

Files needed

PL7 Pro installation media - Too big for online scan - [Download](#)

setup32.exe - [Virus scan result](#) - [Download](#)

Unitelway_driver_7_2_2019-.zip - [Virus scan result](#) - [Download](#) - **Please do not use an older driver as they tend to mess things up**

Optional:

PL7 Pro SP5 - Too big for online scan - [Download](#)

Enabledlinkedconnections.reg - [Virus scan result](#) - [Download](#)

XIP-driver_7_2_2019.zip - [Download](#) - Useful if you have an ethernet enabled PLC

Introduction

Unfortunately Schneider Electric has decided not to support PL7 on 64-bit systems, it can also be difficult to get PL7 to work on later versions of windows.

Their official response is 'Upgrade to Unity, convert your program' but this is really not an option on a running system that just need a minor update or maintenance.

This guide will show you how to install PL7 Pro **natively** in Windows 10 x64 - this is done without the use of virtual machines.

It has been tested to work with the TSXCUSB485 USB cable and the TSXPCX1031 RS232 cable.

The RS232 cable is easier to work with as it does not require an additional driver like the USB cable does.

if your laptop does not have a RS232 port as pretty much all newer models do, you've probably tried a USB to serial converter, 9 out of 10 times this does not work.

Through trial and error I've found that the [StarTech ICUSB2321F](#) works flawlessly, so give it a try if you have serial programming cables lying around.

With the latest XIP driver from Schneider, it is also possible to program via the XIP driver. Please follow the steps carefully, it is quite difficult to recover from a botched driver installation, as it is almost impossible to uninstall the wrong driver version, and previous version won't install if a later version is present on the system.

Step 1 - Preparing to install PL7 Pro

Copy the contents of the CD-ROM to a directory on your harddrive, for example C:\PL7 Installation

I recommend **NOT** putting it in C:\PL7 as this is the default installation dir for PL7.

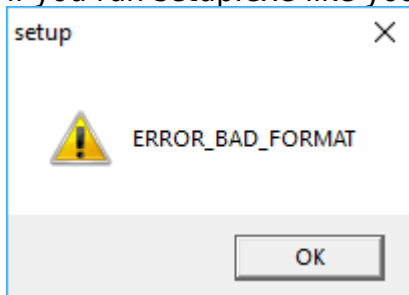
Next, unzip [setup32.zip](#) and place setup32.exe into the installation dir

It should look something like this:

Installation of PL7 Pro on 64-bit based systems

Name	Date modified	Type	Size
UNTLW-00	2/23/2018 7:56 PM	File folder	
UNTLW-95	2/23/2018 7:56 PM	File folder	
UNTLW-NT	2/23/2018 7:56 PM	File folder	
_genet.fx	12/12/2001 9:32 AM	FX File	44 KB
inst32i.ex	12/12/2001 9:32 AM	EX_ File	313 KB
isdel.ex	12/12/2001 9:33 AM	EX_ File	8 KB
_setup.dll	12/12/2001 9:34 AM	Application extens...	6 KB
_setup.lib	2/16/2005 8:40 AM	LIB File	364 KB
PL7PRO.1	2/16/2005 8:21 AM	1 File	115,248 KB
setup.bmp	6/14/2004 9:39 AM	BMP File	105 KB
setup.exe	11/24/2003 6:02 PM	Application	197 KB
setup.ini	2/16/2005 8:41 AM	Configuration sett...	1 KB
setup.ins	10/1/2003 1:51 PM	INS File	122 KB
setup32.exe	10/5/2017 3:04 PM	Application	662 KB

If you run setup.exe like you're supposed to, you'll get this error:

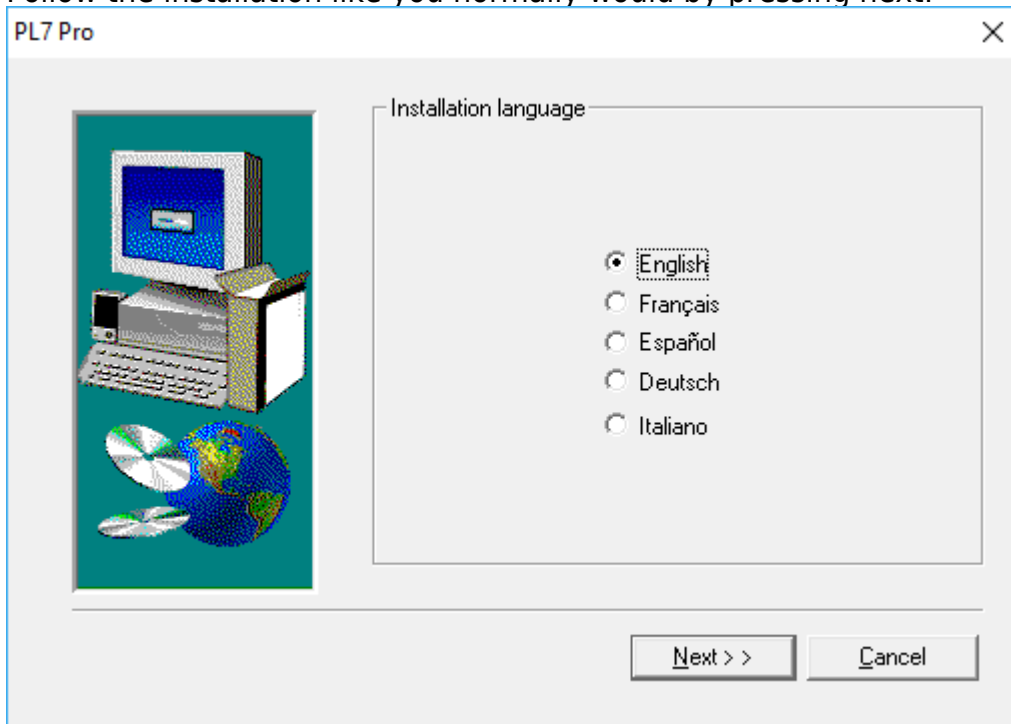


This has usually been the showstopper for installing PL7 Pro on any 64-bit based system. However if you run setup32.exe the installation will start up correctly:

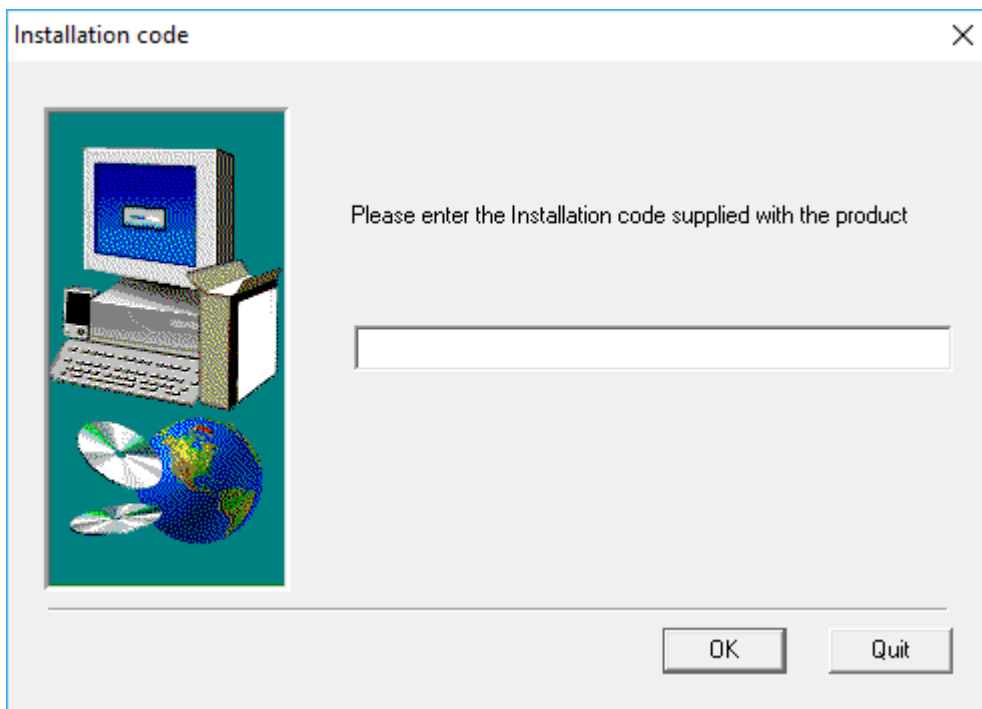
Installation of PL7 Pro on 64-bit based systems



Follow the installation like you normally would by pressing next:

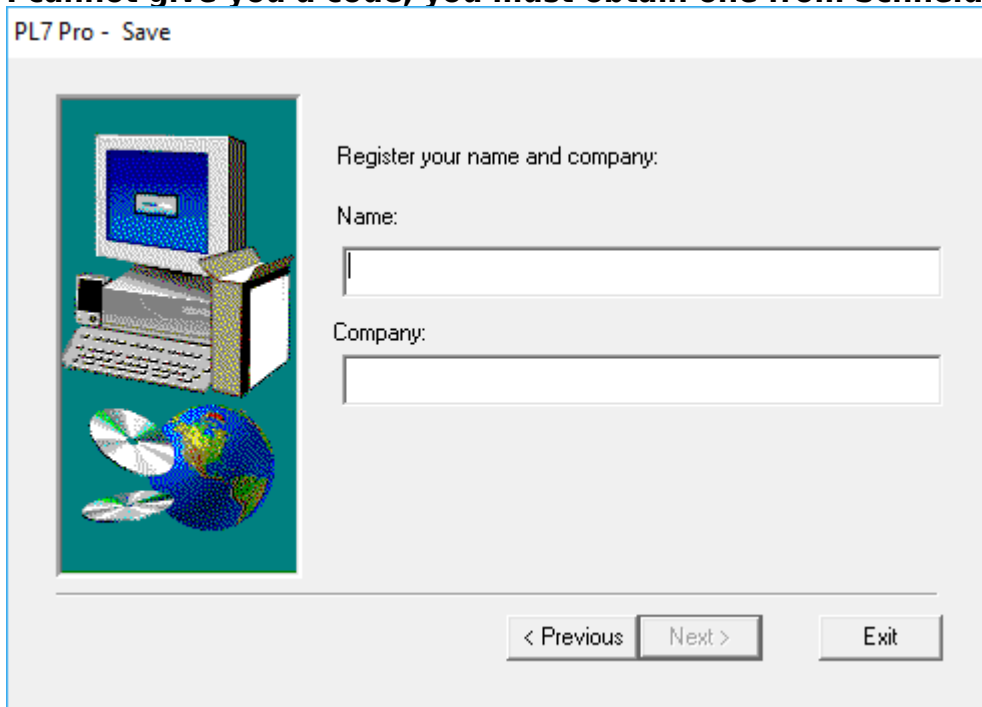


I select english and press Next >>



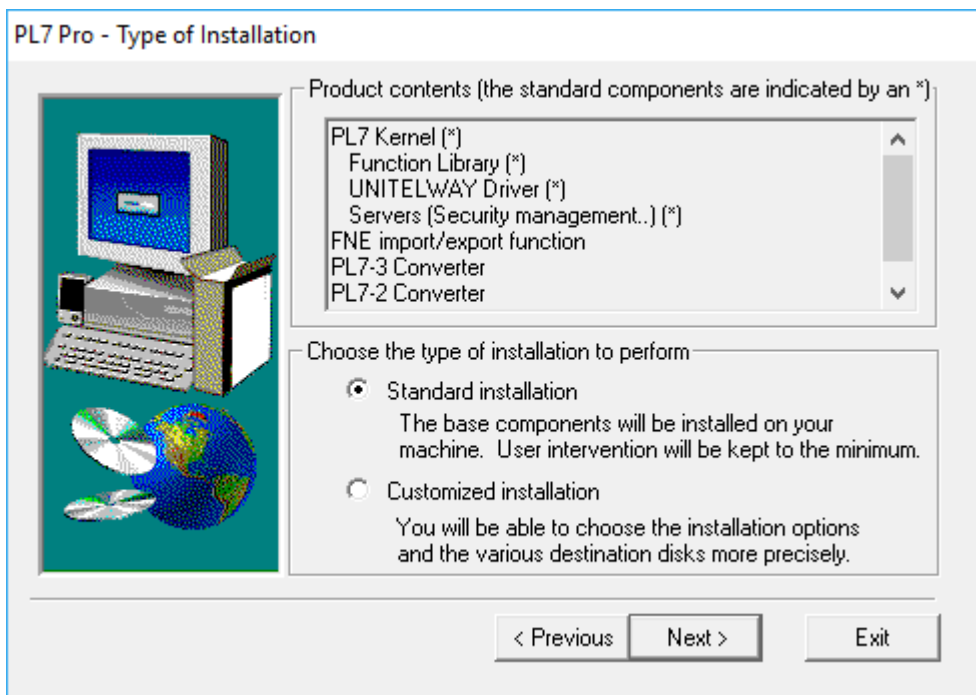
Insert your installation code, it is usually located on a sticker placed on the jewel case of your installation CD, and press OK.

I cannot give you a code, you must obtain one from Schneider Electric.

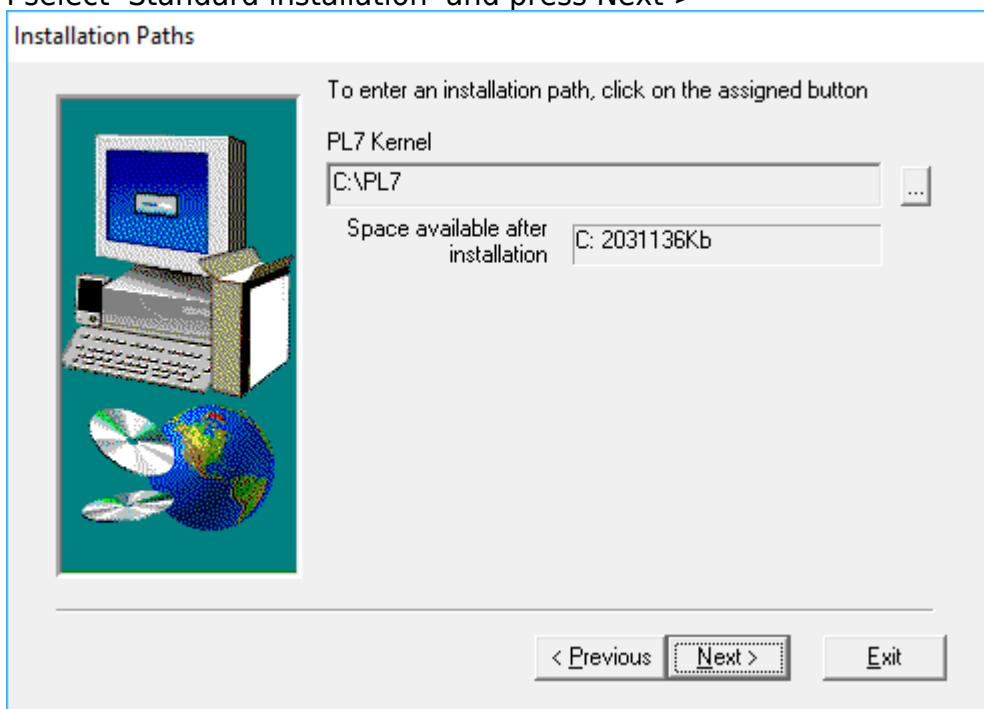


Type in your name and company, you must type something in both fields, otherwise Next > > will be greyed out.

Press Next > when you've filled out both fields.

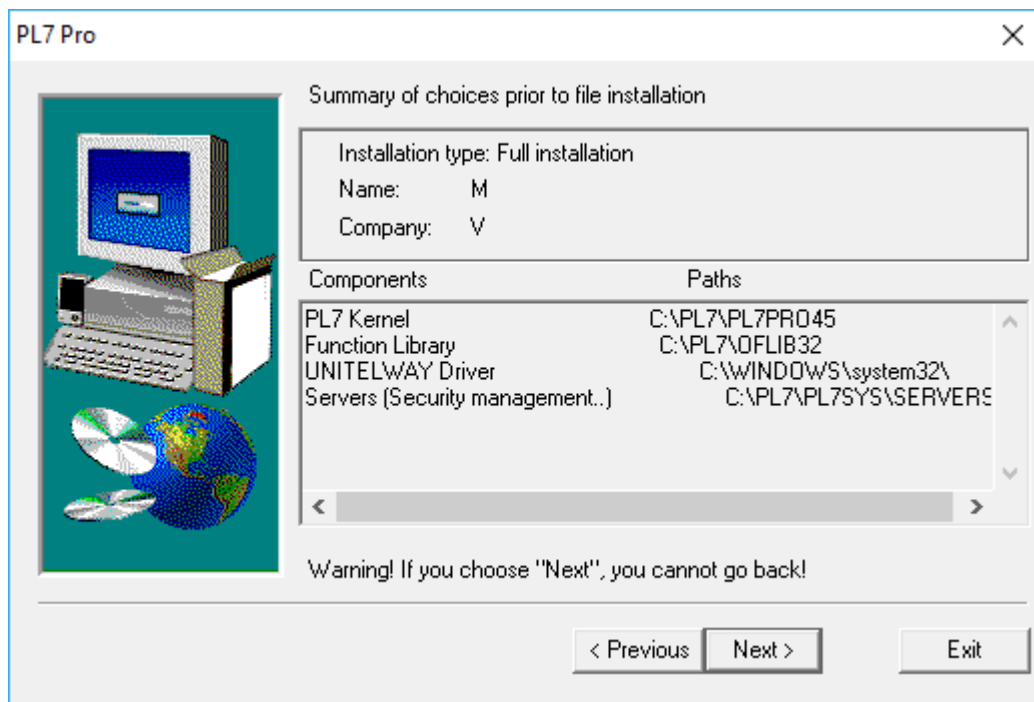


I select 'Standard installation' and press Next >

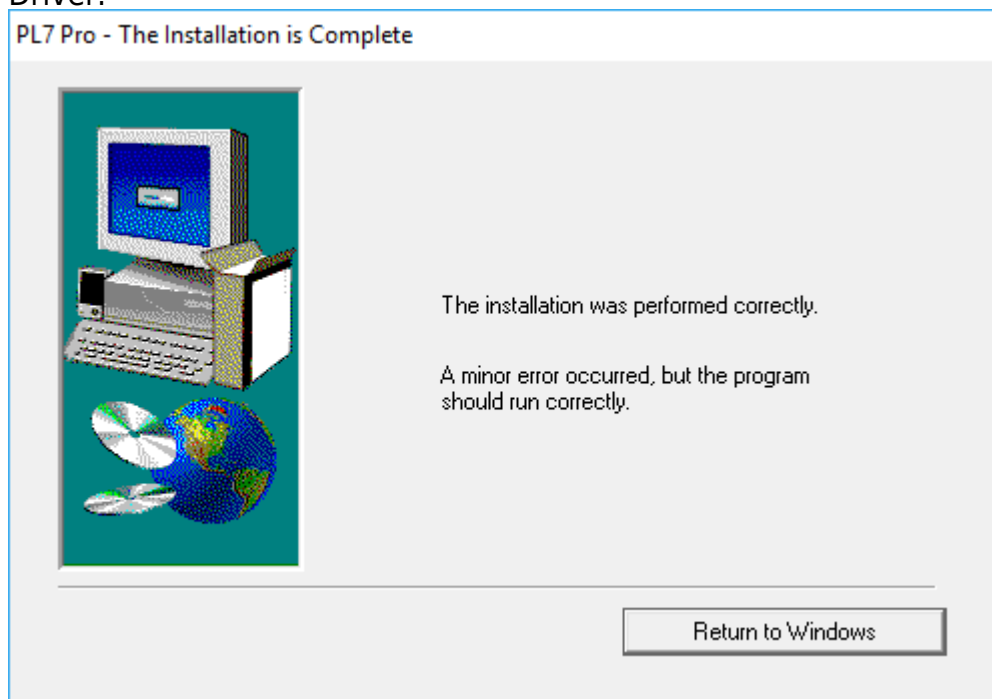


For the sake of simplicity I recommend that you install it into the default directory - Just press Next >

Installation of PL7 Pro on 64-bit based systems



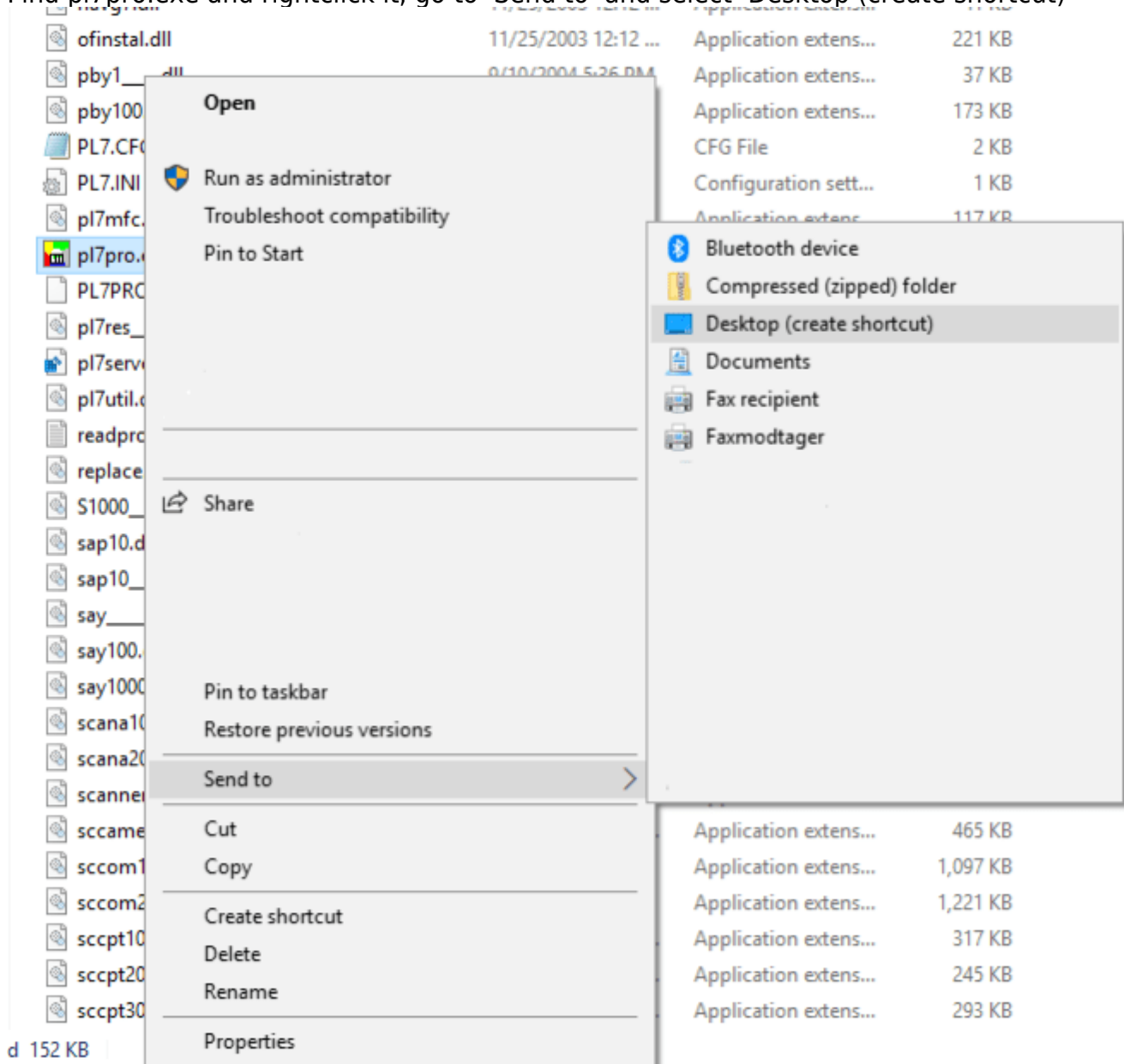
This is a summary, if you are ready to install press Next >
The installation will now run, first it will install PL7, then it will attempt to install the Unitelway Driver.



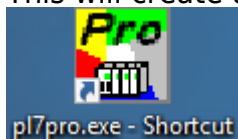
The installation will complain that 'A minor error occurred' this is normal, don't worry about it, now click 'Return to Windows'

The installation will create a folder called 'Modicon Telemecanique' if you look in the start menu of windows. It will contain a non-working drivers manager - we'll fix this later.

It failed at creating the shortcut for PL7 and we will have to create that manually
Open up your file explorer and go to C:\PL7\PL7PRO45\EXE\
Find pl7pro.exe and rightclick it, go to 'Send to' and select 'Desktop (create shortcut)



This will create a shortcut to PL7 Pro on your desktop:



In order to run PL7 properly you must run it as administrator, failure to do so will result in a licens alias file error.

You do not have to run PL7 at this time, if you install service pack 5 it will automatically request administrator access, and you won't have to set it up manually.

This concludes step 1, and the PL7 Pro application itself should now be running natively in 64-bit windows.

Step 2 - Installation of Service Pack 5

This step is very similar to step 1.

If you're logged into <http://www.tscautomate.com> with your credentials the direct link for Service Pack 5 is <http://www.tscautomate.com/files/5/8/0/3/pl7v45sp5.zip>

If you're not logged in you'll get an error message stating "Access denied. You're not logged."

Don't worry if you do not have access to tscautomate.com, you can download it from my page [here](#)

Unzip pl7v45sp5.zip to a directory on your PC; I used C:\PL7V45SP5 which is the default directory in the zip file.

Copy the same setup32.exe you used for the PL7 installation to your Service Pack 5 directory. It should look something like this:

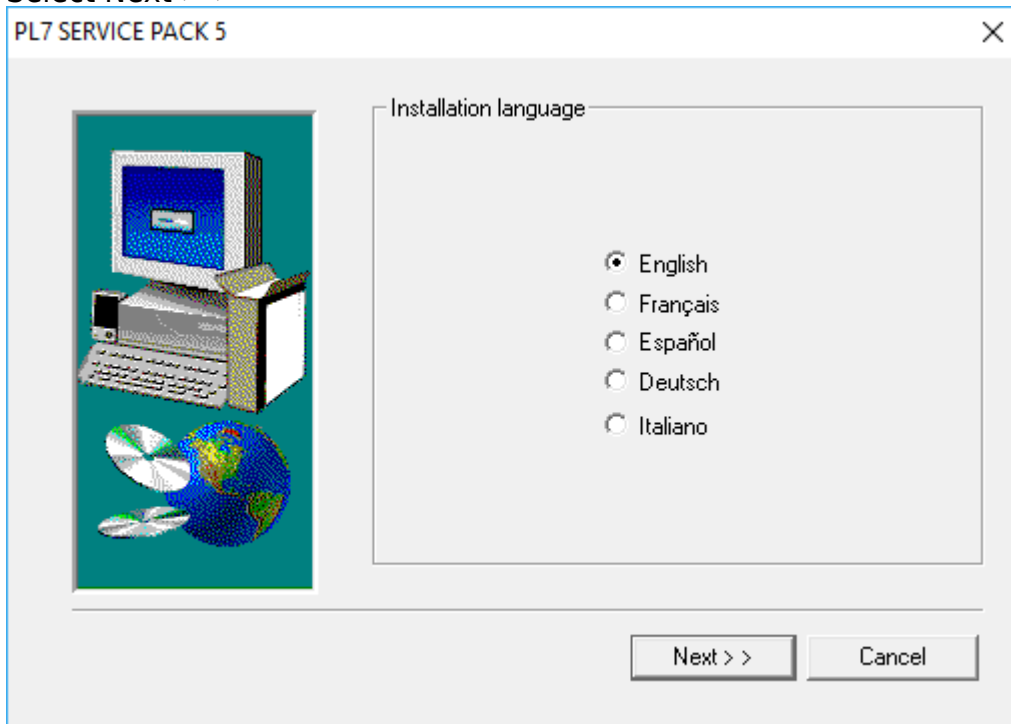
Name	Date modified	Type	Size
UNTLW-00	11/17/2008 1:20 PM	File folder	
UNTLW-95	11/17/2008 1:20 PM	File folder	
UNTLW-NT	11/17/2008 1:20 PM	File folder	
UNTLW-VISTA	11/17/2008 1:20 PM	File folder	
VISTA TOOLS	11/17/2008 1:20 PM	File folder	
INST32I.EX	9/8/2008 8:51 AM	EX_ File	313 KB
_ISDEL.EXE	9/8/2008 8:51 AM	Application	8 KB
_SETUP.DLL	9/8/2008 8:51 AM	Application extens...	6 KB
_setup.lib	9/8/2008 8:51 AM	LIB File	958 KB
PI7V45SP5.1	9/8/2008 8:55 AM	1 File	95,040 KB
setup.BMP	9/8/2008 8:51 AM	BMP File	53 KB
Setup.exe	9/8/2008 8:51 AM	Application	44 KB
SETUP.INS	9/8/2008 8:51 AM	INS File	88 KB
setup.pkg	9/8/2008 8:51 AM	PKG File	37 KB
setup32.exe	10/5/2017 3:04 PM	Application	662 KB

Now run setup32.exe, the installation should now start correctly:

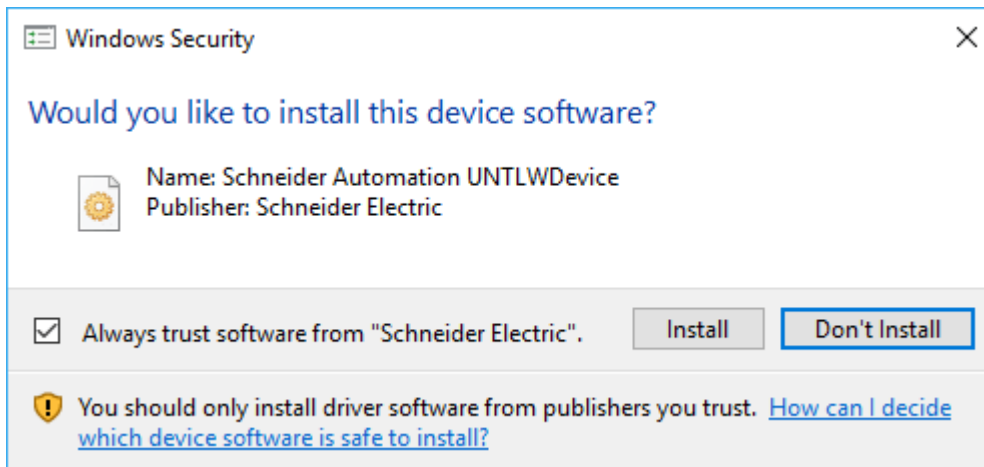
Installation of PL7 Pro on 64-bit based systems



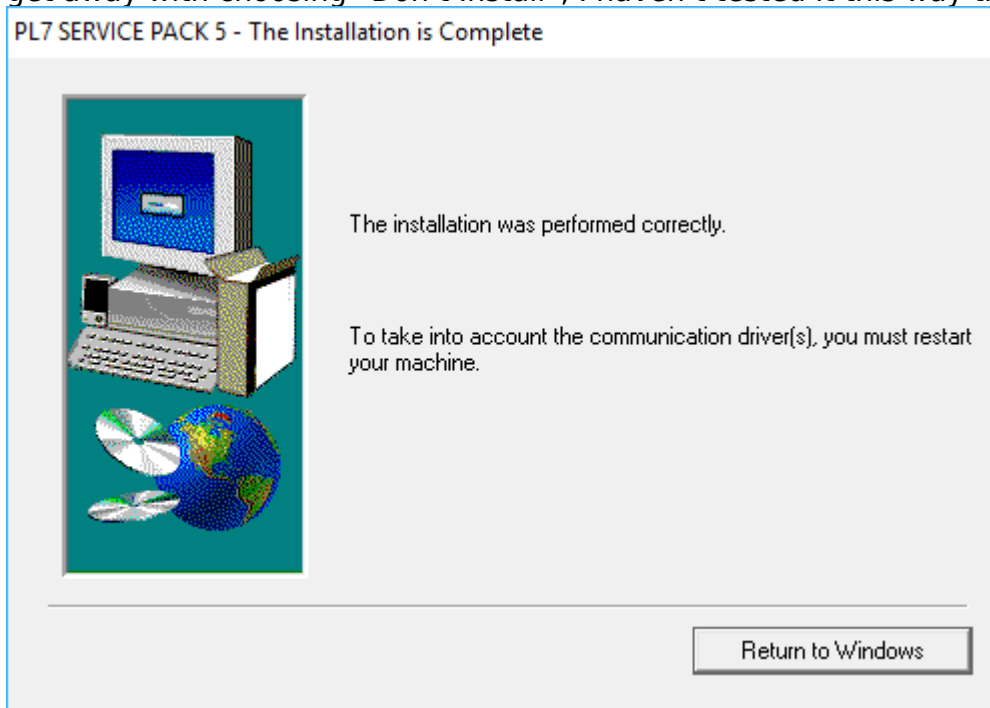
Select Next >>



Once again, select language, I choose english, when you're done click Next >> Installation should now begin.



This page will pop up during the installation process, I choose "Install", but you can probably get away with choosing "Don't Install", I haven't tested it this way though.



Installation complete - click Return to Windows.

It is not necessary to reboot, this won't make the drivers manager work regardless. This concludes the service pack 5 installation.

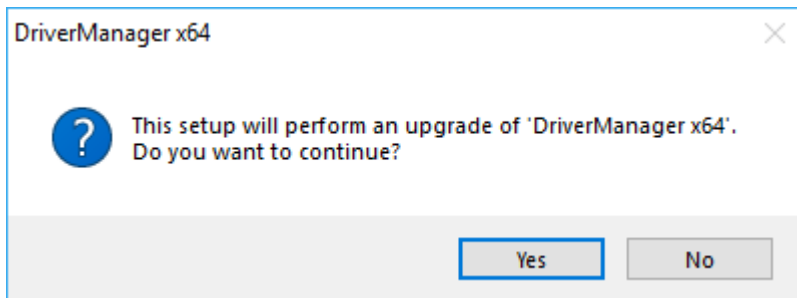
Step 3 - Getting the drivers manager to work

Download the Unitelway Drivers Suite from this page: [Download](#)

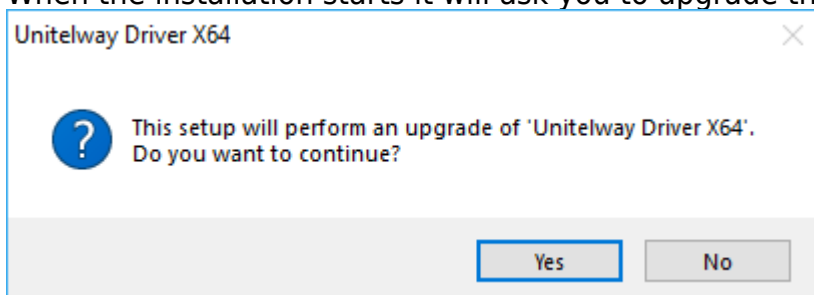
!PLEASE DO NOT USE OLDER DRIVERS AS THEY CAN MESS UP YOUR INSTALLATION!

It contains a directory with the release notes and the installation file, I just unzipped it on my desktop.

Run the extracted file SchneiderUnitelwayDriverSuite.exe it will request administrator privileges, answer yes.



When the installation starts it will ask you to upgrade the drivers manager, answer yes here.

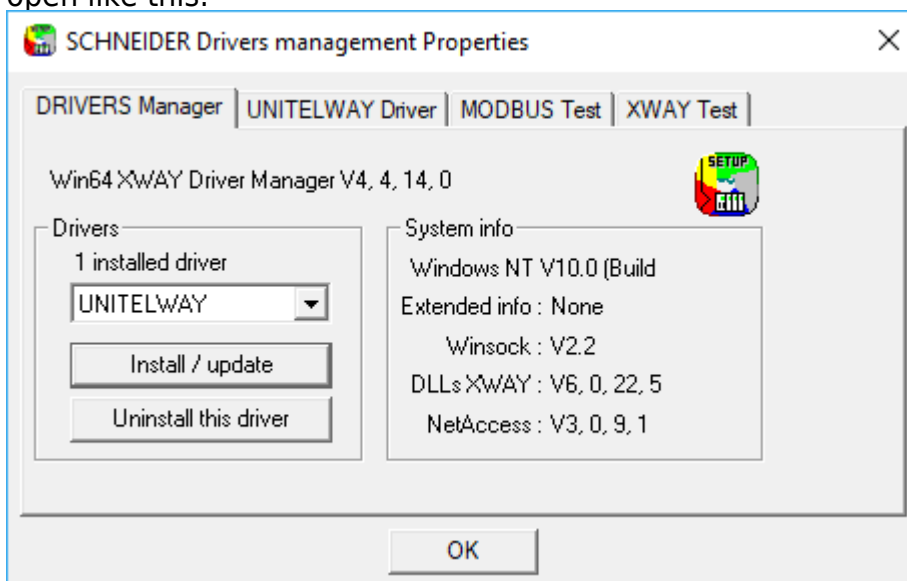


Later it will ask you to upgrade 'Unitelway Driver X64', answer yes here. Give it some time, and when no more installation windows are active in the windows taskbar, the new drivers manager should be installed. If you can't find it try looking in the windows control panel.

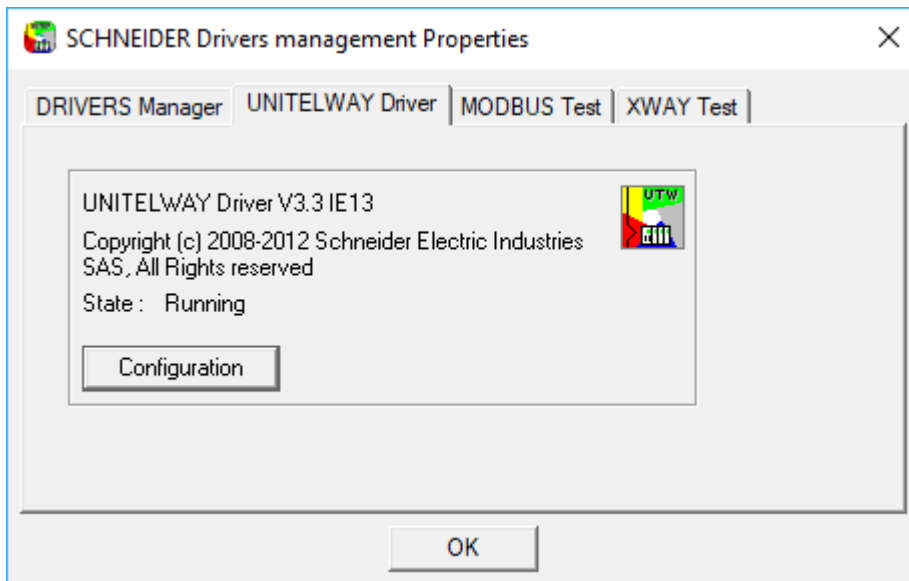


Drivers Manager

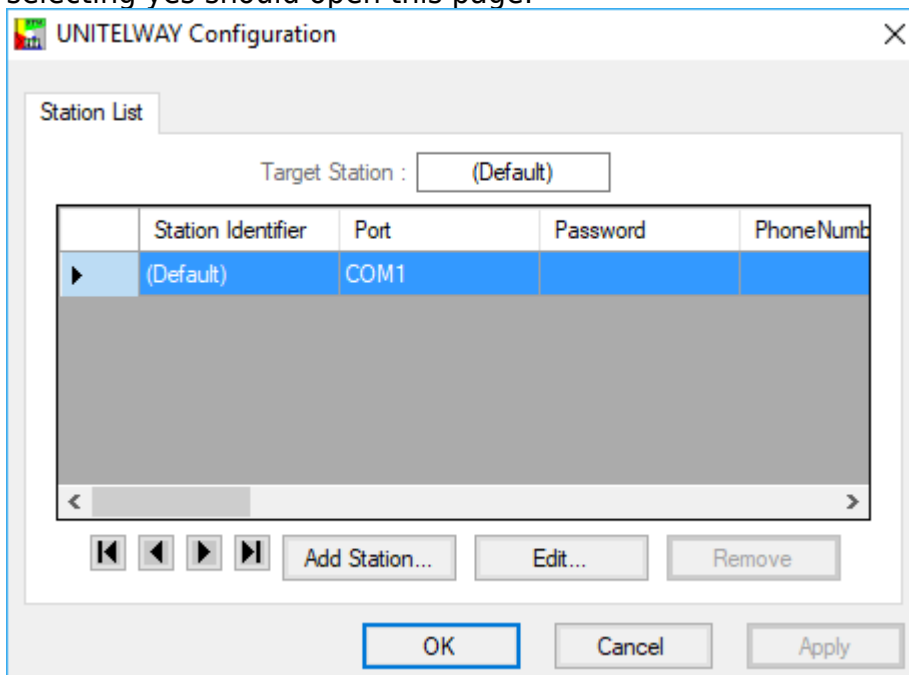
The icon and text looks like this in Windows 10
Double click the drivers manager to activate it, if all things work as they should it should open like this:



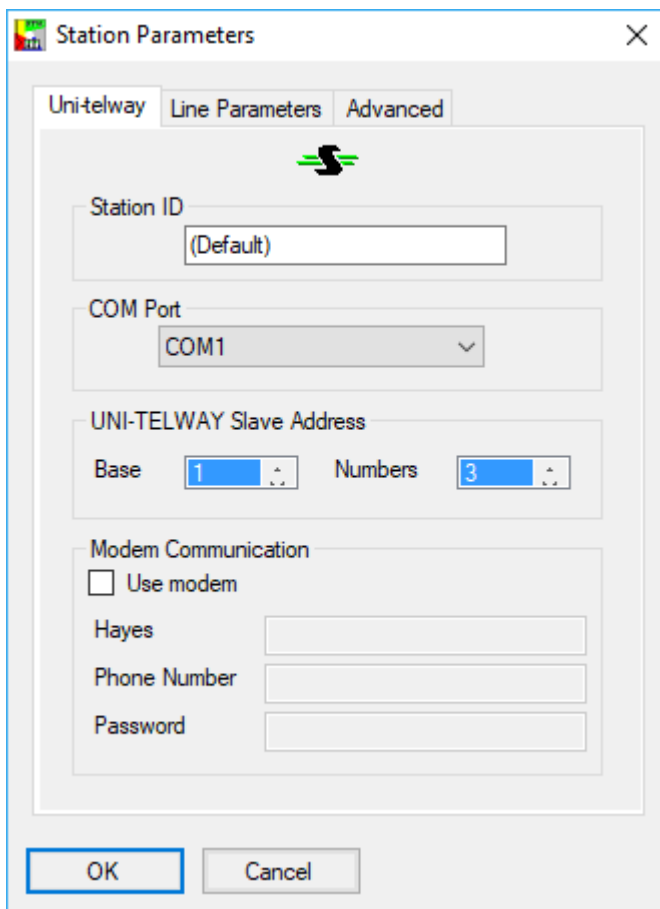
Selecting the 'UNITELWAY Driver' tab should open a page like this:



Selecting 'Configuration' will cause CnfUTW3.exe to request administrator privileges, selecting yes should open this page:



Highlighting the (Default) Station identifier and selecting 'Edit...' should open this page:



If you are using a RS232 cable select the right COM port, you need to know what your port is called as there is no indication what port the cable is installed on.

If the USB cable driver is installed correctly and the cable is attached you should see (ready) after the COM port it is installed on in the drop down list.

If the USB cable is NOT showing up correctly you may need an update Unitelway driver as it also contains the windows driver for the USB cable (Check <http://tscautomate.com> for updates if it suddenly stops working, I will also try to post new drivers on the front of this blog).

You can check the windows device manager to see if the USB driver is installed properly, if you have a yellow exclamation mark next to it you probably need a driver update.

This concludes the drivers manager installation, you should now have a working PL7 Pro installation with SP5 installed and the ability to connect to a PLC and program it via the USB or Serial cable.

Step 4 - Enabling the ability to open .stx files directly from network shares

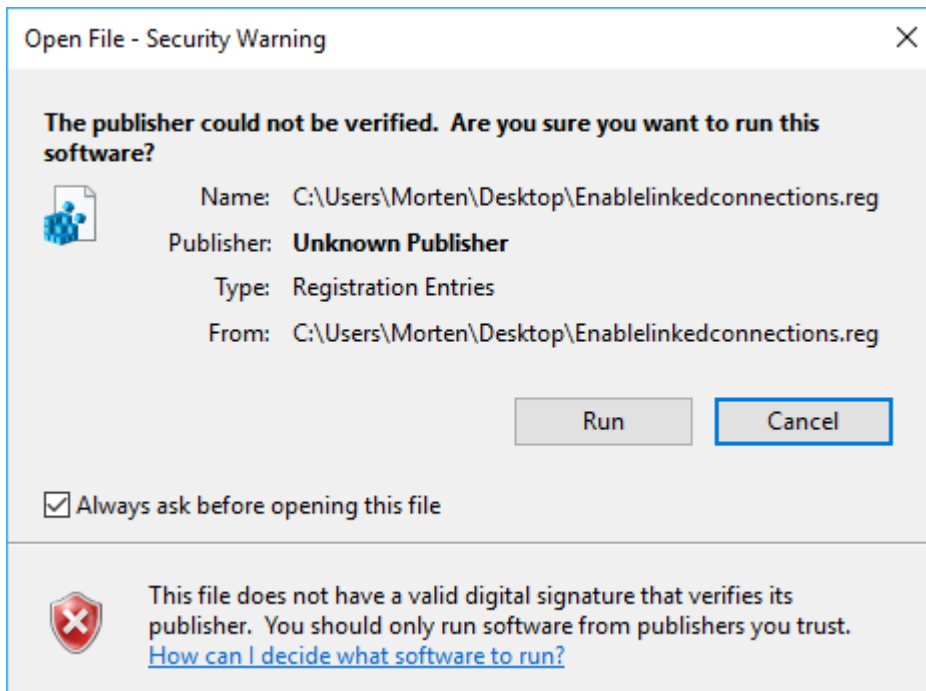
If you are having trouble opening .stx files directly on a network drive then you may need this small fix.

This is not really a PL7 issue but more of a windows quirk.

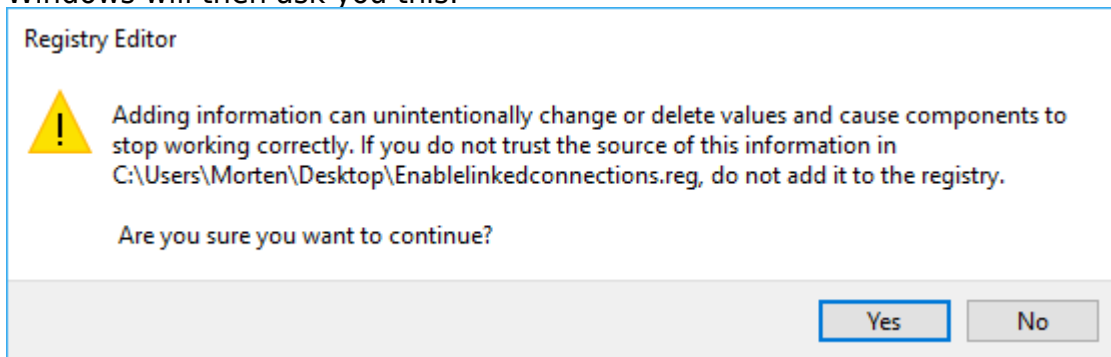
Download [Enabledlinkedconnections.zip](#)

Unzip the file Enablelinkedconnections.reg somewhere, I would choose my windows desktop

Run Enablelinkedconnections.reg



Just select 'Run' here
Windows will then ask you this:



Select yes here to merge the file with the registry database.

If you feel unsafe opening a .reg file you can simply open the .reg file with notepad and add the settings manually, it's just 1 setting:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Policies\System]
"EnableLinkedConnections"=dword:00000001
```

Reboot your PC and it should work.

This concludes step 4

Step 5 - Installation of the XIP driver

The XIP driver is used to transfer program via ethernet to premium PLCs with an ethernet port onboard (For example [TSX P573623A](#))

This method is **MUCH FASTER** than via the serial cable.

This step is **OPTIONAL** if you do not intend to program via an ethernet cable, you can skip this part.

However, a valid ethernet configuration must already be on the PLC, meaning you cannot program an empty card with this method, for that you must still use the serial cable.

Personally, I have a small program with just a hardware configuration that contains just an

ethernet setup and nothing else.

I download this to the PLC via the serial cable, and when the download is complete and the ethernet module is initialized, I download the large program via the ethernet cable.

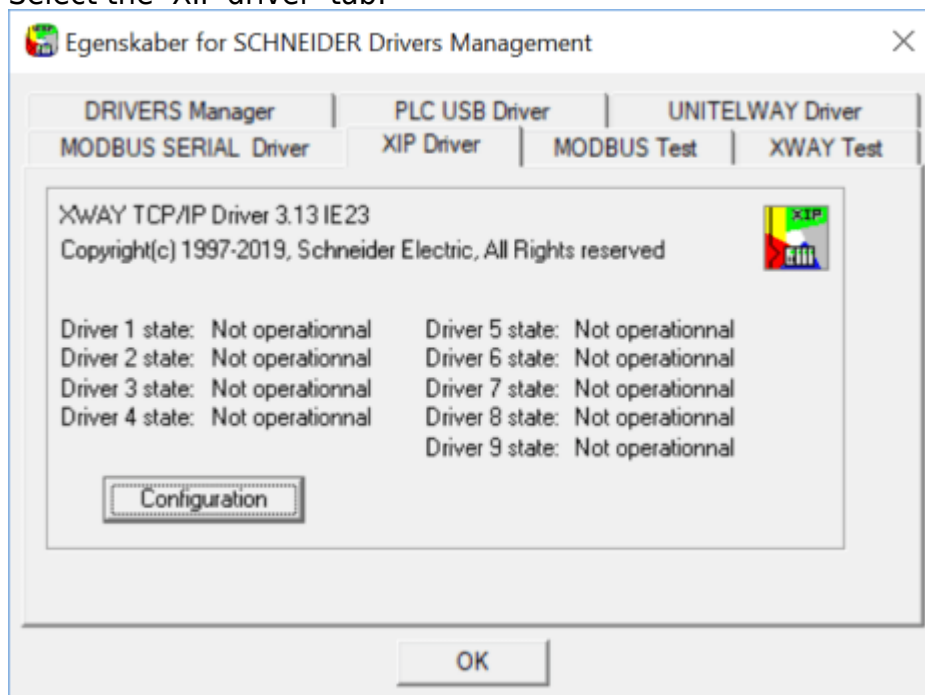
Download the XIP driver suite from here: [Download](#)

Extract the contents, it should contain a directory called 'XIP driver' with the release notes and the executable for installation.

Run 'SchneiderXipDriverSuite.exe'

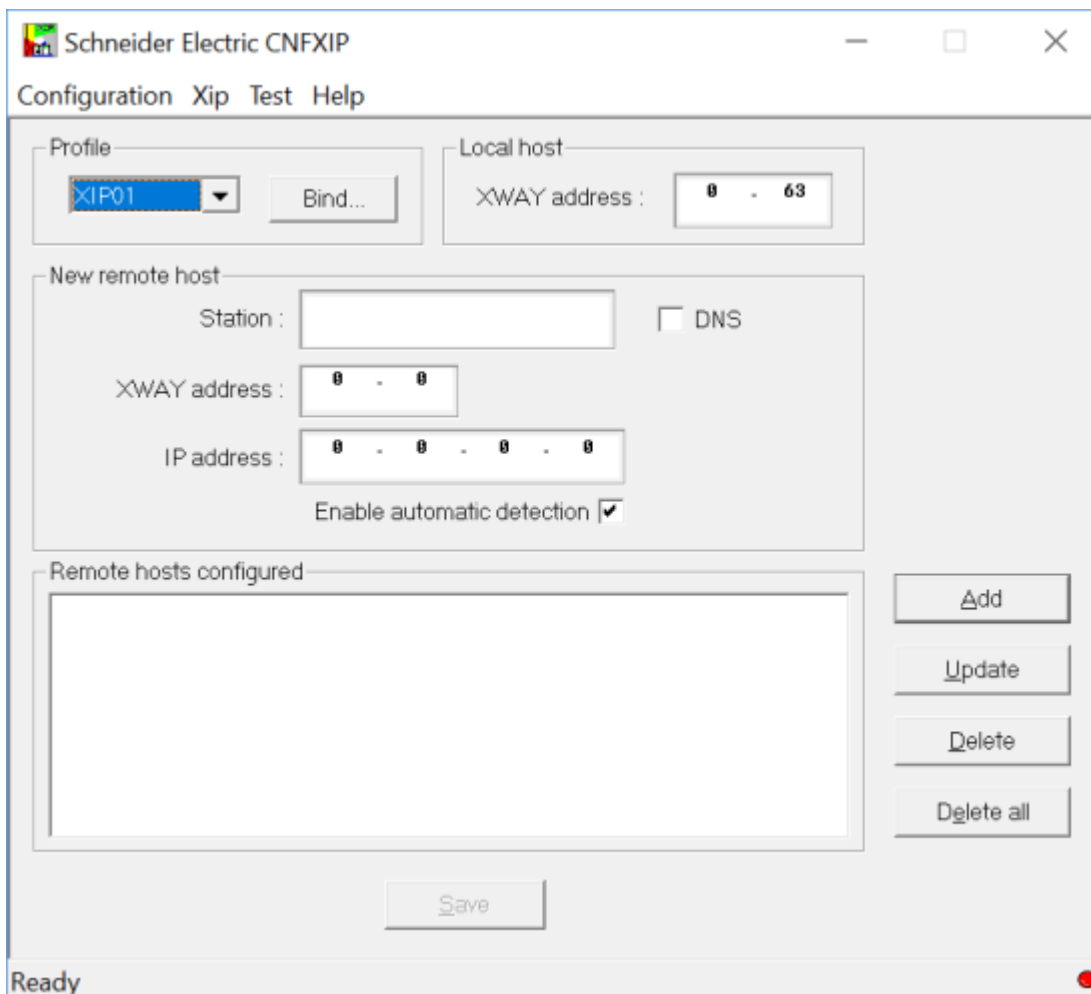
Follow the installation and when it is completed start 'Driver manager' again

Select the 'XIP driver' tab:



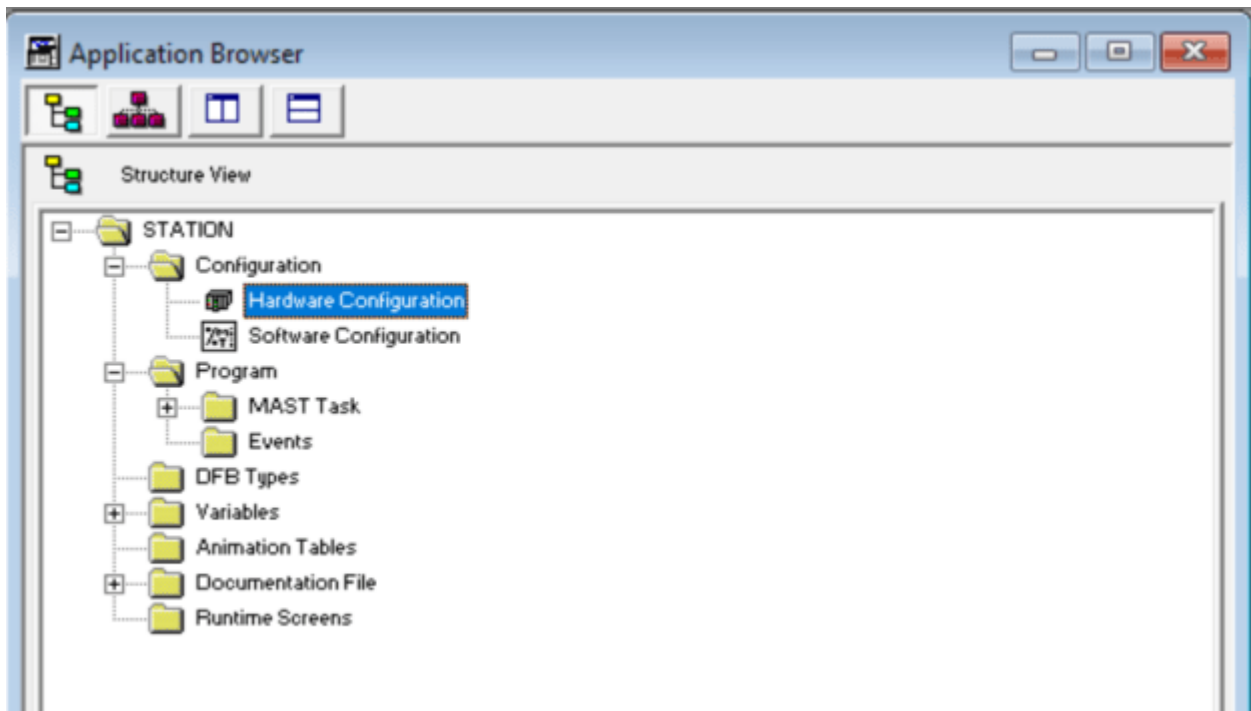
Click 'Configuration':

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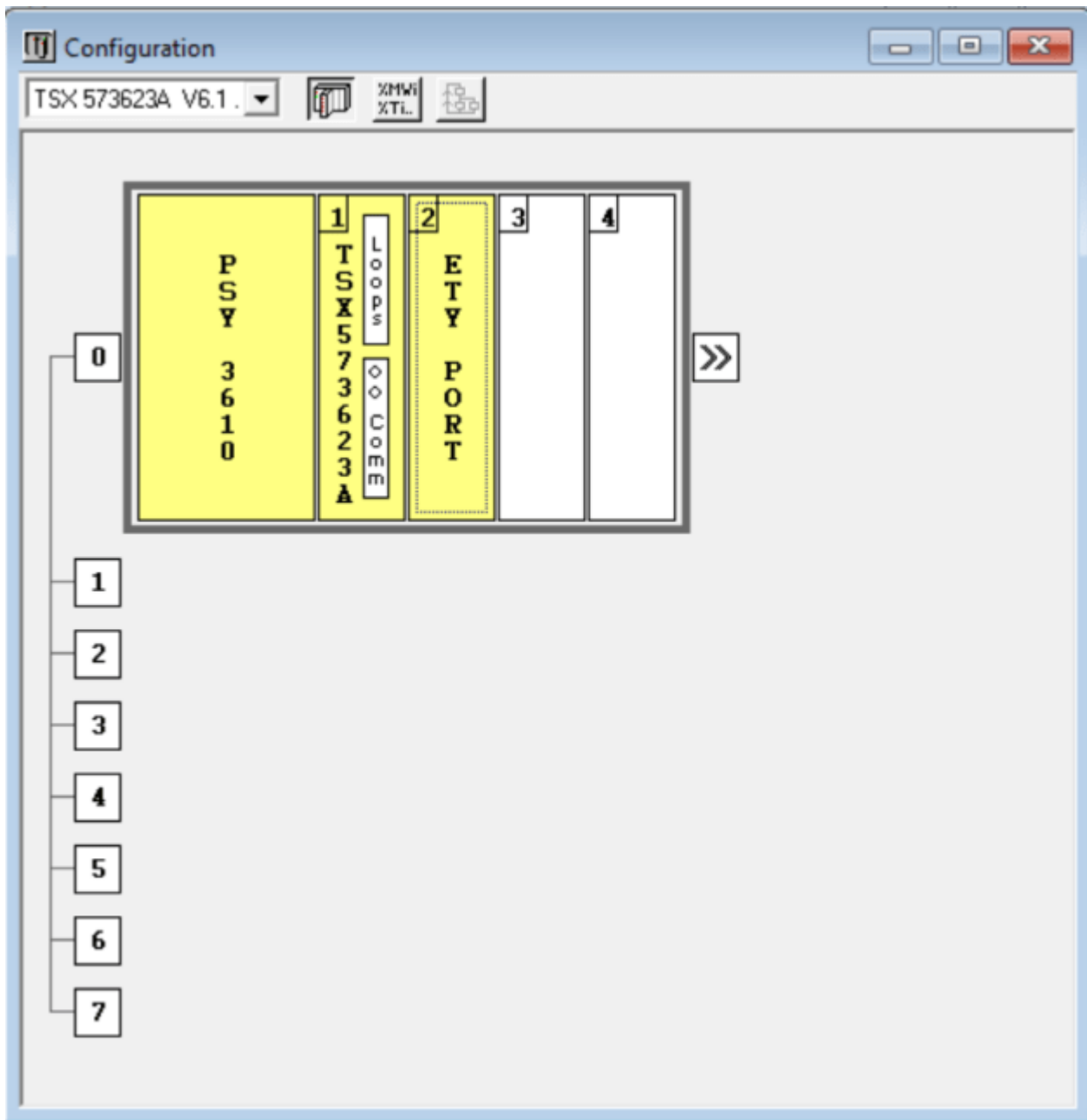


This screen should reflect the hardware setup in your PLC.
To check these things open your PL7 program in PL7 Pro:

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Double click the hardware configuration in the application browser:



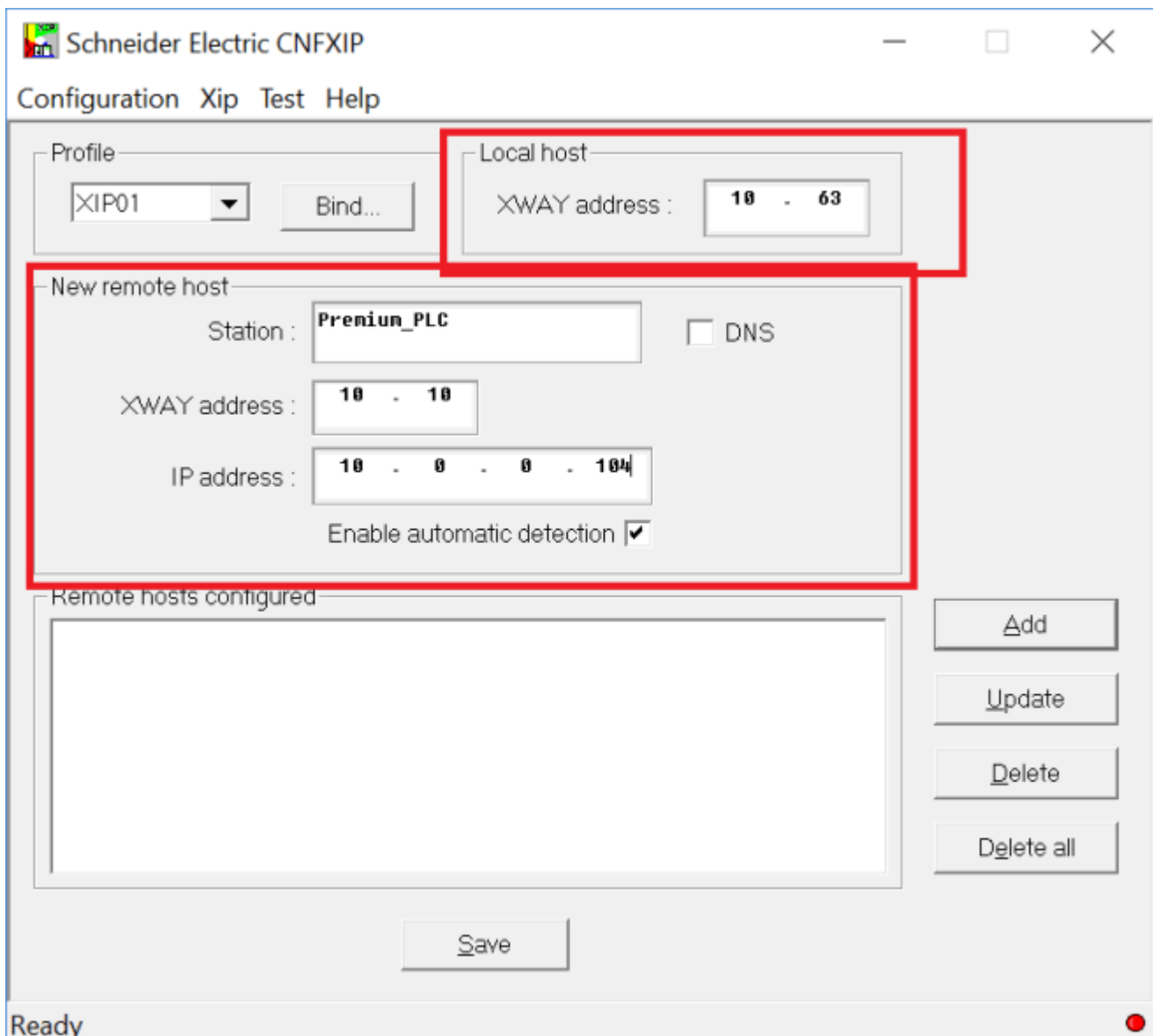
Double click the 'ETY PORT' slot:

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The screenshot shows the 'TSX ETY PORT [RACK 0 POSITION 2]' configuration window. The 'Configuration' dropdown is set to 'TCP/IP 10/100 MODULE'. The 'Designation' field contains 'TCP/IP 10/100 MODULE'. The 'Module IP address' section shows 'IP address' as 10.0.0.104, 'Subnetwork mask' as 255.255.255.0, and 'Gateway address' as 0.0.0.0. The 'Module utilities' section has checkboxes for 'IO Scanning', 'Global data', 'Address server', and 'Bandwidth', all of which are unchecked. The 'SNMP' tab is selected, showing 'XWAY address' with 'Network' 10 and 'Station' 10. The 'IP address configuration' section has 'Configured' selected, with 'IP address' 10.0.0.104, 'Subnetwork mask' 255.255.255.0, and 'Gateway address' 0.0.0.0. The 'Ethernet configuration' section has 'Ethernet II' selected. The 'Connection configuration' table is shown below.

	Xway Addr.	IP address	Protocol	Access	Mode
1			UNITE	✓	MULTI
2			UNITE	✓	MULTI
3			UNITE	✓	MULTI
4			UNITE	✓	MULTI
5			UNITE	✓	MULTI
6			UNITE	✓	MULTI
7			UNITE	✓	MULTI
8			UNITE	✓	MULTI
9			UNITE	✓	MULTI
10			UNITE	✓	MULTI
11			UNITE	✓	MULTI
12			UNITE	✓	MULTI

The info you need is the 'XWAY address' and the 'IP address'
Go back to your XIP configuration:



Local host:

XWAY address: must be NETWORK.UnusedStationID.

In this example where the PLC is on network 10 we must therefore start with 10 and since nothing is using station 63 this is a valid station number for the PC.

New Remote host:

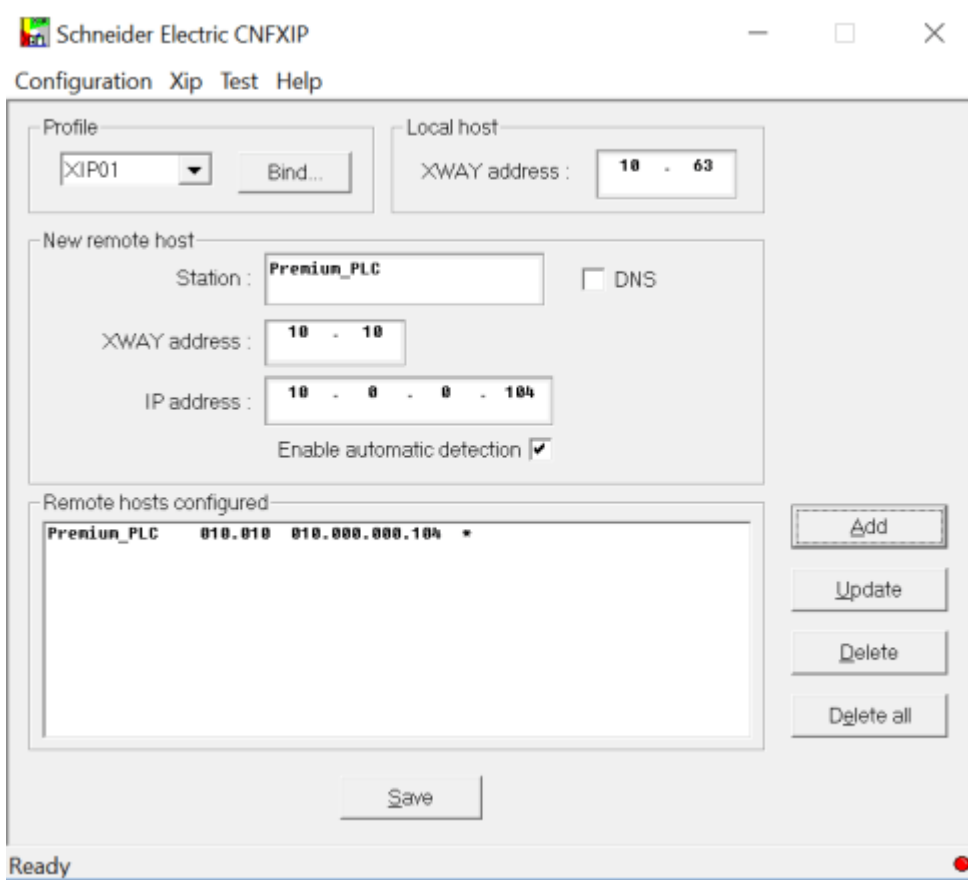
Station: Can be whatever you want, I just call it Premium_PLC

XWAY address: Is what you noted in your hardware configuration, in this example 10.10

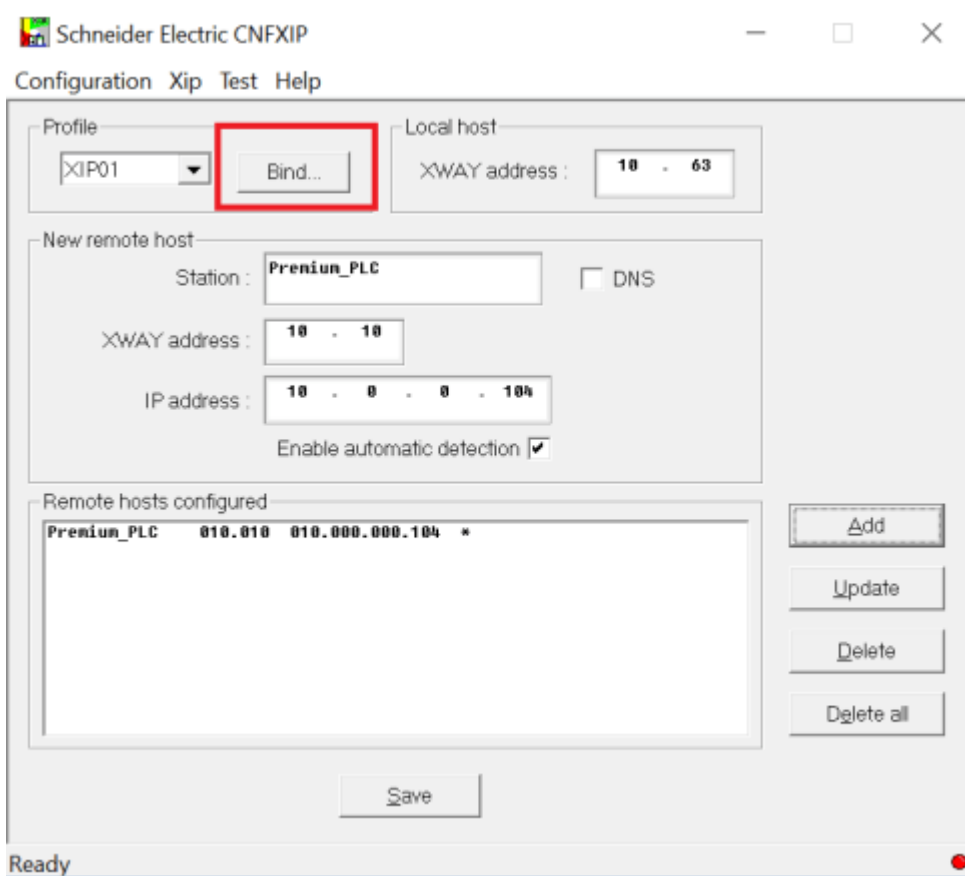
IP Address is the IP you noted for the PLC, in this example 10.0.0.104

Click the 'Add' Button:

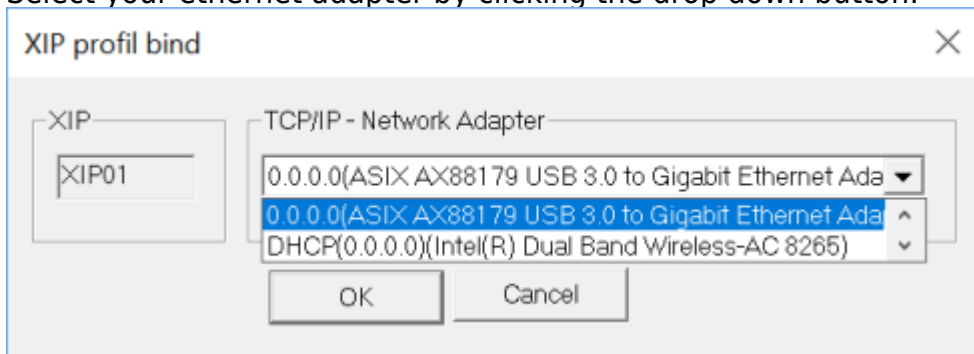
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When you press 'Add' it shows up under 'Remote hosts configured'
Now go to Bind...:



Select your ethernet adapter by clicking the drop down button:



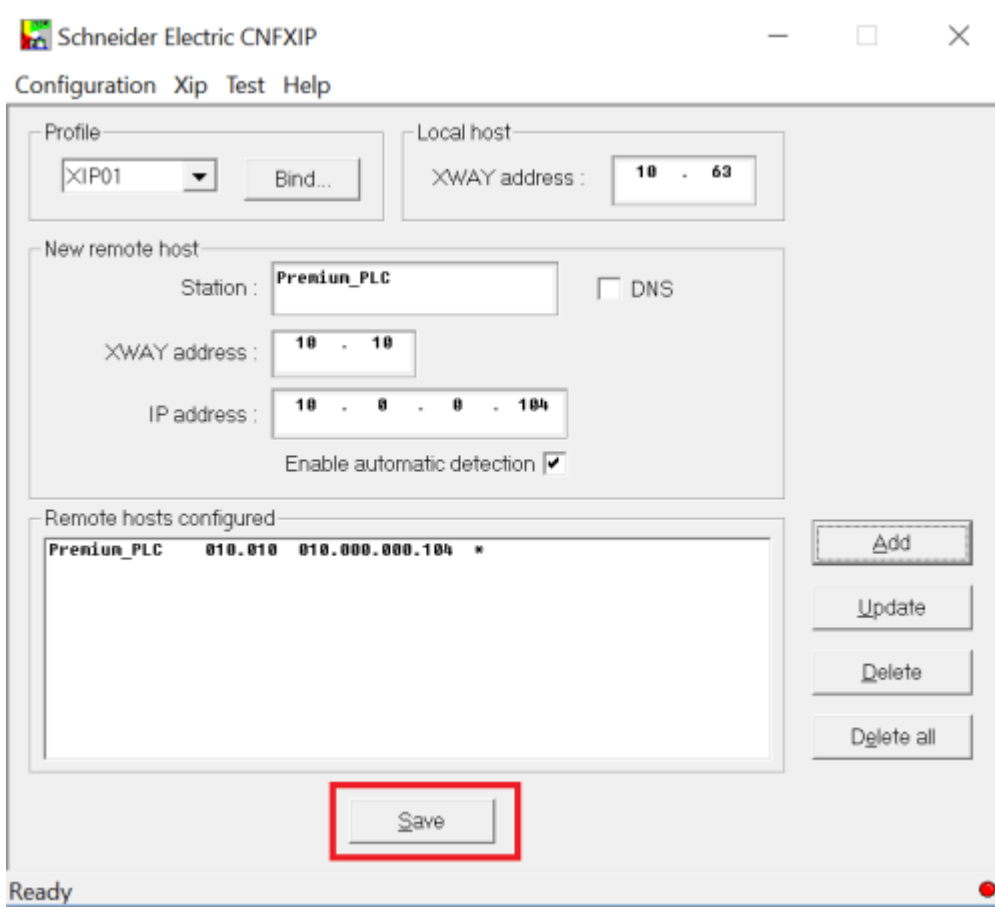
If your adapter is missing you can use the small up/down arrows on the right to find it. You can also use the arrow keys on your keyboard.

REMEMBER: The chosen ethernet adapter MUST have a unique IP on the SAME SUBNET as the PLC

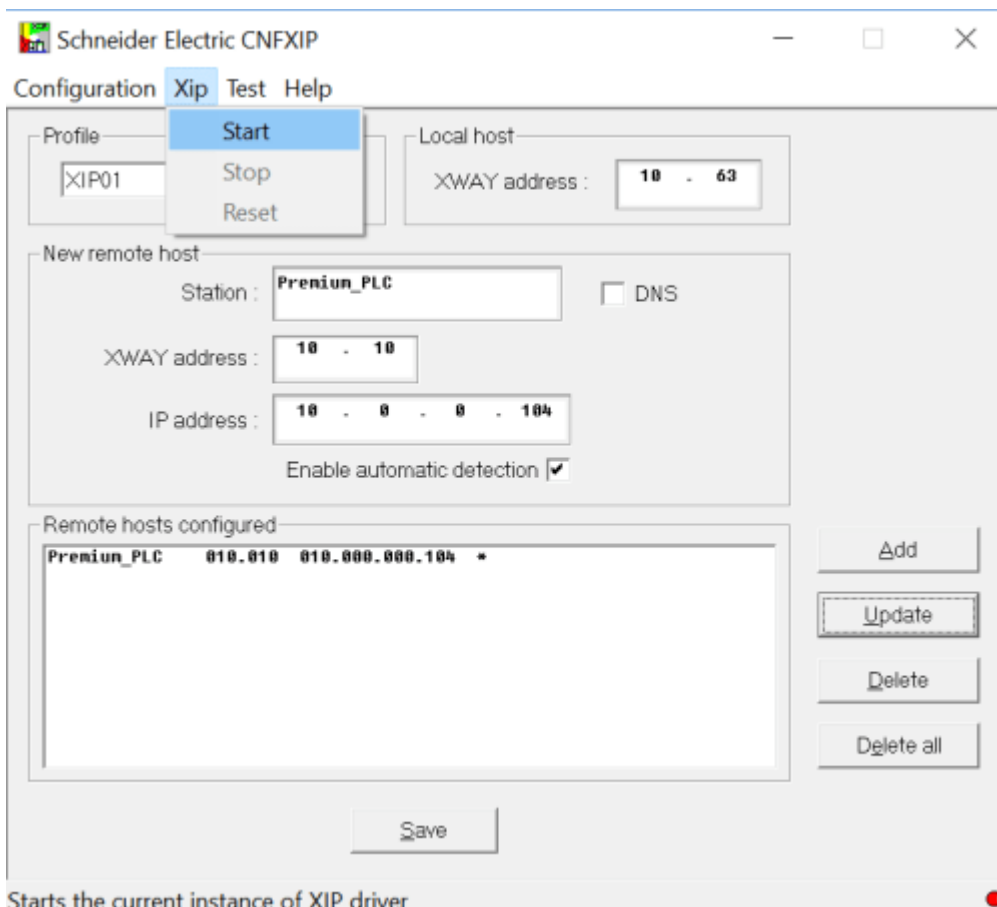
Meaning, for this example you could set a static IP on the specified ethernet adapter called 10.0.0.200 and subnet 255.255.255.0.

Click OK, when the adapter selection window closes press save:

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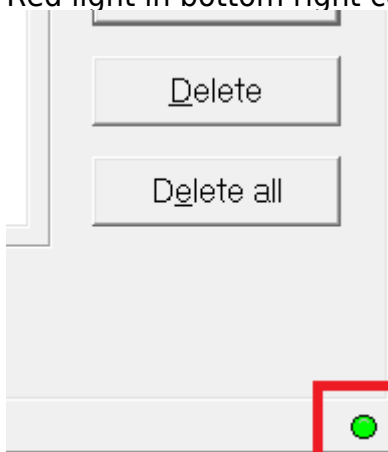


Now go to XIP and press start:



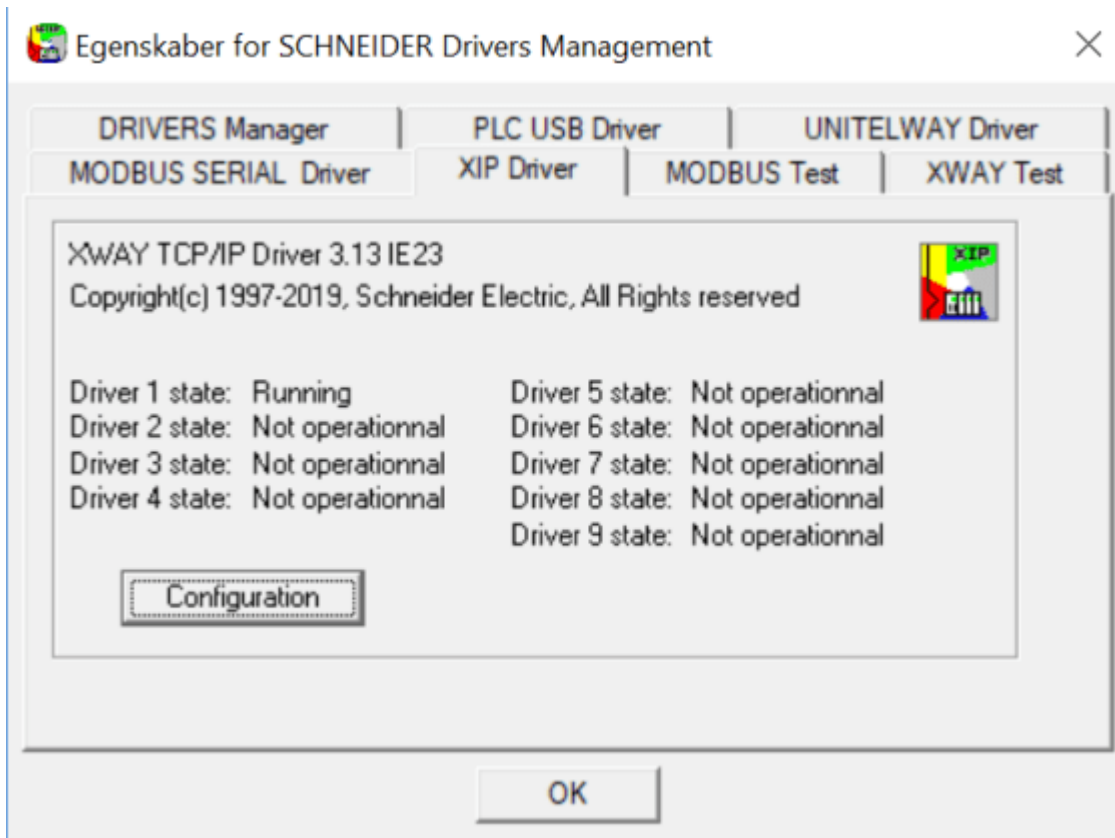
Starts the current instance of XIP driver

Red light in bottom right corner of the window should turn green:



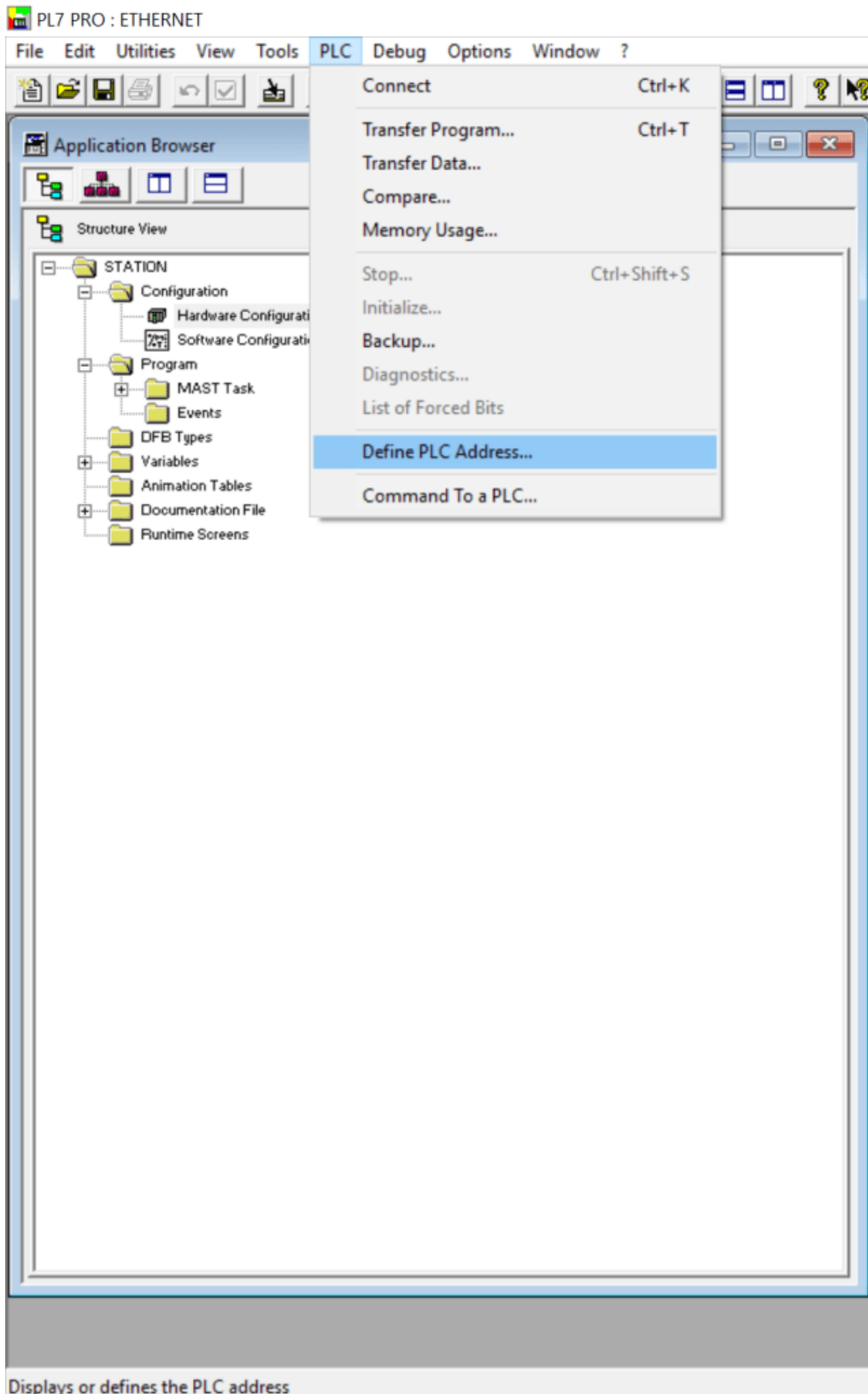
Close the XIP configuration window, either by using the X in the top right corner of the window, or by going to Configuration > Exit
If it asks you to save configuration again, just press 'Yes'

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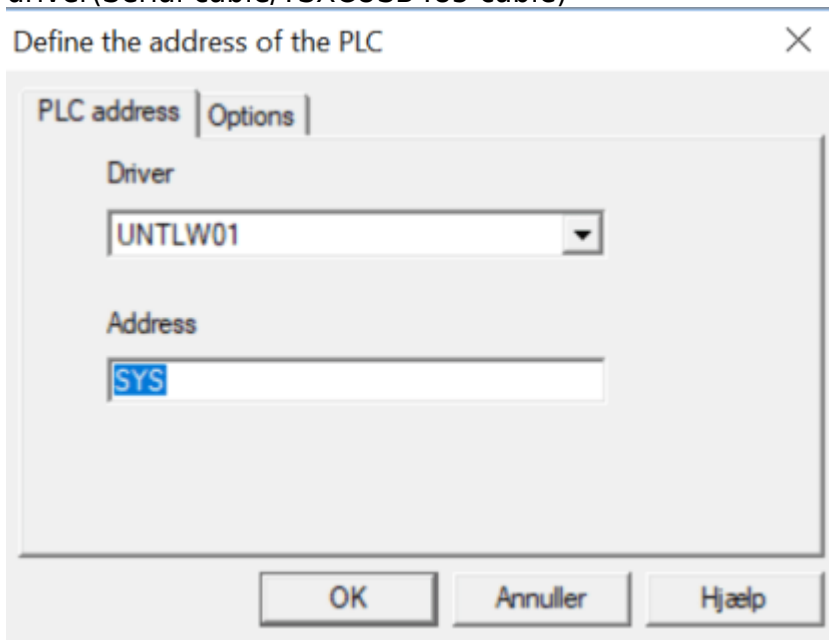


As you can see Driver 1 state is now 'Running'
Close the driver manager and go to PL7, Select PLC -> Define PLC Address...

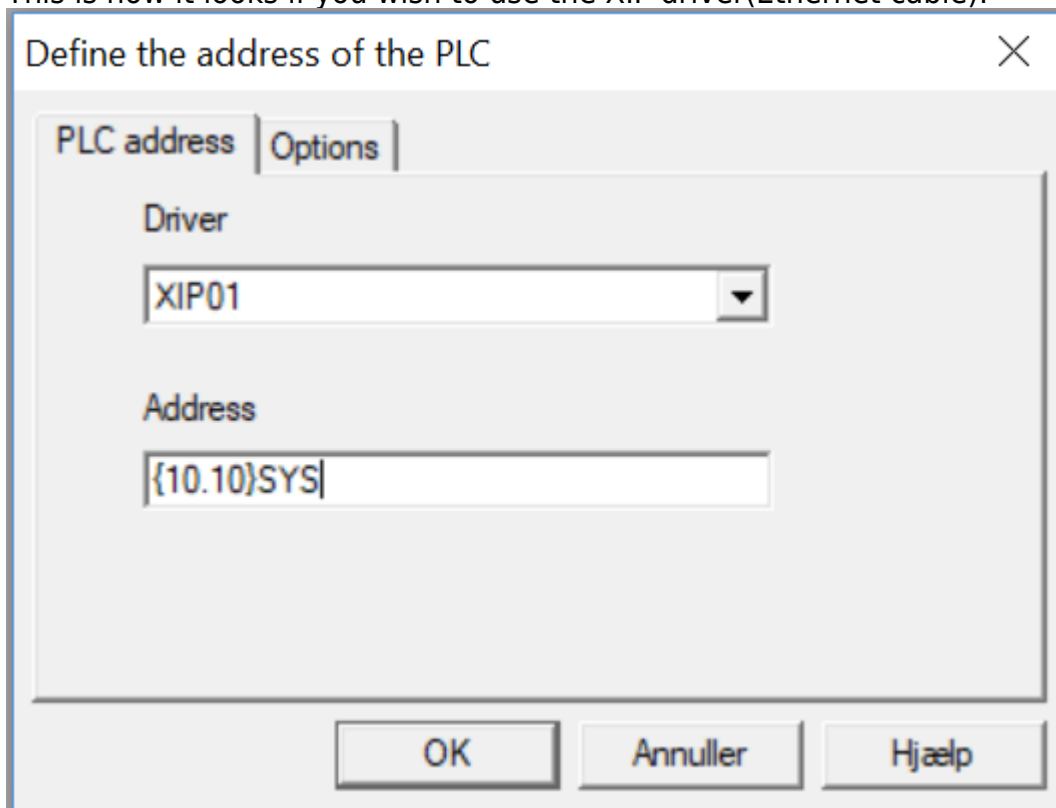
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This will open a new window - This is how it looks if you wish to use the Unitelway driver(Serial cable/TSXCUSB485 cable)



This is how it looks if you wish to use the XIP driver(Ethernet cable):

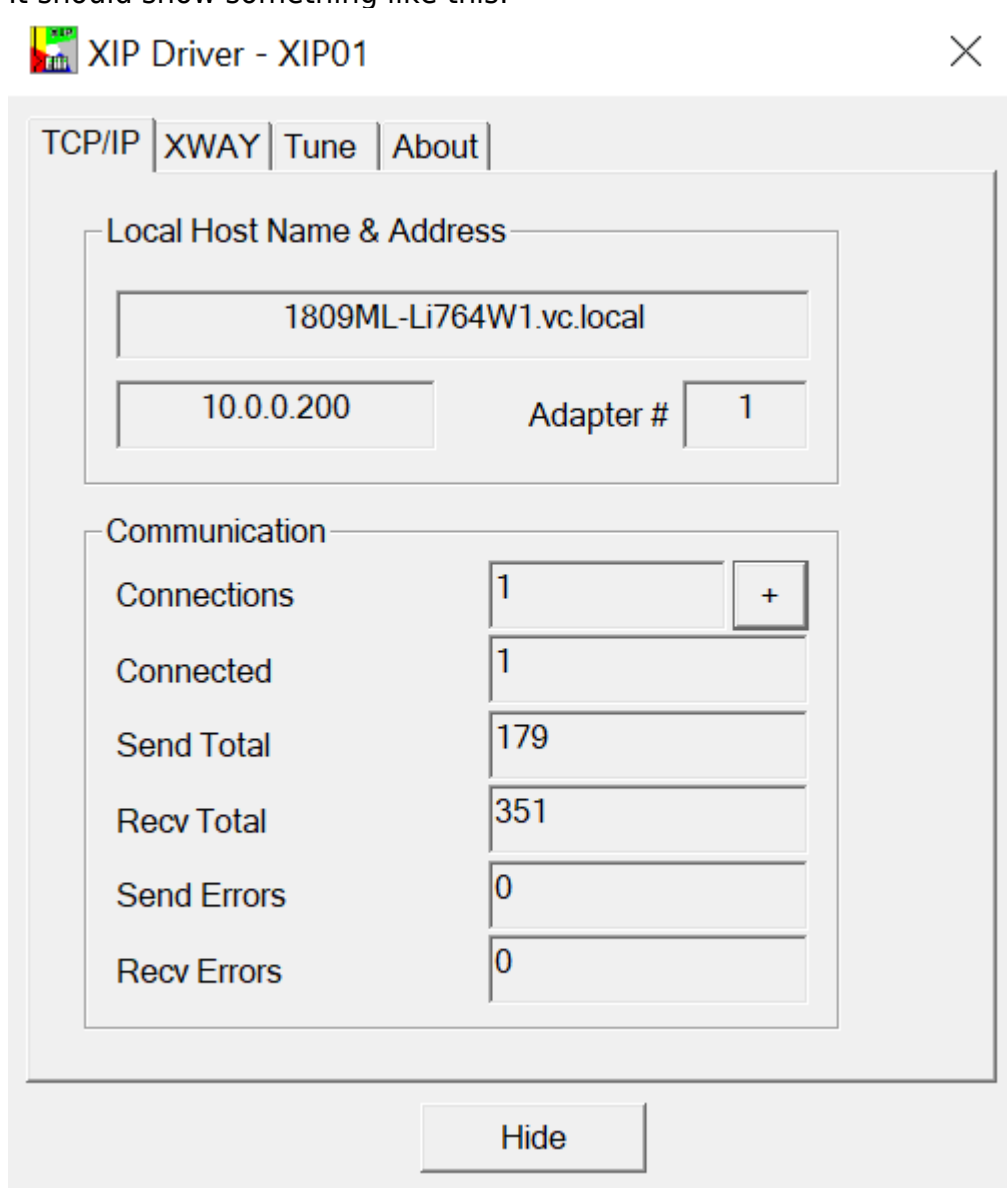


If your PLC is *not* running with network and station ID 10 you must change the numbers in between { and } accordingly

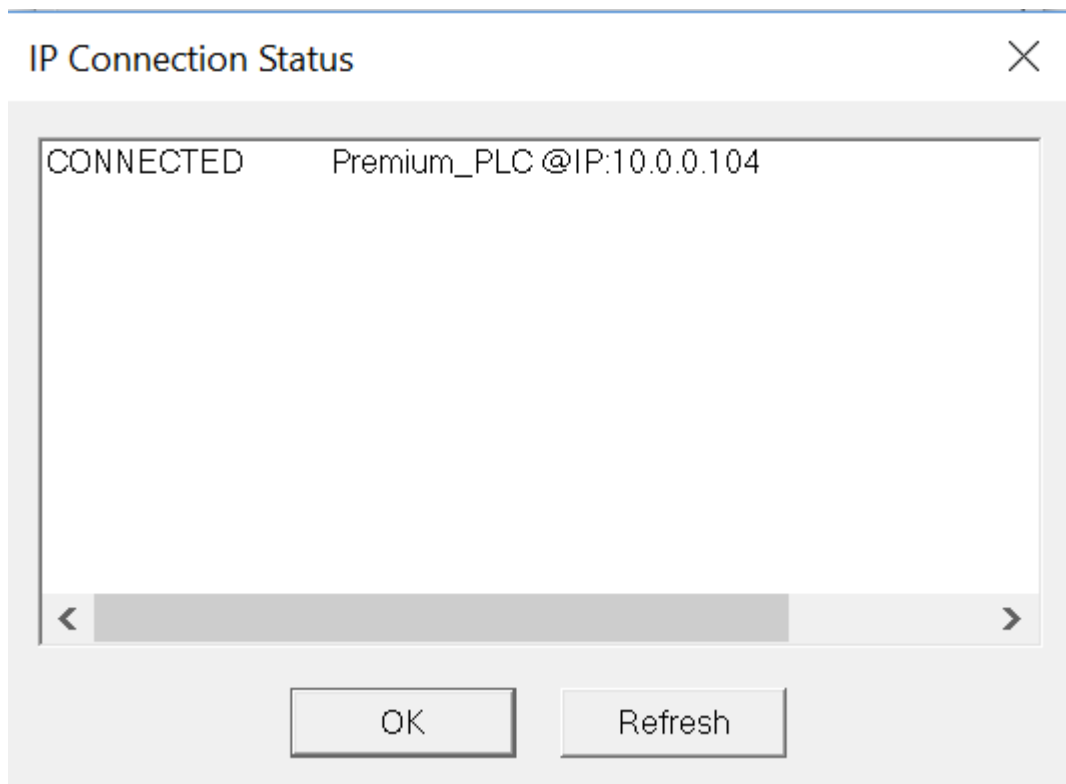
Press OK and hit connect, if you have setup everything correctly it should respond as usual. If you are experiencing problems try double clicking on the XIP driver icon in your systray:



It should show something like this:



As you can see there is 1 connection, this is good, this means that the PLC is detected. If you click the plus(+)-sign next to the amount of connections you can get a more detailed view:



This means that the XIP profile we configured and called 'Premium_PLC' is responding and is connected, and all is fine.

If you're unable to connect and unable to see the configured PLC in this window, you might have a problem with your network setup or your PLC configuration.

You can also ping a configured PLC:

```
C:\Users\ >ping 10.0.0.104

Pinging 10.0.0.104 with 32 bytes of data:
Reply from 10.0.0.104: bytes=32 time=1ms TTL=64
Reply from 10.0.0.104: bytes=32 time=1ms TTL=64
Reply from 10.0.0.104: bytes=32 time=1ms TTL=64
Reply from 10.0.0.104: bytes=32 time=1ms TTL=64

Ping statistics for 10.0.0.104:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 1ms, Average = 1ms
```

If it does not respond you should check the ethernet settings of the used NIC, it should have a static IP set in the same subnet as the PLC with a **UNIQUE IP**

If it does respond and are still unable to connect, check the network and station ID,

This concludes the XIP driver installation.

Conclusion

I hope this guide was helpful to you, you should now have a working PL7 Pro installation on your 64-bit version of windows.

If you feel something is unclear, or if you simply have some tips or better methods let me know, and I'll update the guide.

You can contact me at morten@imap.cc