OTA Update for Smart Plug 16A

Please make sure the following configurations are done before starting the OTA (Over-The-Air) process for SP16.

1. .Bin File Setup -> Create the .bin file of the ready-to-upload code. Follow the below steps to create a .bin file,
    a. Open the Arduino IDE.
    b. Go to Sketch.
    c. Select the "Export Compiled Binary" option.
    d. automatically file will be created where the main Arduino file is located.

2. Flask Service Configuration -> Please run the below flask service for the .bin file return

```python
from flask import Flask, make_response, send_file

app = Flask(__name__)


@app.route("/sp16")
def return_pdf():
    filename = 'SmartPlug.ino.esp32.bin'
##    return "From Flask Service"
    return send_file(filename)

if __name__ == "__main__":
    app.run(host='0.0.0.0', port=1000)
```

    a. First relocate the .bin file where the above python code file is located.
    b. Change the .bin file name as mentioned in the python code or make a change in the python code.
    c. Run the python service. Before that, ensure your system is routed to the server for static IP.
    d. The static IP and port are **203.109.124.70:1000.**
    e. Please Note -> The Static IP and port total length should not change. The IP and port number can change but the length should not change.
    f. The @app. route -> **/sp16** should note a change in service.

3. MQTTbox Setup -> Total of two topics are there for the SP16 OTA update,
    a. Global OTA Update, where all SP16 will get updated. The topic is **SP16_Global_OTA.**
    b. Dedicated device OTA update, where a single device can update. The topic is evzspABCD/SP16_OTA. The device will change for every device.

Evoluzn - mqtt://107.180.94.60:18889

Topic to publish

SP16_Global_OTA

QoS

0 - Almost Once ▾

Retain ☐

Payload Type

Strings / JSON / XML / Characters ▾

e.g: {'hello':'world'}

Payload

http://203.109.124.70:1000/SP16

[Publish]

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Topic to publish

evzspABCD/SP16_OTA

QoS

0 - Almost Once ▾

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e.g: {'hello':'world'}

Payload

http://203.109.124.70:1000/SP16

[Publish]

4. Once the OTA will be done, Will receive the following message on MQTT Box,
   a. For Individual devices,

OTA DONE: evzspB17C4C

qos : 0, **retain** : false, **cmd** : publish, **dup** : false, **topic** : evzspB17C4C/status, **messageId** : , **length** : 41

   b. For global device,

OTA DONE: Global_SP16

qos : 0, **retain** : false, **cmd** : publish, **dup** : false, **topic** : evzspB17C4C/status, **messageId** : , **length** : 41

Thank You!