

MQTTModbus

1. Install RIAPS on a Computer (follow the instruction of <https://github.com/RIAPS/riaps-integration/blob/master/riaps-x86runtime/README.md>)
2. Flash the BBB (follow the instruction of [https://github.com/RIAPS/riaps-bbbruntime/README.md](https://github.com/RIAPS/riaps-integration/blob/master/riaps-bbbruntime/README.md))
3. (only for RIAPS 1.1.15) Turn off the security by editing /usr/local/riaps/etc/riaps.conf and changing "security = off" on both the VM and BBBs.
4. Log into the BBBs and copy the public key to the authorized keys – "sudo cp /usr/local/riaps/keys/id_rsa.pub ~/.ssh/authorized_keys"
5. Connect via Ethernet both VM and BBBs to a router (with a working internet connection)
6. Install the MQTT library both on VM and BBBs: sudo pip3 install paho-mqtt
7. Test MQTT (follow the instruction of <https://github.com/RIAPS/riaps-apps/tree/master/apps-vu/MQTTExample>)
8. In the VM open the folder MQTTModbus and check the .deplo file (see if the IP addresses match the wanted devices) it could be useful to know the topics
9. Inside the .riaps file check the IP address of the BROKER (it is written twice inside the code) that one want to use: or a private broker created on the computer or free online broker such as iot.eclipse.org test.mosquitto.org
10. For Modbus connection follow the instruction of <https://github.com/RIAPS/riaps-library/tree/master/ModbusTesting>
11. Check the slave addresses and boudrate inside the .riaps file (they have to match that ones of the Modbus slaves)
12. Launch the RIAPS CTRL and an deploy the codes.