

IOT

A tutorial about generating push notifications with Telegram for ElectricLink.

1 Download telegram and create a bot

1.1 Start with downloading the Telegram app on a phone.

1.2 In the Telegram search bar type: 'botfather'. Make sure you enter this correctly. (1)

1.3 Talk to botfather and type: /newbot

1.4 Follow the instruction botfather gives you and fill in your name and username.

1.5 Go back in the application on your phone and search: "IDBot"

1.6 Open IDbot and type: /getid and receive your ID. You will need this later.

2 Arduino

2.1 Open Arduino on your laptop.

2.2 Once you are in Arduino go to Tools>Boards>Manage Boards... and download ESP8266

2.3 Open your browser and Google. Here you search and download the Universal Arduino Telegram Bot library.

2.4 Add the library you just downloaded to Sketch>Include Library> Add.ZIP Library

2.5 Next you have to download AduinoJson. You will find this in Sketch>Include Library>Manage Libraries> and search ArduinoJson.

3 Including the code

3.1 Go to <https://randomnerdtutorials.com/telegram-control-esp32-esp8266-nodemcu-outputs/>. Here you copy the describe code and paste this in a new sketch in Arduino.

1 Error



If you do not enter botfather correctly you will simply not find it.

3.1 Error

Once uploading the sketch i got this error. Nothing happened on the Amica board and the Serialmonitor displayed symbols.

Solution

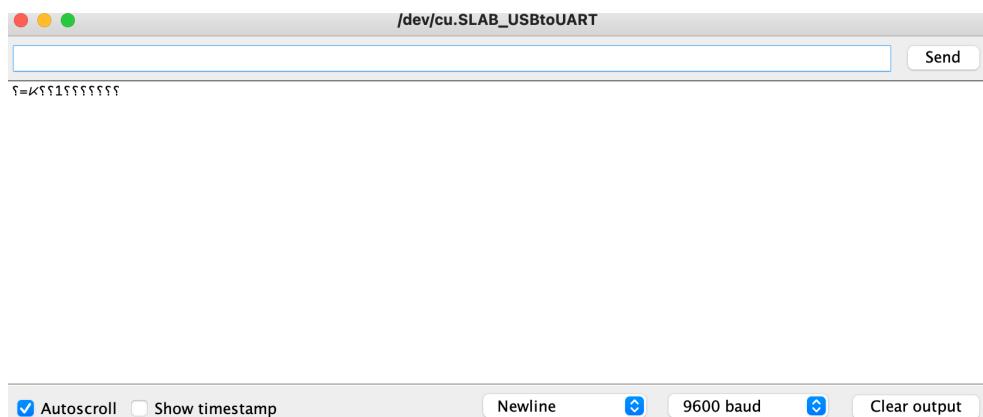
Turn on the Hotspot on your phone and fill the information in Arduino at **ssid** and **password**.

Fill in your Telegram BOTtoken at **#define BOTtoken**

Fill in Chat_ID (see step 1.6) at **#define CHAT_ID**

3.2 Error

The serialboard still displayed symbols.



Solution

Go to your code and find **Serial.begin**. Change the number to **9600**.

```
void setup() {  
    Serial.begin(115200);  
  
    ↓  
  
void setup() {  
    Serial.begin(9600);
```

Your code should work now, press upload again.

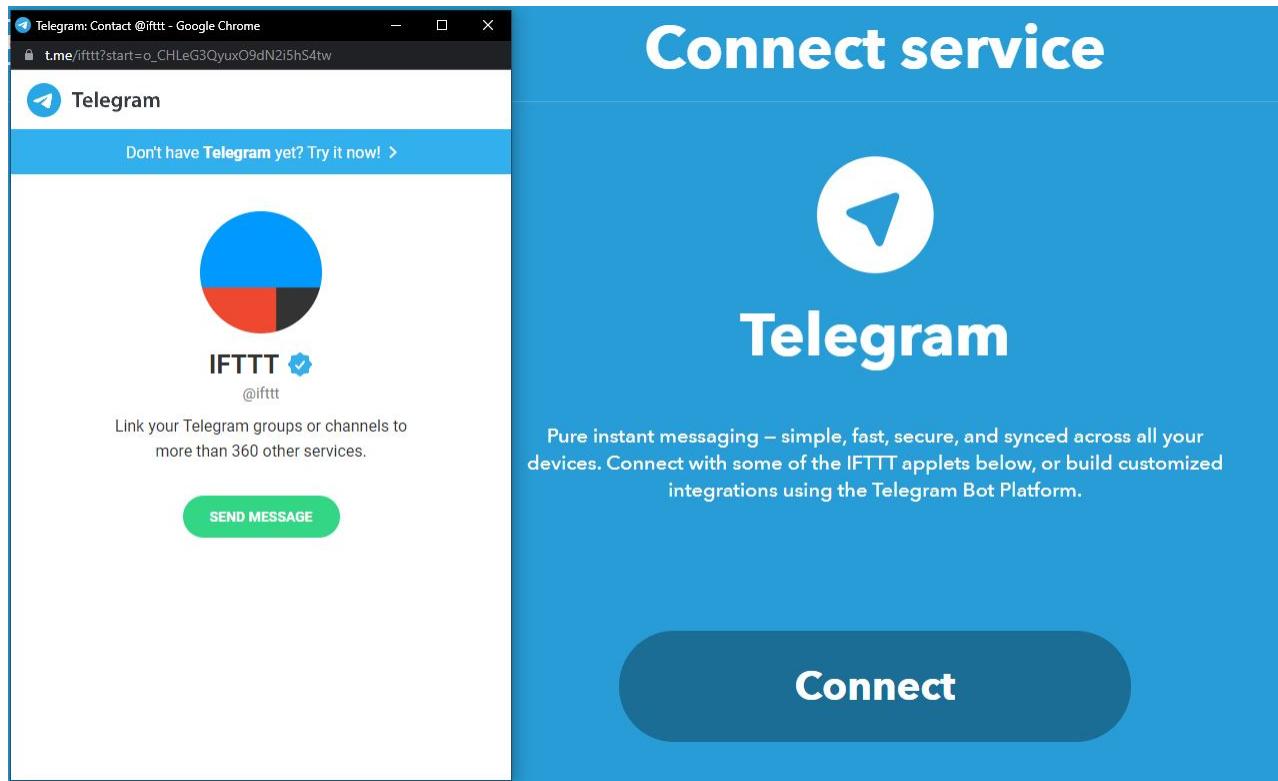
4 IFTTT

4.1 Next we are going to start and look at IFTTT. In Arduino go to Sketch>Include Library>Manage Libraries> and download IFTTTSender.

4.2 To use IFTTT with your board, we have to create a recipe on the website of IFTTT.

4.1 Error

I tried to connect IFTTT to link with my board and without filling in information I got this message



Solution

I couldn't connect through browser so I tried to do these steps on my phone which made connection.

4.3 Authorize IFTTT in the Telegram app once you pressed **begin**. Select Telegram in the authorization.

4.2 Error

I miss understood the steps in the tutorial I followed. Instead of Telegram another recipe has to be selected called **Maker**.

5 Maker (incase you didnt do these steps in step 4)

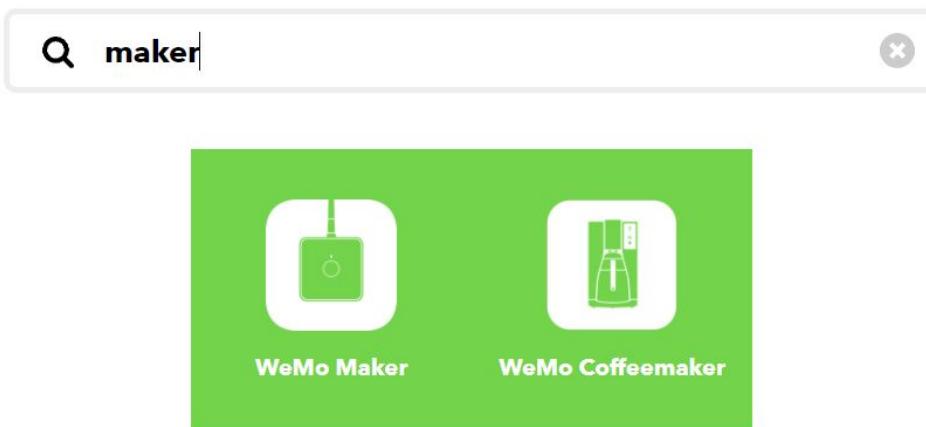
5.1 We are going to start and look at IFTTT. In Arduino go to Sketch>Include Library>Manage Libraries> and download IFTTTSMaker.

5.2 To use IFTTT with your board, we have to create a recipe on the website of IFTTT.

5 Error

It appears that **Maker** is discontinued and cant be found in IFTTT anymore.

Choose a service



6 Error

After continuing this tutorial a day later I got a this error.



I have encountered this error before and knew I had to delete and reset my setting of Adafruit all over again. This error also appears when the board isn't connected correctly, but I knew this wasn't the case. I reinstalled Adafruit and put all my setting back. I restart my laptop and the same error appeared once again.

Used sources and tutorials

Instructables. (2018, 1 maart). Send Notifications to Your Phone From an ESP8266.
Geraadpleegd op 27 oktober 2021, van
<https://www.instructables.com/Send-Notifications-to-Your-Phone-From-an-ESP8266/>

Santos, S. (2020, 2 september). Telegram: Control ESP32/ESP8266 Outputs with Arduino IDE.
Random Nerd Tutorials. Geraadpleegd op 27 oktober 2021, van
<https://randomnerdtutorials.com/telegram-control-esp32-esp8266-nodemcu-outputs/>

Push Notifications Arduino Esp8266 - Example of how to generate push notifications on your phone from your ESP8266 using the Arduino IDE. - (push-notifications-arduino-esp8266). (2016). Github.
Geraadpleegd op 27 oktober 2021, van
<https://opensourcelibs.com/lib/push-notifications-arduino-esp8266>