**INSTALL MOSQUITTO BROKER ON LINUX**

sudo apt-get update.

sudo apt-get install mosquitto

sudo apt install mosquitto mosquitto-clients

HOME -> Open Terminal

cd /etc/mosquitto

ls

sudo vim mosquitto.conf

Add the following lines at the end of the mosquitto.conf file

listener 1883

allow\_anonymous true

Quit using : Escape and !wq command

sudo mosquitto -c mosquitto.conf

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**INSTALL MOSQUITTO BROKER ON WINDOWS**

* Install broker
* Open cmd window. Run the command **cd C:\Program Files\mosquitto**
* Add the following lines at the end of the mosquitto.conf file

listener 1883

allow\_anonymous true

* Start mosquito. Run the command **mosquitto**

Open two CMD windows

* Start the mosquito broker on both.
* Publish on one

**mosquitto\_pub -h localhost -t test -m "hello world"**

* Subscribe on the other

**mosquitto\_sub -h localhost -t test**

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**STM\_CODE:**

Configure all 4 LEds - GPIO\_Output

/\* USER CODE BEGIN PV \*/

uint8\_t flag=0;

/\* USER CODE END PV \*/

/\*In while(1)\*/

if(flag == 1){

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_12, 1);

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_13, 1);

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_14, 1);

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_15, 1);

}

else{

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_12, 0);

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_13, 0);

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_14, 0);

HAL\_GPIO\_WritePin(GPIOD, GPIO\_PIN\_15, 0);

}

===========================================================================================

/\*JSON SCRIPT FOR TEMPLATE\*/

{

"variablelist": [

{

"address": "0x20000028",

"type": 1,

"value": "{{payload}}"

}

],

"accesspoint" : 0

}

============================================================================================

Log in to your server a second time, so you have two terminals side-by-side. In the new terminal, use mosquitto\_sub to subscribe to the test topic:

mosquitto\_sub -h localhost -t test

-h is used to specify the hostname of the MQTT server, and -t is the topic name.

You’ll see no output after hitting ENTER because mosquitto\_sub is waiting for messages to arrive. Switch back to your other terminal and publish a message:

mosquitto\_pub -h localhost -t test -m "hello world"

The options for mosquitto\_pub are the same as mosquitto\_sub, though this time we use the additional -m option to specify our message.

Hit ENTER, and you should see hello world pop up in the other terminal. You’ve sent your first MQTT message!

Enter CTRL+C in the second terminal to exit out of mosquitto\_sub, but keep the connection to the server open.

We’ll use it again for another test in Step 5.

Turn Led ON /OFF From LOCAL MACHINE

mosquitto\_pub -p 1883 -h 192.100.100.1 -t "test/topic" -m "hello desd”

mosquitto\_pub -t "test/topic" -m "1"

mosquitto\_sub -t "test/topic"

mosquitto\_pub -t desd -h 192.168.0.102 -p 1883 -m "room temp is 25c"

mosquitto\_sub -t desd -h 192.168.0.102 -p 1883