

# Connect Edge devices to the cloud with Etisalat IoT Platform





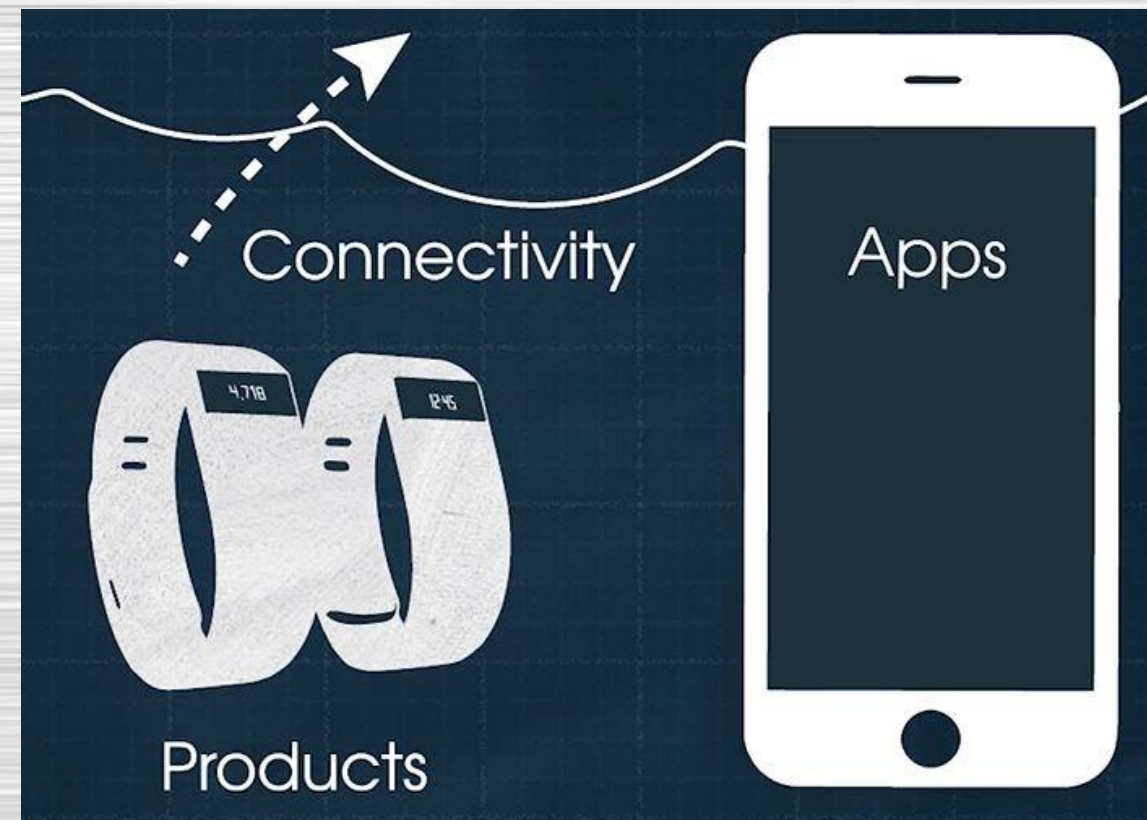
# About The Assembly

- A Smart Lab & makerspace based out of **in5** since 2014
- Almost **300** Free workshops done
- **Assembly : HACK** - Embedded systems, IoT, hardware
- **Assembly : CODE** - Software - APIs, frameworks, apps
- **Assembly: Data Science** - Advanced topics in AI/ML
- Audience – Students | Professionals | Entrepreneurs
- Focus on Smart Technology & Practical Applications
- [members.theassembly.ae](https://members.theassembly.ae) | @makesmartthings

# The Internet Of Things

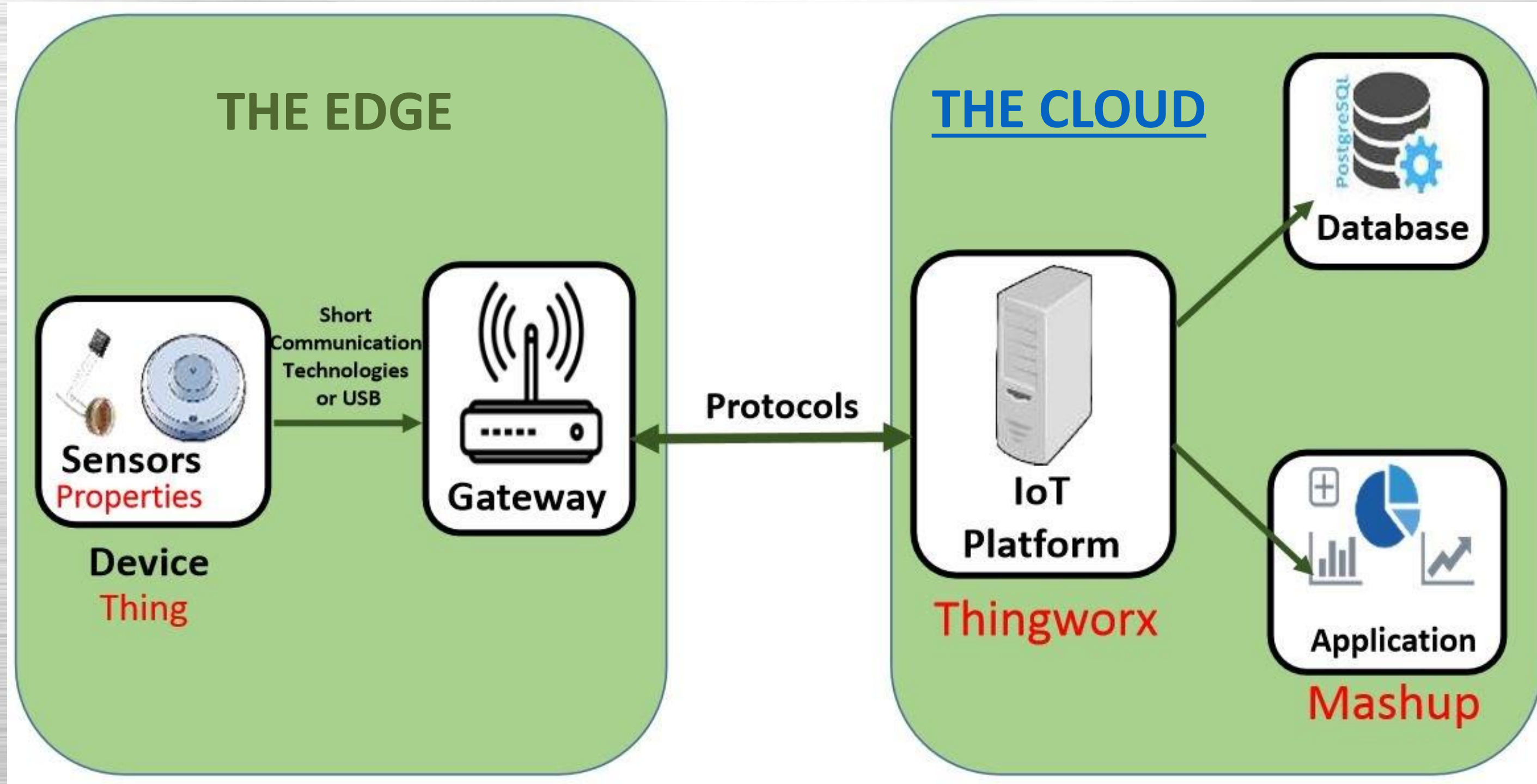
- *The network of physical objects that can exchange data for value*
- Smart Connected Products (SCPs) can:

- Monitor
- Control
- Optimize
- Automate





# What Is 'The Edge'?



# Connecting To The Cloud From The Edge



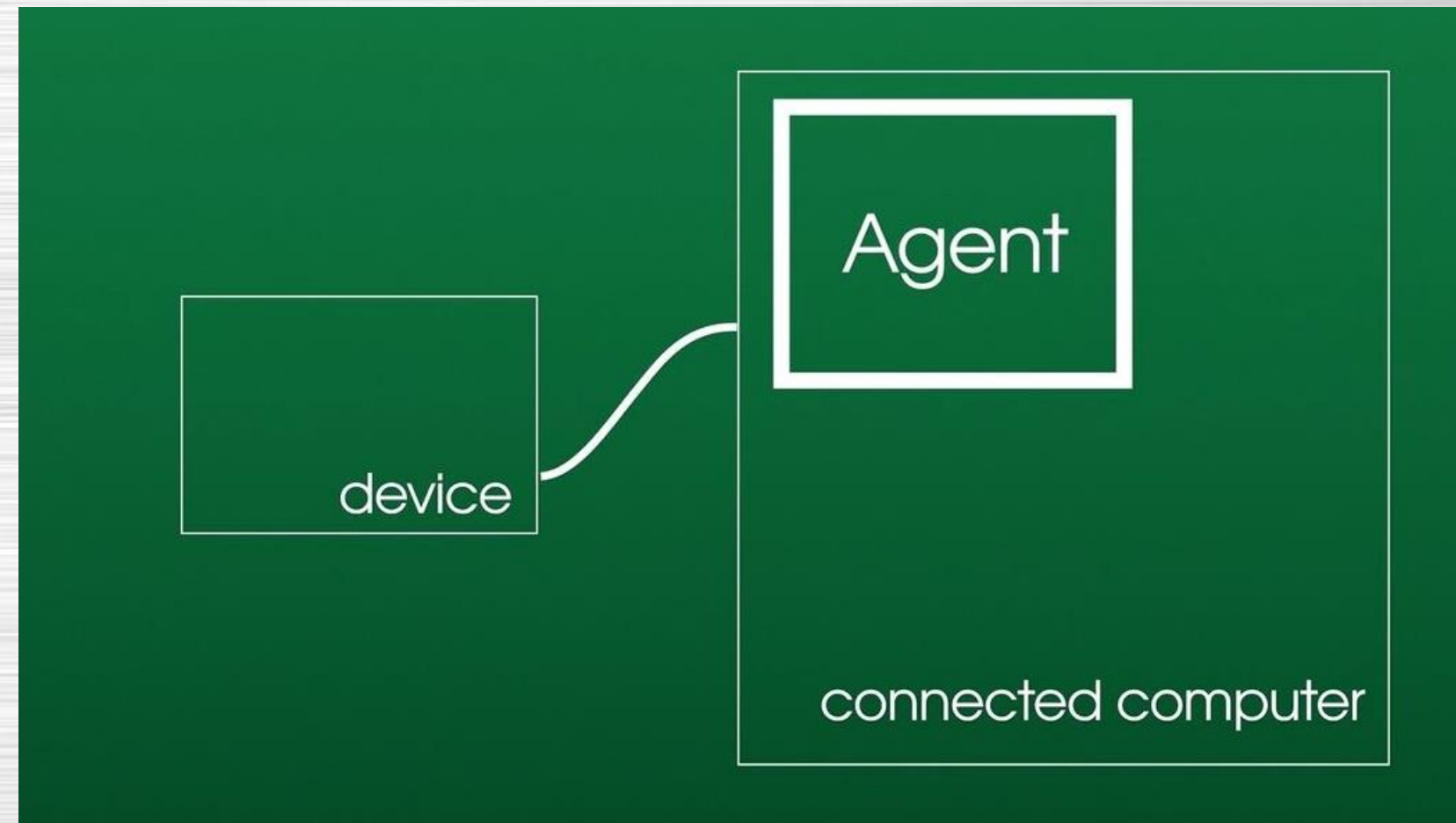
- REST API – using HTTP Requests
  - 1 Way – from Edge To Cloud
  - Requires code
- Edge SDKs (C/Java/JavaScript/Android/IOS)
  - Uses AlwaysOn – 2 way
  - Requires code
- Edge Agents
  - Uses AlwaysOn – 2 way
  - Readymade software

[Read More About Connectivity](#)



# Edge Agents

- Middleware to monitor data from / control device(s)
- Can be used to:
  - Change configs
  - Update firmware
  - Optimize procedures
- Kepware
- AlwaysOn/WebSockets



# Edge Micro Server



- Out of the box agent with **ThingWorx – EMS** can:
  - Bind remote things on cloud to virtual things on edge
  - Maintain **AlwaysOn** duplex connection with cloud
  - Act as **HTTP proxy** on edge network
  - Enable **File Transfer & Tunneling**



# LUA Script Resource

- **EMS** only connects – does not manage remote properties, events or services
- **LUA Script Resource** acts as **process manager**
- Can be on same machine as **EMS**



# Scenario

