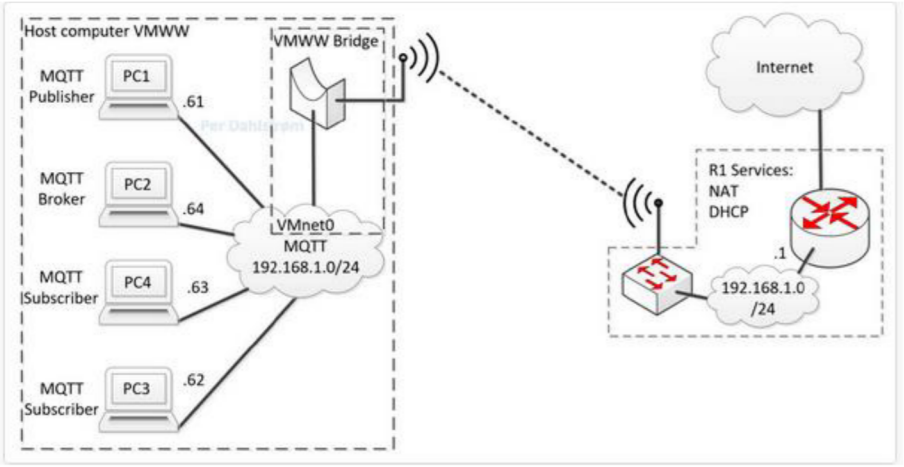
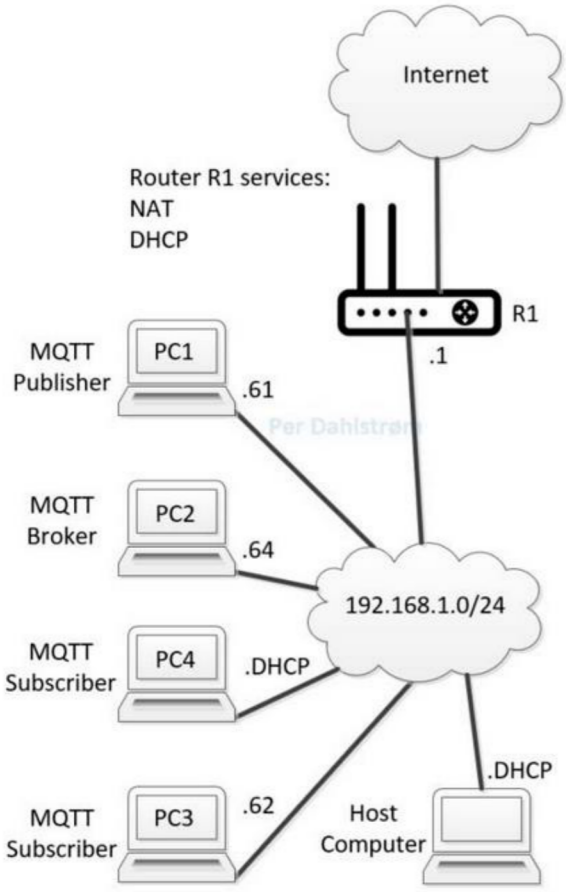
Assignment 55 Basic MQTT devices on VMWW bridged network.



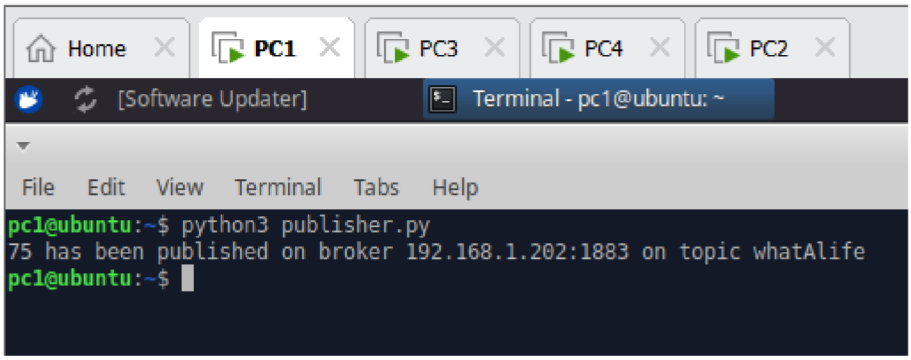


PC1, PC2, PC3 on static IP, PC4 on dhcp

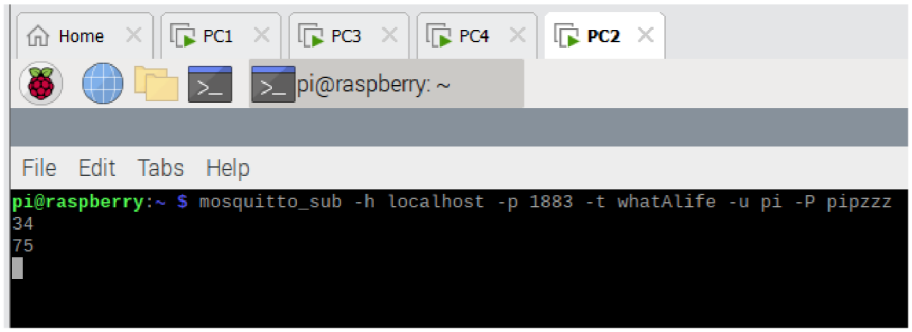
The static pc's should be outside automatic dhcp range of the router

All pc's connected to vmnet0 and vmnet0 bridged to the host pc wifi

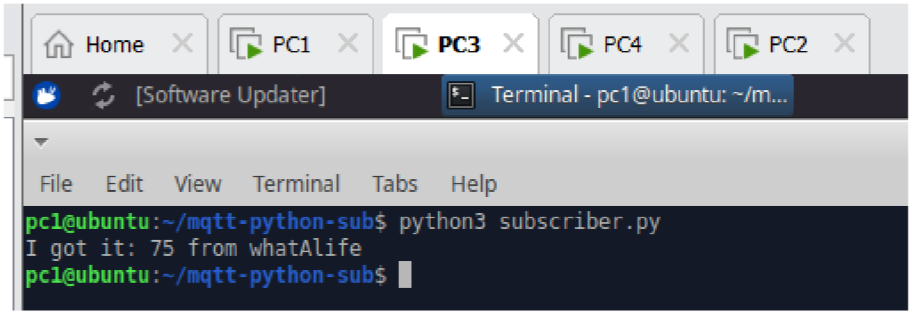
PC1 as a publisher



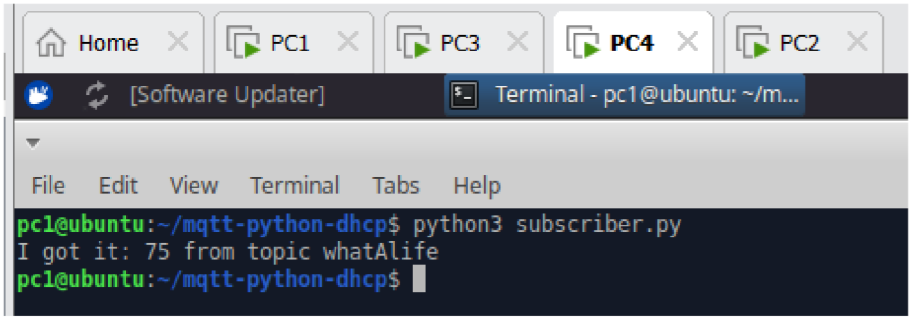
PC2 as a broker, host



PC3 as a static subscriber



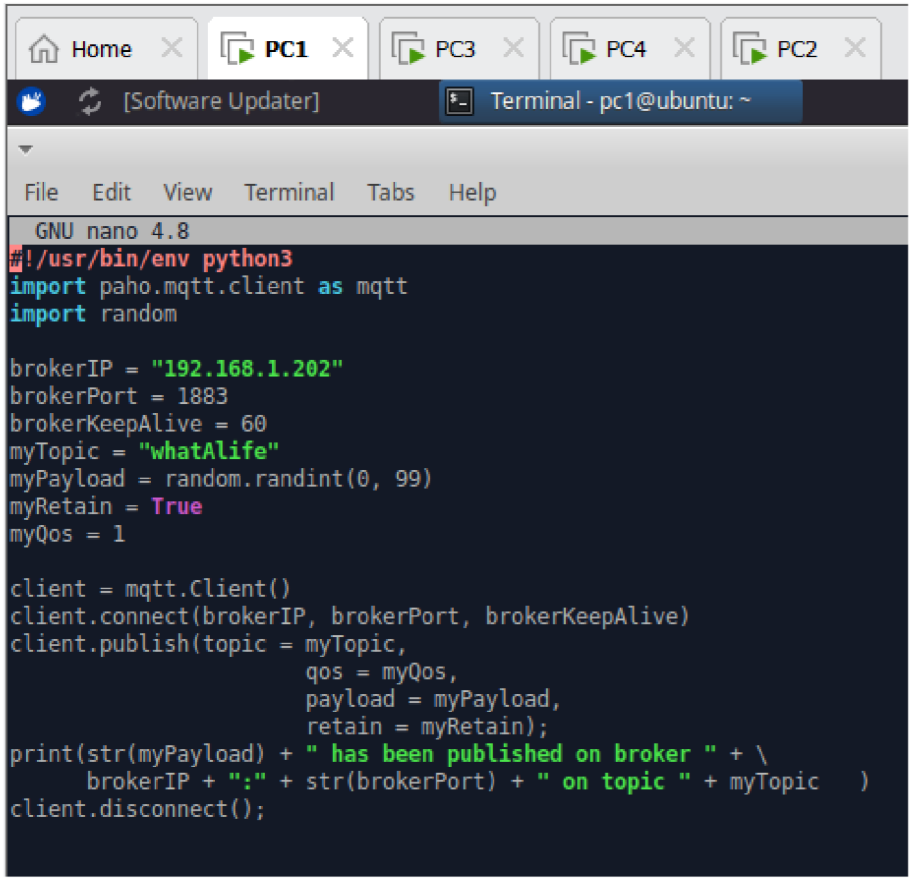
PC4 as a dhcp subscriber



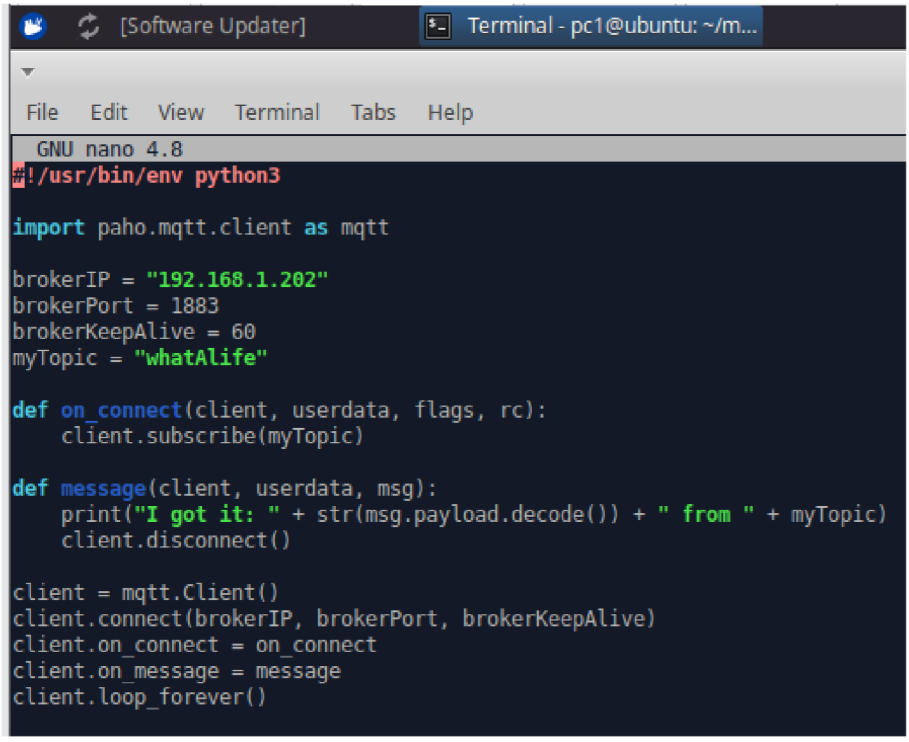
Run sudo apt update and upgrade and after “sudo apt install python3-pip", then “sudo pip3 install paho-mqtt" for publisher and subscriber

For the broker “sudo apt install mosquitto” and “sudo apt install mosquitto-clients"

The publisher program



The subscriber program


[Software Updater]
Terminal - pc1@ubuntu: ~/m...
File Edit View Terminal Tabs Help
GNU nano 4.8
#!/usr/bin/env python3
import paho.mqtt.client as mqtt
brokerIP = "192.168.1.202"
brokerPort = 1883
brokerKeepAlive = 60
myTopic = "whatAlife"
def on_connect(client, userdata, flags, rc):
client.subscribe(myTopic)
def message(client, userdata, msg):
print("I got it: " + str(msg.payload.decode()) + " from " + myTopic)
client.disconnect()
client = mqtt.Client()
client.connect(brokerIP, brokerPort, brokerKeepAlive)
client.on_connect = on_connect
client.on_message = message
client.loop_forever()