

# Forget Email, My Watch Can Control A Drone!

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IBM Bluemix™  
[www.bluemix.net](http://www.bluemix.net)





# The Internet Of THINGS





BY 2020

\*According to Intel

<http://intel.ly/1i8O2ec>





# VOLUME REQUIRES THE CLOUD

IBM Bluemix™  
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# IBM Internet of Things Foundation



Applications  
CLOUD

DEVICES

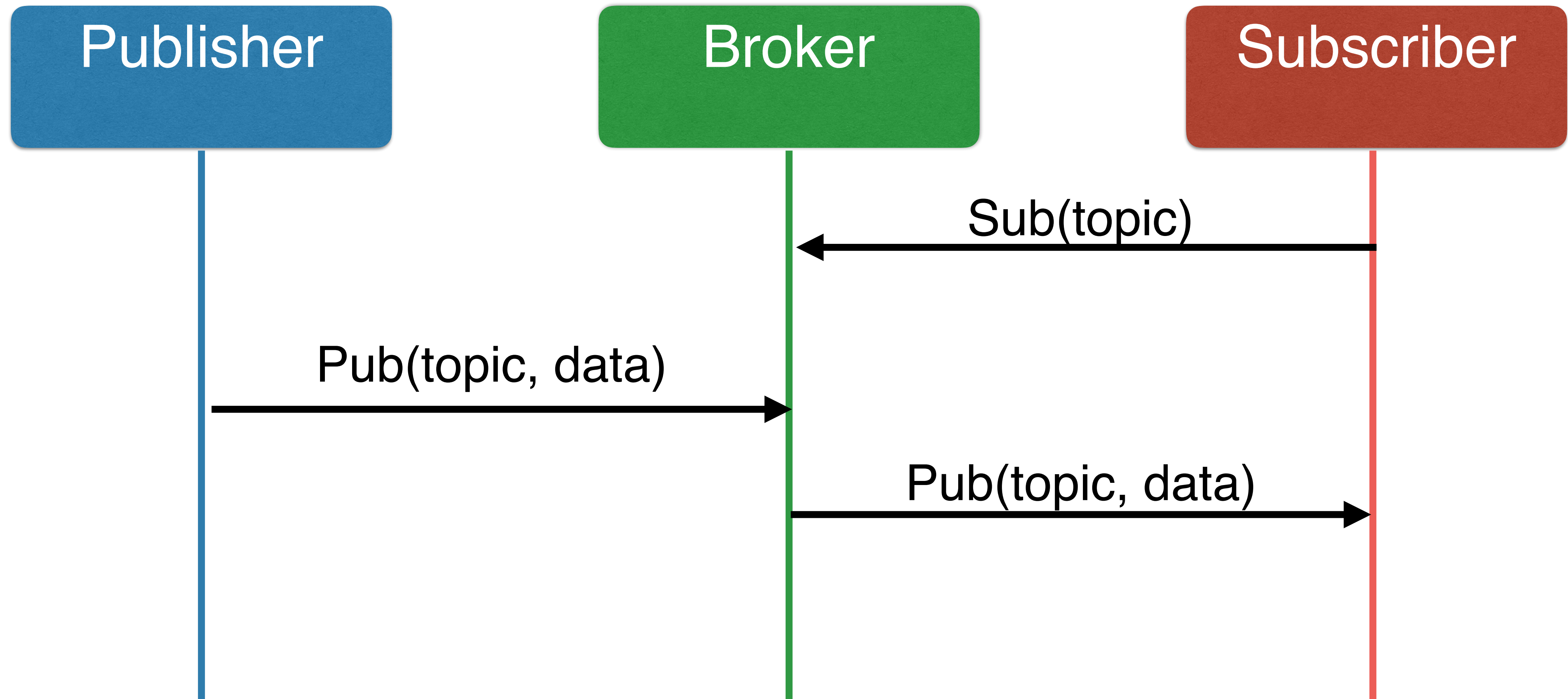
MQTT

MANAGEMENT

SECURITY

APIS &  
Client Libraries







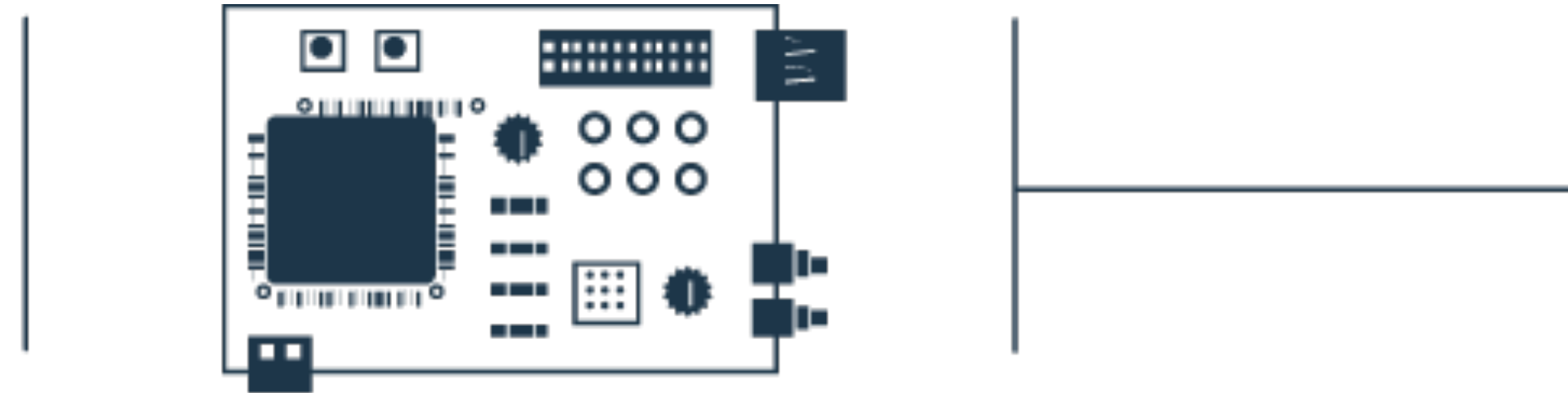
IBM Internet of Things  
Foundation



+

IBM Bluemix





## Your device or gateway

We start with your device, be it a sensor, a gateway or something else.  
To find out how to get it connected, search our recipes.



## MQTT

Your device data is sent securely up to the cloud using  
the open, lightweight MQTT messaging protocol.



## REST & Real-time APIs

Use our secure APIs to connect your apps  
with the data coming from your devices.



## IBM Internet of Things Foundation

This is the hub of all things IBM IoT. This is where you can  
setup and manage your connected devices so that your  
apps can access their live and historical data.



## Your application and analytics

Create applications within IBM Bluemix, another cloud,  
or your own servers to interpret the data you now have access to!

# Devices Can...

1. Publish Events
2. Subscribe To Commands



# Connecting Devices

1. Organization ID
2. Device ID
3. Device Type
4. Auth Token



# Applications Can...

1. Subscribe To Events
2. Publish Commands



# Connecting Applications

1. Organization ID
2. Unique App ID
3. API Key
4. API Token



# Fly Drone Fly

1. Establish WiFi Connection
2. Use Bebop Node Library
3. Register Drone With IoTf
4. Register App With IoTf
5. Publish Commands To Fly





# Demo





MQTT  
WORKS  
BUT....





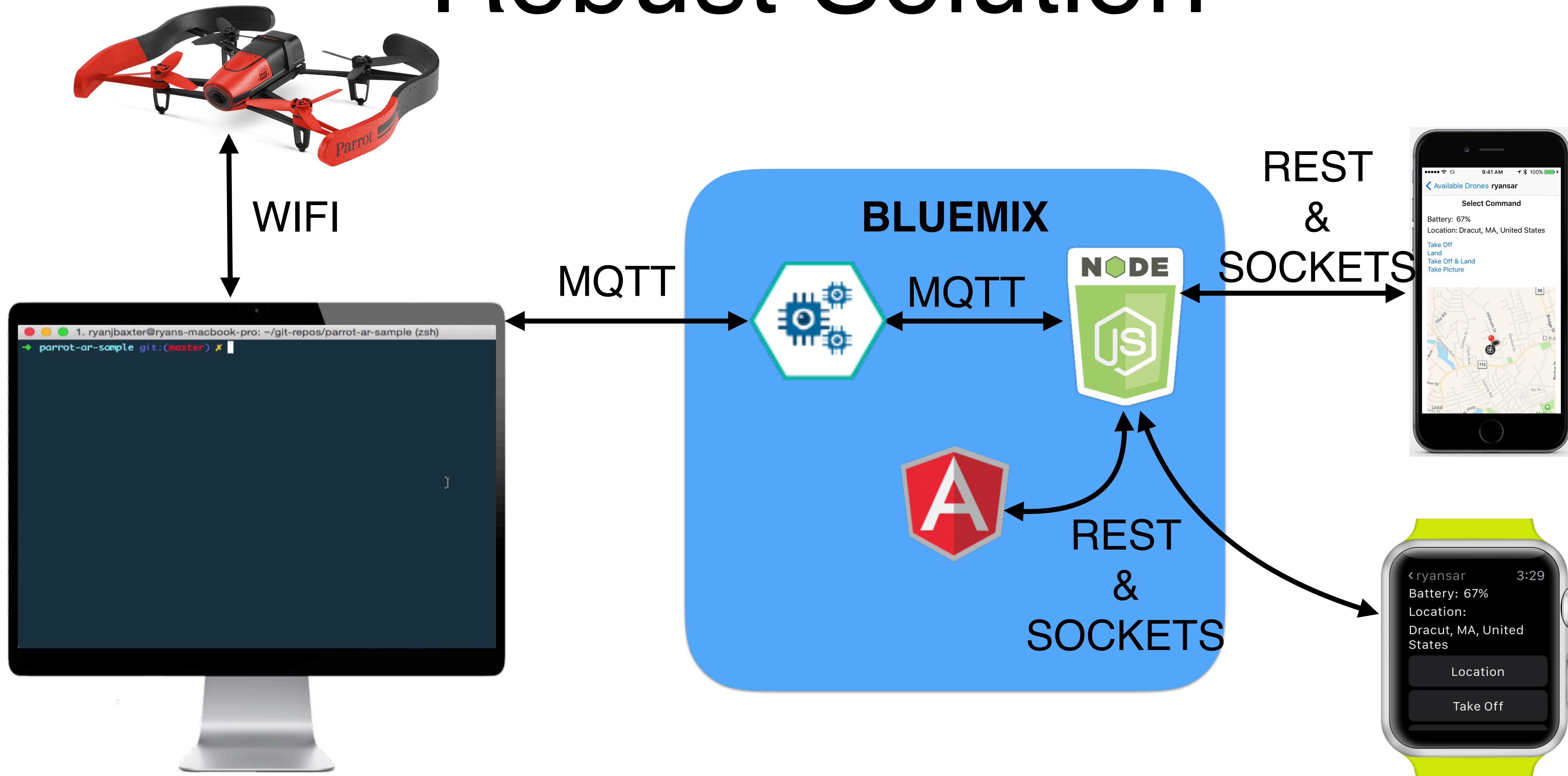
SHOULD  
BE KEPT ON THE  
SERVER



# REST & SOCKETS BACKED BY MQTT



# Robust Solution





# RESOURCES





MQTT

<http://mqtt.org>

IBM Bluemix

<http://bluemix.net>

IBM Internet of Things  
Foundation

<http://internetofthings.ibmcloud.com>





# QUESTIONS

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