

Part 1



Lesson

1

Design thinking

What is LORA Network



WIDE AREA NETWORK PROTOCOL



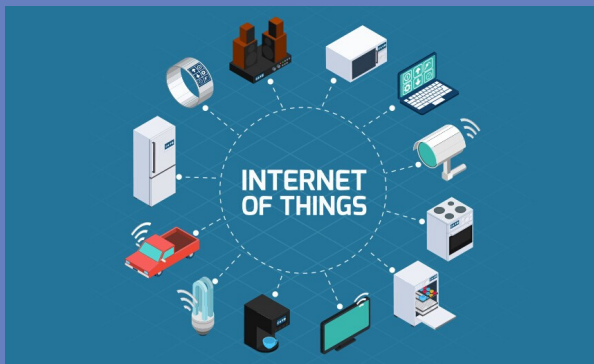
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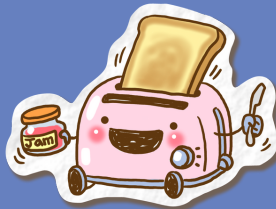
Overview

In this lesson you will learn about LoRa a low power long range wide area network protocol. Don't be intimidated if you don't know the meaning of some words or concepts. In this lesson all terminology will be defined.

IoT (internet of Things)



All the things that are connected to the internet. **Things** refers to devices that are able to connect to the internet and have sensors that transmit data.



1. Is a toaster an IoT device?

Answer: Maybe. A toaster is IoT if it can connect to the internet and upload data.



Creating a network

A **network** consists of two or more devices that can communicate with each other.



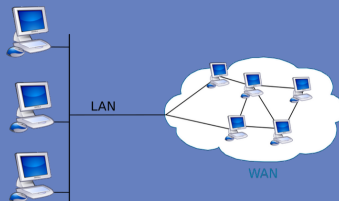
Protocol

A network protocol is a set of rules, guidelines, and formats that make communication between devices possible.



Wide Area Network (WAN)

A WAN is not restricted to a geographic location. The internet is a worldwide public WAN. The further the distance the lower the network becomes.



1. Is a toaster an IoT device?

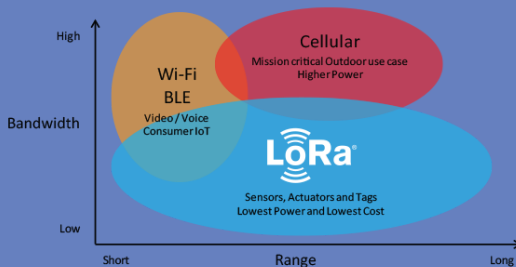


LoRa (Long Range)

The physical layer or the (wireless) modulation which creates the long range communication link

LoRaWAN (Long Range Wide Area Network)

A communication protocol and system architecture for the network



What LoRa is used for

1. Fire Detection
2. Fleet Management
3. Agriculture
4. Air Pollution Monitoring
5. So much more

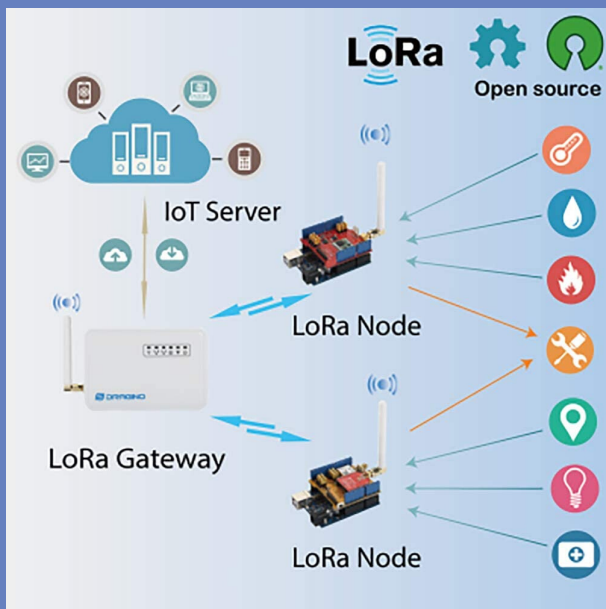


1. Can you use LoRa network to stream YouTube videos?



Putting it all together

Each node can collect different kinds of data using sensors. A LoRa Node can transmit data to the LoRa gateway and the gateway stores that data on an IoT server.



1. What kind of messages would you send in the network?



Thank You!

Welcome to LoRa academy, make sure to contact your instructors for any questions.

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