Important Information for MQTT-NX1P2 Connection

The following document contains further explanation on the important steps outlined during the MQTT Server, Mosquito Broker and Node-RED, controller connection configuration. The following document should be viewed in conjunction with the MQTT_NX1P2 Connection Guide PowerPoint slides and demonstration video.

MQTT Server, Mosquito Broker and Node Red Installation and Configuration

Refer to the ***'mosquitto Installation on different OS'*** Text document provided to determine which Mosquito package to install. Installation of MQTT.fx is also required. Depending on which version of Node-RED you have installed, it may be required to install a dashboard and MQTT module. This can be done my selecting the '*Manage Palette'* tab located in the top right settings tab. Select the Install tab and search for the desired module i.e. (dashboard and MQTT). It is recommended that you install the lasts version of each module.

MQTT Server

Click on the settings tab and input the information. Profile Name: local mosquito. Profile Type: MQTT Broker. Broker Address: 192.168.250.100. Broker Port: 1883. Client ID: Needs to be authentic i.e. Demo_Client. Username: Arbitrary name (omron). Password: Arbitrary password (omron123). Subscribe to a topic i.e. "*MachineData/*" and "*OEE/*".

Windows Firewall

A new rule is required in order to establish a connection. This can be done by selecting the Advanced settings in the Windows Firewall settings, then selecting Inbound Rules -> New Rule. Create a rule for the port then specify the desired port number ('1883').

Sysmac Studio

Ensure the user credentials match the client settings established in the MQTT server. In MQTT_client -> Host: 192.168.250.100. UserLogin.User: omron. UserLogin.password: omron123. ServerPort: 1883.

Node-Red

Firstly, type ***"node-red"*** in the nodered.js window. Then identify the URL address, i.e. '***https://127.0.0.1:1880***' and type this into your search engine to launch Node-RED. Insert a MQTT connection node and ensure the user credentials are the same as established in the MQTT server. Add a debug node to view if any information is being received by the server. Add a function node to extract the information from the server. Add a dashboard node to view the data.