Create an IoT Solution

13 January 2022

Safyzan b Salim

Internet of things

Field of study

The Internet of things describes physical objects that are embedded with sensors, processing ability, software, and other technologies that connect and exchange data with other devices and systems over the Internet or other communications networks. Wikipedia

Industrial internet of things

The industrial internet of things refers to interconnected sensors, instruments, and other devices networked together with computers' industrial applications, including manufacturing and energy management. Wikipedia

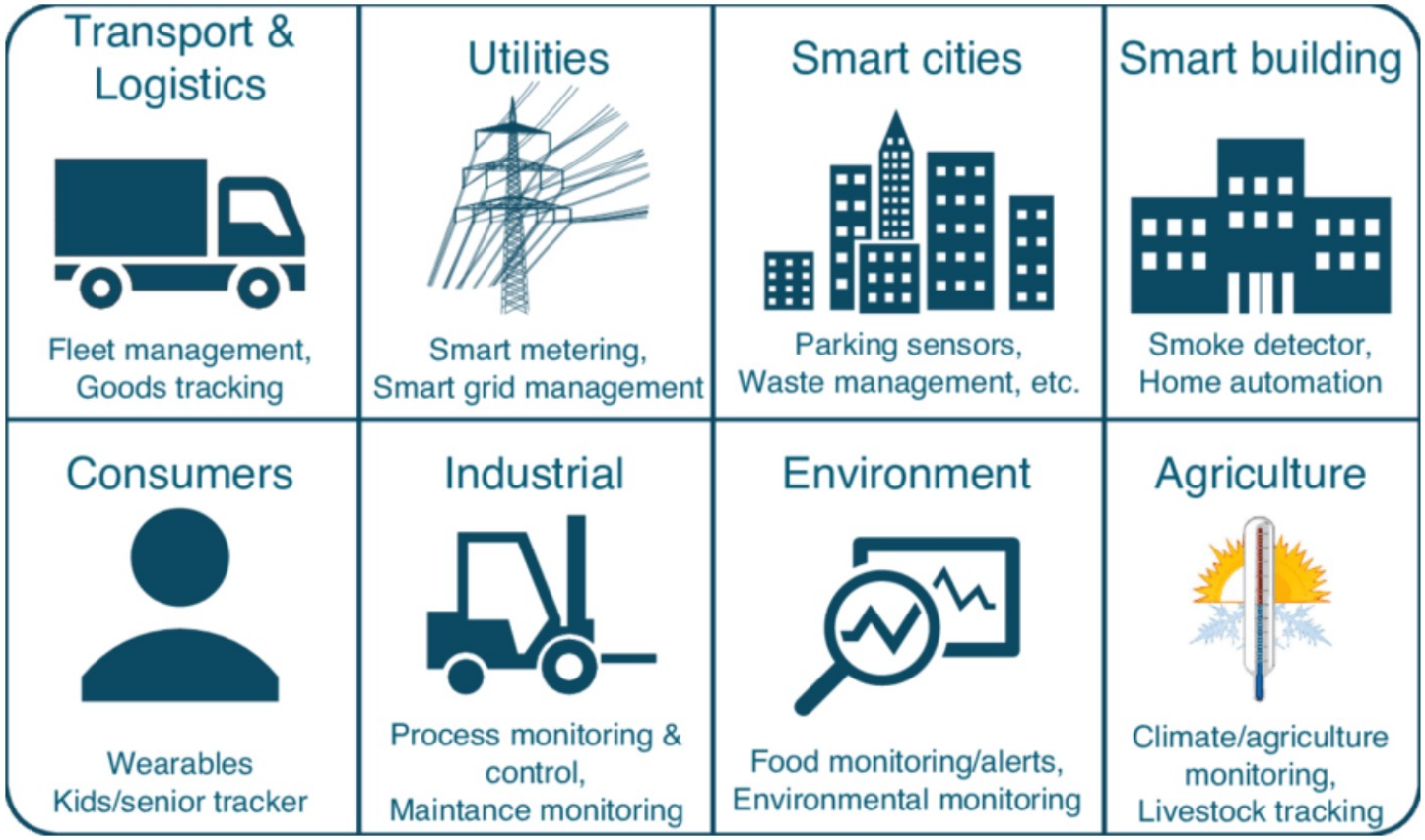
In Reality

In principle, IoT and IIoT work in the same way. They both connect devices to the internet and make them smarter. The difference is that IoT works to make consumers live more convenient and easier, where IIoT works to increase safety and efficiency on production facilities.

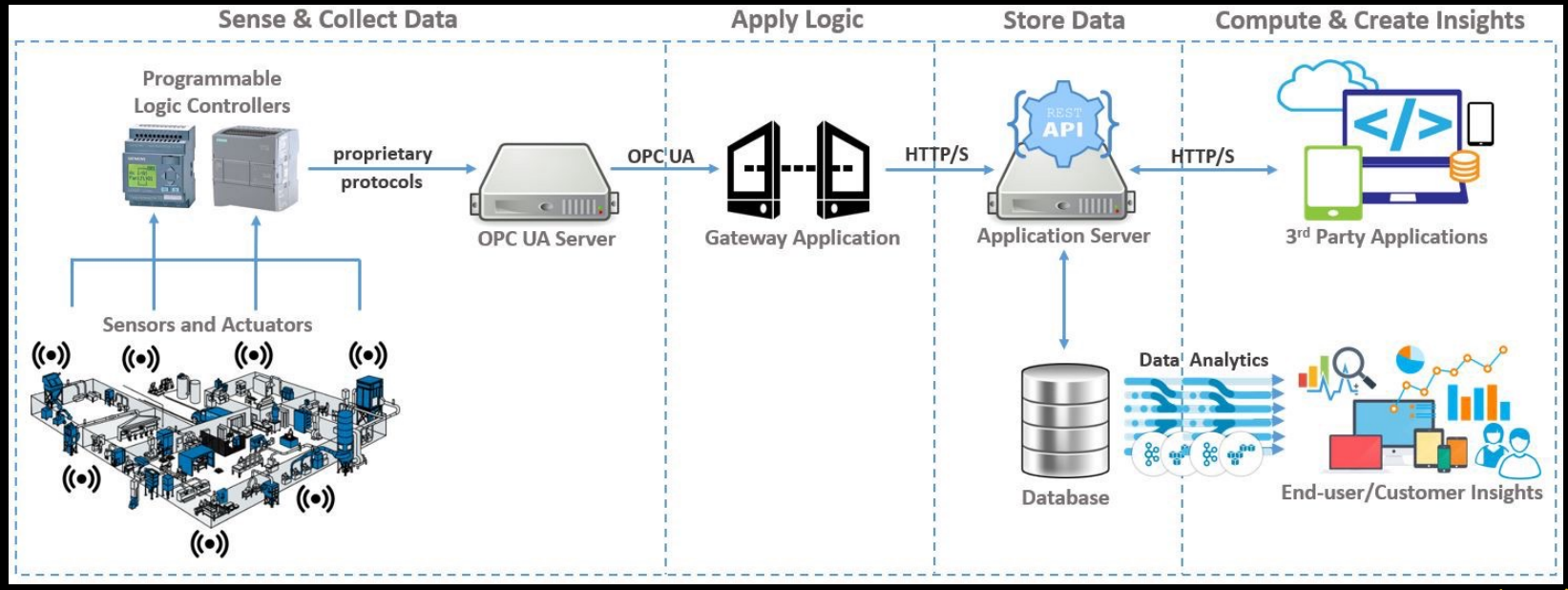
IoT is B2C (business-to-consumer) and IIoT is B2B (business-to-business). [redacted]

https://optiware.com/blog/what-is-the-difference-between-iot-and-iiot/

Where to Apply?



https://vizah.ch/en/developing-iot-applications-best-technologies-and-tools-for-iot-developers/



Open Platform Comm United Architecture.
≡ data exchange std for m2m
IoT

Building an IoT Solution in 4 Basic Steps

IIoT / IoT Components – 915MHz

Sensors / Nodes

Distance Detection Sensor

Soil Moisture & EC Sensor

GPS Tracker

Gateways

Dragino

Indus

Heltec Helium Miner

IoT Servers

THE THINGS NETWORK

Databases

influxdb

CrateDB

mongoDB

RethinkDB

SQLite

User Interfaces

Grafana

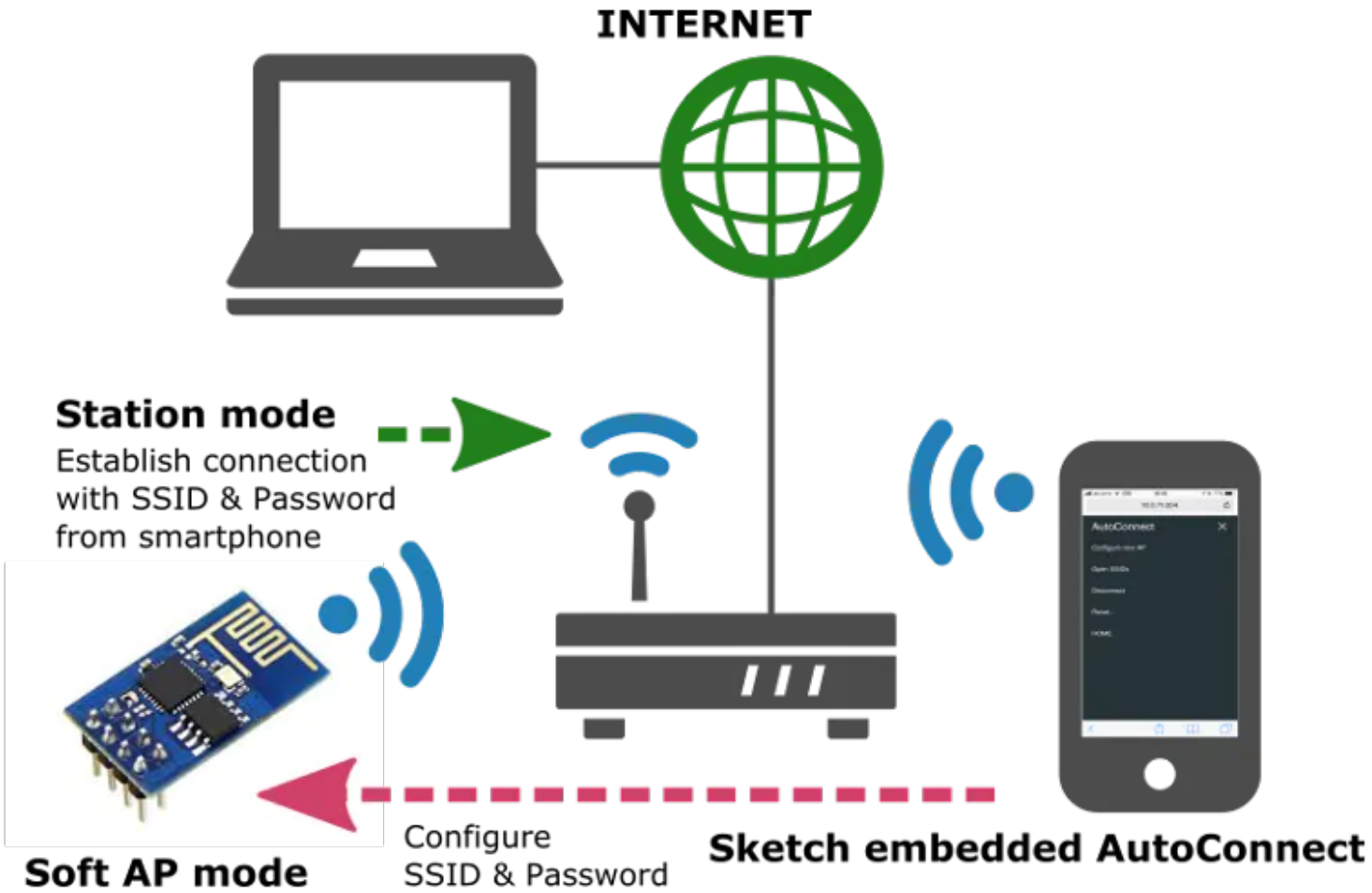
TagoIO

FAVORIOT PLATFORM

Node-RED

ThingSpeak

We Always Sees This Project



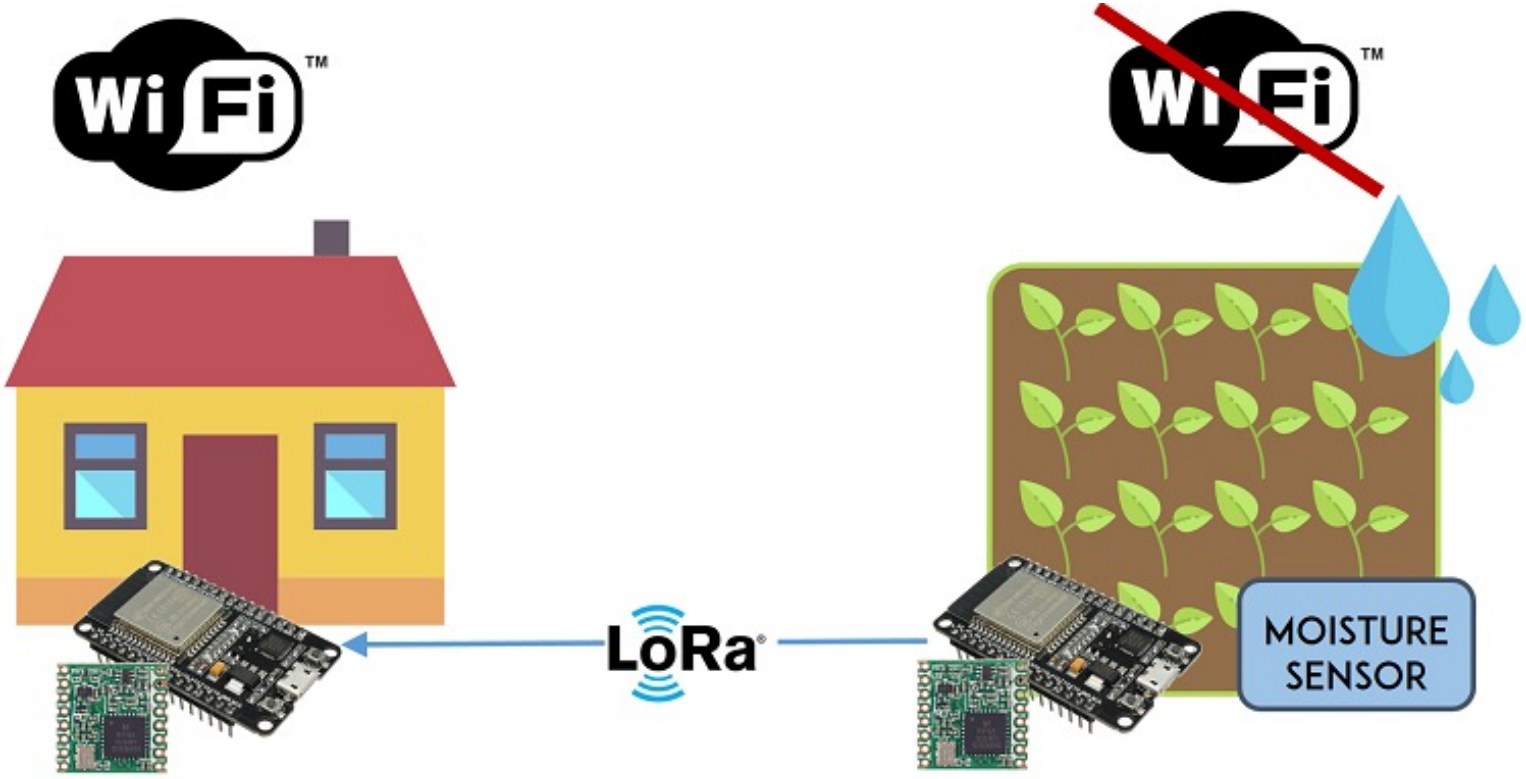
NodeMCU

ESP32

TTGO

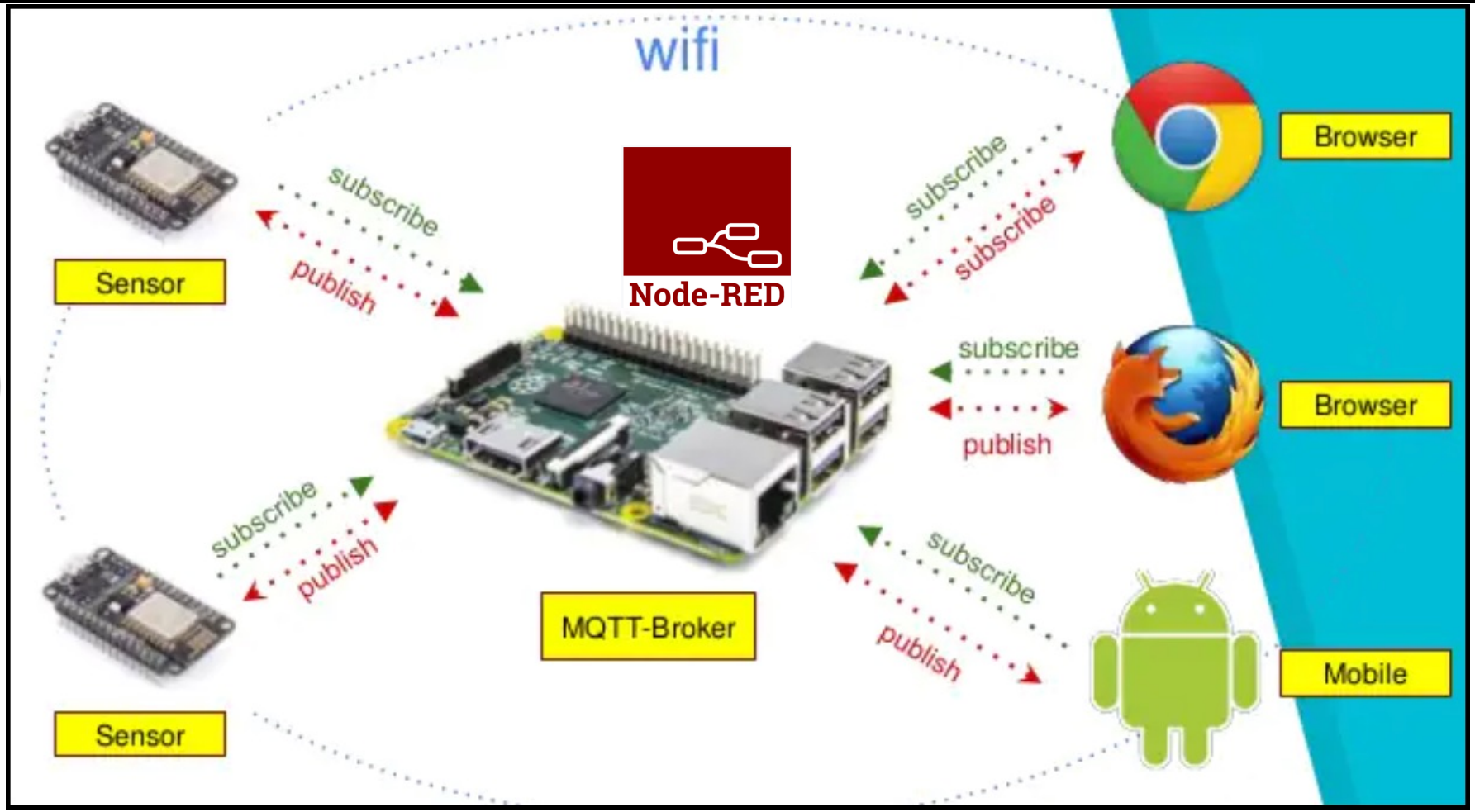
- https://www.hackster.io/hieromon-ikasamo/esp8266-esp32-connect-wifi-made-easy-d75f45

We Might Also See This Project

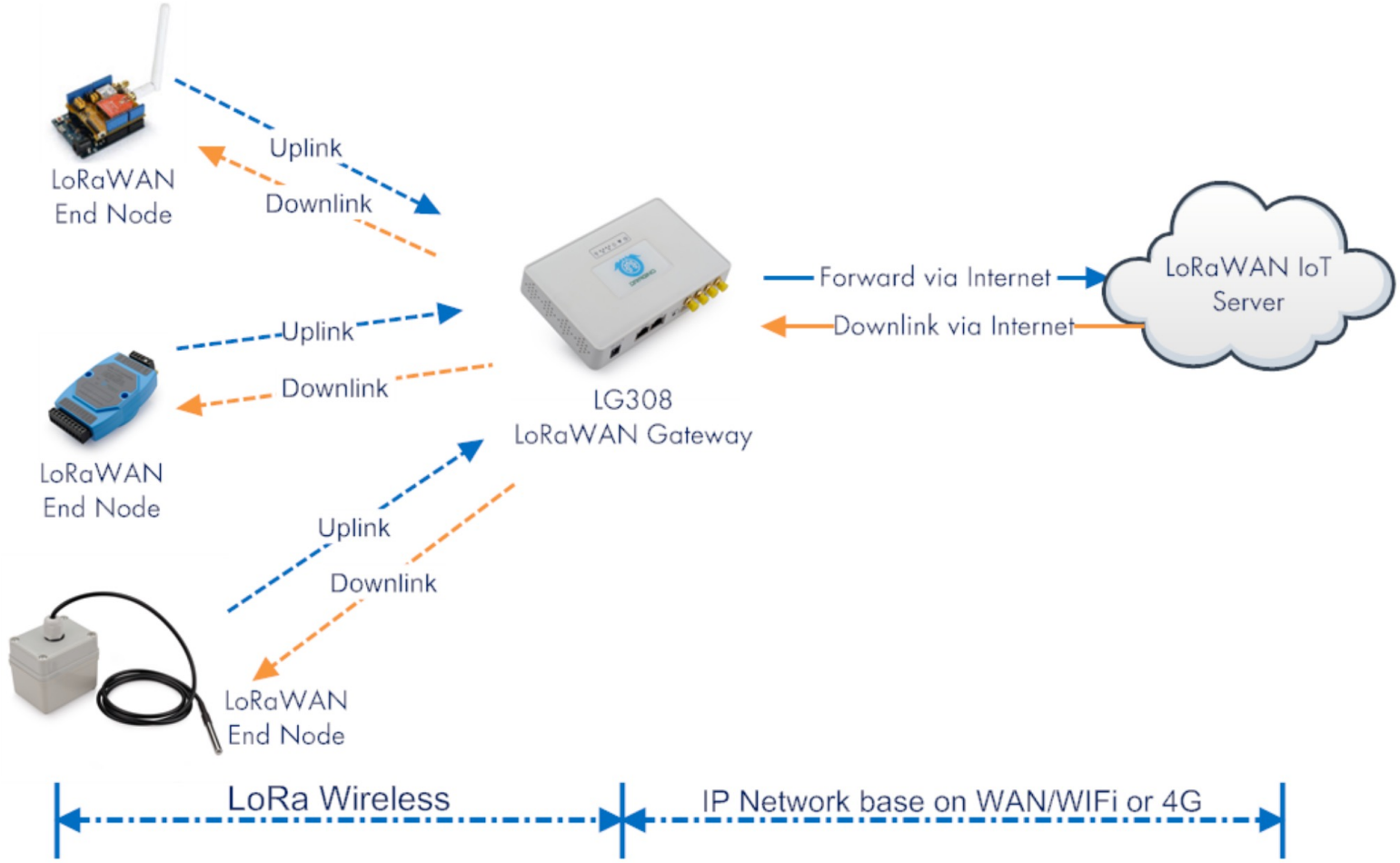


- https://randomnerdtutorials.com/esp32-lora-rfm95-transceiver-arduino-ide/

Why Don’t You Consider This



Or This


LoRaWAN
End Node
Uplink
Downlink
Uplink
Downlink
LoRaWAN
End Node
Uplink
Downlink
LoRaWAN
End Node
LG308
LoRaWAN Gateway
Forward via Internet
Downlink via Internet
LoRaWAN IoT
Server
LoRa Wireless
IP Network base on WAN/WIFi or 4G


Questions?