At SiliconCode, we are continually updating and innovating. In our latest implementation of remote switching, we are making use of a public broker available on the internet to connect between publisher and the subscriber. In our case, publisher is anyone who is subscribed to the broker (Host is: broker.hivemq.com) and publishes to a topic (Light). The host connects to the client (publisher) through a specific port (8000). The subscriber is our microcontroller, which subscribes to the topic "Light" at the same broker. Whenever there is anything published (either a 1 or 0 to the topic Light) the broker broadcasts to all the subscribers to that topic. We as a subscriber will execute a callback function when that happens and switch the light on or off accordingly.

Here are the steps:

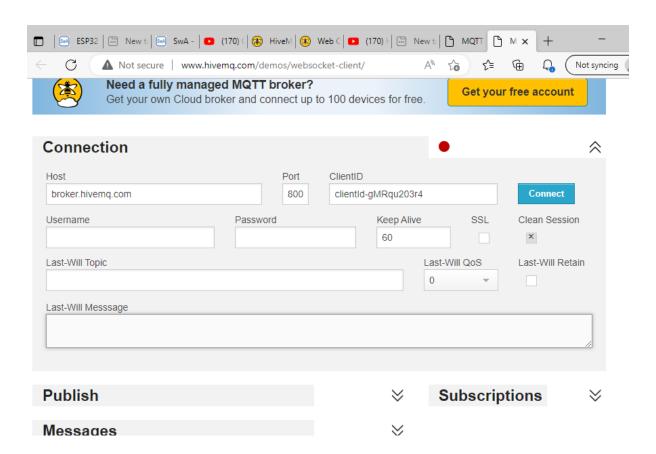
Open the websocket link to the broker "hivemq" by clicking (Ctrl + click) on the link below:

MQTT Websocket Client (hivemq.com)

For host enter: broker.hivemq.com

For port enter: 8000

(Don't have to change anything else)



Click on Connect button on the top right.

It takes you to a Subscriber/Publisher window.

To switch on the light at the SiliconCode office, enter the topic as Pan_Tilt.

In the message box type 4 sets of PAN,TILT values each 3 digit and press publish.

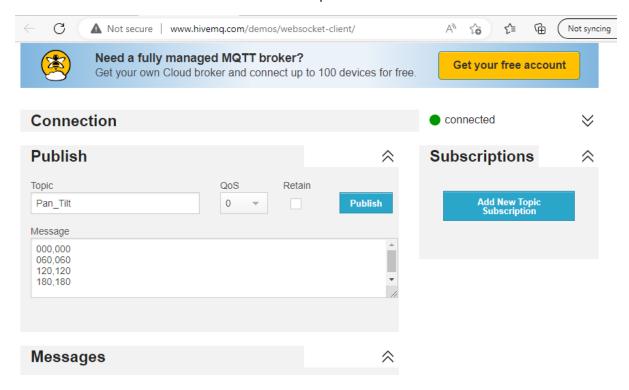
000,000

060,060

120,120

180,180

The broker send this to all the subscribers to the topic "Pan TIIt".



The esp32 board, which is signed up as a subscriber at hivemq to the topic Pan Tilt will read the values and apply the same to the servo motors responsible for the Pan and Tilt.