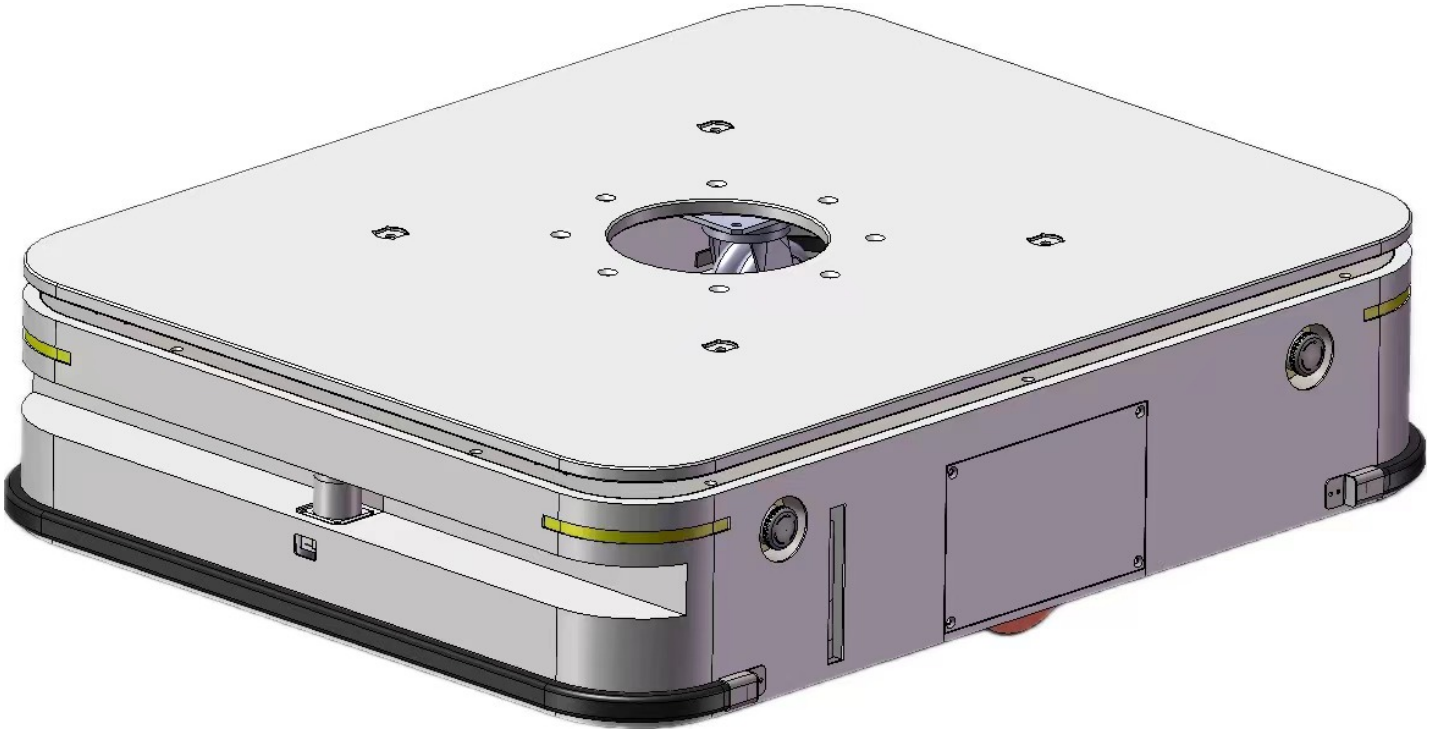
LIFTIANS

## New Robot Configuration

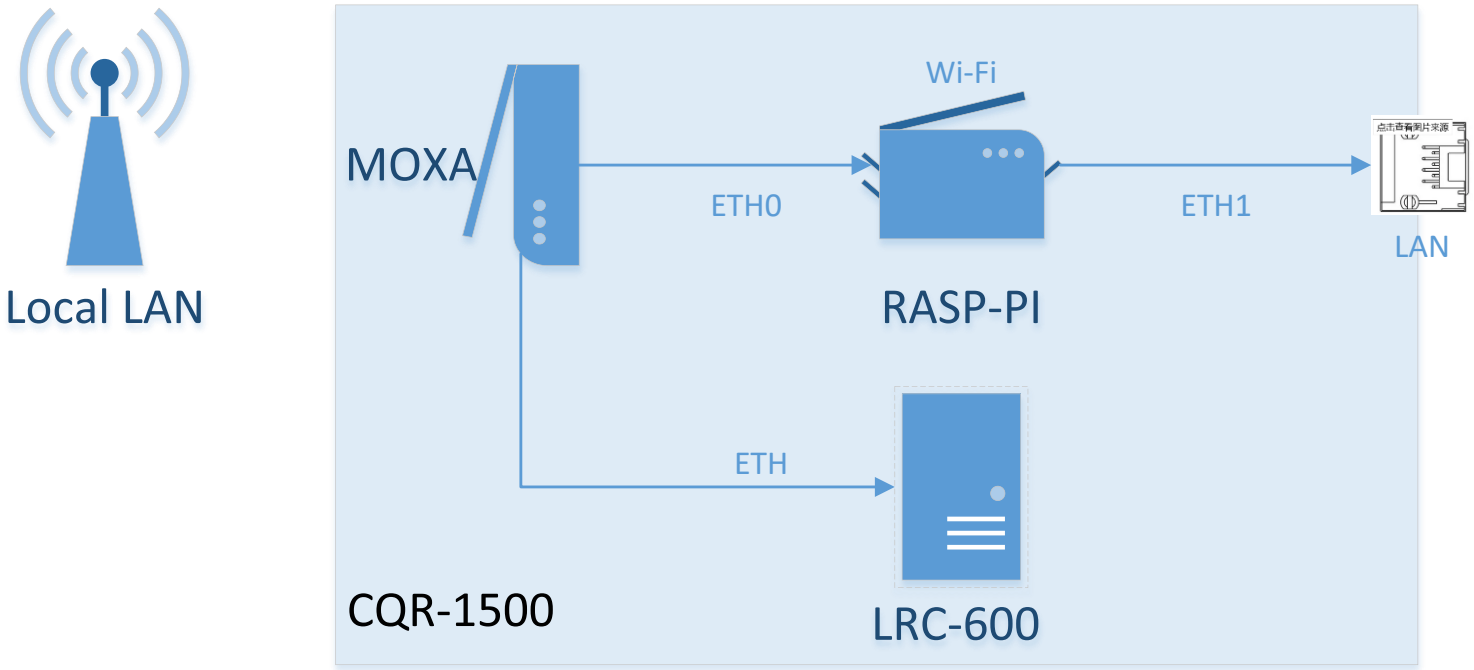


LIFTIANS

| | | | |
|---|---|---|---|
| **Model** | CQR-1500 | **SN** | **CQR152401080057** |
| **Engineer** | **Allen Cheung** | **Date** | **Jan 8 2024** |

LIFTIANS

Network Topology



LIFTIANS

| | | | |
|---|---|---|---|
| Local LAN | SSID | LASER_CART | |
| | PW | okagv2015 | |
| | IP | 192.168.1.1 | |
| CQR-1500 | MOXA-1137C | WLAN | 192.168.1.157 |
| | | | ID:admin |
| | | | PW:moxa |
| | | LAN | 192.168.0.1 |
| | RASP-PI | WLAN | 192.168.1.57 |
| | | ETH0 | 192.168.0.3 |
| | | ETH1 | 192.168.126.252 |
| | LRC-600 | ETH | 192.168.0.2 |
| | | Remote server | 192.168.1.2/9007 |
| | | | 192.168.1.251/51888 |
| | | | 192.168.1.20/9007 |
| | | | 192.168.0.3/51888 |
| | | | 192.168.126.253/51888(wired) |

LIFTIANS

# Network settings on the computer (Already configured on the Y4B computer)

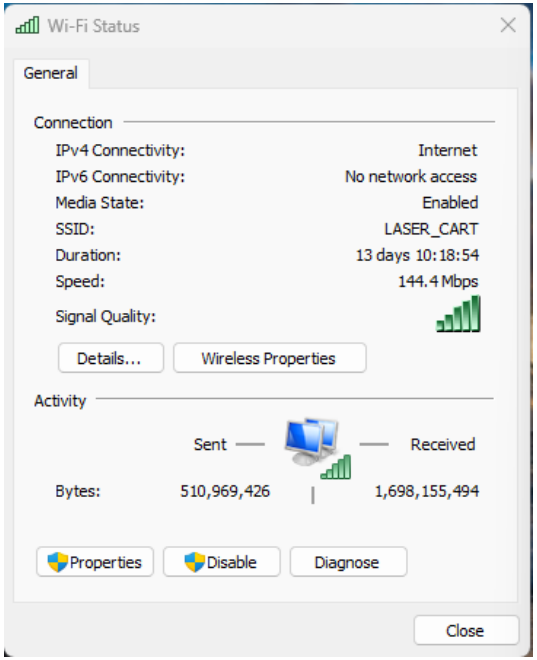
There are two network settings on the computer:

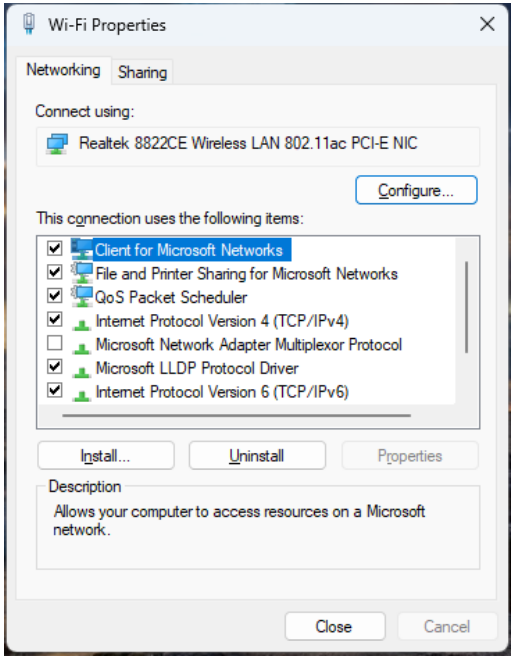
To get to the Internet Protocol Version 4 (TCP/IPv4) Properties, follow the steps below:

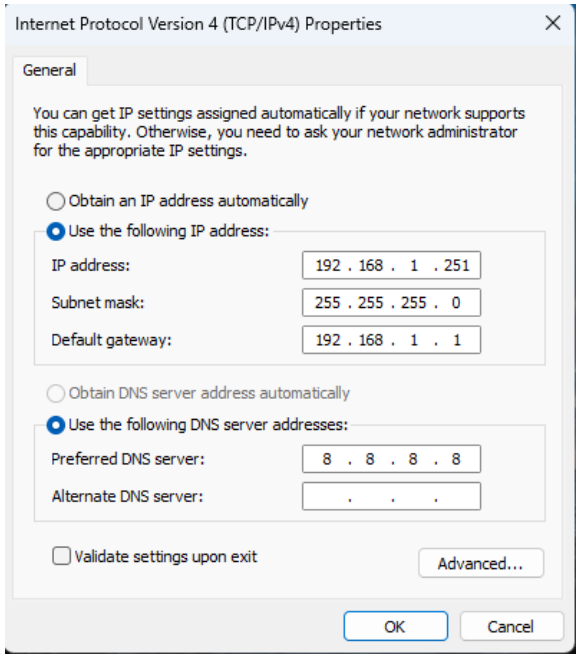
**Control Panel > Network and Internet > Network and Sharing Center > Connections > Properties > Internet Protocol Version 4 (TCP/IPv4) > Properties**

Wifi to LASER_CART:

Static IP:



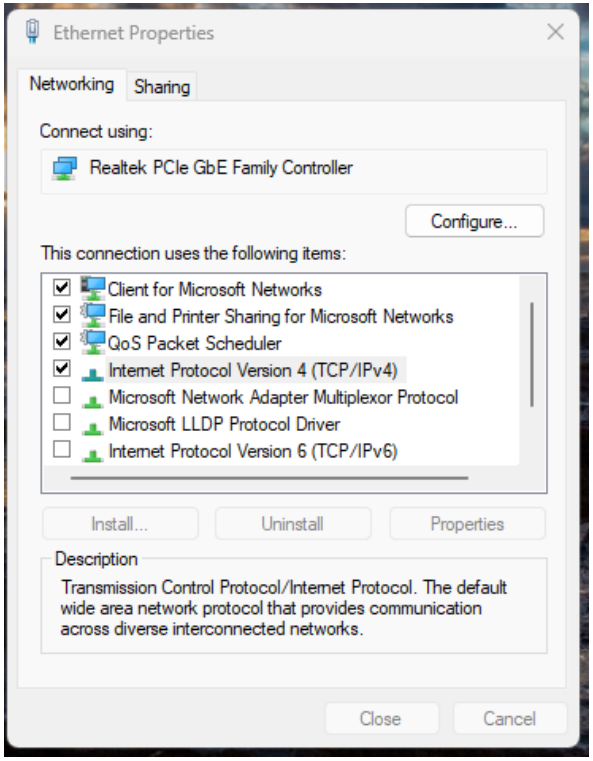



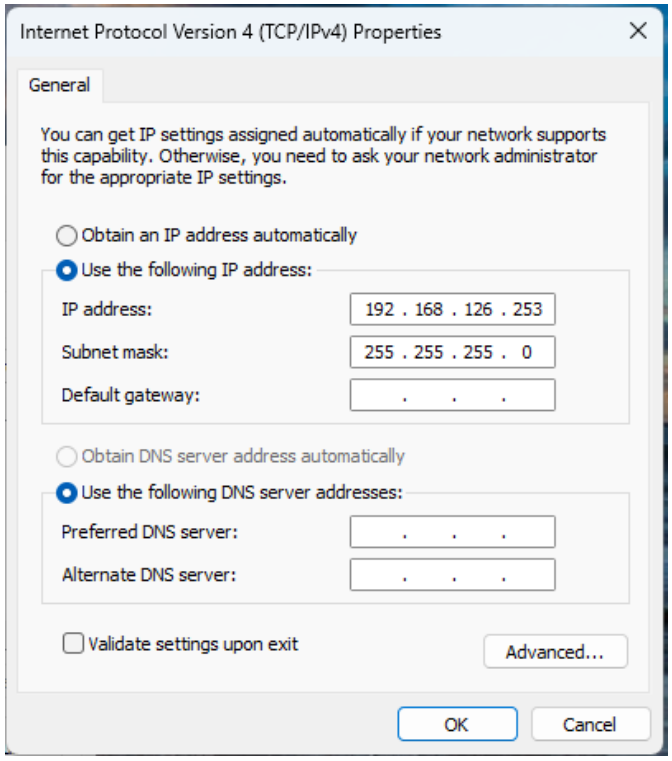



LIFTIANS

## Ethernet Cable directly connected to the robot:

Set the Computer Static IP: 192.168.126.253



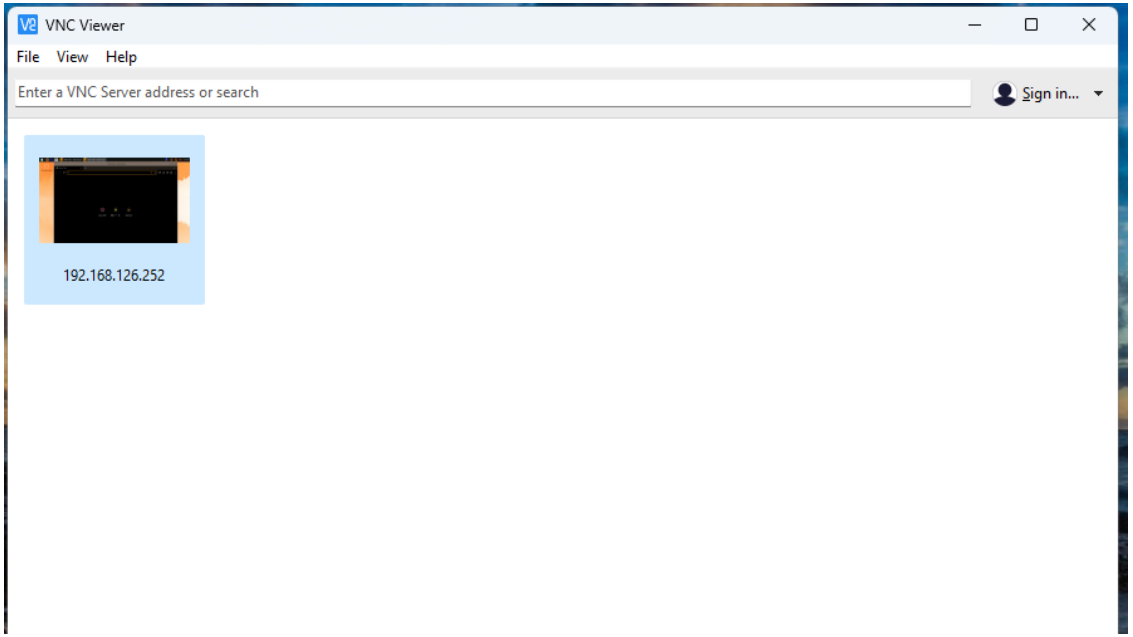



LIFTIANS

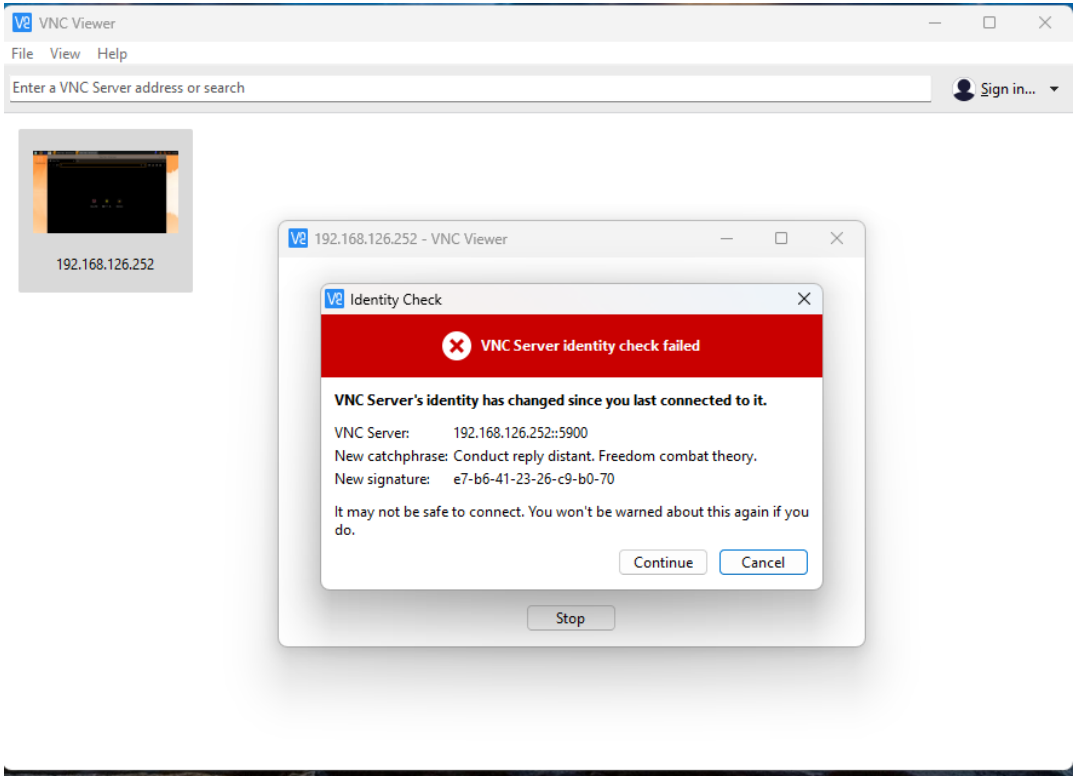
## Run VNC Viewer

While the ethernet cable is being connected, run the VNC Viewer program.

Connecting to the Raspberry Pi IP 192.168.126.252 with ID: liftians and password being the same as of MM. The 192.168.126.252 IP is the static IP within the Raspberry Pie environment.

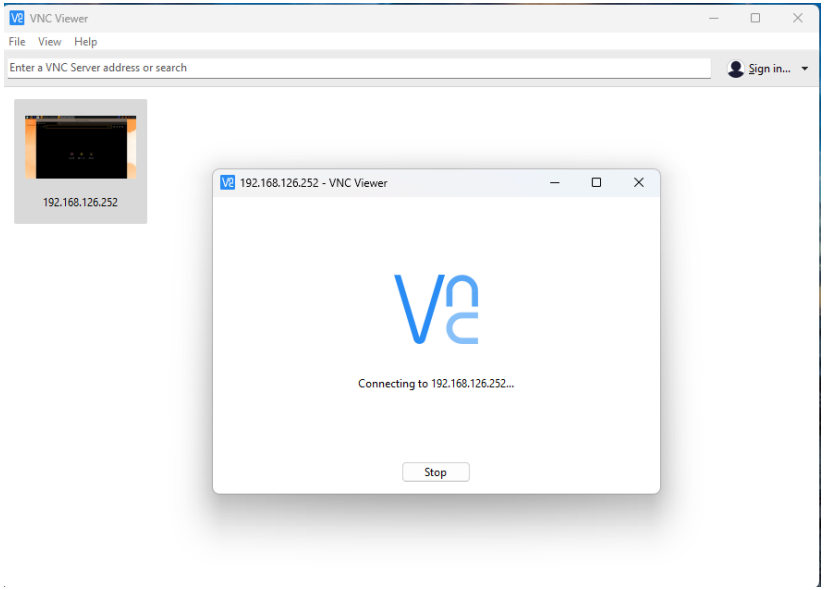


LIFTIANS



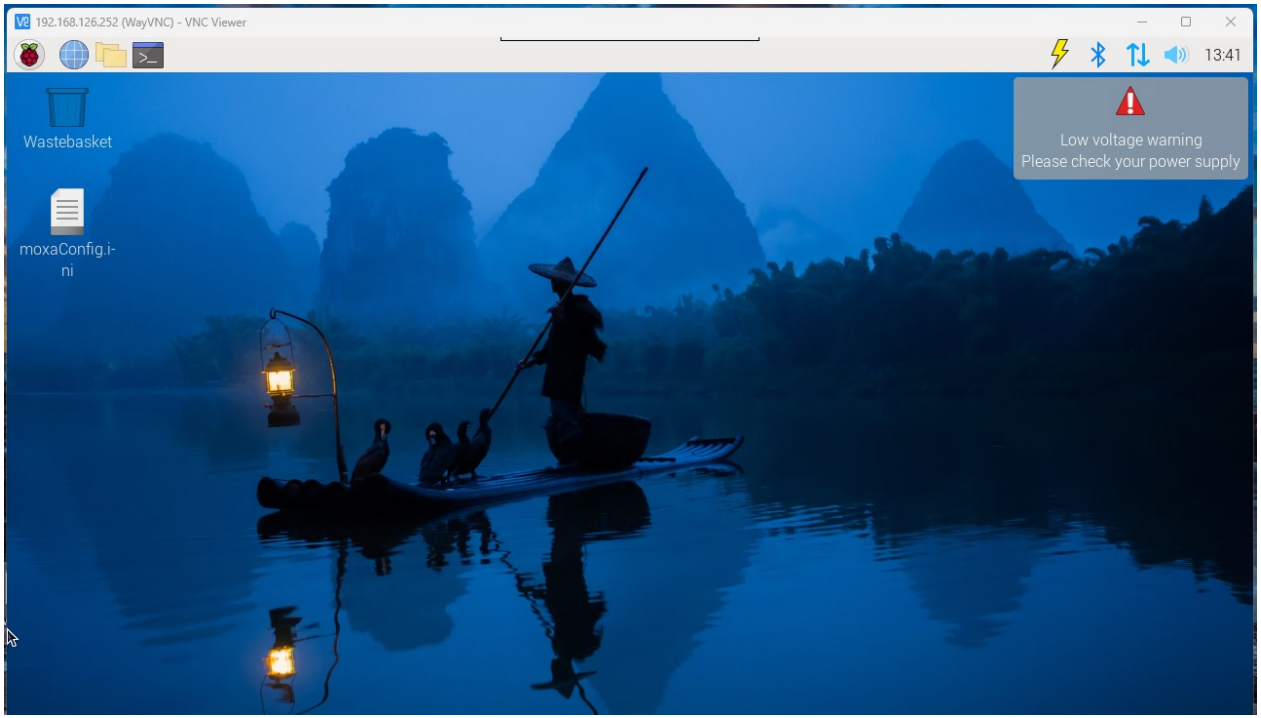

Click on Continue

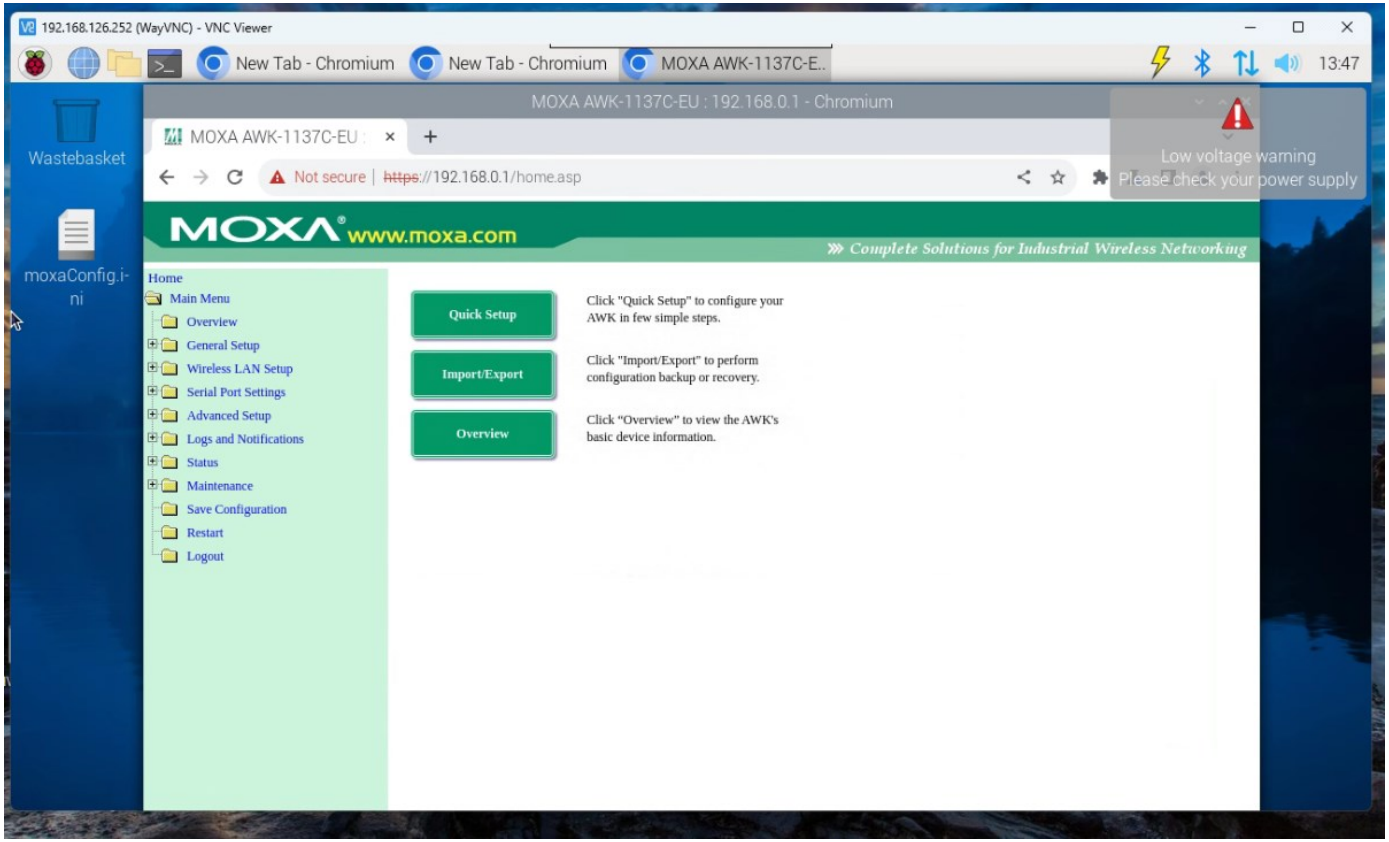
LIFTIANS


VNC Viewer
File View Help
Enter a VNC Server address or search
Sign in...
192.168.126.252
192.168.126.252 - VNC Viewer
Connecting to 192.168.126.252...
Stop

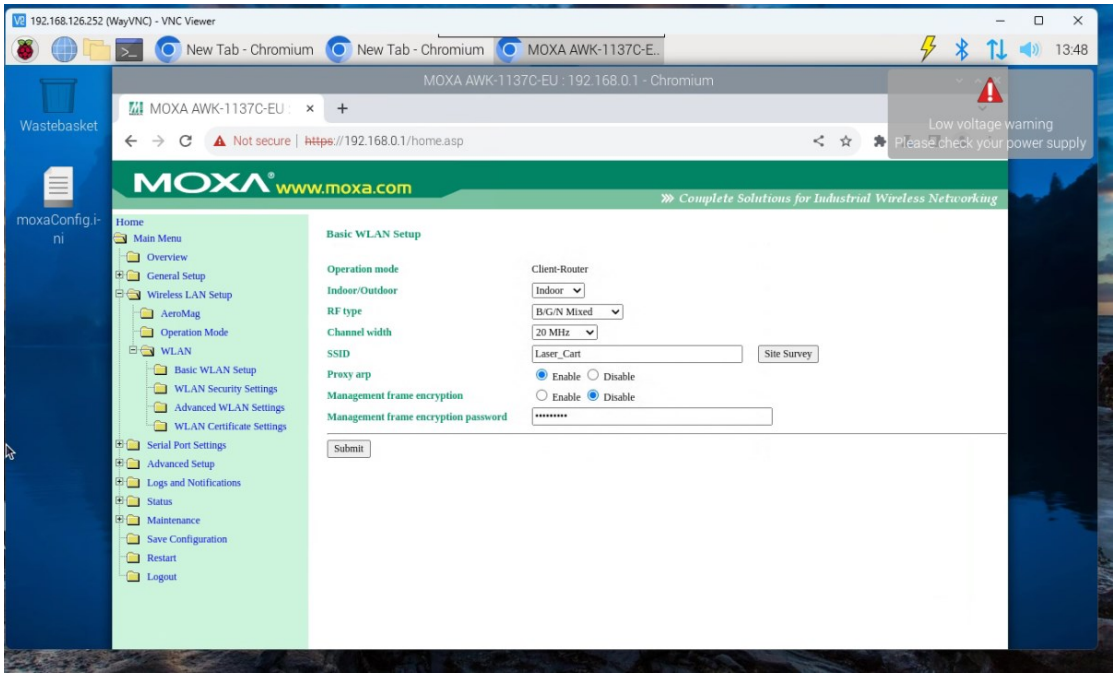
LIFTIANS

Inside the VNC Viewer, open the web browser to access 192.168.0.1 Moxa page to change the password and other network settings



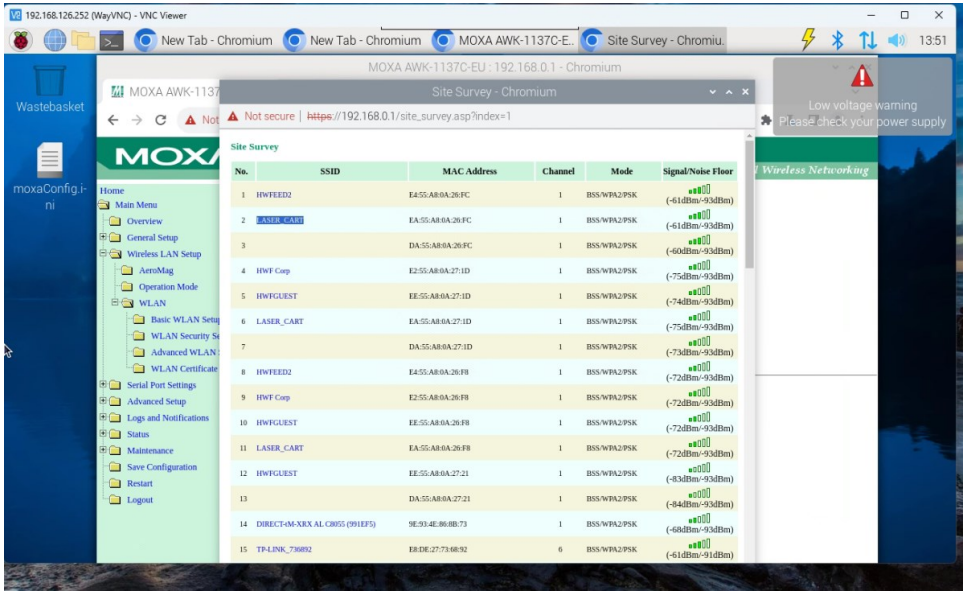


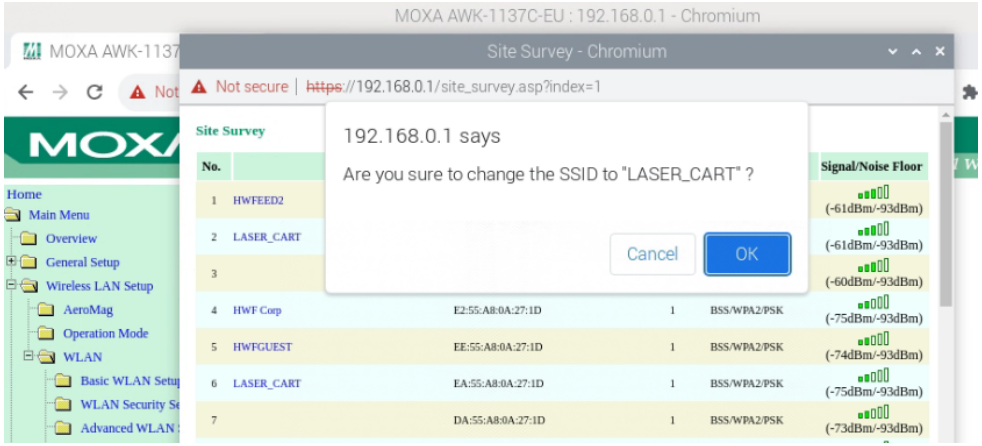

Browse Main Menu > Wireless LAN Setup > WLAN > Basic WLAN Setup




Click on the SiteSurvey button and select any LASER_CART access points

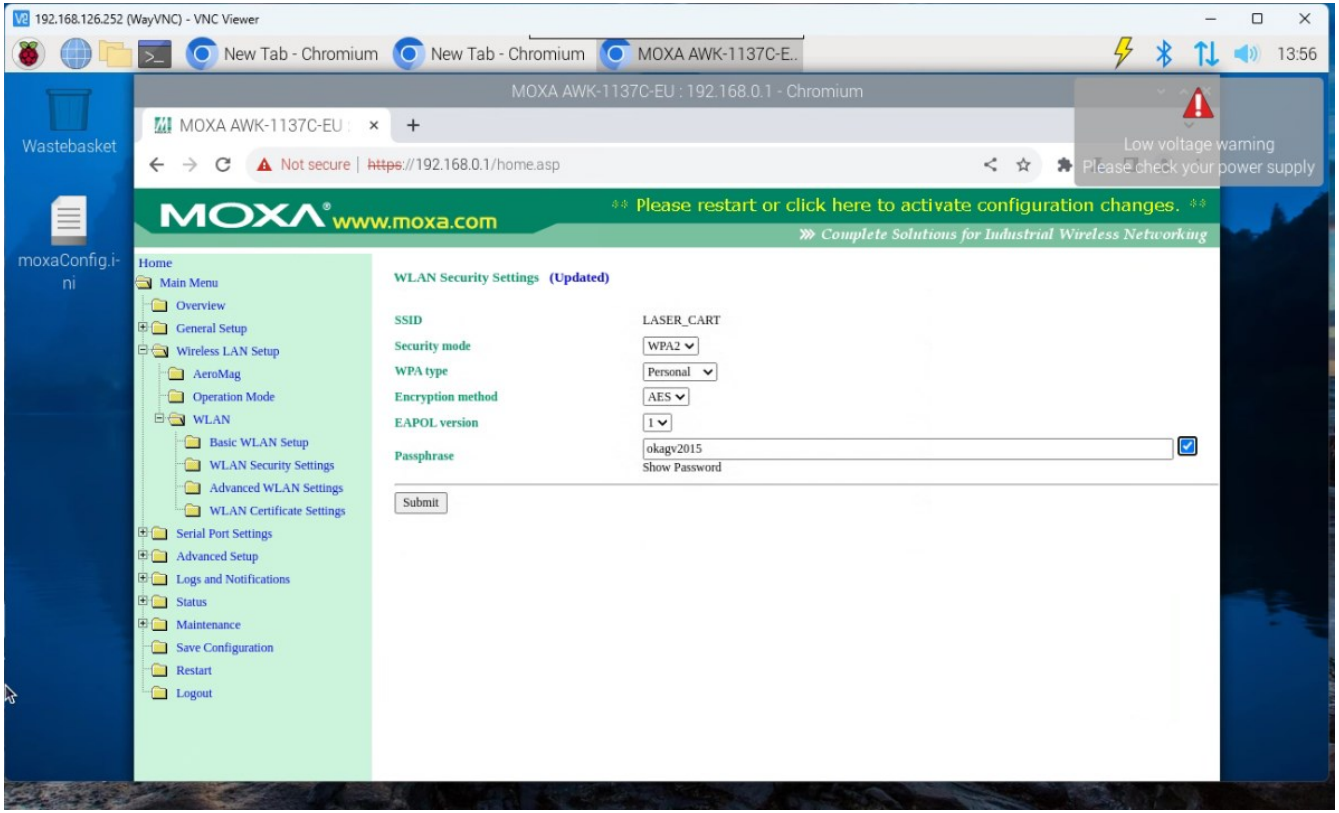
LIFTIANS


192.168.126.252 (WayVNC) - VNC Viewer
New Tab - Chromium
New Tab - Chromium
MOXA AWK-1137C-E..
Site Survey - Chromiu.
13:51
Wastebasket
moxaConfig.i-ni
MOXA AWK-1137C-EU : 192.168.0.1 - Chromium
Site Survey - Chromium
Not secure | https://192.168.0.1/site_survey.asp?index=1
Low voltage warning
Please check your power supply
Site Survey
No. SSID MAC Address Channel Mode Signal/Noise Floor
1 HWFEED2 E4:55:A8:0A:26:FC 1 BSS/WPA2/PSK (-61dBm/-93dBm)
2 LASER_CART EA:55:A8:0A:26:FC 1 BSS/WPA2/PSK (-61dBm/-93dBm)
3 DA:55:A8:0A:26:FC 1 BSS/WPA2/PSK (-60dBm/-93dBm)
4 HWF Corp E2:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-75dBm/-93dBm)
5 HWFGUEST EE:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-74dBm/-93dBm)
6 LASER_CART EA:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-75dBm/-93dBm)
7 DA:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-73dBm/-93dBm)
8 HWFEED2 E4:55:A8:0A:26:F8 1 BSS/WPA2/PSK (-72dBm/-93dBm)
9 HWF Corp E2:55:A8:0A:26:F8 1 BSS/WPA2/PSK (-72dBm/-93dBm)
10 HWFGUEST EE:55:A8:0A:26:F8 1 BSS/WPA2/PSK (-72dBm/-93dBm)
11 LASER_CART EA:55:A8:0A:26:F8 1 BSS/WPA2/PSK (-72dBm/-93dBm)
12 HWFGUEST EE:55:A8:0A:27:21 1 BSS/WPA2/PSK (-83dBm/-93dBm)
13 DA:55:A8:0A:27:21 1 BSS/WPA2/PSK (-84dBm/-93dBm)
14 DIRECT-tM-XRX AL C8055 (991EF5) 9E:93:4E:86:8B:73 1 BSS/WPA2/PSK (-68dBm/-93dBm)
15 TP-LINK_736892 E8:DE:27:73:68:92 6 BSS/WPA2/PSK (-61dBm/-91dBm)
Home
Main Menu
Overview
General Setup
Wireless LAN Setup
AeroMag
Operation Mode
WLAN
Basic WLAN Setup
WLAN Security Se
Advanced WLAN
WLAN Certificate
Serial Port Settings
Advanced Setup
Logs and Notifications
Status
Maintenance
Save Configuration
Restart
Logout
Wireless Networking

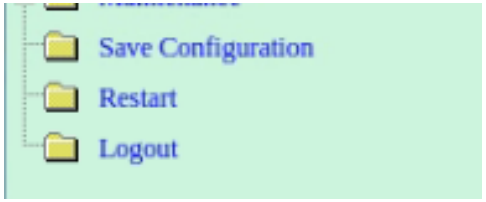

MOXA AWK-1137C-EU : 192.168.0.1 - Chromium
Site Survey - Chromium
Not secure | https://192.168.0.1/site_survey.asp?index=1
192.168.0.1 says
Are you sure to change the SSID to "LASER_CART" ?
Cancel
OK
Site Survey
No.
Signal/Noise Floor
1 HWFEED2 (-61dBm/-93dBm)
2 LASER_CART (-61dBm/-93dBm)
3 (-60dBm/-93dBm)
4 HWF Corp E2:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-75dBm/-93dBm)
5 HWFGUEST EE:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-74dBm/-93dBm)
6 LASER_CART EA:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-75dBm/-93dBm)
7 DA:55:A8:0A:27:1D 1 BSS/WPA2/PSK (-73dBm/-93dBm)
Home
Main Menu
Overview
General Setup
Wireless LAN Setup
AeroMag
Operation Mode
WLAN

Set password to okagv2015 and click Submit

Click on WLAN Security Settings and check Show Password box to type in the correct password again.




Save Configuration and Restart the Moxa router

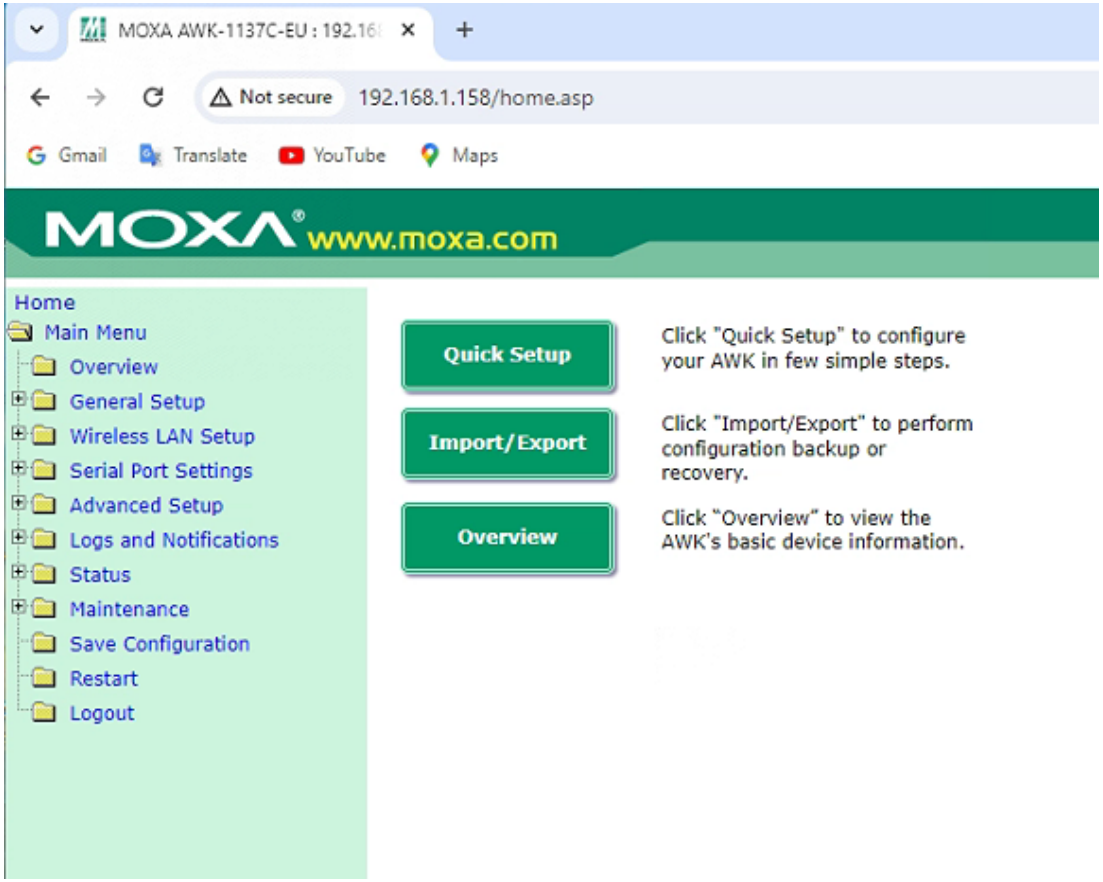



Save and restart the Moxa program to make the changes effective. It will take about one minute to restart the Moxa router

LIFTIANS

# Log in to Moxa page outside VNC Viewer – DISCONNECTING THE ETHERNET CABLE

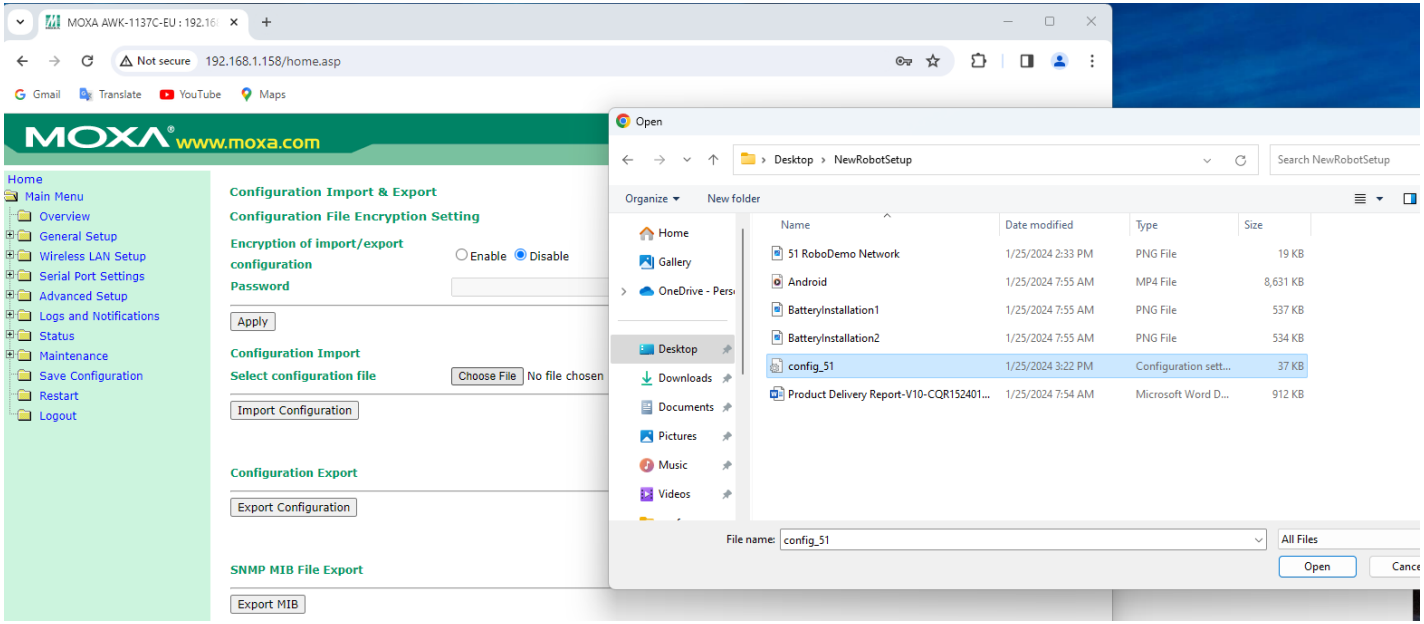
Open the web browser with IP: 192.168.1.1XX, XX is the robot number. Click on Import/Export on the home page.



LIFTIANS

# Import the network configuration file from bot 51.

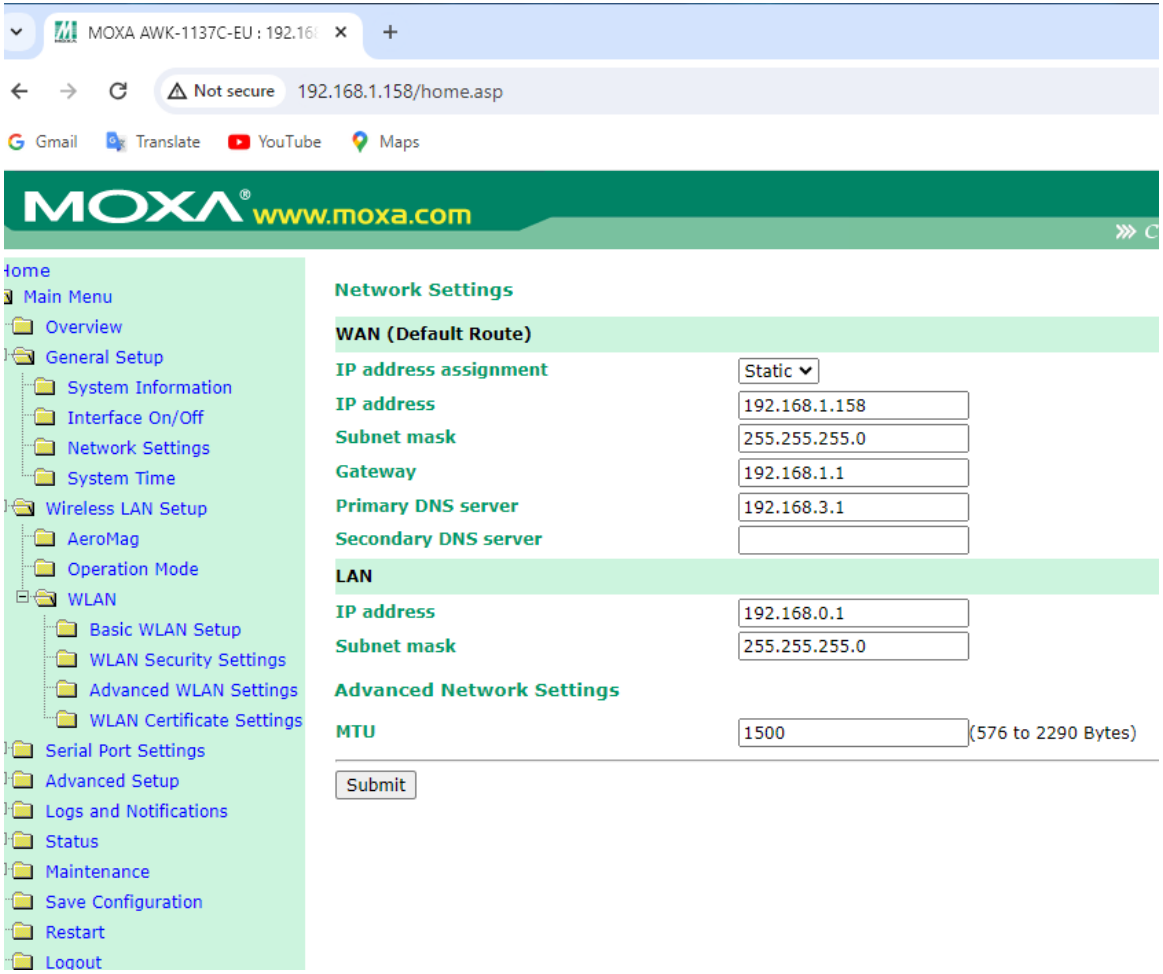
Choose File (Desktop > NewRobotSetup > Config_51 ) > Open > Import Configuration




Change the IP address to 192.168.1.1XX from 192.168.1.151

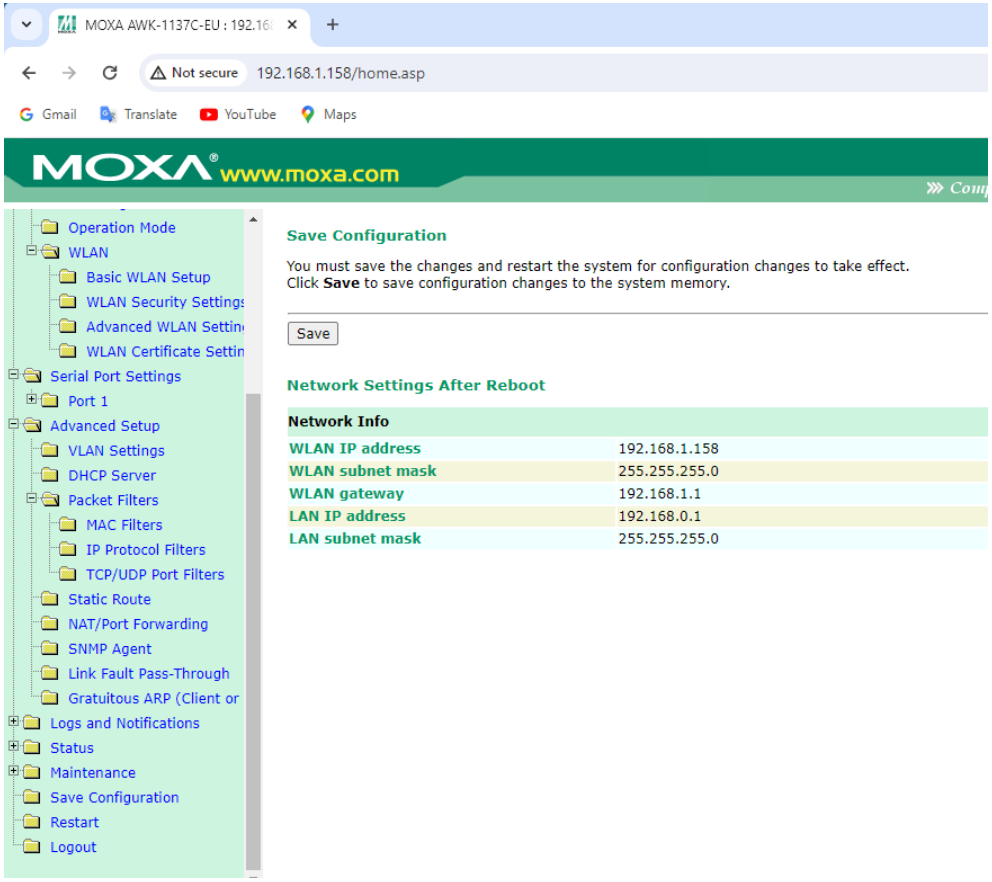
LIFTIANS

General Setup > Network Settings



LIFTIANS

Save Configuration and Restart

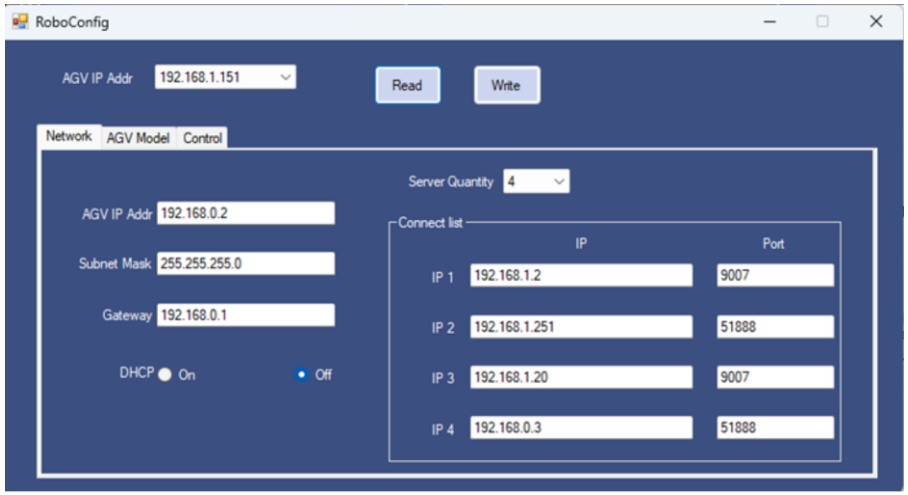
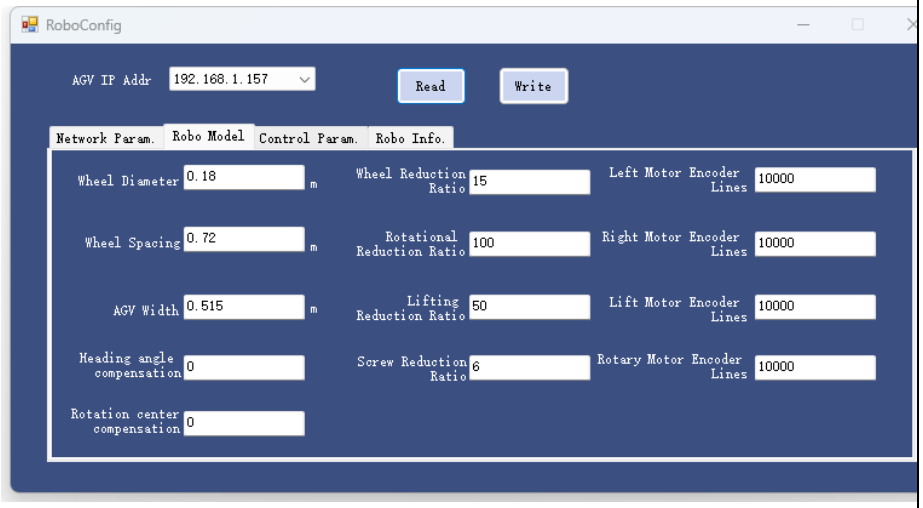


LIFTIANS

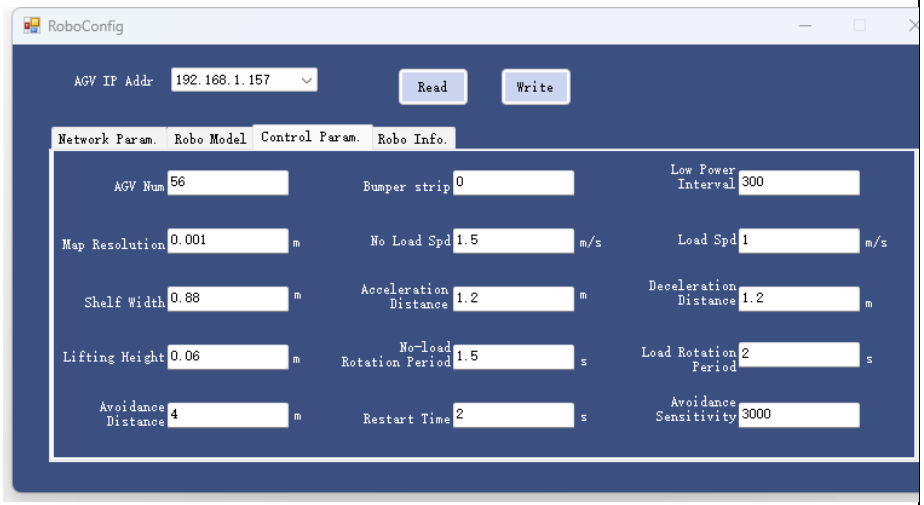
# Configuration

Use the network configuration for Bot 51 as HWF network connections (Primary and Secondary Servers)

RoboDemo connection > RoboCheck > Protocal Switch to LiftiansTest > RoboConfig to select an IP > **Read** from Network Param> Modify Network parameters and **Write**

| Network Config (HWF, NEED CHANGES IP3 and IP 4) | Robo. Model Config. |
|---|---|
|  |  |
| IP 1: 192.168.1.2:9007 is assigned for BOTSERVICE on the Primary server<br>IP 2: 192.168.1.251:51888 is where RoboDemo is connected, or Android device where Liftians RoboRemote App is installed<br>IP 3: 192.168.1.20:9007 is assigned for BOTSERVICE on the Secondary server<br>IP 3: 192.168.0.3:51888 is reserved for Raspberry Pi ETH0 | Preconfigured, no need to change |

LIFTIANS

| Robo. Control Parameters (NEED CHANGES) | Robo. Info. |
| --- | --- |
|  |  |