

```
#include <ESP8266WiFi.h>

#include <WiFiClient.h>

#include <PubSubClient.h>

#include "DHT.h"

const char* ssid = "project1";
const char* password = "22222222";

#define DHTPIN 12
#define DHTTYPE DHT22
DHT dht(DHTPIN, DHTTYPE);

#define ID "jpg7s5"
#define DEVICE_TYPE "ESP8266"
#define DEVICE_ID "PRO"
#define TOKEN "JEEVITHAECE"

char server[] = ID ".messaging.internetofthings.ibmcloud.com";
char publish_Topic1[] = "iot-2/evt/Data1/fmt/json";
char publish_Topic2[] = "iot-2/evt/Data2/fmt/json";
char publish_Topic3[] = "iot-2/evt/Data3/fmt/json";
char authMethod[] = "use-token-auth";
char token[] = TOKEN;

char clientId[] = "d:" ID ":" DEVICE_TYPE ":" DEVICE_ID;////////a-6758fk-
gbpgmf1xf8///SyKj8fKYlys)9wQ9at

WiFiClient wifiClient;

PubSubClient client(server, 1883, NULL, wifiClient);

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

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dht.begin();

Serial.println();

WiFi.begin(ssid, password);

while (WiFi.status() != WL_CONNECTED) {

    delay(500);

    Serial.print(".");

}

Serial.println("");

Serial.println(WiFi.localIP());


if (!client.connected()) {

    Serial.print("Reconnecting client to ");

    Serial.println(server);

    while (!client.connect(clientId, authMethod, token)) {

        Serial.print(".");

        delay(500);

    }

    Serial.println("Connected TO IBM IoT cloud!");

}

}

```

```

long previous_message = 0;

void loop() {

    client.loop();

    long current = millis();

    if (current - previous_message > 3000) {

        previous_message = current;

        float hum = 34;

        float temp = 35;

        float level = 1;

        if (isnan(hum) || isnan(temp) ){

```

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Serial.println(F("Failed to read from DHT sensor!"));
return;
}
```

```
Serial.print("Temperature: ");
Serial.print(temp);
Serial.print("°C");
Serial.print(" Humidity: ");
Serial.print(hum);
Serial.print("%");
```

```
String payload = "{\"d\":{\"Name\":\"\" DEVICE_ID \"\"";
    payload += "\",\"Temperature\":";
    payload += temp;
    payload += "\"}";
```

```
Serial.print("Sending payload: ");
Serial.println(payload);
```

```
if (client.publish(publish_Topic1, (char*) payload.c_str())) {
    Serial.println("Published successfully");
} else {
    Serial.println("Failed");
}
```

```
String payload1 = "{\"d\":{\"Name\":\"\" DEVICE_ID \"\"";
    payload1 += "\",\"Humidity\":";
    payload1 += hum;
    payload1 += "\"}";
    Serial.print("Sending payload: ");
    Serial.println(payload1);
    Serial.println('\n');
```

```

    if (client.publish(publish_Topic2, (char*) payload1.c_str())) {
        Serial.println("Published successfully");
    } else {
        Serial.println("Failed");
    }
String payload2 = "{\"d\":{\"Name\":\"\" DEVICE_ID \"\"";
    payload2 += "\",\"Level\":\"";
    payload2 += level;
    payload2 += "\"}";
    Serial.print("Sending payload: ");
    Serial.println(payload2);
    Serial.println('\n');

    if (client.publish(publish_Topic3, (char*) payload2.c_str())) {
        Serial.println("Published successfully");
    } else {
        Serial.println("Failed");
    }

}
}

```