Consort Ethernet Configuration

Contents

Consort

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Introduction

The latest series of devices from Consort has the possibility to be equipped with an Ethernet port to be able to connect the device to a LAN (Local Area Network). This expands the possibilities to manage and read the devices over the network from any desired location.

For the ease of use for the user and to maintain compatibility with existing software also, the choice was made to use a complete module which allows to communicate with the Consort device like a serial communications port, type COMx.

These modules do require some software actions -- to be done externally from the device -- to:

- Set up an IP address which will be the network address from the device.
- Set up a Virtual Comm Port which can be used in any serial communications program to correspond with the device.

Required Hardware

The required hardware for connection from a Consort network device to a *Ethernet switch* is a standard straight forwarded network cable type CAT5e.

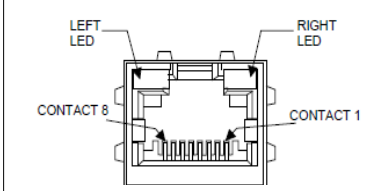When connecting directly to a computer network interface, a cross-over network cable is required.

Required Software

1. The IP address and some other settings from the Ethernet module needs to be set using the Lantronix *Device Installer* program. The latest version can be downloaded from the Lantronix website via this link: http://ltxfaq.custhelp.com/app/answers/detail/a_id/644.

2. When the module is properly configured, a software bridge needs to be implemented by means of a Virtual Comm Port. This can be achieved using the *Com Port Redirector* from Lantronix at this link: http://ltxfaq.custhelp.com/app/answers/detail/a_id/928 .

Please download and install these 2 programs to be able to set up the device for the serial communication. The given links can also be found on our website www.Consort.be, section Support.

Getting Started

Connect the device via the Ethernet port to the network.

Link LED Left Side	
Color	**Meaning**
Off	No Link
Amber	10 Mbps
Green	100 Mbps

Activity LED Right Side	
Color	**Meaning**
Off	No Activity
Amber	Half Duplex
Green	Full Duplex

The LED's on the device should start to blink. When properly connected the left side LED remains lit. The right side LED will blink.
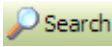
In case of proper connection -- the left LED remains on -- one can now search and configure the device following the next steps.

Device Installer

Launch

- Launch the program *DeviceInstaller* (***Required Software***, *item 1)* on the computer to have the following screen:
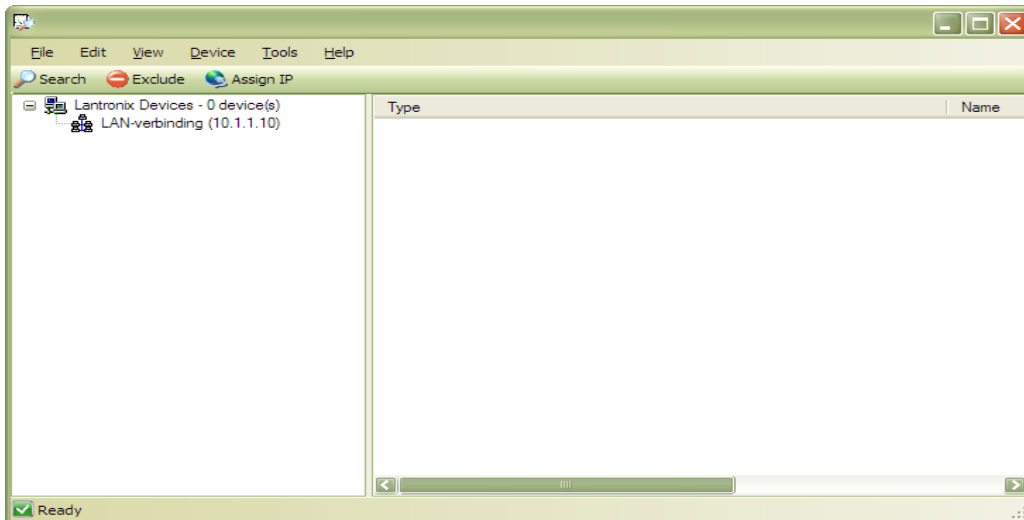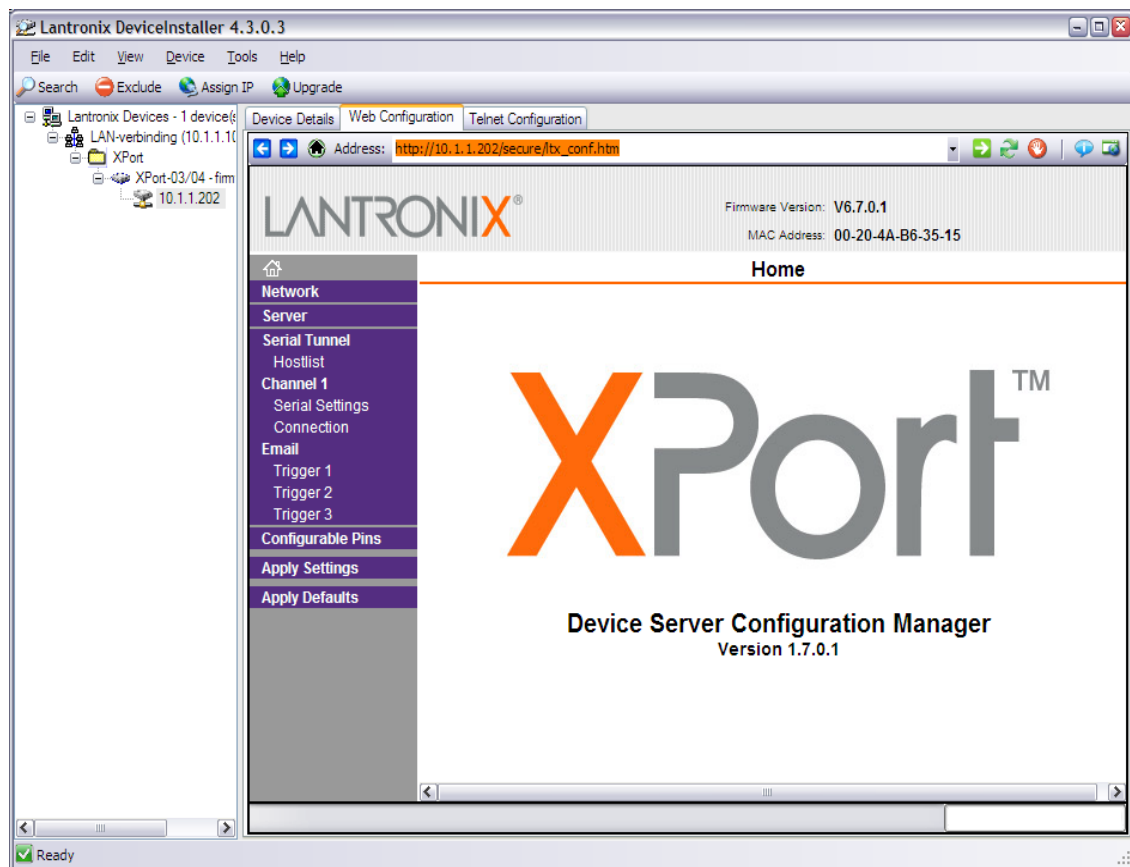

- When multiple network interfaces are present, select the interface to which the device is connected.

- Click the 🔍 Search icon so the software can find the connected devices. The search will take some moments.

- When finished, expand the complete tree by clicking the symbols **+**. The screen will show then e.g.

Consort
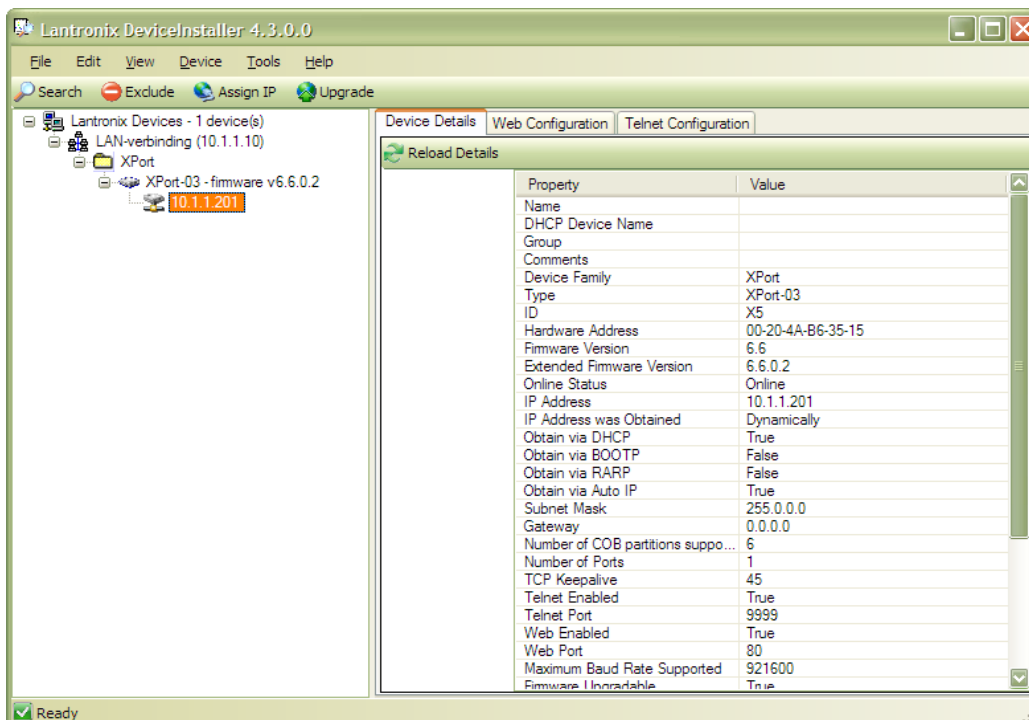
Web interface

The device mostly has an automatically assigned IP address as DHCP is enabled by default. As this address can be changing in time, it is better to assign a fixed IP address manually.

- Click the Tabbed page *Web Configuration* followed by the *Go* Icon ➡ .

- The device might request a username and password. Ignore this request by leaving the input fields blank -- unless a password has been configured before -- and continue choosing *OK*.

- The following web interface will appear.

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IP address

First needs the IP address to be configured according to the network requirements to be able to connect to the device.

In case it is not known which address can be used, contact the local network administrator to have correct values. This is important as firewalls will block addresses which are not allowed on the network.

- Click the item *Network* in the left column.

- Choose *Use the following IP configuration*.

- Fill in the *IP address* and *Subnet Mask* for your device.

- When using in a LAN only or direct with a computer, the *Default Gateway* can be filled with 0.0.0.0.

- Click the *OK* button, *"Done!"* will appear next to the button. Your settings are not permanent yet as the device is not programmed! This will be done later.

The example values for the IP configuration here given should not be followed as this can be completely erroneous for your network:

Serial port

The settings of the serial communication port needs to be set according to the configuration of your device.

For the Consort devices, the baud rate can be different, check this out first on your device. It is important the exact same baud rate is set as the one configured in the device.

The other settings are *8 data bits, no parity, 1 stop bit, no flow control*.

- Click the item *Serial Settings* in the left column.
- Set the protocol RS232, flow control, baud rate, Data bits, Parity and stop bits.
- Also configure all parameters of the Flush Mode to Yes.
- Click the *OK* button, *"Done!"* will appear next to the button. Your settings are not permanent yet as the device is not programmed! This will be done later.

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Configurable pins

The device has some configurable pins which aren't used and should be configured as follows:

- Click the item *Configurable Pins* in the left column.

- Set all pin functions to *General Purpose I/O*.

- Set all pin directions to *Input*.

- The setting of the Active level is not important.

- Click the *OK* button, *"Done!"* will appear next to the button. <u>Your settings are not permanent yet as the device is not programmed!</u> This will be done later.

Apply Settings

When all settings are configured, it is important the device is programmed with these.
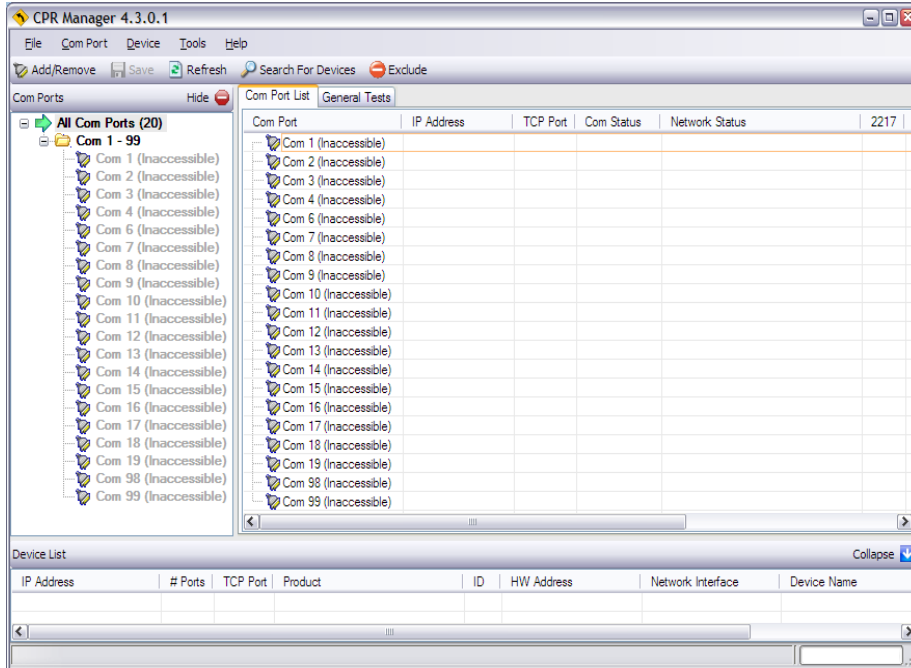
- Click the item *Apply Settings* in the left column.
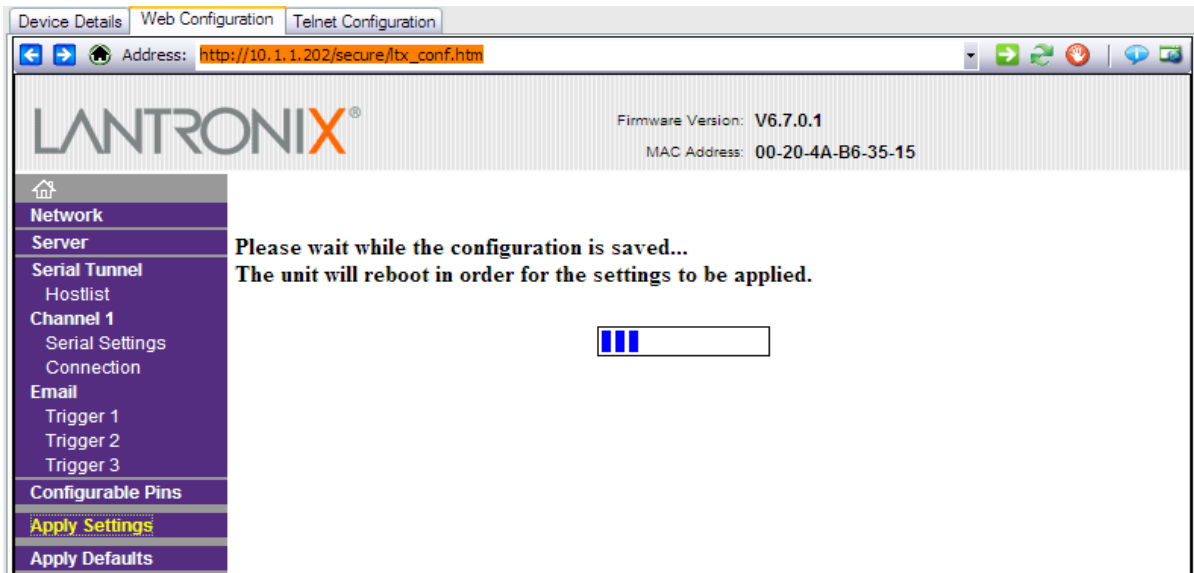
When finished, the Home screen will reappear. To see the new configuration, it is best to close the Device Installer program and restart it.
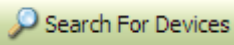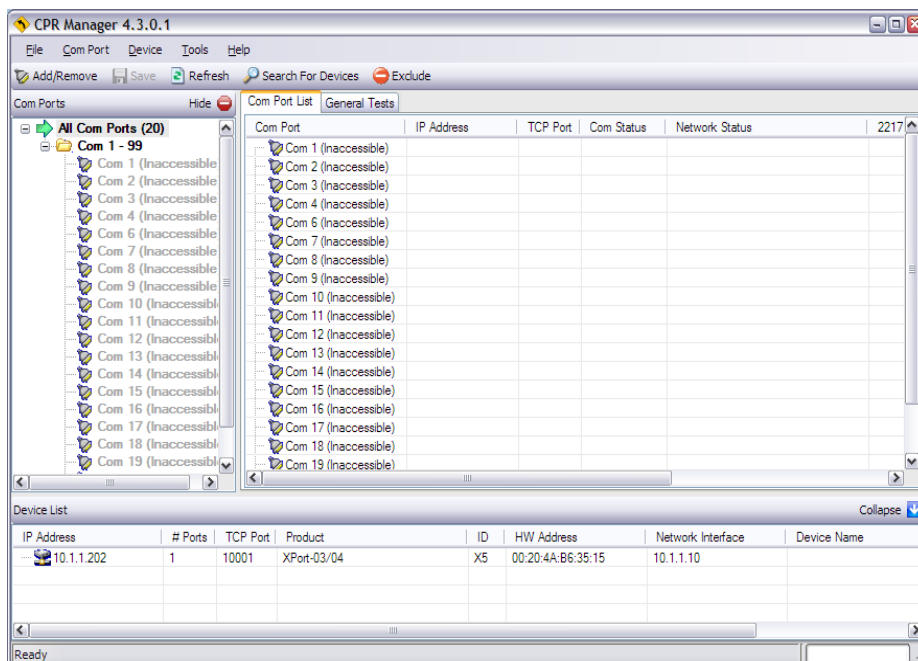
Com Port Redirector

Launch

- Launch the program *CPR Manager* (***Required Software***, *item 2)* on the computer to have the following screen e.g.:
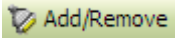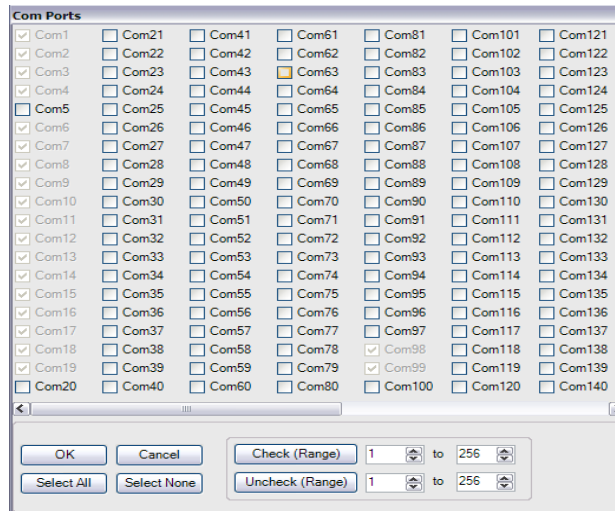

Devices

- Click the button to have your available Consort instruments shown in the list at the bottom:

Add Virtual Comm Port

To add a new Virtual Comm Port which should interact as COMx for the Consort device:
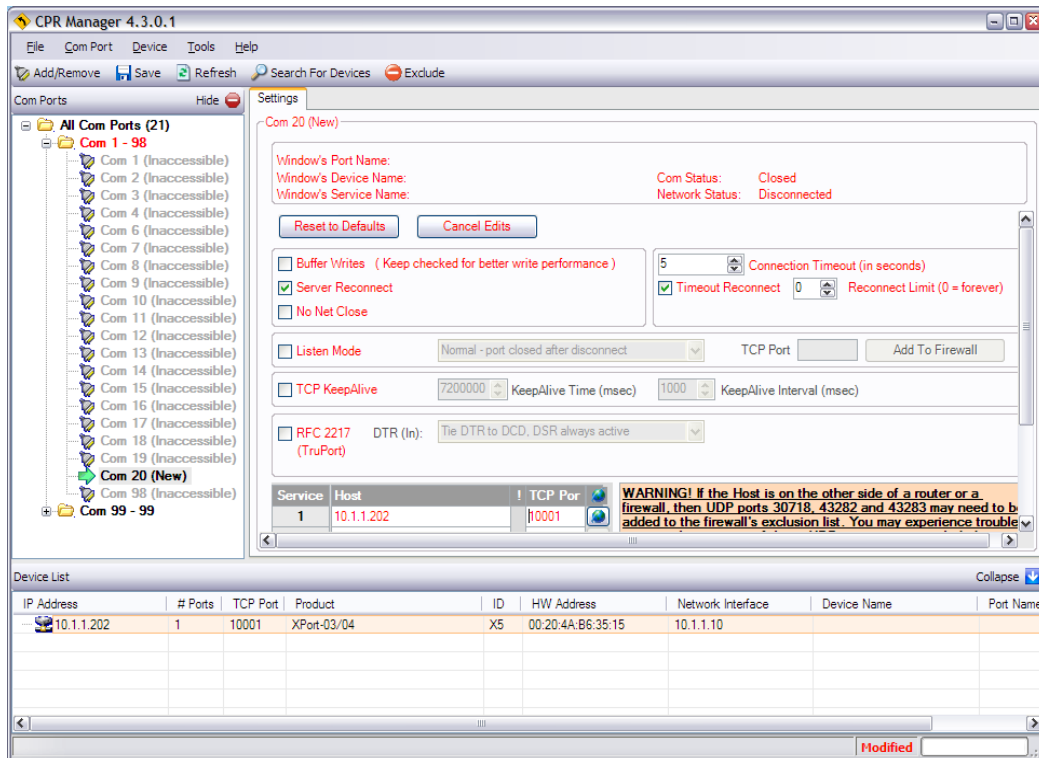
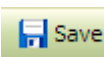- Click the button 🔧 Add/Remove to have the following screen:
  e.g.

- Check one of the available COMx ports as the desired number to add. Note that some programs do not allow higher numbers.

- Click *OK* to confirm your selection and select the new port to have the following screen:
  e.g.
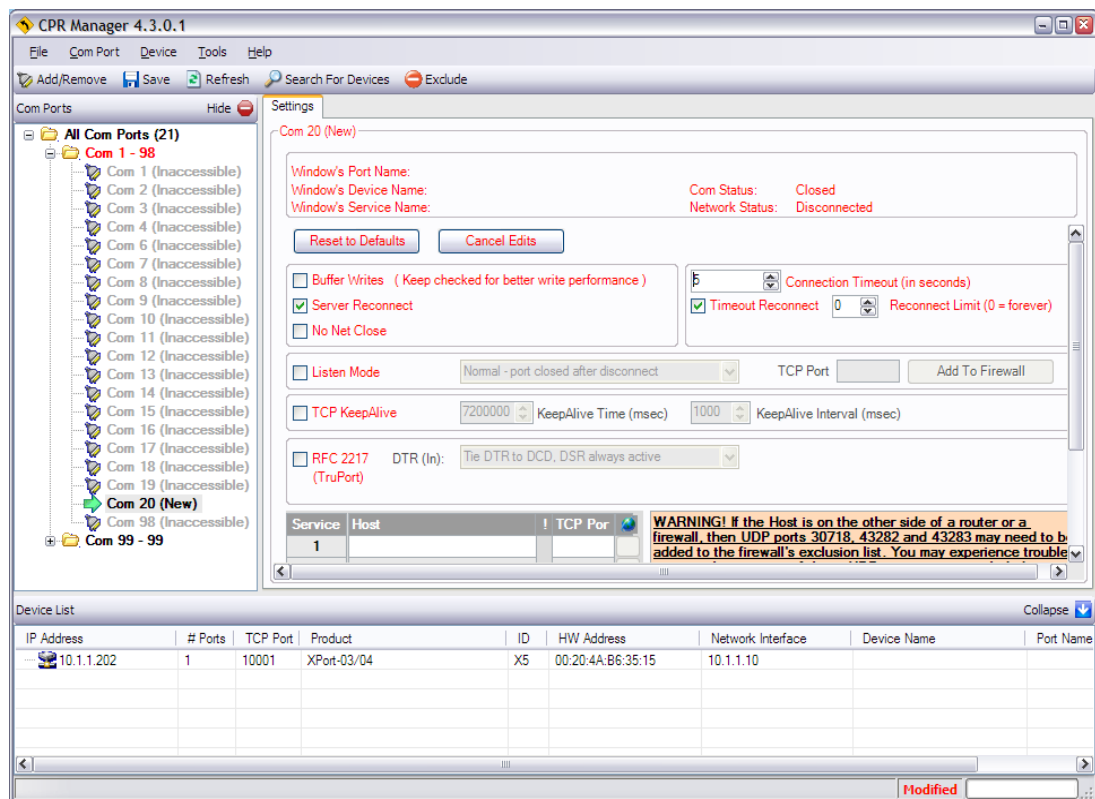
- Double click the device in the list at the bottom, to link it to this new port.

- Make sure to set the check boxes 'Server Reconnect' and 'Timer Reconnect'. Disable other check boxes.

- Click the button [Save] to install the COM port to your system.

- When using the first time, Windows will notify the software is not in the compatibility list. Please ignore this message and confirm to continue.

- Close the program when finished.

Finally

When all settings have succeeded, your device can now be accessed as a regular serial communications port such as other RS232 or RS485 ports. When using for e.g. the Consort Data Information software, simply set your Serial Port to the VCP you've just created.

More information

More information on the device and its features can be found in these guides from the device:
http://www.lantronix.com/support/downloads/?p=XPORT.

Commonly asked Xport questions:

http://ltxfaq.custhelp.com/app/answers/detail/a_id/987/kw/xport-03/session/L3NpZC8zdVE3ZHY5aw%3D%3D