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Configuring Allen Bradley Compactlogix/Controllogix PLCs For Use With The UIO - Ethernet-IP

Setup the PLC

With RSLogix 5000 software create the following tags:

- Create a tag called EDI_POS consisting of 20 elements using **16 bit** integer registers.

- Create a tag called EDI_REQ consisting of 20 elements using **16 bit** integer registers.

That's it. There are no message blocks or files to contend with. The communication is handled entirely by the UIO module.

Setup the UIO

*Note: Each EDI control must have its network option turned on and an address character assigned. Legal characters are **A** through **U** (**S** cannot be used). It is a good idea to keep the addresses sequential, starting with **A**. Be careful not to duplicate an address as unpredictable results will occur. Instructions on enabling the network and assigning addresses are covered in the EDI-V5 installation Manual in the section "How To Use Option Codes".*
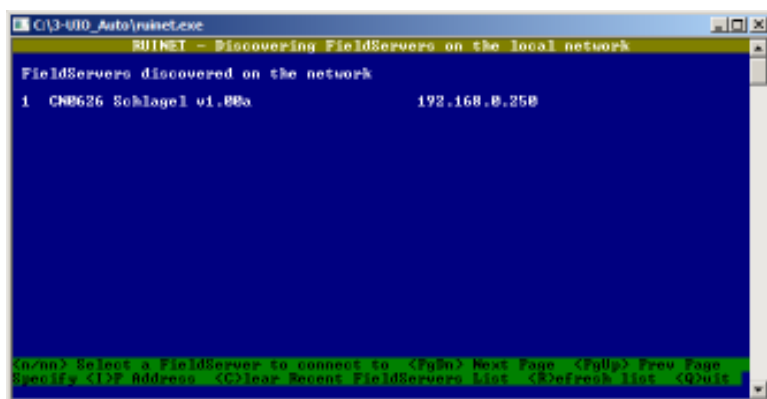
Before starting be sure the latest version of UIO_Cfg.exe and Ruinet.exe reside in the same directory on your computer. These can be downloaded from *http://www.schlagel.com/instrcnman.html*.

Connect the UIO to the PC with the serial cable.

Connect the UIO Ethernet module to the PLC network.

Note: If you need to change the IP address of the UIO Ethernet module, see the separate instruction sheet describing the procedure..
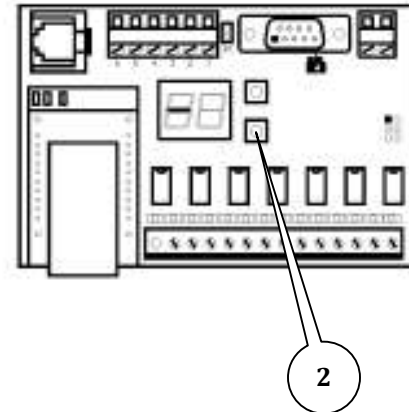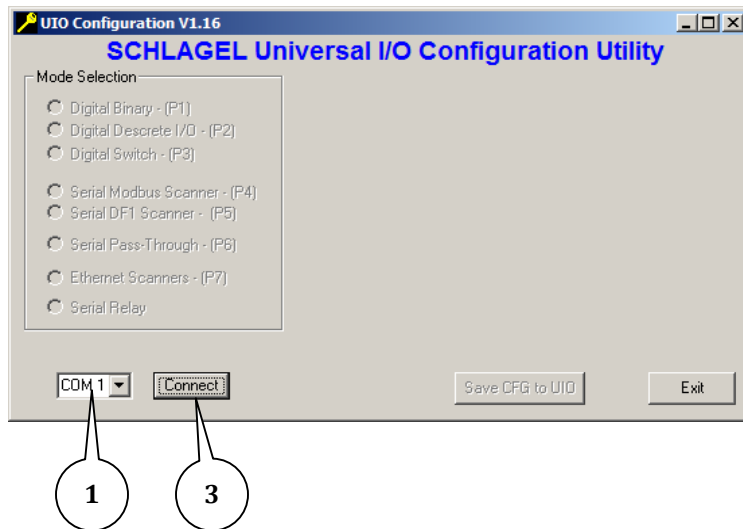
Run Ruinet.exe and confirm the UIO Ethernet module is discovered.

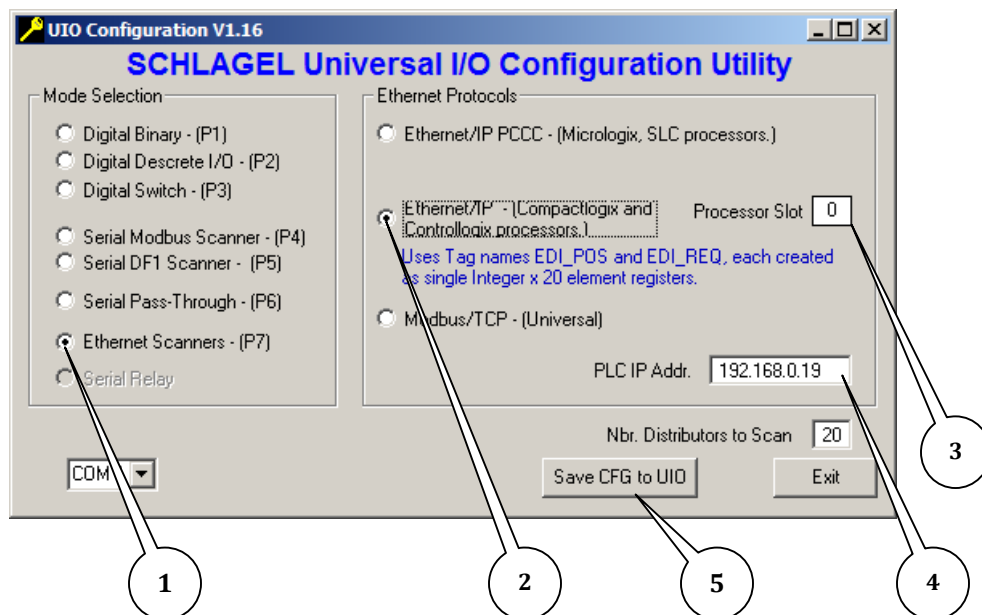Press *Q* a couple of times to close Ruinet.exe.

Run the UIO_Cfg.exe program.

1. Select the correct COM port in the pulldown box.
2. Press and hold the lower (black) button on the UIO until the display shows a single dash in the left digit..
3. Press the connect button.

Certain options will now be enabled in the program allowing you to select the desired operating mode of the UIO.

1. Select the **Ethernet Scanners – (P7)** radio button.

2. Select the **Ethernet/IP** radio button.

3. Enter the slot number of the PLC processor in the backplane. (The left or first slot is '0'). CompactLogix is always slot '0'.

4. Enter the PLC IP address

5. Press the **Save CFG to UIO** button.

The UIO will now re-boot. This will take approximately 1 minute.

With all connections properly made, you should be able to see the distributor drive positions in the EDI_POS tag and be able to command new distributor positions using the EDI_REQ tag.