

# Create an IoT Solution

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## 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). For companies with multiple plants and production facilities the benefits

of implementing IIoT solutions like **APPRO EMI** and **WISS OEE** are huge. The ability to monitor and analyze data, conduct predictive

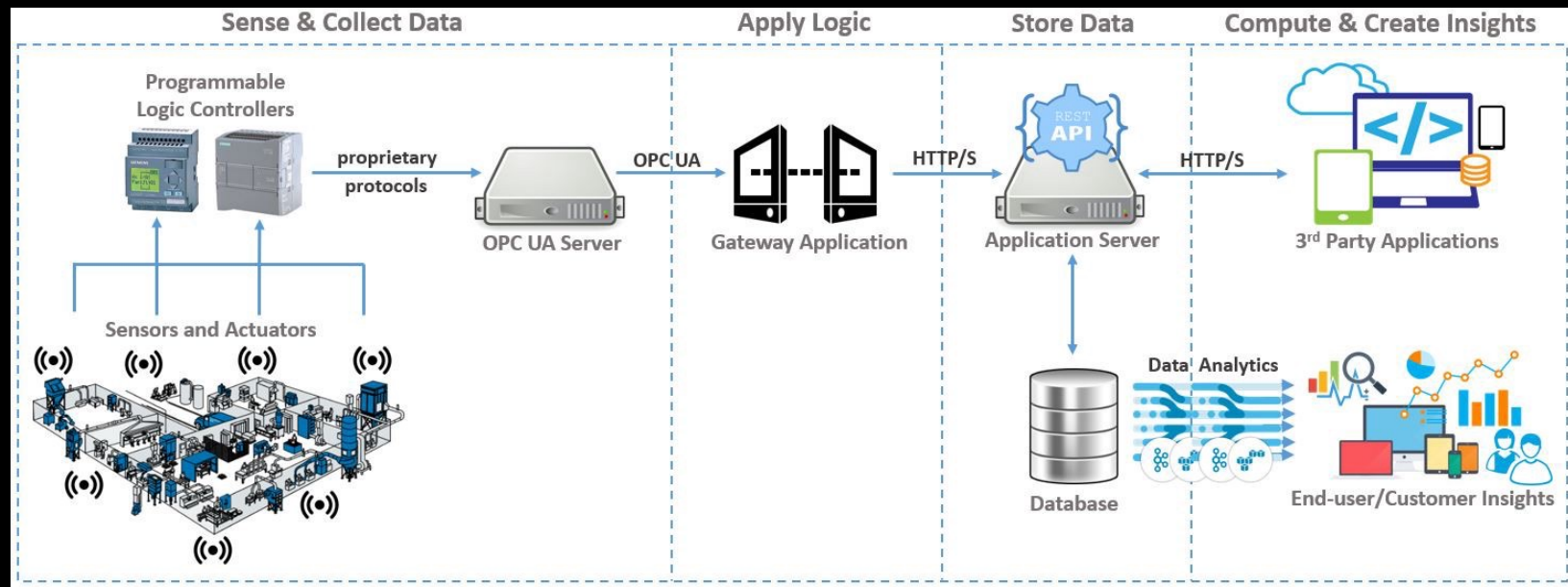
maintenance, and optimize production processes can significantly reduce downtime and increase efficiency, leading to higher productivity and lower costs.

Furthermore, IIoT solutions can improve safety by monitoring equipment health and identifying potential hazards before they become critical, reducing the risk of accidents and injuries.

## Where to Apply?

<p>Transport &amp; Logistics</p>  <p>Fleet management, Goods tracking</p>	<p>Utilities</p>  <p>Smart metering, Smart grid management</p>	<p>Smart cities</p>  <p>Parking sensors, Waste management, etc.</p>	<p>Smart building</p>  <p>Smoke detector, Home automation</p>
<p>Consumers</p>  <p>Wearables Kids/senior tracker</p>	<p>Industrial</p>  <p>Process monitoring &amp; control, Maintenance monitoring</p>	<p>Environment</p>  <p>Food monitoring/alerts, Environmental monitoring</p>	<p>Agriculture</p>  <p>Climate/agriculture monitoring, Livestock tracking</p>

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



Building an IoT  
Solution in 4 Basic  
Steps

## Sensors / Nodes



Distance Detection Sensor



Soil Moisture & EC Sensor



GPS Tracker

## Gateways



Dragino



Indus



Heltec Helium Miner

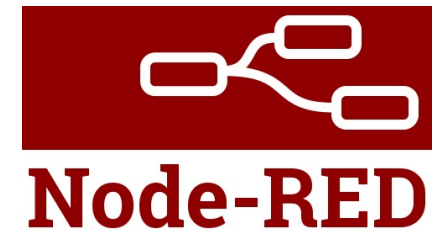
## IoT Servers



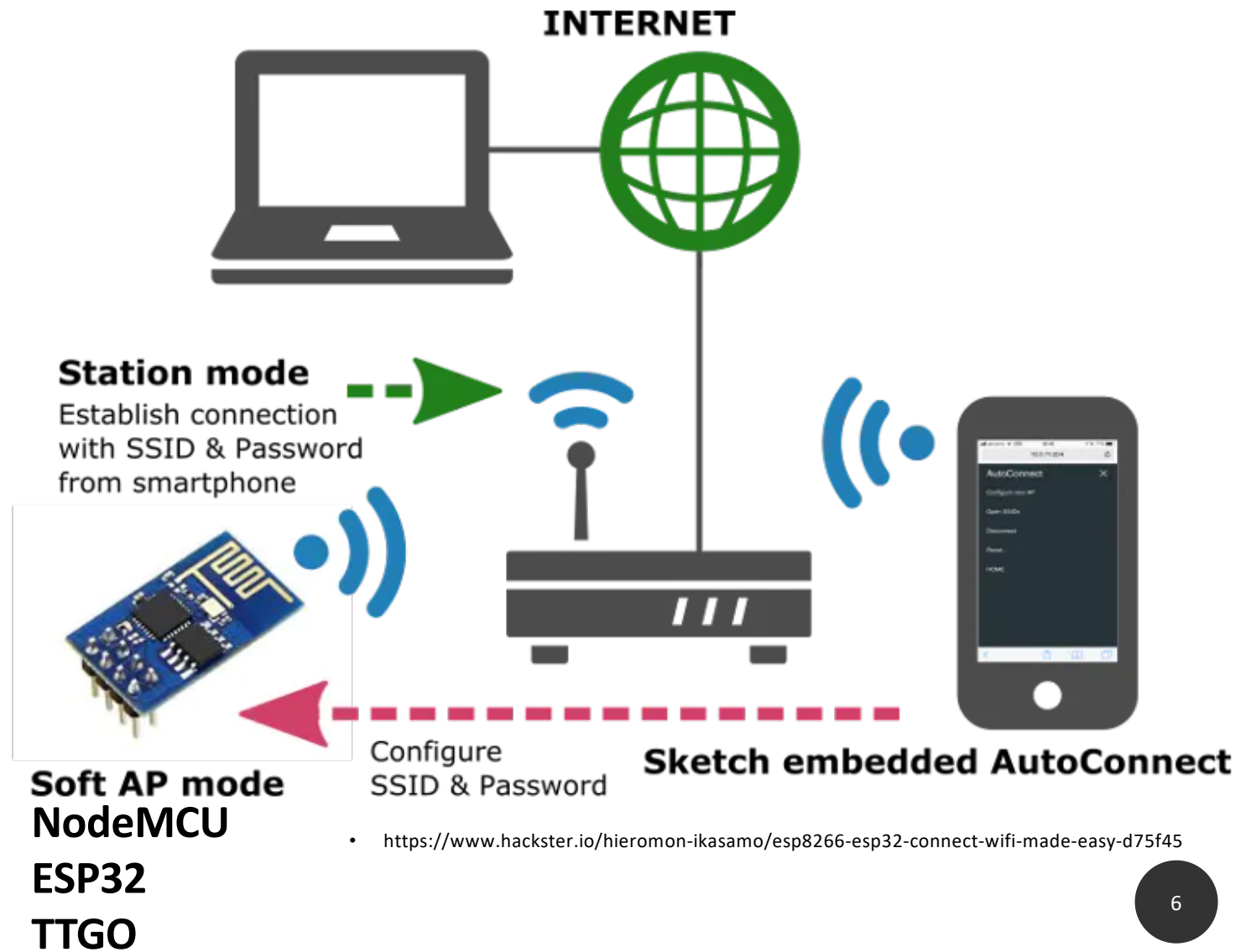
## Databases



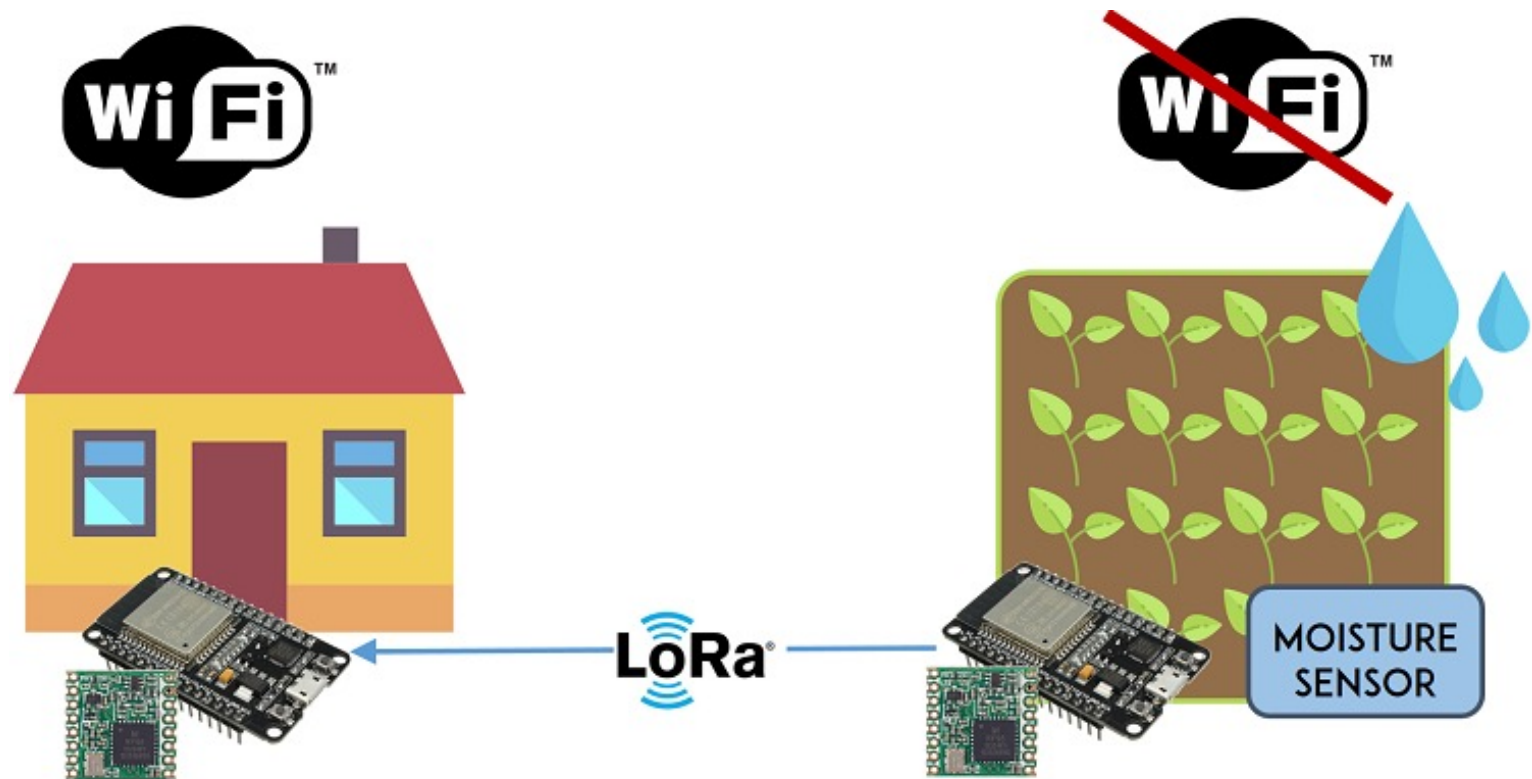
## User Interfaces



We **Always**  
Sees This  
Project



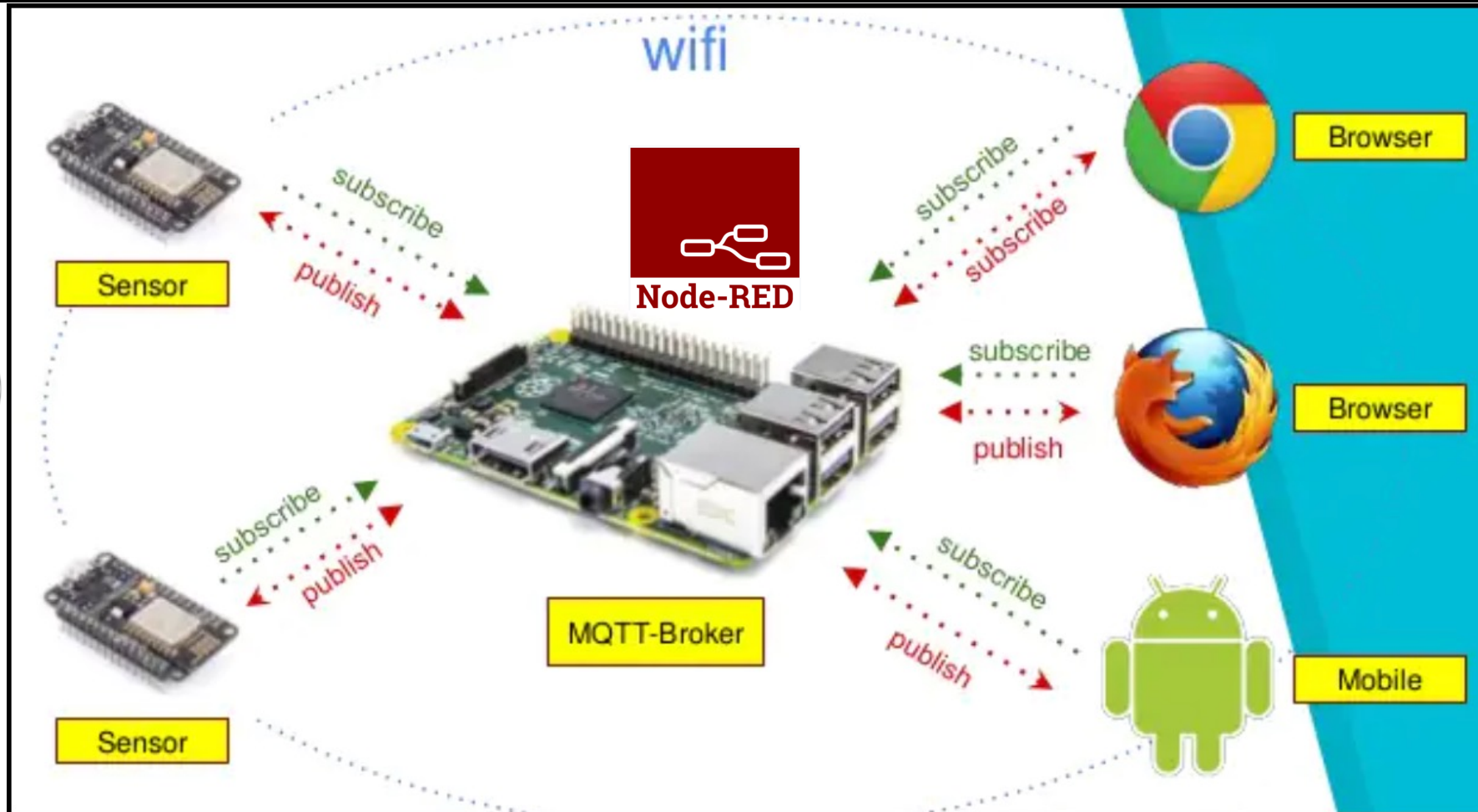
We **Might**  
Also See This  
Project



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



# Why Don't You Consider This





## Or This

