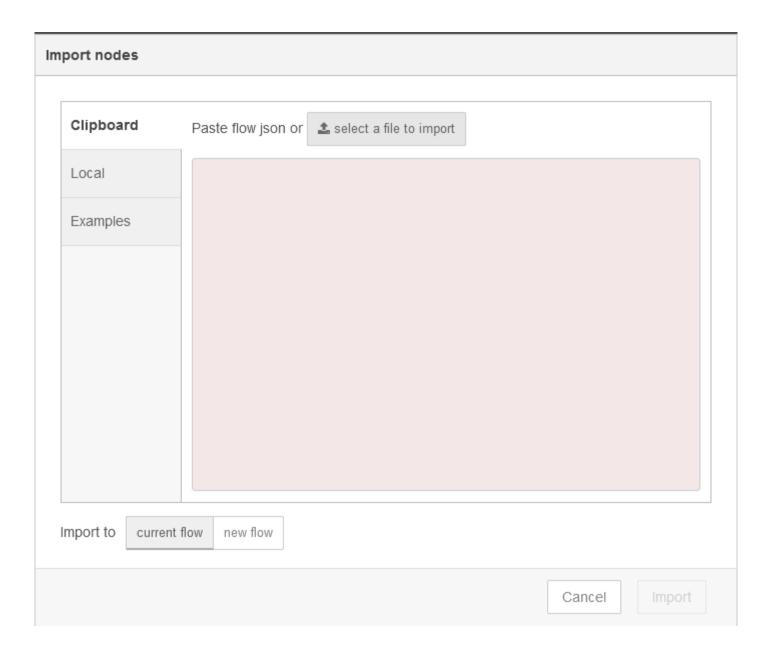


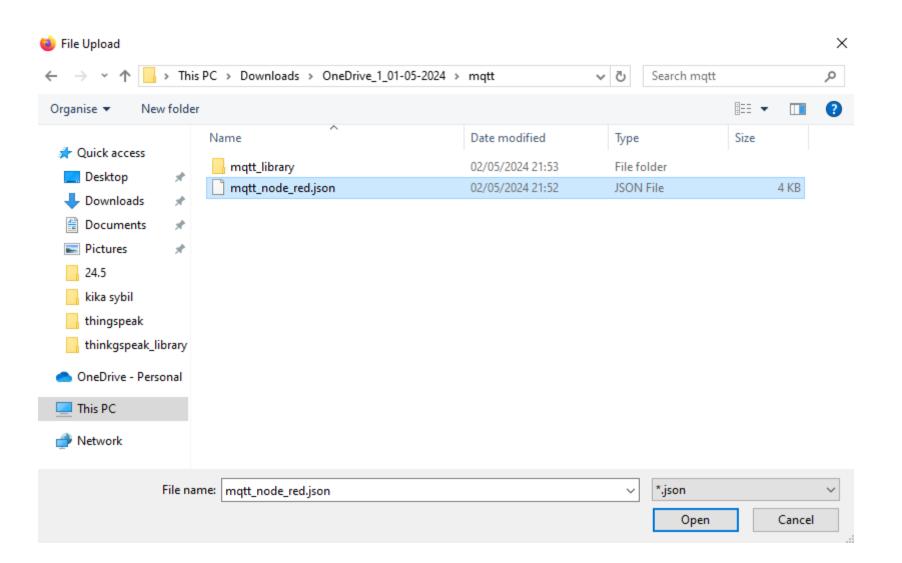




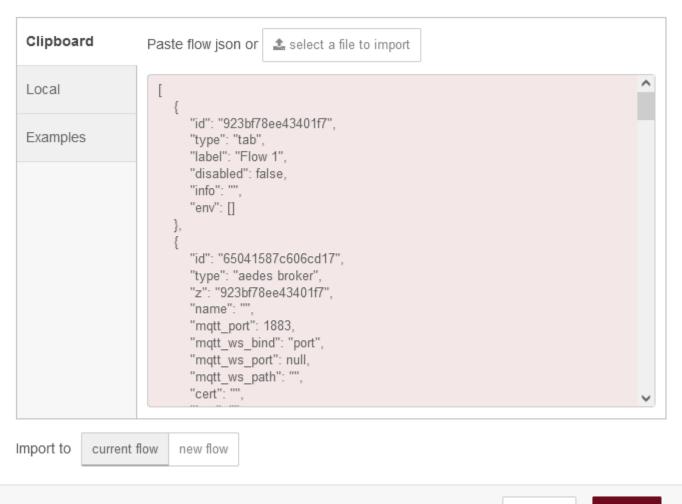
## Importing existing file







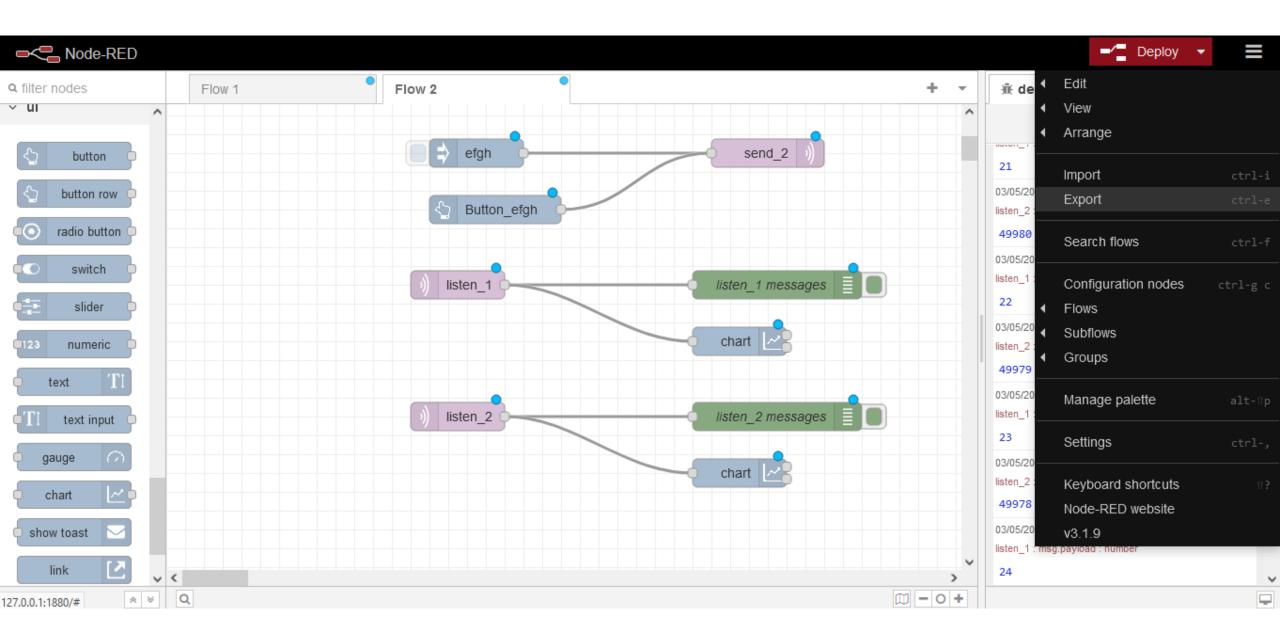
#### Import nodes

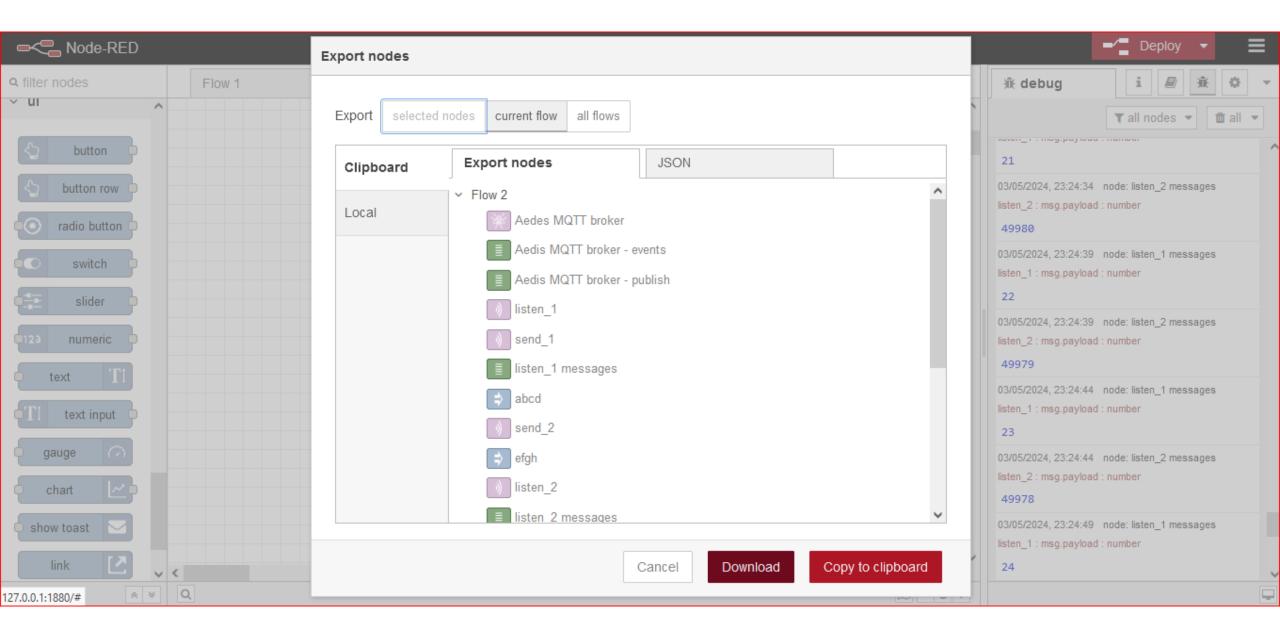


Cancel

Import

## Saving existing file

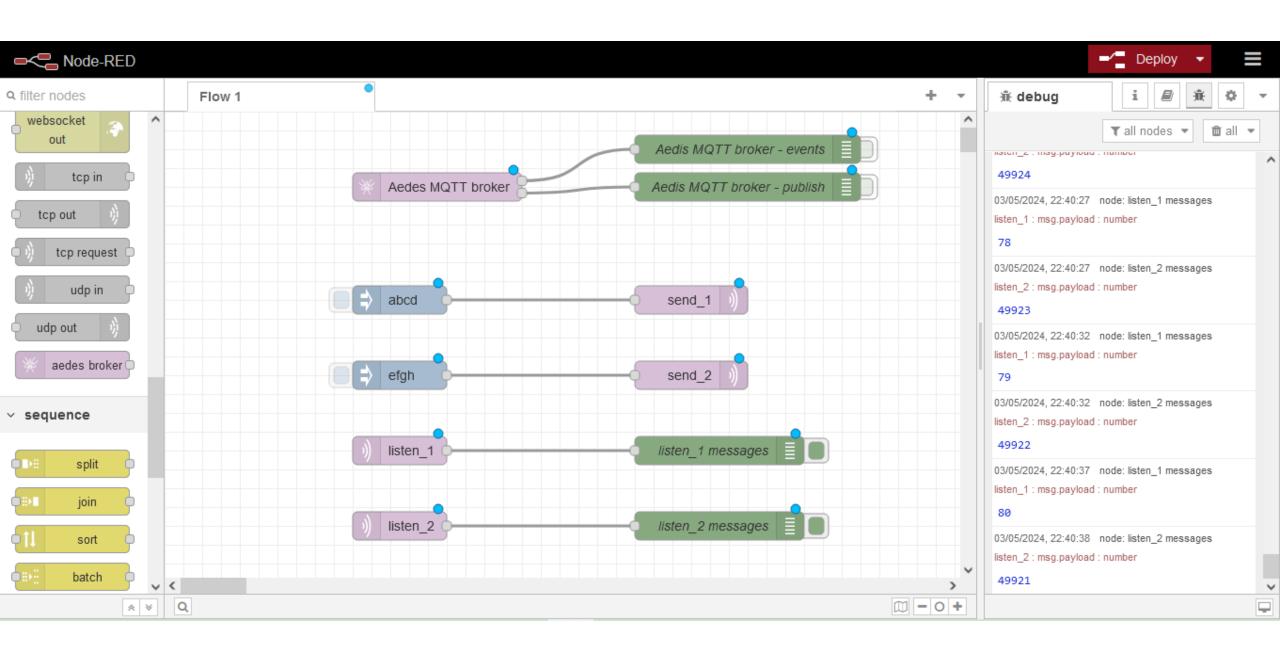


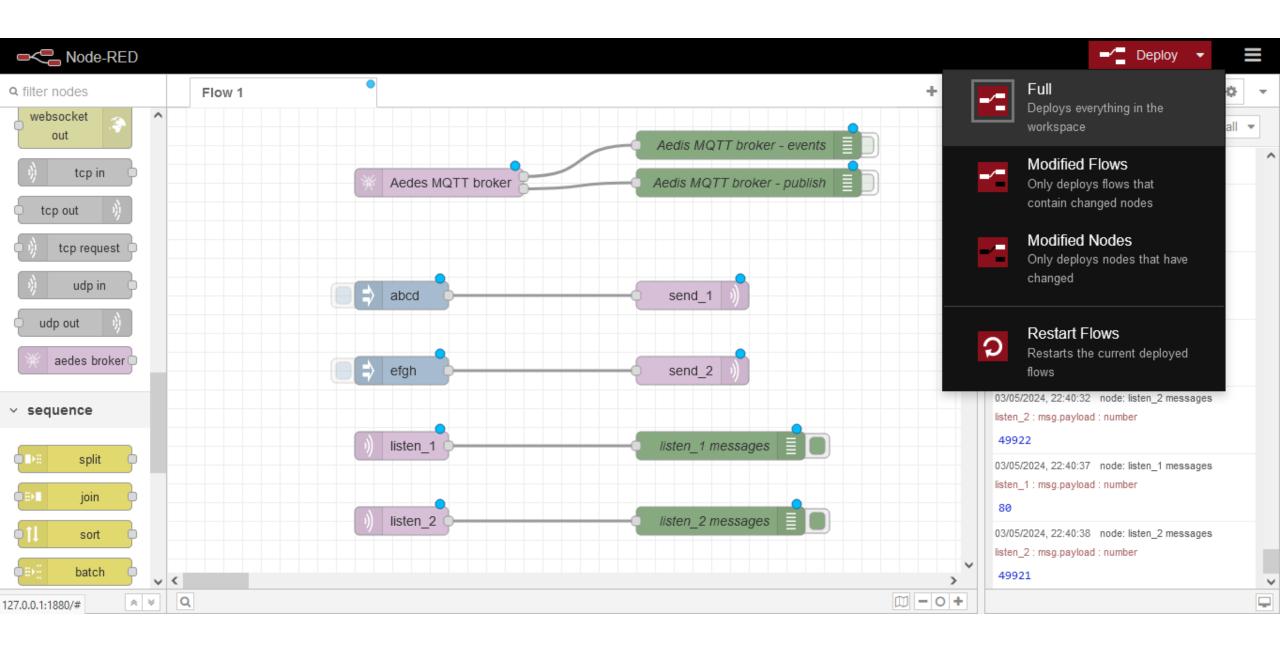


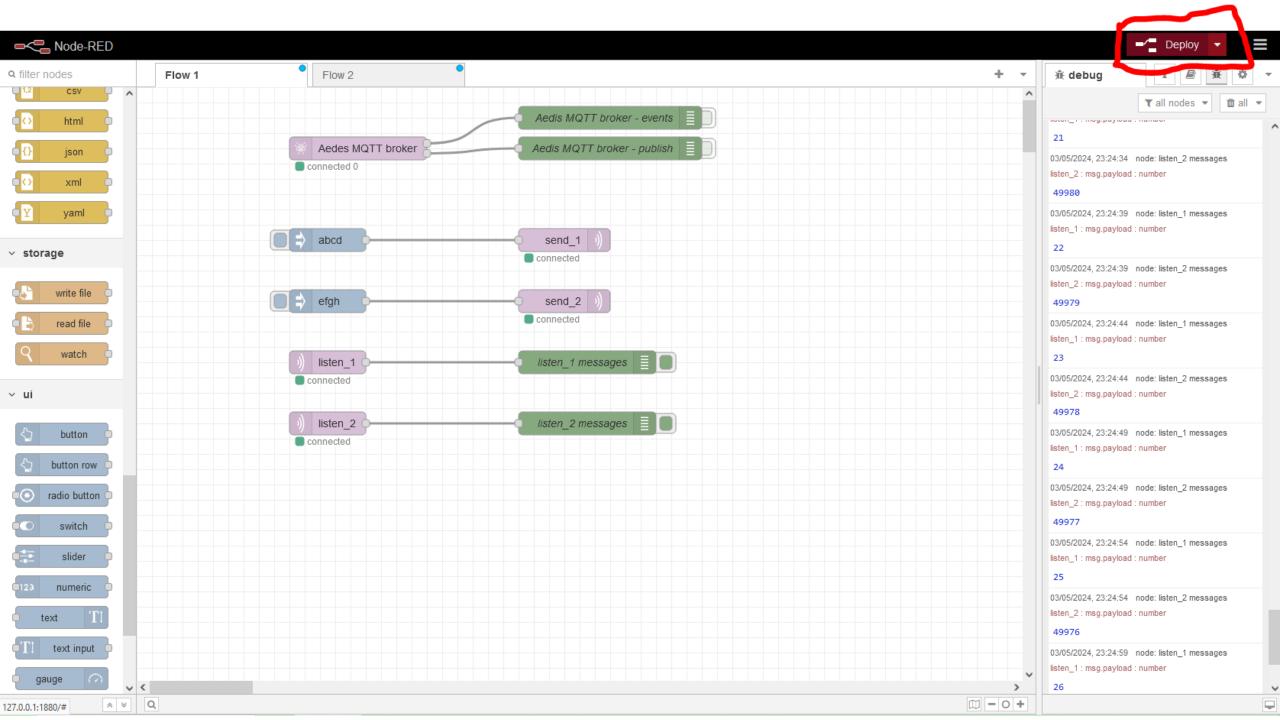
### Saving existing files

• It is recommended to always save files when closing the Node-Red.

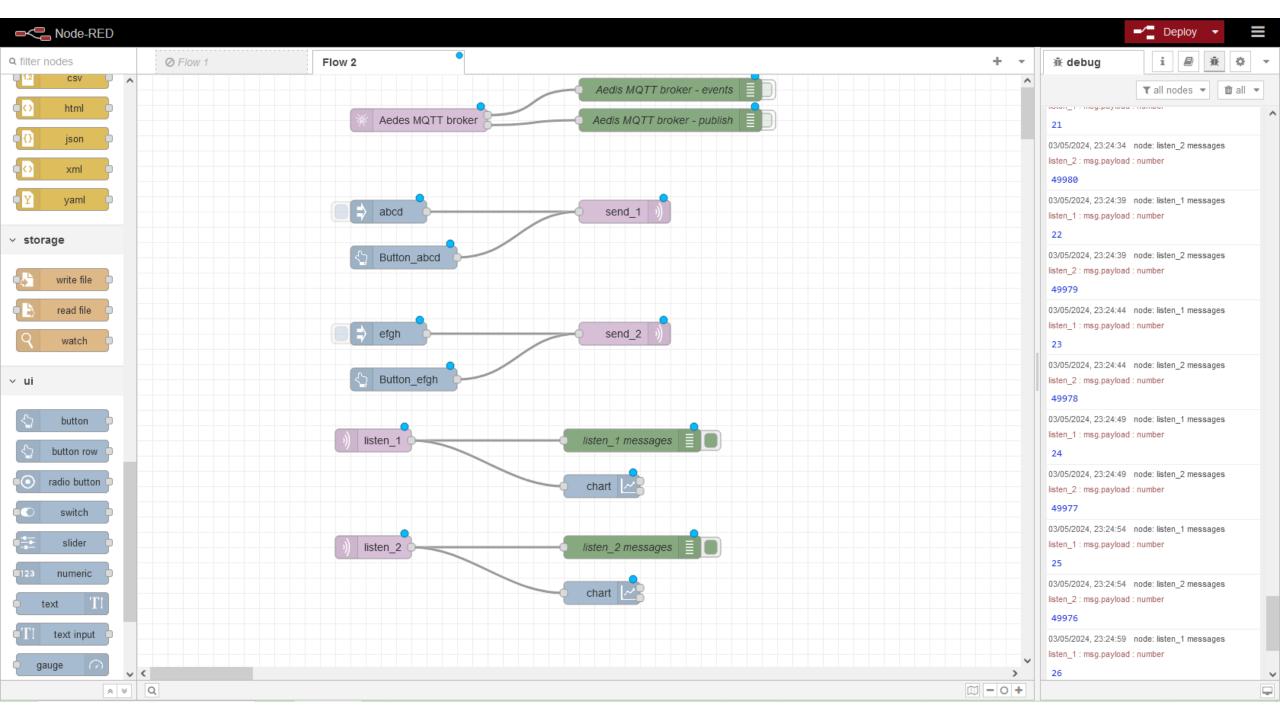
mqtt\_node\_red\_application.json







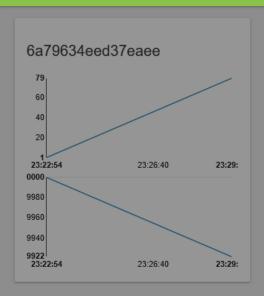
mqtt\_node\_red\_application\_graphic.json





receive

send



• http://127.0.0.1:1880/ui

# MicroPython

Command Prompt C:\Users\tomas>ipconfig Windows IP Configuration Ethernet adapter Ethernet: Connection-specific DNS Suffix .: Link-local IPv6 Address . . . . : fe80::8a0b:ba63:45d8:2185%12 IPv4 Address. . . . . . . . . : 192.168.1.25 Subnet Mask . . . . . . . . . : 255.255.255.0 Default Gateway . . . . . . . : 192.168.1.1 C:\Users\tomas>\_

```
MQTT_SERVER_IP_ADDRESS = '192.168.1.25'

# we can create as much sub topics as we want to
MQTT_SERVER_SUB_TOPIC_1 = 'send_1'
MQTT_SERVER_SUB_TOPIC_2 = 'send_2'

# we can create as much pub topics as we want to
MQTT_SERVER_PUB_TOPIC_1 = 'listen_1'
MQTT_SERVER_PUB_TOPIC_2 = 'listen_2'
```