Digi Connect® N2S-170 Getting Started Guide

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Introduction

This document is intended as an installation guide for the Digi Connect N2S-170 when using the three most typical use cases: RealPort, TCP Sockets, and UDP Sockets.

For full information on the Digi Connect N2S-170, consult the Digi Connect Family Users Guide.

Configuring the IP address

There are two methods to configure the IP address, via the supplied CD, or by using the Digi Discovery Utility. Both work equally well.

For the Discovery Utility refer to page 7.

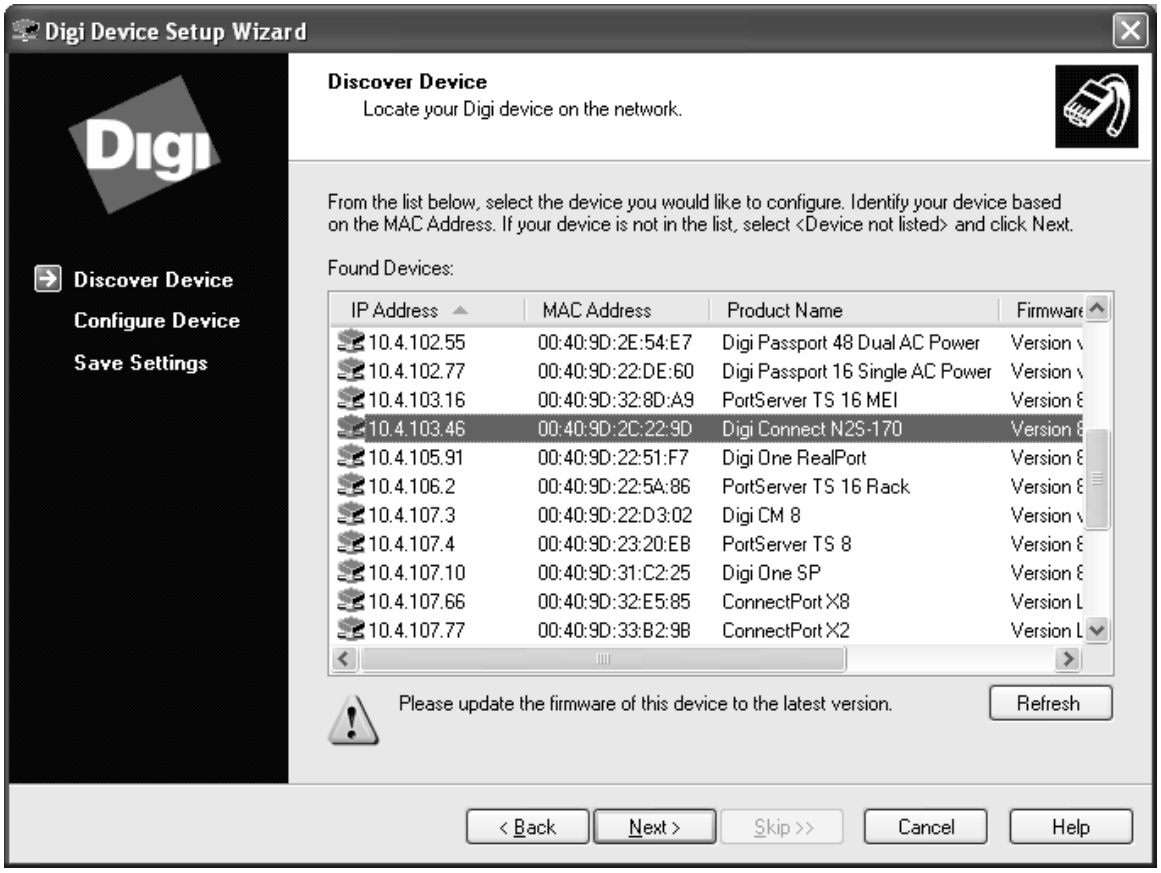
Configuring the IP address using the CD:

1. Insert the Digi Configuration CD into your PC and it will auto run, bringing up the introduction page.

2. Click on the setup icon or wait a few seconds and the Digi Device Setup Wizard will start.

3. Be sure you have the Digi Connect N2S-170 physically installed and that the Ethernet port is connected to your local LAN network.

4. Click "**Next**" when you are ready to proceed.

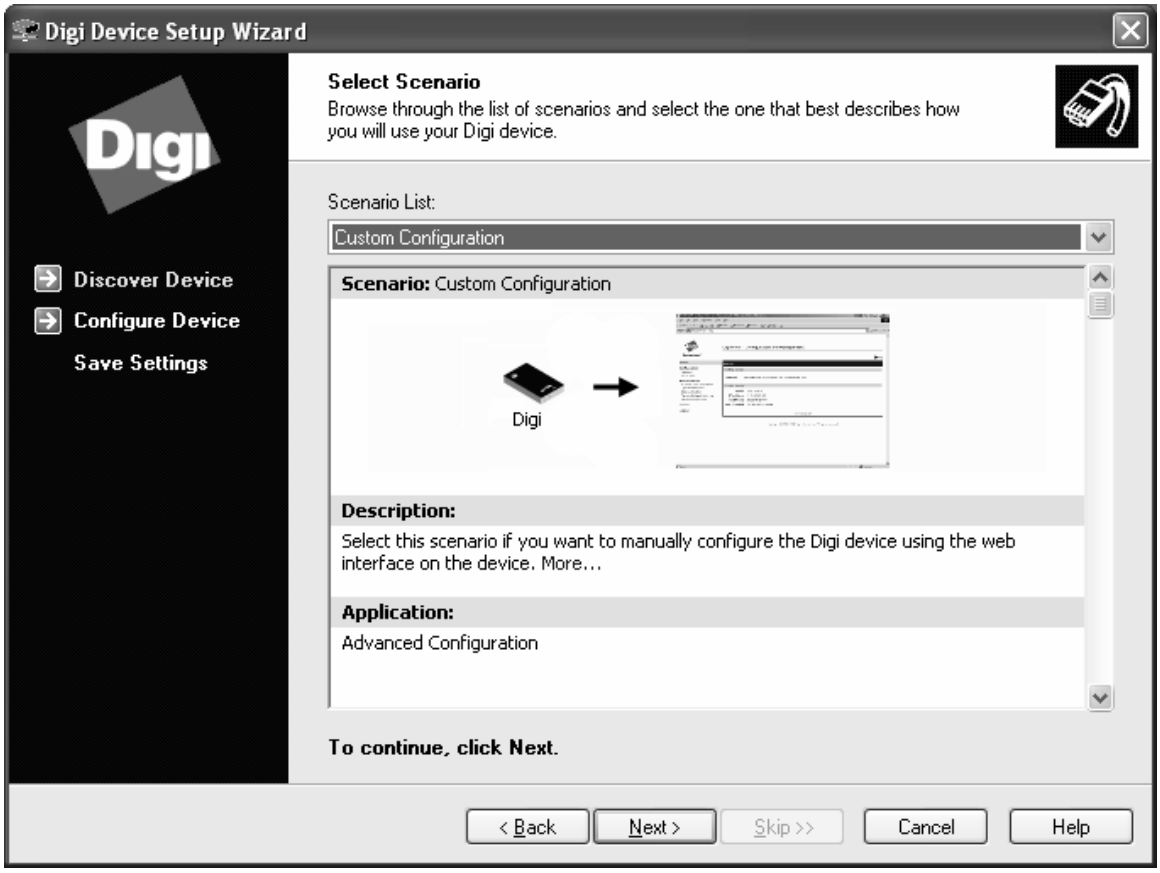


The unit will be located by its MAC address and it may not have a valid IP address if no DHCP server is running.

5. Select the Digi Connect N2S-170 you wish to configure.

6. Press "**Next.**"

   Note: If you wish to use a static IP address enter the information before pressing "**Next**."



7. Review the displayed Network Settings.

8. If settings are correct, click "**Next**." Wait while the Settings are being saved.

Congratulations, the Setup Wizard is completed.

9. You can select to configure another device, or click "**Finish.**"

Your browser will be started so that you can log into the device using the default user "**root**" and the default password "**dbps**."

Configuring the IP address using the Digi Discovery Utility

If using the Digi Discovery Utility from our web site:
http://ftp1.digi.com/support/utilities/40002256_F.exe
run it to locate the Digi Connect N2S-170.

If the IP address is **not** valid, double-click on the unit to be configured. This will bring up a screen where the IP address can be edited. Use DHCP or assign a static IP address.

If the IP address **is** valid, double-click on the IP address to start your browser and log into the device using the default user "**root**" and the default password "**dbps.**"

Configuring the Digi Connect N2S-170 Communications Method

The three methods of communicating with devices through the Digi Connect N2S-170, are RealPort Installation, TCP Socket Communication, and UDP Socket Communication. Refer to pages below for each installation method.

I. Installing RealPort

For customers using the RealPort com redirector for a RealPort type installation:

1. Stop after setting the IP address.
2. Close the browser.
3. Install RealPort on your PC.

The Digi Connect N2S-170 has default settings which work when using RealPort without any further configuration of the device.

You can install the version of RealPort from the included CD.

To be sure you have the most recent version, please visit the Digi web site at this link: http://www.digi.com/support/productdetl.jsp?pid=3358&osvid=57&s=321&tp=1

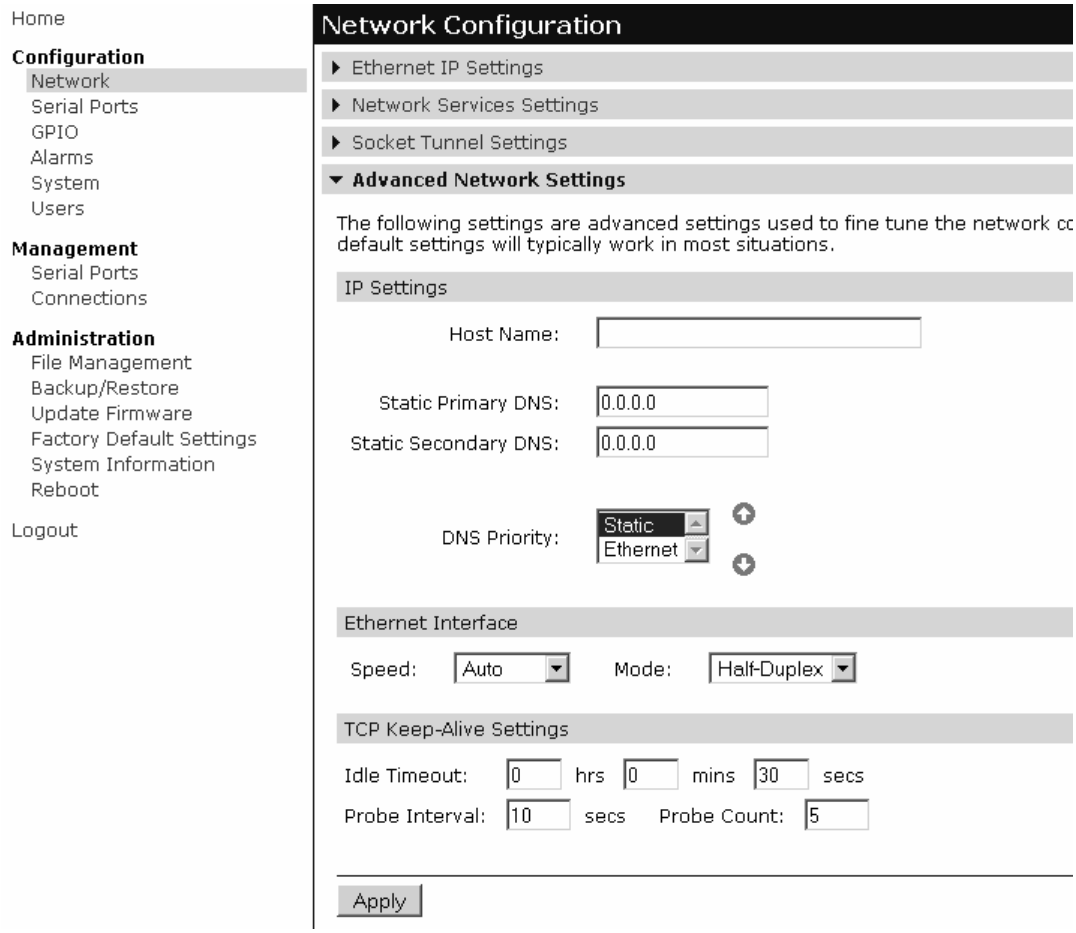
When you unzip the driver package, run the "Setup" program.

Instructions for installing RealPort are not covered in this document. Consult the Digi web site for the RealPort installation manual for your specific operating system.

II. TCP Socket Communication

1. Log into the Digi Connect N2S-170 by typing its IP address into your browser. Log in as:
   Username: **root**
   Password: **dbps**

2. Under Configuration, select Network, and then Advanced Network Settings. You will see the following page.



3. Change the default settings under the TCP Keep-Alive Settings as shown.

4. If you are instructed to use different values, cross out the values below and write in the values you used.

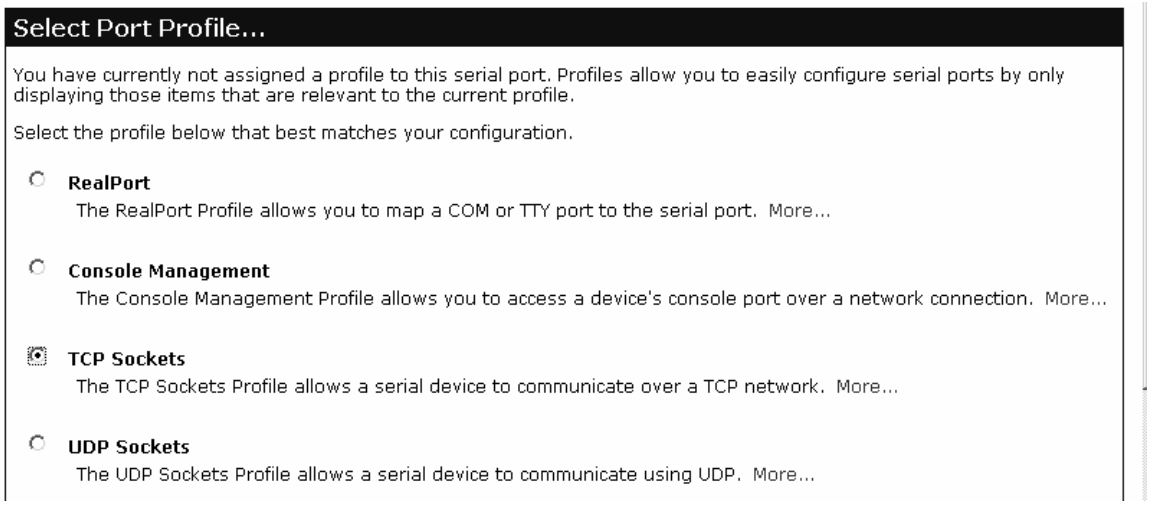
Idle Timeout:	0 hrs 0 mins 30 secs	_____
Probe Interval:	10 secs	_____
Probe Count:	5	_____

5. When finished, make sure to click "**Apply.**"

6. Next, under Configuration, select Serial Ports and then select Port 1.

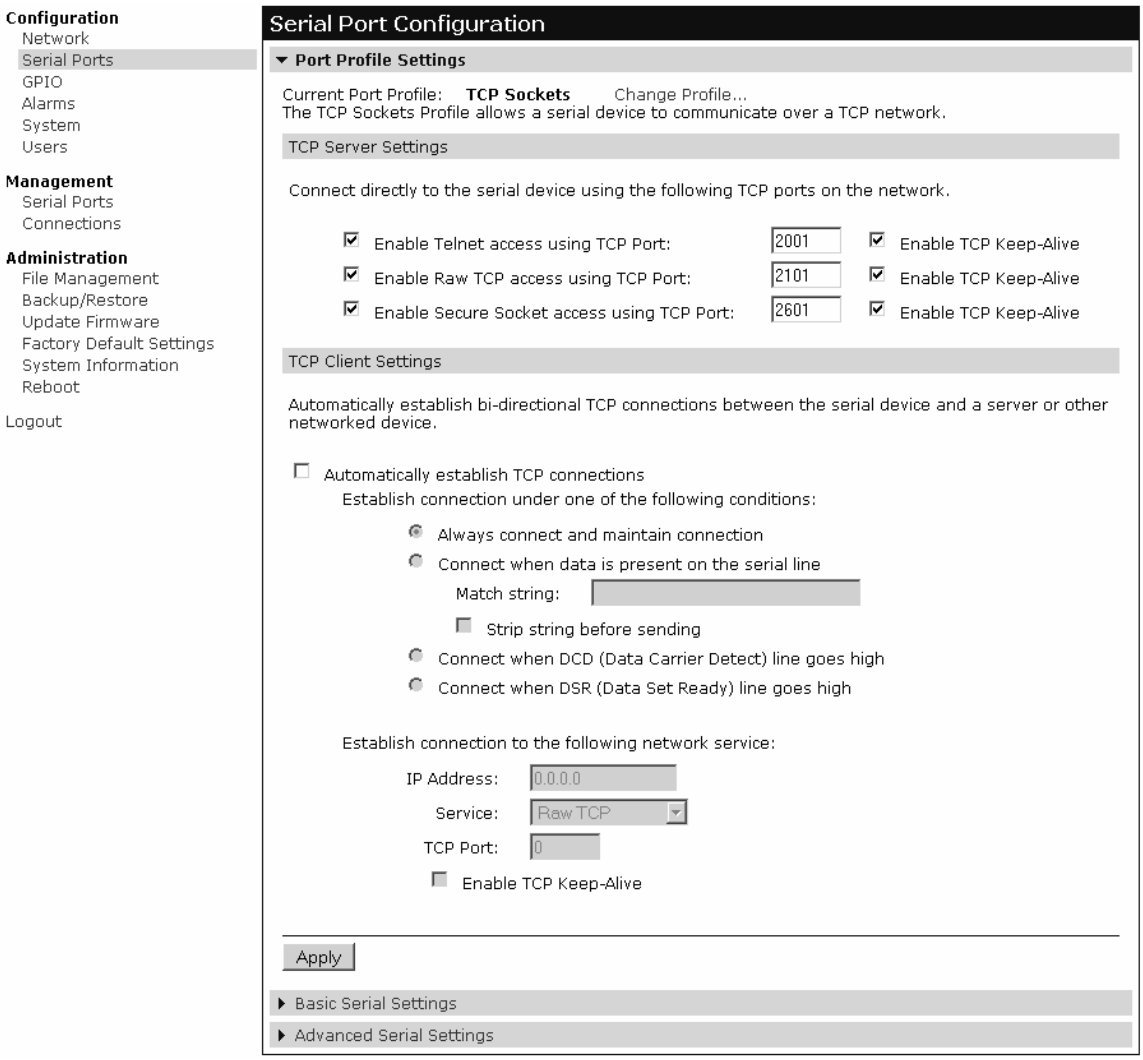
7. The Select Port Profile page will open as shown below.

8. Select TCP Sockets.



9. Scroll Down and Click "**Apply.**"

   The Serial Port Configuration page opens as below:



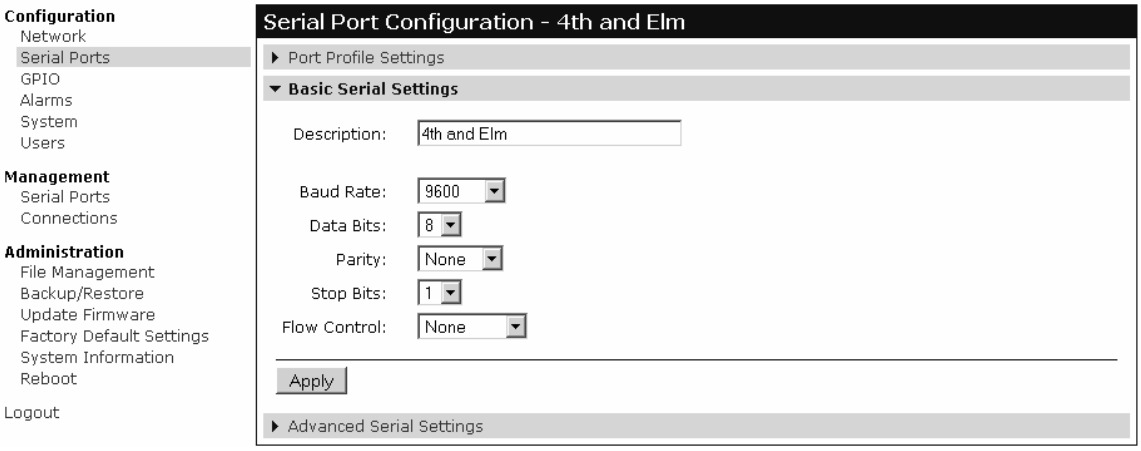
10. By default, the TCP Keep-Alive options are not enabled. Enable these as shown.

11. Scroll down and click "**Apply**" after making any changes.

Basic Serial Settings:

12. At the bottom of the page, click on "**Basic Serial Settings.**"

The following page will open. Make any changes to the serial port parameters you wish to use, and enter a description for this port.



13. Write down the correct settings for your device below for future reference:

Description _____

Baud Rate: _____

Data Bits: _____

Parity: _____

Stop Bits: _____

Flow Control: _____

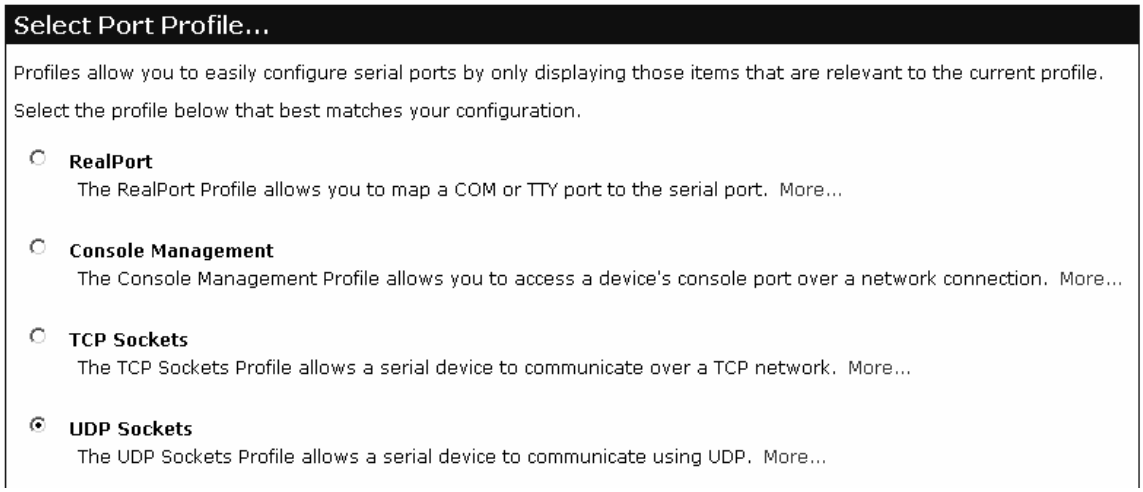
14. Make any necessary changes for the device you are connecting to.

15. Make sure to Click "**Apply**" when you are done.

III. UDP Socket Communication

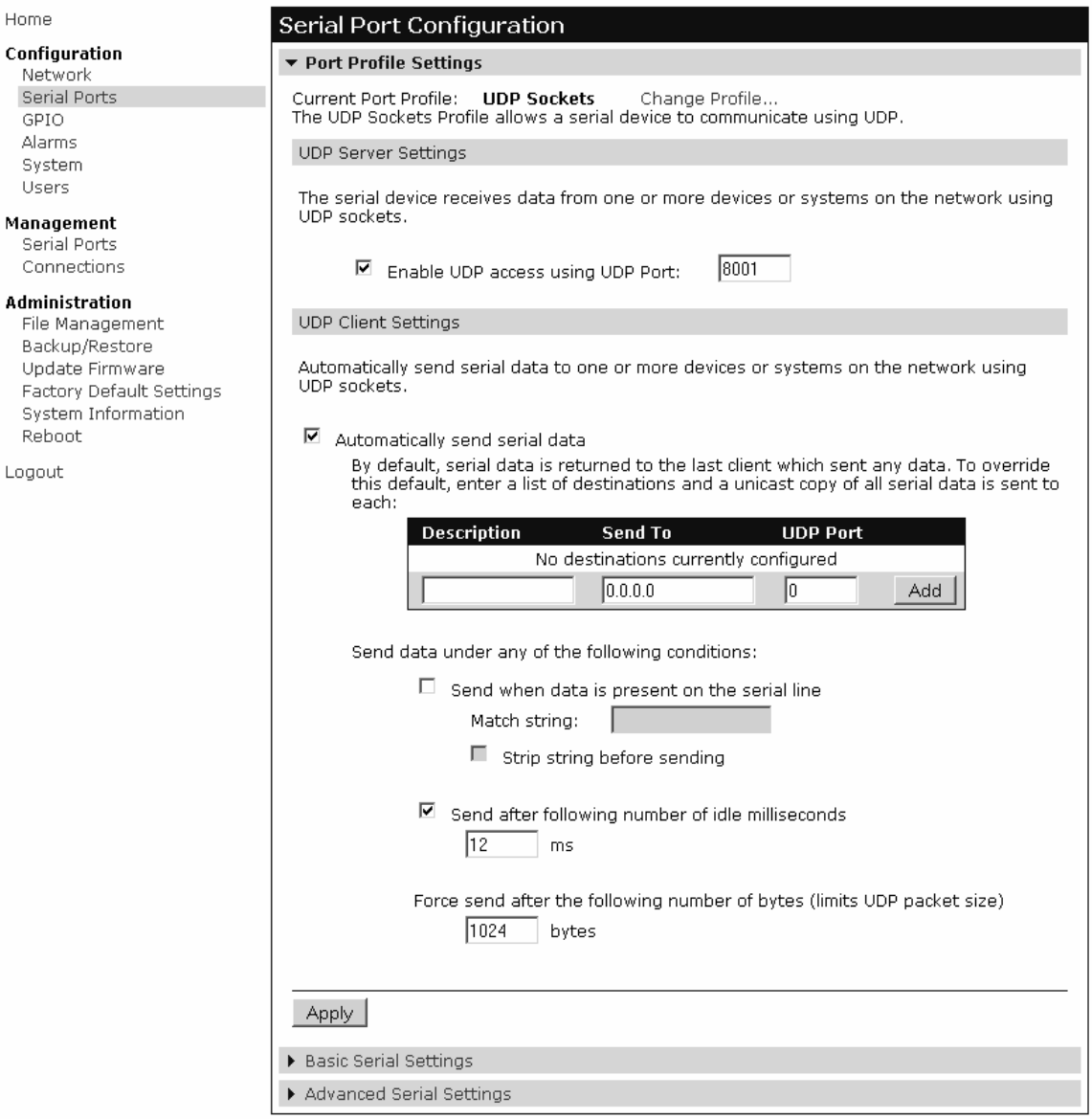
1. Log into the Digi Connect N2S-170 by typing its IP address into your browser. Log in as:
   Username: **root**
   Password: **dbps**

2. Under Configuration, select **"Serial Ports," "Port 1,**" and **"UDP Sockets."**



3. Scroll down and click "**Apply**."

The following page will open:



4. Check "**Enable UDP access using UDP Port,**" and set the correct port number for your application. 8001 is used in this example. (Default is 2101.)

5. Check "**Automatically send serial data.**" Additional information is not required.

6. Check "**Send after the following number of idle milliseconds.**"

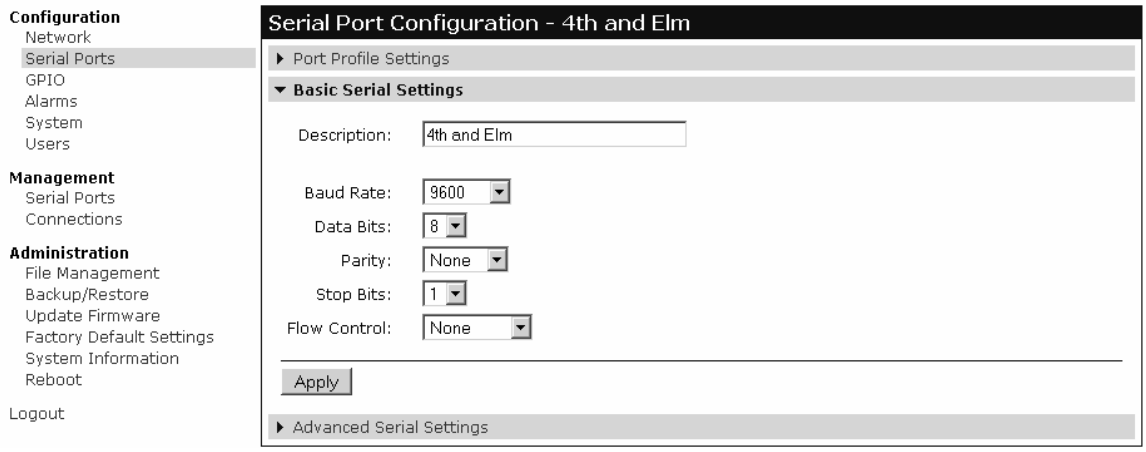
7. Set the value to 12 ms.
   If instructed to use different values write them here:
   UDP Socket Number _____
   Send after _____ idle ms

8. Click "**Apply.**"

9. At the bottom of the page, click on "**Basic Serial Settings.**"

Basic Serial Settings:

The following page will open. Here you can make any changes to the serial port parameters you wish to use, and enter a description for this port.



10. Write down the correct settings for your device below for future reference:

    Description _____

    Baud Rate: _____

    Data Bits: _____

    Parity: _____

    Stop Bits: _____

    Flow Control: _____

11. Make any necessary changes for the device to which you are connecting.

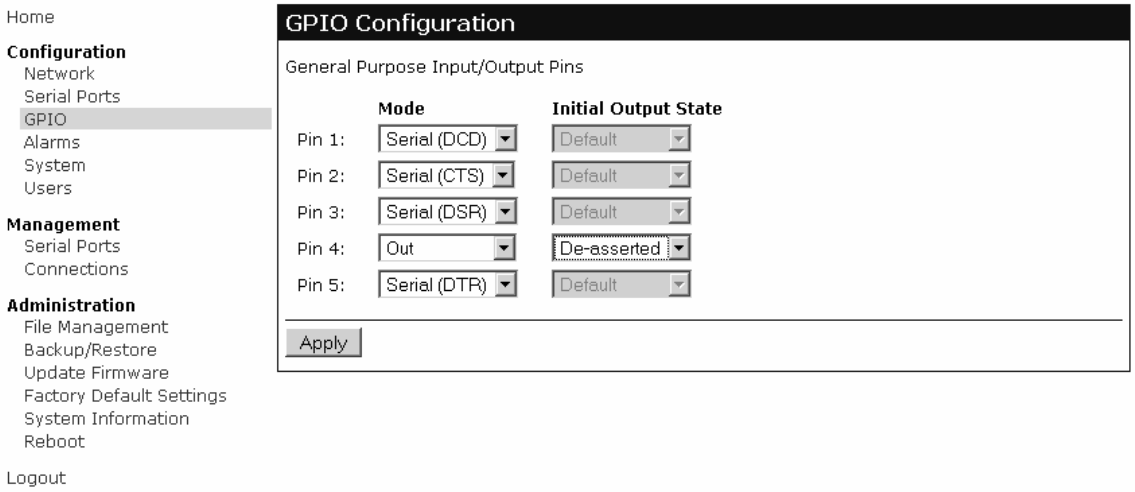
12. Make sure to click "**Apply**" when you are done.

13. To finish UDP configuration, set the output signals.

UDP Output signal configuration:

14. Under Configuration, select "**GPIO**."

The page below opens.



15. Set pin 4 mode to "**Out,**" and set pin 4 Initial Output State to "**De-asserted.**"

16. Click "**Apply**."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