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-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. (only for RIAPS 1.1.15) Log into the VM 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 .ripas file (they have to match that ones of the Modbus slaves)

12. Launch the RIAPS CTRL and an deploy the codes.