Application Note

Automation Builder – Ethernet Gateway driver setup

1. Setup the Ethernet communication in Windows:

Before you are able to download the compiled program the first time from the PC to the PLC, you have to setup the communication parameter. There are two options you can use to login to the PLC, either with Ethernet or serial with TK503 USB cables.

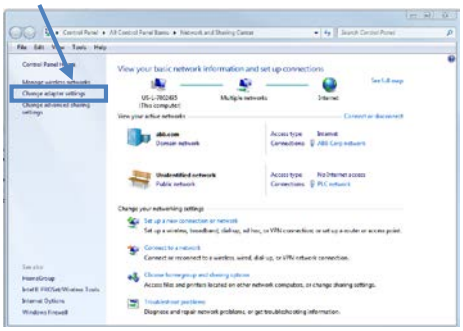
Online Access with Ethernet setup for your PC:

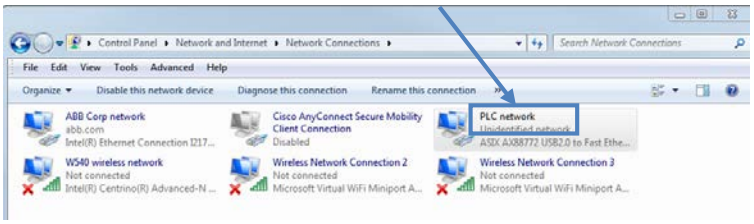
To verify the IP address of your PC

Make sure that your PC address is in the same subnet (First 3 octets are identical) as the CPU's IP address. The factory setting of the CPU for IP address is 192.168.0.10. Then the IP of the PC should be **192.168.0.x**, x should be different number than **10** so that it will not have an IP conflict with the CPU. Subnet mask should be 255.255.255.0.

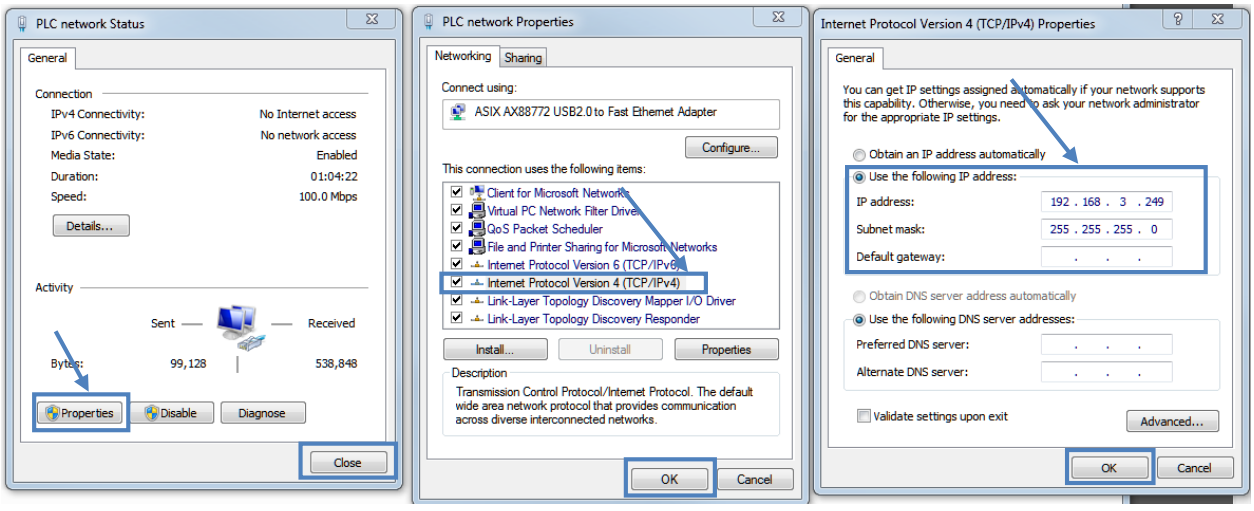
To change the IP address in your PC:

1.1 Go to **Windows Control Panel** > **Network and Internet** > **Network and Sharing Center**
1.2 Click on **Change adapter settings**
1.3 Select Local Area Connection (in this example is **PLC network** connection below) and right click it to open the menu.



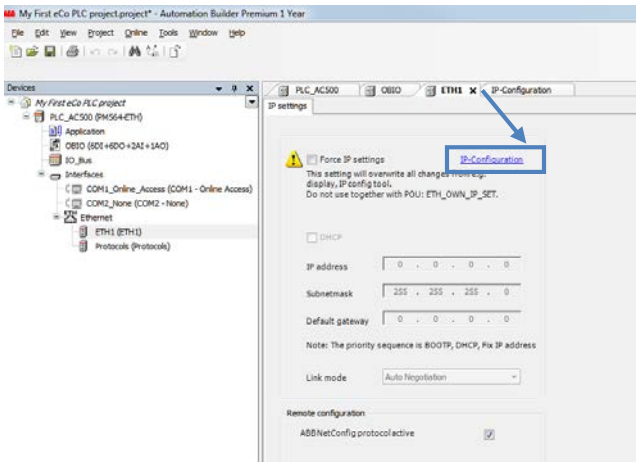


1.4 Choose **Properties** (the status is active when the Ethernet connection between PC and PLC is active)
1.5 Select **Internet Protocol Version 4 (TCP/IPv4)** and double click to see properties.
1.6 Key in your desired IP address and subnet mask then click OK.

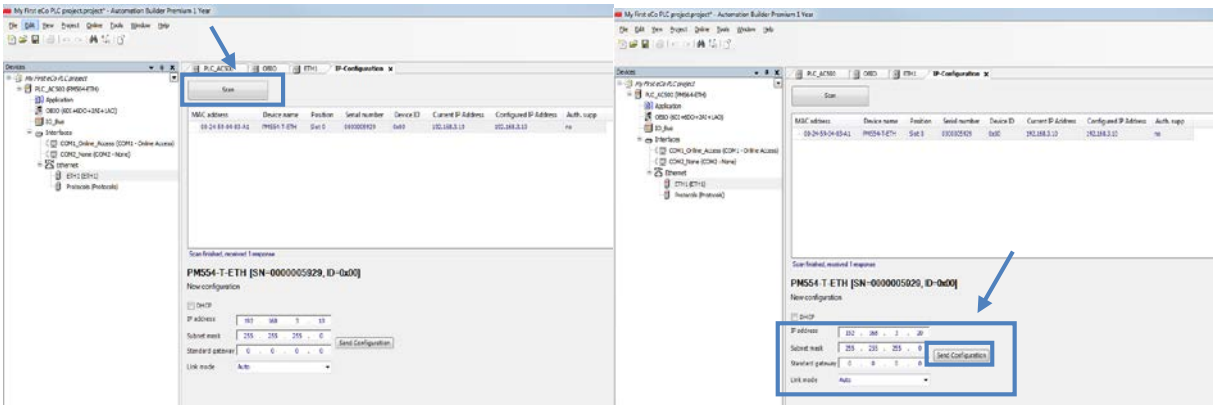


2. Setup the IP address in Automation Builder software:

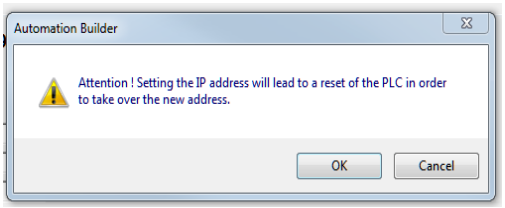
- Make sure the CPU's RUN switch is at **STOP** position
- Click IP-Configuration to access Scan tool



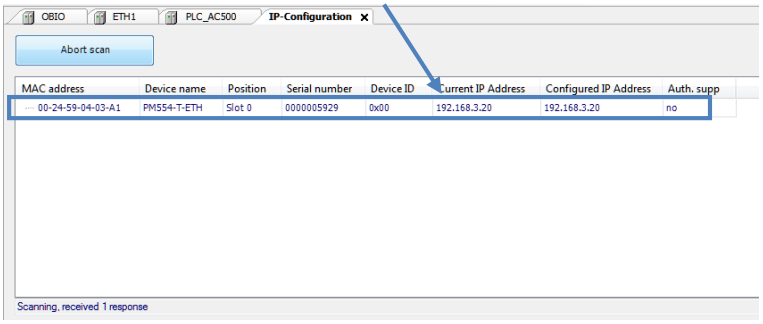
- Click on Scan button for searching active PLC on the network
- Highlight the active IP address in the search window
- Change the IP address to new IP address such as 192.168.3.20
- Click on Send Configuration button to send new IP address to PLC.



- The warning message window display is shown below for this change.
- This screen shows the progress of IP address settings is sending to CPU. Wait about 30 seconds for CPU to register new IP address (the RUN and ERR lights are flashing during this process).
- Click OK to accept this new IP address for this CPU.

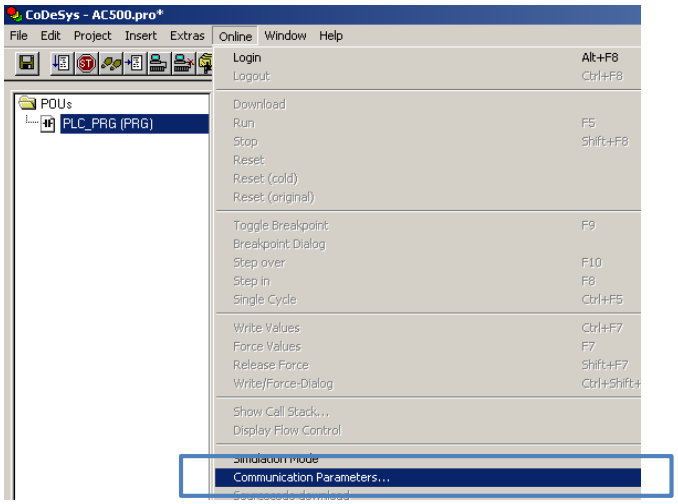


- Press "**Scan**" button again to verify the IP address of CPU. This window shows the Configured IP address sent to CPU successfully. This IP address will be used in IEC 61131-3 CoDeSys to download your PLC project to CPU.



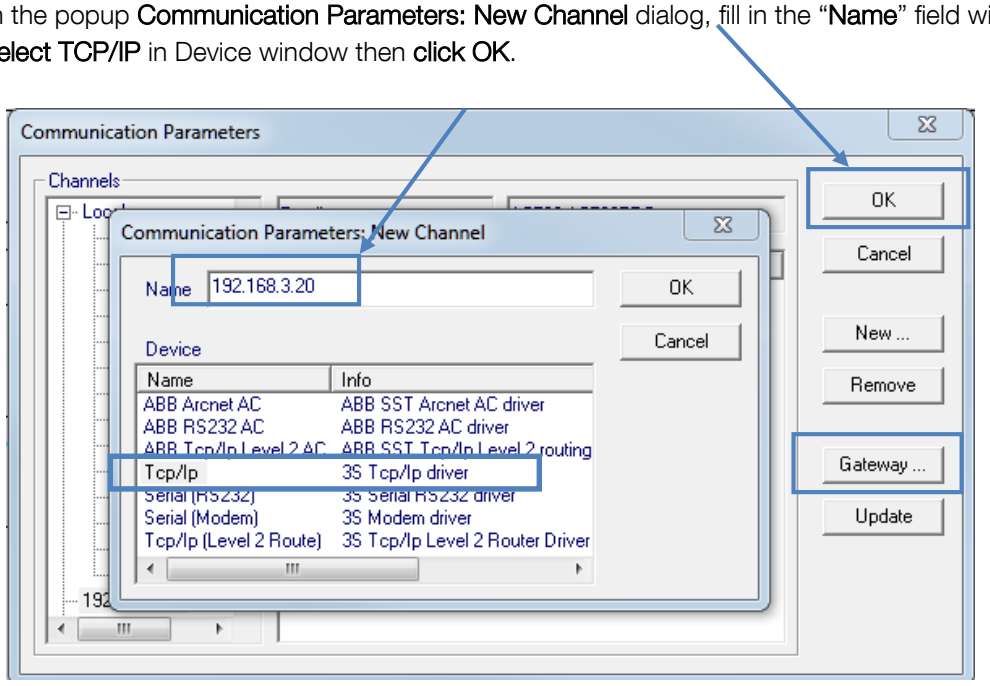
3. Download and Go online with project:

From **Online** menu, select **Communication Parameters**.

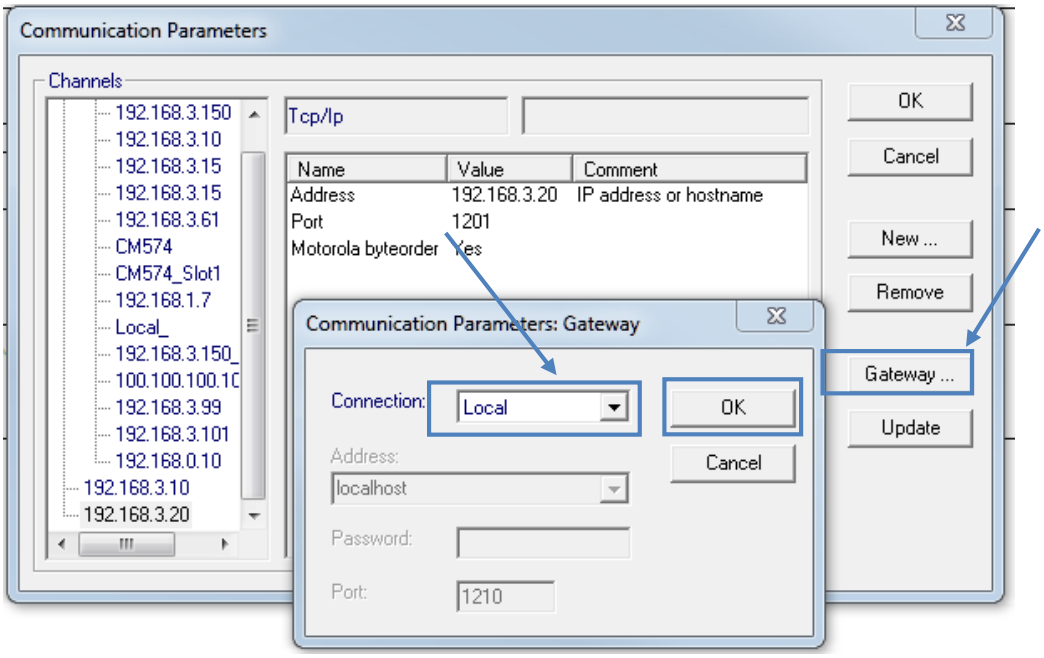


3.1 In the **Communication Parameter** dialog box, **click New…** button to add a new channel. Type the name for this channel. In this example below, **192.168.3.20** is the name for this channel.

3.2 In the popup **Communication Parameters: New Channel** dialog, fill in the "**Name**" field with **192.168.3.35**, **select TCP/IP** in Device window then **click OK**.



Click **Gateway** then select **Local** for **Connection** from popup **Communication Parameters: Gateway** window as shown below.



3.3 **Double click** in each **Value** field to replace with

- Address: **192.168.3.20**
- Port: **1201**
- Motorola byteorder: **Yes**

Click **OK** to accept these entries.