link website: https://mosquitto.org/2013/01/mosquitto-debian-repository/

link youtube:
https://www.youtube.com/watchv=1CGfGuZqmhc&feature=youtu.be

link website: https://iotbytes.wordpress.com/mosquitto-mqtt-broker-on-raspberry-pi/

In this Video, Step by Step Demonstration is being done regarding Installing Mosquitto Server (MQTT) on Raspberry Pi 3.

Steps to Install and Configure Mosquitto Server on Raspberry Pi 3:

Step 1: Update the System
#sudo apt-get update

Step 2: Update the System Repositories
#sudo wget http://repo.mosquitto.org/debian/mosquitto-repo.gpg.key
#sudo apt-key add mosquitto-repo.gpg.key
#cd /etc/apt/sources.list.d/
#sudo wget http://repo.mosquitto.org/debian/mosquitto-jessie.list
#sudo apt-get update
#sudo apt-get install mosquitto

Step 3: Install Three Parts of Mosquitto Proper
#sudo apt-get install mosquitto mosquitto-clients python-mosquitto

Step 4: Stop the Server
#sudo /etc/init.d/mosquitto stop

Step 5: Configuring and Starting the Mosquitto Server
#sudo nano /etc/mosquitto/mosquitto.conf

The File Should Look as follows
Place your local configuration in /etc/mosquitto/conf.d/

#
A full description of the configuration file is at
/usr/share/doc/mosquitto/examples/mosquitto.conf.example

pid_file /var/run/mosquitto.pid

persistence true
persistence_location /var/lib/mosquitto/

log_dest topic

log_type error
log_type warning
log_type notice
log_type information

connection_messages true
log_timestamp true

include_dir /etc/mosquitto/conf.d

Step 6: Starting the Server
#sudo /etc/init.d/mosquitto start

Step 7: Open Two Terminals using Putty
Terminal 1: Type the following:
#mosquitto_sub -d -t hello/world

Terminal 2: Type the Following:
mosquitto_pub -d -t hello/world -m "Hello from Terminal window 2!"

you can see the message on Terminal 1...

Check Mosquitto Service Status, Process and Default Port (1883) –

service mosquitto status
ps -ef | grep mosquitto-je*
netstat -tln | grep 1883

If you see Mosquitto service running and listening to TCP Port 1883, you have a functional MQTT Broker.

To uninstall Mosquitto you can use following command –

sudo apt-get purge mosquitto
If you want to completely remove Mosquitto with it's associated configuration files, use following command –

sudo apt-get --purge remove mosquitto

MQTT Public Brokers for global communication

URL: https://github.com/mqtt/mqtt.github.io/wiki/public_brokers

This page is an effort to list the publically-accessible MQTT brokers, often useful for testing and prototyping.

Note: none of these test brokers carry any guarantee of service. Be sensible when using them and don't break things for others! :-)

field	value
address	`iot.eclipse.org`
port	`1883`, `80` (WebSockets)
type	mosquitto

field	value
info	web page, Xively statistics, topics and HTTP bridge

---

field	value
address	`test.mosquitto.org`
port	`1883`, `8883` (SSL), `8884` (SSL), `80` (WebSockets)
type	mosquitto
info	web page, Xively statistics, topics and HTTP bridge

---

field	value
address	`dev.rabbitmq.com`
port	`1883`
type	rabbitmq
info	admin dashboard

---

field	value
address	`broker.mqttdashboard.com`
port	`1883`, `8000` (WebSockets)
type	HiveMQ

field	value
info	information page, stastistics and dashboard

---

field	value
address	`q.m2m.io`
port	`1883`
type	`m2m.io`
info	requires signup/username and password, connecting to m2m.io

---

field	value
address	`www.cloudmqtt.com` (Note: actual host varies, see dashboard)
port	`18443`, `28443` (SSL)
type	mosquitto
info	requires signup/username and password, pricing (free plan available), documentation

---

field	value
address	`mqtt.simpleml.com`
port	`1883` (MQTT), `8883` (MQTT+SSL), `80` (REST), `80` (WebSockets), `5683` (CoAP)
type	SimpleML

field	value
info	Free MQTT service to evaluate Machine Learning models, documentation

---

field	value
address	`mqtt.dioty.co`
port	`1883` (MQTT), `8883` (MQTT+SSL), `8080` (WebSockets), `8880` (WebSockets+SSL)
type	`mosca`
info	Free - requires signup/username and password, documentation, includes mobile IoT app (iOS and Android)

---

field	value
address	`mqtt.swifitch.cz`
port	`1883` (MQTT)
type	`mosquitto`
info	Free, it is mostly running for Swifitch project, but you can use it too for testing your IoT or whatever ;), it is running on Raspberry Pi.